

DANE

1201-04-79

50-7
30-13
3-1201

INDEX OF SHEETS		
Sheet No. 1	Title	Typical Sections and Details (Includes Erosion Control Plans)
Sheet No. 2-2.56	Estimate of Quantities	
Sheet No. 3-3.5	Miscellaneous Quantities	
Sheet No. 3A-3N	Right of Way Plat	
Sheet No. 4-4.13	Plan and Profile	
Sheet No. 5-5.17	Standard Detail Drawings	
Sheet No. 6-6.47	Sign Plates	
Sheet No. 7-7.21	Structure Plans	
Sheet No. 8-8.4	Computer Earthwork Data	
Sheet No. 9-9.78	Cross Sections	
TOTAL SHEETS = 265		



DESIGN DESIGNATION		
	(EXISTING)	(BYPASS)
A.D.T. 1995	=	----
A.D.T. 2012	=	7,000
D.H.V. 2012	=	700
D.	=	60-40
T. (DHV)	=	4.9%
DESIGN SPEED	=	65 MPH
ESALS	=	N.A.

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	— P —
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)	----		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

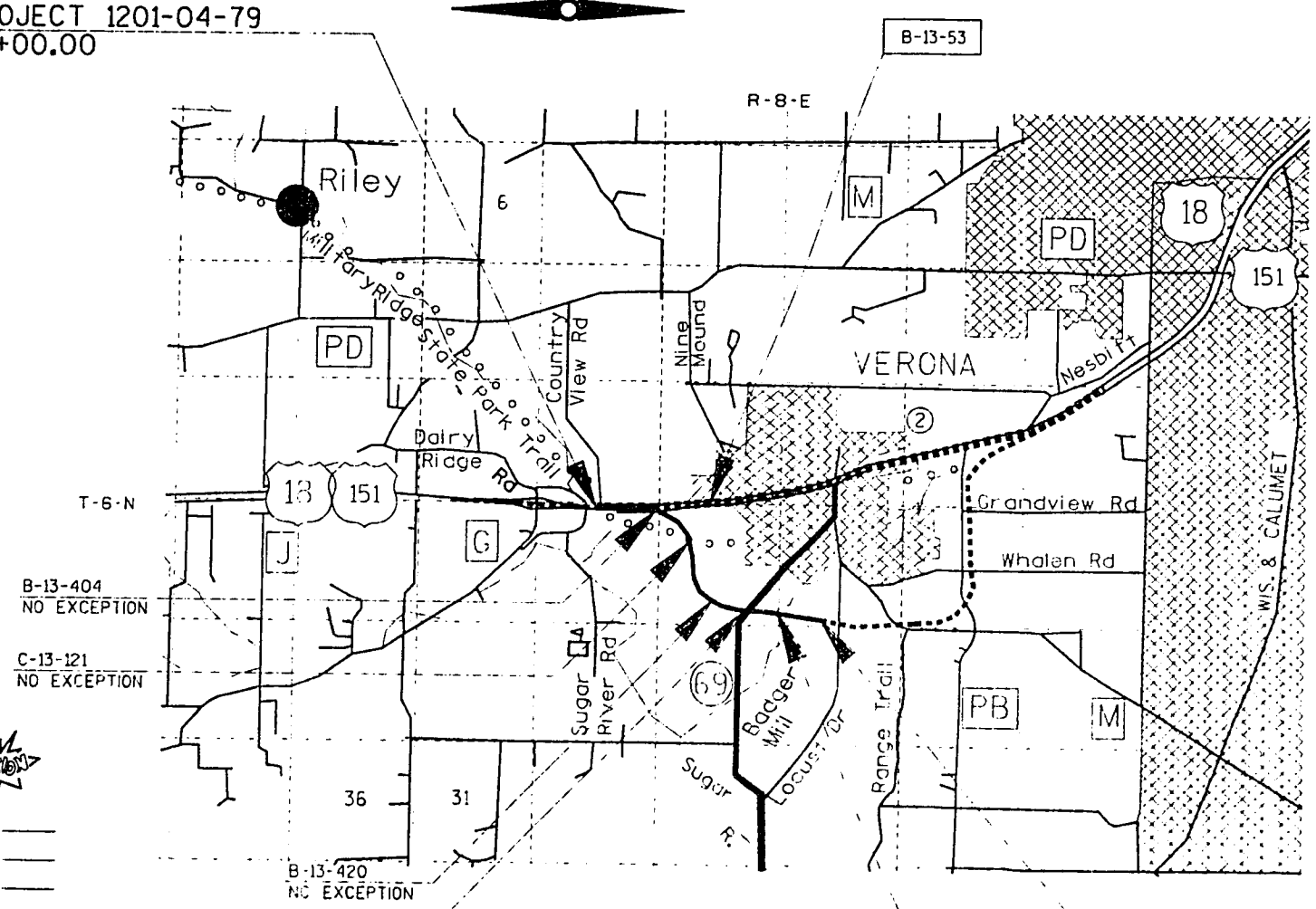
PLAN OF PROPOSED IMPROVEMENT

VERONA BYPASS
(WEST INTERCHANGE - LOCUST DRIVE)
U.S.H. 18
DANE COUNTY



STATE PROJECT NUMBER
1201-04-79

BEGIN PROJECT 1201-04-79
STA. 500+00.00
X= 2,115,423.60
Y= 359,945.77



B-13-407 & B-13-408
EXCEPTION TO NET & LENGTH
STA. 584+60.63 TO STA. 586+51.51

B-13-424
EXCEPTION TO NET & LENGTH
STA. 592+24.83 TO STA. 597+68.58

LAYOUT
SCALE 0 0.8 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.982 M. RUPAL.

END PROJECT 1201-04-79
STA. 607+00.00

ALL COORDINATES IN THIS PLAN
ARE REFERENCED TO THE
WISCONSIN COORDINATE SYSTEM
SOUTH ZONE.
GRID CONVERSION FACTOR = 1.000

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1201-04-79	NH 017(71)	1

AS BUILT STRUCTURE PLAN

STRUCTURES B-13-53
PRIME CONTRACTOR MAHON BROS., INC.
STRUCTURE SUBCONTRACTOR LUNDA
PROJECT MANAGER JEFF GUST
WORK START-COMPLETED FEB. 14, 1995-DEC. 20, 1995

CRIM HILL
VERONA, WISCONSIN

8-26-94

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY: TEG
DESIGNED BY: JARVIS
CHECKED BY: RLF
PROJECT MANAGER: RRF
PROJECT ENGINEER: NKAH ELL

9/6/94 Jeff Gust
9/20/94 Richard Gust

GENERAL NOTES

STANDARD DETAIL DRAWINGS

KEY MAP

STATE PROJECT NUMBER
1201-04-79SHEET NO.
2.0

GENERAL NOTES

USH 18

DANE COUNTY

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. COMMON. ROCK 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 ASPHALTIC CONCRETE PAVEMENT SHALL CONSIST OF A 1-1/2-INCH SURFACE COURSE AND TWO BINDER COURSES.
5. THE 3, 3-1/2 AND 4-INCH ASPHALTIC CONCRETE PAVEMENT SHALL CONSIST OF A 1-1/2-INCH SURFACE COURSE AND ONE BINDER COURSE. THE 2-INCH ASPHALTIC SURFACE SHALL CONSIST OF ONE 2-INCH 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 SMALL 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.

8A5-9a,9b,9c,9d
8B6-3
8C1-5
8C5-2
8D1-11
8D3-4
8D4-3
8D15-1a
8D15-1b8E4-2
8E6-7
8E8-2
8E9-4
8F1-10a
8F4-5
8F6-3

9A1-8a

11A1-2

12A3-4

13A4-3
13B2-3
13C1-9
13C12-2

13C13-1

14B15-1a
14B15-1b

14B16-1a,1b

14B18-1a

14B18-1c
14B20-2a
14B20-2b

15C7-4a

15B1-7a,7b

15C2-2

15C8-6a & 6b

15C8-6d

15C8-6e

15C10-3b

15C10-3c

15C11-5

15C12-2

15D12-1

INLET & MANHOLE COVERS

MANHOLES TYPE 1

INLETS, TYPES 1, 2, 3 & 4

INLETS, TYPES 8, 9, 10 AND 11

CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES

CONCRETE SURFACE DRAINS, DROP INLET TYPE AT STRUCTURES

CONCRETE SURFACE DRAIN AND ASPHALTIC FLUME

EDGEDRAIN OUTLET DETAILS

EDGEDRAIN AND CRUSHED AGGREGATE BASE COURSE, OPEN GRADED,

NO.1 OR NO.2

SOD OR MASONRY AND SOD DITCH CHECKS

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

TYPICAL INSTALLATION OF EROSION BALES

SILT FENCE

APRON ENDWALLS FOR CULVERT PIPE

JOINT TIES FOR CONCRETE PIPE

REINFORCED CONCRETE APRON ENDWALLS FOR PIPE UNDERDRAIN

AT GRADE SIDE ROAD INTERSECTIONS, TYPES "B", "C" AND "D"

MAINTENANCE CROSSOVER FOR FREEWAYS

NAME PLATE-STRUCTURES

ASPHALTIC SHOULDER RUMBLE STRIPS

CONCRETE PAVEMENT APPROACH SLAB

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES

DOVELED NON-REINFORCED CONCRETE PAVEMENT; RANDOM SPACED

JOINTS 17'-20'-18'-19'

DOVELED NON-REINFORCED CONCRETE PAVEMENT (TRANSVERSE JOINTS

SPACED AT 20' AND NORMAL)

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

CLASS "A" STEEL PLATE BEAM GUARD, POST MOUNTING ON PIER FOOTING

AND CULVERTS

CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE

TYPE 1 AND 2

CLASS "A" STEEL PLATE BEAM GUARD (AT BRIDGES, OBSTACLES

AND SIDEROADS/DRIVEWAYS)

CLASS "A" STEEL PLATE BEAM GUARD BULLNOSE AT TWIN BRIDGES

STEEL THREE BEAM STRUCTURE APPROACH

STEEL THREE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARED

END AND VERTICAL FACED PARAPETS

PAVEMENT MARKING SYMBOLS

WOVEN WIRE FENCE

BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES

PAVEMENT MARKING (MAINLINE & INTERSECTIONS)

PAVEMENT MARKING (ISLANDS, STOP LINE AND CROSS WALK)

PAVEMENT MARKING (RAMPS AND GORES)

RAISED PAVEMENT MARKERS (RAMPS AND ARROWS)

RAISED PAVEMENT MARKERS (CASTING AND SAWCUT DETAIL)

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING

OPERATIONS)

TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STANDARD ABBREVIATIONS

B/L
C/L OR E
T/L
R/L OR E
MIN.BASE LINE
CENTER LINE
TRANSIT LINE
REFERENCE LINE
MINIMUMMAX.
NOR.
TYP.
VAR.MAXIMUM
NORMAL
TYPICAL
VARIABLEF.E.
P.E.
CABC
DCBC
OGBC
SHLDR.FIELD ENTRANCE
PRIVATE ENTRANCE
CRUSHED AGGREGATE BASE COURSE
DENSE GRADED BASE COURSE
OPEN GRADED BASE COURSE
SHOULDERSDD
S.E.
N.C.
R.C.
EBRLSTANDARD DETAIL DRAWINGS
SUPERELEVATION
NORMAL CROWN
REVERSE CROWN
EASTBOUND REFERENCE LINEWBRL
PU
PUU
CP
CSCPWESTBOUND REFERENCE LINE
PIPE UNDERDRAIN
PIPE UNDERDRAIN UNPERFORATED
CULVERT PIPE
CORRUGATED STEEL CULVERT PIPECSPA
RCP, SS
RCCP
RCHECPCORRUGATED STEEL PIPE ARCH
REINFORCED CONCRETE PIPE, STORM SEWER
REINFORCED CONCRETE CULVERT PIPE
REINFORCED CONCRETE HORIZONTAL ELLIPTICAL

MH

MANHOLE

EBE
EBS
ACP
R.O.EXCAVATION BELOW EMBANKMENT
EXCAVATION BELOW SUBGRADE
ASPHALTIC CONCRETE PAVEMENT
RUNOUT

CONSTRUCTION DETAIL INDEX

SHEET NO.

TITLE

2.0 ——— GENERAL NOTES

2.1 - 2.2 ——— PROJECT OVERVIEW

2.3 - 2.7 ——— TYPICAL SECTIONS

2.8 - 2.18 ——— CONSTRUCTION DETAILS

2.21 - 2.23 ——— INTERSECTION DETAILS

2.19 - 2.20 & } RAMP PAVING DETAILS

2.24 - 2.27 }

2.28 ——— CONTOUR MAP

2.29 ——— CROSS SECTION MATCHLINE

2.31 - 2.33 ——— DRAINAGE AND EROSION CONTROL

2.34 - 2.36 ——— STORM SEWER

2.37 - 2.38 ——— SIGNING

2.39 - 2.41 ——— PAVEMENT MARKING

2.42 - 2.53 ——— TRAFFIC CONTROL

2.54 - 2.56 ——— ALIGNMENT

UTILITIES

GAS

MADISON GAS AND ELECTRIC COMPANY
MR. JOHN YOCERST
P.O. BOX 1321
MADISON, WI 53701
PHONE: 608/252-7160
OR
PAT CARROLL
PHONE: 608/252-7903

TELEPHONE

MOUNT VERNON TELEPHONE COMPANY
MR. JACK NORTHRUP
P.O. BOX 930095
VERONA, WI 53593
PHONE: 608/845-6445
OR
MR. JOHN AMUNDSON
PHONE: 608/845-5800

WATER & SEWER

VERONA MUNICIPAL WATER & SEWER UTILITY
MR. RONALD RIEDER
P.O. BOX 930188
VERONA, WI 53593-0188
PHONE: 608/845-6695

ELECTRIC

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

RECREATION TRAIL

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
- SOUTHERN UNIT
(MILITARY RIDGE RECREATIONAL TRAIL)
MR. GREG MARKUS
3911 FISH HATCHERY ROAD
FITCHBERG, WI 53711
PHONE: 608/251-5550MR. HAL MEIER (EROSION CONTROL)
PHONE: 608/275-3308

DIGGERS HOTLINE

DANE COUNTY
PHONE: 800/242-8511TO OBTAIN LOCATION OF
PARTICIPANTS' UNDERGROUND
FACILITIES BEFORE YOU
DIG IN WISCONSIN

CALL DIGGERS HOTLINE

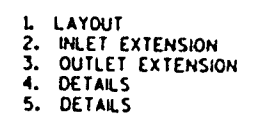
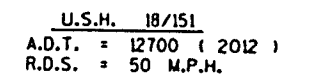
1-800-242-8511

TOLL FREE

TELEFAX (414) 260-0847

TDD (FOR HEARING IMPAIRED) 1-800-842-2288

WISCONSIN STATUTE 182.01(2) - 1974
REQUIRES MINIMUM 24 HOURS JAV
NOTICE BEFORE YOU EXCAVATE



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.

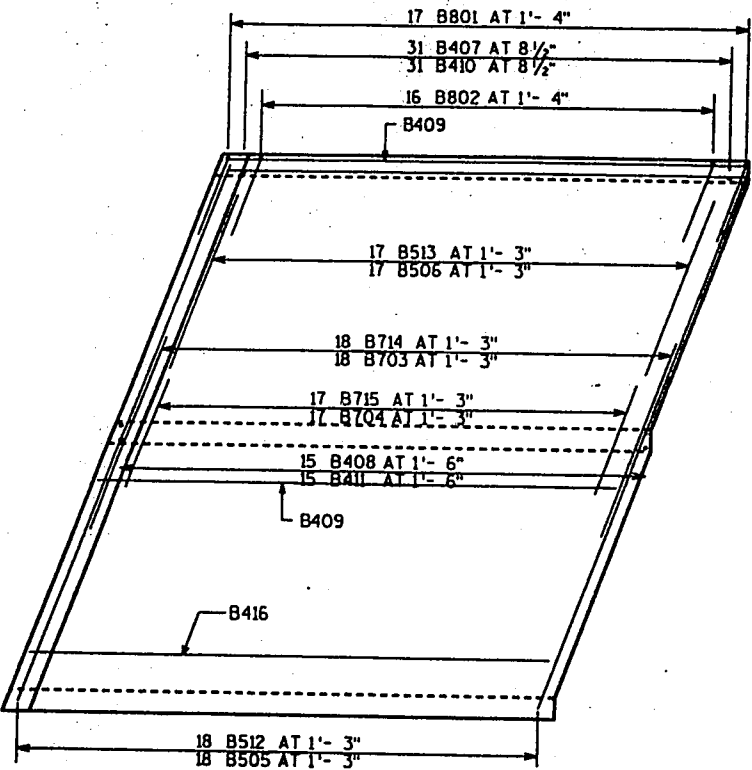
9.101.04-024

BILL OF BARS 15,000 LBS.

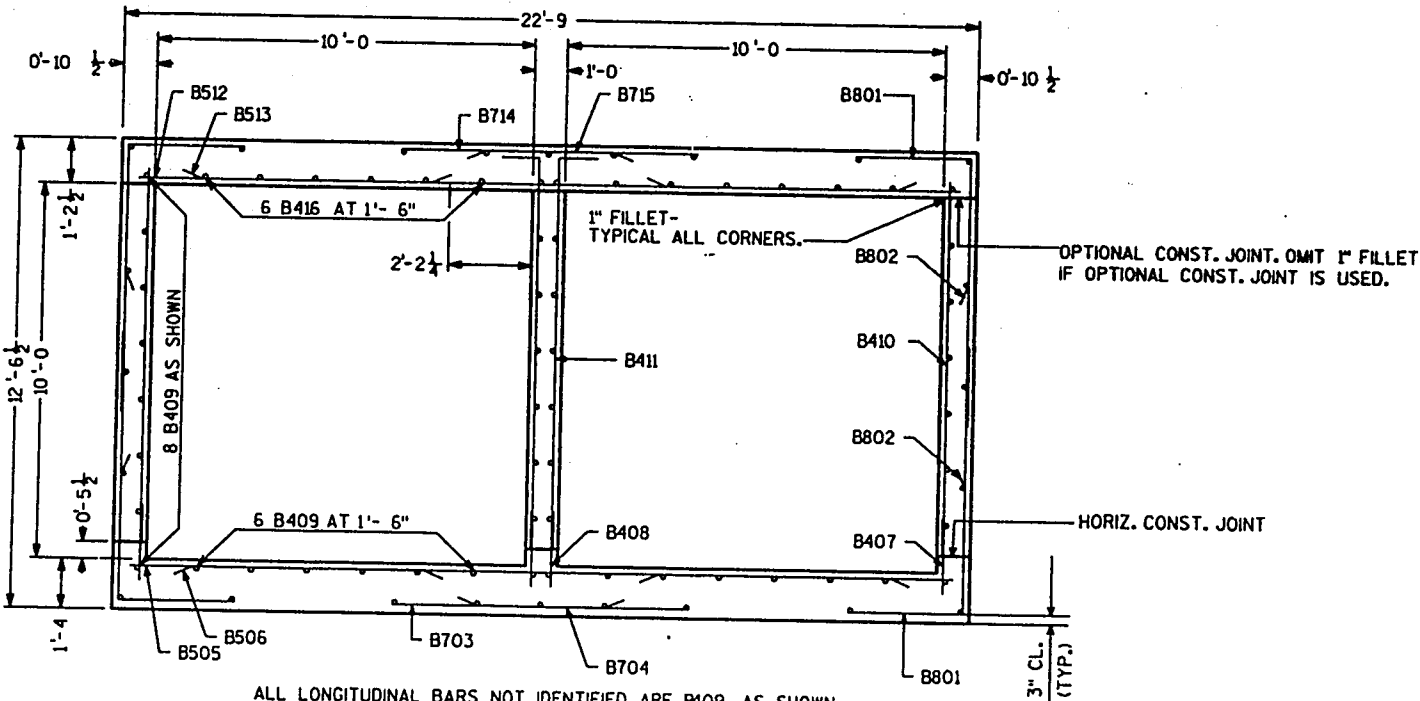
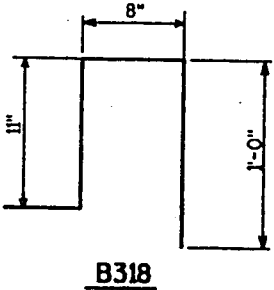
THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG
OF A "L" SHAPED BAR.

MARK	NUMBER REQ-D.	LENGTH	BENT	CUTTING DIAG.	LOCATION
B801	136	10'-2"	3-3	NO	CORNERS
B802	128	6'-11"	3-3	NO	CORNERS
B703	36	8'-4"	NO	NO	BOTTOM SLAB
B704	34	4'-8"	NO	NO	BOTTOM SLAB
B505	36	23'-2"	NO	NO	BOTTOM SLAB
B506	68	7'-6"	NO	NO	BOTTOM SLAB
B407	124	2'-0"	NO	NO	BOTTOM SLAB-DOWELS
B408	60	2'-0"	NO	NO	BOTTOM SLAB-DOWELS
B409	136	21'-0"	NO	NO	LONGITUDINAL BARS
B410	124	10'-6"	NO	NO	OUTSIDE WALLS-VERTICAL
B411	60	11'-6"	1-0	NO	INSIDE WALL-VERTICAL
B512	36	23'-2"	NO	NO	TOP SLAB
B513	68	7'-6"	NO	NO	TOP SLAB
B714	36	8'-4"	NO	NO	TOP SLAB
B715	34	4'-8"	NO	NO	TOP SLAB
B416	24	21'-0"	NO	NO	TOP SLAB-LONGITUDINAL
B417	2	23'-1"	NO	NO	HEADER
B318	32	3'-3"	YES	NO	HEADER
B519	77	4'-0"	NO	NO	VERTICAL CONSTRUCTION JOINT
B520	33	1'-6"	*	NO	WITH 3/8" DIA. CONCRETE MASONRY ANCHORS

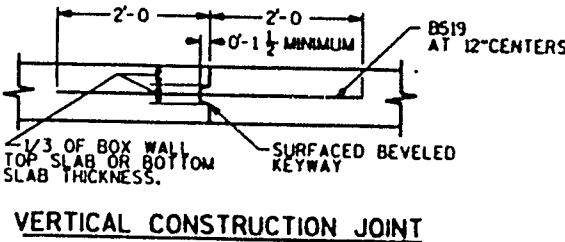
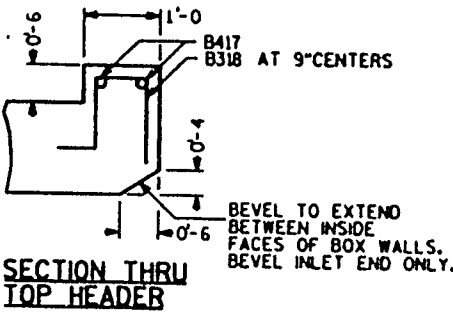
* THREAD ONE END 3"



PLAN VIEW OF EXTENSION PANEL
USE IDENTICAL STEEL IN OTHER PANEL.

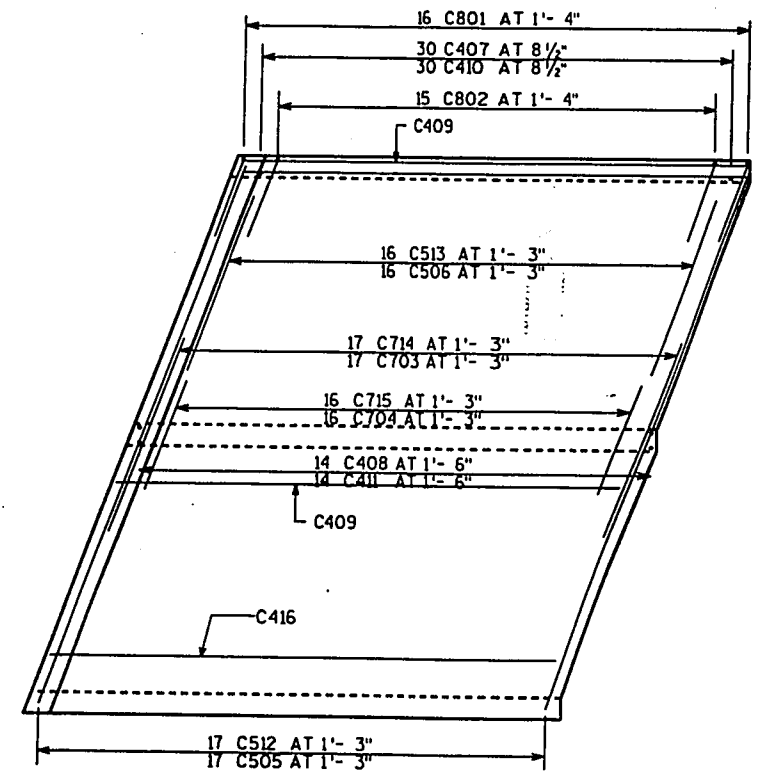


ALL LONGITUDINAL BARS NOT IDENTIFIED ARE B409 AS SHOWN.
TYPICAL SECTION THRU BOX

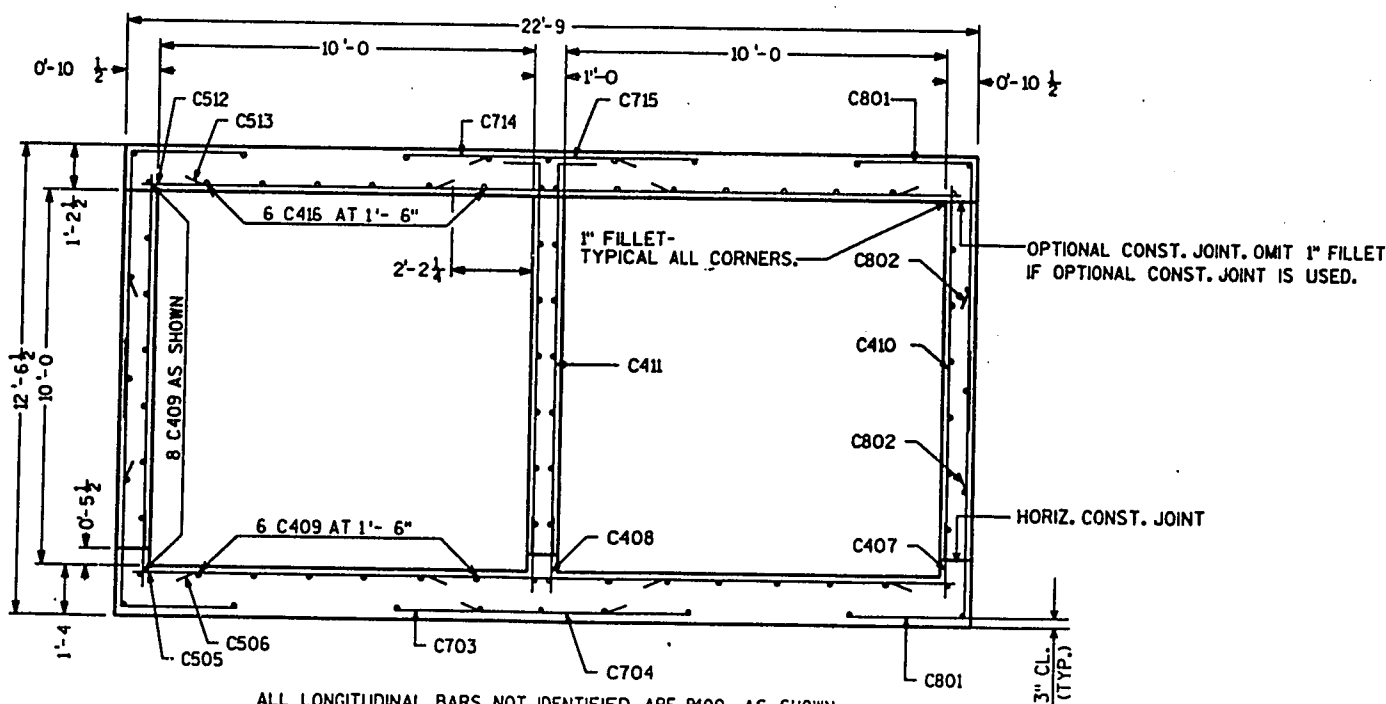


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-13-53			
CONST. SPEC.	1989	DRWN BY	PLANS C&D
INLET EXTENSION DETAILS			SHEET 2

FILE: 53INLET.DGN
SCALE: 1"=1'-0"

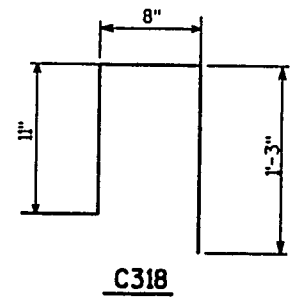


PLAN VIEW OF EXTENSION PANEL

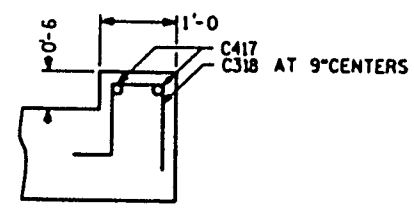


ALL LONGITUDINAL BARS NOT IDENTIFIED ARE B409 AS SHOWN.

TYPICAL SECTION THRU BOX



C318



SECTION THRU TOP HEADER

STATE PROJECT NUMBER	SHEET NO.
1201-04-79	8.2

BILL OF BARS 7,020 LBS.

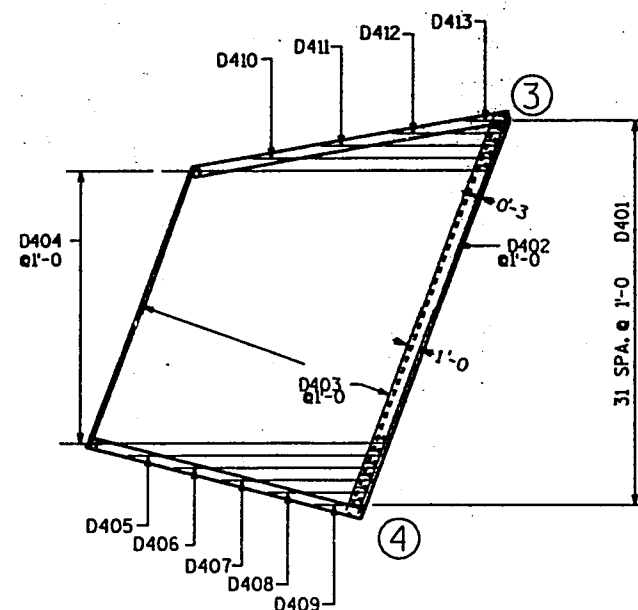
THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE. THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR.

MARK	NUMBER REQ'D.	LENGTH	BENT	CUTTING DIAG.	LOCATION
C801	64	10-2	3-3	NO	CORNERS
C802	60	6-11	3-3	NO	CORNERS
C703	17	8-4	NO	NO	BOTTOM SLAB
C704	16	4-8	NO	NO	BOTTOM SLAB
C505	17	23-2	NO	NO	BOTTOM SLAB
C506	32	7-6	NO	NO	BOTTOM SLAB
C407	60	2-0	NO	NO	BOTTOM SLAB-DOWELS
C408	28	2-0	NO	NO	BOTTOM SLAB-DOWELS
C409	68	20-6	NO	NO	LONGITUDINAL BARS
C410	60	10-6	NO	NO	OUTSIDE WALLS-VERTICAL
C411	28	11-6	1-0	NO	INSIDE WALL-VERTICAL
C512	17	23-2	NO	NO	TOP SLAB
C513	32	7-6	NO	NO	TOP SLAB
C714	17	8-4	NO	NO	TOP SLAB
C715	16	4-8	NO	NO	TOP SLAB
C416	12	20-6	NO	NO	TOP SLAB-LONGITUDINAL
C417	2	23-1	NO	NO	HEADER
C318	32	3-3	YES	NO	HEADER
C519	33	1-6	*	NO	WITH 3/8" DIA. CONCRETE MASONRY ANCHORS

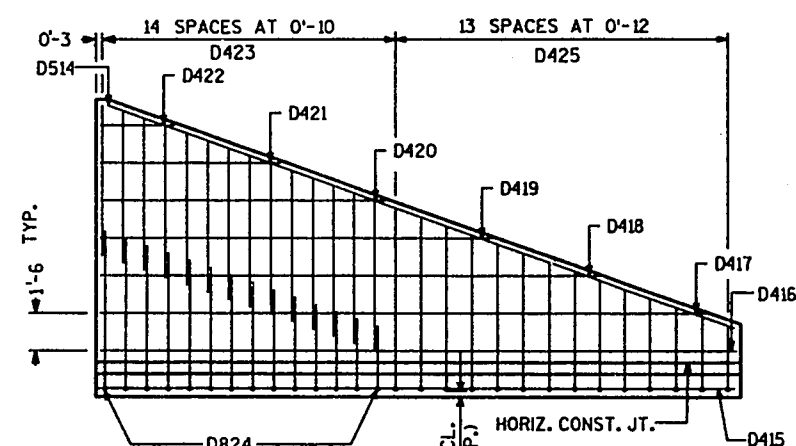
* THREAD ONE END 3"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE 8-13-53			
CONST. SPEC.	1989	DRAWN BY RES	PLANS C.O.D.
OUTLET EXTENSION DETAILS			SHEET 3

FILE: 530UTLET.DGN
SCALE:

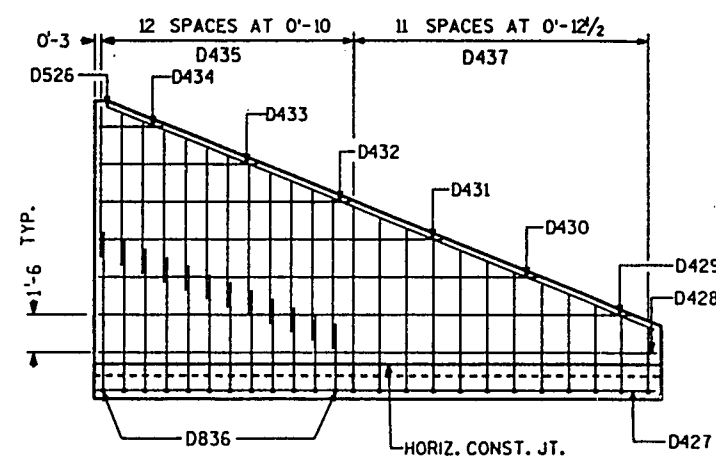


APRON DETAILS



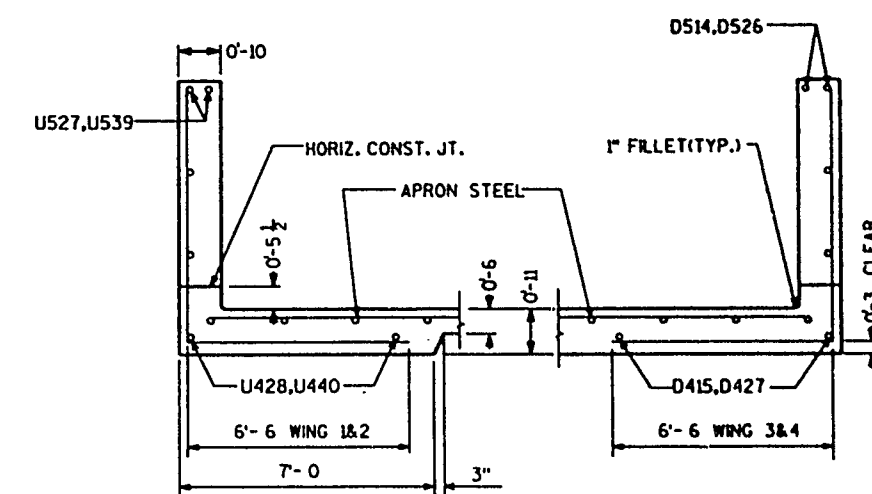
WING 1

WING 3

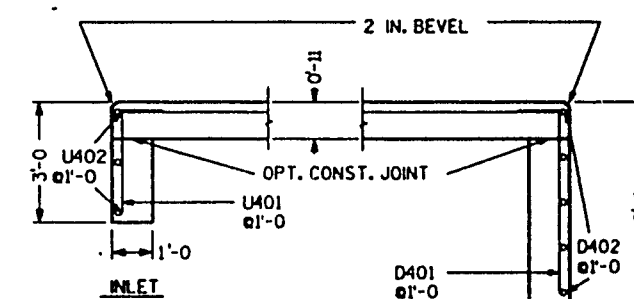


WING 2

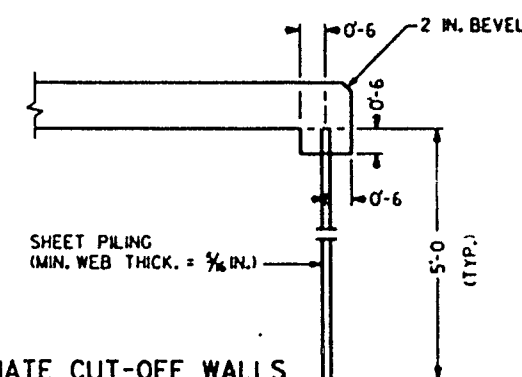
WING 4



SECTION THRU WINGS
AT RIGHT ANGLES TO WING WALLS



CUT-OFF WALLS
SECTION THRU THE WALLS



ALTERNATE CUT-OFF WALLS

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-13-53			
CONST. SPEC.	1989	DRAWN BY	RES PLANS CALC.
DETAILS			SHEET 4

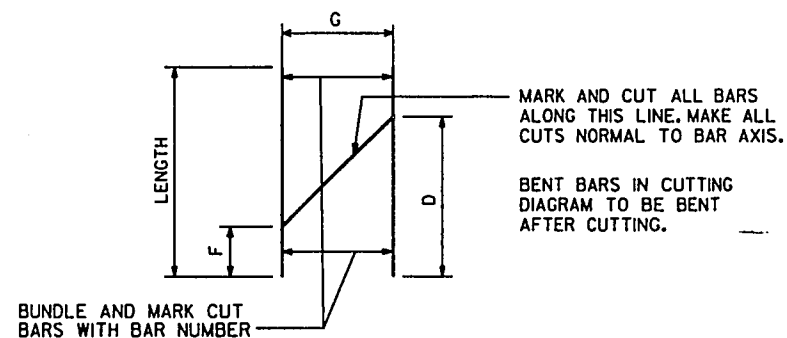
BILL OF BARS

5360 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.

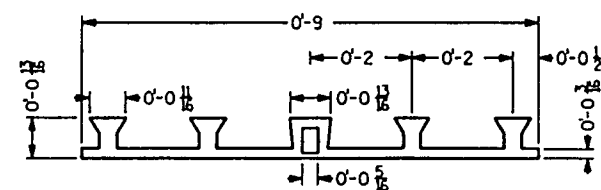
MARK	NO.	LENGTH	BENT	CUT	LOCATION
U401	45	3-6	1-0		INLET APRON AND CUTOFF WALL
U402	6	24-10			INLET APRON AND CUTOFF WALL
U403	22	37-5		*	" APRON
U404	23	25-11			" APRON
U405	1	21-7			" APRON
U406	1	19-6			" APRON
U407	1	17-4			" APRON
U408	1	15-3			" APRON
U409	1	13-2			" APRON
U410	1	11-1			" APRON
U411	1	9-0			" APRON
U412	1	6-11			" APRON
U413	1	4-9			" APRON
U414	1	2-8			" APRON
U415	1	21-5			" APRON
U416	1	19-7			" APRON
U417	1	17-10			" APRON
U418	1	16-0			" APRON
U419	1	14-3			" APRON
U420	1	12-6			" APRON
U421	1	10-8			" APRON
U422	1	8-11			" APRON
U423	1	7-2			" APRON
U424	1	5-4			" APRON
U425	1	3-7			" APRON
U426	1	1-10			" APRON
U527	2	23-10			WING 1 -HORIZONTAL
U428	2	22-10			WING " -HORIZONTAL-APRON
U429	1	22-3			WING " -HORIZONTAL
U430	1	21-3			WING " -HORIZONTAL
U431	1	17-6			WING " -HORIZONTAL
U432	1	13-9			WING " -HORIZONTAL
U433	1	10-0			WING " -HORIZONTAL
U434	1	6-3			WING " -HORIZONTAL
U435	1	2-7			WING " -HORIZONTAL
U436	12	6-0			WING " -VERTICAL
U837	6	22-2	6-6	*	WING " -VERTICAL
U438	7	22-10	6-6	*	WING " -VERTICAL
U539	2	31-9			WING 2 -HORIZONTAL
U440	2	31-3			WING " -HORIZONTAL-APRON
U441	1	30-8			WING " -HORIZONTAL
U442	1	29-3			WING " -HORIZONTAL
U443	1	24-2			WING " -HORIZONTAL
U444	1	19-0			WING " -HORIZONTAL
U445	1	13-10			WING " -HORIZONTAL
U446	1	8-9			WING " -HORIZONTAL
U447	1	3-7			WING " -HORIZONTAL
U448	16	6-0			WING " -VERTICAL
U849	8	22-2	6-6	*	WING " -VERTICAL
U450	9	22-11	6-6	*	WING " -VERTICAL
D401	32	5-6	1-0		OUTLET APRON AND CUTOFF WALL
D402	10	17-6			OUTLET APRON AND CUTOFF WALL
D403	22	29-10		*	" APRON
D404	23	25-11			" APRON
D405	1	20-3			" APRON
D406	1	16-2			" APRON
D407	1	12-1			" APRON
D408	1	7-11			" APRON
D409	1	3-10			" APRON
D410	1	19-3			" APRON
D411	1	13-11			" APRON
D412	1	8-7			" APRON
D413	1	3-3			" APRON
D514	2	26-7			WING 3 -HORIZONTAL
D415	2	25-9			WING " -HORIZONTAL-APRON
D416	1	25-2			WING " -HORIZONTAL
D417	1	24-0			WING " -HORIZONTAL
D418	1	19-9			WING " -HORIZONTAL
D419	1	15-7			WING " -HORIZONTAL
D420	1	11-4			WING " -HORIZONTAL
D421	1	7-2			WING " -HORIZONTAL
D422	1	2-11			WING " -HORIZONTAL

MARK	NO.	LENGTH	BENT	CUT	LOCATION
D423	14	6-0			WING " -VERTICAL
D824	7	22-0	6-6	*	WING " -VERTICAL
D425	7	22-8	6-6	*	WING " -VERTICAL
D526	2	23-8			WING 4 -HORIZONTAL
D427	2	22-8			WING " -HORIZONTAL-APRON
D428	1	22-1			WING " -HORIZONTAL
D429	1	21-0			WING " -HORIZONTAL
D430	1	17-4			WING " -HORIZONTAL
D431	1	13-7			WING " -HORIZONTAL
D432	1	9-11			WING " -HORIZONTAL
D433	1	6-3			WING " -HORIZONTAL
D434	1	2-6			WING " -HORIZONTAL
D435	12	6-0			WING " -VERTICAL
D836	6	22-1	6-6	*	WING " -VERTICAL
D437	6	22-10	6-6	*	WING " -VERTICAL

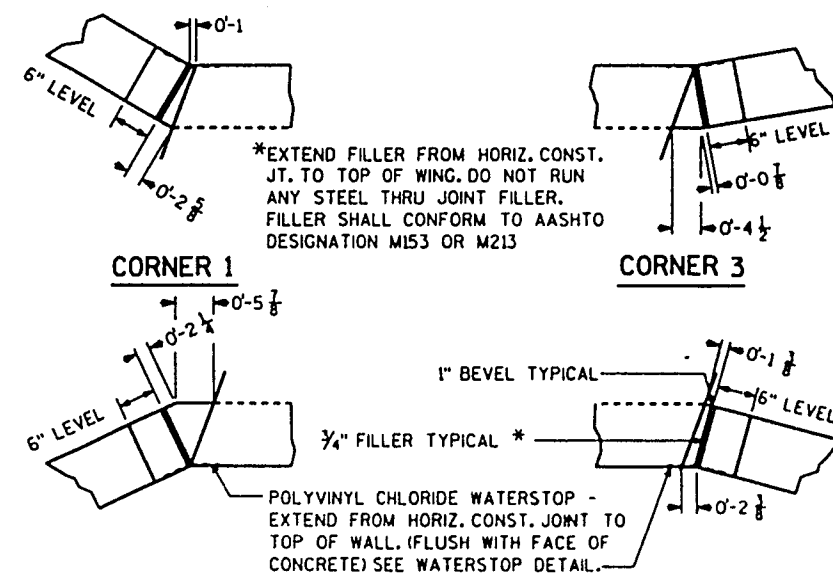


CUTTING DIAGRAM

MARK	D	F	G	SETS REOD
U403	24-10	12-6	22	1
U837	10-11	9-3	6	1
U438	11-3	8-11	7	1
U849	10-11	9-3	8	1
U450	11-4	8-11	9	1
D403	17-6	12-5	22	1
D824	10-10	9-1	7	1
D425	11-2	8-11	7	1
D836	10-11	9-3	6	1
D437	11-2	8-11	6	1



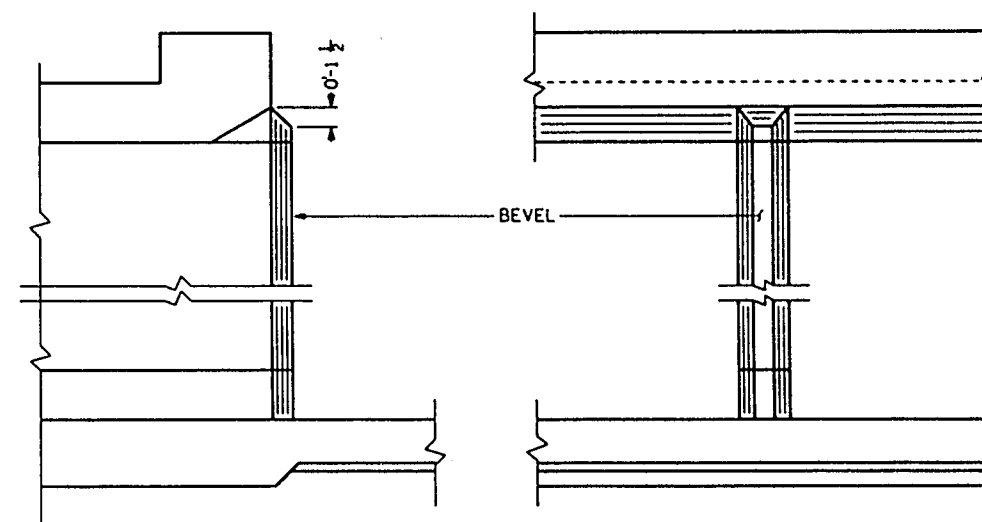
POLYVINYL CHLORIDE WATERSTOP



CORNER 2

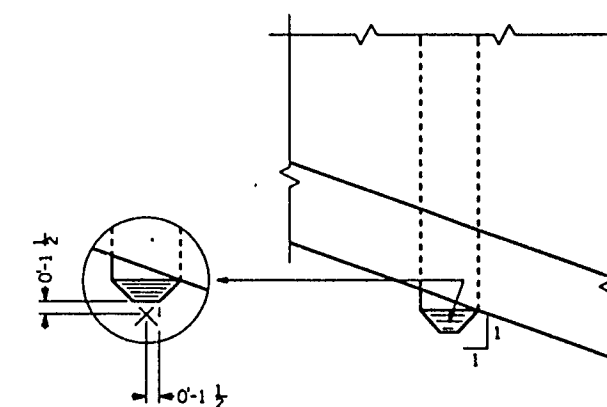
CORNER 4

CORNER DETAILS



SECTION

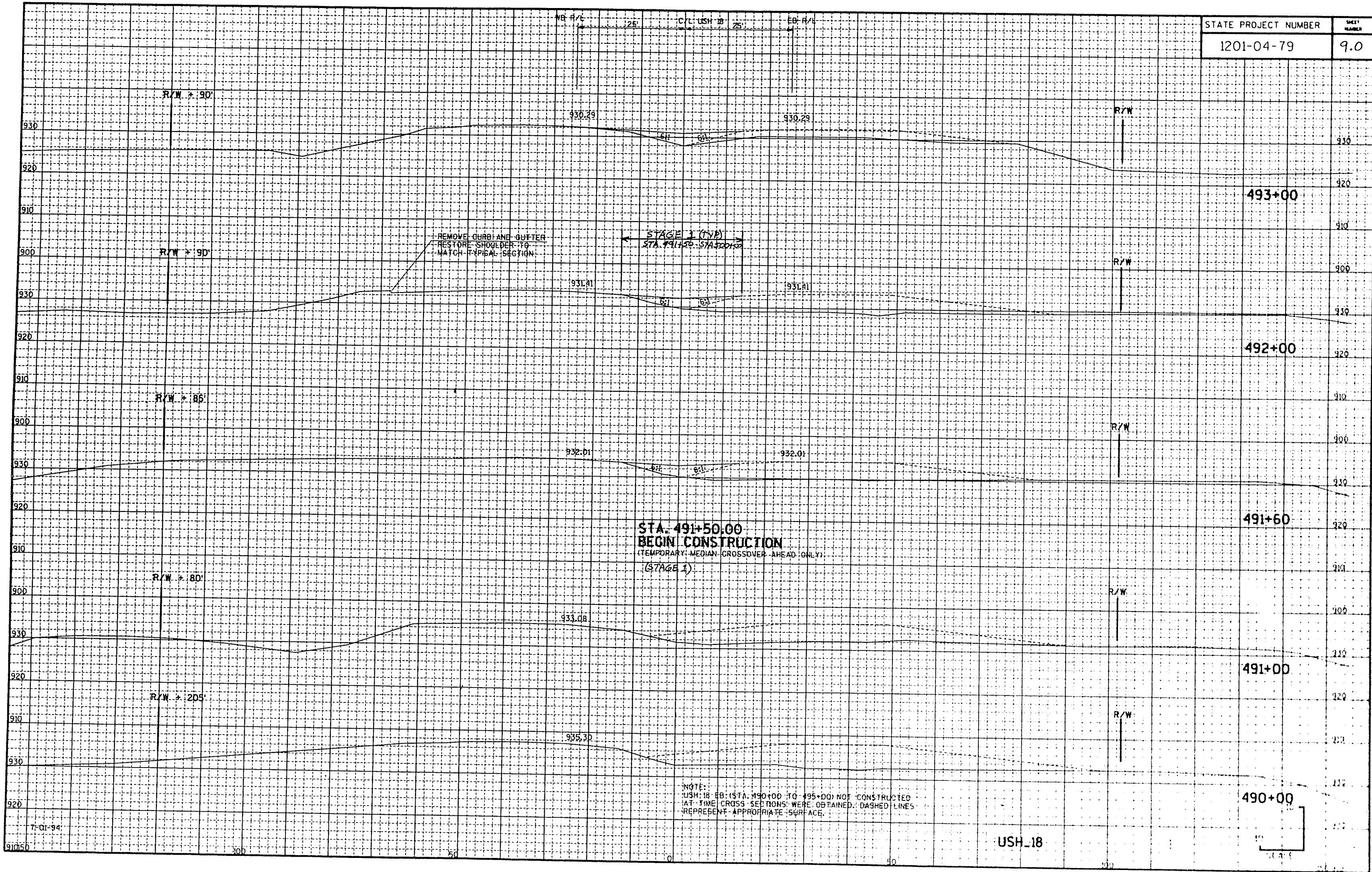
ELEVATION



PLAN

INLET NOSE DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
STRUCTURE B-13-53			
CONST. SPEC.	1989	DRAWN BY	RES
DETAILS			SHEET 5



7-01-94

USH-18

SCALE