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Sheet No.	1	Title
Sheet No.	*	Typical Sections and Details (Includes Erosion Control Plans)
Sheet No.	3-3.6	Estimate of Quantities
Sheet No.	3A-30	Miscellaneous Quantities
Sheet No.	4-4.14	Right of Way Plat
Sheet No.	5-5.18	Plan and Profile
Sheet No.	6-6.59	Standard Detail Drawings
Sheet No.	7-7.19	Sign Plates
Sheet No.	8-8.6	Structure Plans
Sheet No.	———	Computer Earthwork Data
Sheet No.	9-9.47	Cross Sections

*2-2.44, 2.44A, 2.45-2.63

TOTAL SHEETS = 257

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

VERONA BYPASS
(LOCUST DRIVE - EAST INTERCHANGE)

U.S.H. 18

DANE COUNTY

STATE PROJECT NUMBER
1201-04-78

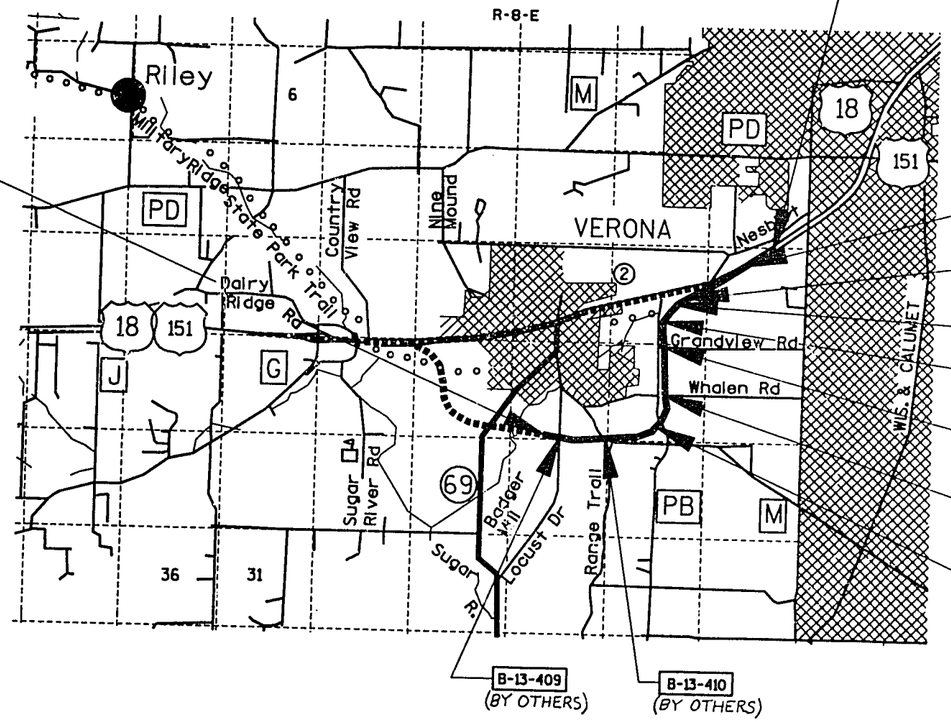
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1201-04-78	NH 017(70)	1

AS BUILT CONSTRUCTION PLAN

WORK TYPE GRADE, BASE, ASPH. & CONC. PAV'T.
CONTRACTOR STREU CONSTRUCTION CO.
PROJECT MANAGER MARK J. SPONEM P.E.
WORK START-COMPLETED 4-2-95 / 10-5-95

BEGIN PROJECT 1201-04-78
STA. 607+00.00
X= 2,123,656.60
Y= 355,223.02

END PROJECT 1201-04-78
STA. 798+00.00



B-13-426 REQ'D

B-13-417 & B-13-418
EXCEPTION TO NET C/L LENGTH
STA. 744+30.29 - STA. 745+90.63

B-13-425
EXCEPTION TO NET C/L LENGTH
STA. 738+11.48 - STA. 738+52.52

C-13-117 (BY OTHERS)

B-13-415 & B-13-416
EXCEPTION TO NET C/L LENGTH
STA. 717+31.42 - STA. 718+33.26

B-13-413 & B-13-414
EXCEPTION TO NET C/L LENGTH
STA. 690+88.83 - STA. 692+08.83

B-13-411 & B-13-412
EXCEPTION TO NET C/L LENGTH
STA. 675+71.55 - STA. 677+57.53

DESIGN DESIGNATION

		(EXISTING)		(BYPASS)
A.D.T.	1995	=	----	5,300
A.D.T.	2012	=	----	9,000
D.H.V.	2012	=	----	900
D.		=	----	60-40
T. (DHV)		=	----	4.9%
DESIGN SPEED		=	----	65 MPH
ESALS			----	1,679,000

CONVENTIONAL SIGNS

COUNTY LINE		COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS		UNDERGROUND UTILITIES GAS	G
PROPERTY LINE		ELECTRIC	E
LOT LINE		TELEPHONE	T
LIMITED EASEMENT		SERVICE PEDESTAL	
EXISTING RIGHT OF WAY		CABLE MARKER	
NEW RIGHT OF WAY		POWER POLE	
REFERENCE LINE		TELEPHONE POLE	
SLOPE INTERCEPT		RAILROADS	
ORIGINAL GROUND		MARSH	
MARSH OR ROCK PROFILE		WOODED AREA	
CULVERT IN PLACE			
CULVERT REQUIRED			
CULVERT REQUIRED (Profile)			
CULVERT IN PLACE (Profile)			

LAYOUT
SCALE 0 · 0.8 MI.

TOTAL NET LENGTH OF CENTERLINE = 3.502 MI. RURAL

ALL COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE GRID SYSTEM SOUTH ZONE.
GRID CONVERSION FACTOR = 0.99991

SIGNAL PLANS PREPARED BY
TRAFFIC ENGINEERING SERVICES, INC.
ELM GROVE, WISCONSIN
WISCONSIN WAYNE E. HIGGINS E-13373 Reg. Engineer
PROFESSIONAL ENGINEER
07-21-94 (Date) (Signature)

ORIGINAL PLANS PREPARED BY
HILL
MILWAUKEE, WISCONSIN
WISCONSIN JEFFREY A. ROEMER E-23321 DELAFIELD, WI
PROFESSIONAL ENGINEER
7-21-94 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	TLG
Designer	JAR/AVL
District Examiner	RGL
District Supervisor	DJP
Proj. Dev. Engineer	Richard P. Ellinger
C.O. Examiner	M. M. ARNOLT

APPROVED FOR DISTRICT OFFICE
DATE: 7/29/94 Munzer Haidar (Signature)
AUTHORIZED FOR CENTRAL OFFICE TRAFFIC
DATE: 9/7/94 (Signature)
AUTHORIZED FOR CENTRAL OFFICE DESIGN
DATE: (Signature)

1201-4-78 Dane

FILE NAME: TITLE.DGN

WISDOT/CADDS SHEET 11

STATE PROJECT NUMBER	SHEET NO
1201-04-78	2.0

GENERAL NOTES

USH 18 — DANE COUNTY

KEY MAP

GENERAL NOTES

1. NO TREES ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
2. FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTED FROM BORROW, UNCLASSIFIED, AND MARSH EXCAVATION. THE FACTOR USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS THE EARTHWORK SUMMARY.
3. EXCAVATION BELOW SUBGRADE (EBS/EBE) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER.
4. THE 5-INCH & 4-1/2-INCH ASPHALTIC CONCRETE PAVEMENT SHALL CONSIST OF A 1-1/2-INCH SURFACE COURSE AND TWO BINDER COURSES.
5. THE 3, AND 3-1/2-INCH ASPHALTIC CONCRETE PAVEMENT SHALL CONSIST OF A 1-1/2-INCH SURFACE COURSE AND ONE BINDER COURSE. THE 2-INCH ASPHALTIC CONCRETE PAVEMENT SHALL CONSIST OF ONE SURFACE COURSE.
6. ASPHALTIC MATERIAL FOR TACK COAT SHALL BE APPLIED AT A MAXIMUM RATE OF 0.025 GAL/S.Y..
7. ALL CONCRETE PIPE SHALL HAVE JOINT TIES INSTALLED ON THE LAST TWO PIPE JOINTS AND THE ENDWALL JOINT AT BOTH THE INLET AND DISCHARGE ENDS.
8. EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER.
9. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
10. THE EXISTING DRIVEWAYS AND FIELD ENTRANCES WILL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.
11. THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS SUPERELEVATION WHEN SUPERELEVATION IS GREATER THAN 0.04 FT./FT. IF SUPERELEVATION IS LESS THAN OR EQUAL TO 0.04 FT./FT., THEN LOW SIDE SHOULDER SLOPE IS 0.04 FT./FT. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS SUPERELEVATION.
12. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.
13. THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
14. ALL CURB RADII ARE MEASURED TO THE FLANGE OF CURB UNLESS OTHERWISE NOTED.
15. A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET THE EXISTING ASPHALTIC SURFACE.
16. ALL COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM (SOUTH ZONE). THE CONTROL SURVEY FOR THIS PROJECT WAS CONDUCTED AND MET SPECIFICATIONS FOR THIRD ORDER SURVEYS.
17. ALL OPENINGS OR HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS, SHALL BE BACKFILLED WITH GRANULAR BACKFILL.
18. AFTER PLACING CURB AND GUTTER, ANY EXCESS CONCRETE PROTRUDING BEYOND THE BACK OF CURB LINE SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO BACKFILLING.
19. ALL CONCRETE CURB AND GUTTER IS LOW SIDE (NON-REJECT) UNLESS OTHERWISE INDICATED ON THE PLAN.
20. SILT FENCE REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.
21. INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.
22. CONCRETE PAVEMENT JOINTS:
    - RANDOM SPACED 17'-20'-18'-19' ON MAINLINE.
    - TRANSVERSE JOINT AT 20' & NORMAL ON RAMPS.

STANDARD DETAIL DRAWINGS

8A5-9b,9c	INLET COVERS
8C1-4	INLETS, TYPES 1,2 & 3
8C5-1	INLETS, TYPES 8, 9, 10 AND 11
8D1-11	CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES
8D3-4	CONCRETE SURFACE DRAINS, DROP INLET TYPE AT STRUCTURES
8D4-3	CONCRETE SURFACE DRAIN AND ASPHALTIC FLUME
8D15-1a	EDGEDRAIN OUTLET DETAILS
8D15-1b	EDGEDRAIN AND CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NO.1 OR NO.2
8E4-2	SOD OR MASONRY AND SOD DITCH CHECKS
8E6-7	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
8E8-2	TYPICAL INSTALLATION OF EROSION BALES
8E9-4	SILT FENCE
8F1-10a	APRON ENDWALLS FOR CULVERT PIPE
8F4-5	JOINT TIES FOR CONCRETE PIPE
8F6-3	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
9B2-5	CONDUIT
9C2-1	CONCRETE BASES
9C3-1	CAST BASES
9C6-1	CONCRETE CONTROL CABINET BASES, TYPE 9, SPECIAL
9D1-1	CABINET SERVICE INSTALLATION
9E1-1a	POLE MOUNTINGS FOR TRAFFIC SIGNALS, TYPE 2
9E1-1b	POLE MOUNTINGS FOR TRAFFIC SIGNALS & LIGHT UNITS, TYPE 3
9E1-1c	POLE MOUNTINGS FOR TRAFFIC SIGNALS & LIGHTING UNITS, TYPE 4
9E1-1d	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5
9E1-1e	HARDWARE DETAILS FOR POLE MOUNTINGS
9E3-1	NON-FREEWAY LIGHTING UNIT POLE WIRING
9F2-1	LOOP DETECTOR INSTALLED IN NEW CONCRETE PAVEMENT 8x8x8-INCH JUNCTION BOX — FOR INFORMATION ONLY
9F3-1	LOOP DETECTOR INSTALLED IN NEW CONCRETE PAVEMENT 8x8x8-INCH JUNCTION BOX (MULTIPLE LEAD-OUT) — FOR INFORMATION ONLY
11A1-2	MAINTENANCE CROSSOVER FOR FREEWAYS
12A2-3	SLOPE PAVING STRUCTURES (CRUSHED AGGREGATE)
12A3-4	NAME PLATE-STRUCTURES
13A4-3	ASPHALTIC SHOULDER RUMBLE STRIPS
13B2-3	CONCRETE PAVEMENT APPROACH SLAB
13C1-9	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES
13C12-2	DOWELED NON-REINFORCED CONCRETE PAVEMENT; RANDOM SPACED JOINTS 17'-20'-18'-19'
13C13-1	DOWELED NON-REINFORCED CONCRETE PAVEMENT (TRANSVERSE JOINT SPACED AT 20' & NORMAL)
14B6-3a,b	CONCRETE BARRIER, SINGLE-FACED
14B15-1a	CLASS "A" STEEL PLATE BEAM GUARD, INSTALLATION AND ELEMENTS
14B16-1a,1b	CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE TYPE 1 AND 2
14B18-1a	CLASS "A" STEEL PLATE BEAM GUARD (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B18-1c	CLASS "A" STEEL PLATE BEAM GUARD BULLNOSE AT TWIN BRIDGES
14B20-2a	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-2b	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARED END AND VERTICAL FACED PARAPETS
14B18-1b	CLASS "A" STEEL PLATE BEAM GUARD AT MEDIAN APPROACH TO BRIDGES
15B1-7a,7b	WOVEN WIRE FENCE
15C2-2	BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES
15C7-4a	PAVEMENT MARKING SYMBOLS
15C8-5c	PAVEMENT MARKING (ISLANDS, STOP LINE AND CROSS WALK)
15C8-5d	PAVEMENT MARKING (RAMPS AND GORES)
15C8-5a	PAVEMENT MARKING MAINLINE
15C8-5b	PAVEMENT MARKING (LEFT TURN LANE)
15C10-3b	RAISED PAVEMENT MARKERS (RAMPS AND ARROWS)
15C10-3c	RAISED PAVEMENT MARKERS (CASTING AND SAWCUT DETAIL)
15C12-1	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D12-1	LANE CLOSURE WHERE SPEED IS 45 MPH OR GREATER
15C11-5	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STANDARD ABBREVIATIONS

B/L	BASE LINE
C/L OR ℄	CENTER LINE
T/L	TRANSIT LINE
R/L OR ℄	REFERENCE LINE
MIN.	MINIMUM
MAX.	MAXIMUM
NOR.	NORMAL
TYP.	TYPICAL
VAR.	VARIABLE
F.E.	FIELD ENTRANCE
P.E.	PRIVATE ENTRANCE
CABC	CRUSHED AGGREGATE BASE COURSE
DGBC	DENSE GRADED BASE COURSE
OGBC	OPEN GRADED BASE COURSE
SHLDR.	SHOULDER
SDD	STANDARD DETAIL DRAWINGS
S.E.	SUPERELEVATION
N.C.	NORMAL CROWN
R.C.	REVERSE CROWN
EBRL	EASTBOUND REFERENCE LINE
WBRL	WESTBOUND REFERENCE LINE
PU	PIPE UNDERDRAIN
PUU	PIPE UNDERDRAIN UNPERFORATED
CP	CULVERT PIPE
CSCP	CORRUGATED STEEL CULVERT PIPE
CSPA	CORRUGATED STEEL PIPE ARCH
RCP, SS	REINFORCED CONCRETE PIPE, STORM SEWER
RCCP	REINFORCED CONCRETE CULVERT PIPE
RCHECP	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CULVERT PIPE
MH	MANHOLE
EBE	EXCAVATION BELOW EMBANKMENT
EBS	EXCAVATION BELOW SUBGRADE

UTILITIES

GAS

MADISON GAS AND ELECTRIC COMPANY
MR. JOHN YOGERST
P.O.BOX 1231
MADISON, WI 53701
PHONE: 608/252-7195

TELEPHONE

MOUNT VERNON TELEPHONE COMPANY
MR. JACK NORTHRUP OR
MR. JOHN AMUNDSON
P.O. BOX 930095
VERONA, WI 53593
PHONE: 608/845-6445

ELECTRIC

WISCONSIN POWER AND LIGHT COMPANY
MR. JIM PALZKILL
P.O. BOX 192
MADISON, WI 53703
PHONE: 608/252-3456

WISCONSIN POWER AND LIGHT COMPANY

LOCAL CONTACT
MR. MIKE BURNS
P.O. BOX 4
OREGON, WI 53575
PHONE: 608/258-5143

WISCONSIN DEPARTMENT OF TRANSPORTATION
DISTRICT 1
MR. BRUCE BELSCAMPER
2101 WRIGHT STREET
MADISON, WI 53704-2583
PHONE: 608/246-3817

CABLE T.V.

MARCUS CABLE
MR. RANDY STEURER
P.O. BOX 145
WAUNAKEE, WI 53597-0145
PHONE: 608/849-8033

WATER & SEWAGE

MADISON METROPOLITAN SEWERAGE DISTRICT
MR. DICK KLASS
1610 MOORLAND ROAD
MADISON, WI 53713
PHONE: 608/222-1201

TOWN OF VERONA
MS.ROSE JOHNSON
335 NORTH NINE MOUND ROAD
VERONA, WI 53593

RECREATION TRAIL

ICE AGE PARK AND TRAIL FOUNDATION
MR. GARY WERNER
333 W. MIFFLIN ST.
MADISON, WI 53705

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
- SOUTHERN DISTRICT
MR. GREG MARKUS
3911 FISH HATCHERY ROAD
FITCHBERG, WI 53711
PHONE: 608/251-5550

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
(EROSION CONTROL LIASON)
MR. HAL MEIER
PHONE: 608/275-3308

DIGGERS HOTLINE

DANE COUNTY
PHONE:800/242-8511*

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
TELEFAX (414) 258-0647
TDD (FOR HEARING IMPAIRED) 1-800-542-2289

WISCONSIN STATUTE 182.0175 (1974)
REQUIRES MINIMUM OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

CONSTRUCTION DETAIL INDEX

SHEET NO.	TITLE
2.0	GENERAL NOTES
2.1 - 2.3	PROJECT OVERVIEW
2.4 - 2.10	TYPICAL SECTIONS
2.11 - 2.25	CONSTRUCTION DETAILS
2.26	INTERSECTION DETAILS
2.27 - 2.32	RAMP PAVING DETAILS
2.33 - 2.34	CONTOUR / MATCHLINE
2.35 - 2.37	DRAINAGE AND EROSION CONTROL
2.38 - 2.42	STORM SEWER
2.43 - 2.44	SIGNING
2.44A & 2.45 - 2.48	TRAFFIC SIGNALS
2.49 - 2.53	PAVEMENT MARKING
2.54 - 2.62	TRAFFIC CONTROL
2.63	ALIGNMENT

LEVELS ON:

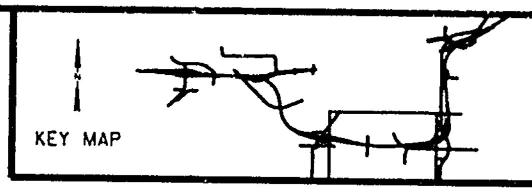
FILE NAME: HDGN: 7820J.DGN

WISDOT/CADDS SHEET

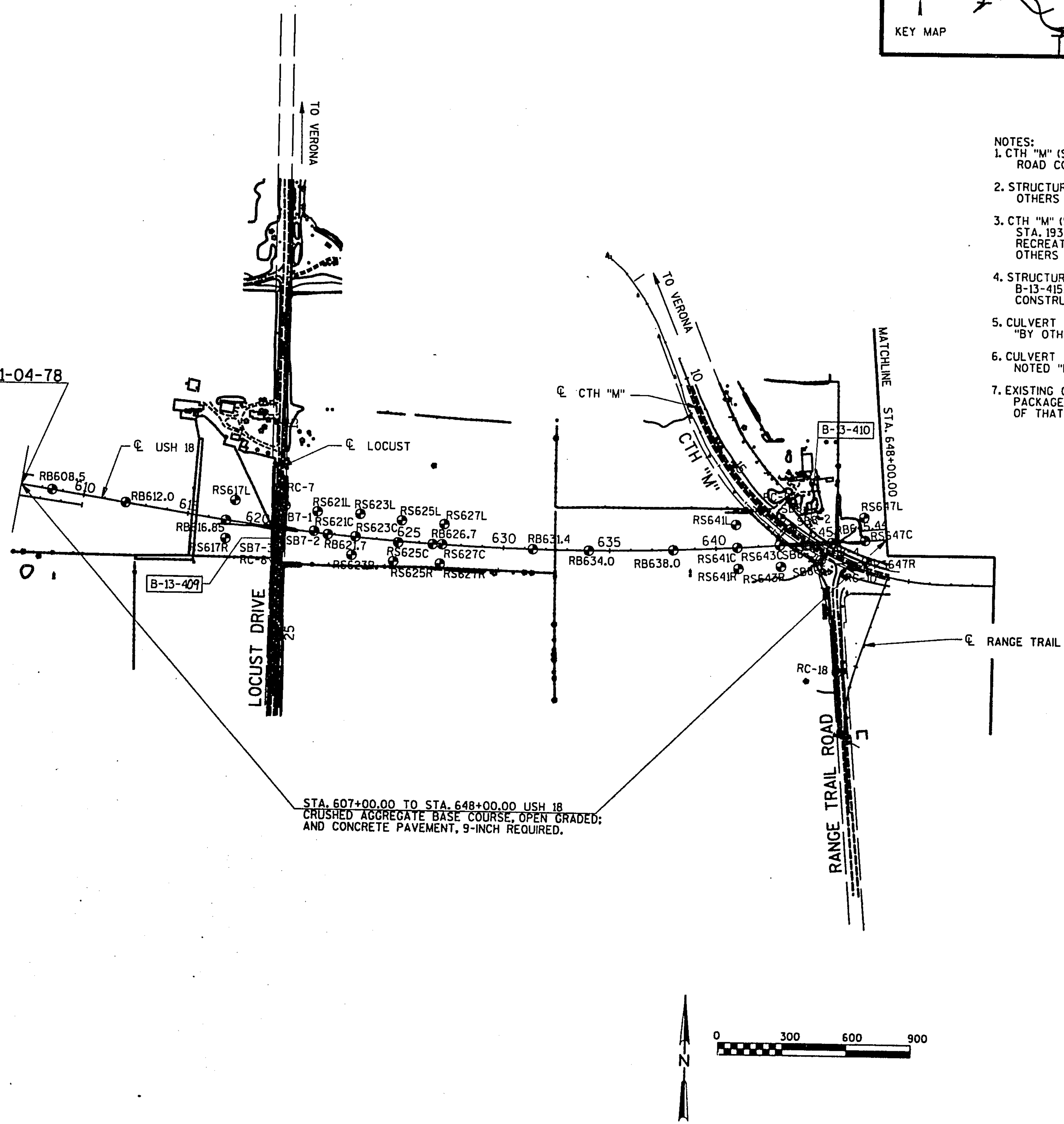
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.1

PROJECT OVERVIEW AND BORING LOCATION

USH 18 DANE COUNTY



NOTES:
1. CTH "M" (STA. 10+00.00 TO STA. 29+00.00), LOCUST DRIVE AND RANGE TRAIL ROAD CONSTRUCTED BY OTHERS UNDER I.D. 1201-04-75.
2. STRUCTURES B-13-409 (LOCUST) AND B-13-410 (CTH "M") CONSTRUCTED BY OTHERS UNDER I.D. 1201-04-75.
3. CTH "M" (STA. 51+00.00 TO STA. 56+50.00), CTH "PB" (STA. 113+00.00 TO STA. 193+00.00) WHALEN ROAD, GRANDVIEW ROAD, AND MILITARY RIDGE RECREATIONAL TRAIL (STA. 8+00.00 TO STA. 26+00.00) CONSTRUCTED BY OTHERS UNDER I.D. 1201-04-72.
4. STRUCTURES B-13-411/412 (CTH "PB"), B-13-413/414 (WHALEN ROAD), B-13-415/416 (GRANDVIEW ROAD) AND B-13-417/418 (RAMP "E-1") CONSTRUCTED BY OTHERS UNDER I.D. 1201-04-76.
5. CULVERT PIPES AND OTHER ITEMS PREVIOUSLY REMOVED ARE NOTED "BY OTHERS".
6. CULVERT PIPES AND OTHER ITEMS PREVIOUSLY CONSTRUCTED ARE NOTED "BY OTHERS".
7. EXISTING GROUNDLINES IN AREAS CONSTRUCTED UNDER PREVIOUS GRADING PACKAGE PORTRAY THE EXISTING GROUND PRIOR TO CONSTRUCTION OF THAT PACKAGE.



FILE NAME: HDGN: 78200.DGN

LEVELS ON -

KEY MAP

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.2

PROJECT OVERVIEW AND BORING LOCATION

USH 18

DANE COUNTY

0 300 600 900

BEGIN PAVING
STA 646+74 "PB-1"

MATCHLINE STA. 648+00

BEGIN PAVING
STA 648+00 "PB-2"

STA. 648+00.00 TO STA. 763+00.00 "WB" / 765+00.00 "EB" USH 18
CRUSHED AGGREGATE BASE COURSE, OPEN GRADED AND
CONCRETE PAVEMENT, 9-INCH REQUIRED.
CONCRETE PAVEMENT, 9-INCH REQUIRED ON ALL RAMPS.

TO PAOLI

CTH "PB"

℄ CTH "PB"
(CONSTRUCTED BY OTHERS)

℄ RAMP "PB-1"

℄ RAMP "PB-2"

℄ RAMP "PB-3"

℄ RAMP "PB-4"

RAMP "PB-2"

RAMP "PB-4"

USH 18

℄ USH 18

CTH "M"

℄ CTH "M"

WHALEN ROAD

℄ WHALEN ROAD

GRANDVIEW ROAD

℄ GRANDVIEW ROAD

BRIDGES
BY OTHERS

B-13-411
B-13-412

B-13-413
B-13-414

B-13-415
B-13-416

STA 692+00 "PB-4"

STA 699+00 "PB-3"

WHALEN ROAD AND GRANDVIEW
ROADS CONSTRUCTED BY OTHERS

MATCH LINE STA. 721+00

RS647.0
RBB650.0
RBB655.0
RB664.0
RB669.0
MBP869.1
PBHA62.2
RBPB44.0
SB98-1
SB98-2
SB98-3
SB98A-3680
RB679.2
RB685.0
RB688.8
SB10B-1
SB10B-2
RC17
SB10A-2
RB695.5
RB699.8
RS702.5R
RS702.5L
RB702.5
RB705.2

59.60.
54.52
29.30. 32.
24.25.
20.

LEVELS ON •

FILE NAME: HDGN: :B20\DGN

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.2

PROJECT OVERVIEW
AND BORING LOCATION

USH 18 — DANE COUNTY

KEY MAP

0 300 300 900

BEGIN CONSTRUCTION
STA. 726+00.00 RAMP "E-1"

BEGIN CONSTRUCTION
STA 729+00.00 RAMP "E-2"

BEGIN CONSTRUCTION
STA. 12+00.00 "LOCAL ROAD"

TO VERONA

℄ LOCAL ROAD

LIMITS OF GRADING, CABC AND PAVING RAMP "E-1" AND RAMP "E-2"

℄ CTH "PB-N"

END CONSTRUCTION
STA. 8+00 "MRRT"

℄ NESBITT ROAD

B-13-417
B-13-418
BRIDGES BY OTHERS

BEGIN CONSTRUCTION
STA. 3+00 "MRRT"

END CONSTRUCTION
STA. 59+90.00 CTH "PBN"

CTH "PB"

B-13-425
CULVERT BY OTHERS

C-13-117
CULVERT BY OTHERS

BADGER MILL CREEK

"MRRT"

RAMP "E-1"

RAMP "E-2"

USH 18

MILITARY RIDGE RECREATIONAL TRAIL

STA. 721+00

GRANDVIEW ROAD

END CONSTRUCTION
STA 770+25.00 RAMP "E-2"

END CONSTRUCTION
STA 774+75.00 RAMP "E-1"

RC15 NESBITT ROAD

BEGIN CONSTRUCTION
STA 19+00.00 "NESBITT ROAD"

B-13-426

END PROJECT 1201-04-78
STA. 798+00.00

℄ USH 18

TO MADISON

GOOSE LAKE

STA. 648+00.00 TO 763+00.00 "WB" / STA. 765+00.00 "EB" USH 18
CRUSHED AGGREGATE BASE COURSE, OPEN GRADED AND CONCRETE PAVEMENT, 9-INCH REQUIRED.

STA. 763+00.00 "WB" / STA. 765+00.00 "EB" TO STA. 798+00.00 USH 18 "WB" / "EB"
GRADING, CRUSHED AGGREGATE BASE COURSE; CRUSHED AGGREGATE BASE COURSE, OPEN GRADED AND CONCRETE PAVEMENT, 10-INCH REQUIRED.

LEVELS ON: 59.60. 5L 32. 29.30. 24.25. 20.

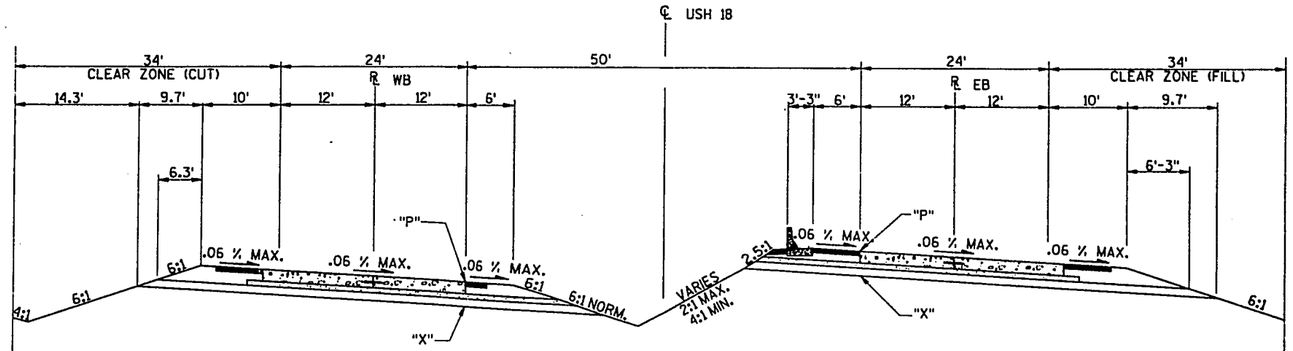
FILE NAME: HDGN: T8202.DGN

KEY MAP

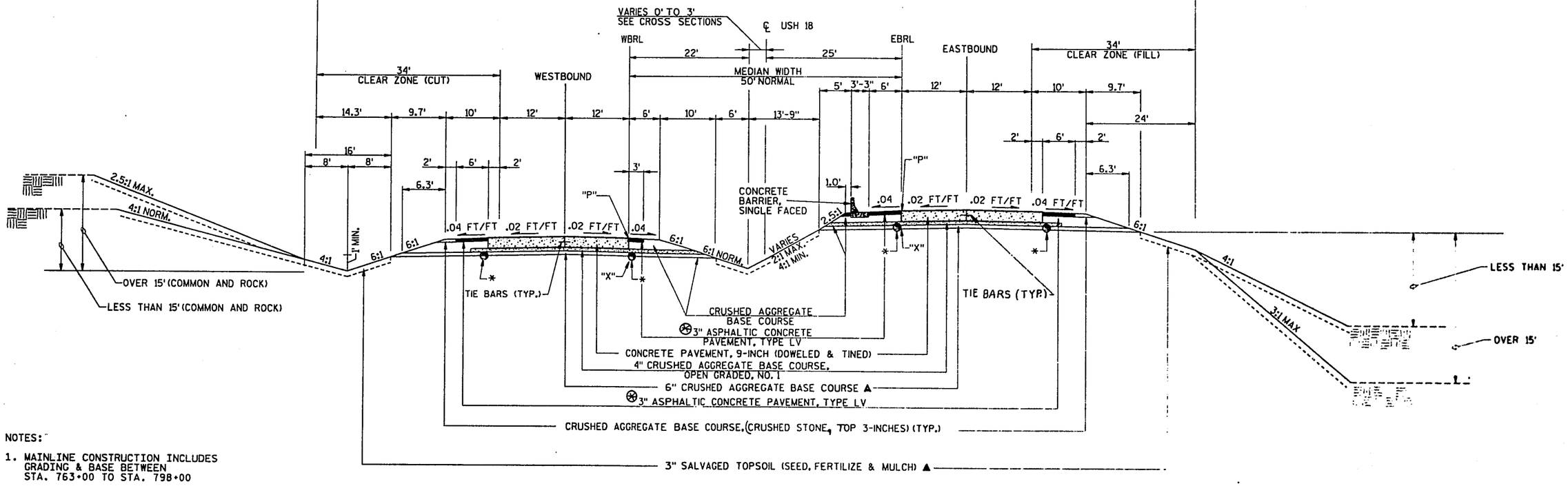
STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.1

TYPICAL SECTION MAINLINE

USH 18 | DANE COUNTY



TYPICAL SUPERELEVATED SECTION
(CONSTANT WIDTH SUBGRADE)



NOTES:

1. MAINLINE CONSTRUCTION INCLUDES GRADING & BASE BETWEEN STA. 763+00 TO STA. 798+00
2. NOT UNDER THIS CONTRACT (▲).
3. PROPOSED PIPE UNDERDRAIN (⊛). (SEE SDD)
4. "P" = POINT REFERRED TO ON PROFILE.
5. "X" = POINT REFERRED TO ON CROSS SECTION.

TYPICAL FINISHED SECTION

USH 18 BYPASS MAINLINE

SPLIT PROFILE AREA
(CTH "PB" INTERCHANGE TO EAST INTERCHANGE)
⊛ ASPHALTIC CONCRETE RUMBLE STRIP (SEE SDD)

59,60.

5.

LEVELS ON .

FILE NAME: HDGN: 73204.DGN

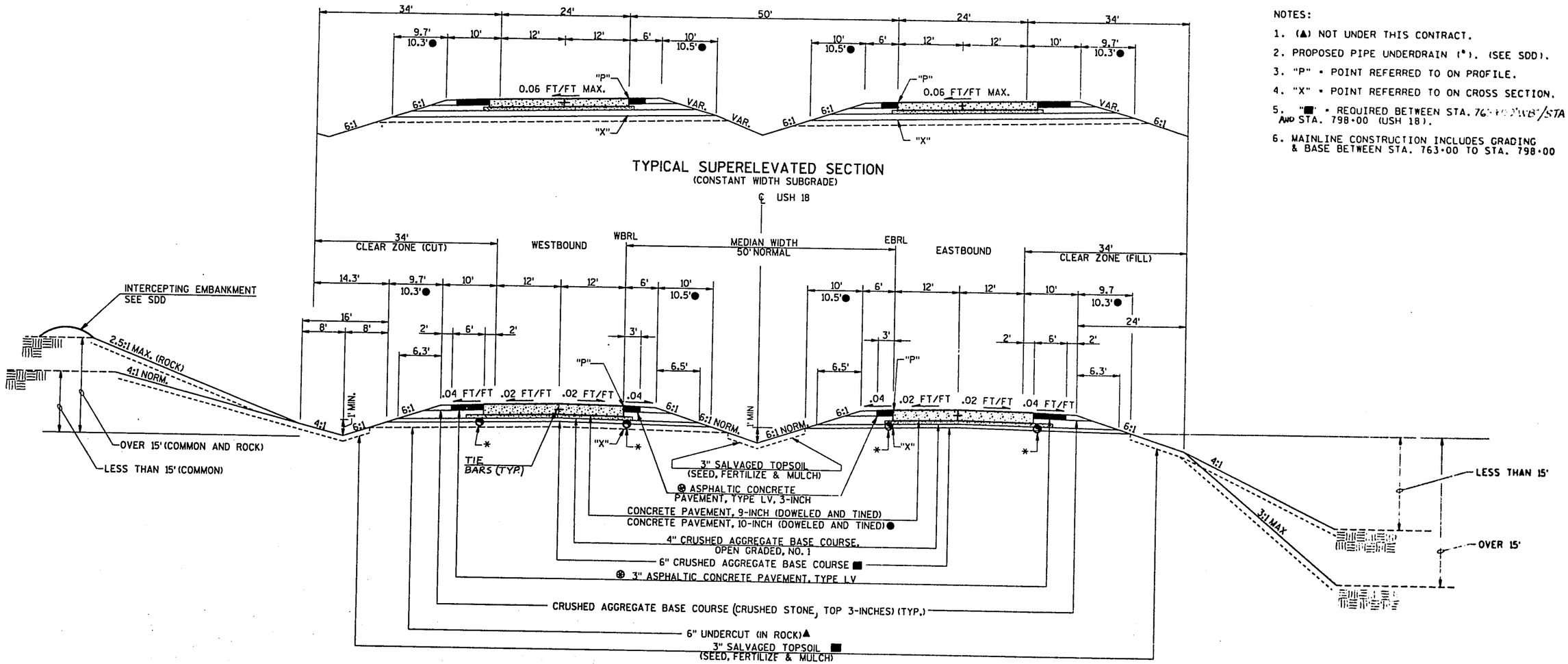
KEY MAP

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.5

TYPICAL SECTION MAINLINE

USH 18 DANE COUNTY



TYPICAL FINISHED SECTION

USH 18 BYPASS MAINLINE

STA. 607+00.00 TO STA. 763+00.00 WB CONCRETE PAVEMENT, 9-INCH
STA. 607+00.00 TO STA. 765+00.00 EB CONCRETE PAVEMENT, 9-INCH
STA. 763+00.00 TO STA. 798+00.00 WB CONCRETE PAVEMENT, 10-INCH ●
STA. 765+00.00 TO STA. 798+00.00 EB CONCRETE PAVEMENT, 10-INCH ●

⊛ ASPHALTIC SHOULDER RUMBLE STRIP (SEE SDD)

NOTES:

1. (▲) NOT UNDER THIS CONTRACT.
2. PROPOSED PIPE UNDERDRAIN (*). (SEE SDD).
3. "P" = POINT REFERRED TO ON PROFILE.
4. "X" = POINT REFERRED TO ON CROSS SECTION.
5. "■" = REQUIRED BETWEEN STA. 763+00 WB/STA 765+00 EB AND STA. 798+00 (USH 18).
6. MAINLINE CONSTRUCTION INCLUDES GRADING & BASE BETWEEN STA. 763+00 TO STA. 798+00

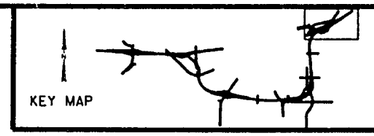
GRADING, BASE & PAVING UNDER THIS CONTRACT

59,60.

5.

LEVELS ON •

FILE NAME: HDGN: 78203.DGN

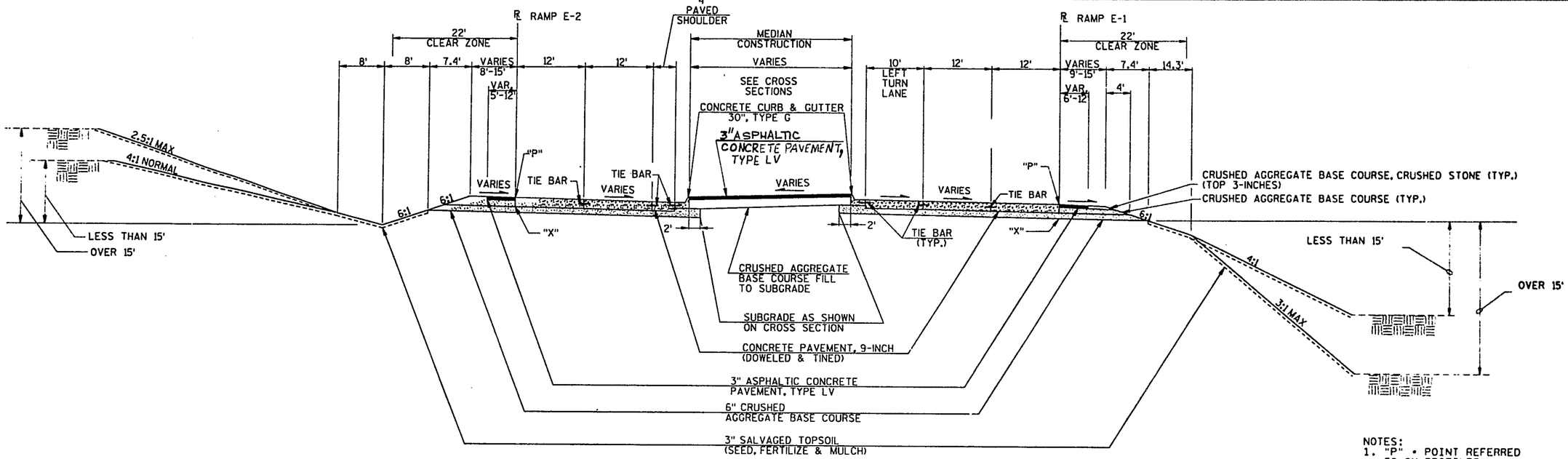


STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.0

TYPICAL SECTIONS
RAMPS "E-1"/"E-2"

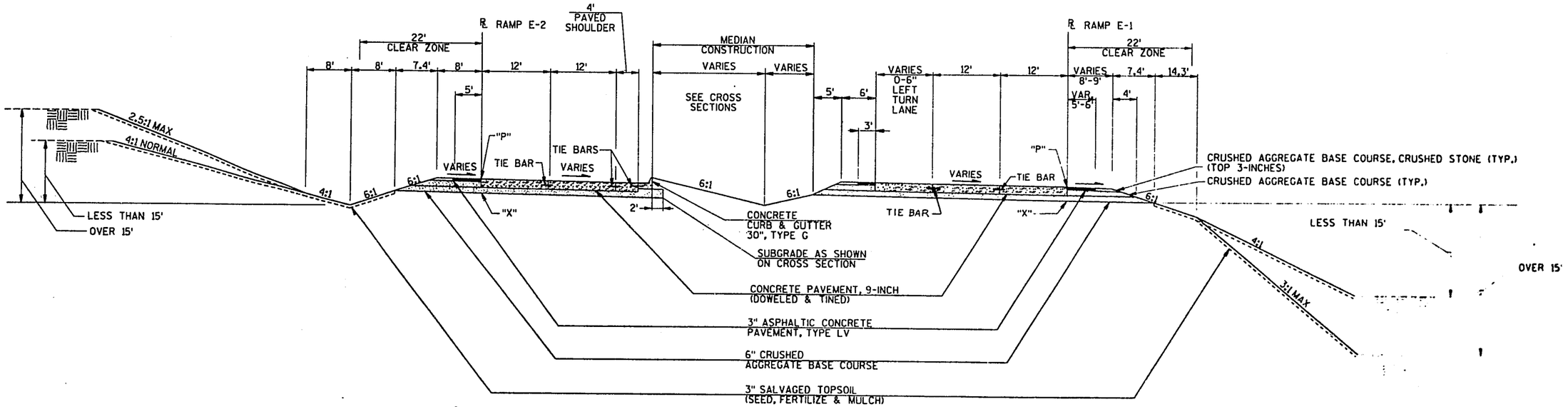
USH 18 DANE COUNTY



RAMP "E-2" / RAMP "E-1" MEDIAN DETAIL

RAMP "E-2" STA. 737+10.00 TO STA. 739+60.00
RAMP "E-1" STA. 733+75.00 TO STA. 736+09.00
(SHOWN IN DIRECTION OF STATIONING)

NOTES:
1. "P" - POINT REFERRED TO ON PROFILES
2. "X" - POINT REFERRED TO ON CROSS SECTIONS



RAMP "E-2" / RAMP "E-1" MEDIAN DETAIL

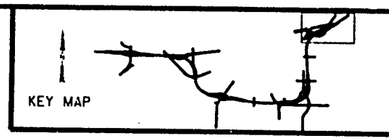
RAMP "E-2" STA. 736+45.00 TO STA. 737+10.00
RAMP "E-1" STA. 733+20.00 TO STA. 733+75.00
(SHOWN IN DIRECTION OF STATIONING)

GRADING, BASE AND PAVING UNDER THIS CONTRACT

59.60.

LEVELS ON

FILE NAME: HDGN: 78207B.DGN

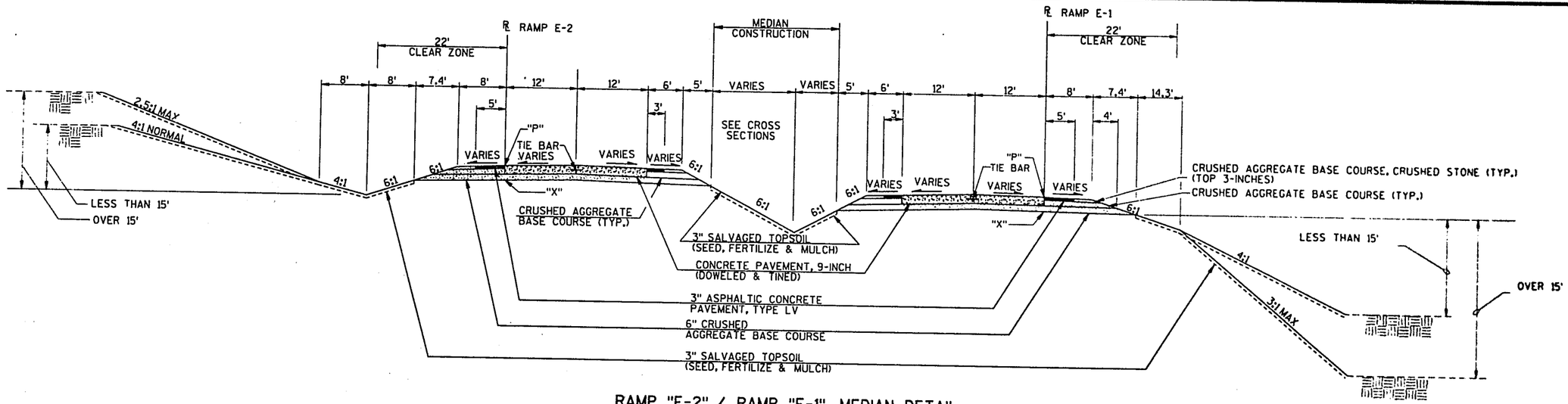


STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.1

TYPICAL SECTIONS
RAMPS "E-1"/"E-2"

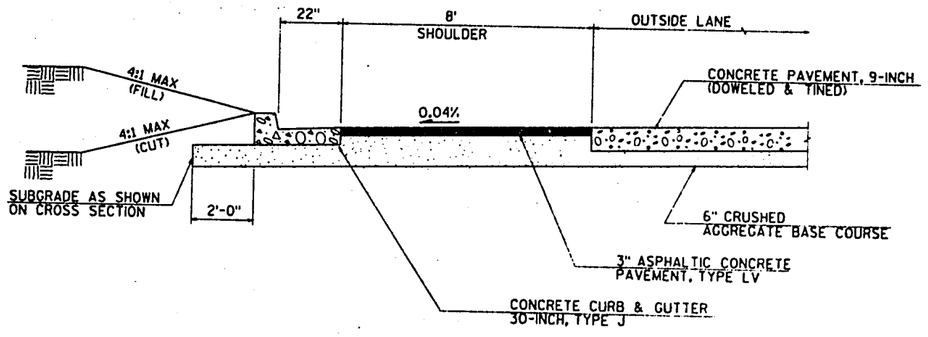
USH 18 DANE COUNTY



RAMP "E-2" / RAMP "E-1" MEDIAN DETAIL

RAMP "E-2" STA. 729+00.00 TO STA. 736+45.00
RAMP "E-1" STA. 726+00.00 TO STA. 733+20.00
(SHOWN IN DIRECTION OF STATIONING)

NOTES:
1. "P" - POINT REFERRED TO ON PROFILES
2. "X" - POINT REFERRED TO ON CROSS SECTIONS



RAMP "E-2" OUTSIDE SHOULDER STA. 729+00.00 TO STA. 733.00.00

GRADING, BASE AND PAVING UNDER THIS CONTRACT

59.60.

LEVELS ON -

FILE NAME: HDGN: T8207C.DGN

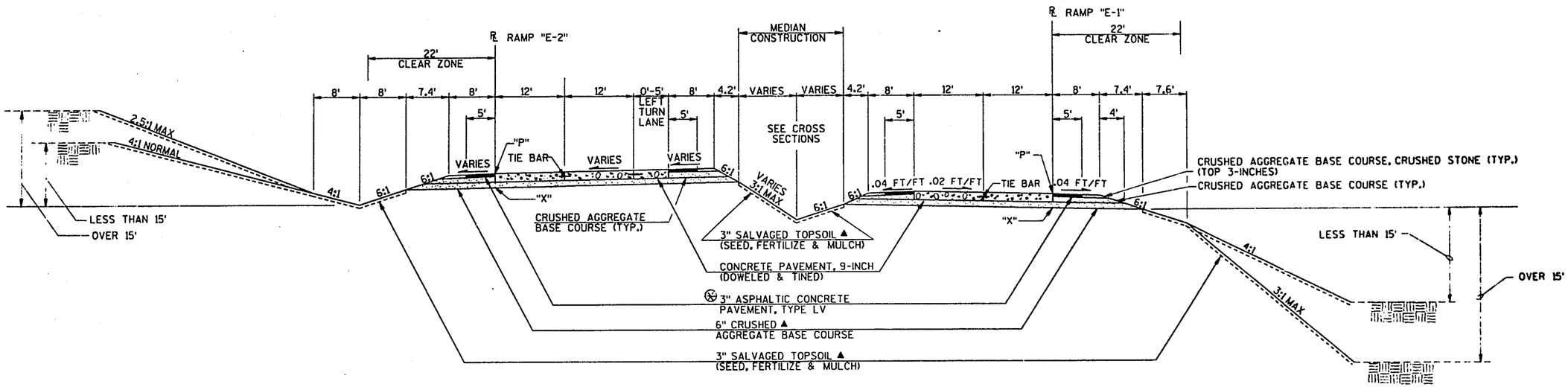
KEY MAP

STATE PROJECT NUMBER
1201-04-78

SHEET NO. 2.14

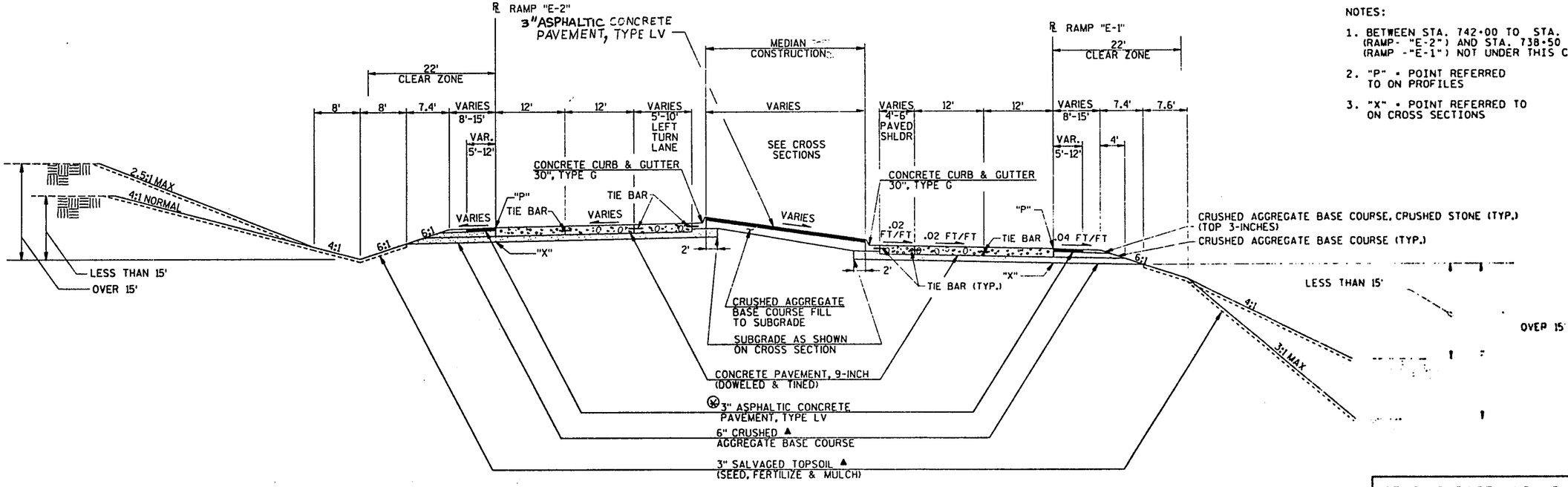
TYPICAL SECTIONS RAMPS "E-1" / "E-2"

USH 18 DANE COUNTY



RAMP "E-2" / RAMP "E-1" MEDIAN DETAIL

RAMP "E-2" STA. 742+60.75 TO STA. 747+37.49
RAMP "E-1" STA. 739+20.00 TO STA. 741+70.00
(SHOWN IN DIRECTION OF STATIONING)



RAMP "E-2" / RAMP "E-1" MEDIAN DETAIL

RAMP "E-2" STA. 739+60.00 TO STA. 742+60.75
RAMP "E-1" STA. 736+09.50 TO STA. 739+20.00
(SHOWN IN DIRECTION OF STATIONING)
⊗ ASPHALTIC SHOULDER RUMBLE STRIP (SEE SDD)

NOTES:

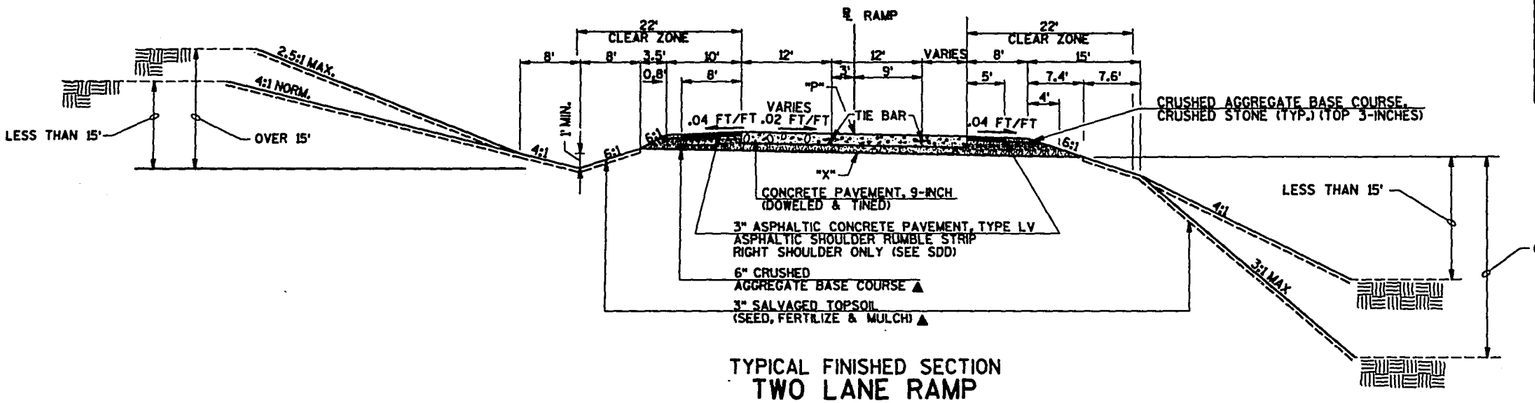
1. BETWEEN STA. 742+00 TO STA. 747+37.49 (RAMP "E-2") AND STA. 738+50 TO STA. 741+70 (RAMP "E-1") NOT UNDER THIS CONTRACT (▲).
2. "P" = POINT REFERRED TO ON PROFILES
3. "X" = POINT REFERRED TO ON CROSS SECTIONS

GRADING, BASE AND PAVING UNDER THIS CONTRACT

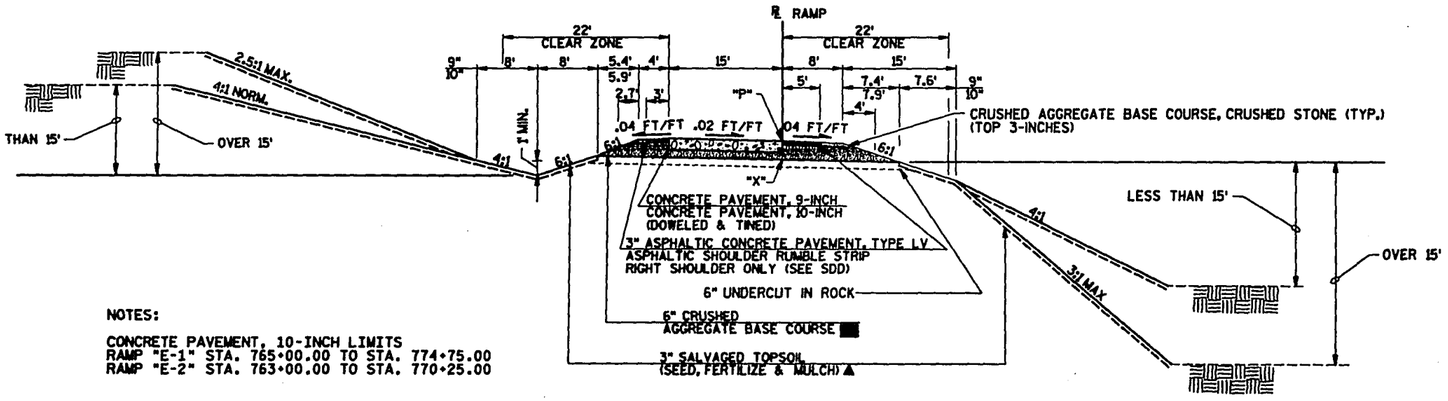
59.60.

LEVELS ON •

FILE NAME: DGN: 78205.DGN



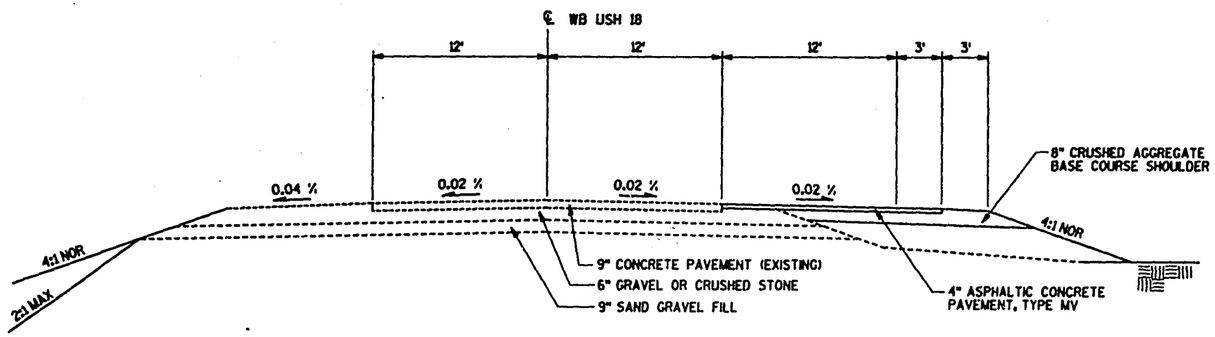
TYPICAL FINISHED SECTION
TWO LANE RAMP
RAMP "PB-4"
STA. 681+65.23 TO STA. 687+65.00



NOTES:

CONCRETE PAVEMENT, 10-INCH LIMITS
RAMP "E-1" STA. 765+00.00 TO STA. 774+75.00
RAMP "E-2" STA. 763+00.00 TO STA. 770+25.00

TYPICAL FINISHED SECTION
ONE LANE RAMP
RAMPS "E-1", "E-2", "PB-1", "PB-2", "PB-3", "PB-4"



TYPICAL SECTION
TEMPORARY PASSING LANE
USH WB AT CTH PB-N

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.0

TYPICAL SECTIONS RAMPS AND TEMP. PASSING LANE
USH 18 DANE COUNTY

NOTES:

1. RAMP CONSTRUCTION DOES NOT INCLUDE GRADING & BASE AT THE CTH "PB" RAMPS. (SEE PAVING DETAILS FOR LIMITS).
2. NOT UNDER THIS CONTRACT (▲).
3. "P" = POINT REFERRED TO ON PROFILE.
4. "X" = POINT REFERRED TO ON CROSS SECTION.
5. (■) - REQUIRED BETWEEN STA. 726+00 TO STA. 738+50 (RAMP E-1) AND STA. 729+00 TO STA. 742+00 (RAMP E-2)

PLOT SCALE: 1.0'/IN.
PLOT NAMES: [illegible]
59.60
SL
LEVELS ON
FILE NAME: HDGN: 78206.DGN
WISDOT/CADDS SHEET 42

KEY MAP

STATE PROJECT NUMBER
1201-04-78

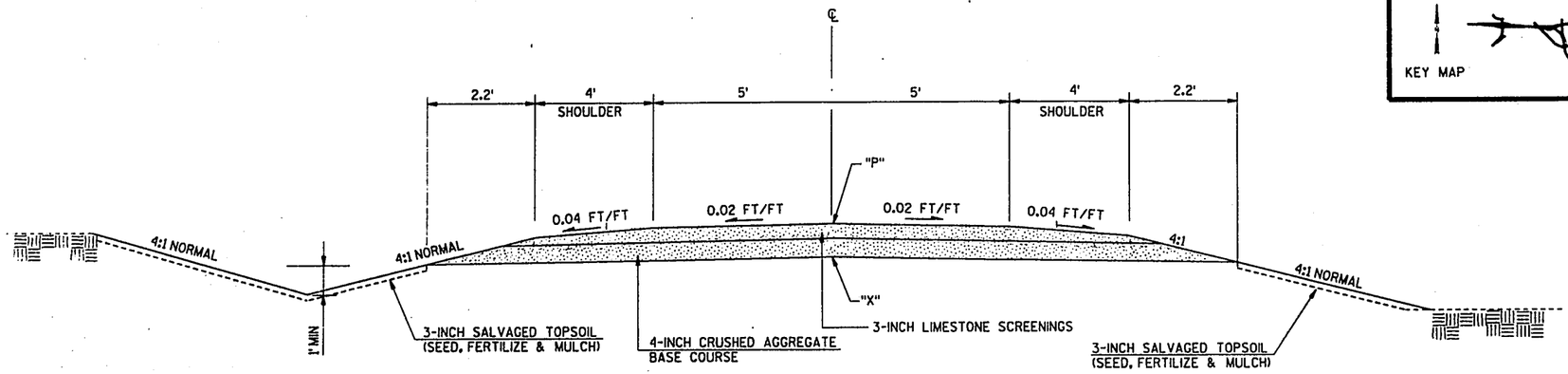
SHEET NO
2.10

TYPICAL SECTION SIDEROADS

USH 18 DANE COUNTY

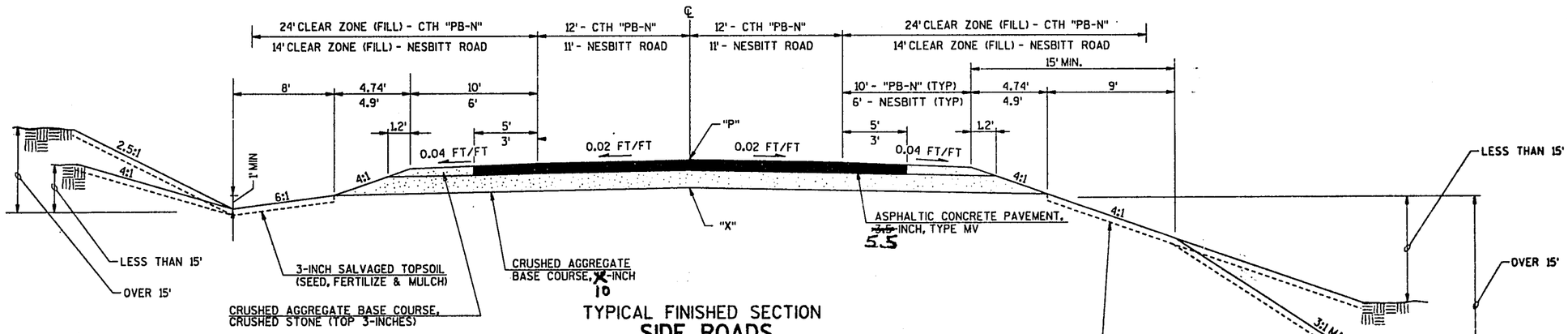
NOTES:

1. GRADING, BASE & PAVEMENT FOR CTH "PB-N". LOCAL ROAD & NESBITT ROAD ARE TO BE CONSTRUCTED UNDER THIS CONTRACT. EXCEPT THAT - GRADING BETWEEN STA. 49+00 "NESBITT" AND STA. 52+00 "CTH PBN" BY OTHERS UNDER 1201-04-72.
2. "P" = POINT REFERRED TO ON PROFILE.
3. "X" = POINT REFERRED ON CROSS SECTION.



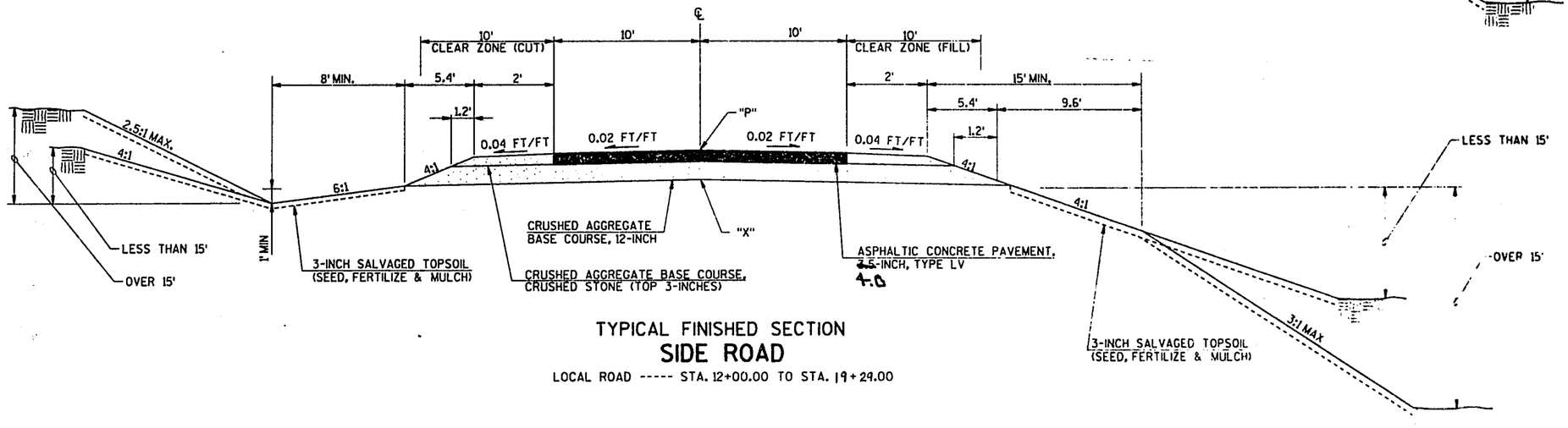
TYPICAL FINISHED SECTION
MILITARY RIDGE RECREATION TRAIL

STA. 3+00.00 TO STA. 8+00.00 (AT EAST INTERCHANGE)



TYPICAL FINISHED SECTION
SIDE ROADS

NESBITT ROAD ------- STA. 19+00.00 TO STA. 50+00.00
CTH "PB-N" ----------STA. 50+00.00 TO STA. 59+90.00



TYPICAL FINISHED SECTION
SIDE ROAD

LOCAL ROAD ----- STA. 12+00.00 TO STA. 19+24.00

59.60.

LEVELS ON •

FILE NAME: HDGN: 78207.DGN

KEY MAP

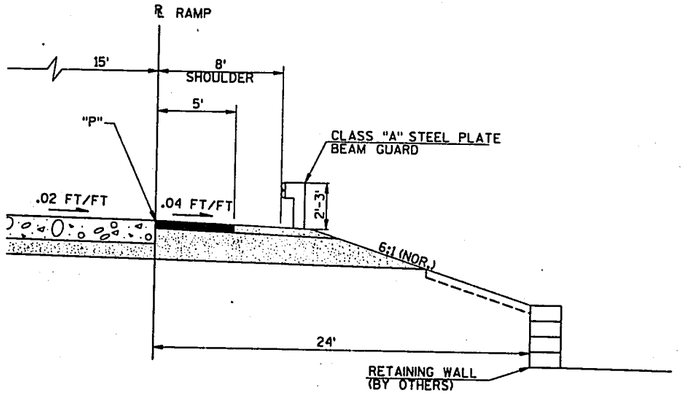
STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.11

CONSTRUCTION DETAIL
RAMP "E-1" / "MRRT"

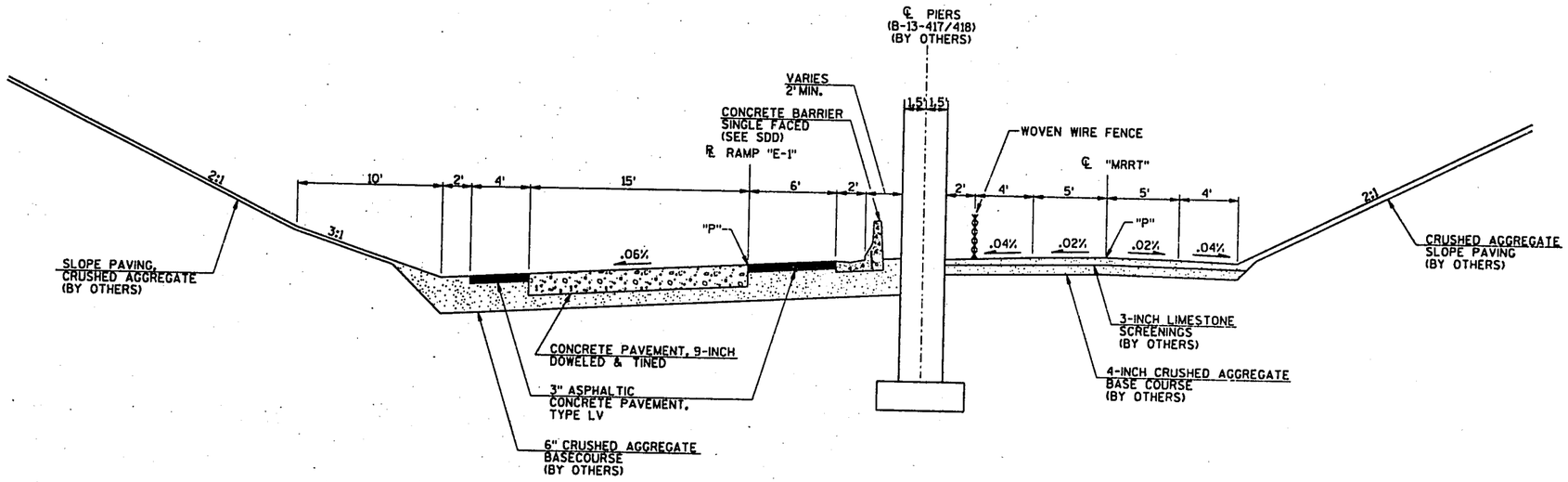
USH 18

DANE COUNTY



RAMP "E-1" WITH BEAM GUARD AT RETAINING WALL DETAIL

STA. 758+63.50 TO STA. 762+75.00



RAMP "E-1" / "MRRT" WITH CONCRETE BARRIER DETAIL

STA. 742+50.00 TO STA. 744+00.00

59.60

5½

LEVELS ON

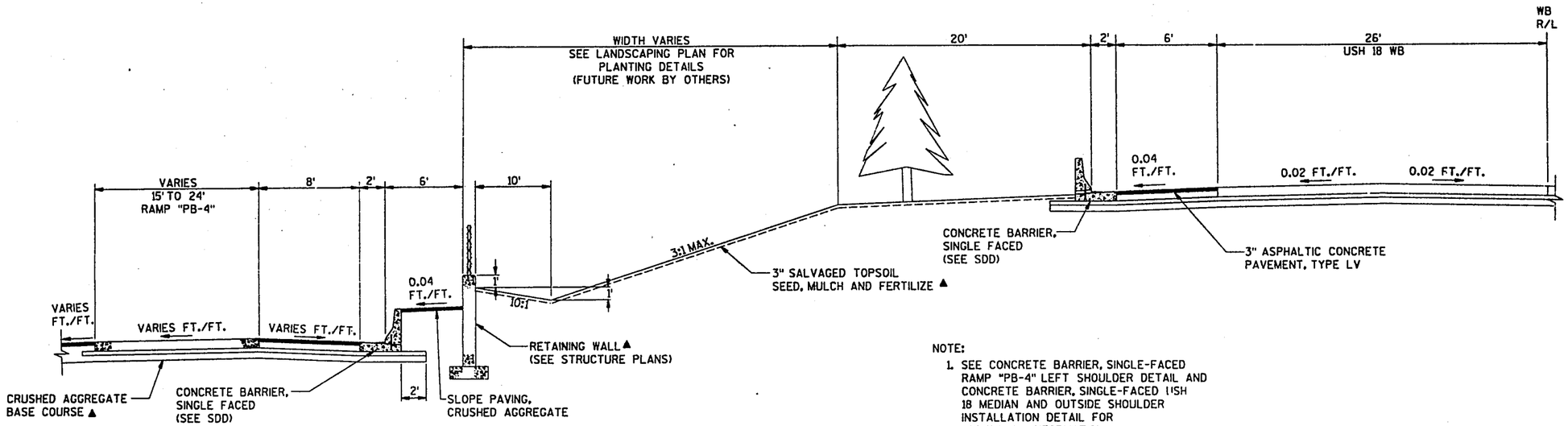
FILE NAME: HDGN: 78206A.DGN

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.1

CONSTRUCTION DETAILS

USH 18 | DANE COUNTY

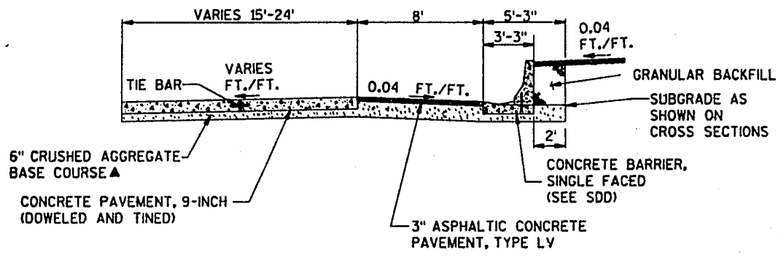


NOTE:

1. SEE CONCRETE BARRIER, SINGLE-FACED RAMP "PB-4" LEFT SHOULDER DETAIL AND CONCRETE BARRIER, SINGLE-FACED USH 18 MEDIAN AND OUTSIDE SHOULDER INSTALLATION DETAIL FOR ADDITIONAL INFORMATION.
2. CONSTRUCTED PREVIOUSLY UNDER I.D. 1201-04-72 (▲)

TYPICAL GRADING

FOR AREA BETWEEN RAMP "PB-4" AND USH 18 WB

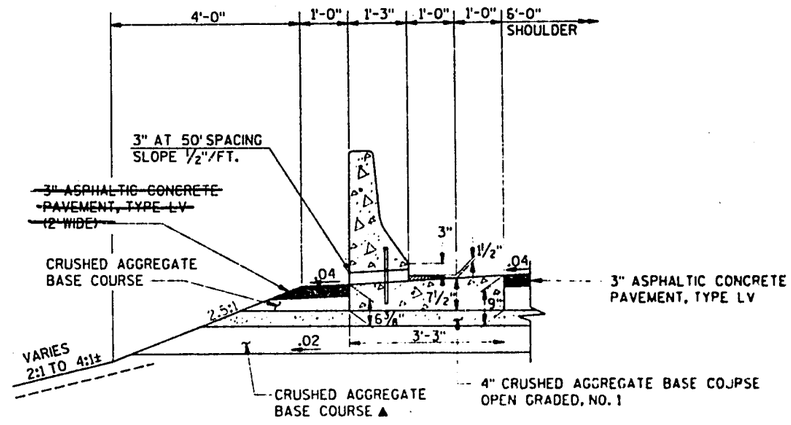


CONCRETE BARRIER, SINGLE-FACED

RAMP "PB-4" SHOULDER DETAIL

NOTE:

1. CONSTRUCTED PREVIOUSLY UNDER I.D. 1201-04-72 (▲)



CONCRETE BARRIER, SINGLE-FACED

USH 18 MEDIAN AND OUTSIDE SHOULDER INSTALLATION DETAIL

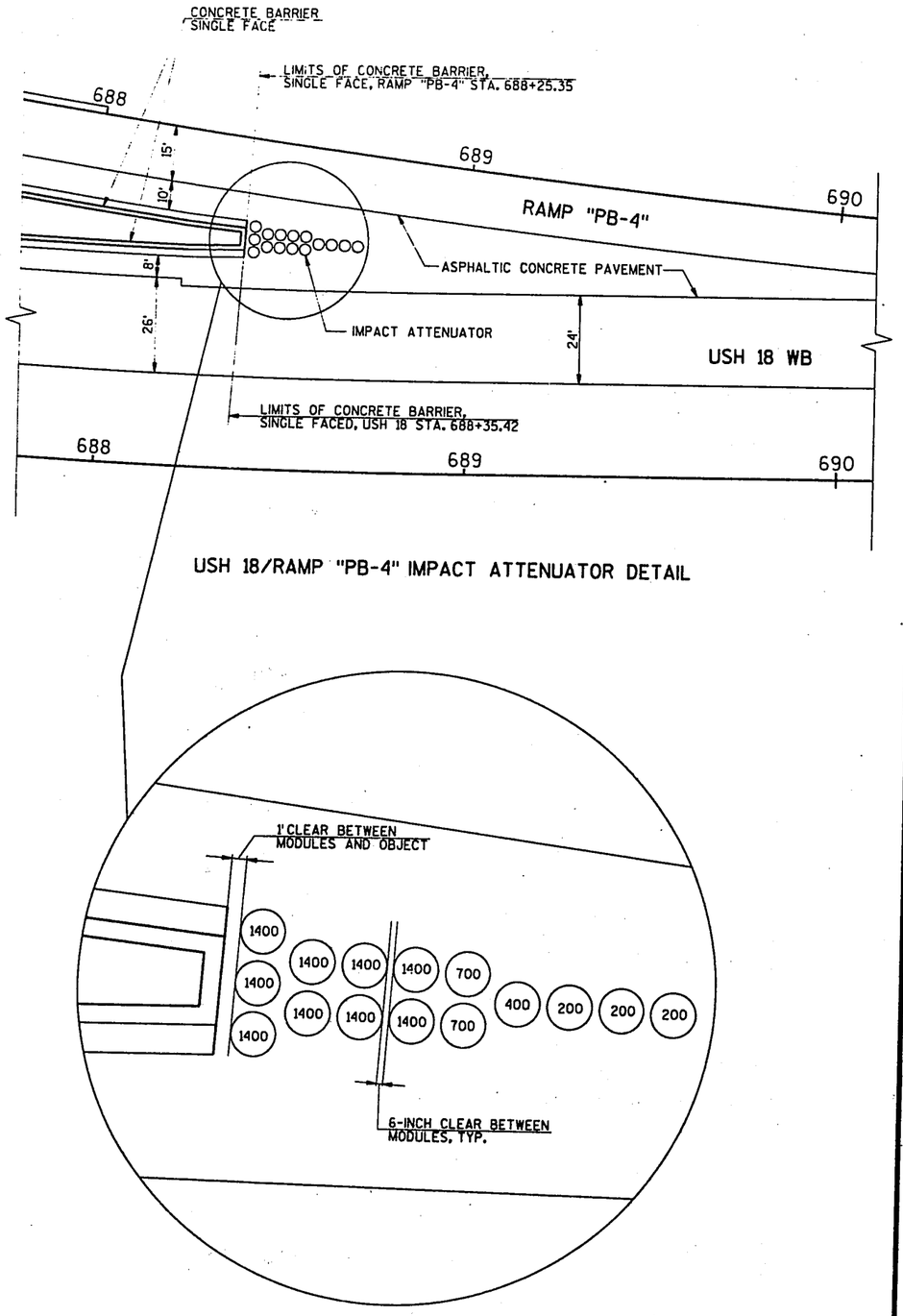
NOTE:

1. CONSTRUCTED PREVIOUSLY UNDER I.D. 1201-04-72 (▲)

59.60

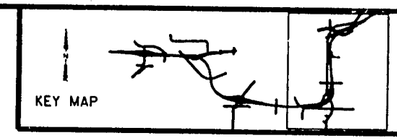
LEVELS ON

FILE NAME: HDGN: 78209.DGN



USH 18/RAMP "PB-4" IMPACT ATTENUATOR DETAIL

LAYOUT OF INERTIAL BARREL SYSTEM

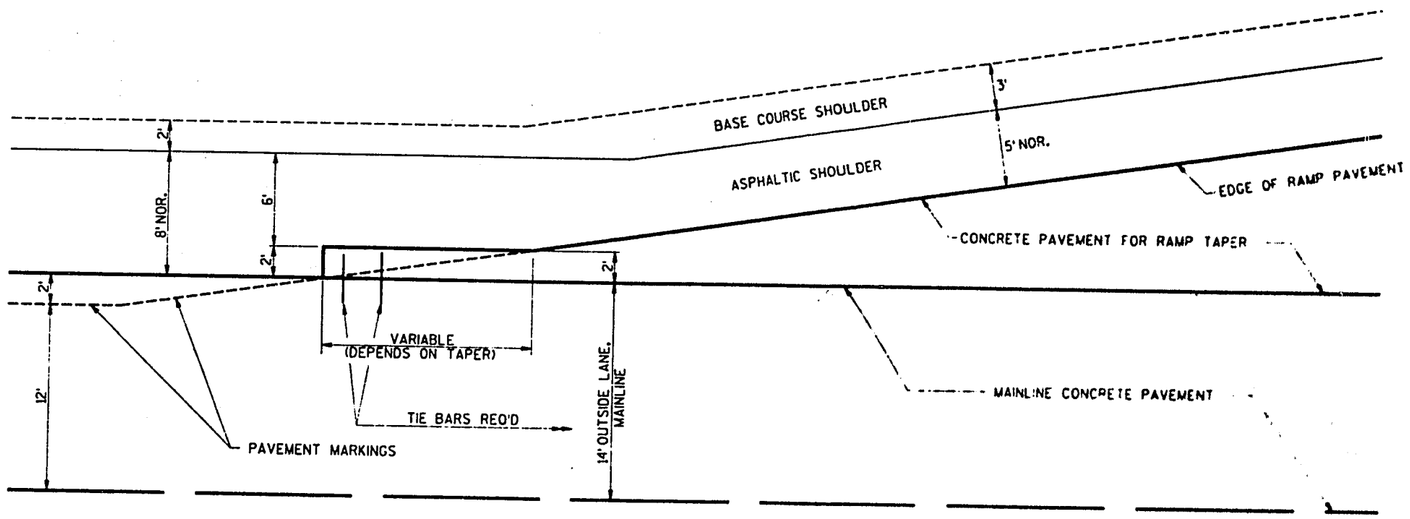


STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.1

CONSTRUCTION DETAIL

USH 18 DANE COUNTY



TYPICAL "END OF RAMP TAPER" CONSTRUCTION DETAIL

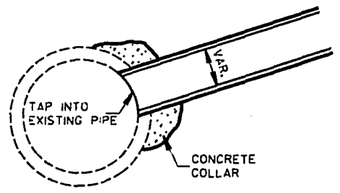
59.60.
51.
20.
LEVELS ON

FILE NAME: HDGN: 78212.DGN

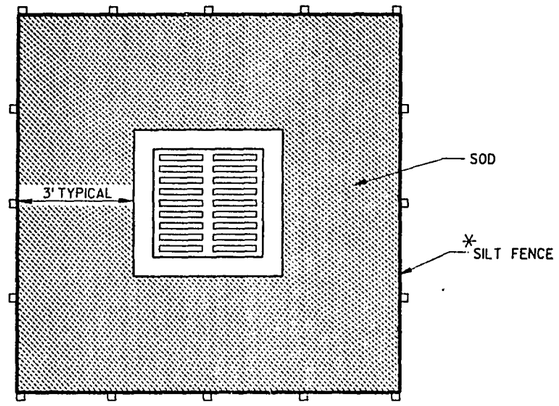
CONSTRUCTION DETAILS

USH 18 — DANE COUNTY

KEY MAP

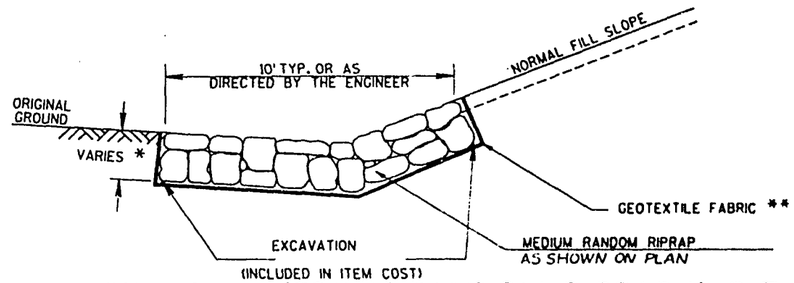


DETAIL FOR CONCRETE COLLAR



SOD AT INLETS

* TEMPORARY BRACE WITH 2"X4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER

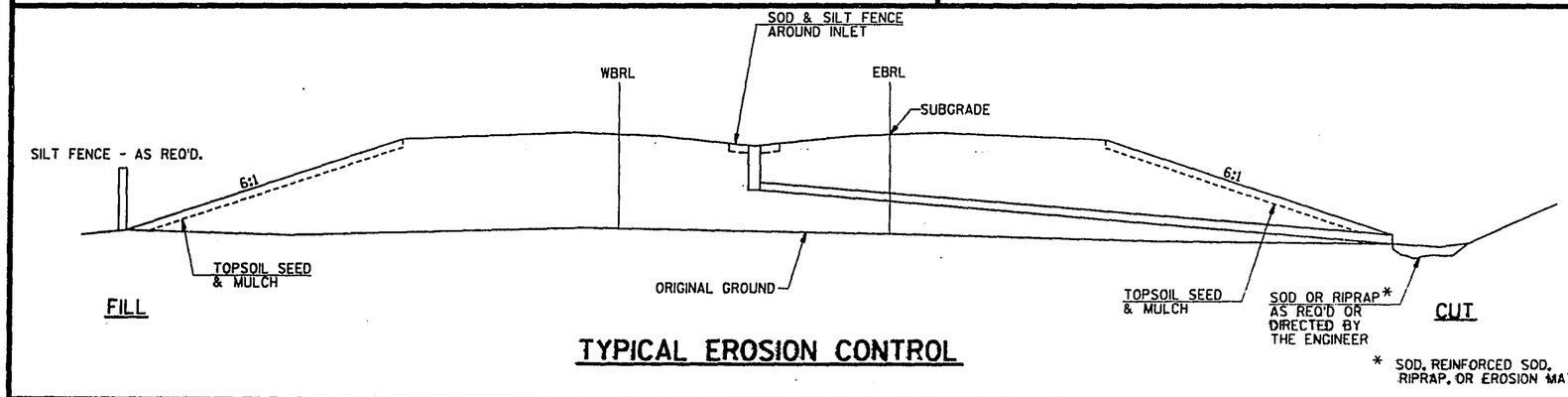


DETAIL FOR MEDIUM RANDOM RIPRAP IN DITCHES

MEDIUM RANDOM RIPRAP CAN BE MACHINE SELECTED AND MACHINE PLACED. NEED NOT BE SMOOTH.

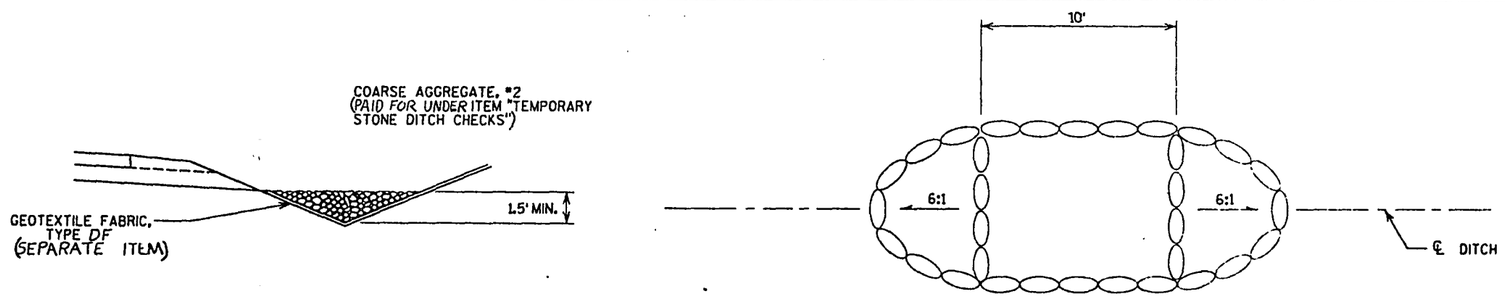
* 1.5' FOR MEDIUM RANDOM RIPRAP

** TYPE "R" FOR MEDIUM RANDOM RIPRAP AND RIPRAP

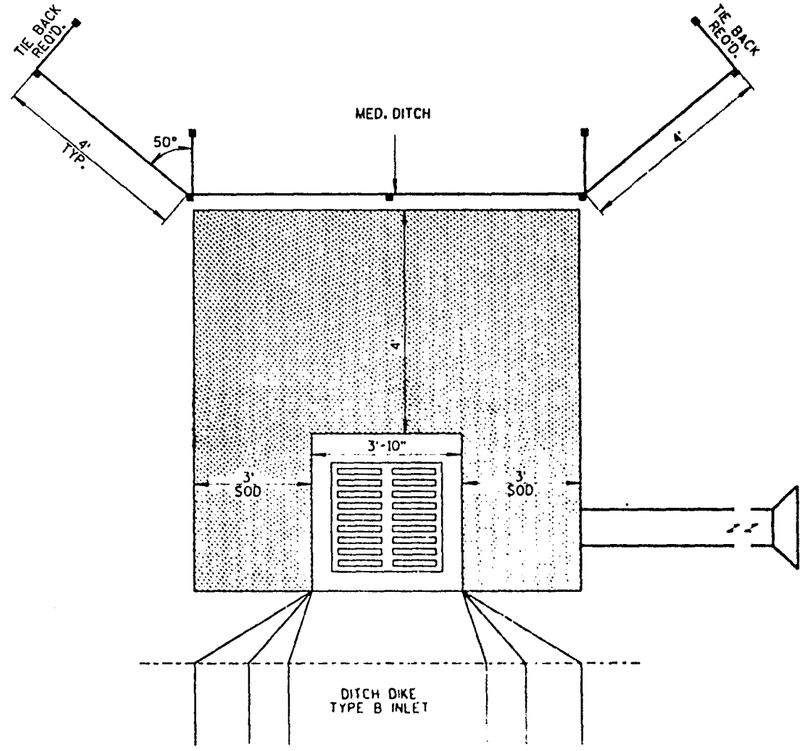


TYPICAL EROSION CONTROL

* SOD, REINFORCED SOD, RIPRAP, OR EROSION MAT



TEMPORARY STONE DITCH CHECKS



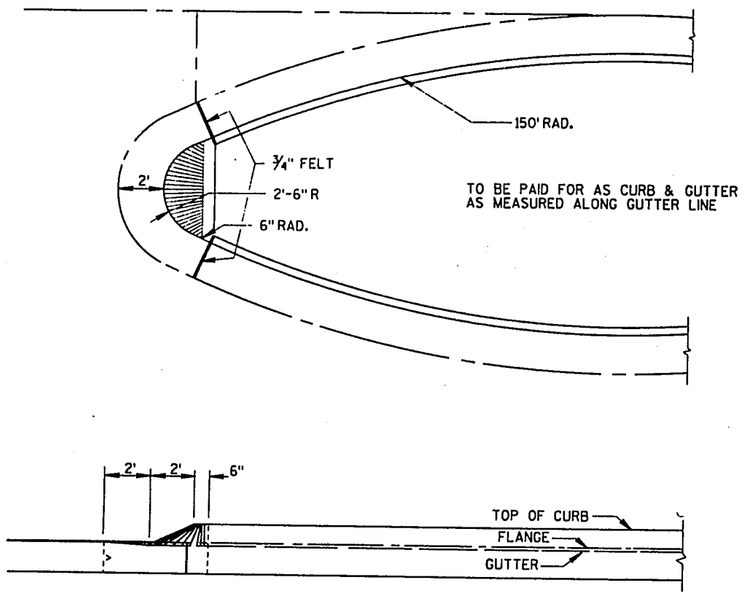
DETAILS FOR CONSTRUCTING SILT FENCE AROUND MEDIAN INLET OR AS DIRECTED BY THE ENGINEER

SILT FENCE AT INLET

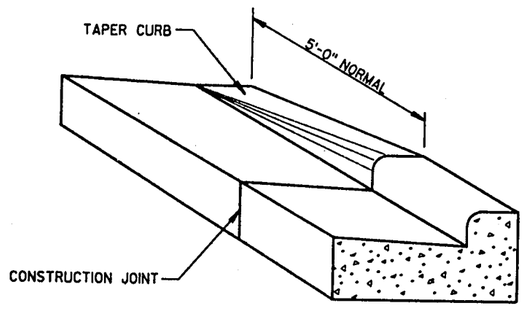
59.60, 51,

LEVELS ON •

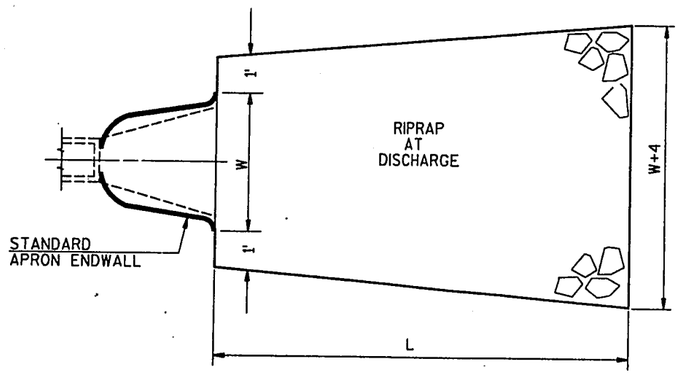
FILE NAME: HDGN: 78208.DGN



DETAIL OF ISLAND NOSE
(TO BE USED FOR ALL ISLAND NOSE RADII)

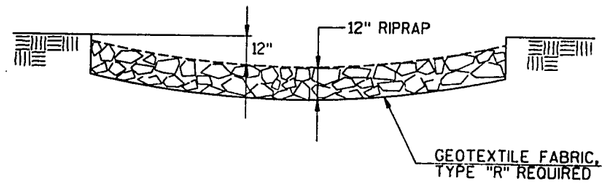


DETAIL OF CURB & GUTTER TERMINI

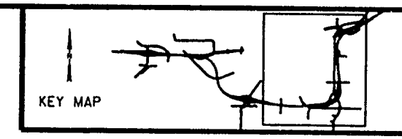


L= 3W OR 10' MIN. IF S < 3%
L= 3W + S%/2 OR 10' MIN. IF 3% < S < 10%
S= PIPE SLOPE

TYPICAL PLACEMENT OF RIPRAP ALONG ENDWALLS
(REQUIRED AT ALL NEW CROSSDRAINS)



DETAIL FOR
RIPRAP TREATMENT AT CULVERTS



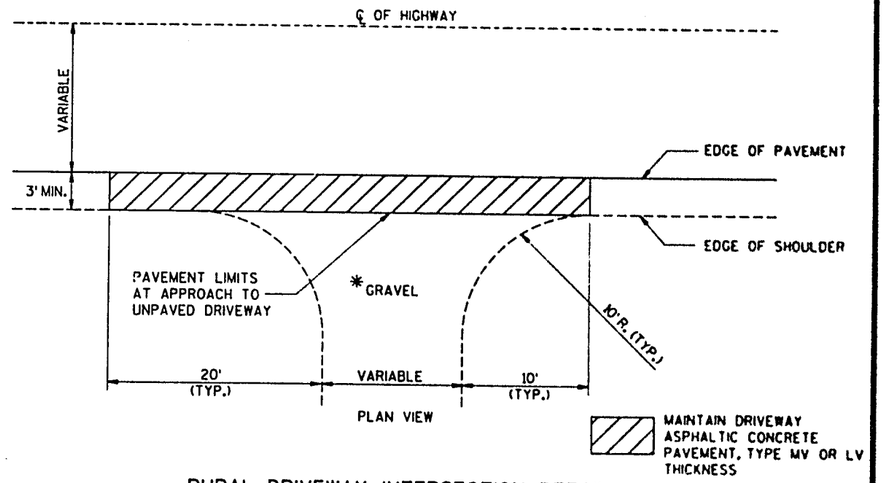
STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.15

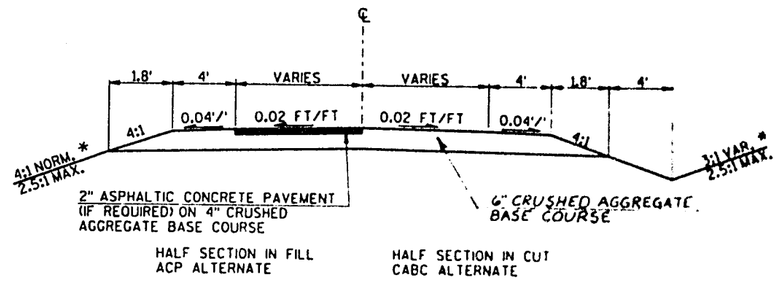
CONSTRUCTION DETAILS

USH 18

DANE COUNTY

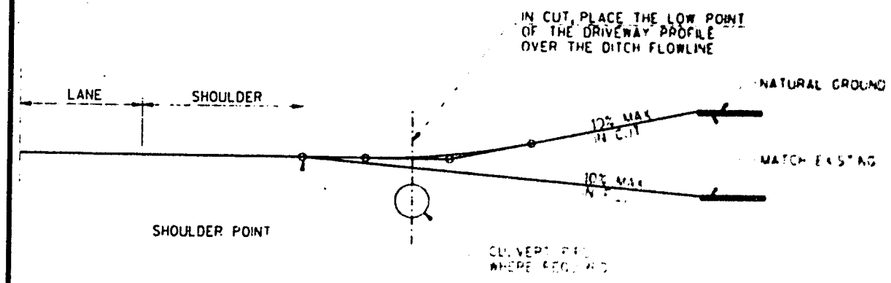


RURAL DRIVEWAY INTERSECTION DETAIL
*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED IN KIND TO DRIVEWAY PAVEMENT MATCH POINT.



*6:1 WITHIN CLEAR ZONE

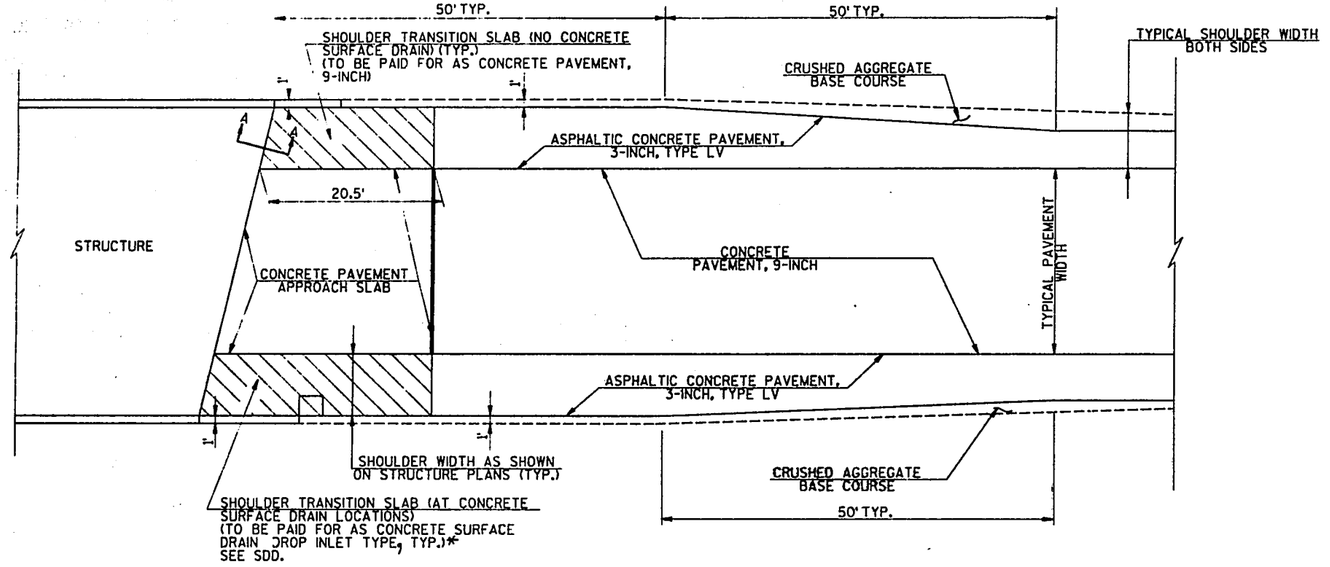
TYPICAL SECTION FOR
PRIVATE ENTRANCES



TYPICAL RURAL DRIVEWAY DETAIL
RURAL DRIVEWAY DETAIL

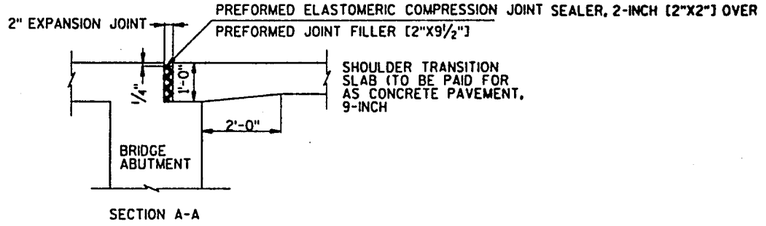
59.60
5!
LEVELS ON *

FILE NAME: HDGN: 7821LDGN

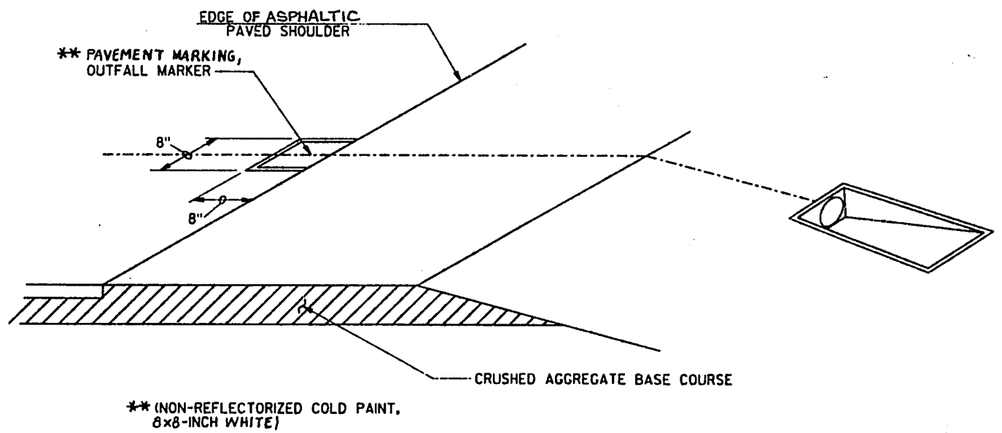


SHOULDER PAVEMENT DETAIL AT BRIDGE APPROACHES (TYP.)

*SEE SDD "CONCRETE SURFACE DRAIN DROP INLET TYPE AT STRUCTURES"



SECTION A-A



**(NON-REFLECTORIZED COLD PAINT, 8x8-INCH WHITE)

PIPE UNDERDRAIN OUTLETS

ELEVATION VIEW

KEY MAP

STATE PROJECT NUMBER 1201-04-78

SHEET NO 2.16

CONSTRUCTION DETAILS

USH 18 DANE COUNTY

59.60

20.

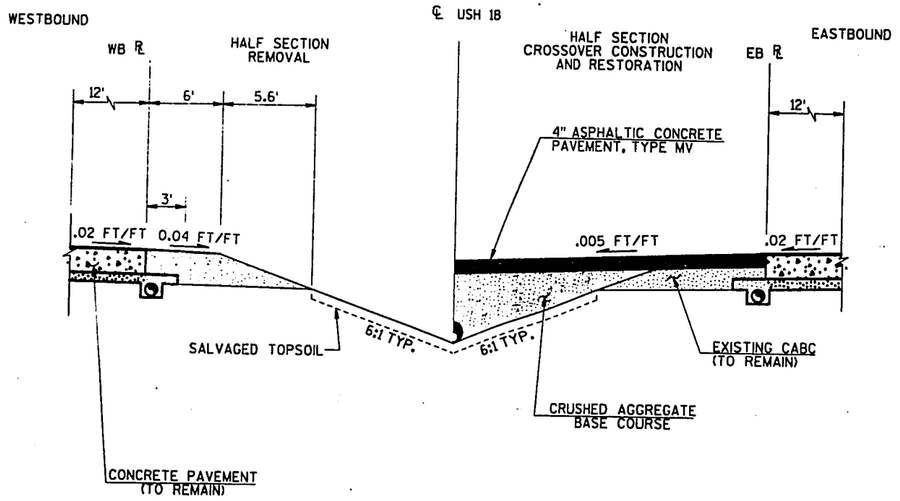
LEVELS ON -

FILE NAME: HDGN: 78210.DGN

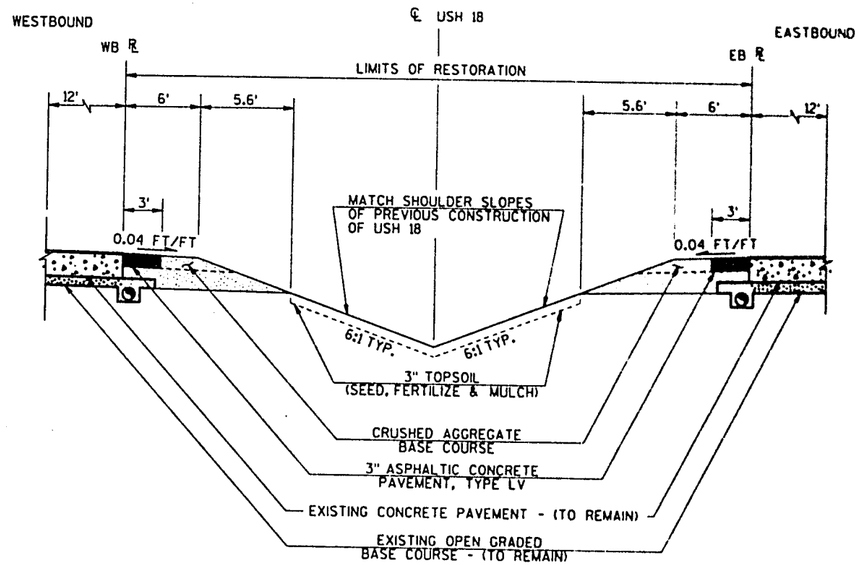
STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.17

KEY MAP

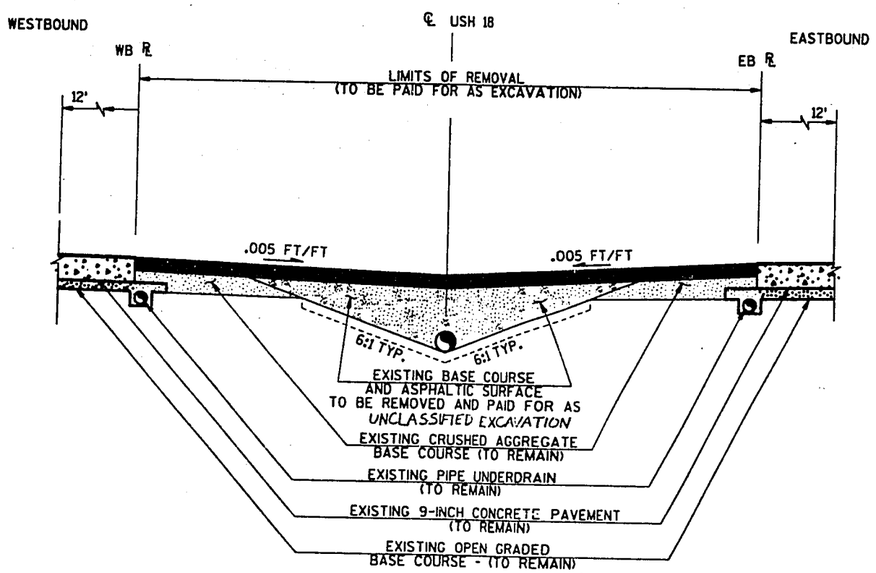
CONSTRUCTION DETAILS
TEMPORARY MEDIAN CROSSOVER
USH 18 DANE COUNTY



TEMPORARY MEDIAN CROSSOVER
CONSTRUCTION SECTION
STA. 770+00 AREA



TEMPORARY MEDIAN CROSSOVER
RESTORATION SECTION
STA 770+00 AREA, STA 880+00 AREA

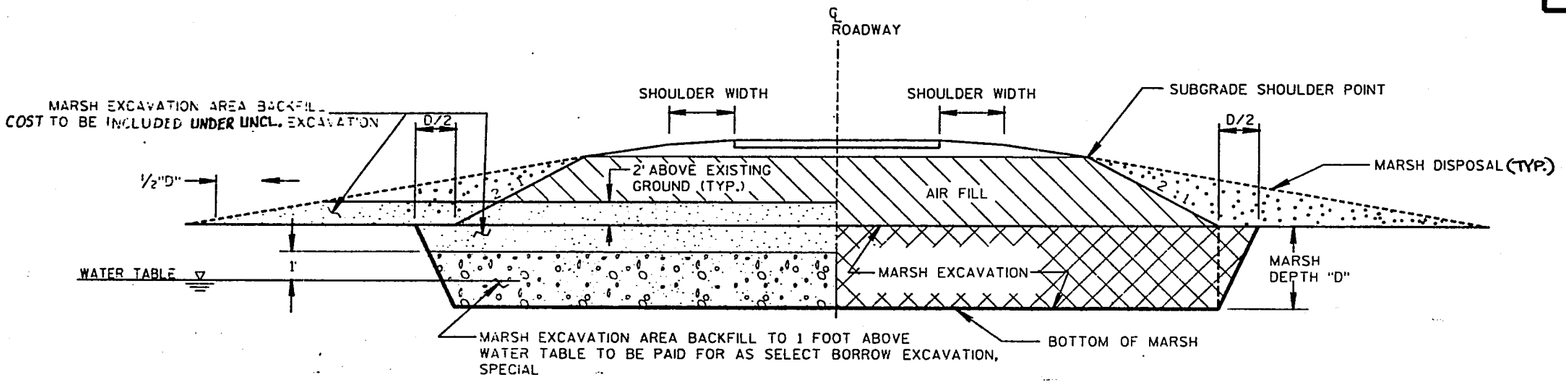


TEMPORARY MEDIAN CROSSOVER
REMOVAL SECTION
STA. 770+00 AREA
STA. 880+00 AREA

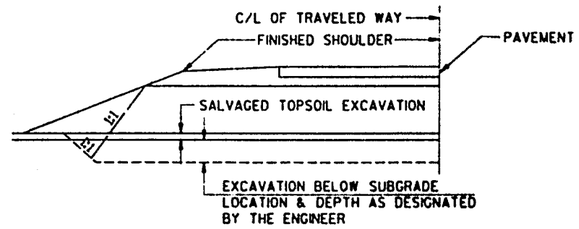
59.60

LEVELS ON

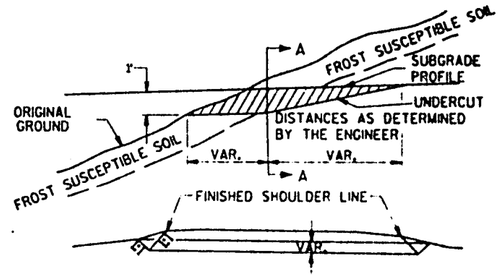
FILE NAME: HDGN: 78213.DGN



TYPICAL MARSH EXCAVATION AND BACKFILL DETAIL
STA. 765+00 – 798+00



DETAIL FOR EXCAVATION BELOW SUBGRADE



SECTION A-A
CROSS SECTION SHOWING UNDERCUT

DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUTS

59.60

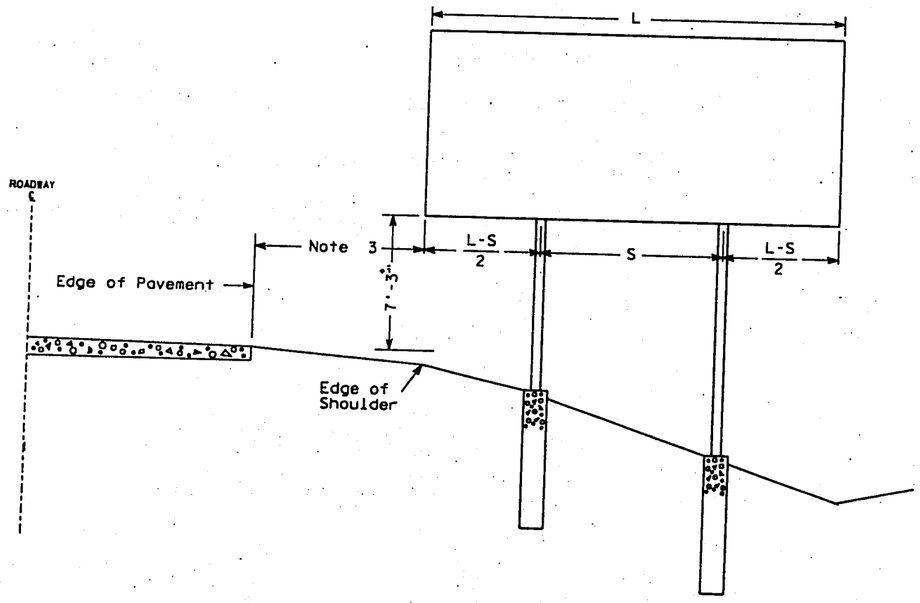
LEVELS ON -

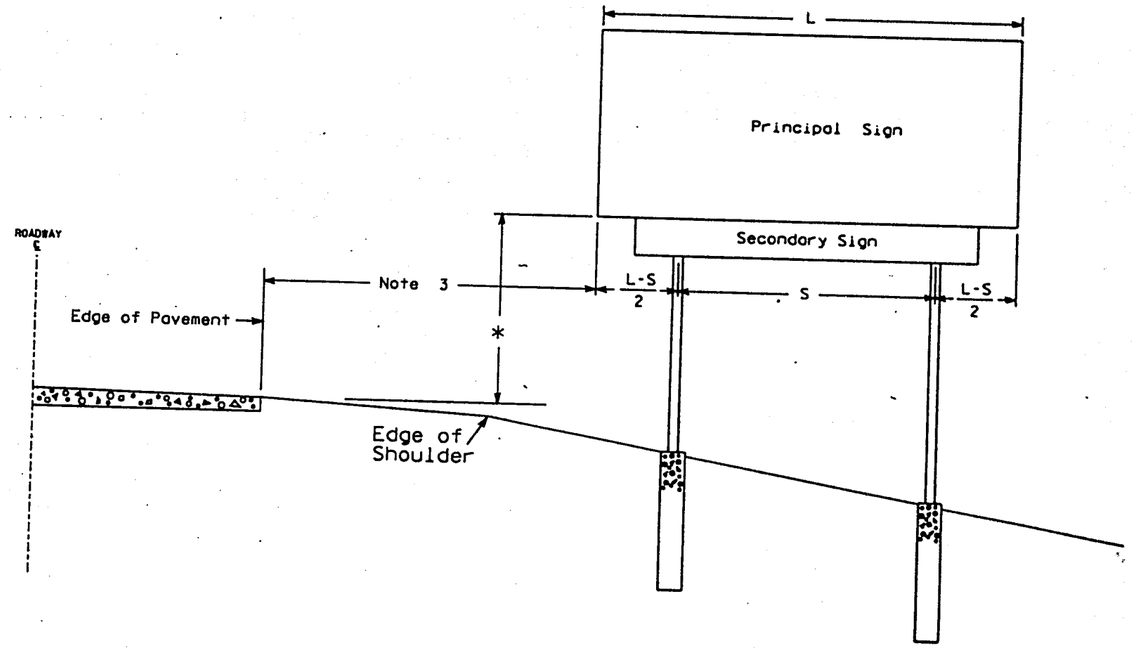
FILE NAME: HDGN: 78214.DGN

PLOT NAME: A4-1
PLOT SCALE: 48:1
FILE NAME: A4-1
ORIGINATOR: AL WIEDENBECK
LEVELS ON -23.
10.

STATE PROJECT NUMBER 1201-04-78

SHEET NO 2.19





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18ft, and the space between any two posts shall not be less than 9ft.
3. The sign offset distance shall be as listed in the plan.
4. The (±) tolerance shown on this sheet is 3in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.

* Clearance is 8'- 3" (±) when the secondary sign is 3ft or less in height. For secondary signs larger than 3ft, the clearance to the bottom of the secondary sign shall be 5'- 3" (±).

DATE DRAWN 1-7-93 DATE REDRAWN

DATE REVISED

TYPICAL INSTALLATION OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

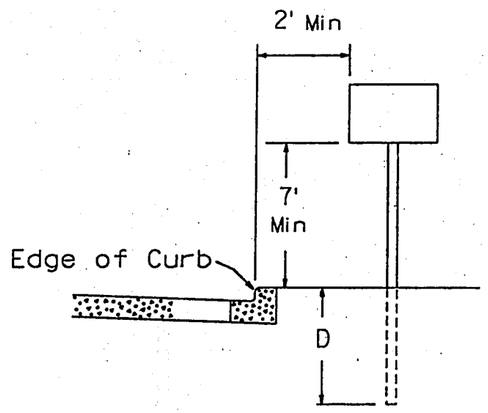
DATE 6-16-

PLATE NO. 24.10

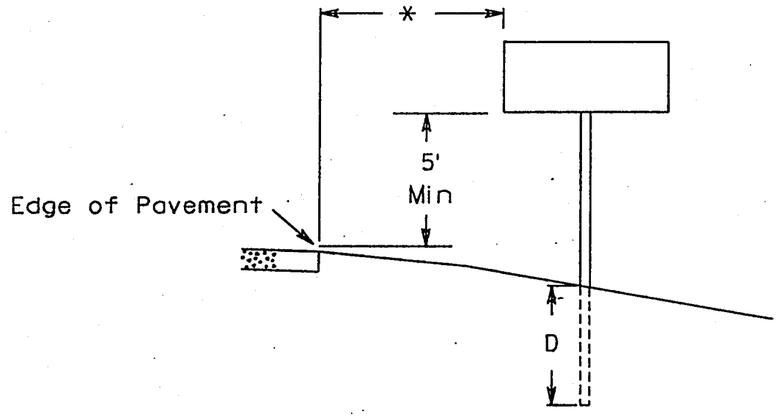
TR_STDPLATE A41.DGN

58.59.

URBAN AREA



RURAL AREA

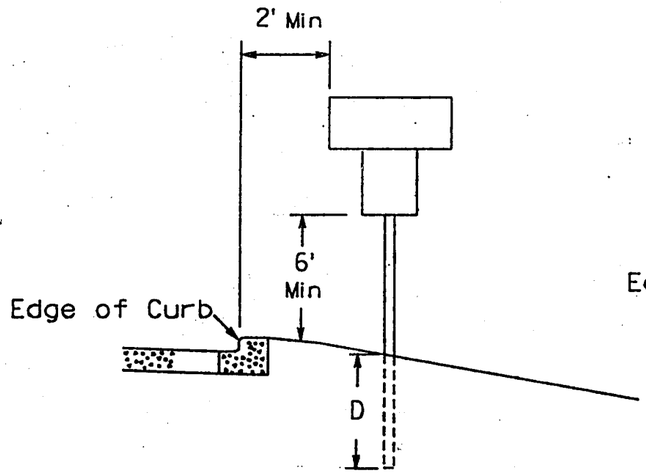


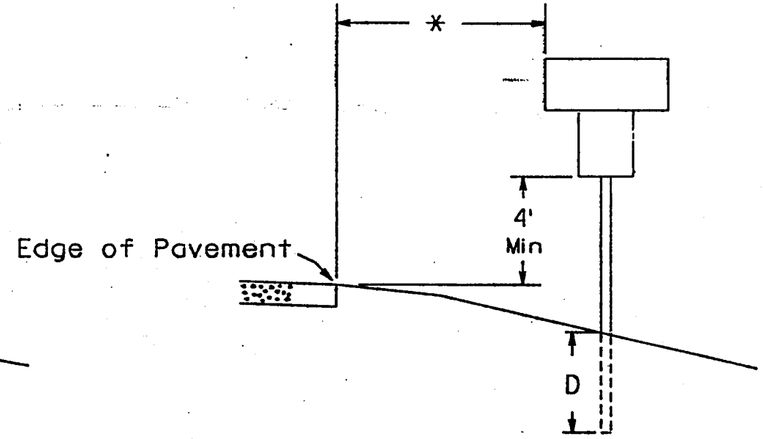
GENERAL NOTES

1. Sign assemblies wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. See plate A4-4 for typical installations.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'





* 12 feet minimum from edge of pavement. Where there is a paved shoulder, 6' minimum from edge of paved shoulder, but at least 12 feet from edge of pavement.

DATE DRAWN 9-12-91 DATE REDRAWN
DATE REVISED 1-14-92

TYPICAL INSTALLATION OF TYPE II SIGNS ON SINGLE POSTS

[illegible] DEPT OF TRANSPORTATION

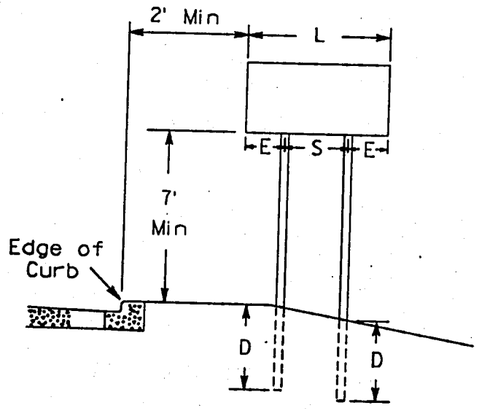
APPROVED: Edward F. Reich
1/21/92

A4 1.9

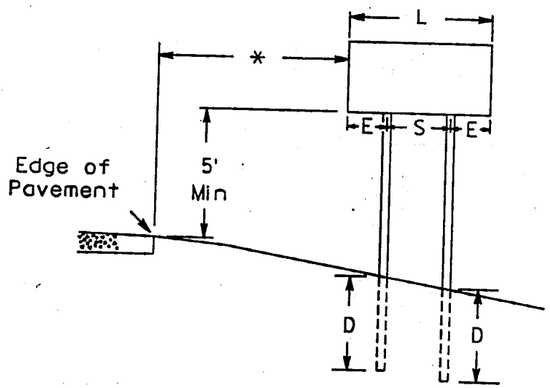
LEVELS ON • 2.3.

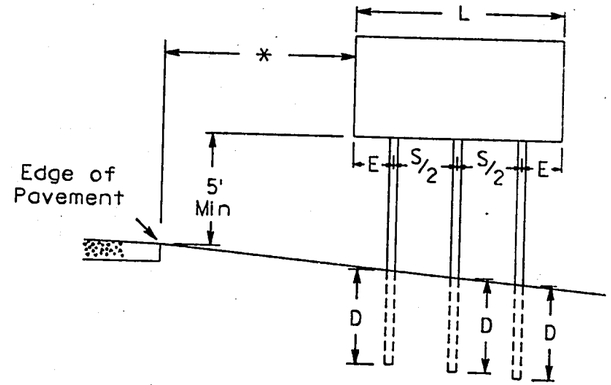
TR.STDPLATE A43.DGN

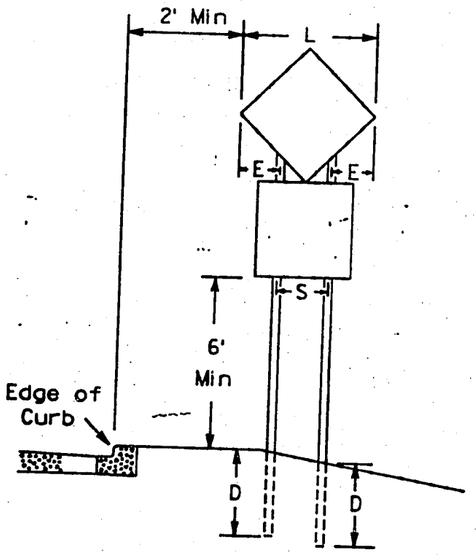
URBAN AREA

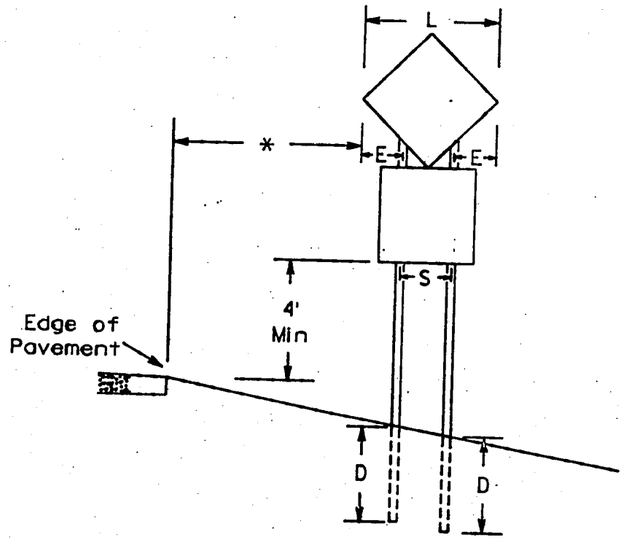


RURAL AREA









GENERAL NOTES

1. For 3 post installations, post spacing is S/2 and S must be greater than 7'-0"
2. For 4 post installations, post spacing is S/3 and S must be greater than 10'-6"

* 12 feet minimum from edge of pavement. Where there is a paved shoulder, 6' minimum from edge of paved shoulder, but at least 12 feet from edge of pavement.

DIAMOND SHAPED SIGNS		
L	S	E
Less than 60"	20"	L/2 - 10
60"--72"	32"	L/2 - 16
Greater than 72"	3 L/5	L/5

SIGN SHAPE OTHER THAN DIAMOND (Two Post Installations)		
L	S	E
Less than 60"	L-24"	12"
60" or more	3 L/5	L/5

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

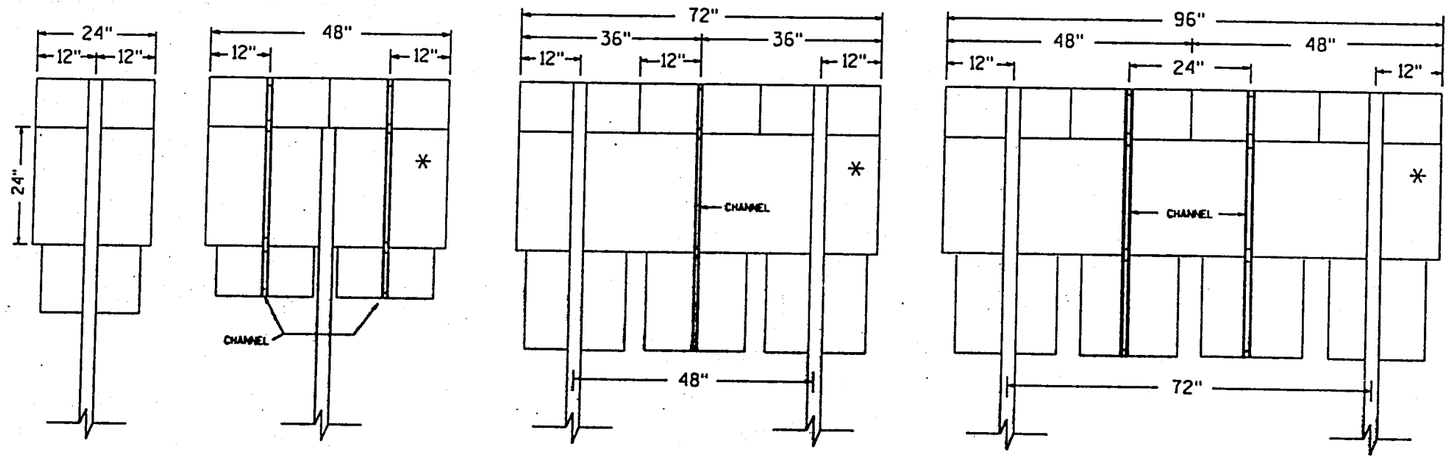
DATE DRAWN 6-3-87 DATE REDRAWN 10-1-91
DATE REVISED 11-6-92

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

APPROVED

DATE 1/22/92 STANDARD A4-4.3

LEVELS ON - 2.3



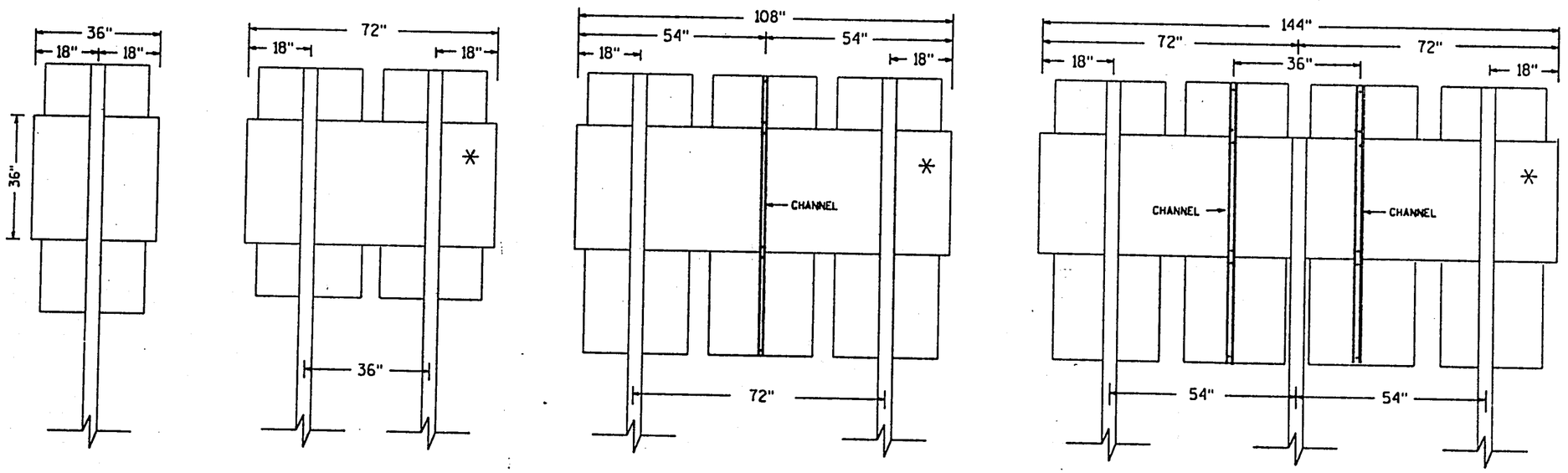
NOTES:

1. Post spacing shall be according to this detail but post embedment depth shall be in accordance with A4-4.
2. Channel material shall be as specified in Section 633 of Std. Specs. and weight shall be approx. 1.4 lbs/ft.
3. Base material for a multiple marker head panel (*) shall be one piece high density overlay plywood. All other materials within the assembly can be either plywood or aluminum.

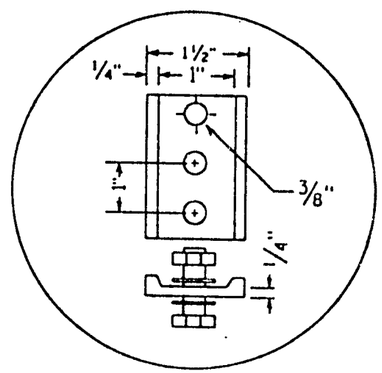
CHANNEL HARDWARE:

Aluminum Sign components: -1/4" x 3/4" bolt and 1/4" flat washers

Plywood Sign Components: -1/4" x 1 1/4" bolt and 1/4" flat washers



CHANNEL DETAIL



DATE DRAWN 6-5-87 DATE REDRAWN
DATE REVISED

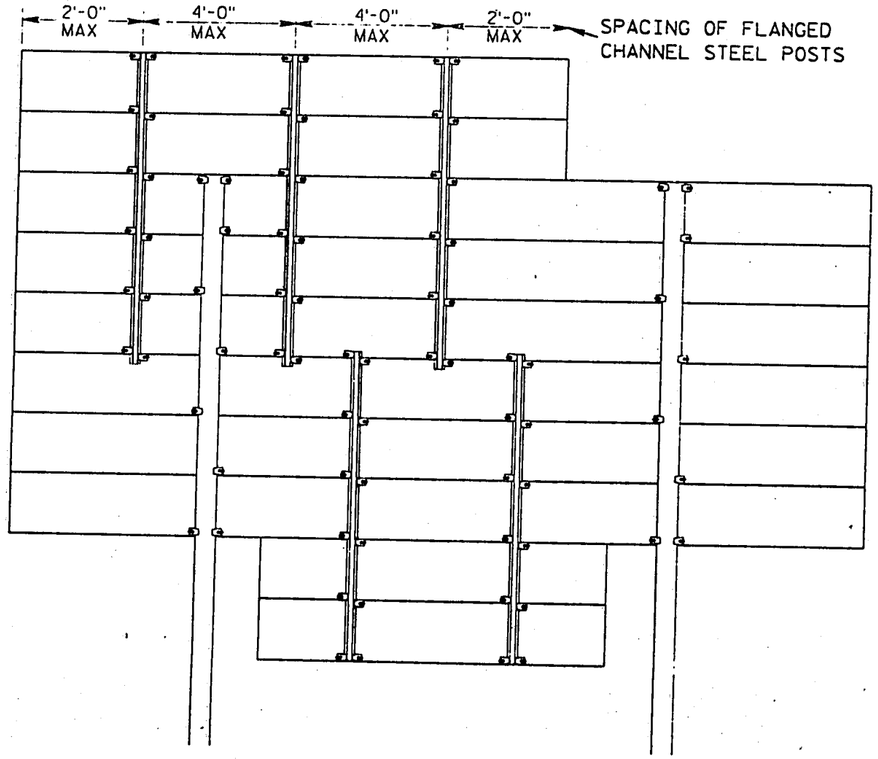
TYPICAL PANEL INSTALLATION FOR J TYPE ASSEMBLIES

WISCONSIN DEPT. OF TRANSPORTATION
APPROVED
State Traffic Engineer
DATE

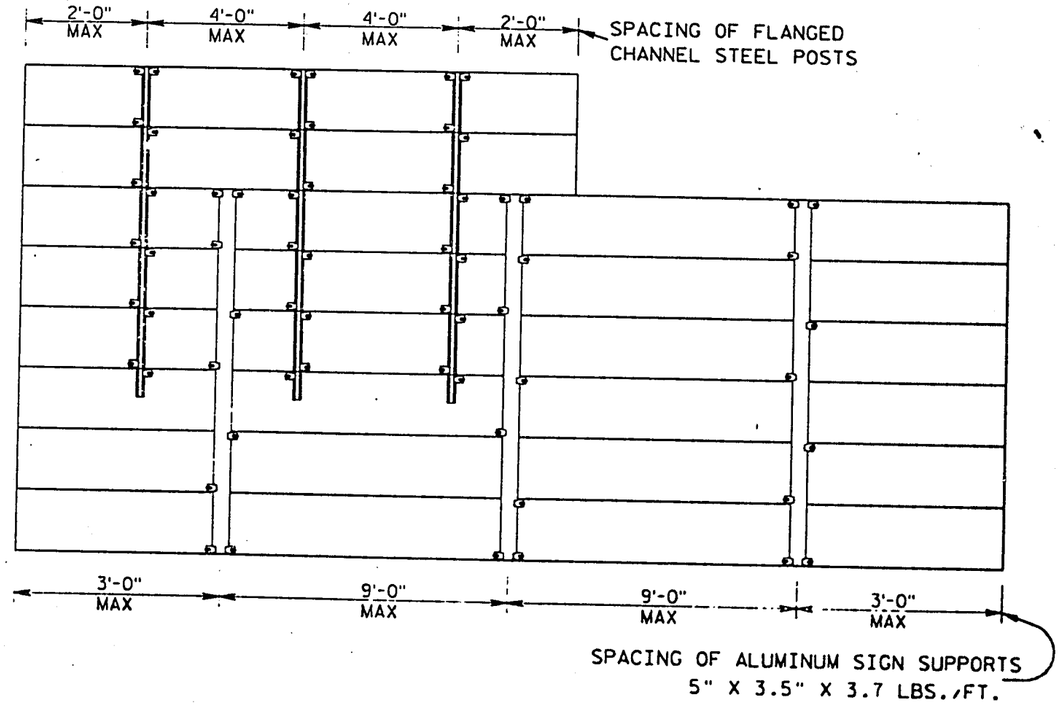
58.59.
LEVELS ON + 1.2.
10.

58.59.

GROUND MOUNTED SIGN



SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to section 633 of STANDARD SPECIFICATIONS and shall be furnished and paid for under a separate item or if not, as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:
   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'-0" - 12'-0" = 3 CHANNELS
   PANEL LENGTH 13'-0" OR MORE = 4 CHANNELS
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide two (2) post clips at top and bottom of each Guide sign and alternate interior clips. Post Clip other signs, EXIT NUMBER or NEXT EXIT as shown.

DATE DRAWN 6-11-87 DATE REDRAWN
DATE REVISED 11-23-92

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

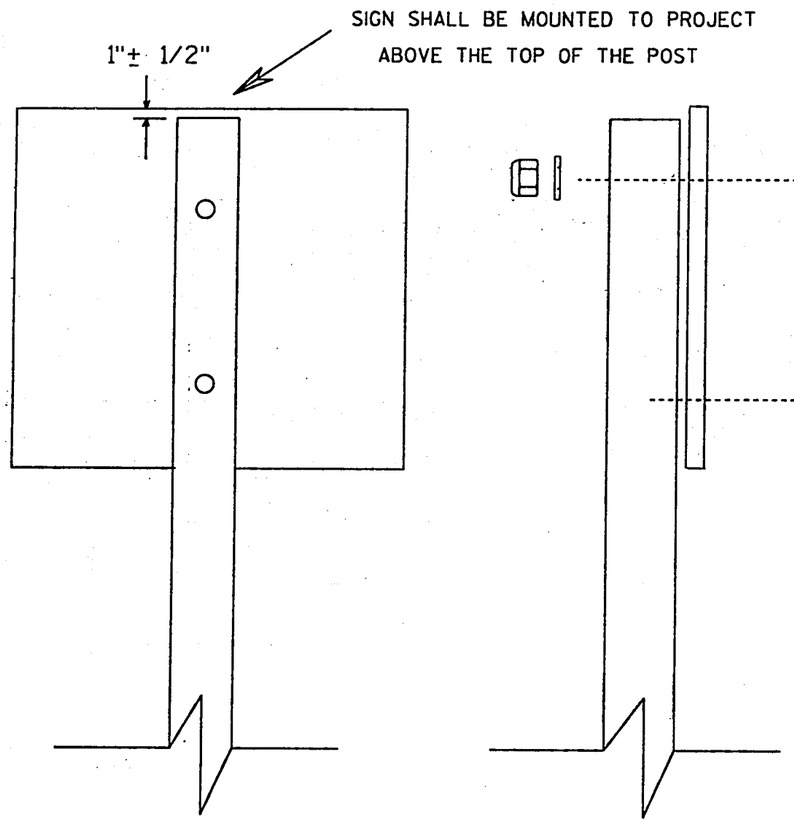
WISCONSIN DEPT OF TRANSPORTATION

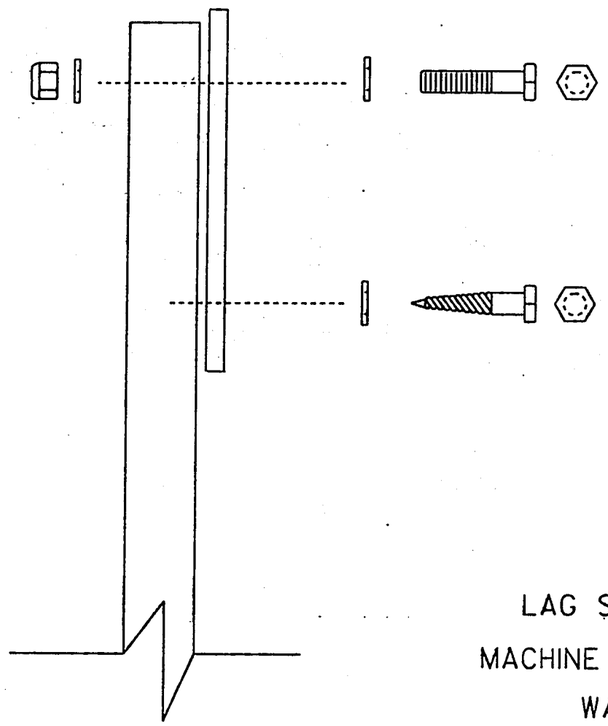
APPROVED

DATE 12/7/92 PLATE NO. A4 U.S.

. LEVELS ON = 2, 5, 10.

WISDOT/CADDS SHEET 4.





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

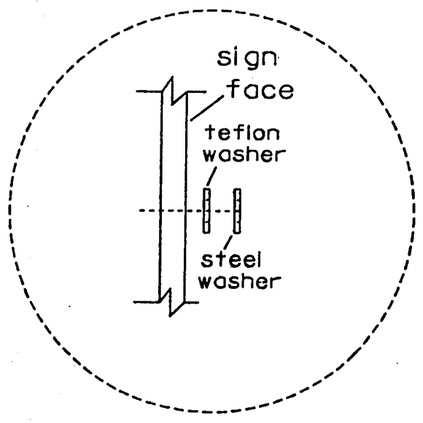
a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
c. Electro-galvanized in accordance with ASTM Designation :B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

WASHERS - 1" O.D. X 3/8" I.D. X 1/16" STEEL for signs 24x24 and smaller.
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL for signs 24x30 to 36x48.
1-1/2" O.D. X 7/16" I.D. X 1/16" STEEL for signs 48x48 and larger.
1-1/4" O.D. X 3/8" I.D. X .080 TEFLON for all Type H signs.



Washer Placement when Sign Has Type H Face

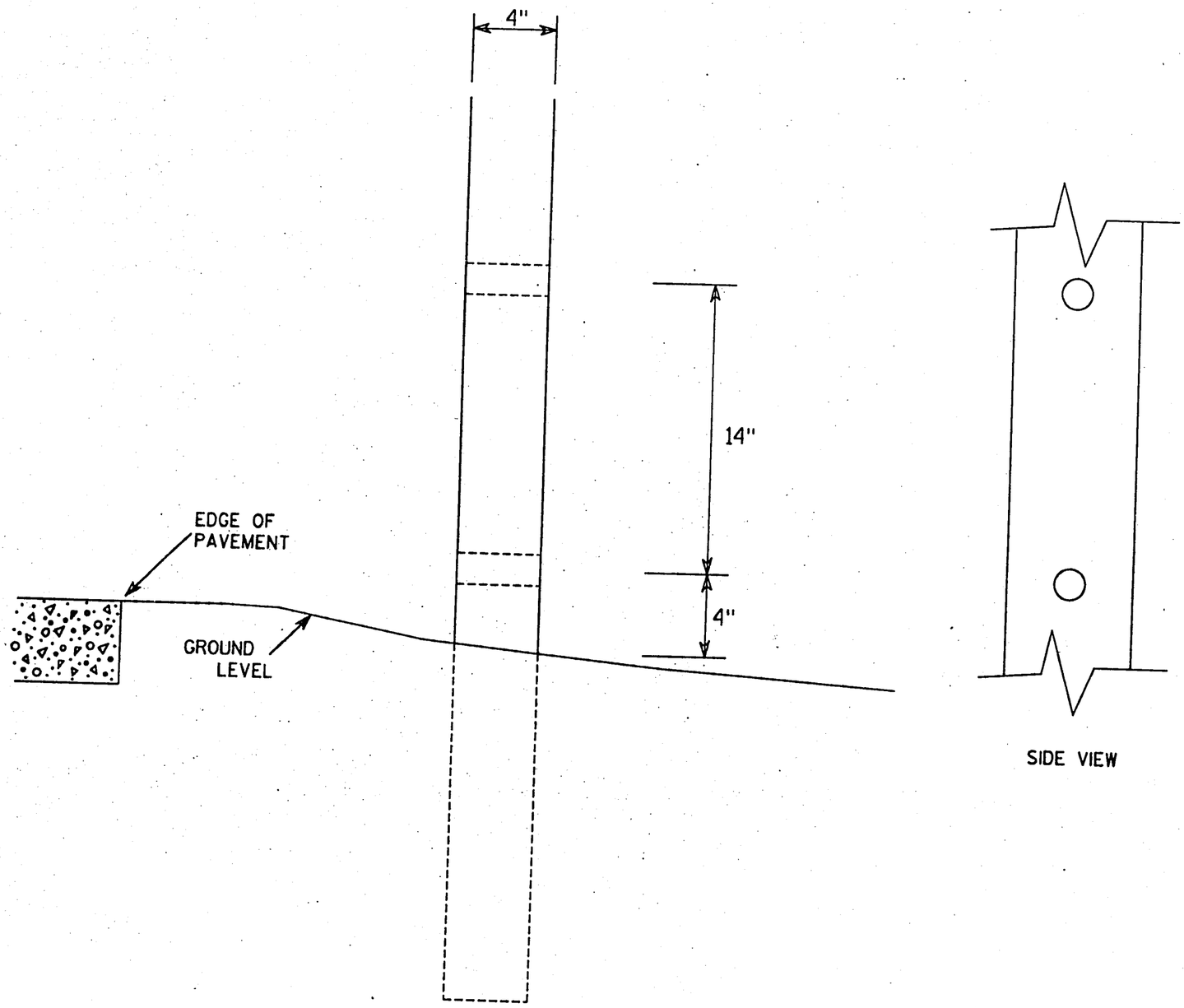
DATE DRAWN 1-29-92 DATE REDRAWN
DATE REVISED

ATTACHMENT OF SIGNS TO WOOD POSTS

WISCONSIN DEPT. OF TRANSPORTATION

APPROVED
DATE 2-1-92 FED. NO. A4-5.2

58.59.
PLOT NAME: A4II
LEVELS ON - 1.2. 5. 10.



SIDE VIEW

GENERAL NOTES

1. All 4x6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

DATE DRAWN 11-1-91 DATE REDRAWN
DATE REVISED

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
State Traffic Engineer

DATE 11/5/91 PLATE NO. A4-II.1

STATE PROJECT NUMBER	SHEET NO
1201-04-78	2.26

INTERSECTION PAVING PLAN
RAMP "E-1"/"E-2", CTH PB-NESBITT RD.

USH 18 — DANE COUNTY

KEY MAP

DATA TABLE					
	NESBITT ROAD		LOCAL ROAD		
POINT NO.	STATION	OFFSET	STATION	OFFSET	RADIUS
1	47+94.82	22.0' RT.	19+86.12	58.7' LT.	60.0'
2	47+94.82	82.0' RT.	19+27.18	70.0' LT.	60.0'
3	48+47.13	73.4' RT.	19+27.18	10.0' LT.	60.0'
4	48+64.70	66.7' RT.	19+32.28	10.0' RT.	40.0'
5	49+04.60	63.9' RT.	19+32.28	50.0' RT.	40.0'
6	49+15.00	25.3' RT.	19+70.10	63.0' RT.	40.0'

DATA TABLE							
	CTH PBN / NESBITT RD.		RAMP E-1		RAMP E-2		
POINT NO.	STATION	OFFSET	STATION	OFFSET	STATION	OFFSET	RADIUS
7	49+58.15	36.8' RT.	-	-	739+26.94	44.9' LT.	50.0'
8	49+45.21	85.2' RT.	-	-	738+79.96	62.0' LT.	50.0'
9	49+95.02	80.8' RT.	-	-	738+79.95	12.0' LT.	50.0'
10	50+96.97	70.9' RT.	735+35.34	12.0' RT.	-	-	40.0'
11	51+36.36	64.0' RT.	735+35.34	52.0' RT.	-	-	40.0'
12	51+36.36	24.0' RT.	735+74.73	58.9' RT.	-	-	40.0'
13	51+07.08	38.0' LT.	736+40.84	40.9' RT.	-	-	50.0'
14	51+20.02	86.2' LT.	736+86.15	62.0' RT.	-	-	50.0'
15	-	-	736+86.15	12.0' RT.	-	-	50.0'
16	49+41.76	29.0' LT.	-	-	739+93.97	55.5' LT.	40.0'
17	49+41.76	69.0' LT.	-	-	740+33.82	52.0' LT.	40.0'
18	49+81.61	72.5' LT.	-	-	740+33.82	12.0' LT.	40.0'
19	49+57.27	18.5' RT.	-	-	739+45.30	44.2' LT.	1.5'
20	49+87.15	19.5' RT.	-	-	739+41.70	14.5' LT.	2.5'
21	49+87.68	25.6' RT.	-	-	739+35.56	14.5' LT.	2.5'
22	51+12.09	18.5' LT.	736+20.80	42.4' RT.	-	-	1.5'
23	50+83.56	19.5' LT.	736+26.74	14.5' RT.	-	-	2.5'
24	50+82.52	25.4' LT.	736+32.72	14.5' RT.	-	-	2.5'
25	-	-	-	-	737+79.95	0.0'	-
26	-	-	733+35.34	0.0'	-	-	-
27	52+36.36	12.0' RT.	-	-	-	-	-
28	52+03.96	12.0' LT.	-	-	-	-	-
29	-	-	737+86.15	0.0'	-	-	-
30	-	-	-	-	741+53.82	0.0'	-
31	-	-	739+70.92	61.8' LT.	743+10.75	24.0' RT.	-
32	-	-	739+21.02	41.7' LT.	742+60.88	35.0' RT.	-
33	-	-	738+67.69	38.3' LT.	742+10.75	34.0' RT.	554.9'
34	50+29.45	53.5' LT.	736+66.54	38.0' LT.	740+10.75	34.0' RT.	60.0'
35	50+29.87	49.9' LT.	736+62.92	37.9' LT.	740+07.12	34.1' RT.	4.0'
36	50+33.83	50.5' LT.	736+63.16	33.9' LT.	740+07.36	30.1' RT.	4.0'
37	50+37.76	49.8' LT.	736+62.09	30.0' LT.	740+06.29	42.0' RT.	4.0'
38	50+36.50	64.7' LT.	736+77.08	28.0' LT.	740+21.28	42.0' RT.	56.0'
39	-	-	738+00.00	28.0' LT.	741+44.21	42.0' RT.	-
40	-	-	739+20.00	28.0' LT.	742+58.33	48.4' RT.	-

DATA TABLE							
	CTH PBN / NESBITT RD.		RAMP E-1		RAMP E-2		
POINT NO.	STATION	OFFSET	STATION	OFFSET	STATION	OFFSET	RADIUS
41	-	-	733+07.49	24.0' LT.	736+35.41	60.9' RT.	-
42	-	-	733+75.00	34.0' LT.	737+09.13	46.5' RT.	882.8'
43	-	-	734+07.49	34.0' LT.	737+44.14	44.2' RT.	882.8'
44	50+42.94	54.8' RT.	735+57.49	34.0' LT.	739+01.70	38.0' RT.	60.0'
45	50+42.58	51.6' RT.	735+60.67	34.1' LT.	739+04.88	37.9' RT.	4.0'
46	50+38.62	52.2' RT.	735+60.46	38.1' LT.	739+04.67	33.9' RT.	4.0'
47	50+34.68	51.4' RT.	735+61.54	41.9' LT.	739+05.74	30.1' RT.	4.0'
48	50+33.94	66.6' RT.	735+46.46	44.0' LT.	738+90.66	28.0' RT.	56.0'
49	-	-	733+18.00	56.4' LT.	736+45.00	28.0' RT.	-

GENERAL NOTES:
1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT
2. STATION / OFFSETS SHOWN IN DATA TABLES ARE LOCATED AT THE EDGE OF PAVEMENT
3. RADIUS IS SHOWN TO FLANGE OF CURB AND GUTTER.
4. TYPE "A" INTERSECTION, SEE SDD.

LEVELS ON • 1, 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: 78280.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.27

RAMP "PB-1" PAVING DETAILS

USH 18 — DANE COUNTY

KEY MAP

BEGIN CONSTRUCTION
STA. 646+74.00 ℄ RAMP "PB-1" =
STA. 646+74.00 ℄ USH 18, 49'LT.

991.91 993.03 994.15 995.27 996.39 997.51 650 998.63 999.75 1000.87 1001.99 1003.11 1004.23 1005.35 1006.47 1007.59 1008.71 655 1009.83 1010.95 1012.07 1013.19 1014.31 1015.24 1016.10 1016.70 1017.18 1017.72 660 1018.61 1019.61 1020.55 1021.74
991.33 994.16 995.30 996.44 997.58 998.72 999.86 1001.00 1002.14 1003.28 1004.42 1005.56 1006.70 1007.84 1008.98 1010.12 1011.25 1012.37 1013.49 1014.61 1015.54 1016.47 1017.24 1017.93 1018.55 1019.49 1020.49 1021.54 1022.62
991.92 993.06 994.20 995.34 996.48 997.62 998.76 650 999.90 1001.04 1002.18 1003.32 1004.46 1005.60 1006.74 1007.88 1009.02 1010.16 655 1011.30 1012.44 1013.58 1014.72 1015.86 1017.00 1018.14 1019.28 1020.42 1021.56 660 1022.70 1023.84 1024.98

℄ USH 18
℄ RAMP "PB-2"
℄ RANGE TRAIL ROAD
℄ CTH "M"
RANGE TRAIL ROAD
CTH "M"
USH 18 WB
USH 18 EB
RAMP "PB-1"
RAMP "PB-2"
PC585 658+74.24
PC583 658+90.38
PT6 26+85.62
MATCHLINE STA. 661+50
59.62
51.
25
30

CURVE 585

STA.	RATE	REMARKS
657+50.00	0.02	END NORMAL CROWN
660+00.00	0.059	BEGIN FULL SUPER
663+20.50	0.059	END FULL SUPER
663+70.90	0.08	BEGIN S.E. = 0.08

0 50 100 150

STA. 662+07.10 USH 18/151, CTR 3' RAD. 60'LT.

CURVE 586

STA.	RATE	REMARKS
663+20.50	0.059	END S.E. = .059
663+70.90	0.08	BEGIN FULL SUPER
669+91.50	0.08	END FULL SUPER
672+31.50	0.02	BEGIN NORMAL CROWN

MATCHLINE STA. 661+50
PC586 663+07.57
PT585
1022.84 1023.72 1023.95 1024.61 1025.05 1025.73 1025.94 1026.16 1026.12 1027.26 1027.24 1027.26 1028.36 1028.46 1029.56 1030.67 665 1029.17 1030.57 1031.68 C586 1032.78 1033.89 1034.99 1035.99 1036.79 1037.38 1037.78 1037.96 1037.94 1037.72 1037.30 1036.67 1035.83 1034.80 1033.55 1032.11 1030.46 675 1028.71 1026.96 1025.20 1023.45 1021.70
.059 .072 .08 .08 .076 .056 .035 .014 .007 .02 .03 .05 .029
1026.12 1027.26 1028.46 1029.56 1030.67 1031.77 1032.88 1033.98 1035.09 1036.19 1037.19 1037.99 1038.58 1038.98 1039.11 1038.78 1038.24 1037.51 1036.56 1035.53 1034.36 1032.80 1031.36 1029.71 1027.96 1026.21 1024.76 1023.33 1021.91
PT586 670+54.81
PC587 673+06.91
PI587 676+56.47
665 670 675
C587
℄ USH 18
℄ RAMP "PB-2"
℄ RAMP "PB-1"
USH 18 WB
USH 18 EB
RAMP "PB-2"
RAMP "PB-1"
29.30.31.
20.
LEVELS ON -

CURVE 587

STA.	RATE	REMARKS
672+00.24	0.02	END NORMAL CROWN
673+40.24	0.05	BEGIN FULL SUPER
675+50.00	0.05	END FULL SUPER
677+00.00	0.014	BEGIN NORMAL CROWN

0 50 100 150

PAVING ONLY UNDER THIS CONTRACT

STA. 146+14.60 ℄ CTH "PB" =
STA. 677+43.54 ℄ RAMP "PB-1"

CONCRETE PAVEMENT, 9-INCH BY OTHERS

END PAVING
STA. 675+84.44

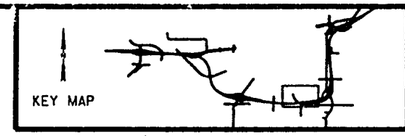
FILE NAME: HDGN:..T2263.DGN

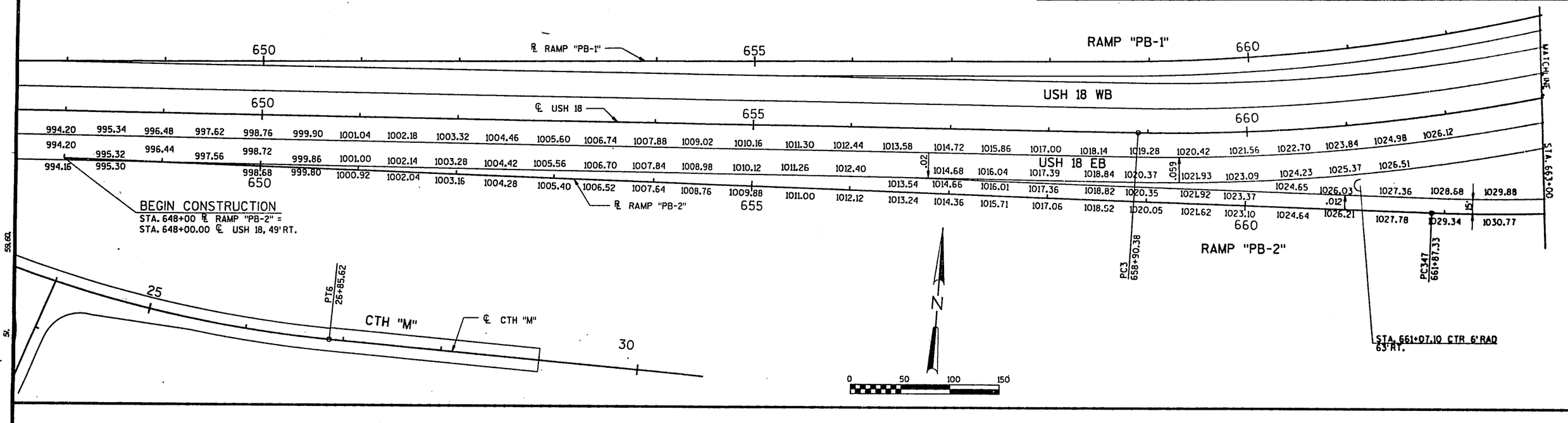
STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.28

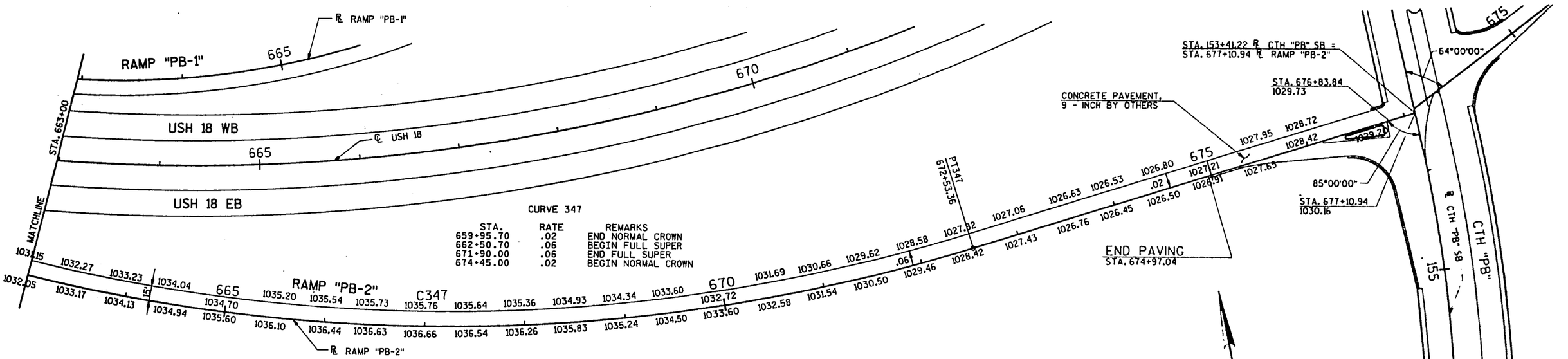
RAMP "PB-2" PAVING DETAILS

USH 18 | DANE COUNTY

KEY MAP







PAVING ONLY
UNDER THIS CONTRACT

FILE NAME: IIDGN: 72265.DGN

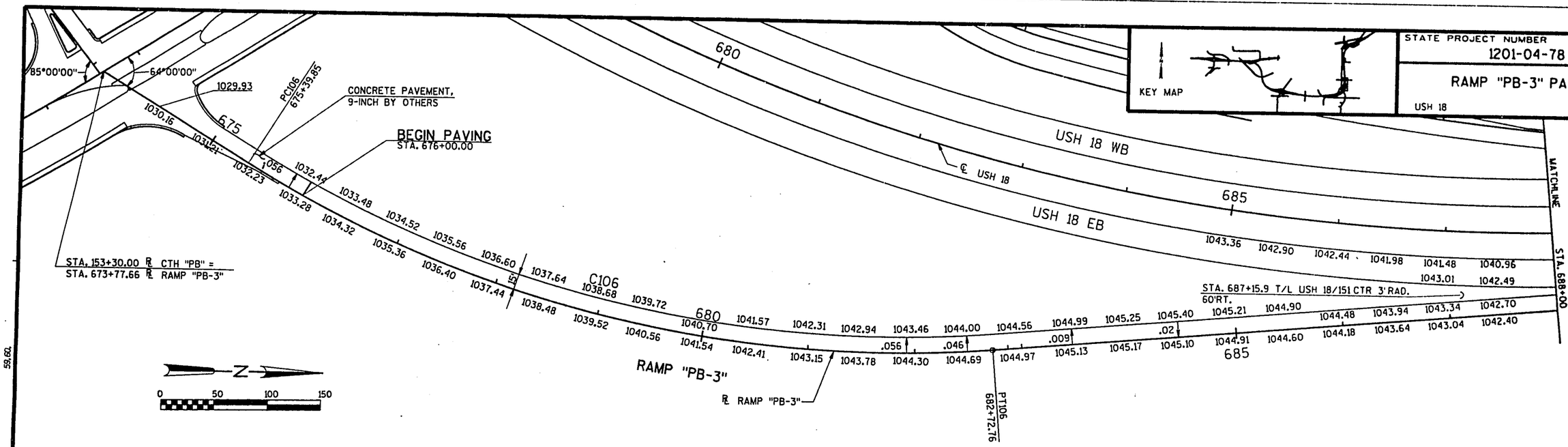
LEVELS ON

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.29

RAMP "PB-3" PAVING DETAILS

USH 18 — DANE COUNTY

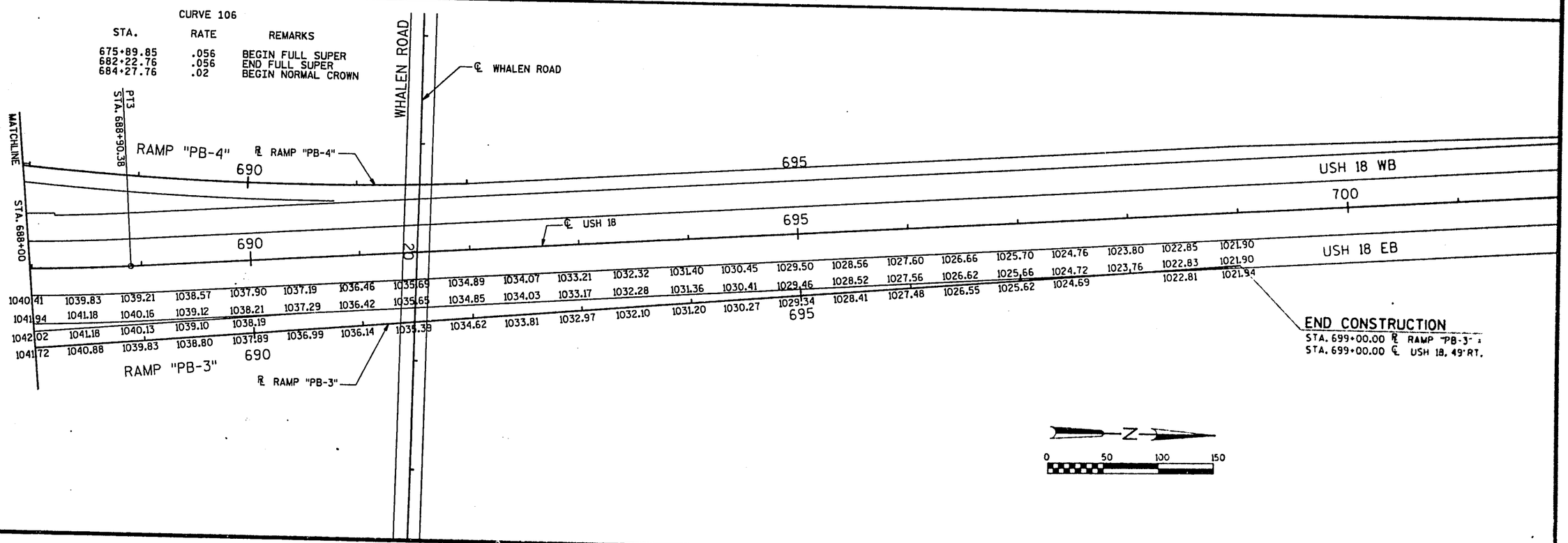
KEY MAP



PAVING ONLY UNDER THIS CONTRACT

CURVE 106

STA.	RATE	REMARKS
675+89.85	.056	BEGIN FULL SUPER
682+22.76	.056	END FULL SUPER
684+27.76	.02	BEGIN NORMAL CROWN



FILE NAME: HDGN: T2267.DGN

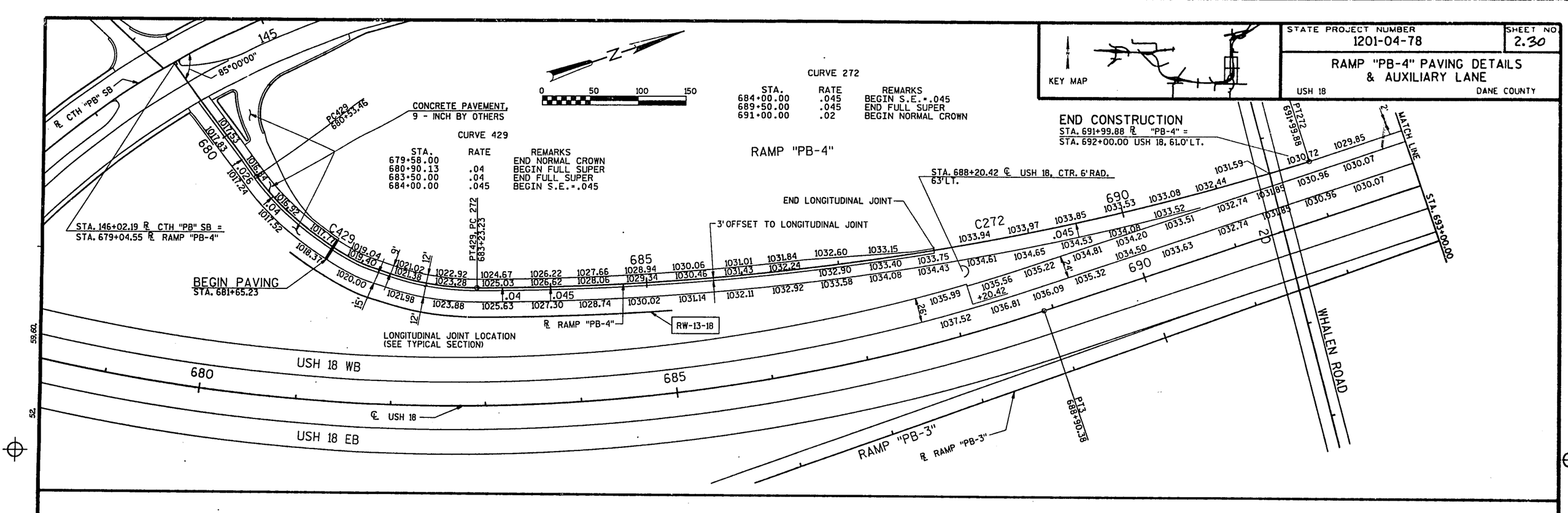
WISDOT/CADDS SHEET 42

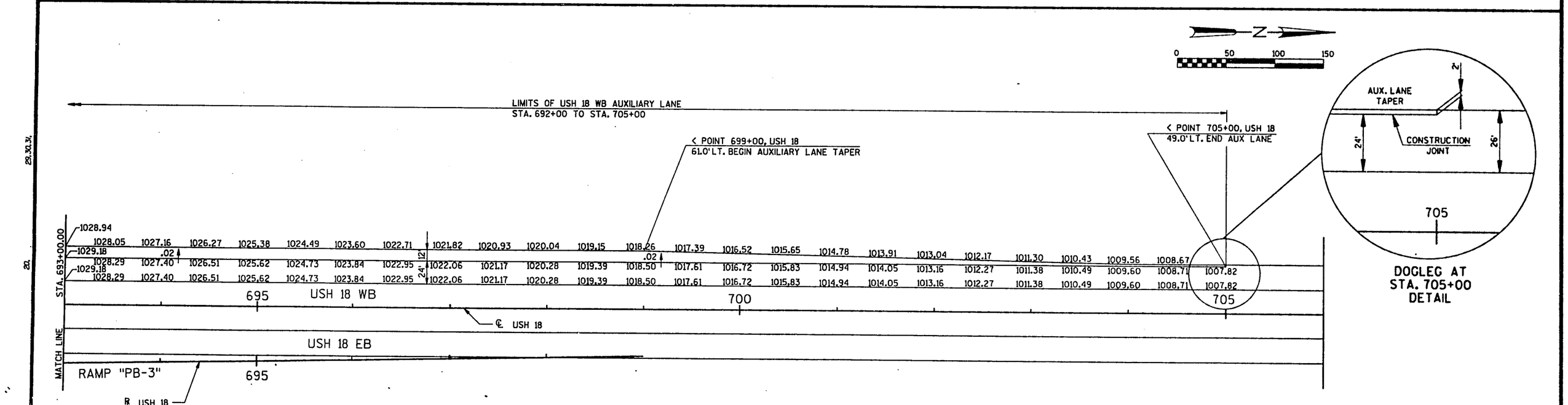
STATE PROJECT NUMBER 1201-04-78 | SHEET NO 2.30

RAMP "PB-4" PAVING DETAILS & AUXILIARY LANE

USH 18 — DANE COUNTY

KEY MAP





PAVING ONLY UNDER THIS CONTRACT

FILE NAME: HDGNL 72269.DGN

WISDOT CADDS SHEET 47

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.31

RAMP "E-1" PAVING DETAILS

USH 18 — DANE COUNTY

KEY MAP

CURVE 521

STA.	RATE	REMARKS
741+70.24	.02	END NORMAL CROWN
743+70.24	-.06	BEGIN FULL SUPER
754+18.39	-.06	END FULL SUPER
756+18.39	.02	BEGIN NORMAL CROWN

NESBITT RD.

℄ RAMP "E-2"

4' PAVED SHOULDER, TYPE LV

85°00'00"

CTH PB

GRADING UNDER THIS CONTRACT

738+00

STA. 736+09.50 ℞ OLD USH 18 EB = STA. 50+72.28 ℄ CTH "PB-N"

CONCRETE C&G, 30 INCH, TYPE G

5' PAVED SHOULDER, ACP TYPE LV

STA. 739+20, 28.0', LT. END C&G/BEGIN 8' SHLDR

RAMP "E-2"

741+70.0, 24.60', LT. END 8' SHOULDER

80' 20:1 TAPER SHOULDER 8' TO 4'

RAMP "E-1"

GRADING BY OTHERS UNDER I.D. 1201-04-72

450' LANE TRANSITION 2 LANES TO 1 LANE 50:1 TAPER

742+50

CONSTRUCTION JOINT

742+50.0, 19', LT.

20:1 TAPER

4' SHOULDER (3' PAAVED SHOULDER ACP, TYPE LV)

12'

3'

15'

CONTINUE 4' SHOULDER

PC521 743+20.24

C521

℞ RAMP "E-1"

MATCH LINE

STA. 751+00.00

0 50 100 150

GRADING, BASE & PAVING UNDER THIS CONTRACT

℄ USH 18

USH 18 E.B.

STA. 761+17.70 CTR, 3' RAD 60' RT.

STA 751+50.00

MATCHLINE

PT521 754+68.39

PC522 757+09.91

PT522 762+26.27

PC520 762+75.00

STA. 765+00.00

MATCHLINE STA. 766+50.00

C522

℞ RAMP "E-1"

CONCRETE PAVEMENT, 9-INCH

CONCRETE PAVEMENT, 10-INCH

CURVE 522

STA.	RATE	REMARKS
756+18.39	.02	END NORMAL CROWN
757+67.99	.06	BEGIN FULL SUPER
761+67.99	.06	END FULL SUPER
763+42.94	.02	BEGIN NORMAL CROWN

GORE LAYOUT DETAIL

MATCHLINE STA. 766+50.00

PT520 STA. 774+75

RAMP "E-1"

END CONSTRUCTION

STA. 774+75.00 ℞ RAMP "E-1"

STA. 774+75.00 ℄ USH 18, 4' RT.

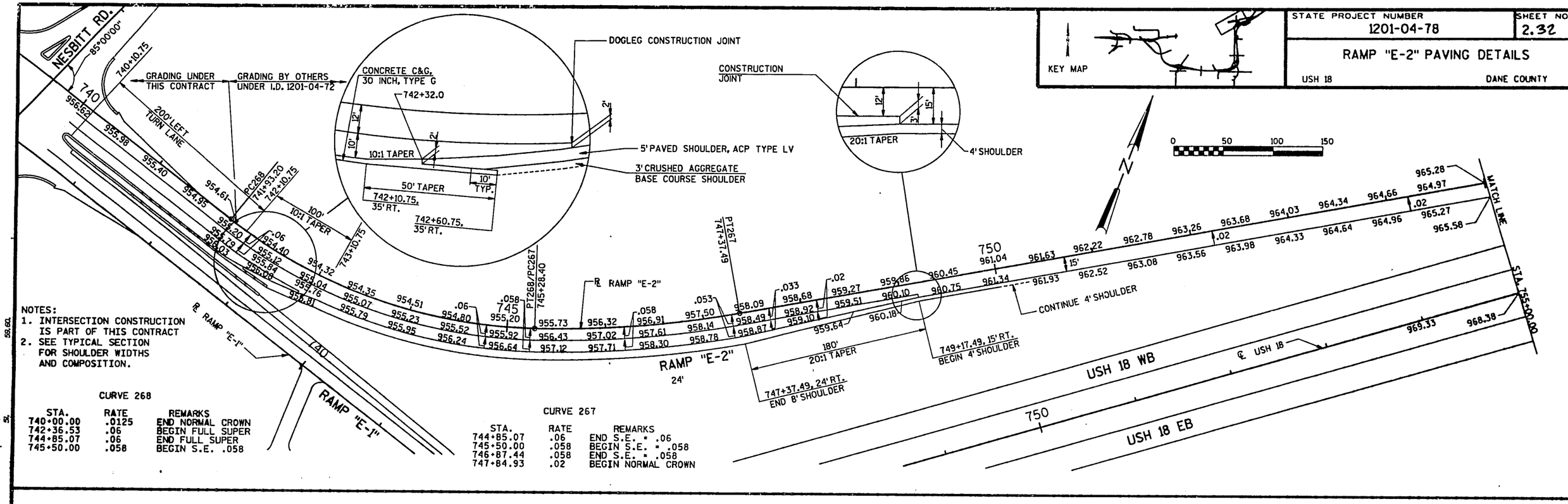
FILE NAME: HDGN: T2270.UGN

STATE PROJECT NUMBER	SHEET NO
1201-04-78	2.32

RAMP "E-2" PAVING DETAILS

USH 18 — DANE COUNTY

KEY MAP



NOTES:
1. INTERSECTION CONSTRUCTION IS PART OF THIS CONTRACT
2. SEE TYPICAL SECTION FOR SHOULDER WIDTHS AND COMPOSITION.

CURVE 268

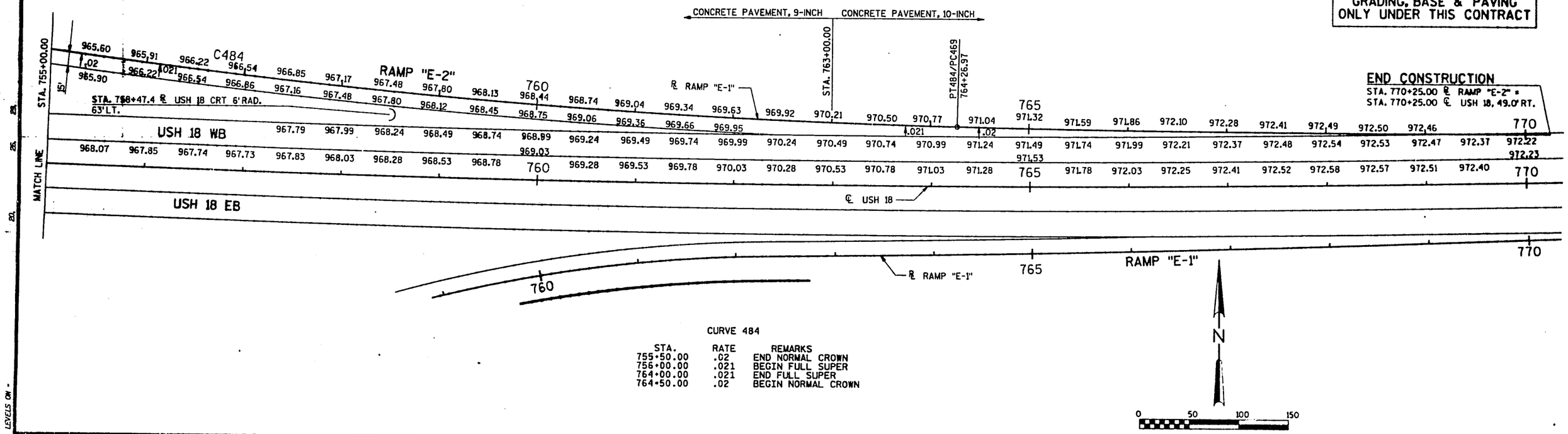
STA.	RATE	REMARKS
740+00.00	.0125	END NORMAL CROWN
742+36.53	.06	BEGIN FULL SUPER
744+85.07	.06	END FULL SUPER
745+50.00	.058	BEGIN S.E. .058

CURVE 267

STA.	RATE	REMARKS
744+85.07	.06	END S.E. = .06
745+50.00	.058	BEGIN S.E. = .058
746+87.44	.058	END S.E. = .058
747+84.93	.02	BEGIN NORMAL CROWN

GRADING, BASE & PAVING ONLY UNDER THIS CONTRACT

END CONSTRUCTION
STA. 770+25.00 ℄ RAMP "E-2" =
STA. 770+25.00 ℄ USH 18, 49.0' RT.



CURVE 484

STA.	RATE	REMARKS
755+50.00	.02	END NORMAL CROWN
756+00.00	.021	BEGIN FULL SUPER
764+00.00	.021	END FULL SUPER
764+50.00	.02	BEGIN NORMAL CROWN

FILE NAME: HDGN: 72272.DGN

WISDOT/CADDS SHEET 42

KEY MAP

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.33

CROSS SECTION MATCHLINE
EAST INTERCHANGE

USH 18

DANE COUNTY

B.A. RAMP "E-2"

B.A. RAMP "E-1"

B.A. LOCAL ROAD

E.A. RAMP "E-1"

E.A. RAMP "E-2"

B.A. "PBN"

E.A. "PBN"

E.A. NESBITT

℄ CTH "PB-N"

℄ "MRRT"

℄ USH 18

℄ NESBITT ROAD

M/L

NOTES :
B.A. = BEGIN EARTHWORK ABRUPTLY
E.A. = END EARTHWORK ABRUPTLY
THIS LAYOUT SHOWS OFFSETS AT CROSS SECTIONS WHERE MATCHLINES ARE REQUIRE ONLY. CROSS SECTIONS ARE PROVIDED EVERY 100 FEET (TYP.)

FILE NAME: HDGN:72215.DGN

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.34

GRADING CONTOURS FOR EAST INTERCHANGE

USH 18 DANE COUNTY

KEY MAP

N

0 100 200 300

BEGIN CONSTRUCTION
STA. 12+00.00 LOCAL ROAD

℄ LOCAL ROAD

LOCAL ROAD

GRADING LIMITS
PREVIOUS CONTRACT

℄ NESBITT ROAD

NESBITT ROAD

BEGIN CONSTRUCTION
STA. 729+00.00 RAMP "E-2"

℄ RAMP "E-2"

W.S.H.

RAMP "E-2"

USH 18

℄ USH 18

℄ RAMP "E-1"

BEGIN CONSTRUCTION
STA. 726+00.00 RAMP "E-1"

C.T.H. "PB"

EXISTING CTH "PB"

℄ CTH "PB-N"

CTH "PB"

RAMP "E-1"

℄ "MRRT"

B-13-417

B-13-418

4-13-425

LEGEND

APPROXIMATE GRADING LIMITS OF THIS CONTRACT.
USH 18 STA. 765+00.00 TO STA. 798+00.00
RAMP "E-1" STA. 726+00.00 TO STA. 735+00.00
RAMP "E-2" STA. 729+00.00 TO STA. 758+50.00
NESBITT RD. STA. 19+00.00 TO STA. 49+00.00
CTH "PB" STA. 52+00.00 TO STA. 59+00.00
LOCAL RD. STA. 12+00.00 TO 22+00.00
"MRRT" STA. 3+00.00 TO STA. 5+00.00

NOTES:

1. PREVIOUS GRADING FOR THE EAST INTERCHANGE BEGAN UNDER CONTRACT I.D. 1201-04-72. GRADING WILL BE COMPLETED UNDER THIS CONTRACT.
2. NESBITT ROAD, CTH PB AND LOCAL ROAD WILL BE PAVED UNDER A FUTURE CONTRACT I.D. 1201-04-78.

LEVELS ON - 59.60, 29,30,31,32, 25, 20

FILE NAME: HDGN: I2219.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.35

DRAINAGE & EROSION CONTROL PLAN EAST INTERCHANGE

USH 18 — DANE COUNTY

KEY MAP

N

0 100 200 300

LOCAL ROAD

CULVERTS PLACED UNDER PREVIOUS GRADING CONTRACT

EXISTING CULVERT TO REMAIN

NESBITT ROAD

MATCHLINE STA. 734+00.00

MATCHLINE STA. 739+00.00

BEGIN CONSTRUCTION
STA. 729+00.00 RAMP "E"

EROSION MAT CLASS I, TYPE B

RAMP "E-2"

U.S.H.

RAMP "E-1"

EXISTING RIPRAP TO REMAIN

MEDIUM RADOM RIPRAP

BEGIN CONSTRUCTION
STA. 726+00.00 RAMP "E-1"

"CTH PB-N"

CONNECT TO EXISTING RIPRAP

"MRRT"

LIMITS OF MEDIUM RANDOM RIPRAP

END CONSTRUCTION
STA. 8+00.00 "MRRT"

USH 18

RAMP "E-1"

BEGIN CONSTRUCTION
STA. 3+00.00 "MRRT"

MATCHLINE STA. 735+30.00

BADGER MILL CREEK

LEGEND

- EROSION BALES
- SILT FENCE
- EROSION MAT (CLASS, TYPE)
- SOD
- SOD DITCH CHECKS WITH SEED AND MULCH
- TEMPORARY STONE DITCH CHECK
- RIPRAP (UNLESS OTHERWISE NOTED)
- DIVERSION CHANNEL
- INTERCEPTING EMBANKMENT
- DIRECTION OF FLOW (DITCH)
- DIRECTION OF FLOW (CULVERT)

LEVELS ON: 59,60, 51,52, 29,30,31,32, 25, 20

FILE NAME: HDGN:78277.DGN

SHEET 1 OF 3

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.36

DRAINAGE & EROSION CONTROL PLAN

USH 18 — DANE COUNTY

KEY MAP

C/L NESBITT ROAD

NESBITT ROAD

BEGIN CONSTRUCTION
STA. 19+00.00 NESBITT ROAD

0 100 200 300

B-13-426
SEE BRIDGE PLANS FOR STAGED CONSTRUCTION OF BOX CULVERT & TEMPORARY DIVERSION CHANNEL

MATCHLINE STA. 789+00.00

MATCHLINE STA. 789+00.00

MATCHLINE STA. 789+00.00

R/L RAMP "E-2"

R/L RAMP "E-1"

RAMP "E-1"

760 RAMP "E-2"

USH 18 WB

USH 18 EB

C/L USH 18

EXISTING DRAINAGE STRUCTURES TO REMAIN BETWEEN STA. 796+00.00 TO STA. 805+50.00 SEE CROSS SECTIONS.

END PROJECT 1201-04-78
STA. 798+00.00

END CONSTRUCTION 1201-04-78
STA. 805+50.00

0 100 200 300

LEGEND

- EROSION BALES
- SILT FENCE
- EROSION MAT. (CLASS, TYPE)
- SOD
- SOD DITCH CHECKS WITH SEED AND MULCH
- TEMPORARY STONE DITCH CHECK
- RIPRAP (UNLESS OTHERWISE NOTED)
- DIVERSION CHANNEL
- INTERCEPTING EMBANKMENT
- DIRECTION OF FLOW (DITCH)
- DIRECTION OF FLOW (CULVERT)

FILE NAME: H00118278.DGN

SHEET 2 OF 3

WISDOT/CADDS SHEET 42

KEY MAP

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.37

DRAINAGE & EROSION CONTROL DETAIL

USH 18

DANE COUNTY

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 281 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 65 ACRES

LEVELS ON = 59,60, 54,58, 23,30,34,52, 25, 20,

FILE NAME: MDGN: 78279.DGN

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.38

STORM SEWER
U.S.H. 18

USH 18 DANE COUNTY

KEY MAP

RAMP "PB-1"

CTH "PB"

STA. 675+67.15, 20'RT.
1-V INLET, D=2.5'
150

STA. 676+03.1, 58'LT.
1-V INLET, D=2.5'
154

STA. 680+50, 83'LT.
APRON ENDWALL
OUT

STA. 685+30, 75'LT.
PIPE JOINT
CONCRETE COLLAR REQUIRED
PJ130

STA. 683+00, 73'LT.
APRON ENDWALL
OUT

RAMP "PB-4"

STA. 688+15, 58'LT.
1-B INLET
D=2.60'
128

STA. 690+40, 2.1'RT.
APRON ENDWALL
OUT

STA. 680+50, 58'LT.
1-B INLET, D=1.84'
132

STA. 683+00, 58'LT.
1-B INLET, D=1.84'
131

RAMP "PB-3"

STA. 688+25, 58'LT.
1-B INLET
D=2.41'
127

STA. 685+30, 58'LT.
1-B INLET
D=7.96'
129

STA. 690+30, 18'RT.
1-B INLET
D=5.21'
126

MYAN EN ROAD

STA. 692+22.35, 67.8'LT.
1-V INLET, D=2.5'
153

154 U.S.H. 18

STA. 699+90, 2.0'RT.
APRON ENDWALL
OUT

STA. 702+40, 2.0'RT.
APRON ENDWALL
OUT

STA. 704+90, 2.0'RT.
APRON ENDWALL
OUT

STA. 706+00.00

MATCHLINE

STA. 692+12.32, 69.8'RT.
1-V INLET, D=2.5'
152

STA. 690+40, 18'RT.
1-B INLET
D=5.12'
125

STA. 699+90, 18'RT.
1-B INLET
D=5.31'
124

STA. 702+40, 18'RT.
1-B INLET
D=4.91'
123

STA. 704+90, 18'RT.
1-B INLET
D=4.59'
122

NOTES:
1. STRUCTURES NOT IDENTIFIED HAVE BEEN CONSTRUCTED BY OTHERS UNDER PROJECT ID 1201-04-72.
2. SEE SDD AND TABULATION OF PIPE UNDERDRAIN FOR THE LAYOUT OF I-V INLETS.

0 100 200 300

CTH "PB"

STA. 712+40, 3.0'RT.
APRON ENDWALL
OUT

STA. 717+00, 3.5'RT.
APRON ENDWALL
OUT

STA. 715+80, 18'RT.
1-B INLET
D=3.21'
117

STA. 714+90, 3.3'RT.
APRON ENDWALL
OUT

STA. 718+45.85, 58'LT.
1-V INLET, D=2.5'
155

STA. 722+55, 4.3'RT.
APRON ENDWALL
OUT

U.S.H. 18

STA. 728+96.71, 2.2'RT.
APRON ENDWALL
OUT

STA. 709+90, 2.8'RT.
APRON ENDWALL
OUT

STA. 706+00.00

STA. 707+40, 3.0'RT.
APRON ENDWALL
OUT

STA. 707+40, 18'RT.
1-B INLET
D=4.37'
121

MATCHLINE

STA. 709+90, 18'RT.
1-B INLET
D=4.02'
120

STA. 712+40, 18'RT.
1-B INLET
D=3.63'
119

STA. 714+90, 18'RT.
1-B INLET
D=3.40'
118

STA 716+90, 18'RT.
1-B INLET
D=3.21'
116

STA 717+00, 18'RT.
1-B INLET
D=3.21'
115

STA. 722+35, 18'RT.
1-B INLET
D=2.37'
114

STA. 722+55, 18'RT.
1-B INLET
D=2.37'
112

STA. 722+45, 18'RT.
1-B INLET
D=2.37'
113

STA. 728+96.71, 18'RT.
1-B INLET
D=3.55'
111

STA. 718+38.27, 58'RT.
1-V INLET, D=2.5'
154

STA. 733+00.00

MATCHLINE

GRANDVIEW ROAD

RODNEY O. SLOTTEN

AIR PARK
ASSOCIATES, INC.

RODNEY O. SLOTTEN

DANE COUNTY

0 100 200 300

FILE NAME: HDGN: 78260.DGN

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
2.39

KEY MAP

STORM SEWER
U.S.H. 18

USH 18 DANE COUNTY

DANE COUNTY

℄ MILITARY RIDGE RECREATION TRAIL

156 STA. 743+96.94, 20'LT.
1-V INLET, D=2.5'

℄ USH 18

U.S.H. 18 WB

U.S.H. 18 EB

157 STA. 746+19.44, 58'RT.
1-V INLET, D=2.5'

RAMP "E-2"

℄ RAMP "E-2"

RAMP "E-1"

℄ RAMP "E-1"

MILITARY RIDGE RECREATION TRAIL

℄ MILITARY RIDGE RECREATION TRAIL

MATCHLINE STA. 733+00

NOTE:
1. STRUCTURES NOT IDENTIFIED HAVE BEEN CONSTRUCTED UNDER PROJECT 1201-04-72

59.60, 51.52, 39, 41, 29.30, 20, 23.24.25,

LEVELS ON -

FILE NAME: HDGN: 78263.DGN

WISDOT/CADDS SHEET 42

NOTE:
SEE STORM SEWER CONSTRUCTION DETAIL SHEET FOR LOCATION OF GRATE AND INVERT ELEVATIONS AND LAYOUT OF CI STRUCTURES.

KEY MAP

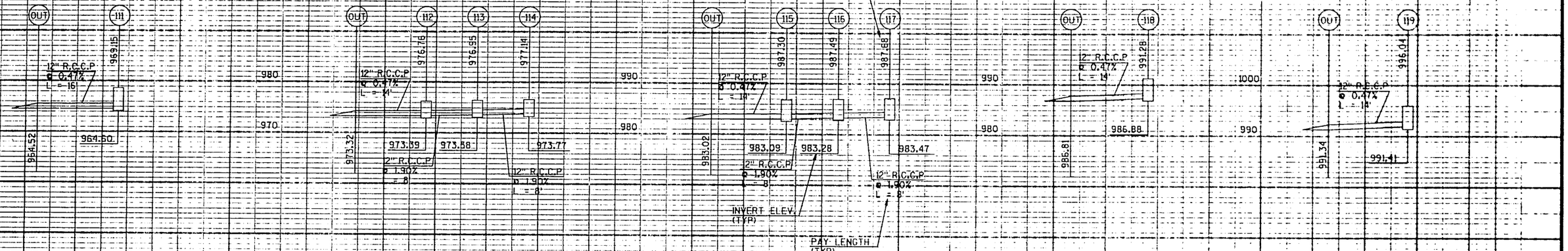
STATE PROJECT NUMBER
1201-04-78

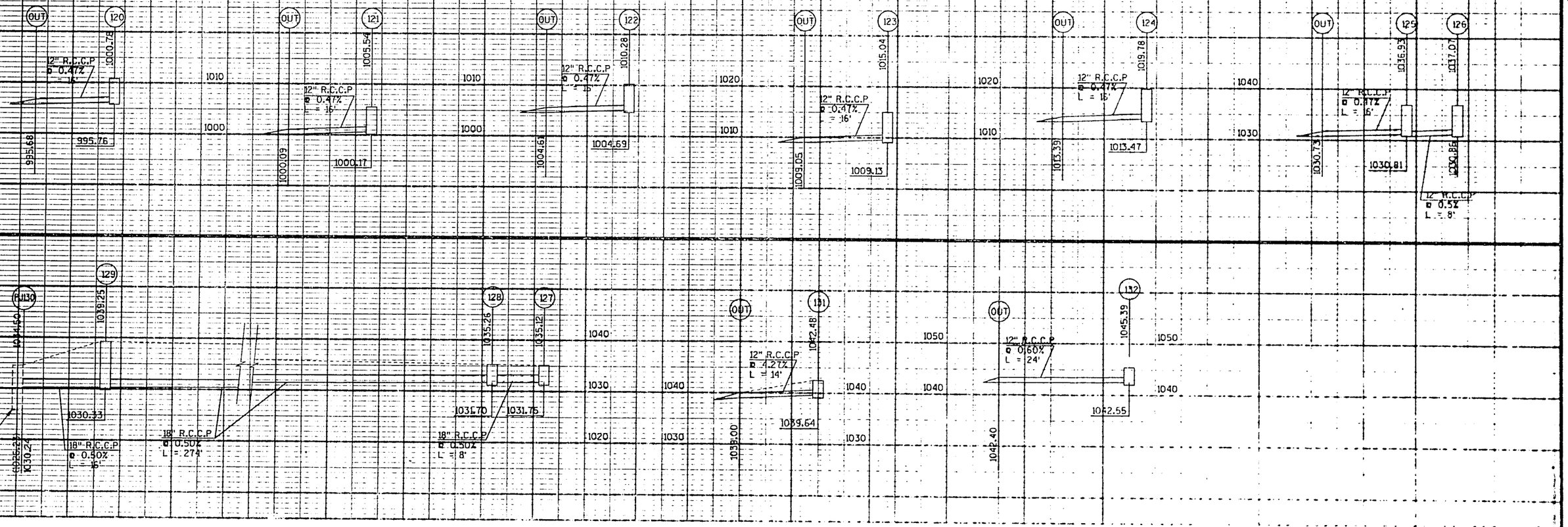
SHEET NO
2.40

STORM SEWER
U.S.H. 18

USH 18

DANE COUNTY





59,62

29, 31, 32

25, 26,

20,

LEVELS ON -

FILE NAME: IIDGN: T8261.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.41

STORM SEWER RAMP "E-1" AND "E-2"

USH 18 DANE COUNTY

KEY MAP

0 50 100 150

N

STA. 733+00(E-1), 46'LT
956
9-MS INLET
D=5.14'

STA. 738+90(E-2), 29.5'RT
951
3-HM INLET
D=8.01'

STA. 738+70(E-2), 29.5'RT
950
3-HM INLET
D=8.26'

STA. 736+77.08(E-1), 29.5'LT
958
3-HM INLET
D=6.12'

3-HM INLET

PJ959 STA. 737+15(E-1), 29.5'LT
PIPE JOINT
CONCRETE COLLAR REQUIRED

954 STA. 741+50(E-2), 35.5'RT
3-HM INLET
D=5.54'

RAMP "E-2"

RAMP "E-1"

PJ955 STA. 740+65(E-2), 35.5'RT
PIPE JOINT
CONCRETE COLLAR REQUIRED

953 STA. 735+47(E-1), 35.5'LT
3-HM INLET
D=8.16'

STA. 738+80(E-2), 29.5'RT
PJ852
PIPE JOINT
CONCRETE COLLAR REQUIRED

STA. 732+50(E-1), 40'LT
PJ957
PIPE JOINT
CONCRETE COLLAR REQUIRED

CTH "PB"

U.S.H. 18

735 740 745 730

S.D. STORM

NOTE:
SEE STORM SEWER CONSTRUCTION DETAIL SHEET FOR LOCATION OF GRATE AND INVERT ELEVATIONS AND LAYOUT OF ℄ - OF STRUCTURES.

PJ957 956 PJ952 950 951 953 958 PJ959 PJ955 954

GRATE ELEV. (TYP)

INVERT ELEV (TYP)

PAY LENGTH (TYP)

54" RCCP

12" RCP
0.00%
L = 7'

36" RCCP

15" RCP
1.00%
L = 4'

18" RCP
1.00%
L = 47'

12" RCP
1.00%
L = 55'

2-48" RCCP (EXISTING)

1-36" RCCP (EXISTING)

1-48" RCCP (EXISTING)

12" RCP
1.00%
L = 77'

950 960 940

959.94 952.11 953.66 951.11 957.47 957.22 957.44 946.53 948.33 948.63 948.63 948.70 955.79 949.09 948.74 947.21 955.65 947.23 948.13 949.53

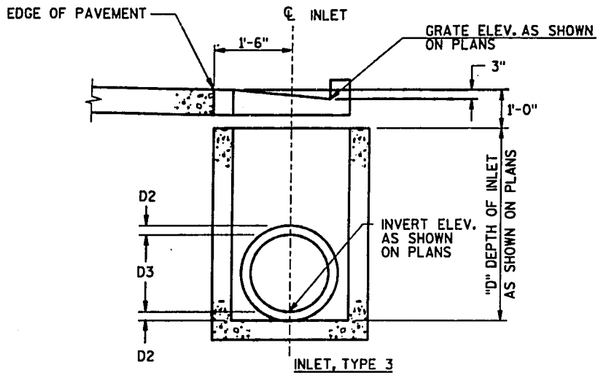
LEVELS ON - 59, 60, 5, 151, 39, 41, 29, 30, 31, 32, 24, 25, 20

FILE NAME: HDGN: 78262.DGN

MICROSTATION CADD SHEET 42

KEY MAP

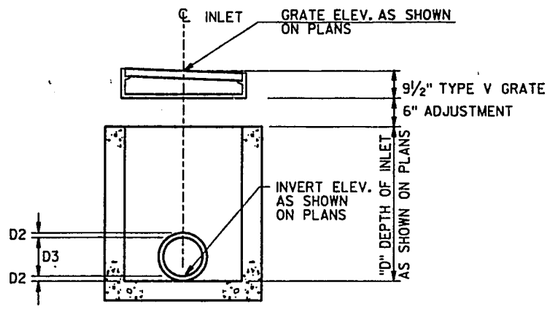
CONSTRUCTION DETAILS
STORM SEWER DRAINAGE STRS.
USH 18 — DANE COUNTY



INLET, TYPE 3

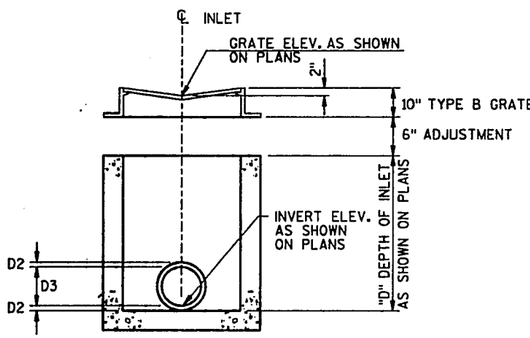
PIPE SIZE	D3	D2
	12"	0.17'
	15"	0.19'
	18"	0.21'
	24"	0.25'
	27"	0.27'
	30"	0.29'
	36"	0.33'

STORM SEWER ELEVATION LOCATIONS AND LAYOUT DIMENSIONS



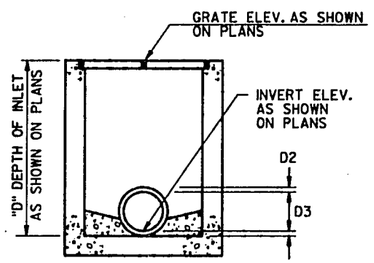
INLET, TYPE 1-V

PIPE SIZE	D3	D2
	12"	0.17'



INLET, TYPE 1-B

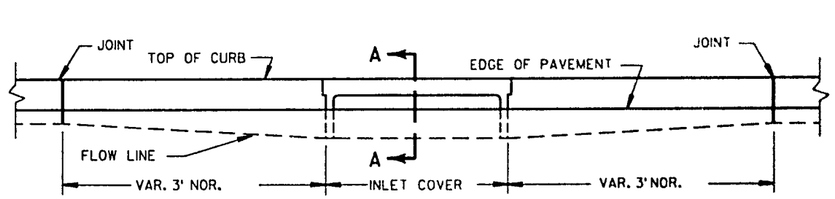
PIPE SIZE	D3	D2
	12"	0.17'



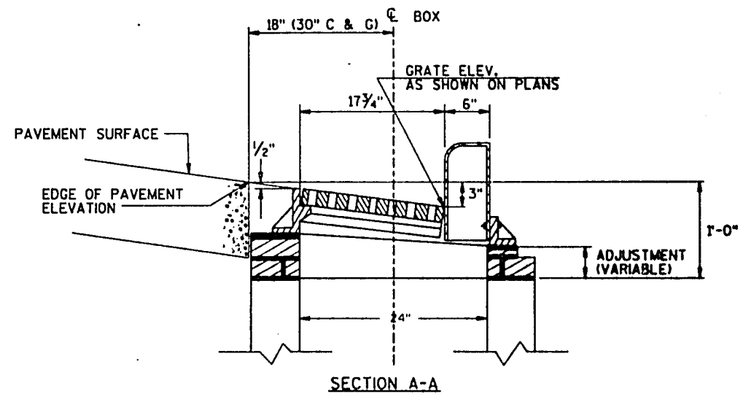
INLET, TYPE 8, 9

PIPE SIZE	D3	D2
	12"	0.17'
	15"	0.19'
	18"	0.21'
	24"	0.25'
	27"	0.27'
	30"	0.29'
	36"	0.33'

DETAIL FOR COMPUTING INLET DEPTH

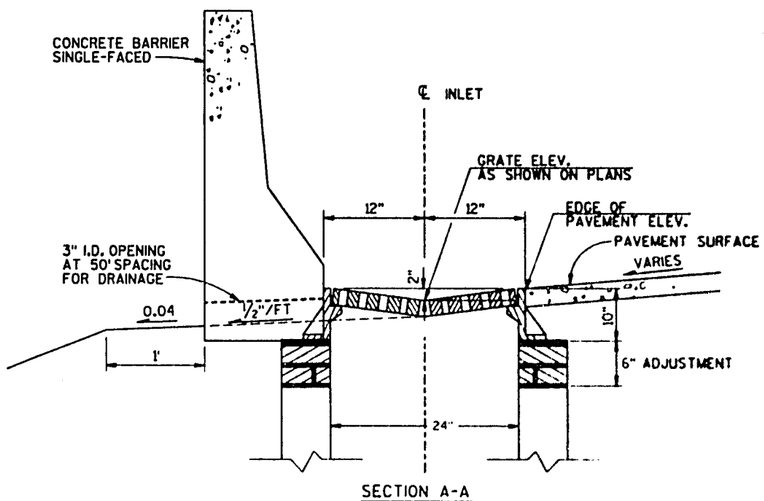


ELEVATION



SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS
(TYPE 3H INLET SHOWN)



SECTION A-A

DETAIL OF CONCRETE BARRIER AND PAVEMENT AT INLETS
(TYPE 1-B INLET SPECIFIED)

59.62

5K

LEVELS ON

KEY MAP

STATE PROJECT NUMBER
1201-04-78

SHEET NO
2.43

SIGNING DETAILS

USH 18

DANE COUNTY

N

0 100 200 300

EAST NORTH BUSINESS BUSINESS 18 151 18 151 — J2-4(2)

BUSINESS BUSINESS 18 151 — J4-2(2)

JCT JCT 18 151 — J1-2(2)

EAST NORTH 18 151 — J2-2(2)

BUSINESS BUSINESS EAST NORTH 18 151 18 151 — J2-4(2)

NORTH EAST 151 18 — J4-2(2)

JCT JCT 18 151 — J1-2(2)

BUSINESS BUSINESS 18 151 — J4-2(2)

JCT JCT 18 151 — J1-2(2)

EXIT 92 TO PB M 1 MILE — E1-1A(5) E1-5(5)

404 W1-6(2)
403 W1-6(2)
410 W3-1(2)
402
414 W1-6(2)
413 W1-6(2)
406 R1-1(2)
412 R1-1(2)
407 R1-1(2)
408 R6-2R(2)
609 R3-55L(2)
411 W1-7(2)
409 R3-1(2)
606 R4-7(2)
702 R5-1(2)
607 W4-2L(2)
701 R5-9(2)
703 R5-9(2)
704 R3-55L(3)
603 R5-9(2)
604 R5-1(2)
605 R4-7(2)
500 R3-1(2)
503 R1-1(2)
502 R1-1(2)
501 R6-2L(2)
505
W3-1(2)
E5-1A(5) "94"
W4-1(5)

NESBITT ROAD

RAMP "E-2"

RAMP "E-1"

USH 18 WB

USH 18 EB

"PB" NORTH

730 735 730 735 740 745 750 755 745 750 755 750 745 740 735 730 45 40 35 30 55 10 5 0 15 20 25 76 76

59,60, 54, 29,30, 32, 20,

LEGEND

- SIGN/SIGNS ON ONE OR MORE WOOD POSTS
- SIGN/SIGNS ON TWO OR MORE STEEL POSTS
- (XXX) SIGN NUMBER
- (*) INSTALLED UNDER I.D. 1201-04-80

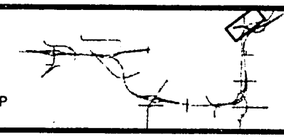
LEVELS ON -

FILE NAME: HDGN: 78227.DGN

SHEET 1 OF 2

ASDCT/CADDS SHEET 42

KEY MAP

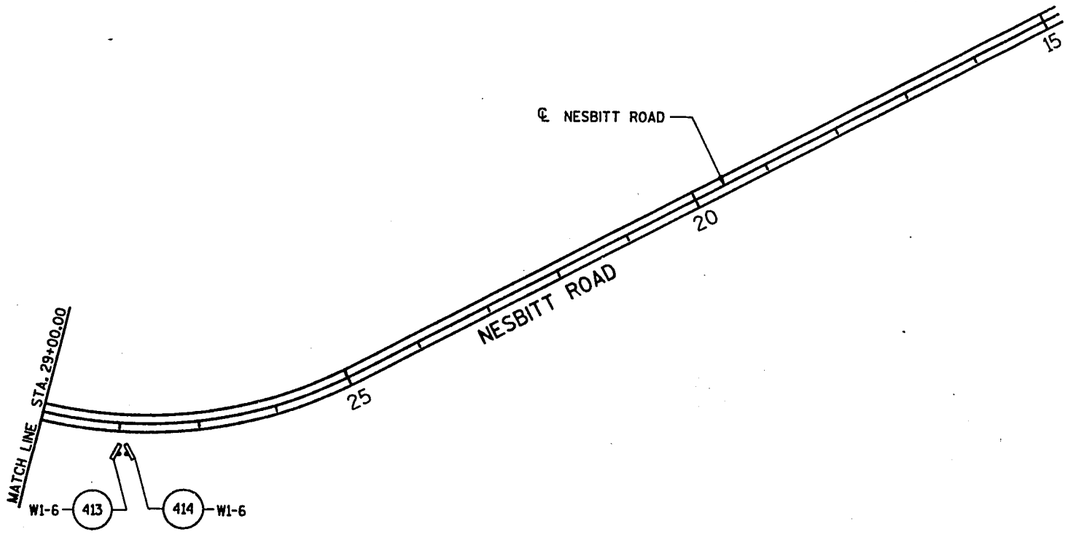


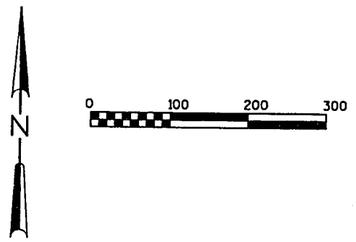
STATE PROJECT NUMBER
1201-04-78

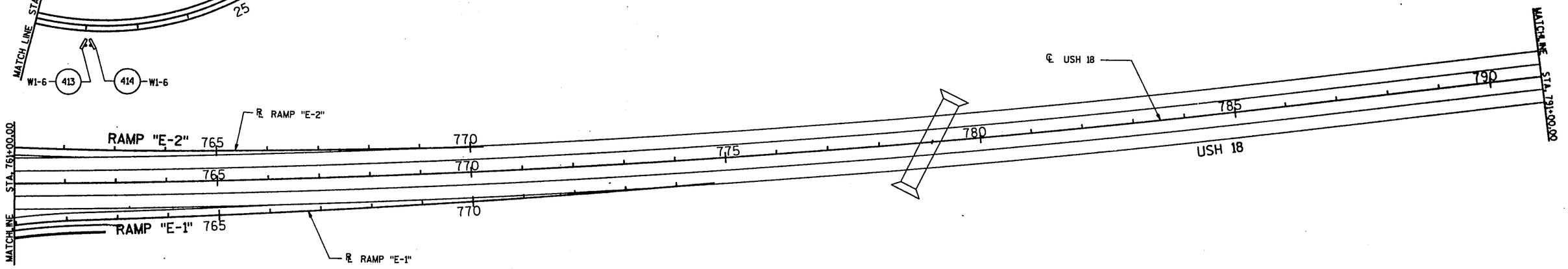
SHEET NO
2.44

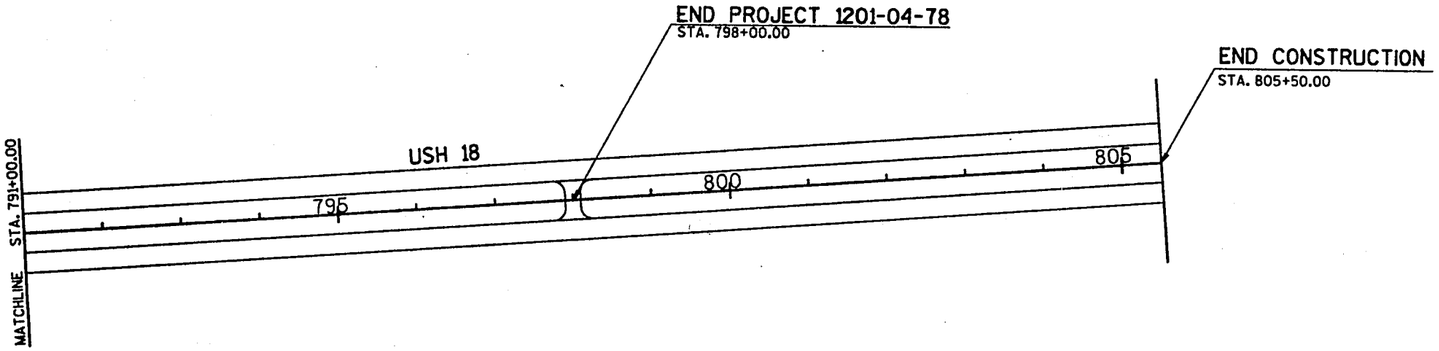
SIGNING DETAILS

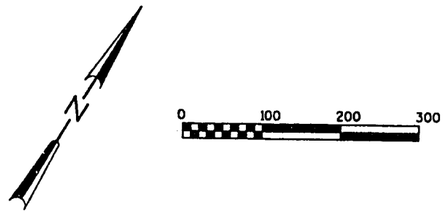
USH 18 DANE COUNTY











59.60, 54,

29,30,31, 20,

LEVELS ON •

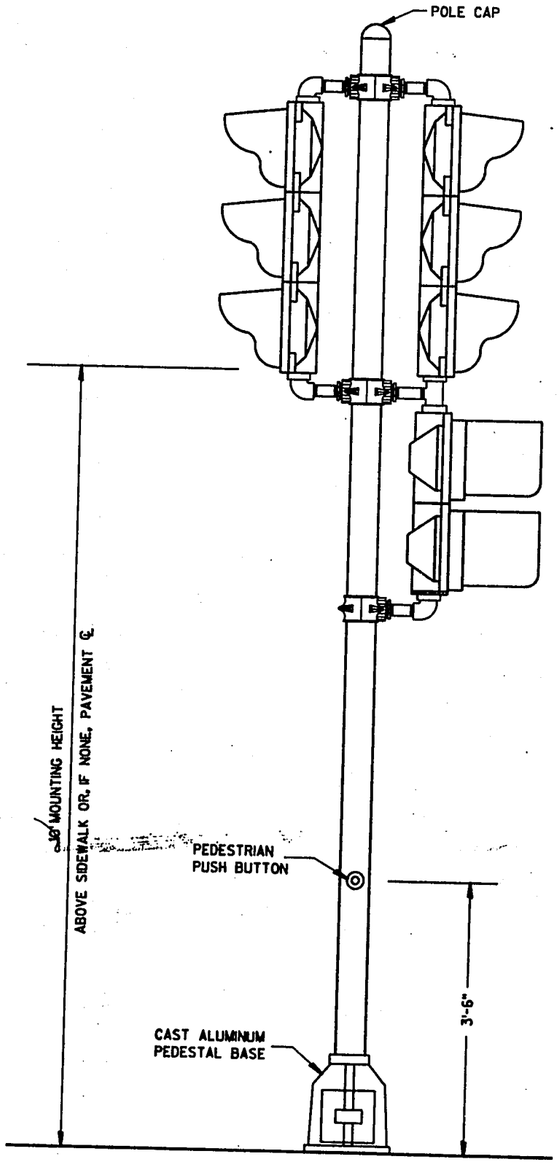
FILE NAME: HDGN: 78228.DGN

SHEET 2 OF 2

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.44A

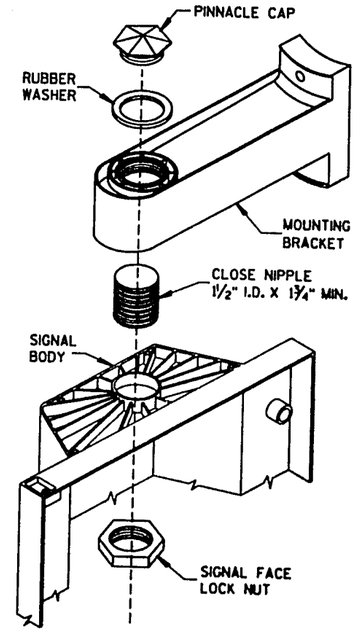
TRAFFIC SIGNAL STANDARD 13'



TRAFFIC SIGNAL STANDARD-13'

GENERAL NOTES

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



SIGNAL FACE MOUNTING DETAIL

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

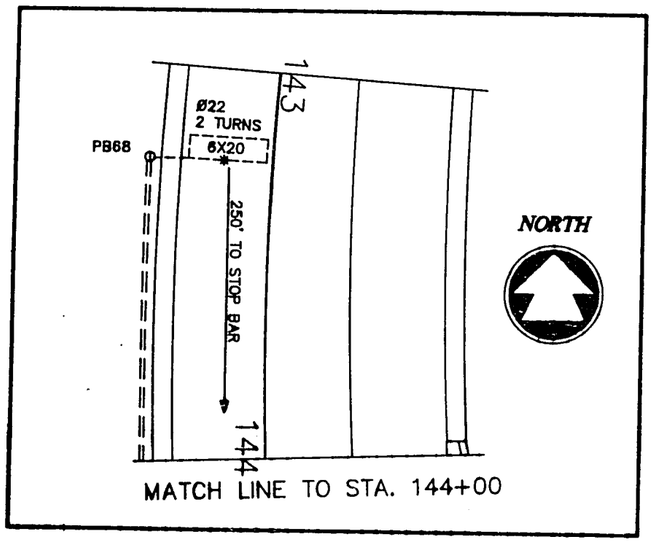
FILE NAME: HDGN:

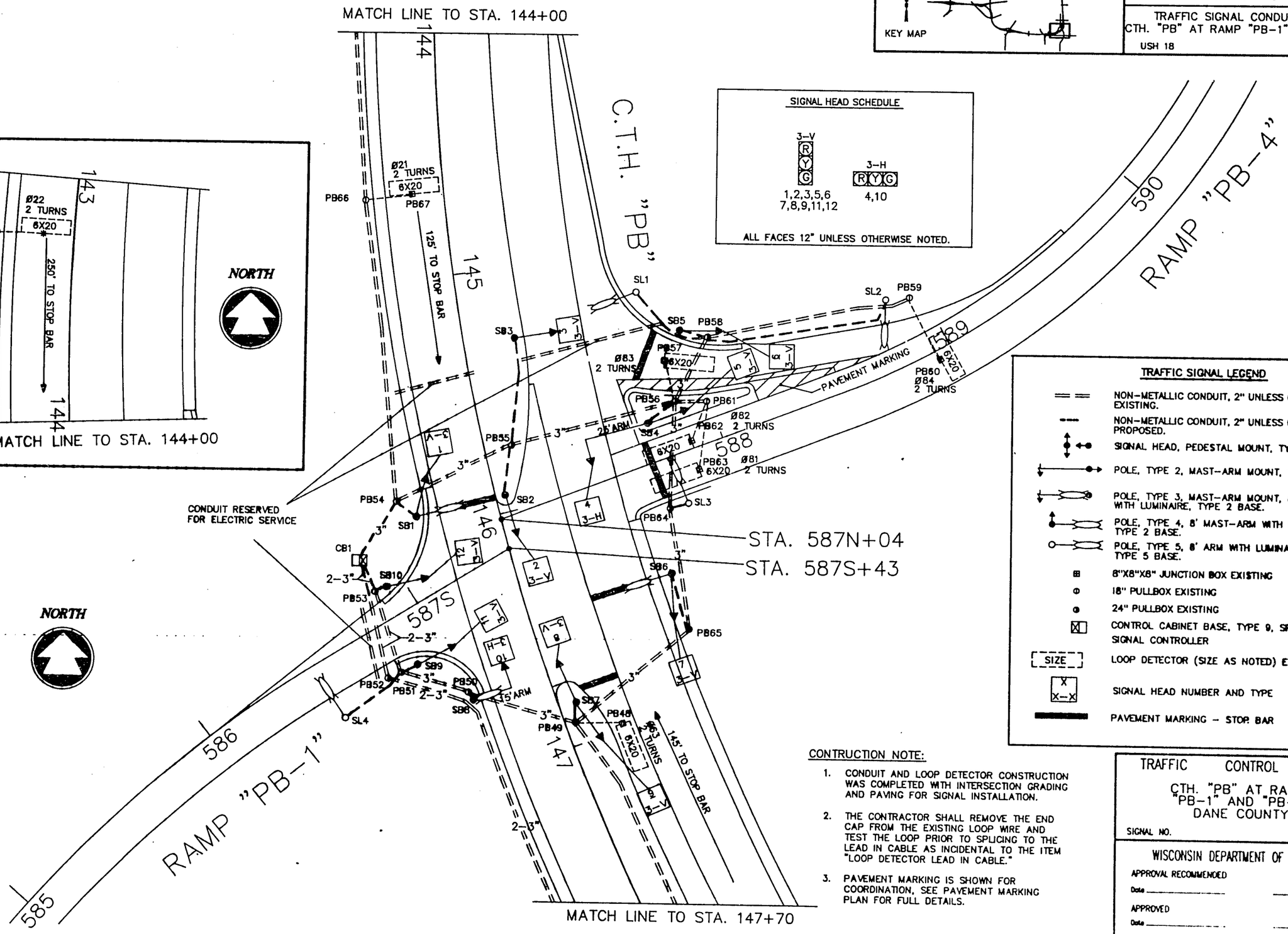
WISDOT/CADDS SHEET 42

KEY MAP

STATE PROJECT NUMBER	SHEET NO
1201-04-78	2.45

TRAFFIC SIGNAL CONDUIT INSTALLATION
CTH. "PB" AT RAMP "PB-1" AND RAMP "PB-4"
USH 18 DANE COUNTY





TRAFFIC SIGNAL LEGEND

- NON-METALLIC CONDUIT, 2" UNLESS OTHERWISE NOTED, EXISTING.
- NON-METALLIC CONDUIT, 2" UNLESS OTHERWISE NOTED, PROPOSED.
- SIGNAL HEAD, PEDESTAL MOUNT, TYPE 1 BASE.
- POLE, TYPE 2, MAST-ARM MOUNT, TYPE 2 BASE
- POLE, TYPE 3, MAST-ARM MOUNT, 8' MAST ARM WITH LUMINAIRE, TYPE 2 BASE.
- POLE, TYPE 4, 8' MAST-ARM WITH LUMINAIRE, TYPE 2 BASE.
- POLE, TYPE 5, 8' ARM WITH LUMINAIRE, TYPE 5 BASE.
- 8"X8"X8" JUNCTION BOX EXISTING
- 18" PULLBOX EXISTING
- 24" PULLBOX EXISTING
- CONTROL CABINET BASE, TYPE 9, SPECIAL & TRAFFIC SIGNAL CONTROLLER
- SIZE — LOOP DETECTOR (SIZE AS NOTED) EXISTING
- X / X-X — SIGNAL HEAD NUMBER AND TYPE
- PAVEMENT MARKING – STOP BAR

CONTRUCTION NOTE:

1. CONDUIT AND LOOP DETECTOR CONSTRUCTION WAS COMPLETED WITH INTERSECTION GRADING AND PAVING FOR SIGNAL INSTALLATION.
2. THE CONTRACTOR SHALL REMOVE THE END CAP FROM THE EXISTING LOOP WIRE AND TEST THE LOOP PRIOR TO SPLICING TO THE LEAD IN CABLE AS INCIDENTAL TO THE ITEM "LOOP DETECTOR LEAD IN CABLE."
3. PAVEMENT MARKING IS SHOWN FOR COORDINATION, SEE PAVEMENT MARKING PLAN FOR FULL DETAILS.

TRAFFIC CONTROL SIGNAL

CTH. "PB" AT RAMPS
"PB-1" AND "PB-4"
DANE COUNTY

SIGNAL NO. SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date _____ DISTRICT TRAFFIC ENGINEER

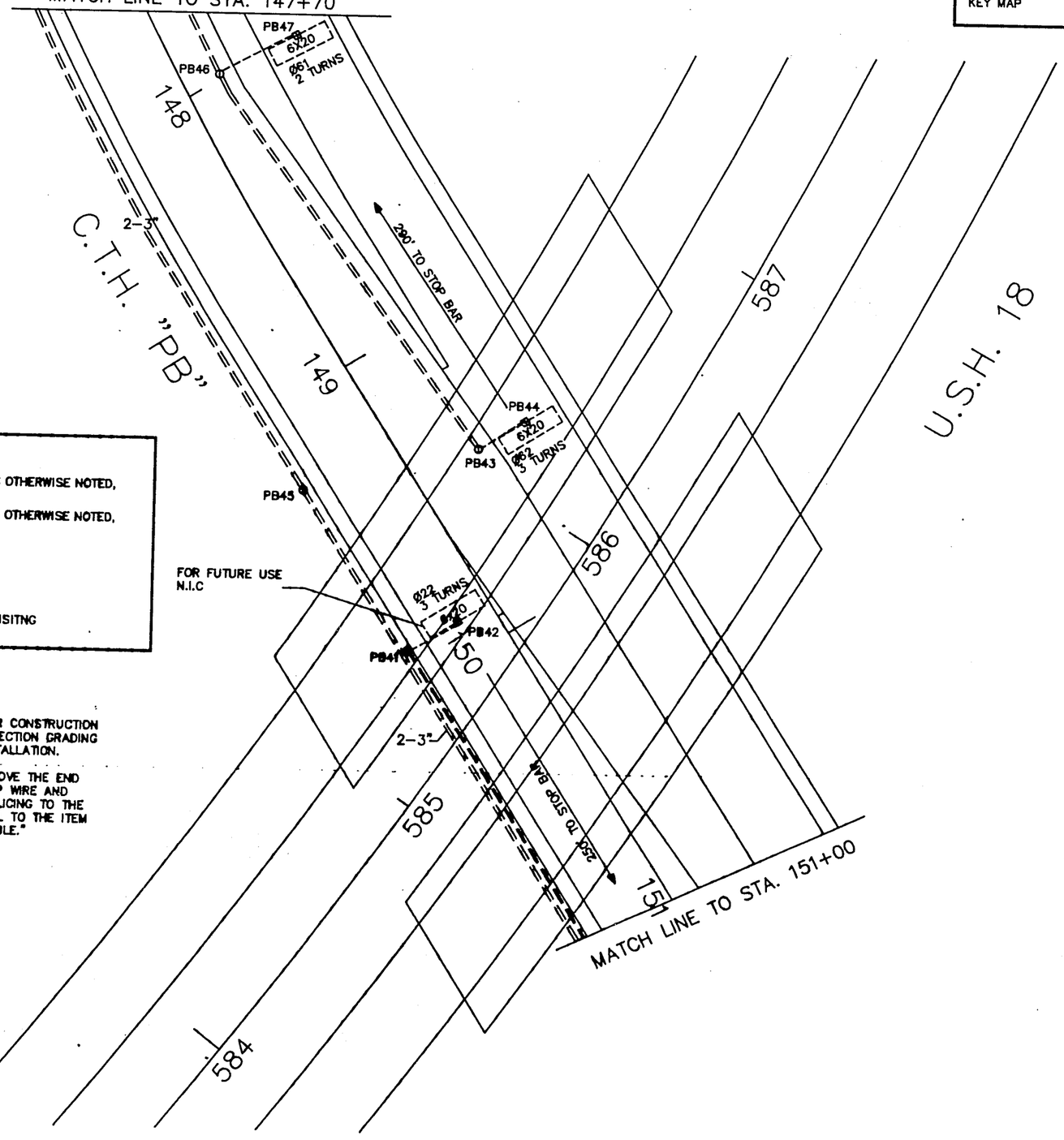
APPROVED
Date _____ CHIEF TRAFFIC ENGINEER

KEY MAP

STATE PROJECT NUMBER	SHEET NO
1201-04-78	2.46

TRAFFIC SIGNAL CONDUIT INSTALLATION
CTH. "PB" AT USH "18"

USH 18 — DANE COUNTY



LEGEND

====	NON-METALLIC CONDUIT, 2" UNLESS OTHERWISE NOTED, EXISTING.
———	NON-METALLIC CONDUIT, 2" UNLESS OTHERWISE NOTED, PROPOSED.
■	8"X8"X8" JUNCTION BOX EXISTING
●	18" PULLBOX EXISTING
●	24" PULLBOX EXISTING
SIZE	LOOP DETECTOR (SIZE AS NOTED) EXISITNG

CONTRUCTION NOTE:

1. CONDUIT AND LOOP DETECTOR CONSTRUCTION WAS COMPLETED WITH INTERSECTION GRADING AND PAVING FOR SIGNAL INSTALLATION.
2. THE CONTRACTOR SHALL REMOVE THE END CAP FROM THE EXISTING LOOP WIRE AND TEST THE LOOP PRIOR TO SPLICING TO THE LEAD IN CABLE AS INCIDENTAL TO THE ITEM "LOOP DETECTOR LEAD IN CABLE."

TRAFFIC CONTROL SIGNAL

CTH. "PB" AT USH "18"
DANE COUNTY

SIGNAL NO. — SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date _____ DISTRICT TRAFFIC ENGINEER

APPROVED
Date _____ CHIEF TRAFFIC ENGINEER

FILENAME: PB_USH18.DWG

KEY MAP

STATE PROJECT NUMBER	SHEET NO
1201-04-78	2.47

TRAFFIC SIGNAL CONDUIT INSTALLATION
CTH. "PB" AT RAMP "PB-2" AND RAMP "PB-3"
USH 18 DANE COUNTY

NORTH

MATCH LINE TO STA. 151+00

MATCH LINE TO STA. 155+00

C.T.H. "PB"

RAMP "PB-2"

RAMP "PB-3"

STA. 583N+77
STA. 584S+11

CONDUIT RESERVED FOR ELECTRIC SERVICE

LEGEND

- NON-METALIC CONDUIT, 2" UNLESS OTHERWISE NOTED. EXISTING.
- NON-METALLIC CONDUIT, 2" UNLESS OTHERWISE NOTED. PROPOSED.
- POLE, TYPE 5, 8' ARM WITH LUMINAIRE, TYPE 5 BASE.
- 8"X8"X8" JUNCTION BOX EXISTING
- 18" PULLBOX EXISTING
- 24" PULLBOX EXISTING
- SIZE — LOOP DETECTOR (SIZE AS NOTED) EXISTING

CONTRUCTION NOTE:

1. CONDUIT AND LOOP DETECTOR CONSTRUCTION WAS COMPLETED WITH INTERSECTION GRADING AND PAVING FOR SIGNAL INSTALLATION.
2. LOOP DETECTORS ARE FOR FUTURE USE, N.I.C.

TRAFFIC CONTROL SIGNAL

CTH. "PB" AT RAMPS "PB-2" AND "PB-3" DANE COUNTY

SIGNAL NO. SCALE 0 20

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date _____ DISTRICT TRAFFIC ENGINEER

APPROVED

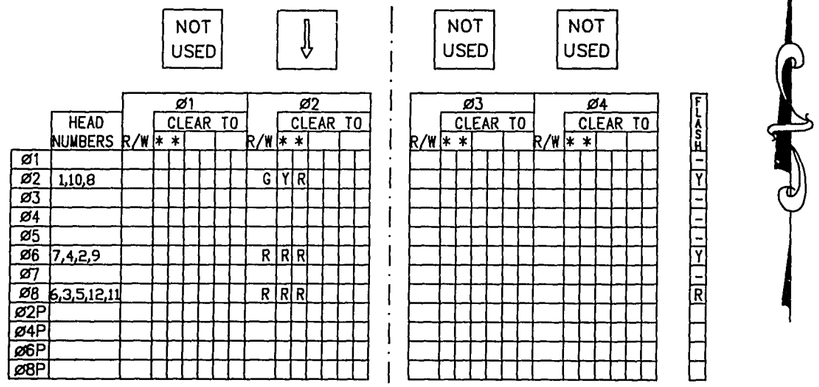
Date _____ CHIEF TRAFFIC ENGINEER

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.48

SEQUENCE OF OPERATION

U.S.H. 18 — DANE COUNTY

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH 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	NON-CONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
Ø 1		
Ø 2	6	8
Ø 3		
Ø 4		
Ø 5		
Ø 6	2	8
Ø 7		
Ø 8	-	2 AND 6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
Ø21	1	X			2	2				6X20	2
Ø22	2	X			2	2				6X20	2
Ø61	3	X			6	6				6X20	2
Ø62	4	X			6	6				6X20	3
Ø63	5	X			6	6			X	6X20	2
Ø81	6	X			8	8				6X20	2
Ø82	7	X			8	8				6X20	2
Ø83	8	X			8	8				6X20	2
Ø84	9			X	-	8			X	6X20	2

CONTROLLER LOGIC

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

OVERLAPS

O.L.	"A"	= N/A
O.L.	"B"	= N/A
O.L.	"C"	= N/A
O.L.	"D"	= N/A

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

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

GENERAL NOTES:

1. 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 ALTERNATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. Ø2 AND Ø6 ARE COORDINATED PHASES.

C.T.H. "PB" AT RAMPS
"PB-1" AND "PB-4"

DANE COUNTY

SIGNAL NO.

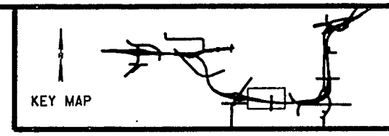
DATE 03/04/94 SHEET NO. 6

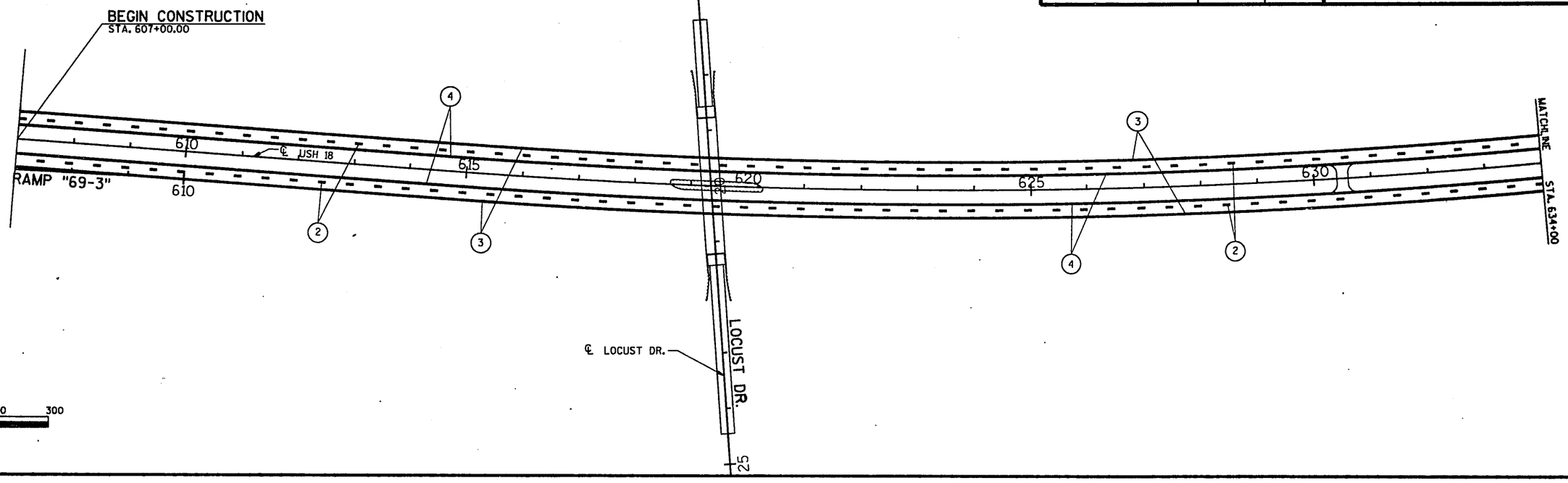
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.49

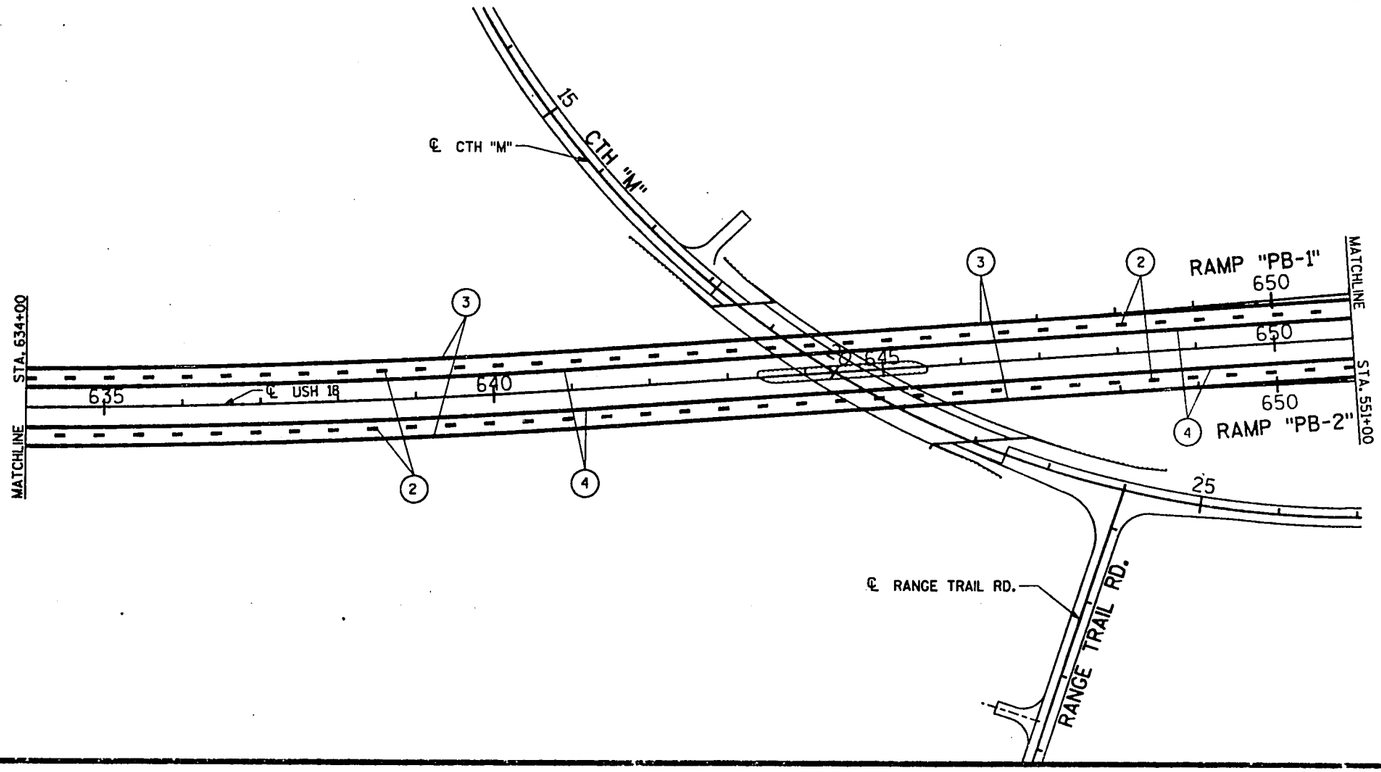
PAVEMENT MARKING PLAN

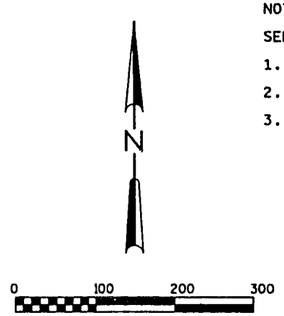
USH 18 — DANE COUNTY

KEY MAP









NOTES:

SEE STANDARD DETAIL DRAWINGS FOR:

1. PAVEMENT MARKING (MAINLINE AND INTERSECTIONS)
2. PAVEMENT MARKING (RAMPS AND GORES)
3. MARKING ON CTH "M" AND RANGE TRAIL ROAD PREVIOUSLY DONE BY OTHERS

LEGEND

PAVEMENT MARKING, EPOXY

(2) LANE LINE, 4-INCH WHITE

(3) EDGE LINE, 4-INCH WHITE

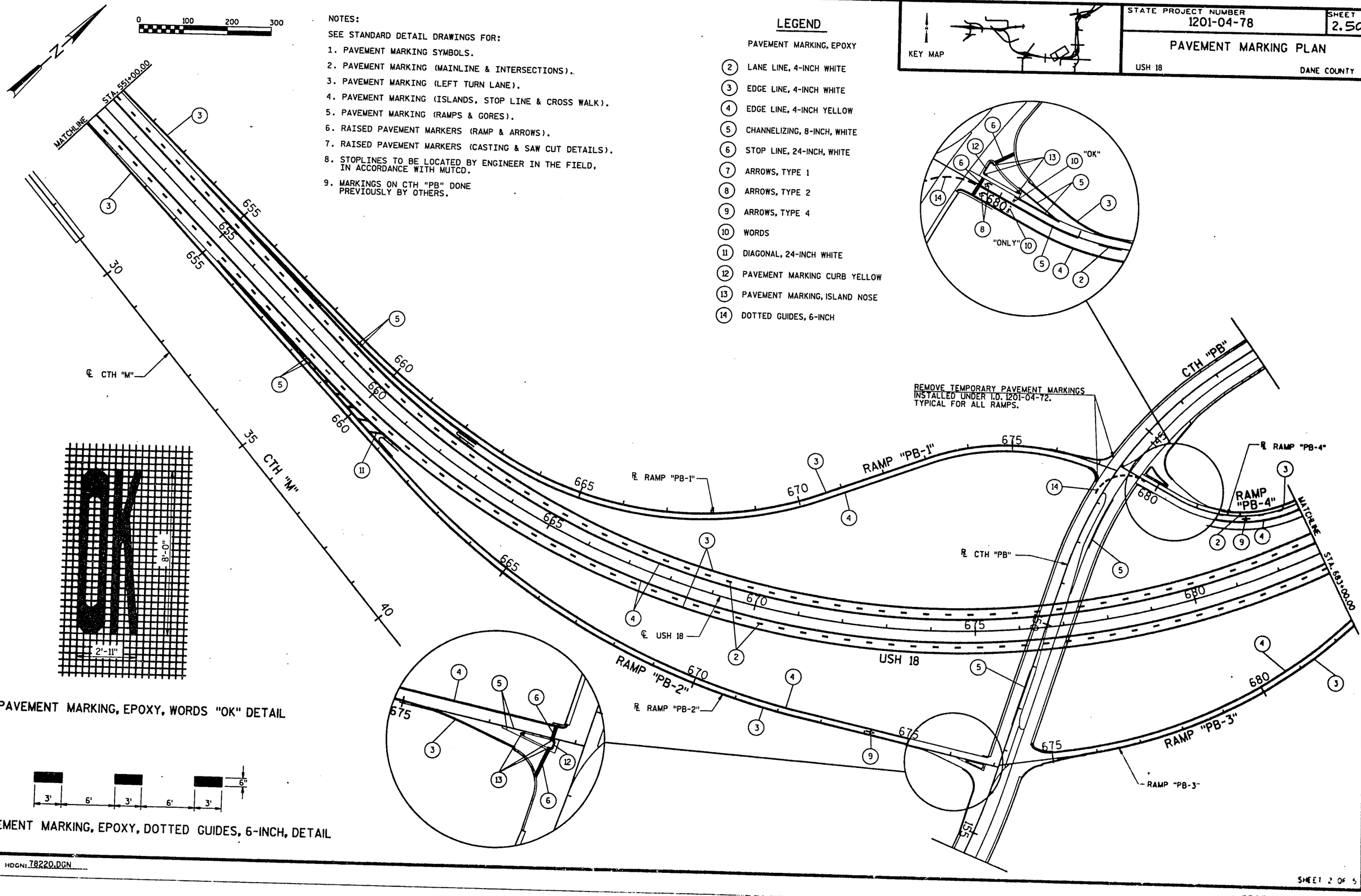
(4) EDGE LINE, 4-INCH YELLOW

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: 78219.DGN

SHEET 10 OF

WISDOT/CADDS SHEET



NOTES:

SEE STANDARD DETAIL DRAWINGS FOR:

1. PAVEMENT MARKING SYMBOLS.
2. PAVEMENT MARKING (MAINLINE & INTERSECTIONS).
3. PAVEMENT MARKING (LEFT TURN LANE).
4. PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK).
5. PAVEMENT MARKING (RAMPS & GORES).
6. RAISED PAVEMENT MARKERS (RAMP & ARROWS).
7. RAISED PAVEMENT MARKERS (CASTING & SAW CUT DETAILS).
8. STOPLINES TO BE LOCATED BY ENGINEER IN THE FIELD, IN ACCORDANCE WITH MUTCD.
9. MARKINGS ON CTH "PB" DONE PREVIOUSLY BY OTHERS.

LEGEND

PAVEMENT MARKING, EPOXY

(2) LANE LINE, 4-INCH WHITE
(3) EDGE LINE, 4-INCH WHITE
(4) EDGE LINE, 4-INCH YELLOW
(5) CHANNELIZING, 8-INCH, WHITE
(6) STOP LINE, 24-INCH, WHITE
(7) ARROWS, TYPE 1
(8) ARROWS, TYPE 2
(9) ARROWS, TYPE 4
(10) WORDS
(11) DIAGONAL, 24-INCH WHITE
(12) PAVEMENT MARKING CURB YELLOW
(13) PAVEMENT MARKING, ISLAND NOSE
(14) DOTTED GUIDES, 6-INCH

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.50

PAVEMENT MARKING PLAN

USH 18 — DANE COUNTY

PAVEMENT MARKING, EPOXY, WORDS "OK" DETAIL

PAVEMENT MARKING, EPOXY, DOTTED GUIDES, 6-INCH, DETAIL

FILE NAME: HDGN: 78220.DGN

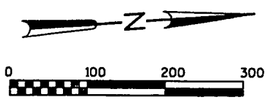
WISDOT/CADDS SHEET 42

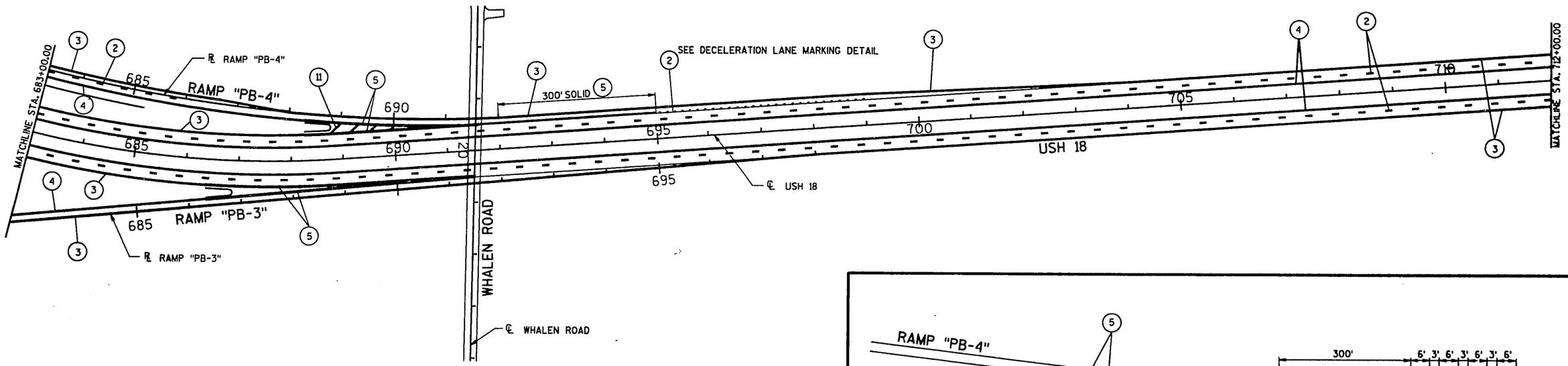
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.51

PAVEMENT MARKING PLAN

USH 18 — DANE COUNTY

KEY MAP





LEGEND

PAVEMENT MARKING, EPOXY

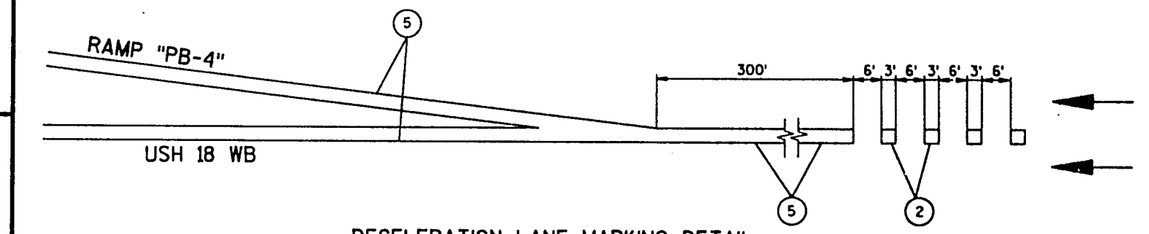
(2) LANE LINE, 4-INCH WHITE

(3) EDGE LINE, 4-INCH WHITE

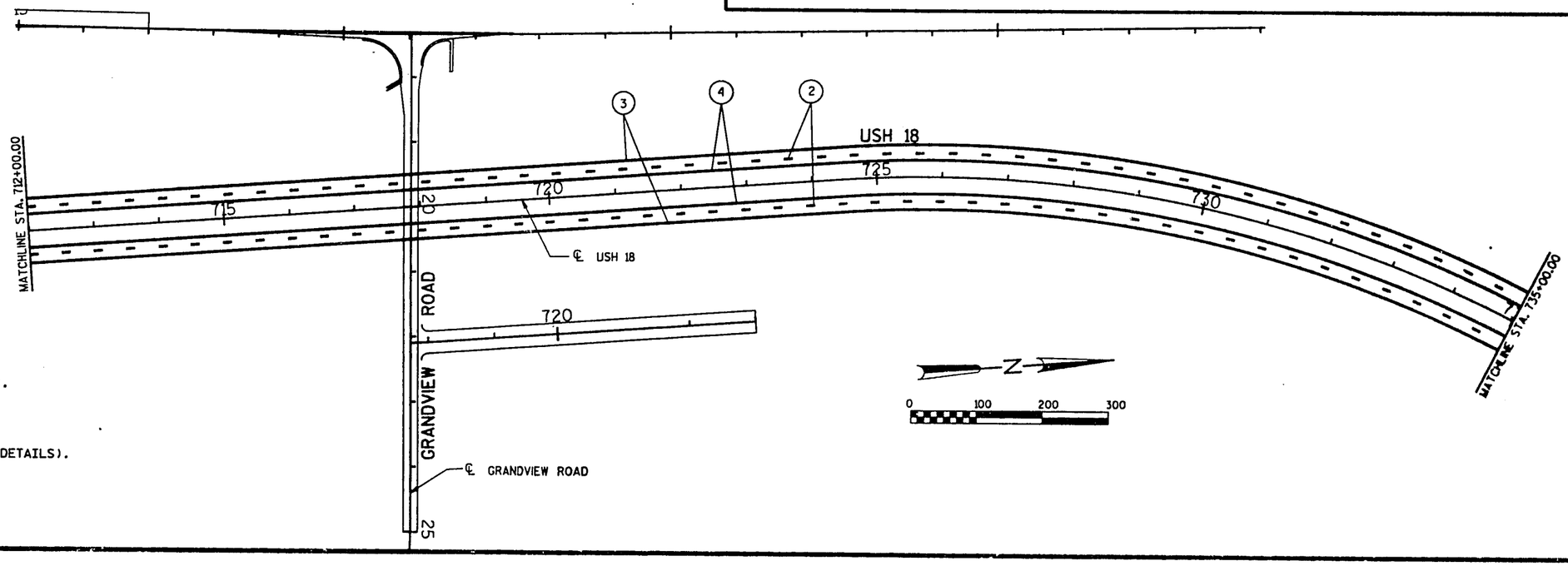
(4) EDGE LINE, 4-INCH YELLOW

(5) CHANNELIZING, 8-INCH, WHITE

(11) DIAGONAL, 24-INCH WHITE



DECELERATION LANE MARKING DETAIL



NOTES:

SEE STANDARD DETAIL DRAWINGS FOR:

1. PAVEMENT MARKING SYMBOLS.
2. PAVEMENT MARKING (MAINLINE & INTERSECTIONS).
3. PAVEMENT MARKING (RAMPS & GORES).
4. RAISED PAVEMENT MARKERS (RAMP & ARROWS).
5. RAISED PAVEMENT MARKERS (CASTING & SAW CUT DETAILS).

FILE NAME: HDGN:.78221.DGN

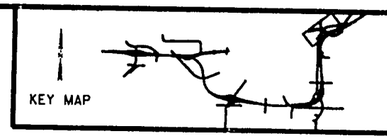
WISDOT/CADDS SHEET 12

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.52

PAVEMENT MARKING PLAN

USH 18 — DANE COUNTY

KEY MAP



LEGEND

PAVEMENT MARKING, EPOXY

1. CENTER LINE, 4-INCH YELLOW
2. LANE LINE, 4-INCH WHITE
3. EDGE LINE, 4-INCH WHITE
4. EDGE LINE, 4-INCH YELLOW
5. CHANNELIZING, 8-INCH, WHITE
6. STOP LINE, 24-INCH
9. ARROWS, TYPE 4
11. DIAGONAL, 24-INCH, WHITE
12. PAVEMENT MARKING CURB YELLOW
13. PAVEMENT MARKING, ISLAND NOSE

NOTES:

SEE STANDARD DETAIL DRAWINGS FOR:

1. PAVEMENT MARKING SYMBOLS.
2. PAVEMENT MARKING (MAINLINE & INTERSECTIONS).
3. PAVEMENT MARKING (LEFT TURN LANE).
4. PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK).
5. PAVEMENT MARKING (RAMPS & GORES).
6. RAISED PAVEMENT MARKERS (RAMP & ARROWS).
7. RAISED PAVEMENT MARKERS (CASTING & SAW CUT DETAILS).
8. STOPLINES TO BE LOCATED BY ENGINEER IN THE FIELD, IN ACCORDANCE WITH WUTCD.

FILE NAME: HDGN:78222.DGN

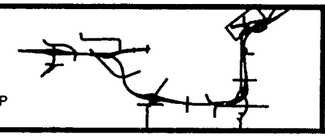
WISDOT/CADDS SHEET 42

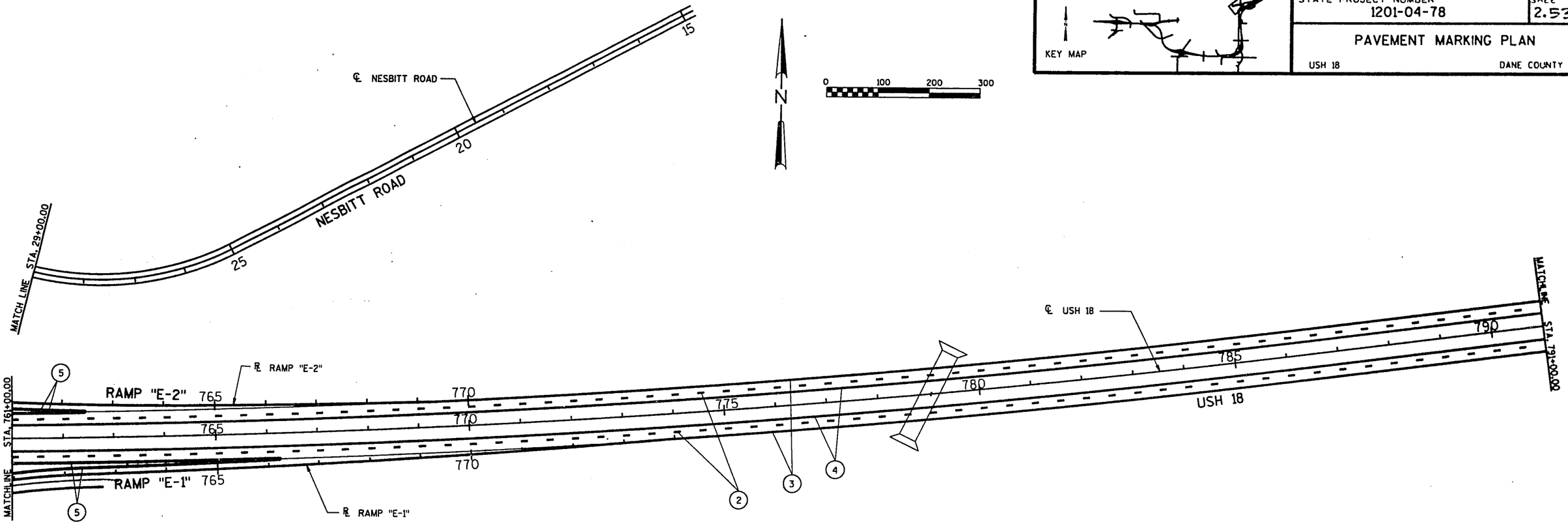
STATE PROJECT NUMBER 1201-04-78 | SHEET NO 2.53

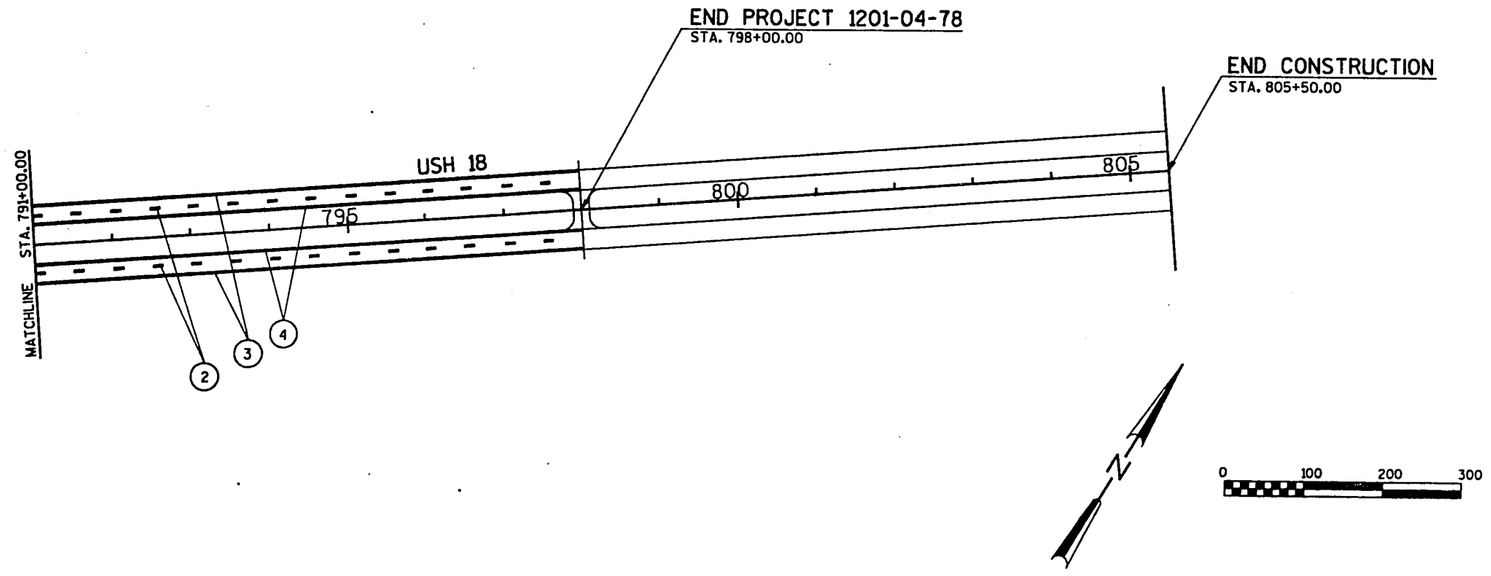
PAVEMENT MARKING PLAN

USH 18 | DANE COUNTY

KEY MAP







LEGEND

PAVEMENT MARKING, EPOXY

1. CENTER LINE, 4-INCH YELLOW
2. LANE LINE, 4-INCH WHITE
3. EDGE LINE, 4-INCH WHITE
4. EDGE LINE, 4-INCH YELLOW
5. CHANNELIZING, 8-INCH, WHITE
6. STOP LINE, 24-INCH
11. DIAGONAL, 24-INCH, WHITE
12. PAVEMENT MARKING CURB YELLOW
13. PAVEMENT MARKING, ISLAND NOSE

NOTES:

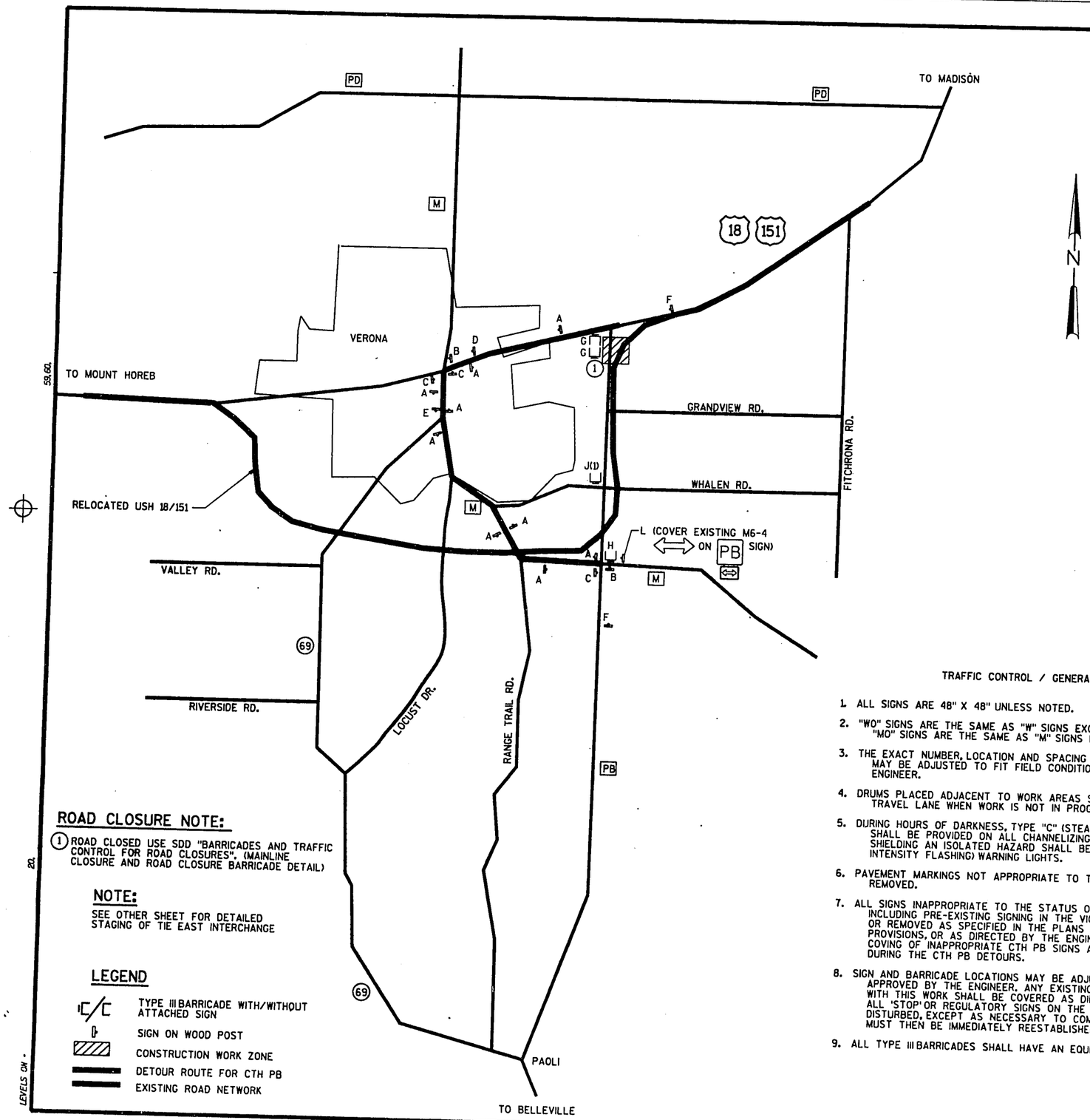
SEE STANDARD DETAIL DRAWINGS FOR:

1. PAVEMENT MARKING SYMBOLS.
2. PAVEMENT MARKING (MAINLINE & INTERSECTIONS).
3. PAVEMENT MARKING (LEFT TURN LANE).
4. PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK).
5. PAVEMENT MARKING (RAMPS & GORES).
6. RAISED PAVEMENT MARKERS (RAMP & ARROWS).
7. RAISED PAVEMENT MARKERS (CASTING & SAW CUT DETAILS).
8. STOPLINES TO BE LOCATED BY ENGINEER IN THE FIELD, IN ACCORDANCE WITH MUTCD.

SHEET 5 OF 5

FILE NAME: HDGN: 78223.DGN

WISDOT/CADDS SHEET 42



ROAD CLOSURE NOTE:

(1) ROAD CLOSED USE SDD "BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES". (MAINLINE CLOSURE AND ROAD CLOSURE BARRICADE DETAIL)

NOTE:

SEE OTHER SHEET FOR DETAILED STAGING OF TIE EAST INTERCHANGE

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- SIGN ON WOOD POST
- CONSTRUCTION WORK ZONE
- DETOUR ROUTE FOR CTH PB
- EXISTING ROAD NETWORK

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.54

ADVANCE TRAFFIC CONTROL AND CTH "PB" DETOUR PLAN

USH 18 DANE COUNTY

A = DETOUR PB — M4-8 24"X12" / M1-5A 24"X24"

B = DETOUR PB ⇦ — M4-8 24"X12" / M1-5A 24"X24" / M06-1L 21"X21"

C = DETOUR PB ⇨ — M4-8 24"X12" / M1-5A 24"X24" / M06-1R 21"X21"

D = DETOUR PB ⇦ — M4-8 24"X12" / M1-5A 24"X24" / M5-1L 21"X21"

E = DETOUR PB ⇧ — M4-8 24"X12" / M1-5A 24"X24" / M06-1 (AHEAD) 21"X21"

J(X) = R11-3 60" X 30" ROAD CLOSED X MILES AHEAD LOCAL TRAFFIC ONLY — TYPE III BARRICADE

F = PB M1-5A 24"X24" / DETOUR AHEAD W20-2 / PB M1-5A 24"X24" / DETOUR 500 FT W20-2

L = M06-6L 21"X21"

G = R11-2 48"X30" ROAD CLOSED — TYPE III BARRICADE

STAGE 1

H = R11-3 60" X 30" ROAD CLOSED 1½ MILES AHEAD LOCAL TRAFFIC ONLY — TYPE III BARRICADE; M4-9L 30" X 24" DETOUR ⇦ — TYPE III BARRICADE

TRAFFIC CONTROL / GENERAL NOTES

1. ALL SIGNS ARE 48" X 48" UNLESS NOTED.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE. "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4. DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
5. DURING HOURS OF DARKNESS, TYPE "C" (STEADY BURN) WARNING LIGHTS SHALL BE PROVIDED ON ALL CHANNELIZING DEVICES IN TAPERS. BARRICADES SHIELDING AN ISOLATED HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) WARNING LIGHTS.
6. PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.
7. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER. THIS INCLUDES THE COVING OF INAPPROPRIATE CTH PB SIGNS AND/OR ARROWS DURING THE CTH PB DETOURS.
8. SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS APPROVED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL 'STOP' OR REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT AS NECESSARY TO COMPLETE THE WORK. THE SIGN MUST THEN BE IMMEDIATELY REESTABLISHED
9. ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET.

PLOT SCALE: 1"=20'
PLOT NAME: TD2378.DGN
REV. DATES
FILE NAME: HDGN: 78299.DGN
WISDOT/CADDS SHEET

STATE PROJECT NUMBER 1201-04-78 | SHEET NO 2.55

TRAFFIC CONTROL EAST INTERCHANGE STAGE 1

USH 18 DANE COUNTY

KEY MAP

TRAFFIC CONTROL / GENERAL NOTES

1. ALL SIGNS ARE 48" X 48" UNLESS NOTED.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE. "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4. DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
5. DURING HOURS OF DARKNESS, TYPE "C" (STEADY BURN) WARNING LIGHTS SHALL BE PROVIDED ON ALL CHANNELIZING DEVICES IN TAPERS. BARRICADES SHIELDING AN ISOLATED HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) WARNING LIGHTS.
6. PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.
7. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER.
8. SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS APPROVED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL 'STOP' OR REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT AS NECESSARY TO COMPLETE THE WORK. THE SIGN MUST THEN BE IMMEDIATELY REESTABLISHED
9. ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET.

STAGE 1

TRAFFIC

AT THE BEGINNING OF STAGE 1:
EASTBOUND TRAFFIC ON EXISTING USH 18 WILL USE THE EXISTING MEDIAN CROSSOVER LOCATED WEST OF THE NESBITT ROAD INTERSECTION. THE TWO WESTBOUND LANES OF USH 18 WILL BE TEMPORARILY CONVERTED INTO ONE EASTBOUND LANE AND ONE WESTBOUND LANE BETWEEN NESBITT ROAD AND THE EXISTING MEDIAN CROSSOVER LOCATED EAST OF STA. 798+00.

AT THE END OF STAGE 1:
DIVERT USH 18 EASTBOUND TRAFFIC TO ONE OF THE WESTBOUND TRAVEL LANES AT LINCOLN STREET. MAINTAIN UNTIL THE MEDIAN CROSSOVER LOCATED EAST OF STA. 798+00.
CLOSE CTH PB TO TRAFFIC BETWEEN EXISTING USH 18 AND THE MRRT.

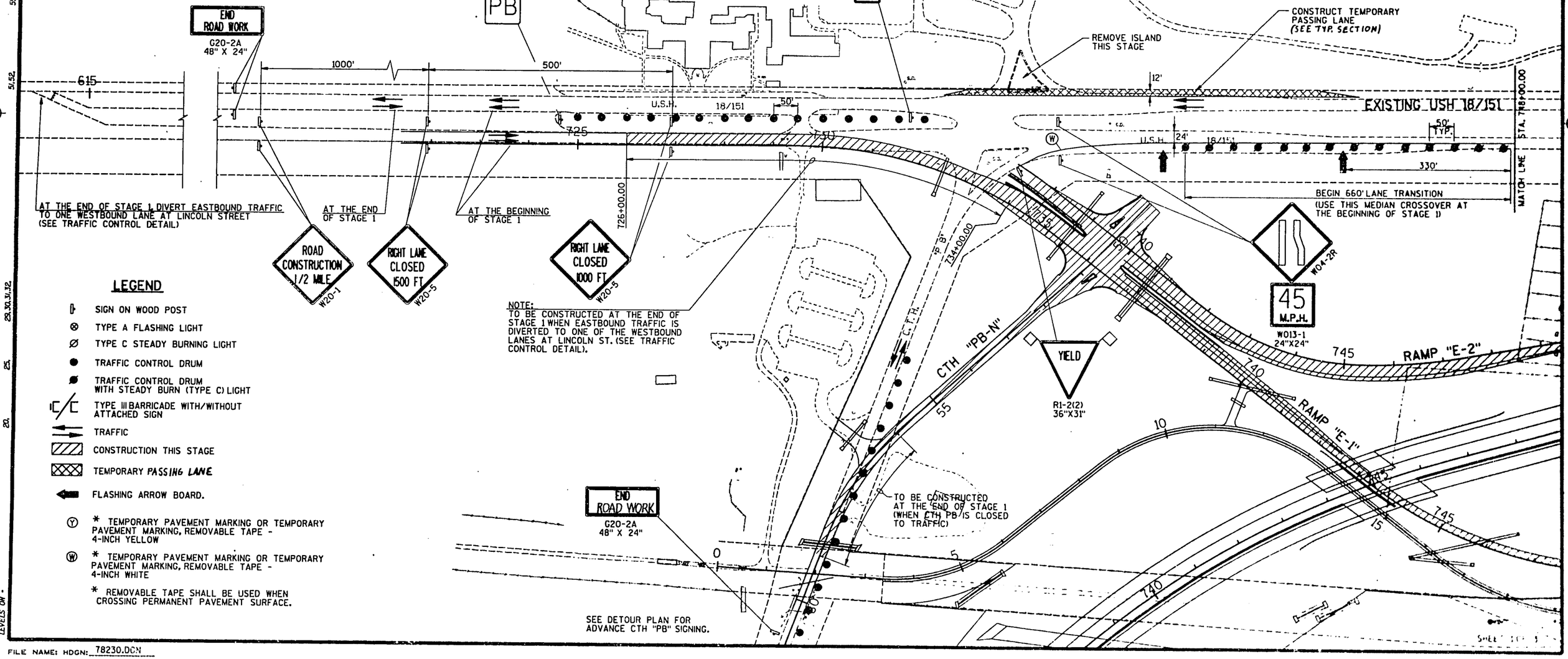
CONSTRUCT

CONSTRUCT 800' TEMPORARY PASSING LANE ON THE NORTH SIDE OF EXISTING USH 18 NEAR THE LOCAL ROAD INTERSECTION.
USH 18 EB BETWEEN STA. 757+00 AND STA. 798+00
(THIS INCLUDES SOUTH PORTION OF BOX CULVERT B-13-426 AT STA. 779+00).
USH 18 WB BETWEEN STA. 757+00 AND STA. 773+00.
RAMP E-1 BETWEEN STA. 734+00 AND STA. 773+00.
RAMP E-2 BETWEEN STA. 737+50 AND STA. 769+00.
CTH PB-N BETWEEN STA. 49+00 AND STA. 56+00.

AT THE END OF STAGE 1:
RAMP E-1 BETWEEN STA. 726+00 AND STA. 734+00.
CTH PB-N BETWEEN STA. 56+00 AND STA. 59+00.

NOTE:
FOR THE END OF STAGE 1, ADD W06-3 SIGNS ON USH 18 FOR TRAFFIC TURNING OFF OF CTH PB. ALSO WILL NEED A TEMPOARY STOP SIGN AND STOPLINE AT THE RELOCATED STOPPING POINT.

NOTE:
AT THE END OF STAGE 1, WHEN EASTBOUND TRAFFIC IS DIVERTED TO ONE OF THE WESTBOUND LANES, MOVE THESE EXISTING SIGNS TO LOCATIONS SHOWN. MOVE BACK TO EASTBOUND LANES FOR STAGE 2 (PAY FOR AS MOVING SIGNS, TYPE II).



LEGEND

- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY PASSING LANE
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH WHITE

* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

59.60, 51.52, 29.30.31.32, 25, 20, LEVELS ON

FILE NAME: HDGN: 78230.DGN

WISDOT/CADDS SHEET 42

PLOT SCALE: 1"=100'

PLOT NAME: 78231.DGN

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	2.56

KEY MAP

TRAFFIC CONTROL
EAST INTERCHANGE
STAGE 1

USH 18 — DANE COUNTY

0 100 200 300

TEMPORARY PAVEMENT MARKING, RAISED MARKERS AT 25 FT SPACING. WHITE ON RIGHT, YELLOW ON LEFT

W01-4L

45 M.P.H.

W013-1 24"X24"

W01-6 60" X 30"

TYPE III BARRICADE

R11-2 48"X30" ROAD CLOSED

TYPE III BARRICADE

LEFT TURN LANE

R3-55L 24"X30" (MOUNT IN DRUM)

R11-2 48"X30" ROAD CLOSED

TYPE III BARRICADE

TRAFFIC CONTROL, FLEXIBLE TUBULAR MARKER POSTS, BASES REQUIRED (AT 50' SPACING)

NESBITT ROAD

W06-1 48" X 48"

B-13-426

DOUBLE YELLOW TEMPORARY PAVEMENT MARKING, PAINT YELLOW AND MARKER POSTS, FLEXIBLE TUBULAR MARKER BASES @ 50' INTERVALS FOR 600'

CONTINUE 1 LANE WB TRAFFIC FOR 400 FT.

400'

150' TAPER

100' STORAGE

EXISTING USH 18/151

MATCH LINE STA. 748+00.00

50' TYP.

8" TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE

375'± TRAFFIC ON ONE LANE

TRAFFIC ON TEMPORARY ROAD

TEMPORARY PAVEMENT MARKING, RAISED MARKERS REQ'D. AT 25' SPACING YELLOW(LT.) WHITE(RT.)

(TEMPORARY ROAD CONSTRUCTED BY OTHERS)

EXISTING USH 18/151 EB USED AS HAUL ROAD

RAMP "E-2"

USH 18 WB

USH 18 EB

RAMP "E-1"

MRRT

USH 18 EB

W06-3 48" X 48"

DO NOT PASS

R4-1 24" X 30"

LEGEND

- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY MEDIAN CROSSOVER
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH WHITE

* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

LEVELS ON =

FILE NAME: HDGN: 78231.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.57

TRAFFIC CONTROL
EAST INTERCHANGE
STAGE 1

USH 18 DANE COUNTY

KEY MAP

0 100 200 300

END PROJECT 1201-04-78
STA. 798+00.00

USH 18 WB

USH 18 EB

MATCH LINE STA. 780+00

100' TYP

50'

800' SINGLE USH 18 EB LANE

660' LANE TRANSITION

250'

25'

SEE DETAIL
LANE CLOSURE
WHERE SPEED IS
45 MPH OR GREATER
FOR ADVANCE SIGNING

R5-1
30"X30"
DO NOT ENTER

TYPE III BARRICADE

W06-3

DO NOT PASS
R4-1
24" X 30"

350' 250'

50'

W06-1

W01-4R

45 M.P.H.
W013-1
36"X36"

R4-7
24"X30"
(IN DRUM)

TEMPORARY PAVEMENT MARKING, RAISED PAVEMENT MARKERS REQUIRED AT 25' SPACING YELLOW (L.T.) WHITE (R.T.)

R11-2 (MOD.)
48"X30"
LANE CLOSED

TYPE III BARRICADE

END ROAD WORK
G20-2A
48" X 24"

LEGEND

- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY CROSSOVER (EXISTING)
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH WHITE

* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

LEVELS ON

FILE NAME: HDGN: 78232.DGN

SHEET 3 OF 3

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL / GENERAL NOTES

1. ALL SIGNS ARE 48" X 48" UNLESS NOTED.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE. "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
4. DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
5. DURING HOURS OF DARKNESS, TYPE "C" (STEADY BURN) WARNING LIGHTS SHALL BE PROVIDED ON ALL CHANNELIZING DEVICES IN TAPERS. BARRICADES SHIELDING AN ISOLATED HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) WARNING LIGHTS.
6. PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.
7. ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER.
8. SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS APPROVED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL 'STOP' OR REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT AS NECESSARY TO COMPLETE THE WORK. THE SIGN MUST THEN BE IMMEDIATELY REESTABLISHED
9. ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET.

STAGE 2

TRAFFIC

WESTBOUND TRAFFIC ON USH 18 WILL USE THE EXISTING MEDIAN CROSSOVER LOCATED EAST OF STA. 798+00. THE TWO EASTBOUND TRAVEL LANES OF USH 18 WILL BE TEMPORARILY CONVERTED INTO ONE EASTBOUND LANE AND ONE WESTBOUND LANE BETWEEN EAST OF STA. 798+00 AND STA. 772+00. WEST OF STA. 772+00, WESTBOUND TRAFFIC WILL USE RAMP E-2 AND EASTBOUND TRAFFIC WILL USE RAMP E-1.

AT THE BEGINNING OF STAGE 2:
WESTBOUND TRAFFIC ON RAMP E-2 WILL BE DIVERTED TO ONE OF THE USH 18 EASTBOUND TRAVEL LANES BETWEEN THE NEW CTH PB-N INTERSECTION AND LINCOLN STREET.

AFTER RAMP E-2 IS CONSTRUCTED BETWEEN STA. 729+00 AND STA. 737+50, WESTBOUND TRAFFIC ON RAMP E-2 WILL USE THE TWO WESTBOUND TRAVEL LANES OF EXISTING USH 18.

NESBITT ROAD WILL BE CLOSED TO TRAFFIC DURING ALL OF STAGE 2.
LOCAL ROAD WILL BE OPEN TO LOCAL TRAFFIC DURING STAGE 2.

CONSTRUCT

RAMP E-2 BETWEEN STA. 729+00 AND STA. 737+50.
CONSTRUCT THE WEST MEDIAN CURB AND GUTTER AT THE NEW CTH PB-N INTERSECTION ONCE WESTBOUND TRAFFIC FROM RAMP E-2 IS ROUTED TO THE TWO EXISTING WESTBOUND LANES OF USH 18.

USH 18 WESTBOUND BETWEEN STA. 773+00 AND STA. 798+00 (THIS INCLUDES BUILDING THE REMAINING PORTION OF BOX CULVERT B-13-426 AT STA. 779+00).

NESBITT ROAD BETWEEN STA. 19+00 AND 49+00.
LOCAL ROAD BETWEEN STA. 13+00 AND 20+00.

TO BE CONSTRUCTED AT THE BEGINNING OF STAGE 2. AFTER THIS SEGMENT OF CONSTRUCTION IS COMPLETE, ROUTE WESTBOUND TRAFFIC FROM RAMP E-2 BACK TO EXISTING USH 18 WESTBOUND LANES

AT THE BEGINNING OF STAGE 2

AFTER COMPLETION OF RAMP E-2 BETWEEN STA. 729+00 AND STA. 737+00.

WHILE EXISTING USH 18 IS BEING RECONSTRUCTED BETWEEN STA. 729+00 AND STA. 737+50 (AT THE BEGINNING OF STAGE 2), DIVERT WESTBOUND TRAFFIC TO ONE EASTBOUND TRAVEL LANE BETWEEN CTH PB-N AND LINCOLN STREET. SEE TRAFFIC CONTROL DETAIL.

LEGEND

- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY ROADWAY
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH WHITE

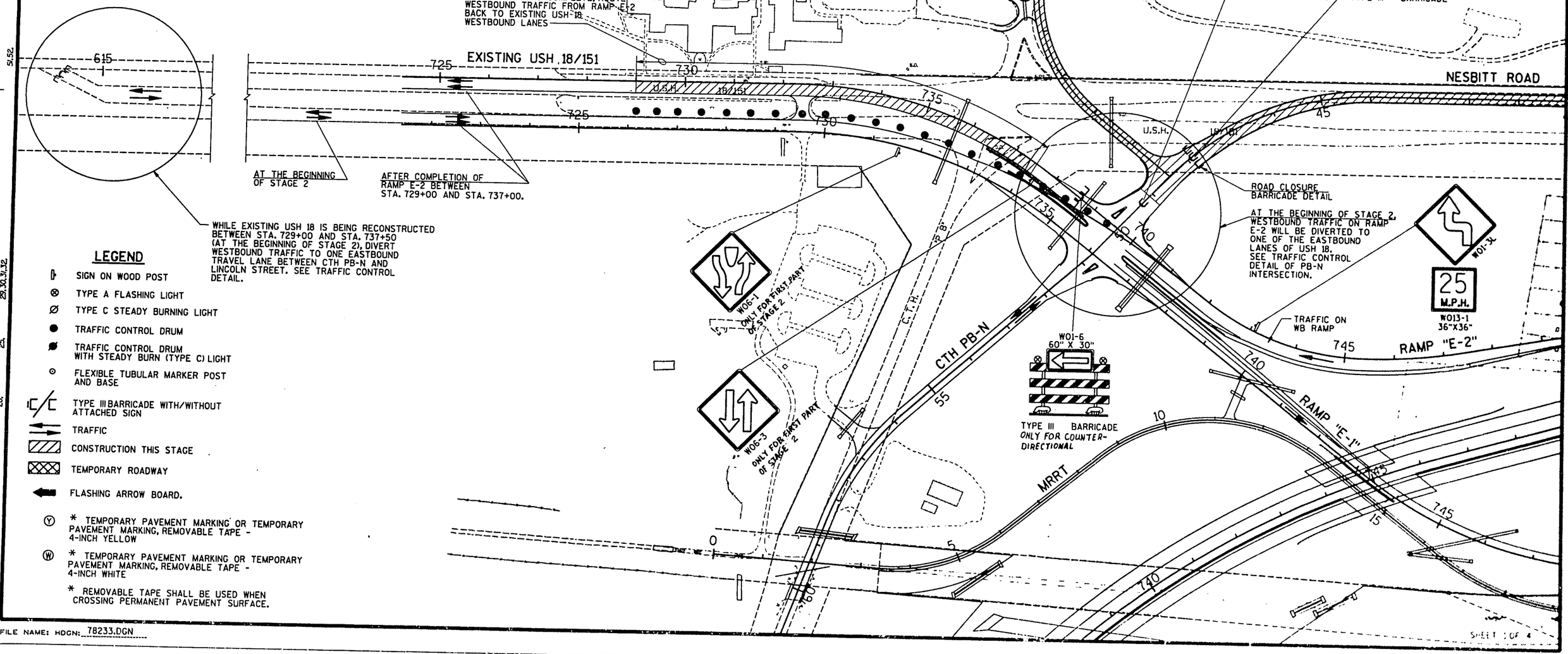
* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.58

TRAFFIC CONTROL EAST INTERCHANGE STAGE 2

USH 18 DANE COUNTY



FILE NAME: HDGN: 78233.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.59

TRAFFIC CONTROL EAST INTERCHANGE STAGE 2

USH 18 DANE COUNTY

KEY MAP

0 100 200 300

MAINLINE CLOSURE WITH ROAD CLOSURE BARRICADE DETAIL

NESBITT ROAD

W01-4R

45 M.P.H.

W013-1 36"X36"

B-13-426

W06-3

DO NOT PASS R4-1 24"X30"

MATCH LINE STA. 180+00

USH 18 WB

USH 18 EB

U.S.H. 18/151

50'

FOR MEDIAN CROSSOVER, SEE TRAFFIC CONTROL DETAIL

R4-7 24"X30" (IN DRUM)

WB TRAFFIC ON RAMP

EB TRAFFIC ON RAMP

RAMP "E-2"

RAMP "E-1"

MRRT

LEGEND

- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY ROADWAY
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH WHITE

* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

SHEET 2 OF 4

FILE NAME: HDGN: 78234.DGN

LEVELS ON

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.60

TRAFFIC CONTROL EAST INTERCHANGE STAGE 2

USH 18 — DANE COUNTY

KEY MAP

0 100 200 300

USH 18 WB

USH 18 EB

MATCH LINE - STA. 780+00.00

785 790 795 800 805

59.60

51.52

50'

800' SINGLE USH 18 EB LANE — 660' LANE TRANSITION — 250' — 25'

SEE S.D.D. LANE CLOSURE WHERE SPEED IS 45 MPH OR GREATER FOR ADVANCE SIGNING

W06-1

W06-3

DO NOT PASS
R4-1
24"X30"

W01-6
60" X 30"
TYPE III BARRICADE

W01-4L

45
M.P.H.
W013-1
36"X36"

880 885 895 900 905

500'

USE EXISTING MEDIAN CROSSOVER

℄ USH 18

R11-2 (MOD.)
48"X30"
LANE CLOSED
TYPE III BARRICADE

END ROAD WORK
G20-2
48"X24"

LEGEND

- TEMPORARY DELINEATORS
- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY ROADWAY
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE 4-INCH WHITE

* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

SHEET 3 OF 4

PLOT SCALE: 1"=100'

PLOT NAME: 78235.DGN

REV. DATE 7-21-94

ORIGINATOR: J.A.PIERONI

LEVELS ON

FILE NAME: HDGN: 78235.DGN

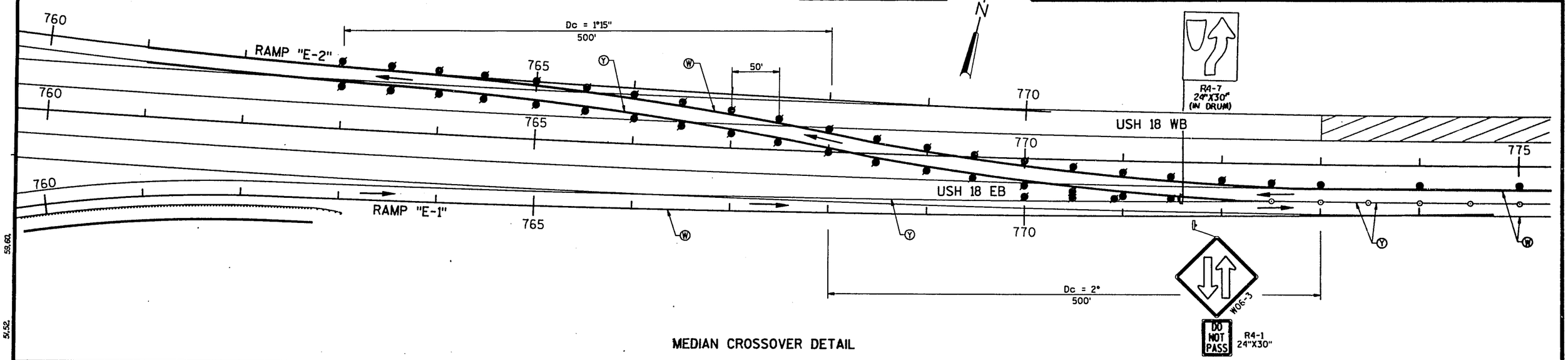
WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 2.61

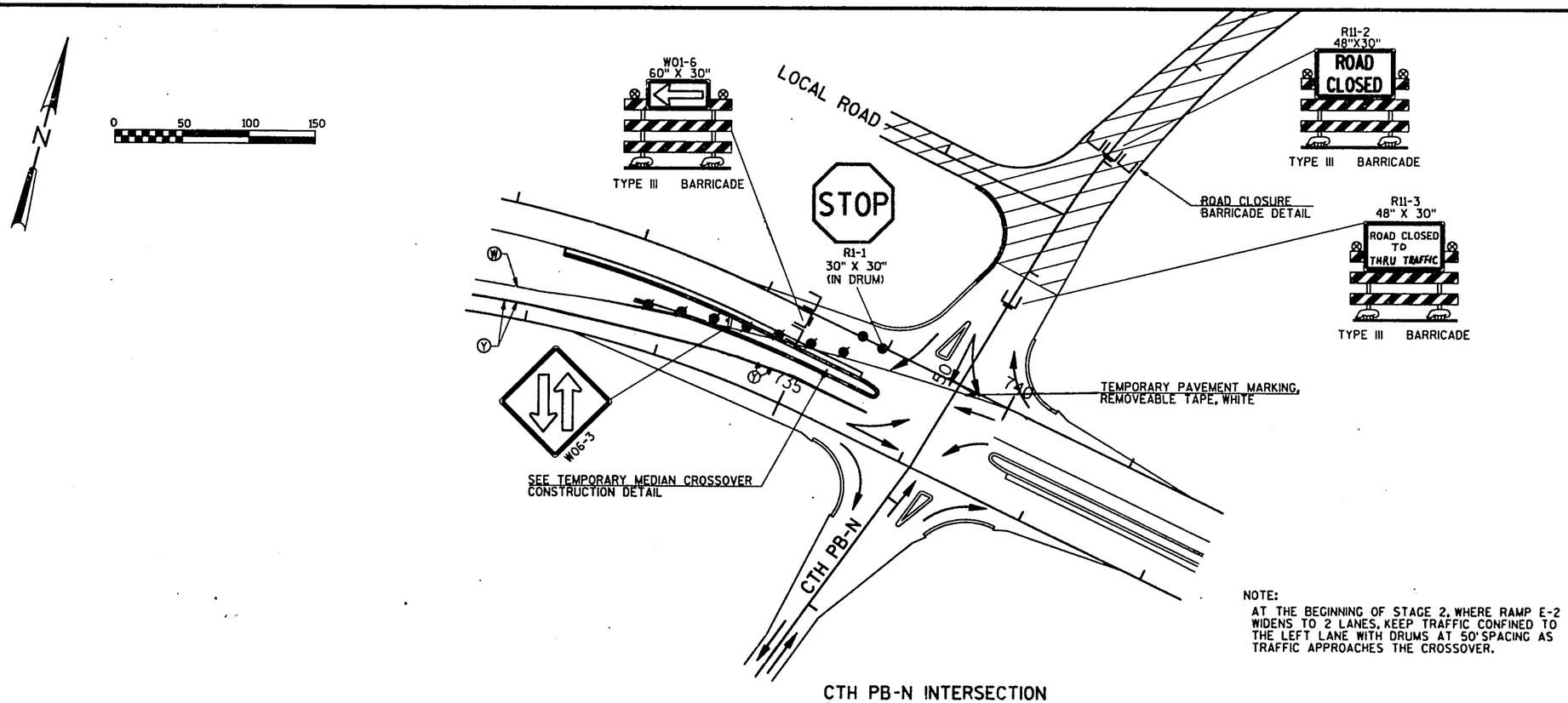
TRAFFIC CONTROL DETAILS STAGE 2

USH 18 DANE COUNTY

KEY MAP



MEDIAN CROSSOVER DETAIL



CTH PB-N INTERSECTION
AT THE BEGINNING OF STAGE 2

NOTE:
AT THE BEGINNING OF STAGE 2, WHERE RAMP E-2 WIDENS TO 2 LANES, KEEP TRAFFIC CONFINED TO THE LEFT LANE WITH DRUMS AT 50' SPACING AS TRAFFIC APPROACHES THE CROSSOVER.

LEGEND

- SIGN ON WOOD POST
- TYPE A FLASHING LIGHT
- TYPE C STEADY BURNING LIGHT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH STEADY BURN (TYPE C) LIGHT
- FLEXIBLE TUBULAR MARKER POST AND BASE
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC
- CONSTRUCTION THIS STAGE
- TEMPORARY ROADWAY
- FLASHING ARROW BOARD.
- (Y) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH YELLOW
- (W) * TEMPORARY PAVEMENT MARKING OR TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE - 4-INCH WHITE

* REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT PAVEMENT SURFACE.

SHEET 4 OF 4

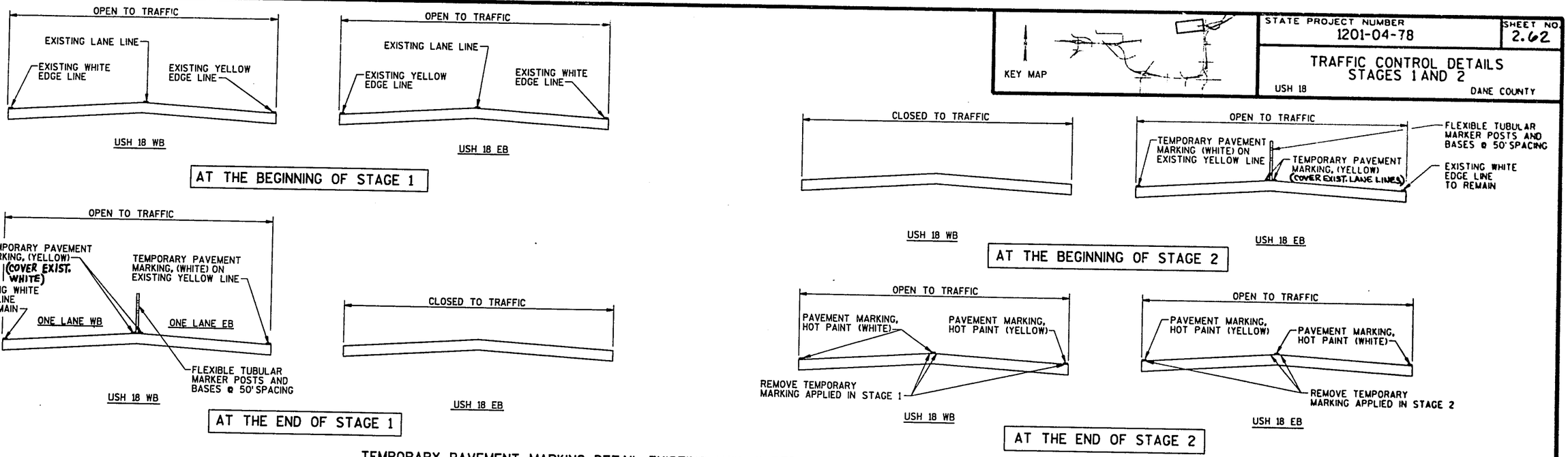
FILE NAME: HDGN: 78237.DGN

WISDOT/CADDS SHEET 42

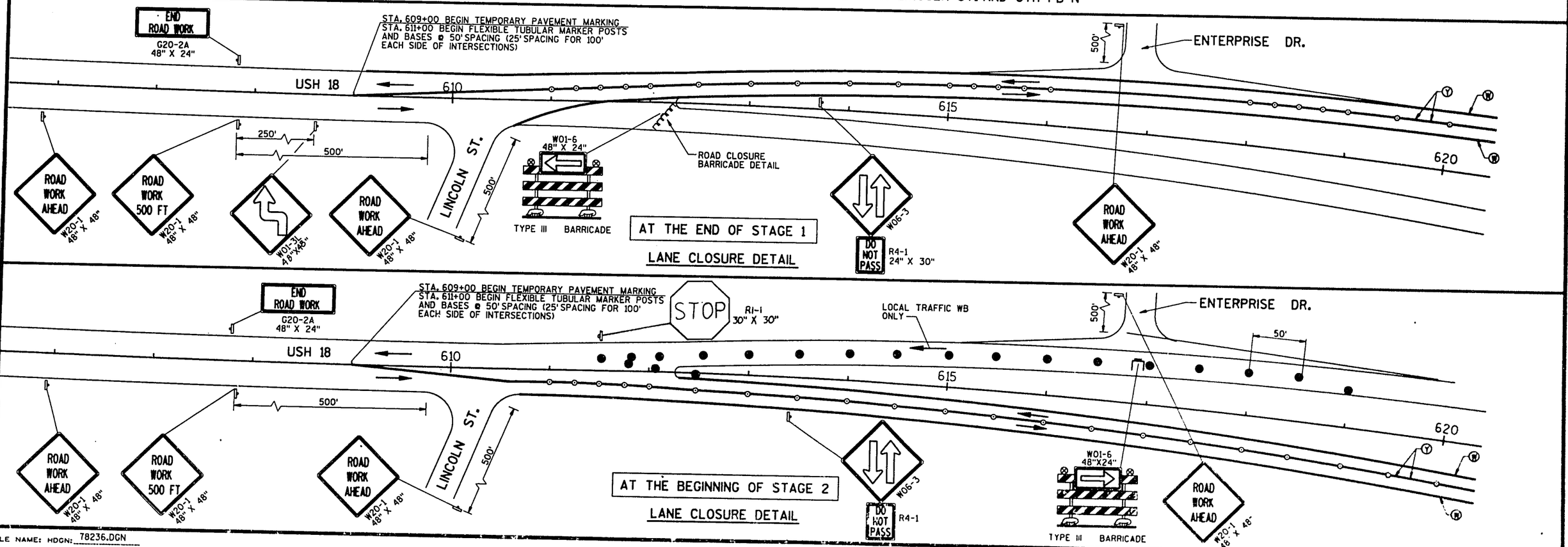
TRAFFIC CONTROL DETAILS STAGES 1 AND 2

USH 18 DANE COUNTY

KEY MAP



TEMPORARY PAVEMENT MARKING DETAIL EXISTING USH 18 BETWEEN LINCOLN ST. AND CTH PB-N



FILE NAME: HDGN: 78236.DGN

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER
1204-04-78

SHEET NO.
2.63

ALIGNMENT PLAN
EAST DIVERGENCE INTERCHANGE

USH 18 — DANE COUNTY

KEY MAP

0 100 200 300

N

USH 18
C101

P.I.	STA. 736+84.25
X	2,130,260.98
Y	361,915.60
Δ	65°45'00.0"
D	03°00'00.0"
T	1234.36'
L	2191.67'
R	1909.86'
S.E.=	0.059 FT/FT
R.O.=	190'

USH 18
C105

P.I.	STA. 771+71.22
X	2,133,576.38
Y	363,697.02
Δ	07°20'50.2"
D	00°15'00.0"
T	1471.47'
L	2938.91'
R	22,918.31'
S.E.=	0.020 FT/FT
R.O.=	N/A

RAMP "E-2"

C268

P.I.	STA. 743+66.83
X	2,130,971.60
Y	362,626.26
Δ	36°52'19.2"
D	11°00'00.0"
T	173.63'
L	335.20'
R	520.87'
S.E.=	0.060 FT/FT
R.O.=	130'

C267

P.I.	STA. 746+33.30
X	2,131,245.10
Y	362,678.80
Δ	11°30'00.0"
D	05°30'00.0"
T	104.90'
L	209.09'
R	1041.74'
S.E.=	0.058 FT/FT
R.O.=	150'

C484

P.I.	STA. 759+91.17
X	2,132,501.32
Y	363,195.85
Δ	06°32'38.5"
D	00°45'00.0"
T	436.74'
L	872.54'
R	7639.44'
S.E.=	0.021 FT/FT
R.O.=	175'

C469

P.I.	STA. 767+26.00
X	2,133,145.31
Y	363,551.59
Δ	01°29'56.3"
D	00°15'02.3"
T	299.03'
L	598.01'
R	22,858.72'
S.E.=	0.020 FT/FT
R.O.=	N/A

RAMP "E-1"

C521

P.I.	STA. 750+01.49
X	2,131,819.76
Y	362,132.49
Δ	77°30'00.0"
D	06°45'00.0"
T	681.26'
L	1148.15'
R	848.83'
S.E.=	0.060 FT/FT
R.O.=	150'

C522

P.I.	STA. 759+70.78
X	2,132,556.53
Y	363,058.74
Δ	20°39'58.0"
D	04°00'00.0"
T	261.16'
L	516.65'
R	1432.39'
S.E.=	0.060 FT/FT
R.O.=	175'

C520

P.I.	STA. 768+75.14
X	2,133,337.87
Y	363,525.13
Δ	03°00'00.0"
D	00°15'00.0"
T	600.14'
L	1200.00'
R	22,918.31'
S.E.=	0.020 FT/FT
R.O.=	N/A

NOTE:
SEE PLAN/PROFILE FOR SIDE ROAD GEOMETRY

FILE NAME: HDGN: T2503.DGN

WISDOT/CADDS SHEET 42

DATE 09/27/94

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY	
20101	CLEARING	STA.	6.00	6.00	
20104	GRUBBING	STA.	6.00	6.00	
20351	REMOVING OLD BRIDGE, STATION 779+00	L.S.	1.00	1.00	
20352	REMOVING OLD BRIDGE, STATION 778+85	L.S.	1.00	1.00	
20405	REMOVING C&G	L.F.	1147.00	1147.00	
20406	" CONC. SIDEWALK	S.Y.	200.00	200.00	
20401	REMOVING PAVEMENT	S.Y.	38,400.00	38,400.00	
20411	REMOVING GUARDRAIL	L.F.	714.00	714.00	
20503	UNCLASSIFIED EXCAVATION	C.Y.	56,000.00	56,000.00	
20505	MARSH EXCAVATION	C.Y.	3,000.00	3,000.00	
20620	EXCAVATION FOR STRUCTURES, CULVERTS B-13-426	L.S.	1:00	1.00	
20801	BORROW EXCAVATION	C.Y.	28,000.00	28,000.00	
20901	GRANULAR BACKFILL	C.Y.	400.00	400.00	GROUP CODE 01020
"	"	"	119.00		119.00
21132	PREPARATION OF FOUNDATION FOR CRUSHED AGGREGATE BASE COURSE, OPEN GRADED	STA.	371.00	371.00	
21301	FINISHING ROADWAY	L.S.	1.00	1.00	
21401	OBLITERATING OLD ROAD	STA.	32.00	32.00	
30404	CRUSHED AGGREGATE BASE COURSE	TON	130,200.00	130,200.00	
30418	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NUMBER 1	TON	38,400.00	38,400.00	
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	470.00	470.00	
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	753.00	753.00	
40713	ASPHALTIC CONCRETE PAVEMENT, TYPE MV	TON	3,700.00	3,700.00	
40714	ASPHALTIC CONCRETE PAVEMENT, TYPE LV	TON	8,815.00	8,815.00	
41509	CONCRETE PAVEMENT, 9-INCH	S.Y.	118,000.00	118,000.00	
41510	CONCRETE PAVEMENT, 10-INCH	S.Y.	21,250.00	21,250.00	
41519	H.E.S. CONCRETE PAVEMENT, 9-INCH	S.Y.	265.00	265.00	
41534	CONCRETE SURFACE DRAINS	C.Y.	40.00	40.00	
41535	CONCRETE PAVEMENT APPROACH SLAB	S.Y.	1,240.00	1,240.00	
41571	PAVEMENT TIES	EACH	32.00	32.00	
50220	PREFORMED ELASTOMERIC COMPRESSION JOINT SEALER, 2-INCH	L.F.	810.00	810.00	

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
50401	CONCRETE MASONRY, CULVERTS	C.Y.	571.00	571.00
50409	CONCRETE MASONRY, ENDWALLS	C.Y.	18.00	18.00
50505	HIGH-STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	LB.	64,310.00	64,310.00
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	82.00	82.00
52005	CULVERT PIPE, CLASS III, 24-INCH	L.F.	38.00	38.00
52009	CULVERT PIPE, CLASS III, 36-INCH	L.F.	124.00	124.00
52013	CULVERT PIPE, CLASS III, 60-INCH	L.F.	52.00	52.00
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	4.00	4.00
52063	APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	2.00	2.00
52067	APRON ENDWALLS FOR CULVERT PIPE, 36-INCH	EACH	2.00	2.00
52071	APRON ENDWALLS FOR CULVERT PIPE, 60-INCH	EACH	2.00	2.00
52109	CORRUGATED STEEL CULVERT PIPE, 30-INCH	L.F.	30.00	30.00
52145	STEEL APRON ENDWALLS FOR CULVERT PIPE, 12-INCH	EACH	8.00	8.00
52150	STEEL APRON ENDWALLS FOR CULVERT PIPE, 30-INCH	EACH	2.00	2.00
52201	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 12-INCH	L.F.	246.00	246.00
52203	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 18-INCH	L.F.	298.00	298.00
52205	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 24-INCH	L.F.	92.00	92.00
52209	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 36-INCH	L.F.	118.00	118.00
52211	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 48-INCH	L.F.	236.00	236.00
52212	REINFORCED CONCRETE CULVERT PIPE, CLASS III, 54-INCH	L.F.	168.00	168.00
52260	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 12-INCH	EACH	13.00	13.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
52264	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	1.00	1.00
52267	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 36-INCH	EACH	1.00	1.00
52270	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 54-INCH	EACH	2.00	2.00
60135	CONCRETE CURB AND GUTTER, 30-INCH, TYPE G	L.F.	1,000.00	1,000.00
60136	CONCRETE CURB AND GUTTER, 30-INCH, TYPE J	L.F.	900.00	900.00
60302	CONCRETE BARRIER, SINGLE-FACED	L.F.	8,850.00	8,850.00
60405	SLOPE PAVING, CRUSHED AGGREGATE	S.Y.	225.00	225.00
60601	RIPRAP	C.Y.	470.00	470.00
60604	MEDIUM RANDOM RIPRAP	C.Y.	490.00	490.00
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	130.00	130.00
60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH	L.F.	47.00	47.00
61121	INLETS, TYPE 1	EACH	29.00	29.00
61122	INLETS, TYPE 3	EACH	5.00	5.00
61124	INLETS, TYPE 9	EACH	2.00	2.00
61162	INLET COVERS, TYPE B	EACH	21.00	21.00
61170	INLET COVERS, TYPE MS	EACH	5.00	5.00
61176	INLET COVERS, TYPE V	EACH	8.00	8.00
61180	INLET COVERS, TYPE HM	EACH	5.00	5.00
61182	ADJUSTING MANHOLES		1.00	1.00
61201	PIPE UNDERDRAIN, 6-INCH	L.F.	53,900.00	53,900.00
61211	PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L.F.	4,520.00	4,520.00
61214	PIPE UNDERDRAIN, UNPERFORATED, 12-INCH	L.F.	335.00	335.00
61254	REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN, 6-INCH	EACH	236.00	236.00
61334	NONMETALLIC CONDUIT, 2-INCH	L.F.	420.00	420.00
61336	NONMETALLIC CONDUIT, 3-INCH	L.F.	90.00	90.00

E.3.2

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
61407	STEEL THRIE BEAM STRUCTURE APPROACH	L.F.	408.00	408.00
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	2,770.00	2,770.00
61412	ANCHORAGES FOR STEEL PLATE BEAM GUARD, TYPE 1	EACH	14.00	14.00
61413	ANCHORAGES FOR STEEL PLATE BEAM GUARD, TYPE 2	EACH	1.00	1.00
61423	IMPACT ATTENUATORS	EACH	1.00	1.00
61601	WOVEN WIRE FENCE	L.F.	3,250.00	3,250.00
61801	MAINTENANCE AND REPAIR OF HAUL ROADS	L.S.	1.00	1.00
61910	MOBILIZATION	L.S.	1.00	1.00
62202	ASPHALTIC SHOULDER RUMBLE STRIP	L.F.	83,350.00	83,350.00
62203	ASPHALTIC FLUMES	S.Y.	18.00	18.00
62401	WATER	MGAL	400.00	400.00
62501	TOPSOIL	S.Y.	5,500.00	5,500.00
62505	SALVAGED TOPSOIL	S.Y.	96,000.00	96,000.00
62703	MULCHING	TON	120.00	120.00
62811	EROSION BALES, DELIVERED	EACH	700.00	700.00
62812	EROSION BALES, INSTALLED	EACH	700.00	700.00
62815	SILT FENCE, DELIVERED	L.F.	25,000.00	25,000.00
62816	SILT FENCE, INSTALLED	L.F.	25,000.00	25,000.00
62817	SILT FENCE MAINTENANCE	L.F.	25,000.00	25,000.00
62819	MOBILIZATIONS, EROSION CONTROL	EACH	4.00	4.00
62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	5.00	5.00
62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	S.Y.	1,400.00	1,400.00
62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	S.Y.	1,400.00	1,400.00
62902	FERTILIZER, TYPE A	CWT.	80.00	80.00
63002	SEEDING	LB.	4,400.00	4,400.00
63003	SEEDING, TEMPORARY	LB.	4,400.00	4,400.00
63101	SODDING	S.Y.	165.00	165.00
63411	WOOD POSTS, 4X6-INCH X 14-FT.	EACH	27.00	27.00
63702	SIGNS, TYPE II, REFLECTIVE	S.F.	185.50	185.50

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
63822	MOVING SIGNS, TYPE II	EACH	2.00	2.00
63827	REMOVING SIGN	EACH	23.00	23.00
64002	POLES, TYPE 2	EACH	1.00	1.00
63830	REMOVING SIGN SUPPORTS	EACH	17.00	17.00
64003	POLES, TYPE 3	EACH	1.00	1.00
64004	POLES, TYPE 4	EACH	2.00	2.00
64005	POLES, TYPE 5, 30-FEET	EACH	10.00	10.00
64012	CONCRETE BASES, TYPE 1	EACH	6.00	6.00
64013	CONCRETE BASES, TYPE 2	EACH	4.00	4.00
64014	CONCRETE BASES, TYPE 5	EACH	10.00	10.00
64032	LUMINAIRES, 150 WATTS, HIGH PRESSURE SODIUM	EACH	13.00	13.00
64052	MAST ARMS, SINGLE MEMBER, 8-FOOT	EACH	13.00	13.00
64075	ELECTRICAL WIRE, LIGHTING, NO. 12	L.F.	1,170.00	1,170.00
64079	ELECTRICAL WIRE, LIGHTING, NO. 4	L.F.	720.00	720.00
64081	ELECTRICAL SERVICE, LIGHTING, C.T.H. PB AND RAMP PB-1 AT CB1	L.S.	1.00	1.00
64210	FIELD LABORATORY	L.S.	1.00	1.00
64220	FIELD OFFICE, TYPE C	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
64310	TRAFFIC CONTROL, ARROW BOARDS	DAYS	530.00	530.00
64313	TRAFFIC CONTROL, DRUMS	DAYS	47,500.00	47,500.00
64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	1,400.00	1,400.00
64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	2,200.00	2,200.00
64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	23,700.00	23,700.00
64326	TRAFFIC CONTROL, SIGNS	DAYS	5,100.00	5,100.00
64329	TRAFFIC CONTROL, FLEXIBLE TUBULAR MARKER POSTS	EACH	1,250.00	1,250.00
64333	TRAFFIC CONTROL, FLEXIBLE TUBULAR MARKER BASES	EACH	1,000.00	1,000.00
64401	PAVEMENT MARKING, HOT PAINT	L.F.	54,500.00	54,500.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	111,270.00	111,270.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
64414	PAVEMENT MARKING, CHANNELIZING, EPOXY, 8-INCH	L.F.	8,470.00	8,470.00
64438	PAVEMENT MARKING, STOP LINE, EPOXY, 24-INCH	L.F.	205.00	205.00
64472	PAVEMENT MARKING, ARROWS, EPOXY, TYPE 2	EACH	2.00	2.00
64474	PAVEMENT MARKING, ARROWS, EPOXY, TYPE 4	EACH	4.00	4.00
64479	PAVEMENT MARKING, WORDS, EPOXY	EACH	2.00	2.00
64481	TEMPORY PAVEMENT MARKING, TAPE	L.F.	5,755.00	5,755.00
64484	TEMPORARY PAVEMENT MARKING	L.F.	167,100.00	167,100.00
64487	REMOVING PAVEMENT MARKINGS	L.F.	7,600.00	7,600.00
64492	PAVEMENT MARKING, DIAGONAL, EPOXY, 24-INCH	L.F.	410.00	410.00
64495	PAVEMENT MARKING, CURB, EPOXY	L.F.	710.00	710.00
64496	PAVEMENT MARKING, ISLAND NOSE, EPOXY	S.F.	95.00	95.00
64498	PAVEMENT MARKING, RAISED MARKERS	EACH	146.00	146.00
64499	TEMPORARY PAVEMENT MARKING, RAISED MARKERS	EACH	830.00	830.00
64503	GEOTEXTILE FABRIC, TYPE DF	S.Y.	37,620.00	37,620.00
64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	3,100.00	3,100.00
64601	SAWING EXISTING PAVEMENT	L.F.	105.00	105.00
64602	SAWING FULL DEPTH	L.F.	58.00	58.00
90001	TRAFFIC MANAGEMENT	HRS.	400.00	400.00
90002	LIMESTONE SCREENING	TON	220.00	220.00
90003	SELECTED BORROW EXCAVATION, SPECIAL	TON	6,000.00	6,000.00
90004	TEMPORARY STONE DITCH CHECKS	EACH	4.00	4.00
90005	QUALITY MANAGEMENT PROGRAM, BASE COURSES	TON	168,600.00	168,600.00
90006	WASHED STONE	TON	56.00	56.00
90007	TRAFFIC SIGNAL CONTROLLER, INSTALL STATE FURNISHED	EACH	1.00	1.00
90008	ELECTRICAL WIRE, LIGHTING UF 12-2/GRD	L.F.	1,285.00	1,285.00
90009	ELECTRICAL SERVICE, TRAFFIC SIGNALS, METER BREAKER PEDESTAL,CTH PB INTERCHANGE	L.S.	1.00	1.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
90010	QUALITY MANAGEMENT PROGRAM, AGGREGATES FOR CONCRETE PAVEMENT	S.Y.	139,515.00	139,515.00
90011	PAVEMENT MARKING, EPOXY, DOTTED GUIDES, 6-INCH	L.F.	40.00	40.00
90012	GRADING, SHAPING, AND FINISHING MEDIAN CROSSOVER REMOVAL, STA. 880+00 AREA	L.S.	1.00	1.00
90394	PROFILOGRAPH	L.S.	1.00	1.00
90402	QUALITY MANAGEMENT PROGRAM, ASPHALTIC MIXTURE	TON	12,515.00	12,515.00
90545	CONCRETE COLLAR	EACH	6.00	6.00
90643	SAND BAGS	EACH	1,900.00	1,900.00
90660	ELECTRICAL WIRE, TRAFFIC SIGNALS, NO. 10 RHW/XLP	L.F.	2,015.00	2,015.00
90715	TRAFFIC CONTROL, DETOUR	L.S.	1.00	1.00
90716	TRAFFIC CONTROL, DETOUR, SIGNS	DAYS	1,170.00	1,170.00
90778	PAVEMENT MARKING, OUTFALL MARKERS	EACH	226.00	226.00
90781	CONCRETE CONTROL CABINET BASES, TYPE 9, SPECIAL	EACH	1.00	1.00
90800	PEDESTAL BASES	EACH	6.00	6.00
90801	TRANSFORMER BASES	EACH	14.00	14.00
90810	TRAFFIC SIGNAL STANDARDS, STEEL, 13-FT.	EACH	6.00	6.00
90813	MAST ARMS, TRAFFIC SIGNAL TROMBONE, 15-FT.	EACH	1.00	1.00
90815	MAST ARMS, TRAFFIC SIGNAL TROMBONE, 25-FT.	EACH	1.00	1.00
90817	TRAFFIC SIGNAL FACES, 3-12 VERTICAL	EACH	10.00	10.00
90823	TRAFFIC SIGNAL FACES, 3-12 HORIZONTAL	EACH	2.00	2.00
90834	TRAFFIC SIGNAL MOUNTING HARDWARE, EAST INTERCHANGE\CTH PB	L.S.	1.00	1.00
90838	BACKPLATES	EACH	8.00	8.00
90841	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR, NO. 14	L.F.	270.00	270.00
90842	TRAFFIC SIGNAL CABLE, 7 CONDUCTOR, NO. 14	L.F.	535.00	535.00

3.9

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1201-04-78 QUANTITY
90844	TRAFFIC SIGNAL CABLE, 12 CONDUCTOR, NO. 14	L.F.	580.00	580.00
90873	LOOP DETECTOR LEAD IN CABLE	L.F.	1,975.00	1,975.00

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3A

MISCELLANEOUS QUANTITIES

USH 18 | DANE COUNTY

KEY MAP

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING STA.	GRUBBING STA.
748+00	754+00	RAMP E-1 RT.	6	6

REMOVING PAVEMENT

STATION	STATION	LOCATION	S.Y.
726+00	798+00	USH 18 WB	19,200
726+00	798+00	USH 18 EB	19,200
		TOTAL	38,400

EARTHWORK SUMMARY

STATION	STATION	LOCATION	FILL C.Y.	MARSH EXCAVATION C.Y.	UNCLASSIFIED EXCAVATION C.Y.	(WASTE)* OR BORROW C.Y.	SELECTED BORROW EXCAVATION, SPECIAL TON
763+00 -	798+00	USH 18	34,000	3,000	17,000	24,000	6,000
726+00 -	735+00	RAMP E-1	7,500	0	1,100	8,200	0
729+00 -	738+50	RAMP E-2	4,200	0	1,300	3,950	0
19+00 -	49+00	NESBITT ROAD	5,000	0	10,500	(4,250)•	0
52+00 -	59+92	CTH PB NORTH	6,800	0	11,600	(3,100)	0
12+00 -	20+00	LOCAL ROAD	3,300	0	3,600	525	0
3+00 -	8+00	MILITARY RIDGE RECREATION TRAIL	1,800	0	7,200	(4,950)	0
766+00 -	772+00	TEMP. MEDIAN CROSSOVER, CONSTRUCT	500	0	0	625	0
766+00 -	772+00	TEMP. MEDIAN CROSSOVER, REMOVAL	0	0	900	(900)	0
--- -	---	TEMP. SHOULDER WIDENING	0	0	350	(350)	0
--- -	---	EBS UNDISTRIBUTED	0	0	2,450	---	0
		TOTALS =	63,100	3,000	56,000	28,000	6,000

* WASTE/BORROW = [FILL]*1.25 - (0.5*MARSH) - UNCLASSIFIED EXCAVATION

• NOT INCLUDED IN WASTE / BORROW TOTAL

NOTE: ALL EXCAVATIONS ARE RAW NUMBERS, (EXPANSION FACTOR = 1.00). IT IS ONLY WHEN THE EXCAVATIONS ARE TO BE REUSED, THAT THE EXPANSION FACTOR COMES INTO EFFECT.

PREPARATION OF FOUNDATION FOR CRUSHED AGGREGATE BASE COURSE, OPEN GRADED

STATION		STATION	LOCATION	STA.
607+00	-	675+72	USH 18, WB.	68.7
607+00	-	675+72	USH 18, EB.	68.7
677+57	-	690+89	USH 18, WB.	13.3
677+57	-	690+89	USH 18, EB.	13.3
692+09	-	717+31	USH 18, WB.	25.2
692+00	-	717+31	USH 18, EB.	25.2
718+33	-	744+31	USH 18, WB.	26.0
718+33	-	744+30	USH 18, EB.	26.0
745+91	-	798+00	USH 18, WB.	52.3
745+91	-	798+00	USH 18, EB.	52.3
			TOTAL	371.0

OBLITERATING OLD ROAD

STATION		STATION	LOCATION	STA.
23+00	-	25+00	EXISTING NESBITT RD.	2
747+00	-	765+00	EXISTING USH 18, EB.	18
763+00	-	769+00	EXISTING USH 18, WB.	6
50+00	-	56+00	EXISTING CTH PB	6
			TOTAL	32

GRANULAR BACKFILL

STATION		STATION	LOCATION	C.Y.	REMARKS
681+35	-	685+25	RAMP PB-4, RT.	220	BETWEEN CONC. BARRIER AND RW-13-18
---	-	---	UNDISTRIBUTED	180	FOR BACKFILLING REMOVALS
			TOTAL	400	

CRUSHED AGGREGATE BASE COURSE

STATION		STATION	LOCATION	BASE TON	SHOULDER (GRADE 3) TON	OPEN GRADED BASE COURSE NO. 1 TON
607+00	-	675+71.55	USH 18, EB	10,425	1,225	5,800
677+57.53	-	690+88.83	USH 18, EB	1,902	218	1,100
692+08.83	-	717+31.42	USH 18, EB	3,703	422	2,150
718+33.26	-	744+30.29	USH 18, EB	4,378	487	2,200
745+90.63	-	798+00	USH 18, EB	16,156	870	4,400
607+00	-	675+71.55	USH 18, WB	17,069	1,956	5,800
677+57.53	-	690+88.83	USH 18, WB	2,003	227	1,100
692+08.83	-	717+31.32	USH 18, WB	3,043	362	2,150
718+33.26	-	744+30.29	USH 18, WB	4,392	488	2,200
745+90.63	-	798+00	USH 18, WB	16,848	886	4,400
---	-	---	PIPE UNDERDRAIN, USH 18			7,100
647+00	-	675+84	RAMP PB-1	1,870	330	
649+00	-	674+97	RAMP PB-2	1,819	321	
676+00	-	698+00	RAMP PB-3	1,428	252	
681+65	-	691+00	RAMP PB-4	880	155	
726+00	-	773+75	RAMP E-1	5,959	1,052	
729+00	-	769+25	RAMP E-2	5,062	893	
3+00	-	8+00	MRRT	480		
19+00	-	50+00	NESBITT ROAD	14,114	437	
50+70	-	59+90	CTH PB NORTH	4,440	360	
12+00	-	19+29	LOCAL ROAD	931	59	
765+00	-	772+00	TEMP. CROSSOVER MEDIAN	1,600		
630+50	-	---	USH 18, MEDIAN, MAINTENANCE CROSSOVER	100		
---	-	---	TEMP. SHOULDER WIDENING	600		
			TOTALS	119,200	11,000	38,400
				130,200		

FILE NAME: HDGN: 78300.DGN SHEET 1

WISDOT/CADDS SHEET 42

ASPHALTIC CONCRETE PAVEMENT

STATION		STATION	LOCATION	ASPHALTIC CONCRETE PAVEMENT, TYPE LV SURFACE TON	ASPHALTIC CONCRETE PAVEMENT, TYPE LV BINDER* TON	ASPHALTIC CONCRETE PAVEMENT, TYPE MV SURFACE TON	ASPHALTIC CONCRETE PAVEMENT, TYPE MV BINDER* TON	ASPHALTIC MATERIAL FOR TACK COAT GAL**	ASPHALTIC MATERIAL FOR PLANT MIX TON
19+00	-	50+00	NESBIT ROAD			992	1,328	274.8	139.2
50+70	-	59+90	CTH PB-N			324	431	89.9	45.3
12+00	-	19+29	LOCAL ROAD	214	286			59.5	30.0
55+01	-	78+00	USH 18, TEMP. MED. CROSSOVER			144	241	45.8	23.1
607+00	-	675+72	USH 18, EB	548	553				66.0
677+58	-	690+89	USH 18, EB	98	98				11.7
692+09	-	717+31	USH 18, EB	193	193				23.1
718+33	-	744+30	USH 18, EB	233	233				27.9
745+91	-	798+00	USH 18, EB	393	393				47.1
607+00	-	675+72	USH 18, WB	530	530				63.6
677+58	-	690+89	USH 18, WB	103	103				12.3
692+09	-	717+31	USH 18, WB	148	148				17.7
718+33	-	744+30	USH 18, WB	233	233				27.9
745+91	-	798+00	USH 18, WB	405	405				48.6
647+74	-	675+84	RAMP PB-1	213	213				25.5
649+00	-	674+97	RAMP PB-2	208	208				24.9
676+00	-	698+00	RAMP PB-3	113	113				13.5
681+65	-	691+00	RAMP PB-4	78	78				9.3
726+00	-	773+75	RAMP E-1	358	358				43.9
729+00	-	769+25	RAMP E-2	245	245				29.4
---	-	---	CTH PB-N PASSING LANE			90	150		15.0
737+10	-	739+60	RAMP E-2, MEDIAN	25	25				3.5
742+61	-	747+37	RAMP E-2, MEDIAN	38	37				4.5
			TOTAL	4,370	4,445	1,550	2,150	470.0	753.0
				8,815		3,700			

* UP TO 35% RECYCLED ASPHALTIC PAVEMENT MAY BE USED. SEE SPECIAL PROVISIONS.
** APPLICATION RATE ASSUMED AT 0.025 GAL./S.Y.

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3B

MISCELLANEOUS QUANTITIES

USH 18 — DANE COUNTY

CONCRETE PAVEMENT, 10-INCH (DOWELED), 9-INCH (DOWELED), 9-INCH (H.E.S.)

STATION		STATION	LOCATION	10-INCH S.Y.	9-INCH S.Y.	9-INCH (HES) S.Y.
765+00	-	798+00	USH 18 EB	9,535		
763+00	-	798+00	USH 18 WB	10,115		
765+00	-	773+75	RAMP E-1	1,165		
763+00	-	769+25	RAMP E-2	435		
607+00	-	675+72	USH 18 EB		19,985	
677+58	-	690+89	USH 18 EB		3,845	
692+09	-	717+31	USH 18 EB		7,290	
718+33	-	744+30	USH 18 EB		7,500	
745+91	-	765+00	USH 18 EB		5,515	
607+00	-	675+72	USH 18 WB		20,055	
677+79	-	690+94	USH 18 WB		3,800	
692+12	-	717+35	USH 18 WB		7,290	
718+36	-	744+00	USH 18 WB		7,410	
745+91	-	763+00	USH 18 WB		5,065	
647+74	-	675+84	RAMP PB-1		4,080	
649+00	-	674+97	RAMP PB-2		3,705	
676+00	-	698+00	RAMP PB-3		2,865	
681+65	-	691+00	RAMP PB-4		3,185	
726+00	-	732+50	RAMP E-1		1,735	
733+50	-	765+00	RAMP E-1		6,150	
729+00	-	763+00	RAMP E-2		8,100	
675+72	-	677+58	B-13-411 *		55	
675+94	-	677+87	B-13-412 *		50	
690+89	-	692+09	B-13-413 *		50	
690+94	-	692+12	B-13-414 *		60	
717+31	-	718+33	B-13-415 *		45	
717+35	-	718+36	B-13-416 *		45	
744+30	-	745+91	B-13-417 *		55	
744+00	-	743+47	B-13-418 *		65	
732+50	-	733+50	RAMP E-1			265
			TOTAL	21,250	118,000	265

* SHOULDER TRANSITION SLAB

CONCRETE SURFACE DRAINS

STATION		STATION	LOCATION	C.Y.
675+72	-	677+58	B-13-411	5
675+94	-	677+87	B-13-412	5
690+89	-	692+09	B-13-413	5
690+94	-	692+12	B-13-414	5
717+31	-	718+33	B-13-415	5
717+35	-	718+36	B-13-416	5
744+30	-	745+91	B-13-417	5
744+00	-	743+47	B-13-418	5
			TOTAL	40

CONCRETE PAVEMENT APPROACH SLAB

STATION		STATION	LOCATION	S.Y.
675+51	-	675+71	B-13-411	70
675+51	-	675+71	B-13-412	70
677+57	-	677+78	B-13-411	70
677+57	-	677+78	B-13-412	70
690+68	-	960+88	B-13-413	100
690+68	-	960+88	B-13-414	100
692+08	-	692+24	B-13-413	95
692+08	-	692+24	B-13-414	85
717+10	-	717+31	B-13-415	60
717+10	-	717+31	B-13-416	60
718+33	-	718+53	B-13-415	60
718+33	-	718+53	B-13-416	60
744+09	-	744+30	B-13-417	85
744+09	-	744+30	B-13-418	85
745+90	-	746+11	B-13-417	85
745+90	-	746+11	B-13-418	85
			TOTAL	1,240

PAVEMENT TIES

STATION	LOCATION	EACH
726+00	RAMP E-1	8
729+00	RAMP E-2	8
798+00	USH 18, WB.	8
798+00	USH 18, EB.	8
	TOTAL	32

PREFORMED ELASTOMERIC JOINT SEALER, 2-INCH

STATION	LOCATION	L.F.
675+72	B-13-411	50
677+57	B-13-411	50
675+94	B-13-412	50
677+86	B-13-412	50
690+88	B-13-413	60
692+08	B-13-413	55
690+93	B-13-414	60
692+11	B-13-414	55
717+31	B-13-415	45
718+33	B-13-415	45
717+34	B-13-416	45
718+36	B-13-416	45
744+30	B-13-417	50
745+90	B-13-417	50
744+00	B-13-418	50
745+47	B-13-418	50
	TOTAL	810

CONCRETE CURB AND GUTTER, 30-INCH, TYPE G

STATION		STATION	LOCATION	L.F.
736+45	-	739+09	RAMP E-2, RT.	271
740+03	-	742+61	RAMP E-2, RT.	265
733+75	-	735+64	RAMP E-1, LT.	196
736+59	-	739+20	RAMP E-1, LT.	268
			TOTAL	1,000

CONCRETE CURB AND GUTTER, 30-INCH, TYPE J

STATION		STATION	LOCATION	L.F.
48+65	-	49+95	NESBITT RD. RT.	188
49+57	-	49+87	NESBITT RD. RT.	65
49+42	-	49+82	NESBITT RD. LT.	64
50+97	-	51+36	CTH PB-N RT.	68
50+94	-	51+12	CTH PB-N LT.	60
51+07	-	736+86	CTH PB-N LT.	55
729+00	-	733+00	RAMP E-2, LT.	400
			TOTAL	900

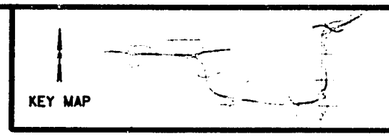
CONCRETE BARRIER, SINGLE FACED

STATION		STATION	LOCATION	L.F.
677+50	-	684+00	USH 18, WB. LT.	650
677+57	-	688+40	USH 18, WB. LT.	1,100
681+00	-	688+40	RAMP PB-4, RT.	750
687+50	-	690+88	USH 18, EB. MEDIAN	350
692+08	-	717+31	USH 18, EB. MEDIAN	2,550
718+33	-	744+30	USH 18, EB. MEDIAN	2600
742+50	-	744+00	RAMP E-1, RT.	150
745+90	-	753+00	USH 18, EB. MEDIAN	700
			TOTAL	8,850

LEVELS ON 59.60, 54.

FILE NAME: HDGN: 78300.DGN
SHEET 2

WISDOT/CADDS SHEET 42



STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3C

MISCELLANEOUS QUANTITIES FOR DRAINAGE ITEMS

USH 18 — DANE COUNTY

REINFORCED CONCRETE CULVERT PIPE

FROM STRUCTURE (*)	TO STRUCTURE (*)	INLET STATION	OUTLET STATION	LOCATION	CLASS	12" L.F.	18" L.F.	24" L.F.	36" L.F.	48" L.F.	54" L.F.	INLET OFFSET	INLET ELEV.	OUTLET OFFSET	OUTLET ELEV.	SLOPE FT./FT.	* JOINT TIES EACH	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE EACH INLET	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE EACH DISCHARGE	CONCRETE MASONRY ENDWALL C.Y. INLET	CONCRETE MASONRY ENDWALL C.Y. DISCHARGE
100	OUT	785+25	785+25	USH -18	III			92				0' RT	959.67	92' RT	957.67	0.0217			1 - 24"		
102	102	773+50	773+00	USH -18	III				118			127' LT	956.00	106' RT	954.98	0.0043	12	1 - 36"			
111	OUT	728+96.71	728+96.71	USH -18	III	16						18' RT	964.60	2.2' RT	964.52	0.0047			1 - 12"		
114	113	722+35	722+45	USH -18	III	8						18' RT	973.77	18' RT	973.58	0.0190					
113	112	722+45	722+55	USH -18	III	8						18' RT	973.58	18' RT	973.39	0.0190					
112	OUT	722+55	722+55	USH -18	III	14						18' RT	973.39	4.3' RT	973.32	0.0047			1 - 12"		
117	116	716+80	716+90	USH -18	III	8						18' RT	983.47	18' RT	983.28	0.0190					
116	115	716+90	717+00	USH -18	III	8						18' RT	983.28	18' RT	983.09	0.0190					
115	OUT	717+00	717+00	USH -18	III	14						18' RT	983.09	3.5' RT	983.02	0.0047			1 - 12"		
118	OUT	714+90	714+90	USH -18	III	14						18' RT	986.88	3.3' RT	986.81	0.0047			1 -12"		
119	OUT	712+40	712+40	USH -18	III	14						18' RT	991.41	3.0' RT	991.34	0.0047			1 - 12"		
120	OUT	709+90	709+90	USH -18	III	16						18' RT	995.76	2.8' RT	995.68	0.0047			1 - 12"		
121	OUT	707+40	707+40	USH -18	III	16						18' RT	1000.17	2.0' RT	1000.09	0.0047			1 - 12"		
122	OUT	704+90	704+90	USH -18	III	16						18' RT	1004.69	2.0' RT	1004.61	0.0047			1 - 12"		
123	OUT	702+40	702+40	USH -18	III	16						18' RT	1009.13	2.0' RT	1009.05	0.0047			1 - 12"		
124	OUT	699+90	699+90	USH -18	III	16						18' RT	1013.47	2.0' RT	1013.39	0.0047			1 - 12"		
126	125	690+30	690+40	USH -18	III	8						18' RT	1030.86	18' RT	1030.81	0.0050					
125	OUT	690+40	690+40	USH -18	III	16						18' RT	1030.81	2.1' RT	1030.73	0.0047			1 - 12"		
127	128	688+25	688+15	USH -18	III		8					58' LT	1031.75	58' LT	1031.70	0.0050					
128	129	688+15	685+30	USH -18	III		274					58' LT	1031.70	58' LT	1030.33	0.0050					
129	PJ130	685+30	685+30	USH -18	III		16					58' LT	1030.33	75' LT	1030.24	0.0050					
131	OUT	683+00	683+00	USH -18	III	14						58' LT	1039.64	73' LT	1039.00	0.0427	4		1 - 12"		
132	OUT	680+50	680+50	USH -18	III	24						58' LT	1042.55	83' LT	1042.40	0.0060			1 - 12"		
902	---	732+50	732+50	RAMP E-1	III						168	140' LT	953.30	28' RT	951.30	0.0119	12	1 - 54"	1 - 54"		
200	---	58+50	58+95	CTH PB	III					236		61' LT	943.80	48' RT	943.40	0.0034	16			9	9
		TOTALS				246	298	92	118	236	168						44	1 - 36" 1 - 54"	13 - 12" 1 - 24" 1 - 54"	9 (18)	9

* NON-BID ITEM

CULVERT PIPE

STRUC. (*)	INLET STATION	OUTLET STATION	LOCATION	CLASS	THICKNESS STEEL	THICKNESS ALUMINUM	18" L.F.	24" L.F.	36" L.F.	60" L.F.	INLET OFFSET	INLET ELEV.	OUTLET OFFSET	OUTLET ELEV.	SLOPE FT./FT.	* ** JOINT TIES EACH	APRON ENDWALLS FOR CULVERT PIPE EACH INLET	APRON ENDWALLS FOR CULVERT PIPE DISCHARGE
600	18+00	19+00	LOCAL RD.	III	0.079	0.105			124		28' LT	954.02	44' RT	949.48	0.0366	12	1 - 36"	1 - 36"
601	56+35	56+87	CTH PB	III	0.138	0.164				52	62' RT	944.79	62' RT	944.54	0.0048	12	1 - 60"	1 - 60"
603	14+17	14+34	LOCAL RD.	III	0.064	0.060	17				22' LT	971.78	22' LT	971.21	0.0335		1 - 18"	1 - 18"
604	15+25	15+90	LOCAL RD.	III	0.064	0.060	65				32' RT	964.47	39' RT	960.34	0.0635	12	1 - 18"	1 - 18"
605	37+86	38+24	NESBITT	III	0.004	0.075		38			35' RT	983.24	35' RT	982.02	0.0321		1 - 24"	1 - 24"
	TOTALS						82	38	124	52						48	2 - 18" 1 - 24" 1 - 36" 1 - 60"	2 - 18" 1 - 24" 1 - 36" 1 - 60"

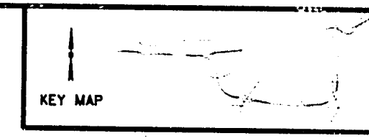
* NON-BID ITEM
** IF CONCRETE

59.60

LEVELS ON *

FILE NAME: H:\Sht\7830\DGN_V:\BDR1

WISDOT/CADDS SHEET 42



STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3D

MISCELLANEOUS QUANTITIES FOR DRAINAGE ITEMS

USH 18 | DANE COUNTY

DRAINAGE STRUCTURES

STRUCTURE NUMBER	STATION	LOCATION	OFFSET	INLETS TYPE 1 EACH	INLETS TYPE 9 EACH	INLET COVERS TYPE B EACH	INLET COVERS TYPE V EACH	INLET COVERS TYPE MS EACH	CONC. COLLAR EACH	* CASTING FLAG ELEV.	INVERT ELEV.	* DEPTH FEET	COMMENTS
100	785+25	USH-18	0' RT		1			2		962.50	959.67	3.08	
101	779+00	USH-18	0' RT					[1]**		965.22	**	***	CONNECT TO BOX CULVERT
157	746+19.44	USH-18	58' RT	1			1			976.80	973.18	2.50	
156	743+96.94	USH-18	20' LT	1			1			976.28	972.66	2.50	
111	728+96.71	USH-18	18' RT	1		1				969.15	964.60	3.55	
114	722+35	USH-18	18' RT	1		1				977.14	973.77	2.37	
113	722+45	USH-18	18' RT	1		1				976.95	973.58	2.37	
112	722+55	USH-18	18' RT	1		1				976.76	973.39	2.37	
155	718+45.85	USH-18	58' LT	1			1			983.50	979.88	2.50	
154	718+38.27	USH-18	58' RT	1			1			984.72	981.10	2.50	
117	716+80	USH-18	18' RT	1		1				987.68	983.47	3.21	
116	716+90	USH-18	18' RT	1		1				987.49	983.28	3.21	
115	717+00	USH-18	18' RT	1		1				987.30	983.09	3.21	
118	714+90	USH-18	18' RT	1		1				991.28	986.88	3.40	
119	712+40	USH-18	18' RT	1		1				996.04	991.41	3.63	
120	709+90	USH-18	18' RT	1		1				1000.78	995.76	4.02	
121	707+40	USH-18	18' RT	1		1				1005.54	1000.17	4.37	
122	704+90	USH-18	18' RT	1		1				1010.28	1004.69	4.59	
123	702+40	USH-18	18' RT	1		1				1015.04	1009.13	4.91	
124	699+90	USH-18	18' RT	1		1				1019.78	1013.47	5.31	
153	692+22.35	USH-18	67.8' LT	1			1			1030.04	1026.42	2.50	
152	692+12.32	USH-18	69.8' RT	1			1			1034.13	1030.51	2.50	
126	690+30	USH-18	18' RT	1		1				1037.07	1030.86	5.21	
125	690+40	USH-18	18' RT	1		1				1036.93	1030.81	5.12	
127	688+25	USH-18	58' LT	1		1				1035.12	1031.75	2.41	
128	688+15	USH-18	58' LT	1		1				1035.26	1031.70	2.60	
129	685+30	USH-18	58' LT	1		1				1039.25	1030.33	7.96	
PJ130	685+30	USH-18	75' LT						[1] ***		1030.24		CONNECT TO EXISTING 9-MS INLET
131	683+00	USH-18	58' LT	1		1				1042.48	1039.64	1.84	
132	680+50	USH-18	58' LT	1		1				1045.39	1042.55	1.84	
151	676+03.01	USH-18	58' LT	1			1			1046.43	1042.81	2.50	
150	675+67.15	USH-18	20' RT	1			1			1048.02	1044.40	2.50	
956	733+00	RAMP E-1	46' LT		1			2		959.04	954.11	5.14	
	TOTALS			29	2	21	8	4					

NOTE:

* DEPTH REFERS TO STRUCTURE DEPTHS AS SHOWN ON S.D.D.

** INLET CONNECTS TO PROPOSED BOX CULVERT

*** DEPTH MEASURED FROM GRATE TO INSIDE TOP OF BOX CULVERT

• GRATE ELEVATION FOR INLETS

•• INLET AND COVER PART OF STRUCTURE PLANS. QUANTITIY SHOWN HERE FOR REFERENCE ONLY.

••• CONCRETE COLLAR REQUIRED, LISTED ELSEWHERE

STORM SEWER

STRUCTURE NUMBER	STATION	LOCATION	OFFSET	* CASTING FLAG ELEV.	INLETS TYPE 3 EACH	INLET COVERS TYPE HM EACH	CONCRETE COLLAR EACH	DEPTH IN FEET	FROM STRUCTURE (*)	TO STRUCTURE (*)	INLET INVERT ELEV.	DISCH. INVERT ELEV.	REINFORCED CONCRETE PIPE, CL. III STORM SEWER 12" L.F.	REINFORCED CONCRETE PIPE, CL. III STORM SEWER 18" L.F.	SLOPE (%)
956	733+00	RAMP E-1	46' LT	959.04	**	***									
PJ957	732+50	RAMP E-1	40' LT				1	5.14	956 PJ957	PJ957 •	954.11 953.61	953.61		47	1.00%
950	738+70	RAMP E-2	29.5' RT	957.47	1	1 -LT									
PJ952	738+80	RAMP E-2	29.5' RT				2	8.26	950 PJ952	PJ952 ••	948.63 948.53	948.53	7		1.00%
953	735+47	RAMP E-1	35.5' LT	957.44	1	1 -RT									
951	738+90	RAMP E-2	29.5' RT	957.22	1	1 -LT		8.16	953	951	948.70	948.63	4		1.00%
PJ952	738+80	RAMP E-2	29.5' RT					8.01	951 PJ952	PJ952 ••	948.63	948.53	7		1.00%
958	736+77.08	RAMP E-1	29.5' LT	955.79	1	1 -RT									
PJ959	737+15	RAMP E-1	29.5' LT				1	6.12	958 PJ959	PJ959 •••	949.09 948.71	948.71	35		1.00%
954	741+50	RAMP E-2	35.5' RT	955.65	1	1 -LT									
PJ955	740+65	RAMP E-2	35.5' RT				1	5.54	954 PJ955	PJ955 •••	949.53 948.73	948.73	77		1.00%
PJ130	685+30	USH-18	75' LT				1			••••					
	TOTALS				5	5	6						130	47	

NOTE:

* GRATE ELEVATION FOR INLETS

** TYPE 9 INLET REQUIRED, LISTED ELSEWHERE

*** TYPE MS COVER REQUIRED, LISTED ELSEWHERE

• CONNECT TO PROPOSED 54" RCCP

•• CONNECT TO PROPOSED 36" RCCP

••• CONNECT TO PROPOSED 2-48" RCCP

•••• CONNECT TO EXISTING 9-MS INLET

59.60

LEVELS ON -

FILE NAME: HDGN: 7830LDGN, V: BDR2

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3E

MISCELLANEOUS QUANTITIES

USH 18 — DANE COUNTY

PIPE UNDERDRAIN, 6-INCH GEOTEXTILE FABRIC, TYPE DF

STATION		STATION	LOCATION	PIPE L.F.	FABRIC S.Y.
607+00	-	616+00	USH 18, EB OUTSIDE	900	600
607+00	-	640+50	USH 18, EB MEDIAN	3,350	2,280
640+50	-	660+00	USH 18, EB OUTSIDE	1,950	1,300
640+50	-	688+00	USH 18, EB MEDIAN	4,750	3,170
688+00	-	725+50	USH 18, EB MEDIAN	3,750	2,500
688+00	-	725+50	USH 18, EB OUTSIDE	3,750	2,500
725+50	-	758+00	USH 18, EB OUTSIDE	3,250	2,170
745+50	-	758+00	USH 18, EB MEDIAN	1,250	830
758+00	-	798+00	USH 18, EB MEDIAN	4,000	2,675
607+00	-	616+00	USH 18, WB OUTSIDE	900	600
607+00	-	640+50	USH 18, WB MEDIAN	3,350	2,230
640+50	-	660+00	USH 18, WB MEDIAN	1,950	1,300
640+50	-	688+00	USH 18, WB OUTSIDE	4,750	3,170
688+00	-	725+50	USH 18, WB MEDIAN	3,750	2,500
688+00	-	725+50	USH 18, WB OUTSIDE	3,750	2,500
725+50	-	758+00	USH 18, WB MEDIAN	3,250	2,170
745+50	-	758+00	USH 18, WB OUTSIDE	1,250	830
758+00	-	798+00	USH 18, WB MEDIAN	4,000	2,675
			TOTALS	53,900	36,000

PIPE UNDERDRAIN, UNPERFORATED, 12-INCH * STEEL APRON ENDWALLS FOR CULVERT PIPE, 12-INCH

OUTLET STATION	LOCATION		PIPE UNDERDRAIN, UNPERFORATED 12-INCH L.F.	INLET OFFSET	INVERT ELEV.	OUTLET OFFSET	INVERT ELEV.	SLOPE FT./FT.	STEEL APRON ENDWALLS FOR CULVERT PIPE,12-INCH EACH
675+67.15	B-13-411		17	20' RT	1044.40	9' RT.	1044.30	0.0059	1
676+03.01	B-13-412		15	58' LT	1042.81	72' LT.	1042.71	0.0067	1
692+12.32	B-13-413	***	75	69.8' RT	1030.51	140' RT.	1025.50	0.0668	1
692+22.35	B-13-414		18	67.8' LT	1026.42	85' LT.	1025.80	0.0344	1
718+38.27	B-13-415	***	80	58' RT	981.10	144' RT.	960.60	0.2384	1
718+45.85	B-13-416	***	80	58' LT	979.88	134' LT.	960.00	0.2616	1
746+19.44	B-13-417	***	35	58' RT	973.18	90' RT.	952.80	0.5823	1
743+96.94	B-13-418		15	20' LT	972.66	2' LT.	970.40	0.1256	1
		TOTAL	335						8

* TO BE USED WITH CONCRETE SURFACE DRAINS, DROP INLET TYPE AT STRUCTURES
*** TWO ELBOWS REQUIRED

STEEL PLATE BEAM GUARD, CLASS A STEEL THRIE BEAM STRUCTURE APPROACH ANCHORAGES FOR STEEL PLATE BEAM GUARD, TYPE 1 AND TYPE 2

STATION		STATION	LOCATION	BEAM GUARD L.F.	STRUCTURE APPROACH L.F.	TYPE 1 ANCHORAGES EACH	TYPE 2 ANCHORAGES EACH
673+65	-	675+29	USH 18, RT.	162			
675+29	-	675+56	USH 18, RT.		27		
673+65	-	---	USH 18, RT.			1	
674+85	-	675+66	USH 18, MEDIAN *	140			
675+45	-	675+94	USH 18, MEDIAN		27		
675+66	-	675+93	USH 18, MEDIAN		27		
684+00	-	684+65	USH 18, MEDIAN	65			
684+00	-	684+27	USH 18, MEDIAN		27		
684+65	-	---	USH 18, MEDIAN			1	
686+00	-	687+23	USH 18, MEDIAN	123			
687+23	-	687+50	USH 18, MEDIAN		28		
686+00	-	---	USH 18, MEDIAN			1	
692+09	-	692+36	USH 18, MEDIAN		27		
692+36	-	693+09	USH 18, MEDIAN **	75			
693+01	-	---	USH 18, MEDIAN			1	
692+11	-	692+30	USH 18, LT.		27		
692+38	-	695+11	USH 18, LT.	237			
695+11	-	---	USH 18, LT.			1	
714+68	-	717+06	USH 18, RT.	237			
714+68	-	---	USH 18, RT.			1	
717+06	-	717+33	USH 18, RT.		27		
718+35	-	718+62	USH 18, MEDIAN		27		
718+62	-	719+68	USH 18, MEDIAN **	105			
719+68	-	---	USH 18, MEDIAN			1	
718+35	-	718+62	USH 18, LT.		28		
718+62	-	720+99	USH 18, LT.	237			
720+99	-	---	USH 18, LT.			1	
741+72	-	---	USH 18, RT.			1	
741+72	-	744+24	USH 18, RT.	252			
744+24	-	741+51	USH 18, RT.		27		
743+34	-	744+30	USH 18, LT. **	90			
743+92	-	---	USH 18, LT.				1
745+90	-	746+17	USH 18, LT.		27		
746+17	-	748+69	USH 18, LT.	252			
748+69	-	---	USH 18, LT.			1	
745+90	-	746+17	USH 18, MEDIAN		27		
746+17	-	747+50	USH 18, MEDIAN **	130			
747+50	-	---	USH 18, MEDIAN			1	
688+87	-	---	RAMP PB-3, RT.			1	
688+87	-	690+62	RAMP PB-3, RT.	175			
690+62	-	690+89	RAMP PB-3, RT.		28		
741+85	-	---	RAMP E-1, RT.			1	
741+85	-	742+13	RAMP E-1, RT.	40			
742+13	-	745+50	RAMP E-1, RT.		27		
758+63	-	763+00	RAMP E-1, RT.	450			
758+63	-	---	RAMP E-1, RT.			1	
			TOTALS	2,770	408	14	1

* BULLNOSE INSTALLATION
** PARALLEL INSTALLATION REQ'D.

IMPACT ATTENUATORS

STATION	LOCATION	EACH
688+25	RAMP PB-4	1
	TOTAL	1

WOVEN WIRE FENCE

STATION		STATION	LOCATION	L.F.
48+50	-	774+77 "18"	NESBITT RD., LT.	3,250
			TOTAL	3,250

ASPHALTIC SHOULDER RUMBLE STRIP

STATION		STATION	LOCATION	L.F.
607+00	-	648+00	USH 18, WB. OUTSIDE	4,100
607+00	-	648+00	USH 18, WB. MEDIAN	4,100
648+00	-	662+00	USH 18, WB. MEDIAN	1,400
662+00	-	675+71	USH 18, WB. OUTSIDE	1,371
662+00	-	675+71	USH 18, WB. MEDIAN	1,371
677+58	-	688+50	USH 18, WB. OUTSIDE	1,092
677+58	-	688+50	USH 18, WB. MEDIAN	1,092
688+50	-	690+89	USH 18, WB. MEDIAN	239
692+09	-	704+00	USH 18, WB. MEDIAN	1,191
704+00	-	717+31	USH 18, WB. OUTSIDE	1,331
704+00	-	717+31	USH 18, WB. MEDIAN	1,331
718+33	-	744+30	USH 18, WB. OUTSIDE	2,597
718+33	-	744+30	USH 18, WB. MEDIAN	2,597
745+10	-	758+50	USH 18, WB. OUTSIDE	1,350
745+10	-	758+50	USH 18, WB. MEDIAN	1,350
758+00	-	798+00	USH 18, WB. MEDIAN	4,000
769+25	-	798+00	USH 18, WB. OUTSIDE	2,875
607+00	-	649+00	USH 18, EB. OUTSIDE	4,200
607+00	-	649+00	USH 18, EB. MEDIAN	4,200
649+00	-	661+00	USH 18, EB. MEDIAN	1,200
661+00	-	675+71	USH 18, EB. OUTSIDE	1,471
661+00	-	675+71	USH 18, EB. MEDIAN	1,471
677+58	-	687+00	USH 18, EB. OUTSIDE	942
677+58	-	687+00	USH 18, EB. MEDIAN	942
687+00	-	690+89	USH 18, EB. MEDIAN	389
692+09	-	717+31	USH 18, EB. MEDIAN	2,522
698+00	-	717+31	USH 18, EB. OUTSIDE	1,931
718+33	-	744+30	USH 18, EB. OUTSIDE	2,597
718+33	-	744+30	USH 18, EB. MEDIAN	2,597
745+10	-	761+00	USH 18, EB. OUTSIDE	1,590
745+10	-	761+00	USH 18, EB. MEDIAN	1,590
761+00	-	798+00	USH 18, EB. MEDIAN	3,700
773+75	-	798+00	USH 18, EB. OUTSIDE	2,425
648+00	-	675+84	RAMP PB-1, LT.	2,597
649+00	-	674+97	RAMP PB-2, RT.	2,784
676+00	-	698+00	RAMP PB-3, RT.	2,200
681+65	-	704+00	RAMP PB-4, LT.	2,235
737+80	-	773+75	RAMP E-1, RT.	3,595
741+40	-	769+25	RAMP E-2, LT.	2,785
			TOTAL	83,350

LEVELS ON -

FILE NAME: HDGN: 78300.DGN SHEET 3

WISDOT/CADDS SHEET 12

PIPE UNDERDRAIN, UNPERFORATED, 6-INCH
REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN, 6-INCH
PAVEMENT MARKING OUTFALL MARKER

STATION	LOCATION		PIPE L.F.	ENDWALLS EACH	MARKERS EACH
607+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
609+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
612+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
614+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
616+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
617+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
619+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
622+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
624+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
627+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
629+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
632+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
634+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
637+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
639+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
640+50	USH 18, EB	MEDIAN	34	2	1
	USH 18, WB	OUTSIDE	38	2	1
643+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
645+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
648+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
649+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
650+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
653+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	25	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	27	1	1
655+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	30	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	32	1	1
658+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	35	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	37	1	1
660+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
663+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
665+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
668+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
670+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
673+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
675+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
678+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
680+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
683+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
685+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
688+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	37	1	1
690+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	31	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	36	1	1
693+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	32	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	35	1	1
695+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	32	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	37	1	1
698+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	34	1	1
700+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	28	1	1
703+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
705+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
708+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
710+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
713+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
715+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
718+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
720+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
723+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
725+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
728+00	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
729+50	USH 18, EB	OUTSIDE	38	2	1
	USH 18, WB	MEDIAN	34	2	1
732+00	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
734+50	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
737+00	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
739+50	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
742+00	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
745+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
747+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
749+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
752+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
754+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, EB	OUTSIDE	19	1	1
	USH 18, WB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
757+00	USH 18, EB	MEDIAN	34	2	1
	USH 18, EB	OUTSIDE	38	2	1
	USH 18, WB	MEDIAN	34	2	1
	USH 18, WB	OUTSIDE	38	2	1
759+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	42	1	1
762+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	34	1	1
764+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	25	1	1
767+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	25	1	1
769+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	25	1	1
772+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	25	1	1
774+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	25	1	1
777+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
779+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
782+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
784+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
787+00	USH 18, EB	MEDIAN	34	2	1
	USH 18, WB	OUTSIDE	38	2	1
789+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
792+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
794+50	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	19	1	1
797+00	USH 18, EB	MEDIAN	17	1	1
	USH 18, WB	OUTSIDE	20	1	1
		TOTAL	4,520	236	226

KEY MAP

STATE PROJECT NUMBER 1201-04-78

SHEET NO. 3F

MISCELLANEOUS QUANTITIES

USH 18 DANE COUNTY

FILE NAME: HDGN: 78300.DGN
SHEET 4

LEVELS ON

WISDOT/CADOS SHEET 42

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 36

MISCELLANEOUS QUANTITIES

USH 18 | DANE COUNTY

EROSION BALES

STATION		STATION	LOCATION	DELIVERED EACH	INSTALLED EACH
732+50	-	735+50	RAMP E-1, RT.	320	320
734+00	-	738+00	RAMP E-2, LT	240	240
			UNDISTRIBUTED	140	140
			TOTAL	700	700

SILT FENCE (SILTY*)

STATION		STATION	LOCATION	DELIVERED L.F.	INSTALLED L.F.	MAINTENANCE L.F.
729+00	-	736+50	RAMP E-2, LT.	750	750	750
740+50	-	744+00	RAMP E-2, LT.	350	350	350
726+00	-	732+00	RAMP E-1, RT.	600	600	600
51+50	-	59+00	CTH PB, RT.	850	850	850
51+50	-	56+00	CTH PB-N, RT.	550	550	550
12+00	-	17+00	LOCAL RD., RT.	500	500	500
12+00	-	19+50	LOCAL RD., LT.	750	750	750
19+00	-	48+00	NESBITT RD., RT.	2,900	2,900	2,900
19+00	-	49+00	NESBITT RD., LT.	3,000	3,000	3,000
3+00	-	8+00	MRRT, LT.	500	500	500
5+50	-	8+00	MRRT, RT.	250	250	250
765+00	-	805+50	USH 18, LT.	4,050	4,050	4,050
765+00	-	805+50	USH 18, RT.	4,050	4,050	4,050
3+00	-	8+50	MRRT, LT.	1,100	1,100	1,100
			UNDISTRIBUTED	4,800	4,800	4,800
			TOTALS	25,000	25,000	25,000

* ASSUME SILTY SOILS

EROSION MAT, CLASS I, TYPE B

STATION		STATION	LOCATION	DELIVERED S.Y.	INSTALLED S.Y.
15+75	-	19+00	LOCAL RD. RT.	542	542
14+50	-	18+00	LOCAL RD. LT.	583	583
			UNDISTRIBUTED	275	275
			TOTAL	1,400	1,400

SIGNS, TYPE II, REFLECTIVE

SIGN NO.	CODE NO.	SIGN MESSAGE	SIZE INCHES	SIGN AREA TYPE II S.F.	SAME POST AS SIGN NO.	WOOD POSTS 4 x 6 INCH 14' EACH
402	M2-1 (2)	JCT	21 x 15	2.19		1
	M1-4 (2)	18	24 x 24	4.00	402	
	M2-1 (2)	JCT	21 x 15	2.19	402	
	M1-4 (2)	151	24 x 24	4.00	402	
403	W1-6 (2)	NIGHT ARROW (SINGLE)	48 x 24	8.00		1
404	W1-6 (2)	NIGHT ARROW (SINGLE)	48 x 24	8.00		1
406	R1-1 (2)	STOP	30 x 30	6.25		1
407	R1-1 (2)	STOP	30 x 30	6.25		1
408	R6-2R (2)	ONE WAY RIGHT ARROW	18 x 24	3.00		1
409	R3-1 (2)	NO RIGHT TURN SYMBOL	24 x 24	4.00		1
410	W3-1 (2)	STOP AHEAD	36 x 36	9.00		1
411	W1-7 (2)	NIGHT ARROW (DOUBLE)	48 x 24	8.00		1
412	R1-1 (2)	STOP	30 x 30	6.25		1
413	W1-6 (2)	NIGHT ARROW (SINGLE)	48 x 24	8.00		1
414	W1-6 (2)	NIGHT ARROW (SINGLE)	48 x 24	8.00		1
500	R3-1 (2)	NO RIGHT TURN SYMBOL	24 x 24	4.00		1
501	R6-2L (2)	ONE WAY LEFT ARROW	18 x 24	3.00		1
502	R1-1 (2)	STOP	30 x 30	6.25		1
503	R1-1 (2)	STOP	30 x 30	6.25		1
505	M2-1 (2)	JCT	21 x 15	2.19		1
	M1-4 (2)	18	24 x 24	4.00	505	
	M2-1 (2)	JCT	21 x 15	2.19	505	
	M1-4 (2)	151	24 x 24	4.00	505	
603	R5-9 (2)	WRONG WAY	36 x 24	6.00		1
604	R5-1 (2)	DO NOT ENTER	30 x 30	6.25		1
605	R4-7 (2)	KEEP RIGHT SYMBOL	24 x 30	5.00		1
606	R4-7 (2)	KEEP RIGHT SYMBOL	24 x 30	5.00		1
607	W4-2L (2)	PAVEMENT WIDTH TRANSITION SYMBOL	36 x 36	9.00		1
609	R3-55L (2)	LEFT TURN LANE (ARROW)	24 x 30	5.00		1
701	R5-9 (2)	WRONG WAY	36 x 24	6.00		1
702	R5-1 (2)	DO NOT ENTER	30 x 30	6.25		1
703	R5-9 (2)	WRONG WAY	36 x 24	6.00		1
704	R3-55L (3)	LEFT TURN LANE W/ARROW	36 x 48	12.00		1
		TOTAL		185.50		27

GOETEXTILE FABRIC, TYPE R
RIPRAP, MEDIUM RANDOM RIPRAP
TEMPORARY STONE DITCH CHECK

STATION		STATION	LOCATION	GEOTEXTILE FABRIC TYPE R S.Y.	RIPRAP C.Y.	MEDIUM RANDOM RIPRAP C.Y.	TEMPORARY STONE DITCH CHECK EACH
3+00	-	7+00	MRRT LT.	930		300	
7+00	-	9+00	MRRT LT.	450		150	
732+50		---	RAMP E-1 RT.	15	5		
735+25		---	RAMP E-1 RT.	15	5		
738+75		---	RAMP E-2, LT.	100	35		
763+00		---	USH 18, MEDIAN	300	100		
773+00		---	USH 18, RT.	100	35		
774+00		---	USH 18, MEDIAN	300	100		
774+00		---	USH 18, RT.	75	25		
788+25		---	USH 18, MEDIAN	300	100		
788+25		---	USH 18, RT.	75	25		
731+75		---	RAMP E-1 RT.	80		10	1
15+00		---	LOCAL RD. RT.	80		10	1
17+75		---	LOCAL RD. LT.	80		10	1
18+75		---	LOCAL RD. RT.	80		10	1
---		---	PIPE UNDERDRAIN, UNPERFORATED, 12-INCH **	120	40		
			TOTALS	3,100	470	490	4

** LISTED ELSEWHERE

SAWING EXISTING PAVEMENT

STATION	LOCATION	L.F.
726+00	RAMP E-1	27
729+00	RAMP E-2	26
798+00	USH 18, WB.	26
798+00	USH 18, EB.	26
	TOTAL	105

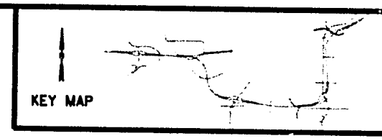
59.60

5%

LEVELS ON -

FILE NAME: HDGN1_73JCO.DGN
SHEET 5

WISDOT/CADDS SHEET 42



STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3H

MISCELLANEOUS QUANTITIES

USH 18 DANE COUNTY

PAVEMENT MARKING, EPOXY

LOCATION	STATION	STATION	CENTER LINE 4-INCH YELLOW L.F.	LANE LINE 4-INCH WHITE L.F.	EDGE LINE 4-INCH WHITE L.F.	EDGE LINE 4-INCH YELLOW L.F.	STOP LINE 24-INCH WHITE L.F.	CHANNELIZING 8-INCH WHITE L.F.	ARROWS TYPE 2 EACH	ISLAND NOSE S.F.	DIAGONAL 24-INCH WHITE L.F.	CURB (YELLOW) L.F.	ARROWS TYPE 4 EACH	WORDS EACH	DOTTED GUIDES 6-INCH L.F.
USH 18 WB	607+00	798+00		4,775		19,100									
USH 18 EB	607+00	798+00		4,775		19,100									
USH 18 WB	607+00	647+00			4,000										
USH 18 WB	662+50	688+20			2,570										
USH 18 WB	704+00	758+00			5,400										
USH 18 WB	770+00	798+00			2,800										
USH 18 EB	610+00	648+00			3,800										
USH 18 EB	661+50	686+40			2,490										
USH 18 EB	699+00	760+50			6,150										
USH 18 EB	774+00	798+00			2,400										
USH 18 WB	653+80	662+50						870							
RAMP PB-1	653+80	662+50						870							
USH 18 WB	688+20	695+00						680							
RAMP PB-4	688+20	691+20						300			90				
USH 18 WB	695+00	699+00						80							
RAMP E-2	758+00	762+50						450							
USH 18 EB	655+50	661+50						450			170				
RAMP PB-2	655+50	661+50						600							
USH 18 EB	686+40	691+50						600			150				
RAMP PB-3	686+40	691+50						510							
USH 18 EB	760+50	766+20						510							
RAMP E-1	760+50	766+20						570							
RAMP PB-1	647+00	677+00						570							
RAMP PB-1	662+50	677+00			3,050										
RAMP PB-2	648+00	677+00				1,450									
RAMP PB-2	661+50	677+00			2,900			60							
RAMP PB-3	674+50	686+40				1,550									
RAMP PB-3	674+50	699+00				1,190									
RAMP PB-4	679+50	688+20			2,450										
RAMP PB-4	680+50	704+00				870									
RAMP PB-4 (THRU)	679+75				2,350										
RAMP PB-4 (RT.)	679+75						30								
RAMP PB-4	682+00						30					30			
RAMP PB-4	679+75	681+00													
RAMP PB-4	681+00	686+00						245					1		
RAMP PB-4	680+20	680+75		125											
RAMP PB-4	679+80							110							
RAMP PB-4	680+20								2		20				
RAMP PB-4	692+00	699+00		135											
RAMP PB-2	674+00							305						2	
RAMP PB-2	676+40	ISLAND											1		
RAMP PB-2	676+75														
RAMP E-1	729+00	735+50					60				15				
RAMP E-1	734+80	735+50		165	650	650						20			
RAMP E-1	734+80	735+50						70							
RAMP-E-1	736+50	738+00						70							
RAMP E-1	736+50	760+50		40											
RAMP E-1	737+00	774+00				2,400									
RAMP E-1	734+00	735+60			3,700										
RAMP E-2	731+80	739+00		175	720	720					10				
RAMP E-2	740+00	747+50		190								160			
RAMP E-2	740+50	770+00										160			
RAMP E-2	740+00	758+00			2,950										
RAMP E-2	740+00	742+00				1,800									
RAMP E-2	740+00	740+40						200			10				
RAMP E-2	741+00							40				200			
CTH PB (SB)	151+20	152+60						140					2		
CTH PB (NB)	146+70	148+00						130							
NESBITT ROAD	AT RAMP						45	20			20				
CTH PB-N	AT RAMP						40	20			20				
CTH PB-N	50+80	60+00	1,840									70			
CTH PB-N	AT RAMP PB-4				1,840							70			
		TOTALS:	1,840	10,380	50,220	48,830	205	8,470	2	95	410	710	4	2	40

111,270

LEVELS ON -

FILE NAME: HDGN: 78300.DGN
SHEET 6

W:\DOT/CADDS SHEET 42

MISCELLANEOUS QUANTITIES

USH 18 — DANE COUNTY

KEY MAP

WATER

STATION		STATION	LOCATION	MGAL
607+00	-	798+00	USH 18	244
647+00	-	675+84	RAMP PB - 1	4
649+00	-	674+97	RAMP PB - 2	4
676+00	-	698+00	RAMP PB - 3	3
681+65	-	691+00	RAMP PB - 4	2
726+00	-	773+75	RAMP E - 1	18
729+00	-	769+25	RAMP E - 2	17
19+00	-	50+00	NESBITT ROAD	50
50+70	-	59+90	CTH PB NORTH	33
12+00	-	19+29	LOCAL ROAD	9
3+00	-	8+00	MRRT	15
			TOTAL	400

NOTE: APPLICATION RATE IS 2 GAL/CY OF UNCLASSIFIED EXCAVATION AND 2 GAL/TON OF CRUSHED AGGREGATE BASE COURSE

TOPSOIL, SALVAGED TOPSOIL, MULCHING, FERTILIZER, SEEDING AND TEMPORARY SEEDING

STATION		STATION	LOCATION	TOPSOIL S.Y.	SALVAGED TOPSOIL S.Y.	MULCHING TEMPORARY* TONS	MULCHING TONS	FERTILIZER TYPE A CWT	SEEDING (NO. 20) LBS.	TEMPORARY SEEDING LBS.
729+00	-	739+00	RAMP E-2, LT.		8,845	4	4	6	310	310
28+00	-	48+50	NESBITT ROAD, RT.		10,843	5	5	7	381	381
28+00	-	46+00	NESBITT ROAD, LT.		13,550	6	6	9	476	476
19+00	-	28+00	NESBITT ROAD, RT.		4,273	2	2	3	150	150
766+00	-	780+00	USH 18 WB, LT.		18,092	8	8	11	635	635
766+00	-	780+00	USH 18 MEDIAN		8,052	4	4	5	283	283
773+00	-	780+00	USH 18 EB, RT.		4,868	2	2	3	171	171
780+00	-	805+00	USH 18 WB, LT.		8,457	4	4	5	297	297
780+00	-	805+00	USH 18 MEDIAN		10,416	5	5	7	366	366
780+00	-	805+00	USH 18 EB, RT.		8,606	4	4	5	300	300
12+00	-	20+00	LOCAL ROAD	5,500		3	3	4	195	195
			UNDISTRIBUTED			13	13	16	838	838
			TOTAL	5,500	96,000	60	60	80	4,400	4,400
						120				

* FOR USE WITH TEMPORARY SEEDING AND PAID FOR AS "MULCHING"

SODDING

STATION		STATION	LOCATION	S.Y.
726+00	-	732+50	RAMP E-1, RT. (SOD DITCH CHECKS)	71
12+00	-	15+25	LOCAL RD, RT. (SOD DITCH CHECKS)	36
12+00	-	14+50	LOCAL RD, LT. (SOD DITCH CHECKS)	28
18+00	-	19+50	LOCAL RD, LT. (SOD DITCH CHECKS)	15
---	-	---	ASPHALTIC FLUMES	15
			TOTAL	165

LIMESTONE SCREENING

STATION		STATION	LOCATION	TON
3+00	-	8+00	MRRT	220
			TOTAL	220

CORRUGATED STEEL CULVERT PIPE

STATION	LOCATION	PIPE 30-INCH L.F.	THICKNESS STEEL	APRON ENDWALLS 30-INCH EACH	REMARKS
789+00	USH 18	30	0.079	2	EXT. 16' LT. & 14' RT.
	TOTALS	30		2	

PAVEMENT MARKING, RAISED MARKERS

STATION		STATION	LOCATION	ONE WAY RED EACH	ONE WAY WHITE EACH	TWO WAY WHITE/RED EACH
674+00	-	---	RAMP PB-2**	8		
682+00	-	---	RAMP PB-4**	8		
741+00	-	---	RAMP E-2 **	16		
---	-	---	RAMP PG-2, GORE		24	25
---	-	---	RAMP PB-4, GORE		15	13
---	-	---	RAMP E-2, GORE		18	19
			SUB-TOTAL	32	57	57
					146	

** TWO WAY WHITE/RED AT ARROWS, TYPE 4 (8 MARKERS/ARROWS)

MOVING SIGNS, TYPE 2

STATION	LOCATION	EACH
725+00	RAMP E-1, LT	1
732+00	RAMP E-1, LT	1
	TOTAL	2

SLOPE PAVING, CRUSHED AGGREGATE

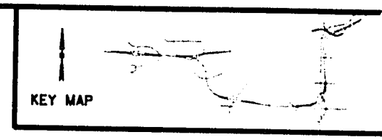
STATION		STATION	LOCATION	S.Y.
681+35		685+25	RAMP PB-4, RT.	225
			TOTAL	225

TEMPORARY PAVEMENT MARKING, RAISED MARKERS

STATION		STATION	LOCATION	ONE WAY YELLOW EACH	ONE WAY WHITE EACH
---	-	---	EXISTING USH 18	250	250
---	-	---	USH 18 CROSSOVER	165	165
			SUB-TOTAL	415	415
				830	

ASPHALTIC FLUMES

STATION	LOCATION	S.Y.
739+05	RAMP E-2, LT.	6
736+60	RAMP E-1, RT.	6
19+60	LOCAL RD. LT.	6
	TOTAL	18



STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3J

MISCELLANEOUS QUANTITIES

USH 18 | DANE COUNTY

TRAFFIC CONTROL, ARROW BOARDS

STATION	LOCATION	STAGE	DAYS
740+80	EXISTING USH 18	1 (A)	80
744+50	EXISTING USH 18	1 (A)	80
889+50	USH 18	1 (A)	103
895+50	USH 18	1 (A)	103
899+00	USH 18	2 (C)	82
905+00	USH 18	2 (C)	82
		TOTAL	530

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE

TRAFFIC CONTROL, DRUMS

STATION		STATION	LOCATION	STAGE	DRUM DAYS
---	-	---	EXISTING USH 18 (LOCAL RD.- NESBITT RD.)	1 (A)	6,000
---	-	---	CTH PB	1 (A)	1,040
725+00	-	732+00	EXISTING USH 18 (WEST OF LOCAL RD.)	1 (B)	330
767+00	-	878+00	USH 18, RT.	1 (C)	12,240
878+00	-	896+00	USH 18, RT.& LT.	1 (C)	8,670
611+00	-	619+00	EXISTING USH 18 (ENTERPRISE DR. INTERSECTION)	2 (A)	440
---	-	---	MEDIAN CROSSOVER @ CTH "PB-N"/NESBITT RD.	2 (A)	462
763+00	-	773+00	MEDIAN CROSSOVER	2 (C)	3,034
773+00	-	878+00	USH 18, LT.	2 (C)	8,610
878+00	-	905+00	MEDIAN CROSSOVER	2 (C)	6,674
				TOTAL	47,500

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE

TRAFFIC CONTROL, BARRICADES, TYPE III

STATION	LOCATION	STAGE	DAYS
755+00	EXISTING USH 18	1 (A)	80
756+00	EXISTING USH 18	1 (A)	80
612+00	EXISTING USH 18	1 (B)	110
---	CTH "PB" DETOUR PLAN	1 (B)	110
766+00	USH 18/NESBITT RD. INTERSECTION	1 (C)	306
884+50	USH 18	1 (C)	102
886+00	USH 18	1 (C)	102
---	ENTERPRISE DRIVE	2 (A)	22
738+50	RAMP E-2/NESBITT RD. INTERSECTION	2 (A)	66
48+00	NESBITT ROAD	2 (A)	66
49+00	NESBITT ROAD	2 (A)	22
883+00	USH 18	2 (C)	246
895+00	USH 18	2 (C)	88
		TOTAL	1,400

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE

TRAFFIC CONTROL, WARNING LIGHTS, TYPE A

STATION	LOCATION	STAGE	DAYS
755+00	BARRICADES, EXISTING USH 18	1 (A)	160
756+00	BARRICADES, EXISTING USH 18	1 (A)	160
612+00	BARRICADES, EXISTING USH 18	1 (B)	132
---	BARRICADES, CTH "PB" DETOUR PLAN	1 (B)	132
766+00	BARRICADES, USH 18/NESBITT RD. INTERSECTION	1 (C)	408
884+50	BARRICADES, USH 18	1 (C)	204
886+00	BARRICADES, USH 18	1 (C)	204
---	BARRICADES, ENTERPRISE DRIVE	2 (A)	44
738+50	BARRICADES, RAMP E-2/NESBITT RD. INTERSECTION	2 (A)	88
48+00	BARRICADES, NESBITT ROAD	2 (A)	88
49+00	BARRICADES, NESBITT ROAD	2 (A)	44
883+00	BARRICADES, USH 18	2 (C)	348
895+00	BARRICADES, USH 18	2 (C)	188
		TOTAL	2,200

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE

TRAFFIC CONTROL, WARNING LIGHTS, TYPE C

STATION		STATION	LOCATION	STAGE	DAYS
---	-	---	DRUMS, EXISTING USH 18 (LOCAL RD.- NESBITT RD.)	1 (A)	6,000
767+00	-	878+00	DRUMS, USH 18, RT.	1 (C)	1,530
878+00	-	896+00	DRUMS, USH 18, RT.& LT.	1 (C)	7,140
763+00	-	773+00	DRUMS, MEDIAN CROSSOVER	2 (C)	3,034
878+00	-	905+00	DRUMS, MEDIAN CROSSOVER	2 (C)	5,996
				TOTAL	23,700

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE

LEVELS ON
FILE NAME: HDGN: 78300.DGN SHEET 8
WISDOT/CADDS SHEET 12

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 3K

MISCELLANEOUS QUANTITIES

USH 18 | DANE COUNTY

TRAFFIC CONTROL, SIGNS

STATION		STATION	LOCATION	STAGE	48"x 48" DAYS	30"x 30" DAYS	24"x 24" DAYS	48"x 30" DAYS	60"x 30" DAYS	30"x 24" DAYS	36"x36" DAYS	48"x24" DAYS	36"x31" DAYS
---	-	---	EXISTING USH 18 (ENTERPRISE DR. - LOCAL RD.)	1 (A)	480							160	
---	-	---	CTH "PB-N"	1 (A)								80	80
---	-	---	EXISTING USH 18 (LOCAL RD. - NESBITT RD.)	1 (A)	240		240	80	80	80			
600+00	-	614+00	EXISTING USH 18	1 (B)	88					22		44	
---	-	---	LINCOLN STREET	1 (B)	22								
---	-	---	ENTERPRISE DRIVE	1 (B)	22								
---	-	---	USH 18/NESBITT ROAD INTERSECTION	1 (C)				102					
767+00	-	945+00	USH 18	1 (C)	1,372	102		102		306	102	102	
600+00	-	615+50	EXISTING USH 18	2 (A)	88					22		22	
---	-	---	LINCOLN STREET	2 (A)	22								
---	-	---	ENTERPRISE DRIVE	2 (A)	22							22	
---	-	---	MEDIAN CROSSOVER @ CTH "PB-N"/NESBITT RD.	2 (A)	66			44	22		22		
---	-	---	LOCAL ROAD	2 (A)	22								
772+00	-	772+00	USH 18	2 (C)	82					82			
874+00	-	905+00	USH 18	2 (C)	246			82	82	82	82	82	
			SUB-TOTALS		2,772	102	240	410	184	594	206	512	80
			TOTAL		5,100								

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE

TRAFFIC CONTROL, DETOUR, SIGNS

LOCATION	STAGE	48"x 48" DAYS	21"x 21" DAYS	24"x 12" DAYS	24"x 24" DAYS	48"x 30" DAYS	60"x 30" DAYS	30"x 24" DAYS
CTH "PB" DETOUR PLAN	1 (B)	92	176	352	440	44	44	22
	SUB-TOTALS	92	176	352	440	44	44	22
	TOTAL	1,170						

(B) END OF CONSTRUCTION STAGE

PAVEMENT MARKING, HOT PAINT

STATION		STATION	LOCATION	WHITE SKIP DASH L.F.	WHITE EDGE LINE L.F.	YELLOW EDGE LINE L.F.
609+00	-	730+00	EXISTING USH 18, EB	3,050	12,100	12,100
609+00	-	730+00	EXISTING USH 18, WB	3,050	12,100	12,100
			SUB-TOTALS	6,100	24,200	24,200
			TOTAL	54,500		

REMOVING PAVEMENT MARKINGS

STATION		STATION	LOCATION	L.F.
722+00	-	765+00	EXISTING USH 18, WB, CENTERLINE	325
767+00	-	878+00	USH 18, WB, CENTERLINE	2,775
886+00	-	893+00	USH 18, WB, CENTERLINE	175
722+00	-	735+00	EXISTING USH 18, EB, CENTERLINE	325
780+00	-	881+00	USH 18, EB, CENTERLINE	2,525
895+00	-	902+00	USH 18, EB, CENTERLINE	175
---	-	---	CTH PB RAMPS	550
			TOTAL	7,600

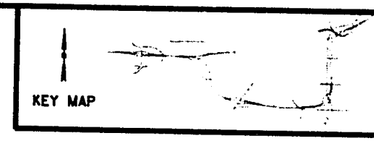
TRAFFIC CONTROL

STATION		STATION	LOCATION	FLEXIBLE TUBULAR MARKER POSTS EACH	FLEXIBLE TUBULAR MARKER BASES EACH
611+00	-	619+00	EXISTING USH 18	20	20
619+00	-	765+00	EXISTING USH 18	292	292
767+00	-	878+00	USH 18	223	223
611+00	-	612+00	EXISTING USH 18	5	5
612+00	-	735+00	EXISTING USH 18	246	246
773+00	-	880+50	USH 18	214	214
---	-	---	REPLACEMENTS	250	
			TOTALS	1,250	1,000

TEMPORARARY PAVEMENT MARKING

STATION		STATION	LOCATION	STAGE	L.F.
738+00	-	767+00	EXISTING USH 18, EB RT.	1 (A)	2,900
751+50	-	765+00	EXISTING USH 18, EB LT.	1 (A)	1,350
764+00	-	765+00	EXISTING USH 18, EB (8" CHANNELIZING)	1 (A)	100
609+00	-	765+00	EXISTING USH 18, WB LT.	1 (B)	15,600
609+00	-	765+00	EXISTING USH 18, WB (DOUBLE YELLOW CENTERLINE)	1 (B)	31,200
767+00	-	878+00	USH 18, WB LT.	1 (C)	11,100
767+00	-	878+00	USH 18, WB (DOUBLE YELLOW CENTERLINE)	1 (C)	22,200
878+00	-	886+00	USH 18, EB RT.	1 (C)	800
878+00	-	889+00	USH 18, EB LT.	1 (C)	1,100
878+00	-	893+00	USH 18, WB LT.	1 (C)	1,460
609+00	-	737+00	EXISTING USH 18, EB (DOUBLE YELLOW CENTERLINE)	2 (A)	25,600
609+00	-	740+00	EXISTING USH 18, WB RT.	2 (A)	13,100
737+00	-	740+00	MEDIAN CROSSOVER (5' SKIPS)	2 (A)	150
740+00	-	743+00	WB LT. TURN LANE, (8" CHANNELIZING)	2 (A)	300
761+00	-	773+00	USH 18, WB RT.	2 (A)	1,200
761+00	-	773+00	USH 18, WB LT.	2 (A)	1,200
764+00	-	773+00	USH 18, EB RT.	2 (A)	900
764+00	-	773+00	USH 18, EB LT.	2 (A)	900
773+00	-	880+50	USH 18, EB (DOUBLE YELLOW CENTERLINE)	2 (A)	21,500
773+00	-	888+00	USH 18, WB RT.	2 (A)	11,500
880+50	-	888+00	USH 18, EB LT.	2 (A)	750
880+50	-	902+00	USH 18, WB LT.	2 (A)	2,190
			TOTAL		167,100

(A) BEGINNING OF CONSTRUCTION STAGE
(B) END OF CONSTRUCTION STAGE
(C) THROUGHOUT CONSTRUCTION STAGE



STATE PROJECT NUMBER	SHEET NO.
1201-04-78	3L

MISCELLANEOUS QUANTITIES

USH 18 DANE COUNTY

* GRADING, SHAPING AND FINISHING MEDIAN CROSSOVER REMOVAL STA. 880+00 AREA

ITEM	L.S.
GRADING, SHAPING AND FINISHING MEDIAN CROSSOVER REMOVAL STA. 880+00 AREA	1

NOTE: THE FOLLOWING QUANTITY ESTIMATES FOR ITEMS ARE FOR INFORMATION ONLY AND ARE INCLUDED IN THIS LUMP SUM ITEM.

ITEM	QUANTITY / UNIT
UNCLASSIFIED EXCAVATION	2,000 CY
CRUSHED AGGREGATE BASE COURSE	150 TONS
ASPHALTIC CONCRETE PAVEMENT, TYPE LV	40 TONS
ASPHALTIC MATERIAL FOR PLANT MIX	3 TONS
MULCHING	1 TON
TOPSOIL	1,400 SY
FERTILIZER, TYPE A	1 CWT
SEEDING	50 LB.
SAWING EXISTING PAVEMENT	700 LF

* FOR ADDITIONAL INFORMATION, SEE SHEETS 2.17, 5.18 & 9.44 THRU 9.47

59.60

5L

LEVELS ON -

FILE NAME: HDGN: 78300.DGN
SHEET 10

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	3M

MISCELLANEOUS QUANTITIES

U.S.H. 18 DANE COUNTY

POLES, BASES, MAST ARMS & LUMINAIRES

	SIGNAL BASE NO.	STATION	LOCATION	CONC. CONTROL CABINET BASES, TYPE 9 SPECIAL EACH	TRAFFIC SIGNAL CONTROLLER, INSTALLED STATE FURNISHED EACH	CONCRETE BASES, TYPE 1 EACH	CONCRETE BASES, TYPE 2 EACH	CONCRETE BASES, TYPE 5 EACH	PEDESTAL BASES EACH	TRANSFORMER BASES EACH	TRAFFIC SIGNAL STANDARDS, 13 FT. EACH	POLE TYPE 2 EACH	POLE TYPE 3 EACH	POLE TYPE 4 EACH	POLE TYPE 5 30-FT EACH	MAST ARMS, TRAFFIC SIGNAL TROMBONE, 15 FT. EACH	MAST ARMS, TRAFFIC SIGNAL TROMBONE, 25 FT. EACH	MAST ARM, SINGLE MEMBER 8 FT. EACH	LUMINAIRES, 150W, HPS, (120V) EACH
C.T.H. "PB" & RAMPS "PB-1" & "PB-4"	CB1	586+91	27' LT.	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	SB1	145+94	34' RT.	–	–	–	1	–	–	1	–	–	–	1	–	–	–	1	1
	SB2	145+93	04' LT.	–	–	1	–	–	1	–	1	–	–	–	–	–	–	–	–
	SB3	145+30	22' LT.	–	–	1	–	–	1	–	1	–	–	–	–	–	–	–	–
	SB4	587N+74	16' LT.	–	–	–	1	–	–	1	–	1	–	–	–	–	1	–	–
	SB5	587N+99	47' LT.	–	–	1	–	–	1	–	1	–	–	–	–	–	–	–	–
	SB6	146+40	61' LT.	–	–	–	1	–	–	1	–	–	–	1	–	–	–	1	1
	SB7	146+82	07' LT.	–	–	1	–	–	1	–	1	–	–	–	–	–	–	–	–
	SB8	146+69	32' RT.	–	–	–	1	–	–	1	–	–	1	–	–	1	–	1	1
	SB9	586+86	22' RT.	–	–	1	–	–	1	–	1	–	–	–	–	–	–	–	–
	SB10	586+93	13' LT.	–	–	1	–	–	1	–	1	–	–	–	–	–	–	–	–
	SL1	145+21	72' LT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL2	588+84	28' LT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL3	587N+78	21' RT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL4	586+50	25' RT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
C.T.H. "PB" & RAMPS "PB-2" & "PB-3"	SL5	152+76	34' RT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL6	152+57	62' LT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL7	584N+72	16' RT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL8	153+95	62' LT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL9	153+97	43' RT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
	SL10	583+43	25' LT.	–	–	–	–	1	–	1	–	–	–	–	1	–	–	1	1
			TOTALS	1	1	6	4	10	6	14	6	1	1	2	10	1	1	13	13

SIGNAL FACES

HEAD NO.	SIGNAL BASE NO.	TYPE OF MOUNT	VERTICAL, 3-12V EACH	HORIZONTAL, 3-12H EACH	BACKPLATES EACH
1	SB1	POST	1	–	–
2	SB2	POST	1	–	1
3	SB3	POST	1	–	1
4	SB4	MAST ARM	–	1	1
5	SB4	SIDE POLE	1	–	1
6	SB5	POST	1	–	–
7	SB6	POST	1	–	–
8	SB7	POST	1	–	1
9	SB7	POST	1	–	–
10	SB8	MAST ARM	–	1	1
11	SB9	POST	1	–	1
12	SB10	POST	1	–	1
		TOTALS	10	2	8

LOOP DETECTOR CONDUIT, 1-INCH (EXISTING)
LOOP DETECTOR LEAD IN CABLE AND LOOP DETECTOR WIRE (EXISTING)

LOOP PHASE NO.	EXISTING LOOP WIRE L.F.	LEAD IN CABLE L.F.	EXISTING 1-INCH CONDUIT L.F.
ø 21	145'	160'	75'
ø 22	130'	305'	65'
ø 61	165'	235'	80'
ø 62	195'	380'	75'
ø 63	145'	130'	75'
ø 81	165'	170'	80'
ø 82	145'	170'	70'
ø 83	140'	155'	70'
ø 84	165'	270'	80'
TOTALS	1,395'	1,975'	670'

ELECTRICAL WIRE, LIGHTING

LOCATION-LOCATION	TYPE 12-2 W/ GRD. L.F.	NO. 12 XLP POLE WIRE L.F.	NO. 4 XLP L.F.
CB1-SB1	40'	2@45'=90'	–
SB1-SL1	200'	2@45'=90'	–
SL1-SL2	120'	2@45'=90'	–
CB1-SL4	90'	2@45'=90'	–
SL4-SB8	70'	2@45'=90'	–
SB8-SB6	135'	2@45'=90'	–
SB6-SL3	90'	2@45'=90'	–
CB1-SL5	–	2@45'=90'	720'
SL5-SL6	145'	2@45'=90'	–
SL6-SL7	110'	2@45'=90'	–
SL7-SL8	105'	2@45'=90'	–
SL5-SL10	80'	2@45'=90'	–
SL10-SL9	100'	2@45'=90'	–
TOTALS	1,285'	1,170'	720'

FILENAME: PBI_4011.DWG

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	3N

MISCELLANEOUS QUANTITIES

U.S.H. 18 DANE COUNTY

EXISTING UNDER CONTRACT I.D. 1201-04-72

PULLBOX & JUNCTION BOX

	PULLBOX & JUNCTION BOX NUMBER	8X8X8 JUNCTION BOX EACH	18X36 EACH	24x36 EACH	STATION	LOCATION
C.T.H. "PB" & RAMPS "PB-2" & "PB-3"	PB20	–	1	–	154+54	23' LT.
	PB21	1	–	–	154+55	40' LT.
	PB22	–	–	1	153+42	18' LT.
	PB23	–	–	1	583+72	10' RT.
	PB24	–	–	1	153+93	45' RT.
	PB25	–	–	1	154+08	38' RT.
	PB26	–	–	1	583+44	33' RT.
	PB27	–	1	–	582+55	13' RT.
	PB28	1	–	–	582+53	09' LT.
	PB29	1	–	–	583+72	06' LT.
	PB30	–	–	1	583+58	23' LT.
	PB31	–	–	1	152+77	38' RT.
	PB32	1	–	–	152+28	05' LT.
	PB33	–	–	1	152+27	24' LT.
	PB34	–	–	1	152+46	61' LT.
	PB35	–	–	1	584N+76	25' LT.
	PB36	–	–	1	584N+58	19' RT.
	PB37	–	–	1	153+57	61' LT.
	PB38	–	–	1	152+29	32' RT.
	PB39	–	1	–	151+38	30' RT.
	PB40	1	–	–	151+38	12' RT.
	PB41	–	1	–	149+89	30' RT.
	PB42	1	–	–	149+89	12' RT.
C.T.H. "PB" & RAMPS "PB-1" & "PB-4"	PB43	–	1	–	149+45	22' LT.
	PB44	1	–	–	149+45	40' LT.
	PB45	–	–	1	149+26	32' RT.
	PB46	–	1	–	147+97	12' LT.
	PB47	1	–	–	147+95	39' LT.
	PB48	1	–	–	146+97	22' LT.
	PB49	–	–	1	146+91	04' LT.
	PB50	–	–	1	146+65	33' RT.
	PB51	–	–	1	586+79	21' RT.
	PB52	–	–	1	586+72	20' RT.
	PB53	–	–	1	586+88	13' LT.
	PB54	–	–	1	145+87	40' RT.
	PB55	–	–	1	145+73	12' LT.
	PB56	–	–	1	587N+88	21' LT.
	PB57	1	–	–	587N+89	38' LT.
	PB58	–	–	1	588+11	40' LT.
	PB59	–	1	–	588+93	25' LT.
	PB60	1	–	–	588+94	04' RT.
	PB61	–	1	–	587N+99	16' LT.
	PB62	1	–	–	587N+88	03' LT.
	PB63	1	–	–	587N+86	09' RT.
	PB64	–	–	1	587N+70	20' RT.
	PB65	–	–	1	146+68	60' LT.
	PB66	–	1	–	144+66	32' RT.
	PB67	1	–	–	144+65	13' RT.
	PB68	–	1	–	143+23	31' RT.
TOTAL UNDER I.D. 1201-04-72		14	10	25		
TOTAL UNDER I.D. 1201-04-78		0	0	0		

NONMETALLIC CONDUIT-EXISTING (X) UNDER CONTRACT I.D. 1201-04-72

	FROM--TO	2-INCH L.F.	3-INCH L.F.
C.T.H. "PB" & RAMPS "PB-2" & "PB-3"	PB31-PB33	–	(85')
	PB33-PB34	–	(45')
	PB34-SL6	15'	–
	PB34-PB35	–	(2@35'=70')
	PB35-PB36	–	(2@50'=100')
	PB36-SL7	15'	–
	PB36-PB37	–	(45')
	PB37-SL8	40'	–
	PB37-PB22	–	(50')
	PB22-PB20	(120')	–
	PB22-PB23	–	(60')
	PB23-PB24	–	(2@45'=90')
	PB24-SL9	5'	–
	PB23-PB30	–	(40')
	PB30-SL10	20'	–
	PB30-PB26	–	(60')
	PB26-PB27	(95')	–
	PB30-PB31	–	(3@50'=150')
	PB31-PB38	–	(2@50'=100')
	PB38-PB45	–	(2@305'=610')
C.T.H. "PB" & RAMPS "PB-1" & "PB-4"	PB45-PB52	–	(2@305'=610')
	PB52-CB1	–	(2@40'=80)2@15'=30'
	CB1-PB54	–	30'
	PB54-PB66	(130')	–
	PB66-PB68	(150')	–
	PB54-SB1	10'	–
	PB54-PB55	–	(55')
	PB55-SB2	25'	–
	PB55-SB3	45'	–
	PB55-PB56	–	(75')
	PB56-SB4	15'	–
	PB56-PB58	–	(35')
	PB58-SL1	40'	–
	PB58-SB5	15'	–
	PB58-PB59	(85')	–
	PB58-SL2	80'	–
	PB56-PB61	(15')	–
	PB56-PB64	–	(50')
	PB64-SL3	10'	–
	PB64-PB65	–	(50')
	PB65-SB6	25'	–
	PB65-PB49	–	(65')
	PB49-SB7	10'	–
	PB49-PB46	(110')	–
	PB46-PB43	(150')	–
	PB49-PB50	–	(50')
	PB50-SB8	5'	–
	PB50-PB51	–	(30')
	PB51-SB9	10'	–
	PB51-SL4	30'	–
	PB51-PB53	–	(2@40'=80')
	PB53-SB10	5'	–
	PB53-CB1	–	2@15'=30'
587S+37(78'LT.)-587N+09(60'LT.)		(35')	–
587N+35(58'LT.)-587N+93(52'LT.)		(60')	–
146+20(64'RT.)-146+50(67'RT.)		(30')	–
TOTAL UNDER I.D. 1201-04-72		(980')	(2,685')
TOTAL UNDER I.D. 1201-04-78		420'	90'

NOTE: THE LAST THREE NONMETALLIC CONDUIT ENTRIES REPRESENT CONDUIT RESERVED FOR ELECTRIC SERVICE(EXISTING).

TRAFFIC SIGNAL CABLE NO. 14

FROM – TO	HEAD NO.	CABLE LAYOUT COLOR CODE	NO. OF CONDUCTORS POLE WIRE 5/C L.F.	7/C L.F.	12/C L.F.
CB1–SB1	1	R, O, G	20'	50'	–
CB1–SB2	2	R, O, G	20'	–	120'
	3	R/BLK, O/BLK, GRN/BLK	–	–	–
SB2–SB3 (JUMPER)	3	R, O, G	20'	80'	–
CB1–SB4	4	R, O, G	20'	–	190'
	5	R/BLK, O/BLK, GRN/BLK	20'	–	–
	6	BLK, WHT/BLK, BLU	–	–	–
SB4–SB5 (JUMPER)	6	R, O, G .	20'	75'	–
CB1–SB6	7	R, O, G	20'	240'	–
CB1–SB7	8	R/BLK, O/BLK, GRN/BLK	20'	–	165'
	9	R, O, G	20'	–	–
CB1–SB8	10	R, O, G	50'	–	105'
	11	R/BLK, O/BLK, GRN/BLK	–	–	–
SB8–SB9 (JUMPER)	11	R, O, G	20'	60'	–
CB1–SB10	12	R, O, G	20'	30'	–
		TOTAL	270'	535'	580'

ELECTRICAL WIRE, TRAFFIC SIGNALS NO. 10

BONDED JUMPERS (STRANDED) L.F.		BONDING AND NEUTRAL (STRANDED) (1EACH) L.F.	
SB1–PB54	15'	CB1–SB1	2● 45'= 90'
SB2–PB55	25'	SB1–SB2	2●100'=200'
SB3–PB55	50'	SB2–SB3	2● 80'=160'
SB4–PB56	20'	SB3–SB4	2●140'=280'
SB5–PB58	15'	SB4–SB5	2● 70'=140'
SB6–PB65	25'	SB5–SB6	2●170'=340'
SB7–PB49	10'	SB6–SB7	2●100'=200'
SB8–PB50	5'	SB7–SB8	2● 70'=140'
SB9–PB51	10'	SB8–SB9	2● 55'=110'
SB10–PB53	10'	SB9–SB10	2● 55'=110'
		SB10–CB1	2● 30'= 60'
	185'		1,830'
TOTAL		2,015'	

CONVENTIONAL SIGNS AND ABBREVIATIONS

STATE LINE
COUNTY LINE
TOWNSHIP AND RANGE LINES
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE — P.L.
CORPORATE LIMITS — NAME
LOT, TIE AND OTHER MINOR LINES
SLOPE INTERCEPTS — SLOPE INTERCEPTS
UNDERGROUND FACILITY (GAS, TELEPHONE, ELECTRIC, ETC.) — G (TYPE)
FENCE
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
BEAM GUARD
TRANSMISSION TOWER AND LINE
GAS MARKER OR TELEPHONE PEDESTAL — T.P. (TYPE)

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS — CAUTION
BRIDGE
STREAM OR RIVER — NAME
LAKE — NAME
CULVERT (BOX, PIPE OR CATTLE PASS) — (TYPE)
RAIL LINE — (SMALL SCALE) (LARGE SCALE)
SIGN — / SIGN

HYDRANT
FOUNDATION OR RUIN — FDN.
BUILDING — TYPE
CEMETERY
R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN — I.P.
VALVE — GAS (TYPE)
WINDMILL
SILO, MANHOLE, VENT, SEPTIC VENT, WELL, ETC. — M.H. (TYPE)
GAS PUMPS — G.P.
BUSHES
TREES (DECIDUOUS) (CONIFEROUS)
WOODS
ENCROACHING SIGN — E-1 / SIGN

	COMPENSABLE	NON-COMPENSABLE
POWER POLE		
TELEPHONE POLE		

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

ACCESS RIGHTS	A.R.	FIBER OPTIC CABLE	F.O.
UNDER GROUND	U.G.	GAS VALVE	G.V.
HOUSE TRAILER	H.T.	MOBILE HOME	M.H.
WATER VALVE	W.V.	HANGAR	HA.
VOLUME	VOL.	LIQUID PROPANE STATION	L.P. STA
RECORDED	REC'D	WATERS EDGE	W.E.
POINT OF BEGINNING	P.O.B.	PERMANENT LIMITED EASEMENT	P.L.E.
ACCESS POINT	A.P.	LONG CHORD	L.C.
ACRES	AC.	LONG CHORD BEARING	L.C.B.
ALUMINUM	ALUM.	MANHOLE	M.H.
AND OTHERS	ET AL	MONUMENT	MON.
ASPHALTIC	ASP.	OUTLOT	O.L.
BACK	BK.	PAGE	P.
BARN	B.	PARKER-KALON FASTENER	P.K.
BUSINESS	BUS.	PROPERTY LINE	P.L.
CABLE MARKER	C.M.	RADIUS	R.
CABLE TELEVISION	CATV	RAILROAD	R.R.
CATCH BASIN	C.B.	REFERENCE LINE	R.L.
CERTIFIED SURVEY MAP	C.S.M.	RESTRICTED DEVELOPMENT EASEMENT	R.D.E.
CONCRETE	CONC.	RIGHT	RT.
CORNER	COR.	RIGHT OF WAY	R/W
CULVERT	CULV.	SANITARY SEWER	SAN.
DOING BUSINESS AS	d/b/a	SECTION	SEC.
ELECTRIC	ELEC.	SHED	S.
FORWARD	FWD.	TANGENT	TAN.
FOUNDATION	FDN.	TAVERN	TAV.
GARAGE	G.	TELEPHONE	T.
GAS MARKER	G.M.	TELEPHONE MANHOLE	T.M.H.
GAS PUMPS	G.P.	TELEPHONE PEDESTAL	T.P.
HANGAR	HA.	TELEVISION PEDESTAL	TV P.
HOUSE	H.	TEMPOTARY LIMITED EASEMENT	T.L.E.
IRON PIN	I.P.	WALL	W.
LEFT	LT.	GAS AS 'PAINTED' ON GROUND BY UTILITY	GPA
LENGTH	L.	STORM SEWER	SS
		CENTER OF SECTION	C.O.S.

NOTES

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

GOVERNMENTAL LAND LINE AND REFERENCE LINE ARE NOT COINCIDENTAL.

DISTANCES FROM REFERENCE LINE ARE ← XX' R →

DISTANCES FROM GOVERNMENTAL LAND LINE ARE ← XX' G → OR XX' G

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE AS SPECIFIED ON EACH PLAT DETAIL SHEET: GOVERNMENT LAND LINES; PREVIOUS PROJECTS 1200-03-21, F 017-2(15), COUNTY PROJECT NO. 403, S02541(1), S0257(4) & (5), SIII8(4), REFERENCE LINES; OR THE CENTERLINE OF EXISTING PAVEMENT AS NOTED.

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE, NAD 27 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 BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION (AS PER THE CONTRACT NEGOTIATED WITH CH2M HILL CENTRAL, INC., DATED AUGUST 28, 1990) 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.

G N

OFFICIAL PLAT ON FILE WITH THE REGISTER OF DEEDS OFFICE

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1201-04-21	4.0	26
FEDERAL PROJECT NUMBER		

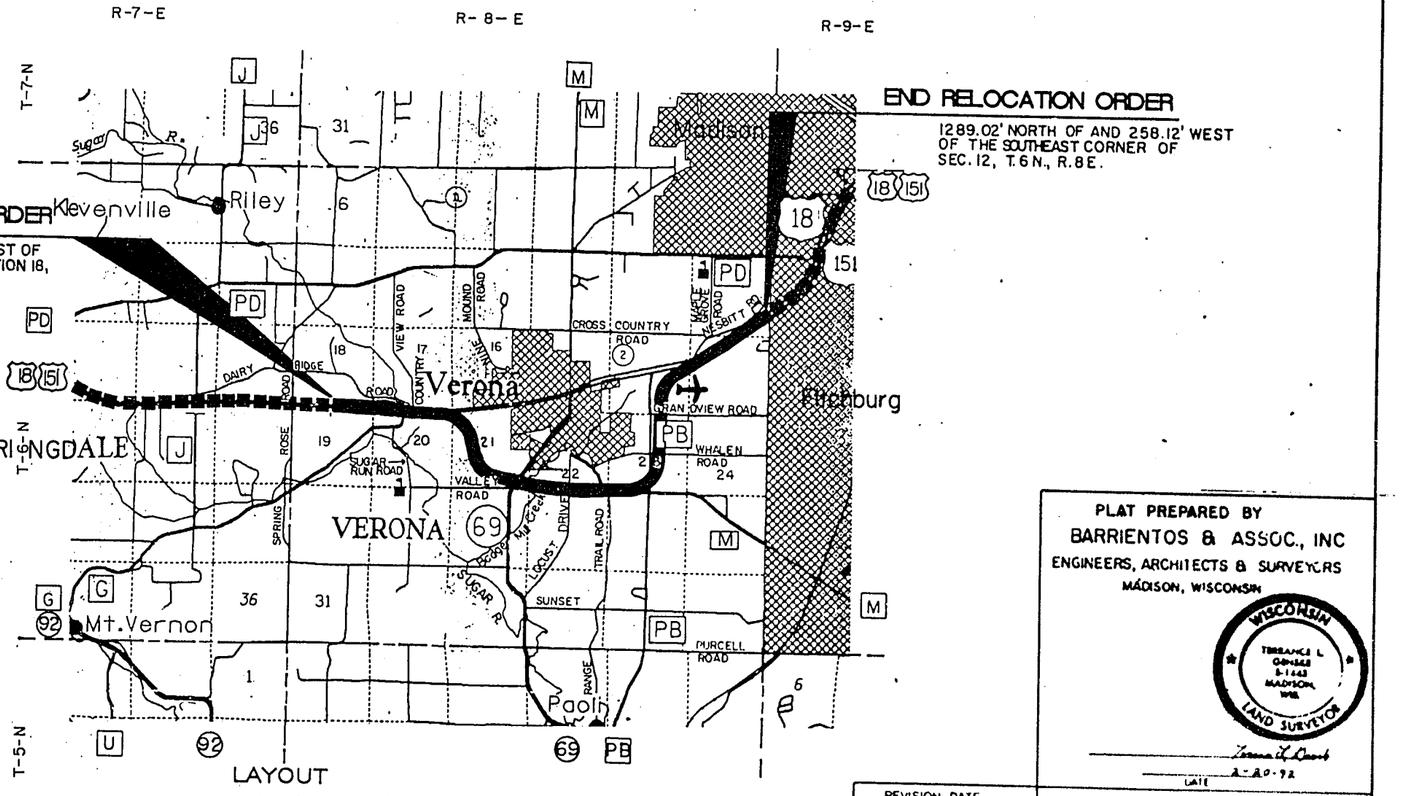
PLAT OF RIGHT OF WAY REQUIRED FOR

VERONA BYPASS

(C.T.H. G – NESBITT ROAD)

U.S.H. 18 — DANE COUNTY

1201-4-78/4.0



TOTAL NET LENGTH OF CENTERLINE= 7.302 MILES RURAL

REVISION DATE
7-14-92
11-12-92
1-26-93 N.C.
10-27-93
3-24-94 N.C.
7-28-94 N.C.

PLAT PREPARED BY
BARRIENTOS & ASSOC., INC
ENGINEERS, ARCHITECTS & SURVEYORS
MADISON, WISCONSIN

WISCONSIN — TERRANCE L. CARLSON S-1443 MADISON, WIS. — LAND SURVEYOR

DATE 8-20-92

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED:

DATE 3-2-92

SCHEDULE OF LAND & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROLIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED

REVISION DATE
7-14-92
11-12-92
1-26-93
10-27-93
3-24-94
7-28-94

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	3-2-92

R/W PROJECT NUMBER: 1201 - 04 - 21
FEDERAL PROJECT NUMBER: 1201-4-78

SHEET: 4.1 / 4.1

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	TOTAL ACRES OR S.F.	R/W ACRES REQUIRED OR S.F. NEW	EXISTING	TOTAL	TOTAL ACRES REM.	T.L.E. ACRES	H.E. ACRES
1	4.3,4.5	CLIFFORD F. & JOYCE E. GUST	FEE, T.L.E., A.R.	385.19	10.05	2.18	12.23	372.96	0.48	——
2	4.3,4.4	SISK FARMS, INC.	FEE, T.L.E., A.R.	63.77	6.59	——	6.59	57.18	2.39	——
3	4.4	JULIAN O. & ANNA MAY RHINER	FEE, T.L.E.	178.6	4.53	2.91	7.44	171.16	0.54	——
4	4.4,4.5	THOMAS J. & MICHELE J. PELLITTERI	FEE, A.R.	82.34	5.52	0.53	6.05	76.29	——	——
5										
6	4.4	ARNOLD A. JENNERMAN & MARGARET M. STEUCK	FEE, T.L.E.	36.7	0.63	0.98	1.61	35.09	0.21	——
7										
8	4.5	ROYCE M. ESSIG	FEE	7.78	0.18	——	0.18	7.60	——	——
9	4.6,4.7,4.7A, 4.8,4.10	WISCONSIN D.O.T.	FEE	432.19	432.19	——	432.19	——	——	——
10										
11	4.7	RICHARD B. & RUTH L. STAMPFL	FEE	242.4	0.20	0.15	0.35	242.05	——	——
12										
13	4.6, 4.10 4.20,4.21	STATE OF WISCONSIN, DEPARTMENT OF NATURAL RESOURCES	FEE, T.L.E., H.E.	INDET.	1.86	——	1.86	INDET.	2.04	0.80
14	4.8,4.10	MARVIN & DOLORES THOMPSON	FEE	72.00 (INCLUDES 0.64 ACRE REMNANT FOR A TOTAL OF 8.83 ACRES)	8.83	——	8.83	63.17	——	——
15										
16	4.10	ESTATES OF PALMER PETERS & THELMA C. PETERS	FEE	79.7	0.40	——	0.40	79.30	——	——
17										
18	4.11,4.12	ALEX BARTH, ETAL.	FEE, T.L.E., A.R.	174.00	26.23	2.86	29.09	144.91	1.14	——
19	4.13	DWAINE W. & DONNA J. DICKINSON	FEE, T.L.E., A.R.	37.70	2.74	1.20	3.94	33.76	0.59	——
20										
21	4.13	KIRK A. & JAN D. FELLER	FEE, A.R.	120.00	1.74	2.32	4.06	115.94	——	——
22	4.12	ELMER PALMER, VENDOR DUWAYNE J. & JUDITH A. HOFFMAN, VENDEE	FEE, T.L.E., A.R.	141.50	21.93	1.30	23.23	118.27	1.33	——
23	4.12	K. & M. ENTERPRISES	FEE, T.L.E.	2.15	0.22	——	0.22	1.93	0.16	——
24										
25										
26	4.12	MONROE PROPERTIES, INC.	FEE, T.L.E.	1.99	0.05	——	0.05	1.94	0.09	——
27	4.12	JEROME D. KAVON	FEE, T.L.E.	2.25	0.01	——	0.01	2.24	0.11	——
28	4.12	TERRY A. & VICKIE L. HEILIGER	T.L.E.	0.34	——	——	——	0.34	0.02	——
29										
30										
31	4.14	RANDALL J. ACKER	FEE, T.L.E.,	120.00	9.88	0.48	10.36	109.64	0.05	——
32	4.14,4.15	DONALD G. GUST	FEE, T.L.E., A.R.	113.50	17.01	0.51	17.52	95.98	0.70	——
33	4.14,4.15	CLARENCE H. & VIRGINIA A. WITT	FEE, T.L.E.,	136.00	2.10	0.22	2.32	133.68	0.07	——
34	4.15,4.18	IRVING WILD, VENDOR RICHARD M. & MARLY M. TOLLEFSON, VENDEE	FEE, A.R.	109.00	13.46	4.20	17.66	91.34	——	——
35	4.18	ERVIN & BONNIE C. ROWE	A.R.	INDET.	——	——	——	——	——	——
36	4.15	RAYMOND W. & LOIS J. GUST	FEE, T.L.E.,	72.40	1.16	0.30	1.46	70.94	1.17	——
37	4.16,4.18	IRVING WILD, VENDOR RUSSELL J. AND ROSE M. JOHNSON , VENDEE	FEE, A.R.	40.00	23.24	——	23.24	16.76	——	——
38	4.16,4.18	JAMES J. VAN DE GRIFT MARITAL TRUST, 1/2 ANN R. VAN DE GRIFT, 1/2	FEE, T.L.E., A.R.	INDET	26.82	0.98	27.80	INDET.	0.17	——
39	4.16,4.17	JOHN D. ADAMS	FEE, T.L.E.	160.00	5.89	——	5.89	154.11	0.14	——
40										
41	4.17	MARK J. KOCH & CAROL A. DRESEN	FEE	5.13	0.05	0.10	0.15	4.98	——	——
42	4.17	BLACKHAWK BOW HUNTERS	FEE	12.91	0.08	0.06	0.14	12.77	0.32	——
43	4.17	ELWOOD C. & PHYLLIS ANDERSON	FEE	27.00	1.89	0.97	2.86	24.14	——	——
44										
45										
46	4.17	JAMES & JUDY PAUTZKE	T.L.E.	2.00	——	——	——	2.00	0.16	——
47	4.18	JAMES J. VAN DE GRIFT TRUST	FEE, T.L.E., A.R.	INDET.	14.82	0.25	15.07	INDET.	1.18	——
48	4.19	RODNEY SLOTTEN	FEE, T.L.E., A.R.	57.59	23.28	0.33	23.61	33.98	0.12	——
49	4.19	AIR PARK ASSOCIATES, INC.	P.L.E., FEE, T.L.E., A.R.	17.33	0.62	0.15	0.77	16.56	0.15	—— (0.54 ACRE P.L.E.)

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	TOTAL ACRES OR S.F.	R/W ACRES REQUIRED OR S.F. NEW	EXISTING	TOTAL	TOTAL ACRES REM.	T.L.E. ACRES	H.E. ACRES
51	4.20,4.21	DANE COUNTY	FEE	INDET.	47.51	——	47.51	INDET.	——	——
52	4.21–4.23	SHARON L. NESBITT, ETAL.	FEE, T.L.E.,	128.50	68.99	0.07	69.06	59.44	1.03	——
53	4.23–4.25	K.A. RAYNER TRUST	FEE	82.21	81.62	0.59	82.21	0	——	——
54										
55										
56										
57										
58										
59										
60										
61	4.4,4.6,4.8,4.10 4.12,4.13,4.15,4.16, 4.18–4.21	MT. VERNON TELEPHONE COMPANY			RELEASE OF RIGHTS					
62	4.3,4.4,4.5,4.12–4.18,4.21 4.23–4.25	WISCONSIN POWER AND LIGHT COMPANY			RELEASE OF RIGHTS					
63	4.12	CITY OF VERONA			RELEASE OF RIGHTS					

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	TOTAL ACRES OR S.F.	R/W ACRES REQUIRED OR S.F. NEW	EXISTING	TOTAL	TOTAL ACRES REM.	T.L.E. ACRES	H.E. ACRES
118	4.11,4.12	ALEX BARTH, ETAL.	FEE, A.R.	144.91	1.93	——	1.93	142.98	——	——
121	4.13	KIRK A. & JAN D. FELLER	FEE, A.R.	115.94	0.41	0.22	0.63	115.31	——	——

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
7-14-92 11-12-92 1-26-93 N.C. 10-27-93 3-24-94 7-28-94	U.S.H. 18	DANE	3-2-92	1201-04-21	4.2
	NOT TO SCALE			FEDERAL PROJECT NUMBER	
				1201-4-78	4.2

TOWN

BEGIN RELOCATION ORDER
STA. 437+00.00

END RELOCATION ORDER
STA. 822+54.76

SEVEN SPRINGS ROAD

DAIRY RIDGE ROAD

MILITARY RIDGE RECREATION TRAIL

COUNTRY VIEW ROAD

"CV" LINE

"G-1" LINE

450+00

"G-4" LINE

"G-2" LINE

"G-3" LINE

"G" LINE

"W-2" LINE

500+00

"W-1" LINE

HALF MILE ROAD

CITY OF VERONA

CROSS COUNTRY ROAD

NESBITT ROAD

GOOSE POND

"NESBITT" LINE

"LOCAL" LINE

"E-2" LINE

"E-1" LINE

750+00

NESBITT POND

"BIKE" LINE

MILITARY RIDGE RECREATION TRAIL

BADGER MILL CREEK

GRANDVIEW ROAD

"GRANDVIEW" LINE

TOWN OF VERONA

CITY OF FITCHBURG

FITCHBURG ROAD

CLEARY'S PIT (PRIVATE)

FIREMAN'S BEACH PIT

W. BIKE TRAIL

550+00

BRUCE ST.

"69-1" LINE

"69-4" LINE

"69-2" LINE

"69" LINE

600+00

"69-3" LINE

VALLEY ROAD

"VALLEY" LINE

PINE ROW ROAD

"69" LINE

SUGAR RIVER ROAD

SUGAR RIVER

GRAVEL PIT POND (PRIVATE)

WHALEN ROAD

"PB-4" LINE

"PB-1" LINE

"W" LINE

650+00

"WHALEN" LINE

"RT" LINE

"PB" LINE

"LOCUST" LINE

LOCUST DRIVE

TRAIL ROAD

RANGE

TOWN OF VERONA

OF

VERONA

G N

T-6-N

R-8-E

R-8-E

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
1-14-92 2-12-92 11-26-93 N.C. 12-27-93 N.C. N.C. N.C.	U.S.H. 18	DANE	3-2-92	1201 - 04 - 21	4.14
	SCALE, FT. 0 100 200	GRID FACTOR 0.99991		FEDERAL PROJECT NUMBER 1201-4-78	4.3

NOTE:
EXISTING HIGHWAY R/W ON LOCUST DRIVE IN SECTION 22 ESTABLISHED FROM GOVERNMENTAL LAND LINE.
EXISTING HIGHWAY R/W ON LOCUST DRIVE IN SECTION 27 ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.

G N

TOWN OF VERONA

T 6 N R 8 E — 22

ALUM. MON.
Y 357,493.805
X 2,124,876.898

PI STA 628+27.26
Y 354,881.11
X 2,125,756.31
DELTA= 13°15'00" Lt.
D= 0°30'00"
T=1,330.94'
L=2,650.00'
R=11,459.16'
PC STA 614+96.33
PT STA 641+46.33

SW – SW | SE – SW | SW – SE | SE – SE

(31) RANDALL J. ACKER

(32) DONALD G. GUST

(33) CLARENCE H. & VIRGINIA A. WITT

(62) WISCONSIN POWER & LIGHT COMPANY
EASEMENT RELEASE, PARCEL 27

(62) WISCONSIN POWER & LIGHT COMPANY
POWER POLES

S80°-49'-23"E 1,196.32'
S79°-36'-15"E 664.15'
S81°-53'-45"E 1,312.30'
S80°-45'-00"E 4,294.51'
S85°-30'-49"E 602.08'
S89°-07'-36"E 2,595.50'
SE COR. SEC. 21 TO S.1/4 COR. SEC. 22
S81°-04'-21"E 259.98'
S85°-51'-43"E 691.63'
S89°-07'-36"E 0.62'
"LOCUST" TO S1/4 COR., SEC. 22
S88°58'13"E 2,641.78'
S. 1/4 COR. SEC. 22 TO SE COR. SEC. 22
N88°-24'-17"E 1,116.54'
N87°-21'-04"E 285.05'
N78°-19'-49"E 212.48'
S72°-49'-59"E 149.70'
S60°-40'-16"E 216.21'
N86°-40'-37"E 210.46'
S15°-59'-34"W 103.56'
N89°-04'-34"W 33.08'
S01°-04'-26"E 101.51'
S00°-55'-26"W 112.13'
S00°-55'-26"W 157.93'
S80°-45'-00"E
N86°00'-00"E

PC 614+96.33
161.53'
438.07' ALONG TAN.
892.87' ALONG TAN.
307.90'
163.82'
N00°-02'-27"E
S1/4 COR. TO IAN
S01°-02'-27"W 2469.41' ALONG 1/4 LINE TO TAN
S01°-02'-27"W 402.06' TO CORNER
S01°-04'-26"E 278.23'
S01°-04'-26"E 33.28'
22+99.76 "LOCUST" = 619+35.20
22+99.73"LOCUST" 50 22+99.77"LOCUST" 33.28'
22+99.94"LOCUST" 33.28'
24+00"LOCUST" 32.92
24+00"LOCUST" 32.92
24+00"LOCUST" T.L.E. 60'
24+00"LOCUST" 33.08'
16+751 LOCUST T.L.E. 80'
16+751 LOCUST T.L.E. 80'
17+357.93"LOCUST" T.L.E. 80'
15+00 LOCUST T.L.E. 24.82'
16+00 LOCUST T.L.E. 80'
18+00"LOCUST"
20+00"LOCUST"
17+87.13 60' T.L.E.
17+80 40.04'
18+99.76 "LOCUST"
T.L.E. SLOPES 0.05 AC.
T.L.E. SLOPES 0.20 AC.
T.L.E. SLOPES 0.03 AC.
SLOPE INTERCEPT
SLOPE INTERCEPT
SLOPE INTERCEPT
P.I. 628+27.26
O.H. 69KV
80' W.P.& L. EASEMENT
80' W.P. & L. EASEMENT
P.L.
LOCUST DRIVE
33' C

605+00'69-4" | 605+00 | 605+00'69-3" | 610+00 | 610+00'69-3" | 610+00 160' | 615+00 | 618+00 160' | 620+00 | 621+00 250' | 621+50 270' | 623+00 240' | 623+00 150' | 625+00 | 625+00 190' | 630+00 | 632+00 150' | 23+00 60' | 24+00 LOCUST 60'

ALUM. MON.
Y 354,900.37
X 2,122,280.06

ALUM. MON.
Y 354,860.810
X 2,124,875.021

CORNER IS LOCATED AT STA. 21+71.77"LOCUST", 0.62 FEET LEFT

ALUM. MON.
Y 354,813.33
X 2,127,516.11

T 6 N R 8 E — 21 22 28 27

T 6 N R 8 E — 22 27

T 6 N R 8 E — 22 23 27 26

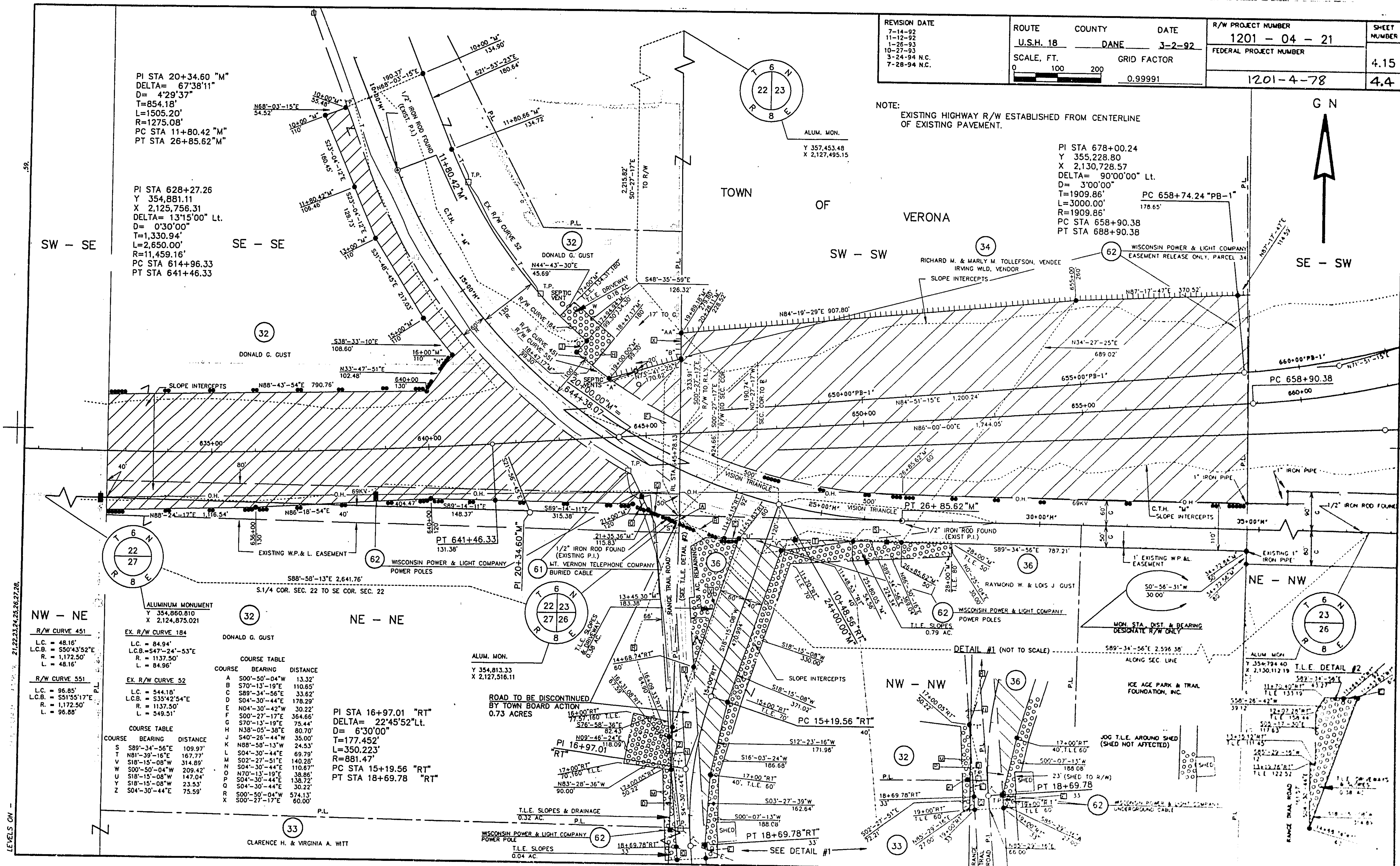
NW – NW | NE – NW | NW – NE | NE – NE

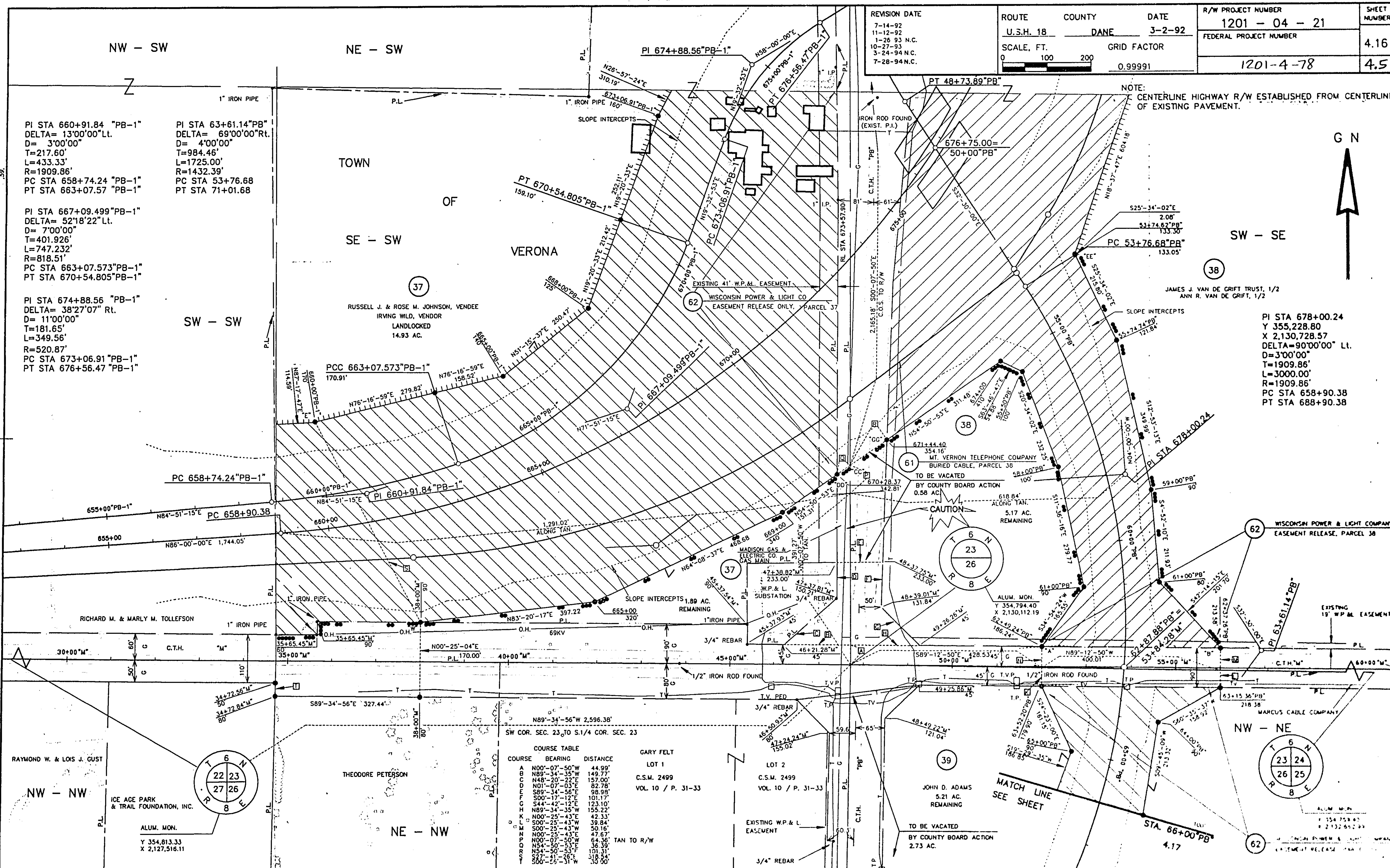
COURSE TABLE

COURSE	BEARING	DISTANCE
A	S00°-55'-26"W	112.13'
B	S89°-04'-34"E	19.96'
C	S00°-55'-32"W	105.00'
D	S71°-15'-41"W	21.20'
E	N71°-15'-41"E	121.57'
F	S89°-04'-34"E	55.18'
G	S88°-40'-37"W	52.76'
H	N00°-02'-27"E	160.02'
J	N00°-55'-26"E	100.00'
K	S89°-04'-34"E	26.92'
L	N74°-22'-41"E	35.96'
M	N74°-22'-41"E	34.27'

LEVELS ON – 21,22,23,24,25,26,27,28.

CADDS SHEET 75


REVISION DATE
7-14-92
11-12-92
1-26-93
10-27-93
3-24-94 N.C.
7-28-94 N.C.
ROUTE U.S.H. 18
COUNTY DANE
DATE 3-2-92
SCALE, FT. 0 100 200
GRID FACTOR 0.99991
R/W PROJECT NUMBER 1201 - 04 - 21
FEDERAL PROJECT NUMBER 1201-4-78
SHEET NUMBER 4.15 4.4
NOTE:
EXISTING HIGHWAY R/W ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.
G N
PI STA 20+34.60 "M"
DELTA= 67°38'11"
D= 4°29'37"
T=854.18'
L=1505.20'
R=1275.08'
PC STA 11+80.42 "M"
PT STA 26+85.62"M"
PI STA 628+27.26
Y 354,881.11
X 2,125,756.31
DELTA= 13°15'00" Lt.
D= 0°30'00"
T=1,330.94'
L=2,650.00'
R=11,459.16'
PC STA 614+96.33
PT STA 641+46.33
PI STA 678+00.24
Y 355,228.80
X 2,130,728.57
DELTA= 90°00'00" Lt.
D= 3°00'00"
T=1909.86'
L=3000.00'
R=1909.86'
PC STA 658+90.38
PT STA 688+90.38
PC 658+74.24 "PB-1"
PC 658+90.38
TOWN OF VERONA
SW - SE
SE - SE
SW - SW
SE - SW
NW - NE
NE - NE
NE - NW
NW - NW
ALUM. MON.
Y 357,453.48
X 2,127,495.15
ALUMINUM MONUMENT
Y 354,860.810
X 2,124,875.021
ALUM. MON.
Y 354,813.33
X 2,127,516.11
ALUM. MON.
Y 354,794.40
X 2,130,112.19
32 DONALD G. GUST
33 CLARENCE H. & VIRGINIA A. WITT
34 RICHARD M. & MARLY M. TOLLEFSON, VENDEE IRVING WILD, VENDOR
36 RAYMOND W. & LOIS J. GUST
61 MT. VERNON TELEPHONE COMPANY BURIED CABLE
62 WISCONSIN POWER & LIGHT COMPANY POWER POLES
62 WISCONSIN POWER & LIGHT COMPANY EASEMENT RELEASE ONLY, PARCEL 34
62 WISCONSIN POWER & LIGHT COMPANY UNDERGROUND CABLE
ICE AGE PARK & TRAIL FOUNDATION, INC.
S88°-58'-13"E 2,641.76'
S.1/4 COR. SEC. 22 TO SE COR. SEC. 22
S89°-34'-56"E 2,596.38' ALONG SEC. LINE
MON. STA. DIST. & BEARING DESIGNATE R/W ONLY
EXISTING W.P.& L. EASEMENT
ROAD TO BE DISCONTINUED BY TOWN BOARD ACTION 0.73 ACRES
T.L.E. SLOPES 0.79 AC.
T.L.E. SLOPES & DRAINAGE 0.32 AC.
T.L.E. SLOPES 0.04 AC.
T.L.E. SLOPES & DRIVEWAY 0.38 AC.
0.38 AC. REMAINING
T.L.E. DRIVEWAY 0.18 AC.
JOG T.L.E. AROUND SHED (SHED NOT AFFECTED)
23' (SHED TO R/W)
DETAIL #1 (NOT TO SCALE)
SEE DETAIL #1
T.L.E. DETAIL #2
RANGE TRAIL ROAD
C.T.H. "M"
VISION TRIANGLE
SLOPE INTERCEPTS
1/2" IRON ROD FOUND (EXIST. P.I.)
1" IRON PIPE
EXISTING 1" IRON PIPE
PT 641+46.33
PI 20+34.60"M"
PT 26+85.62"M"
PC 15+19.56 "RT"
PI 16+97.01 "RT"
PT 18+69.78"RT"
10+48.56"RT" 24+00.00"M"
20+00.00"M" = 644+38.07
11+80.42"M"
N88°-43'-54"E 790.76'
N84°-19'-29"E 907.80'
N87°-17'-47"E 370.52'
N84°-51'-15"E 1,200.24'
N86°-00'-00"E 1,744.05'
N34°-27'-25"E 689.02'
N88°-24'-17"E 1,116.54'
N86°-18'-54"E 404.47'
S89°-14'-11"E 148.37'
S89°-14'-11"E 315.38'
S89°-34'-56"E 787.21'
R/W CURVE 451
L.C. = 48.16'
L.C.B. = S50°43'52"E
R. = 1,172.50'
L. = 48.16'
R/W CURVE 551
L.C. = 96.85'
L.C.B. = S51°55'17"E
R. = 1,172.50'
L. = 96.88'
EX. R/W CURVE 184
L.C. = 84.94'
L.C.B.=S47°-24'-53"E
R. = 1137.50'
L. = 84.96'
EX. R/W CURVE 52
L.C. = 544.18'
L.C.B. = S35°42'54"E
R. = 1137.50'
L. = 549.51'
COURSE TABLE
COURSE BEARING DISTANCE
S S89°-34'-56"E 109.97'
T N81°-39'-16"E 167.77'
V S18°-15'-08"W 314.89'
W S00°-50'-04"W 209.42'
U S18°-15'-08"W 147.04'
Y S18°-15'-08"W 23.53'
Z S04°-30'-44"E 75.59'
COURSE TABLE
COURSE BEARING DISTANCE
A S00°-50'-04"W 13.32'
B S70°-13'-19"E 110.65'
C S89°-34'-56"E 33.62'
D S04°-30'-44"E 178.29'
E N04°-30'-42"W 30.22'
F S00°-27'-17"E 364.66'
G S70°-13'-19"E 75.44'
H N38°-05'-38"E 80.70'
J S40°-26'-44"W 35.00'
K N88°-58'-13"W 24.53'
L S04°-30'-44"E 69.79'
M S02°-27'-51"E 140.28'
N S04°-30'-44"E 110.67'
O N70°-13'-19"E 38.86'
P S04°-30'-44"E 138.72'
Q S04°-30'-44"E 30.22'
R S00°-50'-04"W 574.13'
X S00°-27'-17"E 60.00'
PI STA 16+97.01 "RT"
DELTA= 22°45'52"Lt.
D= 6°30'00"
T=177.452'
L=350.223'
R=881.47'
PC STA 15+19.56 "RT"
PT STA 18+69.78 "RT"
LEVELS ON - 21,22,23,24,25,26,27,28,
CADDS SHEET 75



COURSE TABLE

COURSE	BEARING	DISTANCE
A	N00°-07'-50"W	44.99'
B	N89°-34'-35"W	149.77'
C	N48°-20'-22"E	157.00'
D	N01°-07'-03"E	82.78'
E	S89°-34'-56"E	98.98'
F	S00°-17'-12"E	101.17'
G	S44°-42'-12"E	123.10'
H	N89°-34'-35"W	155.22'
K	N00°-25'-43"E	42.33'
L	S00°-25'-43"W	39.84'
M	S00°-25'-43"W	50.16'
N	N00°-25'-43"E	47.67'
P	N00°-07'-50"W	64.36' TAN TO R/W
Q	N54°-50'-53"E	36.39'
R	N54°-50'-53"E	101.31'
S	S27°-41'-26"E	318.54'
T	S00°-56'-31"W	30.00'

REVISION DATE
7-14-92
11-12-92
1-26-93 N.C.
10-27-93
3-24-94 N.C.
7-28-94 N.C.

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	3-2-92
SCALE, FT. 0 100 200	GRID FACTOR	0.99991

R/W PROJECT NUMBER	SHEET NUMBER
1201 - 04 - 21	4.17
FEDERAL PROJECT NUMBER	
1201-4-78	4.6

NOTE: EXISTING HIGHWAY R/W ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.

TOWN OF VERONA

NE – SW

NW – SE

SW – NE

NE – NW

NW – NE

LOT 1 C.S.M. 2227 DANE COUNTY ICE AGE PARK & TRAIL FOUNDATION, INC.

ELWOOD C. & PHYLLIS ANDERSON (43)

WILLIAM E. & ELIZABETH J. ENTERS

J. PAUTZKE (46)

BLACKHAWK BOWHUNTERS (42) LOT 1 C.S.M. 2227 VOL. 9 / P. 20

PART OF LOT 3 CSM NO. 2499 VOL. 10 P.31-33

MARK KOCH & CAROL DRESEN (41) PART OF LOT 3 C.S.M. 2499 VOL. 10 / P.31-33

GARY FELT LOT 1 C.S.M. 2499 VOL 10 / P. 31-33

LOT 2 C.S.M. 2499 VOL. 10 / P. 31-33

WISCONSIN POWER & LIGHT COMPANY (62) EASEMENT RELEASE PARCEL 41

WISCONSIN POWER & LIGHT COMPANY (62) POWER POLES

MT. VERNON TELEPHONE COMPANY

JOHN D. ADAMS (39)

MADISON GAS & ELECTRIC COMPANY

DANE COUNTY

ALUM. MON. Y 352,191.271 X 2,127,477.918

ALUM. MON. Y 352,173.36 X 2,130,064.18

ALUM. MON. Y 352,121.311 X 2,132,634.905

ALUM. MON. Y 354,794.40 X 2,130,112.19

ALUM. MON. Y 353,414.93 X 2,130,196.22

1/2" IRON ROD FOUND (DANE COUNTY EXISTING P.I., STA. 95+74.5)

6" IRON POST

3/4" REBAR

30' T.L.E. SLOPES 0.16 AC.

20' T.L.E. SLOPES 0.14 AC.

T.L.E. DRIVEWAY 0.32 AC.

0.19 AC REMAINS

86' PRIVATE ACCESS EASEMENT

ROAD TO BE VACATED BY COUNTY BOARD ACTION. 2.73 AC.

EXISTING W.P. & L. EASEMENT

SLOPE INTERCEPT

C.T.H. "PB"

PI STA 81+18.72"PB"
DELTA= 2°51'45"Lt.
D= 1°00'24"
T=142.20'
L=284.34'
R=5,691.58'
PC STA 79+76.51"PB"
PT STA 82+60.85"PB"

PI STA 86+39.31"PB"
DELTA= 2°51'45"Rt

PI STA 77+22.27"PB"
DELTA= 35°30'15"Lt.
D= 6°45'00"
T=271.75'
L=525.99'
R=848.83'
PC STA 74+50.52"PB"
PT STA 79+76.51"PB"

PI STA 63+61.14 "PB"
DELTA= 69°00'00"Rt.
D= 4°00'00"
T=984.46'
L=1,725.00'
R=1,432.39'
PC STA 53+76.68 "PB"
PT STA 71+01.68 "PB"

COURSE TABLE

COURSE	BEARING	DISTANCE
A	S36°-30'-00"W	18.79' (ALONG TAN.)
B	N89°-00'-11"W	30.00'
C	S00°-59'-49"W	230.50'
D	S00°-59'-49"W	230.18'
E	S89°-36'-11"E	30.00' (ALONG T.L.E.)
G	S00°-59'-49"W	280.96'
K	S89°-36'-11"E	10.00' (ALONG R/W)
L	S36°-17'-42"W	3.73'
M	N56°-59'-44"W	242.47'
N	S53°-30'-00"E	70.79'
O	S89°-35'-34"E	227.30'
P	S89°-23'-26"E	40.75'
R	S0°-59'-49"W	39.15'
S	S89°-36'-11"E	98.68' (R/W TO C.O.S.)
T	N88°-50'-28"W	126.32' (R/W TO C.O.S.)
Q	S64°-24'-07"E	87.59'
U	S01°-02'-57"W	66.00'
V	N85°-17'-28"E	79.97'
W	S00°-59'-49"W	264.00'
X	N00°-24'-26"E	66.41'
Y	S89°-35'-34"E	219.00'
Z	S10°-24'-03"W	67.44'
AA	N89°-35'-34"W	207.30'
BB	S10°-24'-03"W	94.15'

IDENTICAL POINTS

MATCH LINE SEE SHEET 4.18

CAUTION

CADDS SHEET 79

REVISION DATE
7-14-92
11-12-92
1-26-93 N.C.
10-27-93
3-24-94 N.C.
7-28-94 N.C.

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	3-2-92

SCALE, FT. 0 100 200 — GRID FACTOR 0.99991

R/W PROJECT NUMBER	SHEET NUMBER
1201 - 04 - 21	
FEDERAL PROJECT NUMBER	4.18
1201-4-78	4.7

NOTE: EXISTING HIGHWAY R/W ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.

TOWN OF VERONA

(37) RUSSELL J. & ROSE M. JOHNSON, PURCHASER
RICHARD M. & MARLY M. TOLLEFSON, VENDOR

(61) MT. VERNON TELEPHONE COMPANY BURIED CABLE

(62) WISCONSIN POWER & LIGHT COMPANY EASEMENT RELEASE ONLY, PARCEL 34

(62) WISCONSIN POWER & LIGHT COMPANY EASEMENT RELEASE ONLY, PARCEL 47

(62) WISCONSIN POWER & LIGHT COMPANY TEMPORARY EASEMENT RELEASE, PARCEL 47

(47) JAMES J. VAN DE GRIFT TRUST

(34) RICHARD M. & MARLY M. TOLLEFSON, VENDEE
IRVING WILD, VENDOR

(35) ERVIN & BONNIE C. ROWE

(38) JAMES J. VAN DE GRIFT TRUST, 1/2
ANN R. VAN DE GRIFT, 1/2

MADISON GAS & ELECTRIC COMPANY - GAS MAIN

ALUM. MON. Y 354,794.40 X 2,130,112.19

ALUM. CAP Y 357,414.973 X 2,130,106.212

ALUM. MON. Y 360,019.79 X 2,130,100.28

ALUM. MON Y 357,376.87 X 2,132,689.31

LANDLOCKED 14.93 AC.

PI STA 681+99.28 "PB-4"
DELTA= 53°57'16"
D= 20°00'00"
T=145.82'
L=269.77'
R=286.48'
PC STA 680+53.46"PB-4"
PT STA 683+23.23"PB-4"

PI STA 674+88.56 "PB-1"
DELTA= 38°27'07" Rt.
D= 11°00'00"
T=181.65'
L=349.56'
R=520.87'
PC STA 673+06.91"PB-1"
PT STA 676+56.47"PB-1"

PI STA 45+73.04 "PB"
DELTA= 37°30'00"Lt.
D= 6°00'00"
T=324.15'
L=625.00'
R=954.93'
PC STA 42+48.89"PB"
PT STA 48+73.89"PB"

PI STA 678+00.24
Y 355,228.80
X 2,130,728.57
DELTA=90°00'00" Lt.
D=3°00'00"
T=1909.86'
L=3000.00'
R=1909.86'
PC STA 658+90.38
PT STA 688+90.38

PI STA 687+65.01"PB-4"
DELTA= 17°31'59"Lt
D= 2°00'00"
T= 441.78'
L= 876.65'
R= 2864.789'
PC STA 683+23.23"PB-4"
PT STA 691+99.88"PB-4"

PI 19+31.84"WHALEN"
DELTA= 0°18'58"Rt

PI 22+02.97"WHALEN"
DELTA= 0°03'51"RT

PI STA 28+92.41 "PB"
DELTA= 3°46'38"Lt
D= 1°00'08"
T=188.54'
L=376.94'
R=5717.58'
PC STA 27+03.87 "PB"
PT STA 30+80.81"PB"

PI 19+31.84"WHALEN"
DELTA= 0°18'58"Rt

PI 22+02.97"WHALEN"
DELTA= 0°03'51"RT

PI STA 37+47.73 "PB"
DELTA= 7°42'33"Rt.
D= 3°00'00"
T=128.68'
L=256.37'
R=1909.86'
PC STA 36+19.05 "PB"
PT STA 38+76.02 "PB"

COURSE TABLE

COURSE	BEARING	DISTANCE
A	N89°-09'-18"W	167.34'
B	N46°-41'-33"W	82.21'
C	N46°-11'-36"W	87.42'
D	N46°-41'-33"W	15.24'
E	N46°-21'-49"E	165.22'
F	N00°-26'-24"E	54.61'
G	S89°-05'-33"W	43.50'
H	N89°-09'-18"W	470.06'(ALONG 1/4 LINE TO R/W)
J	N02°-42'-33"W	108.88'
X	N04°-57'-17"W	45.59'
L	S89°-21'-41"E	31.39'
M	S89°-09'-18"E	119.25'
N	N02°-42'-33"W	17.22'
P	S02°-42'-33"E	48.88'
Q	N04°-00'-00"W	42.14'
R	N68°-39'-33"E	55.02'
S	N27°-06'-02"W	19.22'

COURSE TABLE

COURSE	BEARING	DISTANCE
W	S89°-40'-39"E	167.51'
X	N25°-31'-43"W	33.34'
Y	N27°-06'-02"W	233.87'
Z	N04°-00'-00"W	132.50'
BB	S89°-09'-18"E (ALONG 1/4 LINE)	638.15'
CC	N46°-21'-49"E	39.71'
DD	N05°-43'-48"W	30.17'
EE	S89°-40'-38"E	182.64'
FF	N01°-14'-20"W	30.01'
GG	N46°-11'-36"W	43.60'
HH	N90°-00'-00"E	17.02'
II	S02°-42'-34"E	304.94'
JJ	N12°-44'-47"W	62.18'
KK	N31°-55'-14"W	123.58'

SIGN NUMBER	SIGN OWNER
47-1	DON SWISH TIMES

R/W CURVE 506 L.C. = 86.50' L.C.B. = S00°-51'-13"W R. = 11,557.51' L. = 86.50'

R/W CURVE 505 L.C. = 373.21' L.C.B. = S01°-47'-03"E R. = 11,557.51' L. = 373.23'

R/W CURVE 48 L.C. = 761.81' L.C.B. = N00°-49'-14"W R. = 11,557.51' L. = 761.95'

CAUTION

SLOPE INTERCEPTS

LEVELS ON - 21,22,23,24,25,26,27,28

CADDS SHEET 75

REVISION DATE
7-14-92
11-12-92
1-26-93 N.C.
10-27-93
3-24-94 N.C.
7-28-94 N.C.

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	3-2-92

SCALE, FT. 0 100 200 — GRID FACTOR 0.99991

R/W PROJECT NUMBER	SHEET NUMBER
1201 - 04 - 21	4.19
FEDERAL PROJECT NUMBER	
1201-4-78	4.8

NOTE: EXISTING R/W ALONG C.T.H."PB" ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.

PI STA 736+84.25
Y 361,915.60
X 2,130,260.98
DELTA= 65°45'00" Rt.
D=3°00'00"
T=1,234.36'
L=2,191.67'
R=1,909.86'
PC STA 724+49.89
PT STA 746+41.56

PI STA 24+95.41"GRANDVIEW"
DELTA= 1°32'09"

R/W CURVE 3
L.C.=229.30'
L.C.B.=N01°-24'-44"E
R.=2,914.79'
L=229.36'

R/W CURVE 1
L.C.=166.08'
L.C.B.=N0°-39'-01"E
R.=11,389.16'
L=166.08'

R/W CURVE 2
L.C.=213.98'
L.C.B.=N0°-16'-17"W
R.=11,409.16'
L=213.97'

COURSE TABLE

COURSE	BEARING	DISTANCE
A	N03°-38'-06"W	17.03'
B	N01°-52'-28"E	25.39'
C	N89°-40'-44"E	321.39'
D	N04°-00'-00"W	27.02'
E	S01°-12'-53"W	27.01'
F	S00°-11'-41"W	17.00'
G	N01°-52'-28"E	40.66'
H	N88°-47'-13"W	5.48'
J	S89°-40'-44"W	81.87'
L	N05°-31'-04"W	237.19'
M	N45°-52'-46"E	44.65'
N	N46°-49'-03"E	69.46'
O	N04°-00'-00"W	315.02'

CADDS SHEET 7

NOTE: Access along U.S.H. 18 controlled under CONTROLLED ACCESS PROJECT CA017-2(2).

REVISION DATE
7-14-92
11-12-92
1-26-93 N.C.
10-27-93
3-24-94
7-28-94

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	3-2-92
SCALE, FT. 0 100 200	GRID FACTOR 0.99991	

R/W PROJECT NUMBER	SHEET NUMBER
1201 - 04 - 21	4.20
FEDERAL PROJECT NUMBER	
1201-4-78	4.9

NOTE: EXISTING R/W ALONG C.T.H. "PB" ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT. EXISTING HIGHWAY R/W ESTABLISHED FROM PREVIOUS PROJECT F 017-2(15) REFERENCE LINE.

10' M.G.& E. GAS EASEMENT

WITNESS CORNER FOUND CONCRETE MONUMENT WITH BRASS CAP

ACTUAL CORNER IS 5.50 FEET, S00°-00'-07"W OF WITNESS, IN A LARGE TREE.

WITNESS CORNER COORDINATES
Y 365,346.87
X 2,130,077.08

DANE COUNTY

T 6 N R 8 E 11 14

729+51.21"E-1" 119.00

SE - NW

IDENTICAL POINTS

CAUTION

U.S.H. 18

725+00"E-1"

N77°-35'-25"E 812.93'

PC 729+51.21 "E-1"

BUILDING CORNER ENCROACHMENT

729+51.21"E-1" 11.00'

730+62.24"E-1" 61.64'

N47°-01'-47"W 191.24'

NOTE: BUILDING TO REMAIN WITH REVOCABLE PERMIT

N12°-24'-35"W 190.00'

730+00 "E-1"

PI 732+46.88 "E-1"

70'

120'

TOWN

T 6 N R 8 E 14

ALUM. MON.
Y 362,680.56
X 2,130,083.63

OF

TO BE VACATED BY COUNTY BOARD ACTION
1.13 AC.

DANE COUNTY (51)

VERONA

NE - SW

NOTE: M.H. IS FOR MAINTAINING WATER LEVEL IN ADJACENT POND

FIBER OPTIC CABLE MT. VERNON TELEPHONE CO.

EXISTING EASEMENT W.P. & L.

MILITARY RIDGE RECREATIONAL TRAIL

STATE OF WISCONSIN DEPT. OF NATURAL RESOURCES

3/4"-REBARS FOUND (TIES FOR OLD R/W)

ROCER MILL CREEK

DANE COUNTY (51)

COURSE TABLE

COURSE	BEARING	DISTANCE
A	S81°-24'-26"W	74.16'
B	S81°-24'-26"W	133.31'
C	S59°-14'-33"E	118.66'
D	S81°-24'-26"W	267.63'
E	N10°-48'-50"E	62.08'

PI STA 750+01.49 "E-1"
DELTA= 77°30'00"Lt.
D= 6°45'00"
T=681.26'
L=115.15'
R=848.83'
PC STA 743+20.23 "E-1"
PT STA 754+68.38"E-1"

PI STA 759+70.78 "E-1"
DELTA= 20°39'58" Rt.
D= 4°00'00"
T=261.16'
L=516.65'
R=1,432.39'
PC STA 757+09.62 "E-1"
PT STA 762+26.27 "E-1"

PI STA 768+75.14 "E-1"
DELTA= 3°00'00"Lt.
D= 00°15'00"
T=600.14'
L=1,200.00'
R=22,918.31'
PC STA 762+75.00 "E-1"
PT STA 774+75.00 "E-1"

PI STA 732+46.88 "E-1"
DELTA= 33°24'35"Rt.
D= 6°15'00"
T=295.67'
L=560.03'
R=848.83'
PC STA 729+51.21 "E-1"
PT STA 735+20.24 "E-1"

CURVE 185
L.C.=868.33'
L.C.B.=N67°-54'-33"E
R.=1,860.09'
L.=876.41'

R/W CURVE 1
L.C.=285.69'
L.C.B.=N60°-55'-06"E
R.=408.10'
L.=291.87'

CURVE 597
L.C.=657.03'
L.C.B.=N64°-03'-35"E
R.=1,960.09'
L.=660.15'

R/W CURVE 3
L.C.=229.30'
L.C.B.=N01°-24'-44"E
R.=2,914.79'
L.=229.36'

R/W CURVE 285
L.C.=240.37'
L.C.B.=N77°42'09"E
R.=1,860.09'
L.=240.54'

R/W CURVE 726
L.C.=347.83'
L.C.B.=S65°41'30"W
R.=1,879.85'
L.=348.33'

R/W CURVE 730
L.C.=122.58'
L.C.B.=S78°10'22"W
R=490.87'
L=122.90'

R/W CURVE 395
L.C.=632.79'
L.C.B.=N64°12'17"E
R=1,860.09'
L=635.88'

PI STA 46+42.73"NESBITT"
DELTA= 46°50'20"
D= 10°00'00"
T=248.17'
L=463.39'
R=572.96'
PC STA 43+94.56"NESBITT"
PT STA 48+62.95"NESBITT"

ALUM. MON.
Y 360,019.79
X 2,130,100.28

T 6 N R 8 E 14 23

SE - SW

48+41.34"NESBITT" 267'

PI 46+42.73"NESBITT"

47+89.04"NESBITT" 201.36'

48+80.93"NESBITT" 318.90'

N10°-08'-27"W 2661.06' ALONG 1/4 LINE TO C.O.S.

130+56.81"E-1" 126.54'

N77°-35'-25"E 1,038.95'

T.P.

CHISLED "X"

48+50"NESBITT"

S76°-50'-20"W 47+63.18"NESBITT" 60'

S31°-30'-00"E 100'

U.S.H. 18

S63°-00'-00"E 200.22'

47+14.37"NESBITT" 100'

47+29.56"NESBITT" 50'

PT 48+62.95"NESBITT"

50+00.00"NESBITT"&"PB"=
739+60.00 "E-2"

50+72.27"PB"=
735+20.50"E-1" 1,444.20'

R/W TO R S89°-14'-33"E

S31°-00'-00"W 72.28'

735+00 "E-1"

PT 735+20.24"E-1"

S31°-40'-07"E 152.08'

S64°-00'-00"W

S31°-38'-54"E 60'

S31°-33'-22"E 60'

500.21'

S36°-00'-00"W

PC 55+72.48"PB"

55+00.00"PB"

55+72.48"PB"

PI 57+13.48"PB"

N10°-48'-50"E 332.46'

55+72.48"PB" N10°-48'-50"E 256.84'

732+52.18 "E-1" 187.42'

C.T.H. "PB"

136.63'

DANE COUNTY, LESSOR, STATE OF WISCONSIN, DEPARTMENT OF NATURAL RESOURCES, LESSEE

N01°-21'-30"W 2,661.06' ALONG 1/4 LINE TO C.O.S.

P.L.

PT 58+48.99"PB" 75.33'

58+11.00"PB" 78.00'

58+39.99"PB" 50.00'

58+72.47"PB" 102.36'

S81°-24'-26"W 341.78'

R/W CURVE

FIBER OPTIC TEL.

N81°-24'-26"E 643.46'

737+25.25 1188.71'

S81°-24'-26"W 214.31'

PI 736+84.25

T.L.E. SLOPES
0.42 AC.
DANE COUNTY
2.03 AC. REMAINING

N14°-00'-00"W 147.15'

N26°-48'-45"E 465.54'

N81°-18'-06"E 144.97'

N33°-18'-06"E 111.90'

735+00

733+00 180'

732+00 479.55'

P.O.B.

C.T.H. "P.B."

732+24.02 358.82'

EXISTING R/W CURVE

110'

59+39.51"PB"

60+11.60"PB" 55.00'

60+60.00"PB"

S08°-21'-30"E 100'

FO

51 DANE COUNTY

NW - SE

N40°-02'-07"E 360.34'

736+00 180'

LANDLOCKED 19.85 ACRES

SLOPE INTERCEPTS

N33°-45'-43"E 183.20'

S83°-28'-16"E 354.43'

734+00 160'

733+10.64 166.66'

N16°-30'-12"E 365.62'

48 RODNEY D. SLOTTEN

SW - SE

PI STA 736+84.25
Y 361,915.60
X 2,130,250.98
DELTA= 55°45'00"
D= 3°30'00"
T=1,254.36'
L=2151.67'
R=1,636.86'
PC STA 724+39.91
PT STA 746+41.58

PI STA 57+13.48"PB"
DELTA= 27°39'00"Rt.
D= 3°30'00"
T=141.02'
L=276.00'
R=572.96'
PC STA 55+72.48"PB"
PT STA 58+48.99"PB"

N89°-14'-33"W 1070.90' ALONG 1/4 LINE TO R

R STA. 749+79.86

750+00

S.T.A. 750+01.49

S64°-00'-00"E

T 6 N R 8 E 13 14

ALUM. MON.
Y 362,645.75
X 2,132,716.92

N61°-45'-00"E 1058.19'

PC 743+20.23

PT 746+41.56

745+00 "E-1"

744+00

747+75.23"E-1"

R/W CURVE 730

R/W CURVE 726

R/W CURVE 285

R/W CURVE 591

R/W CURVE 395

S81°-24'-26"E 163.52'

S81°-11'-06"E 275.20'

745+69.53 264.94'

744+00 197.43'

740+00

740+00 "E-1"

T.L.E. SLOPES
1.62 AC.

3/4" REBARS FOUND (TIES FOR OLD R/W)

N41°-40'-27"E 156.44'

N41°-40'-27"E 199.63'

CC 742+26.83 225.21'

61 MT. VERNON TELEPHONE COMPANY FIBER OPTIC CABLE

SEE SHEET NO. 4.21 FOR MATCH LINE

PI 750+01.49 "E-1"

P.L.

G N

ROONEY D. SLOTTEN

48

NE - SE

P.L.

Note: Access along U. S. H. 18 controlled by Access Control Regulations, recorded in Volume 447 of records, Page 83, Document No. 136501, and Controlled Access Project CA017-2(2).

REVISION DATE
7-14-92
11-12-92
1-26-93 N.C.
10-27-93
3-24-94
7-28-94

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	3-2-92

SCALE, FT. 0 100 200 — GRID FACTOR 0.99991

R/W PROJECT NUMBER	SHEET NUMBER
1201 - 04 - 21	4.21
FEDERAL PROJECT NUMBER	
1201-4-78	4.10

NOTE: EXISTING HIGHWAY R/W ON USH 18 ESTABLISHED FROM PREVIOUS PROJECT F 017-2(15) REFERENCE LINE.

PC 43+94.56"NESBITT"
26.88'
N77°-35'-25"E 425.73'
PI 46+42.73"NESBITT"
PT 17+99.78"LOCAL"
S63°-00'-00"E 200.22'
S31°-00'-00"W
S77°-50'-20"W 1,038.95'
N77°-35'-25"E
PC 43+94.56"NESBITT"
N77°-35'-25"E 26.88' 425.73'
45°00'NESBITT'
20+00'LOCAL' = 48+50'NESBITT'
IDENTICAL POINTS
N77°-35'-25"E 985.10'
17+99.78'LOCAL' 100
43+94.56'NESBITT 100
WISCONSIN POWER AND LIGHT COMPANY EASEMENT RELEASE (TEMPORARY), PARCEL 51
SLOPE INTERCEPTS
39+68.83"NESBITT 28.72'
PC 24+88.98"NESBITT"
165'
49.22'
PT 29+30.67"NESBITT"
93.48' 29+84.00"NESBITT" 93.00'
S00°-22'-04"W 2729.82'
MT. VERNON TELEPHONE COMPANY BURIED CABLE
R/W CURVE 38
R/W CURVE 338
R/W CURVE 77
S77°-50'-20"W
ALUM. CAP IN CONCRETE G.P.S. CONTROL STATION NUMBER 309
29+30.67"NESBITT"
PI 27+21.45"NESBITT"
WISCONSIN POWER & LIGHT COMPANY EASEMENT RELEASE, PARCEL 52
S89°-14'-33"E 1,562.86
C.O.S.14 10°R
N61°-45'-00"E 1,058.19'
PC 756+99.75
500.02' ALONG TAN.
PI 759+70.78"E-1"
N59°-09'-58"E
N89°-14'-33"W 1,070.90'
R TO E1/4 COR. SEC. 14
N38°-30'-00"E 241.24'
755+00'E-1'
760+00'E-1'
765+00'E-1'
770+00'E-1'
971.45' ALONG TAN.
PI 768+75.14"E-1"
PI STA 771+71.22
N54°-24'-40"E 1,209.87'
PT 774+75.00"E-1"
S27°-04'-52"E 71.06'
774+77.48 165.23'
BADGER MILL CREEK
NO°-22'-04"E 320.77' ALONG SEC. LINE TO TAN.
48.73'
R/W CURVE 726 752+19.83"E-1" 49.67'
753+80.81"E-1" 53.48'
R/W CURVE 395
R/W CURVE 185
R/W CURVE 597
MILITARY RIDGE RECREATIONAL TRAIL STATE OF WISCONSIN, DEPT. OF NATURAL RESOURCES
PC 757+09.62"E-1"
143.93'
PT 762+26.27"E-1"
189.02'
PC 762+75.00"E-1"
184.96'
N54°-24'-40"E 456.30'
N54°-24'-40"E 2,588.57'
ALONG SEC. LINE TO R/W NO°-22'-04"E 270.81'
48.90'
SLOPE INTERCEPTS
PI STA 46+42.73"NESBITT"
DELTA= 46°50'20"
D= 10°00'00"
T=248.17'
L=468.39'
R=572.96'
PC STA 43+94.56"NESBITT"
PT STA 48+62.95"NESBITT"
PI STA 27+21.45"NESBITT"
DELTA= 44°10'07"Rt.
D= 10°00'00"
T=232.47'
L=441.69'
R=572.96'
PC STA 24+88.98"NESBITT"
PT STA 29+30.66"NESBITT"
PI STA 768+75.14"E-1"
DELTA =3°00'00"Lt.
D= 00°15'00"
T=600.14'
L=1,200.00'
R=22,918.31'
PC STA 762+75.00"E-1"
PT STA 774+75.00"E-1"
PI STA 771+71.22
Y 363,697.02
X 2,133,576.38
DELTA= 7°20'50" Lt.
D= 0°15'00"
T=1,471.47'
L=2,938.91'
R=22,918.31'
PC STA 756+99.75
PT STA 786+38.66
PI STA 750+01.49"E-1"
DELTA=7°7'-30"-30"Lt
D= 6°45'00"
T=681.26'
L=1,148.15'
R=848.83'
PC STA 743+20.23"E-1"
PT STA 754+68.38"E-1"
PI STA 759+70.78
DELTA=20°39'58"Rt
D= 4°00'00"
T=261.16'
L=516.65'
R=1,432.39'
PC STA 757+09.62"E-1"
PT STA 762+26.27"E-1"
R/W CURVE 726 L.C.=347.83' L.C.B.=N65°41'30"E R=1,879.85' L=348.33'
R/W CURVE 395 L.C.=632.79' L.C.B.=N64°12'17"E R=1,860.09' L=635.88'
R/W CURVE 185 L.C.=868.33' L.C.B.=N67°-54'-33"E R=1,860.09' L=876.41
R/W CURVE 137 L.C.=561.19' L.C.B.=N67°-36'-05"E R=5,616.34' L=561.42
R/W CURVE 338 L.C.=62.86' L.C.B.=S77°-40'-13"E R=5,616.34' L=62.86'
R/W CURVE 77 L.C.=447.79' L.C.B.=S44°-40'-13"E R=971.64' L=451.85'
R/W CURVE 38 L.C.=218.22' L.C.B.=S57°-40'-13"E R=971.64' L=218.44'

COURSE TABLE		
COURSE	BEARING	DISTANCE
A	S33°-40'-13"W	57.16'
B	S32°-03'-11"W	71.99'
C	S33°-57'-09"W	132.29'
D	N54°-24'-40"E	19.97'
E	N54°-24'-40"E	76.66'
F	N00°-22'-04"E	26.46'
G	N89°-14'-33"W	165.00'
H	N51°-07'-03"E	170.54'

SIGN NUMBER	SIGN OWNER
52-1	HIGHLANDER HOTEL
52-2	DARTSON INN
52-3	PIZZA HUT

ALUM. MON. Y 362,680.56 X 2,130,083.63
CONC. MON. WITH BRASS CAP Y 365,314.63 X 2,132,734.05
ALUM. MON. Y 362,645.74 X 2,132,716.76
DANE COUNTY LANDLOCKED 20.4 ACRES
DANE COUNTY
SHARON L. NESBITT, ETAL.
DELBERT E. BISCHOFF
VERONA
SITE KEY
SEE SHEET MATCH LINE
MATCH LINE SEE SHEET
STA. 750+00 4.20
STA. 776+00 4.23
LEVELS ON - 21,22,23,24,25,26,27,28
CADDS SHEET 75

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
1-26-93 N.C. 10-27-93 3-24-94 N.C. 7-28-94 N.C.	U.S.H. 18	DANE	11-12-92	1201-04-21	4.22
	SCALE, FT. 0 100 200	GRID FACTOR 0.99991		FEDERAL PROJECT NUMBER 1201-4-78	4.11

NOTE: EXISTING HIGHWAY R/W ON USH 18 ESTABLISHED FROM PREVIOUS PROJECT F 017-2(15) REFERENCE LINE.

Note: Access along U.S.H. 18 controlled by Access Control Regulations, recorded in Volume 447 of records, Page 83, Document No. 136501, and Controlled Access Project CA017-2(2).

CONC. MON. WITH BRASS CAP
Y 365,314.63
X 2,132,734.05

T 6 N, 11 12, 14 13, R 8 E

52-3

PI 27+21.45"NESBITT"
29+30.67"NESBITT"
100'
577°-50'-20"W
S0°-22'-04"W 2,077.65' FROM E.1/4 COR. SEC. 14
R STA. = 762+02.82
765+00
765+04"E-1"
971.45' ALONG TAN.
PI 768+75.14"E-1"
1,209.87'
N54°-24'-40"E
SLOPE INTERCEPTS FO MT. VERNON TELEPHONE COMPANY FIBER OPTIC CABLE
100'
MILITARY RIDGE RECREATIONAL TRAIL STATE OF WISCONSIN DEPT. OF NATURAL RESOURCES
N54°-24'-40"E 2,568.57'
760+00
N59°-09'-58"E
760+09"E-1"
BADGER MILL CREEK
N0°-22'-04"E 320.77' ALONG SEC. LINE TO TAN.
48.73'
PC 762+75.00"E-1"
FO
184.96'
P.L.
PT 762+26.27"E-1"
189.02
N54°-24'-40"E
48.90'
N0°-22'-04"E 270.81' ALONG SEC. LINE TO R/W
N54°-24'-40"E
456.50'
FO
PC 757+09.62"E-1"
143.93'
N89°-14'-33"W 165.00'
N0°-22'-04"E 26.46'

52 — SW – NW — SHARON L. NESBITT, ETAL.

52 — SE – NW — SHARON L. NESBITT, ETAL.

SW – NE

G N

S89°-04'-38"W 2615.48'

S89°-04'-38"W 1,306.96'

P.L.

T 6 N, 14 13, R 8 E
ALUM. MON.
Y 362,645.74
X 2,132,716.76

DELBERT E. BISCHOFF

NW – SW

DELBERT E. BISCHOFF

T 6 N, 13, R 8 E
ALUM. MON.
Y= 362,687.871
X=2,135,331.829

TOWN OF VERONA

NE – SW

NW – SE

AMOS H. THORSON

DANE COUNTY

LANDLOCKED 20.4 AC.

SIGN NUMBER	SIGN OWNER
52-3	PIZZA HUT

PI STA 759+70.78"E-1"
DELTA=20°39'58"Rt
D= 4°00'00"
T=261.16'
L=516.65'
R=1432.39'
PC STA 757+09.62"E-1"
PT STA 762+26.27"E-1"

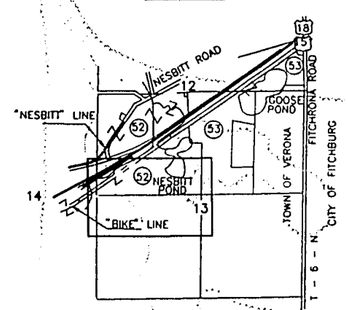
PI STA 768+75.14"E-1"
DELTA =3°00'00"Lt.
D= 00°15'00"
T=600.14'
L=1,200.00'
R=22,918.31'
PC STA 762+75.00"E-1"
PT STA 774+75.00"E-1"

PI STA 771+71.22
Y 363,697.02
X 2,133,576.38
DELTA= 7°20'50" Lt.
D= 0°15'00"
T=1,471.47'
L=2,938.91'
R=22,918.31'
PC STA 756+99.75
PT STA 786+38.66

T 6 N, 14 13, 23 24, R 8 E
ALUM. MON.
Y 359,995.472
X 2,132,713.590

T 6 N, 13, 24, R 8 E
ALUM. MON.
Y= 360,041.375
X=2,135,311.170

SITE KEY



21,22,23,24,25,26,27,28,

LEVELS ON –

CADDS SHEET 21

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
7-14-92 N.C. 11-12-92 1-26-93 N.C. 10-27-93 3-24-94 N.C. 7-28-94	U.S.H. 18	DANE	3-2-92	1201 - 04 - 21	4.23
	SCALE, FT. 0 100 200	GRID FACTOR 0.99991		FEDERAL PROJECT NUMBER 1201-4-78	4.12

Note: Access along U. S. H. 18 controlled by Access Control Regulations, recorded in Volume 447 of records, Page 83, Document No. 136501. and Controlled Access Project CA017-2(2).

NOTE:
EXISTING HIGHWAY R/W ESTABLISHED FROM PREVIOUS PROJECT F 017-2(15) REFERENCE LINE.

SITE KEY

TOWN OF VERONA
CITY OF FITCHBURG

TOWN OF VERONA

NESBITT ROAD

NESBITT ROAD

C.S.M. 4540 VOL.20 / P.5,6

1" IRON PIPES FOUND

CONC. MON. W/ BRASS CAP
Y 365,314.63
X 2,132,734.05

CONC. MON. WITH BRASS CAP
Y 365,341.893
X 2,135,352.546

NW COR. SEC. 13 TO N. 1/4 COR. SEC. 13
N89°-24'-12"E 2,618.86'

MADISON METROPOLITAN SEWERAGE DISTRICT-EASEMENT

SHARON L. NESBITT, ETAL.

WALTER HERRINGTON

L=1,427.46'
L.C.=1,423.62'
L.C.B.= N61°-41'-02"E
R.=5,616.32'

SLOPE INTERCEPTS

N54°-24'-10"E 290.61'

N54°-24'-10"E 388.98'

N54°-24'-10"E 4,936.05'

N54°-24'-10"E

U.S.H. 18/151

EXISTING D.O.T. REBAR WITH CAP AT P.T.

N54°-26'-33"E 331.11'

N54°-26'-33"E 1,478.60'

N54°-26'-33"E 1,809.58'

N54°-26'-33"E 457.11'

1-1/4" REBAR FOUND 0.50' NORTH OF P.L

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
MILITARY RIDGE RECREATIONAL TRAIL

MADISON METROPOLITAN SEWERAGE DISTRICT
SANITARY SEWER IN 30' EASEMENT

N54°-24'-40"E 2,568.57'

N54°-24'-52"E 2,233.93'

N54°-24'-52"E 1,984.42'

SEE SHEET MATCH LINE

PI STA 771+71.22
Y 363,697.02
X 2,133,576.38
DELTA= 7°20'50"
D= 0°15'00"
T=1471.47'
L=2938.91'
R=22918.31'
PC STA 756+99.75
PT STA 786+38.66

ALUM. MON.
Y 362,687.87
X 2,135,331.83

K.A. RAYNER TRUST
VOLUME 4675, PAGE 67,68

CENTER OF SECTION 13 TO RECREATIONAL TRAIL
N0°-26'-50"E 1,986.52'

TOWN OF VERONA
SANITARY SEWER
IN 32' AND 40' EASEMENTS

K A RAYNER TRUST

WISCONSIN POWER & LIGHT CO.
4 POWER POLES

GOOSE LAKE

DAVID V MONTGOMERY

32' EASEMENT

30' EASEMENT

40' EASEMENT

NW - NW

NE - NW

SE - NW

NW - NE

STA. 776+00

783+46.66
108.15'

PT 786+38.66
110.00'

790+45.83
135'

780+27.63'
110'

N00°-27'-00"E
30.92'

N0°-26'-50"E
266.57'

N89°-24'-04"E
284.02'

N89°-24'-04"E
235.37'

N0°-26'-50"E
186.98'

N0°-26'-50"E
186.67'

N0°-26'-50"E
1356.61'

783+09.52
138.11'

786+38.66
135.96'

783+10.90
238.10'

801+17.15
137'

775+00
780+00
785+00
790+00
795+00
800+00
805+00

R6E R9E

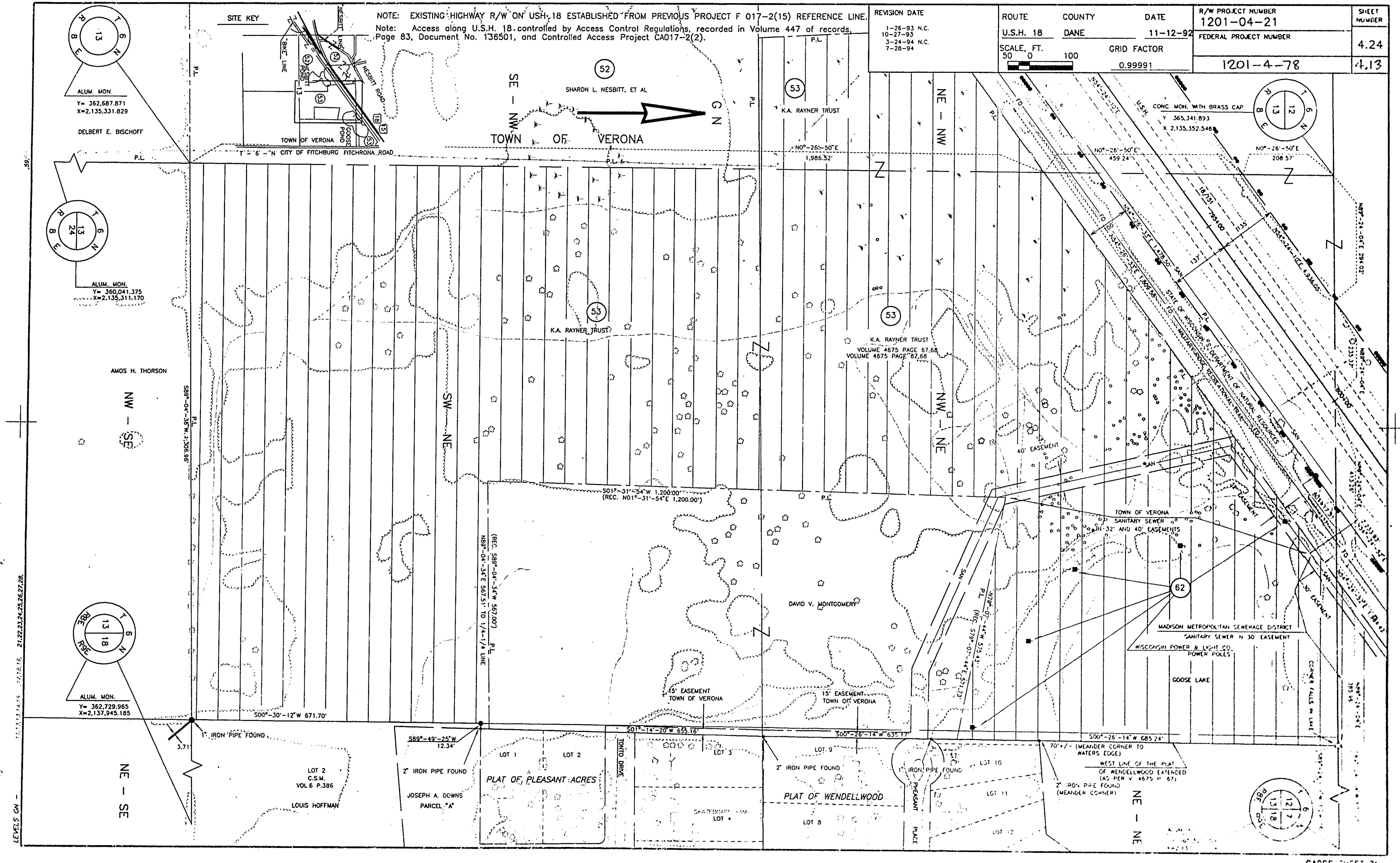
T 6 N
R 8 E
12 13

T 6 N
R 8 E
11 12 14 13

T 6 N
R 8 E
12 7 13 18

LEVELS ON - 21,22,23,24,25,26,27,28

CADDS SHEET 75


NOTE: EXISTING HIGHWAY R/W ON USH 18 ESTABLISHED FROM PREVIOUS PROJECT F 017-2(15) REFERENCE LINE.
Note: Access along U.S.H. 18 controlled by Access Control Regulations, recorded in Volume 447 of records, Page 83, Document No. 136501, and Controlled Access Project CA017-2(2).
REVISION DATE
1-26-93 N.C.
10-27-93
3-24-94 N.C.
7-28-94
ROUTE
COUNTY
DATE
U.S.H. 18
DANE
11-12-92
SCALE, FT.
50 0 100
GRID FACTOR
0.99991
R/W PROJECT NUMBER
1201-04-21
FEDERAL PROJECT NUMBER
1201-4-78
SHEET NUMBER
4.24
4.13
SITE KEY
BIKE LINE
NESBITT POND
NESBITT ROAD
GOOSE POND
TOWN OF VERONA
T - 6 - N CITY OF FITCHBURG FITCHRONA ROAD
ALUM. MON.
Y= 362,687.871
X=2,135,331.829
DELBERT E. BISCHOFF
ALUM. MON.
Y= 360,041.375
X=2,135,311.170
AMOS H. THORSON
NW - SE
S89°-04'-38"W 1,306.96'
P.L.
52
SHARON L. NESBITT, ET AL
TOWN OF VERONA
SE - NW
SW - NE
53
K.A. RAYNER TRUST
N0°-26'-50"E
1,986.52'
NE - NW
NW - NE
K.A. RAYNER TRUST
VOLUME 4675 PAGE 67,68
CONC. MON. WITH BRASS CAP
Y 365,341.893
X 2,135,352.546
N0°-26'-50"E
459.24'
N0°-26'-50"E
208.57'
N34°-24'-10"E
U.S.H.
18/151
795+00
N34°-26'-33"E 1,478.50'
N34°-26'-33"E 1,809.58'
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MILITARY RIDGE RECREATIONAL TRAIL
N34°-24'-10"E 4,934.05'
N89°-24'-04"E 294.02'
800+00
40' EASEMENT
SAN
FO
S01°-31'-54"W 1,200.00'
(REC. N01°-31'-54"E 1,200.00')
(REC. S89°-04'-34"W 567.00')
N89°-04'-34"E 567.51' TO 1/4-1/4 LINE
DAVID V. MONTGOMERY
TOWN OF VERONA
SANITARY SEWER
IN 32' AND 40' EASEMENTS
62
MADISON METROPOLITAN SEWERAGE DISTRICT
SANITARY SEWER IN 30' EASEMENT
WISCONSIN POWER & LIGHT CO.
POWER POLES
GOOSE LAKE
N78°-07'-44"W 575.43'
(REC. S79°-07'-44"E 571.73')
CORNER FALLS IN LAKE
15' EASEMENT
TOWN OF VERONA
ALUM. MON.
Y= 362,729.965
X=2,137,945.185
S00°-30'-12"W 671.70'
1" IRON PIPE FOUND
3.71'
S89°-49'-25"W
12.34'
2" IRON PIPE FOUND
LOT 2
C.S.M.
VOL.6 P.386
LOUIS HOFFMAN
JOSEPH A. DOWNS
PARCEL "A"
NE - SE
S01°-14'-20"W 655.16'
S00°-26'-14"W 635.17'
S00°-26'-14"W 685.24'
LOT 1
LOT 2
PLAT OF PLEASANT ACRES
TONTO DRIVE
LOT 3
LOT 4
LOT 9
LOT 8
PLAT OF WENDELLWOOD
PHEASANT PLACE
LOT 10
LOT 11
LOT 12
70'+/- (MEANDER CORNER TO WATERS EDGE)
WEST LINE OF THE PLAT OF WENDELLWOOD EXTENDED (AS PER V. 4675 P. 67)
2" IRON PIPE FOUND (MEANDER CORNER)
NE - NE
LEVELS ON -
CADDS SHEET 7

NOTE: EXISTING HIGHWAY R/W ON USH 18 ESTABLISHED FROM PREVIOUS PROJECT F 017-2(15) REFERENCE LINE.

Note: Access along U.S.H. 18 controlled by Access Control Regulations, recorded in Volume 447 of records, Page 83, Document No. 136501, and Controlled Access Project CA017-2(2).

REVISION DATE
1-26-93 N.C.
10-27-93
3-24-94 N.C.
7-28-94 N.C.

ROUTE	COUNTY	DATE
U.S.H. 18	DANE	9-11-92

SCALE, FT. 0 100 200

GRID FACTOR 0.99991

R/W PROJECT NUMBER	SHEET NUMBER
1201-04-21	4.25
FEDERAL PROJECT NUMBER	
1201-4-78	4.14

NW - SE

NE - SE

SW - SE

SE - SE

SW - SW

NW - NE

NE - NE

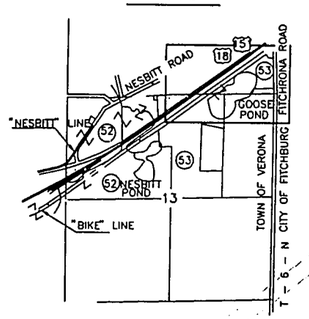
NW - NW

G N

TOWN OF VERONA

TOWN OF FITCHBURG

SITE KEY



T 6 N, 12 | 7, R8E R9E

CONC. MON. WITH BRASS CAP
Y= 367,992.910
X=2,137,998.931

END RELOCATION ORDER
STA. 822+54.76=
Y 366,658.15
X 2,137,712.86

T 6 N, 12 | 13, R 8 E

CONC. MON. WITH BRASS CAP
Y 365,341.893
X 2,135,352.546

T 6 N, 12 | 7, 13 | 18, R8E R9E

CONC. MON. WITH BRASS CAP
Y= 365,369.259
X=2,137,970.956

TO FITCHBURG 0.1 MILES +/-

820+00

815+00

810+00

805+00

800+00

795+00

N54°-24'-10"E 4,936.05'

N54°-24'-52"E 2,233.93'

N54°-24'-52"E 1,984.42'

N54°-26'-33"E 1,478.50'

N54°-26'-33"E 1,809.58'

N89°-24'-04"E 294.02'

N89°-24'-04"E 235.37'

N89°-24'-04"E 238.86'

N89°-24'-04"E 174.40'

N89°-24'-04"E 385.98'

N89°-24'-04"E 1,676.13'

S89°-24'-04"W 514.35'

S89°-24'-04"W 547.36'

S89°-24'-04"W 633.28'

S39°-20'-16"W 175.02' 134.2' (ALONG MEANDER LINE)

S35°-15'-08"E 111.06'

821+01.50 237.35'

821+00.83 348.45'

S00°-26'-14"W 685.24'

S00°-36'-39"W 781.20'

S00°-36'-39"W 760.63'

S00°-36'-39"E 134.23'

S89°-37'-07"E 33.00'

S00°-36'-35"W 1,709.18'

822+28.05 440.82'

P.I. 157.22' S89°-37'-02"E 190.22' (REC. 188.10')

P.I. 110.97' (REC. 110.97')

1.80

137'

150'

U.S.H. 18/151

107'+/- MEANDER CORNER TO EDGE WATER

73'+/- MEANDER CORNER TO EDGE WATER

MADISON METROPOLITAN SEWERAGE DISTRICT SANITARY SEWER IN 30' EASEMENT

30' EASEMENT

32' EASEMENT

40' EASEMENT

TOWN OF VERONA SANITARY SEWER IN 32' AND 40' EASEMENTS

CORNER FALLS IN LAKE

GOOSE LAKE

WEST LINE OF THE PLAT OF WENDELLWOOD EXTENDED (AS PER V. 4675 P. 67)

STATE OF WISCONSIN - DEPARTMENT OF NATURAL RESOURCES

MILITARY RIDGE RECREATIONAL TRAIL

K.A. RAYNER TRUST
VOLUME 4675, PAGE 67,68

DONALD J. & VIRGINIA M. KRUEGER

2" IRON PIPE FOUND

3/4" REBAR FOUND

1-1/4" REBAR FOUND

MT. VERNON TELEPHONE CO.

GAS VALVE

GAS M.H.'S

MADISON METROPOLITAN SEWERAGE DISTRICT (PUMPING STATION)

SEPTIC VENT

MADISON GAS & ELECTRIC CO.

WISCONSIN POWER & LIGHT CO. POWER POLES

PLAT OF WENDELLWOOD

GOOSE LAKE DRIVE

OUTLOT 29

OUTLOT 35

FITCHBURG ROAD

VERONA ROAD

CITY LIMITS

CADDS SHEET 75

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.0

PLAN & PROFILE U.S.H. 18

USH 18 — DANE COUNTY

KEY MAP

0 100 200 300

PAVING ONLY

BEGIN PROJECT 1201-04-78
STA. 607+00.00

STA. 606+00.0

RAMP "69-4"

RAMP "69-3"

℄ USH 18

S 80°45'00.0" E

SLOPE INTERCEPTS

RANDALL J. ACKER

DONALD G. GUST

MAINLINE

USH 18 WB

USH 18 EB

STA. 630+00.00

96°07'54"

B-13-409

CLASS 'A' STEEL PLATE BEAM GUARD (BY OTHERS)

BM BA114

STA. 20+20.00 "L"
1-18" X 46L.F. CMCP
REMOVED BY OTHERS

CLARENCE H. & VIRGINIA A. WITT

STA. 619+35.20 ℄ USH 18=
STA. 19+99.76 ℄ "LOCUST DR"

℄ LOCUST DRIVE

LOCUST DRIVE

USH 18
C2
P.I. STA. 628+27.26
2445,756.31'
354,881.11
Δ 13°15'00.0"
D 08°30'00.0"
T 1330.84'
L 2650.00'
R 11,459.16'
e.c. 0.020 FT/FT
R.C. = 190'

STATION 619+35.20
STRUCTURE B-13-409
2 SPAN 70" PRESTRESSED CONCRETE GIRDER
40' CLEAR ROADWAY
SKEW 6° RHF
SEE STRUCTURE PLANS
BY OTHERS

BENCH MARKS

NO.	STATION	LOCATION	DESCRIPTION	ELEV.
BM. BA114	20+62.62	21.14' ℄ T.	ON EAST SIDE OF LOCUST DRIVE RR SPK IN W SIDE DSL 16" & 12" POPLAR, +/- 100' NO. OF POWER LINES.	1016.41

FOR INFORMATION ONLY
GRADING BY OTHERS
MAINLINE PAVING ONLY

"WB" AND "EB" PROFILE

FINISHED MAINLINE PROFILE "EB" & "WB"

FINISHED MAINLINE PROFILE NOT PART OF THIS CONTRACT STA. 602+00 TO STA. 607+00

1000.0 VC
k = 192

+3.4255%

PVT 604+00.00
EL 958.33

PVC 607+50.00
EL 970.12

BEGIN PROJECT 1201-04-78
STA. 607+00.00

SPECIAL DITCH, RT.

STA. 612+10.57
1-54"X320 L.F. CLASS III RCCP BY OTHERS
SKEW 51° RHF
2 APRON ENDWALLS BY OTHERS

SPECIAL DITCH, LT.

PVI 618+00.00
EL 999.14

-0.7200%

1700.0 VC
k = 110

STA. 618+50
1-12" X 83 L.F. PUU BY OTHERS
SKEW 0° RHF
1 APRON ENDWALL BY OTHERS
1 TYPE 1-V INLET BY OTHERS

STA. 620+10
1-12" X 83 L.F. PUU BY OTHERS
SKEW 0° RHF
1 APRON ENDWALL BY OTHERS
1 TYPE 1-V INLET BY OTHERS

PVT 624+50.00
EL 993.12

SPECIAL DITCH, RT.

SPECIAL DITCH, LT.

STA. 602+10 TO STA. 603+50
1-24" X 102 L.F. CLASS III RCCP BY OTHERS
1-TYPE 8-MS INLET BY OTHERS
1 CONCRETE COLLAR BY OTHERS.

1020 1010 1000 990 980 970 960 950 940

952.32 954.97 958.13 961.56 964.99 968.41 971.81 974.99 977.92 980.62 983.07 985.28 987.24 988.96 990.43 991.66 992.65 993.39 993.89 994.15 994.16 993.93 993.45 992.76 992.04 991.32 990.60 989.88 989.16

2 3 4 605 6 7 8 9 610 1 2 3 4 615 6 7 8 9 620 1 2 3 4 625

59.60 41.42 39. 36. 29. 25. 20. 5/.

LEVELS 04

FILE NAME: HOON: 75500.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.1

PLAN & PROFILE U.S.H. 18

USH 18 DANE COUNTY

KEY MAP

PAVING ONLY

0 100 200 300

N

DONALD G. GUST

CONSTRUCT MAINTENANCE CROSSOVER
STA. 630+50.00, SEE SDD
GRADING & PIPE INSTALLED
BY OTHERS

SLOPE INTERCEPTS

USH 18 WB

USH 18 EB

℄ U.S.H. 18

STA. 630+00.00

MATCH LINE

USH 18
C2

P.I.	STA. 628+27.26
X	2,125,756.31
Y	454,881.11
Δ	13°15'00.0"
D	00°30'00.0"
T	330.94'
L	2650.00'
R	11,459.16'
S.E.	0.020 FT/FT
R.O.	190'

SLOPE INTERCEPTS

DONALD G. GUST

CLASS A STEEL PLATE BEAM GUARD (BY OTHERS)

STATION 644+38.07
STRUCTURE B-13-410
2 SPAN 84" STEEL PLATE GIRDER
44' CLEAR ROADWAY
SKEW 54°46'00" RHF
SEE STRUCTURE PLANS
(BY OTHERS)

STA. 644+38.07 ℄ USH 18 =
STA. 20+00.00 ℄ CTH "M"

B-13-410

OBLITERATE OLD ROADWAY
(BY OTHERS)

DONALD G. GUST

℄ CTH "M"

RANGE TRAIL

S 10°15'08.4" W

STA. 24+00.00 ℄ CTH "M" =
STA. 10+48.56 ℄ RANGE TRAIL
TYPE C INTERSECTION
℄ RANGE TRAIL RD
RAYMOND W. & LOIS GUST

RICHARD M. & MARLY M. TOLLEFSON

N86°00'00.0"E

35°13'34.9"

BM 317

95°00'00.0"

S 89°34'55.6" E

CTH "M"

ICE AGE PARK & TRAIL FOUNDATION, INC.

SAW & MATCH STA. 29+00

STA. 659+00.00

BENCH MARKS

NO.	STATION	LOCATION	DESCRIPTION	ELEV.
BM 317	21+15.39	23.30' LT.	CHISEL "+" ON NORTH END CMCP UNDER CTH "M"	1000.53

"WB" & "EB" PROFILE

MAINLINE PAVING ONLY

600.0 VC
K = 199

℄ CTH "M" B-13-410 (BY OTHERS)

STA. 637+40
1-24" X 86 L.F. RCCP CLASS III BY OTHERS
SKEW 0° LHF
1-APRON ENDWALL BY OTHERS
1-TYPE 8-MS INLET BY OTHERS

PVC 639+00.00 EL 982.68

PVI 642+00.00 EL 980.52

PVT 645+00.00 EL 987.36

FINISHED MAINLINE PROFILE "EB" R "WB" R

-0.72000%

+2.28000%

STA. 630+40.00
1-42"X200 L.F. RCCP CLASS III BY OTHERS
SKEW 69° LHF
2-APRON ENDWALL BY OTHERS

STA. 630+00.00
1-24"X40 L.F. RCCP CLASS III BY OTHERS
1-TYPE 9-MS INLET BY OTHERS
1-CONCRETE COLLAR BY OTHERS

SPECIAL DITCH, RT.

STA. 635+95.14
3-48"X 240 L.F. RCCP CLASS III BY OTHERS
SKEW 49° RHF
2-CONCRETE MASONRY APRON ENDWALLS BY OTHERS

STA. 640+50.00
1-24" X 62 L.F. RCCP CLASS III BY OTHERS
SKEW 13° RHF
1-APRON ENDWALL BY OTHERS
1-TYPE 10 INLET BY OTHERS

SPECIAL DITCH, LT.

STA. 642+00.00, 83.5' LT. TO STA. 642+56.00, 74' LT.
STA. 642+56.00, 74' LT. TO STA. 644+10.00, 74' LT.
STA 644+10.00, 74' LT. TO STA. 645+94, 110' LT.
1-48" X 57 L.F. RCCP CLASS III BY OTHERS
1-48" X 154 L.F. RCCP CLASS III BY OTHERS
1-48" X 187 L.F. RCCP CLASS III BY OTHERS
2-TYPE 5 M.H. BY OTHERS
2-APRON ENDWALLS BY OTHERS

STA. 644+82.00, 82' RT. TO STA. 648+25.00, 85' RT.
1-42"X 342 L.F. RCCP CLASS III BY OTHERS
2-APRON ENDWALLS BY OTHERS

STA. 646+00.00
1-24"X 92 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 9 INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

STA. 648+50.00
1-24"X 104 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

STA. 658+00.00
1-24"X 104 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

989.16 988.44 987.72 987.00 986.28 985.56 984.84 984.12 983.40 982.68 982.21 982.24 982.77 983.80 985.33 987.36 989.64 991.92 994.20 996.48 998.76 1001.04 1003.32 1005.60 1007.88 1010.16 1012.44 1014.72 1017.00 1019.28

630 1 2 3 4 635 6 7 8 9 640 1 2 3 4 645 6 7 8 9 650 1 2 3 4 655 6

LEVELS ON - 41,42 39, 36, 29,30,31,32 23,24,25, 20, 5i, 59.60

FILE NAME: HDGN: 75501.DGN

MISCELLANEOUS SHEET 32

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.3

PLAN & PROFILE U.S.H. 18

USH 18 — DANE COUNTY

KEY MAP

PAVING ONLY

0 100 200 300

USH 18
C3
P.I. STA. 678+00.24
X 2,130,728.57
Y 355,228.80
Δ 90°00'00.0"
D 03°00'00.0"
T 1909.86'
L 3000.00'
R 1909.86'
S.E.= 0.059 FT/FT
R.O.= 190'

RUSSELL J. AND ROSE M. JOHNSON

REMOVE BUILDINGS PARCEL 37 (TYP.) (BY OTHERS)

ABANDON WELL (BY OTHERS)

REMOVE SEPTIC TANK (BY OTHERS)

REMOVE FOUNDATION ONLY (BY OTHERS)

SLOPE INTERCEPTS

CONSTRUCTED RETAINING WALL RW-13-18 STA. 681+35 "PB-4" TO STA. 685+25 "PB-4" (BY OTHERS)

MATCHLINE STA 659+00.00

MATCHLINE

CTH "PB"

RAMP "PB-1"

RAMP "PB-2"

RAMP "PB-3"

RAMP "PB-4"

U.S.H. 18 WB

U.S.H. 18 EB

℄ USH 18/151

STA. 676+75.00 ℄ USH 18 = STA. 150+00.00 ℄ CTH "PB"

CLASS "A" STEEL PLATE BEAM GUARD

B-13-411

B-13-412

RW-13-18

64°57'41.0"

CONCRETE BARRIER SINGLE FACED

EXCEPTION TO NET CENTERLINE LENGTH STA. 675+71.55 TO STA. 677+57.53 STRUCTURES B-13-411 AND B-13-412

STA 686+00.00

JAMES J. VAN DE GRIFT TRUST

GARY FELT

RUSSELL J. AND ROSE M. JOHNSON

NOTE:
1. STRUCTURES B-13-411 AND B-13-412 ARE NOT PART OF THIS CONTRACT.
2. SEE ALIGNMENT PLAN FOR RAMP GEOMETRY.

BEGIN SPLIT PROFILE FOR USH 18

PVC 666+50.00 WB EL 1036.08

PVC 667+25.00 WB EL 1036.08

PVI674+00.00 EB EL 1057.46

PVI675+00.00 WB 1055.74

PVT 681+50.00 EB EL 1046.58

PVT 682+75.00 WB EL 1044.68

-1.4034% ℄ CTH "PB"

+2.2800%

-0.9200%

+2.2800%

STA. 676+63.49
STRUCTURE B-13-411
2-SPAN 54" PRESTRESSED CONCRETE GIRDERS
40' CLEAR ROADWAY
SKEW 25°02' LHF
(BY OTHERS)
1550.0 VC
K = 420

1500.0 VC
K = 460

STA. 676+86.85
STRUCTURE B-13-412
2-SPAN 54" PRESTRESSED CONCRETE GIRDERS
40' CLEAR ROADWAY
SKEW 25°02' LHF
(BY OTHERS)

STA. 667+00
1-24"x106 L.F. RCCP CLASS III BY OTHERS
SKEW 25° LHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON SIDEWALL BY OTHERS

STA. 684+00
1-24"x106 L.F. RCCP CLASS III BY OTHERS
SKEW 29° RHB
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

ELEVATIONS "WB" PROFILE

ELEVATIONS "EB" PROFILE

FINISHED MAINLINE PROFILE "EB"

FINISHED MAINLINE PROFILE "WB"

MAINLINE & RAMP PAVING ONLY

BENCH MARKS

NO.	STATION	LOCATION	DESCRIPTION	ELEV.
BM 319	663+32.06	317.02 RT.	RR SPK IN S. SIDE PP # 6-8-23 ON N. SIDE CTH M 1870	1057.50
BM 320	667+81.96	70LT RT.	CHIS "+" ON C.M.C.P. AT SW. QUAD. CTH M AND CTH PB	1041.39
BM 321	671+76.62	149.12 RT.	RR SPK IN S. SIDE PP # 6-8-24 ON W. SIDE CTH M 25/6	1056.16
BM 322	677+07.38	138.52 LT.	PUNCH HOLE IN S. END CMCP UNDER EB AT JOHNSON FARM	1060.33

1070 1060 1050 1040 1030 1020 1010 1000 990

1019.28 1021.56 1023.84 1026.12 1028.40 1030.68 1032.96 1035.24 1037.52 1039.73 1041.72 1043.46 1044.97 1046.24 1047.27 1048.07 1048.62 1048.94 1049.02 1048.87 1048.48 1047.84 1046.98 1045.87 1044.53 1043.13 1041.73 1040.32

1019.28 1021.55 1023.84 1026.12 1028.40 1030.68 1032.96 1035.24 1037.49 1039.56 1041.41 1043.05 1044.48 1045.69 1046.69 1047.48 1048.05 1048.41 1048.56 1048.49 1048.21 1047.72 1047.01 1046.12 1045.20 1044.28

9 660 1 2 3 4 665 6 7 8 9 670 1 2 3 4 675 6 7 8 9 680 1 2 3 4

59.60

39, 41, 30, 23, 24, 25, 20,

FILE NAME: ROGNL12505.DGN

MSDOT CADDS

NOTE: THIS SHEET IS INCLUDED FOR ALIGNMENT & PAVING INFO. ONLY. ALL OTHER WORK IS PART OF PROJECT 1201-04-72.

KEY MAP

STATE PROJECT NUMBER 1201-04-72 78 | SHEET NO. 3.85.3

PLAN & PROFILE CTH "PB" RAMPS

USH 18 - DANE COUNTY

0 100 200 300

RUSSELL J. AND ROSE M. JOHNSON

RICHARD H. AND MARLY R. TOLLE AND SON

ERVIN AND BONNIE C. ROWE

JAMES J. VAN DE GRIFT TRUST

GARY FELT

JOHN D. ADAMS

SLOPE INTERCEPTS

MATCH LINE STA 657+00.00

MATCH LINE STA 691+00.00

STA. 146+02.19 ℄ CTH "PB" = STA. 679+04.55 ℄ "PB-4"

STA. 146+14.60 ℄ CTH "PB" = STA. 677+43.54 ℄ RAMP "PB-1"

STA. 153+41.22 ℄ CTH "PB" = STA. 677+10.94 ℄ RAMP "PB-2"

STA. 676+75.00 ℄ USH 18 = STA. 150+00.00 ℄ CTH "PB"

STA. 153+30.00 ℄ CTH "PB" = STA. 673+77.66 ℄ RAMP "PB-3"

CONSTRUCT RETAINING WALL STA. 681+35 "PB-4" TO STA. 685+25 "PB-4"

RAMP "PB-1"

RAMP "PB-2"

RAMP "PB-3"

RAMP "PB-4"

℄ CTH "PB"

℄ USH 18

℄ RAMP "PB-1"

℄ RAMP "PB-2"

℄ RAMP "PB-3"

℄ RAMP "PB-4"

CTH "M"

B-13-411

B-13-412

74°58'00.0"

95°00'00.0"

64°57'41.0"

85°00'00.0"

116°00'00.0"

OBLITERATE OLD ROAD

CAUTION

NOTE: SEE ALIGNMENT PLAN FOR RAMP GEOMETRY

FILE NAME: HDGN: 72510.DGN

LEVELS ON

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
5.05.4

PROFILE FOR RAMPS
"PB-1" AND "PB-2"

USH 18 DANE COUNTY

KEY MAP

NOTE: THIS SHEET IS FOR PROFILE INFO. ONLY. ALL OTHER WORK IS PART OF PROJECT 1201-04-78.

RAMP "PB-1" PROFILE

SPLINE LINE ELEVATIONS STA. 646+74.10 TO STA. 667+50

EXISTING GROUND LINE

FINISHED "WB" AND "EB" PROFILE

2.24%

STA. 656+00
1-24"×104' L.F. RCCP CLASS III REQ'D.
1-TYPE B MS INCET REQ'D (C/L USH 18)
1-APRON ENDWALL REQ'D.

STA. 667+00
1-36"×60' L.F. RCCP CLASS III REQ'D.
SKEW 10° LHF
2-APRON ENDWALLS REQ'D.

+2.2084%

-3.0332%

PVI 671+00.00
EL 1042.72

FINISHED "EB" PROFILE

FINISHED "WB" PROFILE

STA. 674+50
1-24"×68' L.F. RCCP CLASS III REQ'D.
SKEW 46° LHF
2-APRON ENDWALLS REQ'D.

FINISHED RAMP "PB-1" PROFILE

+1.5031%

PVT 674+50.00
EL 1035.46

700.0 VC
K = 122

ELEVATIONS ALONG "PB-1" PROFILE

991.91	994.15	996.39	998.63	1000.87	1003.11	1005.35	1007.59	1009.83	1012.07	1014.31	1016.10	1017.18	1018.61	1020.56	1022.84	1025.05	1027.26	1029.47	1031.68	1033.89	1035.95	1037.39	1037.96	1037.72	1035.67	1034.80	1032.11	1028.71	1025.20	1021.70
7	8	9	650	1	2	3	4	655	6	7	8	9	660	1	2	3	4	665	6	7	8	9	670	1	2	3	4	675	6	7

RAMP "PB-2" PROFILE

SPLINE LINE ELEVATIONS STA. 640+00 TO STA. 660+50

EXISTING GROUND LINE

FINISHED "WB" AND "EB" PROFILE

2.24%

FINISHED RAMP "PB-2" PROFILE

PVC 661+80.00
EL 1029.72

STA. 663+00
1-24"×56' L.F. RCCP CLASS IV REQ'D.
SKEW 0° LHF
1-APRON ENDWALL REQ'D. (DISCH. END)
1-SLOPED SECTION APRON ENDWALL (INLET END)

+2.318%

-2.0762%

PVC 666+30.00
EL 1041.52

FINISHED "EB" PROFILE

FINISHED "WB" PROFILE

FINISHED RAMP "PB-2" PROFILE

2.0762%

-1.5572%

+1.5481%

PVT 670+20.00
EL 1033.20

840.0 VC
K = 160

PVC 672+75.00
EL 1027.91

PVT 674+00.00
EL 1025.31

ELEVATIONS ALONG "PB-2" PROFILE

996.44	998.68	1000.92	1003.16	1005.40	1007.64	1009.88	1012.12	1014.36	1017.06	1020.05	1023.10	1026.21	1029.34	1032.05	1034.13	1035.60	1036.44	1036.66	1036.26	1035.24	1033.60	1031.5	1029.46	1027.83	1026.49	1025.5	1024.96	1024.8	1024.9	1025.1
8	9	650	1	2	3	4	655	6	7	8	9	660	1	2	3	4	665	6	7	8	9	670	1	2	3	4	675	6	7	8

FILE NAME: HDG...PSH.DGN

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
5.10.5.5

PROFILE FOR RAMPS "PB-3" AND "PB-4"

USH 16 — DANE COUNTY

KEY MAP

NOTE: THIS SHEET IS FOR PROFILE INFO. ONLY. ALL OTHER WORK IS PART OF PROJECT 1201-04-78.

RAMP "PB-4" PROFILE

SPLINE LINE ELEVATIONS
STA. 680+00 TO STA. 695+00

FINISHED "EB" PROFILE

FINISHED RAMP "PB-4" PROFILE

FINISHED "WB" PROFILE

EXISTING GROUND LINE

ELEVATIONS ALONG "PB-4" PROFILE

240.0' VC
K = 32

PVI 681+98.00
EL 1019.32

PVC 677+58.00
EL 1018.71

PVC 682+58.00
EL 1019.32

PVI 680+78.00
EL 1014.55

PVC 682+50.00
EL 1012.62

-4.0963%

+3.9636%

0.4000%

-1.4563%

+5.9631%

STA. 680+70
1-24"x82' L.F. RCCP CLASS III REQ'D.
SKEW 0° LHF
1-APRON ENDWALL REQ'D. (INSCH END)
1-SLOPED SECTION APRON ENDWALL REQ'D. (INCL. END)

STA. 685+50
2-24"x66' L.F. RCCP CLASS III REQ'D.
SKEW 0° LHF
1-TYPE 9-MS INLET REQ'D.
1-APRON ENDWALL REQ'D.

700.0' VC
K = 10

PVI 689+50.00
EL 1033.25

STA. 690+55
2-60"x55' L.F. RCCP CLASS III REQ'D.
SKEW 30° LHF
2-CONCRETE MASONRY ENDWALLS REQ'D.

1080	1070	1060	1050	1040	1030	1020	1010	1000	990	980

3	4	675	6	7	8	9	680	1	2	3	4	685	6	7	8	9	690	1	2	3	4	695	6	7	8	9	700	1	2	3
								1017.53	1016.92	1019.40	1023.28	1026.62	1029.34	1031.43	1032.90	1033.75	1033.97	1033.53	1032.44	1030.72	1028.98	1027.24	1025.50	1023.76	1022.02	1020.28				

RAMP "PB-3" PROFILE

SPLINE LINE ELEVATIONS
STA. 680+00 TO STA. 695+00

FINISHED "EB" PROFILE

FINISHED RAMP "PB-3" PROFILE

FINISHED "WB" PROFILE

EXISTING GROUND LINE

ELEVATIONS ALONG "PB-3" PROFILE

PVI 674+08.82
EL 1023.90
PVI 674+38.86
EL 1029.33

PVI 688+00.00
EL 1041.84

-0.798%

-1.2000%

+2.0798%

+0.0999%

STA. 681+58
1-24"x140' L.F. RCCP CLASS III REQ'D.
SKEW 0° LHF
2-APRON ENDWALLS REQ'D.

PVC 679+50.00
EL 1041.56

PVI 686+50.00
EL 1043.64

700.0' VC
K = 23

STA. 688+70
2-60"x55' L.F. RCCP CLASS III REQ'D.
SKEW 30° LHF
2-CONCRETE MASONRY ENDWALLS REQ'D.

1060	1050	1040	1030	1020	1010	1000	990

3	4	675	6	7	8	9	680	1	2	3	4	685	6	7	8	9	690	1	2	3	4	695	6	7	8	9
		1031.20	1033.28	1035.36	1037.44	1039.52	1041.54	1043.15	1044.30	1044.97	1045.18	1044.91	1044.18	1043.04	1041.72	1039.83	1037.89	1036.14	1034.62	1032.97	1031.20	1029.34	1027.48	1025.62				

59.60.
51.
39. 41.

LEVELS ON -

FILE NAME: MDGN:72512.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.6

PLAN & PROFILE U.S.H. 18

USH 18 DANE COUNTY

KEY MAP

NOTE:
1. STRUCTURES B-13-413 AND B-13-414 ARE NOT PART OF THIS CONTRACT
2. SEE ALIGNMENT PLAN FOR RAMP GEOMETRY.

USH 18
C3
P.I. STA. 678+00.24
X 2,130,728.57
Y 355,228.80
Δ 90°00'00.0"
D 03°00'00.0"
T 1909.86'
L 3000.00'
R 1909.86'
S.E.= 0.059 FT/FT
R.O.= 190'

STA. 135+20.76 ℞ CTH PB =
STA. 15+44.21 ℄ WHALEN ROAD
STA. 692+00.00 RAMP "PB-4" =
STA. 692+00.00 USH 18, 61.00' LT.

STA. 689+00.00 ℞ "PB-3" =
STA. 699+00.00 ℄ USH 18, 49.0' RT.

EXCEPTION NET CENTERLINE LENGTH
STA. 690+88.83 TO STA. 692+08.83
STRUCTURES B-13-413 AND B-13-414

STA. 691+52.26 ℄ USH 18 =
STA. 20+00.00 ℄ "WHALEN"

LIMITS OF USH 18 WB AUXILIARY LANE SEE DETAILS

SLOPE INTERCEPTS

PAVING ONLY

CONCRETE BARRIER SINGLE FACED

CLASS "A" STEEL PLATE BEAM GUARD

JAMES J. VAN DE GRIFT TRUST

RODNEY O. SLOTTEN

WHALEN ROAD

MATCH LINE STA. 686+00.00

MATCH LINE STA. 712+00.00

BENCH MARKS

NO.	STATION	LOCATION	DESCRIPTION	ELEV.
BM			RR SPK IN N SIDE 22" OAK AT	1004.83
BM 18	687+65.32	198.16 RT.	GATE IN N S FENCE LINE	
BM			60d SPK IN S SIDE PP #1782635.2ND	
BM 19	691+62.04	82.67 LT.	POLE E. OF CTH PB ON WHALEN RD.	1007.73
BM 123	15+69.2 WHALEN	37.4 RT.	CHIS "+" C.M.CP IN SE QUAD CTH PB AND WHALEN RD.	998.65

"WB" AND "EB" PROFILE

ELEVATIONS "WB" PROFILE

ELEVATIONS "EB" PROFILE

FINISHED MAINLINE PROFILE "EB"

FINISHED MAINLINE PROFILE "WB"

800.0' VC
K = 81

-1.4034%
-0.9200%
-1.7800%
-1.9000%

STA. 690+50
1-24"x150 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

200.0' VC
K = 53

STA. 689+09
2-60"x554 L.F. RCCP CLASS V BY OTHERS
SKEW 20° LHF
2-CONCRETE MASONARY ENDWALLS BY OTHERS

STA. 691+54.29
STRUCTURE B-13-413
1-SPAN 70' PRESTRESSED CONCRETE GIRDER
50'-54' CLEAR ROADWAY
SKEW 4°38' LHF
(BY OTHERS)

STA. 691+54.29
STRUCTURE B-13-414
1-SPAN 70' PRESTRESSED CONCRETE GIRDER
50'-54' CLEAR ROADWAY
SKEW 4°38' LHF
(BY OTHERS)

STA. 696+40
1-48"x336 L.F. RCCP CLASS III BY OTHERS
SKEW 0° LHF
2-APRON ENDWALLS BY OTHERS

STA. 700+00
1-24"x85 L.F. RCCP CLASS III BY OTHERS
1-24"x56 L.F. RCCP CLASS III BY OTHERS
SKEW 0° LHF
2-TYPE 8-MS INLETS BY OTHERS
1-APRON ENDWALL BY OTHERS

STA. 708+00
1-24"x78 L.F. RCCP CLASS III BY OTHERS
1-24"x158 L.F. RCCP CLASS III BY OTHERS
SKEW 0° LHF
2-TYPE 8-MS INLETS BY OTHERS
1-APRON ENDWALL BY OTHERS

STA. 719+50
1-48"x196 L.F. RCCP CLASS III BY OTHERS
SKEW 15° LHF
2-APRON ENDWALLS BY OTHERS

FILE NAME: HUGN:12506.DGN

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO 5.7

PLAN & PROFILE U.S.H. 18

USH 18 DANE COUNTY

PAVING ONLY

CTH "PB"

SLOPE INTERCEPTS

BUILDINGS REMOVED BY OTHERS

REMOVED UNDERGROUD TANK BY OTHERS

86°19'16.5"

B-13-416

U.S.H. 18 WB

U.S.H. 18 EB

℄ USH 18

CONCRETE BARRIER SINGLE FACED

STA 712+00.00 MATCHLINE

CLASS "A" STEEL BEAM GUARD

B-13-415

℄ SLOTTEN DRIVE

SLOTTEN DRIVE

GRANDVIEW ROAD

STA. 717+85.94 ℄ USH 18
STA. 20+00.00 ℄ "GRANDVIEW"

EXCEPTION TO NET CENTERLINE LENGTH
STA. 717+31.42 TO STA. 718+33.26
STRUCTURES B-13-415 AND B-13-416

RODNEY O. SLOTTEN

AIR PARK ASSOCIATES, INC.

USH 18 C101

P.I. STA. 736+84.25
X 2,130,260.98
Y 361,915.60
Δ 65°45'00.0"
D 03°00'00.0"
T 1234.36'
L 2191.67'
R 1909.86'
S.E.= 0.059 FT/FT
R.O.= 190°

CONCRETE BARRIER SINGLE FACED

C-13-117

RODNEY O. SLOTTEN

SLOPE INTERCEPTS

STA 737+00.00 MATCHLINE

DANE COUNTY

NOTE:
1. STRUCTURES B-13-416, B-13-415 AND C-13-117 ARE NOT PART OF THIS CONTRACT.

"WB" AND "EB" PROFILE

ELEVATIONS "WB" PROFILE

ELEVATIONS "EB" PROFILE

FINISHED MAINLINE PROFILE "EB"

FINISHED MAINLINE PROFILE "WB"

STA. 717+84.34
STRUCTURE B-13-416
1-SPAN 54" PRESTRESSED CONCRETE GIRDER
40' CLEAR ROADWAY
SKEW 3°41' LHF
(BY OTHERS)

STA. 717+87.54
STRUCTURE B-13-416
1-SPAN 54" PRESTRESSED CONCRETE GIRDER
40' CLEAR ROADWAY
SKEW 3°41' LHF
(BY OTHERS)

STA. 717+12
1-24"x144 L.F. RCCP CLASS III BY OTHERS
SKEW 0° LHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

STA. 722+00
1-24"x128 L.F. RCCP CLASS III BY OTHERS
SKEW 0° LHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALLS BY OTHERS

STA. 729+50
1-24"x124 L.F. RCCP CLASS III BY OTHERS
SKEW 180° LHF
1-TYPE 9-MS INLET BY OTHERS

STA. 730+74.00
STRUCTURE C-13-117 BY OTHERS
CELL BOX CULVERT
SKEW 18° RHF
1-TYPE 8-MS INLET BY OTHERS

1-9'X5' BOX CULVERT

C-13-117

PVC 724+75.00 EB EL 972.98

PVT 727+75.00 EB EL 967.28

PVT 730+75.00 EB EL 969.69

PVC 726+00.00 WB EL 972.22

PVT 728+00.00 WB EL 966.88

PVT 731+00.00 WB EL 968.75

600.0 VC k = 221

600.0 VC k = 249

-1.9000%

-1.7800%

0.4033%

0.6230%

LIMITS OF MARSH EXCAVATION

MARSH EXCAVATION LINE

BENCH MARKS

NO.	STATION	LOCATION	DESCRIPTION	ELEV.
BM 325	716+45±	255'± LT.	CHIS "+" ON E END C.M.C.P. AT SE QUAD GRANDVIEW AND PB	965.60
BM B-72	718+04	292.6 LT.	TOP OF MONUMENT, S¼ COR., SEC. 14	957.40
BM BA 22	718+05.34	52.22 LT.	CHIS "□" ON NE COR. BRIDGE E OF CTH PB ON GRANDVIEW	962.58
BM BA 23			60d SPK IN S SIDE WINDBREAK POLE NORTH OF AIRPORT	960.04
BM 326	729+77.6	307.7 LT.	CHIS "□" ON SW COR. BRIDGE ON CTH PB NORTH OF AIRPORT	955.38
BM BA 24			RR SPK IN N SIDE 10" BOX ELDER ON E-W FENCE N OF AIRPORT	958.74
BM 327	735+89	460.5 LT.	CHIS "□" ON NE COR. BRIDGE ON CTH PB JUST S OF BIKE TRAIL	953.78
BM 13	732+37.63	19.75 LT.	USGS DISC ON S END BOX CULVERT AT HWY 51 AND CTH PB	956.40

LEVELS ON ▪

FILE NAME: HDGN: T2507.DGN

WSDOT FORM 1800 (REV. 4)

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.9

PLAN & PROFILE U.S.H. 18

USH 18 DANE COUNTY

KEY MAP

USH 18 C101

P.I. STA. 736+84.25
X 2,130,260.98
Y 361,915.60
Δ 65°45'00.0"
D 03°00'00.0"
T 1234.36'
L 2191.67'
R 1909.86'
S.E.= 0.059 FT/FT
R.O.= 190'

USH 18 C105

P.I. STA. 751+71.22
X 2,133,576.38
Y 363,697.02
Δ 07°20'50.0"
D 00°15'00.0"
T 1371.47'
L 2938.91'
R 22,918.31'
S.E.=0.020 FT/FT
R.O.= N.A.

DANE COUNTY
MILITARY RIDGE RECREATION TRAIL
℄ MILITARY RIDGE RECREATION TRAIL
RAMP "E-2"
RAMP "E-1"
℄ USH 18
U.S.H. 18 WB
U.S.H. 18 EB
N 61°45'00.0" E
ABANDON WELL
CLASS "A" STEEL PLATE BEAM GUARD
STA. 744+93.59 ℄ USH 18 = STA. 743+34.90 ℄ RAMP "E-1"
STA. 744+56.21 ℄ USH 18 = STA. 14+18.09 ℄ "MRRT"
EXCEPTION TO NET CENTERLINE LENGTH STA. 744+30.29 TO STA. 745+90.63 STRUCTURES B-13-417 & B-13-418
END CONCRETE BARRIER SINGLE FACED
CONCRETE BARRIER SINGLE FACED
EXCEPTION TO NET CENTERLINE LENGTH STA. 736+11.48 TO STA. 738+52.52 STRUCTURE B-13-425
MATCH LINE STA. 760+00.00
B-13-417
B-13-418
B-13-425
STA. 737+00
PC524 8°52'41"
PT101 746+41.95
PC524 13+36.78
PC524 748+20.24
22°18'02.5
120°11'27.6"
PT521 754+88.39
PC522 751+09.51
PC525
PT526 755+96.07
PC526
PC105 754+43.84
PT105 755+99.74
C268
C267
C524
C525
C521
C526
FO
FENCE

NOTE:
1. STRUCTURES B-13-417, B-13-418 & B-13-425 ARE NOT PART OF THIS CONTRACT.

0 100 200 300
PAVING ONLY

BENCH MARKS

NO.	STATION	LOCATION	DESCRIPTION	ELEV.
BM 34	748+56.85	552.27 LT.	CHIS "□" ON S.W. COR. BOX CULVERT UNDER HWY. 151, E. OF CTH "B"	962.52
BM 341	759+30	362.0 RT.	RR SPK. IN SE COR. TIMBER ABUT. OF BR. ON BIKE TRAIL E. OF OAKS	954.65
BM 340	747+74.78	340.54 RT.	RR SPK. IN SE SIDE 1 FT. IN 10" OAK ON N. SIDE BIKE TRAIL W. OF OAKS	952.95

ELEVATIONS "WB" PROFILE
ELEVATIONS "EB" PROFILE
STA. 742+30.00, 190' RT. TO STA. 743+00.00, 190' RT.
2-18"X40 L.F. RCCP CLASS III BY OTHERS
4-APRON ENDWALLS BY OTHERS
STA. 742+70.00, 210' RT. TO STA. 743+60.00, 210' RT.
2-18"X70 L.F. RCCP CLASS III BY OTHERS
4-APRON ENDWALLS BY OTHERS
STA. 738+52
STRUCTURE B-13-425 BY OTHERS
3 CELL BOX CULVERT
SKEW 42° RHF
1-TYPE 8-MS INLET BY OTHERS
3-9'X8' BOX CULVERT
FINISHED MAINLINE PROFILE "EB"
FINISHED MAINLINE PROFILE "WB"
PVC 740+75.00 EB EL 977.72
PVC 742+50.00 WB EL 975.91
PVI 745+75.00 EB EL 981.74
PVI 746+25.00 WB EL 978.25
STA. 745+11.99
STRUCTURE B-13-417
2-SPAN 45" PRESTRESSED CONCRETE GIRDER
40' CLEAR ROADWAY
SKEW 31°21'35" RHF
(BY OTHERS)
STA. 744+76.34
STRUCTURE B-13-418
2-SPAN 45" PRESTRESSED CONCRETE GIRDER
40' CLEAR ROADWAY
SKEW 30°27'42" RHF
(BY OTHERS)
1000.0 VC
K = 446
750.0 VC
K = 422
PVT 750+15.00 EB EL 974.56
PVT 750+30.00 WB EL 973.93
PVC 754+00.00 EB EL 969.33
PVC 754+00.00 WB EL 969.90
400.0 VC
K = 242
PVT 756+00.00 EB EL 967.03
PVT 756+00.00 WB EL 967.03
PVT 758+00.00 EB EL 968.03
PVT 758+00.00 WB EL 968.03
400.0 VC
K = 206
END SPLIT PROFILE FOR USH 18
+0.8033%
+0.6230%
-1.4355%
-1.1512%
+0.5000%
-1.4366%
STA. 751+20.00
1-24"X100 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS
STA. 756+79
1-24"X104 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

972.49 973.11 973.73 974.36 974.98 975.60 976.20 976.58 976.73 976.65 976.32 975.76 974.97 973.93 972.78 971.63 970.18 969.33 968.38 967.85 967.73 968.03 968.53 969.03
974.71 975.51 976.32 977.12 977.92 978.55 978.96 979.15 979.12 978.86 978.37 977.66 976.73 975.58 974.20 972.77 971.33 969.90 968.70 967.99 967.77 968.04 968.53 969.03
740 745 750 755 760
1010 1000 990 980 970 960 950 940

LEVELS ON 39.41, 29.30, 23.24,25, 20, 59.60, 5.52

FILE NAME: HDGN: 7508.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.9

PLAN & PROFILE U.S.H. 18

USH 18 DANE COUNTY

KEY MAP

0 100 200 300

SHARON L. NESBITT

NESBITT ROAD C258

P.I. STA. 27+25.34
X 2,132,705.09
Y 363,544.36
Δ 44°10'06.9"
D 10°00'00.0"
T 232.47'
L 441.69'
R 572.96'
S.E.= 0.059 FT/FT
R.O.= 125'

USH 18 C105

P.I. STA. 771+71.22
X 2,133,576.38
Y 363,697.02
Δ 07°20'50.2"
D 00°15'00.0"
T 1471.47'
L 2938.91'
R 22,918.31'
S.E.=0.020 FT/FT
R.O.= N/A

NESBITT RD.

STA. 770+25.00 ℄ RAMP "E-2" = STA. 770+25.00 ℄ USH 18, 49.0' LT.

STA. 774+75.00 ℄ RAMP "E-1" = STA. 774+75.00 ℄ USH 18, 49.0' RT.

RAMP "E-2" C484

RAMP "E-1" C520

U.S.H. 18 WB C469

U.S.H. 18 EB C105

SLOPE INTERCEPT

B-13-426

STA. 778+95
3-CELL BOX CULVERT
SKEW 35° RHF

STA. 786+00.00

MATCH LINE

SLOPE INTERCEPT

STRUCTURE B-13-426 REQ'D.
STA. 778+76.69 TO STA. 779+13.31
SKEW 35° L.H.F.

SHARON L. NESBITT

NOTE:
1. SEE ALIGNMENT PLAN FOR RAMP GEOMETRY

"WB" AND "EB" PROFILE

EXISTING GROUND LINE (PRIOR TO GRADING BY OTHERS)

FINISHED MAINLINE PROFILE

+0.5000% +0.5000% +0.5000% -0.3750% -0.3750%

PVC 768+00.00 EL 973.05

PVT 770+00.00 EL 972.28

PVC 766+00.00 EL 972.03

400.0 VC k = 457

600' VC K=890

PVC 784+00.00 EL 967.03

STA. 763+00
1-24"x138 L.F. RCCP CLASS III BY OTHERS
SKEW 0° RHF
1-TYPE 8-MS INLET BY OTHERS
1-APRON ENDWALL BY OTHERS

8-MS INLET AND SOUTH HALF OF CULVERT PLACED UNDER PREVIOUS GRADING CONTRACT

LIMITS OF MARSH EXCAVATION (BY OTHERS UNDER PREVIOUS GRADING CONTRACT)

MARSH EXCAVATION LINE

P102
STA. 773+30
1-36"x118 L.F. RCCP CLASS III REQ'D.
SKEW 12° LHF
2-APRON ENDWALLS REQ'D.
8-MS INLET (BY OTHERS)

STA. 778+50
REMOVE STRUCTURE B-13-57
SINGLE-SPAN STEEL GRIDER
36.7' OVERALL LENGTH
35.0' OVERALL WIDTH

STA. 779+10
REMOVE STRUCTURE B-13-68
SINGLE-SPAN STEEL GRIDER
36.7' OVERALL LENGTH
35.0' OVERALL WIDTH

STA. 778+95
STRUCTURE B-13-426 REQ'D
3-CELL 9'0"x 20'0" CONCRETE
BOX CULVERT
1-TYPE 8-MS INLET REQ'D.

B-13-426

3-9'x8' BOX CULVERTS

EXISTING GROUND LINE

STA. 779+70 RT. TO STA. 780+60 RT.
1-30"x 90 L.F. CP CLASS III BY OTHERS
2-APRON ENDWALLS BY OTHERS
INV. EL. EACH END 958.0

P101
STA. 779+00.
1-TYPE 8-MS INLET REQ'D. (PART OF B-13-426)

LIMITS OF MARSH EXCAVATION

P100
STA. 785+25
1-24"x 92 L.F. RCCP CLASS III REQ'D
SKEW 0° RHF
1-TYPE 9 INLET REQ'D.
1-APRON ENDWALL REQ'D.

ELEVATIONS "EB" AND "WB" PROFILE

BENCH MARKS

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
BM 15	760+62.40	317.9' LT.	HOR. CONTROL RT. 308 - AL. CAP IN CONCRETE IN MEDIAN RR	991.27
BM BA125			RR SPK. IN W SIDE TWN 14 POPLARS ±500' S OF C.P. 309 AT E/W000S	978.00
BM 16	765+92.06	178.56 LT.	CHIS "□" ON SE COR. MEDIAN CATCH BASIN, HWY. 151 AT NESBITT RD.	980.81
BM 17	778+49.19	62.46 RT.	CHIS "□" ON SW WW OF S BR. HWY. 151 EAST OF NESBITT RD.	966.87

LEVELS ON 4, 42, 39, 28, 30, 31, 32, 23, 24, 25, 20

FILE NAME: HDGN:72509.DGN

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.10

PLAN & PROFILE U.S.H. 18

USH 15 DANE COUNTY

KEY MAP

PAVING ONLY

MAINTENANCE CROSSOVER
STA. 798+00.00 TO REMAIN

℄ USH 18

STA. 786+00.00 MATCH LINE

U.S.H. 18 (15)

USH 18 WB

USH 18 EB

STA. 763+00 - STA. 798+00
EARTHWORK SUMMARY
UNCL. 17,000 C.Y.
FILL 34,000 C.Y.
MARSH 3,000 C.Y.
(RAMP E1 / E2 INCLUDED
STA. 763+00.00 TO STA. 774+75.00)

END PROJECT 1201-04-78
STA. 798+00.00

PROJECT 1201-05-71
TO BE CONSTRUCTED BY OTHERS

600.0 VC
R = 890

PVI STA. 790+00.00
EL 966.80

PVI STA. 787+00.00
EL 965.90

PVI STA. 805+50.00
EL 971.43

-0.3750%

+0.2989%

MATCH EXISTING
STA. 798+00.00

END EARTHWORK
STA. 798+00.00

STA. 789+00.00
1-30" X 16 L.F. AND 1-30" X 14 L.F.
CORRUGATED STEEL CULVERT PIPE REQ'D.
2-APRON ENDWALLS REQ'D.

LEVELS ON - 41,42, 39, 29,30,31,32, 23,24,25, 20, 59.60, 51.52

1010 1000 990 980 970 960 950 940 930

966.50 966.41 966.42 966.55 966.80 967.10 967.39 967.69 967.99 968.29 968.53 968.83 969.9 969.49 969.79 970.08 970.38 970.68 970.98 971.28

6 7 8 9 790 1 2 3 4 795 6 7 8 9 800 1 2 3 4 5

FILE NAME: HDGN: 72576.DGN

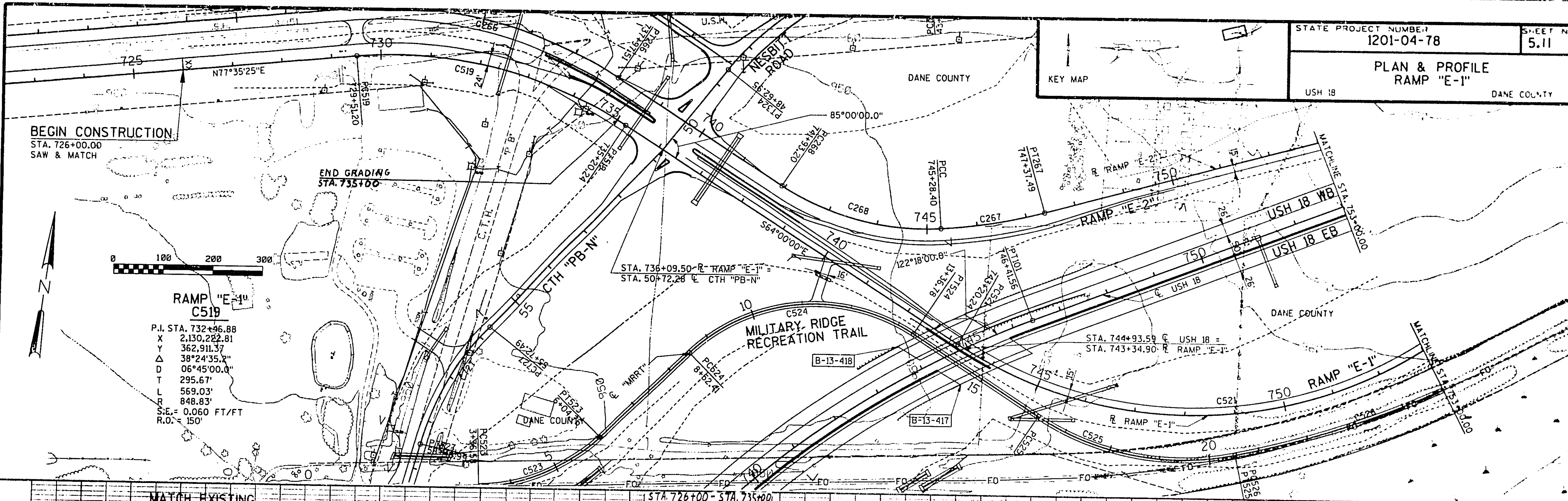
STATE PROJECT NUMBER 1201-04-78

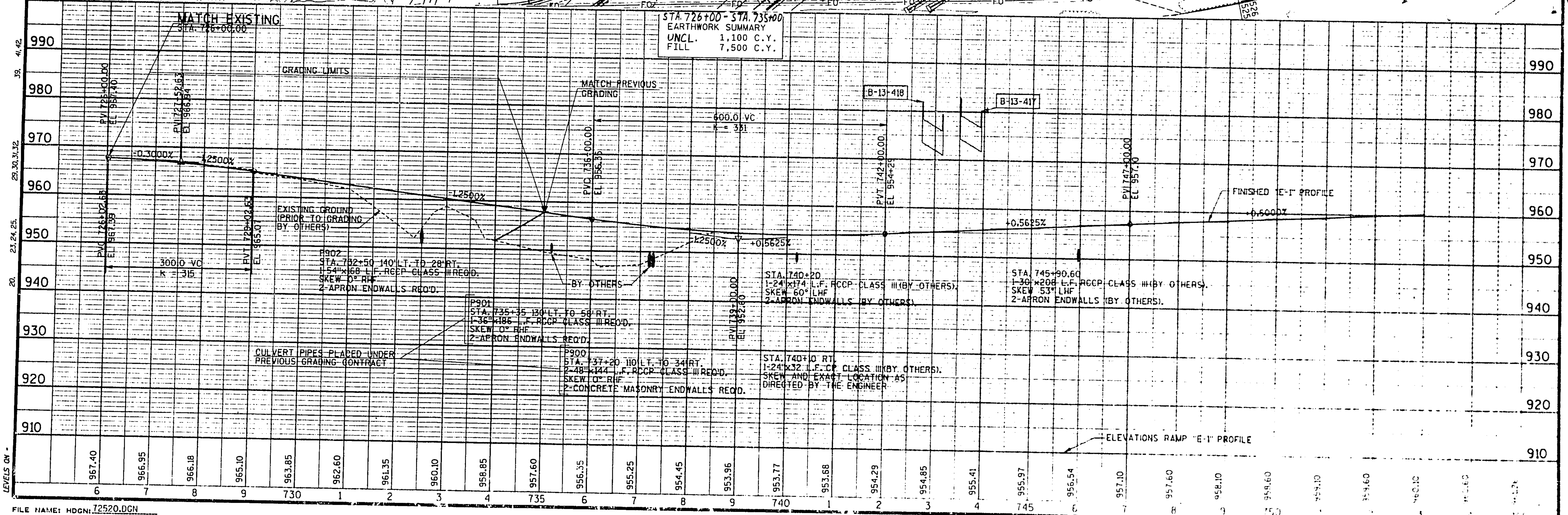
SHEET NO. 5.11

PLAN & PROFILE RAMP "E-1"

USH 18 DANE COUNTY

KEY MAP





FILE NAME: HDGN: 72520.DGN

KEY MAP

STATE PROJECT NUMBER 1201-04-78 | SHEET NO 5.12

PLAN & PROFILE RAMP "E-1"

USH 18 — DANE COUNTY

EXISTING USH 18 WB

EXISTING USH 18 EB

NESBITT ROAD

DANE COUNTY

℄ RAMP "E-2"

RAMP "E-2"

STA. 770+25.00 ℞ RAMP "E-2"
STA. 770+25.00 ℄ USH 18, 49' LT.

PC484 755+94.43

PC105 756+99.74

PCC 764+26.91

PT469 770+25.00

C469

C105

C484

C520

USH 18 WB

USH 18 EB ℄ USH 18

MATCHLINE STA. 753+00

N 61°45'00.0" E

RAMP "E-1"

C522

PT522 757+09.61

PT521 754+68.39

PT622 762+26.27

PC520

℞ RAMP "E-1"

CLASS "A" STEEL PLATE BEAM GUARD

INTERLOCKING RETAINING WALL (BY OTHERS)

SHARON L. NESBITT

END CONSTRUCTION
STA. 774+75.00 ℞ RAMP "E-1" =
STA. 774+75.00 ℄ USH 18, 49' RT.

NOTE:
SEE ALIGNMENT PLAN FOR RAMP GEOMETRY

0 100 200 300

59,60,
51,52

42, 39, 29,30,31,32, 23,24,25, 20,

990 980 970 960 950 940 930 920 910

20000 VC
K = 315

PVC 754+00.00
960.80

PVT 756+00.00
EL 962.23

PVI 755+00.00
EL 961.10

+0.5000%

+1.1333%

+1.1333%

FINISHED "E-1" PROFILE

GRADING LIMITS

EXISTING GROUND LINE

PVI 774+75.00
EL 970.33

STA. 763+00
1-24"X38' L.F. RCCP CLASS III REQ'D (BY OTHERS)
SKEW 0°RHF
1-TYPE 8 INLET (BY OTHERS)
1-APRON ENDWALL (BY OTHERS)

SPLINE LINE ELEVATIONS
STA. 761+00 TO STA. 772+00

ELEVATIONS RAMP "E-1" PROFILE

960.10	960.60	961.26	962.23	963.37	964.50	965.63	966.77	967.90	968.91	969.88	970.60	971.14	971.68	972.10	972.31	972.28	972.04	971.68	971.12	970.96	970.60		
3	4	755	6	7	8	9	760	1	2	3	4	765	6	7	8	9	770	1					

LEVELS ON

FILE NAME: HDGN: 78521.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.13

PLAN & PROFILE
RAMP "E-2"

USH 18 DANE COUNTY

KEY MAP

0 100 200 300

RAMP "E-2"
C266
P.I. STA. 735+24.15
X 2,130,194.22
Y 363,005.42
Δ 38°24'35.2"
D 06°45'00.0"
T 295.67'
L 569.03'
R 848.83'
S.E.= 0.060 FT/FT
D.O. = 150'

BEGIN CONSTRUCTION
STA. 729+00
SAW AND MATCH

END GRADING
STA. 738+50.00

CONCRETE CURB & GUTTER, 30-INCH, TYPE J

LOCAL ROAD
℄ LOCAL ROAD
NESBITT ROAD
℄ NESBITT ROAD
DANE COUNTY
U.S.H. 18
℄ USH 18
USH 18 WB
USH 18 EB
RAMP "E-2"
RAMP "E-1"
℄ RAMP "E-2"
℄ RAMP "E-1"
CTH "PB-N"
℄ CTH "PB-N"
"MRRT"
℄ "MRRT"
"P" "B"
MATCH LINE STA. 750+00.00
N 67°37'40.9" E
N 61°45'00.0" E
85°00'00.0"
STA. 739+60.00 ℄ RAMP "E-2" = STA. 50+00.00 ℄ NESBITT ROAD

C519 C266 C267 C268 C524 C525 C526 C527 C528 C529 C530 C531 C532 C533 C534 C535 C536 C537 C538 C539 C540 C541 C542 C543 C544 C545 C546 C547 C548 C549 C550 C551 C552 C553 C554 C555 C556 C557 C558 C559 C560 C561 C562 C563 C564 C565 C566 C567 C568 C569 C570 C571 C572 C573 C574 C575 C576 C577 C578 C579 C580 C581 C582 C583 C584 C585 C586 C587 C588 C589 C590 C591 C592 C593 C594 C595 C596 C597 C598 C599 C600 C601 C602 C603 C604 C605 C606 C607 C608 C609 C610 C611 C612 C613 C614 C615 C616 C617 C618 C619 C620 C621 C622 C623 C624 C625 C626 C627 C628 C629 C630 C631 C632 C633 C634 C635 C636 C637 C638 C639 C640 C641 C642 C643 C644 C645 C646 C647 C648 C649 C650 C651 C652 C653 C654 C655 C656 C657 C658 C659 C660 C661 C662 C663 C664 C665 C666 C667 C668 C669 C670 C671 C672 C673 C674 C675 C676 C677 C678 C679 C680 C681 C682 C683 C684 C685 C686 C687 C688 C689 C690 C691 C692 C693 C694 C695 C696 C697 C698 C699 C700 C701 C702 C703 C704 C705 C706 C707 C708 C709 C710 C711 C712 C713 C714 C715 C716 C717 C718 C719 C720 C721 C722 C723 C724 C725 C726 C727 C728 C729 C730 C731 C732 C733 C734 C735 C736 C737 C738 C739 C740 C741 C742 C743 C744 C745 C746 C747 C748 C749 C750 C751 C752 C753 C754 C755 C756 C757 C758 C759 C760 C761 C762 C763 C764 C765 C766 C767 C768 C769 C770 C771 C772 C773 C774 C775 C776 C777 C778 C779 C780 C781 C782 C783 C784 C785 C786 C787 C788 C789 C790 C791 C792 C793 C794 C795 C796 C797 C798 C799 C800 C801 C802 C803 C804 C805 C806 C807 C808 C809 C810 C811 C812 C813 C814 C815 C816 C817 C818 C819 C820 C821 C822 C823 C824 C825 C826 C827 C828 C829 C830 C831 C832 C833 C834 C835 C836 C837 C838 C839 C840 C841 C842 C843 C844 C845 C846 C847 C848 C849 C850 C851 C852 C853 C854 C855 C856 C857 C858 C859 C860 C861 C862 C863 C864 C865 C866 C867 C868 C869 C870 C871 C872 C873 C874 C875 C876 C877 C878 C879 C880 C881 C882 C883 C884 C885 C886 C887 C888 C889 C890 C891 C892 C893 C894 C895 C896 C897 C898 C899 C900 C901 C902 C903 C904 C905 C906 C907 C908 C909 C910 C911 C912 C913 C914 C915 C916 C917 C918 C919 C920 C921 C922 C923 C924 C925 C926 C927 C928 C929 C930 C931 C932 C933 C934 C935 C936 C937 C938 C939 C940 C941 C942 C943 C944 C945 C946 C947 C948 C949 C950 C951 C952 C953 C954 C955 C956 C957 C958 C959 C960 C961 C962 C963 C964 C965 C966 C967 C968 C969 C970 C971 C972 C973 C974 C975 C976 C977 C978 C979 C980 C981 C982 C983 C984 C985 C986 C987 C988 C989 C990 C991 C992 C993 C994 C995 C996 C997 C998 C999 C1000

STA. 729+00 – STA. 738+50
EARTHWORK SUMMARY
UNCL. 1,300 C.Y.
FILL 4,200 C.Y.

GRADING LIMITS

PVI 729+00.00 EL 967.80
PVI 733+50.00 EL 963.15
PVC 730+25.00 EL 968.47
PVC 737+25.00 EL 960.81
PVI 738+75.00 EL 958.22
PVC 740+50.00 EL 955.98
PVI 738+00.00 EL 959.18
PVI 745+50.00 EL 955.77
PVI 743+00.00 EL 952.78

+0.3000% 2.2156% -1.2800% +1.1800%
650.0 VC K = 258
600.0 VC K = 203

P902
STA. 735+60
54"X168 L.F. RCCP CLASS III REQ'D.
SKEW 0° RHF
2-APRON ENDWALLS

P901
STA. 738+85
72"X118 L.F. RCCP CLASS III REQ'D.
SKEW 0° RHF
2-APRON ENDWALLS REQ'D.

P900
STA. 740+60
2-48"X144 L.F. RCCP CLASS III REQ'D.
SKEW 0° RHF
2-CONCRETE MASONRY ENDWALLS REQ'D.

BY OTHERS

MATCH EXISTING
STA. 729+00

CULVERTS PLACED UNDER PREVIOUS GRADING CONTRACT

EXISTING GROUND LINE (PRIOR TO GRADING)

FINISHED RAMP "E-2" PROFILE

ELEVATIONS RAMP "E-2" PROFILE

966.62 967.80 968.10 968.29 968.11 967.54 966.58 965.23 963.50 961.40 959.36 957.80 956.62 955.40 954.61 954.32 954.51 955.20 956.32 957.50 958.68 959.86 961.04

8 9 730 1 2 3 4 735 6 7 8 9 740 1 2 3 4 745 6 7 8 9 750

LEVELS ON - 59.60 51.52 41.42 39. 29.30.31.32 23.24.25. 20.

FILE NAME: HDGN: T8522.DGN

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.14

PLAN & PROFILE RAMP "E-2" & FENCING

USH 18 DANE COUNTY

KEY MAP

0 100 200 300

N

STA. 769+17.30
223.45' LT.

END CONSTRUCTION
STA. 770+25.00 ℄ RAMP "E-2"
STA. 770+25.00 ℄ USH 18, 49' LT.

SHARON L. NESBITT

END WOVEN WIRE FENCE
MATCH EXISTING
STA. 774+77.48, 144.42 LT.

MATCH LINE STA. 750+90.00

RAMP "E-2"

R RAMP "E-2"

PC484 755+54.43

PC105 756+99.54

PC0 764+26.97

PT469 770+25.00

N 61°45'00.0" E

℄ USH 18

USH 18 WB

USH 18 EB

C484

C469

C105

C520

C522

PT521 754+68.39

PT522 767+26.27

PC520

R RAMP "E-1"

DANE COUNTY

RAMP "E-1"

PC502 751+00.00

PT526 25+99.0

℄ "MRRT"

MILITARY RIDGE RECREATION TRAIL

C526

FO

PT520 774+75.00

STA. 774+75.00 ℄ RAMP "E-1"
STA. 774+75 ℄ USH 18, 49' RT.

B-13-426

SHARON L. NESBITT

59.60

59.52

39, 41

29,30,31,32

23,24,25

20

LEVELS ON

PVI STA. 752+00.00
EL. 963.40

PVI STA. 770+25.00
ELEV. 972.13

+1.1800% +0.8277

PVC STA. 750+00.00
EL. 962.22

PVT STA. 753+00.00
EL. 964.03

200.0 VC
K = 362

FINISHED "E-2" PROFILE

SPLINE LINE ELEVATIONS
STA. 748+50 TO STA. 770+25

ELEVATIONS RAMP "E-2" PROFILE

NOTE:
GRADING COMPLETED UNDER PREVIOUS CONTRACT

	750	1	2	3	4	755	6	7	8	9	760	1	2	3	4	765	6	7	8	9	770	1
	961.04	962.22	963.26	964.03	964.65	965.28	965.91	966.54	967.17	967.80	968.44	963.04	969.63	970.21	970.77	971.32	971.86	972.28	972.49	972.46	972.22	

FILE NAME: HDGN: 0923.DGN

MSDOT CADDS SHEET

STATE PROJECT NUMBER
1201-04-78

SHEET NO.
5.15

PLAN & PROFILE
NESBITT ROAD

USH 18 — DANE COUNTY

KEY MAP

0 100 200 300

OBLITERATE OLD ROAD

STA. 764+17.30
223.45' LT.

STA. 24+88.95
103' LT., NESBITT RD.

STA. 29+30.67
103' LT., NESBITT RD.

STA. 43+94.56
103' LT., NESBITT RD.

SHARON L. NESBITT, TTAL

24' PAVED

C258

P.I. 29+30.67

S 77°50'19.9" W

℄ NESBITT ROAD

NESBITT ROAD

CONSTRUCT DRIVEWAY STA. 38+00.00
SEE NESBITT CROSS SECTIONS

MATCH EXISTING

MATCHLINE STA. 44+50.00

DANE COUNTY

BEGIN CONSTRUCTION
STA. 19+00.00 SAW & MATCH

NESBITT ROAD
C258

P.I. STA. 27+09.82
X 2,132,705.09
Y 363,544.36
Δ 44°10'06.9"
D 10°00'00.0"
T 232.47'
L 441.69'
R 572.96'
S.E.= 0.059 FT/FT
D.O. = 125'

NESBITT ROAD

FINISHED NESBITT PROFILE

EXISTING GROUND LINE

PVI 15+00.00 EL 965.80
PVC 13+25.00 EL 970.60
300.0 VC K = 80
PVI 20+15.00 EL 971.30
PVT 22+25.00 EL 968.00
PVC 23+26.00 EL 982.51
350.0 VC K = 91
PVI 25+00.00 EL 980.53
PVT 28+75.00 EL 991.79
PVC 32+00.00 EL 995.54
800.0 VC K = 144
PVI 36+00.00 EL 998.48
PVC 40+00.00 EL 979.17
PVI 40+00.00 EL 979.17
100.0 VC K = 136
PVT 44+00.00 EL 983.96
PVC 44+85.00 EL 984.63
PVI 42+00.00 EL 969.58

+0.8000%
+0.7200%
+4.5462%
-4.8200%
-1.8831%

STA. 37+86.00, 35' RT. TO
STA. 38+24.00, 35' RT.
1-24" X 38' L.F. CP REQ'D.
2-APRON ENDWALLS REQ'D.

970.95 973.31 976.92 981.43 985.67 988.86 990.94 991.97 992.69 993.41 994.13 994.85 995.57 995.94 995.62 994.61 992.91 990.51 987.42 983.64 979.17 974.72 971.00 968.01 965.76 963.88

FILE NAME: HDGN: 78518.DGN

WISDOT CADDS SHEET 42

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.10

PLAN & PROFILE
NESBITT RD., CTH "PB" & LOCAL RD. & FENCING

USH 18 DANE COUNTY

KEY MAP

0 100 200 300

RAMP "E-2"

RAMP "E-1"

"MRRT"

BEGIN WOVEN WIRE FENCE STA. 48+50.00, 103' LT. NESBITT ROAD

PC268 741+93.20

S64°00'00.0"E

STA. 739+50.00 RAMP "E-2" = STA. 50+00.00 NESBITT ROAD = STA. 50+00.00 CTH "PB"

STA. 736+09.50 RAMP "E-1" = STA. 50+72.27 CTH "PB"

PT523 736+04.75

PC524 736+46.57

S 08°21'04.0" W

PC722 736+72.69

PT324 48+52.35

C324 R = 572.96' L = 276.50' T = 141.00' D = 10°00'00.0" STA. 44+50

MATCH LINE

NESBITT ROAD

S36°00'00.0"W

80°00'00.0"

CTH "PB"

PT518 735+20.24

85°00'00.0"

END CONSTRUCTION STA. 59+90 ASSUMED TO BE AT END OF STRUCTURE

STA. 48+50.00 NESBITT ROAD = STA. 20+00.00 LOCAL ROAD

S63°00'00.0"E

PT266 737+97.51

PT380 17+99.18

OBLITERATE OLD ROAD

REMOVE CURB & GUTTER

C380 R = 318.31' L = 375.56' T = 213.09' D = 18°00'00.0" PC380 12+62.22

BEGIN CONSTRUCTION STA. 12+00.00 LOCAL ROAD SAW & MATCH

S 04°36'00.0" W

LOCAL ROAD

PT518 734+51.20

CTH "PB"/NESBITT ROAD

C727

P.I. STA. 58+44.97
X 2,130,274.76
Y 362,338.00
Δ 27°39'00.0"
D 10°00'00.0"
T 141.00'
L 276.50'
R 572.96'
S.E.= 0.040 FT/FT
D.O. = 125'

C324

P.I. STA. 46+42.73
X 2,130,804.36
Y 363,134.76
Δ 46°50'19.9"
D 10°00'00.0"
T 246.70'
L 465.90'
R 572.96'
S.E.= 0.059 FT/FT
D.O. = 125'

LOCAL ROAD

C380

P.I. STA. 16+37.31
X 2,130,315.12
Y 363,120.70
Δ 67°36'00.0"
D 18°00'00.0"
T 213.09'
L 375.56'
R 318.31'
S.E.= 0.020 FT/FT
D.O. = 100'

NESBITT ROAD
STA. 19+00 - STA 49+00
EARTH WORK SUMMARY
UNCL. 10,500 C.Y.
FILL 5,000 C.Y.

CTH PB (NORTH)
STA. 52+00 - STA. 59+92
EARTH WORK SUMMARY
UNCL. 11,600 C.Y.
FILL 6,800 C.Y.

GRADING PREVIOUS CONTRACT

RAMP "E-2" R/L

RAMP "E-1" R/L

200.0 VC k = 311

PVI 45+85.00 EL 962.28

PVT 46+85.00 EL 961.04

PVI 50+00.00 EL 957.13

PVC 50+75.00 EL 956.20

PVT 52+25.00 EL 955.08

PVI 51+50.00 EL 955.27

-1.8831% -1.2410% -1.2410% -1.2410% -1.2410% -0.2491% -0.2491%

MATCH EXISTING BRIDGE

PVI 60+22.60 EL 953.26

P601
STA. 56+35 62' RT. TO STA. 56+87 62' RT.
1-60"x52 L.F. C.P. REQ'D
2-APRON ENDWALLS REQ'D.

P200
2-48"x118 L.F. RCCP, CLASS III REQ'D.
SKEW 22° LHF
2- CONCRETE MASONRY ENDWALLS REQ'D.

963.88 962.21 960.85 959.61 958.37 957.13 955.91 955.16 954.89 954.65 954.40 954.15 953.90 953.65 953.40 953.19

45 6 7 8 9 50 1 2 3 4 55 6 7 8 9 60 1

MATCH EXISTING
STA. 12+00.00

PVI 12+00.00 EL 975.00

P603
STA. 14+17.00 TO STA. 14+34.00 LT.
1-18"x17 L.F. CMP REQ'D.
2-APRON ENDWALLS REQUIRED

PVI 14+00.00 EL 975.60

STA. 12+00 - STA. 20+00
EARTH WORK SUMMARY
UNCL. 3,600 C.Y.
FILL 3,300 C.Y.

+0.3000% +0.3000% -2.7603% -2.7603% -3.0000%

PVC 13+00.00 EL 975.30

PVT 15+00.00 EL 972.84

200.0 VC k = 65

PVI 17+50.00 EL 959.59

PVI 20+00.00 EL 958.59

P604
STA. 15+25.00 TO 15+90.00 RT.
1-18"x65 L.F. CP REQ'D.
2-APRON ENDWALLS REQ'D.

P600
STA. 18+50
1-36"x124 L.F. CP REQ'D.
SKEW 50° LHF
2-APRON ENDWALLS REQ'D.

LOCAL ROAD

975.30 974.83 972.84 970.08 967.32 964.56 961.80 958.95

3 4 15 6 7 8 9 20

1010 1000 990 980 970 960 950 940 930

1010 1000 990 980 970 960 950 940 930 920 910

990 980 970 960 950 940 930

41.42 39. 29.30. 24.25. 20.

59.00. 51.

LEVELS ON -

FILE NAME: HDCN: 78519.DGN

WISDOT CADDS SHEET 42

STATE PROJECT NUMBER 1201-04-78 | SHEET NO. 5.17

PLAN & PROFILE MILITARY RIDGE RECREATIONAL TRAIL

USH 18 DANE COUNTY

KEY MAP

END CONSTRUCTION
STA. 8+00.00

BEGIN CONSTRUCTION
STA. 3+00.00

STA. 11+00.00 "MRRT", 50'

STA. 12+00.00 "MRRT", 9'

STA. 4+00.00 "MRRT", 50'

STA. 16+00.00 "MRRT", 9'

STA. 17+00.00 "MRRT", 40'

STA. 24+00.00 "MRRT" 40'

STA. 25+00.00 "MRRT" 50'

STA. 29+00.00 "MRRT" 50'

STA. 742+50.00 RAMP "E-1" BEGIN CONCRETE BARRIER

STA. 744+00.00 RAMP "E-1" END CONCRETE BARRIER

CLASS "A" STEEL PLATE BEAM GUARD

CONCRETE BARRIER SINGLE-FACED

WOVEN WIRE FENCE

RAMP "E-2"

RAMP "E-1"

USH 18 WB

USH 18 EB

℄ USH 18

℄ MRRT

B-13-418

B-13-417

120°11'27.6"

DANE COUNTY

MILITARY RIDGE RECREATIONAL TRAIL

C523		C524		C525		C526	
P.I. STA.	04+77.30	P.I. STA.	11+39.81	P.I. STA.	18+52.77	P.I. STA.	23+24.54
X	2,130,298.33	X	2,130,858.11	X	2,131,580.13	X	2,132,047.34
Y	362,037.08	Y	362,565.91	Y	362,213.76	Y	362,374.64
Δ	42°54'25.9"	Δ	7.7°30'00.0"	Δ	45°00'00.0"	Δ	16°35'19.6"
D	16°00'00.0"	D	16°00'00.0"	D	11°00'00.0"	D	03°00'00.0"
T	140.72'	T	287.40'	T	215.75'	T	278.43'
L	268.17'	L	484.38'	L	409.09'	L	552.96'
R	358.10'	R	358.10'	R	520.87'	R	1909.86'
S.E.=	0.020 FT/FT	S.E.=	0.020 FT/FT	S.E.=	0.020 FT/FT	S.E.=	0.020 FT/FT

NOTE: SEE ALIGNMENT PLAN FOR RAMP GEOMETRY

STA. 3+00-STA. 8+00
EARTHWORK SUMMARY
COMMON 7,200 C.Y.
FILL 1,800 C.Y.

LIMITS OF GRADING
STA. 3+00.00 TO 8+00.00

FINISHED "MRRT" PROFILE

EXISTING GROUND LINE

ELEVATIONS "MRRT" PROFILE

MATCH EXISTING

+0.0590%

+0.5000%

+0.8400%

-0.1933%

L = 200.0'
K = 453

200.0' VC
K = 203

PVI 2+95 EL 951.32
PVC 5+00 EL 951.44
PVT 7+00 EL 952.00
PVI 16+00 EL 956.50
PVC 19+00 EL 953.98
PVT 21+00 EL 953.28
PVI 26+00 EL 954.00

STA. 4+75 TO 5+65
2-18"x106 L.F. RCCP CLASS III (BY OTHERS).
4-APRON ENDWALLS (BY OTHERS).

STA. 745+20 RAMP "E-1" (STA. 16+20 MRRT)
1-30"x208 L.F. RCCP CLASS III (BY OTHERS).
SKEW 55° LHF
2-APRON ENDWALLS (BY OTHERS).

STA. 16+45.76
1-24"x120 L.F. RCCP CLASS III (BY OTHERS).
SKEW 59° LHF
2-APRON ENDWALLS (BY OTHERS).

FILE NAME: HDGN: 72524.DGN

WISDOT CADDS SHEET 32

STATE PROJECT NUMBER	SHEET NO.
1201-04-75	5.4
1201-04-78	5.18
U.S.H. 18 TEMPORARY CROSS-OVERS	DANE CO.

NOTE: THIS PLAN & PROFILE SHEET IS INCLUDED AS INFORMATION FOR BID ITEM "GRADING, SHAPING, AND FINISHING MEDIAN CROSSOVER REMOVAL, STA. 880+00 AREA"-1 L.S. (STATIONING ON THIS SHEET DOES NOT EQUATE TO STATIONING ON PROJECT 1201-04-78.)

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
19	713+96	CHISELED "B" S.W. CORNER OF MEDIAN CATCH BASIN	MEDIAN	966.00

	D°	L▲	Δ▲	PC	PT
X-1	1°00'	651.49	6°30'54"	706+97	713+48.5
X-2	1°00'	651.49	6°30'54"	713+48.5	720+00

SLOPE INTERCEPTS

TO BE DONE UNDER PROJECT I.D. 1201-04-75

BM 19

710+00 "WB"

710

X-1

12"

12"

3'

3'

N 54 25' 18" E

710+00 "EB"

P.C. 706+97.00

P.C.C. 713+48.5

715+00 "WB"

715

X-2

3'

3'

715+00 "EB"

N 54°-25'-18" E

720+00 "WB"

P.T. 720+00

TEMPORARY PAVEMENT MARKING (YELLOW) PAINT AS REQ'D.

STA. 716+85 "EB"
EXISTING 72"X158" CATTLE PASS

STA. 717+42 "EB"
EXISTING C.M.P.

STA. 710+55
968.43

STA. 716+28
970.32

+0.33 %

MATCH EXISTING

MATCH EXISTING

975

970

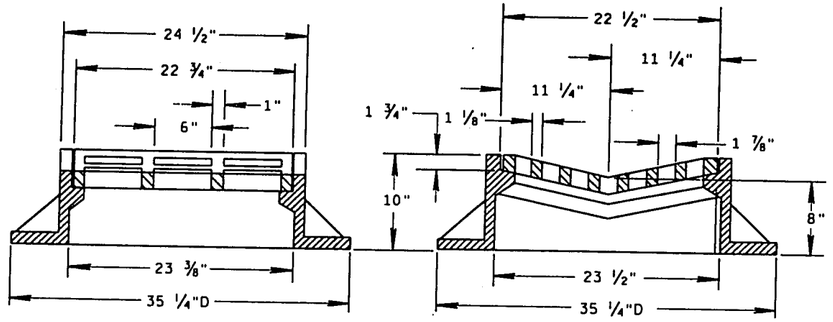
965

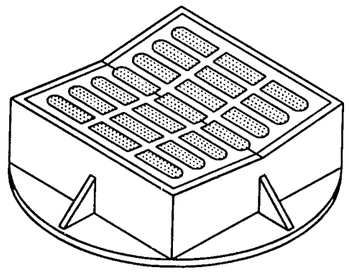
68.58 68.91 69.24 69.57 69.90 70.23

706 7 8 9 710 1 2 3 4 715 6 7 8 9 720

DESIGN DONE BY DISTRICT 1

FILE NAME : D:\...\DGN\...DGN ORIGINATOR : DIST.#1 - DOTBBC PLOT NAME : 120152 PLOT SCALE : 1"=50'

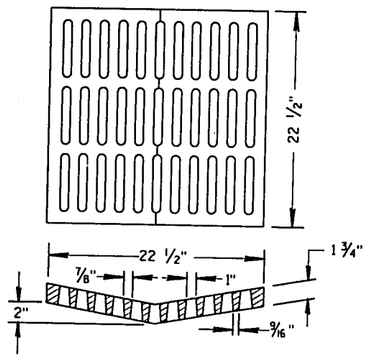




TYPE "B"

(APPROXIMATE WEIGHT 395 LBS.)

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

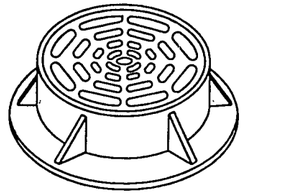


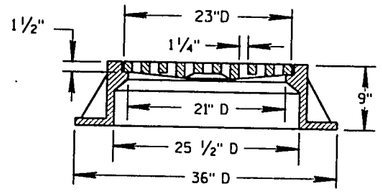
ALTERNATIVE GRATE FOR FOR TYPE "B" COVER

(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.

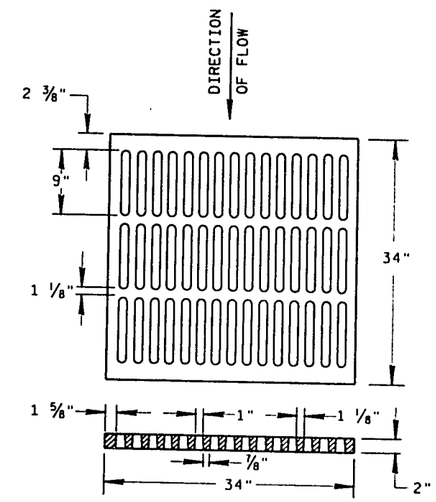
GENERAL NOTES

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.

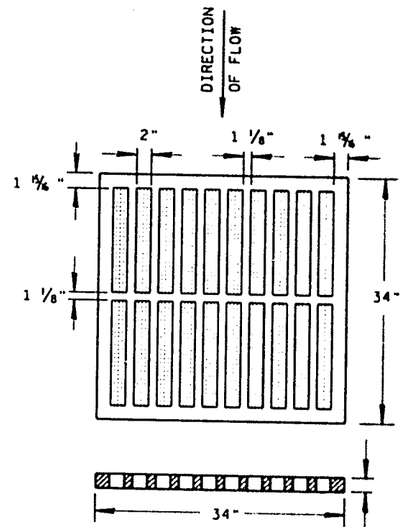


ALTERNATIVE TYPE "MS"

(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

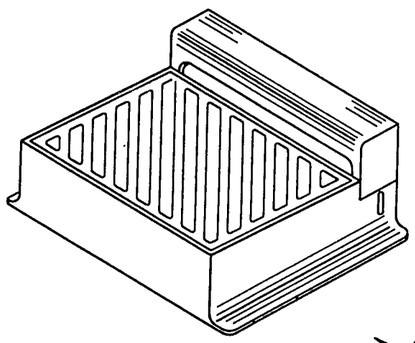


TYPE "MS"

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

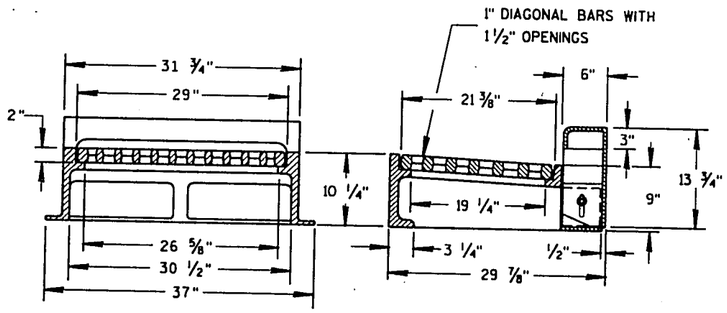
USE ON FREEWAYS AND EXPRESSWAYS

NOTE AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

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.

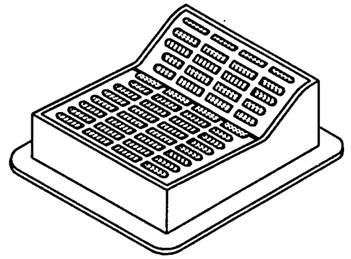
INLET COVERS

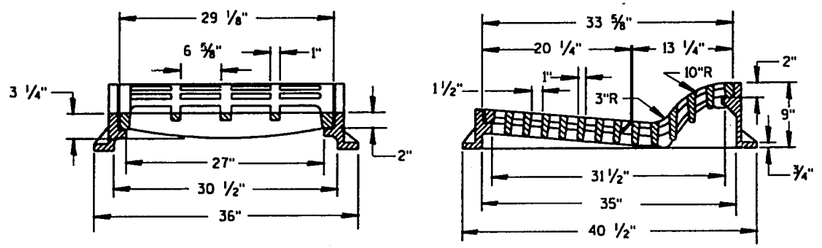
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/25/93
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 8 A 5-9b

S.D.D. 8 A 5-9b



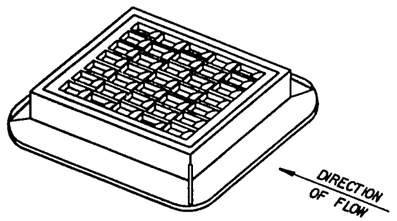


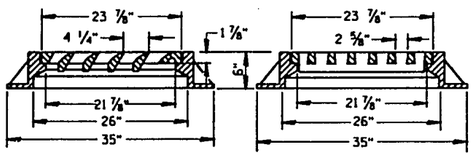
TYPE "F"

(APPROXIMATE WEIGHT 830 LBS.)

FRAME.....485 LBS.
GRATE.....165 LBS.
GRATE.....180 LBS.

USE WITH CONCRETE CURB & GUTTER, 36 INCH.

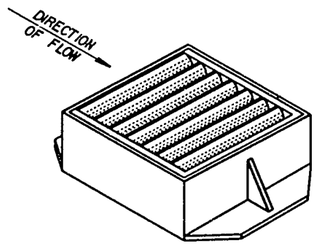


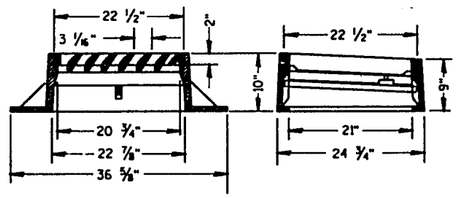


TYPE "S"

(APPROXIMATE WEIGHT 400 LBS.)

FRAME.....245 LBS.
GRATE.....155 LBS.

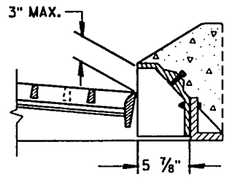




TYPE "V"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME.....270 LBS.
GRATE.....130 LBS.
SAFETY BAR.....5 LBS.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT 60 LBS.)

CURB BOX.....60 LBS.

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH

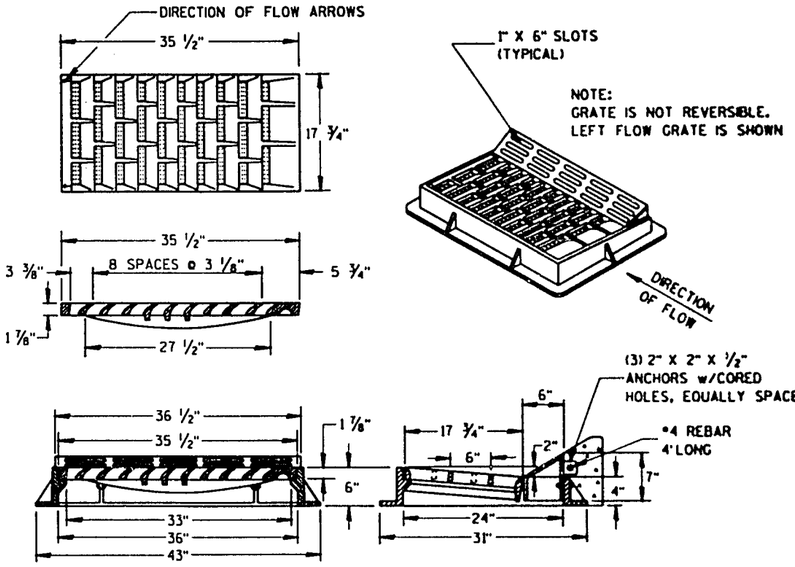
NOTE AS TYPE HM-GJ ON DRAINAGE TABLE

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

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



TYPE "HM"

(APPROXIMATE WEIGHT 420 LBS.)

FRAME.....195 LBS.
GRATE.....135 LBS.
CURB BOX.....90 LBS.

USE WITH CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM" COVER

NOTE AS TYPE HM-S ON DRAINAGE TABLE

INLET COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

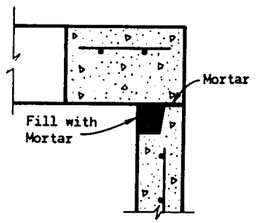
APPROVED
1/25/93
DATE

STATE DESIGN ENGINEER FOR HRTS

FHWA

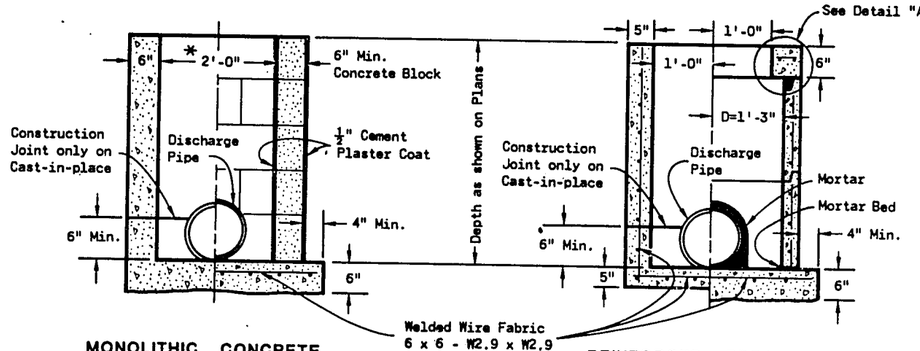
S.D.D. 8 A 5-9c

S.D.D. 8 A 5-9c



DETAIL "A"

*Selection of square or circular design will be based on the pipe sizes and the Inlet Cover being utilized.



MONOLITHIC CONCRETE CONCRETE BLOCK

REINFORCED CONCRETE PRECAST REINFORCED CONCRETE

INLETS TYPE 1

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.

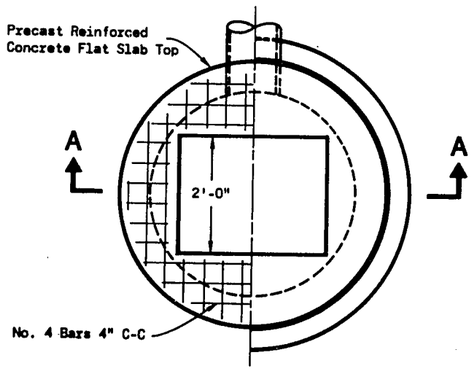
Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Precast Reinforced Concrete Flat Slab Tops may be used on the structures. The Tops shall be installed on a bed of mortar.

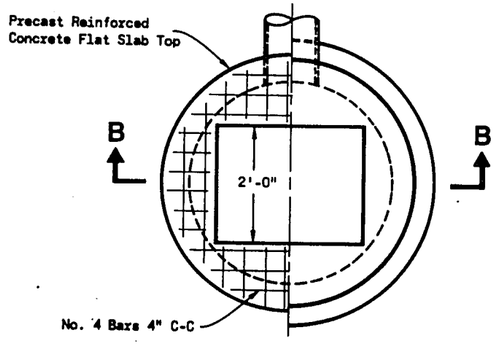
All Bar Steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers shall be placed with tongue down.

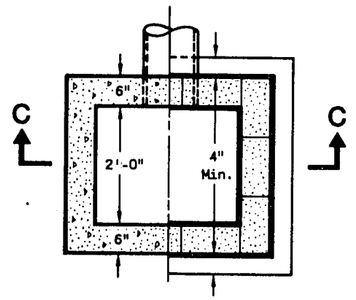
(1) Use 2'-6" opening for Type 2 Inlets and 3'-0" opening for Type 3 Inlets.



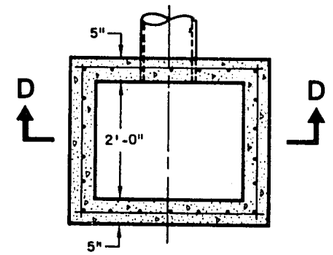
PLAN VIEW



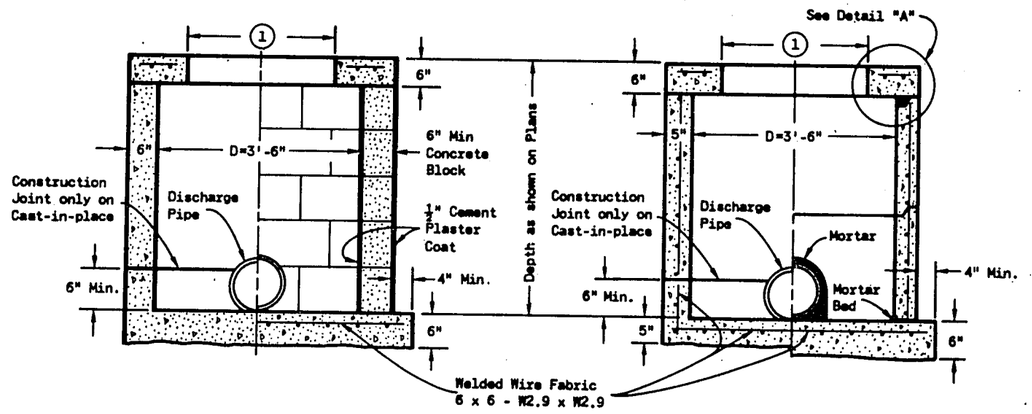
PLAN VIEW



PLAN VIEW



PLAN VIEW

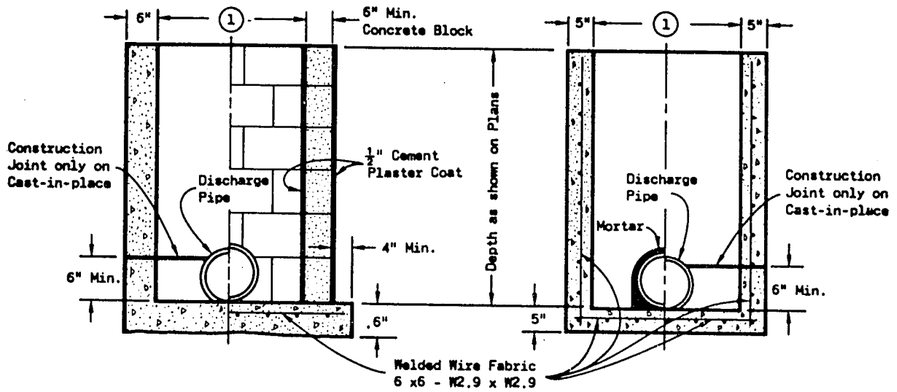


MONOLITHIC CONCRETE CONCRETE BLOCK

REINFORCED CONCRETE PRECAST REINFORCED CONCRETE

SECTION A-A

SECTION B-B



MONOLITHIC CONCRETE CONCRETE BLOCK

PRECAST REINFORCED CONCRETE REINFORCED CONCRETE

SECTION C-C

SECTION D-D

INLETS TYPE 2 & 3

INLETS TYPE 1, 2 & 3

State of Wisconsin
Department of Transportation

APPROVED 4-13-82 (DATE)

S.D.D. 8 C 1-4

S.D.D. 8 C 1-4

GENERAL NOTES

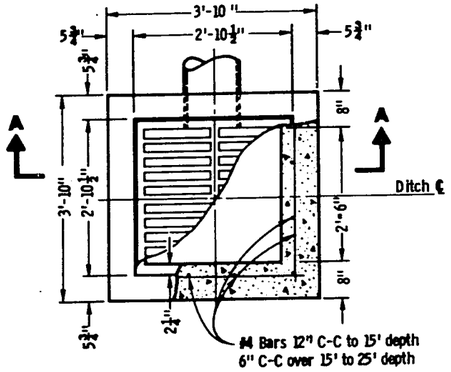
Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

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.

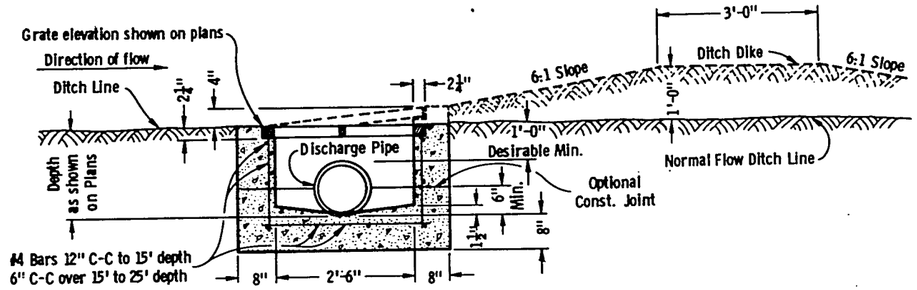
Precast reinforced concrete inlet units, if used, shall conform to the requirements of the Catch Basins, Manholes and Inlets Section of the Standard Specification's.

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.



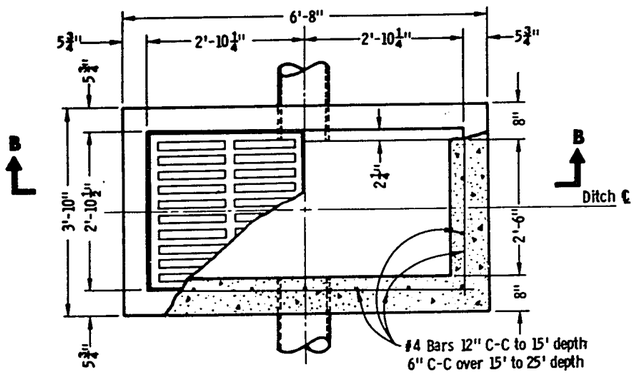
PLAN VIEW



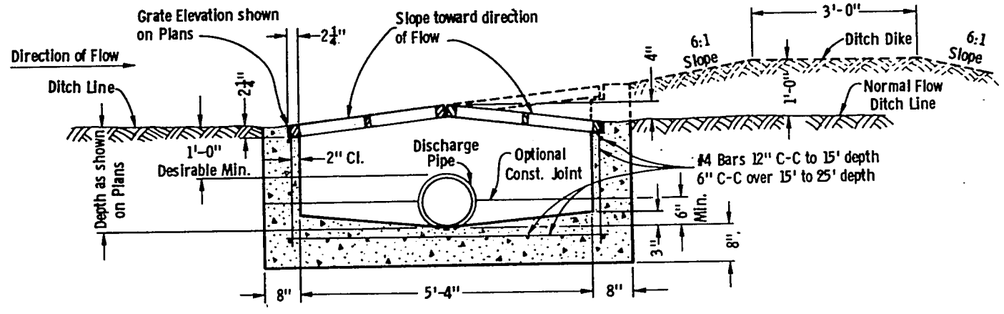
SECTION A-A

INLET TYPE 8

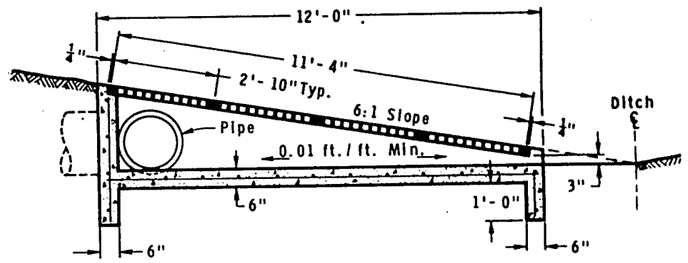
REINFORCED CONCRETE



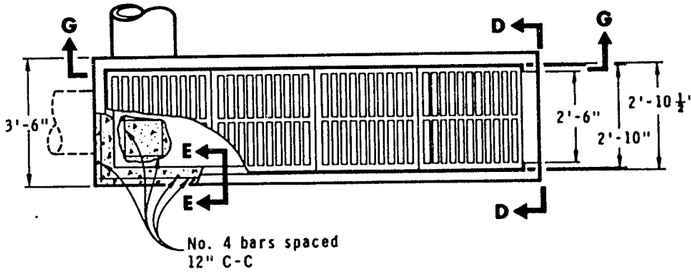
PLAN VIEW



SECTION B-B



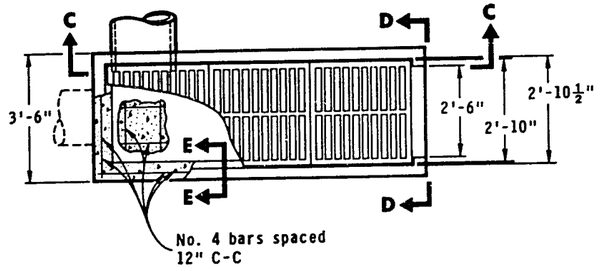
SECTION G-G



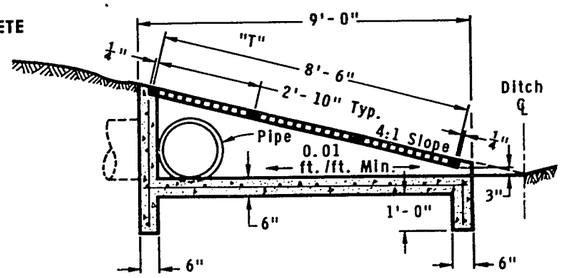
PLAN VIEW
INLET TYPE 11
REINFORCED CONCRETE

INLET TYPE 9

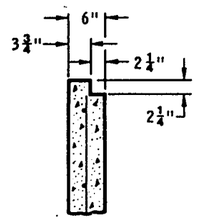
REINFORCED CONCRETE



PLAN VIEW



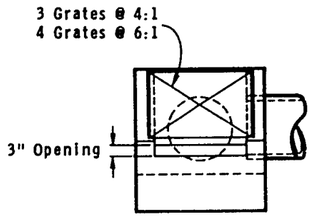
SECTION C-C



SECTION E-E

INLET TYPE 10

REINFORCED CONCRETE



VIEW D-D

INLETS TYPE 8,9,10 and 11

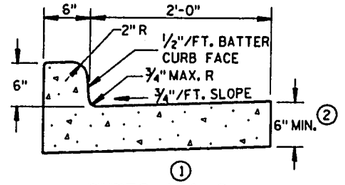
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
4-30-74 DATE — CHIEF OF FACILITIES DEVELOPMENT

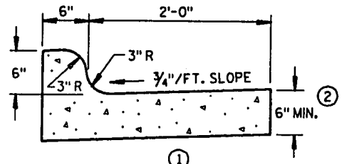
APPROVED
5-02-74 DATE — STATE HIGHWAY ENGINEER

S.D.D. 8C5-1

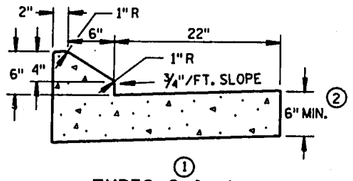
S D D. 8C5-1



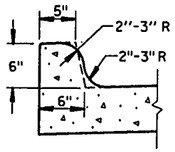
① TYPES A & D



① TYPES K & L

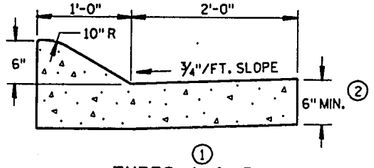


① TYPES G & J



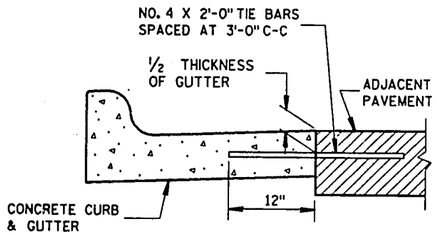
OPTIONAL CURB SHAPE FOR TYPES K & L ①

CONCRETE CURB & GUTTER 30"



① TYPES A & D

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

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.

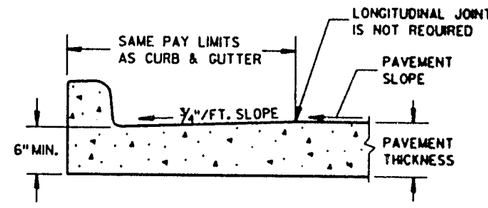
JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

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

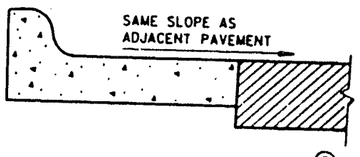
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

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.

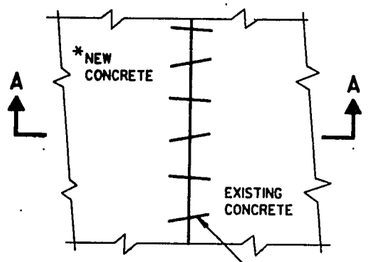
③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

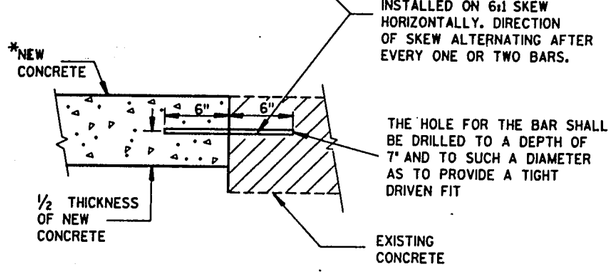


REVERSE SLOPE GUTTER ③
(TYPICAL FOR ALL CURB & GUTTER TYPES)

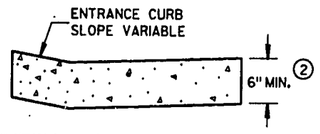


*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

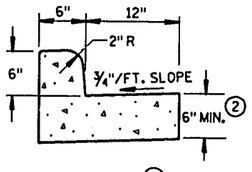
PLAN VIEW



SECTION A-A
PAVEMENT TIES

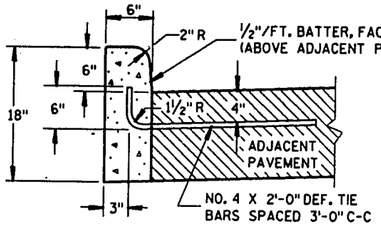


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

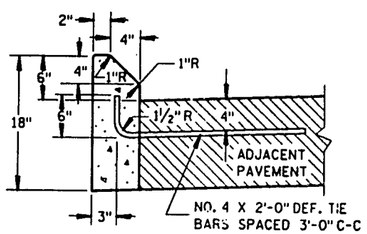


① TYPES A & D

CONCRETE CURB & GUTTER 18"



① TYPES A & D



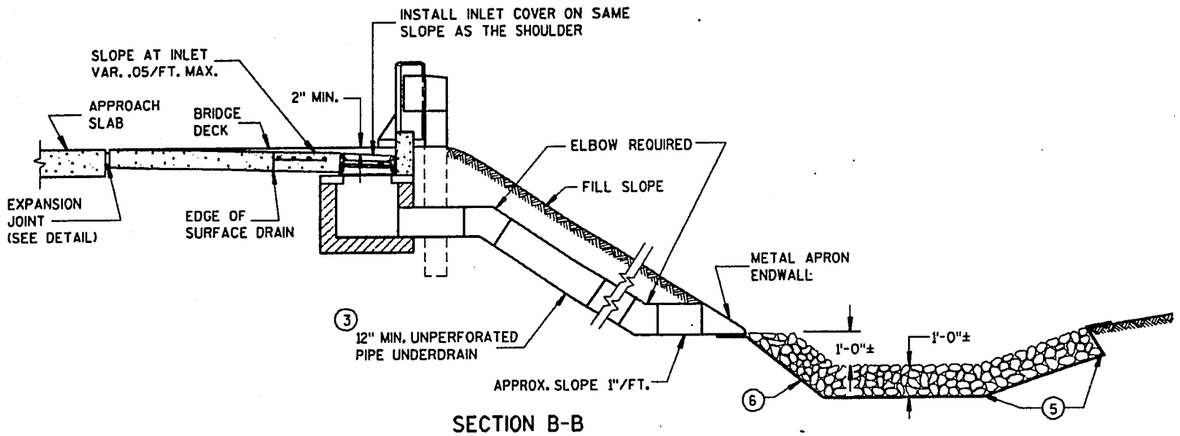
① TYPES G & J

CONCRETE CURB

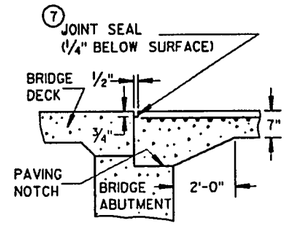
CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10-23-86 DATE — STATE DESIGN ENGINEER FOR HOWS — FHWA

S.D.D. 8 D 1-11

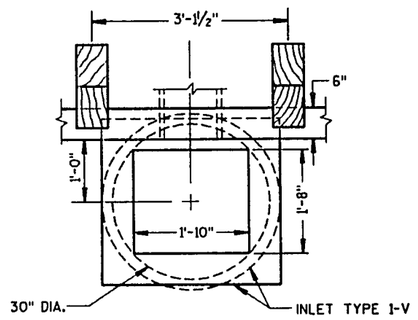
S.D.D. 8 D 1-11



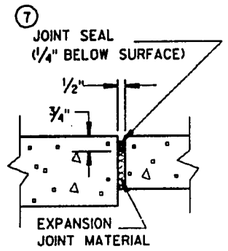
SECTION B-B



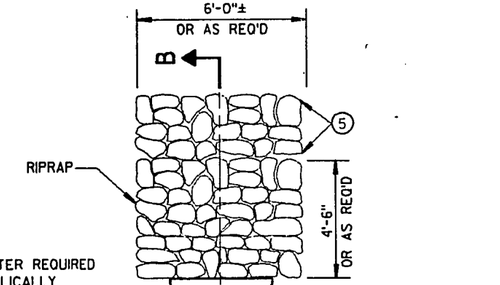
SECTION D-D

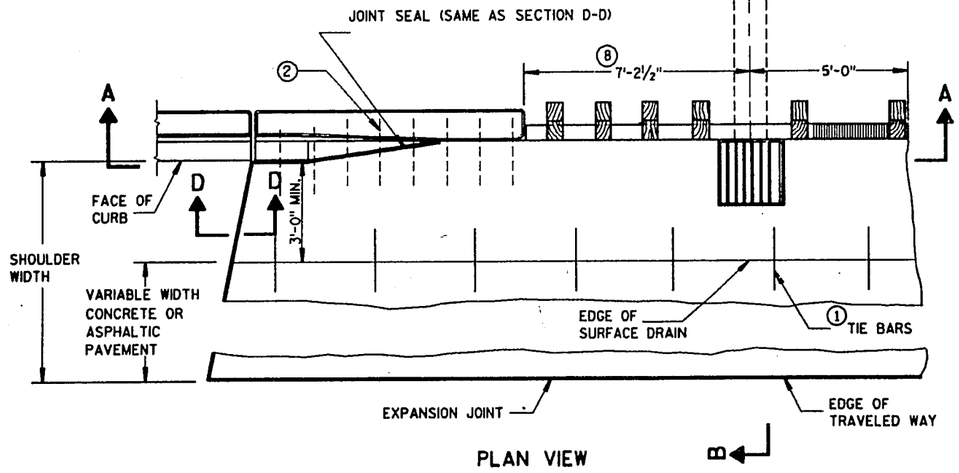


PLAN VIEW

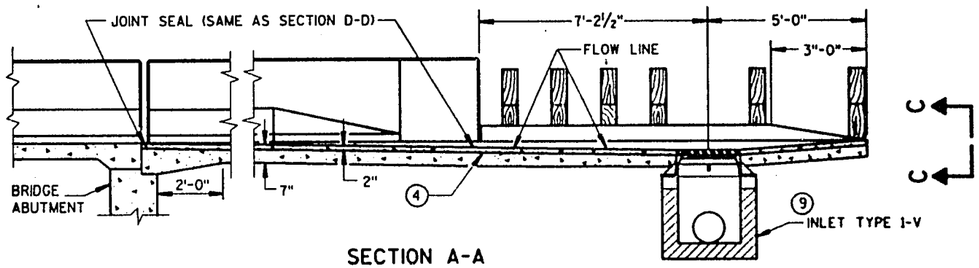


EXPANSION JOINT DETAIL

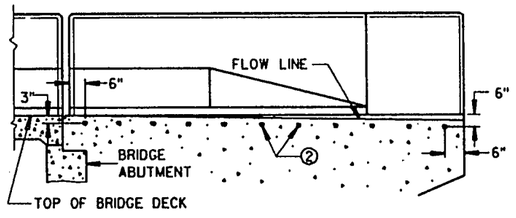




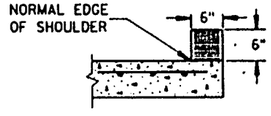
PLAN VIEW



SECTION A-A



LOCATION OF TIE BARS IN WINGWALL



SECTION C-C

GENERAL NOTES

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

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR PAVEMENT TIES PLACED AS DIRECTED BY THE ENGINEER.

(3) THE PIPE UNDERDRAIN MAY BE ANY ONE OF THE SIX MATERIALS LISTED IN THE STANDARD SPECIFICATIONS SECTION 612.2 (EXCEPT SECTION 612.2.3 DRAIN TILE).

(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(6) GEOTEXTILE FABRIC, TYPE 'R'

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".

(9) SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C1 FOR DETAILS.

CONCRETE SURFACE DRAIN DROP INLET TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

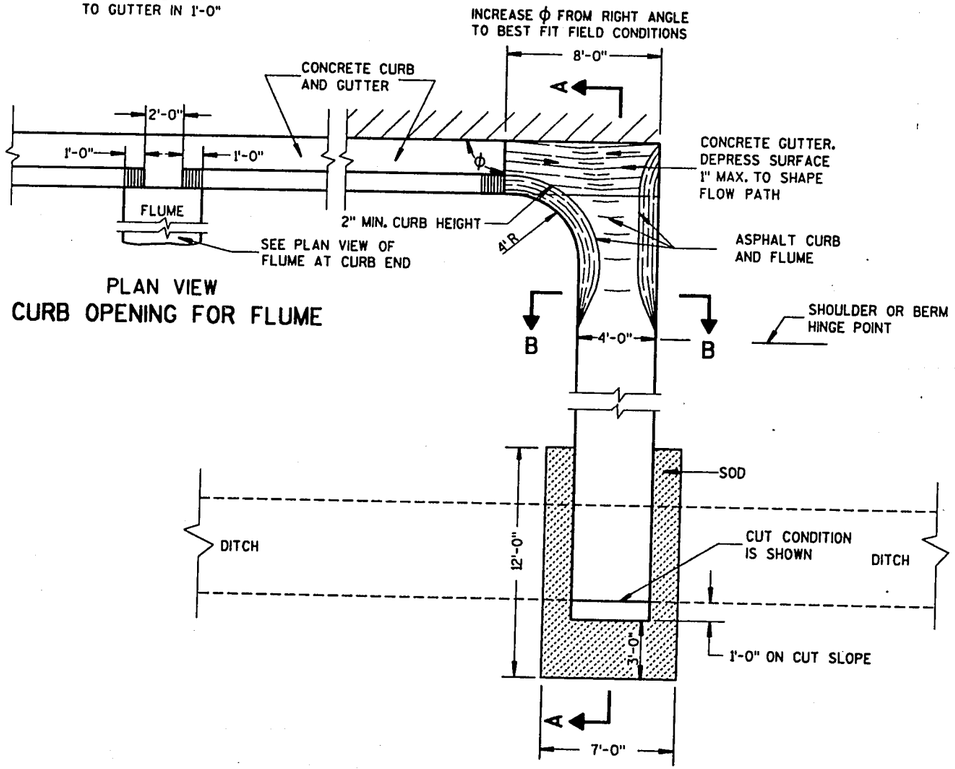
APPROVED 7/2/90 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 8 D 3-4

S.D.D. 8 D 3-4

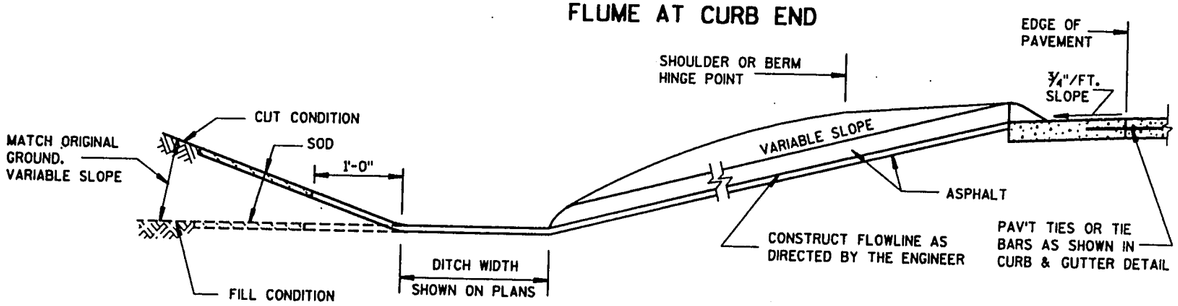
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS TO GUTTER IN 1'-0"

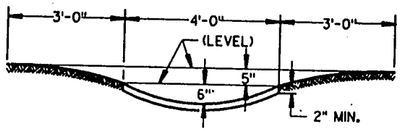


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

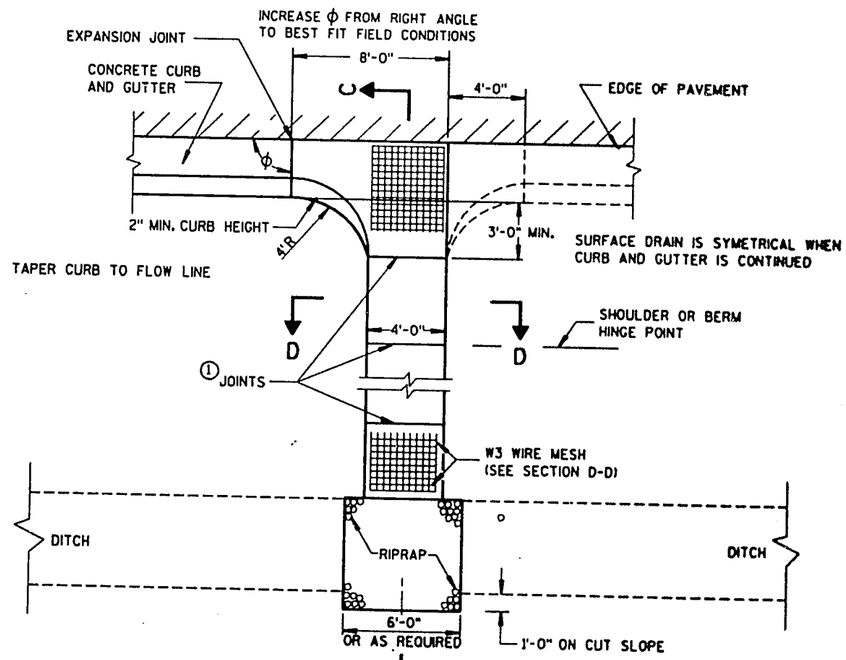
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

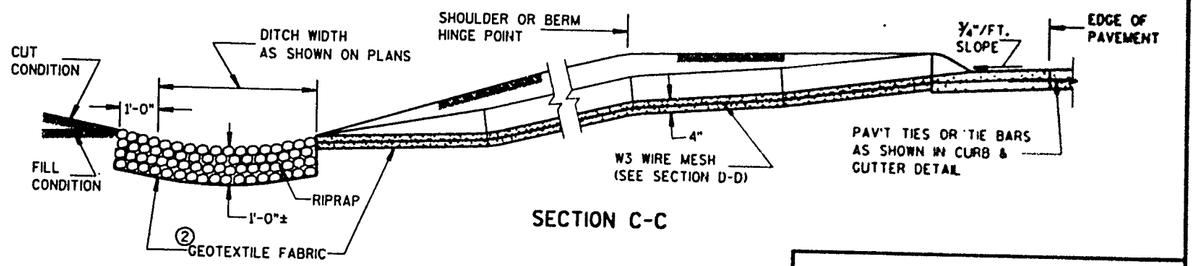
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

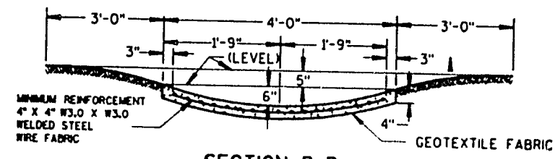
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAIN & ASPHALTIC FLUME

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

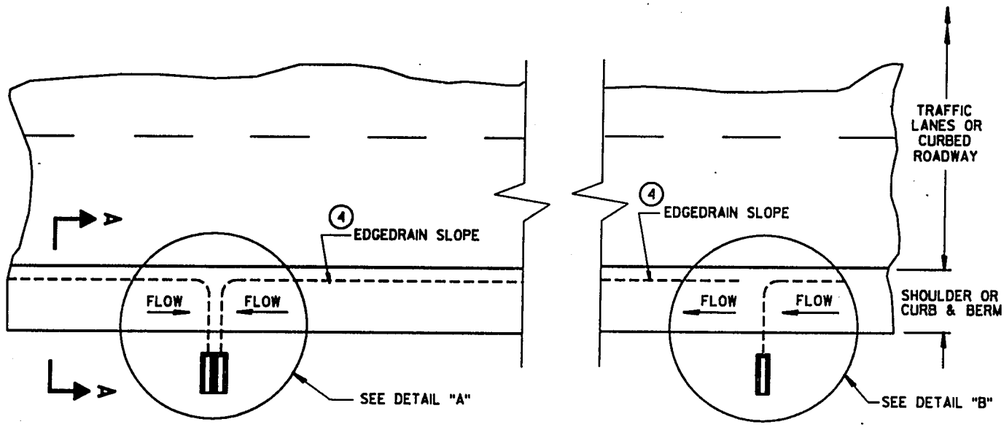
APPROVED 10/23/09 DATE

STATE DESIGN ENGINEER FOR HSYS

FHWA

S.D.D. 8 D 4-3

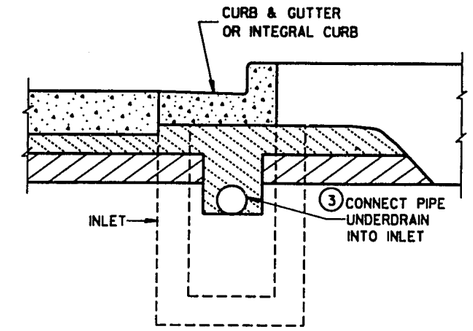
S.D.D. 8 D 4-3



PLAN VIEW

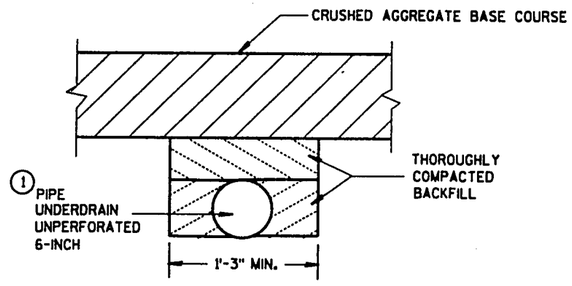
ROADWAY WITH SHOULDERS OR CURBS

(EDGEDRAIN OUTLETS TO ROADSIDE) (2)



SECTION B-B

URBAN CROSS SECTION



SECTION C-C

(TRENCH FOR OUTFALL PIPE)

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

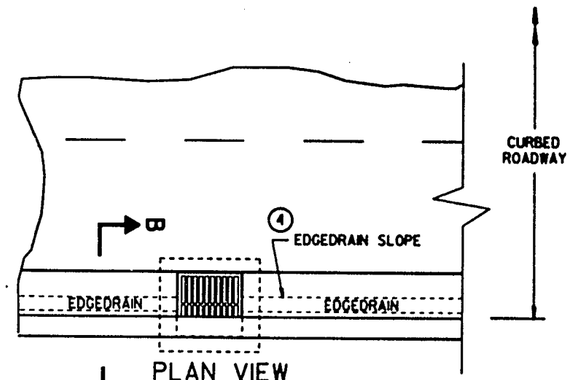
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

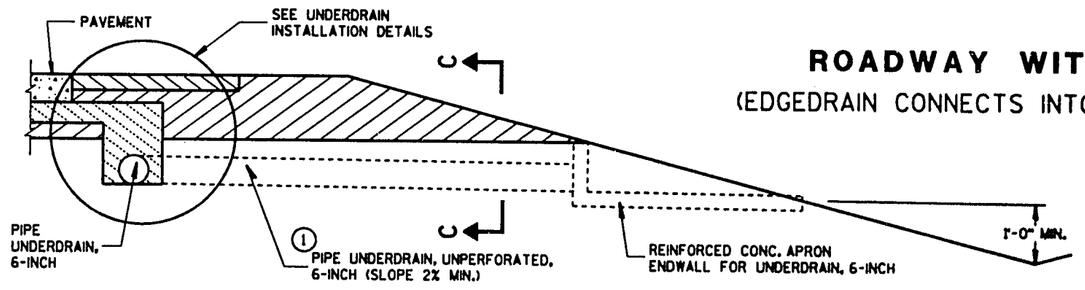
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



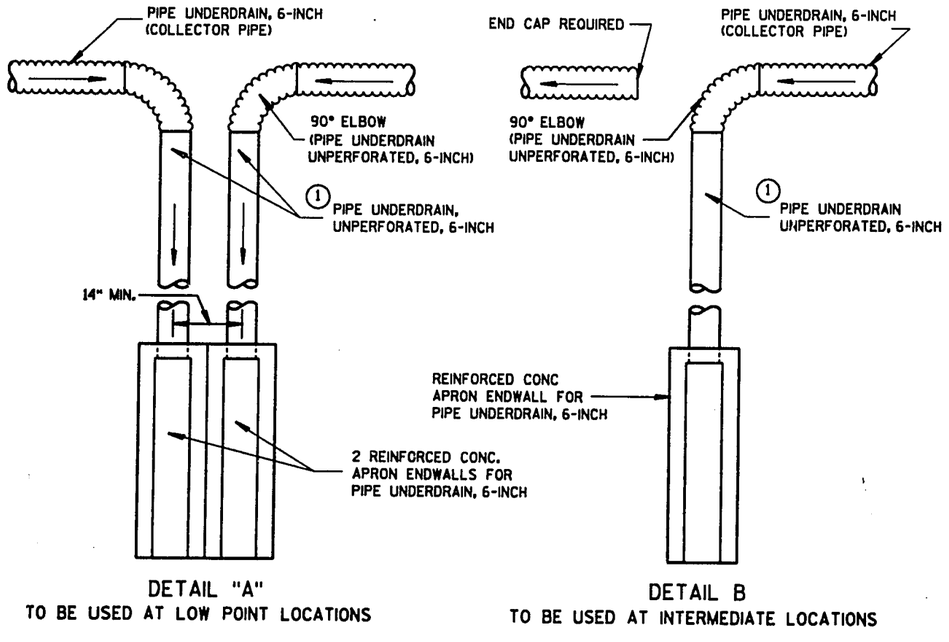
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



SECTION A-A

RURAL CROSS SECTION



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

DETAIL B
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS

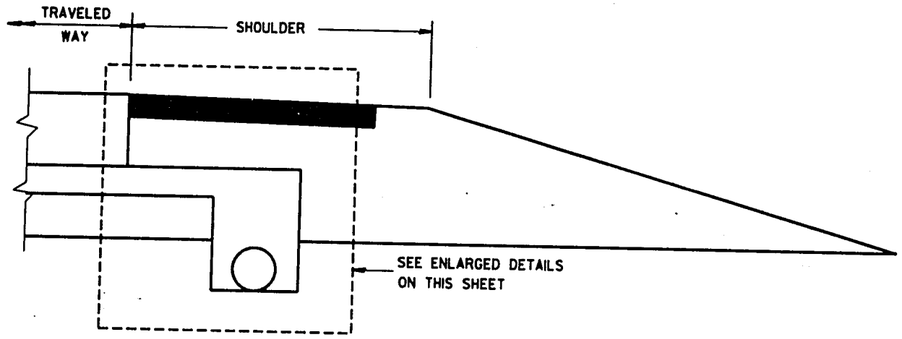
NOTE:
SDD 8F6-X AND SDD 8D15-1b or SDD 8D15-1c ARE REQUIRED WITH THIS DRAWING IN CONTRACT PLANS.

EDGEDRAIN OUTLET DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 15-1a

S.D.D. 8 D 15-1a



RURAL CROSS SECTION

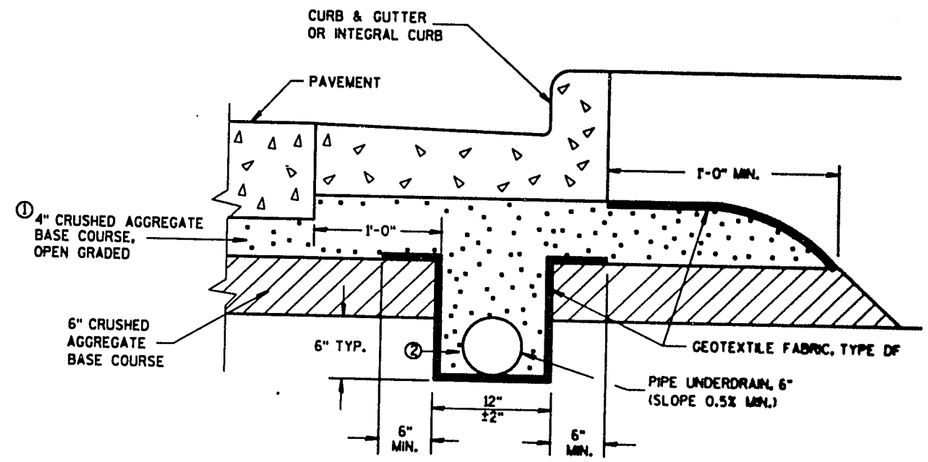
NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

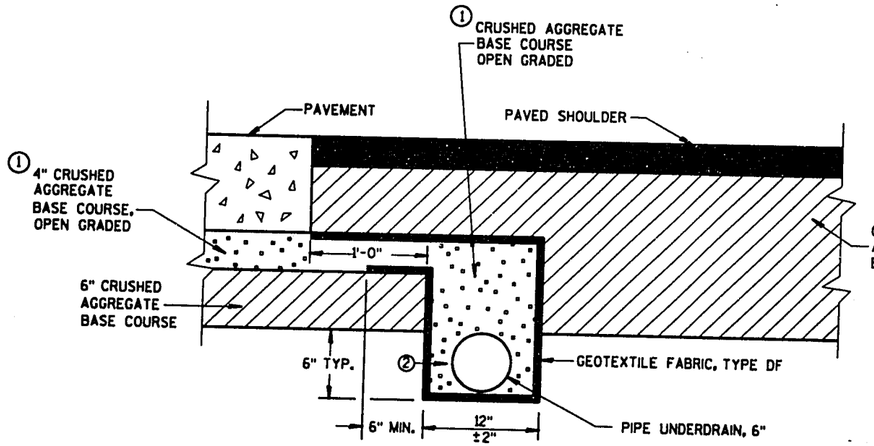
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

① THE GRADATION OF THE OPEN GRADED BASE COURSE SHALL BE EITHER NO. 1 OR NO. 2 AS SPECIFIED ELSEWHERE IN THE CONTRACT.

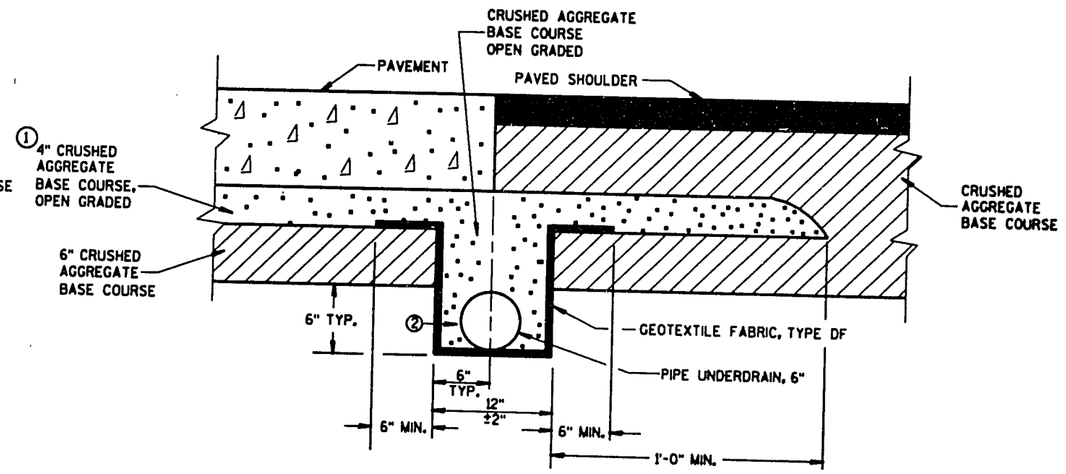
② TRENCH BACKFILL WILL BE PAID FOR AS CRUSHED AGGREGATE BASE COURSE, OPEN GRADED NO. 1 OR NO. 2 AS SPECIFIED.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

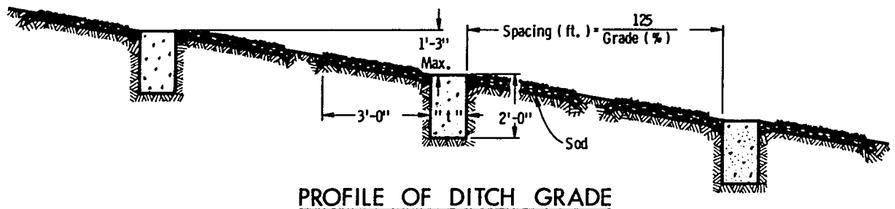
NOTE:
SDD 8D15-1a IS REQUIRED WITH THIS DRAWING IN CONTRACT PLANS.

EDGEDRAIN AND CRUSHED AGGREGATE BASE COURSE, OPEN GRADED NO.1 OR NO. 2

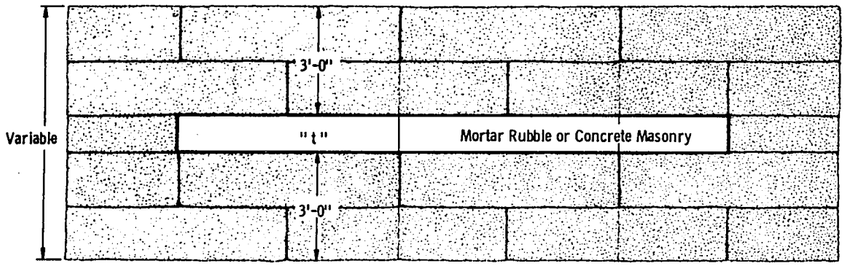
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 12/1/93 Roy L. Thompson
DATE CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 D 15-1b

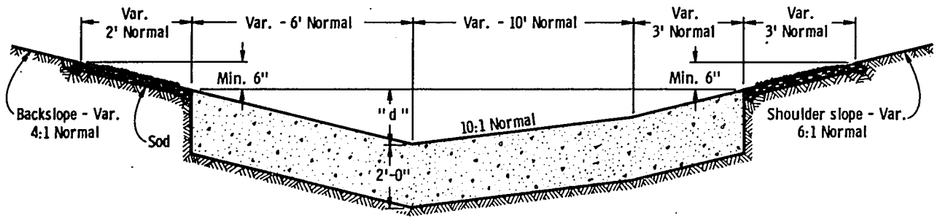


PROFILE OF DITCH GRADE

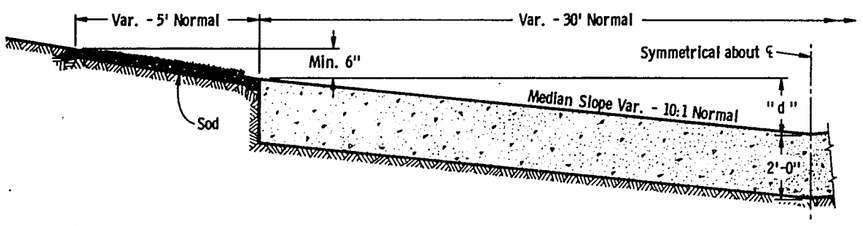


PLAN VIEW SHOWING MASONRY AND SOD

" t " - Masonry thickness shall be 0'-9" for concrete and 1'-0" for mortar rubble.



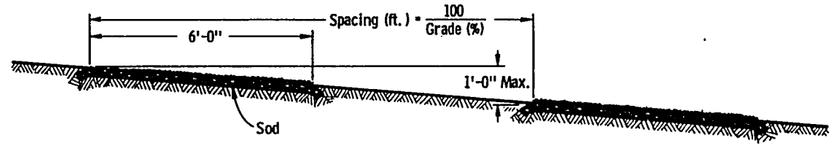
SIDE DITCH CROSS SECTION



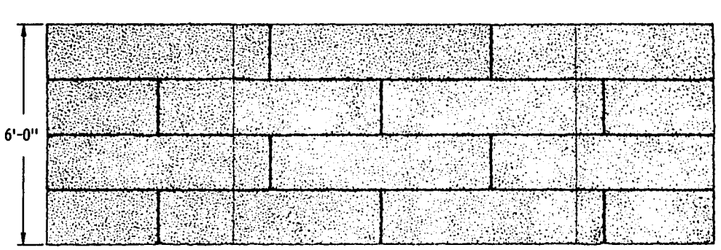
MEDIAN DITCH CROSS SECTION

" d " - The minimum depth of the masonry portion of the ditch checks shall be equal to the maximum depth of flow. The normal " d " will be 1'-6".

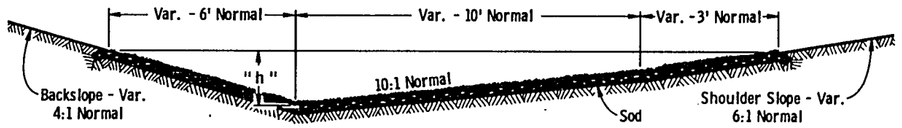
MASONRY AND SOD DITCH CHECKS



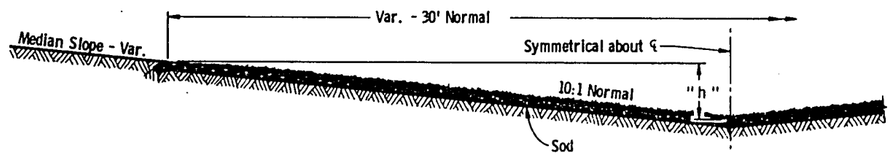
PROFILE OF DITCH GRADE



PLAN VIEW SHOWING SOD



SIDE DITCH CROSS SECTION



MEDIAN DITCH CROSS SECTION

" h " - The minimum height of ditch to be sodded shall be equal to the maximum depth of flow plus 6". The normal " h " will be 1'-6".

SOD DITCH CHECKS

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.

Alternate designs for ditch checks, of the material or combination of materials shown hereon, may be used upon written permission of the Engineer.

Sod strips for ditch checks may be placed either transversely or longitudinally to the direction of water flow.

SOD OR MASONRY AND SOD DITCH CHECKS

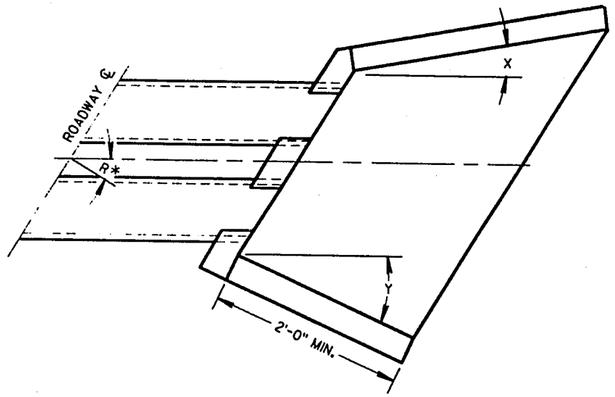
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
9/7/71 DATE — S. C. Rhamstine — STATE HIGHWAY DESIGN ENGINEER

APPROVED
9/7/71 DATE — H. J. Brunnette — STATE HIGHWAY ENGINEER

S.D.D. 8E4-2

S.D.D. 8E4-2



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

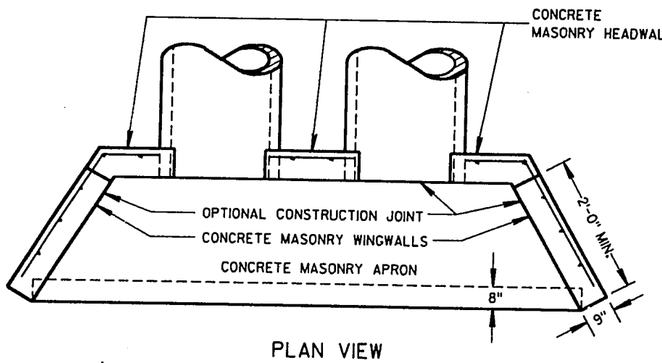
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

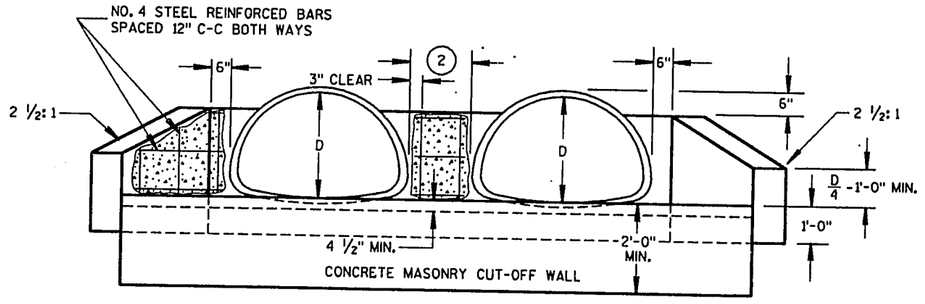
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



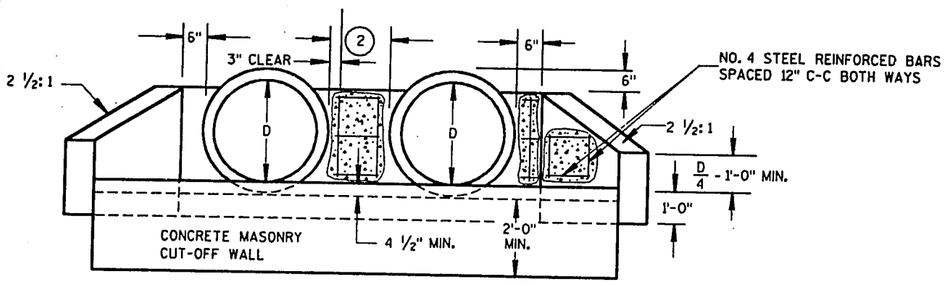
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



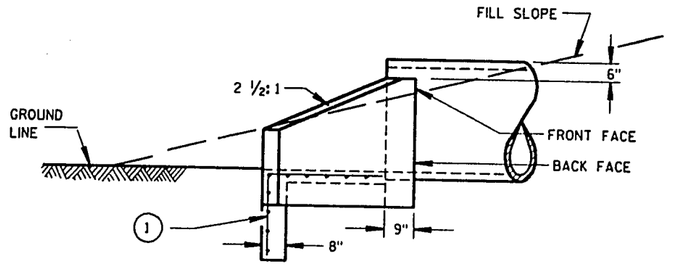
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

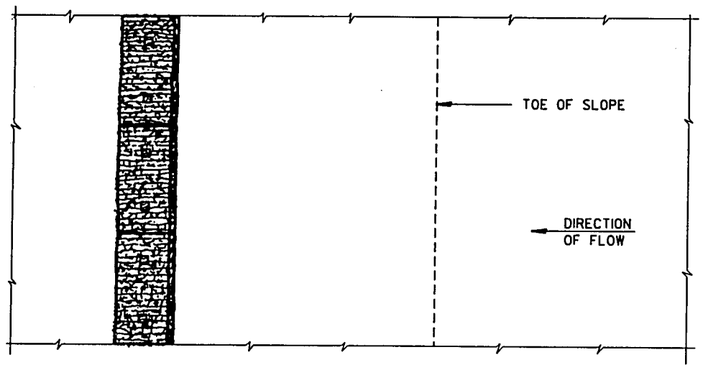
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 5/23/90 DATE — STATE DESIGN ENGINEER FOR HWYS

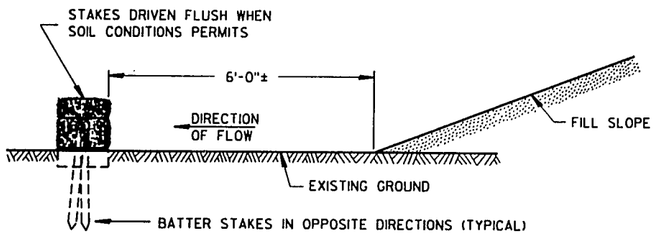
FHWA

S.D.D. 8 E 6-7

S.D.D. 8 E 6-7



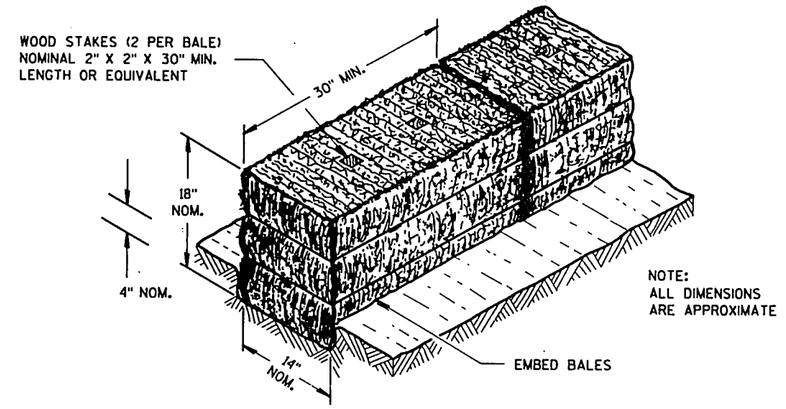
PLAN VIEW

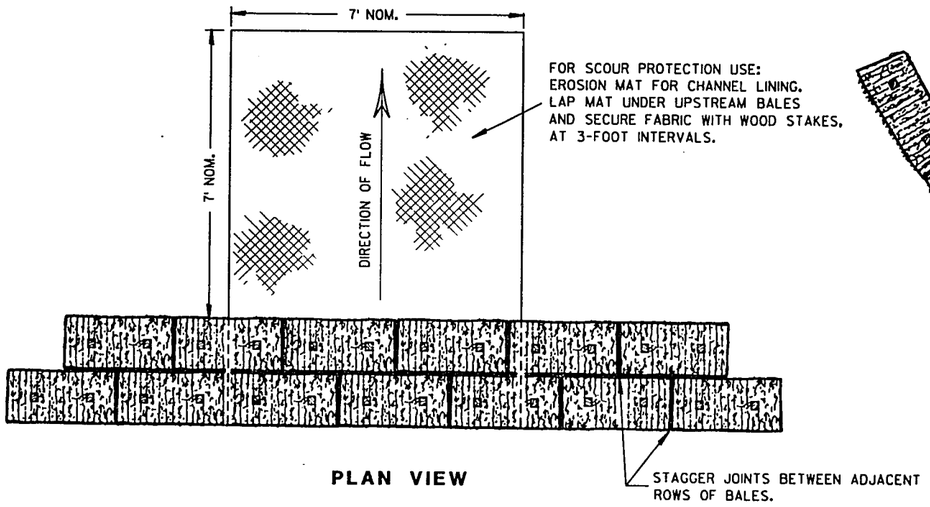


FRONT ELEVATION

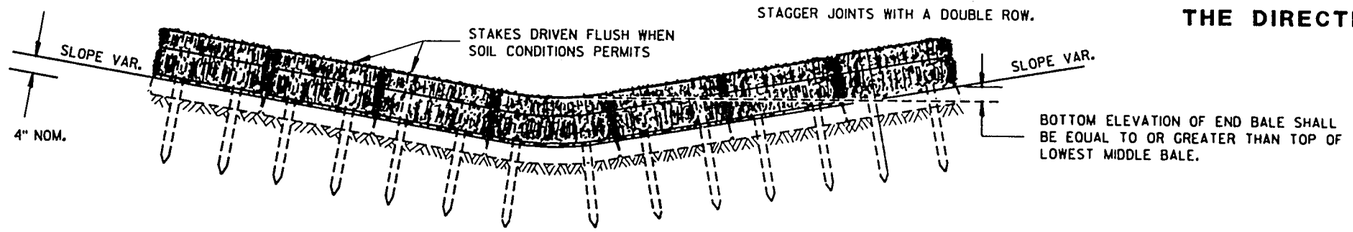
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW





PLAN VIEW

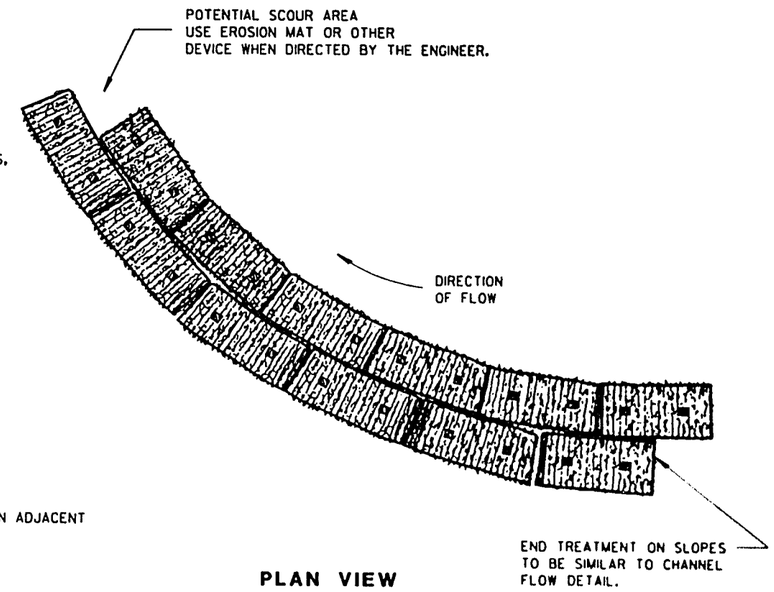


FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW

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.



PLAN VIEW

EROSION BALES WHEN ALTERING THE DIRECTION OF FLOW

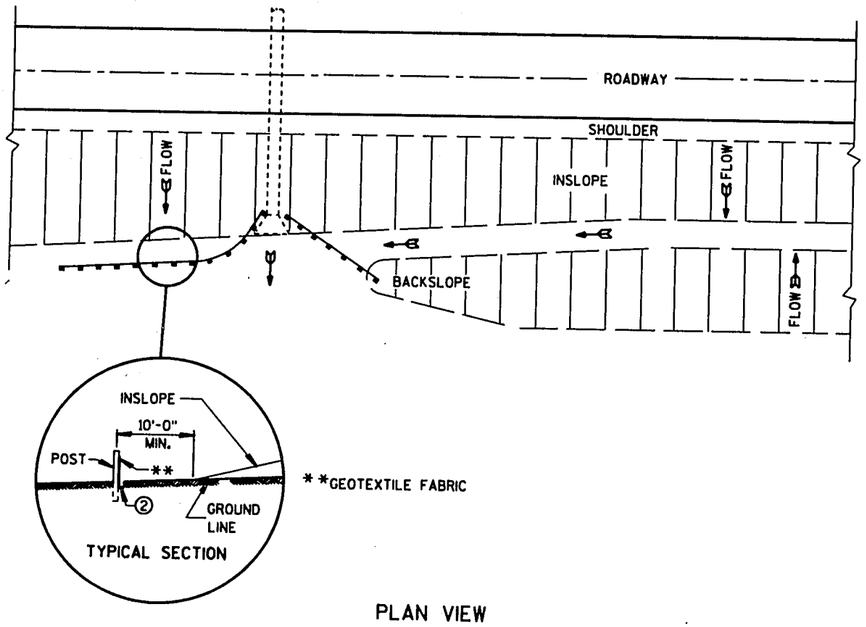
TYPICAL INSTALLATIONS OF EROSION BALES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/29/94
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

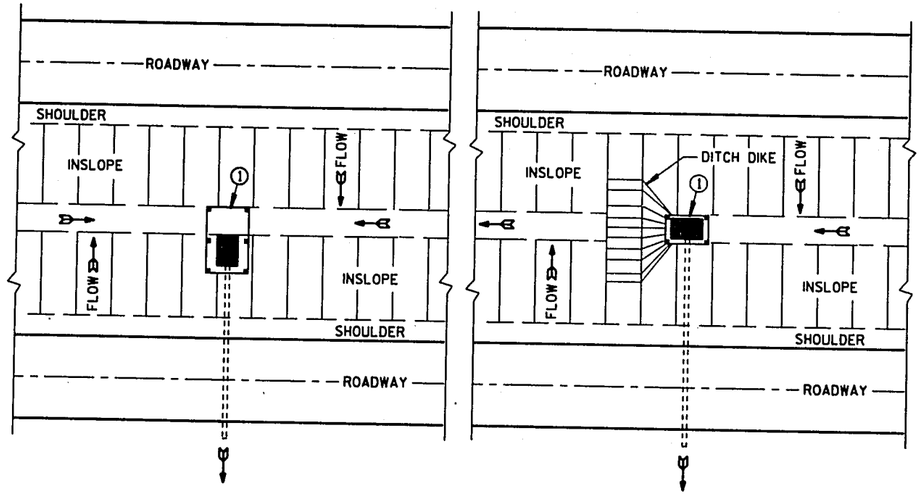
S.D.D. 8 E 8-2

S.D.D. 8 E 8-2



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



SITUATION 1 SITUATION 2

PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

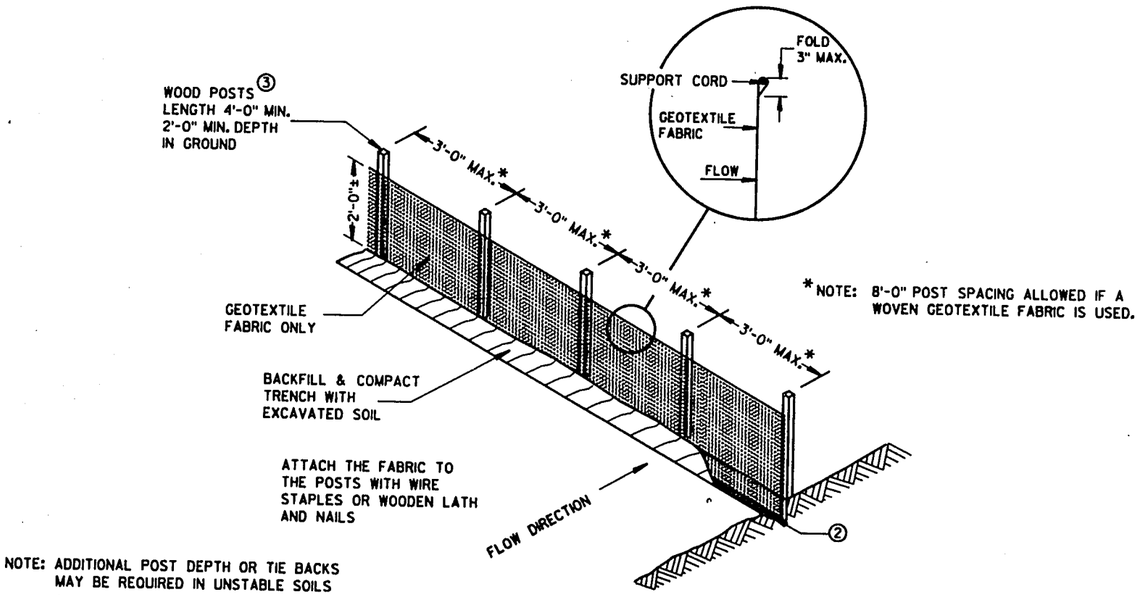
GENERAL NOTES

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.

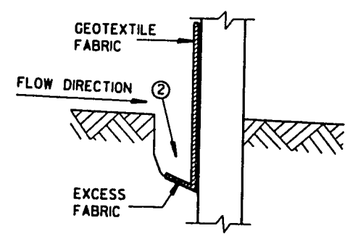
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.



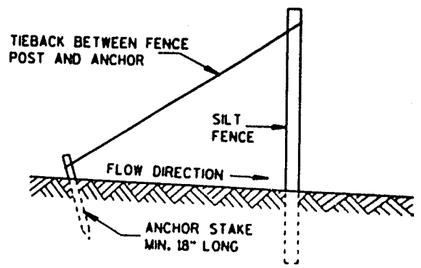
*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

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
6/29/04 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 E 9-4

S.D.D. 8 E 9-4

METAL APRON ENDWALLS

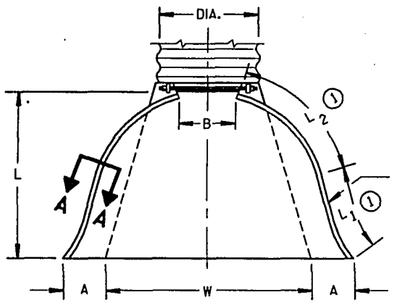
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L_1 ①	L_2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

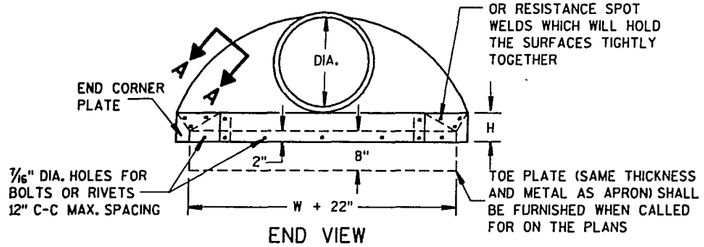
PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 3/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 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 2/3 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

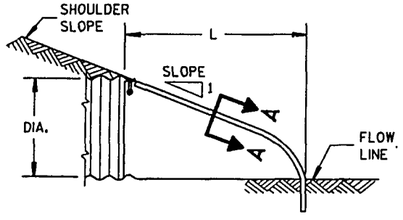
REINFORCED EDGE (SEE SECTION A-A)



END VIEW

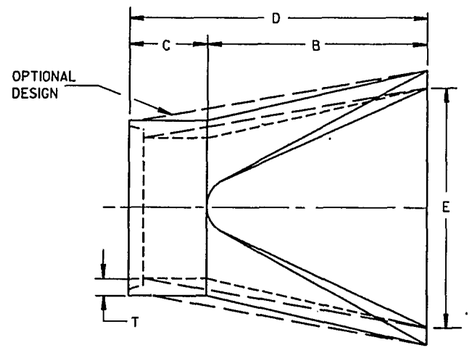
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS

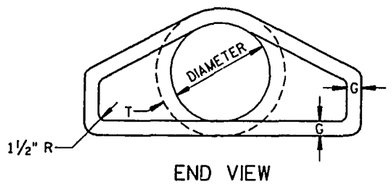


SIDE ELEVATION

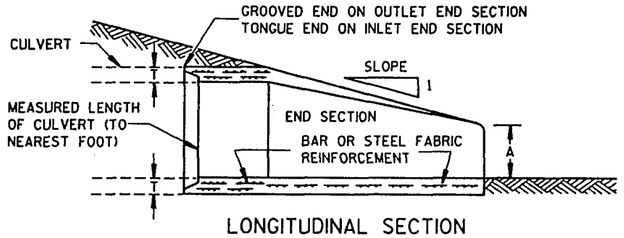
METAL ENDWALLS



PLAN

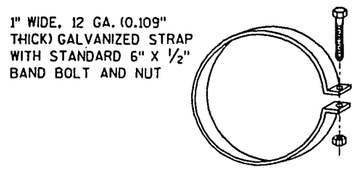


END VIEW



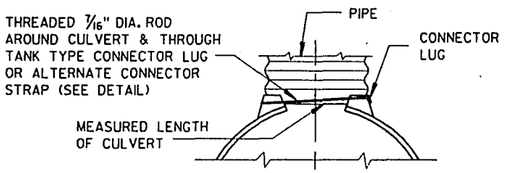
LONGITUDINAL SECTION

CONCRETE ENDWALLS

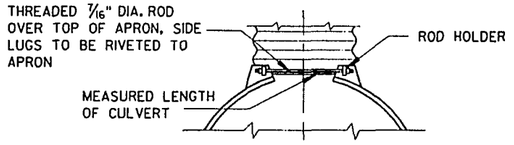


ALTERNATE FOR TYPE 1 CONNECTION

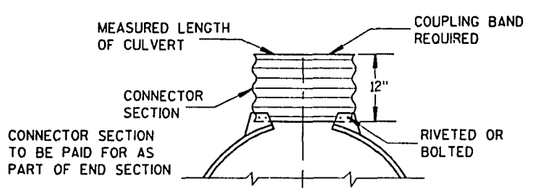
END SECTION CONNECTOR STRAP



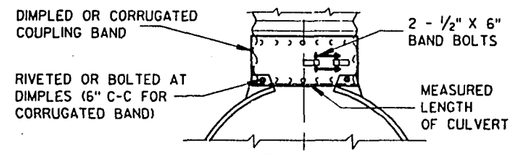
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

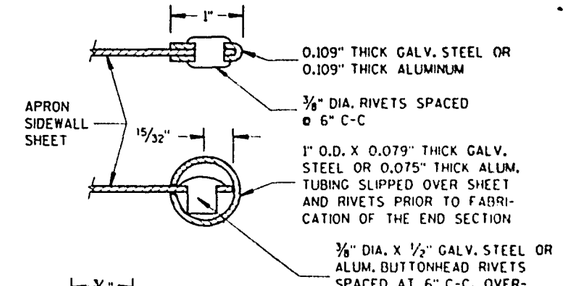
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

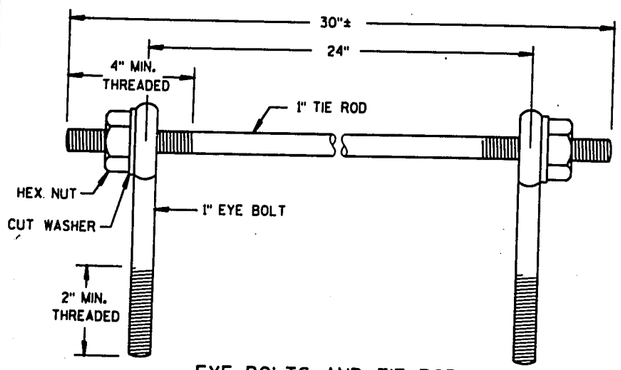
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

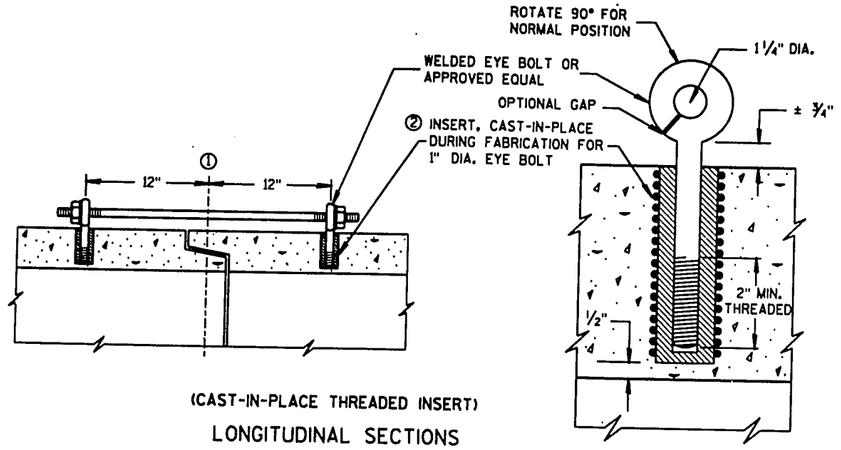
APPROVED 12/17/87 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

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

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



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES. UNLESS OTHERWISE STATED IN THE CONTRACT THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE CULVERT PIPE AS INDICTED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CULVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

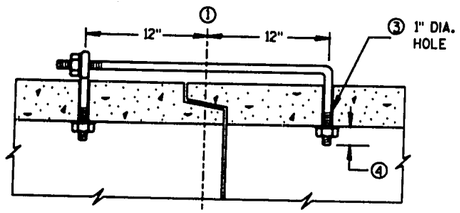
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12" FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2".

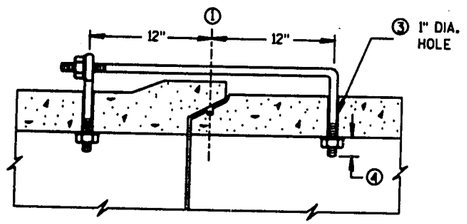
⑤ ROD DIAMETER + 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

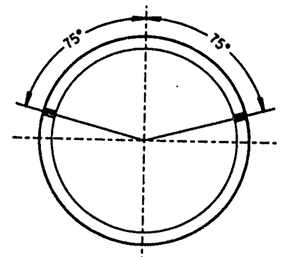
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

ADJUSTABLE TIE ROD TABLE

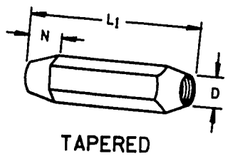
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES

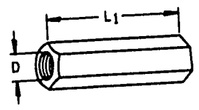


PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



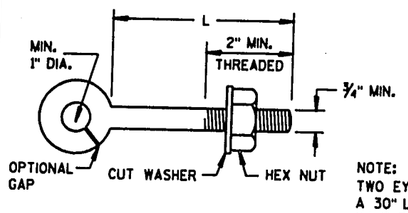
TAPERED



PLAIN

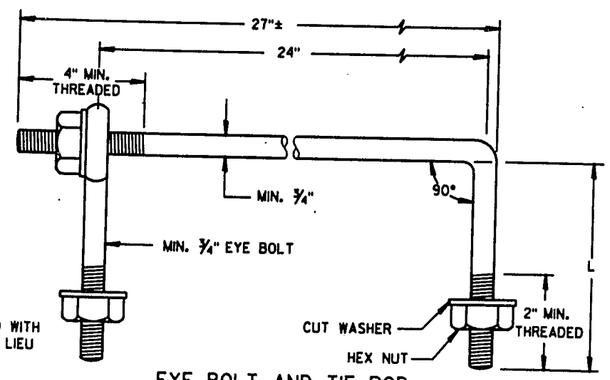
RIGHT AND LEFT THREADS

SLEEVE NUTS



EYE BOLT

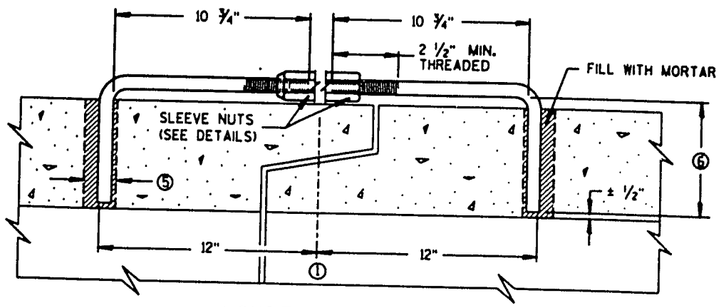
NOTE:
TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 8/10/92 DATE

STATE DESIGN ENGINEER FOR HWYS

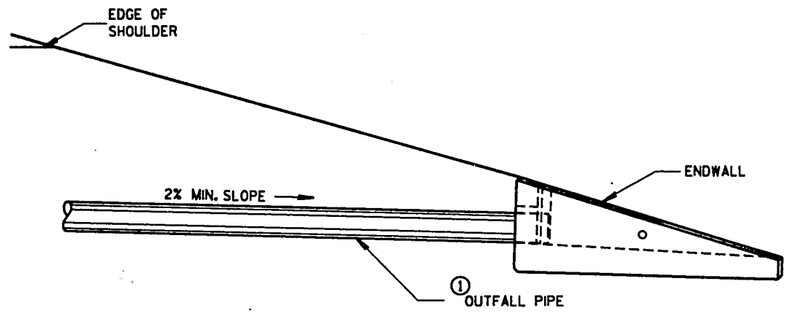
FHWA

S.D.D. 8 F 4-5

S.D.D. 8 F 4-5

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	M
**4	6	12	5¼	9	8	32	36	11	2⅜	6½	4
6	8	14	7¼	11	10	42	44	13	3⅝	8½	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.

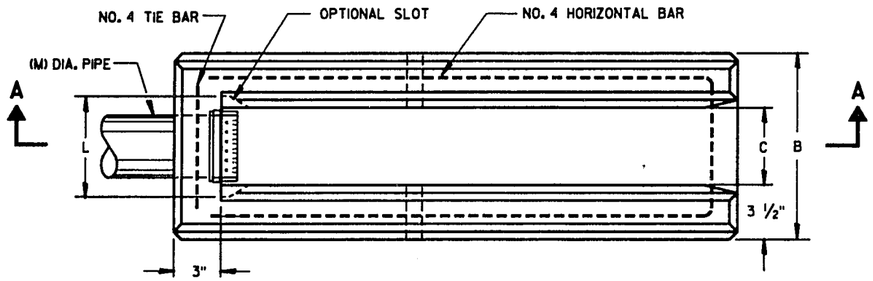
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

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.

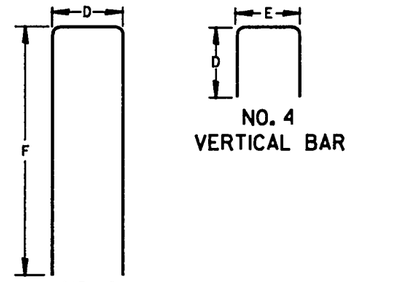
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE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

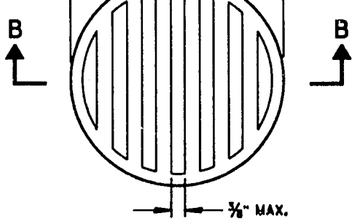
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL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



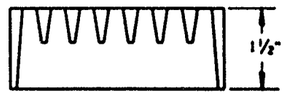
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS



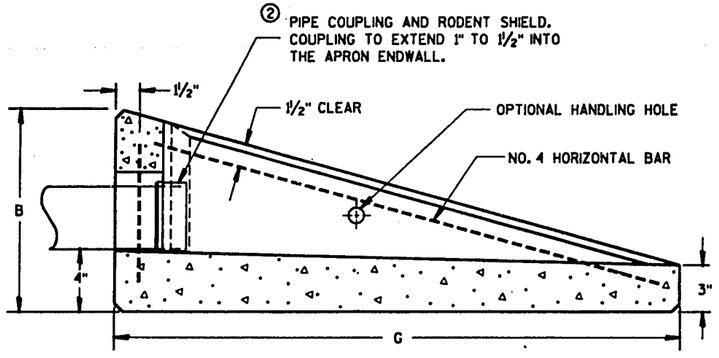
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



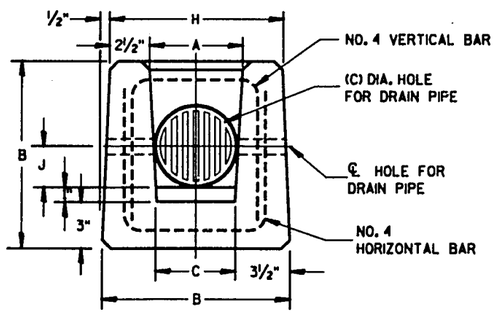
SECTION B-B

② RODENT SHIELD

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



SECTION A-A



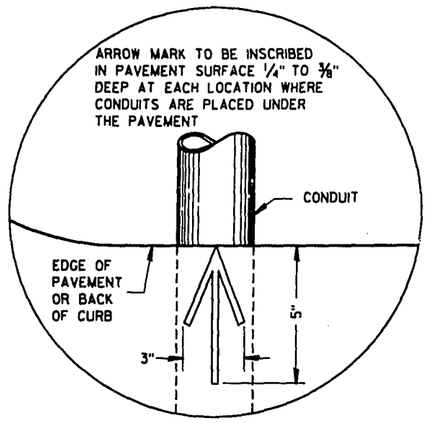
END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/19/93 DATE FHWA	STATE DESIGN ENGINEER FOR WDOT

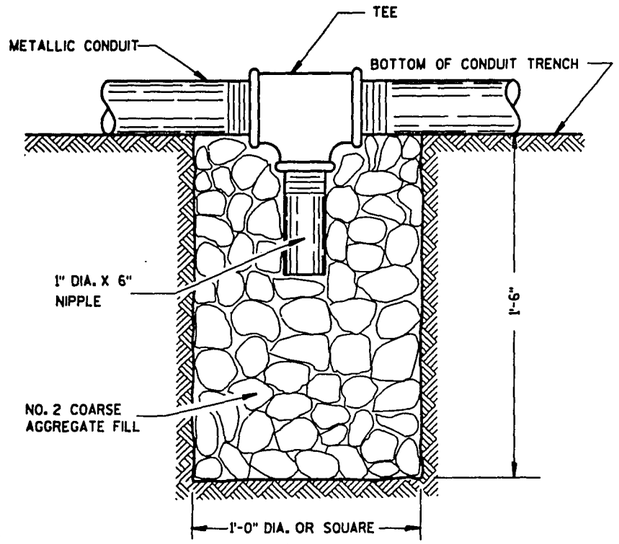
S.D.D. 8 F 6-3

S.D.D. 8 F 6-3



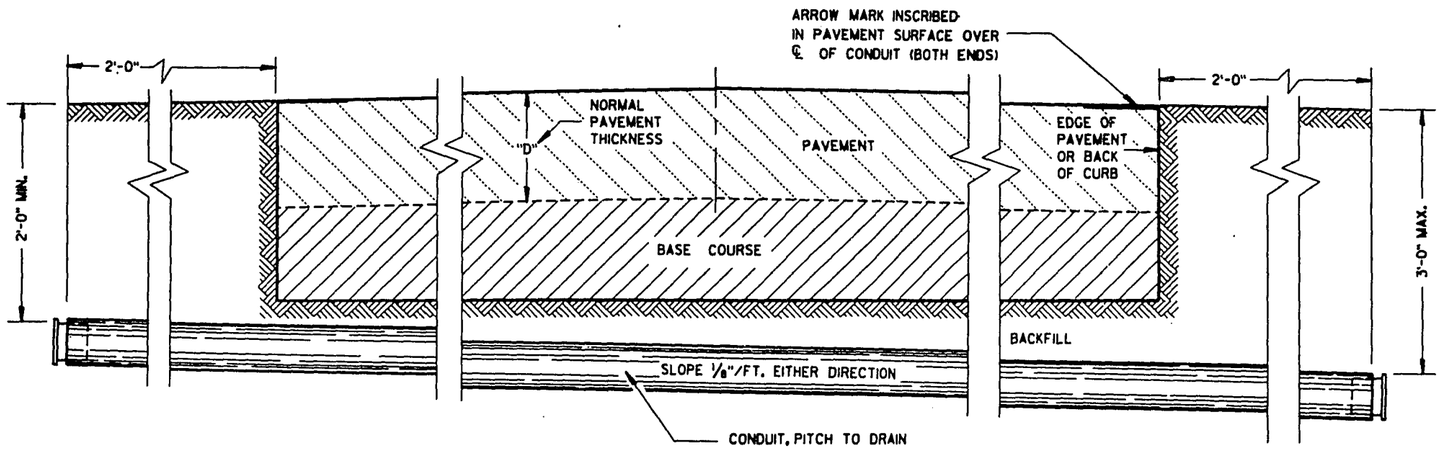
PLAN VIEW

ARROW MARK



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

DRAIN SUMP FOR CONDUIT



SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

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)

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE — STATE ELECTRICAL ENGR FOR HWYS

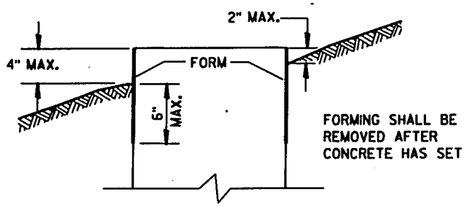
9/15/92 DATE — STATE TRAFFIC ENGINEER FOR HWYS

FHWA

S.D.D. 9 B 2-5

S.D.D. 9 B 2-5

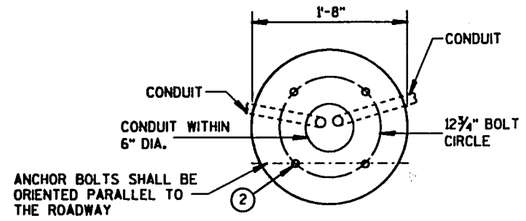
FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE

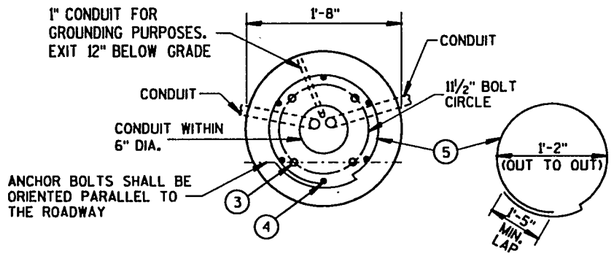


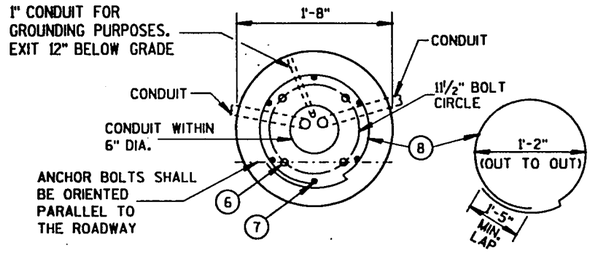
FORMING DETAIL

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.



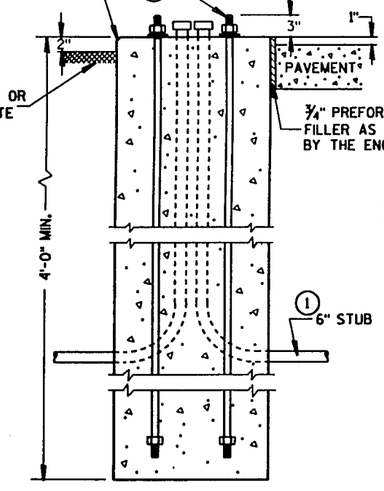




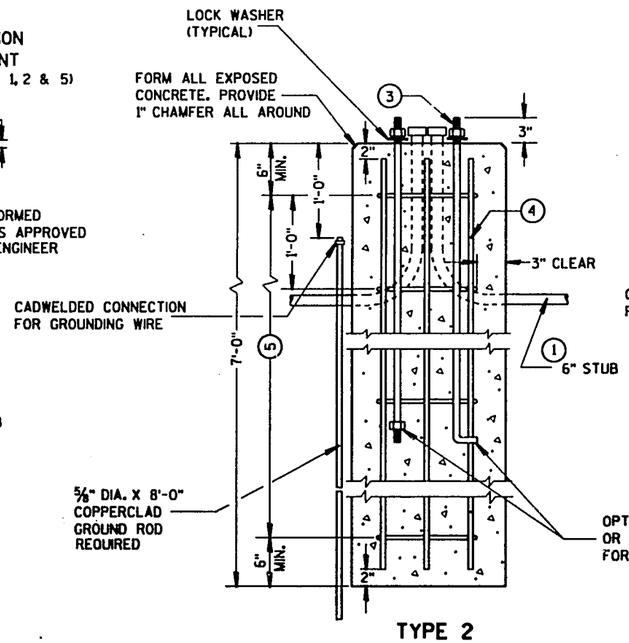
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2 & 5)

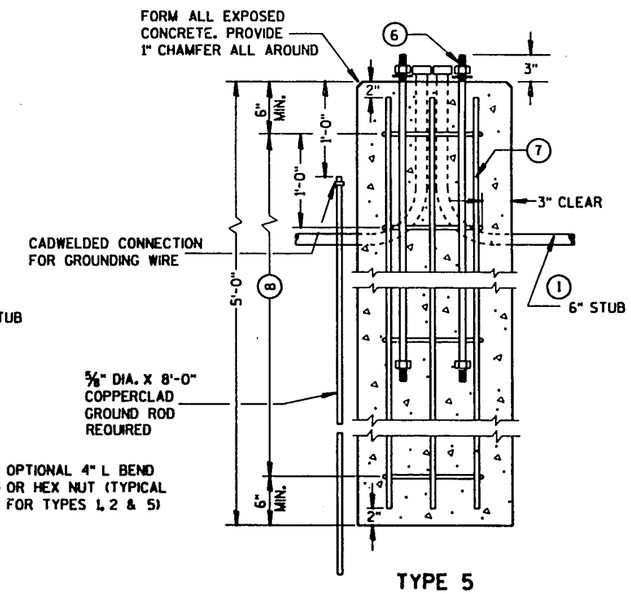
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)



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
11/21/93 DATE — STATE ELECTRICAL ENGR FOR HSYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HSYS

FHWA

S.D.D. 9 C 2-1

S.D.D. 9 C 2-1

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.

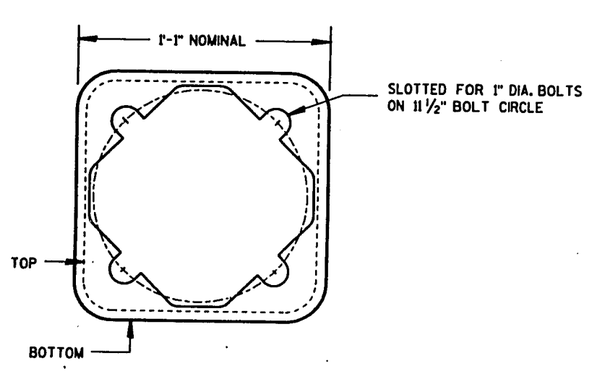
DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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.

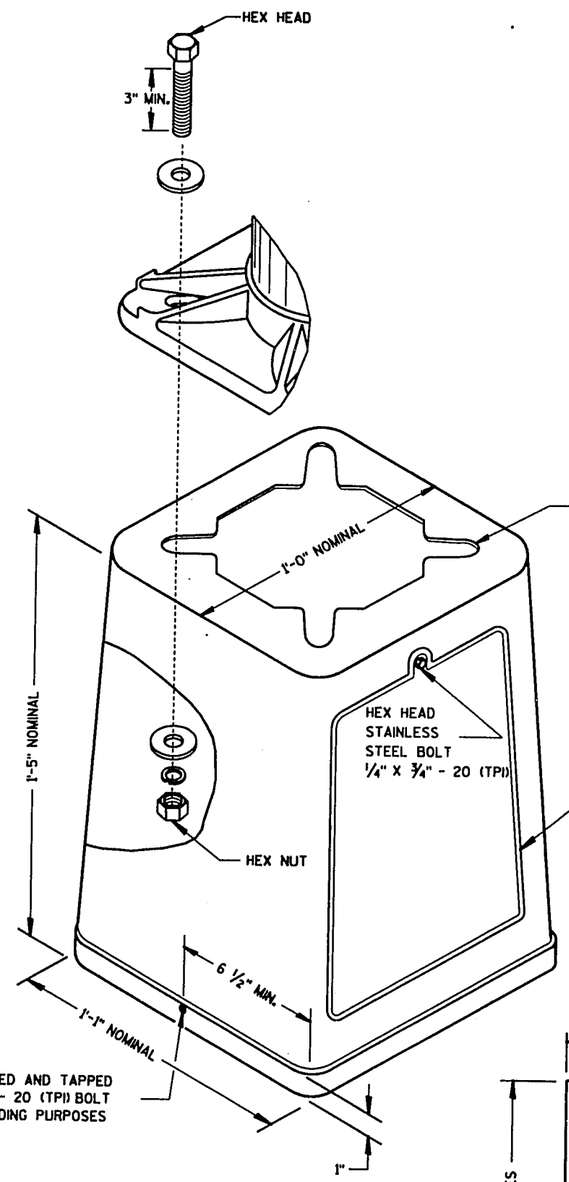
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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.



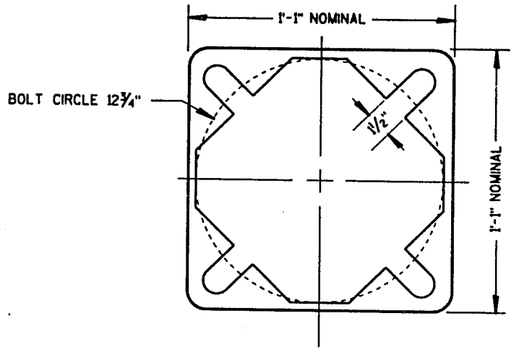
BOTTOM VIEW
(TRANSFORMER BASE)



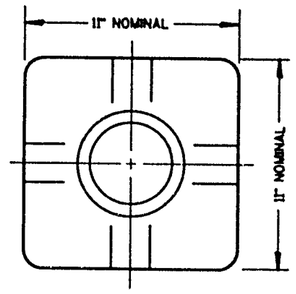
ISOMETRIC VIEW

TRANSFORMER BASE

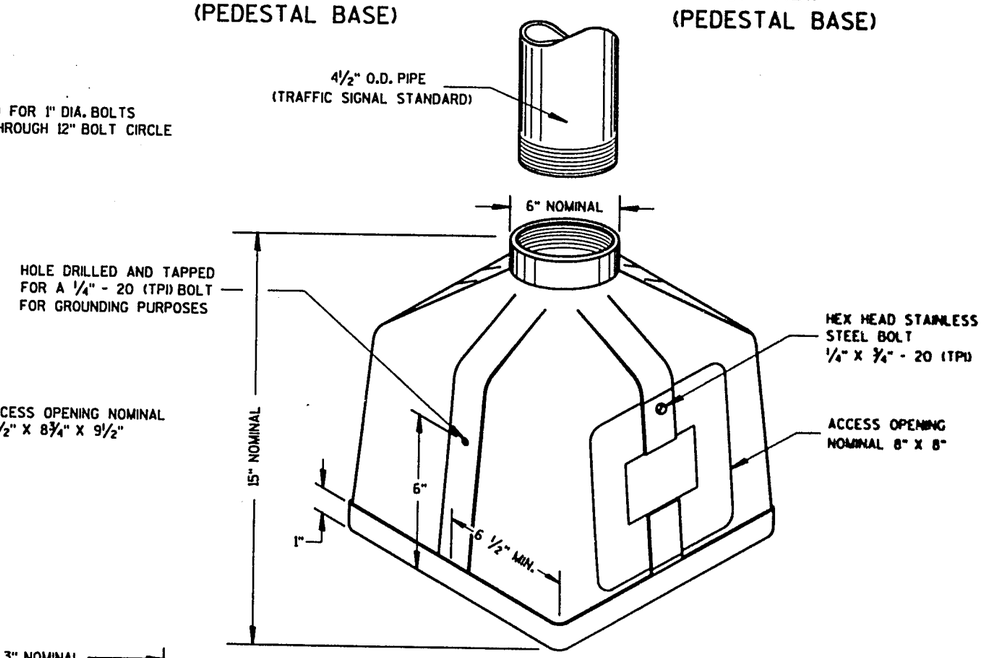
INTENDED FOR USE WITH TYPE 2, 3, 4 & 5 POLES



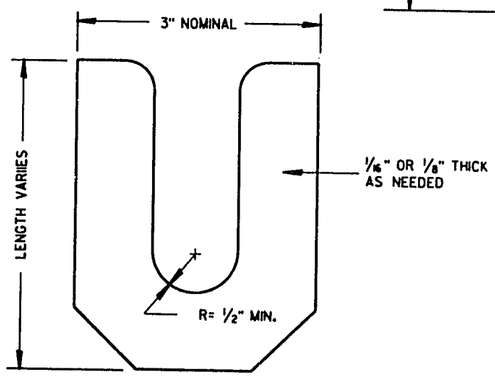
BOTTOM VIEW
(PEDESTAL BASE)



TOP VIEW
(PEDESTAL BASE)



ISOMETRIC VIEW
PEDESTAL BASE



LEVELING SHIM

CAST BASES

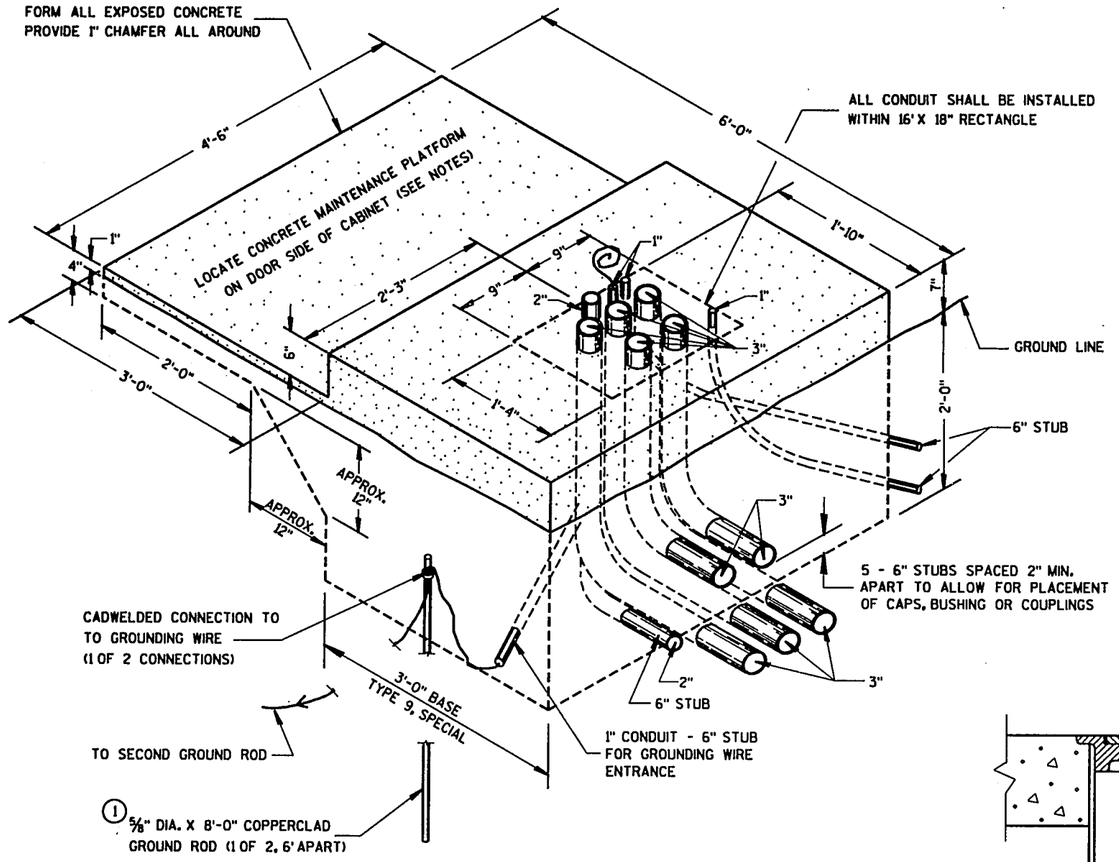
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS
1/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS

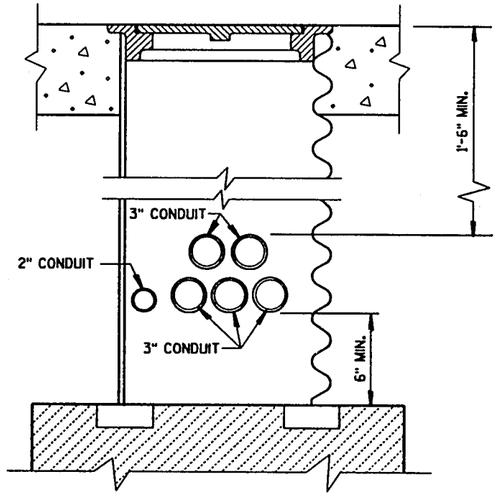
FHWA

S.D.D. 9 C 3-1

S.D.D. 9 C 3-1



TYPE 9, SPECIAL (5-3")
(ISOMETRIC VIEW)
(C.Y. CONCRETE = APPROX. 1.56)



CONDUIT LOCATIONS IN 24" X 36" PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 9, SPECIAL)
FOR OTHER PULL BOX INFORMATION, SEE SDD FOR "PULL BOXES"

GENERAL NOTES

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

INSTALL FOUR ½ 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 SURFACE SHALL BE TROWEL FINISHED AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE 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.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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.

CONDUIT EXITING THE CONCRETE BASE (ONE TWO INCH, FIVE THREE INCH) SHALL TERMINATE IN PULL BOX(S) AS SHOWN ON THE PLANS.

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

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

(1) A NO. 6 STRANDED, BARE COPPER GROUNDING WIRE SHALL BE CADWELDED TO THE GROUD ROD. THE OTHER END OF THE GROUNDING WIRE SHALL BE FED TO THE TOP OF THE CONTROL CABINET BASE, BY WAY OF THE 1" CONDUIT INSTALLED FOR GROUNDING WIRE ENTRANCE USE. FOUR (4) FEET OF NO. 6 GROUNDING WIRE SHALL BE LEFT AT THE TOP OF THE CONTROL CABINET BASE FOR FUTURE USE. IT SHALL BE NEATLY COILED AND TIED.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL (5-3" & 1-2" CONDUITS)

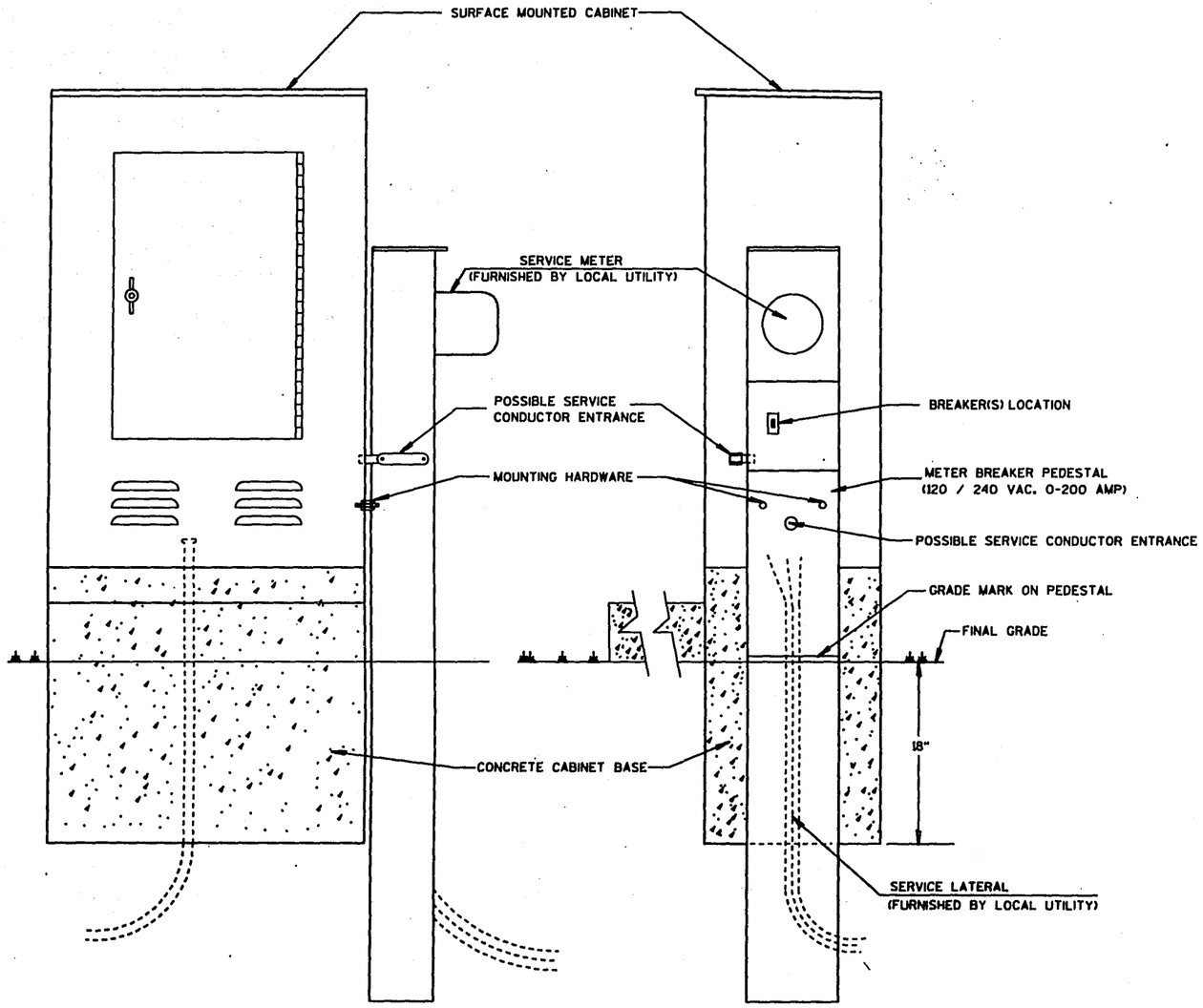
CONCRETE CONTROL CABINET
BASE, TYPE 9, SPECIAL

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 6-1

S.D.D. 9 C 6-1



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AS REQUIRED AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

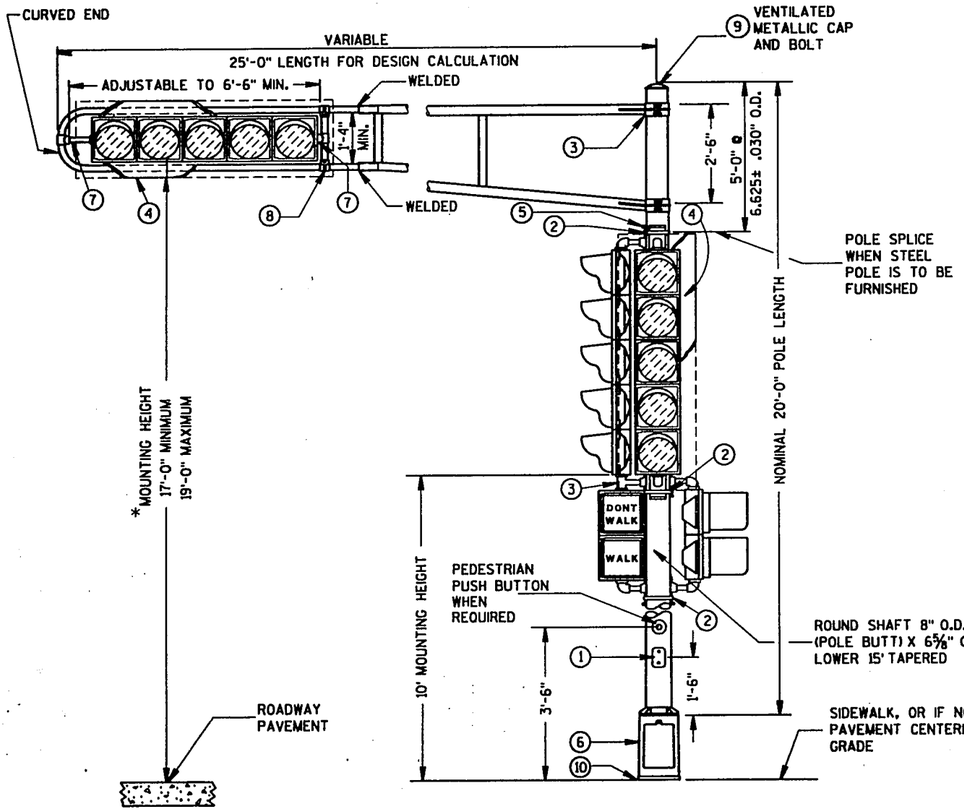
CABINET SERVICE INSTALLATION

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 D 1-1

S.D.D. 9 D 1-1



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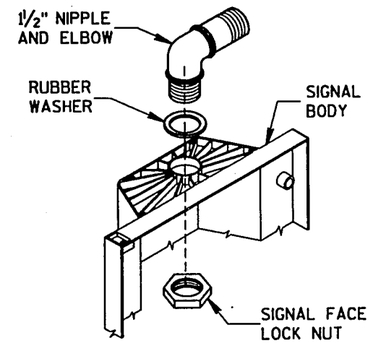
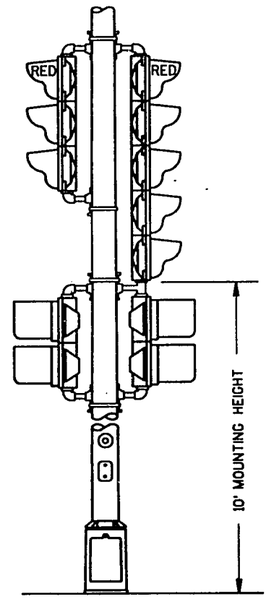
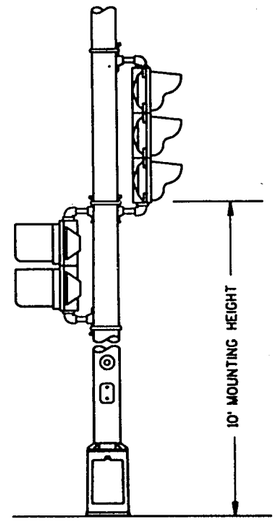


SIGNAL FACE MOUNTING DETAIL



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



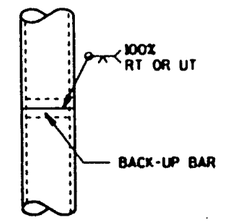
TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

GENERAL NOTES

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 FACES.
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 (¼" X ¾" LONG- 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 CERTIFICATION 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.



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

TYPE 2 POLE MOUNTING CONFIGURATION

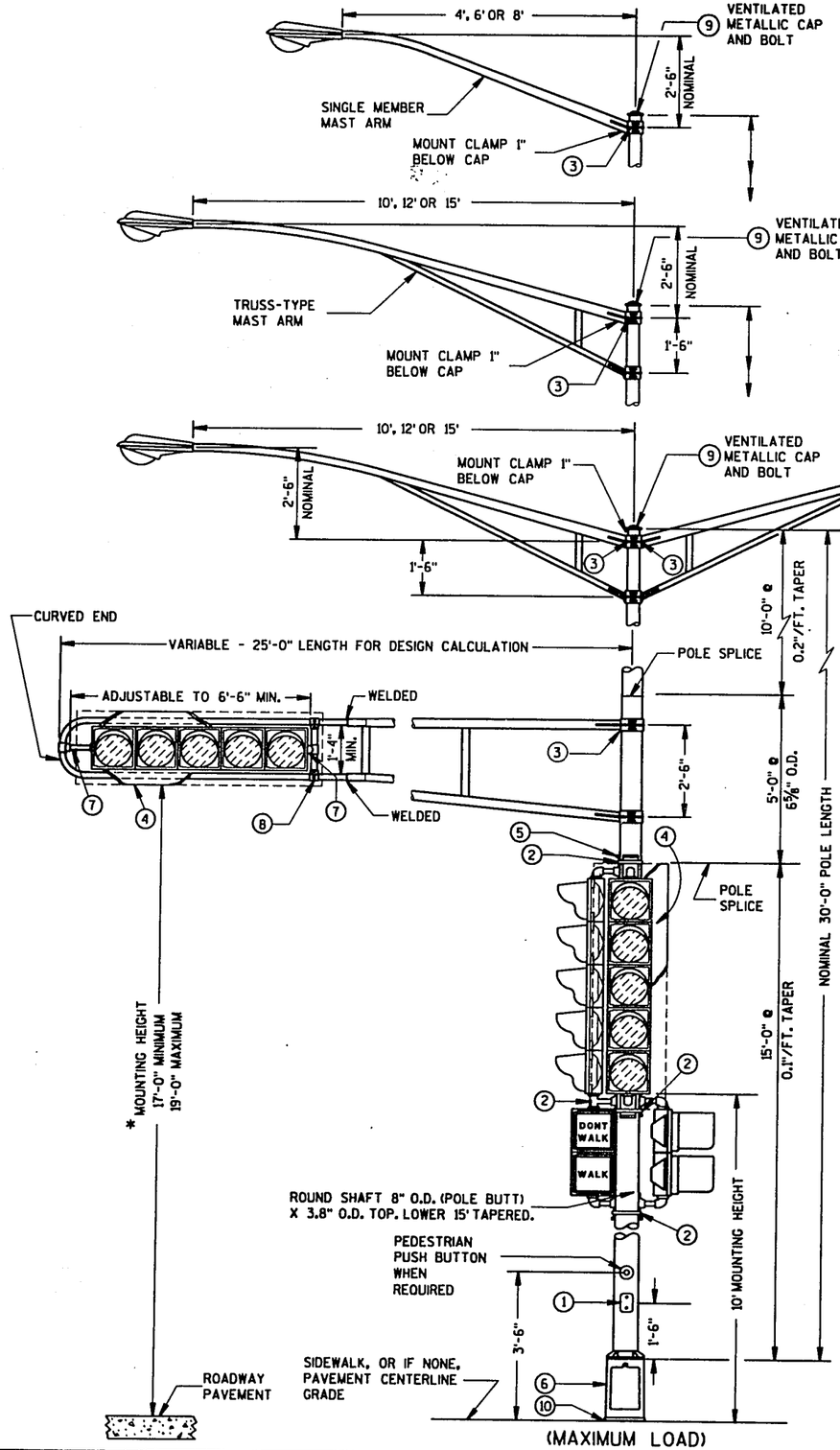
DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)
THIS DETAIL IS APPLICABLE WHEN SIGNALS ARE MOUNTED ON A TROMBONE ARM. DO NOT USE FOR LIGHTING.

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

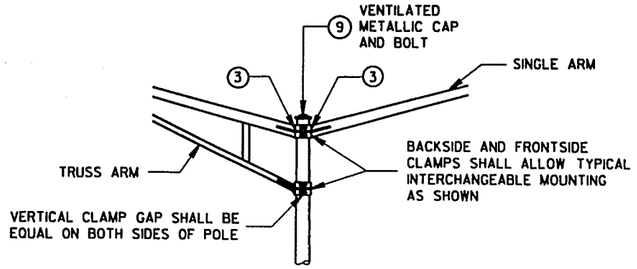
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-1a

S.D.D. 9 E 1-1a

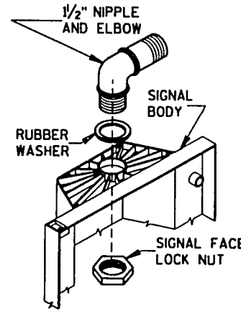


(MAXIMUM LOAD)

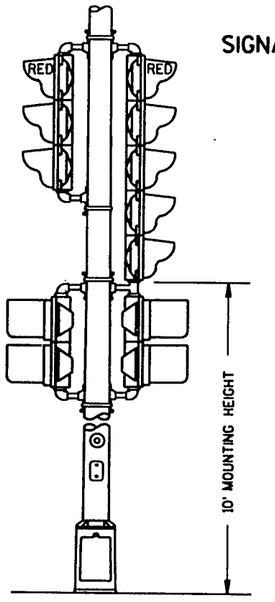


INTERCHANGEABLE MOUNTING DETAIL

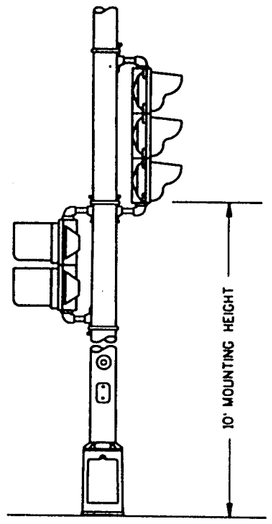
LUMINAIRE
WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.



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

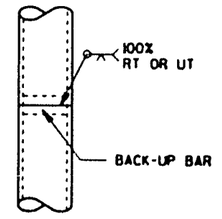
ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED FOR TWIN 15' ARMS WITH LUMINAIRES.

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

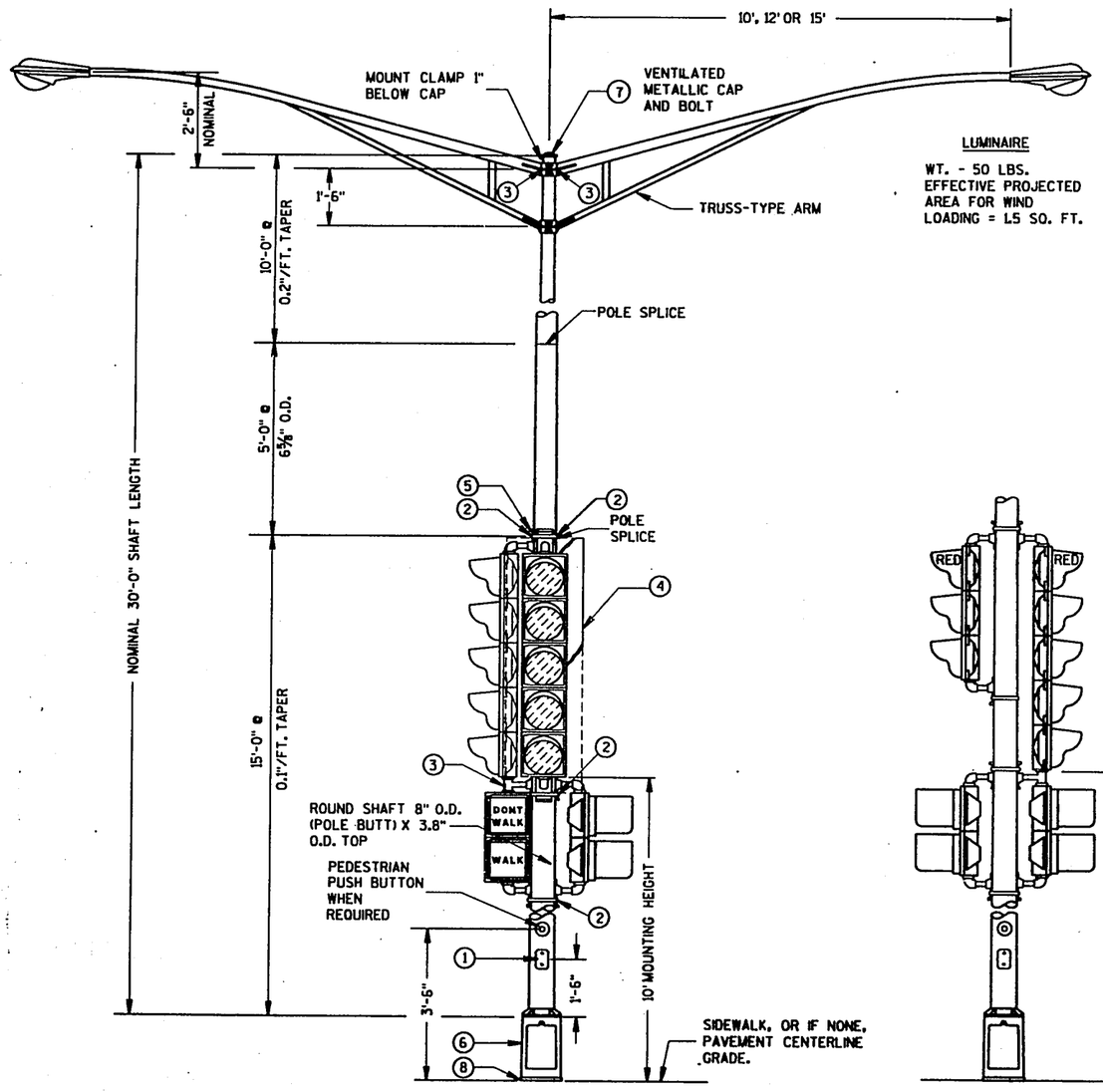
NOTE:
SHEET SDD 9 E 1-1a IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



(MAXIMUM LOAD)

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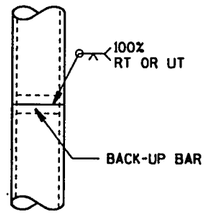
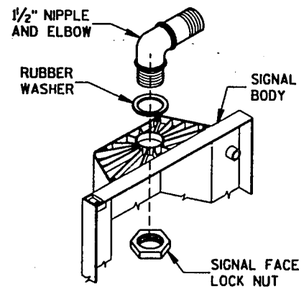
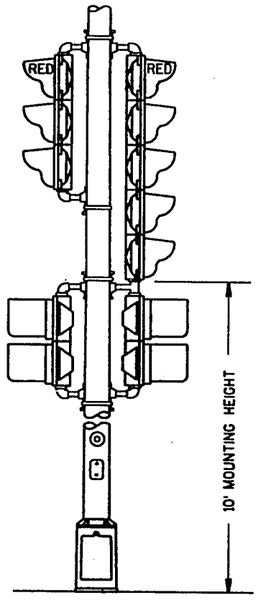


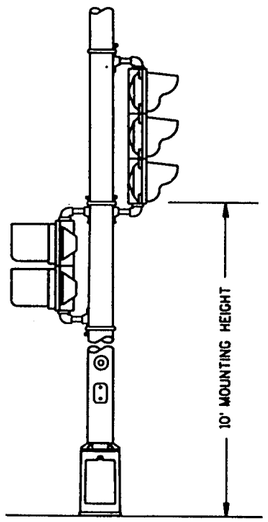
POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

GENERAL NOTES

THE POLE USED IN THE TYPE 4 MOUNTING CONFIGURATION SHALL BE INTERCHANGEABLE WITH, AND MEET THE LOADING REQUIREMENTS OF A TYPE 3 POLE.

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.

(L) 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.

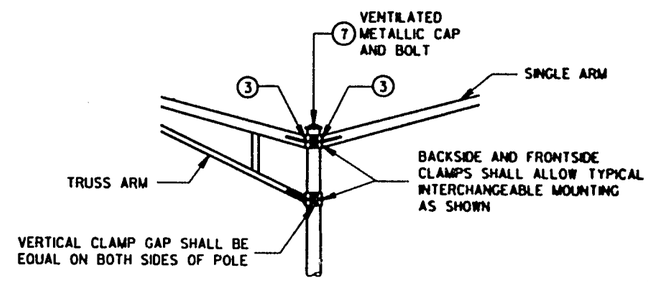
(4.) VERTICAL MOUNTED SIGNAL FACES WITH BACKBOARDS REQUIRED ARE LOCATED AS SHOWN ON THE PLANS. BACKBOARDS ARE REQUIRED TO SURROUND SIGNAL FACES. BACKBOARDS SHALL EXTEND 5" BEYOND EXTREMITIES OF SIGNAL FACE.

(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.) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8.) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

NOTE:

SHEET SDD 9 E1-1a IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

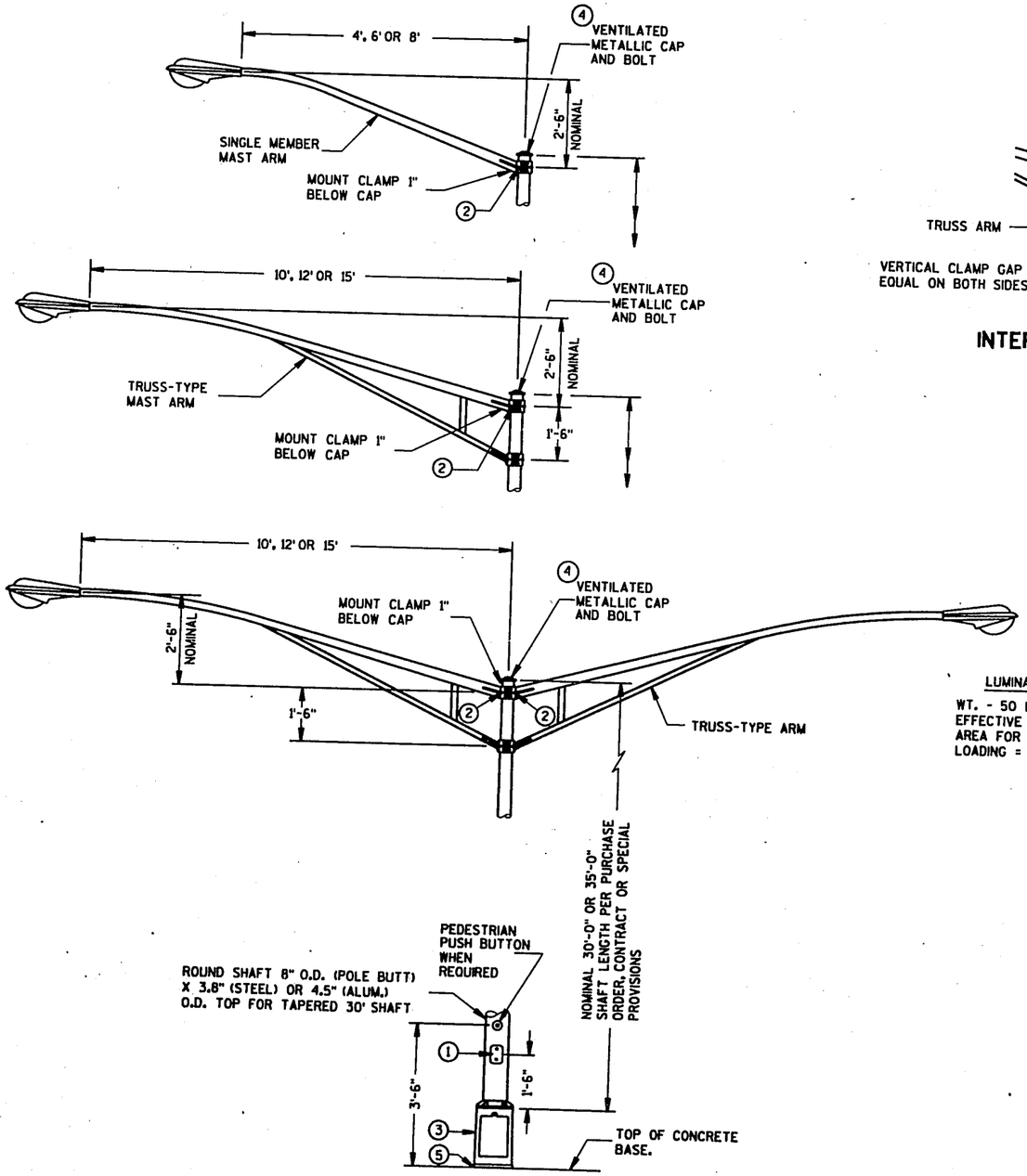
TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-1c

S.D.D. 9 E 1-1c



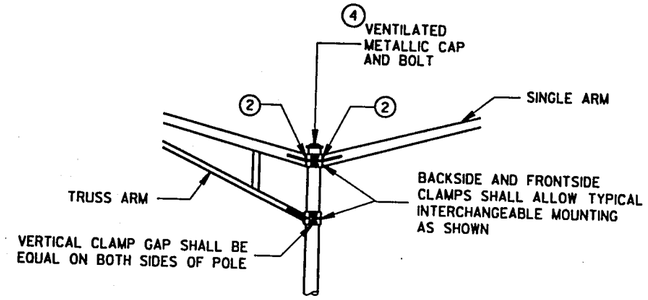
LUMINAIRE

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

TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

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 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. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM TRANSFORMER BASE. WHEN REQUIRED.
4. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

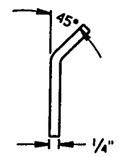
NOTE:
SHEET SDD 9 E 1-1a IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

POLE MOUNTINGS FOR LIGHTING UNITS TYPE 5

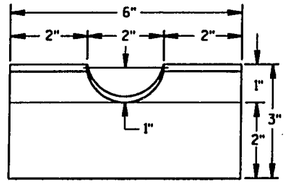
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-1d

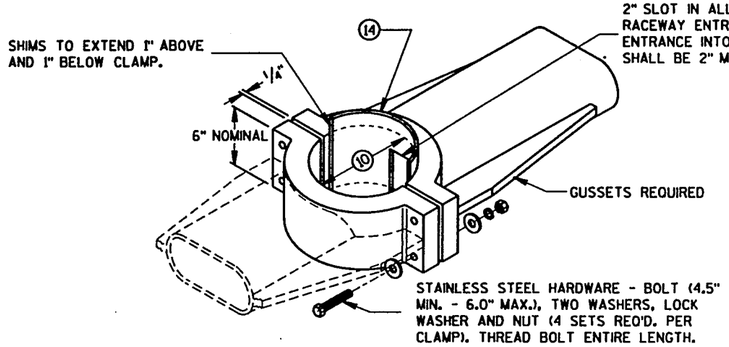
S.D.D. 9 E 1-1d



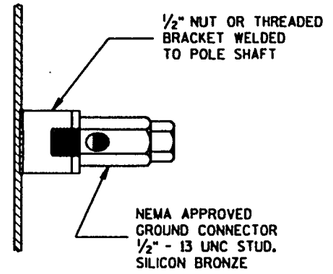
END VIEW

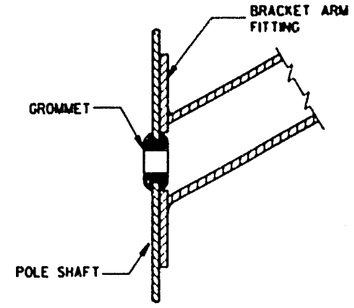


FRONT VIEW
RECTANGULAR CLAMP SHIM
(4 TO A SET)

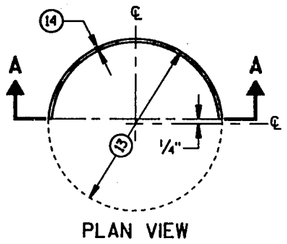


TYPICAL TROMBONE MAST ARM AND LUMINAIRE MAST ARM MOUNTING CLAMP

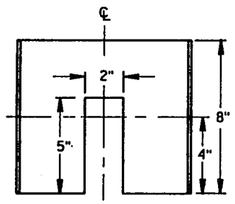




TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



PLAN VIEW



SECTION A-A
CIRCULAR CLAMP SHIM
(2 TO A SET)

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".

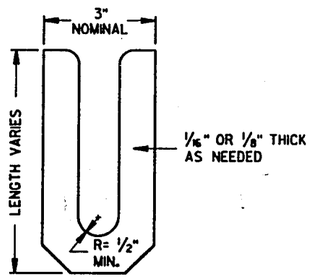
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

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

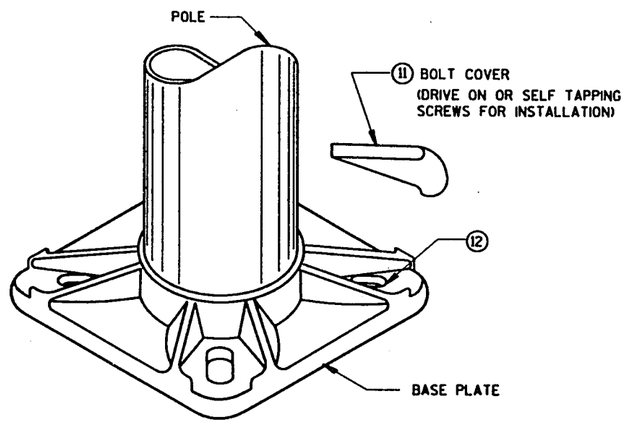
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(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.

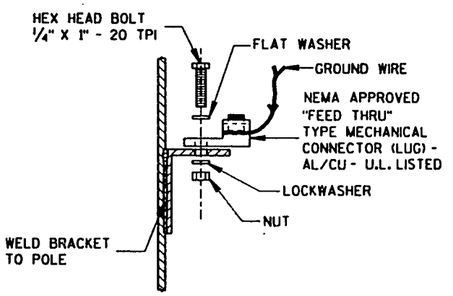
SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



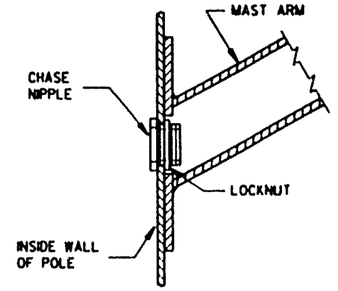
LEVELING SHIM (15)



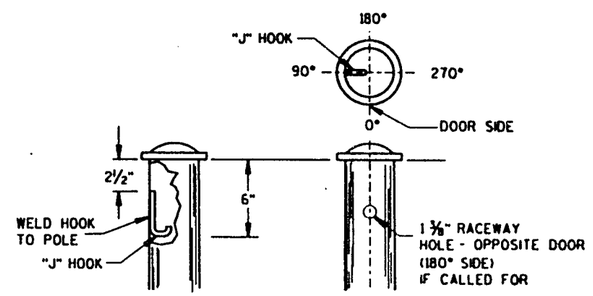
BASE PLATE



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



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT



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.

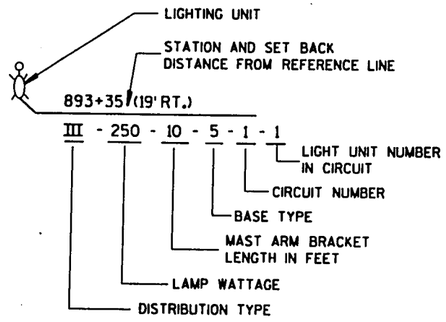
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

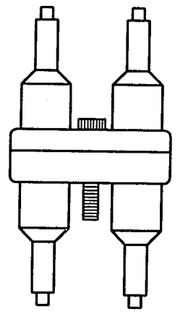
APPROVED
3/21/93 DATE — STATE ELECTRICAL ENGR FOR HBYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HBYS
FHWA

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

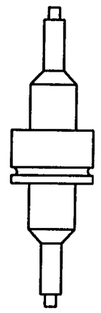
S.D.D. 9 E 1-1e



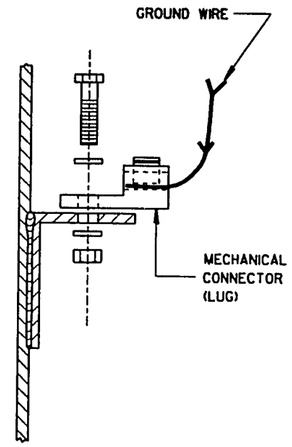
LIGHTING UNIT CODE

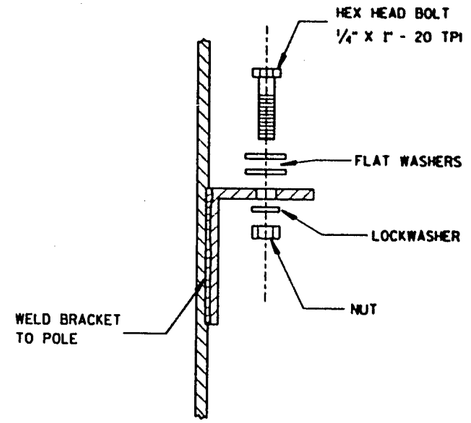


DETAIL "A"
DOUBLE POLE



DETAIL "B"
SINGLE POLE

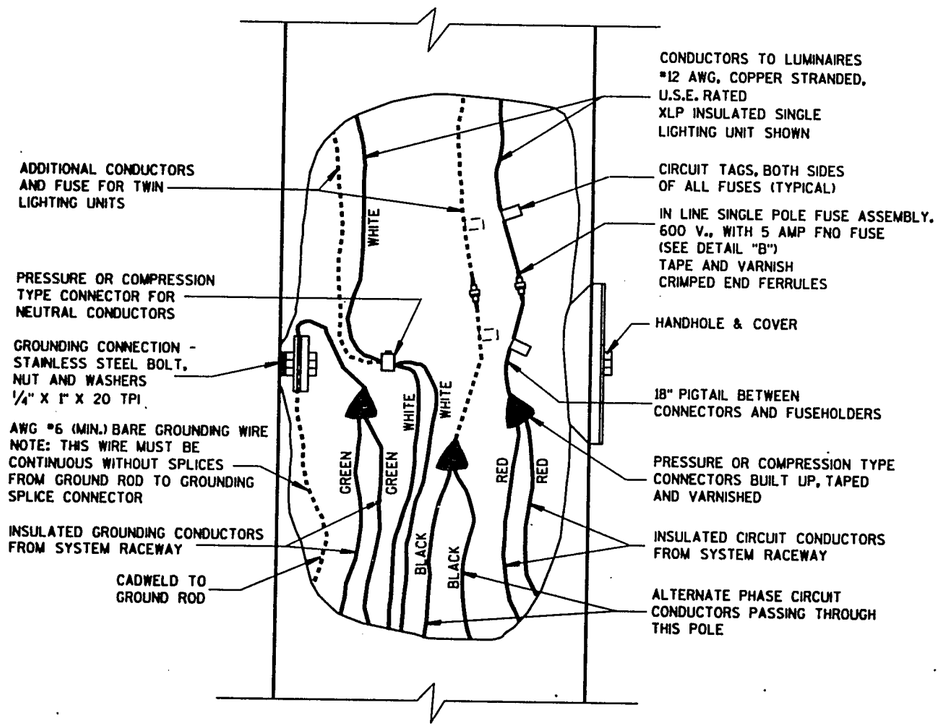




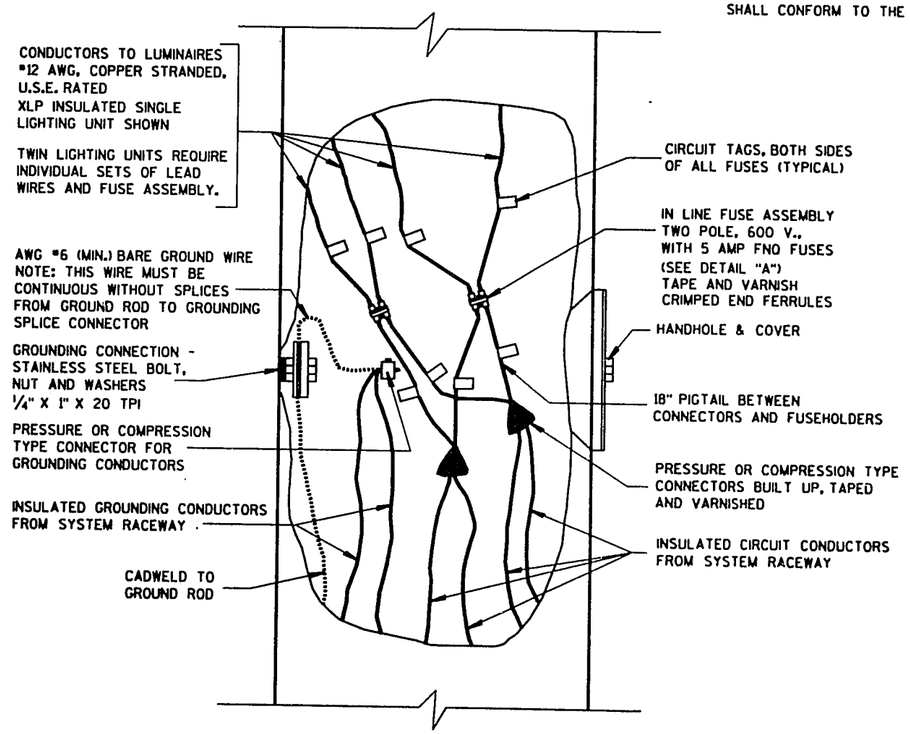
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

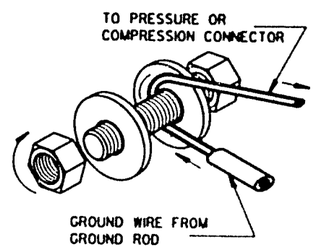
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.



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

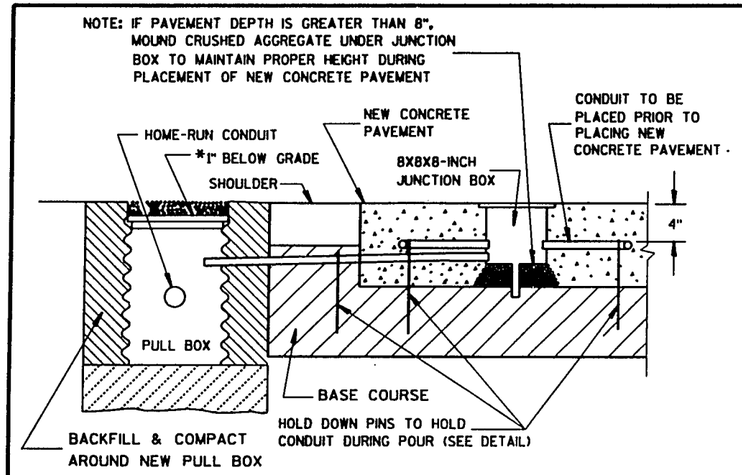
NON-FREEWAY LIGHTING UNIT
POLE WIRING

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

S.D.D. 9 E 3-1

S.D.D. 9 E 3-1



SECTION A-A
NO CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE, BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

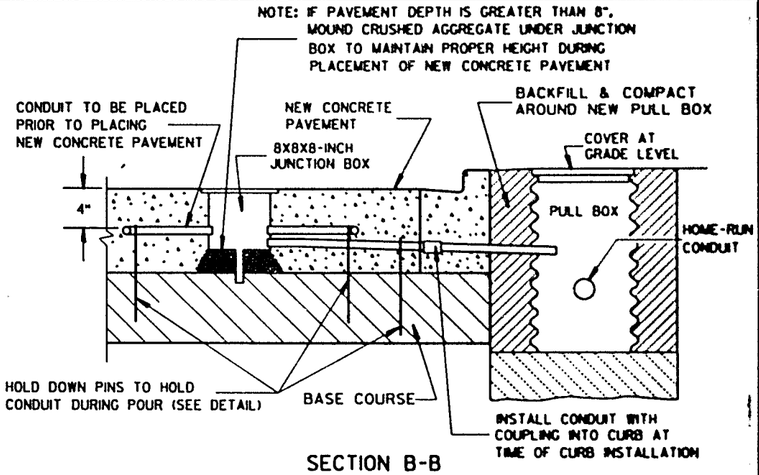
ANY PVC LEADOUT CONDUIT CONTAINING MORE THAN ONE TWISTED PAIR OF LOOP LEAD WIRE SHALL BE 2".

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TURNS PER FOOT BEFORE INSTALLATION.

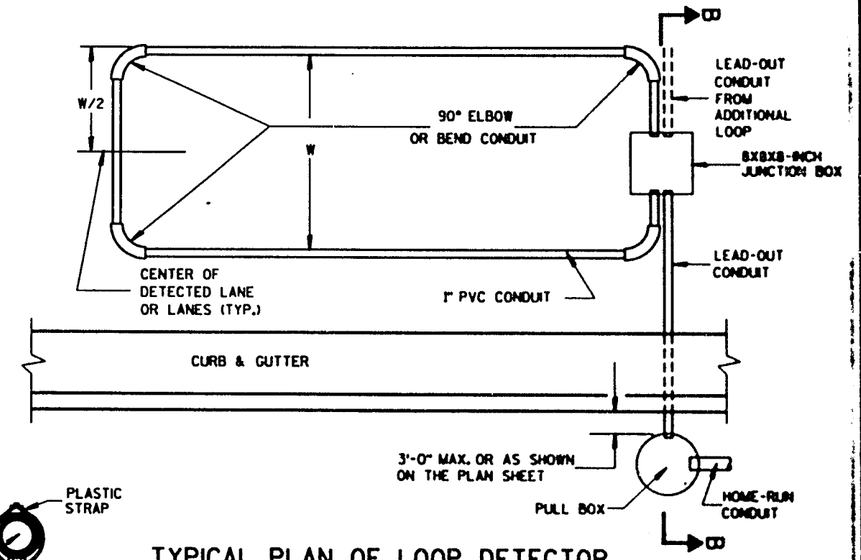
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROAD SIDE PULL BOX, THROUGH THE JUNCTION BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

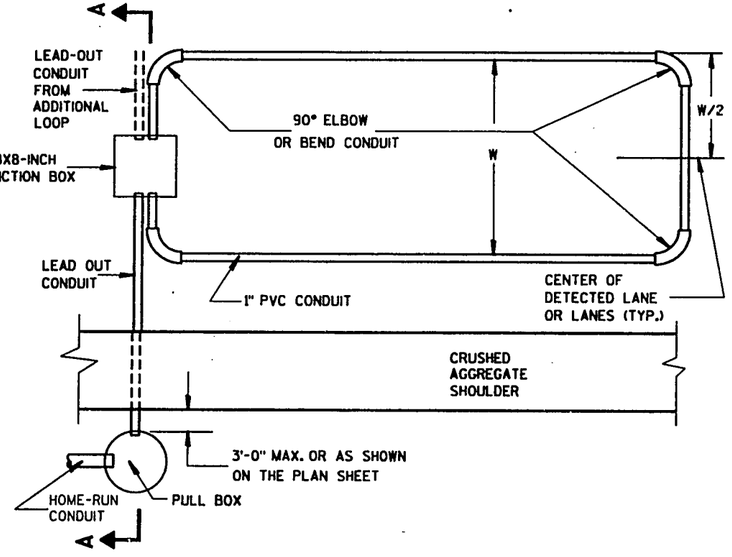
PROTECTION OF THE JUNCTION BOX AND RELATED CONDUITS SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW CONCRETE PAVEMENT IS POURED.



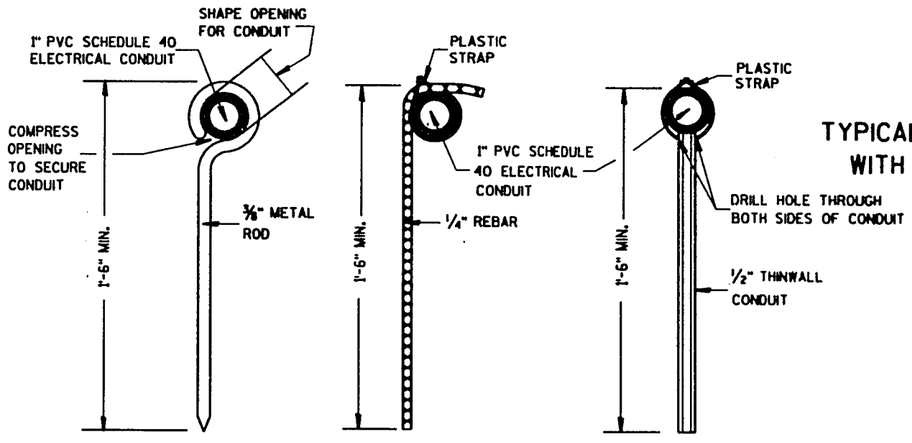
SECTION B-B
CURB & GUTTER
DETECTOR LOOP INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR WITH 8X8X8-INCH JUNCTION BOX



TYPICAL PLAN OF LOOP DETECTOR WITH 8X8X8-INCH JUNCTION BOX

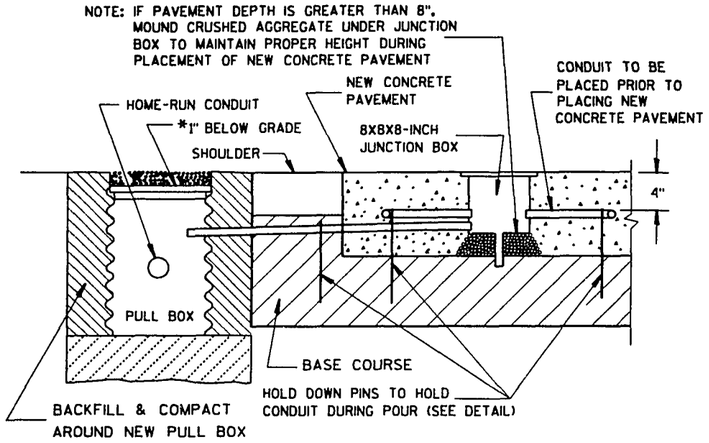


TYPICAL DETAILS FOR HOLD DOWN PINS

LOOP DETECTOR INSTALLED IN NEW CONCRETE PAVEMENT 8X8X8-INCH JUNCTION BOX
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 4/21/23 DATE — STATE ELECTRICAL ENGR FOR HBTS. 4/21/23 DATE — STATE TRAFFIC ENGINEER FOR HBTS. FHBA

S.D.D. 9 F 2-1

S.D.D. 9 F 2-1



SECTION A-A
NO CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

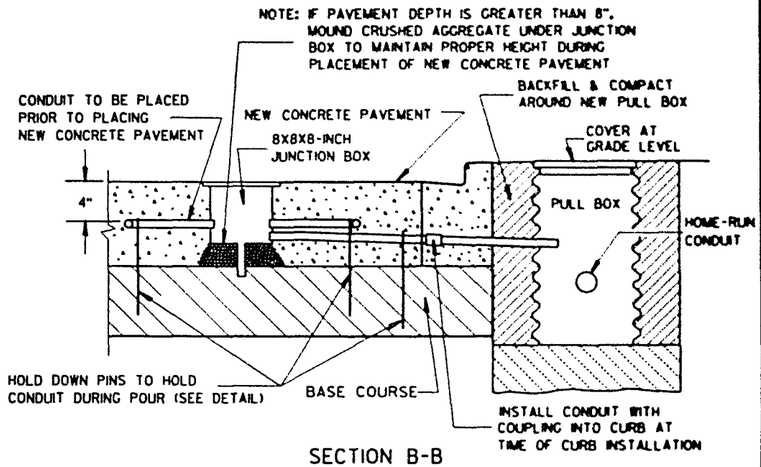
LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TURNS PER FOOT BEFORE INSTALLATION.

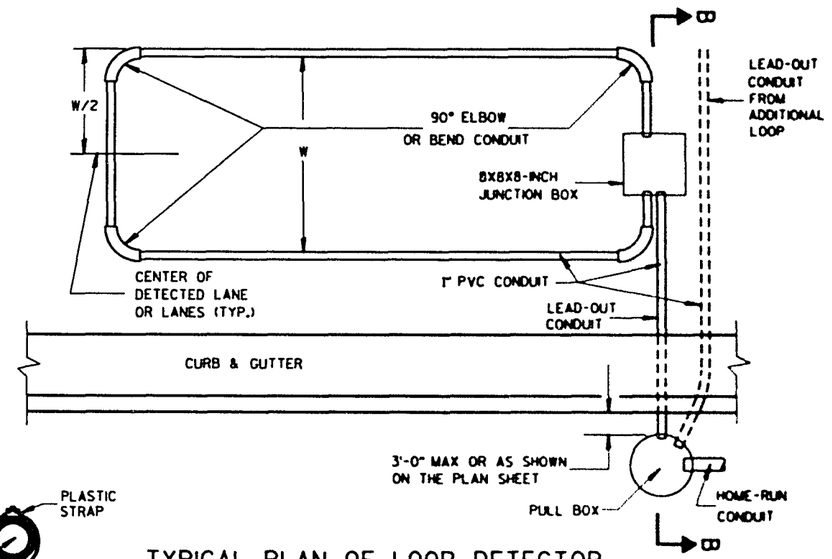
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROAD SIDE PULL BOX, THROUGH THE JUNCTION BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

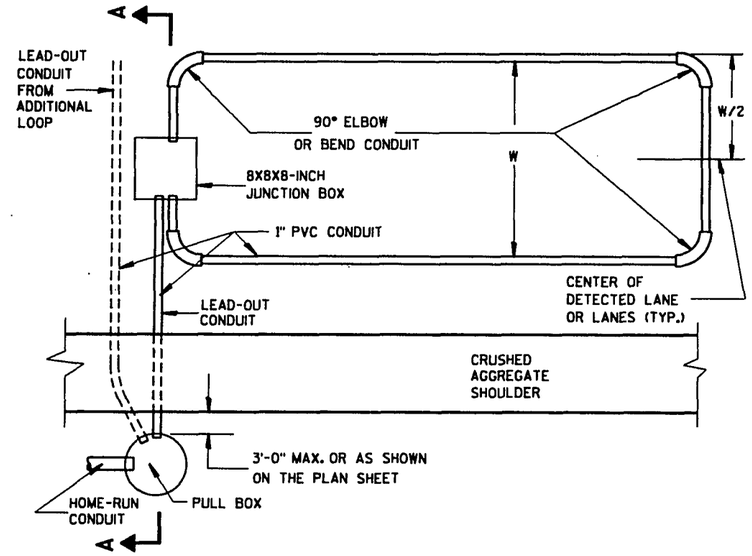
PROTECTION OF THE JUNCTION BOX AND RELATED CONDUITS SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW CONCRETE PAVEMENT IS POURED.



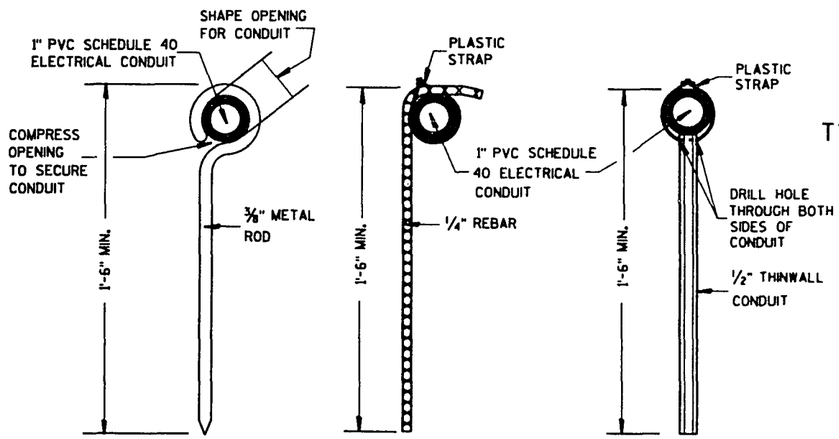
SECTION B-B
CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR
WITH 8X8X8-INCH JUNCTION BOX



TYPICAL PLAN OF LOOP DETECTOR
WITH 8X8X8-INCH JUNCTION BOX



TYPICAL DETAILS FOR HOLD DOWN PINS

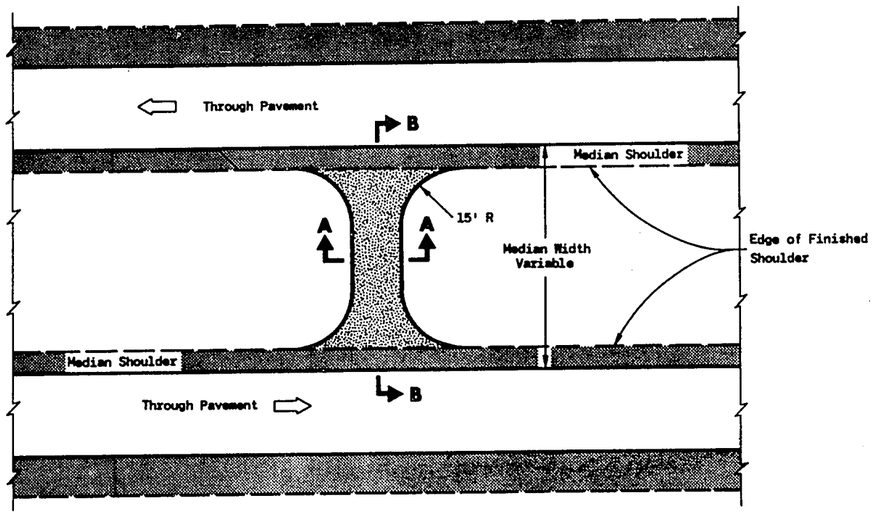
LOOP DETECTOR INSTALLED
IN NEW CONCRETE PAVEMENT
8X8X8-INCH JUNCTION BOX
(MULTIPLE LEAD-OUT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

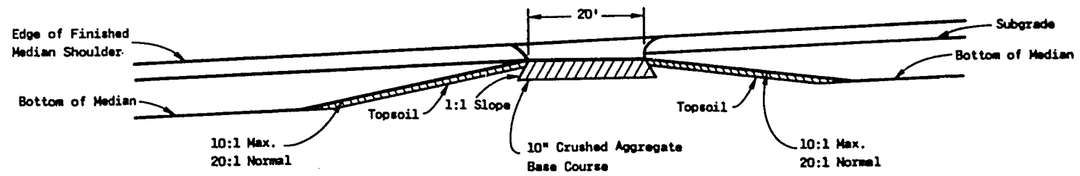
APPROVED
4/21/93 DATE — STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE — STATE TRAFFIC ENGINEER FOR HWYS
FHWA

S.D.D. 9 F 3-1

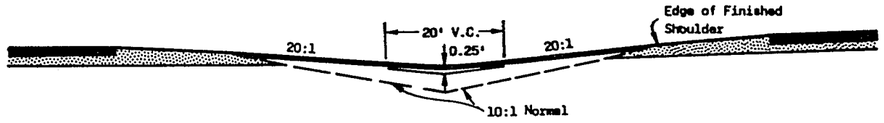
S.D.D. 9 F 3-1



PLAN VIEW



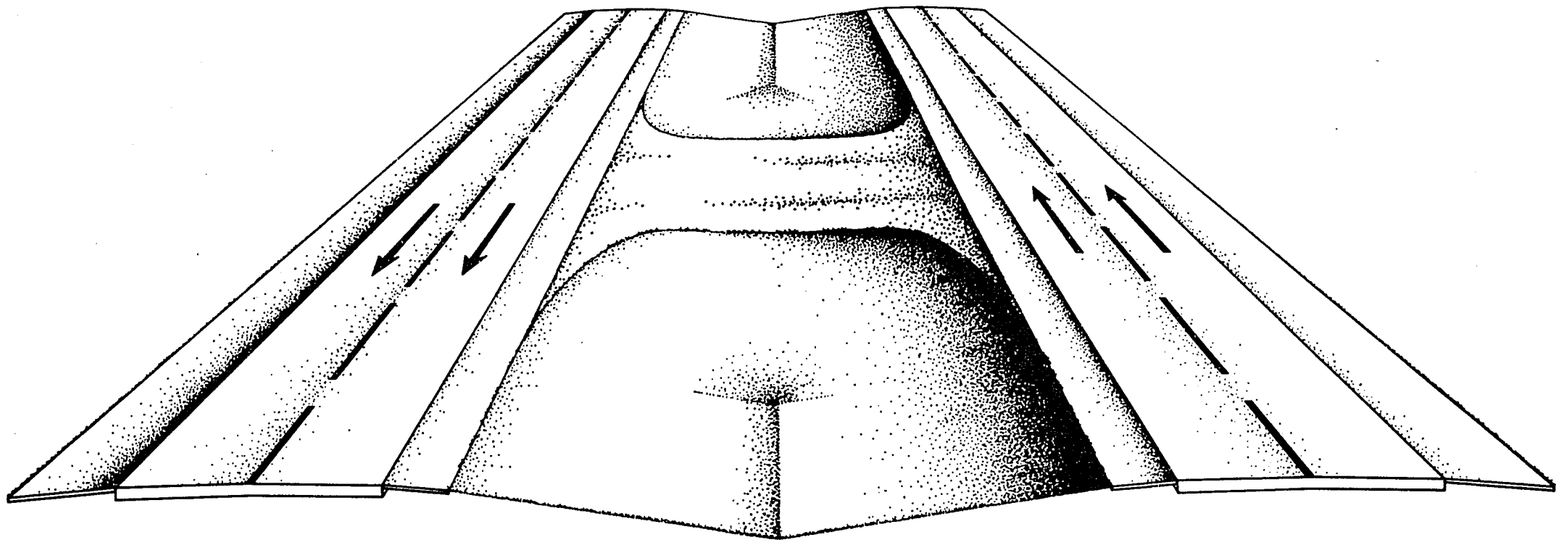
SECTION A-A



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.



MAINTENANCE CROSSOVER FOR FREEWAYS

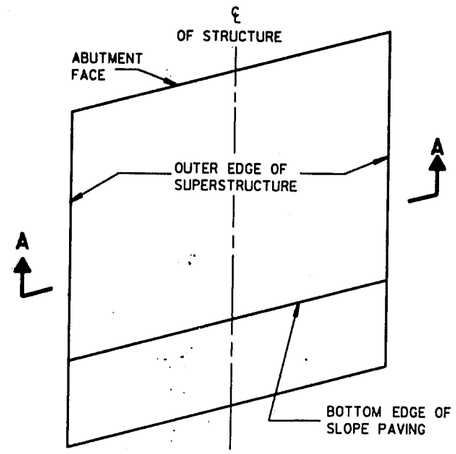
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
5-16-73 DATE — CHIEF OF FACILITIES DEVELOPMENT

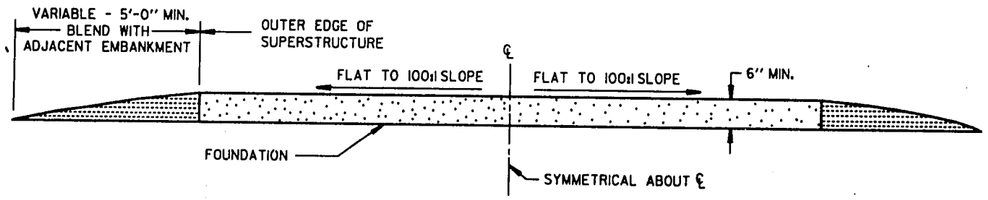
APPROVED
5-17-73 DATE — STATE HIGHWAY ENGINEER

S.D.D. 11A1-2

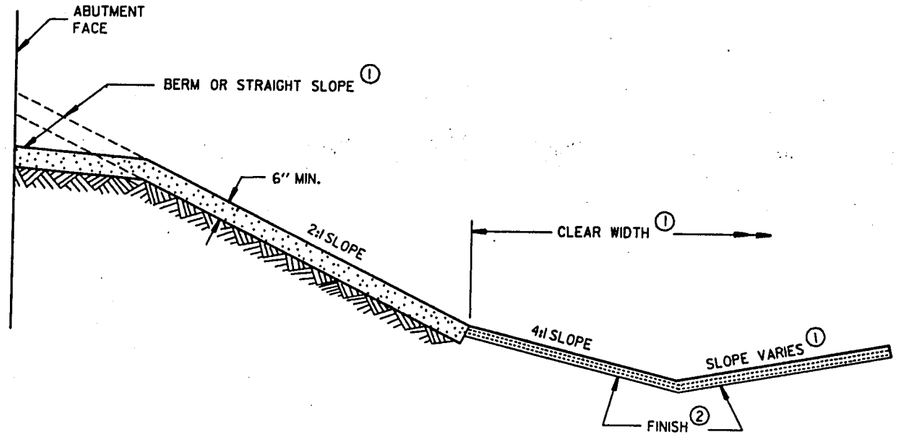
S.D.D. 11A1-2



PLAN VIEW



SECTION A-A



STANDARD CROSS SECTION

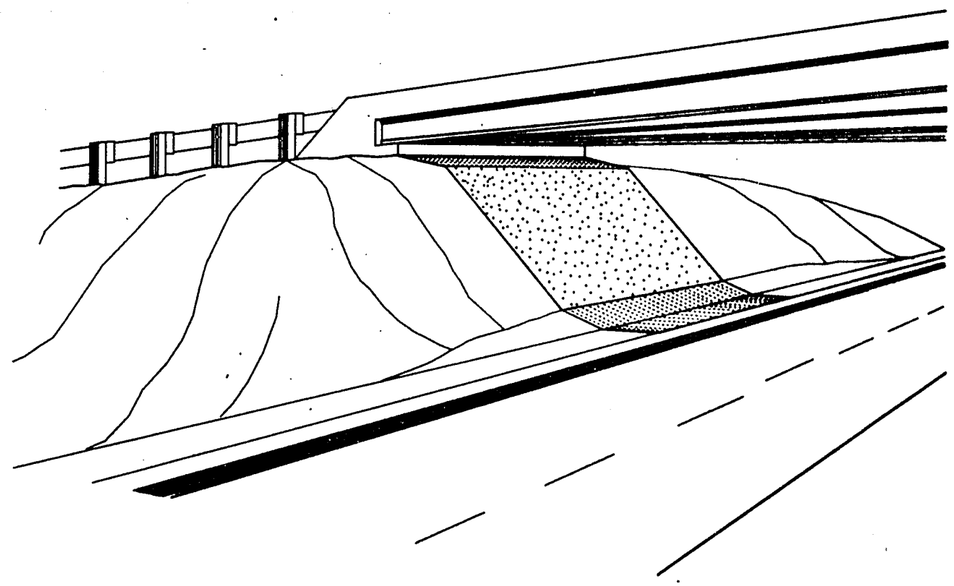
GENERAL NOTES

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.

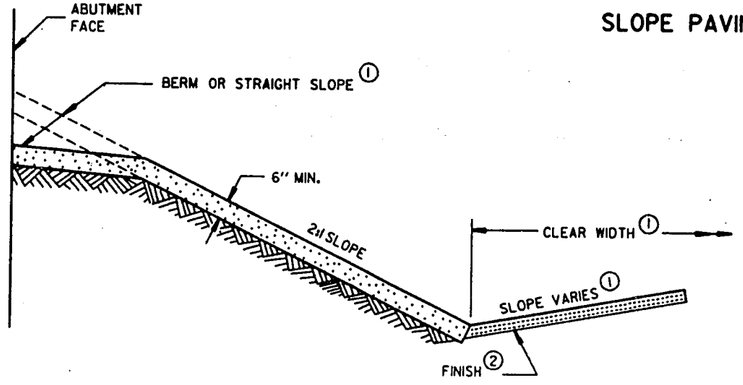
WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

① DIMENSIONS, SLOPES AND SLOPE LIMITS ARE DETAILED ON THE STRUCTURE PLANS.

② MATCH EXISTING FINISH OR FINISH AS SHOWN ELSEWHERE IN THE CONTRACT.



SLOPE PAVING UNDER STRUCTURES



ALTERNATE CROSS SECTION

SLOPE PAVING - STRUCTURES (CRUSHED AGGREGATE)

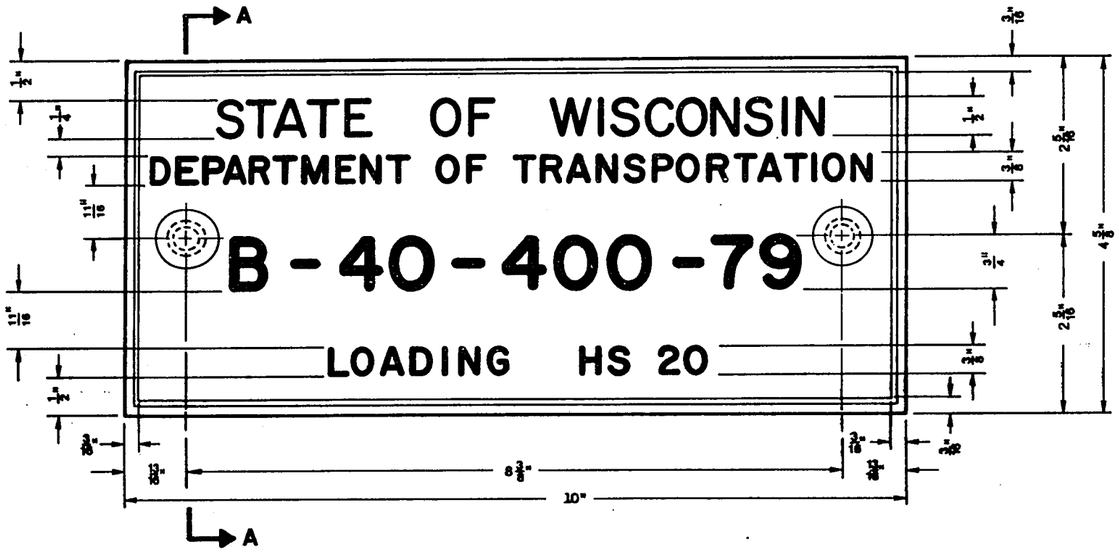
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 9-21-84 DATE
FHWA

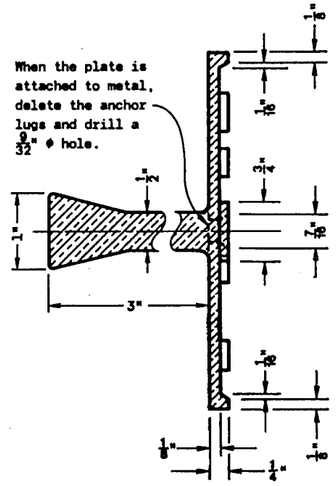
CHIEF DESIGN ENGINEER

S.D.D. 12 A 2-3

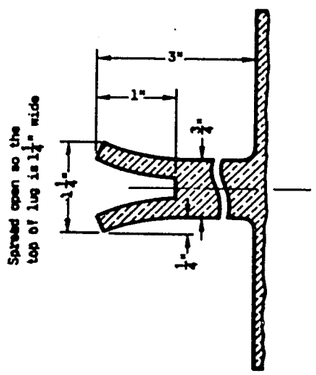
S.D.D. 12 A 2-3



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



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES LINES 4 AND 5 ABOVE SHALL READ:

B = Bridge
C = Culvert
RW = Retaining Wall

Year of Substantial Completion

County No.

Bridge No.

B-40-400-79

UNIT 1A HS 20M

Unit No. for Multiple Unit

Design Loading of Structure Indicated on the Plan

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

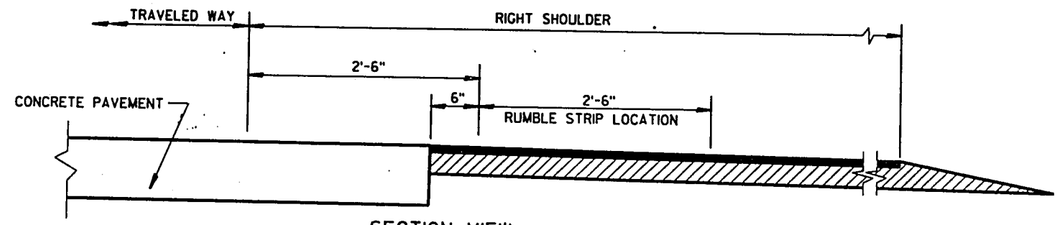
APPROVED 9-27-79
DATE

CHIEF DESIGN ENGINEER

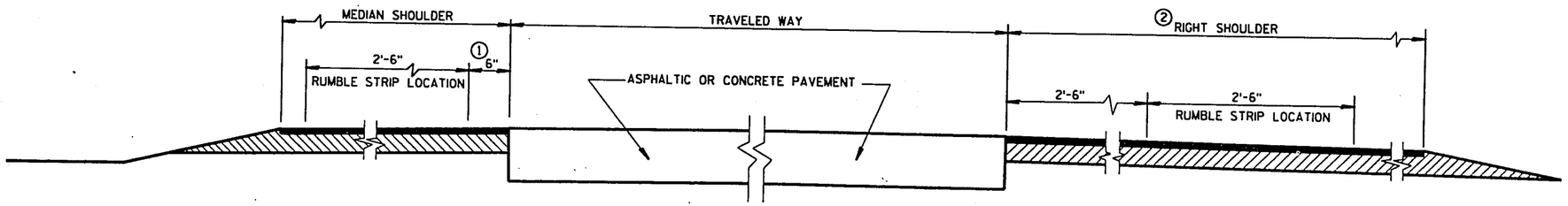
FHWA

S.D.D. 12 A 3-4

S.D.D. 12 A 3-4



SECTION VIEW
(CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF ASPHALTIC SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

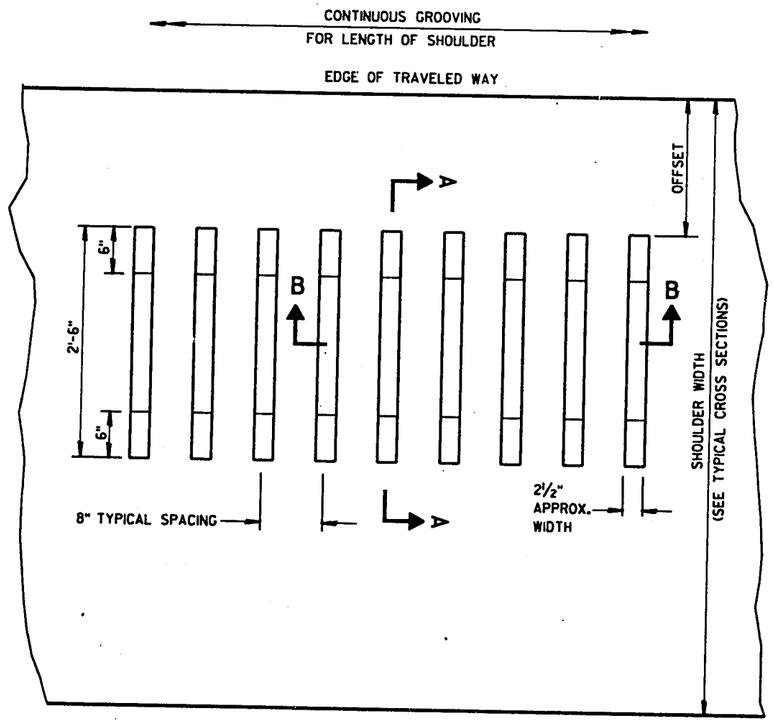
GENERAL NOTES

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

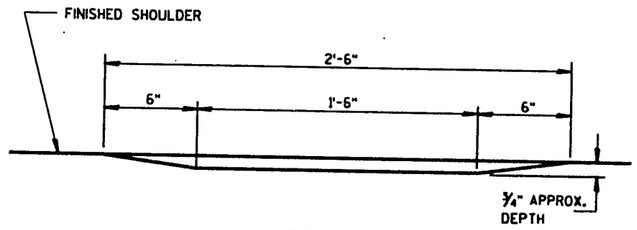
FINISH ROLLING OF THE ASPHALTIC SHOULDER SHALL INCLUDE THE SURFACE OVER THE RUMBLE STRIP DEPRESSIONS.

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

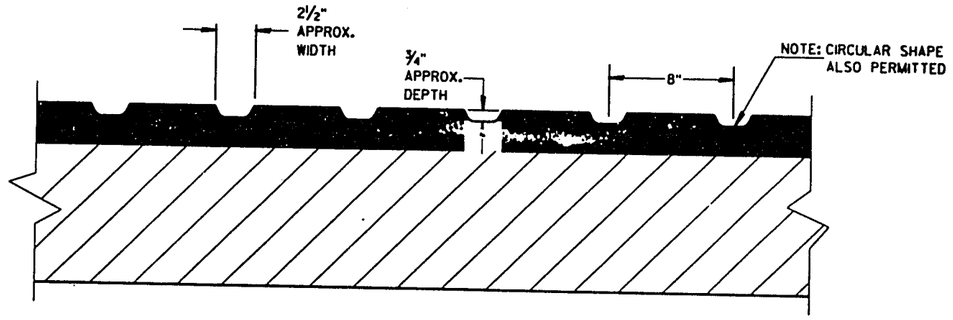
② DIMENSIONS ALSO APPLY WHEN RUMBLE STRIPS ARE REQUIRED IN THE RIGHT SHOULDER OF RAMPS.



PLAN VIEW



SECTION A-A



SECTION B-B

ASPHALTIC SHOULDER
RUMBLE STRIPS

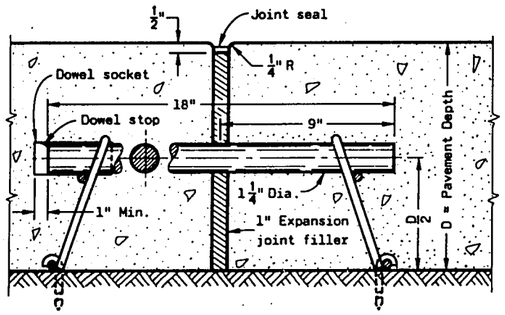
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/8/91
DATE
STATE DESIGN ENGINEER FOR HSYS

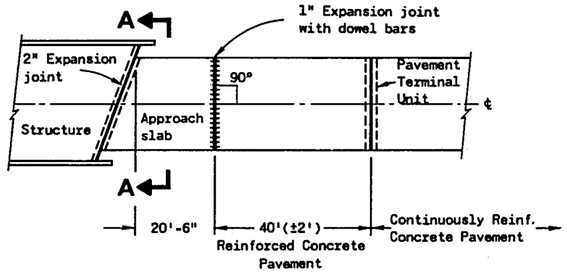
FHWA

S.D.D. 13 A 4-3

S.D.D. 13 A 4-3

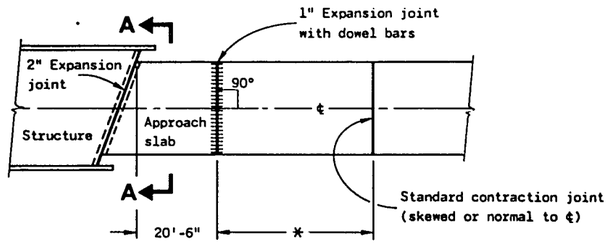


EXPANSION JOINT



APPROACH SLAB AND ADJACENT PAVEMENT

* 12' Min., 20' Max. for Non-reinforced Concrete Pavement.
40' ± 2' for Reinforced Concrete Pavement.

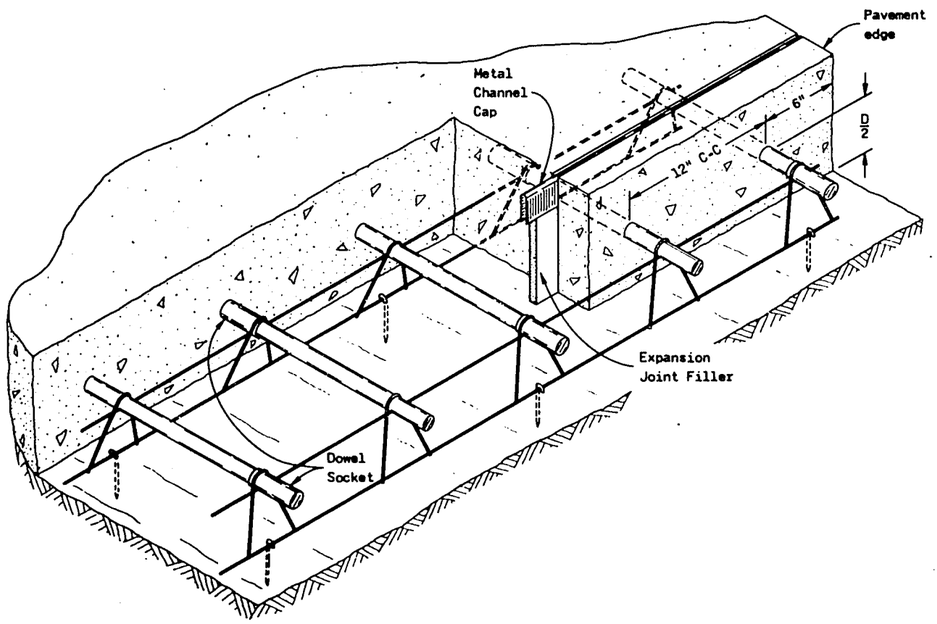


APPROACH SLAB AND ADJACENT PAVEMENT

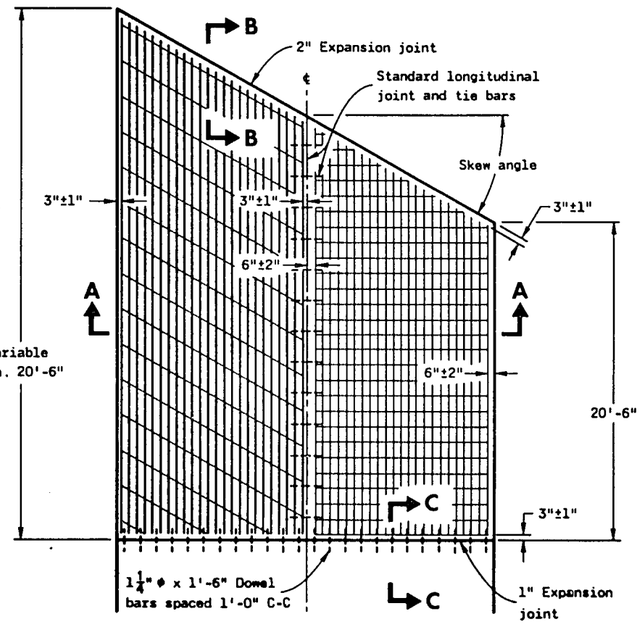
BIDDING INFORMATION

APPROACH SLAB QUANTITIES
(One slab, 24' wide)

Skew Angle	Concrete Pavement		Welded Wire Fabric 6" x 12" - W5.5 x W4 (55 lbs./100 sq. ft.)		Steel Reinforcement (Grade 60)	
	Sq. Yds.	Cu. Yds.	Sq. Yds.	Pounds	No. 8 Bars Pounds	No. 4 Bars Pounds
0°	54.7	18.2	54.7	271	2681	173
15°	63.2	21.1	63.2	313	3091	196
30°	73.2	24.4	73.2	362	3572	228
45°	86.7	28.9	86.7	429	4219	267
60°	110.1	36.7	110.1	545	5347	338



INSTALLING DEVICE FOR DOWEL BARS AND EXPANSION JOINT ASSEMBLY



HALF SECTION BOTTOM REINFORCEMENT

HALF SECTION TOP REINFORCEMENT

APPROACH SLAB

GENERAL 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.

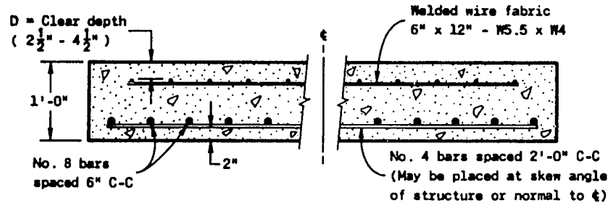
JOINT SEALING
Expansion joints shall be sealed as follows:

1. On pavements having transverse contraction joints sealed with a poured type sealer, expansion joints shall be sealed with the same type sealant, 1/4" 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.

JOINT FILLER
Expansion joint filler between structure and approach slab may consist of two, 1 inch thicknesses of material.

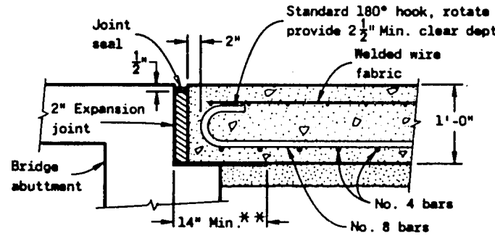
WELDED WIRE FABRIC
Sheet widths of 8 feet are permitted.

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

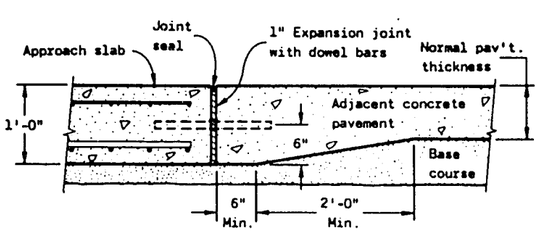
REINFORCEMENT POSITIONING DETAIL



SECTION B-B

BEND DETAIL
BOTTOM REINFORCEMENT

** Galvanized metal flashing (Place full width of pavement and secure by nailing to base).



SECTION C-C

TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

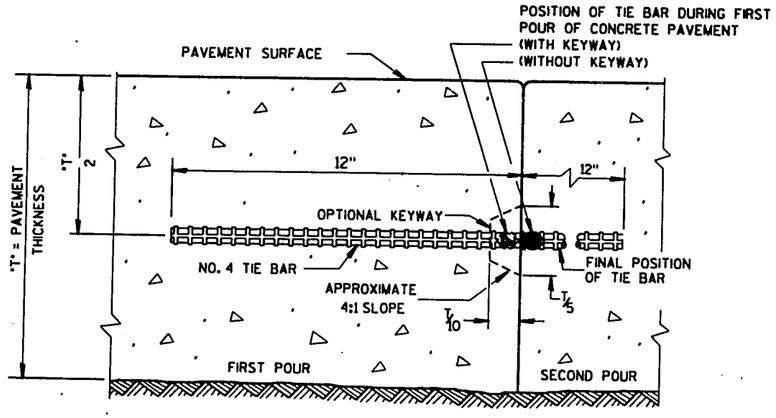
CONCRETE PAVEMENT APPROACH SLAB

State of Wisconsin
Department of Transportation

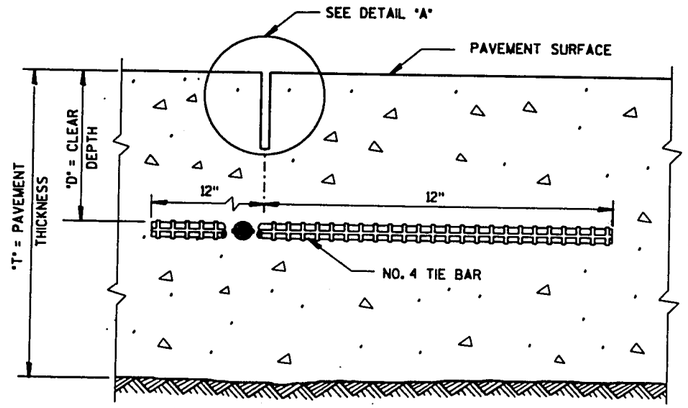
APPROVED 2/24/81
DATE
CHIEF DESIGN ENGINEER

S.D.D. 13 B 2-3

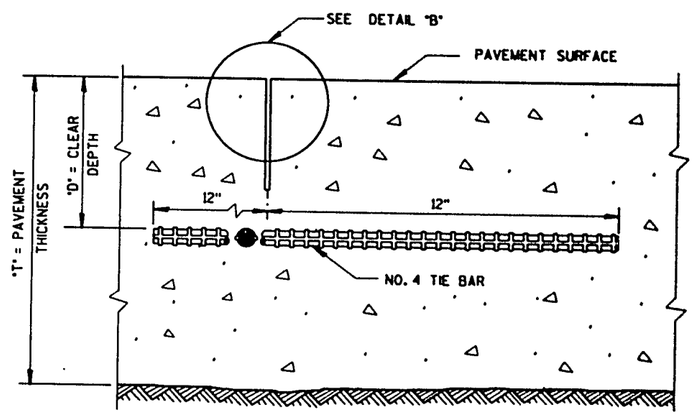
S.D.D. 13 B 2-3



CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

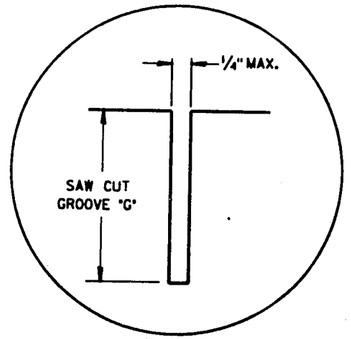
GENERAL NOTES

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

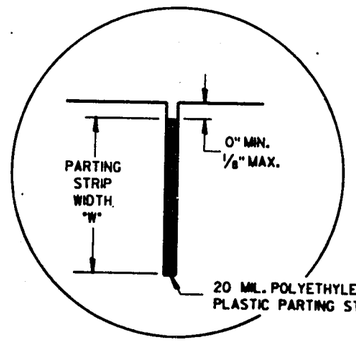
DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

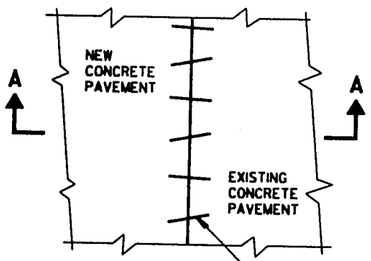
TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.



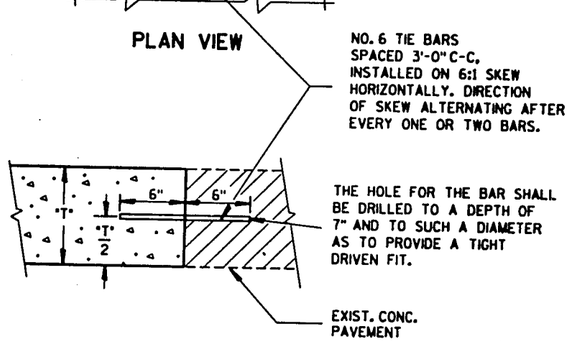
DETAIL "A"



DETAIL "B"

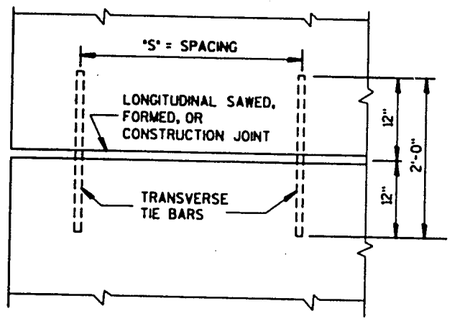


PLAN VIEW



SECTION A-A
PAVEMENT TIES

PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S"		PARTING STRIP WIDTH "W"
			PAVEMENT WIDTH 24' OR 26'	30'	
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

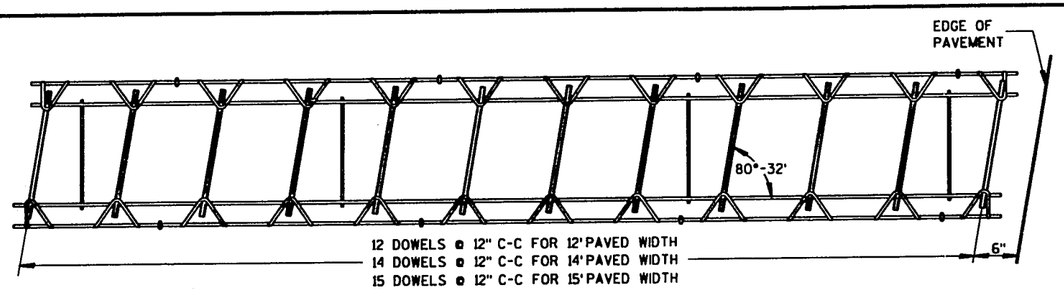
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 3/16/92 DATE
STATE DESIGN ENGINEER FOR HWYS

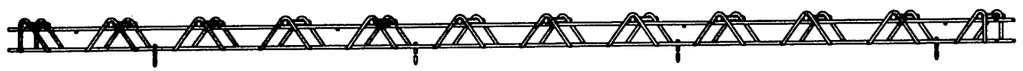
FHWA

S.D.D. 13 C 1-9

S.D.D. 13 C 1-9



PLAN VIEW

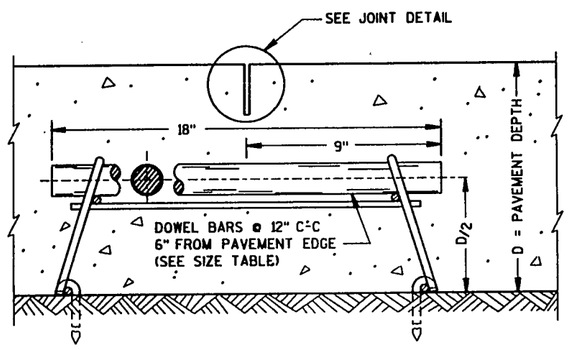


SIDE VIEW

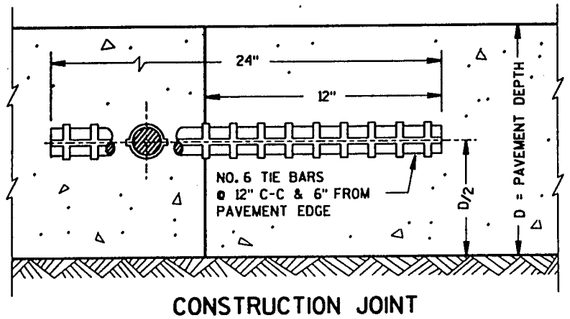
SKEWED CONTRACTION JOINT DOWEL ASSEMBLY ①

DOWEL BAR SIZE TABLE

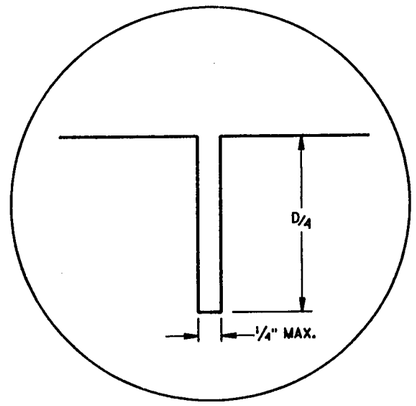
PAVEMENT DEPTH	DOWEL BAR DIAMETER
9"	1 1/4"
MORE THAN 9"	1 1/2"



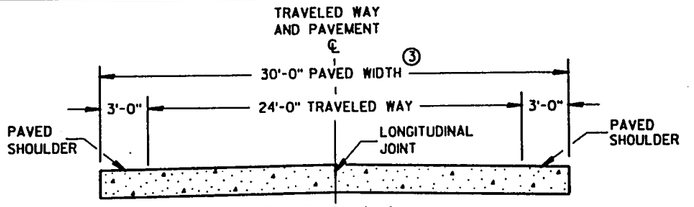
DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT

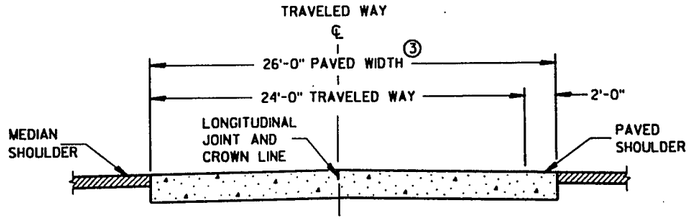


JOINT DETAIL

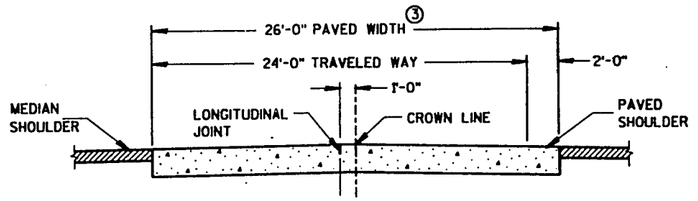


SECTION A-A ②

TWO-LANE TWO-WAY HIGHWAY

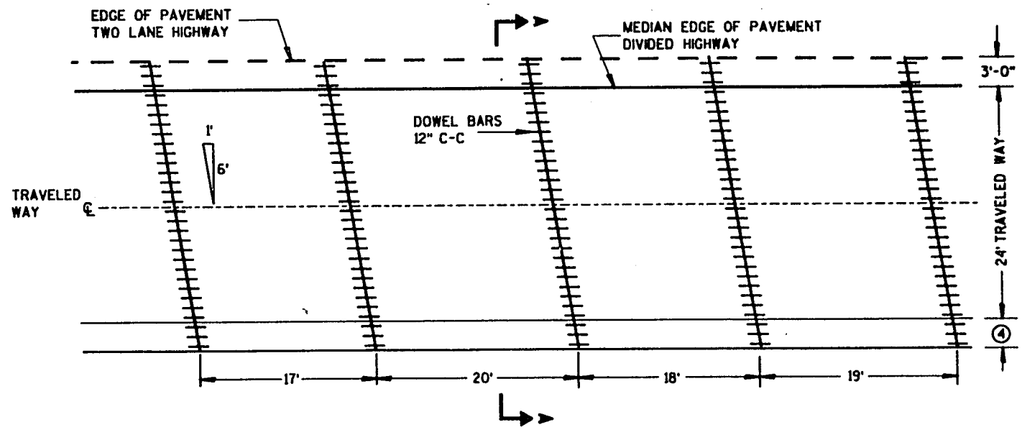


SECTION A-A



ALTERNATIVE SECTION A-A

DIVIDED HIGHWAY ②



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

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

CONTRACTION JOINTS

CONTRACTION JOINTS SHALL BE RANDOM SPACED AND SKEWED RIGHT HAND FORWARD.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE PARALLEL TO THE CENTERLINE.

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 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.

② REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

③ THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER WILL BE MEASURED AS CONCRETE PAVEMENT.

④ 2'-0" DIVIDED HIGHWAYS
3'-0" TWO-LANE TWO-WAY HIGHWAYS
SEE SECTION A-A

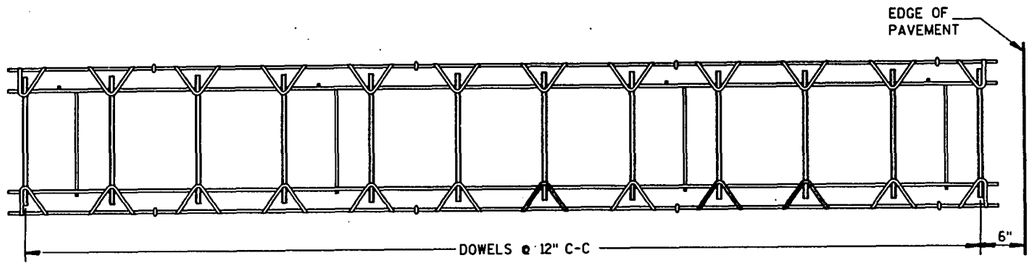
DOWELED NON-REINFORCED
CONCRETE PAVEMENT
RANDOM SPACED JOINTS 17'-20'-18'-19'

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

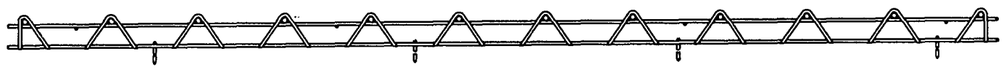
APPROVED
7/9/92
DATE
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

S.D.D. 13 C 12-2

S.D.D. 13 C 12-2



PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY①

DOWEL BAR SIZE TABLE

PAVEMENT DEPTH	DOWEL BAR DIAMETER
9" OR LESS	1 1/4"
MORE THAN 9"	1 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.

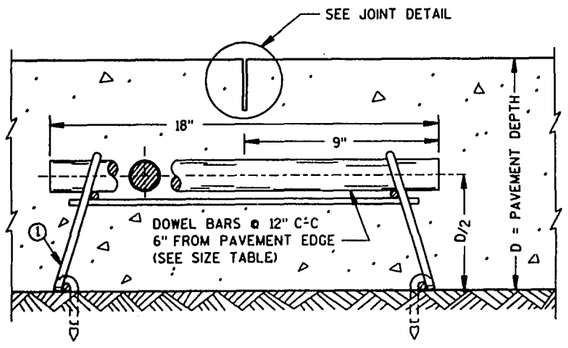
CONSTRUCTION JOINTS

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.

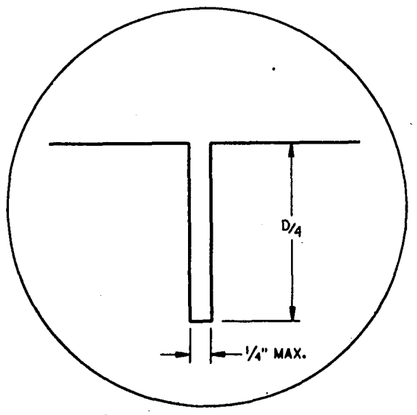
TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

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

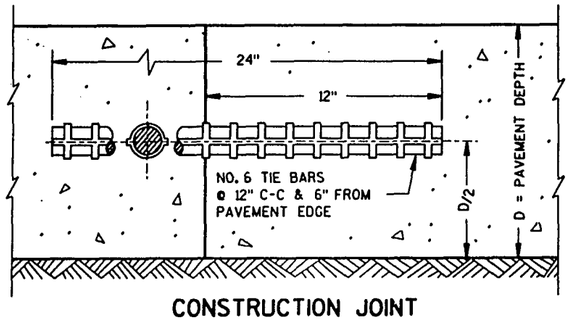
① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.



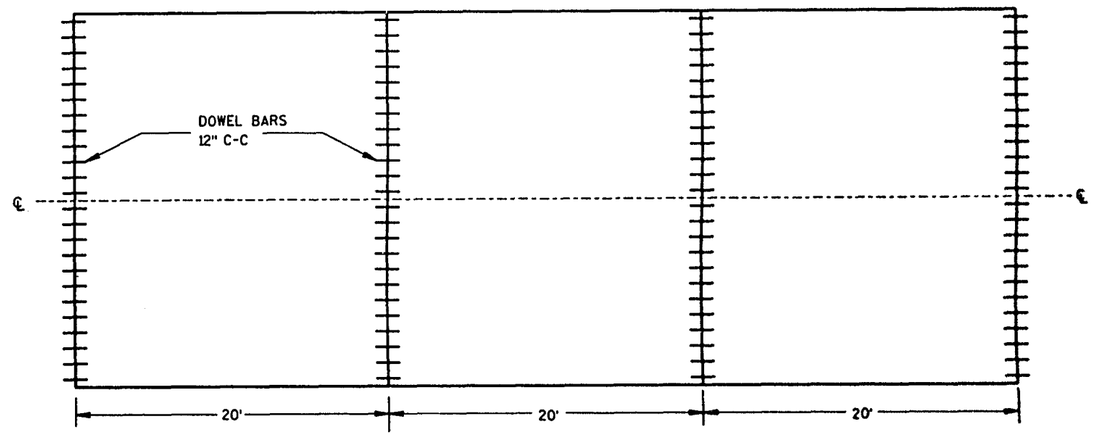
DOWELED CONTRACTION JOINT



JOINT DETAIL



CONSTRUCTION JOINT



CONTRACTION JOINT LOCATIONS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

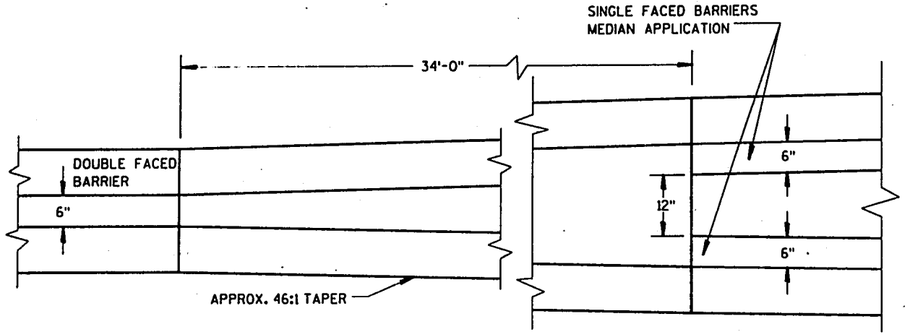
APPROVED 12/19/90 DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 13 C 13-1

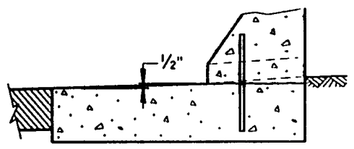
S.D.D. 13 C 13-1



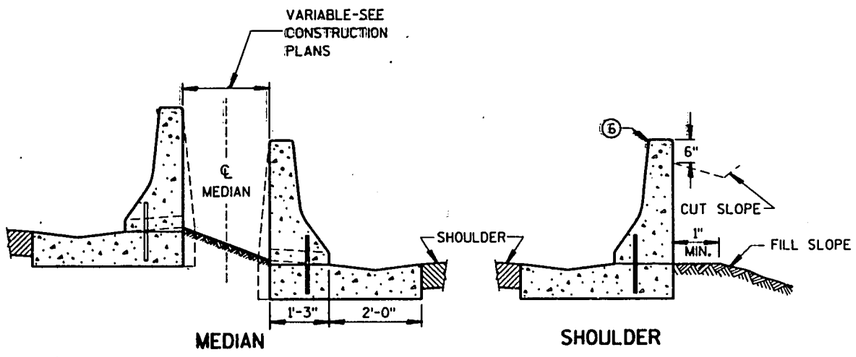
PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

(FOOTINGS ARE NOT SHOWN)

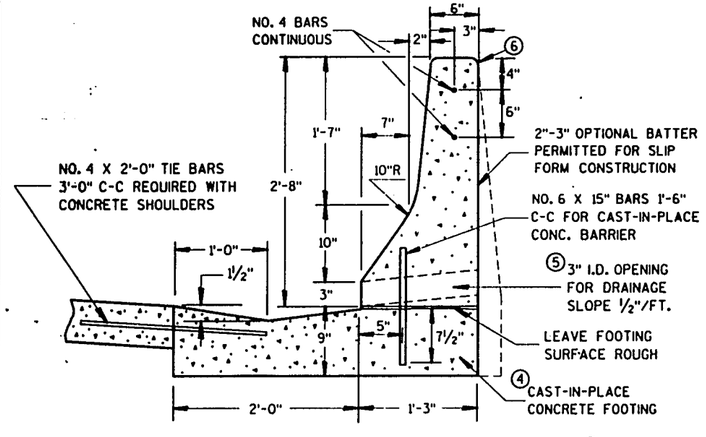


HIGH SIDE
CONCRETE BARRIER DETAIL

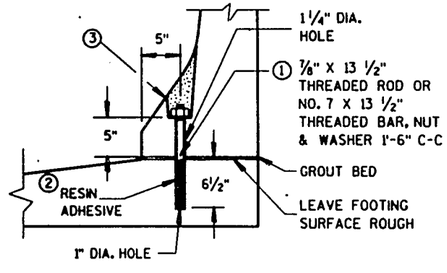


MEDIAN SHOULDER

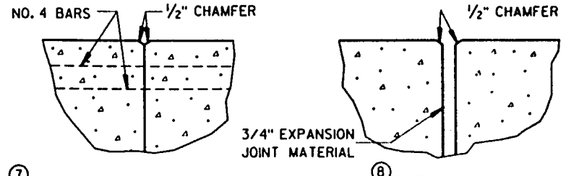
TYPICAL APPLICATIONS



SECTION VIEW



ANCHORAGE DETAIL FOR
PRECAST CONCRETE ALTERNATE



JOINT DETAILS

GENERAL NOTES

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

PRECAST UNITS SHALL BE FIRMLY BUTTED TOGETHER IN A CONTINUOUS LINE AND BE INTERCONNECTED BY VERTICAL MALE-FEMALE SHEAR CONNECTORS FORMED IN THE BARRIER ENDS.

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

① THREADED RODS SHALL MEET THE REQUIREMENTS OF ASTM A572, GRADE 50, AND BE THREADED A MINIMUM LENGTH OF 2 ½ INCHES AT THE TOP AND 6 ½ INCHES AT THE BOTTOM. NO. 7 REINFORCEMENT BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31, GRADE 60 AND BE THREADED A MINUMIM LENGTH OF 2 ½ INCHES AT THE TOP. THE THREADED ROD OR NO. 7 REINFORCEMENT BAR, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153. NUTS SHALL BE TORQUED TO 300 FOOT POUNDS.

② THE RESIN ADHESIVE SHALL BE MADE BY AN APPROVED MANUFACTURER AND CERTIFIED TO PROVIDE A PULLOUT STRENGTH OF 19,000 POUNDS FOR THE ANCHORS AND CONCRETE EMBEDMENT SHOWN.

③ BLOCKED OUT OPENINGS SHALL BE FILLED WITH A COMMERCIAL NON-SHRINK GROUT AFTER BARRIER IS INSTALLED.

④ BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN CONTRACT.

⑤ OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.

⑥ ¾-INCH BEVEL OR 1-INCH RADIUS (TYPICAL).

⑦ NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.

⑧ EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES.

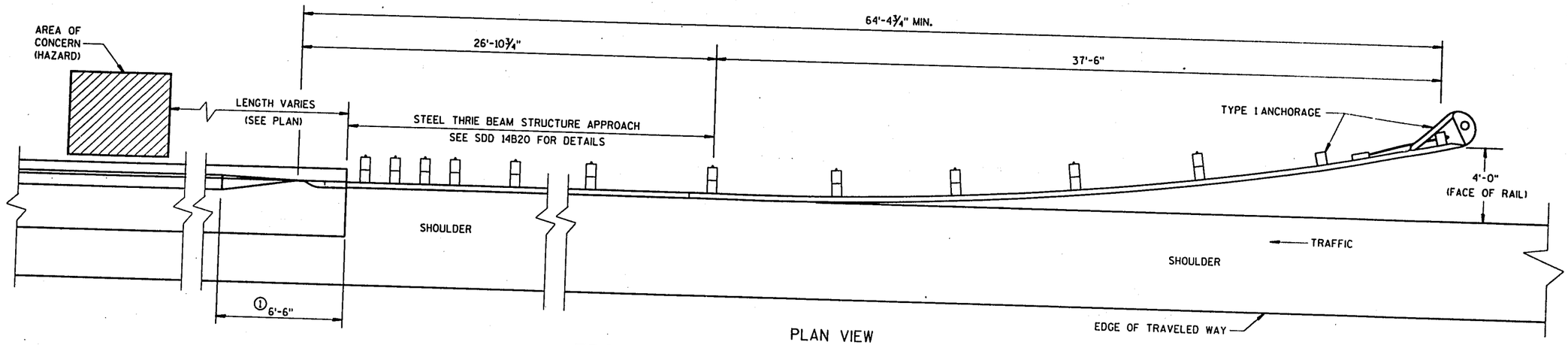
NOTE:
THIS DRAWING CONSISTS OF TWO SHEETS BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

CONCRETE BARRIER,
SINGLE-FACED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 6-3a

S.D.D. 14 B 6-3a



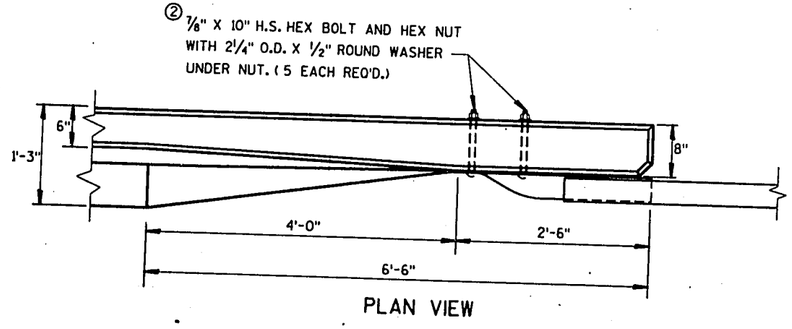
PLAN VIEW

TRANSITION TO STEEL PLATE BEAM GUARD AND TERMINAL ANCHOR

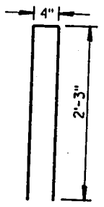
NOTES:

① A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.

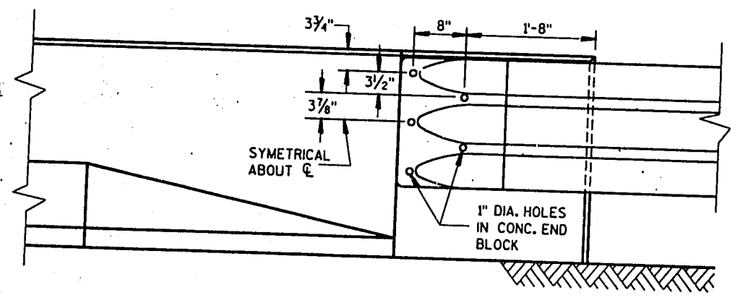
② HIGH STRENGTH BOLTS SHALL MEET REQUIREMENTS OF ASTM A325.



PLAN VIEW

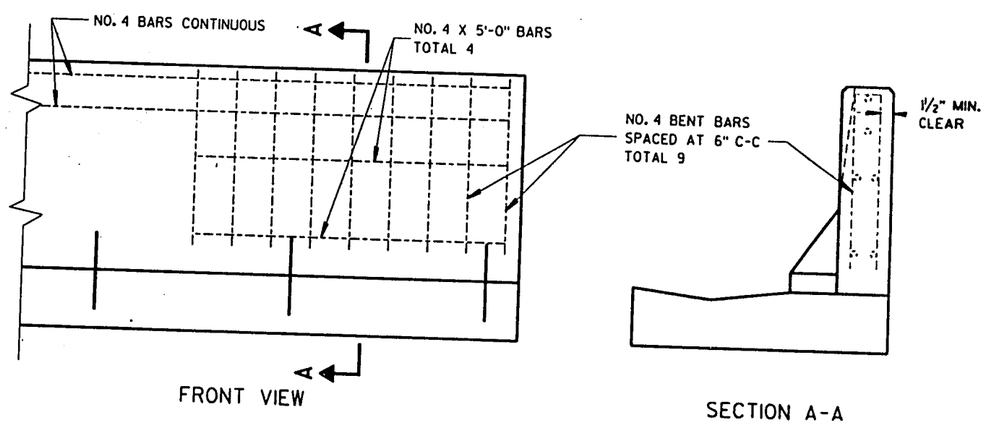


BENT BAR DETAIL



FRONT VIEW

CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW

SECTION A-A

REINFORCEMENT AT BARRIER END

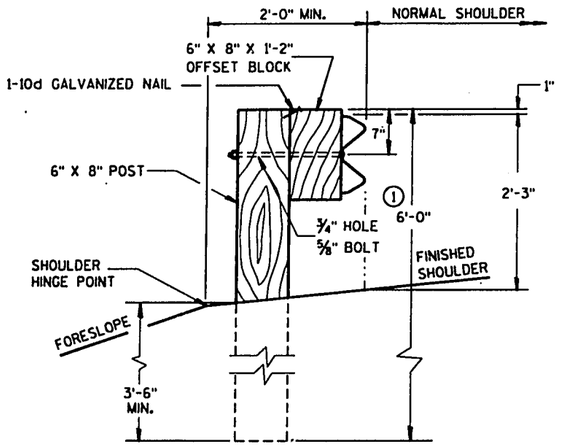
CONCRETE BARRIER, SINGLE-FACED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

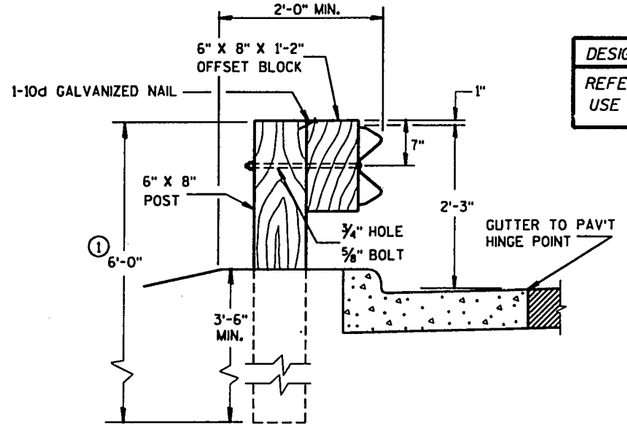
APPROVED 1/16/91 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 14 B 6-3b

S.D.D. 14 B 6-3b



END VIEW
LOCATED ALONG A ROADWAY SHOULDER



END VIEW
LOCATED ALONG A CURBED ROADWAY

DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)

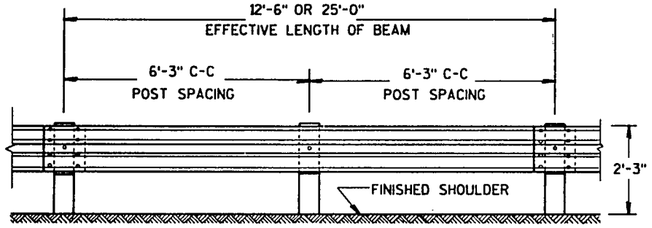
REFER TO PROCEDURE 11-45-1 FOR GUIDANCE ON THE USE OF BEAM GUARD ON CURBED ROADWAYS.

GENERAL NOTES

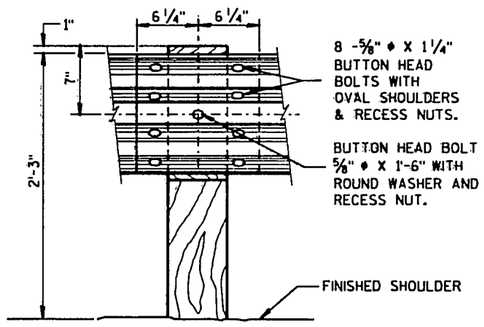
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

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.



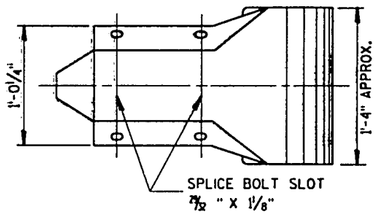
FRONT VIEW



FRONT VIEW
BEAM SPLICING AND POST MOUNTING DETAIL

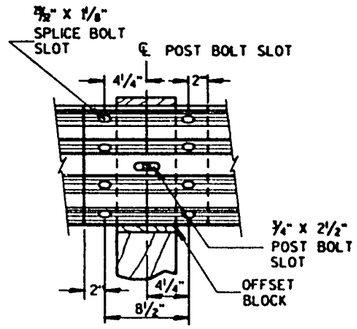
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

PLAN VIEW

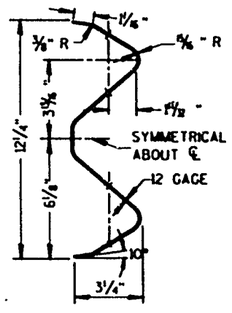


FRONT VIEW

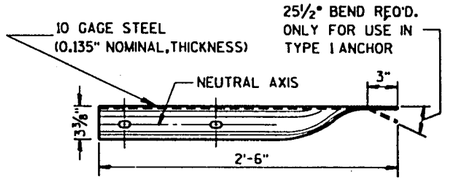
W BEAM END SECTION (ROUNDED)



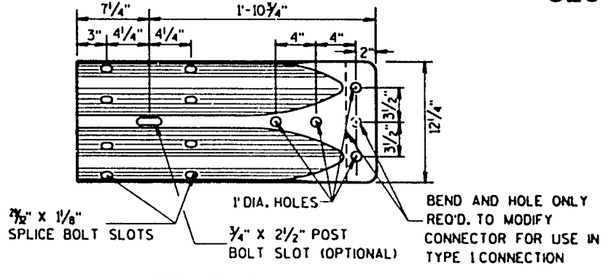
W BEAM SPLICE



SECTION THRU W BEAM



PLAN VIEW



FRONT VIEW

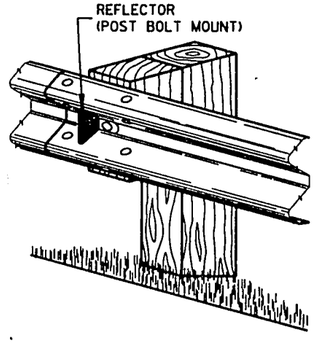
W BEAM TERMINAL CONNECTOR

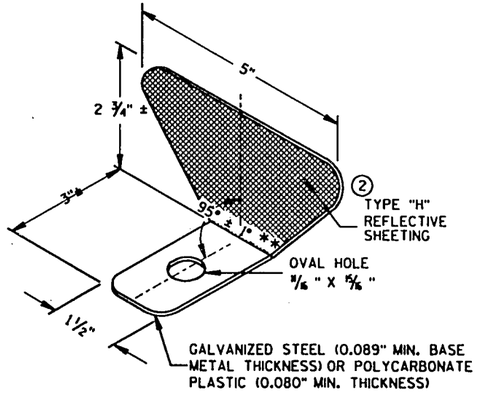
REFLECTOR SPACING

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

* 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

NOTE:
SHEETS 16 IS OPTIONAL FOR INCLUSION IN PLANS WHEN APPLICABLE.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

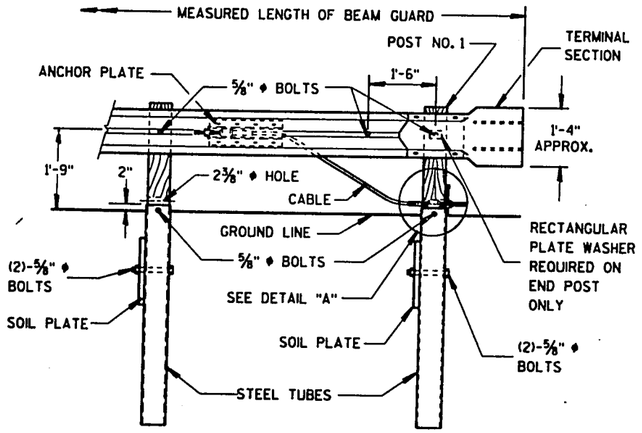
APPROVED
5/15/81
DATE

STATE DESIGN ENGINEER FOR H&PS

FHWA

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

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



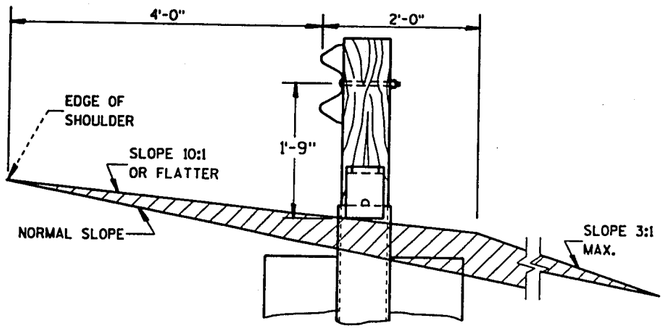
FRONT VIEW

① TYPE 1 ANCHORAGE

TANGENT OFFSET TABLE	
POST NO.	OFFSET (FEET)
1	4.00
2	2.78
3	1.78
4	1.00
5	0.44
6	0.11
7	0.00

**37'-6" INSTALLATION, 6 SPACES AT 6'-3"

TANGENT OFFSET TABLE



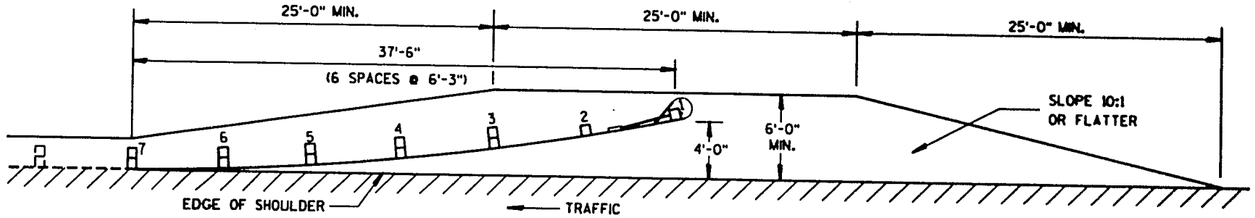
SECTION A-A

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.

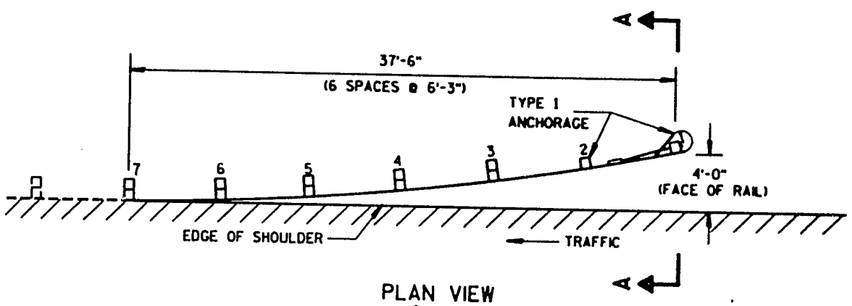
POSTS AT LOCATIONS 1 & 2 SHALL BE WOOD BREAKAWAY POSTS INSERTED AND BOLTED INTO STEEL TUBES.

① TYPE 1 AND TYPE 2 ANCHORAGES SHALL CONSIST OF STEEL TUBE(S), SOIL PLATE(S), WOOD BREAKAWAY POST(S), BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE. ALL STEEL PARTS SHALL BE GALVANIZED.



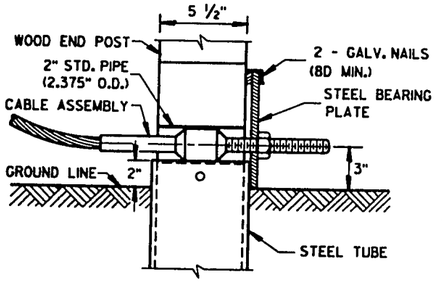
PLAN VIEW

ROADWAY WIDENING FOR TYPE 1 ANCHORAGE



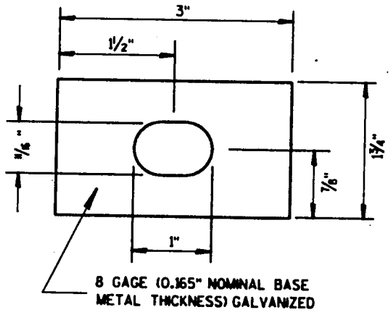
PLAN VIEW

END TREATMENT WITH ANCHORAGE TYPE 1

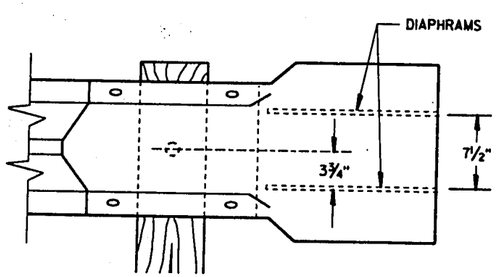


DETAIL "A"

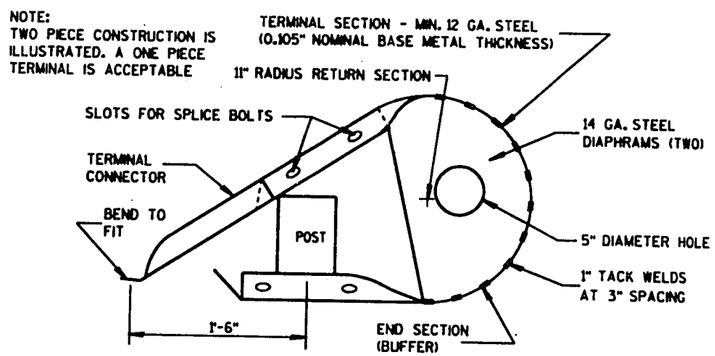
(POST NO. 1)



RECTANGULAR PLATE WASHER



FRONT VIEW



PLAN VIEW

TERMINAL SECTION DETAIL

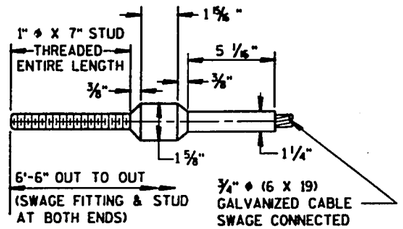
NOTE:
THIS DRAWING CONSISTS OF TWO SHEETS. BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE, TYPE 1 & 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 16-1a

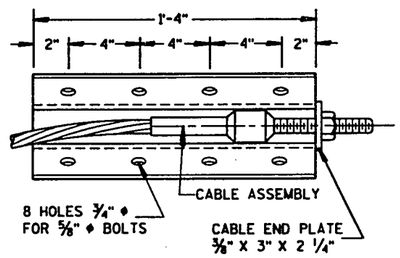
S.D.D. 14 B 16-1a



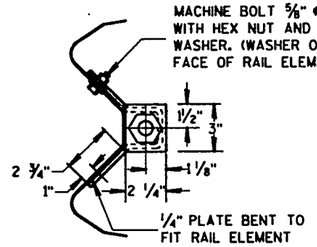
CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB

(TIGHTEN UNTIL TAUT)

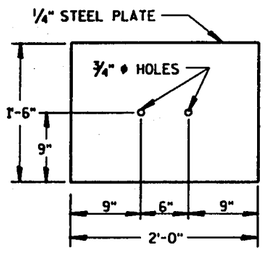


FRONT VIEW

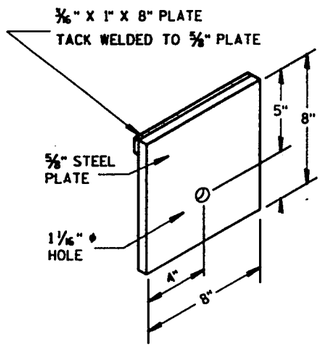


END VIEW

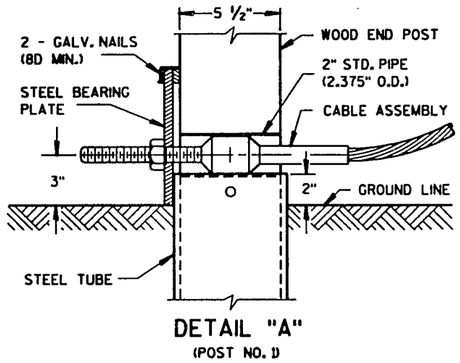
ANCHOR PLATE DETAIL



SOIL PLATE

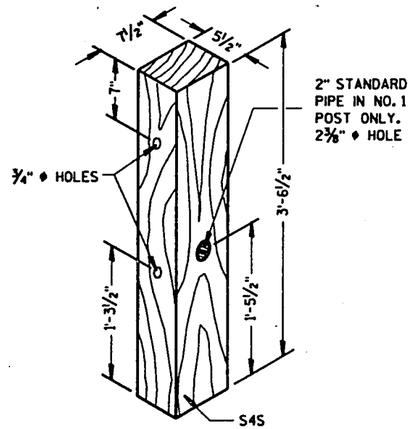


STEEL BEARING PLATE

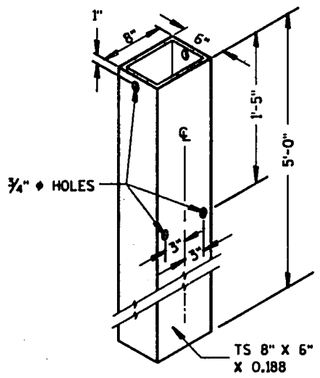


DETAIL "A"

(POST NO. 1)



WOOD BREAKAWAY POST



STEEL TUBE

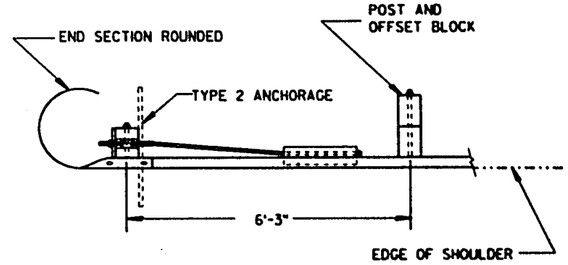
THE STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A501

ANCHORAGE COMPONENTS

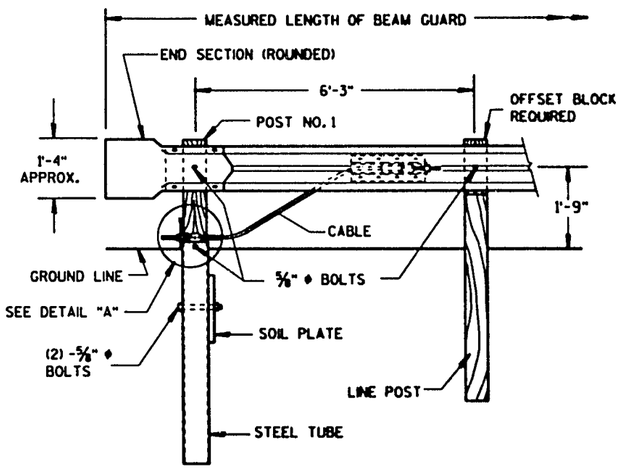
(COMMON TO BOTH TYPE 1 & 2 ANCHORAGES)

NOTE:

STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.



PLAN VIEW



FRONT VIEW
TYPE 2 ANCHORAGE

END TREATMENT WITH ANCHORAGE TYPE 2

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)

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

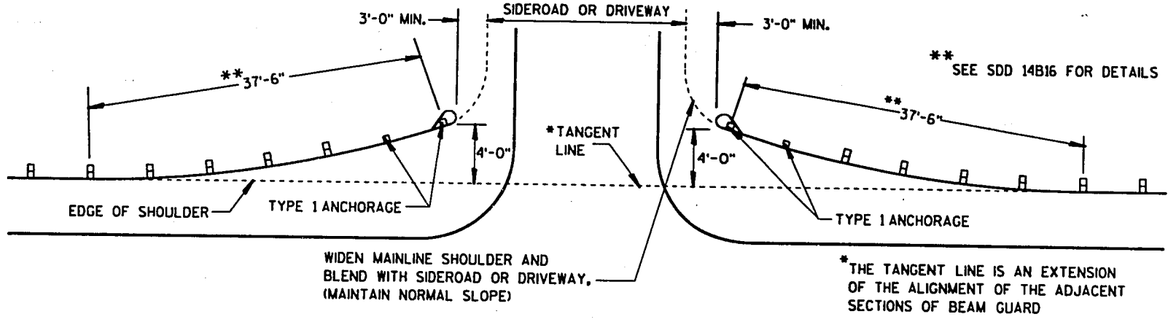
CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE, TYPE 1 & 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/19/71
DATE
STATE DESIGN ENGINEER FOR HWYS.
FHWA

S.D.D. 14 B 16-1b

S.D.D. 14 B 16-1b



BEAM GUARD AT MINOR SIDEROADS OR DRIVEWAYS

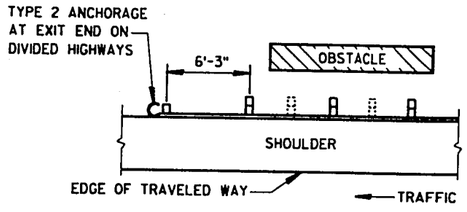
GENERAL NOTES

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.

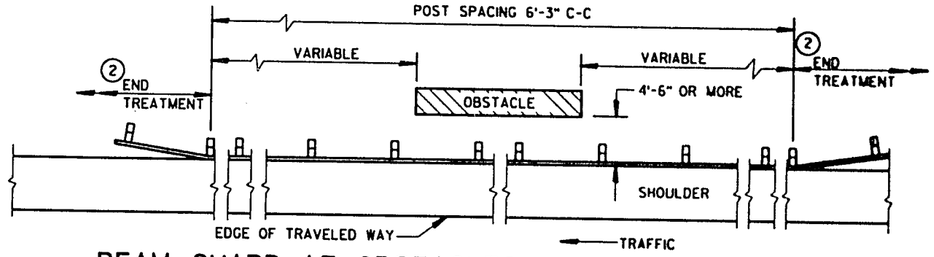
BEAM GUARD LOCATIONS AND LENGTHS ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURE APPROACH.

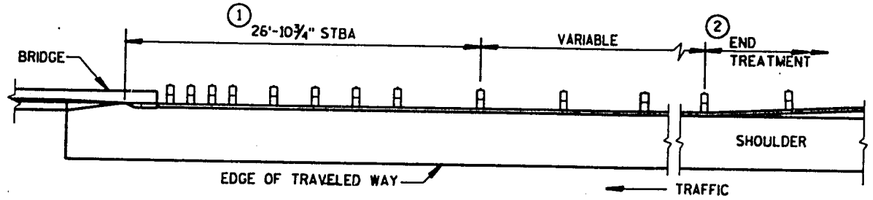
(2) UNLESS OTHERWISE INDICATED, THE FLARED END TREATMENT WITH A TYPE 1 ANCHORAGE SHALL BE USED TO TERMINATE BEAM GUARD ON THE TRAFFIC APPROACH SIDE OF BRIDGES/OBSTACLES. TYPE 2 ANCHORAGE SHALL BE USED ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.



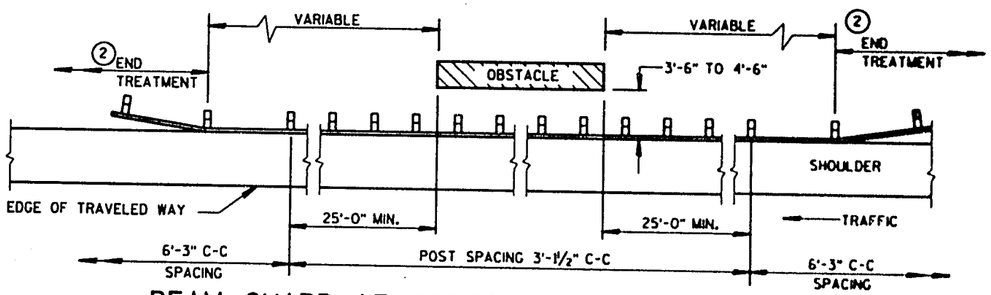
BEAM GUARD AT OBSTACLES
EXIT END - ONE WAY TRAFFIC



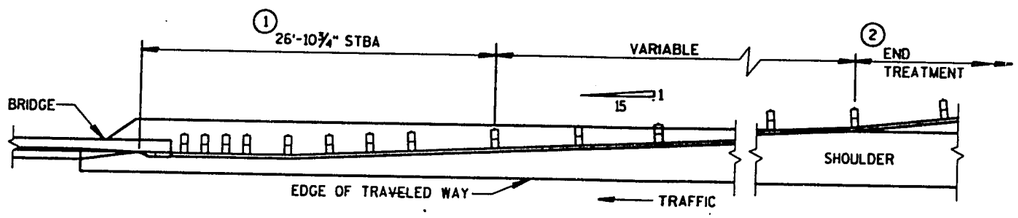
BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC
(RAIL TO OBSTACLE CLEARANCE 4'-6" OR MORE)



BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC
(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES

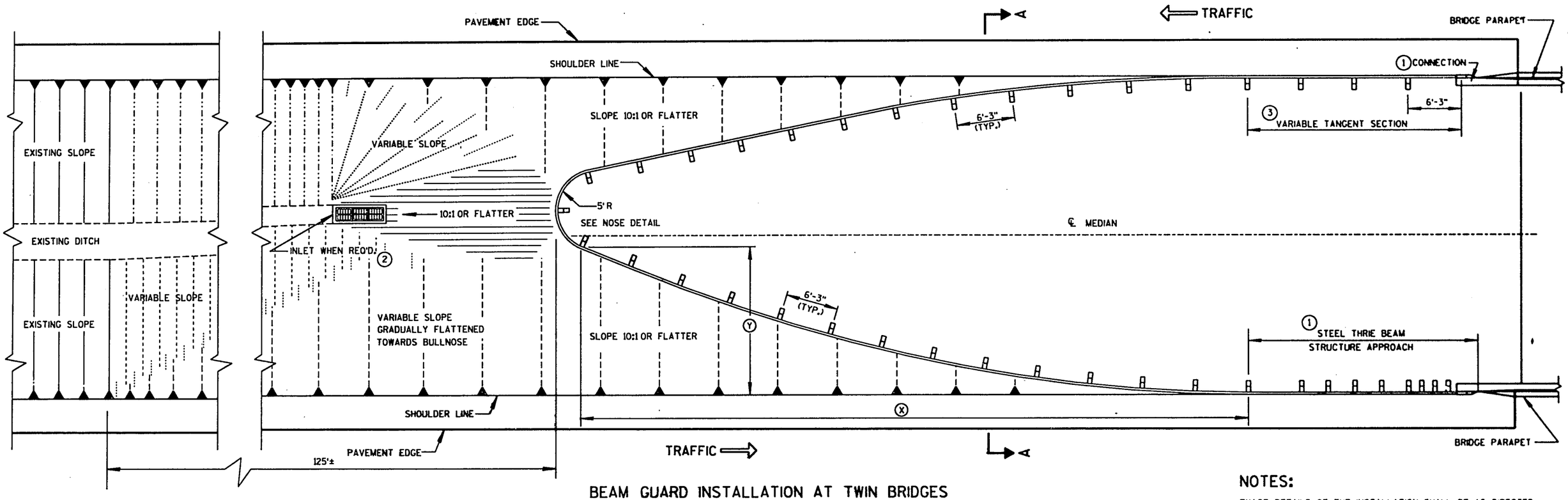
CLASS "A" STEEL PLATE BEAM GUARD (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

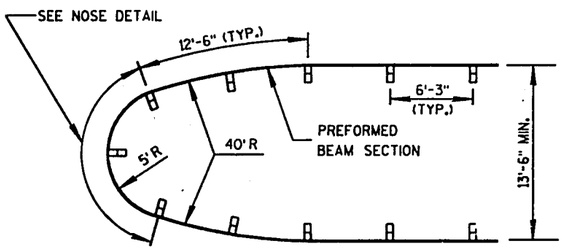
APPROVED 5/15/91 DATE
STATE DESIGN ENGINEER FOR HDTS
FHWA

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

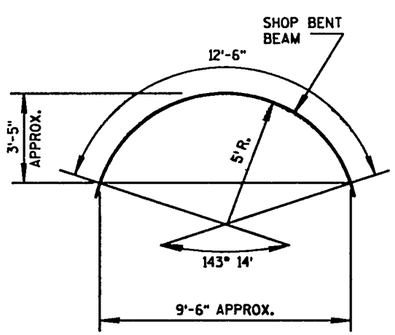
S.D.D. 14 B 18-1a



BEAM GUARD INSTALLATION AT TWIN BRIDGES



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



NOSE DETAIL

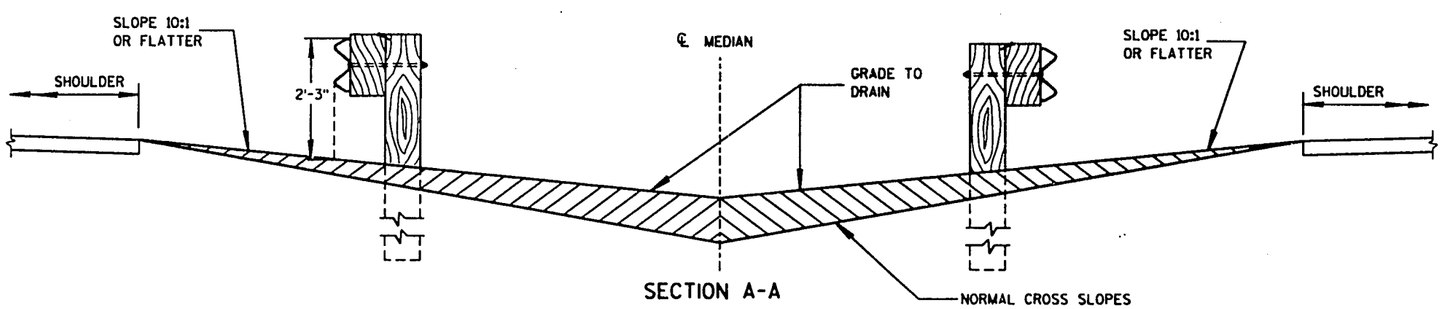
OFFSETS TO PARABOLIC CURVES														
Distance Along Curve	0.00'	6.25'	12.50'	18.75'	25.00'	31.25'	37.50'	43.75'	50.00'	56.25'	62.50'	68.75'	75.00'	81.25'
ⓧ	0.00'	6.25'	12.49'	18.72'	24.92'	31.09'	37.22'	43.32'	49.36'	55.35'	61.28'	67.15'	73.00'	78.75'
Ⓨ	0.00'	0.11'	0.44'	1.00'	1.77'	2.75'	3.94'	5.34'	6.93'	8.71'	10.68'	12.82'	15.15'	17.48'

NOTES:

EXACT DETAILS OF THE INSTALLATION SHALL BE AS DIRECTED BY THE ENGINEER.

THE BULLNOSE INSTALLATION WILL BE MEASURED IN PLACE BY THE LINEAR FOOT ALONG EACH SIDE AND AROUND THE NOSE AS STEEL PLATE BEAM GUARD, CLASS "A" EXCEPT THE STEEL THRIE BEAM STRUCTURE APPROACH.

1. SEE SDD 14 B 20 FOR DETAILS.
2. DRAINAGE DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.
3. LENGTH SHALL BE ADJUSTED IN MULTIPLES OF 6'-3" AS NECESSARY TO FIT THE INSTALLATION INTO SITES WHERE THE BRIDGES ARE SKEWED OR THE ROADWAYS ARE CURVED.

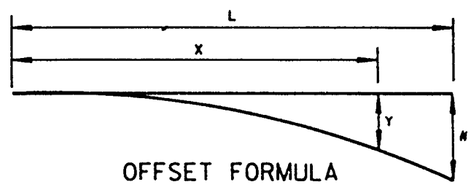


SECTION A-A

X=INTERMEDIATE DISTANCES Y=INTERMEDIATE OFFSETS
L=TOTAL LENGTH OF FLARE W=WIDTH OF FINAL OFFSET

OFFSETS BASED ON FORMULA

$$Y = W\frac{X^2}{L^2}$$



OFFSET FORMULA

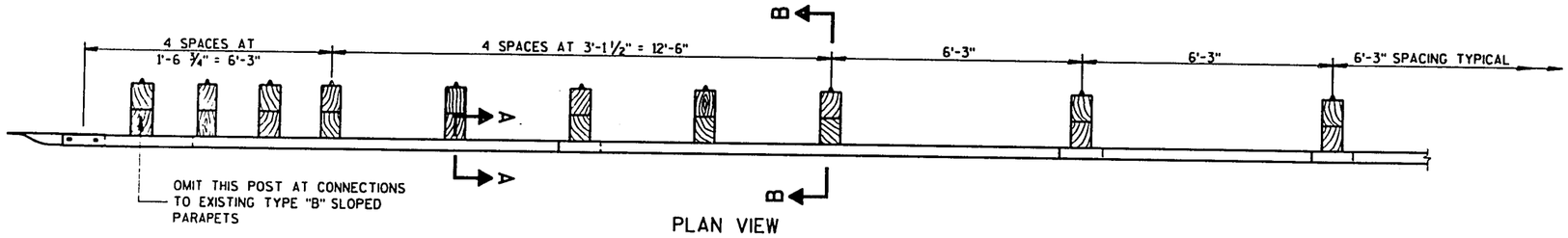
CLASS "A" STEEL PLATE BEAM GUARD BULLNOSE AT TWIN BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

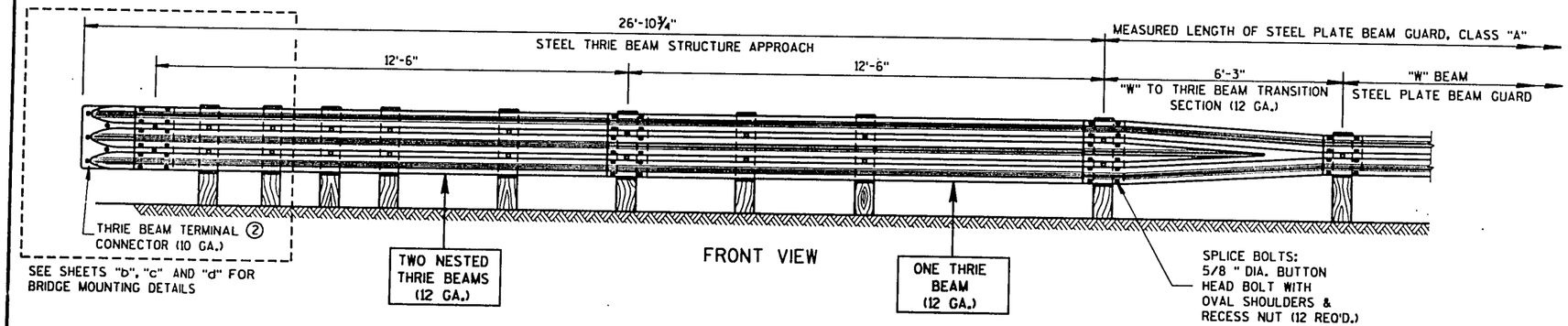
APPROVED
DATE
STATE DESIGN ENGINEER FOR HOTS
FHWA

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

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



PLAN VIEW



FRONT VIEW

GENERAL NOTES

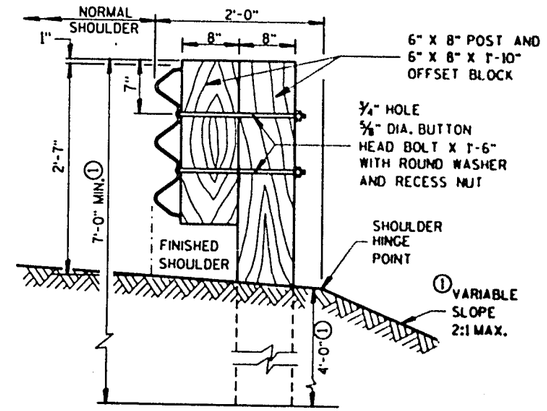
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

THRIE BEAM STRUCTURE APPROACH SHALL BE FURNISHED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS "A", TYPE 2, BEAM AS SPECIFIED IN AASHTO DESIGNATION M180.

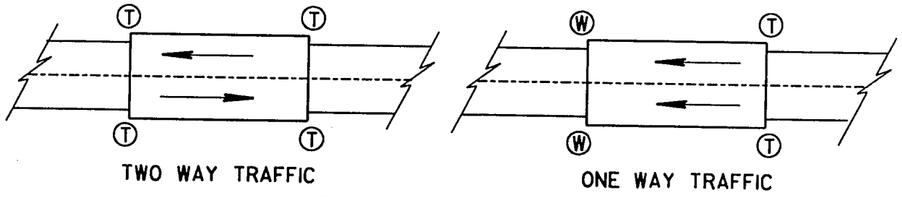
THRIE BEAM SHALL BE BOLTED TO ALL POSTS AND OFFSET BLOCKS. FIELD DRILLING/PUNCHING OF BOLT HOLES IN THE BEAM IS PERMITTED WHERE POST SPACING IS LESS THAN 6'-3".

① POST LENGTH SHALL BE INCREASED TO PROVIDE A MINIMUM EMBEDMENT OF 4'-0" WHERE THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

② A TERMINAL CONNECTOR IS NOT REQUIRED AT CONNECTIONS TO BRIDGE RAILING TYPE "W".



SECTION B-B



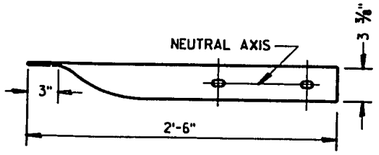
TWO WAY TRAFFIC

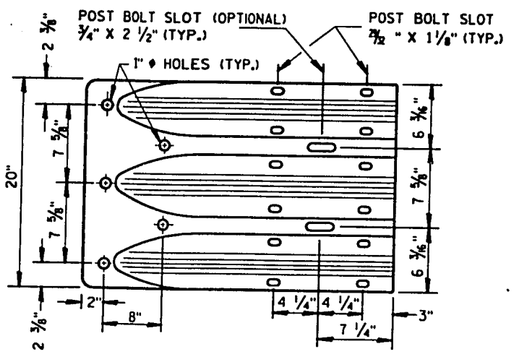
ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

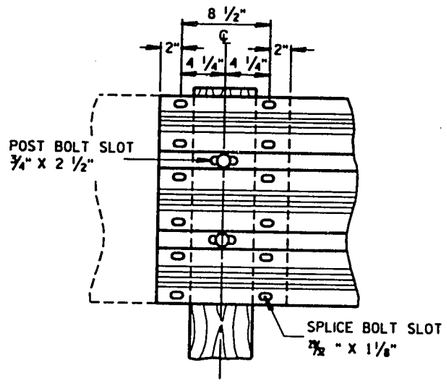
Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

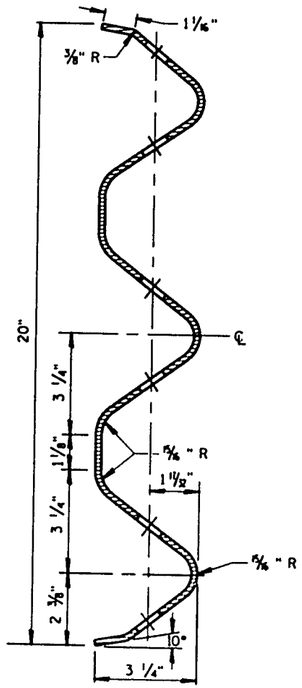




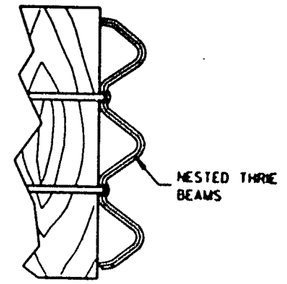
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU THRIE BEAM RAIL ELEMENT



PARTIAL SECTION A-A

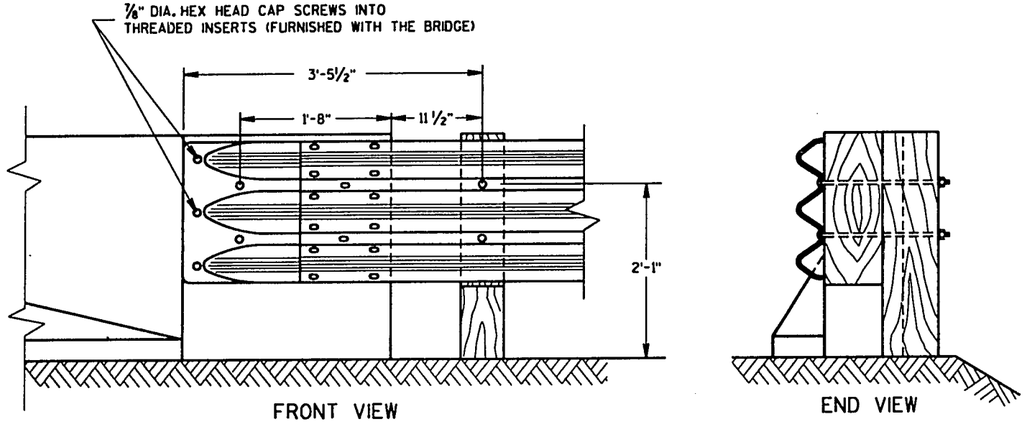
NOTE:
THIS DRAWING CONSISTS OF FOUR SHEETS. SHEET 2a MUST BE SUPPLEMENTED WITH AT LEAST ONE ADDITIONAL SHEET, 2b, 2c OR 2d WHEN THIS DRAWING IS CALLED FOR IN PLANS.

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 20-2a

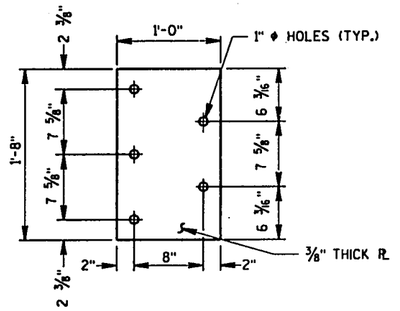
S.D.D. 14 B 20-2a



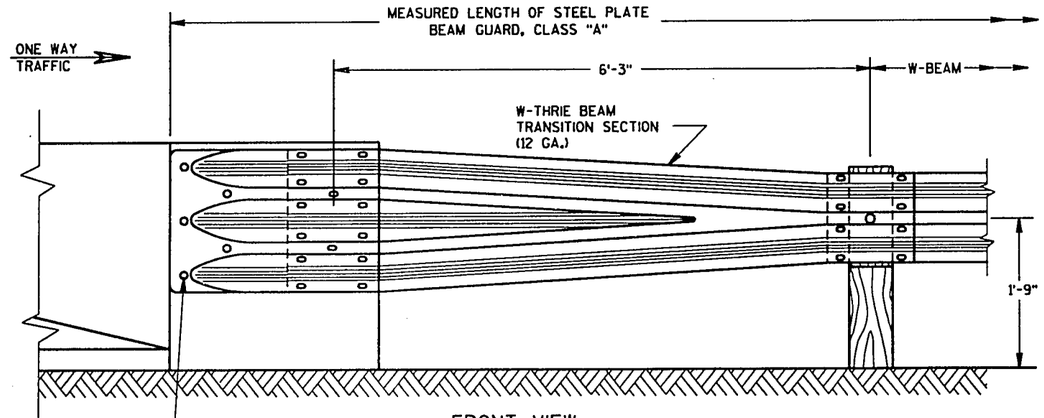
FRONT VIEW

END VIEW

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARED ENDS



② BACKUP PLATE DETAIL



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARED ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

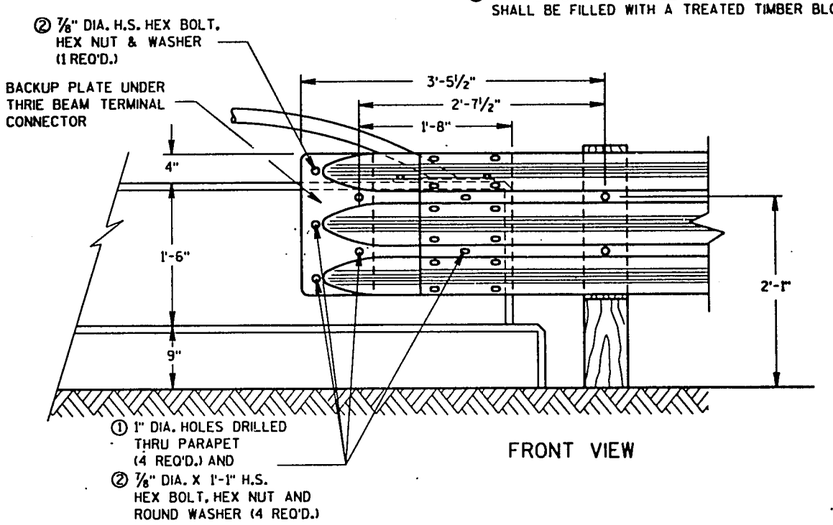
THE CONNECTION DETAILS SHOWN ARE TYPICAL. THE POSITION OF CONNECTIONS TO EXISTING BRIDGES SHALL BE ADJUSTED WHERE NECESSARY TO FIT ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

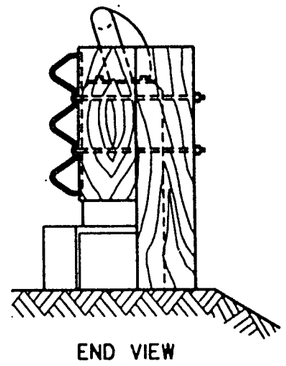
① PAYMENT FOR DRILLING BOLT HOLES THRU THE PARAPET, BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS REQUIRED SHALL BE INCLUDED IN ITEM STEEL THRIE BEAM STRUCTURE APPROACH.

② 2 ¼" O.D. X 5/32 " THICK ROUND WASHER REQUIRED WITH EACH BOLT AT THE BACKFACE OF PARAPET.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

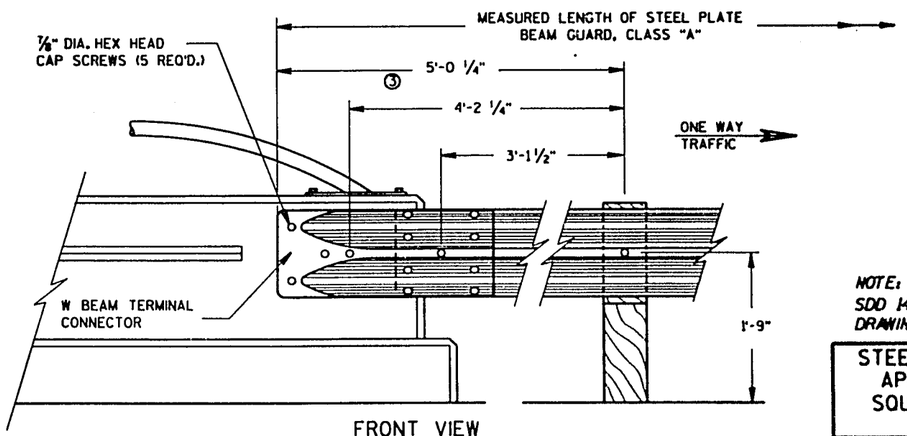


FRONT VIEW



END VIEW

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

NOTE:
SDD 14 B 20-2a IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN PLANS.

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARED END AND VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

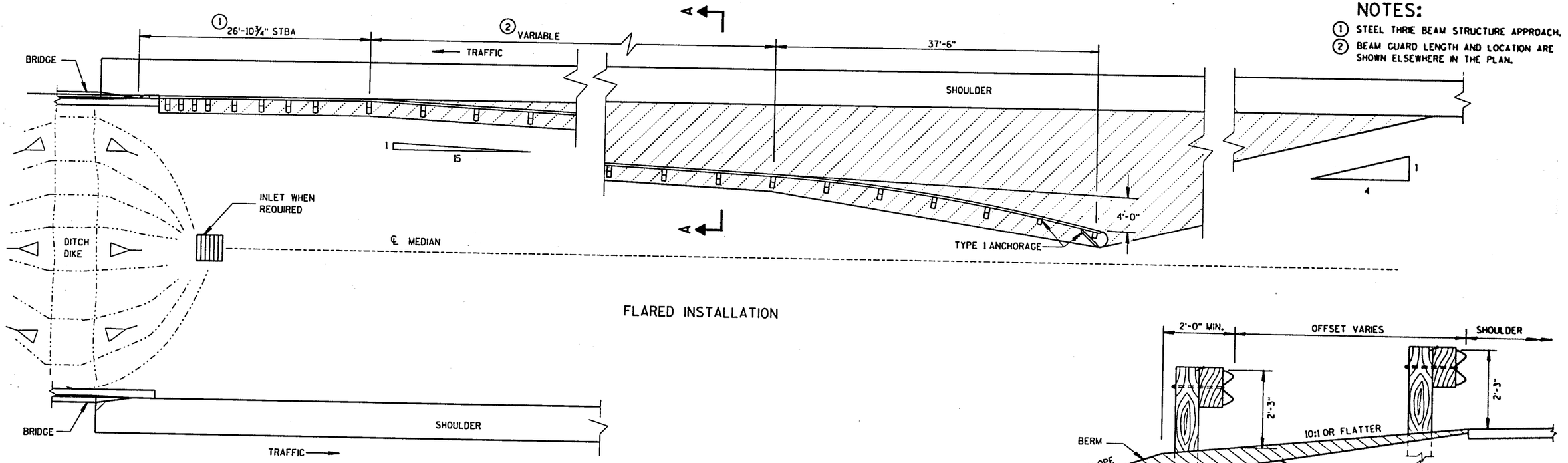
APPROVED
5/8/91
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 14 B 20-2b

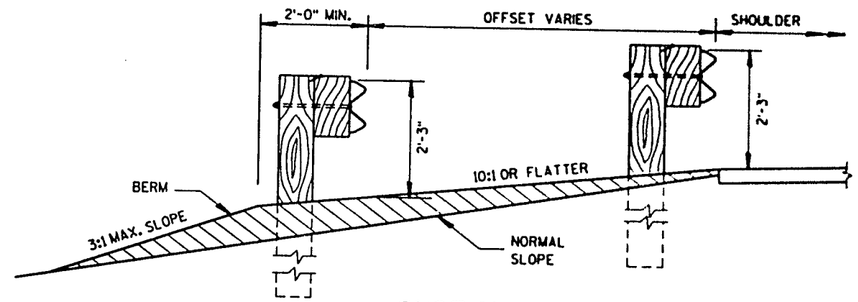
S.D.D. 14 B 20-2b

NOTES:

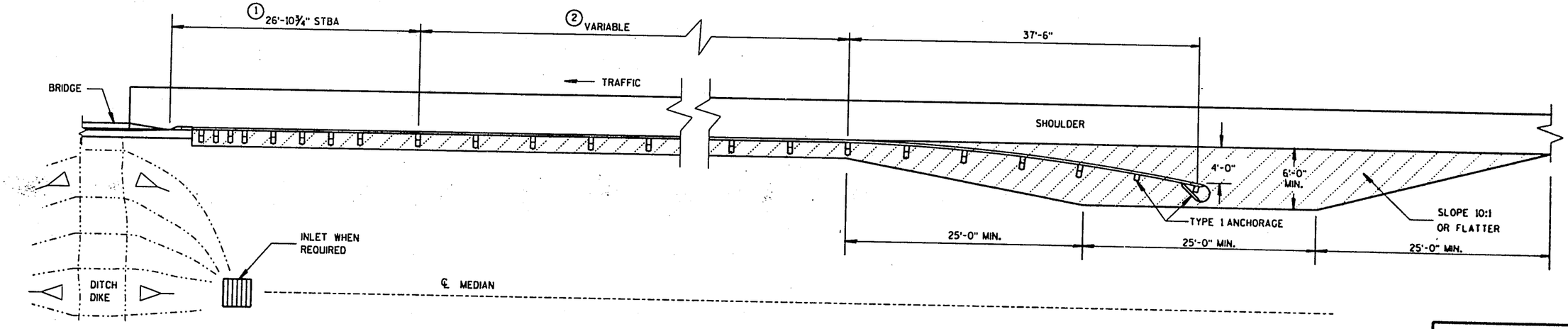
1. STEEL THRIE BEAM STRUCTURE APPROACH.
2. BEAM GUARD LENGTH AND LOCATION ARE SHOWN ELSEWHERE IN THE PLAN.



FLARED INSTALLATION



SECTION A-A



PARALLEL INSTALLATION
(FOR USE WHERE EMBANKMENT AND GRADING FOR FLARED INSTALLATION IS NOT PRACTICABLE)

BEAM GUARD AT MEDIAN APPROACH TO BRIDGES

CLASS "A" STEEL PLATE
BEAM GUARD AT
MEDIAN APPROACH TO BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

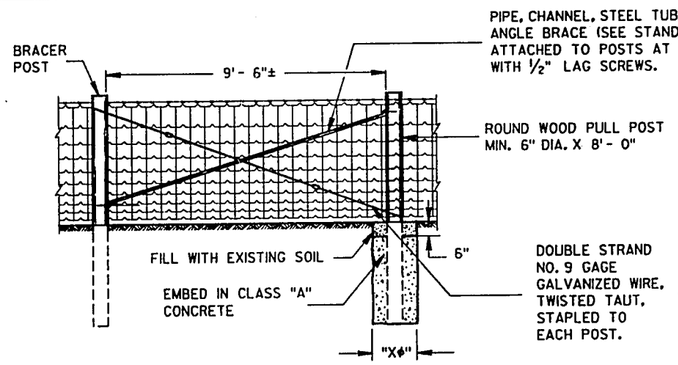
APPROVED
5/15/71
DATE
STATE DESIGN ENGINEER FOR HWYS.
FHWA

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

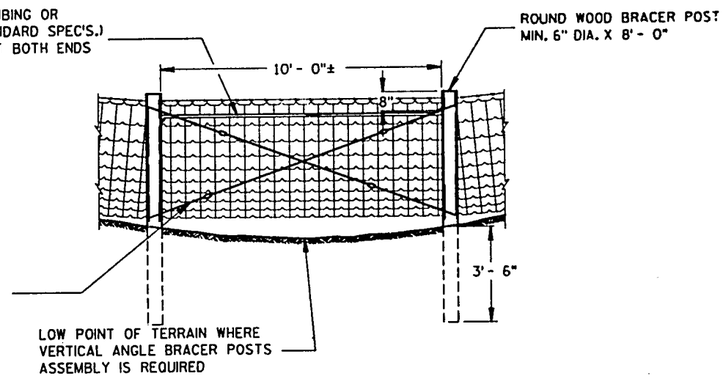
S.D.D. 14 B 18-1b

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

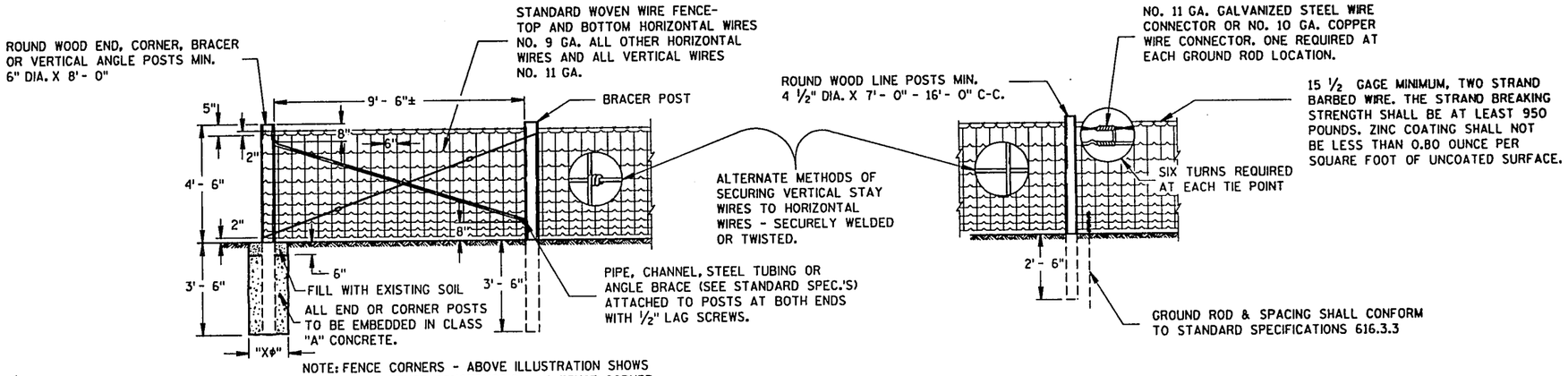
ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY



NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

LINE FENCE CONSTRUCTION

GENERAL NOTES

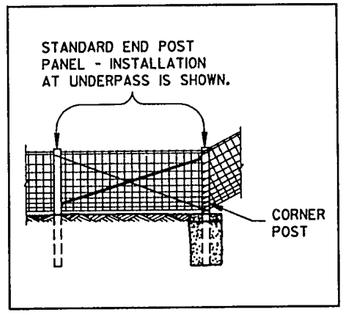
DETAILS OF CONSTRUCTION NOT SHOWN HEREON SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

"X∅" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

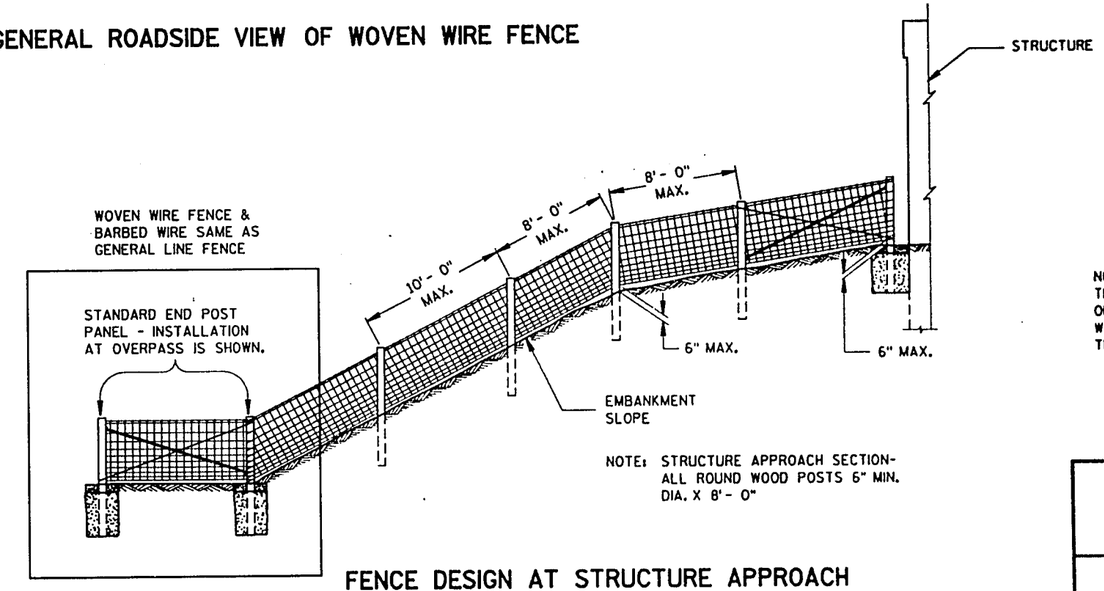
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



ALTERNATE FENCE DESIGN AT STRUCTURE

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

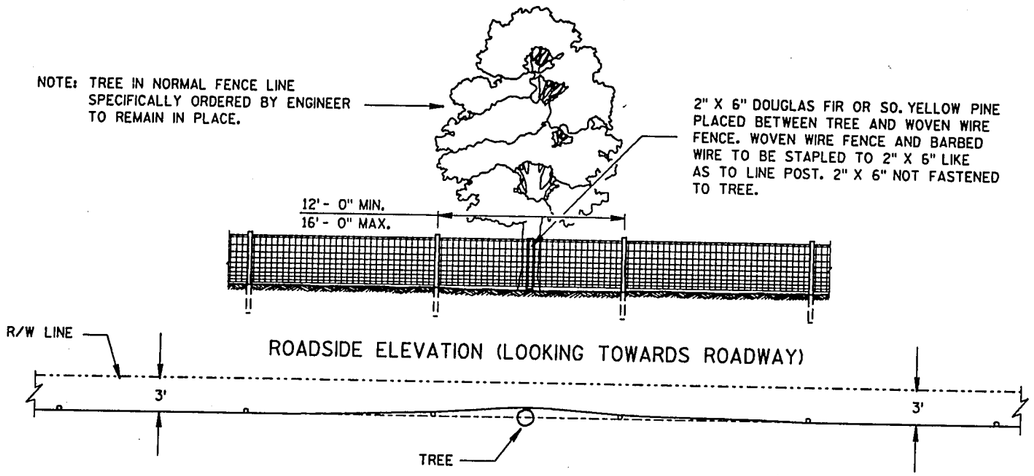
NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES AND BOTH ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.

WOVEN WIRE FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D.15 B 1-7a

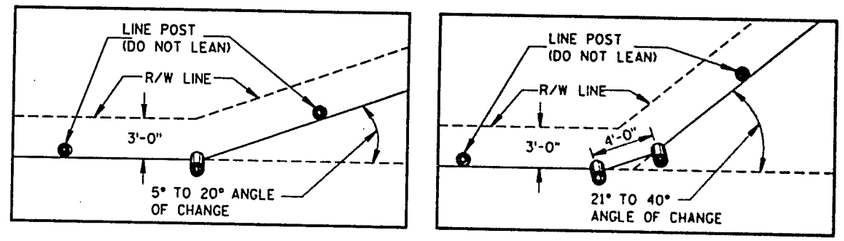
S.D.D.15 B 1-7a



ROADSIDE ELEVATION (LOOKING TOWARDS ROADWAY)

PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



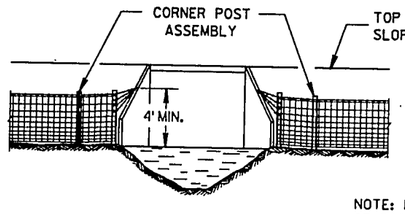
PLAN VIEW
SINGLE POST CORNER

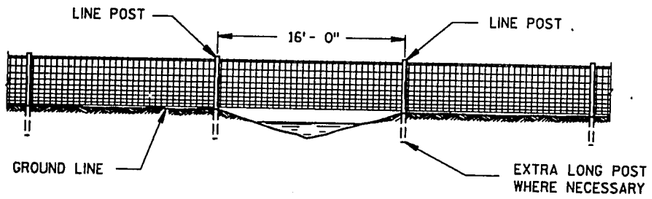
PLAN VIEW
DOUBLE POST CORNER

RIGHT OF WAY LINE CHANGE 40° AND LESS

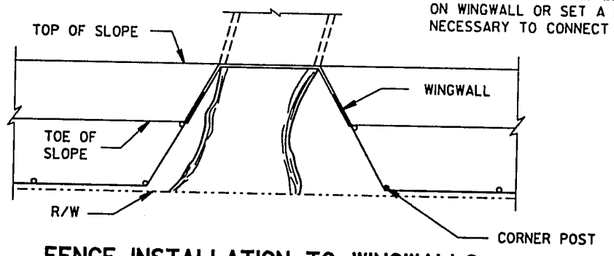
NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



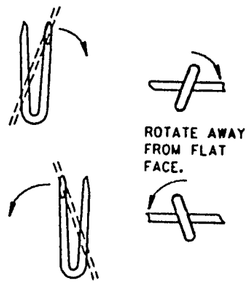


FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH



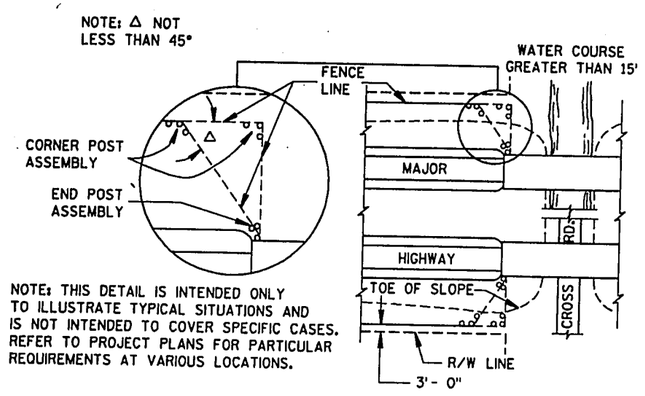
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.

FENCE INSTALLATION TO WINGWALLS

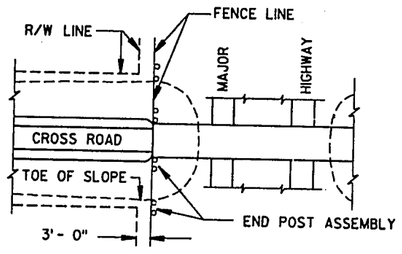


LINE POST

NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES AND BOTH ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.



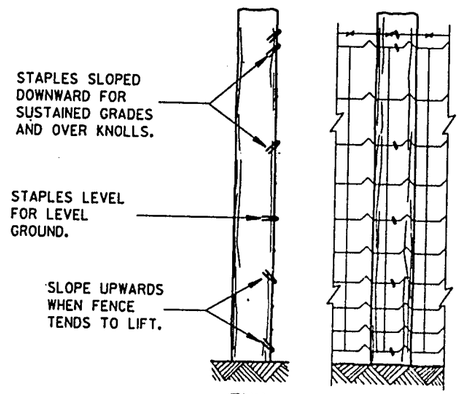
PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

FENCE LOCATION AT STRUCTURES

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION

FARM SIDE ELEVATION

FENCE MOUNTING DETAIL

WOVEN WIRE FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

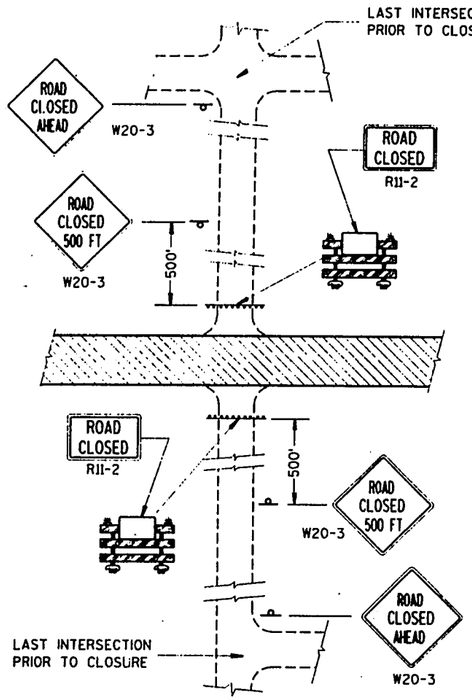
APPROVED 12-26-85 DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

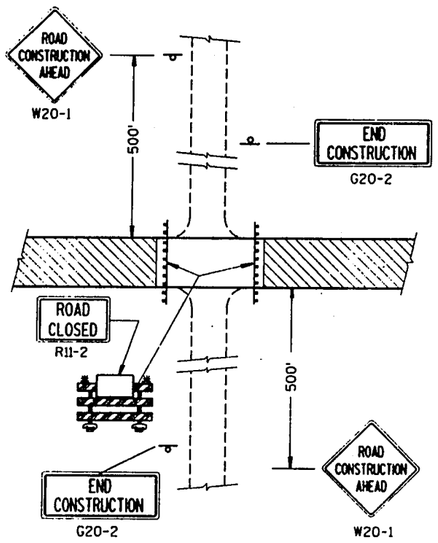
S.D.D.15 B 1-7b

S.D.D.15 B 1-7b



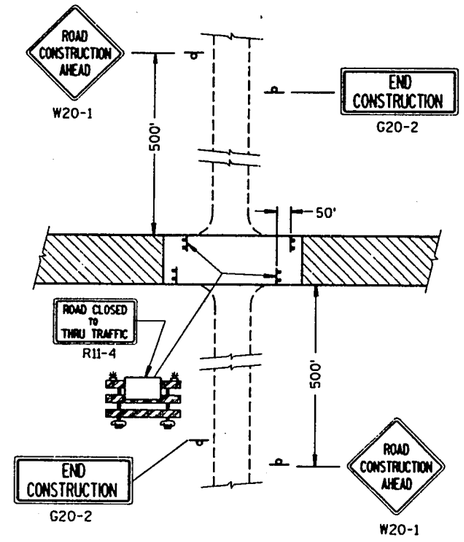
DETAIL 1

(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).

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.

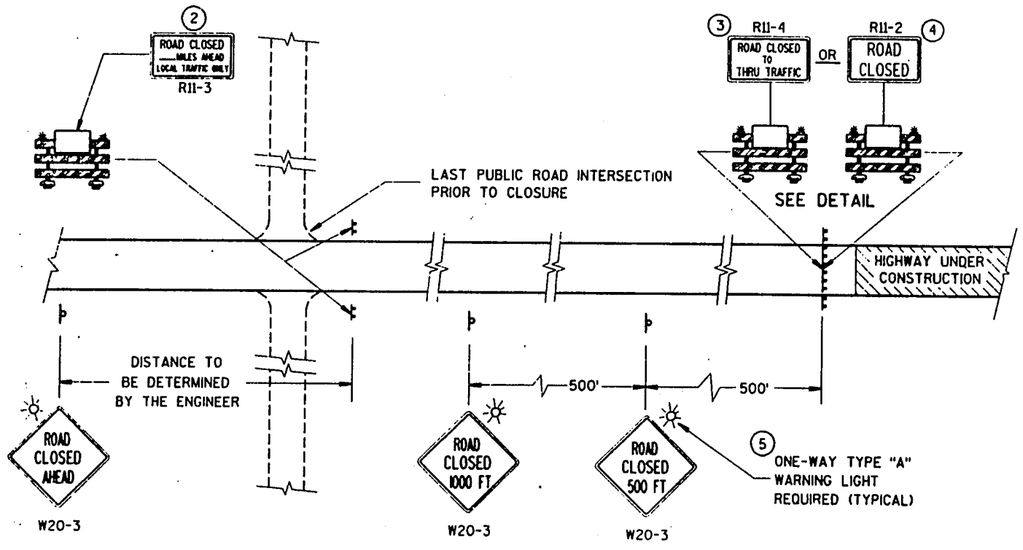
(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.

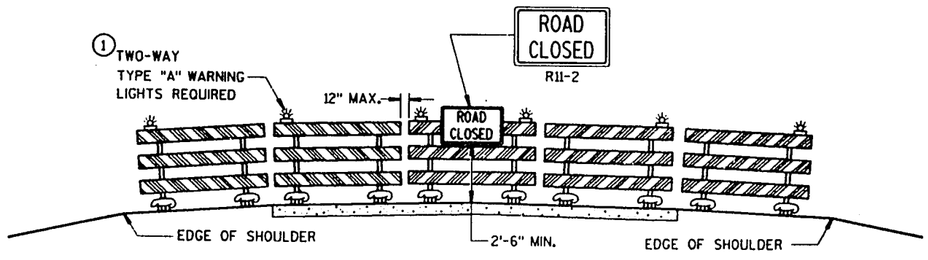
(4) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.

(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.

SIDEROAD CLOSURES

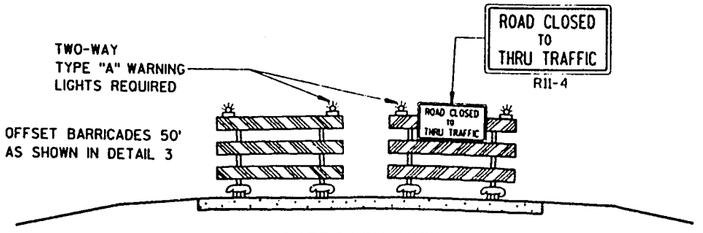


MAINLINE CLOSURE



APPROACH VIEW

ROAD CLOSURE BARRICADE DETAIL



APPROACH VIEW

LANE 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

BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES

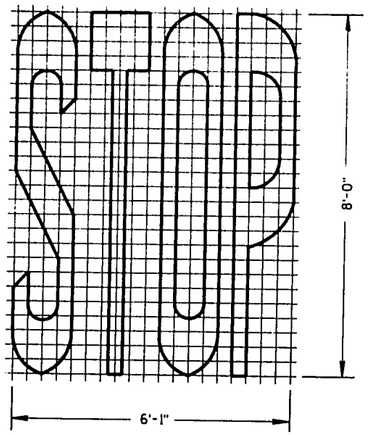
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

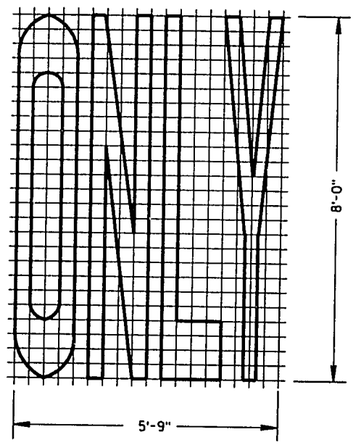
APPROVED
10-31-89
DATE
STATE TRAFFIC ENGINEER FOR HWYS.

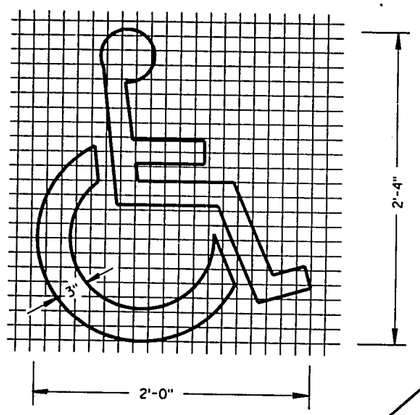
FHWA

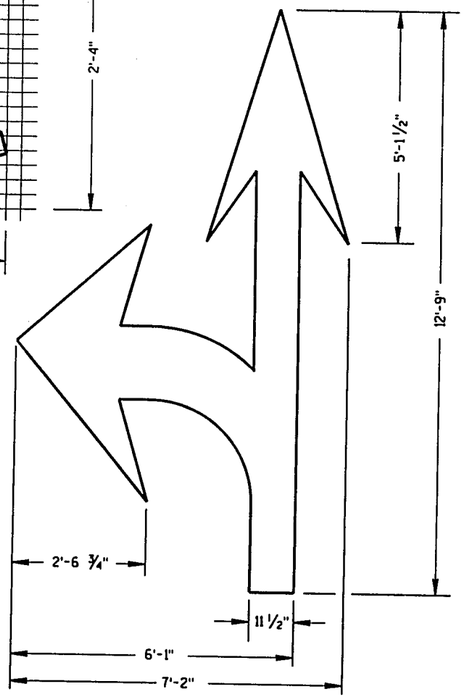
S.D.D. 15 C 2-2

S.D.D. 15 C 2-2

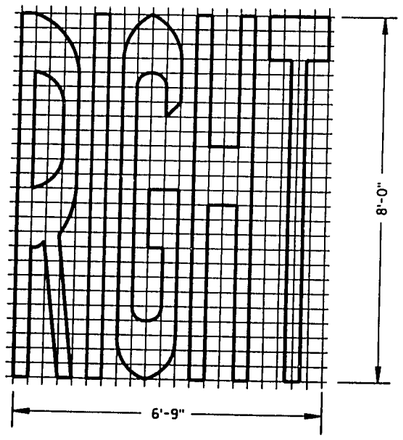


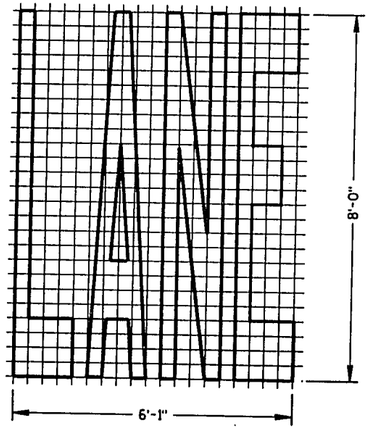


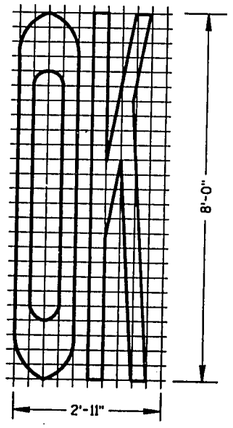


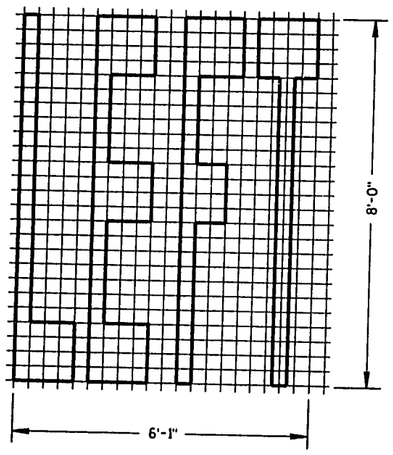


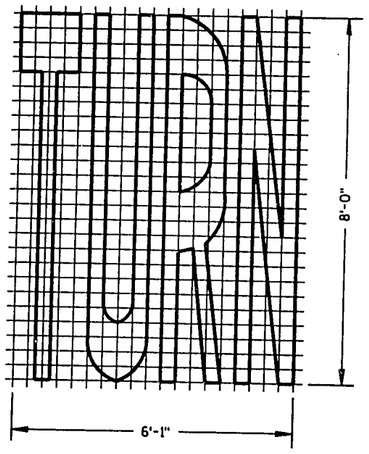
TYPE 3

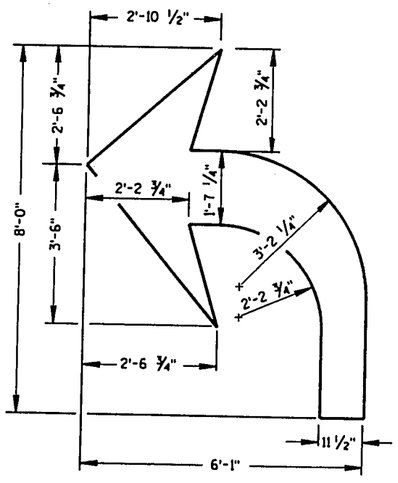




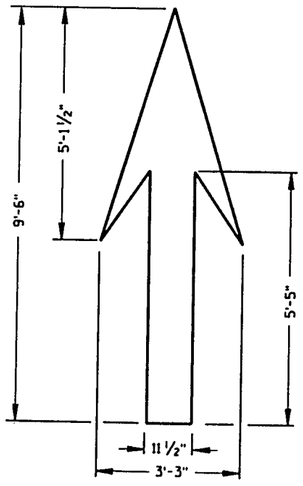








TYPE 2



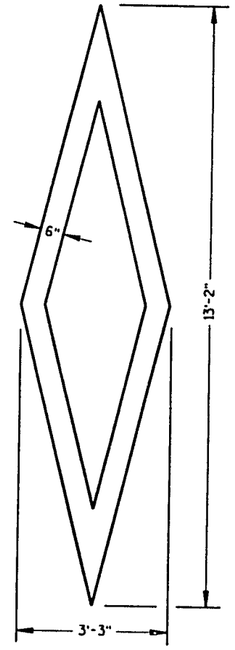
TYPE 1

GENERAL NOTES

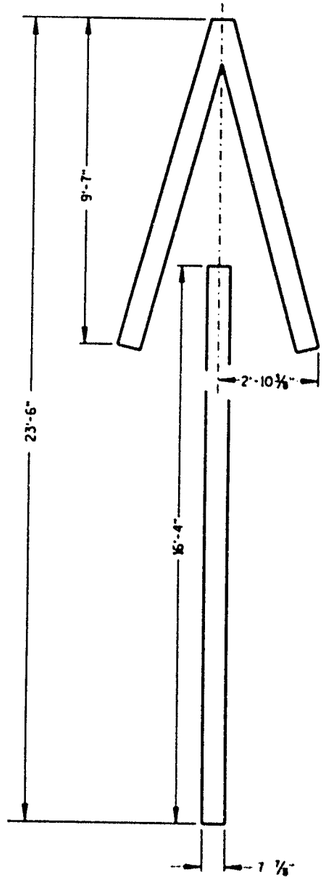
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.



PREFERENTIAL LANE SYMBOL



TYPE 4

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

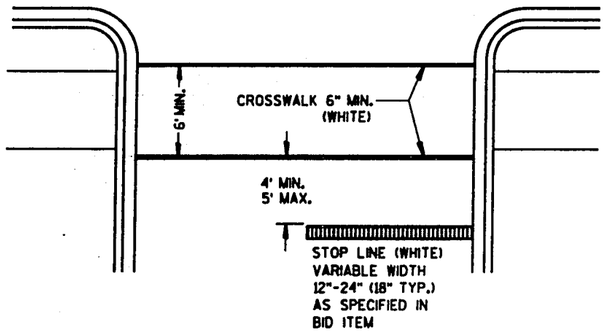
APPROVED
6-29-94
DATE

Charles J. Spang for ICA
STATE TRAFFIC ENGINEER FOR HIGHWAYS

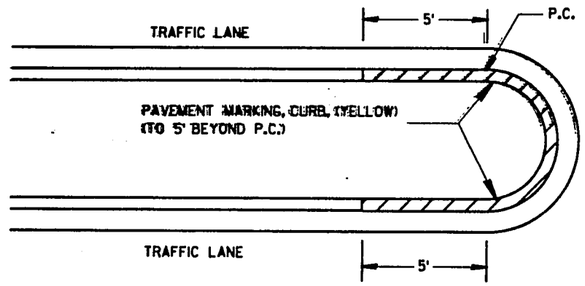
FHWA

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

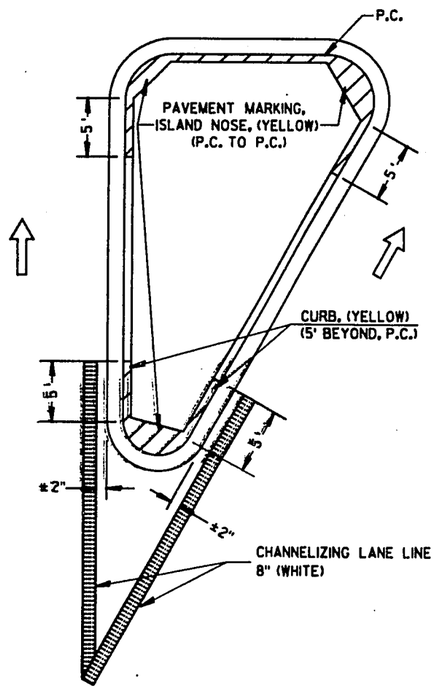
S.D.D. 15 C 7-4a



STOP LINE AND CROSSWALK

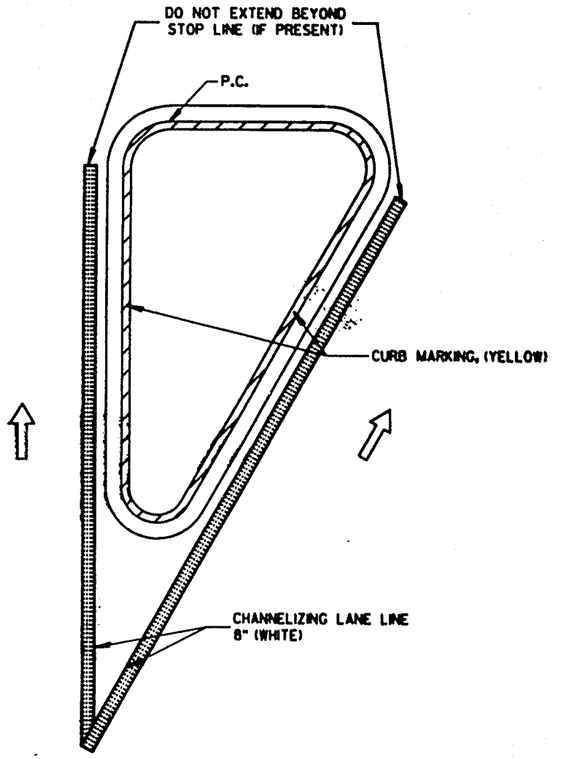


MEDIAN CURB



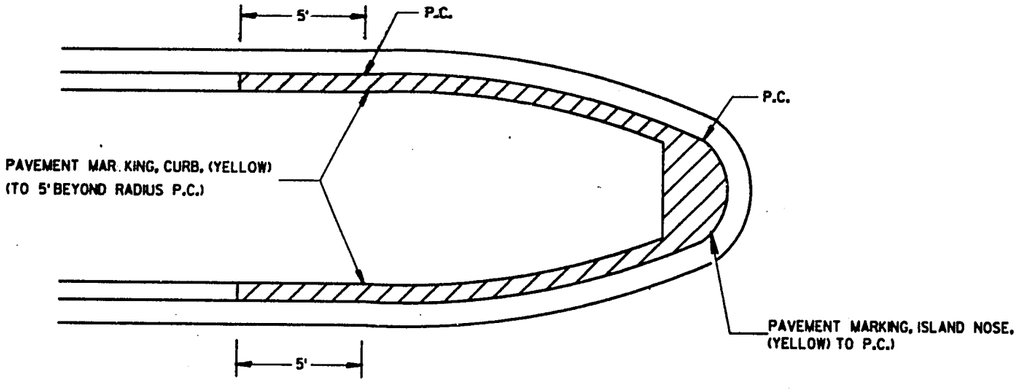
LARGE ISLAND

(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)



BULLET NOSE ISLAND

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

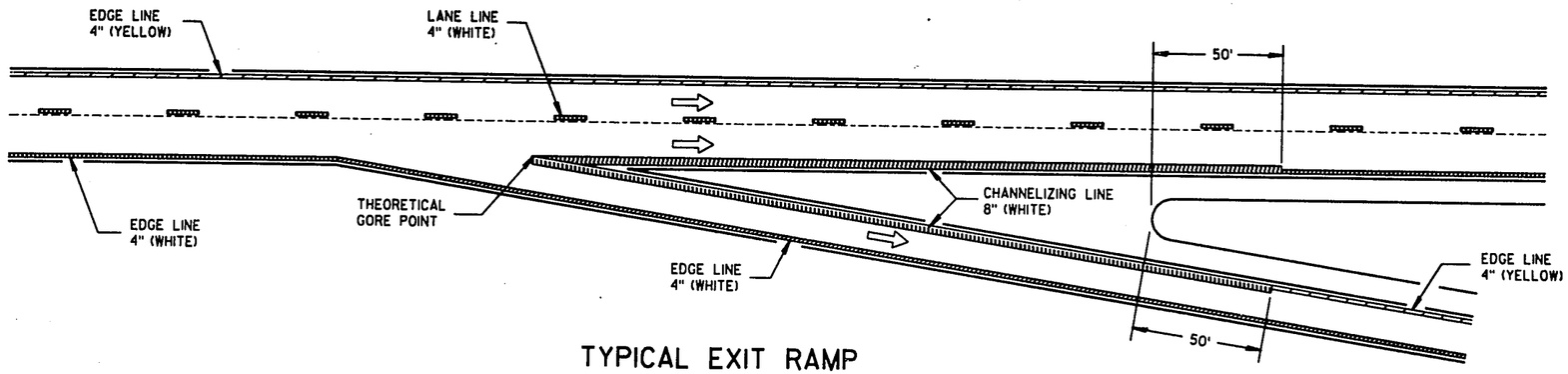
NOTE:
SDD 15 C 8-5a IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

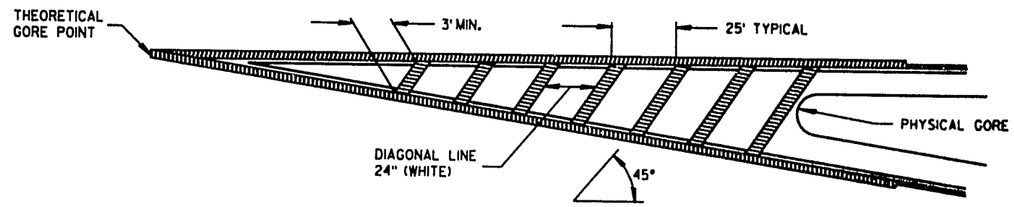
S.D.D. 15 C 8-5c

S.D.D. 15 C 8-5c

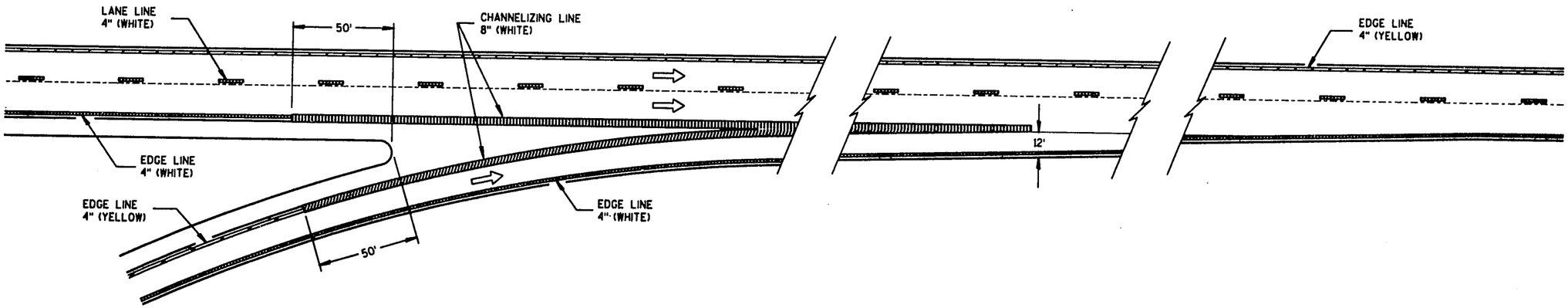


TYPICAL EXIT RAMP

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



CROSS-HATCH LINES AT
EXIT RAMP GORES WHEN REQUIRED



TYPICAL ENTRANCE RAMP

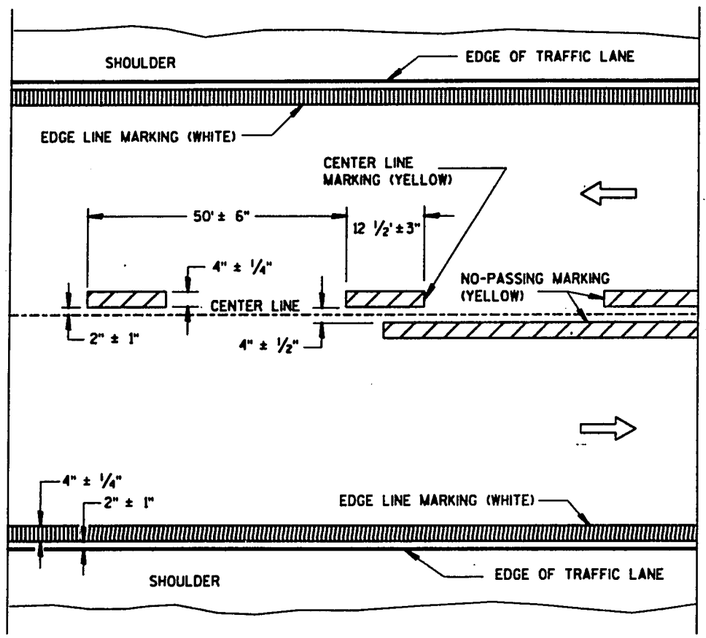
NOTE:
SDD 15 C 8-5o IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

PAVEMENT MARKING
(RAMPS AND GORES)

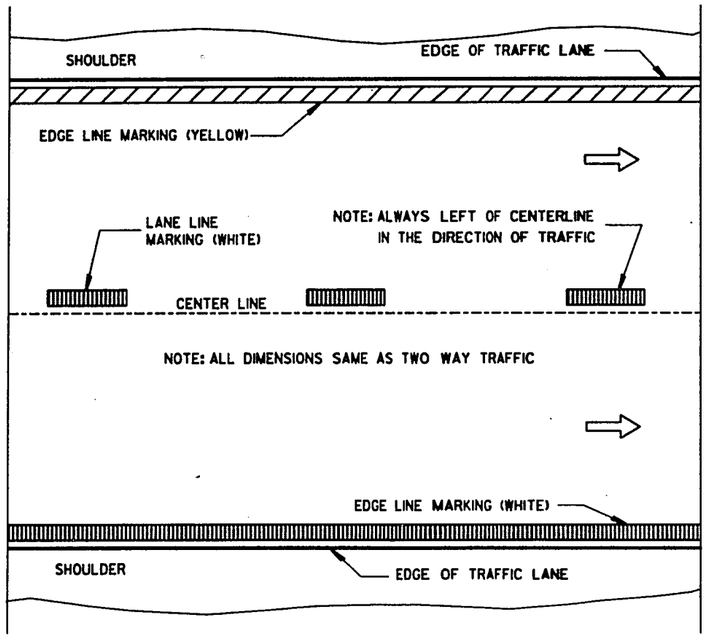
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-5d

S.D.D. 15 C 8-5d



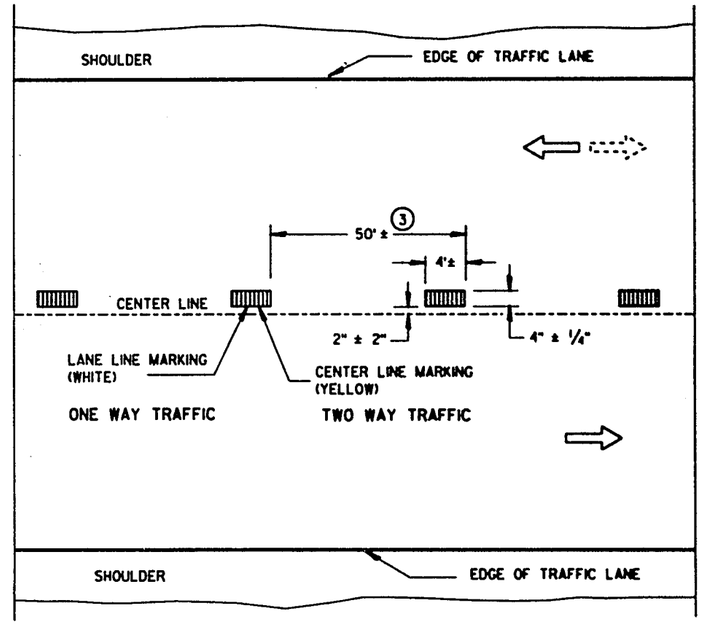
TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

(SHOWS CYCLE FOR PERMANENT CENTER LINE MARKING)



TEMPORARY PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE MARKING)

GENERAL NOTES

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

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

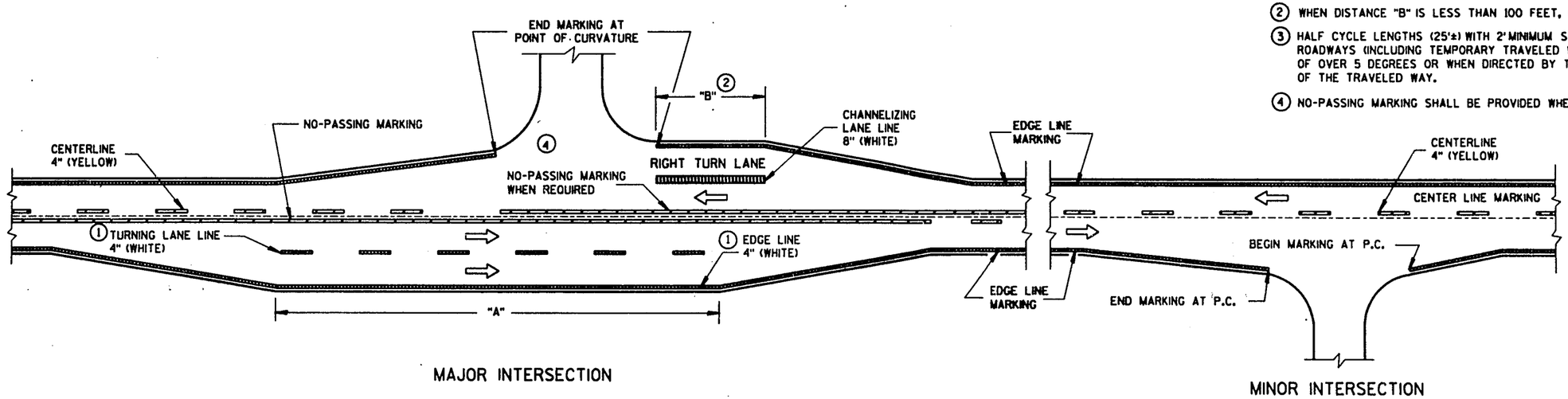
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT TURNING LANE MARKING.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) 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.

(4) NO-PASSING MARKING SHALL BE PROVIDED WHERE SIGHT DISTANCE IS DEFICIENT.

NOTE:
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

NOTE:
THIS DRAWING CONSISTS OF UP TO FOUR SHEETS. SHEET 5a MAY BE USED ALONE OR SUPPLEMENTED BY SHEET 5b, SHEET 5c AND/OR SHEET 5d AS APPLICABLE

PAVEMENT MARKING
(MAINLINE & INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

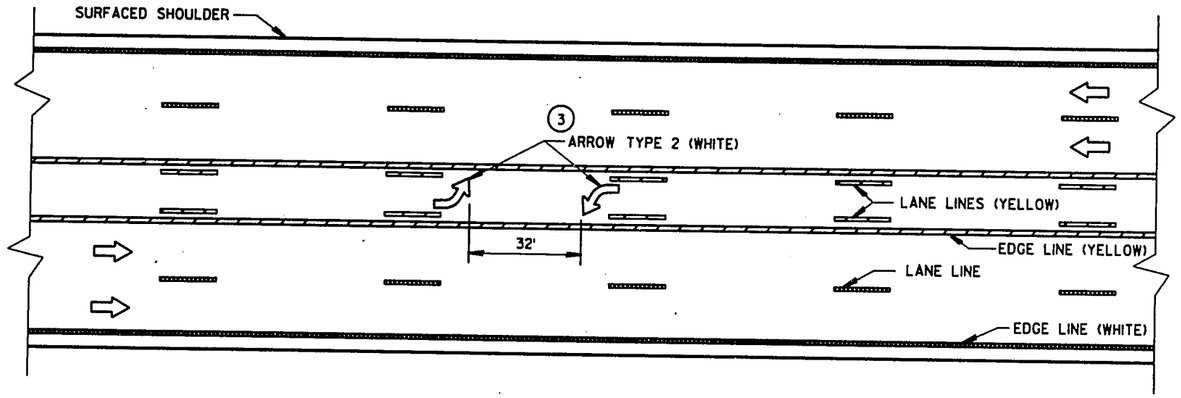
APPROVED 7/20/93 DATE
STATE TRAFFIC ENGINEER FOR H&TS

FHWA

S.D.D. 15 C 8-5a

S.D.D. 15 C 8-5a

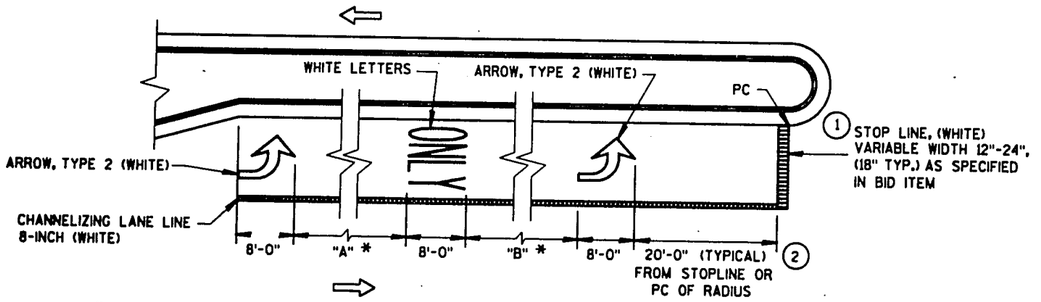
NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

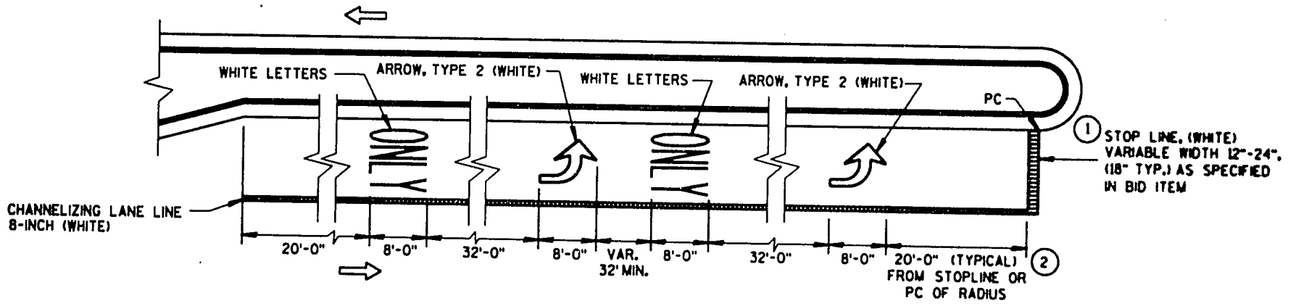
NOTES:

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.

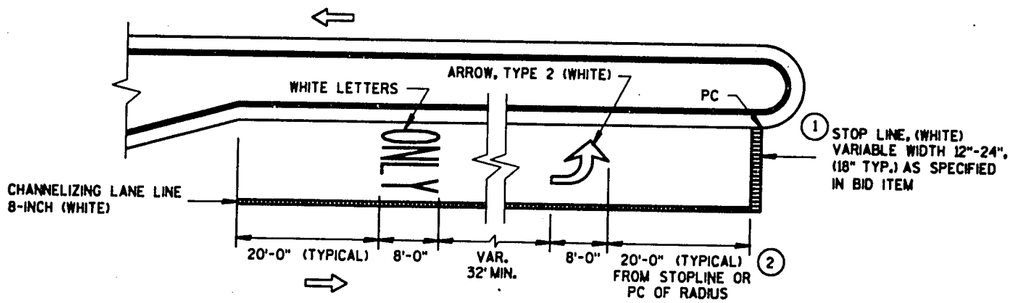


*VARIABLE, 32' MIN.
"A" = "B" (TYPICAL)

LEFT TURN LANE
(LENGTH 108' TO 167')



LEFT TURN LANE
(LENGTH OVER 167')



LEFT TURN LANE
(LENGTH UNDER 108')

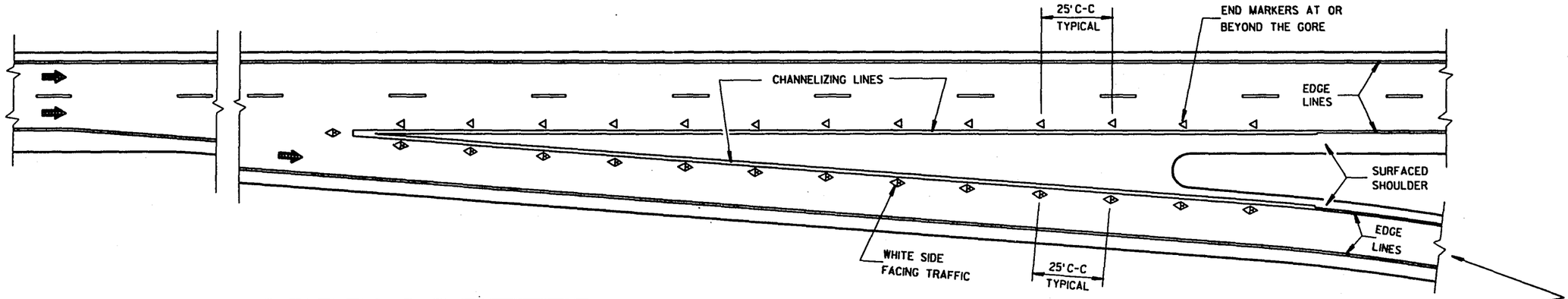
NOTE:
SDD 15 C 8-5a AND SDD 15 C 7 IS REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

PAVEMENT MARKING
(LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

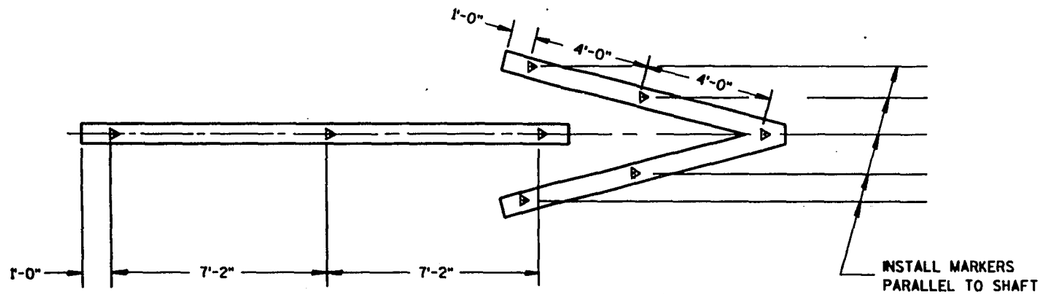
S.D.D. 15 C 8-5b

S.D.D. 15 C 8-5b

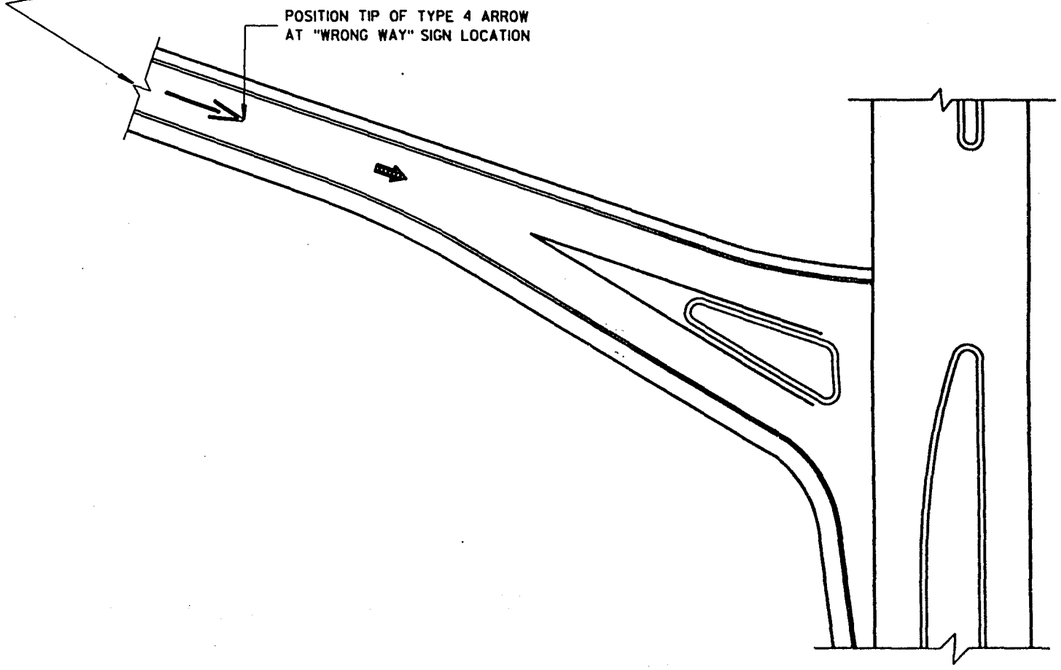


DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)
SPECIFY A MINIMUM OF 12 MARKERS ON EACH SIDE OF THE EXIT RAMP GORE

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)

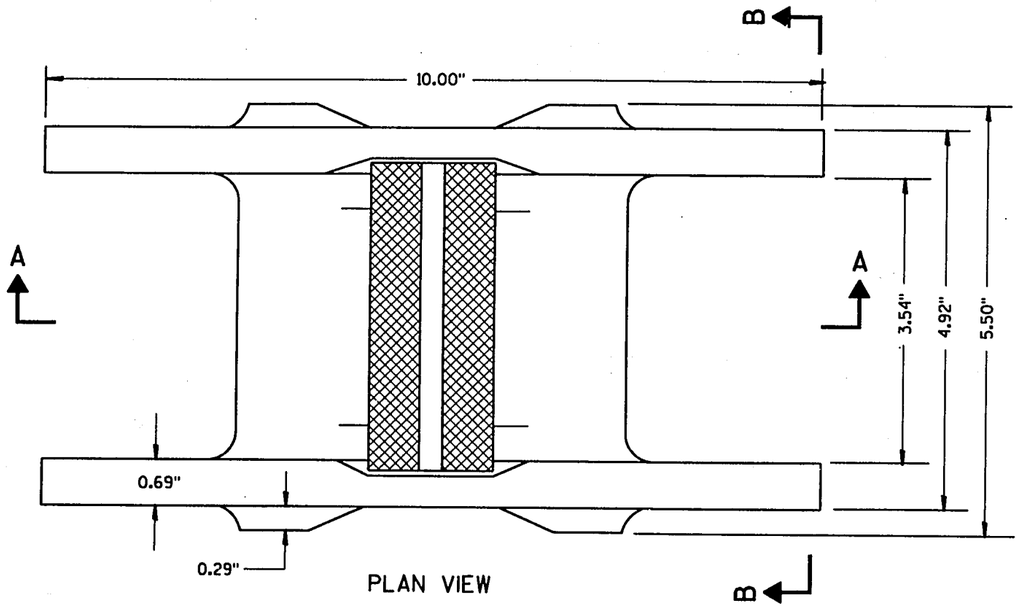
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 2/17/94 (DATE) Peter T. Rusch (STATE TRAFFIC ENGINEER FOR HWYS)

FHWA

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

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



PLAN VIEW

RAISED MARKER
INSTALLED IN PAVEMENT

GENERAL NOTES

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

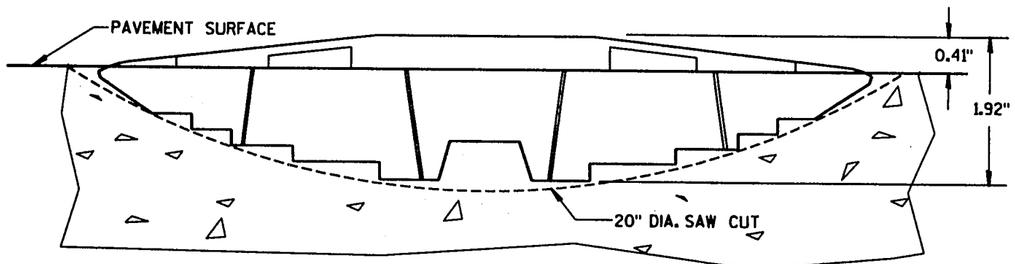
THE CONCRETE SAW SHALL BE FITTED WITH A GANG OF 18 INCH DIAMETER CONCRETE BLADES, BORDERED BY 20 INCH DIAMETER BLADES AT EACH END.

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

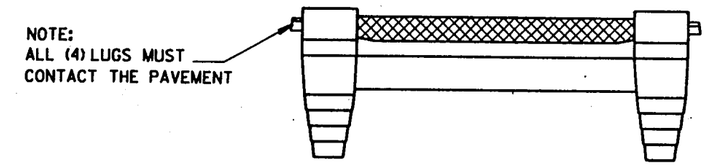
LIE BELOW THE PAVEMENT SURFACE.

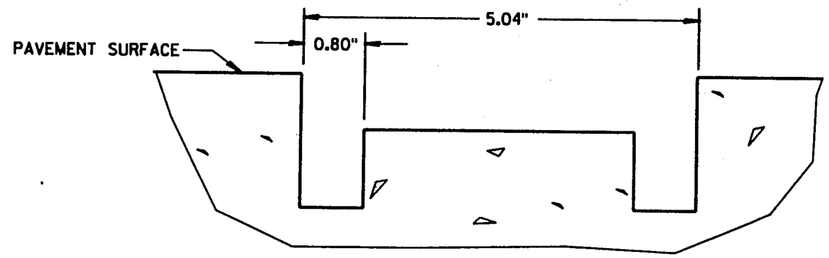
THE SAW CUT AREA MUST BE DRY AND FREE OF DUST, DIRT OR ANY MATERIAL WHICH WILL ADVERSELY AFFECT THE BOND OF THE ADHESIVE.

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.

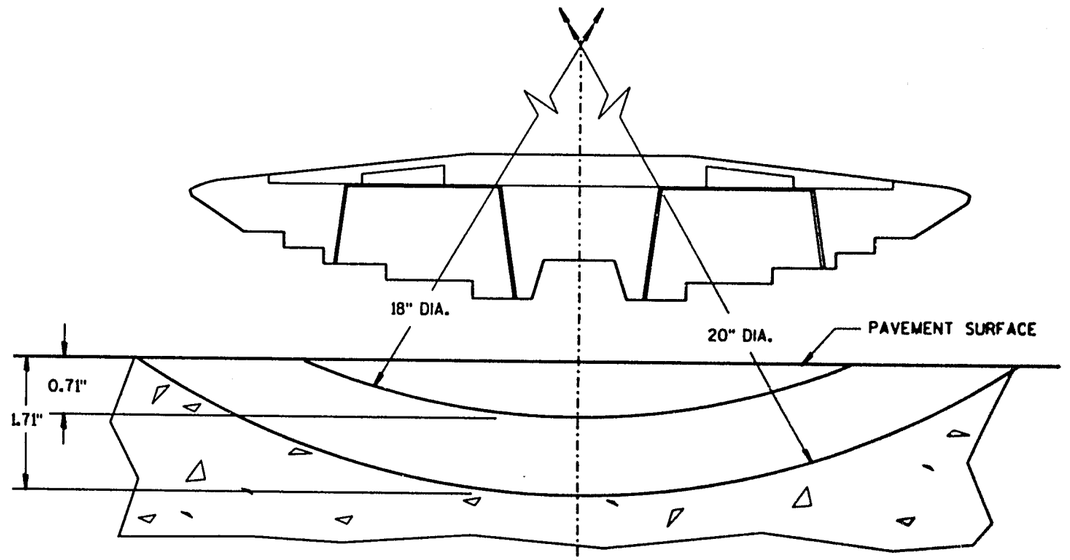


SECTION A-A





SECTION B-B



SAW CUT DETAIL

RAISED PAVEMENT MARKERS
(CASTING & SAWCUT DETAILS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 2/17/94 DATE
STATE TRAFFIC ENGINEER FOR HWYS
FHWA

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

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

TWO-LANE ROADWAY

SYMBOLS

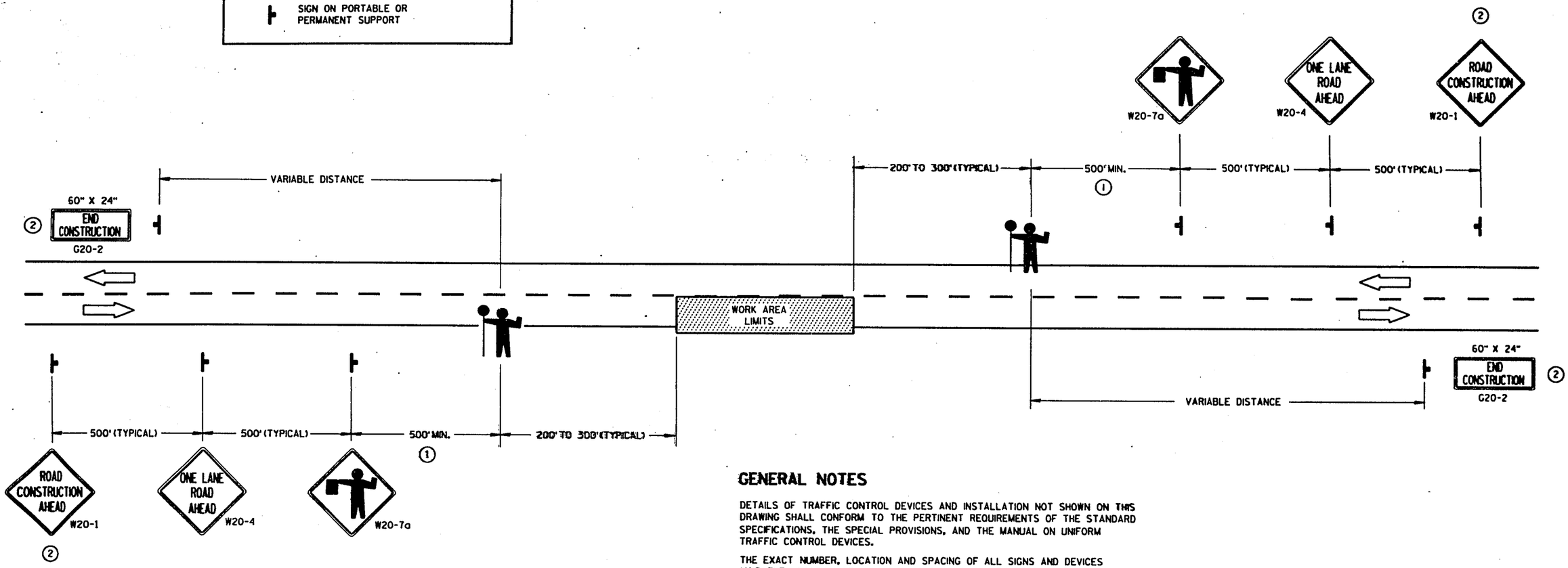
WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT

BE PREPARED TO STOP

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD CONSTRUCTION WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-12-91
DATE
STATE TRAFFIC ENGINEER FOR HWYS

FHWA

S.D.D. 15 C 12-1

S.D.D. 15 C 12-1

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL 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 DESIREABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

(1) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

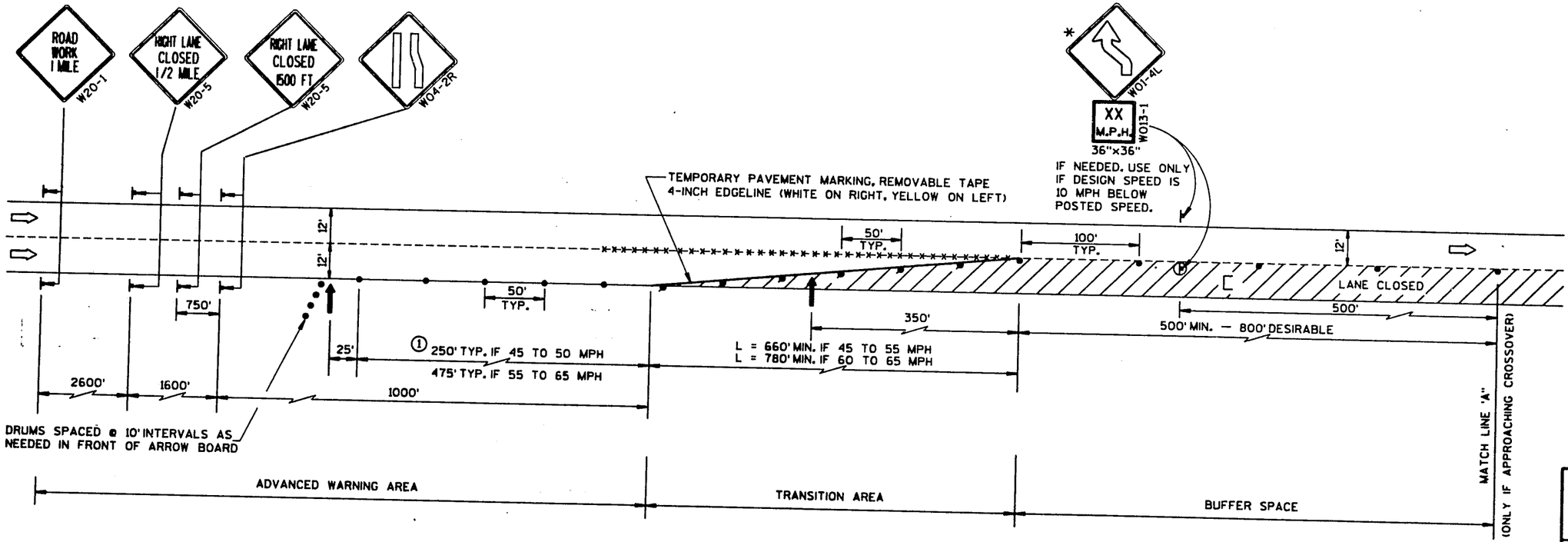
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

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



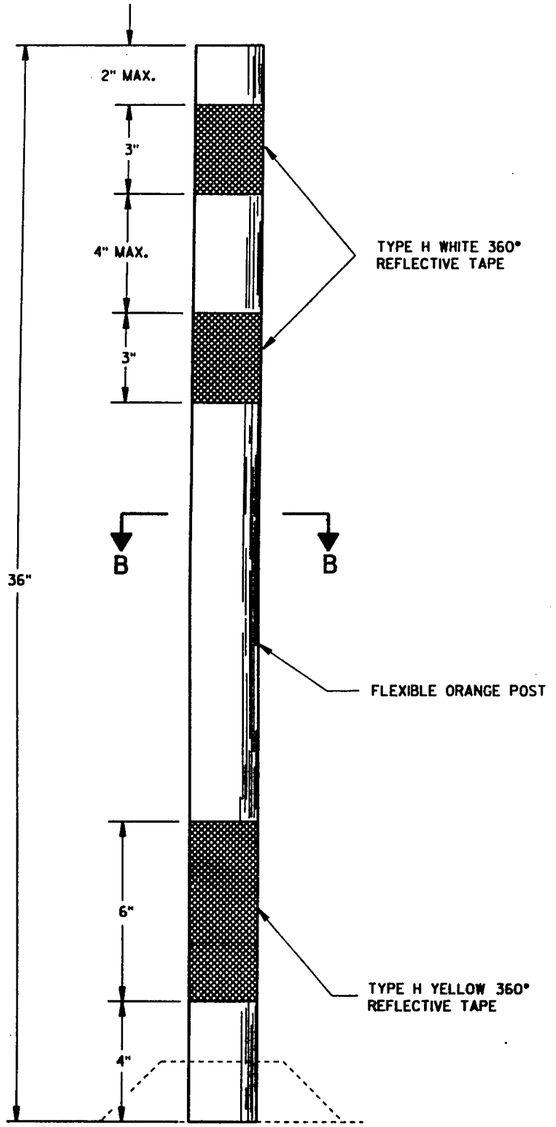
TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

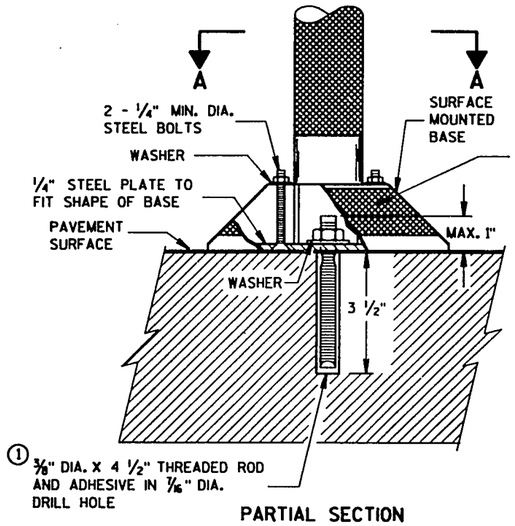
APPROVED
7-14-94
DATE
Charles J. Eppy
for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 D 12-1

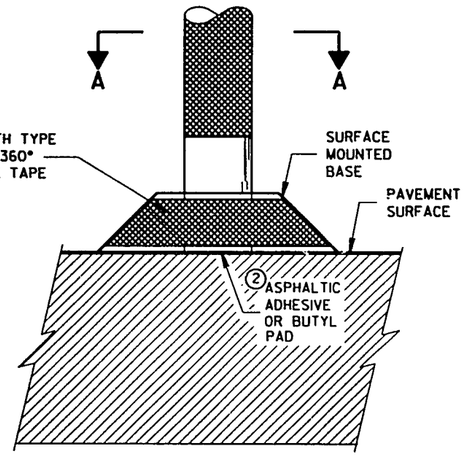
S.D.D. 15 D 12-1



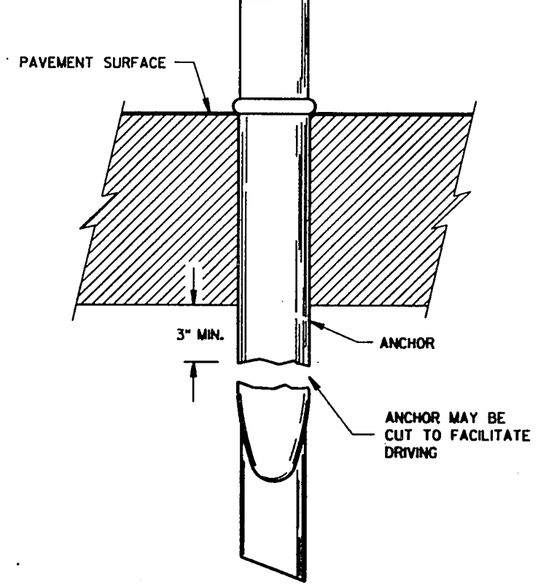
FLEXIBLE TUBULAR MARKER POST

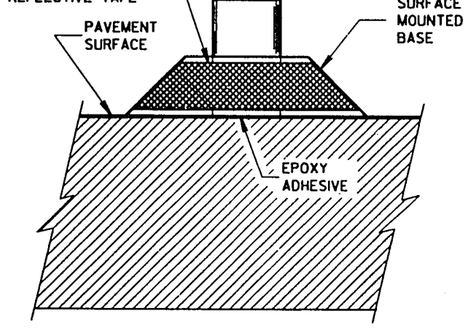


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

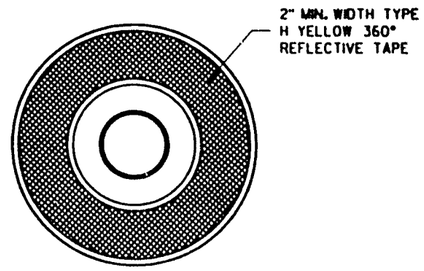
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

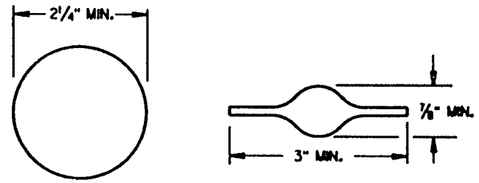
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

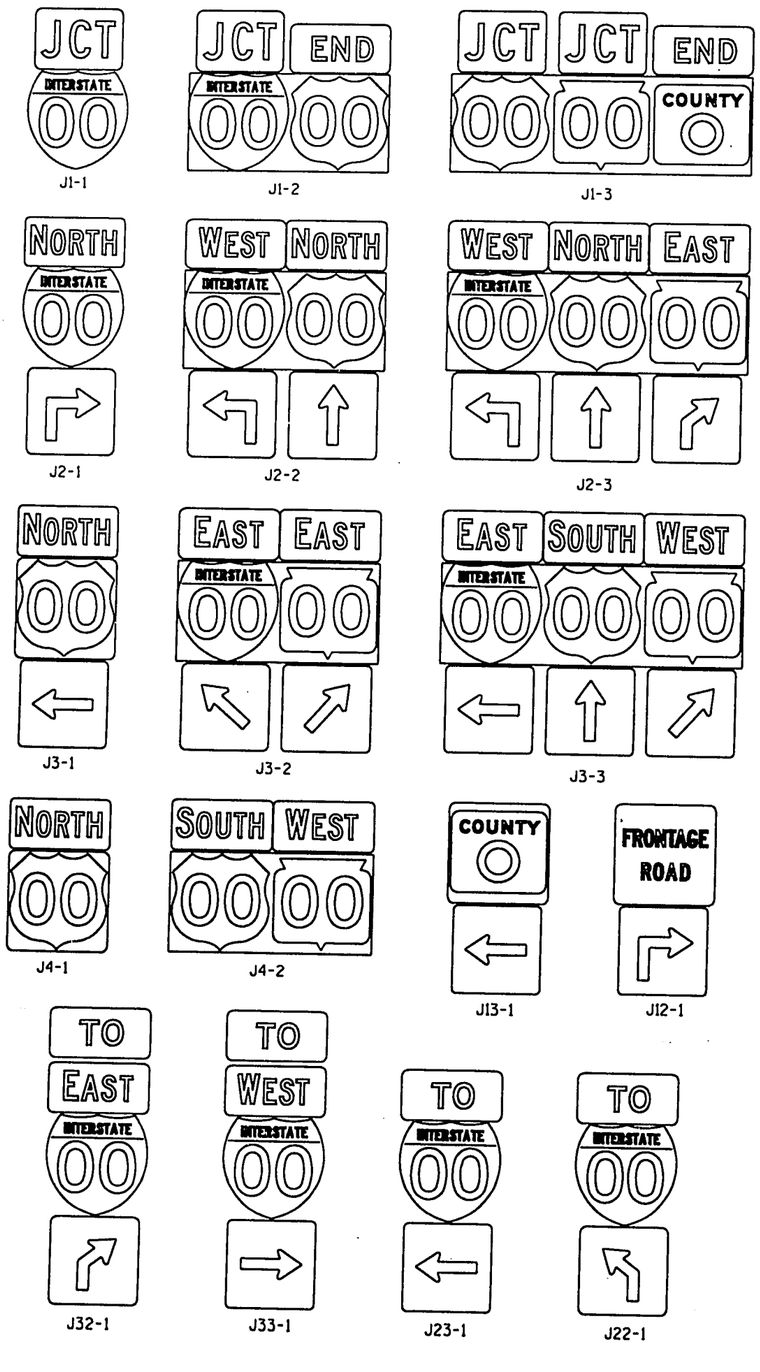
FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 2/17/94 DATE — STATE TRAFFIC ENGINEER FOR HWYS — FHWA

S.D.D. 15 C 11-5

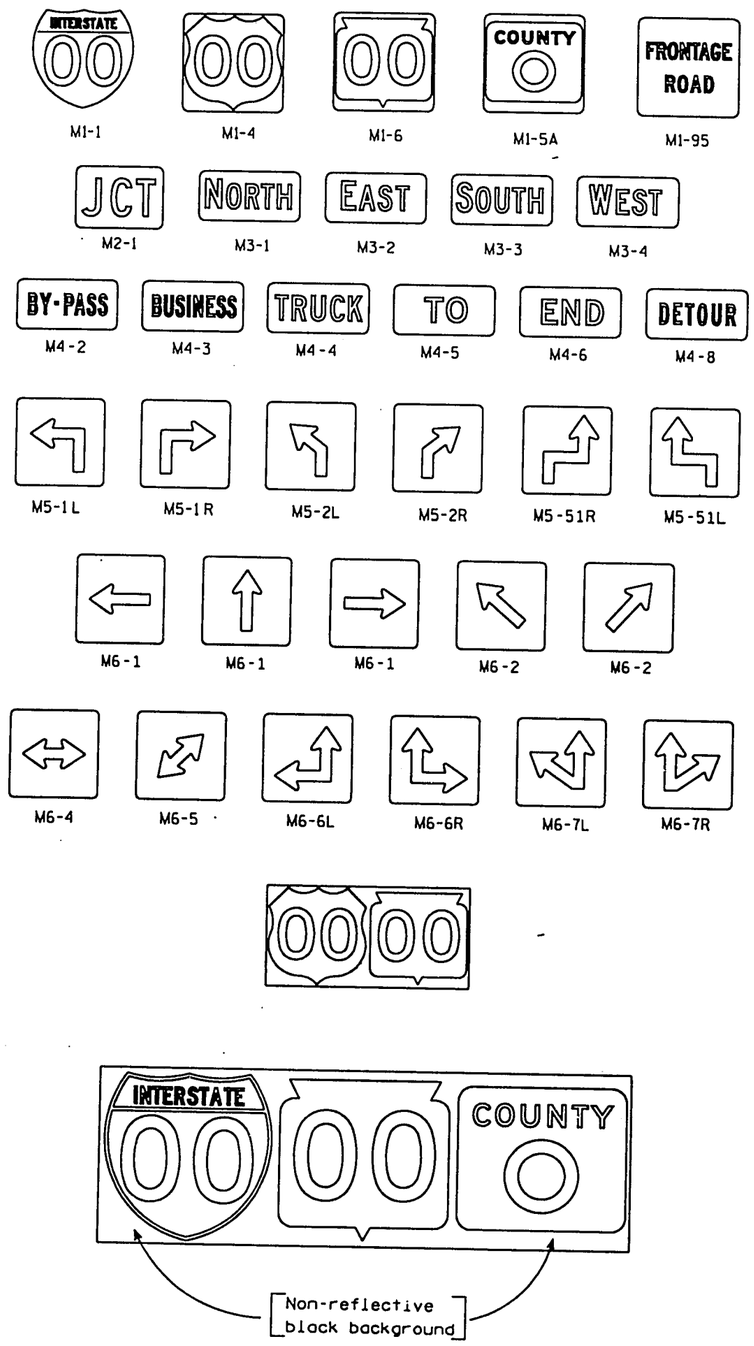
S.D.D. 15 C 11-5

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.0

TYPICAL ASSEMBLIES



INDIVIDUAL COMPONENTS OF ASSEMBLIES



GENERAL NOTES

1. All components within any individual assembly shall be the same "size". The following table illustrates that situation:

SIZE	M1'S	M2	M3'S & M4'S	M5'S & M6'S
2	24 X 24	21 X 15	24 X 12	21 X 21
3,4-5	36 X 36	30 X 21	30 X 15	30 X 30

2. For any assembly containing two or more route markers, the route markers SHALL be placed on a single PLYWOOD panel. All other materials within the assembly can be either plywood or aluminum.

3. Certain marker heads require the component pieces to be the same color. As an example, all the componets used with an M1-1 marker shall be blue.

DATE DRAWN 4-19-93 DATE REDRAWN
DATE REVISED

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

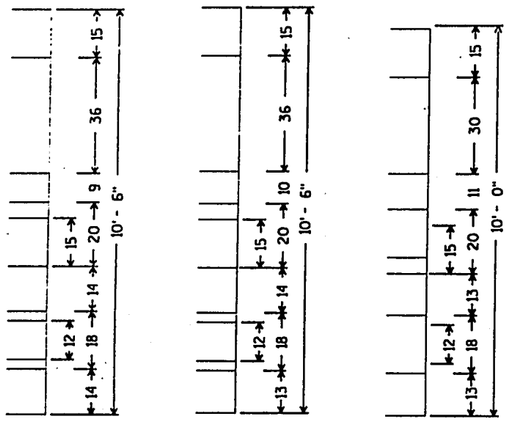
APPROVED

DATE 5-2-93 PLATE NO.

58.50
PLOT NAME: A2 1
PLOT SCALE: 1.0
LEVELS ON: 1,2, 5,6, 10,

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.1

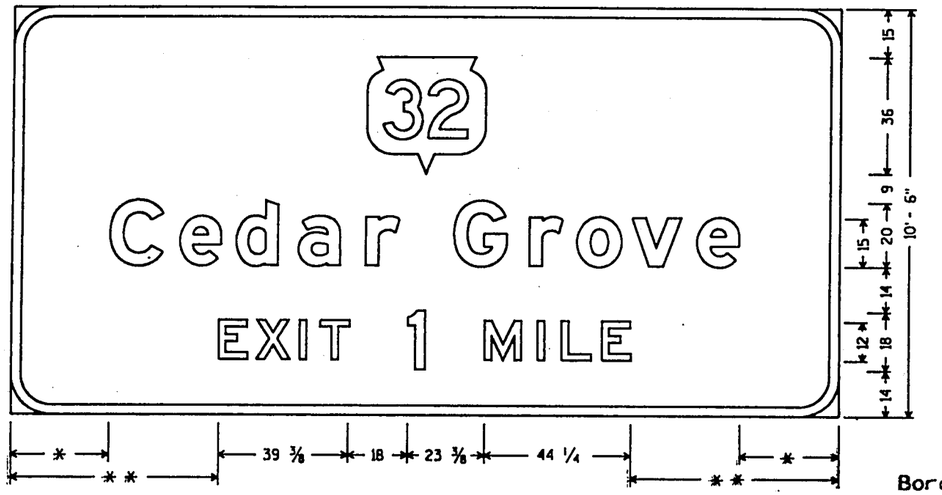
TYPICAL VERTICAL SPACING LAYOUTS



STH-MKR | US OR IH-MKR | CO-MKR

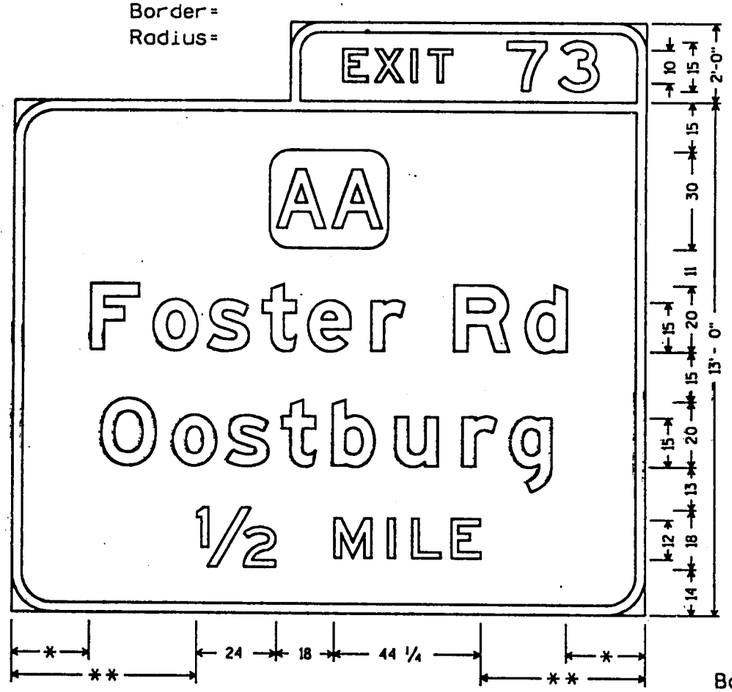
Particular shield and one line of message copy.

TYPICAL EXAMPLES



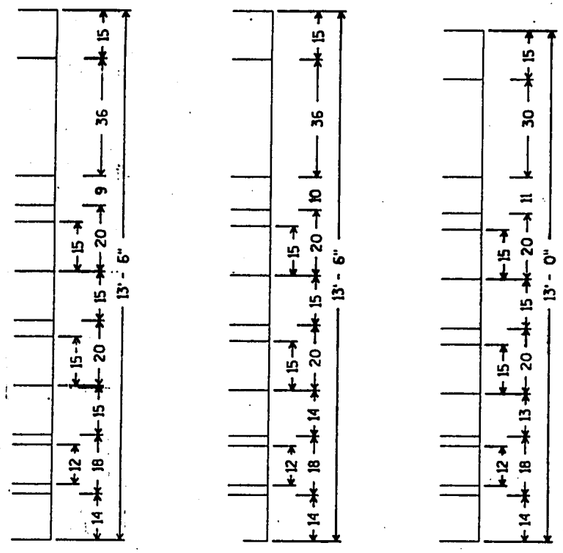
Border =
Radius =

(STH-MKR)



Border =
Radius =

(CO-MKR)



STH-MKR | US OR IH-MKR | CO-MKR

Particular shield and two lines of message copy.

NOTES

1. All signs shall have 15" LC/20" UC message copy, Series E Modified. All Cap letters are 12" Series E.
2. Vertical spacing shall be as shown in the typicals. Note the differences between the various marker heads, and the associated spacings.
3. The sign code for these signs is normally E1-1A.

* Minimum dimension is normally height of upper case letter.

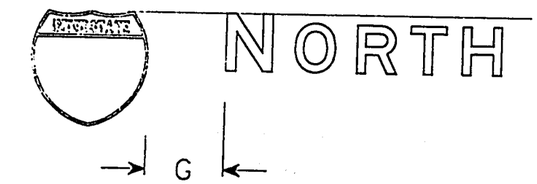
** To be optically centered on the sign.

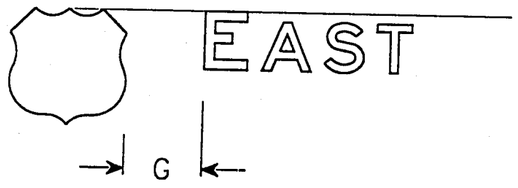
GROUND MOUNTED ADVANCE GUIDE SIGNS

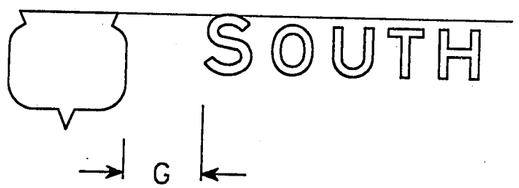
WISCONSIN DEPT OF TRANSPORTATION

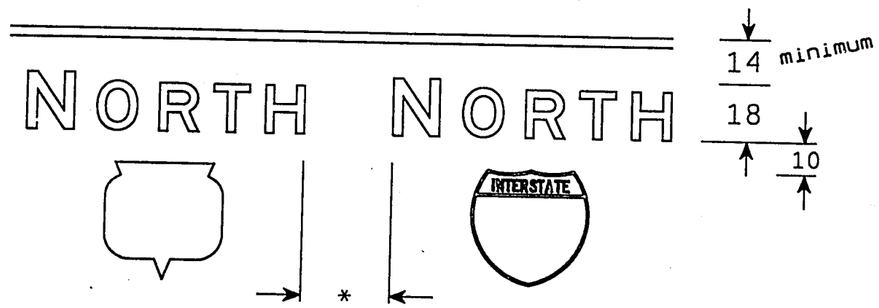
APPROVED Director, Office of Policy

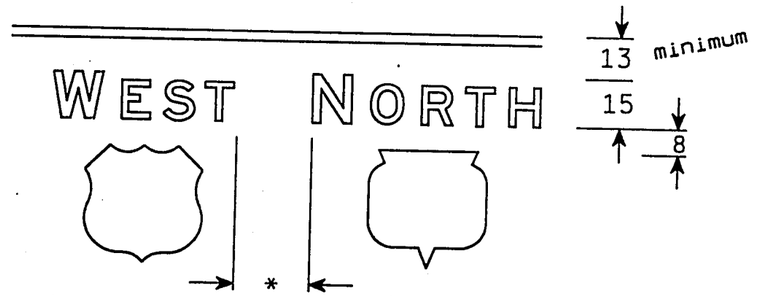
DATE 2/8/94 PLATE NO. A[illegible]

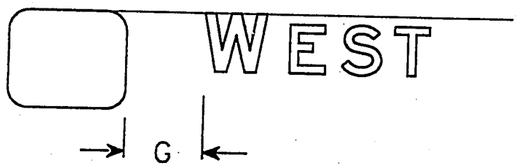


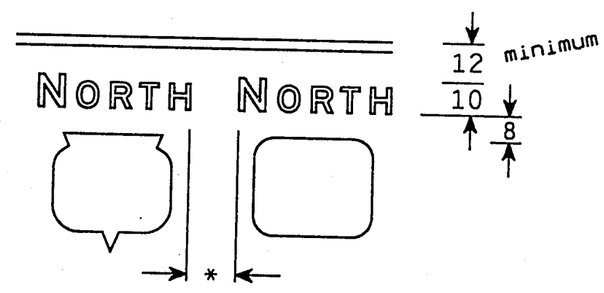










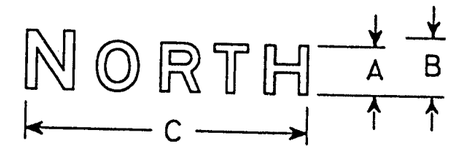


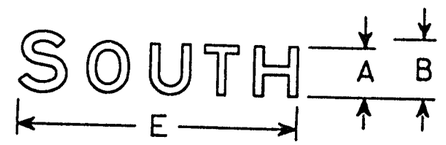
* Minimum dimension of 1.5 times "B".

A	B	C	D	E	F	G
6	8	35 1/4	26 1/4	34 1/2	29 7/8	11
8	10	46 1/4	34 1/4	45 1/4	37 5/8	14
12	15	69 3/8	51 1/8	68	56 1/4	20
15	18	85 1/2	63 7/8	83 7/8	69 1/4	24

NOTES

1. All copy is Series E, modified.





CARDINAL DIRECTIONS FOR GUIDE SIGNS

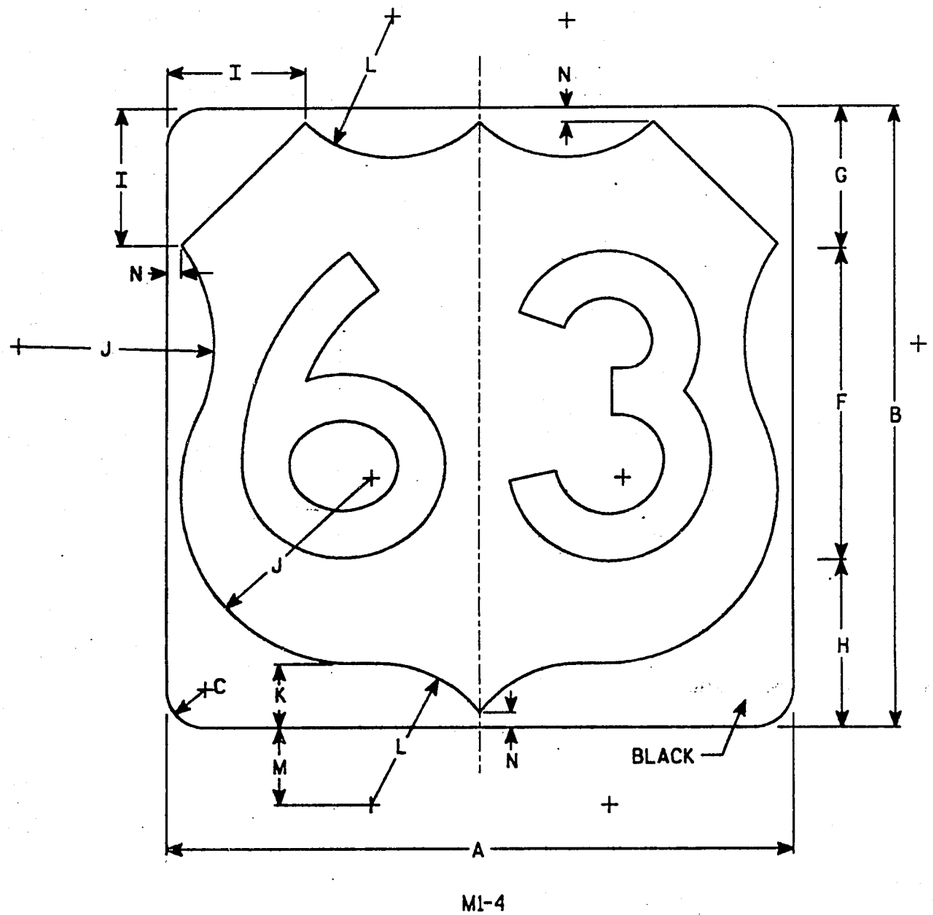
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

DATE 2/14/96 PLATE NO. [illegible]

LEVELS ON • 2 S.G. 10.

58.59.



M1-4

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.

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																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3																											
4	36	36	2 1/4			18	8 1/4	9 3/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 3/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

U.S. ROUTE MARKER
M1-4 FOR ASSEMBLIES

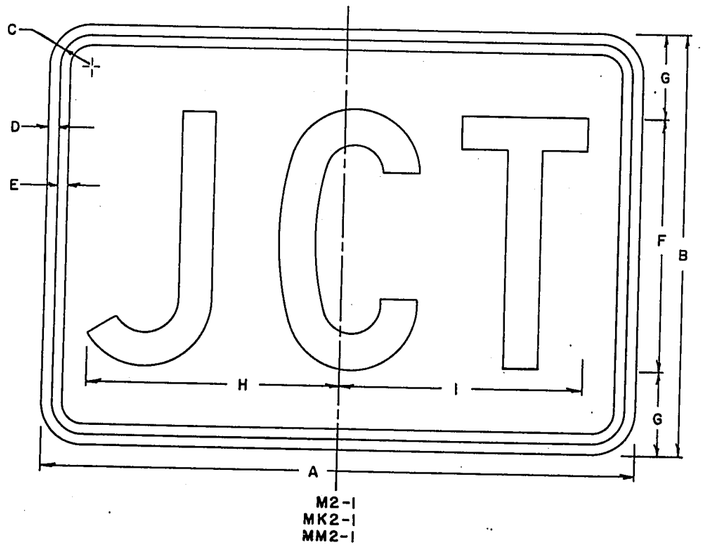
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

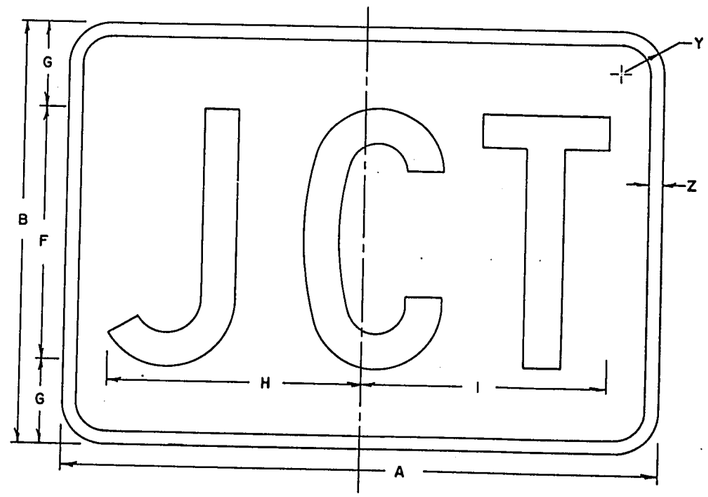
DATE 1-29-93 PLATE NO. M1-4

LEVELS ON: 2 5.6 10.

1201-04-7x/7.4



M2-1
MK2-1
MM2-1



MB2-1
MG2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - See note 5 - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - } See Note 5
   Message - }
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.
5. M2-1: Background - Reflectorized White
   Message - Black
   MB2-1: Background - Reflective Blue
   Message - Reflectorized White
   MG2-1: Background - Reflective Green
   Message - Reflectorized White
   MK2-1: Background - Non-reflective Green
   Message - Non-reflective White
   MM2-1: Background - Reflectorized White
   Message - Reflective Green
   MN2-1: Background - Reflective Brown
   Message - Reflectorized White
   MR2-1: Background - Non-reflective Brown
   Message - Non-reflective Yellow
6. Border shall be omitted on MM2-1.
7. Drawing may be scaled for standard size only.

SIZE	CODE 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	Bid Area Sq. Ft.
Minimum	1																											
Standard	2	21	15	1 1/8	3/8	3/8	9	3	8 15/16	8 5/8																		
Oversize	3																									1 1/2	1/2	2.187
Exp-way	4	30	21	1 1/8	3/8	1/2	13	4	12 7/8	12 7/16																		
Freeway	5	30	21	1 1/8	3/8	1/2	13	4	12 7/8	12 7/16																1 1/2	1/2	4.375
Bicycle	6																									1 1/2	1/2	4.375
Snowmobile	7																											

		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	
Minimum	1																											
Standard	2																											
Oversize	3																											
Exp-way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											

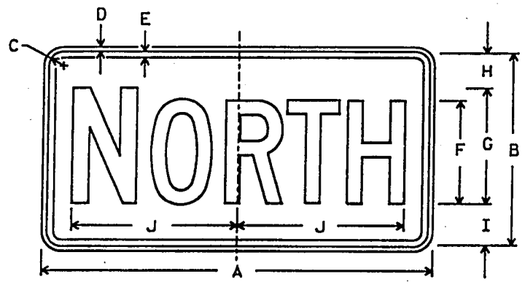
RV	CK	RA	RA

Date Drawn -
Date Released - 11-23-81
Date Revised - 11-23-81

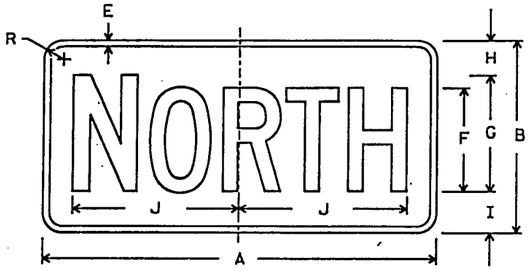
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
DATE 4-7-82
M2-1



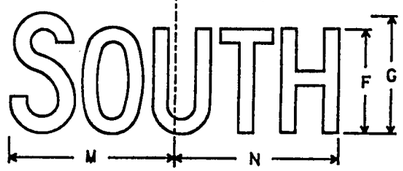
M3-1
MK3-1
MO3-1



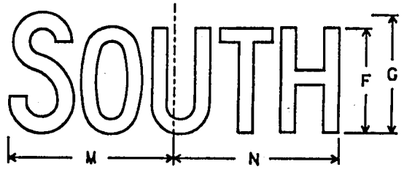
MB3-1
MG3-1
MM3-1*
MN3-1

M3-2
MK3-2
MO3-2

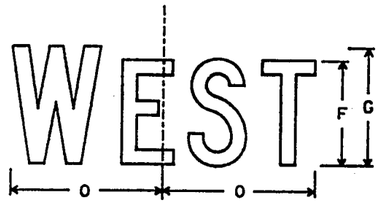
MB3-2
MG3-2
MM3-2*
MN3-2



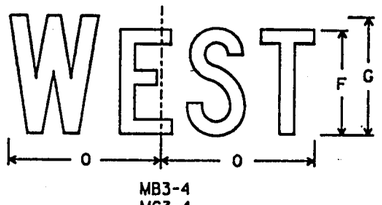
M3-3
MK3-3
MO3-3



MB3-3
MG3-3
MM3-3*
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4*
MN3-4

NOTES

1. Signs are Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
2. Color:
   Background - See note 5
   Message - See note 5
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.
5. M3-1 thru M3-4 Background - Reflective white
   Message - Black
   MB3-1 thru MB3-4 Background - Reflective blue
   Message - Reflective white
   MG3-1 thru MG3-4 Background - Reflective green
   Message - Reflective white
   MK3-1 thru MK3-4 Background - Non-Reflective green
   Message - Non-Reflective white
   MM3-1 thru MM3-4 Background - Reflective white
   Message - Reflective green
   MN3-1 thru MN3-4 Background - Reflective brown
   Message - Reflective white
   MO3-1 thru MO3-4 Background - Reflective Orange
   Message - Black
6. Border shall be omitted on MM series.
7. Note the first letter of each direction is larger than the remainder of the message.

* See Note 6

Metric equivalent for this sign is:

SIZE	
1	
2	600mm x 300mm
3	750mm x 375mm
4	750mm x 375mm
5	750mm x 375mm

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.
2	24	12	1 1/8	3/8	1/2	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2										2.00
3	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2										3.13
4	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2										3.13
5	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2										3.13

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Peter T. Rusch, State Traffic Engineer

DATE 3/25/94 PLATE NO. M3-1.6

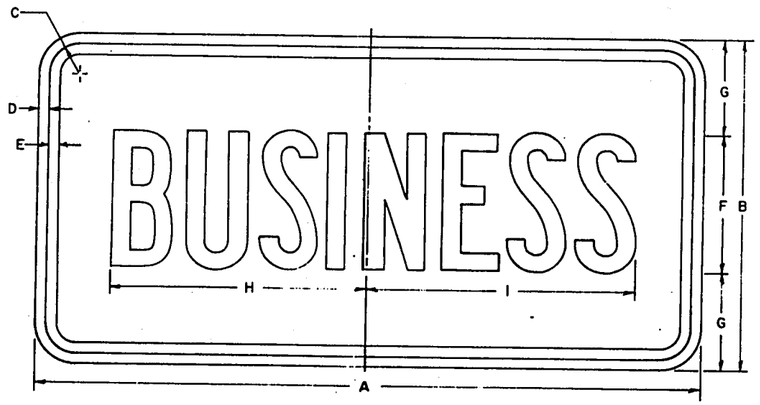
TR STDPLATE M31.DGN

WISDOT/CADDS SHEET 42

58.59.

LEVELS ON: 2,3,5, 10.

PROJECT I. D	SHEET NUMBER	TOTAL SHEETS
1201-04-78	7.6	
PROJECT DESIGNATION		



M4-3

NOTES:

1. Sign is Type II
2. Color:

   Background — Reflectorized White

   Message — Black
3. Face Material — 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. Letters Series "B"
6. Drawing may be scaled for standard size only.

SIZE	CODE 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
Minimum	1																										
Standard	2	24	12	1 1/8	3/8	3/8	5	3 1/2	9 5/16	9 9/16																	
Oversize	3	30	15	1 1/8	3/8	1/2	7	4	12 3/8	12 3/4																	
Exp-way	4																										
Freeway	5																										

		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ
Minimum	1																										
Standard	2																										
Oversize	3																										
Exp-way	4																										
Freeway	5																										

Date Drawn - 4-11-63 Date Redrawn - 8-10-72

Date Revised - 9-27-72

STANDARD SIGN

M4-3

OLD CODE M5-5

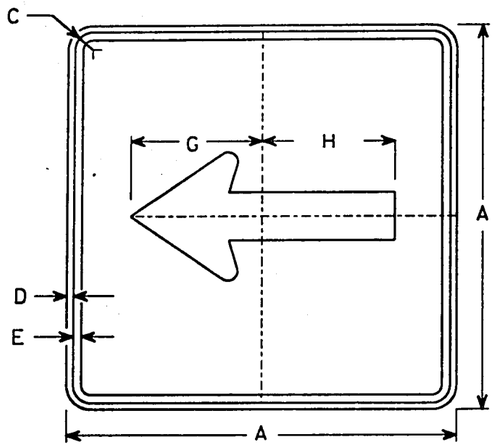
WISCONSIN DIVISION OF HIGHWAYS

APPROVED

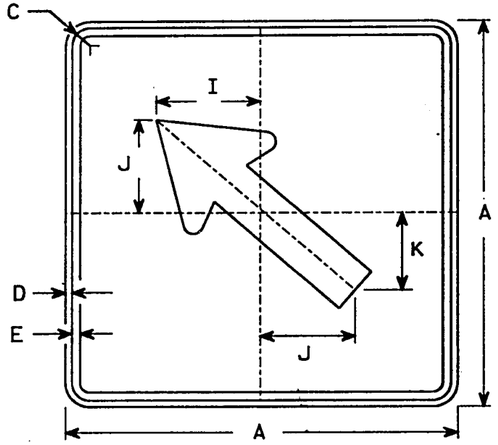
STATE HIGHWAY ENGINEER

DATE 9/18/72 PLATE NO M4.32

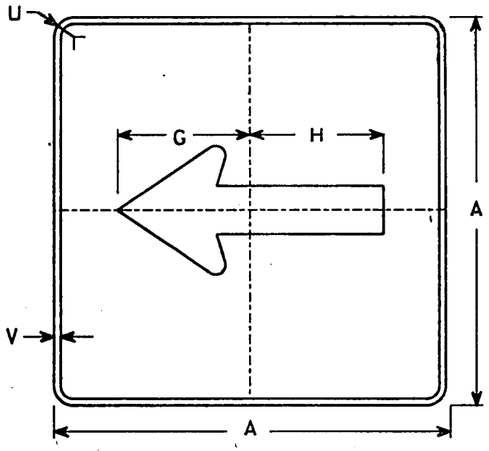
REPLACES OLD PLATE M5-32



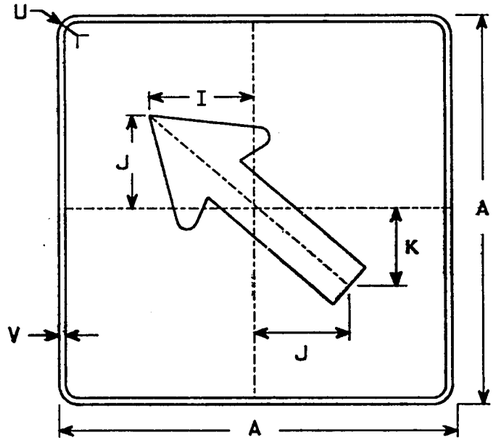
M6-1
MK6-1
MM6-1 (See Note 5)
MO6-1



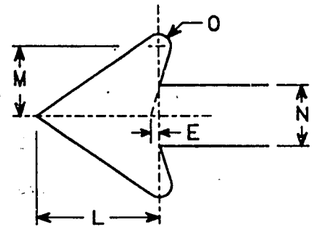
M6-2
MK6-2
MM6-2 (See Note 5)
MO6-2



MB6-1
MG6-1
MN6-1
MR6-1



MB6-2
MG6-2
MN6-2
MR6-2



NOTES

1. Signs are Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
2. Color:
   Background - See note 4
   Message - See note 4
3. 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.
4. M6-1 and M6-2 Background - Reflective white
   Message - Black
   MB6-1 and MB6-2 Background - Reflective blue
   Message - Reflective white
   MG6-1 and MG6-2 Background - Reflective green
   Message - Reflective white
   MK6-1 and MK6-2 Background - Non-Reflective green
   Message - Non-Reflective white
   MM6-1 and MM6-2 Background - Reflective white
   Message - Reflective green
   MN6-1 and MN6-2 Background - Reflective brown
   Message - Reflective white
   MO6-1 and MO6-2 Background - Reflective orange
   Message - Black
   MR6-1 and MR6-2 Background - Non-Reflective brown
   Message - Non-Reflective yellow
5. Border shall be omitted on MM series.

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.
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

DATE DRAWN 2-4-93 DATE REDRAWN
DATE REVISED

STANDARD SIGNS
M6-1 & M6-2
SERIES

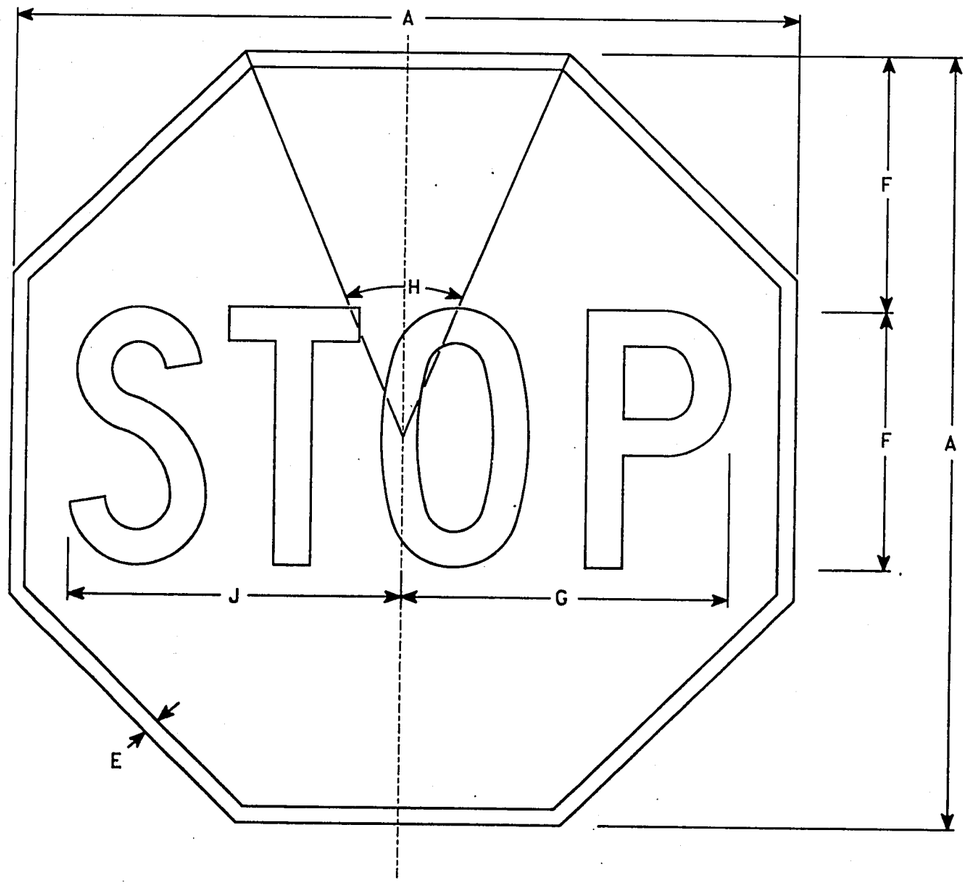
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
DATE 2/12/93 PLATE NO. M6-1,6

TR STDPLATE M61.DGN

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.8

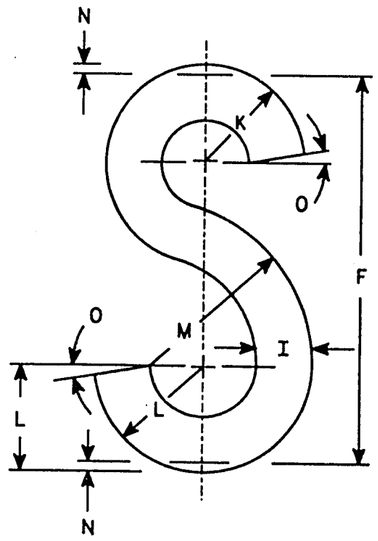
58.59.



R1-1

NOTES

1. Sign is Type II -Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Letter - Series C, with "S" modified



LEVELS ON - 2 5 10.

Metric equivalent for this sign is:

SIZE	
1	600mm X 600mm
2	750mm X 750mm
3	900mm X 900mm
4	1200mm X 1200mm
5	1200mm X 1200mm
6	450mm X 450mm

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	24			3/8	8	10	45°	1 1/8	10 1/4	2	2 1/4	3 1/4	1/8	10°													3.31
2	30			5/8	10	12 1/2	45°	1 3/8	12 3/4	2 1/2	2 3/4	4 1/8	3/16	10°													5.18
3	36			3/4	12	15	45°	1 3/4	15 3/8	3	3 1/4	4 7/8	1/4	10°													7.46
4	48			1	16	20	45°	2 1/4	20 1/2	4	4 3/8	6 1/2	1/4	10°													13.25
5	48			1	16	20	45°	2 1/4	20 1/2	4	4 3/8	6 1/2	1/4	10°													13.25
6	18			3/8	6	7 3/4	45°	1/8	7 3/4	1 1/2	1 5/8	2 1/2	1/8	10°													1.86

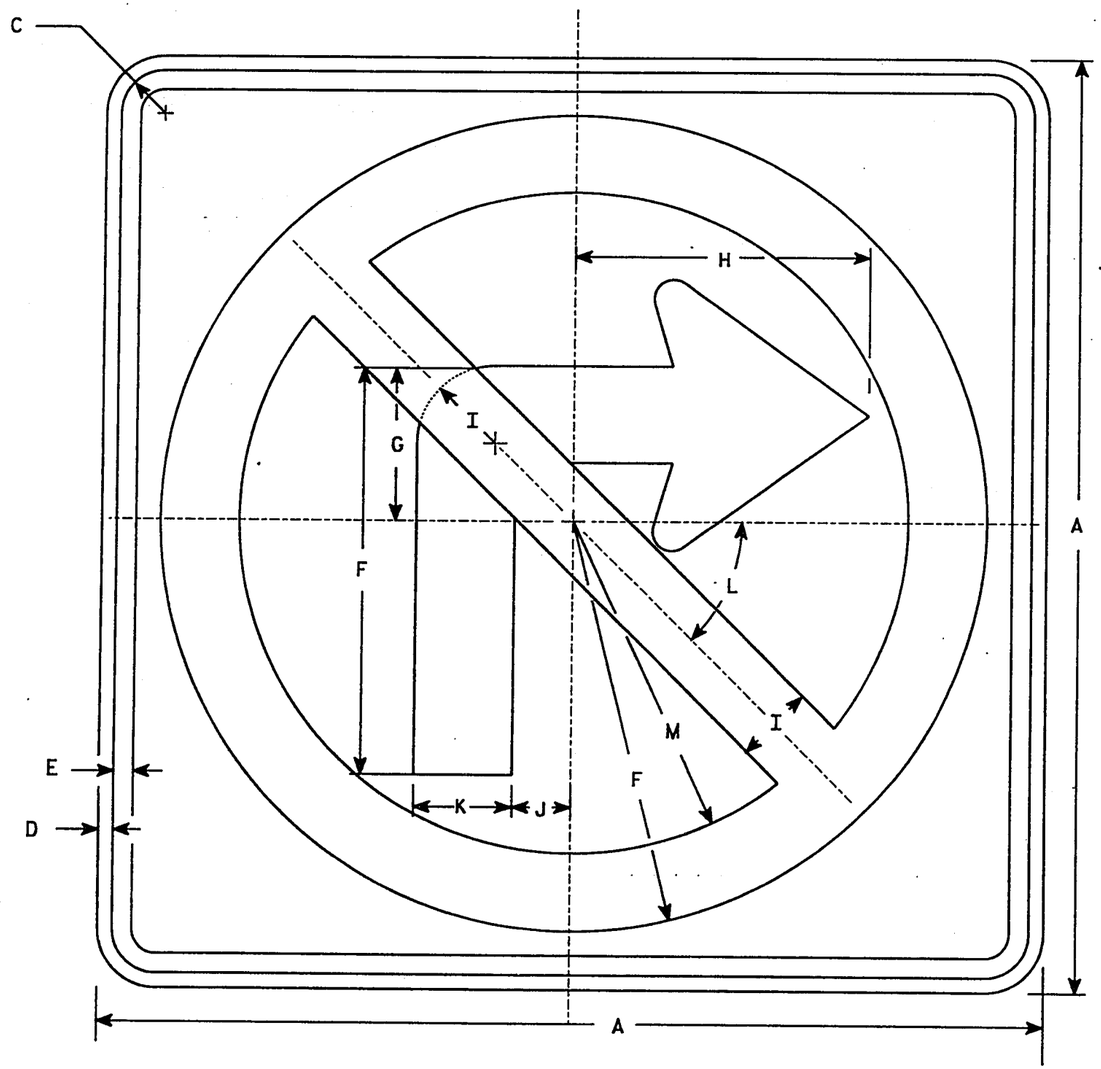
STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Director, Office of Traffic

DATE 2/24/94 PLATE NO. R1-1.8

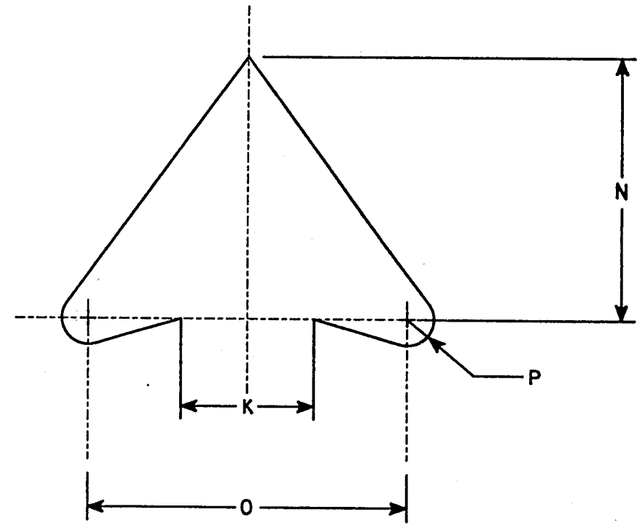
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.9



R3-1

NOTES

1. Sign is Type II- Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. 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.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	600mm X 600mm
2	600mm X 600mm
3	750mm X 750mm
4	900mm X 900mm
5	1200mm X 1200mm

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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
3	30		1 3/8	1/2	5/8	13 1/8	5	9 1/2	2 1/2	1 7/8	3 1/8	45°	10 5/8	6 1/4	7 1/2	5/8											6.25
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

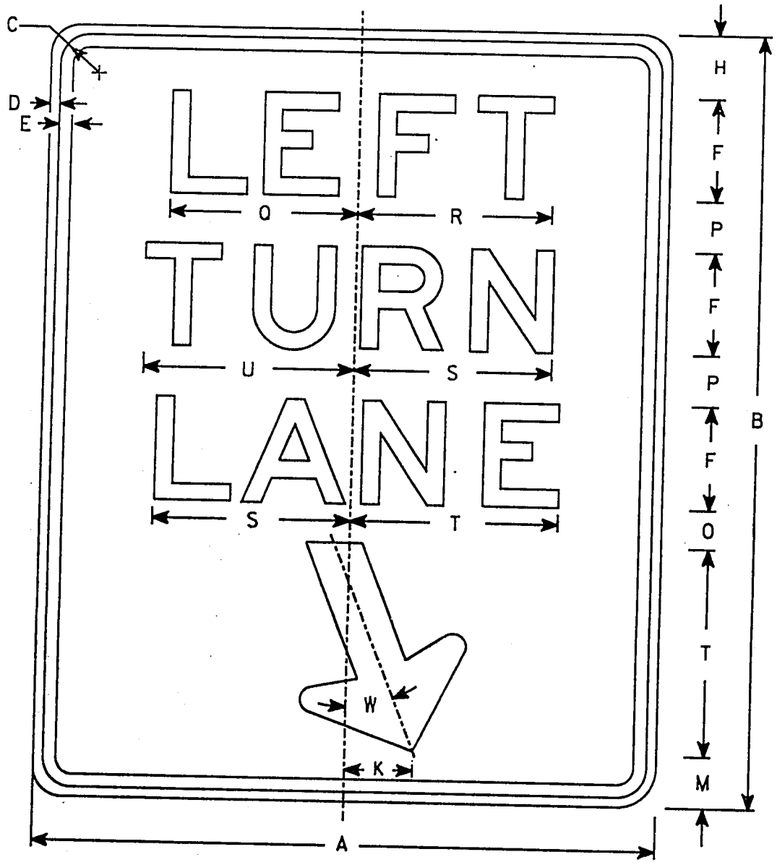
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Gilbert Ruger
Director, Office of Highway

DATE 2/24/94 PLATE NO. R3-1.2

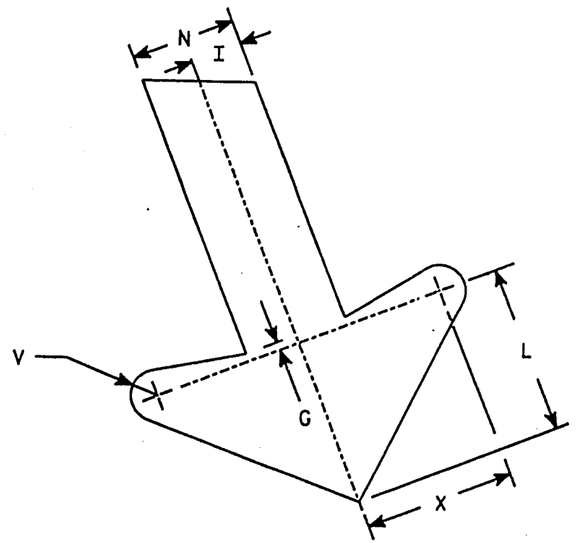
WISDOT-CADD



R3-55L

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
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.



ARROW DETAIL

Metric equivalent for this sign is:

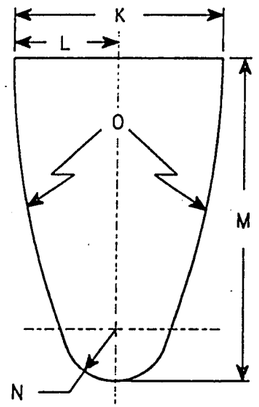
SIZE	
1	
2	600mm X 750mm
3	900mm X 1200mm
4	
5	

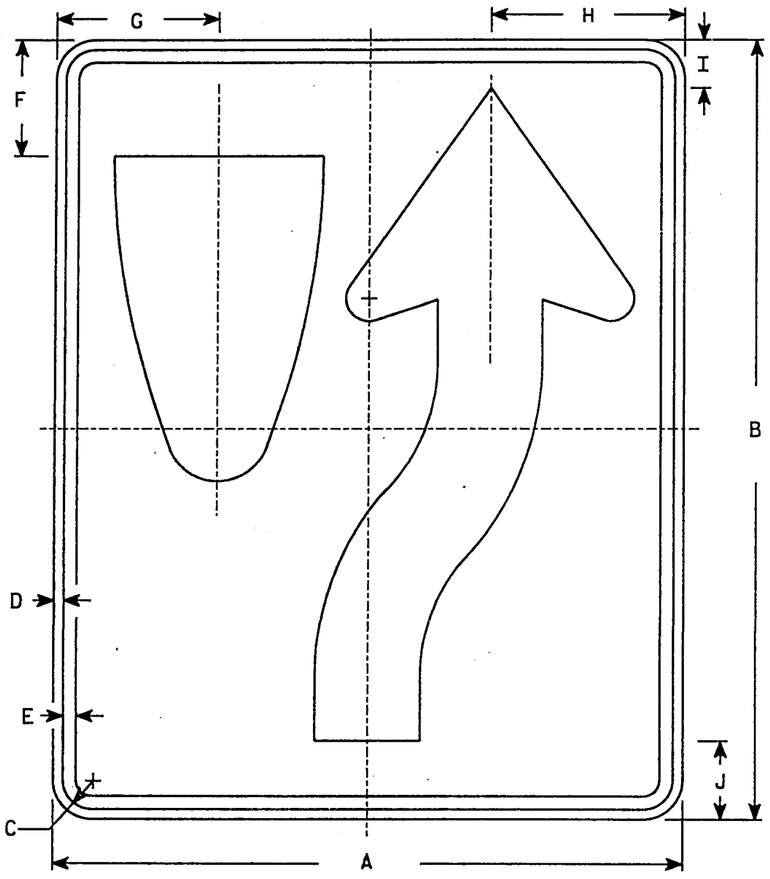
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	2	1 1/2	2	7 1/4	7 1/2	7 5/8	8	8 1/8	1/2	22°				
3	36	48	1 3/4	1/2	5/8	6	3/8	4 1/4	1 1/2	4 1/4	4	4 7/8	3 1/4	3	3	3 3/4	10 7/8	11 1/4	11 1/2	12	12 1/4	3/4	22°				5.0
4																											12.0
5																											

STANDARD SIGN
R3-55L

WISCONSIN DEPT OF TRANSPORTATION
APPROVED

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.11

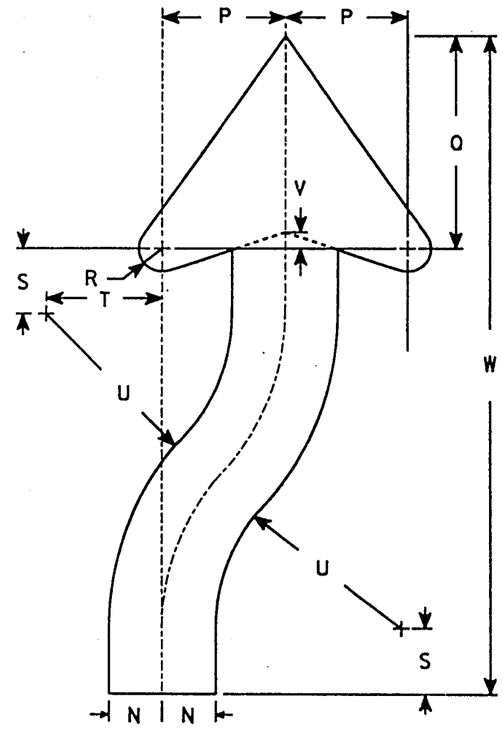




R4-7

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. 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.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	450mm X 600mm
2	600mm X 750mm
3	900mm X 1200mm
4	900mm X 1200mm
5	1200mm X 1500mm

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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/1	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGNS
R4-7 & R4-8

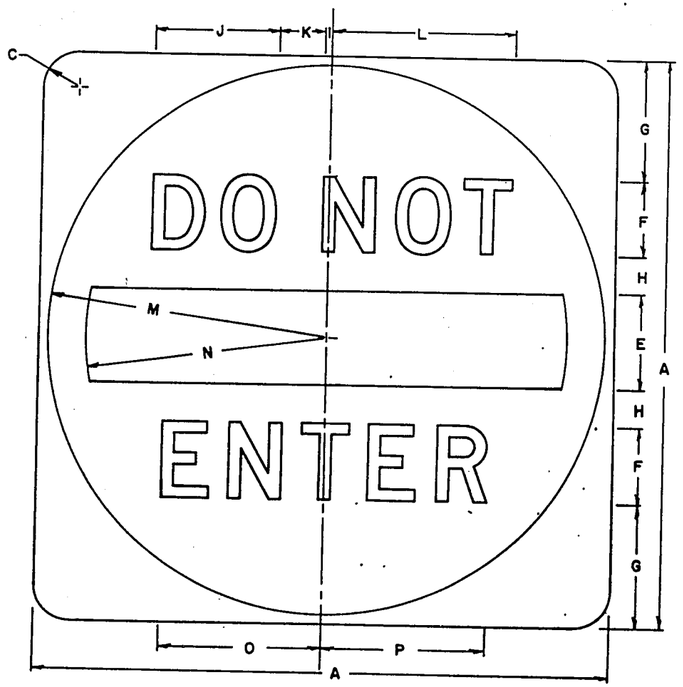
WISCONSIN DEPT OF TRANSPORTATION

APPROVED [signature]

DATE 3/1/94 PLATE NO. R4-7,8

LEVELS ON - 1,2,3, 5, 10.

1201-04-78/7.12



R5-1

NOTES

1. Sign is Type II - Reflective Type H - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 5
3. Message Series - D
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. Message will be reflectorized red circle with letters and bar being reflective white.
6. This drawing may be scaled for standard size only.

SIZE	CODE SIZE	A	B	C	D	I	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Bid Area Sq Ft
Minimum	1																											
Standard	2	30		1 7/8		5	1/4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 9/16											
Oversize	3	36		2 1/4		6	5	7 1/2	2 1/2	7/16	8 1/8	2 15/16	12 1/16	17 1/2	15	10 5/8	10 11/16											6.26
Exp way	4	36		2 1/4		6	5	7 1/2	2 1/2	7/16	8 1/8	2 15/16	12 1/16	17 1/2	15	10 5/8	10 11/16											9.0
Freeway	5	48		3		8	6	11	3	9/16	9 3/4	3 5/8	14 7/16	23 1/2	20	12 3/4	12 7/8											9.0
Bicycle	6																											16.0
Snowmobile	7																											

		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	
Minimum	1																											
Standard	2																											
Oversize	3																											
Exp way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											

V	CK	RA	RA
0			

Date Drawn - Date Redrawn - 5-3-84

Date Revised - 8-3-84

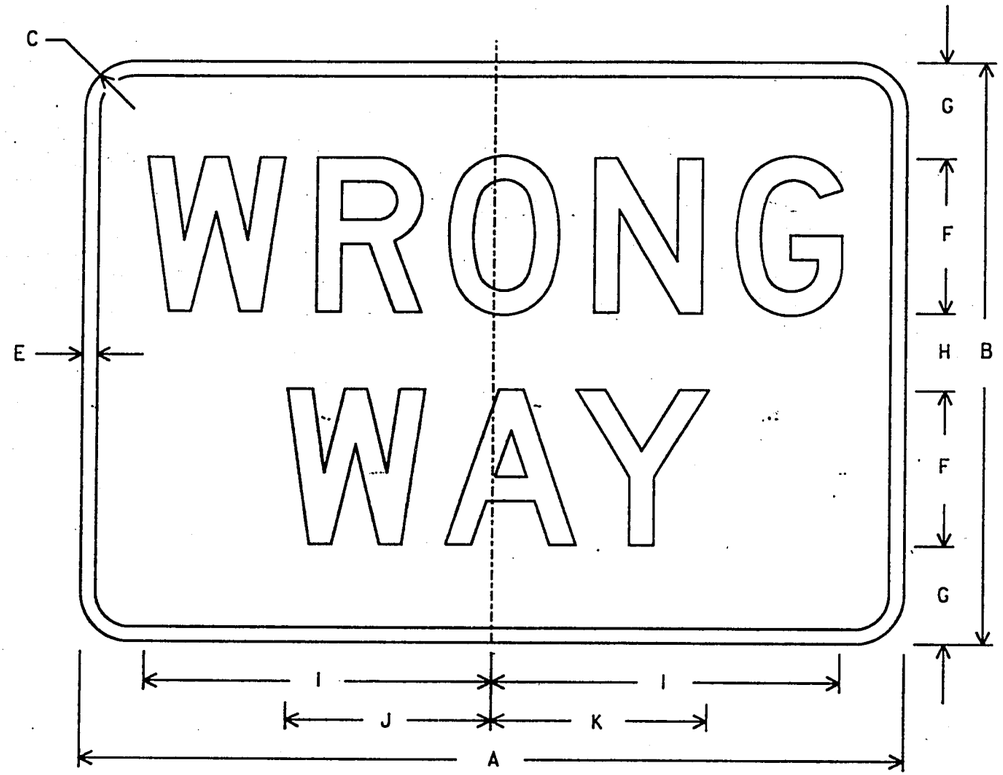
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chief Traffic Engineer

DATE 9-11-84 PLATE NO. R5-1.10



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - Series D
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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

DATE DRAWN 1-29-92 DATE REDRAWN _____
DATE REVISED 4-15-92 _____

STANDARD SIGN
R5-9

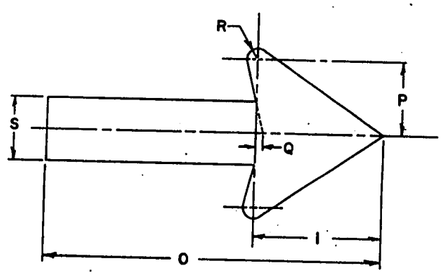
WISCONSIN DEPT OF TRANSPORTATION

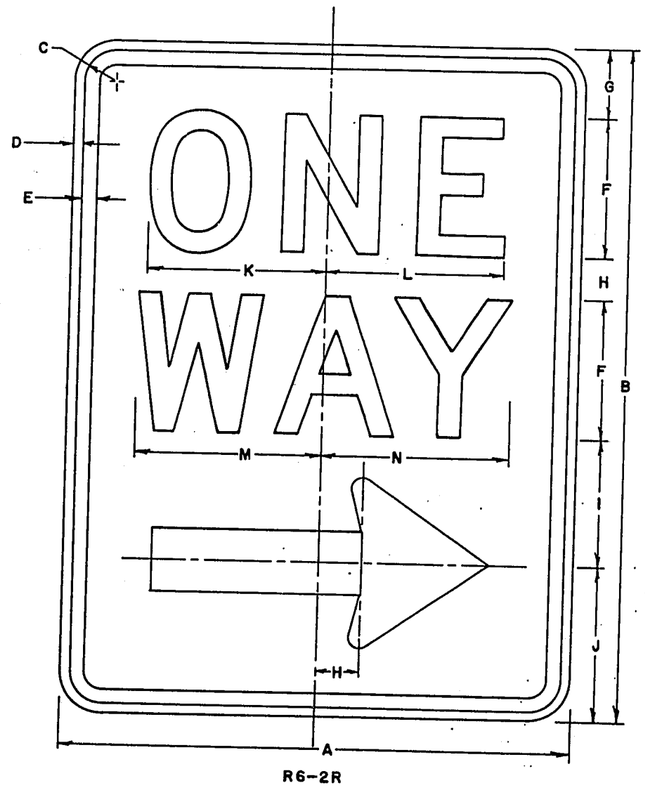
APPROVED _____
State Traffic Engineer

DATE 4/21/92 PLATE NO. R5-9.6

50.59.
LEVELS ON - 2.3. 5. 10.

1201-04-78 / 7.14





R6-2R

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
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. R6-2L same as R6-2R except arrow points left.

SIZE	CODE 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	Bid Area Sq. Ft.
Minimum	1																											
Standard	2	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 1/4	6 5/16	6 9/16	6 5/8	11 7/8	2 5/8	1/4	3/8	2 1/4								
Oversize	3	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	5 1/2	6 1/2	7 11/16	7 3/4	8	8 3/8	15 3/4	3 1/4	5/16	1/2	2 3/4								3.0
Exp-way	4																											5.0
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											

		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	
Minimum	1																											
Standard	2																											
Oversize	3																											
Exp-way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											

RV	CK	RA	RA
-2			

Date Drawn - Date Redrawn - 4-1-83

Date Revised -

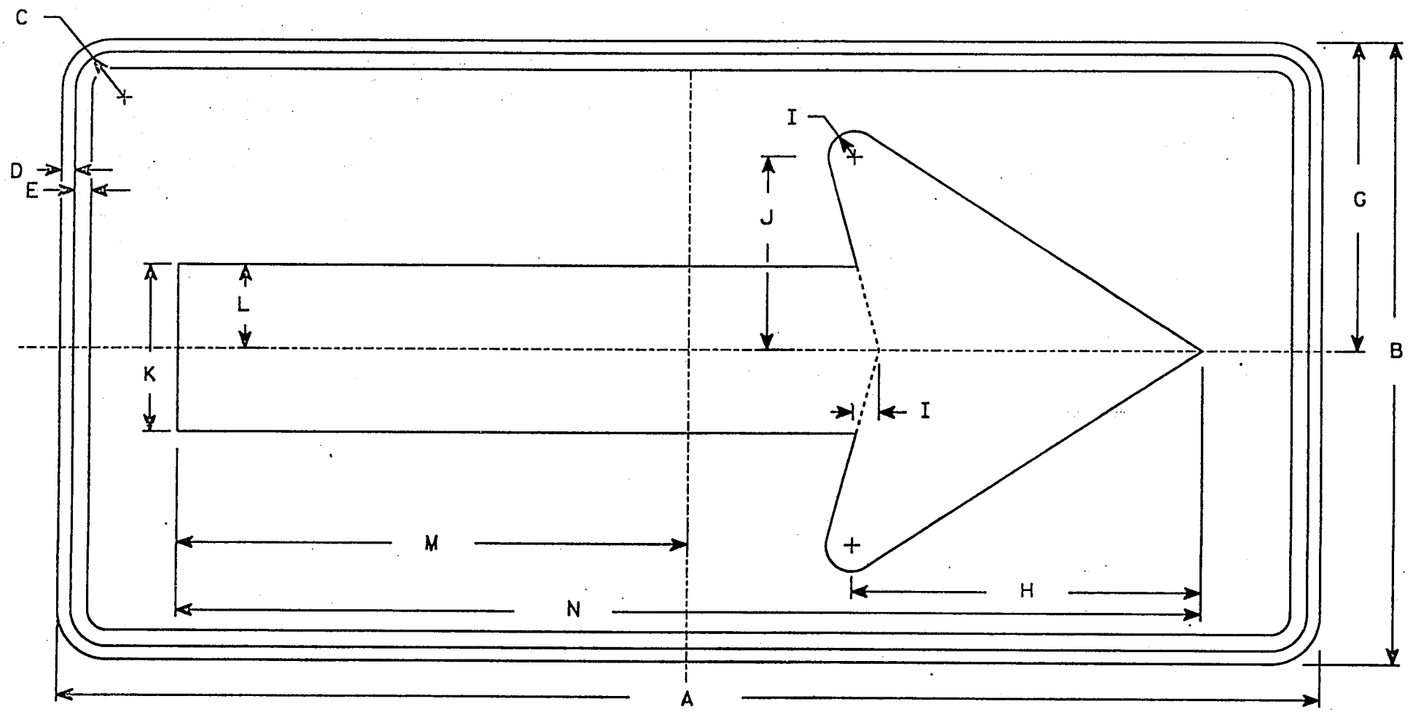
STANDARD SIGN
R6-2R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chief Traffic Engineer

DATE 4-15-83 PLATE NO R6-2.2

58.59.



W1-6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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.

Metric equivalent for this sign is:

SIZE	
1	
2	1200mm X 600mm
3	1500mm X 750mm
4	1500mm X 750mm
5	2400mm X 1200mm

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																											
2	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

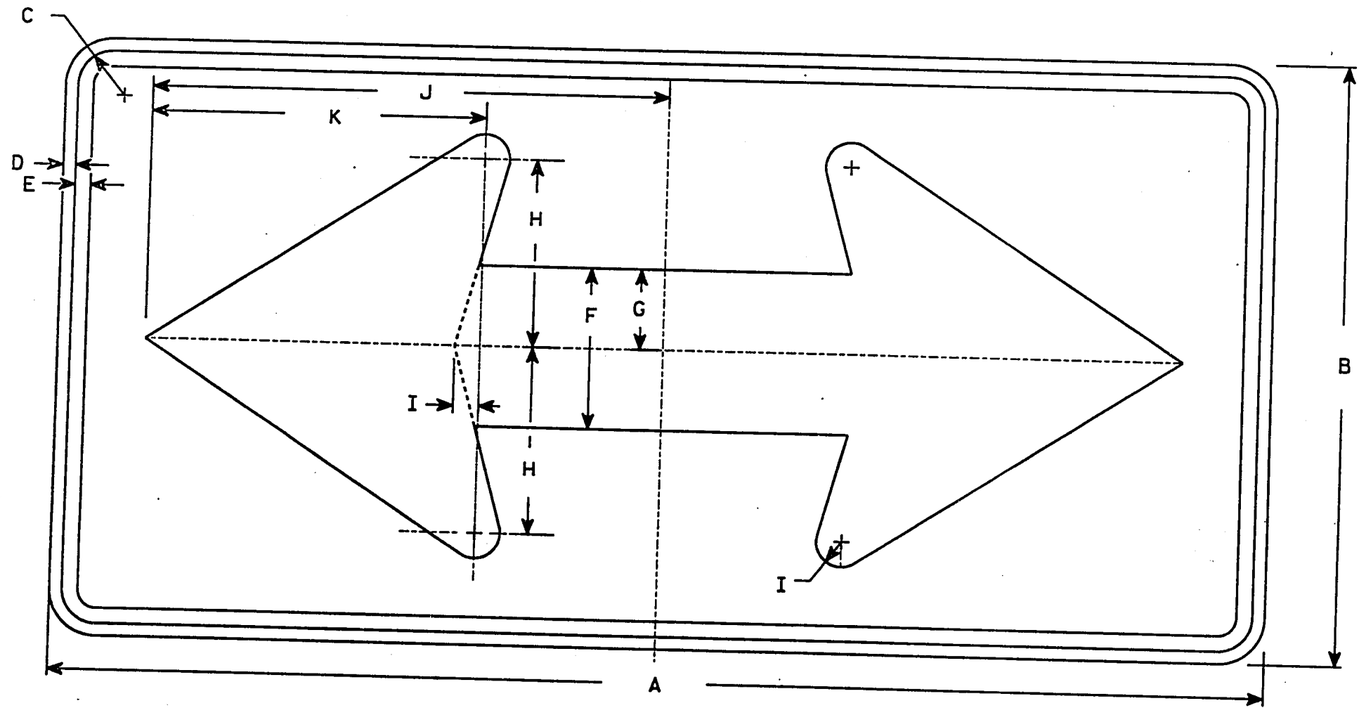
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED [signature]

DATE 3/29/94 PLATE NO. 06.6

LEVELS ON - 2.3. 5. 10.



W1-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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.

Metric equivalent for this sign is:

SIZE	
1	900mm X 450mm
2	1200mm X 600mm
3	1500mm X 750mm
4	1500mm X 750mm
5	2400mm X 1200mm

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	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

STANDARD SIGN
W1-7

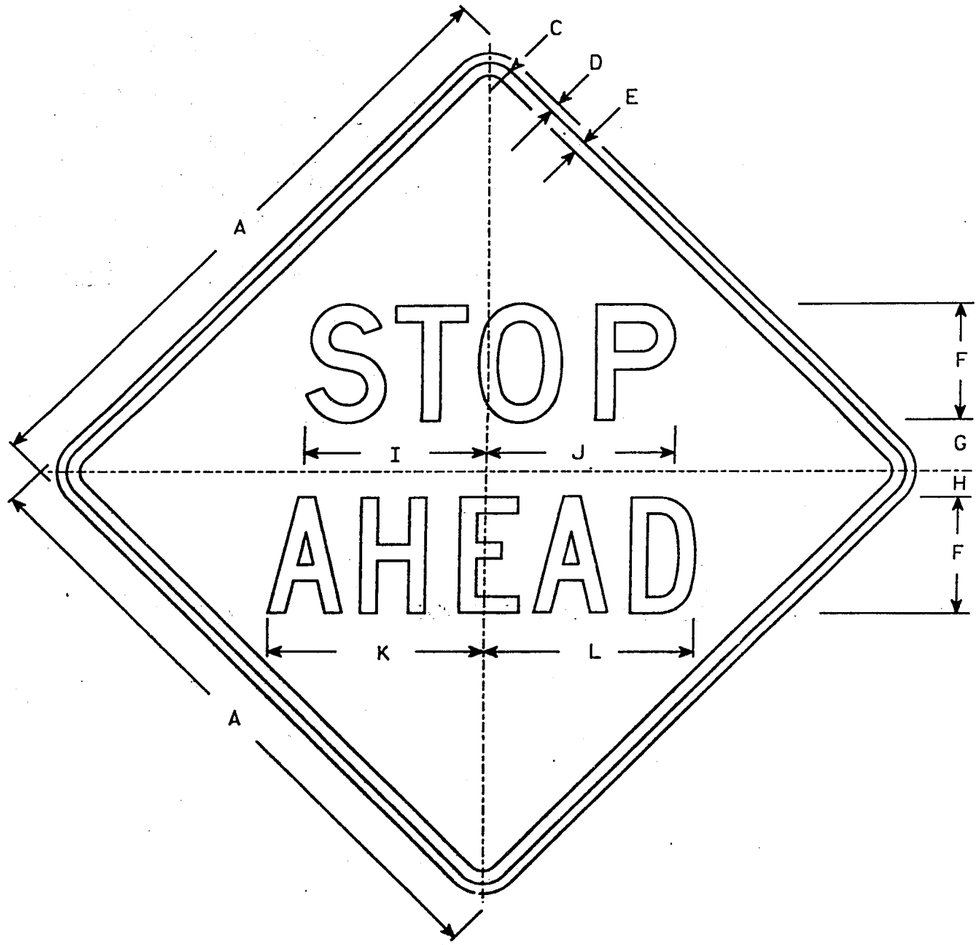
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Director, Office of Traffic

DATE 3/25/94 PLATE NO. W1-7.5

PLOT NAME: LEVELS ON: 2,3,5,6,10,
58,59,

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.17



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 5
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. STOP is Series D and AHEAD is Series C.

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.
BIKE	18		1 1/8	3/8	3/8	3	1 3/4	3/4	4 3/4	5 1/4	5 3/8	5 3/8															2.25
1	30		1 3/8	1/2	5/8	6	2 1/2	1 1/4	9 3/8	9 1/2	10 5/8	10 1/4															6.25
2	36		1 5/8	5/8	3/4	7	3 1/2	1	11 1/8	11 1/4	13 3/8	13 1/4															9.0
3	36		1 5/8	5/8	3/4	7	3 1/2	1	11 1/8	11 1/4	13 3/8	13 1/4															9.0
4	48		2 1/4	3/4	1	9	4	2	13 7/8	14 3/8	16 1/2	16															16.0
5	48		2 1/4	3/4	1	9	4	2	13 7/8	14 3/8	16 1/2	16															16.0

DATE DRAWN 8-13-92 DATE REDRAWN _____
DATE REVISED _____

STANDARD SIGN
W3 - 1

WISCONSIN DEPT OF TRANSPORTATION

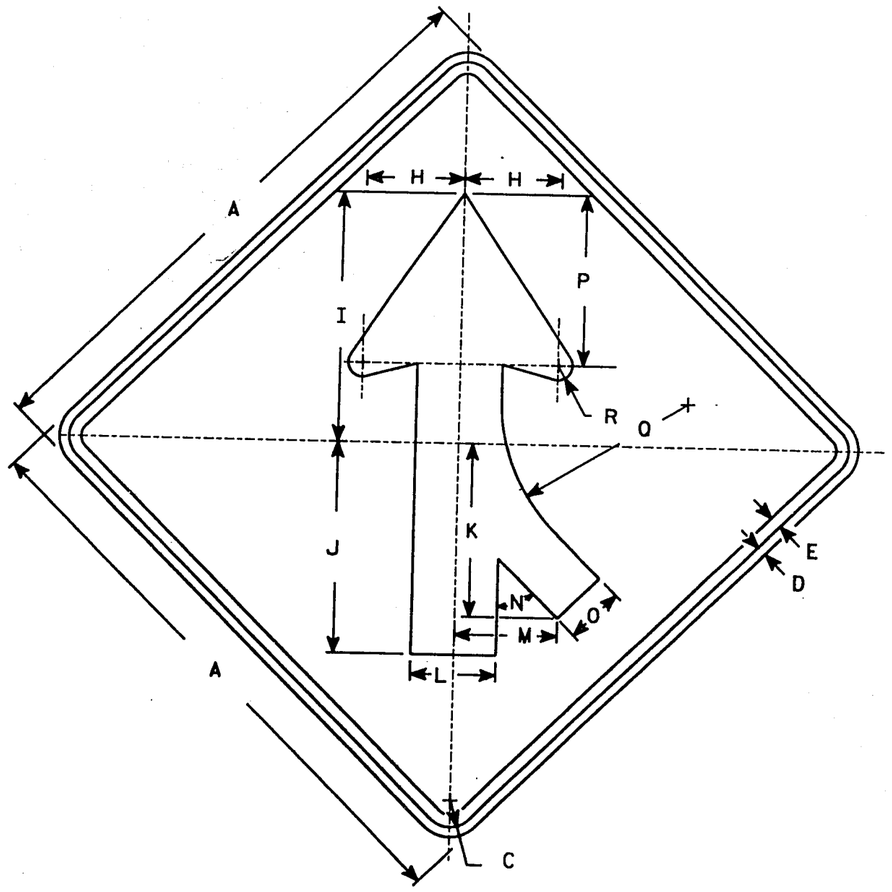
APPROVED

DATE _____ PLATE NO. W3-1

LEVELS ON - 1,2,3, 5, 10.

58.59.

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	7.18



W4-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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.
4. W4-1L is the same as W4-1 except the arrow is reversed along the vertical centerline.

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

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	24		1 1/8	3/8	1/2			4	10 1/4	8 3/4	7 1/4	3 1/2	4 1/4	45°	2 3/8	7 1/8	7 5/8	5/8									4.0
2	30		1 3/8	1/2	5/8			5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
3	36		1 5/8	5/8	3/4			6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	36		1 5/8	5/8	3/4			6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
5	48		2 1/4	3/4	1			8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

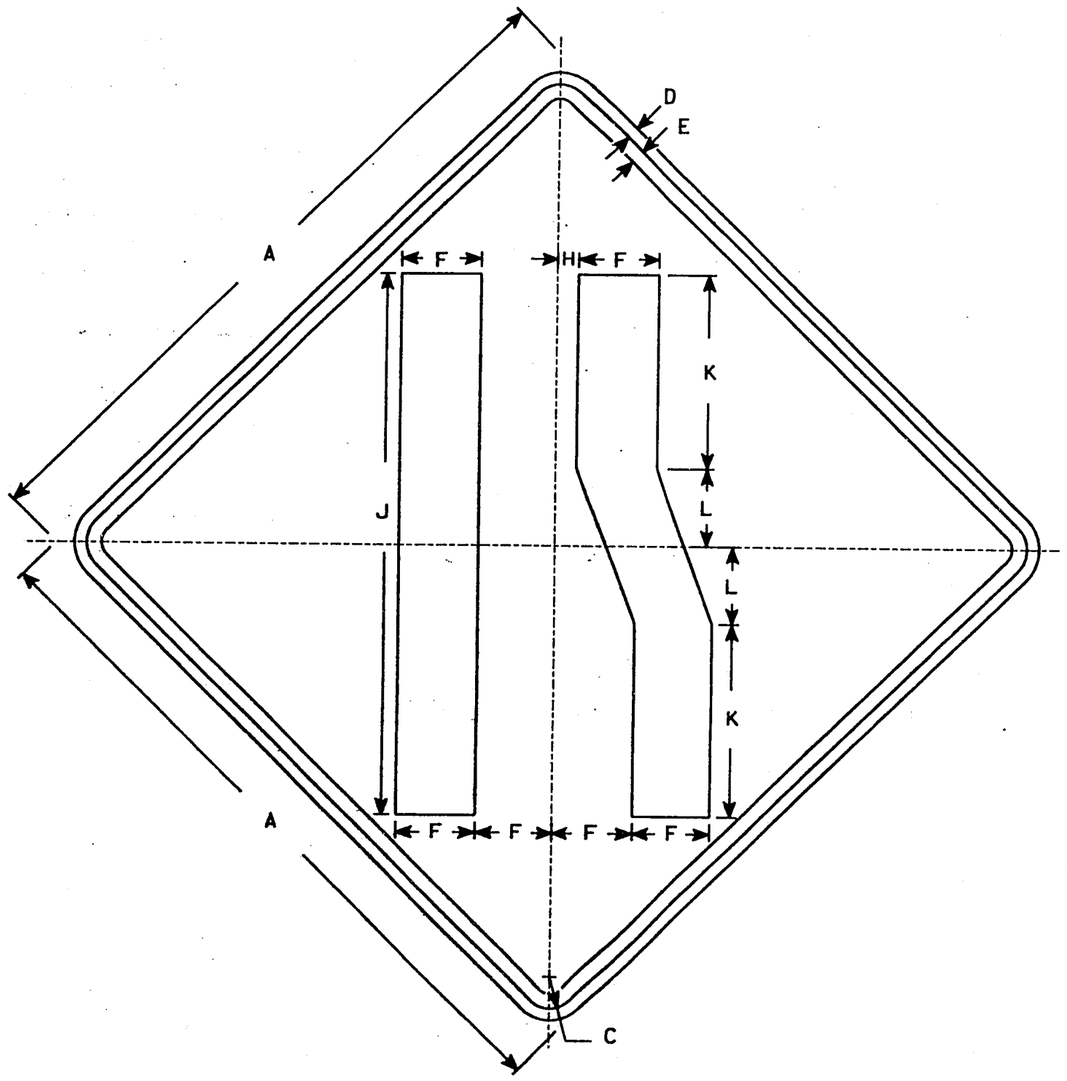
APPROVED Director, Office of Traffic

DATE 6/8/94 PLATE NO. W4-1,1L0

LEVELS ON: 2, 5, 10.

WISDOT/CADDS SHEET 42

58.59.



W4-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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.
4. W4-2L same as W4-2R except message is reversed along the vertical centerline.

Metric equivalent for this sign is:

SIZE	
1	750 mmX 750 mm
2	900 mmX 900 mm
3	
4	900 mmX 900 mm
5	1200 mm X 1200 mm

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	30		1 3/8	1/2	5/8	3		7/8		23	8 1/4	3 1/4															6.25
2	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4															9.0
3																											
4	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4															9.0
5	48		2 1/4	3/4	1	5		1 1/2		37	13 1/4	5 1/4															16.0

STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Director, Office of Traffic

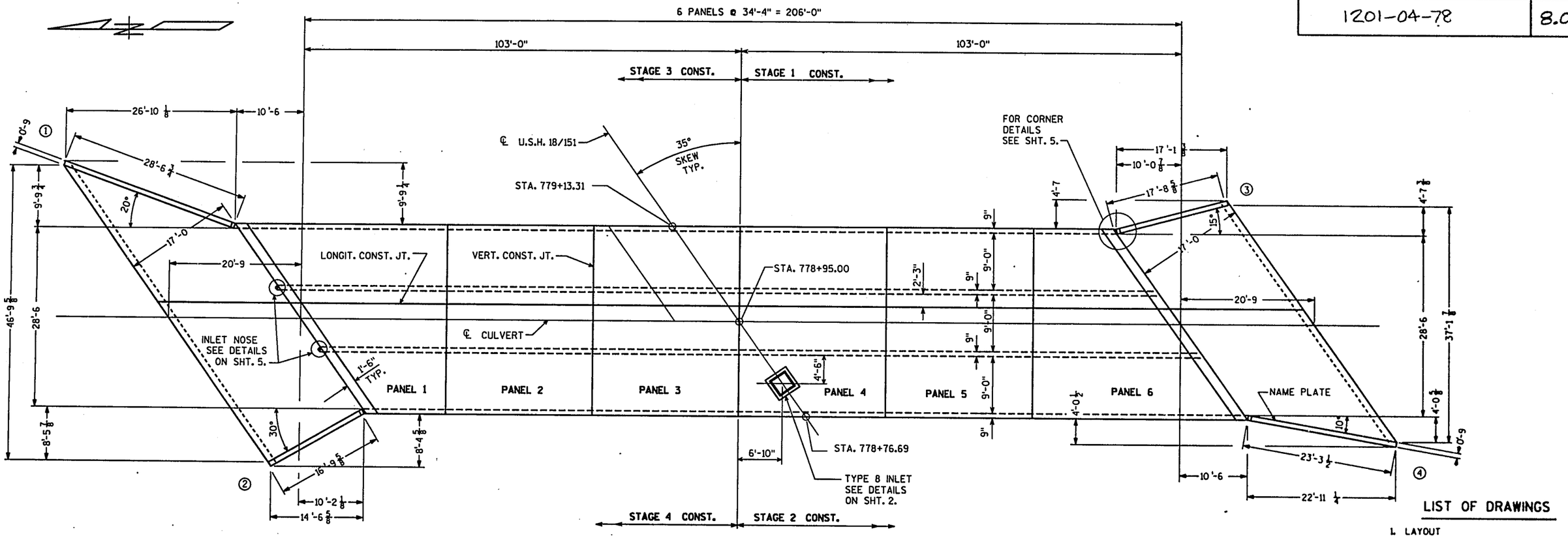
DATE 6/8/94 PLATE NO. W4-2.8

LEVELS ON: 2 5 10.

WISDOT/CADDS SHEET 42

TYPE CODE = X028

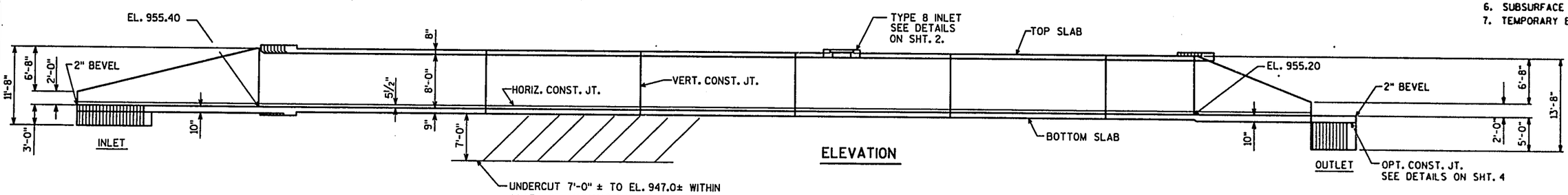
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	8.0



LIST OF DRAWINGS

1. LAYOUT
2. PANELS 2 THRU 5
3. PANELS 1 & 6
4. APRONS
5. DETAILS
6. SUBSURFACE EXPLORATION
7. TEMPORARY BYPASS CHANNEL

PLAN - B-13-426



ELEVATION

NOTE: STAGES 1, 2, 3 & 4 REFER TO CONSTRUCTION OF B-13-426, NOT ROADWAY CONSTRUCTION & TRAFFIC CONTROL.

DESIGN DATA

LIVELOAD: HS20
EARTHLOAD: DESIGNED FOR 3.6 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} = 1130 C.F.S.
VEL. = 5.5 F.P.S.
HW. = EL. 963.4
DRAINAGE AREA = 13.1 SQ. MI.
OVERTOPPING RDWY. = N.A.

TRAFFIC VOLUME

U.S.H. 18
A.D.T. = 20800 (2012)
R.D.S. = 65 M.P.H.

TOTAL ESTIMATED QUANTITIES

BID ITEMS

REMOVING OLD BRIDGE, STA. 778+85±	1	L.S.
REMOVING OLD BRIDGE, STA. 779+00±	1	L.S.
EXCAVATION FOR STRUCTURES, CULVERTS	1	L.S.
CONCRETE MASONRY, CULVERTS	571	C.Y.
HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS	64,310	LBS.
INLET COVER, TYPE MS	1	EACH
SAND BAGS	1,900	EACH
GEOTEXTILE FABRIC, TYPE DF	1,620	S.Y.
WASHED STONE	56	TON

NON-BID ITEMS

POLYVINYL CHLORIDE WATERSTOP	33	L.F.
FILLER	¾"	SIZE

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.
THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT. MATERIALS AND FABRICATION SHALL BE IN ACCORDANCE WITH PRECAST REINFORCED CONCRETE BOX SECTIONS FOR CULVERTS, STORM DRAINS AND SEWERS AASHTO DESIGNATION M259, AND DIVISION 2 SECTION 27 OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, CURRENT EDITION, EXCEPT THAT THE CONCRETE MIXTURE SHALL CONTAIN NOT LESS THAN 564 POUNDS OF PORTLAND CEMENT, BLENDED CEMENT OR PORTLAND CEMENT PLUS POZZOLANIC ADMIXTURE PER CUBIC YARD.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-13-426

USH 18/151 OVER BADGER MILL CREEK

COUNTY: DANE		TOWN/CITY/VILLAGE: VERONA	
DESIGN SPEC.: AASHTO 1993		LOAD: HS-20	CONST. SPEC.: 1989
DESIGNED BY: WLO	DESIGN CKD.: BJ	DRAWN BY: BJ	PLANS CKD.: WLO

APPROVED: H.L. Anderson — CHIEF BRIDGE DESIGN ENGINEER — DATE: 08-07-96

LAYOUT

SHEET 1

DATE: JUNE 1994

CO. 201-04-07 6

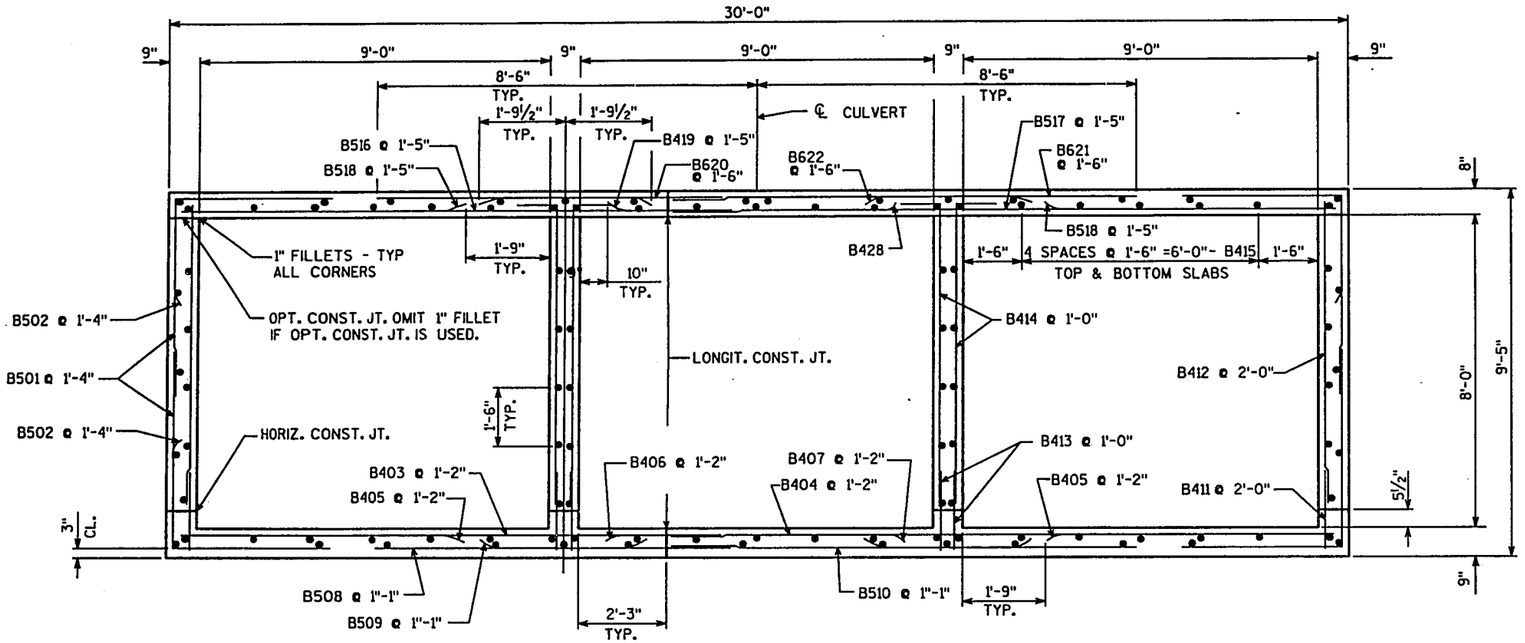
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	8.1

39,060 LBS.

BILL OF BARS

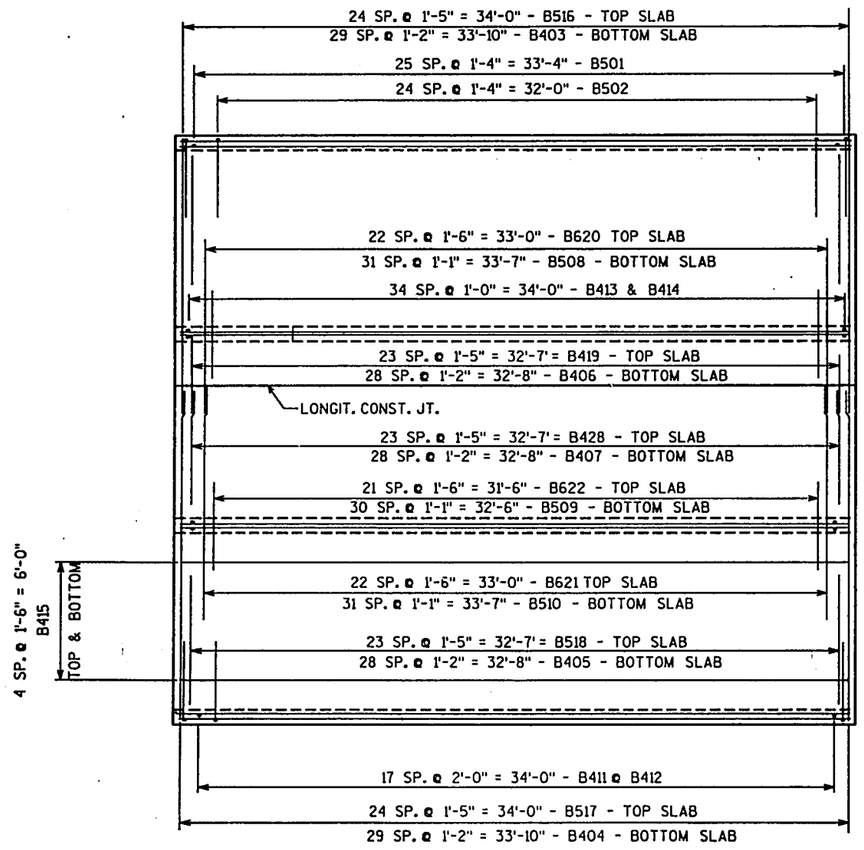
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
B501		416	8-5	3-3			CORNERS
B502		400	6-0	3-3			CORNERS
B403		120	14-2				BOTTOM SLAB
B404		120	16-10				BOTTOM SLAB
B405		232	6-10				BOTTOM SLAB
B406		116	2-10				BOTTOM SLAB
B508		128	8-0				BOTTOM SLAB
B509		248	3-7				BOTTOM SLAB
B510		128	10-9				BOTTOM SLAB
B411		144	2-0				BOTTOM SLAB - DOWELS
B412		144	8-0				OUTSIDE WALLS - VERT.
B413		560	2-0				BOTTOM SLAB - DOWELS
B414		560	9-0	1-0			INSIDE WALLS - VERT.
B415		416	34-0				LONGIT. BARS
B516		100	14-2				TOP SLAB
B517		100	16-10				TOP SLAB
B518		192	6-10				TOP SLAB
B419		96	2-10				TOP SLAB
B620		92	8-4				TOP SLAB
B621		92	10-9				TOP SLAB
B622		176	3-7				TOP SLAB
B523		460	4-0				VERT. CONST. JT.
B624		8	7-10				TYPE 8 INLET
B425		16	1-8	1-0			TYPE 8 INLET
B426		4	3-4				TYPE 8 INLET
B427		2	8-0	YES			TYPE 8 INLET
B407		116	5-5				BOTTOM SLAB
B428		96	5-5				TOP SLAB

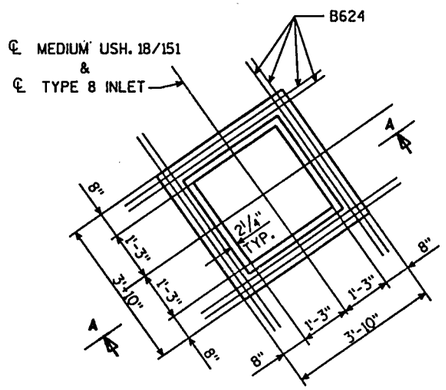


SECTION THRU BOX

ALL LONGITUDINAL BARS NOT LABELED ARE B415

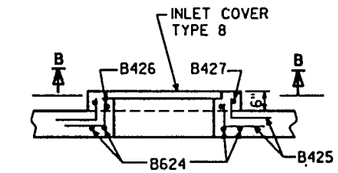


PLAN

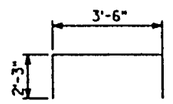


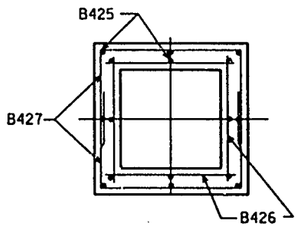
PLAN

INLET COVER NOT SHOWN

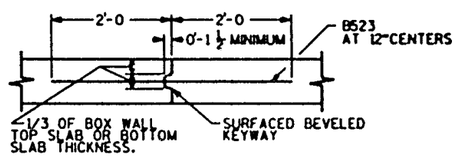


SECTION A





SECTION B



VERTICAL CONSTRUCTION JOINT

TYPE 8 INLET DETAILS

FOR LOCATION SEE SHT. L

NOTE: FIELD CUT OR BEND BAR STEEL REINF. IN TOP SLAB TO CLEAR INLET BY 2" MIN.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

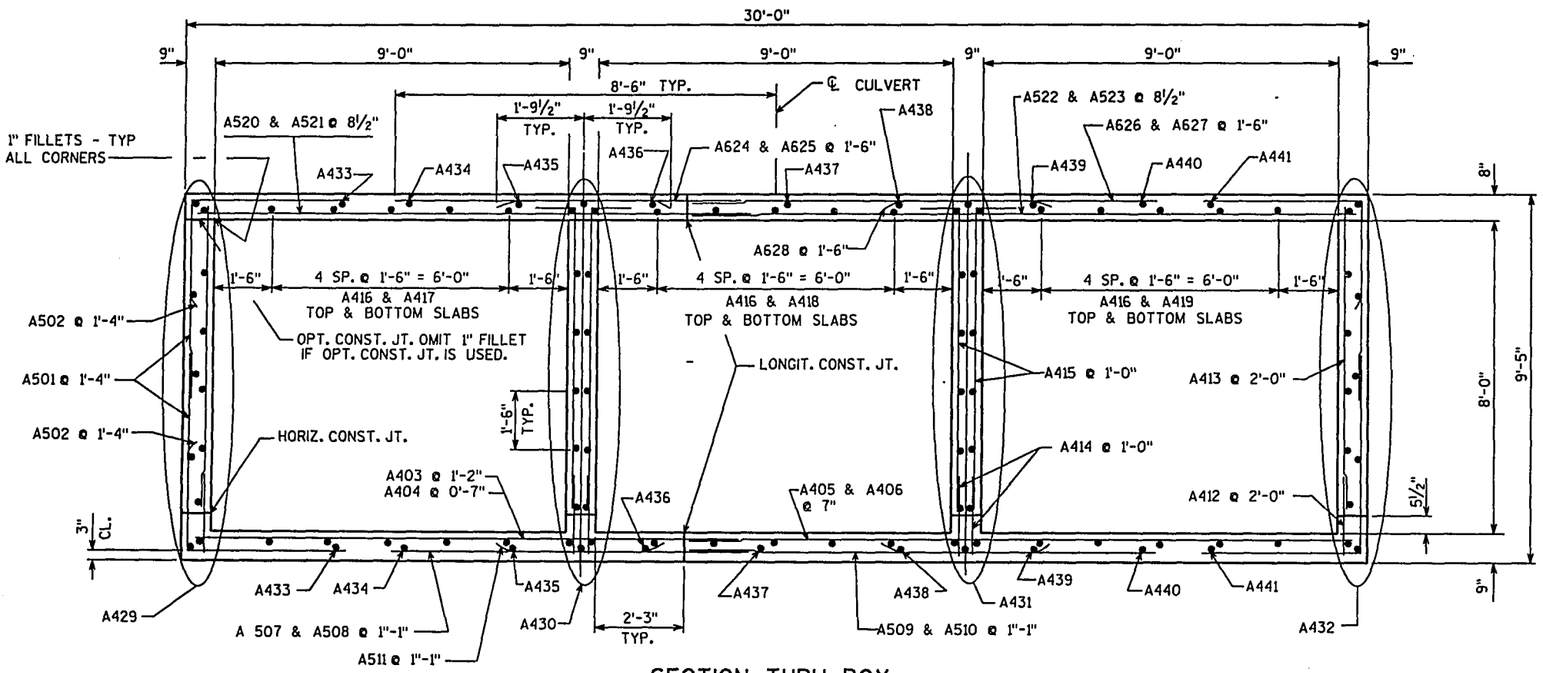
STRUCTURE B-13-426

CONST. SPEC.	1989	DRAWN BY	BJ	PLANS CHD.	WJL

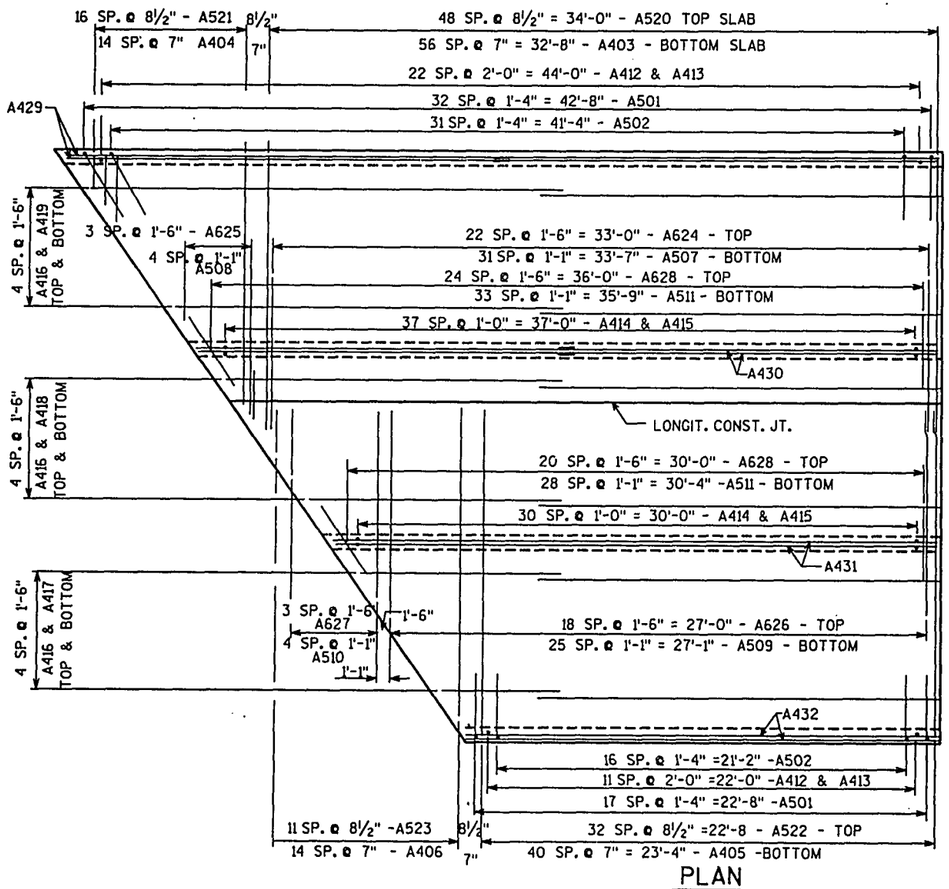
PANELS 2 THRU 5

SHEET 2

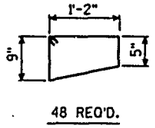
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	8.2



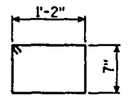
SECTION THRU BOX



PLAN



48 REQ'D.



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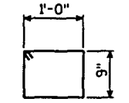
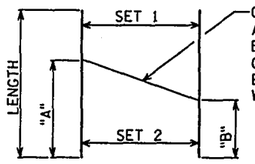


96 REQ'D.

A343

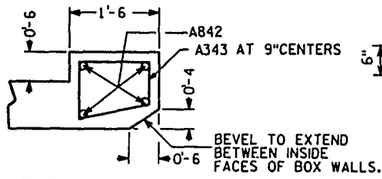


CUT BARS ALONG THIS LINE. MAKE ALL CUTS NORMAL TO BAR AXIS. BARS ON EACH SIDE OF CUT CONSTITUTE ONE SET. BUNDLE EACH SET SEPARATELY AND TAG WITH BAR AND SET NUMBER.

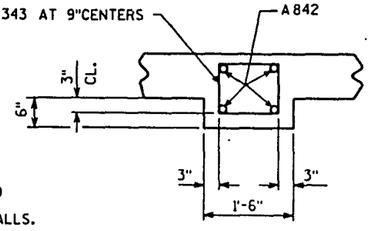
BENT BARS IF USED IN CUTTING DIAGRAM SHALL BE BENT AFTER CUTTING.

CUTTING DIAGRAM

MARK	"A"	"B"	NO. OF BARS/SET	NO. OF EACH SET
A404	12-6	1-8	15	1
A406	15-8	4-0	15	1
A508	7-0	2-9	5	1
A510	9-5	3-4	5	1
A417	10-0	6-0	5	1
A418	17-0	12-9	5	1
A419	23-9	19-6	5	1
A521	9-9	1-8	17	1
A523	15-8	1-6	12	1
A625	8-10	2-2	4	1
A627	9-5	3-4	4	1



SECTION THRU TOP HEADER



SECTION THRU BOTTOM HEADER

21,320 LBS.

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	CUT. DIAG.	BUN-DLE	LOCATION
A501		204	8-5	3-3			CORNERS
A502		196	6-0	3-3			CORNERS
A403		114	14-2				BOTTOM SLAB
A404		15	14-2		YES		BOTTOM SLAB
A405		82	16-10				BOTTOM SLAB
A406		15	19-8		YES		BOTTOM SLAB
A507		64	8-0				BOTTOM SLAB
A508		5	9-9		YES		BOTTOM SLAB
A509		52	10-9				BOTTOM SLAB
A510		5	12-9		YES		BOTTOM SLAB
A511		126	3-7				BOTTOM SLAB
A412		70	2-0				BOTTOM SLAB - DOWELS
A413		70	8-0				OUTSIDE WALLS - VERT.
A414		276	2-0				BOTTOM SLA - DOWELS
A415		276	9-0	1-0			INSIDE WALLS - VERT.
A416		60	20-0				TOP & BOTTOM SLAB
A417		10	16-0		YES		TOP & BOTTOM SLAB
A418		10	29-9		YES		TOP & BOTTOM SLAB
A419		10	43-3		YES		TOP & BOTTOM SLAB
A520		98	14-2				TOP SLAB
A521		17	11-5		YES		TOP SLAB
A522		66	16-10				TOP SLAB
A523		12	17-2		YES		TOP SLAB
A624		46	8-4				TOP SLAB
A625		4	11-0		YES		TOP SLAB
A626		38	10-9				TOP SLAB
A627		4	12-9		YES		TOP SLAB
A628		92	3-7				TOP SLAB
A429		48	22-9				LONG WALL - LONGIT.
A430		64	19-6				INSIDE WALL - LONGIT.
A431		64	15-9				INSIDE WALL - LONGIT.
A432		24	23-4				SHORT WALL - LONGIT.
A433		8	22-3				TOP & BOTTOM SLAB
A434		8	20-9				TOP & BOTTOM SLAB
A435		8	20-1				TOP & BOTTOM SLAB
A436		8	19-0				TOP & BOTTOM SLAB
A437		8	17-9				TOP & BOTTOM SLAB
A438		8	16-9				TOP & BOTTOM SLAB
A439		8	15-6				TOP & BOTTOM SLAB
A440		8	14-6				TOP & BOTTOM SLAB
A441		8	13-4				TOP & BOTTOM SLAB
A842		32	20-0				HEADERS
A343		192	4-8				HEADERS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

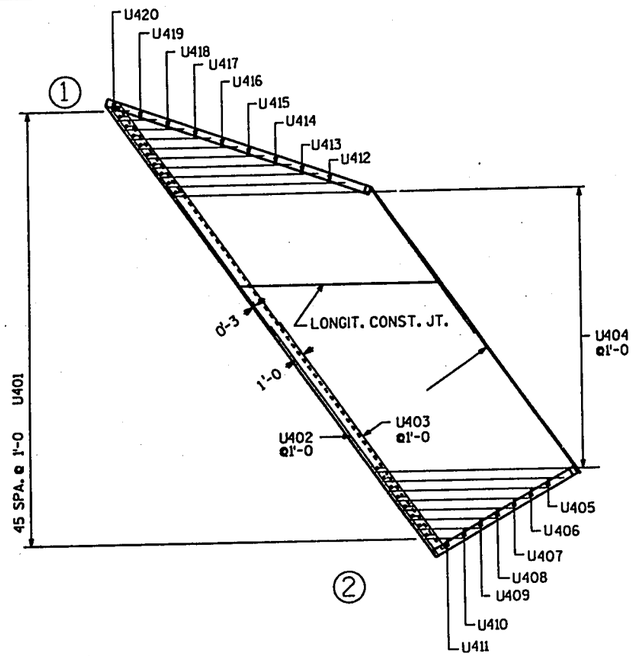
STRUCTURE B-13-426

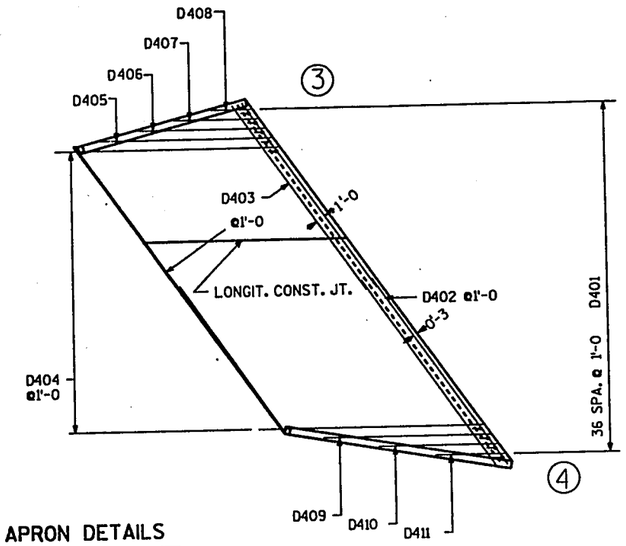
CONST. SPEC. 1989	DRAWN BY BJ	PLANS CHECKED

PANELS 1 & 6

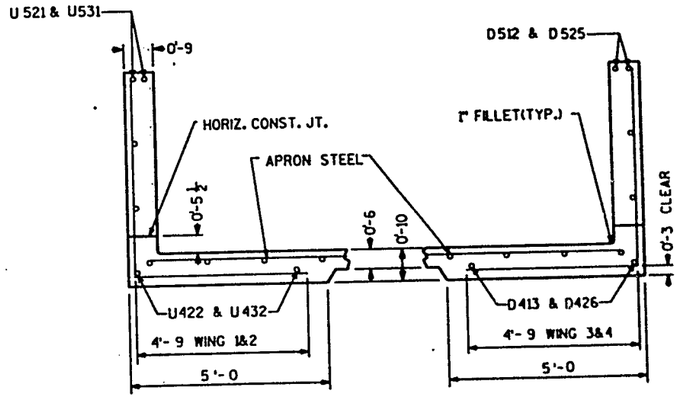
SHEET 3

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	8.3

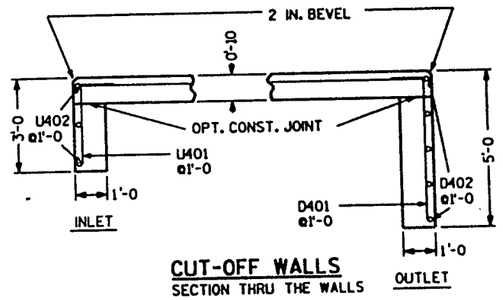




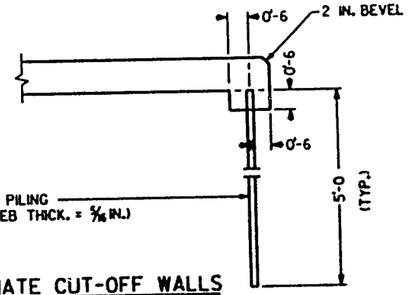
APRON DETAILS



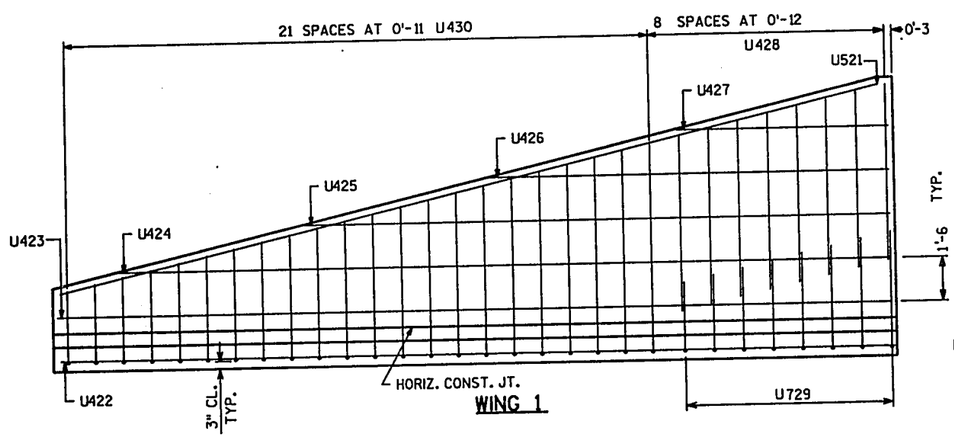
SECTION THRU WINGS
AT RIGHT ANGLES TO WING WALLS



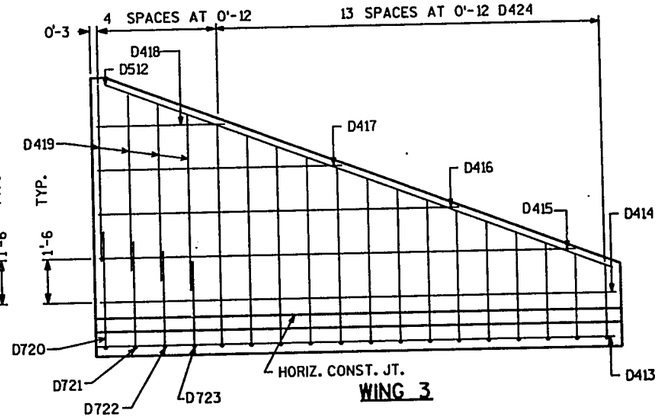
CUT-OFF WALLS
SECTION THRU THE WALLS



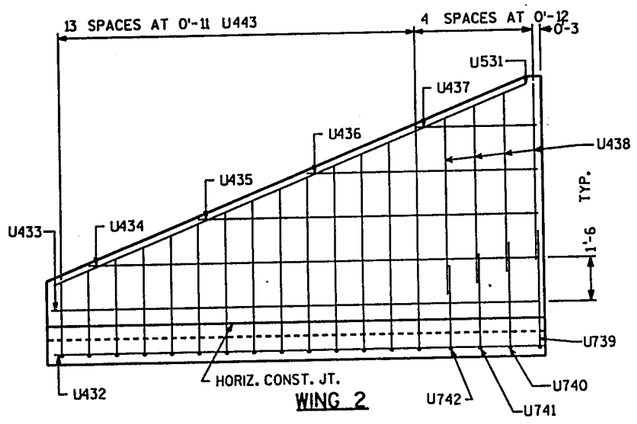
ALTERNATE CUT-OFF WALLS
THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALLS.



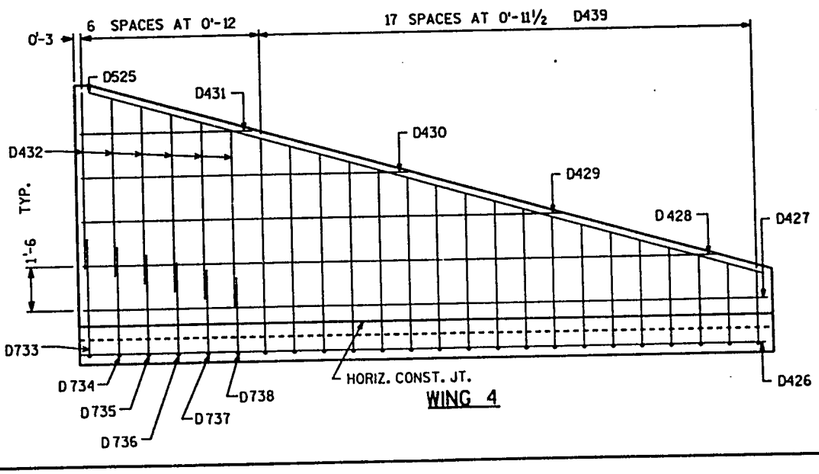
WING 1



WING 3



WING 2



WING 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-13-426

CONST. SPEC.	1989	DRAWN BY	BJ	PLANS C&D.	W.L.L.

APRONS

SHEET 4

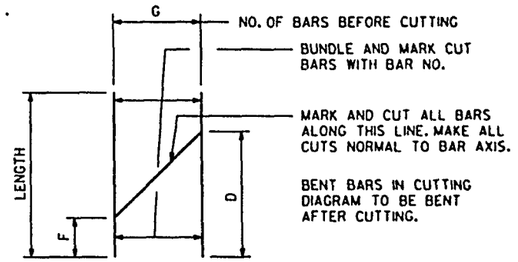
STATE PROJECT NUMBER	SHEET NO.
1201-04-78	8.4

BILL OF BARS — 3930 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.

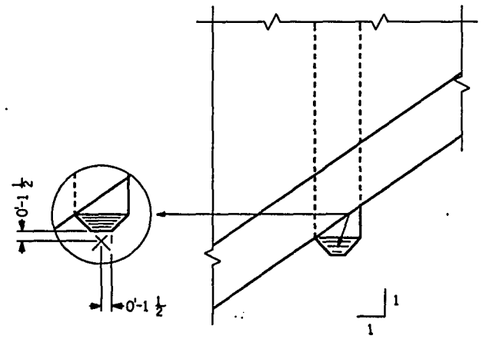
MARK	NO.	LENGTH	BENT	CUT	LOCATION
U401	46	3 -6	1 -0		INLET APRON AND CUTOFF WALL
U402	6	29-1			INLET APRON AND CUTOFF WALL
U403	16	47-10		*	" APRON
U404	30	22-9			" APRON
U405	1	18-5			" APRON
U406	1	16-0			" APRON
U407	1	13-7			" APRON
U408	1	11-2			" APRON
U409	1	8 -9			" APRON
U410	1	6 -3			" APRON
U411	1	3 -10			" APRON
U412	1	18-3			" APRON
U413	1	16-2			" APRON
U414	1	14-2			" APRON
U415	1	12-1			" APRON
U416	1	10-0			" APRON
U417	1	8 -0			" APRON
U418	1	5 -11			" APRON
U419	1	3 -11			" APRON
U420	1	1 -10			" APRON
U521	2	28-10			WING 1 -HORIZONTAL
U422	2	28-10			WING "-HORIZONTAL-APRON
U423	1	28-3			WING "-HORIZONTAL
U424	1	26-3			WING "-HORIZONTAL
U425	1	19-10			WING "-HORIZONTAL
U426	1	13-6			WING "-HORIZONTAL
U427	1	7 -2			WING "-HORIZONTAL
U428	8	6 -0			WING "-VERTICAL
U729	4	15-11	4 -9	*	WING "-VERTICAL
U430	11	19-0	4 -9	*	WING "-VERTICAL
U531	2	17-7			WING 2 -HORIZONTAL
U432	2	17-1			WING "-HORIZONTAL-APRON
U433	1	16-6			WING "-HORIZONTAL
U434	1	15-2			WING "-HORIZONTAL
U435	1	11-6			WING "-HORIZONTAL
U436	1	7 -9			WING "-HORIZONTAL
U437	1	4 -1			WING "-HORIZONTAL
U438	4	6 -0			WING "-VERTICAL
U739	1	8 -9	4 -9		WING "-VERTICAL
U740	1	8 -5	4 -9		WING "-VERTICAL
U741	1	8 -0	4 -9		WING "-VERTICAL
U742	1	7 -8	4 -9		WING "-VERTICAL
U443	7	19-4	4 -9	*	WING "-VERTICAL
D401	37	5 -6	1 -0		OUTLET APRON AND CUTOFF WALL
D402	10	23-6			OUTLET APRON AND CUTOFF WALL
D403	16	42-1		*	" APRON
D404	30	22-9			" APRON
D405	1	17-4			" APRON
D406	1	12-11			" APRON
D407	1	8 -6			" APRON
D408	1	4 -1			" APRON
D409	1	16-10			" APRON
D410	1	11-11			" APRON
D411	1	6 -11			" APRON
D512	2	18-6			WING 3 -HORIZONTAL
D413	2	18-0			WING "-HORIZONTAL-APRON
D414	1	17-5			WING "-HORIZONTAL
D415	1	16-1			WING "-HORIZONTAL
D416	1	12-2			WING "-HORIZONTAL
D417	1	8 -3			WING "-HORIZONTAL
D418	1	4 -4			WING "-HORIZONTAL
D419	4	6 -0			WING "-VERTICAL
D720	1	8 -9	4 -9		WING "-VERTICAL
D721	1	8 -5	4 -9		WING "-VERTICAL
D722	1	8 -1	4 -9		WING "-VERTICAL
D723	1	7 -8	4 -9		WING "-VERTICAL
D424	7	19-5	4 -9	*	WING "-VERTICAL
D525	2	23-9			WING 4 -HORIZONTAL
D426	2	23-6			WING "-HORIZONTAL-APRON
D427	1	23-0			WING "-HORIZONTAL
D428	1	21-3			WING "-HORIZONTAL
D429	1	16-1			WING "-HORIZONTAL

MARK	NO.	LENGTH	BENT	CUT	LOCATION
D430	1	10-11			WING "-HORIZONTAL
D431	1	5 -9			WING "-HORIZONTAL
D432	6	6 -0			WING "-VERTICAL
D733	1	8 -9	4 -9		WING "-VERTICAL
D734	1	8 -6	4 -9		WING "-VERTICAL
D735	1	8 -2	4 -9		WING "-VERTICAL
D736	1	7 -11	4 -9		WING "-VERTICAL
D737	1	7 -8	4 -9		WING "-VERTICAL
D738	1	7 -4	4 -9		WING "-VERTICAL
D439	9	19-2	4 -9	*	WING "-VERTICAL

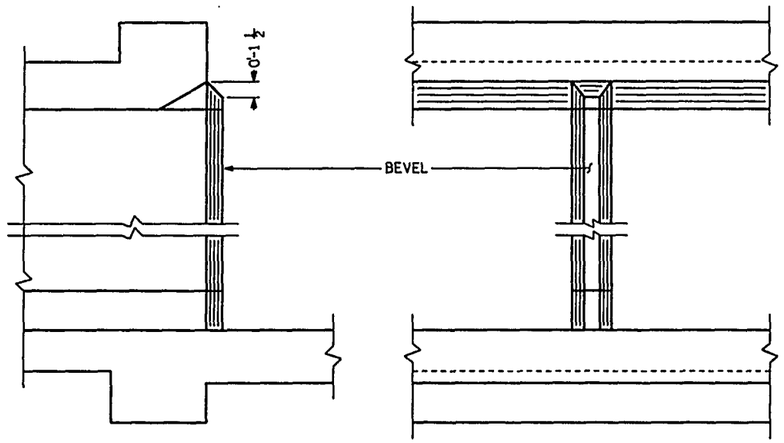


CUTTING DIAGRAM

MARK	D	F	G	SETS REQD
U403	29-1	18-9	16	1
U729	7 -10	7 -2	4	1
U430	9 -5	7 -1	11	1
U443	9 -5	7 -1	7	1
D403	23-6	18-8	16	1
D424	9 -6	7 -1	7	1
D439	9 -5	7 -1	9	1

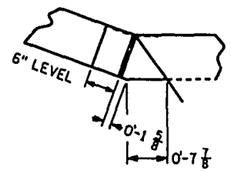


PLAN

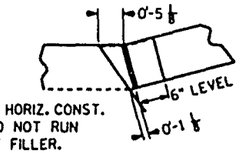


SECTION ELEVATION

INLET NOSE DETAILS

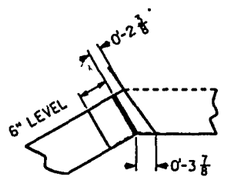


CORNER 1

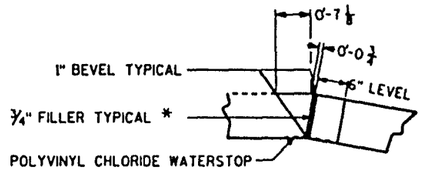


*EXTEND FILLER FROM HORIZ. CONST. JT. TO TOP OF WING. DO NOT RUN ANY STEEL THRU JOINT FILLER. FILLER SHALL CONFORM TO AASHTO DESIGNATION M153 OR M213

CORNER 3



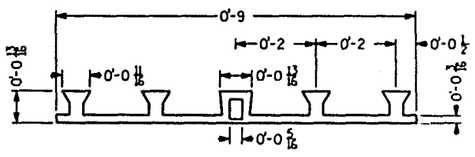
CORNER 2



POLYVINYL CHLORIDE WATERSTOP EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WALL. (FLUSH WITH FACE OF CONCRETE) SEE WATERSTOP DETAIL.

CORNER 4

CORNER DETAILS



POLYVINYL CHLORIDE WATERSTOP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-13-426

CONST. SPEC. 1989	DRAWN BY BJ	PLANS C&D W&S C

DETAILS

SHEET 5

PLOT COMPLETE

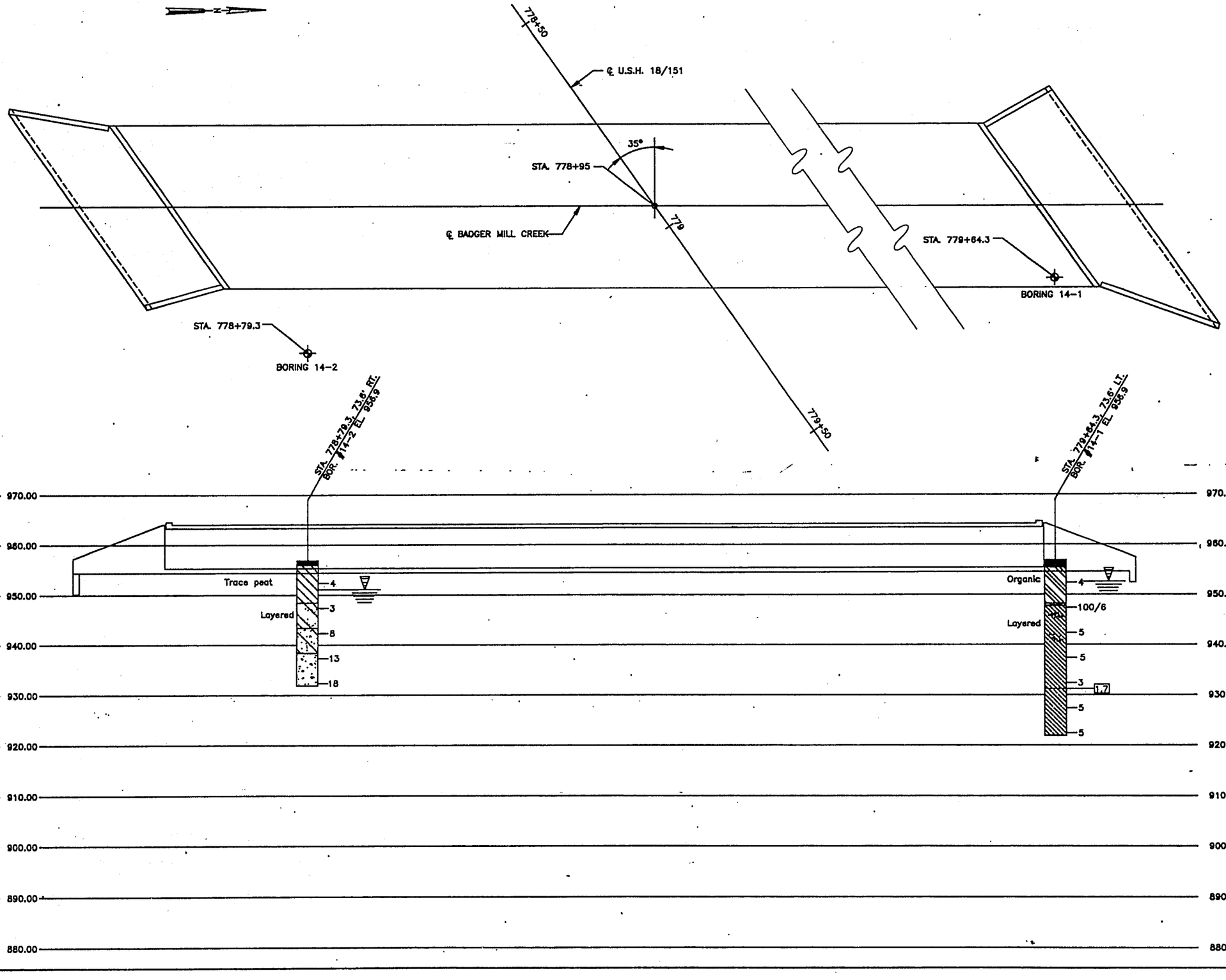
STATE PROJECT NUMBER	SHEET NO.
1201-04-~~02~~78	8.5

ABBREVIATIONS

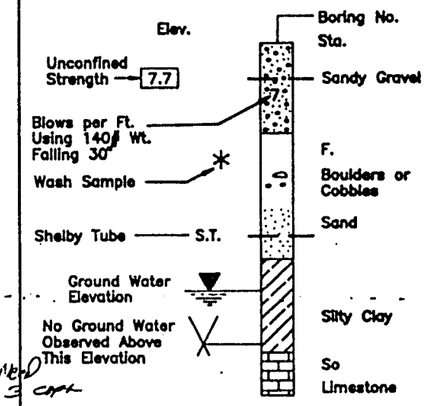
F ___ FINE M ___ MEDIUM C ___ COARSE
WS ___ WEATHERED SO ___ SOUND

MATERIAL SYMBOLS

TOPSOIL · SILT · SHALE · SAND · CLAY · LIMESTONE/DOLOMITE · GRAVEL · BOULDERS/COBBLES · SANDSTONE



LEGEND OF BORING



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

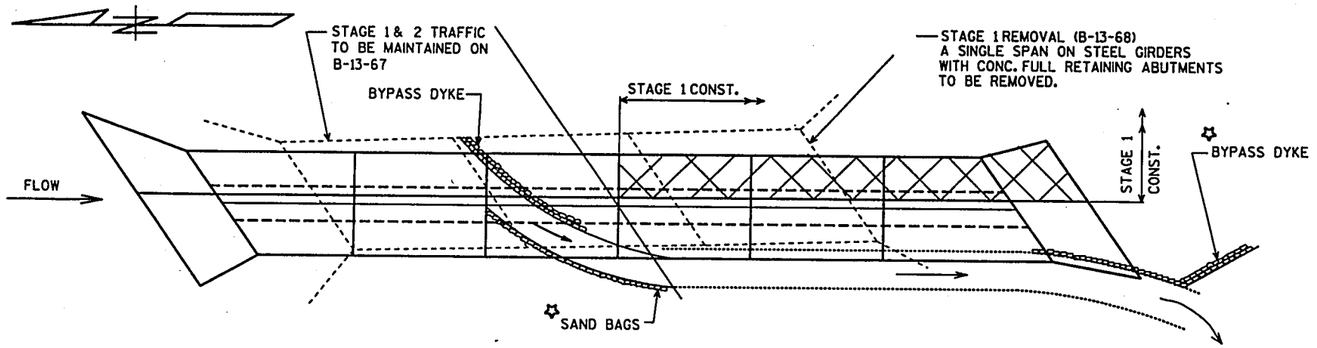
STRUCTURE B-13-426

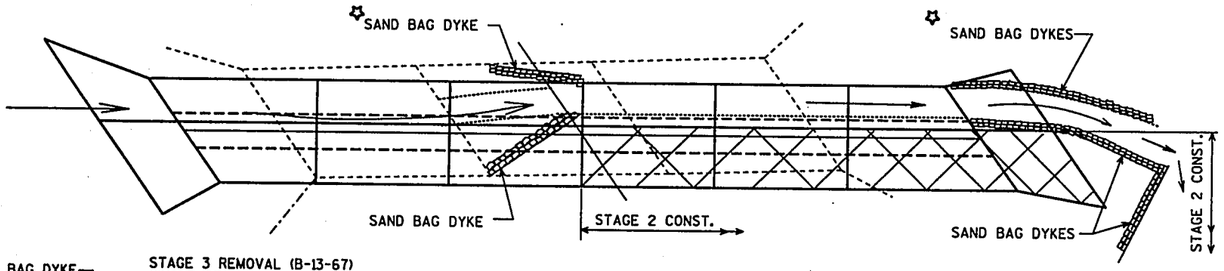
Const. Spec. WIS. 89	Drawn By PR	Plans Checked WLO

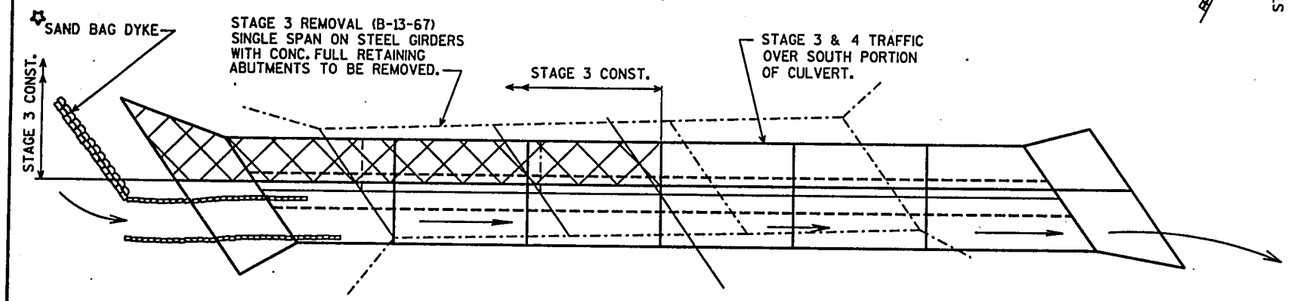
SUBSURFACE EXPLORATION

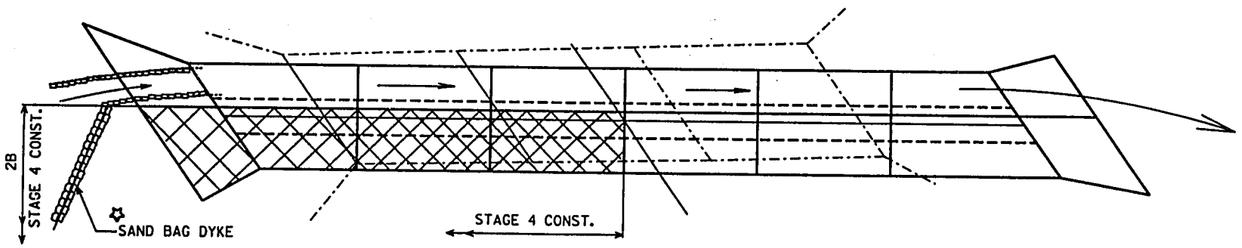
SHEET 6

STATE PROJECT NUMBER	SHEET NO.
1201-04-78	8.6

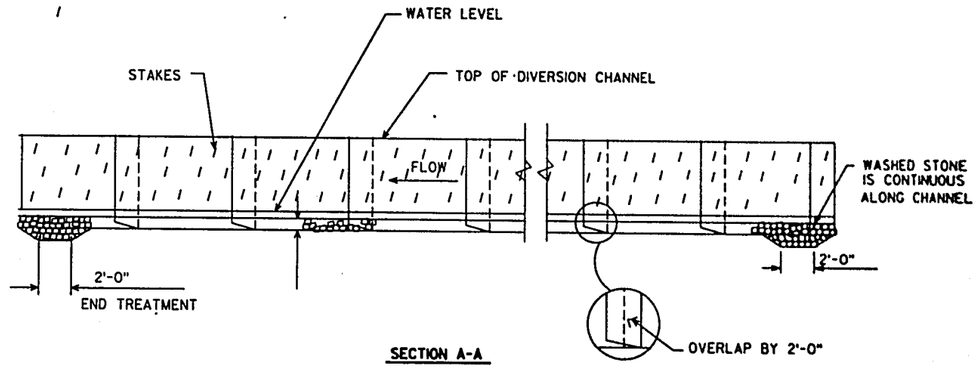




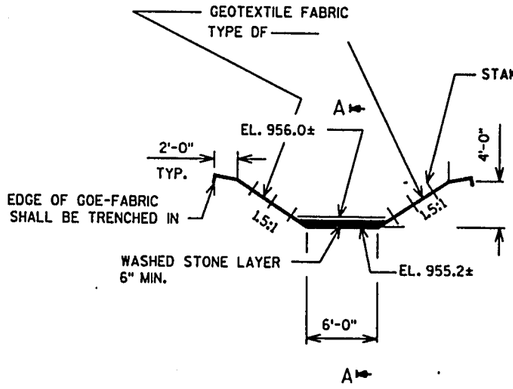




TEMPORARY BYPASS CHANNEL DETAILS



SECTION A-A



TEMPORARY BYPASS CHANNEL DETAILS

PLACE SAND BAGS AS NEEDED FOR BYPASS & BYPASS DYKE

NOTE: EXCAVATION FOR BYPASS CHANNEL WILL BE INCIDENTAL TO BID ITEM "EXCAVATION FOR STRUCTURES, CULVERTS".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-13-426

CONST. SPEC.	DRAWN BY	PLANS C.O.
1989	BJ	WRL

TEMPORARY BYPASS CHANNEL DETAILS

SHEET 7

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	3.0

WB R/L — 25' — C/L USH 18 — 25' — EB R/L

BEGIN CONSTRUCTION
RAMP "E-1" AND EASTBOUND
USH 18 ONLY STA. 765+00.00

R/W +135 — 4:1 — 4:1 — 6:1 — 6:1 — -2.0% — 968.50

R/W +140 — -2.0% — 2.0% — 969.82 — TOPSOIL / CLAY / SAND — 6:1 — STA. 764+50 — 969.82 — 2.0% — -2.0% — -2.0% — 6:1 — 4:1 — 764+75

R/W +122 — 4:1 — 4:1 — 6:1 — 6:1 — -2.0% — 967.89

GRADING & MARSH EXCAVATION COMPLETED UNDER PREVIOUS PROJECT 1201-04-72
TO SHOULDER OF EXISTING ROADWAY
STA 763+00 TO 776+50

-2.0% — 2.0% — 969.44 — 6:1 — 6:1 — 969.44 — 2.0% — -2.0% — -2.0% — 2.1% — 6:1 — 4:1 — TOPSOIL / CLAY — 764+00 — ORGANIC CLAY — SAND — 25'

R/W +145

R/W +112 — 4:1 — 4:1 — 6:1 — 6:1 — 2.0% — 967.33

2.0% — 2.0% — 968.94 — TOPSOIL — 6:1 — ORGANIC CLAY / SAND / AUGER REFUSAL — STA. 762+75 — 968.94 — 2.0% — -2.0% — -2.5% — 3.2% — 6:1 — TOPSOIL / CLAY — STA. 763+50 — 4:1 — 763+00

R/W +153

BEGIN CONSTRUCTION
RAMP "E-2" AND WESTBOUND
USH 18 ONLY STA. 763+00.00

5-24-94

USH_18 — 1A — SCALE 10 10

930 940 950 960 970 980

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7.

GRADING COMPLETED UNDER PREVIOUS PROJECT TO SHOULDER OF EXISTING ROADWAY

RAMP_E2 R/L

R/W +180

968.89

970.37

765+85

CUT = 100 CU. YDS.

R/W +165

968.73

970.22

765+55

CUT = 100 CU. YDS.

R/W +150

968.43

969.94

765+00

CUT = 100 CU. YDS.

R/W +135

R/W +130

R/W +127

BEGIN EARTH WORK AHEAD ONLY
STA. 765+00.00

5-24-94

USH_18

1

SCALE

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7.5

GRADING UNDER THIS CONTRACT

GRADING COMPLETED UNDER PREVIOUS PROJECT

OBLITERATE EXISTING USH 18

R/W +165 4:1 6:1 969.39 -2.0% 970.83 2.0% 6:1 6:1 970.83 2.0% -2.0% -2.0% 6:1 4:1 R/W +118

RAMP E2 R/L

RAMP E1 R/L

BLACK SILTY TOPSOIL

SILTY SAND WITH GRAVEL

BLACK SILTY TOPSOIL

ORGANIC SILTY CLAY

SAND WITH GRAVEL

767+00

CUT = 1200 CU. YDS.

WATERLINE

MARSH EXCAVATION UNDER PREVIOUS CONTRACT 1201-04-72

STA. 767+00 TO 776+50

R/W +175 4:1 6:1 969.09 -2.0% 970.55 2.0% 6:1 6:1 970.55 2.0% -2.0% -2.0% 6:1 4:1 R/W +120

R/L

R/L

766+25

CUT = 300 CU. YDS.

R/W +180 4:1 6:1 968.97 -2.0% 970.44 2.0% 6:1 6:1 970.44 2.0% -2.0% -2.0% 6:1 4:1 R/W +125

R/L

R/L

766+00

CUT = 100 CU. YDS.

970 960 950 940 930 980 970 960 950 940 930 980 970 960 950 940 930

5-24-94

USH 18

2

SCALE 10 10

100 50 0 50 100

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	1.3

GRADING UNDER THIS CONTRACT
1201-04-78

OBLITERATE EXISTING USH 18

GRADING COMPLETED UNDER PREVIOUS PROJECT 1201-04-77

MARSH EXCAVATION UNDER PREVIOUS PROJECT

RAMP E2

R/W

R/L

+130

+145

+160

+100

+110

+122

970.93

969.57

969.60

970.98

969.44

970.89

6:1

-2.0%

2.0%

4:1

3:1

WATERLINE

BROWN TOPSOIL
SILTY CLAY WITH SAND

SILTY SAND WITH GRAVEL

BLACK SILTY TOPSOIL
ORGANIC SILTY CLAY

769+00

CUT = 700 CU. YDS.

768+00

CUT = 900 CU. YDS.

767+25

CUT = CU. YDS.

970

960

950

940

930

5-24-94

USH 18

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	9.4

GRADING UNDER THIS CONTRACT

OBLITERATE EXISTING USH 18 R/W

RAMP E1 R/L

GRADING COMPLETED UNDER PREVIOUS CONTRACT

MARSH EXCAVATION UNDER PREVIOUS PROJECT

STA. 772+75
FILL = 3200 CU. YDS.
CUT = 700 CU. YDS.

STA. 772+00
FILL = 2500 CU. YDS.
CUT = 1300 CU. YDS.

STA. 771+50
BLACK SILTY TOPSOIL
SILTY CLAY ORGANIC
SANDY SILT

STA. 771+00
BLACK SILTY TOPSOIL
ORGANIC SILTY CLAY
SILTY SAND WITH GRAVEL
CUT = 1500 CU. YDS.
FILL = 600 CU. YDS.
WATER LINE

RAMP E2 R/L

STA. 769+50
BLACK CLAYEY SILT
ORGANIC CLAYEY SILT
SILT

STA. 770+00
CUT = 1100 CU. YDS.
FILL = 1900 CU. YDS.

5-24-94

USH_18

4

SCALE

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

BEGIN MARSH EXCAVATION
STA. 776+50 TO 779+00

MARSH REMOVAL UNDER PREVIOUS CONTRACT
1201-04-73 STA. 767+00 TO 776+50

STA 773+30
1-8 MS INLET
(BY OTHERS)

STA. 773+50. 127' LT.
1-36"x///8 L.F. RCCP CLASS III R&D
SKEW 12° LHF
2 APRON ENDWALLS R&D
INV 956.00
P102

STA. 773+00. 106' RT.
1-36"x///8 L.F. RCCP CLASS III R&D
SKEW 12° LHF
1 APRON ENDWALL R&D
INV 956.80
P102

RAMP E2
R/L

WATERLINE

BLACK SILTY TOPSOIL
CLAYEY SILT
SANDY CLAY

BLACK SILTY TOPSOIL
ORGANIC SILT
SILTY CLAY

BLACK SILTY TOPSOIL
ORGANIC SILTY CLAY
SANDY SILT

777+00 — FILL = 2709 CU. YDS. MARSH = 1000 cu yds
776+00 — FILL = 2950 CU. YDS. CUT = 150 CU. YDS
775+00 — FILL = 2400 CU. YDS. CUT = 500 CU. YDS.
774+00 — FILL = 2550 CU. YDS. CUT = 600 CU. YDS.
773+30 — INV 956.80
773+00 — FILL = 1200 CU. YDS. CUT = 300 CU. YDS. INV 954.96

5-24-94

USH 18

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7 of 7

940
960
950

R/W

4:1 6:1 -2.0% 2.0% 967.04 6:1 6:1 2.0% -2.0% 6:1 4:1

STA. 779+50

BROWN TOPSOIL

INV 955.4

STRUCTURE : B-18-#26
BOX CULVERT 3x8'x11'

STA. 779+07
BLACK CLAYEY TOPSOIL

SILTY CLAY

SILTY SAND

INV 955.2

779+00

FILL = 351 CU. YDS.
MARSH = 100 m. yds

778+90

FILL = 227 CU. YDS.
MARSH = 400 m yds

778+50

FILL = 1123 CU. YDS.
MARSH = 300 m yds

778+00

FILL = 2276 CU. YDS.

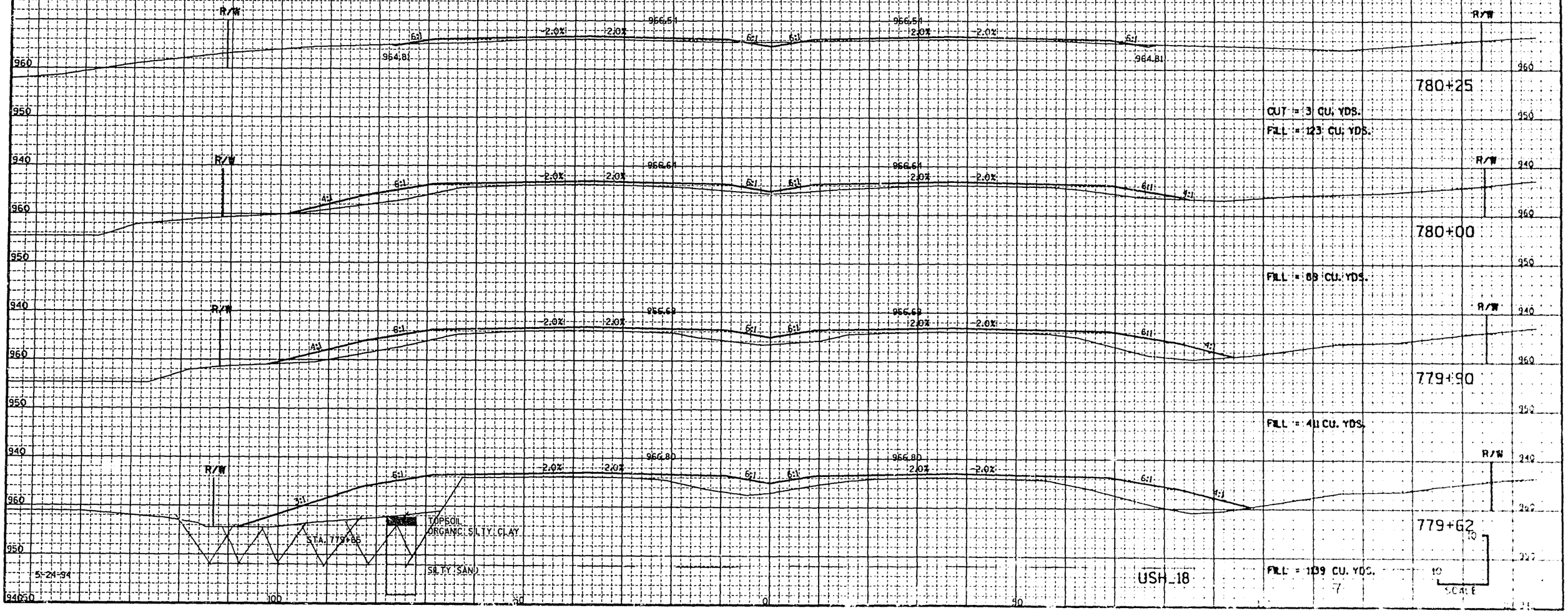
USH 18

5-24-94

6

SCALE 1" = 10'

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	2,5



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7.2

R/W

960 950 940

4:1 6:1 2.0% 2.0% 964.7 6:1 6:1 964.7 2.0% 2.0% 6:1 4:1

INV 959.67 INV 957.67

PIDO
STA. 785+25

1-24"x92 L.F. RCCP CLASS III REQ'D.
SKEW 10° RHF
1-S MS INLET REQ'D
1-ARRON ENDWALLS REQ'D

785+00

CUT = 360 CU. YDS.
FILL = 375 CU. YDS.

R/W

960 950 940

4:1 6:1 -2.0% 2.0% 965.04 6:1 6:1 965.04 2.0% 2.0% 6:1 4:1

784+00

CUT = 224 CU. YDS.
FILL = 447 CU. YDS.

R/W

940 950 960

4:1 6:1 -2.0% 2.0% 965.44 6:1 6:1 965.44 2.0% -2.0% 6:1 4:1

783+00

CUT = 88 CU. YDS.
FILL = 843 CU. YDS.

R/W

940 950 960

4:1 6:1 -2.0% 2.0% 965.84 6:1 6:1 965.84 2.0% -2.0% 6:1 4:1

782+00

CUT = 18 CU. YDS.
FILL = 855 CU. YDS.

R/W

940 950 960

4:1 6:1 -2.0% 2.0% 966.24 6:1 6:1 966.24 2.0% -2.0% 6:1 4:1

781+00

FILL = 505 CU. YDS.

R/W

940 950 960

4:1 6:1 -2.0% 2.0% 966.44 6:1 6:1 966.44 2.0% -2.0% 6:1 4:1

780+50

CUT = 3 CU. YDS.
FILL = 163 CU. YDS.

5-24-94

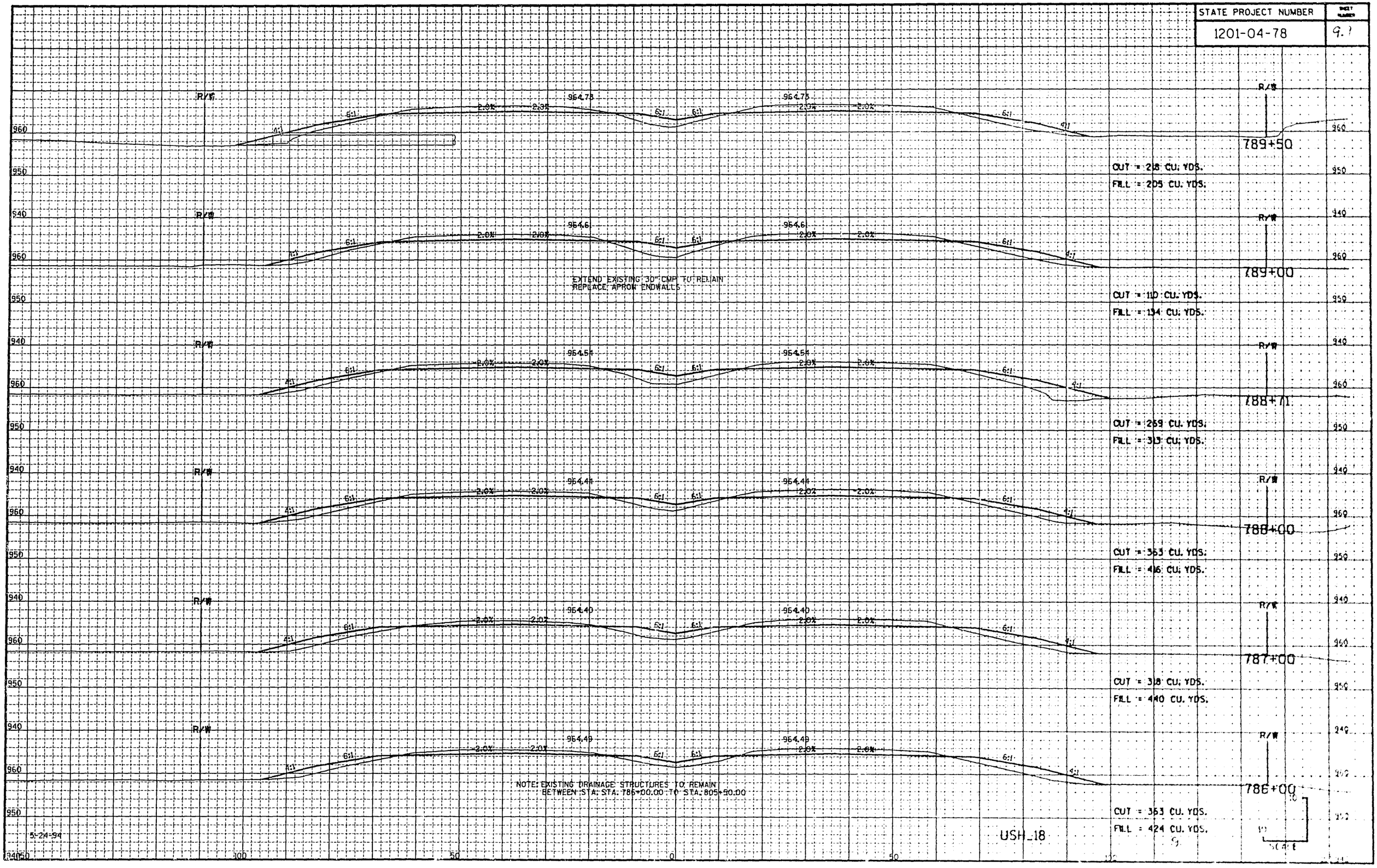
USH 18

8

SCALE
10 10

940 950 100 50 0 50 100 940 950

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	9.1



STATE PROJECT NUMBER

1201-04-78

793+00

CUT = 493 CU. YDS.

FILL = 150 CU. YDS.

792+00

CUT = 270 CU. YDS.

FILL = 91 CU. YDS.

791+45

CUT = 214 CU. YDS.

FILL = 85 CU. YDS.

791+00

CUT = 305 CU. YDS.

FILL = 154 CU. YDS.

790+35

CUT = 166 CU. YDS.

FILL = 98 CU. YDS.

790+00

CUT = 234 CU. YDS.

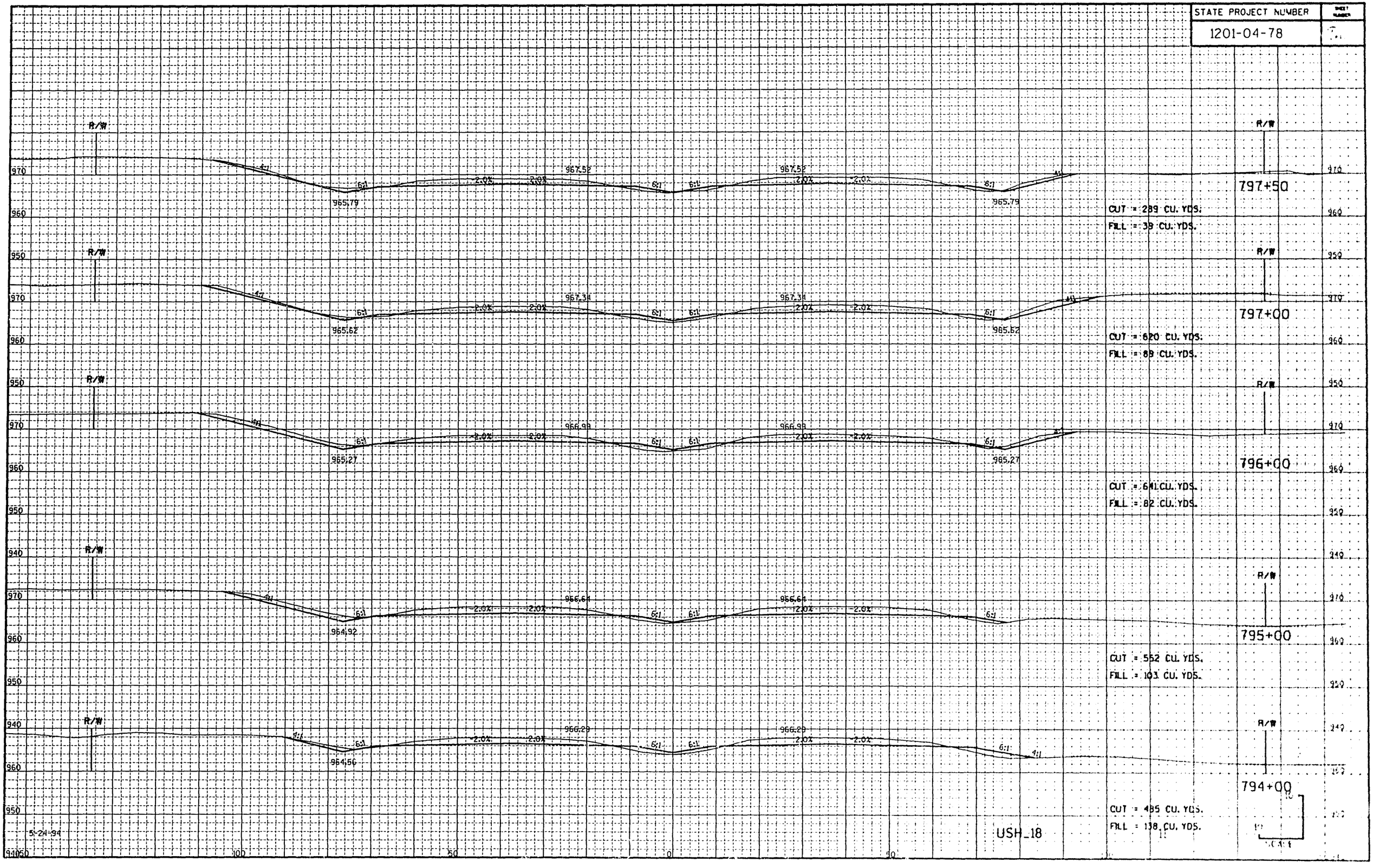
FILL = 173 CU. YDS.

USH_18

5-24-94

SCALE 10

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	9.17

R/W

970

960

950

940

6:1

2.0%

968.16

EXTEND EXISTING 30" CMP TO REMAIN.
REPLACE APRON ENDWALLS
BY OTHERS

799+40

CUT = 102 CU. YDS.
FILL = 10 CU. YDS.

968.04

799+00

CUT = 281 CU. YDS.
FILL = 18 CU. YDS.

967.82

986.09

798+35

CUT = 223 CU. YDS.
FILL = 19 CU. YDS.

967.69

965.97

798+00

CUT = 350 CU. YDS.
FILL = 18 CU. YDS.

END PROJECT 1201-01-78
SALK CITY

5-24-94

USH 18

SCALE

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7.12

RAMP E2

729+15

R/L — M/L MEDIAN DITCH — R/W

963.66 — 962.88 — 956.00

6:1 — 2.6% — 2.6% — 6:1 — 4:1 — 4:1

CUT = 32 CU. YDS.
FILL = 48 CU. YDS.

729+00

R/L — M/L — R/W

963.85 — 963.00 — 956.35

6:1 — 2.6% — 2.0% — 6:1 — 4:1 — 4:1

CUT = 270 CU. YDS.
FILL = 69 CU. YDS.

728+00

R/L — M/L — R/W

964.93 — 963.43 — 958.10

6:1 — 2.0% — 2.0% — 6:1 — 4:1 — 4:1

CUT = 251 CU. YDS.
FILL = 69 CU. YDS.

727+00

R/L — M/L — R/W

965.70 — 963.70 — 961.10

6:1 — 2.0% — 2.0% — 6:1 — 4:1 — 4:1

CUT = 228 CU. YDS.
FILL = 88 CU. YDS.

726+00

R/L — M/L — R/W

966.15 — 963.73 — 961.50

6:1 — 2.0% — 2.0% — 6:1 — 4:1 — 4:1

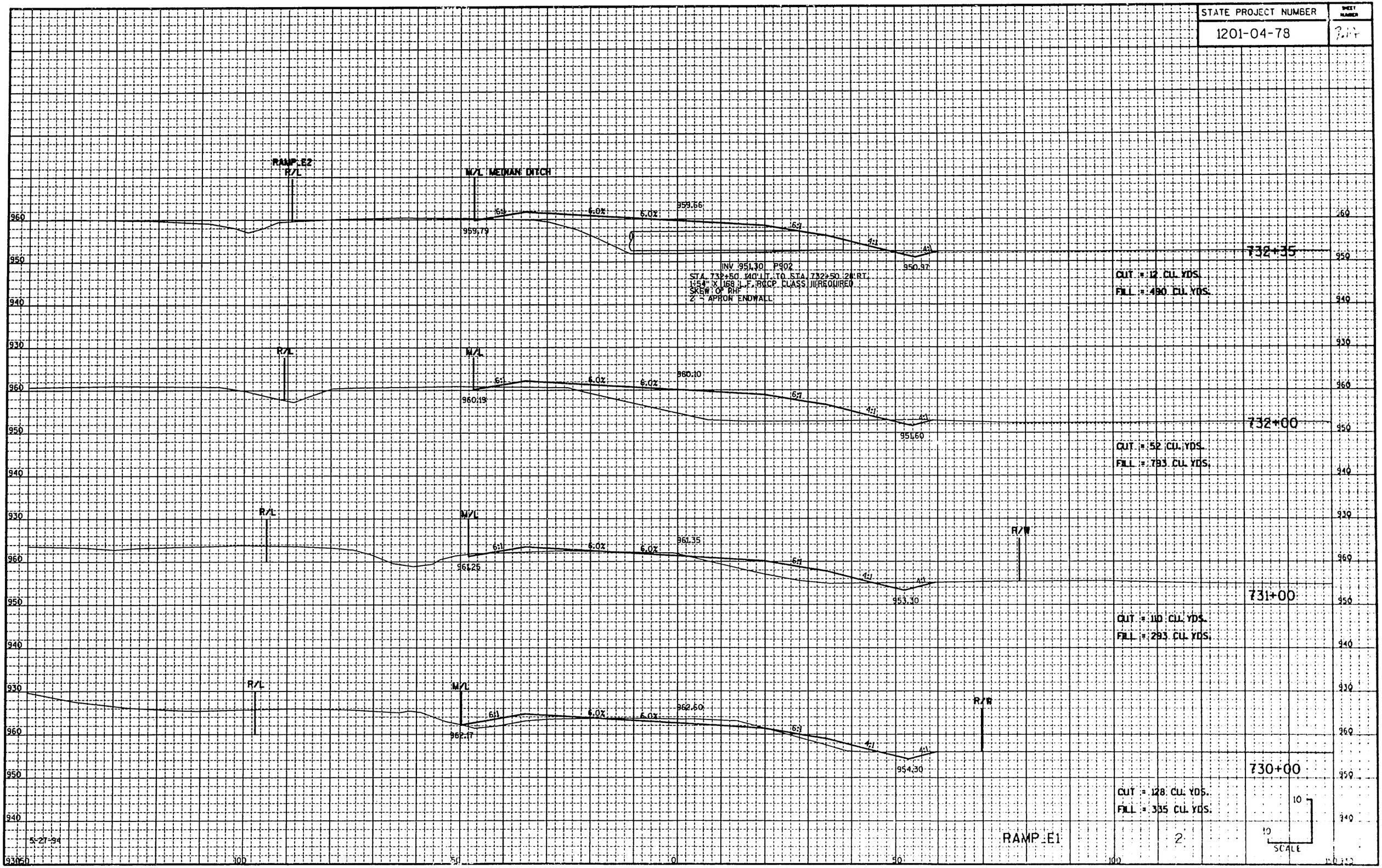
RAMP E1

5-27-94

940 950 960 970

100 50 0 40 120

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7.14



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	2.5

RAMP_E2

R/L

M/L RAMP_E2

6.0%

6.0%

957.60

6:1

4:1

734+00

FILL = 342 CU. YDS.

R/L

M/L

6.0%

6.0%

957.85

6:1

4:1

733+80

FILL = 241 CU. YDS.

R/L

M/L MEDIAN DITCH

6:1

6.0%

6.0%

958.10

6:1

4:1

733+60

CUT = 2 CU. YDS.

FILL = 280 CU. YDS.

R/L

M/L

959.04

6:1

6.0%

6.0%

958.85

6:1

4:1

956.33

733+00

CUT = 9 CU. YDS.

FILL = 78 CU. YDS.

R/L

M/L

959.3

6:1

6.0%

6.0%

959.16

6:1

4:1

732+75

CUT = 7 CU. YDS.

FILL = 407 CU. YDS.

10

1

5-27-94

RAMP_E1

3

960

950

940

930

100

50

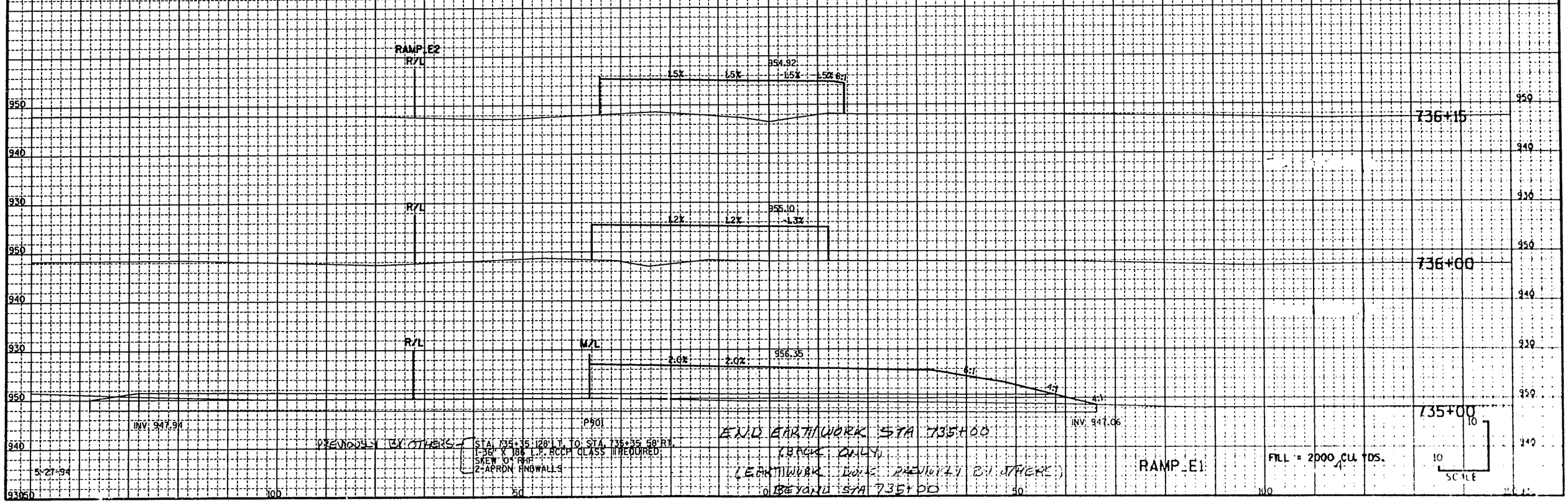
0

50

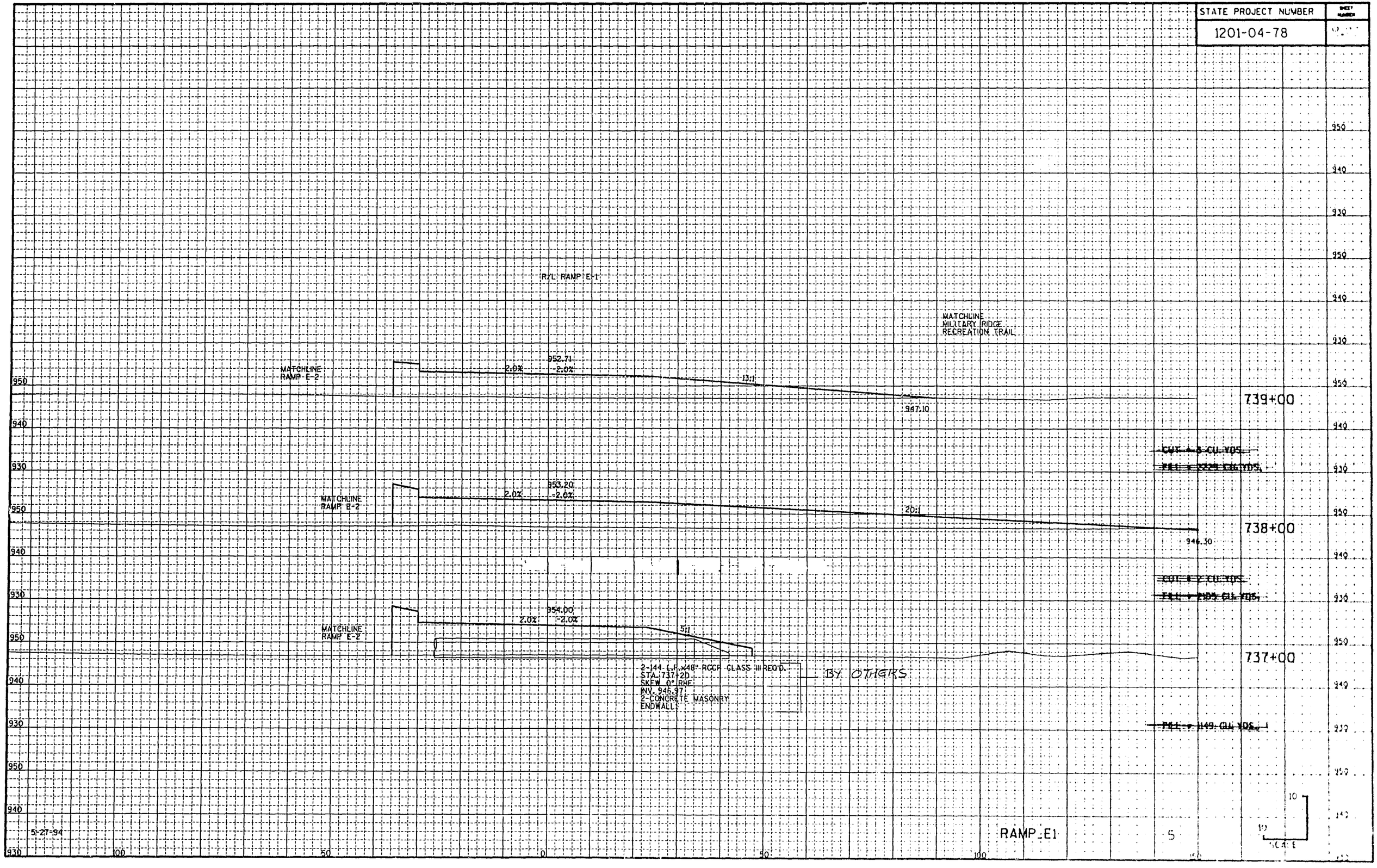
100

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	9.0

INTERSECTION RAMP E-1 AND CTH PBN



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	1 of

R/L RAMP E-1

MATCHLINE USH 18 BRIDGE

2:1

-6.0%

954.16

6.0%

954.3

6:1

MATCHLINE MILITARY RIDGE RECREATION TRAIL

R/W

744+00

MATCHLINE USH 18 BRIDGE

2:1

-6.0%

954.02

6.0%

954.2

6:1

MATCHLINE MILITARY RIDGE RECREATION TRAIL

R/W

~~FILL = 93 CU. YDS.~~

743+75

MATCHLINE USH 18 BRIDGE

2:1

-3.2%

953.60

3.2%

953.9

6:1

MATCHLINE MILITARY RIDGE RECREATION TRAIL

R/W

~~CUT = 1 CU. YDS.~~

~~FILL = 200 CU. YDS.~~

743+00

~~CUT = 54 CU. YDS.~~

~~FILL = 310 CU. YDS.~~

SWALE MATCHLINE RAMP E2

95L20

95L93

6:1

0.8%

953.04

-0.8%

6:1

952.3

MATCHLINE MILITARY RIDGE RECREATION TRAIL

R/W

742+00

~~CUT = 154 CU. YDS.~~

~~FILL = 746 CU. YDS.~~

MATCHLINE MILITARY RIDGE RECREATION TRAIL

R/W

17:1

6:1

2.0%

952.63

-2.0%

6:1

950.7

1-174 L.F.x24" RCCP CLASS III BY OTHERS
STA. 739+50 RT. TO 741+00 LT.
SKEW: 60° LHF
INV: 949.00
2-APRON ENDWALLS BY OTHERS

741+00

~~FILL = 157 CU. YDS.~~

95L88 DITCH

6:1

2.0%

952.52

-2.0%

MATCHLINE MILITARY RIDGE RECREATION TRAIL

R/W

6:1

948.1

3-32 L.F.x 24" CP CLASS III BY OTHERS
STA. 740+00 RT.
SKEW AND EXACT LOCATION AS DIRECTED BY THE ENGINEER

1-174 L.F.x24" RCCP CLASS III BY OTHERS
STA. 739+50 RT. TO 741+00 LT.
SKEW 60° LHF
INV. 947.50
2-APRON ENDWALLS BY OTHERS

740+00

~~FILL = 1523 CU. YDS.~~

10

10

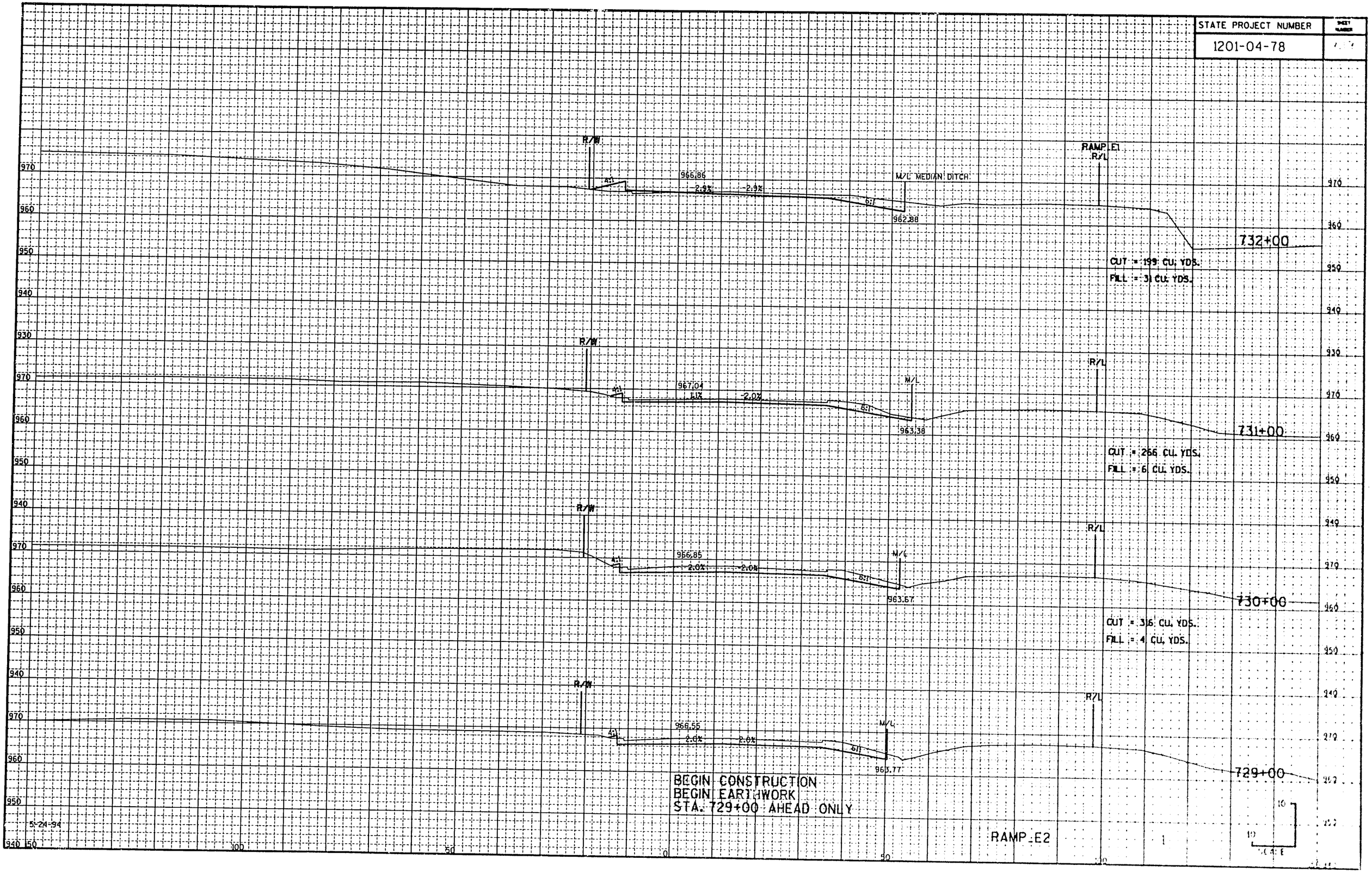
SCALE

5-27-94

RAMP E1

6

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	9.77

R/W — 963.67 — -5.0% — -5.0% — M/L MEDIAN DITCH — RAMP E1 R/L

6:1 — 4:1 — 4:1 — 6:1 — 6:1

957.72 — 960.14

735+20

CUT = 24 CU. YDS.
FILL = 169 CU. YDS.

R/W — 963.98 — -5.0% — -5.0% — M/L — R/L

6:1 — 4:1 — 4:1 — 6:1 — 6:1

958.60 — 960.34

735+00

CUT = 14 CU. YDS.
FILL = 124 CU. YDS.

R/W — 964.21 — -5.0% — -5.0% — M/L — R/L

6:1 — 4:1 — 4:1 — 6:1 — 6:1

959.26 — 960.49

734+85

CUT = 38 CU. YDS.
FILL = 605 CU. YDS.

R/W — 965.33 — -5.0% — -5.0% — M/L — R/L

6:1 — 4:1 — 6:1 — 6:1

961.28

734+00

CUT = 35 CU. YDS.
FILL = 381 CU. YDS.

R/W — 966.29 — -5.0% — -5.0% — M/L — R/L

6:1 — 4:1 — 6:1 — 6:1

733+00

CUT = 126 CU. YDS.
FILL = 18 CU. YDS.

960 950 940 930 960 950 940 930 960 950 940 930 970 960 950

5-24-94

100 50 0 50 100

RAMP E2

2

10 10

SCALE

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

LOCAL ROAD M/L

960.15
-5.0%
-5.0%
954.43
4:1
6:1
6:1
M/L RAMP E-1
RAMP E-1
R/L
737+00
CUT = 24 CU. YDS.
FILL = 62 CU. YDS.

960.48
-5.0%
-5.0%
954.86
4:1
4:1
6:1
6:1
M/L RAMP E-1
R/L
736+85
CUT = 29 CU. YDS.
FILL = 117 CU. YDS.

R/W
960.92
-5.0%
-5.0%
955.68
4:1
4:1
6:1
6:1
M/L RAMP E-1
R/L
736+65
CUT = 34 CU. YDS.
FILL = 470 CU. YDS.

R/W
962.25
-5.0%
-5.0%
958.00
4:1
4:1
6:1
6:1
M/L MEDIAN DITCH
R/L
736+00
CUT = 44 CU. YDS.
FILL = 449 CU. YDS.

R/W
963.25
-5.0%
-5.0%
956.62
4:1
4:1
6:1
6:1
M/L
959.88
R/L
735+45
CUT = 38 CU. YDS.
FILL = 217 CU. YDS.

960 950 940 930

5-24-94

RAMP_E2

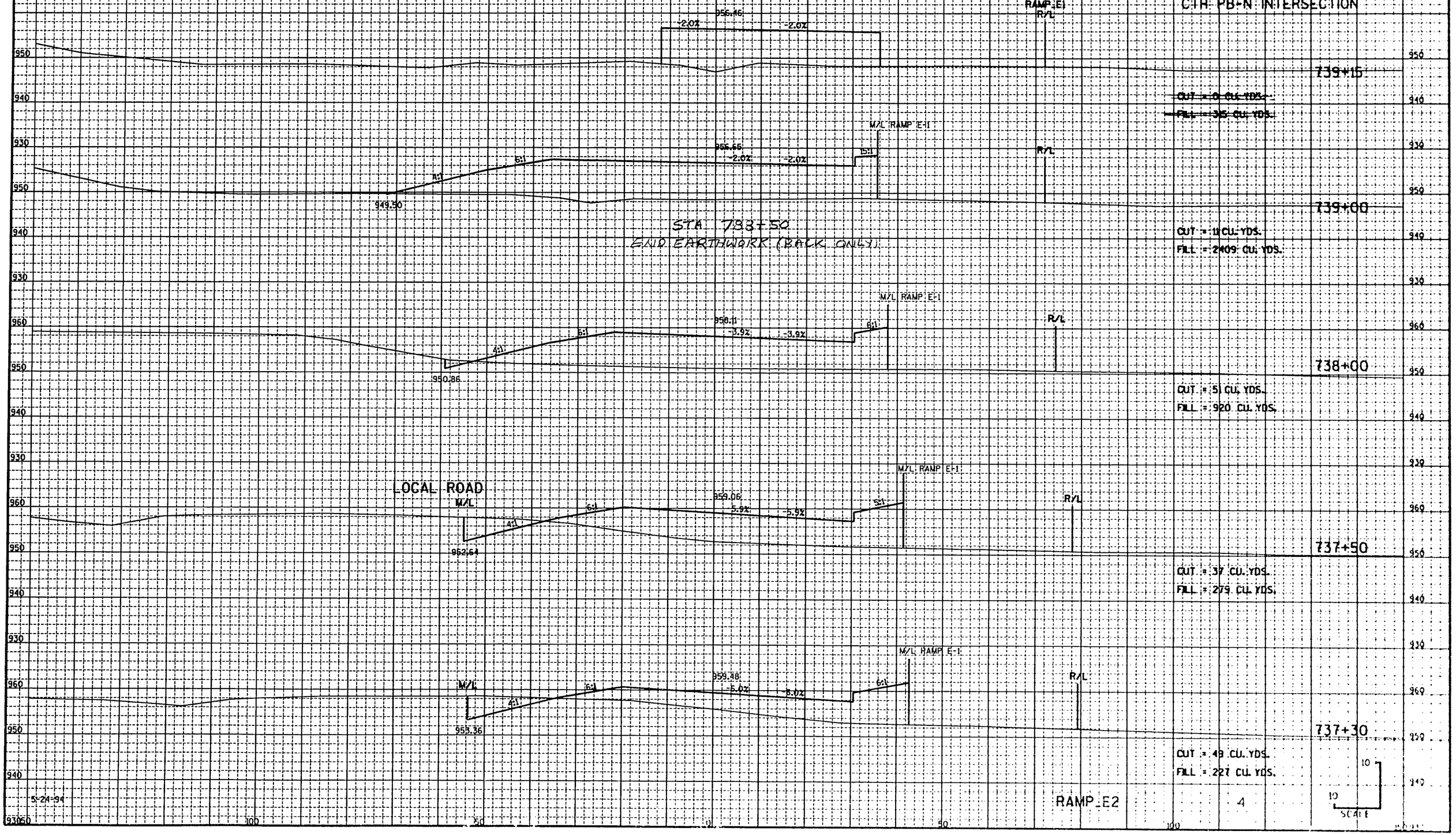
3

SCALE

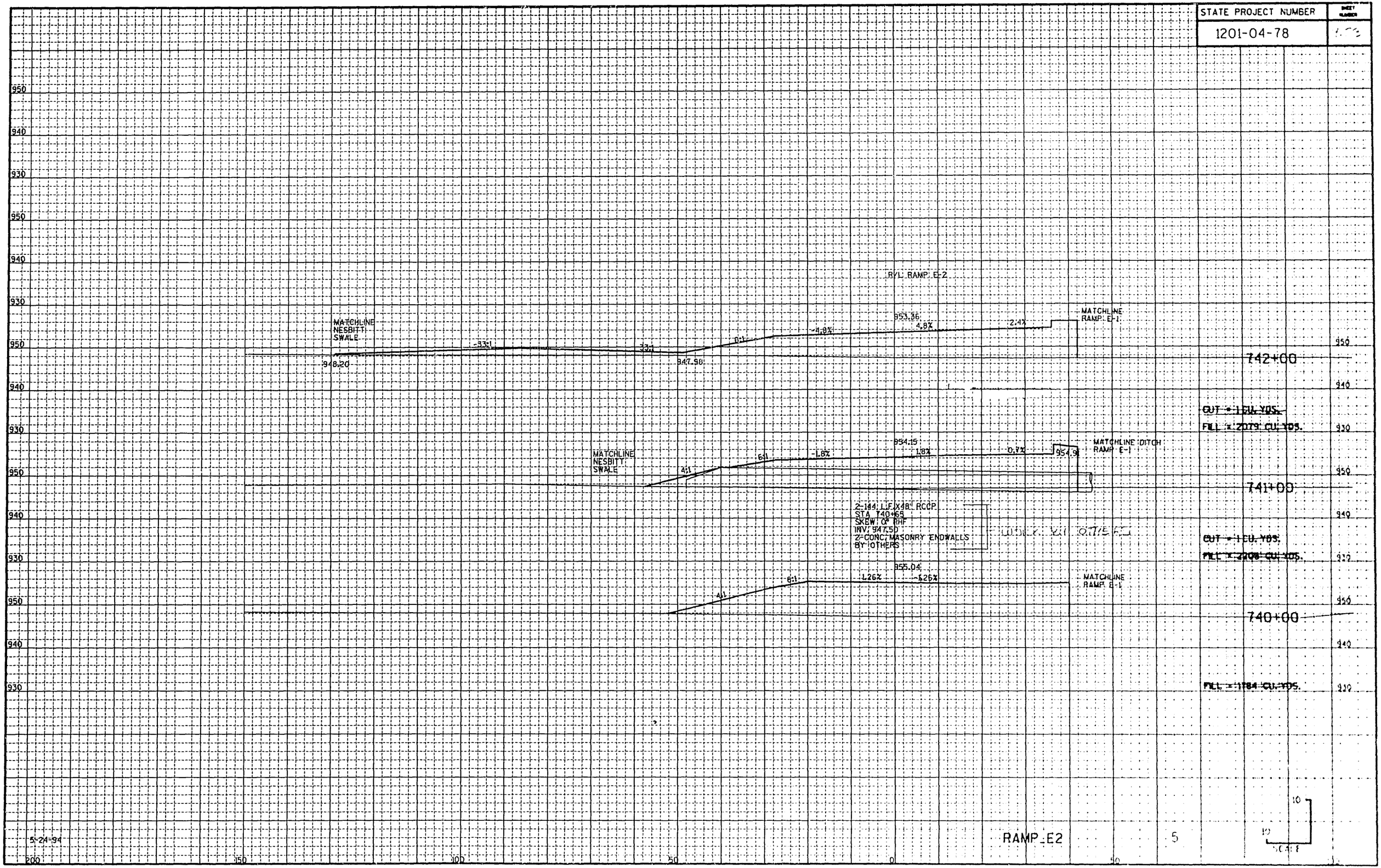
INTERSECTION RAMP E-2 AND CTH PB-N

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

RAMP E-1/E-2/NESBITT
CTH PB-N INTERSECTION



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

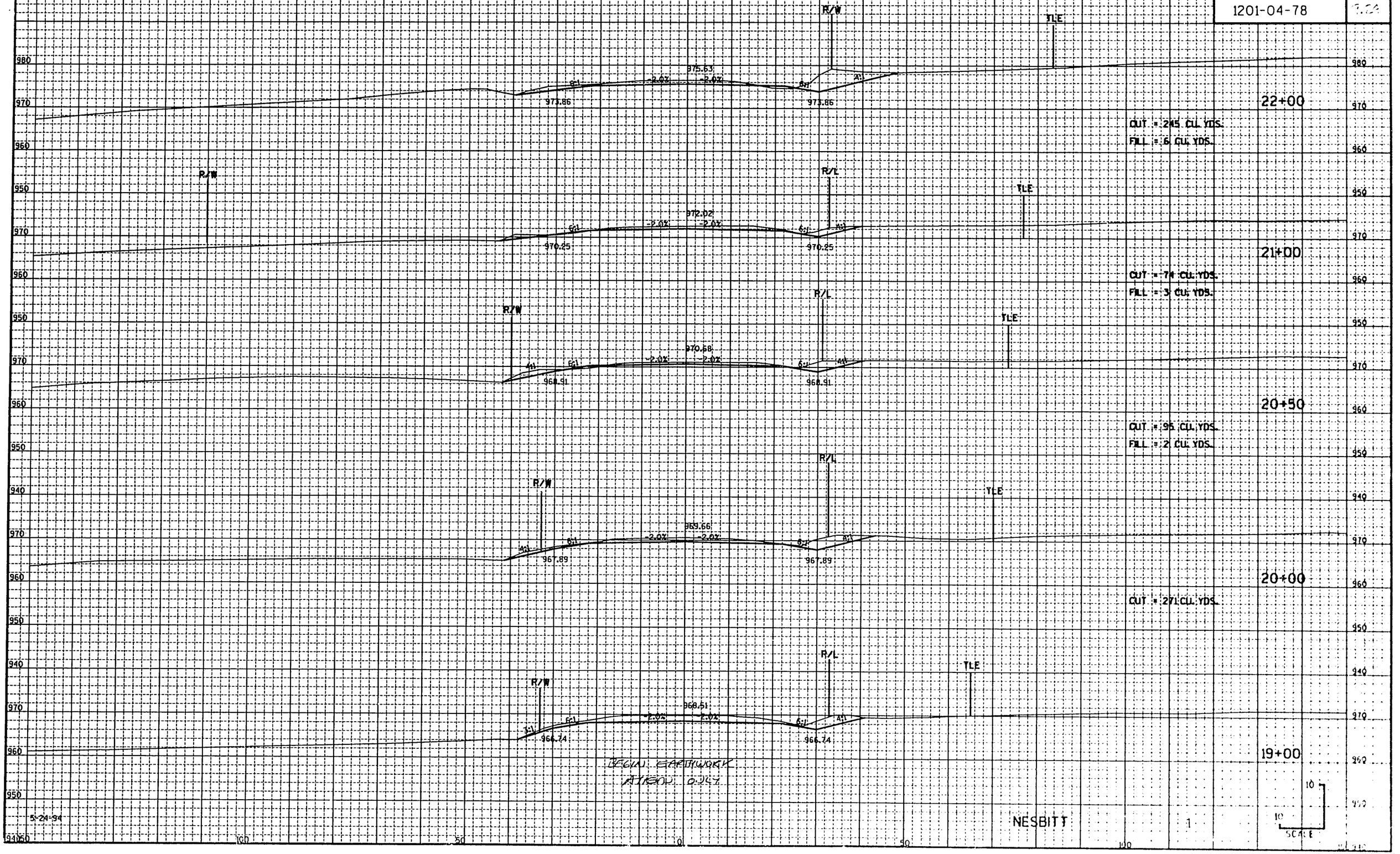


5-24-94

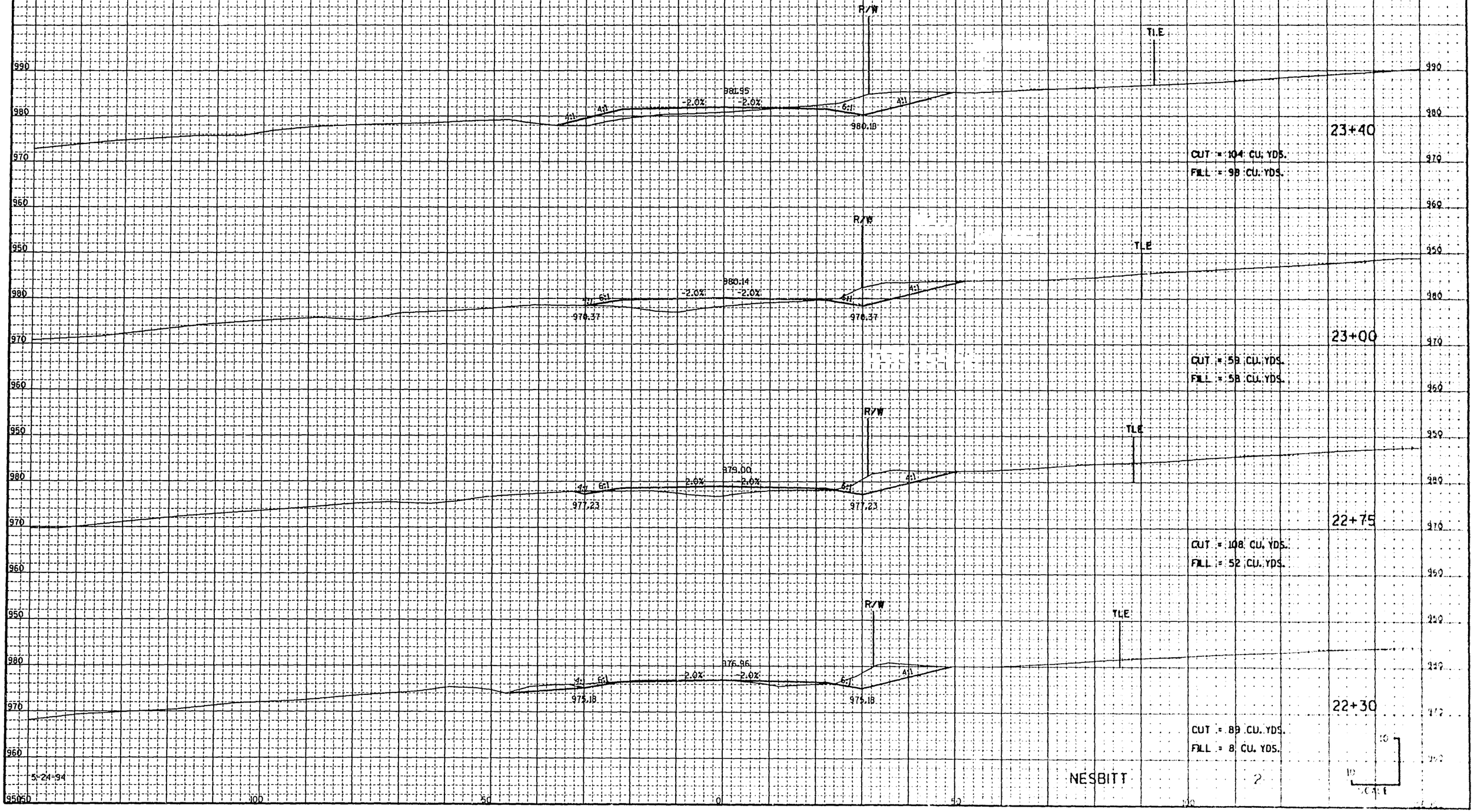
RAMP E2

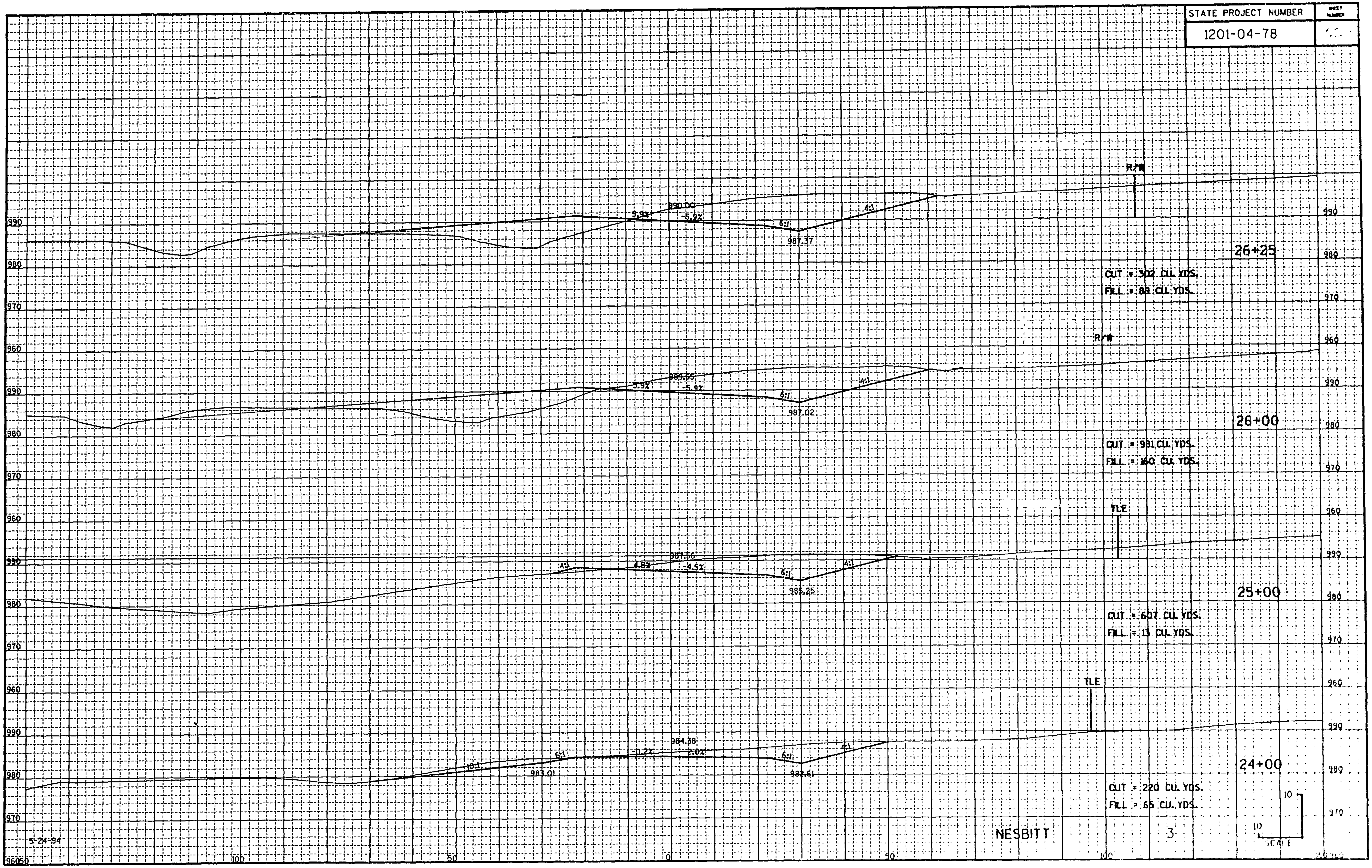
5

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7.24



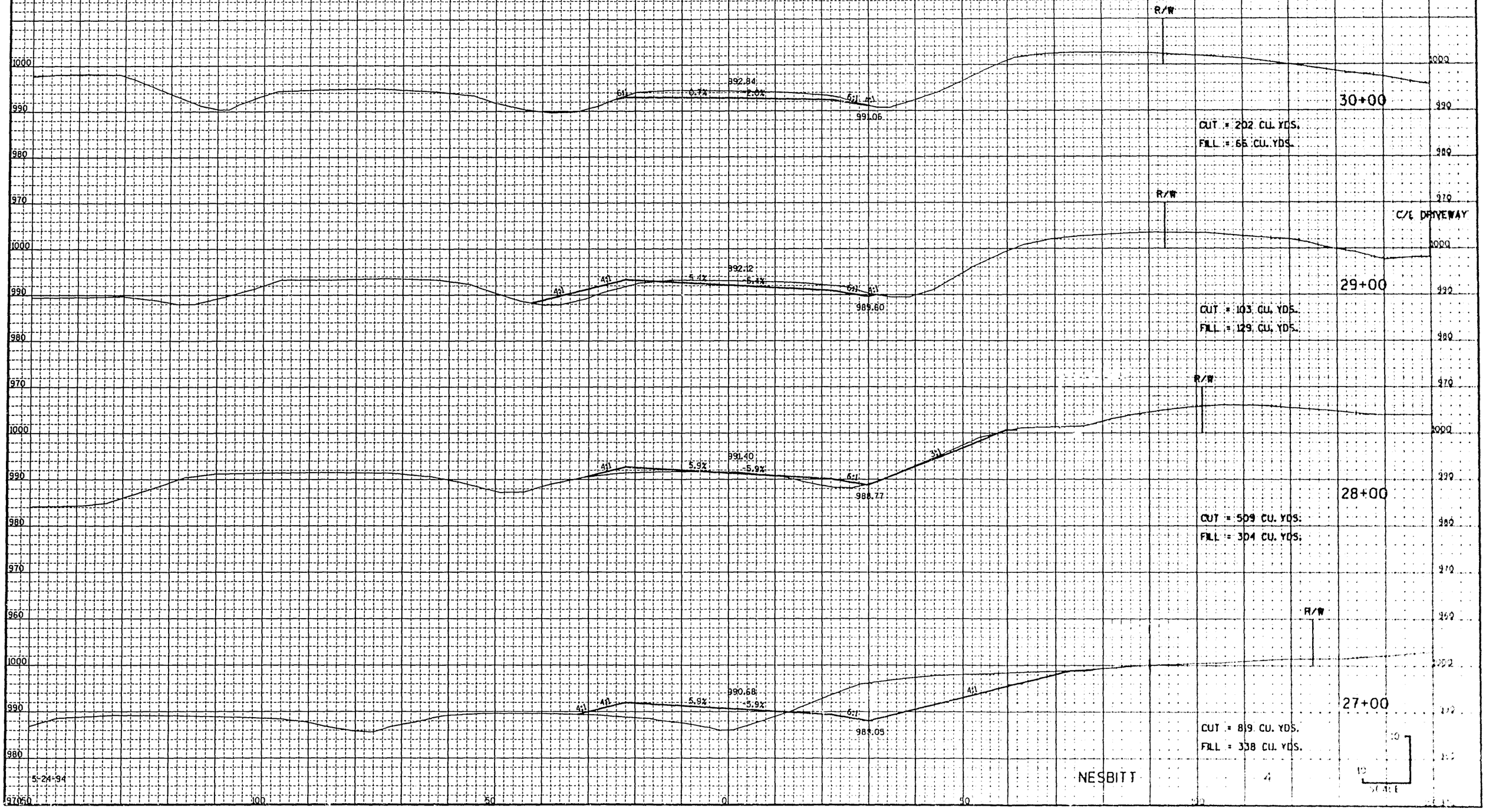
STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	[illegible]



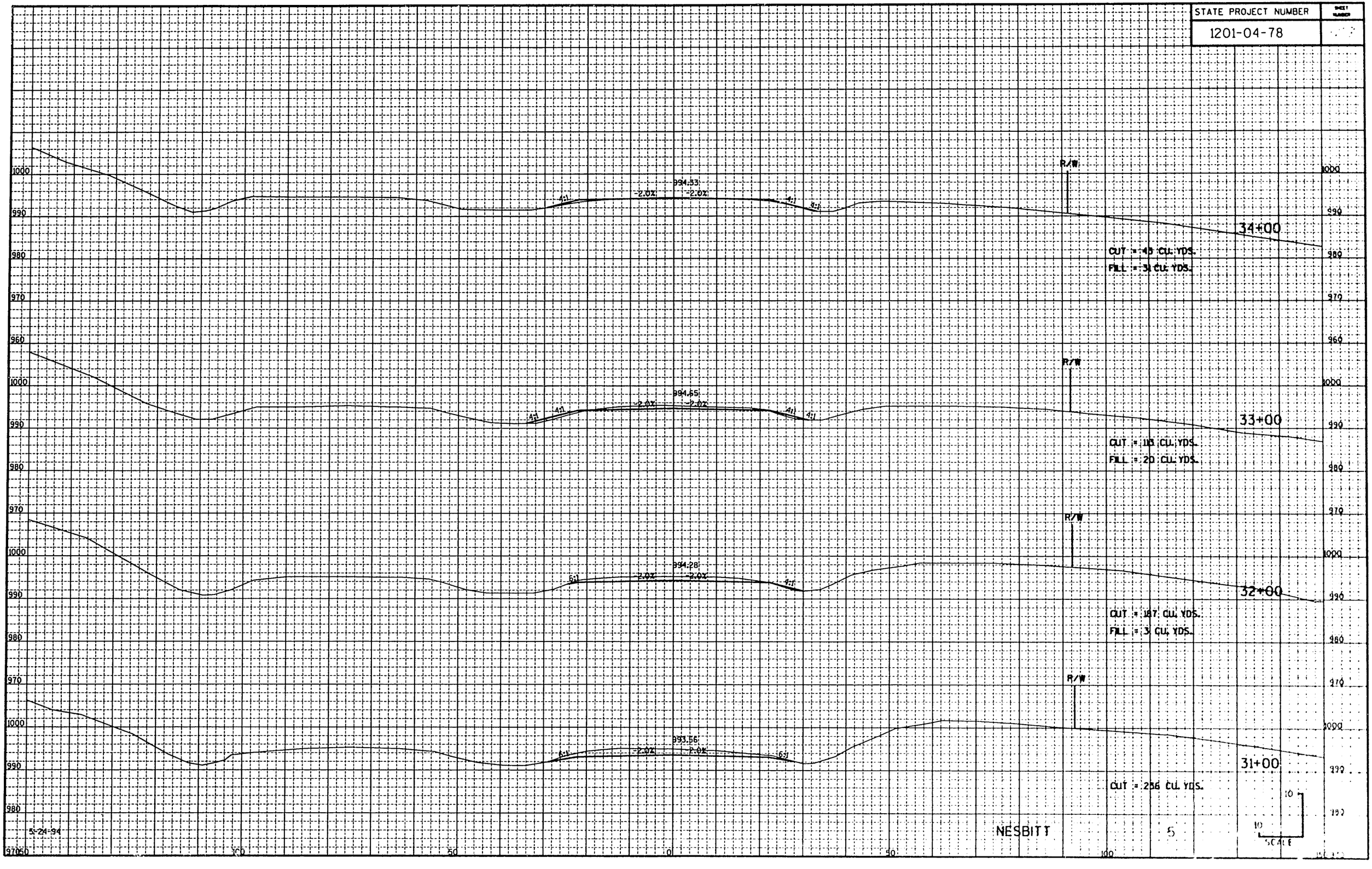


STATE PROJECT NUMBER
1201-04-78
R/W
990.00
5.9%
-5.9%
6:1
4:1
987.37
26+25
CUT = 302 CU. YDS.
FILL = 88 CU. YDS.
R/W
989.65
5.9%
-5.9%
6:1
4:1
987.02
26+00
CUT = 981 CU. YDS.
FILL = 160 CU. YDS.
TLE
987.56
4:1
4.8%
-4.5%
6:1
4:1
985.25
25+00
CUT = 607 CU. YDS.
FILL = 13 CU. YDS.
TLE
984.38
10:1
6:1
-0.2%
-2.0%
6:1
4:1
983.01
982.61
24+00
CUT = 220 CU. YDS.
FILL = 65 CU. YDS.
990
980
970
960
150
100
50
0
50
100
150
5-24-94
NESBITT
3
10
10
SCALE

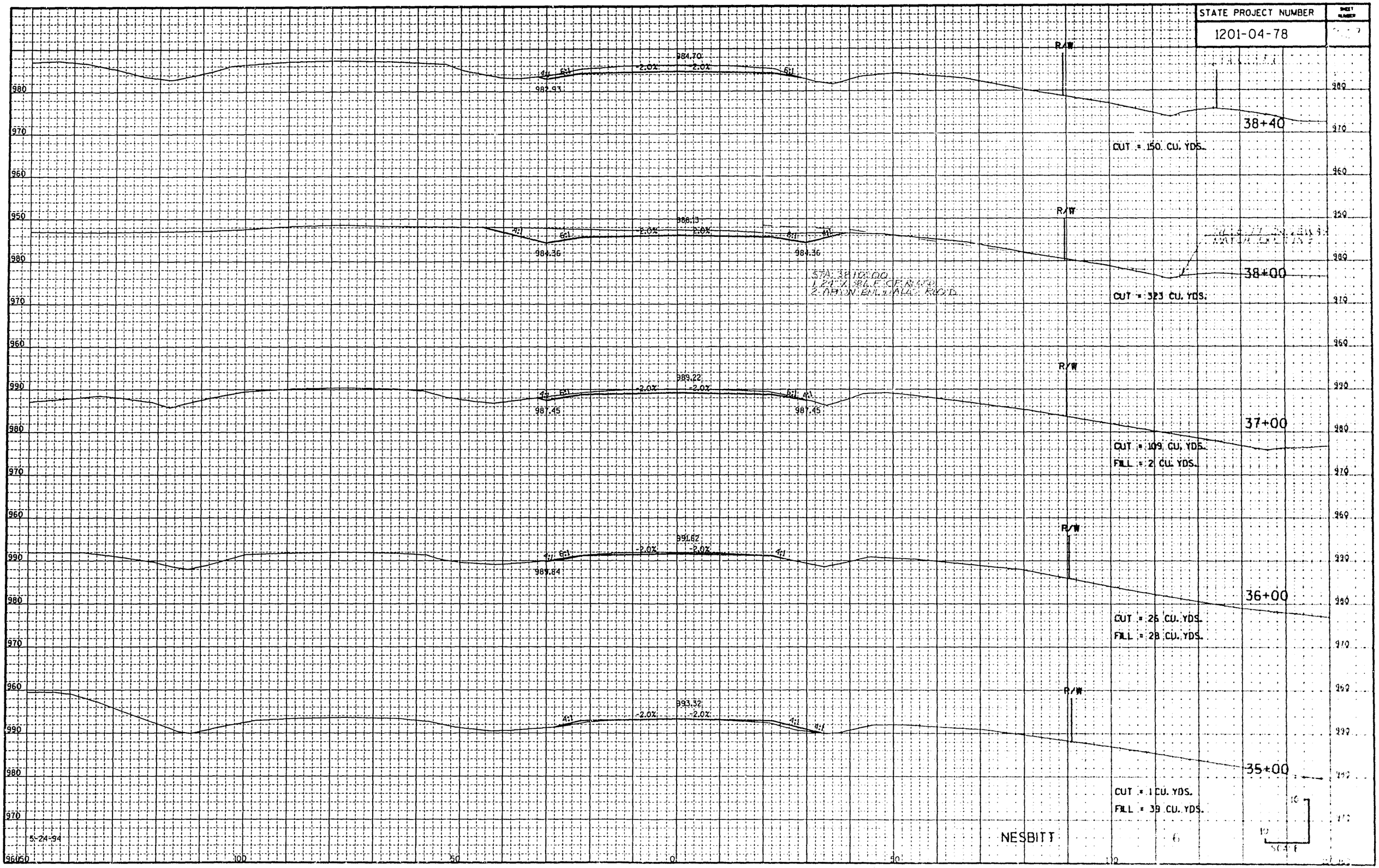
STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	7



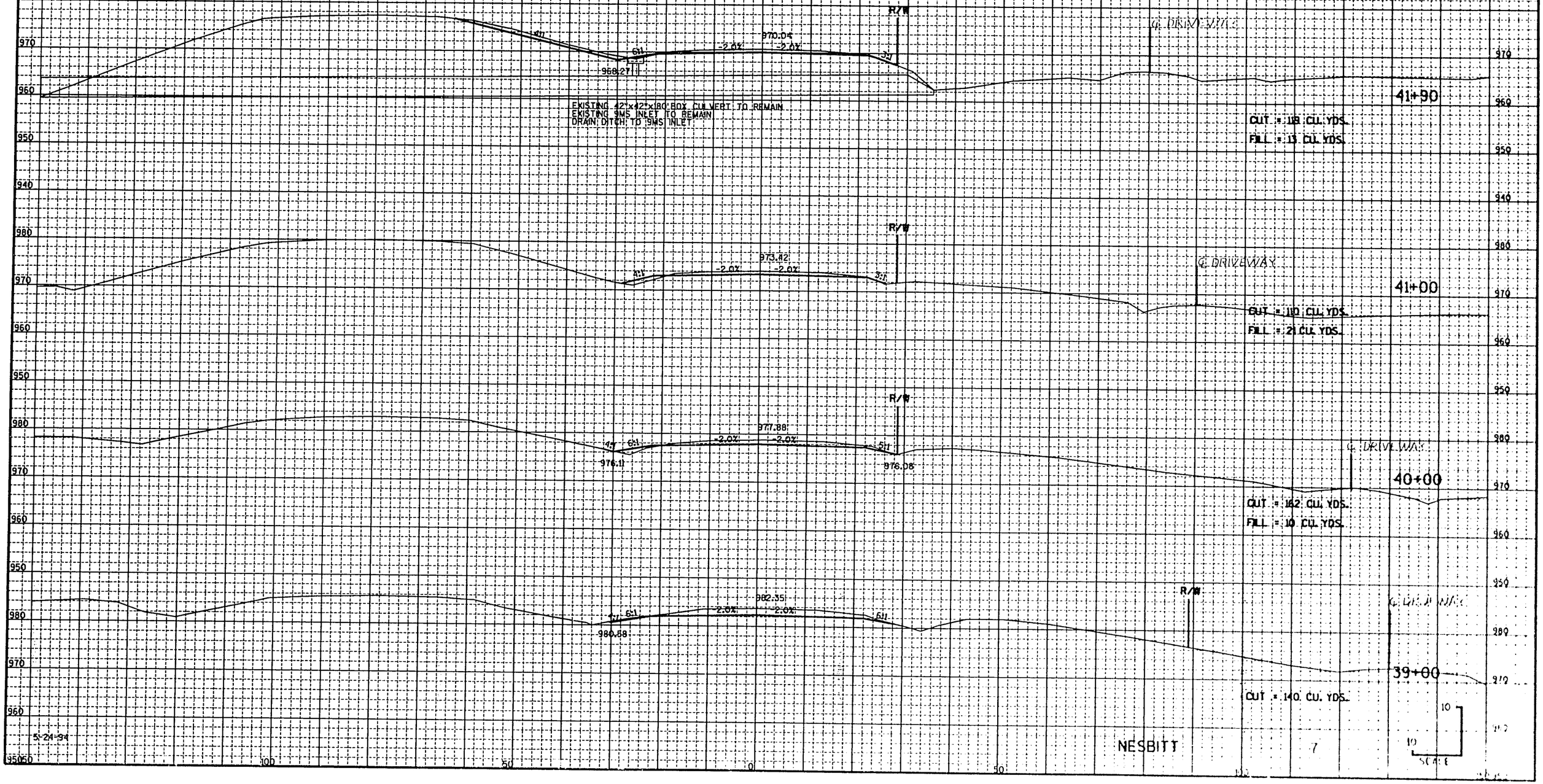
STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

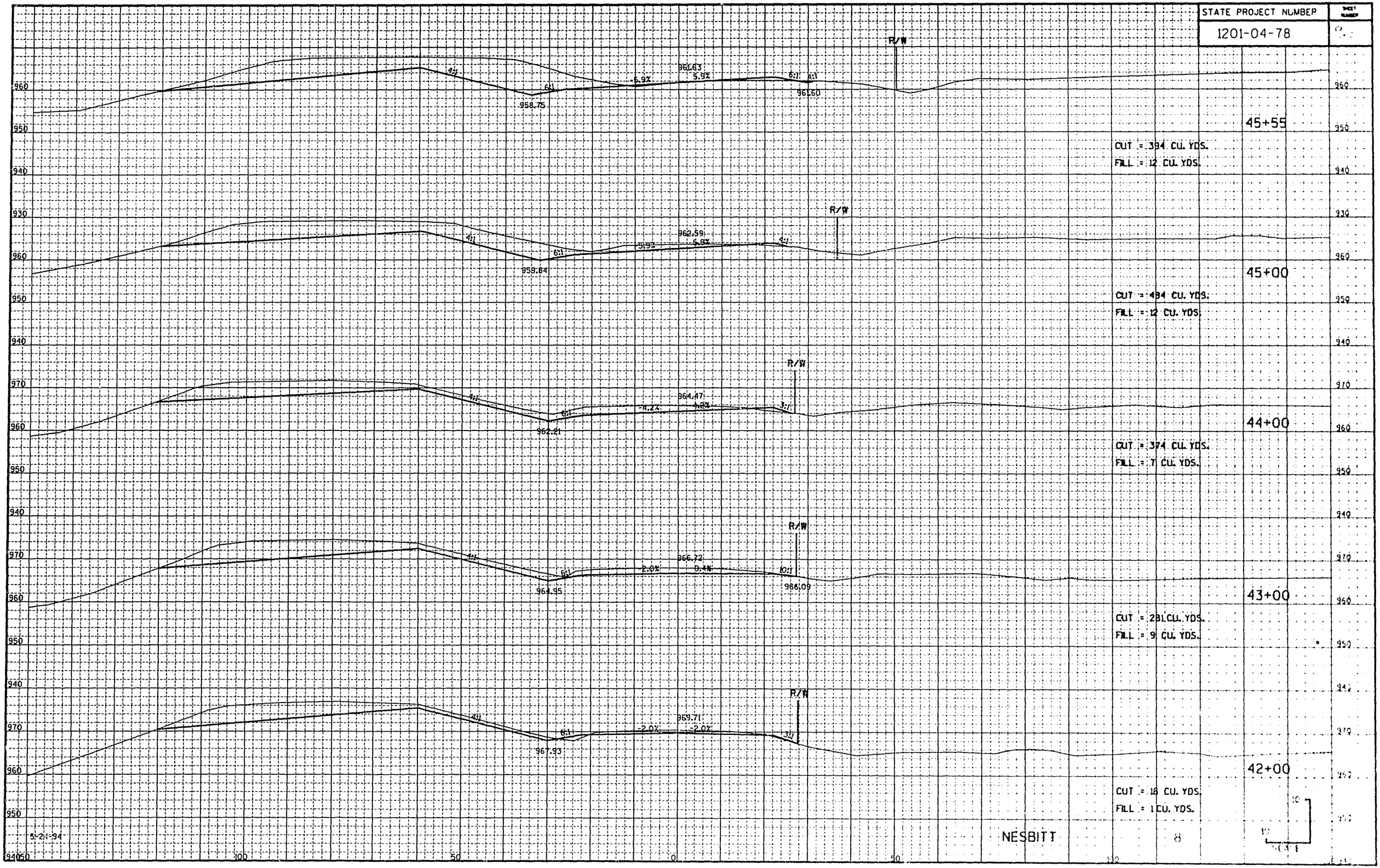


STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	30

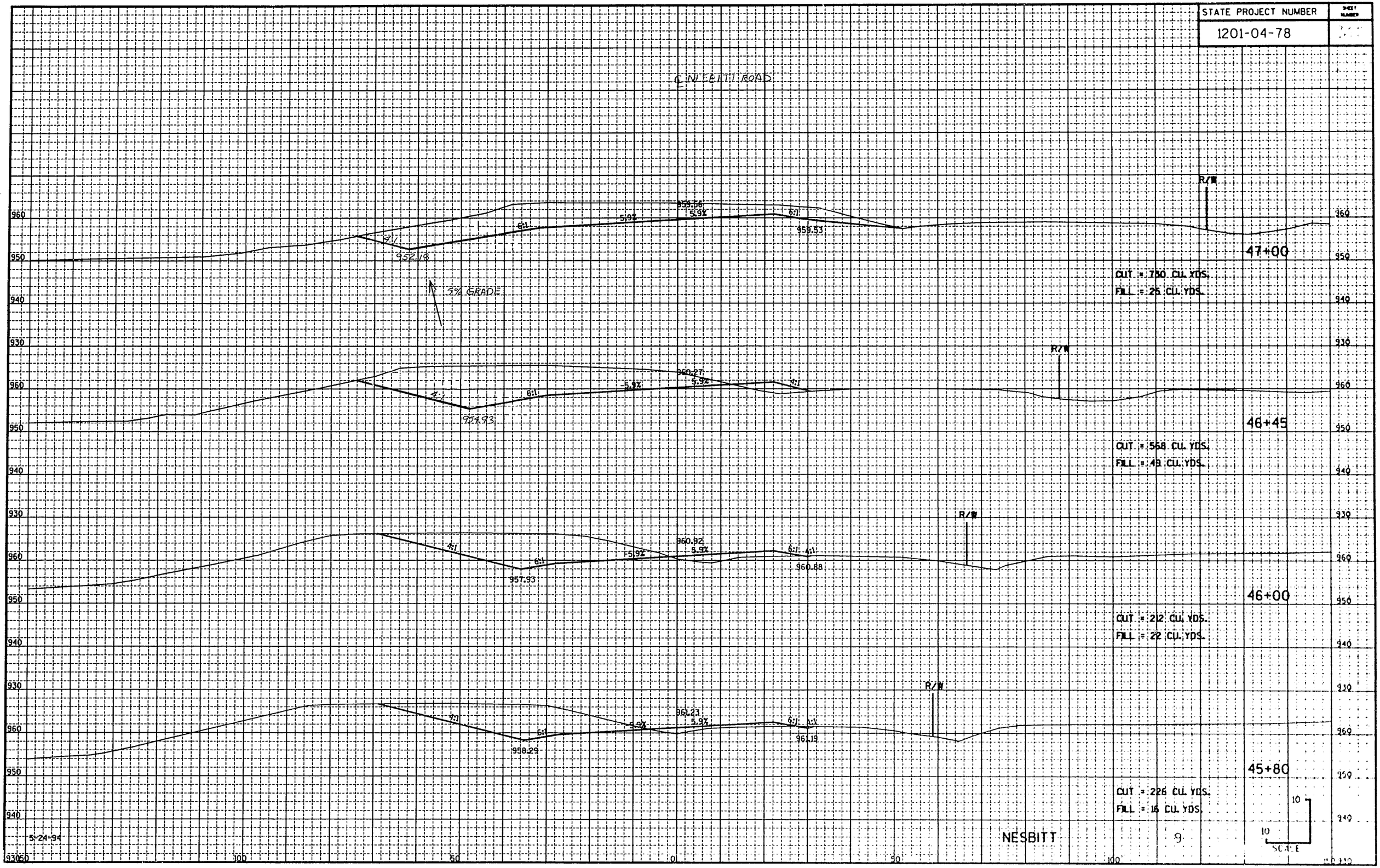


NESBITT

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	9



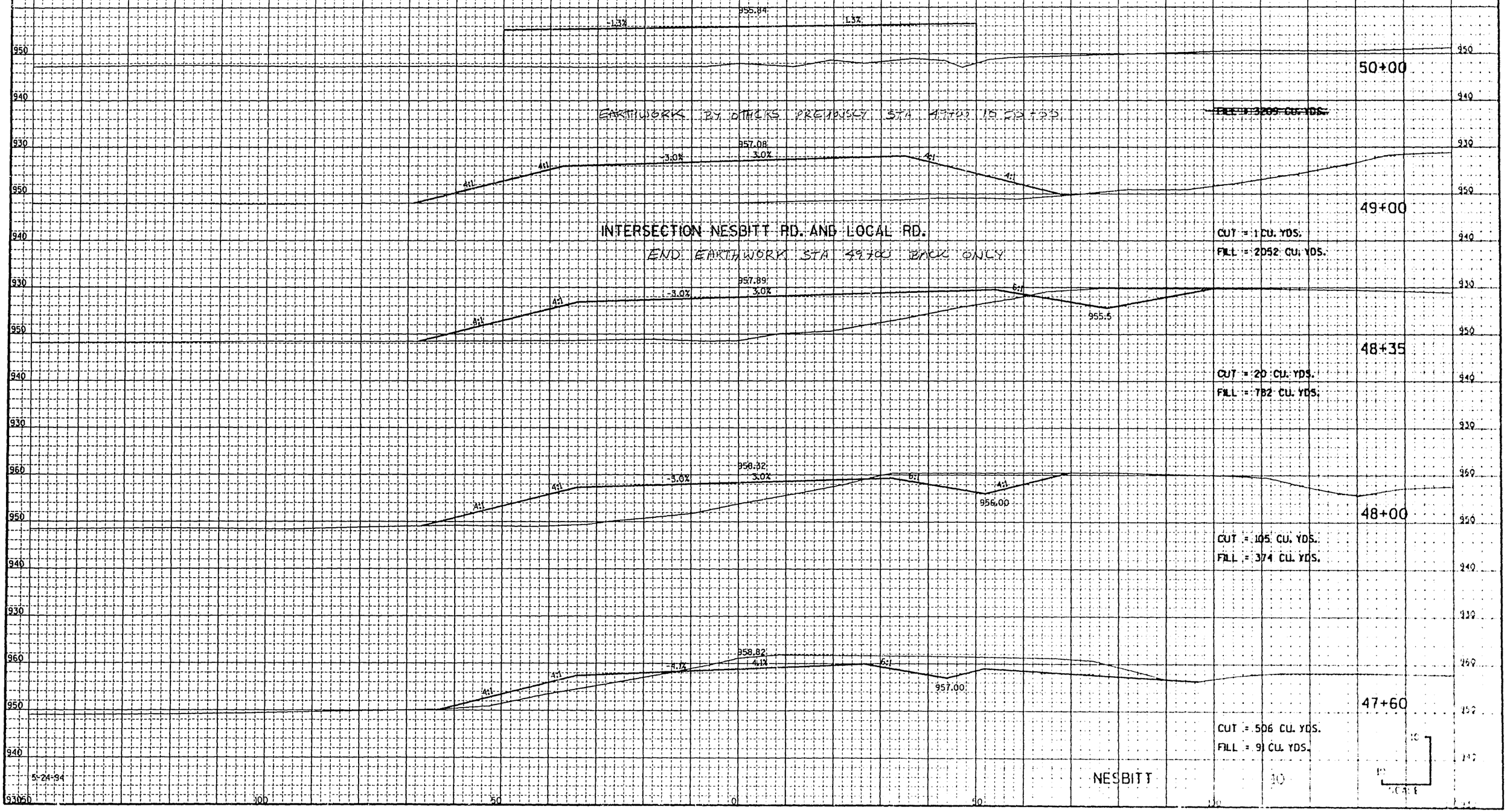
STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



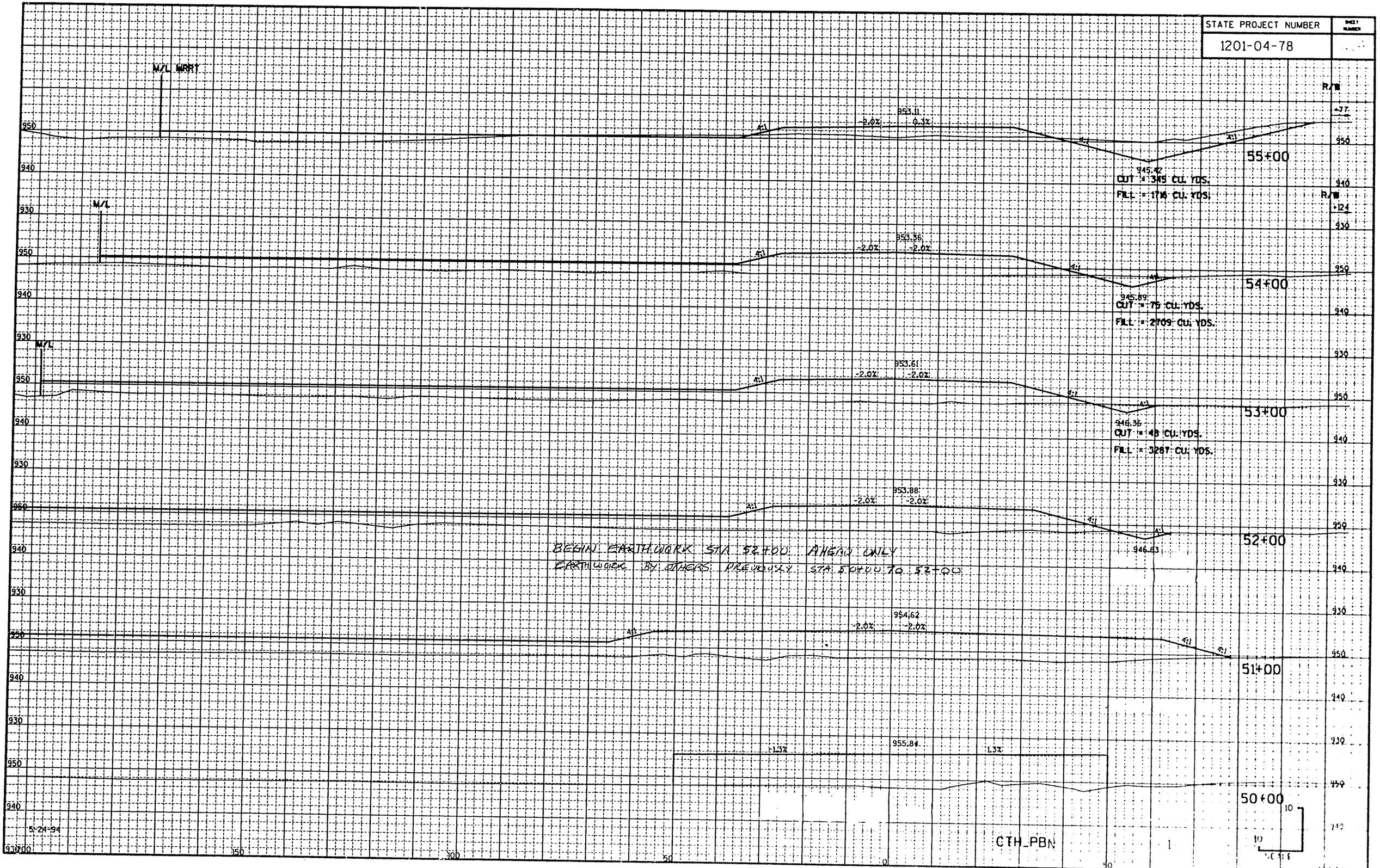
STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

END EARTHWORK STA. 50+00 BACK ONLY

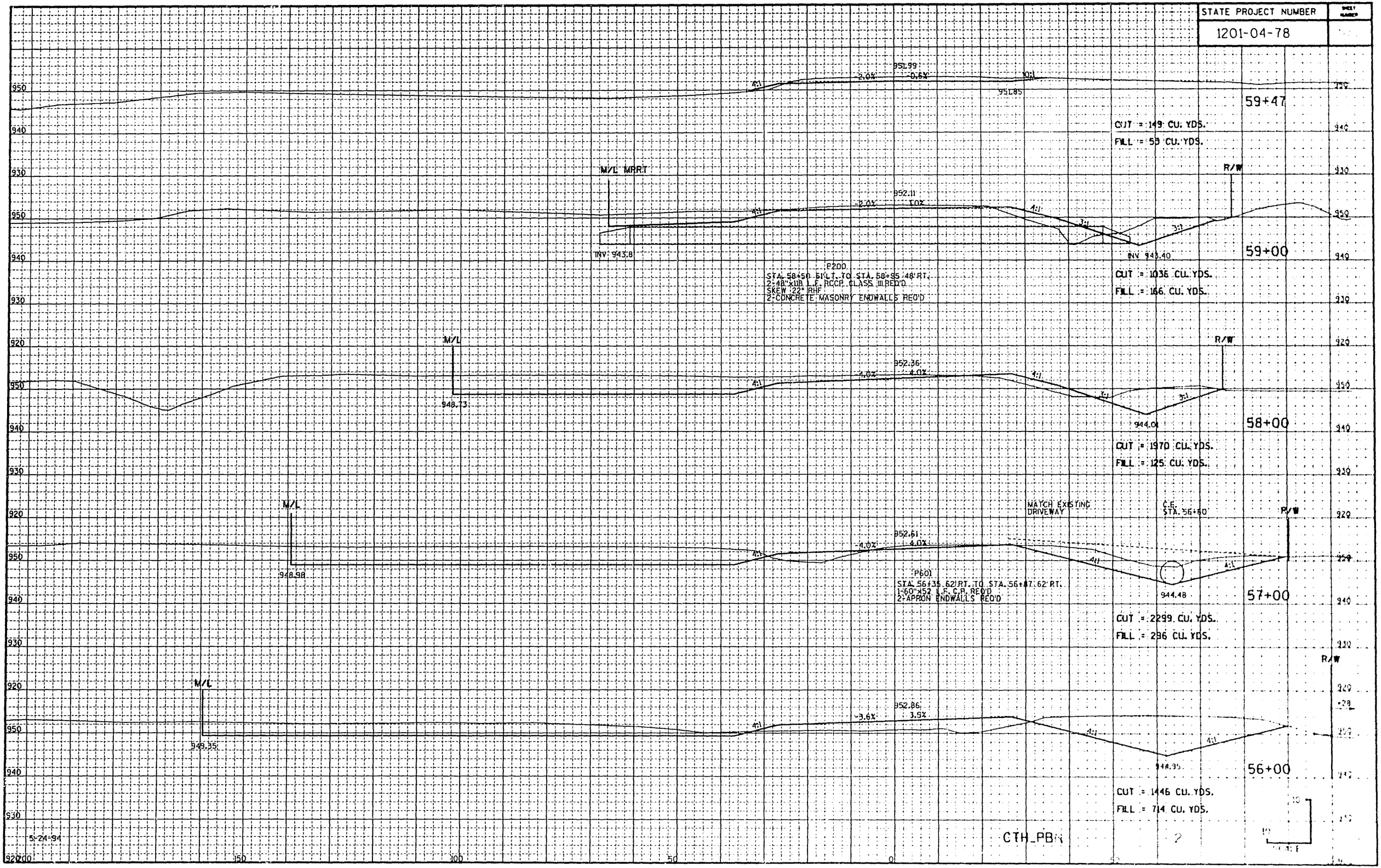
INTERSECTION NESBITT RD. AND CTH PBN



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

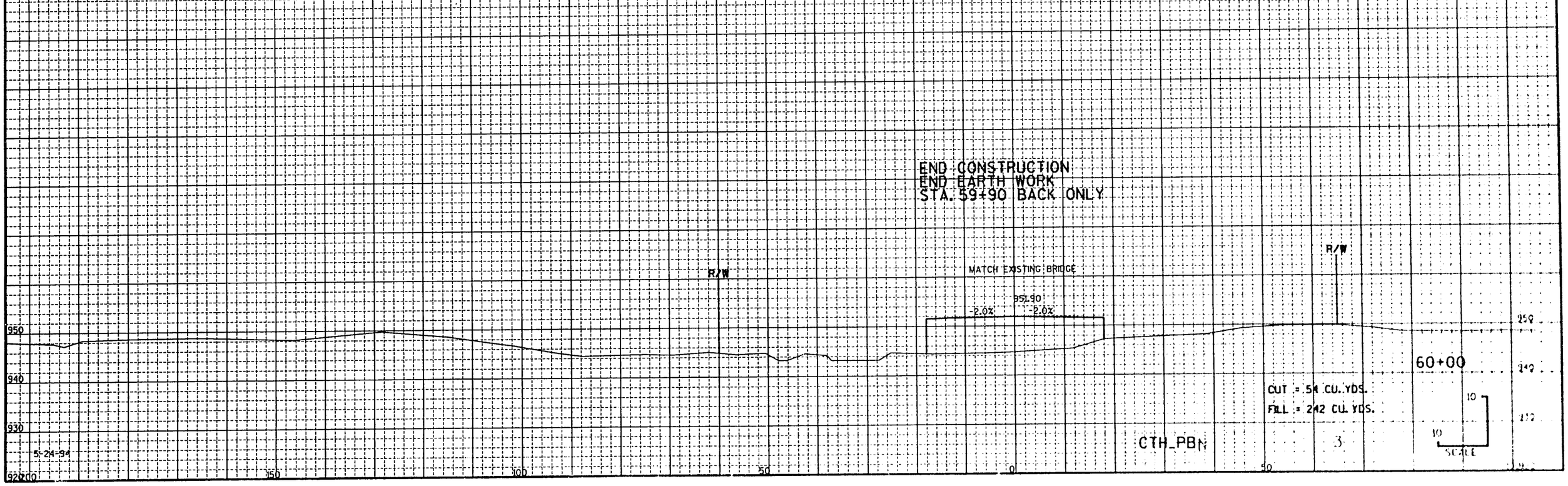


STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

END CONSTRUCTION
END EARTH WORK
STA. 59+90 BACK ONLY



5-24-94

CTH_PBN

3

STATE PROJECT NUMBER

1201-04-78

15+00

CUT = 258 CU. YDS.

FILL = 43 CU. YDS.

14+00

CUT = 196 CU. YDS.

13+50

CUT = 191 CU. YDS.

13+00

CUT = 114 CU. YDS.

12+65

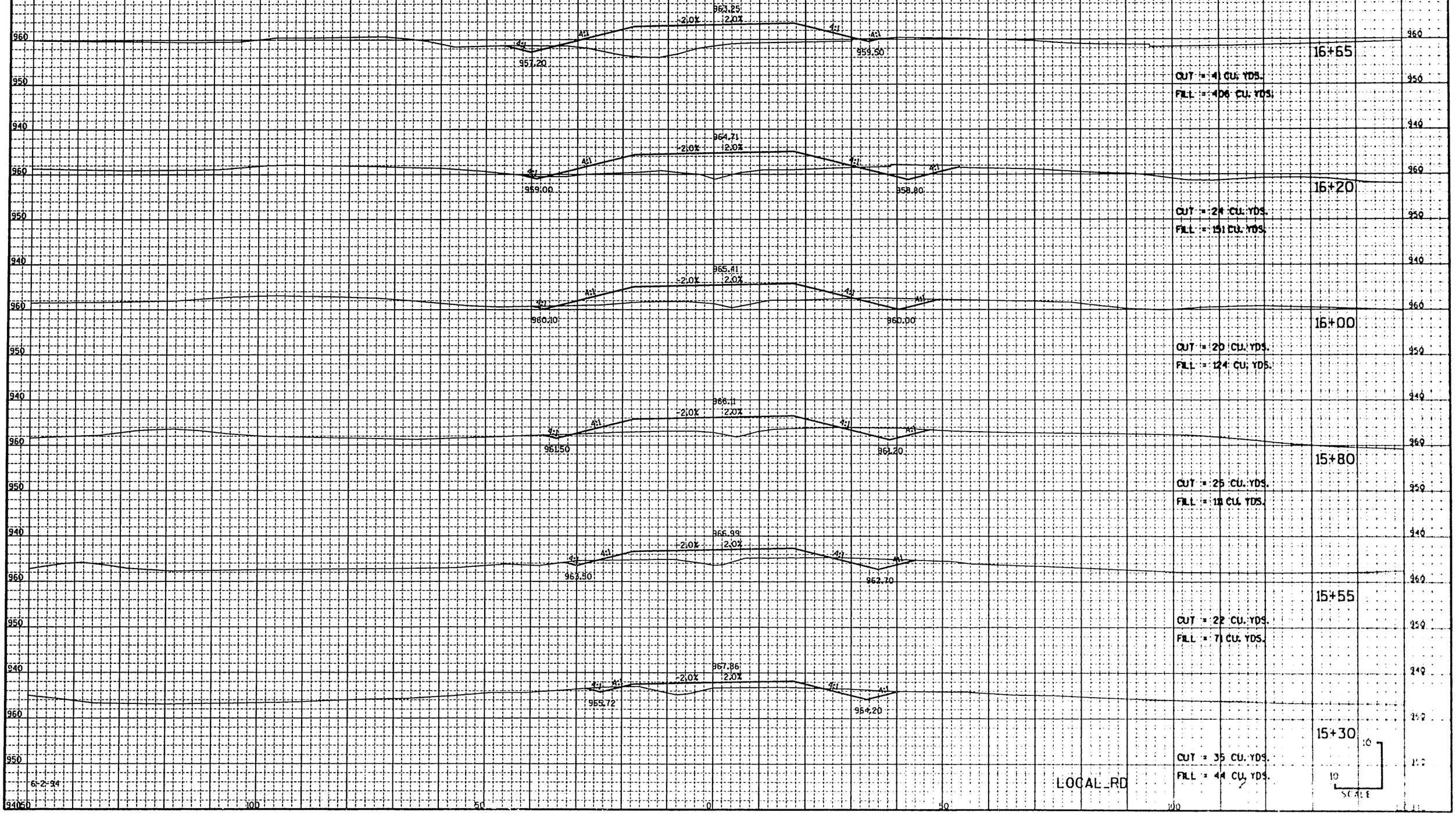
CUT = 156 CU. YDS.

12+00

6-2-94

LOCAL RD

STATE PROJECT NUMBER	
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

960.47
-2.0%
0.2%
4:1
4:1
954.56
4:1
16:1
951.48
18+12
CUT = 217 CU. YDS.
FILL = 55 CU. YDS.

960.62
-2.0%
0.7%
4:1
4:1
954.50
4:1
16:1
951.94
18+00
CUT = 92 CU. YDS.
FILL = 25 CU. YDS.

960.69
-2.0%
0.9%
4:1
4:1
954.51
4:1
8:1
952.19
17+95
CUT = 257 CU. YDS.
FILL = 82 CU. YDS.

960.88
-2.0%
1.5%
4:1
4:1
954.65
4:1
27:1
952.70
17+80
CUT = 699 CU. YDS.
FILL = 615 CU. YDS.

962.32
-2.0%
2.0%
4:1
4:1
955.90
4:1
956.70
4:1
17+00
CUT = 11 CU. YDS.
FILL = 341 CU. YDS.
10
1

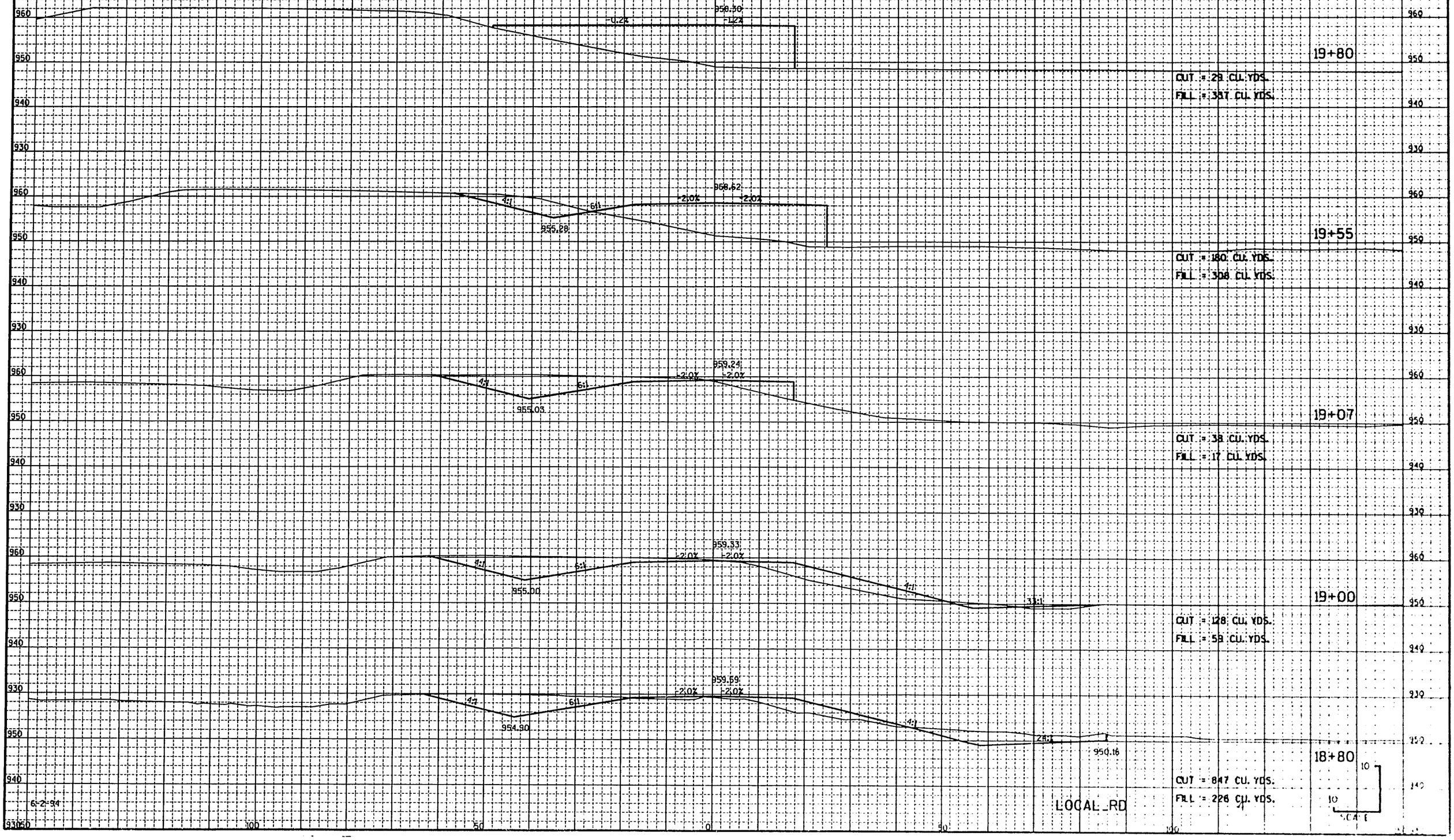
6-2-94

LOCAL RD

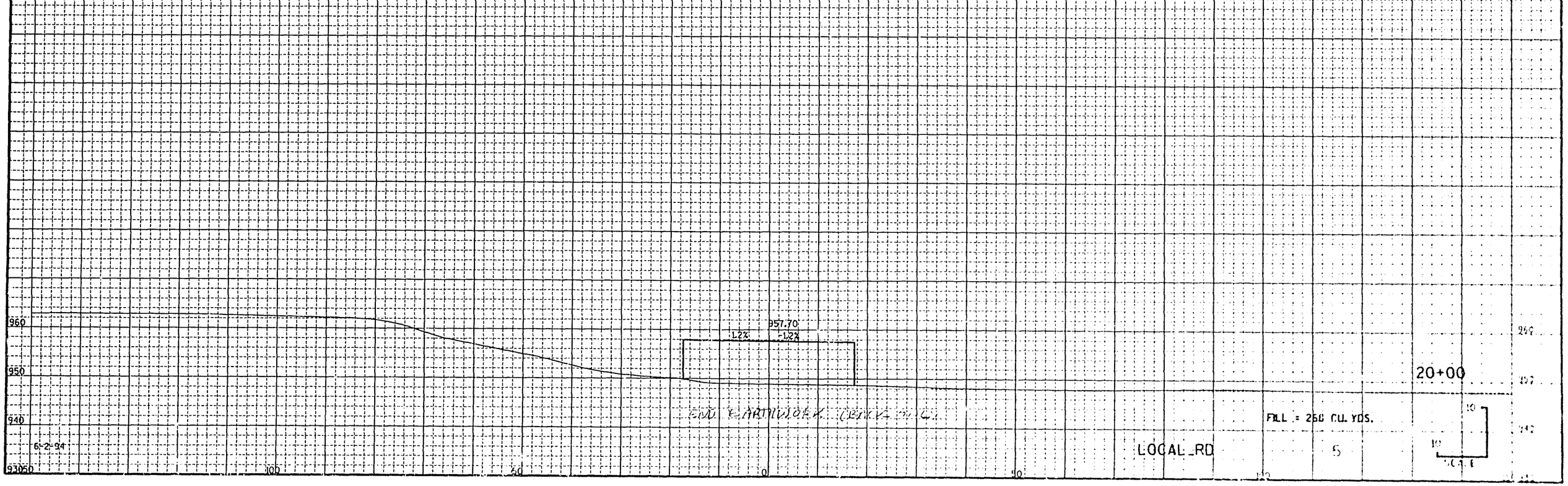
940 950 960

100 50 0 50

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

M/L CTH PBN SWALE

950.03
2.0% 2.0%
4:1

6+00
CUT = 2318 CU. YDS.
FILL = 231 CU. YDS.

M/L
944.39
950.86
2.0% 2.0%
4:1
949.63

5+00
CUT = 2062 CU. YDS.
FILL = 108 CU. YDS.

M/L
944.12
950.80
2.0% 2.0%
4:1
949.58

4+00
CUT = 1155 CU. YDS.
FILL = 50 CU. YDS.

943.70
950.74
2.0% 2.0%
4:1

3+00

BEGIN CONSTRUCTION
STA. 3+00
AHEAD ONLY

5-24-94

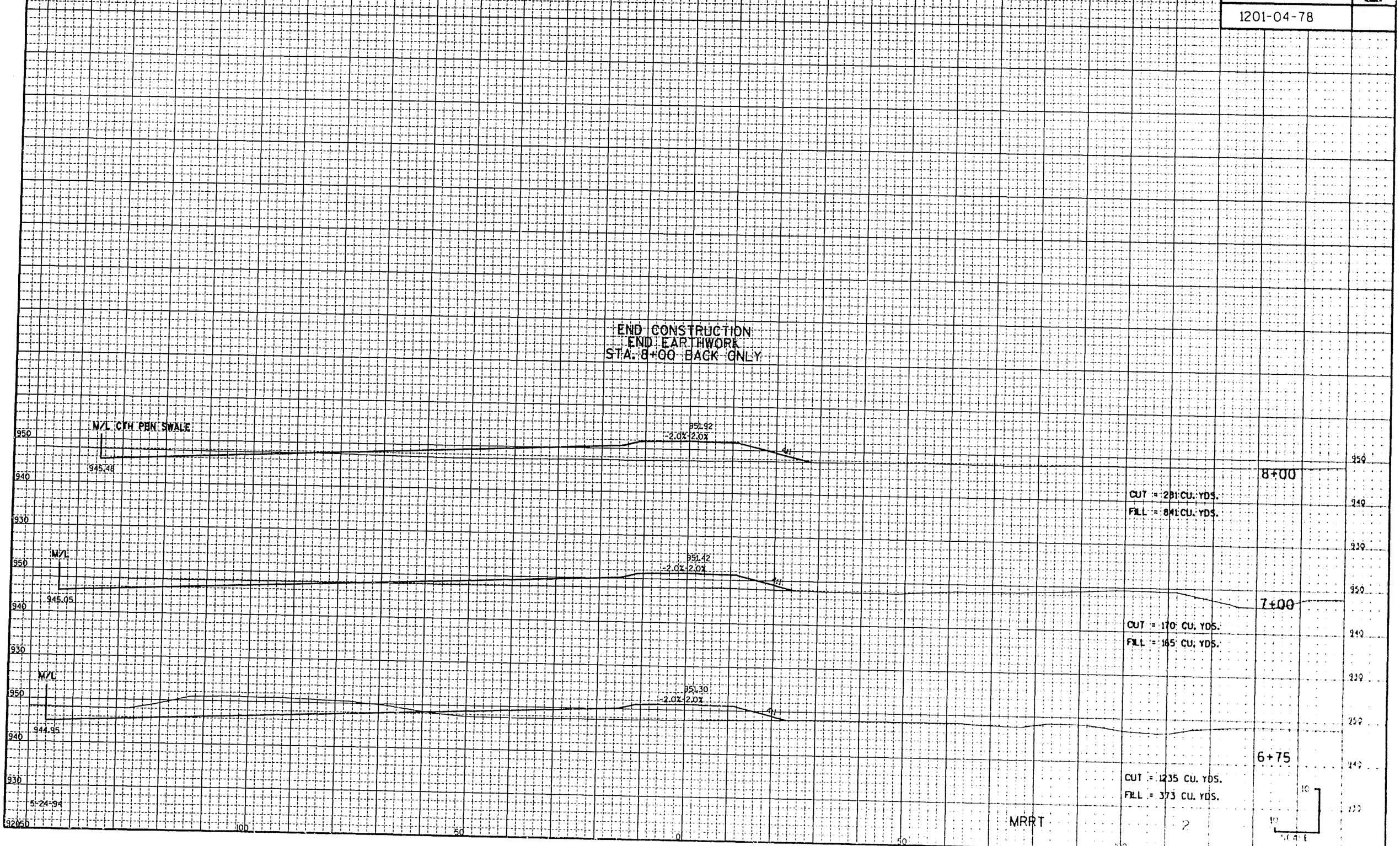
MRRT

1

SCALE
10
10

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-78	

END CONSTRUCTION
END EARTHWORK
STA. 8+00 BACK ONLY



STATE PROJECT NUMBER	SHEET NUMBER
1201-04-75	9.33
1201-04-78 / 9.44	

712+00
970

NOTE: THIS SHEET INCLUDED AS INFORMATION FOR BID ITEM "GRADING, SHAPING, AND FINISHING MEDIAN CROSSOVER REMOVAL, STA. 880+00 AREA"

(STATIONING ON THIS SHEET DOES NOT EQUATE TO STATIONING ON PROJECT 1201-04-78.)

711+00
970

711+00
970

710+00
970

GRADING LIMITED TO CROSS-HATCHED SECTIONS ±

710+00
970

PROJ. 1201-04-78
X-OVER REMOVAL & RESTORATION
INFORMATION FOR STA. 880+00 AREA.

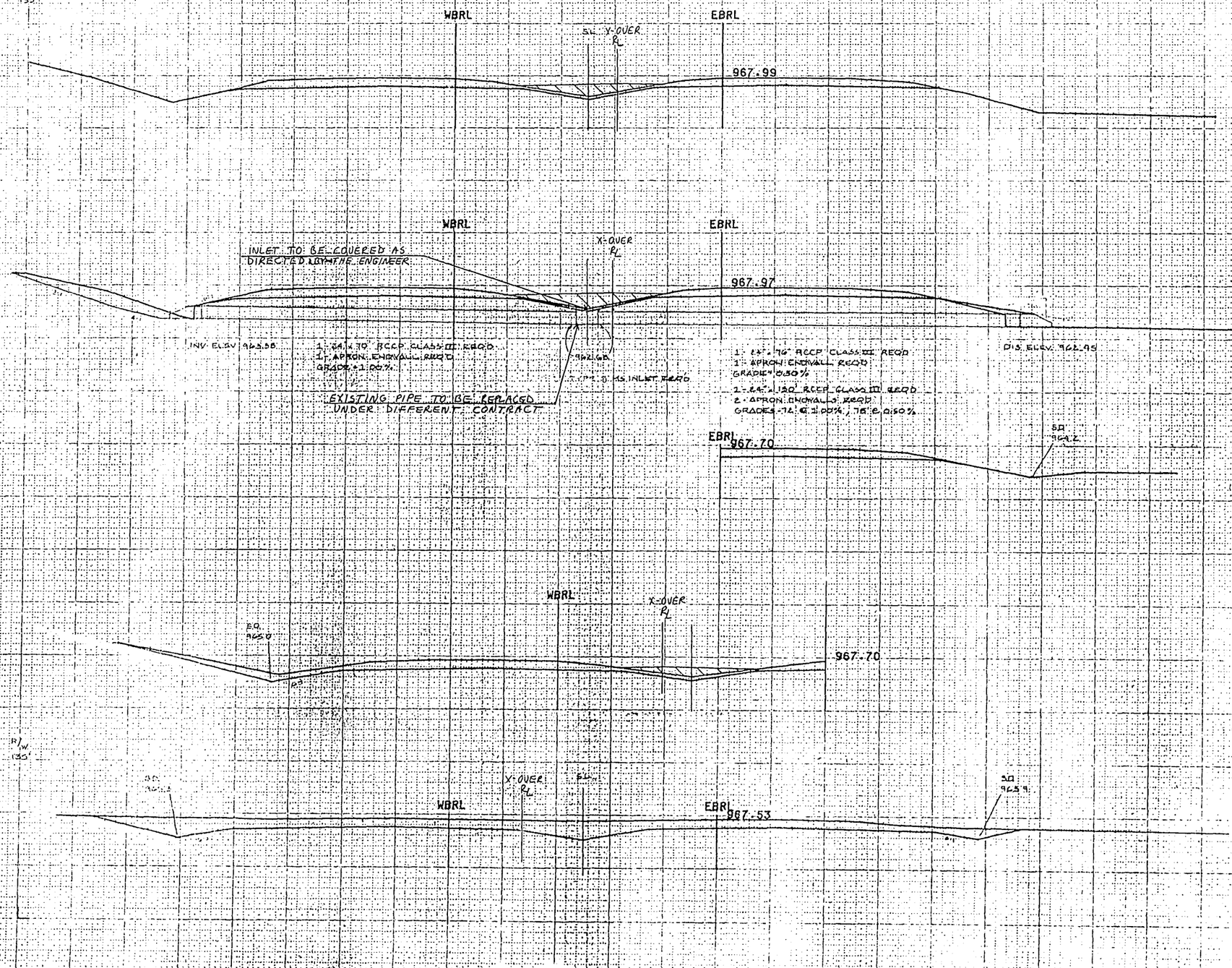
TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-75	9.34

1201-04-78 / 9.45

NOTE: THIS SHEET INCLUDED AS INFORMATION FOR BID ITEM "GRADING, SHAPING, AND FINISHING MEDIAN CROSSOVER REMOVAL, STA. 880+00 AREA".
(STATIONING ON THIS SHEET DOES NOT EQUATE TO STATIONING ON PROJ. 1201-04-78.)



714+00
970

713+93
970

713+00
970

713+00
970

712+43
970

GRADING LIMITED TO CROSS-HATCHED SECTIONS±

PROJ. 1201-04-78
X-OVER REMOVAL & RESTORATION
INFORMATION FOR STA. 880+00 AREA

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10 0

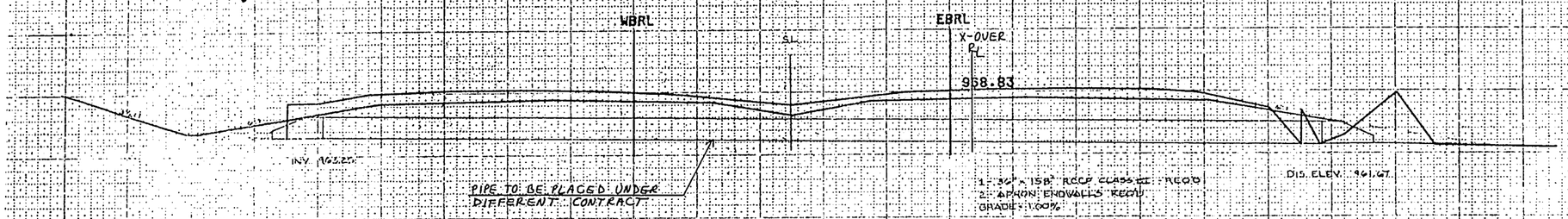
SHEET NO 4

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-75	9.35

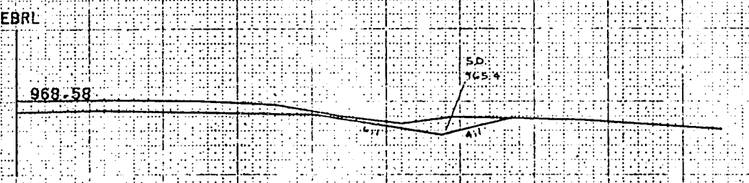
1201-04-78 / 9.46

NOTE: THIS SHEET INCLUDED AS INFORMATION FOR BID ITEM "GRADING, SHAPING, AND FINISHING MEDIAN CROSSOVER REMOVAL, STA. 880+00 AREA.

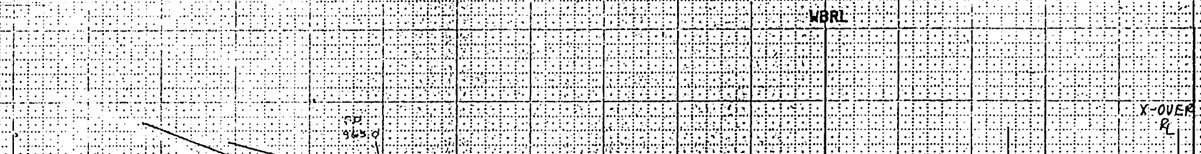
(STATIONING ON THIS SHEET DOES NOT EQUATE TO STATIONING ON PROJ. 1201-04-78.)



716+85
970



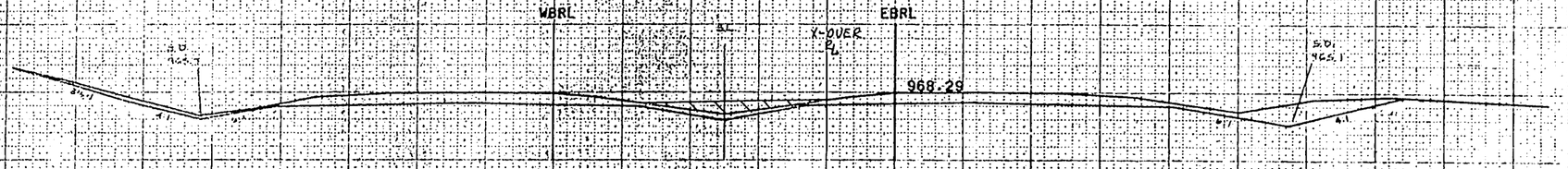
716+00
970



716+00
970

GRADING LIMITED TO CROSS-HATCHED SECTIONS ±

PROJ. 1201-04-78
X-OVER REMOVAL & RESTORATION
INFORMATION FOR STA. 880+00 AREA.



715+00
970

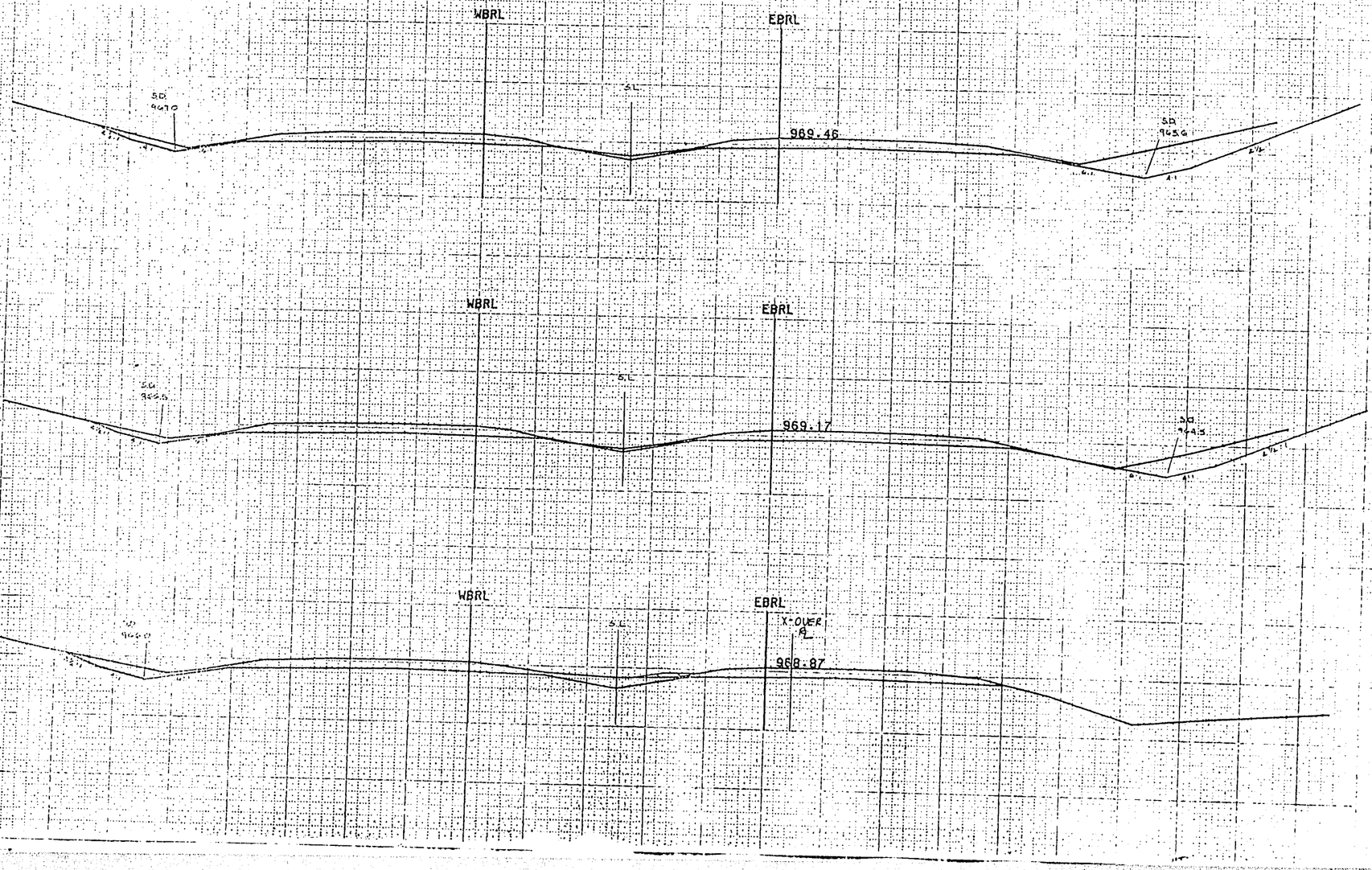
20
10

TEMPLATE IS SUBGRADE
PRINTED ELEV IS SUBGRADE

SCALE: FEET
20 10 0

STATE PROJECT NUMBER	SHEET NUMBER
1201-04-75	9.36
1201-04-78/9,47	

NOTE: THIS SHEET INCLUDED AS INFORMATION FOR BID ITEM "GRADING, SHAPING, AND FINISHING MEDIAN, CROSSOVER REMOVAL, STA. 880+00 AREA. (STATIONING ON THIS SHEET DOES NOT EQUATE TO STATIONING ON PROJECT 1201-04-78.)



719+00
970

718+00
970

GRADING LIMITED TO CROSS-HATCHED SECTIONS ±

PROJ. 1201-04-78
X-OVER REMOVAL & RESTORATION
INFORMATION FOR STA. 880+00 AREA.

717+00
970

TEMPLATE IS SUBGRADE
PRINTED FLEV IS SUBGRADE

SCALE: FEET
20 10 0