PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F FRAME C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY
SLOPE EASEMENT

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE

MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR AGGREGATE SHOULDER & CONCRETE OVERLAY.

LOCATED ON C.S.A.H. 10 **BETWEEN** C.S.A.H. 30 AND I-90 **AND** APPROX. 2 MILES S. DOVER **(GEOGRAPHIC DESCRIPTION)**

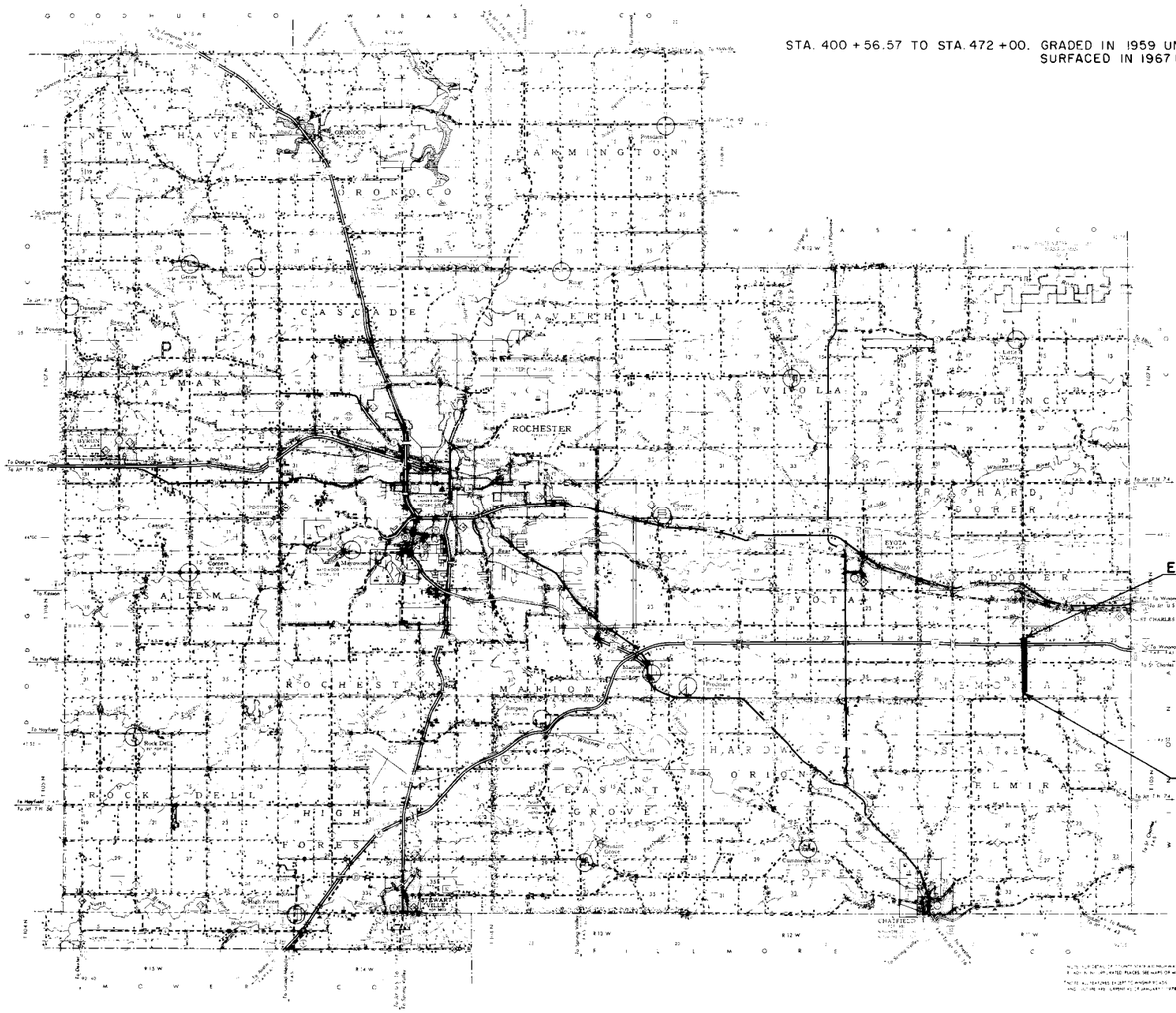
FROM 4188.43' S. OF N.W. COR. SEC. 34 T106N. R11W. **TO** 2955.0' N. OF N.W. COR. SEC. 34 T106N. R11W. **(LEGAL DESCRIPTION)**

~~**STATE PROJ. NO.**~~

GROSS LENGTH		FEET	MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH		FEET	MILES

~~**STATE PROJ. NO.**~~ S.A.P. 55-610-13

GROSS LENGTH	7143.43	FEET	1.353 MILES
BRIDGES-LENGTH	0	FEET	0 MILES
EXCEPTIONS-LENGTH	0	FEET	0 MILES
NET LENGTH	7143.43	FEET	1.353 MILES



STA. 400+56.57 TO STA. 472+00. GRADED IN 1959 UNDER S.A.P. 55-610-01
SURFACED IN 1967 UNDER S.A.P. 55-610-03

END: S.A.P. 55-610-13
STA. 472+00.00

BEGIN: S.A.P. 55-610-13
STA. 400+56.57

SCALES

PLAN		100 FEET
PROFILE		100 FEET HORZ. & 20' VERT.
INDEX MAP		10,560 FEET
GENERAL LAYOUT		

MINN. PROJ. NO.

SPECIFICATIONS REFERENCE

The 1978 Edition of the Minnesota Department of Transportation "Standard Specifications For Highway Construction" Shall Govern.

INDEX

SHEET NO. 1 TITLE SHEET & LAYOUT MAP.

SHEET NO. 2 ESTIMATE OF QUANTITIES & TYPICAL SECTIONS.

SHEET NO. 3 PAVEMENT JOINTS.

SHEET NO. 4&5 PLAN & PROFILE

DESIGN DESIGNATION

R
ADT (Current Year) = 404
ADT (Future Year) = 646
DHV (Design Hr. Vol.) =
D (Directional Distr.) = %
T (Heavy Commercial) = %
SOIL FACTOR 130
PROJ. HCADT ONEWAY 16
PROJ. TST HCADT ONEWAY 11

ΣN18(20)
Design Speed 45 MPH
Based on STOPPING Sight Distance
Height of eye 3.75' Height of object 0.5'
Design Speed not achieved at:

STA.	TO STA.	MPH
STA.	TO STA.	MPH
STA.	TO STA.	MPH

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 3-26-82 REG. NO. 10219 ENGR. J.K. Dolan

COUNTY Olmsted

Recommended for Approval _____ 3-26 19 82
DISTRICT STATE AID ENGINEER

Recommended for Approval _____ 19
STATE AID PLANS AND SPECS ENGINEER

Approved _____ 19 _____
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED

_____ _____
DIVISION ADMINISTRATOR DATE

STATE AID PROJ. NO. 55-610-13
~~**STATE PROJ. NO.**~~ **SHEET NO.** 1 **OF** 5 **SHEETS**

STATE AID TITLE SHEET S-777 ALUMINUM APPLIED SIGNS

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	MUNICIPIAL	RURAL	TOTAL ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LUMP SUM		1	1
2221.501	AGGREGATE SHOULDERING, CLASS 3	TON		811	811
2221.501	AGGREGATE SHOULDERING, CLASS 2	TON		1701	1701
2301.501	CONCRETE PAVEMENT (P)	SQ.YD.		15,843	15,549
2301.511	STRUCTURAL CONCRETE (OVERLAY)	CU. YD.		2642	2642
2331.504	BITUMINOUS MAT'L. FOR MIXTURE	TON		49	49
2331.516	SHOULDER MIXTURE	TON		750	750
2357.502	BITUMINOUS MAT'L. FOR TACK COAT	GALLON		240	240

(P) PLAN QUANTITY.

CONSTRUCTION NOTES

GRADES:

THE CENTERLINE GRADE FOR PAVING WILL BE ESTABLISHED BY THE OLMSTED COUNTY HIGHWAY DEPT.

JOINTS:

ALL CONTRACTION JOINTS, ALL LONGITUDINAL JOINTS AND HEADER JOINTS WILL BE INCIDENTAL TO ITEM NO. 2301.501 CONCRETE PAVEMENT AND NO DIRECT COMPENSATION WILL BE MADE THERE FOR.

REINFORCED PANEL OVER CULVERTS:

REINFORCED CONCRETE PANELS OF THE LENGTH INDICATED AT LOCATIONS LISTED BELOW SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAIL PLATE NOTED IN THE PLANS, MODIFIED TO THE EXTENT THAT A DOWELED TRANSVERSE JOINT WILL NOT BE REQUIRED. REINFORCED PANELS WILL BE INCIDENTAL TO ITEM NO. 2301.501 CONCRETE PAVEMENT AND NO DIRECT COMPENSATION WILL BE MADE THERE FOR.

STA.: 400+66	17' PANEL
417+92	19' PANEL
432+62	15' PANEL

CONCRETE PAVEMENTS NON-REINFORCED:

CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAIL PLATE NOTED IN THE PLANS, MODIFIED TO THE EXTENT THAT DOWELS WILL NOT BE REQUIRED IN THE LAST TEN CONTRACTION JOINTS AT END OF PROJECT.

AGGREGATE SHOULDERING, CLASS 2:

ITEM NO. 2221.501 AGGREGATE SHOULDERING CLASS 2 INCLUDES 399 TONS FOR 15 ENTRANCES AND APPROACHES AND 1302 TONS FOR SHOULDERING.

SHOULDER MIXTURE:

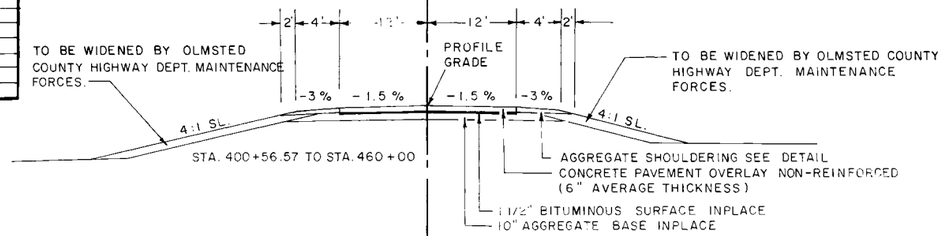
ITEM NO. 2331.516 SHOULDER MIXTURE INCLUDES 120 TONS FOR 5 ENTRANCES AND APPROACHES, 176 TONS FOR BITUMINOUS SHOULDER CONSTRUCTION AND 454 TONS FOR BITUMINOUS OVERLAY FROM STA. 460 TO STA. 472.

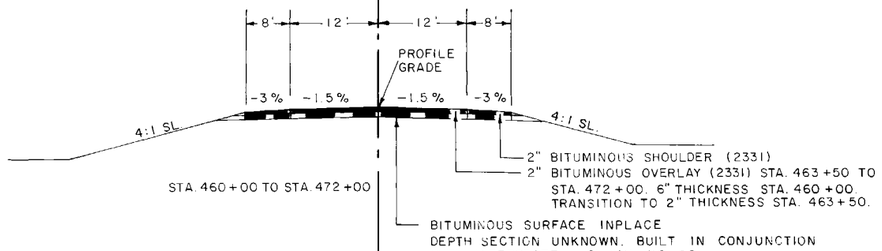
STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

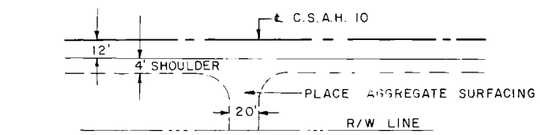
PLATE NO.	DESCRIPTION
0003 A	SPECIFICATION REFERENCE TO STANDARD PLATES.
1016 G	CONCRETE PAVEMENTS NON-REINFORCED.
1070 I	REINFORCED PANEL OVER CULVERTS.
1120 R	CONTRACTION JOINTS
1140 R	LONGITUDINAL JOINTS
1141 B	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
1150 N	CONSTRUCTION OF HEADER JOINTS
8000 H	STANDARD BARRICADES

TYPICAL SECTION

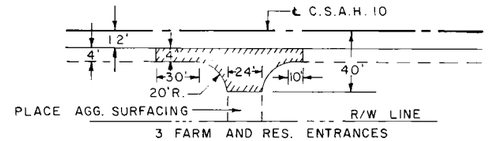




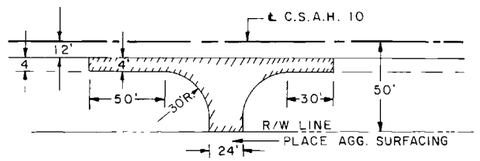
APPROACHES AND ENTRANCES



10 FIELD ENTRANCES



3 FARM AND RES. ENTRANCES

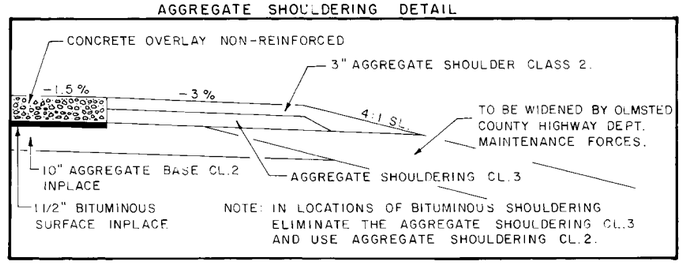


2 ROAD APPROACHES

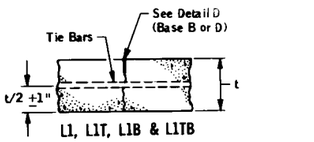
DESIGNATES BITUMINOUS SURFACING

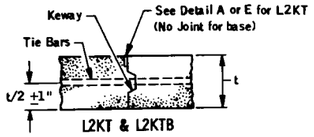
NOTE: ALL DIMENSIONS AND SLOPES SHOWN ON TYPICAL SECTIONS ARE APPROXIMATE.

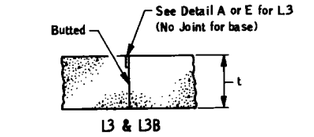
AGGREGATE SHOULDERING DETAIL

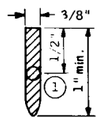


Fed. Proj. No.

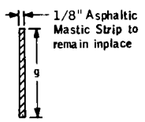




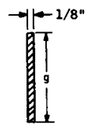




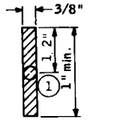
DETAIL A
(Formed & Sealer Spec. 3723)



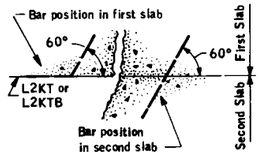
DETAIL B
(Formed & Unsealed)



DETAIL D
(Sawed & Sealer Spec. 3723)
(Base joints unsealed)



DETAIL E
(Sawed & Sealer Spec. 3723)



TIE BAR BENDING DETAIL

TYPE L1 JOINT DEPTHS

Pav't. Thickness	Non-Reinf. Pav't.	Reinforced Pav't.	Concrete Base
t	g	g	g
6"	2"		2"
6-1/2"	2"		2"
7"	2-1/4"		2-1/4"
7-1/2"	2-1/4"		2-1/4"
8"	2-1/2"	2-1/2"	2-1/2"
8-1/2"	2-1/2"	2-1/2"	2-1/2"
9"	2-3/4"	2-3/4"	2-3/4"
10"	3"	3"	3"

LONGITUDINAL JOINTS

CLASS DESIGNATION				JOINT DETAIL	JOINT SEALER SPEC.
Without Tie Bars	With Tie Bars	With Keyway & Tie Bars	Butted		
L1 L1B	L1T L1TB	L2KT L2KTB	L3 L3B	D B or D A or E None	3723 Unsealed 3723 Unsealed

LEGEND

L = Longitudinal Joint
No. = Joint Reference
T = Tie Bars
K = Keyway
B = Concrete Base

EXAMPLE

L2KT
- Tie Bars
- Keyway
- Joint Reference
- Longitudinal Joint

LONGITUDINAL JOINT NOTES

Tie bars for L1TB joints shall be the same size and spacing as shown on standard plan sheet 5-297.217.

Except when noted otherwise in the plans the tie bar spacing for all L2KT and L2KTB joints shall be 2' 6" c. to c. and bent 60° as shown.

Tie bars in the L2KT and L2KTB joints shall be the same size and length as used for the L1T or L1TB joints when tying pav't. to pav't. or base to base. Tie bars in the L2KT or L2KTB joints shall be No. 4 x 2' 6" when tying curb and gutter to pav't. or base.

All tie bars shall meet the requirements of Grade 60 for AASHO M-31 or M-53.

Normally, tied pavement widths shall not exceed 30 feet except bridge approach panels and pavement tapers.

Joint width tolerance, +1/16", -1/32".

Spec. 3723 Sealer - Top of sealer flush to -3/16" below top of pavement surface.

(1) Just prior to sealing joint (Detail A&E) a paper rope with a 1/8" larger diameter than the joint opening may be placed 1/2" below the top of the pavement.

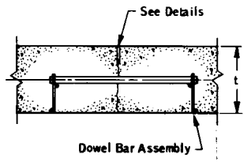
GENERAL NOTES:

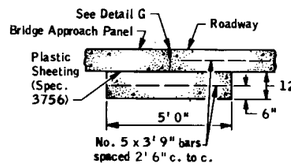
See the following standard plates and standard plan sheet for additional details: Dowel Bar Assembly 1103; Pav't. Keyway 1141; and Concrete Pavement with Skewed Joints 5-297.217.

See paving layouts in the plans for joint class designations to be used and special reinforcement required.

APPROVED June 8, 1981
R. O. Kipp
Director
OFFICE OF ENGINEERING STANDARDS

LONGITUDINAL JOINTS
DESIGN L





CONCRETE SILL
(Included as part of C3S joint)

LEGEND

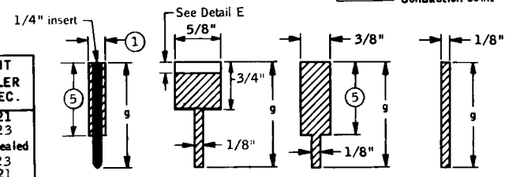
C = Contraction Joint
No. = Joint Reference
-1 = Hot Poured Seal 3723
D = Dowel Bars
S = Concrete Sill
B = Concrete Base

EXAMPLE

C1DB
- Concrete Base
- Dowel Bars
- Joint Reference
- Contraction Joint

CONTRACTION JOINTS

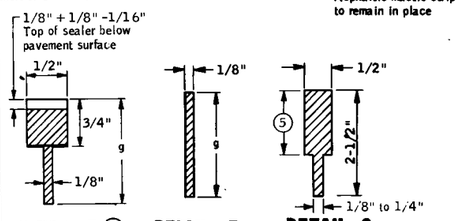
CLASS DESIGNATION		JOINT DETAIL	JOINT SEALER SPEC.
WITHOUT DOWELS	WITH DOWELS		
C1	C1D	A or C	3721
C1-1	C1D-1	A or B	3723
C1B	C1DB	D or F	Unsealed
C2-1	C2D-1	B	3723
C3S		G	3721
C4	C4D	C	3721
C5-1	C5D-1	E	3723



DETAIL A Formed (Insert to be removed) **DETAIL B** (2) Sawed or Formed (3) **DETAIL C** Sawed **DETAIL D** Formed Asphaltic mastic strip to remain in place

MIN. CONTRACTION JOINT DEPTHS

Pav't. Thickness	Non-Reinf. Pav't.	Reinforced Pav't.	Concrete Base
t	g	g	g
6"	1-5/8"		1-1/4"
6-1/2"	1-5/8"		1-1/4"
7"	1-5/8"		1-1/2"
7-1/2"	1-5/8"		1-1/2"
8"	1-5/8"	2"	1-1/2"
8-1/2"	1-5/8"	2"	1-1/2"
9"	1-5/8"	2"	1-1/2"
10"	2"	2-1/2"	2"



DETAIL E (6) Sawed **DETAIL F** Sawed **DETAIL G** Formed and Sawed (4)

(1) Design C1 or C1D: Prior to installing preformed joint sealer in the formed joint, (Detail A) the joint shall be widened to a nominal width of 3/8" by sawing along the full length of the formed joint.

Design C1-1 or C1D-1: Prior to sealing formed joint (Detail A) with hot poured joint sealer, the joint shall be widened to a nominal width of 5/8" for a depth of 3/4", +1/8", -1/16", by sawing along the full length of the formed joint. Prior to sealing joint (Detail B) with hot poured joint sealer a strip of paper 5/8" wide shall be placed on the bottom of the 5/8" wide joint.

(2) Design C1-1 or C1D-1, C2-1 or C2D-1: Prior to sealing joint (Detail B) with hot poured joint sealer a strip of paper 5/8" wide shall be placed on the bottom of the 5/8" wide Joint.

(3) Design C2-1 or C2D-1: Use insert for forming joint (no sawing permitted).

(4) Use 5/16" x 2" insert for forming joint. Final dimensions shall be obtained by sawing.

(5) Depth shall be 1/4" greater than preformed joint sealer when compressed to fit joint design width.

(6) Design C5-1 or C5D-1: Prior to sealing joint (Detail E) with hot poured joint sealer a strip of paper 1/2" wide shall be placed on the bottom of the 1/2" wide joint.

CONTRACTION JOINT NOTES

In concrete base construction the contraction joints shall be spaced at 30 foot intervals and at right angles to the longitudinal joints except as noted below. Where concrete base is constructed adjacent to existing pavement or base, the contraction joints in the new base shall match those in the existing pavement or base except that the spacing shall not be less than 15 feet nor more than 30 feet.

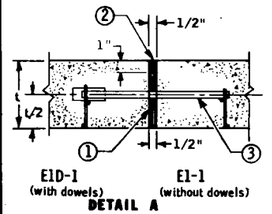
Joint width tolerances: +1/16", -1/32"

GENERAL NOTES:

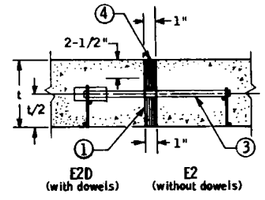
See the following standard plates and standard plan sheet for additional details: Dowel Bar Assembly 1103; Construction of Header Joints 1150, and Concrete Pavement with Skewed Joints 5-297.217.

See paving layouts in the plans for joint class designation to be used and special reinforcement required.

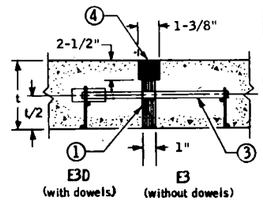
CONTRACTION JOINTS
DESIGN C



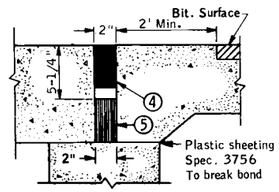
E1D-1 (with dowels) E1-1 (without dowels)
DETAIL A



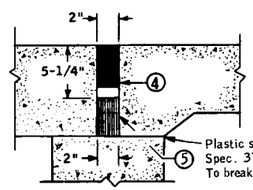
E2D (with dowels) E2 (without dowels)
DETAIL B



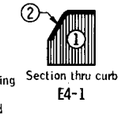
E3D (with dowels) E3 (without dowels)
DETAIL C



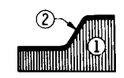
E4B (without dowels)
DETAIL D



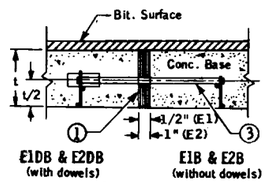
E4 (without dowels)
DETAIL E



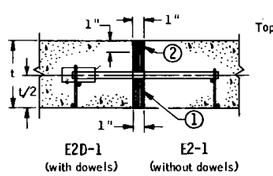
E4-1



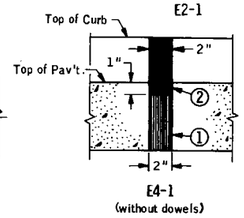
E2-1



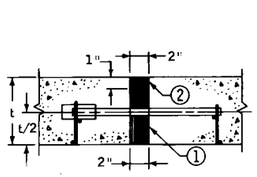
E1DB & E2DB (with dowels) E1B & E2B (without dowels)
DETAIL F



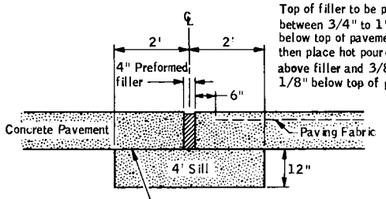
E2D-1 (with dowels) E2-1 (without dowels)
DETAIL G



E4-1 (without dowels)
DETAIL H



E4D (with dowels)
DETAIL I



Top of filler to be placed between 3/4" to 1". below top of pavement, then place hot pour (2) above filler and 3/8" ± 1/8" below top of pav't.

DETAIL E&S JOINT

(1) Preformed Joint Filler Material - Spec. 3702

(2) Joint Sealer as specified. Top of sealer, flush to 1/8" below top of pavement surface. Top of sealer for curb section E joints flush with surface (0") ± 1/8".

(3) Dowel Bar Assembly See Std. Pl. 1103

(4) Joint Sealer - Spec. 3721 Refer to plans for details of sealer

(5) Preformed Joint Filler Material - Spec. 3702 or an approved sheet polystyrene.

LEGEND

E = Expansion Joint
No. = Joint Reference
-1 = Hot Poured Seal (2)
D = Dowel Bars
B = Concrete Base

EXAMPLE

E1D-1
- Hot Poured Seal (2)
- Dowel Bars
- Joint Reference
- Expansion Joint

EXPANSION JOINTS

CLASS DESIGNATION		JOINT DETAIL	JOINT SEALER SPEC.
WITH DOWELS	WITHOUT DOWELS		
E1D-1	E1-1	A	(2)
E1DB	E1B	F	Unsealed
E2D	E2	B	3721
E2D-1	E2-1	G	(2)
E2DB	E2B	F	Unsealed
E3D	E3	C	3721
	E4	E	3721
	E4B	D	3721
	E4-1	H	(2)
E4D		I	(2)

EXPANSION JOINTS
DESIGN E

PAVEMENT JOINTS

~~State Proj. No.~~ S.A.P. 55-610-13 OLMSTED COUNTY **Sheet No.** 3 **of** 5 **Sheets**

Fed. Proj. No.

℄ CULV 503+82
INFL 24"x76 0 S F

CL 17' REINFORCED
PANEL STA 503+77 5 TO
STA 400+7

PE LT 410+60

CONST AGGREGATE
SURFACE

FARM DR LT 414+09

CONS 2" BITUMINOUS
APPROACH 2 PT TURN
LANE

FARM DR LT 415+14

CONST 2" BITUMINOUS
APPROACH 8 PT TURN
LANE

PE LT 419+83

CONST AGGREGATE
SURFACE

EQUATION

400+56 57

503+80 0

4' AGGREGATE SHOULDER

4' AGGREGATE SHOULDER

1 1/2" SURF PAVT OVERLAY
NON-REINFORCED

BEGIN SAP 55 610 1
STA 400+56 57

PE RT 409+20

CONST AGGREGATE
SURFACE

℄ CULV 417+32
INFL 24"x58 FCP

CONST 9' REINFORCED
PANEL STA 417+81 TO
STA 418+00

PE RT 419+68

CONST AGGREGATE
SURFACE

B M ELEV 319 94
SPK IN P P 50' LT
STA 402+55

B M ELEV 298 72
SPK IN P P 50 LT
STA 418+45

EQUATION

0 62%

6 9%

EXISTING GROUND
ELEV 1322 06

EXISTING GROUND
ELEV 1298 36

1330

1320

1310

1300

1290

1280

1270

1260

State Proj. No.

Sheet No. of **Sheets**

Fed. Proj. No.

F.E. LT. 438+93
CONST. AGGREGATE SURFACE

CR. 129 LT. 442+45
CONST. 2" BITUMINOUS APPROACH
& RIGHT TURN LANE

F.E. LT. 443+58
CONST. AGGREGATE SURFACE

F.E. LT. 455+35
CONST. AGGREGATE SURFACE

S 33 T 108 R 22 W

P.I. 442+45.0
Δ LT. 00°00'07"

4' AGGREGATE SHOULDER

24' CONC. PAV'T. OVERLAY
NON-REINFORCED

4' AGGREGATE SHOULDER

℄ CULV. 432+63
INPL. 36"x48" R.C.P.
CONST. 15' REINFORCED
PANEL STA. 432+56 TO STA. 432+71

F.E. RT. 438+84
CONST. AGGREGATE SURFACE

C.S.A.H. 29 RT. 442+45
CONST. 2" BITUMINOUS
APPROACH & RT. TURN LANE.

F.E. RT. 449+00
CONST. AGGREGATE SURFACE

FARM DR. RT. 454+36
CONST. 2" BITUMINOUS
APPROACH & RT. TURN LANE.

NOTE: C5-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 19' & 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14', AND 19' UNLESS OTHERWISE SHOWN.

B.M. ELEV. 1268.72
SPK. IN P.P. 50' LT.
STA. 437+75

P.I. +00
ELEV. 97.06
600' V.C.
M = 2.205

P.V.C. +00. ELEV. 74.36

P.V.T. +00
ELEV. 69.88

-0.44%

P.V.C. +00
ELEV. 70.14

P.I. +00
ELEV. 71.88
600' V.C.
M = 3.68

P.V.T. +00
ELEV. 66.08

-1.8%

P.I. +92.3333
ELEV. 42.7980
800' V.C.
M = 3.0

P.V.C. +00
ELEV. 45.3860

℄ FINISHED GRADE ELEV.

STA. 460+00 END CONC. PAV'T. OVERLAY
BEGIN BIT. OVERLAY

CONST. 2" MAX. BIT. OVERLAY
STA. 463+50 TO 472+00

CONST. 2" TOP VARIABLE
THICKNESS BIT. OVERLAY
STA. 460+00 TO 463+50.

E.B. LANE
W.B. LANE

4' AGGREGATE SHLD'S

24' CONC. PAV'T. OVERLAY
NON-REINFORCED

F.E. RT. 461+13
CONST. AGGREGATE SURFACE

8' BITUMINOUS SHLD.

8' BITUMINOUS SHLD.

BITUMINOUS SHLD SURFACE INPLACE

FARM ENT. LT. 475+13
NO CHANGE

F. ENT. LT. 478+76
NO CHANGE

℄ CULV. 484+17
INPL. W9x6x39 CONC.
BOX CULV.
SKEWED 30°
NO CHARGE

F. ENT. LT. 487+77
NO CHANGE

FARM ENT. RT. 480+56
NO CHANGE

F.E. RT. 485+08
NO CHANGE

P.I. 468+79.15
Δ LT. 00°01'30"

END: SAP 55-610-13
STA. 472+00

LOW CONC. ELEV. TH. 90

B.M. ELEV. 1232.41
SPK. IN P.P. 50' LT.
STA. 459+38

P.V.T. +92.3333
ELEV. 23.88602

P.I. +47.03677
ELEV. 96.98920
800' V.C.
M = 1.7457

-0.12%

P.V.C. +96.20689
ELEV. 96.94570

P.I. +46.20689
ELEV. 95.32070
800' V.C.
M = 0.5433.75

P.V.T. +96.20689
ELEV. 82.52070

-1.6%

B.M. ELEV. 1194.90
SPK. IN P.P. 50' LT.
STA. 474+68

P.I. +00
ELEV. 79.06
800' V.C.
M = 3.4

P.V.C. +00
ELEV. 83.46

℄ FINISHED GRADE ELEVATION