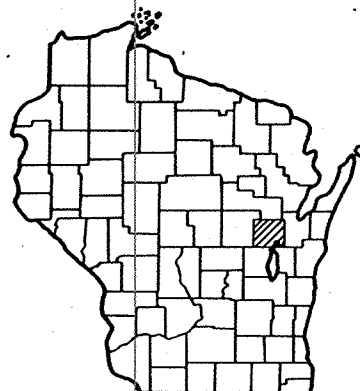


Index of Sheets

Sheet No.	1	Title
Sheet No.	2-2.4	Typical Sections and Details
Sheet No.	3-3.1	Estimate of Quantities
Sheet No.	2.4	Miscellaneous Quantities
Sheet No.	-	Right of Way Plat
Sheet No.	5-5.1	Plan and Profile
Sheet No.	6-6.5	Standard Detail Drawings
Sheet No.	-	Standard Sign Plates
Sheet No.	-	Structure Plans
Sheet No.	-	Computer Earthwork Data
Sheet No.	9-9.2	Cross Sections

TOTAL SHEETS = 19



INTERSECTION Design Designation

	C.T.H."CE"	S.T.H."55"
A.D.T. (1983)	= 4900	8200
A.D.T. (2003)	= 7300	12,100
D.H.V.	= 12%	12%
D.	= 50-50	50-50
T.	= 5% ADT.	5% ADT.
V.	= 50 M.P.H.	50 M.P.H.

Conventional Signs

County Line	-----
Township or Range Line	-----
Section Line	-----
Corporate or City Limits	-----
Property line	-----
Lot Line	-----
Existing Right of Way Line	-----
New Right of Way Line	-----
Base or Survey Line	-----
Slope Intercept	-----
Existing Roadway or Private Entrance	-----

Caution Symbol (Combustible fluids under pressure)	-----
Railroads	-----
Fence	-----
Culverts in Place	-----
Culverts Required	-----
Power Pole	-----
Telephone or Telegraph Pole	-----
Right of Way Markers	-----
Marsh	-----
Wooded Area	-----
Grade Elevation	-----

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

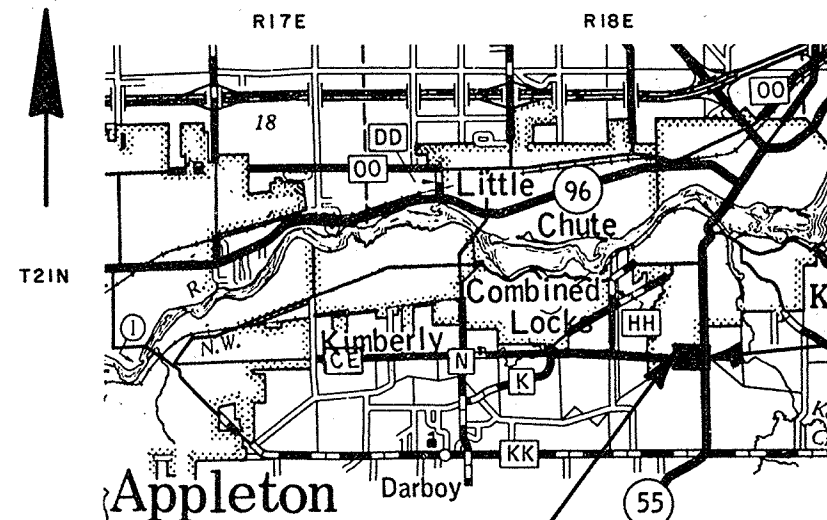
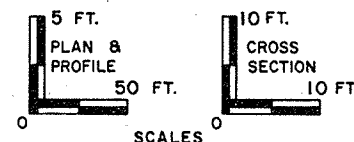
S.T.H. 55 & C.T.H. "CE" INTERSECTION

CITY OF KAUKAUNA

C.T.H. "CE"

OUTAGAMIE COUNTY

STATE PROJECT NUMBER
4656-2-71



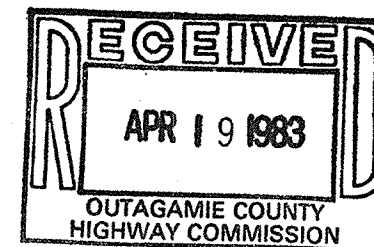
END PROJECT
STA. 99+78

BEGIN PROJECT
STA. 88+00.00

* N 2,472,460 ($\pm 200'$)
* E 157,640 ($\pm 200'$)



Total Net Length of Centerline = 0.223 Mi. (Urban)



* COORDINATES SCALED FROM U.S.G.S. TOPOGRAPHIC MAP, APPLETON, WISCONSIN, QUADRANGLE FOR IDENTIFICATION ONLY.

CE-8

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4656-2-71	HES 1120(1)	1
		2

APPROVED
FOR
OUTAGAMIE COUNTY
DATE 7-23-82
SIGNATURE OF OFFICIAL



PLAN PREPARED
BY
OWEN AYRES & ASSOCIATES, INC.
CONSULTING ENGINEERS
GREEN BAY, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor: O.A.B.A. District Checker: Rlc
Designer: O.A.B.A. C.O. Checker: MWT
District Supervisor: C.O. Coordinator: MWT

Approved: [Signature]
District Transportation Director

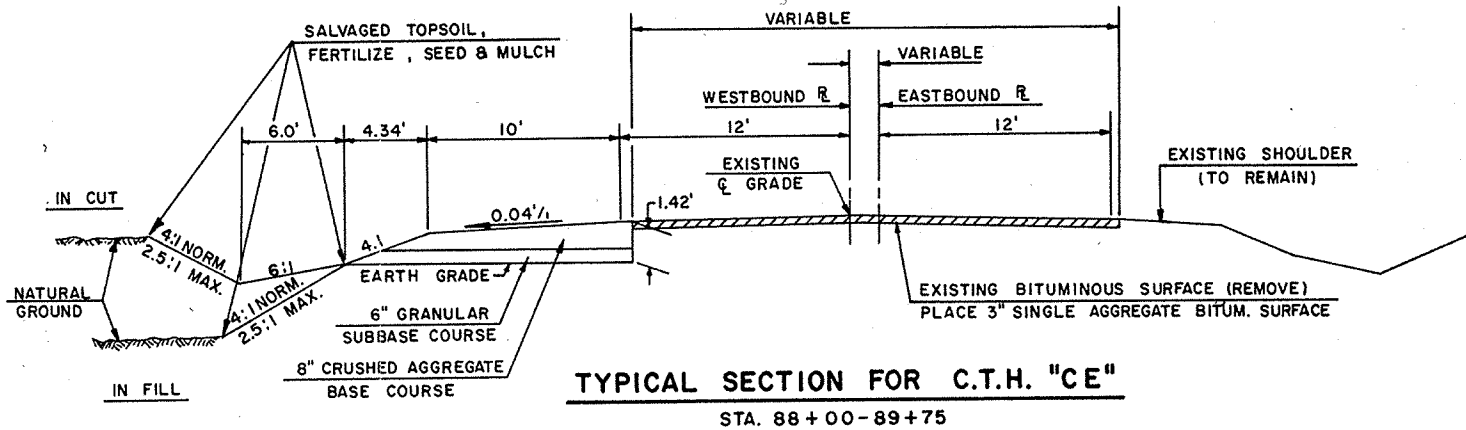
Approved: [Signature]
Chief Design Engineer

Approved: [Signature]
Chief of Department

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 5 WISCONSIN DIVISION

Approved: [Signature]
Division Administrator

STATE PROJECT NUMBER	SHEET NO.
4656-2-71,72	2.0
TYPICAL SECTIONS, GENERAL NOTES, STANDARD DETAIL DRAWINGS & UTILITIES FOR C.T.H. "CE" OUTAGAMIE CO.	



GENERAL NOTES

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

PRIVATE UTILITY COMPANIES SHALL ADJUST OR MOVE ALL FACILITIES WHICH INTERFERE WITH NEW CONSTRUCTION.

FILL AS SHOWN ON THE PLAN SHEETS PERTAINS TO EMBANKMENT CONSTRUCTED FROM UNCLASSIFIED EXCAVATION. THE SHRINKAGE ALLOWANCE USED TO COMPUTE THE VOLUME OF MATERIAL NECESSARY TO COMPLETE THE FILL IS 25% FOR UNCLASSIFIED EXCAVATION BASED ON THE VOLUME OF FILL.

ALL AREAS COVERED WITH TOPSOIL SHALL BE MULCHED.

DISTURBED AREAS IN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE SUBGRADE SHOULDER POINTS, ARE TO BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

ALL TIES ON THIS PLAN ARE HORIZONTAL UNLESS DESCRIBED.

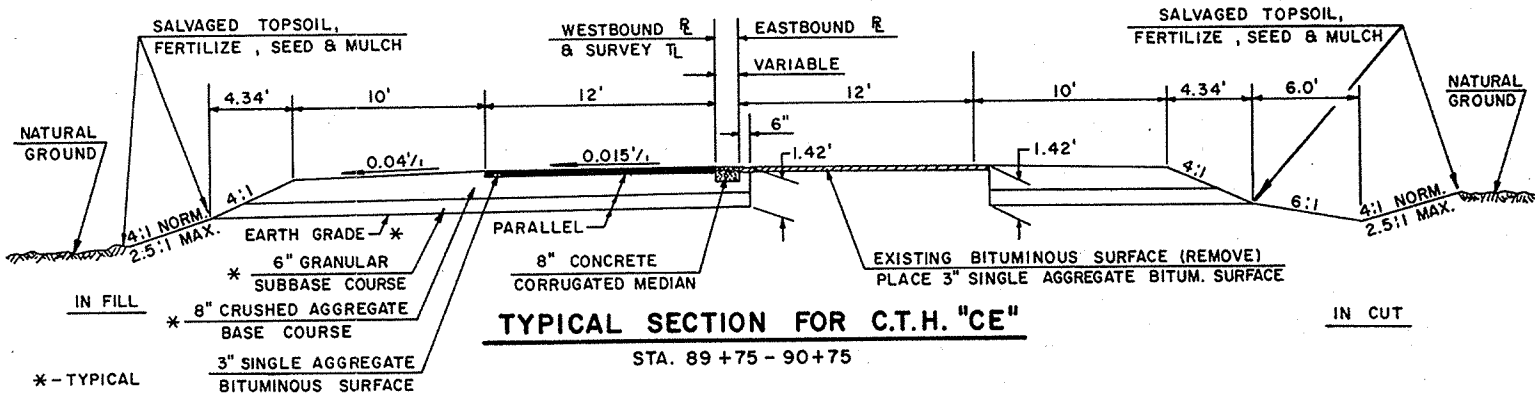
CURVE DATA BASED ON ARC DEFINITION.

ALL DISTANCES ARE GROUND DISTANCES.

ALL BEARINGS ARE TRUE BEARINGS.

ALL RADII SHOWN ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.

WHEN THE QUANTITY OF THE ITEMS OF GRANULAR SUBBASE AND CRUSHED AGGREGATE BASE COURSE OR BITUMINOUS SURFACE COURSE ARE MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE; AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.



UTILITIES

WISCONSIN ELECTRIC POWER COMPANY
N. P. SCHEMM
807 SOUTH ONEIDA ST.
P.O. BOX 1699
APPLETON, WI. 54913

WISCONSIN GAS COMPANY
MR. DEAN SULLIVAN
1921 SOUTH 8TH. STREET
P.O. BOX 789
WISCONSIN RAPIDS, WI. 54494

WISCONSIN TELEPHONE COMPANY
D. A. BENZSHAWEL
221 WEST WASHINGTON
P.O. BOX 2159
APPLETON, WI. 54913

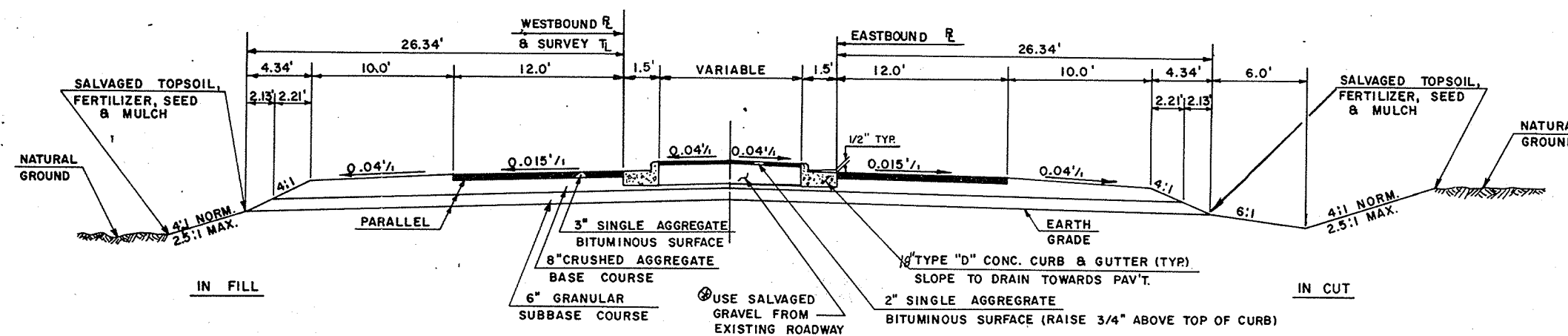
KAUKAUNA ELECTRIC & WATER DEPT.
ERNIE MULLEN
777 ISLAND STREET
KAUKAUNA, WI. 54130

CALL CABLE LOCATING
1 (800) 242-8511
(TOLL FREE)

STANDARD DETAIL DRAWINGS

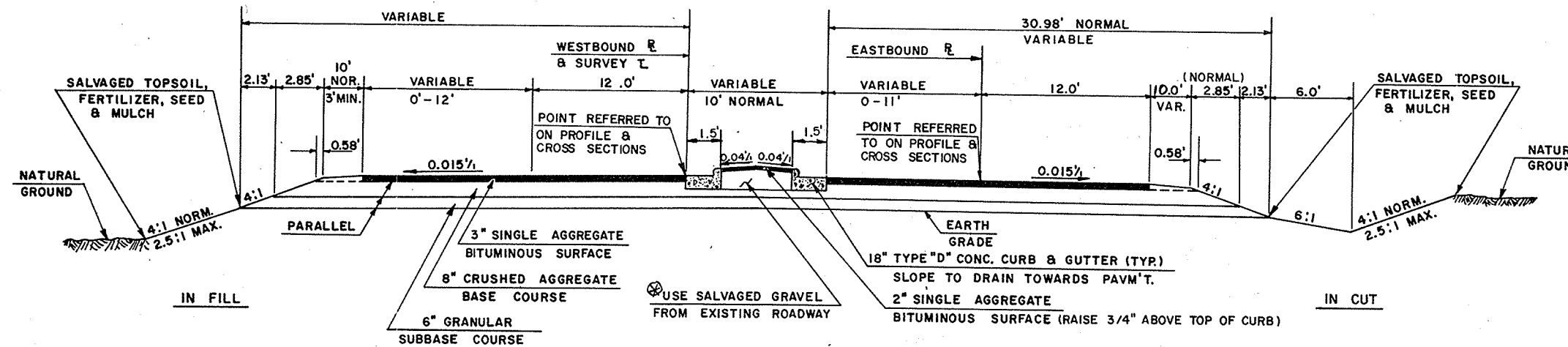
MANHOLE AND INLET COVERS	8A5-3b	100
INLETS, TYPES 8, 9, 10 & 11	8C5-1	100
CONCRETE CURB, CONCRETE CURB & GUTTER & PAVEMENT TIES	8D1-6	100
EROSION MAT	8E7-1	100
TRAFFIC SIGNAL, COUNTER & PULL BOX DETAILS	9B3-3	100
CONSTRUCTION BARRICADES & STANDARD SIGNS	15C1-7	100

STATE PROJECT NUMBER	SHEET NO.
4656-2-71,72	21
TYPICAL SECTIONS FOR C.T.H. "CE" OUTAGAMIE COUNTY	



TYPICAL SECTION FOR C.T.H. "CE"

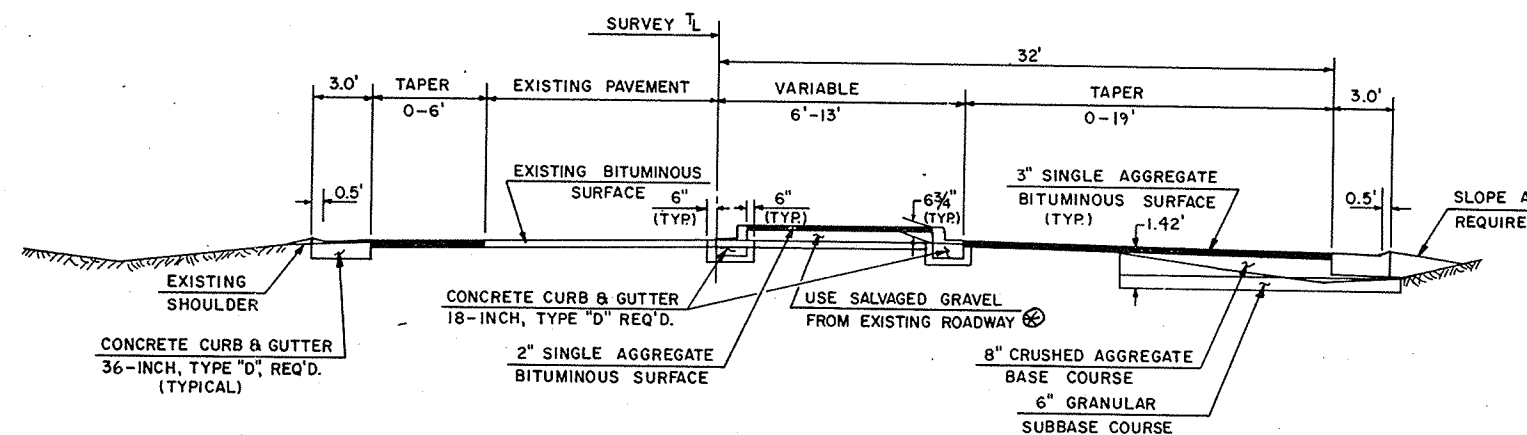
STA. 90+75 - 95+00



TYPICAL SECTION FOR C.T.H. "CE"

STA. 95+00 - 99+62

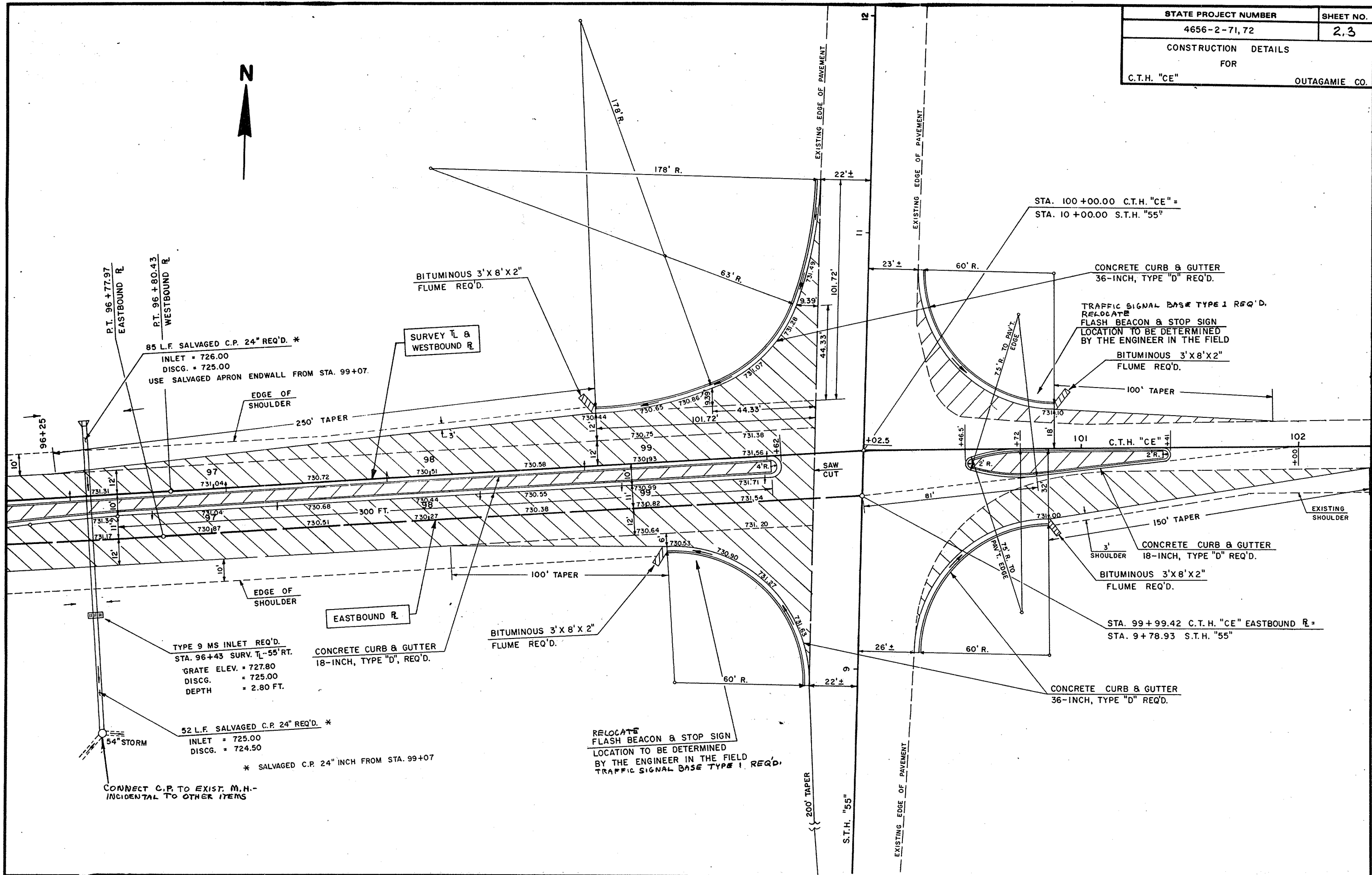
⊗ INCIDENTAL TO OTHER ITEMS



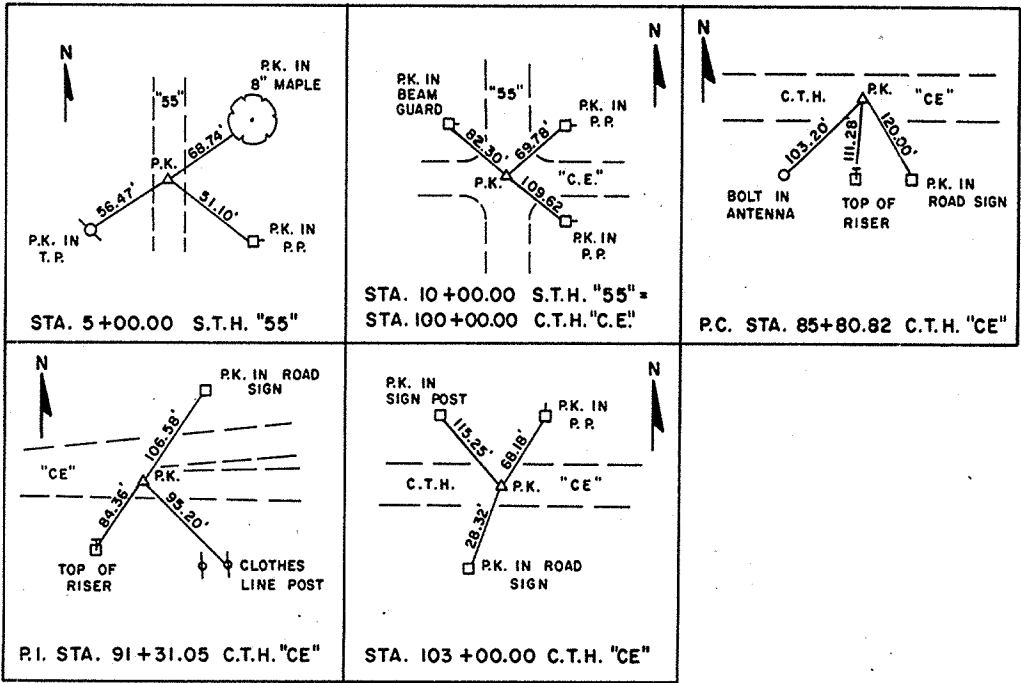
TYPICAL SECTION FOR C.T.H. "CE"

STA. 100+85 - 102+00

STATE PROJECT NUMBER	SHEET NO.
4656-2-71, 72	2, 3
CONSTRUCTION DETAILS FOR	
C.T.H. "CE"	OUTAGAMIE CO.



STATE PROJECT NUMBER	SHEET NO.
4656 - 2 - 71, 72	2, 4
CONSTRUCTION DETAILS, HORIZONTAL TIES, ALIGNMENT DIAGRAM & MISC. QUANTITIES FOR	
C.T.H. "CE"	OUTAGAMIE CO.



SINGLE AGGREGATE BITUMINOUS SURFACE

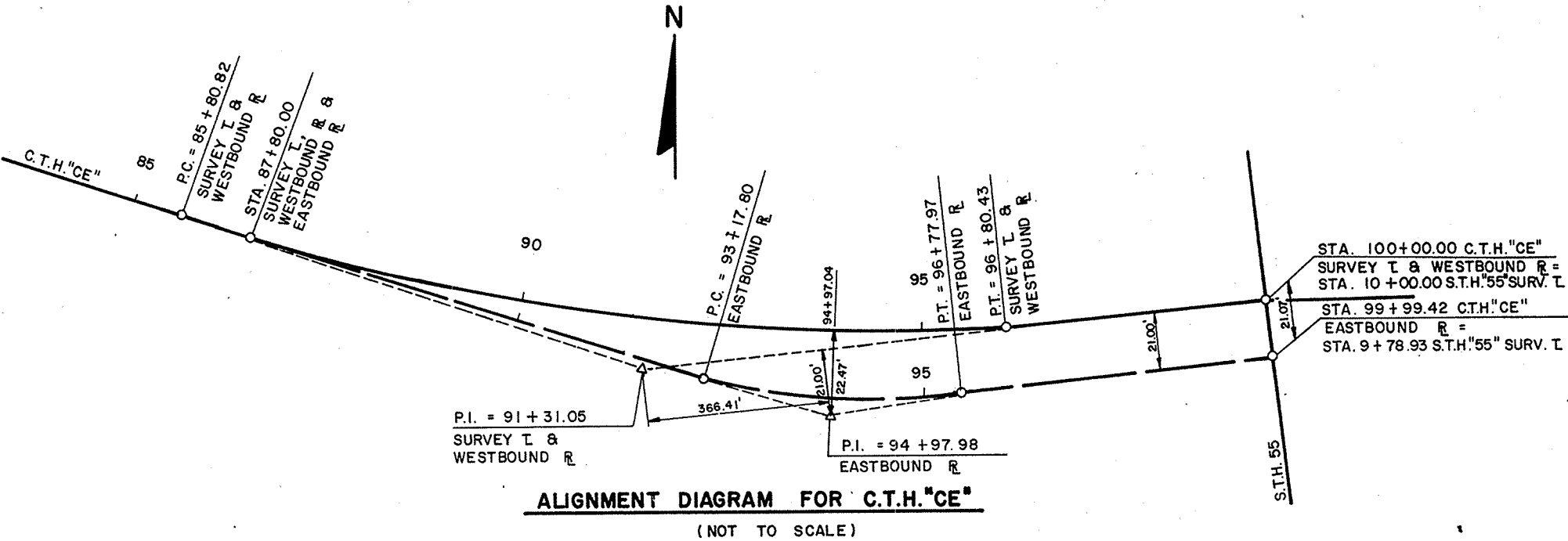
LOCATION	TONS
STATION 88 + 00 - 102 + 00	825
MEDIAN AND FLUMES	100

SEEDING

LOCATION	MIXTURE #	LBS.
MISCELLANEOUS AREAS	#1	100

CONCRETE CURB, CURB & GUTTER

LOCATION	CONCRETE C. & G. 18" TYPE "D" (L.F.)	CONCRETE C. & G. 18" TYPE "D" (L.F.)	CONCRETE C. & G. 36" TYPE "D" (L.F.)
ISLANDS	190		
90 + 75 - 99 + 62 (MEDIAN)		1790	
ALL QUADRANTS, RADII			455



ESTIMATE OF QUANTITIES

DATE 04/05/83

PROJECT ID: 4656-02-71
OUTAGAMIE COUNTY
STH 55 & CTH CE INTERSECTION
CITY OF KAUKAUNA
C.T.H. "CE"

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4656-02-71 QUANTITY
20503	UNCLASSIFIED EXCAVATION	C.Y.	8,738.00	8,738.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
52407	SALVAGED CULVERT PIPE, 24-INCH	L.F.	137.00	137.00
61124	INLETS, TYPE 9	EACH	1.00	1.00
61170	INLET COVERS, TYPE MS	EACH	2.00	2.00

61910	MOBILIZATION	L.S.	1.00	1.00
62505	SALVAGED TOPSOIL	S.Y.	7,500.00	7,500.00
62702	MULCHING	S.Y.	7,500.00	7,500.00
62802	EROSION MAT	S.Y.	35.00	35.00
62905	FERTILIZER, TYPE B	CWT.	5.00	5.00

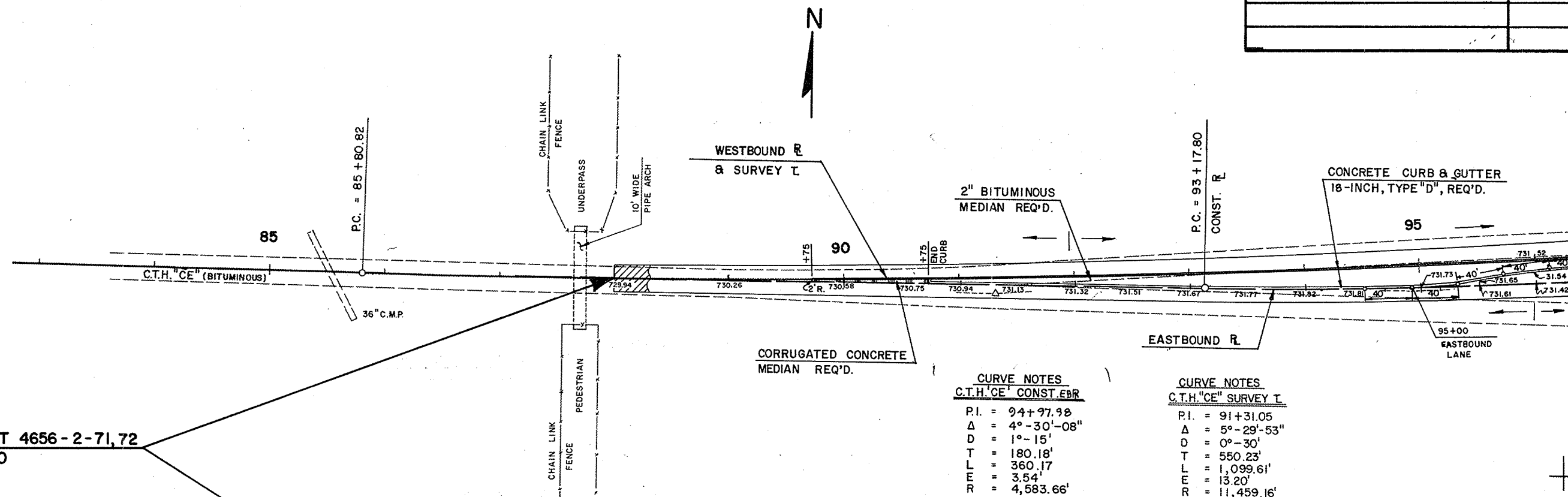
63002	SEEDING	LB.	100.00	100.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
90001	SHAPING AND COMPACTING CRUSHED AGGREGATE BASE COURSE	TON	3,000.00	3,000.00
90002	SHAPING AND COMPACTING GRANULAR SUBBASE COURSE	TON	2,600.00	2,600.00
90003	PLACING AND COMPACTING SINGLE AGGREGATE BITUMINOUS SURFACE	TON	925.00	925.00

90004	RELOCATING FLASHERS	EACH	2.00	2.00
90005	SALVAGED APRON ENDWALL	EACH	1.00	1.00
90055	TRAFFIC SIGNAL BASES, TYPE 1	EACH	2.00	2.00

SHEET 3

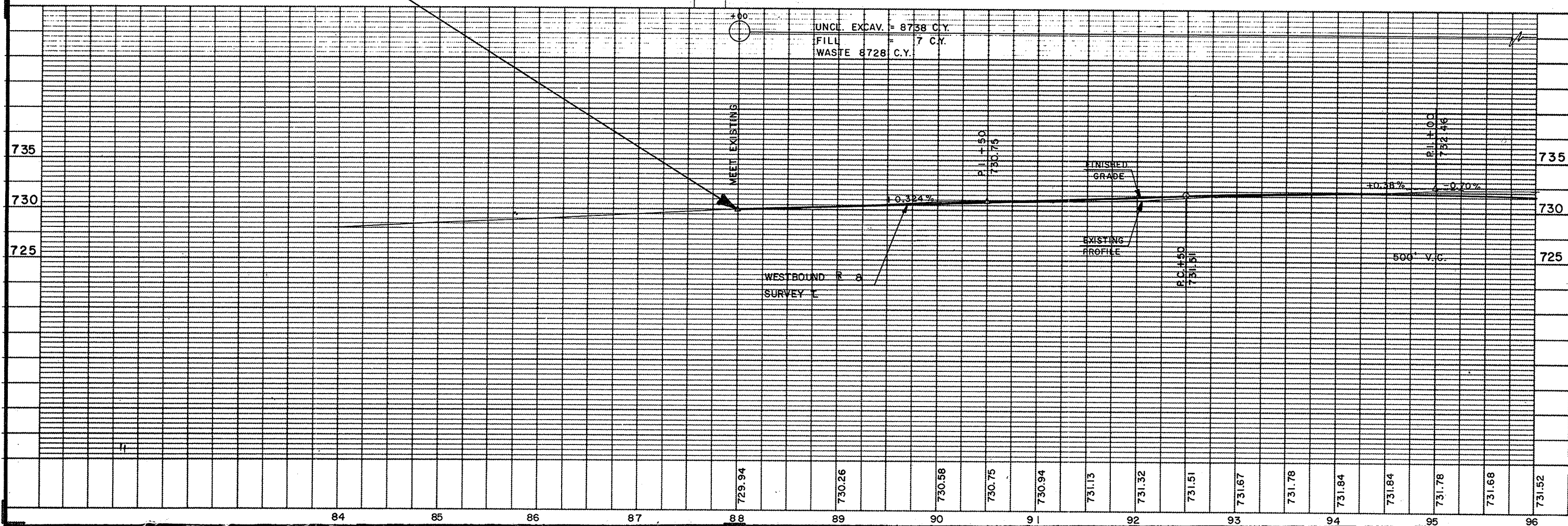
STATE PROJECT NUMBER	SHEET NO.
4656-2-71,72	5

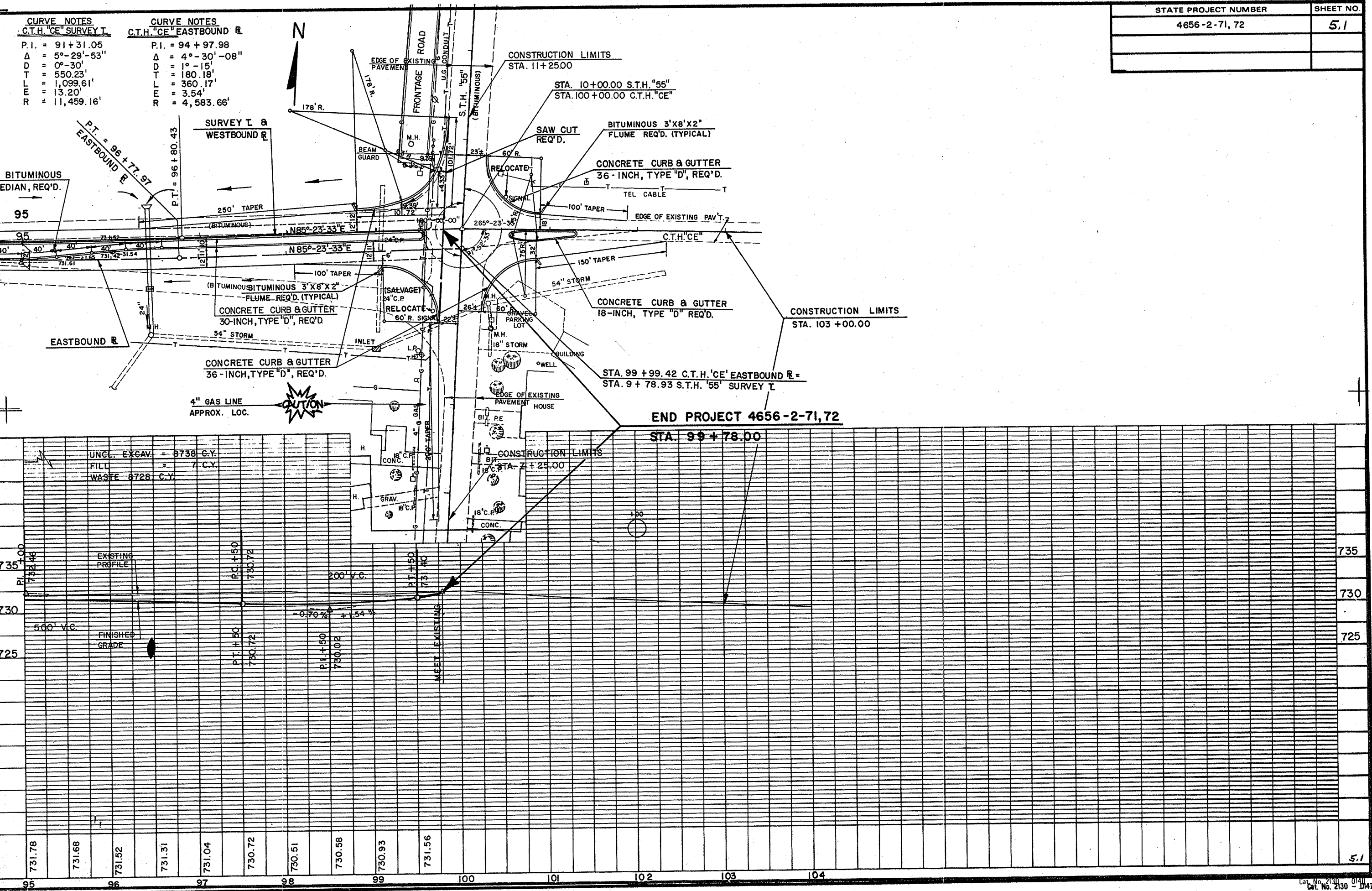
BEGIN PROJECT 4656-2-71,72
STA. 88+00.00



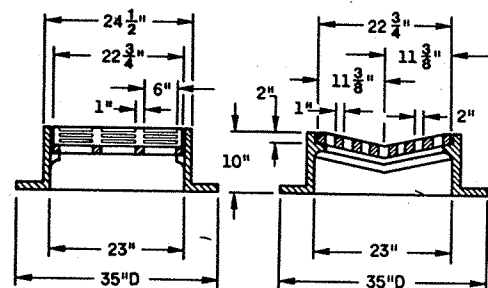
CURVE NOTES
C.T.H. 'CE' CONST. EBR
P.I. = 94+97.98
Δ = 4°-30'-08"
D = 1°-15'
T = 180.18'
L = 360.17'
E = 3.54'
R = 4,583.66'

CURVE NOTES
C.T.H. 'CE' SURVEY L
P.I. = 91+31.05
Δ = 5°-29'-53"
D = 0°-30'
T = 550.23'
L = 1,099.61'
E = 13.20'
R = 11,459.16'



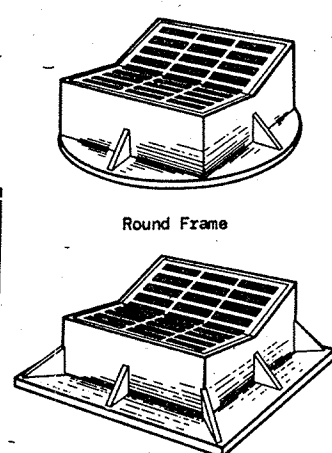


STATE PROJECT NUMBER	SHEET NO.
4656-2-71, 72	5.1

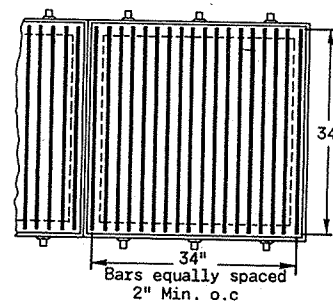


TYPE "B"

(Approximate Weight 395 lbs.)
Frame Weight 285 lbs.
Grate Weight 110 lbs.

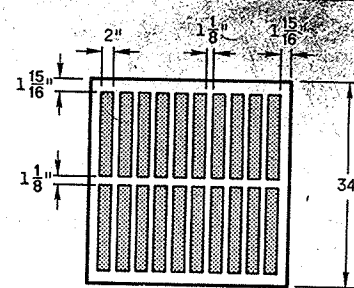


Round Frame
Alternate Frame
(Square type)
35" Square



STEEL GRATE

(Approximate Weight 209 lbs.)



CAST IRON GRATE

(Approximate Grate Weight 285 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.

All Catch Basin, Manhole and Inlet Covers which are placed in vehicular traffic areas shall be "Non-Rocking" type.

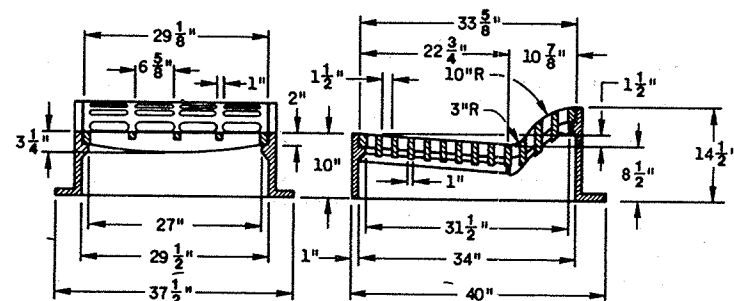
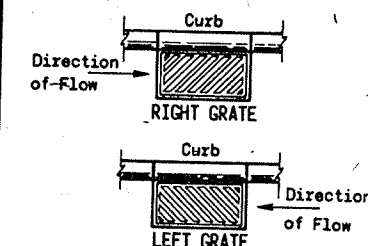
Adjustment of the cover to grade may be accomplished by the use of mortar and brick, or by precast concrete grade rings. Precast concrete grade rings shall conform to the specifications for Precast Reinforced Concrete Manhole Sections, AASHTO Designation M199, except that when such units are wet cast, they shall be made with air-entraining portland cement. Maximum adjustment shall be 8 inches.

The actual weight of covers may vary within 5 percent, plus or minus, of the approximate weight.

The Type "MS" cover may either be a cast iron grate or a steel grate and frame at the contractors option. A frame is not required with the cast iron cover.

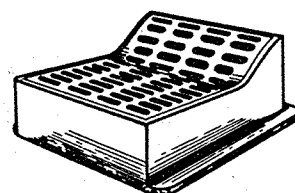
The steel grating shall be capable of carrying an H20 load on a 2'-10" max. clear span and shall have a minimum section modulus thru the main bearing bars of 3.80 inches³ per ft. of width. The grating shall be cut in such a manner that all riveted or welded connections are left intact. End banding with a 3/8" min. thickness is required. The size of the frame shall be such that when the grate is in place, the clearance between the grate and the frame will not exceed 5/8" on any side. Main bars shall be laterally supported by transverse bars. Grating and frame shall be galvanized as specified in AASHTO Designation M-111 after fabrication. Grating shall be approved by the Engineer.

Diagonal Slots shall be oriented to the direction of flow. RIGHT and LEFT grates or grates that are manufactured to be reversible and can be used as either RIGHT or LEFT grates shall be furnished depending on direction of flow. (See sketch below)



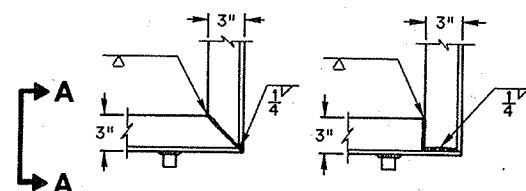
TYPE "MS"

CAUTION: DO NOT USE GRATES WITH LONGITUDINAL SLOTS WHERE BICYCLE TRAFFIC IS PERMITTED.

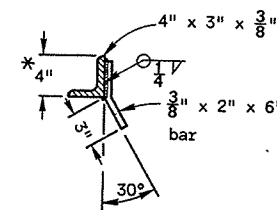


TYPE "F"

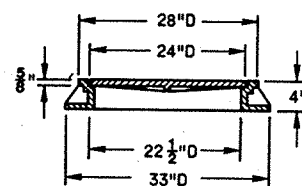
(Approximate Weight 850 lbs.)
Frame 515 lbs.
Back grate 160 lbs.
Front grate 175 lbs.



**TYPICAL CORNER OF
FRAME FOR STEEL GRATE**

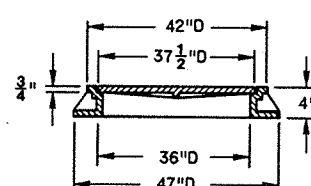


SECTION A-A



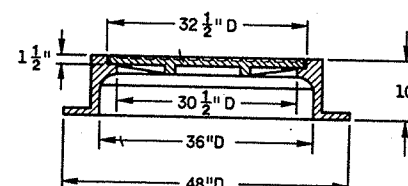
TYPE "L"

(Approximate Weight 220 lbs.)



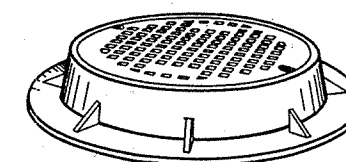
TYPE "M"

(Approximate Weight 535 lbs.)



TYPE "K"

(Approximate Weight 785 lbs.)



**CATCH BASIN
MANHOLE AND
INLET COVERS**

State of Wisconsin
Department of Transportation
Division of Highways

APPROVED
11-23-77

DATE

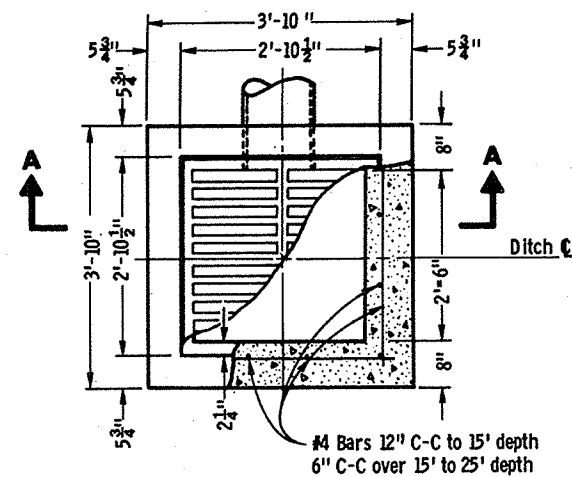
APPROVED
11-25-77

DATE

FHWA

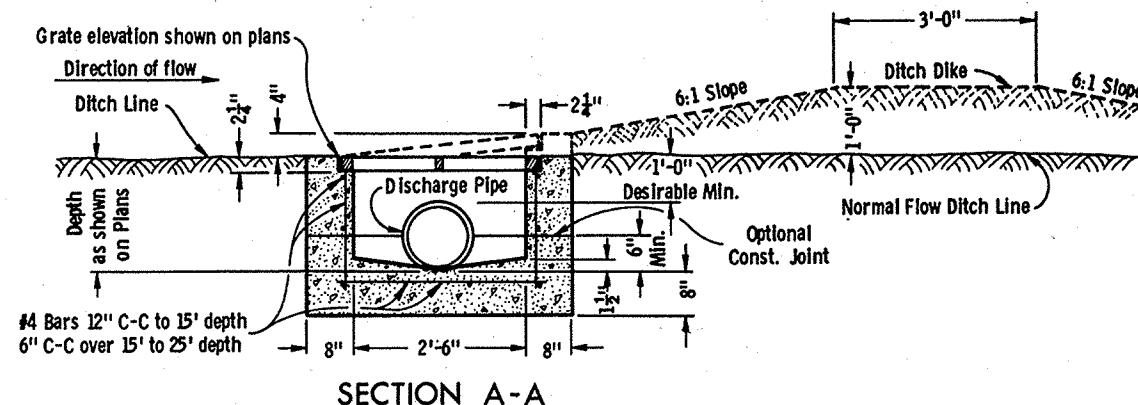
W. B. Baker
SUPERVISING DEVELOPMENT ENGINEER

D. J. Starnes
CHIEF OF FACILITIES DEVELOPMENT

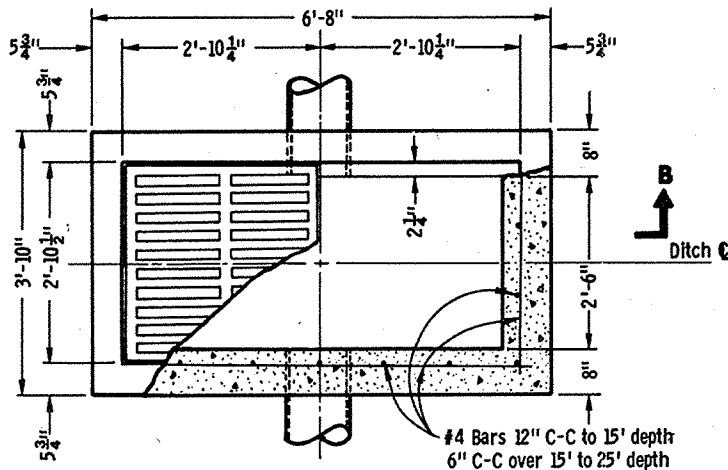


PLAN VIEW

INLET TYPE 8
REINFORCED CONCRETE

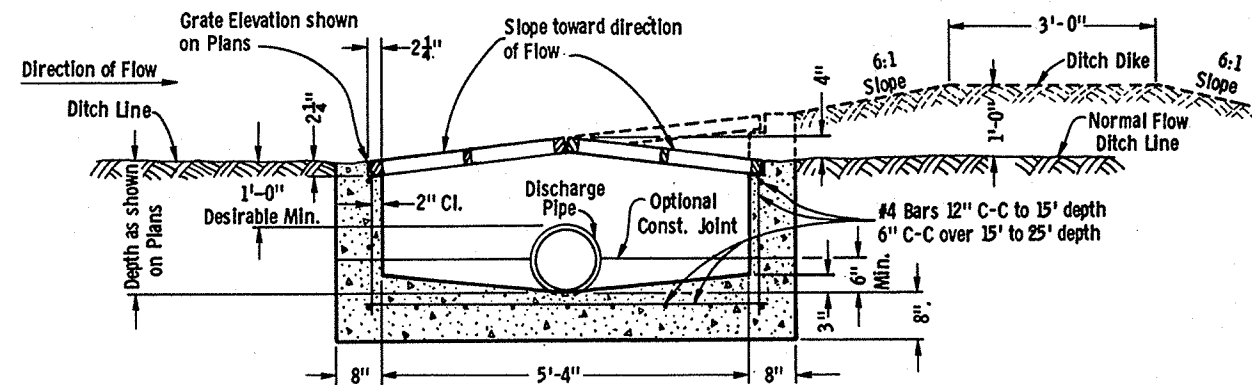


SECTION A-A

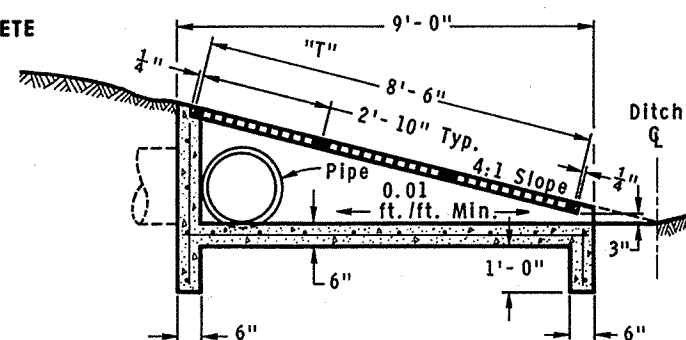


PLAN VIEW

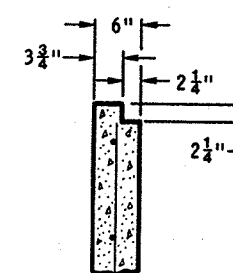
INLET TYPE 9
REINFORCED CONCRETE



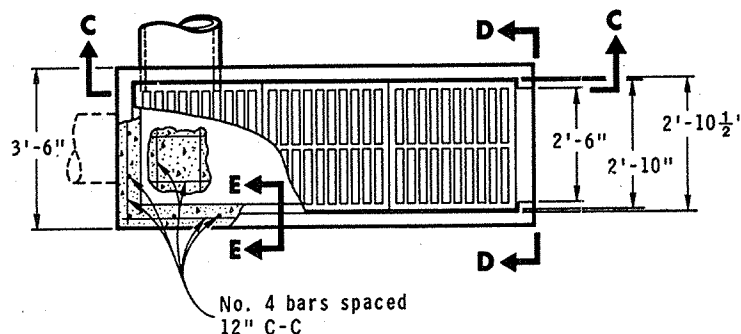
SECTION B-B



SECTION C-C

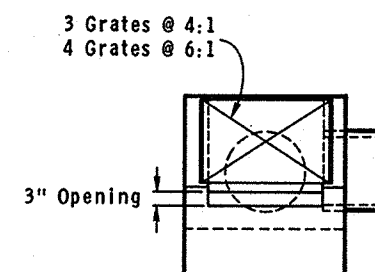


SECTION E-E



PLAN VIEW

INLET TYPE 10
REINFORCED CONCRETE



VIEW D-D

GENERAL NOTES

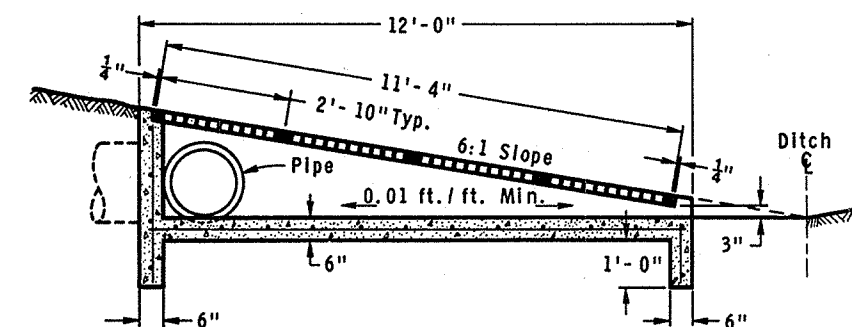
Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Detailed drawings for proposed alternate designs for Inlets which may include precast reinforced concrete inlets, shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

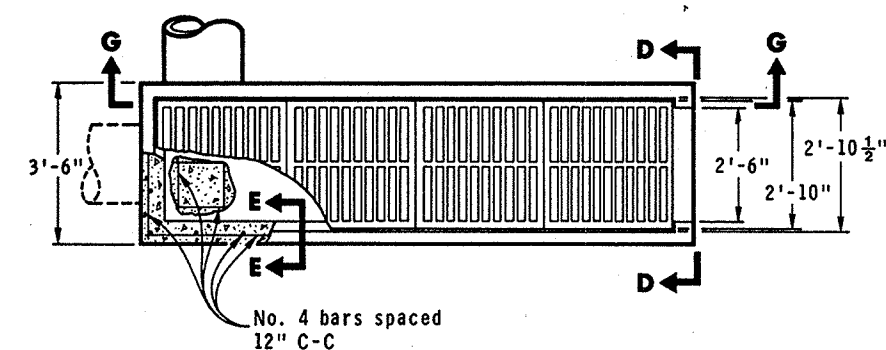
Precast reinforced concrete Inlet units, if used, shall conform to the requirements of the Catch Basins, Manholes and Inlets Section of the Standard Specification's.

All Inlets are designated on the Plans as "Inlets, 8-MS", etc. This designation is interpreted to mean that the number, or first digit designates the masonry portion of the structure and the following letter designates the type of cover or iron casting to be used therewith to comprise the complete unit.

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



SECTION G-G



PLAN VIEW
INLET TYPE II
REINFORCED CONCRETE

INLETS TYPE 8, 9, 10 and 11

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL

4-30-74
DATE

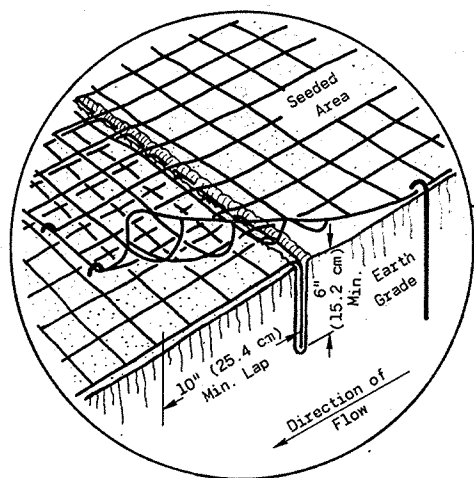
APPROVED
5-02-74
DATE

DATE

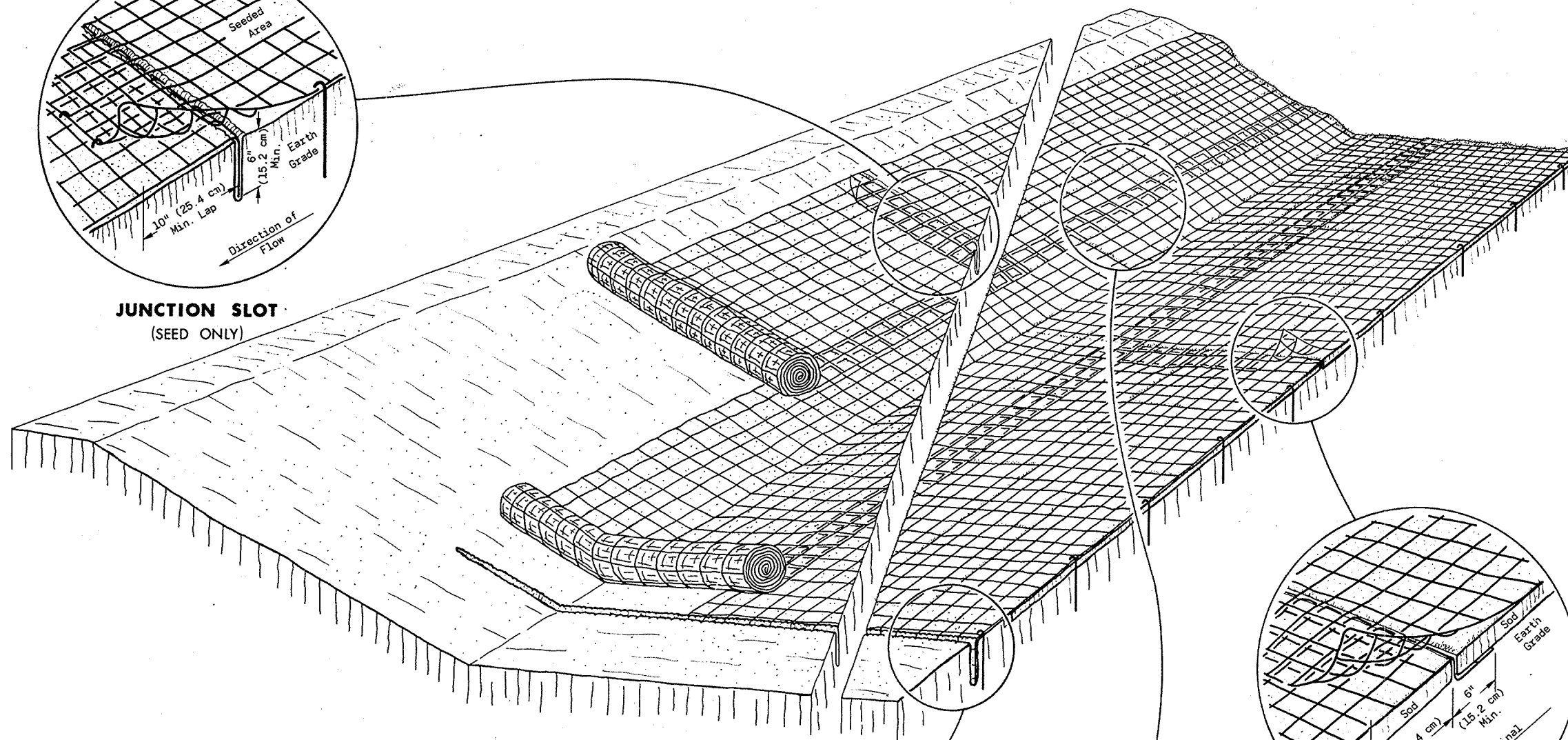
J. C. McDaniel
CHIEF OF FACILITIES DEVELOPMENT

W. J. Siedler
STATE HIGHWAY ENGINEER

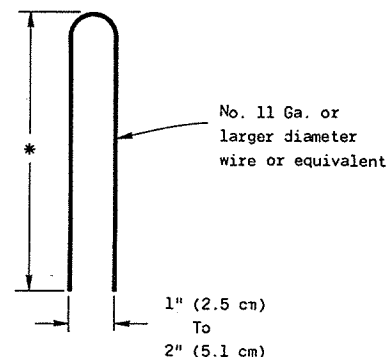
S.D.D. 8C5-1



**JUNCTION SLOT
(SEED ONLY)**

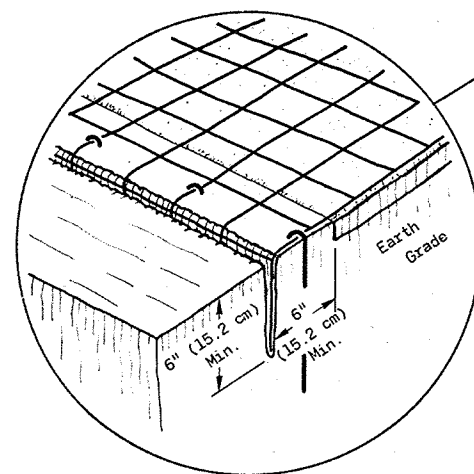


**JUNCTION SLOT
(SOD ONLY)**

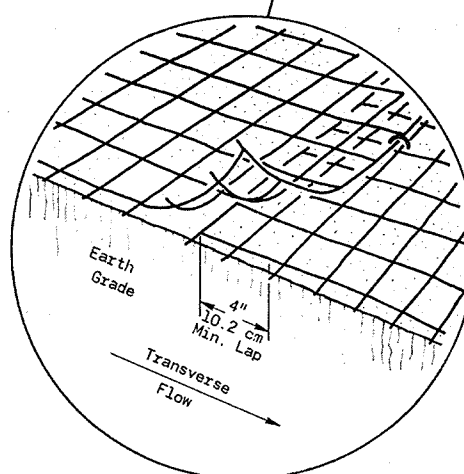


**DETAIL OF
TYPICAL STAPLE**

- * 6" (15.2 cm) Min for firm soils
12" (30.5 cm) Min for loose soils
8" (20.3 cm) Min. where both sod and mats are being used.



**ANCHOR SLOT
AT BEGINNING AND END OF EROSION MAT
(SEED AND SOD)**



**LAP JOINT
(SEED AND SOD)**

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.

Variations in the dimensions or materials shown hereon shall be permitted if they provide equivalent protection and material strength and if prior approval of the Engineer is obtained.

Lap Joints shall not be placed in the bottom of V-shaped ditches.

Junction Slots on adjacent strips of Matting shall be staggered a minimum of 4 feet (1.219 m) apart.

Edges of the Erosion Mat shall be impressed in the soil.

Erosion Mat shall be measured and payed for in accordance with the Standard Specifications.

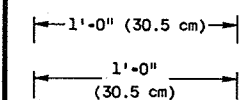
EROSION MAT OVER SOD

- Only Jute Fabric will be permitted over sod.
- Wood Stakes for Sod may be omitted by the Engineer if the existing slope and soil conditions so warrant.
- The width of Erosion Mat shall always equal the Sod width.
- Sod strips may be placed either longitudinally or transversely to the flow line of the Ditch.

EROSION MAT OVER SEEDING

Junction or Anchor Slots shall be at minimum intervals of 100 feet (30.48 m) on grades up to and including 3 percent, and 50 feet (15.24 m) on grades exceeding 3 percent.

METHOD OF DIMENSIONING



BASIS: 1 in. = EXACTLY 25.4 mm

EROSION MAT

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:

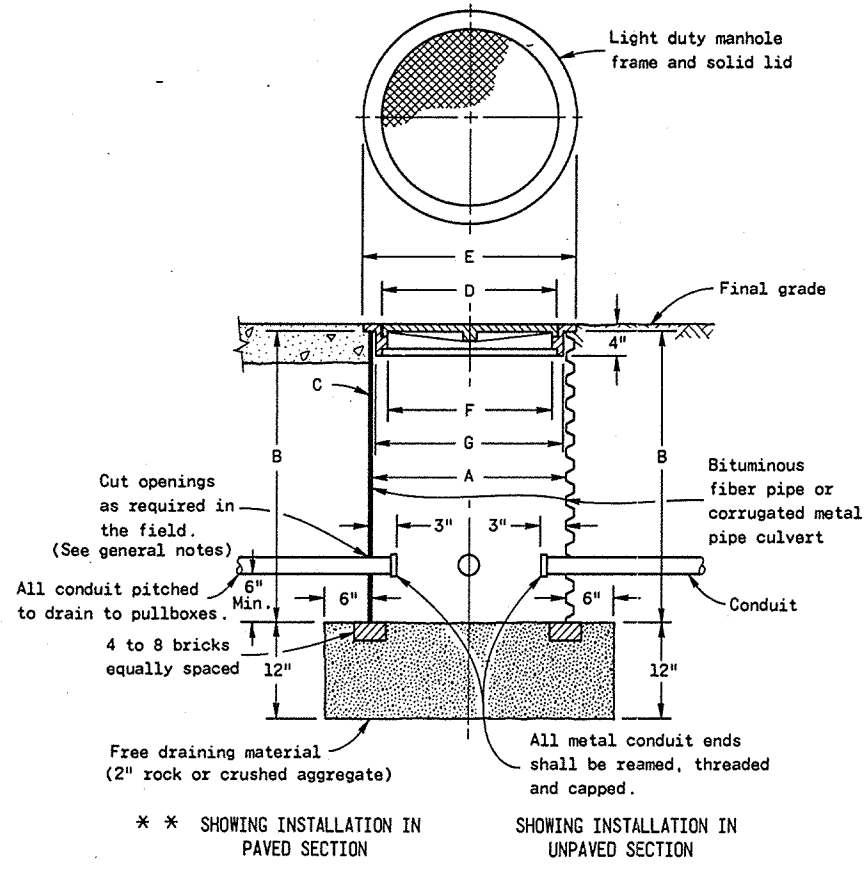
12-3-73
DATE

J. C. Kneiss
CHIEF OF FACILITIES DEVELOPMENT

APPROVED

1-15-74
DATE

W. S. Siddle
STATE HIGHWAY ENGINEER



PULL BOX AND DETECTOR BOX DETAIL

TABLE OF DIMENSIONS AND WEIGHTS

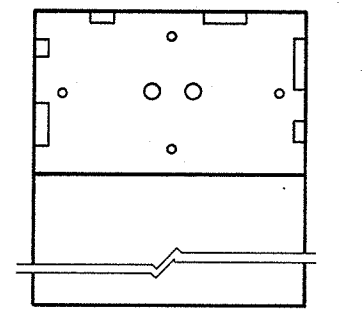
DIMENSION IN INCHES		TYPE OF PIPE				
		BITUMINOUS FIBER				CORR. METAL
Pipe diameter (Inside)	A	12	18	24	24	24
Pipe Length	B	24	24	24	36	36
Wall Thickness	C	0.4	0.4	0.4	0.4	0.064
Manhole Lid	D	10 1/4	16 1/4	22 1/4	22 1/4	22 1/4
Manhole Frame	E	14 1/2	20 1/2	26 1/2	26 1/2	26 1/2
Manhole Frame	F	8 1/2	14 1/2	20 1/2	20 1/2	20 1/2
Manhole Frame	G	11 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *						
Lid & Frame		55	100	145	145	145

* The actual weight of manhole lid and frame may vary within 5 percent plus or minus of the weights shown.

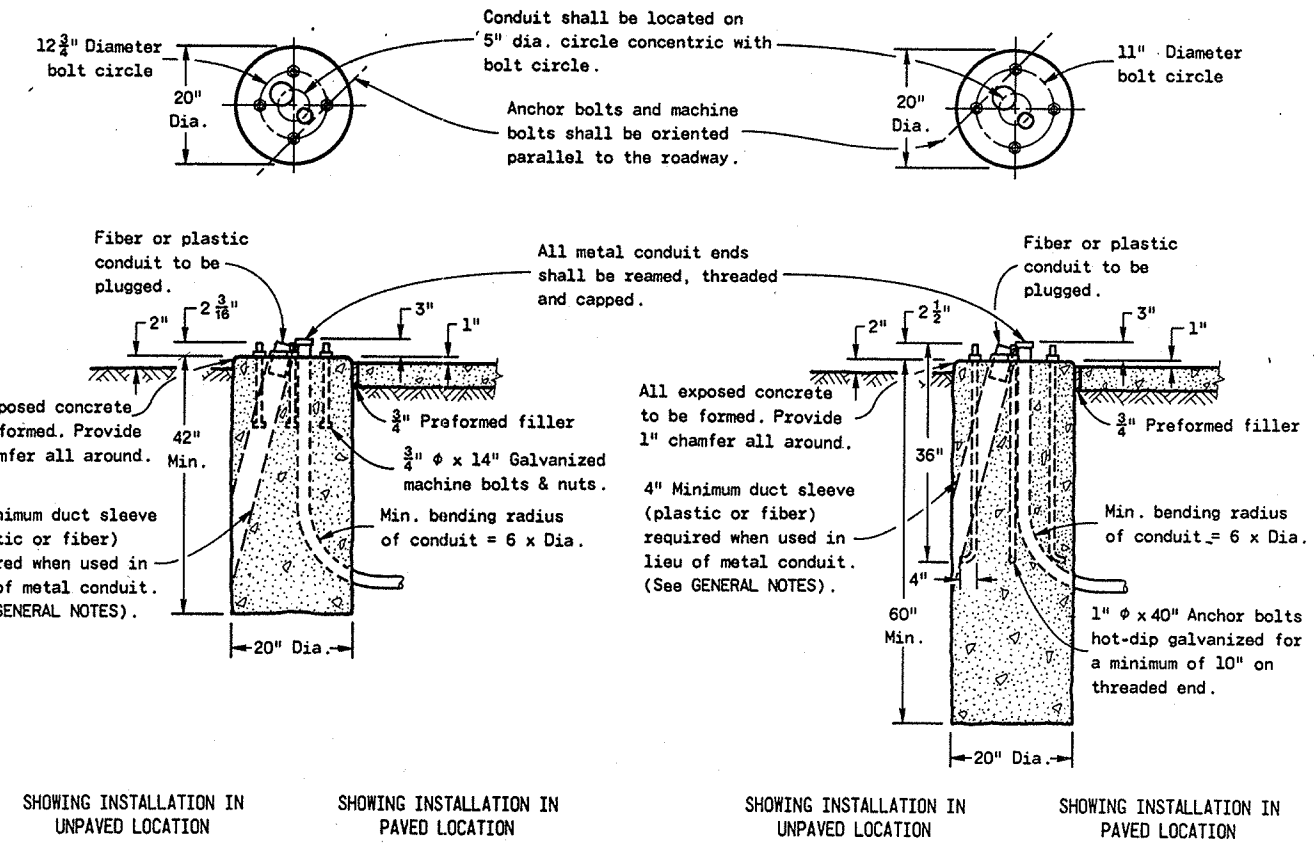
** If placement of pull box in traffic lane is required, the manhole frame and lid must be heavy duty type, suitable for vehicular loading.

TABLE OF DIMENSIONS

Control Cabinet Base	H	I	J	K
Type 1 - 30" Cabinet	34"	20 1/2"	27 1/4"	13 3/4"
Type 2 - 38" Cabinet	42"	20 1/2"	35 1/2"	13 3/4"
Type 3 - 38" Cabinet	42"	28"	35 1/2"	21 1/4"
Type 4 - Cabinet	See Mfg. Spec.			



TYPICAL METER TROUGH OR CONDUIT LOCATIONS



TRAFFIC SIGNAL BASE TYPE 1

TRAFFIC SIGNAL BASE TYPE 2

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.

Conduit may be metal, fiber or plastic. Locate as required.

Concrete masonry shall be Grade A.

Conduit installed as a continuous system between pullboxes shall have a min. depth of 12 inches, max. depth of 36 inches, and shall always be below the pavement.

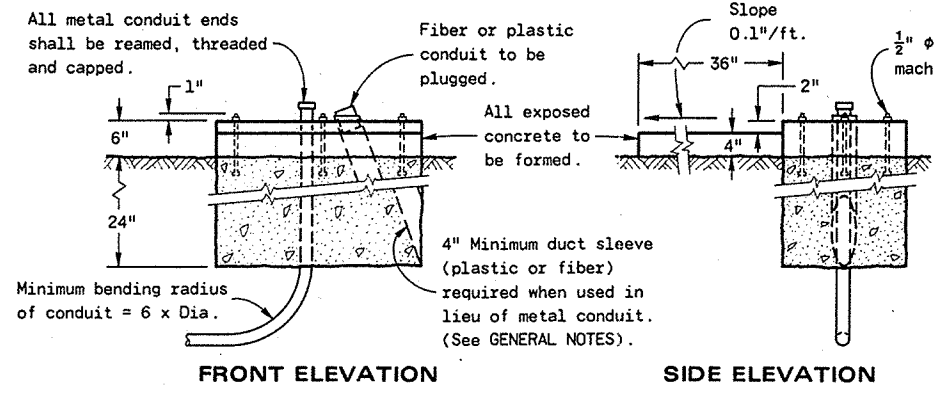
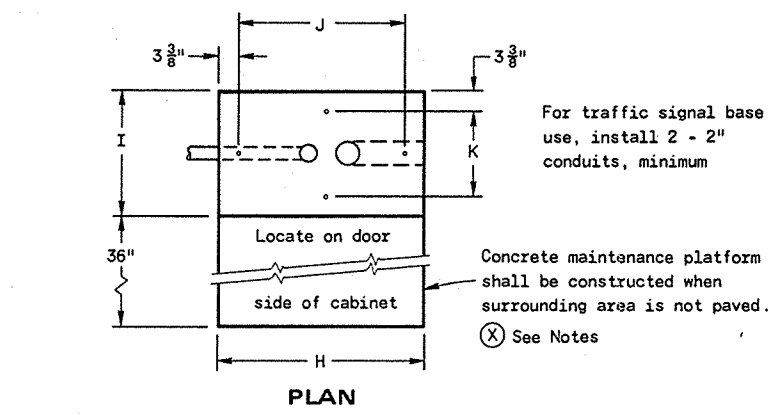
Entrance holes into pull boxes and detector boxes shall be cut with a saw or punch. Hole size shall be the outside diameter of the conduit or duct that is to fit in the opening, plus no more than 1/4\".

A meter trough or conduit may be mounted on the side of the cabinet to provide electrical service.

The exact location of the service entrance into the cabinet must be determined. Before pouring the base insert a two inch thick block into the two inch lip of the concrete base. The block must be directly below, and centered upon, the hole in the cabinet wall used for electrical entrance. The block shall be as long as the concrete base is deep. Also, for trough use, it shall be 2 inches thick by 9 inches wide and for conduit use, 2 inches thick by 3 inches wide.

Install a 1 inch duct in all cabinet bases for grounding wires. The top of the duct shall be accessible from inside the cabinet and exit a minimum of 12 inches below ground.

When a Type 1 base is used to post mount a control cabinet, pour a 24\" square platform located on the door side of the cabinet.



TRAFFIC SIGNAL AND TRAFFIC COUNTER CONTROL CABINET BASE TYPE 1, 2 and 3

TRAFFIC SIGNAL, COUNTER AND PULL BOX DETAILS

State of Wisconsin
Department of Transportation
Division of Transportation Facilities

APPROVED
10-17-79
DATE

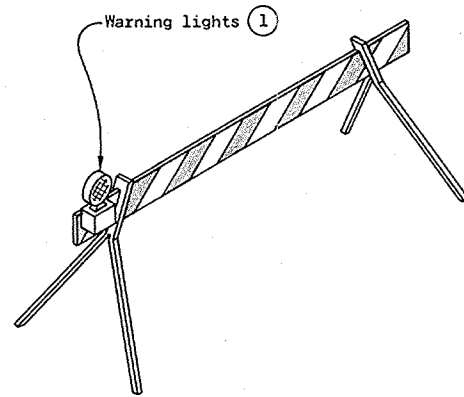
CHIEF DESIGN ENGINEER

FHWA

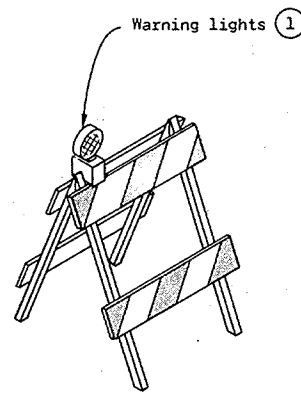
TABLE OF BARRICADE CHARACTERISTICS

BARRICADE TYPE	I	II	III
Height	3' Minimum		5' Minimum
*Rail Width	8" Minimum to 12" Maximum		
Rail Length	2' Minimum		4' Minimum
**Stripe Width	6" at 45° Angle		
Stripe Colors	Reflectorized Orange & White		

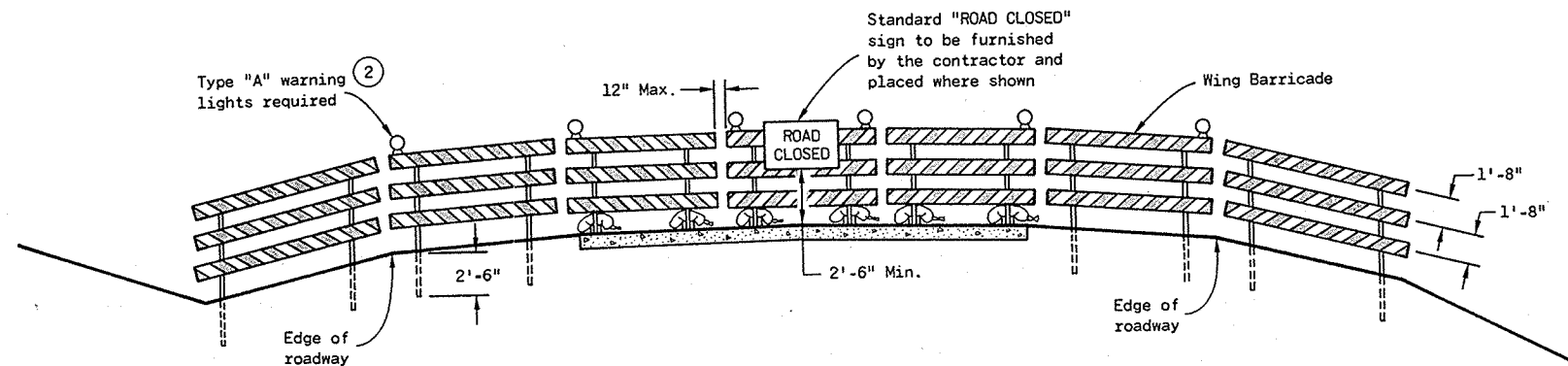
* Nominal dimensions when barricade is constructed of lumber.
 ** Shall be 4" for rail lengths less than 3'.



TYPICAL TYPE I BARRICADE

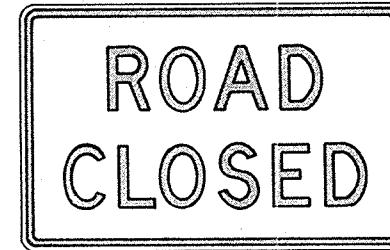


TYPICAL TYPE II BARRICADE



TYPICAL INSTALLATION SHOWING TYPE III BARRICADE

CONSTRUCTION BARRICADES



R11-2

48" x 30"

Black Lettering on Reflective
White Background

Letter Series "D"

Letter height 8"



W20-3

48" x 48"

Black Lettering on Reflective
Orange Background

Letter Series "D"

Letter height 7"

STANDARD SIGNS - TYPE II

GENERAL NOTES

The contractor shall furnish, erect and maintain barricades and signs. Details regarding location, spacing, dimensions, fabrication, material, sign lettering, lighting devices and color of barricades and signs shall conform to this drawing, the Manual On Uniform Traffic Control Devices, the Standard Specifications, Special Provisions and/or plans.

Type III Barricades and Signs shall be erected at the termini of projects and at other road or street locations where it is necessary to control or eliminate public access to the construction area.

Type I and II Barricades shall be used on projects when traffic is to be maintained through the construction area.

The actual field location of barricade installations and advance signs shall be as directed by the Engineer.

Each barricade shall have the name and telephone number of a person responsible for 24 hour emergency service printed in letters at least $\frac{3}{4}$ inch in height on the barricade rails. Prior to May 1, 1983, such information may be shown on either front or back faces of the barricade rails. After May 1, 1983, all printed information or identification markings shall be shown only on the back side of barricade rails.

Type I Barricades may include other unstriped horizontal panels necessary to provide stability.

On high speed expressways or in other situations where barricades may be susceptible to overturning in the wind, sandbags should be used for ballasting. Sandbags may be placed on lower parts of the frame or stays to provide the required ballast but shall not be placed on top of any striped rail.

- Unless otherwise provided elsewhere in the contract, warning lights are required on all barricades which will be located near traffic operations during periods of inclement weather or hours of darkness. Barricades used to shield isolated hazards shall be equipped with Type "A" (low intensity - flashing) lights unless Type "B" (high intensity) - flashing lights are specified elsewhere in the contract documents. Barricades used for channelization or delineation of the travel path shall be equipped with Type "C" (steady burn) lights except for the initial barricade(s) in sequence, which shall be equipped with Type "A" or "B" lights as previously noted.
- Two warning lights shall be provided on the center barricade and at least one warning light shall be provided on each of the other barricades within the roadway limits. Spacing of the warning lights shall be uniform to the edge of roadway as shown.

CONSTRUCTION BARRICADES & STANDARD SIGNS

State of Wisconsin
Department of Transportation

APPROVED
9-14-81
DATE

D. J. Strand
CHIEF DESIGN ENGINEER

FHWA

