Aug '04

ORDER OF SHEETS

Sheet No.	1	Title
Sheet No.		Typical Sections and Details
Sheet No.		Estimate of Quantities
Sheet No.		Miscellaneous Quantities
Sheet No.		Right of Way Plat
Sheet No.		Plan and Profile
Sheet No.		Standard Detail Drawings
Sheet No.		Sign Plates
Sheet No.	✓	Structure Plans
Sheet No.		Computer Earthwork Data
Sheet No.		Cross Sections

TOTAL SHEETS = 241

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1123-09-71	NH 2004634	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

APPLETON - GREEN BAY

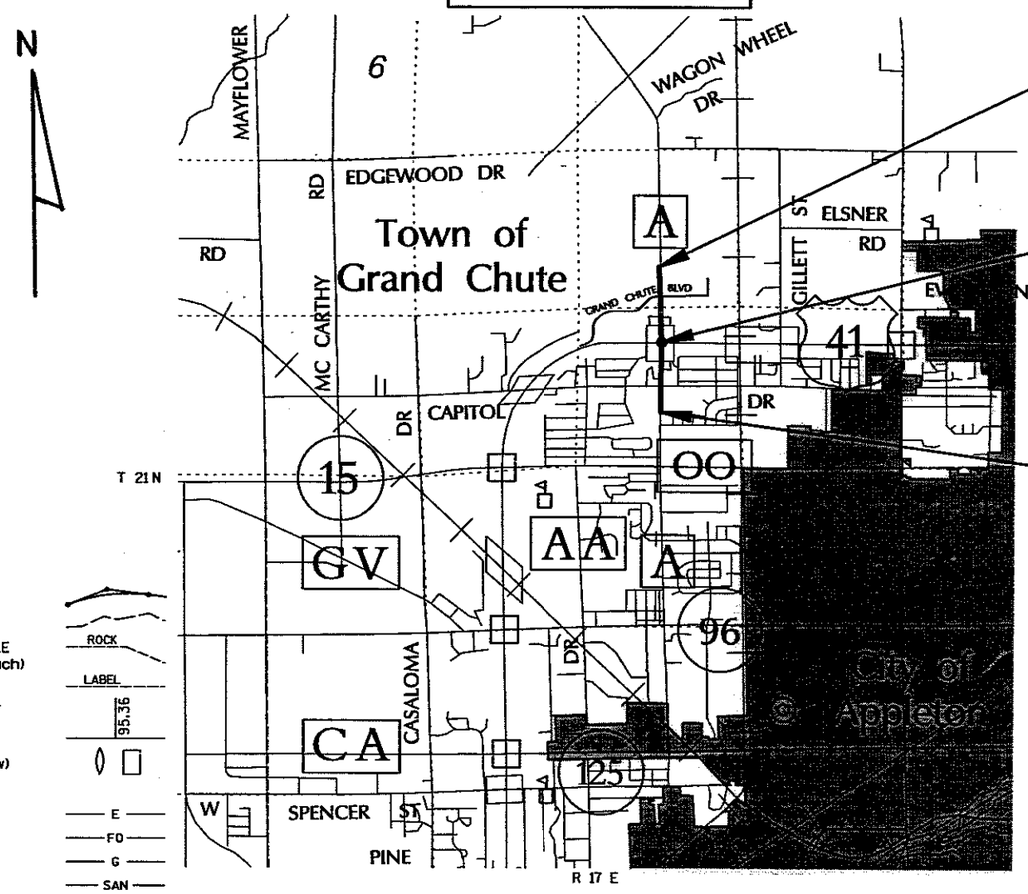
CTH A BRIDGE & APPROACHES

USH 41 A - Capitol Drive to Grand Chute Blvd.

OUTAGAMIE COUNTY

JUL - 9 2004

STATE PROJECT NUMBER
1123-09-71



LAYOUT
SCALE 0 ½ MI.

END PROJECT 1123-09-71
STA 252+49
Y = 578605.0303
X = 817153.7723

STRUCTURES
B-44-140
C-44-15

BEGIN PROJECT 1123-09-71
STA 203+14.98
Y = 573673.0293
X = 817074.3640

TOTAL NET LENGTH OF CENTERLINE = 0.934 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), OUTAGAMIE COUNTY

DESIGN DESIGNATION

A.D.T.	2004	= 15,000
A.D.T.	2024	= 23,800
D.H.V.	2024	= 2400
D.D.		= 55/45
T.		= 11.1%
DESIGN SPEED		= 45 MPH
ESALS		= 804

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE	PL + 58.1	ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

ORIGINAL PLANS PREPARED BY
OMNI ASSOCIATES

WISCONSIN
MARGARET A. HAWLEY
E28679
APPLETON, WI
PROFESSIONAL ENGINEER

3/29/04

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor
Designer
Project Manager
District Examiner LEE RINGBLOM
District Supervisor JIM LAMERS
C.O. Examiner NR DIFFERT

APPROVED FOR DISTRICT OFFICE
DATE 3/31/04 (Signature)

E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582TTL.dgn PLOT DATE : 03/31/2004 08:32:50 AM PLOT BY : hawleym PLOT NAME : ORG DATE : Originator : OMNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 10

A-23

A-23

ARD DETAIL DRAWINGS

UMBER	TITLE
6a	INLET COVERS TYPE A, H, A-S & H-S
6b	INLET COVERS TYPE B, B-A, C, MS, MS-A & WM
6d	INLET COVER, TYPE Z MANHOLE COVERS, TYPE K, J, J-S, L & M
	CATCH BASINS TYPE 3 & 5
	MANHOLES, TYPE 1
	MANHOLES, TYPES 2 AND 3
	MANHOLES, TYPES 5 AND 6
	INLETS, TYPES 1,2,3, AND 4
	INLETS, TYPES 8,9,10, AND 11
3	CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES
a	CURB RAMPS TYPE 1, 2 AND 3
b	CURB RAMPS TYPE 1-A
	TYPICAL INSTALLATIONS OF EROSION BALES/TEMPORARY DITCH CHECKS
	SILT FENCE
2	INLET PROTECTION TYPE A, B, C AND D
1	APRON ENDWALLS FOR CULVERT PIPE
	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
	JOINT TIES FOR CONCRETE PIPE
	CONDUIT
	PULL BOX
	CONCRETE BASES, TYPES 1, 2, AND 5
	TRANSFORMER/PEDESTAL BASE
	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
a	POLE MOUNTINGS FOR TRAFFIC SIGNALS, TYPE 2
g	HARDWARE DETAILS FOR POLE MOUNTINGS
c	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
4	CONCRETE CORRUGATED MEDIAN
1	CONCRETE MEDIAN NOSE
3	SLOPE PAVING-STRUCTURES (CRUSHED AGGREGATE)
7	NAME PLATE-(STRUCTURES)
4	CONCRETE PAVEMENT APPROACH SLAB
11	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES
-4	URBAN DOWELED CONCRETE PAVEMENT
10a,b,c,&d	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
10e&f	CONCRETE BARRIER TEMPORARY PRECAST, 10'-0"
-4a	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
-4b	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
-4a	STEEL PLATE BEAM GUARD, CLASS "A", (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
-4d	STEEL PLATE BEAM GUARD, CLASS "A", BULLNOSE INSTALLATION AT MEDIAN PIERS AND SIGN SUPPORTS
-5a	STEEL THRIE BEAM STRUCTURE APPROACH
-5b	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARED END AND VERTICAL FACED PARAPETS
-3a ,b & c	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
10a & b	CHAIN LINK FENCE
4a & b	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
4c	DETOUR SIGNING FOR MAINLINE CLOSURES
6a	PAVEMENT MARKING SYMBOLS
9a	PAVEMENT MARKING (MAINLINE)
9b	PAVEMENT MARKING (INTERSECTION)
9d	PAVEMENT MARKING (LEFT TURN LANE)
10e	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
-1	MEDIAN ISLAND MARKING
-2	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
-1	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
6	LANDMARK REFERENCE MONUMENTS AND COVERS

UTILITIES

ELECTRIC	WE ENERGIES - ELECTRIC OPERATIONS 800 SOUTH LYNNDALE AVENUE APPLETON, WI 54912 ATTN: JIM QUINN TELEPHONE: 920-380-3401
ELECTRIC TRAFFIC SIGNALS	OUTAGAMIE COUNTY HIGHWAY DEPARTMENT 1313 HOLLAND ROAD APPLETON, WI 54911 ATTN: AL GEURTS TELEPHONE: 920-832-5673
COMMUNICATIONS	APPLETON AREA SCHOOL DISTRICT 120 EAST HARRIS STREET P.O. BOX 2019 APPLETON, WI 54911 ATTN: JIM HAWBAKER TELEPHONE: 920-993-7062 EXT 2127
TELEPHONE	SBC 4TH FLOOR ENGINEERING 221 WEST WASHINGTON STREET APPLETON, WI 54911 ATTN: MARIE SCHWARM TELEPHONE: 920-735-3206
CABLE TV	TIME WARNER CABLE 1001 KENNEDY AVENUE P.O. BOX 145 KIMBERLY, WI 54136-0145 ATTN: ROCK WERY TELEPHONE: 920-831-9207
GAS	WE ENERGIES - GAS P.O. BOX 907 APPLETON, WI 54912-0907 ATTN: DENNIS GIRARD TELEPHONE: 920-380-3466 / 920-428-4384 MOBILE
SANITARY & WATER	GRAND CHUTE SANITARY DISTRICT 1 & 2 1900 WEST GRAND CHUTE BOULEVARD GRAND CHUTE, WI 54913 ATTN: TODD PRAHL TELEPHONE: 920-832-1581

OTHER CONTACTS

COUNTY SURVEYOR	JIM HEBERT OUTAGAMIE COUNTY COURTHOUSE 410 S. WALNUT STREET APPLETON, WI 54911 TELEPHONE: 715-258-4420
DNR LIAISON	SHELLY SCHAETZ WDNR LAKE MICHIGAN DISTRICT 1125 N. MILITARY AVENUE PO BOX 10448 GREEN BAY, WI 54307 TELEPHONE: 920-492-5819
DIGGERS HOTLINE	CABLE LOCATE TELEPHONE: (800) 242-8511 (TOLL FREE)

DIGGERS HOTLINE

Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

2

GENERAL NOTES

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

FILL AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENTS CONSTRUCTED FROM COMMON EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 30 PERCENT. ALL FILL VOLUMES SHOWN ARE THE ACTUAL VOLUMES.

EXCAVATION BELOW SUBGRADE (EBS) IS SHOWN ON THE CROSS SECTIONS. IT WILL BE MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LIMITS AND DEPTH OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

ALL DISTURBED AREAS, NOT OTHERWISE SURFACED, ARE TO BE TOPSOILED, FERTILIZED, SEEDED AND MULCHED.

DISTURBED AREAS ADJACENT TO LAWNS SHALL BE SEEDED WITH MIXTURE NO. 40, ALL OTHERS SHALL BE SEEDED WITH MIXTURE NO. 10, EXCEPT WETLANDS, WHICH SHALL BE SEEDED WITH MIXTURE NO. 60.

WHEREVER TOPSOIL IS SHOWN ON THE PLANS, THE ITEMS OF SALVAGED TOPSOIL OR TOPSOIL MAY BE USED EXCEPT AS NOTED IN WETLAND AREAS.

ALL MANHOLE AND INLET OFFSETS ARE GIVEN TO THE CENTER OF THE STRUCTURE.

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN IN THE STANDARD DETAIL DRAWINGS.

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

THE EXACT LOCATIONS OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

BOXOUTS SHALL BE PROVIDED IN CONCRETE SIDEWALK BY THE CONTRACTOR FOR SIGN PLACEMENT. THE COST OF THE BOXOUTS SHALL BE INCIDENTAL TO CONCRETE MEDIAN. LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

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

CURB HEIGHTS AT THE ENDS OF CURB AND GUTTER SHALL BE TAPERED FROM 6 TO 0 INCHES IN 3 FEET, WHERE APPLICABLE.

DRIVEWAYS SHALL BE REPLACED IN KIND. AGGREGATE BASE DENSE 3/4-INCH WILL BE USED UNDER ALL DRIVEWAYS AND SIDEWALK.

CURB RAMP OPENINGS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE GIVEN BY THE ENGINEER IN THE FIELD.

THE WISCONSIN DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT WHICH SHALL BE SET IN THE STRUCTURE AS DESIGNATED BY THE ENGINEER.

DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES.

BEARINGS SHOWN ON THIS PLAN ARE GRID BEARINGS BASED ON THE OUTAGAMIE COUNTY COORDINATE SYSTEM

ALL COORDINATES ON THIS PLAN ARE REFERENCED TO THE OUTAGAMIE COUNTY COORDINATE SYSTEM.

PLAN ELEVATIONS = USGS DATUM

ORDER OF "SECTION 2" SHEETS

SHEET TITLE
GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
CONTOURS AND WETLAND MITIGATION
EROSION CONTROL PLAN
STORM SEWER
PAVEMENT MARKING AND SIGNING
TRAFFIC SIGNALS
TRAFFIC CONTROL PLAN
ALIGNMENT PLAN

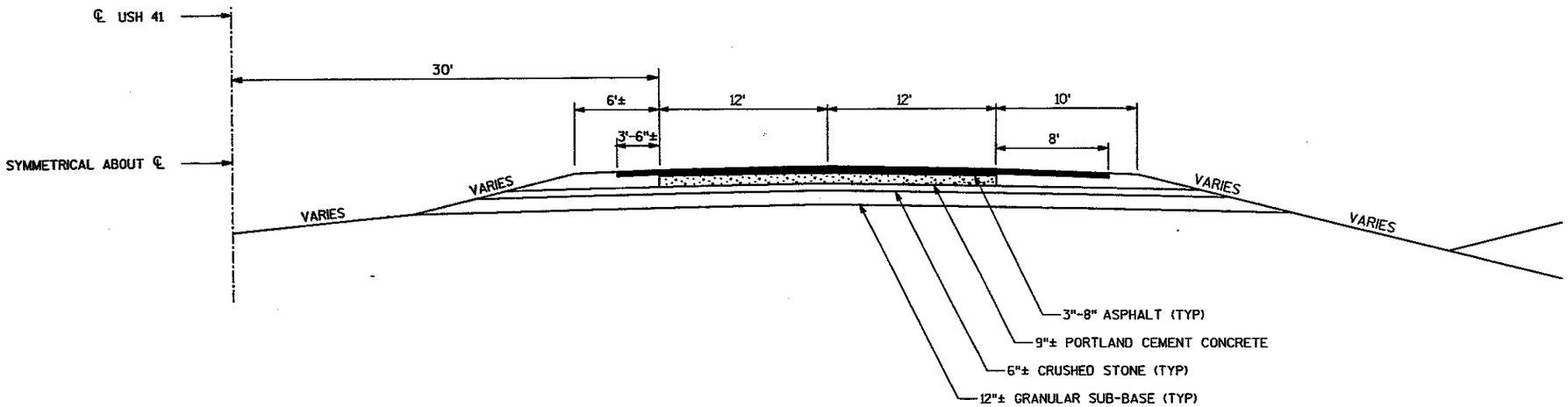
EROSION CONTROL NOTES

RUNOFF COEFFICIENT FOR THIS PROJECT:
EXISTING PAVEMENT 0.95, EXISTING SLOPES 0.30,
NEW PAVEMENT 0.95, NEW SLOPES 0.30.

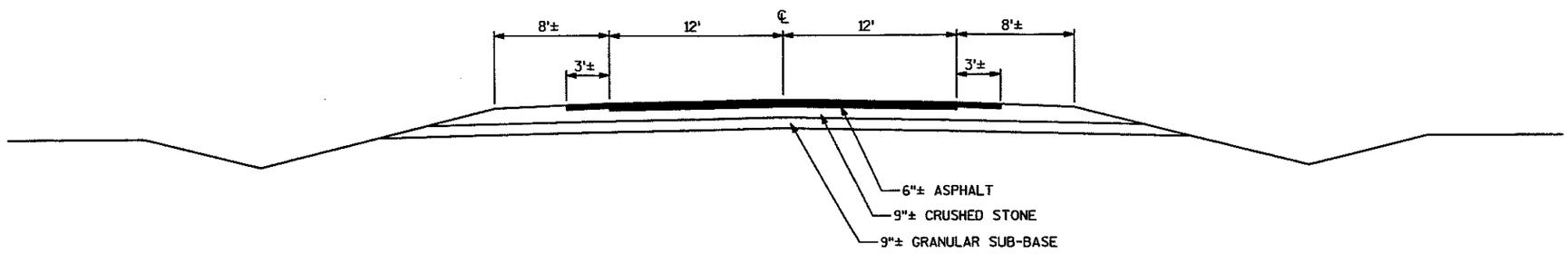
TOTAL PROJECT AREA = 25.12 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 18.44 ACRES

3



USH 41 EXISTING TYPICAL ½ SECTION



CTH A EXISTING TYPICAL SECTION

PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TYPICAL EXISTING SECTIONS	SCALE, FEET 0	SHEET NO: 4	E

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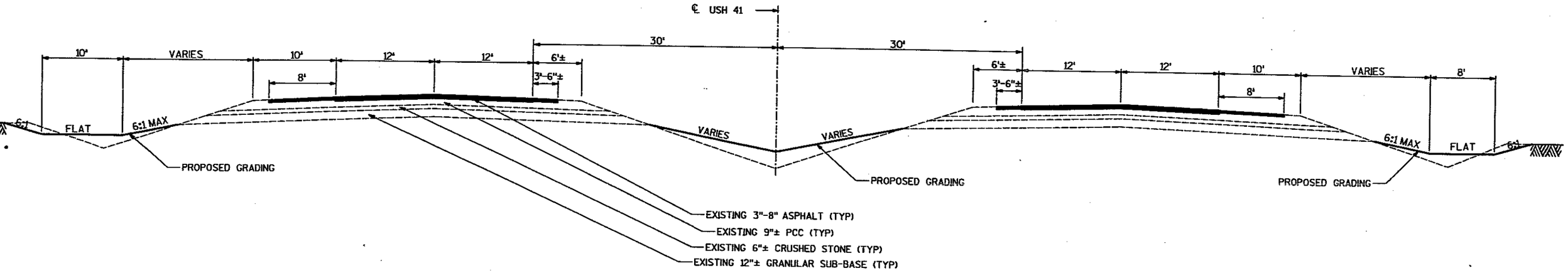
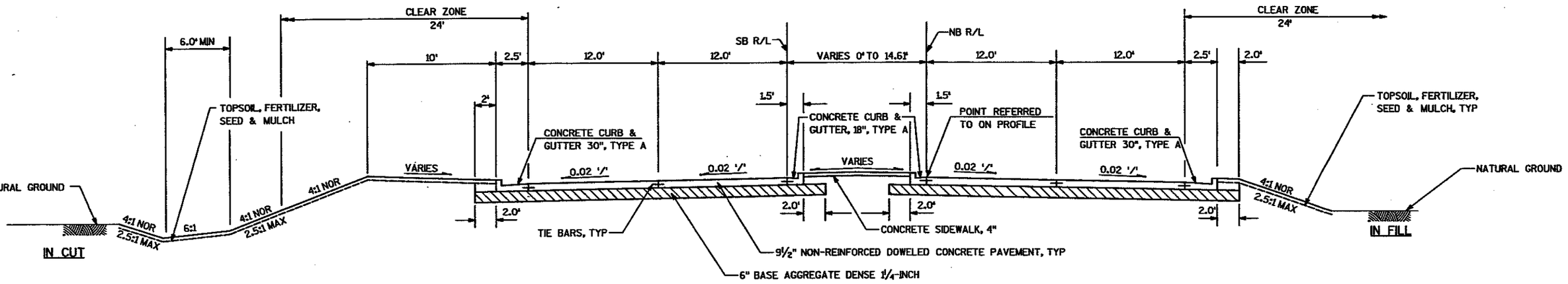


PAVEMENT DEPTHS FOR INFORMATION ONLY

TYPICAL SECTION FOR USH 41

RIGHT	STA 663+95 TO STA 669+50
MEDIAN	STA 666+70 TO STA 670+25
LEFT	STA 666+90 TO STA 672+15

2



TYPICAL CROSS SECTION FOR CTH A
STA 203+15 TO STA 206+05

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PROPOSED TYPICAL SECTIONS	SCALE, FEET 0 5 10	SHEET NO: 6	E

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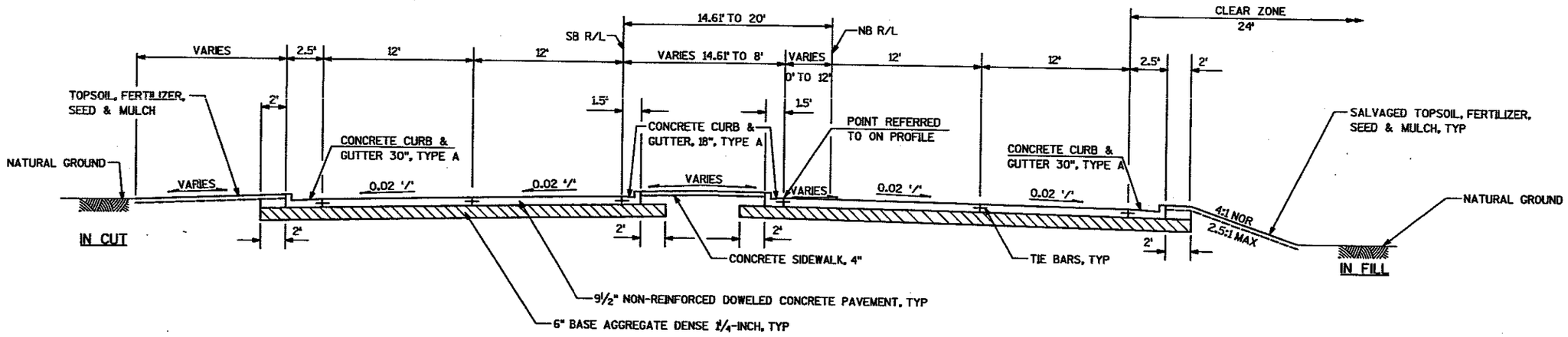
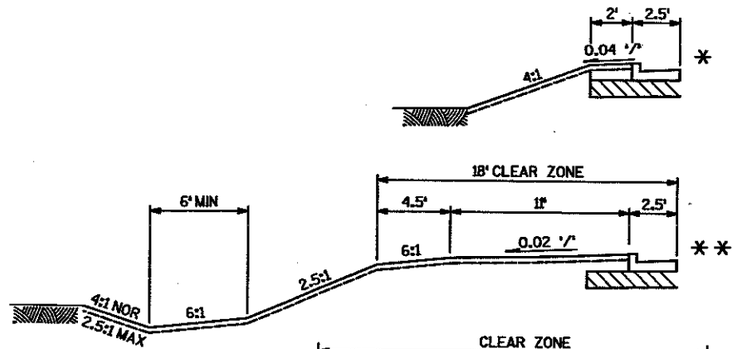
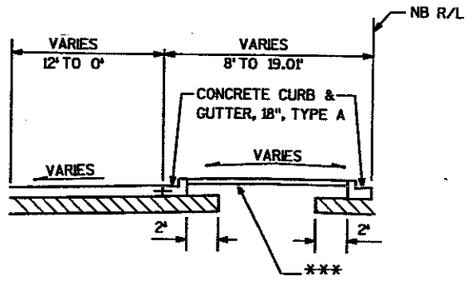
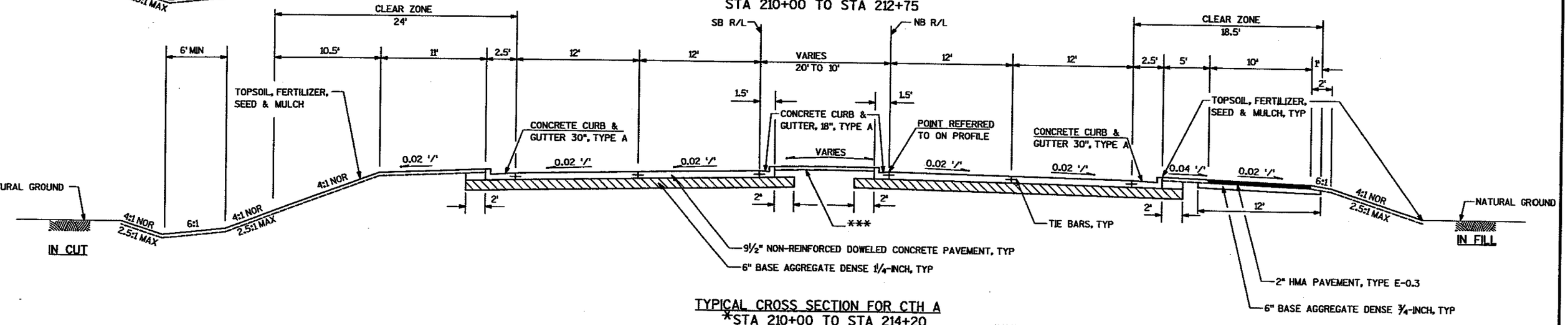


TYPICAL CROSS SECTION FOR CTH A
STA 206+05 TO STA 210+00





STA 210+00 TO STA 212+75



TYPICAL CROSS SECTION FOR CTH A
*STA 210+00 TO STA 214+20
STA 214+20 TO STA 216+50
**STA 216+50 TO STA 222+00

***CONCRETE SIDEWALK, 4" FROM STA 210+65 TO STA 211+65
TOPSOIL, FERTILIZER, SEED AND MULCH FROM STA 211+65 TO STA 222+00

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PROPOSED TYPICAL SECTIONS	SCALE, FEET 0 5 10	SHEET NO: 7 E

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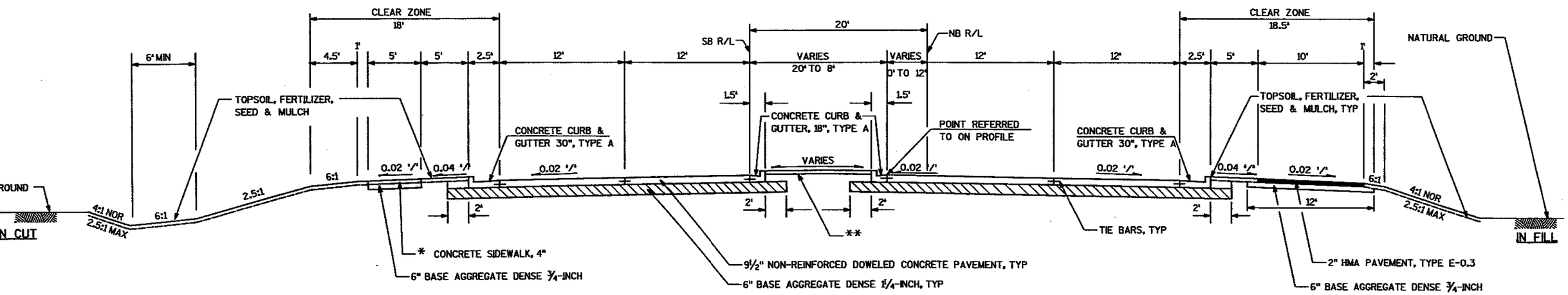
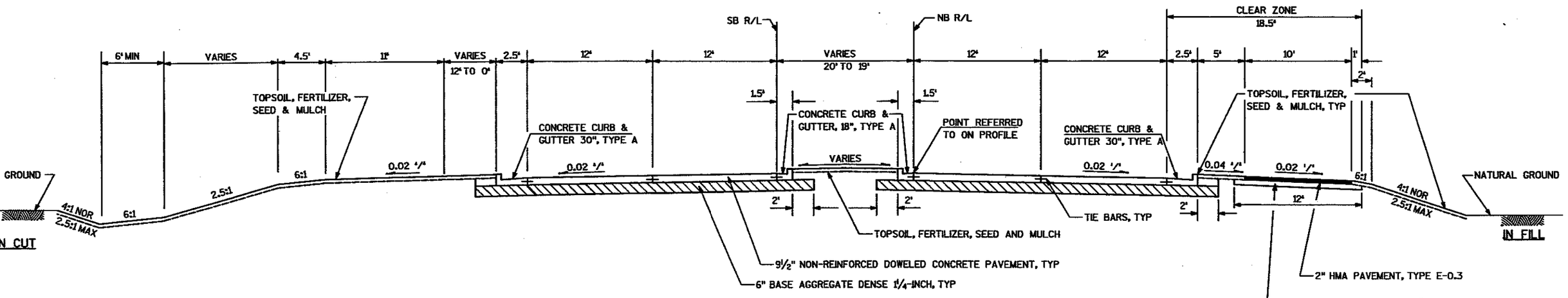


TYPICAL CROSS SECTION FOR CTH A
STA 222+00 TO STA 223+49.24
STA 224+61.74 TO STA 227+00

* CONCRETE SIDEWALK FROM STA 223+27 TO STA 225+83

**CONCRETE SIDEWALK, 4" FROM STA 222+64 TO STA 226+21
TOPSOIL, FERTILIZER, SEED AND MULCH FROM STA 222+00 TO STA 222+64



TYPICAL CROSS SECTION FOR CTH A
STA 227+00 TO STA 228+25

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PROPOSED TYPICAL SECTIONS	SCALE, FEET 0 5 10	SHEET NO: 8	E

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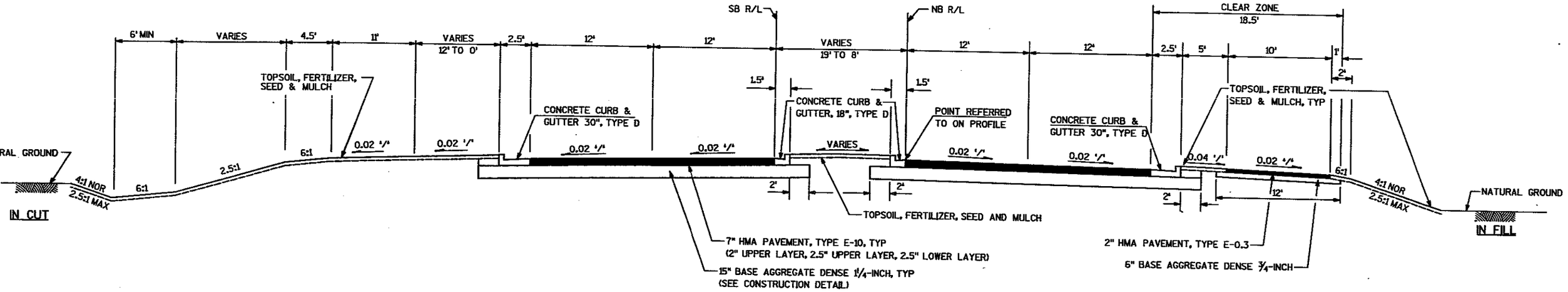
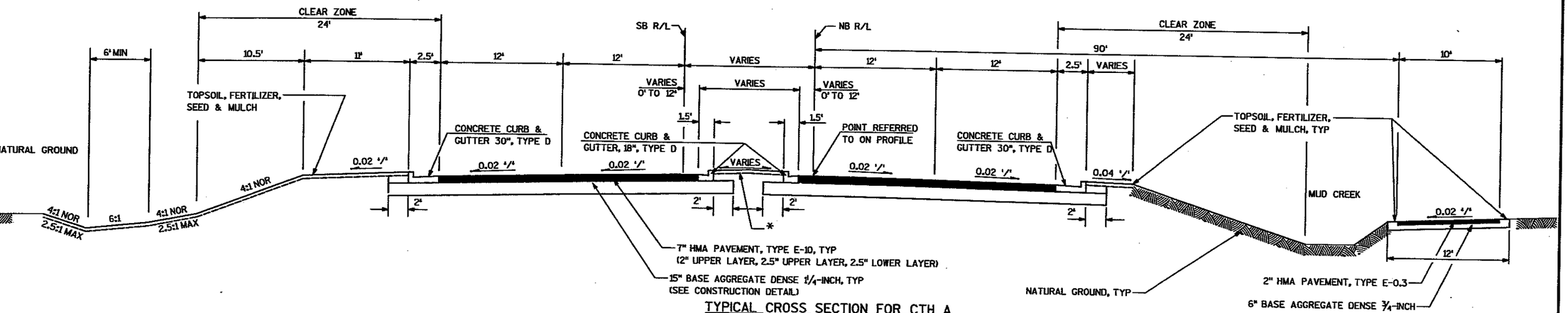


TYPICAL CROSS SECTION FOR CTH A
STA 228+25 TO STA 234+50



TYPICAL CROSS SECTION FOR CTH A
STA 234+50 TO STA 243+00

* TOPSOIL, FERTILIZER, SEED AND MULCH STA 234+50 TO STA 237+78 AND STA 242+20 TO STA 243+00
CONCRETE SIDEWALK, 4" STA 237+78 TO STA 242+20

TE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PROPOSED TYPICAL SECTIONS	SCALE, FEET 0 5 10	SHEET NO: 9 E

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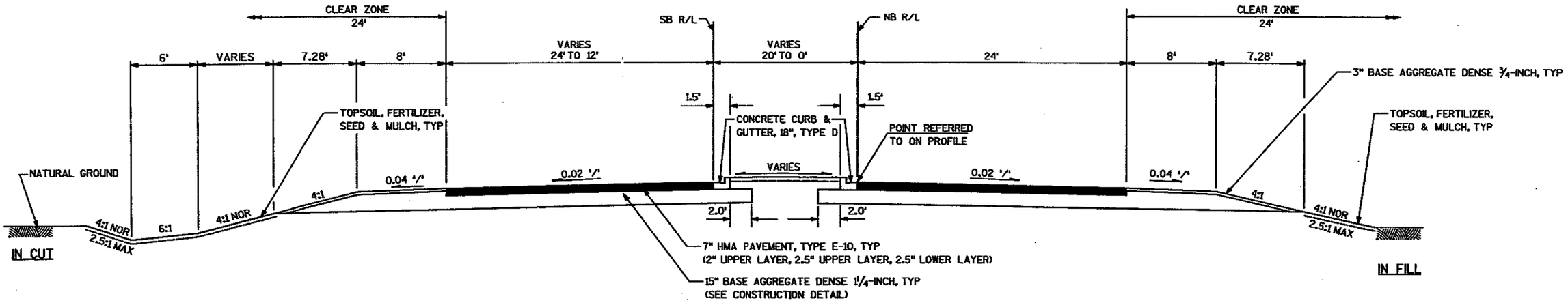
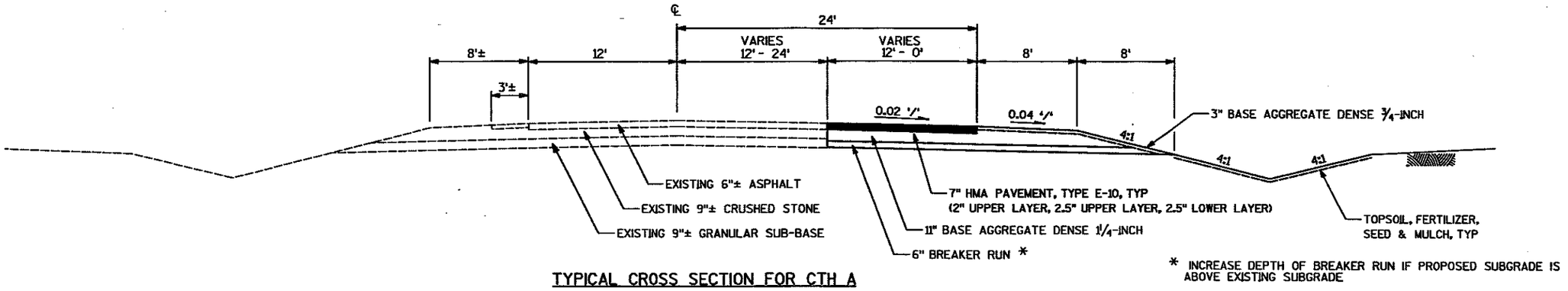
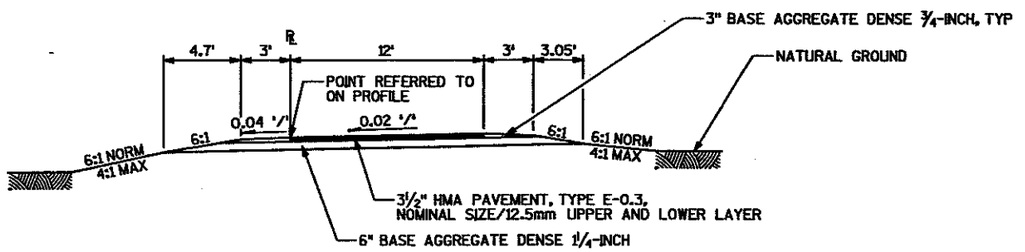


TYPICAL CROSS SECTION FOR CTH A
STA 243+00 TO STA 250+10



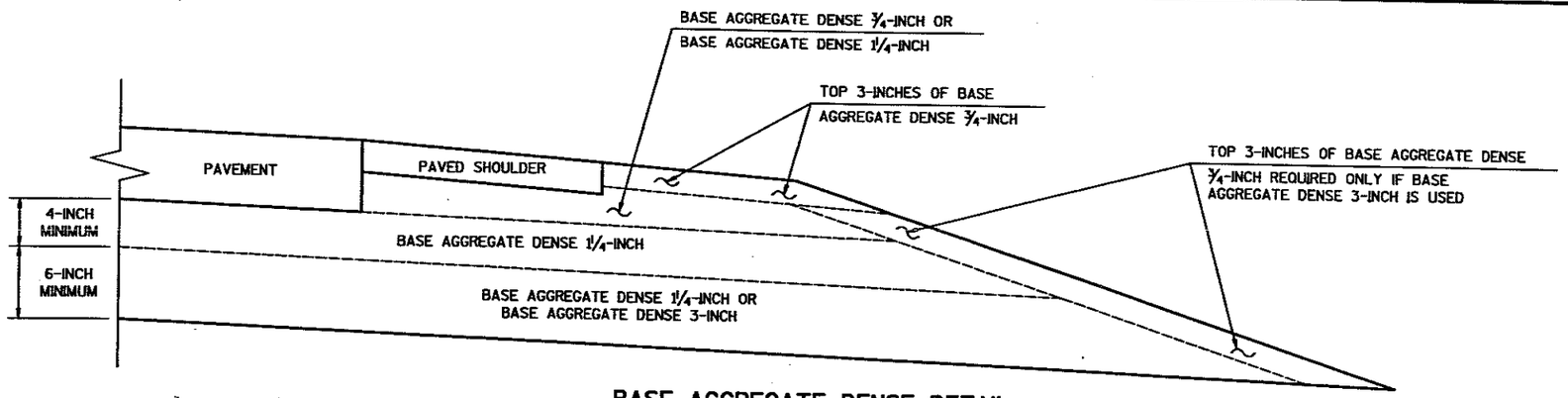
TYPICAL CROSS SECTION FOR CTH A
STA 250+10 TO STA 252+49



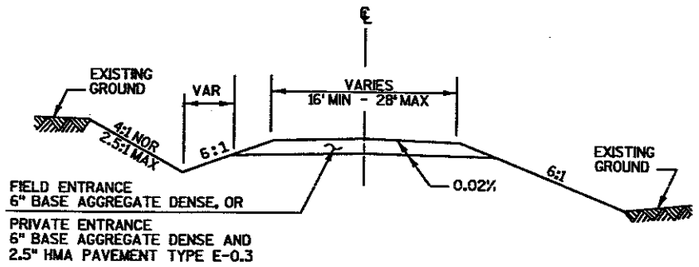
TYPICAL CROSS SECTION FOR SCHUH DRIVEWAY
STA 12+82 TO STA 20+00

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PROPOSED TYPICAL SECTIONS	SCALE, FEET 0 5 10	SHEET NO: 10	E

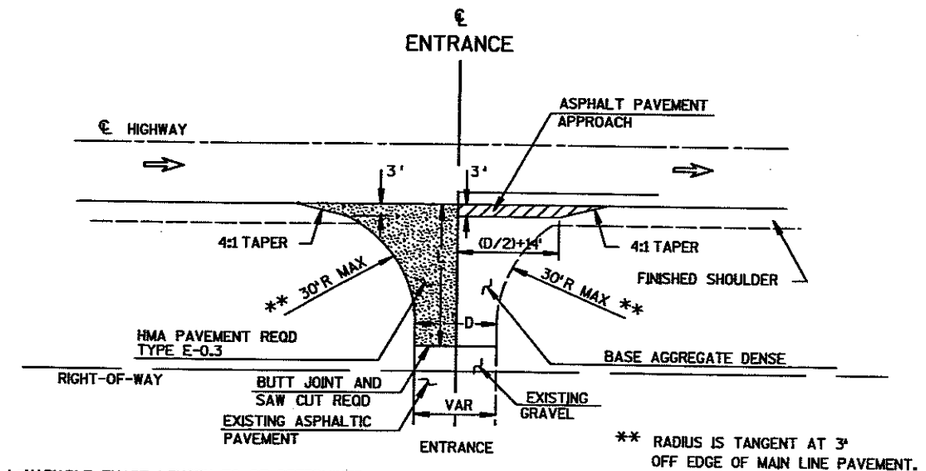
F:\Transportation\E1582A02\SHEET\PLAN\E1582TY7.2DG PLOT DATE : 06/07/2004 09:30:57 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 42



BASE AGGREGATE DENSE DETAIL



TYPICAL CROSS SECTION

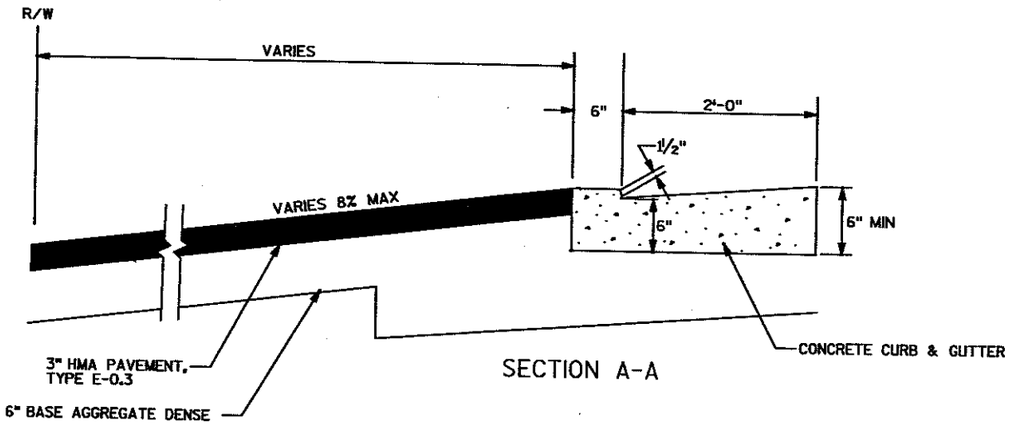


L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

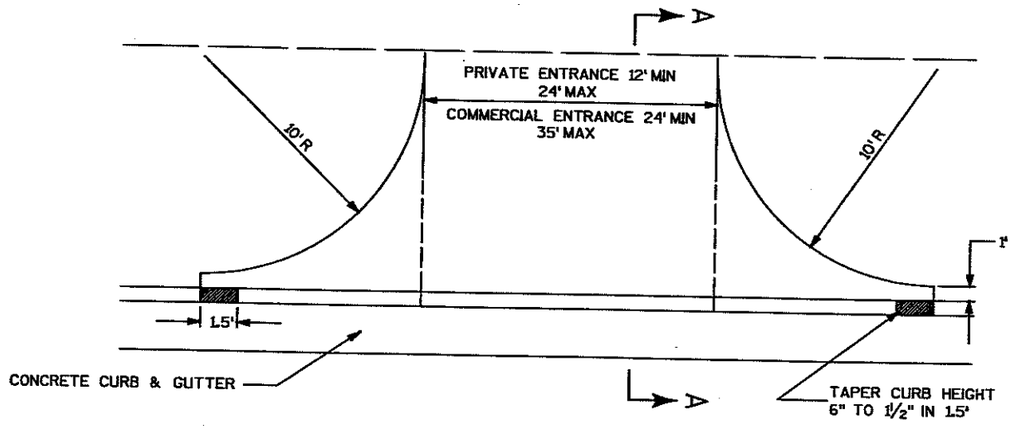
D=DRIVEWAY WIDTH
D=20'TYP(PE's & FE's) (16'MIN-24'MAX)

PLAN VIEW

RURAL PRIVATE AND FIELD ENTRANCES

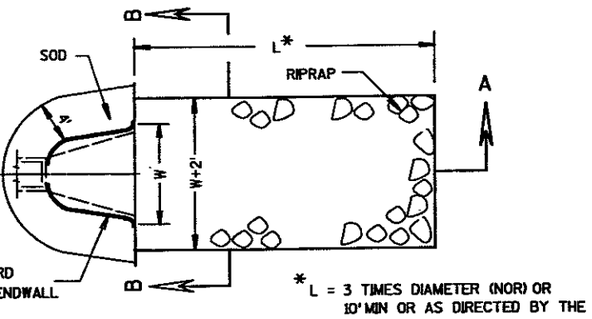


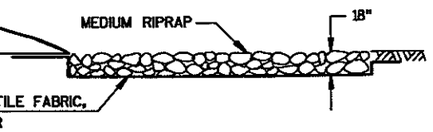
SECTION A-A



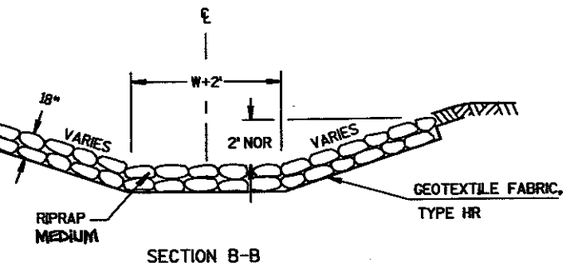
URBAN COMMERCIAL AND PRIVATE ENTRANCES

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SCALE, FEET 0	SHEET NO: 11 E



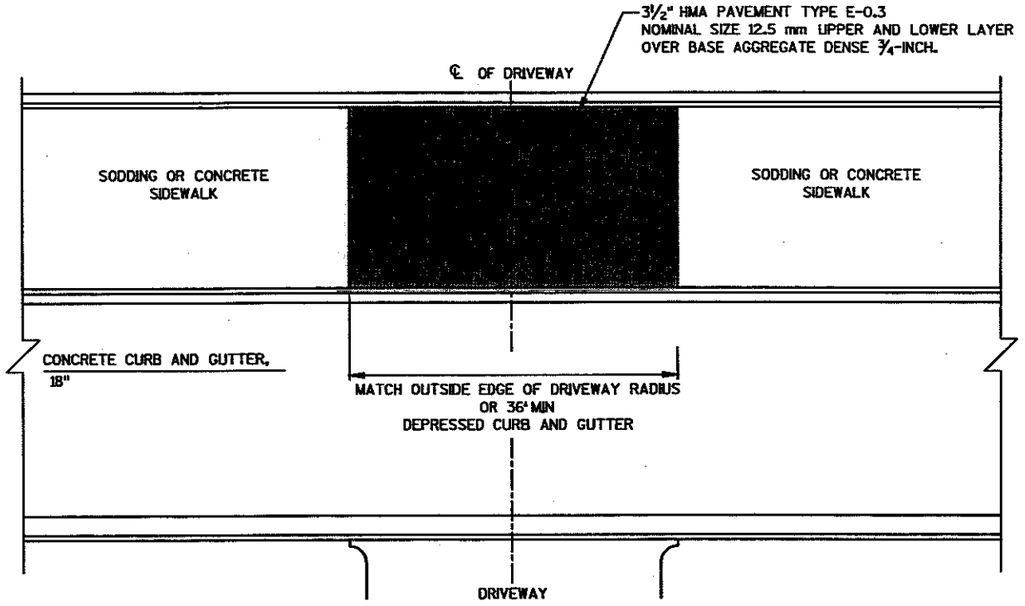


SECTION A-A

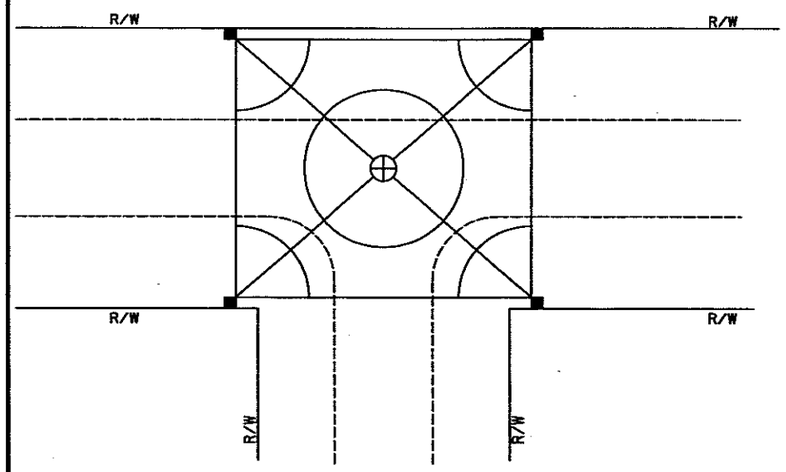


SECTION B-B

RIPRAP MEDIUM



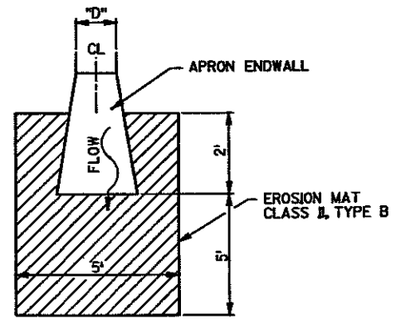
DRIVEWAY MEDIAN OPENING



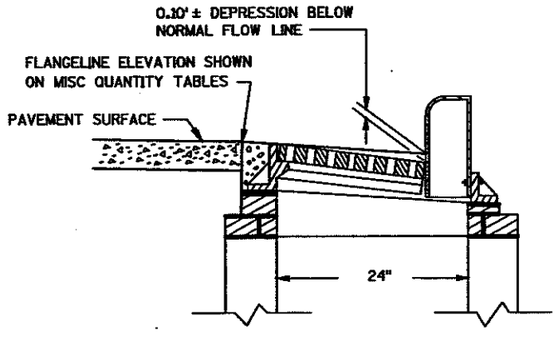
TYPICAL LAYOUT FOR LANDMARK REFERENCE MONUMENTS

LEGEND

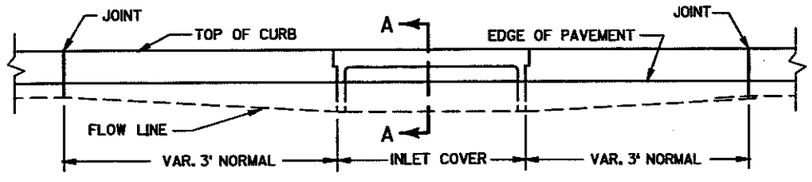
- ⊕ LANDMARK MONUMENT TO BE REFERENCED (TYPE A OR D EXCEPT WITHIN TRAVELLED ROADWAY) (BY OTHERS)
- ■ LANDMARK REFERENCE MONUMENT (NEW OR EXISTING) (TYPE A, C OR D)
- —— DISTANCES TO BE MEASURED
- ⌒ ANGLES TO BE MEASURED



ON MAT AT ENDWALL (DISCHARGE)

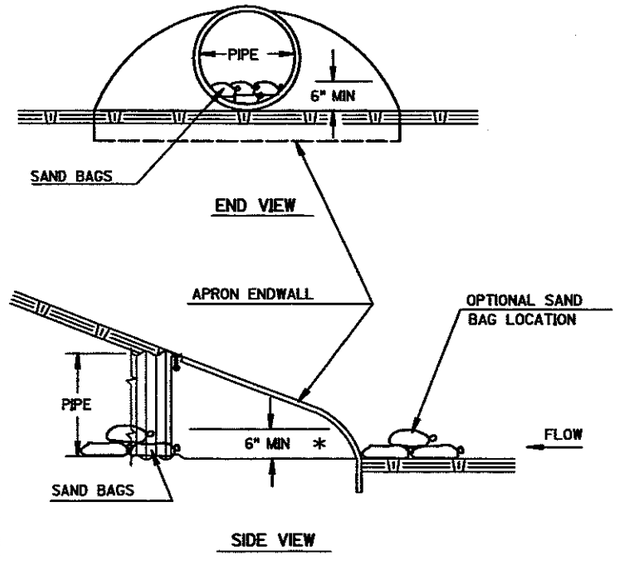


SECTION A-A



ELEVATION

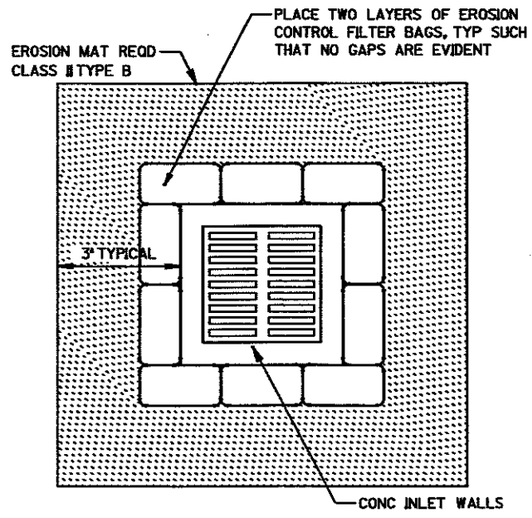
DETAIL OF CURB AND GUTTER AT INLETS



SIDE VIEW

CULVERT PIPE DITCH CHECK

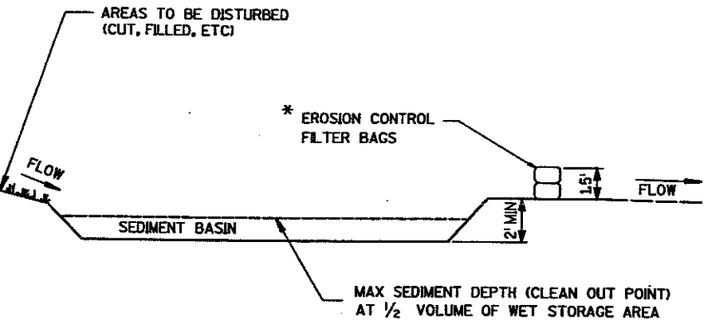
(INSTALL ON INLET END ONLY)



FILTER BAGS & EROSION MAT AT FIELD INLETS

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SCALE, FEET 0	SHEET NO: 12	E

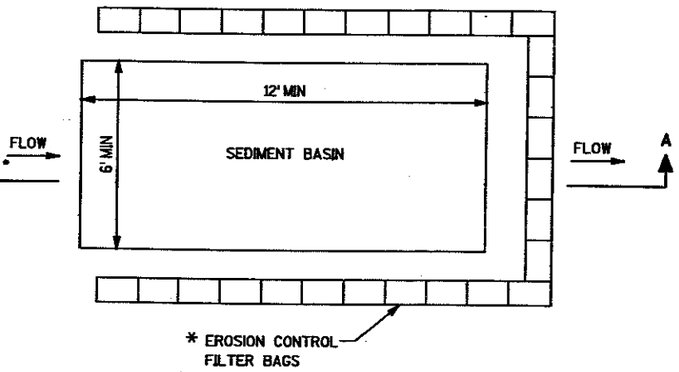
F:\Transportation\E1582A02\SHEET\PLAN\E1582DT2.DGN PLOT DATE : 06/07/2004 09:31:47 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



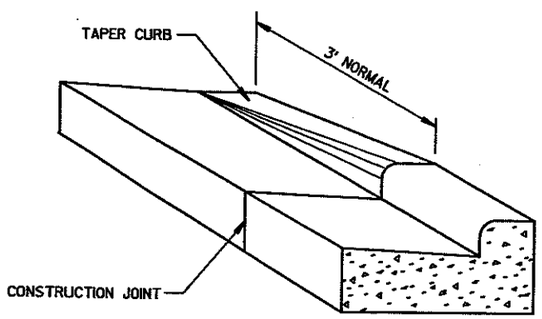
SEDIMENT TRAP

SECTION A-A

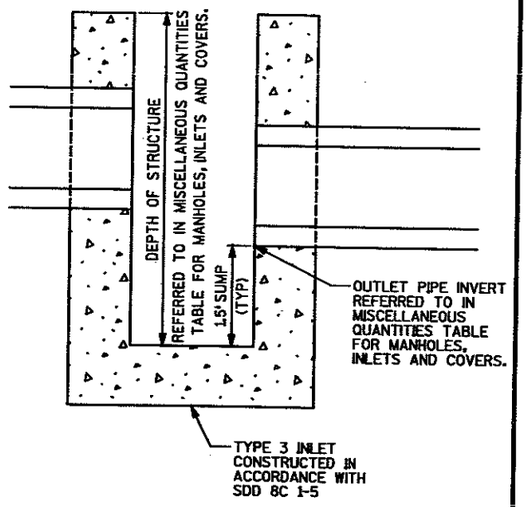
* PAID FOR SEPARATELY



SEDIMENT TRAP

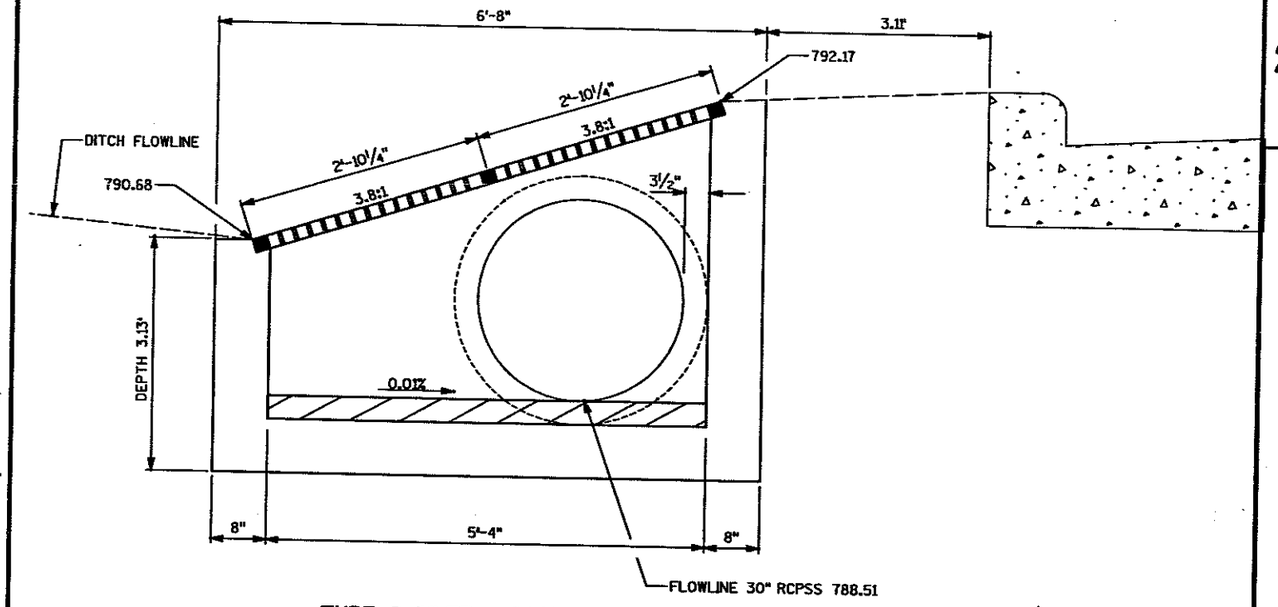


DETAIL OF CURB & GUTTER TERMINI



INLET TYPE 3 SPECIAL

(1.5' SUMP)
SEE SDD FOR ADDITIONAL INFORMATION
NOT INCLUDED HERE.

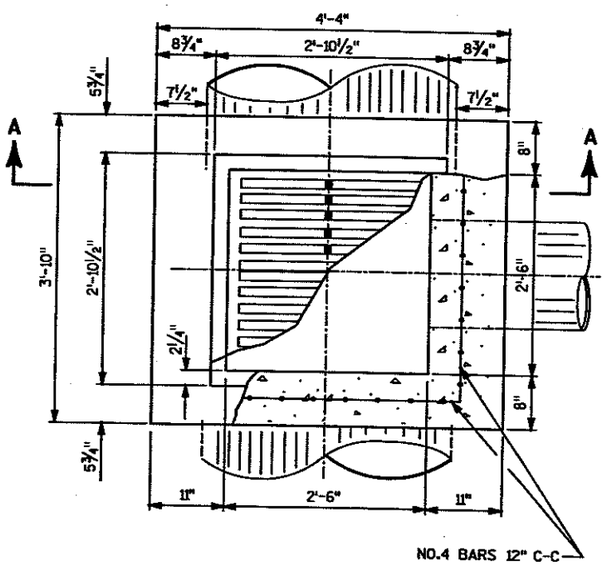


TYPE 9 INLET - CAST IN PLACE

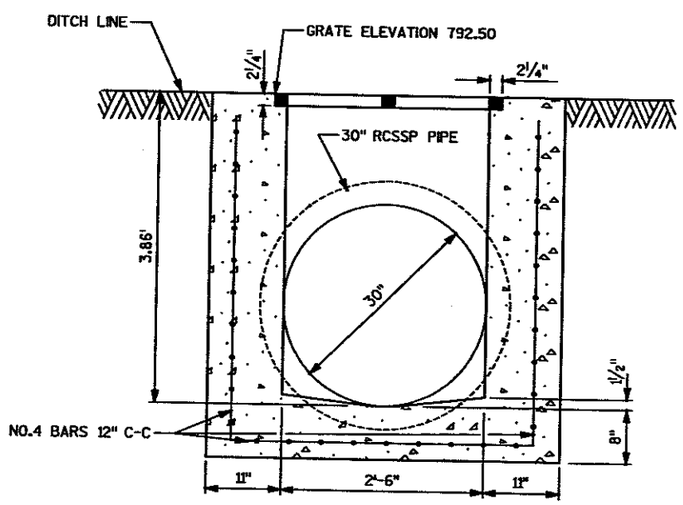
STRUCTURE NO. 14
STA 207+02 CTH A, 51.3'LT

SEE SDD FOR ADDITIONAL INFORMATION
NOT INCLUDED HERE.

NOTE: ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR.



PLAN VIEW



SECTION A-A

TYPE 8 INLET, SPECIAL - CAST IN PLACE

SEE SDD FOR ADDITIONAL INFORMATION
NOT INCLUDED HERE.

STRUCTURE NO. 21
STA 208+00

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SCALE, FEET	SHEET NO: 13	E

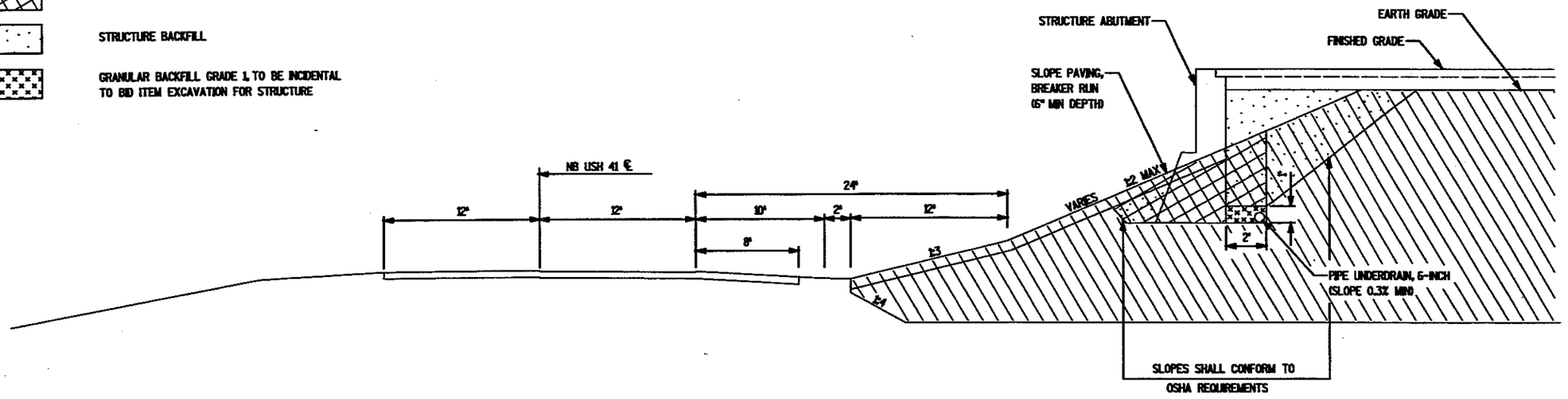
ME : F:\Transportation\E1582A02\SHEET\PLAN\E1582DT3.dgn PLOT DATE : 06/07/2004 09:32:39 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

EXISTING FILL OR (FILL IN PLACE)

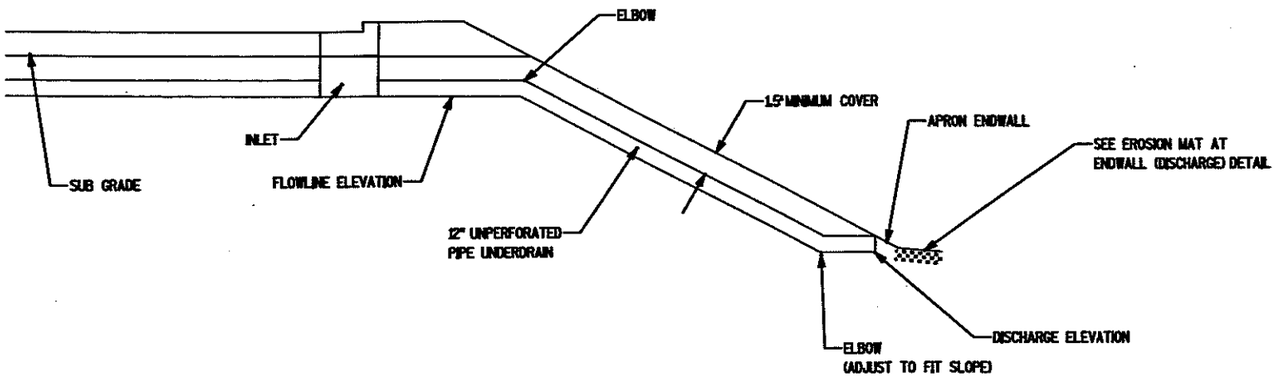
EXCAVATION FOR STRUCTURE

STRUCTURE BACKFILL

GRANULAR BACKFILL GRADE 1, TO BE INCIDENTAL TO BID ITEM EXCAVATION FOR STRUCTURE

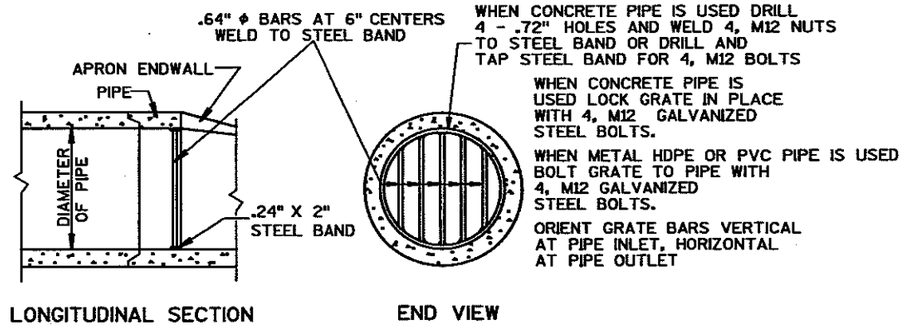


LONGITUDINAL SECTION FOR NORTH & SOUTH ABUTMENTS, STRUCTURE B-44-140



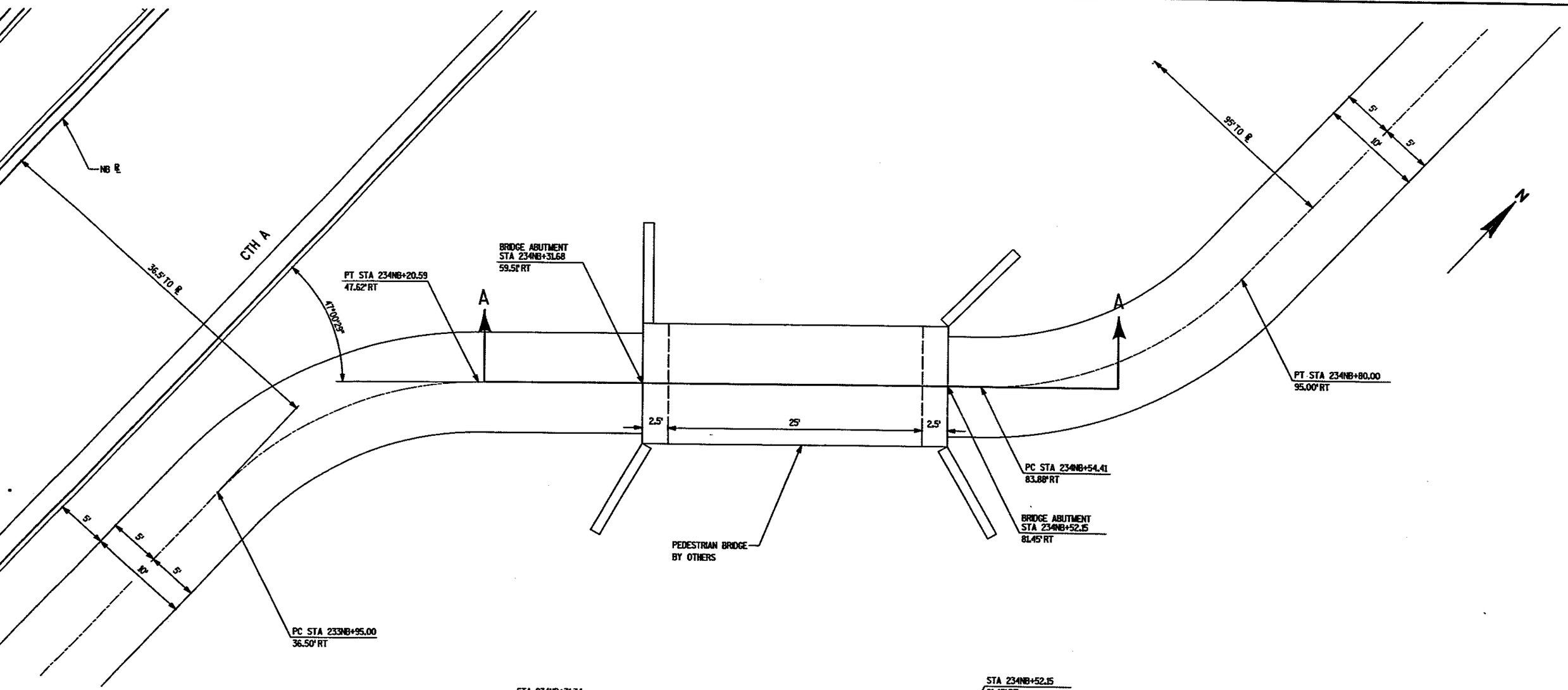
DETAIL FOR INLET DISCHARGE PIPE TO DITCH

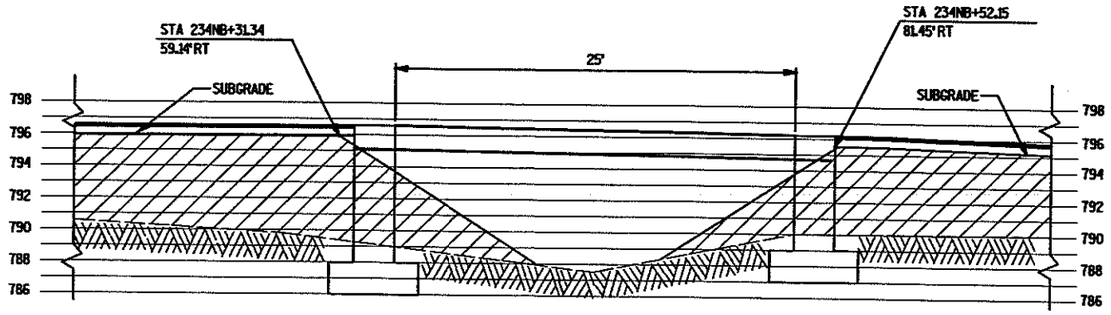
STA 223+00 LT
STA 231+50 RT



PIPE GRATE DETAIL

PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONSTRUCTION DETAIL	SCALE, FEET 0	SHEET NO: 14	E





SECTION A

LEGEND

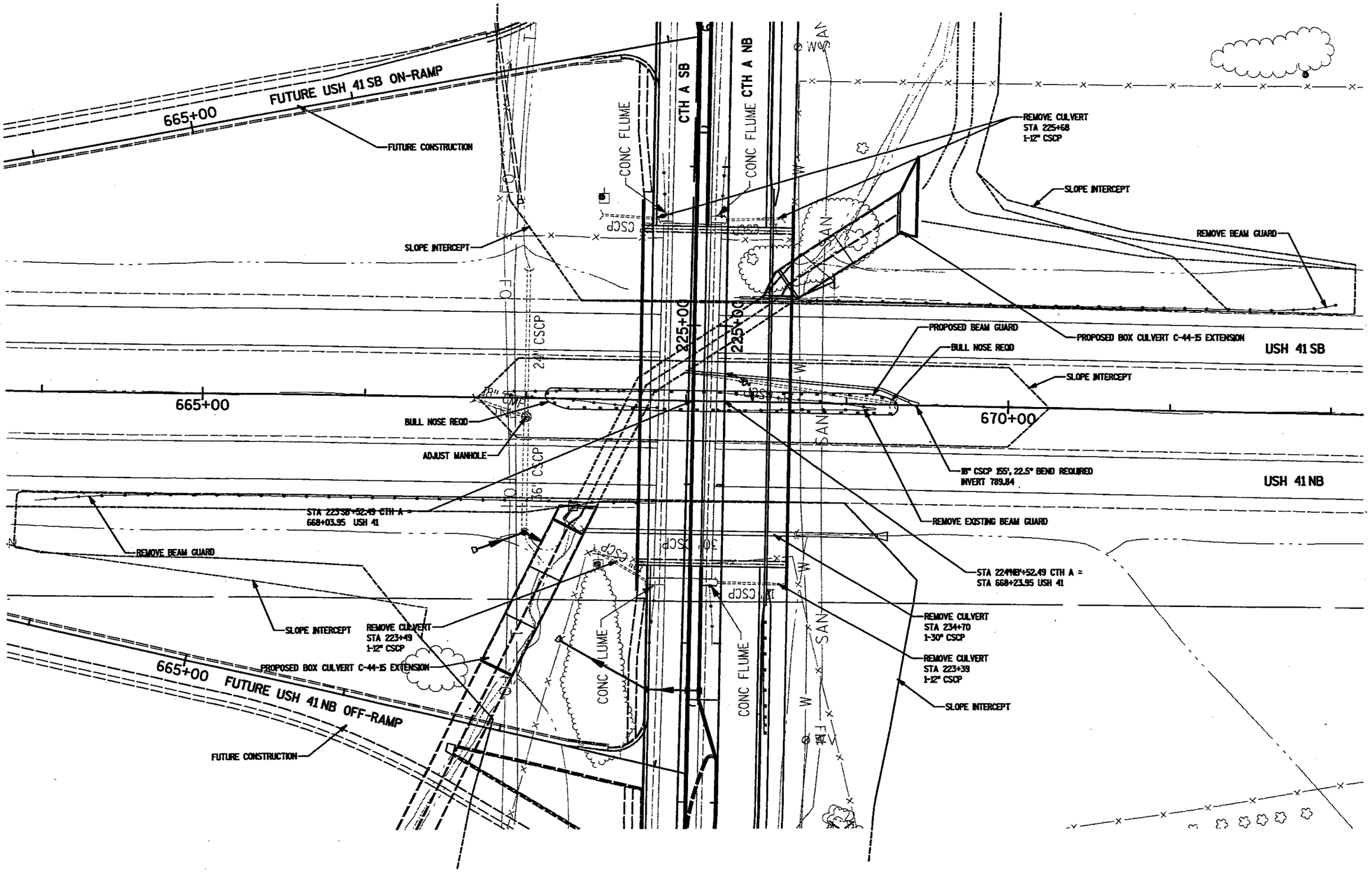
FILL (BY CONTRACTOR)

NATURAL GROUND

LONGITUDINAL SECTION FOR NORTH AND SOUTH ABUTMENT AT PEDESTRIAN BRIDGE

ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONSTRUCTION DETAIL	SCALE, FEET 0 5 10	SHEET NO: 15	E

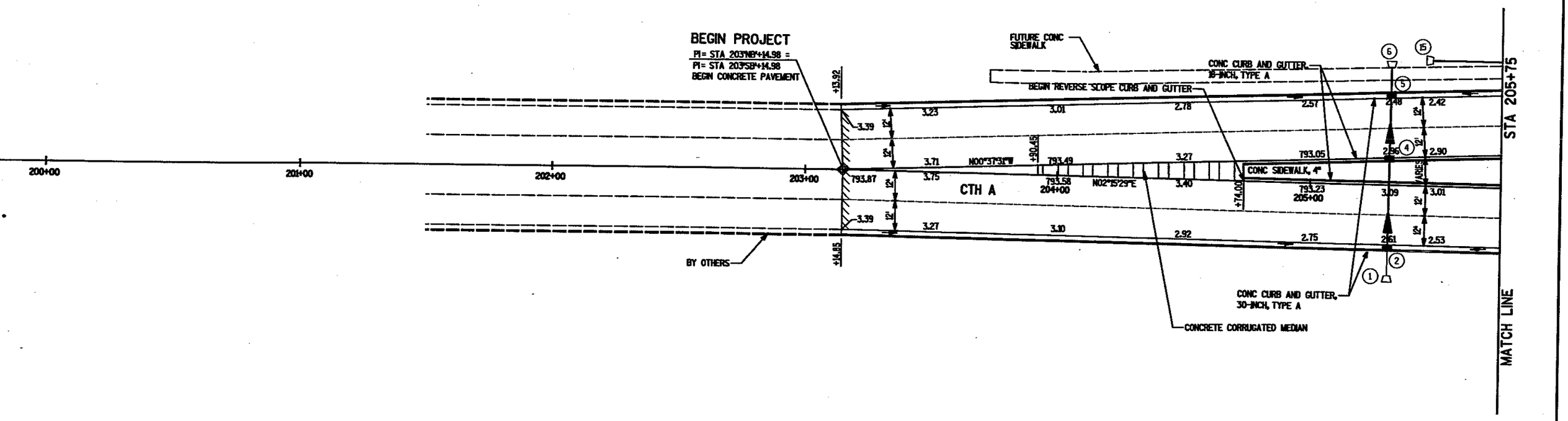
NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582DT6.dgn PLOT DATE : 03/29/2004 02:12:08 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$



USH 41 AT CTH A

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONSTRUCTION DETAILS	SCALE, FEET 0 30 60	SHEET NO: 16 E

F:\Transportation\E1582A02\SHEET\PLAN\E1582DT4.dgn PLOT DATE : 06/07/2004 09:38:12 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

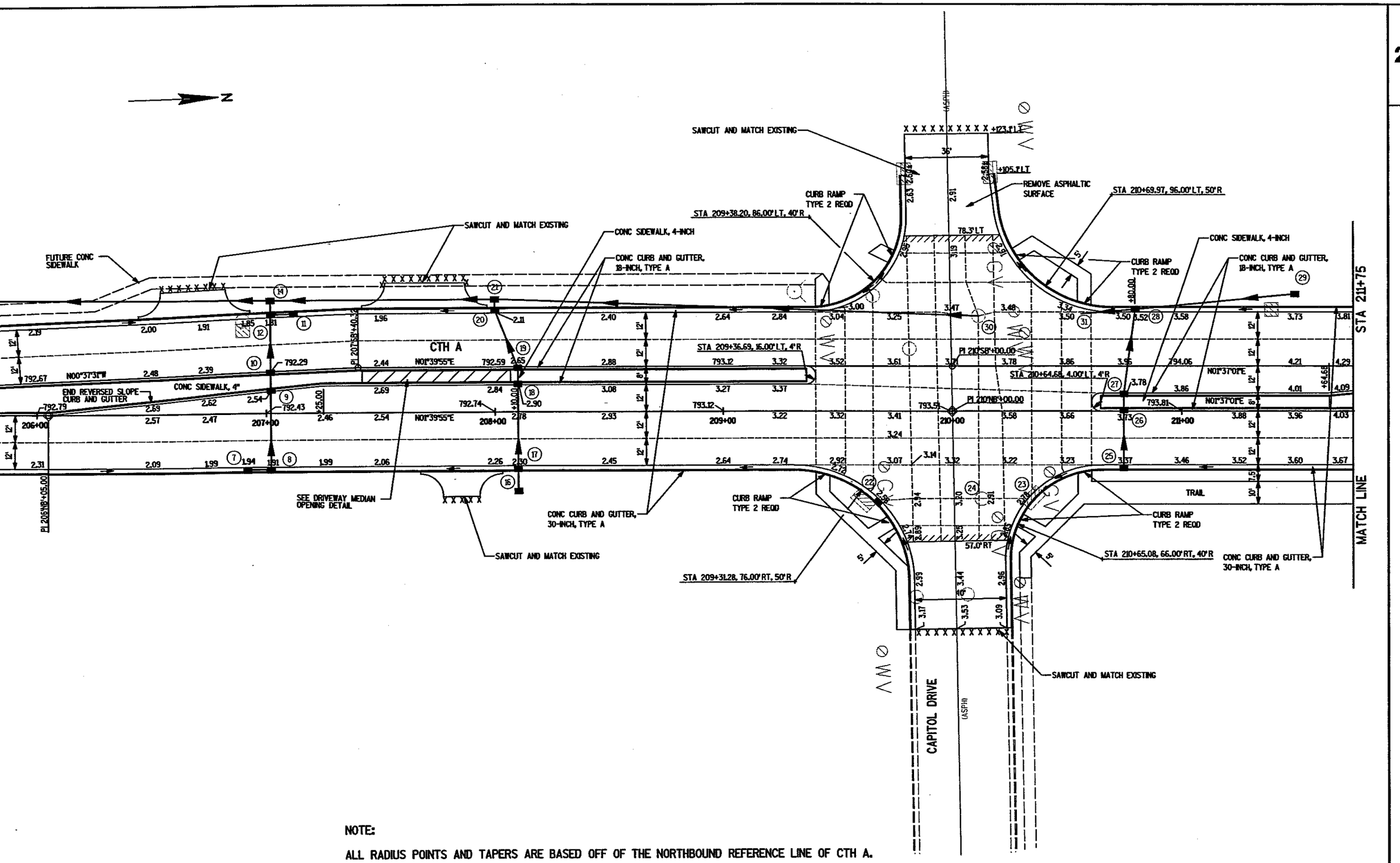


NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 17 E

ME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PD1.dgn PLOT DATE : 06/07/2004 09:39:09 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : **.....plotscale.....**
WISDOT/CADDS SHEET 42

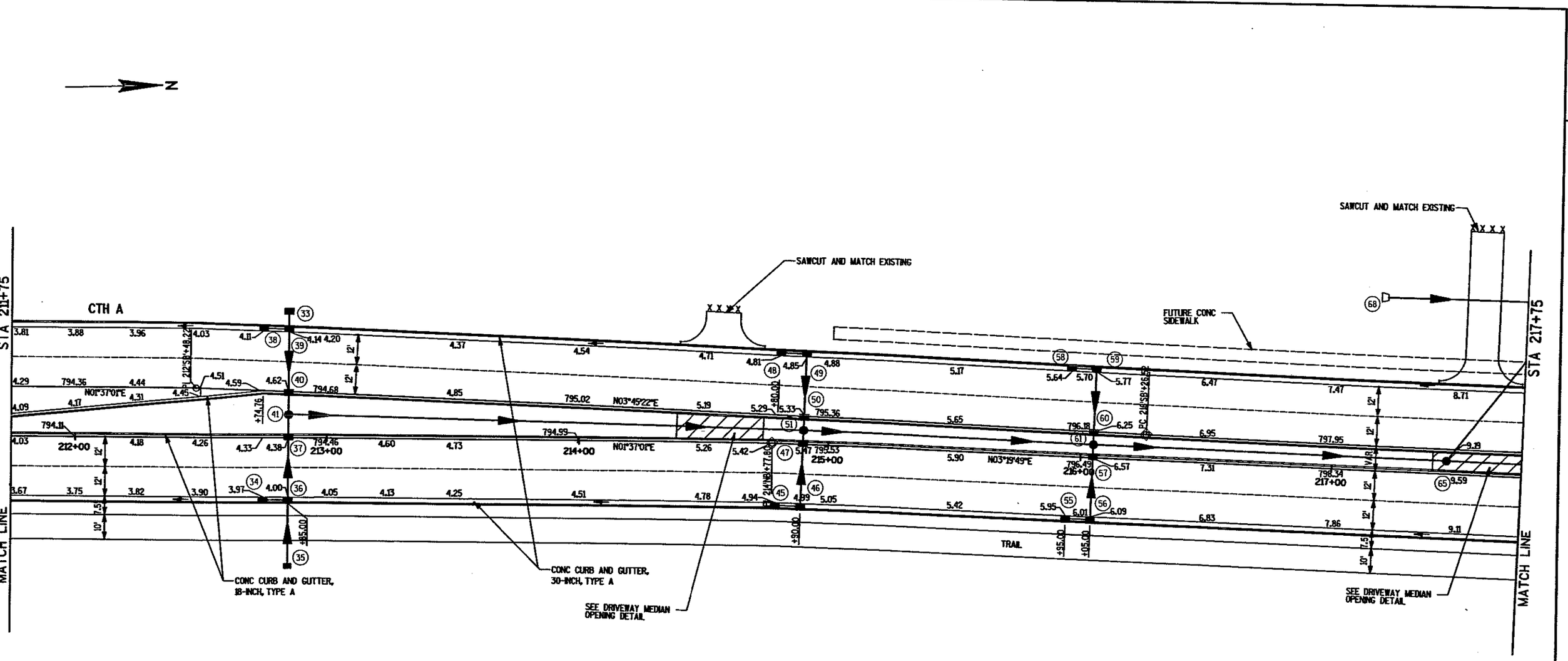


NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 18	E

: F:\Transportation\E1582A02\SHEET\PLAN\E1582PD2.dgn PLOT DATE : 03/28/2004 07:24:13 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 19 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PD3.dgn PLOT DATE : 03/22/2004 04:13:03 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

N

CURVE #1

P1STA 218SB+82.42
N : 575239.190
E : 817125.826
D : 0°30'00"
T : 255.91'
L : 511.73'
R : 11459.16'
PC STA 216+26.52
N : 574983.833
E : 817109.062
PT STA 221+38.25
N : 575495.040
E : 817131.173

LEGEND
24"x48" PULLBOX
3" CONDUIT

CTH A

CURVE #1

FUTURE CONC SIDEWALK

PB2

TWO 3" CONDUIT

FUTURE CONC SIDEWALK

CONC SIDEWALK, 4-INCH

CONCRETE PAVEMENT APPROACH SLAB

PB7

STA 223+75

PB3

PB4

PB5

PB6

PB8

TRAIL

FLAT DRIVEWAY CUT 112.5'

CONC CURB AND GUTTER, 30-INCH, TYPE A

CONC CURB AND GUTTER, 18-INCH, TYPE A

CONC CURB AND GUTTER, 18-INCH, TYPE A

MATCH LINE

NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 20	E

F:\Transportation\E1582A02\SHEET\PLAN\E1582PD4.dgn PLOT DATE : 06/07/2004 09:40:03 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

N

LEGEND
24"x48" PULLBOX
3" CONDUIT

STA 227+59.14, 150.67' LT, 150' R

FUTURE CONC SIDEWALK
CONCRETE PAVEMENT APPROACH SLAB
CONC SIDEWALK, 4-INCH
TWO 3" CONDUIT
FUTURE CONC SIDEWALK
END OF CONCRETE PAVEMENT

STA 223+75
STA 229+75
MATCH LINE
MATCH LINE

PB9 PB10 PB11 PB12 PB13 PB14 PB15

N01°11'51"E
N01°26'34"E
TRAIL

224+00 225+00 226+00 227+00 228+00 229+00

CONC CURB AND GUTTER, 18-INCH, TYPE A
CONC CURB AND GUTTER, 30-INCH, TYPE A
CURVE #2
CONC CURB AND GUTTER, 30-INCH, TYPE D
CONC CURB AND GUTTER, 18-INCH, TYPE D

CURVE #2

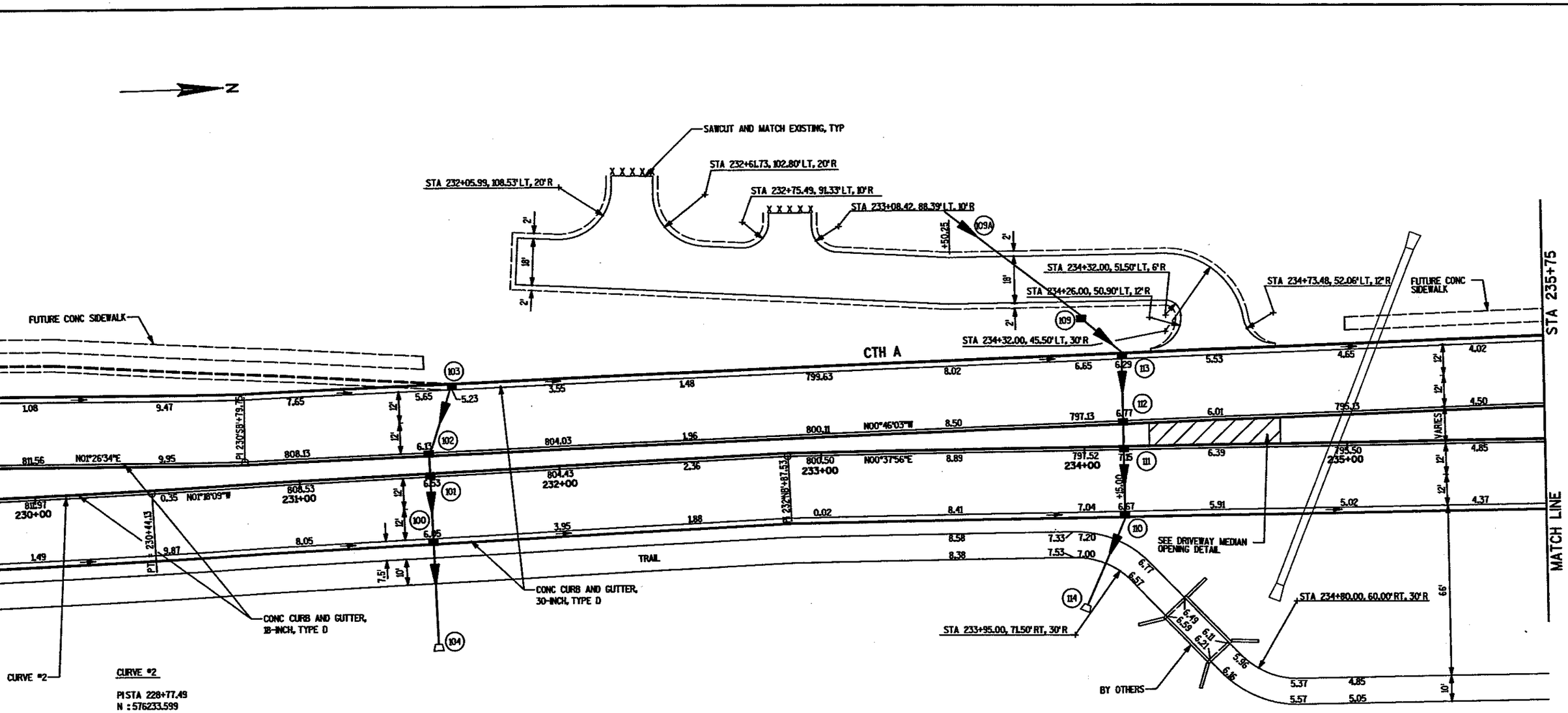
PISTA 228NB+77.49
N : 576233.599
E : 817166.614
D : 0°45'00"
T : 166.69'
L : 333.33'
R : 7639.44'
PC STA 227+10.80
N : 576066.942
E : 817163.131
PT STA 230+44.13
N : 576400.249
E : 817162.825

NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 21 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PD5.dgn PLOT DATE : 03/29/2004 11:25:16 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$



CURVE #2

PISTA 228+77.49
N : 576233.599
E : 817166.614
D : 0°45'00"
T : 166.69'
L : 333.33'
R : 7639.44'
PC STA 227+10.80
N : 576066.942
E : 817163.131
PT STA 230+44.13
N : 576400.249
E : 817162.825

NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 22	E

N

LEGEND
24"x48" PULLBOX
3" CONDUIT

STA 239+63.69, 86.00'LT, 40'R
STA 239+79.48, 16.00'LT, 4'R
SAWCUT AND MATCH EXISTING
FUTURE CONC SIDEWALK
3" CONDUIT SPECIAL
STA 241+18.45, 106.00'LT, 60'R
STA 241+06.31, 75.00'LT, 75'R
PB18
PB23
PB21
CTH A
STA 241+75
PI = 240+28.88
PB17
PB22
STA 240+89.46, 5.00'LT, 3'R
236+00
237+00
238+00
239+00
240+00
241+00
N00°46'03"W
N00°37'56"E
N00°32'57"W
796.57
CONC SIDEWALK, 4-INCH
CONC CURB AND GUTTER, 30-INCH, TYPE D
CURB RAMP, TYPE 2 RECD
STA 239+43.48, 70.00'RT, 20'R
STA 239+33.53, 84'RT, 60'R
PB16
PB19
PB20
STA 240+24.53, 42.39'RT, -3'R
STA 240+91.29, 67.00'RT, 74'R
CONC SIDEWALK, 4-INCH
MATCH LINE
TRAIL
REMOVE ASPHALTIC SURFACE
GRAND CHUTE BLVD
SAWCUT AND MATCH EXISTING
4.5" ASPHALTIC CONCRETE PAVEMENT, TYPE E-10
(2" UPPER LAYER,2.5" LOWER LAYER)

NOTE:

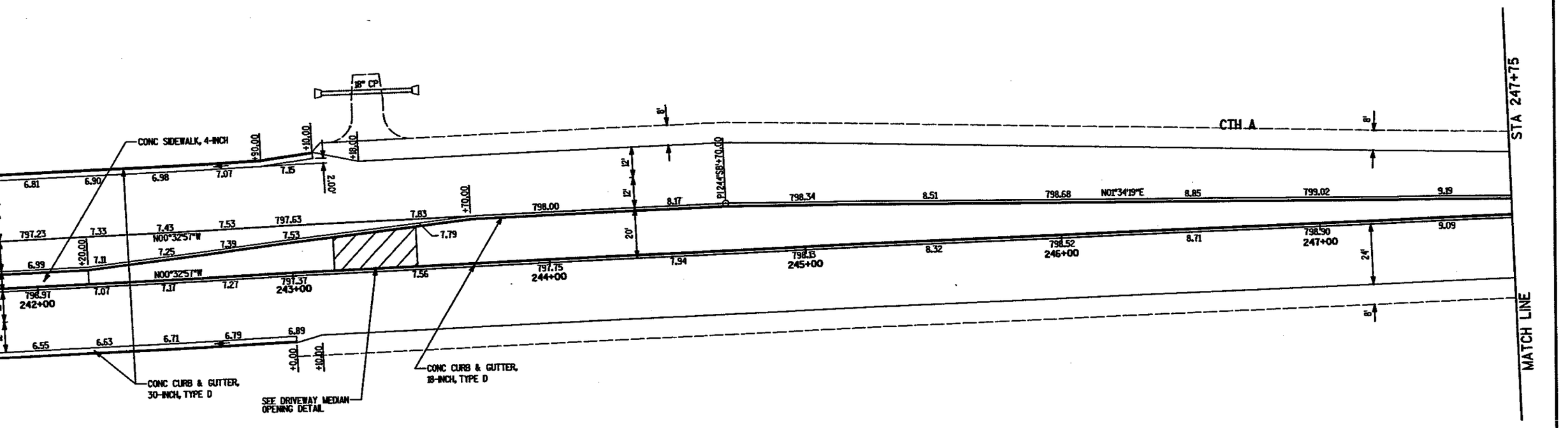
ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 23 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PD7.dgn PLOT DATE : 03/29/2004 02:53:43 PM PLOT BY : knutho PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

N

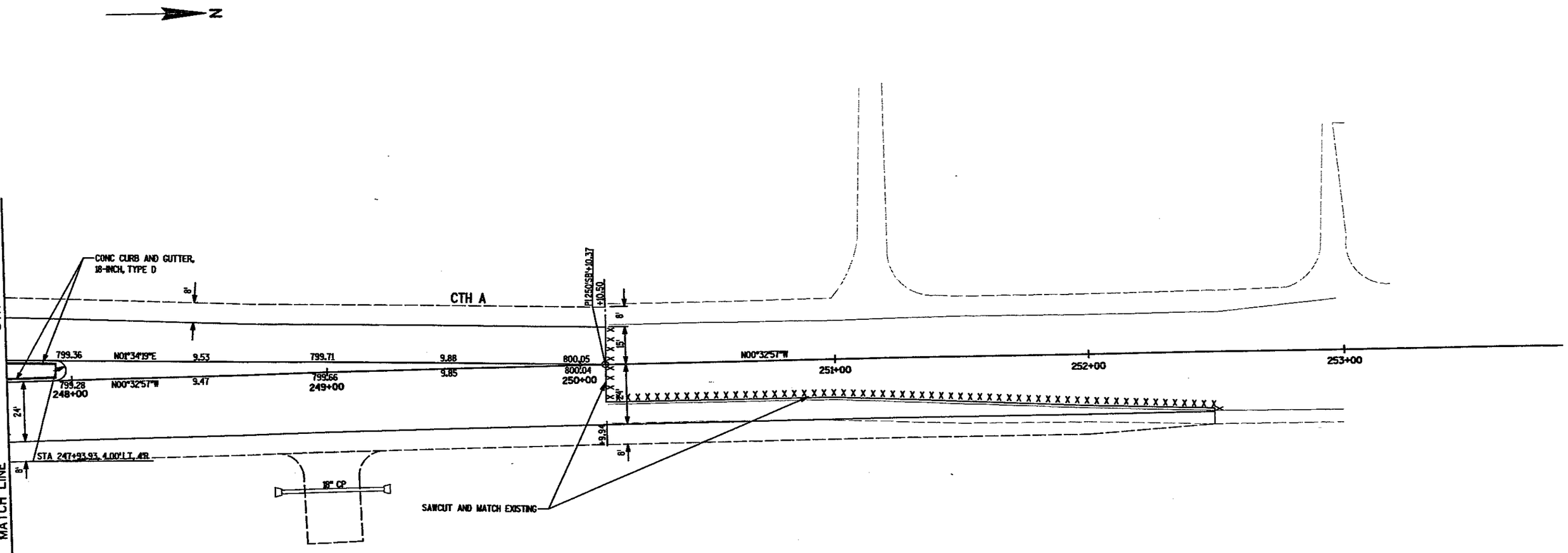


NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 2A	E

: F:\Transportation\E1582A02\SHEET\PLAN\E1582PD8.dgn PLOT DATE : 03/22/2004 04:35:18 PM PLOT BY : knutho PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



NOTE:

ALL RADIUS POINTS AND TAPERS ARE BASED OFF OF THE NORTHBOUND REFERENCE LINE OF CTH A.

ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVING DETAIL	SCALE, FEET 0 20 40	SHEET NO: 25 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PD9.dgn PLOT DATE : 03/29/2004 11:27:29 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTE: IN ORDER TO REMOVE REED CANARY GRASS FROM THE MITIGATION SITE, THE TOP TWO (2') FEET OF SOIL THAT IS REMOVED FROM THE EXISTING AND PROPOSED WETLANDS MAY BE USED AS FILL AND OR TOPSOIL IN UPLAND SITES BUT NOT IN THE MITIGATION SITE.

2

EXISTING DELINEATED WETLANDS

PROPOSED WETLAND MITIGATION AREA #1

USH 41 NORTHBOUND OFF-RAMP

FUTURE USH 41 SOUTHBOUND ON-RAMP

USH 41 NORTHBOUND

USH 41 SOUTHBOUND

CHRISTIAN & MISSIONARY ALLIANCE CHURCH OF APPLETON

CONC ROOF CELLAR

SLOPE INTERCEPT (TYP)

JOSEPH G. & JOYCE A. MAROSZEK

EUGENE W. & DOROTHY E. DORN

HSE 3901

CABC

66" CSCP

24" CSCP

CONC FLUME

SAN

W

CHANNEL RELOCATION

EXISTING 40' DRAINAGE EASEMENT

EXISTING R/W

R/W

BLF

ANDREW J. SCHUH

EDWARD ROSE PROPERTIES, INC.

BRANCH OF MUD CREEK

UNDER CONSTRUCTION

220+00

225+00

230+00

665+00

670+00

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CONTOUR AND MATCHLINE DETAIL WETLAND MITIGATION AREA #1	SCALE, FEET 0 50 100	SHEET NO: 26	E

: F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582CP1.dgn PLOT DATE : 03/29/2004 12:13:56 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

RTIES

MATTHEW D. DORN

E L DORN ESTATE, LLP

RICHARD L. & KATHLEEN DORN

E L DORN ESTATE, LLP

2

P/L

18" CSCP

24" CSCP

240+00

245+00

250+00

CTH A

REB 1¼"

7'H x 9.5'W CSPA

MUD CREEK

BEAM GUARD

CONC FLUME

EXITING R/W

SLOPE INTERCEPT

REB 1¼"

CHARLES E. & SANDRA KOHL

TOWN OF GRAND CHUTE

TOWN OF GRAND CHUTE

EXISTING R/W

GRAND CHUTE BLVD

EXITING R/W

SAN

SS

G

G/V

BOP = 4+00.00

1+00

190

2+00

195

3+00

4+00

5+00

6+00

7+00

8+00

EOP = 8+50.00

MUD CREEK

SLOPE INTERCEPT

NOTE: IN ORDER TO REMOVE REED CANARY GRASS FROM THE MITIGATION SITE, THE TOP TWO (2') FEET OF SOIL THAT IS REMOVED FROM THE EXISTING AND PROPOSED WETLANDS MAY BE USED AS FILL AND OR TOPSOIL IN UPLAND SITES BUT NOT IN THE MITIGATION SITE.

EXISTING DELINEATED WETLANDS

PROPOSED WETLAND MITIGATION AREA #2

N

ATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | WETLAND MITIGATION AREA #2 | SCALE, FEET 0 50 100 | SHEET NO: 27 | E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582WT2.dgn PLOT DATE : 03/23/2004 06:57:22 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

ND
- SILT FENCE
- EROSION MAT, URBAN, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- EROSION MAT, CLASS II, TYPE B
- MEDIUM RIPRAP
- TEMORARY DITCH CHECKS
- SURFACE WATER FLOW
- SEDIMENT TRAP

CAPITOL DRIVE
(ASPH)
(CONC)
HSE 2632
HSE 3340
205+00
210+00
215+50
24" DRCP
SPLIT RAIL FENCE
24" RCP
SIGN
MATCH LINE
(FUTURE USH 41 OFF-RAMP)
(FUTURE USH 41 ON-RAMP)
CONC FLUME
CSCP
SAN
SS
15" CMCP
220+00
225+00
230+00
230+50
CABC
12" CSCP
12" PVC
18" CSCP
24" CSCP
30" CSCP
36" CSCP
UND CONSTR
MUD CREEK

PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 28	E

F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582EC1.dgn PLOT DATE : 03/29/2004 11:46:42 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

EXISTING DETENTION POND

HSE 3901

230+50

MATCH LINE

235+00

240+00

245+00

CTH A

MUD CREEK

CONC FLUME

GRAND CHUTE BLVD.

BEAM GUARD

MUD CREEK

MATCH LINE

LEGEND

- SILT FENCE
- EROSION MAT, URBAN, CLASS I, TYPE A
- EROSION MAT, CLASS I, TYPE B
- EROSION MAT, CLASS II, TYPE B
- MEDIUM RIPRAP
- TEMORARY DITCH CHECKS
- SURFACE WATER FLOW
- (S) SEDIMENT TRAP

245+50

250+00

CTH A

MATCH LINE

MUD CREEK TRIBUTARY

PC = 13+86.88

PT 14+55.01

15+00

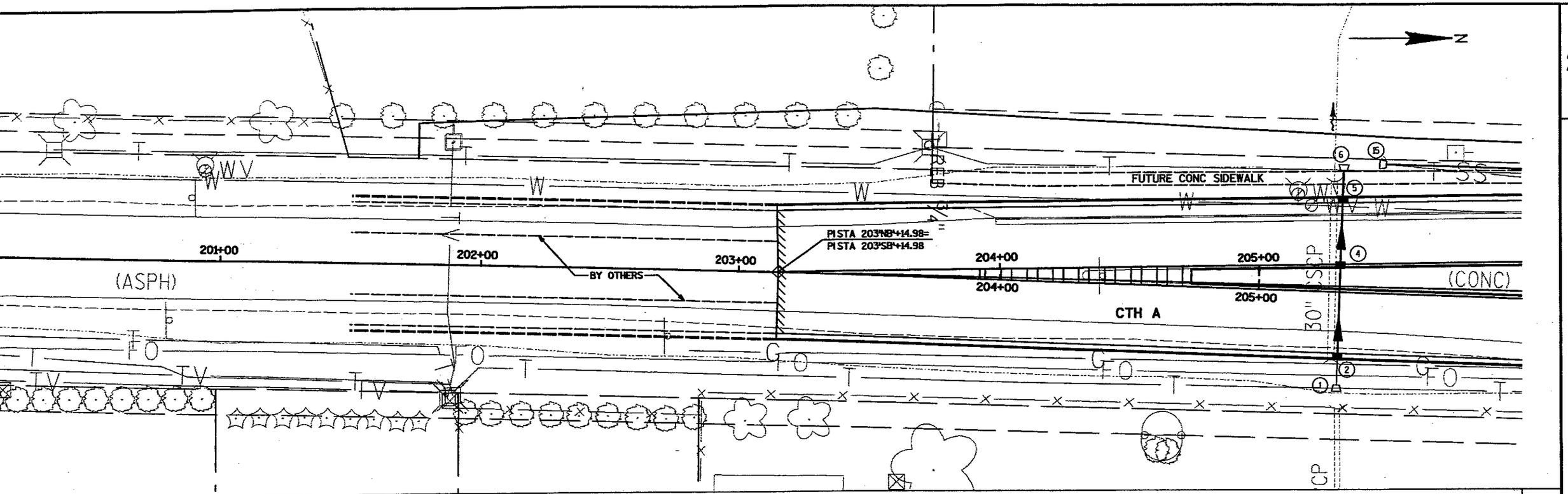
EOP 20+00.00

20+00

SCHUH'S DRIVEWAY

ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	EROSION CONTROL	SCALE, FEET 0 50 100	SHEET NO: 29 E

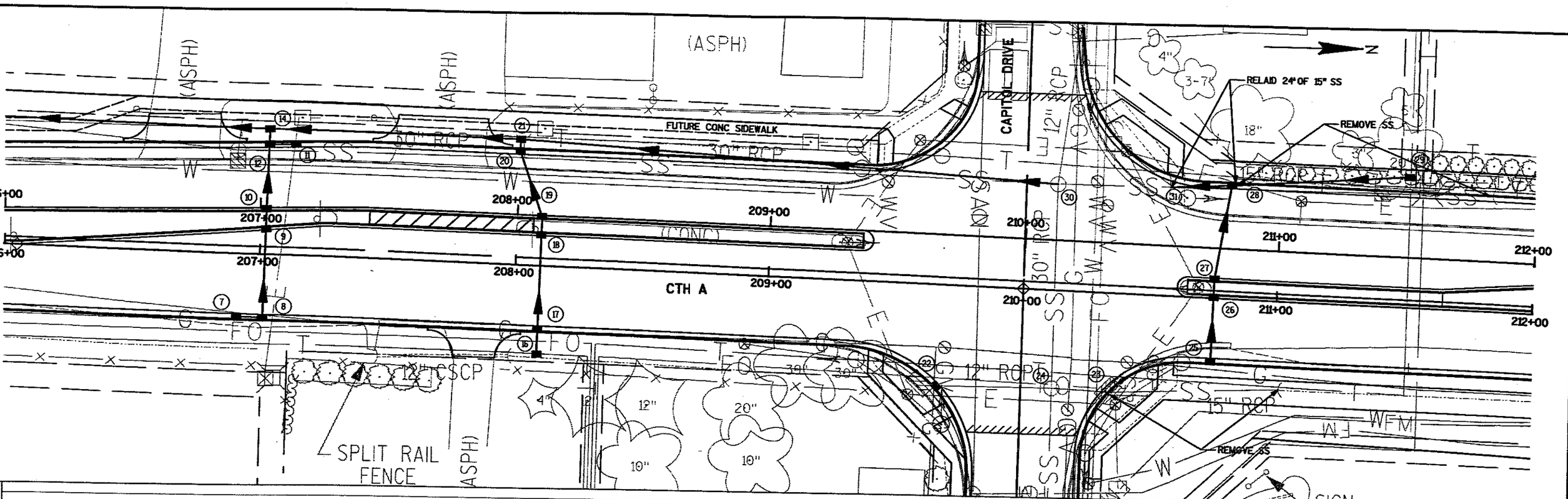
NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582EC2.dgn PLOT DATE : 03/28/2004 08:30:18 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

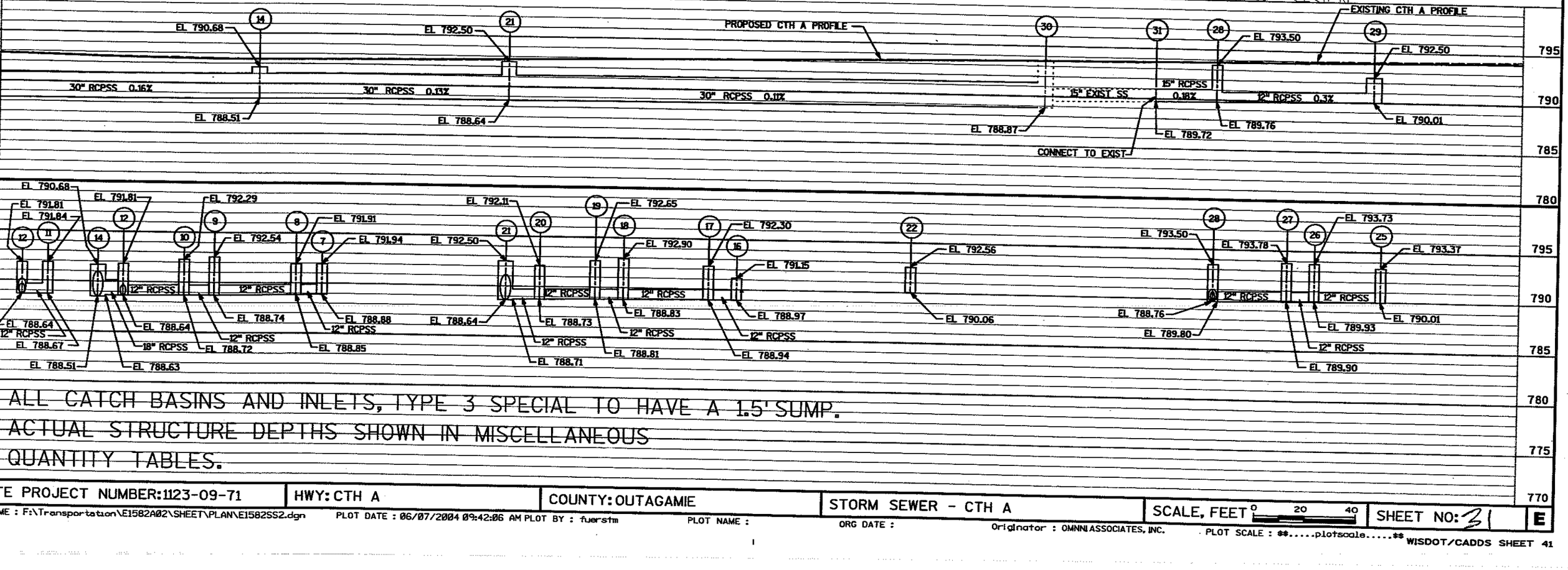


LL CATCH BASINS AND INLETS, TYPE 3 SPECIAL TO HAVE A 1.5' SUMP.
CTUAL STRUCTURE DEPTHS SHOWN IN MISCELLANEOUS
UANTITY TABLES.

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 30	E

F:\Transportation\E1582A02\SHEET\PLAN\E1582SS1.dgn PLOT DATE : 06/07/2004 09:41:17 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 41

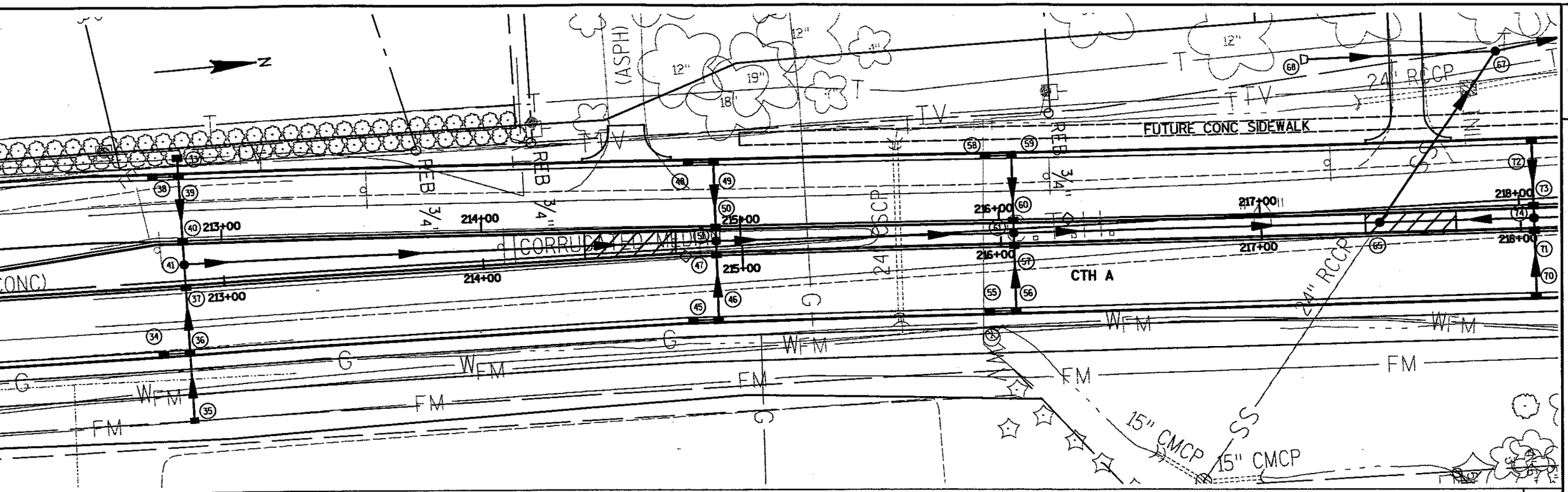


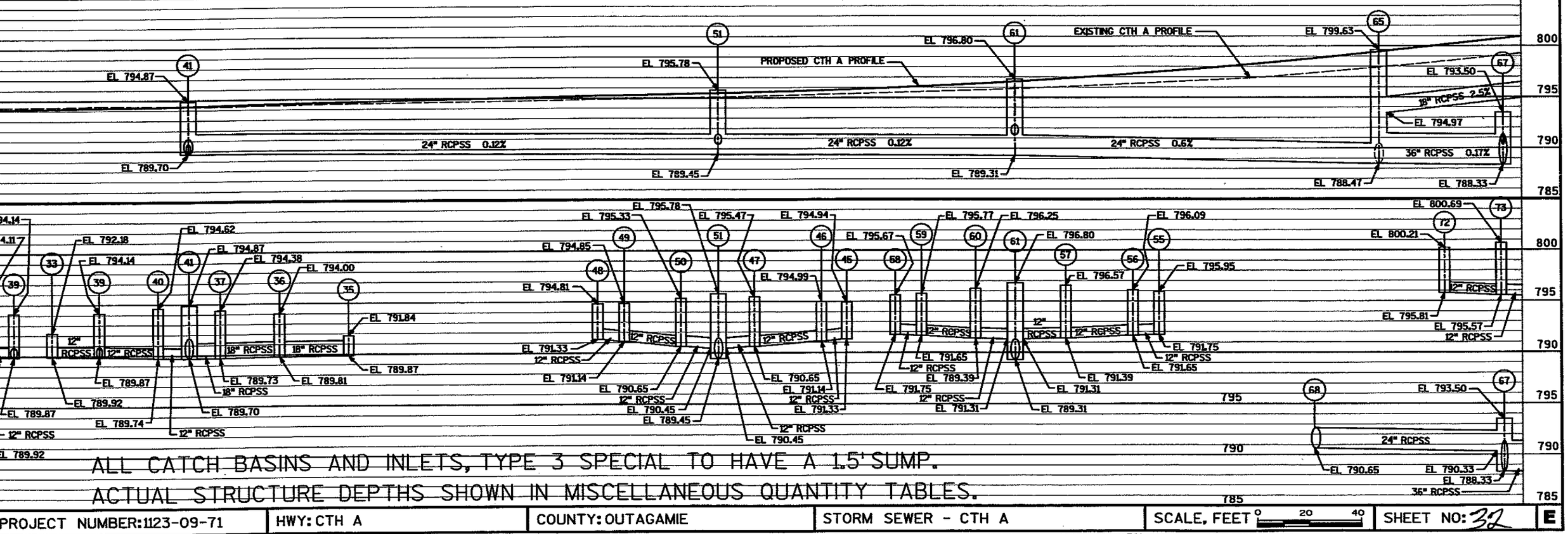


ALL CATCH BASINS AND INLETS, TYPE 3 SPECIAL TO HAVE A 1.5' SUMP. ACTUAL STRUCTURE DEPTHS SHOWN IN MISCELLANEOUS QUANTITY TABLES.

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 31 E

ME : F:\Transportation\E1582A02\SHEET\PLAN\E1582SS2.dgn PLOT DATE : 06/07/2004 09:42:06 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 41

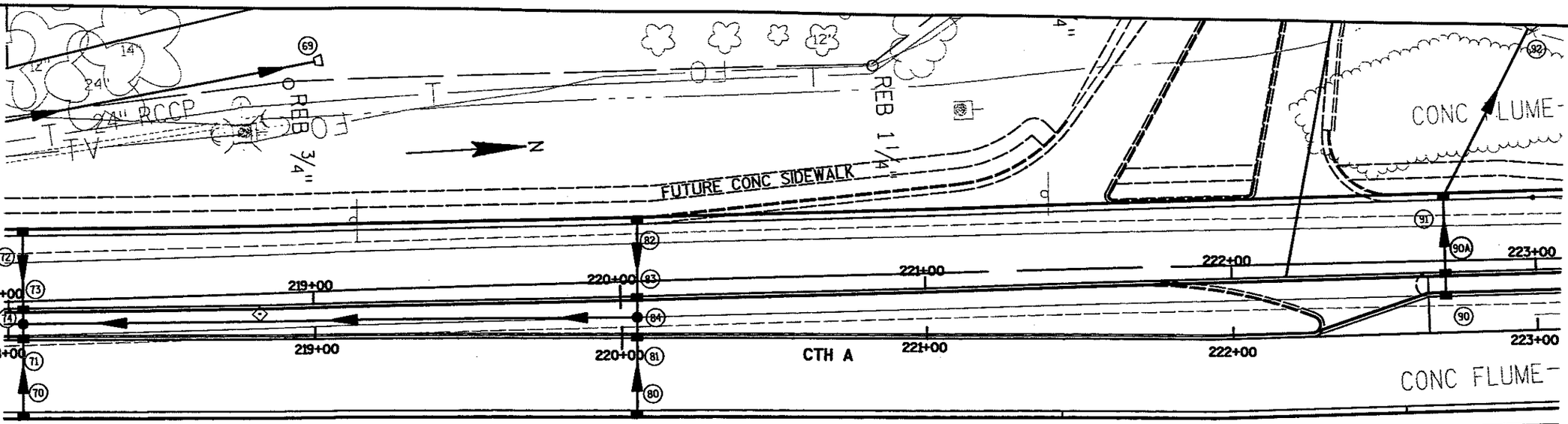


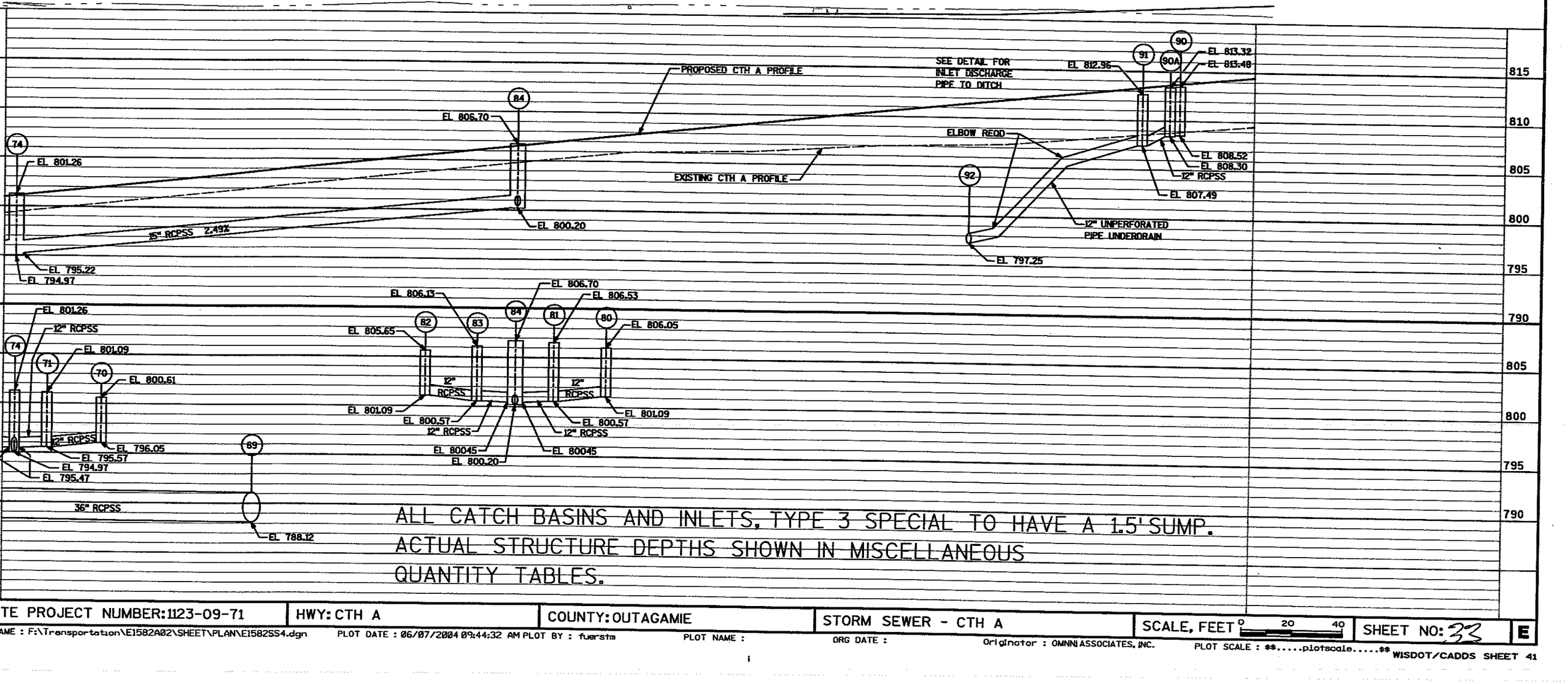


ALL CATCH BASINS AND INLETS, TYPE 3 SPECIAL TO HAVE A 1.5' SUMP.
ACTUAL STRUCTURE DEPTHS SHOWN IN MISCELLANEOUS QUANTITY TABLES.

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 32 E

F:\Transportation\E1582A02\SHEET\PLAN\E1582SS3.dgn PLOT DATE : 06/07/2004 09:42:57 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41

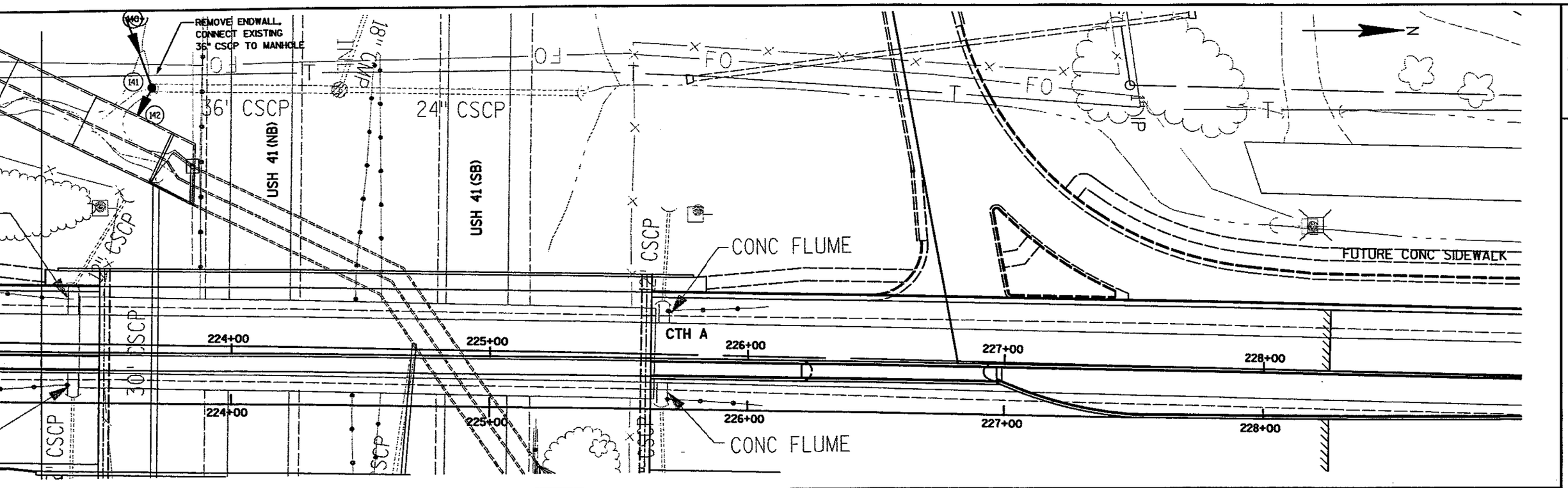


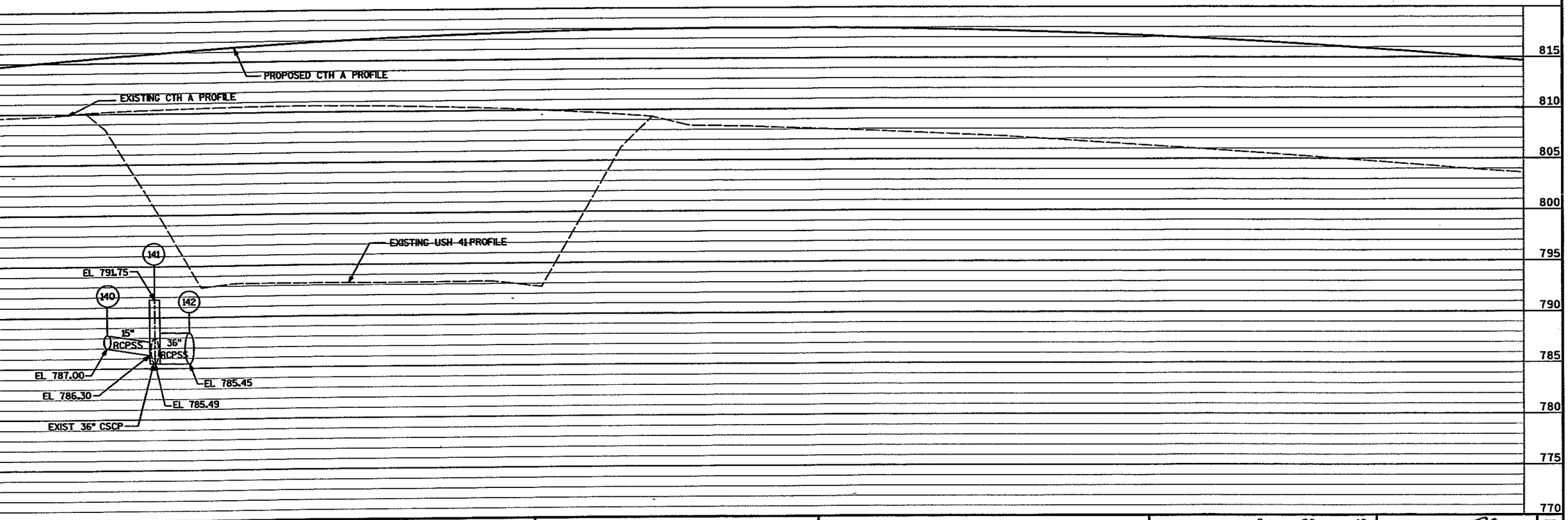


ALL CATCH BASINS AND INLETS, TYPE 3 SPECIAL TO HAVE A 1.5' SUMP. ACTUAL STRUCTURE DEPTHS SHOWN IN MISCELLANEOUS QUANTITY TABLES.

TE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 33 E

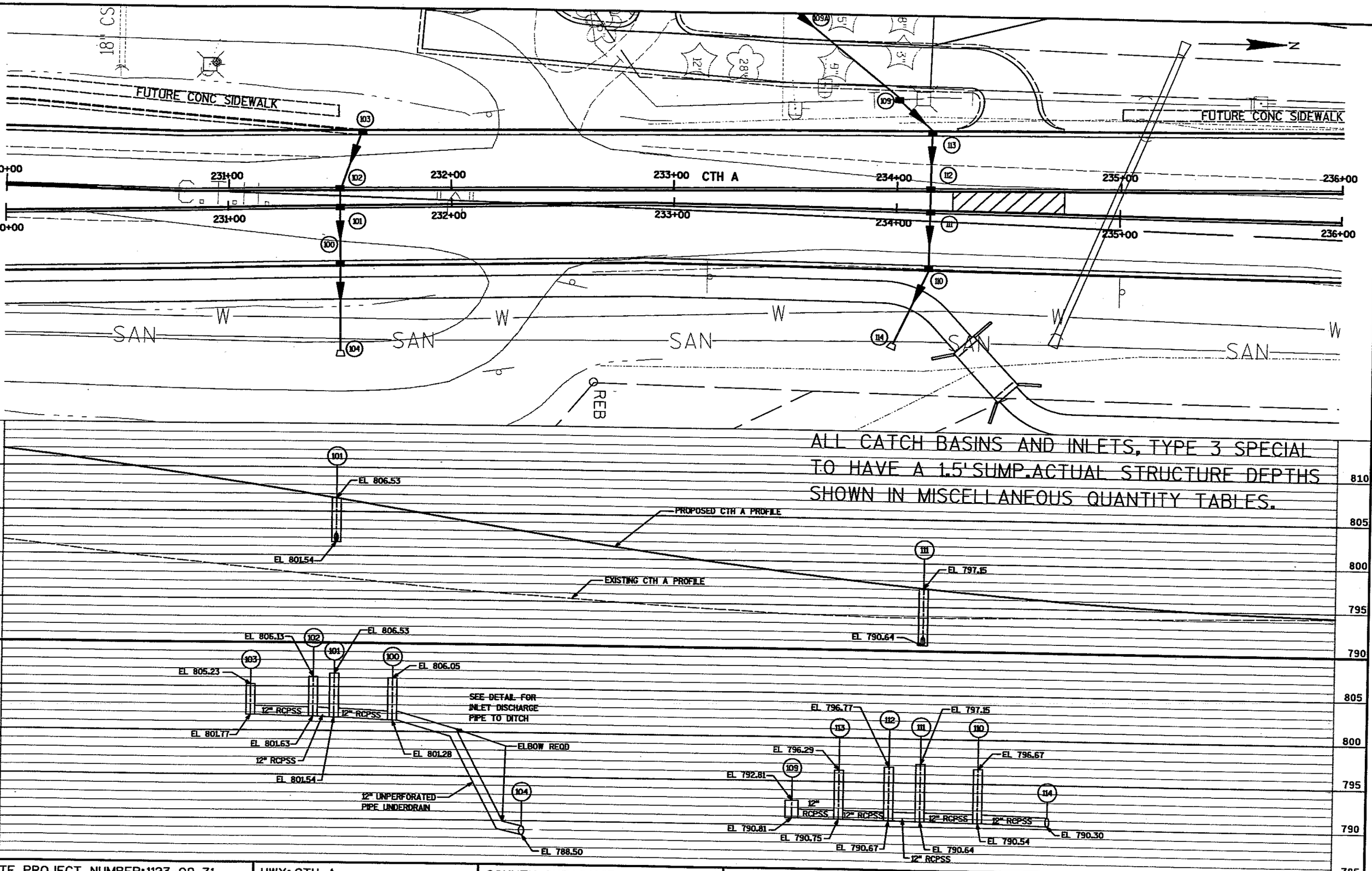
AME : F:\Transportation\E1582A02\SHEET\PLAN\E1582SS4.dgn PLOT DATE : 06/07/2004 09:44:32 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41





PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 34	E

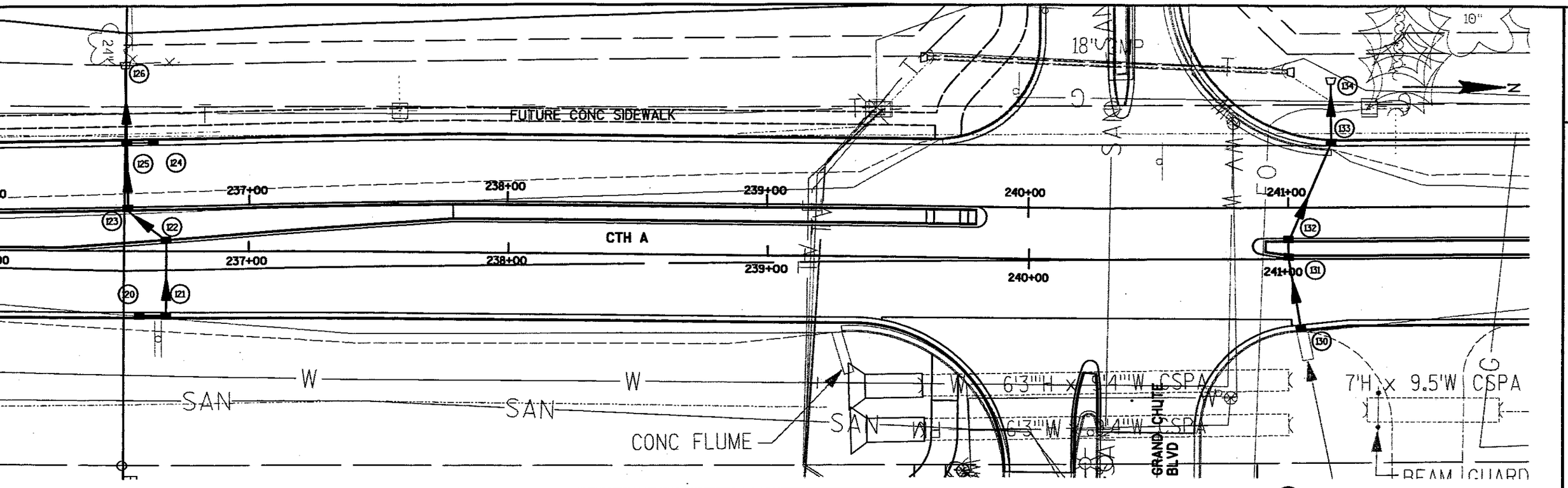
: F:\Transportation\E1582A02\SHEET\PLAN\E1582SS5.dgn PLOT DATE : 03/23/2004 08:48:58 AM PLOT BY : knutthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41

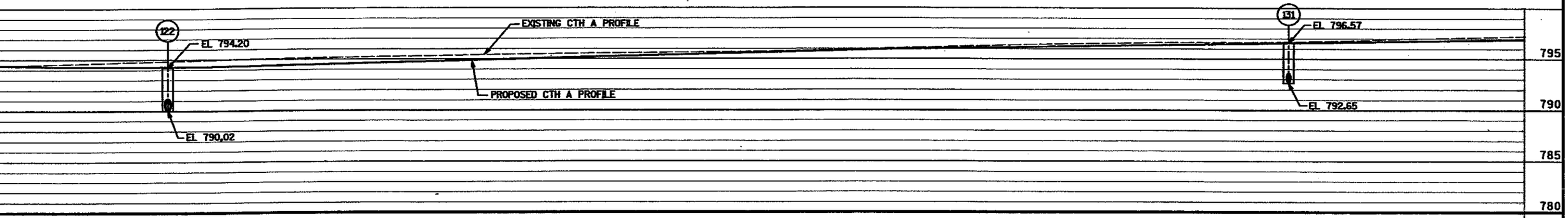


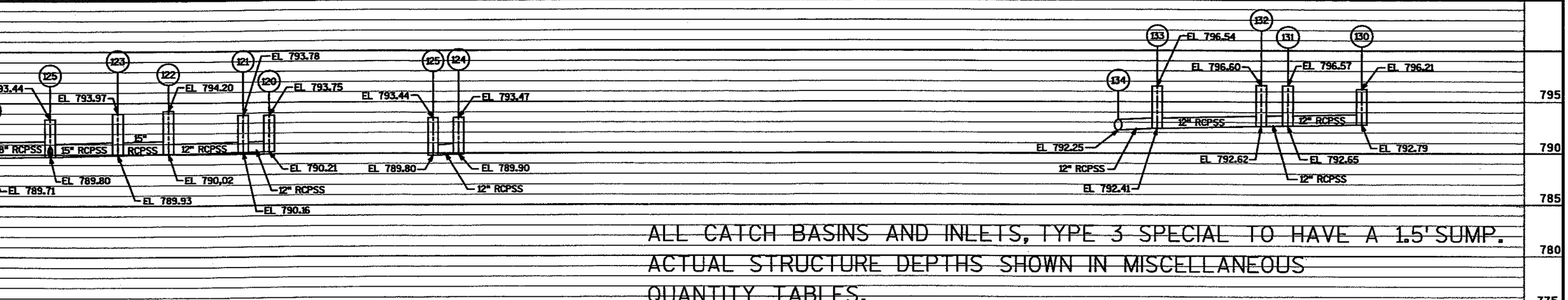
ALL CATCH BASINS AND INLETS, TYPE 3 SPECIAL TO HAVE A 1.5' SUMP. ACTUAL STRUCTURE DEPTHS SHOWN IN MISCELLANEOUS QUANTITY TABLES.

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 35 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582SS6.dgn PLOT DATE : 06/07/2004 09:45:26 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 41

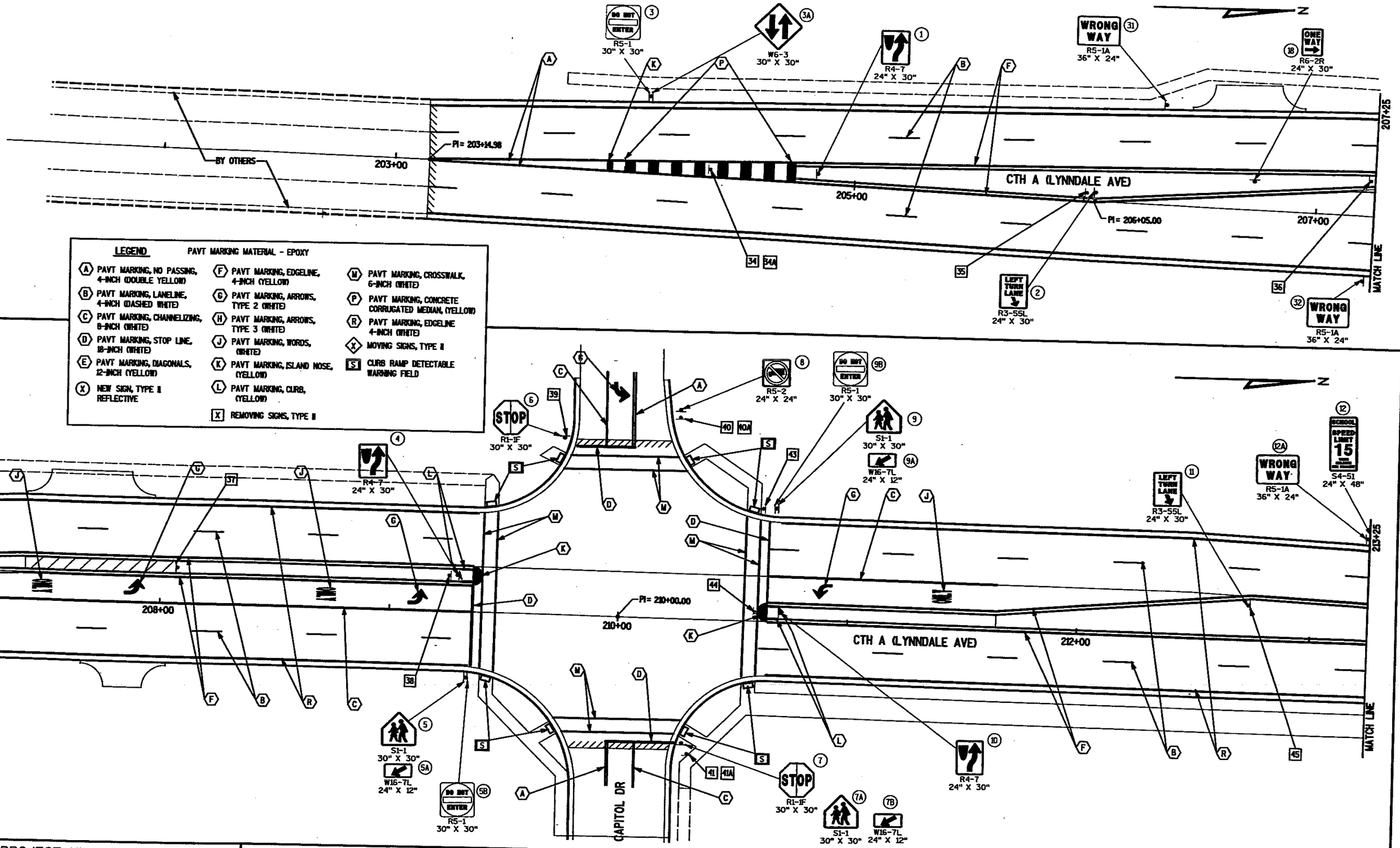






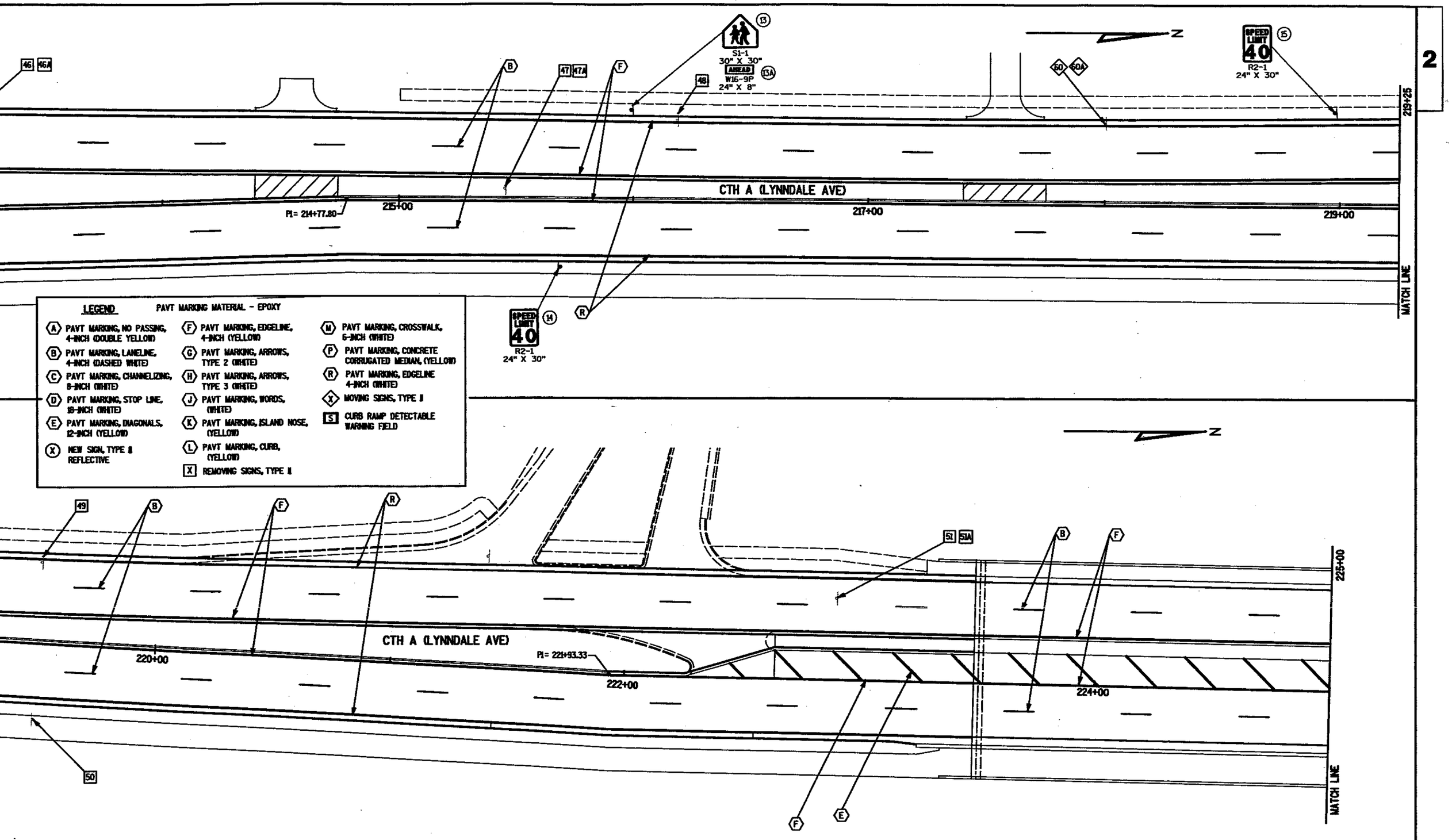
ALL CATCH BASINS AND INLETS, TYPE 3 SPECIAL TO HAVE A 1.5' SUMP. ACTUAL STRUCTURE DEPTHS SHOWN IN MISCELLANEOUS QUANTITY TABLES.

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	STORM SEWER - CTH A	SCALE, FEET 0 20 40	SHEET NO: 36	E



E PROJECT NUMBER:1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | PAVEMENT MARKING & SIGNING | SCALE, FEET 0 20 40 | SHEET NO: 37 | E

E : F:\Transportation\E1582A02\SHEET\PLAN\E1582PM1.dgn PLOT DATE : 06/07/2004 09:47:16 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$



PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVEMENT MARKING & SIGNING	SCALE, FEET 0 20 40	SHEET NO: 38	E

225+00

25-00

MATCH LINE

227+00
PC = 227+10.80

229+00

231+00

PT = 230+44.13

231+00

MATCH LINE

CTH A (LYNNDALE AVE)

N

F

52

52A

53

E

B

R

F

LEGEND

PAVT MARKING MATERIAL - EPOXY

- (A) PAVT MARKING, NO PASSING, 4-INCH (DOUBLE YELLOW)
- (B) PAVT MARKING, LANELINE, 4-INCH (DASHED WHITE)
- (C) PAVT MARKING, CHANNELIZING, 8-INCH (WHITE)
- (D) PAVT MARKING, STOP LINE, 18-INCH (WHITE)
- (E) PAVT MARKING, DIAGONALS, 12-INCH (YELLOW)
- (X) NEW SIGN, TYPE II REFLECTIVE
- (F) PAVT MARKING, EDGELINE, 4-INCH (YELLOW)
- (G) PAVT MARKING, ARROWS, TYPE 2 (WHITE)
- (H) PAVT MARKING, ARROWS, TYPE 3 (WHITE)
- (J) PAVT MARKING, WORDS, (WHITE)
- (K) PAVT MARKING, ISLAND NOSE, (YELLOW)
- (L) PAVT MARKING, CURB, (YELLOW)
- [X] REMOVING SIGNS, TYPE II
- (M) PAVT MARKING, CROSSWALK, 6-INCH (WHITE)
- (P) PAVT MARKING, CONCRETE CORRUGATED MEDIAN, (YELLOW)
- (R) PAVT MARKING, EDGELINE 4-INCH (WHITE)
- (X) MOVING SIGNS, TYPE II
- [S] CURB RAMP DETECTABLE WARNING FIELD

54

55

N

B

R

F

PI= 232+87.53

233+00

CTH A (LYNNDALE AVE)

235+00

237+00

237+00

MATCH LINE

MATCH LINE

61 61A 61B
MOUNT BOTTOM OF SIGN AT MIN 7.12'

57

56

62

16
LEFT TURN LANE
R3-55L
24" X 30"

17
W11-2
30" X 30"

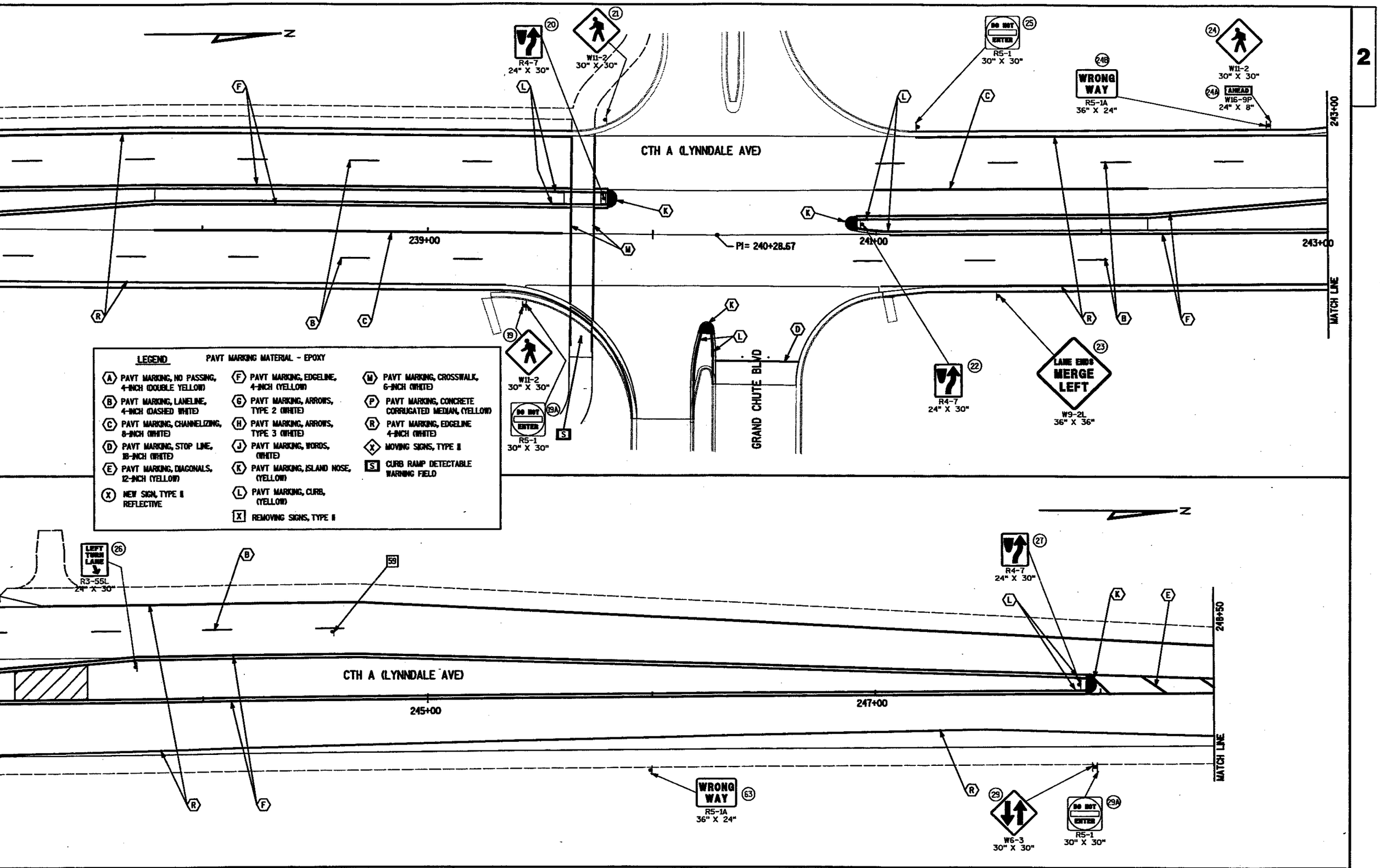
17A
AHEAD
W16-9P
24" X 8"

17B
WRONG WAY
R5-1A
36" X 24"

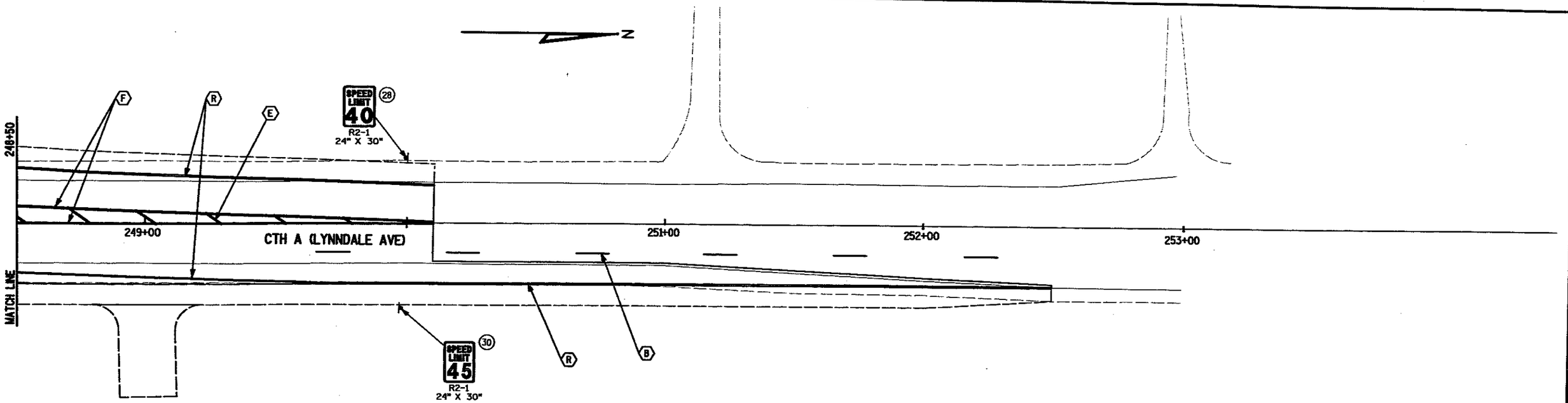
58 58A

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVEMENT MARKING & SIGNING	SCALE, FEET 0 20 40	SHEET NO: 39 E

ME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PM3.dgn PLOT DATE : 06/07/2004 09:50:01 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$



PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVEMENT MARKING & SIGNING	SCALE, FEET 0 20 40	SHEET NO: 40	E



LEGEND PAVT MARKING MATERIAL - EPOXY

- (A) PAVT MARKING, NO PASSING, 4-INCH (DOUBLE YELLOW)
- (B) PAVT MARKING, LANELINE, 4-INCH (DASHED WHITE)
- (C) PAVT MARKING, CHANNELIZING, 8-INCH (WHITE)
- (D) PAVT MARKING, STOP LINE, 18-INCH (WHITE)
- (E) PAVT MARKING, DIAGONALS, 12-INCH (YELLOW)
- (X) NEW SIGN, TYPE II REFLECTIVE
- (F) PAVT MARKING, EDGELINE, 4-INCH (YELLOW)
- (G) PAVT MARKING, ARROWS, TYPE 2 (WHITE)
- (H) PAVT MARKING, ARROWS, TYPE 3 (WHITE)
- (J) PAVT MARKING, WORDS, (WHITE)
- (K) PAVT MARKING, ISLAND NOSE, (YELLOW)
- (L) PAVT MARKING, CURB, (YELLOW)
- [X] REMOVING SIGNS, TYPE II
- (M) PAVT MARKING, CROSSWALK, 6-INCH (WHITE)
- (P) PAVT MARKING, CONCRETE CORRUGATED MEDIAN, (YELLOW)
- (R) PAVT MARKING, EDGELINE 4-INCH (WHITE)
- (X) MOVING SIGNS, TYPE II
- [S] CURB RAMP DETECTABLE WARNING FIELD

TE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	PAVEMENT MARKING & SIGNING	SCALE, FEET 0 20 40	SHEET NO: 4 E

ME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PM5.dgn PLOT DATE : 06/07/2004 09:51:12 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

N

EXISTING PULLBOXES TO REMAIN (ADJUST)

SB6

SB7

CONNECT TO EXIST 3" CONDUIT

REMOVE PULLBOX

REMOVE PULLBOX

SB5

SB8

PB1

REMOVE PULL BOX

CTH A

220'

210'-00

PB5

SB4

EXIST CONDUIT TO REMAIN (EMPTY)

SB9

PB3

PB4

EXISTING PB TO REMAIN (ADJUST)

220'

210'-00

CONNECT TO EXIST 3" CONDUIT

EXISTING PB TO REMAIN (ADJUST)

REMOVE PULLBOX

SB3

SB10

EXISTING PB TO REMAIN (ADJUST)

SB2

REMOVE PULL BOX

CONCRETE CONTROL CABINET BASE

SB1

REMOVE PULL BOX

CONNECT EXIST CONDUIT TO NEW PULLBOX

REMOVE CONCRETE BASE

EXISTING LOOP DETECTOR & PULL BOX TO REMAIN

CAPITOL DRIVE (CONC)

SIGNAL FACES AND NUMBERS

3-V	3-H
R Y G	R Y G
3, 7, 9, 10, 11, 14	2, 6
5-V	**P**
R Y G Y G	PED 1-12
1, 4, 5, 8, 12, 13	PEDESTRIAN FACE HAND/MAN 15, 16, 17, 18, 19, 20, 21, 22

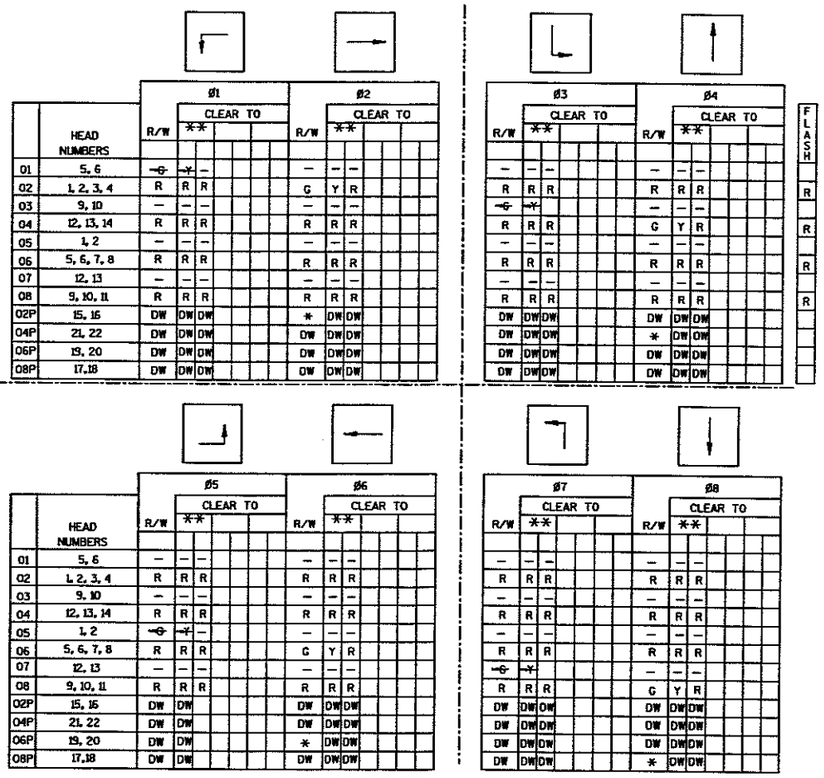
LEGEND

- SIGNAL HEAD, PEDESTAL MOUNT
- LUMINAIRE
- SIGNAL HEAD MAST ARM MOUNT AND LENGTH
- PED PUSH BUTTON
- 24"X48" PULL BOX
- 12"X24" PULL BOX
- SIGNAL HEAD NUMBER / MOUNTING CONFIGURATION
- 1" CONDUIT
- 2" CONDUIT
- 3" CONDUIT

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET NO: 42	E

: F:\Transportation\E1582A02\SHEET\PLAN\E1582SP1.dgn PLOT DATE : 03/25/2004 09:28:51 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION



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

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

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	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1				5.8 x 5.8 *	4
21	2	X			2	2			X	5.8 x 5.8 *	4
22	3	X			2	2			X	5.8 x 5.8 *	4
23	4	X			2	2				5.8 x 5.8 *	4
31	5	X			3	3				5.8 x 5.8 *	4
41	6	X			4	4				5.8 x 5.8 *	4
42	7	X			4	4				5.8 x 5.8 *	4
43	8	X			4	4				5.8 x 5.8 *	4
51	9	X			5	5				5.8 x 5.8 *	4
61	10	X			6	6			X	5.8 x 5.8 *	4
62	11	X			6	6			X	5.8 x 5.8 *	4
63	12	X			6	6				5.8 x 5.8 *	4
71 **	13	X			7	7				5.8 x 5.8 *	4
81	14	X			8	8				5.8 x 5.8 *	4
82	15	X			8	8				5.8 x 5.8 *	4
83	16	X			8	8				5.8 x 5.8 *	4
84 ***	-	X			8	8				6 x 15 (FUTURE)	4

*** FOR FUTURE USE

** EXISTING LOOP

* DIAMOND LOOP - 6' WIDE BY 10' LONG (SEE DETAIL)

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	PHASE RECALL	DUAL ENTRY W/O
01			6
02		MIN	6
03			8
04			8
05			2
06		MIN	2
07			4
08			4

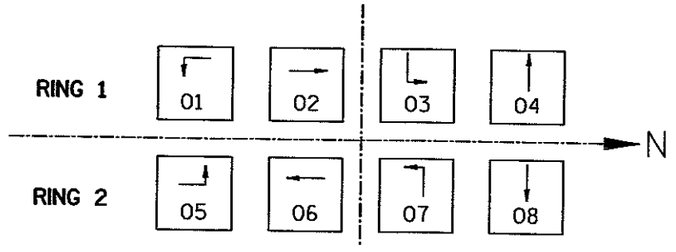


CHART 1

PHASE ON	NON-CONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
01	5 or 6	2,3,4,7,8
02	5 or 6	1,3,4,7,8
03	7 or 8	1,2,4,5,6
04	7 or 8	1,2,3,5,6
05	1 or 2	3,4,6,7,8
06	1 or 2	3,4,5,7,8
07	3 or 4	1,2,5,6,8
08	3 or 4	1,2,5,6,7

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	

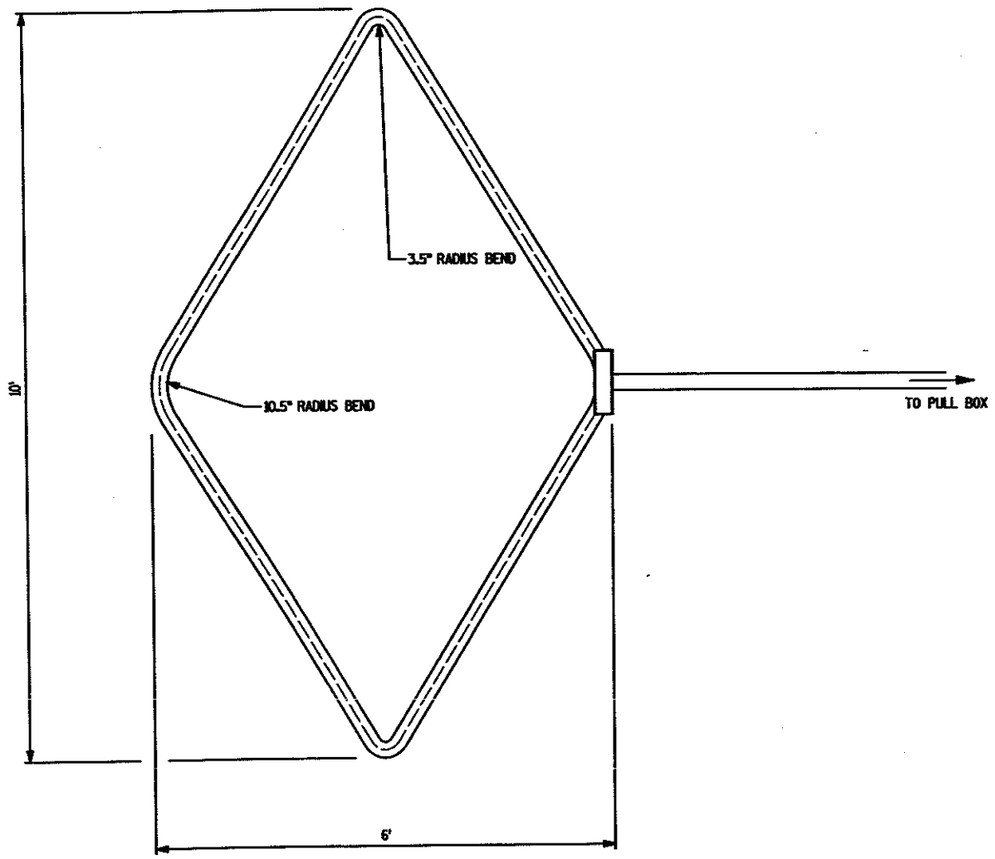
TYPE OF LIGHTING	
NONE	
IN TRAFFIC CONTROL CABINET	X
IN SEPARATE CONTROL CABINET	

OVERLAPS

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

GENERAL NOTES

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



DIAMOND SHAPED LOOP DETECTOR

16 CONDUCTOR CABLE

R	RED	
Y	ORANGE	TRAFFIC N & W
G	GREEN	
R	RED/BLACK	
Y	ORANGE/BLACK	TRAFFIC S & E
G	GREEN/BLACK	
W-G	BLUE	PED TO CROSS SIDE STREET
DW-Y	BLACK	N.B. & W.B. ISLAND ARROWS
W-G	BLUE/BLACK	PED TO CROSS MAIN STREET
DW-Y	WHITE/BLACK	S.B. & E.B. ISLAND ARROWS
PED BUTTON	BLUE/WHITE	PED BUTTONS
PED BUTTON	BLACK/WHITE	
R	RED/WHITE	EXTRA - SPECIAL MOVEMENTS
Y	BLACK/RED	EXTRA - SPECIAL MOVEMENTS
G	GREEN/WHITE	Ped Button N.B. & S.B

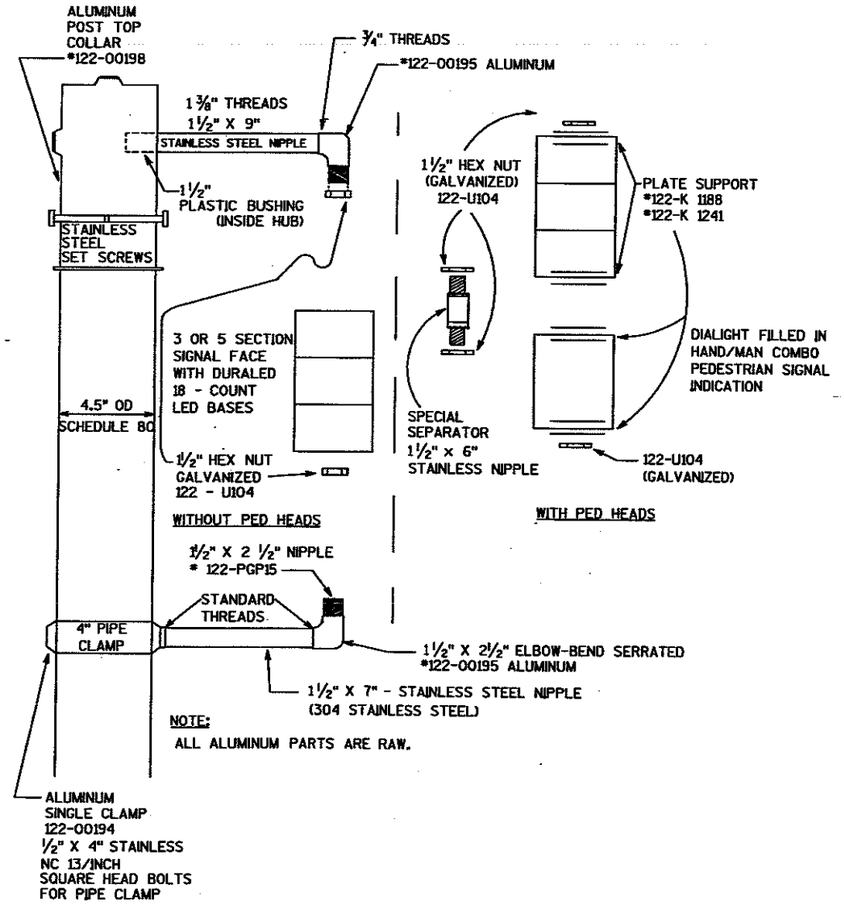
WHITE = NEUTRAL
*10 Solid Green Ground

DOWN THE POLE

RED	RED BALL
YELLOW	YELLOW BALL
GREEN	GREEN BALL
BLACK	GREEN ARROW
ORANGE	YELLOW ARROW
BLUE	WALK
BROWN	DON'T WALK

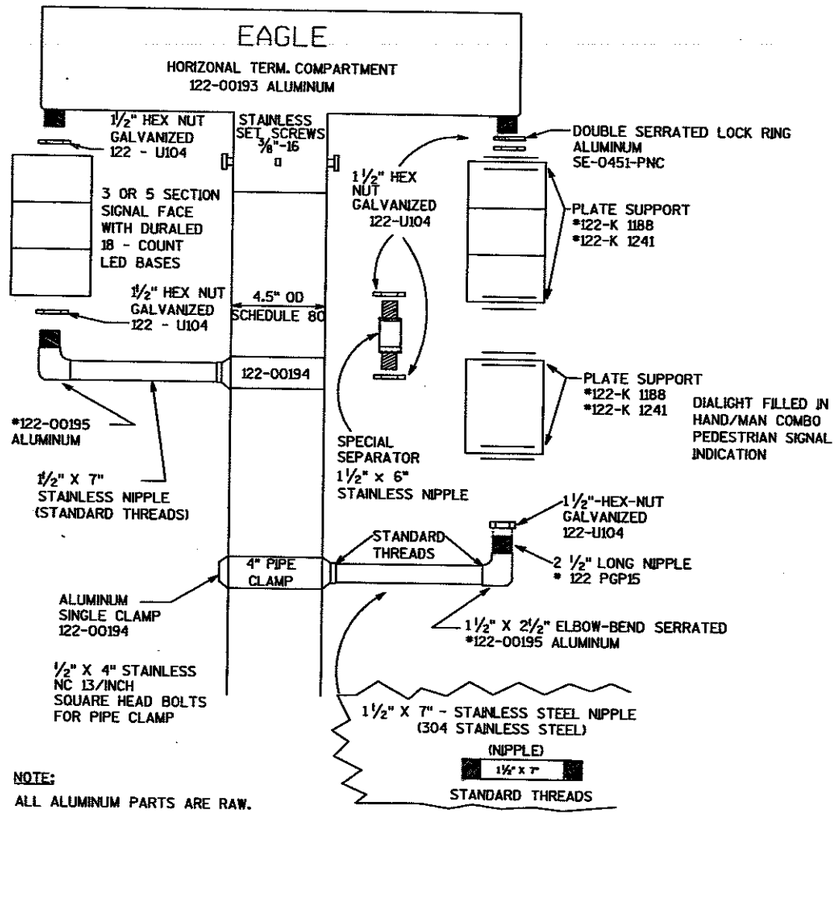
TAPE COLORS

WHITE	N.B.
YELLOW	W.B.
ORANGE	S.B.
BLUE	E.B.
RED	PED BUTTON



TRAFFIC STANDARD (SINGLE)

CITY OF APPLETON
TRAFFIC DIVISION
DEPARTMENT OF PUBLIC WORKS



TRAFFIC STANDARD (DOUBLE)

CITY OF APPLETON
TRAFFIC DIVISION
DEPARTMENT OF PUBLIC WORKS

TRAFFIC SIGNAL MOUNTING HARDWARE

SEE SDD FOR ADDITIONAL INFORMATION NOT SHOWN HERE.

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC SIGNAL DETAILS	SCALE, FEET	SHEET NO: 45	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\signalhdwe.dgn PLOT DATE : 06/07/2004 09:51:53 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

BRIDGE OUT
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

ROAD CLOSED AHEAD
W20-3
48" X 48"

DETOUR AHEAD
W20-2
48" X 48"

END
M4-6B
24" X 12"

DETOUR
M4-8
24" X 12"

500'
500'
500'
1000'

CTH A

PROJECT LIMITS

ROAD CLOSED 1/2 MILE
W20-3
48" X 48"

STOP AHEAD
W03-1
36" X 36"

ROAD CLOSED 1 MILE
W20-3
48" X 48"

DETOUR
M4-9L
30" X 24"

BRIDGE OUT
2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

ROAD CLOSED AHEAD
W20-3
48" X 48"

DETOUR AHEAD
W20-2
48" X 48"

DETOUR
M4-9R
30" X 24"

STOP
R1-1
36" X 36"

BRIDGE OUT
1 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

NORTHLAND AVENUE (CTH OO)

USH 41

EDGEWOOD DRIVE (CTH JJ)

RICHMOND STREET (STH 47)

DETOUR
M4-8
24" X 12"

NORTH
M 3-1
24" X 12"

SOUTH
M 3-3
24" X 12"

COUNTY A
M1-5A
24" X 24"

M05-1L
21" X 15"

M05-1R
21" X 15"

M06-1L
21" X 15"

M06-1R
21" X 15"

TRAFFIC CONTROL/ GENERAL NOTES

1. ALL SIGNS, DRUM, AND BARRICADE LOCATIONS ARE APPROXIMATE, THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. ONE BARRICADE REQUIRED AT EACH LOCATION WHERE SHOWN UNLESS INDICATED IN PARAENTHESIS.
3. NUMBER OF BARRICADES REQUIRED IS SHOWN IN PARENTHESIS AT EACH LOCATION.

LEGEND

- POST MOUNTED SIGN
- TYPE III BARRICADES
- FLAGS 15" X 15" MIN., (ORANGE)
- WORK ZONE

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	DETOUR PLAN - CTH A	SCALE, FEET 0 600 1200	SHEET NO: 46	E

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

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582DP1.dgn PLOT DATE : 03/29/2004 08:09:05 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

N

SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
RAMP CLOSED AHEAD W20-3AM

(CLOSE USH 41 SOUTHBOUND ON-RAMP)
R11-2 48" X 30" ROAD CLOSED
TYPE III BARRICADE (3)
TYPE III BARRICADE (1)

DETOUR M4-8 24" X 12"
SOUTH M 3-3 30" X 15"
41 M1-4 36" X 36"
M05-1L 30" X 30"

DETOUR AHEAD W20-2 48" X 48"
DETOUR 2 MILES W20-2 48" X 48"

USH 41

1000'

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M05-1R 21" X 21"

END M 4-6 24" X 12"
DETOUR M4-8 24" X 12"

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M06-3 21" X 21"

NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"

RAMP CLOSED AHEAD W20-3AM

CAPITOL DRIVE

NORTHLAND AVENUE (CTH 00)

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M06-3 21" X 21"

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M06-3 21" X 21"

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M05-1R 21" X 21"

RICHMOND STREET (STH 47)

500'
200'

END M 4-6 24" X 12"
DETOUR M4-8 24" X 12"

DETOUR M4-8 24" X 12"
NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"
M06-3 21" X 21"

DETOUR M4-8 24" X 12"
NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"

R11-2 48" X 30" ROAD CLOSED
TYPE III BARRICADE (2)
TYPE III BARRICADE (4)

(CLOSE USH 41 NORTHBOUND ON-RAMP)

USH 41

DETOUR M4-8 30" X 15"
NORTH M 3-1 30" X 15"
41 M1-4 36" X 36"
M06-3 30" X 30"

DETOUR AHEAD W20-2 48" X 48"

DETOUR 2 MILES W20-2 48" X 48"

DETOUR M4-8 24" X 12"
NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"
M06-3 21" X 21"

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M06-3 21" X 21"

DETOUR M4-8 24" X 12"
NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"
M05-1L 21" X 21"

DETOUR M4-8 24" X 12"
NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"
M 6-1 21" X 21"

DETOUR M4-8 24" X 12"
SOUTH M 3-3 24" X 12"
41 M1-4 36" X 36"
M 6-1 21" X 21"

DETOUR M4-8 24" X 12"
NORTH M 3-1 24" X 12"
41 M1-4 36" X 36"

TRAFFIC CONTROL/ GENERAL NOTES

1. ALL SIGNS, DRUMS, AND BARRICADE LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. ONE BARRICADE IS REQUIRED WHERE SHOWN UNLESS INDICATED IN PARENTHESIS.

LEGEND

- POST MOUNTED SIGN
- TYPE III BARRICADES
- WORK ZONE

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	DETOUR PLAN - USH 41	SCALE, FEET 0 600 1200	SHEET NO: A7	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582DP2.dgn PLOT DATE : 03/29/2004 08:12:15 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

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

N

½MILE ½MILE 2600' 1100' 500' 500' 500' 780' 1560' 780'

US HIGHWAY 41

50' TYP

50' TYP

USH 41 NORTHBOUND

TYPE III BARRICADE

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

ROAD WORK 2 MILES W20-1

DETOUR AHEAD W20-2

LEFT LANE CLOSED 1 MILE W20-5

LEFT LANE CLOSED 1/2 MILE W20-5

LEFT LANE CLOSED 1500 FT W20-5

W04-2L

NORTHLAND AVENUE (CTH 00)

NORTH

LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C
- SIGN ON POST
- FLASHING ARROW BOARD
- BARRICADE TYPE III WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW

NOTE: ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED.

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	DETOUR PLAN - USH 41	SCALE, FEET 0 150 300	SHEET NO: 48	E

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

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582DP4.dgn PLOT DATE : 03/29/2004 08:14:51 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

WINROWE COURT
WINROWE DR
EVERGREEN DRIVE
HAYM
FOXCROFT CT
WINDOVER CT
OLDE PALTZER CT
EVERGREEN DRIVE
N
ALVIN STREET
(S.T.H. "47")
PINEWILD CT
TIMBERLINE CT
DETOUR AHEAD W20-2
TIMBER
LEFT LANE CLOSED 1 MILE W20-5
ROAD WORK 2 MILES W20-1
QUAIL RIDGE DRIVE
BALSAM CT
W04-2
LEFT LANE CLOSED 1500 FT W20-5
OLDE PALTZER LA
TYLBURY CT
LEFT LANE CLOSED 1/2 MILE W20-5
PEPPERCORN DRIVE
USH 41 SOUTHBOUND
U.S.H. "41"
50' TYP
(U.S.H. "41")
50' TYP
780'
1560'
780'
500'
500'
500'
1100'
2600'
½MILE
½MILE
R11-2 48"X 30"
LANE CLOSED
TYPE III BARRICADE
TYPE III BARRICADE
CARIBOU CT
SIOUX DRIVE
SIOUX CT
NORFOLK PLACE
NORTHBREEZE DRIVE
RICHMOND (S.T.H. "47") STREET
CHIPPEWA DRIVE
SHOSHONE DRIVE
APACHE PL
DIVISION STREET
ONEIDA STREET
ONEIDA ST
WELLINGTON DRIVE
HILLSBOROUGH DRIVE
MORRISON STREET
SENECA DR
SENECA CT
ONEIDA CT
ONEIDA STREET
SENECA DRIVE

NOTE: ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED.

LEGEND

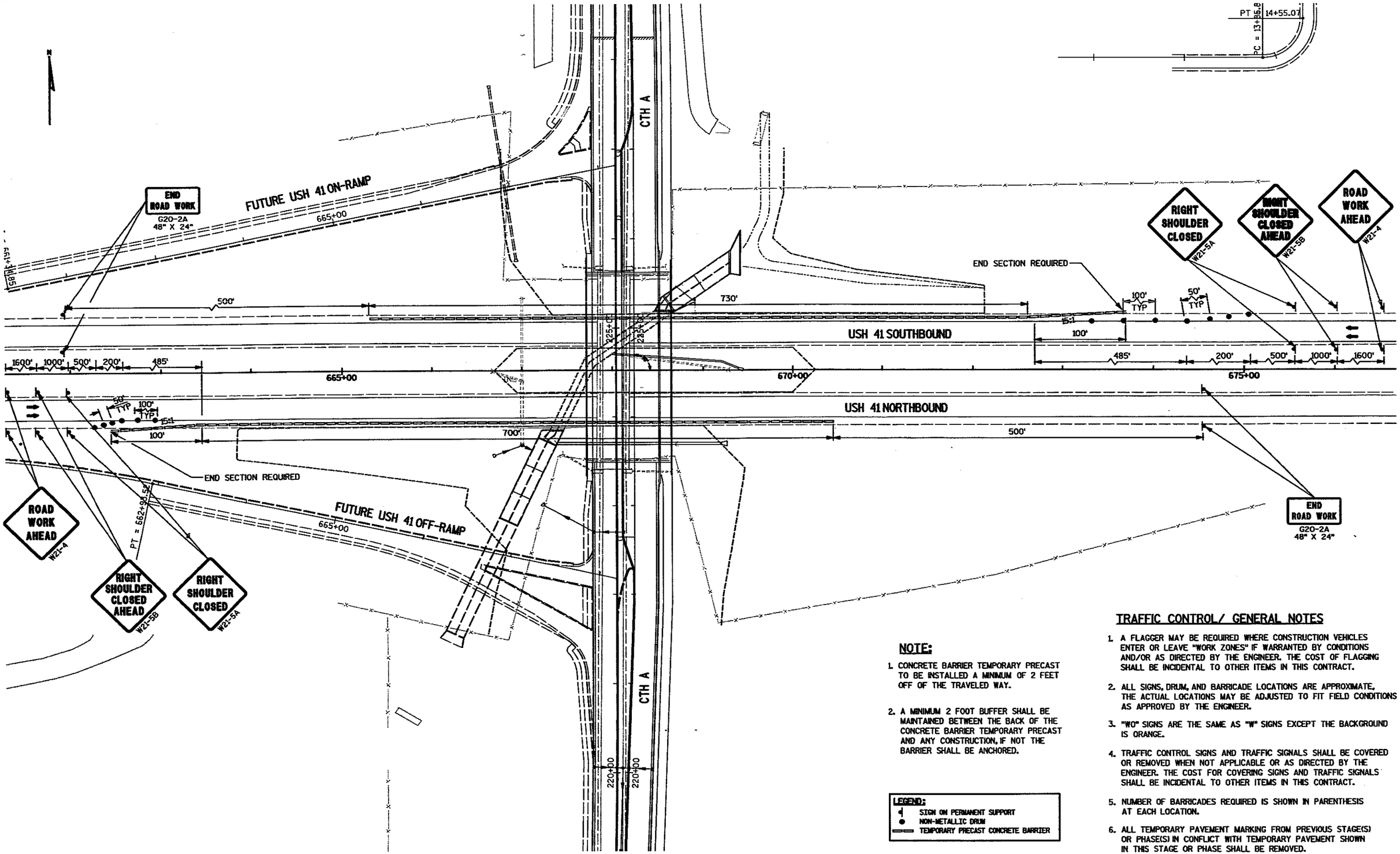
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C
- SIGN ON POST
- FLASHING ARROW BOARD
- BARRICADE TYPE III WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	DETOUR PLAN - USH 41	SCALE, FEET 0 150 300	SHEET NO: 49	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582DP3.dgn PLOT DATE : 03/29/2004 08:19:30 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

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



NOTE:

1. CONCRETE BARRIER TEMPORARY PRECAST TO BE INSTALLED A MINIMUM OF 2 FEET OFF OF THE TRAVELED WAY.
2. A MINIMUM 2 FOOT BUFFER SHALL BE MAINTAINED BETWEEN THE BACK OF THE CONCRETE BARRIER TEMPORARY PRECAST AND ANY CONSTRUCTION, IF NOT THE BARRIER SHALL BE ANCHORED.

LEGEND:
- SIGN ON PERMANENT SUPPORT
- NON-METALLIC DRUM
- TEMPORARY PRECAST CONCRETE BARRIER

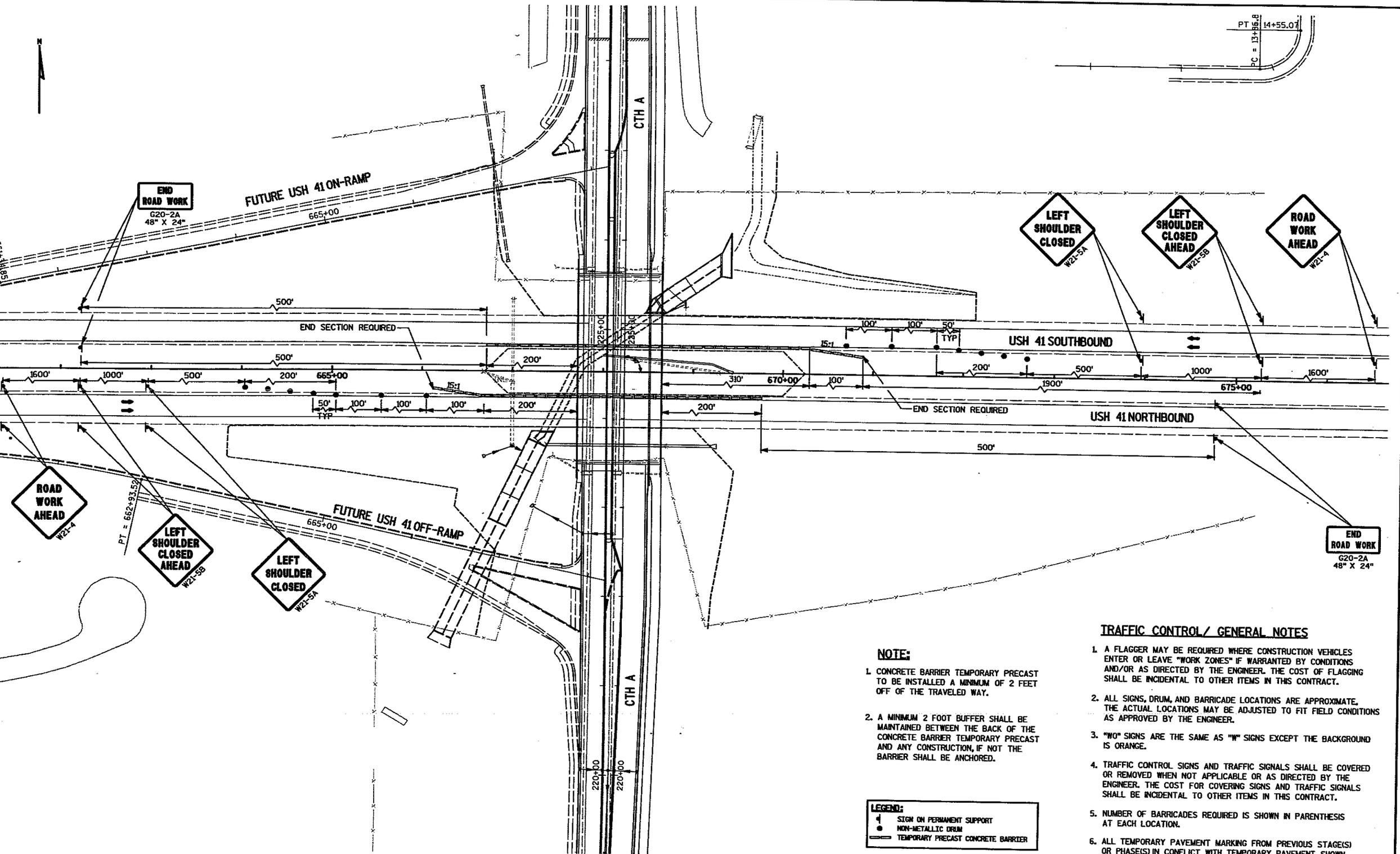
TRAFFIC CONTROL/ GENERAL NOTES

1. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK ZONES" IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER. THE COST OF FLAGGING SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
2. ALL SIGNS, DRUM, AND BARRICADE LOCATIONS ARE APPROXIMATE, THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. TRAFFIC CONTROL SIGNS AND TRAFFIC SIGNALS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE OR AS DIRECTED BY THE ENGINEER. THE COST FOR COVERING SIGNS AND TRAFFIC SIGNALS SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
5. NUMBER OF BARRICADES REQUIRED IS SHOWN IN PARENTHESIS AT EACH LOCATION.
6. ALL TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE(S) OR PHASE(S) IN CONFLICT WITH TEMPORARY PAVEMENT SHOWN IN THIS STAGE OR PHASE SHALL BE REMOVED.

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - USH 41 OUT. SHLD	SCALE, FEET 0 50 100	SHEET NO: 50	E

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

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582TCo.dgn PLOT DATE : 03/23/2004 11:10:34 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



NOTE:

1. CONCRETE BARRIER TEMPORARY PRECAST TO BE INSTALLED A MINIMUM OF 2 FEET OFF OF THE TRAVELED WAY.
2. A MINIMUM 2 FOOT BUFFER SHALL BE MAINTAINED BETWEEN THE BACK OF THE CONCRETE BARRIER TEMPORARY PRECAST AND ANY CONSTRUCTION, IF NOT THE BARRIER SHALL BE ANCHORED.

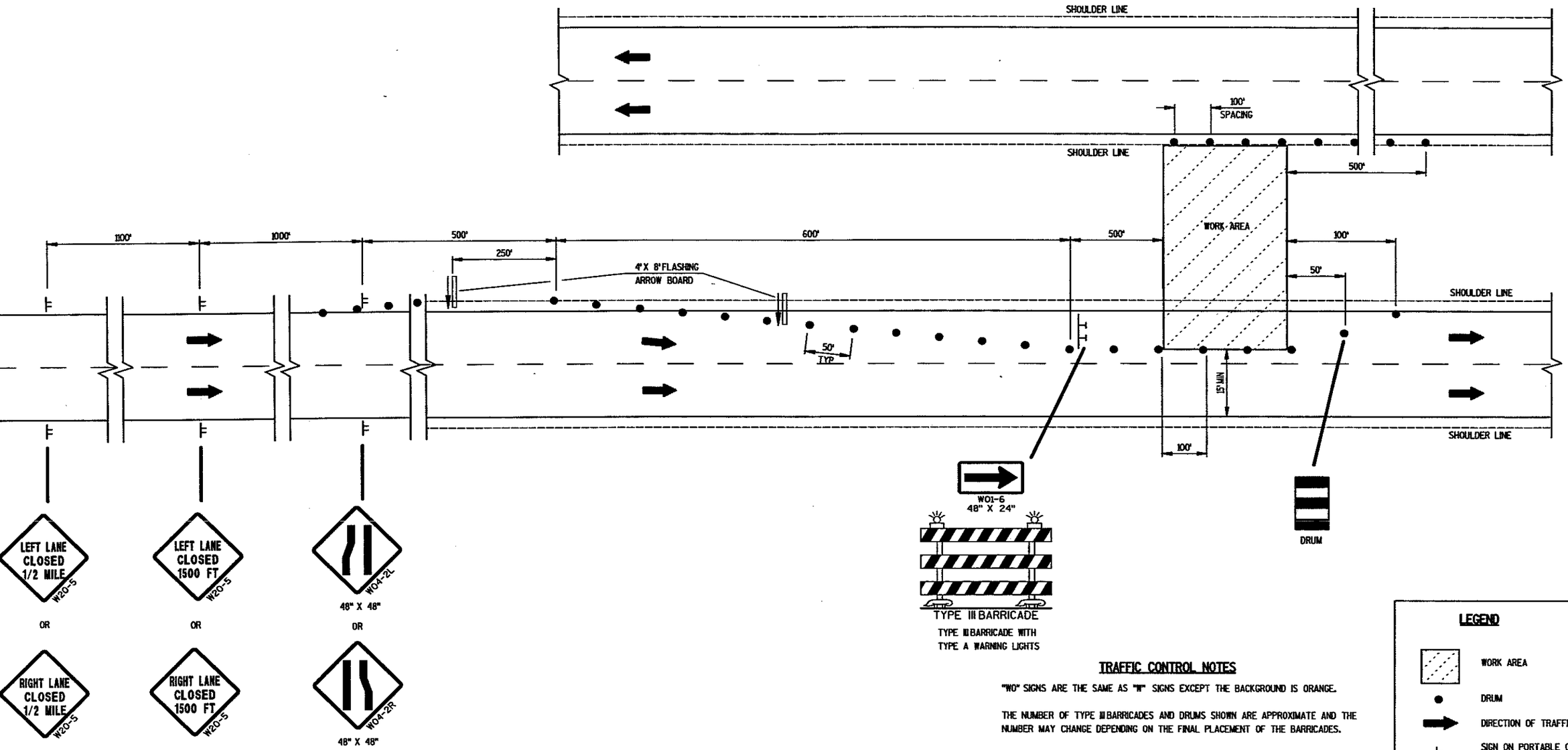
LEGEND:
- SIGN ON PERMANENT SUPPORT
- NON-METALLIC DRUM
- TEMPORARY PRECAST CONCRETE BARRIER

TRAFFIC CONTROL/ GENERAL NOTES

1. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK ZONES" IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER. THE COST OF FLAGGING SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
2. ALL SIGNS, DRUM, AND BARRICADE LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. TRAFFIC CONTROL SIGNS AND TRAFFIC SIGNALS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE OR AS DIRECTED BY THE ENGINEER. THE COST FOR COVERING SIGNS AND TRAFFIC SIGNALS SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
5. NUMBER OF BARRICADES REQUIRED IS SHOWN IN PARENTHESIS AT EACH LOCATION.
6. ALL TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE(S) OR PHASE(S) IN CONFLICT WITH TEMPORARY PAVEMENT SHOWN IN THIS STAGE OR PHASE SHALL BE REMOVED.

ATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - USH 41 INSIDE SHLD	SCALE, FEET 0 50 100	SHEET NO: 57 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582TC1.dgn PLOT DATE : 03/23/2004 11:14:27 AM PLOT BY : knutho PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



USH 41 LANE CLOSURE DETAIL

USH 41 NORTHBOUND OR SOUTHBOUND AS REQUIRED
(DAYTIME OPERATION ONLY)

TRAFFIC CONTROL NOTES

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

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

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

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

LEGEND

- WORK AREA
- DRUM
- DIRECTION OF TRAFFIC FLOW
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE III BARRICADE WITH TYPE A WARNING LIGHTS
- 4' X 8' FLASHING ARROW BOARD

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - USH 41 LANE CLOSURE	SCALE, FEET 0	SHEET NO: 52	E

PHASE 1

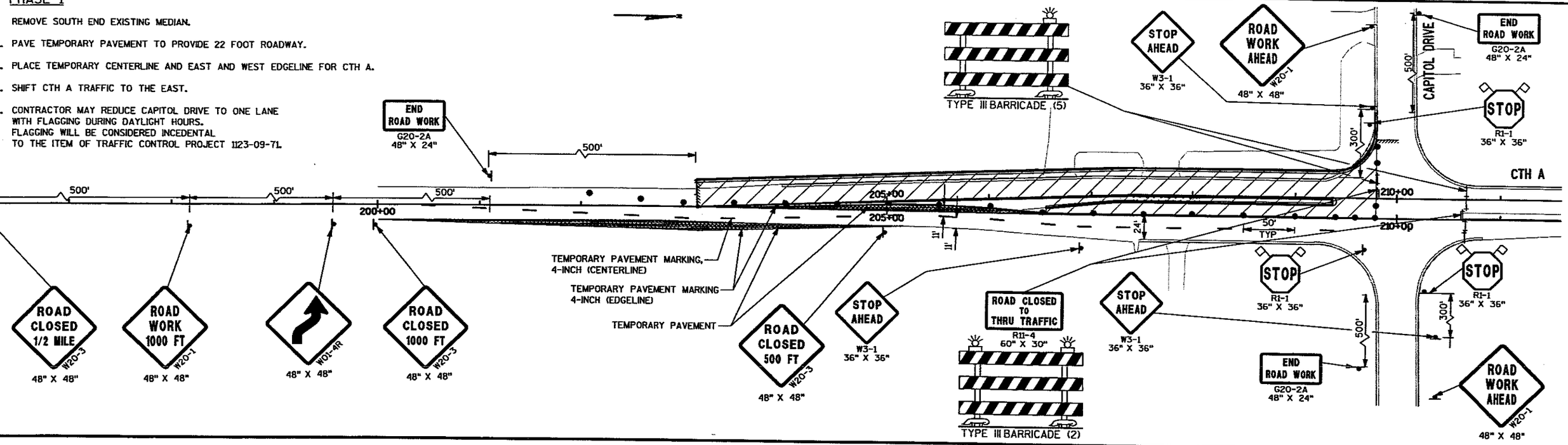
REMOVE SOUTH END EXISTING MEDIAN.

. PAVE TEMPORARY PAVEMENT TO PROVIDE 22 FOOT ROADWAY.

. PLACE TEMPORARY CENTERLINE AND EAST AND WEST EDGELINE FOR CTH A.

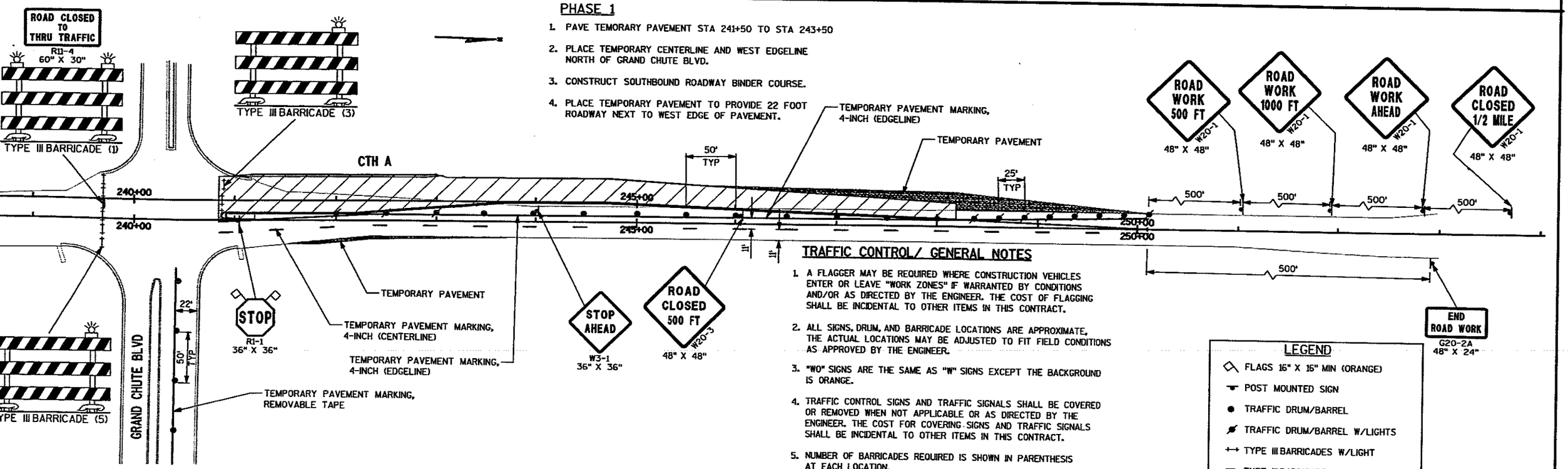
. SHIFT CTH A TRAFFIC TO THE EAST.

. CONTRACTOR MAY REDUCE CAPITOL DRIVE TO ONE LANE WITH FLAGGING DURING DAYLIGHT HOURS. FLAGGING WILL BE CONSIDERED INCEDENTAL TO THE ITEM OF TRAFFIC CONTROL PROJECT 1123-09-71.



PHASE 1

1. PAVE TEMORARY PAVEMENT STA 241+50 TO STA 243+50
2. PLACE TEMPORARY CENTERLINE AND WEST EDGELINE NORTH OF GRAND CHUTE BLVD.
3. CONSTRUCT SOUTHBOUND ROADWAY BINDER COURSE.
4. PLACE TEMPORARY PAVEMENT TO PROVIDE 22 FOOT ROADWAY NEXT TO WEST EDGE OF PAVEMENT.



TRAFFIC CONTROL/ GENERAL NOTES

1. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK ZONES" IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER. THE COST OF FLAGGING SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
2. ALL SIGNS, DRUM, AND BARRICADE LOCATIONS ARE APPROXIMATE, THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. TRAFFIC CONTROL SIGNS AND TRAFFIC SIGNALS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE OR AS DIRECTED BY THE ENGINEER. THE COST FOR COVERING SIGNS AND TRAFFIC SIGNALS SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
5. NUMBER OF BARRICADES REQUIRED IS SHOWN IN PARENTHESIS AT EACH LOCATION.
6. ALL TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE(S) OR PHASE(S) IN CONFLICT WITH TEMPORARY PAVEMENT SHOWN IN THIS STAGE OR PHASE SHALL BE REMOVED.

LEGEND

- FLAGS 16" X 16" MIN (ORANGE)
- POST MOUNTED SIGN
- TRAFFIC DRUM/BARREL
- TRAFFIC DRUM/BARREL W/LIGHTS
- TYPE III BARRICADES W/LIGHT
- TYPE III BARRICADES W/SIGN & LIGHTS
- TEMPORARY PAVEMENT
- WORK ZONE

ATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - PHASE 1	SCALE, FEET 0 50 100	SHEET NO: 53 E

NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582TC1.dgn PLOT DATE : 03/29/2004 08:32:16 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

PHASE 2

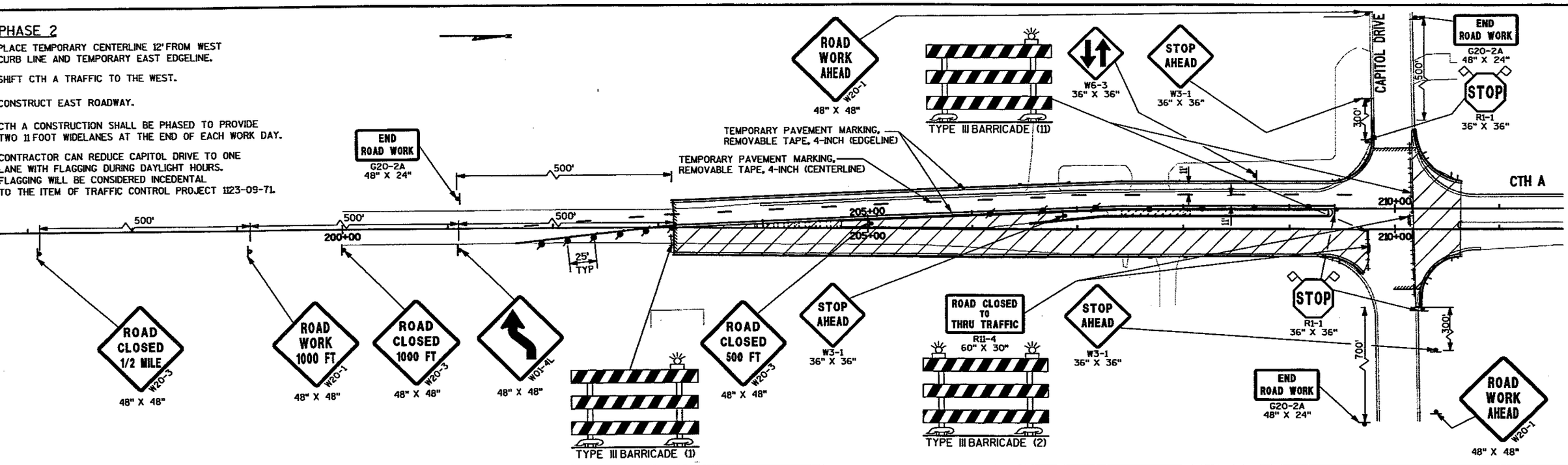
PLACE TEMPORARY CENTERLINE 12' FROM WEST CURB LINE AND TEMPORARY EAST EDGELINE.

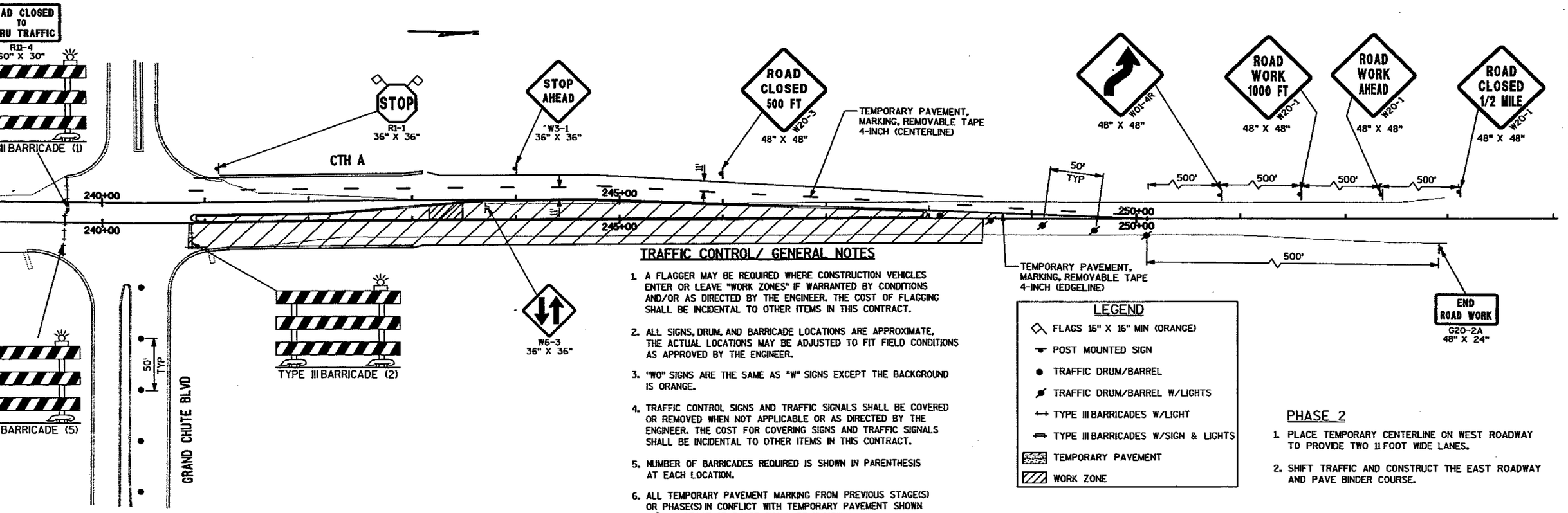
SHIFT CTH A TRAFFIC TO THE WEST.

CONSTRUCT EAST ROADWAY.

CTH A CONSTRUCTION SHALL BE PHASED TO PROVIDE TWO 11 FOOT WIDELANES AT THE END OF EACH WORK DAY.

CONTRACTOR CAN REDUCE CAPITOL DRIVE TO ONE LANE WITH FLAGGING DURING DAYLIGHT HOURS. FLAGGING WILL BE CONSIDERED INCEDENTAL TO THE ITEM OF TRAFFIC CONTROL PROJECT 1123-09-71.





TRAFFIC CONTROL/ GENERAL NOTES

1. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK ZONES" IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER. THE COST OF FLAGGING SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
2. ALL SIGNS, DRUM, AND BARRICADE LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. TRAFFIC CONTROL SIGNS AND TRAFFIC SIGNALS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE OR AS DIRECTED BY THE ENGINEER. THE COST FOR COVERING SIGNS AND TRAFFIC SIGNALS SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
5. NUMBER OF BARRICADES REQUIRED IS SHOWN IN PARENTHESIS AT EACH LOCATION.
6. ALL TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE(S) OR PHASE(S) IN CONFLICT WITH TEMPORARY PAVEMENT SHOWN IN THIS STAGE OR PHASE SHALL BE REMOVED.

LEGEND

- FLAGS 15" X 15" MIN (ORANGE)
- POST MOUNTED SIGN
- TRAFFIC DRUM/BARREL
- TRAFFIC DRUM/BARREL W/LIGHTS
- TYPE III BARRICADES W/LIGHT
- TYPE III BARRICADES W/SIGN & LIGHTS
- TEMPORARY PAVEMENT
- WORK ZONE

PHASE 2

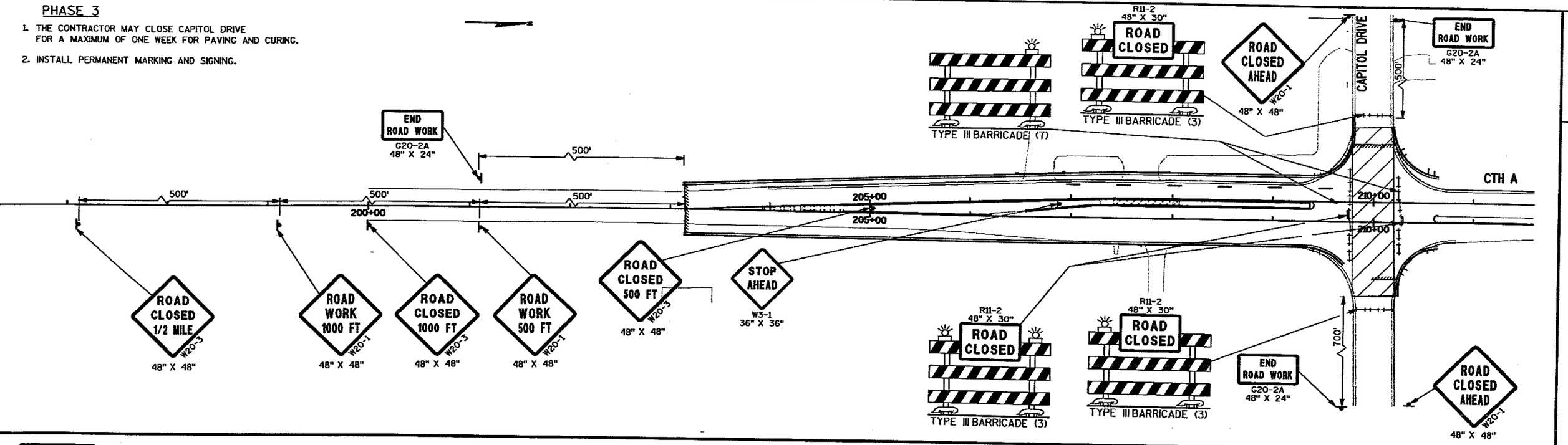
1. PLACE TEMPORARY CENTERLINE ON WEST ROADWAY TO PROVIDE TWO 11 FOOT WIDE LANES.
2. SHIFT TRAFFIC AND CONSTRUCT THE EAST ROADWAY AND PAVE BINDER COURSE.

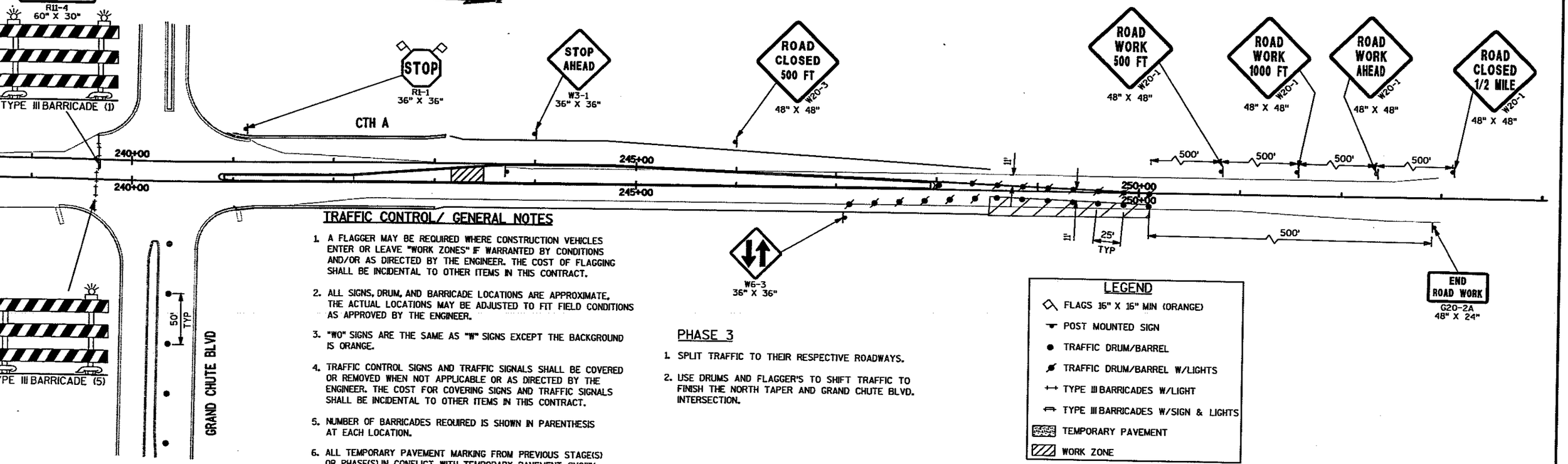
PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - PHASE 2	SCALE, FEET 0 50 100	SHEET NO: 54	E

: F:\Transportation\E1582A02\SHEET\PLAN\E1582TC2.dgn PLOT DATE : 03/29/2004 08:48:06 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

PHASE 3

1. THE CONTRACTOR MAY CLOSE CAPITOL DRIVE FOR A MAXIMUM OF ONE WEEK FOR PAVING AND CURING.
2. INSTALL PERMANENT MARKING AND SIGNING.





TRAFFIC CONTROL/ GENERAL NOTES

1. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK ZONES" IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER. THE COST OF FLAGGING SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
2. ALL SIGNS, DRUM, AND BARRICADE LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
4. TRAFFIC CONTROL SIGNS AND TRAFFIC SIGNALS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE OR AS DIRECTED BY THE ENGINEER. THE COST FOR COVERING SIGNS AND TRAFFIC SIGNALS SHALL BE INCIDENTAL TO OTHER ITEMS IN THIS CONTRACT.
5. NUMBER OF BARRICADES REQUIRED IS SHOWN IN PARENTHESIS AT EACH LOCATION.
6. ALL TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE(S) OR PHASE(S) IN CONFLICT WITH TEMPORARY PAVEMENT SHOWN IN THIS STAGE OR PHASE SHALL BE REMOVED.

PHASE 3

1. SPLIT TRAFFIC TO THEIR RESPECTIVE ROADWAYS.
2. USE DRUMS AND FLAGGER'S TO SHIFT TRAFFIC TO FINISH THE NORTH TAPER AND GRAND CHUTE BLVD. INTERSECTION.

LEGEND

- FLAGS 15" X 15" MIN (ORANGE)
- POST MOUNTED SIGN
- TRAFFIC DRUM/BARREL
- TRAFFIC DRUM/BARREL W/LIGHTS
- TYPE III BARRICADES W/LIGHT
- TYPE III BARRICADES W/SIGN & LIGHTS
- TEMPORARY PAVEMENT
- WORK ZONE

ATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	TRAFFIC CONTROL - PHASE 3	SCALE, FEET 0 50 100	SHEET NO: 55	E

NAME : f:\Transportation\E1582A02\SHEET\PLAN\E1582TC3.dgn PLOT DATE : 03/23/2004 01:06:41 PM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

N

CTH A

200+00

N01°39'55"E

BOP = 201+50
Y = 573508.1160
X = 817069.5700

BOP = 203'SB'+14.98

PI = 203'SB'+14.98

N00°37'31"W

PISTA 203'NB'+14.98 =
PISTA 203'SB'+14.98
Y = 573673.0293
X = 817074.3640

N02°15'29"E

205+00

205+00

PI = 206'NB'+05.00
Y = 573962.8196
X = 817085.7901

PI = 207'SB'+40.32
Y = 574098.3438
X = 817069.7216

EQUATION

BK = 207'SB'+40.32
AH = 207'SB'+40.01

SECTION LINE

N01°39'55"E

N01°39'55"E

20'

17'

5'

N01°39'55"E

RR SPIKE
FOUND
Y=574357.74
X=817094.27

T 21 N
R 17 E
16

210+80

PI = 210'NB'+00.00
Y = 574357.6541
X = 817097.2688

PI = 210'SB'+00.00
Y = 574358.2268
X = 817077.2770

SECTION LINE

N01°37'01"E

N01°37'01"E

PI = 212'SB'+48.22
Y = 574606.3495
X = 817084.2805

STA 213'NB'+75

MATCH LINE

T 21 N
R 16 E
21

N

CURVE DATA #1
PI 218'SB'+82.42
Y = 575239.1898
X = 817125.8258
Δ = 2°33'31"
D = 0°30'00"
T = 255.91'
R = 11459.16'
L = 511.73'
C = 511.69'
PC = STA 216'SB'+26.52
Y = 574983.8330
X = 817109.0619
PT = STA 221'SB'+38.25
Y = 575495.0403
X = 817131.1733

PC = 216'SB'+26.52

N03°45'22"E

215+00

N01°37'01"E

215+00

PI = 214'NB'+77.80
Y = 574835.2598
X = 817110.7498

N03°19'49"E

CTH A

PI = 218'SB'+82.42
Y = 575239.1898
X = 817125.8258

CURVE #1

EQUATION

PT = 221'SB'+38.25

BK = 221'SB'+93.12
AH = 221'SB'+93.33

SECTION LINE

EOP = 668+19.41

N01°37'01"E

220+00

220+00

PI = 221'NB'+93.33
Y = 575549.5885
X = 817152.3178

N01°11'51"E

N01°11'51"E

20'

STA 668+19.41 =
STA 222'SB'+17.88
Y = 575574.5511
X = 817132.8352

1/16 LINE

USH 41 ℄

00+599

FUTURE USH 41 NB OFF-RAMP

00+599

SECTION LINE

STA 668+18.99 =
STA 226'SB'+81.88
Y = 576038.4424
X = 817142.5310

665+00

FUTURE USH 41 SB ON-RAMP

EOP = 668+18.99

225+00

225+00

PC=227'NB'+10.80

PI = 227'SB'+93.99

PI = 228'NB'+77.49
Y = 576233.5990
X = 817166.6144

CURVE #2

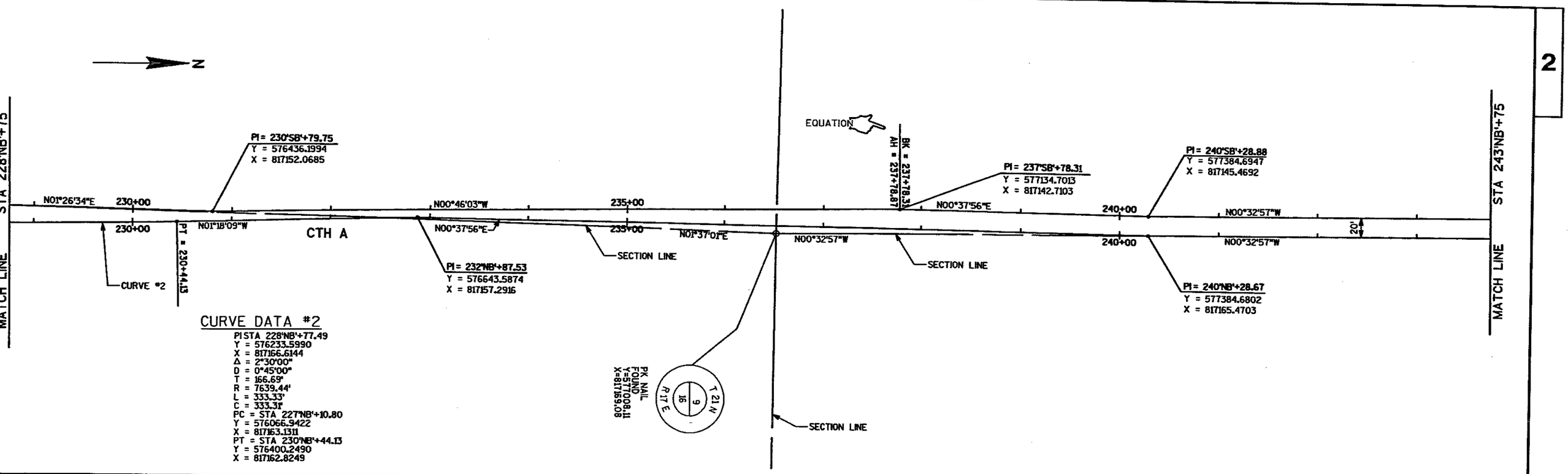
STA 228'NB'+75

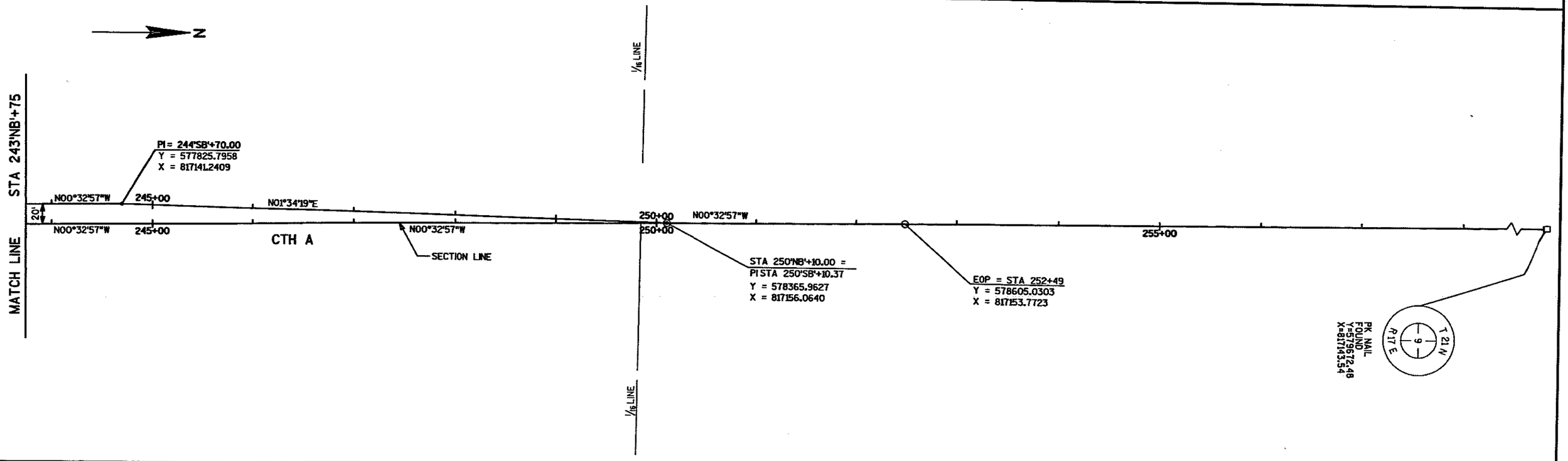
MATCH LINE

CURVE DATA #2
PI STA 228'NB'+77.49
Y = 576233.5990
X = 817166.6144
Δ = 2°30'00"
D = 0°45'00"
T = 166.69'
R = 7639.44'
L = 333.33'
C = 333.31'
PC = STA 227'NB'+10.80
Y = 576066.9422
X = 817163.1311
PT = STA 230'NB'+44.13
Y = 576400.2490
X = 817162.8249

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	ALIGNMENT PLAN	SCALE, FEET 0 50 100	SHEET NO: 56	E

: f:\Transportation\E1582A02\SHEET\PLAN\E1582AP1.dgn PLOT DATE : 03/17/2004 09:15:38 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42





ATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	ALIGNMENT PLAN	SCALE, FEET 0 50 100	SHEET NO: 57 E

N

BOP = STA 12+82
Y = 576144.9791
X = 817762.9767

S88°42'41"E

PT = 14+55.07

PC = 13+85.88

CURVE #3

PL

R/W

BEB 3/4"

15+00

N01°10'58"E

35'

20+00

ANDY SCHUH'S DRIVEWAY

EOP = STA 20+00
Y = 576730.6486
X = 817917.9853

EOP = 20+00.00

MUD CREEK DRAINAGE EASEMENT

PK NAIL
FOUND
Y=577008.11
X=817169.08

T 21 N
R 17 E
9
16

SECTION LINE

WEST ACCESS ROAD

CURVE DATA #3

PI STA 14+29.96
Y = 576141.7657
X = 817905.8264
Δ = 90°06'21"
D = 130°13'04"
T = 44.08'
R = 44.00'
L = 69.20'
C = 62.28'
PC = STA 13+85.88
Y = 576142.7571
X = 817861.7562
PT = STA 14+55.07
Y = 576185.8376
X = 817906.7363

N

BOP = STA 1+00
Y = 577706.5182
X = 817439.6386

BOP = 1+00.00

2+00

3+00

N27°00'00"E

4+00

5+00

NORTH WETLAND MITIGATION

6+00

7+00

8+00

EOP = STA 8+50
Y = 578374.7731
X = 817780.1315

EOP = 8+50.00

PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	ALIGNMENT PLAN	SCALE, FEET 0 50 100	SHEET NO: 58	E

: f:\Transportation\E1582A02\SHEET\PLAN\E1582AP3.dgn PLOT DATE : 03/17/2004 09:17:56 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

DATE 09JUN04

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-09-71 QUANTITY
0010	201.0105	CLEARING	STA	16.000	16.000
0020	201.0120	CLEARING	ID	16.000	16.000
0030	201.0205	GRUBBING	STA	16.000	16.000
0040	201.0220	GRUBBING	ID	16.000	16.000
0050	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	16.000	16.000
0060	203.0200	REMOVING OLD STRUCTURE (STATION) 01. 224+51.50	LS	1.000	1.000
0070	203.0200	REMOVING OLD STRUCTURE (STATION) 02. 667+66.56	LS	1.000	1.000
0080	203.0200	REMOVING OLD STRUCTURE (STATION) 03. 227NB+23	LS	1.000	1.000
0090	203.0200	REMOVING OLD STRUCTURE (STATION) 04. 241NB+52	LS	1.000	1.000
0100	204.0100	REMOVING PAVEMENT	SY	940.000	940.000
0110	204.0110	REMOVING ASPHALTIC SURFACE	SY	700.000	700.000
0120	204.0150	REMOVING CURB & GUTTER	LF	1,370.000	1,370.000
0130	204.0155	REMOVING CONCRETE SIDEWALK	SY	135.000	135.000
0140	204.0165	REMOVING GUARDRAIL	LF	1,455.000	1,455.000
0150	204.0170	REMOVING FENCE	LF	1,100.000	1,100.000
0160	204.0195	REMOVING CONCRETE BASES	EACH	13.000	13.000
0170	204.0210	REMOVING MANHOLES	EACH	1.000	1.000
0180	204.0220	REMOVING INLETS	EACH	4.000	4.000
0190	204.0245	REMOVING STORM SEWER (SIZE) 01. 15-INCH	LF	188.000	188.000
0200	204.0245	REMOVING STORM SEWER (SIZE) 02. 24-INCH	LF	65.000	65.000
0210	204.0245	REMOVING STORM SEWER (SIZE) 03. 12-INCH	LF	24.000	24.000
0220	204.0245	REMOVING STORM SEWER (SIZE) 04. 30-INCH	LF	468.000	468.000
0230	204.0270	ABANDONING CULVERT PIPES	EACH	1.000	1.000
0240	205.0100	EXCAVATION COMMON	CY	27,110.000	27,110.000
0250	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-44-140	LS	1.000	1.000
0260	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 01. C-44-15	LS	1.000	1.000
0270	206.6000.S	TEMPORARY SHORING	SF	370.000	370.000
0280	208.0100	BORROW	CY	111,931.000	111,931.000
0290	210.0100	BACKFILL STRUCTURE	CY	2,555.000	2,555.000
0300	213.0100	FINISHING ROADWAY (PROJECT) 01. 1123-09-71	EACH	1.000	1.000
0310	301.0100.S	QMP BASE AGGREGATE	TON	24,740.000	24,740.000
0320	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	3,050.000	3,050.000
0330	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	22,290.000	22,290.000
0340	310.0115	BASE AGGREGATE OPEN GRADED	CY	240.000	240.000
0350	311.0110	BREAKER RUN	TON	4,000.000	4,000.000
0370	415.0095	CONCRETE PAVEMENT 9 1/2-INCH	SY	13,080.000	13,080.000
0380	415.1095	CONCRETE PAVEMENT HES 9 1/2 INCH	SY	240.000	240.000
0390	415.1195.S	QMP CONCRETE PAVEMENT URBAN	DAY	10.000	10.000
0400	415.2000.S	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	3,147.000	3,147.000
0410	416.0050	CONCRETE PAVEMENT APPROACH SLAB	SY	210.000	210.000
0440	416.0805	CONCRETE PAVEMENT GAPS	EACH	2.000	2.000
0450	455.0105	ASPHALTIC MATERIAL PG58-28	TON	52.000	52.000
0460	455.0115	ASPHALTIC MATERIAL PG64-22	TON	130.000	130.000
0470	455.0120	ASPHALTIC MATERIAL PG64-28	TON	230.000	230.000
0480	455.0605	TACK COAT	GAL	750.000	750.000
0490	460.1100	HMA PAVEMENT TYPE E-0.3	TON	830.000	830.000
0500	460.1110	HMA PAVEMENT TYPE E-10	TON	5,920.000	5,920.000
0510	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	4,335.000	4,335.000

DATE 09JUN04

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

1123-09-71

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0520	460.3000	QMP HMA MIXTURE	TON	6,750.000	6,750.000
0530	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	410.000	410.000
0550	502.0100	CONCRETE MASONRY BRIDGES	CY	1,126.000	1,126.000
0560	502.0300.S	QMP CONCRETE STRUCTURES 5-CYLINDER	CY	1,126.000	1,126.000
0570	502.0400.S	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	11,260.000	11,260.000
0580	502.3200	PROTECTIVE SURFACE TREATMENT	SY	2,590.000	2,590.000
0590	502.6102	MASONRY ANCHORS TYPE S 1/2-INCH	EACH	286.000	286.000
0600	502.6105	MASONRY ANCHORS TYPE S 5/8-INCH	EACH	705.000	705.000
0610	503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	1,897.000	1,897.000
0620	504.0100	CONCRETE MASONRY CULVERTS	CY	382.000	382.000
0630	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	12,870.000	12,870.000
0640	505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	62,890.000	62,890.000
0650	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	182,360.000	182,360.000
0660	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	27.000	27.000
0670	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-44-140	EACH	32.000	32.000
0680	511.2110	PILING STEEL DELIVERED AND DRIVEN HP 12-INCH X 53 LB	LF	2,535.000	2,535.000
0690	512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	1,570.000	1,570.000
0700	512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	1,570.000	1,570.000
0710	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	50.000	50.000
0720	520.0118	CULVERT PIPE CLASS III 18-INCH	LF	75.000	75.000
0730	520.1018	APRON ENDWALLS FOR CULVERT PIPE 18-INCH	EACH	4.000	4.000
0740	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	155.000	155.000
0750	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	2.000	2.000
0760	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	1.000	1.000
0770	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	144.000	144.000
0780	522.0330	CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	LF	185.000	185.000
0790	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	3.000	3.000
0800	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	1.000	1.000
0810	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	1.000	1.000
0820	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	2.000	2.000
0830	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	4.000	4.000
0840	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	3.000	3.000
0850	601.0405	CONCRETE CURB & GUTTER 18-INCH TYPE A	LF	4,035.000	4,035.000
0860	601.0407	CONCRETE CURB & GUTTER 18-INCH TYPE D	LF	3,790.000	3,790.000
0870	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	4,670.000	4,670.000
0880	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	2,710.000	2,710.000
0890	602.0405	CONCRETE SIDEWALK 4-INCH	SF	8,690.000	8,690.000
0910	602.0501.S	CURB RAMP DETECTABLE WARNING FIELD	SF	80.000	80.000
0920	603.0500	CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR FURNISHED & DELIVERED	LF	2,930.000	2,930.000
0930	603.0800	CONCRETE BARRIER TEMPORARY PRECAST CONTRACTOR FURNISHED & INSTALLED	LF	2,930.000	2,930.000
0940	606.0200	RIPRAP MEDIUM	CY	390.000	390.000

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ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-09-71 QUANTITY
0950	606.0300	RIPRAP HEAVY	CY	40.000	40.000
0960	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	1,021.000	1,021.000
0970	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	277.000	277.000
0980	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	152.000	152.000
0990	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	527.000	527.000
1000	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	244.000	244.000
1010	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	197.000	197.000
1020	608.0430	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH	LF	212.000	212.000
1030	609.0115	RELAID STORM SEWER 15-INCH	LF	24.000	24.000
1040	610.0124	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH	LF	101.000	101.000
1050	611.0107	CATCH BASINS TYPE 5	EACH	3.000	3.000
1060	611.0201	MANHOLES TYPE 1	EACH	5.000	5.000
1070	611.0210	MANHOLES TYPE 3	EACH	2.000	2.000
1080	611.0215	MANHOLES TYPE 5	EACH	1.000	1.000
1090	611.0305	INLETS TYPE 8	EACH	5.000	5.000
1100	611.0307	INLETS TYPE 9	EACH	1.000	1.000
1110	611.0530	MANHOLE COVERS TYPE J	EACH	7.000	7.000
1120	611.0612	INLET COVERS TYPE C	EACH	1.000	1.000
1130	611.0624	INLET COVERS TYPE H	EACH	56.000	56.000
1140	611.0639	INLET COVERS TYPE H-S	EACH	9.000	9.000
1150	611.0642	INLET COVERS TYPE MS	EACH	8.000	8.000
1160	611.8110	ADJUSTING MANHOLE COVERS	EACH	5.000	5.000
1170	611.8115	ADJUSTING INLET COVERS	EACH	3.000	3.000
1180	611.9800.S	PIPE GRATES	EACH	1.000	1.000
1190	612.0106	PIPE UNDERDRAIN 6-INCH	LF	200.000	200.000
1200	612.0204	PIPE UNDERDRAIN UNPERFORATED 4-INCH	LF	66.000	66.000
1210	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	40.000	40.000
1220	612.0212	PIPE UNDERDRAIN UNPERFORATED 12-INCH	LF	121.000	121.000
1230	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1.000	1.000
1240	614.0200	STEEL THRIE BEAM STRUCTURE APPROACH	LF	33.000	33.000
1250	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	550.000	550.000
1260	614.0370	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	EACH	1.000	1.000
1270	616.0205	FENCE CHAIN LINK 5-FT	LF	2,090.000	2,090.000
1280	616.0208	FENCE CHAIN LINK 8-FT	LF	481.000	481.000
1290	616.0329	GATES CHAIN LINK (WIDTH) 01. 3-FT, 6-INCH	EACH	2.000	2.000
1300	616.0404	FENCE CHAIN LINK SALVAGED 4-FT.	LF	230.000	230.000
1310	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1123-09-71	EACH	1.000	1.000
1320	619.1000	MOBILIZATION	EACH	0.950	0.950
1330	620.0100	CONCRETE CORRUGATED MEDIAN	SF	490.000	490.000
1340	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	250.000	250.000
1350	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	8.000	8.000

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

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1360	621.1100	LANDMARK REFERENCE MONUMENTS AND CAST IRON COVERS	EACH	2.000	2.000
1370	623.0200	DUST CONTROL SURFACE TREATMENT	SY	1,880.000	1,880.000
1380	624.0100	WATER	MGAL	245.000	245.000
1390	625.0100	TOPSOIL	SY	65,380.000	65,380.000
1410	627.0205	MULCHING	TON	104.000	104.000
1440	628.1505	SILT FENCE DELIVERED	LF	6,630.000	6,630.000
1450	628.1510	SILT FENCE INSTALLED	LF	6,630.000	6,630.000
1460	628.1520	SILT FENCE MAINTENANCE	LF	13,260.000	13,260.000
1470	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	3.000	3.000
1480	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	8.000	8.000
1490	628.2010	EROSION MAT DELIVERED CLASS I TYPE B	SY	22,950.000	22,950.000
1500	628.2015	EROSION MAT DELIVERED URBAN CLASS I TYPE A	SY	4,900.000	4,900.000
1510	628.2030	EROSION MAT DELIVERED CLASS II TYPE B	SY	525.000	525.000
1520	628.3010	EROSION MAT INSTALLED CLASS I TYPE B	SY	22,950.000	22,950.000
1530	628.3015	EROSION MAT INSTALLED URBAN CLASS I TYPE A	SY	4,900.000	4,900.000
1540	628.3030	EROSION MAT INSTALLED CLASS II TYPE B	SY	525.000	525.000
1550	628.6510	SOIL STABILIZER TYPE B	ACRE	3.000	3.000
1560	628.7015	INLET PROTECTION TYPE C	EACH	63.000	63.000
1570	628.7505	TEMPORARY DITCH CHECKS DELIVERED	LF	140.000	140.000
1580	628.7510	TEMPORARY DITCH CHECKS INSTALLED	LF	140.000	140.000
1590	628.7550	CULVERT PIPE DITCH CHECKS	EACH	11.000	11.000
1600	629.0210	FERTILIZER TYPE B	CWT	52.600	52.600
1610	630.0110	SEEDING MIXTURE NO. 10	LB	617.000	617.000
1620	630.0130	SEEDING MIXTURE NO. 30	LB	220.000	220.000
1630	630.0140	SEEDING MIXTURE NO. 40	LB	447.000	447.000
1640	630.0160	SEEDING MIXTURE NO. 60	LB	190.000	190.000
1650	630.0200	SEEDING TEMPORARY	LB	957.000	957.000
1660	630.0300	SEEDING BORROW PIT	LB	940.000	940.000
1670	631.0300	SOD WATER	MGAL	6.000	6.000
1680	631.1100	SOD EROSION CONTROL	SY	835.000	835.000
1690	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	19.000	19.000
1700	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	9.000	9.000
1710	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	2.000	2.000
1720	634.0620	POSTS WOOD 4X6-INCH X 20-FT	EACH	1.000	1.000
1730	637.0202	SIGNS REFLECTIVE TYPE II	SF	246.140	246.140
1740	638.2102	MOVING SIGNS TYPE II	EACH	7.000	7.000
1750	638.2602	REMOVING SIGNS TYPE II	EACH	33.000	33.000
1760	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	22.000	22.000
1770	642.5000	FIELD OFFICE TYPE B (PROJECT) 01. 1123-09-71	EACH	1.000	1.000
1780	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1123-09-71	EACH	1.000	1.000
1800	643.0300	TRAFFIC CONTROL DRUMS	DAYS	9,980.000	9,980.000
1810	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAYS	4,410.000	4,410.000
1820	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAYS	5,900.000	5,900.000
1830	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAYS	2,860.000	2,860.000
1840	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAYS	216.000	216.000
1850	643.0900	TRAFFIC CONTROL SIGNS	DAYS	11,710.000	11,710.000
1860	643.1050.S	TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE	DAY	372.000	372.000
1870	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 1123-09-71	EACH	1.000	1.000
1880	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAYS	20,970.000	20,970.000

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ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1123-09-71 QUANTITY
1890	645.0110	GEOTEXTILE FABRIC TYPE DF	SY	168.000	168.000
1900	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	820.000	820.000
1910	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	720.000	720.000
1920	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	19,600.000	19,600.000
1930	646.0226	PAVEMENT MARKING CHANNELIZING EPOXY 8-INCH	LF	775.000	775.000
1940	646.0600	REMOVING PAVEMENT MARKINGS	LF	3,350.000	3,350.000
1950	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	4.000	4.000
1970	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	3.000	3.000
1980	647.0456	PAVEMENT MARKING CURB EPOXY	LF	90.000	90.000
1990	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	170.000	170.000
2000	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	6.000	6.000
2010	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	540.000	540.000
2020	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	695.000	695.000
2030	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY	SF	140.000	140.000
2040	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	3,000.000	3,000.000
2050	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	2,870.000	2,870.000
2060	650.4000	CONSTRUCTION STAKING STORM SEWER SYSTEM	EACH	91.000	91.000
2070	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	9,700.000	9,700.000
2080	650.5000	CONSTRUCTION STAKING BASE	LF	5,110.000	5,110.000
2090	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	6,250.000	6,250.000
2100	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-44-140	LS	1.000	1.000
2110	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. C-44-15	LS	1.000	1.000
2120	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	4,590.000	4,590.000
2130	650.9900	CONSTRUCTION STAKING INITIAL LAYOUT	LF	10,780.000	10,780.000
2140	652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	575.000	575.000
2150	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	70.000	70.000
2160	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	2,462.000	2,462.000
2170	652.0615	CONDUIT SPECIAL 3-INCH	LF	120.000	120.000
2180	652.0800	CONDUIT LOOP DETECTOR	LF	690.000	690.000
2190	653.0105	PULL BOXES STEEL 12X24-INCH	EACH	5.000	5.000
2200	653.0145	PULL BOXES STEEL 24X48-INCH	EACH	23.000	23.000
2210	654.0101	CONCRETE BASES TYPE 1	EACH	6.000	6.000
2220	654.0102	CONCRETE BASES TYPE 2	EACH	4.000	4.000
2230	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	1.000	1.000
2240	655.0240	CABLE TRAFFIC SIGNAL 7-14 AWG	LF	340.000	340.000
2250	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	1,025.000	1,025.000
2260	655.0615	ELECTRICAL WIRE LIGHTING 10 AWG	LF	750.000	750.000
2270	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	3,360.000	3,360.000
2280	655.0800	LOOP DETECTOR WIRE	LF	2,320.000	2,320.000
2290	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. CTH A & CAPITOL DRIVE INTERSECTION	LS	1.000	1.000
2300	657.0100	PEDESTAL BASES	EACH	6.000	6.000
2310	657.0255	TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE	EACH	4.000	4.000

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ESTIMATE OF QUANTITIES

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	
2320	657.0315	POLES TYPE 4	EACH	2.000	2.000
2330	657.0395.S	POLES (TYPE) 01. TYPE 2	EACH	2.000	2.000
2340	657.0420	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	EACH	2.000	2.000
2350	657.0425	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	EACH	4.000	4.000
2360	657.0595.S	TROMBONE ARMS (LENGTH) 01. 20-FT	EACH	2.000	2.000
2370	657.0710	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	EACH	4.000	4.000
2380	658.0120	TRAFFIC SIGNAL FACE 5-12 INCH VERTICAL	EACH	2.000	2.000
2390	658.0155	TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL	EACH	2.000	2.000
2400	658.0225	BACKPLATES SIGNAL FACE 5 SECTION 12-INCH	EACH	2.000	2.000
2410	658.0412	PEDESTRIAN SIGNAL FACE 12-INCH	EACH	8.000	8.000
2420	658.0500	PEDESTRIAN PUSH BUTTONS	EACH	8.000	8.000
2430	659.0125	LUMINAIRES UTILITY HPS 250 WATTS	EACH	4.000	4.000
2440	690.0100	SAWING EXISTING PAVEMENT	LF	1,380.000	1,380.000
2450	690.0200	SAWING CONCRETE PAVEMENT FULL DEPTH	LF	40.000	40.000
2460	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	300.000	300.000
2470	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	1,500.000	1,500.000
2480	SPV.0035	SPECIAL 01. SEDIMENT TRAP EXCAVATION	CY	30.000	30.000
2490	SPV.0035	SPECIAL 02. QMP SUBGRADE	CY	102,700.000	102,700.000
2500	SPV.0060	SPECIAL 01. INLET TYPE 8 SPECIAL	EACH	1.000	1.000
2510	SPV.0060	SPECIAL 02. EROSION CONTROL FILTER BAGS, DELIVERED	EACH	422.000	422.000
2520	SPV.0060	SPECIAL 03. EROSION CONTROL FILTER BAGS, INSTALLED	EACH	422.000	422.000
2530	SPV.0060	SPECIAL 04. EROSION CONTROL FILTER BAGS, MAINTENANCE	EACH	844.000	844.000
2540	SPV.0060	SPECIAL 05. MODIFY EXISTING TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL	EACH	4.000	4.000
2550	SPV.0060	SPECIAL 06. MODIFY EXISTING TRAFFIC SIGNAL FACE 5-12 INCH VERTICAL	EACH	6.000	6.000
2560	SPV.0060	SPECIAL 07. SALVAGED APRON ENDWALLS, STEEL 112 X 75 INCH	EACH	2.000	2.000
2570	SPV.0060	SPECIAL 08. BORROW PIT TRACK PAD	EACH	5.000	5.000
2580	SPV.0060	SPECIAL 09. INLETS TYPE 3 SPECIAL	EACH	62.000	62.000
2590	SPV.0075	SPECIAL 01. STREET SWEEPING	HRS	10.000	10.000
2600	SPV.0090	SPECIAL 01. FENCE CHAIN LINK 5-FT SPECIAL	LF	210.000	210.000
2610	SPV.0090	SPECIAL 02. PIPE ARCH CORRUGATED STEEL, 112 X 75 INCH	LF	44.000	44.000
2620	SPV.0090	SPECIAL 03. CABLE TRAFFIC SIGNAL 16-14AWG	LF	1,450.000	1,450.000
2630	SPV.0090	SPECIAL 04. PILING STEEL PREBORING SPECIAL	LF	250.000	250.000
2640	SPV.0105	SPECIAL 01. CONTROL CABINET MODIFICATIONS, CTH A AND CAPITOL DRIVE	LS	1.000	1.000
2650	SPV.0105	SPECIAL 02. REMOVE AND SALVAGE EXISTING TRAFFIC SIGNALS CTH A AND CAPITOL DRIVE	LS	1.000	1.000
2660	SPV.0180	SPECIAL 01. CONCRETE PAVEMENT HES SPECIAL 9-1/2	SY	780.000	780.000
2670	SPV.0180	SPECIAL 02. SLOPE PAVING BREAKER RUN	SY	570.000	570.000

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CLEARING AND GRUBBING

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
CATEGORY 0020			
STA 210SB+00 - 219SB+00	CTH A, LT	9	9
STA 220SB+00 - 222SB+00	CTH A, LT	2	2
STA 227SB+00 - 229SB+00	CTH A, LT	2	2
STA 233SB+00 - 234SB+00	CTH A, LT	1	1
STA 221NB+00 - 222NB+00	CTH A, RT	1	1
	SUBTOTALS	15	15
CATEGORY 0030			
STA 236SB+00 - 237SB+00	CTH A, LT	1	1
	SUBTOTALS	1	1
	PROJECT TOTALS	16	16

STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
CATEGORY 0020			
STA 216NB+05	CTH A, RT	3	3
STA 217NB+15	CTH A, RT	4	4
STA 220NB+15	CTH A, RT	6	6
STA 220NB+65	CTH A, RT	3	3
	PROJECT TOTALS	16	16

REMOVING SMALL CULVERT PIPES

STATION	LOCATION	SIZE	203.0100 EACH
CATEGORY 0020			
STA 215NB+61	CTH A	24" CSCP	1
STA 223NB+39	CTH A, RT	12" CSCP	1
STA 223SB+49	CTH A, LT	12" CSCP	1
STA 223NB+70	CTH A	30" CSCP	1
STA 225NB+68	CTH A, RT	12" CSCP	1
STA 225SB+68	CTH A, LT	12" CSCP	1
STA 228SB+18	CTH A, LT	12" CSCP	1
STA 229SB+54	CTH A, LT	12" CSCP	1
STA 230SB+55	CTH A, LT	18" CSCP	1
STA 235NB+00	CTH A	36" CSCP	1
		SUBTOTAL	10
CATEGORY 0030			
STA 205NB+08	CTH A	30" CSCP	1
STA 208NB+00	CTH A, RT	12" CSCP	1
STA 242SB+17	CTH A, LT	18" CSCP	1
STA 243SB+35	CTH A, LT	18" CSCP	1
STA 246NB+07	CTH A, RT	18" CSCP	1
STA 668+00	USH 41 MEDIAN	18" CSCP	1
		SUBTOTAL	6
		PROJECT TOTAL	16

REMOVING OLD STRUCTURE

STATION	LOCATION	DESCRIPTION	203.0200 LS
CATEGORY 0020			
STA 227NB+23	CTH A, 140' RT	5.7 x 7.5 CMPA	1
		SUBTOTAL	1
CATEGORY 0030			
STA 241NB+52	CTH A, 59' RT	7' x 9.5' CSPA	1
		SUBTOTAL	1
		PROJECT TOTAL	2

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	204.0165 LF
CATEGORY 0020		
STA 222NB+97 - 223NB+42	CTH A, RT	45
STA 222SB+97 - 223SB+42	CTH A, LT	45
STA 225NB+63 - 226NB+08	CTH A, RT	45
STA 225SB+63 - 226SB+08	CTH A, LT	45
STA 665+00 - 668+90	USH 41 NORTHBOOUND	390
STA 666+80 - 669+20	MEDIAN USH 41	480
STA 668+15 - 672+05	USH 41 SOUTHBOUND	390
	SUBTOTAL	1,440
CATEGORY 0030		
STA 241+20, RT	CTH A	15
	SUBTOTAL	15
	PROJECT TOTAL	1,455

REMOVING CURB AND GUTTER

STATION TO STATION	LOCATION	204.0150 LF
CATEGORY 0020		
STA 210NB+20 - 210NB+85	CTH A, RT	95
STA 210SB+20 - 212SB+00	CTH A, LT	225
	SUBTOTAL	320
CATEGORY 0030		
STA 207NB+47 - 209NB+83	CTH A, RT	285
STA 203SB+98 - 209SB+78	CTH A, LT	635
STA 239NB+28 - 239NB+75	GRAND CHUTE BLVD RADIUS	30
STA 240NB+20	GRAND CHUTE BLVD MEDIAN	30
	SUBTOTAL	980
	PROJECT TOTAL	1,300

REMOVING PAVEMENT

STATION TO STATION	LOCATION	204.0100 SY
CATEGORY 0020		
STA 210NB+60 - 214NB+50	MEDIAN CONC LOADING ZONE	420
STA 214NB+50 - 215NB+55	MEDIAN CONC LOADING ZONE	115
STA 223NB+40	CONC FLUME	7
STA 223SB+40	CONC FLUME	6
STA 225NB+70	CONC FLUME	7
STA 225SB+70	CONC FLUME	5
	SUBTOTAL	560
CATEGORY 0030		
STA 204NB+30 - 207NB+30	MEDIAN CONC LOADING ZONE	275
STA 208NB+00 - 209NB+45	MEDIAN CONC LOADING ZONE	90
STA 239NB+00	CONC FLUME	8
STA 241NB+05	CONC FLUME	7
	SUBTOTAL	380
	PROJECT TOTAL	940

REMOVING CONCRETE SIDEWALK

LOCATION	204.0155 SY
CATEGORY 0020	
NORTHEAST QUADRANT CTH A/CAPITOL DRIVE	35
NORTHWEST QUADRANT CTH A/CAPITOL DRIVE	35
SUBTOTAL	70
CATEGORY 0030	
SOUTHEAST QUADRANT CTH A/CAPITOL DRIVE	40
SOUTHWEST QUADRANT CTH A/CAPITOL DRIVE	15
SUBTOTAL	55
PROJECT TOTAL	125

REMOVING ASPHALTIC SURFACE

LOCATION	204.0110 SY
CATEGORY 0020	
CAPITOL DR.	210
SUBTOTAL	210
CATEGORY 0030	
GRAND CHUTE BOULEVARD	490
SUBTOTAL	490
PROJECT TOTAL	700

3

REMOVING FENCE

STATION TO STATION	LOCATION	204.0170 LF
CATEGORY 0020		
STA 221NB+71 - 223NB+56	CTH A, RT	250
STA 221SB+44 - 223SB+56	CTH A, LT	260
STA 225NB+53 - 226NB+54	CTH A, RT	270
STA 225SB+53 - 227SB+42	CTH A, LT	420
	PROJECT TOTAL	1,200

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
CATEGORY 0020		
STA 211NB+39	CTH A, 45' LT	1
STA 217NB+80	CTH A, 55' LT	1
	SUBTOTAL	2
CATEGORY 0030		
STA 206NB+90	CTH A, 37' LT	1
STA 209NB+62	CTH A, 40' RT	1
		2
	PROJECT TOTAL	4

REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 EACH
CATEGORY 0020		
STA 210NB+23	CTH A, 82' LT	1
STA 210NB+27	CTH A, 64' RT	1
STA 210NB+40	CTH A, 90' RT	1
STA 210NB+63	CTH A, 39' LT	1
STA 210NB+64	CTH A, 26' RT	1
STA 210NB+71	CTH A, 3' LT	1
STA 220NB+40	CTH A, 70' RT	1
STA 220NB+40	CTH A, 40' RT	1
	SUBTOTAL	8
CATEGORY 0030		
STA 209NB+36	CTH A, 31' RT	1
STA 209NB+27	CTH A, 15' LT	1
STA 209NB+34	CTH A, 44' LT	1
STA 209NB+72	CTH A, 82' LT	1
STA 209NB+70	CTH A, 55' RT	1
	SUBTOTAL	5
	PROJECT TOTAL	13

ABANDONING CULVET PIPES

STATION	LOCATION	204.0270 EACH
CATEGORY 0020		
STA 217SB+40 - 218SB+82	CTH A, LT	1
	PROJECT TOTAL	1

REMOVING MANHOLES

STATION	LOCATION	204.0210 EACH
CATEGORY 0030		
STA 206NB+90	CTH A, 41.5' LT	1
	PROJECT TOTAL	1

REMOVING STORM SEWER

N TO STATION	LOCATION	204.0245.01 12-INCH L.F.	204.0245.02 15-INCH L.F.	204.0245.03 24-INCH L.F.	204.0245.04 30-INCH L.F.
RY 0020					
20-211NB+05	CTH A, RT	---	85	---	---
30-211SB+83	CTH A, LT	---	103	---	---
15-217SB+80	CTH A, LT	---	---	65	---
	SUBTOTALS	0	188	65	0
ORY 0030					
45-210SB+12	CTH A, LT	---	---	---	468
90	CTH A, LT	14	---	---	---
00	CTH A, LT	10	---	---	---
	SUBTOTALS	24	0	0	468
	PROJECT TOTALS	24	188	65	468

YARDAGE SUMMARY

STATION TO STATION	LOCATION	205.0100 EXCAVATION COMMON C.Y.	FILL C.Y.	EXPANDED FILL (1.3) C.Y.	208.0100 BORROW EXPANDED (1.23) C.Y.
CATEGORY 0020					
STA 210+00 - 223+28	CTH A	6,376	32,521	42,277	33,968
STA 225+77 - 236+00	CTH A	8,826	63,436	82,467	69,676
STA 12+82 - 20+00	SCHUH DRIVEWAY	6	1,558	2,025	1,911
STA 1+00 - 5+50	NORTH MITIGATION AREA	1,854	0	-	(1,754)
STA 663+95 - 669+50	USH 41 NORTHBOUND	156	3,341	4,343	3,962
STA 666+90 - 672+15	USH 41 SOUTHBOUND	528	3,784	4,919	4,155
STA 666+70 - 67+25	USH 41 MEDIAN	140	119	155	14
	SUBTOTALS	17,886	104,759	136,187	111,931
CATEGORY 0030					
STA 203+15 - 210+00	CTH A	2,637	613	797	(1,741)
STA 236+00 - 252+49	CTH A	6,587	2,500	3,250	(3,157)
	SUBTOTALS	9,224	3,113	4,047	(4,898)
	PROJECT TOTALS	27,110	107,872	140,234	107,032

BORROW = 1.23(FILL - COMMON/1.3)

*EXCAVATION COMMON FROM CATEGORY 0030 TO BE HAULED TO CATEGORY 0020
FOR A CATEGORY 0020 TOTAL BORROW OF 107,032 C.Y.

3

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	301.0100.S QMP BASE AGGREGATE TON
CATEGORY 0020				
210NB+20 - 215NB+50	CTH A	---	1,470	1,470
210NB+65 - 211NB+65	MEDIAN SIDEWALK	15	---	15
210NB+28 - 210NB+61	SIDEWALK	20	---	20
214SB+57	DRIVEWAY	25	---	25
215NB+50 - 223NB+48	CTH A	---	2,060	2,060
217SB+58	DRIVEWAY	55	---	55
222NB+64 - 223NB+48	MEDIAN SIDEWALK	15	---	15
225NB+62 - 228NB+25	CTH A	---	740	740
225NB+62 - 226NB+98	MEDIAN SIDEWALK	20	---	20
228NB+25 - 236NB+00	CTH A	---	4,850	4,850
232SB+80 - 234SB+60	DRIVEWAY	55	400	455
12+82 - 20+00	SCHUH DRIVEWAY	75	640	715
UNDISTRIBUTED	CTH A	100	500	600
	SUBTOTALS	380	10,660	11,040
CATEGORY 0030				
203NB+15 - 210NB+20	CTH A	---	2,190	2,190
204NB+50 - 209NB+50	MEDIAN SIDEWALK	80	---	80
206NB+70 - 207NB+90	DRIVEWAYS	45	---	45
209NB+41 - 209NB+81	SIDEWALK	15	---	15
236NB+00 - 243NB+00	CTH A	---	5,110	5,110
237NB+80 - 242NB+00	MEDIAN SIDEWALK	45	---	45
243NB+00 - 252NB+49	CTH A	490	4,330	4,820
243NB+30 - 249NB+00	DRIVEWAYS	70	---	70
201NB+50 - 207NB+00	CTH A UNDER TEMP. PAVEMENT	300	---	---
245SB+00 - 250SB+20	CTH A UNDER TEMP. PAVEMENT	300	---	---
	SUBTOTALS	1,345	11,630	12,375
CATEGORY 0040				
210NB+65 - 215NB+50	TRAIL	230	---	230
215NB+50 - 223NB+48	TRAIL	380	---	380
222SB+90 - 223SB+48	SIDEWALK	10	---	10
225NB+62 - 226NB+64	SIDEWALK	15	---	15
225NB+62 - 230NB+50	TRAIL	230	---	230
230NB+50 - 239NB+75	TRAIL	460	---	460
	SUBTOTALS	1,325	0	1,325
	PROJECT TOTALS	3,050	22,290	24,740

CONCRETE PAVEMENT

LOCATION	415.0095 CONCRETE PAVEMENT 9 1/2 INCH SY	415.1095 CONCRETE PAVEMENT HES 9 1/2 INCH SY	SPV.0180.01 CONCRETE PAVEMENT HES SPECIAL 9 1/2 INCH SY	415.1195.S QMP CONCRETE URBAN DAY	415.2000S INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
CATEGORY 0020					
CTH A NB	1,455	---	---	1	325
CTH A SB	1,730	---	---	1	386
CTH A NB	---	60	---	---	13
CTH A NB	2,210	---	---	1	493
CTH A SB	2,030	---	---	1	453
CTH A NB	---	60	---	---	13
CTH A NB-Paved Shoulder	10	---	---	---	2
CTH A NB-Paved Shoulder	10	---	---	---	2
CTH A NB	860	---	---	1	192
CTH A SB	665	---	---	1	148
SUBTOTALS	8,970	120	0	6	2,029
CATEGORY 0030					
CTH A NB	2,185	---	---	1	488
CTH A SB	1,925	---	---	1	430
CTH A NB	---	120	---	---	27
CTH A NB	---	---	415	1	93
CTH A SB	---	---	365	1	81
SUBTOTALS	4,110	120	780	4	1,118
PROJECT TOTALS	13,080	240	780	10	3,147

CONCRETE PAVEMENT APPROACH SLAB

STATION TO STATION	LOCATION	416.0050 SY
CATEGORY 0020		
STA 223NB+33 - 223NB+48	CTH A	63
STA 223SB+33 - 223SB+48	CTH A	63
STA 225NB+62 - 225+NB77	CTH A	42
STA 225SB+62 - 225+SB77	CTH A	42
	PROJECT TOTAL	210

CONCRETE PAVEMENT GAPS

STATION TO STATION	LOCATION	416.0805 EACH
CATEGORY 0030		
STA 209NB+82 - 210NB+00	CTH A NORTHBOUND	1
STA 209SB+82 - 210SB+00	CTH A SOUTHBOUND	1
	PROJECT TOTAL	2

ONE GAP INCLUDES ALL LANES IN THAT DIRECTION

BREAKER RUN

LOCATION	311.0110 TON
CATEGORY 0020	
UNDISTRIBUTED	4,000
PROJECT TOTAL	4,000

3

ASPHALTIC ITEMS

TION TO STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0115 ASPHALTIC MATERIAL PG64-22 TON	455.0120 ASPHALTIC MATERIAL PG64-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	460.2000 DENSITY INCENTIVE HMA PAVEMENT DOL	460.3000 QMP HMA MIXTURE TON
EGORY 0020									
SB+57	DRIVEWAY	0.5	---	---	---	6	---	4	6
NB+57	MEDIAN	0.5	---	---	1	8	---	5	8
SB+58	DRIVEWAY	1.5	---	---	---	23	---	14	23
NB+58	MEDIAN	0.5	---	---	1	7	---	5	7
NB+25-236NB+00	CTH A	---	18	33	106	---	850	545	850
+25-236+00, LT	CTH A	---	18	33	106	---	850	545	850
SB+80-234SB+60	DRIVEWAY	7.0	---	---	---	115	---	72	115
NB+50	MEDIAN	0.5	---	---	1	8	---	5	8
82-20+00	SCHUH DRIVEWAY	12.5	---	---	25	210	---	135	210
	CAPITOL DRIVE	---	2	2	1	---	60	39	60
	SUBTOTALS	23	38	68	241	377	1,760	1,369	2,137
EGORY 0030									
SB+70	DRIVEWAY	0.5	---	---	---	6	---	4	6
SB+75	DRIVEWAY	0.5	---	---	---	7	---	5	7
NB+75	MEDIAN	0.5	---	---	0.5	5	---	4	5
NB+90	DRIVEWAY	0.5	---	---	---	4	---	3	4
NB+90	MEDAIN	0.5	---	---	0.5	3	---	2	3
NB+00-243NB+00	CTH A	---	33	60	188	---	1520	975	1,520
SB+00-244SB+70	CTH A	---	25	44	140	---	1150	740	1,150
NB+00-250NB+10	CTH A	---	18	32	100	---	815	525	815
NB+30	MEDIAN	0.5	---	---	1	8	---	6	8
SB+70-250SB+10	CTH A	---	11	19	60	---	485	310	485
NB+10-252NB+49	CTH A	---	2	3	7	---	55	36	55
	GRAND CHUTE BLVD	---	3	4	12	---	135	86	135
	SUBTOTALS	3	92	162	509	33	4,160	2,696	4,193
EGORY 0040									
NB+60-215NB+50	TRAIL	4.5	---	---	---	75	---	50	75
NB+50-223NB+48	TRAIL	8.0	---	---	---	120	---	75	120
NB+62-230NB+50	TRAIL	4.5	---	---	---	75	---	50	75
NB+50-239NB+75	TRAIL	9.0	---	---	---	150	---	95	150
	SUBTOTALS	26	0	0	0	420	0	270	420
	PROJECT TOTALS	52	130	230	750	830	5,920	4,335	6,750

ASPHALTIC SURFACE TEMPORARY

STATION	LOCATION	465.0125 TON	REMARKS
CATEGORY 0030			
STA 200NB+00 - 205NB+20	CTH A, RT	120	PHASE 1
STA 203NB+50 - 206NB+60	CTH A, LT	80	PHASE 1
STA 241NB+60 - 243NB+70	CTH A, RT	30	PHASE 1
STA 245SB+70 - 250SB+10	CTH A, LT	180	PHASE 1
	TOTAL	410	

APRON ENDWALLS FOR CULVERT PIPE

STRUCTURE NUMBER	STATION	LOCATION	520.1018 APRON ENDWALLS FOR CP 18-INCH EACH	521.1012 APRON ENDWALLS FOR CP STEEL 12-INCH EACH	521.1018 APRON ENDWALLS FOR CP STEEL 18-INCH EACH	522.1012 APRON ENDWALLS FOR CP REIN CONC 12-INCH EACH	522.1015 APRON ENDWALLS FOR CP REIN CONC 15-INCH EACH	522.1018 APRON ENDWALLS FOR CP REIN CONC 18-INCH EACH	522.1024 APRON ENDWALLS FOR CP REIN CONC 24-INCH EACH	522.1030 APRON ENDWALLS FOR CP REIN CONC 30-INCH EACH	522.1036 APRON ENDWALLS FOR CP REIN CONC 36-INCH EACH	STEEL MINIMUM THICKNESS INCHES	ALUM MINIMUM THICKNESS INCHES
CATEGORY 0020													
68	217NB+20	70' LT	---	---	---	1	---	---	---	---	---	---	---
69	219NB+00	92' LT	---	---	---	---	---	---	---	---	1	---	---
92	223NB+00	100'LT	---	1	---	---	---	---	---	---	---	0.064	---
140	223NB+57	153' LT	---	---	---	---	1	---	---	---	---	---	---
---	223NB+70	96' RT	---	---	---	---	---	---	---	1	---	---	---
---	225NB+75	130' LT	---	---	---	---	---	---	1	---	---	---	---
---	227NB+75	158' LT	---	---	---	---	---	---	1	---	---	---	---
104	231NB+50	86.5'RT	---	1	---	---	---	---	---	---	---	0.064	---
114	234NB+00	60'RT	---	---	---	1	---	---	---	---	---	---	---
	234NB+73	54' RT	---	---	---	---	---	---	---	---	1	---	---
	235NB+25	76' LT	---	---	---	---	---	---	---	---	1	---	---
	669+50	USH 41 MEDIAN	---	---	1	---	---	---	---	---	---	0.064	---
		SUBTOTALS	0	2	1	2	1	0	2	1	3		
CATEGORY 0030													
1	205'BN'+31	36'RT	---	---	---	---	---	---	---	1	---	---	---
6	205'SB'+31	42'LT	---	---	---	---	---	---	---	1	---	---	---
15	205'SB'+50	42'LT	---	---	---	---	---	---	---	1	---	---	---
126	236'NB'+54	71'LT	---	---	---	---	---	1	---	---	---	---	---
134	241'NB'+17	70'LT	---	---	---	1	---	---	---	---	---	---	---
---	243SB+30	DRIVEWAY	2	---	---	---	---	---	---	---	---	---	---
---	249NB+00	DRIVEWAY	2	---	---	---	---	---	---	---	---	0.064	0.060
		SUBTOTALS	4	0	0	1	0	1	0	3	0	0.064	0.060
		PROJECT TOTALS	4	2	1	3	1	1	2	4	3		

CULVERT PIPE

STATION	LOCATION	520.0118 CULV PIPE CLASS III 18-INCH L.F.	521.0118 CULV PIPE CORRUGATED STEEL 18-INCH L.F.	522.0136 CULV PIPE REIN CONC CLASS III 36-INCH L.F.	522.0330 CULV PIPE REIN CONC CLASS IV 30-INCH L.F.	STEEL MINIMUM THICKNESS INCHES	ALUM. MINIMUM THICKNESS INCHES	INLET ELEVATION	OUTLET ELEVATION	* JOINT TIES EACH	REMARKS
CATEGORY 0020											
223NB+70	CTH A	---	---	---	185	---	---	787.70	786.30	4	CONNECT TO BOX CULVERT EXTENTION
234NB+95	CTH A	---	---	144	---	---	---	788.68	788.40	8	MATCH LOCATION AND EL. OF DETENTION POND
668+00	USH 41 MEDIAN	---	155	---	---	0.064	---	789.84	---		22.5 DEGREE BEND REQUIRED & CONNECT INTO BOX CULVERT
	SUBTOTALS	0	155	144	185						
CATEGORY 0030											
243SB+30	DRIVEWAY	35	---	---	---	0.064	0.060				
249NB+00	DRIVEWAY	40	---	---	---	0.064	0.060				
	SUBTOTALS	75	0	0	0						
	PROJECT TOTALS	75	155	144	185						*NON BID ITEM, FOR INFORMATION ONLY

TEMPORARY PAVEMENT MARKING

STATION TO STATION	LOCATION	649.0100 TEMPORARY PAVEMENT MARKING (YELLOW) 4-INCH LF	649.0100 TEMPORARY PAVEMENT MARKING (WHITE) 4-INCH LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE (YELLOW) 4-INCH LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE (YELLOW) 4-INCH LF
CATEGORY 0030					
200'NB'+50-210'NB'+65	CTH A	200	1600	---	---
200'SB'+50-210'SB'+65	CTH A	---	---	200	1600
236'NB'+00-245'NB'+50	CTH A	120	480	---	---
236'SB'+00-245'SB'+50	CTH A	---	---	110	420
245'NB'+50-250'NB'+10	CTH A	120	480	---	---
245'SB'+50-250'SB'+10	CTH A	---	---	120	420
PROJECT TOTALS		440	2,560	430	2,440

PROJECT TOTAL TEMPORARY PAVEMENT MARKING 4-INCH = 3,000 LF
PROJECT TOTAL TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH = 2,870 LF

CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0405 CONCRETE CURB AND GUTTER 18-INCH TYPE A L.F.	601.0407 CONCRETE CURB AND GUTTER 18-INCH TYPE D L.F.	601.0409 CONCRETE CURB AND GUTTER 30-INCH TYPE A L.F.	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D L.F.
CATEGORY 0020					
STA 210NB+20 - 215NB+50	CTH A	485	---	560	---
STA 210SB+20 - 215SB+50	CTH A	490	---	570	---
STA 215NB+50 - 223NB+48	CTH A	800	---	800	---
STA 215SB+50 - 223SB+48	CTH A	800	---	800	---
STA 225NB+62 - 228NB+25	CTH A	265	---	265	---
STA 225SB+62 - 228SB+25	CTH A	265	---	265	---
STA 228NB+25 - 230NB+50	CTH A	---	225	---	225
STA 228SB+25 - 230SB+50	CTH A	---	225	---	225
STA 230NB+50 - 236NB+00	CTH A	---	550	---	550
STA 230SB+50 - 236SB+00	CTH A	---	550	---	550
	SUBTOTALS	3,105	1,550	3,260	1,550
CATEGORY 0030					
STA 203NB+15 - 209NB+82	CTH A	465	---	700	---
STA 203SB+15 - 209SB+82	CTH A	465	---	710	---
STA 236NB+00 - 239NB+80	CTH A	---	380	---	360
STA 236SB+00 - 239SB+80	CTH A	---	380	---	370
STA 240NB+25	GRAND CHUTE BLVD	---	70	---	---
STA 240NB+91 - 245NB+50	CTH A	---	460	---	200
STA 240SB+91 - 245SB+50	CTH A	---	460	---	185
STA 245NB+50 - 247NB+94	CTH A	---	245	---	---
STA 245SB+50 - 247SB+94	CTH A	---	245	---	---
	SUBTOTALS	930	2,240	1,410	1,115
	PROJECT TOTALS	4,035	3,790	4,670	2,665

CONCRETE SIDEWALK 4-INCH

STATION TO STATION	LOCATION	602.0405 S.F.
CATEGORY 0020		
STA 210SB+28 - 210SB+61	NW QUADRANT	290
STA 210NB+28 - 210NB+61	NE QUADRANT	390
STA 210NB+65 - 211NB+65	MEDAIN	500
STA 222NB+64 - 223NB+48	MEDAIN	420
STA 225NB+62 - 227NB+00	MEDAIN	690
	SUBTOTAL	2,290
CATEGORY 0030		
STA 204NB+74 - 209NB+37	MEDIAN	2,930
STA 209NB+41 - 209NB+81	SE QUADRANT	390
STA 209SB+41 - 209SB+75	SW QUADRANT	130
STA 237NB+78 - 239NB+79	MEDIAN	1,010
STA 240NB+91 - 242NB+20	MEDIAN	650
	SUBTOTAL	5,110
CATEGORY 0040		
STA 222SB+90 - 223SB+48	LT	315
STA 223NB+24 - 223NB+48	RT	280
STA 225SB+62 - 226SB+21	LT	315
STA 225NB+62 - 225NB+86	RT	280
STA 239NB+64 - 239NB+74	LT	100
	SUBTOTAL	1,290
	PROJECT TOTAL	8,690

ADJUSTING INLET COVERS

STATION	LOCATION	611.8115 EACH
CATEGORY 0020		
210NB+17	106'LT	1
210NB+35	38' RT	1
	SUBTOTAL	2
CATEGORY 0030		
209NB+79	105'LT	1
	SUBTOTAL	1
	PROJECT TOTAL	3

CONCRETE BARRIER TEMPORARY PRECAST

STATION TO STATION	LOCATION	603.0500 CONTRACTOR FURNISHED & DELIVERED L.F.	603.0800 CONTRACTOR FURNISHED & INSTALLED L.F.
CATEGORY 0020			
662+35 - 670+65	USH 41 NB	830	830
665+70 - 670+65	USH 41 NB MEDIAN	500	500
665+70 - 670+65	USH 41 SB MEDIAN	500	500
665+70 - 673+65	USH 41 SB	800	800
	PROJECT TOTALS	2630	2630

ADJUSTING MANHOLE COVERS

STRUCTURE NUMBER	STATION	LOCATION	611.8110 EACH	REMARKS
CATEGORY 0030				
24	210NB+12	39' RT	1	
30	210NB+12	42' LT	1	
		SUBTOTAL	2	
CATEGORY 0040				
	209SB+82	8' LT	1	SANITARY
		SUBTOTAL	1	
		PROJECT TOTAL	3	

PIPE GRATES

STATION	LOCATION	611.9800.S EACH	REMARKS
CATEGORY 0030			
205NB+50	57.7'LT	1	30" ENDWALL, STRUCTURE 15
	TOTAL	1	

3

STORM SEWER PIPE

LOCATION FROM	TO	608.0312 REIN CONC CLASS III 12 IN. L.F.	608.0315 REIN CONC CLASS III 15 IN. L.F.	608.0318 REIN CONC CLASS III 18 IN. L.F.	608.0324 REIN CONC CLASS III 24 IN. L.F.	608.0330 REIN CONC CLASS III 30 IN. L.F.	608.0336 REIN CONC CLASS III 36 IN. L.F.	608.0430 REIN CONC CLASS IV 30 IN. L.F.	610.0124 REIN CONC HORIZONTAL ELLIPTICAL CLASS III 24x38 IN. L.F.	609.0115 RELAID STORM SEWER 15 IN. L.F.	612.0212 PIPE UNDERDRAIN UNPERFORATED 12 IN. L.F.	612.0204 PIPE UNDERDRAIN UNPERFORATED 4-INCH L.F.	INLET ELEVATION	DISCHARGE ELEVATION	* JOINT TIES EACH	COMMENTS
CATEGORY 0020																
25	26	26	---	---	---	---	---	---	---	---	---	---	790.01	789.93	---	
26	27	11	---	---	---	---	---	---	---	---	---	---	789.93	789.90	---	
27	28	34	---	---	---	---	---	---	---	---	---	---	789.90	789.80	---	
28	31	---	---	---	---	---	---	---	---	24	---	---	789.76	789.72	---	CONNECT TO EX. 15" STORM SEWER PIPE
29	28	70	---	---	---	---	---	---	---	---	---	---	790.01	789.80	---	
33	39	9	---	---	---	---	---	---	---	---	---	---	789.90	789.87	---	
34	36	10	---	---	---	---	---	---	---	---	---	---	790.33	790.30	---	
35	36	---	---	27	---	---	---	---	---	---	---	---	789.87	789.81	---	
36	37	---	---	26	---	---	---	---	---	---	---	---	789.81	789.73	---	
37	41	---	---	9	---	---	---	---	---	---	---	---	789.73	789.70	---	
38	39	10	---	---	---	---	---	---	---	---	---	---	789.92	789.87	---	
39	40	26	---	---	---	---	---	---	---	---	---	---	789.87	789.74	---	
40	41	9	---	---	---	---	---	---	---	---	---	---	789.74	789.70	---	
41	51	---	---	---	205	---	---	---	---	---	---	---	789.70	789.45	---	
45	46	10	---	---	---	---	---	---	---	---	---	---	791.33	791.14	---	
46	47	26	---	---	---	---	---	---	---	---	---	---	791.14	790.65	---	
47	51	5	---	---	---	---	---	---	---	---	---	---	790.65	790.45	---	
48	49	10	---	---	---	---	---	---	---	---	---	---	791.33	791.14	---	
49	50	26	---	---	---	---	---	---	---	---	---	---	791.14	790.65	---	
50	51	5	---	---	---	---	---	---	---	---	---	---	790.65	790.45	---	
51	61	---	---	---	115	---	---	---	---	---	---	---	789.45	789.31	---	
55	56	10	---	---	---	---	---	---	---	---	---	---	791.75	791.65	---	
56	57	26	---	---	---	---	---	---	---	---	---	---	791.65	791.39	---	
57	61	5	---	---	---	---	---	---	---	---	---	---	791.39	791.31	---	
58	59	7	---	---	---	---	---	---	---	---	---	---	791.75	791.65	---	
59	60	26	---	---	---	---	---	---	---	---	---	---	791.65	791.39	---	
60	61	5	---	---	---	---	---	---	---	---	---	---	791.39	791.31	---	
61	65	---	---	---	140	---	---	---	---	---	---	---	789.31	788.47	---	
65	67	---	---	---	---	---	82	---	---	---	---	---	788.47	788.33	---	
67	69	---	---	---	---	---	101	---	---	---	---	---	788.33	788.12	4	
68	67	---	---	---	67	---	---	---	---	---	---	---	790.65	790.33	4	
70	71	26	---	---	---	---	---	---	---	---	---	---	796.05	795.57	---	
71	74	5	---	---	---	---	---	---	---	---	---	---	795.57	795.47	---	
72	73	26	---	---	---	---	---	---	---	---	---	---	795.81	795.57	---	
73	74	5	---	---	---	---	---	---	---	---	---	---	795.57	795.47	---	
74	65	---	---	60	---	---	---	---	---	---	---	---	794.97	793.47	---	
80	81	26	---	---	---	---	---	---	---	---	---	---	801.09	800.57	---	
81	84	6	---	---	---	---	---	---	---	---	---	---	800.57	800.45	---	
82	83	26	---	---	---	---	---	---	---	---	---	---	801.09	800.57	---	
83	84	6	---	---	---	---	---	---	---	---	---	---	800.57	800.45	---	
84	74	---	200	---	---	---	---	---	---	---	---	---	800.20	795.22	---	
90	90A	7	---	---	---	---	---	---	---	---	---	---	808.52	808.30	---	
90A	91	26	---	---	---	---	---	---	---	---	---	---	808.30	807.49	---	
91	92	---	---	---	---	---	---	---	---	62	---	---	807.49	797.25	---	

*NON-BID ITEM, FOR INFORMATION ONLY

STORM SEWER PIPE

LOCATION FROM	LOCATION TO	608.0312 REIN CONC CLASS III 12 IN. L.F.	608.0315 REIN CONC CLASS III 15 IN. L.F.	608.0318 REIN CONC CLASS III 18 IN. L.F.	608.0324 REIN CONC CLASS III 24 IN. L.F.	608.0330 REIN CONC CLASS III 30 IN. L.F.	608.0336 REIN CONC CLASS III 36 IN. L.F.	608.0430 REIN CONC CLASS IV 30 IN. L.F.	610.0124 REIN CONC HORIZONTAL ELLIPTICAL CLASS III 24x38 IN. L.F.	609.0115 RELAID STORM SEWER 15 IN. L.F.	612.0212 PIPE UNDERDRAIN UNPERFORATED 12 IN. L.F.	612.0204 PIPE UNDERDRAIN UNPERFORATED 4-INCH L.F.	INLET ELEVATION	DISCHARGE ELEVATION	* JOINT TIES EACH	COMMENTS
100	104	---	---	---	---	---	---	---	---	---	59	---	801.28	788.50	---	
101	100	26	---	---	---	---	---	---	---	---	---	---	801.54	801.28	---	
102	101	9	---	---	---	---	---	---	---	---	---	---	801.63	801.54	---	
103	102	28	---	---	---	---	---	---	---	---	---	---	801.77	801.63	---	
109A	109	---	---	---	---	---	---	---	---	---	---	66	794.00	791.00	---	
109	113	21	---	---	---	---	---	---	---	---	---	---	790.81	790.75	---	
110	114	31	---	---	---	---	---	---	---	---	---	---	790.54	790.30	4	
111	110	26	---	---	---	---	---	---	---	---	---	---	790.64	790.54	---	
112	111	10	---	---	---	---	---	---	---	---	---	---	790.67	790.64	---	
113	112	26	---	---	---	---	---	---	---	---	---	---	790.75	790.67	---	
140	141	---	32	---	---	---	---	---	---	---	---	---	787.00	786.30	4	
141	142	---	---	---	---	---	14	---	---	---	---	---	785.49	785.45	---	CONNECT TO BOX CULVERT
SUBTOTALS CATEGORY 0030		702	232	122	527	0	197	0	0	24	121	66				
1	2	---	---	---	---	---	---	---	18	---	---	---	788.35	788.33	4	
2	4	---	---	---	---	---	---	---	36	---	---	---	788.33	788.29	---	
4	5	---	---	---	---	---	---	---	26	---	---	---	788.29	788.26	---	
5	6	---	---	---	---	---	---	---	21	---	---	---	788.26	788.24	4	
7	8	10	---	---	---	---	---	---	---	---	---	---	788.88	788.85	---	
8	9	36	---	---	---	---	---	---	---	---	---	---	788.85	788.74	---	
9	10	8	---	---	---	---	---	---	---	---	---	---	788.74	788.72	---	
10	12	26	---	---	---	---	---	---	---	---	---	---	788.72	788.64	---	
11	12	10	---	---	---	---	---	---	---	---	---	---	788.67	788.64	---	
12	14	---	---	7	---	---	---	---	---	---	---	---	788.64	788.63	---	
14	15	---	---	---	---	146	---	---	---	---	---	---	788.51	788.27	4	
16	17	11	---	---	---	---	---	---	---	---	---	---	788.97	788.94	---	
17	18	38	---	---	---	---	---	---	---	---	---	---	788.94	788.83	---	
18	19	7	---	---	---	---	---	---	---	---	---	---	788.83	788.81	---	
19	20	26	---	---	---	---	---	---	---	---	---	---	788.81	788.73	---	
20	21	6	---	---	---	---	---	---	---	---	---	---	788.73	788.71	---	
21	14	---	---	---	---	98	---	---	---	---	---	---	788.64	788.51	---	
30	21	---	---	---	---	---	---	212	---	---	---	---	788.87	788.64	---	
120	121	10	---	---	---	---	---	---	---	---	---	---	790.21	790.16	---	
121	122	29	---	---	---	---	---	---	---	---	---	---	790.16	790.02	---	
122	123	---	19	---	---	---	---	---	---	---	---	---	790.02	789.93	---	
123	125	---	26	---	---	---	---	---	---	---	---	---	789.93	789.80	---	
124	125	10	---	---	---	---	---	---	---	---	---	---	789.90	789.80	---	
125	126	---	---	23	---	---	---	---	---	---	---	---	789.80	789.71	4	
130	131	28	---	---	---	---	---	---	---	---	---	---	792.79	792.65	---	
131	132	7	---	---	---	---	---	---	---	---	---	---	792.65	792.62	---	
132	133	42	---	---	---	---	---	---	---	---	---	---	792.62	792.41	---	
133	134	15	---	---	---	---	---	---	---	---	---	---	792.41	792.25	4	
SUBTOTALS		319	45	30	0	244	0	212	101	0	0	0				
PROJECT TOTAL		1021	277	152	527	244	197	212	101	24	121	66				

*NON-BID ITEM, FOR INFORMATION ONLY

MANHOLES, INLETS, AND COVERS

STRUCTURE NUMBER	STATION	OFFSET	DIR.	STRUCTURE	ENDWALL SIZE INCHES	611.0107 CATCH BASIN TYPE 5 EACH	611.0201 MANHOLE TYPE 1 EACH	611.0210 MANHOLE TYPE 3 EACH	611.0215 MANHOLE TYPE 5 EACH	SPV.0060.09 INLET TYPE 3 SPECIAL EACH	611.0305 INLET TYPE 8 EACH	SPV.00060.01 INLET TYPE 8 SPECIAL EACH	611.0307 INLET TYPE 9 EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE HS EACH	611.0642 INLET COVERS TYPE MS EACH	611.0612 INLET COVERS TYPE C EACH	611.0530 MANHOLE COVERS TYPE J EACH	TOP OF COVER/ FLANGELINE ELEVATION	TOP OF STRUCTURE ELEVATION	OUTLET PIPE INVERT ELEVATION	STR. DEPTH (FT)	REMARKS
TERGORY 0020																							
25	210NB+75	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.37	792.37	790.01	3.86	NOTE D
26	210NB+75	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.73	792.73	789.93	4.30	NOTE D
27	210NB+75	11.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.78	792.78	789.91	4.37	NOTE D
28	210NB+80	45.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.50	792.50	789.76	4.24	NOTE C, NOTE D
29	211NB+50	53.00	LT	INLET	---	---	---	---	---	---	1	---	---	---	---	1	---	---	792.50	792.50	790.01	2.49	
33	212NB+85	53.00	LT	INLET	---	---	---	---	---	---	1	---	---	---	---	1	---	---	792.18	792.18	789.90	2.28	
34	212NB+75	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.97	792.97	790.33	4.14	NOTE D
35	212NB+85	52.00	RT	INLET	---	---	---	---	---	---	1	---	---	---	---	1	---	---	791.84	791.84	789.87	1.97	
36	212NB+85	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.00	793.00	789.81	4.69	NOTE D
37	212NB+85	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.38	793.38	789.73	5.15	NOTE D
38	212NB+75	44.50	LT	INLET		---	---	---	---	1	---	---	---	1	---	---	---	---	794.11	793.11	789.92	4.69	NOTE D
39	212NB+85	44.10	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.14	793.14	789.87	4.77	NOTE D
40	212NB+85	18.10	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.62	793.62	789.74	5.38	NOTE D
41	212NB+85	9.30	LT	MANHOLE	---	---	1	---	---	---	---	---	---	---	---	---	---	1	794.87	793.87	789.70	4.17	
45	214NB+80	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.94	793.94	791.33	4.11	NOTE D
46	214NB+90	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.99	793.99	791.14	4.35	NOTE D
47	214NB+90	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	795.47	794.47	790.65	5.32	NOTE D
48	214NB+80	36.90	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.81	793.81	791.33	3.98	NOTE D
49	214NB+90	36.80	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	794.85	793.85	791.14	4.21	NOTE D
50	214NB+90	10.80	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	795.33	794.33	790.65	5.18	NOTE D
51	214NB+90	5.70	LT	MANHOLE	---	---	1	---	---	---	---	---	---	---	---	---	---	1	795.78	794.78	789.45	5.33	
55	215NB+95	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	795.95	794.95	791.75	4.70	NOTE D
56	216NB+05	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.09	795.09	791.65	4.94	NOTE D
57	216NB+05	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.57	795.57	791.41	5.66	NOTE D
58	215NB+98	36.10	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	795.67	794.67	791.75	4.42	NOTE D
59	216NB+05	36.00	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	795.77	794.77	791.65	4.62	NOTE D
60	216NB+05	10.00	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.25	795.25	791.39	5.36	NOTE D
61	216NB+05	5.20	LT	MANHOLE	---	---	1	---	---	---	---	---	---	---	---	---	---	1	796.80	795.80	789.31	6.49	
65	217NB+45	5.00	LT	MANHOLE	---	---	---	1	---	---	---	---	---	---	---	---	---	1	799.63	798.63	788.47	10.16	BUILD ON EX. 24"
67	217NB+93	71.00	LT	MANHOLE	---	---	---	---	1	---	---	---	---	---	---	---	1	---	793.66	792.66	788.33	4.33	
68	217NB+20	70.00	LT	ENDWALL	24	---	---	---	---	---	---	---	---	---	---	---	---	---	790.65	0.00	790.65	0.00	
69	219NB+00	92.00	LT	ENDWALL	36	---	---	---	---	---	---	---	---	---	---	---	---	---	788.12	0.00	788.12	0.00	
70	218NB+05	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	800.61	799.61	796.05	5.06	NOTE D
71	218NB+05	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	801.09	800.09	795.57	6.02	NOTE D
72	218NB+05	35.90	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	800.21	799.21	795.81	4.90	NOTE D

TOP OF COVER ELEVATION IS FLANGE ELEVATION FOR INLETS AND RIM ELEVATION FOR MANHOLE

NOTE A: CAST IN PLACE

NOTE B: CONCRETE FLAT SLAB TOP WITH INLET SIZE OPENING REQUIRED

NOTE C: CONNECT TO EXISTING STORM SEWER

NOTE D: INLETS TYPE 3 TO BE BUILT WITH A 1.5 FOOT SUMP, SEE DETAIL

MANHOLES, INLETS, AND COVERS

STRUCTURE NUMBER	STATION	OFFSET	DIR.	STRUCTURE	ENDWALL SIZE INCHES	611.0107 CATCH BASINS TYPE 5 EACH	611.0201 MANHOLE TYPE 1 EACH	611.0210 MANHOLE TYPE 3 EACH	611.0215 MANHOLE TYPE 5 EACH	SPV.0060.09 INLET TYPE 3 SPECIAL EACH	611.0305 INLET TYPE 8 EACH	SPV.00060.01 INLET TYPE 8 SPECIAL EACH	611.0307 INLET TYPE 9 EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE HS EACH	611.0642 INLET COVERS TYPE MS EACH	611.0612 INLET COVERS TYPE C EACH	611.0530 MANHOLE COVERS TYPE J EACH	TOP OF COVER/ FLANGELINE ELEVATION	TOP OF STRUCTURE ELEVATION	OUTLET PIPE INVERT ELEVATION	STR. DEPTH (FT)	REMARKS
CATERGORY 0020																							
73	218NB+05	9.90	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	800.69	799.69	795.57	5.62	NOTE D
74	218NB+05	5.20	LT	MANHOLE	---	---	1	---	---	---	---	---	---	---	---	---	---	1	801.26	800.26	794.97	5.29	
80	220NB+05	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	806.05	805.05	801.09	5.46	NOTE D
81	220NB+05	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	806.53	805.53	800.57	6.46	NOTE D
82	220NB+05	39.30	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	805.65	804.65	801.09	5.06	NOTE D
83	220NB+05	13.30	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	806.13	805.13	800.57	6.06	NOTE D
84	220NB+05	6.90	LT	MANHOLE	---	---	1	---	---	---	---	---	---	---	---	---	---	1	806.70	805.70	800.20	5.50	
90	222NB+70	12.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	813.48	812.48	808.52	5.46	NOTE D
90A	222NB+70	19.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	813.32	812.32	808.30	5.52	NOTE D
91	222NB+70	45.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	812.96	811.96	807.49	5.97	NOTE D
92	223NB+00	100.00	LT	ENDWALL	12	---	---	---	---	---	---	---	---	---	---	---	---	---	797.25	0.00	797.25	0.00	2 ELBOWS REQ'D, METAL APRON EW.
100	231NB+50	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	806.05	805.05	801.28	5.27	NOTE D
101	231NB+50	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	806.53	805.53	801.54	5.49	NOTE D
102	231NB+50	8.80	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	806.13	805.13	801.63	5.00	NOTE D
103	231NB+60	34.20	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	805.23	804.23	801.77	3.96	NOTE D
104	231NB+50	86.50	RT	ENDWALL	12	---	---	---	---	---	---	---	---	---	---	---	---	---	788.50	0.00	788.50	0.00	2 ELBOWS REQ'D, METAL APRON EW.
109	234NB+00	51.70	LT	INLET	---	---	---	---	---	---	1	---	---	---	---	1	---	---	792.81	792.81	790.81	2.00	
110	234NB+15	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.67	795.67	790.54	6.63	NOTE D
111	234NB+15	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	797.15	796.15	790.64	7.01	NOTE D
112	234NB+15	10.60	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.77	795.77	790.67	6.60	NOTE D
113	234NB+15	36.60	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.29	795.29	790.75	6.04	NOTE D
114	234NB+00	59.44	RT	ENDWALL	12	---	---	---	---	---	---	---	---	---	---	---	---	---	790.30	0.00	790.30	0.00	
140	223NB+57	153.00	LT	ENDWALL	15	---	---	---	---	---	---	---	---	---	---	---	---	---	787.00	0.00	787.00	0.00	
141	223NB+68	123.70	LT	MANHOLE	---	---	---	1	---	---	---	---	---	---	---	---	---	---	790.82	789.82	785.49	4.33	CON.EX. 36" CSCP
142	223NB+62	111.30	LT	BOXCULVERT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00	785.45	0.00	
	SUBTOTALS					0	5	2	1	41	4	0	0	41	0	4	1	7					
CATERGORY 0030																							
1	205NB+31	49.00	RT	ENDWAL	24x38	---	---	---	---	---	---	---	---	---	---	---	---	---	788.35	0.00	788.35	0.00	
2	205NB+31	25.50	RT	INLET	---	1	---	---	---	---	---	---	---	1	---	---	---	---	792.61	791.61	788.33	4.78	NOTE B
4	205NB+31	10.20	LT	INLET	---	1	---	---	---	---	---	---	---	1	---	---	---	---	792.96	791.96	788.29	5.17	NOTE B
5	205NB+31	36.20	LT	INLET	---	1	---	---	---	---	---	---	---	1	---	---	---	---	792.48	791.48	788.26	4.72	NOTE B
6	205NB+31	62.70	LT	ENDWALL	24x38	---	---	---	---	---	---	---	---	---	---	---	---	---	788.24	0.00	788.24	0.00	

TOP OF COVER ELEVATION IS FLANGE ELEVATION FOR INLETS AND RIM ELEVATION FOR MANHOLE

NOTE A: CAST IN PLACE

NOTE B: CONCRETE FLAT SLAB TOP WITH INLET SIZE OPENING REQUIRED

NOTE C: CONNECT TO EXISTING STORM SEWER

NOTE D: INLETS TYPE 3 TO BE BUILT WITH A 1.5 FOOT SUMP, SEE DETAIL

MANHOLES, INLETS, AND COVERS

STRUCTURE NUMBER	STATION	OFFSET	DIR.	STRUCTURE	ENDWALL SIZE INCHES	611.0107 CATCH BASINS TYPE 5 EACH	611.0201 MANHOLE TYPE 1 EACH	611.0210 MANHOLE TYPE 3 EACH	611.0215 MANHOLE TYPE 5 EACH	SPV.0060.09 INLET TYPE 3 SPECIAL EACH	611.0305 INLET TYPE 8 EACH	SPV.00060.01 INLET TYPE 8 SPECIAL EACH	611.0307 INLET TYPE 9 EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE HS EACH	611.0642 INLET COVERS TYPE MS EACH	611.0612 INLET COVERS TYPE C EACH	611.0530 MANHOLE COVERS TYPE J EACH	TOP OF COVER/ FLANGELINE ELEVATION	TOP OF STRUCTURE ELEVATION	OUTLET PIPE INVERT ELEVATION	STR. DEPTH (FT)	REMARKS
7	206NB+92	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	791.94	790.94	788.88	3.56	NOTE D
8	207NB+02	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	791.91	790.91	788.85	3.56	NOTE D
9	207NB+02	10.21	LT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	792.54	791.54	788.74	4.30	NOTE D
10	207NB+02	17.98	LT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	792.29	791.29	788.72	4.07	NOTE D
11	207NB+12	43.90	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	791.85	790.85	788.67	3.68	NOTE D
12	207NB+02	44.03	LT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	791.81	790.81	788.64	3.67	NOTE D
14	207NB+02	51.30	LT	INLET	---	---	---	---	---	---	---	---	1	---	---	2	---	---	790.68	790.68	788.51	2.17	NOTE A,SEE DETAIL
15	205NB+50	57.70	LT	ENDWALL	30	---	---	---	---	---	---	---	---	---	---	---	---	---	788.27	0.00	788.27	0.00	
16	208NB+10	36.00	RT	INLET	---	---	---	---	---	---	1	---	---	---	---	1	---	---	791.15	791.15	788.97	2.18	
17	208NB+10	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	792.30	791.30	788.94	3.86	NOTE D
18	208NB+10	12.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	792.90	791.90	788.83	4.57	NOTE D
19	208NB+10	19.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	792.65	791.65	788.81	4.34	NOTE D
20	208NB+00	45.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	792.11	791.11	788.73	3.88	NOTE D
21	208NB+00	51.50	LT	MANHOLE	---	---	---	---	---	---	---	1	---	---	---	1	---	---	792.50	792.50	788.64	3.86	NOTE A,SEE DETAIL
22	209NB+68	41.44	RT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	792.56	791.56	790.06	3.00	NOTE C, NOTE D
120	236NB+58	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	793.75	792.75	790.21	4.04	NOTE D
121	236NB+68	25.50	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.78	792.78	790.16	4.12	NOTE D
122	236NB+68	3.50	LT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	794.20	793.20	790.02	4.68	NOTE D
123	236NB+54	16.50	LT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	793.97	792.97	789.93	4.54	NOTE D
124	236NB+64	42.70	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	793.47	792.47	789.90	4.07	NOTE D
125	236NB+54	42.50	LT	INLET	---	---	---	---	---	1	---	---	---	---	1	---	---	---	793.44	792.44	789.80	4.14	NOTE D
126	236NB+54	71.00	LT	ENDWALL	18	---	---	---	---	---	---	---	---	---	---	---	---	---	789.71	0.00	789.71	0.00	
130	241NB+05	27.30	RT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.21	795.21	792.79	3.92	NOTE D
131	241NB+00	0.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.57	795.57	792.65	4.42	NOTE D
132	241NB+00	7.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.60	795.60	792.62	4.48	NOTE D
133	241NB+17	45.50	LT	INLET	---	---	---	---	---	1	---	---	---	1	---	---	---	---	796.54	795.54	792.41	4.63	NOTE D
134	241NB+17	70.00	LT	ENDWALL	12	---	---	---	---	---	---	---	---	---	---	---	---	---	792.25	0.00	792.25	0.00	
	SUBTOTALS					3	0	0	0	21	1	1	1	15	9	4	0	0					
	PROJECT TOTALS					3	5	2	1	62	5	1	1	56	9	8	1	7					

TOP OF COVER ELEVATION IS FLANGE ELEVATION FOR INLETS AND RIM ELEVATION FOR MANHOLE

NOTE A: CAST IN PLACE

NOTE B: CONCRETE FLAT SLAB TOP WITH INLET SIZE OPENING REQUIRED

NOTE C: CONNECT TO EXISTING STORM SEWER

NOTE D: INLETS TYPE 3 TO BE BUILT WITH A 1.5 FOOT SUMP, SEE DETAIL

PAVEMENT MARKING EPOXY

STATION TO STATION	LOCATION	602.0501.S CURB RAMP DETECTABLE WARNING FIELD SF	646.0106 LANELINE EPOXY YELLOW 4-INCH LF	646.0106 LANELINE EPOXY WHITE 4-INCH LF	646.0226 CHANNELIZING 8-INCH LF	647.0166 ARROWS, TYPE 2 EACH	647.0356 WORDS EACH	647.0456 CURB LF	647.0566 STOPLINE 18-INCH LF	647.0606 ISLAND NOSES EACH	647.0726 DIAGONAL 12-INCH LF	647.0766 CROSSWALK, 6-INCH LF	647.0856 CORRUGATED MEDIAN SF
CATEGORY 0020													
210'NB'+65 - 215'NB'+50	CTH A	16	490	610	20	---	---	5	30	---	---	105	---
210'SB'+65 - 215'SB'+50	CTH A	16	490	610	100	1	1	5	40	---	---	155	---
215'NB'+65 - 230'NB'+50	CTH A	---	1,500	1,860	---	---	---	---	---	---	---	---	---
215'SB'+65 - 230'SB'+50	CTH A	---	1,500	1,860	---	---	---	---	---	---	---	---	---
230'NB'+65 - 236'NB'+00	CTH A	---	550	690	---	---	---	---	---	---	---	---	---
230'SB'+65 - 236'SB'+00	CTH A	---	550	690	---	---	---	---	---	---	350	---	---
	SUBTOTALS	32	5,080	6,320	120	1	1	10	70	0	350	260	0
	0020 SUBTOTAL EPOXY 4-INCH = 11,400												
CATEGORY 0030													
203'NB'+714 - 210'NB'+65	CTH A	16	660	770	200	3	2	5	38	1	---	145	140
203'SB'+14 - 210'SB'+65	CTH A	16	625	780	30	---	---	5	27	1	---	115	---
236'NB'+00 - 245'NB'+50	CTH A	---	820	965	185	---	---	50	35	2	---	---	---
236'SB'+00 - 245'SB'+50	CTH A	---	830	1,015	120	---	---	10	---	1	---	---	---
245'NB'+50 - 250'NB'+10	CTH A	---	250	775	---	---	---	5	---	1	190	---	---
245'SB'+50 - 250'SB'+10	CTH A	---	250	460	120	---	---	5	---	---	---	---	---
	SUBTOTALS	32	3,435	4,765	655	3	2	80	100	6	190	260	140
	0030 SUBTOTAL EPOXY 4-INCH = 8,200												
CATEGORY 0040													
215'SB'+50 - 230'SB'+50	CTH A	---	---	---	---	---	---	---	---	---	---	---	---
236'SB'+00 - 245'NB'+50	CTH A	---	---	---	---	---	---	---	---	---	---	125	---
236'SB'+00 - 245'SB'+50	CTH A	16	---	---	---	---	---	---	---	---	---	50	---
	SUBTOTALS	16	0	0	0	0	0	0	0	0	0	175	0
	PROJECT TOTALS	80	8,515	11,085	775	4	3	90					

PROJECT TOTAL EPOXY 4-INCH = 19,600

REMOVING PAVEMENT MARKING

STATION TO STATION	DESCRIPTION	LOCATION	646.0600 LF
CATEGORY 0030			
200'NB'+50-209'NB'+50	STAGE 1	CTH A	330
241'NB'+00-250'NB'+50	STAGE 1	CTH A	1500
201'SB'+50-209'SB'+50	STAGE 2(TEMPORARY MARKINGS)	CTH A	1000
240'SB'+80-250'SB'+25	STAGE 2(TEMPORARY MARKINGS)	CTH A	270
250'SB'+25-252'SB'+50		CTH A	250
		PROJECT TOTALS	3,350

STEEL PLATE BEAM GUARD

STATION TO STATION	LCOATION	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH L.F.	614.0370 ENERGY ABSORBING TERMINAL EACH	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	NOTES
CATEGORY 0020					
222NB+44 - 223NB+25	CTH A RT	33	1	---	
667+12 - 669+30	USH 41 MEDIAN	---	---	550	2 BULL NOSES REQ'D
	PROJECT TOTALS	33	1	550	

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	620.0300 SF
CATEGORY 0020		
210NB+65	4'LT	50
	SUBTOTAL	50
CATEGORY 0030		
209NB+37	16'LT	50
239NB+80	16'LT	50
240NB+91	5'LT	50
247NB+94	4'LT	50
	SUBTOTAL	200
	PROJECT TOTAL	250

3

FENCE

STATION TO STATION	LCOATION	616.0205 CHAIN LINK 5-FT L.F.	616.0329 GATES CHAIN LINK 3'-6" EACH	616.0404 CHAIN LINK SALVAGED 4-FT LF	SPV.0090.01 CHAIN LINK 5-FT, SPECIAL L.F.
CATEGORY 0020					
219NB+50-221NB+60	CTH A RT, TRAIL	---	---	---	210
221NB+60-223NB+35	CTH A RT, USH 41 R/W	245	---	---	---
221SB+50-223SB+35	CTH A LT, USH 41 R/W	220	1	---	---
225NB+76-226NB+56	CTH A RT, USH 41 R/W	210	---	---	---
225SB+78-227SB+25	CTH A LT, USH 41 R/W	320	1	---	---
	SUBTOTAL	995	2	0	0
CATEGORY 0030					
203NB+20-205NB+50	CTH A RT, LIONS PARK	---	---	230	---
	SUBTOTAL	0	0	230	0
CATEGOY 0040					
216NB+50-219NB+50	CTH A RT, TRAIL	300	---	---	---
226NB+56-234NB+30	CTH A RT, TRAIL	775	---	---	---
234NB+45-235nb+25	CTH A RT, TRAIL	80	---	---	---
	SUBTOTAL	1,155	0	0	0
	PROJECT TOTALS	2,150	2	230	0

LANDMARK REFERENCE MONUMENTS

STATION	DESCRIPTION	621.0100 LANDMARK REFERENCE MONUMENTS EACH	621.1100 LANDMARK REFERENCE MONUMENTS & CAST IRON COVERS EACH
CATEGORY 0020			
210NB+00	SECTION CORNER	---	1
---	WITNESS MONUMENTS	4	---
	SUBTOTAL	4	1
CATEGORY 0030			
236NB+53	SECTION CORNER	---	1
---	WITNESS MONUMENTS	4	---
	SUBTOTAL	4	1
	PROJECT TOTAL	8	2

CONCRETE CORRUGATED MEDIAN

STATION TO STATION	LOCATION	620.0100 S.F.
CATEGORY 0030		
203NB+95-204NB+75	CTH A	490
	PROJECT TOTAL	490

DUST CONTROL SURFACE TREATMENT

STATION TO STATION	LOCATION	623.0200 S.Y.
CATEGORY 0030		
239NB+90-243NB+00	CTH A	830
239SB+90-243SB+00	CTH A	830
239NB+90-243NB+00	GRAND CHUTE BLVD	220
	PROJECT TOTAL	1880

WATER

STATION	DESCRIPTION	624.0100 MGAL
CATEGORY 0020		
210NB+20-236NB+00	BASE COURSE	65
210NB+20-236NB+00	DUST CONTROL	45
	SUBTOTAL	110
CATEGORY 0030		
201NB+50-210NB+20	BASE COURSE	10
201NB+50-210NB+20	DUST CONTROL	15
236NB+00-252NB+49	BASE COURSE	65
236NB+00-252NB+49	DUST CONTROL	40
	SUBTOTAL	130
CATEGORY 0040		
210NB+65-239NB+75	BASE COURSE	10
	SUBTOTAL	10
	PROJECT TOTAL	250

TOPSOIL, SALVAGED TOPSOIL, FERTILIZER, MULCHING, AND SEEDING

STATION TO STATION	LOCATION	625.0100 TOPSOIL S.Y.	627.0205 MULCHING TON	629.0210 FERTILIZER TYPE B CWT	630.0110 SEEDING MIXTURE NO. 10 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 * LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT MIXTURE LB
CATEGORY 0020										
210NB+20 - 217NB+0	CTH A, RT	2,370	2	1.5	6	---	71	---	32	---
210SB+20 - 217SB+0	CTH A, LT	1,770	1	1.1	---	---	64	---	24	---
217NB+00 - 223NB+9	CTH A, RT	1,530	1	1.0	16	---	13	---	21	---
217SB+00 - 223SB+9	CTH A, LT	7,030	5	4.4	82	17	2	---	95	---
225NB+15 - 236NB+0	CTH A, RT	7,140	5	4.5	78	5	18	9	97	---
225SB+15 - 236SB+0	CTH A, LT	7,560	5	4.8	70	22	45	---	103	---
226NB+50 - 234NB+0	WETLAND MITIGAION SITI	6,990	5	4.4	---	---	---	95	---	---
1+00 - 5+50	WETLAND MITIGAION SITI	3,340	2	2.1	---	---	---	46	---	---
12+82 - 20+00	ANDY SCHUH DRIVEWAY	3,210	2	2.0	36	---	21	---	44	---
665+50 - 667+50	CTH A, LT	4,500	3	2.8	61	---	---	---	61	---
663+95 - 672+15	USH 41	5,320	4	3.4	42	40	---	---	72	---
BORROW PITS		---	48	0.0	---	---	---	---	---	940
UNDISTRIBUTED		---	9	8.4	103	24	64	36	140	---
	SUBTOTALS	50,760	92	40.4	494	108	298	186	689	940
CATEGORY 0030										
201NB+50 - 210NB+2	CTH A, RT	1,920	1	1.2	---	---	69	---	26	---
201NB+50 - 210SB+2	CTH A, LT	2,050	1	1.3	---	---	67	3	26	---
236NB+00 - 240NB+0	CTH A, RT	1,700	1	1.1	14	12	---	---	23	---
236SB+00 - 240SB+0	CTH A, LT	1,950	1	1.2	18	12	---	---	27	---
241NB+00 - 252NB+4	CTH A, RT	4,160	3	2.6	31	35	---	---	57	---
241SB+00 - 250SB+1	CTH A, LT	5,390	4	3.4	53	28	---	---	73	---
UNDISTRIBUTED		---	3	3.0	30	25	36	1	59	---
	SUBTOTALS	17,170	15	13.8	146	112	172	4	291	0
	PROJECT TOTALS	67,930	106	54.2	640	220	470	190	980	940

SEED MIXTURE NO. 40 SHALL BE SOWED AT A RATE OF 4 POUNDS PER 1000 SF WHICH IS DOUBLE THE NORMAL RATE

3

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
CATEGORY 0020		
BOX CULVERT EXTENSION	1	2
WETLAND MITIGATION	1	2
210NB+00 - 236NB+00	0.5	2
SUBTOTAL	2.5	6
CATEGORY 0030		
201NB+50 - 210NB+00	0.5	2
SUBTOTAL	0.5	2
PROJECT TOTAL	3	8

SOIL STABILIZER TYPE B

LOCATION	628.6510 ACRE
CATEGORY 0020	
UNDISTRIBUTED	3
PROJECT TOTAL	3

BORROW PIT TRACKING PAD

LOCATION	SPV.0060.08 ACRE
CATEGORY 0020	
GRAND CHUTE TOWN HALL SITE	1
GRAND CHUTE DETENSION POND SITE	1
UNDISTRIBUTED	3
PROJECT TOTAL	5

3

EROSION CONTROL

STATION TO STATION	LOCATION	628.7505 TEMPORARY DITCH CHECKS DELIVERED L.F.	628.7510 TEMPORARY DITCH CHECKS INSTALLED L.F.	628.1505 SILT FENCE DELIVERED L.F.	628.1510 SILT FENCE INSTALLED LF	628.1520 SILT FENCE MAINTENANCE LF	628.2010 EROSION MAT DELIVERED CLASS I TYPE B S.Y.	628.3010 EROSION MAT INSTALLED CLASS I TYPE B S.Y.	628.2015 EROSION MAT DELIVERED URBAN CLASS I TYPE A S.Y.	628.3015 EROSION MAT INSTALLED URBAN CLASS I TYPE A S.Y.	628.2030 EROSION MAT DELIVERED CLASS II TYPE B S.Y.	628.3030 EROSION MAT INSTALLED CLASS II TYPE B S.Y.	606.0200 MEDIUM RIPRAP C.Y.	645.0120 GEOTEXTILE FABRIC TYPE HR S.Y.
CATEGORY 0020														
210NB+00 - 215NB+50	CTH A	---	---	---	---	---	---	---	1,055	1,055	30	30	---	---
215NB+50 - 223NB+90	CTH A	20	20	740	740	1,480	8,240	8,240	1,710	1,710	40	40	120	230
225NB+15 - 230NB+50	CTH A	20	20	1,060	1,060	2,120	8,050	8,050	1,145	1,145	240	240	190	375
230NB+50 - 236NB+00	CTH A	---	---	1,000	1,000	2,000	2,790	2,790	1,135	1,135	30	30	20	40
19+00 - 20+00	SCHUH DRIVEWAY	---	---	100	100	200	---	---	---	---	---	---	---	---
666+70 - 670+25	USH 41 MEDIAN	---	---	---	---	---	1,840	1,840	---	---	---	---	---	---
UNDISTRIBUTED		15	15	.730	730	1,460	2,030	2,030	1,255	1,255	25	25	---	---
	SUBTOTALS	55	55	3,630	3,630	7,260	22,950	22,950	6,300	6,300	365	365	330	645
CATEGORY 0030														
201NB+50 - 210NB+00	CTH A	30	30	230	230	460	---	---	725	725	70	70	---	---
236NB+00 - 245NB+50	CTH A	---	---	1,450	1,450	2,900	---	---	985	985	60	60	60	110
245NB+50 - 252NB+49	CTH A	40	40	720	720	1,440	---	---	295	295	15	15	---	---
UNDISTRIBUTED		15	15	600	600	1,200	---	---	495	495	15	15	---	---
	SUBTOTALS	85	85	3,000	3,000	6,000	0	0	2,500	2,500	160	160	60	110
	PROJECT TOTALS	140	140	6,630	6,630	13,260	22,950	22,950	8,800	8,800	525	525	390	755

INLET PROTECTION, TYPE C

STATION	LOCATION	628.7015 EACH
CATEGORY 0020		
210'NB'+75	CTH A, 24'RT	1
210'NB'+75	CTH A	1
210'SB'+75	CTH A, 12'RT	1
210'SB'+80	CTH A, 24'LT	1
212'NB'+75	CTH A, 24'RT	1
212'NB'+85	CTH A, 24'RT	1
212'NB'+85	CTH A	1
212'SB'+75	CTH A, 24'LT	1
212'SB'+85	CTH A, 24'LT	1
212'SB'+85	CTH A	1
214'NB'+80	CTH A, 24'RT	1
214'NB'+90	CTH A, 24'RT	1
214'NB'+90	CTH A	1
214'SB'+80	CTH A, 24'LT	1
214'SB'+80	CTH A, 24'LT	1
214'SB'+90	CTH A	1
215'NB'+95	CTH A, 24'RT	1
216'NB'+05	CTH A, 24'RT	1
216'NB'+05	CTH A	1
215'SB'+98	CTH A, 24'LT	1
216'SB'+05	CTH A, 24'LT	1
216'SB'+05	CTH A	1
218'NB'+05	CTH A, 24'RT	1
218'NB'+05	CTH A	1
218'SB'+05	CTH A, 24'LT	1
218'SB'+05	CTH A	1
220'NB'+05	CTH A, 24'RT	1
220'NB'+05	CTH A	1
220'SB'+05	CTH A, 24'LT	1
220'SB'+05	CTH A	1
222'NB'+70	CTH A, 12'LT	1
222'SB'+60	CTH A, 24'LT	1
231'NB'+50	CTH A, 24'RT	1
231'NB'+50	CTH A	1
231'SB'+50	CTH A	1
231'SB'+60	CTH A, 24'LT	1
234'NB'+15	CTH A, 24'RT	1
234'NB'+15	CTH A	1
234'SB'+15	CTH A	1
234'SB'+15	CTH A, 24'LT	1
	SUBTOTAL	40

INLET PROTECTION, TYPE C, CONT'D

STATION	LOCATION	628.7015 EACH
CATEGORY 0030		
205'NB'+31	CTH A, 24'RT	1
205'SB'+31	CTH A	1
205'SB'+31	CTH A, 24'LT	1
206'NB'+92	CTH A, 24'RT	1
207'NB'+02	CTH A, 24'RT	1
207'NB'+02	CTH A, 10'LT	1
207'SB'+02	CTH A	1
206'SB'+92	CTH A, 24'LT	1
207'SB'+02	CTH A, 24'LT	1
208'NB'+10	CTH A, 24'RT	1
208'NB'+10	CTH A, 12'LT	1
208'SB'+10	CTH A	1
208'SB'+00	CTH A, 24'LT	1
236'NB'+58	CTH A, 24'RT	1
236'NB'+68	CTH A, 24'RT	1
236'NB'+68	CTH A, 3'LT	1
236'SB'+54	CTH A	1
236'SB'+54	CTH A, 24'LT	1
236'SB'+64	CTH A, 24'LT	1
241'NB'+05	CTH A, 26'RT	1
241'NB'+00	CTH A	1
241'NB'+00	CTH A, 8'LT	1
241'SB'+17	CTH A, 24'LT	1
	SUBTOTAL	23
	PROJECT TOTAL	63

CULVERT PIPE DITCH CHECKS

STATION	LOCATION	628.7550 EACH
CATEGORY 0020		
217'SB'+20	CTH A, 60'LT	1
223'SB'+57	CTH A, 133'LT	1
223'NB'+70	CTH A, 103'RT	1
227'SB'+70	CTH A, 140'LT	1
235'SB'+30	CTH A, 65'LT	1
667+00	USH 41, 80'LT	1
670+55	USH 41 MEDIAN	1
	SUBTOTAL	7
CATEGORY 0030		
205'NB'+31	CTH A, 49'RT	1
241'SB'+00	CTH A, 65'LT	1
243'SB'+55	CTH A, 48'LT	1
249'NB'+25	CTH A, 48'RT	1
206'NB'+92	CTH A, 24'RT	1
	SUBTOTAL	4
	PROJECT TOTAL	11

SOD REOSION CONTROL AND SOD WATER

STATION TO STATION	LOCATION	631.1100 SOD EROSION CONTROL S.Y.	631.0300 SOD WATER MGAL
CATEGORY 0020			
UNDISTRIBUTED		615	4
	SUBTOTALS	615	4
CATEGORY 0030			
UNDISTRIBUTED		220	2
	SUBTOTALS	220	2
	PROJECT TOTALS	835	6

3

SIGNS REFLECTIVE TYPE II

SIGN NO.	SIGN CODE	DESCRIPTION	L X H	637.0202 SIGNS REFLECTIVE TYPE II S.F.	634.0614 4X6 WOOD POSTS 14' EACH	634.0616 4X6 WOOD POSTS 16' EACH	634.0618 4X6 WOOD POSTS 18' EACH	634.0620 4X6 WOOD POSTS 20' EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
CATEGORY 0020												
7	R1-1F	STOP (FOLDING)	30X30	5.18	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
7A	S1-1	SCHOOL ADVANCE	30X30	4.69	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
7B	W16-7L	LEFT DIAGONAL ARROW	24X12	2.00	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
8	R5-2	NO TRUCKS SYMBOL	24X24	4.00	1	---	---	---	---	---	---	
9	S1-1	SCHOOL ADVANCE	30X30	4.69	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
9A	W16-7L	LEFT DIAGONAL ARROW	24X12	2.00	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
9B	R5-1	DO NOT ENTER	30X30	6.25	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
10	R4-7	KEEP RIGHT	24X30	5.00	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
11	R3-55L	LEFT TURN LANE	24X30	5.00	1	---	---	---	---	---	---	
12	S4-51	SCHOOL SPEED LIMIT	24X48	8.00	---	1	---	---	---	---	---	
12A	R5-1A	WRONG WAY	36X24	6.00	---	---	---	---	---	---	---	SAME POST AS 12
13	S1-1	SCHOOL ADVANCE	30X30	4.69	---	1	---	---	---	---	---	FLUORESCENT YELLOW-GREEN SIGN
13A	W16-9P	AHEAD	24X8	1.34	---	---	---	---	---	---	---	SAME POST AS 13, FLUORESCENT YELLOW-GREEN SIGN
14	R2-1	SPEED LIMIT 40 MPH	24X30	5.00	1	---	---	---	---	---	---	
15	R2-1	SPEED LIMIT 40 MPH	24X30	5.00	1	---	---	---	---	---	---	
40	R5-2P	NO TRUCKS	---	---	---	---	---	---	1	1	---	
40A	R5-2	NO TRUCKS SYMBOL	---	---	---	---	---	---	1	---	---	SAME POST AS 40
41	R1-1F	STOP (FOLDING)	---	---	---	---	---	---	1	---	---	ON SIGNAL POLE
41A	S2-1	SCHOOL	---	---	---	---	---	---	1	---	---	ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
43	S2-1	SCHOOL	---	---	---	---	---	---	1	---	---	ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
44	R4-7	KEEP RIGHT	---	---	---	---	---	---	1	---	---	ON SIGNAL POLE
45	R3-55L	LEFT TURN LANE	---	---	---	---	---	---	1	1	---	
46	S4-51	SCHOOL SPEED LIMIT	---	---	---	---	---	---	1	1	---	FLUORESCENT YELLOW-GREEN SIGN
46A	S4-2	WHEN CHILDREN ARE PRESENT	---	---	---	---	---	---	1	---	---	
47	R4-7	KEEP RIGHT	---	---	---	---	---	---	1	1	---	
47A	W5-52L	STRIPE DOWN RIGHT	---	---	---	---	---	---	1	---	---	SAME POST AS 47
48	S1-1	SCHOOL ADVANCE	---	---	---	---	---	---	1	1	---	FLUORESCENT YELLOW-GREEN SIGN
49	R2-1	SPEED LIMIT	---	---	---	---	---	---	1	1	---	
50	R2-1	SPEED LIMIT	---	---	---	---	---	---	1	1	---	
51	W3-3	SIGNAL AHEAD	---	---	---	---	---	---	1	1	---	
51A	W13-1W	35MPH	---	---	---	---	---	---	1	---	---	SAME POST AS 51
52	R2-5A	REDUCE SPEED AHEAD	---	---	---	---	---	---	1	1	---	
52A	W13-1W	SPEED LIMIT	---	---	---	---	---	---	1	---	---	SAME POST AS 52
52B		COMPRESSION BRAKES PROHIBITED	---	---	1	---	---	---	---	---	1	FROM 226'NB'+25, LT TO 228'NB'+50, LT
53	W3-3	SIGNAL AHEAD	---	---	---	---	---	---	1	1	---	
54	W14-1	DEAD END	---	---	---	---	---	---	1	---	---	ON POWER POLE
55	R1-1	STOP	---	---	---	---	---	---	1	1	---	
56	W14-1	DEAD END	---	---	---	---	---	---	1	1	---	
57	R1-1	STOP	---	---	---	---	---	---	1	1	---	
60		ADOPT A HIGHWAY	---	---	---	---	1	---	---	1	1	218'NB'+00, LT
60A		MEN WORKING	---	---	---	---	---	---	---	---	1	218'NB'+00, LT, SAME POST AS 60
61		ADOPT A HIGHWAY	---	---	---	---	---	1	---	1	1	FROM 233'NB'+17, RT TO 232'NB'+50, RT
61A		GORDON BUBOLZ NATURE PRESERVE	---	---	---	---	---	---	---	---	1	SAME POST AS 61
61B		MEN WORKING	---	---	---	---	---	---	---	---	1	MOUNTAT 7.12'MIN TO BOTTOM OF SIGN ,SAME POST AS 61
62		ROAD TO NATURE CENTER	---	---	1	---	---	---	---	1	1	FROM 235'NB'+02, RT TO 234'NB'+50 RT
		SUBTOTALS		68.84	6	2	1	1	23	16	7	

SHEET 1 OF 2

SIGNS REFLECTIVE TYPE II, CONT'D

SIGN NO. CATEGORY	SIGN CODE 0030	DESCRIPTION	L X H	637.0202 SIGNS REFLECTIVE TYPE II S.F.	634.0614 4X6 WOOD POSTS 14' EACH	634.0616 4X6 WOOD POSTS 16' EACH	634.0618 4X6 WOOD POSTS 18' EACH	634.0620 4X6 WOOD POSTS 20' EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
1	R4-7	KEEP RIGHT	24X30	5.00	1	---	---	---	---	---	---	
2	R3-55L	LEFT TURN LANE	24X30	5.00	1	---	---	---	---	---	---	
3	R5-1	DO NOT ENTER	30X30	6.25	---	1	---	---	---	---	---	
3A	W6-3	TWO WAY TRAFFIC SYMBOL	30X30	6.25	---	---	---	---	---	---	---	SAME POST AS 3
4	R4-7	KEEP RIGHT	24X30	5.00	---	---	---	---	---	---	---	
5	S1-1	SCHOOL ADVANCE	30X30	4.69	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
5A	W16-7L	LEFT DIAGONAL ARROW	24X12	2.00	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
5B	R5-1	DO NOT ENTER	30X30	6.25	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
6	R1-1F	STOP (FOLDING)	30X30	5.18	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
16	R3-55L	LEFT TURN LANE	24X30	5.00	1	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
17	W11-2	PEDESTRIAN CROSSING SYMBOL	30X30	6.25	---	1	---	---	---	---	---	
17A	W16-9P	AHEAD	24X8	1.34	---	---	---	---	---	---	---	
17B	R5-1A	WRONG WAY	36X24	6.00	---	---	---	---	---	---	---	
18	R6-2R	ONE WAY	24X30	5.00	1	---	---	---	---	---	---	SAME POST AS 17
19	W11-2	PEDESTRIAN CROSSING SYMBOL	30X30	6.25	---	1	---	---	---	---	---	SAME POST AS 17
19A	R5-1	DO NOT ENTER	30X30	6.25	---	---	---	---	---	---	---	
20	R4-7	KEEP RIGHT	24X30	5.00	1	---	---	---	---	---	---	
21	W11-2	PEDESTRIAN CROSSING SYMBOL	30X30	6.25	---	1	---	---	---	---	---	SAME POST AS 19
22	R4-7	KEEP RIGHT	24X30	5.00	1	---	---	---	---	---	---	
23	W9-2L	LANE ENDS MERGE LEFT	36X36	9.00	---	---	1	---	---	---	---	
24	W11-2	PEDESTRIAN CROSSING SYMBOL	30X30	6.25	---	1	---	---	---	---	---	
24A	W16-9P	AHEAD	24X8	1.34	---	---	---	---	---	---	---	
24B	R5-1A	WRONG WAY	36X24	6.00	---	---	---	---	---	---	---	SAME POST AS 24
25	R5-1	DO NOT ENTER	30X30	6.25	1	---	---	---	---	---	---	SAME POST AS 24
26	R3-55L	LEFT TURN LANE	24X30	5.00	1	---	---	---	---	---	---	
27	R4-7	KEEP RIGHT	24X30	5.00	1	---	---	---	---	---	---	
28	R2-1	SPEED LIMIT 40 MPH	24X30	5.00	1	---	---	---	---	---	---	
29	W6-3	TWO WAY TRAFFIC SYMBOL	30X30	6.25	---	1	---	---	---	---	---	
29A	R5-1	DO NOT ENTER	30X30	6.25	---	---	---	---	---	---	---	
30	R2-1	SPEED LIMIT 45 MPH	24X30	5.00	---	1	---	---	---	---	---	SAME POST AS 29
31	R5-1A	WRONG WAY	36X24	6.00	1	---	---	---	---	---	---	
32	R5-1A	WRONG WAY	36X24	6.00	1	---	---	---	---	---	---	
34	R4-7	KEEP RIGHT	---	---	---	---	---	---	---	---	---	
34A	W5-52L	STRIPE DOWN RIGHT	---	---	---	---	---	---	1	1	---	
35	R3-55L	LEFT TURN LANE	---	---	---	---	---	---	1	---	---	SAME POST AS 34
36	R4-7	KEEP RIGHT	---	---	---	---	---	---	1	1	---	
37	R4-7	KEEP RIGHT	---	---	---	---	---	---	1	1	---	
38	S2-1	SCHOOL	---	---	---	---	---	---	1	1	---	
39	R1-1F	STOP (FOLDING)	---	---	---	---	---	---	1	---	---	ON SIGNAL POLE, FLUORESCENT YELLOW-GREEN SIGN
58	R2-1	SPEED LIMIT	---	---	---	---	---	---	1	---	---	ON SIGNAL POLE
58A	W14-3	NO PASSIGN ZONE	---	---	---	---	---	---	1	1	---	
59	R2-1	SPEED LIMIT	---	---	---	---	---	---	1	---	---	SAME POST AS 58
63	R5-1A	WRONG WAY	36X24	6.00	1	---	---	---	1	1	---	
		SUBTOTALS		177.30	13	7	1	0	10	6	0	
		PROJECT TOTALS		246.14	19	9	2	1	33	22	7	

3

SHEET 2 OF 2

STATE PROJECT NO: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	MISCELLANEOUS QUANTITIES	SHEET NO: 83	E
FILE NAME: F:\TRANSPORTATION\E1582A02\QUANTITIES\MISC QUANTITIES E1582A02	ORIGINATOR: OMNNI ASSOCIATES	ORIG. DATE: MARCH 21, 2003	REV. DATE:	PRINT DATE: June 7, 2004	

TRAFFIC CONTROL ITEMS

LOCATION	SERVICE PERIOD DAYS	643.1050.S PORTABLE CHANGEABLE MESSAGE NO	643.1050.S PORTABLE CHANGEABLE MESSAGE DAY	643.0800 ARROW BOARDS NO	643.0800 ARROW BOARDS DAYS	643.0300 DRUMS NO	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III NO	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A NO	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO	643.0715 WARNING LIGHTS TYPE C DAYS	643.0900 SIGNS NO	643.0900 SIGNS DAYS	643.3000 DETOUR SIGNS NO	643.3000 DETOUR SIGNS DAYS	REMARKS
CATEGORY 0020																		
USH 41 SHOULDER CLOSURES	125	---	---	---	---	---	---	---	---	---	---	---	---	16	2,000	---	---	WINTER SHOULDER CLOSURES
USH 41 LANE CLOSURES	20	2	40	2	40	14	280	---	---	---	---	---	---	16	320	---	---	BOX CULVERT EXTENTIONS
USH 41 SHOULDER CLOSURES	20	---	---	---	---	14	280	---	---	---	---	---	---	32	640	---	---	BRIDGE WORK
USH 41 LANE CLOSURES	70	2	140	2	140	28	1,960	---	---	---	---	---	---	32	2,240	---	---	BRIDGE WORK
CTH A, PHASE 1 CAPITOL DRIVE	80	---	---	---	---	21	1,680	8	640	12	960	3	240	18	1,440	---	---	
CTH A, PHASE 2 CAPITOL DRIVE	80	---	---	---	---	14	1,120	15	1,200	15	1,200	9	720	18	1,440	---	---	
CTH A, PHASE 3 CAPITOL DRIVE	10	---	---	---	---	---	---	18	180	22	220	---	---	14	140	---	---	
DETOUR CTH A	170	---	---	---	---	---	---	5	850	10	1,700	---	---	11	1,870	120	20,400	CTH A DETOUR
DETOUR USH 41	6	2	12	6	36	170	1,020	20	120	25	150	65	390	---	---	95	570	USH 41 DETOUR
USH41/441 INTERCHANGES	90	2	180	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	SUBTOTALS		372		216		6,340		2,990		4,230		1,350		10,090		20,970	
CATEGORY 0030																		
CTH A, PHASE 1	80	---	---	---	---	30	2,400	9	720	10	800	12	960	9	720	---	---	
CTH A, PHASE 2	80	---	---	---	---	12	960	8	640	10	800	5	400	10	800	---	---	
CTH A, PHASE 3	10	---	---	---	---	28	280	6	60	7	70	15	150	10	100	---	---	
	SUBTOTALS		0		0		3,640		1,420		1,670		1,510		1,620		0	
	PROJECT TOTALS		372		216		9,980		4,410		5,900		2,860		11,710		20,970	

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	650.4000 STORM SEWER SYSTEM EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB AND GUTTER LF	650.7000 CONCRETE PAVEMENT LF	650.9900 INITIAL LAYOUT LF
CATEGORY 0020							
STA 210'NB'+00 - 215'NB'+50	CTH A	12	550	---	---	550	550
STA 210'SB'+00 - 215'SB'+50	CTH A	9	550	---	---	550	550
STA 215'NB'+50 - 230'NB'+50	CTH A	12	1,285	225	450	1,060	1,285
STA 215'SB'+50 - 230'SB'+50	CTH A	15	1,285	225	225	1,060	1,285
STA 230'NB'+50 - 236'NB'+00	CTH A	6	550	550	1,820	---	550
STA 230'SB'+50 - 236'SB'+00	CTH A	5	550	550	1,860	---	550
STA 663+95 - 672+15	USH 41	---	---	---	---	---	1,080
STA 13+00 - 20+00	ANDY SCHUH DRIVEWAY	---	700	700	---	---	700
	SUBTOTALS	59	5,470	2,250	4,355	3,220	6,550
CATEGORY 0030							
STA 203'NB'+15 - 210'NB'+00	CTH A	11	685	---	---	685	685
STA 203'SB'+15 - 210'SB'+00	CTH A	9	685	---	---	685	685
STA 236'NB'+00 - 245'NB'+50	CTH A	5	950	950	660	---	950
STA 236'SB'+00 - 245'SB'+50	CTH A	7	950	950	645	---	950
STA 245'NB'+50 - 252'NB'+50	CTH A	---	500	500	295	---	500
STA 245'SB'+50 - 250'SB'+10	CTH A	---	460	460	295	---	460
	SUBTOTALS	32	4,230	2,860	1,895	1,370	4,230
	PROJECT TOTALS	91	9,700	5,110	6,250	4,590	10,780

LOOP DETECTORS

LOOP NO.	SIZE FT X FT	NO. OF TURNS	652.0800 CONDUIT LF	655.0700 LEAD IN CABLE LF	655.0800 WIRE LF
CATEGORY 0020					
11	5.8 x 5.8*	4	30	120	114
41	5.8 x 5.8*	4	34	35	122
42	5.8 x 5.8*	4	48	35	150
43	5.8 x 5.8*	4	42	35	140
61	5.8 x 5.8*	4	40	310	134
62	5.8 x 5.8*	4	46	310	146
63	5.8 x 5.8*	4	30	85	114
71	EXIST		EXIST	65	EXIST
	SUBTOTALS		270	995	920
CATEGORY 0030					
21	5.8 x 5.8*	4	42	390	138
22	5.8 x 5.8*	4	56	390	166
23	5.8 x 5.8*	4	32	180	118
31	5.8 x 5.8*	4	62	245	214
51	5.8 x 5.8*	4	30	215	114
81	5.8 x 5.8*	4	40	245	138
82	5.8 x 5.8*	4	50	245	154
83	5.8 x 5.8*	4	44	245	144
84**	6x15	4	64	210	214
	SUBTOTALS		420	2365	1400
	PROJECT TOTALS		690	3360	2320

* Diamond loop, 6' wide x 10' long (see detail)

** Future loop- do not connect in control cabinet

3

CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM	TO	LOCATION	652.0225 2-INCH LF	652.0235 3-INCH LF	652.0615 3-INCH SPECIAL LF	REMARK
CATEGORY 0020						
CB	EXIST 3" CONDUITS	CTH A & CAPITOL DR.	---	200	---	3 CONNECTIONS REQD
SB1	CB	CTH A & CAPITOL DR.	20	0	---	
SB7	EXIST PB	CTH A & CAPITOL DR.	20	0	---	
SB8	EXIST PB	CTH A & CAPITOL DR.	10	---	---	
SB9	EXIST PB	CTH A & CAPITOL DR.	---	100	---	
SB10	EXIST PB	CTH A & CAPITOL DR.	---	---	---	
PB1	EXIST 3" CONDUIT	CTH A & CAPITOL DR.	10	---	---	
PB2	PB3	NORTHBOUND OFF RAMP	---	50	---	FOR FUTURE SIGNALS
PB3	PB4	NORTHBOUND OFF RAMP	---	40	---	FOR FUTURE SIGNALS
PB4	PB5	NORTHBOUND OFF RAMP	---	96	---	FOR FUTURE SIGNALS
PB5	PB6	NORTHBOUND OFF RAMP	---	60	---	FOR FUTURE SIGNALS
PB6	PB7	NORTHBOUND OFF RAMP	---	90	---	FOR FUTURE SIGNALS
PB6	PB8	NORTHBOUND OFF RAMP	---	120	---	FOR FUTURE SIGNALS
PB8	PB9		---	440	---	FOR FUTURE SIGNALS
PB9	PB10	SOUTHBOUND ON RAMP	---	75	---	FOR FUTURE SIGNALS
PB10	PB11	SOUTHBOUND ON RAMP	---	44	---	FOR FUTURE SIGNALS
PB10	PB12	SOUTHBOUND ON RAMP	---	80	---	FOR FUTURE SIGNALS
PB11	PB13	SOUTHBOUND ON RAMP	---	125	---	FOR FUTURE SIGNALS
PB13	PB14	SOUTHBOUND ON RAMP	---	40	---	FOR FUTURE SIGNALS
PB14	PB15	SOUTHBOUND ON RAMP	---	40	---	FOR FUTURE SIGNALS
	SUBTOTALS		60	1600	0	
CATEGORY 0030						
SB2	EXIST PB	CTH A & CAPITOL DR.	---	50	---	FOR FUTURE SIGNALS
SB3	EXIST PB	CTH A & CAPITOL DR.	5	---	---	FOR FUTURE SIGNALS
SB4	EXIST PB	CTH A & CAPITOL DR.	---	55	---	FOR FUTURE SIGNALS
SB5	EXIST PB	CTH A & CAPITOL DR.	---	---	---	FOR FUTURE SIGNALS
SB6	EXIST PB	CTH A & CAPITOL DR.	5	---	---	FOR FUTURE SIGNALS
PB16	PB17	CTH A & GRAND CHUTE BLVD.	---	75	---	FOR FUTURE SIGNALS
PB17	PB18	CTH A & GRAND CHUTE BLVD.	---	60	---	FOR FUTURE SIGNALS
PB16	PB19	CTH A & GRAND CHUTE BLVD.	---	45	---	FOR FUTURE SIGNALS
PB19	PB20	CTH A & GRAND CHUTE BLVD.	---	53	---	FOR FUTURE SIGNALS
PB21	PB22	CTH A & GRAND CHUTE BLVD.	---	35	28	FOR FUTURE SIGNALS
PB20	PB22	CTH A & GRAND CHUTE BLVD.	---	62	---	FOR FUTURE SIGNALS
	SUBTOTALS		10	435	28	
CATEGORY 0040						
PB18	PB23	CTH A & GRAND CHUTE BLVD.	---	---	47	FOR FUTURE SIGNALS
PB23	PB21	CTH A & GRAND CHUTE BLVD.	---	---	45	FOR FUTURE SIGNALS
	SUBTOTALS		0	0	92	
	PROJECT TOTALS		70	2035	120	

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

LOCATION	655.0515 GROUND (GREEN) LF
CATEGORY 0020	
CTH A/CAPITOL DR. INTERSECTION CB-SB1' CB-SB10; CB-SB9; SB9-Exist PB; SB9-SB8; SB8-SB7; SB8-PB1	400
CATEGORY 0030	
CTH A/CAPITOL DR INTERSECTION CB-SB2; SB2-SB3; SB2-Exist PB; SB3-SB4; SB4-Exist PB; CB-SB5; SB5-SB6; SB5-Exist PB	625
PROJECT TOTAL	1025

ELECTRICAL WIRE LIGHTING 10 AWG

FROM	TO	CATEGORY	655.0615 LF
CB	SB4	030	250
CB	SB9	020	500
PROJECT TOTALS			750

TRAFFIC SIGNAL CABLE, NO. 14

FROM	TO	SPV.0090.03 16 COND. LF	HEAD NOS.	655.0240 BASE TO HEAD 7 COND, LF
CATEGORY 0020				
CB	SB1	30	9, 14	40
CB	SB7	190	13	20
CB	SB8	190	7	20
CB	SB9	100	1, 8	40
CB	SB10	40	2	50
SUBTOTALS		550		170
CATEGORY 0030				
CB	SB2	130	10	20
CB	SB3	130	3	20
CB	SB4	170	4, 5	40
CB	SB5	230	6	50
CB	SB6	240	11,12	40
SUBTOTALS		900		170
PROJECT TOTALS		1450		340

TRAFFIC SIGNALS

SIGNAL BASE NUMBER	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES EACH	657.0395.S POLES TYPE 2 EACH	657.0315 POLES TYPE 4 EACH	657.0420 TRAFIC SIGNAL STANDARDS 13 FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS 15 FT EACH	657.0595.S TROMBONE ARMS 20 FT EACH	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FOOT EACH	659.0125 LUMINAIRES UTILITY HPS 250 WATTS EACH
CATEGORY 0020											
SB-1	1	---	1	---	---	---	---	1	---	---	---
SB-7	1	---	1	---	---	---	---	1	---	---	---
SB-8	1	---	1	---	---	---	1	---	---	---	---
SB-9	---	1	---	1	---	1	---	---	---	2	2
SB-10	---	1	---	1	1	---	---	---	1	---	---
SUBTOTALS	3	2	3	2	1	1	1	2	1	2	2
CATEGORY 0030											
SB-2	1	---	1	---	---	---	---	1	---	---	---
SB-3	1	---	1	---	---	---	1	---	---	---	---
SB-4	---	1	---	1	---	1	---	---	---	2	2
SB-5	---	1	---	1	1	---	---	---	1	---	---
SB-6	1	---	1	---	---	---	---	1	---	---	---
SUBTOTALS	3	2	3	2	1	1	1	2	1	2	2
PROJECT TOTALS	6	4	6	4	2	2	2	4	2	4	4

CONDUIT RIGID NON-METALLIC SCHEDULE 40 1-INCH

FROM	TO	LOCATION	652.0210 1-INCH LF
CATEGORY 0020			
CB	PB2	CTH A & CAPITOL DRIVE	25
EXIST PB	PB3	CTH A & CAPITOL DRIVE	45
PB3	PB4	CTH A & CAPITOL DRIVE	230
		SUBTOTAL	300
CATEGORY 0030			
EXIST PB	PB5	CTH A & CAPITOL DRIVE	45
PB5	PB6	CTH A & CAPITOL DRIVE	230
		SUBTOTAL	275
		PROJECT TOTAL	575

PULL BOXES STEEL

	653.0105 12x24-INCH EACH	653.0145 24x48-INCH EACH
CATEGORY 0020		
CTH A/CAPITOL DRIVE (North)	3	1
NORTHBOUND OFF RAMP	--	7
SOUTHBOUND ON RAMP	--	7
SUBTOTAL	3	15
CATEGORY 0030		
CTH A/CAPITOL DRIVE (SOUTH)	2	---
GRAND CHUTE BOULEVARD	---	5
SUBTOTAL	2	5
CATEGORY 0040		
GRAND CHUTE BOULEVARD	---	3
SUBTOTAL	---	---
PROJECT TOTALS	5	23

CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL

LOCATION	654.0217 EACH
CATEGORY 0030	
CTH A/CAPITOL DRIVE, NE QUADRANT	1

PEDESTRIAN SIGNAL FACES & PUSHBUTTONS

SIGNAL BASE NUMBER	658.0412 PEDESTRIAN SIGNAL FACE EACH	658.0500 PEDESTRIAN PUSH BUTTON EACH
CATEGORY 0020		
SB 1	1	1
SB 7	1	1
SB 8	1	1
SB 10	1	1
SUBTOTALS	4	4
CATEGORY 0030		
SB 2	1	1
SB 3	1	1
SB 5	1	1
SB 6	1	1
SUBTOTALS	4	4
PROJECT TOTALS	8	8

TRAFFIC SIGNAL FACES & BACKPLATES

FACE NUMBER	SPV.0060.05 MODIFY EXIST 3-12 INCH VERT FACE EACH	SPV.0060.06 MODIFY EXIST 5-12 INCH VERT FACE EACH	658.0120 5-12 INCH VERT FACE EACH	658.0155 3-12 INCH HORIZ FACE EACH	658.0225 BACKPLATES 5 SECTION 12-INCH EACH
CATEGORY 0020					
1	---	1	---	---	---
2	---	---	---	1	---
7	1	---	---	---	---
8	---	1	---	---	---
9	---	---	1	---	1
13	---	---	1	---	1
14	1	---	---	---	---
SUBTOTALS	2	2	2	1	2
CATEGORY 0030					
3	1	---	---	---	---
4	---	1	---	---	---
5	---	1	---	---	---
6	---	---	---	1	---
10	---	1	---	---	---
11	1	---	---	---	---
12	---	1	---	---	---
SUBTOTALS	2	4	0	1	0
PROJECT TOTALS	4	6	2	2	2

SAWING EXISTING PAVEMENT

STATION TO STATION	LOCATION	690.0100 L.F.
CATEGORY 0020		
214+60,LT	DRIVEWAY	18
217+60,LT	DRIVEWAY	12
245+50 - 250+50	TEMP. PAVEMENT	500
	SUBTOTAL	530
CATEGORY 0030		
203+15	CTH A	35
206+70,LT	DRIVEWAY	30
207+70,LT	DRIVEWAY	40
207+85,RT	DRIVEWAY	16
210+01,RT	CAPITOL DR EAST	38
209+99,LT	CAPITOL DR WEST	38
239+38-241+03,RT	GRAND CHUTE BLVD.	165
239+62-241+18,LT	GRAND CHUTE BLVD.	156
250+10	CTH A	32
250+10 - 252+50	CTH A	240
UNDISTRIBUTED		60
	SUBTOTAL	850
	PROJECT TOTAL	1380

SAWING CONCRETE PAVEMENT FULL DEPTH

STATION TO STATION	LOCATION	690.0200 L.F.
CATEGORY 0030		
CAPITOL DR EAST	CURB	5
CAPITOL DR WEST	CURB	5
SE QUAD CAPITOL DR	SIDEWALK	5
SW QUAD CAPITOL DR	SIDEWALK	10
SE QUAD GRAND CHUTE BLVD.	CURB	2.5
SW QUAD GRAND CHUTE BLVD.	CURB	2.5
NE QUAD GRAND CHUTE BLVD.	CURB	2.5
NW QUAD GRAND CHUTE BLVD.	CURB	2.5
GRAND CHUTE BLVD. MEDIAN	CURB	5
	TOTAL	40

3

EROSION CONTROL FILTER BAGS AND SEDIMENT TRAP EXCAVATION

STATION	LOCATION	SPV.0060.02 EROSION CONTROL FILTER BAGS DELIVERED EACH	SPV.0060.03 EROSION CONTROL FILTER BAGS INSTALLED EACH	SPV.0060.04 EROSION CONTROL FILTER BAGS MAINTENANCE EACH	SPV.0035.01 SEDIMENT TRAP EXCAVATION CY
CATEGORY 0020					
211'SB'+50	CTH A, 33'LT INLET	16	16	32	---
212'NB'+85	CTH A, 52'RT INLET	16	16	32	---
213'SB'+00	CTH A, 32'LT INLET	16	16	32	---
217'SB'+93	CTH A, 61'LT MANHOLE	12	12	24	---
221'NB'+25	CTH A, 145'LT SEDIMENT TRAP	54	54	108	6
221'NB'+50	CTH A, 165'LT SEDIMENT TRAP	54	54	108	6
225'SB'+50	CTH A, 110'LT SEDIMENT TRAP	54	54	108	6
234'SB'+00	CTH A, 42'LT INLET	16	16	32	---
235'SB'+50	CTH A, 60'LT SEDIMENT TRAP	54	54	108	6
667+00	USH 41, INLET	12	12	24	---
UNDISTRIBUTED		48	48	96	6
	SUBTOTAL	352	352	704	30
CATEGORY 0030					
207'SB'+02	CTH A, 33'LT INLET	24	24	48	---
208'NB'+00	CTH A, 36'RT INLET	16	16	32	---
208'SB'+10	CTH A, 32'LT INLET	16	16	32	---
UNDISTRIBUTED		14	14	28	---
	SUBTOTAL	70	70	140	0
	PROJECT TOTAL	422	422	844	30

SALVAGED APRON ENDWALLS, STEEL 112x75-INCH

STATION TO STATION	LOCATION	SPV.0600.07 EACH
CATEGORY 0030		
239+60, 50'RT	CTH A	1
239+60, 68'RT	CTH A	1
TOTAL		2

PIPE ARCH CORRUGATED STEEL, 112x75-INCH

STATION TO STATION	LOCATION	SPV.0090.02 L.F.	STEEL MINIMUM THICKNESS INCHES	CORRUGATIONS
CATEGORY 0030				
239+44-239+60, 50'RT	CTHA	22	0.109	3" X 1"
239+44-239+60, 68'RT	CTHA	22	0.109	3" X 1"
TOTAL		44		

QMP SUBGRADE

STATION TO STATION	LOCATION	SPV.0035.02 CY
CATEGORY 0020		
218NB+00 - 223NB+28	CTH A	33,200
225NB+77 - 235NB+00	CTH A	69,500
TOTAL		102,700

3

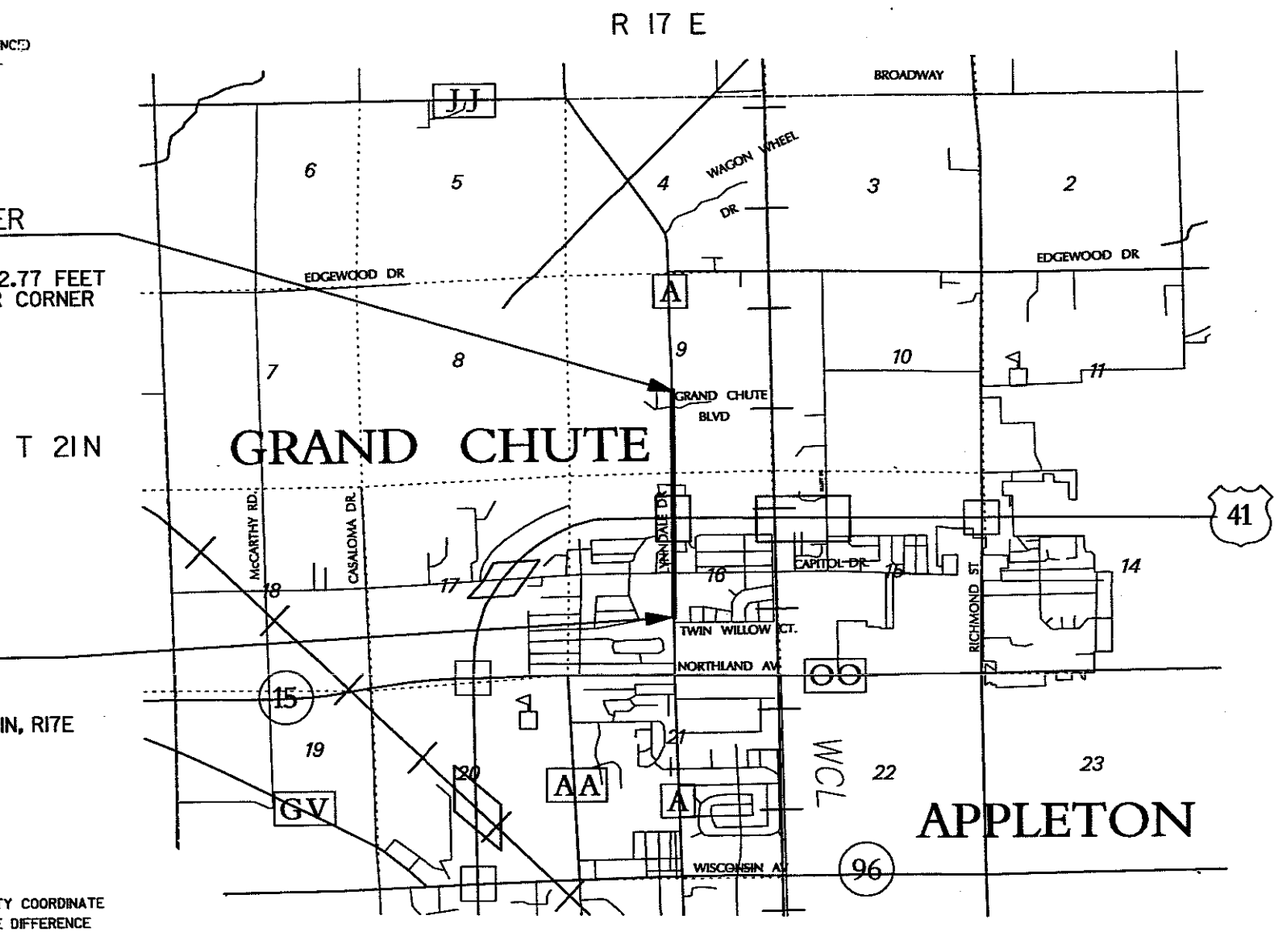
CONVENTIONAL SIGNS AND ABBREVIATIONS

- SECTION LINE
- QUARTER LINE
- TOWNSHIP AND RANGE LINE
- PROPOSED OR NEW CENTERLINE
- PROPOSED OR NEW R/W LINE
- EXISTING R/W LINE
- LOT LINE
- PROPERTY LINE
- COUNTY LINE LIMITS
- SLOPE INTERCEPTS
- R/W POINT
- FENCE
- SECTION OR QUARTER CORNER
- POWER POLE
- TELEPHONE PEDESTAL
- UNDERGROUND TELEPHONE CABLE
- TEMPORARY INTEREST
- NO ACCESS (BY ACQUISITION)
- NO ACCESS (BY STATUTORY AUTHORITY)
- NO ACCESS (BY PREVIOUS PROJECT, COVENANT OR COUNTY ORDINANCE)
- RIGHT-OF-WAY TYPE 2 MONUMENTS SET AT NEWLY ACQUIRED R/W ANGLE POINTS
- PERMANENT LIMITED EASEMENT
- FEE TITLE ACQUIRED R/W

AC	ACRES	R	RADIUS
AP	ACCESS POINT	R.	RANGE
Δ	CENTRAL ANGLE	REF	REFERENCE LINE
C/L	CENTERLINE	R/L	REFERENCE LINE
COR.	CORNER	R/W	RIGHT OF WAY
CTH	COUNTY TRUNK HIGHWAY	S.	SOUTH
D	DEGREE OF CURVE	SEC	SECTION
E.	EAST	SF RES	SINGLE FAMILY RESIDENTIAL
L	LENGTH OF CURVE	SL	SECTION LINE
LC	LONG CHORD	STH	STATE TRUNK HIGHWAY
LCB	LONG CHORD BEARING	SF	SQUARE FEET
MI	MILE	STA	STATION
N.	NORTH	T.	TOWN
PC	POINT OF CURVATURE	T	TANGENT LENGTH OF CURVE
PI	POINT OF INTERSECTION	TI	TEMPORARY INTEREST
PT	POINT OF TANGENCY	USH	UNITED STATES HIGHWAY
PLE	PERMANENT LIMITED EASEMENT	W.	WEST

END RELOCATION ORDER
STA 249+84.34
1,332.19 FEET NORTH OF AND 12.77 FEET WEST OF THE NORTH QUARTER CORNER OF SECTION 16, T21N, R17E
Y = 578340.29
X = 817156.31

BEGIN RELOCATION ORDER
STA 201+75.00
824.64 FEET SOUTH OF AND 23.97 FEET WEST OF THE CENTER OF SECTION 16, T21N, R17E
Y = 573533.11
X = 817070.30



N

LAYOUT
SCALE 0 ½ MI.

TOTAL NET LENGTH OF CENTERLINE = 0.911 MI.

Notes

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS) OUTAGAMIE COUNTY. ALL PLAT DISTANCES ARE GROUND LENGTH. THE DIFFERENCE BETWEEN PLAT BEARINGS REPRESENTS PLANE ANGLES IN DEGREES, MINUTES, AND SECONDS.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER FOR ALL LANDS BEING ACQUIRED.

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. OTHER INFORMATION IS PROVIDED TO SUPPLEMENT THE BASIC PERIMETER DESCRIPTION AND SHALL NOT BE CONSTRUED TO PREVAIL OVER THE PERIMETER DESCRIPTION.

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE 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.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1123-09-21		
FEDERAL PROJECT NUMBER	4.1	10

PLAT OF RIGHT OF WAY REQUIRED FOR
APPLETON - GREEN BAY
(CTY A INTERCHANGE)
USH 41 OUTAGAMIE COUNTY

ACCEPTED FOR
OUTAGAMIE COUNTY
3-21-03 (Date) (Signature)

ORIGINAL PLANS PREPARED BY
OMNI ASSOCIATES
APPLETON, WISCONSIN
WISCONSIN DONALD F. LA COUNT S-1086 KAUKAUNA, WI LAND SURVEYOR
3/21/03 (Date) (Signature)

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	APPROVED FOR DISTRICT OFFICE:
	DATE:

90

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE 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.

PARCEL NUMBER	SHEET NUMBER	OWNER	INT. REQ'D	TOTAL AREA	R/W NEW	REQUIRED EXISTING	REQUIRED TOTAL	TOTAL AREA REM	TI AREA	PLE AREA	ACCESS CONTROL
1*	4.4	SANDRA M. NETT & DREW V. SELIG	FEE	1.28 AC	0.09 AC	—	0.09 AC	1.19 AC	—	—	—
2*	4.4	TOWN OF GRAND CHUTE	TI	2.66 AC	—	—	—	2.66 AC	0.10 AC	—	—
3*	4.4	BETHANY LUTHERAN CHURCH	FEE	4.15 AC	0.12 AC	—	0.12 AC	4.03 AC	—	—	—
4*	4.4	MARK A. VIVODA	TI	0.72 AC	—	—	—	0.72 AC	141 SQ FT	—	—
5*	4.4	BRIAN A. & STEPHANIE EDWARDS	FEE TI	0.34 AC	0.01 AC	—	0.01 AC	0.33 AC	262 SQ FT	—	—
6*	4.4. 4.5	APPLETON COMMUNITY CHURCH	FEE	5.09 AC	0.07 AC	—	0.07 AC	5.02 AC	—	—	—
7*	4.4	JOHN P. & KAY L. MULLINS	FEE	0.52 AC	0.02 AC	—	0.02 AC	0.50 AC	—	—	—
9*	4.4	DAVID J. & SUEZETE EBBEN	FEE	0.65 AC	0.02 AC	—	0.02 AC	0.63 AC	—	—	—
10	4.5	WAYNE J. & TANA L. ALLEN	FEE	0.54 AC	0.07 AC	—	0.07 AC	0.47 AC	—	—	—
11*	4.4. 4.5	RODNEY W. & RHONDA K. FOLZ	FEE	0.58 AC	0.01 AC	—	0.01 AC	0.57 AC	—	—	—
12	4.5	MARTY P. PATRICIA VANDENACKER	FEE	20473 SQ FT	67 SQ FT	—	67 SQ FT	20406 SQ FT	—	—	—
13*	4.5	JEROME G. & AUDREY M. GREVE	FEE ACCESS CONTROL	0.94 AC	0.10 AC	—	0.10 AC	0.84 AC	—	—	1SF RES
15	4.5	JEROME G. GREVE, LOIS JANE SONNENBERG & JEANETTE LOEFER	FEE ACCESS CONTROL	2.12 AC	0.40 AC	—	0.40 AC	1.72 AC	0.05 AC	—	1SF RES
19	4.6	EUGENE W. & DOROTHY E. DORN	FEE ACCESS CONTROL	0.85 AC	0.06 AC	—	0.06 AC	0.79 AC	0.05 AC	—	1SF RES
21**	4.5. 4.6.	CHRISTIAN & MISSIONARY ALLIANCE CHURCH OF APPLETON	FEE	61.71 AC	0.09 AC	—	0.09 AC	61.62 AC	—	—	—
22	4.5. 4.6. 4.8	ANDREW J. SCHUH	FEE TI	8.53 AC	0.80 AC	—	0.80 AC	7.73 AC	1.02 AC	—	—
23*	4.6	CASALOMA PROPERTIES	FEE	1.25 AC	0.12 AC	—	0.12 AC	1.13 AC	—	—	—
24	4.6	EDWARD ROSE PROPERTIES, INC.	FEE PLE	47.40 AC	0.25 AC	—	0.25 AC	47.15 AC	—	0.49 AC	—
25*	4.6. 4.7	MATTHEW D. DORN	FEE	1.81 AC	0.06 AC	—	0.06 AC	1.75 AC	—	—	—
27*	4.7	E.L. DORN ESTATE, LLP	FEE	17.26 AC	0.24 AC	—	0.24 AC	17.02 AC	—	—	—
28*	4.6. 4.7	TOWN OF GRAND CHUTE	FEE TI ACCESS CONTROL	50.30 AC	0.20 AC	—	0.20 AC	50.10 AC	0.03 AC	—	1AP
30	4.5. 4.6.	TOWN OF GRAND CHUTE (30)	CONVEYANCE OF RIGHTS	—	—	—	—	—	—	—	—
40	4.4. 4.5. 4.6	WE ENERGIES (40)	CONVEYANCE OF RIGHTS	—	—	—	—	—	—	—	—
41	4.4. 4.5. 4.6	SBC AMERITECH (41)	CONVEYANCE OF RIGHTS	—	—	—	—	—	—	—	—
42	4.4. 4.5.	TOWN OF GRAND CHUTE SANITARY DISTRICT (42)	CONVEYANCE OF RIGHTS	—	—	—	—	—	—	—	—
43	4.4. 4.5. 4.6	TIME WARNER CABLE (43)	CONVEYANCE OF RIGHTS	—	—	—	—	—	—	—	—

NOTE

* ACQUIRED IN THE NAME OF OUTAGAMIE COUNTY

** PROPOSED RIGHT-OF-WAY IS BEING DEDICATED BY THE DEVELOPER AS PART OF THE SITE DEVELOPMENT PROCESS.

4

REVISION DATE 03-22-04

DATE 3/21/03

SCALE, FEET 0 N/A

HWY: CTH A

COUNTY: OUTAGAMIE

STATE R/W PROJECT NUMBER 1123-09-21

CONSTRUCTION PROJECT NUMBER 1123-09-71,72

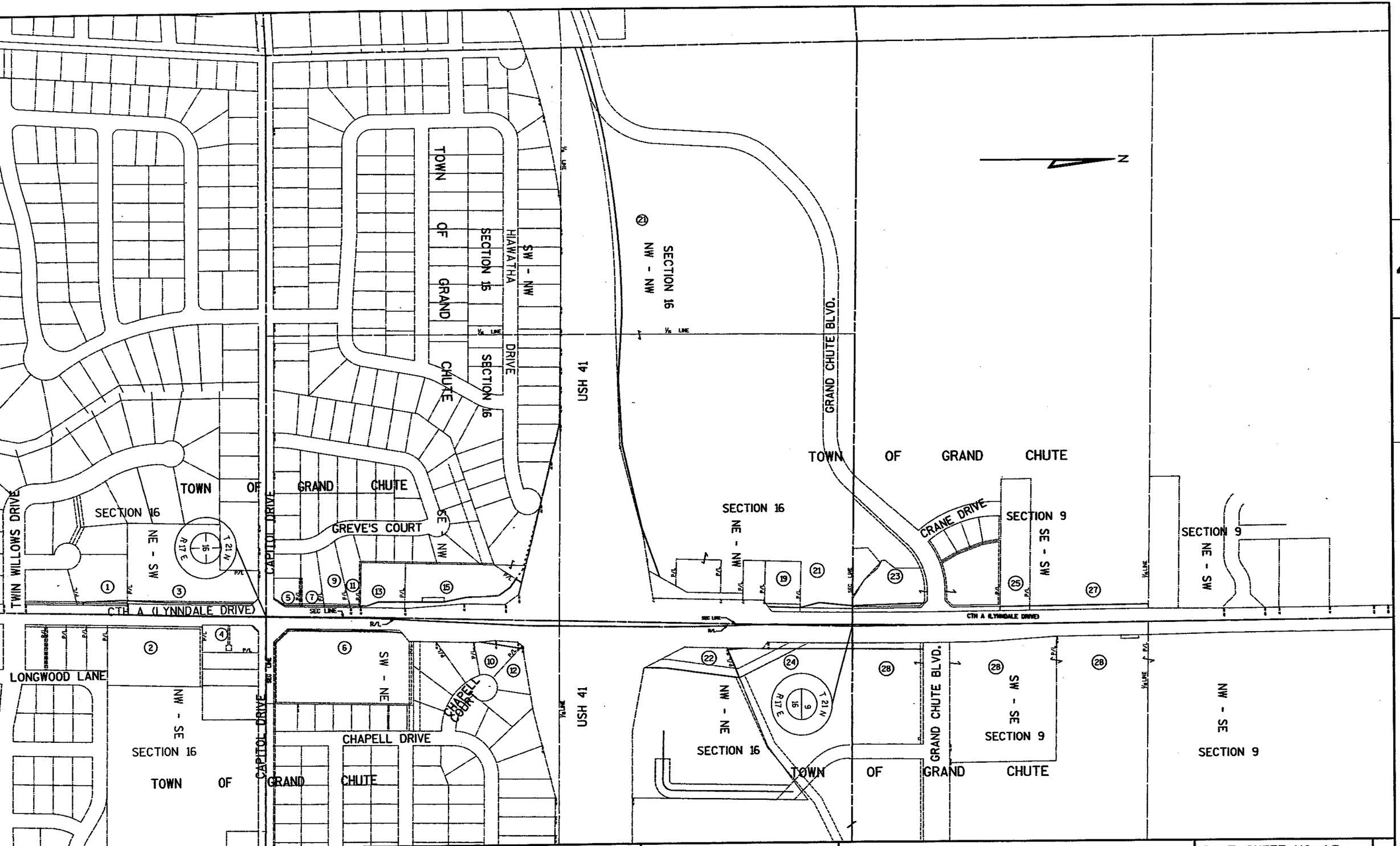
PLAT SHEET NO: 4.2

PS&E SHEET NO: 91

E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\sched.dgn PLOT DATE : 06/07/2004 10:20:39 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 50

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



REVISION DATE 03-22-04 NC	DATE 3/21/03	SCALE, FEET 0 200 400	HWY: CTH A	STATE R/W PROJECT NUMBER 1123-09-21	PLAT SHEET NO: 4.3
	GRID FACTOR N.A.		COUNTY: OUTAGAMIE	CONSTRUCTION PROJECT NUMBER 1123-09-71,72	PS&E SHEET NO: 92 E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\L001.dgn PLOT DATE : 03/22/2004 01:07:58 PM PLOT BY : yurkd PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

CSM 1435
15' DRAINAGE EASEMENT
LOT 3
15' DRAINAGE EASEMENT
CSM 1435
LOT 1
LOT 2
LOT 4
N
MAG NAIL FOUND Y=574391.60 X=814542.32
T 21 N R 17 E 17 16
TOWN OF GRAND CHUTE
GREVE'S COURT
33' R/W
33' R/W
SECTION 16
NE - SW
CSM 3665
3
TEARDROP COURT
CSM 996
LOT 1
LOT 2
N02°15'29"E 51.28'
BETHANY LUTHERAN CHURCH
205+04.65 61.00 R/W (288)
40 WE ENERGIES
SLOPE INTERCEPT 1 AP
1 AP
RR SPIKE FOUND Y=574357.74 X=817094.27
T 21 N R 17 E 16
P/L
(ASPH)
N89°14'23"W 2552.17'
CAPITOL DRIVE
SEC LINE
43 TIME WARNER
P/L
6' UTILITY EASEMENT
(CONC)
WESTBROOK ESTATES
LOT 1
LOT 3
LOT 4
LOT 5
SECTION 16
SE - NW
11
41 SBC AMERITECH
RODNEY W. & RHONDA K. FOLZ
15' ELECTRIC EASEMENT
6' UTILITY EASEMENT
MICHAEL D. & JANET M. FOWLER
15' ELECTRIC EASEMENT
1
SANDRA M. NETT
8' TELEPHONE EASEMENT
15' ELECTRIC EASEMENT
201+75 55.00 R/W (235)
203+50 65.00 R/W (236)
205+53.38 61.00 R/W (279)
N88°20'05"W 13.75'
N01°28'26"W 175.93'
N03°23'05"E 203.41'
61' R/W
N01°39'55"E 336.81'
14'
209+65.70 85.00 R/W (230)
209+42.09 61.00 R/W (234)
210+31.21 81.00 R/W (233)
BRIAN A. & STEPHANIE EDWARDS
210+31.75 87.04' TI
5
7
JOHN P. & KAY L. MULLINS
DAVID J. & SUEZETE EBBEN
9
LOT 4
15' ELECTRIC EASEMENT
6' UTILITY EASEMENT
201+75 41.25' R/W (234)
N88°20'05"W 41.25'
EXISTING R/W
SEC LINE N01°39'55"E 2647.64'
200+00 1822.56' (H)
CTH A (LYNNDALE DRIVE)
756.09' (CONC)
3.00'
30" RCP
SS
S88°20'05"E 58.00'
210+71.21 55.00' TI
210+80.29 55.00' TI
N01°37'01"E 378.79'
55' R/W
214+00
41.25' R/W
50' R/W
REF LINE N01°39'55"E 139.98
REF LINE N02°15'29"E 205+00 290.02'
REF LINE N01°39'55"E 395.00'
57.91'
92.89'
71.21'
N89°15'10"W 3.00'
EXISTING R/W
SEC LINE N01°37'01"E 2651.43'
400.00' 378.79'
518.91'
48' R/W
N88°22'59"W 52.00'
N88°22'59"W 58.00'
REF LINE N01°37'01"E 477.80' 972.26'
52' R/W
EXISTING R/W
N02°59'59"E 207.17'
210+92.89 55.00' R/W (257)
213+00 60.00' R/W (103)
N00°21'27"E 198.39'
MATCH LINE
10' UTILITY EASEMENT
PI 203+14.98
Y = 573673.03
X = 817074.36
Δ = 00°35'34"
PI 206+05.00
Y = 573962.82
X = 817085.79
Δ = 00°35'34"
207+12.03 38.25' R/W (242)
207+12.33 46.99' TI 56.99' TI
207+12.17 47.00' R/W (1065)
209+36.94 38.25' TI
209+41.93 38.25' R/W (236)
209+68.09 64.00' R/W (235)
209+68.17 68.98' TI
202+85.32 49.99' TI 59.99' TI
(ASPH)
24" CMP
24" RCP
STEVEN R. & WENDY L. ARENT
LOT 1
6' UTILITY EASEMENT
JOHN L. & DALLAIS PETERS
LOT 2
VILLAGE IN THE MEADOWS
6' UTILITY EASEMENT
THOR M. & MARY J. THORGERSEN
LOT 3
WILLIAM D. & LOUANN PERRY
LOT 4
2
TOWN OF GRAND CHUTE
SLOPE INTERCEPT
4
1 AP
MARK A. WIVODA
TELEPHONE EASEMENT
OUTAGAMIE COUNTY RECORDS JACKET 6175, IMAGE 16
PI 210+00.00
Y = 574357.65
X = 817097.27
Δ = 00°02'54"
10' UTILITY EASEMENT
6
APPLETON COMMUNITY CHURCH
210+34.82 113.98' R/W (243)
42 TOWN OF GRAND CHUTE SANITARY DIST.
10' ELECTRIC EASEMENT
6' TELEPHONE EASEMENT
10' SANITARY FORCE MAIN EASEMENT
BEGIN RELOCATION ORDER
STA 201+75.00
824.64 FEET SOUTH OF AND
23.97 FEET WEST OF THE
CENTER OF SECTION 16, T21N, R17E
SECTION 16
NW - SE
SECTION 16
GRID COORDINATES
LONGWOOD LANE
TOWN OF GRAND CHUTE
SEC LINE N89°15'10"W 2701.46'
SW - NE
SECTION 16
PK NAIL FOUND Y=574323.30 X=819795.51
T 21 N R 17 E 16 15
33' R/W
33' R/W
BEB 1¼"

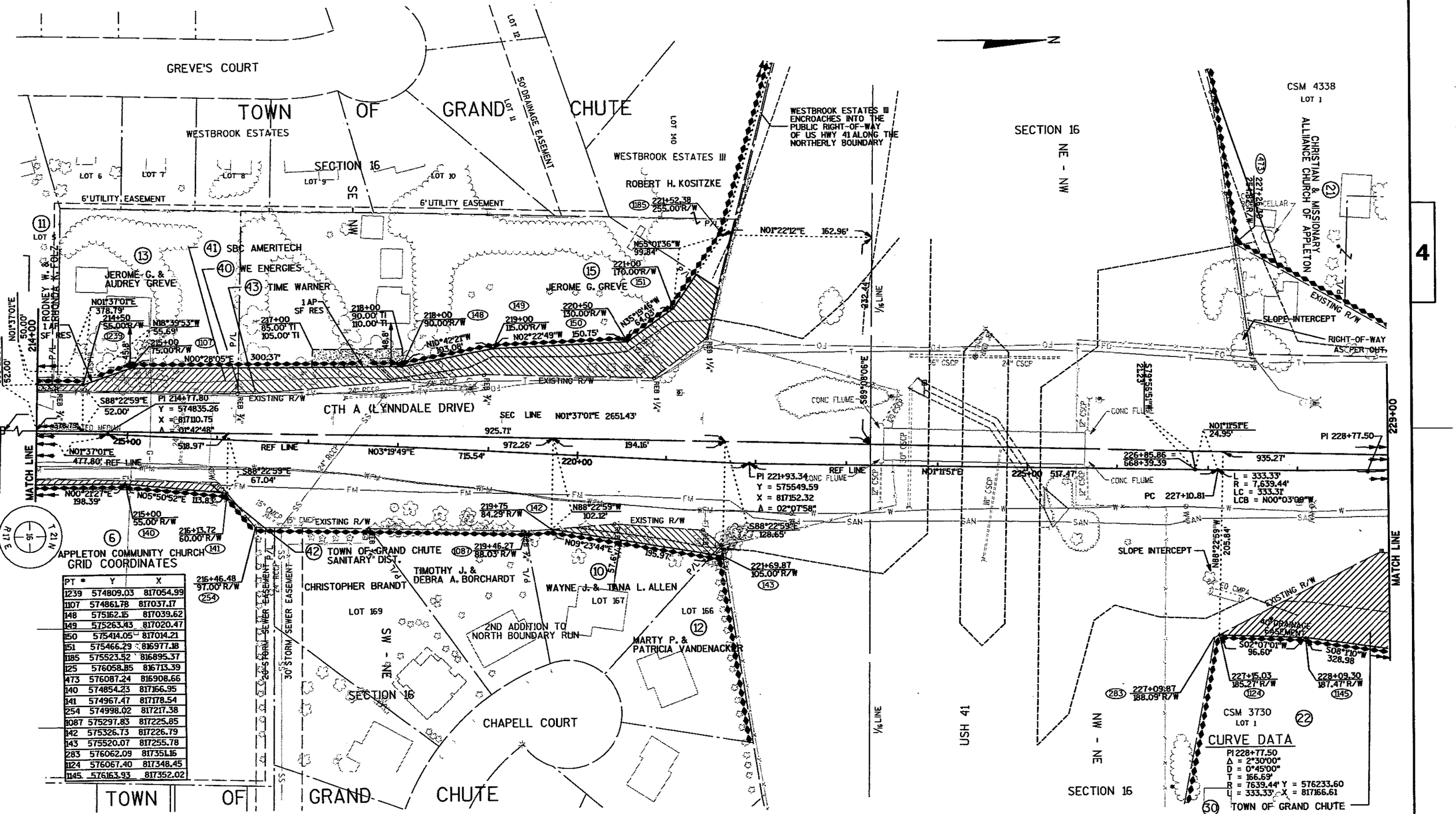
PT	Y	X
1234	573534.30	817029.06
1235	573534.70	817015.32
1236	573710.58	817010.79
1238	574301.54	817034.61
230	574325.88	817011.32
237	574391.77	817017.21
1110	574430.39	817044.30
1065	574068.58	817135.88
1242	574068.69	817127.13
236	574298.49	817133.82
235	574323.89	817160.30
243	574389.24	817212.19
257	574451.99	817151.95
1103	574655.84	817165.71
1279	573913.64	817022.80
1288	573964.88	817024.82

4

REVISION DATE 03-22-04 NC
DATE 3/21/03
GRID FACTOR N.A.
SCALE, FEET 0 50 100
HWY: CTH A
COUNTY: OUTAGAMIE
STATE R/W PROJECT NUMBER 1123-09-21
CONSTRUCTION PROJECT NUMBER 1123-09-71,72
PLAT SHEET NO: 4.4
PS&E SHEET NO: 93
E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\RP01.dgn
PLOT DATE : 03/22/2004 01:11:56 PM PLOT BY : yurkd
PLOT NAME :
ORG DATE :
Originator : OMNNI ASSOCIATES, INC.
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 75

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

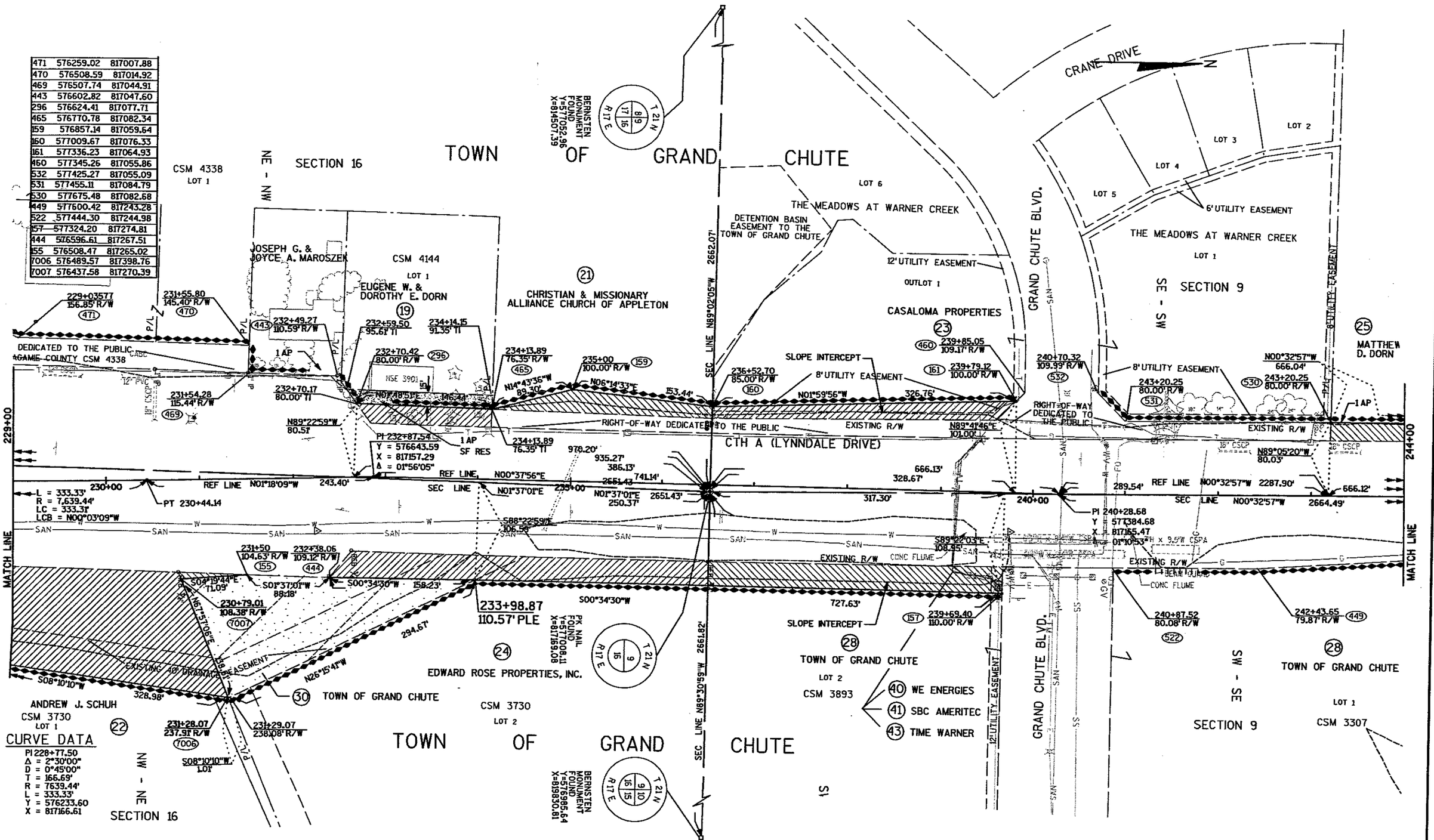


4

REVISION DATE 03-22-04	DATE 3/21/03	SCALE, FEET 0 50 100	HWY: CTH A	STATE R/W PROJECT NUMBER 1123-09-21	PLAT SHEET NO: 4.5
	GRID FACTOR N.A.		COUNTY: OUTAGAMIE	CONSTRUCTION PROJECT NUMBER 1123-09-71,72	PS&E SHEET NO: 94 E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\RP02.dgn PLOT DATE : 03/22/2004 02:15:27 PM PLOT BY : yurkd PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

471	576259.02	817007.88
470	576508.59	817014.92
469	576507.74	817044.91
443	576602.82	817047.60
296	576624.41	817077.71
465	576770.78	817082.34
159	576857.14	817059.64
160	577009.67	817076.33
161	577336.23	817064.93
460	577345.26	817055.86
532	577425.27	817055.09
531	577455.11	817084.79
530	577675.48	817082.68
449	577600.42	817243.28
522	577444.30	817244.98
157	577324.20	817274.81
444	576596.61	817267.51
155	576508.47	817265.02
7006	576489.57	817398.76
7007	576437.58	817270.39

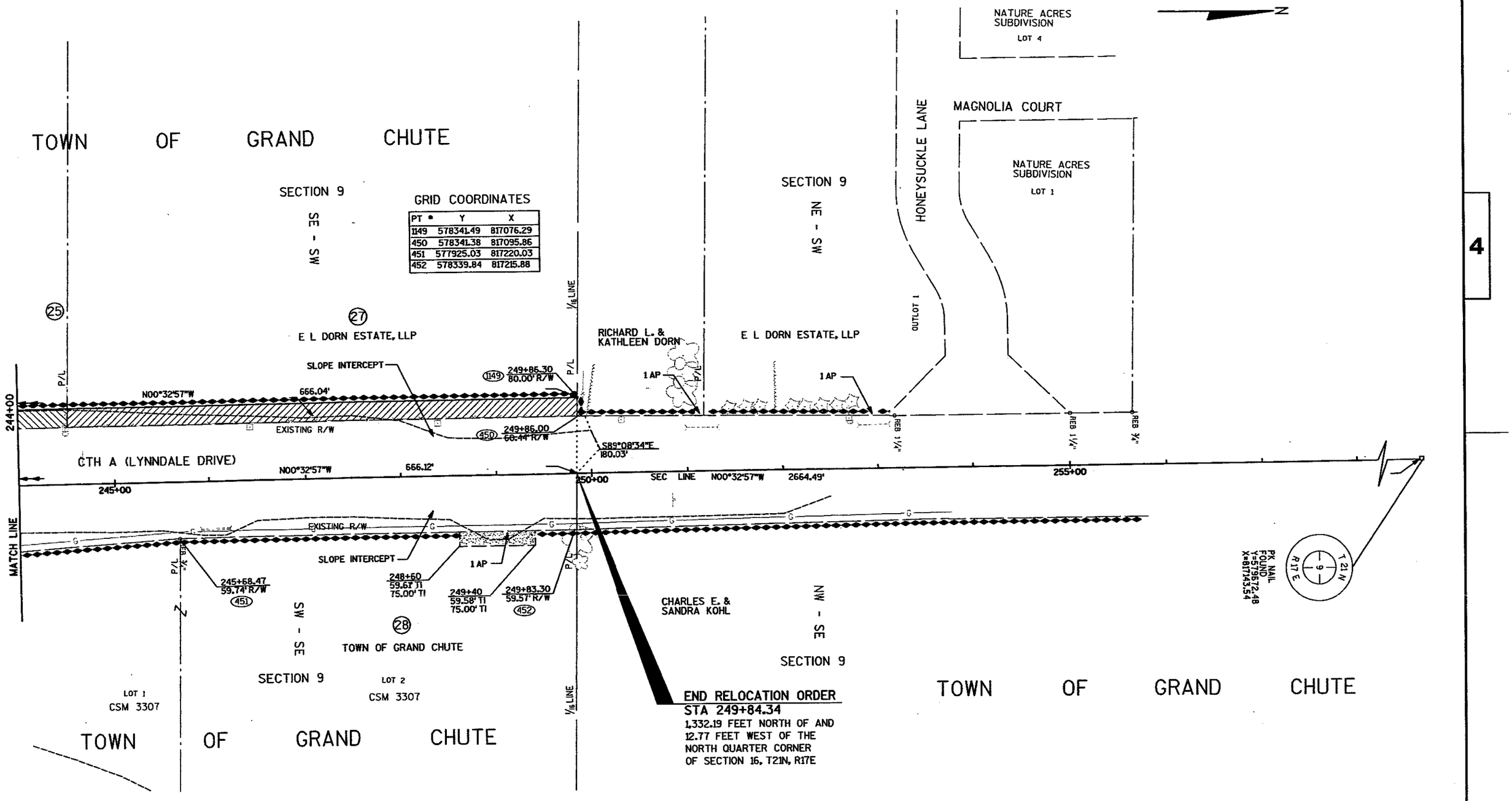


REVISION DATE 03-22-04	DATE 3/21/03	SCALE, FEET 0 50 100	HWY: CTH A	STATE R/W PROJECT NUMBER 1123-09-21	PLAT SHEET NO: 4.6
	GRID FACTOR N.A.		COUNTY: OUTAGAMIE	CONSTRUCTION PROJECT NUMBER 1123-09-71,72	PS&E SHEET NO: 95 E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\RP03.dgn PLOT DATE : 03/22/2004 03:07:41 PM PLOT BY : yurkd PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

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

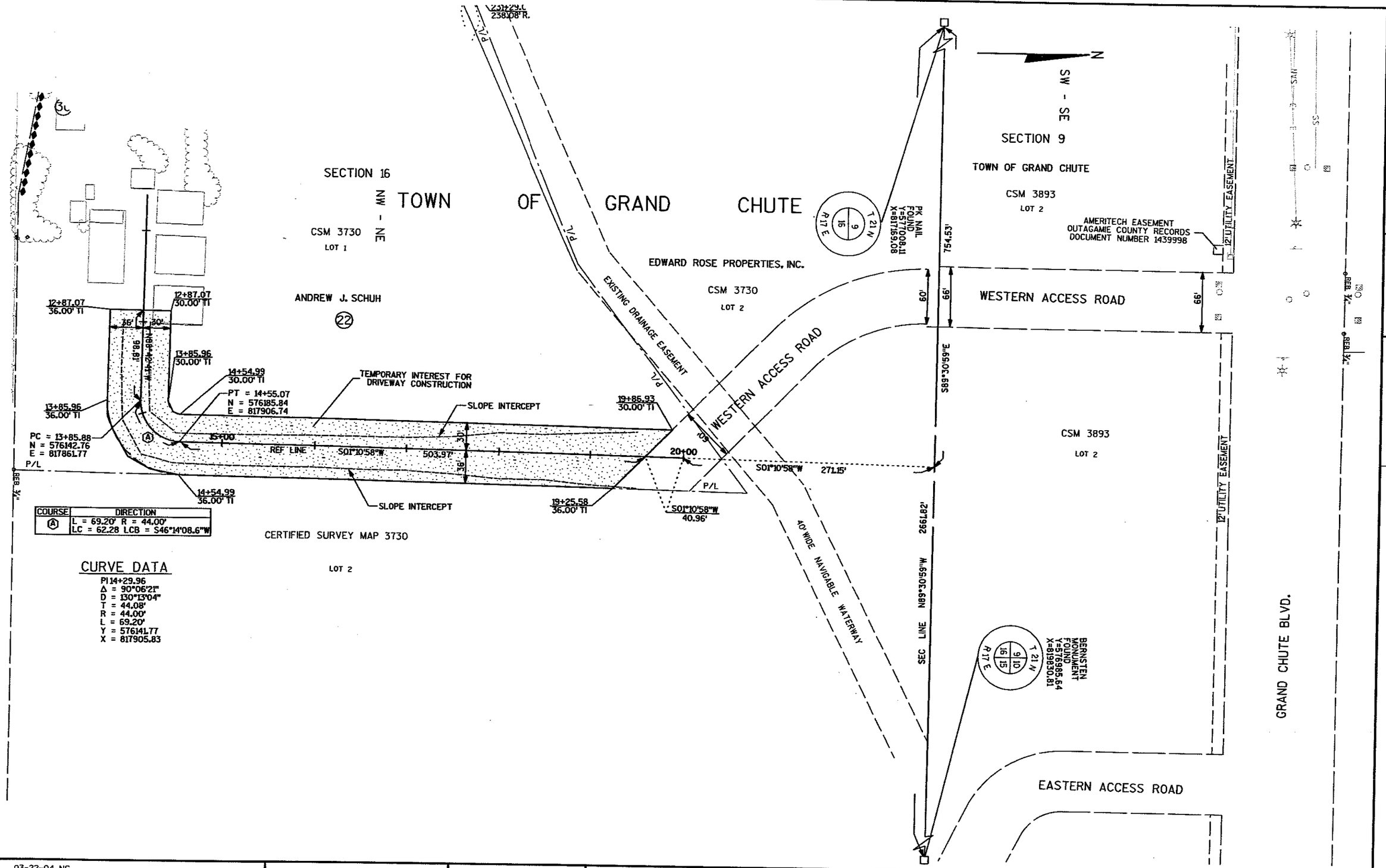
4



4

REVISION DATE 03-22-04 NC	DATE 3/21/03	SCALE, FEET 0 50 100	HWY: CTH A	STATE R/W PROJECT NUMBER 1123-09-21	PLAT SHEET NO: 4.7
	GRID FACTOR N.A.		COUNTY: OUTAGAMIE	CONSTRUCTION PROJECT NUMBER 1123-09-71,72	PS&E SHEET NO: 96 E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\RP04.dgn PLOT DATE : 03/22/2004 01:09:27 PM PLOT BY : yurkd PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75



COURSE	DIRECTION
A	L = 69.20' R = 44.00' LC = 62.28 LCB = S46°14'08.6"W

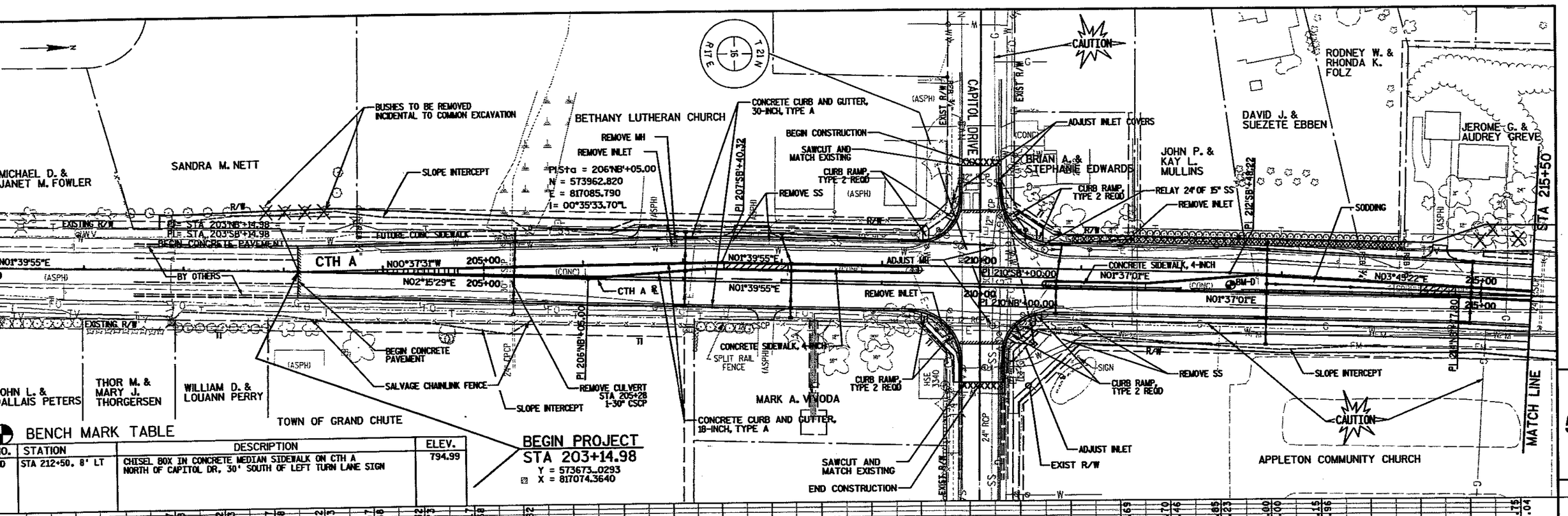
CURVE DATA

P1 14+29.96
Δ = 90°06'21"
D = 130°13'04"
T = 44.08'
R = 44.00'
L = 69.20'
Y = 576141.77
X = 817905.83

REVISION DATE 03-22-04 NC	DATE 03/21/03	SCALE, FEET 0 50 100	HWY: CTH A	STATE R/W PROJECT NUMBER 1123-09-21	PLAT SHEET NO: 4.8	
	GRID FACTOR N.A.		COUNTY: OUTAGAMIE	CONSTRUCTION PROJECT NUMBER 1123-09-71,72	PS&E SHEET NO: 97	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAT\RP07.dgn PLOT DATE : 03/22/2004 01:10:10 PM PLOT BY : yurkd PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 75

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



5

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | PLAN AND PROFILE: CTH A | SHEET NO: 98 | E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PP1.dgn PLOT DATE : 03/29/2004 08:50:50 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40a

JEROME G. & AUDREY GREVE

JEROME G. GREVE

CHRISTIAN & MISSIONARY ALLIANCE CHURCH OF APPLETON

APPLETON COMMUNITY CHURCH

CHRISTOPHER BRANDT

TIMOTHY J. & DEBRA A. BORCHARDT

WAYNE J. & TANA L. ALLEN

MARTY P. & PATRICIA VANDENACKER

ANDREW J. SCHUH

CTH A

USH 41 NORTHBOUND

USH 41 SOUTHBOUND

FUTURE USH 41 NB OFF-RAMP

FUTURE USH 41 SB ON-RAMP

MATCH LINE

MATCH LINE

STA 216+50

STA 230+50

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
C	STA 216+58, 84' RT	CHISELED BOX ON TOP OF SOUTHERN END OF 15 INCH CONCRETE CULVERT, 90 FT EAST OF CTH A CENTER LINE, NW OF CHURCH	790.95
A	STA 223+48, 76' LT	60d NAIL IN POWER POLE AT SOUTHWEST CORNER OF USH 41 AND CTH A, (NO. 91-26803)	793.98
F	STA 229+26, 173' LT	60d NAIL IN LIGHT POLE IN MIDDLE OF PARKING LOT IN FRONT OF GREEN SHED, 150' N OF HOUSE #3801 ON FRONTAGE RD	795.73

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | PLAN AND PROFILE: CTH A | SHEET NO: 99 | E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PP2.dgn PLOT DATE : 06/07/2004 10:11:32 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale..... WISDOT/CADDS SHEET 40a

5

JOSEPH G. & JOYCE A. MAROSZEK

EUGENE W. & DOROTHY E. DORN

POND

CHRISTIAN & MISSIONARY ALLIANCE CHURCH OF APPLETON

CASALOMA PROPERTIES

MATTHEW D. DORN

EDWARD ROSE PROPERTIES, INC.

TOWN OF GRAND CHUTE

CTH A

GRAND CHUTE BLVD

MATCH LINE

MATCH LINE

STA 230+50

STA 245+50

REMOVE CULVERT STA 230+56 1-18" CSCP

EXIST R/W

HSE 3901

BM-H

CONCRETE CURB AND GUTTER, 18-INCH, TYPE D

FUTURE CONC SW

SLOPE INTERCEPT

CONCRETE SIDEWALK, 4-INCH

SAWCUT AND MATCH EXISTING

REMOVE DRIVEWAY

REMOVE CULVERT, STA 242+17, 1-18" CSCP

REMOVE CULVERT, STA 243+35, 1-18" CSCP

18" CSCP

SODDING

CONCRETE CURB AND GUTTER, 30-INCH, TYPE D

CONCRETE CURB AND GUTTER, 18-INCH, TYPE D

CURB RAMP, TYPE W 2 REQD

CONC FLUME

7'H x 9.5'W CSPA

BEAM GUARD

REMOVE OLD STRUCTURE STA 241+52 1-7'X9.5' CSPA

END FENCE 235NB+25, 102' RT

TIMBER PEDESTRIAN BRIDGE - BY OTHERS

REMOVE ASPHALTIC SURFACE

CAUTION

T 21 N R 17 E S 9 S 16

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
BM-H	STA 233+66, 57' LT	60d NAIL IN 2ND POWER POLE NORTH OF HOUSE #3901 ON CTH A NEXT TO FRONTAGE RD NORTH OF USH 41 ON WEST SIDE OF CTH A	792.25

5

SPECIAL DITCH, LT

SPECIAL DITCH, RT

500' VC NB & SB

900' VC NB & SB

EXISTING PROFILE

PROPOSED SB PROFILE

PROPOSED NB PROFILE

SPECIAL DITCH, LT

SPECIAL DITCH, RT

SPECIAL DITCH, LT

SPECIAL DITCH, LT

0.50%

0.50%

0.30%

4.00%

4.00%

0.65%

0.70%

0.96%

0.40%

0.40%

0.61%

0.40%

0.52%

0.38%

0.74%

230+00 231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00 239+00 240+00 241+00 242+00 243+00 244+00 245+00

820 815 810 805 800 795 790 785 780

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | PLAN AND PROFILE: CTH A | SHEET NO: 100 | E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582PP3.dgn PLOT DATE : 03/29/2004 10:55:51 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40a

1

E L DORN ESTATE, LLP

RICHARD L. & KATHLEEN DORN

E L DORN ESTATE, LLP

STA 245+50

MATCH LINE

CONCRETE CURB AND GUTTER, 18-INCH, TYPE D

SLOPE INTERCEPT

R/W

P/L

EXIST R/W

SAWCUT AND MATCH EXISTING

N01°34'19"E

SODDING

N00°32'57"W

CTH A

CTH A ℄

PI STA = 250+58.37

PI EL = 800.37

250+00

250+00

N00°32'57"W

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

REB 1¼"

REB ¾"

REB 1¼"

REB ¾"

REB 1¼"

REB 1¼"

255+00

260+00

18" CMP

18" CP

EXIST R/W

SLOPE INTERCEPT

REMOVE DRIVEWAY

REMOVE CULVERT
STA 246+07
1-18" CSCP

TOWN OF GRAND CHUTE

CHARLES E. & SANDRA KOHL

END PROJECT
STA 252+49
Y = 578605.0303
X = 817353.7723

5

793.83 794.09 794.35 794.61 794.87

SPECIAL DITCH,LT

VPI STA = 250+45.00

VPI EL = 800.08

EXISTING PROFILE

PROPOSED SB PROFILE

0.34%

0.38%

PROPOSED NB PROFILE

0.52%

SPECIAL DITCH,LT

NB ℄

SB ℄

| | | |

USH 41

BEGIN CONSTRUCTION
STA 12+82
Y = 576144.9791
X = 817762.9767

CURVE DATA #3
PI STA 14+29.96
Y = 576141.7657
X = 817905.8264
Δ = 90°06'21"
D = 130°13'04"
T = 44.08'
R = 44.00'
L = 69.20'
C = 62.28'
PC = STA 13+85.88
Y = 576142.7571
X = 817861.7562
PT = STA 14+55.07
Y = 576185.8376
X = 817906.7363

PT = 14+55.07
S88°42'40.98"E
PC = 13+85.88
TI
P/L
CURVE #3
SLOPE INTERCEPT
15+00
N01°10'58.22"E
20+00
SLOPE INTERCEPT
WEST ACCESS ROAD TO BE CONTRUCTED BY OTHERS
MUD CREEK TRIBUTARY
T/d
EXIST R/W
EXIST R/W
END CONSTRUCTION
STA 20+00
Y = 576730.6486
X = 817917.9853
WEST ACCESS ROAD
WORK BY OTHERS,
TO BE CONSTRUCTED 2004
GRAND CHUTE BLVD
BEB 3/4"
BEB 3/4"
5

PROPOSED PROFILE
0.46%
0.50%
-0.30%
0.50%
0.00%±
MATCH WEST ACCESS ROAD CENTERLINE

VPI STA = 12+82.00
VPI EL = 794.51
VPI STA = 14+00.00
VPI EL = 795.05
VPC STA = 15+00.00
VPC EL = 795.55
BP STA = 15+55.56
BP EL = 795.69
VPT STA = 16+00.00
VPT EL = 795.60
VPI STA = 15+50.00
VPI EL = 795.00
VPC STA = 17+00.00
VPC EL = 795.20
LP STA = 17+44.44
LP EL = 795.11
VPT STA = 18+00.00
VPT EL = 795.25
VPI STA = 17+50.00
VPI EL = 795.00
VPI STA = 19+50.00
VPI EL = 796.00
VPI STA = 20+00.00
VPI EL = 796.00

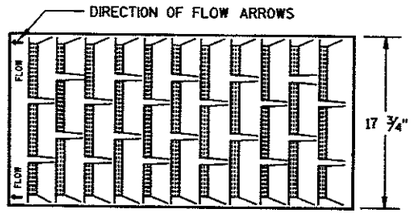
	12+00	13+00	14+00	15+00	16+00	17+00	18+00	19+00	20+00	21+00	22+00	23+00	24+00	25+00	26+00	27+00
	794.8	794.0	794.1	794.1	794.1	794.3	794.4	794.2	793.9	793.6	793.1	792.4	791.7	791.3	790.7	790.4
		794.75	794.90	795.05	795.30	795.55	795.69	795.60	795.40	795.20	795.11	795.25	795.50	795.75	796.00	

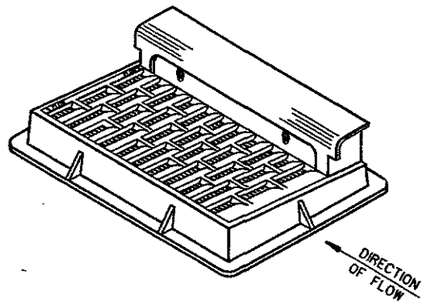
810	805	800	795	790	785	780	775	770

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | PLAN AND PROFILE: ANDY SCHUH'S DRIVEWAY | SHEET NO: 102 | E

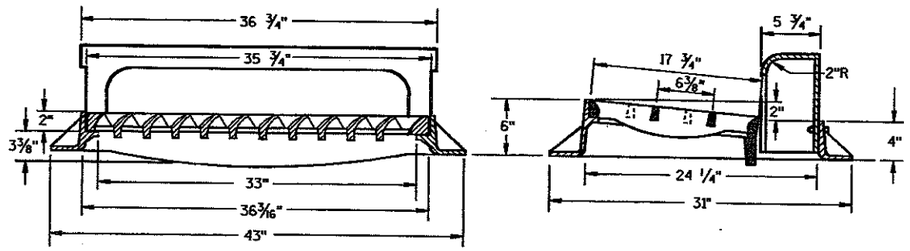
FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582PPA.dgn PLOT DATE : 03/26/2004 09:07:28 AM PLOT BY : hawleym PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 40a

NOTE:
GRATE IS REVERSIBLE.





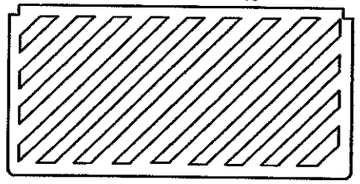
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



TYPE "H"

(APPROXIMATE WEIGHT 422 LBS.)
FRAME..... 175 LBS.
GRATE..... 138 LBS.
CURB BOX..... 109 LBS.

1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 172 LBS.)
GRATE..... 172 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

S.D.D. 8 A 5-16a

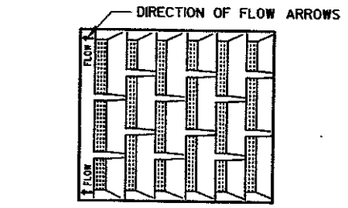
GENERAL NOTES

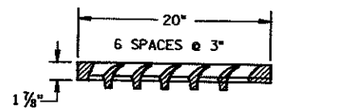
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

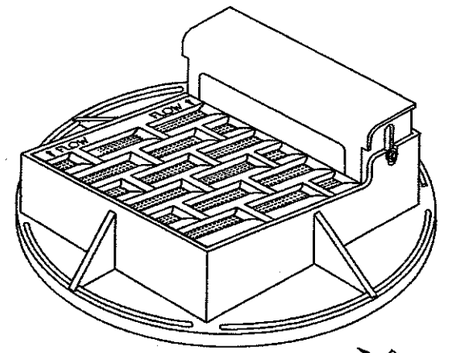
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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.

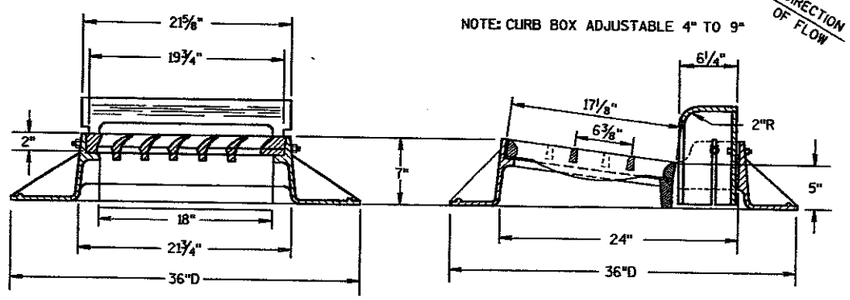






NOTE: CURB BOX ADJUSTABLE 4" TO 9"

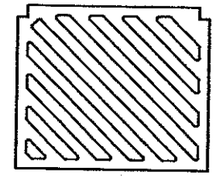
NOTE:
GRATE IS REVERSIBLE.



TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)
FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

1" DIAGONAL BARS WITH 1 1/2" OPENINGS



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

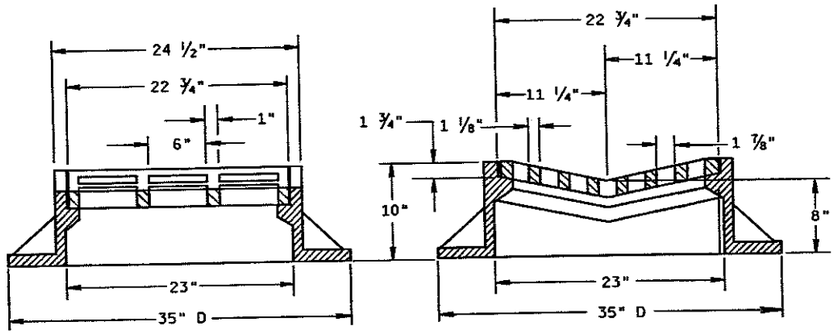
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

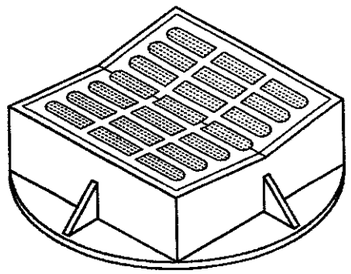
INLET COVERS
TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/04/99
DATE
Tony R. Thurbase
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 A 5-16a

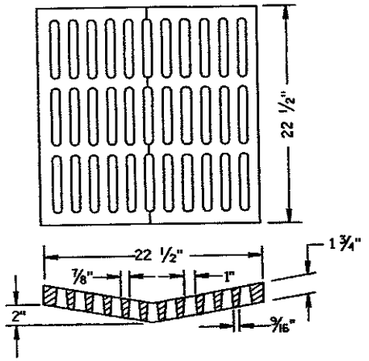




TYPE "B"

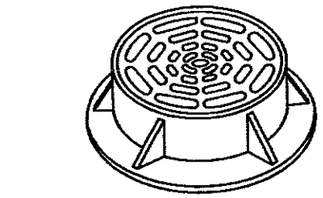
(APPROXIMATE WEIGHT 395 LBS.)

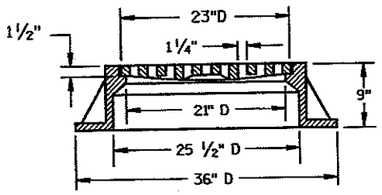
FRAME..... 285 LBS.
GRATE..... 110 LBS.



ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE.....125 LBS.
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE





TYPE "C"

(APPROXIMATE WEIGHT 340 LBS.)

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

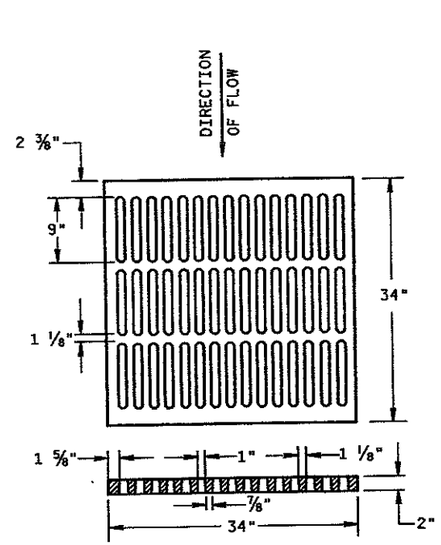
GENERAL NOTES

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.

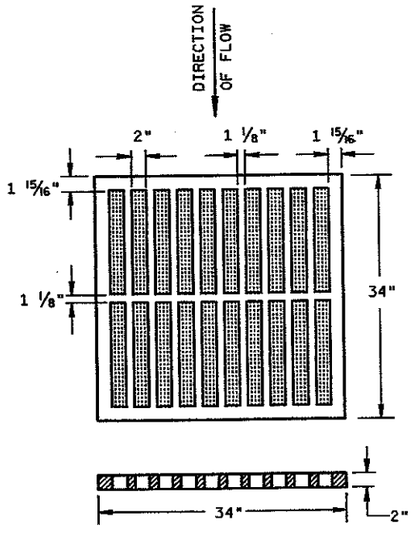
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

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



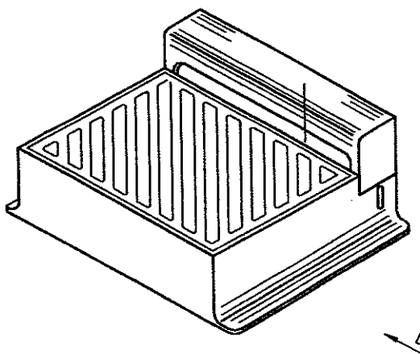
ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE.....365 LBS.
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

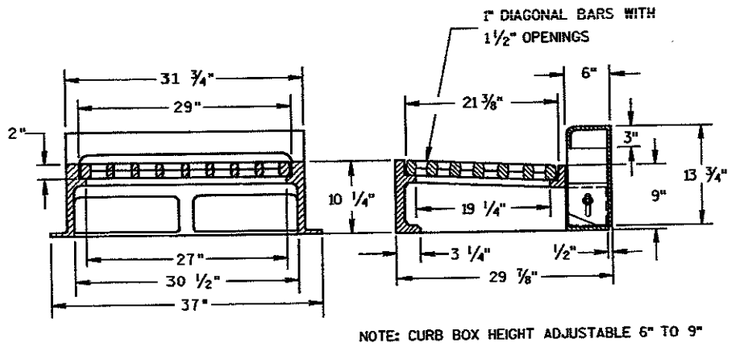


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE.....270 LBS.
USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 670 LBS.)

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

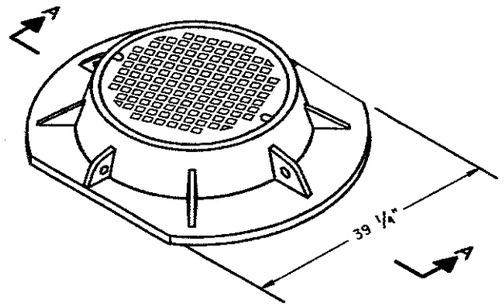
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

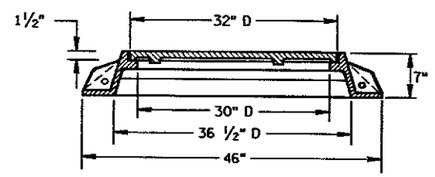
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/04/99 DATE
Roy D. Thompson
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 A 5-16b

S.D.D. 8 A 5-16b



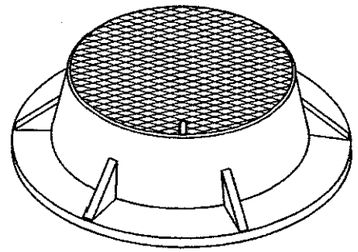


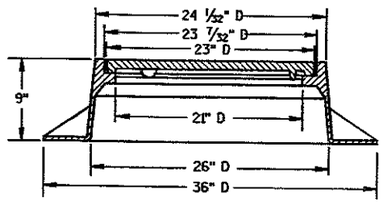
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 415 LBS.)

FRAME.....210 LBS.
LID.....205 LBS.

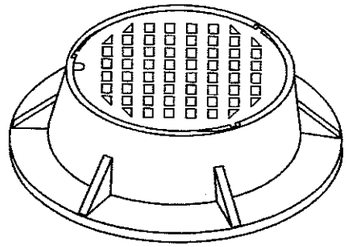


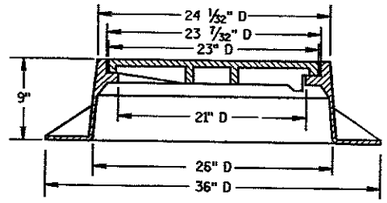


TYPE "J"

(APPROXIMATE WEIGHT 250 LBS.)

FRAME.....135 LBS.
LID.....115 LBS.





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 245 LBS.)

FRAME.....145 LBS.
LID.....100 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

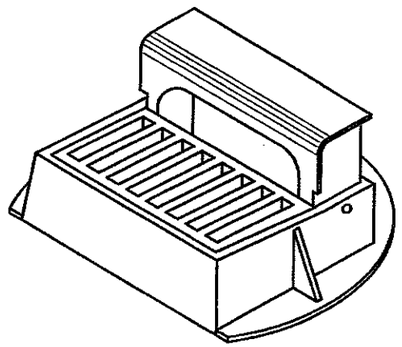
GENERAL NOTES

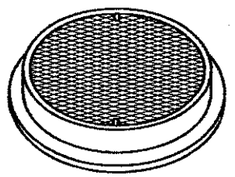
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

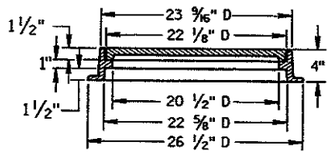
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

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



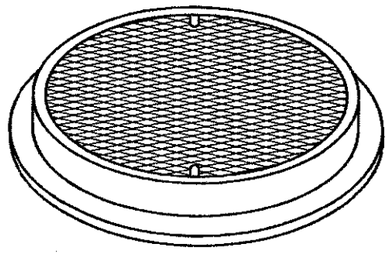


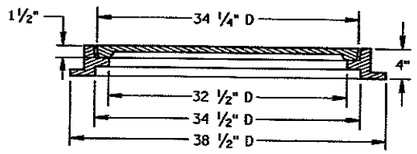


TYPE "L"

(APPROXIMATE WEIGHT 145 LBS.)

FRAME.....75*
LID.....70*



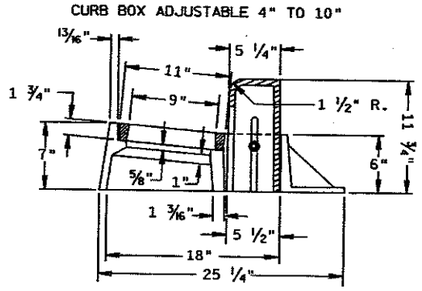


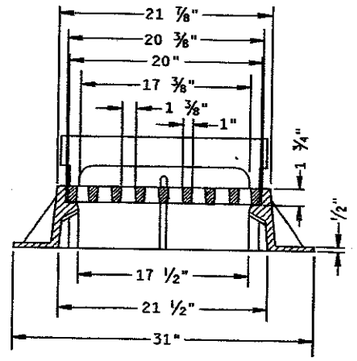
TYPE "M"

(APPROXIMATE WEIGHT 385 LBS.)

FRAME.....125*
LID.....260*

CURB BOX ADJUSTABLE 4" TO 10"





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 340 LBS.)

FRAME.....198 LBS.
GRATE.....50 LBS.
CURB BOX.....92 LBS.

INLET COVER, TYPE Z
MANHOLE COVERS, TYPE
K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

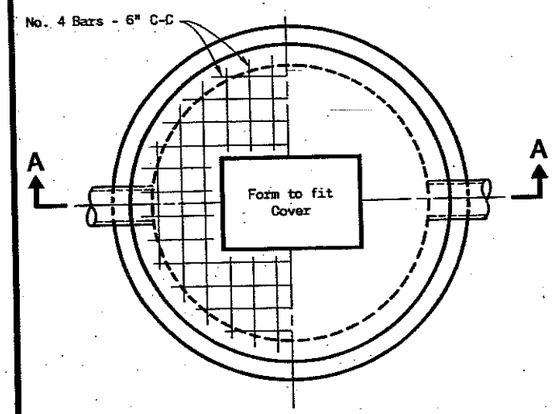
APPROVED 10/04/99
DATE

Roy L. Thuemmler
CHIEF ROADWAY DEVELOPMENT ENGINEER

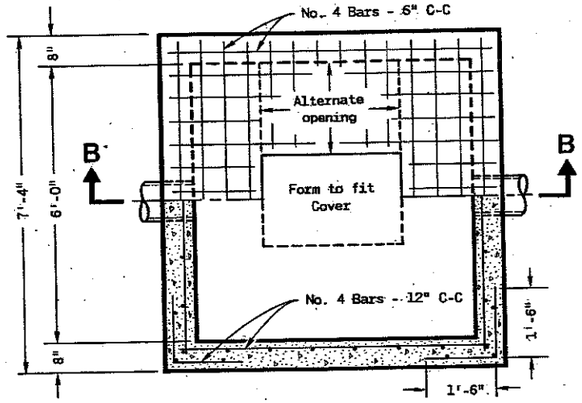
FHWA

S.D.D. 8 A 5-16d

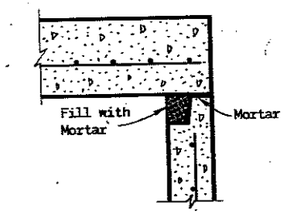
S.D.D. 8 A 5-16d



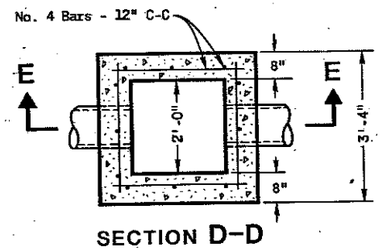
PLAN VIEW



HALF SECTION C-C



DETAIL "A"



SECTION D-D

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

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

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

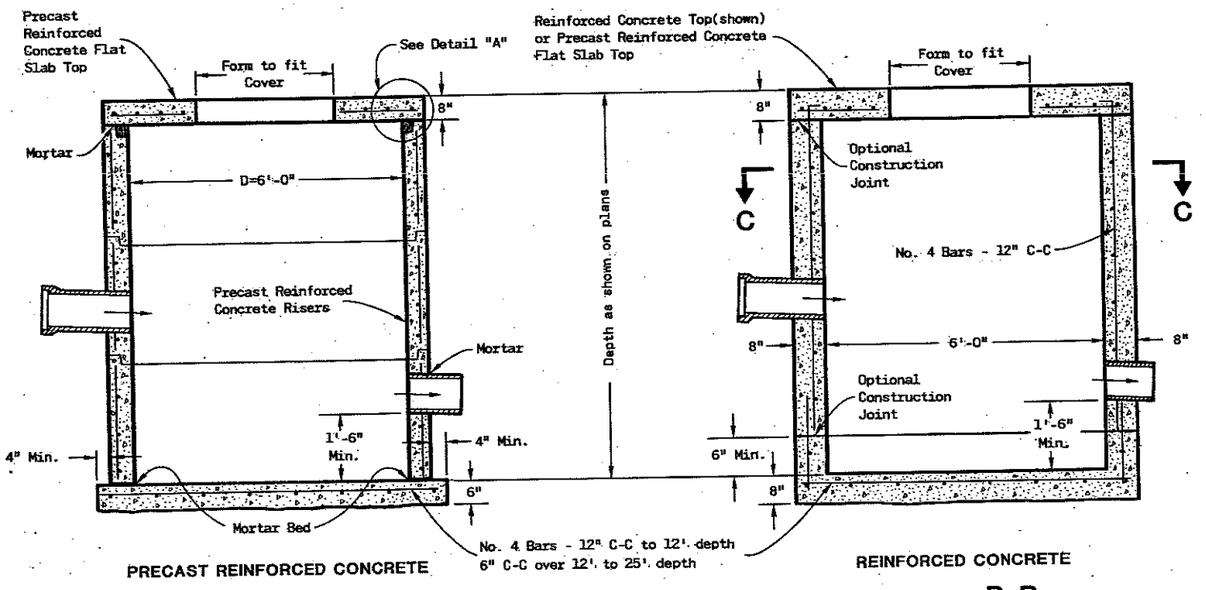
Steps meeting the following requirements shall be installed in all structures over 5 feet in depth: 16 inch C-C maximum spacing; project a minimum clear distance of 4 inches from the wall at the point of embedment; minimum length of 10 inches; minimum wall embedment of 3 inches; and be capable of supporting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

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

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

Precast Reinforced Concrete Risers shall be placed with tongue down.

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



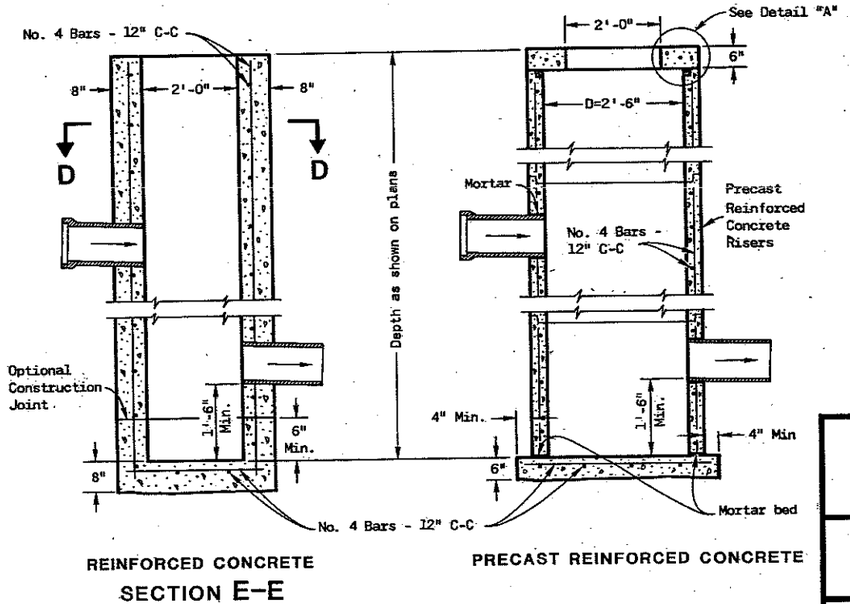
PRECAST REINFORCED CONCRETE

SECTION A-A

REINFORCED CONCRETE

SECTION B-B

CATCH BASINS TYPE 5



REINFORCED CONCRETE

SECTION E-E

PRECAST REINFORCED CONCRETE

CATCH BASINS TYPE 3

CATCH BASINS TYPE 3 & 5

State of Wisconsin
Department of Transportation

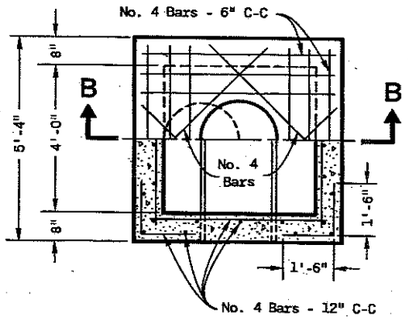
APPROVED 4-13-82
DATE

CHIEF DESIGN ENGINEER

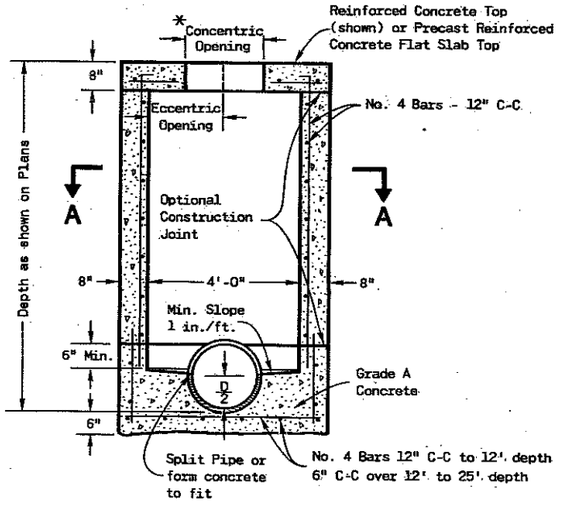
FHWA

S.D.D. 8 A 7-3

S.D.D. 8 A 7-3

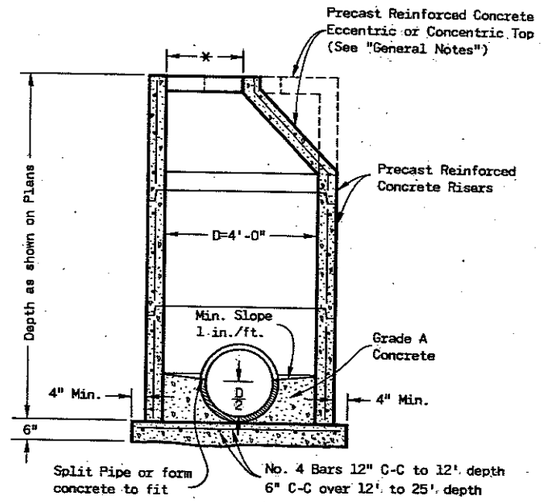


HALF SECTION A-A

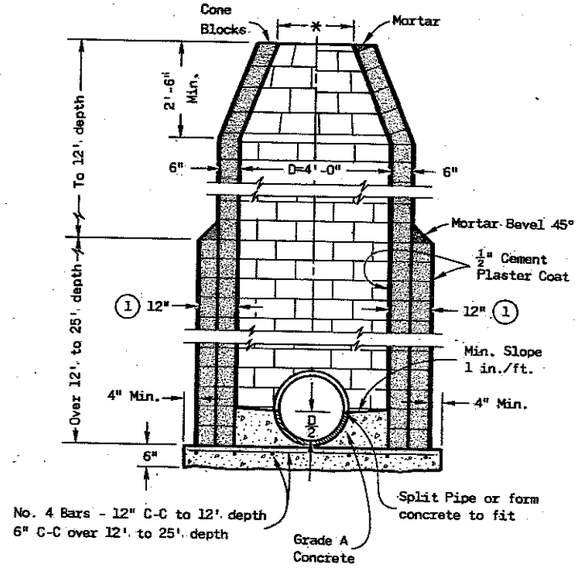


SECTION B-B

REINFORCED CONCRETE



PRECAST REINFORCED CONCRETE



CONCRETE BLOCK

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

(1) 2 courses 6" block.

MANHOLES TYPE 1

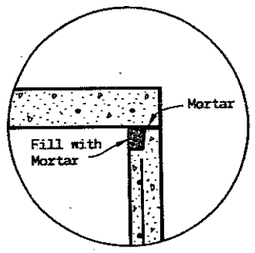
State of Wisconsin
Department of Transportation

APPROVED 4-13-82
DATE
CHIEF DESIGN ENGINEER
FHWA

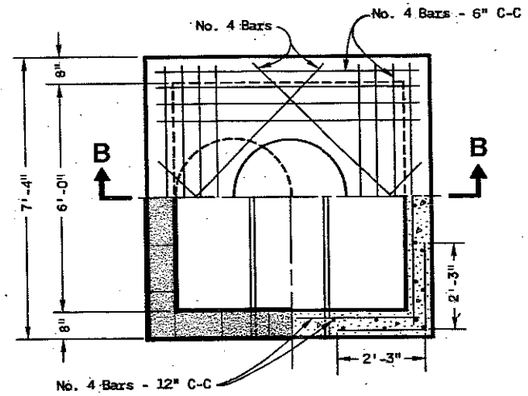
S.D.D. 8 B 6-3

MANHOLES TYPE 1

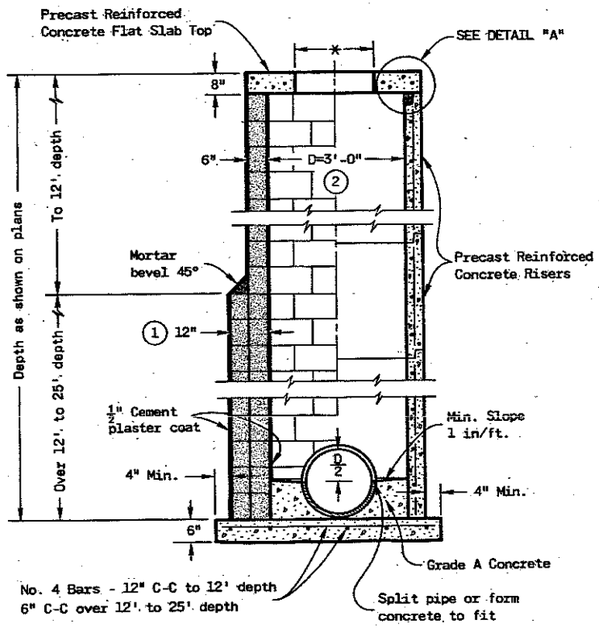
S.D.D. 8 B 6-3



DETAIL "A"

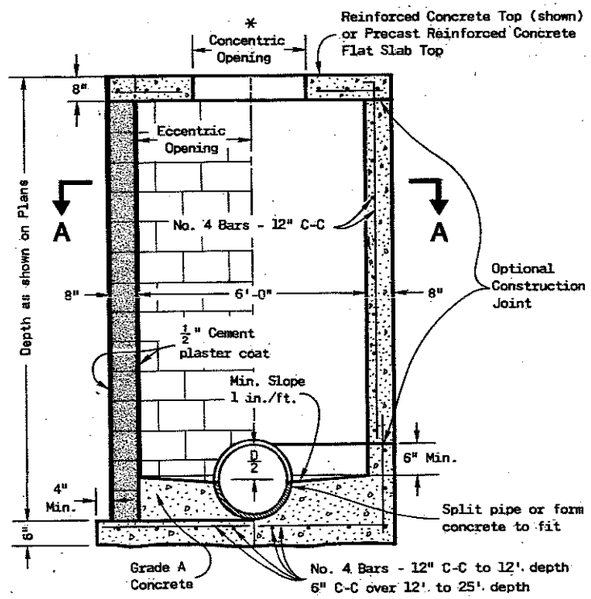


HALF SECTION A–A



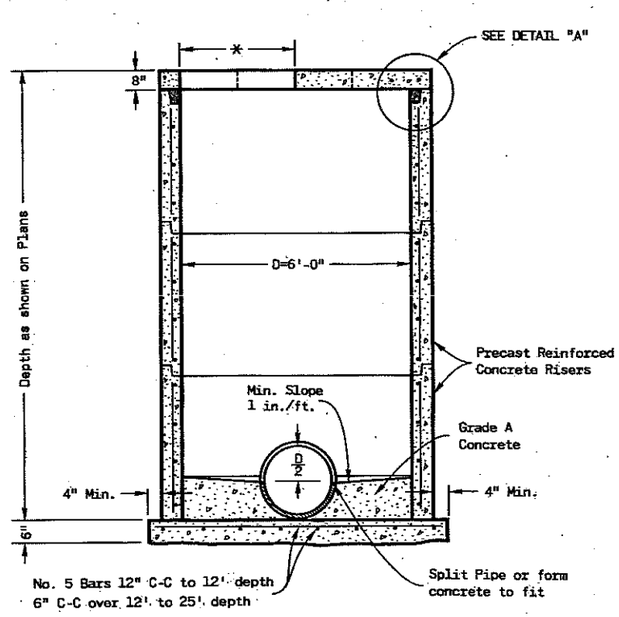
CONCRETE BLOCK ② PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2



SECTION B–B

CONCRETE BLOCK REINFORCED CONCRETE



PRECAST REINFORCED CONCRETE

MANHOLES TYPE 3

GENERAL NOTES

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

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

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

Precast Reinforced Bases shall be placed on a bed of material at least 6" 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.

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

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

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.

All precast inlet units shall conform to the pertinent requirements of AASHTO Designation M 199.

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

(1) 2 courses 6" block.

(2) When connecting pipes are 24" or larger the Precast Manholes may be increased to 42" diameter.

MANHOLES TYPE 2 & 3

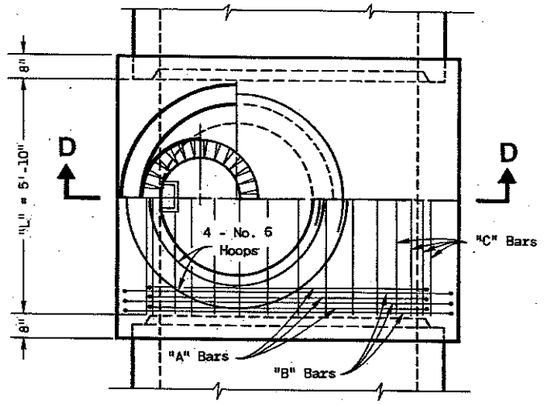
State of Wisconsin
Department of Transportation

APPROVED 4-13-82 DATE
FHWA

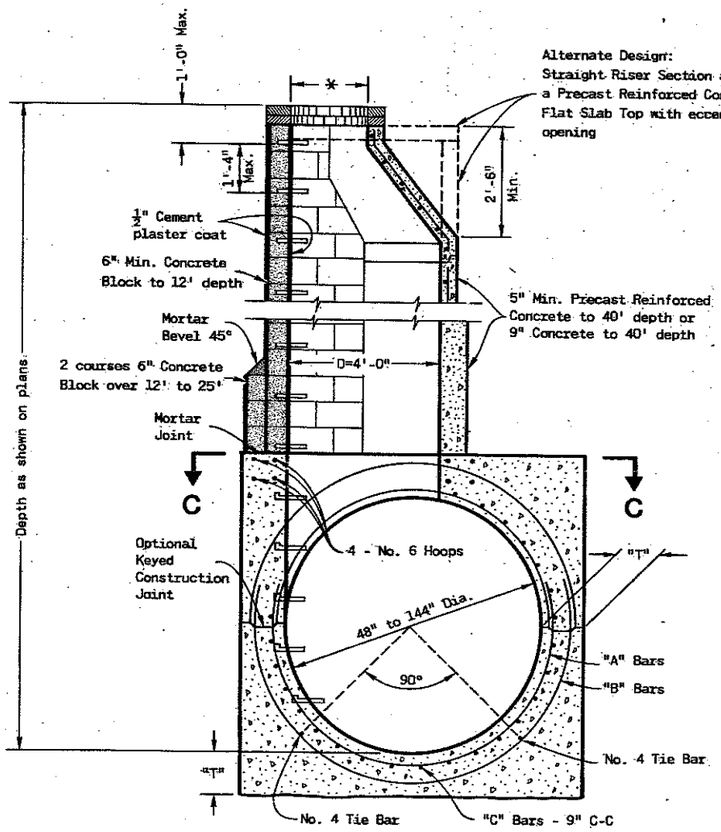
CHIEF DESIGN ENGINEER

S.D.D. 8 B 7-3

S.D.D. 8 B 7-3

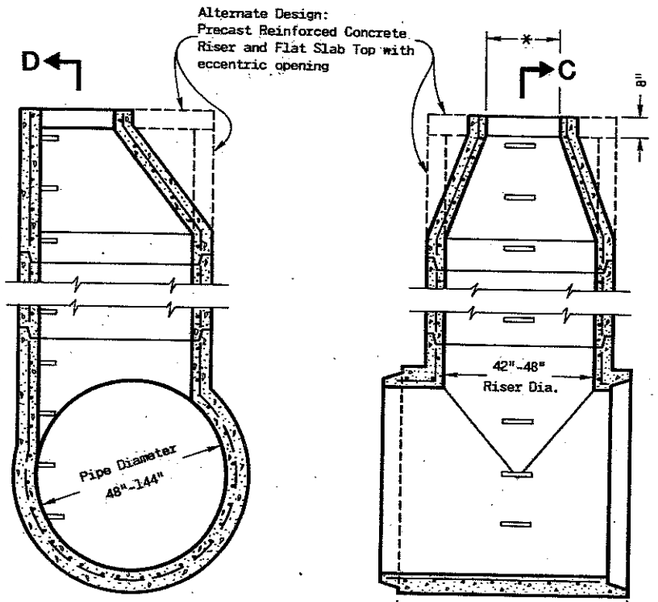


HALF SECTION C–C

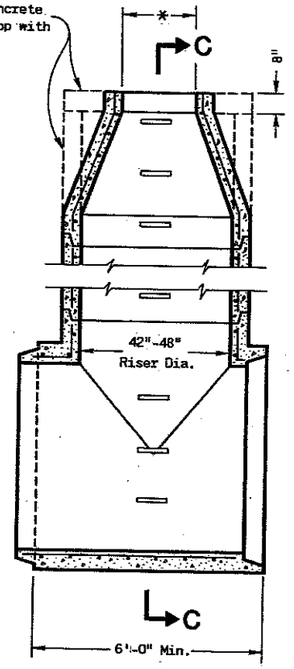


SECTION D–D

MANHOLE TYPE 5



SECTION C–C



SECTION D–D

MANHOLE TYPE 6

PRECAST "T" SECTION

NOTE: All "A","B", and "C" Bar Steel Reinforcing is the same diameter which varies with depth.
No. 5 Bars to 20' depth
No. 6 Bars over 20' to 30' depth
No. 7 Bars over 30' to 40' depth

The "A" and "B" Bars may be placed in one or two segments, and shall lap 24 Bar Diameters.

"C" Bars shall have Standard Hooked Ends.

NOTE: "T" throughout length "L" shall be 13" for Pipe Diameter 48" to 84" and 15" for Pipe Diameter greater than 84".

GENERAL NOTES

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

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

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

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

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

Precast Reinforced Concrete Risers and Eccentric Cones may be used on concrete or concrete block manholes.

Precast sections shall be installed on a bed of mortar.

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

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

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

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

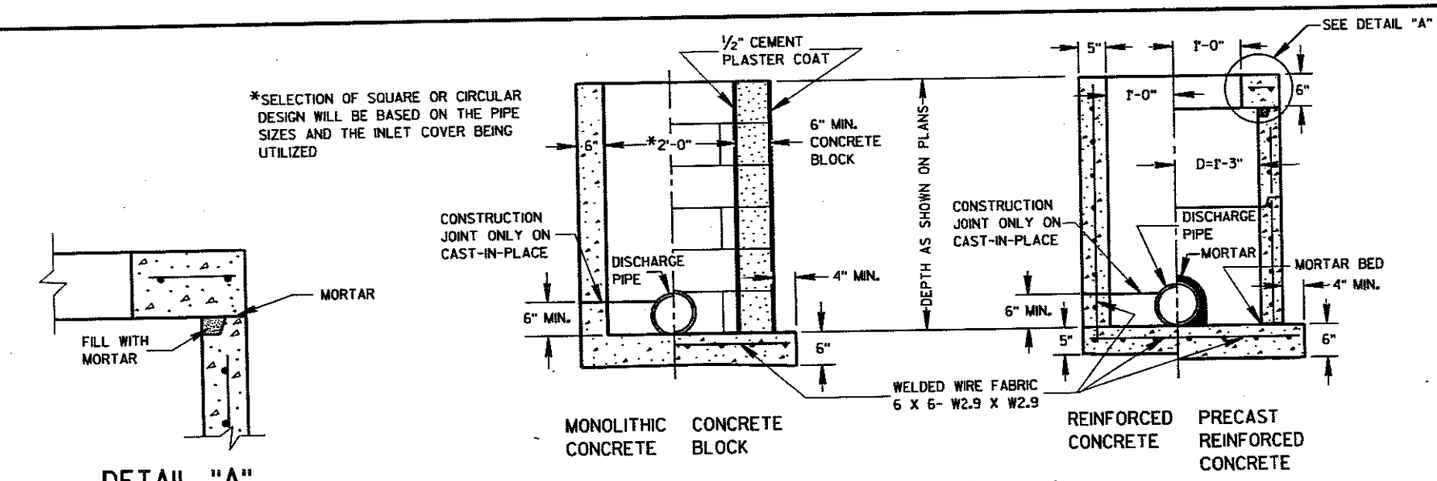
MANHOLES TYPE 5 & 6

State of Wisconsin
Department of Transportation

APPROVED
4-13-82
DATE
CHIEF DESIGN ENGINEER
FHWA

S.D.D. 8 B 8-3

S.D.D. 8 B 8-3



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 OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

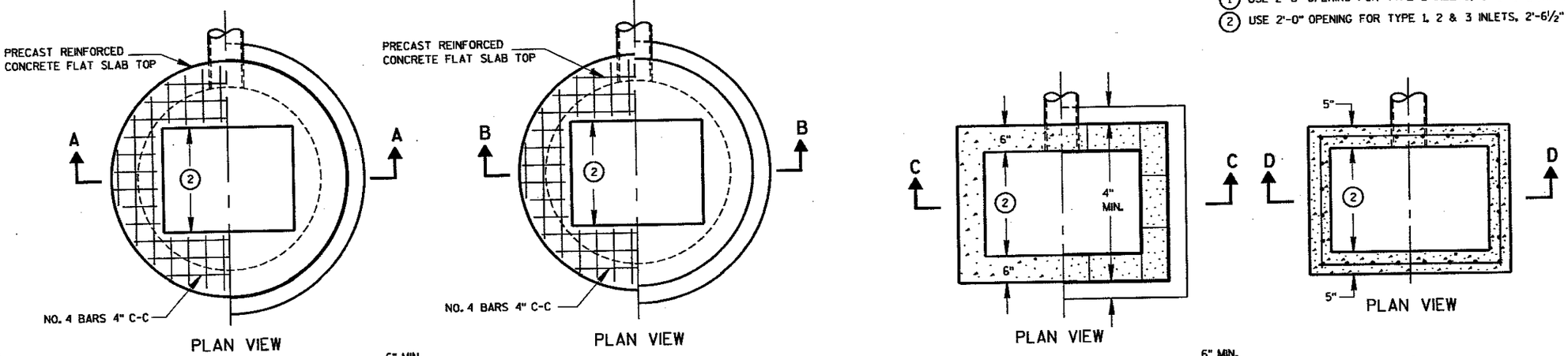
PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

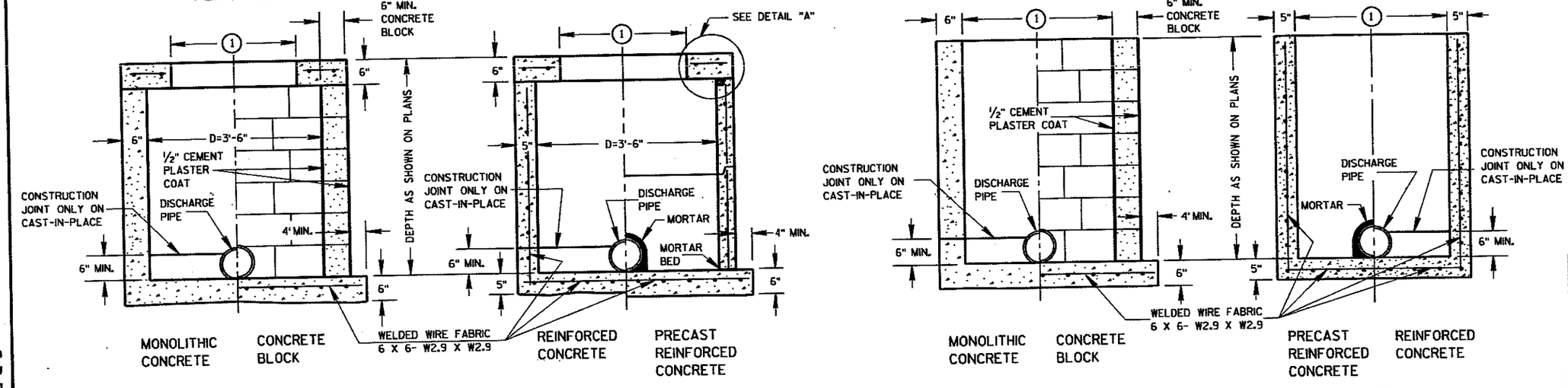
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

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

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





INLETS TYPE 2, 3 & 4

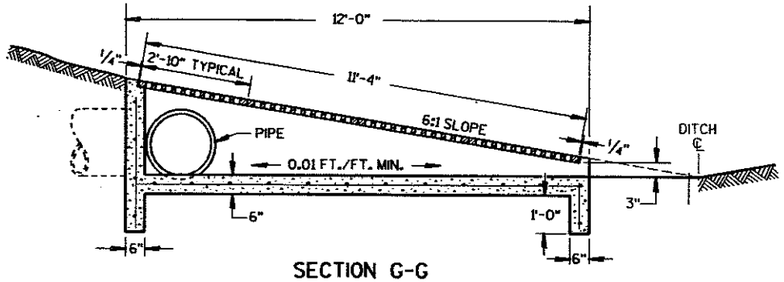
INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

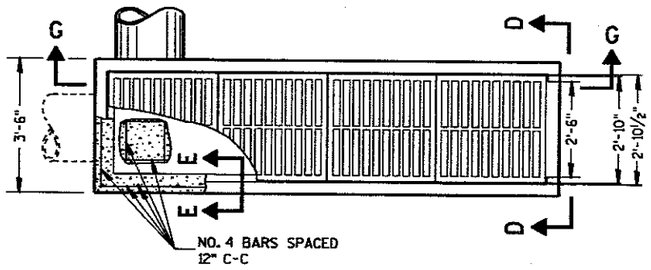
APPROVED 8/24/94 DATE
Roy L. Thinesen
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 C 1-5

S.D.D. 8 C 1-5



SECTION G-G



PLAN 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.

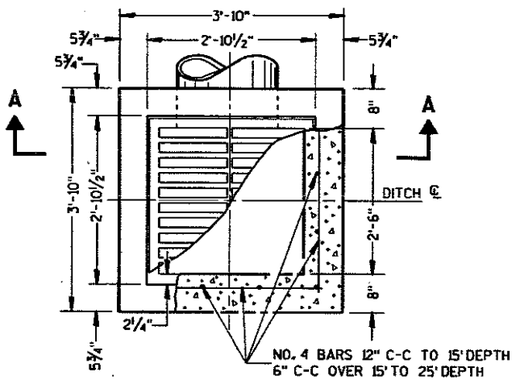
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

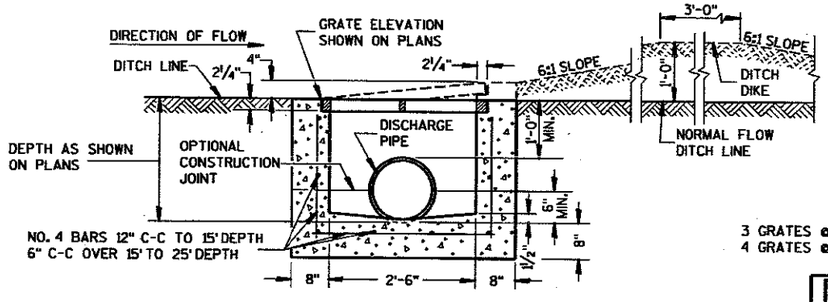
ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

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

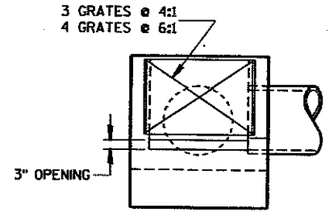
REINFORCED CONCRETE INLET TYPE 11



PLAN VIEW

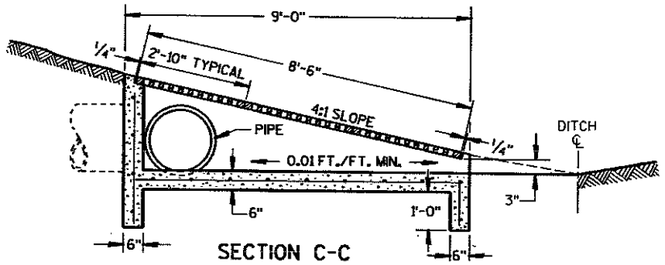


SECTION A-A

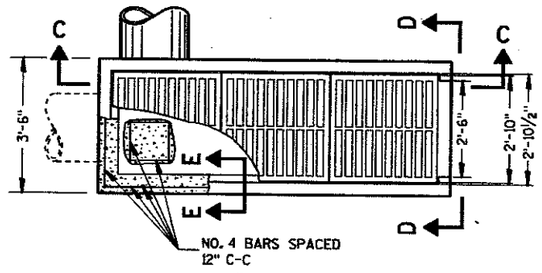


SECTION D-D

REINFORCED CONCRETE INLET TYPE 8

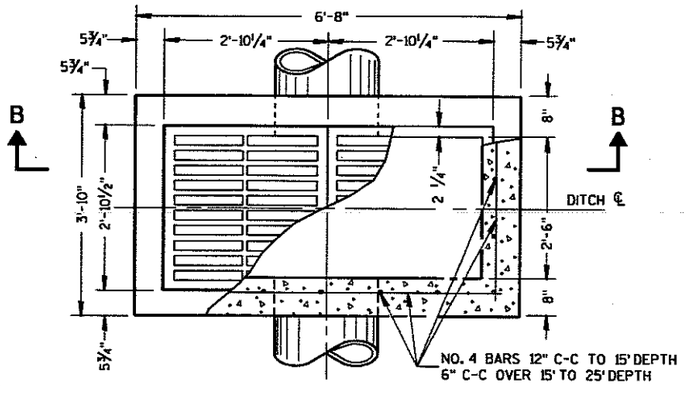


SECTION C-C

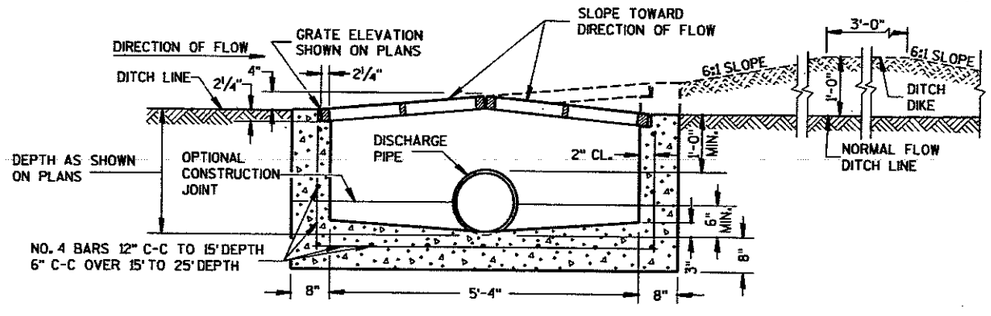


PLAN VIEW

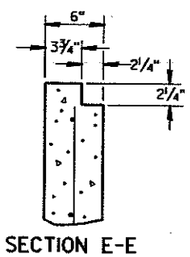
REINFORCED CONCRETE INLET TYPE 10



PLAN VIEW



SECTION B-B



SECTION E-E

REINFORCED CONCRETE INLET TYPE 9

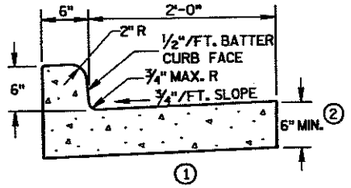
INLETS TYPE 8, 9, 10 AND 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/10/98
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

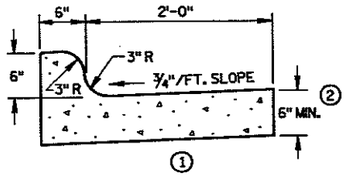
S.D.D. 8 C 5-2

S.D.D. 8 C 5-2



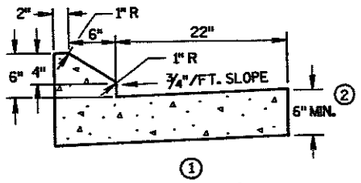
1

TYPES A & D



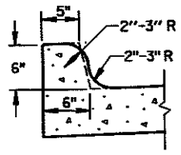
1

TYPES K & L



1

TYPES G & J

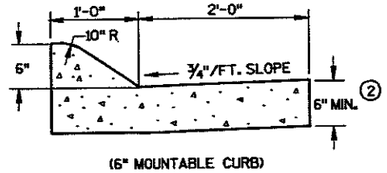


OPTIONAL CURB SHAPE

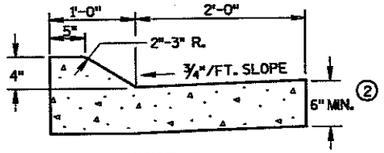
1

FOR TYPES K & L

CONCRETE CURB & GUTTER 30"



(6" MOUNTABLE CURB)



(4" MOUNTABLE CURB)

1

TYPES A & D

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

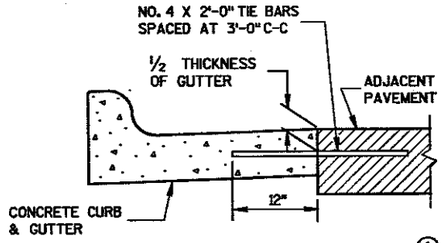
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

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

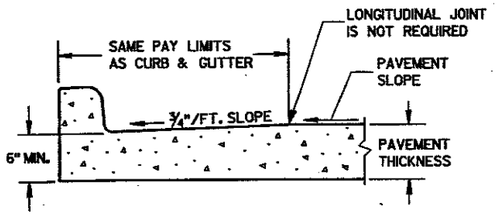
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

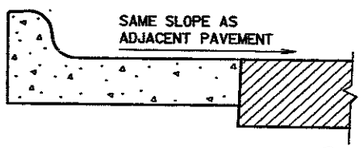


1

TYPICAL TIE BAR LOCATION



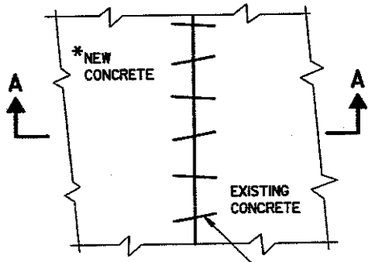
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



3

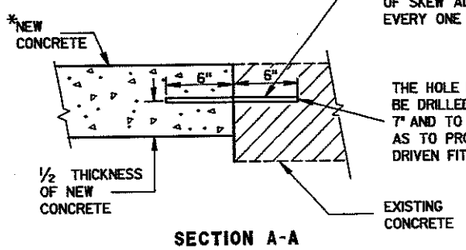
REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



PLAN VIEW

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

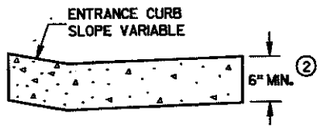


NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

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

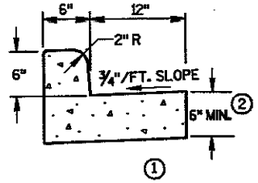
SECTION A-A

PAVEMENT TIES



DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



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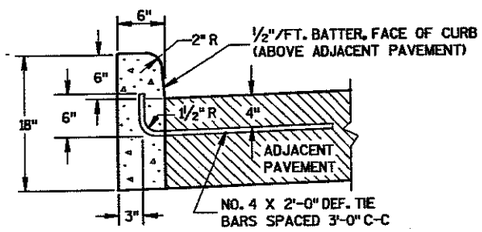
TYPES A & D

CONCRETE CURB & GUTTER 18"



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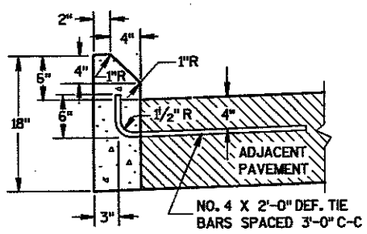
TYPES A & D



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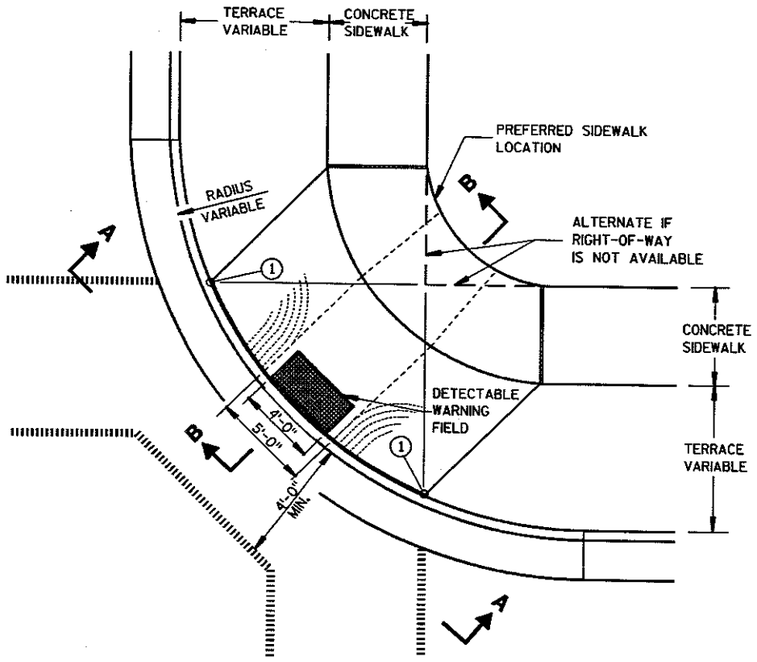
TYPES G & J

CONCRETE CURB

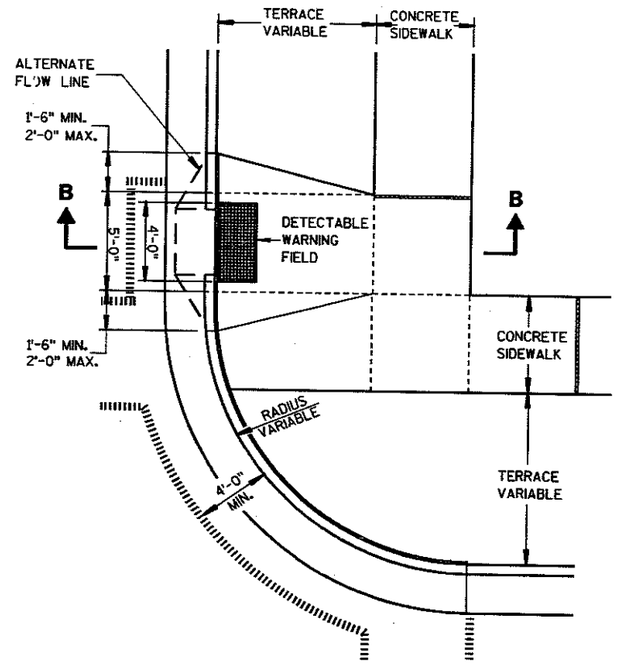
CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 04/16/99 (DATE) Tony L. Ramerson CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA

S.D.D. 8 D 1-13

S.D.D. 8 D 1-13



PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". ALL OTHER CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

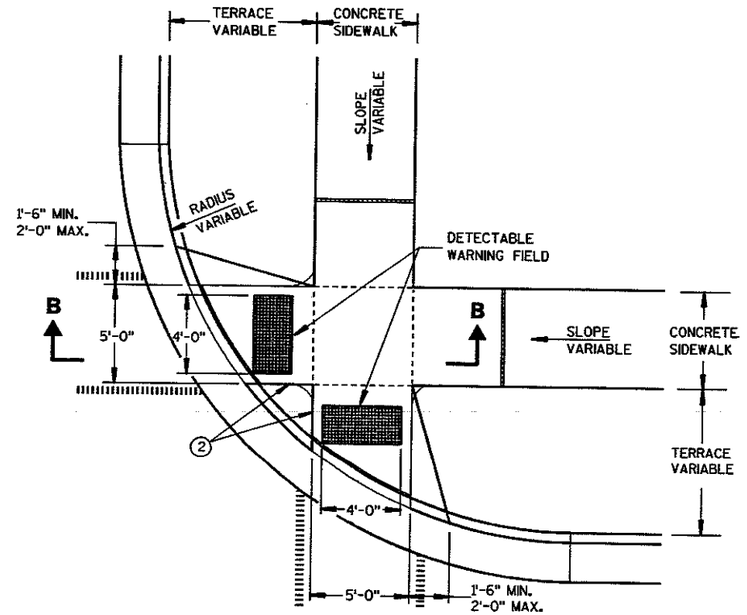
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

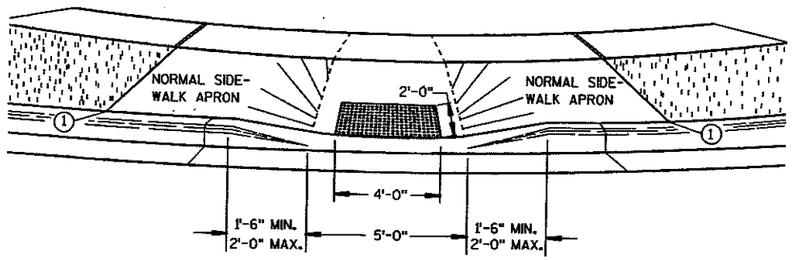
(2) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

LEGEND

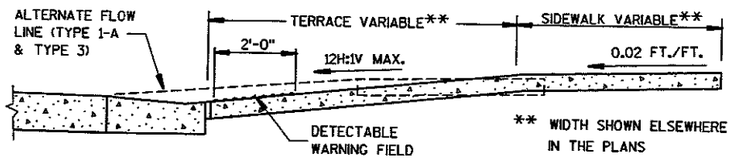
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



VIEW A-A



SECTION B-B

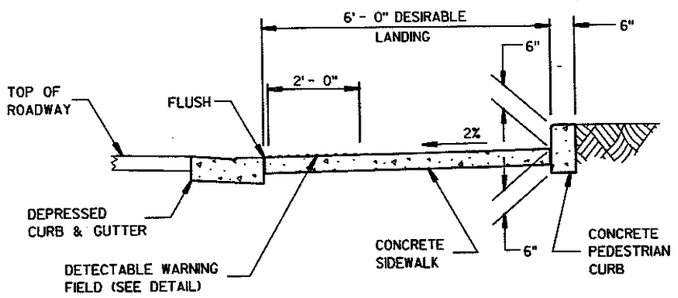
CURB RAMPS
TYPES 1, 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

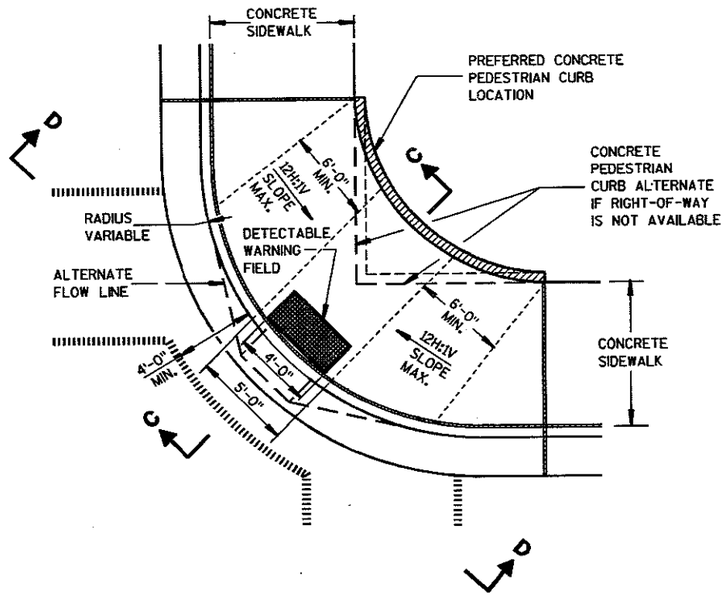
6

S.D.D. 8 D 5-9a

S.D.D. 8 D 5-9a



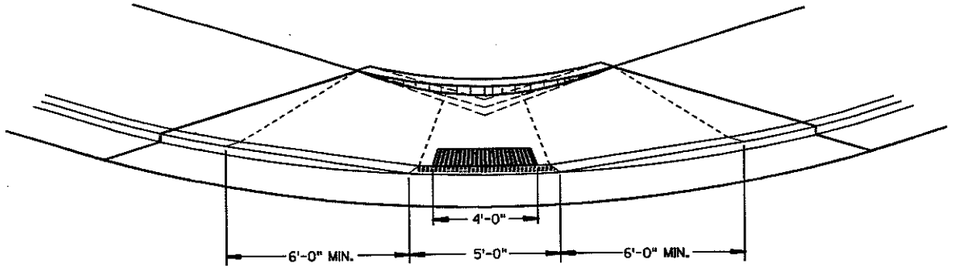
SECTION C-C



PLAN VIEW

TYPE 1-A RAMP

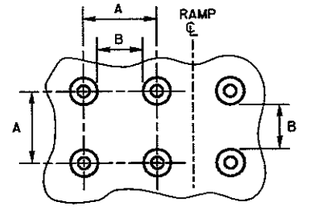
(NO TERRACE)



VIEW D-D

LEGEND

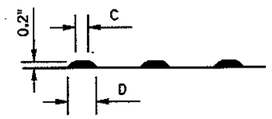
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

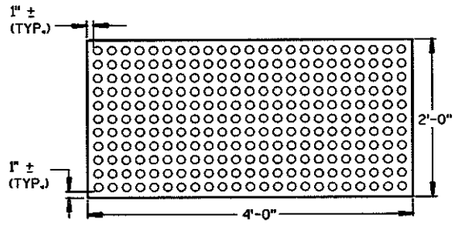
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

CURB RAMPS
TYPE 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

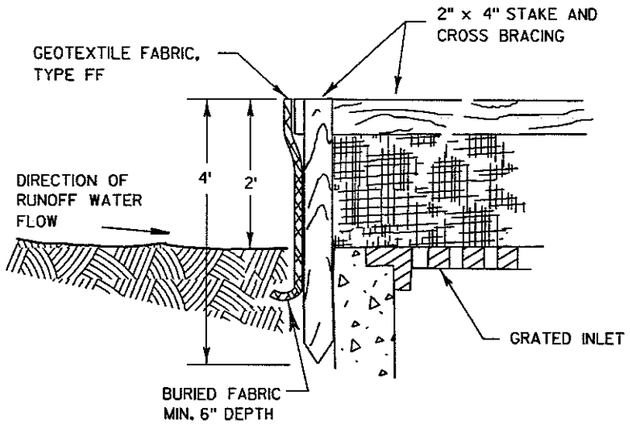
APPROVED 6/25/03
DATE

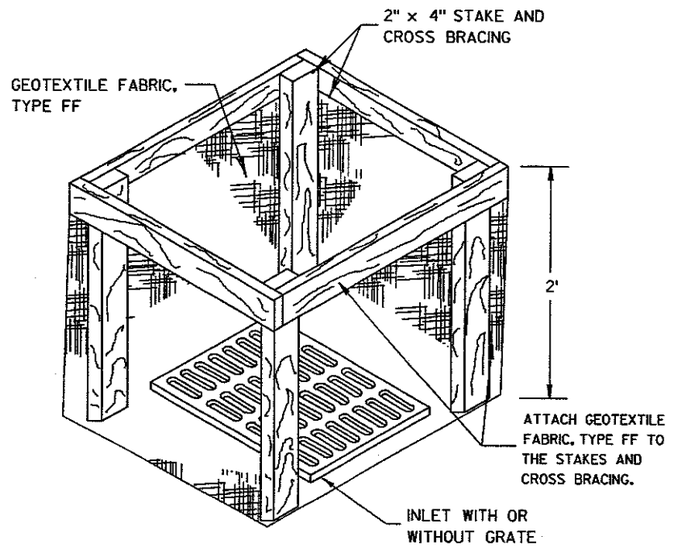
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

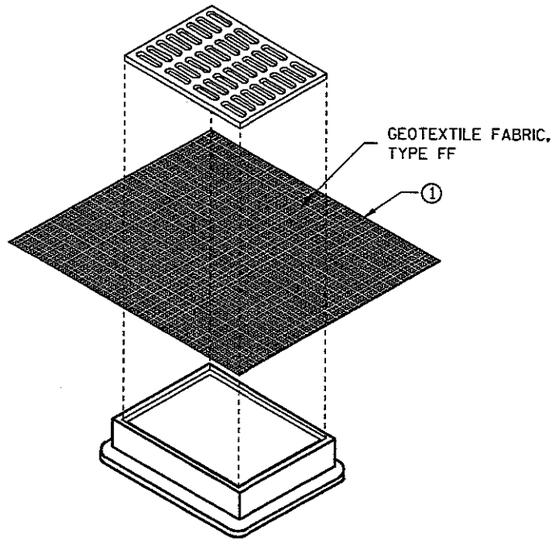
6

S.D.D. 8 D 5-9b



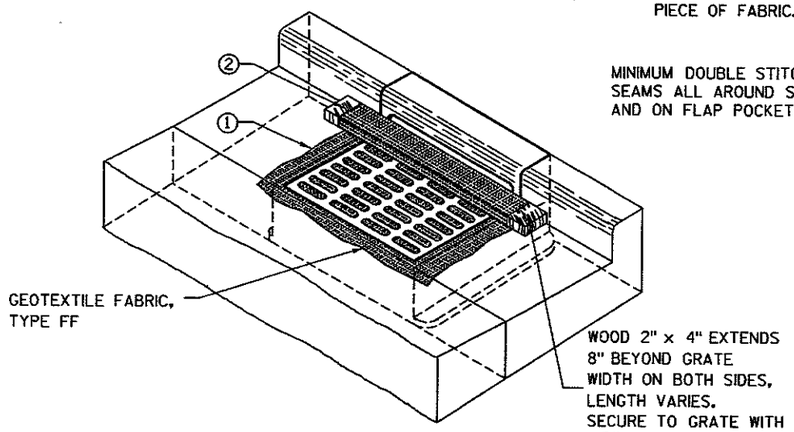


INLET PROTECTION, TYPE A

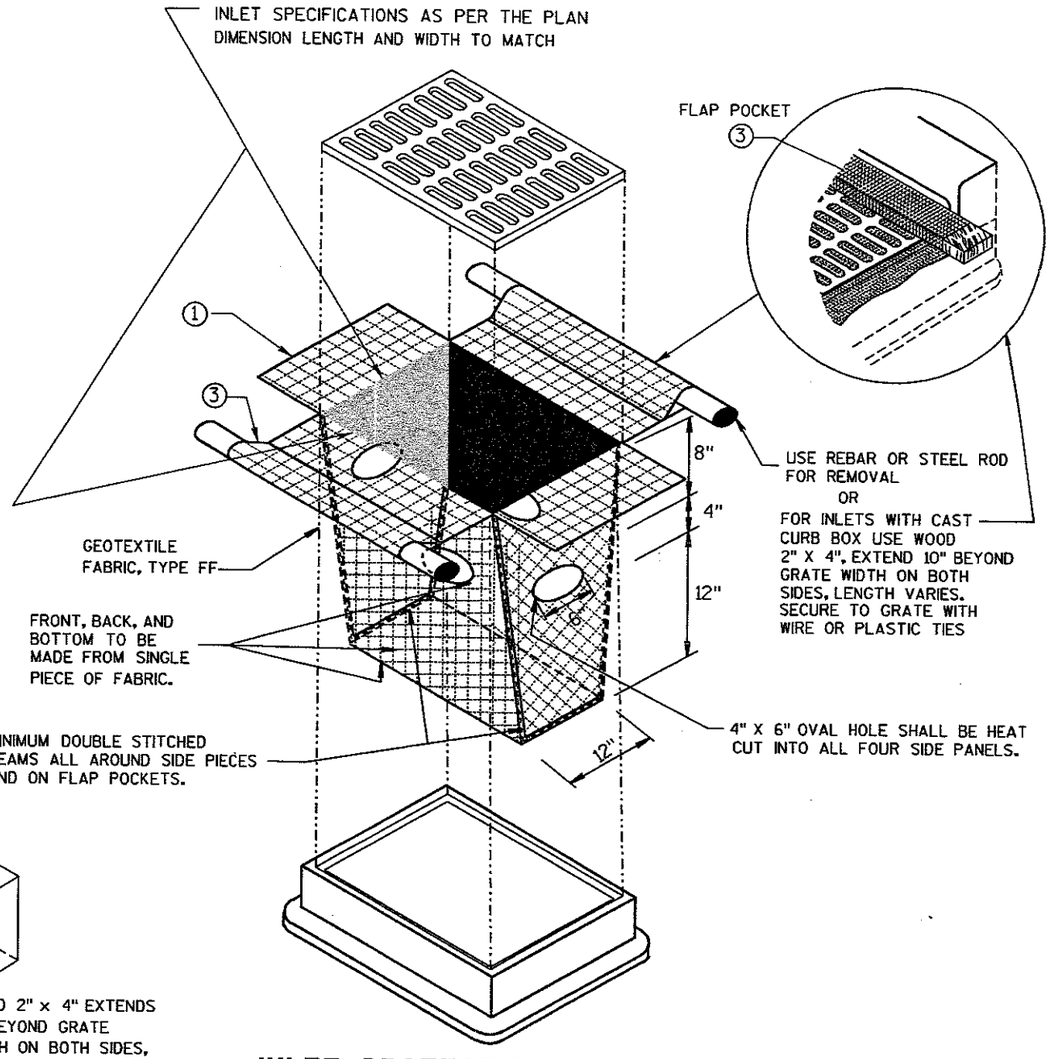


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/16/02
DATE

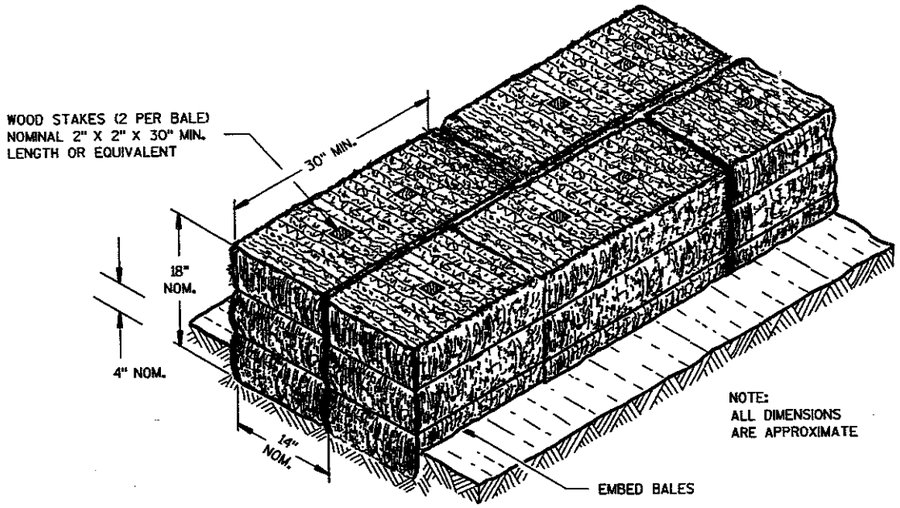
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

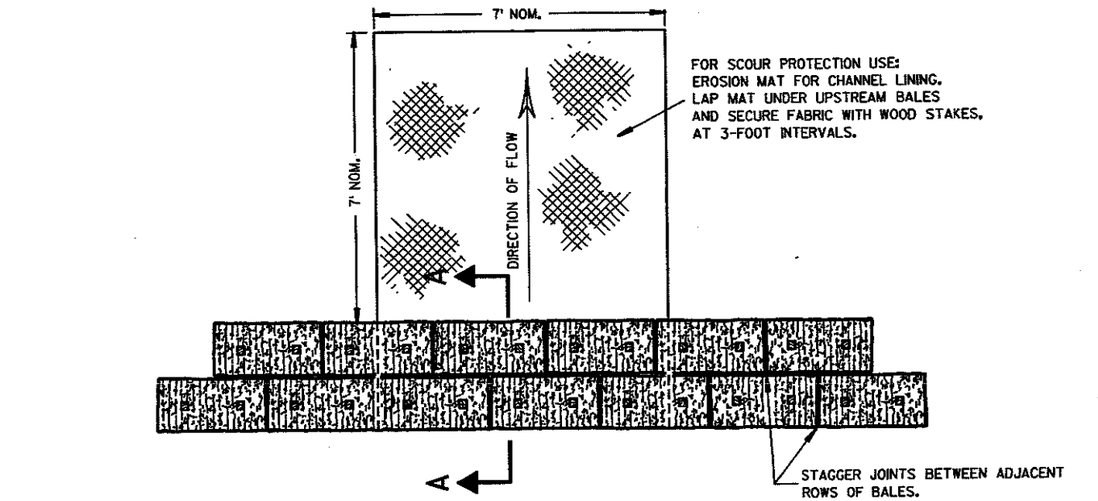
6

S.D.D. 8 E 10-2

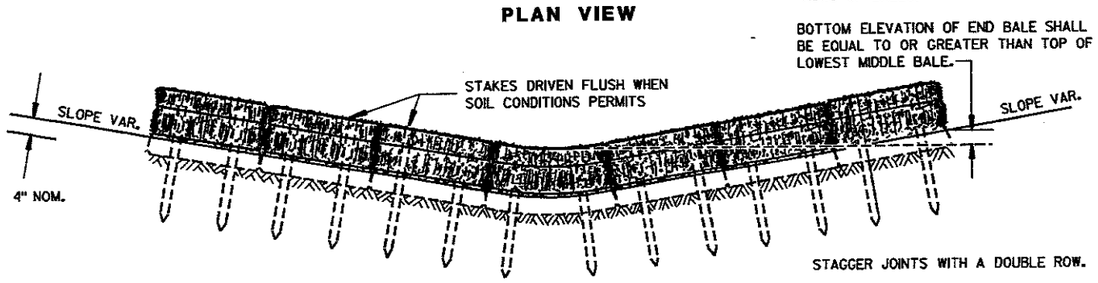
S.D.D. 8 E 10-2



SECTION A-A



PLAN VIEW



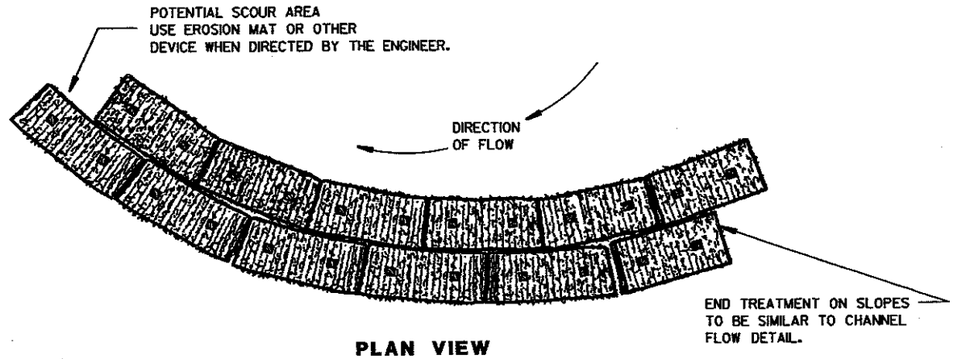
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

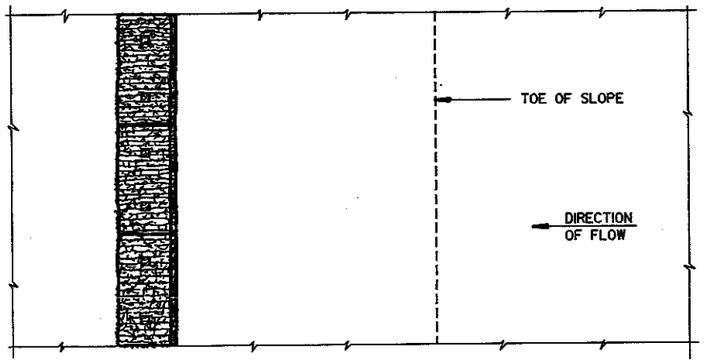
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

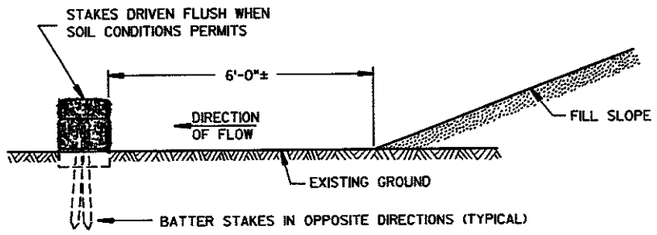


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

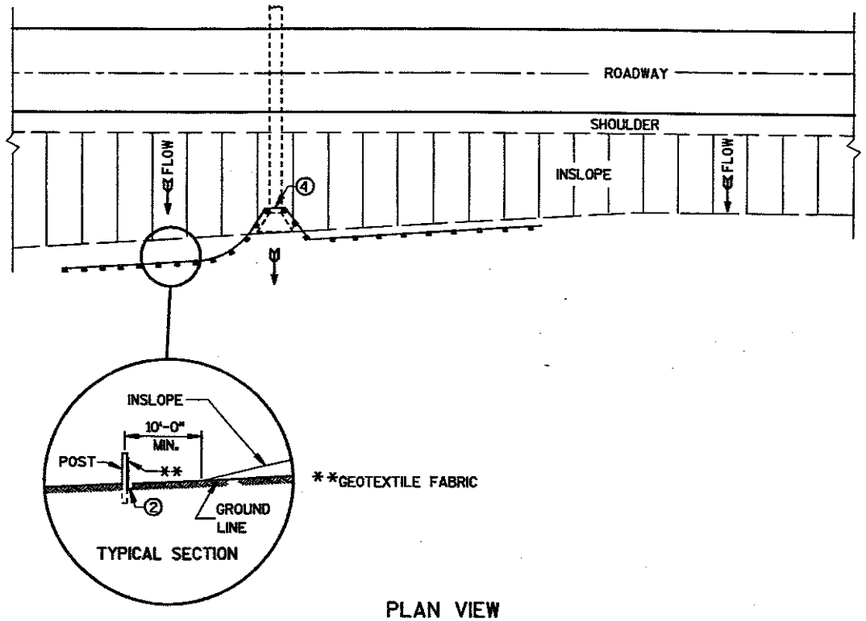
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/4/02
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

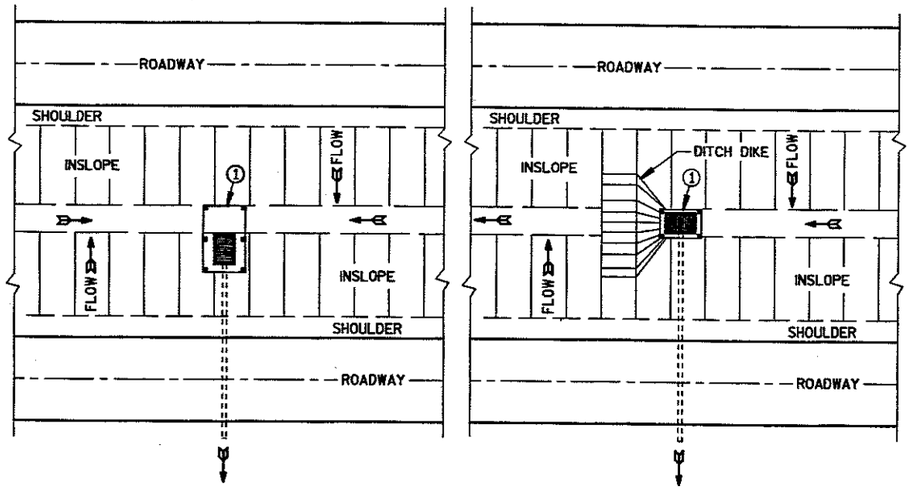
S.D.D. 8 E 8-3

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

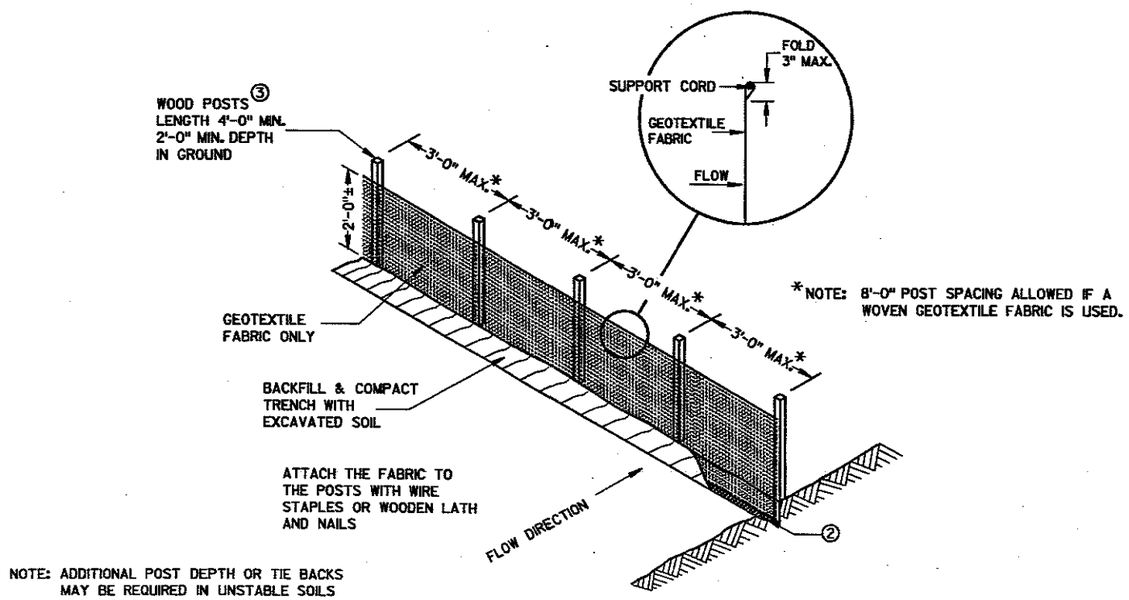
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

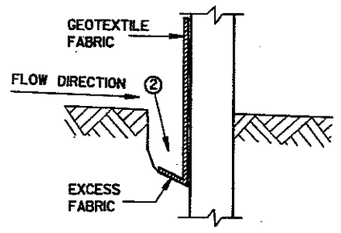
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

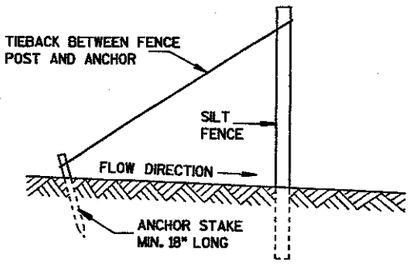


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 03/06/00 DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

S.D.D. 8 E 9-5

S.D.D. 8 E 9-5

METAL APRON ENDWALLS

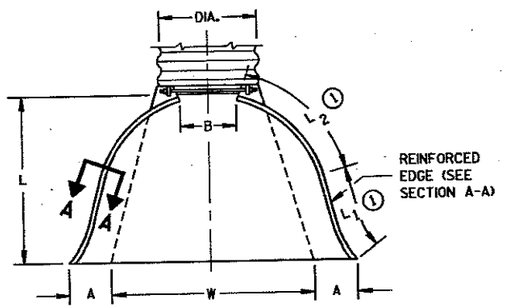
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L_1 ①	L_2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17½	24	2½ to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21¾	30	2½ to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28¼	36	2½ to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29⅝	42	2½ to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37¼	48	2½ to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52¼	60	2½ to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59¾	72	2½ to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75⅝	84	2½ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2¼ to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85½	102	2¼ 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	1½ to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1½ to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1½ to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1½ to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

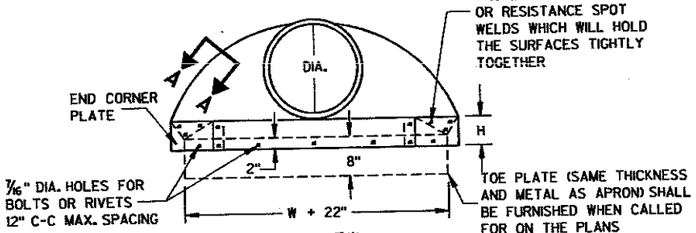
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48⅛	72⅛	24	2	3 to 1
15	2¼	6	27	46	73	30	2¼	3 to 1
18	2½	9	27	46	73	36	2½	3 to 1
21	2¾	9	36	37½	73½	42	2¾	3 to 1
24	3	9½	43½	30	73½	48	3	3 to 1
27	3¼	10½	49½	24	73½	54	3¼	3 to 1
30	3½	12	54	19¾	73½	60	3½	3 to 1
36	4	15	63	34¾	97¾	72	4	3 to 1
42	4½	21	63	35	98	78	4½	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5½	27	65	* 33¼ - ** 35	* 98¼ - ** 100	90	5½	2⅔ to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6½	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5½	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7½	* 24 - ** 36	78	21	99	114	6½	2 to 1
84	8	36	90½	21	111½	120	6½	1½ to 1
90	8½	41	87½	24	111½	132	6½	1½ to 1

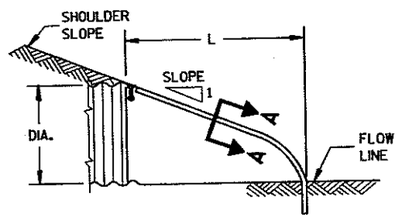
*MINIMUM
**MAXIMUM



PLAN VIEW

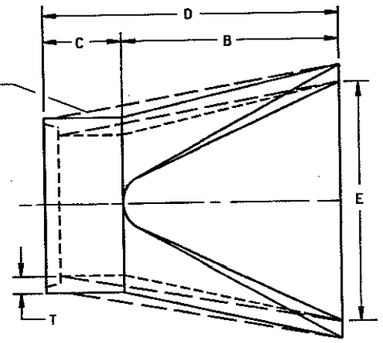


END VIEW

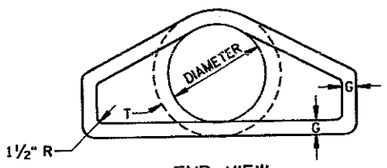


SIDE ELEVATION

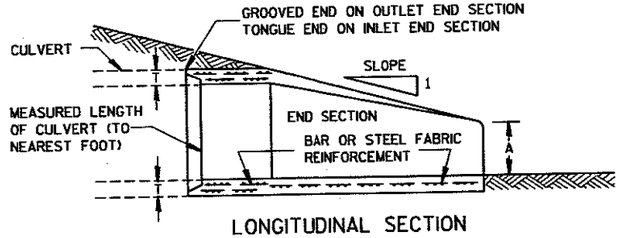
METAL ENDWALLS



PLAN

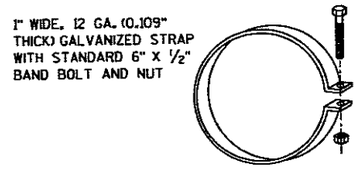


END VIEW



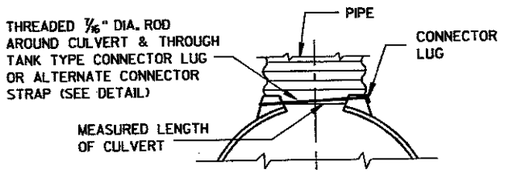
LONGITUDINAL SECTION

CONCRETE ENDWALLS

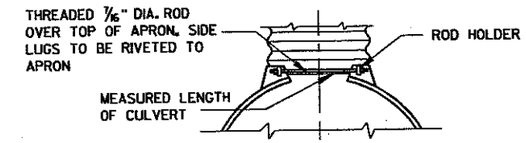


ALTERNATE FOR TYPE 1 CONNECTION

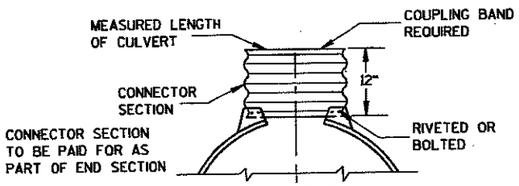
END SECTION CONNECTOR STRAP



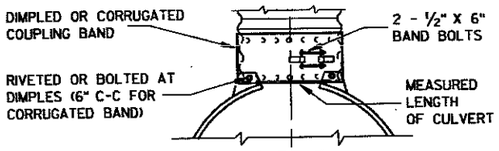
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

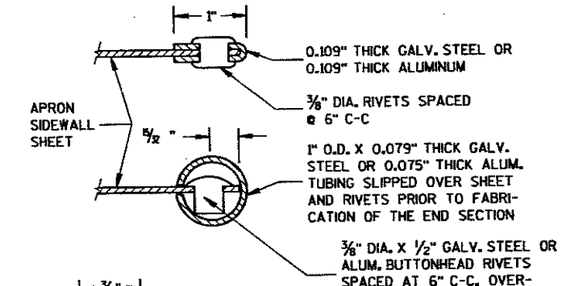
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

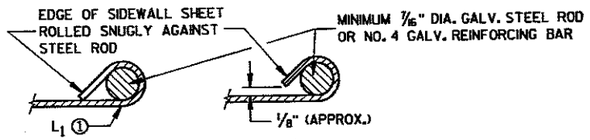
FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

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

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

CONNECTION DETAILS





SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

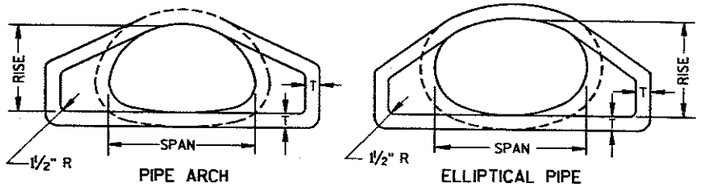
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

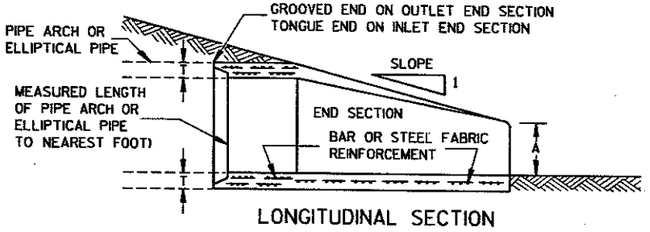
APPROVED
11/30/94
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 F 1-11

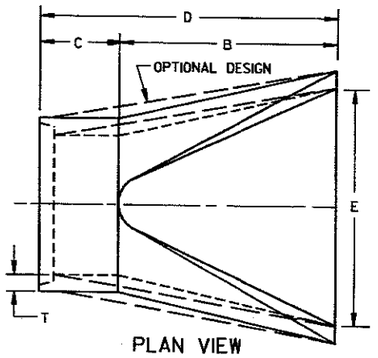
S.D.D. 8 F 1-11



END VIEW

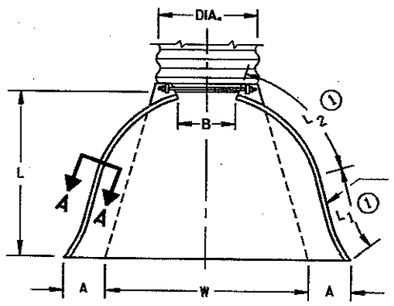


LONGITUDINAL SECTION

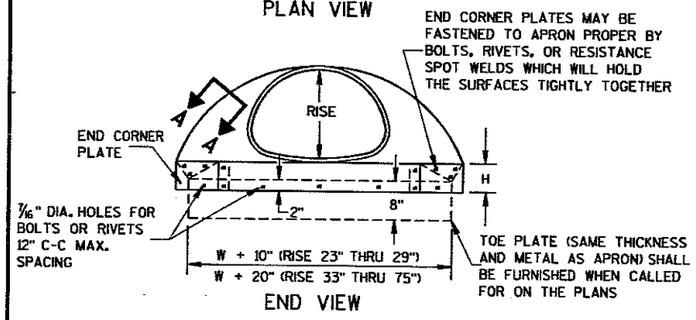


PLAN VIEW

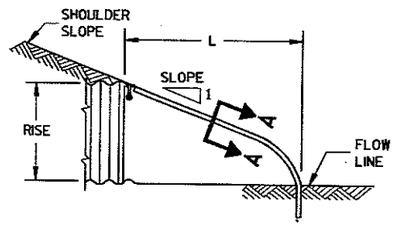
CONCRETE ENDWALLS



PLAN VIEW

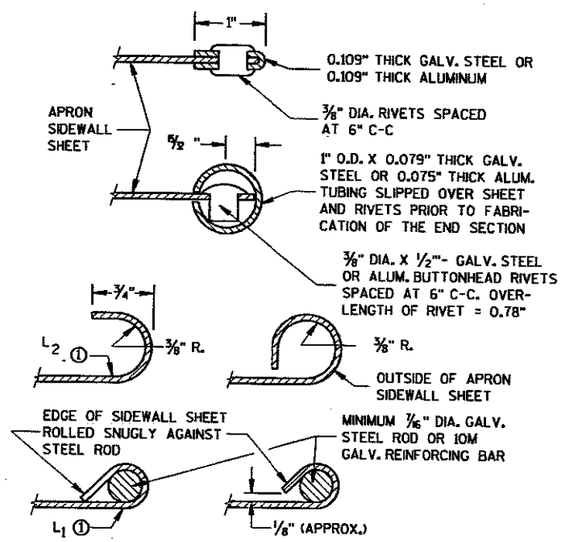


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

*EXCEPT CENTER PANEL SEE GENERAL NOTES

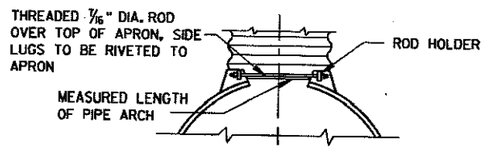
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) **SPAN	**RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 5/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

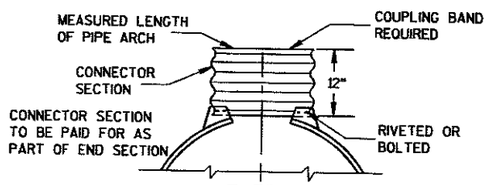
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) **SPAN	**RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



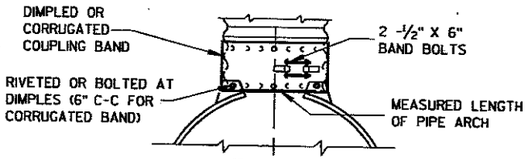
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION 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 THE APPLICABLE SPECIAL PROVISIONS.

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH 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 ARCH 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 77" X 52" THROUGH 112" X 75" 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 ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

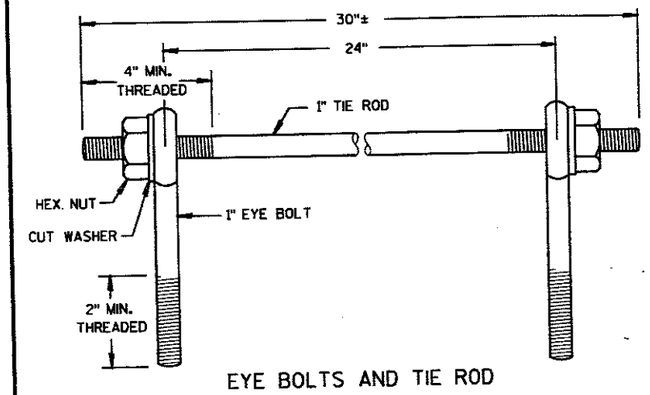
APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

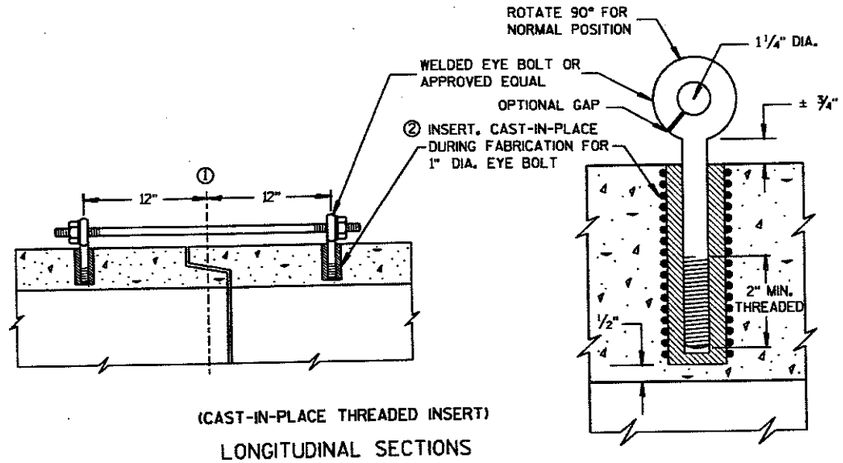
APPROVED 11/30/94 DATE
Roy L. Thiessen
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 F 2-1

S.D.D. 8 F 2-1



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 CILVERT 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.

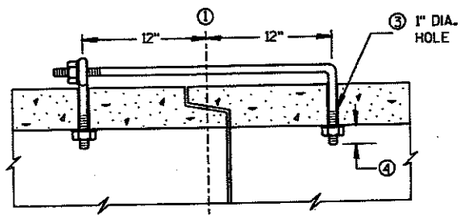
③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12" FROM ℄ OF TONGUE AND GROOVE.

④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2".

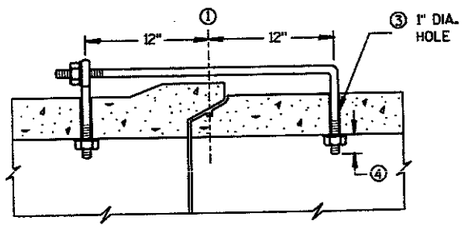
⑤ ROD DIAMETER + 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN ½ 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

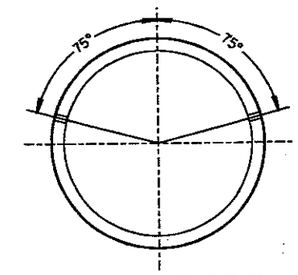
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 ½"	6 ¼"
30"	5"	7"
36"	5 ½"	7"
42"	6"	
48"	6 ½"	
60"	7 ½"	
66"	8"	

ADJUSTABLE TIE ROD TABLE

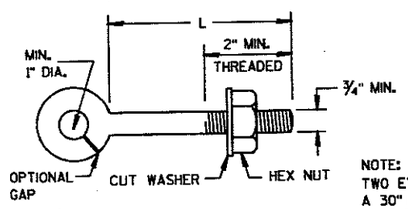
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	⅝	⅝	5	½
66-84	¾	¾	5	½
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



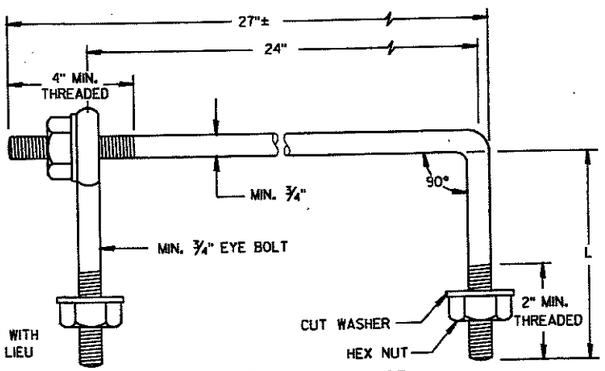
PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



EYE BOLT

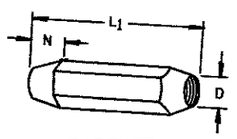
NOTE:
TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



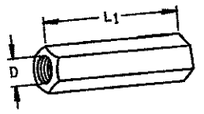
EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



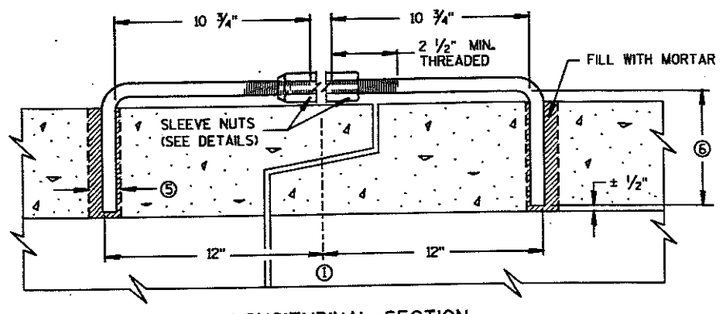
TAPERED



PLAIN

RIGHT AND LEFT THREADS

SLEEVE NUTS



LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

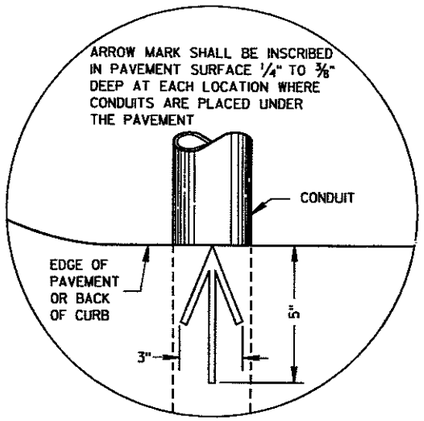
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 6/10/92 DATE
FHWA

STATE DESIGN ENGINEER FOR HWYS

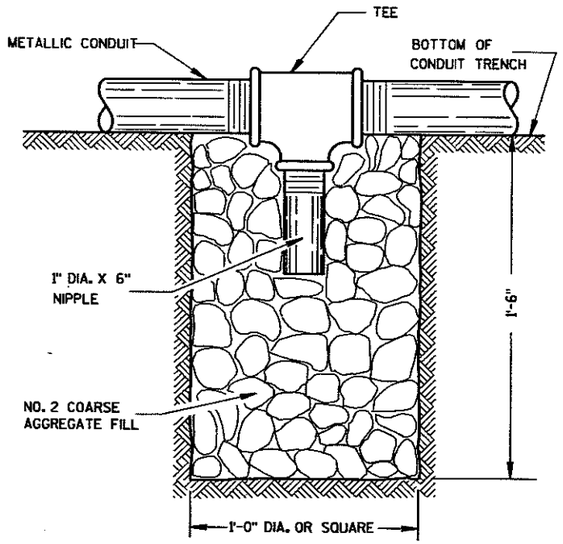
S.D.D. 8 F 4-5

S.D.D. 8 F 4-5



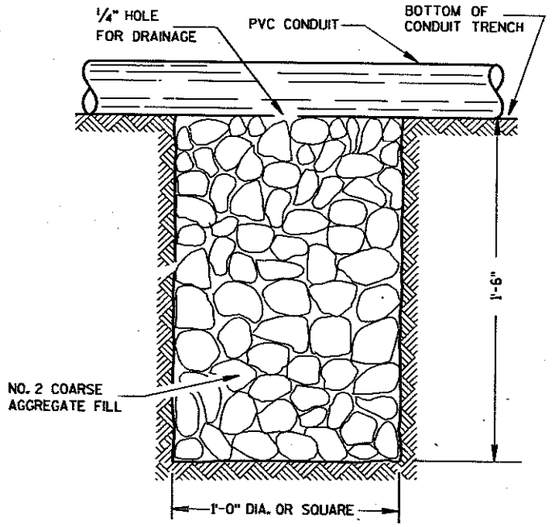
PLAN VIEW

ARROW MARK



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

DRAIN SUMP FOR METALLIC CONDUIT



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

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) 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 AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

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

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

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

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

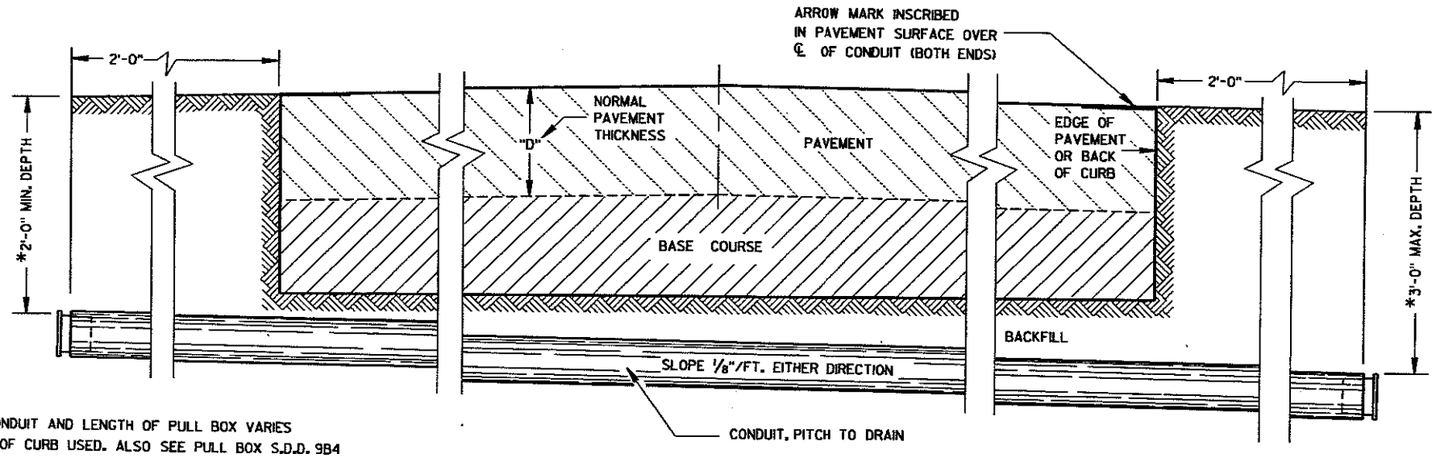
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

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

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.11.

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.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/66 DATE
FHWA

STATE ELECTRICAL ENGINEER FOR HIGHWAYS

S.D.D. 9 B 2-6

S.D.D. 9 B 2-6

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		TYPE OF PIPE									
		CORRUGATED STEEL									POLYETHYLENE SDR 32.5
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24	12
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48	24
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.4
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4	10 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2	14 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	8 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2	11 1/2
WEIGHT IN POUNDS *											
FRAME AND COVER		60	60	60	110	110	110	155	155	155	60

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

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

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

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

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

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

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

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

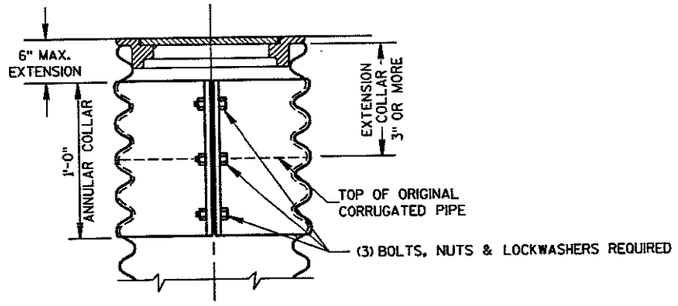
RODENT WIRE SCREEN SHALL BE 1/8" STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

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

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.



CORRUGATED PIPE EXTENDER

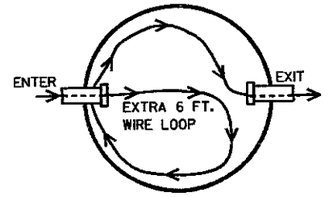
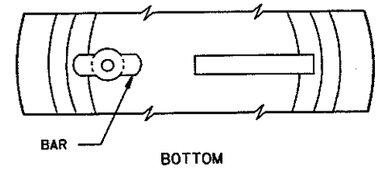
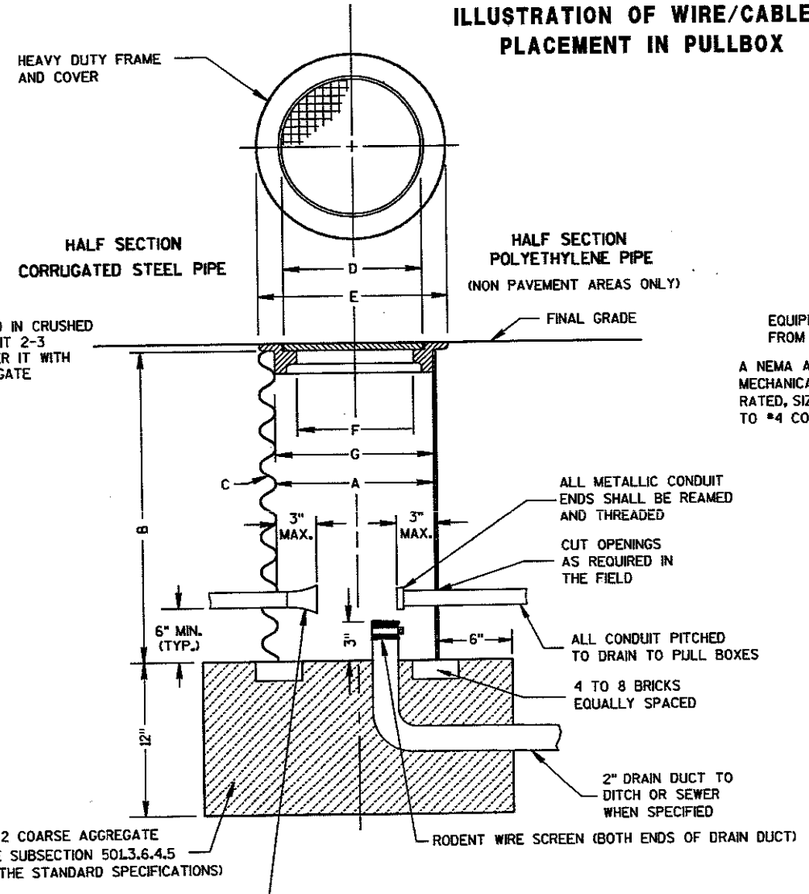


ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULLBOX

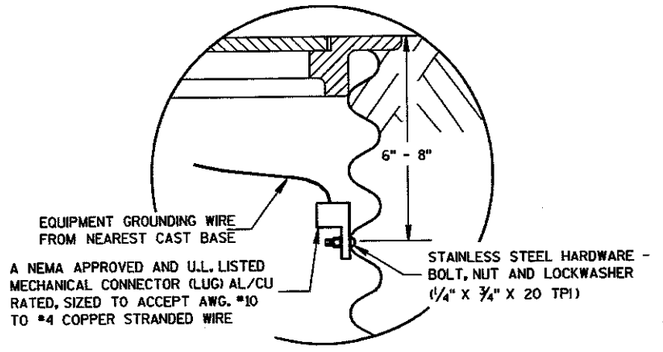


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



PULL BOX



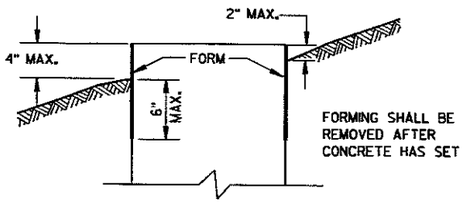
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/11/02
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 B 4-5



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

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.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

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

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

GENERAL NOTES (CONTINUED)

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. 4 AWG. STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR 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 EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(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 RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

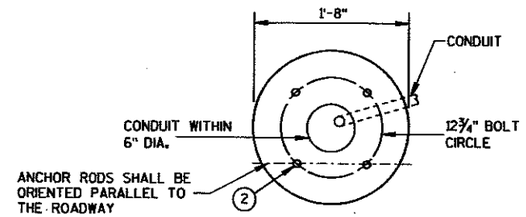
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

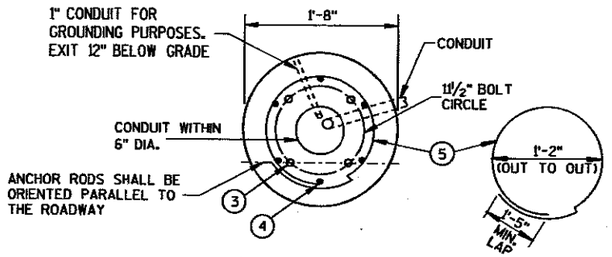
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

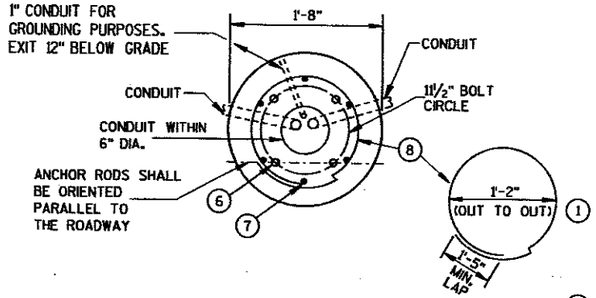
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

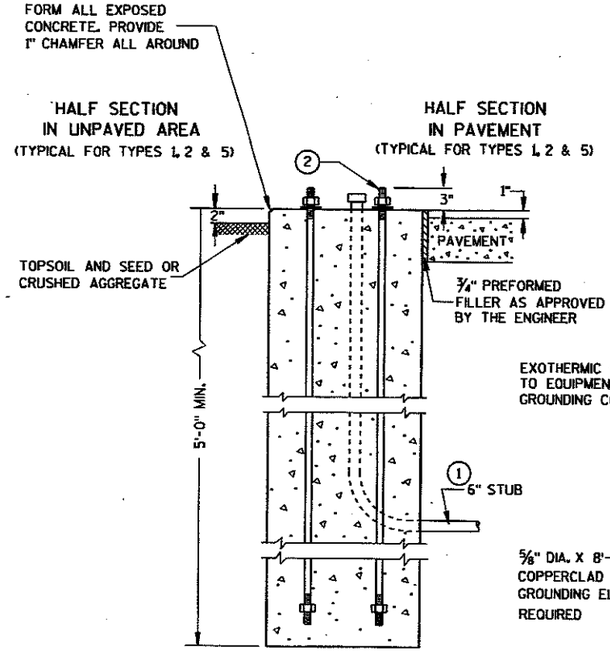
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

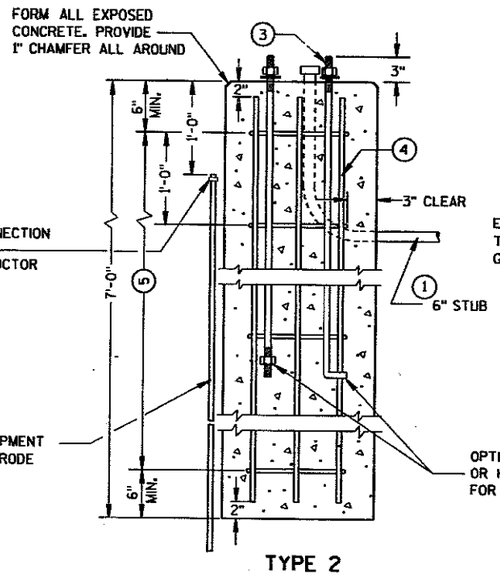




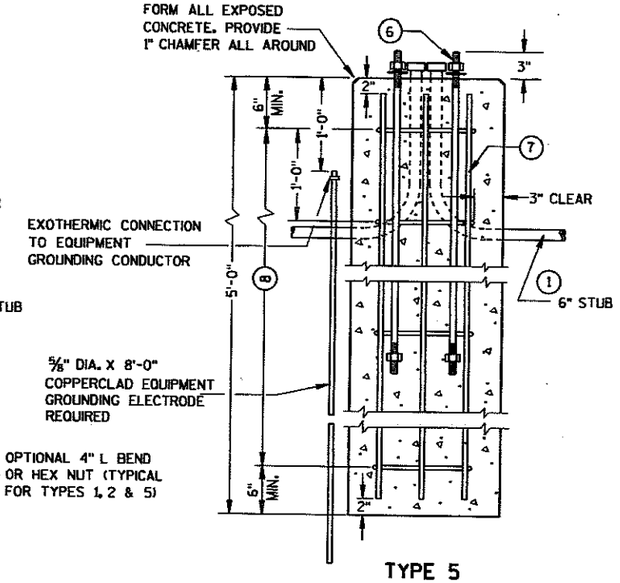




TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

CONCRETE BASES, TYPES 1, 2 & 5
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 10/21/96 DATE — STATE ELECTRICAL ENGINEER FOR HIGHWAYS — FHWA

S.D.D. 9 C 2-2

S.D.D. 9 C 2-2

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 SHALL 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 SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

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.

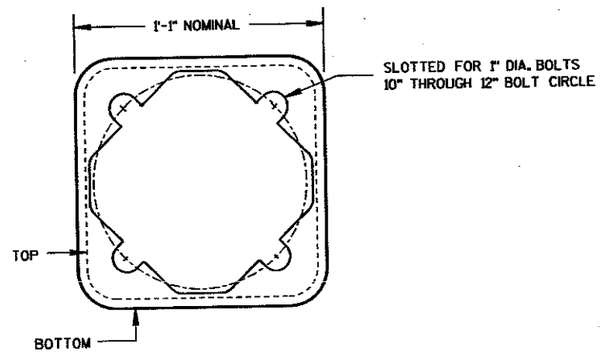
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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.

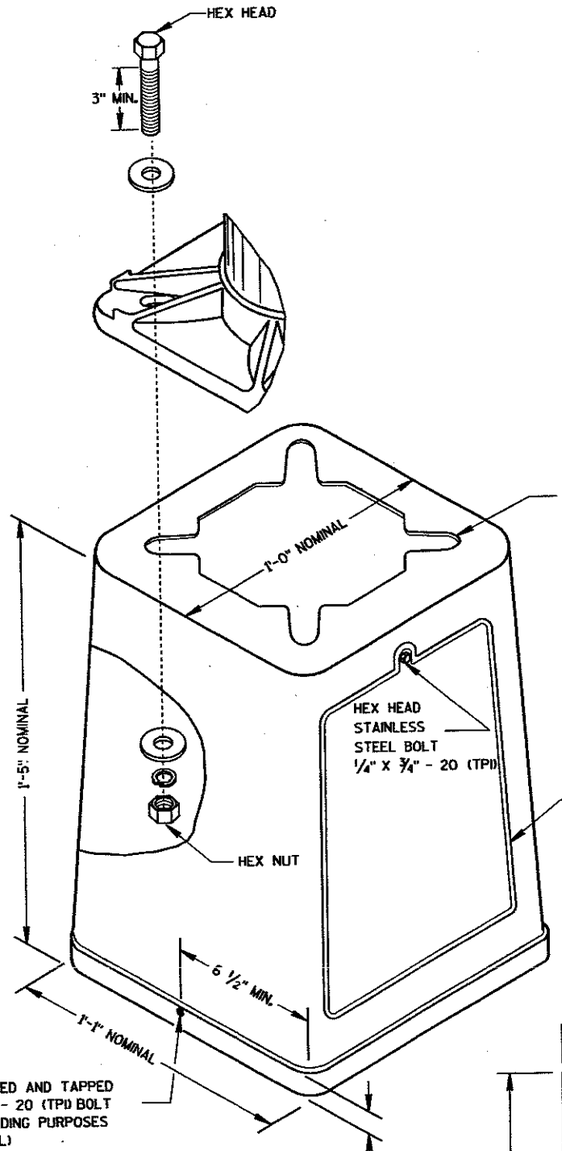
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

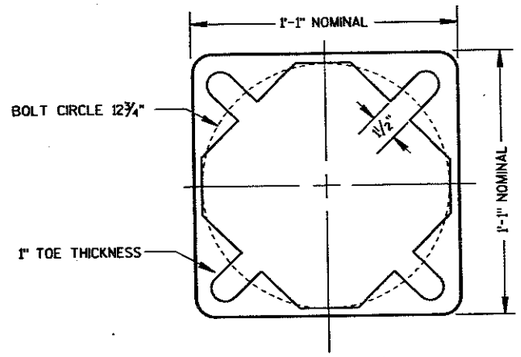
THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



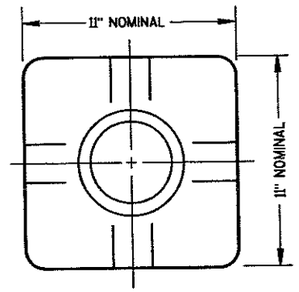
BOTTOM VIEW
(TRANSFORMER BASE)



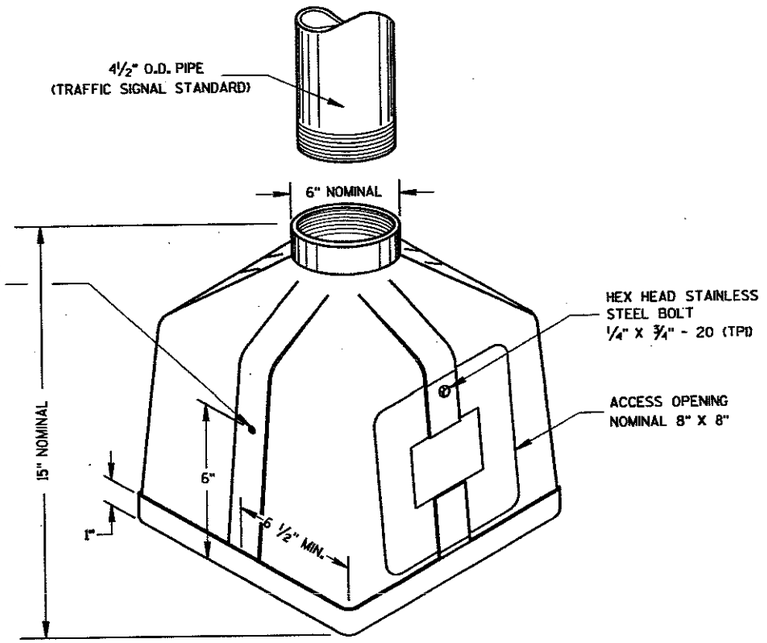
ISOMETRIC VIEW



BOTTOM VIEW
(PEDESTAL BASE)

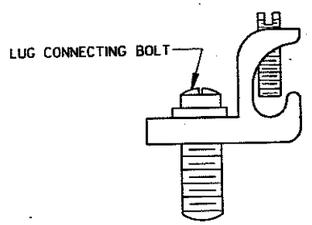


TOP VIEW
(PEDESTAL BASE)



ISOMETRIC VIEW

PEDESTAL BASE

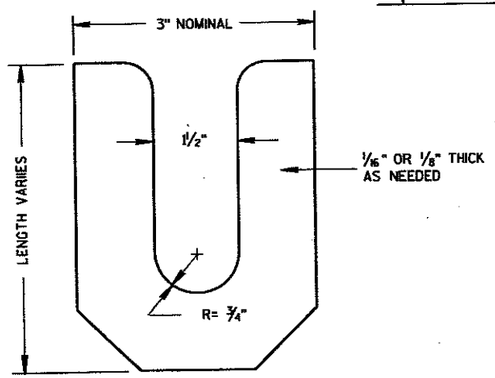


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

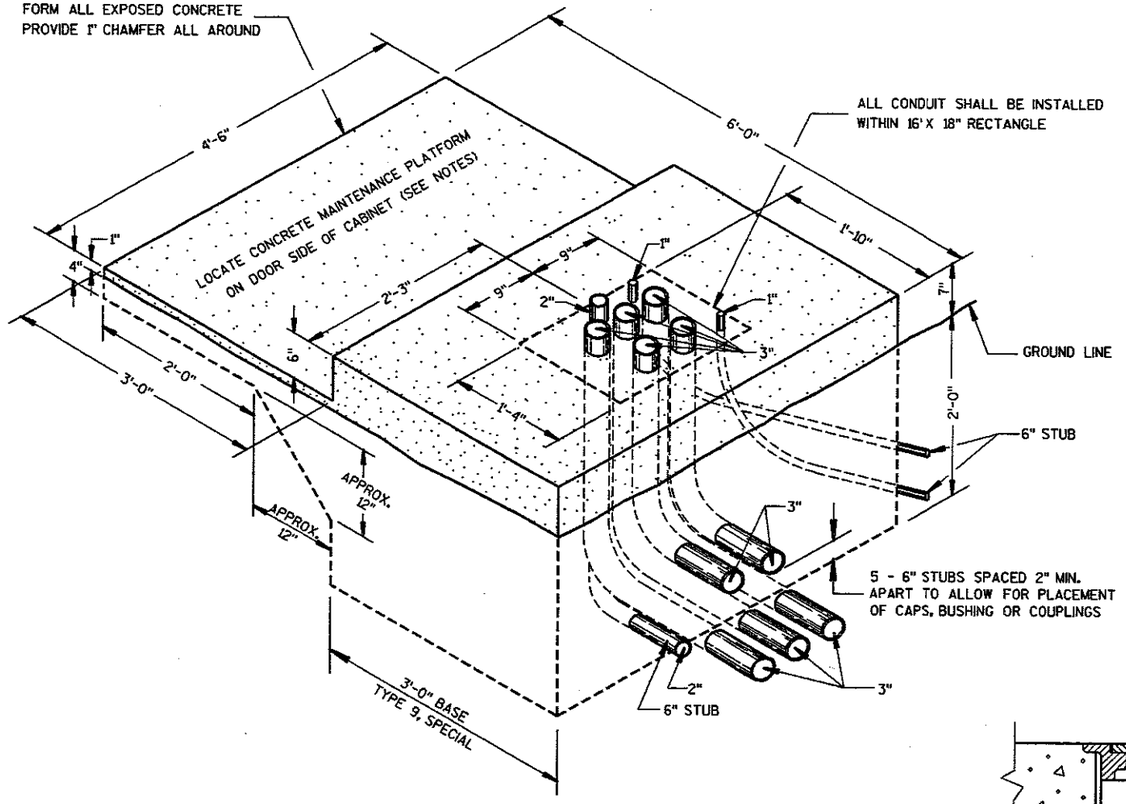
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 10/21/96 DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 C 3-2

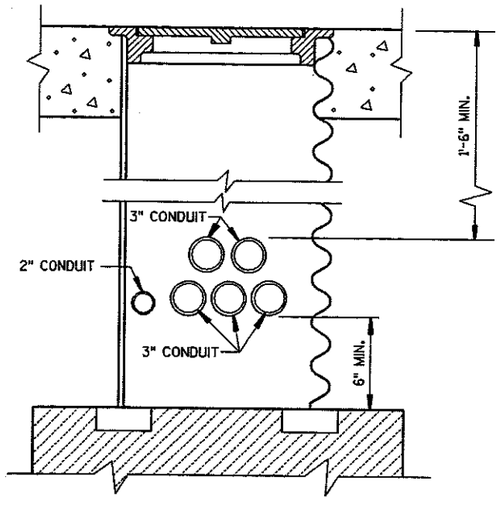
S.D.D. 9 C 3-2



ISOMETRIC VIEW

TYPE 9, SPECIAL (5-3")

(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 STUDS 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.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL (5-3" & 1-2" CONDUITS)

CONCRETE CONTROL CABINET
BASE, TYPE 9, SPECIAL

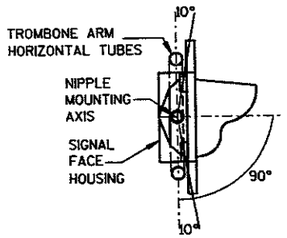
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/93
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

6

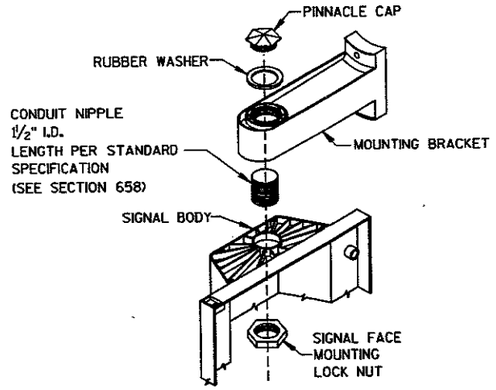
S.D.D. 9 C 6-3

S.D.D. 9 C 6-3



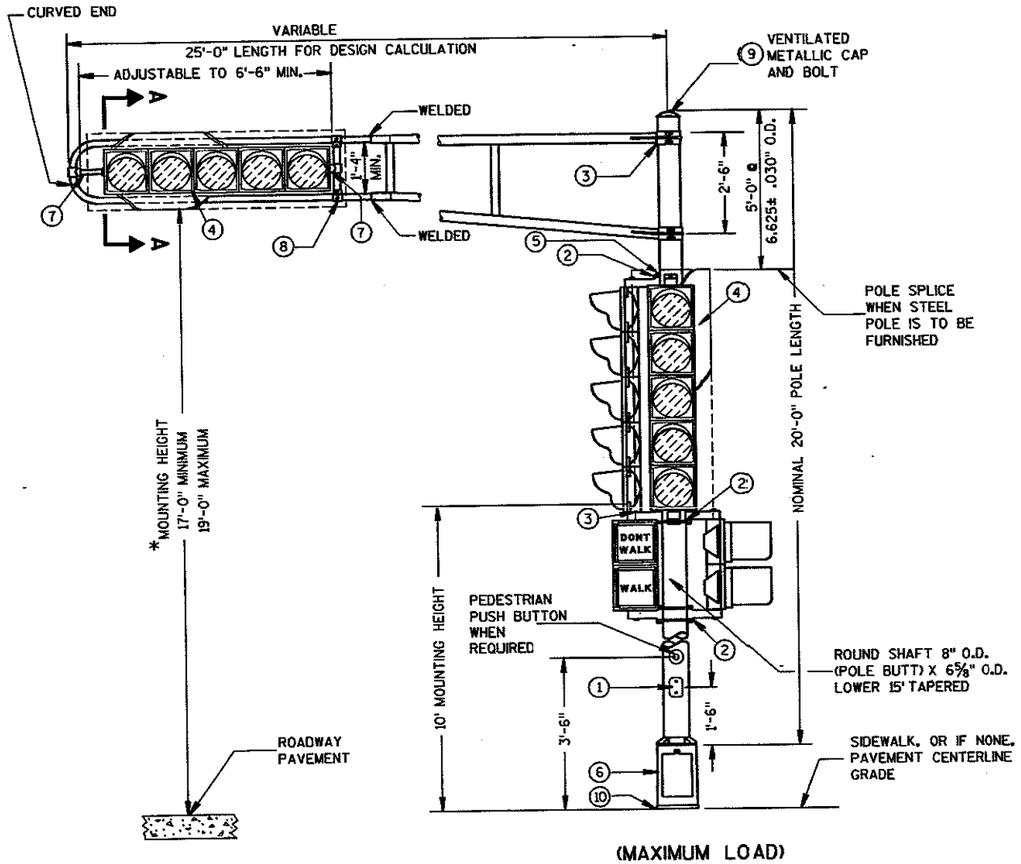
SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

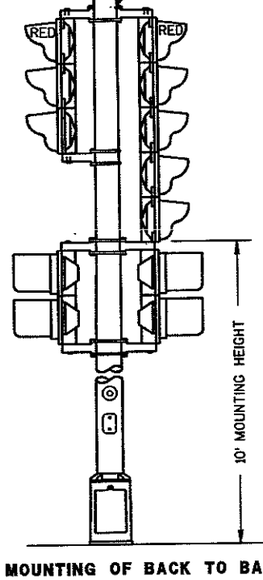


SIGNAL FACE MOUNTING DETAIL

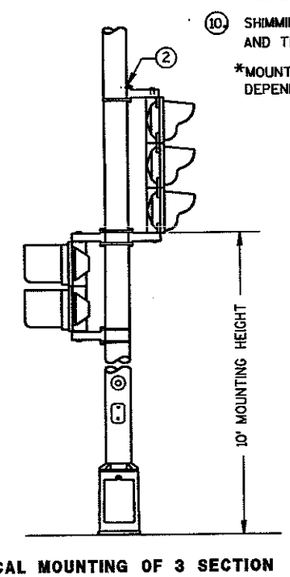
(BANDED)



(MAXIMUM LOAD)



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 2 POLE MOUNTING CONFIGURATION

GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

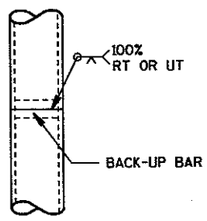
WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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 STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
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. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).
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.

FOR MANUFACTURERS USE ONLY

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 OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



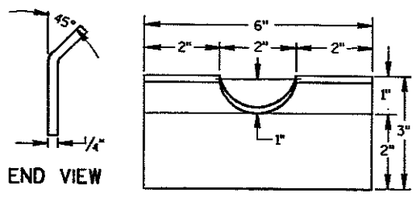
POLE SPLICE DETAIL

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

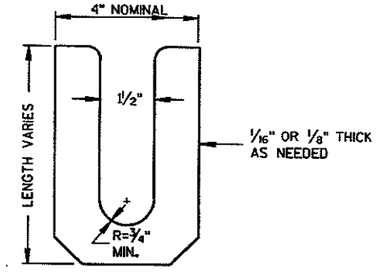
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-4a

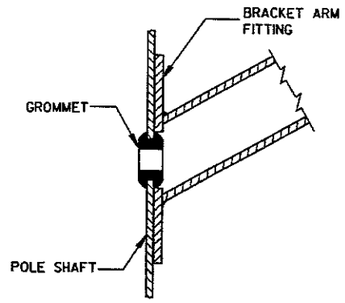
S.D.D. 9 E 1-4a



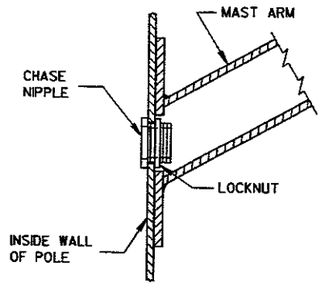
RECTANGULAR CLAMP SHIM
(4 TO A SET)



LEVELING SHIM (15)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

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

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

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

(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 0.25", 0.35", 0.53" OR 0.70".

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

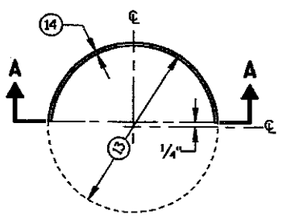
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

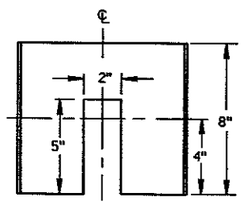
SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

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

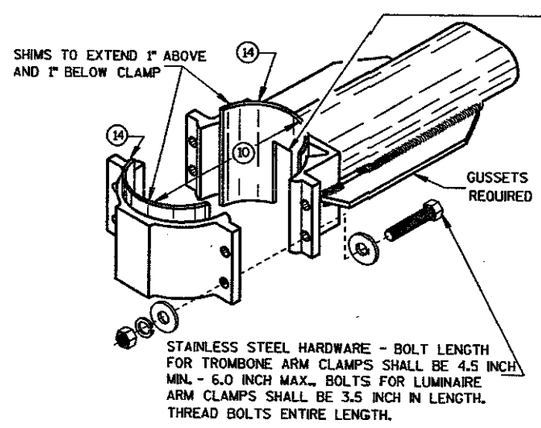
(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

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

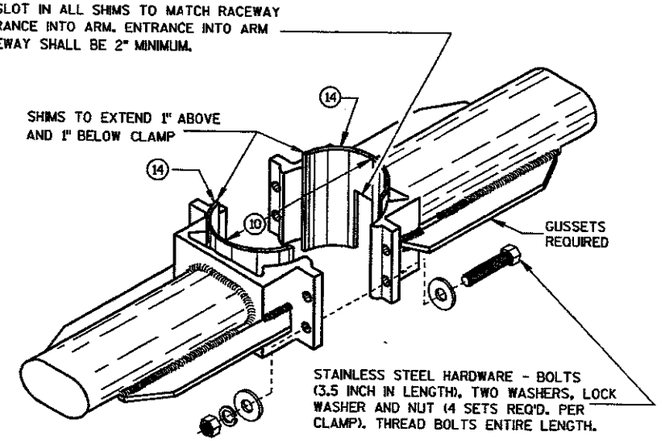




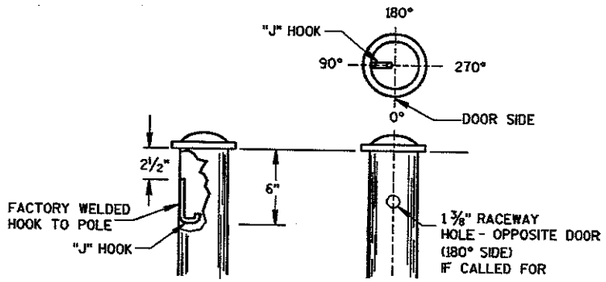
SECTION A-A
CIRCULAR CLAMP SHIM
(2 TO A SET)



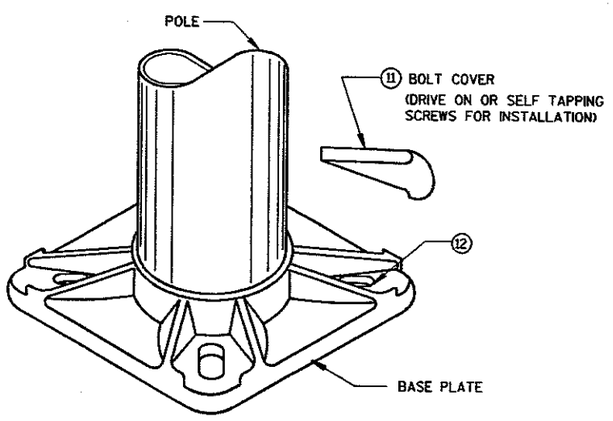
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



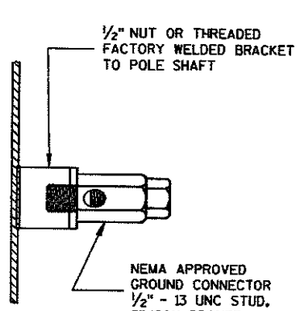
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

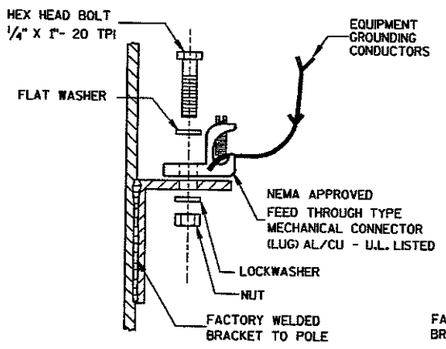


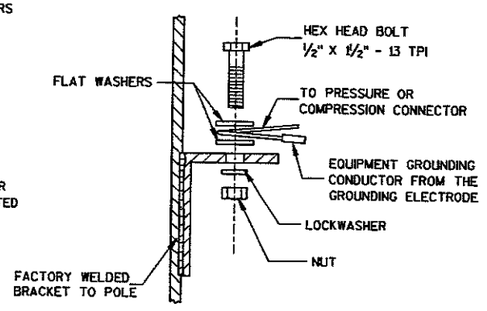
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

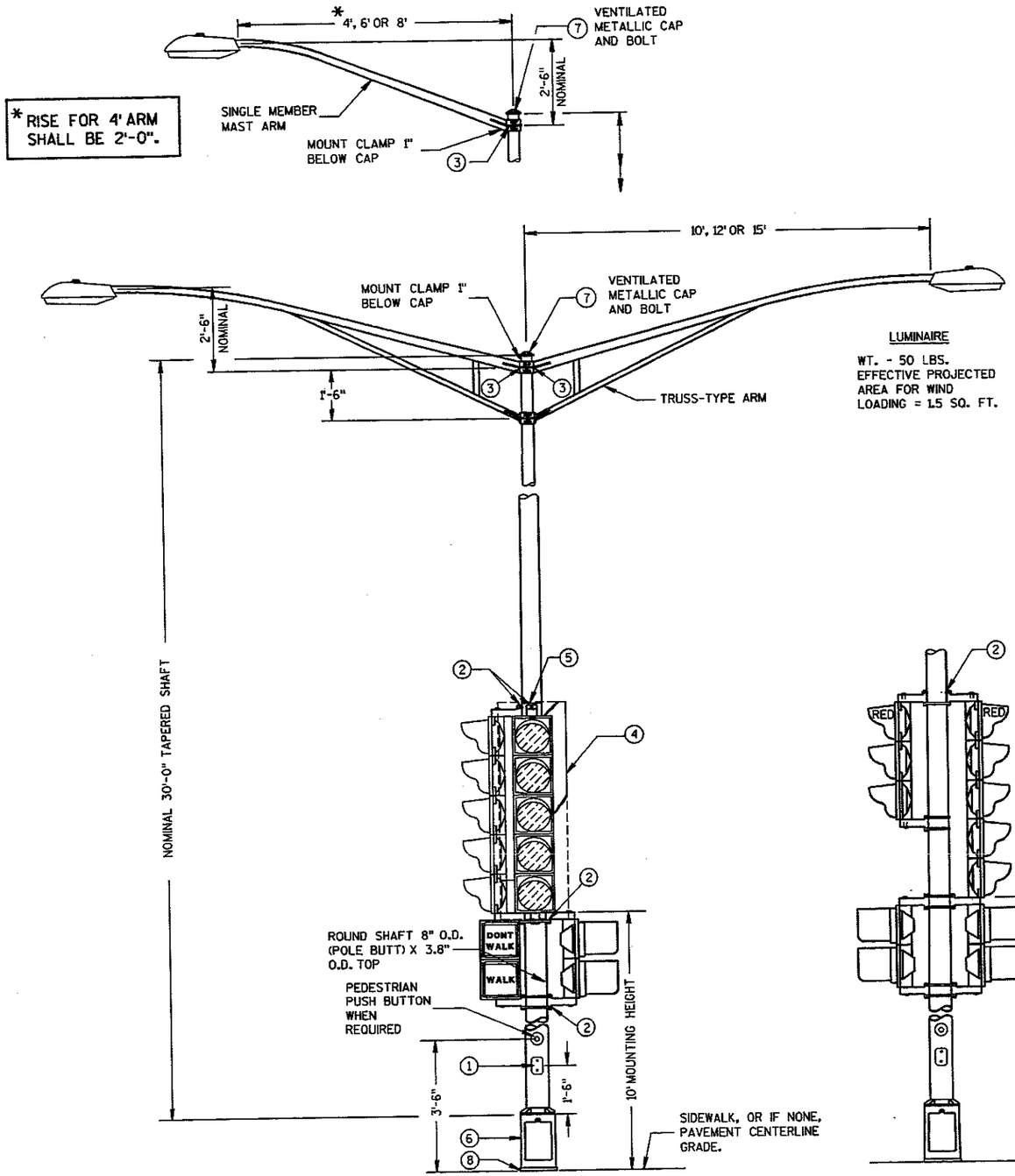
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

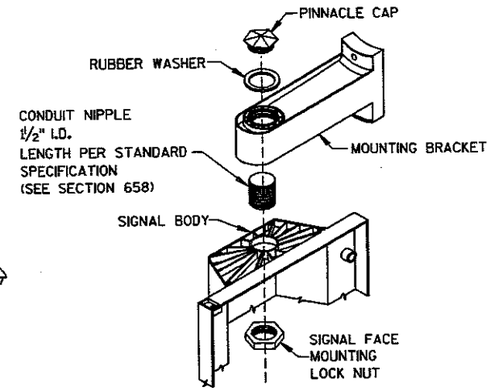
APPROVED 3/05/07
DATE
STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA

S.D.D. 9 E 1-4g

S.D.D. 9 E 1-4g



TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

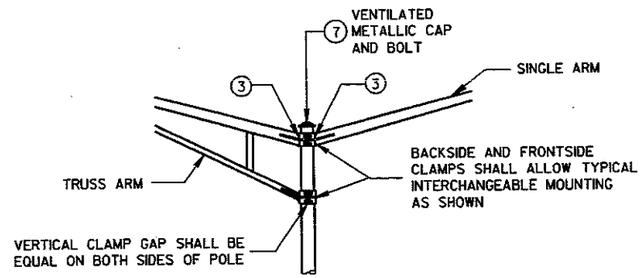
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

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.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

"TYPE 4" SHALL BE INDENT PRINTED WITH 1/2-INCH HIGH FIGURES ON TWO OPPOSITE EDGES OF POLE PLATE.

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 STANDARD SPECIFICATIONS - SEC. 658).
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, WITH SELF-TAPPING STAINLESS STEEL SCREWS.
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.



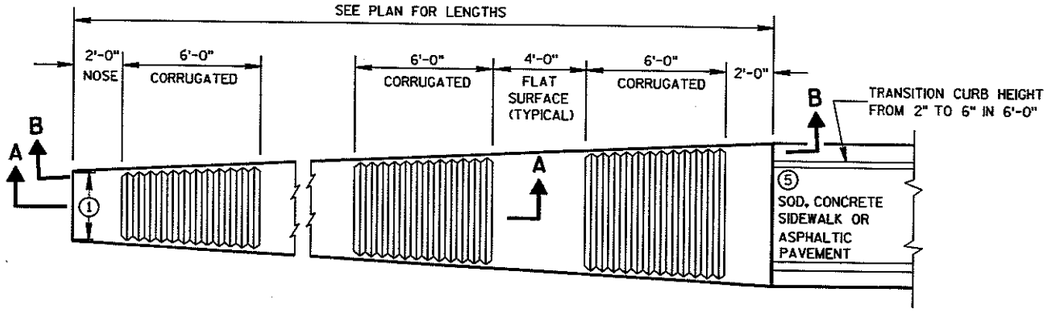
INTERCHANGEABLE MOUNTING DETAIL

6

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

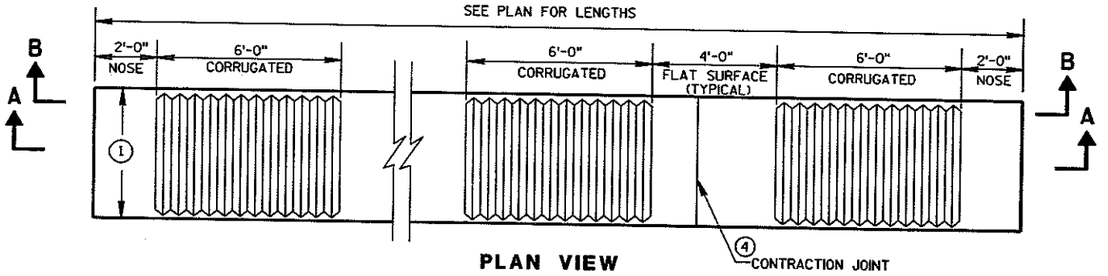
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 9 E 1-5c



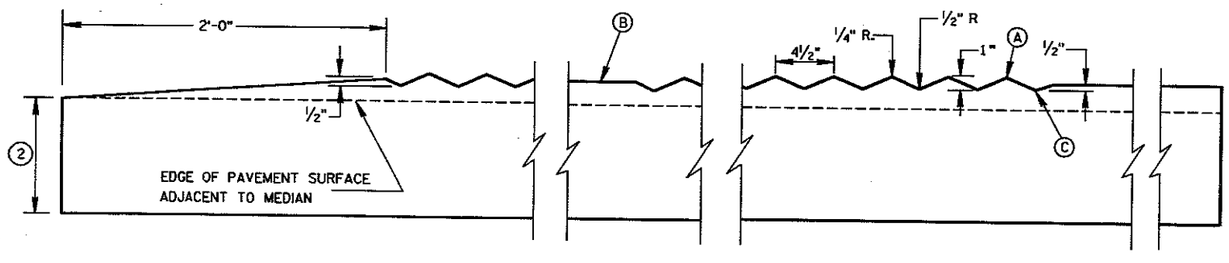
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL 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.

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC FLOWING IN THE SAME DIRECTION NO PAVEMENT MARKING IS APPLIED TO THE CONCRETE CORRUGATED MEDIAN AREA.

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

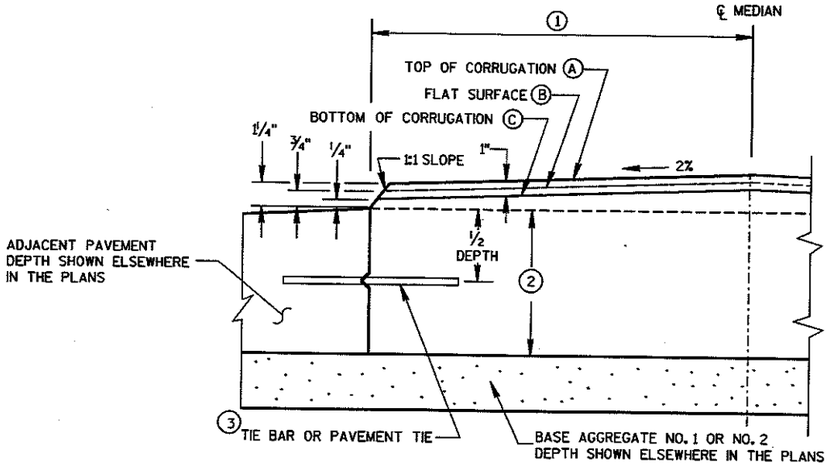
(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

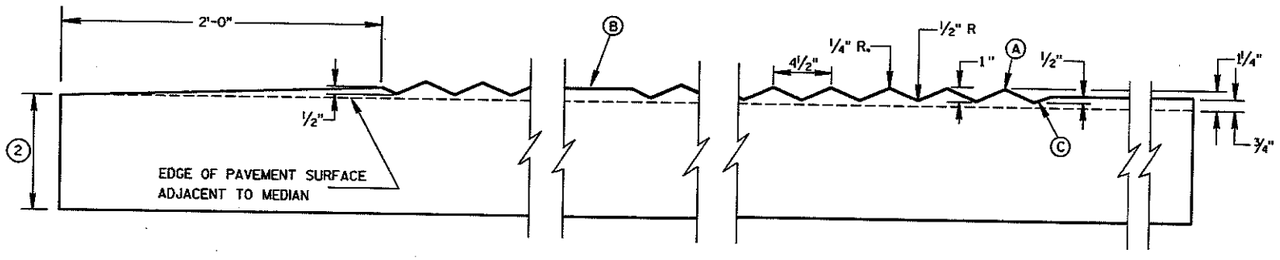
(4) CONCRETE PAVEMENT TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH CRUSHED AGGREGATE BASE, TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

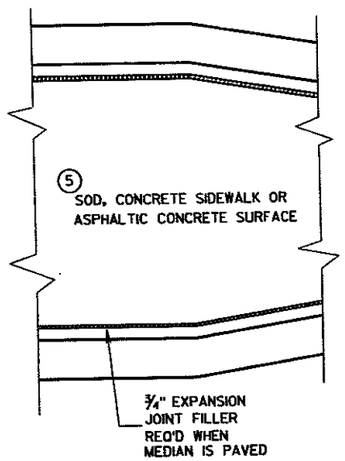
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

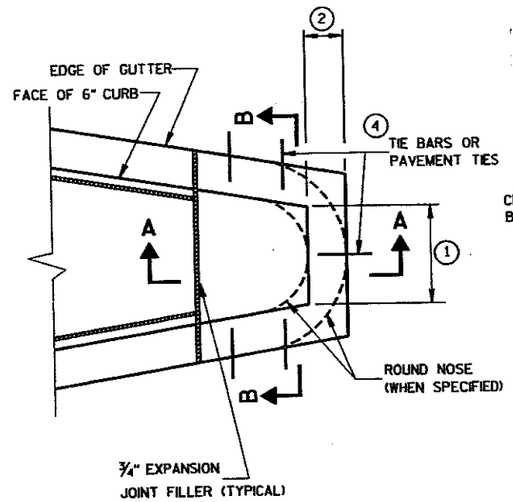
APPROVED 6/25/03
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

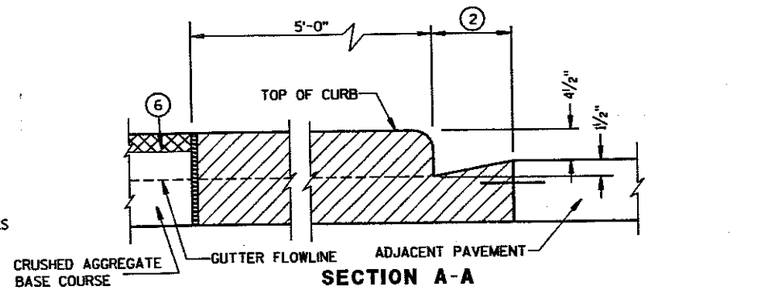
6

S.D.D. 11B 1-4

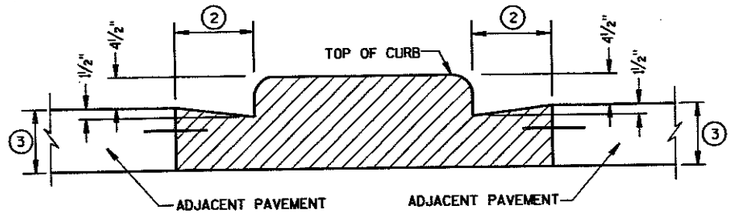
S.D.D. 11B 1-4







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.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

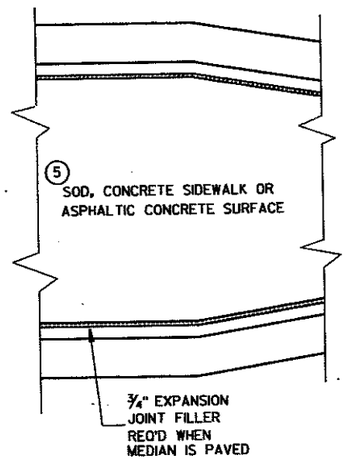
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

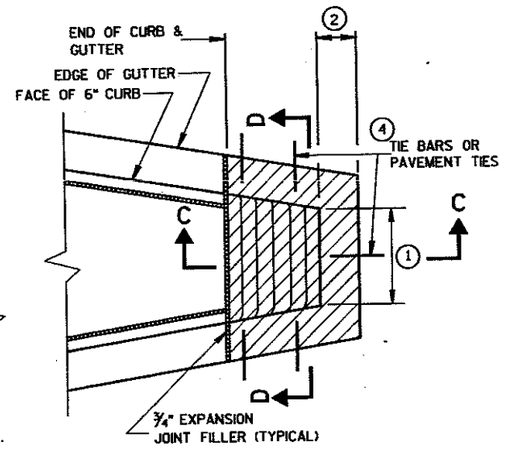
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

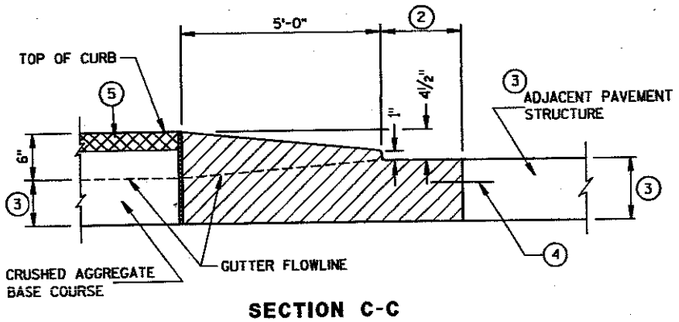
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

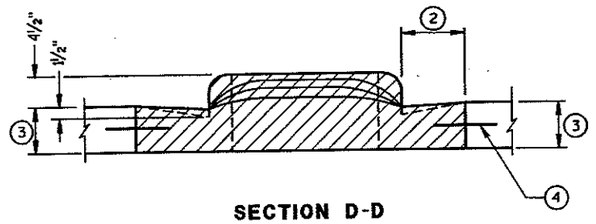
CONCRETE MEDIAN BLUNT NOSE DETAIL







SECTION C-C



SECTION D-D

CONCRETE MEDIAN SLOPED NOSE DETAIL

CONCRETE MEDIAN NOSE

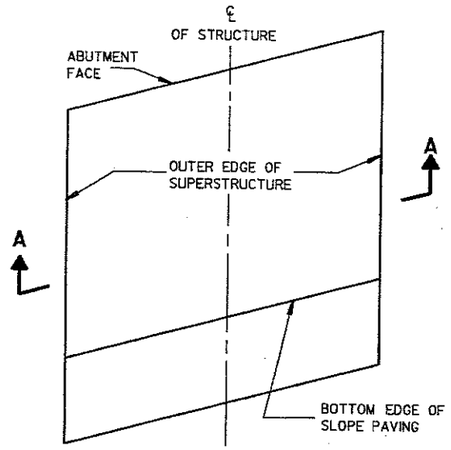
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/30/96 DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER

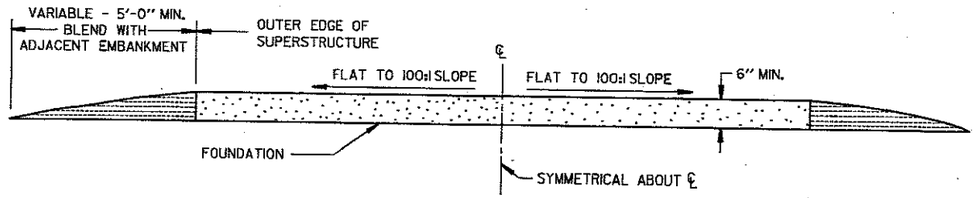
FHWA

S.D.D. 11 B 2-1

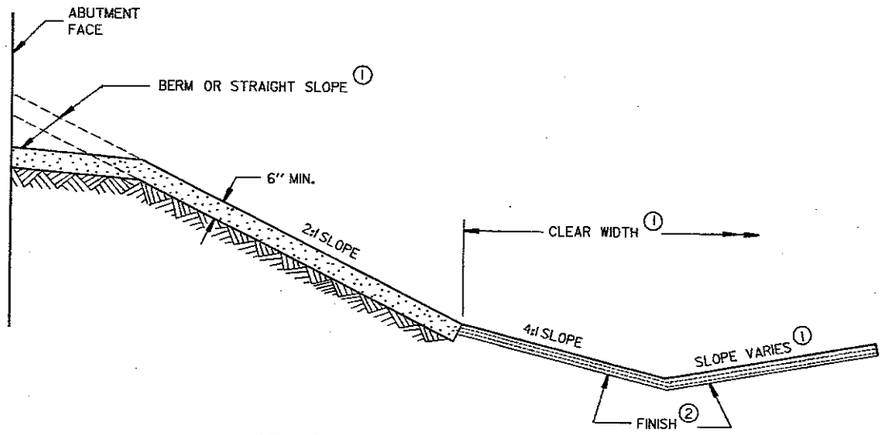
S.D.D. 11 B 2-1



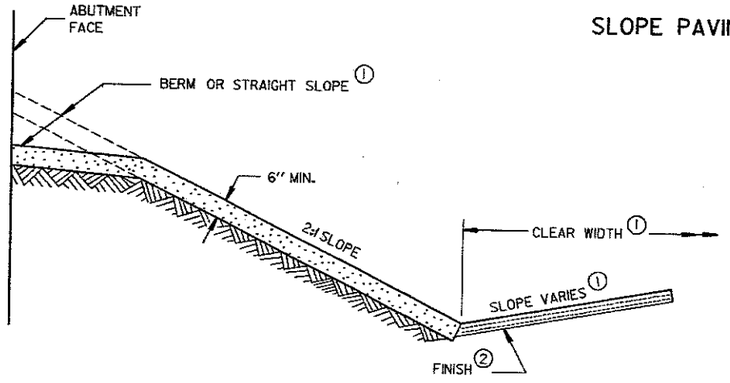
PLAN VIEW



SECTION A-A



STANDARD CROSS SECTION



ALTERNATE CROSS SECTION

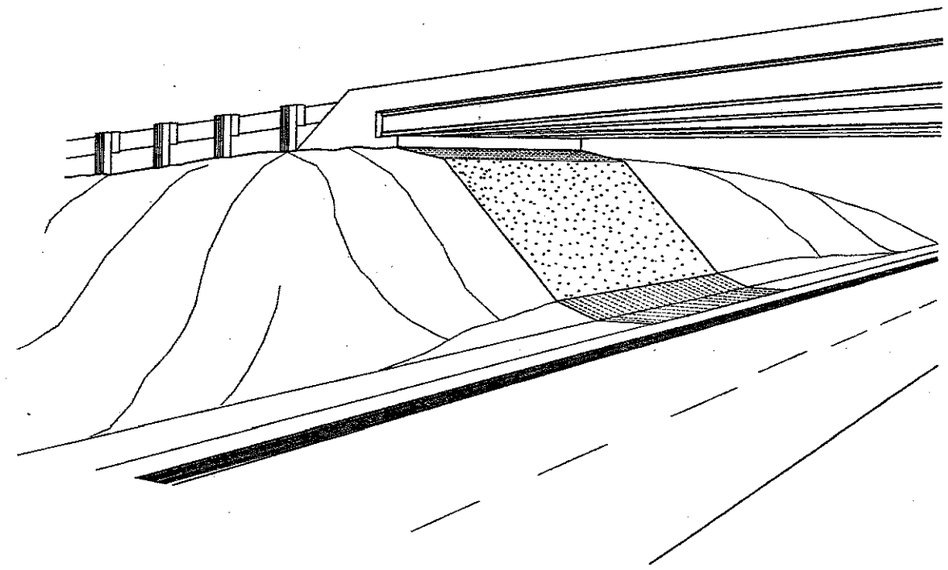
GENERAL NOTES

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

SLOPE PAVING - STRUCTURES (CRUSHED AGGREGATE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

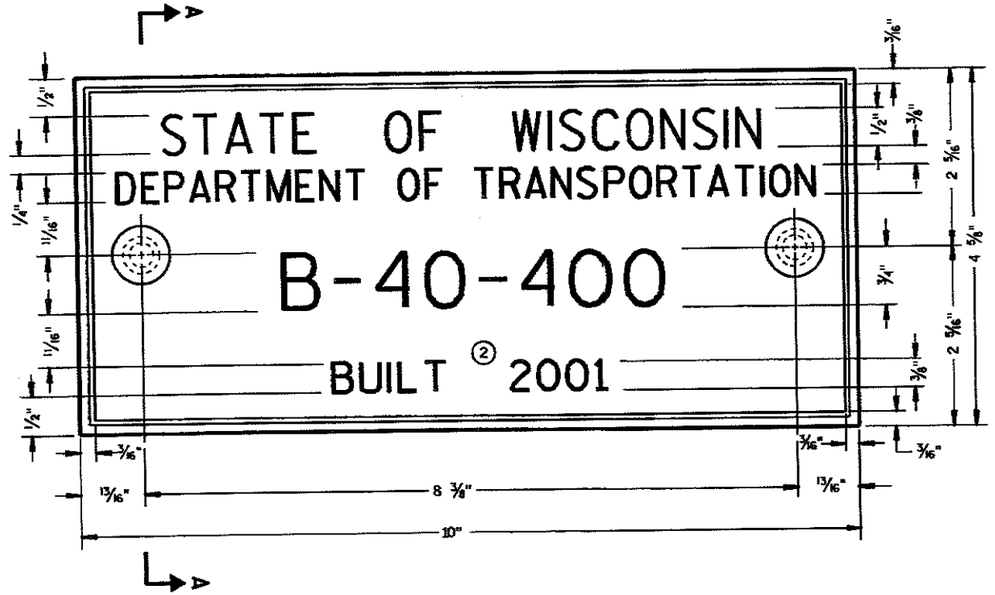
APPROVED 9-21-84 DATE

CHIEF DESIGN ENGINEER

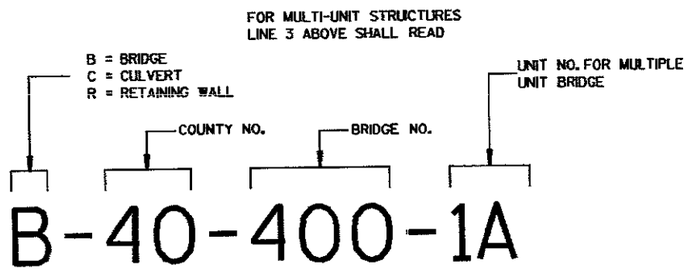
FHWA

S.D.D. 12 A 2-3

S.D.D. 12 A 2-3



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



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

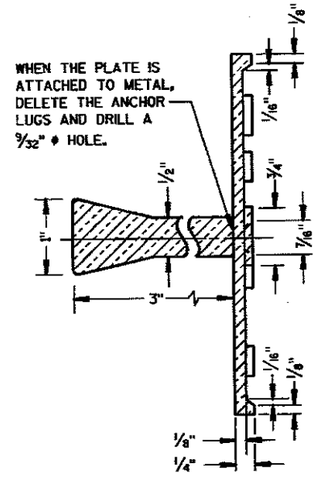
GENERAL NOTES

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.

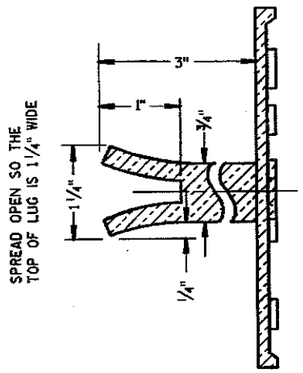
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

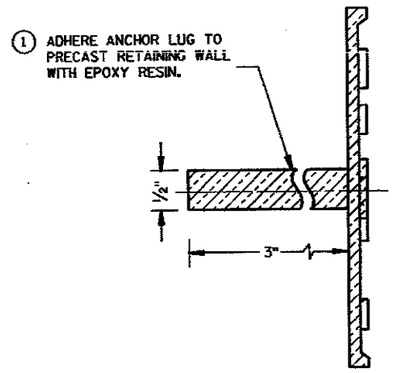
② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE
(STRUCTURES)

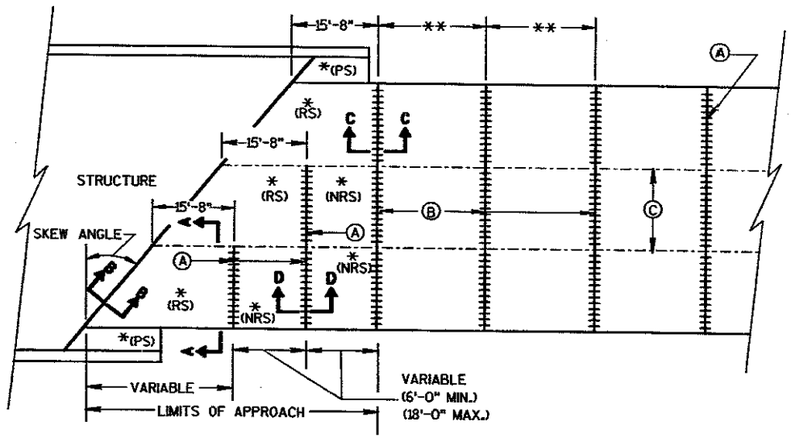
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/29/00
DATE
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

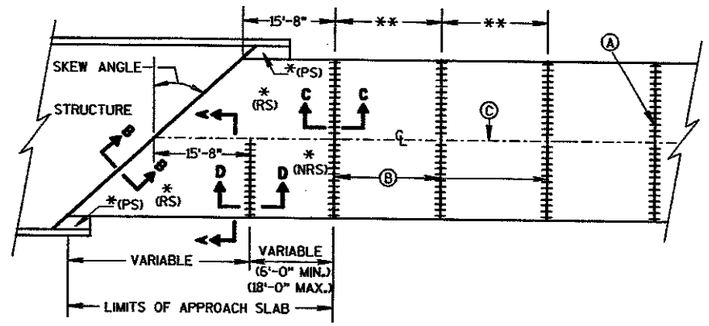
FHWA

S.D.D. 12 A 3-7

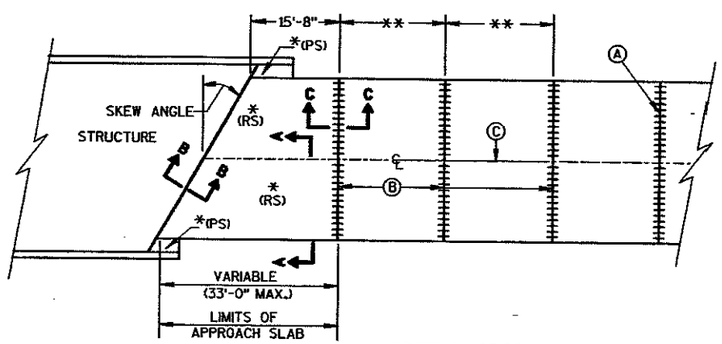
S.D.D. 12 A 3-7



SKEWED PAVEMENT
MORE THAN 2 LANES



SKEWS >30°
(PAVEMENT WIDTH ≤30')



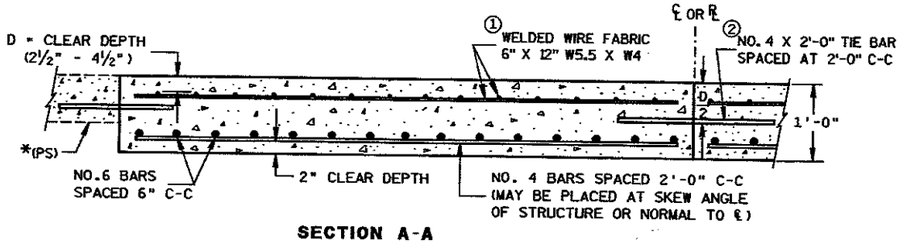
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

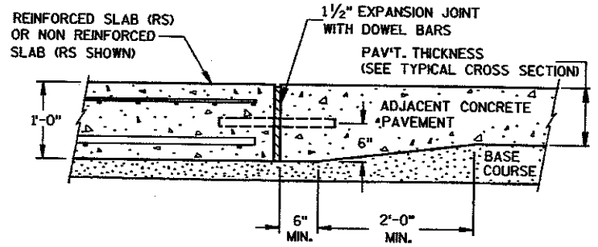
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C11 & SDD 13C12)

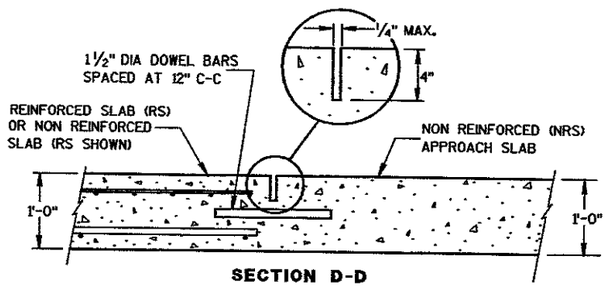
(A) STANDARD CONTRACTION JOINT NORMAL OR SKEWED TO ℄ OR ℄
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL OR SKEWED TO ℄ OR ℄
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

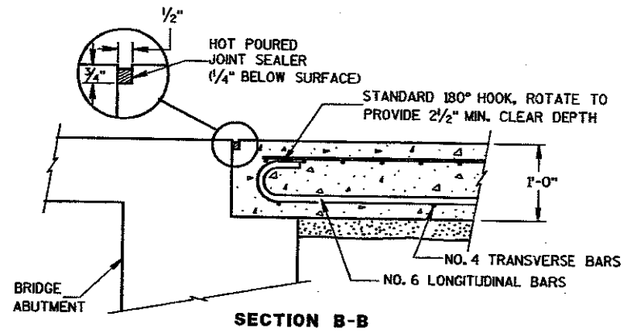
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

DOWEL BARS ARE NOT REQUIRED WHEN THE APPROACH SLAB ABUTS AN ASPHALT PAVEMENT OVER BASE COURSE.

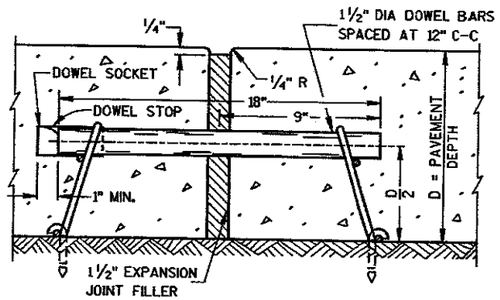
SPLICING OF NO. 6 BARS IN THE APPROACH SLAB IS PERMITTED FOR SKEWED STRUCTURES ONLY. SPLICES SHALL BE STAGGERED, WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP SHALL BE 20 INCHS.

① NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS MAY BE USED FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② TIE BARS BETWEEN REINFORCED SLABS MAY BE OMITTED WHERE SLAB REINFORCEMENT EXTEND ACCROSS THE CENTERLINE OR REFERENCE LINE.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

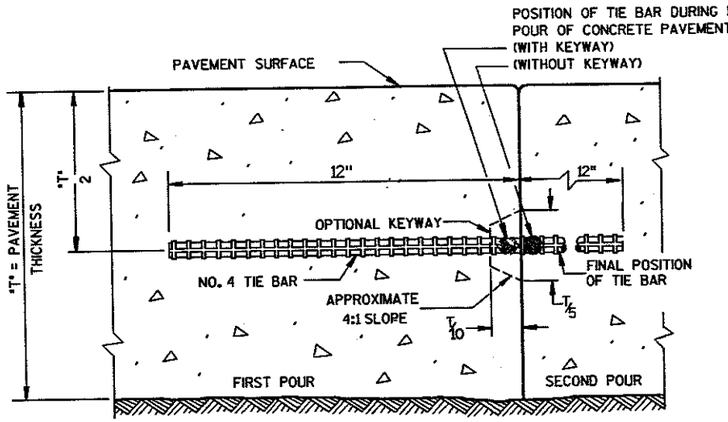
CONCRETE PAVEMENT
APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

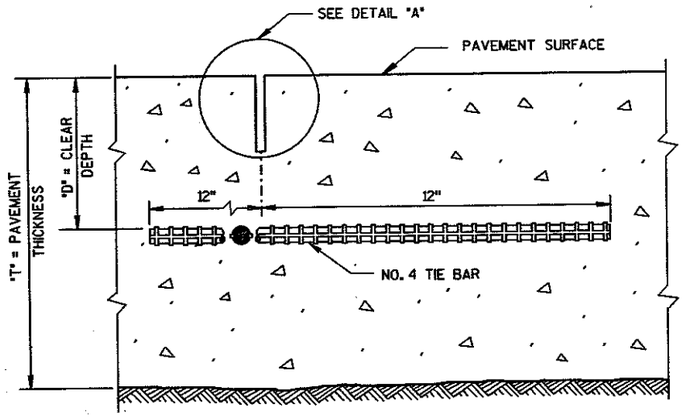
APPROVED
10-14-99
DATE
CHIEF PAVEMENTS & RESEARCH ENGINEER
FHWA

S.D.D. 13 B 2-4

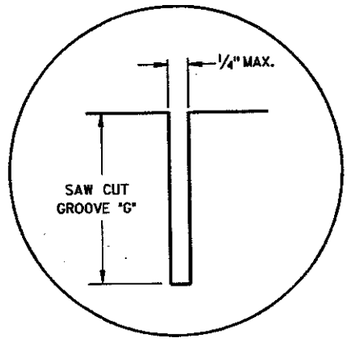
S.D.D. 13 B 2-4



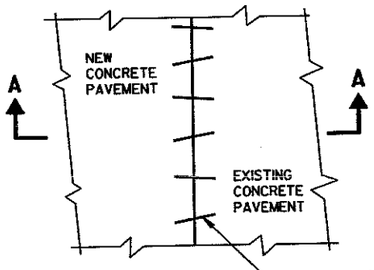
CONSTRUCTION JOINT



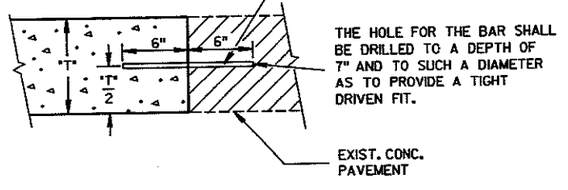
SAWED JOINT



DETAIL "A"

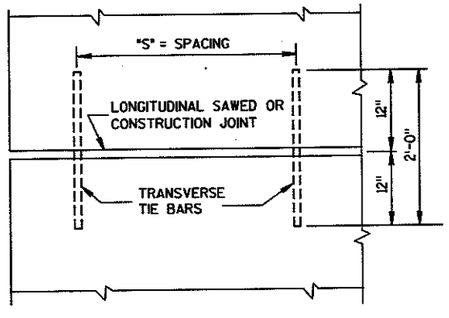


PLAN VIEW



SECTION A-A
PAVEMENT TIES

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

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.

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.

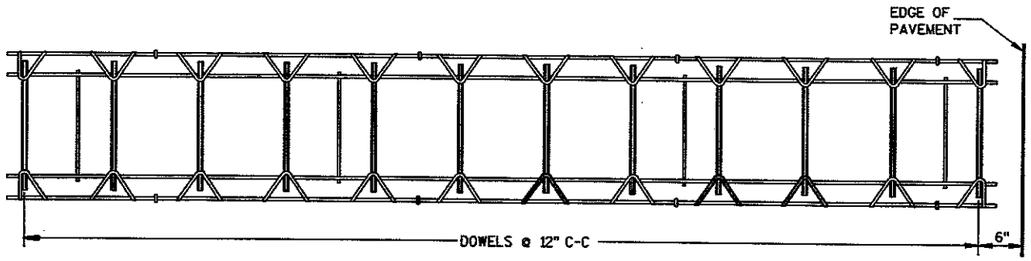
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/6/02 DATE
Bill Duckett PAVEMENT ENGINEER
FHWA

S.D.D. 13 C 1-11

S.D.D. 13 C 1-11



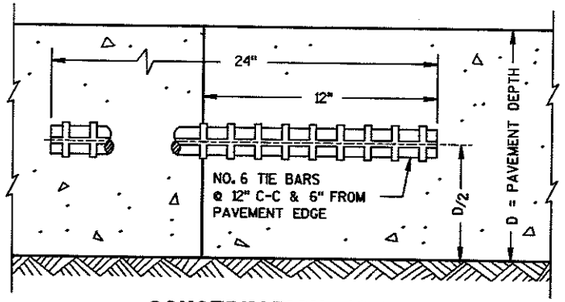
PLAN VIEW

SIDE VIEW

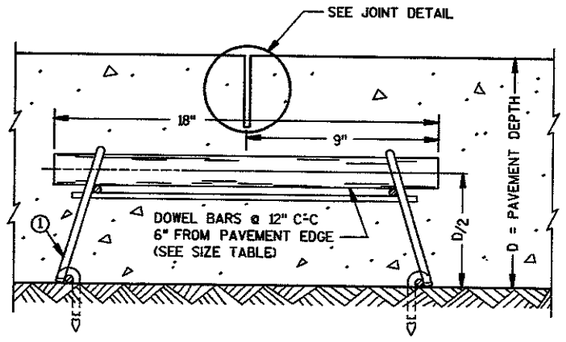
CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6",6 ½"	1¼"	12'
7",7 ½"	1¼"	14'
8",8 ½"	1¼"	15'
9",9 ½"	1¼"	15'
10" & ABOVE	1½"	18'



CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

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 NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS SHALL BE 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 PLACED.

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.

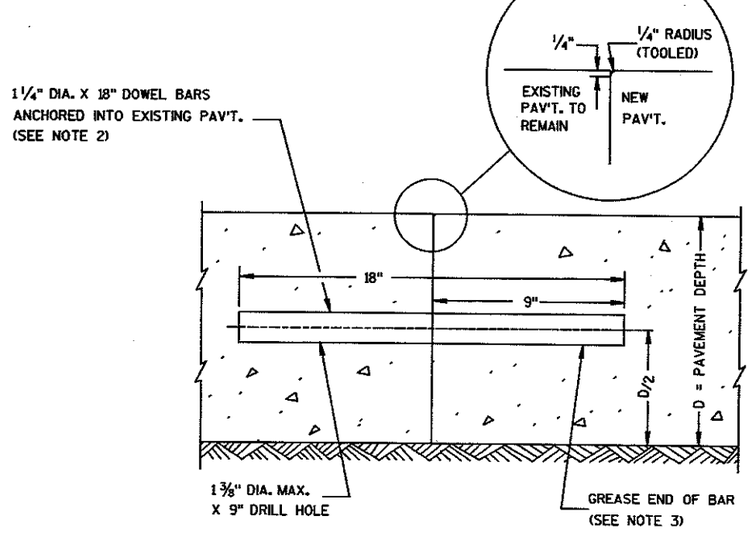
② DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.

③ THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKING GREASE.

④ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 1'-3" ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

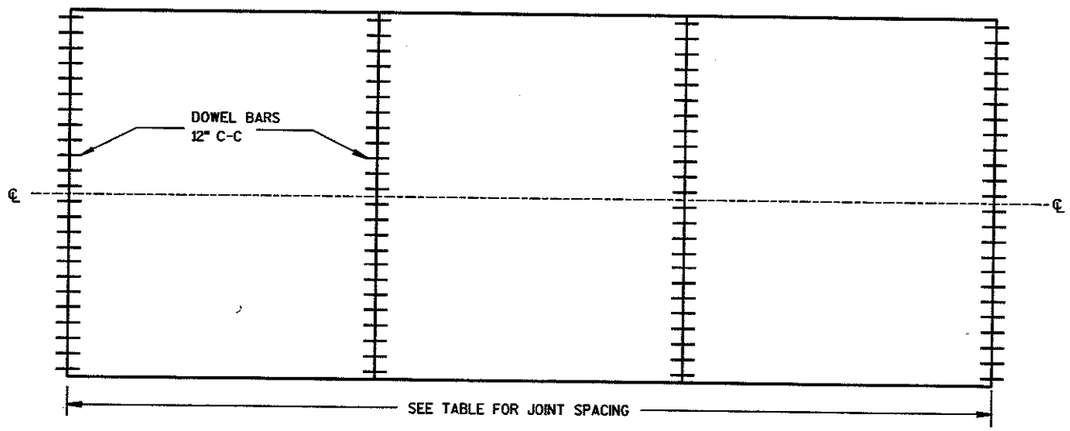
BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 14 INCHES.

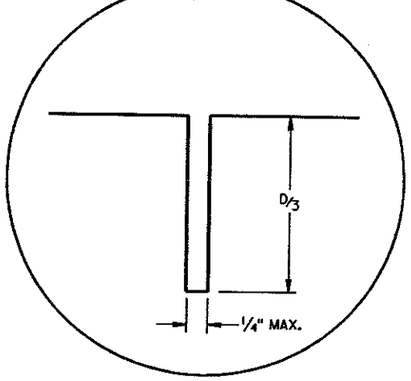


TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ DOWEL BAR DETAIL



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/6/02 DATE
Bill Duckett PAVEMENT ENGINEER
FHWA

S.D.D. 13 C 13-4

S.D.D. 13 C 13-4

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.

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO AASHTO M183. GALVANIZE ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

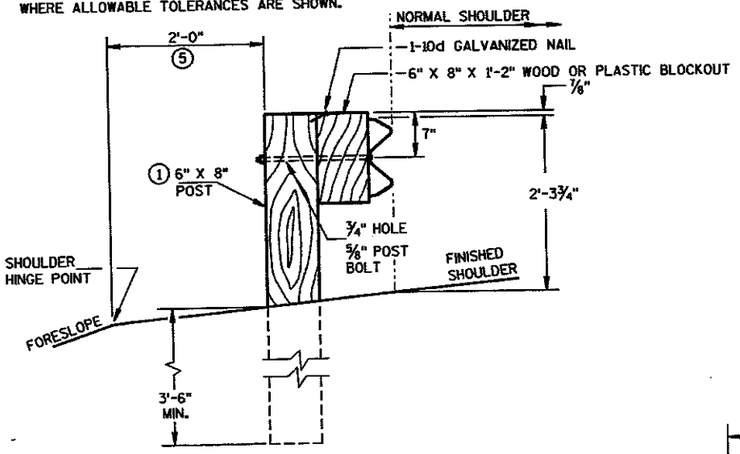
(5) WHEN SPECIFIED IN THE PLANS, THE 2-FOOT MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

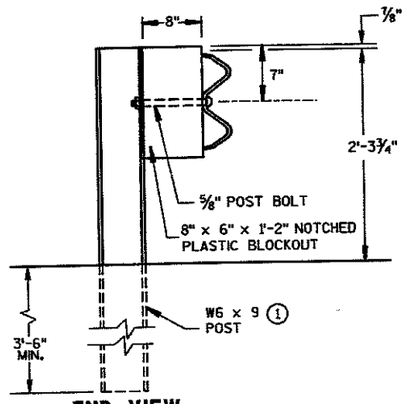
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

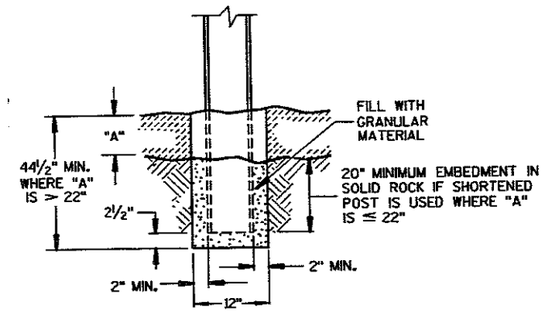
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



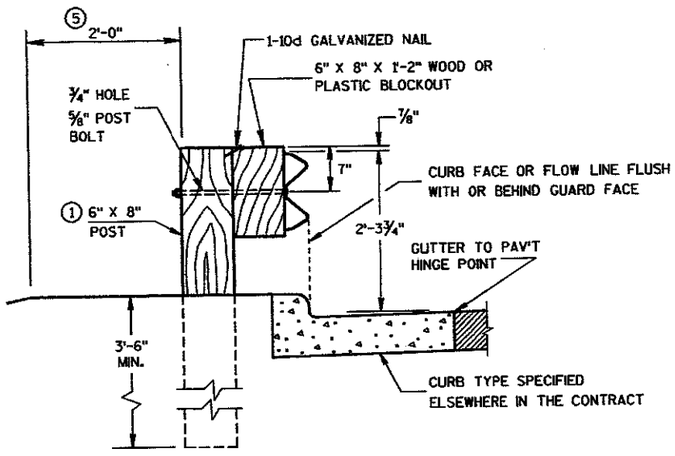
END VIEW
LOCATED ALONG A ROADWAY SHOULDER



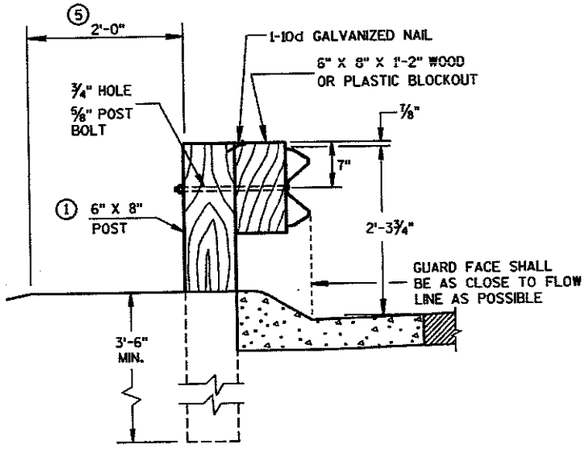
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE



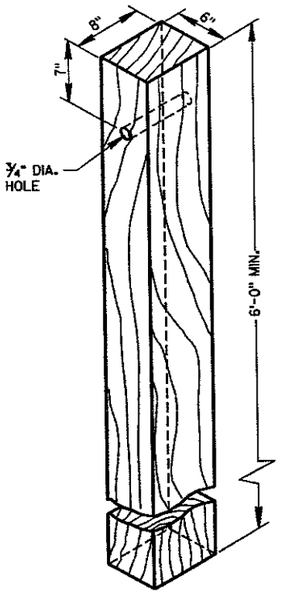
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



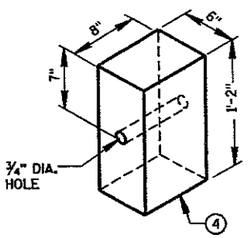
END VIEW
LOCATED ALONG A CURBED ROADWAY



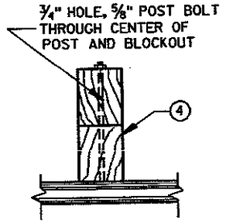
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



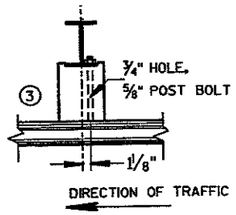
WOOD POST
(6"X8") NOMINAL



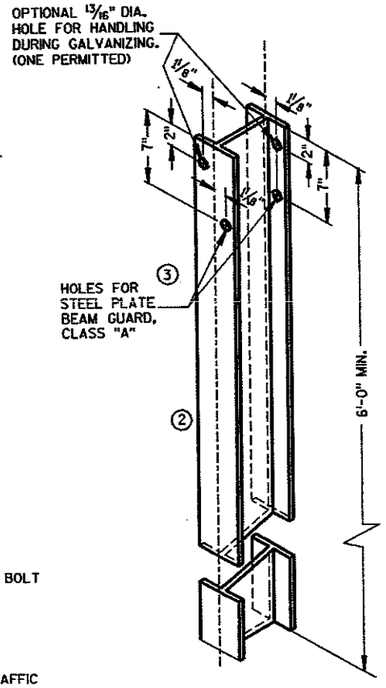
WOOD OR PLASTIC
BLOCKOUT FOR WOOD POSTS



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM

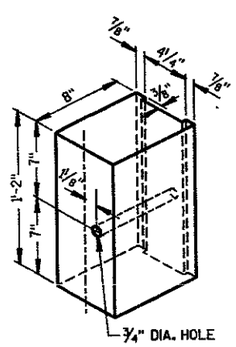


PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



NOTCHED PLASTIC BLOCKOUT
FOR STEEL POSTS

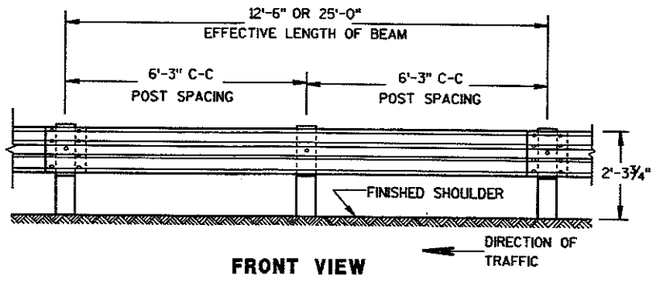
STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

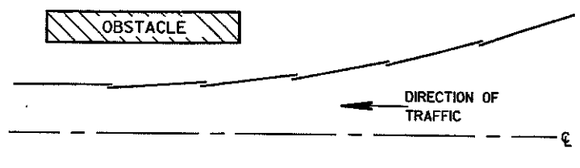
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

S.D.D. 14 B 15-4a

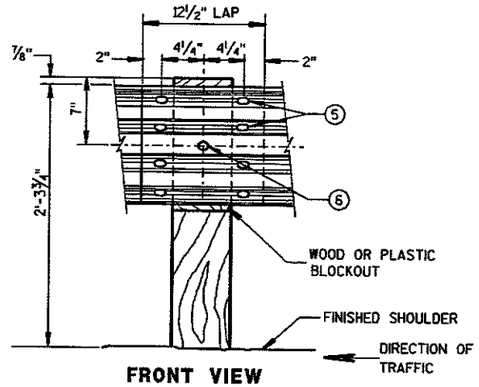
S.D.D. 14 B 15-4a



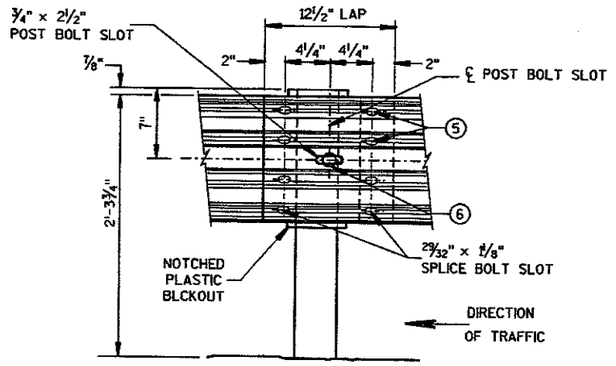
FRONT VIEW



PLAN VIEW
BEAM LAPPING DETAIL



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



FRONT VIEW
BEAM SPLICE AT STEEL POST

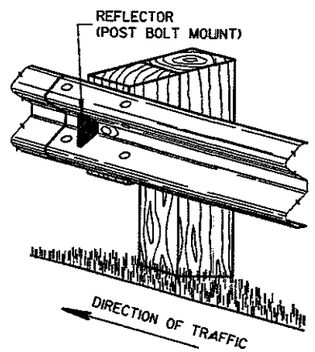
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

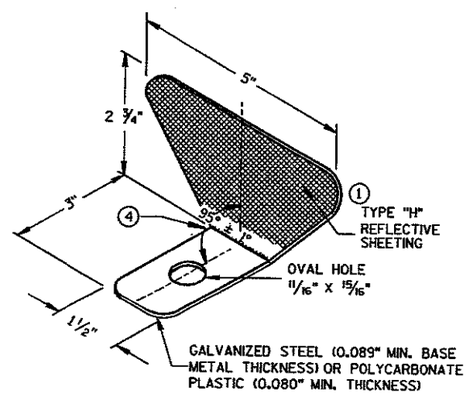
GENERAL NOTES

1. 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.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 -⅝" ϕ X 1¼" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. ⅝" ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.

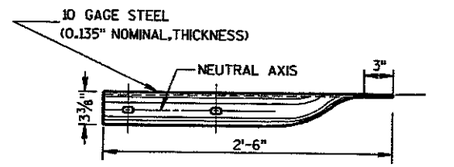
REFLECTOR SPACING ②

	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 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 ④	

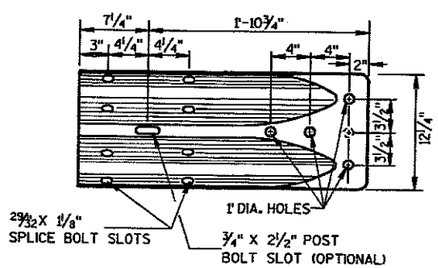




ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

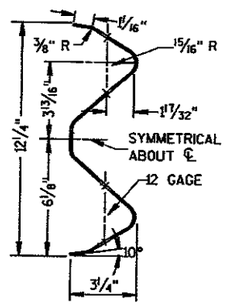


PLAN VIEW



FRONT VIEW

W BEAM TERMINAL CONNECTOR
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION THRU W BEAM

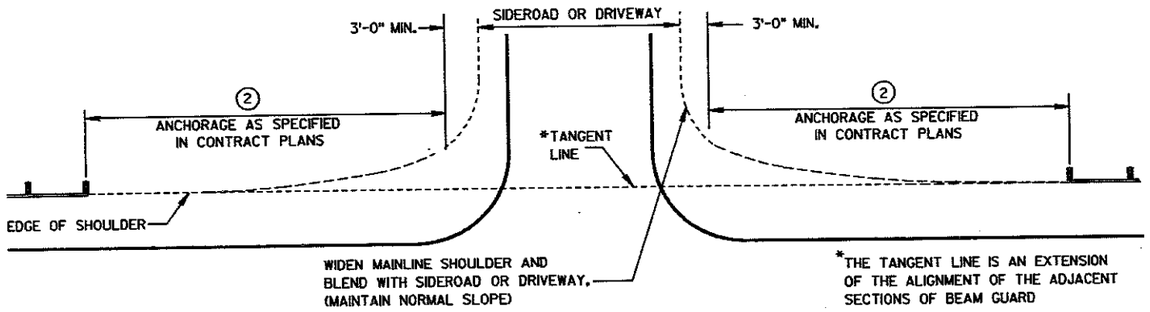
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

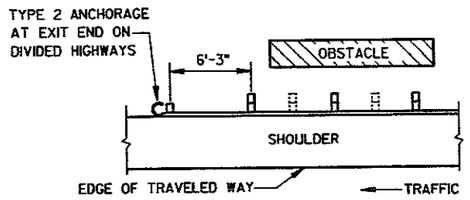
APPROVED 12/08/00 DATE
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 B 15-4b

S.D.D. 14 B 15-4b



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

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.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

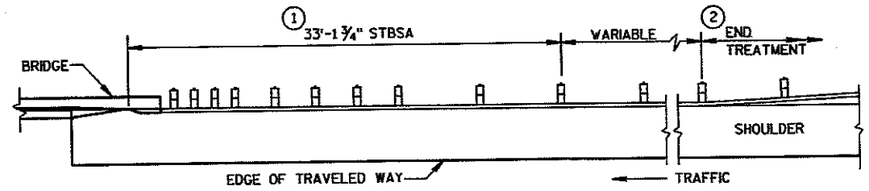
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) USE STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA).

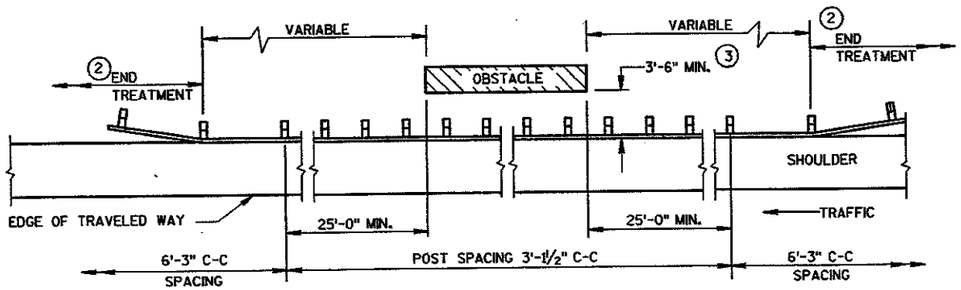
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3) DESIGN DEFLECTION OF W-BEAM BARRIER SYSYTEM

LATERAL DISTANCE TO FIXED OBJECT	POST SPACING
3'-6" TO 4'-6"	3' - 1½"
4'-6" AND OVER	6' - 3"

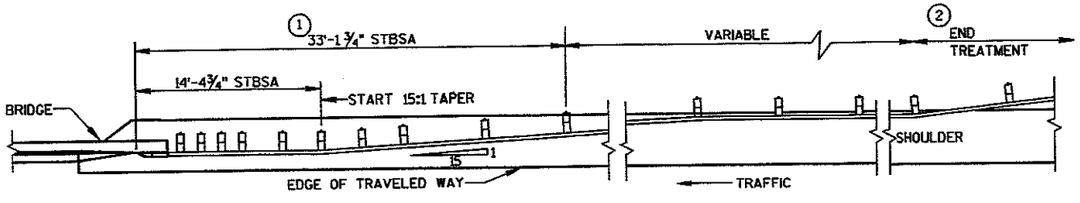


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OSBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES

(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE

John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

S.D.D. 14 B 18-4a

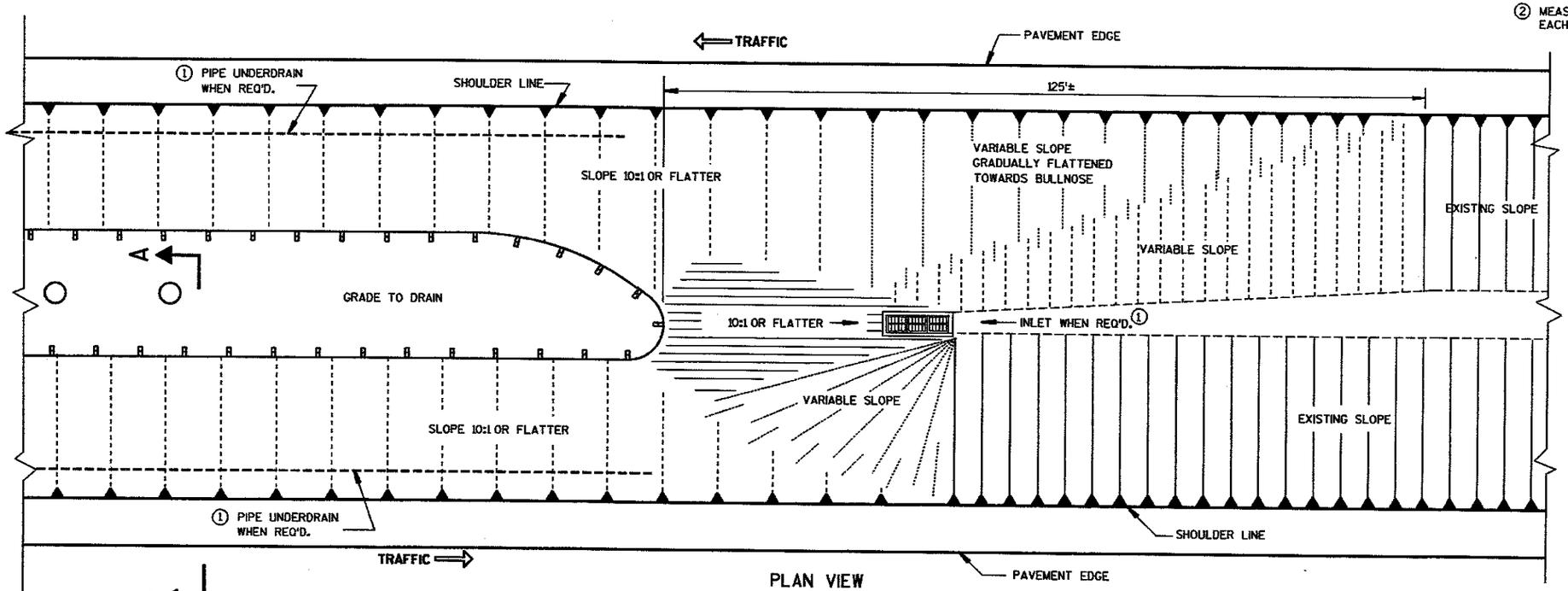
S.D.D. 14 B 18-4a

GENERAL NOTES

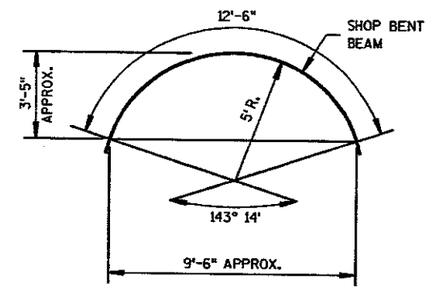
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH BULLNOSE INSTALLATION.

(1) PROJECT SPECIFIC DRAINAGE DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

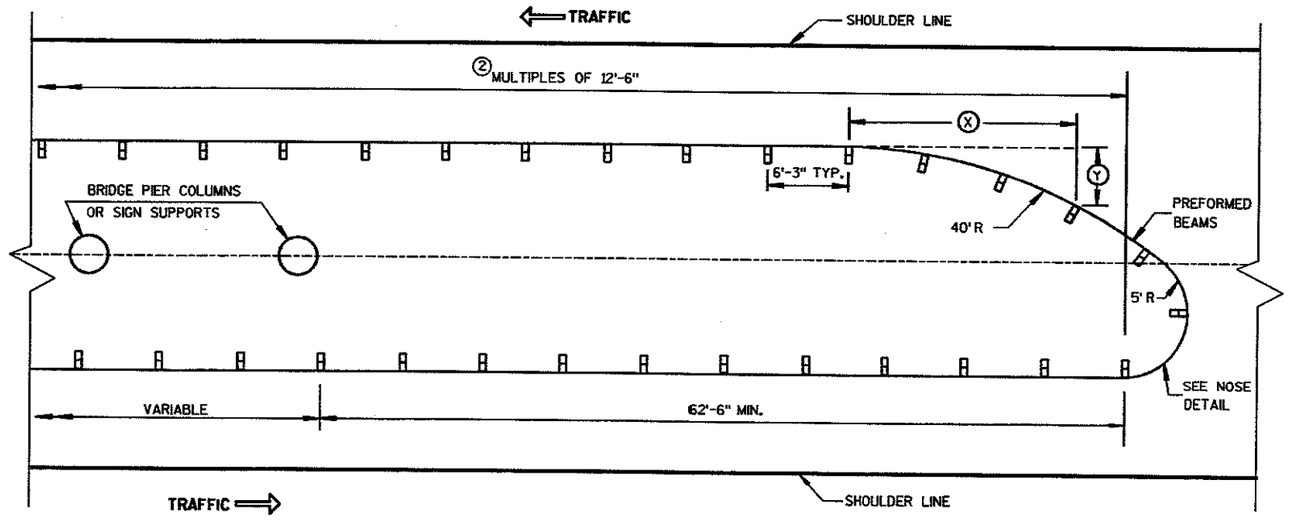
(2) MEASURE THE BULLNOSE INSTALLATION IN PLACE BY THE LINEAR FOOT ALONG EACH SIDE AND AROUND THE NOSE AS STEEL PLATE BEAM GUARD, CLASS "A".



PLAN VIEW
SLOPE DETAIL



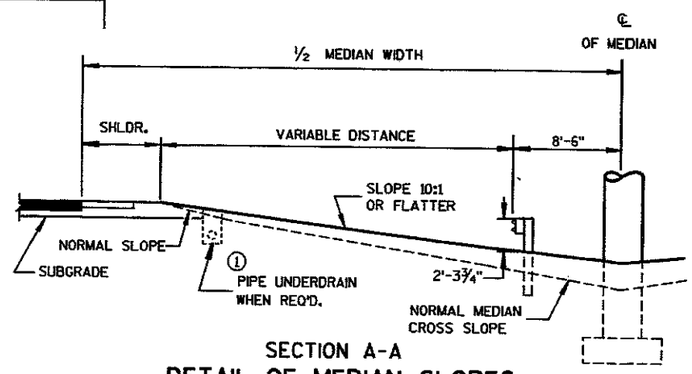
NOSE DETAIL



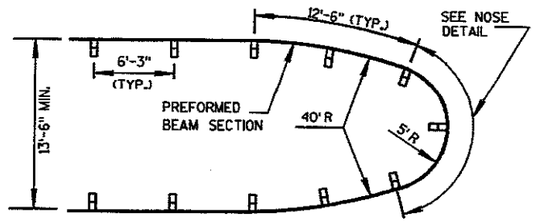
PLAN VIEW
TYPICAL LAYOUT AT PIERS AND SIGN SUPPORTS

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

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



SECTION A-A
DETAIL OF MEDIAN SLOPES



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

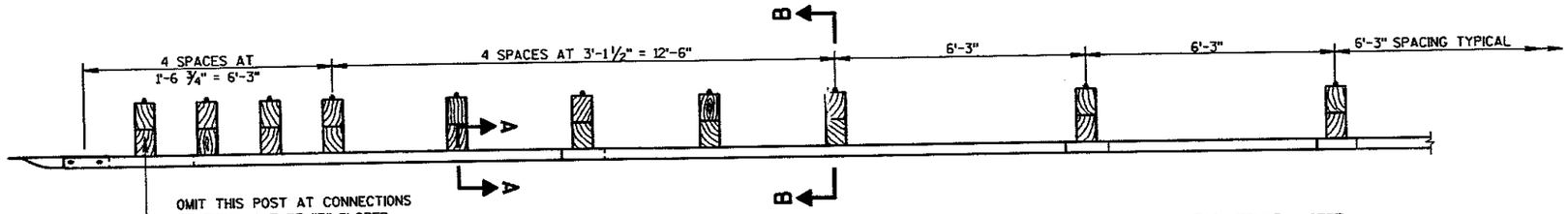
APPROVED
12/08/00
DATE

John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

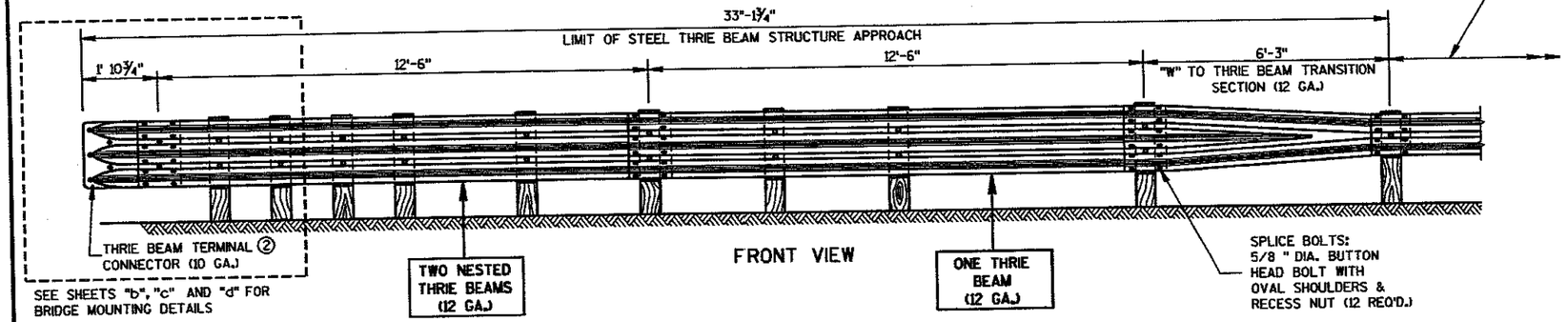
FHWA

S.D.D. 14 B 18-4d

S.D.D. 14 B 18-4d



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.

FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

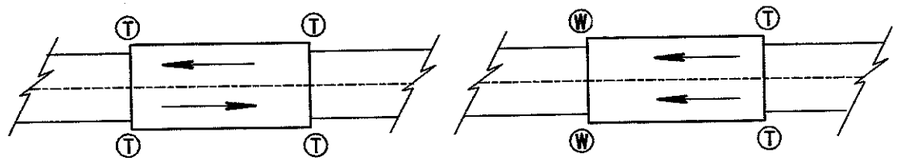
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

① INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 4'-0" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

② BRIDGE RAILING TYPE "W" DO NOT REQUIRE A TERMINAL CONNECTOR.

③ WHEN SPECIFIED IN THE PLANS, THE CONTRACTOR MAY REDUCE OR ELIMINATE THE 2 FOOT MINIMUM TO HINGE POINT IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.



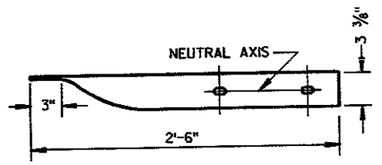
TWO WAY TRAFFIC

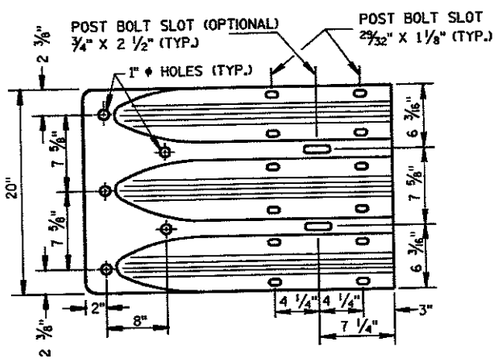
ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

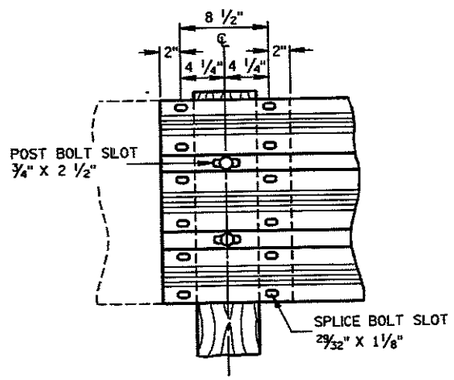
Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

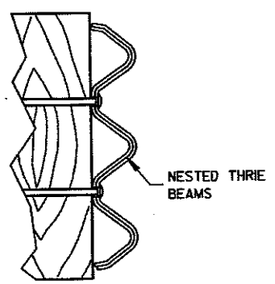




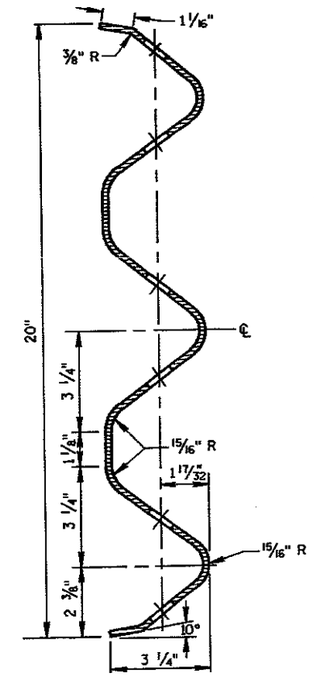
THRIE BEAM TERMINAL CONNECTOR



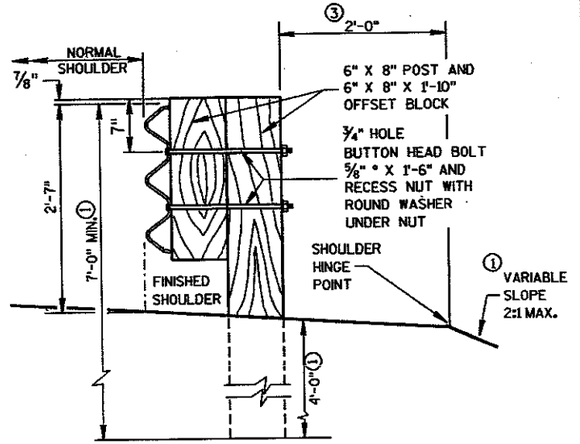
THRIE BEAM SPLICE



PARTIAL SECTION A-A



SECTION THRU THRIE BEAM RAIL ELEMENT



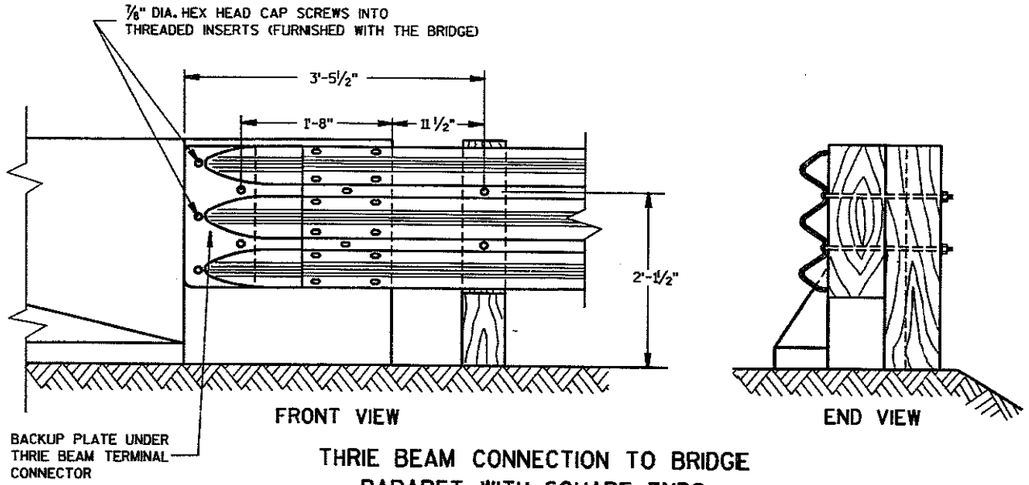
SECTION B-B

STEEL THRIE BEAM STRUCTURE APPROACH

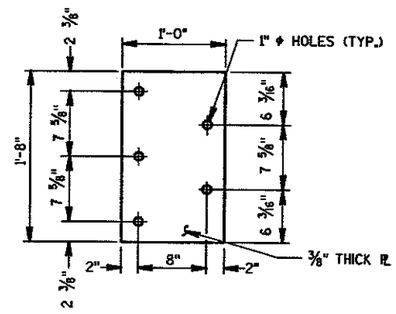
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 20-5a

S.D.D. 14 B 20-5a



THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



② BACKUP PLATE DETAIL

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE 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.

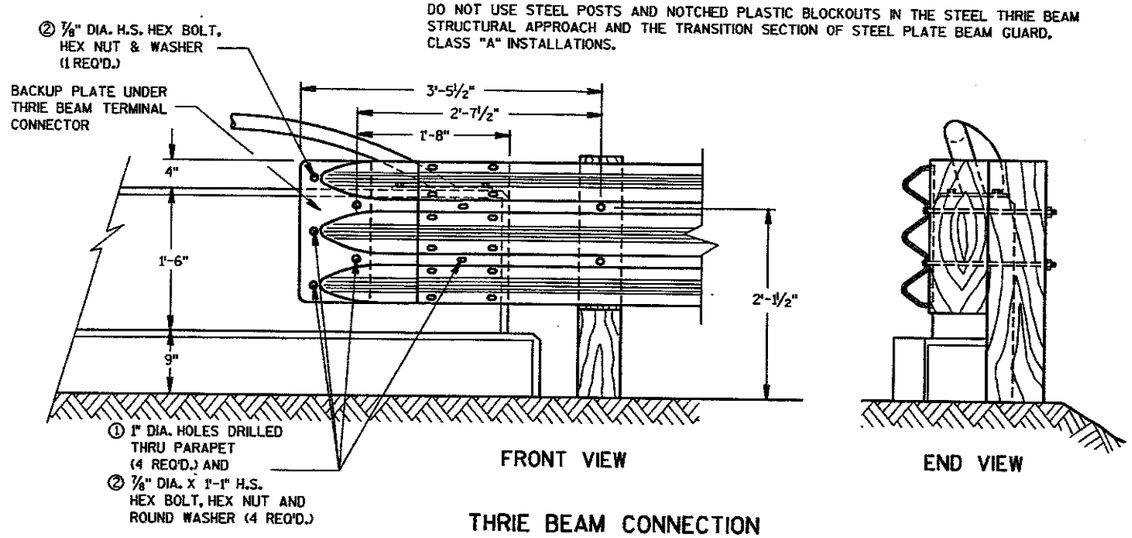
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 ¼" O.D. X 5/32" THICK.

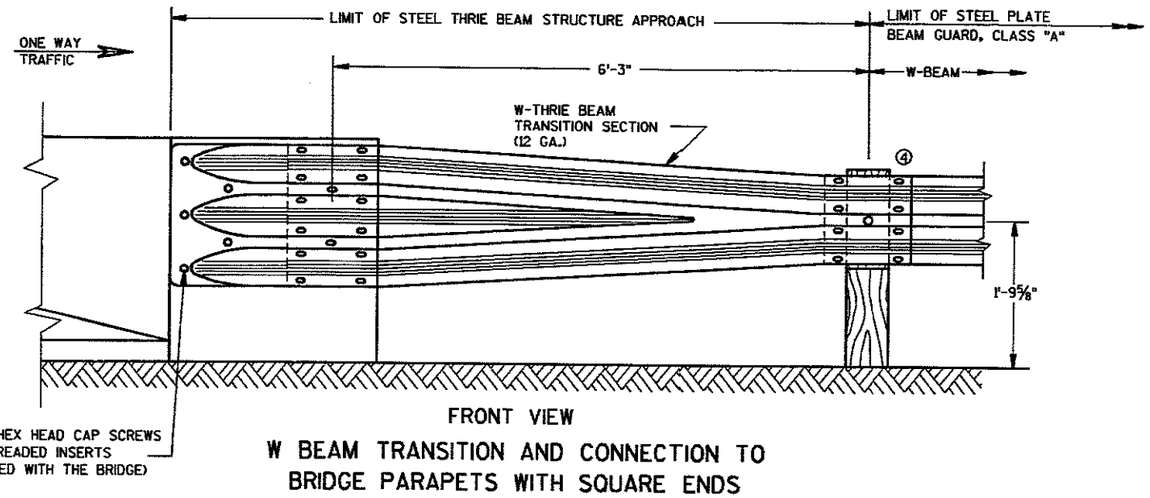
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

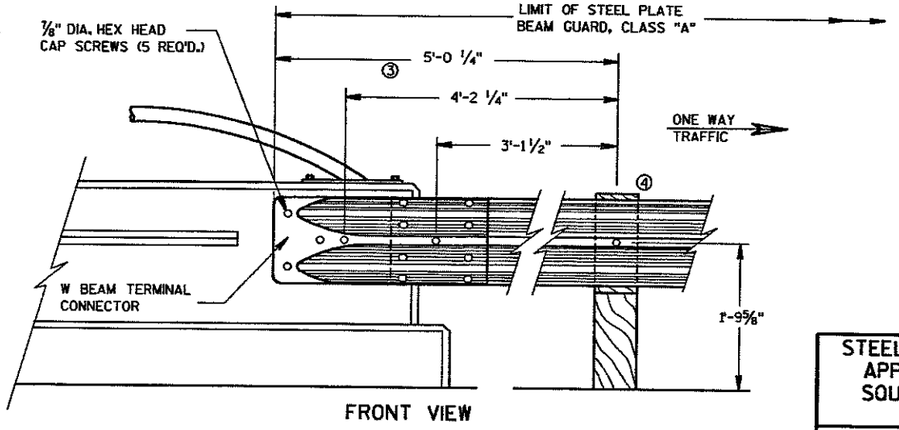


THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

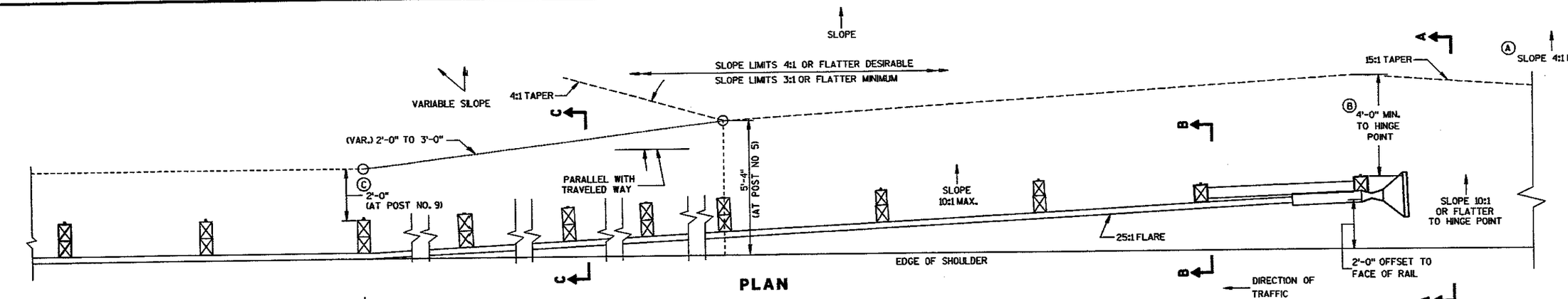
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS

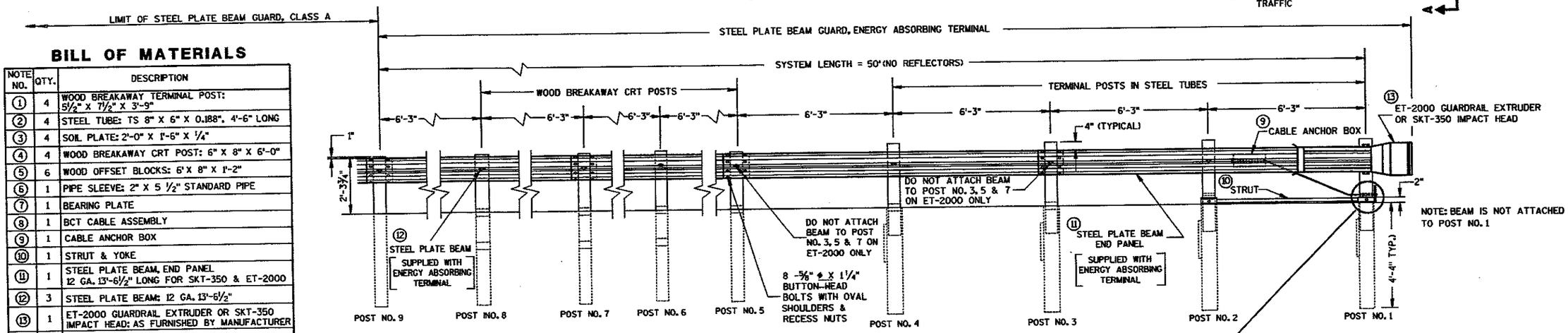
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 B 20-5b

S.D.D. 14 B 20-5b

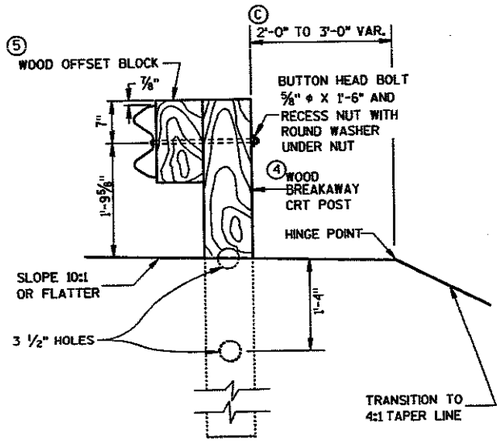




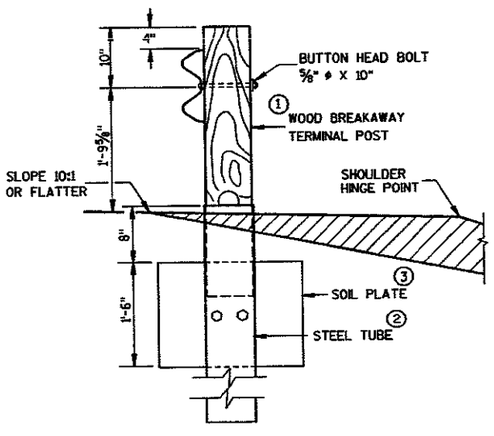
ELEVATION

BILL OF MATERIALS

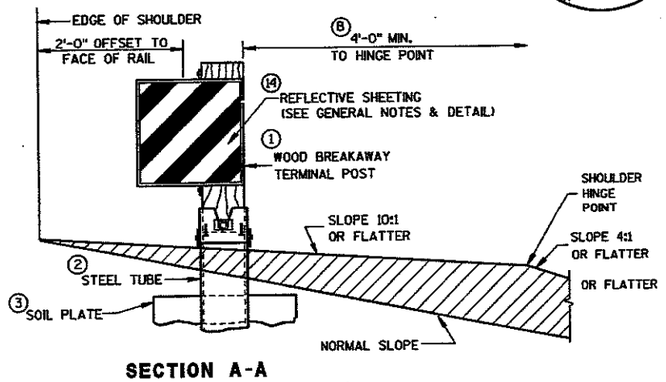
NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X ¼"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6½" LONG FOR SKT-350 & ET-2000
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	1	ET-2000 GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"



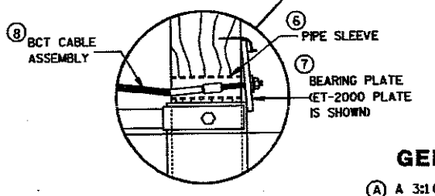
SECTION C-C
TYPICAL AT POST NOS. 5-8 INC.



SECTION B-B
TYPICAL AT POST NO. 2
(ADD WOOD OFFSET BLOCK AT POST 3 & 4)



SECTION A-A
TYPICAL AT POST NO. 1



GENERAL NOTES

(A) A 3:1 OR FLATTER SLOPE MAY BE USED FOR INSTALLATION ON EXISTING HIGHWAYS.

(B) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 4-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. SIMILARLY THE 15:1 TAPER MAY BE REDUCED TO 4:1.

(C) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 2-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK.

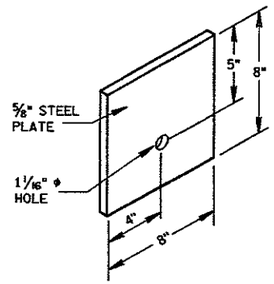
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

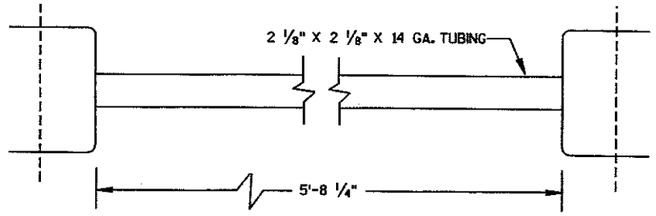
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 24-3a

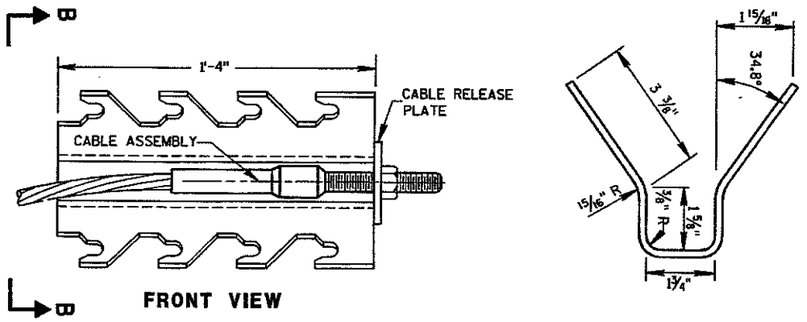
S.D.D. 14 B 24-3a



STEEL BEARING PLATE (SKT-350)



STRUT DETAIL (SKT-350)

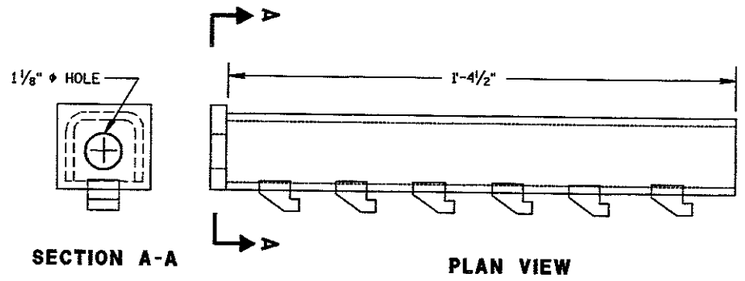


FRONT VIEW

SECTION B-B

CABLE ANCHOR BOX (SKT-350)

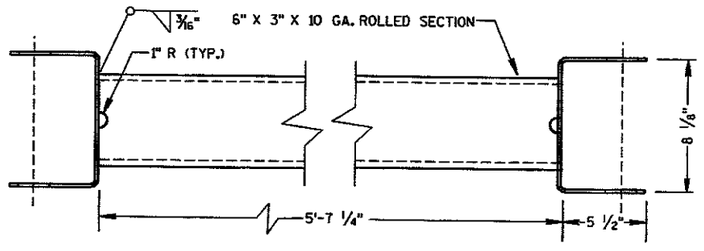
(SKT-350)



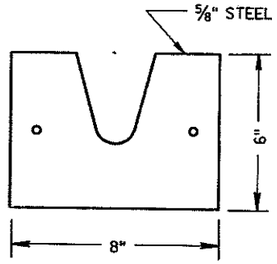
SECTION A-A

PLAN VIEW

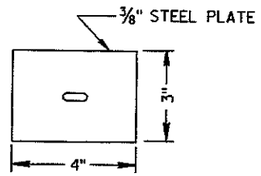
CABLE ANCHOR BOX (ET-2000)



STRUT DETAIL (ET-2000)

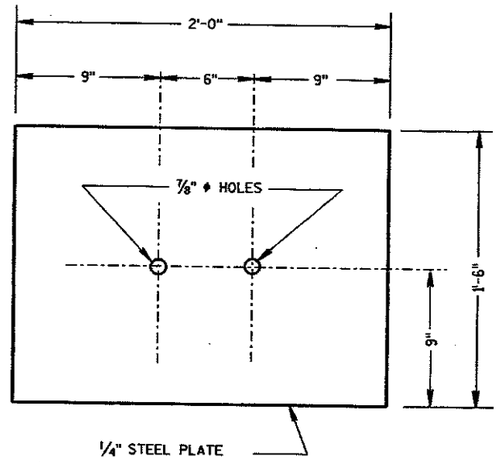


STEEL BEARING PLATE (ET-2000)



BEARING PLATE WASHER ET-2000)

(ET-2000)



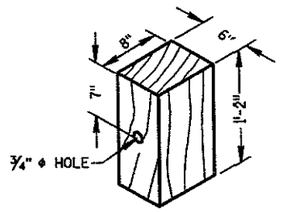
SOIL PLATE (SKT-350 & ET-2000)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

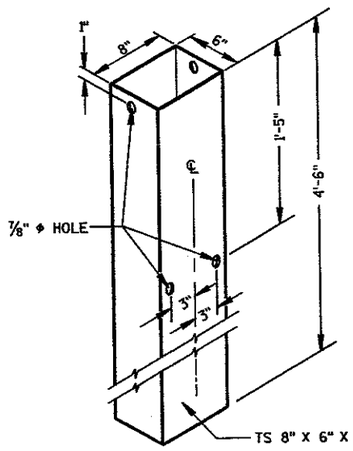
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 24-3b

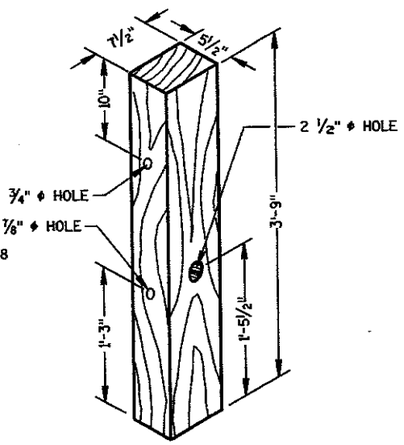
S.D.D. 14 B 24-3b



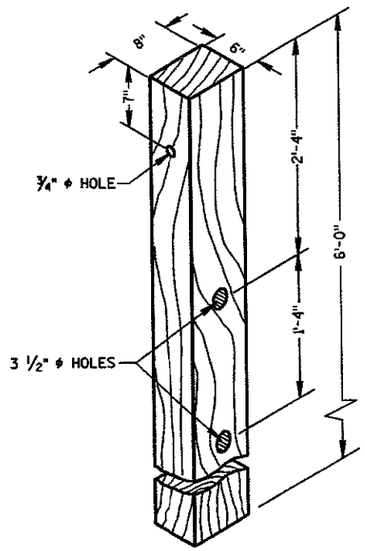
WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



STEEL TUBE
(POSTS NO. 1-4
THE STEEL TUBE SHALL CONFORM
TO REQUIREMENTS OF ASTM A500



TERMINAL POST
(POSTS NO. 1-4



CRT POST
(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS

GENERAL NOTES

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

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIATERY PRODUCT MATERIALS.

THE "ET-2000" IS AVAILABLE FROM SYRO, INC., 2524 N. STEMMONS FREEWAY, DALLAS TEXAS 75207. TELEPHONE 1-800-835-6086 OR 1-800-644-7976

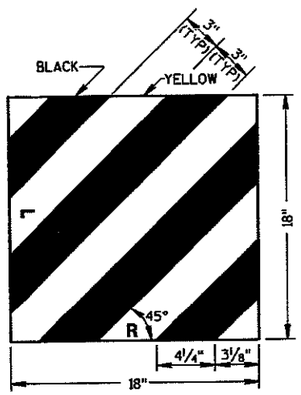
THE "SKT-350" IS AVAILABLE FROM ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, ILLINOIS 60423. TELEPHONE (815) 464-5917

THE ET-2000, AND SKT-350 END TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-93b, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

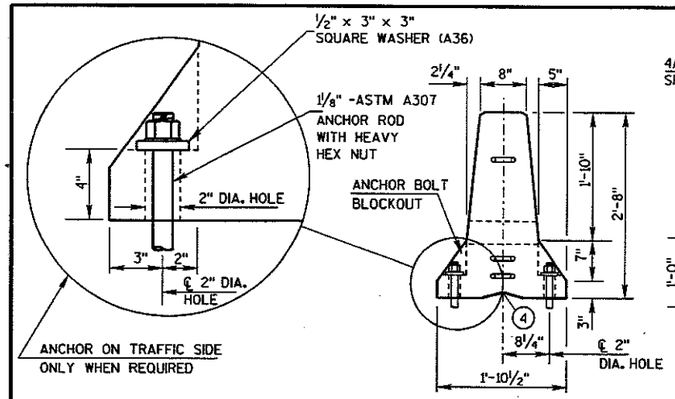


REFLECTIVE SHEETING DETAIL

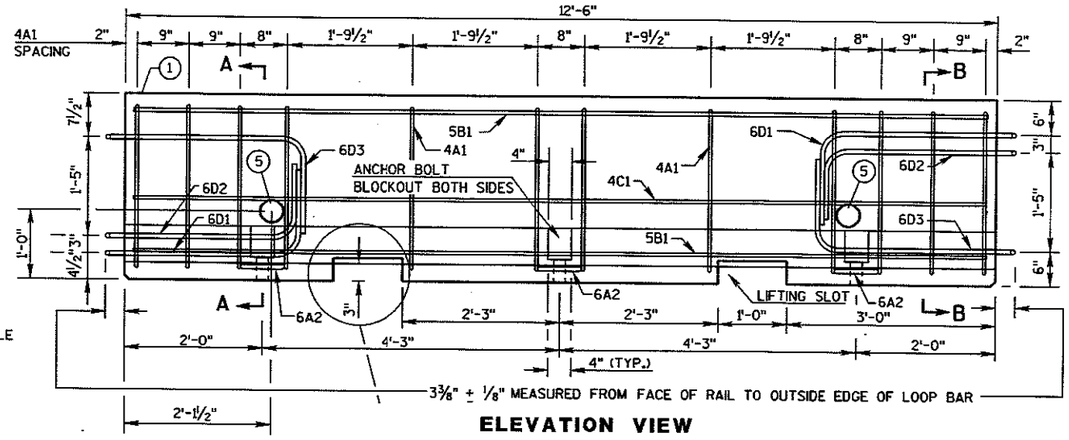
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 12/08/00 DATE CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA

S.D.D. 14 B 24-3c

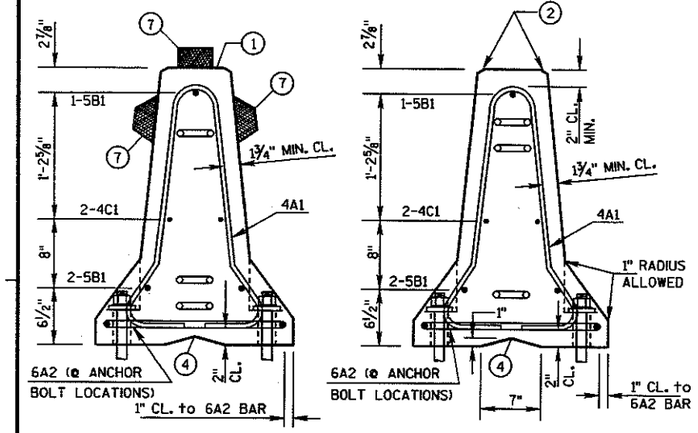
S.D.D. 14 B 24-3c



END VIEW



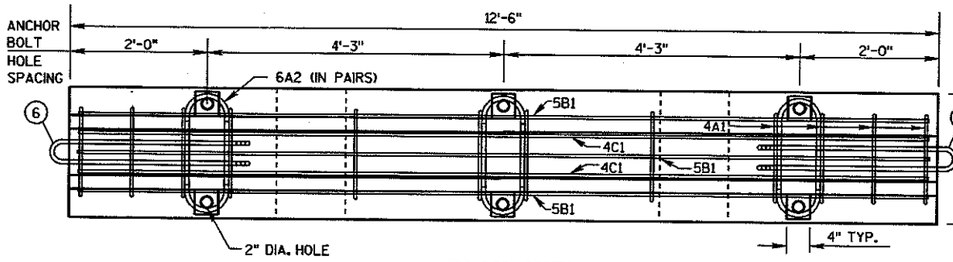
ELEVATION VIEW



SECTION A-A
(STIRRUP PLACEMENT)

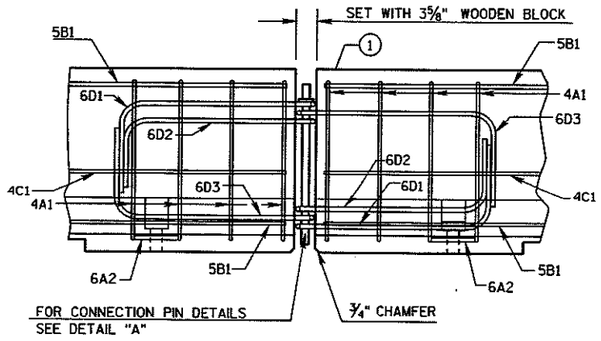
SECTION B-B
(STIRRUP PLACEMENT)

DETAIL "B"
LIFTING SLOT DETAIL

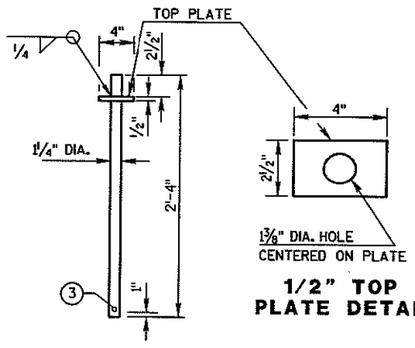


PLAN VIEW

DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN

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. THESE ARE TYPICAL DETAILS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST, 12'-6".

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR CONCRETE REINFORCEMENT, EXCEPT FOR THE LOOP BARS (6D1, 6D2 AND 6D3).

USE ASTM A-615, GRADE 60, ¾" SMOOTH STEEL BARS FOR THE LOOP BARS (6D1, 6D2 AND 6D3) WITH A MINIMUM YIELD STRENGTH OF 60 ksi. A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 ksi. A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

USE EITHER S.D.D. 14 B 7-10 (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" NEEDS TO BE ANCHORED IF THE DISTANCE TO THE DROPOFF OR EDGE OF BRIDGE DECK IS LESS THAN 2 FEET AND THE DROPOFF EXCEEDS 2 FEET.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY STAMPING OR FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) THE CONTRACTOR SHALL PROVIDE A ⅜" HOLE IN THE CONNECTION PIN.

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.

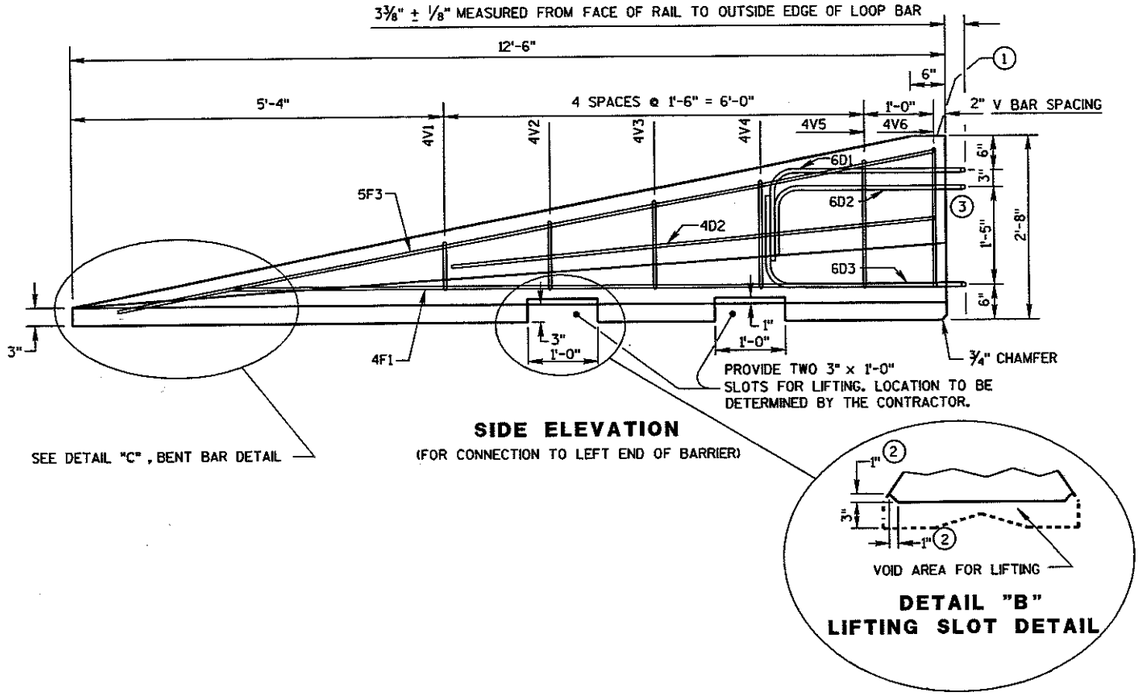
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

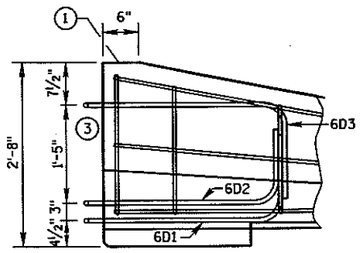
S.D.D. 14 B 7-10a

S.D.D. 14 B 7-10a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)

DETAIL "B"
LIFTING SLOT DETAIL



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. THESE ARE TYPICAL DETAILS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR CONCRETE REINFORCEMENT, EXCEPT FOR THE LOOP BARS (6D1, 6D2 AND 6D3).

USE ASTM A-615, GRADE 60, ¾" SMOOTH STEEL BARS FOR THE LOOP BARS (6D1, 6D2 AND 6D3) WITH A MINIMUM YIELD STRENGTH OF 60 ksi, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 ksi, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

USE EITHER S.D.D. 14 B 7-10 (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

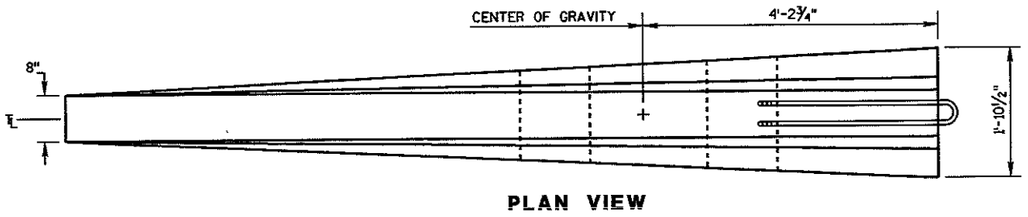
(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY STAMPING OR FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

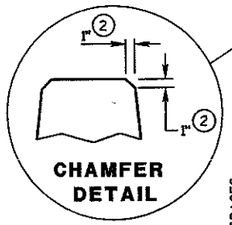
(3) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

IMPORTANT:

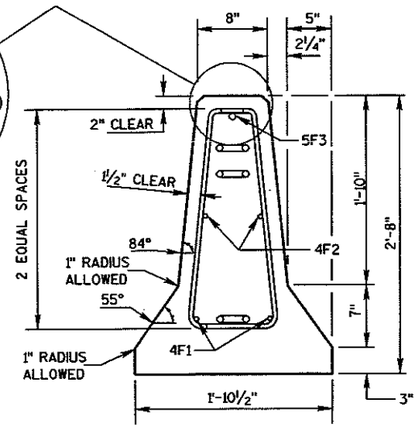
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.



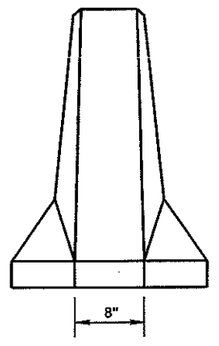
PLAN VIEW



CHAMFER DETAIL



END SECTION



FRONT ELEVATION

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

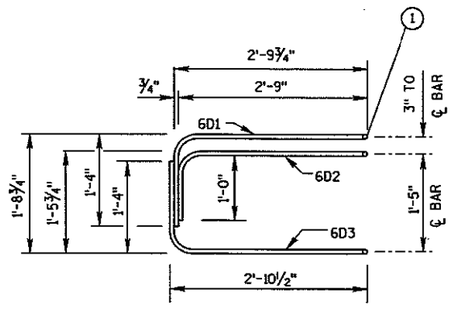
6

S.D.D. 14 B 7-10b

BARRIER TAPER SECTION BILL OF MATERIALS

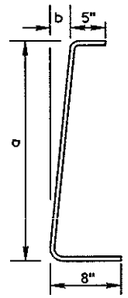
(PER 12'-6" BARRIER TAPER SECTION)

REINFORCING A615 Gr. 60			
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION

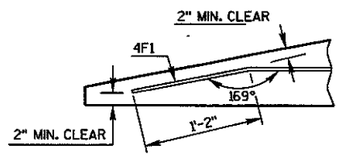
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS

2 AT EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY



DETAIL "C"
BENT BAR DETAIL

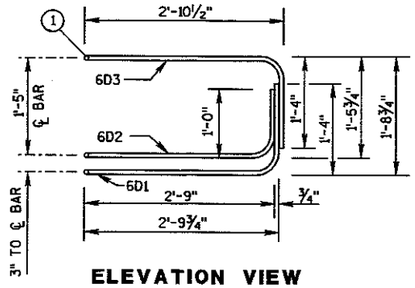
GENERAL NOTES

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.

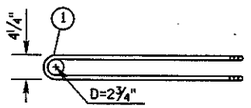
USE EITHER S.D.D. 14 B 7-10 (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.



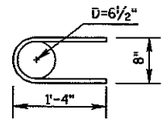
ELEVATION VIEW



PLAN VIEW

LOOP BAR ASSEMBLY

(MARKED END SHOWN, INVERT FOR OTHER END)

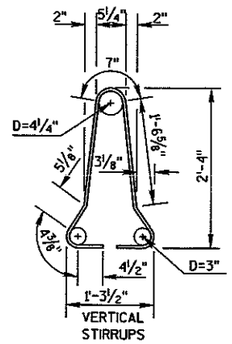


6A2

BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

REINFORCING A615 Gr. 60			
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



4A1

TAPER BARRIER SECTION

BARRIER SECTION

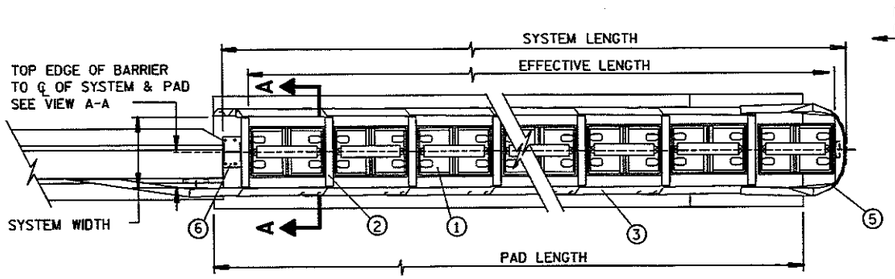
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"
BENDING DIAGRAM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

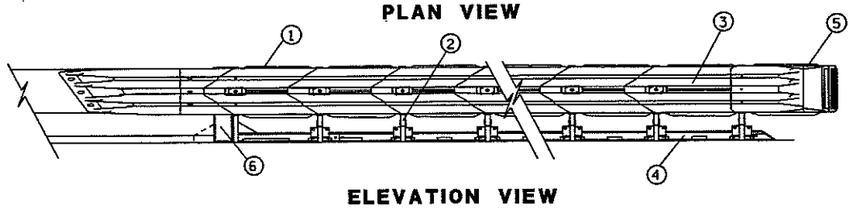
6

S.D.D. 14 B 7-10c

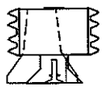
S.D.D. 14 B 7-10c



PLAN VIEW



ELEVATION VIEW



VIEW A-A

TYPICAL CRASH CUSHION

1. QUADGUARD CARTRIDGE
2. DIAPHRAGM
3. FENDER PANEL
4. MONORAIL
5. NOSE ASSEMBLY
6. BACKUP

GENERAL NOTES

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

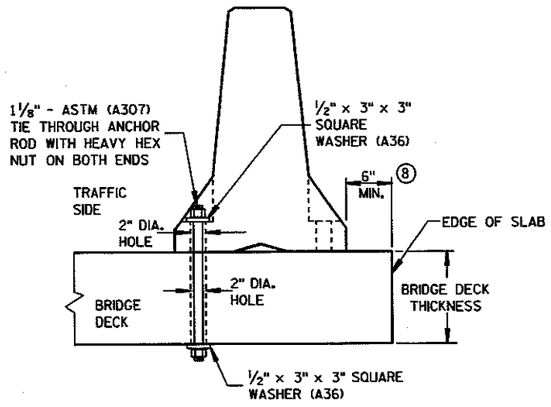
THE CRASH CUSHION SHALL BE MANUFACTURED, ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS DETAILED ELSEWHERE IN THE PLANS OR AS SHOWN ON THE APPROVED SHOP DRAWINGS. ANCHORING OF BARRIER IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

USE EITHER S.D.D. 14 B 7-10 (a-d) OR S.D.D. 14 B 7-10 (e & f). ALL NEW BARRIERS MANUFACTURED AFTER JUNE 2003, MUST CONFORM TO S.D.D. 14 B 7-10 (a-d).

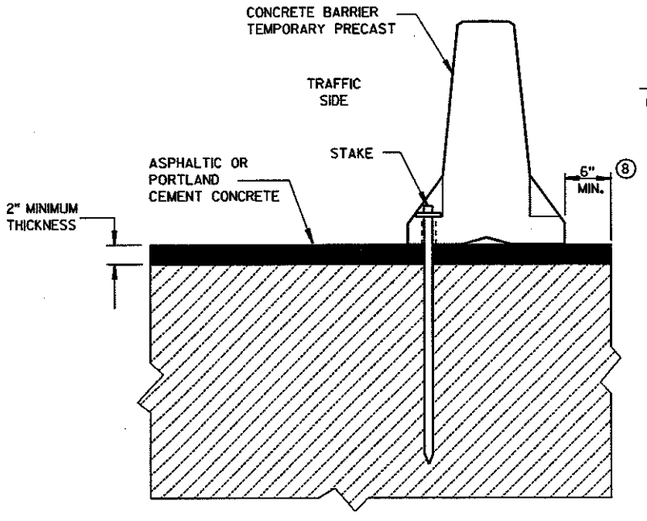
(7) PLACE TRANSITION SECTION IN A TANGENT SECTION OF BARRIER PARALLEL TO ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.

(8) CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" NEEDS TO BE ANCHORED IF THE DISTANCE TO THE DROPOFF OR EDGE OF BRIDGE DECK IS LESS THAN 2 FEET AND THE DROPOFF EXCEEDS 2 FEET.

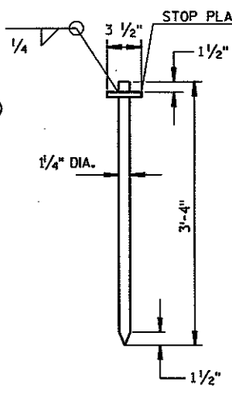
IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.



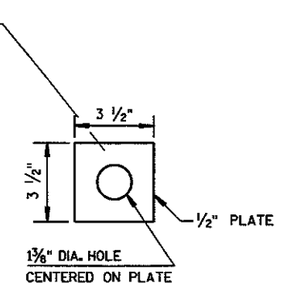
ANCHOR DETAIL FOR INSTALLATION ON BRIDGE DECK



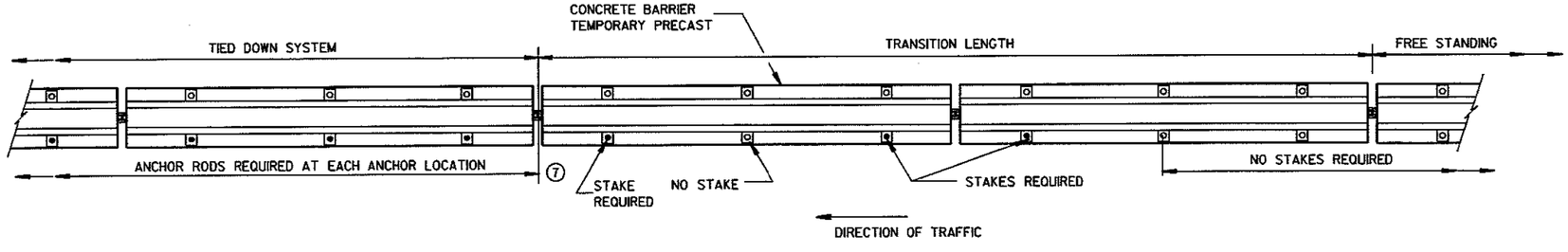
STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE



STAKE



STOP PLATE



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" ANCHORING DETAIL AND CRASH CUSHION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

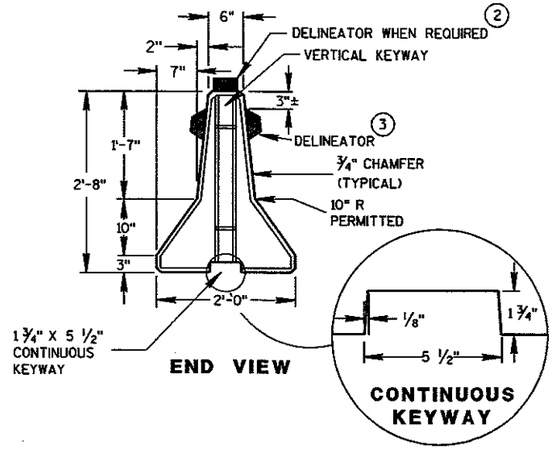
APPROVED 9/11/03 DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

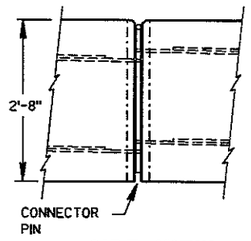
S.D.D. 14 B 7-10d

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

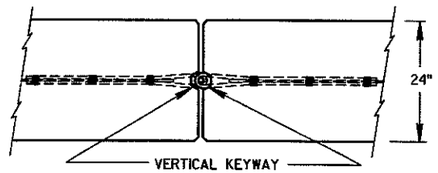
BILL OF MATERIALS



END VIEW



SIDE VIEW



PLAN VIEW

PIN & LOOP CONNECTION 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 THE APPLICABLE SPECIAL PROVISIONS.

THIS S.D.D. IS ONLY VALID FOR EXISTING STOCK OF 10'-0" NEW JERSEY BARRIER. DAMAGED NEW JERSEY BARRIERS MUST BE REPLACED WITH BARRIER FROM S.D.D. 14 B 7-10 (a-d).

BARRIERS SHALL BE REINFORCED WITH EITHER BAR STEEL REINFORCEMENT AS DETAILED ON THIS DRAWING OR WELDED STEEL WIRE FABRIC ADEQUATE TO ASSURE SAFE HANDLING STRENGTH.

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

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

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

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

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

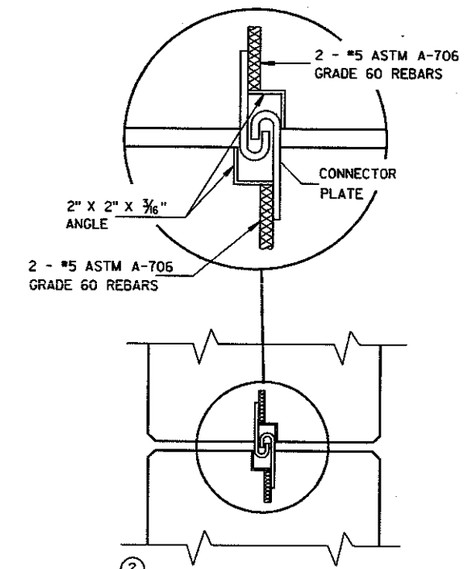
(3) BARRIERS USED TO SEPARATE OPPOSING TRAFFIC SHALL HAVE DELINEATORS ON BOTH SIDES. TOP MOUNTED DELINEATORS SHALL BE DOUBLE FACED FOR THIS CONDITION.

IMPORTANT:

DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.

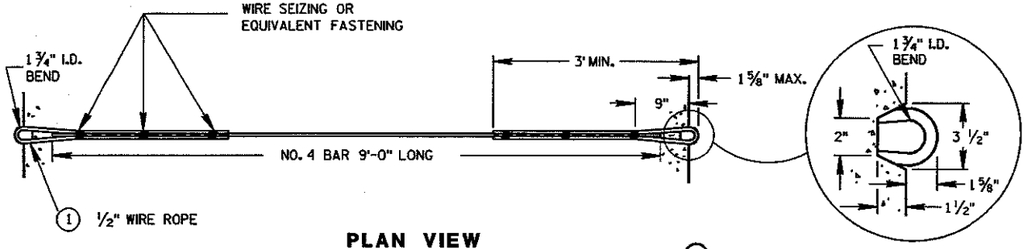
ALTERNATE DESIGN

J-J HOOKS PORTABLE CONCRETE BARRIER BY EASI-SET INDUSTRIES MAY BE FURNISHED INSTEAD OF THE BARRIER DETAILED ON THIS DRAWING. CONTACT INFORMATION : EASISET INDUSTRIES, P.O. BOX 300, MIDLAND, VIRGINIA 22728, TELEPHONE (703) 439-8911.



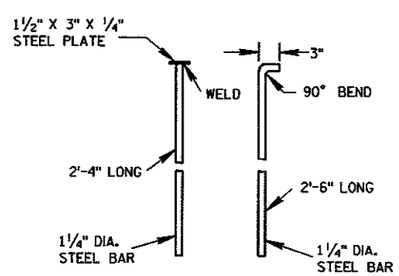
(2) **J-J HOOK CONNECTOR**

(ALTERNATIVE TO PIN & LOOP CONNECTOR)

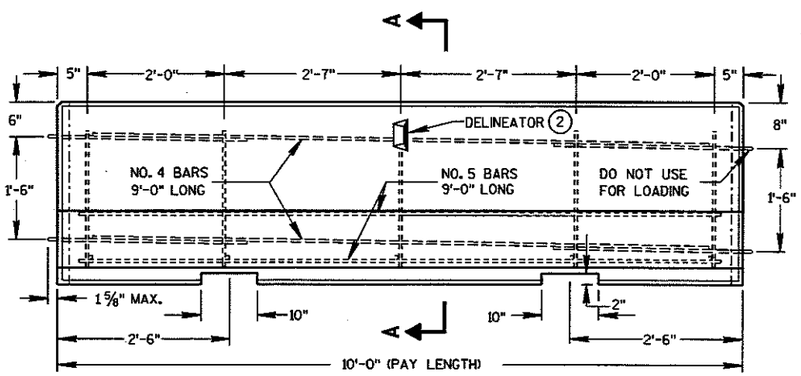


PLAN VIEW

TOP & BOTTOM CONNECTOR ASSEMBLY (1)

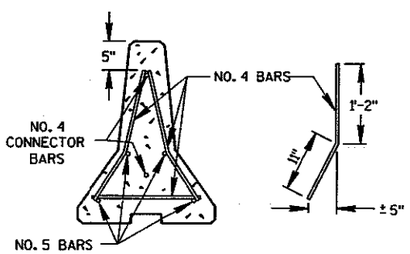


ALTERNATE CONNECTING PINS



SIDE VIEW

LOCATION OF REINFORCEMENT STEEL



SECTION A-A

BAR STEEL REINFORCEMENT

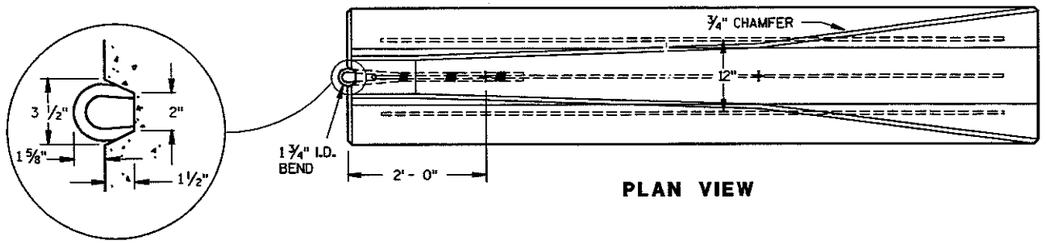
CONCRETE BARRIER
TEMPORARY PRECAST, 10'-0"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

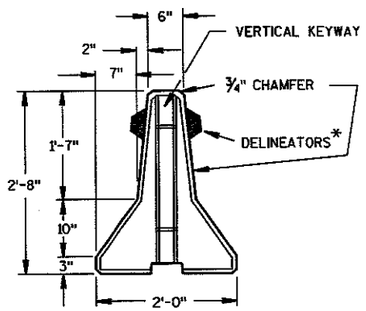
6

S.D.D. 14 B 7-10e

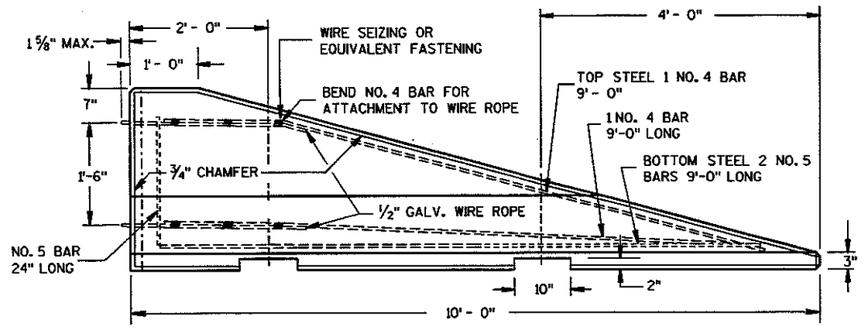
S.D.D. 14 B 7-10e



PLAN VIEW



END VIEW



SIDE VIEW

END SECTION FOR TEMPORARY PRECAST CONCRETE BARRIER

GENERAL NOTES

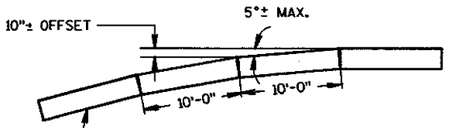
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

THIS S.D.D. IS ONLY VALID FOR EXISTING STOCK OF 10'-0" NEW JERSEY BARRIER. DAMAGED NEW JERSEY BARRIERS MUST BE REPLACED WITH BARRIER FROM S.D.D. 14 B 7-10 (a-d).

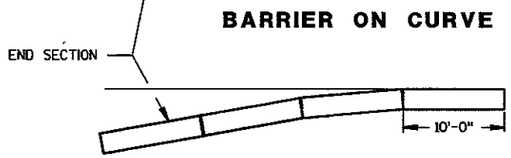
THE CRASH CUSHION SHALL BE MANUFACTURED, ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS DETAILED ELSEWHERE IN THE PLANS OR AS SHOWN ON THE APPROVED SHOP DRAWINGS. THE CRASH CUSHION PLATFORM SHALL BE ANCHORED TO EITHER 6 INCH MINIMUM CONCRETE PAVEMENT OR 3 INCH MINIMUM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

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

IMPORTANT:
DO NOT INTERMIX 12'-6" CONCRETE BARRIER WITH 10'-0" CONCRETE BARRIER IN ANY SINGLE RUN OR INSTALLATION.

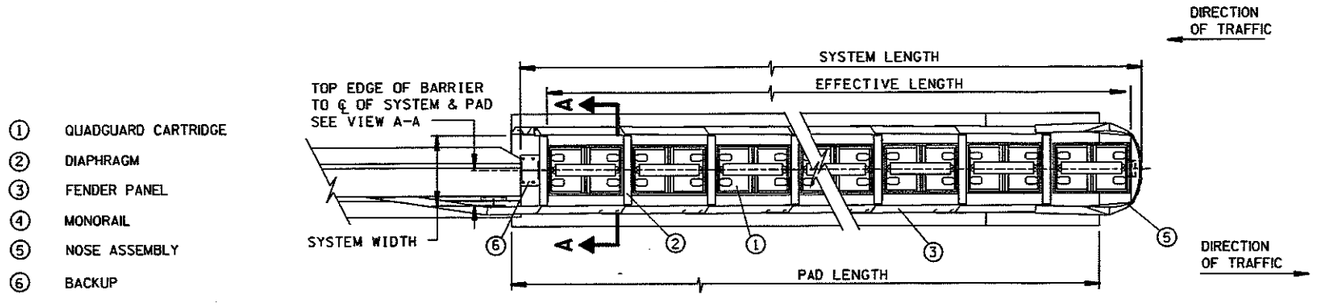


BARRIER ON CURVE



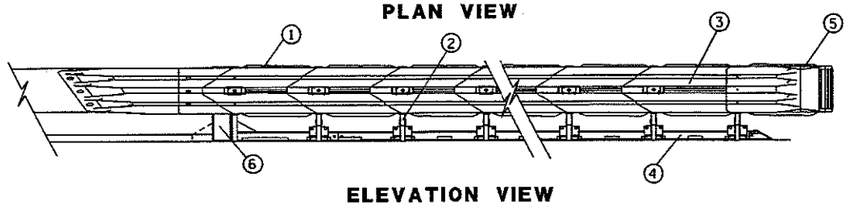
FLARE AT BARRIER END

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



PLAN VIEW

VIEW A-A



ELEVATION VIEW

TYPICAL CRASH CUSHION

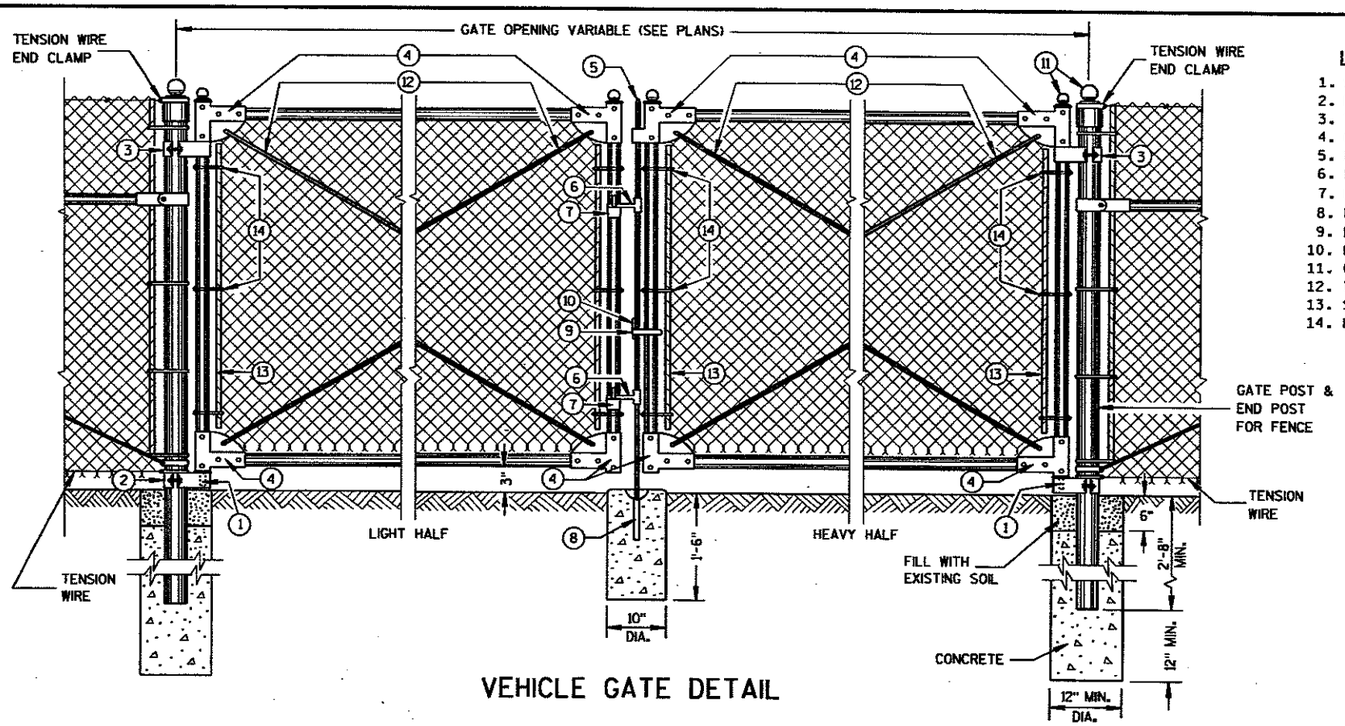
CONCRETE BARRIER TEMPORARY PRECAST END SECTION, 10'-0" AND PORTABLE CRASH CUSHION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

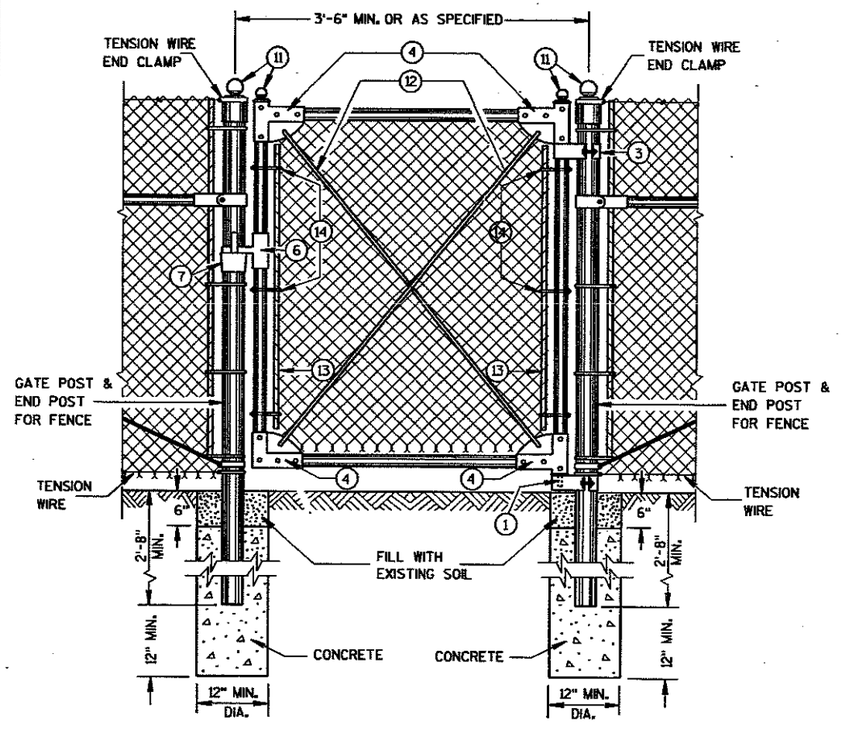
APPROVED 9/11/03
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14B 7-10f



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

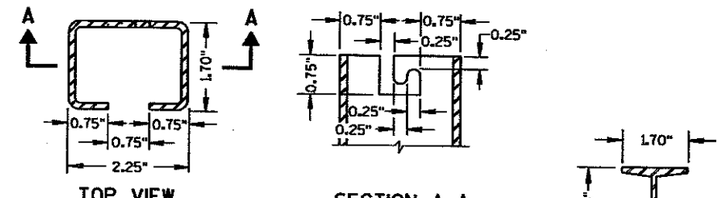
LEGEND

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

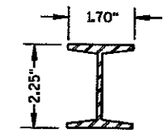
GENERAL NOTES

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

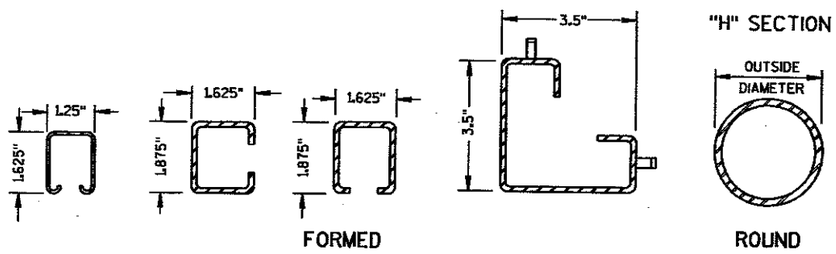
FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.



ALTERNATIVE POST TOP



"H" SECTION



CROSS SECTIONS OF POSTS AND RAILS

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FENCE POSTS AND RAILS

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

* HIGH STRENGTH STEEL

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

GATE FRAME MEMBERS, SIZE AND WEIGHT

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

* HIGH STRENGTH STEEL

GATE POST SIZE AND WEIGHT

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

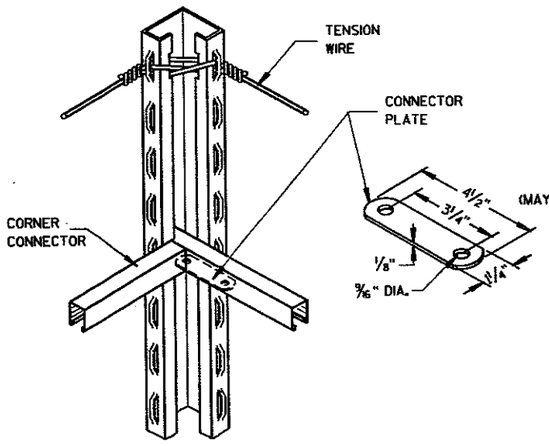
* HIGH STRENGTH STEEL

CHAIN LINK FENCE

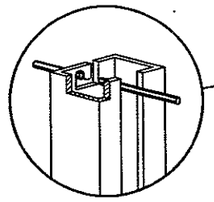
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 B 3-10a

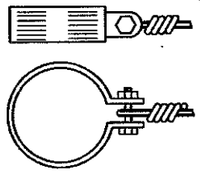
S.D.D. 15 B 3-10a



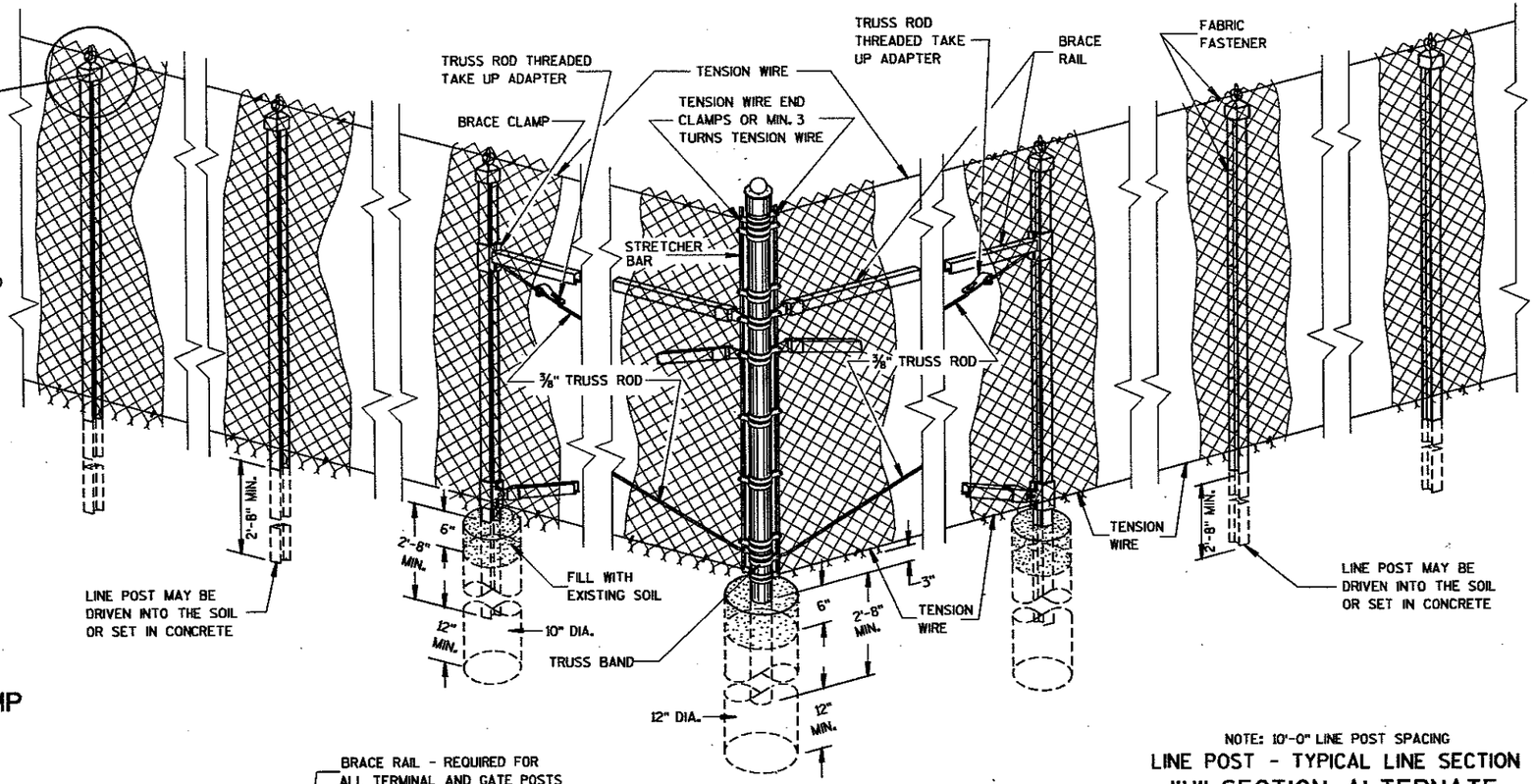
BRACE RAIL CORNER CONNECTION
ROLL FORMED POST



ALTERNATIVE POST TOP
(MAY BE USED INSTEAD OF LOOP CAP)

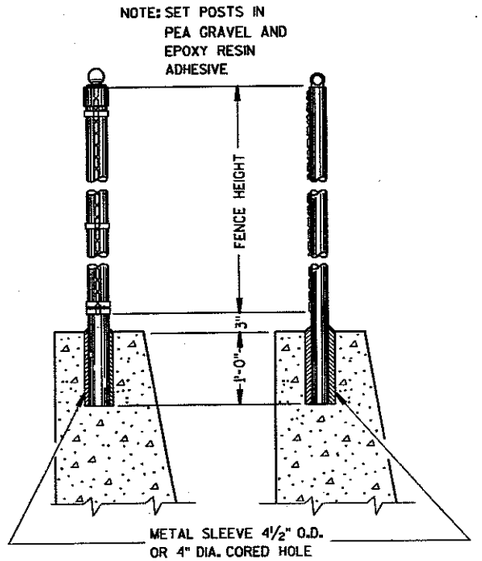


TENSION WIRE END CLAMP

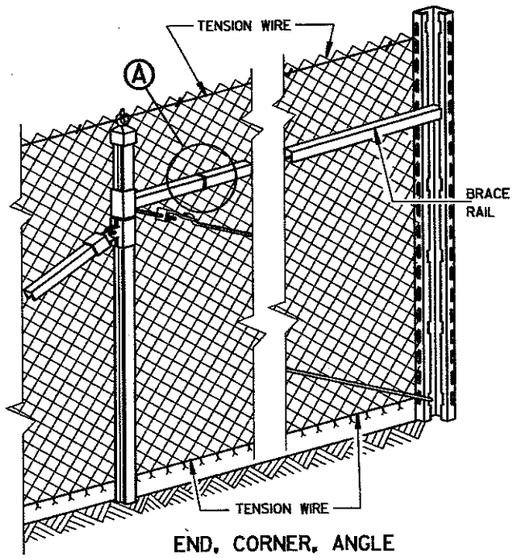


END, CORNER, ANGLE
INTERSECTION & INTERMEDIATE
BRACED POSTS
PIPE ALTERNATE

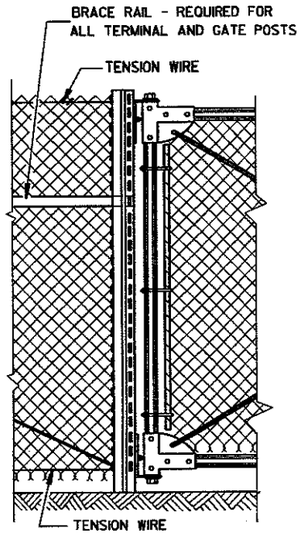
NOTE: 10'-0" LINE POST SPACING
LINE POST - TYPICAL LINE SECTION
"H" SECTION ALTERNATE



END POST &
CORNER POST
LINE POST



END, CORNER, ANGLE
INTERSECTION & INTERMEDIATE
BRACED POSTS

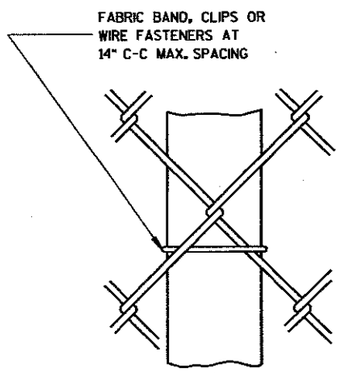


TERMINAL OR GATE POST

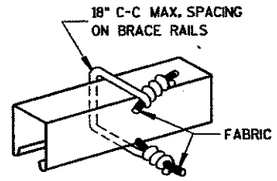
DETAILS OF FENCE ON WALL

ROLL FORMED ALTERNATE

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



LINE POST
FABRIC FASTENER



BRACE RAIL
FABRIC FASTENER
Ⓐ

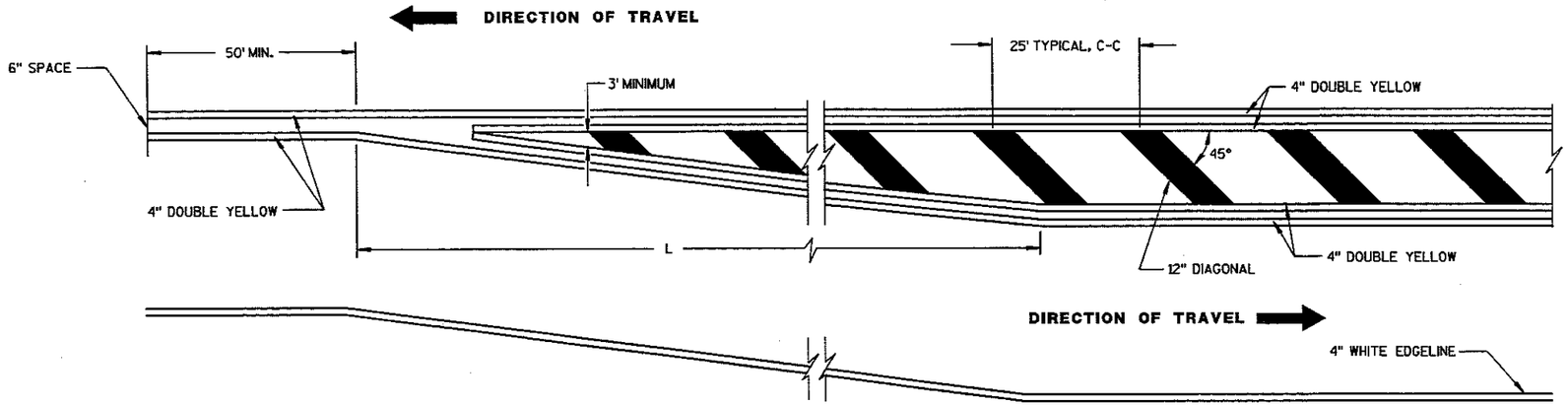
CHAIN LINK FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

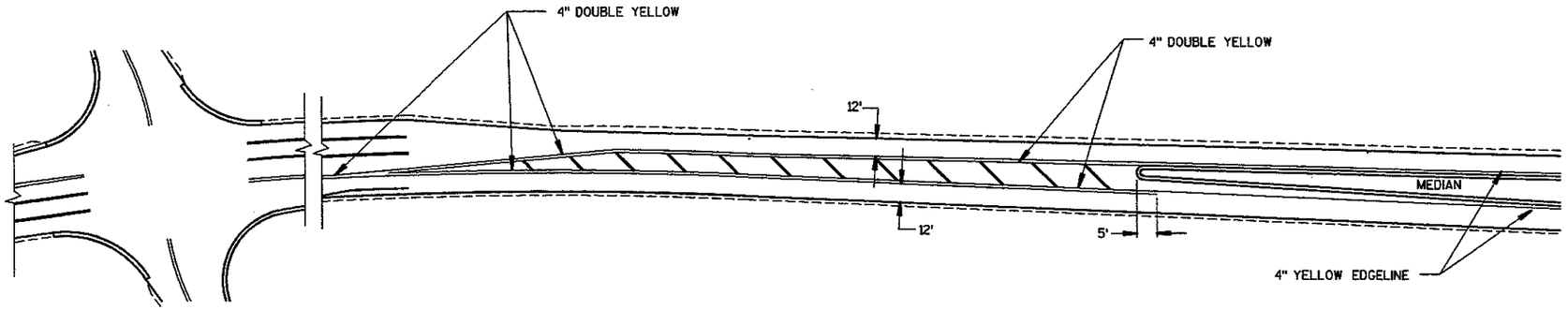
APPROVED 10/25/95 — DATE — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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

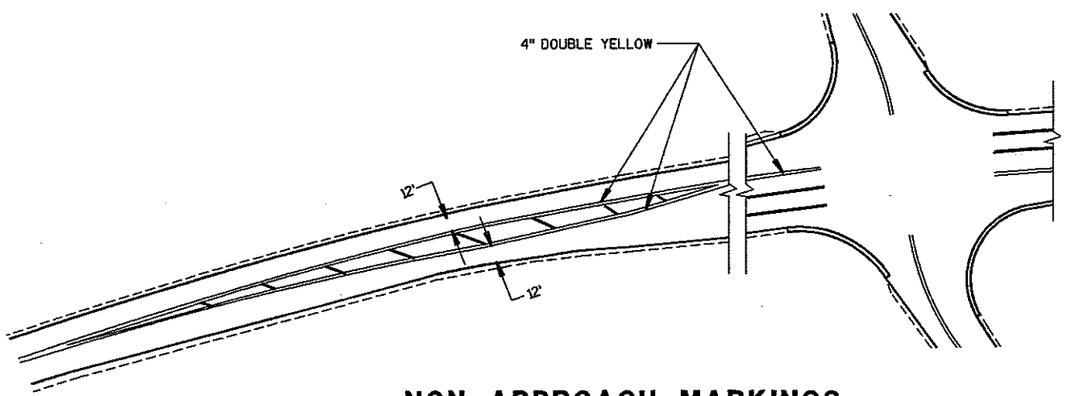
S.D.D. 15 B 3-10b



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

MINIMUM SHIFTING TAPER LENGTH TABLE

POSTED SPEED (S)	TAPER LENGTH (L)
25	100'
30	100'
35	125'
40	165'
45	270'
50	300'
55	330'
65	390'

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

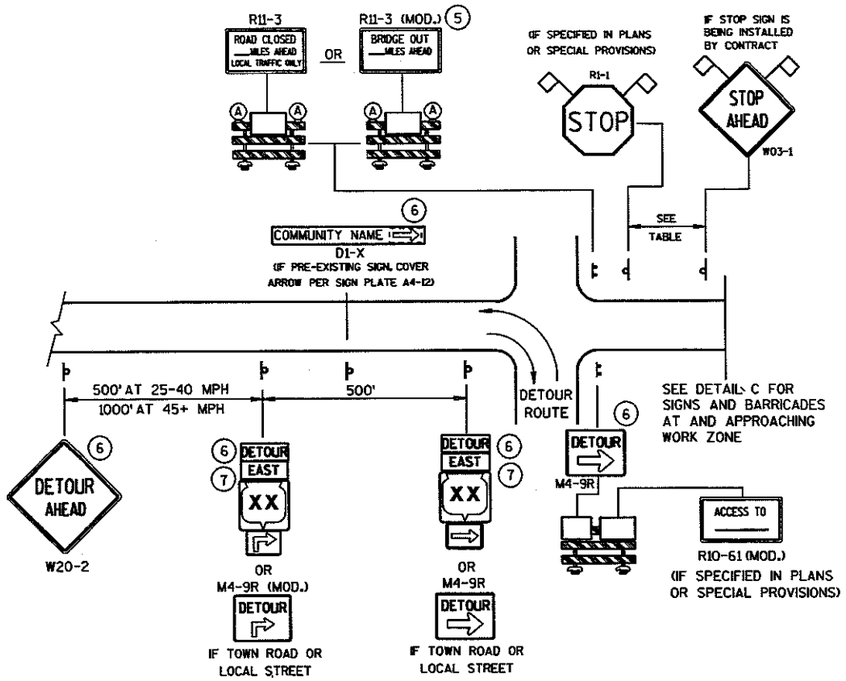
APPROVED
3-17-03 (DATE)
Deborah T. Kyrk for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 18-1

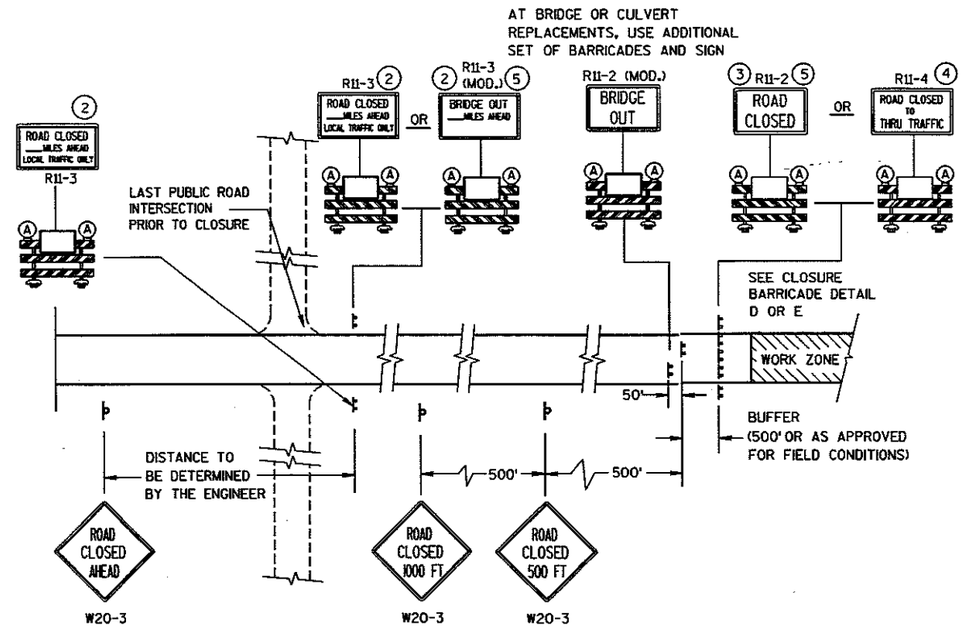
S.D.D. 15 C 18-1



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

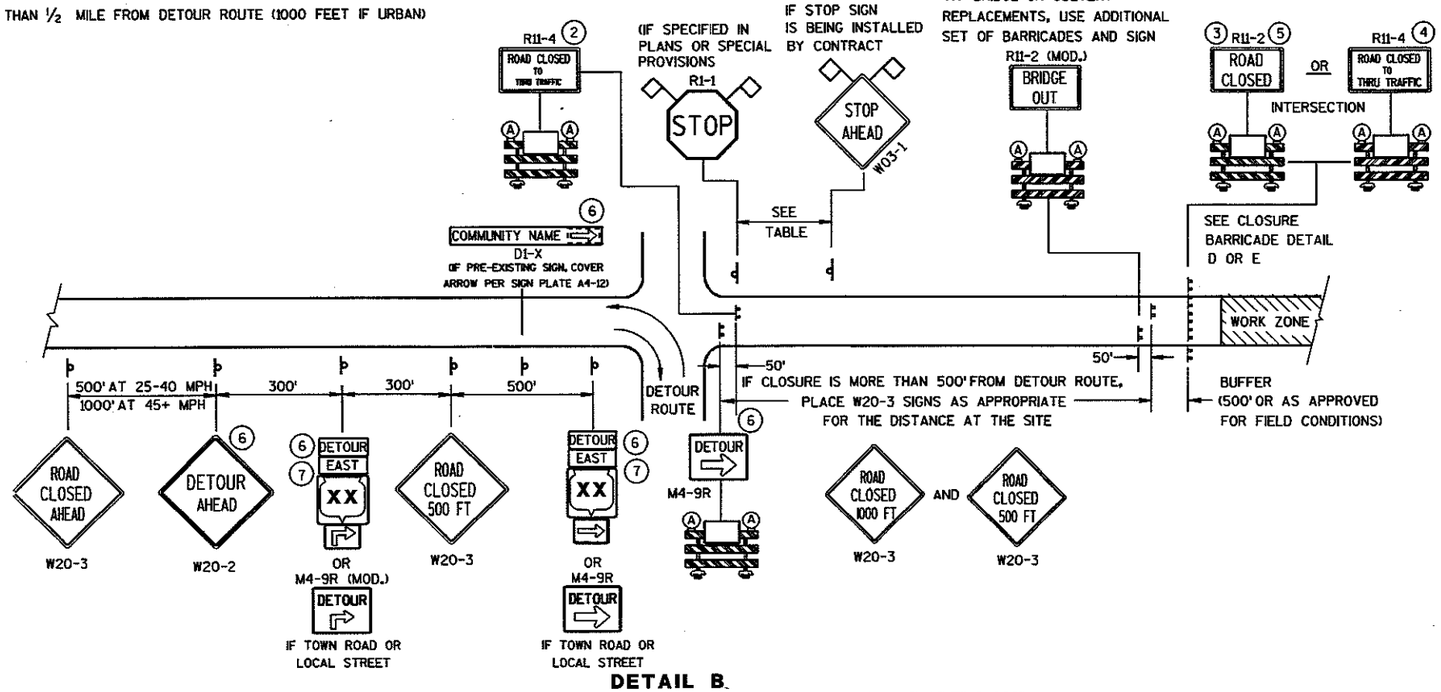


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

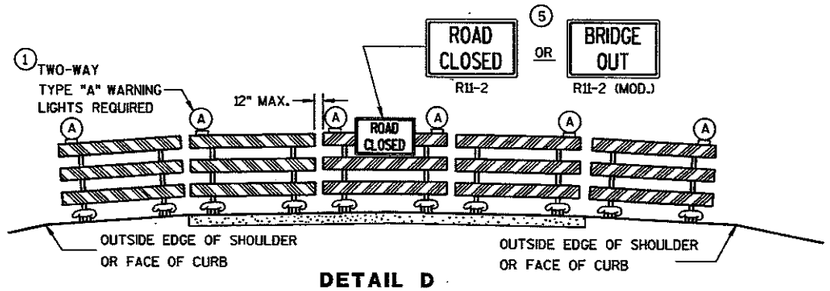
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1; M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

6

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

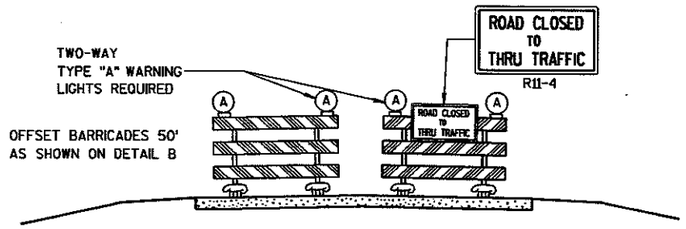
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF 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 (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

6

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/16/03
DATE
Thomas N. Notbohm for
CHIEF SIGNS AND MARKING ENGINEER
FHWA

S.D.D. 15 C 2-4b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

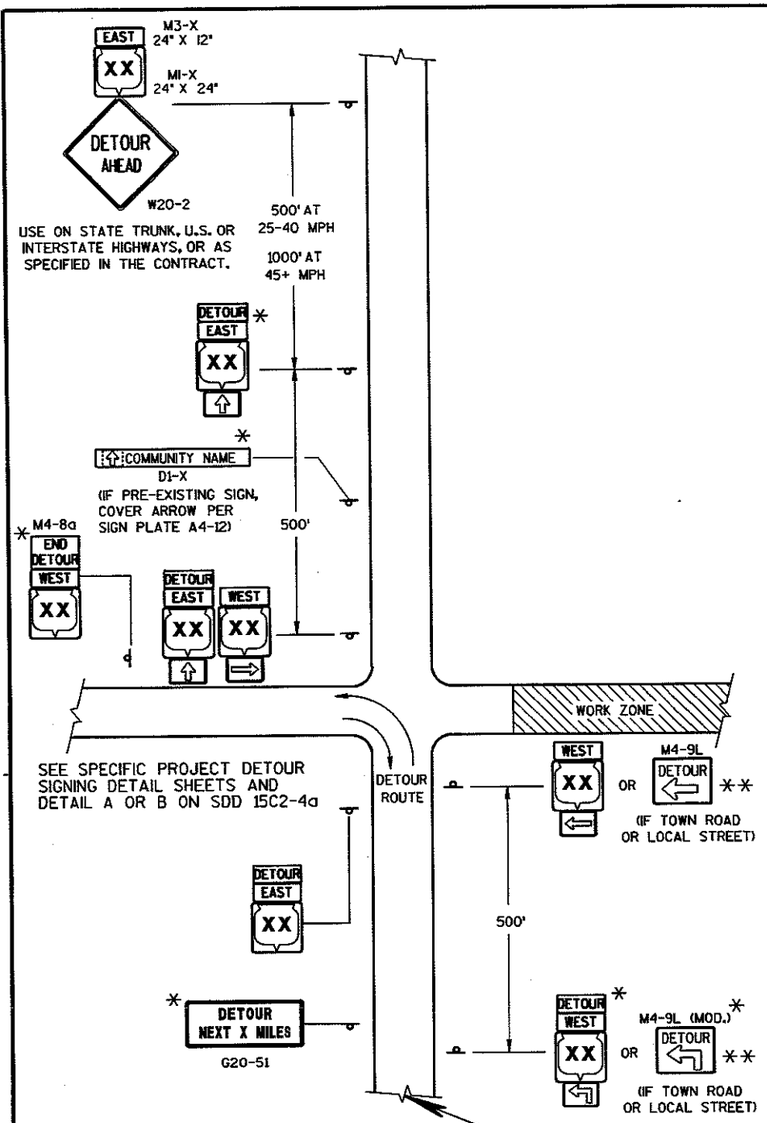
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

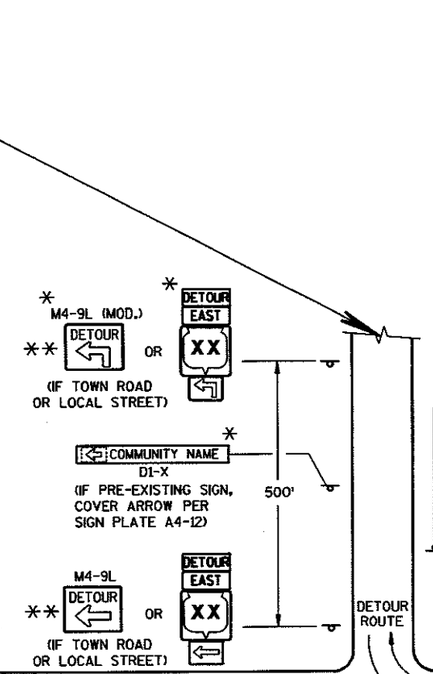
M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
M4-9 SHALL BE 30" X 24".
M4-8a SHALL BE 24" X 18".
G20-51 SHALL BE 60" X 24".
W20-2 SHALL BE 48" X 48".
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

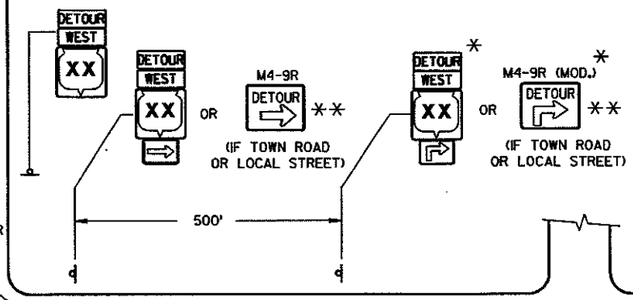
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

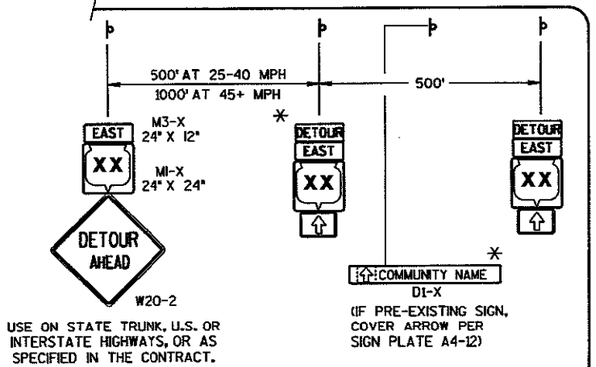
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

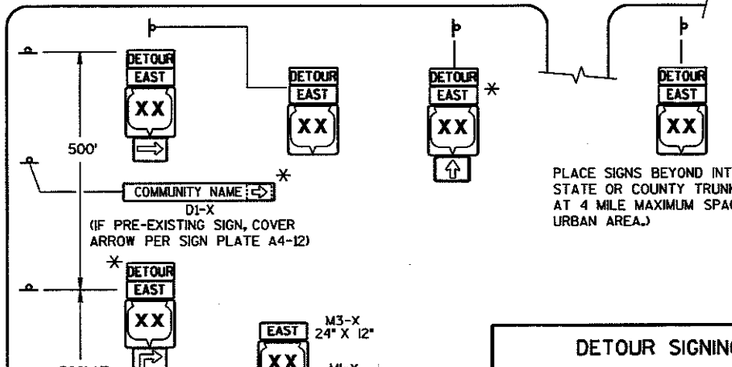


MATCH POINT









LEGEND

- POST MOUNTED SIGN
- WORK ZONE
- DETOUR EAST M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- M05-1 OR M06-1 OR M06-1

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

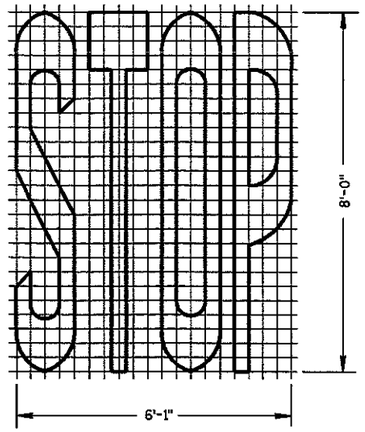
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

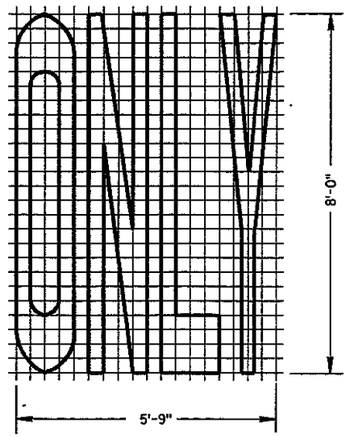
APPROVED
9/12/03 DATE
Thomas N. Notbohm for CHIEF SIGNS AND MARKING ENGINEER
FHWA

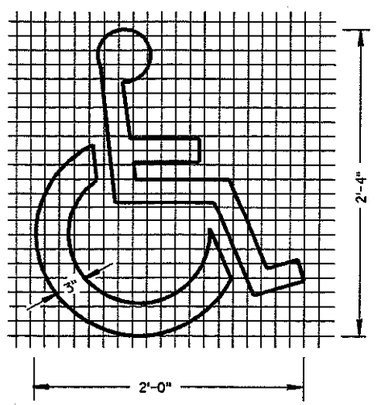
6

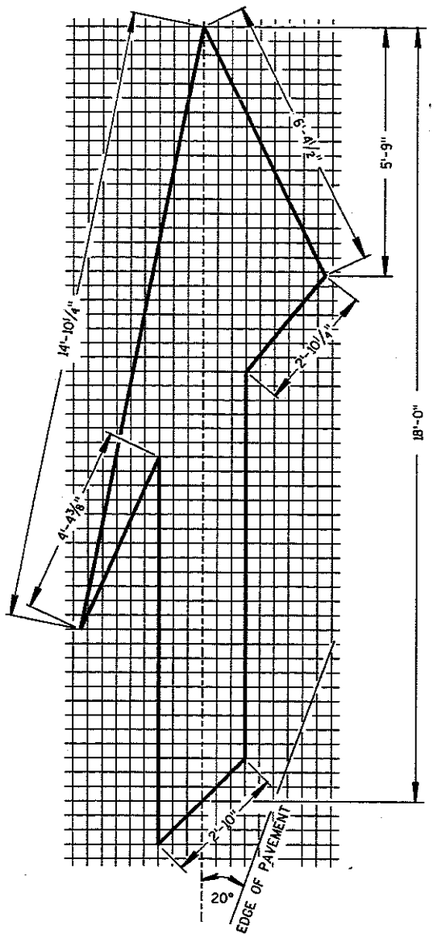
S.D.D. 15 C 2-4c

S.D.D. 15 C 2-4c

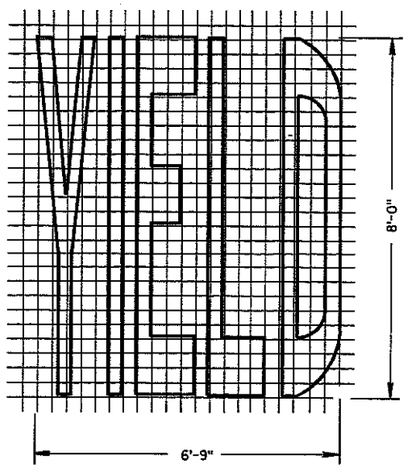


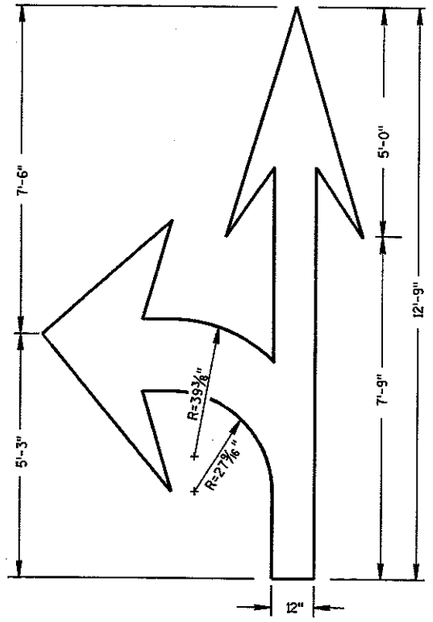




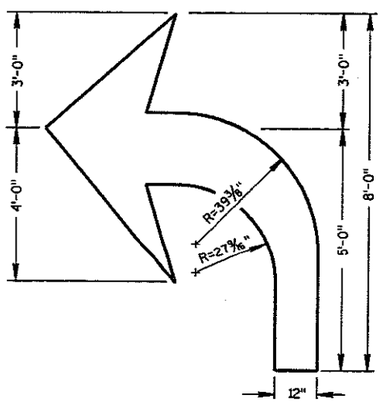


TYPE 5 LANE DROP ARROW

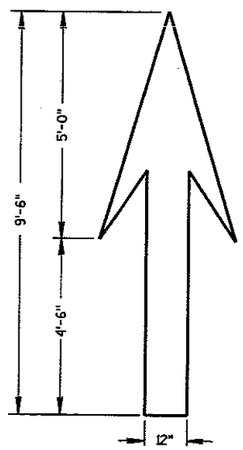




TYPE 3



TYPE 2



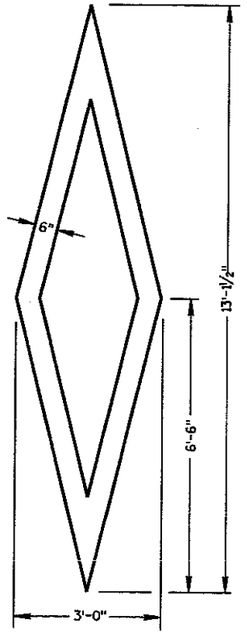
TYPE 1

GENERAL NOTES

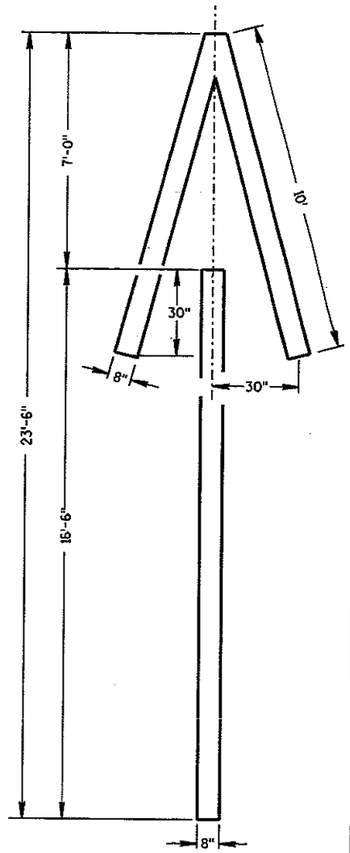
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

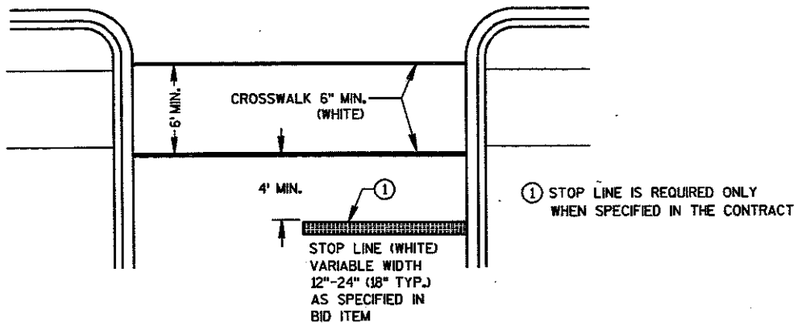
APPROVED
3-18-03 DATE
Deborah J. Kopel for
CHIEF SIGNS AND MARKING ENGINEER

FHWA

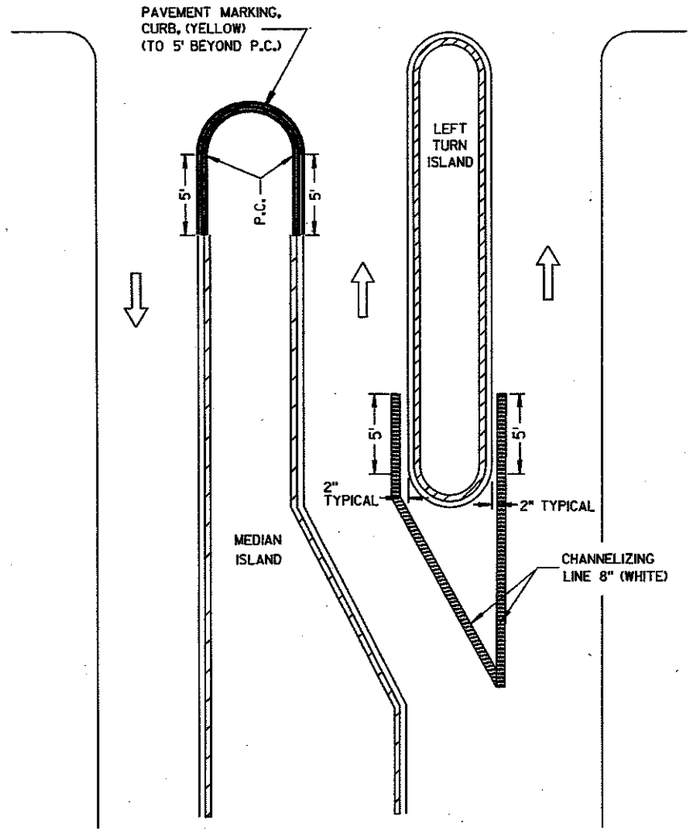
6

S.D.D. 15 C 7-60

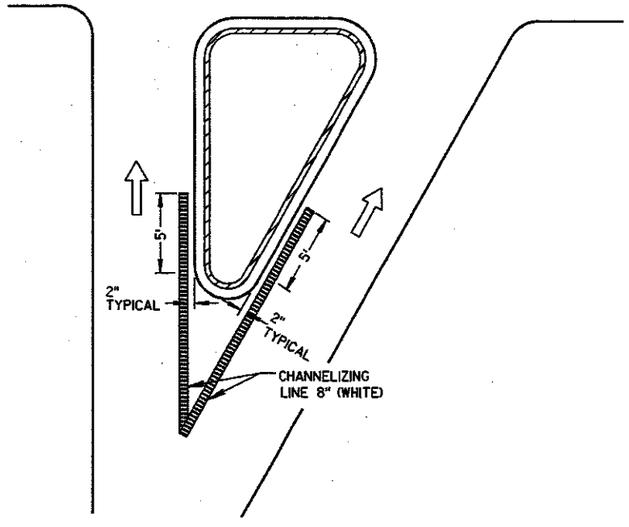
S.D.D. 15 C 7-60



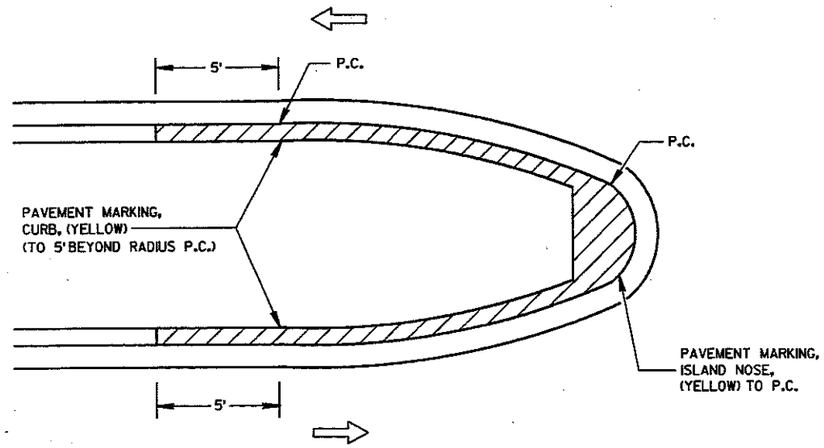
STOP LINE AND CROSSWALK



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



MEDIAN ISLAND WITH SLOPED NOSE

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS, STOP LINE & CROSS WALK)

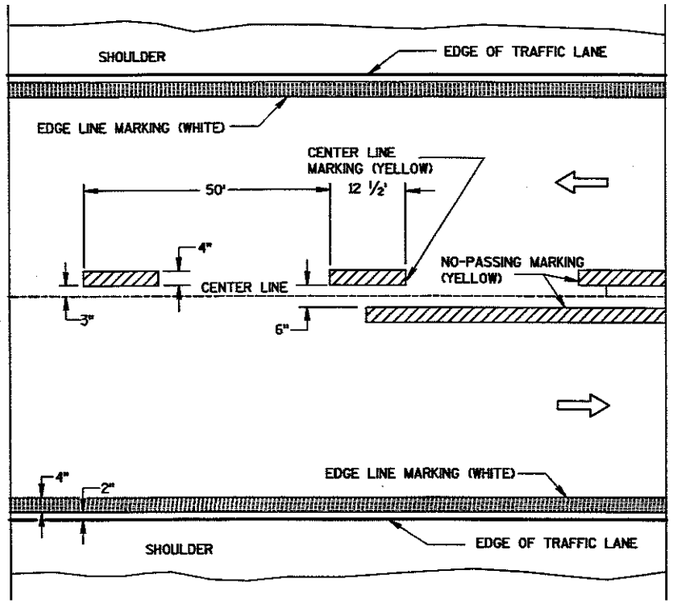
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1-16-03 (DATE)
Deborah K. Voegel for (CHIEF SIGNS AND MARKING ENGINEER)
FHWA

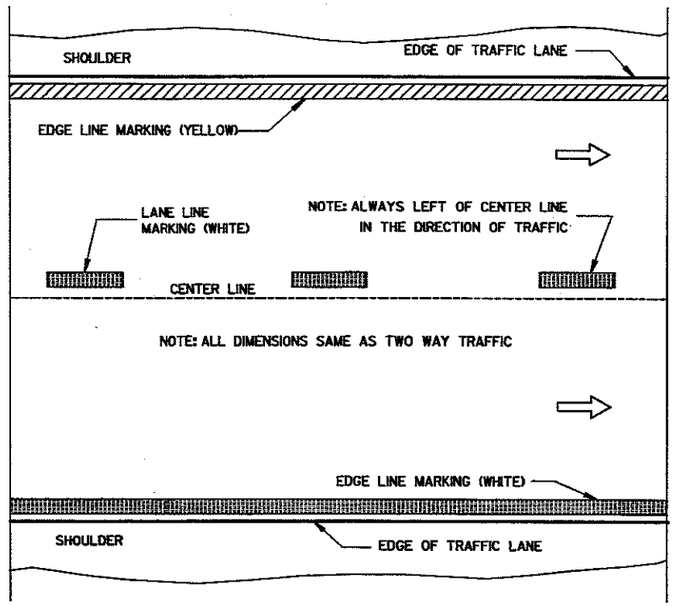
6

S.D.D. 15 C 8-10e

S.D.D. 15 C 8-10e

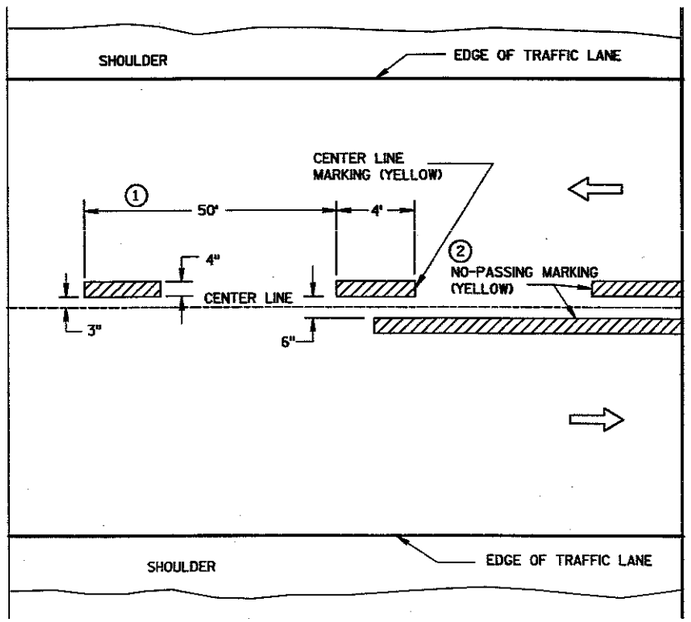


TWO WAY TRAFFIC

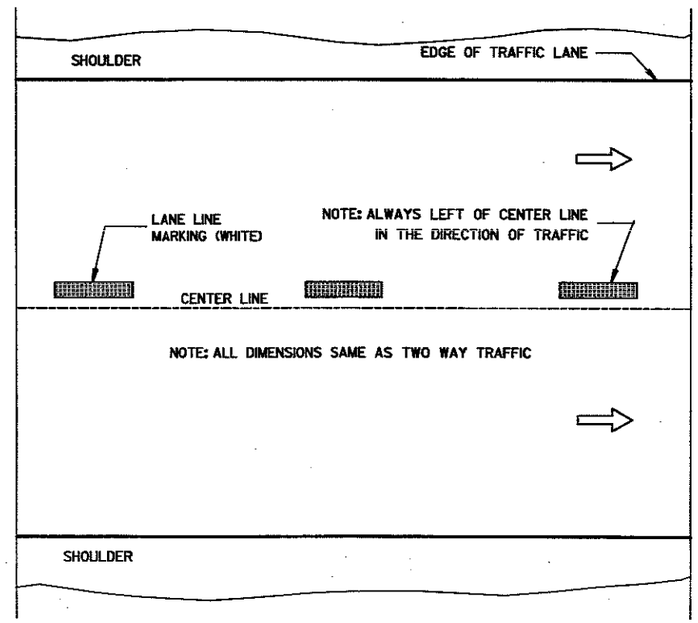


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

GENERAL NOTES

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

(1) 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.

(2) NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-17-00
DATE
Charles T. Sprang
CHIEF SIGNS AND MARKING ENGINEER
FHWA

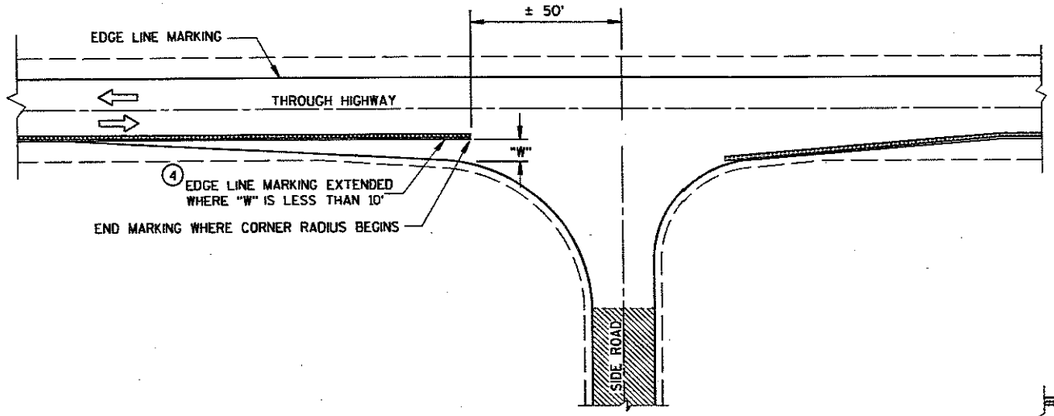
S.D.D. 15 C 8-9a

S.D.D. 15 C 8-9a

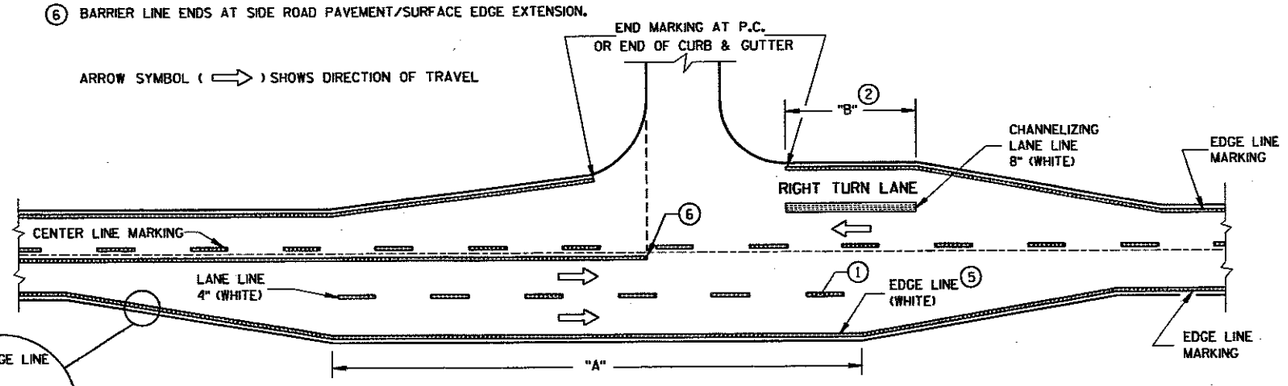
NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
4. LOCATE THE EDGE LINE ALONG THE TAPER WHERE "W" IS 10' OR MORE.
5. THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
6. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

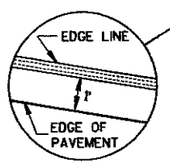


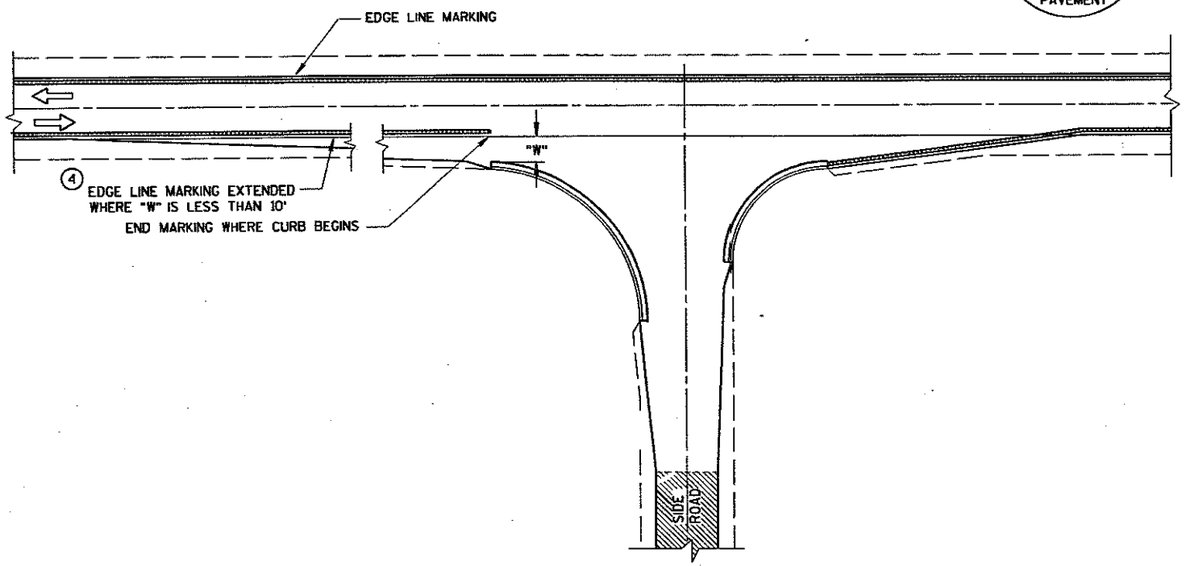
MINOR INTERSECTION WITHOUT CURBS



MAJOR INTERSECTIONS

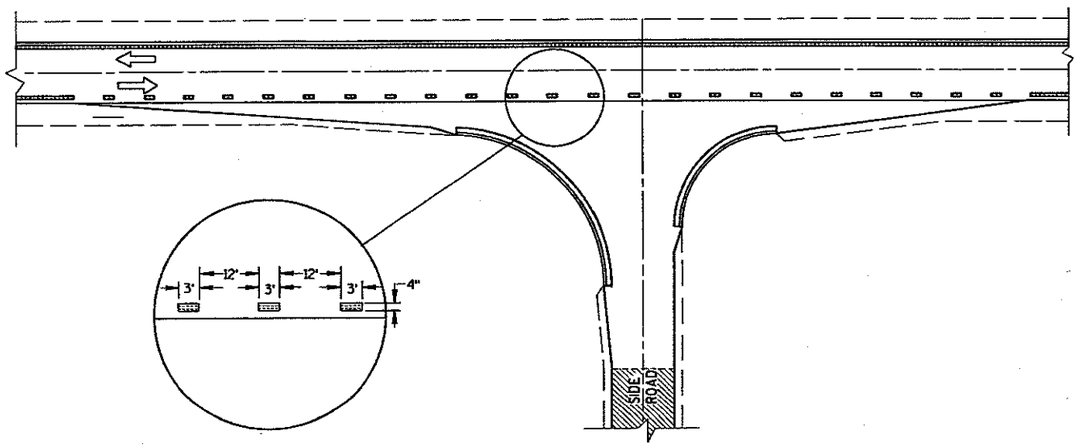
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)





MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

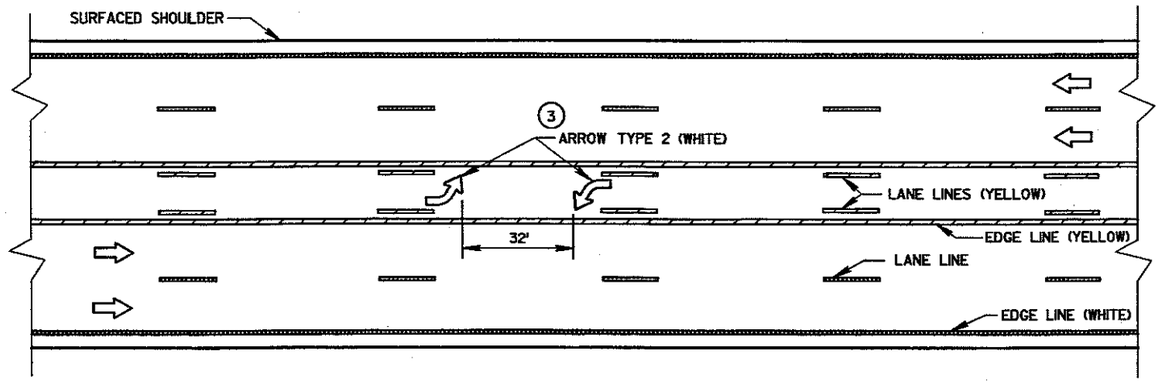
PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-9b

S.D.D. 15 C 8-9b

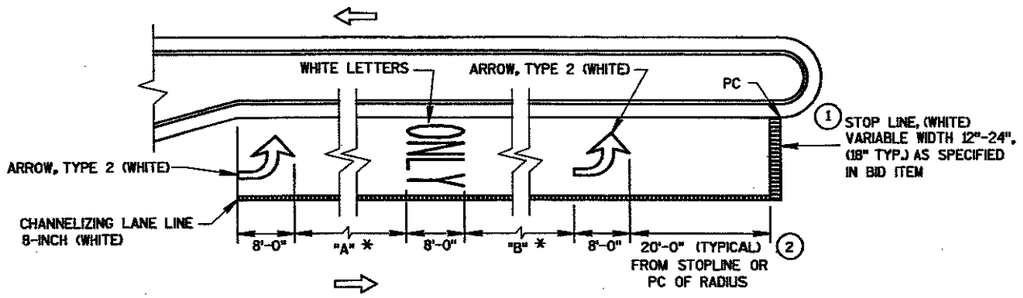
NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

NOTES:

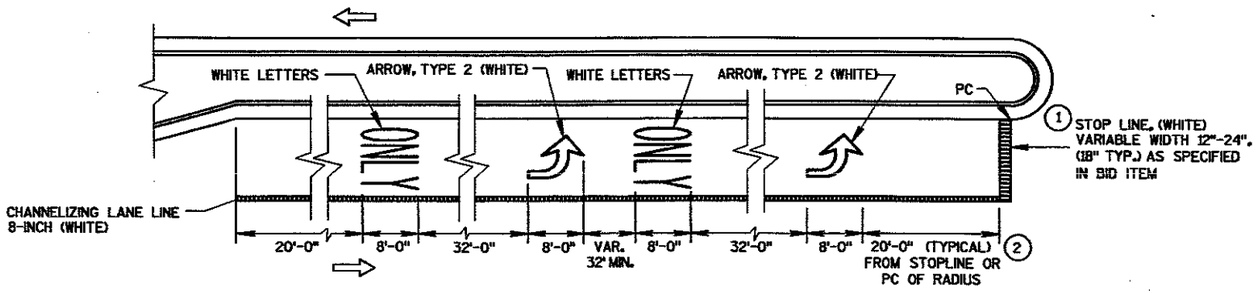
1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.



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

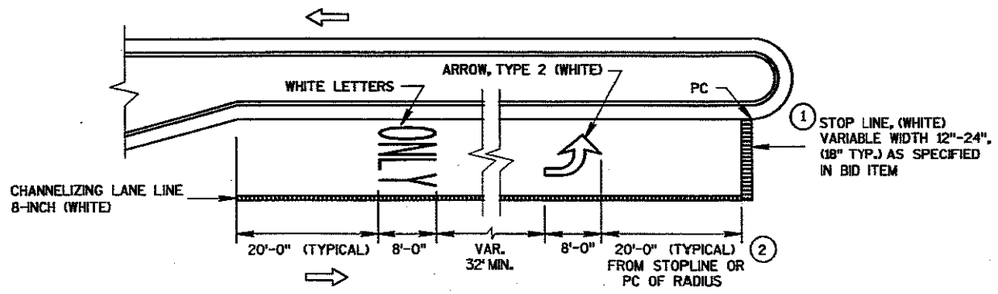
LEFT TURN LANE

(LENGTH 108' TO 167')



LEFT TURN LANE

(LENGTH OVER 167')



LEFT TURN LANE

(LENGTH UNDER 108')

PAVEMENT MARKING
(LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 15 C 8-9d

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) DISTANCE 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.

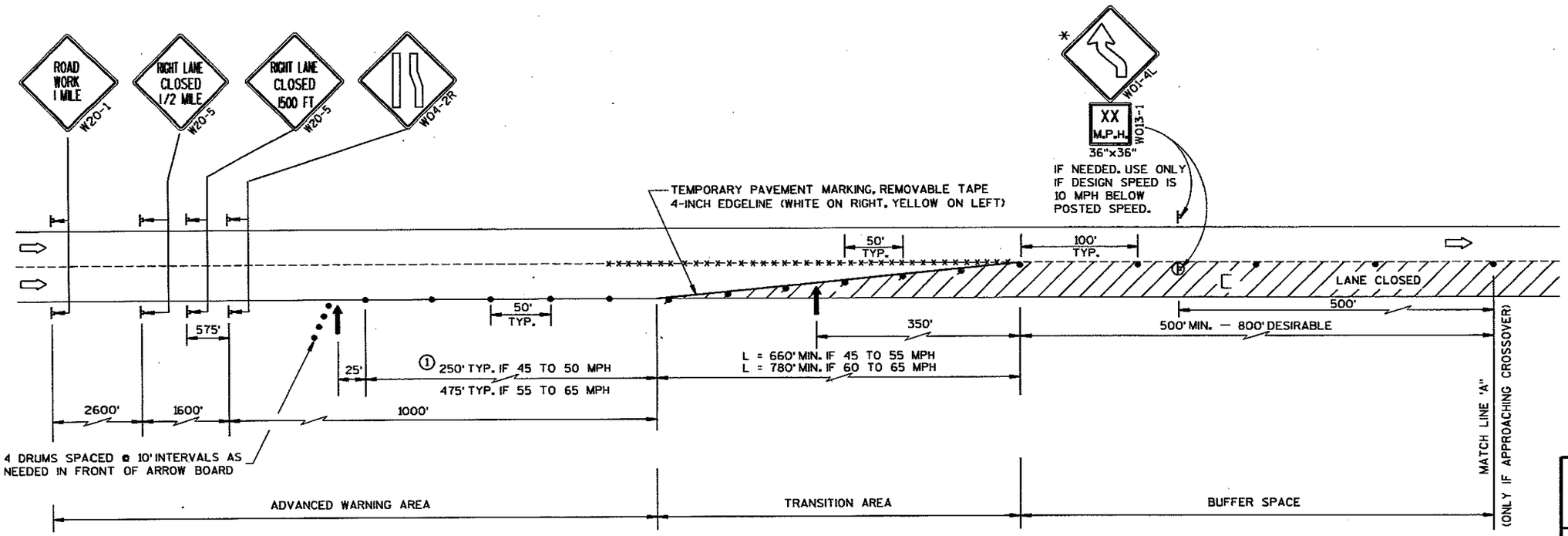
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-1-95 DATE
Charles J. Spang for DIRECTOR, OFFICE OF TRAFFIC
FHWA

S.D.D. 15 D 12-2

S.D.D. 15 D 12-2

SYMBOLS

- TRAFFIC CONTROL DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW
- ARROW BOARD IN CAUTION MODE

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER. REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

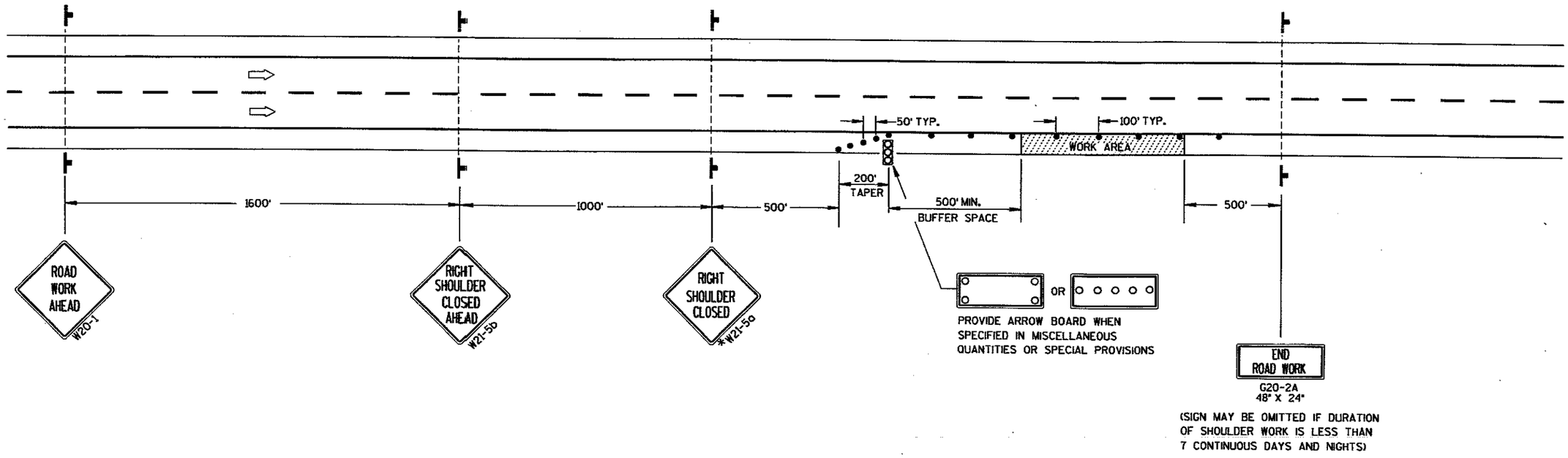
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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 APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

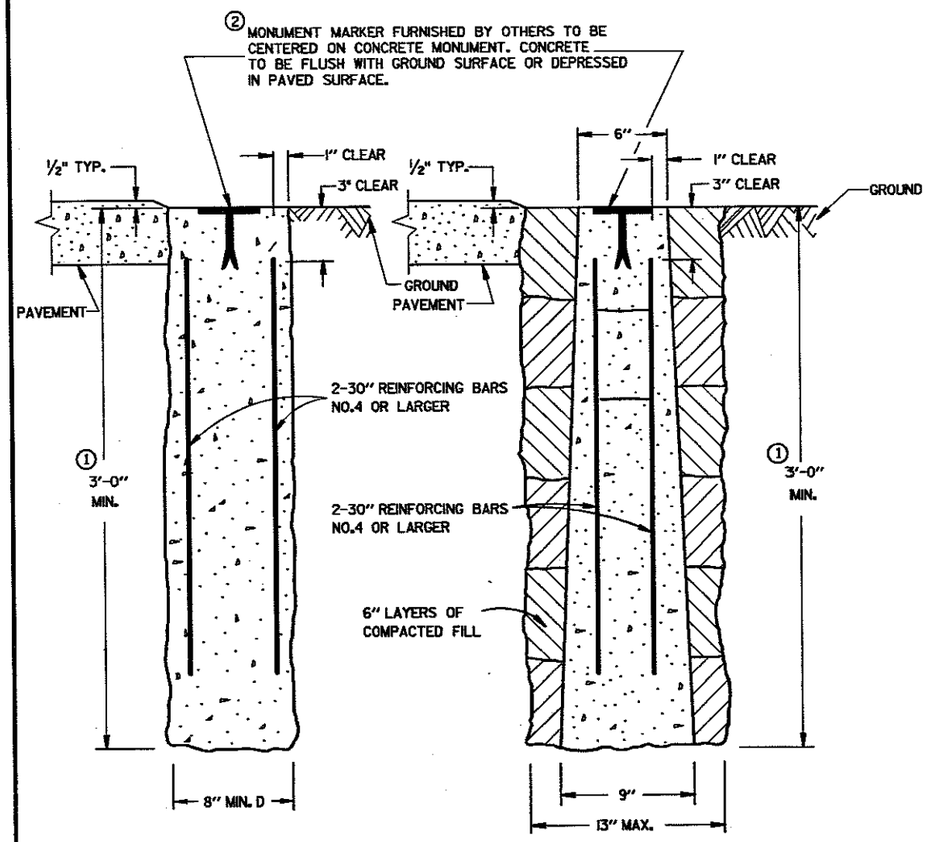
5/23/00
DATE

Charles J. Spang
CHIEF SIGNS AND MARKING ENGINEER

FHWA

S.D.D. 15 D 27-1

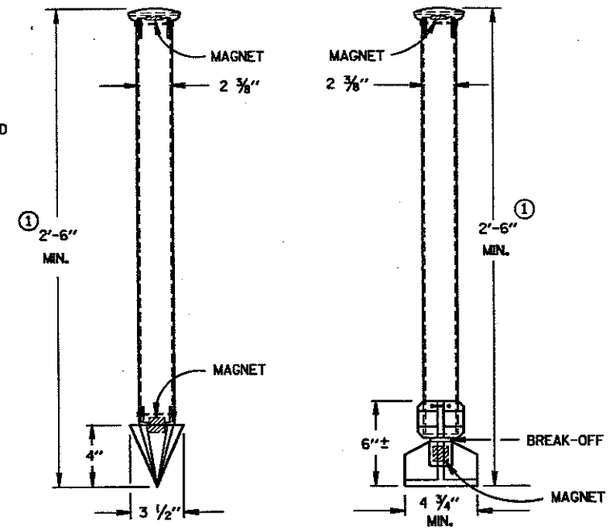
S.D.D. 15 D 27-1



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

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

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

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

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

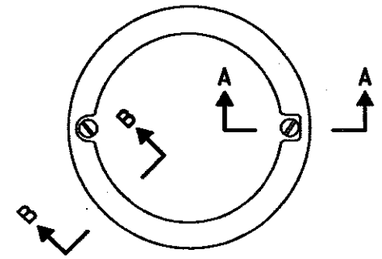
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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

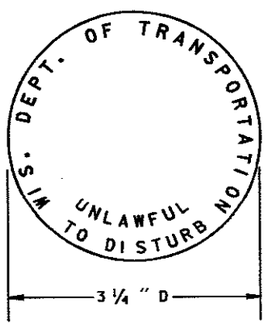
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

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

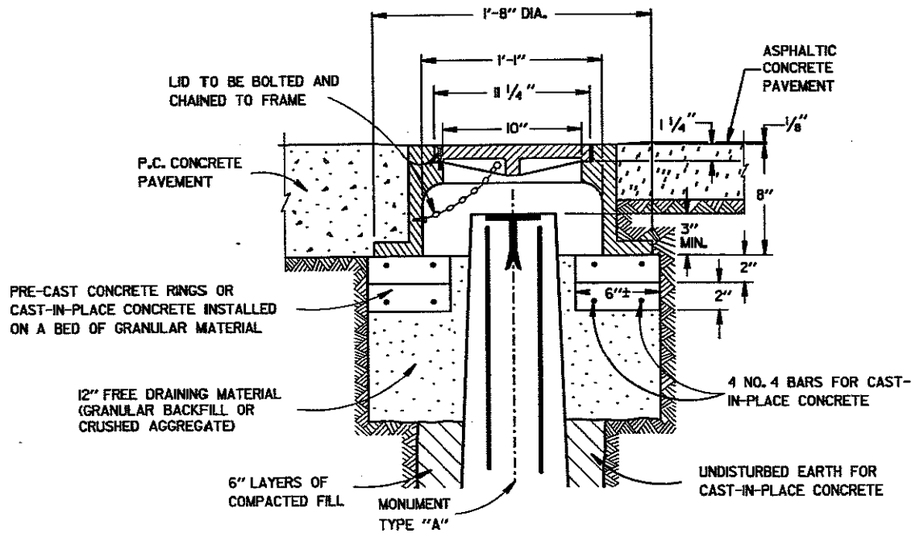
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

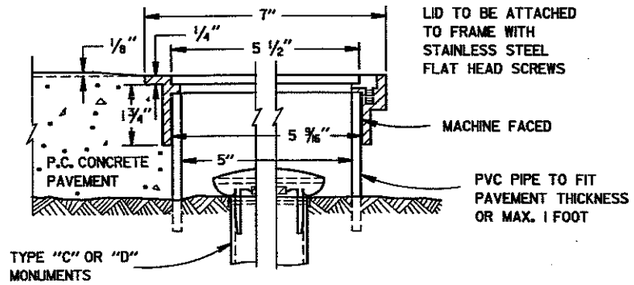


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

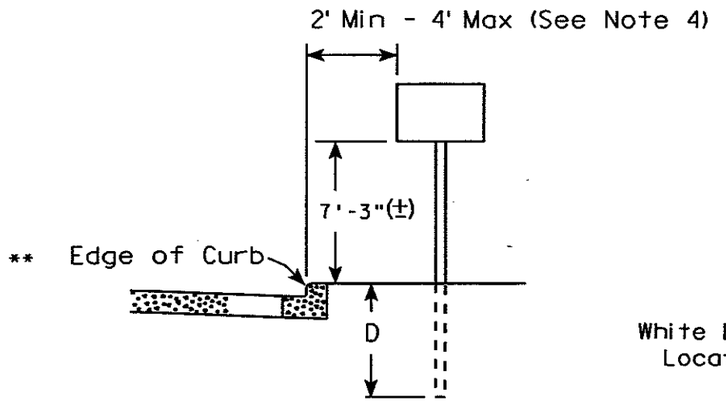
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 9/22/99 DATE
Tony L. Hausmann
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

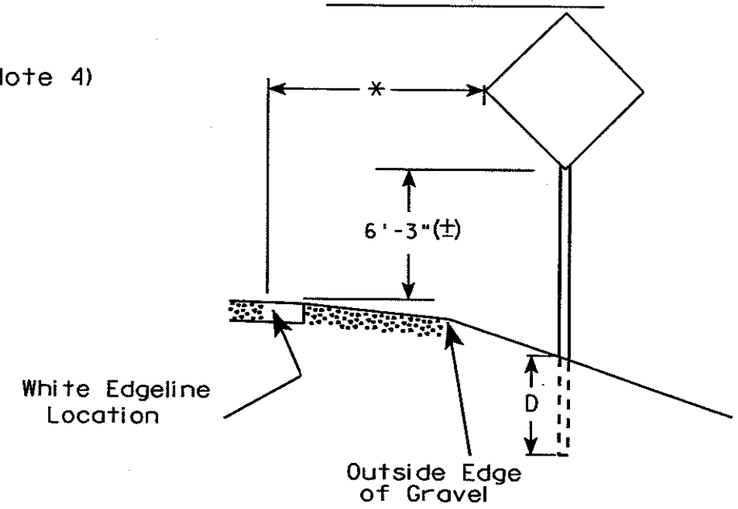
S.D.D. 16 A 1-6

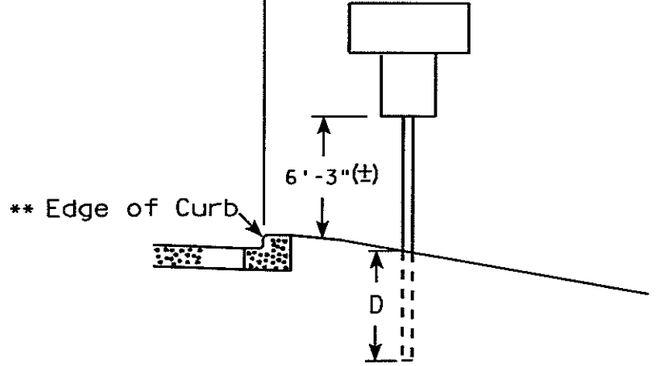
S.D.D. 16 A 1-6

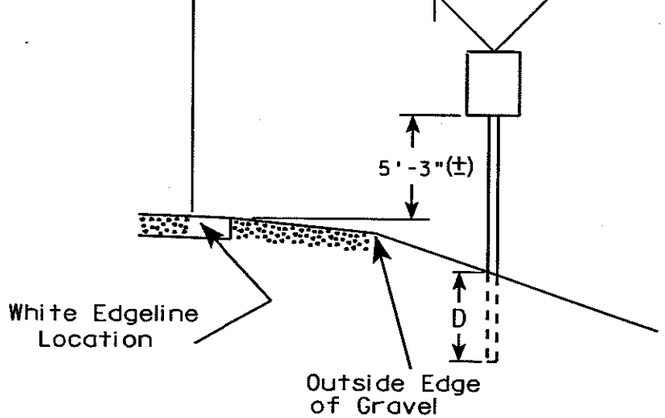
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
3. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.

POST EMBEDMENT DEPTH

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

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted. This same criteria applies to mountable curb as well and measurement shall be taken from flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/20/03 PLATE NO. A4-3.12

7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 165 E

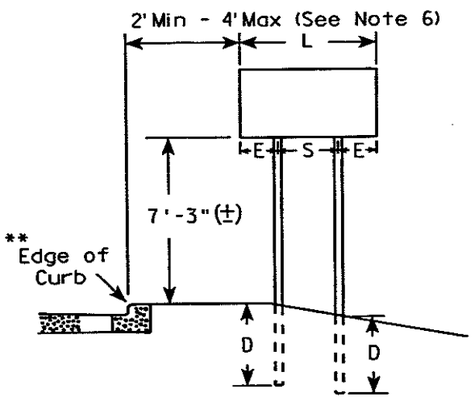
FILE NAME : C:\Users\Projects\tr_stdplate\A43.DGN PLOT DATE : 16-MAR-2004 11:40 PLOT BY : DOTDZK PLOT NAME : REV DATE : 12/20/02 Originator : Sandy Anderson PLOT SCALE : 101.632952:1.000000

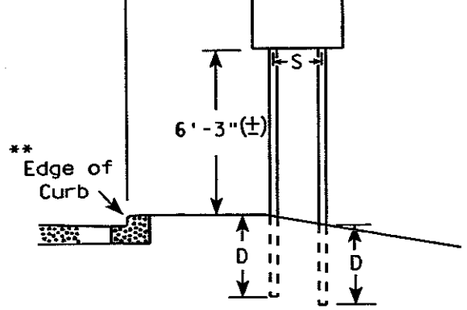
WISDOT/CADDS SHEET 42

LEVELS ON - 2, 5,6, 10,11,12,13,14,15,16,

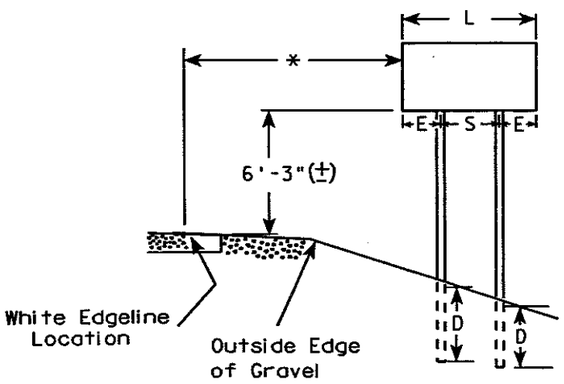
57,58,59,60,61,62,63

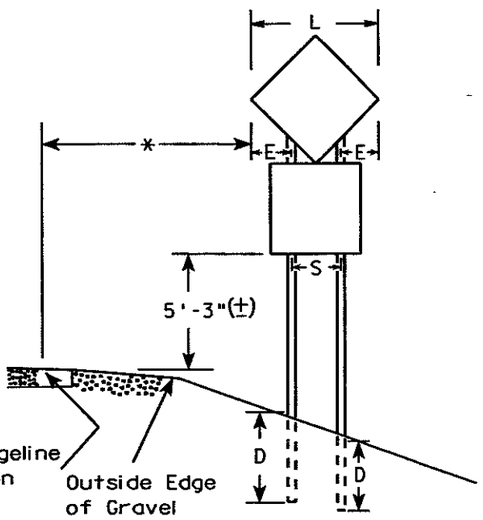
URBAN AREA

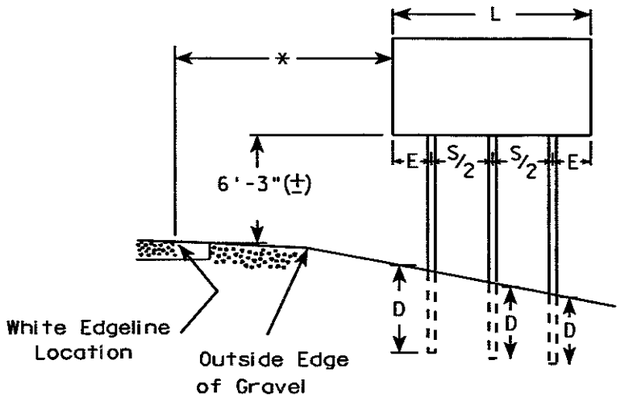




RURAL AREA (See Note 3)







GENERAL NOTES

1. For 3 post installations, spacing is S/2 and S must be greater than 7'-0".
2. For 4 post installations, spacing is S/3 and S must be greater than 10'-6".
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically where there is sidewalk adjacent to the roadway or parking is permitted. This same criteria applies to mountable curb as well and measurement shall be from the flow line.

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'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

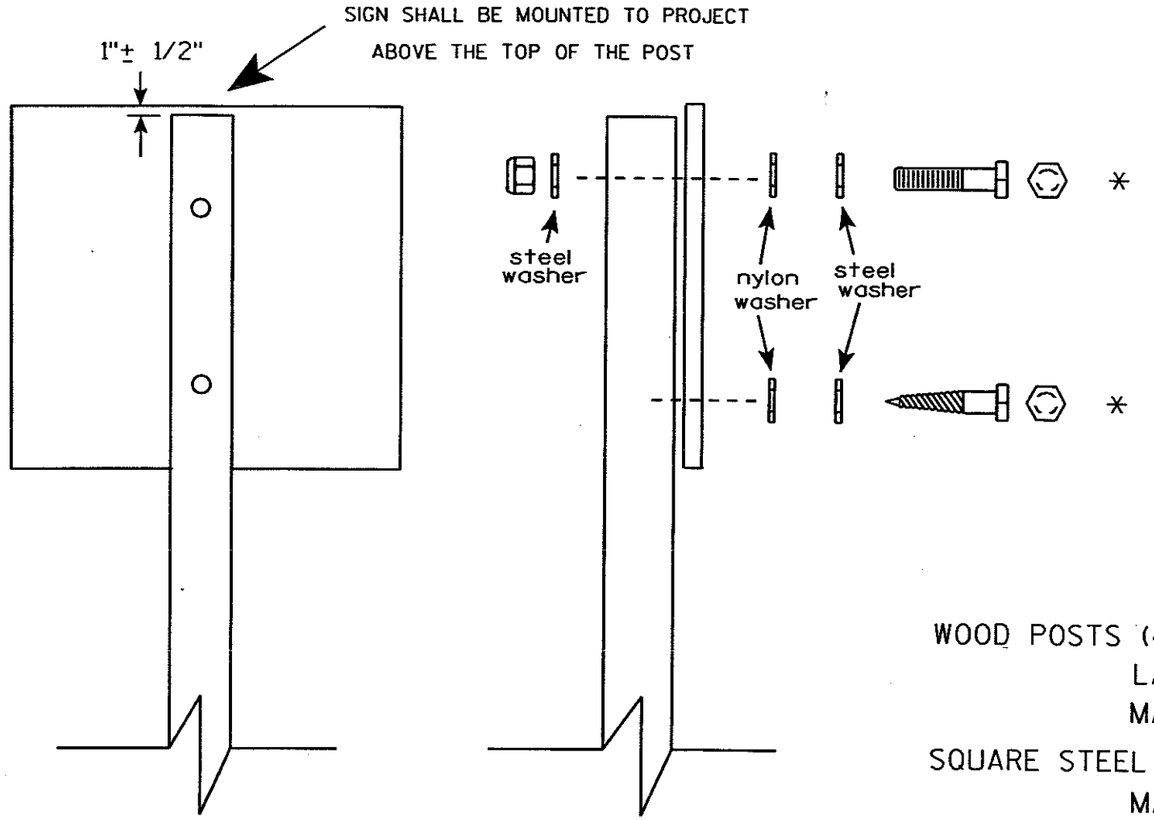
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/20/03 PLATE NO. A4-4.7

7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 1616	E

FILE NAME : C:\Users\Projects\tr_stdplate\A44.DGN PLOT DATE : 16-MAR-2004 11:41 PLOT BY : DOTDZK PLOT NAME : ORG DATE : Originator : Sandy Anderson PLOT SCALE : 103.686747:1.000000 WISDOT/CADDS SHEET 42



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

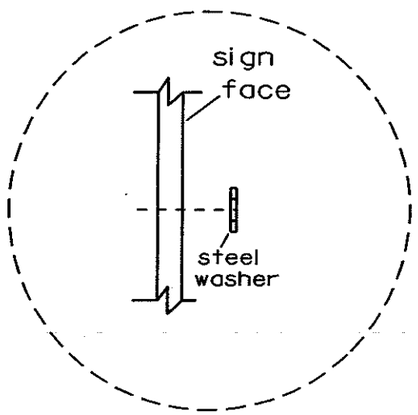
a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs 9 sq. ft. or larger require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

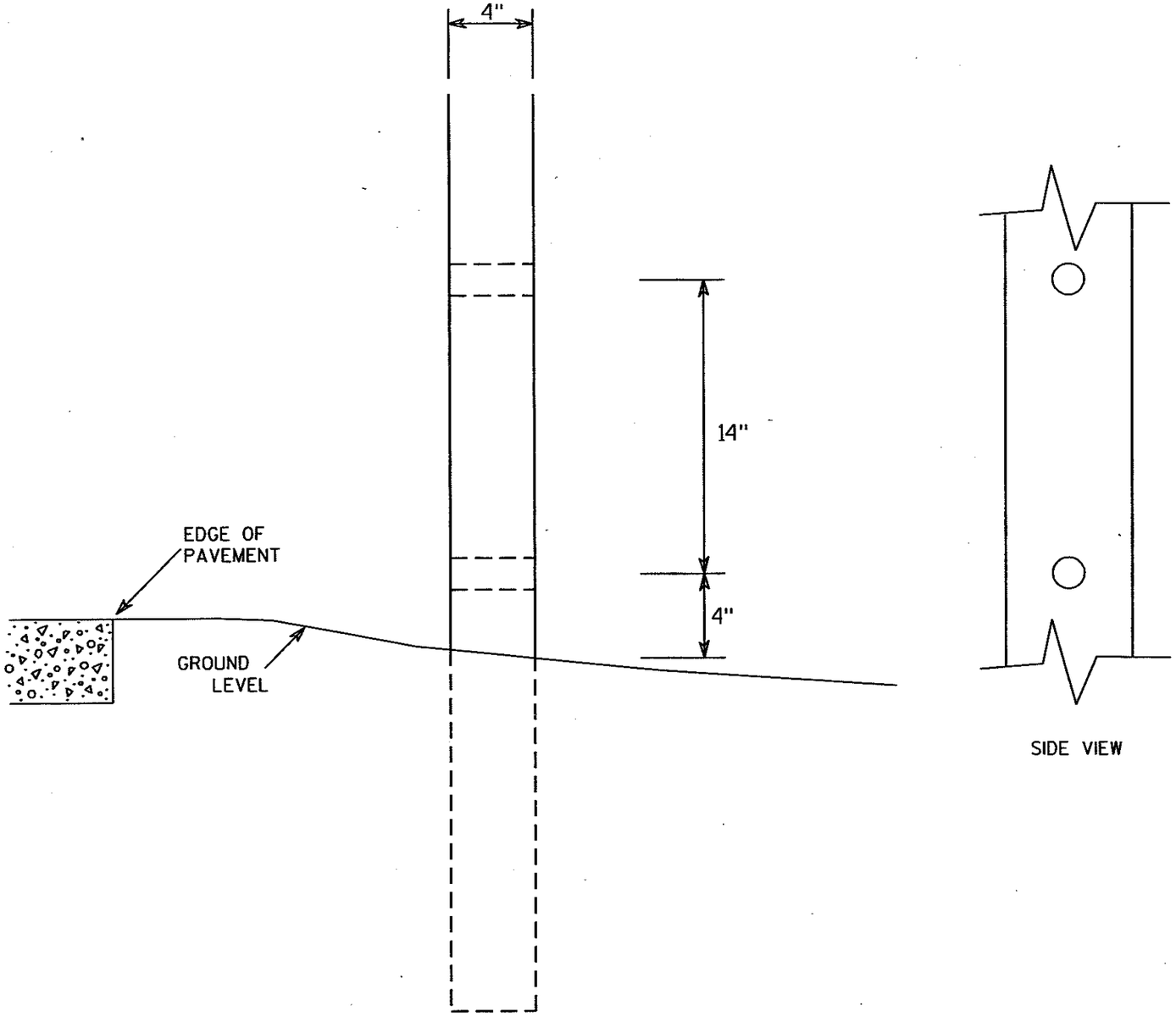
APPROVED Chester J Spang for State Traffic Engineer

DATE 4/03/02 PLATE NO. A4-8.5

STATE PROJECT NUMBER:

SHEET NO: 167 E

7



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST MODIFICATIONS

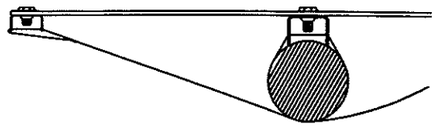
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spange for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

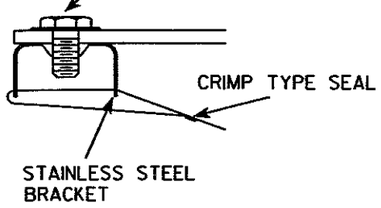
STATE PROJECT NUMBER:					SHEET NO: 168	E

BRACE BANDING

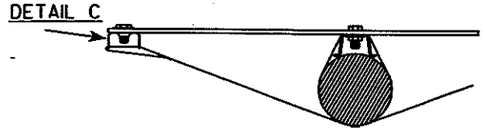


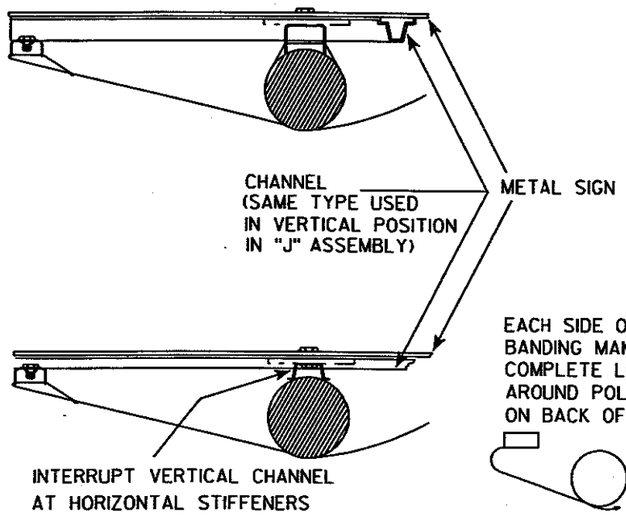
DETAIL C

CADMIUM PLATED STEEL BOLT THROUGH BLACK BORDER



DETAIL C

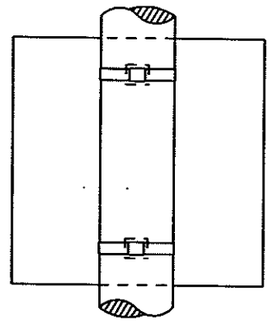


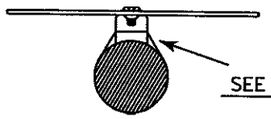


EACH SIDE OF BRACE BANDING MAKES ONE COMPLETE LOOP AROUND POLE-SEAL ON BACK OF POLE

BRACKET BANDING

SINGLE SIGN

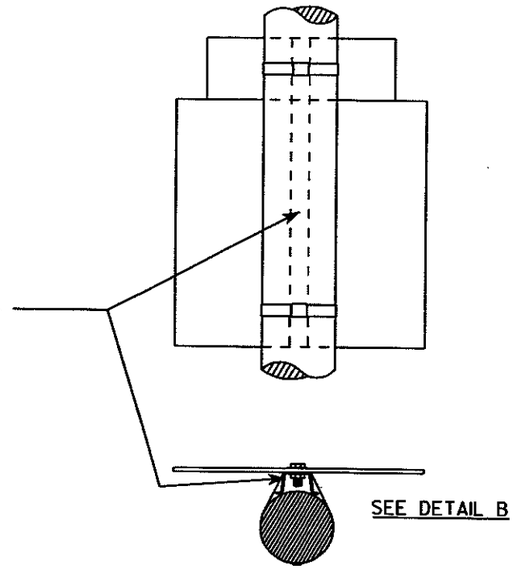


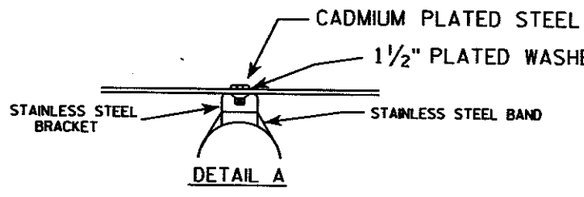


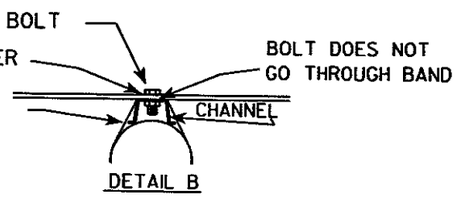
"J" ASSEMBLY

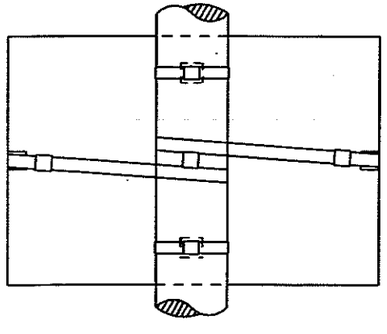
CHANNEL

SEE TYPICAL PANEL INSTALLATION SHEET



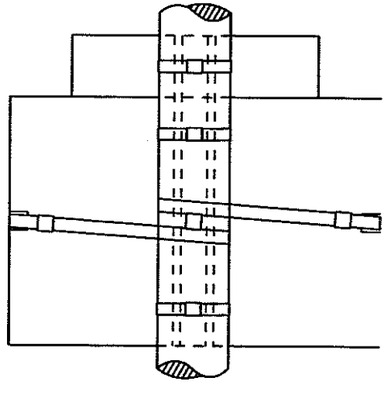






BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.



GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/03/03 PLATE NO. A5-9.1

7

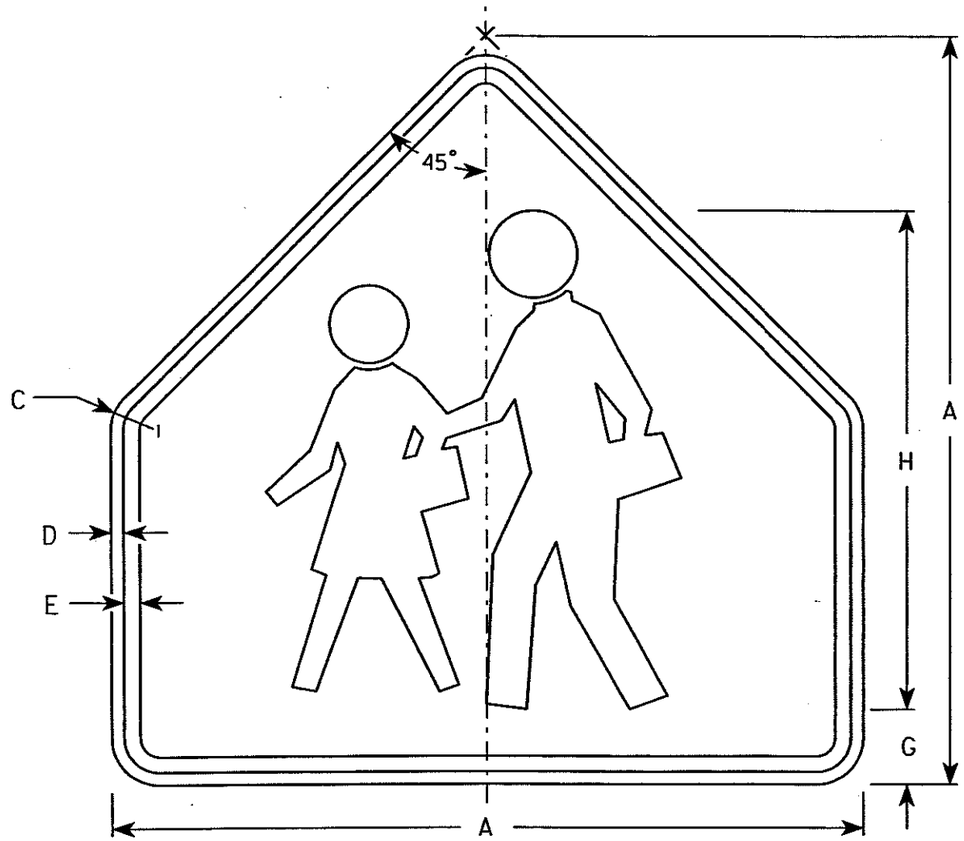
STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 169	E

FILE NAME : C:\Users\Projects\tr_stdplate\A59.DGN PLOT DATE : 16-MAR-2004 11:43 PLOT BY : DOTDZK PLOT NAME : ORG DATE : Feb 2003 Originator : Sandy Anderson PLOT SCALE : 35.891566:1.000000

WISDOT/CADDS SHEET 42

LEVELS ON • 2,3,4,5,6,7, 10.

57,58,59,60, 63



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	750 mm X 750 mm
3	900 mm X 900 mm
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.	Area m2
1																												
2	30		1 3/8	1/2	5/8		3	20																			4.69	0.44
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75	0.63
4																												
5																												

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

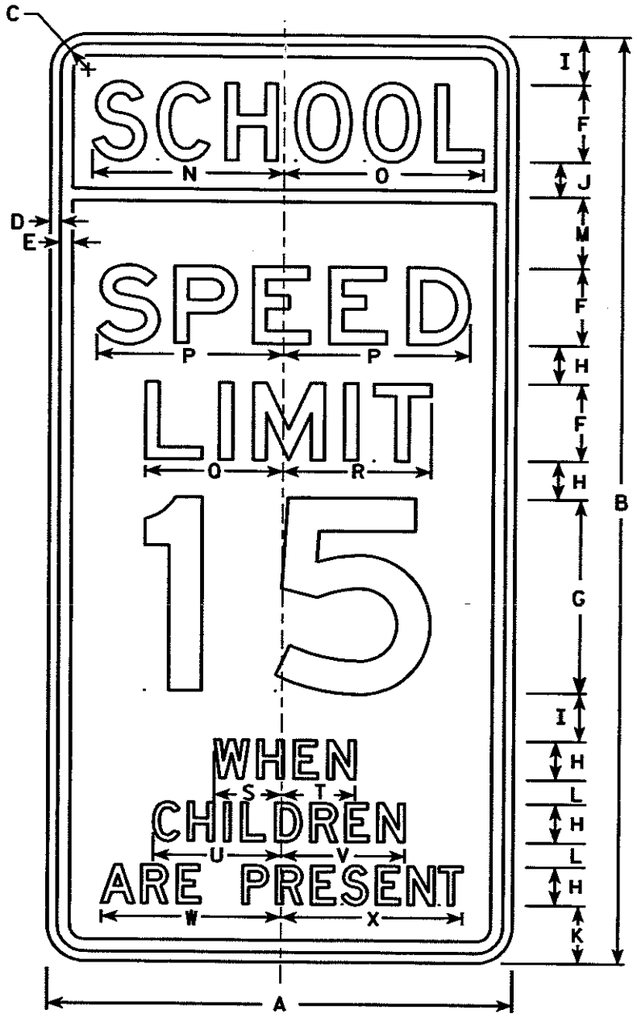
APPROVED Chester J Spang
for State Traffic Engineer
DATE 10/1/01 PLATE NO. S1-1.7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 170 E

FILE NAME : C:\Users\Projects\tr_stdplate\S11.DGN PLOT DATE : 16-MAR-2004 12:38 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 6.187500:1.000000

WISDOT/CADDS SHEET 42

LEVELS ON - 2, 3, 4, 9, 10,
56,59,60, 63



S4-51

NOTES

1. Sign is Type II - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. (See note 5).
2. Color:
   Background - See note 5
   Message - Black
3. Message Series - See note 6
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. Top panel (SCHOOL) background - Yellow Green -Type F Reflective. Lower panel background - White -Type H Reflective.
6. From top to bottom:
   Lines 1, 5, 6 & 7 are series D
   Lines 2, 3 & 4 are series E
7. Line 4 substitute appropriate numerals and adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	
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.	Area m²
1																												
2	24	48	1 3/8	1/2	5/8	4	10	2	2 1/2	1 3/4	3	1 1/4	3 3/4	9 1/8	10 1/4	9 5/8	7 1/8	7 5/8	3 1/2	3 3/8	6 5/8	6 3/8	9 1/4	9 3/8			8.00	0.72
3																												
4																												
5																												

STANDARD SIGN
S4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

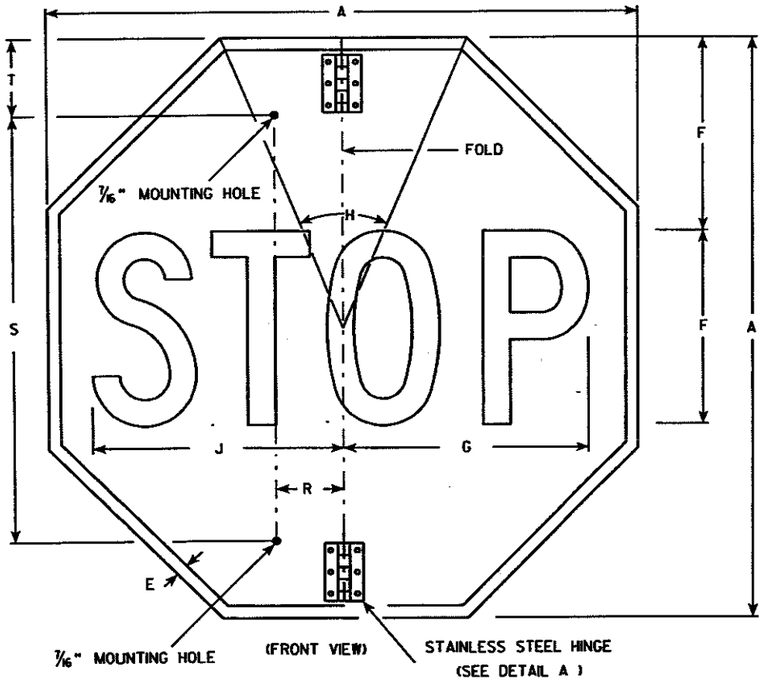
DATE 10/1/02 PLATE NO. S4-51.7

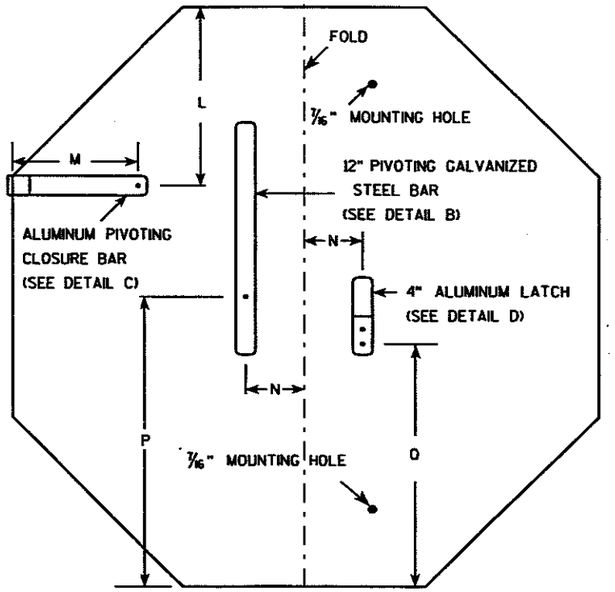
STATE PROJECT NUMBER: | HWY: | COUNTY:

SHEET NO: 171 | E

57,58,59,60,61,62,63
LEVELS ON - 2,3, 5,6,

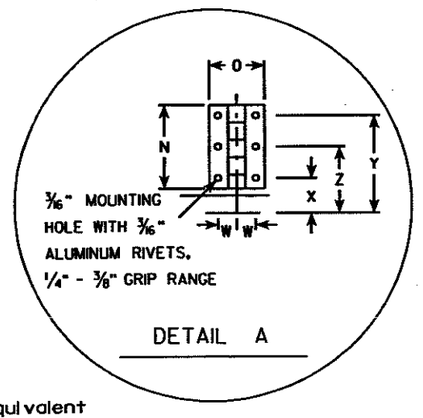
7



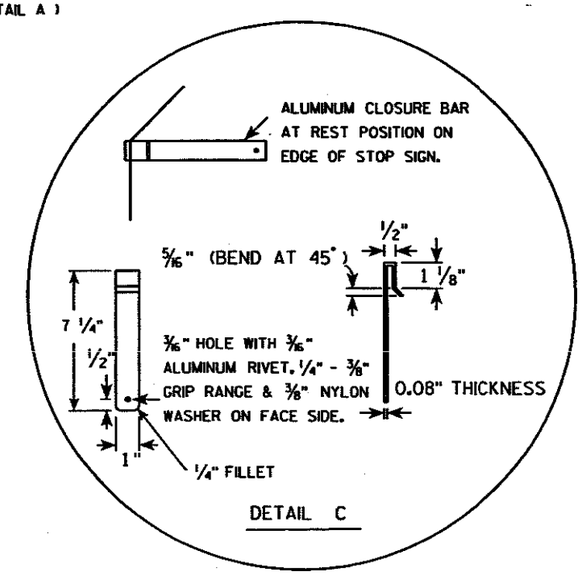


NOTES

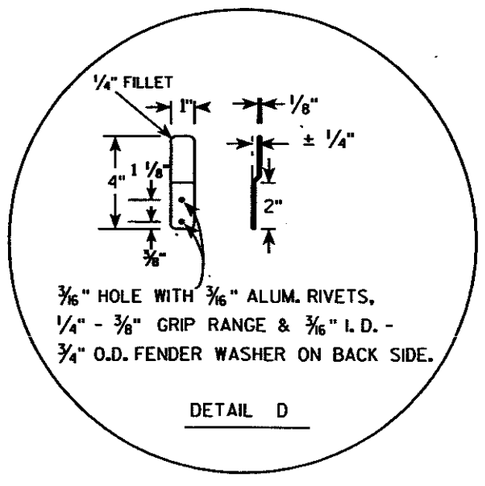
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



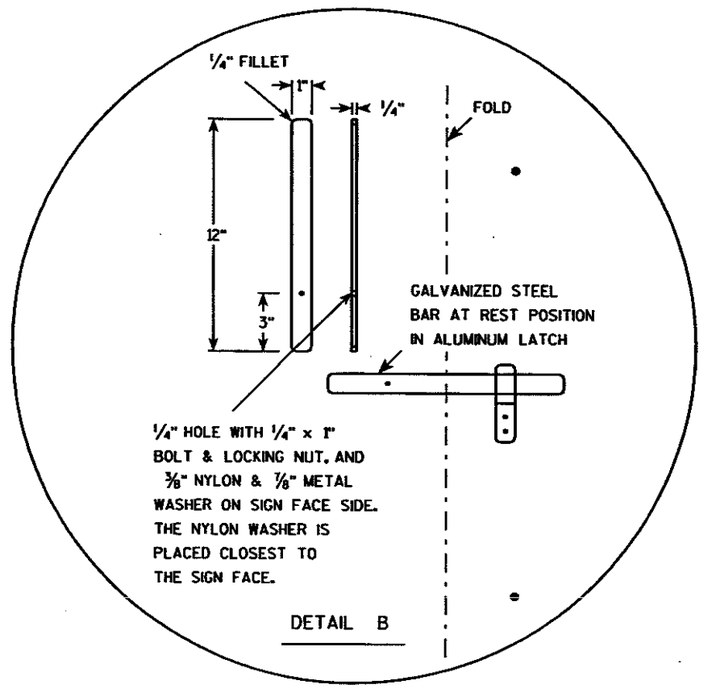
DETAIL A



DETAIL C



DETAIL D



DETAIL B

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
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.	Area m²
1																												
2	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18	0.48
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46	0.69
4																												
5																												

STANDARD SIGN
R1-1F

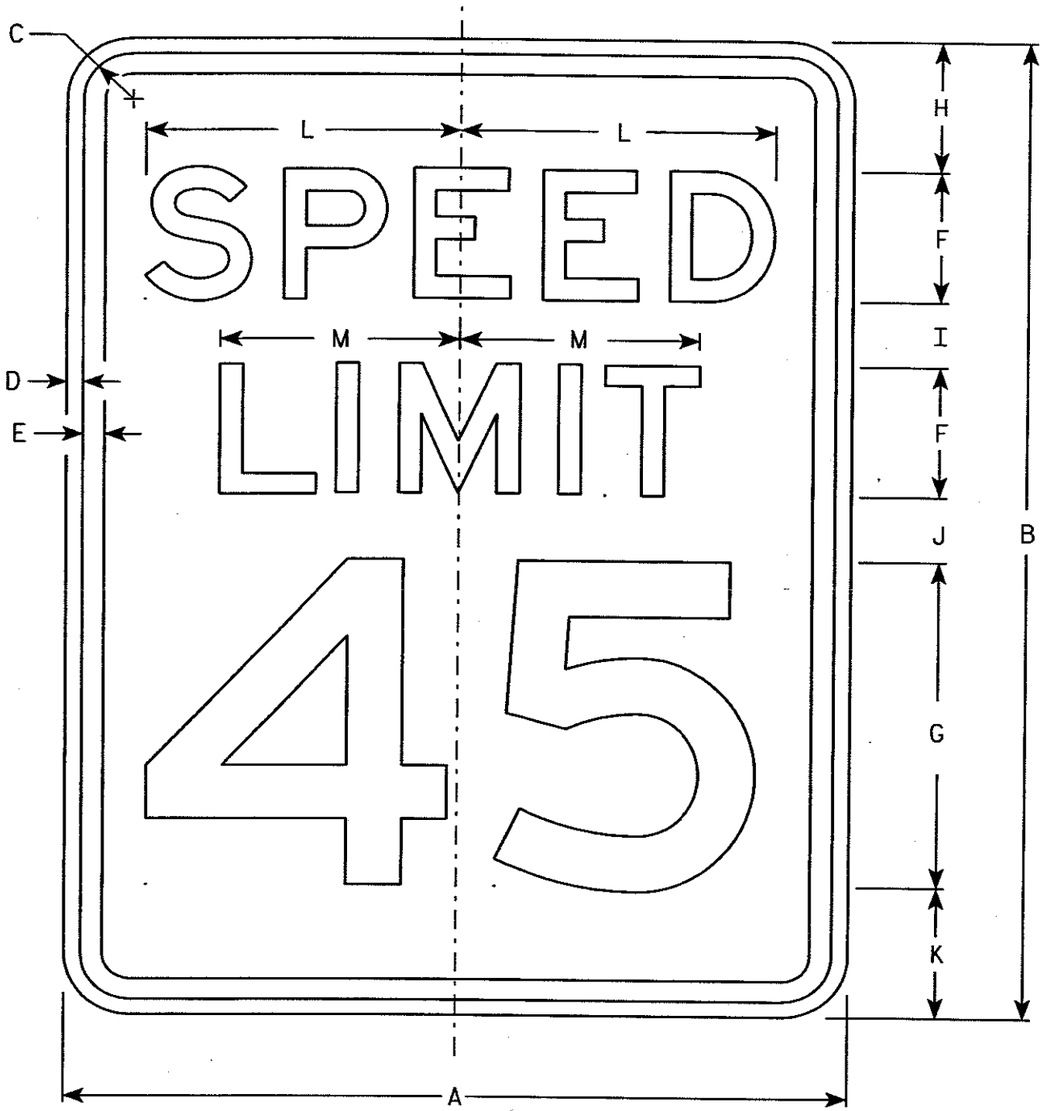
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 2/18/00 PLATE NO. R1-1F.2

7

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 172	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE 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.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 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.	Area m2
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0	.28
2	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0	.46
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0	1.86

STANDARD SIGN
R2-1

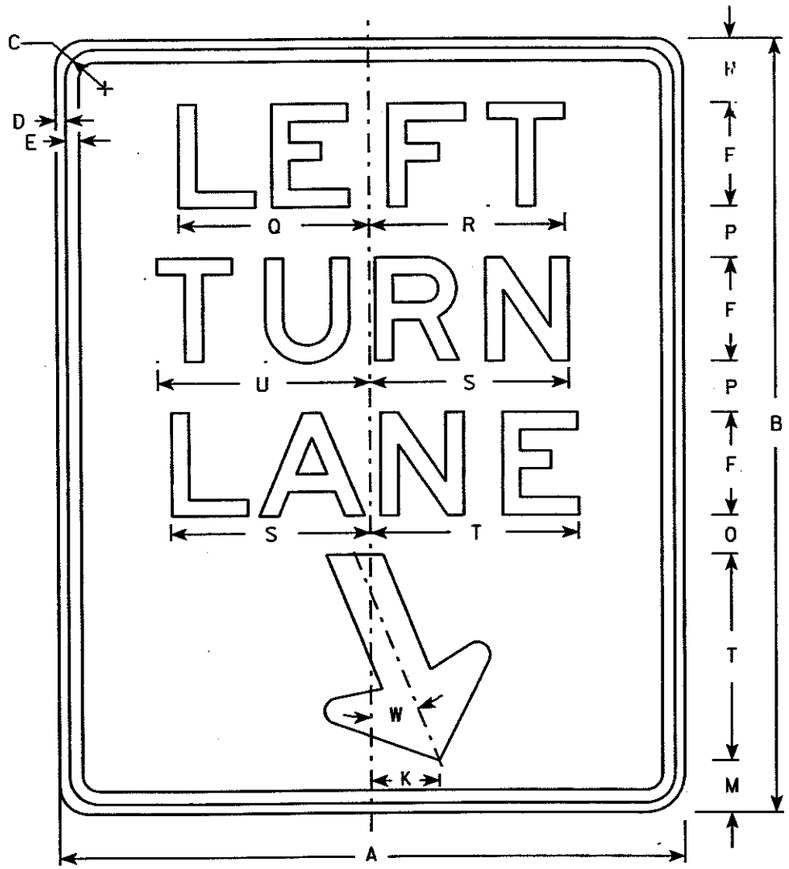
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spaeth for State Traffic Engineer

DATE 2/01/02 PLATE NO. R2-1.11

STATE PROJECT NUMBER:

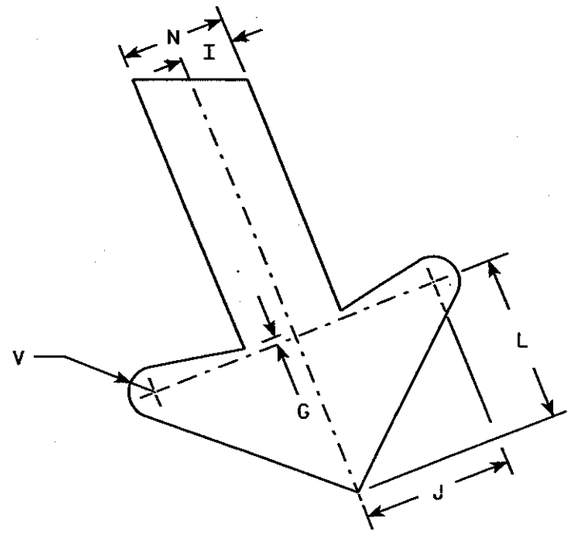
SHEET NO: 173 E



R3-55L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE 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	600 mm X 750 mm
3	900 mm X 1200 mm
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.	Area m2
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°				5.0	0.45
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°				12.0	1.08
4																												
5																												

STANDARD SIGN
R3-55L

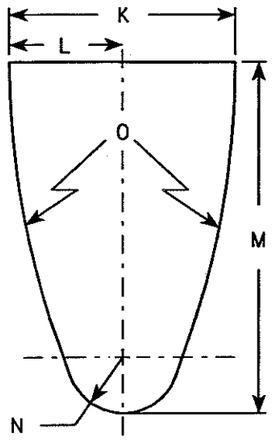
WISCONSIN DEPT OF TRANSPORTATION

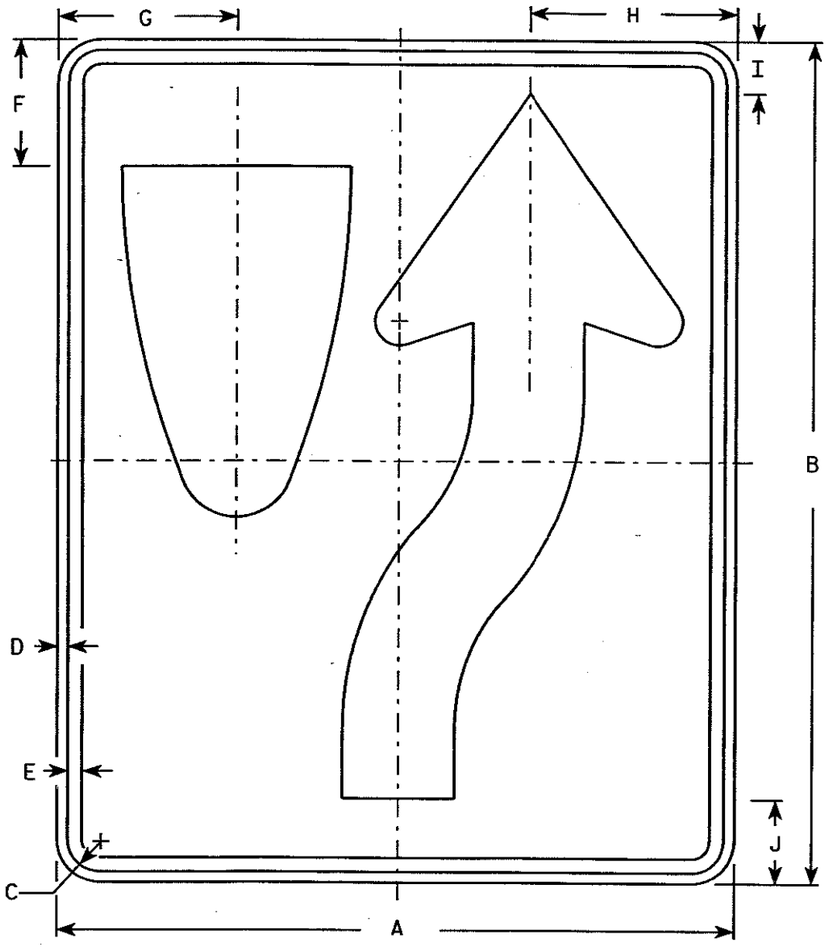
APPROVED Chester J Spang for State Traffic Engineer

DATE 2/05/02 PLATE NO. R3-55L.5

STATE PROJECT NUMBER:

SHEET NO: 174 E

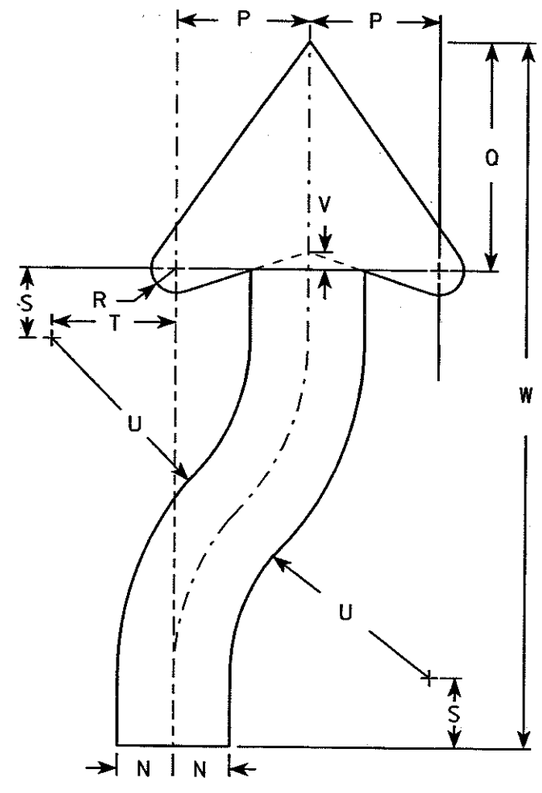




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base 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	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	900 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.	Area m2
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	.27
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	.45
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 1/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
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	1.08
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	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	1.08

STANDARD SIGN
R4-7 & R4-8

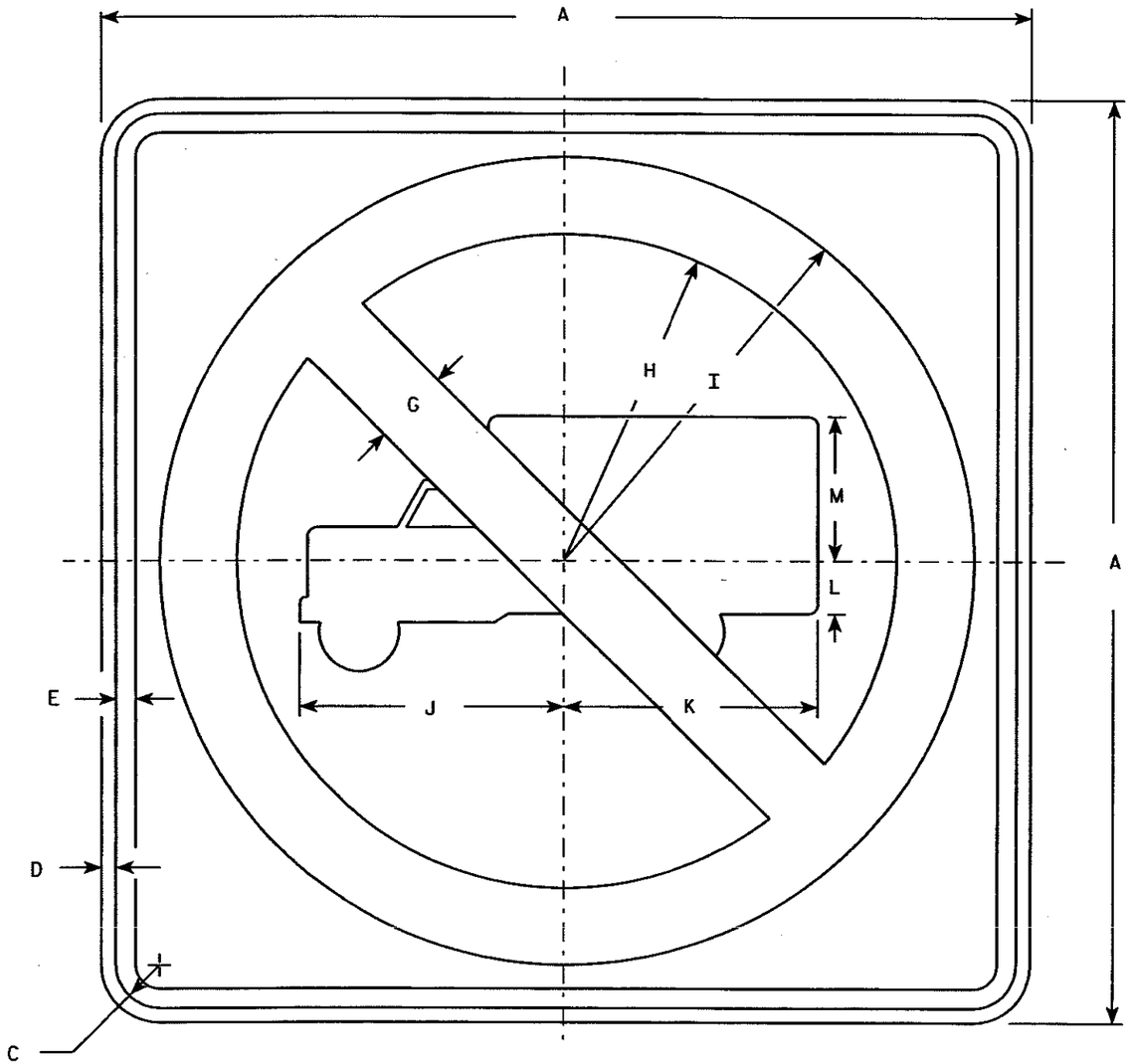
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Sippel for State Traffic Engineer

DATE 2/6/02 PLATE NO. R4-7.7

STATE PROJECT NUMBER: -

SHEET NO: 175 E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE 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. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	750 mm X 750 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.	Area m²
1																												
2	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0	0.36
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25	0.56
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0	0.81
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0	1.44

STANDARD SIGN
R5-2

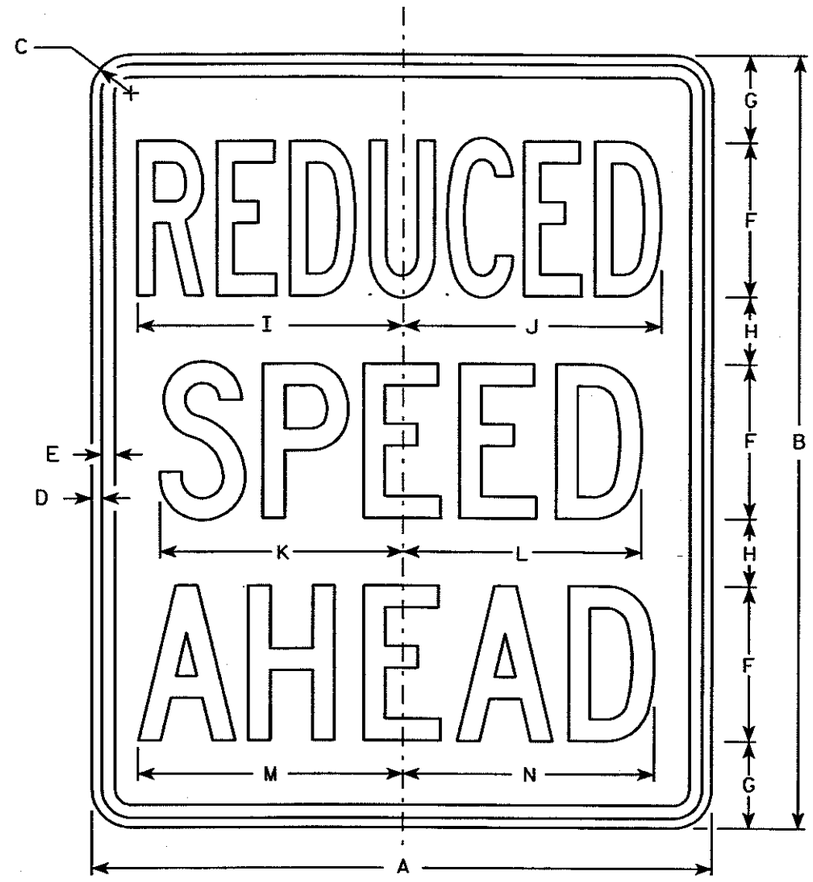
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spay for State Traffic Engineer

DATE 2/6/02 PLATE NO. R5-2.5

STATE PROJECT NUMBER:

SHEET NO: 176 E



R2-5A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is B, Lines 2 & 3 are 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.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 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.	Area m2
1	18	24	1 1/2	3/8	1/2	4	3 1/2	2 1/2	6 7/8	7	6 1/4	6 1/4	6 3/4	6 1/2													3.0	0.27
2	24	30	1 1/2	3/8	1/2	6	3 3/8	2 5/8	10 1/4	10 1/2	9 3/8	9 1/4	10 1/8	9 3/4													5.0	0.45
3	36	48	1 7/8	1/2	5/8	8	7 1/4	4 3/4	14 1/4	14 3/4	12 3/8	10 5/8	12 5/8	12 1/4													12.0	1.08
4	36	48	1 7/8	1/2	5/8	8	7 1/4	4 3/4	14 1/4	14 3/4	12 3/8	10 5/8	12 5/8	12 1/4													12.0	1.08
5	48	60	3	3/4	1	10	8 1/2	6 1/2	17 3/4	18 1/2	15 3/8	13 1/4	15 3/4	15 1/4													20.0	1.80

STANDARD SIGN
R2-5A

WISCONSIN DEPT OF TRANSPORTATION

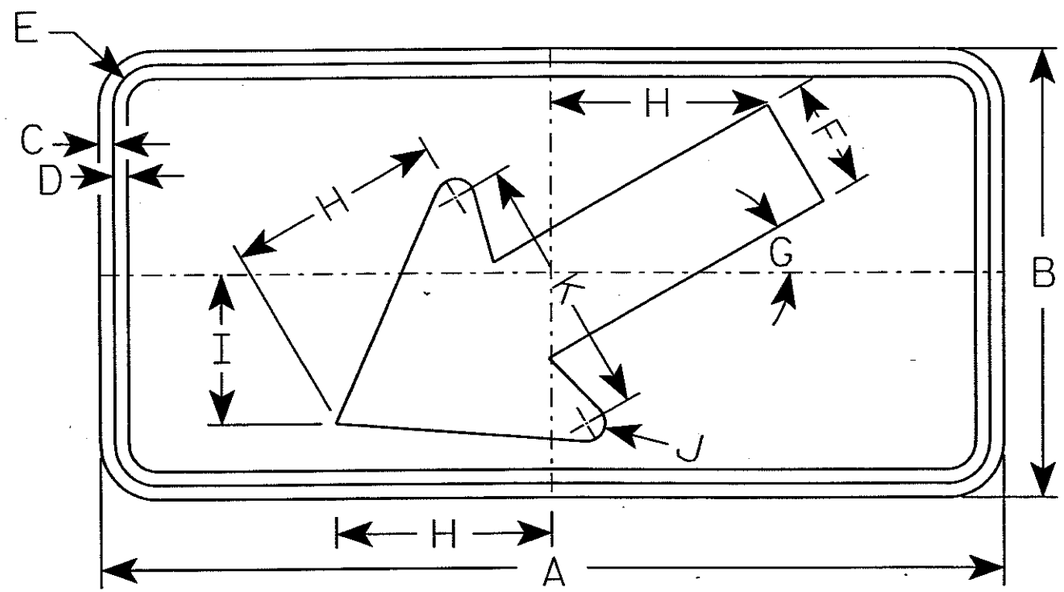
APPROVED Chester J Spang for State Traffic Engineer

DATE 2/01/02 PLATE NO. R2-5A.5

STATE PROJECT NUMBER:

SHEET NO: 177 E

56.59.60.61.62.63
LEVELS ON - 2.3. 5.6. 10.



W16-7L
WF16-7L

NOTES

1. Sign is Type II - Reflective or Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 5
   Message - See Note 5
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. W16-7R & WF16-7R are the same as W16-L & WF-16-7L except the arrow is reversed along the vertical centerline.
5. W16-7R & W16-7L
   Background - Reflective Yellow
   Message - Black
   WF16-7R & WF16-7L
   Background - Type F Reflective Yellow-Green
   Message - Black

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 450 mm
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.	Area m2
1																												
2	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0	0.18
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75	0.34
4																												
5																												

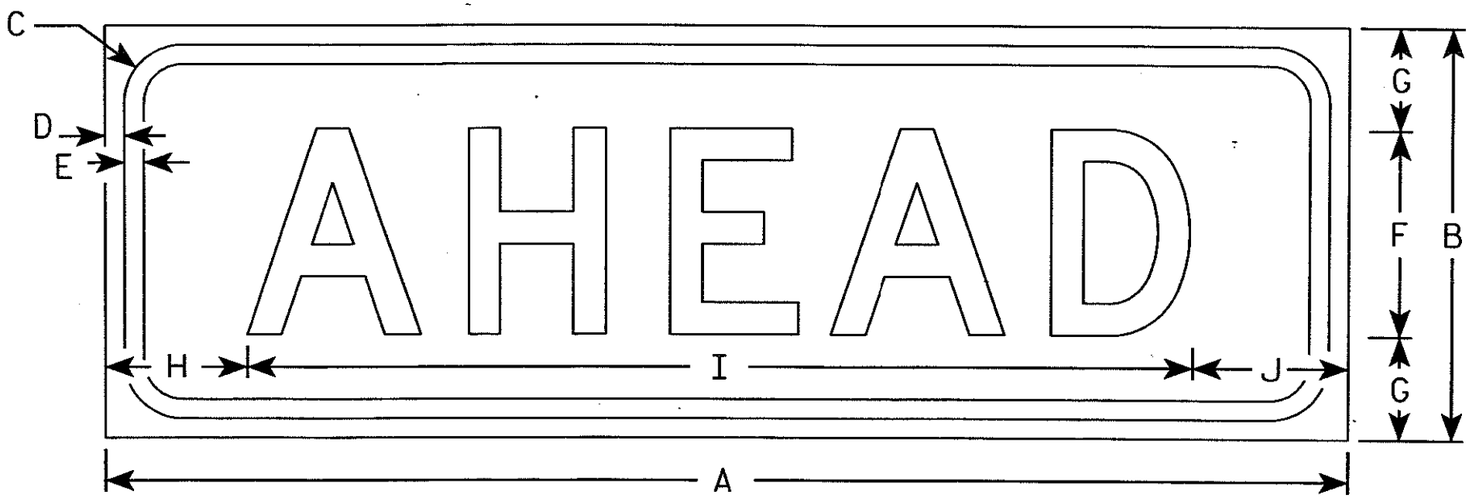
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

DATE 10/2/01 PLATE NO. W16-7.1

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 178 E



W16-9P
WF16-9P

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 5
   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. W16-9P
   Background - Type H Reflective Yellow
   WF16-9P
   Background - Type F Reflective Yellow-Green

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 200 mm
3	900 mm X 350 mm
4	1200 mm X 450 mm
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.	Area m²
1																												
2	24	8	1 1/8	3/8	3/8	4	2	2 3/4	18 1/4	3																	1.34	0.12
3	36	14	1 1/8	3/8	1/2	7	3 1/2	2 1/4	31	2 3/4																	3.5	0.32
4	48	18	1 3/8	1/2	5/8	9	4 1/2	3 3/4	40 1/4	4																	6.0	0.54
5																												

STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

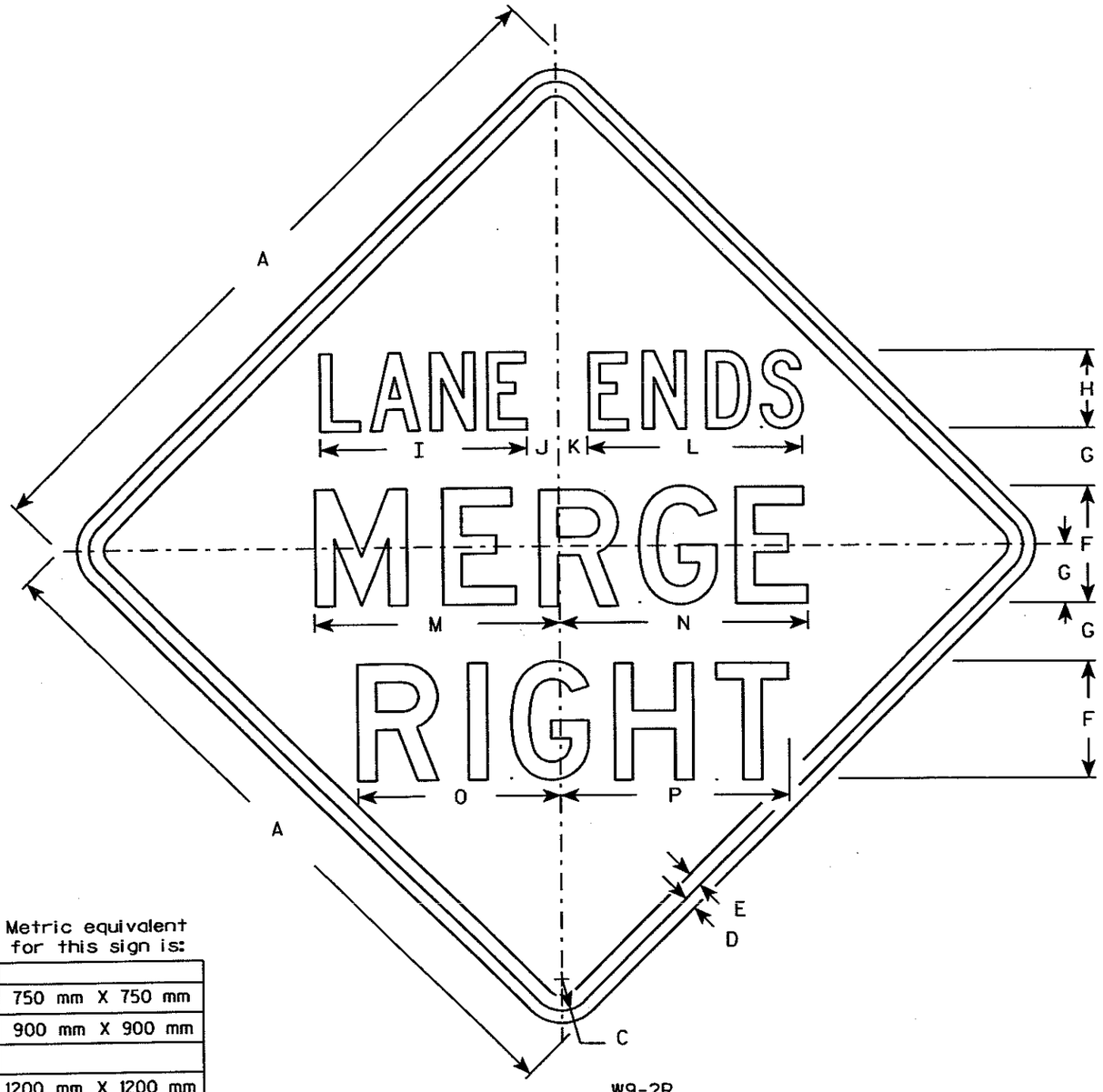
APPROVED Chester J Spang for State Traffic Engineer

DATE 4/24/02 PLATE NO. W16-9P.1

STATE PROJECT NUMBER: | HWY: | COUNTY:

SHEET NO: 179 E

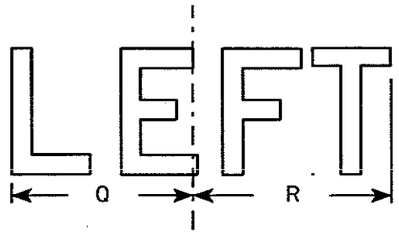
57.58.59.60.61.62.63
LEVELS ON • 2.3. 5.6. 10.
FILE NAME : C:\Users\Projects\tr_stdplate\W169P.DGN PLOT DATE : 16-MAR-2004 12:44 ORG DATE : PLOT NAME : Originator : Dist PLOT SCALE : 2.990964:1.000000
WISDOT/CADDS SHEET 42



W9-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE 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. Line 1is Series C, lines 2 & 3 are Series D.
6. W9-1L is the same as W9-2R except the word LEFT replaces RIGHT.



W9-2L

Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	1200 mm X 1200 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.	Area m²
1	30		1 3/8	1/2	5/8	5	2 1/2	3	8	1	1 1/8	8 1/4	10 3/8	10 5/8	8 5/8	9 7/8	7 1/8	7 5/8									6.25	0.56
2	36		1 5/8	5/8	3/4	6	3	4	10 3/8	1 5/8	1 1/2	11	12 3/8	12 3/4	10 1/4	11 3/4	8 1/2	9 1/8									9.0	0.81
3																												
4	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4	11 1/4	12 1/4									16.0	1.44
5	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4	11 1/4	12 1/4									16.0	1.44

STANDARD SIGN
W9-2

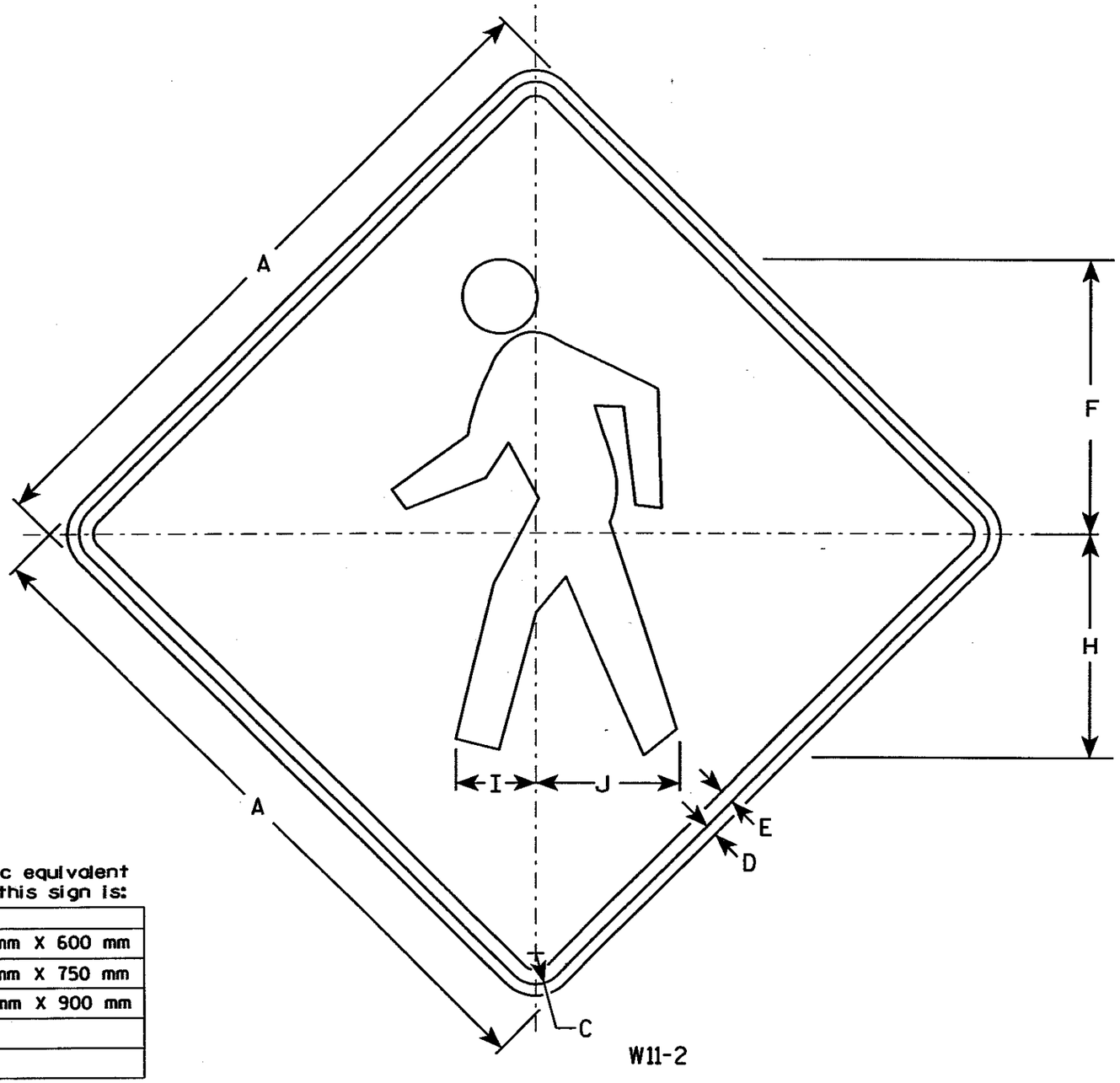
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Sprang for State Traffic Engineer

DATE 01/16/02 PLATE NO. W9-2.7

STATE PROJECT NUMBER: | HWY: | COUNTY: | SHEET NO: 180 | E

LEVELS ON - 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102,



W11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE 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	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
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.	Area m²
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0	0.36
2	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25	0.56
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0	0.81
4																												
5																												

STANDARD SIGN
W11-2

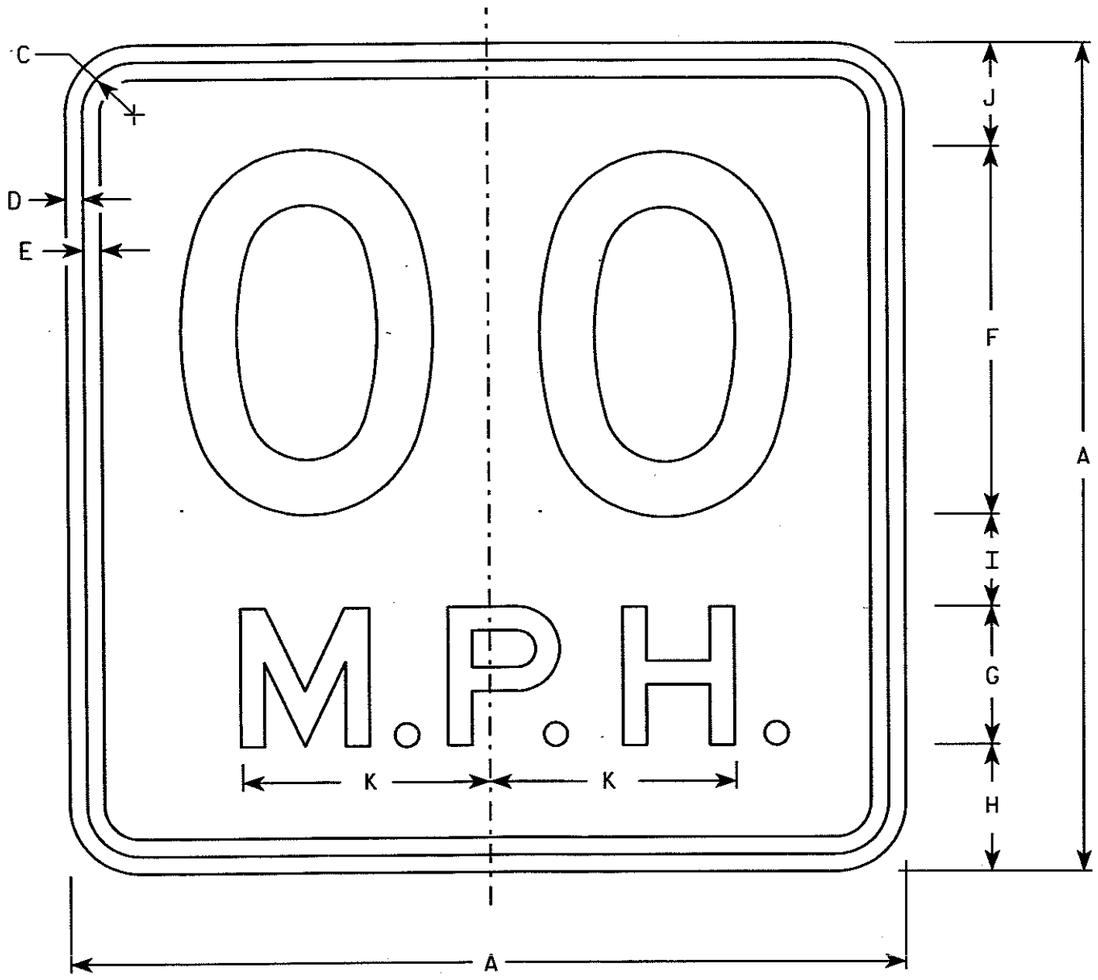
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 1/25/02 PLATE NO. W11-2.5

STATE PROJECT NUMBER:	HWY:	COUNTY:			SHEET NO: 181	E

58,59,60,61, 63
LEVELS ON - 1,2,3, 5,6, 10
FILE NAME : C:\Users\Projects\tr_stdplate\W112.DGN
PLOT DATE : 16-MAR-2004 12:46
ORG DATE : 10/5/94
PLOT NAME :
Originator : Sandy Anderson
PLOT SCALE : 5.732681:1.000000
WISDOT/CADDS SHEET 42



W13-1 & W13-1W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 7
   Message - Black
3. Message Series - See Note 6
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. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E
7. W13-1 has a yellow background while W13-1W has a white background.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 450 mm
2	450 mm X 450 mm
3	600 mm X 600 mm
4	900 mm X 900 mm
5	900 mm X 900 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.	Area m²
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
2	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00	0.36
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81

STANDARD SIGN
W13-1 & W13-1W

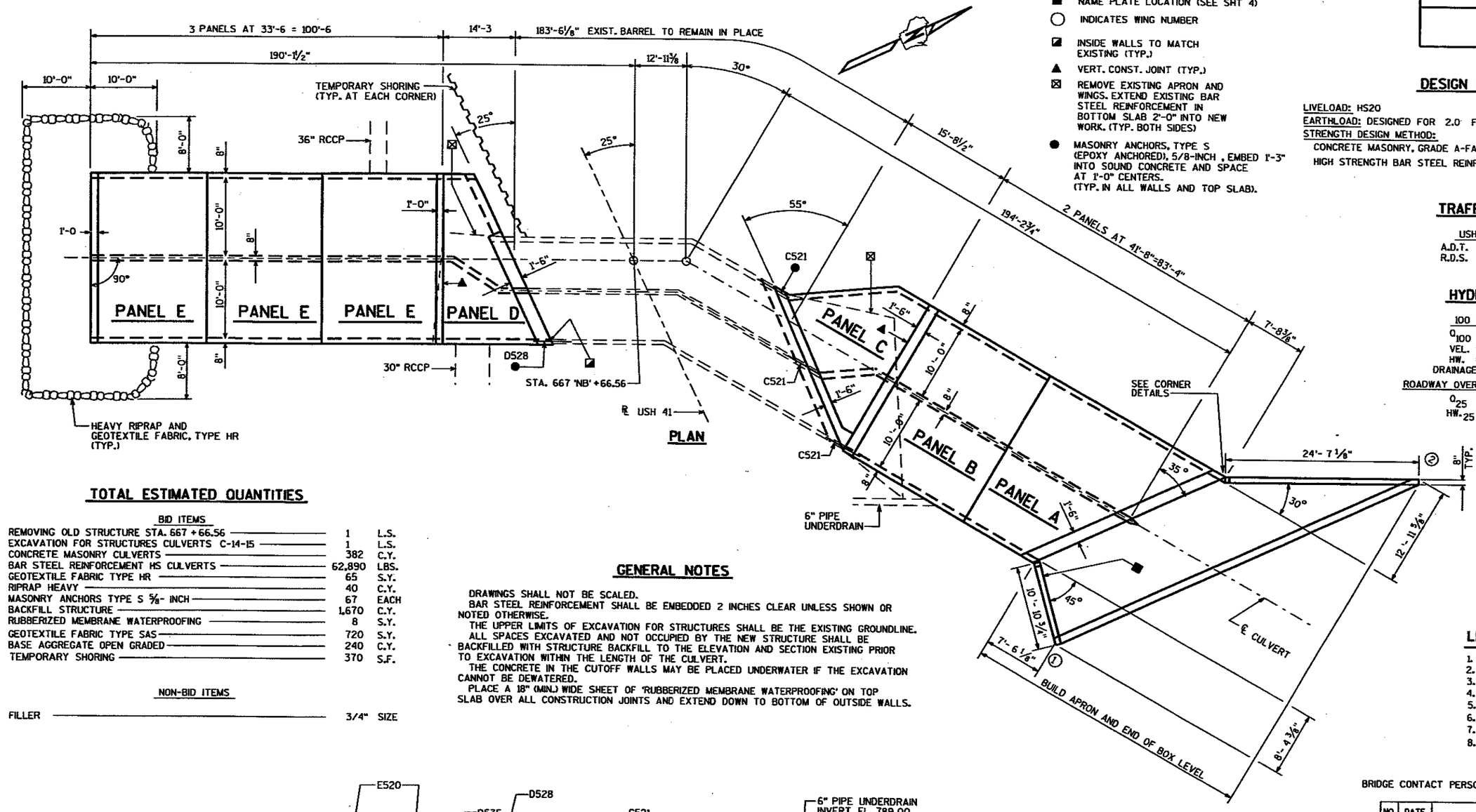
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Sprague for State Traffic Engineer

DATE 01/22/02 PLATE NO. W13-1.11

STATE PROJECT NUMBER: | HWY: | COUNTY: | SHEET NO: 182 E

STATE PROJECT NUMBER
1123-09-71



PLAN

■ NAME PLATE LOCATION (SEE SHT 4)

○ INDICATES WING NUMBER

◪ INSIDE WALLS TO MATCH EXISTING (TYP.)

▲ VERT. CONST. JOINT (TYP.)

⊠ REMOVE EXISTING APRON AND WINGS. EXTEND EXISTING BAR STEEL REINFORCEMENT IN BOTTOM SLAB 2'-0" INTO NEW WORK. (TYP. BOTH SIDES)

● MASONRY ANCHORS, TYPE S (EPOXY ANCHORED), 5/8-INCH , EMBED 1'-3" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP SLAB).

DESIGN DATA

LIVELOAD: HS20

EARTHLOAD: DESIGNED FOR 2.0 FT. OF FILL.

STRENGTH DESIGN METHOD:

CONCRETE MASONRY, GRADE A-FA ——— f'_c = 3500 P.S.I.

HIGH STRENGTH BAR STEEL REINFORCEMENT — f_y = 60000 P.S.I.

TRAFFIC VOLUME

USH 41

A.D.T. = 78200 (2024)

R.D.S. = 70 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 617 C.F.S.

VEL. = 4.9 F.P.S.

HW. = EL. 793.4

DRAINAGE AREA = 2.6 SQ. MI.

ROADWAY OVERTOPPING FREQUENCY=25 YEARS

Q_{25} = 538 C.F.S.

HW_{25} = EL. 792.8

TOTAL ESTIMATED QUANTITIES

BID ITEMS		
REMOVING OLD STRUCTURE STA. 667+66.56	1	L.S.
EXCAVATION FOR STRUCTURES CULVERTS C-14-15	1	L.S.
CONCRETE MASONRY CULVERTS	382	C.Y.
BAR STEEL REINFORCEMENT HS CULVERTS	62,890	LBS.
GEOTEXTILE FABRIC TYPE HR	65	S.Y.
RIPRAP HEAVY	40	C.Y.
MASONRY ANCHORS TYPE S 5/8- INCH	67	EACH
BACKFILL STRUCTURE	1,670	C.Y.
RUBBERIZED MEMBRANE WATERPROOFING	8	S.Y.
GEOTEXTILE FABRIC TYPE SAS	720	S.Y.
BASE AGGREGATE OPEN GRADED	240	C.Y.
TEMPORARY SHORING	370	S.F.

NON-BID ITEMS	
FILLER	3/4" 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.

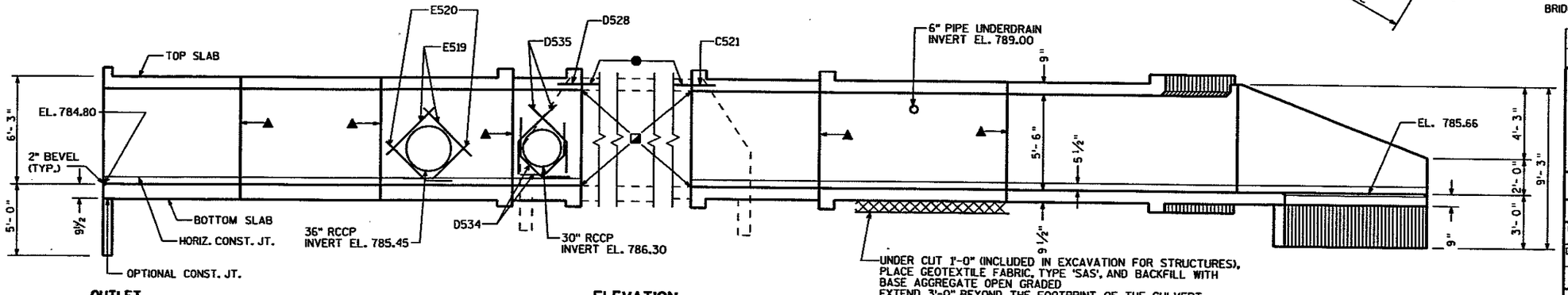
ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION WITHIN THE LENGTH OF THE CULVERT.

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

PLACE A 18" (MIN.) WIDE SHEET OF 'RUBBERIZED MEMBRANE WATERPROOFING' ON TOP SLAB OVER ALL CONSTRUCTION JOINTS AND EXTEND DOWN TO BOTTOM OF OUTSIDE WALLS.

LIST OF DRAWINGS

1. LAYOUT
2. BOX DETAILS PANEL A & B
3. BOX DETAILS PANEL C
4. BOX DETAILS PANEL D
5. BOX DETAILS PANEL E
6. APRON DETAILS
7. DETAILS
8. SUBSURFACE EXPLORATION



OUTLET

ELEVATION
(INTERIOR WALL NOT SHOWN)

INLET

BRIDGE CONTACT PERSON: DAVE GENSON (608)-266-8491

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

APPROVED Trina Hubbard SDR 5-8-2004
CHIEF STRUCTURAL DESIGN ENGINEER DATE

STRUCTURE C-44-15

U.S.H. 41 OVER MUD CREEK

COUNTY	TOWN/CITY/VILLAGE	
OUTAGAMIE	GRAND CHUTE	
DESIGN SPEC. AASHTO STD. SPEC. 2002	LOAD HS-20	CONST. SPEC. 2003
DESIGNED BY FWG / DESIGN CK'D.	DRAWN BY CF	PLANS CK'D. FWG

GENERAL PLAN

SHEET 1 OF 8

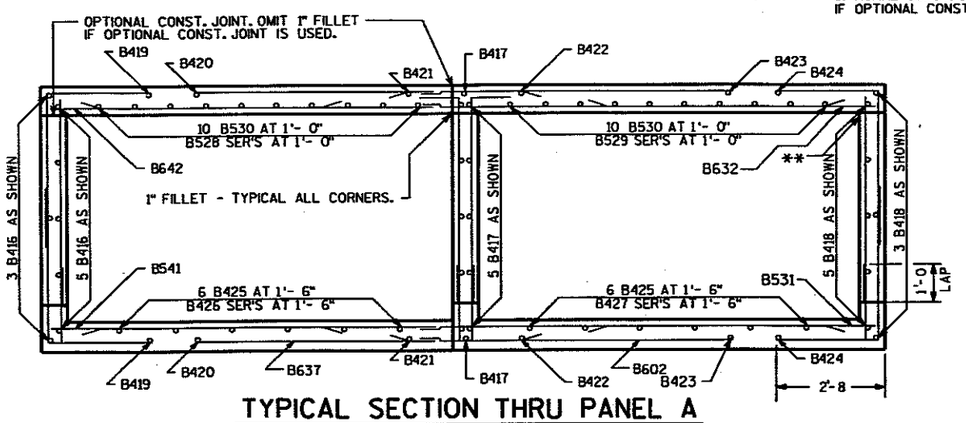
183

8

FILE= 01-4415PLA.DGN
SCALE = 4

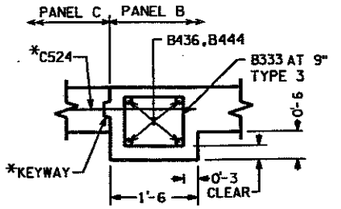
I.D. 1123-09-02B

DATE: JUNE 04



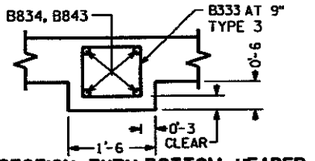
TYPICAL SECTION THRU PANEL A

BAR LABELS AND DIMENSIONS NOT SHOWN ARE IDENTICAL TO THOSE IN PANEL B



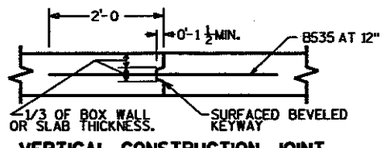
SECTION THRU BOTTOM HEADER

*FOR DETAILS SEE "VERTICAL CONSTRUCTION JOINT"



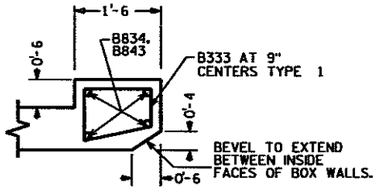
SECTION THRU BOTTOM HEADER

(AT INLET)



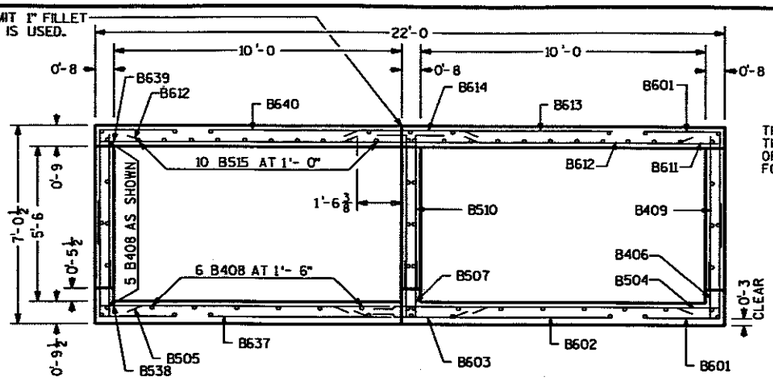
VERTICAL CONSTRUCTION JOINT

2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.



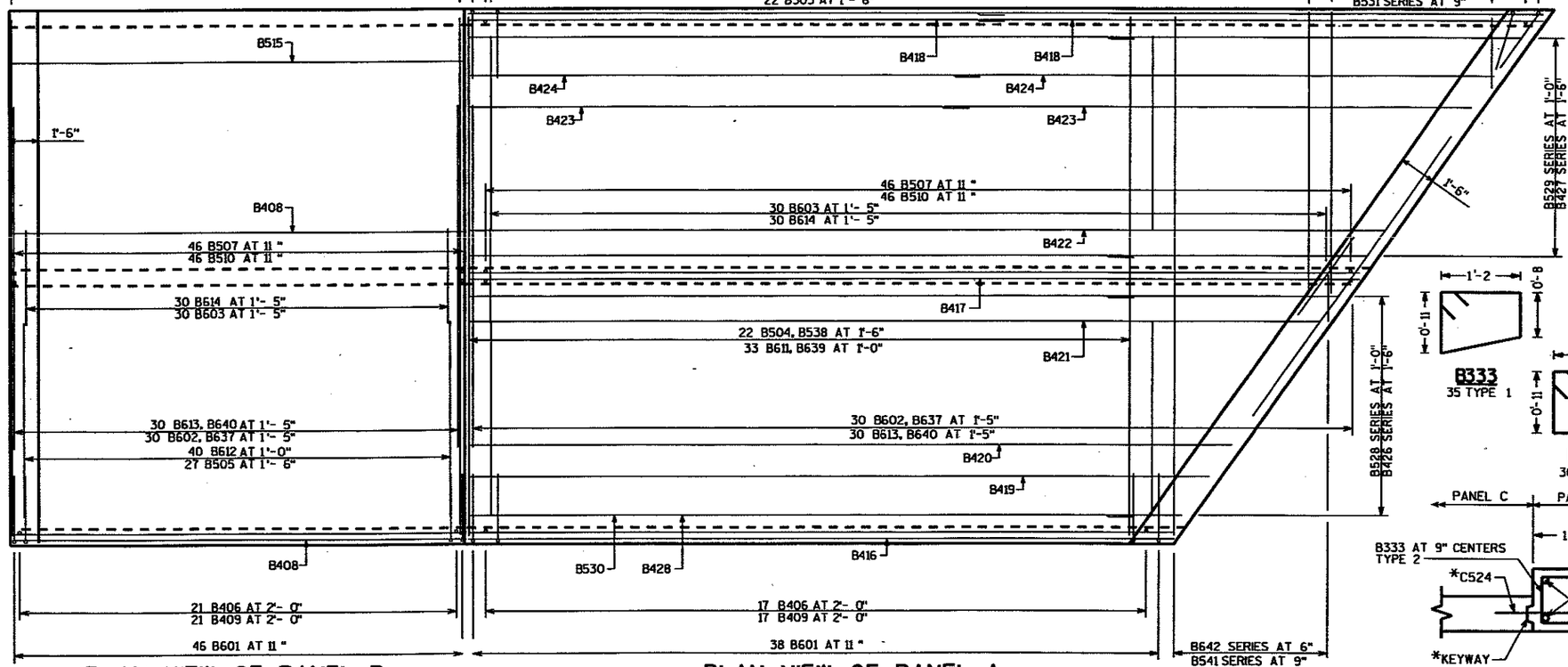
SECTION THRU TOP HEADER

AT INLET



TYPICAL SECTION THRU PANEL B

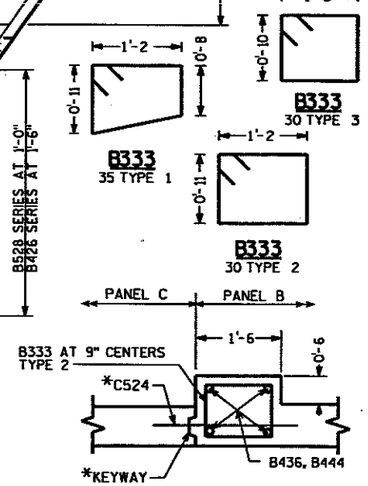
ALL LONGITUDINAL BARS NOT IDENTIFIED ARE B408 AS SHOWN.



PLAN VIEW OF PANEL B

HORIZONTAL SCALE = 1/2 OF VERTICAL SCALE

PLAN VIEW OF PANEL A



SECTION THRU TOP HEADER

AT PANEL C

STATE PROJECT NUMBER

1123-09-71

BILL OF BARS

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. LONGER BARS OF THE SAME SIZE MAY BE SUBSTITUTED FOR SHORTER BARS. PAYMENT BASED ON BAR LENGTHS AS DETAILED.

MARK	NUMBER REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B601	370	6-9	2-8	NO	CORNERS
B602	60	9-6	NO	NO	BOTTOM SLAB TRANS.
B603	60	3-11	NO	NO	BOTTOM SLAB TRANS.
B504	50	12-9	NO	NO	BOTTOM SLAB TRANS.
B505	98	8-0	NO	NO	BOTTOM SLAB TRANS.
B406	84	2-0	NO	NO	WALLS-DOWELS VERT.
B507	176	2-0	NO	NO	WALLS-DOWELS VERT.
B408	52	41-2	NO	NO	TOP&BOTTOM SLAB & WALL
B409	84	5-6	NO	NO	WALLS VERT.
B510	176	6-6	1-0	NO	WALLS VERT.
B611	74	13-1	NO	NO	TOP SLAB TRANS.
B612	146	8-0	NO	NO	TOP SLAB TRANS.
B613	60	9-6	NO	NO	TOP SLAB TRANS.
B614	60	3-11	NO	NO	TOP SLAB TRANS.
B515	20	41-2	NO	NO	TOP SLAB LONGIT.
B416	8	23-10	NO	NO	TOP&BOTTOM SLAB & WALL
B417	12	41-3	NO	NO	TOP&BOTTOM SLAB & WALL
B418	16	25-4	NO	NO	TOP&BOTTOM SLAB & WALL
B419	2	35-3	NO	NO	TOP&BOTTOM SLAB LONGIT.
B420	2	36-2	NO	NO	TOP&BOTTOM SLAB LONGIT.
B421	2	39-8	NO	NO	TOP&BOTTOM SLAB LONGIT.
B422	2	42-4	NO	NO	TOP&BOTTOM SLAB LONGIT.
B423	4	23-11	NO	NO	TOP&BOTTOM SLAB LONGIT.
B424	4	24-5	NO	NO	TOP&BOTTOM SLAB LONGIT.
B425	12	33-2	NO	NO	BOTTOM SLAB LONGIT.
B426	6	5-8	NO	YES	BOTTOM SLAB LONGIT.
B427	6	13-1	NO	YES	BOTTOM SLAB LONGIT.
B528	10	6-2	NO	YES	TOP SLAB LONGIT.
B529	10	13-7	NO	YES	TOP SLAB LONGIT.
B530	20	30-5	NO	NO	TOP SLAB LONGIT.
B531	10	7-11	NO	YES	BOTTOM SLAB TRANS.
B632	14	7-8	NO	YES	TOP SLAB TRANS.
B333	130	4-9	YES	NO	HEADER STIRRUPS VERT.
B834	8	17-3	NO	NO	HEADER-HORIZ.-PANEL A
B535	63	4-0	NO	NO	VERT.CONST.JOINT
B436	8	12-6	NO	NO	HEADER-HORIZ.-PANEL B
B637	60	6-9	NO	NO	BOTTOM SLAB TRANS.
B538	50	10-4	NO	NO	BOTTOM SLAB TRANS.
B639	74	10-4	NO	NO	TOP SLAB TRANS.
B640	60	6-9	NO	NO	TOP SLAB TRANS.
B541	8	17-7	NO	YES	BOTTOM SLAB TRANS.
B642	12	17-3	NO	YES	TOP SLAB TRANS.
B843	8	12-9	NO	NO	HEADER-HORIZ.-PANEL A
B444	8	10-5	NO	NO	HEADER-HORIZ.-PANEL B

LENGTH SHOWN FOR BAR SERIES IN "BILL OF BARS" IS AVERAGE LENGTH.

BAR SERIES TABLE

MARK	LENGTH			NO.OF BARS/SERIES	NO.OF EACH SERIES
B426	3-0	TO	8-3	6	1
B427	10-6	TO	15-9	6	1
B528	3-0	TO	9-4	10	1
B529	10-6	TO	16-9	10	1
B531	3-1	TO	12-9	10	1
B632	2-10	TO	12-5	14	1
B541	2-7	TO	10-4	8	1
B642	2-7	TO	10-4	12	1

BUNDLE AND TAG EACH SERIES SEPARATELY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC. 2003	DRAWN BY RIES	PLANS CK'D. FWG

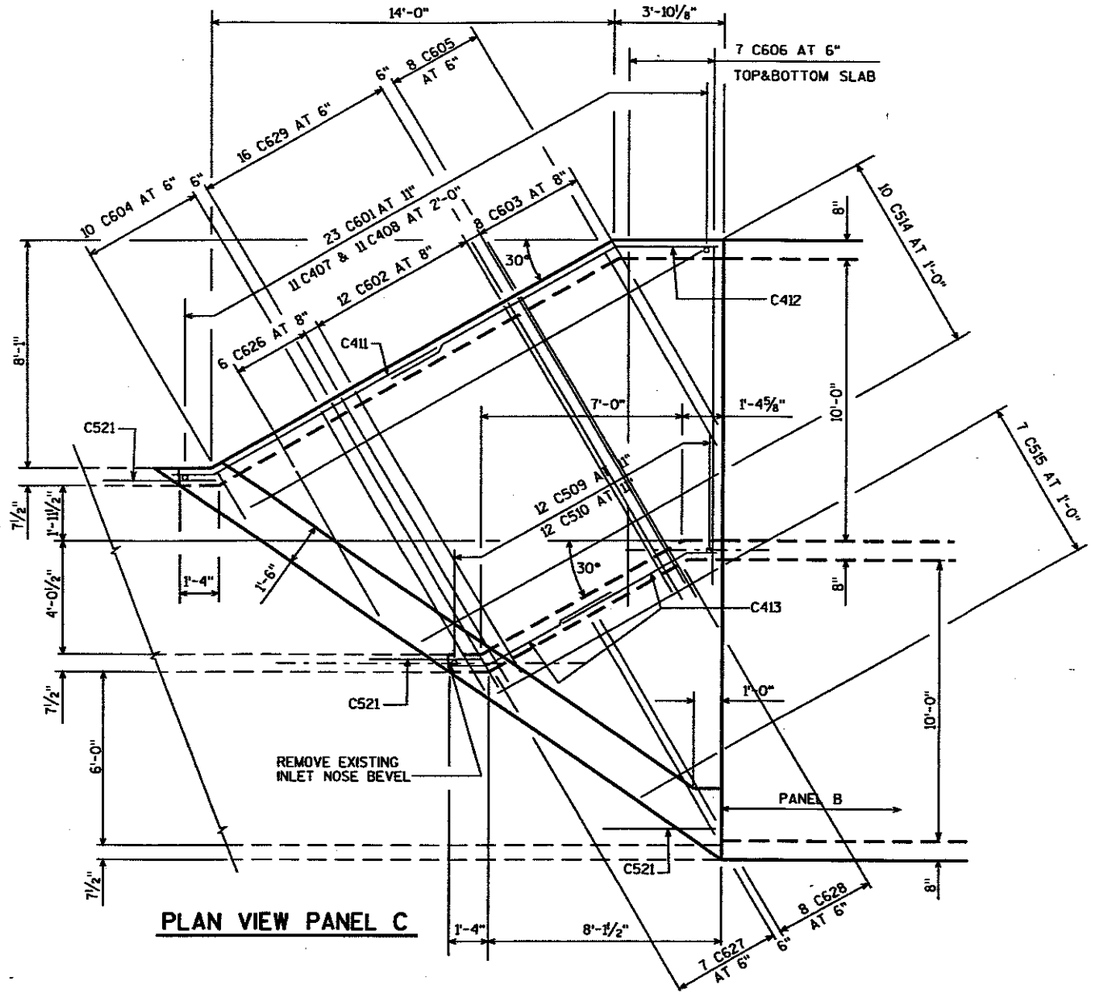
BOX DETAILS PANELS A & B

SHEET 2

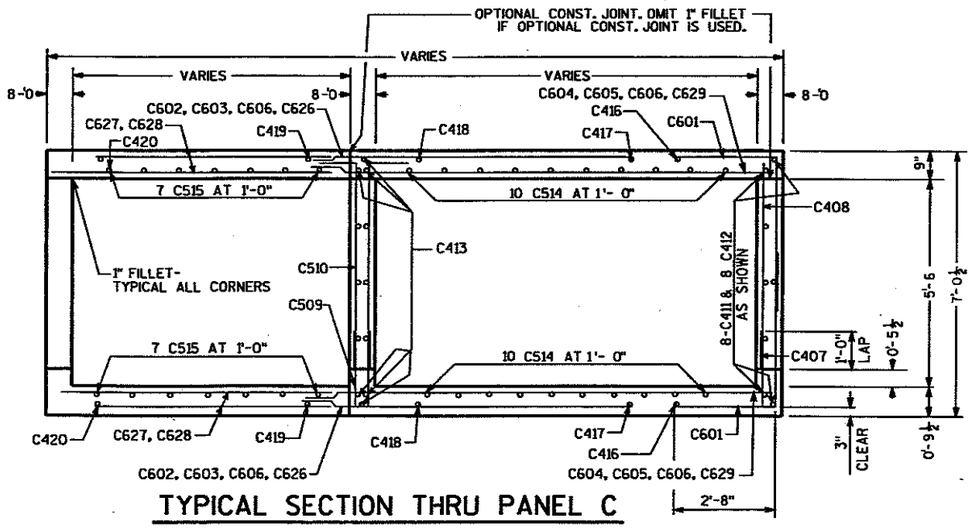
184

8

FILE= 441SPANELAB.DGN
SCALE = 4



PLAN VIEW PANEL C



TYPICAL SECTION THRU PANEL C

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
C603	2 SERIES OF 8	5-0 TO 10-10
C604	2 SERIES OF 10	2-6 TO 12-4
C605	2 SERIES OF 8	6-6 TO 12-10
C606	4 SERIES OF 7	13-1 TO 14-6
C514	2 SERIES OF 10	11-2 TO 19-0
C515	2 SERIES OF 7	3-1 TO 8-5
C626	2 SERIES OF 6	4-6 TO 10-1
C627	4 SERIES OF 7	2-4 TO 8-10
C628	4 SERIES OF 8	2-4 TO 8-0

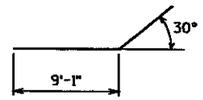
BUNDLE AND TAG EACH SERIES SEPARATELY.

BILL OF BARS

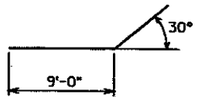
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C601		46	6-9	2-8		CORNERS
C602		24	11-4			TOP&BOTTOM SLAB-TRANS.
C603		16	7-11		▲	TOP&BOTTOM SLAB-TRANS.
C604		20	7-5		▲	TOP&BOTTOM SLAB-TRANS.
C605		16	9-8		▲	TOP&BOTTOM SLAB-TRANS.
C606		28	13-10		▲	TOP&BOTTOM SLAB-TRANS.
C407		11	2-0			EXTERIOR WALL-DOWELS-VERT.
C408		11	5-6			EXTERIOR WALL-VERT.
C509		24	2-0			INTERIOR WALL-DOWELS-VERT.
C510		24	6-6	1-0		INTERIOR WALL-VERT.
C411		8	10-1	X		EXTERIOR WALL-HORIZ.
C412		8	12-8	X		EXTERIOR WALL-HORIZ.
C413		24	6-5	X		INTERIOR WALL-HORIZ.
C514		20	15-1		▲	TOP&BOTTOM SLAB-LONGIT.
C515		14	5-9		▲	TOP&BOTTOM SLAB-LONGIT.
C415		2	17-8			TOP&BOTTOM SLAB-LONGIT.
C417		2	16-6			TOP&BOTTOM SLAB-LONGIT.
C418		2	11-11			TOP&BOTTOM SLAB-LONGIT.
C419		2	8-3			TOP&BOTTOM SLAB-LONGIT.
C420		2	3-3			TOP&BOTTOM SLAB-LONGIT.
C521		37	3-3			CONC. MASONRY ANCHORS
C322		60	4-9	X		HEADER-STIRRUP-VERT.
C823		8	15-10			HEADER-HORIZ.
C524		73	4-0			VERT. CONST. JOINT
C825		8	10-8			HEADER-HORIZ.
C626		12	7-3		▲	TOP&BOTTOM SLAB-TRANS.
C627		28	5-7		▲	TOP&BOTTOM SLAB-TRANS.
C628		32	5-3		▲	TOP&BOTTOM SLAB-TRANS.
C629		32	12-10			TOP&BOTTOM SLAB-TRANS.

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



C411



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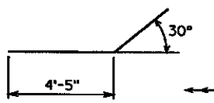

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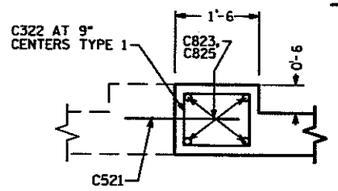
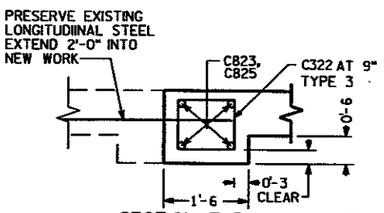
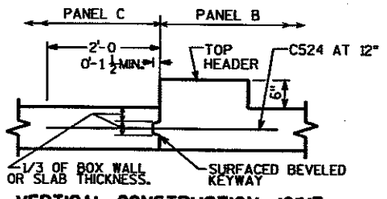


SECTION THRU TOP HEADER

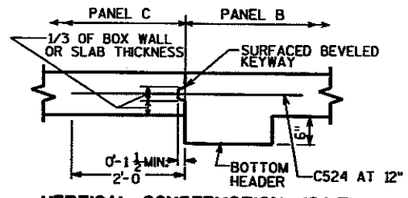


SECTION THRU BOTTOM HEADER



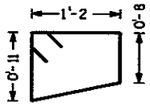
VERTICAL CONSTRUCTION JOINT

2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.

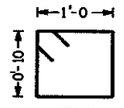


VERTICAL CONSTRUCTION JOINT

2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.



C322
30 TYPE 1



C322
30 TYPE 3

STATE PROJECT NUMBER

1123-09-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC. 2003	DRAWN BY RIES	PLANS CK'D. FWG

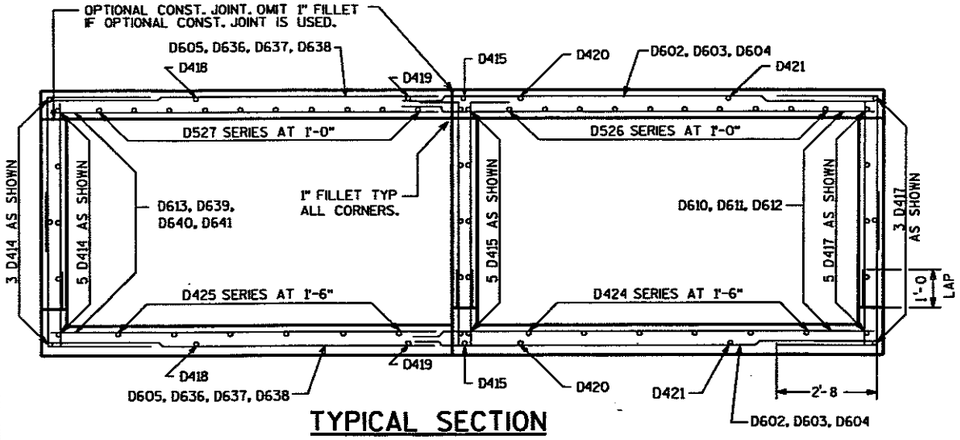
BOX DETAILS
PANEL C

SHEET 3

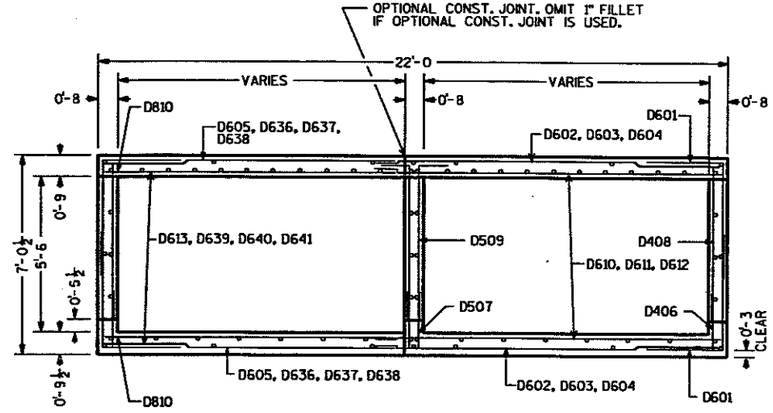
185

8

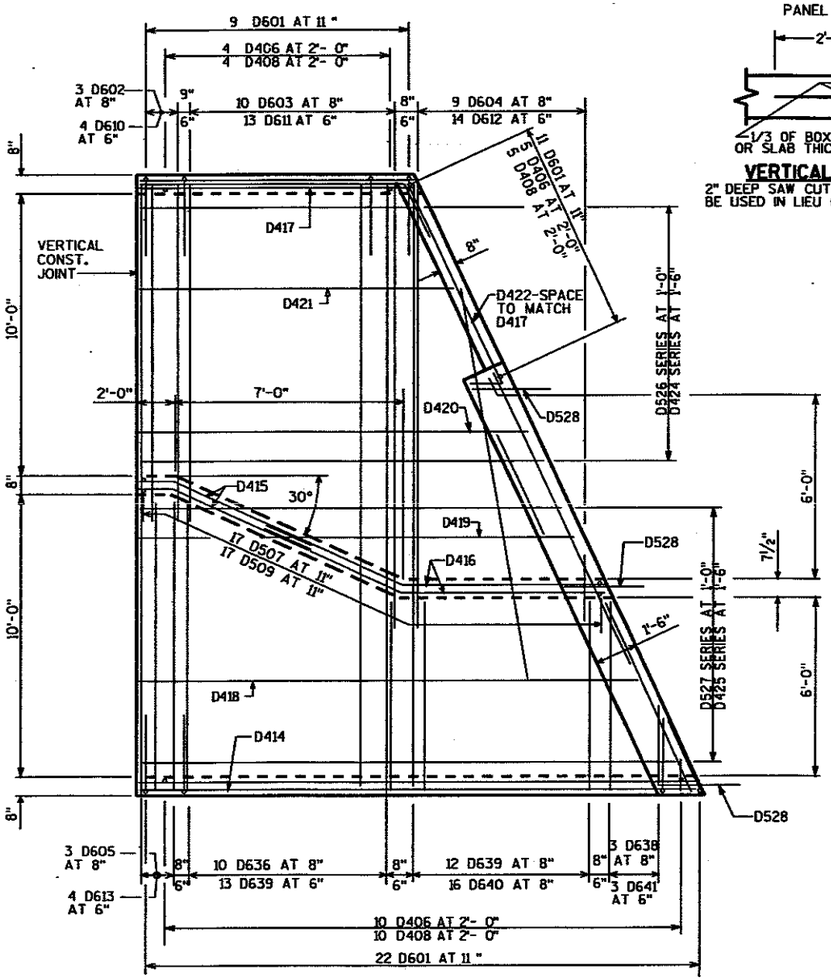
FILE= 4415PANELC.DGN
SCALE = 4



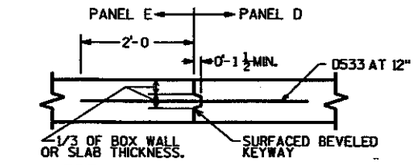
TYPICAL SECTION



TYPICAL SECTION THRU PANEL D

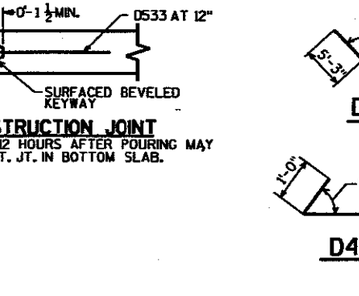


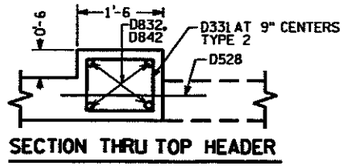
PLAN VIEW OF PANEL D



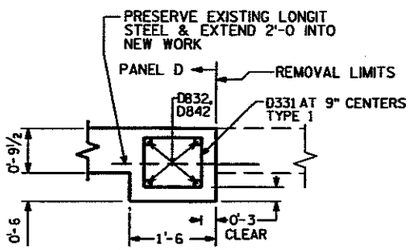
VERTICAL CONSTRUCTION JOINT

2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.





SECTION THRU TOP HEADER

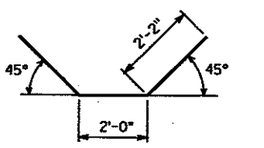


SECTION THRU BOTTOM HEADER

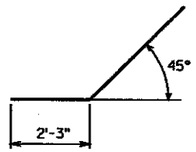
BAR SERIES TABLE

MARK	LENGTH			NO.OF BARS/SERIES	NO.OF EACH SERIES
D603	13-3	TO	16-10	10	2
D424	8-9	TO	12-3	6	1
D425	12-9	TO	17-3	6	1
D526	8-8	TO	12-10	10	1
D527	12-3	TO	16-5	10	1
D529	3-8	TO	21-4	12	1
D830	3-8	TO	21-4	10	1
D604	4-11	TO	16-4	9	2
D636	6-6	TO	10-0	10	2
D638	3-2	TO	6-0	3	2
D611	13-3	TO	16-10	13	2
D612	4-2	TO	17-2	14	2
D639	6-6	TO	10-1	13	2
D641	2-10	TO	4-11	3	2

BUNDLE AND TAG EACH SERIES SEPARATELY



D534



D535

STATE PROJECT NUMBER

1123-09-71

BILL OF BARS

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. LONGER BARS OF THE SAME SIZE MAY BE SUBSTITUTED FOR SHORTER BARS. PAYMENT BASED ON BAR LENGTHS AS DETAILED.

MARK	NUMBER REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
D601	84	6-9	2-8	NO	CORNERS
D602	6	13-1	NO	NO	TOP&BOTTOM SLAB TRANS.
D603	20	15-0	NO	YES	TOP&BOTTOM SLAB TRANS.
D604	18	10-8	NO	YES	TOP&BOTTOM SLAB TRANS.
D605	6	10-4	NO	NO	TOP&BOTTOM SLAB TRANS.
D406	19	2-0	NO	NO	WALLS-DOWELS VERT.
D507	34	2-0	NO	NO	WALLS-DOWELS VERT.
D408	19	5-6	NO	NO	WALLS VERT.
D509	34	6-6	1-0	NO	WALLS VERT.
D610	8	13-1	NO	NO	TOP&BOTTOM SLAB TRANS.
D611	26	13-1	NO	YES	TOP&BOTTOM SLAB TRANS.
D612	28	10-8	NO	YES	TOP&BOTTOM SLAB TRANS.
D613	8	10-4	NO	NO	TOP&BOTTOM SLAB TRANS.
D414	8	19-0	NO	NO	WALL
D415	12	6-3	YES	NO	INTERIOR WALL
D416	12	12-0	YES	NO	INTERIOR WALL
D417	8	9-6	YES	NO	TOP&BOTTOM SLAB WALL
D418	2	17-10	NO	NO	TOP&BOTTOM SLAB LONGIT.
D419	2	15-0	NO	NO	TOP&BOTTOM SLAB LONGIT.
D420	2	13-6	NO	NO	TOP&BOTTOM SLAB LONGIT.
D421	2	10-10	NO	NO	TOP&BOTTOM SLAB LONGIT.
D422	8	10-3	YES	NO	END WALL
D424	6	10-6	NO	YES	BOTTOM SLAB LONGIT.
D425	6	15-0	NO	YES	BOTTOM SLAB LONGIT.
D526	10	10-9	NO	YES	TOP SLAB LONGIT.
D527	10	14-4	NO	YES	TOP SLAB LONGIT.
D528	30	3-3	NO	NO	WALLS&TOP SLAB MASONRY ANCHORS
D529	24	12-6	NO	YES	BOTTOM SLAB TRANS.
D830	20	12-6	NO	YES	TOP SLAB TRANS.
D331	42	4-9	YES	NO	HEADER STIRRUPS VERT.
D832	8	11-9	NO	NO	HEADERS HORIZ.
D533	31	4-0	NO	NO	VERT.CONST.JOINT
D534	2	6-0	YES	NO	WALL AT 30° RCCP
D535	2	4-6	YES	NO	WALL AT 30° RCCP
D636	20	8-3	NO	YES	TOP&BOTTOM SLAB TRANS.
D637	24	6-3	NO	NO	TOP&BOTTOM SLAB TRANS.
D638	6	4-7	NO	YES	TOP&BOTTOM SLAB TRANS.
D639	26	8-3	NO	YES	TOP&BOTTOM SLAB TRANS.
D640	32	6-3	NO	NO	TOP&BOTTOM SLAB TRANS.
D641	6	3-11	NO	YES	TOP&BOTTOM SLAB TRANS.
D842	8	6-11	NO	NO	HEADERS HORIZ.

LENGTH SHOWN FOR BAR SERIES IN "BILL OF BARS" IS AVERAGE LENGTH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC.	DRAWN BY	PLANS CK'D.
2003	RIES	FWG

BOX DETAILS
PANEL D

SHEET 4

186

8

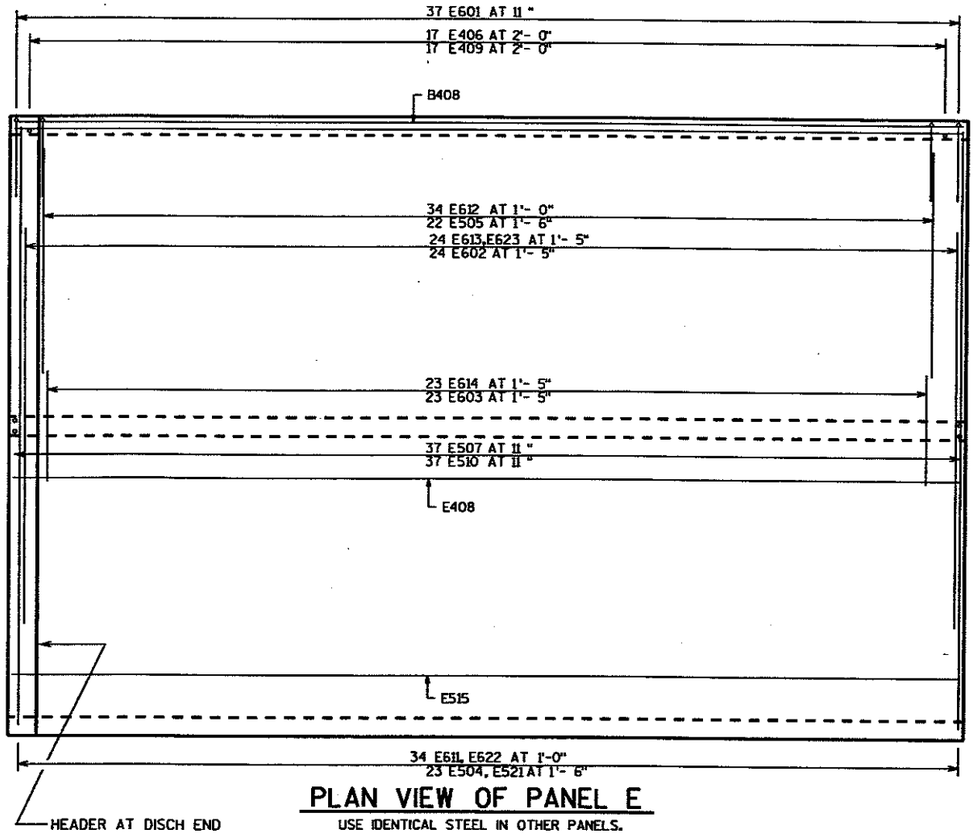
FILE= 4415PANELD.DGN
SCALE = 4

STATE PROJECT NUMBER
1123-09-71

BILL OF BARS

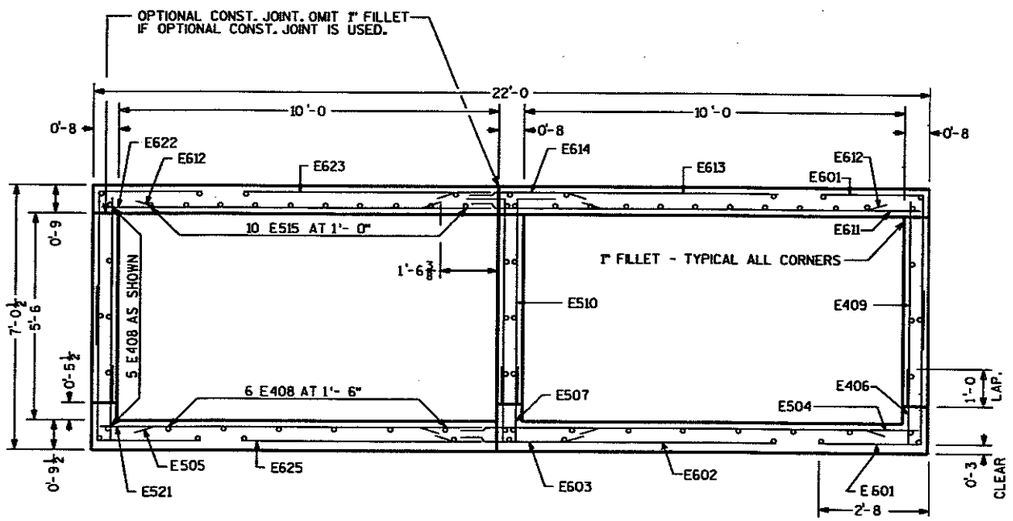
THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE. THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR. LONGER BARS OF THE SAME SIZE MAY BE SUBSTITUTED FOR SHORTER BARS. PAYMENT BASED ON BAR LENGTHS AS DETAILED.

MARK	NUMBER REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
E601	444	6-9	2-8	NO	CORNERS
E602	72	9-6	NO	NO	BOTTOM SLAB TRANS.
E603	69	3-11	NO	NO	BOTTOM SLAB TRANS.
E504	69	12-9	NO	NO	BOTTOM SLAB TRANS.
E505	132	8-0	NO	NO	BOTTOM SLAB TRANS.
E406	102	2-0	NO	NO	WALLS-DOWELS VERT.
E507	222	2-0	NO	NO	WALLS-DOWELS VERT.
E408	156	33-0	NO	NO	TOP&BOTTOM SLAB & WALL
E409	102	5-6	NO	NO	WALLS VERT.
E510	222	6-6	1-0	NO	WALLS VERT.
E611	102	13-1	NO	NO	TOP SLAB TRANS.
E612	204	8-0	NO	NO	TOP SLAB TRANS.
E613	72	9-6	NO	NO	TOP SLAB TRANS.
E614	69	3-11	NO	NO	TOP SLAB TRANS.
E515	60	33-0	NO	NO	TOP SLAB LONGIT.
E416	6	12-1	NO	NO	HEADERS HORIZ.
E317	90	2-10	YES	NO	HEADER STIRRUPS VERT.
E518	126	4-0	NO	NO	VERT.CONST.JOINT
E519	2	6-0	NO	NO	WALL AT 36" RCCP
E520	2	6-0	YES	NO	WALL AT 36" RCCP
E521	69	10-4	NO	NO	BOTTOM SLAB TRANS.
E622	102	10-4	NO	NO	TOP SLAB TRANS.
E623	72	10-4	NO	NO	TOP SLAB TRANS.
E424	6	10-4	NO	NO	HEADERS HORIZ.
E625	72	7-1	NO	NO	BOTTOM SLAB TRANS.



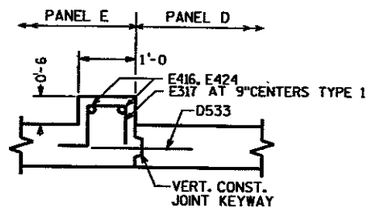
PLAN VIEW OF PANEL E

USE IDENTICAL STEEL IN OTHER PANELS.



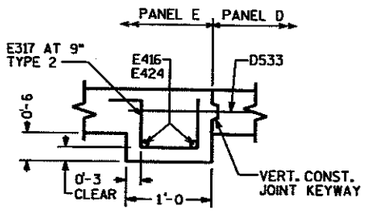
TYPICAL SECTION THRU PANEL E

ALL LONGITUDINAL BARS NOT IDENTIFIED ARE E408 AS SHOWN.

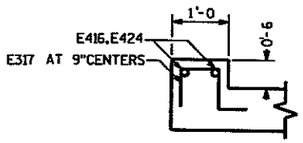


SECTION THRU TOP HEADER

AT PANEL D

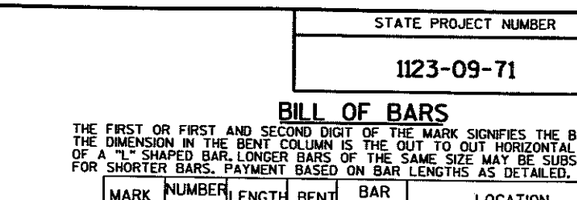


SECTION THRU BOTTOM HEADER



SECTION THRU TOP HEADER

AT OUTLET



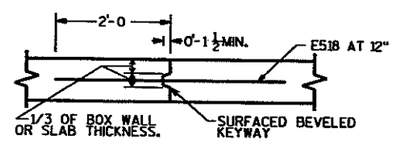
E520

E317

60 TYPE 1

E317

30 TYPE 2



VERTICAL CONSTRUCTION JOINT

2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC. 2003	DRAWN BY RIES	PLANS CK'D. FWG

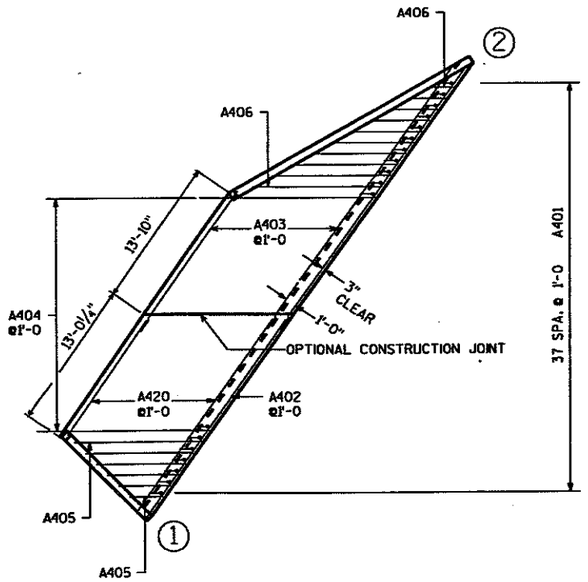
BOX DETAILS PANEL E

SHEET 5

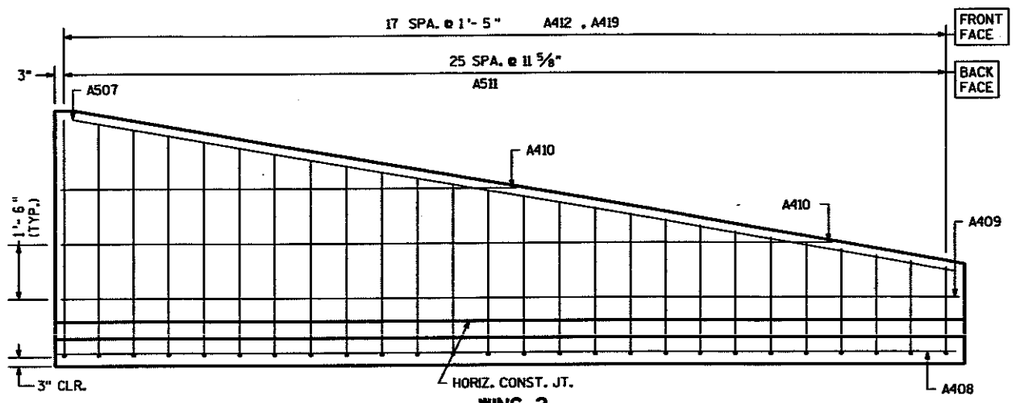
187

8

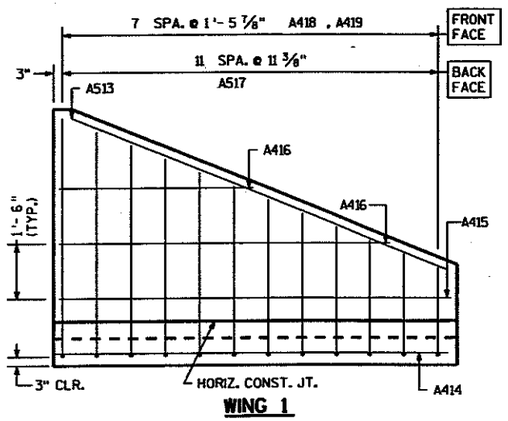
FILE= 4415PANELE.DGN
SCALE = 4



APRON REINF.

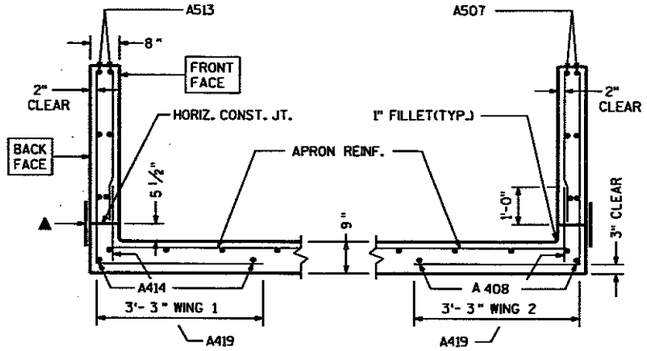


WING 2



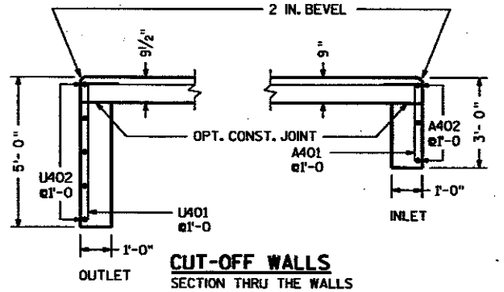
WING 1

▲ 18" RUBBERIZED MEMBRANE WATER-PROOFING. PLACE ALONG HORIZ. CONST. JT. FOR ENTIRE WING LENGTH (TYP.).



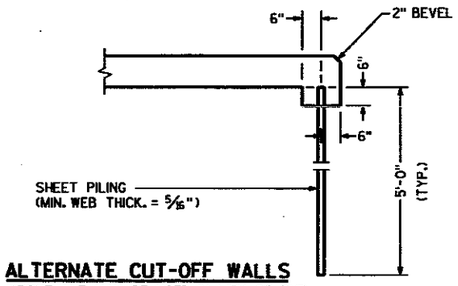
SECTION THRU WINGS

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.

STATE PROJECT NUMBER

1123-09-71

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC.	DRAWN BY	PLANS CK'D.
2003	RIES	FWG

APRON DETAILS

SHEET 6

188

FILE= 4415APR.DGN
SCALE = 4

BILL OF BARS

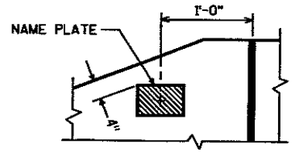
THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF AN L - SHAPED BAR.

BAR MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
U401	22	5 - 6	1 - 0		OUTLET CUTOFF WALL
U402	5	21 - 6			OUTLET CUTOFF WALL
A401	38	3 - 6	1 - 0		INLET APRON AND CUTOFF WALL
A402	6	25 - 3			INLET APRON AND CUTOFF WALL
A403	11	22 - 4		*	" APRON
A404	22	15 - 5			" APRON
A405	6	7 - 3		*	" APRON
A406	10	6 - 9		*	" APRON
A507	2	24 - 6			WING 3 -HORIZONTAL - BOTH FACES
A408	2	24 - 10			WING "-HORIZONTAL -APRON BOTT. SLAB
A409	2	24 - 3			WING "-HORIZONTAL - BOTH FACES
A410	4	16 - 6		*	WING "-HORIZONTAL - BOTH FACES
A511	26	7 - 7	3 - 3	*	WING "-VERTICAL - BACK FACE
A412	18	3 - 5		*	WING "-VERTICAL - FRONT FACE
A513	2	11 - 3			WING 4 -HORIZONTAL - BOTH FACES
A414	2	11 - 2			WING "-HORIZONTAL -APRON BOTT. SLAB
A415	2	10 - 7			WING "-HORIZONTAL - BOTH FACES
A416	4	7 - 1		*	WING "-HORIZONTAL - BOTH FACES
A517	12	7 - 7	3 - 3	*	WING "-VERTICAL - BACK FACE
A418	8	3 - 5		*	WING "-VERTICAL - FRONT FACE
A419	26	2 - 0			WINGS 3 AND 4 - DOWELS - FRONT FACE
A420	11	17 - 2		*	INLET APRON

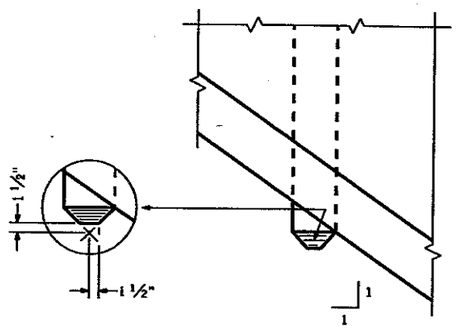
* LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE --- BUNDLE AND TAG EACH SERIES SEPARATELY

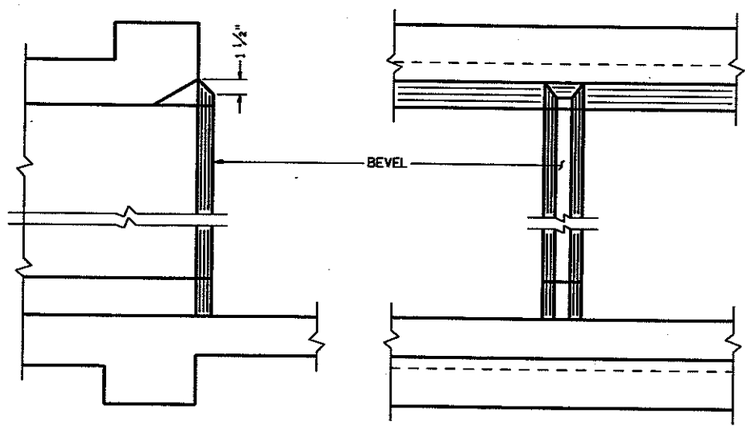
BAR MARK	NO. REQ'D.	LENGTHS FOR EACH SERIES
A403	1 SERIES OF 11	15 - 0 TO 29 - 9
A405	1 SERIES OF 6	3 - 0 TO 11 - 6
A406	1 SERIES OF 10	2 - 2 TO 11 - 5
A410	2 SERIES OF 2	12 - 3 TO 20 - 10
A511	1 SERIES OF 26	5 - 5 TO 9 - 8
A412	1 SERIES OF 18	1 - 3 TO 5 - 6
A416	2 SERIES OF 2	5 - 2 TO 8 - 11
A517	1 SERIES OF 12	5 - 5 TO 9 - 8
A418	1 SERIES OF 8	1 - 3 TO 5 - 6
A420	1 SERIES OF 11	12 - 8 TO 21 - 8



NAME PLATE LOCATION
WING 1

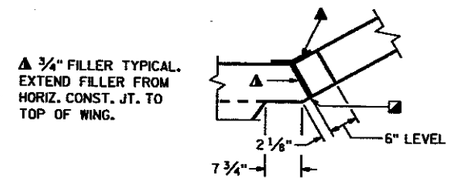


PLAN

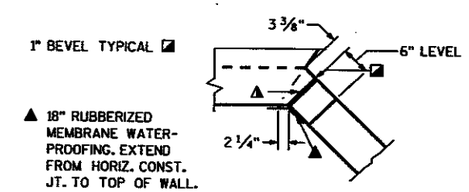


SECTION ELEVATION

INLET NOSE DETAILS



CORNER 2



CORNER 1

CORNER DETAILS

STATE PROJECT NUMBER
1123-09-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC.	DRAWN BY	PLANS CK'D.
2003	RIES	FWG

DETAILS

SHEET 7
189

8

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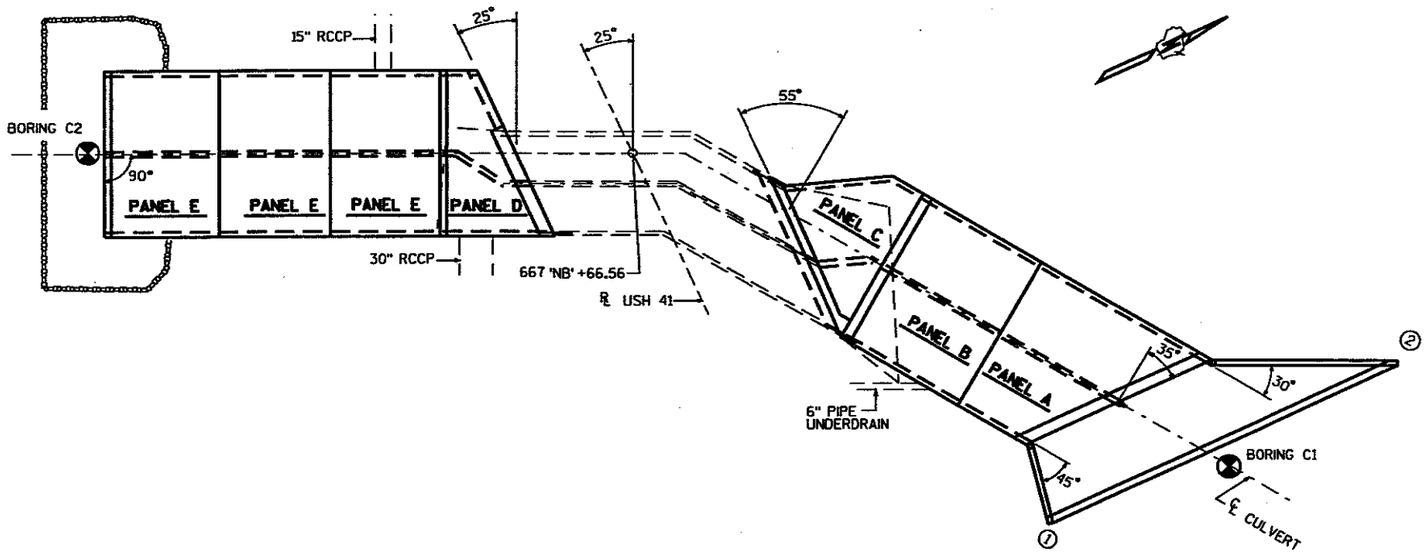
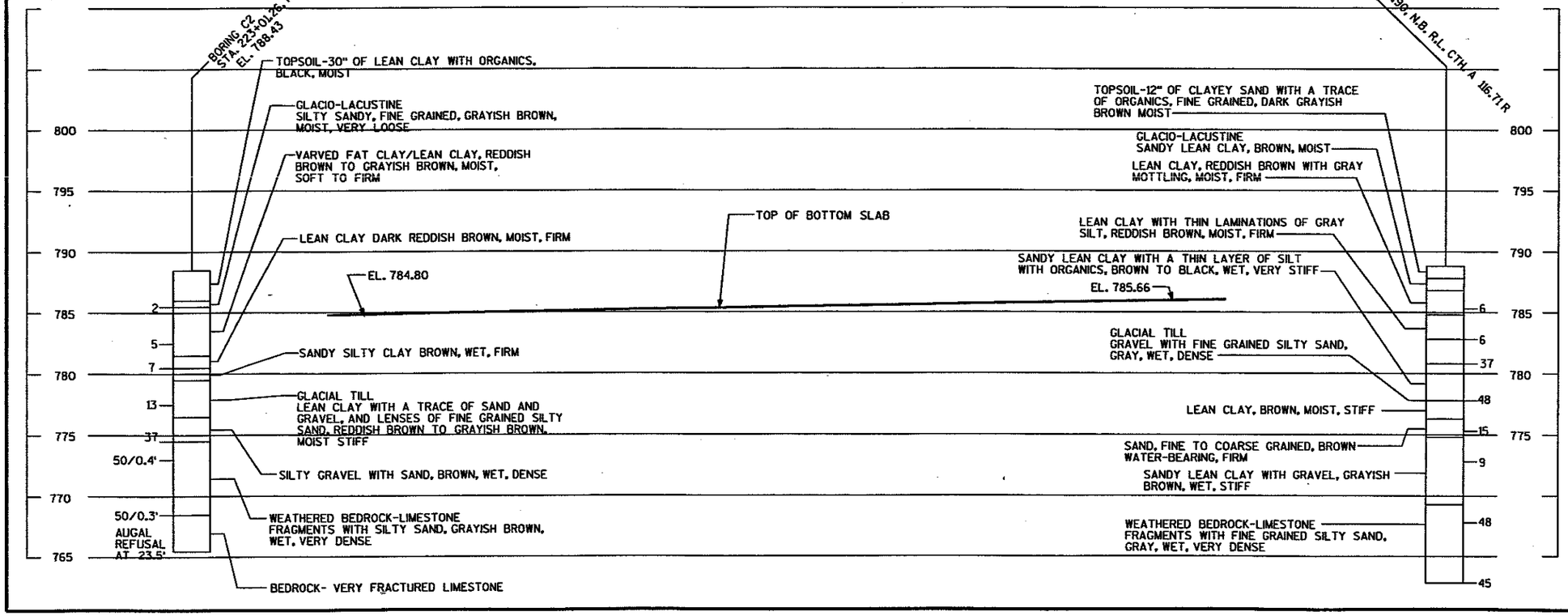
SCALE = 4





STATE PROJECT NUMBER

1123-09-71

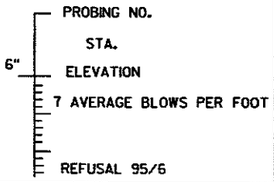
ABBREVIATIONS

F— FINE M— MEDIUM C— COARSE
WS— WEATHERED SO — SOUND

MATERIAL SYMBOLS

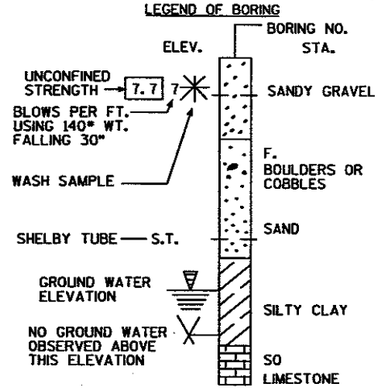
TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

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 WISCONSIN DEPARTMENT OF TRANSPORTATION 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.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-44-15

CONST. SPEC.	2003	DRAWN BY	RIES	PLANS CK'D.	FWG

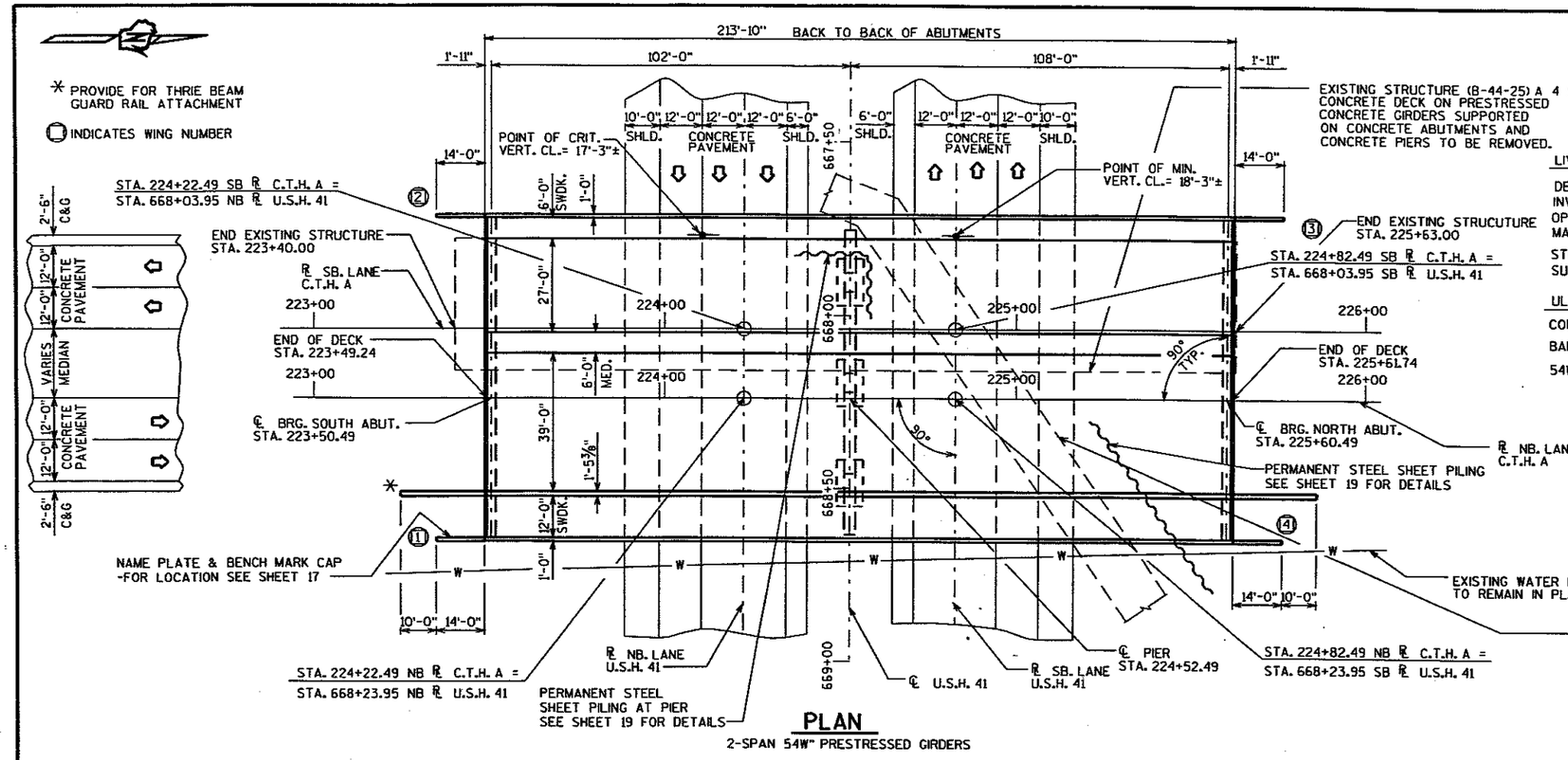
SUBSURFACE EXPLORATION

SHEET 8

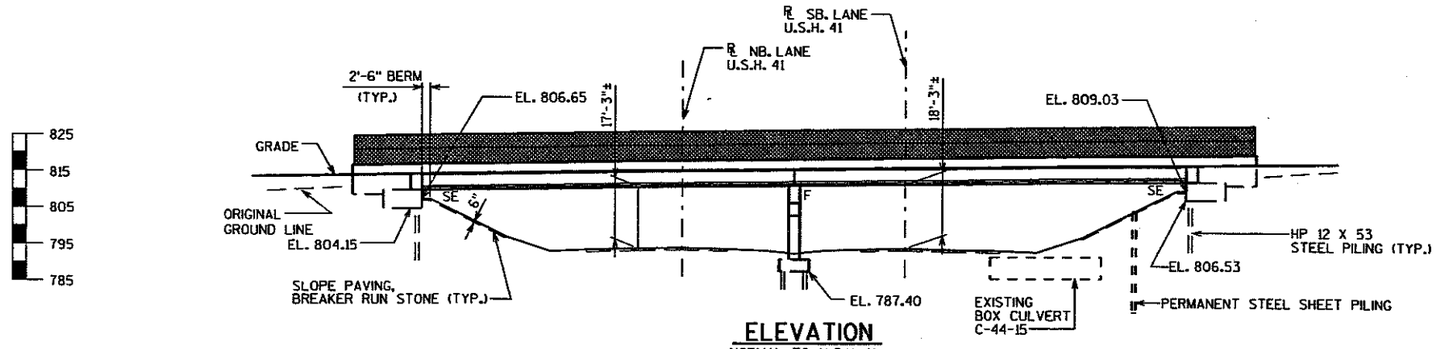
190

FILE= 4415BOR.DGN
SCALE = 10

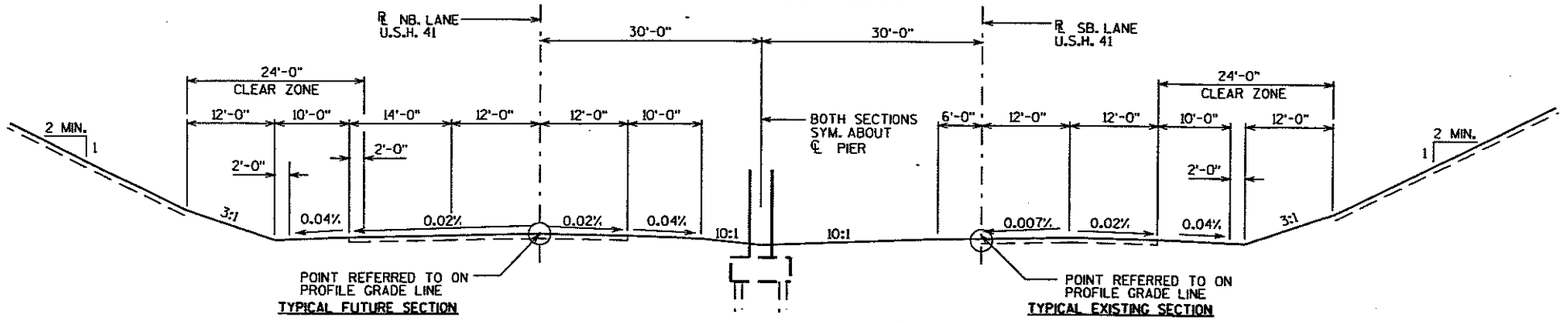
STATE PROJECT NUMBER
1123-09-71



PLAN
2-SPAN 54W" PRESTRESSED GIRDERS



ELEVATION
NORMAL TO U.S.H. 41



TYPICAL SECTION THRU U.S.H. 41 LOOKING WEST

DESIGN DATA

LIVE LOAD:

DESIGN RATING; HS-20
INVENTORY RATING; HS-21
OPERATIONAL RATING; HS-41
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

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

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY DECK — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
54W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 7,000 P.S.I. (SPAN 1) f'c = 8,000 P.S.I. (SPAN 2)
STRANDS- 0.6" ϕ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 70 TONS PER PILE. ESTIMATED 45 FEET LONG.

PIER TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 70 TONS PER PILE. ESTIMATED 25 FEET LONG.

TRAFFIC VOLUME

U.S.H. 41	C.T.H. A
A.D.T.=59,200 (2004)	A.D.T.=15,520 (2004)
A.D.T.=78,200 (2024)	A.D.T.=23,620 (2024)
R.D.S.=70 M.P.H.	R.D.S.=45 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER
9. PIER DETAILS
10. SUPERSTRUCTURE
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE DETAILS
13. 54W" PRESTRESSED GIRDER DETAILS
14. STEEL DIAPHRAGM
15. SLOPED FACE PARAPET 'HF'
16. VERTICAL FACE PARAPET 'A' - WEST
17. VERTICAL FACE PARAPET 'A' - EAST
18. CHAIN LINK FENCE DETAILS
19. STEEL SHEET PILING

STRUCTURES DESIGN CONTACTS:
BILL DREHER (608) 261-8205
JERRY ZIRK (608) 266-5163

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

APPROVED Tom Hubbard 5-28-2004
CHIEF STRUCTURAL DESIGN ENGINEER SDR DATE

8

STRUCTURE B-44-140

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

COUNTY OUTAGAMIE		TOWN/CITY/VILLAGE GRAND CHUTE	
DESIGN SPEC. AASHTO STD. SPEC. 2002		LOAD HS-20	CONST. SPEC. 2003
DESIGNED BY RRW	DESIGN CK'D. WCD	DRAWN BY JPH	PLANS CK'D. ZIRK

GENERAL PLAN

SHEET 1 OF 19

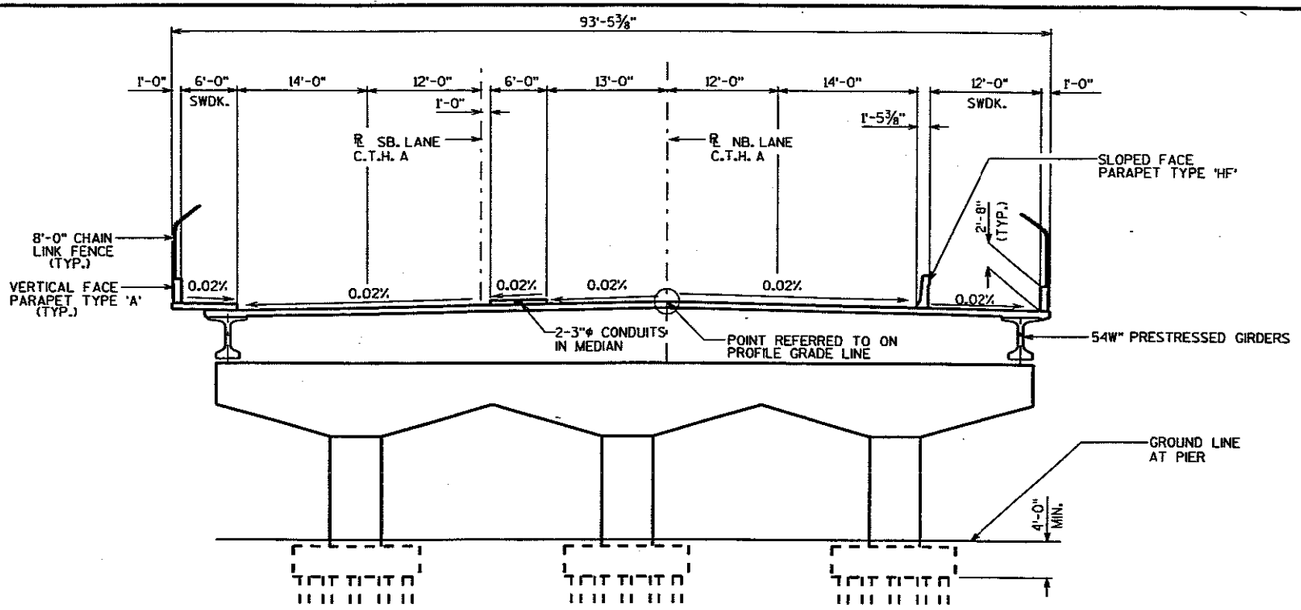
191

I.D. 1123-09-02

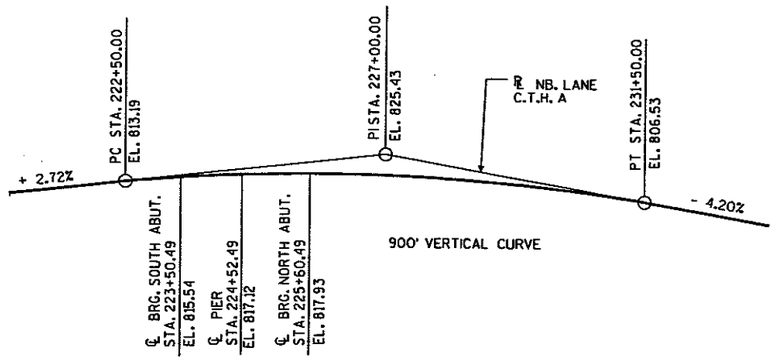
DATE: 04/12/04

FILE= 01-140GP.DGN
SCALE = 20

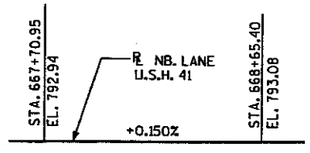
STATE PROJECT NUMBER
1123-09-71



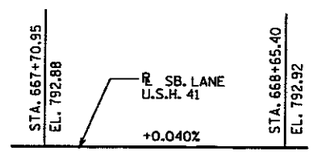
CROSS SECTION THRU ROADWAY LOOKING NORTH



PROFILE GRADE LINE ℄ NB. LANE C.T.H. A



NORTHBOUND U.S.H. 41



SOUTHBOUND U.S.H. 41

PROFILE GRADE LINE U.S.H. 41

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	PIER	TOTALS
REMOVING OLD STRUCTURE STA. 224+51.50	LS	—	—	—	—	1
EXCAVATION FOR STRUCTURES BRIDGES B-44-140	LS	—	—	—	—	1
BACKFILL STRUCTURE	CY	—	440	445	—	885
CONCRETE MASONRY BRIDGES	CY	830	80	80	136	1126
MASONRY ANCHORS TYPE S 1/2-INCH	EACH	286	—	—	—	286
MASONRY ANCHORS TYPE S 5/8-INCH	EACH	638	—	—	—	638
PROTECTIVE SURFACE TREATMENT	SY	2590	—	—	—	2590
PRESTRESSED GIRDER TYPE I 54W-INCH	LF	1897	—	—	—	1897
BAR STEEL REINFORCEMENT HS BRIDGES	LB	—	5040	5060	2770	12870
BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	159590	1630	1640	19500	182360
BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	27	—	—	—	27
STEEL DIAPHRAGMS B-44-140	EACH	32	—	—	—	32
PILING STEEL DELIVERED AND DRIVEN HP 12-INCH X 53 LB.	LF	—	720	765	1050	2535
PILING STEEL PREBORING SPECIAL	LF	—	80	170	—	250
PILING STEEL SHEET PERMANENT DELIVERED	SF	—	—	950	620	1570
PILING STEEL SHEET PERMANENT DRIVEN	SF	—	—	950	620	1570
RUBBERIZED MEMBRANE WATERPROOFING	SY	—	21	21	—	42
SLOPE PAVING BREAKER RUN	SY	—	240	330	—	570
PIPE UNDERDRAIN 6-INCH	LF	—	100	100	—	200
PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	—	20	20	—	40
ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1	—	—	—	1
FENCE CHAIN LINK 8-FT.	LF	481	—	—	—	481
GEOTEXTILE FABRIC TYPE DF (SCHEDULE A)	SY	—	84	84	—	168
CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	427	—	—	—	427
OMP CONCRETE STRUCTURES 5-CYLINDER	CY	830	80	80	136	1126
INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	8300	800	800	1360	11260
NON-BID ITEMS						
FILLER	SIZE	—	—	—	—	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

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

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

CROSS SECTION & QUANTITIES

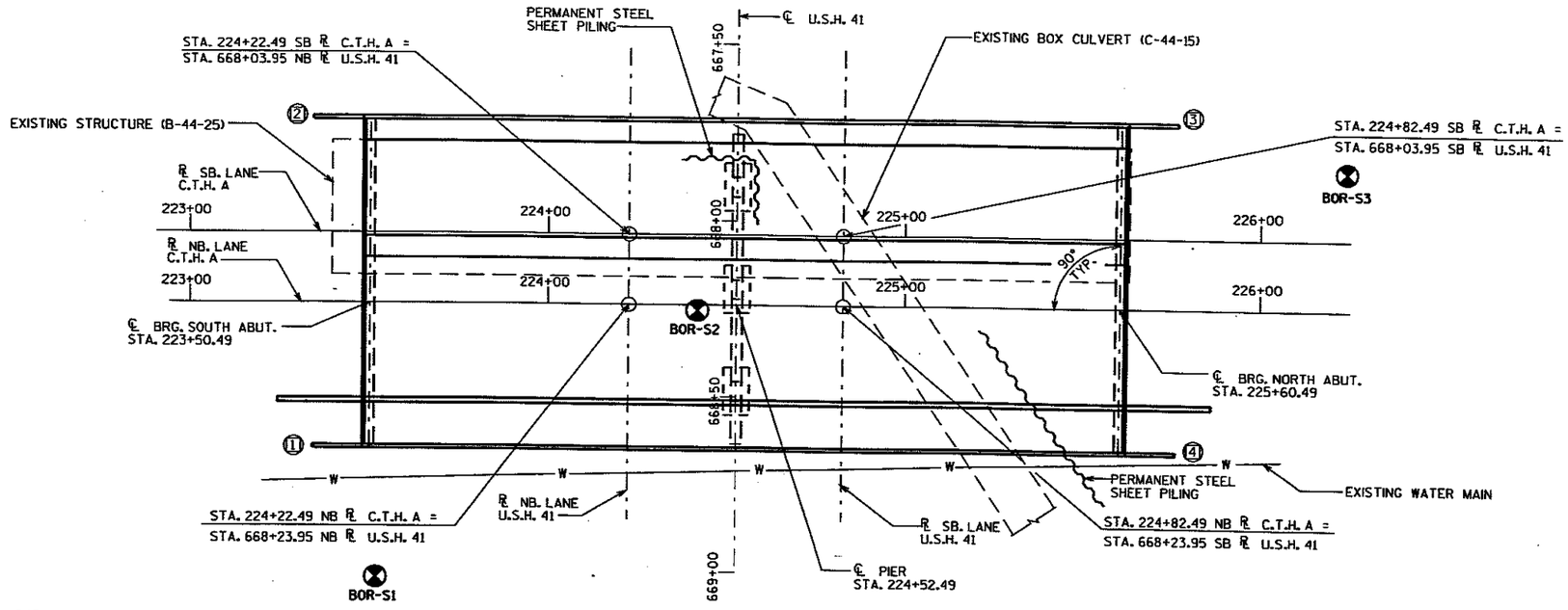
SHEET 2

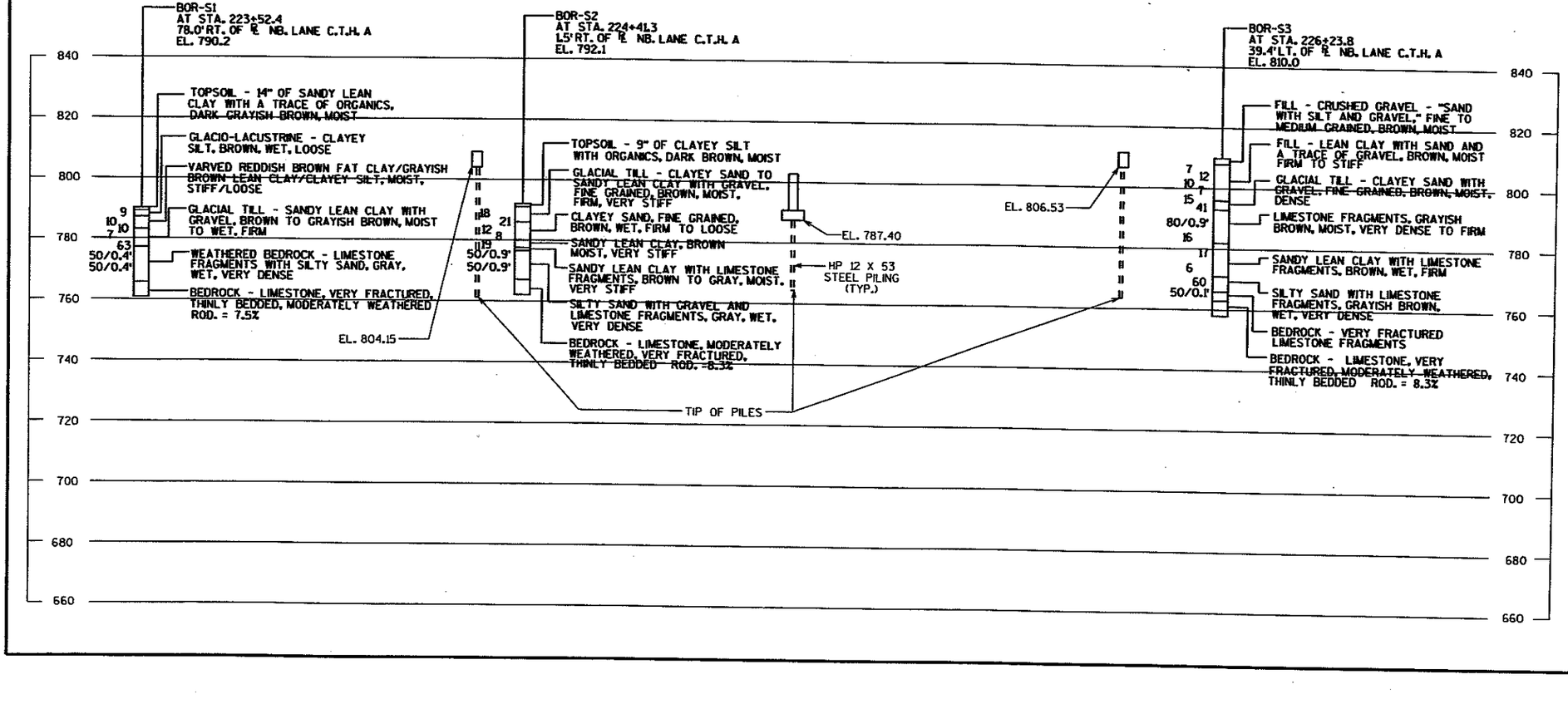
192

8

FILE= 02-140QUANT.DGN
SCALE = 8.0

C.T.H. A OVER U.S.H. 41
APPLETON TO GREEN BAY, OUTAGAMIE COUNTY





STATE PROJECT NUMBER

1123-09-71

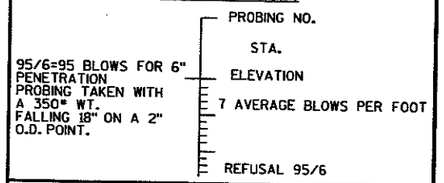
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

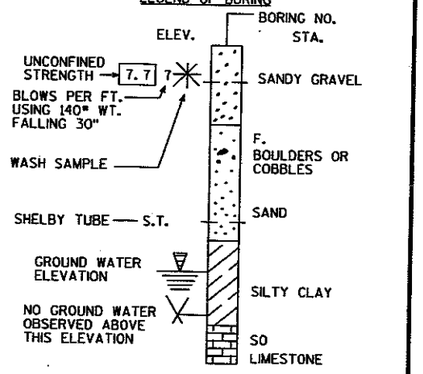
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



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 WISCONSIN DEPARTMENT OF TRANSPORTATION 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.

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

SUBSURFACE EXPLORATION

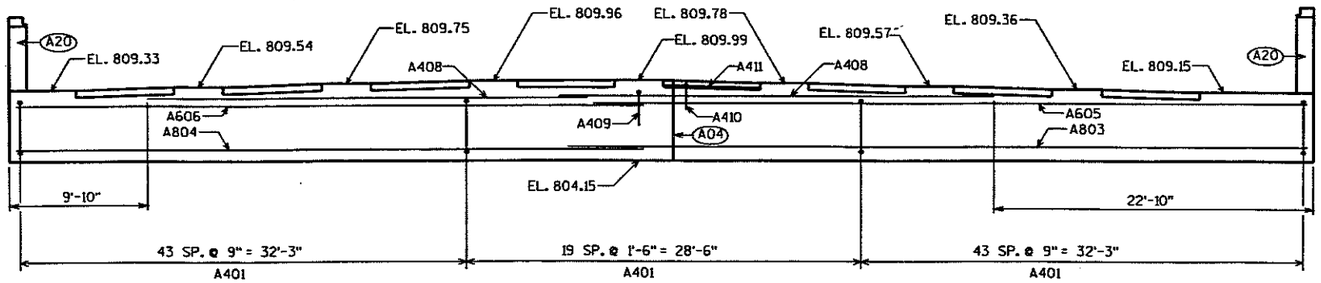
SHEET 3

193

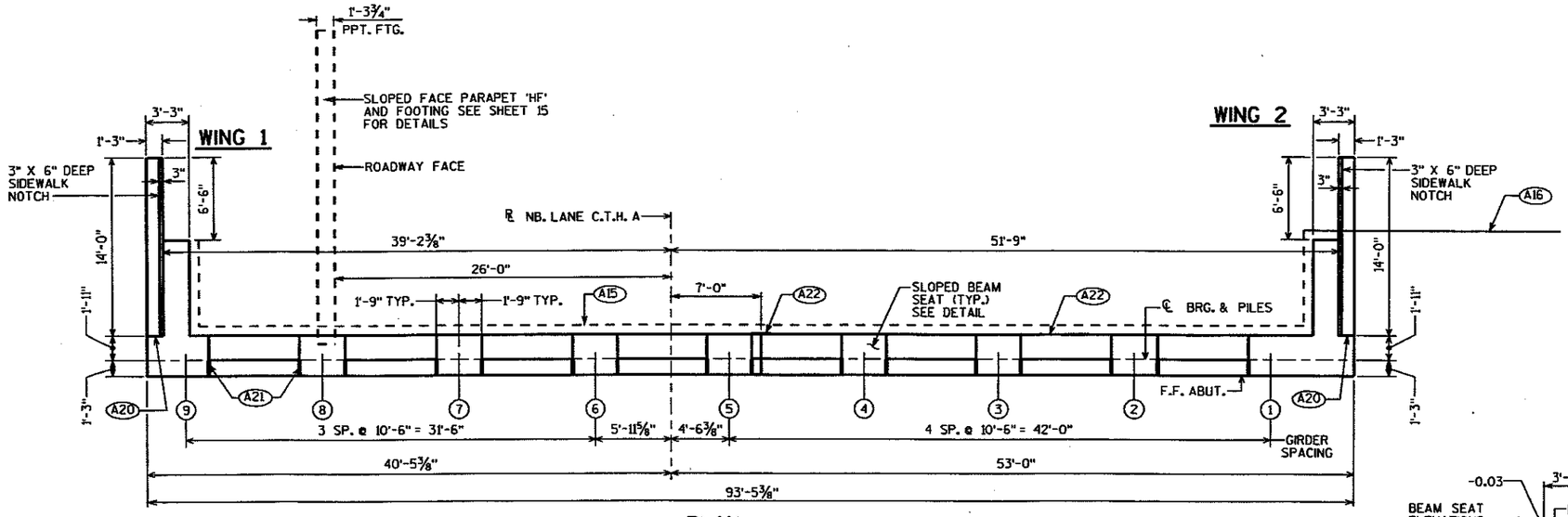
FILE= 03-140SOILS.DGN
SCALE = 20

STATE PROJECT NUMBER

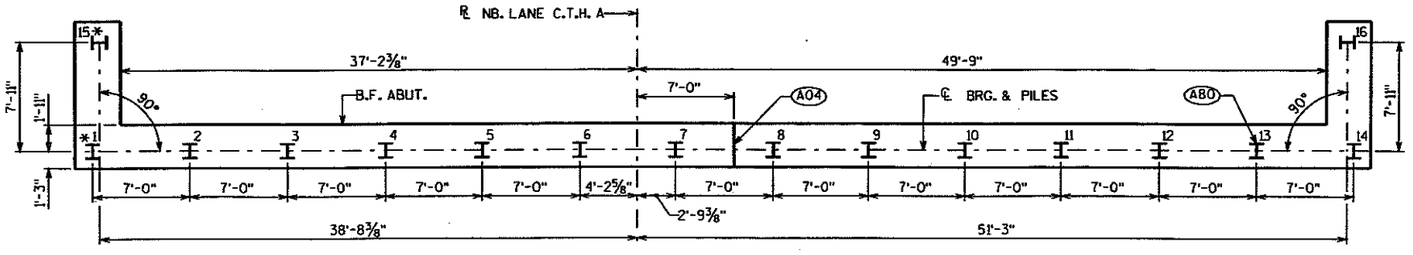
1123-09-71



ELEVATION LOOKING SOUTH

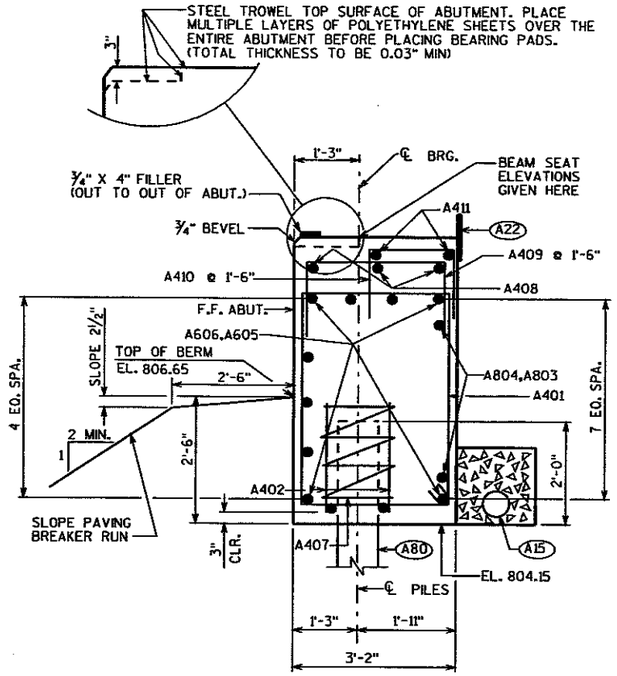


PLAN

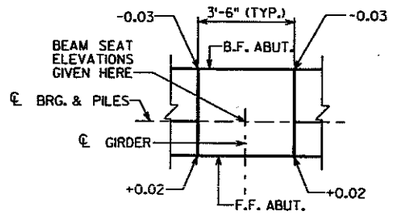


PILE PLAN

*NOTE:
PILES 1 AND 15 SHOULD BE PREBORED TO EL. 765.0 OR TO THE BEDROCK SURFACE (WHICHEVER IS ENCOUNTERED FIRST). PREBORED HOLES MUST BE TEMPORARILY CASED. FILL ANY ANNULAR SPACE WITH SAND.



SECTION THRU BODY



SLOPED BEAM SEAT DETAIL

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2" x 8". ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE.

(A15) PIPE UNDERDRAINS, 6 INCH. SLOPE 0.5% MIN. TO DRAIN. ENCLOSED IN 1'-6" X 1'-6" AREA OF SIZE 1 COARSE AGGREGATE (INCLUDED IN UNDERDRAIN BID ITEM) WRAPPED IN GEOTEXTILE FABRIC, TYPE DF (SCHEDULE A), WITH 1'-6" OVERLAP.

(A16) PIPE UNDERDRAIN, 6 INCH, UNPERFORATED. TO SUITABLE DRAINAGE.

(A20) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A21) 3/4" CORK UP VERT. FACES OF BEAM SEATS.

(A22) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A80) SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 45 FEET LONG, & DRIVEN TO A MIN. BRG. VALUE OF 70 TONS PER PILE. SEE SHEET 5 FOR "PILE SPLICE DETAIL".

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

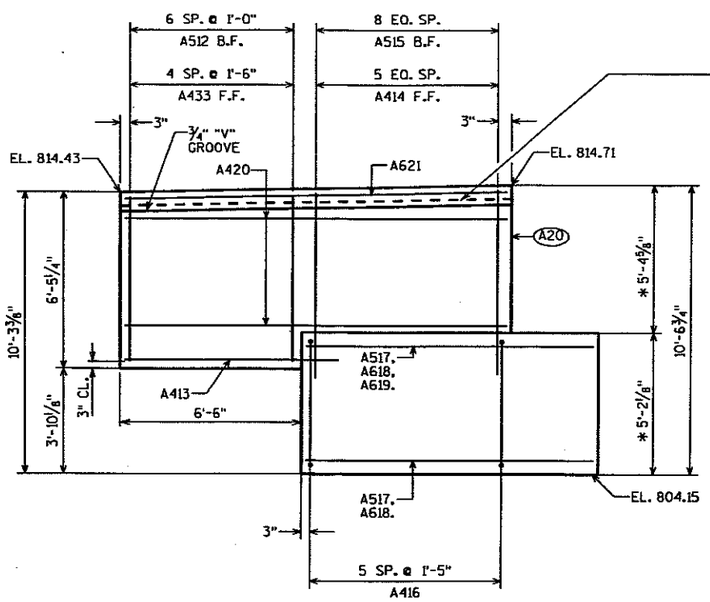
STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

SOUTH ABUTMENT | SHEET 4

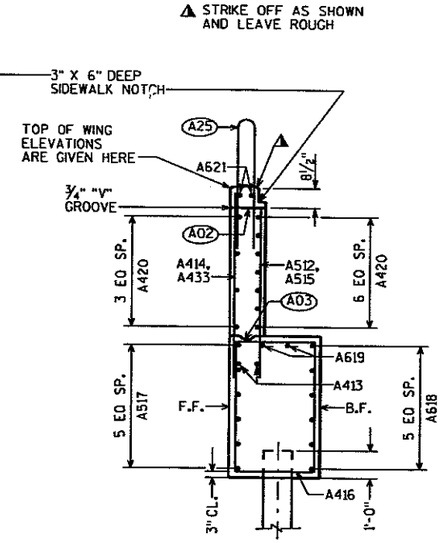
194

FILE= 04-140SABUT.DGN
SCALE = 5.3333



WING 1 ELEVATION

*DIMENSIONS ARE TAKEN AT THE ℄ BRG. SOUTH ABUT.



WING 1 SECTION

(A02) CONSTRUCTION JOINT: STRIKE OFF AND LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" x 6". (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A20) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. 1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A25) FOR PPT. BARS & DIMENSION SEE PARAPET SHT. 17

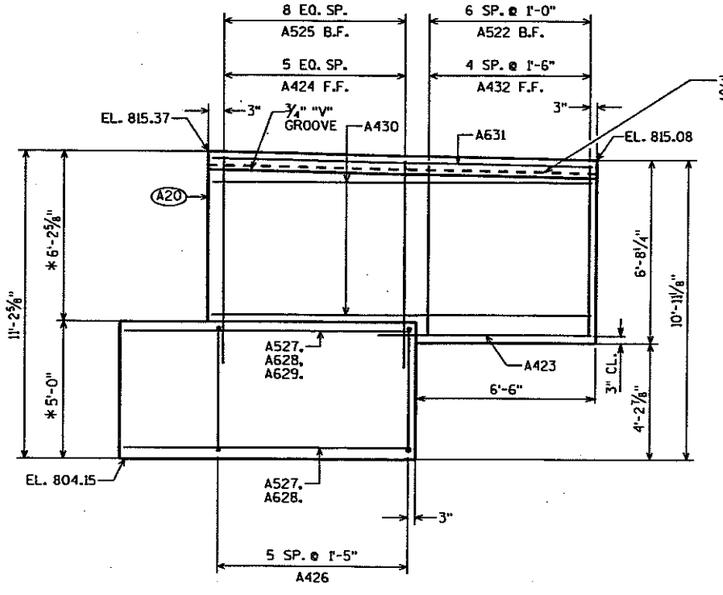
(A26) FOR PPT. BARS & DIMENSION SEE PARAPET SHT. 16

STATE PROJECT NUMBER

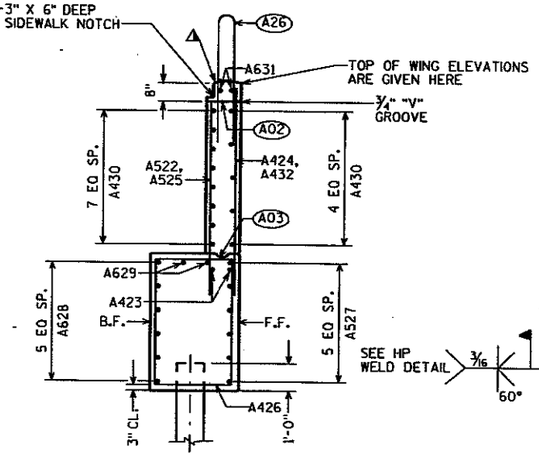
1123-09-71

BILL OF BARS

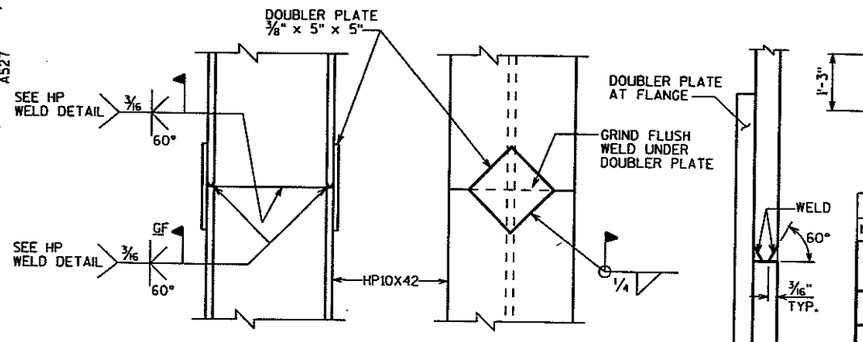
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		106	14'-10"	X		BODY-STIRRUPS
A402		28	2'-3"			PILES- 2 PER PILE
A803		6	53'-5"			BODY-HORIZONTAL
A804		6	44'-10"			BODY-HORIZONTAL
A605		11	51'-3"			BODY-HORIZONTAL
A606		11	44'-10"			BODY-HORIZONTAL
A407		14	28'-0"	X		PILES-1 PER PILE
A408		6	31'-5"			BODY-HORZ. - UNDER GIRS. 3-8
A409		42	7'-0"	X		BODY-TOP - UNDER GIRS. 3-8
A410		48	3'-11"	X		BODY-BETWEEN BEAM SEATS
A411		16	6'-8"			BODY-HORZ. EXT - BETWEEN BEAM SEATS
A512	X	7	5'-6"			WING 1-VERTICAL
A413	X	2	7'-8"			WING 1-HORIZONTAL
A414	X	6	6'-9"			WING 1-VERTICAL
A515	X	9	6'-3"			WING 1-VERTICAL
A416	X	6	15'-10"	X		WING 1-STIRRUP
A517	X	6	10'-4"			WING 1-HORIZONTAL
A618	X	6	10'-4"			WING 1-HORIZONTAL
A619	X	2	10'-4"			WING 1-HORIZONTAL
A420	X	11	13'-8"			WING 1-HORIZONTAL
A621	X	2	13'-8"			WING 1-HORIZONTAL
A522	X	7	5'-9"			WING 2-VERTICAL
A423	X	2	7'-8"			WING 2-HORIZONTAL
A424	X	6	7'-7"			WING 2-VERTICAL
A525	X	9	7'-1"			WING 2-VERTICAL
A426	X	6	15'-6"	X		WING 2-STIRRUP
A527	X	6	10'-4"			WING 2-HORIZONTAL
A628	X	6	10'-4"			WING 2-HORIZONTAL
A629	X	2	10'-4"			WING 2-HORIZONTAL
A430	X	13	13'-8"			WING 2-HORIZONTAL
A631	X	2	13'-8"			WING 2-HORIZONTAL
A432	X	5	6'-3"			WING 2-VERTICAL
A433	X	5	6'-0"			WING 1-VERTICAL



WING 2 ELEVATION



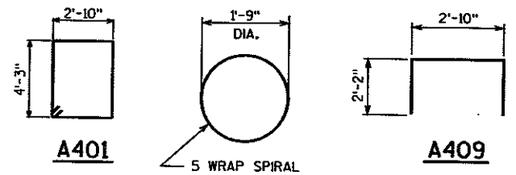
WING 2 SECTION

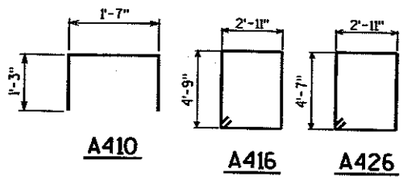


STEEL 'HP' SHAPES

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAIL





NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

SOUTH ABUTMENT DETAILS

SHEET 5

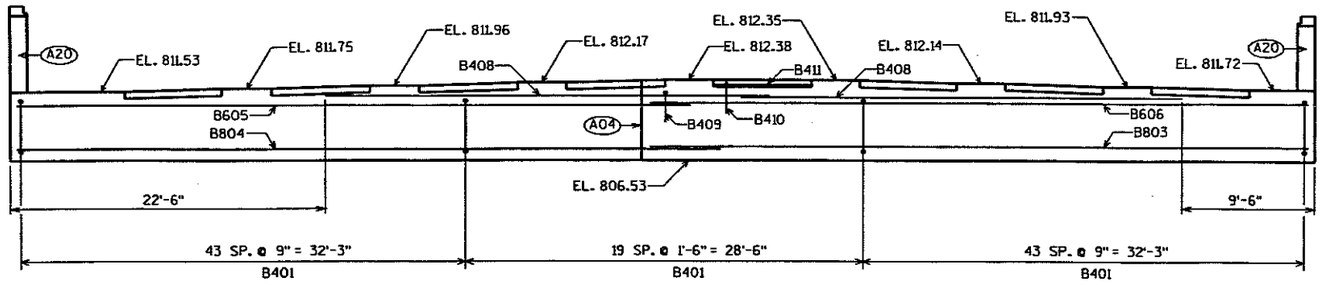
195

8

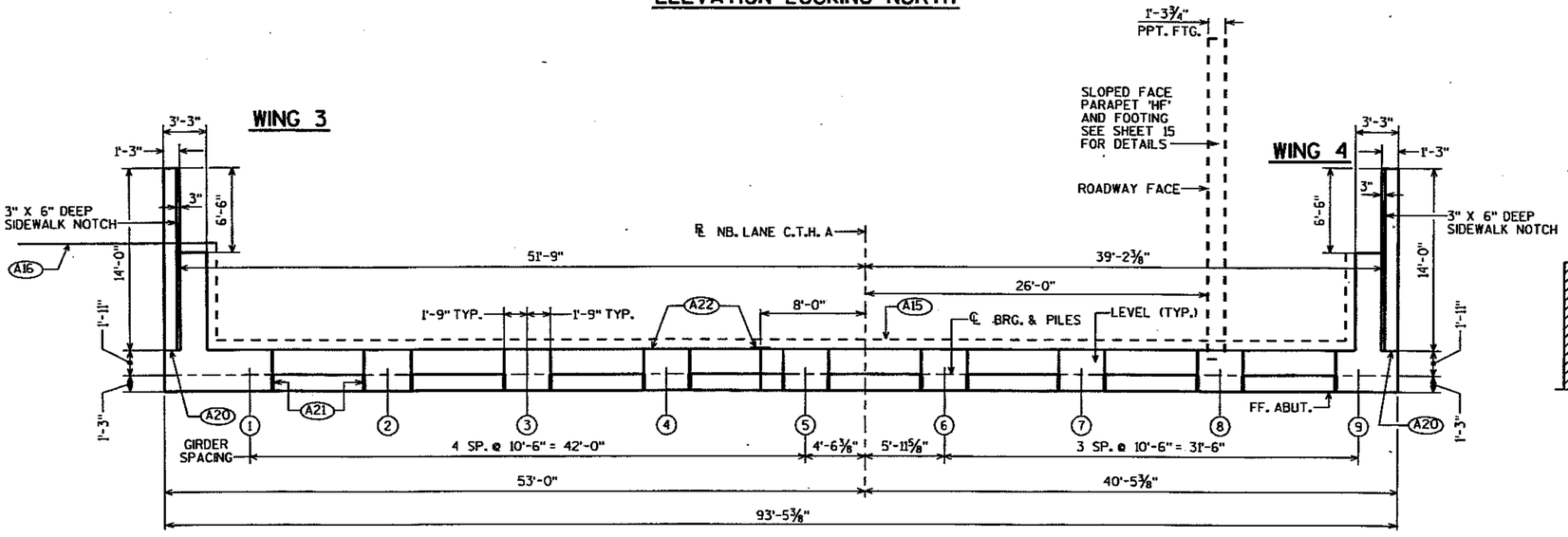
FILE= 05-140SABUTDET.DGN
SCALE = 2.6667

STATE PROJECT NUMBER

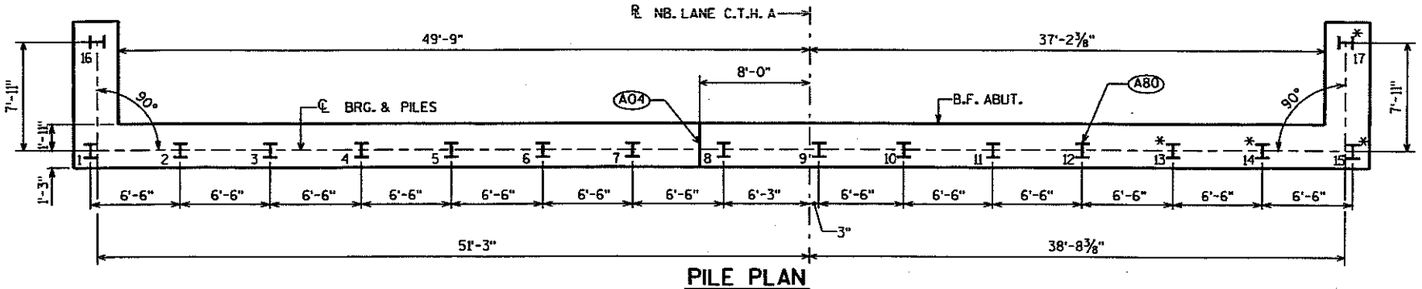
1123-09-71



ELEVATION LOOKING NORTH

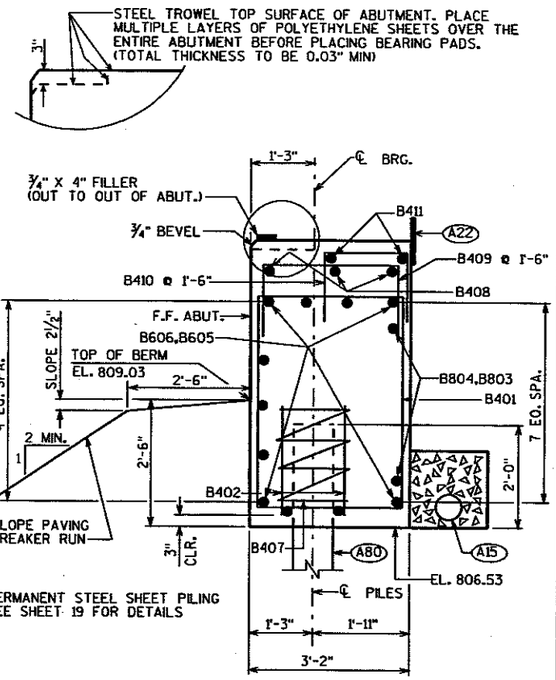


PLAN



PILE PLAN

*NOTE:
PILES 13,14,15 & 17 SHOULD BE PREBORED TO EL. 765.0 OR TO THE BEDROCK SURFACE (WHICHEVER IS ENCOUNTERED FIRST). PREBORED HOLES MUST BE TEMPORARILY CASED. FILL ANY ANNULAR SPACE WITH SAND.



SECTION THRU BODY

A04 VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2" x 8". ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE.

A15 PIPE UNDERDRAINS, 6 INCH. SLOPE 0.5% MIN. TO DRAIN. ENCLOSED IN 1'-6" X 1'-6" AREA OF SIZE 1 COARSE AGGREGATE (INCLUDED IN UNDERDRAIN BID ITEM) WRAPPED IN GEOTEXTILE FABRIC, TYPE DF (SCHEDULE A), WITH 1'-6" OVERLAP.

A16 PIPE UNDERDRAIN, 6 INCH, UNPERFORATED. TO SUITABLE DRAINAGE.

A20 1/2" FILLER (INCLUDED IN WING LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A21 3/4" CORK UP VERT. FACES OF BEAM SEATS.

A22 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A80 SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 45 FEET LONG, & DRIVEN TO A MIN. BRG. VALUE OF 70 TONS PER PILE. SEE SHEET 7 FOR "PILE SPLICE DETAIL".

8

NO.	DATE	REVISION	BY

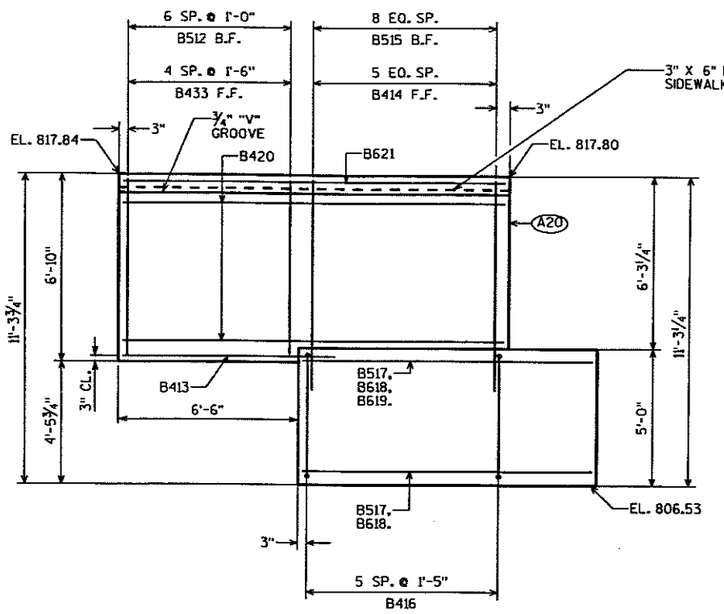
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

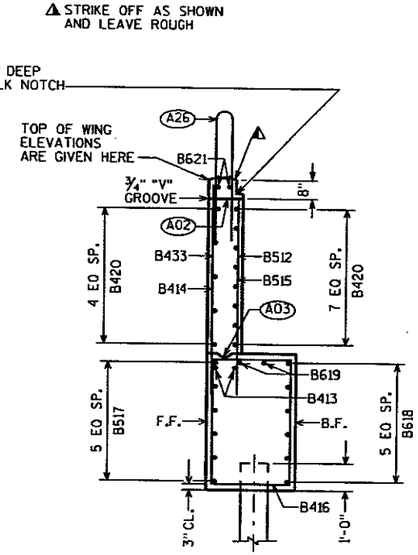
DRAWN BY JPH | PLANS CK'D. ZIRK

NORTH ABUTMENT | SHEET 6 | 196

FILE= 06-140NABUT.DGN
SCALE = 5.3333



WING 3 ELEVATION



WING 3 SECTION

A02 CONSTRUCTION JOINT: STRIKE OFF AND LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" x 6". (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

A20 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A25 FOR PPT. BARS & DIMENSION SEE PARAPET SHT. 17.

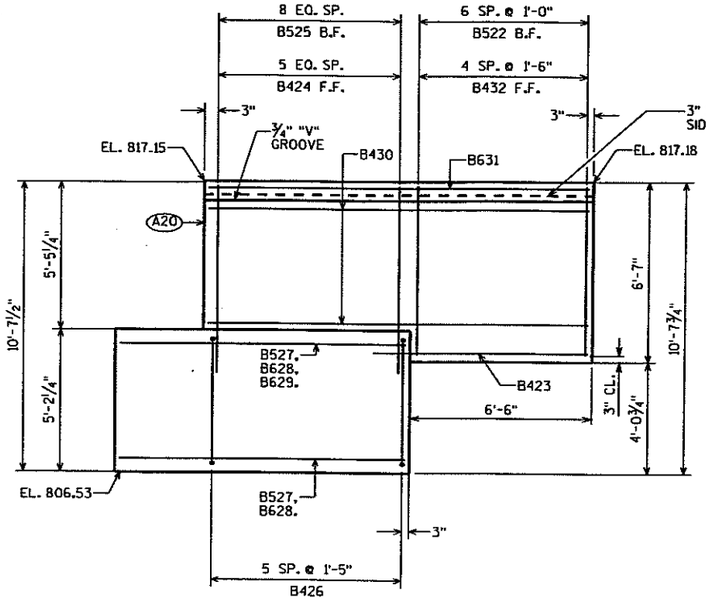
A26 FOR PPT. BARS & DIMENSION SEE PARAPET SHT. 16.

STATE PROJECT NUMBER

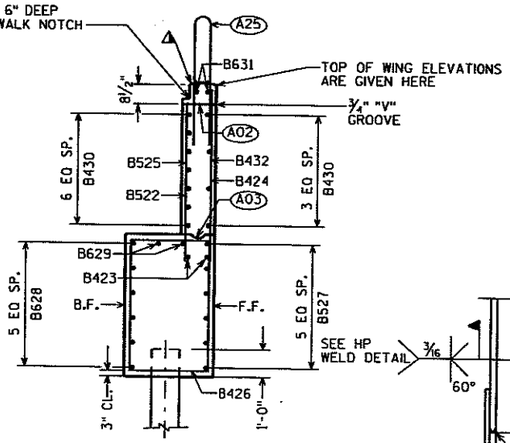
1123-09-71

BILL OF BARS

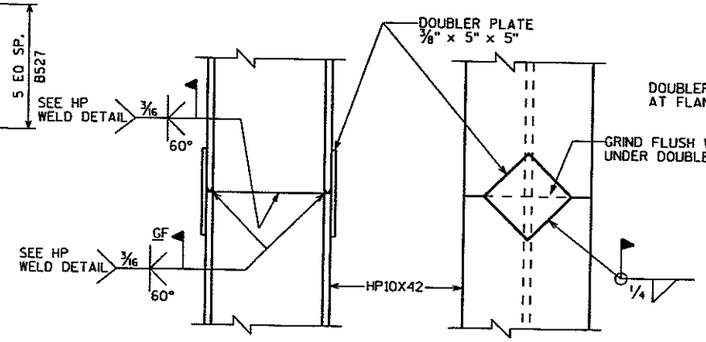
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		106	14'-10"	X		BODY-STIRRUPS
B402		30	2'-3"			PILES- 2 PER PILE
B803		6	47'-8"			BODY-HORIZONTAL
B804		6	50'-7"			BODY-HORIZONTAL
B605		11	48'-5"			BODY-HORIZONTAL
B606		11	47'-8"			BODY-HORIZONTAL
B407		15	28'-0"	X		PILES-1 PER PILE
B408		6	31'-9"			BODY-HORZ. - UNDER GIRS. 3-8
B409		42	7'-0"	X		BODY-TOP - UNDER GIRS. 3-8
B410		48	3'-11"	X		BODY-BETWEEN BEAM SEATS
B411		16	6'-8"			BODY-HORZ. EXT - BETWEEN BEAM SEATS
B512	X	7	5'-11"			WING 3-VERTICAL
B413	X	2	7'-8"			WING 3-HORIZONTAL
B414	X	6	7'-8"			WING 3-VERTICAL
B515	X	9	7'-2"			WING 3-VERTICAL
B416	X	6	15'-6"	X		WING 3-STIRRUP
B517	X	6	10'-4"			WING 3-HORIZONTAL
B618	X	6	10'-4"			WING 3-HORIZONTAL
B619	X	2	10'-4"			WING 3-HORIZONTAL
B420	X	13	13'-8"			WING 3-HORIZONTAL
B621	X	2	13'-8"			WING 3-HORIZONTAL
B522	X	7	5'-8"			WING 4-VERTICAL
B423	X	2	7'-8"			WING 4-HORIZONTAL
B424	X	6	6'-10"			WING 4-VERTICAL
B525	X	9	6'-4"			WING 4-VERTICAL
B426	X	6	15'-10"	X		WING 4-STIRRUP
B527	X	6	10'-4"			WING 4-HORIZONTAL
B628	X	6	10'-4"			WING 4-HORIZONTAL
B629	X	2	10'-4"			WING 4-HORIZONTAL
B430	X	11	13'-8"			WING 4-HORIZONTAL
B631	X	2	13'-8"			WING 4-HORIZONTAL
B432	X	5	6'-2"			WING 4-VERTICAL
B433	X	5	6'-5"			WING 3-VERTICAL



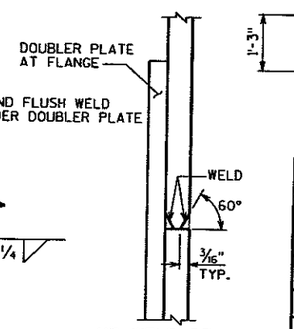
WING 4 ELEVATION



WING 4 SECTION

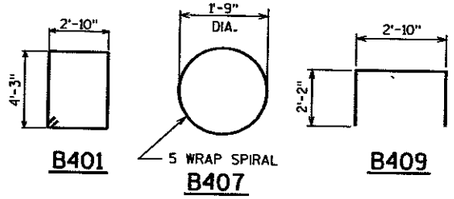


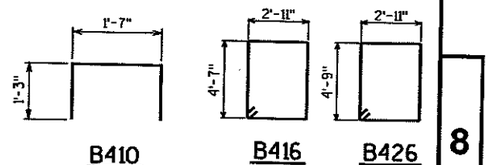
STEEL 'HP' SHAPES



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAIL





8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

NORTH ABUTMENT DETAILS

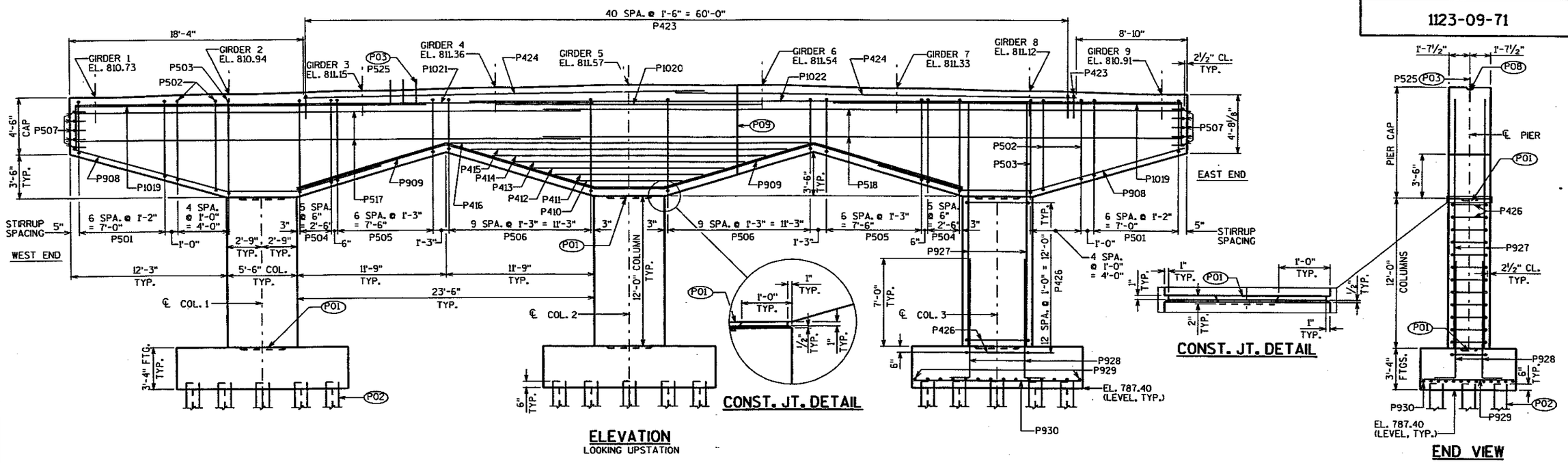
SHEET 7

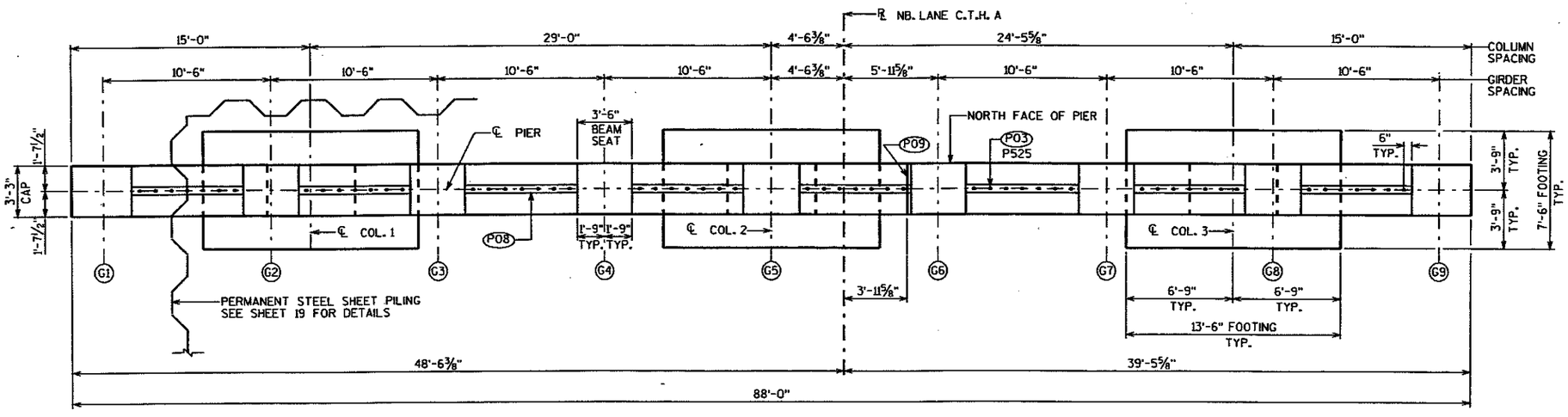
197

FILE= 07-140NABUTDET.DGN
SCALE = 2.6667

STATE PROJECT NUMBER

1123-09-71





PLAN

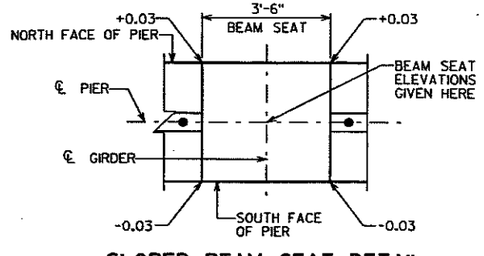
(P01) 3'-6" X 1'-3" X 2" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY. TYP. AT ALL FOOTINGS AND COLUMNS.

(P02) SUPPORT PIER ON HP 12 x 53 STEEL PILING. ESTIMATED 25 FEET LONG & DRIVEN TO A MIN. BRG. VALUE OF 70 TONS PER PILE.

(P03) P525 BARS SPACED @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

(P09) VERT. CONST. JOINT FORMED BY SURFACED BEVELED 2" X 6" X 2'-0" KEYWAY



SLOPED BEAM SEAT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

PIER

SHEET 8

198

8

FILE= 08-140PIER.DGN
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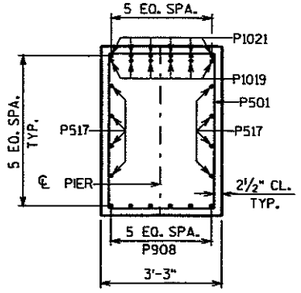
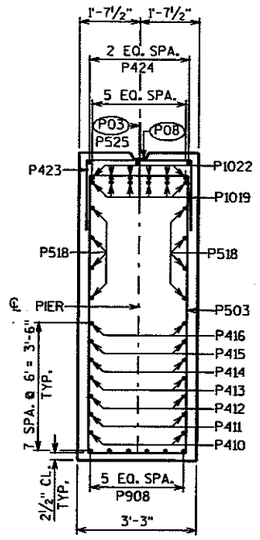
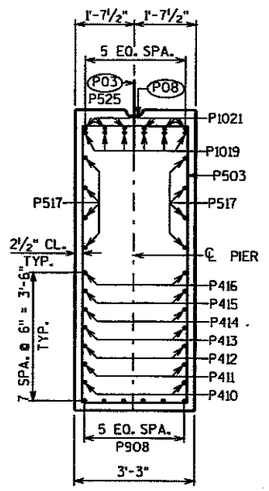


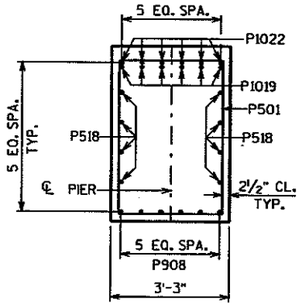
SECTION THRU CAP AT WEST END



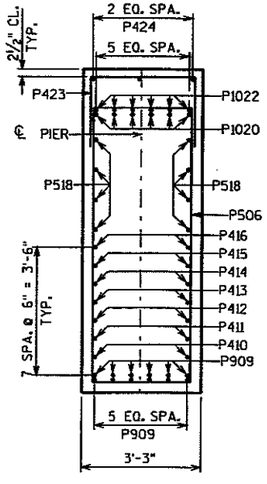
SECTION THRU CAP ABOVE COLUMN 3



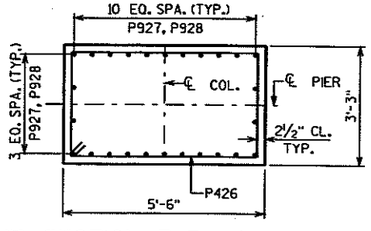
SECTION THRU CAP ABOVE COLUMN 1



SECTION THRU CAP AT EAST END



SECTION THRU CAP ABOVE COLUMN 2

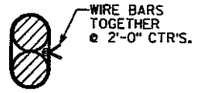


TYP. SECTION THRU COLUMNS

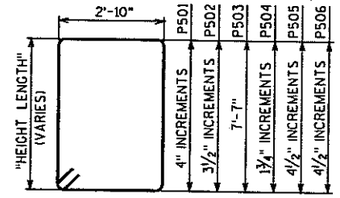
(P02) SUPPORT PIER ON HP 12 x 53 STEEL PILING. ESTIMATED 25 FEET LONG & DRIVEN TO A MIN. BRG. VALUE OF 70 TONS PER PILE.

(P03) P525 BARS SPACED @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

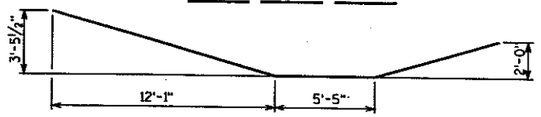
(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.



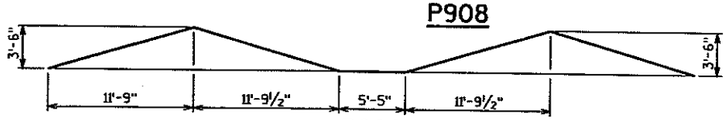
BUNDLING DETAIL



P501 P502 P503
P504 P505 P506



P908



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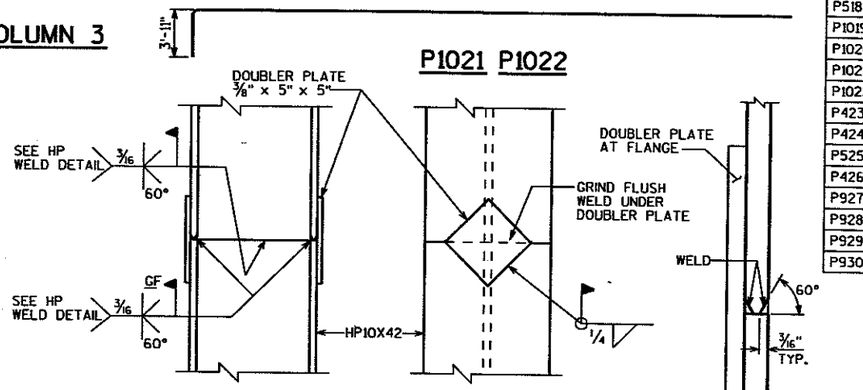
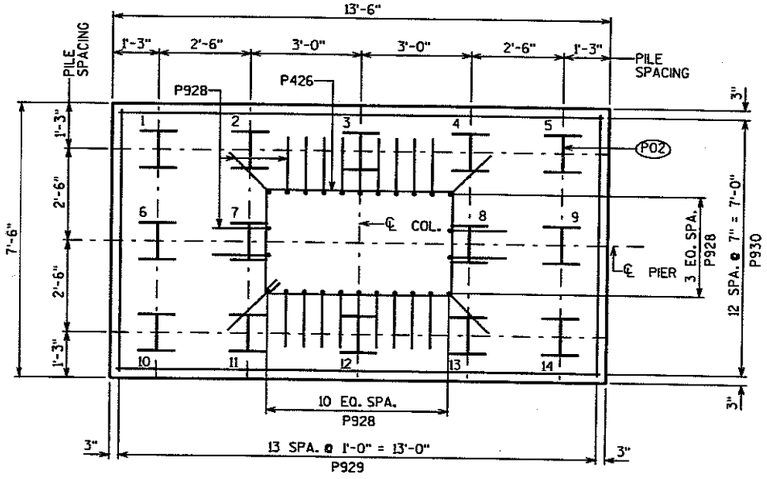


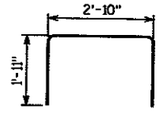
STEEL 'HP' SHAPES

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

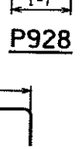
PILE SPLICE DETAIL



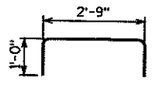
TYP. FOOTING AND PILE PLAN



P423



P928



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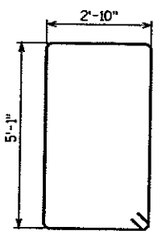


P426

STATE PROJECT NUMBER

1123-09-71

BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	BUNDLED BARS	LOCATION
P501	X	14	16-9	X	◐		CAP - STIRRUP - VERT. - AT EACH END
P502	X	8	20-2	X	◐		CAP - STIRRUP - VERT. - AT EACH END
P503	X	2	21-6	X			CAP - STIRRUP - VERT. - AT EACH END
P504	X	12	20-7	X	◐		CAP - STIRRUP - VERT. - BETWEEN COLUMNS
P505	X	14	17-4	X	◐		CAP - STIRRUP - VERT. - BETWEEN COLUMNS
P506	X	20	18-0	X	◐		CAP - STIRRUP - VERT. - BETWEEN COLUMNS
P507	X	10	4-6	X			CAP - HORIZ. - AT EACH END
P908	X	12	24-11	X			CAP - BOT. - VERT. - ABOVE COLUMNS 1 & 3
P909	X	12	54-3	X		X	CAP - BOT. - VERT. - ABOVE COLUMN 2
P410	X	6	8-3				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P411	X	6	11-7				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P412	X	6	14-11				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P413	X	6	18-3				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P414	X	6	21-7				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P415	X	6	24-11				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P416	X	6	28-3				CAP - HORIZ. - BOTH FACES - ABOVE COLS.
P517	X	8	40-0				CAP - HORIZ. - BOTH FACES - AT WEST END
P518	X	8	50-6				CAP - HORIZ. - BOTH FACES - AT EAST END
P1019	X	12	27-8			X	CAP - TOP - HORIZ. - AT EACH END
P1020	X	6	21-0			X	CAP - TOP - HORIZ. - ABOVE COLUMN 2
P1021	X	6	44-8	X		X	CAP - TOP - VERT. & HORIZ. - AT WEST END
P1022	X	6	60-0	X		X	CAP - TOP - VERT. & HORIZ. - AT EAST END
P423	X	42	6-6	X			CAP - TOP - VERT. - BELOW GIRDERS 3-8
P424	X	6	31-7				CAP - TOP - HORIZ. - BELOW GIRDERS 3-8
P525	X	56	2-0				CAP - TOP - VERT. - CENTER - BTWN. BEAM SEATS
P426	X	39	16-4	X			FTGS. & COLS. - STIRRUP - HORIZ.
P927	X	78	19-6				COLS. & CAP - VERT. - SIDES
P928	X	78	11-0	X			FTGS. & COLS. - DOWELS - VERT.
P929		42	7-2				FTGS. - BOT. - HORIZ.
P930		39	13-2				FTGS. - BOT. - HORIZ.

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

◐ BAR SERIES TABLE

MARK	NO. REQD.	HEIGHT LENGTH	TOTAL LENGTH
P501	2 SERIES OF 7 BARS	4'-2½" TO 6'-2½"	14'-9" TO 18'-9"
P502	2 SERIES OF 4 BARS	6'-5½" TO 7'-4"	19'-3" TO 21'-0"
P504	2 SERIES OF 6 BARS	6'-9" TO 7'-5¾"	19'-10" TO 21'-4"
P505	2 SERIES OF 7 BARS	4'-4½" TO 6'-7½"	15'-1" TO 19'-7"
P506	2 SERIES OF 10 BARS	4'-1½" TO 7'-6"	14'-7" TO 21'-4"

BUNDLE AND TAG EACH BAR SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

PIER DETAILS

SHEET 9

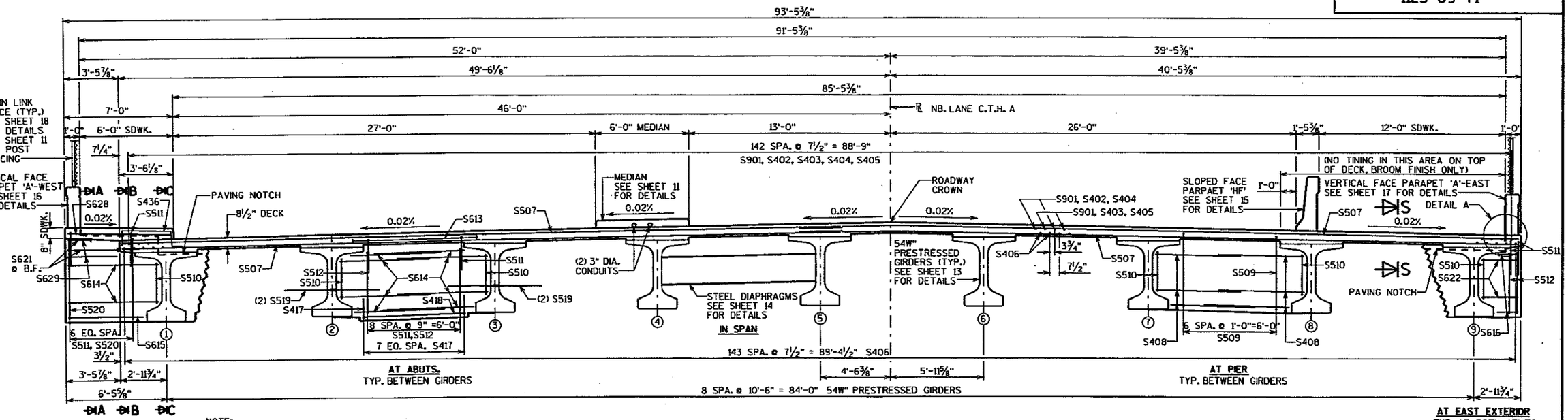
199

8

FILE= 09-140PIERDET.DGN
SCALE = 2.0

STATE PROJECT NUMBER

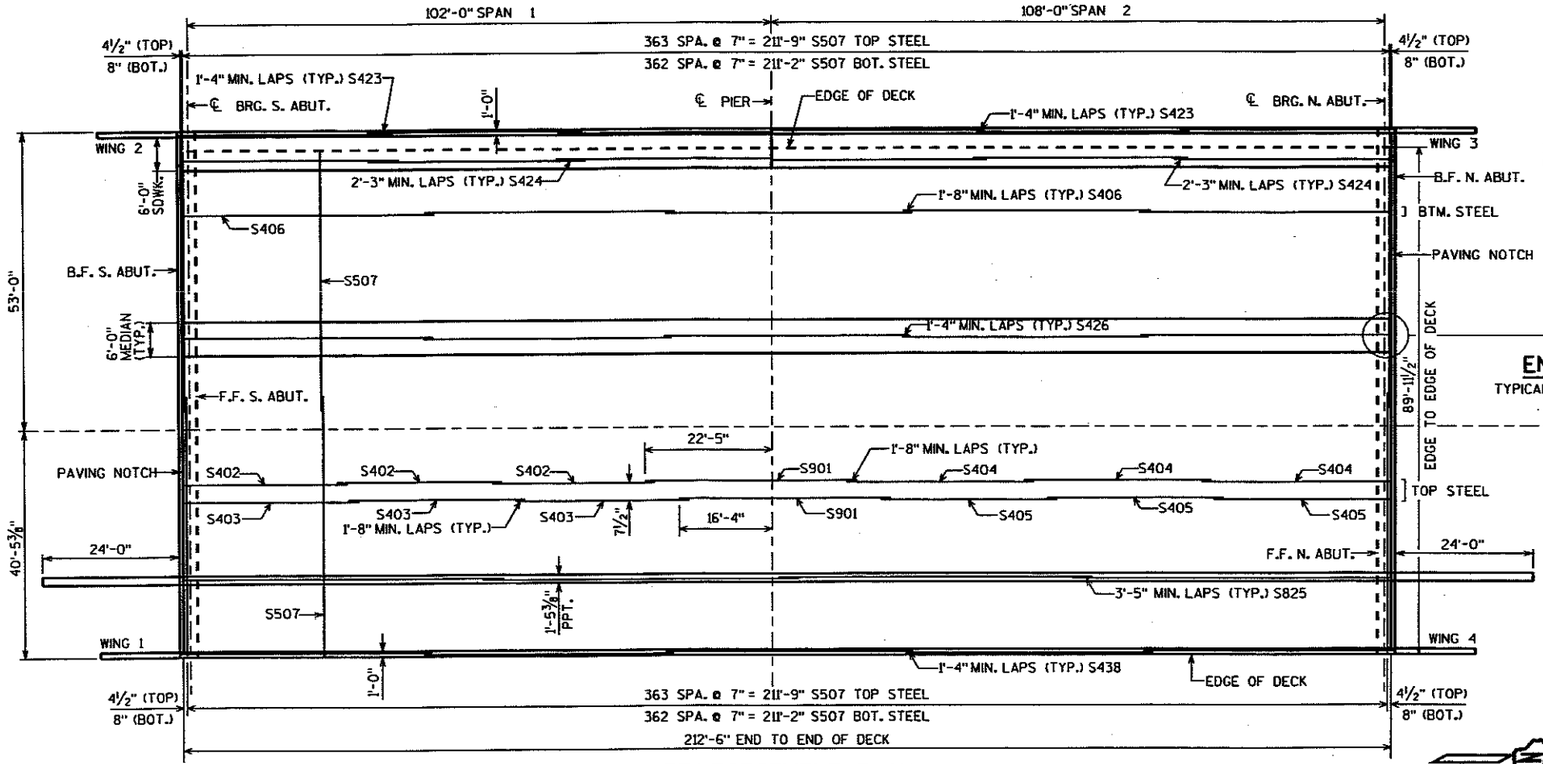
1123-09-71



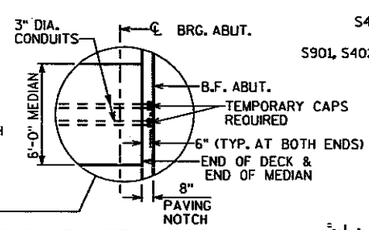
NOTE:
FOR THE SECTIONS THRU THE WEST EXTERIOR (SECTIONS A-A, B-B & C-C) SEE SHEET 11.

CROSS SECTION THRU ROADWAY

LOOKING NORTH

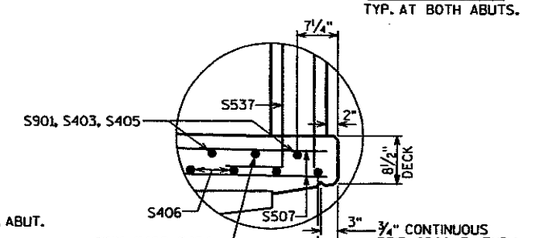


REINFORCEMENT PLAN

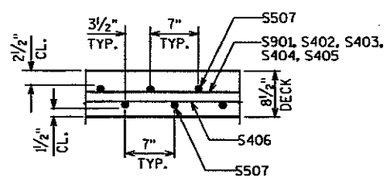


END OF MEDIAN DETAIL

TYPICAL AT BOTH ENDS OF SUPERSTRUCTURE (SHOWING CONDUIT)



DETAIL A



SECTION S-S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

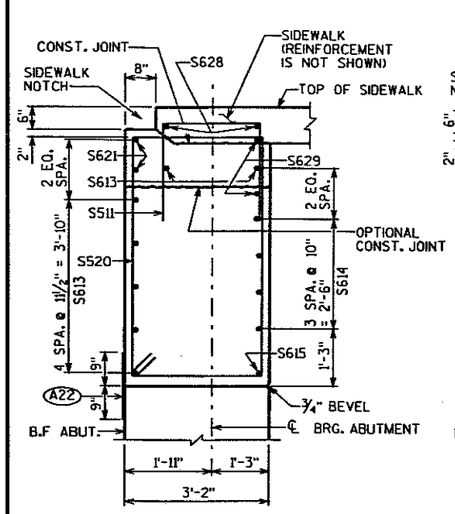
SUPERSTRUCTURE | SHEET 10

200

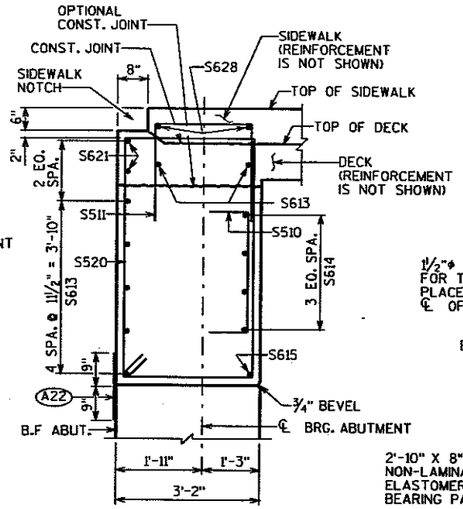
8

FILE= 10-140SUP1.DGN
SCALE = 13

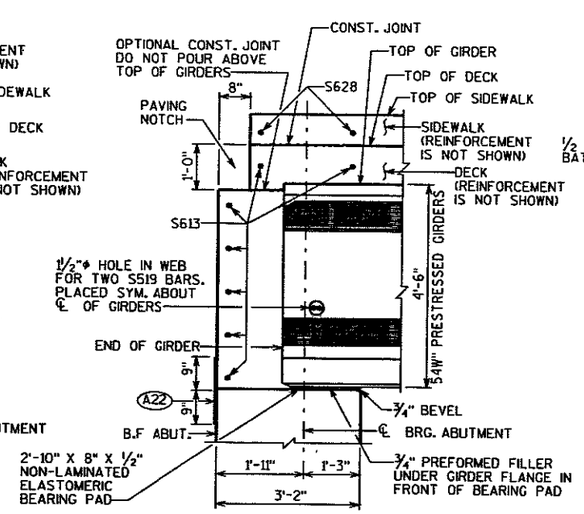
STATE PROJECT NUMBER
1123-09-71



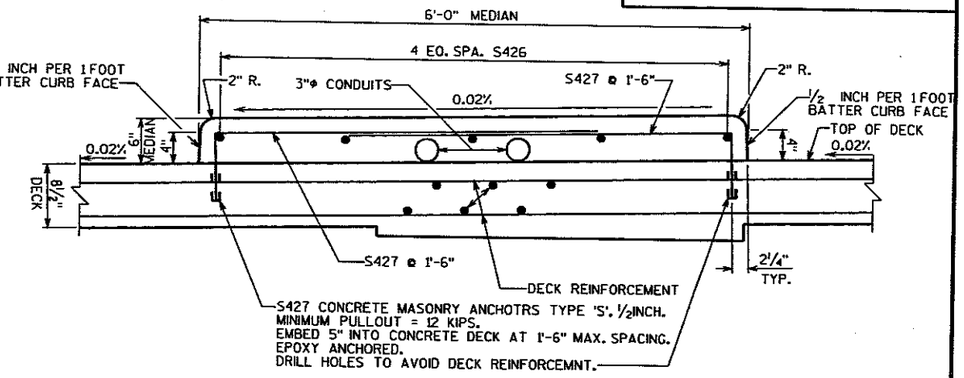
SECTION A-A



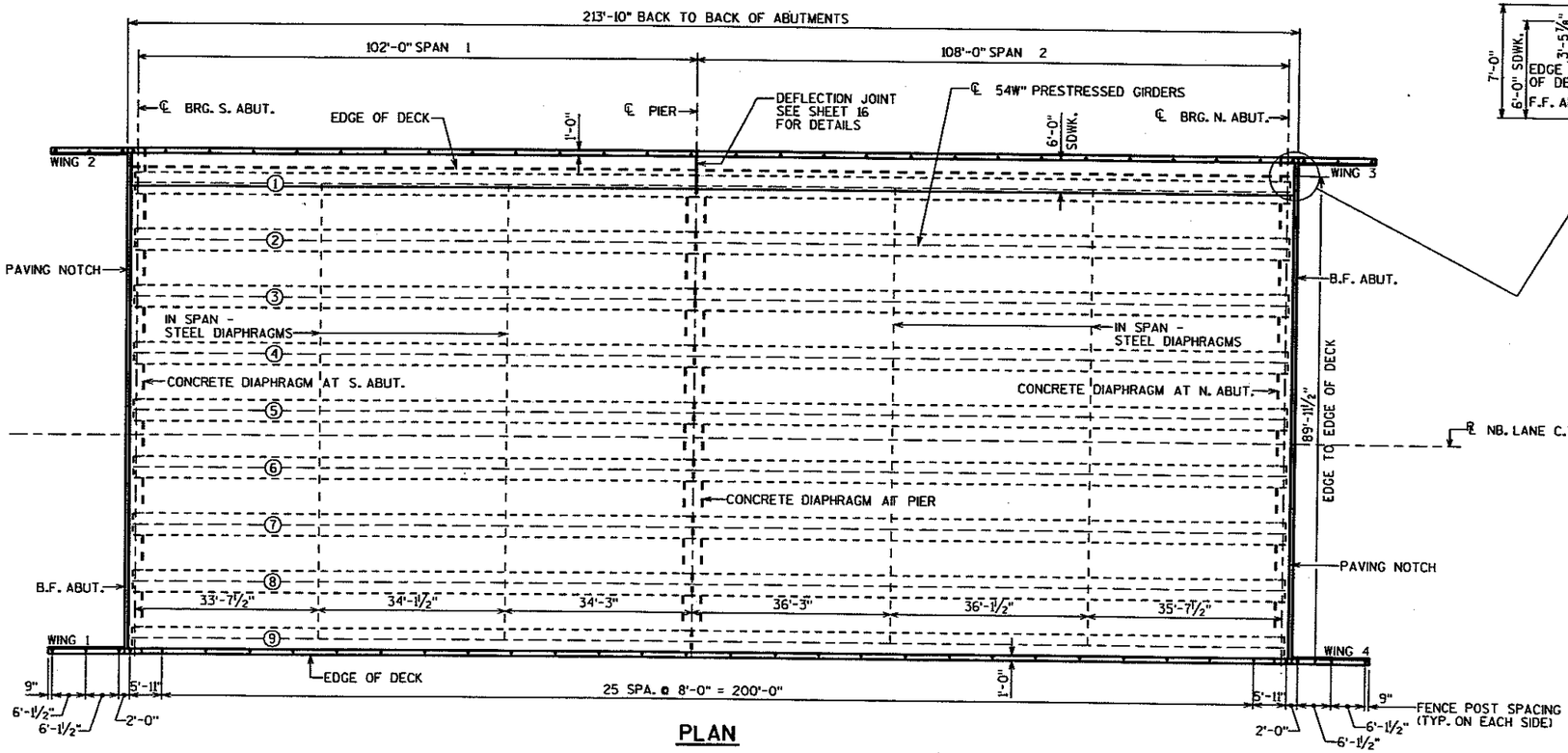
SECTION B-B



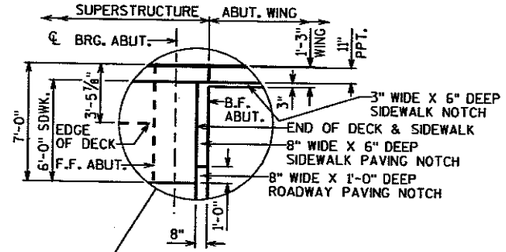
SECTION C-C



SECTION THRU MEDIAN
LOOKING NORTH



PLAN



CORNER DETAIL
TYPICAL AT BOTH ENDS OF SUPERSTRUCTURE

NOTE:
FOR THE SUPERSTRUCTURE'S TOP OF DECK ELEVATIONS SEE SHEET 12.

A22 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

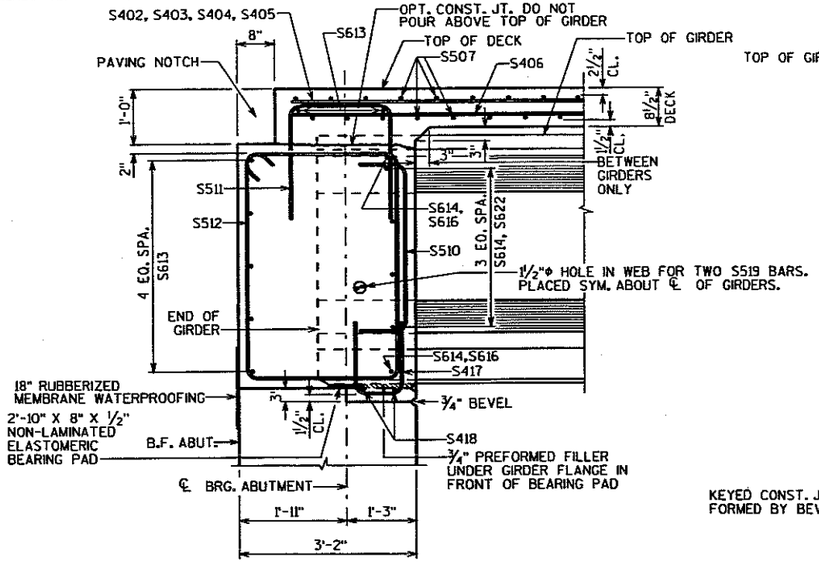
STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

SUPERSTRUCTURE | SHEET 11 | 201

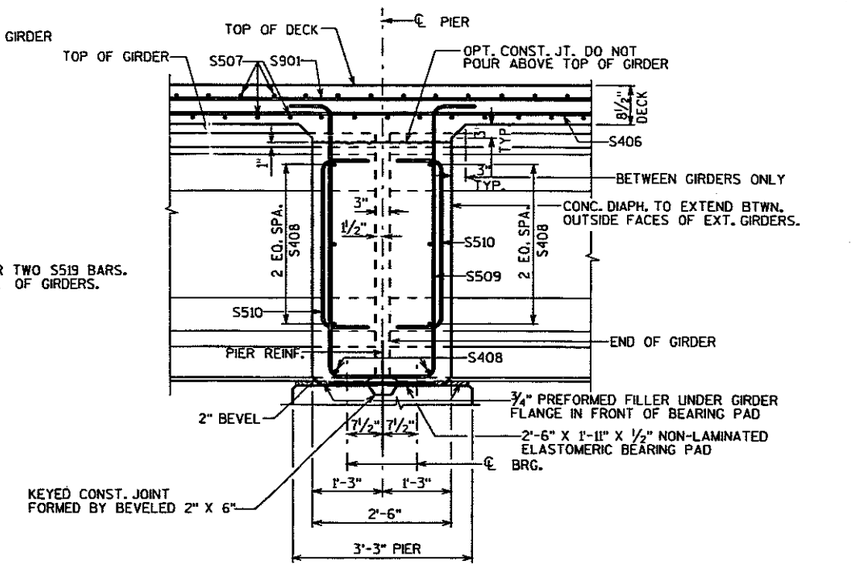
8

FILE= 11-140SUP2.DGN
SCALE = 13



AT ABUTMENTS

TYPICAL SECTION THRU THE ABUTMENT DIAPHRAGM BETWEEN GIRDERS AND AT THE EAST EXTERIOR. (TYPICAL AT BOTH ABUTMENTS)

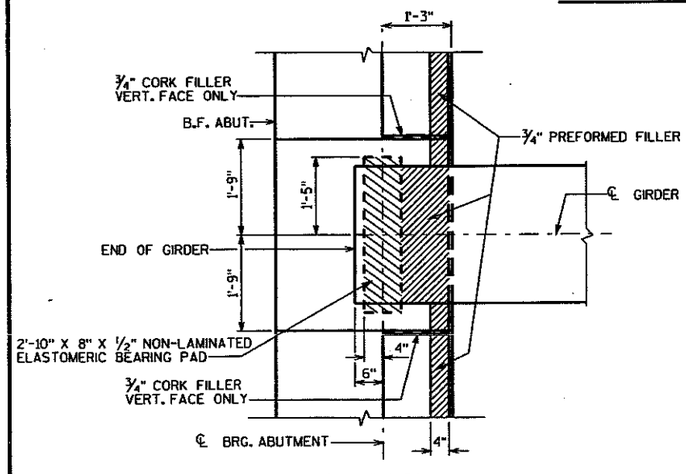


AT PIER

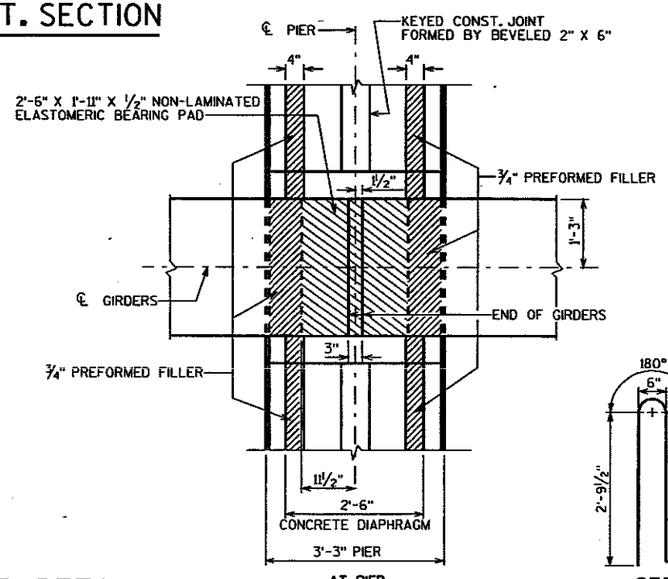
*CONCRETE MASONRY ANCHORS TYPE 'S', ½INCH.

**CONCRETE MASONRY ANCHORS TYPE 'S', ⅝INCH.

PART LONGIT. SECTION



AT ABUTMENTS



AT PIER

BEARING PAD DETAIL

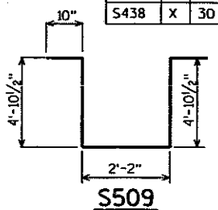
TOP OF DECK ELEVATIONS

	S. ABUT.	1/8	2/8	3/8	4/8	5/8	6/8	7/8	PIER 1	1/8	2/8	3/8	4/8	5/8	6/8	7/8	N. ABUT.
GIR. 1	814.60	814.85	815.08	815.29	815.50	815.69	815.87	816.04	816.19	816.34	816.48	816.60	816.71	816.80	816.88	816.95	817.00
GIR. 2	814.81	815.06	815.29	815.50	815.71	815.90	816.08	816.25	816.40	816.55	816.69	816.81	816.92	817.01	817.09	817.16	817.21
GIR. 3	815.02	815.27	815.50	815.71	815.92	816.11	816.29	816.46	816.61	816.76	816.90	817.02	817.13	817.22	817.30	817.37	817.42
GIR. 4	815.23	815.48	815.71	815.92	816.13	816.32	816.50	816.67	816.82	816.97	817.11	817.23	817.34	817.43	817.51	817.58	817.63
GIR. 5	815.44	815.69	815.92	816.13	816.34	816.53	816.71	816.88	817.03	817.18	817.32	817.44	817.55	817.64	817.72	817.79	817.84
GIR. 6	815.42	815.66	815.89	816.10	816.31	816.50	816.68	816.85	817.00	817.15	817.29	817.41	817.52	817.61	817.69	817.76	817.81
GIR. 7	815.21	815.45	815.68	815.89	816.10	816.29	816.47	816.64	816.79	816.94	817.08	817.20	817.31	817.40	817.48	817.55	817.60
GIR. 8	815.00	815.24	815.47	815.68	815.89	816.08	816.26	816.43	816.58	816.73	816.87	816.99	817.10	817.19	817.27	817.34	817.39
GIR. 9	814.79	815.03	815.26	815.47	815.68	815.87	816.05	816.22	816.37	816.52	816.66	816.78	816.89	816.98	817.06	817.13	817.18

BILL OF BARS

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

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	S901	X	143	37'-6"			DECK - TOP - LONGIT. - OVER PIER
	S402	X	213	28'-7"			DECK - TOP - LONGIT. - SPAN 1
	S403	X	216	30'-8"			DECK - TOP - LONGIT. - SPAN 1
	S404	X	213	33'-1"			DECK - TOP - LONGIT. - SPAN 2
	S405	X	216	31'-0"			DECK - TOP - LONGIT. - SPAN 2
	S406	X	720	43'-10"			DECK - BOT. - LONGIT.
	S507	X	1454	46'-2"			DECK - TOP & BOT. - TRANS.
	S408	X	128	5'-6"			PIER DIAPHRAGM - BOTH FACES - HORIZ. - BTWN. GRDRS.
	S509	X	56	13'-1"	X		PIER DIAPH. & DECK - VERT. - BTWN. GRDRS.
	S510	X	68	4'-1"	X		PIER DIAPH. & ABUT. DIAPH. - VERT.
	S511	X	162	6'-5"	X		ABUT. DIAPH. & DECK - VERT.
	S512	X	148	14'-6"	X		ABUT. DIAPH. - STIRRUP - VERT.
	S613	X	28	48'-4"			ABUT. DIAPH B.F. & DECK - HORIZ.
	S614	X	200	5'-10"			ABUT. DIAPH. - F.F. - HORIZ.
	S615	X	2	4'-10"			ABUT. DIAPH. - F.F. - BOT. - HORIZ. - WEST EXTERIOR
	S616	X	4	1'-4"			ABUT. DIAPH. - F.F. - TOP & BOT. - HORIZ. - EAST EXTERIOR
	S417	X	128	3'-5"	X		ABUT. DIAPH. - F.F. - BOT. - VERT. - BTWN. BEAM SEATS
	S418	X	32	6'-8"			ABUT. DIAPH. - BOT. - HORIZ. - BTWN. BEAM SEATS
	S519	X	36	6'-0"			ABUT. DIAPH. - HORIZ. - THRU GIRDERS
	S520	X	14	16'-11"	X		ABUT. DIAPH. - STIRRUP - VERT. - WEST EXTERIOR
	S621	X	4	5'-8"			ABUT. DIAPH. - TOP - B.F. - HORIZ. - WEST EXTERIOR
	S622	X	8	2'-4"			ABUT. DIAPH. - F.F. - HORIZ. - EAST EXTERIOR
	S423	X	36	37'-6"			WEST PARAPET 'A' - HORIZ.
	S424	X	84	37'-10"			SIDEWALK - TOP & BOT. - HORIZ.
	S825	X	20	55'-9"			PARAPET 'HF' - HORIZ.
	S426	X	25	43'-7"			MEDIAN - TOP - LONGIT.
*	S427	X	286	4'-10"	X		MEDIAN & DECK - TRANS.
	S628	X	4	6'-8"			SIDEWALK - HORIZ. - ABOVE ABUT. DIAPH.
	S629	X	4	3'-2"			ABUT. DIAPH. - TOP - F.F. - HORIZ. - WEST EXTERIOR
**	S530	X	319	1'-11"			PARAPET 'HF' & DECK - VERT.
**	S531	X	319	2'-2"	X		PARAPET 'HF' & DECK - VERT. - RDWY. FACE
	S532	X	319	6'-6"	X		PARAPET 'HF' - VERT.
	S533	X	215	7'-0"	X		WEST PARAPET 'A' & SIDEWALK - VERT.
	S534	X	426	7'-3"	X		SIDEWALK - TOP - TRANS. - VERT.
	S435	X	143	4'-6"			SIDEWALK - BOT. - TRANS. - HORIZ.
	S436	X	426	5'-7"	X		SIDEWALK & DECK - TRANS. - VERT.
	S537	X	215	7'-1"	X		EAST PARAPET 'A' & DECK - TRANS. - VERT.
	S438	X	30	43'-10"	X		EAST PARAPET 'A' - LONGIT.



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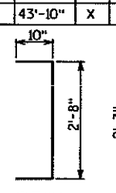

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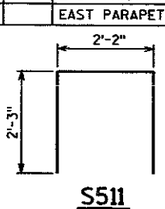

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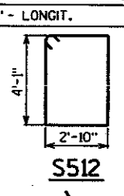

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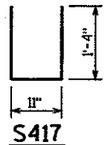

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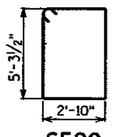

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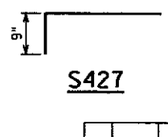

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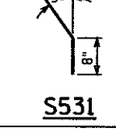

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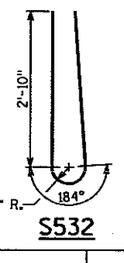

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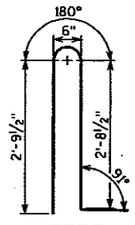

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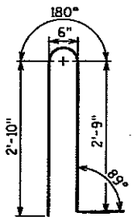

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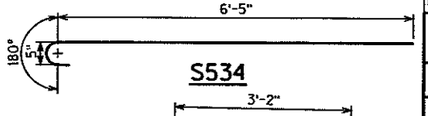

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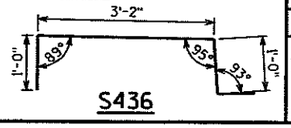


S436

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

SUPERSTRUCTURE DETAILS

SHEET 12

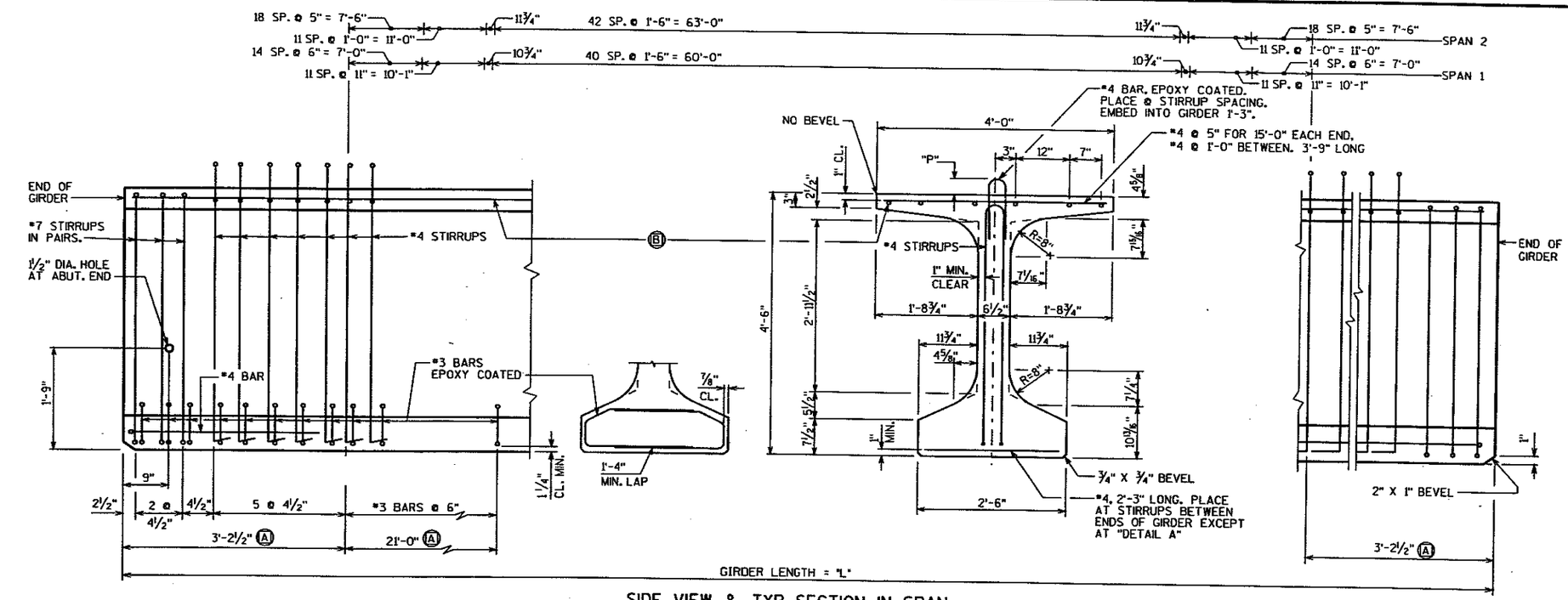
202

STATE PROJECT NUMBER

1123-09-71

8

FILE= 12-140SUP3.DGN
SCALE = 1.3333

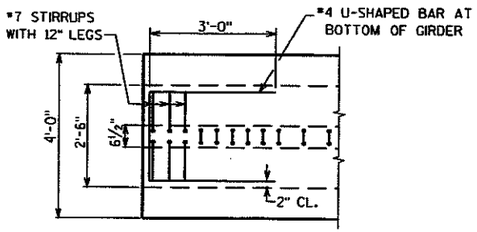


SIDE VIEW & TYP. SECTION IN SPAN

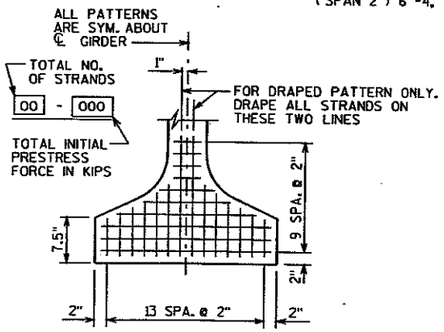
(A) DETAIL TYP. AT EACH END

(B) 6 - BARS, FULL LENGTH

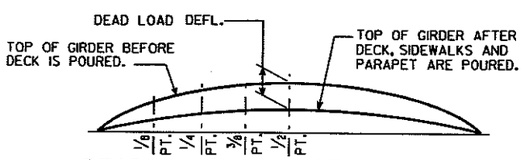
(SPAN 1) 6 #4, 1'-11" MIN. LAP
(SPAN 2) 6 #4, 1'-11" MIN. LAP



TOP VIEW OF GIRDER ENDS



TYP. STRAND PATTERN

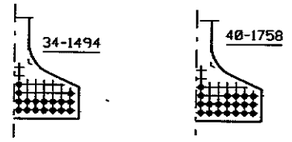


DEAD LOAD DEFLECTION DIAGRAM

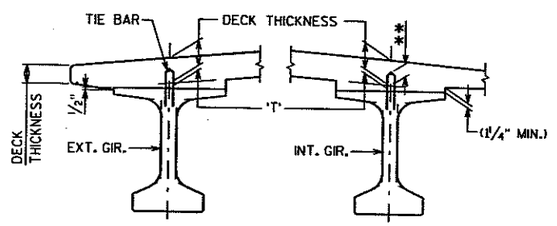
* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) ⅛	¼	⅜	½	CONC. STRGTH. f'c (P.S.I.)	"P"	DIA. OF STRAND	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	("A"	"B" MIN.	"B" MAX.	"C")	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
1	102.38'	0.64	1.10	1.37	1.46	7000	6"	0.60"	34	5363	49.00	16.00	19.00	5.00	0	0
2	108.38'	0.81	1.38	1.73	1.84	8000	6"	0.60"	40	6160	49.00	16.00	19.00	5.00	0	0



ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS



DECK HAUNCH DETAIL

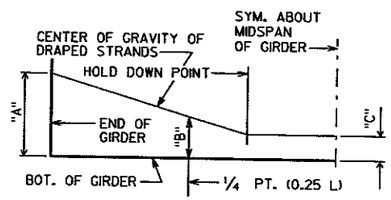
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T' ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT ⅛ POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE:
AN AVERAGE HAUNCH ('T') OF 2½" WAS USED FOR COMPUTING THE SUPERSTRUCTURE QUANTITY "CONCRETE MASONRY BRIDGES".



DRAPED STRAND PROFILE

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE DECK, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED LIQUID BOND BREAKER SHALL BE APPLIED TO THE TOP SURFACE OF THE GIRDER EXCEPT FOR THE CENTER 18". APPLY NO MORE THAN 7 DAYS PRIOR TO POURING THE DECK.

NOX-CRETE:
SILCOSEAL 2000 F (2 COATS)
MASTER BUILDERS:
FIRST COAT - PRECO FORM-COTE
SECOND COAT - RHEOFINISH 220

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

PRESTRESSING STRANDS SHALL BE 0.6"ϕ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER.

BEND EACH END OF #4 STIRRUPS 4½" AND #7 STIRRUPS 12".

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

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, 2 OPTIONS ARE AVAILABLE:

1. USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.
2. USE ASTM A615, GRADE 40 REINFORCEMENT AND A MODIFIED STIRRUP SPACING SUBMITTED TO AND APPROVED BY THE STRUCTURES DEVELOPMENT SECTION.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A497.

STATE PROJECT NUMBER

1123-09-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

54W" PRESTRESSED GIRDER DETAILS

SHEET 13

203

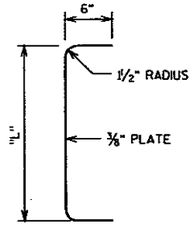
8

FILE= 13-140GIR.DGN
SCALE = 2.6667

STATE PROJECT NUMBER
1123-09-71

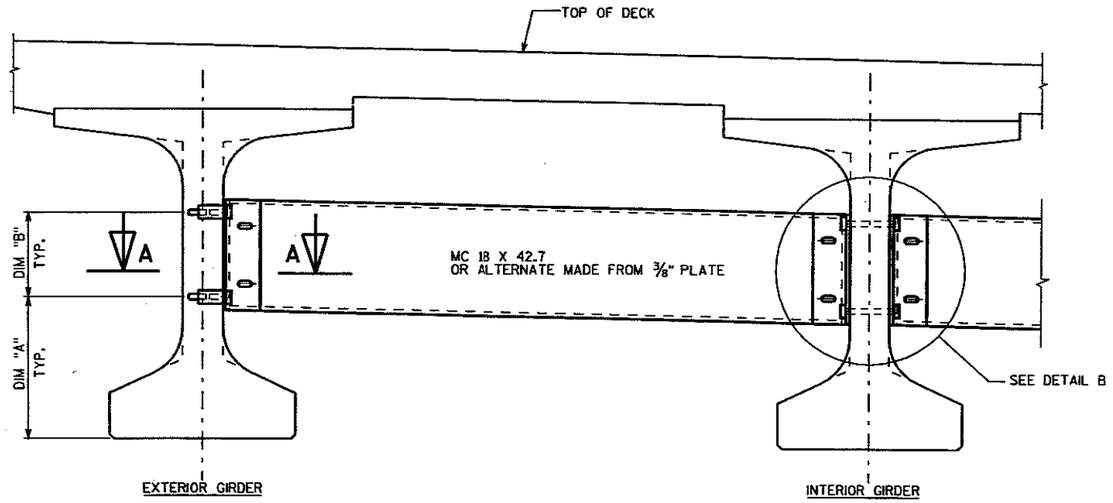
TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
28"	1'-0⅞"	5⅞"	9½"	2¼"
36"	1'-2⅞"	9⅞"	1'-1½"	3¼"
45"	1'-5⅜"	1'-1⅞"	1'-5½"	2¼"
54"	1'-7⅞"	1'-5⅞"	1'-9½"	4¼"
54W"	1'-9⅛"	1'-5⅞"	1'-9½"	4¼"



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2½" FOR ALTERNATE PLATE DIAPHRAGM



PART TRANSVERSE SECTION AT DIAPHRAGM

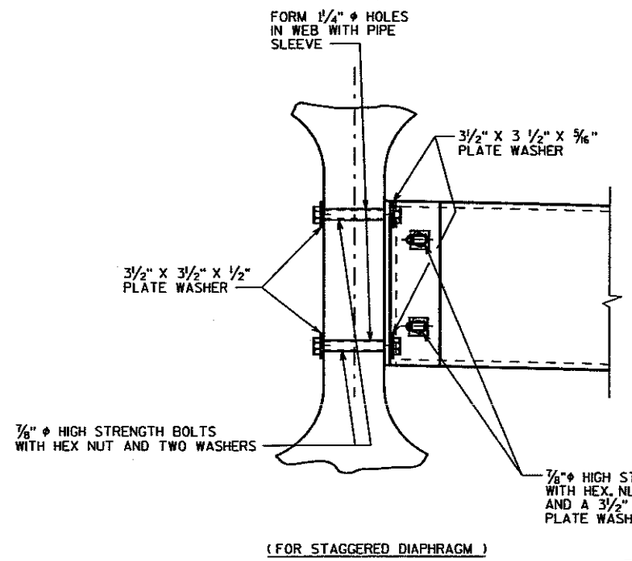
NOTES

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

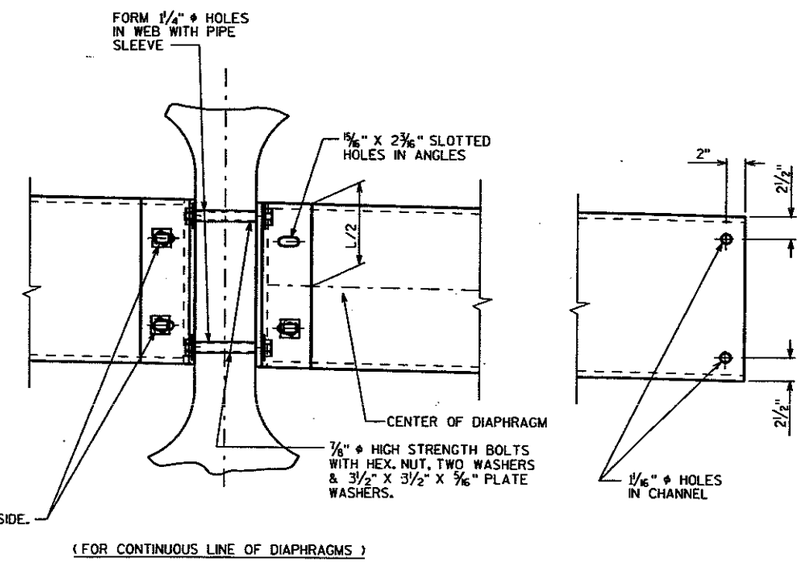
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

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

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

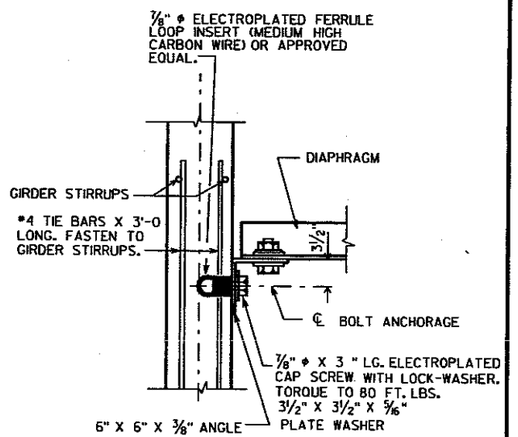


(FOR STAGGERED DIAPHRAGM)



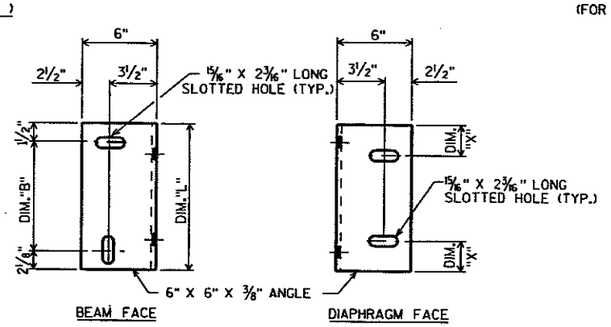
(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B



SECT. A-A

(FOR EXTERIOR ATTACHMENT)



DIAPHRAGM SUPPORT

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

STEEL DIAPHRAGM

SHEET 14

204

FILE= 14-140DIA.DGN
SCALE = 1

℄ OF ANCHOR ASSEMBLY FOR THRIE BEAM.
SEE "GENERAL PLAN" SHT. FOR WING LOCATIONS

24'-8" (TYP. AT EACH END)

SUPERSTUCTURE PPT.

½" FILLER

TOP OF DECK

END OF PARAPET FTG.

PAVING NOTCH

23 SPA. @ 1'-0" = 23'-0"

F401

B.F. ABUT.

EL. 814.49 AT SOUTH END
EL. 817.47 AT NORTH END

INSIDE ELEVATION

STEEL TROWEL HORIZ. SURFACE OF PAVING NOTCH PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS BETWEEN PARAPET FOOTING AND HORIZ. SURFACE OF PAVING NOTCH. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03"

CONST. JOINT - STRIKE OFF AS SHOWN.

SECTION A-A

SECTION B-B

SECTION C-C

BILL OF BARS

FOR ABUTMENT PARAPET 'HF'S AT FOOTINGS.

BAR MARK	COAT	SOUTH ABUT.	NORTH ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
F401	X	25	25	7-6	X		PARAPET HF FOOTING - STIRRUP - VERT.
F402	X	4	4	24-4			PARAPET HF FOOTING - HORIZ. - SIDES
F403	X	4	4	23-8			PARAPET HF FOOTING - HORIZ. - SIDES
F504	X	1	1	24-4	X		PARAPET HF - BOT. - HORIZ.
F805	X	5	5	24-4			PARAPET HF - HORIZ.
F506	X	27	27	4-9	X		PARAPET HF & FOOTING - VERT.
F507	X	8	8	2-4	X		PARAPET HF & FOOTING - VERT.
F508	X	35	35	6-6	X		PARAPET HF - VERT.
F509	X	14	14	4-7	X		PARAPET HF & FOOTING - VERT.
F810	X	2	2	24-5	X		PARAPET HF - HORIZ. - TOP
F511	X	6	6	5-8	X	△	PARAPET HF - VERT. - AT ENDS

△ BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
F511	1 SERIES OF 6	4-10 TO 6-6

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

F504

F401

F507

F506

F508

F509

F810

F511

PLAN

END OF PARAPET FTG.

2" BEVEL

ROADWAY FACE

℄ BRG. ABUT.

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINFORCEMENT THRU THE JOINT. LAP THE LONGIT. BARS A MIN. OF 3'-5". MIN. JOINT SPACING OF 80'-0" DEFINE CONSTRUCTION JOINT WITH A ¾" 'V' GROOVE.

OUTSIDE ELEVATION

5 SPA. @ 6" = 2'-6"
F511, F509

7 SPA. @ 6" = 3'-6"
F507, F508, F509

26 SPA. @ 8" = 17'-4"
F506, F508

NO TINING ON SIDEWALK, BROOM FINISH ONLY

TOP OF DECK

DECK REINFORCEMENT

S532 @ 8"

S530 @ 8"

S531 @ 8"

RDWY. FACE

S825

S530 & S531 CONCRETE MASONRY ANCHORS TYPE 'S', ⅝ INCH. MINIMUM PULLOUT = 14.6 KIPS. EMBED 5" INTO CONCRETE DECK. EPOXY ANCHORED. DRILL HOLES TO AVOID DECK REINFORCEMENT

SECTION D-D

SECTION THRU PARAPET ABOVE DECK

THREADED INSERTS FOR ⅞" ϕ X 2" LONG GALVANIZED HEX. HEAD CAP SCREWS. CAP SCREWS TO BE THREADED A MIN. OF 1⅞" AND SHALL BE SUPPLIED, INCLUDING WASHERS, WITH ASSEMBLY. INSERTS TO BE THREADED A MINIMUM OF 1¾"

5/16" ϕ BARS WELD TO INSERTS.

FACE OF CONCRETE

SYM. ABOUT ℄ ASSEMBLY

END OF INSERT TO BE CLOSED.

5/16" ϕ BARS WELD TO INSERTS.

DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

NOTES:
THE BILL OF BARS AND BAR DETAILS FOR THE PARAPET 'HF' BARS ABOVE THE DECK ARE ON SHEET 12.

BID ITEMS ON THIS SHEET ARE TO BE INCLUDED WITH THE SUPERSTRUCTURE'S QUANTITIES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

SLOPED FACE PARAPET 'HF'

SHEET 15

205

STATE PROJECT NUMBER

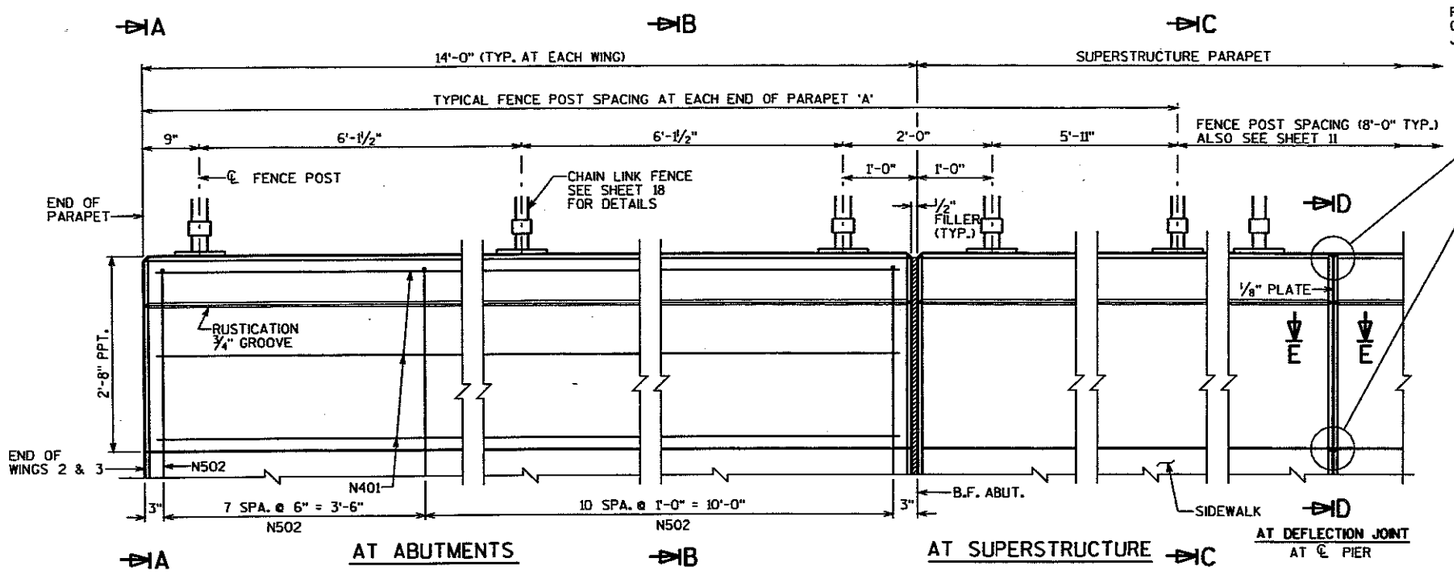
1123-09-71

8

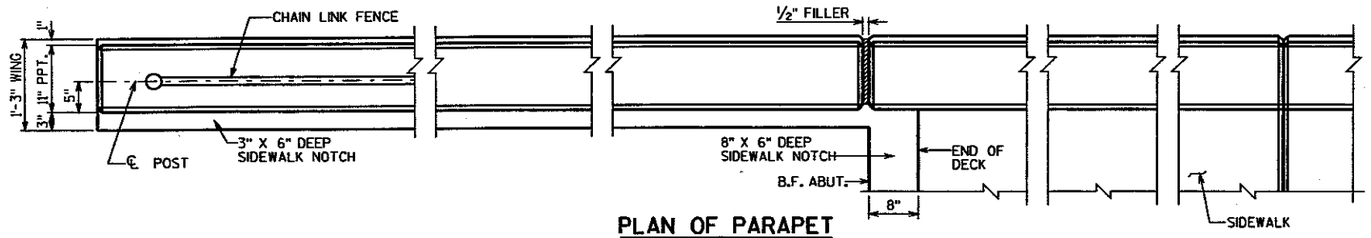
FILE= 15-140PPTHF.DGN
SCALE = 1

STATE PROJECT NUMBER

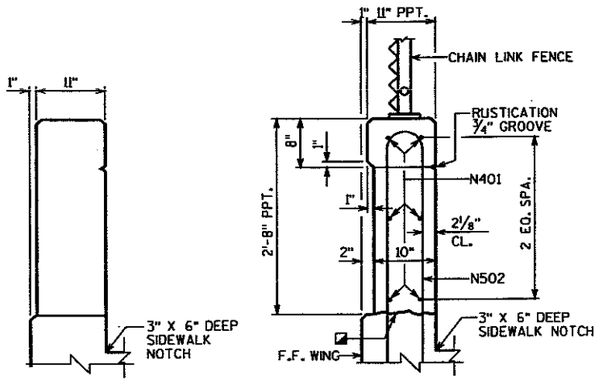
1123-09-71



INSIDE ELEVATION OF PARAPET



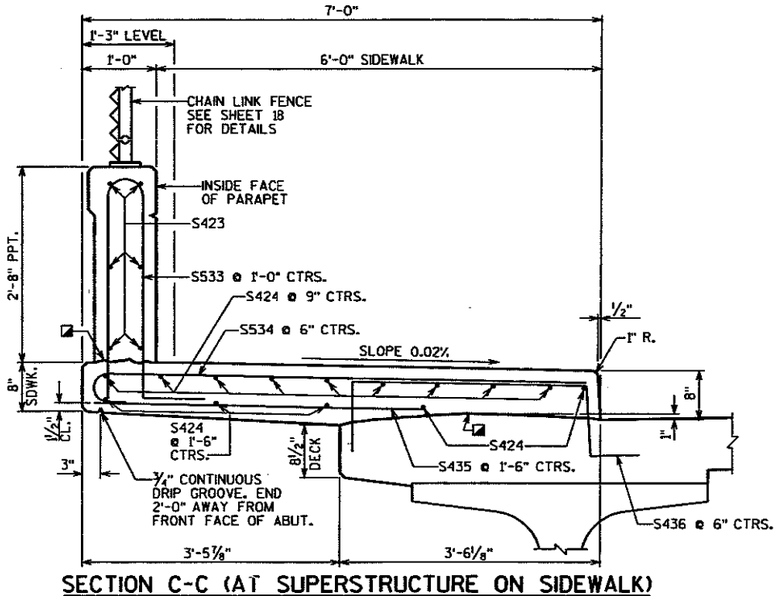
PLAN OF PARAPET



SECTION A-A

STEEL REINFORCEMENT NOT SHOWN

SECTION B-B



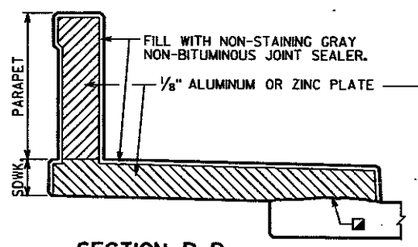
SECTION C-C (AT SUPERSTRUCTURE ON SIDEWALK)

SEE SECTION B-B FOR PARAPET DIMENSIONS.
SEE SHT. 12 FOR THE BILL OF BARS AND BAR DETAILS.

BILL OF BARS

FOR ABUTMENT PARAPETS AT WINGS 2 & 3 ONLY

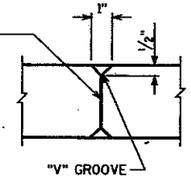
BAR MARK	COAT	NO. REQUIRED S.ABUT	NO. REQUIRED N.ABUT	LENGTH	BENT	LOCATION
N401	X	6	6	13-8		WEST PARAPET A - HORIZ. - AT WINGS 2 & 3
N502	X	18	18	10-5	X	WEST PARAPET A - VERT. - AT WINGS 2 & 3



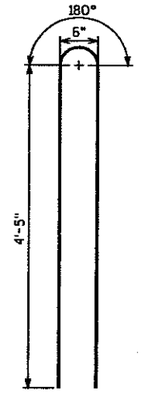
SECTION D-D

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

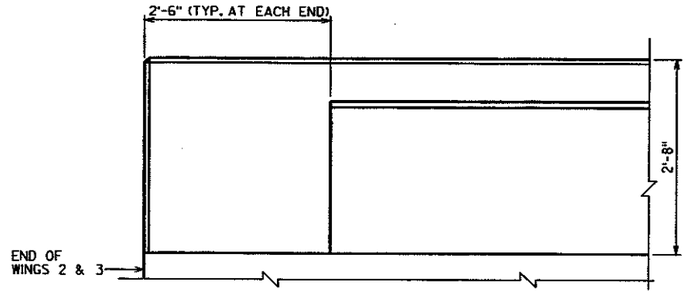
WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION B-B BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED. DO NOT RUN BAR STEEL THRU THE DEFLECTION JOINT.



SECTION E-E



N502



OUTSIDE FACE OF PARAPET

LOOKING EAST

☑ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

VERTICAL FACE PARAPET 'A' - WEST

SHEET 16

206

8

FILE= 16-140WESTPPTA.DGN
SCALE = 1

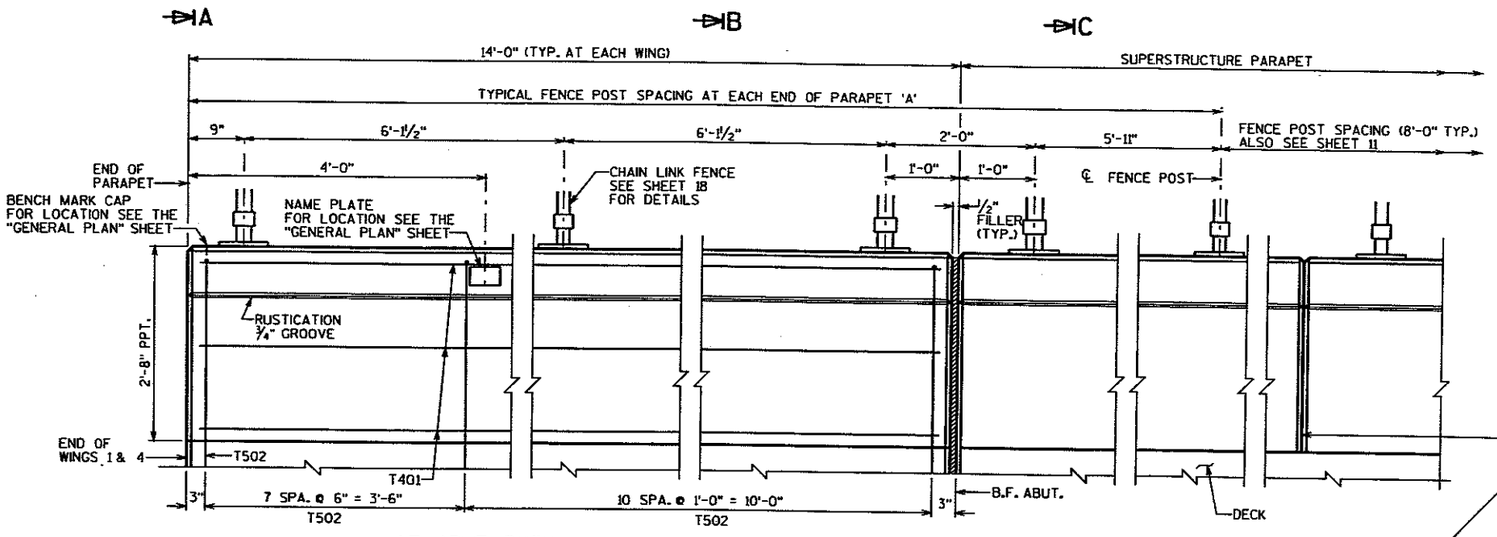
STATE PROJECT NUMBER

1123-09-71

BILL OF BARS

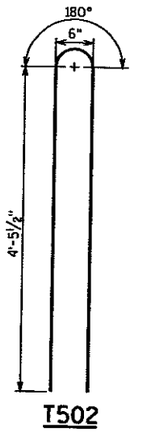
FOR ABUTMENT PARAPETS AT WINGS 1& 4 ONLY

BAR MARK	COAT	NO. REQUIRED S.ABUT	NO. REQUIRED N.ABUT	LENGTH	BENT	LOCATION
T401	X	6	6	13-8		EAST PARAPET A - HORIZ. - AT WINGS 1& 4
T502	X	18	18	10-6	X	EAST PARAPET A - VERT. - AT WINGS 1& 4

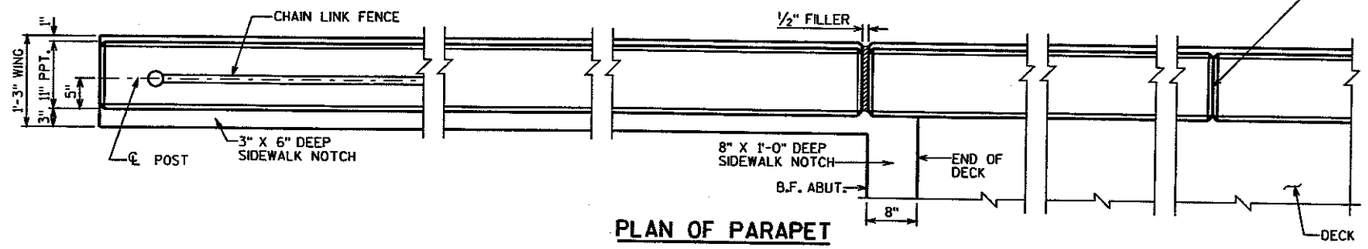


INSIDE ELEVATION OF PARAPET

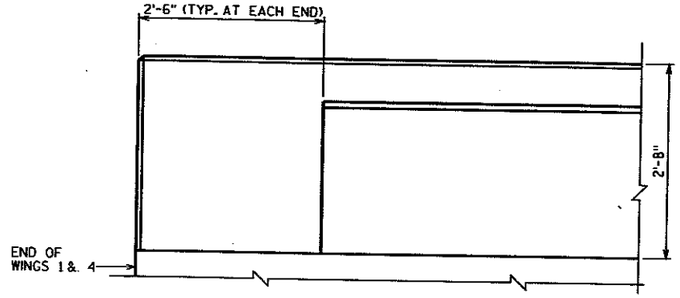
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINFORCEMENT THRU THE JOINT LAP LONGITUDINAL BARS A MIN. OF 1'-4". MIN. JOINT SPACING OF 80'-0". DEFINE CONSTRUCTION WITH A ¾" 'V' GROOVE.



T502

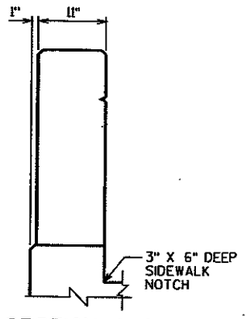


PLAN OF PARAPET



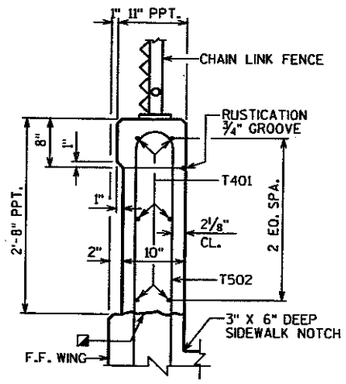
OUTSIDE FACE OF PARAPET

LOOKING WEST

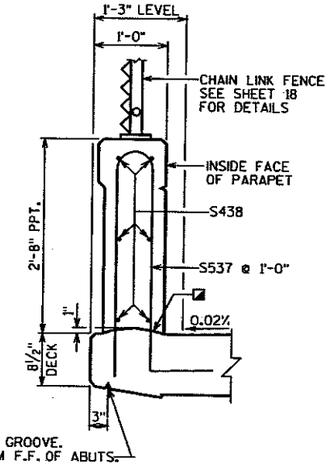


SECTION A-A

STEEL REINFORCEMENT NOT SHOWN



SECTION B-B



¾" CONTINUOUS DRIP GROOVE. END 2'-0" AWAY FROM F.F. OF ABUTS.

SECTION C-C (AT SUPERSTUCTURE ON DECK)

SEE SECTION B-B FOR PARAPET DIMENSIONS.
SEE SHT. 12 FOR THE BILL OF BARS AND BAR DETAILS.

HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

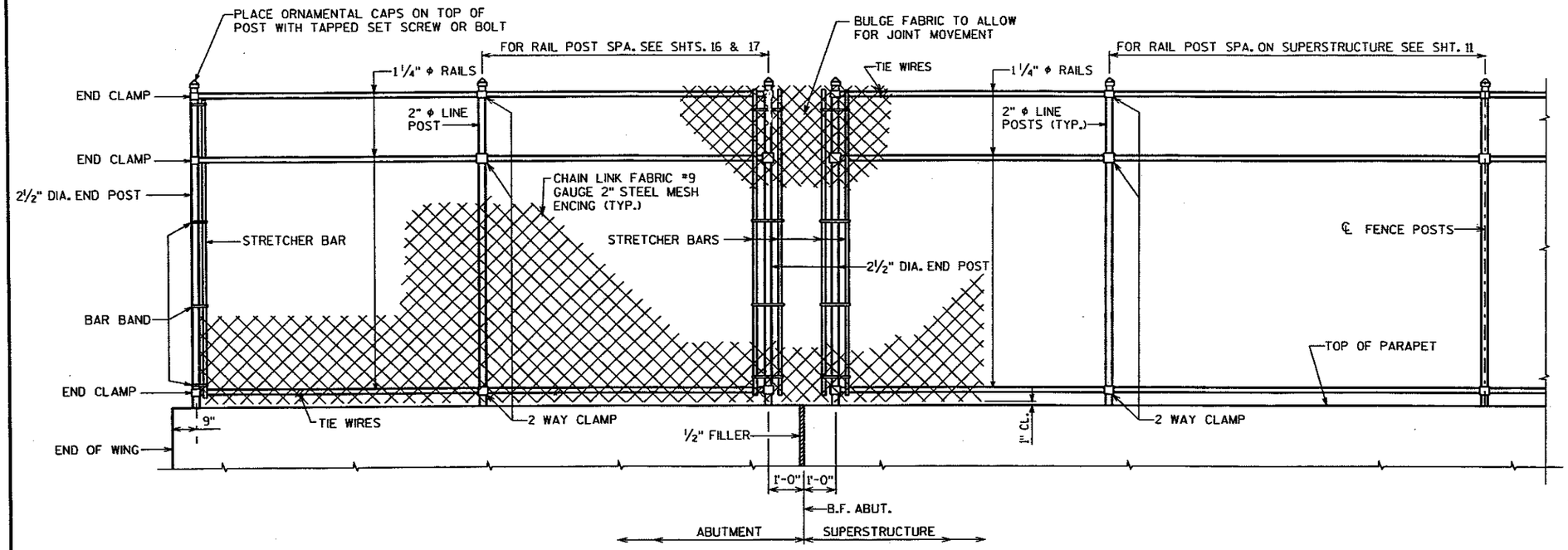
VERTICAL FACE PARAPET 'A' - EAST

SHEET 17

207

8

FILE= 17-140EASTPPTA.DGN
SCALE = 1



FENCE PART ELEVATION

TYP. AT BOTH PARAPETS AND AT EACH WING

STATE PROJECT NUMBER

1123-09-71

GENERAL NOTES

POSTS ARE TO BE SET VERTICAL.

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

ALL FENCING COMPONENTS SHALL BE GALVANIZED STEEL OR APPROVED ALTERNATE LISTED BELOW.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS ON OUTSIDE OF FENCE.

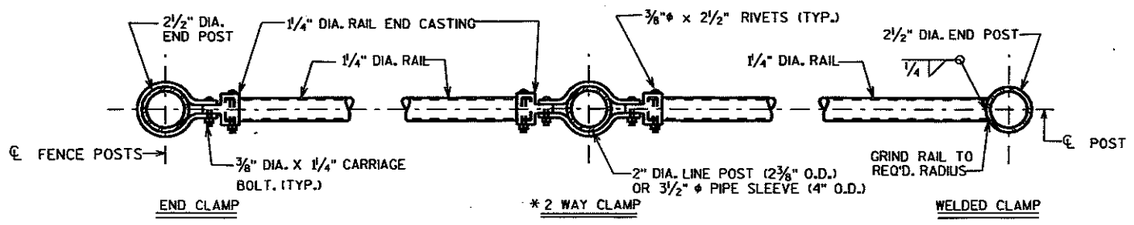
TOP RAIL SHALL BE CONTINUOUS OVER INTERIOR POSTS. MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". PLACE TOP RAIL SPLICES NEAR 1/4 POINTS OF POST SPACING. NO. 9 GAGE TIES AT 9" SPACING REQ'D. ON RAILS & POSTS WITHOUT STRETCHER BARS.

ALTERNATE FENCING MATERIALS ARE ALLUMINUM, ALUMINUM COATED STEEL AND APPROVED COLOR COATING SYSTEMS. IF ALTERNATE MATERIALS ARE USED FOR POSTS & RAILS, THESE ELEMENTS SHOULD BE DESIGNED.

* ALTERNATE BOULEVARD 2-WAY CLAMP MAY BE USED WHEN THE POST IS EITHER BOLTED TO THE 3 1/2"ϕ PIPE SLEEVE OR DIRECTLY WELDED TO THE BASE PLATE.

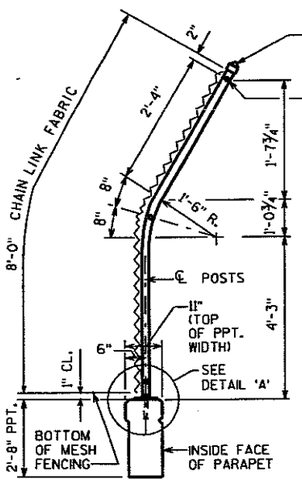
△ 1/2" DIA. X 6 7/8" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE S. 1/2" ϕ CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" ϕ BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE ✿

✿ 1/2" CONCRETE MASONRY ANCHOR, TYPE "S" 6" MIN. EMBEDMENT (EPOXY ANCHORED MIN. PULLOUT OF 10 KIPS, THREADED LENGTH OF ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.



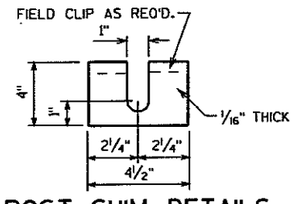
PLAN OF RAILING

NOTE: PLACE ALL NUTS ON OUTSIDE OF FENCE USE HARDWARE AS DETAILED



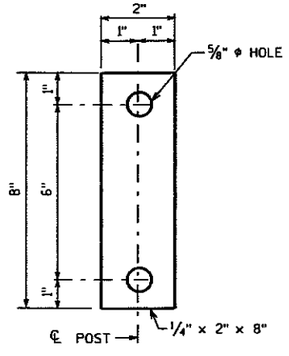
SECTION THRU FENCE

TYP. AT BOTH PARAPETS

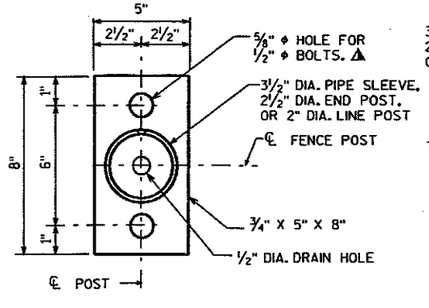


POST SHIM DETAILS

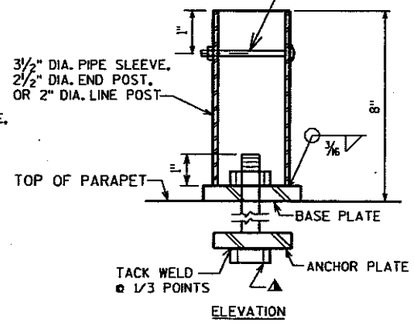
SHIMS REQUIRED ONLY WHEN POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST.



ANCHOR PLATE



BASE PLATE

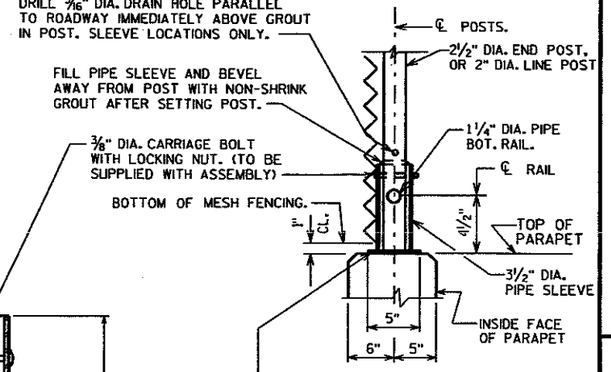


ELEVATION

POST ATTACHMENT

UNIT SHALL BE GALV. AFTER FABRICATION

NOTE:
IN LIEU OF USING THE 3 1/2" ϕ SLEEVE, THE FENCE POST MAY BE WELDED TO THE BASE PLATE.



DETAIL A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

CHAIN LINK FENCE DETAILS

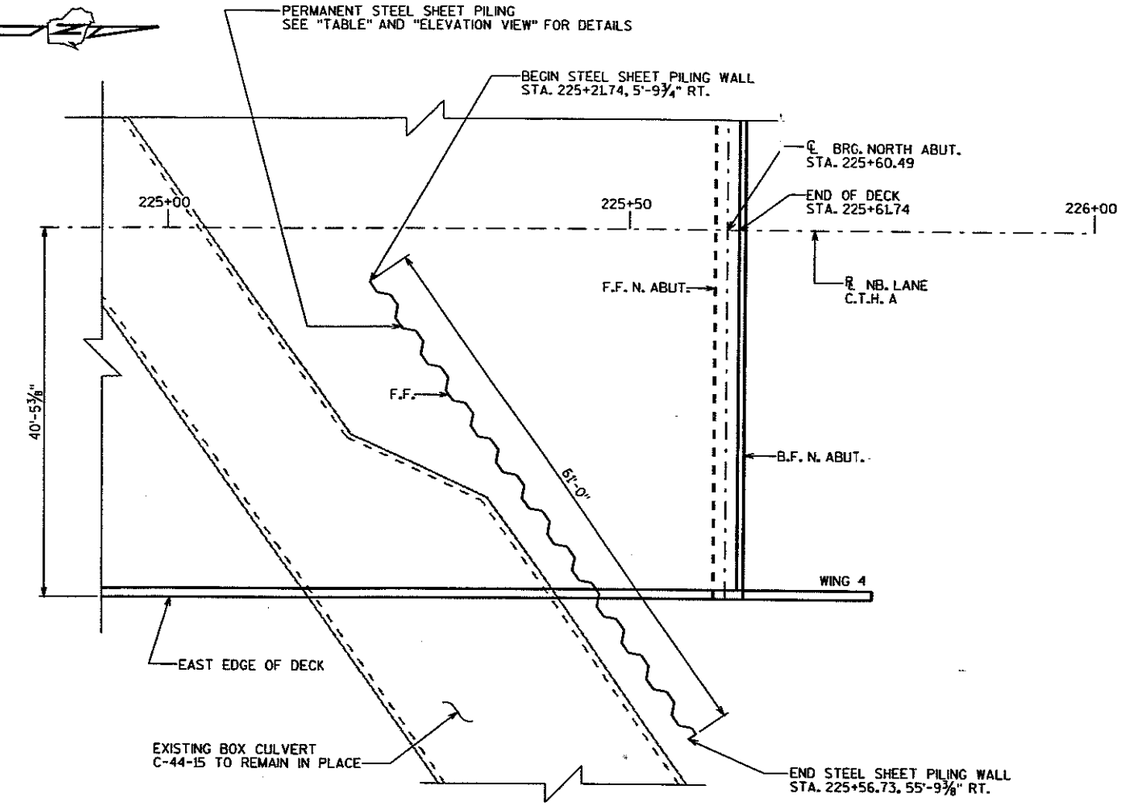
SHEET 18

208

8

FILE= 18-140FENCE.DGN
SCALE = 5.3333

STATE PROJECT NUMBER
1123-09-71

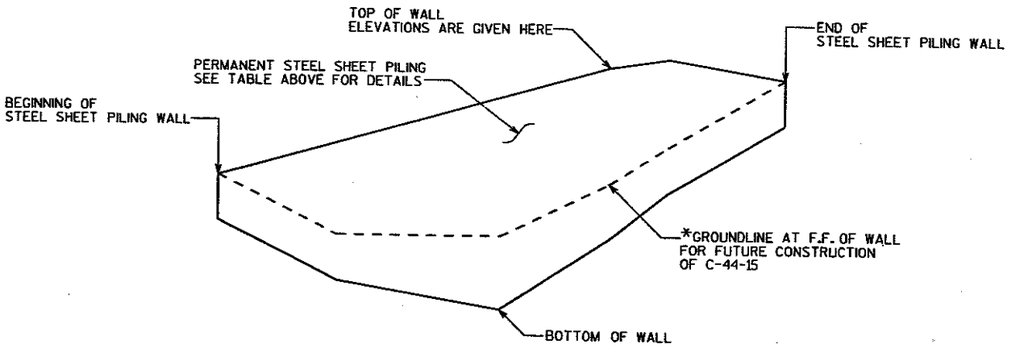


B-44-140 PARTIAL PLAN

SHOWING STEEL SHEET PILING LOCATION AT NORTH ABUTMENT

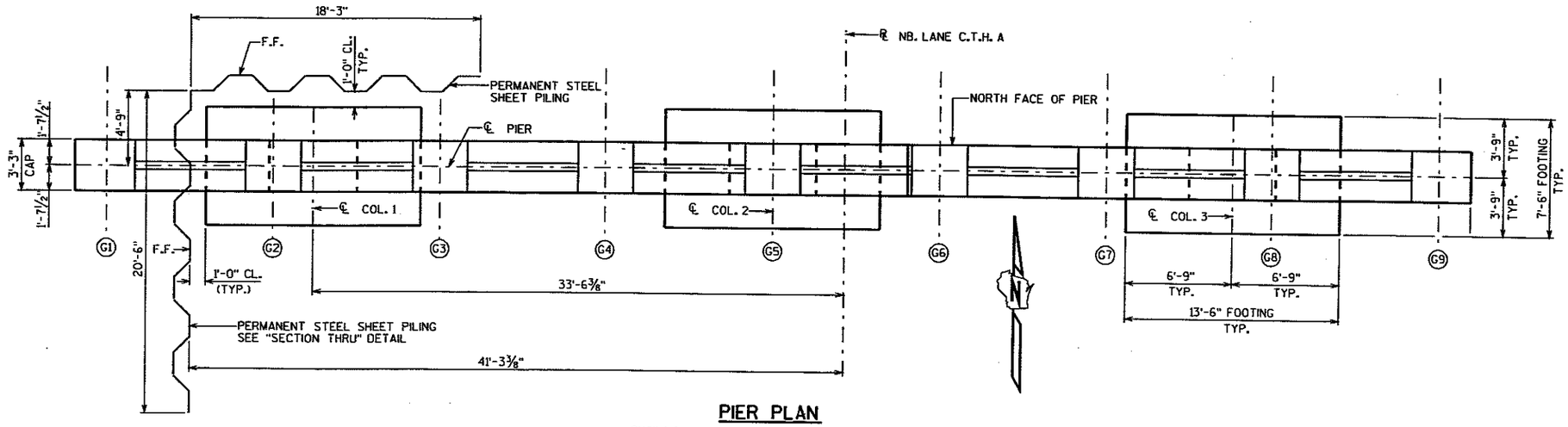
TABLE FOR STEEL SHEET PILING AT NORTH ABUTMENT

DIST. ALONG WALL	TOP OF WALL ELEV.	*GROUND ELEV. @ F.F.	EXPOSED WALL HEIGHT (FT.)	MIN. EMBEDMENT	MIN REQ'D. SECT. MOD. (IN^3/FT.)
BEGIN WALL	791.10'	791.10'	0.0'	5.0'	19.8
12.75'	794.70'	784.60'	10.1'	5.0'	19.8
30.5'	799.80'	784.60'	15.2'	8.0'	19.8
42.25'	803.20'	790.40'	12.8'	6.0'	19.8
48.50'	804.20'	794.50'	9.7'	5.0'	19.8
END WALL	802.00'	802.00'	0.0'	5.0'	19.8



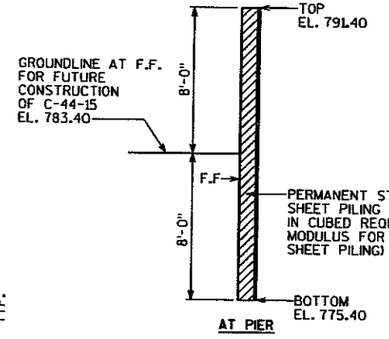
ELEVATION VIEW OF STEEL SHEET PILING AT NORTH ABUTMENT

LOOKING AT F.F. WALL



PIER PLAN

SHOWING STEEL SHEET PILING LOCATION AT PIER



SECTION THRU STEEL SHEET PILING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-44-140

DRAWN BY JPH | PLANS CK'D. ZIRK

STEEL SHEET PILING

SHEET 19

209

8

FILE= 19-140PILING.DGN
SCALE = 4.0

EARTHWORK CTH A

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
203+15	100	0	15	0
203+50	96	127	41	36
204+00	79	162	62	95
204+50	85	152	65	118
205+00	90	162	70	125
205+28	2	0	0	0
205+50	84	161	43	105
206+00	90	161	26	65
206+50	100	176	11	35
206+69	105	72	0	4
207+00	109	123	10	6
207+50	102	196	2	11
207+69	100	71	0	1
207+87	102	67	0	0
208+00	109	51	4	1
208+50	115	207	3	7
209+00	111	209	0	3
209+50	104	199	0	1
210+00	264	341	0	0
210+50	109	346	0	0

EARTHWORK CTH A

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
212+50	92	162	27	54
213+00	76	155	30	52
213+50	71	136	34	59
214+00	65	126	47	76
214+50	67	122	55	95
214+58	67	20	51	16
215+00	62	100	100	117
215+50	53	107	126	210
216+00	41	86	167	272
216+50	34	69	176	318
217+00	35	64	227	373
217+50	29	59	245	436
217+59	26	9	245	82
218+00	191	165	554	607
218+50	223	383	661	1125
219+00	275	461	799	1352
219+50	261	496	918	1590
220+00	256	479	1035	1808
220+50	248	467	1239	2106
221+00	257	468	1503	2539
221+50	199	422	2351	3569
222+00	158	331	2365	4367
222+50	132	269	2232	4256

EARTHWORK CTH A

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
223+00	111	225	2503	4384
223+28 BK	93	106	2441	2564
223+28 AH	0	0	0	0
225+77 BK	0	0	0	0
225+77 AH	214	0	2964	0
226+00	116	141	3147	2603
226+50	125	223	3085	5770
227+00	121	228	3086	5714
227+50	77	183	3364	5972
228+00	155	215	3113	5997
228+50	211	339	2913	5580
229+00	262	444	2738	5232
229+50	323	550	2505	4852
230+00	385	667	2249	4399
230+50	455	791	1929	3867
231+00	584	963	1608	3276
231+50	714	1203	1292	2686
232+00	607	1224	890	2020
232+50	372	907	618	1396
233+00	18	362	577	1106
233+50	4	21	460	960
234+00	12	15	343	743
234+50	0	11	251	549

EARTHWORK CTH A

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
233+50	4	21	460	960
234+00	12	15	343	743
234+50	0	11	251	549
235+00	62	57	120	344
235+50	75	127	100	205
236+00	92	155	77	164
236+50	110	187	63	130
237+00	141	232	50	105
237+50	145	265	47	89
238+00	159	281	38	78
238+50	145	281	46	78
239+00	135	259	54	93
239+50	130	245	55	101
240+00	102	215	48	95
240+50	105	192	52	93
241+00	107	196	80	122
241+50	310	386	69	137
242+00	130	407	71	130
242+50	116	228	65	126
243+00	111	210	55	111
243+50	99	194	48	95
244+00	88	173	60	100

EARTHWORK CTH A

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
246+00	141	218	36	78
246+50	108	231	29	60
247+00	116	207	25	50
247+50	129	227	18	40
248+00	123	233	8	24
248+50	109	215	5	12
249+00	103	196	72	71
249+50	104	192	5	71
250+00	107	195	7	11
250+50	18	116	13	19
251+00	20	35	10	21
251+50	12	30	11	19
252+00	13	23	9	19
252+49	0	12	0	8
TOTALS		20880		95458

EARTHWORK ANDY SCHUH DRIVEWAY

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
12+82	3	0	2	0
13+00	3	2	2	1
13+50	1	3	5	7
14+00	0	1	11	16
14+50	0	0	17	32
15+00	0	0	19	35
15+50	0	0	21	37
16+00	0	0	23	41
16+50	0	0	26	45
17+00	0	0	27	49
17+50	0	0	43	65
18+00	0	0	80	114
18+50	0	0	113	178
19+00	0	0	156	249
19+50	0	0	196	326
20+00	0	0	196	363
TOTALS		6		1558

STATE PROJECT NO: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	EARTHWORK QUANTITIES	SHEET NO: 21	E
FILE NAME:	ORIGINATOR: OMNNI ASSOCIATES	ORIG. DATE:	REV. DATE:	PRINT DATE: March 27, 2004	

EARTHWORK NORTH MITIGATION AREA

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
1+00	0	0	0	0
1+50	37	0	0	0
2+00	144	167	0	0
2+50	250	365	0	0
3+00	227	442	0	0
3+50	187	384	0	0
4+00	93	260	0	0
4+50	48	131	0	0
5+00	33	75	0	0
5+50	0	30	0	0
		1854		0

EARTHWORK USH 41 MEDIAN

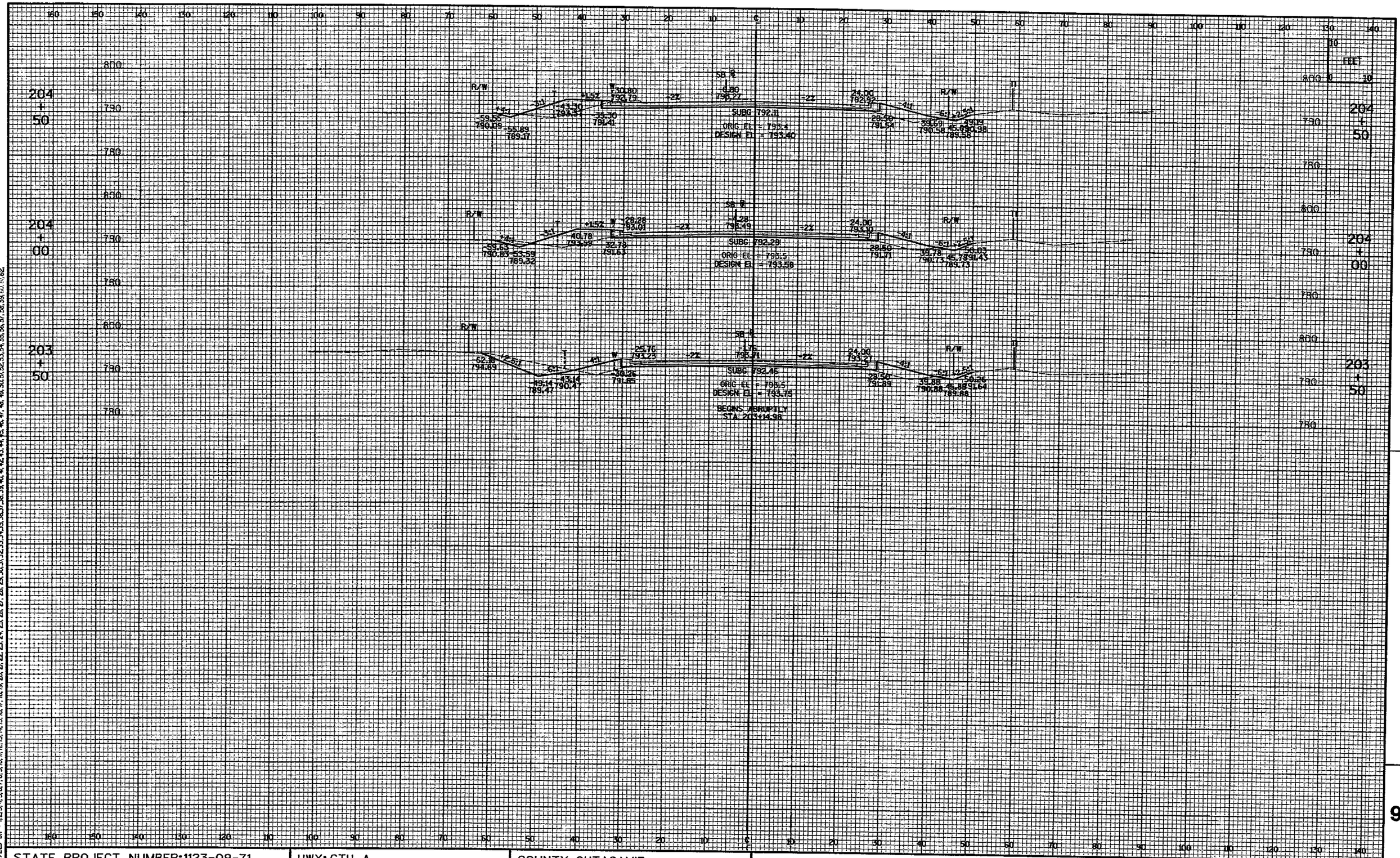
STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
666+70	0	0		
667+00	11	6	14	8
667+50	26	34	5	18
668+00	19	42	3	7
668+50	18	34	1	4
669+00	4	20	16	16
669+50	0	4	23	22
670+00	0	0	16	37
670+25	0	0	0	7
	TOTALS	140		119

EARTHWORK USH 41 NORTHBOUND

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
663+95	0	0	0	0
664+00	6	1	9	1
664+50	7	12	11	19
665+00	8	14	11	20
665+50	10	17	11	20
666+00	14	22	11	20
666+50	10	22	18	27
667+00	0	9	250	248
667+50	0	0	471	668
668+00	32	30	38	471
668+50	0	30	505	503
669+00	0	0	473	906
669+50	0	0	0	438
	TOTALS	156		3341

EARTHWORK USH 41 SOUTHBOUND

STATION	CUT AREA S.F.	CUT VOL. C.Y.	FILL AREA S.F.	FILL VOL. C.Y.
666+90	0	0	0	0
667+00	0	0	98	18
667+50	0	0	614	659
668+00	25	23	42	607
668+50	0	0	651	642
669+00	0	0	635	1191
669+50	108	100	26	612
670+00	72	167	6	30
670+50	44	107	4	9
671+00	31	69	4	7
671+50	17	44	2	6
672+00	1	17	1	3
672+15	0	0	0	0
	TOTALS	528		3784



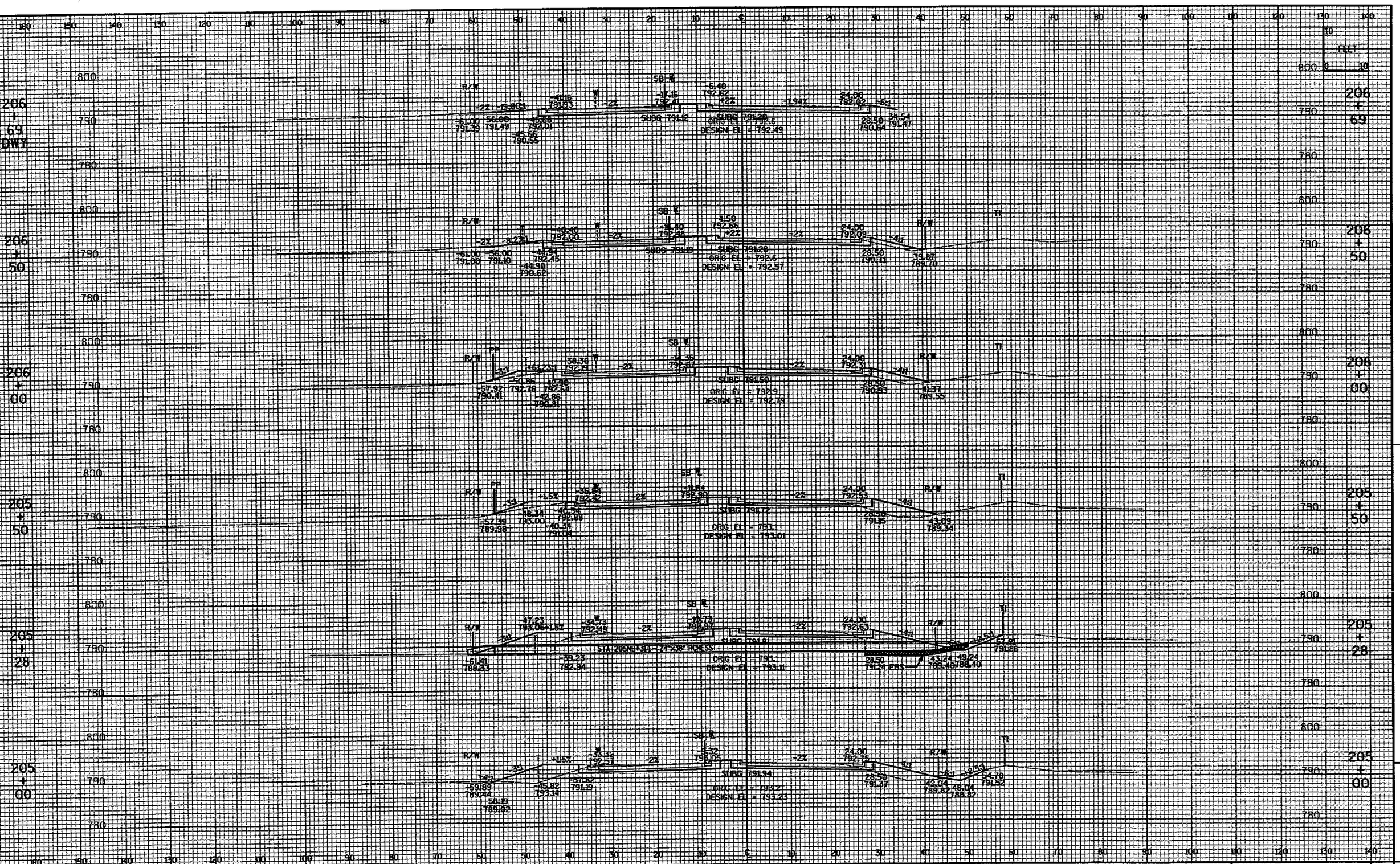
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 213	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X01.dgn PLOT DATE : 03/29/2004 10:37:52 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

9


206 + 69
206 + 50
206 + 00
205 + 50
205 + 28
205 + 00
SB ℄
R/W
SUBG 791.72
ORIG EL = 793.
DESIGN EL = 793.01
SUBG 791.94
ORIG EL = 793.2
DESIGN EL = 793.23
SUBG 791.50
ORIG EL = 792.9
DESIGN EL = 792.79
SUBG 791.20
ORIG EL = 792.6
DESIGN EL = 792.57
SUBG 791.12
ORIG EL = 792.6
DESIGN EL = 792.49
SUBG 791.33
SUBG 791.41
SUBG 791.30
ORIG EL = 792.6
DESIGN EL = 792.49
-2%
-4%
2%
-1.94%
-1.42%
-6%
-5%
-4.5%
-3%
-2.5%
-1.5%
-1%
-0.5%
PP
TI
DWY
24.00
28.50
34.54
35.87
43.09
43.24
49.24
48.04
48.82
54.78
57.96
791.86
789.70
789.34
789.40
789.55
791.52
791.40
790.64
790.71
790.93
791.24 PBS
791.37
791.07
791.35
791.09
791.00
790.62
790.55
790.41
790.91
789.36
791.04
789.44
789.02
789.66
789.33
782.94
792.09
792.02
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792.75
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792.05
792.07
792.19
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792.61
792.83
792.41
792.62
793.06
793.00
793.05
793.14
793.19
793.00
793.36
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791.49
791.10
791.39
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791.83
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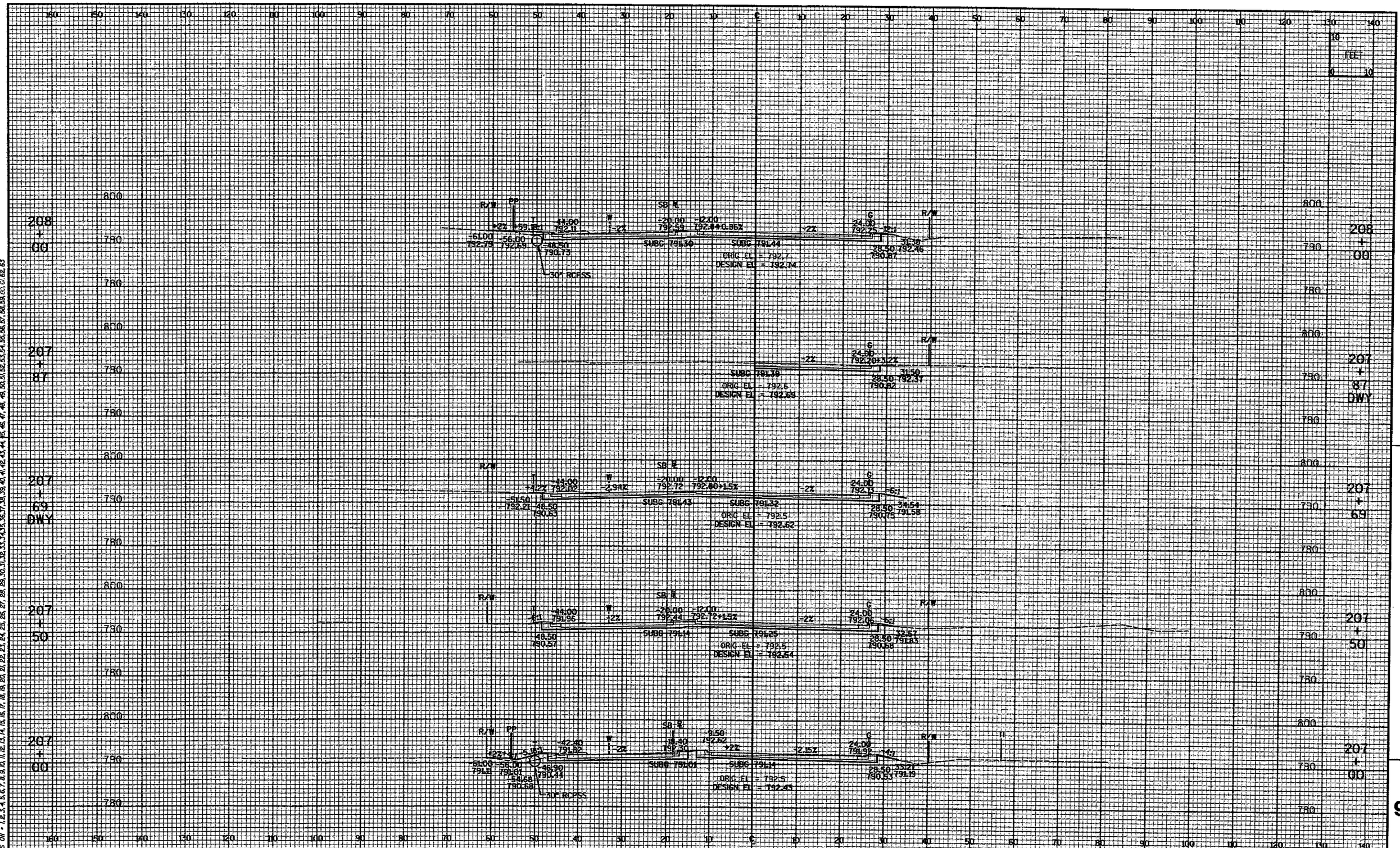
791.52
791.51
791.50



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 215	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X03.dgn PLOT DATE : 02/02/2004 08:30:21 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

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

211 + 00

210 + 50

210 + 00

CAPITOL DRIVE

209 + 50

209 + 00

208 + 50

R/W
T
E
-44.00
793.58
-4%
-2%
-20.00
796.06
+2%
793.82
-8.00
5.46%
24.00
793.46
-2%
-6%
+4%
W
R/W
53.41
792.65
SUBG 792.77
SUBG 792.52
ORIG EL = 794.0
DESIGN EL = 793.81
28.50
792.20
42.50
793.39
47.82
92.36
46.75
792.69

R/W
T
E
-44.00
793.34
+1.2%
-1.68%
-20.00
795.86
+1%
-1.68%
E
C
25.49
793.71
+0.6%
W
-75.00
794.01
-55.50
791.96
SUBG 792.57
SUBG 792.37
ORIG EL = 795.6
DESIGN EL = 793.66
28.99
791.85
42.99
793.69

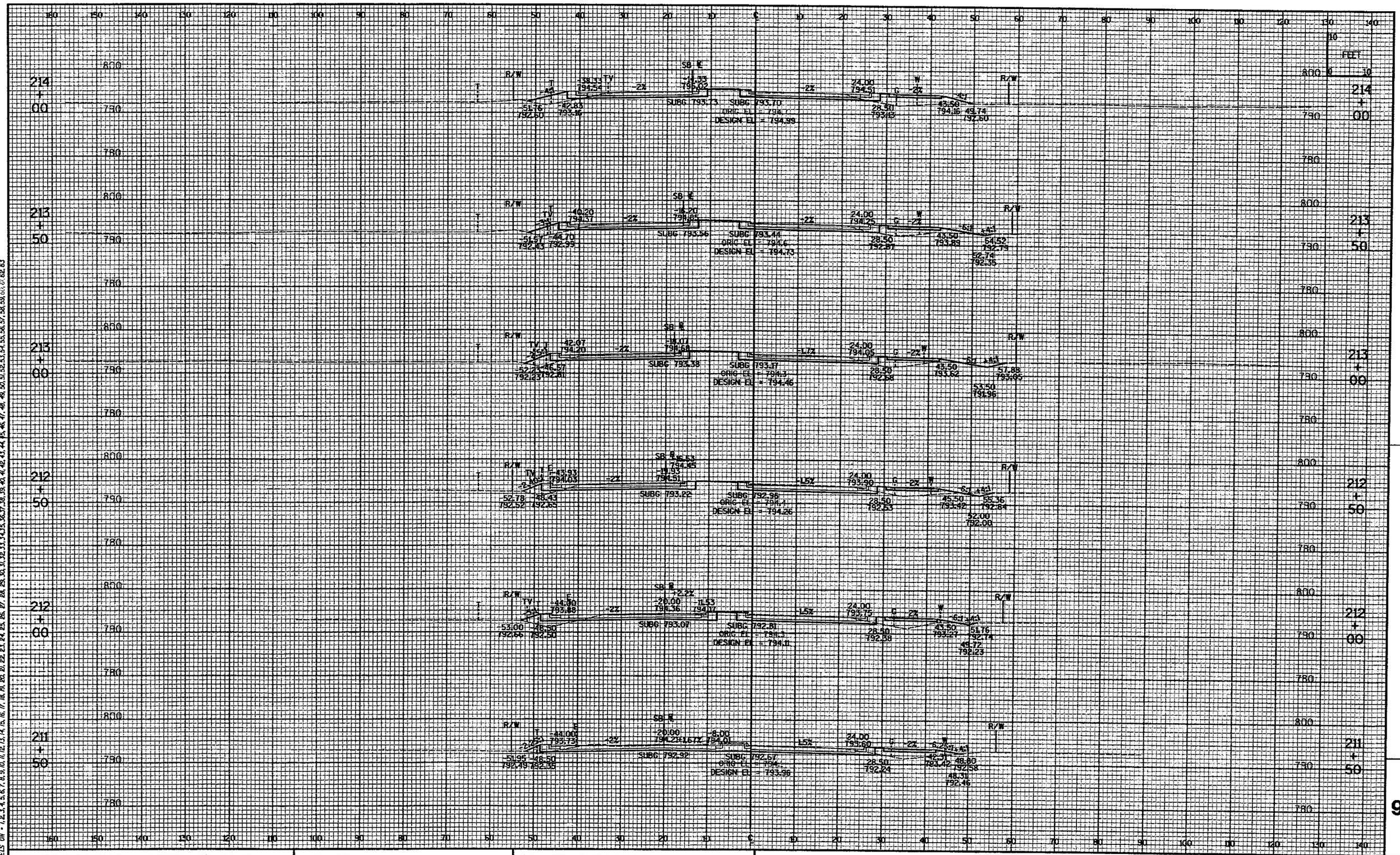
R/W
T
W
-44.00
793.47
-1%
-20.00
796.71
+1%
-0.79%
G
24.00
793.32
E
SUBG 792.32
SUBG 792.22
ORIG EL = 793.5
DESIGN EL = 793.51

R/W
PP
E T
+1.02%
-45.00
793.00
W
-2.08%
-20.00
795.52
+1.02%
-1.93%
C
30.97
792.74
+0.32%
R/W
T
-57.00
793.46
49.58
791.62
SUBG 792.23
SUBG 792.02
ORIG EL = 793.2
DESIGN EL = 793.32
35.47
791.34
38.85
793.18

R/W
PP
T
-44.00
792.64
W
2.00%
-20.00
795.12
12.00
795.27
1.22%
-2%
24.50
792.64
-5%
R/W
-56.00
793.46
48.50
791.26
SUBG 791.83
SUBG 791.83
ORIG EL = 793.
DESIGN EL = 793.12
28.50
791.26
32.12
792.49

R/W
PP
T
-44.00
792.40
W
2.00%
-20.00
795.08
12.00
795.09
1.26%
-2%
24.50
792.85
-5%
R/W
-51.00
793.12
-55.00
793.02
48.50
791.02
SUBG 791.59
SUBG 791.64
ORIG EL = 795.0
DESIGN EL = 792.83
28.50
791.07
28.84
792.84

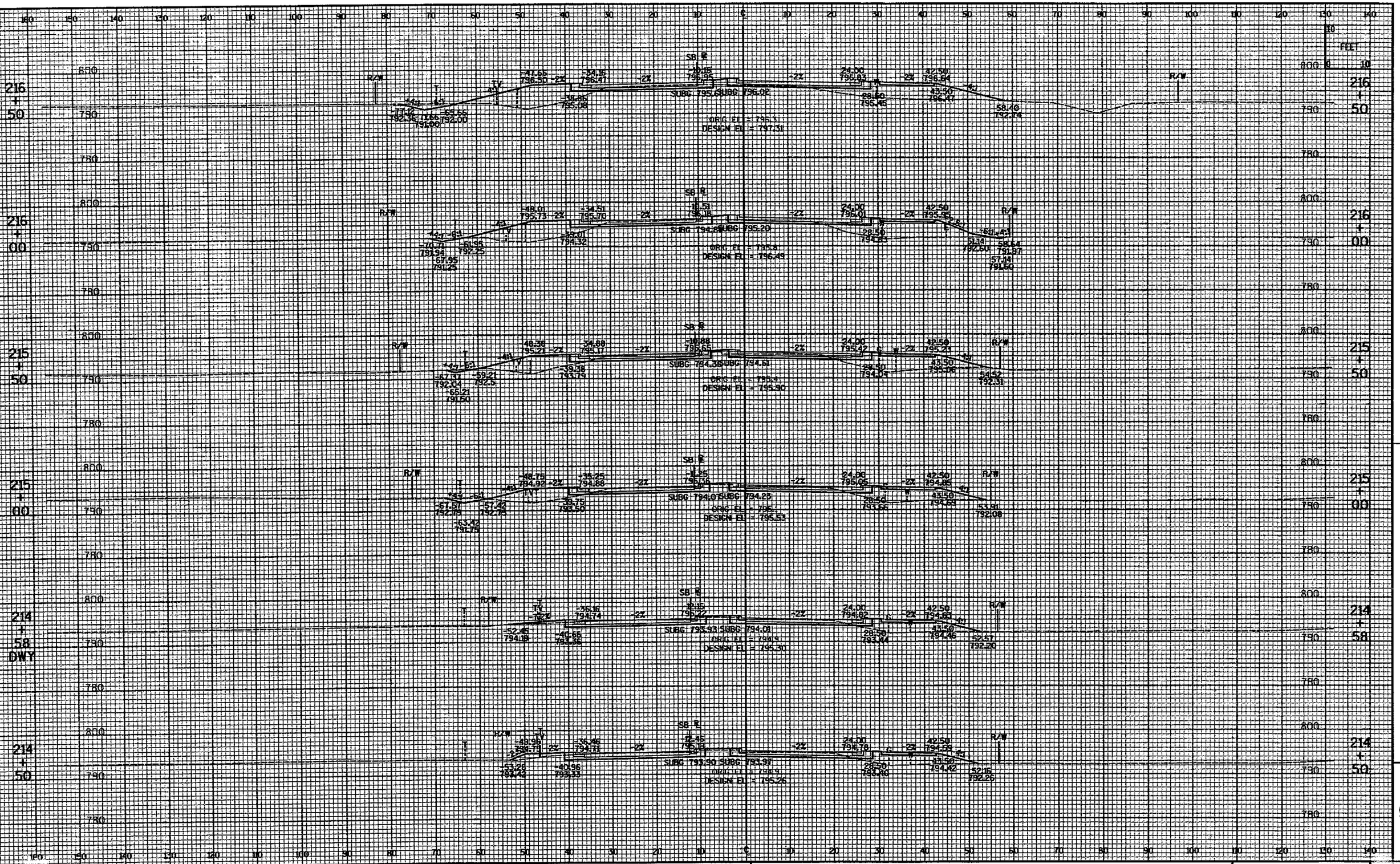
SB R
SB L
FEET
0 10
STATE PROJECT NUMBER: 1123-09-71
HWY: CTH A
COUNTY: OUTAGAMIE
CROSS SECTIONS: CTH A
SHEET NO: 216
E
9
FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X04.dgn
PLOT DATE : 03/26/2004 09:44:31 AM
PLOT BY : hawleym
PLOT NAME :
ORG DATE :
Originator : OMNNI ASSOCIATES, INC.
PLOT SCALE : **.....plotscale.....**
WISDOT/CADDS SHEET 21



STATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 217 E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X05.dgn PLOT DATE : 02/02/2004 10:48:56 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 218

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X06.dgn PLOT DATE : 03/23/2004 01:13:19 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

218 + 50

218 + 00

217 + 59 DWY

217 + 50

217 + 00

PROPOSED 56" RCPSS

ORIG EL = 800.7
DESIGN EL = 802.31

ORIG EL = 799.3
DESIGN EL = 800.95

ORIG EL = 798.2
DESIGN EL = 799.85

ORIG EL = 798.10
DESIGN EL = 799.59

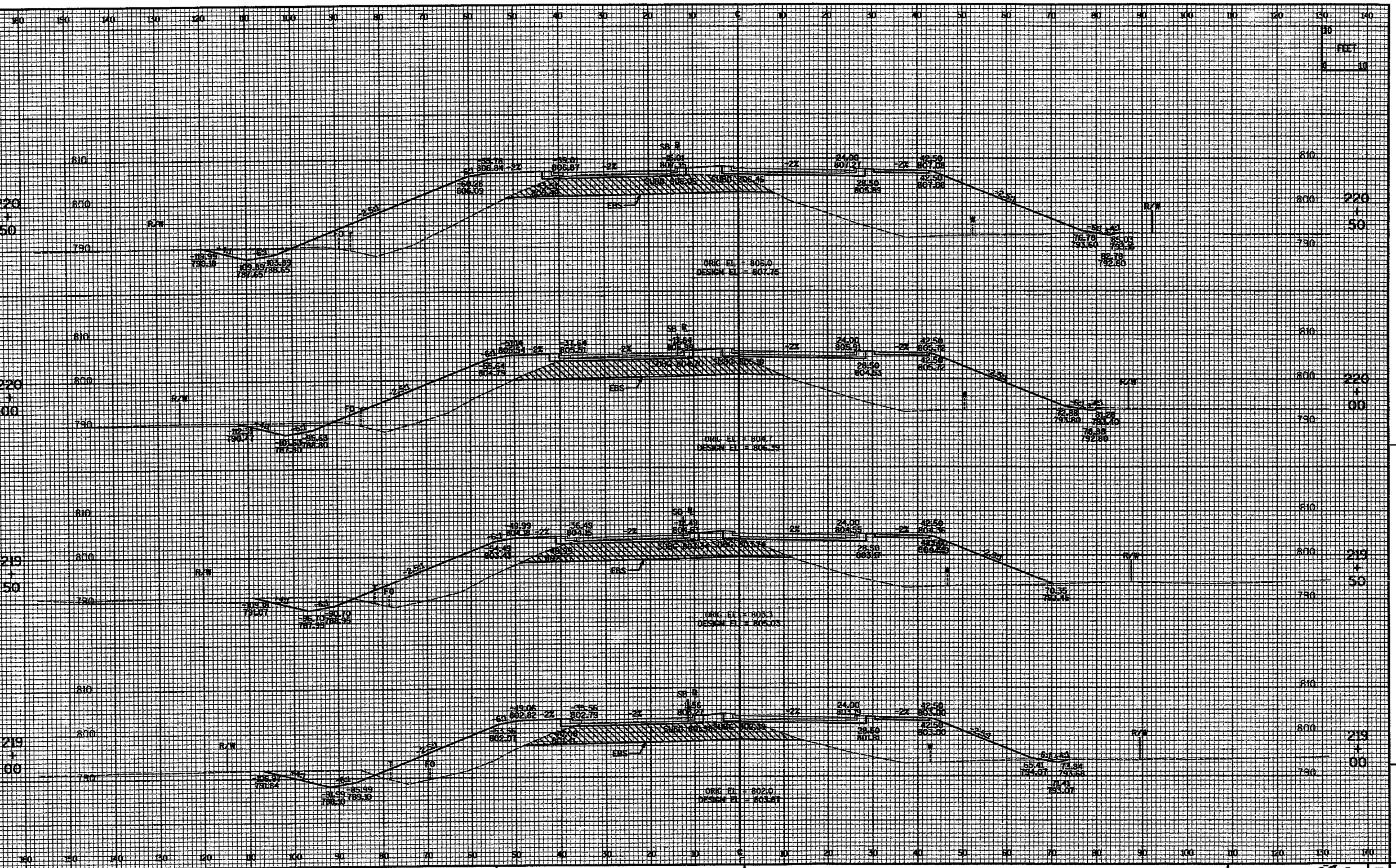
ORIG EL = 797.10
DESIGN EL = 798.34

FEET

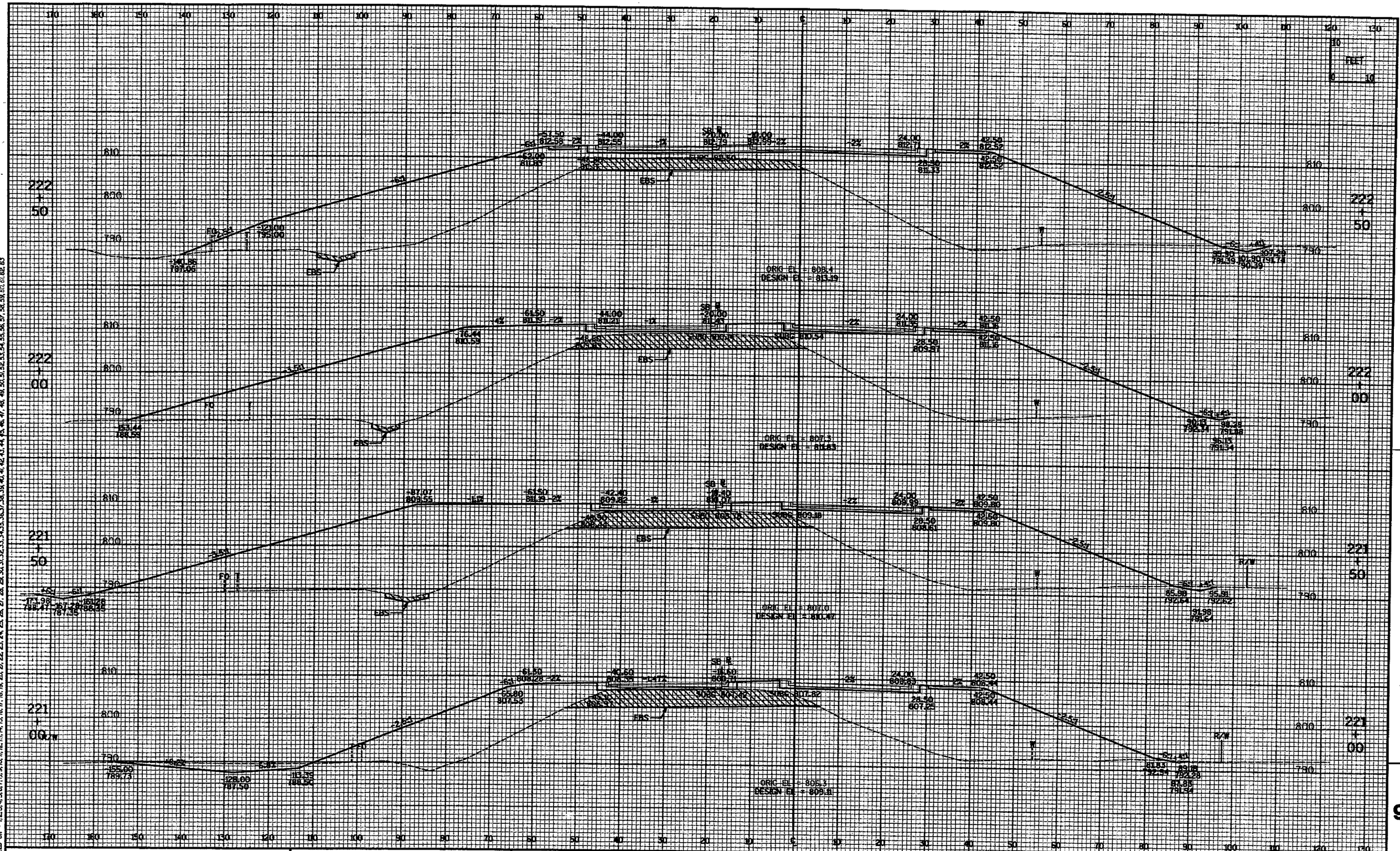
9

STATE PROJECT NUMBER:1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 219	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X07.dgn PLOT DATE : 06/07/2004 10:15:24 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 220	E

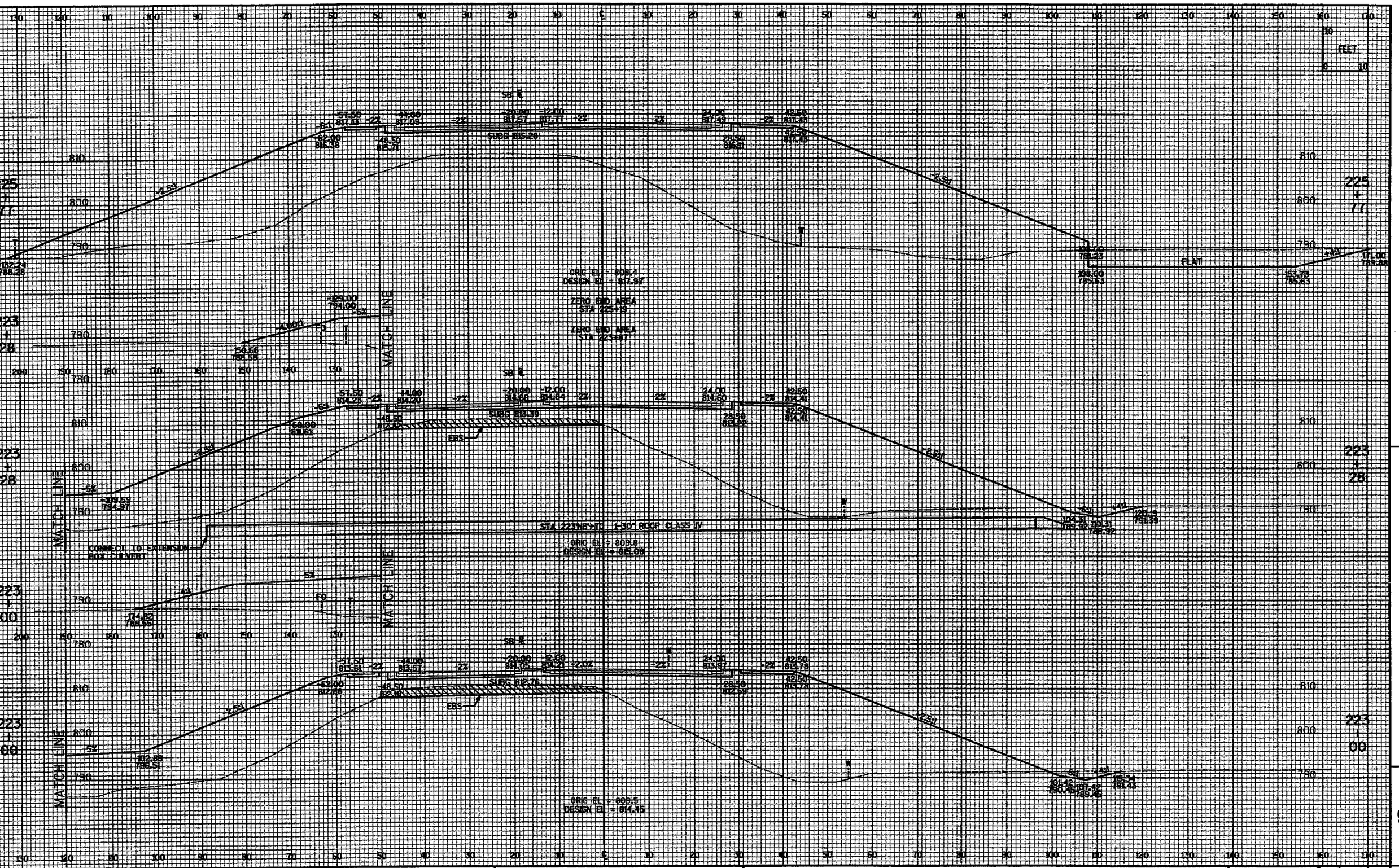


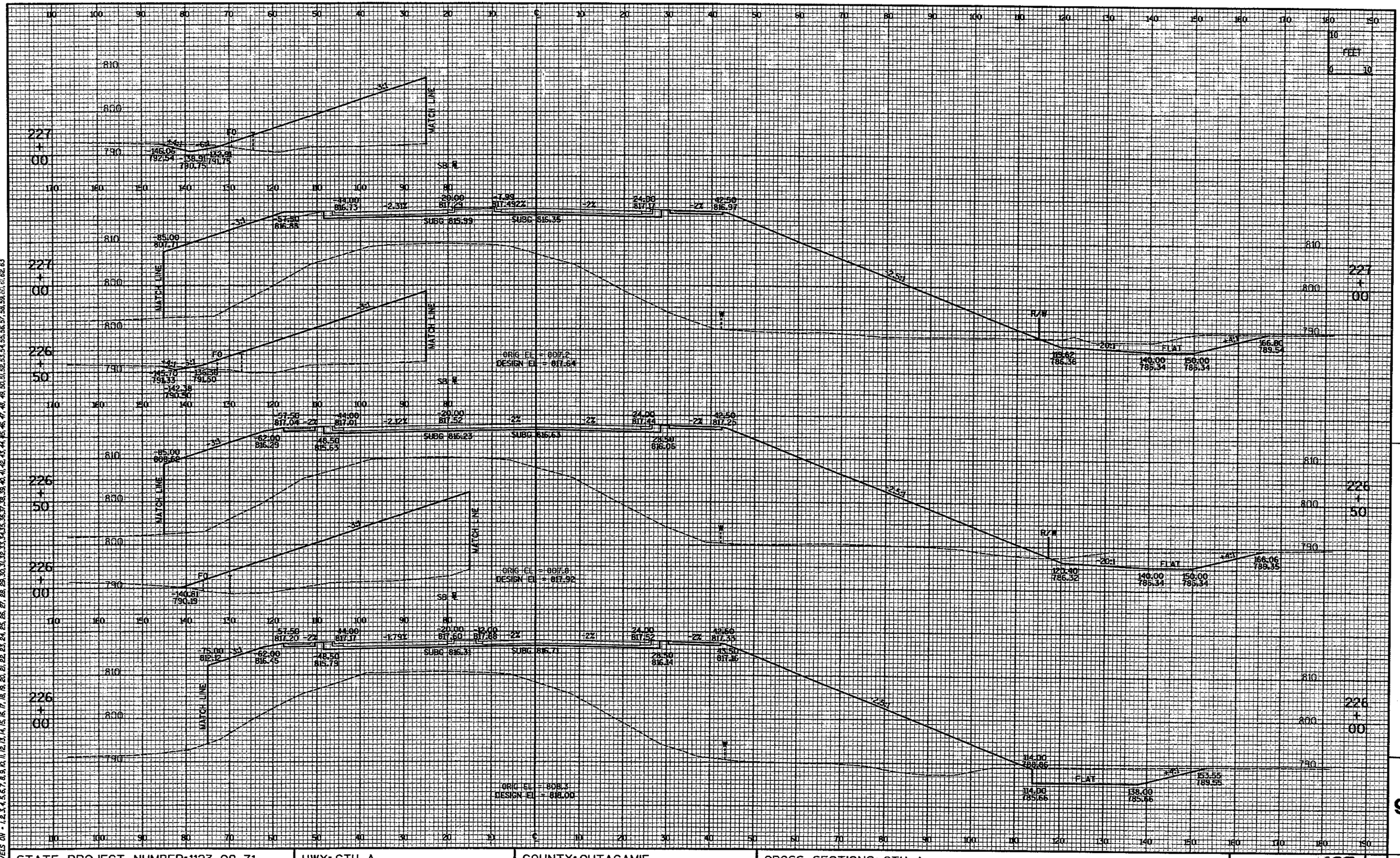
STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 221	E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X09.dgn PLOT DATE : 06/07/2004 10:16:02 AM PLOT BY : fuerstm PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

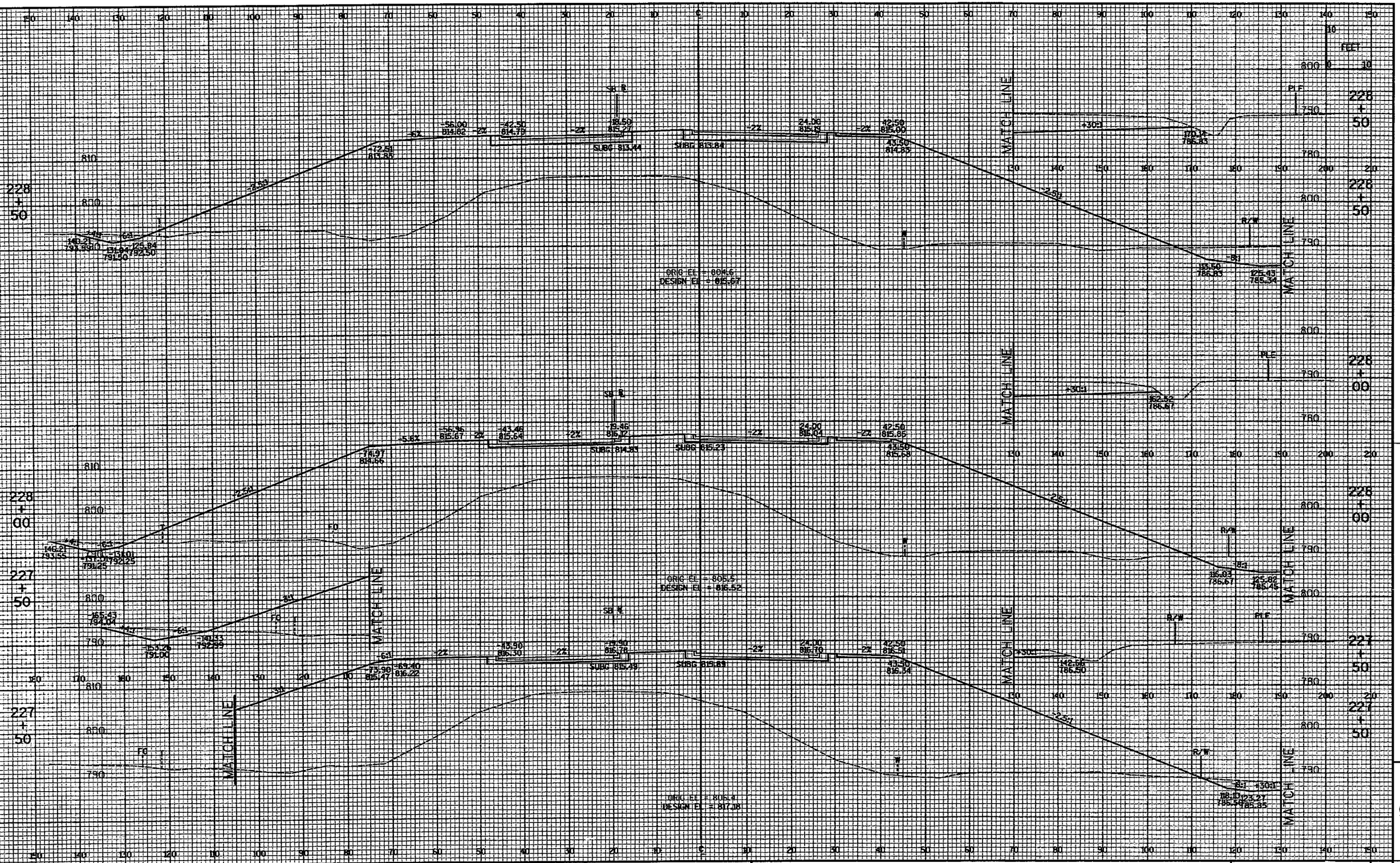
9


SB E
ORIG EL = 808.1
DESIGN EL = 817.97
ZERO END AREA
STA 225+19
ZERO END AREA
STA 223+47
MATCH LINE
SB E
ORIG EL = 809.8
DESIGN EL = 815.08
STA 223+76 1-30" RCCP CLASS IV
CONNECT TO EXTENSION BOX CULVERT
SB E
ORIG EL = 809.5
DESIGN EL = 814.45
FLAT
FEET
0
10



STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH A | SHEET NO: 223 E

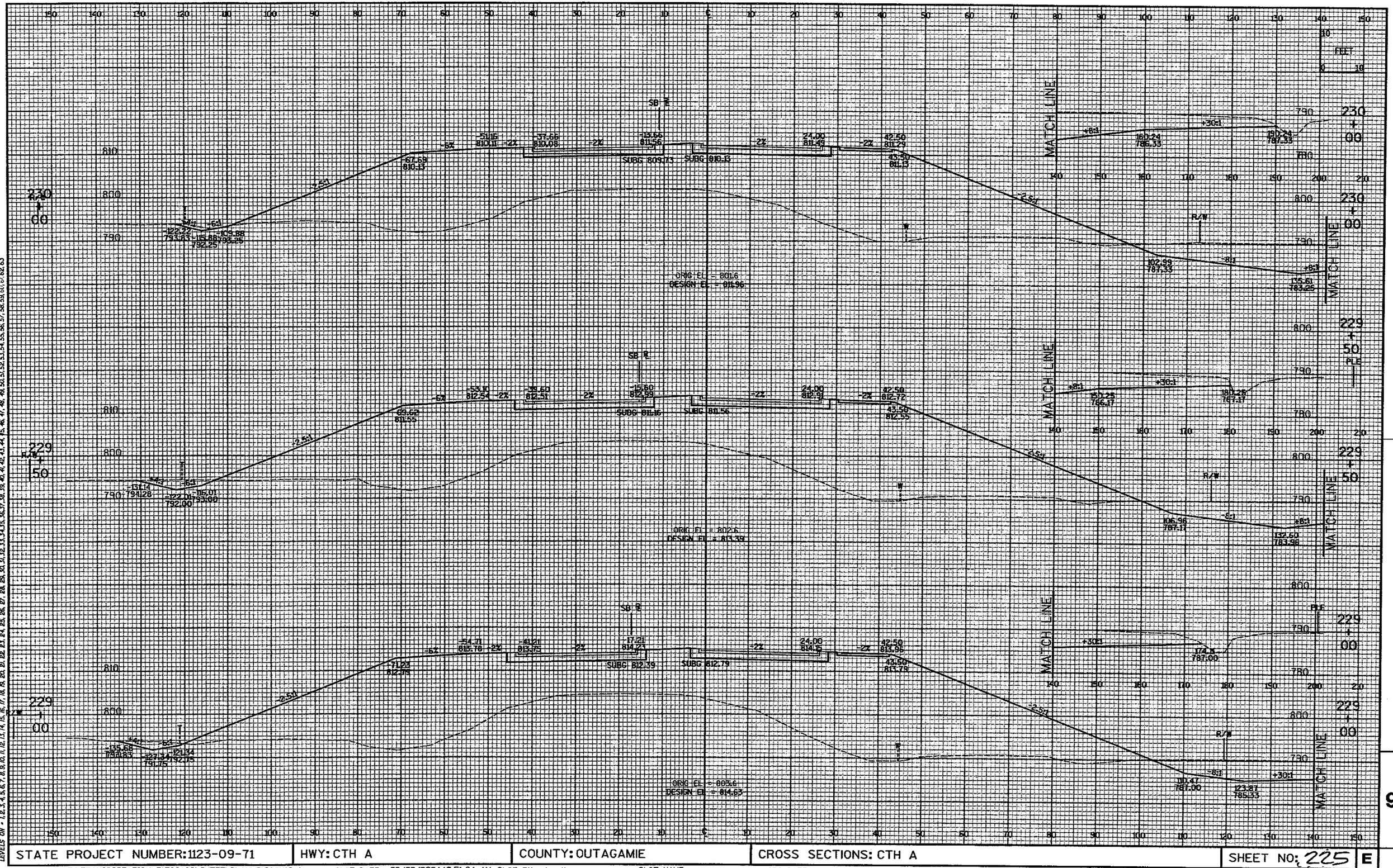
FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X11.dgn PLOT DATE : 03/23/2004 01:58:48 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



9

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH A | SHEET NO: 224 | E

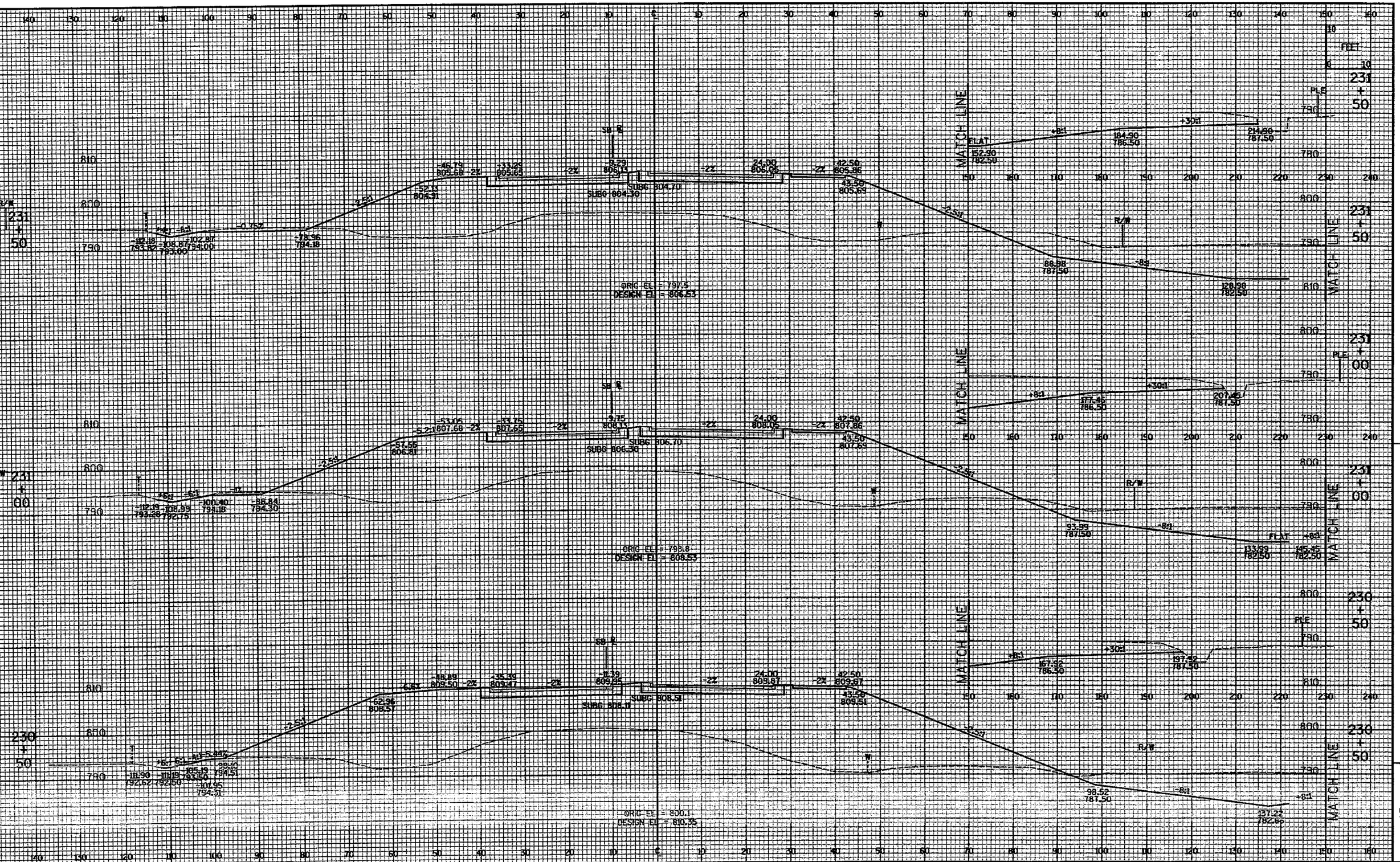
FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X12.dgn PLOT DATE : 03/27/2004 03:37:15 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



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

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 225 E

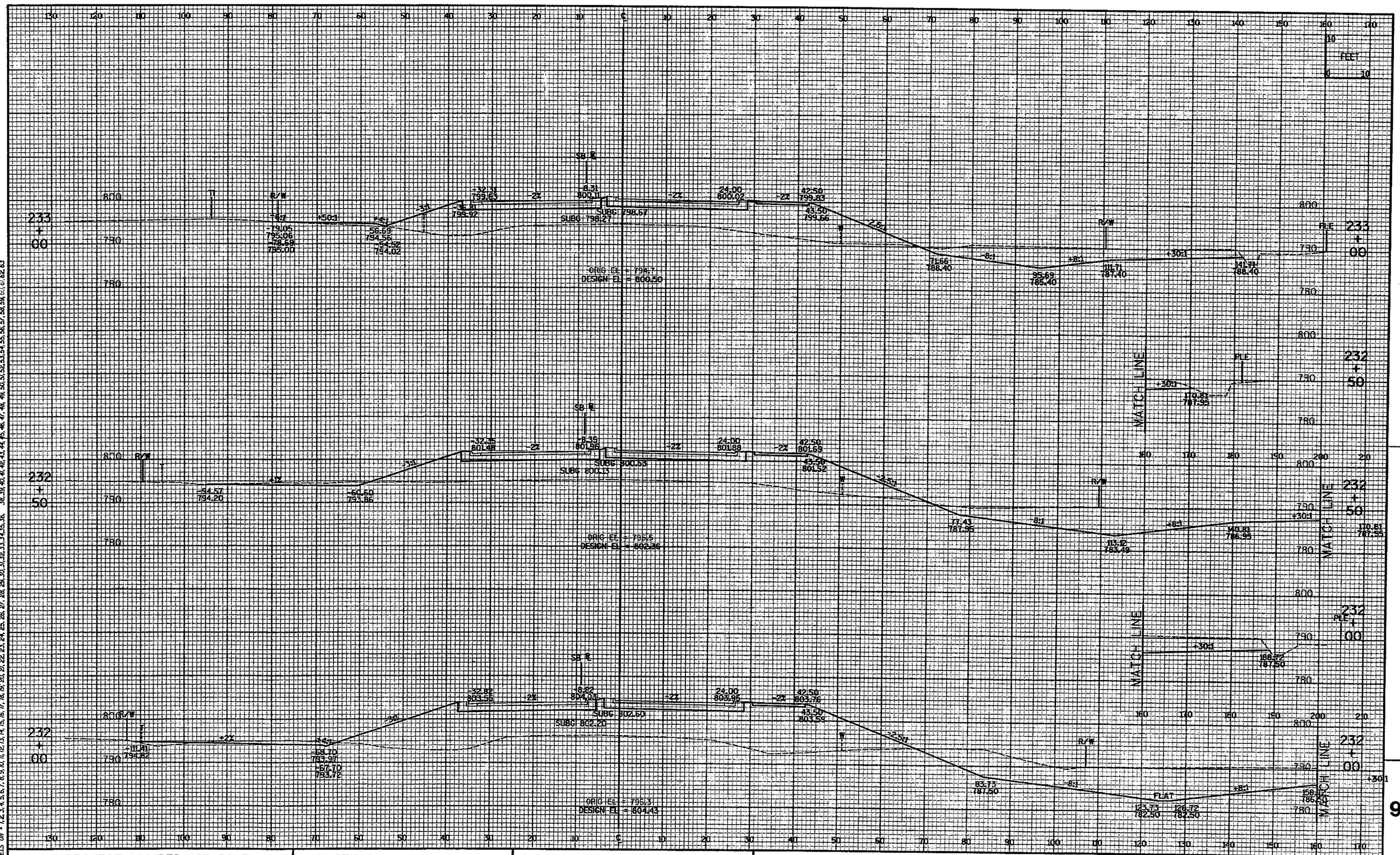
FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X13.dgn PLOT DATE : 02/02/2004 10:51:04 AM PLOT BY : knutho PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



9

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH A | SHEET NO: 226 | E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X14.dgn PLOT DATE : 02/02/2004 10:51:48 AM PLOT BY : knutho PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

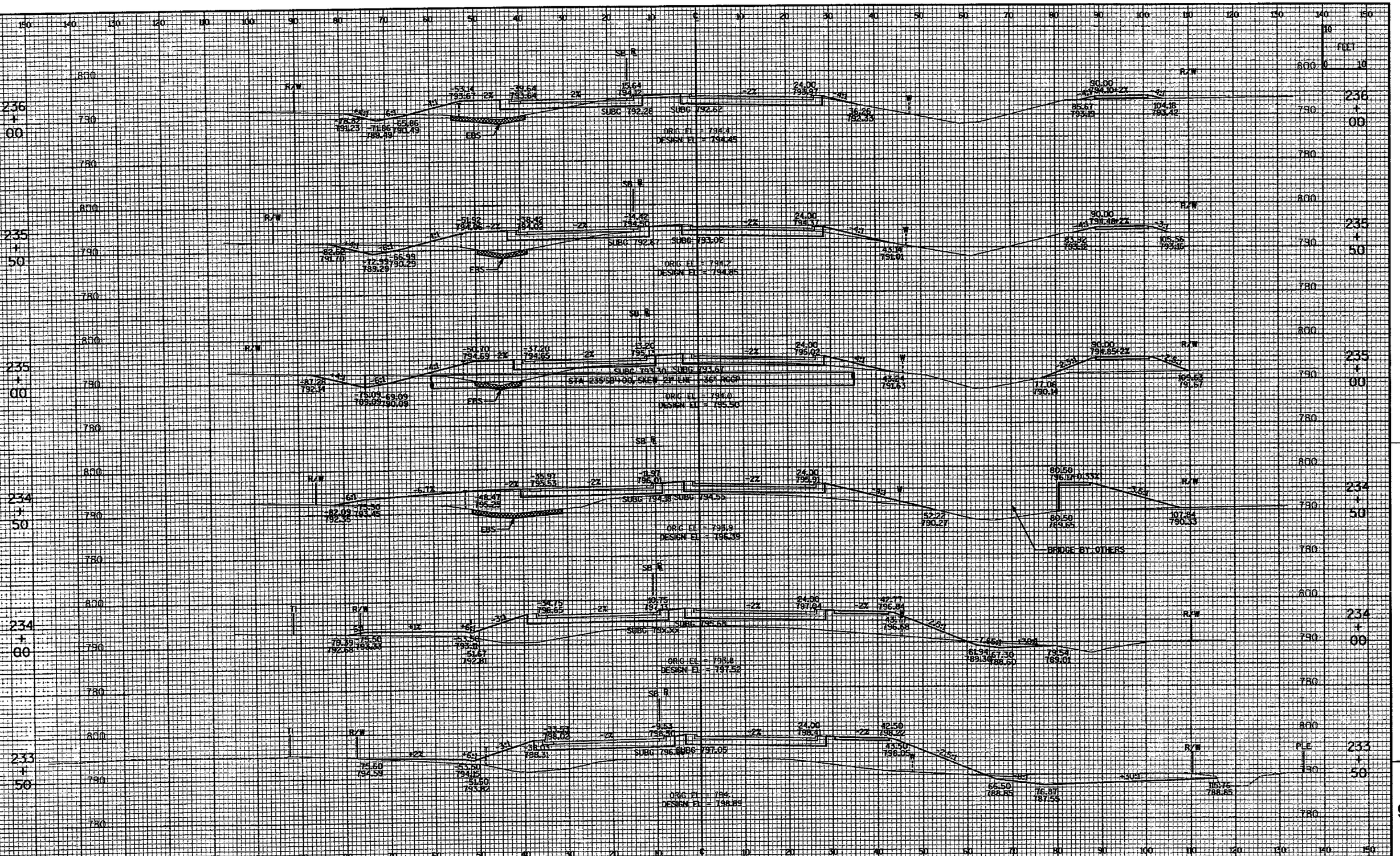


STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 227	E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X15.dgn PLOT DATE : 02/02/2004 10:52:07 AM PLOT BY : knutha PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

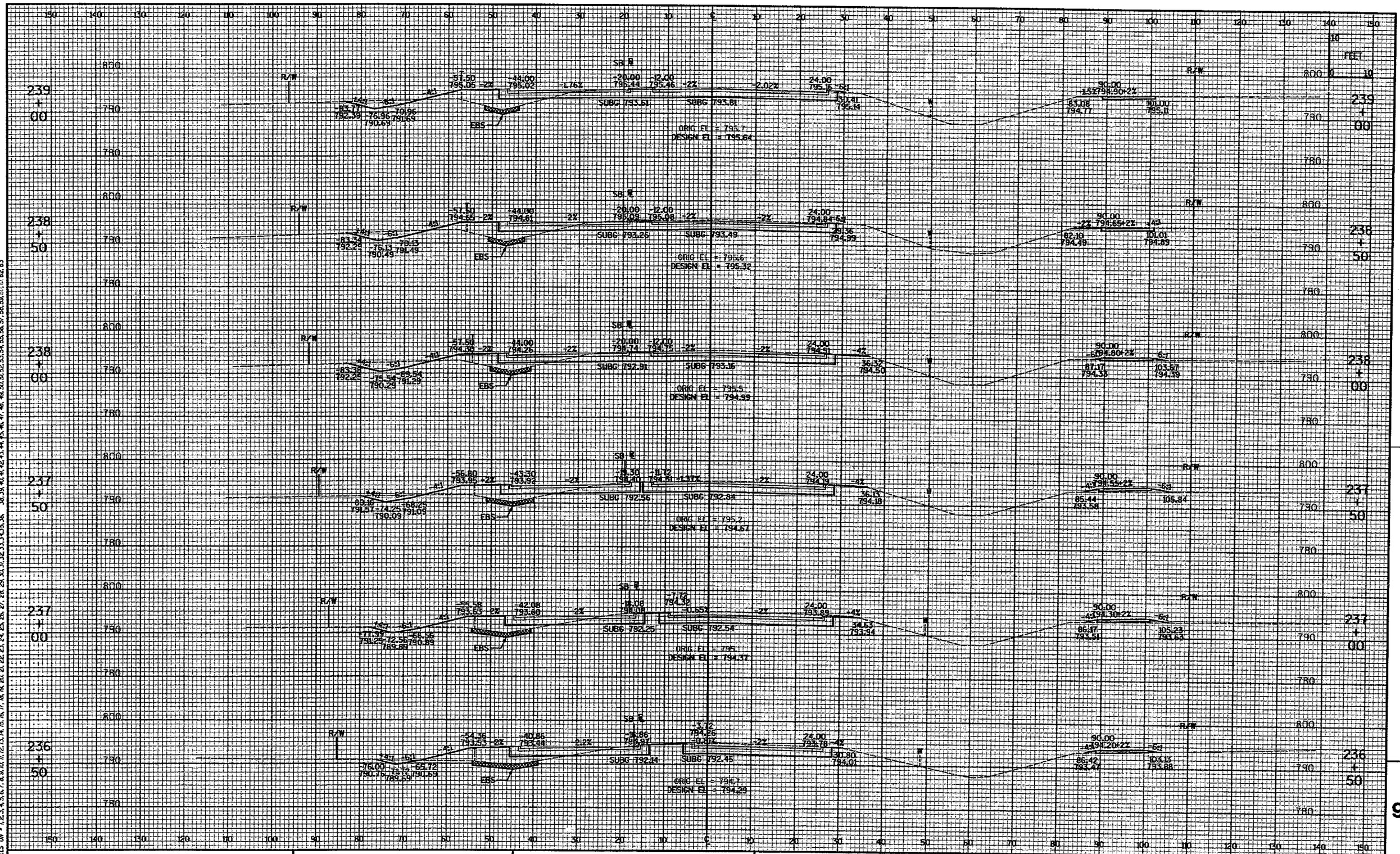
9



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 228 E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X16.dgn PLOT DATE : 03/29/2004 11:33:52 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

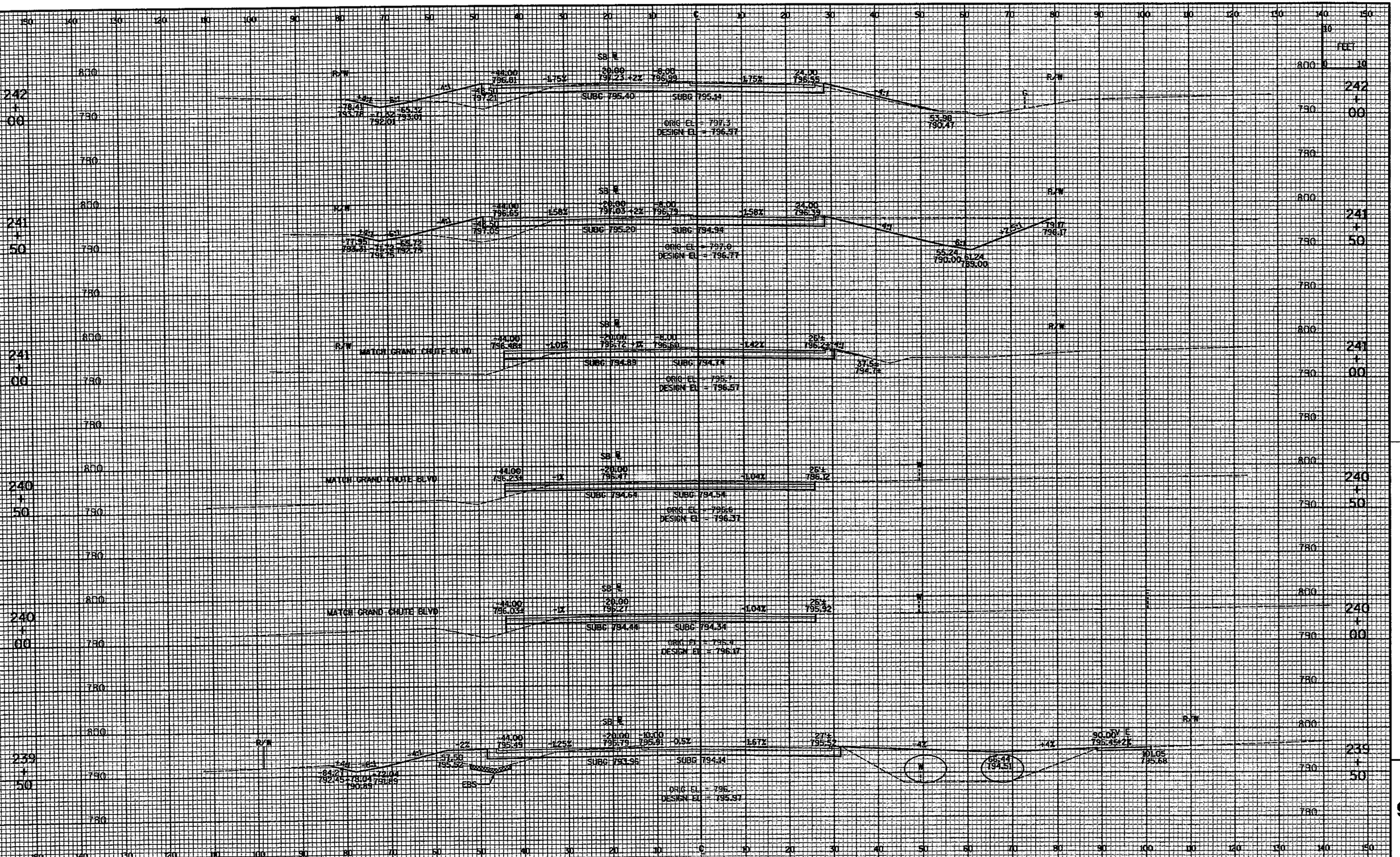
9



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 229 E

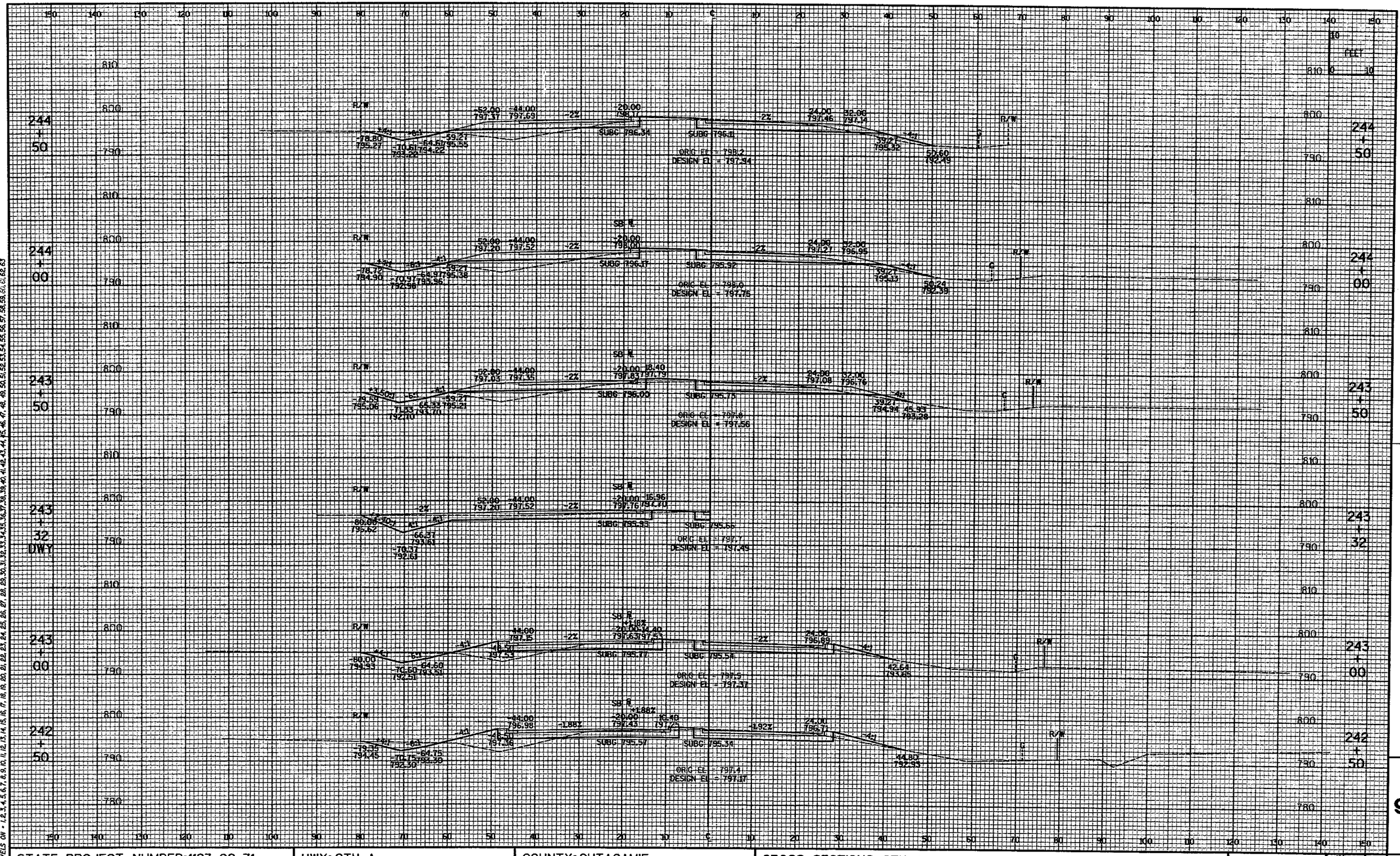
FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X17.dgn PLOT DATE : 02/02/2004 09:13:13 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 230	E

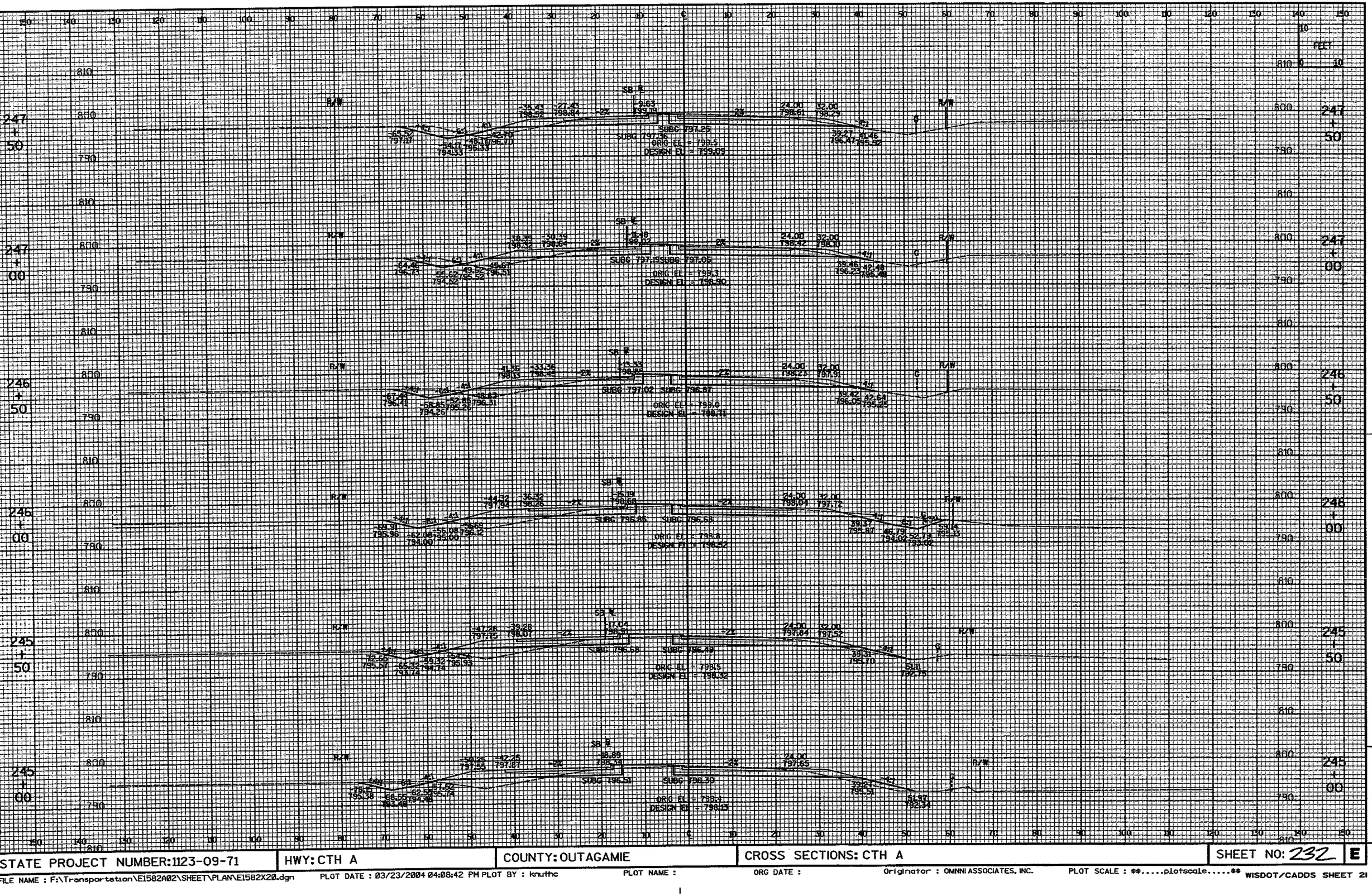
FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X18.dgn PLOT DATE : 02/02/2004 10:52:28 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



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

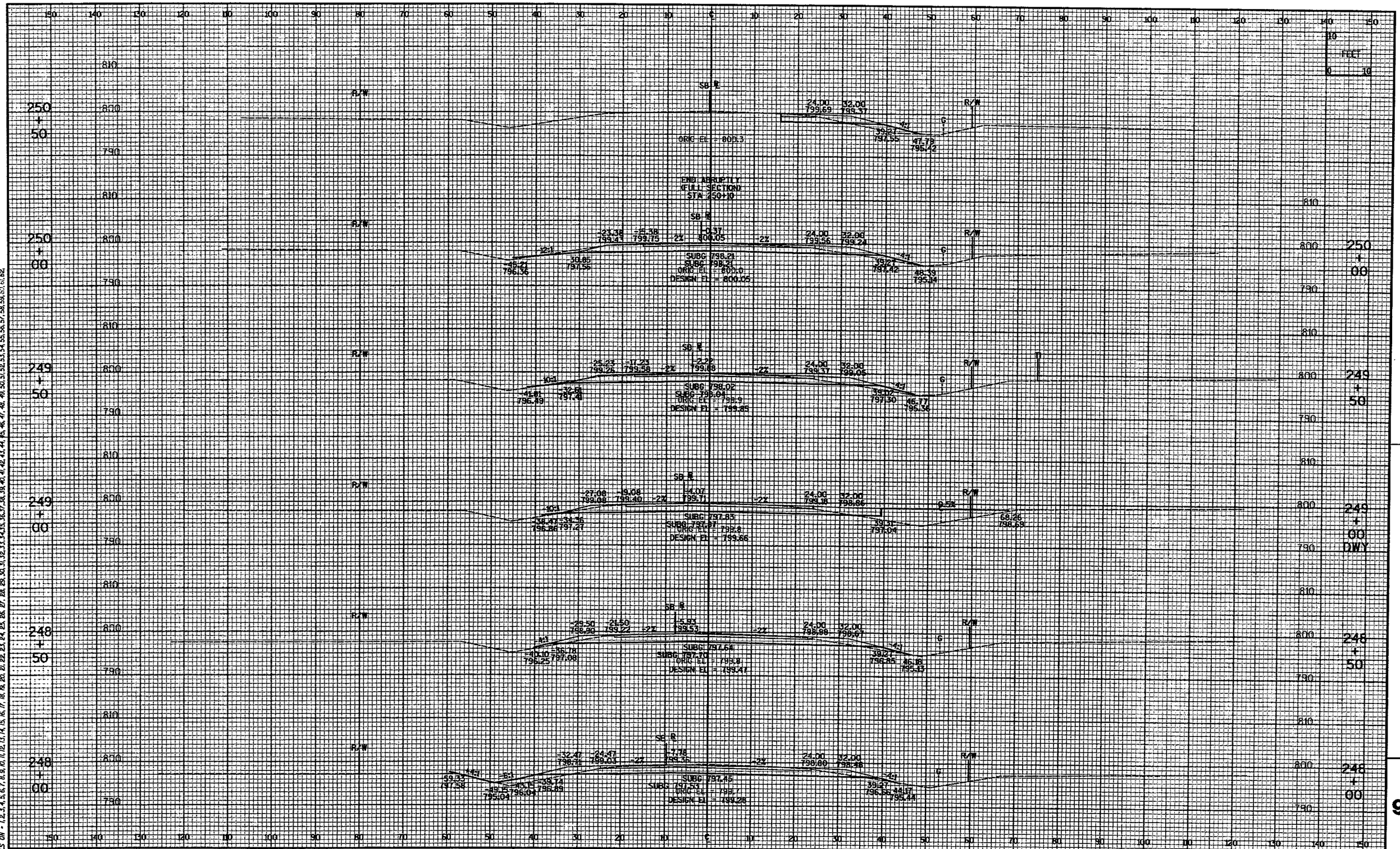
STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 23	E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X19.dgn PLOT DATE : 03/29/2004 11:28:56 AM PLOT BY : knutha PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 21



STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH A | SHEET NO: 232 | E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X20.dgn PLOT DATE : 03/23/2004 04:08:42 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : **.....plotscale.....** WISDOT/CADDS SHEET 21



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: CTH A	SHEET NO: 233 E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X21.dgn PLOT DATE : 03/23/2004 04:35:31 PM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

END ABRUPTLY
STA 252+50

252 + 00

R/W
24.00
800.21
32.00
799.89
4:1
33.27
798.09
6
45.50
796.27
R/W
ORIG EL = 800.9

251 + 50

R/W
24.00
800.09
32.00
799.77
4:1
33.27
797.95
6
47.28
795.95
R/W
ORIG EL = 800.7

251 + 00

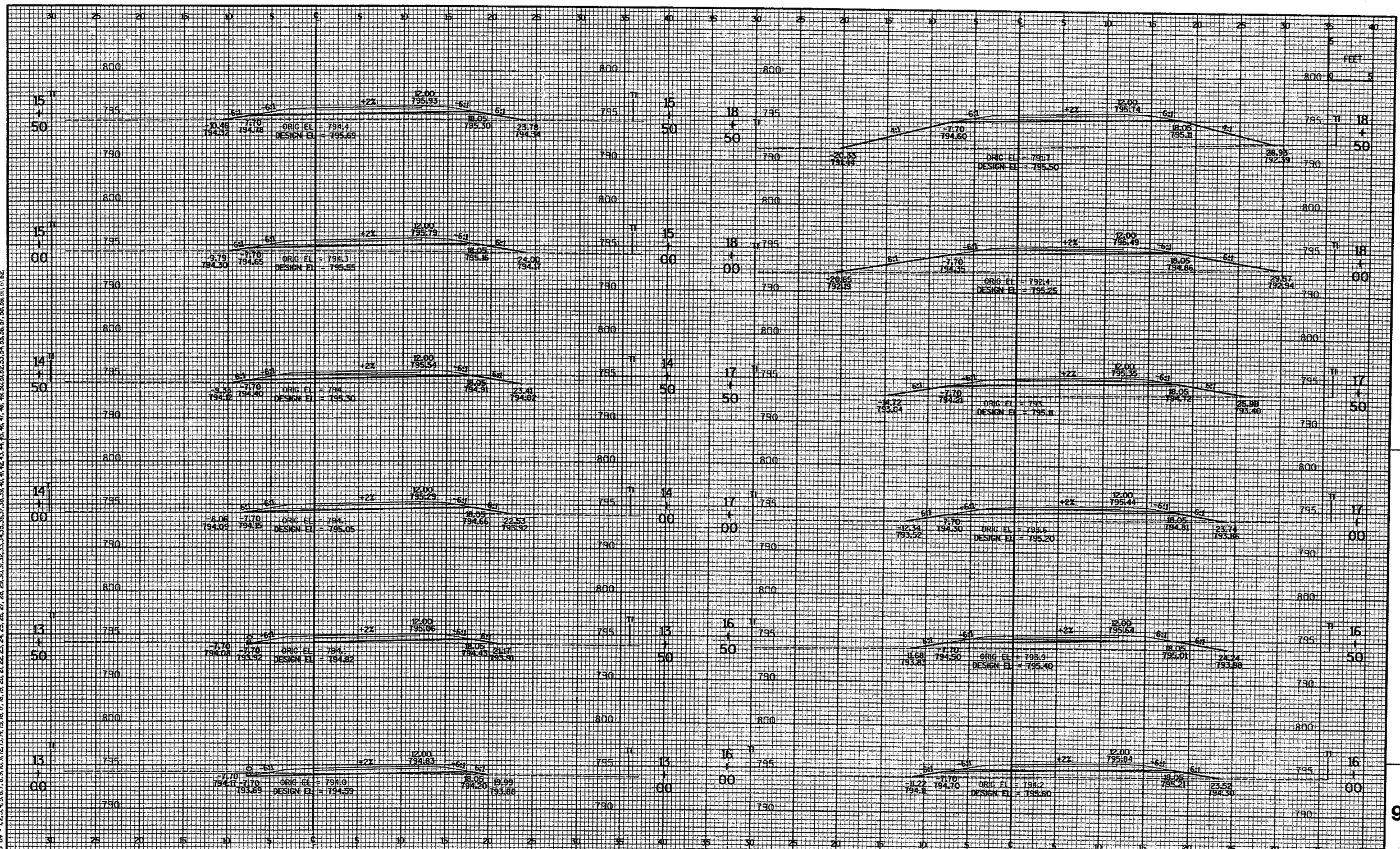
R/W
24.00
799.80
32.00
799.48
4:1
33.27
794.66
6
47.54
795.55
R/W
ORIG EL = 800.5

10 0 10 FEET

9

STATE PROJECT NUMBER:1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: CTH A | SHEET NO: 234 | E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X22.dgn PLOT DATE : 03/23/2004 04:39:58 PM PLOT BY : knutha PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

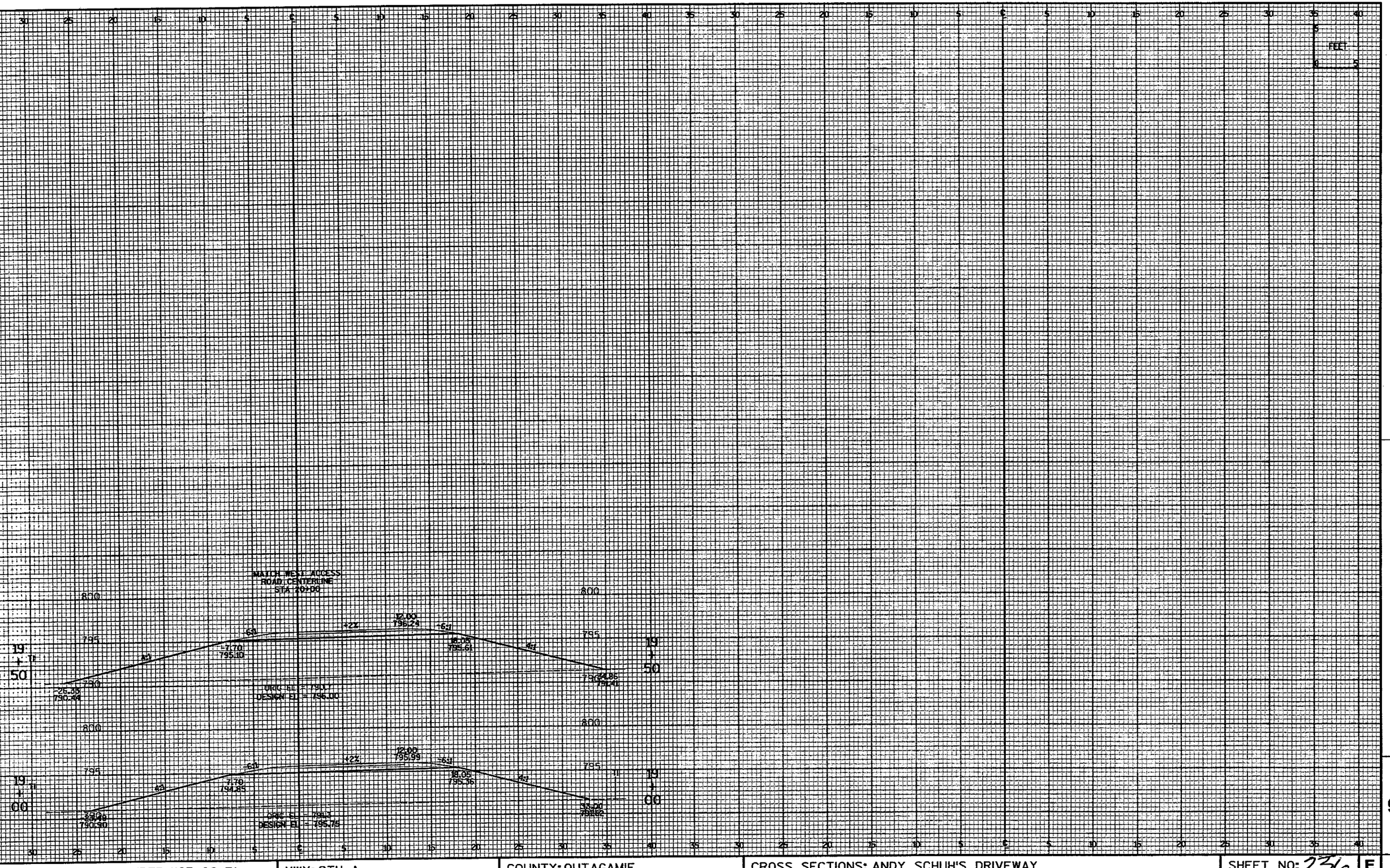


LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,

STATE PROJECT NUMBER: 1123-09-02	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: ANDY SCHUH'S DRIVEWAY	SHEET NO: 235	E

9

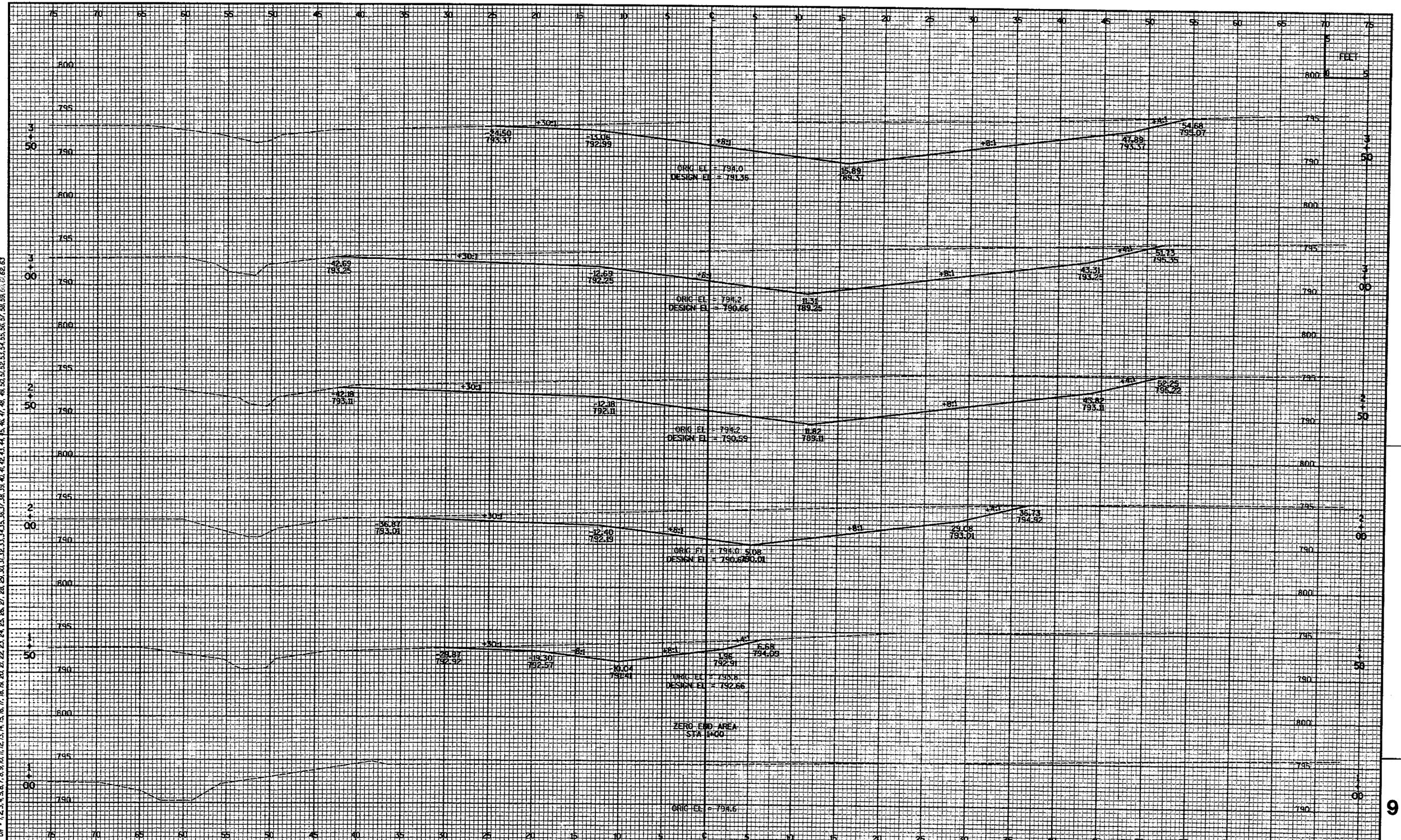
FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X1A.dgn PLOT DATE : 02/02/2004 10:57:47 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



9

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: ANDY SCHUH'S DRIVEWAY | SHEET NO: 236 | E

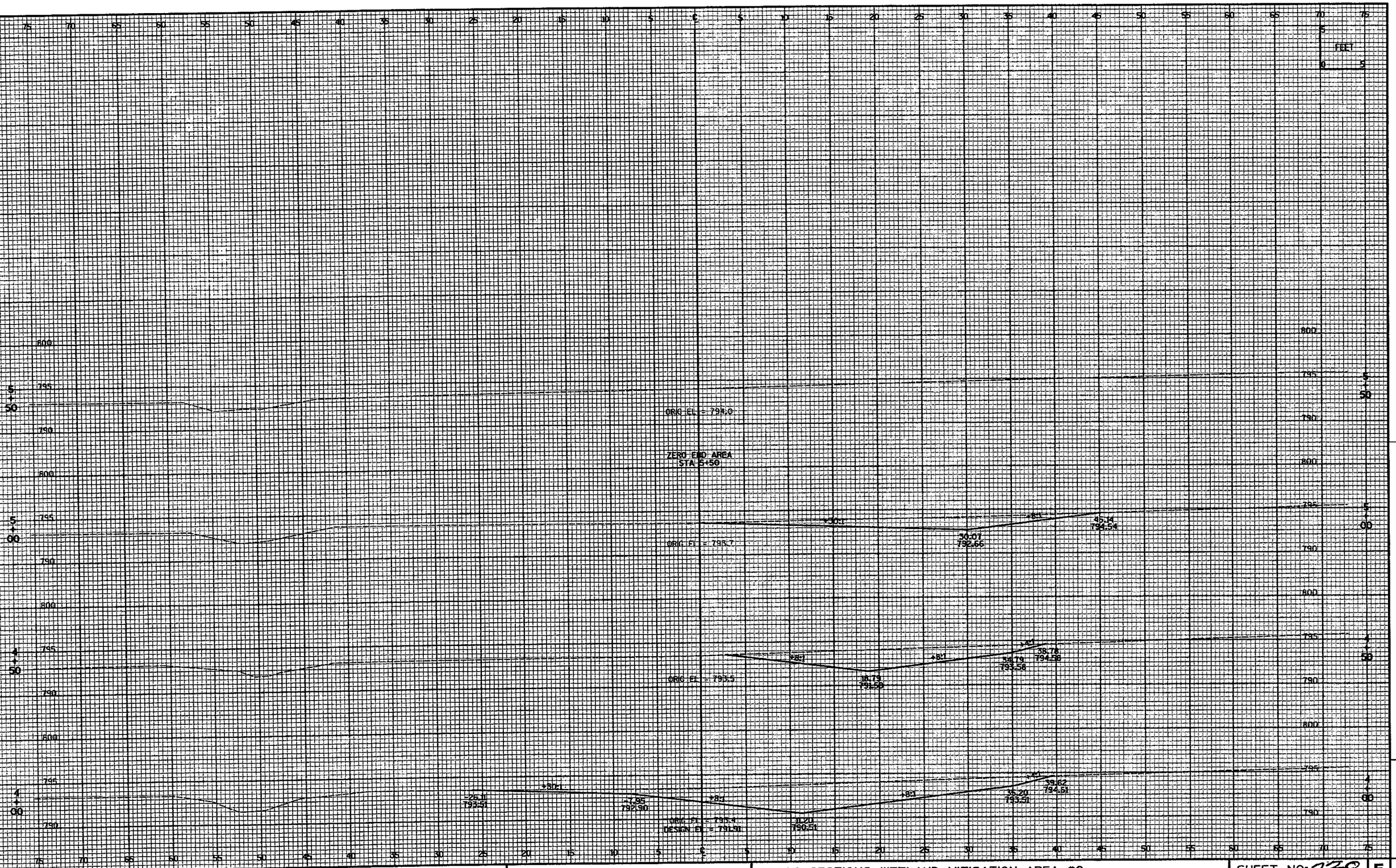
FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X2A.dgn PLOT DATE : 02/02/2004 10:58:15 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



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

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: WETLAND MITIGATION AREA #2	SHEET NO: 237	E

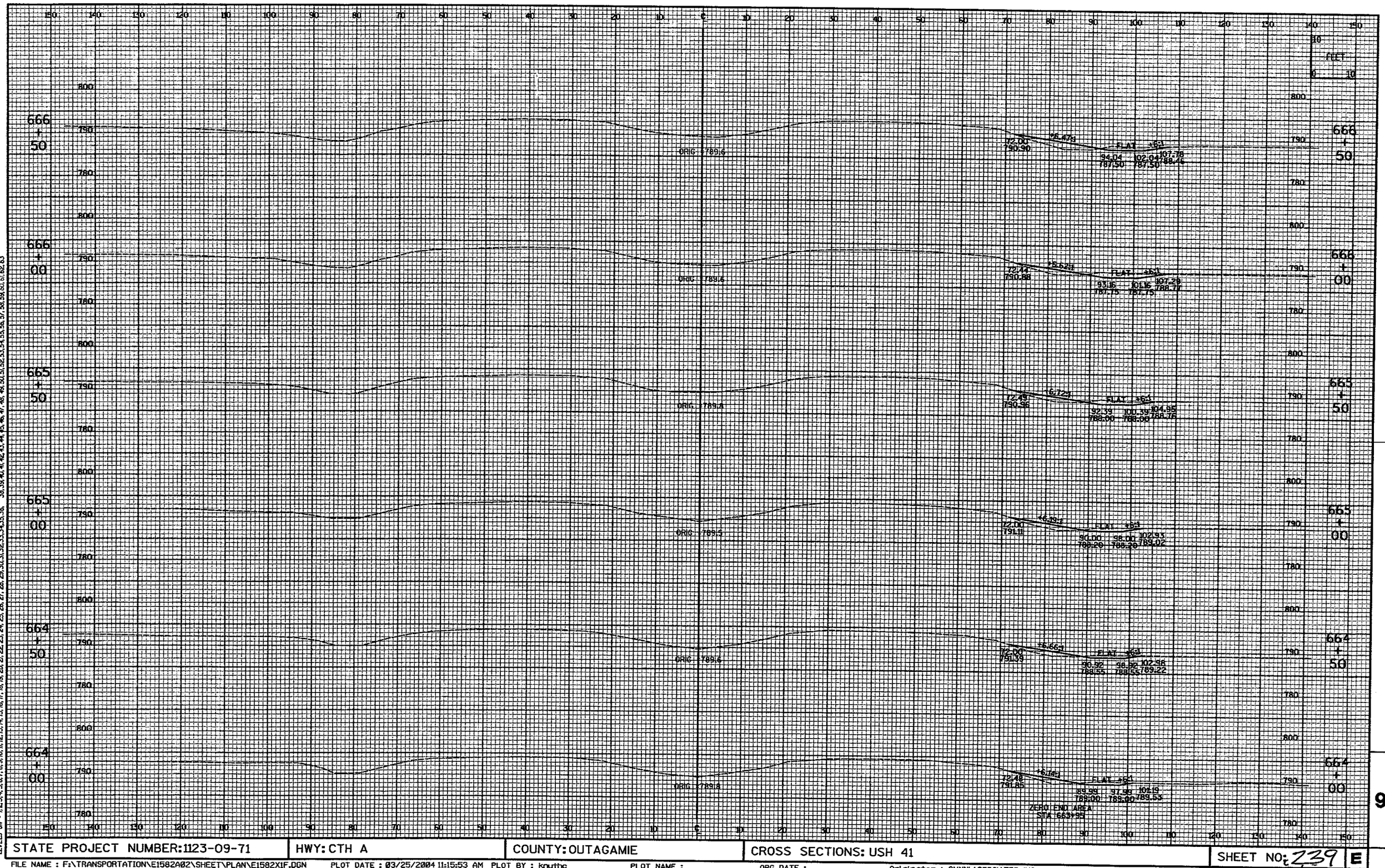
FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X1W.dgn PLOT DATE : 02/02/2004 10:58:35 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: WETLAND MITIGATION AREA #2	SHEET NO: 238 E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X2W.dgn PLOT DATE : 02/02/2004 10:59:02 AM PLOT BY : knuthc PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

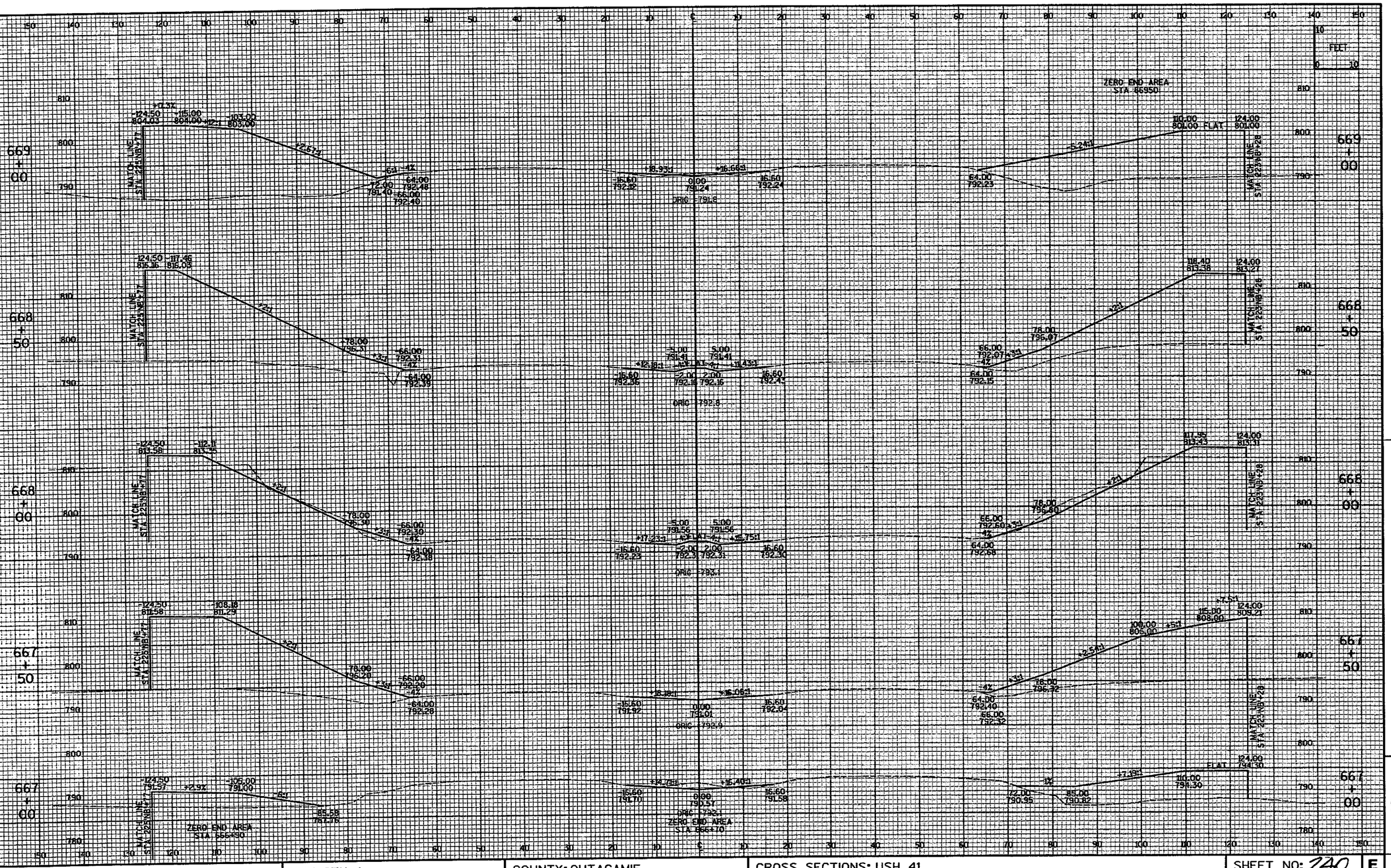


LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER: 1123-09-71	HWY: CTH A	COUNTY: OUTAGAMIE	CROSS SECTIONS: USH 41	SHEET NO: 239 E

FILE NAME : F:\TRANSPORTATION\E1582A02\SHEET\PLAN\E1582X1F.DGN PLOT DATE : 03/25/2004 11:15:53 AM PLOT BY : knutha PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9



STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: USH 41 | SHEET NO: 240 | E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X2F.dgn PLOT DATE : 03/31/2004 08:32:03 AM PLOT BY : hawleym PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

9

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, 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

ZERO END AREA
STA 672+15

672 + 00

-88.48
789.59
+6:1
-72.00
792.34
ORIG 790.4

671 + 50

-116.66
790.50
+6:1
FLAT
101.38
788.95
-91.58
788.55
+8.81:1
-72.00
792.15
ORIG 790.5

671 + 00

-114.98
790.12
+6:1
FLAT
-103.74
788.25
-83.74
788.25
+6:1
-72.00
791.67
ORIG 790.5

670 + 50

-121.55
789.90
+6:1
FLAT
-107.17
787.50
-97.17
787.50
+6:1
72.00
791.10
ORIG 790.2

ZERO END AREA
STA 670+25

670 + 00

-128.58
789.82
+6:1
FLAT
-115.19
786.75
-109.19
786.75
+6:1
72.00
791.45
+9.05:1
-15.60
792.05
0.00
789.84
+7.38:1
16.60
792.24
ORIG 789.9

MATCH LINE
STA 225+00

669 + 50

-124.50
785.66
1.8%
-105.68
786.00
+6:1
-67.67
792.35
ZERO END AREA
STA 669+00
+10:1
-15.60
791.79
3.00
789.84
+5.71:1
15.60
791.87
ORIG 789.5

669 + 00

9

STATE PROJECT NUMBER: 1123-09-71 | HWY: CTH A | COUNTY: OUTAGAMIE | CROSS SECTIONS: USH 41 | SHEET NO: 24 | E

FILE NAME : F:\Transportation\E1582A02\SHEET\PLAN\E1582X3F.dgn PLOT DATE : 03/31/2004 08:31:20 AM PLOT BY : hawleym PLOT NAME : ORG DATE : Originator : OMNNI ASSOCIATES, INC. PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 2