

A

DOUGLAS

96/02/20/190
 HOFFMAN CONSTRUCTION COMPANIES-A JOIN
 8010-13-71 GENERAL CONSTRUCTION
 \$2,244,363.37

AS BUILT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8010-13-71	STP 028(52)	1

INDEX OF SHEETS

- Sheet No. 1 Title
- Sheet No. 2-2.68 Typical Sections and Details
- Sheet No. 3-3.5 Estimate of Quantities
- Sheet No. 3A-3.0 Miscellaneous Quantities
- Sheet No. Right of Way Plat
- Sheet No. 5-5.9 Plan and Profile
- Sheet No. 6-6.3 Standard Detail Drawings
- Sheet No. 7-7.29 Sign Plates
- Sheet No. - Structure Plans
- Sheet No. 9-9.1 Computer Earthwork Data
- Sheet No. 9.2-9.5 Cross Sections

TOTAL SHEETS = 218



TOWER AVENUE, CITY OF SUPERIOR

PLAN OF PROPOSED IMPROVEMENT

(64TH. ST. TO 52ND. ST.)

S.T.H. 35
 DOUGLAS COUNTY

STATE PROJECT NUMBER
8010-13-71

8010-13-71; STP 028(52)
 Tower Avenue (64th - 52th Street)
 STH 35 Douglas County
 Hoffman Construction Company
 Gr, CABC, SS, C & G, Con Pav, lighting, etc.
 STA 474+42 - 527+25 .0988 miles
 Andy Stensland Cont. 1 D8

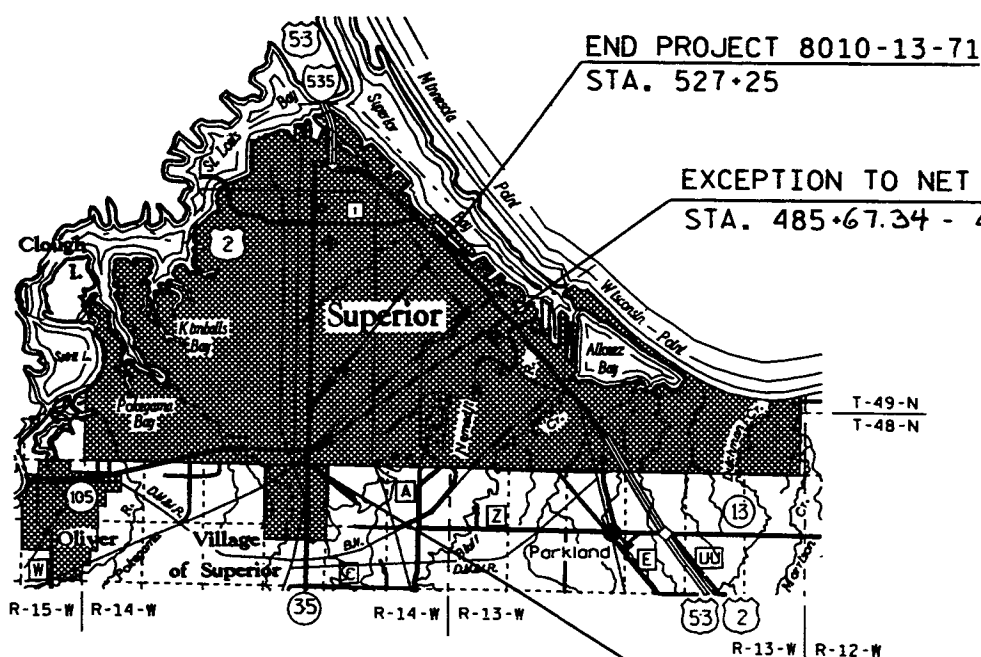
begin const. April 28, 1996
 end const. May 31, 1997

DESIGN DESIGNATION

- A.D.T. (1995) = 12,900
- A.D.T. (2015) = 16,530
- D.H.V. (2015) = 1,770
- D. = 60-40
- T. ADT = 6.0%
- DESIGN SPEED = 25 MPH
- ESALS = N/A

CONVENTIONAL SIGNS

- | | | | |
|--------------------------------|-------|------------------------|-----------|
| COUNTY LINE | ----- | COMBUSTIBLE FLUIDS | CAUTION |
| CORPORATE LIMITS | ----- | UNDERGROUND UTILITIES | |
| PROPERTY LINE | ----- | GAS | --- G --- |
| LOT LINE | ----- | ELECTRIC | --- E --- |
| LIMITED EASEMENT | ----- | TELEPHONE OR TELEGRAPH | --- T --- |
| EXISTING RIGHT OF WAY | ----- | SERVICE PEDESTAL | --- X --- |
| PROPOSED OR NEW R/W LINE | ----- | CABLE MARKER | --- Y --- |
| SURVEY LINE | ----- | POWER POLE | --- P --- |
| SLOPE INTERCEPT | ----- | TELEPHONE POLE | --- Q --- |
| ORIGINAL GROUND | ----- | RAILROAD | ----- |
| MARSH OR ROCK PROFILE | ----- | MARSH AREA | ----- |
| EXISTING CULVERT | ----- | WOODED OR SHRUB AREA | ----- |
| PROPOSED CULVERT (Box or Pipe) | ----- | | |
| CULVERT (Profile View) | ----- | | |



END PROJECT 8010-13-71
 STA. 527+25

EXCEPTION TO NET & LENGTH
 STA. 485+67.34 - 485+80.14

BEGIN PROJECT 8010-13-71
 STA. 474+42
 N. 552,300 (±100')
 E. 1,471,800 (±100')

LAYOUT
 SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.998 MI. (URBAN)

COORDINATE NOTE:
 ALL COORDINATES ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE AND SCALED FROM U.S.G.S. TOPOGRAPHIC MAP SUPERIOR, WISCONSIN-MINNESOTA QUADRANGLE FOR IDENTIFICATION ONLY.

ELECTRICAL/LIGHTING CONSULTANT:

DESIGN, INC.
 227 W. BARRISTER STREET
 EAU CLAIRE, WISCONSIN 54601

DATE 10-20-95

APPROVED FOR CITY OF SUPERIOR

DATE 11-1-95 [Signature]

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor: GARY GALLFORD
 Designer: BARBARA KERBER
 District Examiner: ORVILLE KING
 District Supervisor: RICHARD H. WASHBURN
 C.D. Coordinator: [Signature]
 C.D. Examiner: [Signature]

APPROVED FOR DISTRICT OFFICE

DATE 11-1-95 [Signature]

AUTHORIZED FOR CENTRAL OFFICE DESIGN

DATE 12-15-95 [Signature]



STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.0
TOWER AVENUE, 64th - 52nd STANDARD ABBREVIATIONS, S.D.D.S. UTILITIES & GENERAL NOTES	
S.T.H. 35	DOUGLAS COUNTY

STANDARD ABBREVIATIONS

ACG	AGGREGATE	FT	FOOT	RCPSS	REINFORCED CONCRETE PIPE STORM SEWER
AH	AHEAD	GAL	GALLON	REOD	REQUIRED
ASPH	ASPHALTIC	G	GAS	RT	RIGHT
AC	ASPHALT CEMENT	GR	GRAVEL	R/W	RIGHT OF WAY
APM	ASPHALTIC PLANT MIX	HR	HANDICAP RAMP	SAN	SANITARY (SEWER)
AVG	AVERAGE	HES	HIGH EARLY STRENGTH	SHLDR	SHOULDER
ADT	AVERAGE DAILY TRAFFIC	CWT	HUNDREDWEIGHT	SHR	SHRINKAGE
BK	BACK	HYD	HYDRANT	SR	SIDE ROAD
B&B	BALLED AND BURLAPPED	I.D.	INCH DIAMETER	SDWK	SIDEWALK
B&P	BALLED AND POTTED	INL	INLET	S	SOUTH
BR	BARE ROOT	INT	INTERSECTION	SB	SOUTHBOUND
BRP	BARE ROOT POTTED	INV	INVERT	SP	SPECIAL
BM	BENCH MARK	IP	IRON PIPE	SPECS	SPECIFICATIONS
BLK	BLOCK	LT	LEFT	SF	SQUARE FOOT
CB	CATCH BASIN	LIN FT	LINEAR FOOT	SY	SQUARE YARD
C/L	CENTERLINE	LS	LUMP SUM	STD	STANDARD
CL	CLASS	ML	MAINLINE	SDD	STANDARD DETAIL DRAWING
CE	COMMERCIAL ENTRANCE	MH	MANHOLE	STH	STATE TRUNK HIGHWAY
CONC	CONCRETE	MKG	MARKING	STA	STATION
CORR	CORRUGATED	NC	NORMAL CROWN	SSD	STOPPING SIGHT DISTANCE
CY	CUBIC YARD	N	NORTH	SS	STORM SEWER
CP	CULVERT PIPE	NB	NORTHBOUND	SE	SUPERELEVATION
C&G	CURB AND GUTTER	OBLIT	OBLITERATE	SURF	SURFACE
DHV	DESIGN HOUR VOLUME	PAVT	PAVEMENT	T	TANGENT
DIA	DIAMETER	PU	PIPE UNDERDRAIN	TEL.PED	TELEPHONE PEDESTAL
D	DIRECTIONAL DISTRIBUTION	PC	POINT OF CURVATURE	TV	TELEVISION CABLE
DISCH	DISCHARGE	PI	POINT OF INTERSECTION	TEMP	TEMPORARY
EA	EACH	PT	POINT OF TANGENCY	TLE	TEMPORARY LIMITED EASEMENT
E	EAST	POC	POINT ON CURVE	T	TRUCKS (% OF)
ELEC	ELECTRIC (AL)	POT	POINT ON TANGENT	TYP	TYPICAL
ELEV	ELEVATION	PVC	POLYVINYL CHLORIDE	UNCL	UNCLASSIFIED
EW	ENDWALL	PCC	PORTLAND CEMENT	UG	UNDERGROUND CABLE
ENT	ENTRANCE	LB	POUND	V	VELOCITY OR DESIGN SPEED
EXC	EXCAVATION	PSI	POUND PER SQUARE INCH	VC	VERTICAL CURVE
EBS	EXCAVATION BELOW SUBGRADE	PE	PRIVATE ENTRANCE	VOL	VOLUME
EXIST	EXISTING	PROJ	PROJECT	WM	WATER MAIN
FF	FACE TO FACE	R	RADIUS	WV	WATER VALVE
FL	FLOW LINE	RP	RADIUS POINT	W	WEST
		RR	RAILROAD	YD	YARD

UTILITIES

WISC. BELL INC.
304 S. DEWEY ST.
EAU CLAIRE, WI. 54701
CONTACT: VERN SCHULTZ
TELEPHONE (715) 839-5819

CITY OF SUPERIOR
SANITARY SEWER SYSTEM (PUBLIC WORKS)
SUPERIOR, WI. 54880
CONTACT: JEFF VITO
TELEPHONE (715) 394-0334

BRESNAN COMMUNICATIONS CO.
302 E. SUPERIOR STREET
DULUTH, MN. 55802
CONTACT: JIM MATUSZEWSKI
TELEPHONE (218) 722-2815

SUPERIOR WATER, LIGHT & POWER COMPANY
1230 TOWER AVE.
SUPERIOR, WI. 54880
CONTACT: DAVID SMITH (ELECTRIC)
CONTACT: DALE GROTHE (WATER & GAS)
TELEPHONE (715) 394-5511

DIGGERS HOTLINE
2040 WEST WISCONSIN AVENUE
SUITE 10
MILWAUKEE, WI. 53233
TELEPHONE 1-800-242-8511

BURLINGTON NORTHERN
1 NORTH AVENUE
CARLTON, MN. 55718
CONTACT: DAVE NOLANDER (SIGNAL WORK)
TELEPHONE (612) 228-4029
2304 N. 28TH. STREET
SUPERIOR, WI. 54880
CONTACT: WICK SANFORD (CROSSING WORK)
TELEPHONE (715) 394-1235

GENERAL NOTES

ALL ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D.).

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

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

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

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

WASTE AREAS SHALL BE SEEDED WITH SEED MIXTURE NO. 10.

BEARINGS ON THIS PLAN ARE GRID BEARINGS TO THE NEAREST SECOND.

THE EXACT LOCATION OF PRIVATE AND COMMERCIAL ENTRANCES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

SAWED JOINTS ARE REQUIRED WHERE NEW SURFACING JOINS EXISTING PAVEMENT.

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

TYPE 1 OR 1A CURB RAMPS WILL BE CONSTRUCTED AT EVERY RADIUS AS APPROPRIATE UNLESS OTHERWISE INDICATED ON THE PLAN / PROFILE SHEETS.

INLET GRADE ELEVATIONS ARE DEPRESSED 0.1 FOOT FROM NORMAL FLOWLINE.

DISTURBED AREAS WITHIN CONSTRUCTION LIMITS, EXCLUDING ROADBED, ARE TO BE FERTILIZED AND SODDED OR SEEDED.

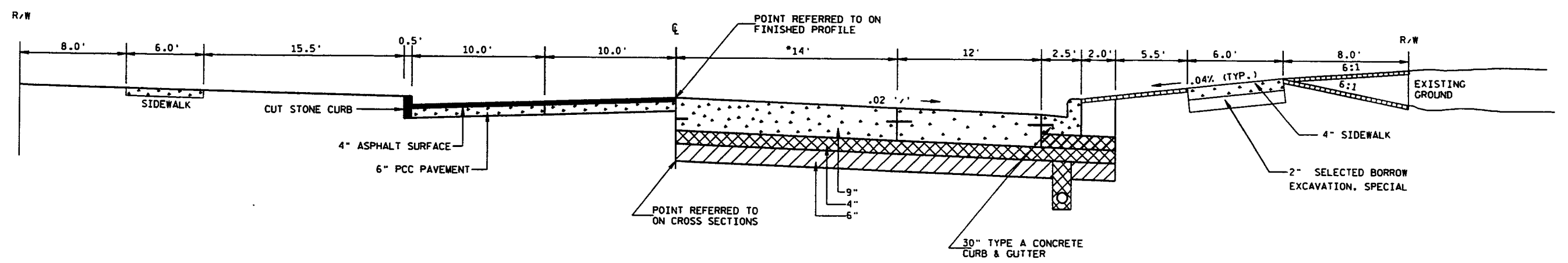
STANDARD DETAIL DRAWINGS

TITLE	NUMBER	TITLE	NUMBER
INLET COVERS	8A5-11a	HARDWARE DETAILS FOR POLE MOUNTINGS	9E1-1e
INLET COVERS	8A5-10b	NON-FREEWAY LIGHTING UNIT POLE WIRING	9E3-1
INLET AND MANHOLE COVERS	8A5-11d	PAVEMENT DETAILS FOR RAILROAD APPROACH	13B1-4
CATCH BASINS, TYPES 3 AND 5	8A7-3	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES	13C1-9
MANHOLES, TYPE 1	8B6-3	DOWELED NON-REINFORCED CONCRETE PAVEMENT (TRANSVERSE JOINTS SPACED AT 20' & NORMAL)	13C13-1
MANHOLES, TYPES 2 AND 3	8B7-3	TREE PLANTING DETAIL	14A2-1
INLETS, TYPE 8,9,10 & 11	8C5-2	BARRICADES AND SIGNS FOR ROAD CLOSURES	15C2-3
CONCRETE CURB, CONCRETE CURB AND GUTTER		PAVEMENT MARKING SYMBOLS	15C7-4a
AND PAVEMENT TIES	8D1-11	PAVEMENT MARKING (MAINLINE)	15C8-7a
CURB RAMPS	8D5-8	PAVEMENT MARKING (LEFT TURN LANE)	15C8-7c
EDGE DRAIN OUTLET DETAILS	8D15-10	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)	15C8-7d
EDGE DRAIN & CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NO. 1 OR NO. 2	8D15-10	PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS	15C9-3
TYPICAL INSTALLATIONS OF EROSION BALES	8E8-2	TRAFFIC CONTROL FOR LANE CLOSURES (SUITABLE FOR MOVING OPERATIONS)	15C12-2
SILT FENCE	8E9-4	LANDMARK REFERENCE MONUMENTS AND COVERS	16A1-5
CONDUIT	9B2-5		
PULL BOX	9B4-1		
CONCRETE CONTROL CABINET BASES	9C5-1		
CABINET SERVICE INSTALLATION	9D1-1		
SIGNAL OR LIGHTING CONTROL CABINET	9D2-1		

GENERAL LEGEND

	CONCRETE PAVEMENT (DOWELED)
	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NO. 2
	CRUSHED AGGREGATE BASE COURSE
	TOPSOIL, FERTILIZER & SOD TO CONSTRUCTION LIMITS
	ASPHALTIC CONCRETE PAVEMENT, TYPE MV

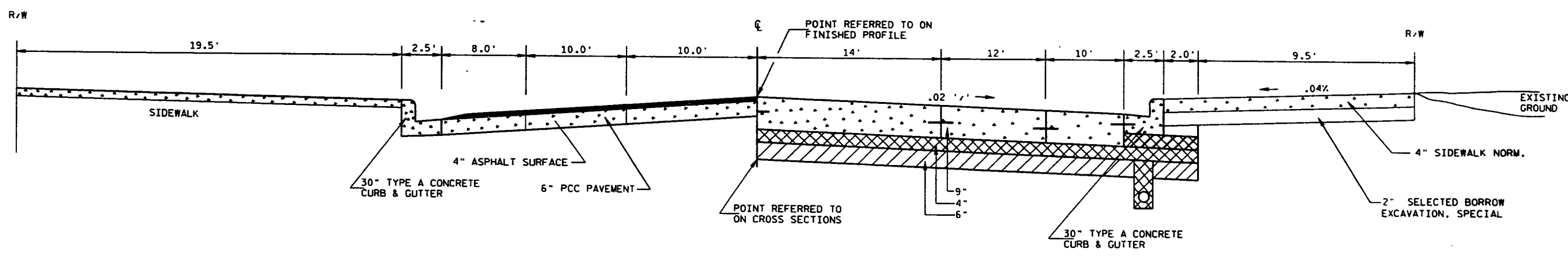
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TYPICAL EXISTING HALF SECTION TYPICAL FINISHED HALF SECTION

TOWER AVENUE

STA. 474+89 TO STA. 487+98.5
 STA. 501+46.5 TO STA. 527+25
 *12' AT STA. 474+42 TO STA. 474+89

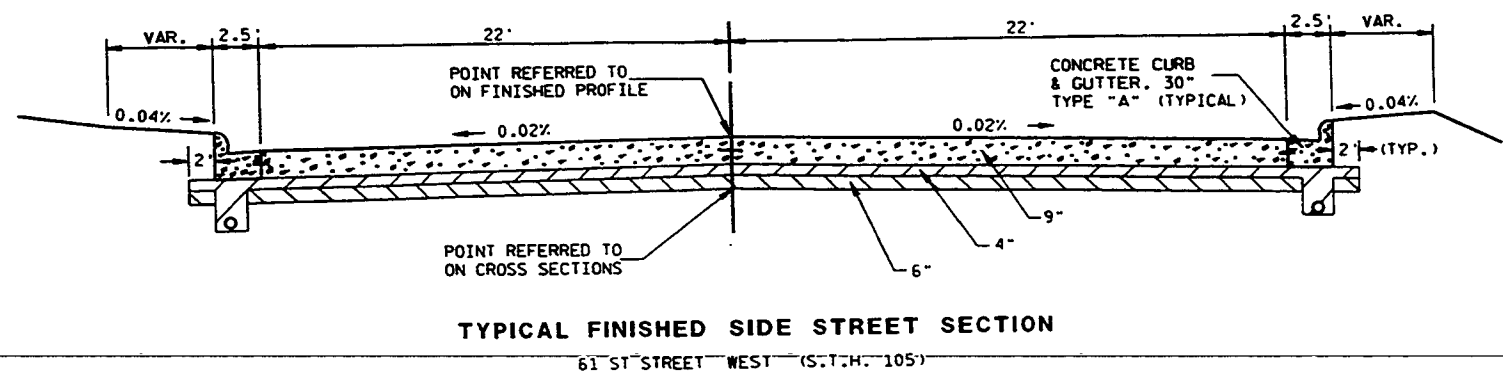
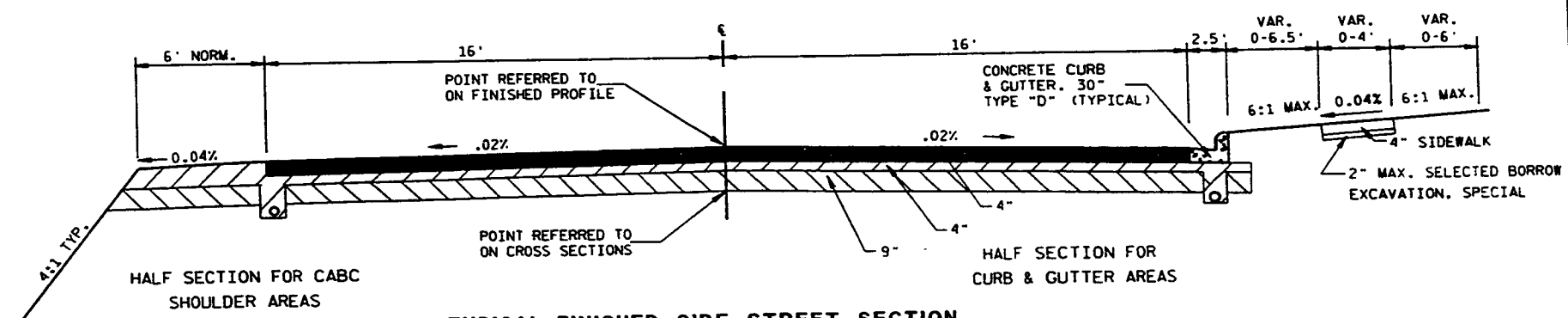
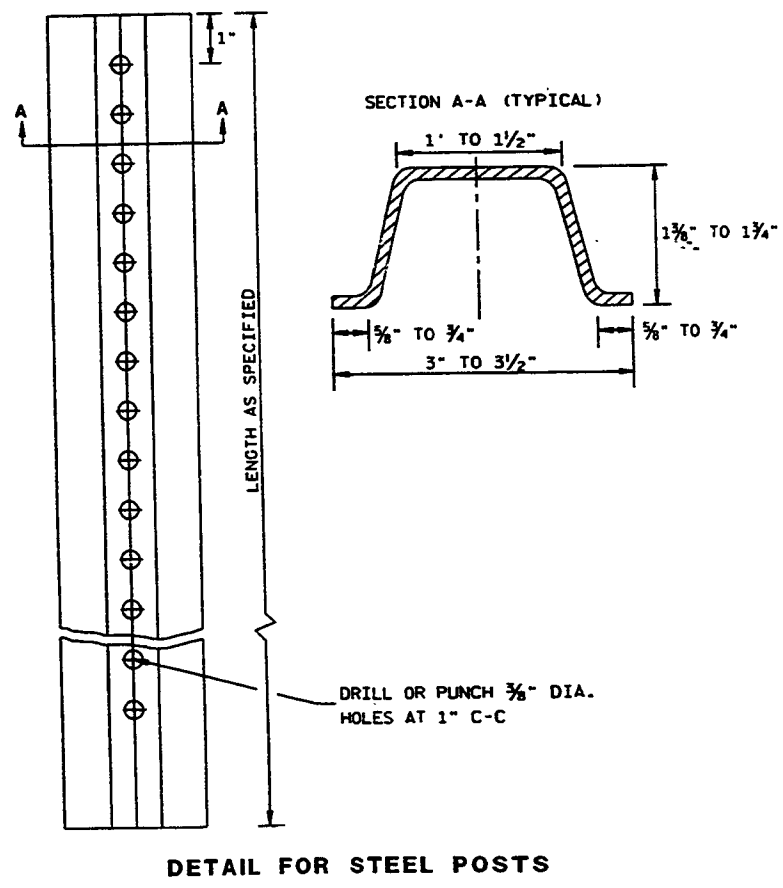
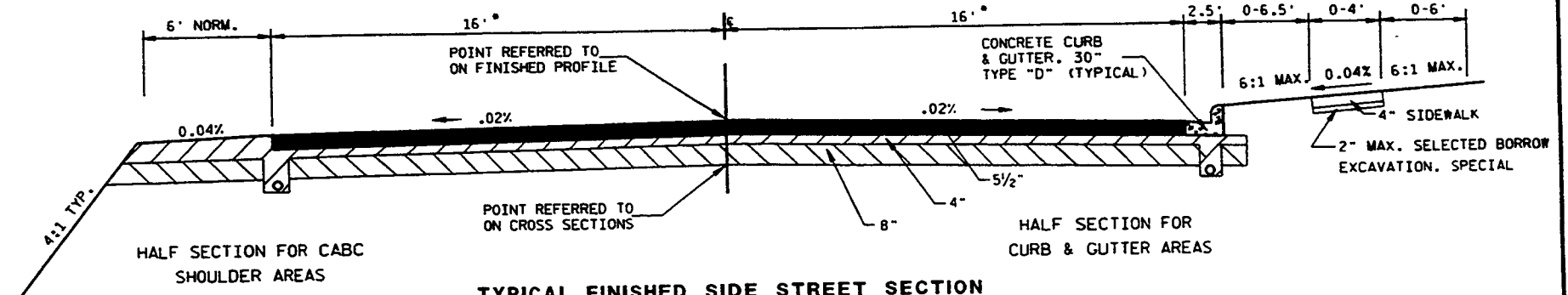
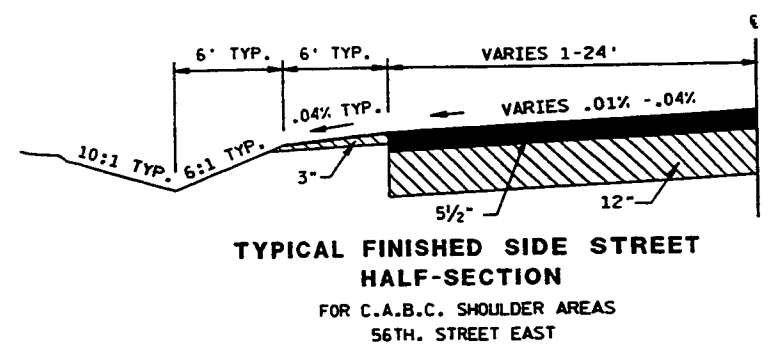


TYPICAL EXISTING HALF SECTION TYPICAL FINISHED HALF SECTION

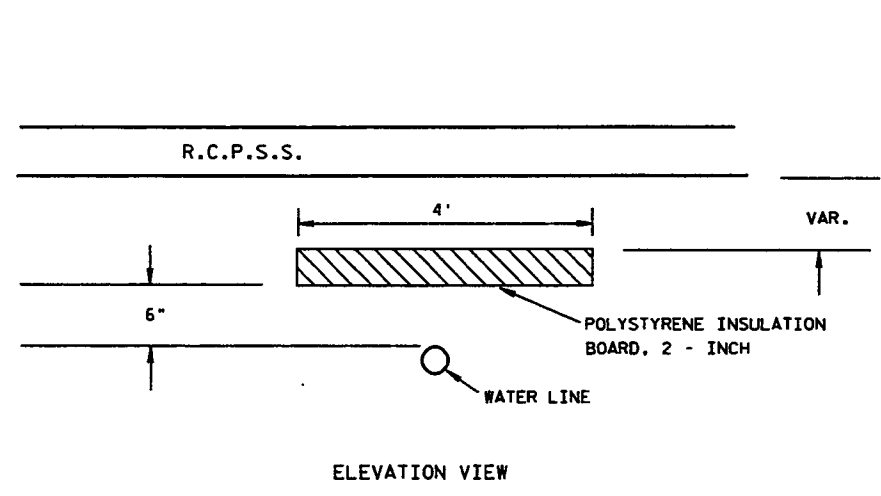
TOWER AVENUE

STA. 487+98.5 TO STA. 501+46.5

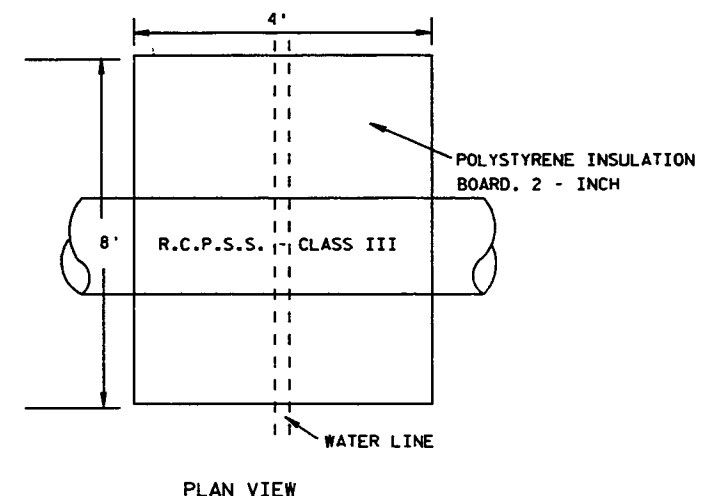
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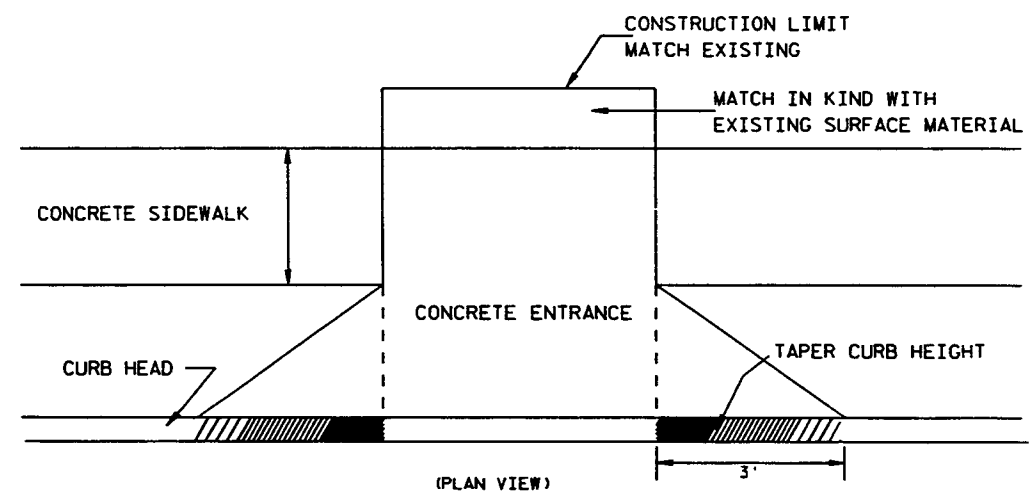
ELEVATION VIEW



PLAN VIEW

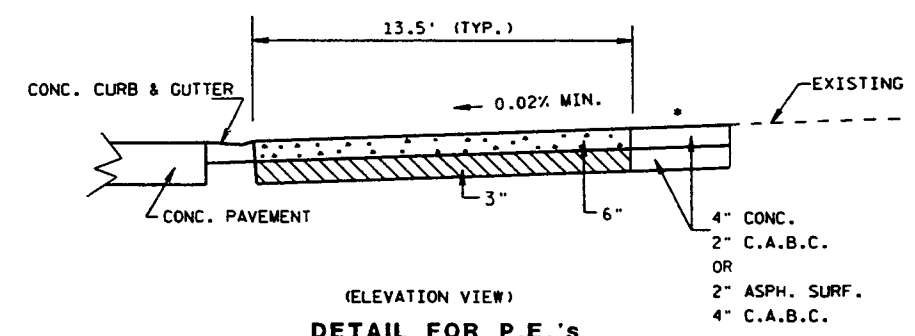
TYPICAL FOR POLYSTYRENE INSULATION BOARD

GENERAL LEGEND	
	CONCRETE PAVEMENT (DOWELED)
	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NO. 2
	CRUSHED AGGREGATE BASE COURSE
	TOPSOIL, FERTILIZER & SOD TO CONSTRUCTION LIMITS
	ASPHALTIC CONCRETE PAVEMENT, TYPE MV

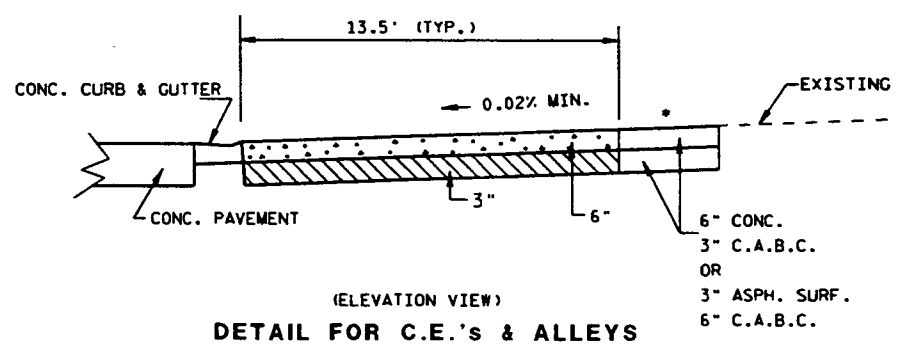


DETAIL FOR P.E.'s, C.E.'s & ALLEYS

WIDTH OF C.E.'S	35' MAX., 12' MIN.
WIDTH OF P.E.'S	24' MAX., 16' MIN.
WIDTH OF ALLEYS	16' MAX., 12' MIN.

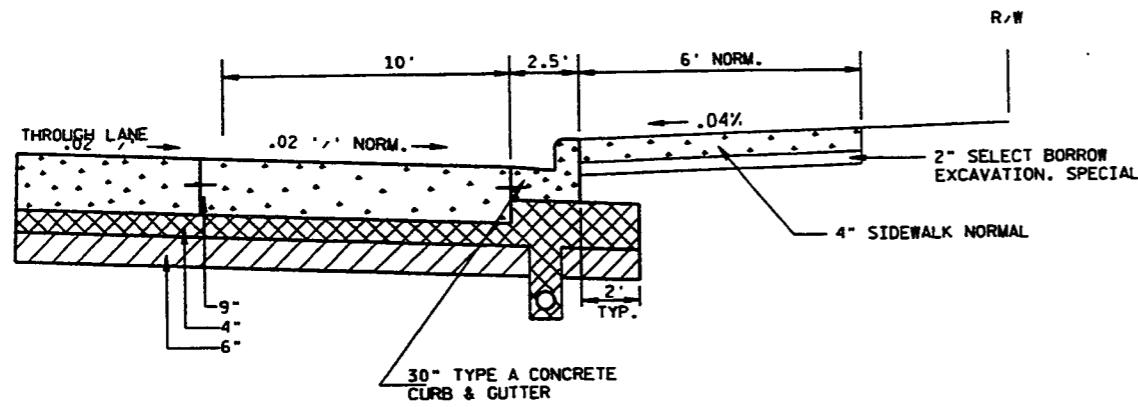


DETAIL FOR P.E.'s
* SLOPE VARIES - .04% TO .07%

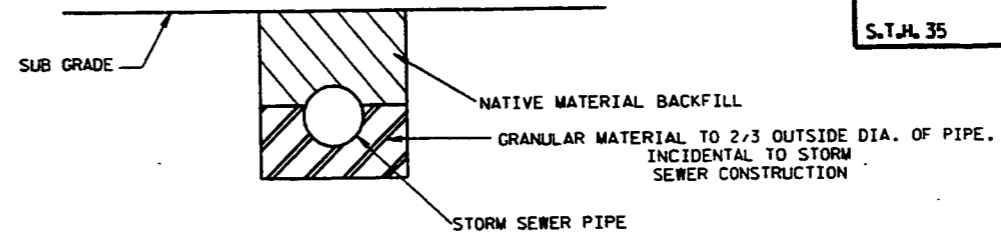


DETAIL FOR C.E.'s & ALLEYS
* SLOPE VARIES - .04% TO .07%

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

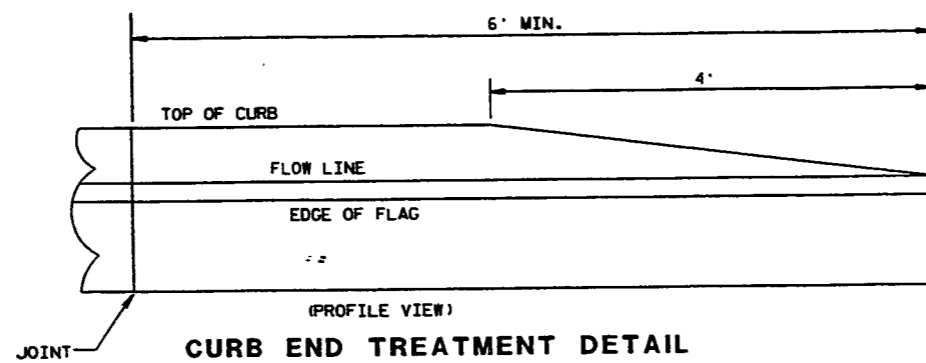


TYPICAL BUS TURNOUT
 STA. 502+55.5-503+95.5 RT.
 STA. 504+68-505+68 LT.



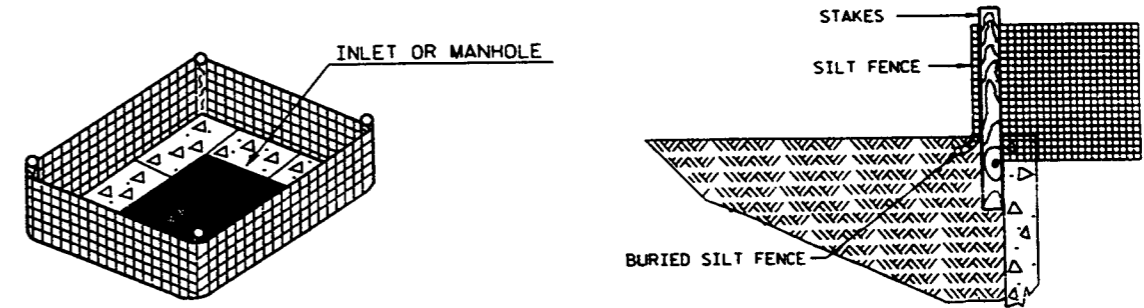
DETAIL FOR STORM SEWER BEDDING

EROSION CONTROL DETAILS

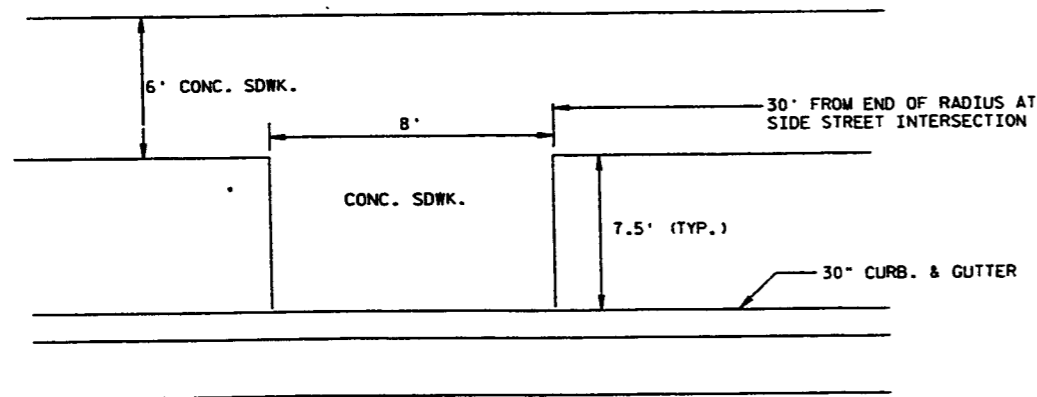


CURB END TREATMENT DETAIL

THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.

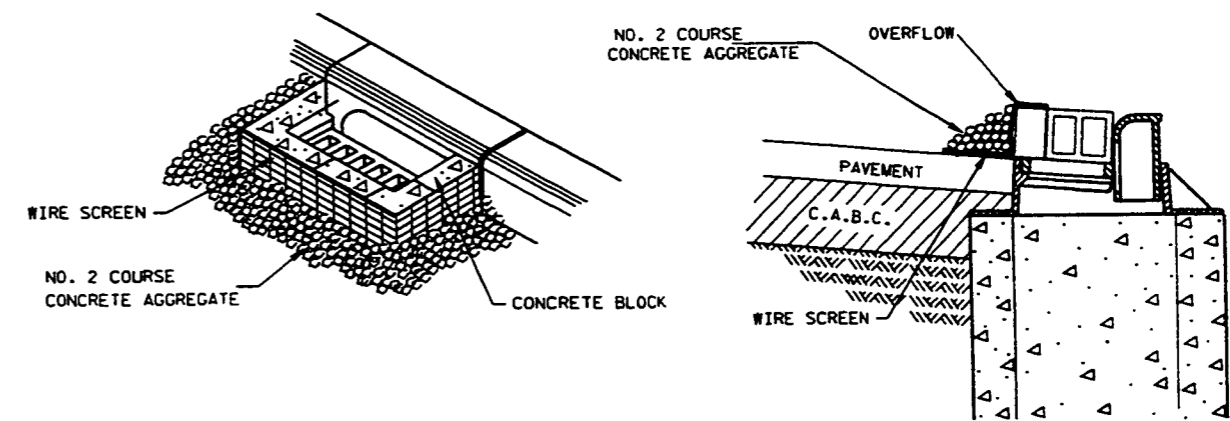


SILT FENCE MANHOLE & INLET SEDIMENT FILTER
 NOTE: TO BE INSTALLED UPON THE COMPLETION OF BACKFILLING THE STRUCTURE



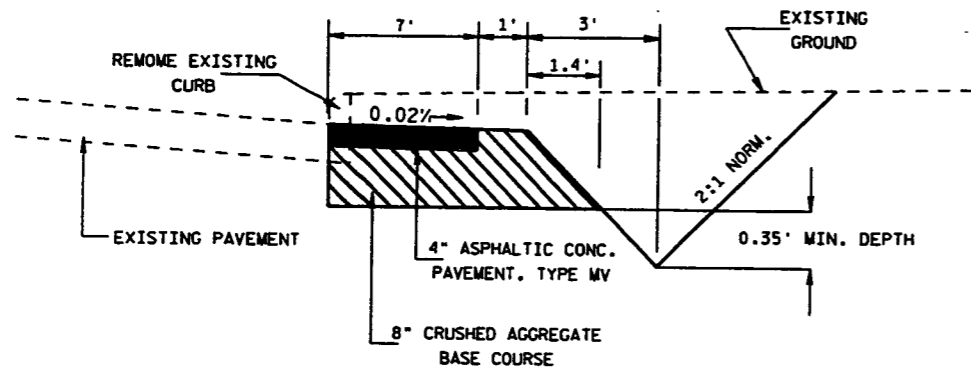
DETAIL FOR CONCRETE SIDEWALK FOR BUS STOPS (PLAN VIEW)

- STA. 510+63-510+71 LT.
- STA. 512+29-512+37 RT.
- STA. 515+48.2-515+56.2 LT.
- STA. 517+06-517+14 RT.
- STA. 520+28.2-520+36.2 LT.
- STA. 522+01.2-522+09.2 RT.
- STA. 524+43-524+51 LT.
- STA. 526+01-526+09 RT.

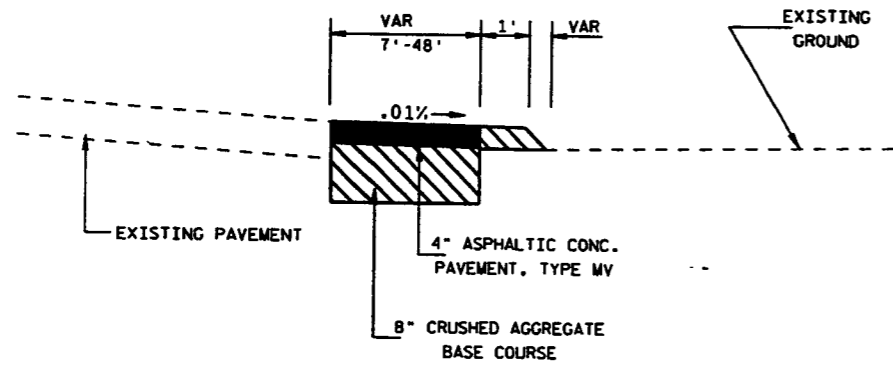


BLOCK AND GRAVEL MANHOLE & INLET SEDIMENT FILTER

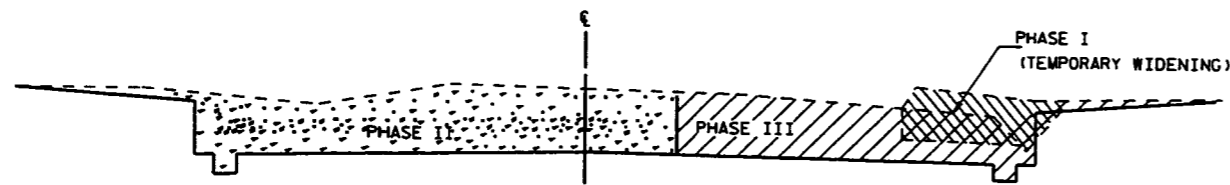
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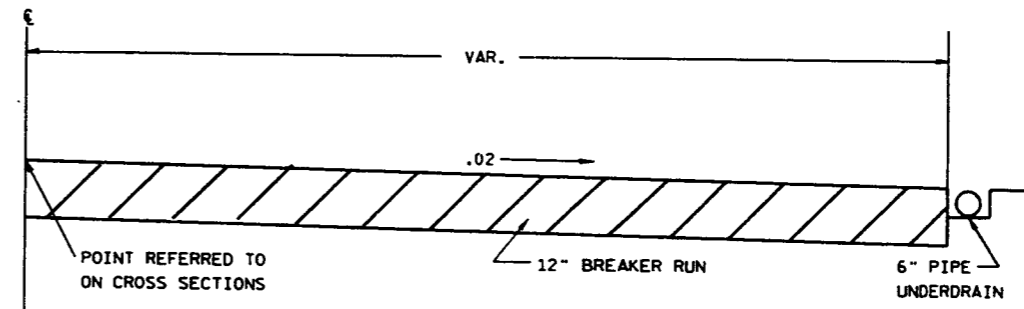
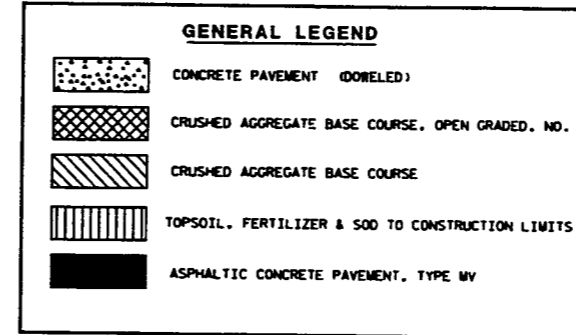
**DETAIL FOR TEMPORARY WIDENING
(PHASE 1 : TRAFFIC CONTROL)**
64 TH STREET TO 61 ST STREET
58 TH STREET TO 52 TH STREET



**DETAIL FOR TEMPORARY WIDENING
(PHASE 1 : TRAFFIC CONTROL)**
56th STREET

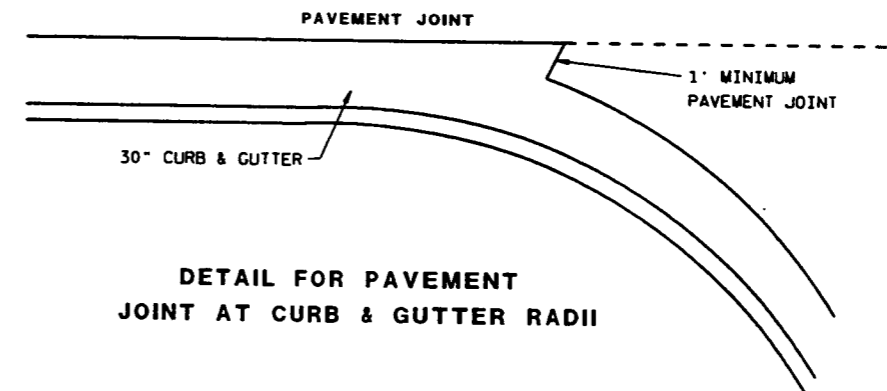


**DETAIL FOR TYPICAL CUTS/FILLS
IN EACH TRAFFIC CONTROL PHASE**



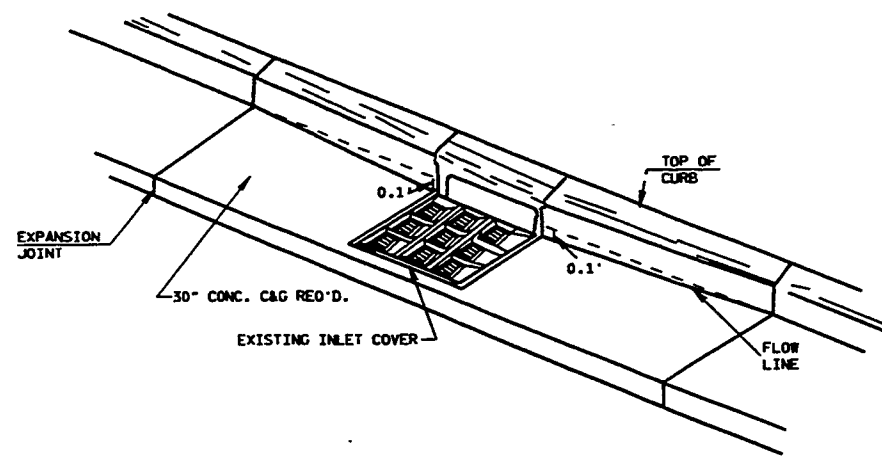
**TYPICAL SUBGRADE STRENGTHENING
DETAIL**

LOCATIONS TO BE DETERMINED
BY ENGINEER

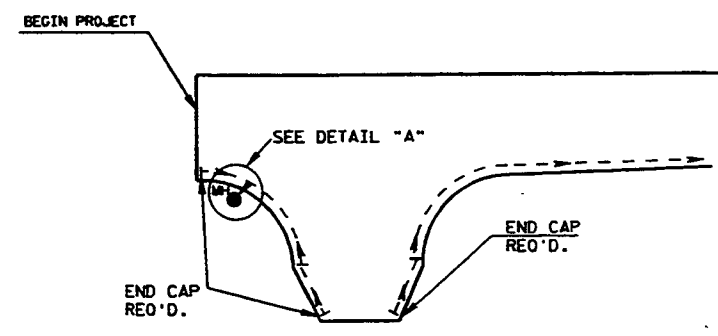


**DETAIL FOR PAVEMENT
JOINT AT CURB & GUTTER RADII**

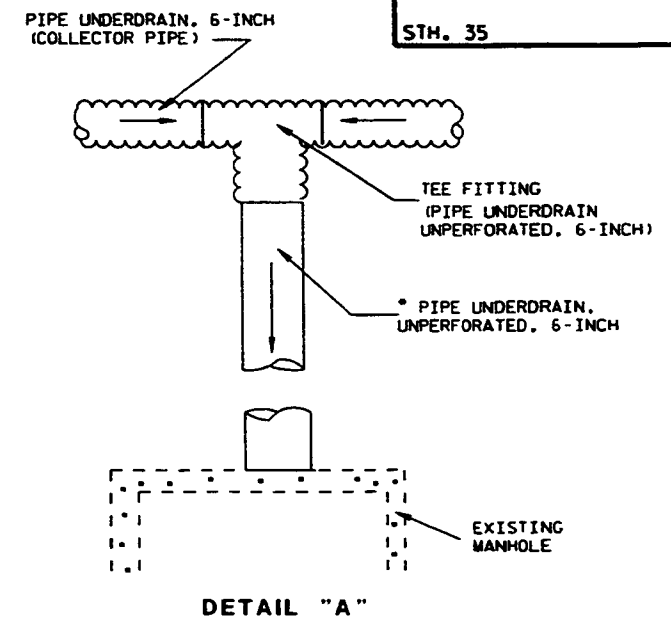
LEVELS ON - 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63



DETAIL FOR DEPRESSION OF INLET GRATE

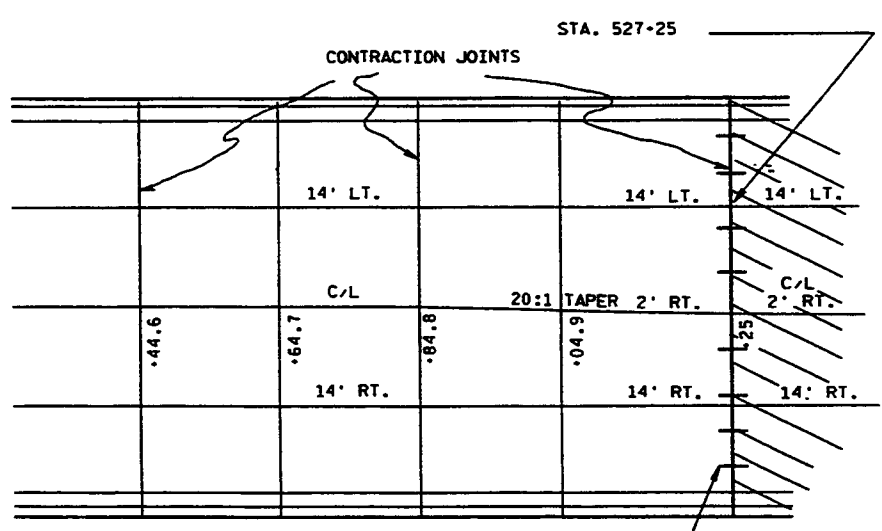


**DETAIL FOR EDGEDRAIN
64th. ST. EAST**

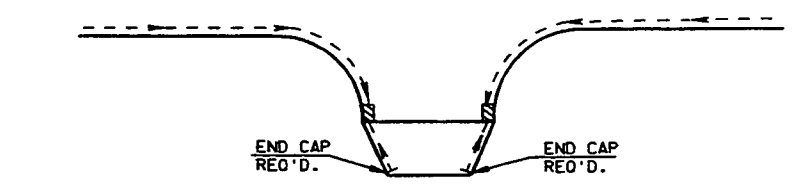


DETAIL "A"

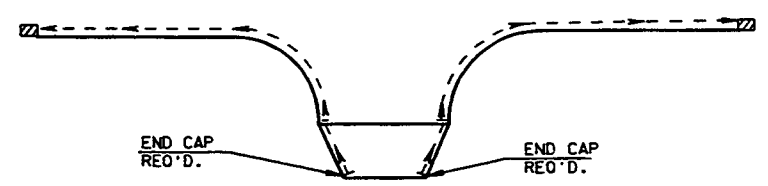
UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:
 POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.
 TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.



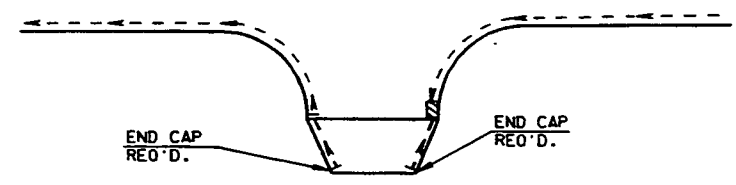
DETAIL FOR CENTERLINE JOINT TAPER AT END OF PROJECT



DETAIL FOR EDGEDRAIN
 63rd. ST. WEST & EAST 59th. ST. WEST
 62nd. ST. EAST 58th. ST. WEST
 61st. ST. EAST 56th. ST. EAST
 60th. ST. WEST & EAST 54th. ST. WEST & EAST
 64th. ST. WEST 57th. ST. WEST
 55th. ST. EAST & WEST

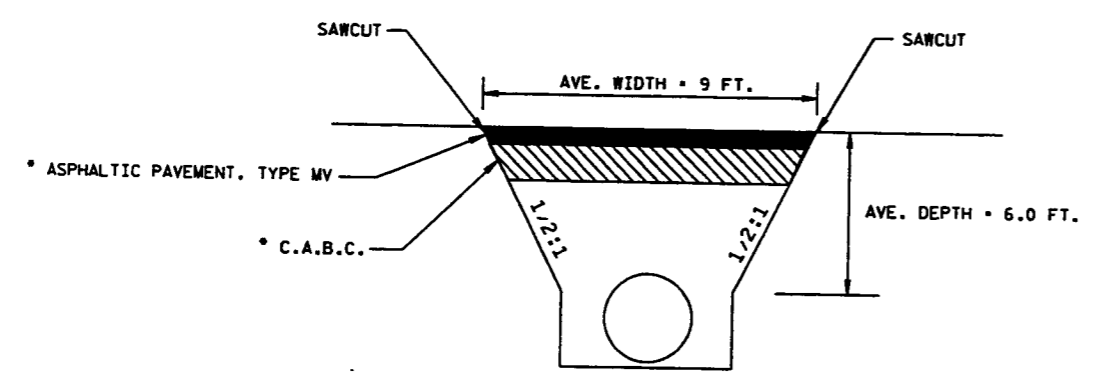


DETAIL FOR EDGEDRAIN
 61st. ST. WEST
 59th. ST. EAST
 58th. ST. EAST
 57th. ST. EAST
 56th. ST. WEST



DETAIL FOR EDGEDRAIN
 53rd. ST. WEST & EAST

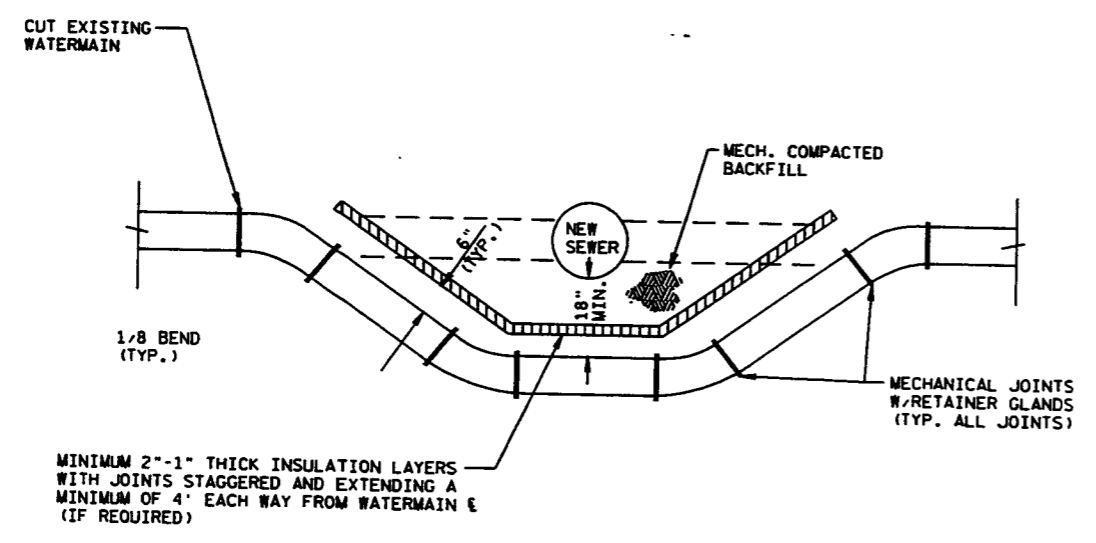
LEVELS ON : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



DETAIL FOR REPLACEMENT OF 18" S.S. PIPE WITH 21" R.C.P.S.S.

STA. 479+21 RT.

* MATCH THICKNESSES WITH EXISTING PAVEMENT STRUCTURE (ESTIMATED AT 4" ASPH. SURFACE & 6" C.A.B.C.)



LOWER WATERMAIN DETAIL

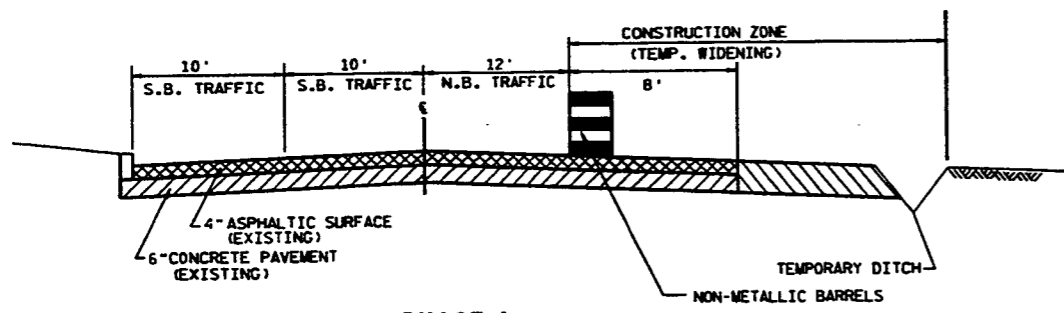
501+54, 13' LT. - 6" MAIN
 511+80, 20' LT. - 12" MAIN
 516+40, 8' LT. - 6" MAIN

RUNOFF COEFFICIENT TABLE

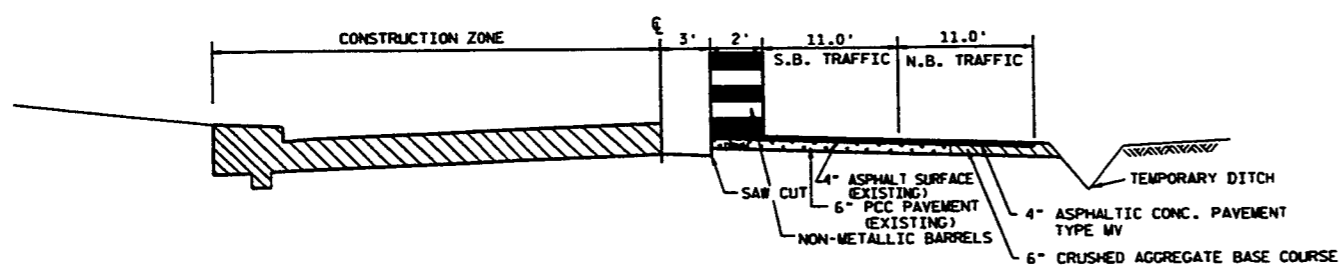
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA • 12.4 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES • 12.4 ACRES

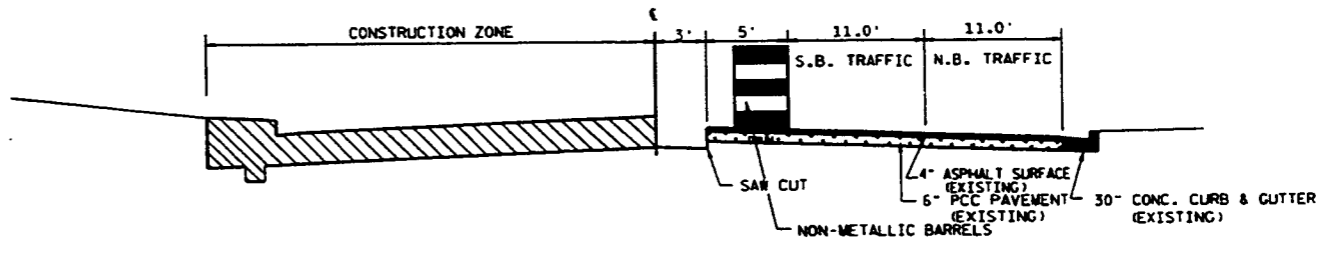
LEVELS ON - 1.2, 3.4, 5.6, 7.8, 9.0, 11.12, 13.14, 15.16, 17.18, 19.20, 21.22, 23.24, 25.26, 27.28, 29.30, 31.32, 33.34, 35.36, 37.38, 39.40, 41.42, 43.44, 45.46, 47.48, 49.50, 51.52, 53.54, 55.56, 57.58, 59.60, 61.62, 63



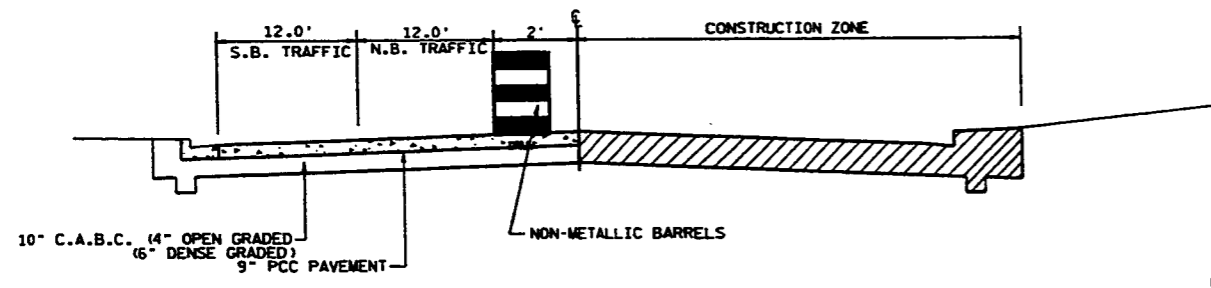
PHASE I
STA. 474+50 TO STA. 484+50
STA. 487+00 TO STA. 527+25



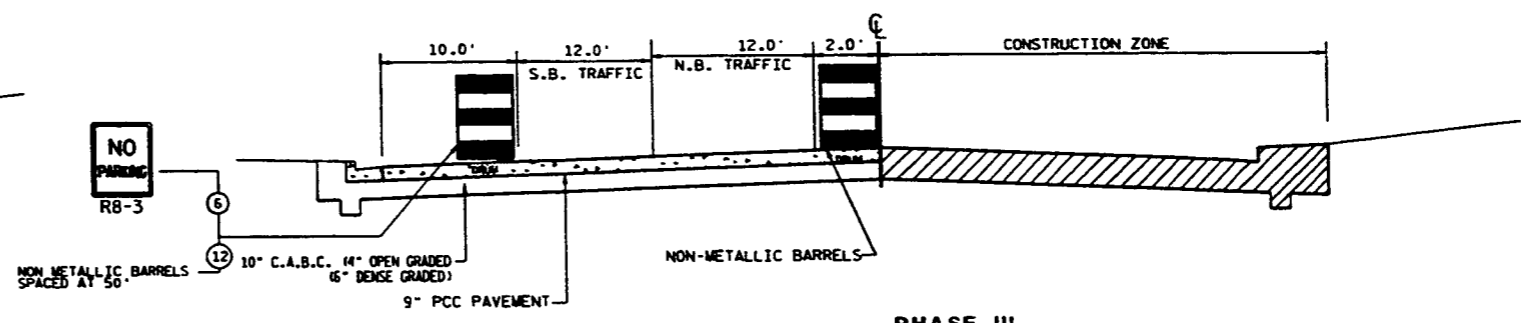
PHASE II
STA. 474+50 TO STA. 488+00
(64th St. TO 61st St.)
STA. 501+50 TO STA. 527+25
(58th St. TO 52nd St.)



PHASE II
STA. 488+00 TO STA. 501+50
(61st St. TO 58th St.)

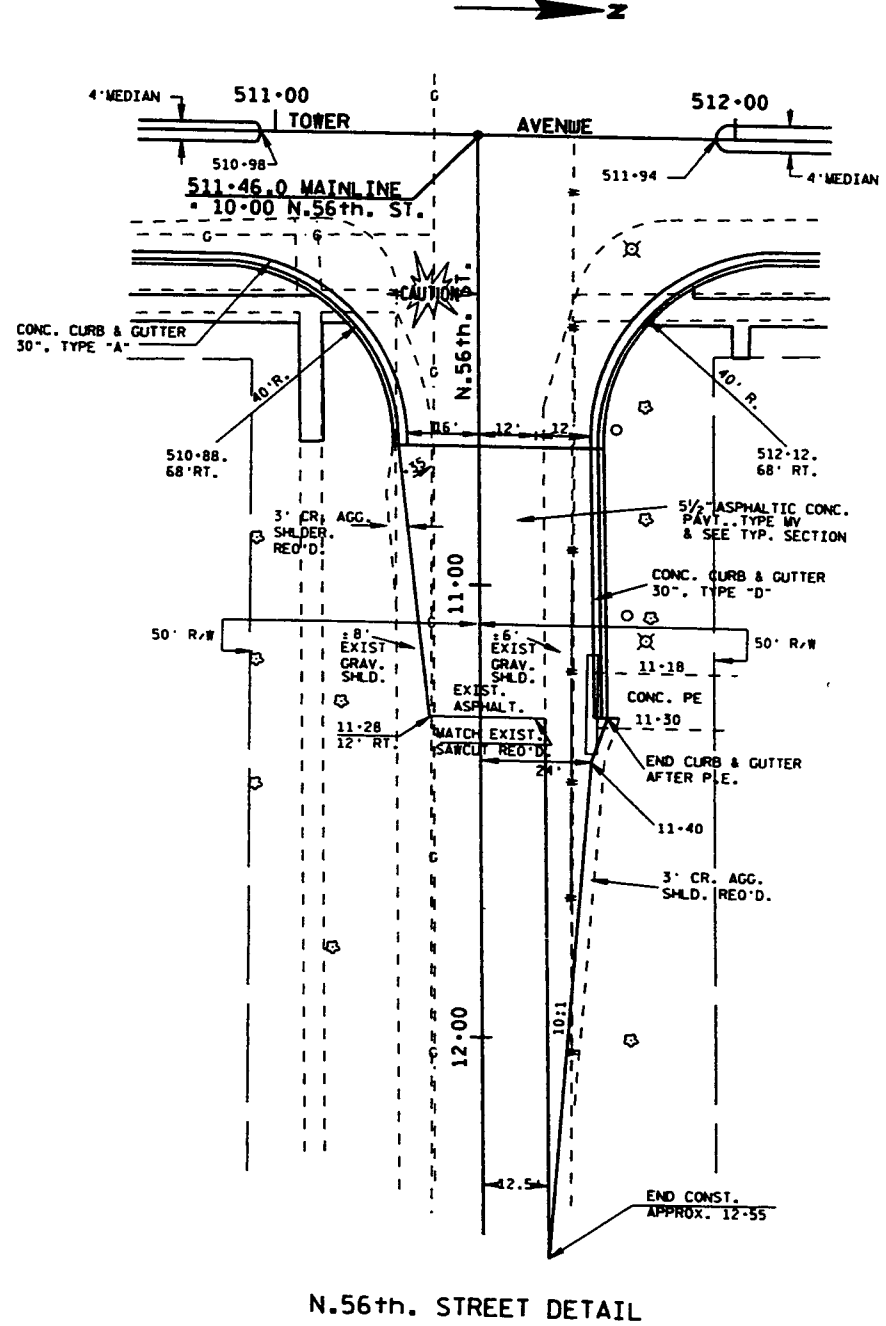
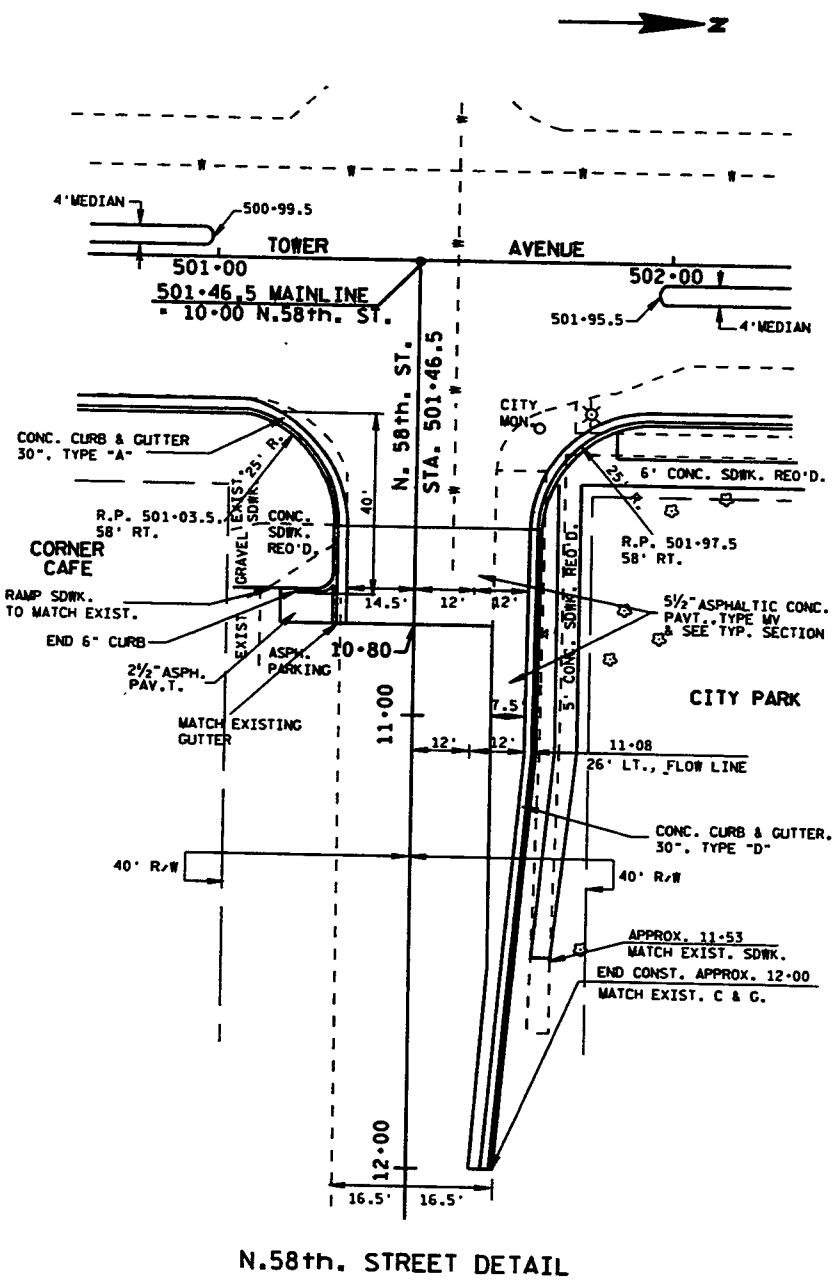


PHASE III
STA. 474+50 TO STA. 488+00
(64th St. TO 61st St.)
STA. 501+50 TO STA. 527+25
(58th St. TO 52nd St.)



PHASE III
STA. 488+00 TO STA. 501+50
(61st St. TO 58th St.)

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

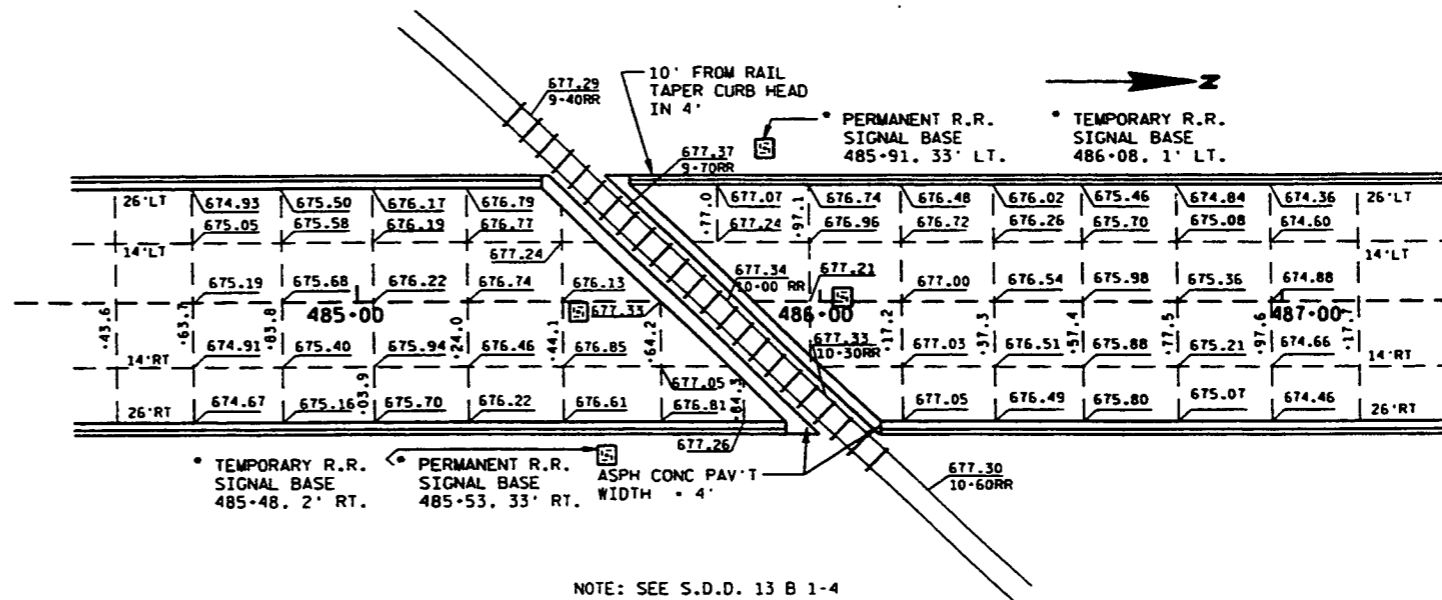
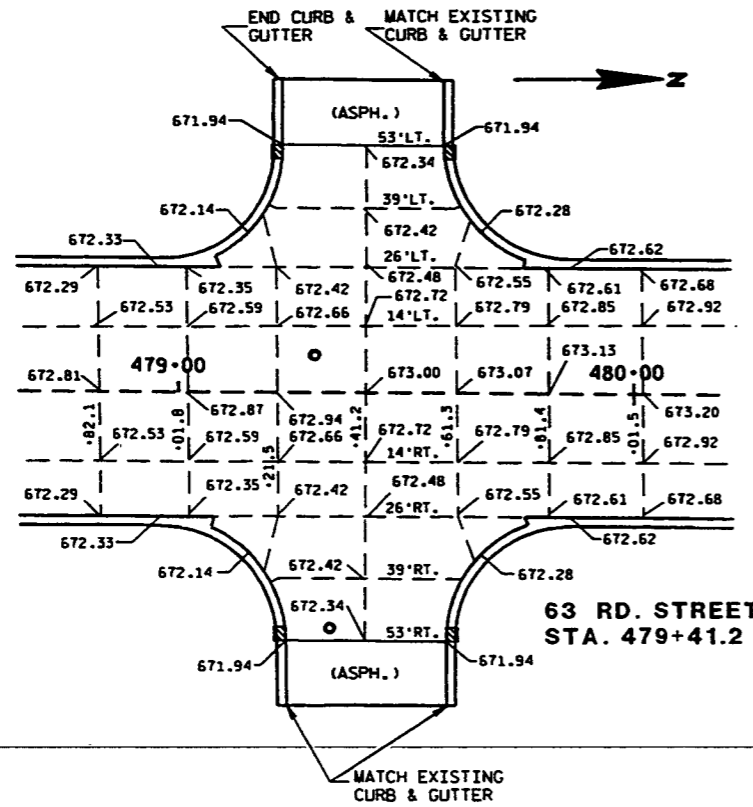
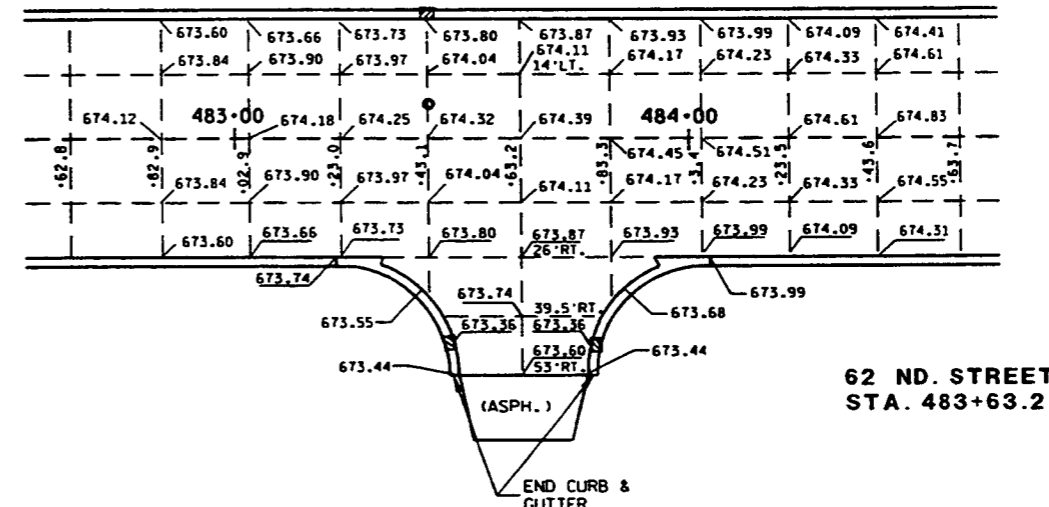
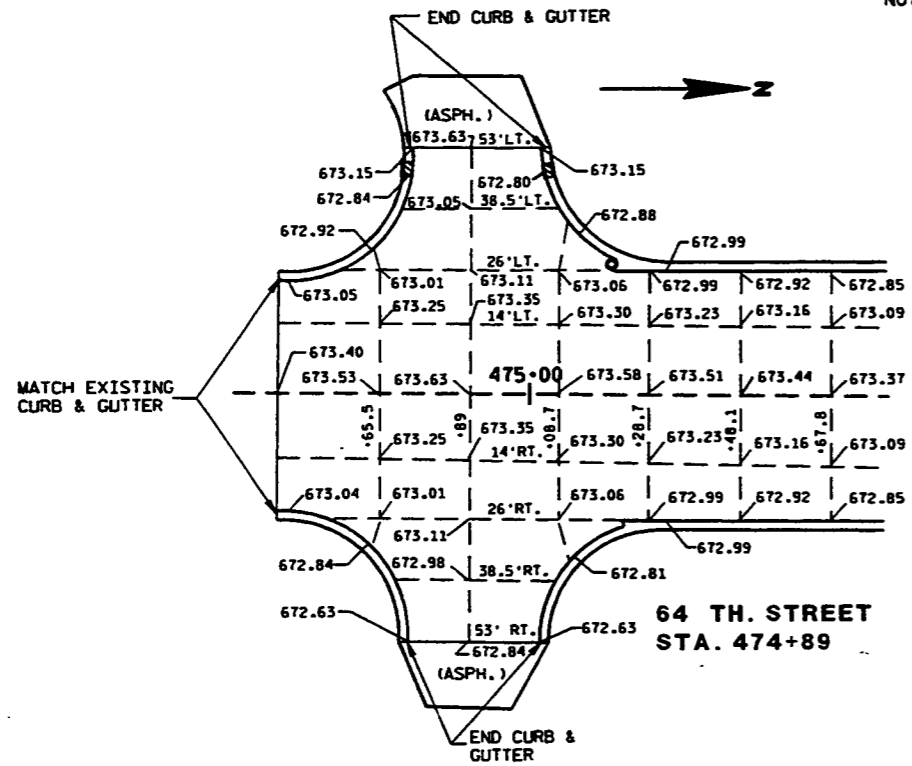


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

JOINT LAYOUTS AND RADIUS & SIDE STREET ELEVATIONS

NOTE: RADIUS AND EDGE OF PAVEMENT ELEVATIONS SHOWN ARE TO FLAGLINE.

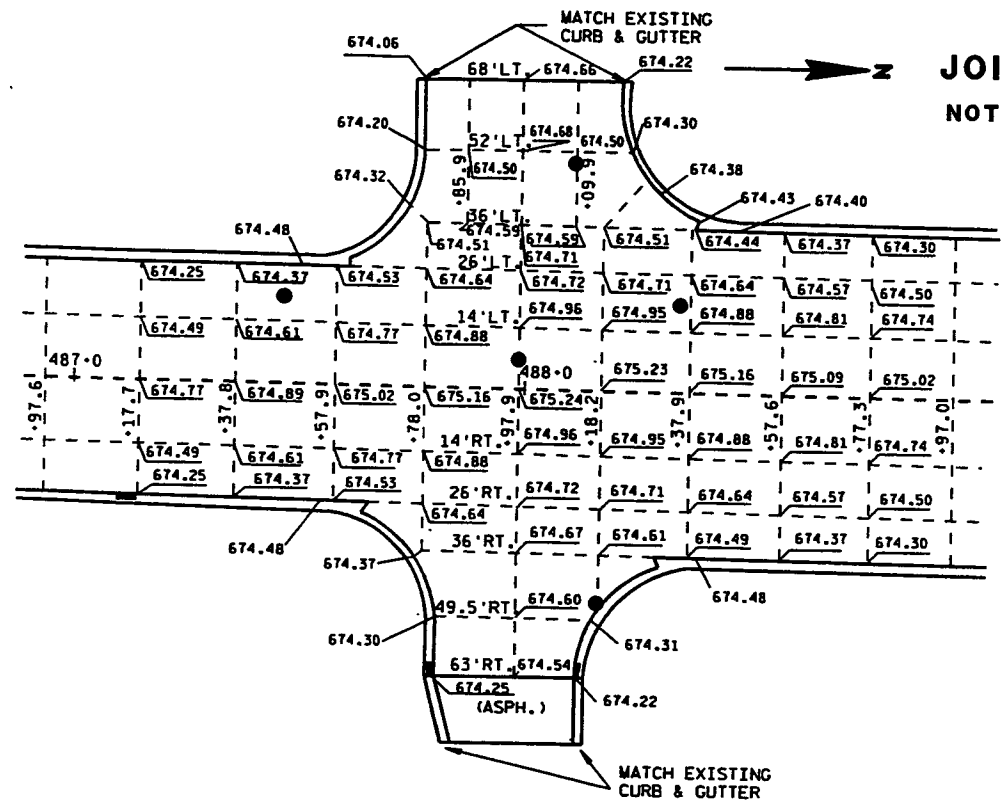
STATE PROJECT NUMBER	8010-13-71	SHEET NO.	2.10
TOWER AVENUE, CITY OF SUPERIOR			
DETAILS			
INTERSECTIONS, JOINTS, ELEVATIONS			
S.T.H. 35	DOUGLAS COUNTY		



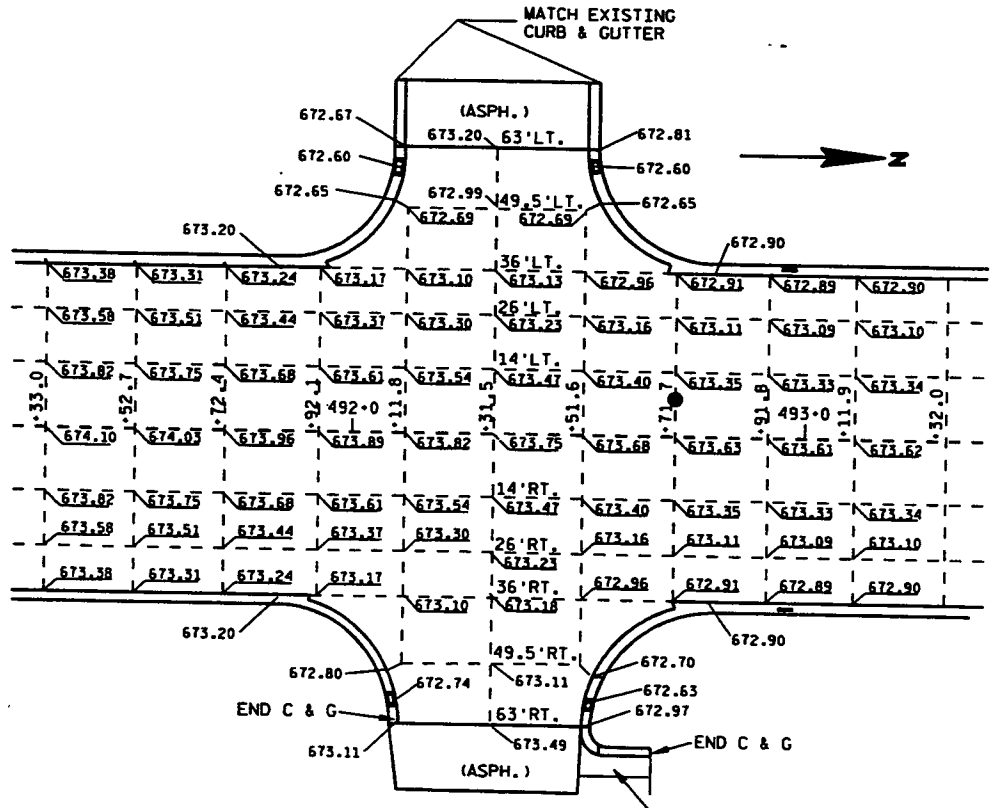
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

JOINT LAYOUTS AND RADIUS & SIDE STREET ELEVATIONS

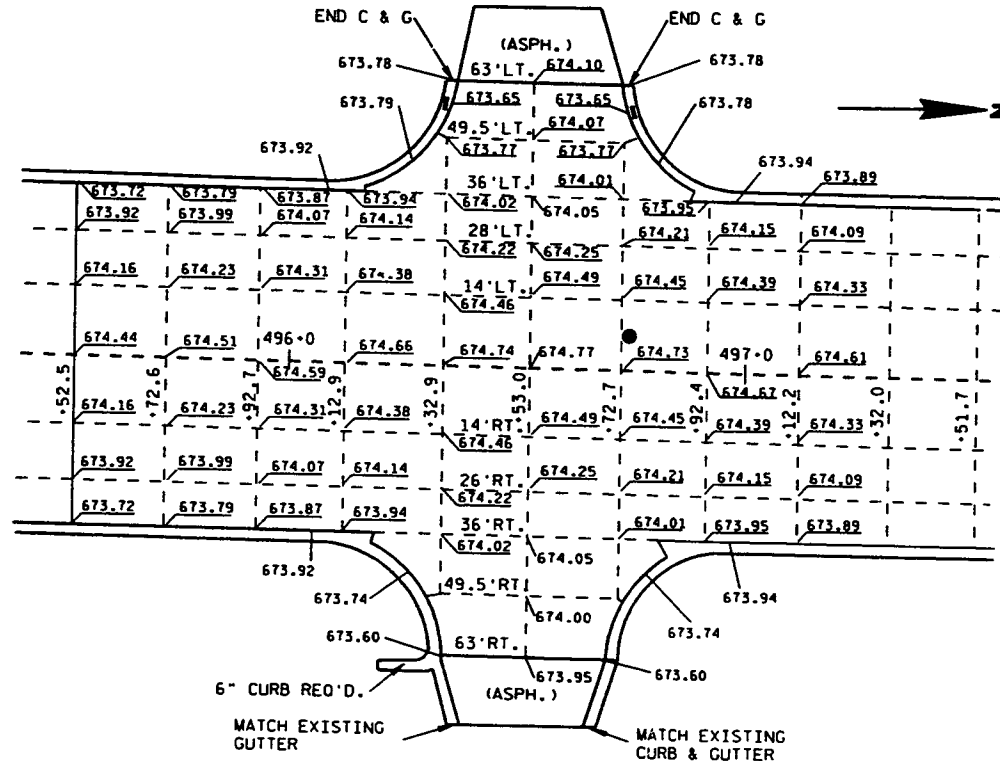
NOTE: RADIUS AND EDGE OF PAVEMENT ELEVATIONS SHOWN ARE TO FLAGLINE.



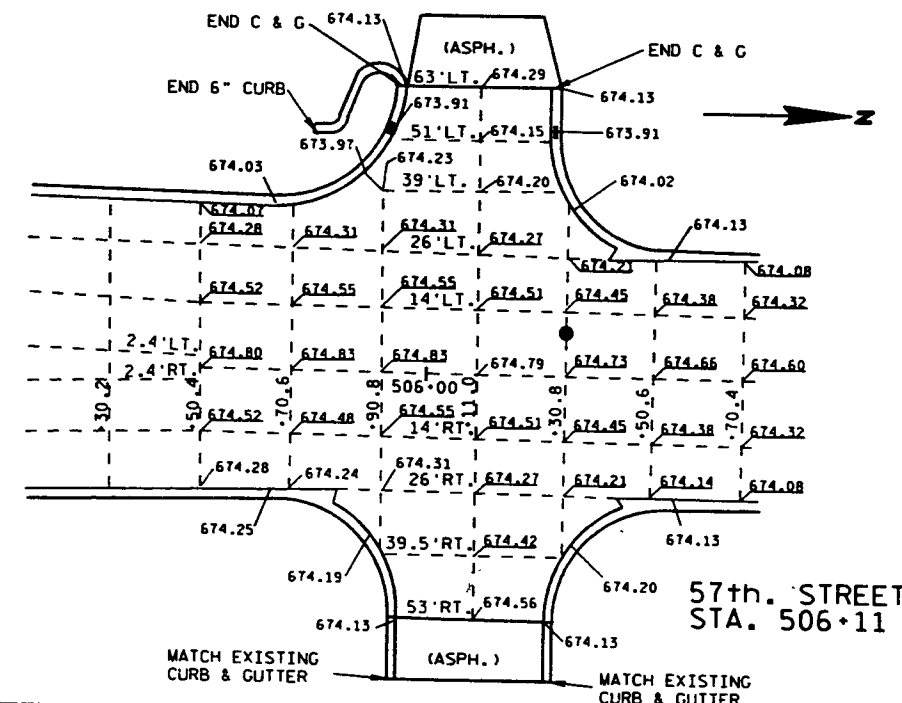
61st. STREET/STH 105
STA. 487+97.9



60th. STREET
STA. 492+31.5
2 1/2" ASPH. CONC. SURF.



59th. STREET
STA. 496+53

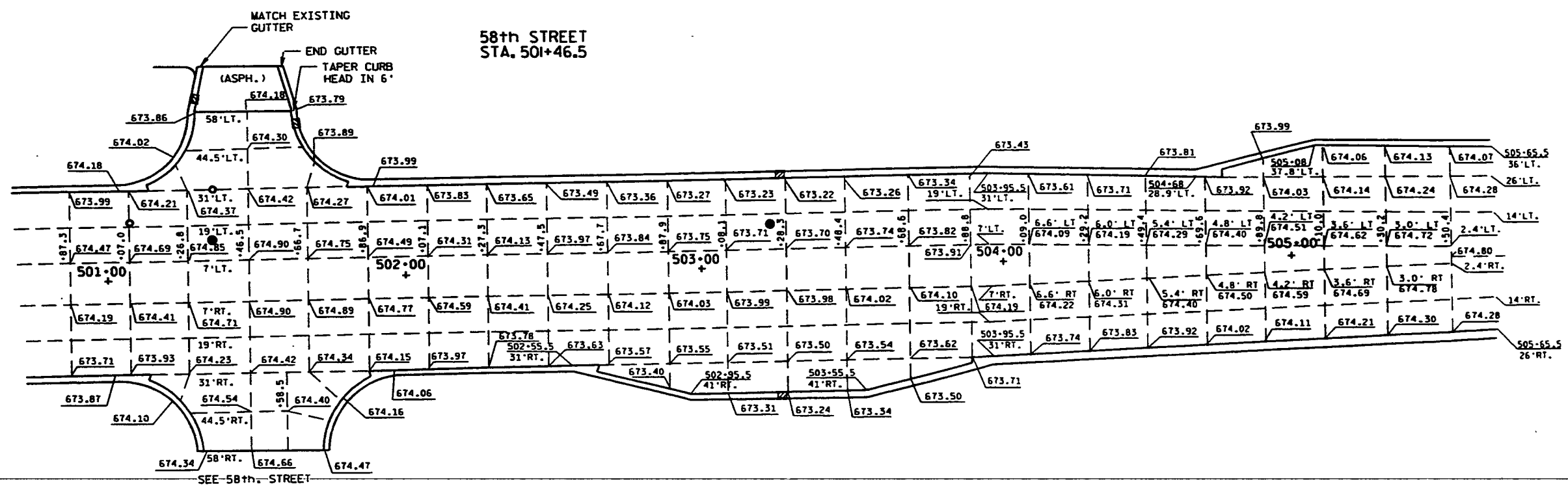
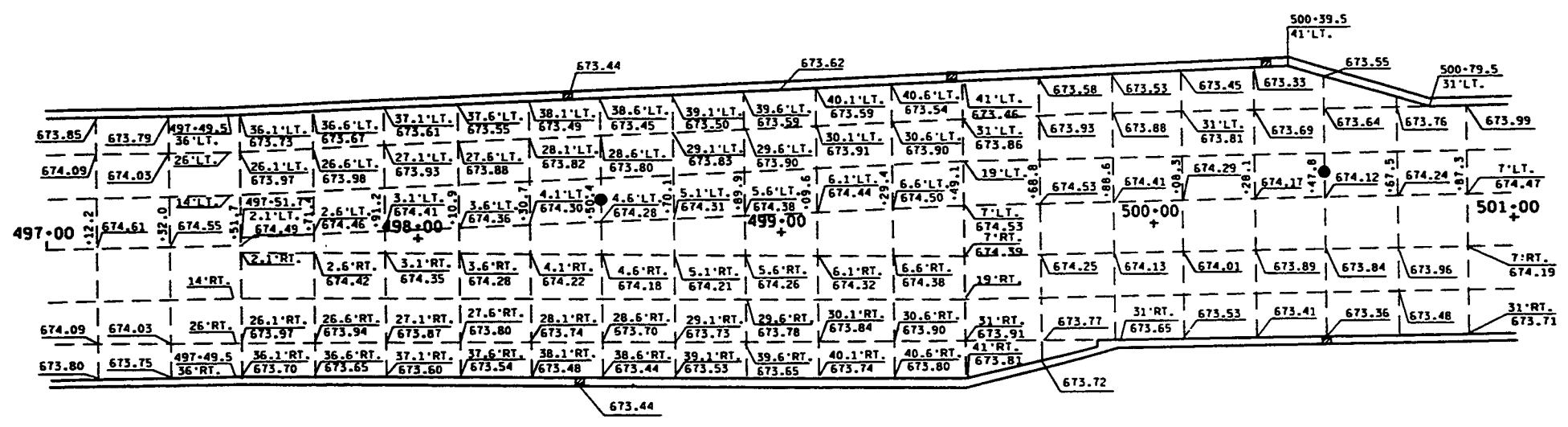


57th. STREET
STA. 506+11

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

JOINT LAYOUTS AND RADIUS & SIDE STREET ELEVATIONS

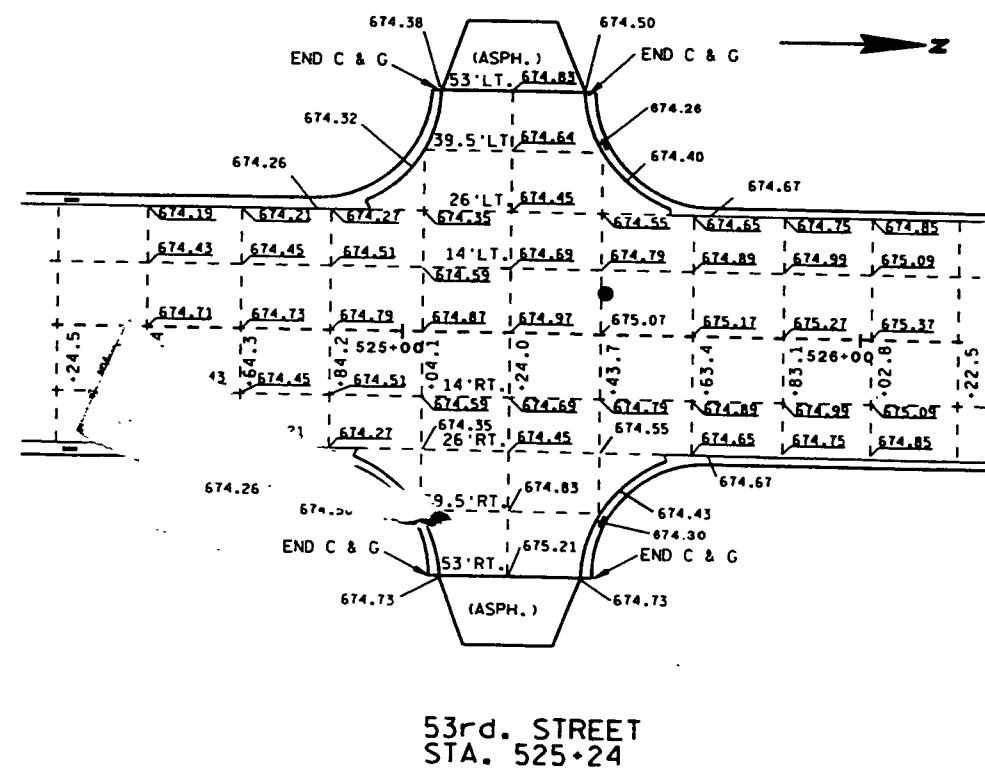
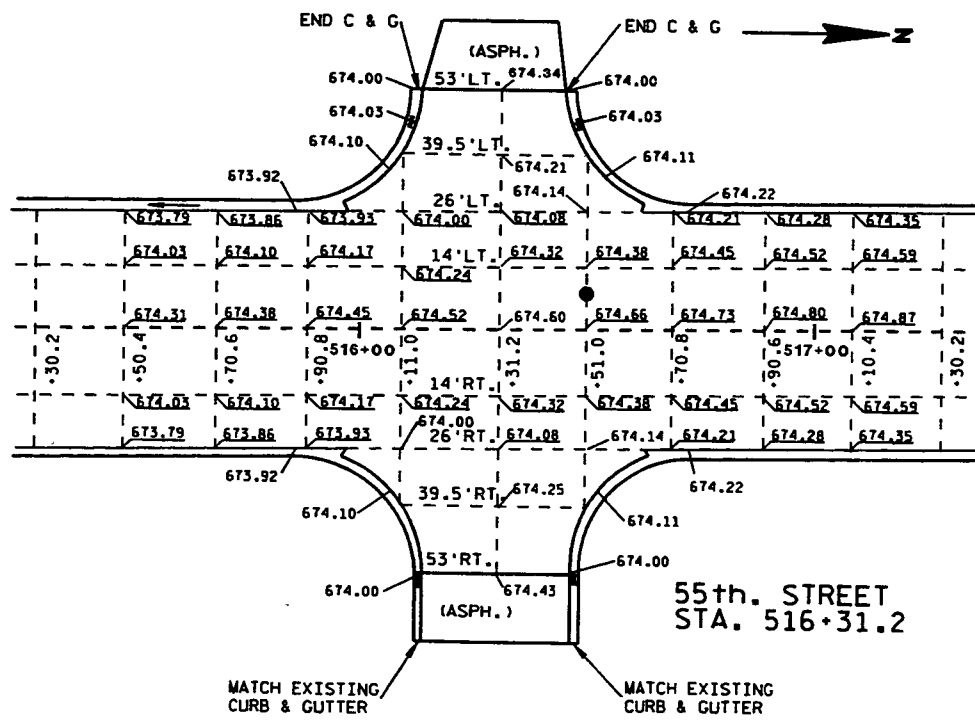
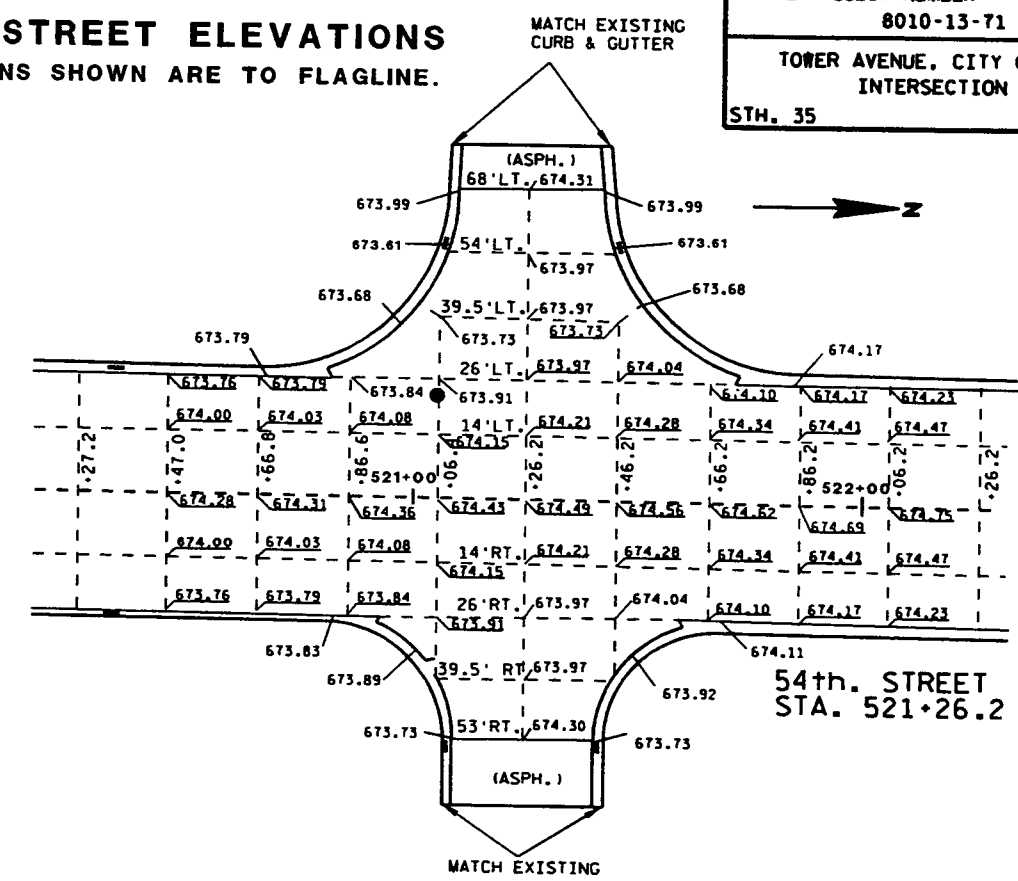
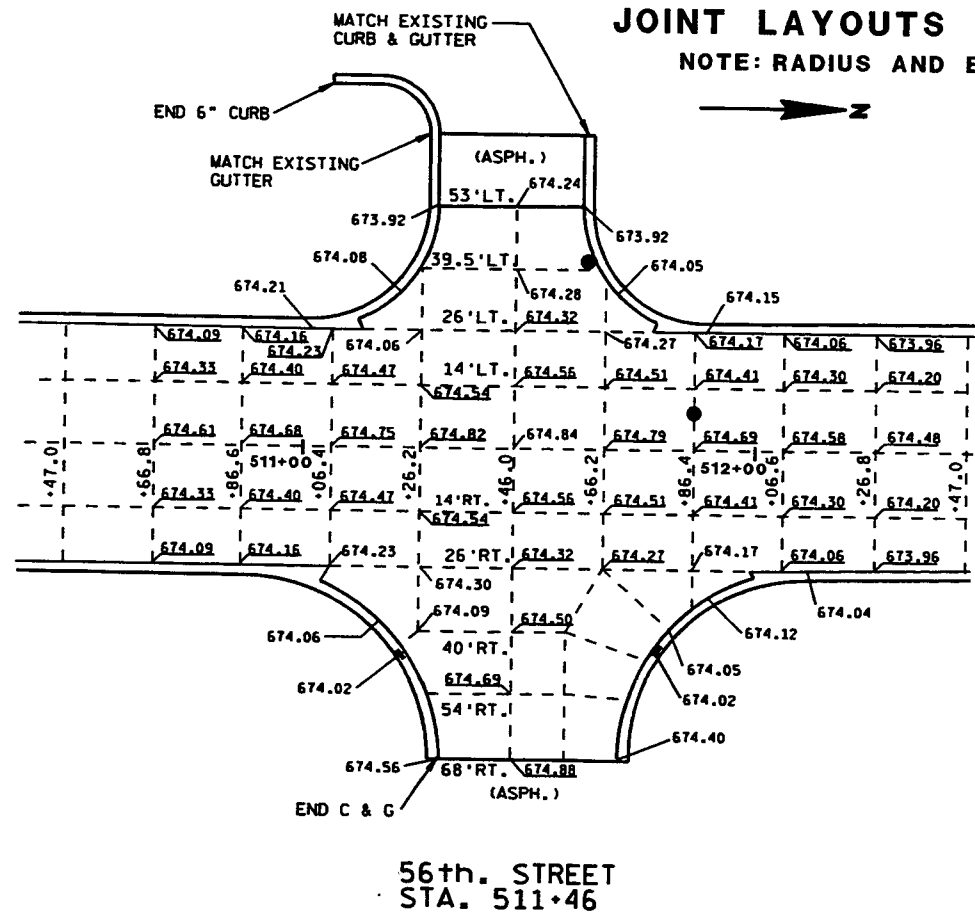
NOTE: RADIUS AND EDGE OF PAVEMENT ELEVATIONS SHOWN ARE TO FLAGLINE.



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

JOINT LAYOUTS AND RADIUS & SIDE STREET ELEVATIONS

NOTE: RADIUS AND EDGE OF PAVEMENT ELEVATIONS SHOWN ARE TO FLAGLINE.



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

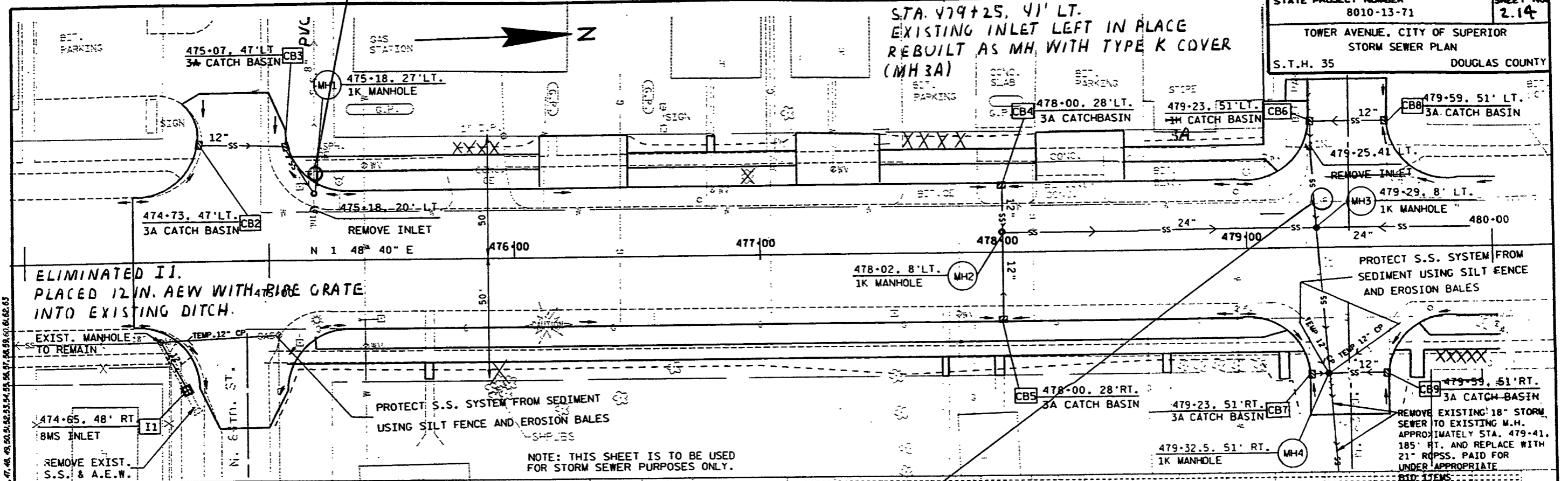
INSTALLED DRIVEWAY TYPE COVER
ON CB3

CB6 (TYPE 3A) IS FREE STANDING;
DOES NOT LIE ON TOP OF EXISTING 18 IN. SS

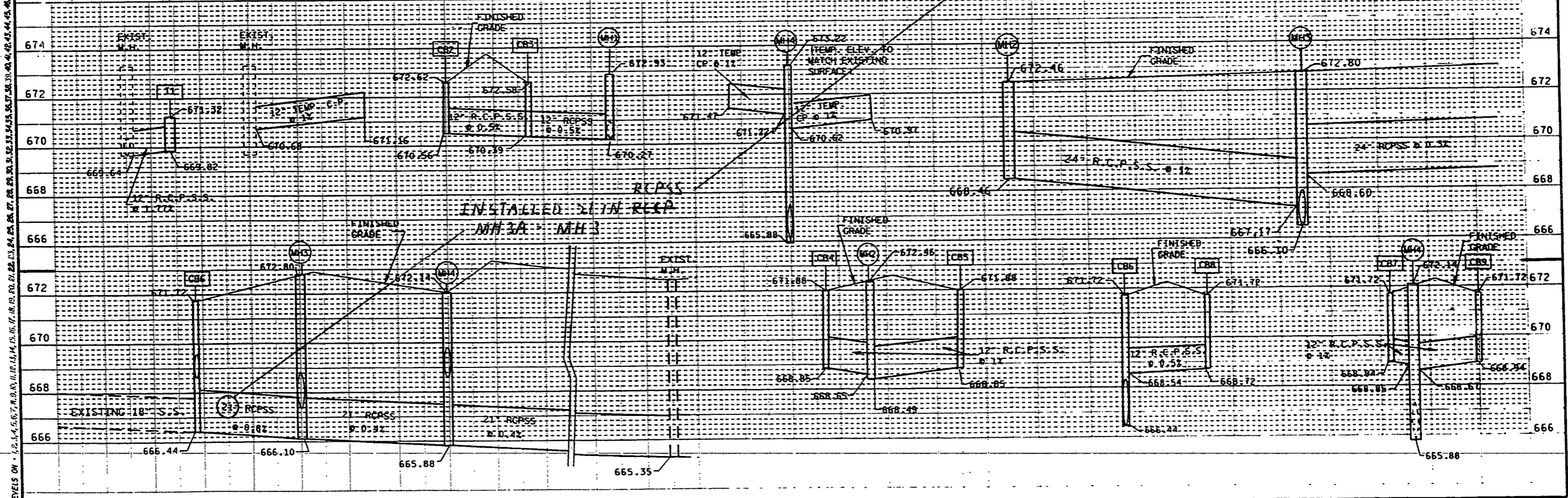
CONCRETE COLLAR CONNECTION
12 IN. RCPSS TO EXISTING 8 IN. PVC

STA. 479+25, 41' LT.
EXISTING INLET LEFT IN PLACE
REBUILT AS MH WITH TYPE K COVER
(MH 3A)

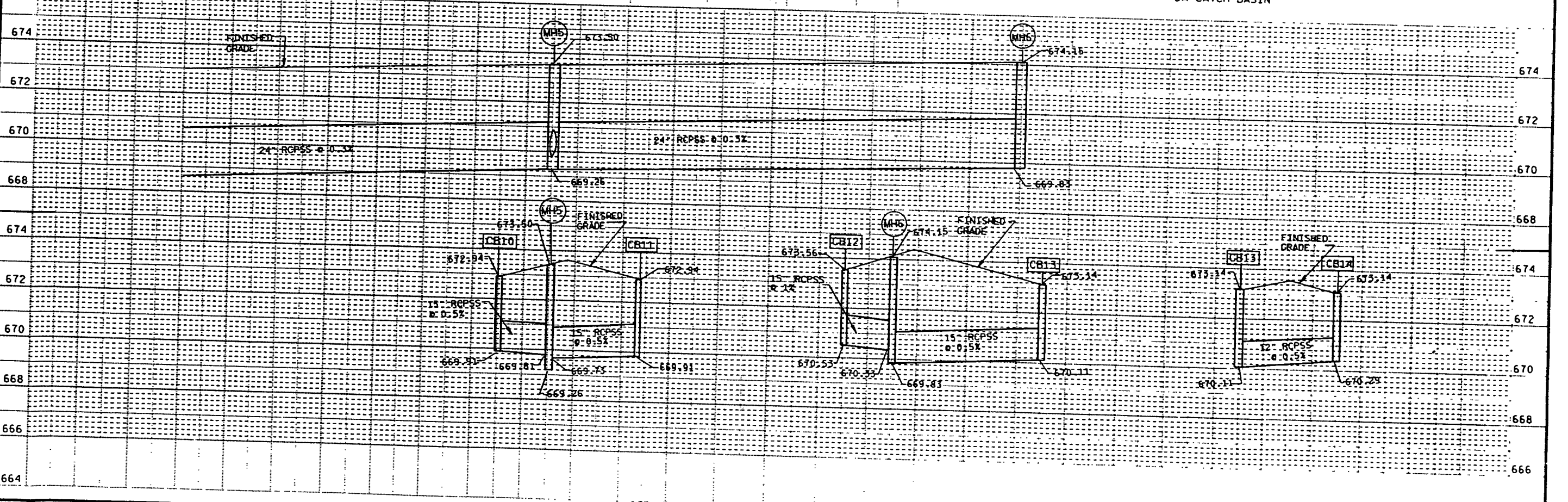
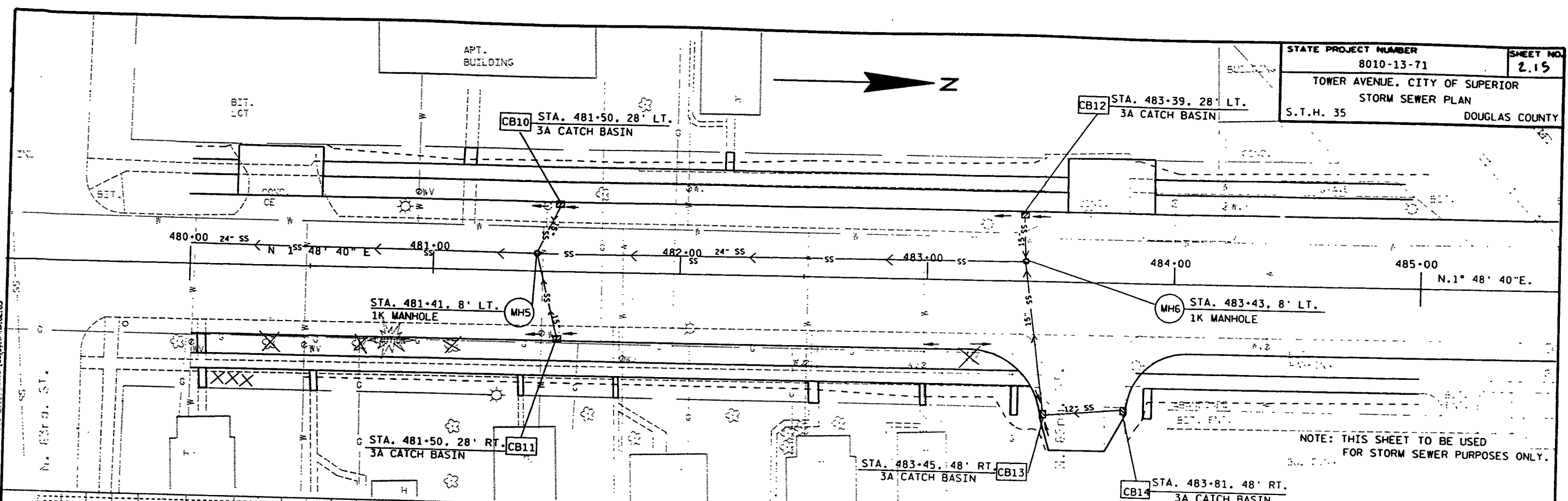
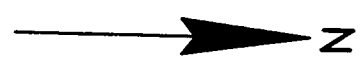
STATE PROJECT NUMBER 8010-13-71	SHEET NO. 2.14
TOWER AVENUE, CITY OF SUPERIOR STORM SEWER PLAN	
S.T.H. 35	DOUGLAS COUNTY



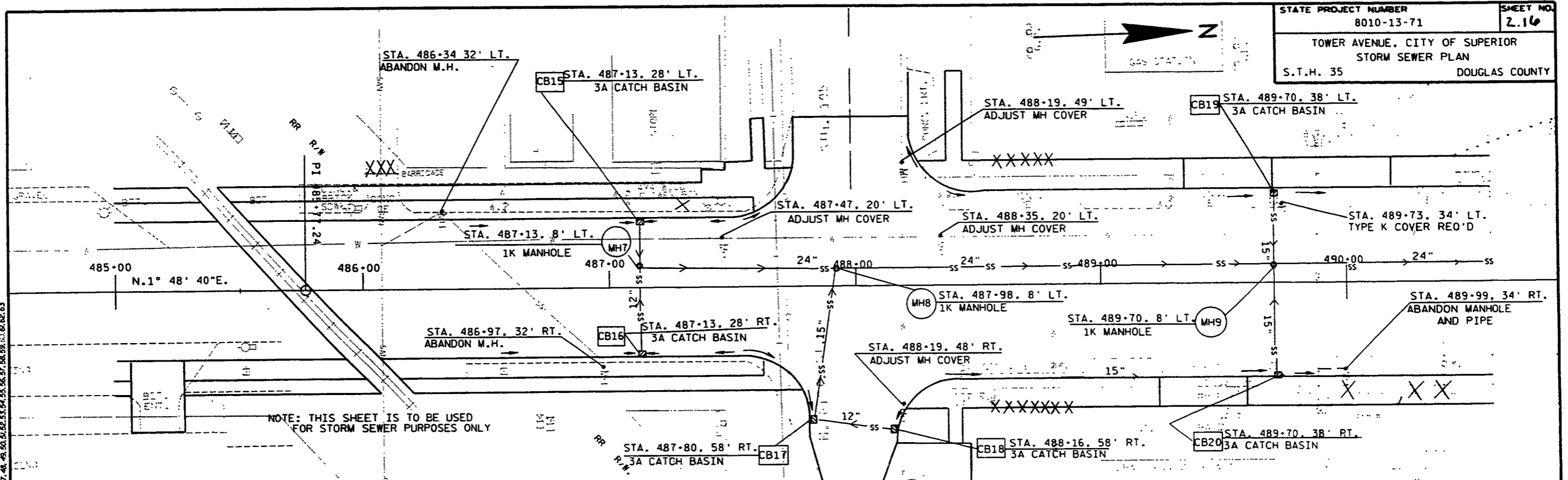
NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY.



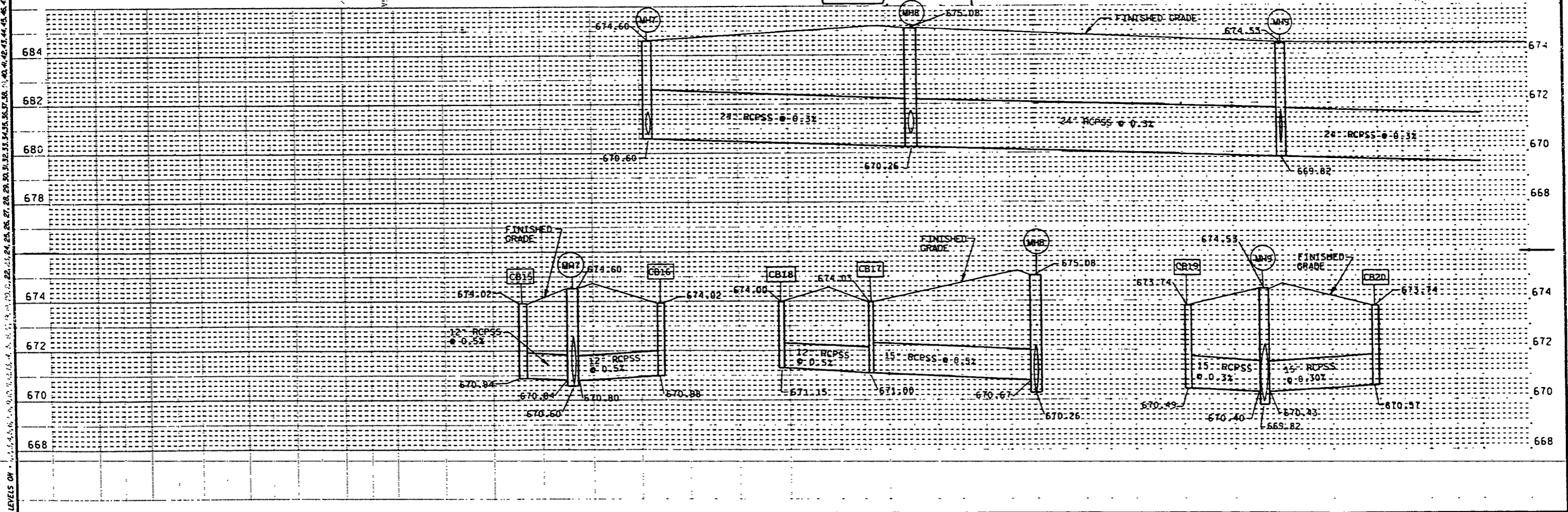
LEVELS ON 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



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, 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, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000



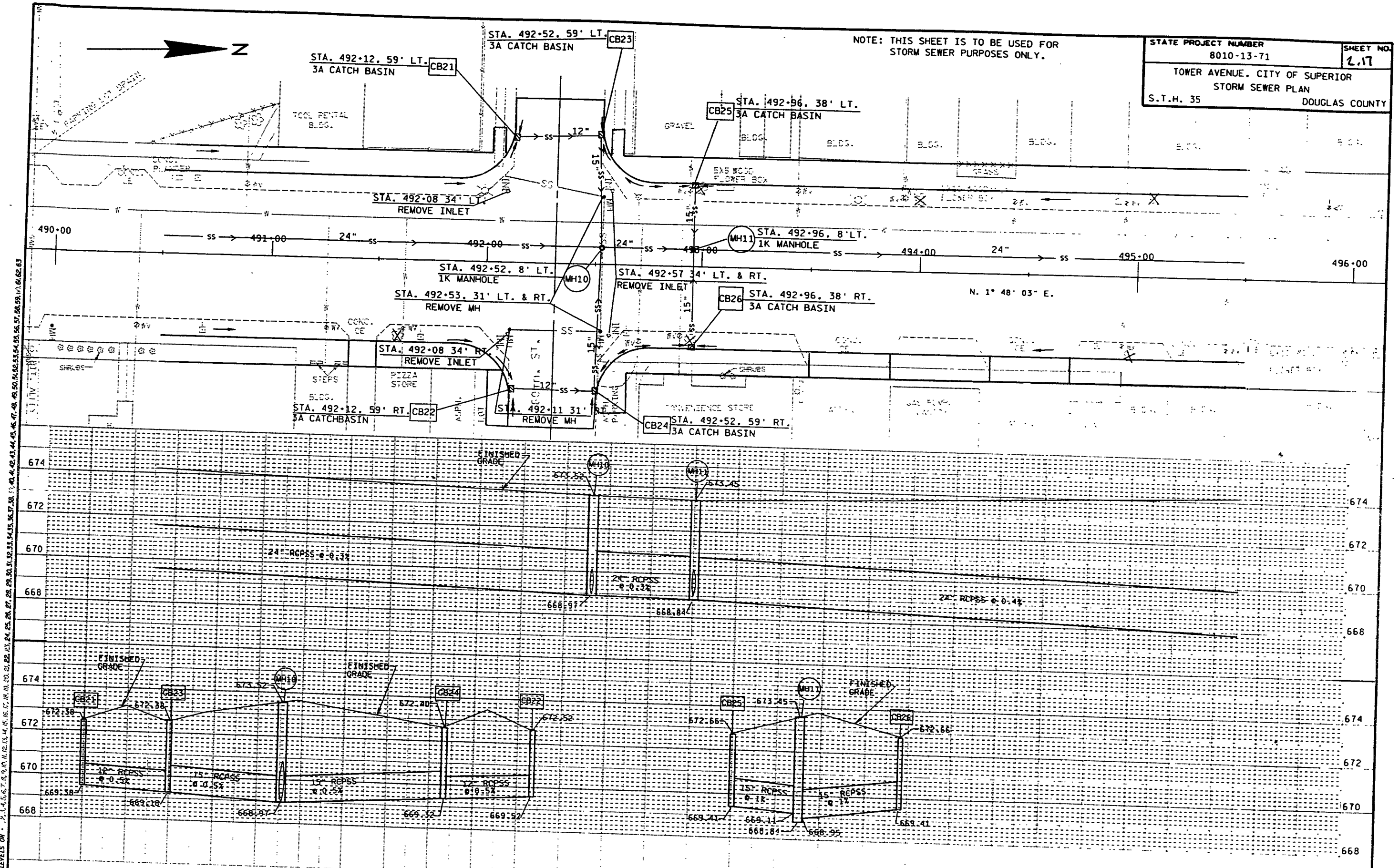
NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY





NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY.

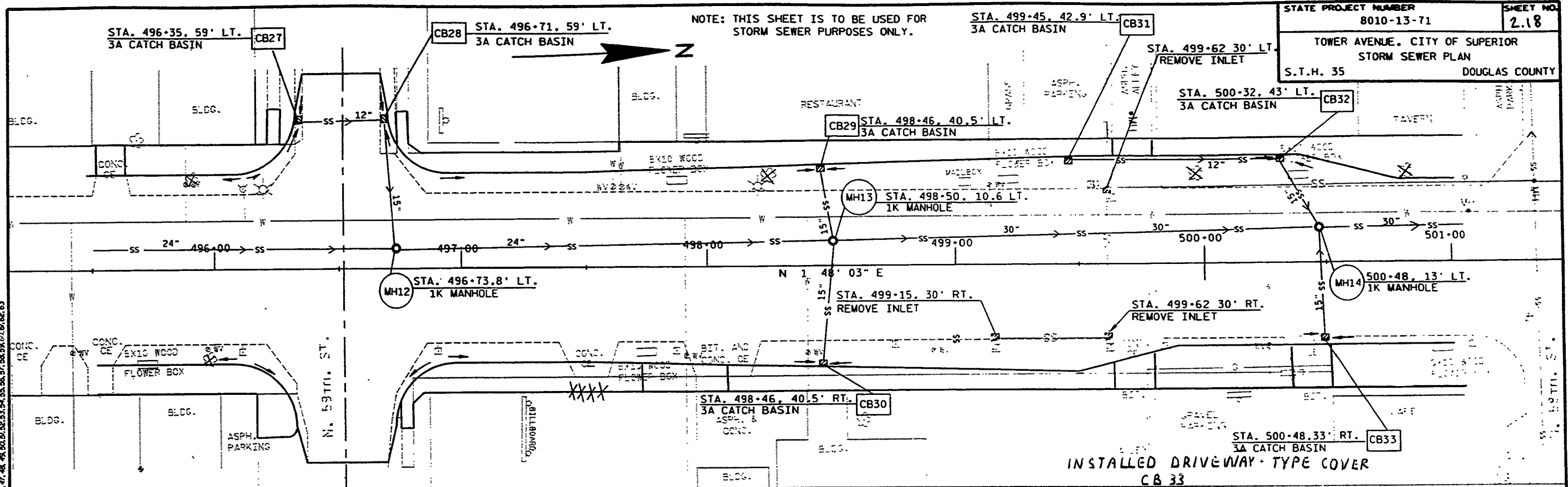
STATE PROJECT NUMBER 8010-13-71	SHEET NO. 2.17
TOWER AVENUE, CITY OF SUPERIOR	
STORM SEWER PLAN	
S.T.H. 35	DOUGLAS COUNTY



LEVELS ON: 2.1, 4.5, 6.7, 8.9, 10.1, 12.1, 13.1, 14.1, 15.1, 16.1, 17.1, 18.1, 19.1, 20.1, 21.1, 22.1, 23.1, 24.1, 25.1, 26.1, 27.1, 28.1, 29.1, 30.1, 31.1, 32.1, 33.1, 34.1, 35.1, 36.1, 37.1, 38.1, 39.1, 40.1, 41.1, 42.1, 43.1, 44.1, 45.1, 46.1, 47.1, 48.1, 49.1, 50.1, 51.1, 52.1, 53.1, 54.1, 55.1, 56.1, 57.1, 58.1, 59.1, 60.1, 61.1, 62.1, 63.1

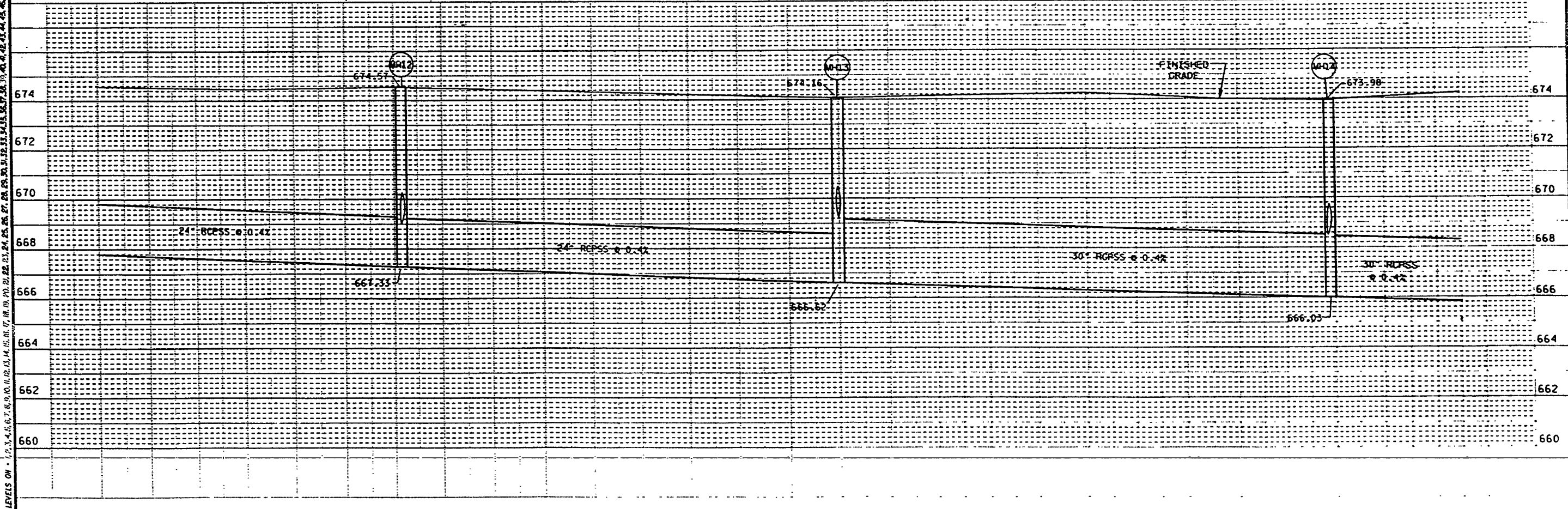
FILE NAME : DB 80101300 STORM4.DCN ORIGINATOR : DISTRICT 8 PLOT NAME : STORM4 PLOT SCALE : 20:1

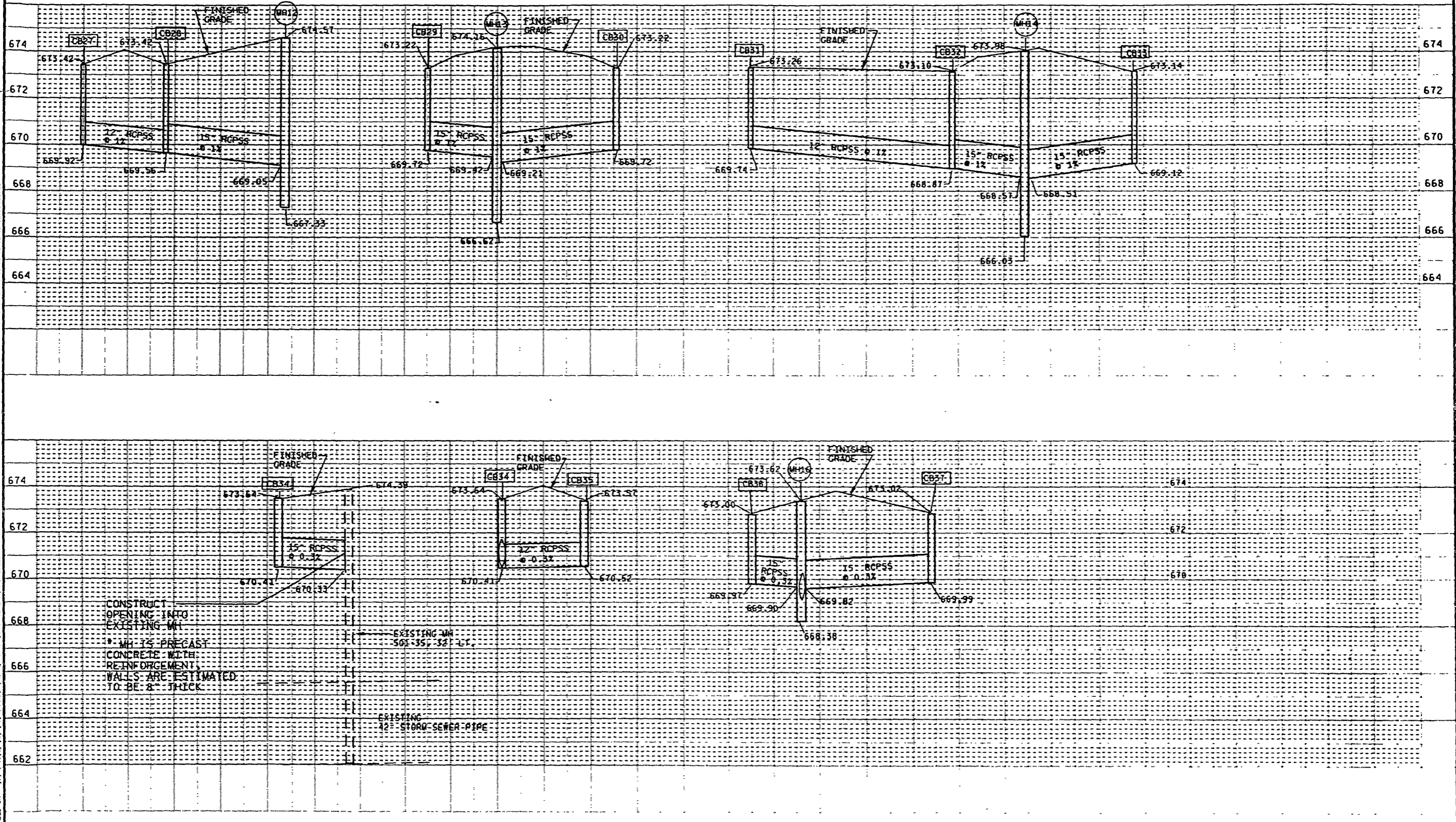
NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY.



INSTALLED DRIVEWAY-TYPE COVER
 CB 33

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



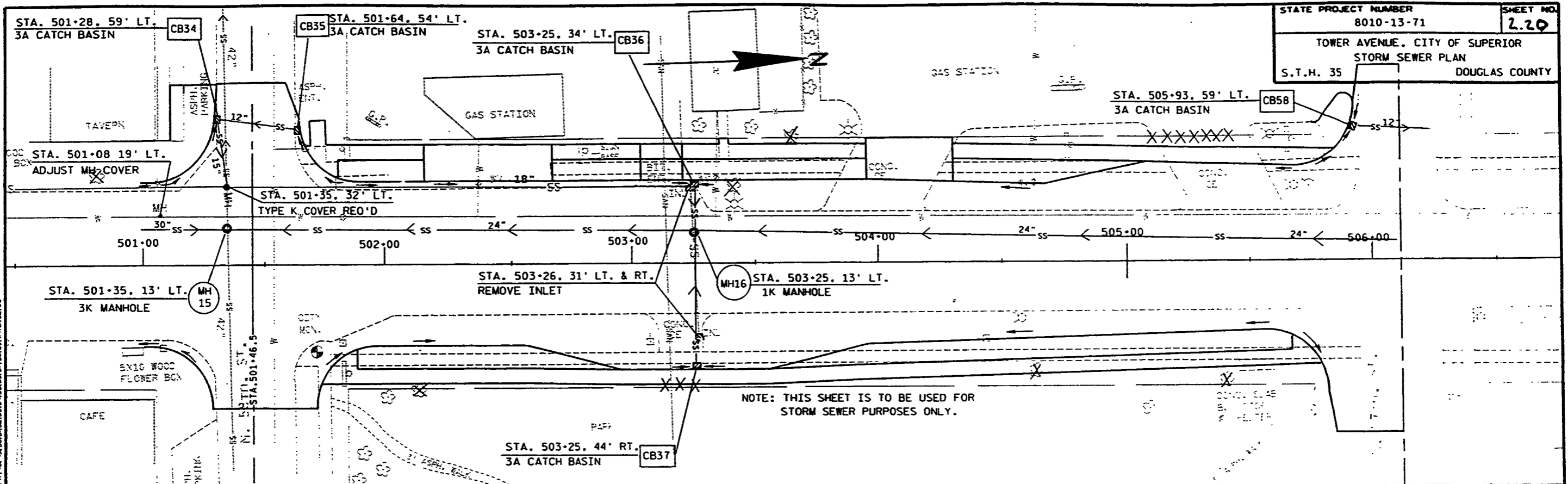


CONSTRUCT
OPENING INTO
EXISTING MH
MH IS PRECAST
CONCRETE WITH
REINFORCEMENT
WALLS ARE ESTIMATED
TO BE 8" THICK

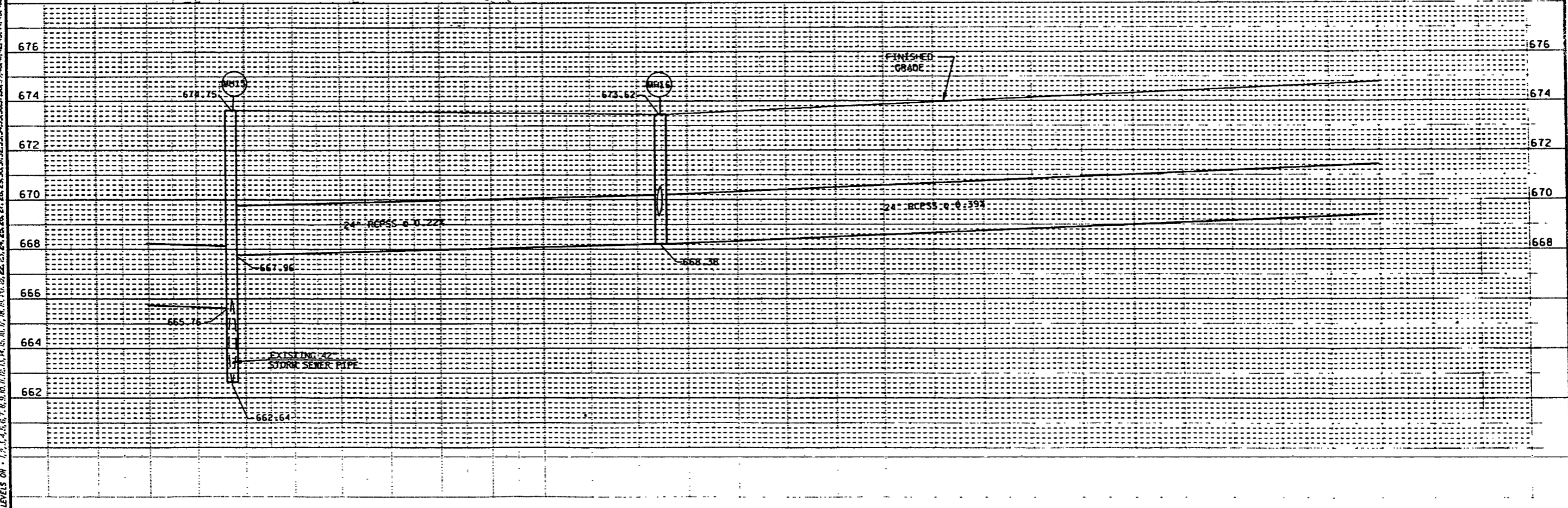
EXISTING MH
50" 35' 32" LT.

EXISTING
12" STORM SEWER PIPE

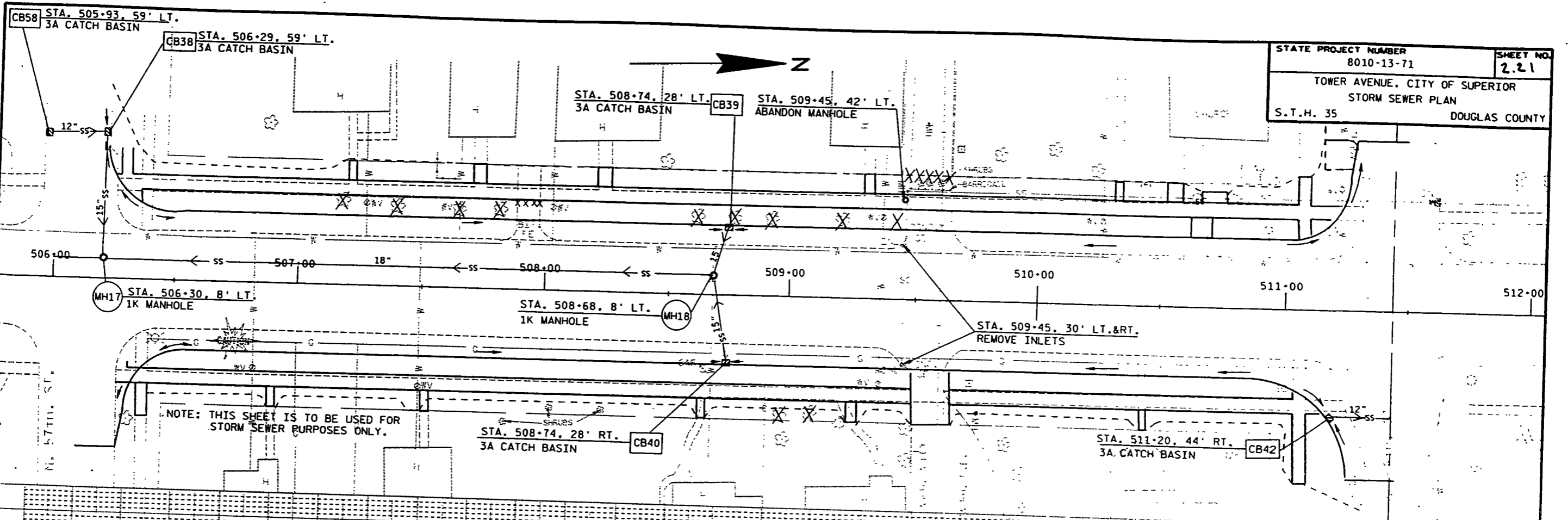
LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY.

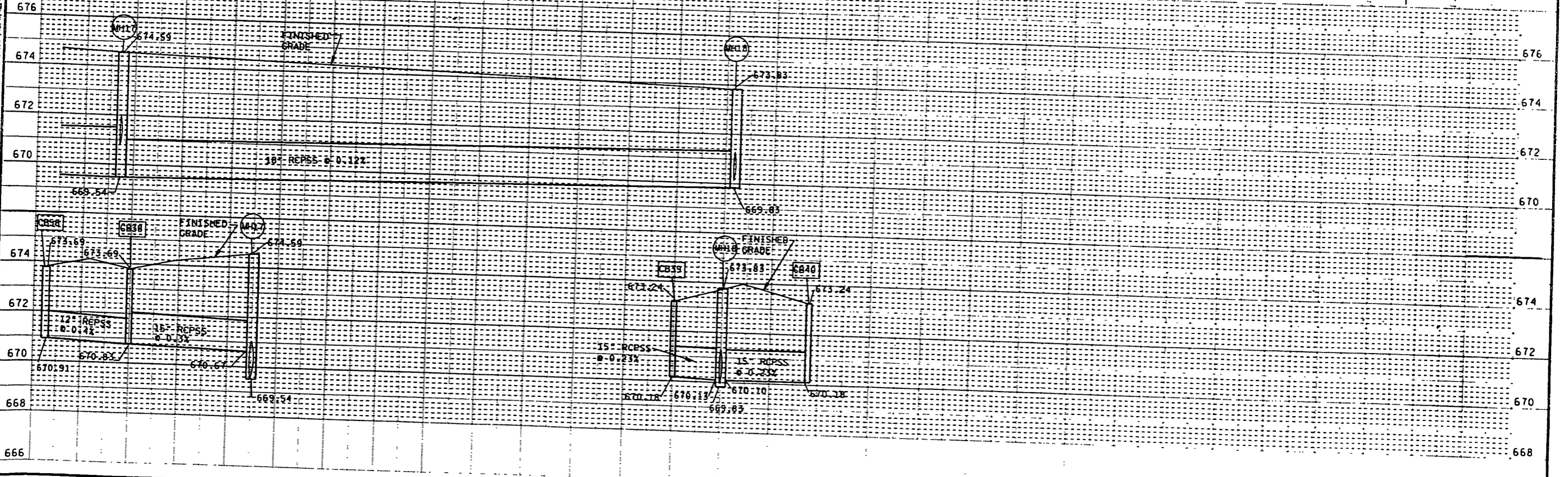


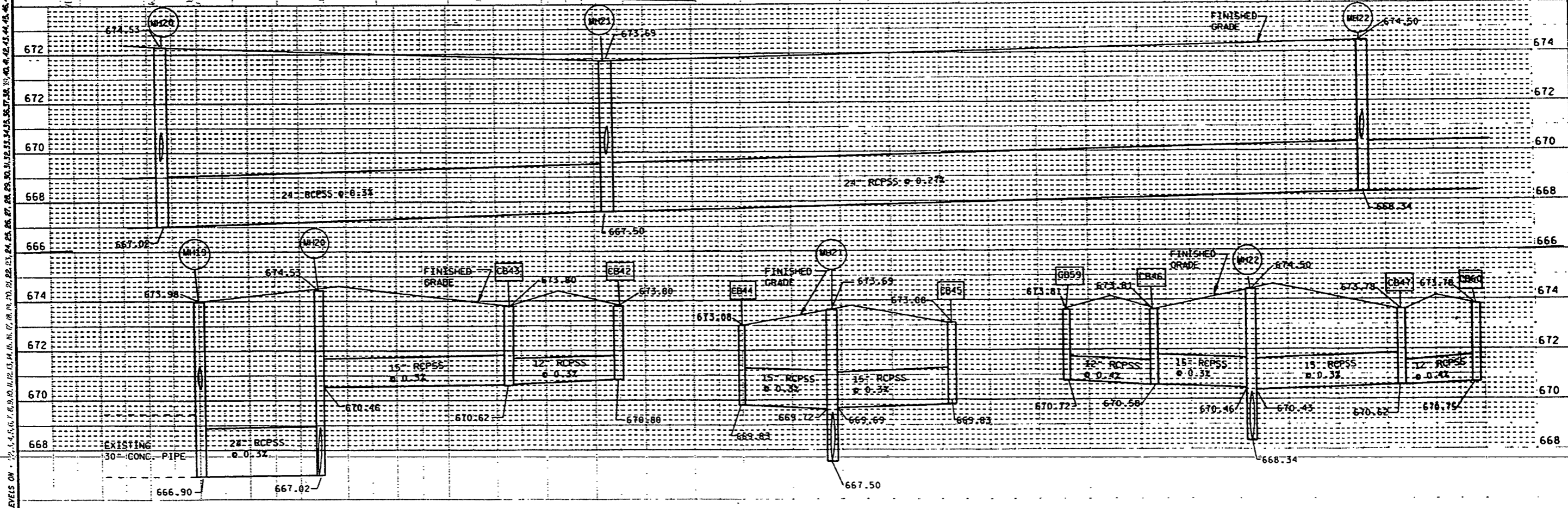
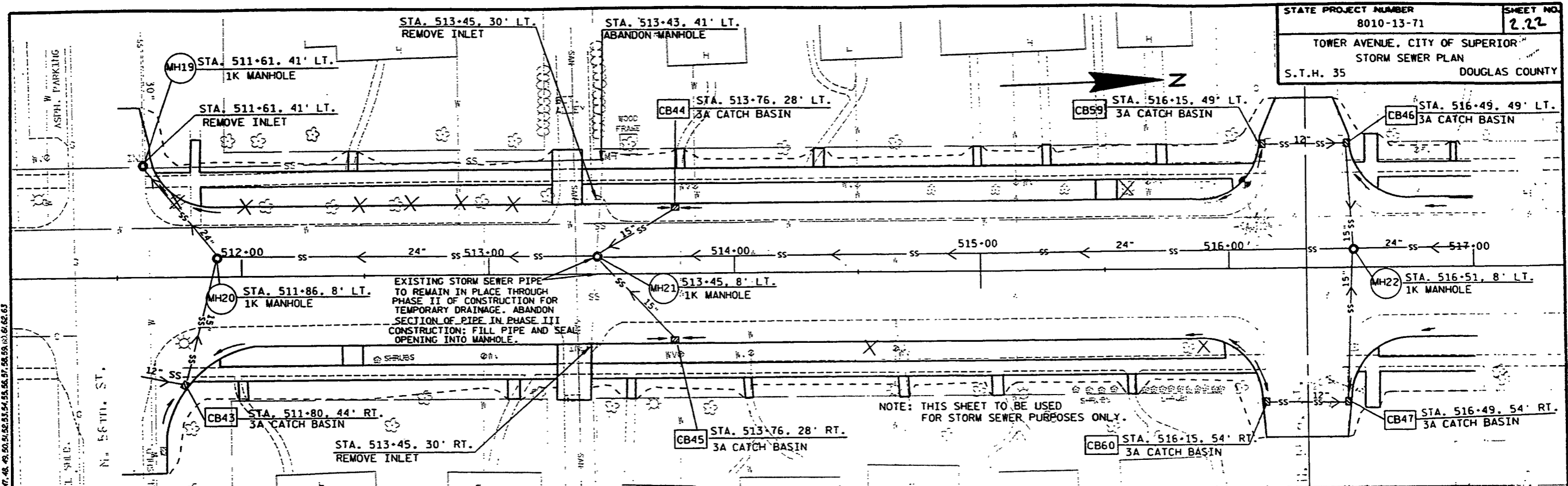
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY.

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





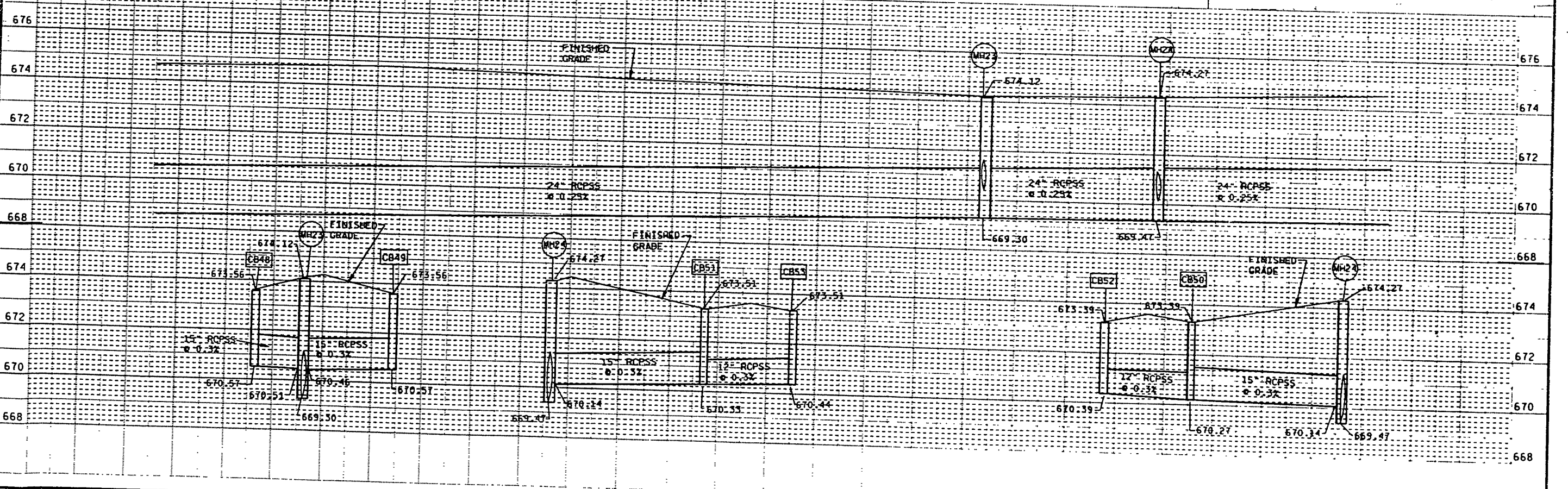
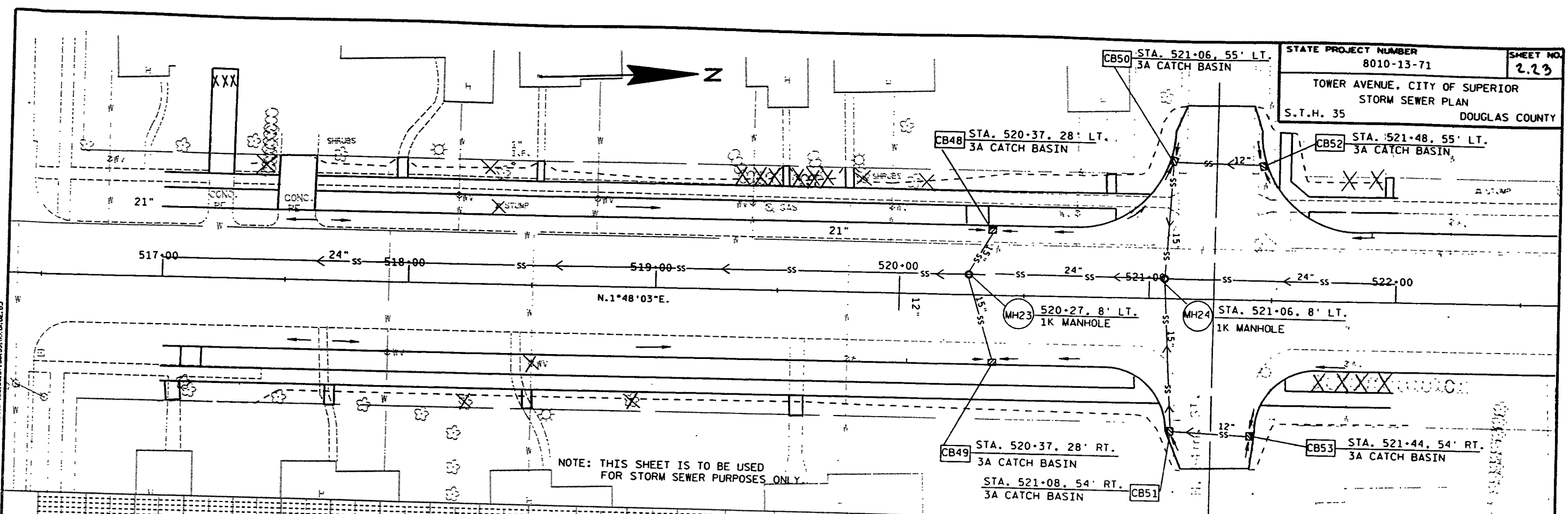
LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 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, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200

STATE PROJECT NUMBER
8010-13-71

TOWER AVENUE, CITY OF SUPERIOR
STORM SEWER PLAN
S.T.H. 35

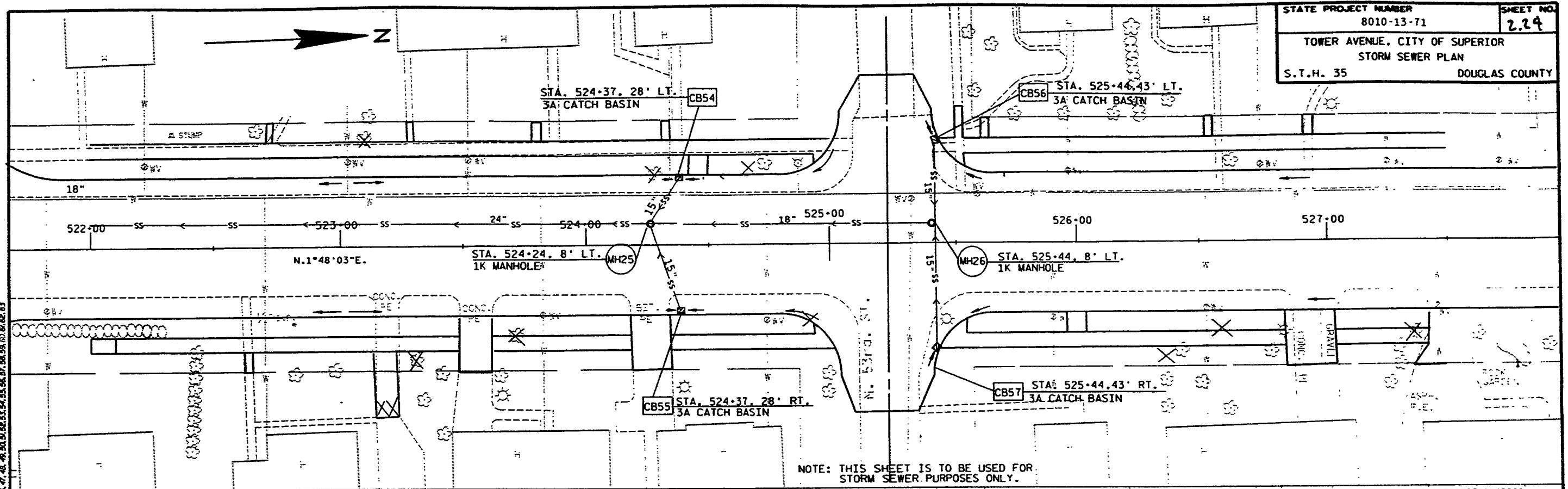
SHEET NO.
2.23

DOUGLAS COUNTY

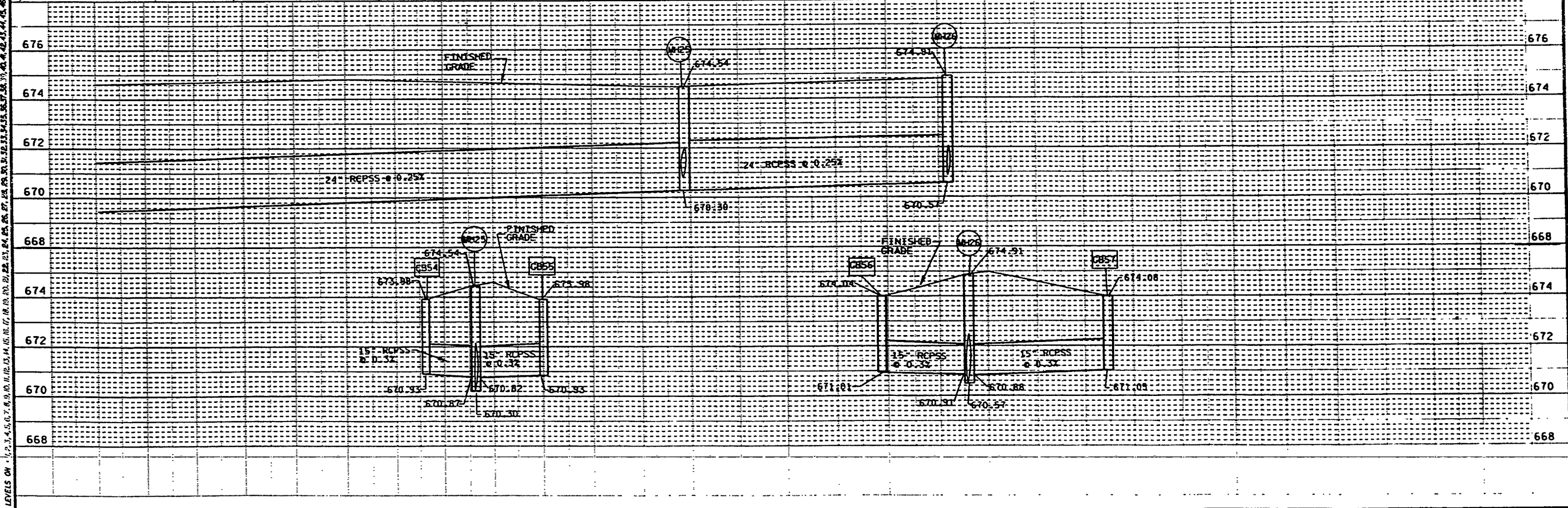


LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

FILE NAME: DB_80101300_STORM9.DGN
ORIGINATOR: DISIBICI_8
PLOT NAME: STORM9
PLOT SCALE: 1/20



NOTE: THIS SHEET IS TO BE USED FOR STORM SEWER PURPOSES ONLY.



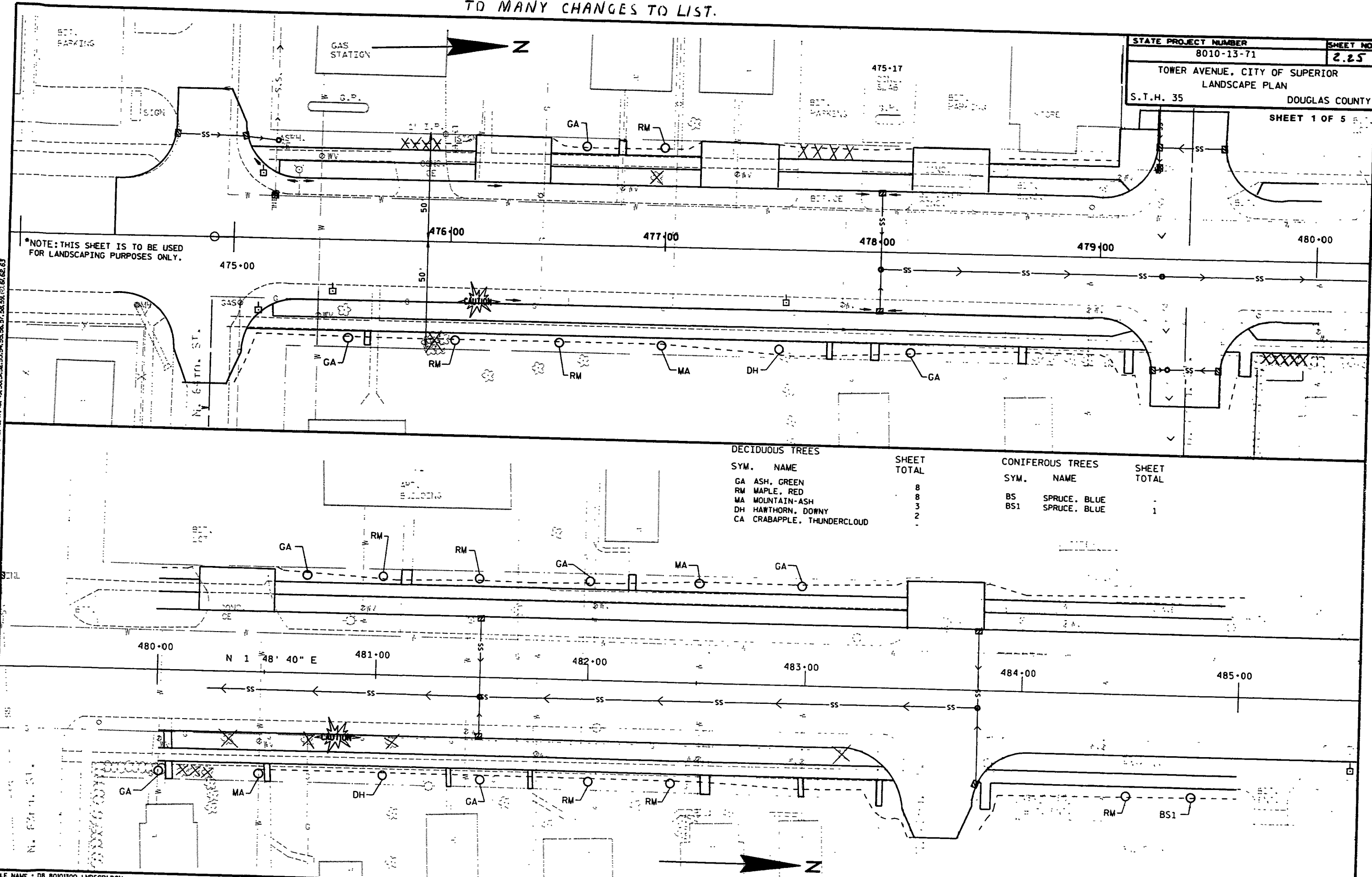
LEVELS ON 1.2, 3.4, 5.6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

TO MANY CHANGES TO LIST.

STATE PROJECT NUMBER 8010-13-71 SHEET NO. 2.25
 TOWER AVENUE, CITY OF SUPERIOR
 LANDSCAPE PLAN
 S.T.H. 35 DOUGLAS COUNTY
 SHEET 1 OF 5

*NOTE: THIS SHEET IS TO BE USED FOR LANDSCAPING PURPOSES ONLY.

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



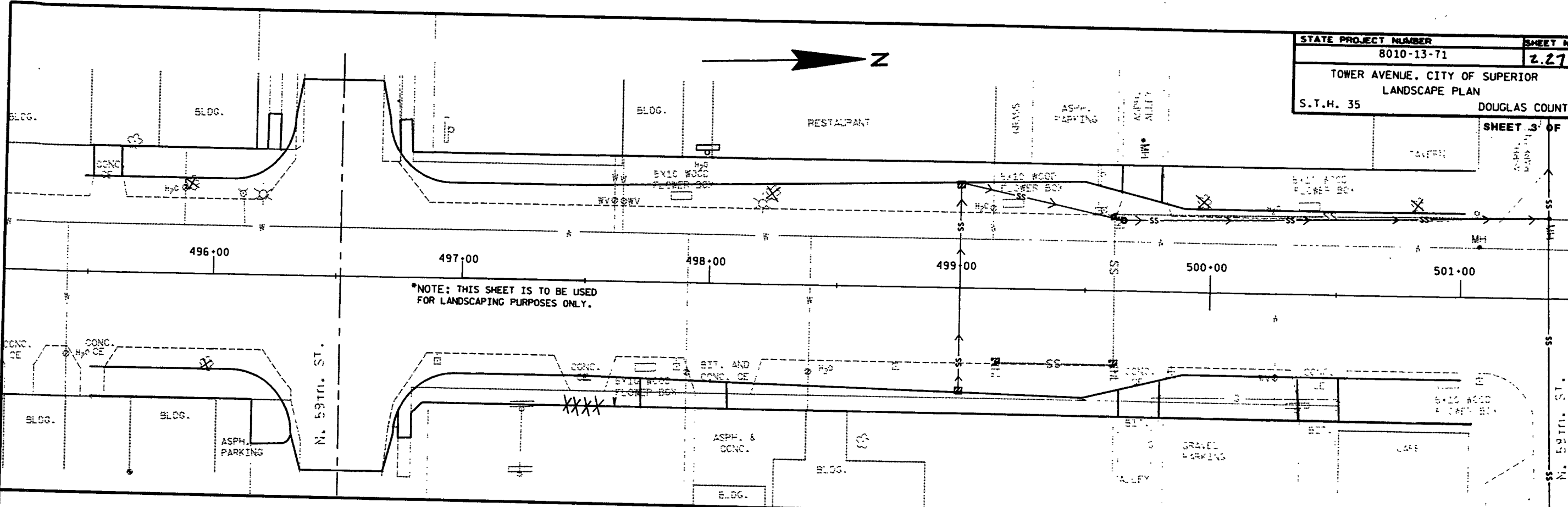
DECIDUOUS TREES

SYM.	NAME	SHEET TOTAL
GA	ASH, GREEN	8
RM	MAPLE, RED	8
MA	MOUNTAIN-ASH	3
DH	HAWTHORN, DOWNY	2
CA	CRABAPPLE, THUNDERCLOUD	-

CONIFEROUS TREES

SYM.	NAME	SHEET TOTAL
BS	SPRUCE, BLUE	-
BS1	SPRUCE, BLUE	1

FILE NAME : DB_80101300_LNDSCPL.DGN ORIGINATOR : DSIBICI_8 PLOT NAME : LNDSCPL PLOT SCALE : 1:100

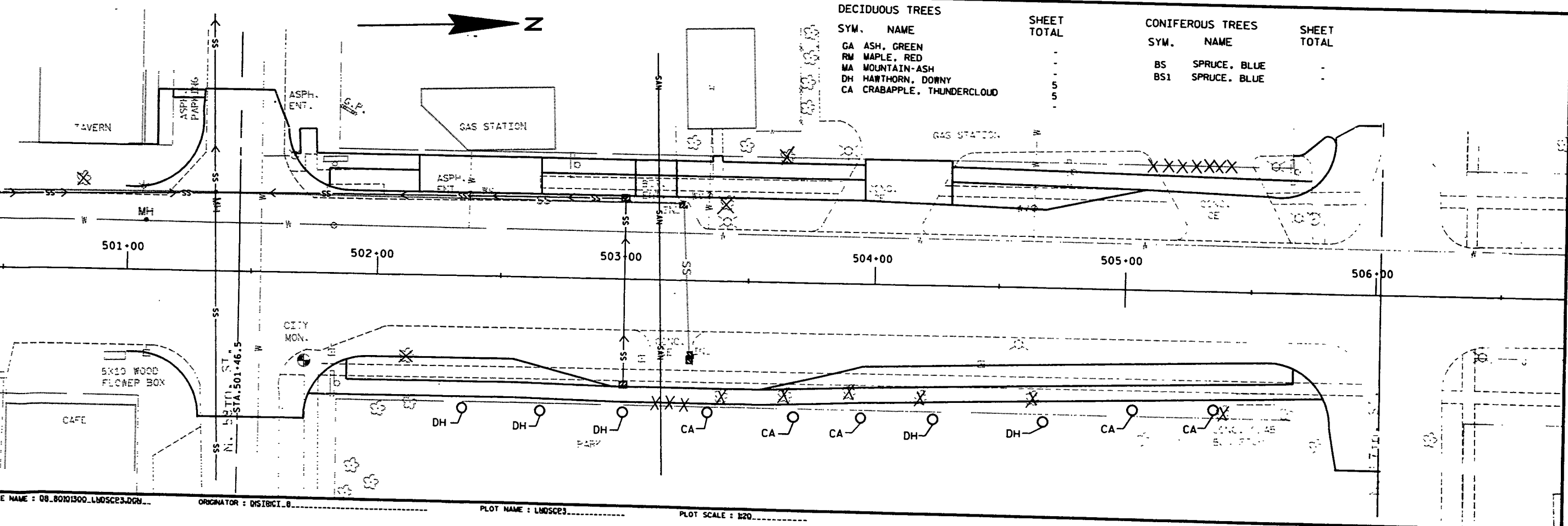


DECIDUOUS TREES

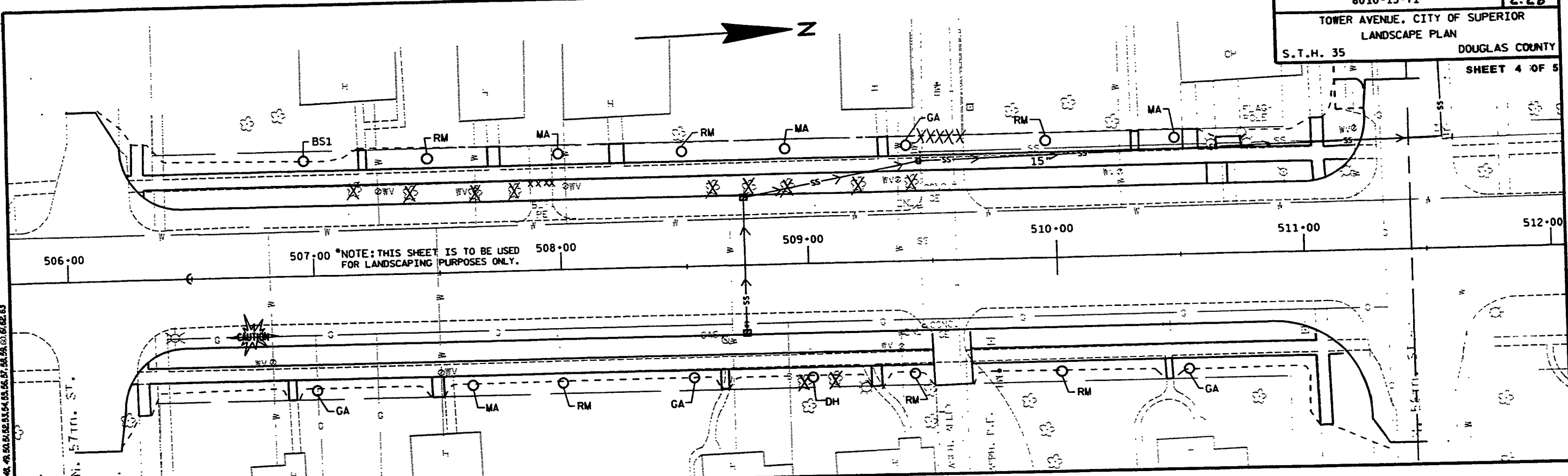
SYM.	NAME	SHEET TOTAL
GA	ASH, GREEN	1
RM	MAPLE, RED	1
MA	MOUNTAIN-ASH	1
DH	HAWTHORN, DOWNY	5
CA	CRABAPPLE, THUNDERCLOUD	5

CONIFEROUS TREES

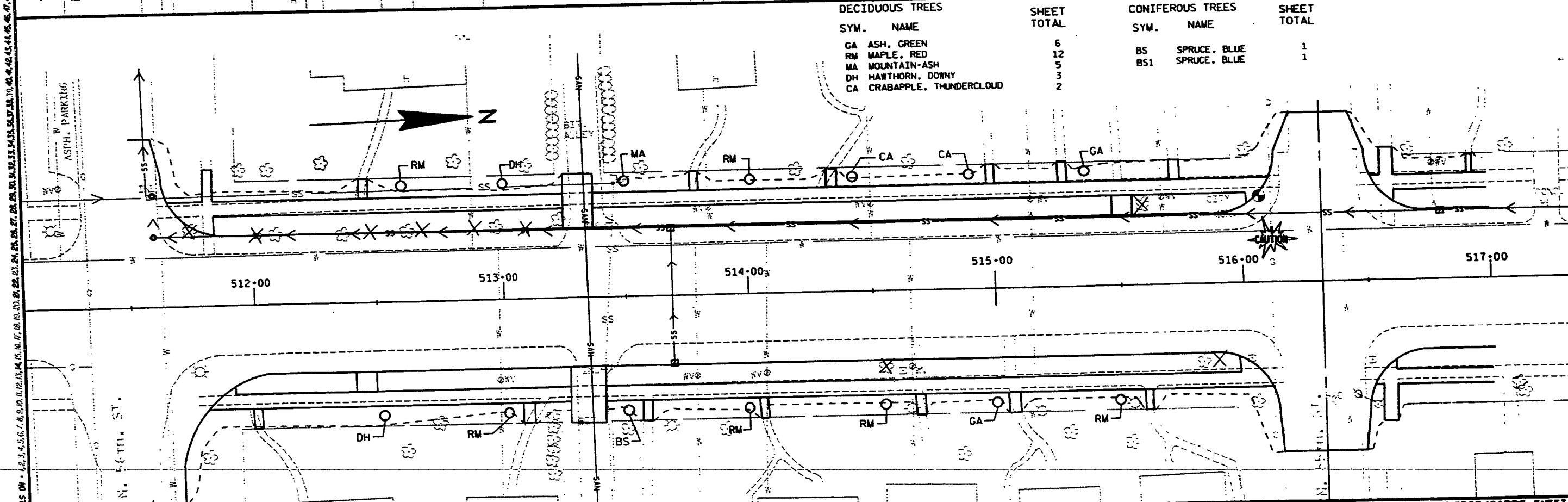
SYM.	NAME	SHEET TOTAL
BS	SPRUCE, BLUE	1
BS1	SPRUCE, BLUE	1



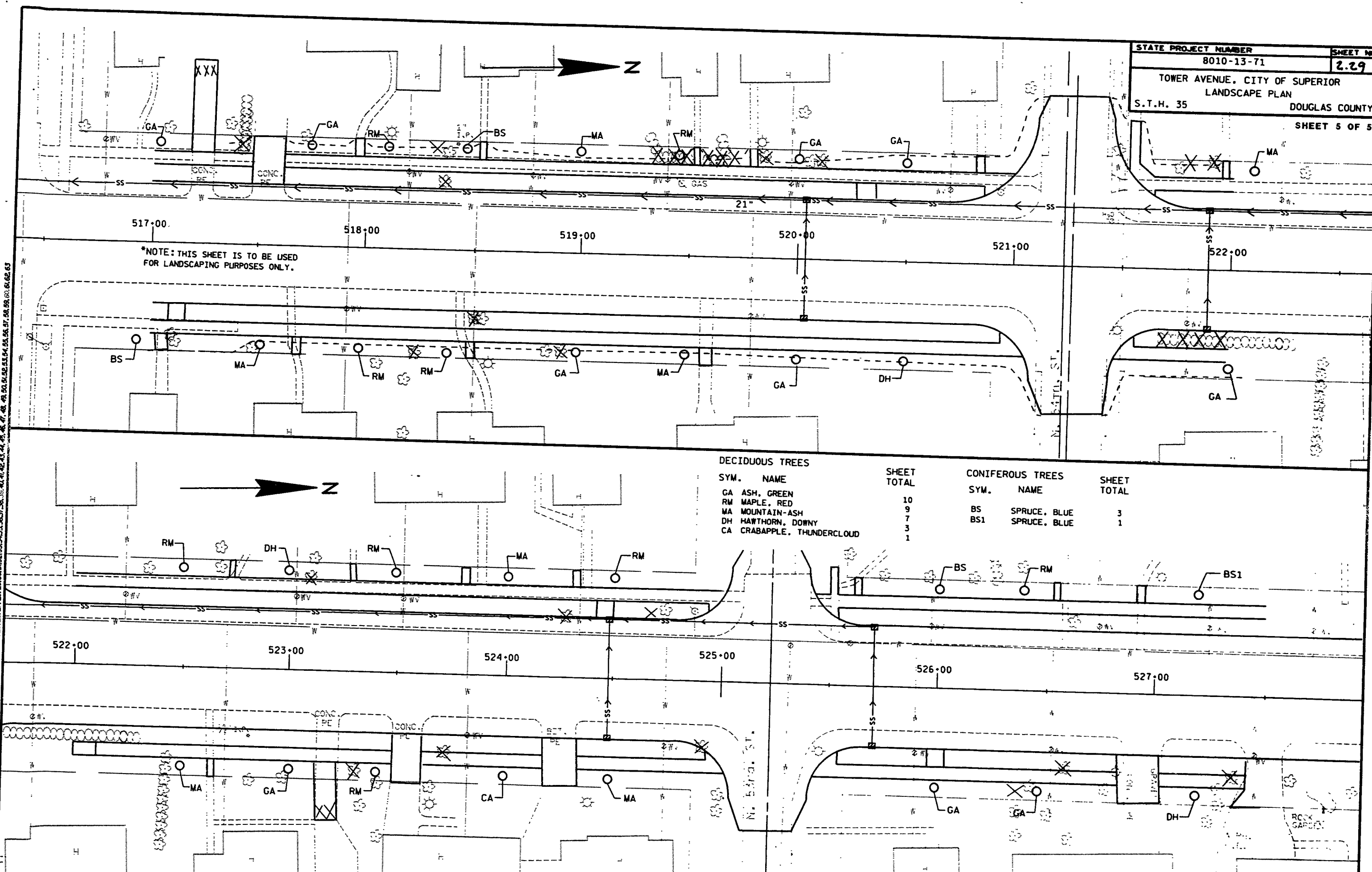
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



DECIDUOUS TREES		SHEET TOTAL	CONIFEROUS TREES		SHEET TOTAL
SYM.	NAME		SYM.	NAME	
GA	ASH, GREEN	6	BS	SPRUCE, BLUE	1
RM	MAPLE, RED	12	BS1	SPRUCE, BLUE	1
MA	MOUNTAIN-ASH	5			
DH	HAWTHORN, DOWNY	3			
CA	CRABAPPLE, THUNDERCLOUD	2			



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



DECIDUOUS TREES

SYM.	NAME	SHEET TOTAL
GA	ASH, GREEN	10
RM	MAPLE, RED	9
MA	MOUNTAIN-ASH	7
DH	HAWTHORN, DOWNY	3
CA	CRABAPPLE, THUNDERCLOUD	1

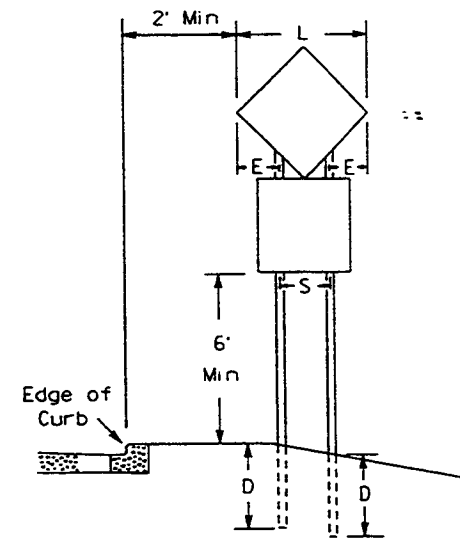
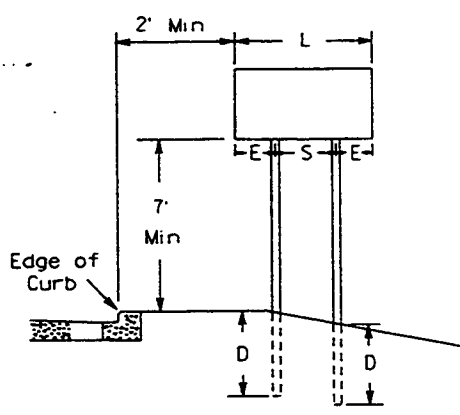
CONIFEROUS TREES

SYM.	NAME	SHEET TOTAL
BS	SPRUCE, BLUE	3
BS1	SPRUCE, BLUE	1

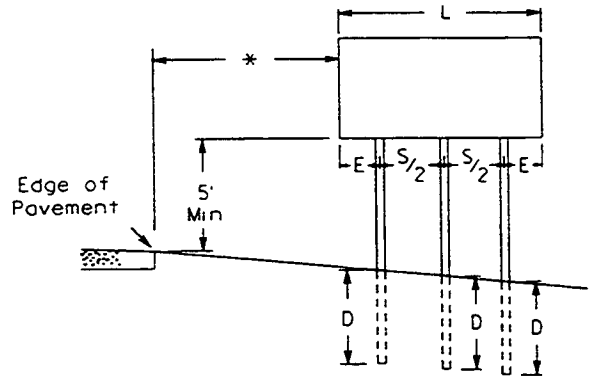
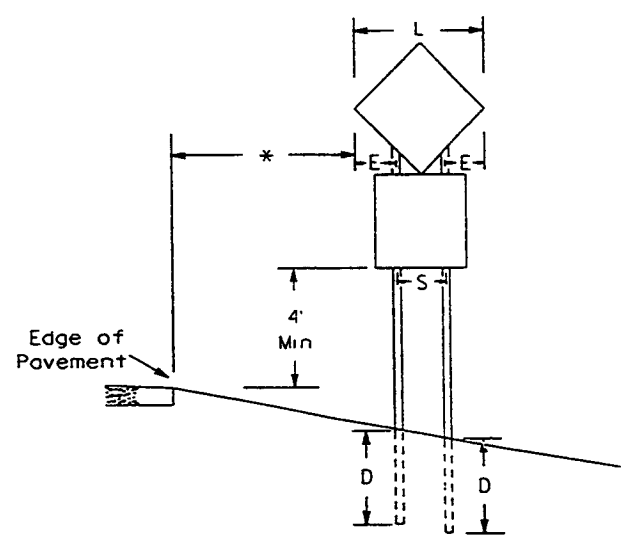
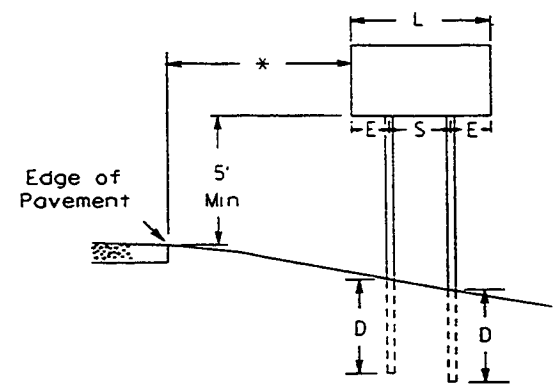
LEVELS ON - 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3

LEVELS ON 2.1.

URBAN AREA



RURAL AREA



GENERAL NOTES

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

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

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

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

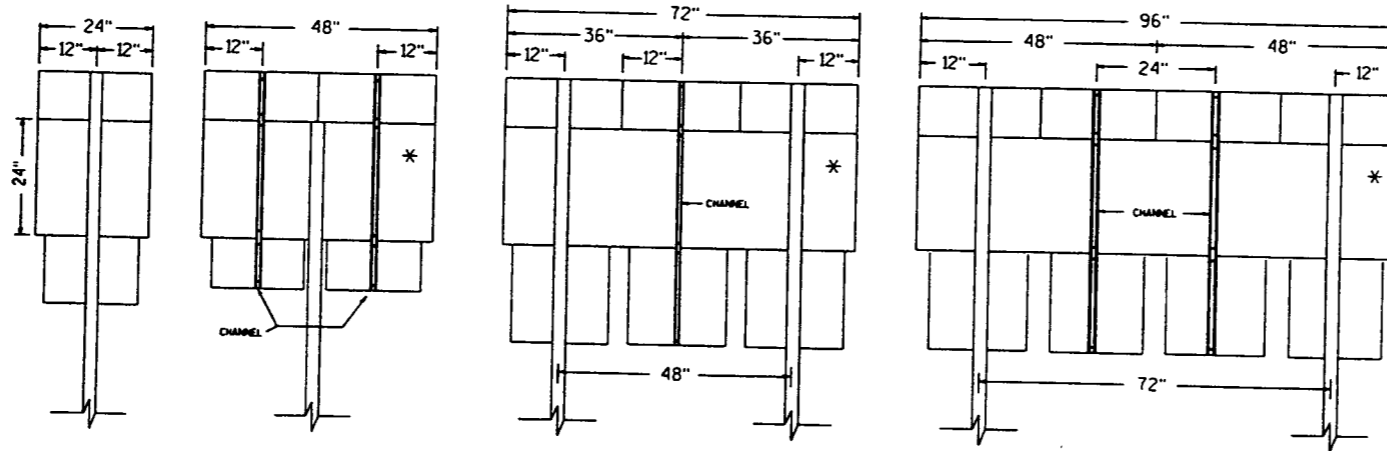
POST EMBEDMENT DEPTH	
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT. OF TRANSPORTATION

11/20/92 PLATE NO. 44-4.3



NOTES:

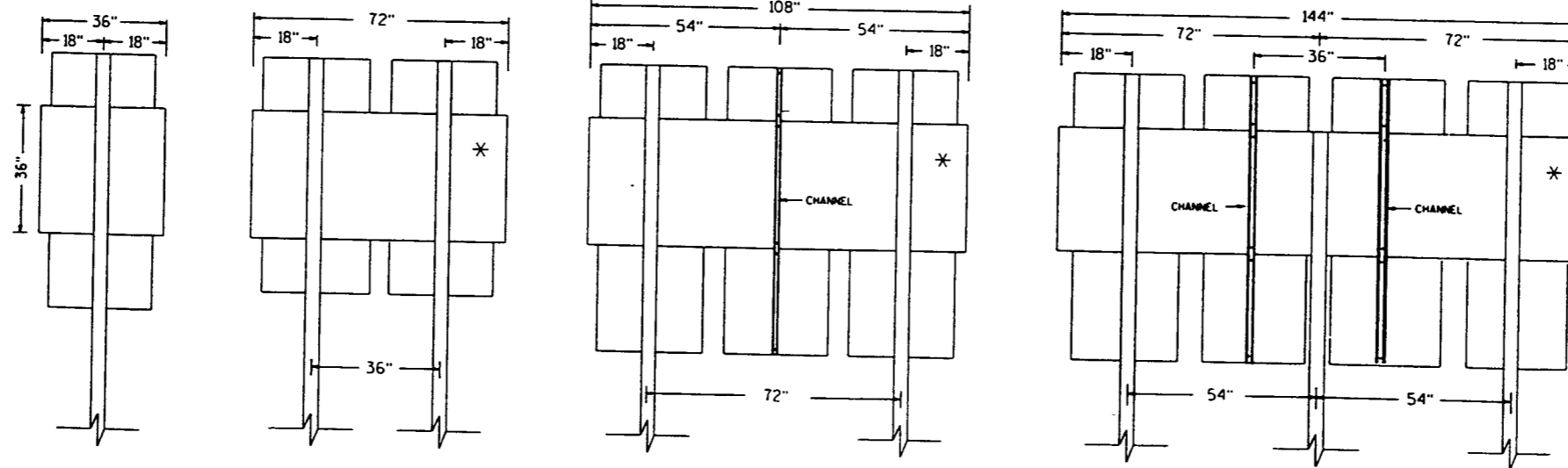
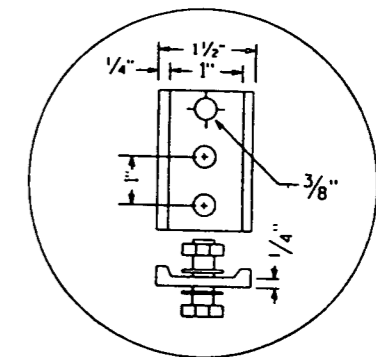
1. Post spacing shall be according to this detail but post embedment depth shall be in accordance with A4-4.
2. Channel material shall be as specified in Section 633 of Std. Specs. and weight shall be approx. 1.4 lbs/ft.
3. Base material for a multiple marker head panel (*) shall be one piece high density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

CHANNEL HARDWARE:

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

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

CHANNEL DETAIL



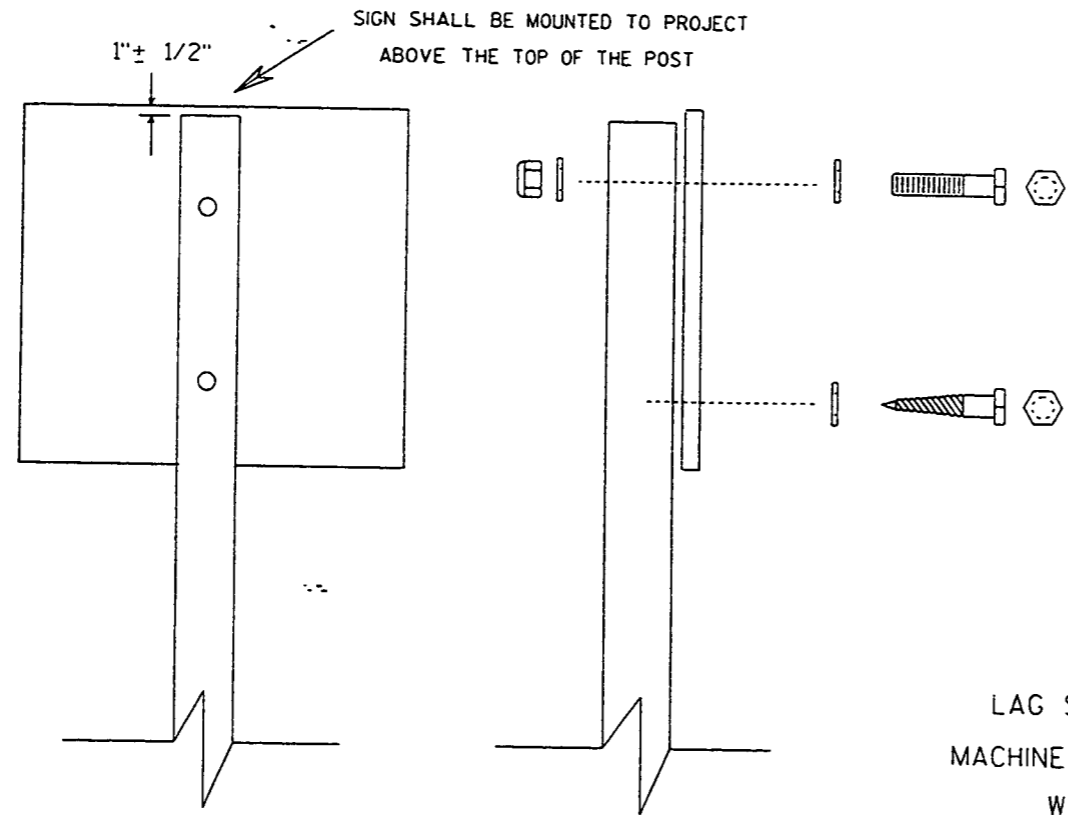
DATE DRAWN 5-3-87 DATE REDRAWN 10-3-91
DATE REVISED

TYPICAL PANEL INSTALLATION
FOR J TYPE ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED: *[Signature]*
State Traffic Engineer
DATE 4/5/91 PLATE NO. A4-5.3

54 99

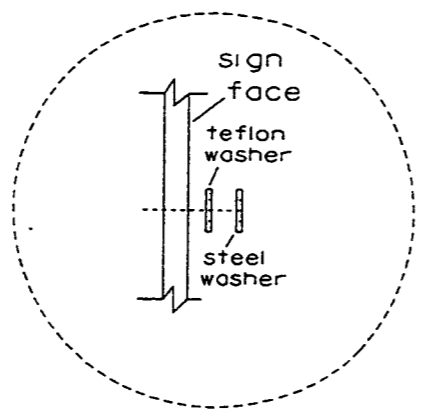


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

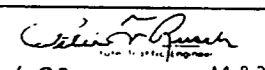
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- LAG SCREWS - 3/8" X 3"
- MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- WASHERS - 1" O.D. X 3/8" I.D. X 1/16" STEEL for signs 24x24 and smaller.
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL for signs 24x30 to 36x48.
- 1-1/2" O.D. X 7/16" I.D. X 1/16" STEEL for signs 48x48 and larger.
- 1-1/4" O.D. X 3/8" I.D. X .080 TEFLON for all Type H signs.

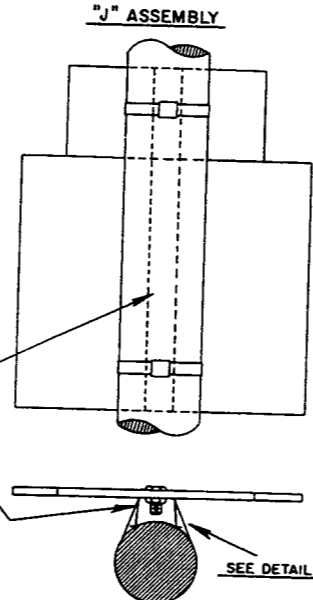
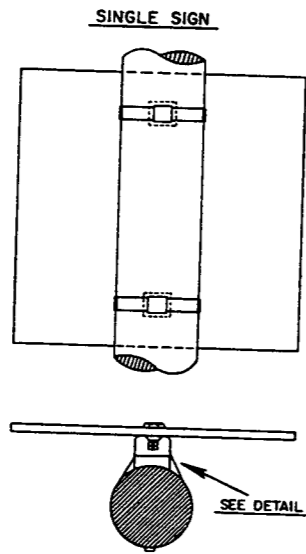


Washer Placement when Sign Has Type H Face

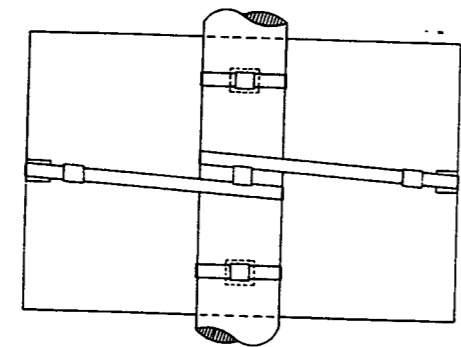
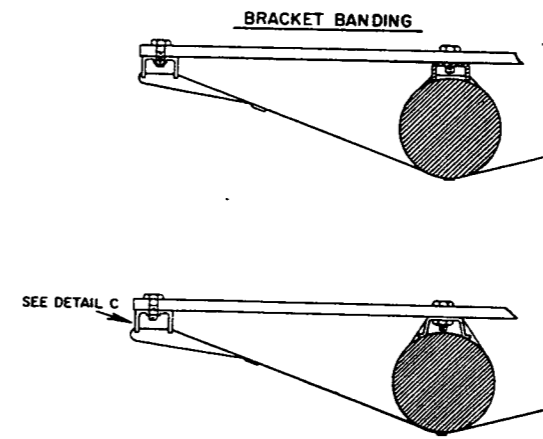
INVEST OR 2

DATE ISSUED: 1-29-92	DATE REVISION:
ATTACHMENT OF SIGNS TO WOOD POSTS	
 DATE 2-1-92 SCALE NO. A4-B.2	

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
PROJECT DESIGNATION	233	

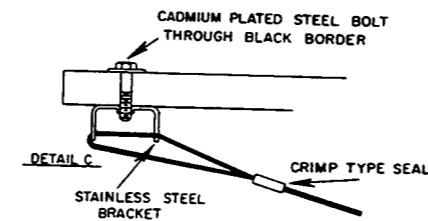
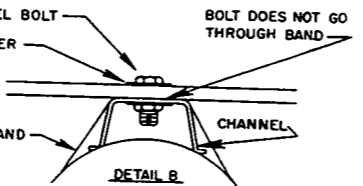
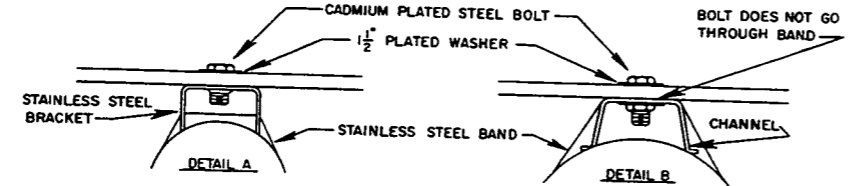
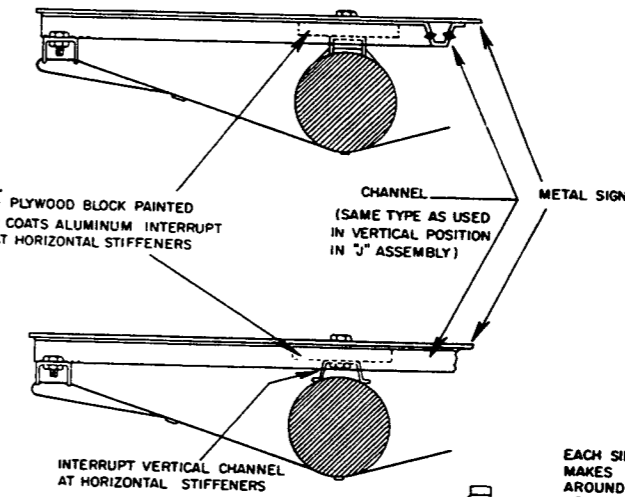
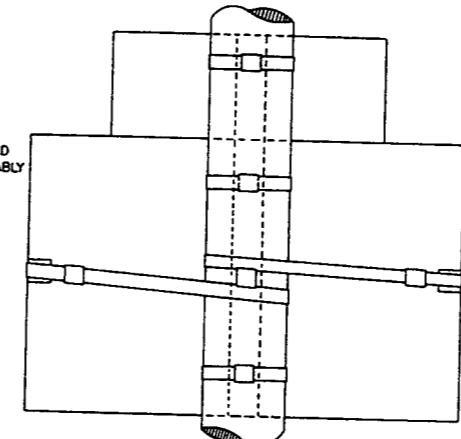


CHANNEL
SEE TYPICAL
PANEL INSTALLATION
SHEET



BRACKET BANDING
USE ONE BRACE BAND ON EACH
SIGN 4 FEET OR MORE IN WIDTH.

BRACE BANDING SHALL BE TIGHTENED
FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

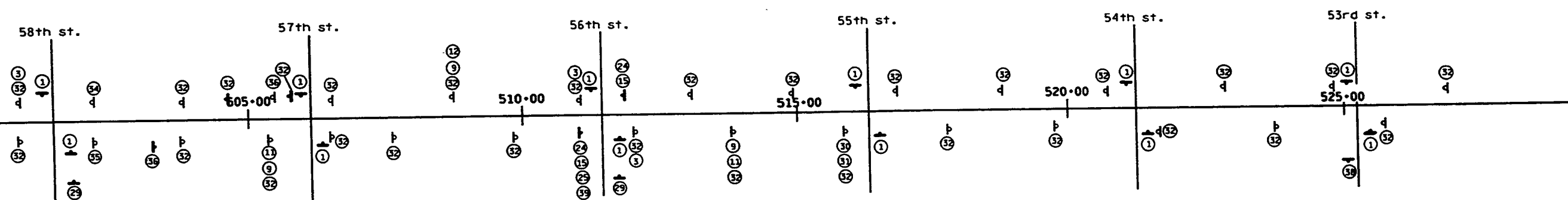
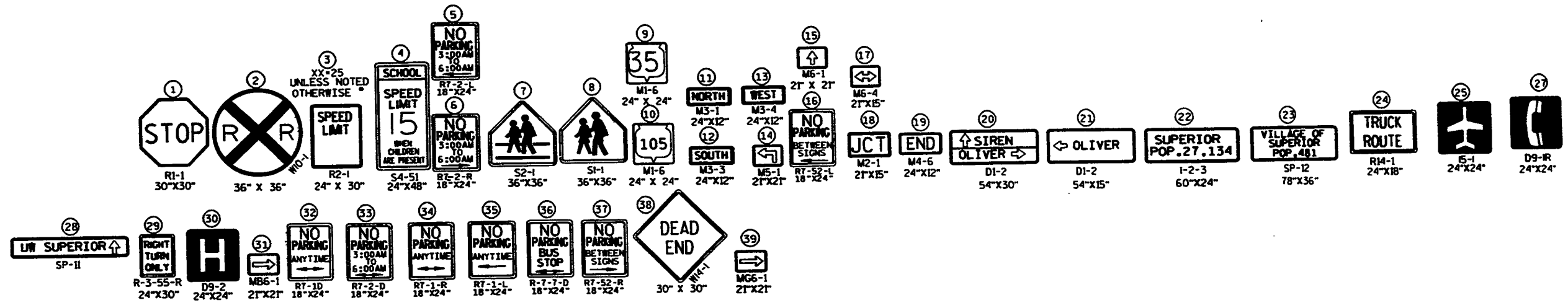
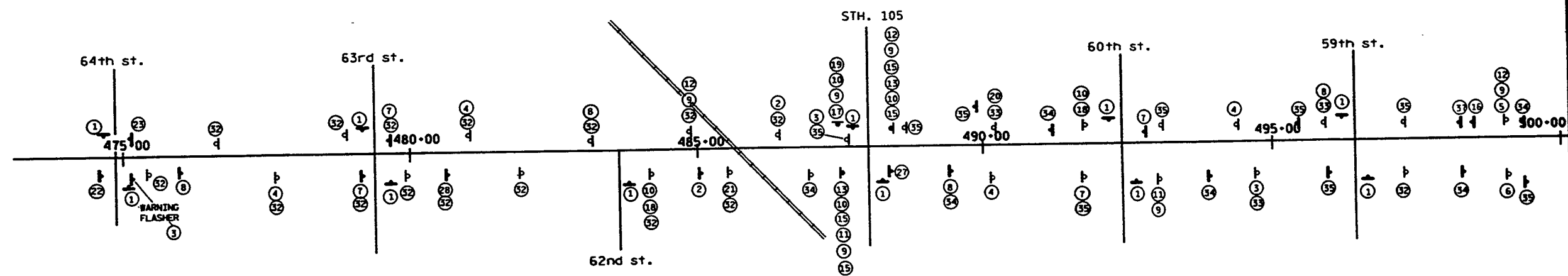


BRACE BANDING

NUMBER OF BRACKET BANDS
WHEN THE AREA OF THE SIGN OR SIGN
ASSEMBLY IS LESS THAN 10 SQUARE FEET
TWO BRACKET BANDS SHALL BE USED
WHEN THE AREA IS 10 SQUARE FEET OR
MORE, THREE BRACKET BANDS SHALL BE
USED

MATERIAL
BANDING AND ASSEMBLY BRACKET SHALL
STAINLESS STEEL ALL BANDING SHALL BE
3/4-INCH IN WIDTH

Date Redrawn - 2/18/71
Date Revised -
SIGN BANDING DETAILS
WISCONSIN DIVISION OF HIGHWAYS
APPROVED _____ CHIEF TRAFFIC ENGINEER
DATE _____ PLATE NO. A3-9.1

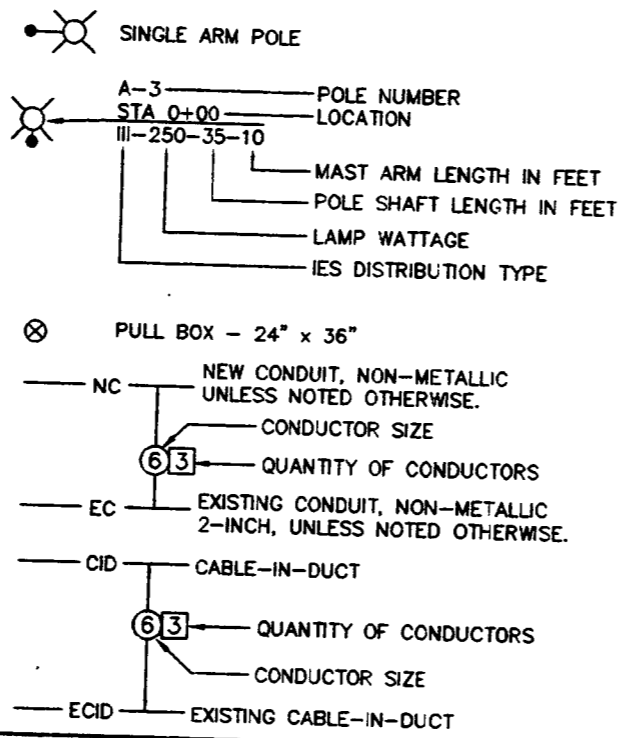


NOTE: ALL PARKING SIGNS SHALL BE SET AT A 45° ANGLE

- 4 SIGNS MOUNTED ON STREET LIGHT POLE (BANDING REQ'D)
- 4 SIGNS MOUNTED ON WOOD POST, 4"x4"
- 4 SIGNS MOUNTED ON STEEL POST, TYPE H

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

LIGHTING / ELECTRICAL LEGEND

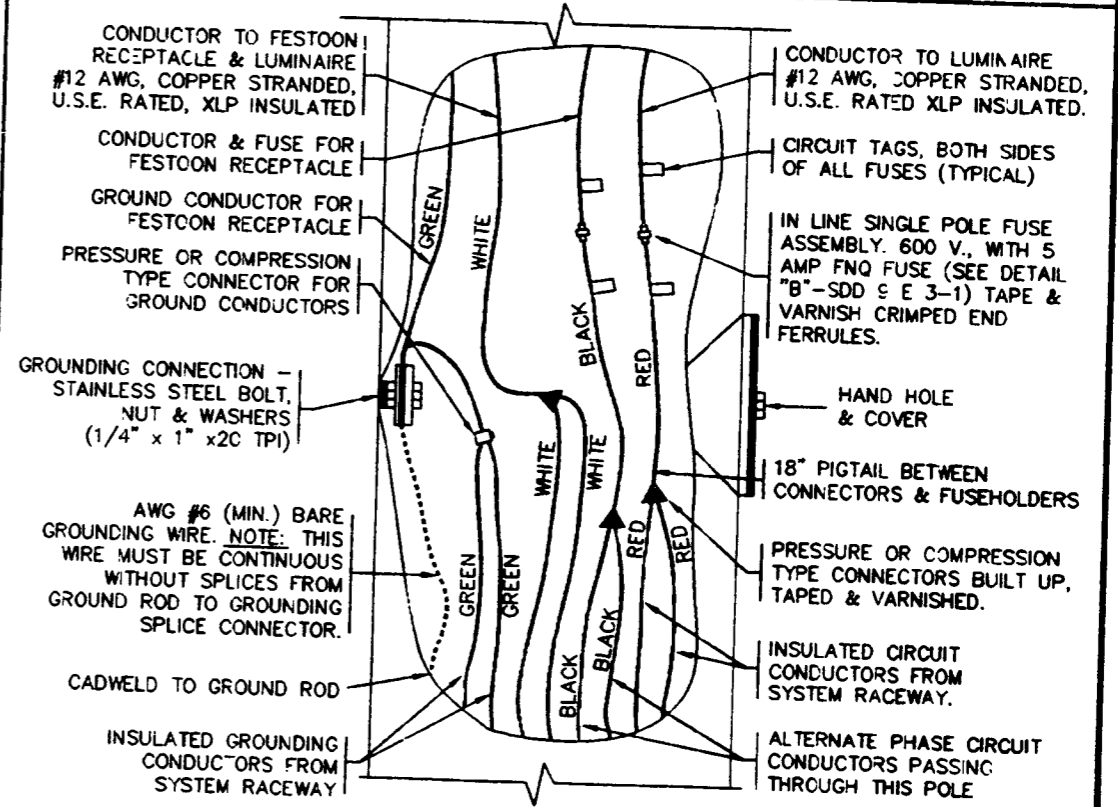


GENERAL NOTES

- ALL STATIONING IS REFERENCED FROM THE TOWER AVENUE REFERENCE LINE, UNLESS SPECIFICALLY NOTED OTHERWISE.
- CABLE IN DUCT SHALL BE PLACED WITHIN ONE (1) FOOT BEHIND CURB, TOWARD SIDEWALK.
- CONDUIT SHALL BE PLACED WITHIN ONE (1) FOOT BEHIND CURB, UNDER SIDEWALK.
- PROVIDE 2" NONMETALLIC SLEEVES UNDER ALL DRIVEWAYS AND ALLEYS ROUTE CABLE-IN-DUCT THROUGH SLEEVES. SLEEVES SHALL EXTEND 2-FEET BEYOND EITHER SIDE OF DRIVEWAY.
- REFER TO ALL OTHER SHEETS OF THE PLANS FOR UTILITY LOCATIONS, RAILROAD SIGNALS AND CONTROLLERS.
- INDICATED DIMENSIONS ARE NOMINAL, MINOR VARIATIONS BEING PERMITTED.

ABBREVIATIONS

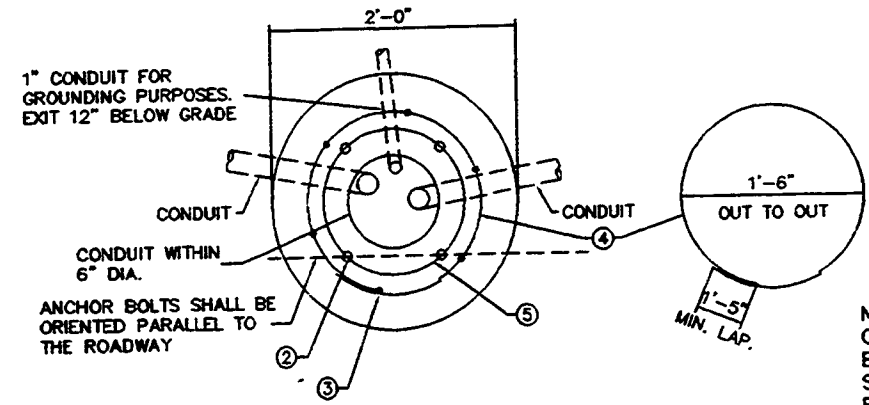
CL	CENTERLINE	P.L.	PROPERTY LINE
CID	CABLE-IN-DUCT	R	RADIUS
CONC.	CONCRETE	R.L.	REFERENCE LINE
DB	DIRECT BURIAL	RT.	RIGHT
E	ELECTRIC	R/W	RIGHT OF WAY
E.B.	EAST BOUND	S.B.	SOUTH BOUND
EC	EXISTING CONDUIT	S.E.	SOUTHEAST
ECID	EXISTING CABLE-IN-DUCT	SEC.	SECTION
FDN.	FOUNDATION	STA.	STATION
LT.	LEFT	S.T.H.	STATE TRUNK HIGHWAY
MAX	MAXIMUM	S.W.	SOUTHWEST
MIN	MINIMUM	U.S.H.	UNITED STATES HIGHWAY
N.B.	NORTH BOUND	VAR	VARIABLE
NC	NEW CONDUIT		
N.E.	NORTHEAST		
NO	NUMBER		
N.W.	NORTHWEST		



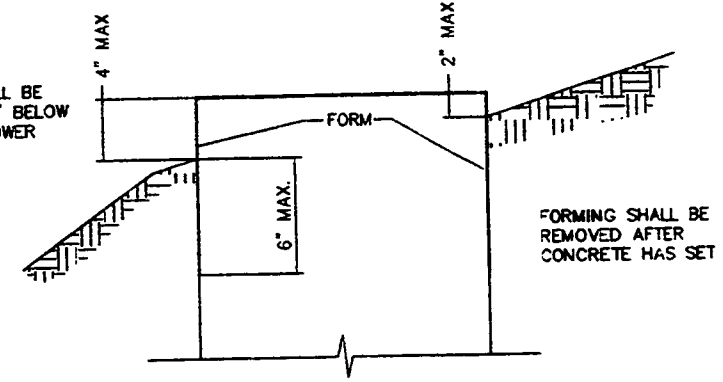
LIGHTING UNIT POLE WIRING
120/240 VOLT, 3 WIRE

DATE: OCTOBER 24, 1985
 REVISED:
 HVP DRAWING #1728
 SCALE: 1/8"=1'-0"
 HVP JOB #92207
 SDH JOB #

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.36
ELECTRICAL/LIGHTING DETAILS	
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	



FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE.

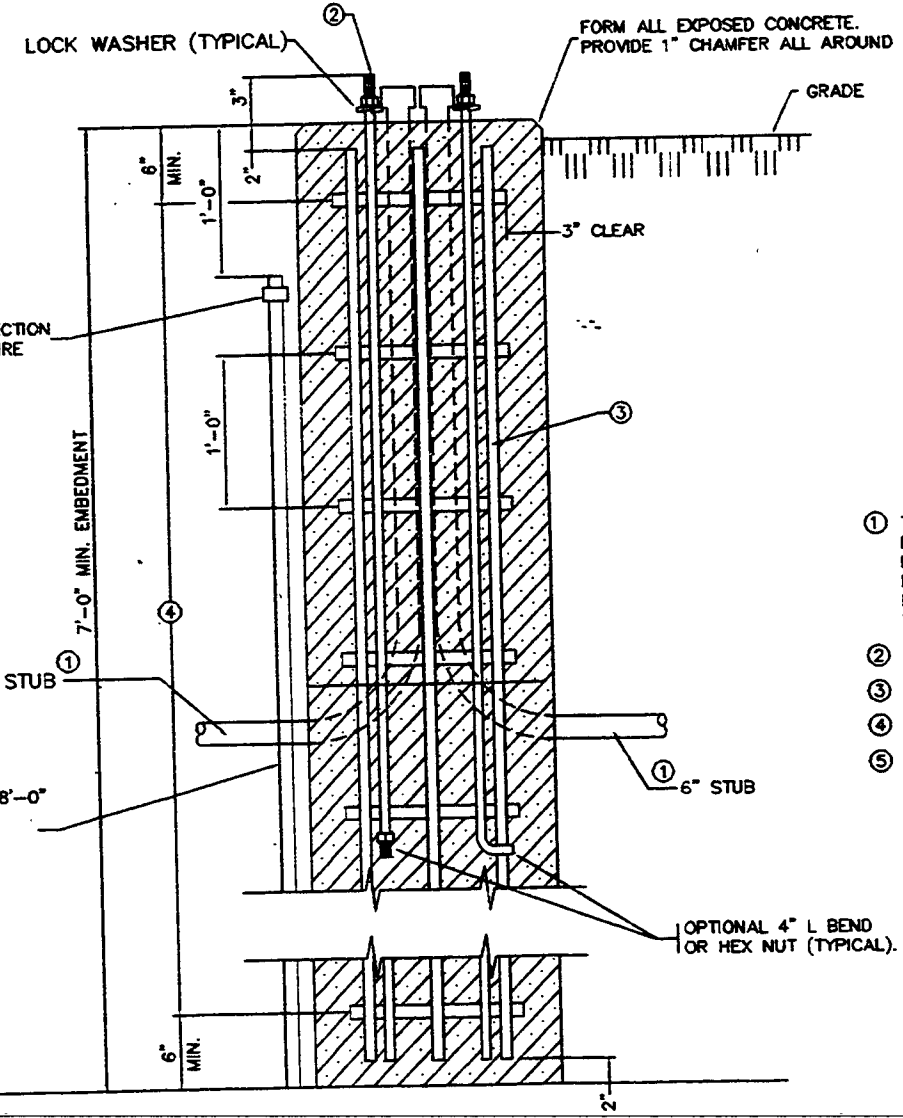


FORMING DETAIL

NOTE: CONTRACTOR SHALL VERIFY BOLT CIRCLE, ANCHOR BOLT SIZE, ARRANGEMENT AND PROJECTION.

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 THE USE OF A CIRCULAR AUGER.
- TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.
- CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.
- MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.
- CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
- ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.
- ALL NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL BE PLUGGED.
- ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
- BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.
- ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.
- WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED
- IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.
- A NO. 6 AWG. STRANDED COPPER GROUNDING WIRE SHALL BE CADWELDED TO THE GROUND ROD
- THE GROUNDING WIRE SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE GROUNDING WIRE SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER
- ANCHOR BOLTS SHALL BE THREADED 8" IN LENGTH ON EACH END OF THE BOLT, AND BE MANUFACTURED IN ACCORDANCE WITH SECTION 640.2.9 OF THE STANDARD SPECIFICATIONS AND ASTM A-449, OR ASTM A-687 (GRADE 105).
- WHEN ANCHOR BOLTS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR BOLT BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

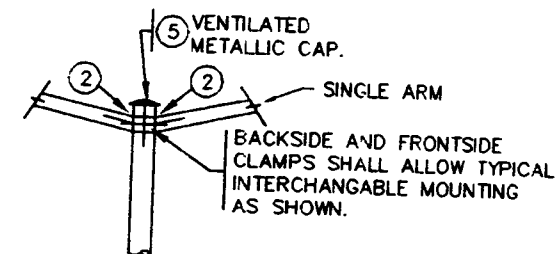
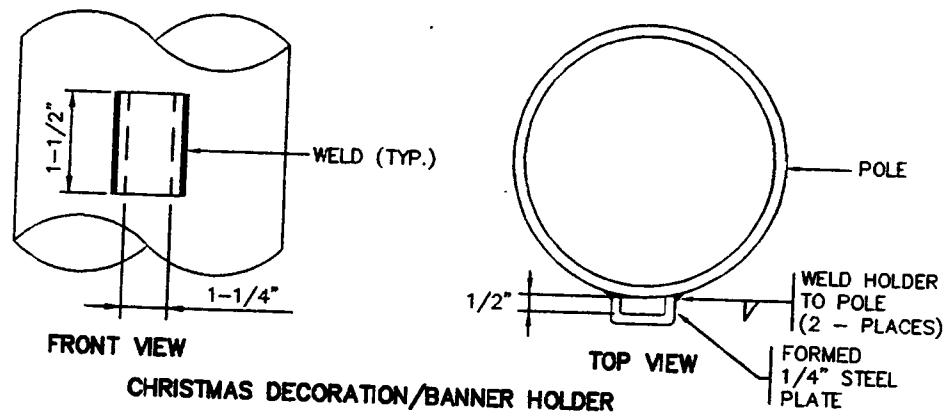


- KEY**
- THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
 - (4) 1" DIA. X 3'-6" ANCHOR BOLTS. (42")
 - (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
 - (7) NO. 4 X 6'-3" BAR STEEL REINFORCEMENT @ 1'-0" C-C
 - POLE BASE BOLT CIRCLE: 30 AND 35 FOOT SHAFT - 11-1/2" @ 38.5 FOOT SHAFT - 13-1/2" @

CONCRETE BASE TYPE 5, SPECIAL

HVP DRAWING #020 SCALE: 1/8"=1'-0"
 HVP JOB #02207
 DATE: OCTOBER 24, 1995
 REVISED:

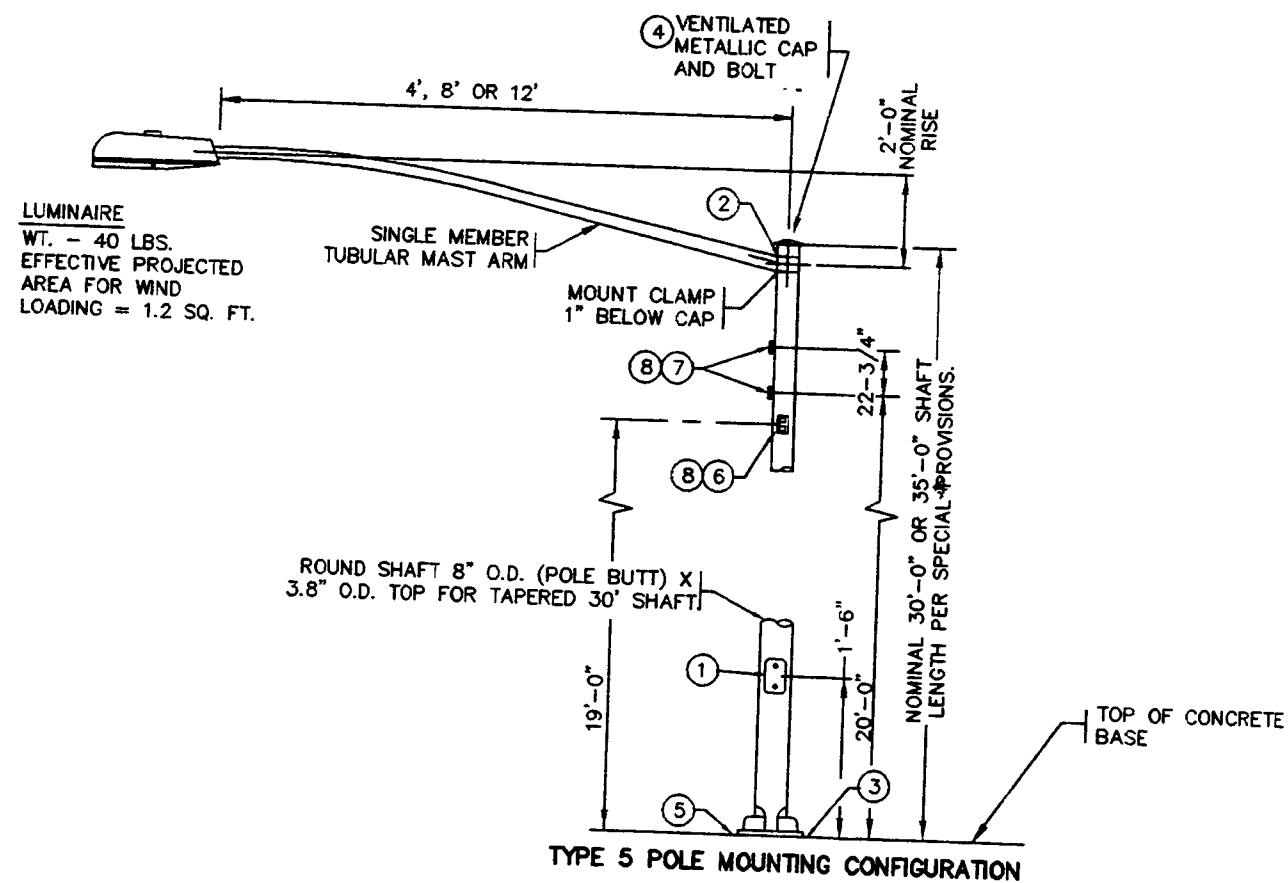
STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.37
ELECTRICAL/LIGHTING DETAILS	
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	



GENERAL NOTES

ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED FOR ARMS AND LUMINAIRES AS SHOWN ON THE PLANS.

THE SLIPFITTER END OF THE MAST ARM SHALL BE A NOMINAL 2-3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

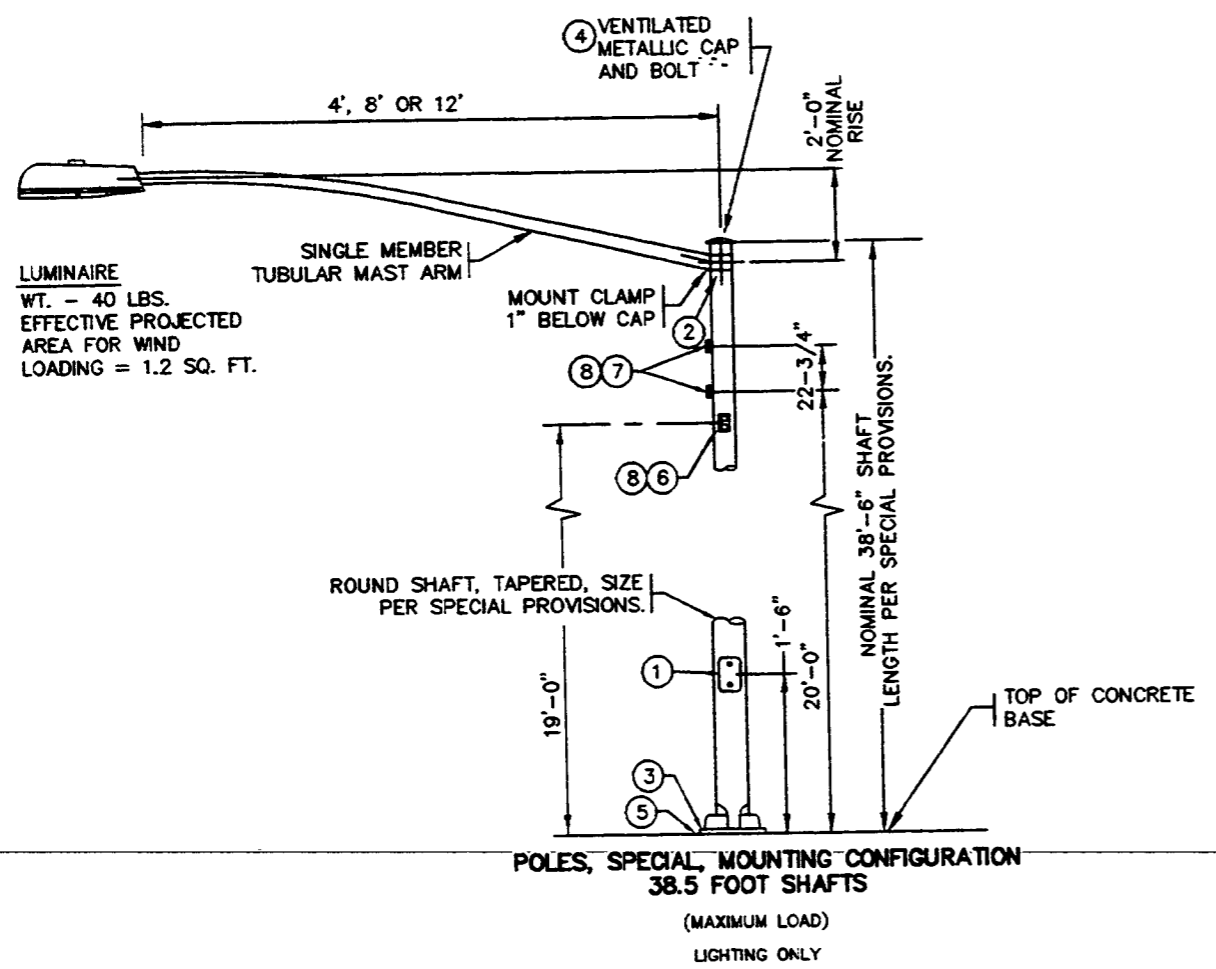
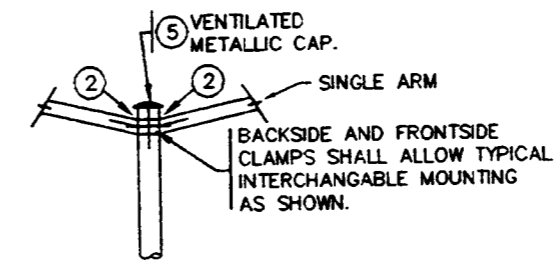
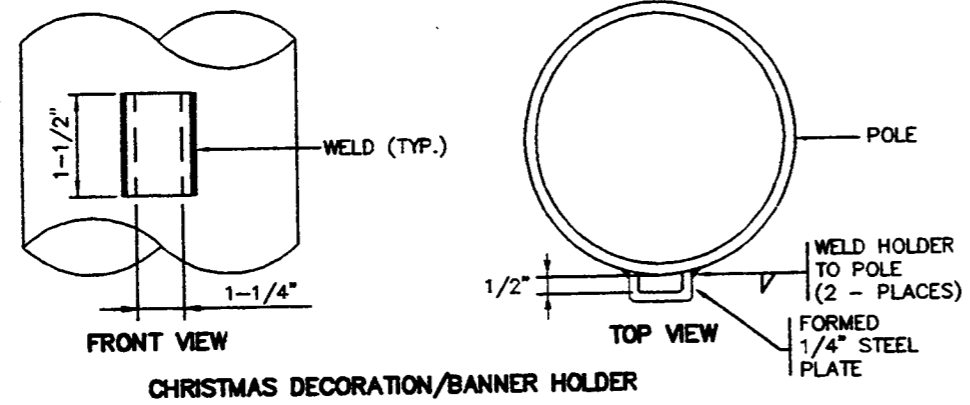


(MAXIMUM LOAD)
LIGHTING ONLY

- ① 4" X 6" REINFORCED HAND HOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
- ② GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1-3/8" HOLE IN POLE SHAFT FOR WIRING.
- ③ POLE BASE
- ④ FURNISH AND INSTALL VENTILATED CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH 1 (ONE) 1/4"x3/4"-20 TPI STAINLESS STEEL HEX HEAD BOLT.
- ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE POLE BASE.
- ⑥ FESTOON OUTLET WITH DUPLEX RECEPTACLE & WEATHERPROOF GASKETED COVER. LOCATE 90° CLOCKWISE FROM MAST ARM.
- ⑦ CHRISTMAS DECORATION/BANNER HOLDER - SEE DETAIL THIS SHEET. LOCATE 0' FROM MAST ARM.
- ⑧ VERIFY ALL DIMENSIONS FOR LOCATING & FABRICATING FESTOON OUTLETS & CHRISTMAS DECORATION/BANNER HOLDERS WITH OWNER DURING SHOP DRAWING APPROVAL.
- ⑨ SEE STANDARD DETAIL DRAWING S.D.D. 9 E 1-1e FOR HARDWARE DETAILS FOR POLE MOUNTINGS.

DATE: OCTOBER 24, 1995
REVISED:
HVP DRAWING #021
SCALE: 1/8" = 1'-0"
HVP JOB #02207
SEN JOB

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.38
ELECTRICAL/LIGHTING DETAILS	
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	



GENERAL NOTES

ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED FOR ARMS AND LUMINAIRES AS SHOWN ON THE PLANS.

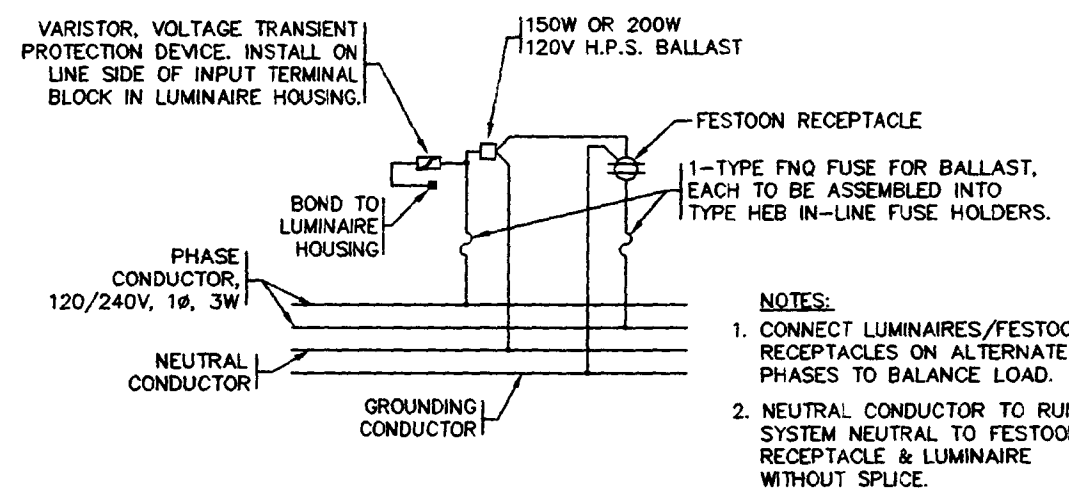
THE SLIPFITTER END OF THE MAST ARM SHALL BE A NOMINAL 2-3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

- ① 4" X 6" REINFORCED HAND HOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
- ② GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1-3/8" HOLE IN POLE SHAFT FOR WIRING.
- ③ POLE BASE.
- ④ FURNISH AND INSTALL VENTILATED CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH 1 (ONE) 1/4" X 3/4" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.
- ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE POLE BASE.
- ⑥ FESTOON OUTLET WITH DUPLEX RECEPTACLE & WEATHERPROOF GASKETED COVER, LOCATE 90° CLOCKWISE FROM MAST ARM.
- ⑦ CHRISTMAS DECORATION/BANNER HOLDER - SEE DETAIL THIS SHEET, LOCATE 0° FROM MAST ARM.
- ⑧ VERIFY ALL DIMENSIONS FOR LOCATING & FABRICATING FESTOON OUTLETS & CHRISTMAS DECORATION/BANNER HOLDERS WITH OWNER DURING SHOP DRAWING APPROVAL.
- ⑨ SEE STANDARD DETAIL DRAWING S.D.D. 9 E 1-1e FOR HARDWARE DETAILS FOR POLE MOUNTINGS.

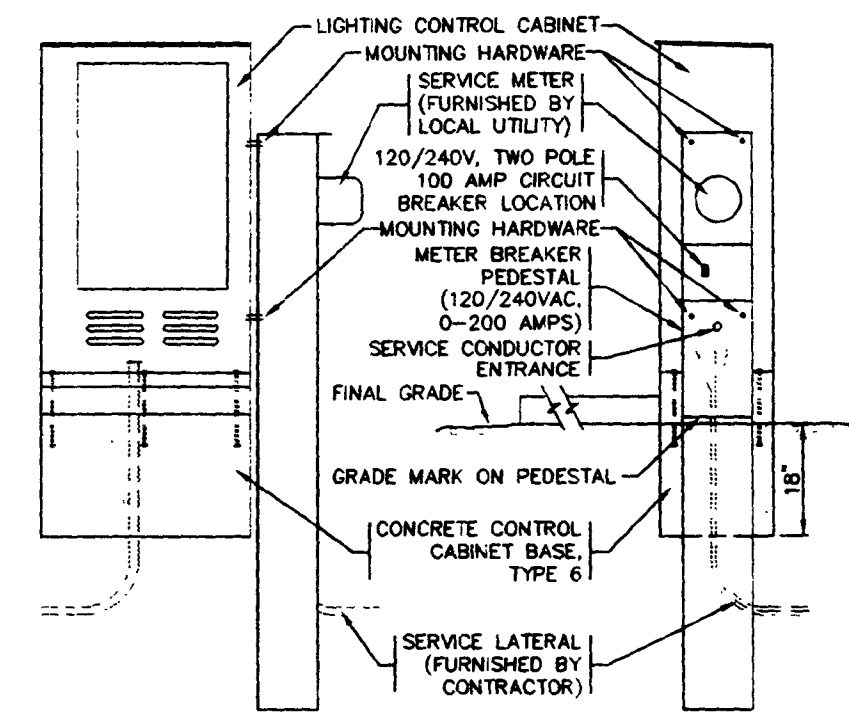
DATE: OCTOBER 24, 1985
REVISED:
HVP JOB #2207
SCALE: 1/8" = 1'-0"
HVP DRAWING #022

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.39
ELECTRICAL/LIGHTING DETAILS	
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	

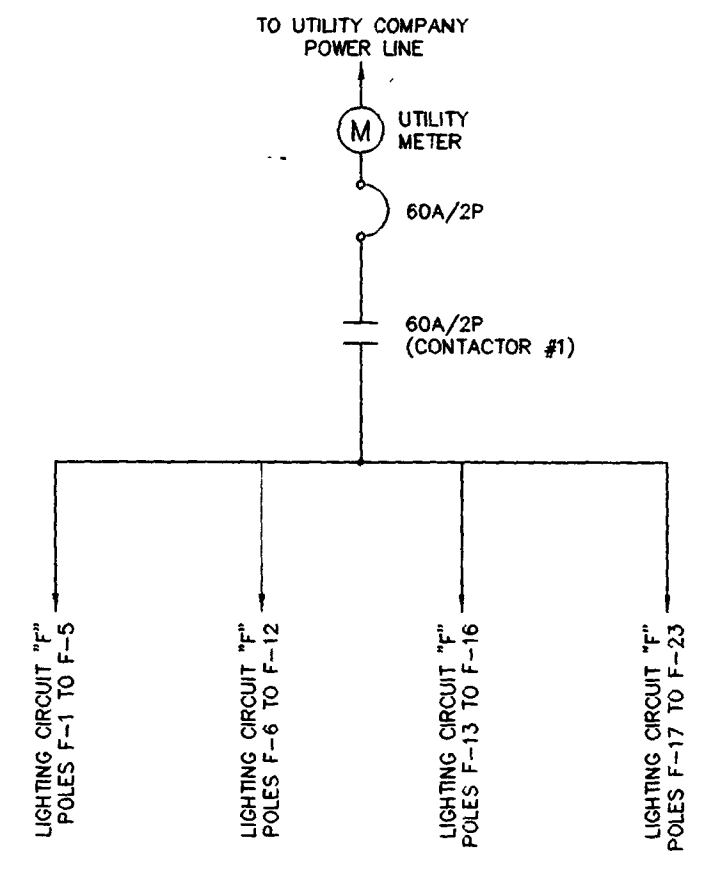
GENERAL NOTES:
 DETAILS OF CONSTRUCTION
 MATERIALS AND WORKMANSHIP
 NOT SHOWN ON THIS DRAWING
 SHALL CONFORM TO THE PERTINENT
 REQUIREMENTS OF THE CONTRACT.



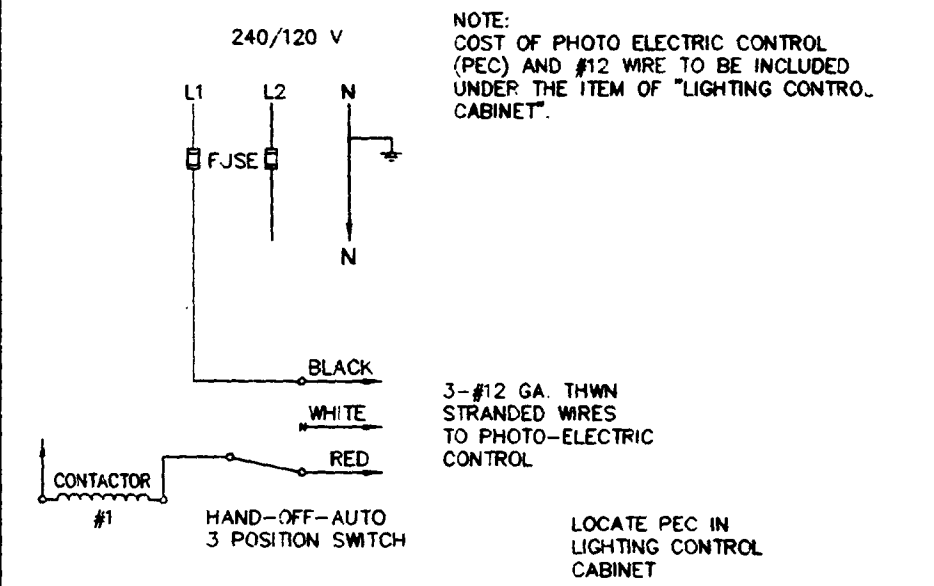
TYPICAL LUMINAIRE/FESTOON RECEPTACLE WIRING DIAGRAM
 120/240V, 1Ø, 3W SERVICE



ELECTRICAL SERVICE LIGHTING STA. 483+30 TOWER AVENUE 48.0' LT.



POWER ONE LINE DIAGRAM - 120/240V, 1Ø, 3 WIRE
 LIGHTING CONTROL CABINET NO. 1

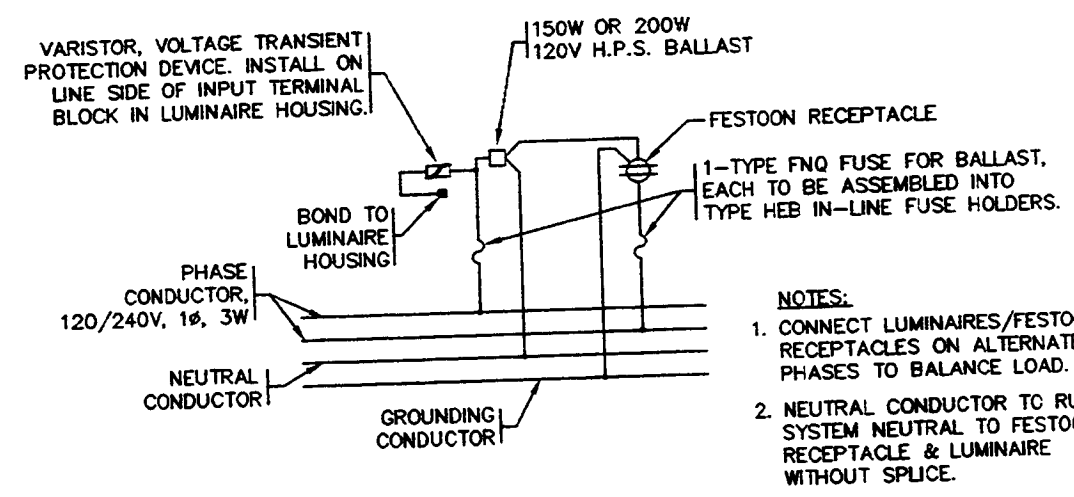


CONTROL WIRING SCHEMATIC
 LIGHTING CONTROL CABINET NO. 1

DATE: OCTOBER 24, 1985
 HVP DRAWING #023
 HVP JOB #02207
 SCALE: 1/8"=1'-0"
 REVISED:

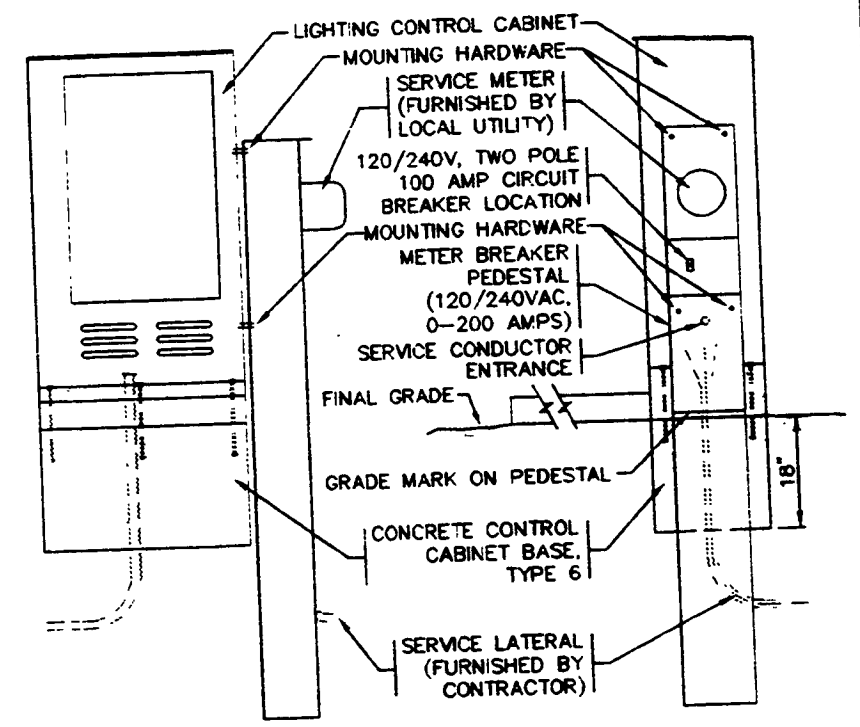
STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.40
ELECTRICAL/LIGHTING DETAILS	
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	

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

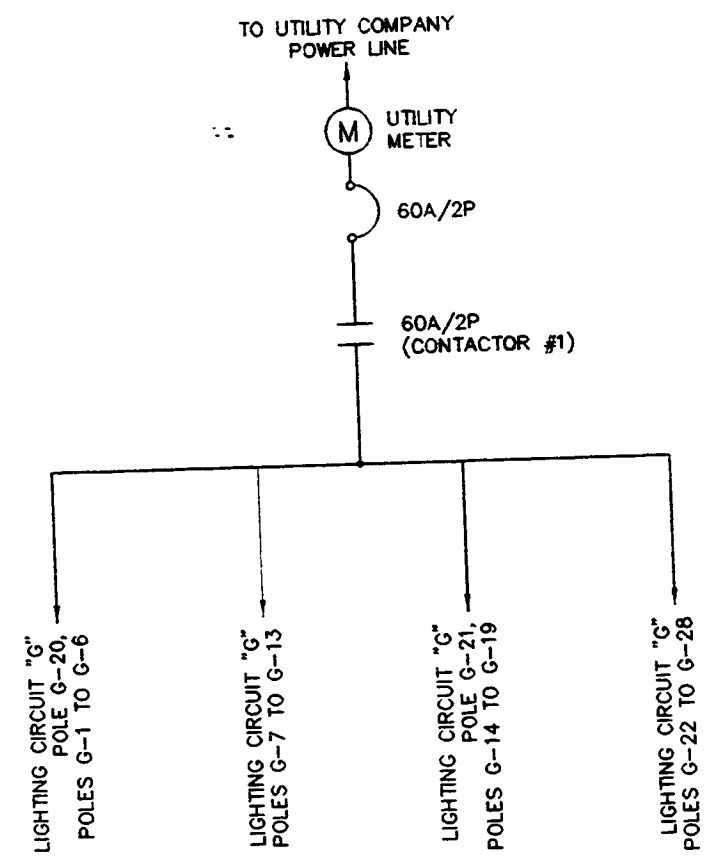


- NOTES:
1. CONNECT LUMINAIRES/FESTOON RECEPTACLES ON ALTERNATE PHASES TO BALANCE LOAD.
 2. NEUTRAL CONDUCTOR TO RUN FROM SYSTEM NEUTRAL TO FESTOON RECEPTACLE & LUMINAIRE WITHOUT SPLICE.

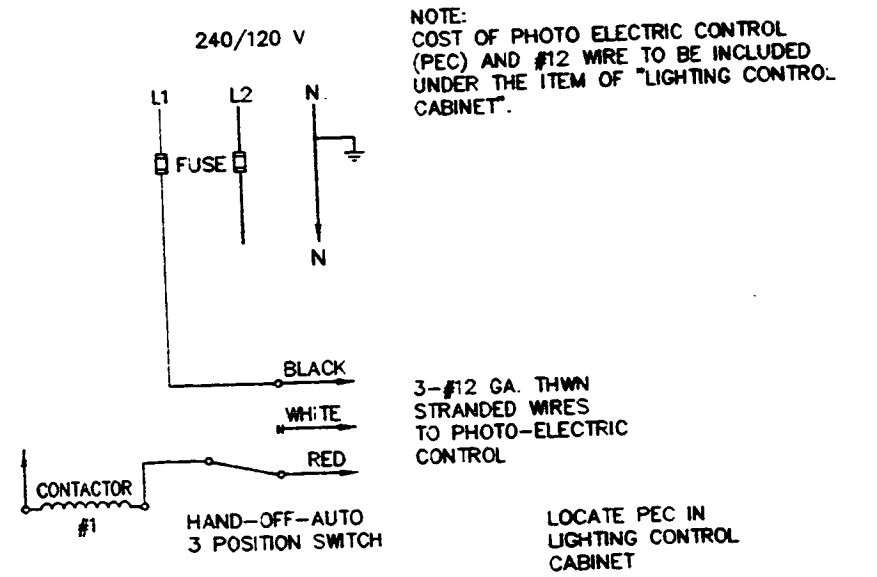
TYPICAL LUMINAIRE/FESTOON RECEPTACLE WIRING DIAGRAM
 120/240V, 1Ø, 3W SERVICE



ELECTRICAL SERVICE LIGHTING, STA. 501+81 TOWER AVENUE 65.0' RT.

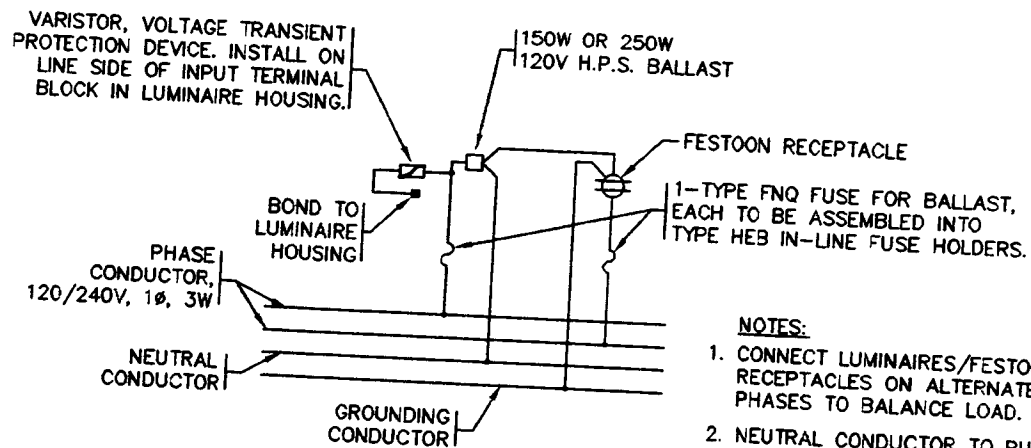


POWER ONE-LINE DIAGRAM - 120/240V, 1Ø 3 WIRE
 LIGHTING CONTROL CABINET NO. 2



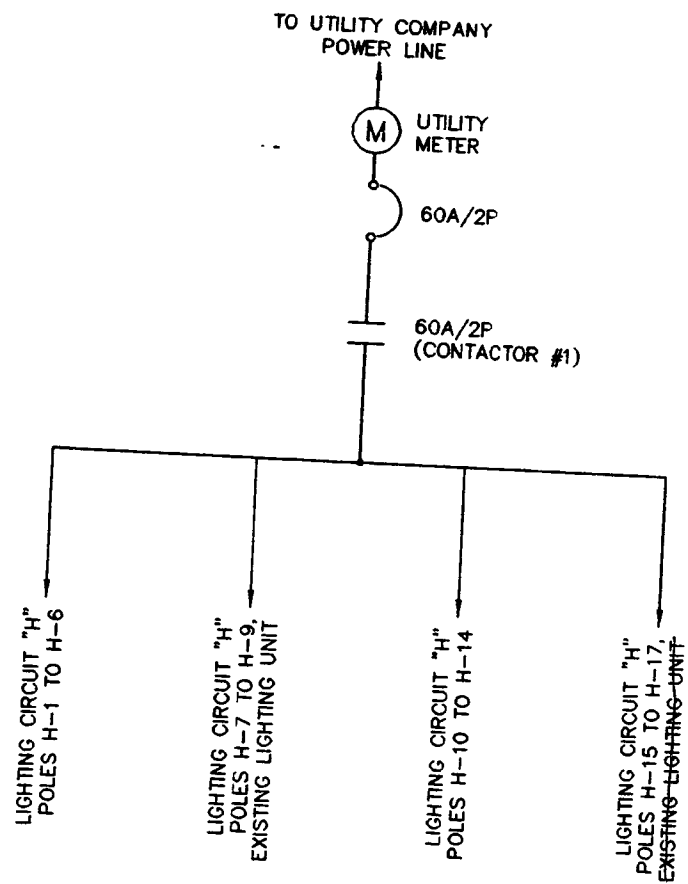
CONTROL WIRING SCHEMATIC
 LIGHTING CONTROL CABINET NO. 2

DATE: OCTOBER 24, 1995
 HVP JOB #02207
 HVP DRAWING #024
 SCALE: 1/8"=1'-0"
 REVISED:



- NOTES:**
1. CONNECT LUMINAIRES/FESTOON RECEPTACLES ON ALTERNATE PHASES TO BALANCE LOAD.
 2. NEUTRAL CONDUCTOR TO RUN FROM SYSTEM NEUTRAL TO FESTOON RECEPTACLE & LUMINAIRE WITHOUT SPLICE.

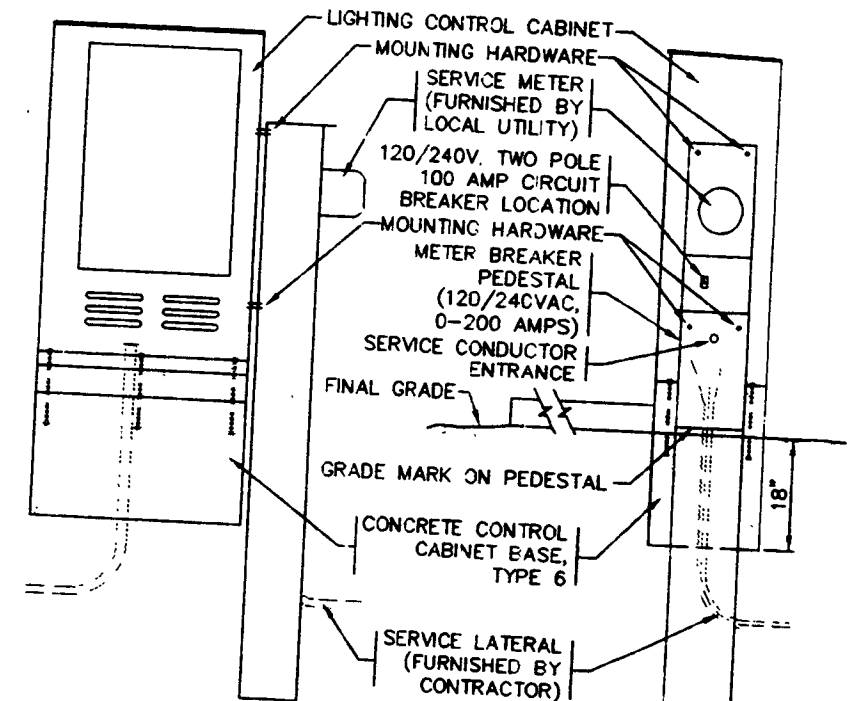
TYPICAL LUMINAIRE/FESTOON RECEPTACLE WIRING DIAGRAM
120/240V, 1 ϕ , 3W SERVICE



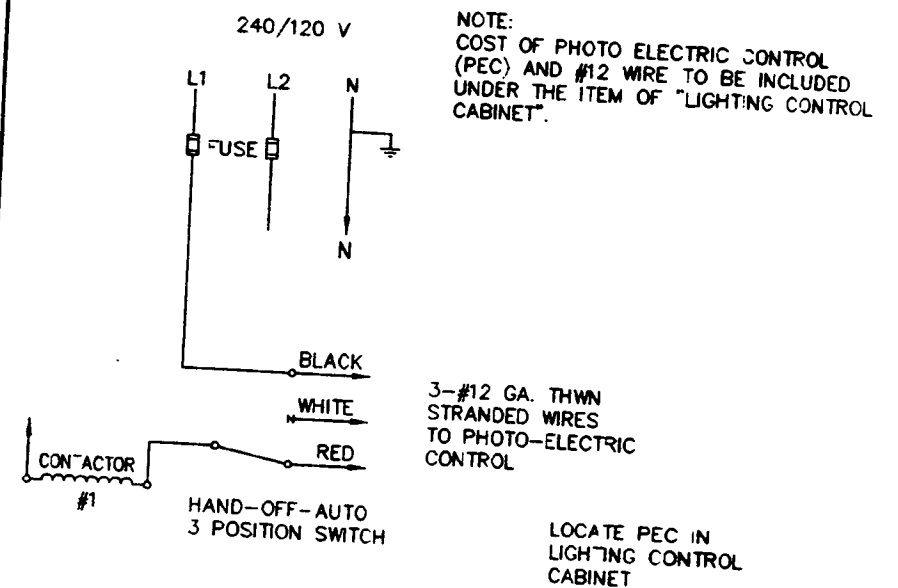
POWER ONE LINE DIAGRAM - 120/240V, 1 ϕ , 3 WIRE
LIGHTING CONTROL CABINET NO. 3

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

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.41
ELECTRICAL/LIGHTING DETAILS	
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	



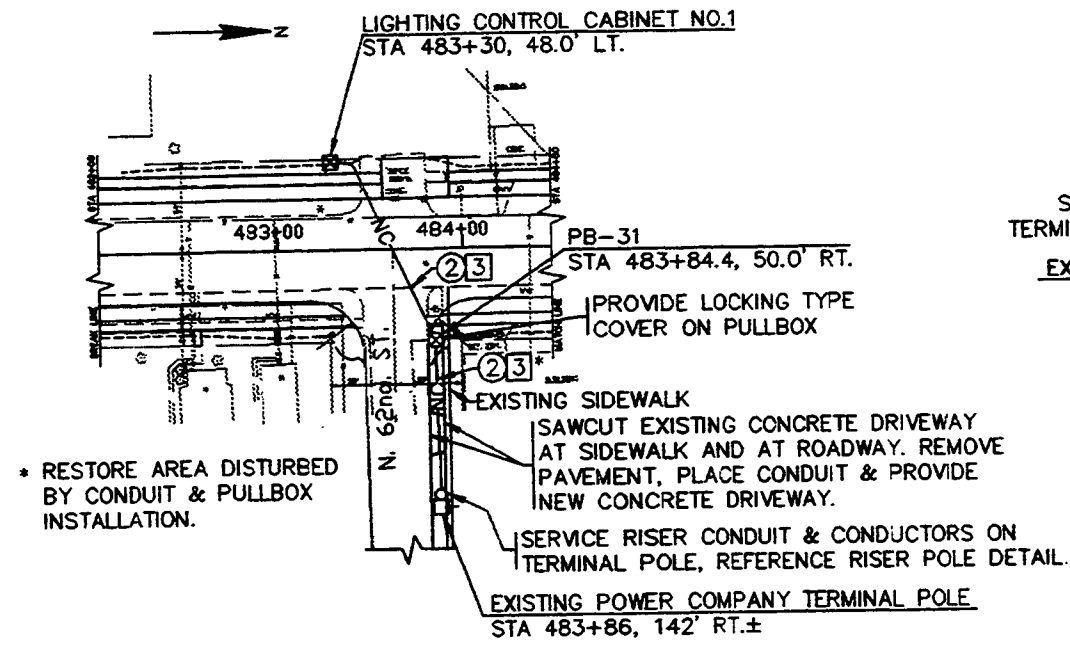
ELECTRICAL SERVICE, LIGHTING, STA. 521+00 TOWER AVENUE 68.0' LT.



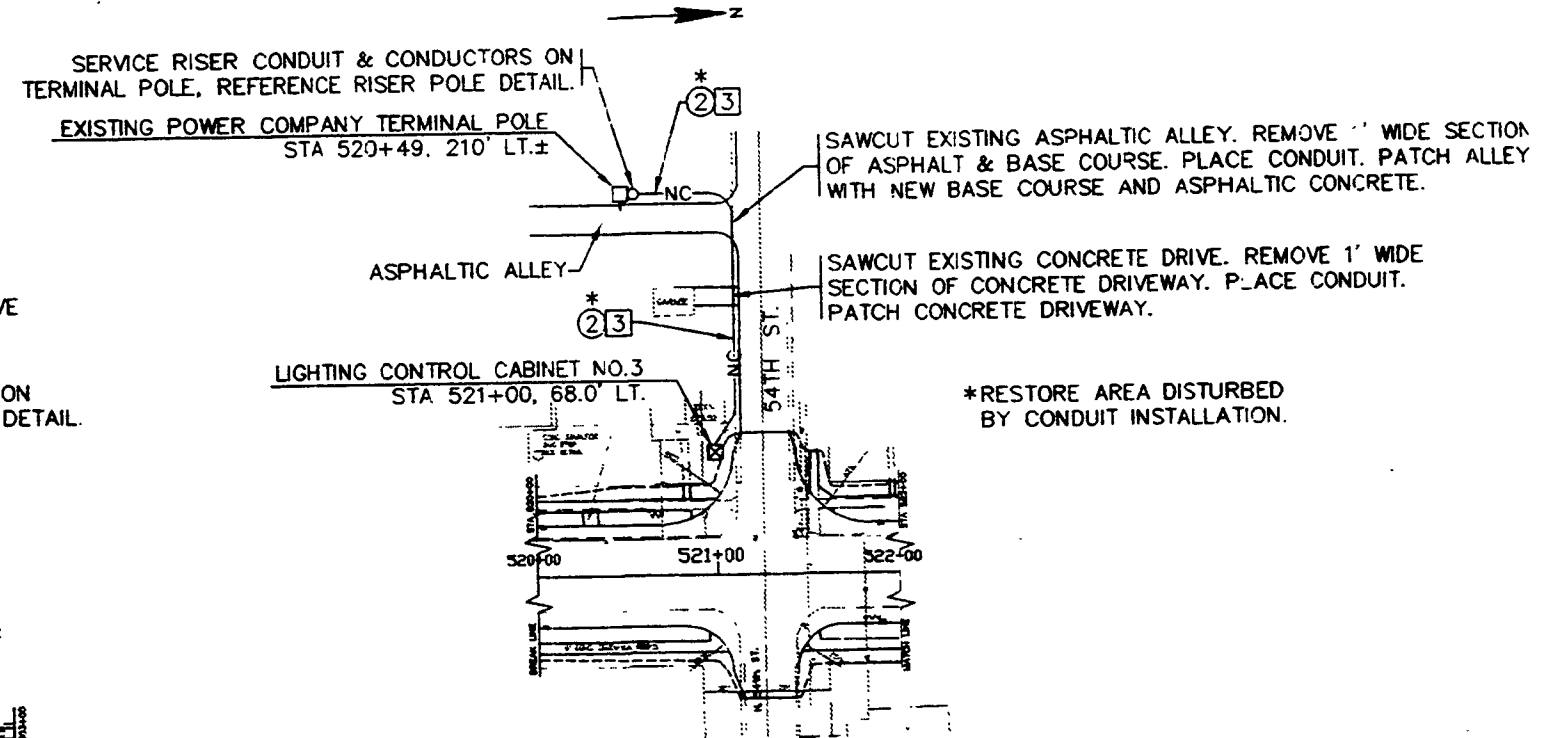
CONTROL WIRING SCHEMATIC
LIGHTING CONTROL CABINET NO. 3

DATE: OCTOBER 24, 1985
REVISED:
HVP JOB #02207
SCALE: 1/8"=1'-0"
HVP DRAWING #025

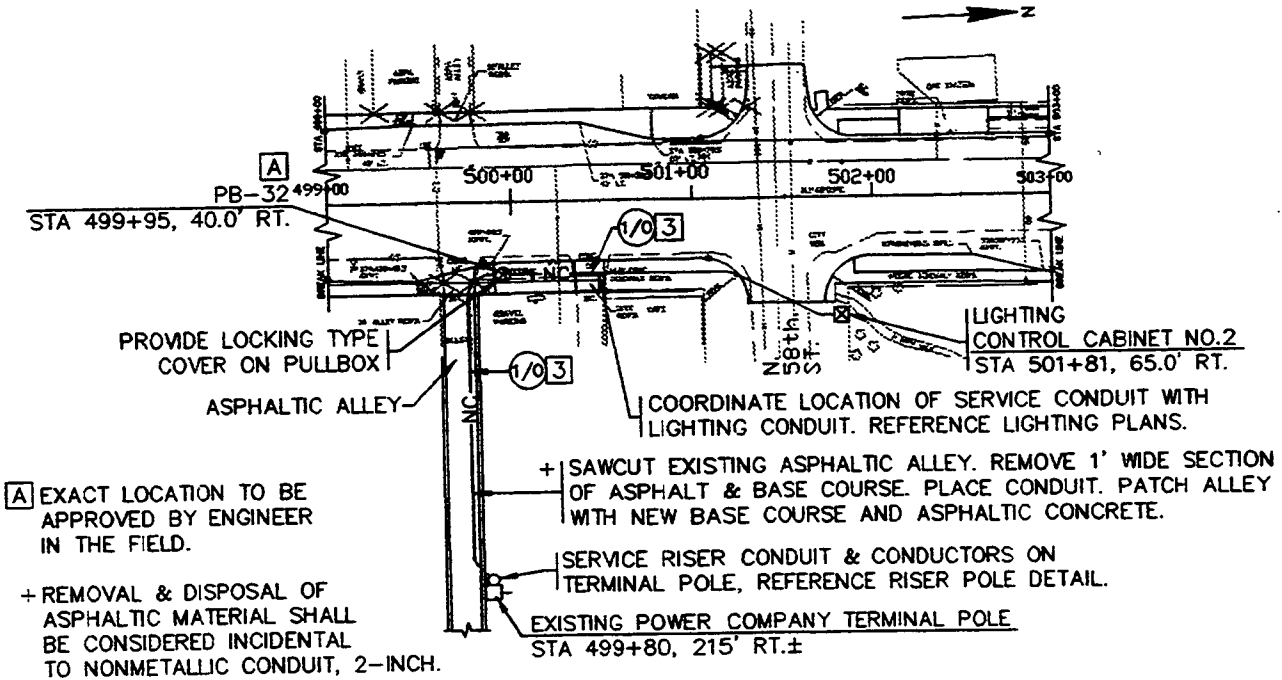
STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.42
LIGHTING SERVICE PLAN TOWER AVENUE, CITY OF SUPERIOR S.T.H. 35 DOUGLAS COUNTY	



ELECTRICAL SERVICE PLAN
LIGHTING CONTROL CABINET NO.1



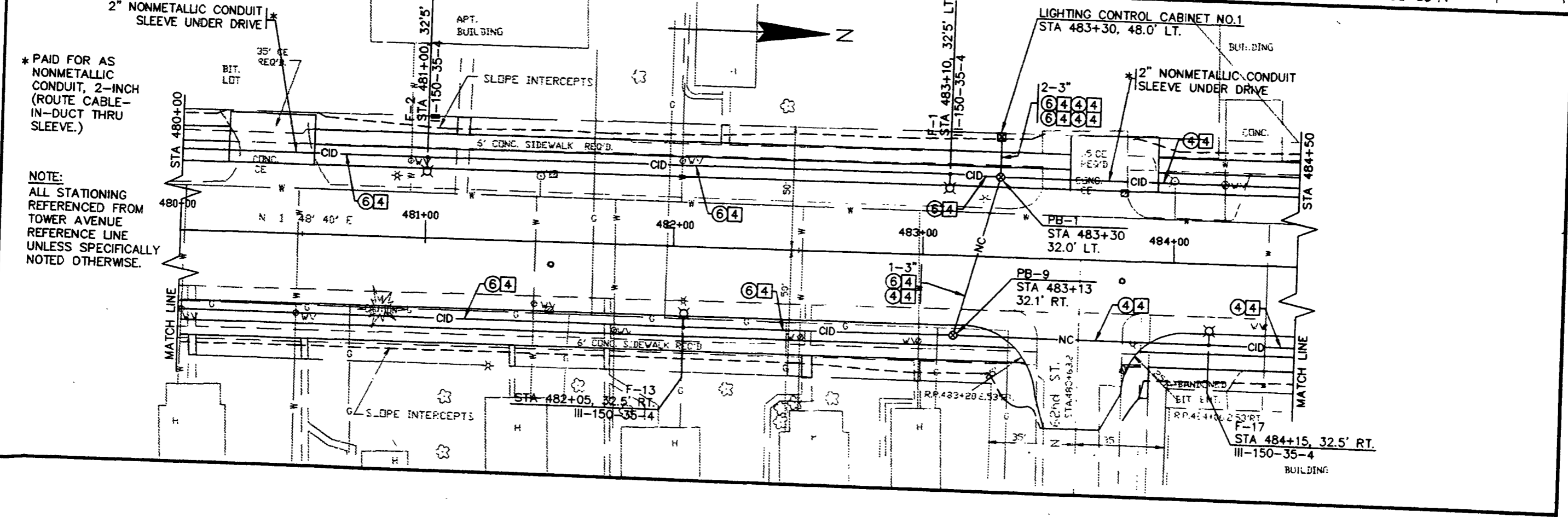
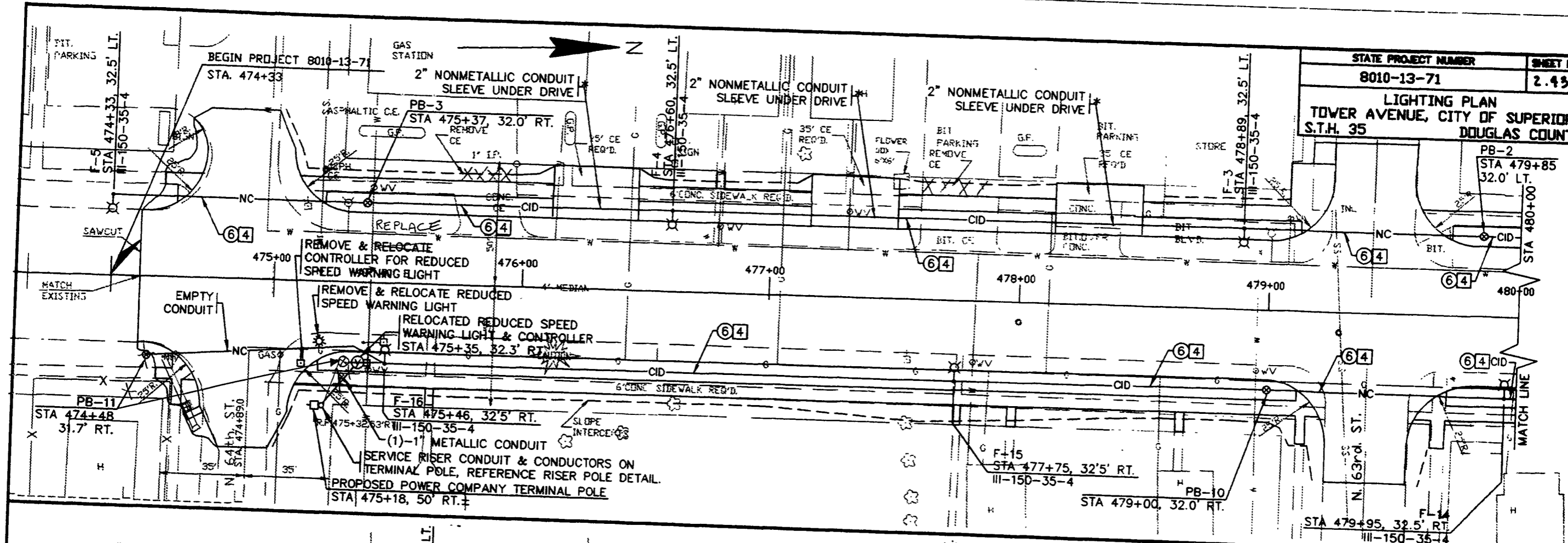
ELECTRICAL SERVICE PLAN
LIGHTING CONTROL CABINET NO.3



ELECTRICAL SERVICE PLAN
LIGHTING CONTROL CABINET NO.2

DATE: OCTOBER 24, 1985
 HVP DRAWING #R16
 SCALE: 1"=50'-0"
 HVP JOB #02207
 SH JOB #
 REVISED:

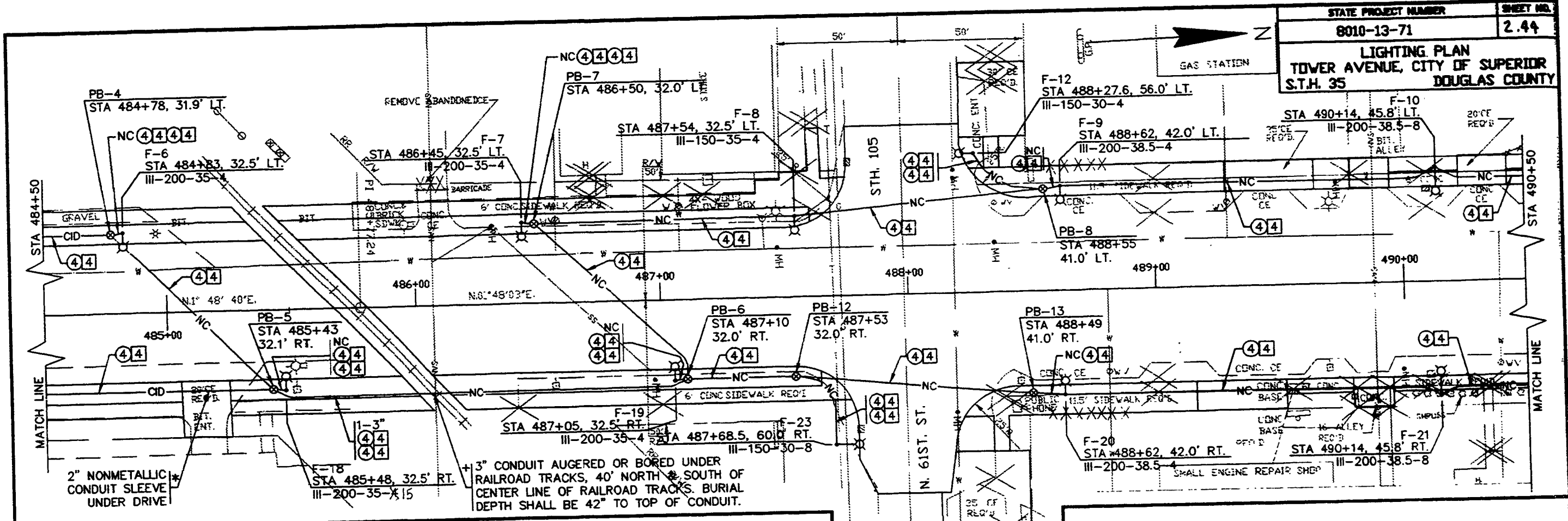
STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.45
LIGHTING PLAN TOWER AVENUE, CITY OF SUPERIOR S.T.H. 35 DOUGLAS COUNTY	



* PAID FOR AS
NONMETALLIC
CONDUIT, 2-INCH
(ROUTE CABLE-
IN-DUCT THRU
SLEEVE.)

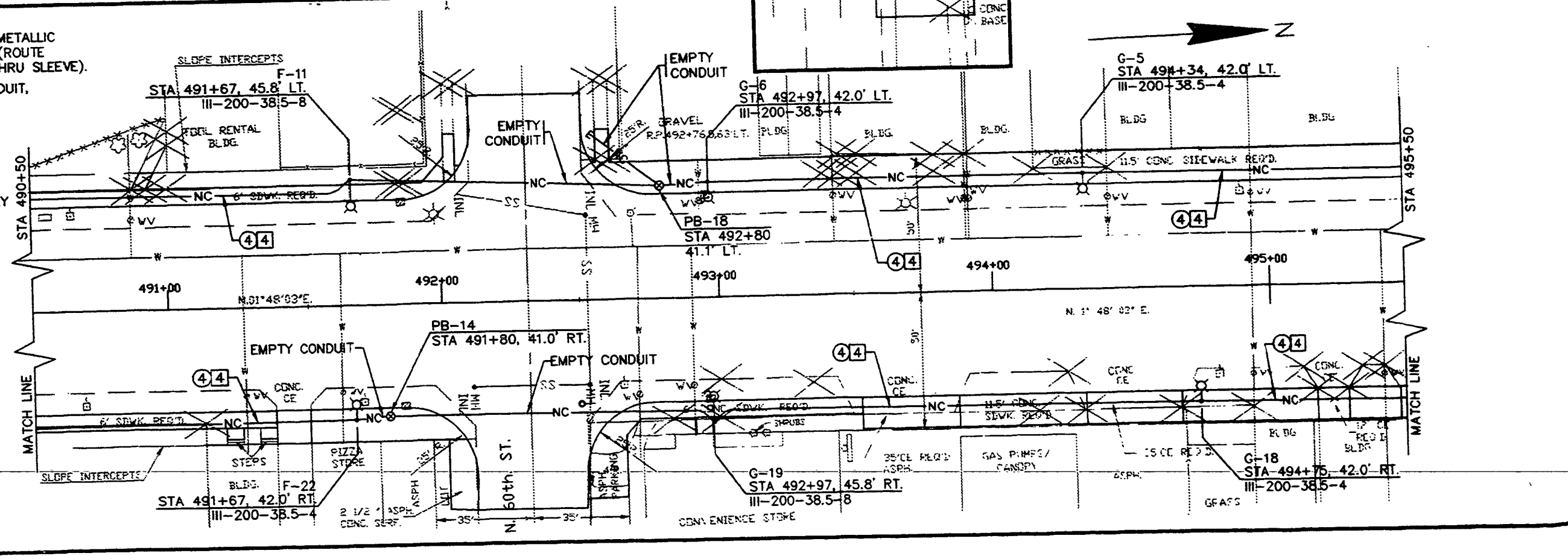
NOTE:
ALL STATIONING
REFERENCED FROM
TOWER AVENUE
REFERENCE LINE
UNLESS SPECIFICALLY
NOTED OTHERWISE.

DATE: OCTOBER 24, 1985
HVP DRAWING #10
SCALE: 1"=20'-0"
HVP JOB #22207
SEN JOB #



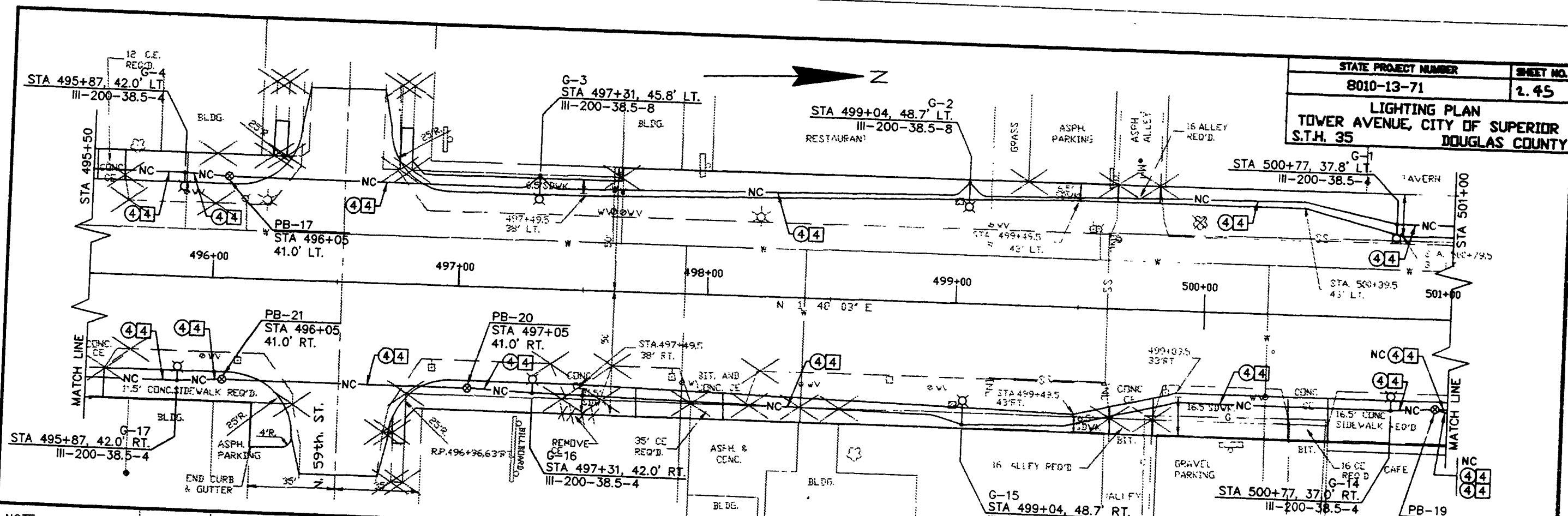
* PAID FOR AS NONMETALLIC CONDUIT, 2-INCH (ROUTE CABLE-IN-DUCT THRU SLEEVE).
 + PAID FOR AS CONDUIT, 3-INCH, SPECIAL.

NOTE:
 ALL STATIONING REFERENCED FROM TOWER AVENUE REFERENCE LINE UNLESS SPECIFICALLY NOTED OTHERWISE.

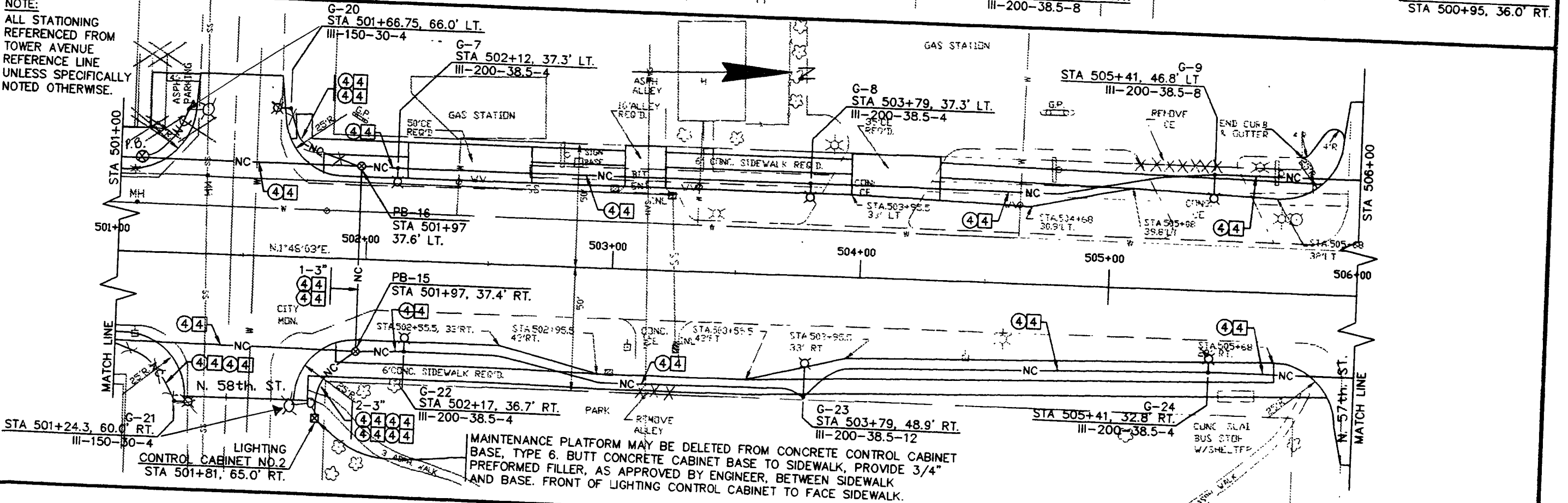


DATE: OCTOBER 24, 1995
 HVP DRAWING #111
 SCALE: 1"=20'-0"
 HVP JOB #22207
 SHEET NO.

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.45
LIGHTING PLAN TOWER AVENUE, CITY OF SUPERIOR DOUGLAS COUNTY	



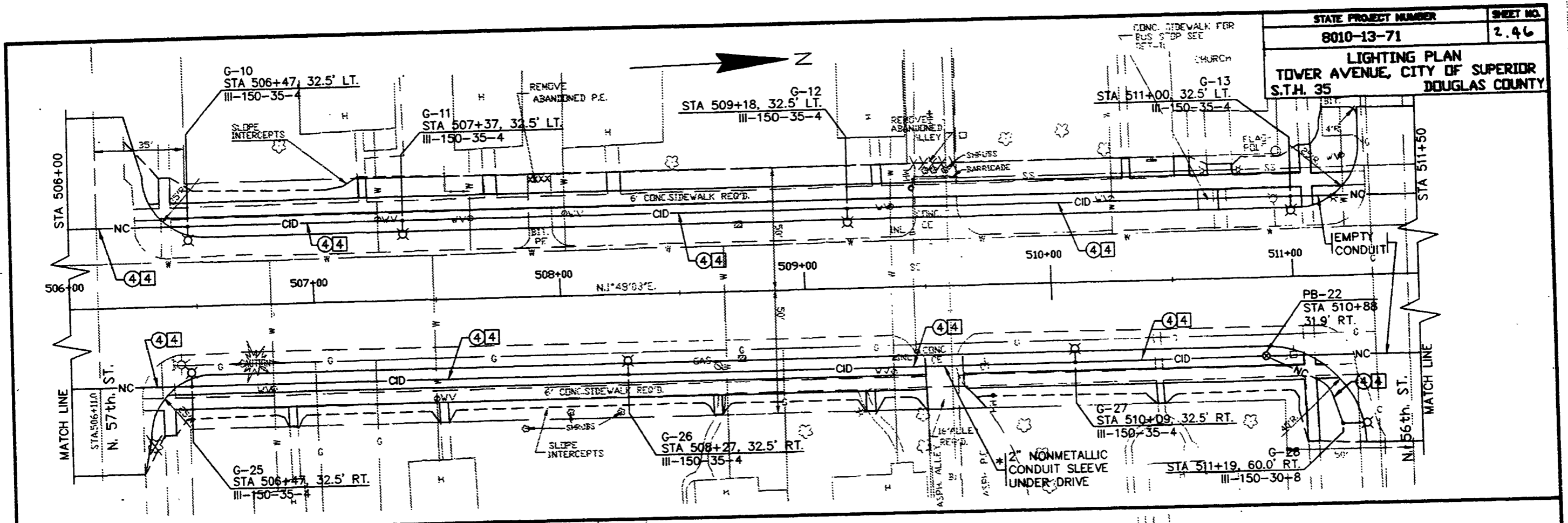
NOTE:
ALL STATIONING
REFERENCED FROM
TOWER AVENUE
REFERENCE LINE
UNLESS SPECIFICALLY
NOTED OTHERWISE.



MAINTENANCE PLATFORM MAY BE DELETED FROM CONCRETE CONTROL CABINET
BASE, TYPE 6. BUTT CONCRETE CABINET BASE TO SIDEWALK, PROVIDE 3/4"
PREFORMED FILLER, AS APPROVED BY ENGINEER, BETWEEN SIDEWALK
AND BASE. FRONT OF LIGHTING CONTROL CABINET TO FACE SIDEWALK.

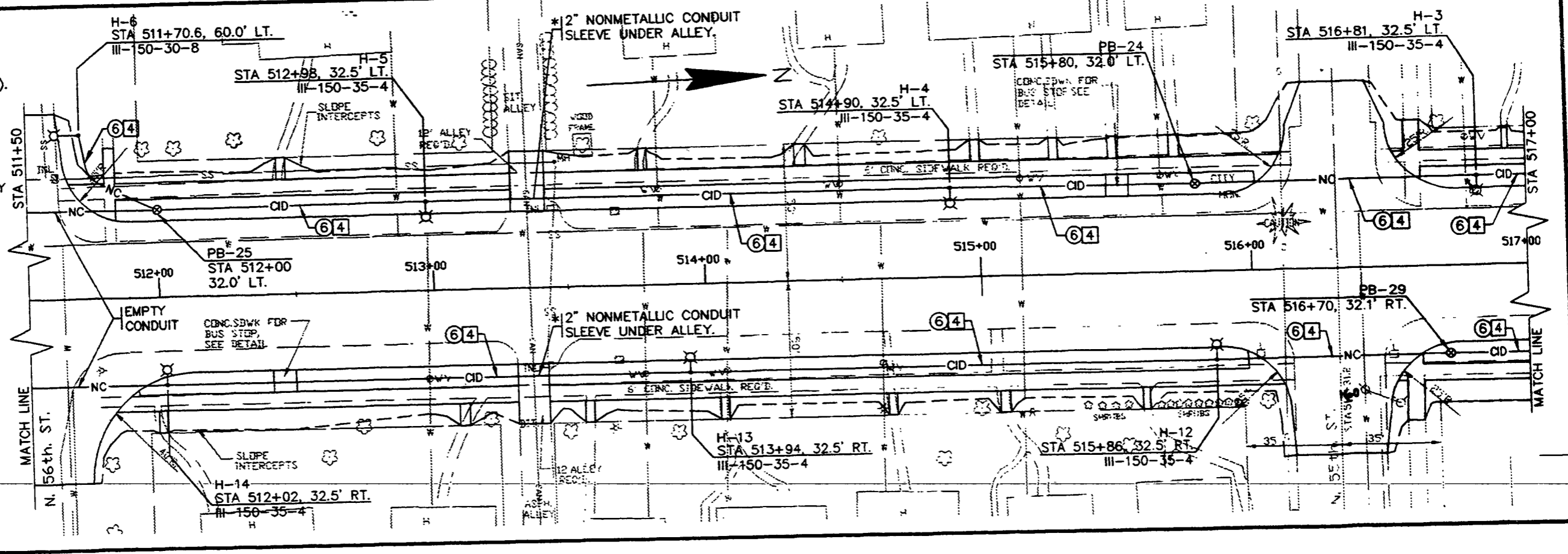
DATE: OCTOBER 24, 1995
REVISED:
HWP DRAWING #12
SCALE: 1"=20'-0"
HWP JOB #02207
SEI JOB #

LIGHTING PLAN
TOWER AVENUE, CITY OF SUPERIOR
S.T.H. 35
DOUGLAS COUNTY



* PAID FOR AS NONMETALLIC CONDUIT, 2-INCH (ROUTE CABLE-IN-DUCT THRU SLEEVE).

NOTE:
 ALL STATIONING REFERENCED FROM TOWER AVENUE REFERENCE LINE UNLESS SPECIFICALLY NOTED OTHERWISE.

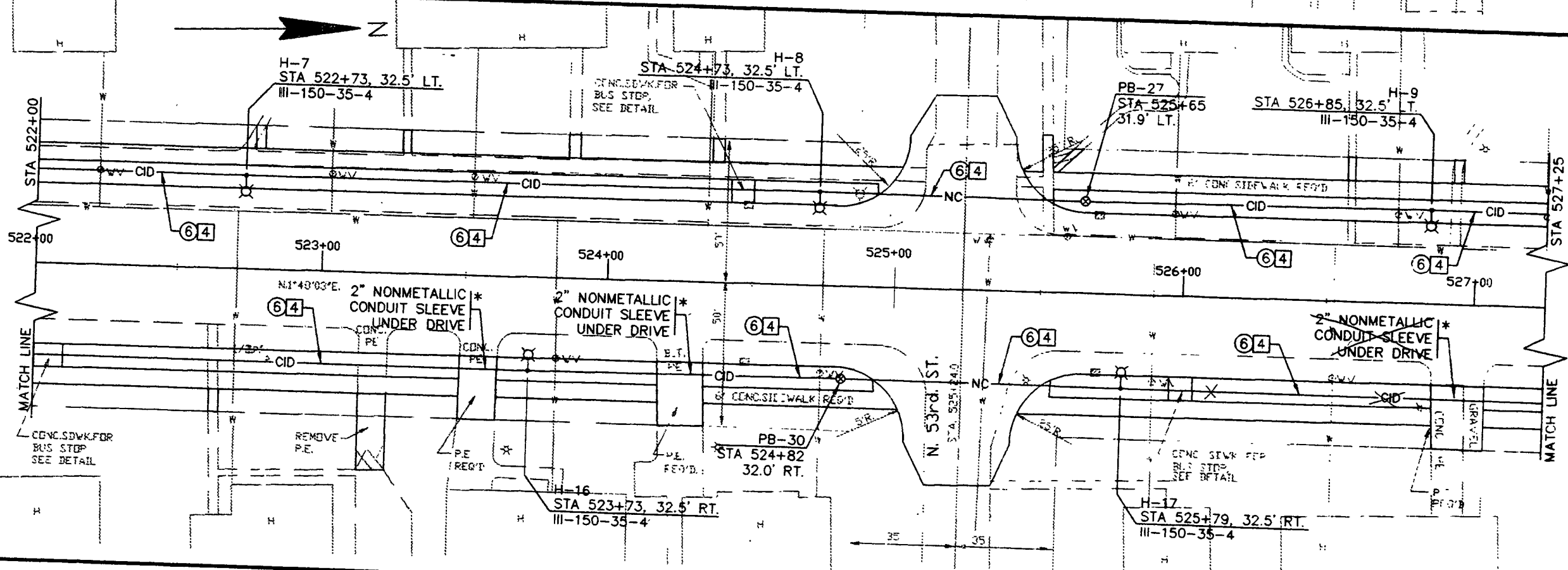
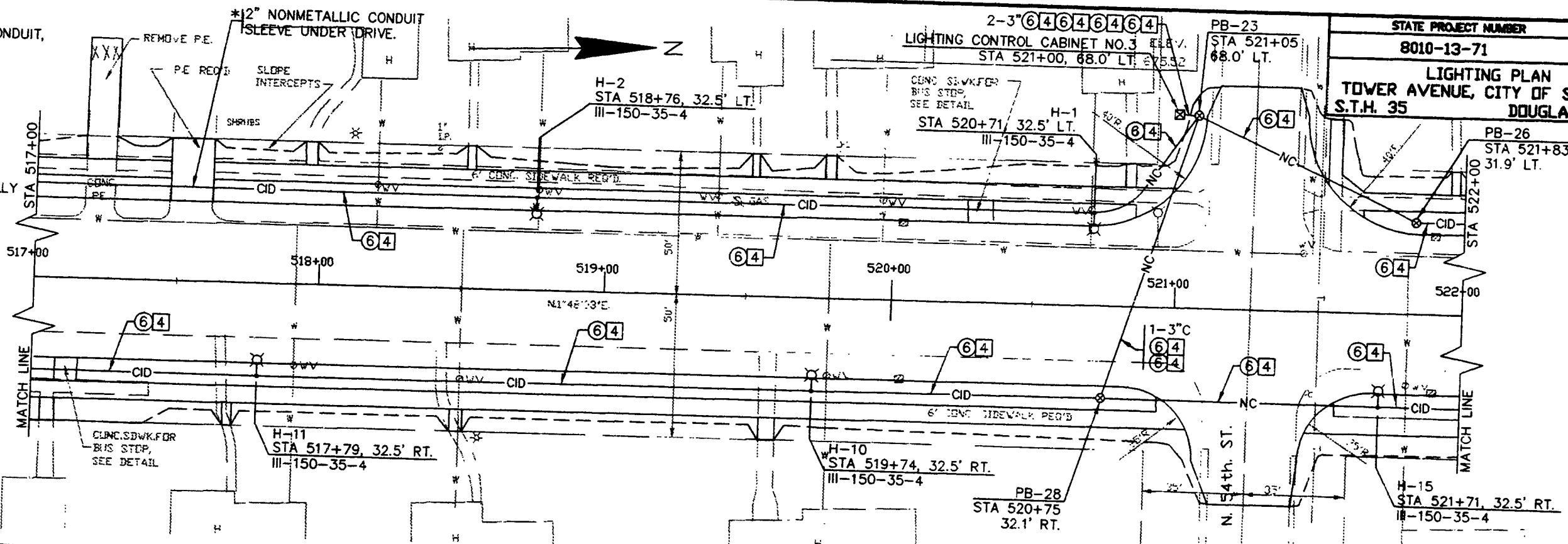


DATE: OCTOBER 24, 1985
 HVP DRAWING #13
 HVP JOB #2207
 SDI JOB #
 SCALE: 1"=20'-0"

* PAID FOR AS
NONMETALLIC CONDUIT,
2-INCH (ROUTE
CABLE-IN-DUCT
THRU SLEEVE)

NOTE:
ALL STATIONING
REFERENCED FROM
TOWER AVENUE
REFERENCE LINE
UNLESS SPECIFICALLY
NOTED OTHERWISE.

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.47
LIGHTING PLAN TOWER AVENUE, CITY OF SUPERIOR S.T.H. 35 DOUGLAS COUNTY	



DATE: OCTOBER 24, 1995
 HVP JOB #2207
 HVP DRAWING #R14
 SCALE: 1"=20'-0"
 REVISED:

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.48
LIGHTING PLAN TOWER AVENUE, CITY OF SUPERIOR S.T.H. 35 DOUGLAS COUNTY	

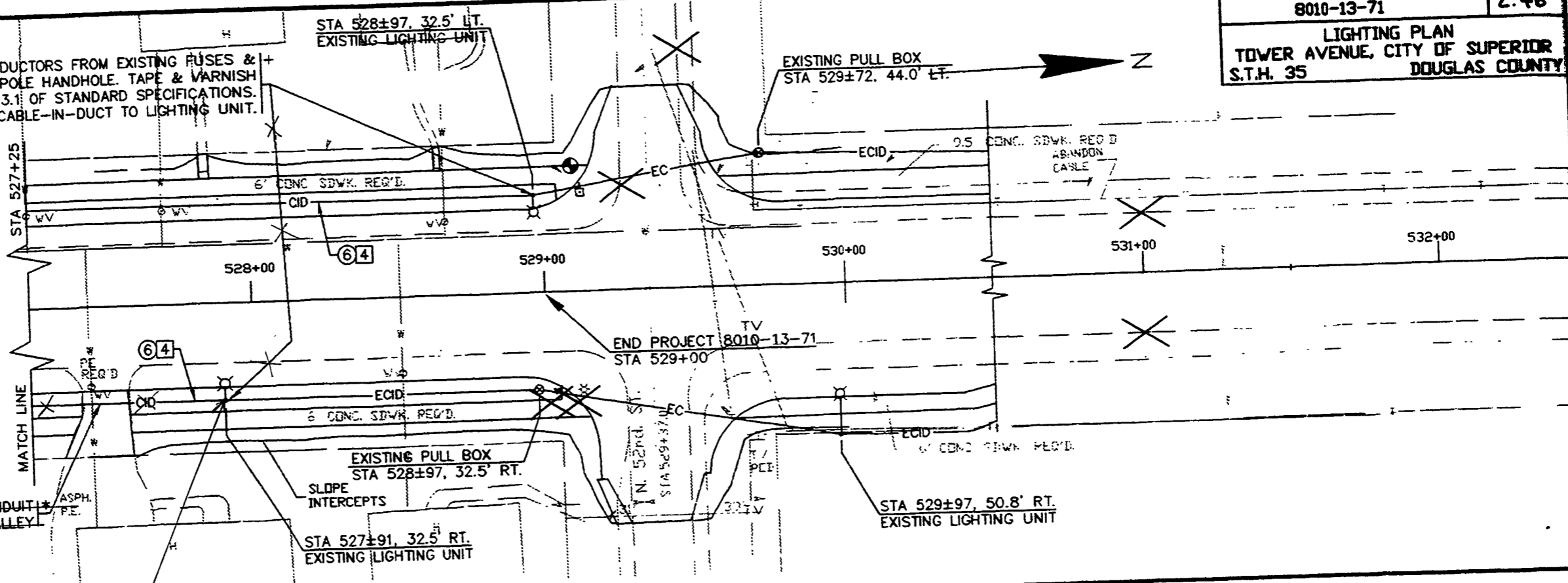
DISCONNECT EXISTING CONDUCTORS FROM EXISTING FUSES & NEUTRAL CONNECTION IN POLE HANDHOLE. TAPE & VARNISH EXISTING CONDUCTORS PER 640.3.1 OF STANDARD SPECIFICATIONS. CONNECT NEW CABLE-IN-DUCT TO LIGHTING UNIT.

* PAID FOR AS NONMETALLIC CONDUIT, 2-INCH (ROUTE CABLE-IN-DUCT THRU SLEEVE).

+ WORK SHALL BE INCIDENTAL TO CABLE-IN-DUCT, 4 CONDUCTOR, NO. 6.

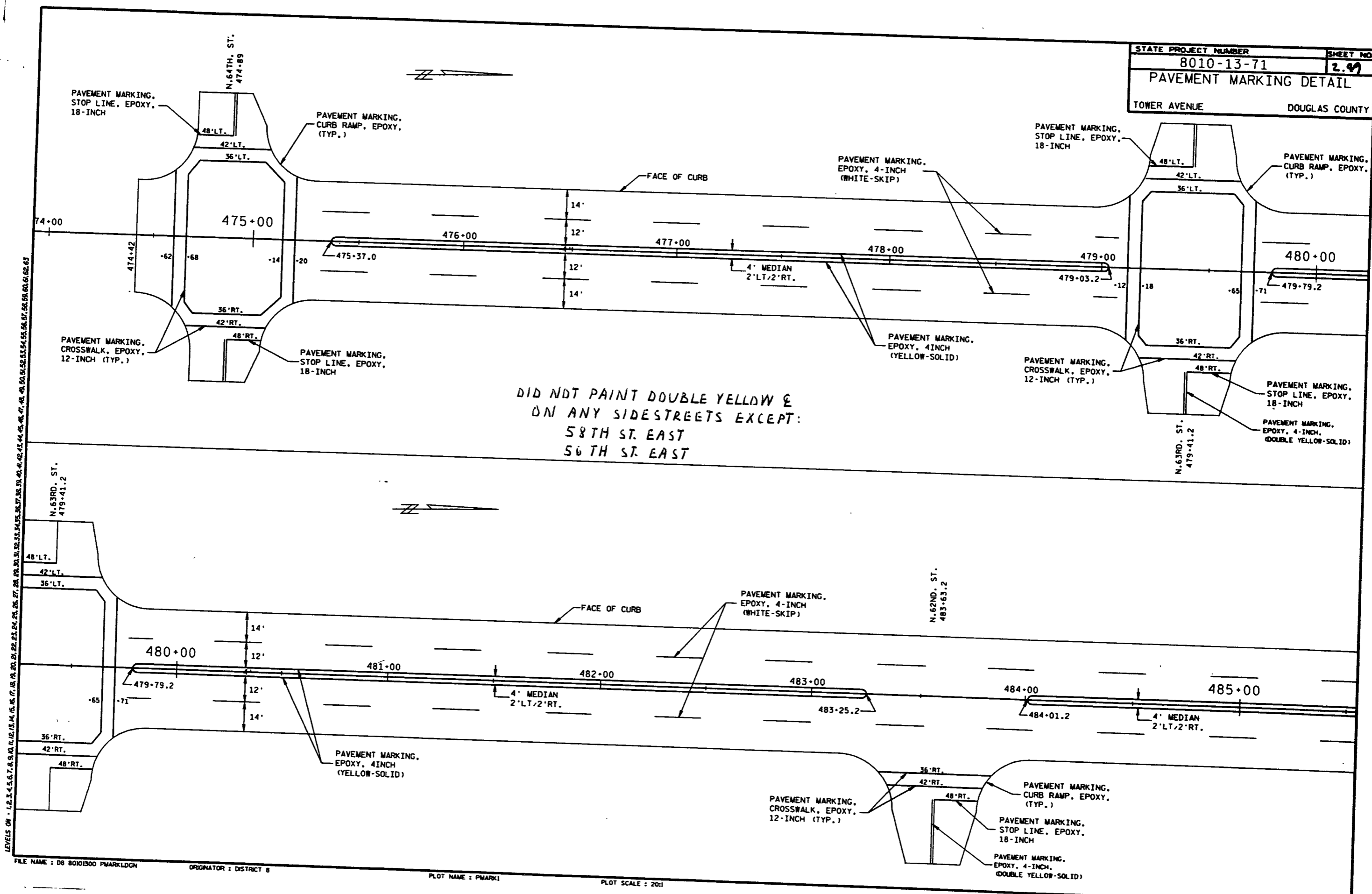
NOTE:
ALL STATIONING REFERENCED FROM TOWER AVENUE REFERENCE LINE UNLESS SPECIFICALLY NOTED OTHERWISE.

2" NONMETALLIC CONDUIT SLEEVE UNDER ALLEY



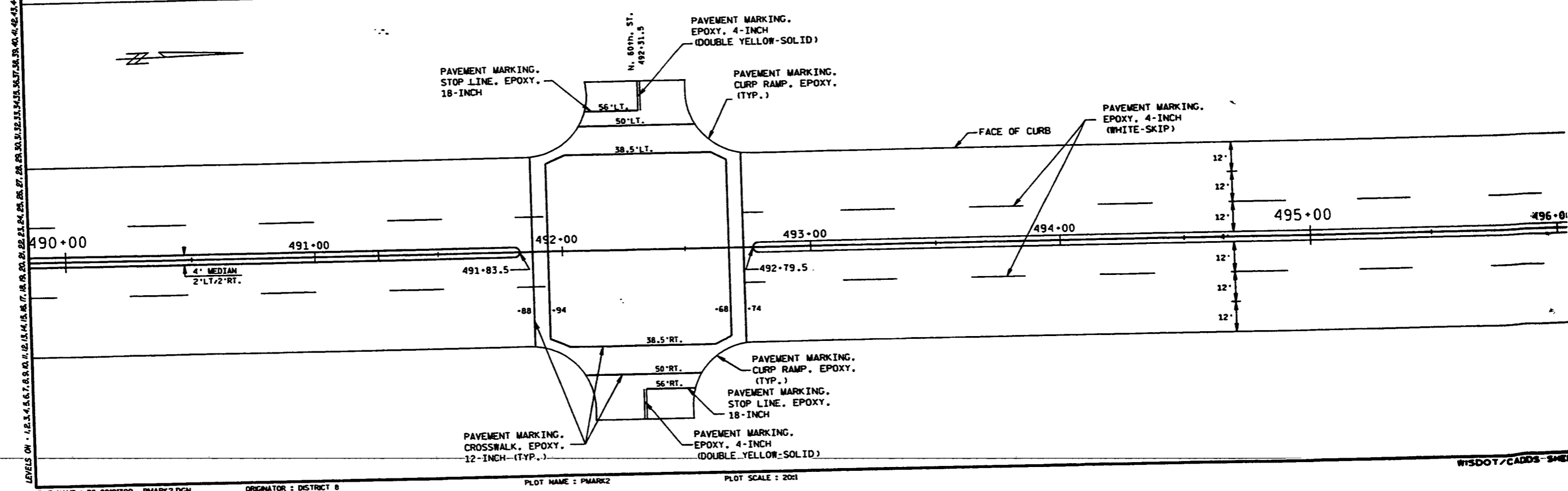
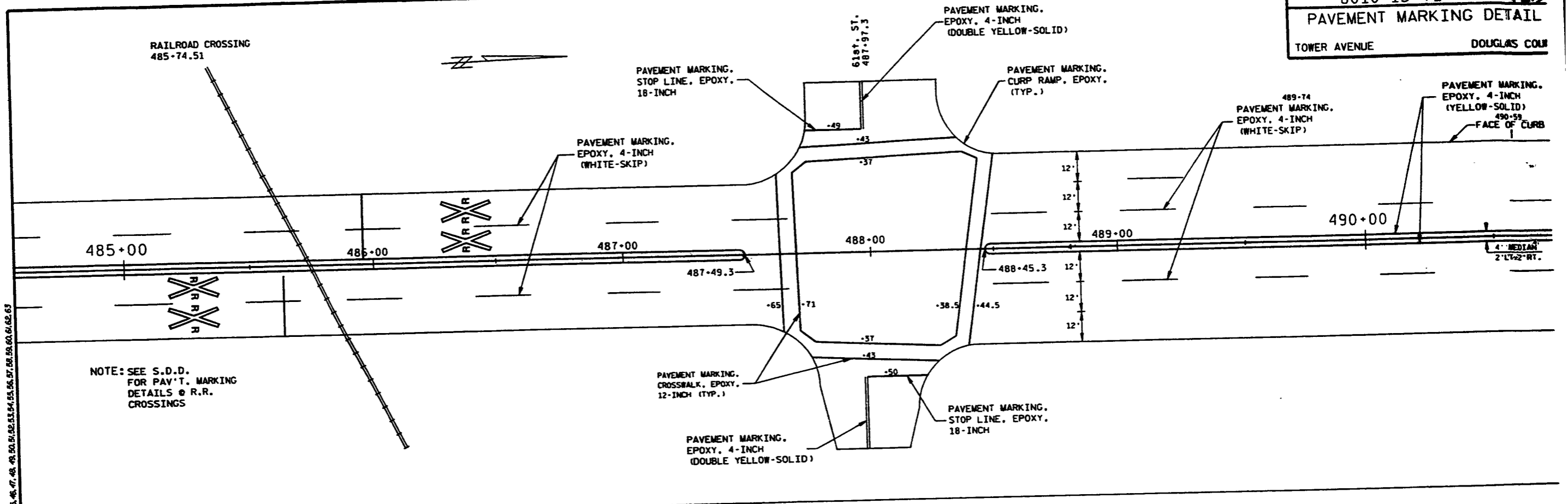
EXISTING LIGHT WAS LEFT CONNECTED TO EXISTING CABINET AT ≈ 50th.

DATE: OCTOBER 24, 1985
 HVP JOB #92207
 HVP DRAWING #15
 SCALE: 1"=20'-0"
 REVISED:



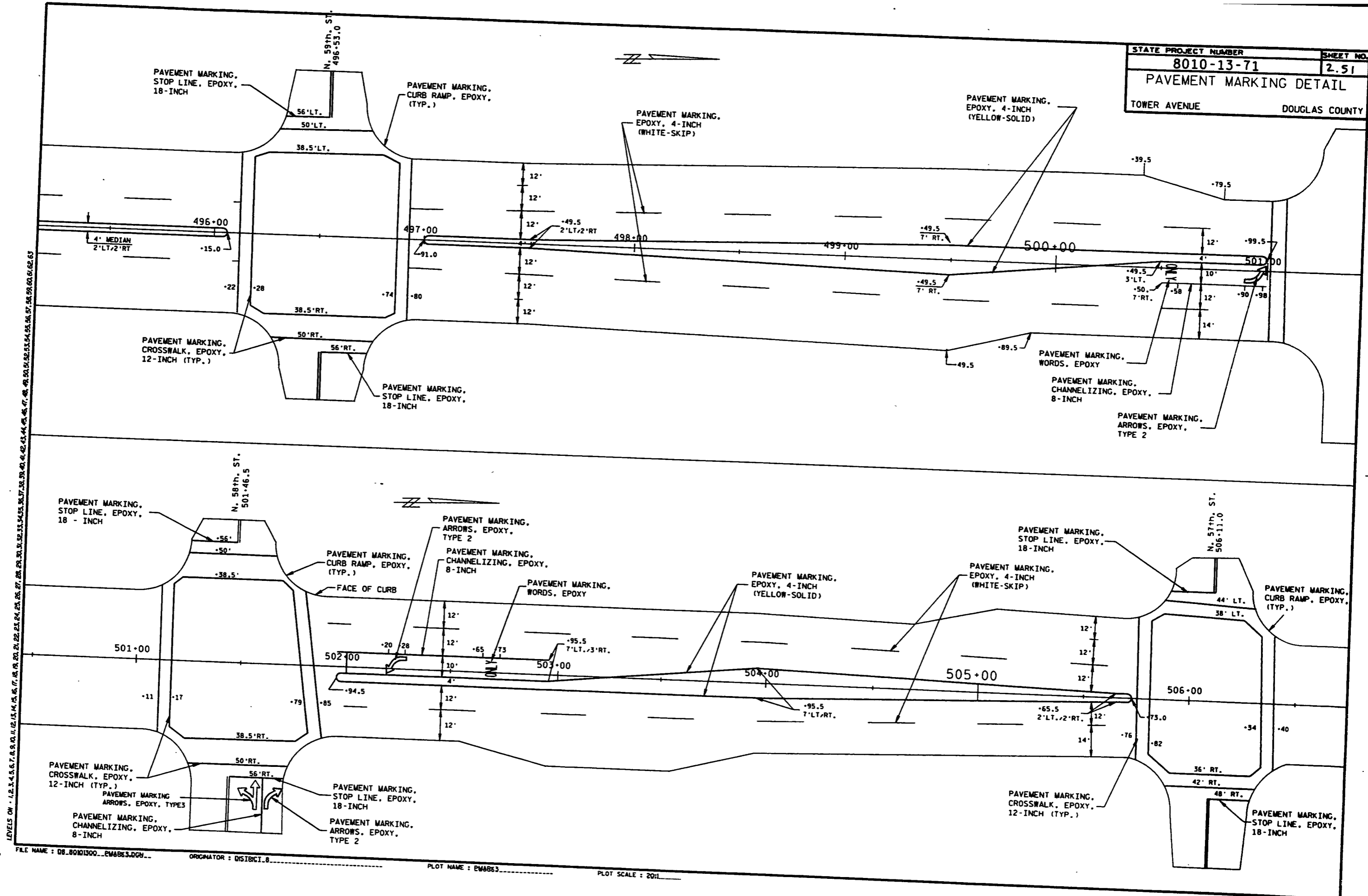
DID NOT PAINT DOUBLE YELLOW &
ON ANY SIDESTREETS EXCEPT:
58TH ST. EAST
56TH ST. EAST

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



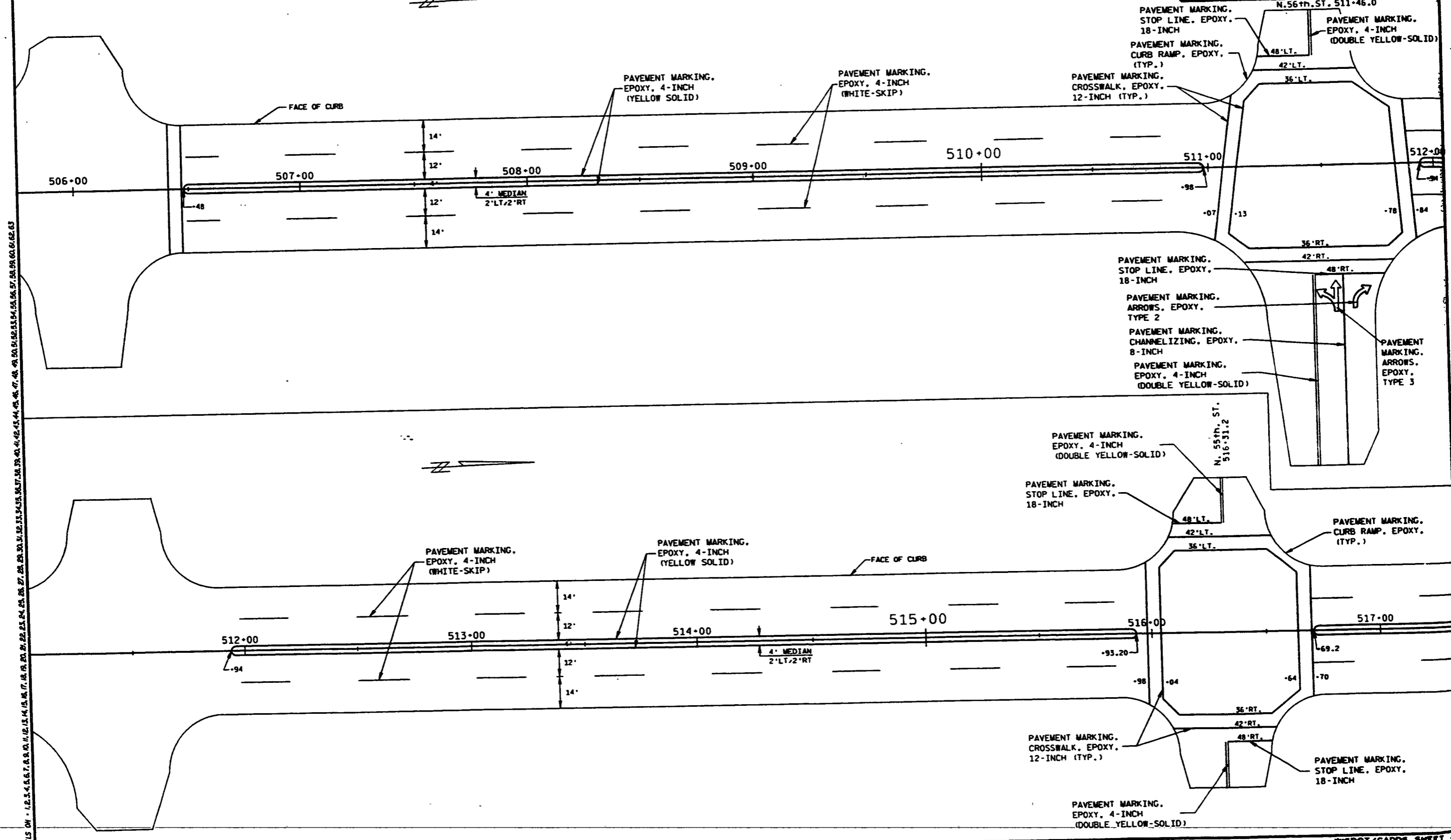
LEVELS ON - 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.51
PAVEMENT MARKING DETAIL	
TOWER AVENUE	DOUGLAS COUNTY



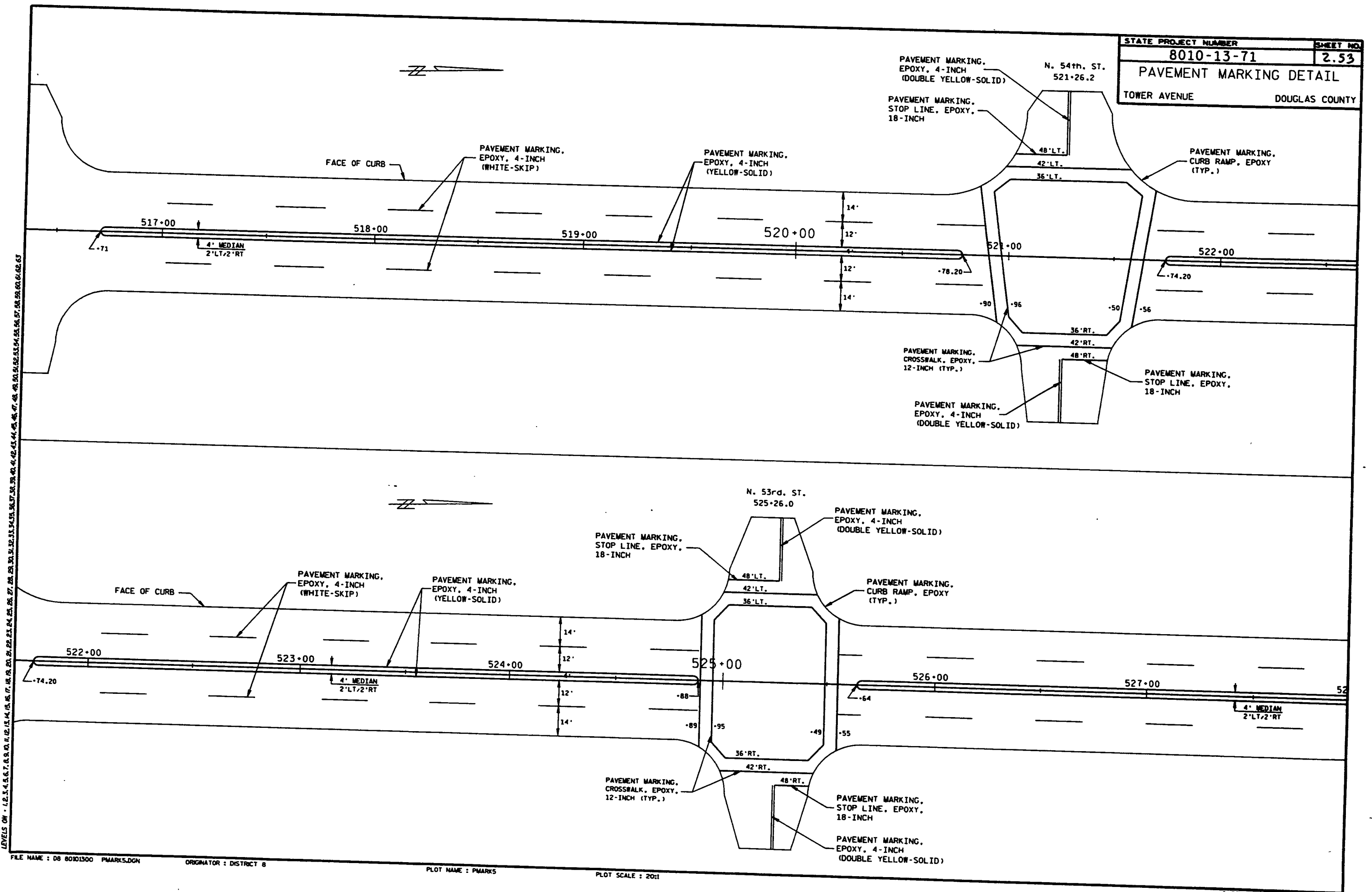
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

FILE NAME : 08_80101300_P04863.DWG... ORIGINATOR : DISIBCT.8 PLOT NAME : P04863 PLOT SCALE : 20:1



LEVELS ON - 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3

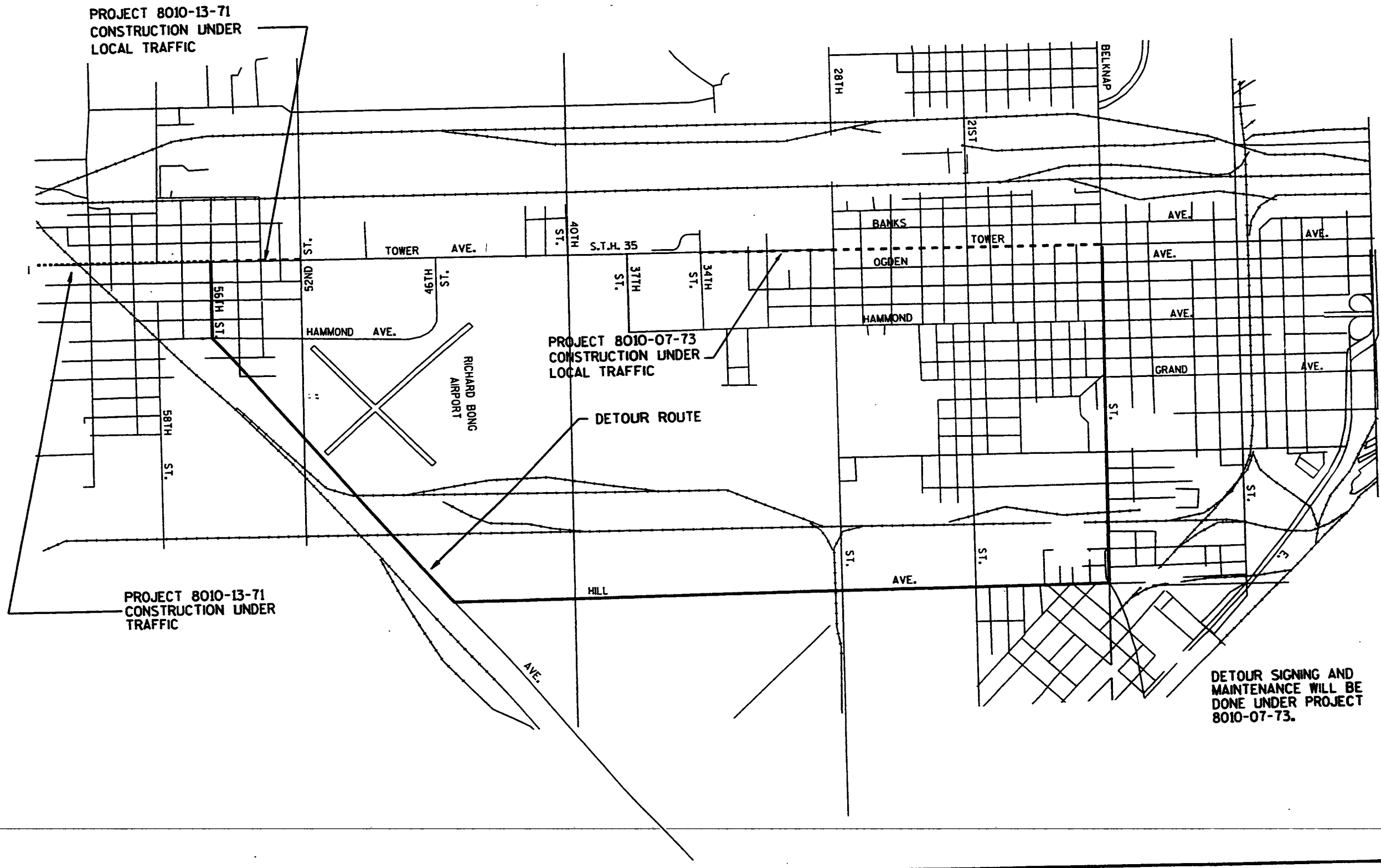
STATE PROJECT NUMBER	SHEET NO.
8010-13-71	2.53
PAVEMENT MARKING DETAIL	
TOWER AVENUE	DOUGLAS COUNTY



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



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



DETOUR SIGNING AND MAINTENANCE WILL BE DONE UNDER PROJECT 8010-07-73.

BILL OF MATERIALS																												
ESTIMATE OF QUANTITIES FOR TRAFFIC CONTROL (QUANTITIES ARE BY EACH UNLESS NOTED OTHERWISE)																												
MESSAGE	SIGN CODE	SIGN SIZE	NO. REQ'D.			MESSAGE	SIGN CODE	SIGN SIZE	NO. REQ'D.			MESSAGE	SIGN CODE	SIGN SIZE	NO. REQ'D.													
			PHASE I	PHASE II	PHASE III				PHASE I	PHASE II	PHASE III				PHASE I	PHASE II	PHASE III											
	W20-3	48" X 48"	3	9	8	ROAD CLOSED	R11-2	48" X 30"	8	15	18		TYPE III BARRICADE				35	75	75		R5-1	30" X 30"				1		
	W012-52	48" X 48"	0	4	0	END ROAD WORK	G20-2A	48" X 24"	2	2	2	2 MILES AHEAD	W057-52	36" X 24"	0	1	1					R3-2	24" X 24"				1	
	W20-5	48" X 48"	1	1	1		W01-6	48" X 24"	2	1	1	500 FT	W20-50	30" X 8"	0	2	2				ROAD CLOSED TO THRU TRAFFIC	R11-4	60" X 30"				1	
	W20-5	48" X 48"	2	1	1		W01-6	48" X 24"	0	2	2	300 FT	W20-50	30" X 8"	0	1	1					W4-9R	30" X 24"				1	
	W20-5	48" X 48"	0	1	1		W01-7	48" X 24"	3	5	8		RT-1	18" X 24"	6	0	0					TYPE "A" WARNING LIGHT				18	28	32
	W20-5	48" X 48"	0	1	1		W04-2L	48" X 48"	0	1	1			TRAFFIC CONTROL DRUM WITH TYPE "C" LIGHT				16	32	22								
	W20-1	48" X 48"	7	17	17		W04-2R	48" X 48"	2	1	1			TRAFFIC CONTROL DRUM				185	265	265								
	R1-1	30" X 30"	0	4	3		W012-52	48" X 48"	0	0	4			* ORANGE FLAGS				0	8	6								

GENERAL NOTES:

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS HIGH INTENSITY ORANGE.

ALL CONSTRUCTION SIGNS HAVE HIGH INTENSITY BACKGROUND, BLACK LEGEND AND BORDER, AND STANDARD ROUTE MARKERS.

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

ADVANCED WARNINGS SIGNS LOCATED ON SIDE STREETS ARE TO BE PLACED APPROXIMATELY 300 FEET IN ADVANCE OF INTERSECTION.

TYPE "C" WARNING LIGHTS ARE TO BE USED ON BARRELS AS INDICATED IN PLAN.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

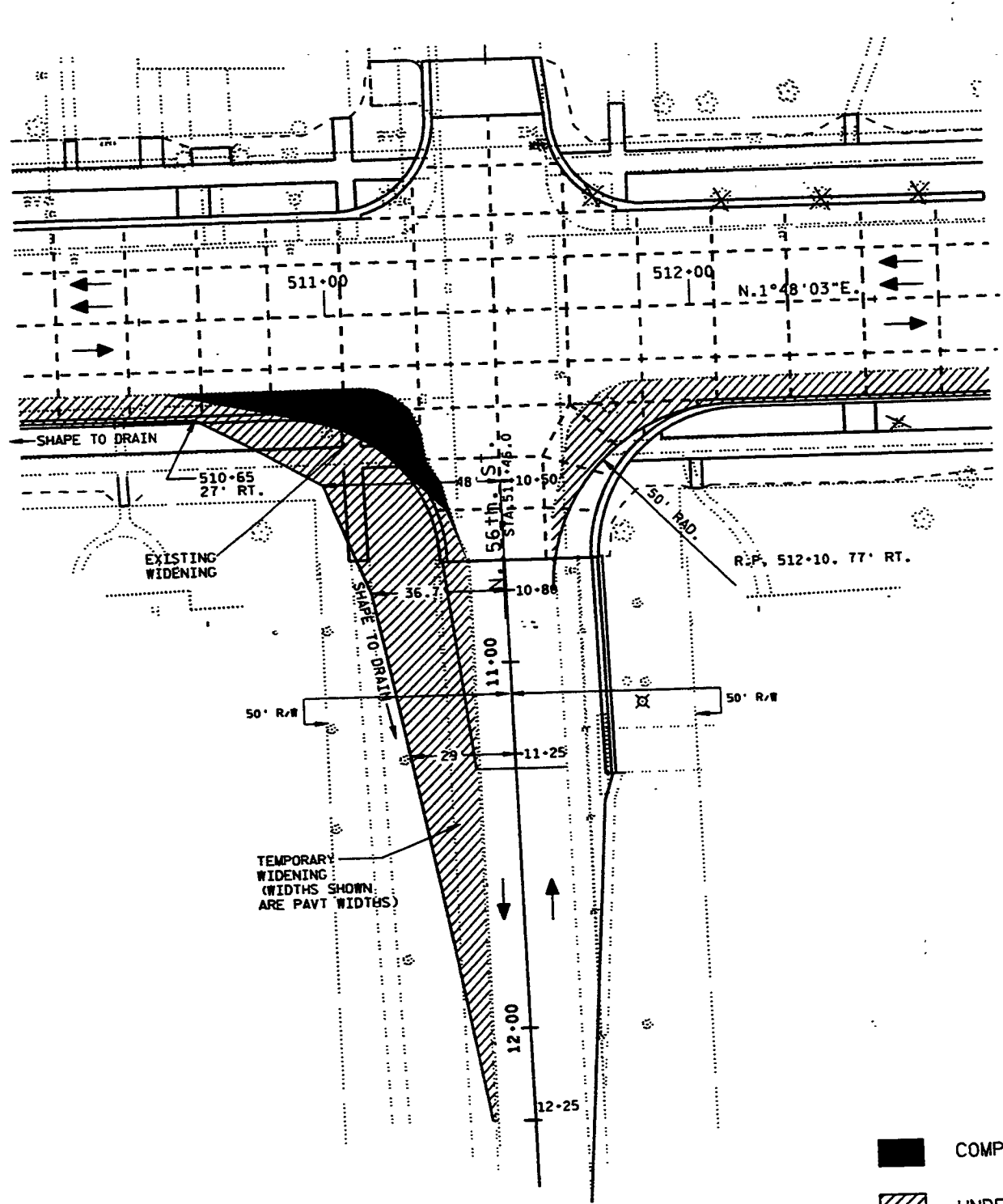
PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.

ALL SIGNS INAPPROPRIATE TO THE STATION OF CONTROL ZONE, INCLUDING PREEXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

BARREL ARE TO BE SPACED AT 25' INTERVALS IN EITHER LANE DROP OR SHIFT TAPERS AND 50' INTERVALS ALONG TANGENT SEGMENTS.

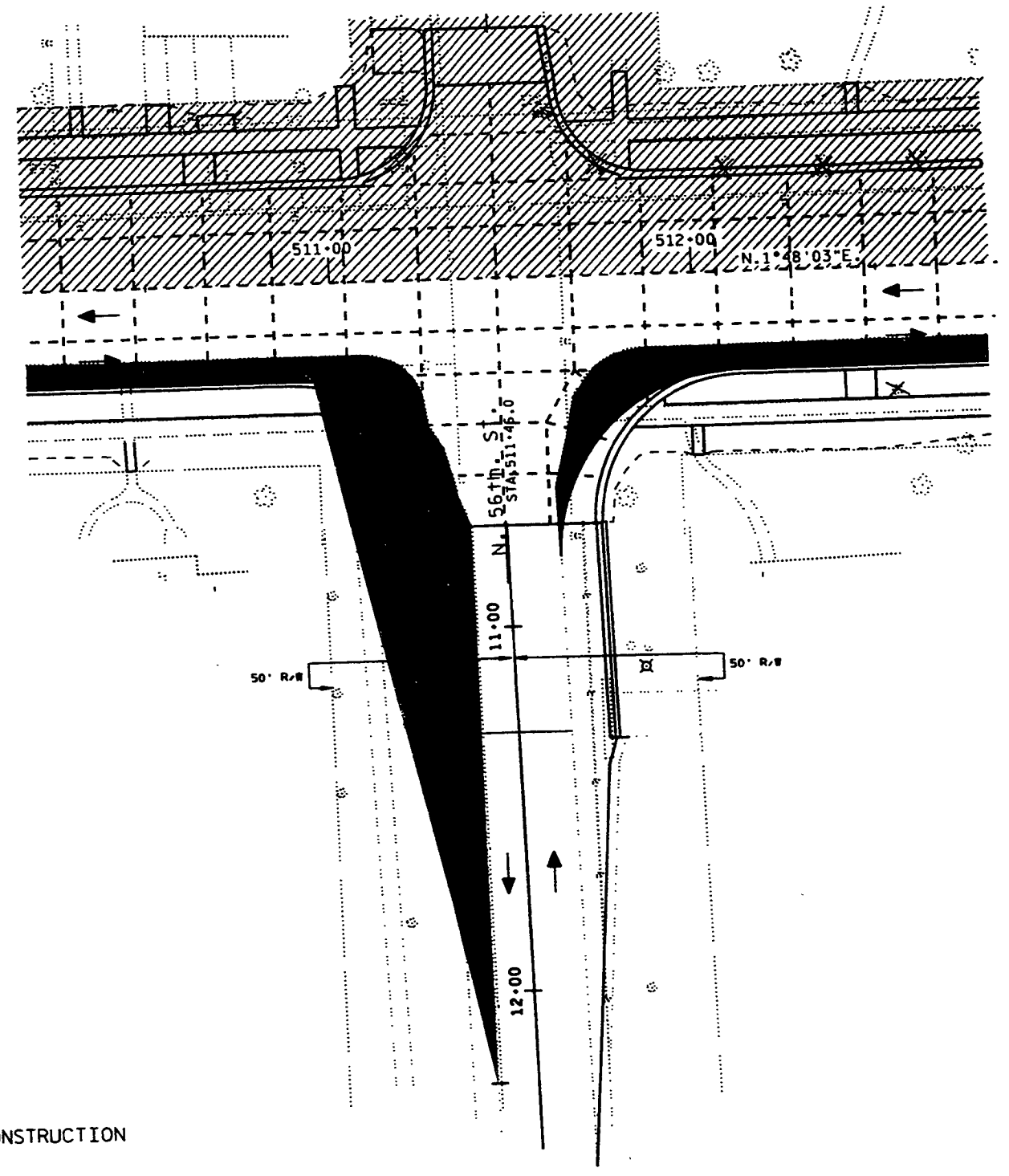
* INCIDENTAL TO SIGNS

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



PHASE I

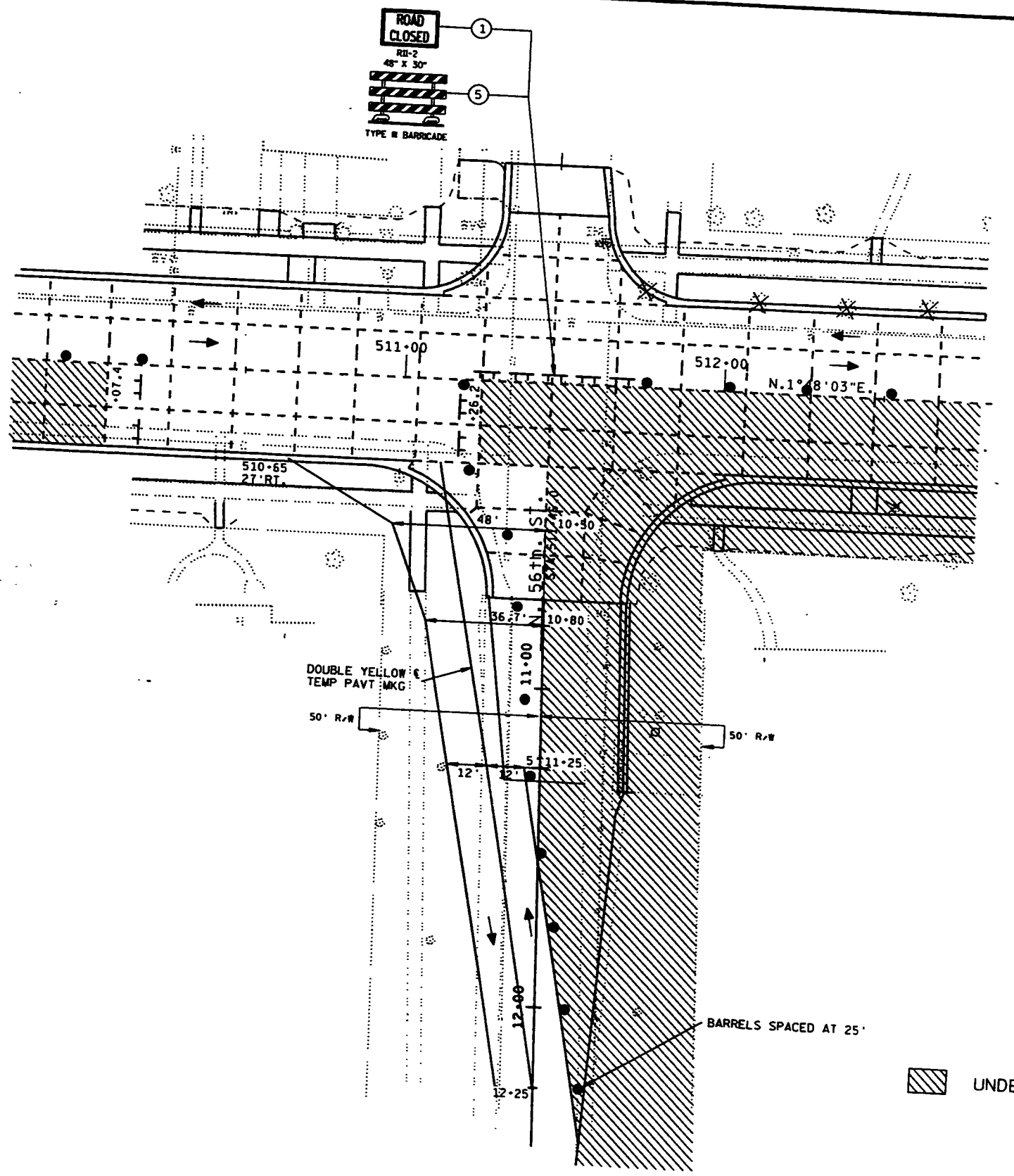
- COMPLETED CONSTRUCTION
- UNDER CONSTRUCTION




PHASE II

LEVELS ON - 510.00, 510.05, 510.10, 510.15, 510.20, 510.25, 510.30, 510.35, 510.40, 510.45, 510.50, 510.55, 510.60, 510.65, 510.70, 510.75, 510.80, 510.85, 510.90, 510.95, 511.00, 511.05, 511.10, 511.15, 511.20, 511.25, 511.30, 511.35, 511.40, 511.45, 511.50, 511.55, 511.60, 511.65, 511.70, 511.75, 511.80, 511.85, 511.90, 511.95, 512.00

STATE PROJECT NUMBER 8010-13-71	SHEET NO. 2.57
TOWER AVE. CITY OF SUPERIOR N. 56th ST. CONSTRUCTION PHASING STH 35	
DOUGLAS COUNTY	

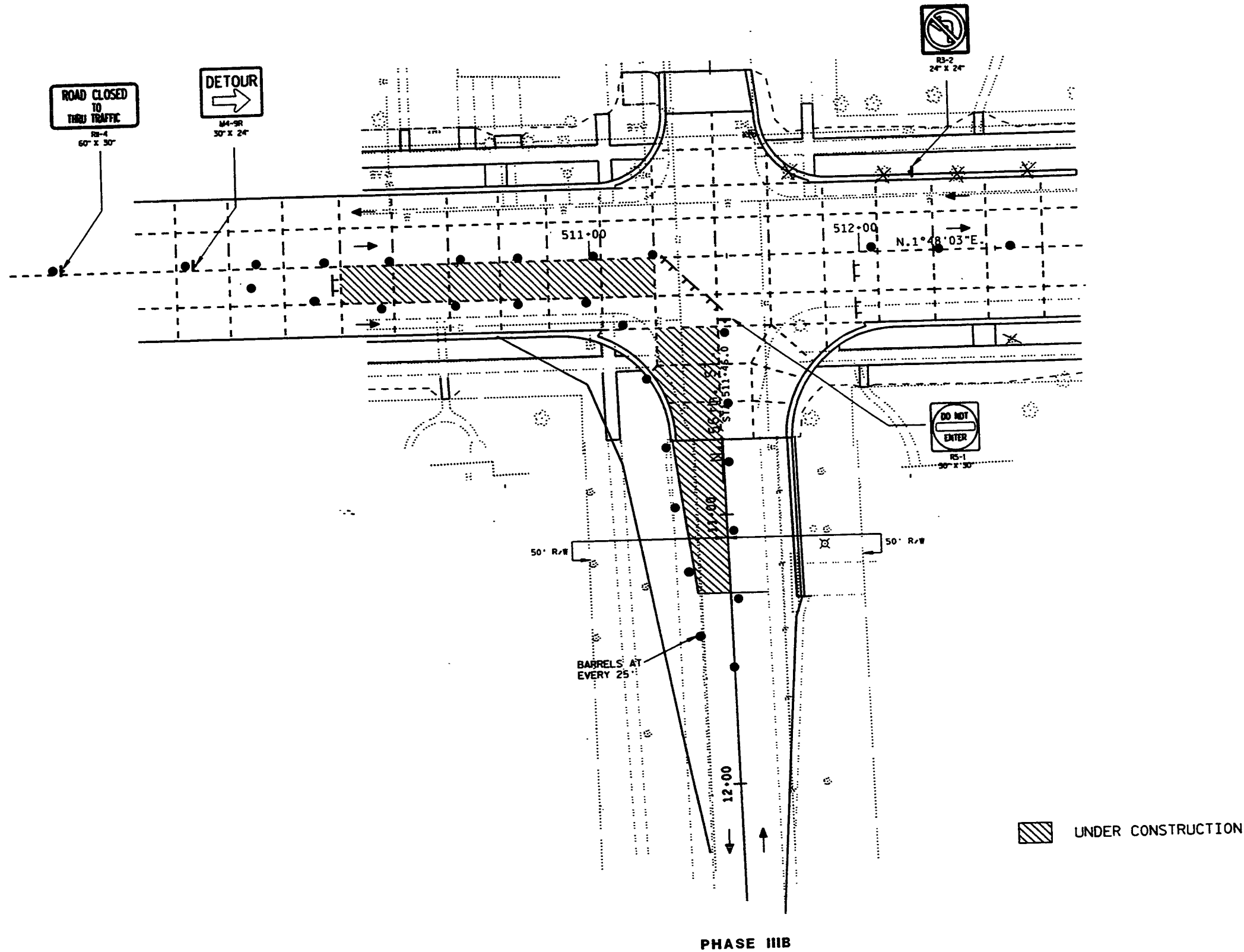


PHASE IIIA

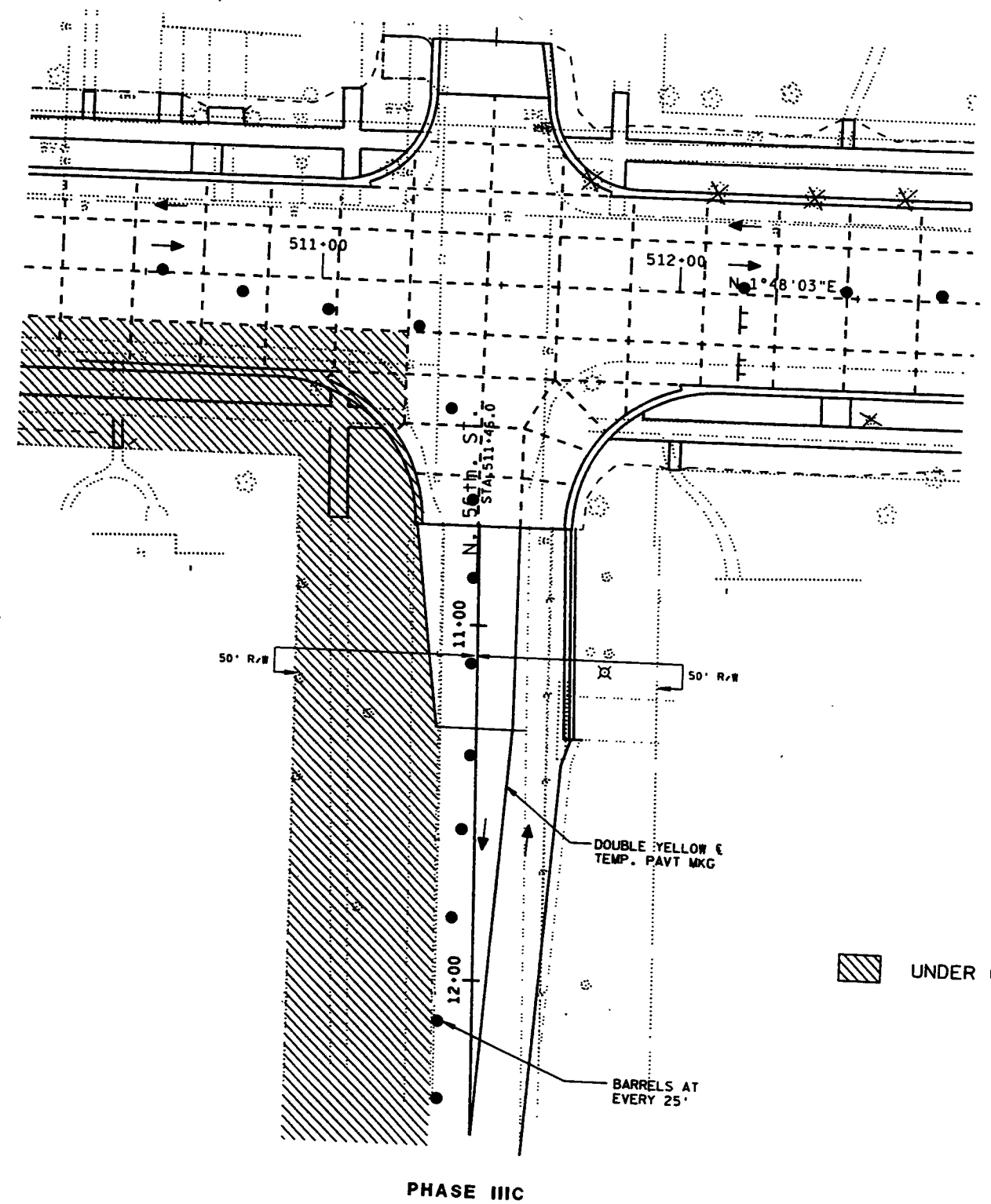
 UNDER CONSTRUCTION


LEVELS ON - 2.00, 2.04, 2.08, 2.12, 2.16, 2.20, 2.24, 2.28, 2.32, 2.36, 2.40, 2.44, 2.48, 2.52, 2.56, 2.60, 2.64, 2.68, 2.72, 2.76, 2.80, 2.84, 2.88, 2.92, 2.96, 3.00, 3.04, 3.08, 3.12, 3.16, 3.20, 3.24, 3.28, 3.32, 3.36, 3.40, 3.44, 3.48, 3.52, 3.56, 3.60, 3.64, 3.68, 3.72, 3.76, 3.80, 3.84, 3.88, 3.92, 3.96, 4.00, 4.04, 4.08, 4.12, 4.16, 4.20, 4.24, 4.28, 4.32, 4.36, 4.40, 4.44, 4.48, 4.52, 4.56, 4.60, 4.64, 4.68, 4.72, 4.76, 4.80, 4.84, 4.88, 4.92, 4.96, 5.00, 5.04, 5.08, 5.12, 5.16, 5.20, 5.24, 5.28, 5.32, 5.36, 5.40, 5.44, 5.48, 5.52, 5.56, 5.60, 5.64, 5.68, 5.72, 5.76, 5.80, 5.84, 5.88, 5.92, 5.96, 6.00, 6.04, 6.08, 6.12, 6.16, 6.20, 6.24, 6.28, 6.32, 6.36, 6.40, 6.44, 6.48, 6.52, 6.56, 6.60, 6.64, 6.68, 6.72, 6.76, 6.80, 6.84, 6.88, 6.92, 6.96, 7.00, 7.04, 7.08, 7.12, 7.16, 7.20, 7.24, 7.28, 7.32, 7.36, 7.40, 7.44, 7.48, 7.52, 7.56, 7.60, 7.64, 7.68, 7.72, 7.76, 7.80, 7.84, 7.88, 7.92, 7.96, 8.00, 8.04, 8.08, 8.12, 8.16, 8.20, 8.24, 8.28, 8.32, 8.36, 8.40, 8.44, 8.48, 8.52, 8.56, 8.60, 8.64, 8.68, 8.72, 8.76, 8.80, 8.84, 8.88, 8.92, 8.96, 9.00, 9.04, 9.08, 9.12, 9.16, 9.20, 9.24, 9.28, 9.32, 9.36, 9.40, 9.44, 9.48, 9.52, 9.56, 9.60, 9.64, 9.68, 9.72, 9.76, 9.80, 9.84, 9.88, 9.92, 9.96, 10.00

FILE NAME: HDG:d8 80101300 56th st.dgn



LEVELS ON 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0

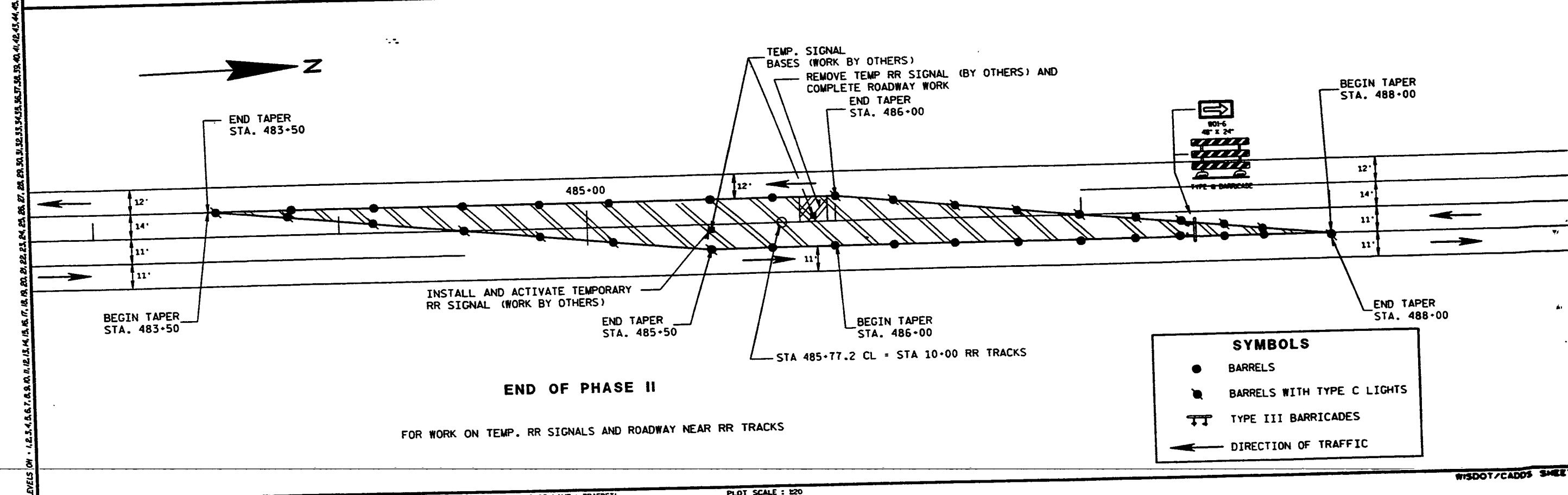
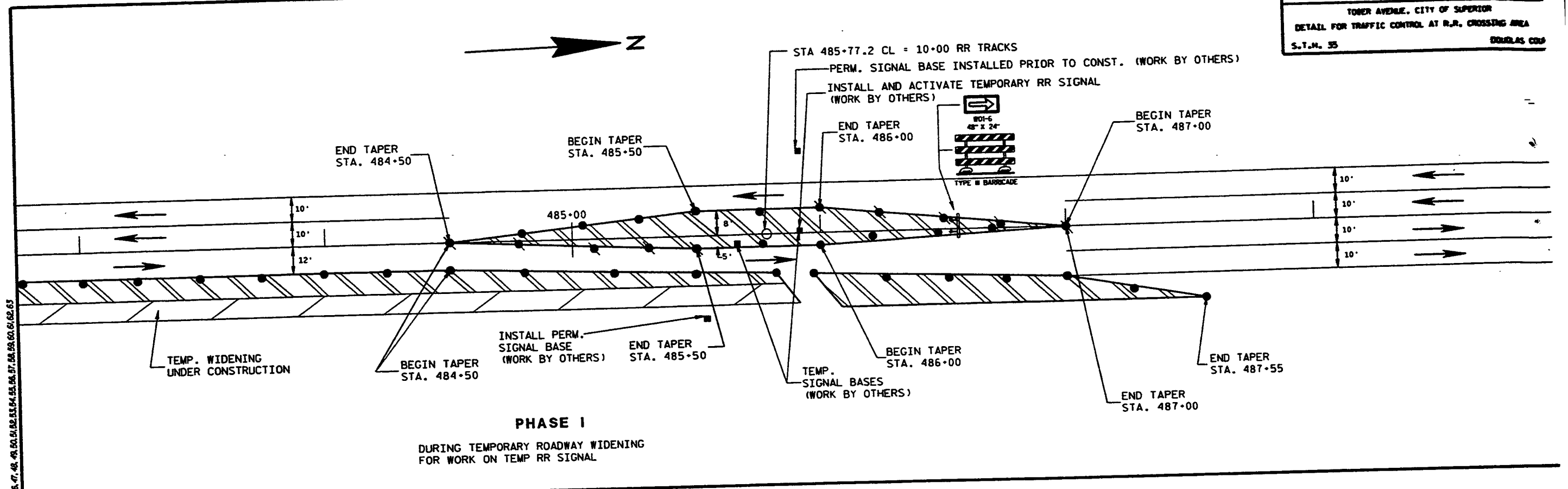


 UNDER CONSTRUCTION

BARRELS AT EVERY 25'

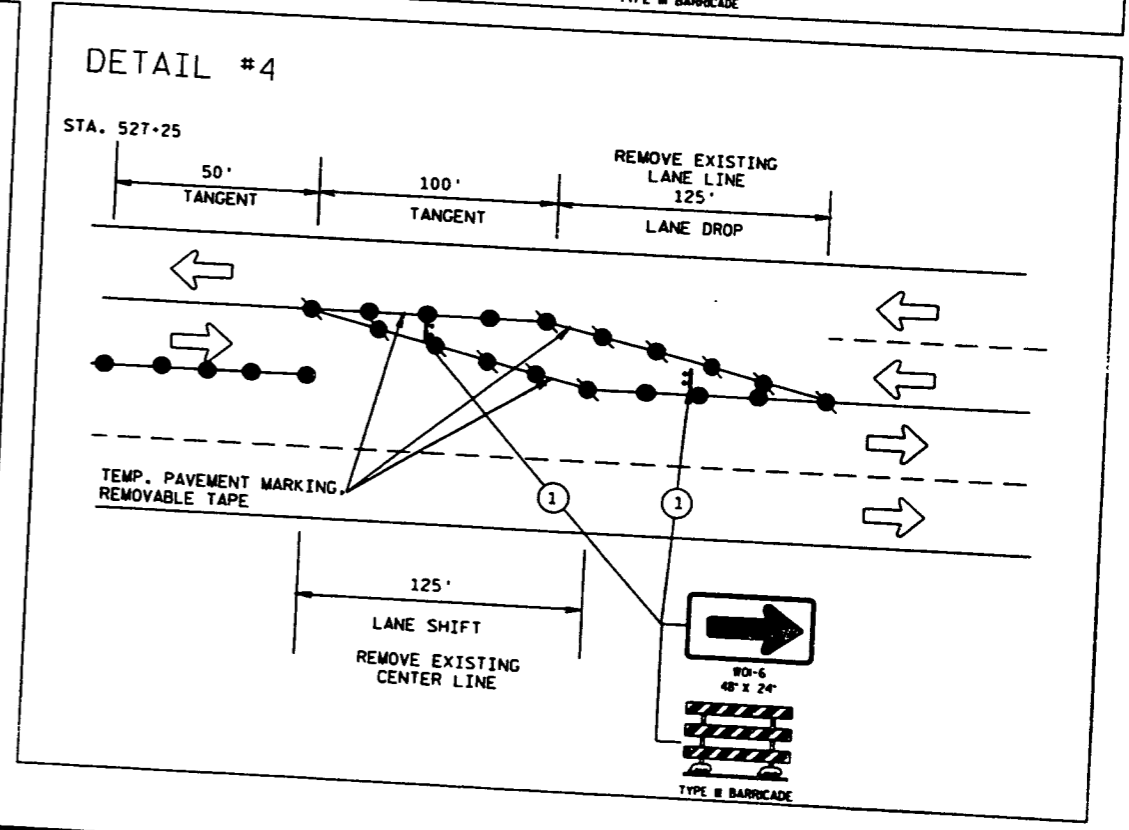
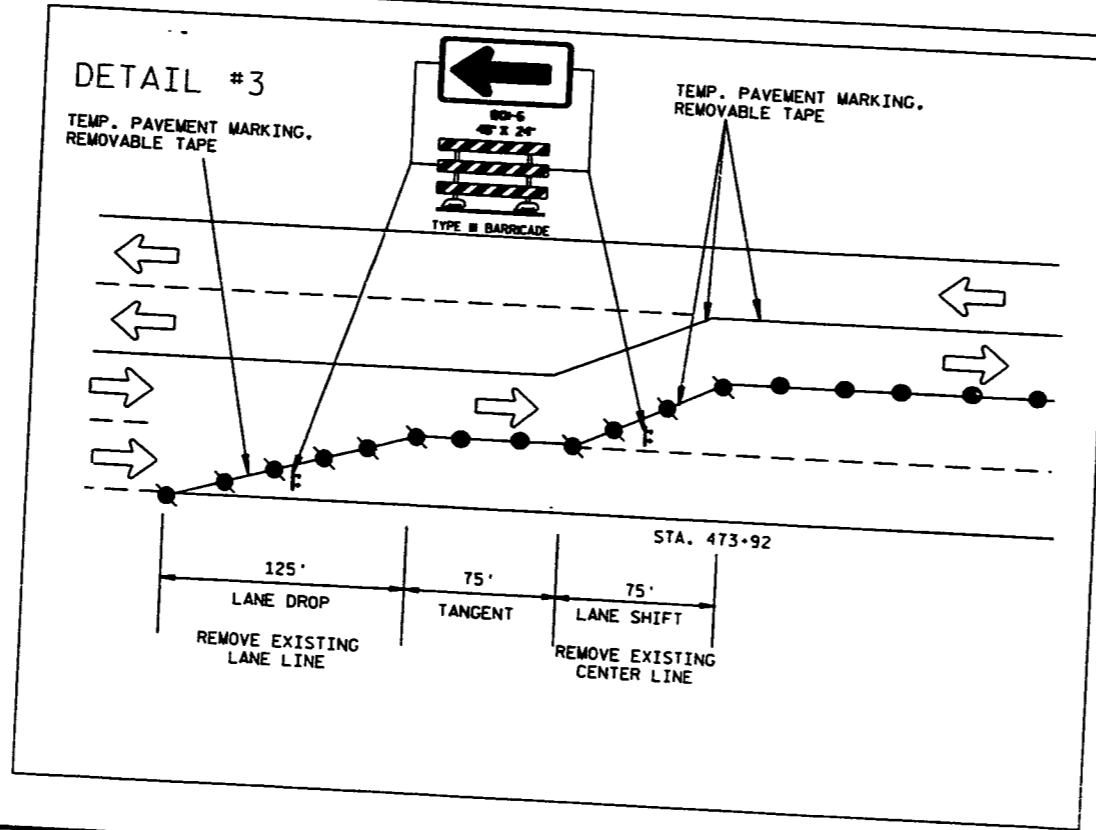
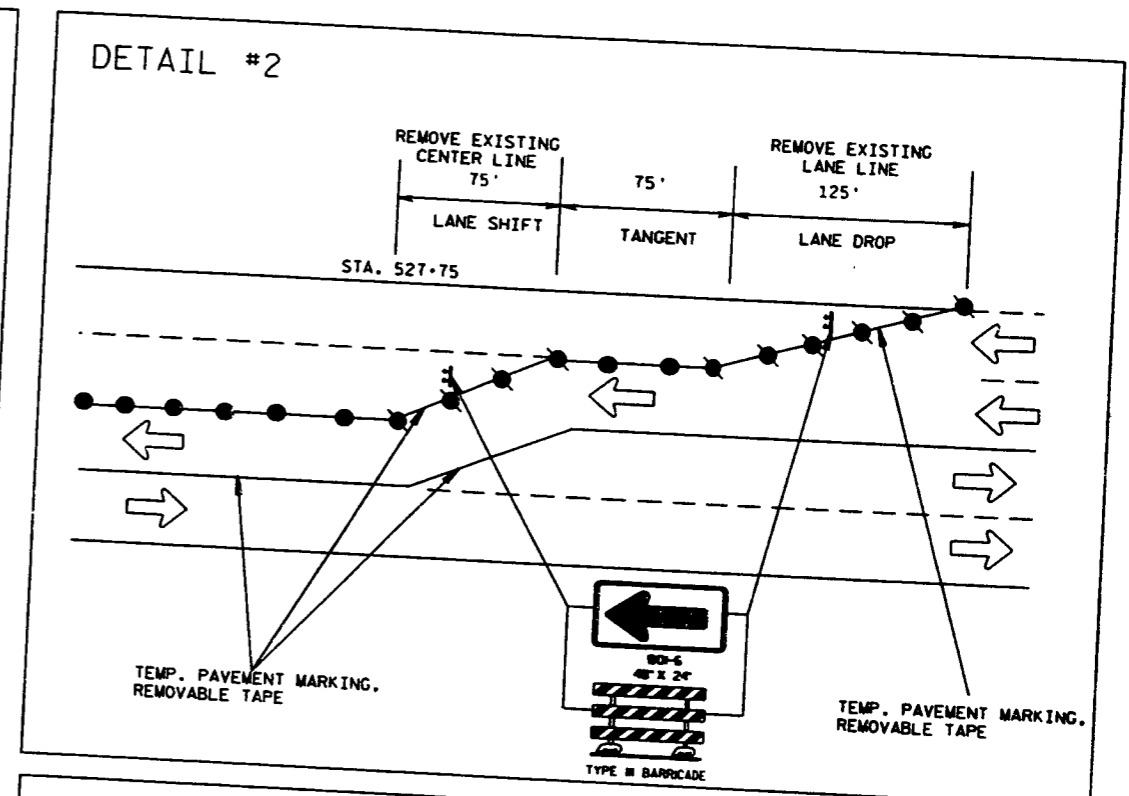
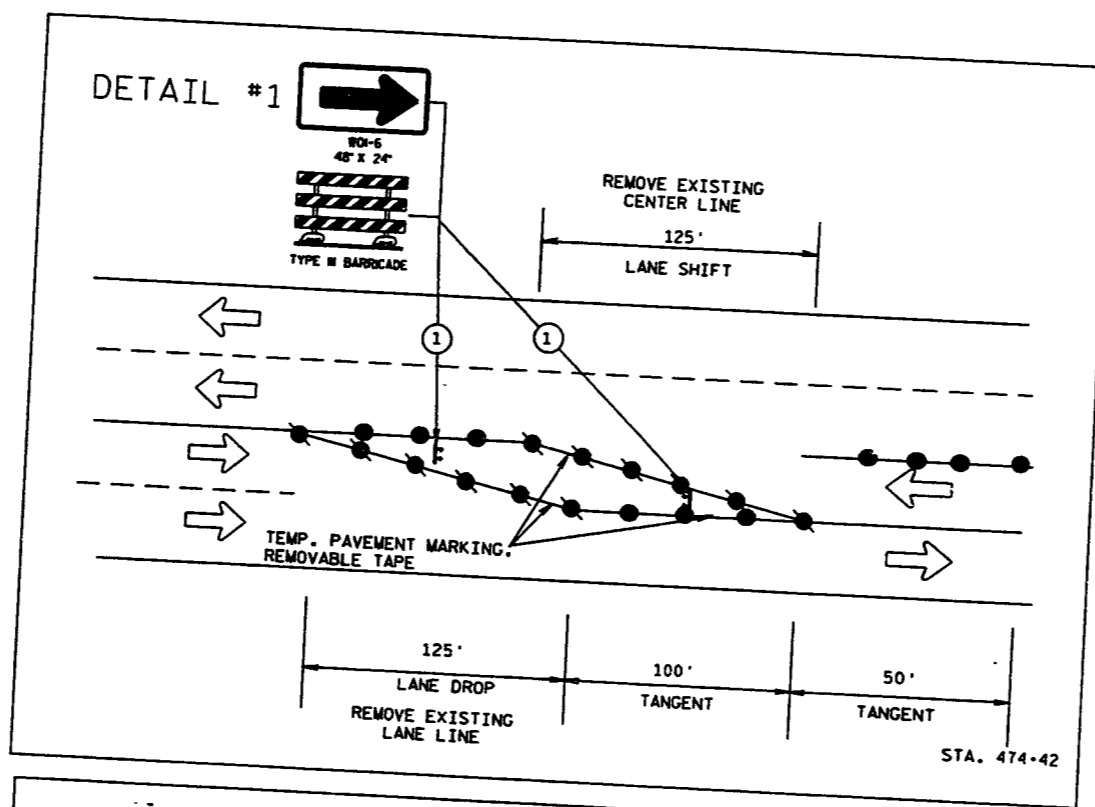
PHASE III C

LEVELS ON - 01.00, 02.00, 03.00, 04.00, 05.00, 06.00, 07.00, 08.00, 09.00, 10.00, 11.00, 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, 28.00, 29.00, 30.00, 31.00, 32.00, 33.00, 34.00, 35.00, 36.00, 37.00, 38.00, 39.00, 40.00, 41.00, 42.00, 43.00, 44.00, 45.00, 46.00, 47.00, 48.00, 49.00, 50.00, 51.00, 52.00, 53.00, 54.00, 55.00, 56.00, 57.00, 58.00, 59.00, 60.00, 61.00, 62.00, 63.00, 64.00, 65.00, 66.00, 67.00, 68.00, 69.00, 70.00, 71.00, 72.00, 73.00, 74.00, 75.00, 76.00, 77.00, 78.00, 79.00, 80.00, 81.00, 82.00, 83.00, 84.00, 85.00, 86.00, 87.00, 88.00, 89.00, 90.00, 91.00, 92.00, 93.00, 94.00, 95.00, 96.00, 97.00, 98.00, 99.00, 100.00

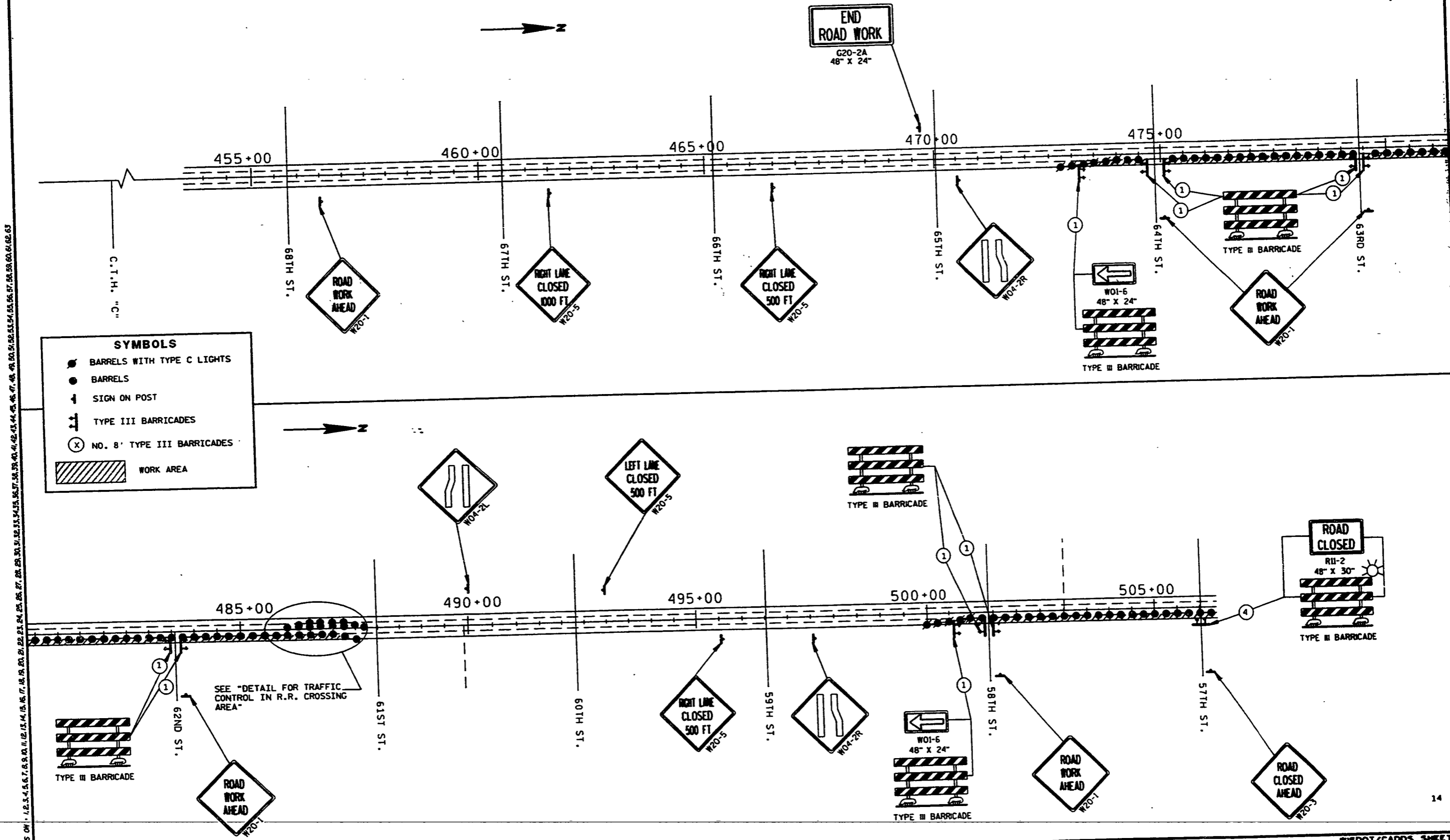


LEVELS ON - 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63

- SYMBOLS**
- BARRELS WITH TYPE C LIGHTS
 - BARRELS
 - TYPE III BARRICADES
 - DIRECTION OF TRAFFIC



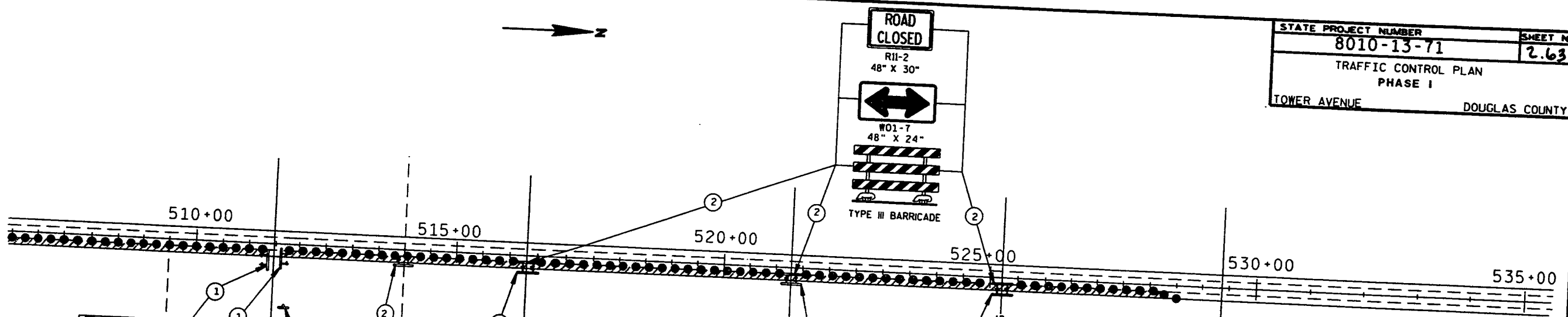
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



SYMBOLS

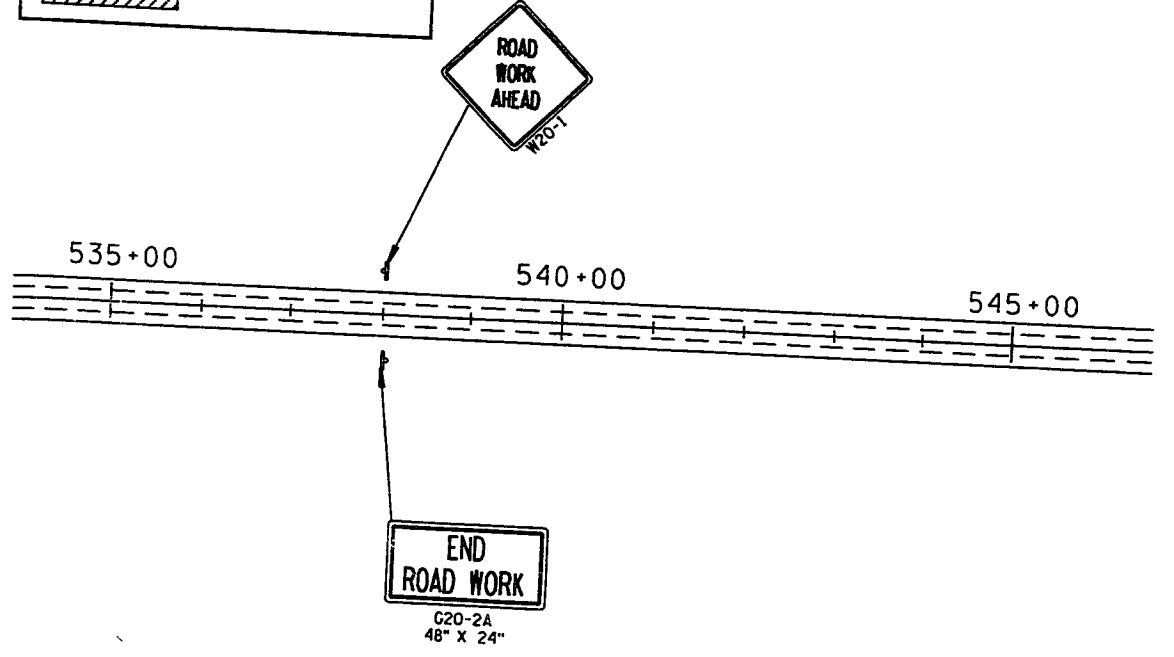
- BARRELS WITH TYPE C LIGHTS
- BARRELS
- ↑ SIGN ON POST
- ⊥ TYPE III BARRICADES
- ⊗ NO. 8' TYPE III BARRICADES
- ▨ WORK AREA

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

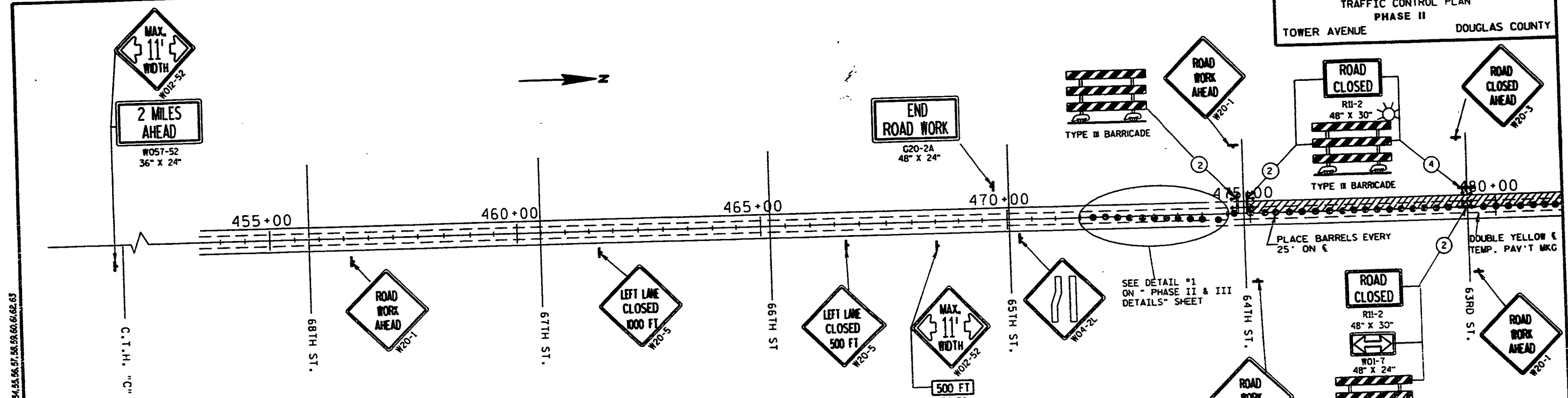


SYMBOLS

- BARRELS WITH TYPE C LIGHTS
- BARRELS
- ↑ SIGN ON POST
- ⊥ TYPE III BARRICADES
- ⊗ NO. 8' TYPE III BARRICADES
- ▨ WORK AREA



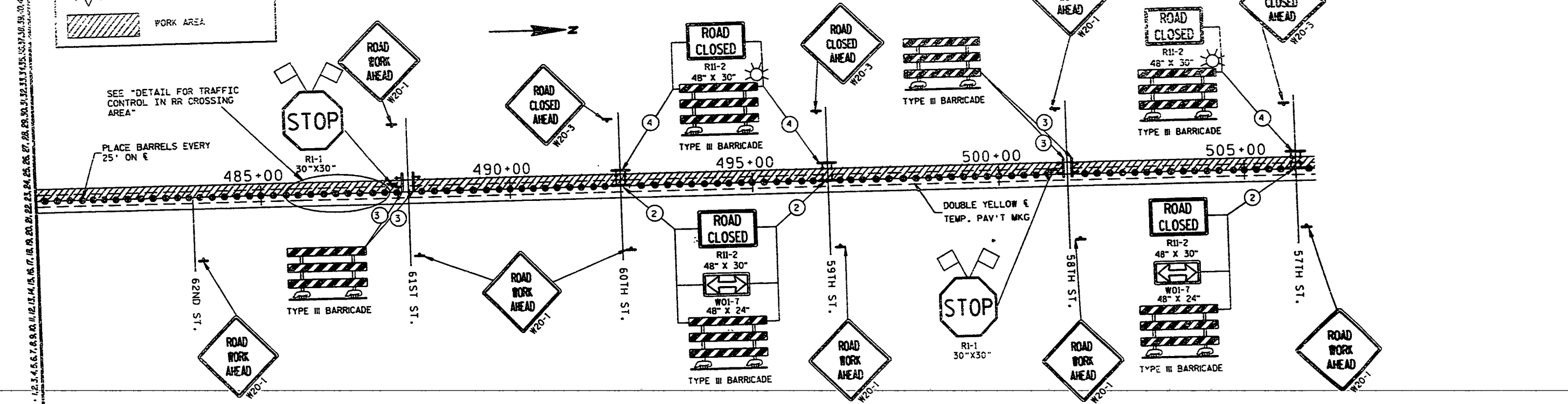
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

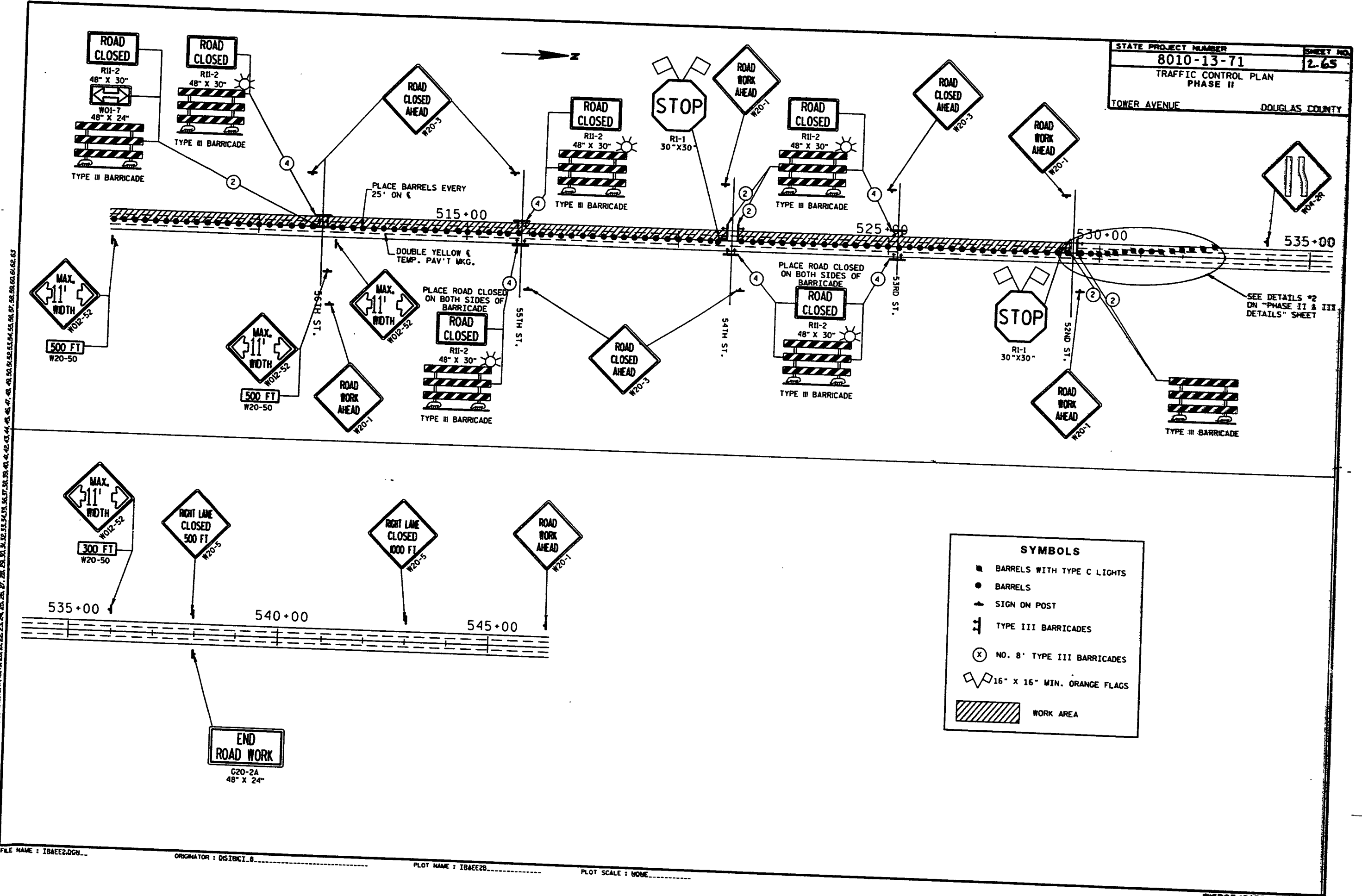


SYMBOLS

- BARRELS
- ↑ SIGN ON POST
- ▬ TYPE III BARRICADES
- ⊗ NO. 8" TYPE III BARRICADES
- ⚡ 16" X 16" MIN. ORANGE FLAGS
- ▨ WORK AREA

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

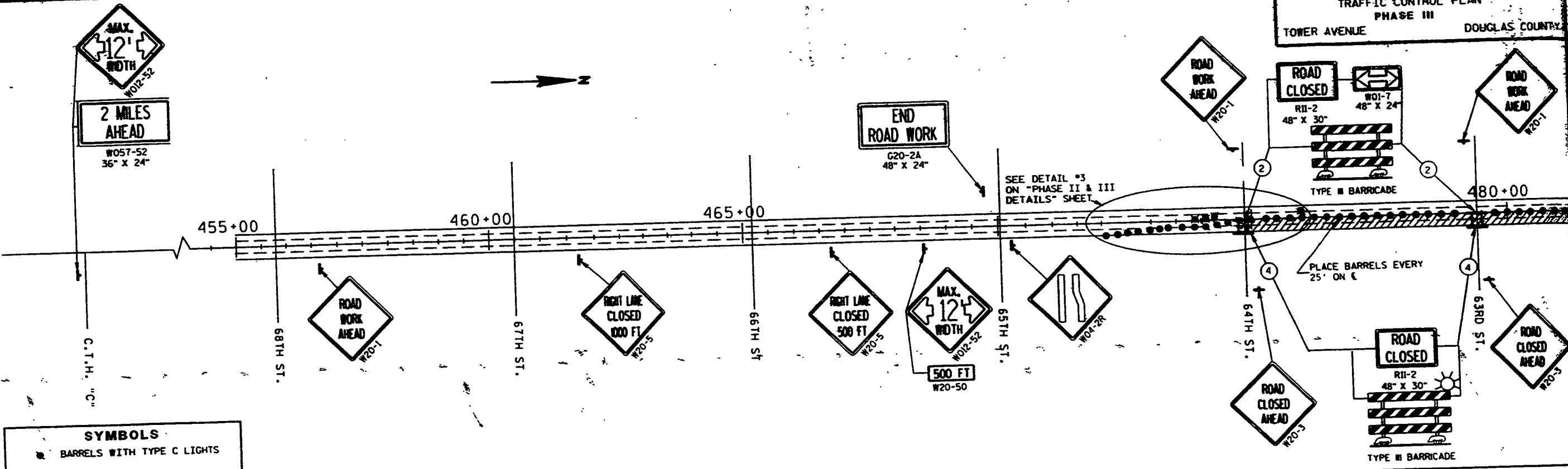




SYMBOLS

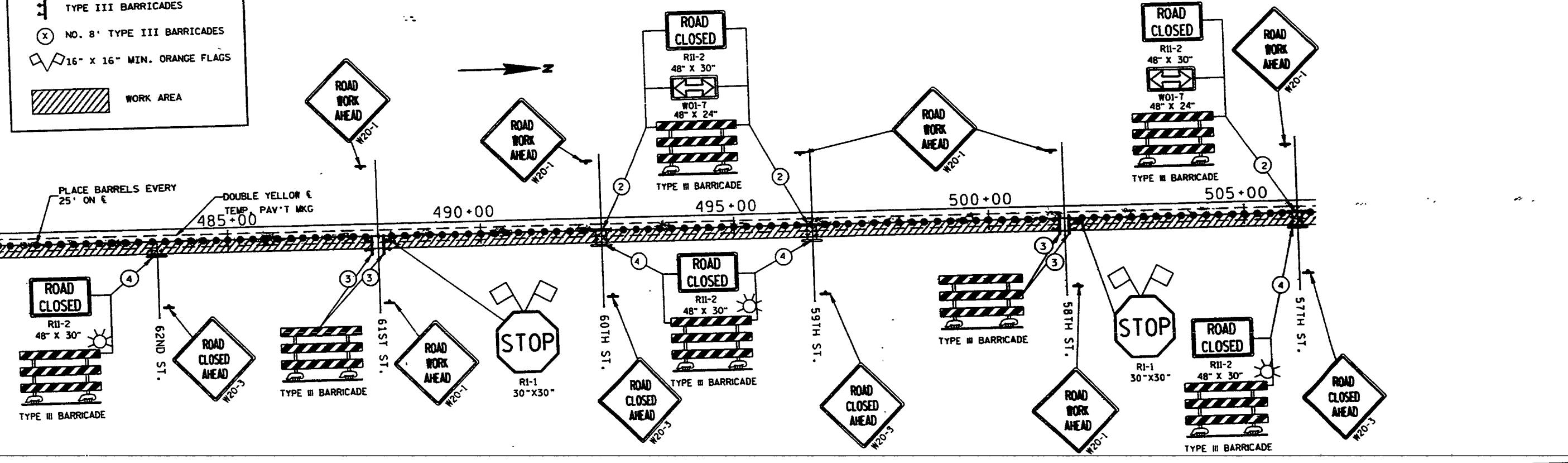
- BARRILES WITH TYPE C LIGHTS
- BARRILES
- ▲ SIGN ON POST
- ⊥ TYPE III BARRICADES
- ⊗ NO. 8' TYPE III BARRICADES
- ◊ 16" x 16" MIN. ORANGE FLAGS
- ▨ WORK AREA

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

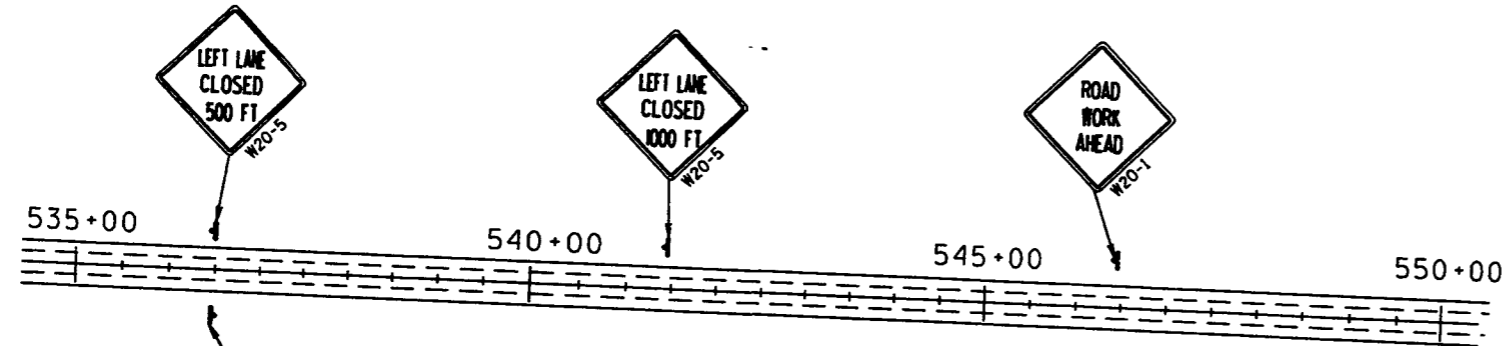
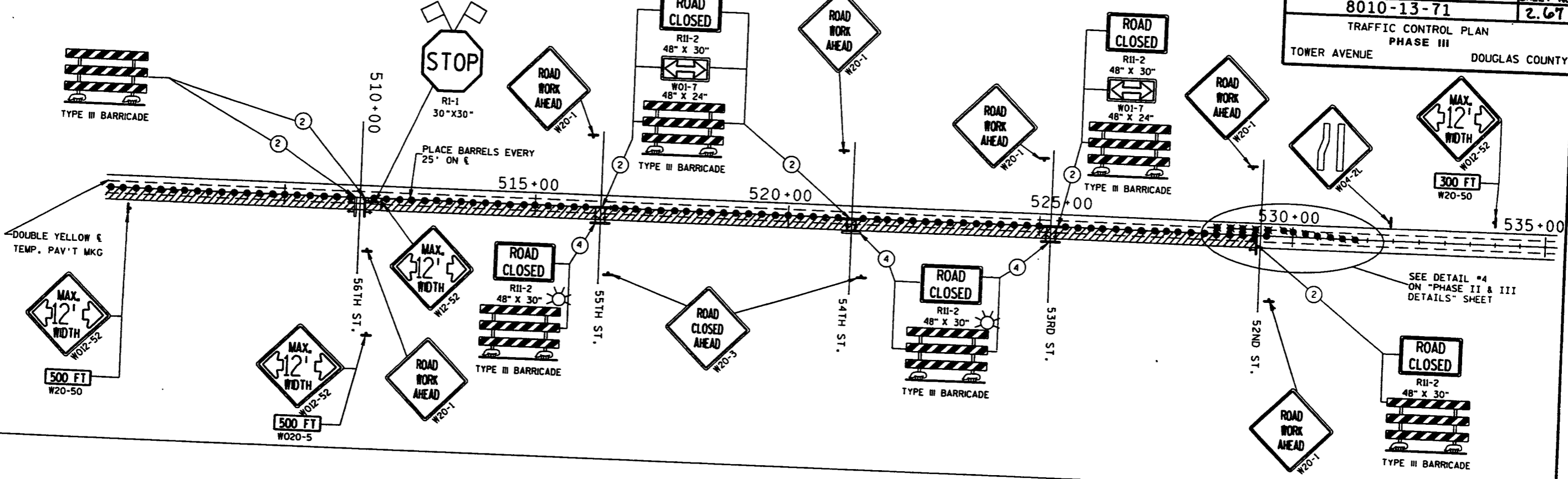


SYMBOLS

- BARRELS WITH TYPE C LIGHTS
- BARRELS
- ▲ SIGN ON POST
- ▬ TYPE III BARRICADES
- ⊙ NO. 8' TYPE III BARRICADES
- ◊ 16" X 16" MIN. ORANGE FLAGS
- ▨ WORK AREA



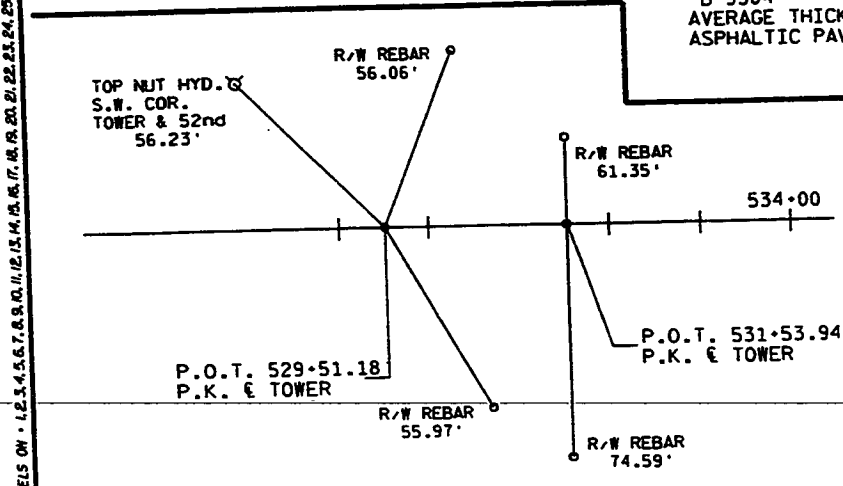
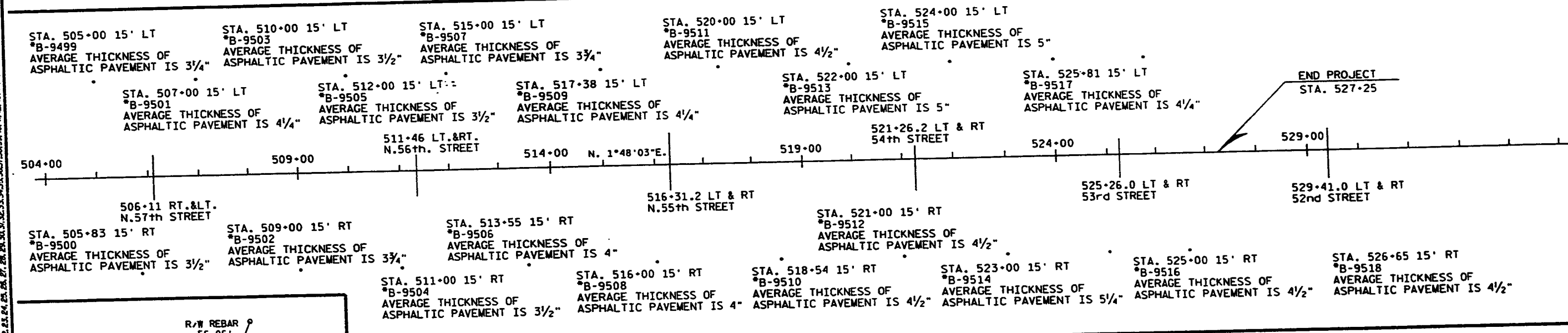
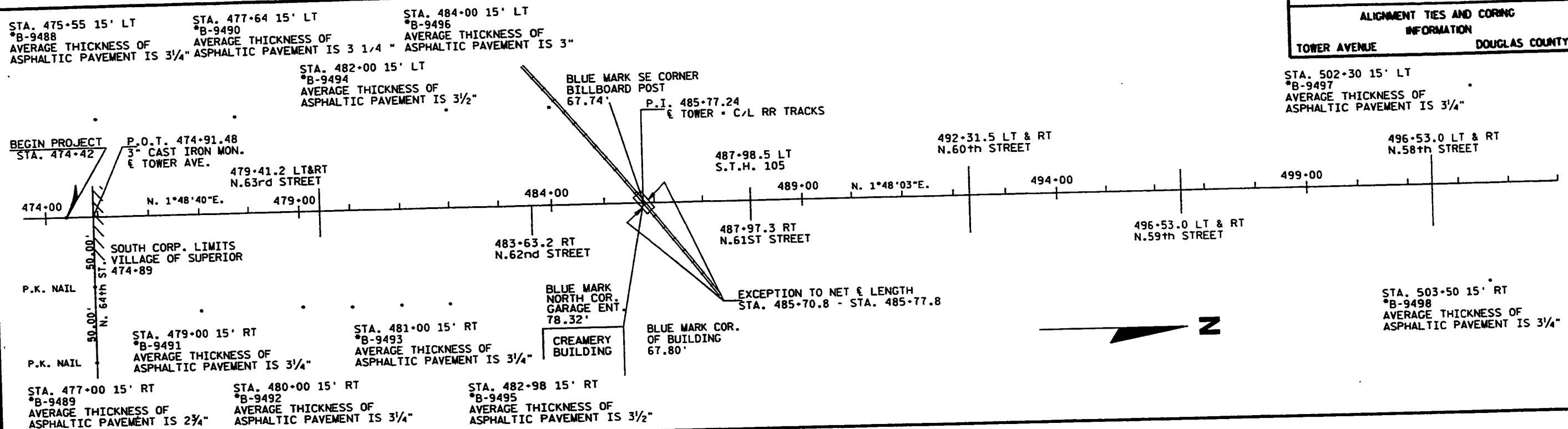
LEVELS ON 1, 1.2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



SYMBOLS

- BARRELS WITH TYPE C LIGHTS
- BARRELS
- SIGN ON POST
- ⊥ TYPE III BARRICADES
- ⊙ NO. 8' TYPE III BARRICADES
- ⚡ 16" X 16" MIN. ORANGE FLAGS
- ▨ WORK AREA

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: AVERAGE ASPHALTIC PAVEMENT THICKNESSES MAY VARY DUE TO ASPHALTIC OVERLAYS THAT WERE PLACED SINCE THESE BORINGS WERE COMPLETED

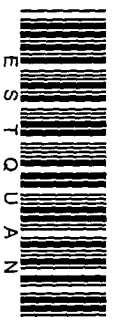
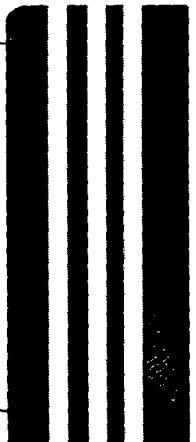
* SOILS BORING DATA ON THESE LOCATIONS IS AVAILABLE AT THE DISTRICT OFFICE UPON REQUEST.

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. 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.

DATE 12/21/95

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-13-71 QUANTITY
20102	CLEARING	I.D.	767.00	767.00
20105	GRUBBING	I.D.	851.00	851.00
20401	REMOVING PAVEMENT	S.Y.	31,675.00	31,675.00
20406	REMOVING CONCRETE SIDEWALK	S.Y.	6,880.00	6,880.00
20413	REMOVING UTILITY POLES	EACH	12.00	12.00
20414	REMOVING MANHOLES	EACH	3.00	3.00
20416	REMOVING INLETS	EACH	16.00	16.00
20422	REMOVING CONCRETE BASES	EACH	3.00	3.00
20480	ABANDONING MANHOLES	EACH	5.00	5.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	34,557.00	34,557.00
21132	PREPARATION OF FOUNDATION FOR CRUSHED AGGREGATE BASE COURSE, OPEN GRADED	STA.	53.00	53.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	15,902.00	15,902.00
30420	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NUMBER 2	TON	10,627.00	10,627.00
30426	BREAKER RUN STONE	TON	8,380.00	8,380.00
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	113.00	113.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	64.00	64.00
40713	ASPHALTIC CONCRETE PAVEMENT, TYPE MV	TON	1,086.00	1,086.00
41509	CONCRETE PAVEMENT, 9-INCH	S.Y.	31,920.00	31,920.00
41519	H.E.S. CONCRETE PAVEMENT, 9-INCH	S.Y.	3,977.00	3,977.00
41531	CONCRETE DRIVEWAY	S.Y.	159.00	159.00
41532	CONCRETE ALLEY	S.Y.	932.00	932.00
41571	PAVEMENT TIES	EACH	32.00	32.00
41572	DOWEL BARS	EACH	100.00	100.00
41575	CONCRETE PAVEMENT GAPS	EACH	7.00	7.00
52080	TEMPORARY CULVERT PIPE, 12-INCH	L.F.	262.00	262.00
60101	CONCRETE CURB, TYPE A	L.F.	427.00	427.00
60123	CONCRETE CURB AND GUTTER, 30-INCH, TYPE A	L.F.	10,153.00	10,153.00



SHEET 3

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	544.00	544.00
60204	CONCRETE SIDEWALK, 4-INCH	S.F.	65,485.00	65,485.00
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	753.00	753.00
60826	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 15-INCH	L.F.	1,391.00	1,391.00
60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH	L.F.	238.00	238.00
60828	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 21-INCH	L.F.	220.00	220.00
60829	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 24-INCH	L.F.	3,595.00	3,595.00
60831	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 30-INCH	L.F.	285.00	285.00
60850	REINFORCED CONCRETE PIPE, CLASS IV, STORM SEWER, 12-INCH	L.F.	57.00	57.00
61110	MANHOLES, TYPE 1	EACH	25.00	25.00
61112	MANHOLES, TYPE 3	EACH	1.00	1.00
61123	INLETS, TYPE 8	EACH	1.00	1.00
61128	RECONSTRUCTING MANHOLES	EACH	1.00	1.00
61152	MANHOLE COVERS, TYPE K	EACH	26.00	26.00
61161	INLET COVERS, TYPE A	EACH	57.00	57.00
61167	INLET COVERS, TYPE H	EACH	1.00	1.00
61170	INLET COVERS, TYPE MS	EACH	1.00	1.00
61182	ADJUSTING MANHOLE COVERS	EACH	6.00	6.00
61201	PIPE UNDERDRAIN, 6-INCH	L.F.	10,470.00	10,470.00
61211	PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L.F.	8.00	8.00
61310	METALLIC CONDUIT, 1-INCH	L.F.	45.00	45.00
61334	NONMETALLIC CONDUIT, 2-INCH	L.F.	6,915.00	6,915.00
61336	NONMETALLIC CONDUIT, 3-INCH	L.F.	445.00	445.00

SHEET 3.1

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-13-71 QUANTITY
61347	CONDUIT, 3-INCH, SPECIAL	L.F.	80.00	80.00
61801	MAINTENANCE AND REPAIR OF HAUL ROADS	L.S.	1.00	1.00
61910	MOBILIZATION	L.S.	1.00	1.00
62112	LANDMARK REFERENCE MONUMENTS AND ALUMINUM COVERS	EACH	3.00	3.00
62301	CALCIUM CHLORIDE SURFACE TREATMENT	TON	58.00	58.00
62401	WATER	MGAL	20.00	20.00
62501	TOPSOIL	S.Y.	10,683.00	10,683.00
62702	MULCHING	S.Y.	2,500.00	2,500.00
62811	EROSION BALES, DELIVERED	EACH	50.00	50.00
62812	EROSION BALES, INSTALLED	EACH	50.00	50.00
62815	SILT FENCE, DELIVERED	L.F.	200.00	200.00
62816	SILT FENCE, INSTALLED	L.F.	200.00	200.00
62817	SILT FENCE MAINTENANCE	L.F.	200.00	200.00
62819	MOBILIZATIONS, EROSION CONTROL	EACH	2.00	2.00
62822	EROSION MAT, DELIVERED, CLASS 1, TYPE A	S.Y.	200.00	200.00
62823	EROSION MAT, INSTALLED, CLASS 1, TYPE A	S.Y.	200.00	200.00
62905	FERTILIZER, TYPE B	CWT.	6.70	6.70
63002	SEEDING	LB.	100.00	100.00
63003	SEEDING, TEMPORARY	LB.	100.00	100.00
63101	SOODING	S.Y.	10,683.00	10,683.00
63201	TREES, ASH, GREEN, MARSHALL SEEDLESS, 2-INCH CAL., B&B	EACH	25.00	25.00
63202	TREES, MAPLE, RED, 2-INCH CAL., B&B	EACH	31.00	31.00
63203	TREES, MOUNTAIN ASH, 2-INCH CAL., B&B	EACH	17.00	17.00
63204	TREES, HAWTHORN, DOWNY, 2-INCH CAL, B&B	EACH	15.00	15.00
63205	TREES, CRABAPPLE, THUNDERCLOUD, 2-INCH CAL, B&B	EACH	8.00	8.00
63208	TREES, SPRUCE, BLUE, 6-FT. HT., B&B	EACH	4.00	4.00
63210	TREES, SPRUCE, BLUE, 4-FT HT, B&B	EACH	3.00	3.00

SHEET 32

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-13-71 QUANTITY
63403	WOOD POSTS, 4X4-INCH X 14-FT.	EACH	1.00	1.00
63404	WOOD POSTS, 4X4-INCH X 16-FT.	EACH	6.00	6.00
63702	SIGNS, TYPE 11, REFLECTIVE	S.F.	704.44	704.44
64005	POLES, TYPE 5, 30-FEET	EACH	6.00	6.00
64006	POLES, TYPE 5, 35-FEET	EACH	38.00	38.00
64072	CABLE-IN-DUCT, 4 CONDUCTOR, NO. 6	L.F.	4,345.00	4,345.00
64073	CABLE-IN-DUCT, 4 CONDUCTOR, NO. 4	L.F.	1,265.00	1,265.00
64075	ELECTRICAL WIRE, LIGHTING, NO. 12	L.F.	8,780.00	8,780.00
64076	ELECTRICAL WIRE, LIGHTING, NO. 10	L.F.	180.00	180.00
64078	ELECTRICAL WIRE, LIGHTING, NO. 6	L.F.	5,875.00	5,875.00
64079	ELECTRICAL WIRE, LIGHTING, NO. 4	L.F.	23,130.00	23,130.00
64080	ELECTRICAL WIRE, LIGHTING, NO. 2	L.F.	1,470.00	1,470.00
64202	FIELD OFFICE, TYPE B	L.S.	1.00	1.00
64210	FIELD LABORATORY	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
64313	TRAFFIC CONTROL, DRUMS	DAYS	51,544.00	51,544.00
64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	12,680.00	12,680.00
64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	5,232.00	5,232.00
64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	4,704.00	4,704.00
64326	TRAFFIC CONTROL, SIGNS	DAYS	12,224.00	12,224.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	12,125.00	12,125.00
64414	PAVEMENT MARKING, CHANNELIZING, EPOXY, 8-INCH	L.F.	273.00	273.00
64419	PAVEMENT MARKING, RAILROAD CROSSINGS, EPOXY	EACH	4.00	4.00
64437	PAVEMENT MARKING, STOP LINE, EPOXY, 18-INCH	L.F.	398.00	398.00
64458	PAVEMENT MARKING, CROSSWALK, EPOXY, 12-INCH	L.F.	4,393.00	4,393.00
64472	PAVEMENT MARKING, ARROWS, EPOXY, TYPE 2	EACH	4.00	4.00

SHEET 3.3

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-13-71 QUANTITY
64473	PAVEMENT MARKING, ARROWS, EPOXY, TYPE 3	EACH	2.00	2.00
64479	PAVEMENT MARKING, WORDS, EPOXY	EACH	4.00	4.00
64481	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE	L.F.	10,889.00	10,889.00
64484	TEMPORARY PAVEMENT MARKING	L.F.	11,521.00	11,521.00
64487	REMOVING PAVEMENT MARKINGS	L.F.	13,412.00	13,412.00
64493	PAVEMENT MARKING, CURB RAMP, EPOXY	L.F.	736.00	736.00
64503	GEOTEXTILE FABRIC, TYPE DF	S.Y.	6,985.00	6,985.00
64601	SAWING EXISTING PAVEMENT	L.F.	1,614.00	1,614.00
64602	SAWING CONCRETE PAVEMENT, FULL DEPTH	L.F.	5,386.00	5,386.00
65001	CONSTRUCTION STAKING, STORM SEWER	L.F.	6,464.00	6,464.00
65010	CONSTRUCTION STAKING, SUBGRADE	STA.	53.00	53.00
65020	CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE	STA.	53.00	53.00
65030	CONSTRUCTION STAKING, CURB AND CURB AND GUTTER	L.F.	11,126.00	11,126.00
90001	REMOVING WOOD LIGHTING POLES	EACH	29.00	29.00
90002	REMOVING LUMINAIRES	EACH	29.00	29.00
90003	REMOVING MAST ARMS	EACH	29.00	29.00
90004	PETROLEUM CONTAMINATED GROUND WATER REMEDIATION	MGAL	1.00	1.00
90005	PETROLEUM CONTAMINATED SOIL REMEDATION	TON	2,555.00	2,555.00
90006	SELECT BORROW EXCAVATION, SPECIAL	TON	621.00	621.00
90007	CATCH BASIN, TYPE 3	EACH	57.00	57.00
90008	NONMETALLIC CONDUIT, SCHEDULE 80, 2-INCH	L.F.	75.00	75.00
90009	BLOCK AND GRAVEL MANHOLE AND INLET SEDIMENT FILTER	EACH	10.00	10.00
90010	STEEL POSTS, 7FT.	EACH	63.00	63.00
90011	STEEL POSTS, 8FT.	EACH	36.00	36.00
90012	POLES, SPECIAL, 38. 5-FT.	EACH	24.00	24.00
90013	CONCRETE BASES, TYPE 5, SPECIAL.	EACH	68.00	68.00

SHEET 34

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8010-13-71 QUANTITY
90014	LUMINAIRES, SPECIAL, 150 WATTS, HPS	EACH	40.00	40.00
90015	LUMINAIRES, SPECIAL, 200 WATTS, HPS	EACH	28.00	28.00
90016	MAST ARMS, SINGLE MEMBER, SPECIAL, 4-FOOT.	EACH	56.00	56.00
90017	MAST ARMS, SINGLE MEMBER, SPECIAL, 8-FOOT.	EACH	11.00	11.00
90018	MAST ARMS, SINGLE MEMBER, SPECIAL, 12-FOOT.	EACH	1.00	1.00
90019	ELECTRICAL WIRE, LIGHTING, SPECIAL NO. 1/0	L.F.	1,295.00	1,295.00
90020	ELECTRICAL SERVICE, LIGHTING, METER, BREAKER PEDESTAL, 483+30 48' LT	L.S.	1.00	1.00
90021	ELECTRICAL SERVICE, LIGHTING, METER, BREAKER PEDESTAL, 501+81 65' RT	L.S.	1.00	1.00
90022	ELECTRICAL SERVICE, LIGHTING, METER, BREAKER PEDESTAL, 521+00 68' LT	L.S.	1.00	1.00
90023	ELECTRIC SERVICE, WARNING LIGHT, METER SOCKET	L.S.	1.00	1.00
90024	RELOCATED REDUCED SPEED WARNING LIGHT.	EACH	1.00	1.00
90025	LIGHTING CONTROL CABINETS	EACH	3.00	3.00
90026	CONSTRUCTION STAKING, CONCRETE BASES	EACH	71.00	71.00
90027	CONSTRUCTION STAKING, PULL BOXES	EACH	32.00	32.00
90028	LOWER WATER MAIN, 12-INCH	EACH	1.00	1.00
90029	LOWER WATER MAIN, 6-INCH	EACH	2.00	2.00
90030	CATCH BASIN, TYPE 1	EACH	1.00	1.00
90319	ABANDONING SEWER	C.Y.	1.00	1.00
90402	QUALITY MANAGEMENT PROGRAM, ASPHALTIC MIXTURE	TON	1,052.00	1,052.00
90782	CONCRETE CONTROL CABINET BASES, TYPE 6	EACH	3.00	3.00
90797	PULL BOXES, 24X36-1INCH	EACH	33.00	33.00
90905	POLYSTYRENE INSULATION BOARD, 2-INCH	S.F.	4,096.00	4,096.00
90999	ON-THE-JOB TRAINING	HRS.	800.00	800.00

SHEET 3.5



CLEARING AND GRUBBING

GROUP CODE	STATION	LOCATION	CLEARING I.D.	GRUBBING I.D.
010	476+99	31.0' LT.	24	24
	480+41	32.0' RT.	28	28
	480+70	31.0' RT.	36	36
	481+13	31.5' RT.	16	16
	481+67	31.0' LT.	20	20
	483+13	31.0' RT.	12	12
	490+56	35.0' LT.	4	4
	492+95	34.0' RT.	4	4
	492+99	36.0' LT.	3	3
	494+97	36.0' RT.	3	3
	495+07	36.0' LT.	4	4
	495+98	36.0' RT.	3	3
	498+25	36.0' LT.	3	3
	500+82	36.0' LT.	4	4
	503+42	31.0' LT.	15	15
	503+66	48.0' LT.	18	18
	504+65	44.0' RT.	24	24
	505+41	44.0' RT.	24	24
	505+78	50.0' RT.	12	12
	507+18	35.0' LT.	14	14
	507+35	32.0' LT.	14	14
	507+53	32.0' LT.	36	36
	507+83	32.0' LT.	40	40
	508+58	30.0' LT.	40	40
	508+80	31.0' LT.	40	40
	508+95	47.0' RT.	10	10
	509+00	31.0' LT.	20	20
	509+03	47.0' RT.	10	10
	509+18	31.0' LT.	24	24
	511+78	32.0' LT.	20	20
	512+09	32.0' LT.	14	14
	512+36	32.0' LT.	16	16
	512+64	32.0' LT.	16	16
	512+98	32.0' LT.	16	16
	513+24	32.0' LT.	18	18
	515+59	32.0' LT.	14	14
	515+83	31.0' RT.	14	14
	516+05	49.0' RT.	10	10
	517+09	43.0' RT.	4	4
	517+12	43.0' RT.	---	30
	517+50	49.0' RT.	10	10
	518+25	46.0' RT.	5	5
	518+37	31.0' LT.	---	5
	518+39	45.0' LT.	14	14
	518+92	46.0' RT.	6	6
	522+33	43.0' LT.	---	48
	522+80	49.0' RT.	6	6
	522+95	49.0' RT.	4	4
	523+08	45.0' LT.	10	10
	523+29	43.0' RT.	4	4
	523+41	48.0' RT.	4	4
	523+71	34.0' RT.	4	4
	524+30	31.0' LT.	16	16
	524+75	31.0' LT.	12	12
	526+40	43.0' RT.	6	6
	526+65	31.0' LT.	14	14
	526+80	44.0' RT.	6	6
TOTAL =			768	851

REMOVING PAVEMENT

GROUP CODE	STATION	MAINLINE (S.Y.)	SIDERoads (S.Y.)	ENTRANCES (S.Y.)
010	474+42-480+00	2631	425	188
	480+00-485+00	2309	70	176
	485+00-490+50	3645	357	206
	490+50-495+50	3362	201	177
	495+50-501+00	3676	233	272
	501+00-506+11	2429	197	276
	506+11-511+46	2466	149	86
	511+46-517+00	2557	265	73
	517+00-522+00	2298	181	93
	522+00-527+25	2427	126	104
030	483+86. 90'-115' RT	---	---	19
	521+10. 152'-162' LT	---	---	1
TOTAL =		27800	2204	1671

CRUSHED AGGREGATE BASE COURSE

GROUP CODE	STATION	TEMPORARY WIDENING (TONS)	MAINLINE (TONS)	SIDERoads (TONS)	ENTRANCES (TONS)	CURB and GUTTER (TONS)	CRUSHED AGGREGATE BASE COURSE OPEN GRADED, NUMBER 2				BREAKER RUN STONE (TON)
							MAINLINE (TONS)	SIDERoads (TONS)	EDGEDRAIN SYSTEM (TONS)	CURB and GUTTER (TONS)	
010	474+42-480+00	222	1041	340	51	153	694	134	71	230	
	480+00-485+00	217	939	86	44	125	626	38	58	188	
	485+00-490+50	154	1191	174	51	140	794	95	64	209	
	490+50-495+50	---	650	196	17	124	433	98	57	185	
	495+50-501+00	---	1426	160	21	130	951	80	60	195	
	501+00-506+11	217	1178	282	34	143	785	138	66	215	
	506+11-511+46	234	1005	243	9	143	670	117	66	214	
	511+46-517+00	199	1040	373	13	137	694	174	63	206	
	517+00-522+00	185	939	203	7	127	626	97	58	190	
	522+00-527+25	195	986	170	22	131	657	75	60	196	
	UNDISTRIBUTED	---	---	---	---	---	---	---	---	---	
030	499+80. 50'-215' RT	---	---	---	---	---	---	---	---	---	8380
	521+10. 193'-209' LT	---	---	---	---	---	---	---	---	---	
040	479+41	---	---	32	---	---	---	---	---	---	
TOTAL =		1623	10395	2259	272	1353	6930	1046	623	2028	8380

REMOVING CONCRETE SIDEWALK

GROUP CODE	STATION	MAINLINE & SIDERoads (S.Y.)	OUTWALKS (S.Y.)
010	474+42-480+00	500	44
	480+00-485+00	408	34
	485+00-490+50	901	8
	490+50-495+50	1424	6
	495+50-501+00	1610	---
	501+00-506+11	67	4
	506+11-511+46	610	59
	511+46-517+00	605	45
	517+00-522+00	274	55
	522+00-527+25	195	31
TOTAL =		6594	286

CONCRETE PAVEMENT

GROUP CODE	STA. - STA.	LOCATION	9 - INCH S.Y.	H.E.S. 9 - INCH S.Y.
010	474+42-480+00	MAINLINE	3730	375
	480+00-485+00	MAINLINE	3020	0
	485+00-490+50	MAINLINE	2828	1201
	490+50-495+50	MAINLINE	2316	0
	495+50-501+00	MAINLINE	4563	87
	501+00-506+11	MAINLINE	3083	1023
	506+11-511+46	MAINLINE	3116	326
	511+46-517+00	MAINLINE	3294	387
	517+00-522+00	MAINLINE	2675	578
	522+00-527+25	MAINLINE	3295	0
TOTAL =			31920	3977

REMOVING UTILITY POLES

GROUP CODE	STATION	LOCATION	EACH
040	475+13	29' LT	1
	489+67	32' RT	1
	490+65	35' LT	1
	491+69	35' RT	1
	494+92	34' LT	1
	496+07	33' RT	1
	497+88	33' RT	1
	498+74	33' RT	1
	499+52	34' LT	1
	501+08	33' RT	1
	503+04	32' RT	1
	504+43	32' RT	1
TOTAL =			12

ASPHALTIC CONCRETE PAVEMENT, TYPE MV

GROUP CODE	STATION	TEMP. WIDENING TONS	PE/CE/ALLEY TONS	INTERSECTIONS TONS	ASPHALTIC MATERIAL PLANT MIX TONS	TACK COAT GAL
010	474+42-480+00	81	21	48	9	16
	480+00-485+00	82	5	10	6	11
	485+00-490+50	47	3	11	4	7
	490+50-495+50	0	0	42	2	3
	495+50-501+00	0	0	33	2	3
	501+00-506+11	81	4	65	9	15
	506+11-511+46	95	2	54	9	24
	511+46-517+00	62	4	90	9	16
	517+00-522+00	82	0	21	6	9
	522+00-527+25	86	3	20	6	9
030	499+80. 50'-215' RT	---	---	4	---	---
	521+10. 193'-209' LT	---	---	1	---	---
040	479+41	---	---	29	---	---
TOTAL =		616	42	428	64	113

CONCRETE PAVEMENT GAPS

GROUP CODE	LOCATION	EACH
010	MAINLINE 64TH STREET WEST	1
	MAINLINE 61ST STREET WEST	1
	MAINLINE 61ST STREET EAST	1
	MAINLINE 58TH STREET WEST	1
	MAINLINE 58TH STREET EAST	1
	MAINLINE 56TH STREET EAST	1
	MAINLINE 54TH STREET WEST	1
TOTAL =		7

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

CONCRETE DRIVEWAY / ALLEY

GROUP CODE	STA - STA	PE (4-INCH) S.Y.	CE/ALLEY (6-INCH) S.Y.
010	474+42 - 480+00	--	93
	480+00 - 485+00	--	136
	485+00 - 490+50	--	265
	490+50 - 495+50	--	106
	495+50 - 501+00	--	107
	501+00 - 506+11	--	165
	506+11 - 511+46	--	24
	511+46 - 517+00	--	36
	517+00 - 522+00	36	--
	522+00 - 527+25	103	--
030	483+86. 90-115' RT	19	--
	521+10. 152-162' LT	1	--
TOTAL =		159	932

CONCRETE CURB AND GUTTER. 30-INCH

GROUP CODE	STA - STA	LOCATION	TYPE "A" L.F.	TYPE "D" L.F.
010	474+42 - 480+00	LT/RT	1154	60
	480+00 - 485+00	LT/RT	993	--
	485+00 - 490+50	LT/RT	1074	30
	490+50 - 495+50	LT/RT	947	30
	495+50 - 501+00	LT/RT	998	30
	501+00 - 506+11	LT/RT	923	209
	506+11 - 511+46	LT/RT	1096	30
	511+46 - 517+00	LT/RT	981	105
	517+00 - 522+00	LT/RT	952	50
	522+00 - 527+25	LT/RT	1035	--
TOTAL =			10153	544

CONCRETE CURB. TYPE A

GROUP CODE	STA. TO STA.	LOCATION	L.F.
010	475+10 - 475+84	LT	74
	476+08 - 476+22	LT	14
	488+40 - 489+28	LT	88
	488+40 - 489+15	RT	89
	489+64 - 489+80	LT	16
	491+76 - 492+08	RT	32
	493+88 - 494+34	RT	46
	496+16 - 496+32	RT	20
	501+76 - 502+82	LT	32
	511+14 - 511+28	LT	16
TOTAL =			427

ADJUSTING MANHOLE COVERS

GROUP CODE	STATION	LOCATION	EACH
040	487+47	20' LT	1
	488+19	49' LT	1
	488+19	48' RT	1
	488+35	20' LT	1
	501+08	19' LT	1
TOTAL =			5

PIPE UNDERDRAIN. 6 - INCH

CODE	STA - STA	LOCATION	PERFORATED L.F.	UNPERFORATED L.F.
010	474+42 - 480+00	LT/RT	1123	8
	480+00 - 485+00	LT/RT	1000	--
	485+00 - 490+50	LT/RT	1104	--
	490+50 - 495+50	LT/RT	977	--
	495+50 - 501+00	LT/RT	1028	--
	501+00 - 506+11	LT/RT	995	--
	506+11 - 511+46	LT/RT	1128	--
	511+46 - 517+00	LT/RT	1086	--
	517+00 - 522+00	LT/RT	1002	--
	522+00 - 527+25	LT/RT	1035	--
TOTAL =			10478	8

ABANDON STRUCTURES

MANHOLES

GROUP CODE	STATION	LOCATION	DEPTH OF STRUCTURE	EACH
010	486+34	32' LT	7'	1
	486+97	32' RT	7'	1
	489+99	34' RT	8'	1
	509+45	42' LT	5'	1
	513+43	41' LT	5'	1
TOTAL =				5

REMOVING STRUCTURES

GROUP CODE	STATION	LOCATION	INLETS		MANHOLES	
			DEPTH OF STRUCTURE (FT)	EACH	DEPTH OF STRUCTURE (FT)	EACH
010	475+18	20' LT	3	1	--	--
	479+25	41' LT	7	1	--	--
	492+08	34' LT	3	1	--	--
	492+08	34' RT	2.5	1	--	--
	492+11	31' RT	--	--	2.5	1
	492+53	31' LT	--	--	3.5	1
	492+53	31' RT	--	--	4.5	1
	492+57	34' LT	3	1	--	--
	492+57	34' RT	3	1	--	--
	499+15	30' RT	2.5	1	--	--
	499+62	30' LT	5.5	1	--	--
	499+62	30' RT	5	1	--	--
	503+26	31' LT	4.5	1	--	--
	503+26	31' RT	4.5	1	--	--
	509+45	30' LT	5	1	--	--
	509+45	30' RT	5	1	--	--
	511+62	41' LT	7	1	--	--
	513+45	30' LT	4	1	--	--
	513+45	30' RT	4	1	--	--
TOTAL =			16	3		

WATER

GROUP CODE	STA - STA	LOCATION	MGAL
010	474+42 - 480+00	MAINLINE	2
	480+00 - 485+00	MAINLINE	2
	485+00 - 490+50	MAINLINE	2
	490+50 - 495+50	MAINLINE	2
	495+50 - 501+00	MAINLINE	2
	501+00 - 506+11	MAINLINE	2
	506+11 - 511+46	MAINLINE	2
	511+46 - 517+00	MAINLINE	2
	517+00 - 522+00	MAINLINE	2
	522+00 - 527+25	MAINLINE	2
TOTAL =			20

CALCIUM CHLORIDE SURFACE TREATMENT

GROUP CODE	STA - STA	LOCATION	TON
010	474+42 - 480+00	MAINLINE	5.7
	480+00 - 485+00	MAINLINE	5
	485+00 - 490+50	MAINLINE	6.4
	490+50 - 495+50	MAINLINE	6.8
	495+50 - 501+00	MAINLINE	7.4
	501+00 - 506+11	MAINLINE	5.3
	506+11 - 511+46	MAINLINE	5.4
	511+46 - 517+00	MAINLINE	5.6
	517+00 - 522+00	MAINLINE	5.1
	522+00 - 527+25	MAINLINE	5.3
TOTAL =			58

EROSION CONTROL

GROUP CODE	LOCATION	SILT FENCE DELIVERED L.F.	SILT FENCE INSTALLED L.F.	MAINTENANCE L.F.	BLOCK & GRAVEL SEDIMENT FILTERS EACH	EROSION BALES EACH	EROSION MAT. CLASS I. TYPE A DELIVERED S.Y.	EROSION MAT. CLASS I. TYPE A INSTALLED S.Y.
010	UNDISTRIBUTED STRUCTURES IN GUTTER-LINE WASTE PIT/BORROW AREAS	200	200	200	10	50	200	200
TOTAL =		200	200	200	10	50	200	200

LOWER WATER MAIN

GROUP CODE	STATION	LOCATION	12-INCH	6-INCH
010	501+54	13' LT	--	1
	511+80	20' LT	1	--
	516+40	8' LT	--	1
TOTAL =			1	2

PAVEMENT TIES

GROUP CODE	STATION	LOCATION	EACH
010	487+98	68' LT	15

DOWEL BARS

GROUP CODE	STATION	LOCATION	EACH
010	474+42	MAINLINE	48
	527+25	MAINLINE	52
TOTAL =			100

REMOVING CONCRETE BASES

GROUP CODE	STATION	LOCATION	COMMENT	SIZE	APPROX. REM. LENGTH FT	EACH
010	488+41	43' RT	CONC. SIGN BASE	18"x18"	3	1
	488+48	48' LT	CONC. SIGN BASE	18"x18"	5	1
	489+55	44' RT	CONC. SIGN BASE	18"x36"	3	1
TOTAL =						3

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

STORM SEWER - STRUCTURES
*SEE S.D.D. 8 A 7-3 TO DETERMINE SUMP ELEV. FOR CATCH BASINS

GROUP CODE	STRUCT. NO.	STATION	LOCATION	CATCH BASIN. TYPE 1 EACH	CATCH BASIN. TYPE 3 EACH	INLET. TYPE 8 EACH	MANHOLE. TYPE 1 EACH	COVER TYPE	CASTING. FLOWLINE ELEV.	DISCHARGE ELEV.#
010	I1	474+65	48' RT	-	-	1	-	MS	671.32	669.82
	MH1	475+18	27' LT	-	-	-	-	K	672.93	670.27
	CB2	474+73	47' LT	-	1	-	-	A	672.62	670.56
	CB3	475+07	47' LT	-	1	-	-	A	672.58	670.39
	CB4	478+00	28' LT	-	1	-	-	A	671.88	668.85
	MH2	478+02	8' LT	-	-	-	-	K	672.46	668.49
	CB5	478+00	28' RT	-	1	-	-	A	671.88	668.85
	CB6	479+23	51' LT	1	-	-	-	H	671.72	666.44
	CB7	479+23	51' RT	-	1	-	-	A	671.72	668.94
	MH3	479+29	8' LT	-	-	-	-	K	672.80	666.10
	MH4	479+32.5	51' RT	-	-	-	1	K	672.14	665.88
	CB8	479+59	51' LT	-	1	-	-	A	671.72	668.72
	CB9	479+59	51' RT	-	1	-	-	A	671.72	668.94
	MH5	481+41	8' LT	-	-	-	-	K	673.50	669.26
	CB10	481+50	28' LT	-	1	-	-	A	672.94	669.91
	CB11	481+50	28' RT	-	1	-	-	A	672.94	669.91
	MH6	483+43	8' LT	-	-	-	-	K	674.15	669.83
	CB12	483+39	28' LT	-	1	-	-	A	673.56	670.53
	CB13	483+45	48' RT	-	1	-	-	A	673.14	670.11
	CB14	483+81	48' RT	-	1	-	-	A	673.14	670.29
	MH7	487+13	8' LT	-	-	-	-	K	674.60	670.60
	CB15	487+13	28' LT	-	1	-	-	A	674.02	670.94
	CB16	487+13	28' RT	-	1	-	-	A	674.02	670.98
	CB17	487+80	58' RT	-	1	-	-	A	674.03	671.00
	MH8	487+98	8' LT	-	-	-	-	K	675.08	670.26
	CB18	488+16	58' RT	-	1	-	-	A	674.00	671.15
	CB19	489+70	38' LT	-	1	-	-	A	673.74	670.49
	CB20	489+70	38' RT	-	1	-	-	A	673.74	670.57
	MH9	489+70	8' LT	-	-	-	-	K	674.53	669.82
	MH10	492+52	8' LT	-	-	-	-	K	673.52	668.97
	CB21	492+12	59' LT	-	1	-	-	A	672.38	669.38
	CB22	492+12	59' RT	-	1	-	-	A	672.52	669.52
	CB23	492+52	59' LT	-	1	-	-	A	672.38	669.18
	CB24	492+52	59' RT	-	1	-	-	A	672.40	669.32
	MH11	492+96	8' LT	-	-	-	-	K	673.45	668.84
	CB25	492+96	38' LT	-	1	-	-	A	672.66	669.41
	CB26	492+96	38' RT	-	1	-	-	A	672.66	669.41
	MH12	496+73	8' LT	-	-	-	-	K	674.57	667.33
	CB27	496+35	59' LT	-	1	-	-	A	673.42	669.92
	CB28	496+71	59' LT	-	1	-	-	A	673.42	669.56
	MH13	498+50	10.6' LT	-	-	-	-	K	674.16	666.62
	CB29	498+46	40.5' LT	-	1	-	-	A	673.22	669.72
	CB30	498+46	40.5' RT	-	1	-	-	A	673.22	669.72
	MH14	500+48	13' LT	-	-	-	-	K	673.98	666.03
	CB31	499+45	42.9' LT	-	1	-	-	A	673.26	669.74
	CB32	500+32	43' LT	-	1	-	-	A	673.10	668.87
	CB33	500+48	33' RT	-	1	-	-	A	673.14	669.12
	CB34	501+28	59' LT	-	1	-	-	A	673.64	670.41

*TEMP ELEV. 673.22

STORM SEWER-STRUCTURES
ITEM SUMMARY

ITEM	EACH
CATCH BASIN. TYPE 1	1
CATCH BASIN. TYPE 3	57
INLET. TYPE 8	1
MANHOLE. TYPE 1	25
MANHOLE. TYPE 3	1
MANHOLE COVER. TYPE A	57
MANHOLE COVER. TYPE H	1
MANHOLE COVER. TYPE K	26
MANHOLE COVER. TYPE MS	1

STORM SEWER - STRUCTURES. (CONT.)
*SEE S.D.D. 8 A 7-3 TO DETERMINE SUMP ELEV. FOR CATCH BASINS

GROUP CODE	STRUCT. NO.	STATION	LOCATION	CATCH BASIN. TYPE 3 EACH	MANHOLE. TYPE 1 EACH	MANHOLE. TYPE 3 EACH	COVER TYPE	CASTING. FLOWLINE ELEV.	DISCHARGE ELEV.#
010	MH15	501+35	13' LT	-	-	1	K	674.75	662.64
	CB35	501+64	54' LT	1	-	-	A	673.57	670.52
	MH16	503+25	13' LT	-	1	-	K	673.62	668.38
	CB36	503+25	34' LT	1	-	-	A	673.00	669.97
	CB37	503+25	44' RT	1	-	-	A	673.02	669.99
	CB58	505+93	59' LT	1	-	-	A	673.69	670.91
	MH17	506+30	8' LT	-	1	-	K	674.59	669.54
	CB38	506+29	59' LT	1	-	-	A	673.69	670.83
	MH18	508+68	8' LT	-	1	-	K	673.83	669.83
	CB39	508+74	28' LT	1	-	-	A	673.24	670.18
	CB40	508+74	28' RT	1	-	-	A	673.24	670.18
	CB42	511+20	44' RT	1	-	-	A	673.80	670.80
	MH49	511+62	41' LT	-	1	-	K	673.98	666.90
	CB43	511+80	44' RT	1	-	-	A	673.80	670.62
	MH20	511+86	8' LT	-	1	-	K	674.53	667.04
	MH21	513+45	8' LT	-	1	-	K	673.69	667.50
	CB44	513+76	28' LT	1	-	-	A	673.08	669.83
	CB45	513+76	28' RT	1	-	-	A	673.08	669.83
	CB59	516+15	49' LT	1	-	-	A	673.81	670.72
	CB60	516+15	54' RT	1	-	-	A	673.78	670.75
	MH22	516+51	8' LT	-	1	-	K	674.50	668.34
	CB46	516+49	49' LT	1	-	-	A	673.81	670.58
	CB47	516+49	54' RT	1	-	-	A	673.78	670.62
	MH23	520+27	8' LT	-	1	-	K	674.12	669.30
	CB48	520+37	28' LT	1	-	-	A	673.56	670.57
	CB49	520+37	28' RT	1	-	-	A	673.56	670.57
	MH24	521+06	8' LT	-	1	-	K	674.27	669.47
	CB50	521+06	55' LT	1	-	-	A	673.39	670.27
	CB51	521+08	54' RT	1	-	-	A	673.51	670.33
	CB52	521+48	55' LT	1	-	-	A	673.39	670.39
	CB53	521+44	54' RT	1	-	-	A	673.51	670.44
	MH25	524+24	8' LT	-	1	-	K	674.54	670.30
	CB54	524+37	28' LT	1	-	-	A	673.98	670.93
	CB55	524+37	28' RT	1	-	-	A	673.98	670.93
	MH26	525+44	8' LT	-	1	-	K	674.91	670.57
	CB56	525+44	43' LT	1	-	-	A	674.04	671.01
	CB57	525+44	43' RT	1	-	-	A	674.08	671.05

TEMPORARY CULVERT PIPE

GROUP CODE	STATION	LOCATION	SIZE	LENGTH	COMMENT
010	483+63.2	31.5' RT	12"	44'	62ND STREET RT
	513+34	31.5' RT	12"	26'	ASPH. ALLEY RT
	523+55	31.5' RT	12"	26'	CONC. PE RT
	524+26	31.5' RT	12"	28'	BIT. PE RT
	526+93	31.5' RT	12"	30'	GRAV./CONC. PE RT
TOTAL =					154 L.F.

STORM SEWER - TEMPORARY CULVERT PIPE

GROUP CODE	FROM	STATION	LOCATION	TO	STATION	LOCATION	SIZE	LENGTH	INLET ELEV.	DISCH. ELEV.
010	TEMP.DITC.	475+07	31' RT	EXIST.MH.	474+57	31' RT	12"	50'	671.16	670.68
	TEMP.DITC.	479+20	31' RT	MH4	479+32.5	51' RT	12"	24'	671.47	671.22
	TEMP.DITC.	479+60	31' RT	MH4	479+32.5	51' RT	12"	34'	670.97	670.62
TOTAL =										108 L.F.

RECONSTRUCTING MANHOLES

GROUP CODE	STATION	LOCATION	EACH
010	479+32.5	51' RT	1

ABANDON SEWER

GROUP CODE	STATION	LOCATION	C.Y.
010	513+45	8' LT	1

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

REINFORCED CONCRETE PIPE STORM SEWER
ITEM SUMMARY TABLE

CLASS	PIPE DIA.	L.F.
III	12"	753
	15"	1391
	18"	238
	21"	220
	24"	3595
	30"	285
IV	12"	57

REINFORCED CONCRETE PIPE STORM SEWER

GROUP CODE	FROM STRUCTURE	STATION	LOCATION	TO STRUCTURE	STATION	LOCATION	DIA. INCH	LENGTH	PIPE CLASS	INLET ELEV.	DISCH. ELEV.
010	I1	474+65	48' RT	EXIST. MH	474+57	31' RT	12	19'	III	669.82	669.64
	CB2	474+73	47' LT	CB3	475+07	47' LT	12	34'	IV	670.56	670.39
	CB3	475+07	47' LT	MH1	475+18	27' LT	12	23'	IV	670.39	670.27
	CB4	478+00	28' LT	MH2	478+02	8' LT	12	20'	III	668.85	668.65
	CB5	478+00	28' RT	MH2	478+02	8' LT	12	36'	III	668.85	668.49
	MH2	478+02	8' LT	MH3	479+29	8' LT	24	127'	III	668.46	667.17
	CB8	479+59	51' LT	CB6	479+23	51' LT	12	36'	III	668.72	668.54
	CB7	479+23	51' RT	MH4	479+32.5	51' RT	12	9'	III	668.94	668.85
	CB9	479+59	51' RT	MH4	479+32.5	51' RT	12	26'	III	668.94	668.67
	CB6	479+23	51' LT	MH3	479+29	8' LT	21	43'	III	666.44	666.10
	MH3	479+29	8' LT	MH4	479+32	51' RT	21	43'	III	666.10	665.88
	MH5	481+41	8' LT	MH3	479+29	8' LT	24	212'	III	669.26	668.60
	MH6	483+43	8' LT	MH5	481+41	8' LT	24	202'	III	669.83	669.26
	CB10	481+50	28' LT	MH5	481+41	8' LT	15	22'	III	669.91	669.81
	CB11	481+50	28' RT	MH5	481+41	8' LT	15	37'	III	669.91	669.73
	CB12	483+39	28' LT	MH6	483+43	8' LT	15	20'	III	670.53	670.33
	CB13	483+45	48' RT	MH6	483+43	8' LT	15	56'	III	670.11	669.83
	CB14	483+81	48' RT	CB13	483+45	48' RT	12	36'	III	670.29	670.11
	MH7	487+13	8' LT	MH8	487+98	8' LT	24	112'	III	670.60	670.26
	CB15	487+13	28' LT	MH7	487+13	8' LT	12	20'	III	670.94	670.84
	CB16	487+13	28' RT	MH7	487+13	8' LT	12	36'	III	670.98	670.80
	CB17	487+80	58' RT	MH8	487+98	8' LT	15	68'	III	671.00	670.67
	CB18	488+16	58' RT	CB17	487+80	58' RT	12	36'	III	671.15	671.00
	CB19	489+70	38' LT	MH9	489+70	8' LT	15	30'	III	670.49	670.40
	CB20	489+70	38' RT	MH9	489+70	8' LT	15	46'	III	670.57	670.43
	MH10	492+52	8' LT	MH11	492+96	8' LT	24	44'	III	668.97	668.84
	CB21	492+12	59' LT	CB23	492+52	59' LT	12	40'	III	669.38	669.18
	CB22	492+12	59' RT	CB24	492+52	59' RT	12	40'	III	669.52	669.32
	CB24	492+52	59' RT	MH10	492+52	8' LT	15	67'	III	669.32	668.97
	CB25	492+96	38' LT	MH11	492+96	8' LT	15	30'	III	669.41	669.11
	CB26	492+96	38' RT	MH11	492+96	8' LT	15	46'	III	669.41	668.95
	MH11	492+96	8' LT	MH12	496+73	8' LT	24	377'	III	668.84	667.33
	MH12	496+73	8' LT	MH13	498+50	10.6' LT	24	177'	III	667.33	666.62
MH13	498+50	10.6' LT	MH14	500+48	13' LT	30	198'	III	666.62	666.03	
CB27	496+35	59' LT	CB28	496+71	59' LT	12	36'	III	669.92	669.56	
CB28	496+71	59' LT	MH12	496+73	8' LT	15	51'	III	669.56	669.05	
CB29	498+46	40.5' LT	MH13	498+50	10.6' LT	15	30'	III	669.72	669.42	
CB30	498+46	40.5' RT	MH13	498+50	10.6' LT	15	51'	III	669.72	669.21	
CB31	499+45	42.9' LT	CB32	500+32	43' LT	12	87'	III	669.74	668.87	
CB32	500+32	43' LT	MH14	500+48	13' LT	15	34'	III	668.87	668.57	

REINFORCED CONCRETE PIPE STORM SEWER. (CONT.)

GROUP CODE	FROM STRUCTURE	STATION	LOCATION	TO STRUCTURE	STATION	LOCATION	DIA. INCH	LENGTH	PIPE CLASS	INLET ELEV.	DISCH. ELEV.
010	CB33	500+48	33' RT	MH14	500+48	13' LT	15	20'	III	669.12	668.51
	MH14	500+48	13' LT	MH15	501+35	13' LT	30	87'	III	666.03	665.76
	MH16	503+25	13' LT	MH15	501+35	13' LT	24	190'	III	668.38	667.96
	CB35	501+64	54' LT	CB34	501+28	59' LT	12	36'	III	670.52	670.41
	CB34	501+28	59' LT	EXIST. MH	501+35	32' LT	15	47'	III	670.41	670.33
	CB36	503+25	34' LT	MH16	503+25	13' LT	15	21'	III	669.97	669.90
	CB37	503+25	44' RT	MH16	503+25	13' LT	15	56'	III	669.99	669.82
	CB58	505+93	59' LT	CB38	506+29	59' LT	12	36'	III	670.91	670.83
	MH17	506+30	8' LT	MH16	503+25	13' LT	24	305'	III	669.54	668.38
	MH18	508+68	8' LT	MH17	506+30	8' LT	18	238'	III	669.83	669.54
	CB38	506+29	59' LT	MH17	506+30	8' LT	15	51'	III	670.83	670.67
	CB39	508+74	28' LT	MH18	508+68	8' LT	15	20'	III	670.18	670.13
	CB40	508+74	28' RT	MH18	508+68	8' LT	15	36'	III	670.18	670.10
	CB42	511+20	44' RT	CB43	511+80	44' RT	12	60'	III	670.80	670.62
	CB43	511+80	44' RT	MH20	511+86	8' LT	15	52'	III	670.62	670.46
	MH22	516+51	8' LT	MH21	513+45	8' LT	24	306'	III	668.34	667.50
	MH21	513+45	8' LT	MH20	511+86	8' LT	24	155'	III	667.50	667.02
	MH20	511+86	8' LT	MH19	511+61	41' LT	24	41'	III	667.02	666.90
	CB44	513+76	28' LT	MH21	513+45	8' LT	15	37'	III	669.83	669.72
	CB45	513+76	28' RT	MH21	513+45	8' LT	15	46'	III	669.83	669.69
	CB59	516+15	49' LT	CB46	516+49	49' LT	12	34'	III	670.72	670.58
	CB60	516+15	54' RT	CB47	516+49	54' RT	12	34'	III	673.75	670.62
	CB46	516+49	49' LT	MH22	516+51	8' LT	15	41'	III	670.58	670.46
	CB47	516+49	54' RT	MH22	516+51	8' LT	15	62'	III	670.62	670.43
	MH23	520+27	8' LT	MH23	516+51	8' LT	24	376'	III	669.30	668.34
	MH24	521+06	8' LT	MH23	520+27	8' LT	24	79'	III	669.47	669.30
	CB48	520+37	28' LT	MH23	520+27	8' LT	15	22'	III	670.57	670.51
	CB49	520+37	28' RT	MH23	520+27	8' LT	15	37'	III	670.57	670.46
	CB52	521+48	55' LT	CB50	521+06	55' LT	12	40'	III	670.39	670.27
	CB50	521+06	55' LT	MH24	521+06	8' LT	15	47'	III	670.27	670.14
	CB53	521+44	54' RT	CB51	521+08	54' RT	12	36'	III	670.44	670.33
	CB51	521+08	54' RT	MH24	521+06	8' LT	15	62'	III	670.33	670.14
	MH25	524+24	8' LT	MH24	521+06	8' LT	24	318'	III	670.30	669.47
MH26	525+44	8' LT	MH25	524+24	8' LT	24	120'	III	670.57	670.30	
CB54	524+37	28' LT	MH25	524+24	8' LT	15	22'	III	670.93	670.87	
CB55	524+37	28' RT	MH25	524+24	8' LT	15	38'	III	670.93	670.82	
CB56	525+44	43' LT	MH26	525+44	8' LT	15	35'	III	671.01	670.91	
CB57	525+44	43' RT	MH26	525+44	8' LT	15	51'	III	671.05	670.88	
040	MH4	479+32	51' RT	EXIST. MH	479+41	185' RT	21	134'	III	665.88	665.35
	MH8	487+98	8' LT	MH9	489+70	8' LT	24	172'	III	670.26	669.82
	MH9	489+70	8' LT	MH10	492+52	8' LT	24	282'	III	669.82	668.97

PAVEMENT MARKING EPOXY

GROUP CODE	STA. - STA.	4 - INCH L.F.	8 - INCH L.F.	RAILROAD CROSSING EACH	STOP LINE 18 - INCH L.F.	CROSSWALK 12 - INCH L.F.	ARROWS TYPE 2 EACH	ARROWS TYPE 3 EACH	WORDS EACH	CURB RAMP L.F.	
010	474+42-480+00	1154	--	--	64	874	--	--	--	128	
	480+00-485+00	962	--	--	16	45	--	--	--	32	
	485+00-490+50	1185	--	4	38	522	--	--	--	64	
	490+50-495+50	969	--	--	40	464	--	--	--	64	
	495+50-501+00	1212	50	--	32	432	1	--	1	64	
	501+00-506+11	1224	153	--	56	464	2	1	2	96	
	506+11-511+46	1372	--	--	32	352	--	--	--	64	
	511+46-517+00	1373	70	--	56	544	1	1	1	96	
	517+00-522+00	1147	--	--	32	348	--	--	--	64	
	522+00-527+25	1259	--	--	32	348	--	--	--	64	
	040	485+00-490+50 (PARKING LANES)	36	--	--	--	--	--	--	--	--
		495+50-501+00 (PARKING LANES)	146	--	--	--	--	--	--	--	--
		501+00-506+11 (PARKING LANES)	86	--	--	--	--	--	--	--	--
TOTAL =		12125	273	4	398	4393	4	2	4	736	

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

TRAFFIC CONTROL

GROUP CODE	PHASE	DRUMS DAYS	BARRICADES DAYS	SIGNS DAYS	WARNING LIGHTS, TYPE A DAYS	WARNING LIGHTS, TYPE C DAYS	TEMP. PAVT. MARKING L.F.
010	PHASE I	4824	840	864	432	384	4890
	PHASE II	23760	6000	5520	2240	2560	11580
	PHASE III	22960	5840	5840	2560	1760	12290
TOTAL		51544	12680	12224	5232	4704	28760

LANDMARK REFERENCE MONUMENTS AND ALUMINUM COVERS

GROUP CODE	STATION	LOCATION	QUANTITY EACH
010	475+17	30' RT	1
	501+72	35' RT	1
	516+07	35' LT	1
TOTAL			3

GEOTEXTILE FABRIC, TYPE DF

GROUP CODE	STA.-STA.	S.Y.
010	474+42-480+00	749
	480+00-485+00	667
	485+00-490+50	736
	490+50-495+50	651
	495+50-501+00	685
	501+00-506+11	663
	506+11-511+46	752
	511+46-517+00	724
	517+00-522+00	668
	522+00-527+25	690
TOTALS		6985

TOPSOIL, MULCHING, FERTILIZING, SEEDING & SODDING

GROUP CODE	STA.-STA.	TOPSOIL S.Y.	MULCH S.Y.	FERT. CWT.	SEED LBS.	TEMP SEED LBS.	SOD S.Y.
010	474+42-480+00	1313		0.8			1313
	480+00-485+00	1812		1.1			1812
	485+00-490+50	845		0.5			845
	490+50-495+50						
	495+50-501+00						
	501+00-506+11	738		0.5			738
	506+11-511+46	1544		1			1544
	511+46-517+00	1509		1			1509
	517+00-522+00	1394		0.9			1394
	522+00-527+25	1478		0.9			1478
030	BORROW PITS & WASTE AREAS		2500		100	100	
	483+86, 45-92' RT	10					10
	483+86, 115-142' RT	6					6
	521+10, 70-152' LT	18					18
	521+10, 162-192' LT	7					7
	520+49-521+09, 210'	9					9
TOTALS		10683	2500	6.7	100	100	10683

SIDEWALK

GROUP CODE	STA.-STA.	CONC. SDWK. 4-INCH S.F.	SELECTED BORROW EXC., SPECIAL TONS
020	474+42-480+00	5541	51
	480+00-485+00	5583	52
	485+00-490+50	7847	73
	490+50-495+50	9050	84
	495+50-501+00	10653	99
	501+00-506+11	4373	40
	506+11-511+46	6644	61
	511+46-517+00	4246	39
	517+00-522+00 LT	2914	31
	517+00-517+40 RT	424	4.5
040	522+00-525+50 LT	2116	22
	517+40-522+00 RT	2529	27
	522+00-527+25 RT	2418	26
	525+50-527+25 LT	1147	12
TOTALS		65485	621.5

EARTHWORK SUMMARY

STA. 474+42 TO 527+75	PHASE I (C.Y.)	PHASE II (C.Y.)	PHASE III (C.Y.)	TOTAL (C.Y.)
UNC. EXC.	2,416	14,308	12,253	28,977
UNC. EXC. - SDWK*		224	211	435
EBS - UNDIS.**		2,150	1,840	3,990
EBS		406	345	751
EBS BACKFILL+25% SHR		508	431	939
FILL		224	619	843
FILL+25% SHR		280	774	1,054
WASTE	2,416	16,300	13,444	32,160
PETRO. CONT. SOIL	255TON	1390TON	910TON	2555TON

* NOT SHOWN IN DETAIL SUMMARY OR ON X-SECTS
** QUANTITY FOR AREAS BACKFILLED WITH BREAKER RUN

SAWING EXISTING PAVEMENT

GROUP CODE	STA. - STA.	SAWING EXISTING PAVEMENT L.F.	SAWING CONCRETE PAVEMENT, FULL DEPTH L.F.
010	474+42-480+00	380	606
	480+00-485+00	22	500
	485+00-490+50	24	537
	490+50-495+50	82	500
	495+50-501+00	65	550
	501+00-506+11	75	511
	506+11-511+46	58	535
	511+46-517+00	110	554
	517+00-522+00	64	500
	522+00-527+25	42	525
030	483+86, 90-115' RT		48
	499+80, 50-215' RT	330	
	521+10, 152-162' LT		20
	521+10, 193-209' LT	32	
040	479+41	260	
TOTAL		1544	5386

POLYSTYRENE INSULATION BOA

GROUP CODE	STATION/LOCATION	S.F.
040	474+96 46' LT	64
	478+00 20' LT	64
	478+95 8' LT	64
	480+02 8' LT	64
	480+49 8' LT	64
	481+44 20' LT	64
	481+44 8' LT	64
	481+44 8' RT	64
	481+76 8' LT	64
	482+52 8' LT	64
	482+98 8' LT	64
	483+39 20' LT	64
	487+13 20' LT	64
	488+19 8' LT	64
	488+80 8' LT	64
	489+70 20' LT	64
	490+39 8' LT	64
	491+26 8' LT	64
	491+62 8' LT	64
	492+52 20' LT	64
	492+72 8' LT	64
	492+90 8' LT	64
	492+96 20' LT	64
	494+93 8' LT	64
	495+42 8' LT	64
	496+73 20' LT	64
	497+91 8' LT	64
	498+40 9' LT	64
	498+49 20' LT	64
	500+25 13' LT	64
	500+45 20' LT	64
	501+35 20' LT	64
	501+54 13' LT	64
	501+54 55' LT	64
	503+25 20' LT	64
	506+25 20' LT	64
	506+82 8' LT	64
	507+49 8' LT	64
	508+68 8' LT	64
	508+74 20' RT	64
	511+64 50' RT	64
	511+80 20' RT	64
	512+98 8' LT	64
	513+65 20' LT	64
	513+78 8' LT	64
	513+78 28' RT	64
	514+07 8' LT	64
	514+65 8' LT	64
	515+15 8' LT	64
	516+40 8' LT	64
	516+40 54' RT	64
	516+50 20' LT	64
	517+92 8' LT	64
	518+50 8' LT	64
	519+79 8' LT	64
	520+37 20' LT	64
	522+07 20' LT	64
	522+81 8' LT	64
	522+71 8' LT	64
	523+82 8' LT	64
	524+37 20' LT	64
	524+75 8' LT	64
	525+31 8' LT	64
	525+40 20' LT	64
TOTAL		4096

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

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

PERMANENT SIGNING
GROUP CODE 040

STATION	LOCATION	STEEL POSTS TYPE H 7'	WOOD POSTS 4" x 4" 16'	REFLECTIVE SIGN CODE	REMARKS	SF
474+60	33' RT	1		I-2-3		11.00
474+70	48' LT	1	1	R1-1		6.25
475+10	48' RT	1	1	R1-1		6.25
475+15	33' LT	2	2	SP-12	MOUNT WITH FLASHING WARNING	16.50
475+46	33' RT			R2-1	BAND TO STREET LIGHT POLE	3.00
475+46	33' RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
476+00	33' RT	1	1	S1-1	BAND TO STREET LIGHT POLE	3.00
476+60	32.5' LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
477+75	32.5' RT			S4-51, R7-1D	BAND TO STREET LIGHT POLE	11.00
478+09	32.5' LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
479+12	32.5' RT	1	1	S2-1, R7-1D	BAND TO STREET LIGHT POLE	12.00
479+20	48' LT	1	1	R1-1		6.25
479+62	48' RT	1	1	R1-1		6.25
479+71	32.5' LT	1	1	S2-1, R7-1D	BAND TO STREET LIGHT POLE	12.00
479+95	30' RT	1	1	R7-1D	BAND TO STREET LIGHT POLE	3.00
480+50	30' RT	2	2	SP-11, R7-1D	BAND TO STREET LIGHT POLE	18.75
481+00	32.5' LT			S4-51, R7-1D	BAND TO STREET LIGHT POLE	11.00
482+05	32.5' RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
483+10	32.5' LT			S1-1, R7-1D	BAND TO STREET LIGHT POLE	12.00
483+83	48' RT	1	1	R1-1		6.25
484+15	32.5' RT			M1-6, M2-1, R7-1D	BAND TO STREET LIGHT POLE	9.12
484+83	32.5' LT			M3-3, M1-6, R7-1D	BAND TO STREET LIGHT POLE	9.00
485+00	32' RT	1	1	W10-1	BAND TO STREET LIGHT POLE	7.07
485+55	32.5' RT			D1-2, R7-1D	BAND TO STREET LIGHT POLE	10.07
486+39	32.5' LT			W10-1, R7-1D	BAND TO STREET LIGHT POLE	10.07
486+99	32.5' RT			R7-1R	BAND TO STREET LIGHT POLE	3.00
487+50	49' LT		2	M4-6, M1-6, M1-6, M6-4	BAND TO STREET LIGHT POLE	12.19
487+54	32.5' LT			R2-1, R7-1L		8.00
487+57	32' RT		2	M3-4, M1-6, M6-1, M3-1, M1-6, M6-1	BAND TO STREET LIGHT POLE	18.12
487+71	49' LT	1	1	R1-1		6.25
488+30	49' RT	1	1	R1-1		6.25
488+38	32' RT	2		D9-1R		4.00
488+40	44' LT		2	M3-3, M1-6, M6-1, M3-4, M1-6, M6-1		18.12
488+62	42' LT			R7-1L, R7-1R	BAND TO STREET LIGHT POLE	3.00
489+40	32' RT	2		S1-1, R7-1R		9.00
489+74	42' LT			R7-1L	BAND TO STREET LIGHT POLE	3.00
490+14	42' LT			D1-2, R7-2-D	BAND TO STREET LIGHT POLE	6.00
490+14	42' RT			S4-51	BAND TO STREET LIGHT POLE	8.00
491+20	42' LT	2		R7-1R	BAND TO STREET LIGHT POLE	3.00
491+67	42' RT			S2-1, R7-1L	BAND TO STREET LIGHT POLE	12.00
491+67	42' LT			M1-6, M2-1	BAND TO STREET LIGHT POLE	6.19
492+07	56' RT	1	1	R1-1		6.25
492+56	56' RT	1	1	R1-1		6.25
492+73	32' LT	1	1	S2-1		9.00
492+97	42' RT			R7-1L	BAND TO STREET LIGHT POLE	3.00
492+97	46' RT			M3-1, M1-6	BAND TO STREET LIGHT POLE	6.00
493+89	42' RT	2		R7-1R	BAND TO STREET LIGHT POLE	3.00
494+34	42' LT			S4-51	BAND TO STREET LIGHT POLE	8.00
494+75	42' RT	2		R2-1, R7-2-D	BAND TO STREET LIGHT POLE	8.00
495+47	42' LT	2		R7-1L	BAND TO STREET LIGHT POLE	3.00
495+87	42' RT			R7-1L	BAND TO STREET LIGHT POLE	3.00
495+87	42' LT	1	1	S1-1, R7-2-D	BAND TO STREET LIGHT POLE	9.00
496+22	56' LT			R1-1		6.25
496+74	56' RT			R1-1		6.25
497+31	42' LT	1	1	R7-1L	BAND TO STREET LIGHT POLE	3.00
497+31	42' RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
497+31	42' RT	2		R7-1R	BAND TO STREET LIGHT POLE	3.00
498+28	42' RT	2		R7-52-R		3.00
498+30	42' LT	2		R7-52-L		3.00
498+50	42' LT			R7-52-L		3.00
499+04	42' RT			R7-2-R	BAND TO STREET LIGHT POLE	3.00
499+04	42' LT	2		M3-3, M1-6, R7-2-L	BAND TO STREET LIGHT POLE	9.00
499+37	42' RT	2		R7-1L	BAND TO STREET LIGHT POLE	3.00
499+41	42' LT	2		R7-1R	BAND TO STREET LIGHT POLE	3.00
500+77	37'8" LT			R2-1, R7-1D	BAND TO STREET LIGHT POLE	8.00
500+77	42' RT	1	1	R1-1		6.25
501+26	56' LT			R1-1		6.25
501+75	56' RT	1	1	R1-1		6.25
501+75	108' RT	2		R3-55-R		5.00
502+12	37'3" LT			R7-1R	BAND TO STREET LIGHT POLE	3.00
502+17	36'7" RT			R7-1L	BAND TO STREET LIGHT POLE	3.00
503+26	37' RT	2		R7-7-D		3.00
503+79	36'7" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
503+79	37'3" LT	2		R7-1D	BAND TO STREET LIGHT POLE	3.00
504+70	34' LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
505+41	38'5" RT			M3-1, M1-6, R7-1D	BAND TO STREET LIGHT POLE	9.00
505+41	38'5" LT	2		R7-7-D	BAND TO STREET LIGHT POLE	3.00
505+80	41' LT	1	1	R1-1		6.25
505+90	50' LT	1	1	R1-1		6.25
506+32	48' RT			R1-1		6.25
506+47	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
506+47	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
507+61	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
508+74	32'5" LT			M3-3, M1-6, R7-1D	BAND TO STREET LIGHT POLE	9.00
509+87	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
511+00	32' RT	3		R14-1, M6-1, 15-1, M6-1	BAND TO STREET LIGHT POLE	13.12
511+00	32'5' LT			R2-1, R7-1D	BAND TO STREET LIGHT POLE	8.00
511+25	46' LT	1	1	R1-1		6.25
511+75	118' RT	2		R3-55-R		5.00
511+75	48' RT	1	1	R1-1		6.25
511+85	32' LT	1	1	R14-1, M6-1		6.06
512+02	32'5" RT			R2-1, R7-1D	BAND TO STREET LIGHT POLE	8.00
512+98	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
513+94	32'5" RT			M1-6, M3-1, R7-1D	BAND TO STREET LIGHT POLE	9.00
514+90	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
515+86	32'5" RT			D9-2, M86-1, R7-1D	BAND TO STREET LIGHT POLE	10.06
516+10	48' LT	1	1	R1-1		6.25
516+52	48' RT	1	1	R1-1		6.25
516+81	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
517+79	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
518+76	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
519+74	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
520+71	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
521+05	48' LT	1	1	R1-1		6.25
521+47	48' RT	1	1	R1-1		6.25
521+71	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
522+73	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
523+73	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
524+73	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
525+05	100' RT	1	1	W14-1		6.25
525+47	48' LT	1	1	R1-1		6.25
525+47	48' RT	1	1	R1-1		6.25
525+79	32'5" RT			R7-1D	BAND TO STREET LIGHT POLE	3.00
526+85	32'5" LT			R7-1D	BAND TO STREET LIGHT POLE	3.00
TOTALS		67	36			704.44

PLANT DATA CHART

SYMBOL	COMMON NAME	SCIENTIFIC NAME	TYPE	AVG. MATURE HEIGHT	SIZE WHEN PLANTED	ROOT ZONE MODE	BALL/POT DIAM.	MINIMUM SIZE DEPTH	PLANT HOLE DIAM.	PLANT HOLE DEPTH	BRACE OR GUY	FERT. UNITS REQ'D	RODENT PROTECT. REQ'D	SHEET 1 EACH	SHEET 2 EACH	SHEET 3 EACH	SHEET 4 EACH	SHEET 5 EACH	TOTAL EACH
TALL GROWING DECIDUOUS TREES																			
GA RM	ASH, MARSHALL'S SEEDLESS GREEN MAPLE, RED	FRAXINUS PENNSYLVANICA "MARSHALL'S SEEDLESS"	1	75'	2-INCH CAL	B&B	24"	16"	36"	16"	BRACE	3	YES	8	1	0	6	10	25
		ACER RUBRUM	1	75'	2-INCH CAL	B&B	24"	16"	36"	16"	BRACE	3	YES	8	2	0	12	9	31
LOW GROWING DECIDUOUS TREES																			
DH CA MA	HAWTHORN, DOWNY CRABAPPLE, THUNDERCHILD ASH, MOUNTAIN	CRATAEGUS MOLLIS	3	25'	2-INCH CAL	B&B	24"	16"	36"	16"	BRACE	3	YES	2	2	5	3	3	15
		MALUS "THUNDERCHILD"	3	20'	2-INCH CAL	B&B	24"	16"	36"	16"	BRACE	3	YES	0	0	5	2	1	8
		SORBUS AUCUPARIA	3	25'	2-INCH CAL	B&B	24"	16"	36"	16"	BRACE	3	YES	3	2	0	5	7	17
MEDIUM GROWING EVERGREEN TREES																			
BS BS1	SPRUCE, BLUE SPRUCE, BLUE	PICEA PUNGENS	4	60'	6-FT HT	B&B	22"	15"	34"	15"	BRACE	4	NO	0	0	0	1	3	4
		PICEA PUNGENS	4	60'	4-FT HT	B&B	16"	12"	28"	12"	BRACE	4	NO	1	0	0	1	1	3

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

ELECTRICAL SERVICE, LIGHTING CONTROL CABINET & CONCRETE CONTROL CABINET BASES. GROUP CODE 030			
LOCATION	LIGHTING CONTROL CABINET EACH	CONCRETE CONTROL CABINET BASE TYPE 6 EACH	ELECTRICAL SERVICE, LIGHTING, METER BREAKER PEDESTAL L.S.
STA 483+30. 48.0' LT	1	1	1
STA 501+81. 65.0' RT	1	1	1
STA 521+00. 68.0' LT	1	1	1
TOTAL	3	3	3

REMOVAL & RELOCATION OF REDUCED SPEED WARNING LIGHT & CONTROLLER GROUP CODE 040				
EXISTING LOCATION	RELOCATED LOCATION	RELOCATED REDUCED SPEED WARNING LIGHT & CONTROLLER EACH	WOOD POSTS 4x4-INCH x 14- FEET EACH	ELECTRICAL SERVICE, WARNING LIGHT, METER SOCKET L.S.
STA 475+20 25' FT.±	STA 435+35 32.3' RT.	1	1	1
TOTAL		1	1	1

LIGHTING UNIT REMOVALS GROUP CODE 040			
LOCATION	REMOVING WOOD LIGHTING POLES - EACH	REMOVING MAST ARMS EACH	REMOVING LUMINAIRES EACH
STA 475+15, 22' RT.±	1	1	1
STA 476+75, 22' LT.±	1	1	1
STA 477+55, 24' RT.±	1	1	1
STA 478+95, 24' LT.±	1	1	1
STA 479+75, 25' RT.±	1	1	1
STA 480+90, 22' LT.±	1	1	1
STA 482+05, 22' RT.±	1	1	1
STA 483+25, 23' LT.±	1	1	1
STA 483+85, 32' RT.±	1	1	1
STA 484+95, 32' LT.±	1	1	1
STA 486+60, 34' RT.±	1	1	1
STA 487+45, 35' LT.±	1	1	1
STA 488+45, 35' RT.±	1	1	1
STA 489+70, 34' LT.±	1	1	1
STA 490+70, 34' RT.±	1	1	1
STA 491+98, 32' LT.±	1	1	1
STA 492+65, 32' RT.±	1	1	1
STA 493+70, 32' LT.±	1	1	1
STA 494+80, 32' RT.±	1	1	1
STA 496+20, 32' LT.±	1	1	1
STA 496+90, 32' RT.±	1	1	1
STA 498+20, 32' LT.±	1	1	1
STA 499+85, 32' RT.±	1	1	1
STA 501+05, 33' LT.±	1	1	1
STA 502+05, 24' RT.±	1	1	1
STA 503+40, 24' LT.±	1	1	1
STA 504+58, 24' RT.±	1	1	1
STA 505+70, 30' LT.±	1	1	1
STA 506+60, 24' RT.±	1	1	1
TOTAL	29	29	29

PULL BOXES GROUP CODE 030		
PULL BOX NUMBER	LOCATION	PULL BOXES 24 X 36 - INCH EACH
PB-1	STA 483+30, 32.0' LT	1
PB-2	STA 479+85, 32.0' LT	1
PB-3	STA 475+37, 32.0' LT	1
PB-4	STA 484+78, 31.9' LT	1
PB-5	STA 485+43, 32.1' RT	1
PB-6	STA 487+10, 32.0' RT	1
PB-7	STA 486+50, 32.0' LT	1
PB-8	STA 488+55, 41.0' LT	1
PB-9	STA 483+13, 32.1' LT	1
PB-10	STA 479+00, 32.0' RT	1
PB-11	STA 474+48, 31.7' RT	1
PB-12	STA 487+53, 32.0' RT	1
PB-13	STA 488+49, 41.0' RT	1
PB-14	STA 491+80, 41.0' RT	1
PB-15	STA 501+97, 37.4' RT	1
PB-16	STA 501+97, 37.6' LT	1
PB-17	STA 496+05, 41.0' LT	1
PB-18	STA 492+80, 41.1' LT	1
PB-19	STA 500+95, 36.0' RT	1
PB-20	STA 497+05, 41.0' RT	1
PB-21	STA 496+05, 41.0' RT	1
PB-22	STA 510+88, 31.9' RT	1
PB-23	STA 521+05, 68.0' LT	1
PB-24	STA 515+80, 32.0' LT	1
PB-25	STA 512+00, 32.0' LT	1
PB-26	STA 521+83, 31.9' LT	1
PB-27	STA 525+65, 31.9' LT	1
PB-28	STA 520+75, 32.1' RT	1
PB-29	STA 516+70, 32.1' RT	1
PB-30	STA 524+82, 32.0' RT	1
TOTAL		* 30

* ADDITION QUANTITIES LISTED ELSEWHERE

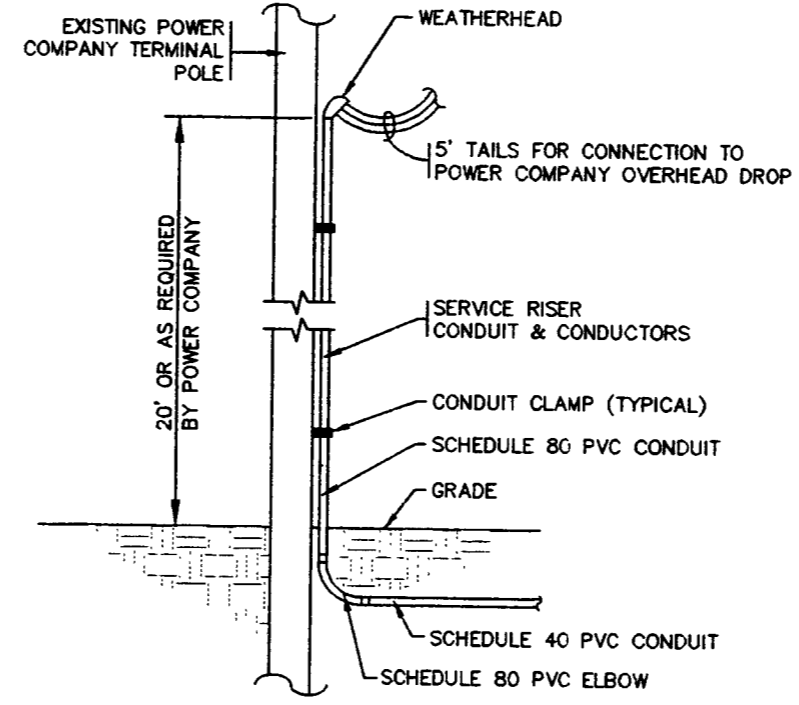
DATE: OCTOBER 24, 1995
 HVP JOB #22207
 SHEET #2320.01
 HVP DRAWING #023
 SCALE: 1/8" = 1'-0"

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
 + RISER CONDUIT ON TERMINAL BASE

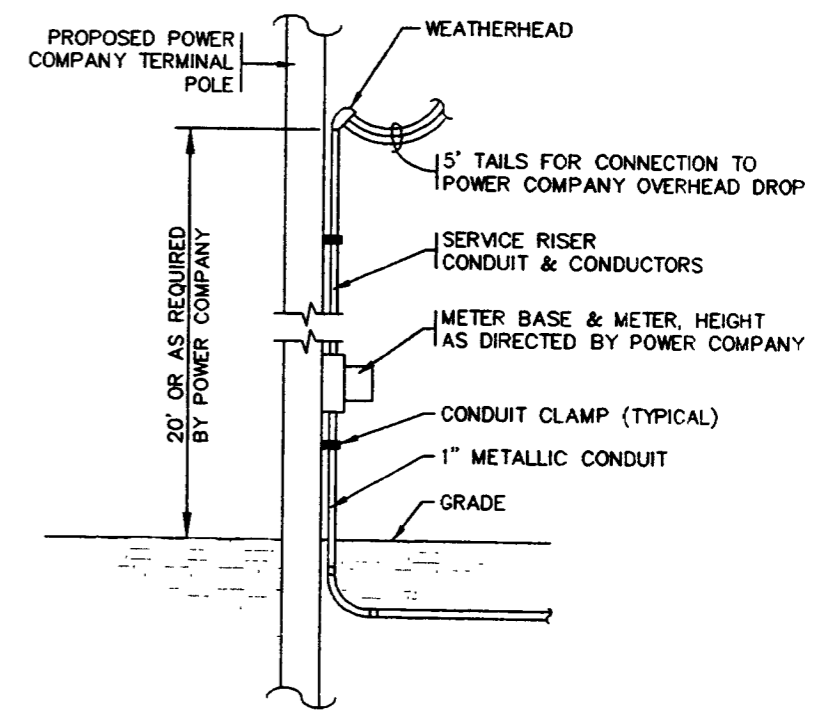
ELECTRICAL/LIGHTING QUANTITIES & DETAILS
TOWER AVENUE, CITY OF SUPERIOR
S.T.H. 35 DOUGLAS COUNTY

CONDUIT & ELECTRICAL WIRE		GROUP CODE						
FROM	TO	030	NONMETALLIC CONDUIT 2-INCH L.F.	NONMETALLIC CONDUIT SCHEDULE 80 2-INCH L.F.	METALLIC CONDUIT 1-INCH L.F.	ELECTRICAL WIRE, LIGHTING, NO. 10 L.F.	ELECTRICAL WIRE, LIGHTING, NO. 2 L.F.	ELECTRICAL WIRE, LIGHTING, SPECIAL, NO. 1/0 L.F.
LIGHTING CONTROL CABINET NO.1, STA 483+30, 48.0' LT.	PB-31, STA 483+84.4, 50.0' RT.		115				395	
PB-31, STA 483+84.4, 50.0' RT.	EXISTING POWER COMPANY TERMINAL POLE, STA 483+84, 140' RT.±		90				280	
EXISTING POWER COMPANY TERMINAL POLE, STA 483+84, 140' RT.±	EXISTING POWER COMPANY TERMINAL POLE, STA 483+84, 140' RT.±			+ 25			90	
LIGHTING CONTROL CABINET NO.2, STA 501+81, 65.0' RT.	PB-32, STA 499+95, 40.0' RT.		195					625
PB-32, STA 499+95, 40.0' RT.	EXISTING POWER COMPANY TERMINAL POLE, STA 499+80, 215' RT.±		190					580
EXISTING POWER COMPANY TERMINAL POLE, STA 499+80, 215' RT.±	EXISTING POWER COMPANY TERMINAL POLE, STA 499+80, 215' RT.±			+ 25				90
LIGHTING CONTROL CABINET NO.3, STA 521+00, 68.0' LT.	EXISTING POWER COMPANY TERMINAL POLE, STA 520+49, 210' LT.±		195				615	
EXISTING POWER COMPANY TERMINAL POLE, STA 520+49, 210' LT.±	EXISTING POWER COMPANY TERMINAL POLE, STA 520+49, 210' LT.±			+ 25			90	
RELOCATED REDUCED SPEED WARNING LIGHT & CONTROLLER, STA 475+35, 32.3' RT.	METER ON PROPOSED POWER COMPANY TERMINAL POLE, STA 475+18, 50' RT.±				30	110		
PROPOSED POWER COMPANY TERMINAL POLE, STA 475+18, 50' RT.±	PROPOSED POWER COMPANY TERMINAL POLE, STA 475+18, 50' RT.±				+ 15	70		
TOTAL			* 785	75	45	180	1,470	1,295

PULL BOXES			GROUP CODE
PULL BCX NUMBER	LOCATION	PULL BOXES 24 X 36 - INCH EACH	030
FB-31	STA 483+84.4, 50.0' RT.	1	
FB-32	STA 499+95, 40.0' RT.	1	
TOTAL		* 2	



RISER POLE DETAIL
 LIGHTING CONTROL CABINETS



RISER POLE DETAIL
 REDUCED SPEED WARNING LIGHT

DATE: OCTOBER 24, 1995
 HVT JOB #032005
 HVT DRAWING PCT: 1/8"=1'-0"
 REVISED: SEH DRAWING

LIGHTING UNITS GROUP CODE 030											
POLE NUMBER	BASE LOCATION	CONCRETE BASE, TYPE 5, SPECIAL EACH	POLES TYPE 5 30- FEET EACH	POLES TYPE 5 35- FEET EACH	POLES SPECIAL 38.5- FEET EACH	MAST ARMS SINGLE MEMBER SPECIAL 4 - FT. EACH	MAST ARMS SINGLE MEMBER SPECIAL 8 - FT. EACH	MAST ARMS SINGLE MEMBER SPECIAL 12 - FT. EACH	LUMINAIRES SPECIAL 150 WATT HPS EACH	LUMINAIRES SPECIAL 200 WATT HPS EACH	ELECTRICAL WRE, LIGHTING, NO. 12 LF.
H-1	STA 520+ 71, 32.5' LT	1		1		1			1		125
H-2	STA 518+ 76, 32.5' LT	1		1		1			1		125
H-3	STA 516+ 81, 32.5' LT	1		1		1			1		125
H-4	STA 514+ 90, 32.5' LT	1		1		1			1		125
H-5	STA 512+ 98, 32.5' LT	1		1		1			1		125
H-6	STA 511 + 70.6 60.0' LT	1	1				1		1		120
H-7	STA 522+ 73, 32.5' LT	1		1		1			1		125
H-8	STA 524+ 73, 32.5' LT	1		1		1			1		125
H-9	STA 526+ 85, 32.5' LT	1		1		1			1		125
H-10	STA 519+ 74, 32.5' RT	1		1		1			1		125
H-11	STA 517+ 79, 32.5' RT	1		1		1			1		125
H-12	STA 515+ 86, 32.5' RT	1		1		1			1		125
H-13	STA 513+ 94, 32.5' RT	1		1		1			1		125
H-14	STA 512+ 02, 32.5' RT	1		1		1			1		125
H-15	STA 521+ 71, 32.5' RT	1		1		1			1		125
H-16	STA 523+ 73, 32.5' RT	1		1		1			1		125
H-17	STA 525+ 79, 32.5' RT	1		1		1			1		125
TOTAL		* 17	* 1	* 16		* 16	* 1		* 17		* 2,120

* ADDITIONAL QUANTITY LISTED ELSEWHERE

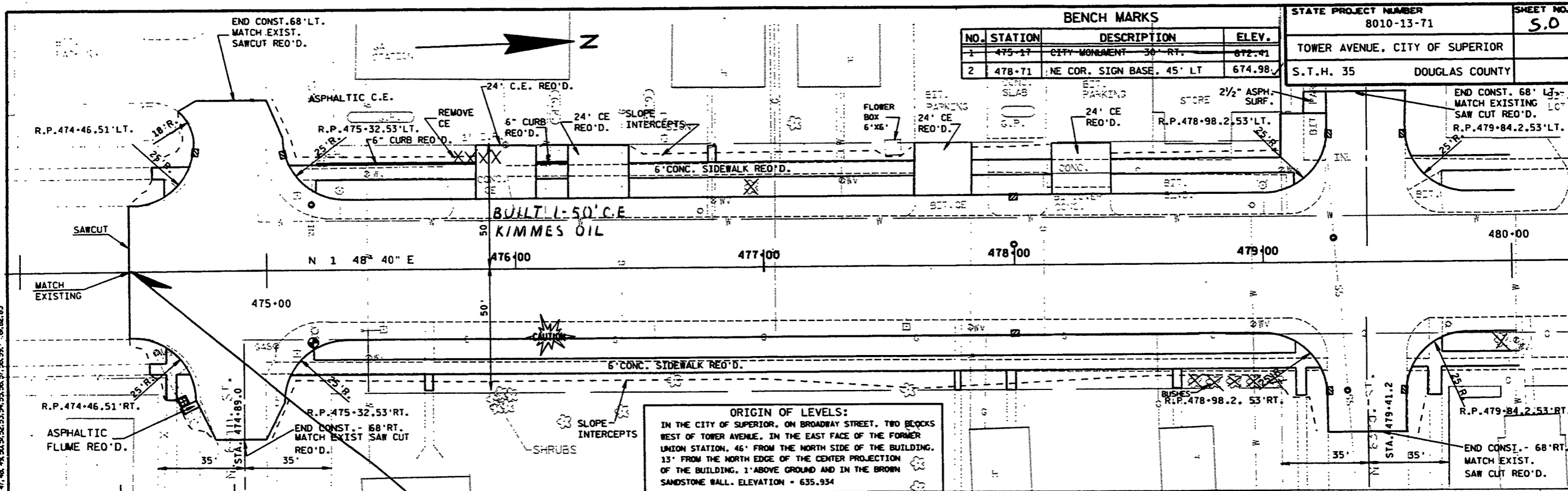
DATE: OCTOBER 24, 1985
 HVP JOB #82207
 SEH JOB #2320.01
 HVP DRAWING #522
 SCALE: 1/8"=1'-0"
 REVISED:

[A] CONDUIT INCLUDED WITH PB-5 TO PB-6 ROUTING, ABOVE.
 ‡ EMPTY CONDUIT.
 + SLEEVE UNDER DRIVEWAY OR ALLEY.
 * ADDITIONAL QUANTITIES LISTED ELSEWHERE

STATE PROJECT NUMBER	SHEET NO.
8010-13-71	3 M
ELECTRICAL/LIGHTING QUANTITIES TOWER AVENUE, CITY OF SUPERIOR S.T.H. 35 DOUGLAS COUNTY	

CONDUIT, ELECTRICAL WIRE & CABLE-IN-DUCT		GROUP CODE 030						
FROM	TO	NONMETALLIC CONDUIT 2-INCH L.F.	NONMETALLIC CONDUIT 3-INCH L.F.	CONDUIT, 3-INCH SPECIAL LF	ELECTRICAL WIRE, LIGHTING, NO. 6 L.F.	ELECTRICAL WIRE, LIGHTING, NO. 4 L.F.	CABLE-IN-DUCT 4 CONDUCTOR, NO. 6 L.F.	CABLE-IN-DUCT 4 CONDUCTOR, NO. 4 LF
LIGHTING CONTROL CABINET NO. 1, STA 483+30, 48.0' LT	PB-1 STA 483+30, 32.0' LT		30		235	235		
PB-1 STA 483+30, 32.0' LT	F-1 STA 483+10, 32.5' LT						30	
F-1 STA 483+10, 32.5' LT	F-2 STA 481+00, 32.5' LT						220	
F-2 STA 481+00, 32.5' LT	PB-2 STA 479+85, 32.0' LT	+ 40					125	
PB-2 STA 479+85, 32.0' LT	F-3 STA 478+89, 32.5' LT	95			415			
F-3 STA 478+89, 32.5' LT	F-4 STA 476+60, 32.5' LT	+ 80					240	
F-4 STA 476+60, 32.5' LT	PB-3 STA 475+37, 32.0' LT	+ 40					130	
PB-3 STA 475+37, 32.0' LT	F-5 STA 474+33, 32.5' LT	105			455			
PB-4 STA 483+30, 32.0' LT	PB-4 STA 484+78, 31.9' LT	+ 40						155
PB-4 STA 484+78, 31.9' LT	F-6 STA 484+83, 32.5' LT	5				105		
PB-4 STA 484+78, 31.9' LT	PB-5 STA 485+43, 32.1' LT	95				370		
PB-5 STA 485+43, 32.1' RT	PB-6 STA 487+10, 32.0' LT		90	80		695		
PB-6 STA 487+10, 32.0' RT	PB-7 STA 486+50, 32.0' LT	85				365		
PB-7 STA 486+50, 32.0' LT	F-7 STA 486+45, 32.5' LT	5				105		
PB-7 STA 486+50, 32.0' LT	F-8 STA 487+54, 3.25' LT	105				450		
F-8 STA 487+54, 3.25' LT	PB-8 STA 488+55, 41.0' LT	105				440		
PB-8 STA 488+55, 41.0' LT	F-12 STA 488+27.6, 56.0' LT.	30				305		
PB-8 STA 488+55, 41.0' LT	F-9 STA 488+62, 42.0' LT	10				60		
F-9 STA 488+62, 42.0' RT	F-10 STA 490+14, 45.8' LT	155				660		
F-10 STA 490+14, 45.8' RT	F-11 STA 491+67, 45.8' LT	155				660		
F-11 STA 491+67, 45.8' RT	PB-18 STA 492+80, 41.1' LT	‡ 115						
PB-1 STA 483+30, 32.0' RT	PB-9 STA 483+13, 32.1' RT		65		285	285		
PB-9 STA 483+13, 32.1' RT	F-13 STA 482+05, 32.5' RT						120	
F-13 STA 482+05, 32.5' RT	F-14 STA 479+95, 32.5' RT						220	
F-14 STA 479+95, 32.5' RT	PB-10 STA 479+00, 38.0' RT	95			415			
PB-10 STA 479+00, 38.0' RT	F-15 STA 477+75, 32.5' RT						135	
F-15 STA 477+75, 32.5' RT	F-16 STA 475+46, 32.5' RT						240	
F-16 STA 475+46, 32.5' RT	PB-11 STA 474+48, 31.7' RT	‡ 100						
PB-9 STA 483+13, 32.1' RT	F-17 STA 484+15, 32.5' RT	105				440		
F-17 STA 484+15, 32.5' RT	PB-5 STA 485+43, 32.1' RT	‡ 25						140
PB-5 STA 485+43, 32.1' RT	F-18 STA 485+48, 32.5' RT	5				105		
PB-5 STA 485+43, 32.1' RT	PB-6 STA 487+10, 32.0' RT	[A]				695		
PB-6 STA 487+10, 32.0' RT	F-19 STA 487+05, 32.5' RT.	5				105		
PB-6 STA 487+10, 32.0' RT	PB-12 STA 487+53, 32.0' RT	40				185		
PB-12 STA 487+53, 32.0' RT	F-23 STA 487+68.5, 60.0' RT	35				345		
PB-12 STA 487+53, 32.0' RT	PB-13 STA 488+49, 41.0' RT	105				445		
PB-13 STA 488+49, 41.0' RT	F-20 STA 488+62, 42.0' RT	15				85		
F-20 STA 488+62, 42.0' RT	F-21 STA 490+14, 45.8' RT	150				640		
F-21 STA 490+14, 45.8' RT	F-22 STA 491+67, 42.0' RT	160				675		
F-22 STA 491+67, 42.0' RT	PB-14 STA 491+80, 41.0' RT	‡ 15						
PB-14 STA 491+80, 41.0' RT	G-19 STA 492+97, 45.8' RT	‡ 115						
LIGHTING CONTROL CABINET NO. 2, STA 501+81, 65.0' RT	PB-15 STA 501+97, 37.4' RT		70			1,330		
PB-15 STA 501+97, 37.4' RT	PB-16 STA 501+97, 37.6' LT		75			650		
PB-16 STA 501+97, 37.6' LT	G-20 STA 501+66.75, 66.0' LT	40				385		
PB-16 STA 501+97, 37.6' LT	G-1 STA 500+77, 37.8' LT	120				515		
G-1 STA 500+77, 37.8' LT	G-2 STA 499+04, 48.7' LT	175				740		
G-2 STA 499+04, 48.7' LT	G-3 STA 497+31, 45.8' LT	175				740		
G-3 STA 497+31, 45.8' LT	PB-17 STA 496+05, 41.0' LT	125				535		
PB-17 STA 496+05, 41.0' LT	G-4 STA 495+87, 42.0' LT	20				75		
G-4 STA 495+87, 42.0' LT	G-5 STA 494+34, 42.0' LT	155				655		
G-5 STA 494+34, 42.0' LT	G-6 STA 492+97, 42.0' LT	140				595		
G-6 STA 492+97, 42.0' LT	PB-18 STA 492+80, 41.1' LT	‡ 15						
	TOTAL	* 3,200	* 330	80	* 1,805	* 14,675	* 1,460	* 295

DATE: OCTOBER 24, 1985
 HVP JOB #2207
 HVP DRAWING #020
 SCALE: 1/8"=1'-0"
 REVISED.



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	475+17	CITY MONUMENT 30' RT.	672.41
2	478+71	NE COR. SIGN BASE 45' LT	674.98

STATE PROJECT NUMBER	8010-13-71	SHEET NO.	S.0
TOWER AVENUE, CITY OF SUPERIOR		DOUGLAS COUNTY	
S.T.H. 35			

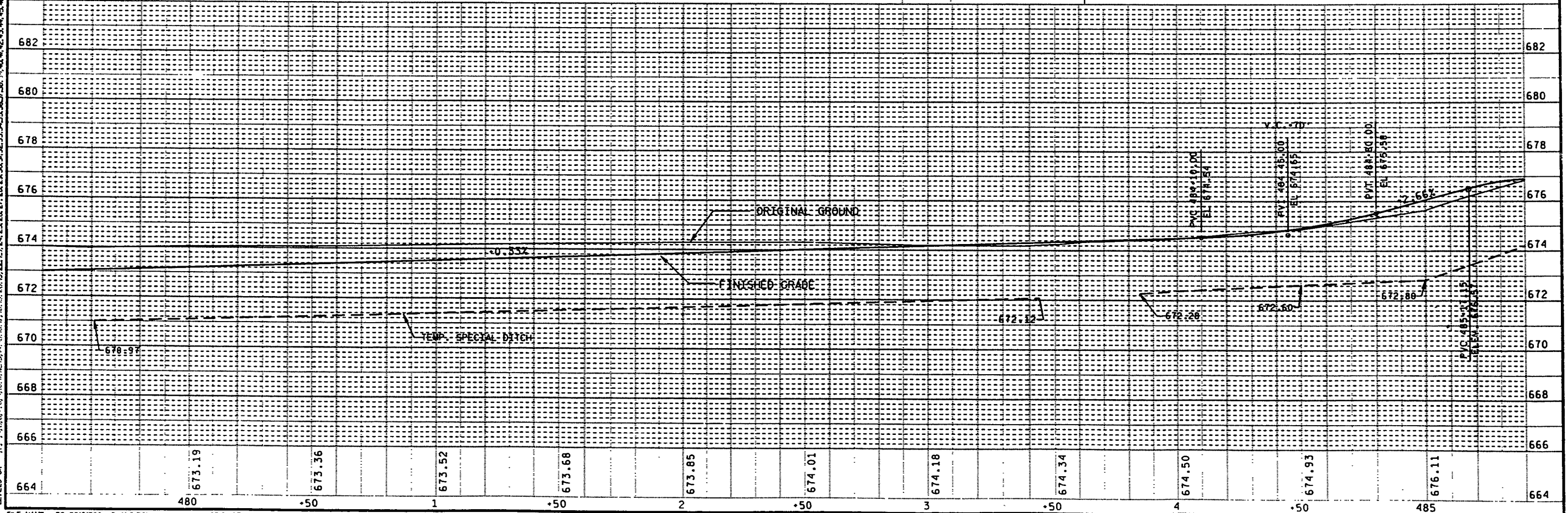
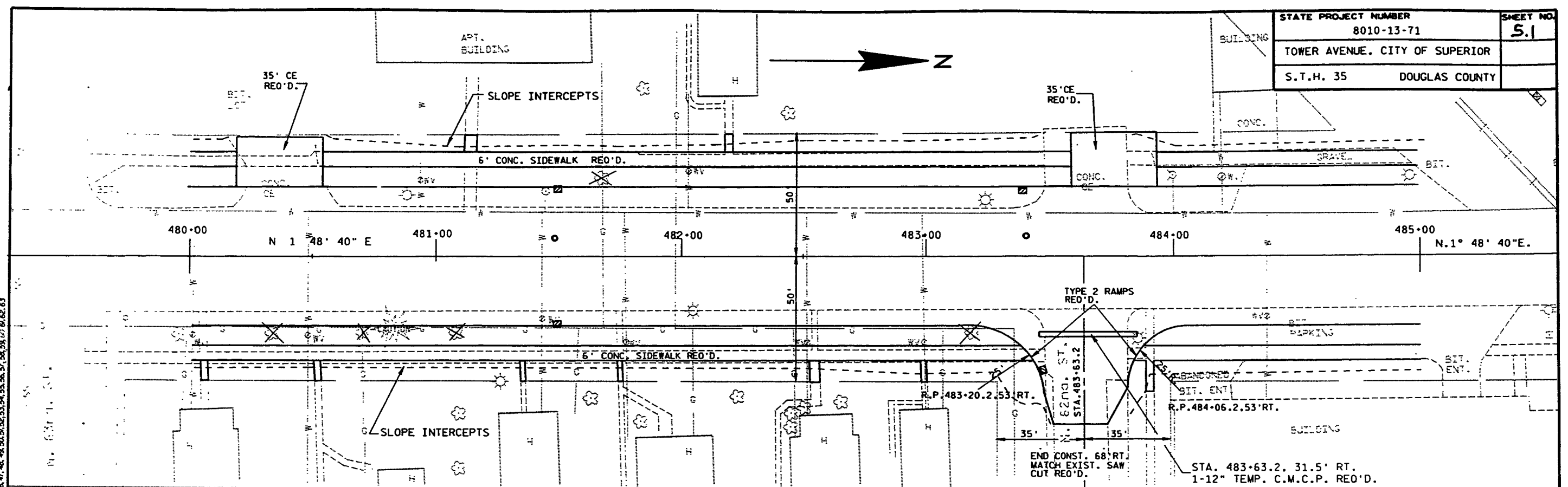
ORIGIN OF LEVELS:
 IN THE CITY OF SUPERIOR, ON BROADWAY STREET, TWO BLOCKS WEST OF TOWER AVENUE, IN THE EAST FACE OF THE FORMER UNION STATION, 46' FROM THE NORTH SIDE OF THE BUILDING, 13' FROM THE NORTH EDGE OF THE CENTER PROJECTION OF THE BUILDING, 1' ABOVE GROUND AND IN THE BROWN SANDSTONE WALL. ELEVATION = 635.934

YARDAGE SUMMARY				
STA 474+42 - 527+75	PHASE I	PHASE II	PHASE III	TOTAL
•••••	••	••	••	••
•••••	2416	14,308	12,253	28,977
•••••	••	224	211	435
•••••	••	2150	1840	3990
•••••	••	406	345	751
•••••	••	224	619	843
•••••	2,416	16,300	13,444	32,160

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.

7

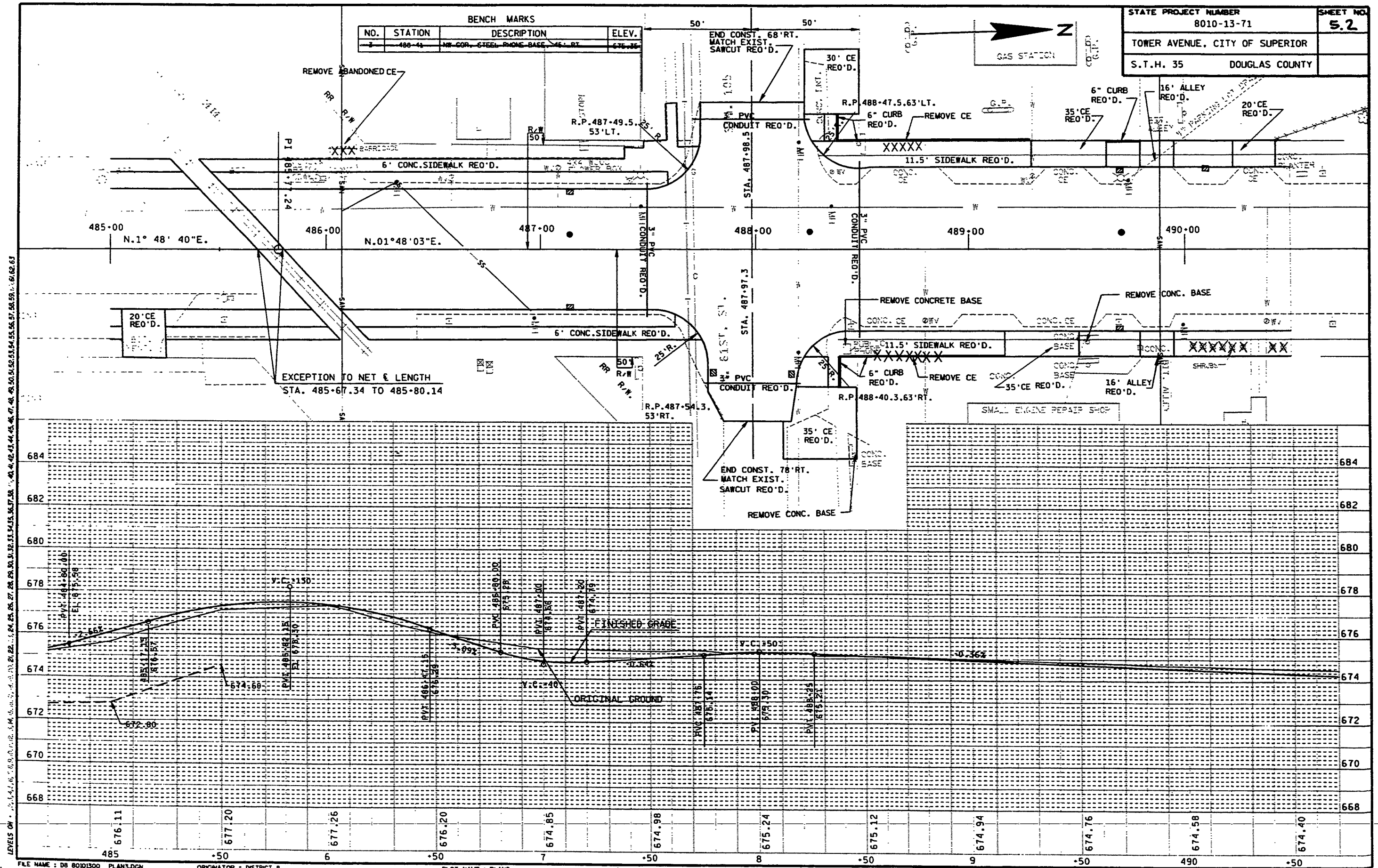
STATE PROJECT NUMBER	8010-13-71	SHEET NO.	5.1
TOWER AVENUE, CITY OF SUPERIOR			
S.T.H. 35	DOUGLAS COUNTY		



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

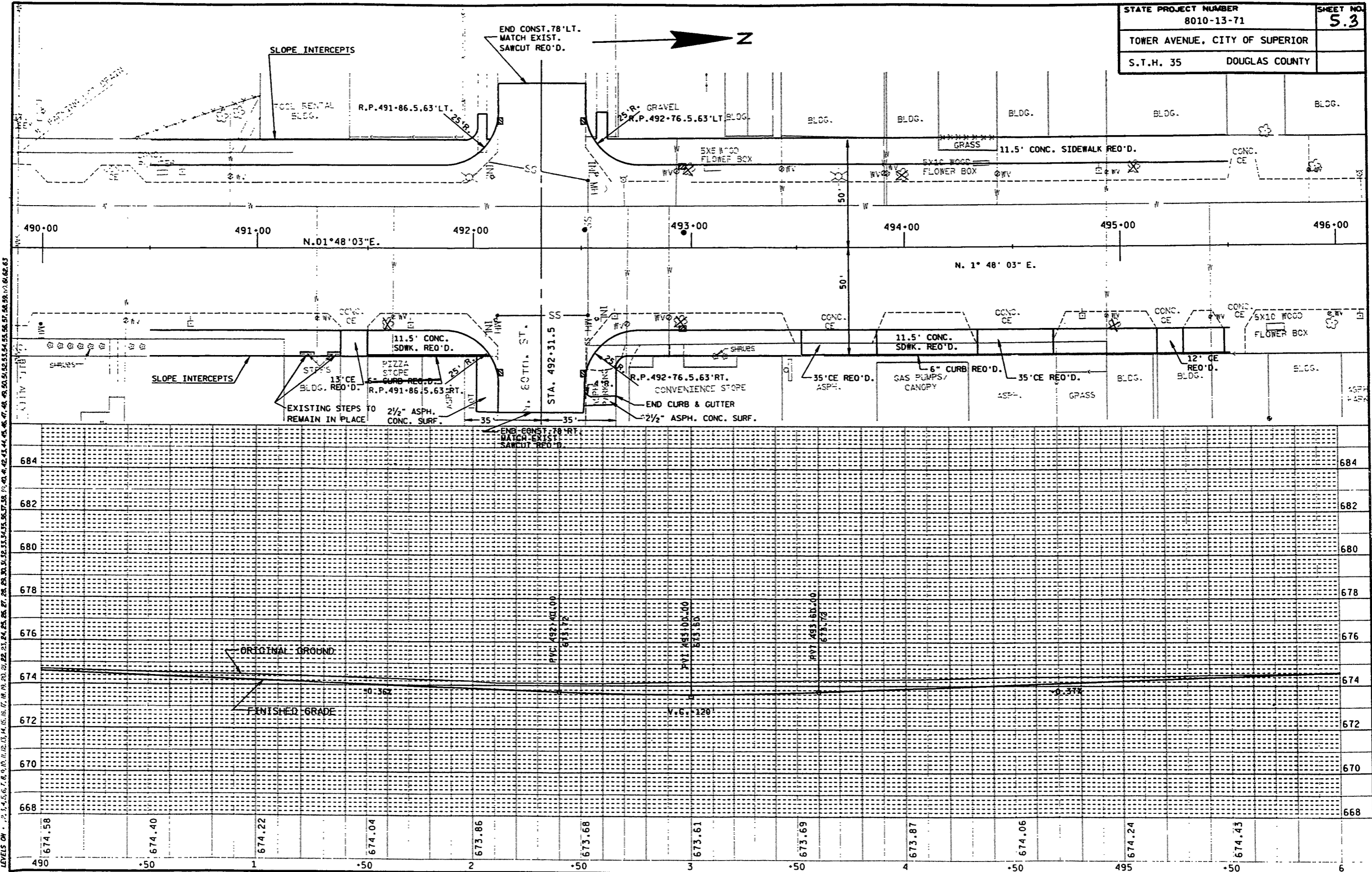
STATE PROJECT NUMBER	8010-13-71	SHEET NO.	5.2
TOWER AVENUE, CITY OF SUPERIOR		S.T.H. 35 DOUGLAS COUNTY	

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	488-44	NW COR. STEEL PHONE BASE 45' RT.	676.36



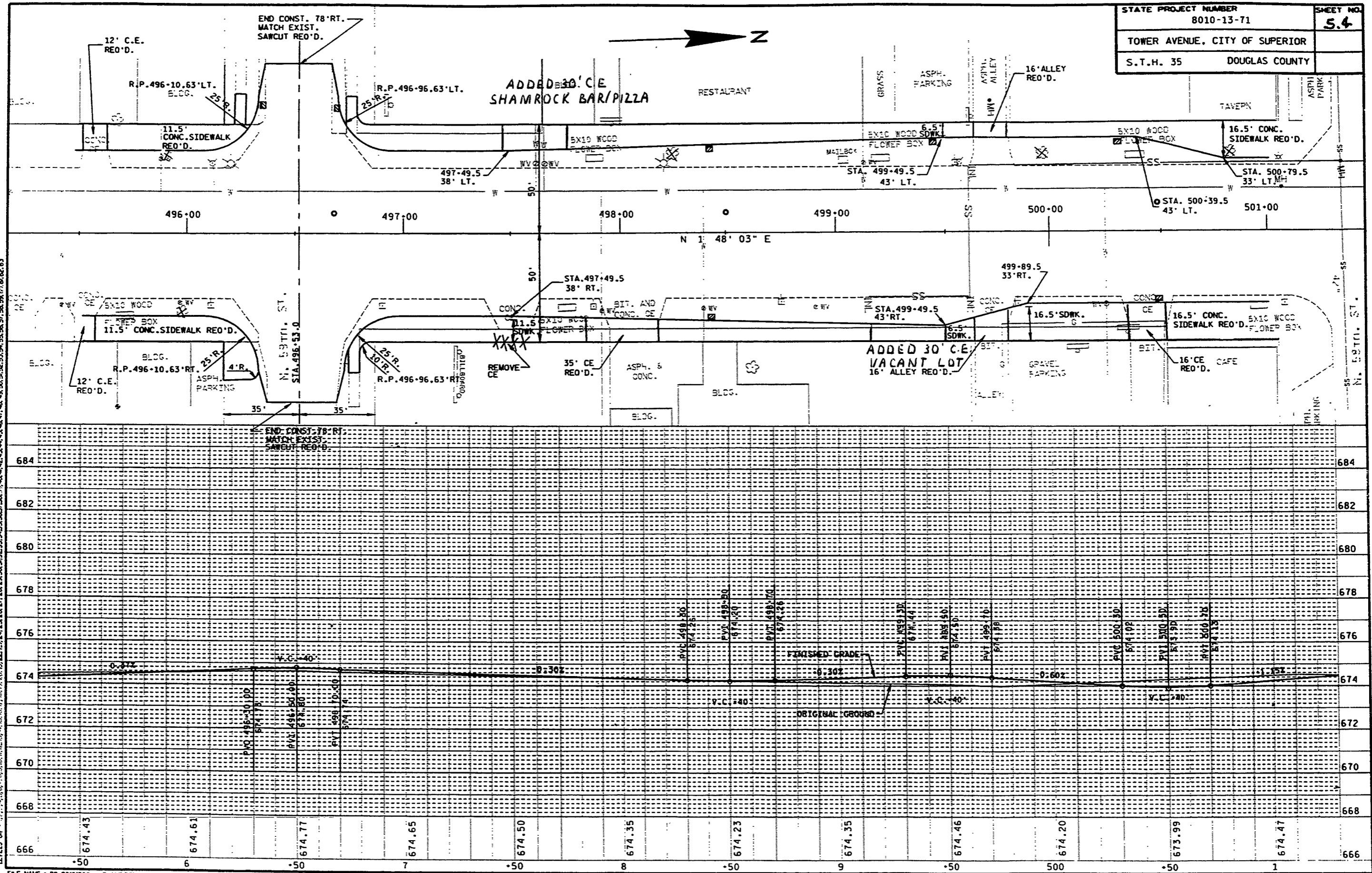
LEVELS ON 485+00 485+05 485+10 485+15 485+20 485+25 485+30 485+35 485+40 485+45 485+50 485+55 485+60 485+65 485+70 485+75 485+80 485+85 485+90 485+95 486+00 486+05 486+10 486+15 486+20 486+25 486+30 486+35 486+40 486+45 486+50 486+55 486+60 486+65 486+70 486+75 486+80 486+85 486+90 486+95 487+00 487+05 487+10 487+15 487+20 487+25 487+30 487+35 487+40 487+45 487+50 487+55 487+60 487+65 487+70 487+75 487+80 487+85 487+90 487+95 488+00 488+05 488+10 488+15 488+20 488+25 488+30 488+35 488+40 488+45 488+50 488+55 488+60 488+65 488+70 488+75 488+80 488+85 488+90 488+95 489+00 489+05 489+10 489+15 489+20 489+25 489+30 489+35 489+40 489+45 489+50 489+55 489+60 489+65 489+70 489+75 489+80 489+85 489+90 489+95 490+00

STATE PROJECT NUMBER 8010-13-71	SHEET NO. 5.3
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35	DOUGLAS COUNTY



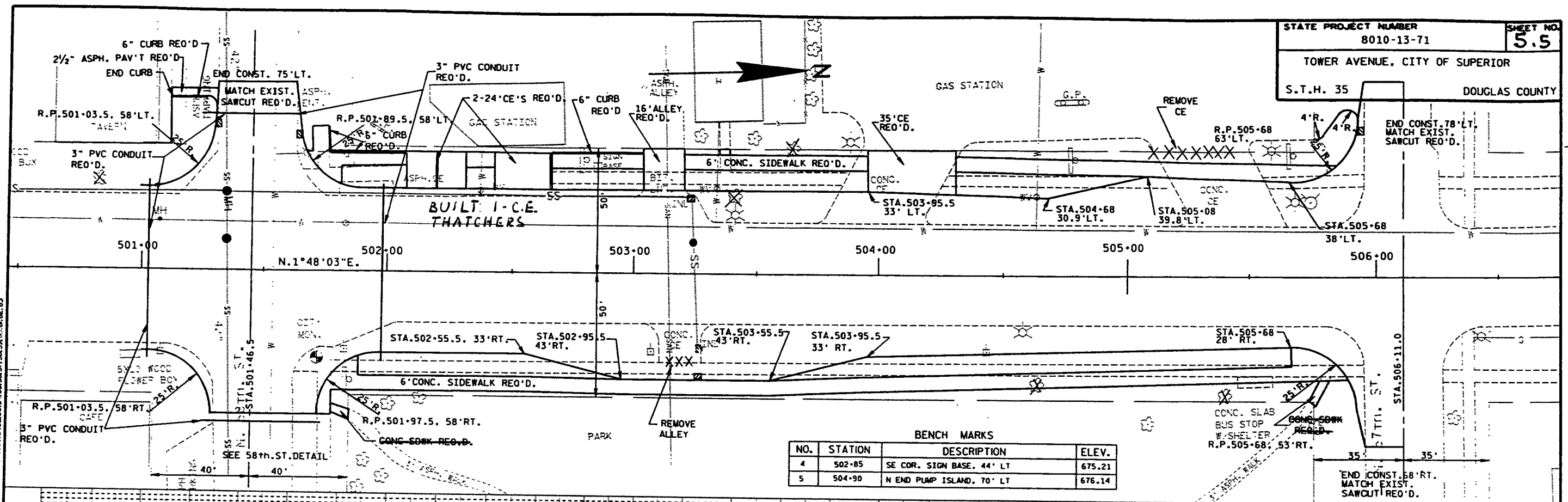
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STATE PROJECT NUMBER	8010-13-71	SHEET NO.	5.4
TOWER AVENUE, CITY OF SUPERIOR			
S.T.H. 35	DOUGLAS COUNTY		



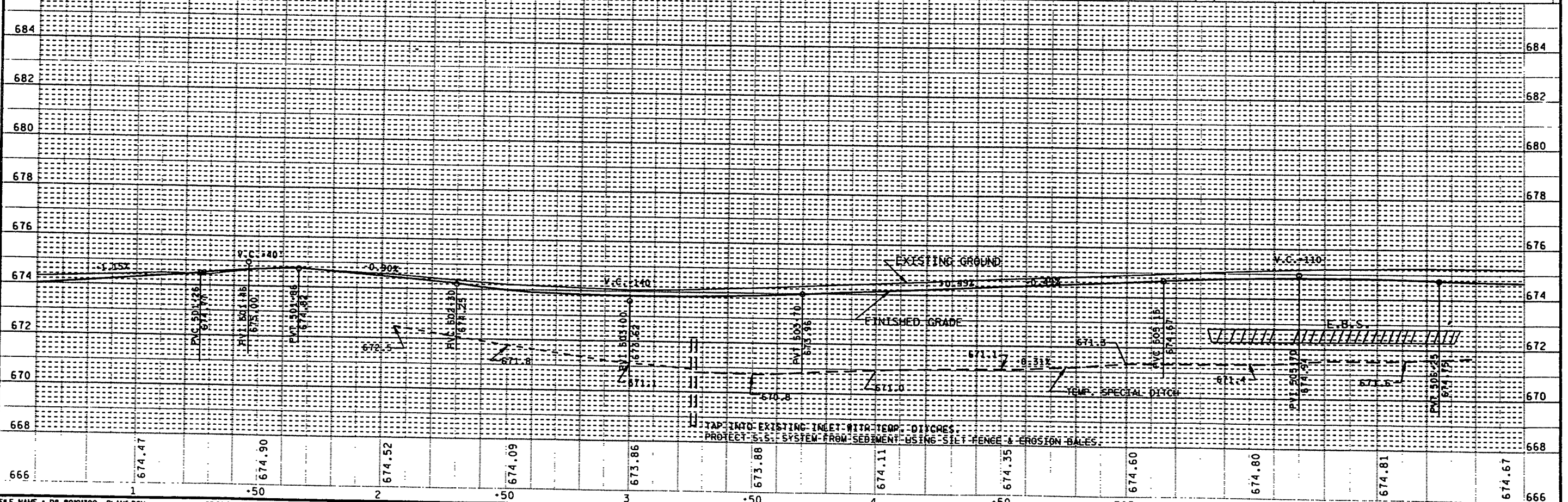
LEVELS ON: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 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

STATE PROJECT NUMBER 8010-13-71 SHEET NO. 5.5
 TOWER AVENUE, CITY OF SUPERIOR
 S.T.H. 35 DOUGLAS COUNTY



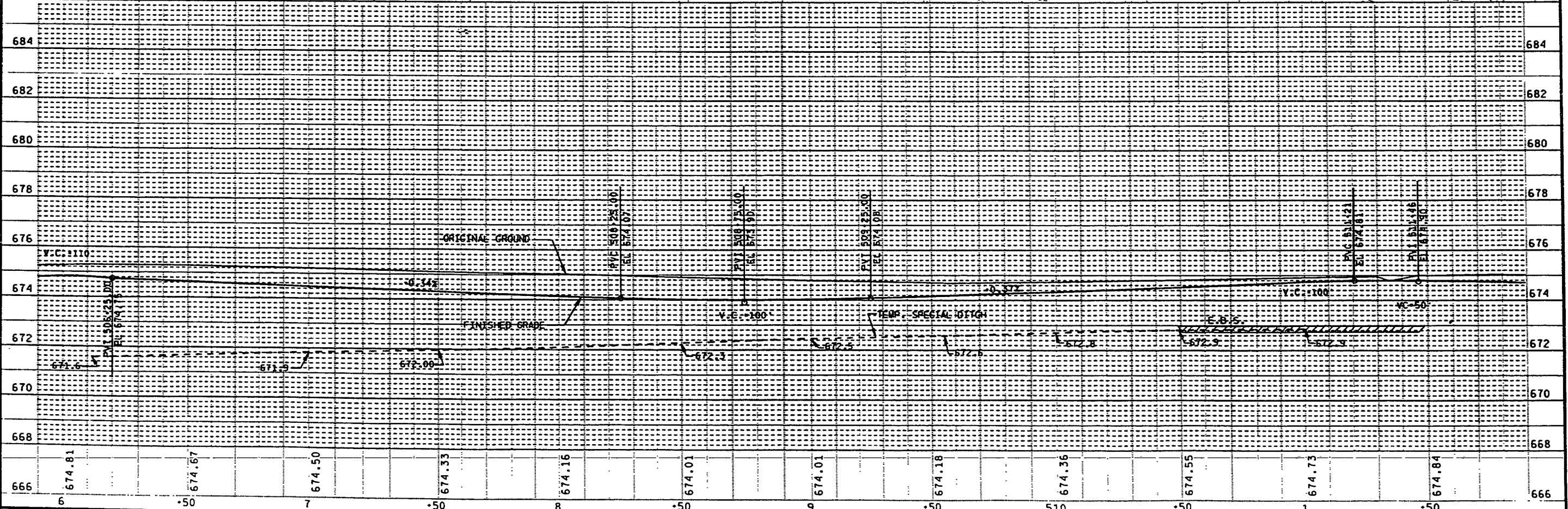
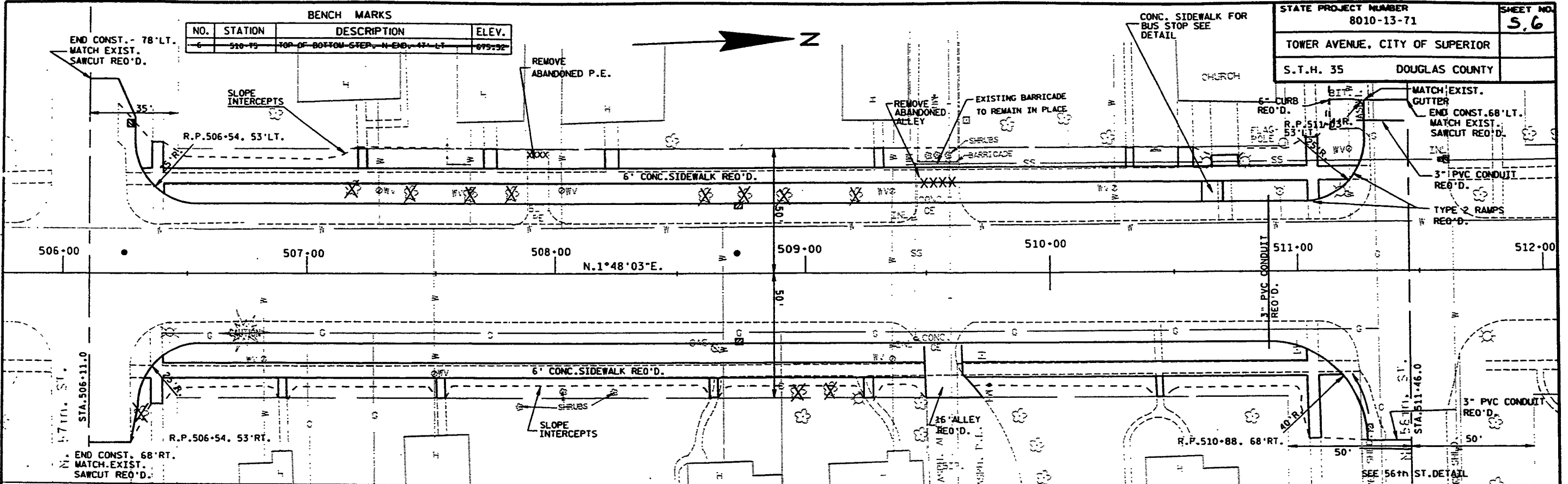
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
4	502+85	SE COR. SIGN BASE, 44' LT	675.21
5	504+90	N END PUMP ISLAND, 70' LT	676.14

LEVELS ON 1 674.47 2 674.90 3 673.86 4 674.11 5 674.35 6 674.60 674.80 674.81 674.67



STATE PROJECT NUMBER 8010-13-71	SHEET NO. 5.6
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35	DOUGLAS COUNTY

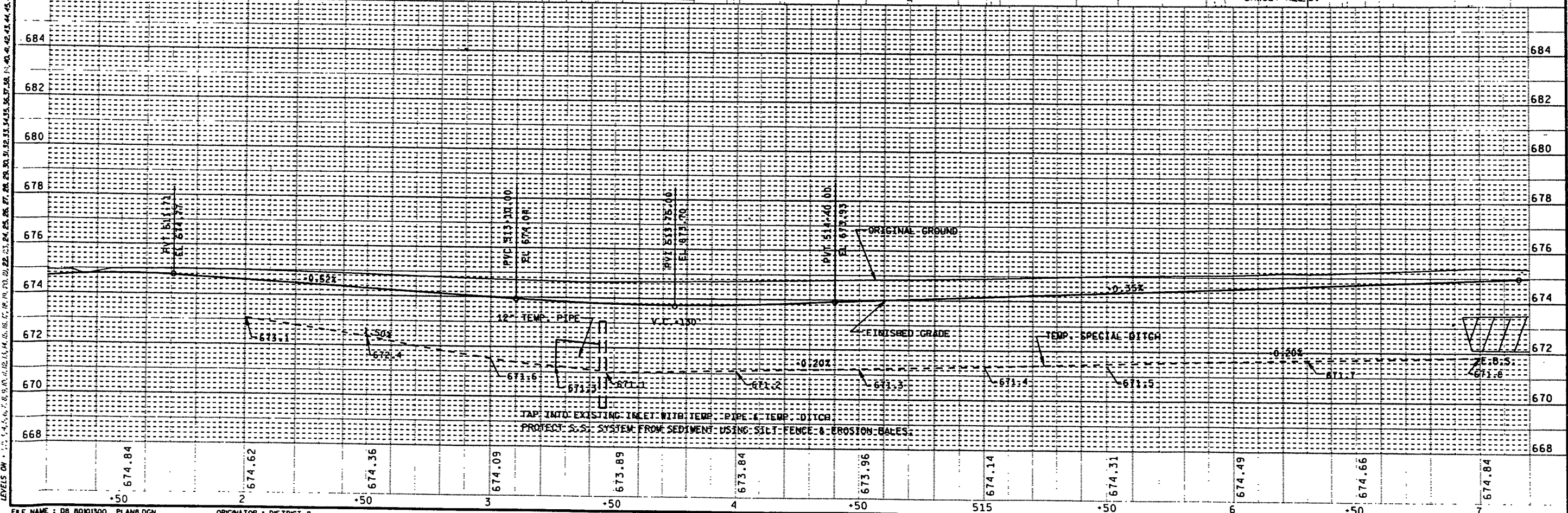
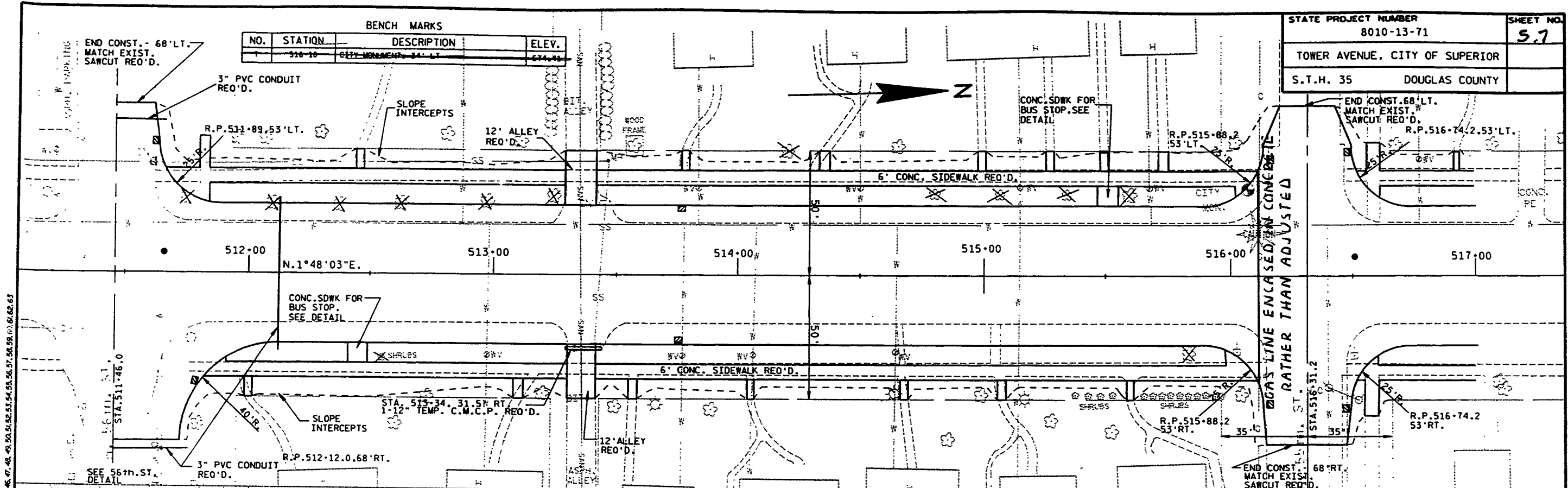
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
6	510+75	TOP OF BOTTOM STEP, N END, 47' LT.	675.32



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, 64, 65

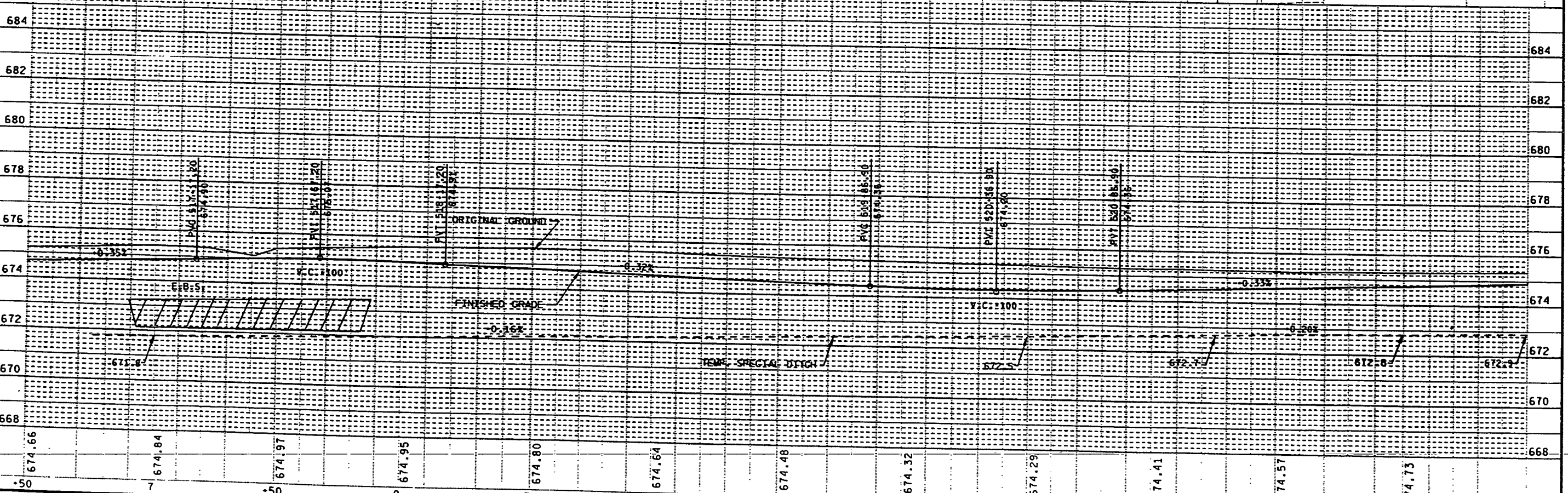
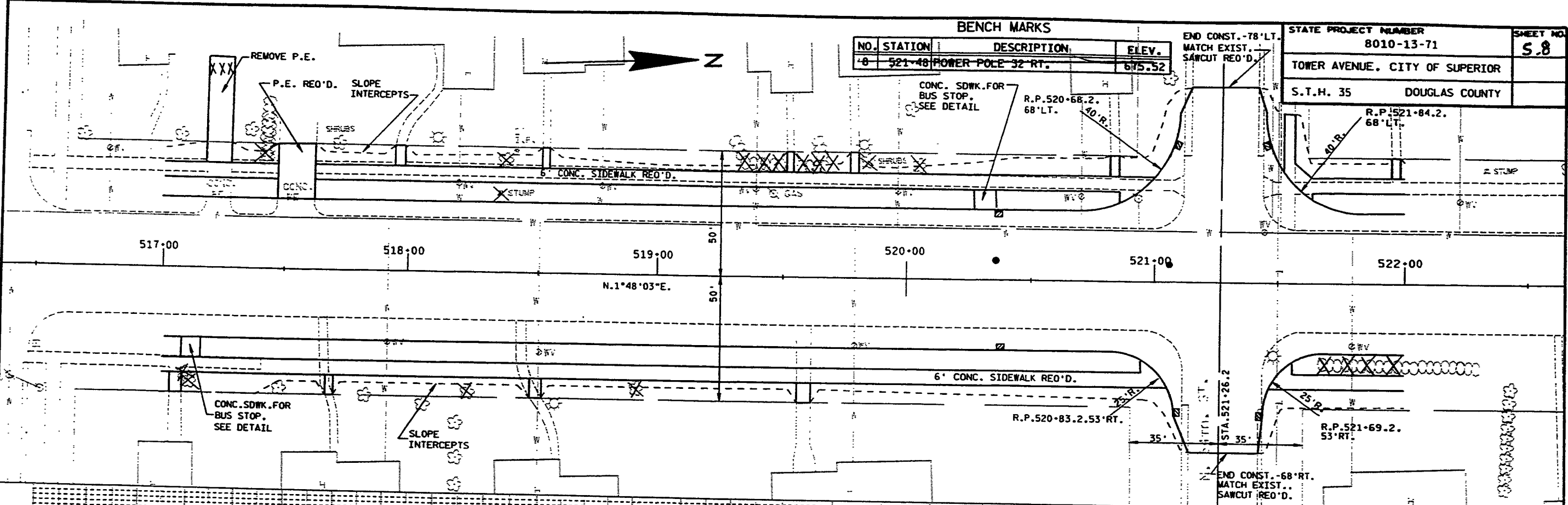
STATE PROJECT NUMBER 8010-13-71	SHEET NO. 5.7
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35	DOUGLAS COUNTY

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	510+10	CITY MONUMENT 24' LT.	674.81



STATE PROJECT NUMBER 8010-13-71	SHEET NO. 5.8
TOWER AVENUE, CITY OF SUPERIOR	
S.T.H. 35 DOUGLAS COUNTY	

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
8	521+48	POWER POLE 32' RT.	675.52



LEVELS ON: 1.2, 3.4, 5.6, 7.8, 9.0, 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

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
9	524+85	TOP NE BOLT HYDRANT, 31' LT	677.09
10	529+10	CITY MONUMENT, 42' LT	674.48

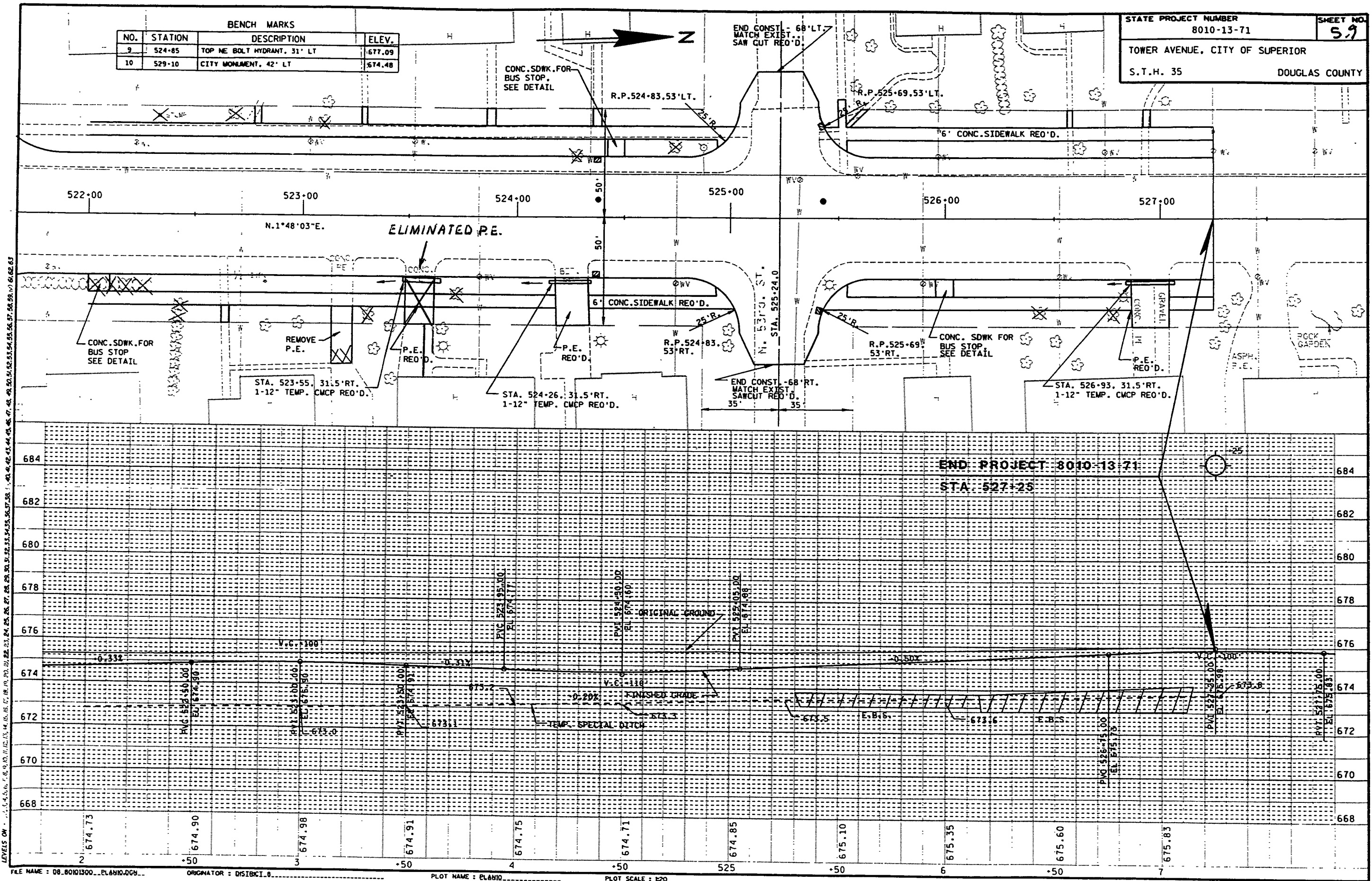
STATE PROJECT NUMBER
8010-13-71

TOWER AVENUE, CITY OF SUPERIOR

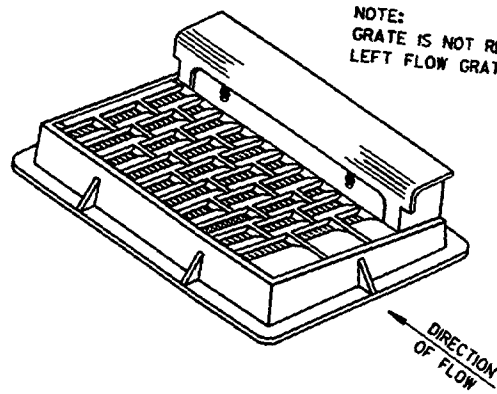
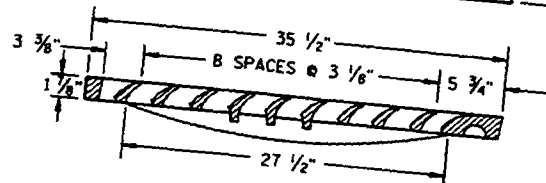
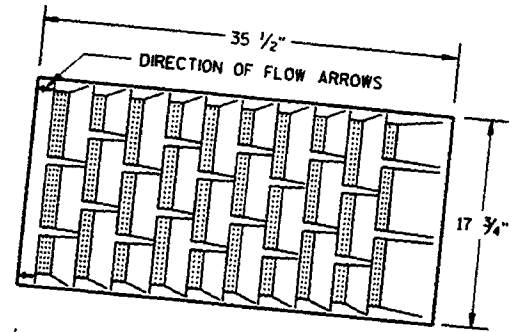
S.T.H. 35

DOUGLAS COUNTY

SHEET NO.
5.9

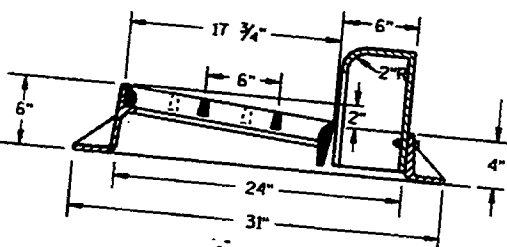
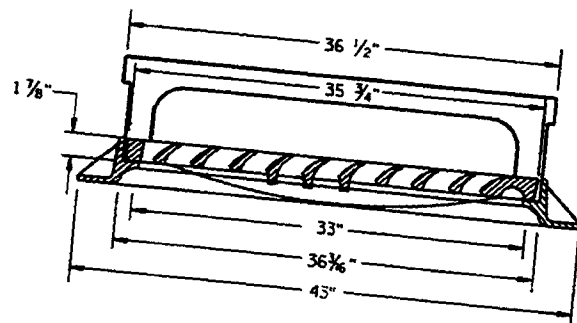


LEVELS ON: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 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. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

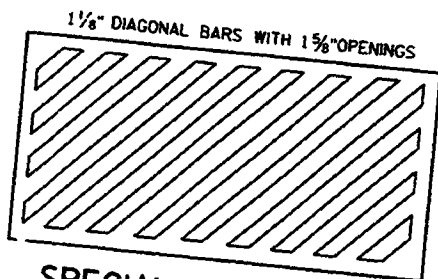


NOTE:
GRATE IS NOT REVERSIBLE.
LEFT FLOW GRATE IS SHOWN

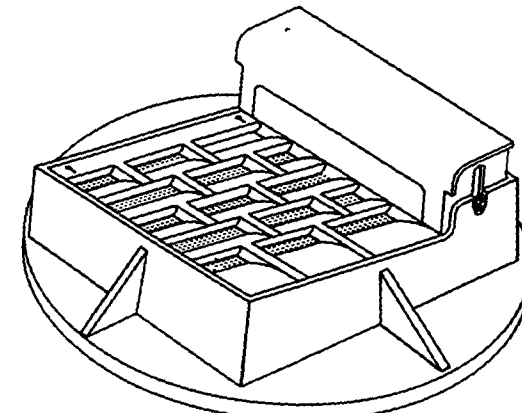
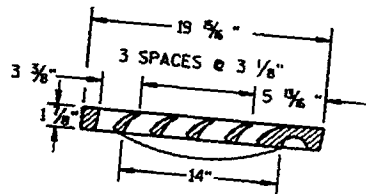
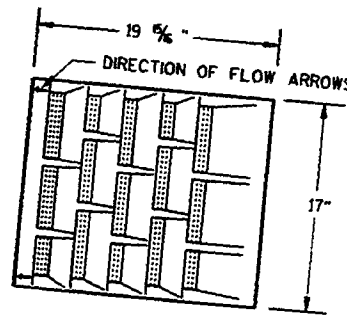
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



TYPE "H"
(APPROXIMATE WEIGHT 420 LBS.)
FRAME..... 170 LBS.
GRATE..... 135 LBS.
CURB BOX..... 115 LBS.

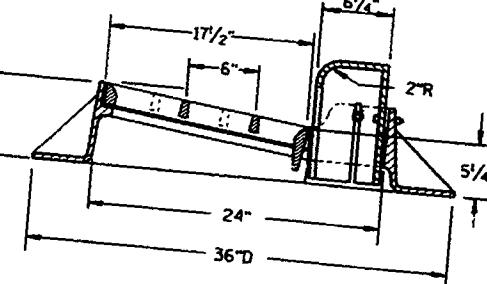
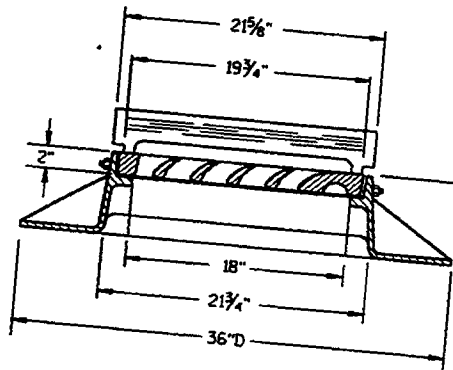


SPECIAL GRATE FOR TYPE "H" COVER
(MEASURES 35 1/2" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 170 LBS.)
GRATE..... 170 LBS.
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



NOTE:
GRATE IS NOT REVERSIBLE.
LEFT FLOW GRATE IS SHOWN

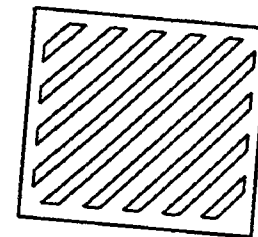
NOTE: CURB BOX ADJUSTABLE 4" TO 9"



TYPE "A"

(APPROXIMATE WEIGHT 355 LBS.)
FRAME..... 185 LBS.
GRATE..... 85 LBS.
CURB BOX..... 85 LBS.

1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



SPECIAL GRATE FOR TYPE "A" COVER
(MEASURES 19 5/8" X 17" X 1 9/8")
GRATE..... 85 LBS.
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

GENERAL NOTES

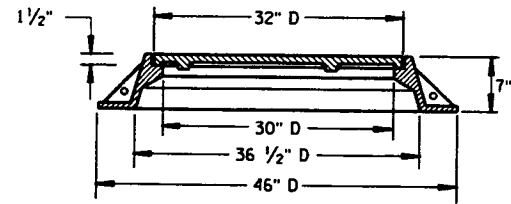
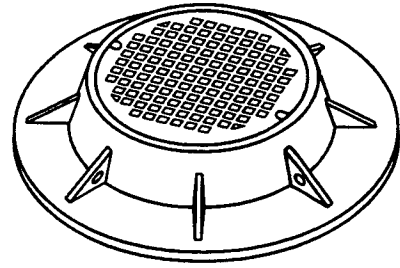
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO 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.

S.D.D. 8 A 5-11a

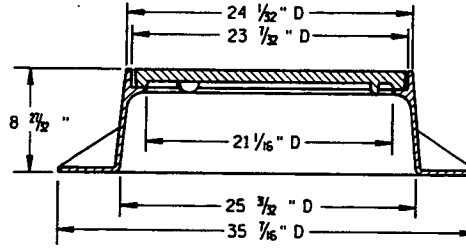
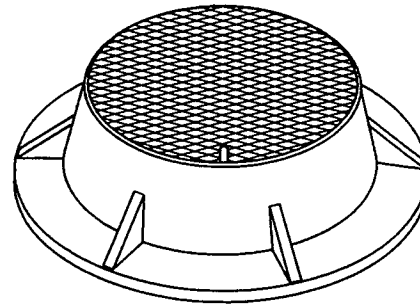


INLET COVERS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 08/02/85	<i>Ray E. Thompson</i> CHIEF ROADWAY DESIGN ENGINEER
FHWA	

S.D.D. 8 A 5-11a



TYPE "K"
 (APPROXIMATE WEIGHT 535 LBS.)
 FRAME..... 330 LBS.
 LID..... 205 LBS.



TYPE "J"
 (APPROXIMATE WEIGHT 255 LBS.)
 FRAME..... 140 LBS.
 LID..... 115 LBS.

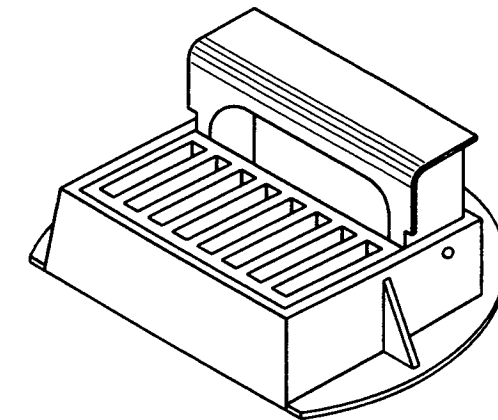
GENERAL NOTES

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.

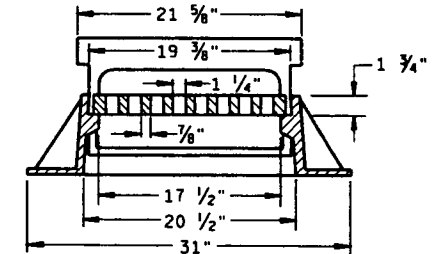
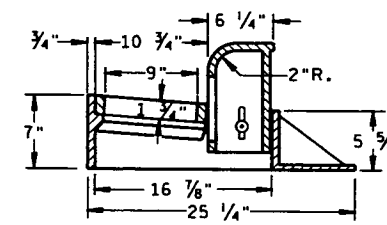
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

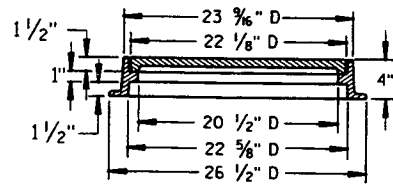
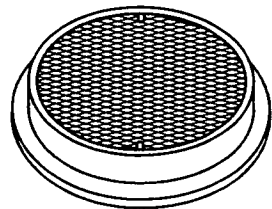
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



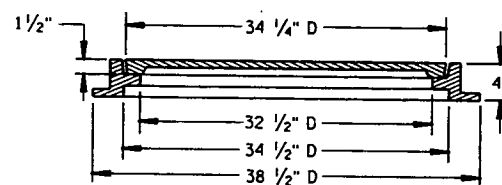
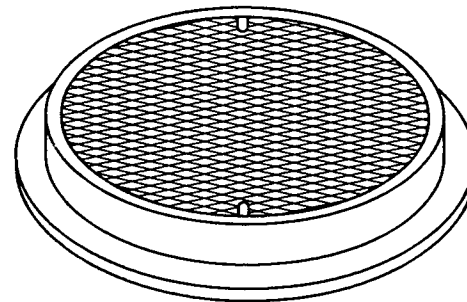
CURB BOX ADJUSTABLE 4" TO 10"



INLET COVER TYPE "Z"
 (APPROXIMATE WEIGHT 280 LBS.)
 FRAME..... 145 LBS.
 GRATE..... 50 LBS.
 CURB BOX..... 85 LBS.



TYPE "L"
 (APPROXIMATE WEIGHT 145 LBS.)
 FRAME..... 75"
 LID..... 70"



TYPE "M"
 (APPROXIMATE WEIGHT 385 LBS.)
 FRAME..... 125"
 LID..... 260"

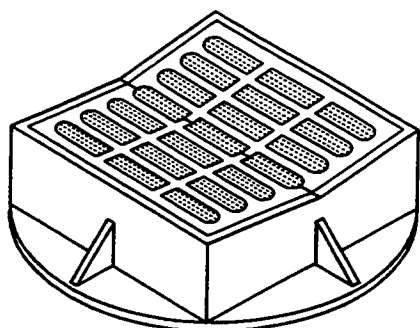
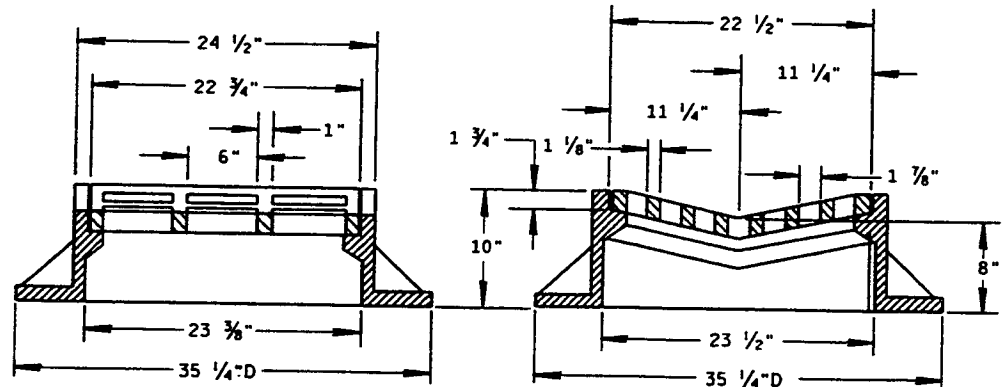
S.D.D. 8 A 5-11d

**INLET AND
 MANHOLE COVERS**

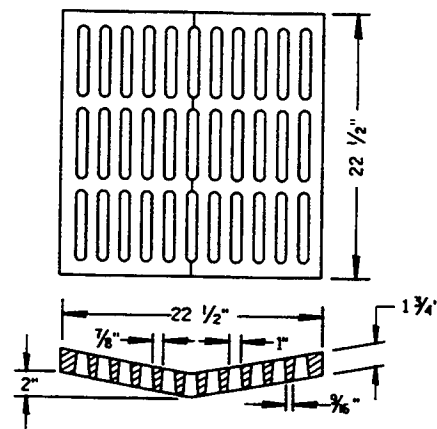
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 08/07/95
 DATE
 Chief Roadway Design Engineer

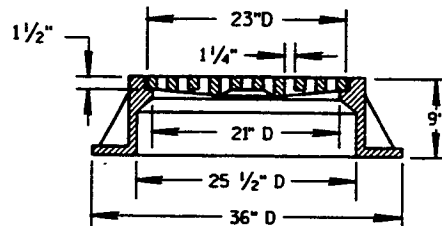
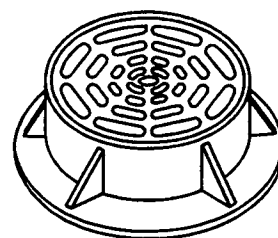
FHWA



TYPE "B"
 (APPROXIMATE WEIGHT 395 LBS.)
 FRAME..... 285 LBS.
 GRATE..... 110 LBS.



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



TYPE "C"
 (APPROXIMATE WEIGHT 340 LBS.)
 FRAME..... 235 LBS.
 GRATE..... 105 LBS.

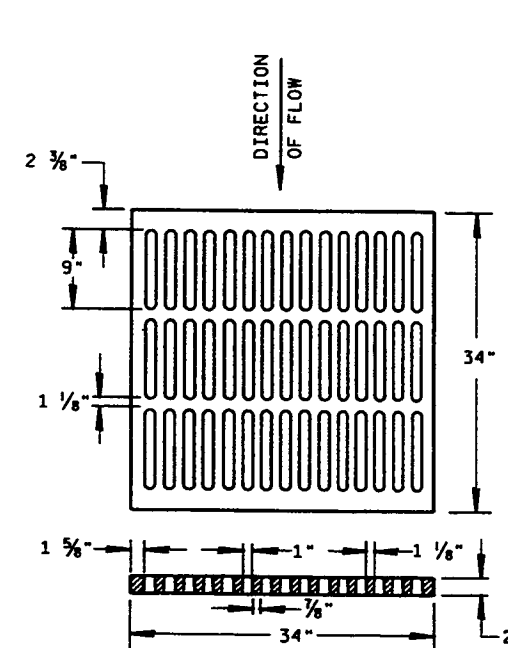
GENERAL NOTES

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.

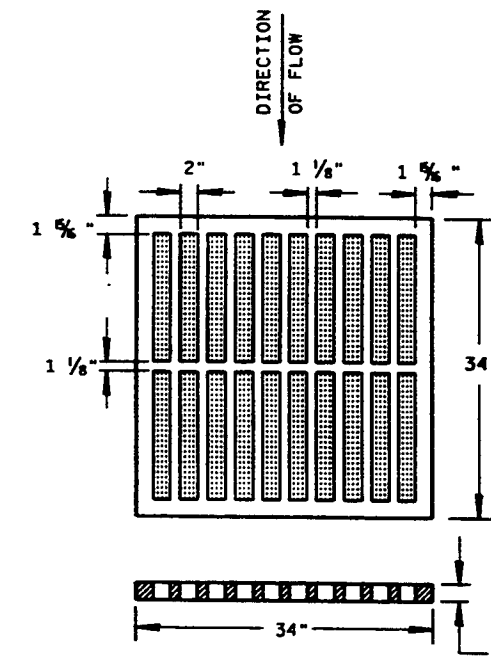
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

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



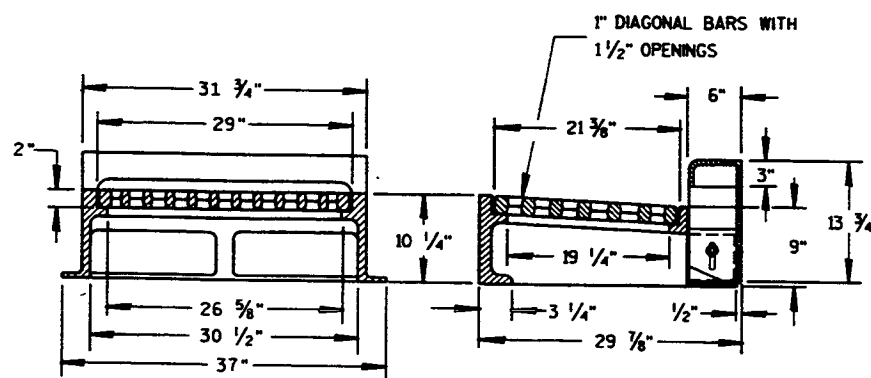
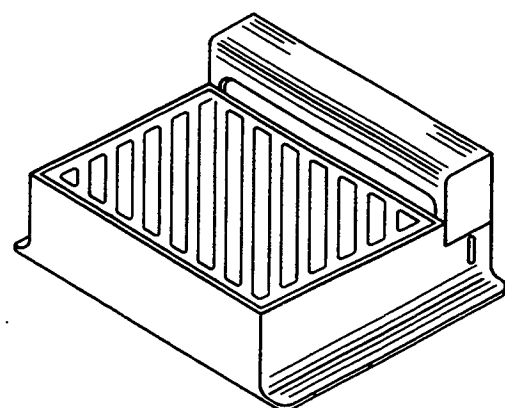
ALTERNATIVE TYPE "MS"
 (APPROXIMATE GRATE WEIGHT 365 LBS.)
 GRATE..... 365 LBS.

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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"
 (APPROXIMATE WEIGHT 670 LBS.)

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

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

DIRECTION OF FLOW

INLET COVERS

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 12/19/94
 DATE
 [Signature]
 CHIEF ROADWAY DESIGN ENGINEER

FHWA

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.

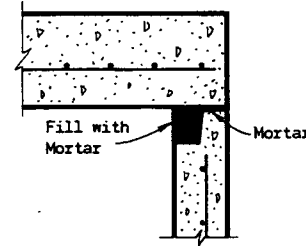
Steps meeting the following requirements shall be installed in all structures over 5 feet in depth: 16 inch C-C maximum spacing; project a minimum clear distance of 4 inches from the wall at the point of embedment; minimum length of 10 inches; minimum wall embedment of 3 inches, and be capable of supporting 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 will be acceptable.

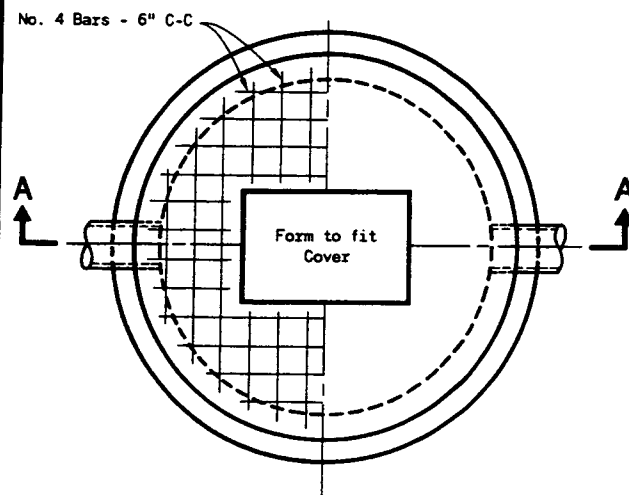
All bar steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers shall be placed with tongue down.

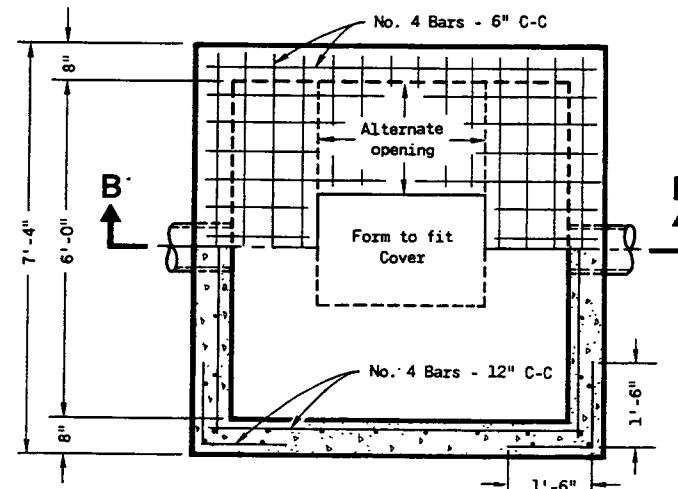
All Precast Inlet Units shall conform to the pertinent requirements of AASHTO Designation M 199.



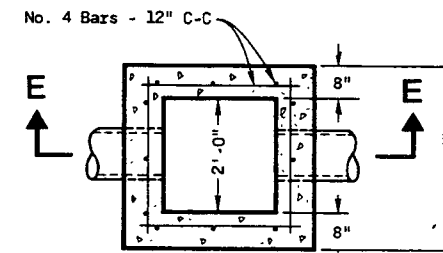
DETAIL "A"



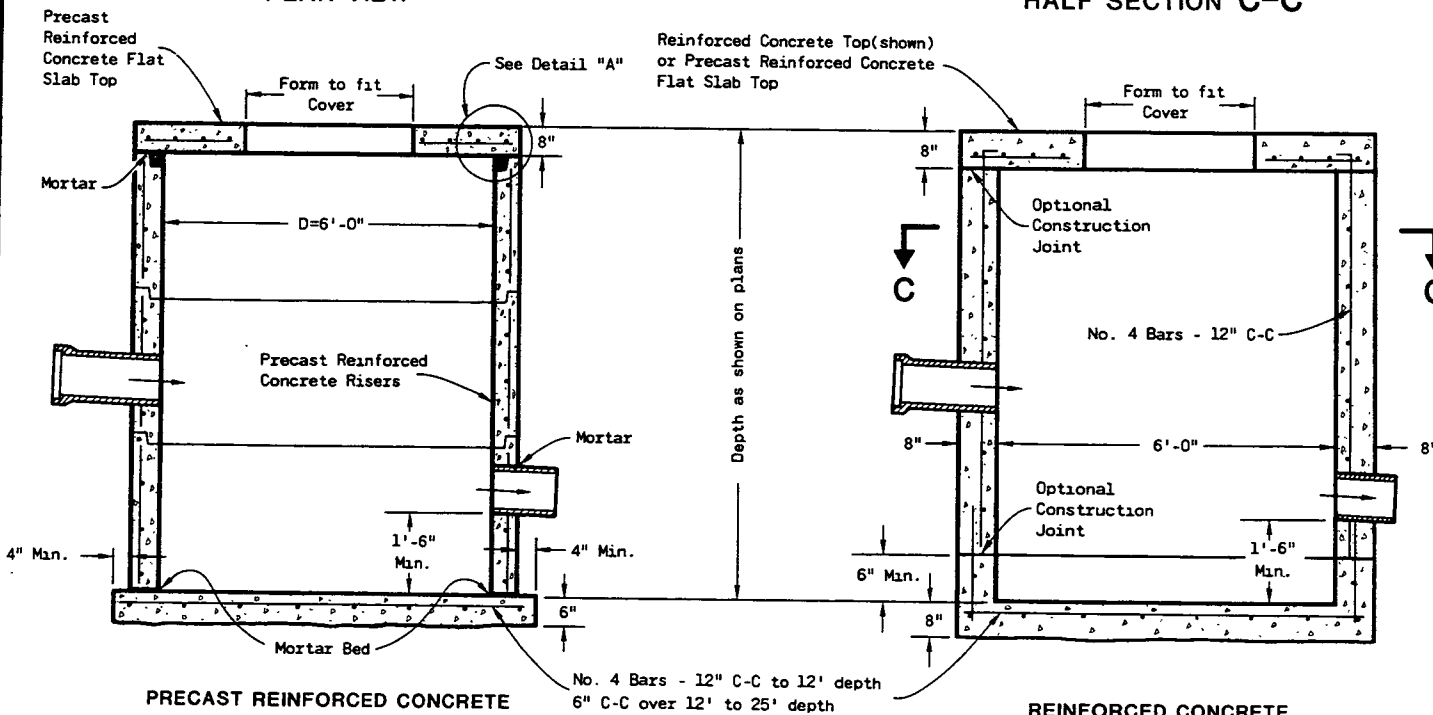
PLAN VIEW



HALF SECTION C-C



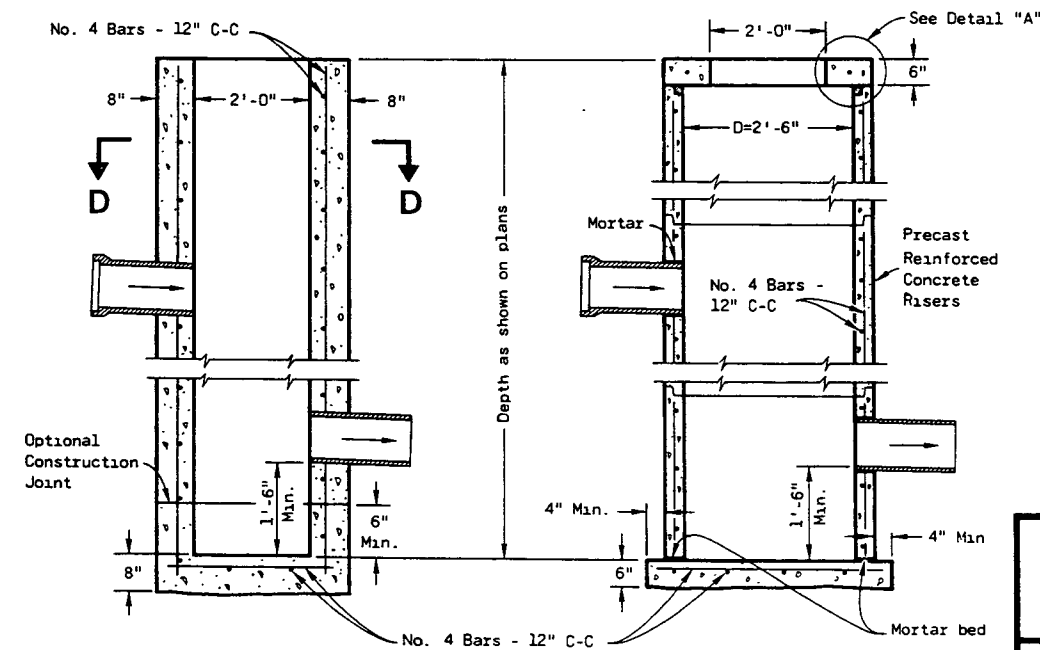
SECTION D-D



SECTION A-A

SECTION B-B

CATCH BASINS TYPE 5



SECTION E-E

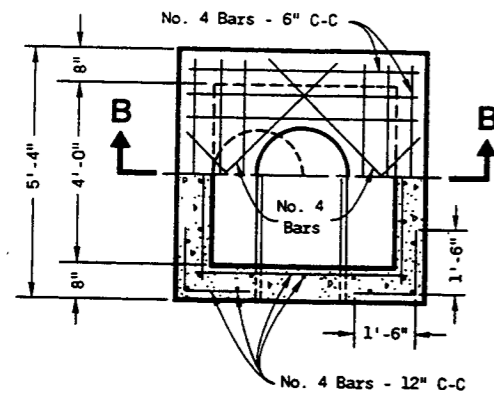
SECTION D-D

CATCH BASINS TYPE 3

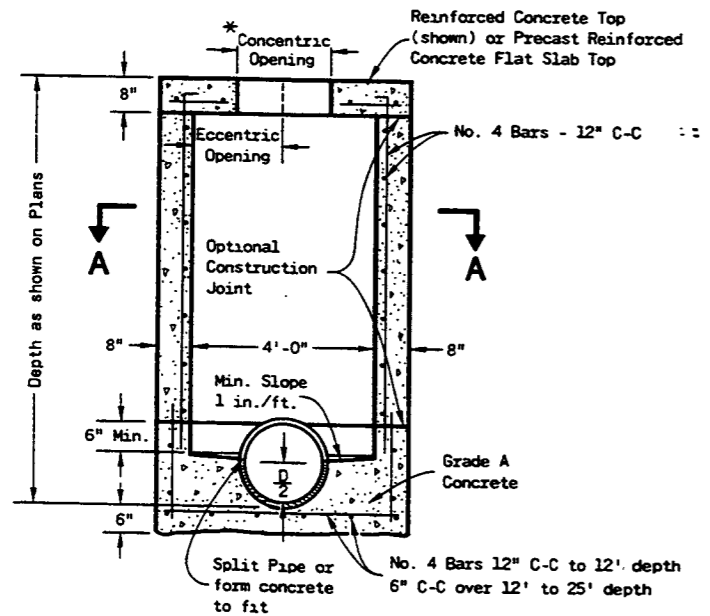
CATCH BASINS TYPE 3 & 5	
State of Wisconsin Department of Transportation	
APPROVED 4-13-82	<i>[Signature]</i>

S.D.D. 8 A 7-3

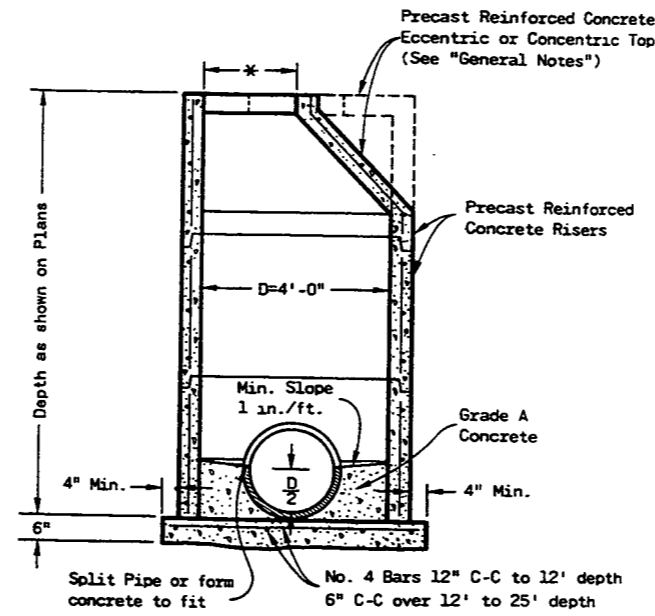
S.D.D. 8 A 7-3



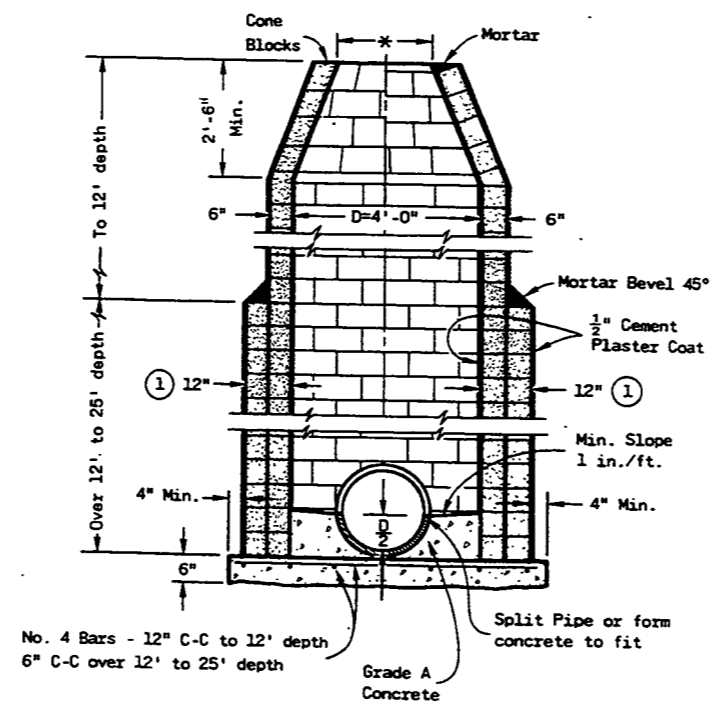
HALF SECTION A-A



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 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 may be placed with tongue up or down.

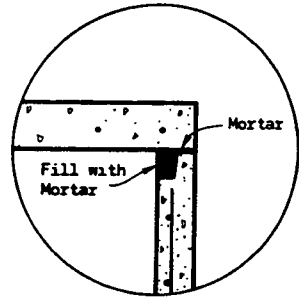
All Precast Inlet Units shall conform to the pertinent requirements of AASHTO Designation M 199.

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

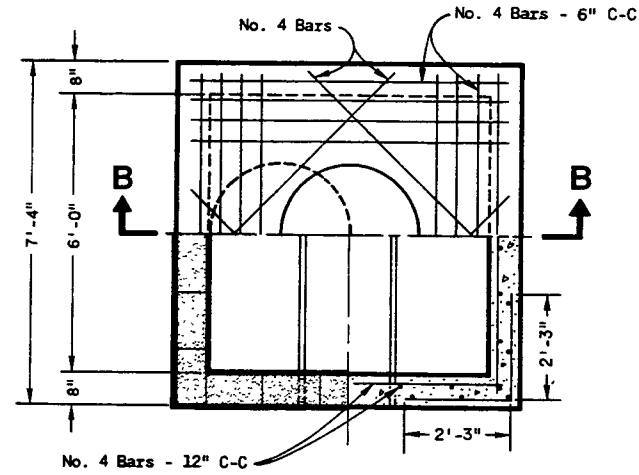
① 2 courses 6" block.

MANHOLES TYPE 1

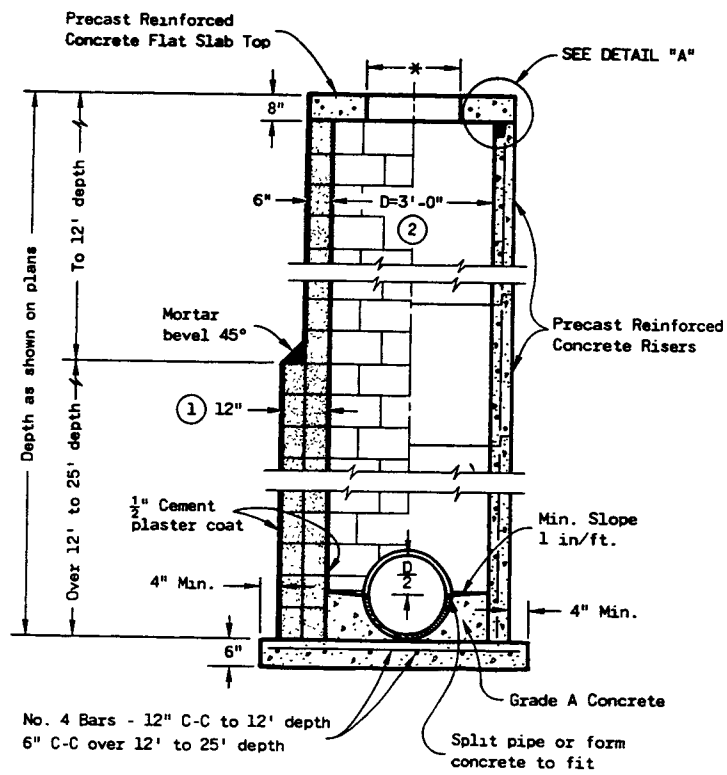
MANHOLES TYPE 1	
State of Wisconsin Department of Transportation	
APPROVED 4-13-82	<i>D. J. Strand</i>



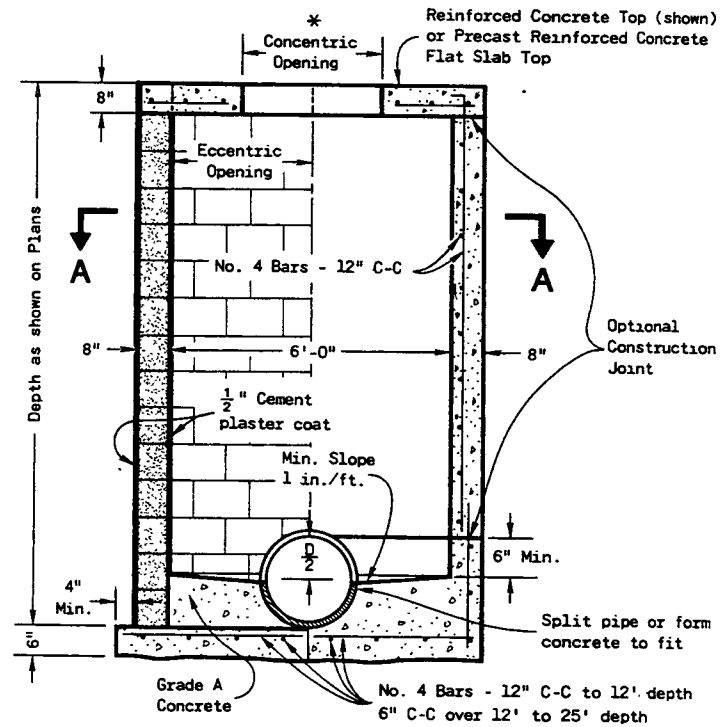
DETAIL "A"



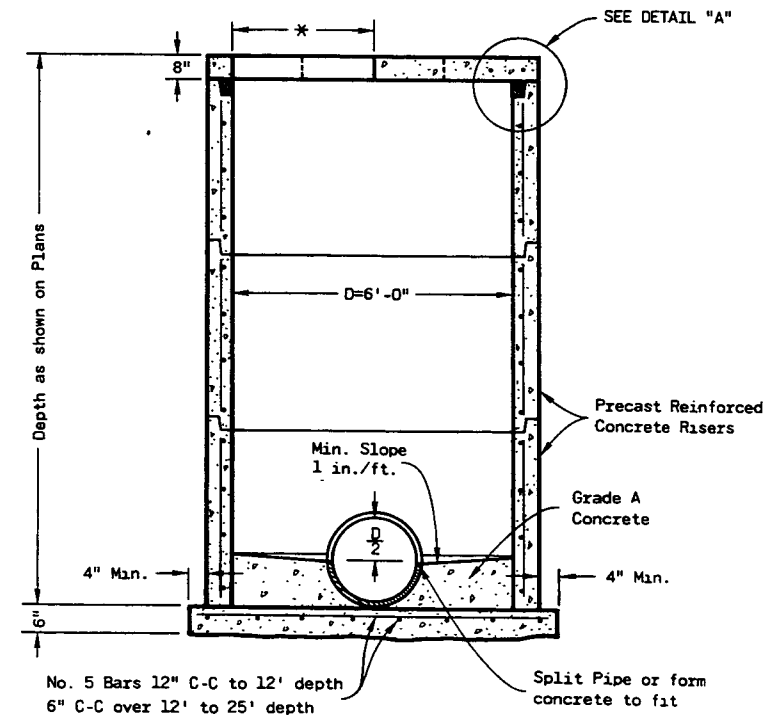
HALF SECTION A-A



CONCRETE BLOCK
 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.

S.D.D. 8 B 7-3

MANHOLES TYPE 2 & 3

State of Wisconsin
 Department of Transportation

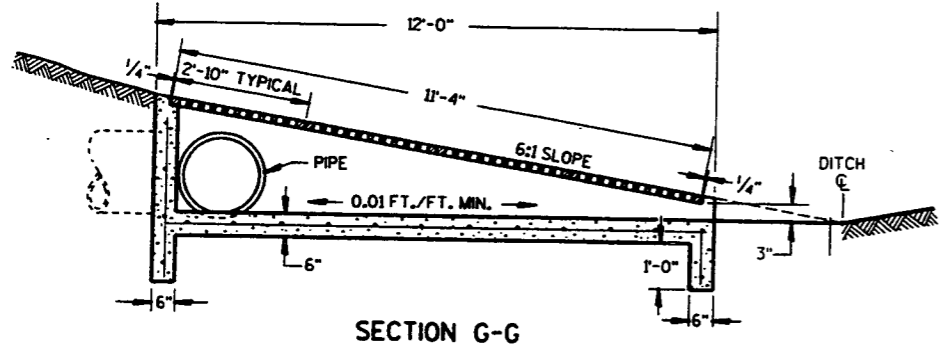
APPROVED
 4-13-82

DATE

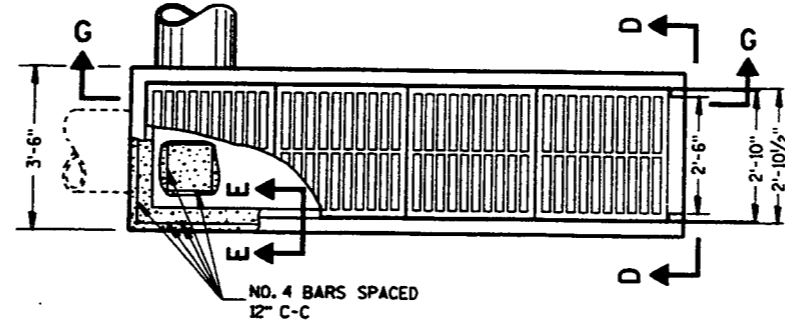
FWHA

D. J. Strand
 DISTRICT ENGINEER

S.D.D. 8 B 7-3



SECTION G-G



PLAN VIEW

REINFORCED CONCRETE INLET TYPE II

GENERAL NOTES

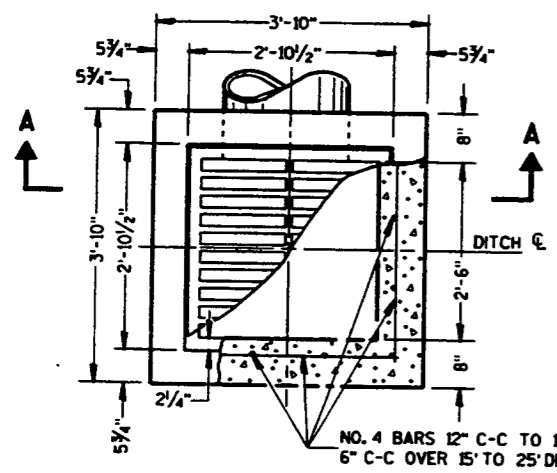
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

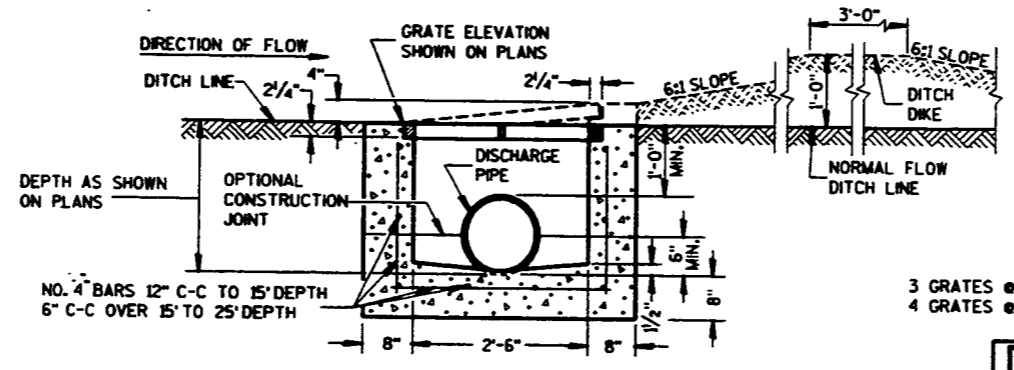
PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE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

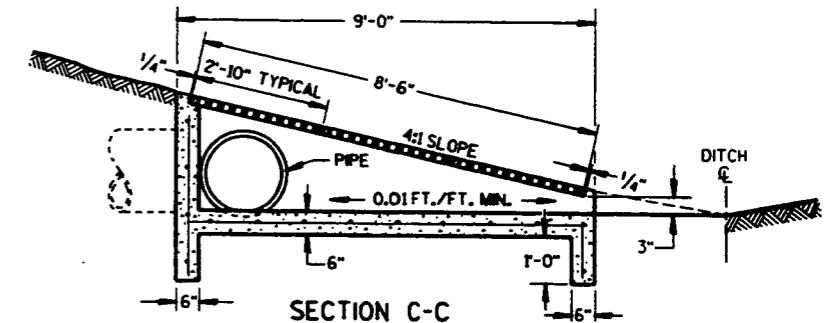
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" MIN. CLEAR UNLESS OTHERWISE SHOWN OR NOTED.



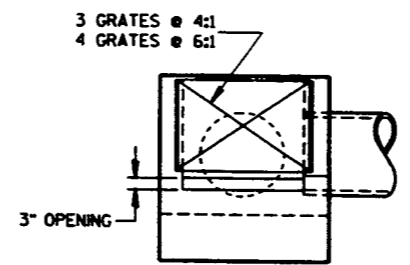
PLAN VIEW



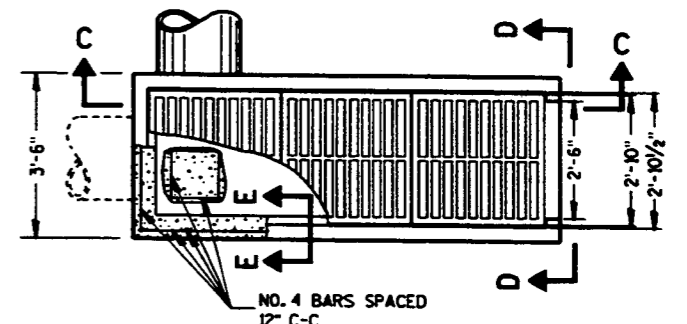
SECTION A-A



SECTION C-C

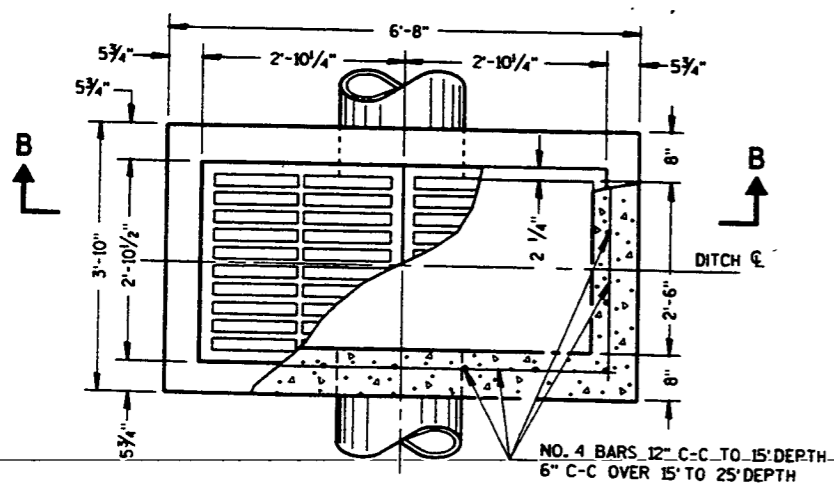


SECTION D-D

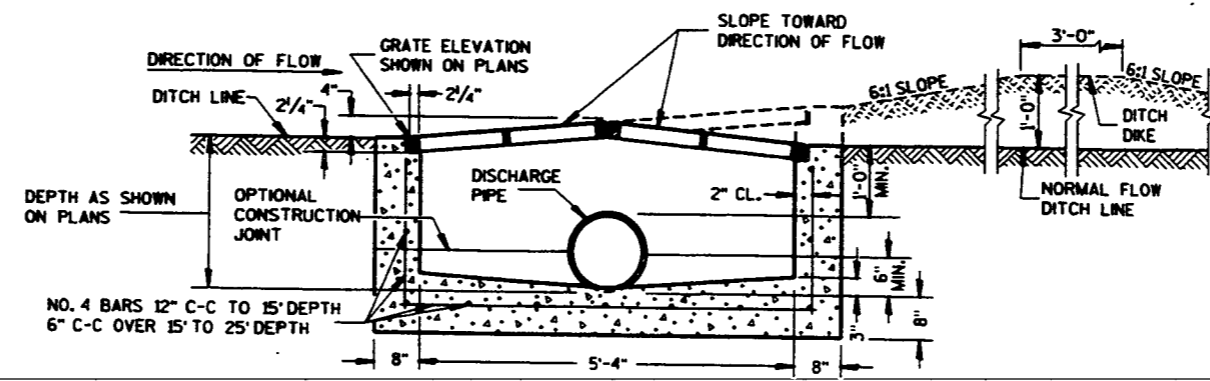


PLAN VIEW

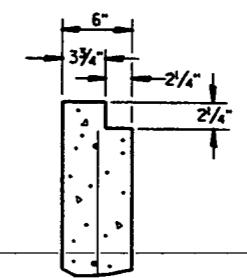
REINFORCED CONCRETE INLET TYPE 10



PLAN VIEW



SECTION B-B



SECTION E-E

REINFORCED CONCRETE INLET TYPE 9

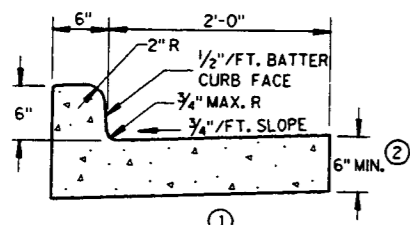
INLETS TYPE 8, 9, 10 AND II

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

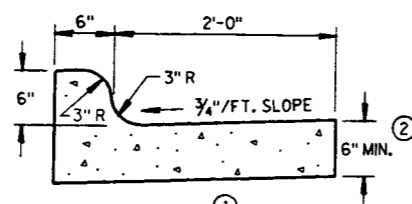
APPROVED
8/10/94
DATE
[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

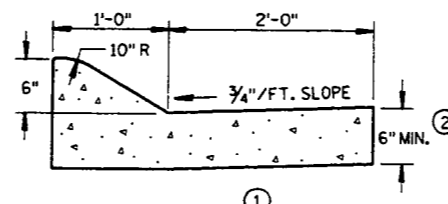
S.D.D. 8 C 5-2



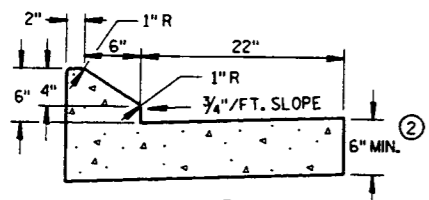
TYPES A & D



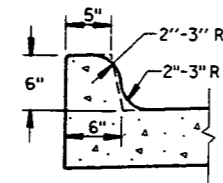
TYPES K & L



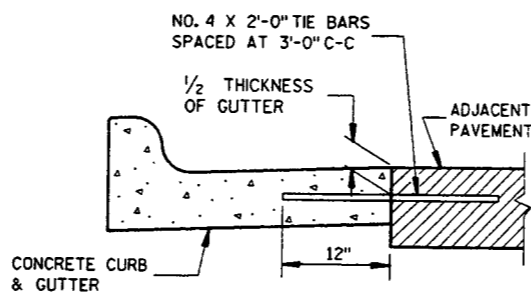
TYPES A & D
CONCRETE CURB & GUTTER 36"



TYPES G & J

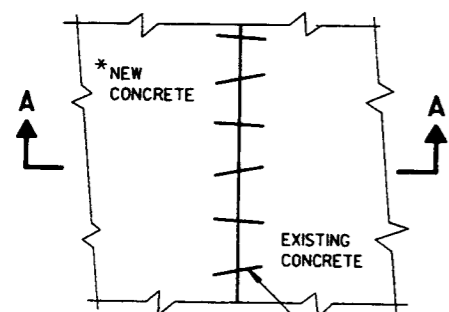


OPTIONAL CURB SHAPE
FOR TYPES K & L



TYPICAL TIE BAR LOCATION

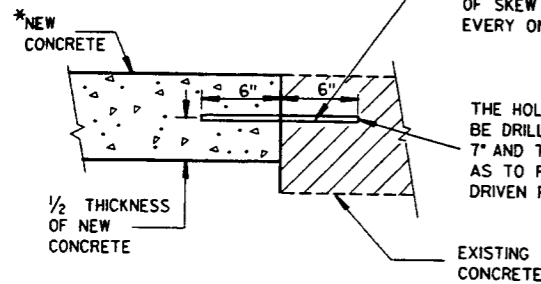
CONCRETE CURB & GUTTER 30"



PLAN VIEW

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

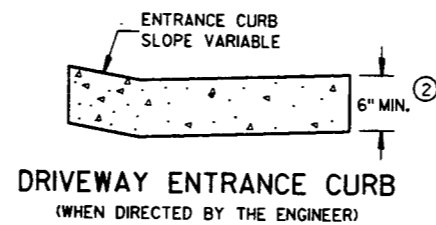
NO. 6 X 12" DEF. BARS
SPACED 3'-0" C-C,
INSTALLED ON 6:1 SKEW
HORIZONTALLY. DIRECTION
OF SKEW ALTERNATING AFTER
EVERY ONE OR TWO BARS.



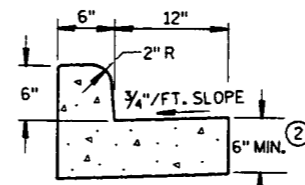
SECTION A-A
PAVEMENT TIES

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

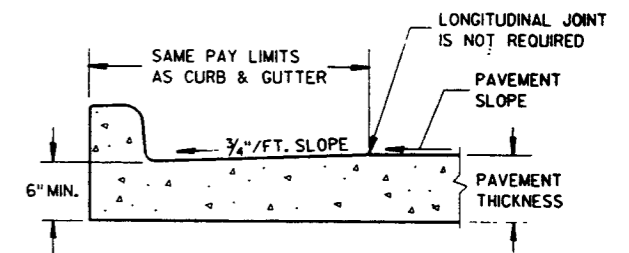
EXISTING
CONCRETE



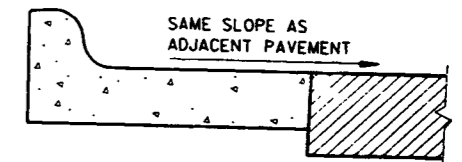
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



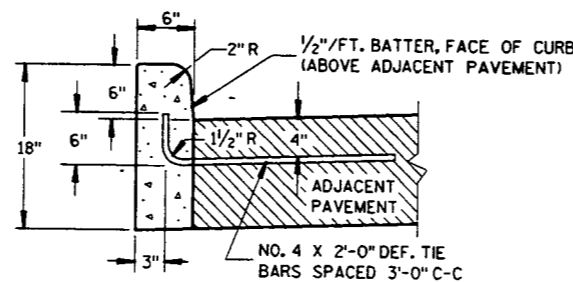
TYPES A & D
CONCRETE CURB & GUTTER 18"



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

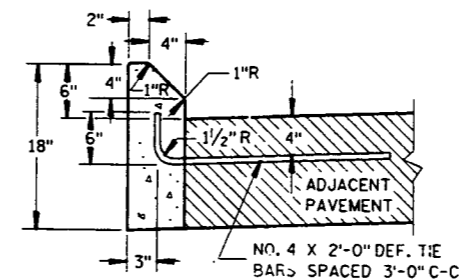


REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



TYPES A & D

CONCRETE CURB



TYPES G & J

GENERAL NOTES

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

SEALANT IS NOT REQUIRED IN THE JOINTS OF CONCRETE CURB OR CONCRETE CURB & GUTTER EXCEPT AS REQUIRED FOR INTEGRAL GUTTER.

PAVEMENT TIES ARE REQUIRED, WHEN INCLUDED IN THE CONTRACT, WHERE CONCRETE CURB, CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT IS PLACED ADJACENT TO EXISTING CONCRETE.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE, TIE BARS AND A LONGITUDINAL CONSTRUCTION JOINT ARE NOT REQUIRED WITH THIS ALTERNATE.

PAVEMENT JOINTS SHALL BE EXTENDED THROUGH INTEGRAL CURB & GUTTER. JOINTS IN INTEGRAL GUTTER SHALL HAVE THE SAME DIMENSIONS AS THE JOINTS IN THE ADJACENT PAVEMENT. JOINTS IN INTEGRAL CURB SHALL BE 1/8" WIDE.

JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE TWO FEET BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.

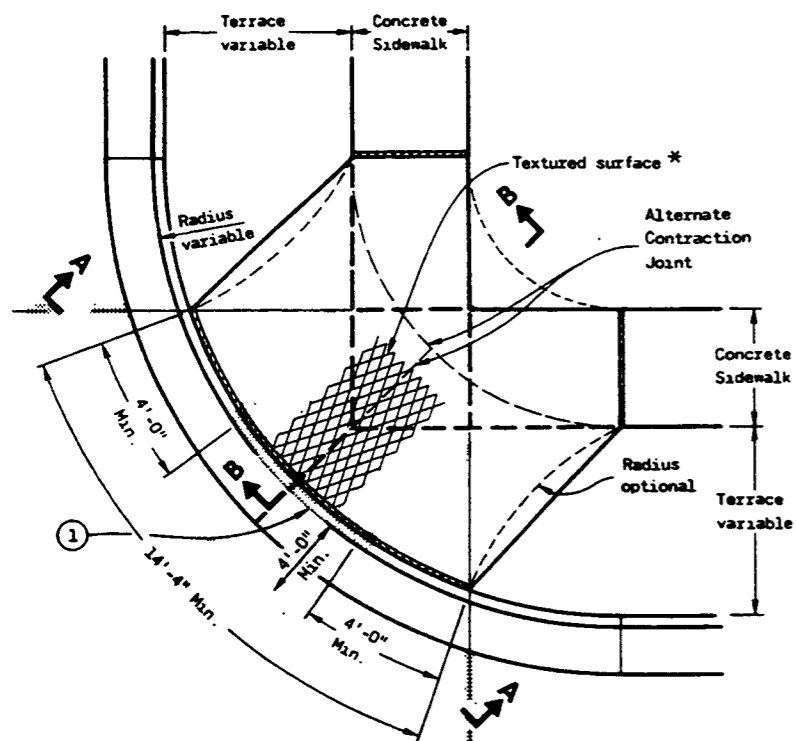
CONCRETE CURB, CONCRETE
CURB & GUTTER AND
PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

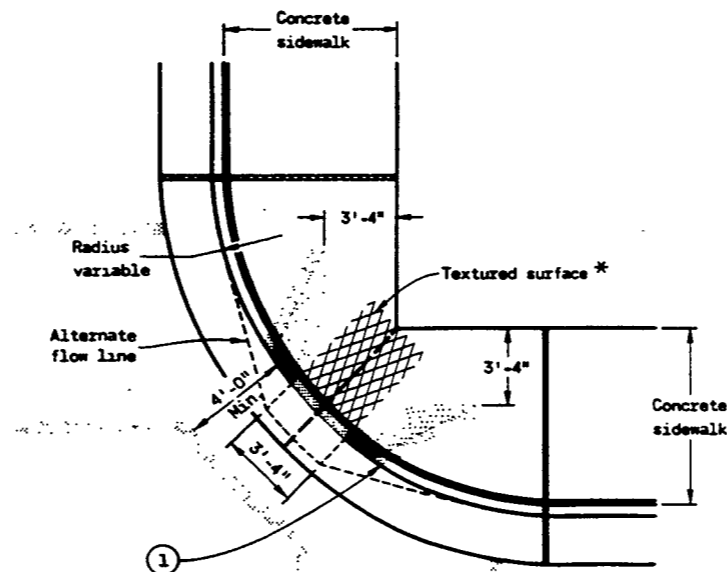
APPROVED
10-23-86
DATE

STATE DESIGN ENGINEER FOR HWYS

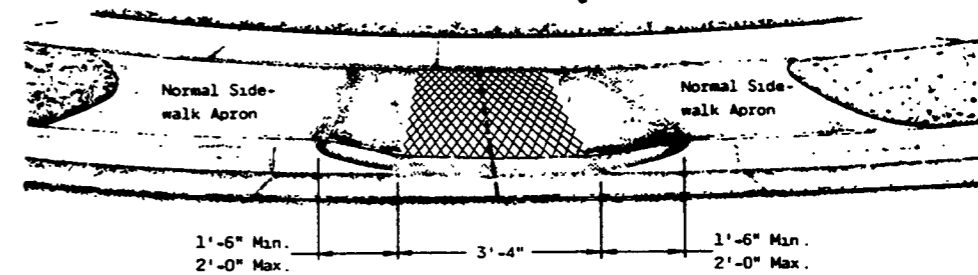
FHWA



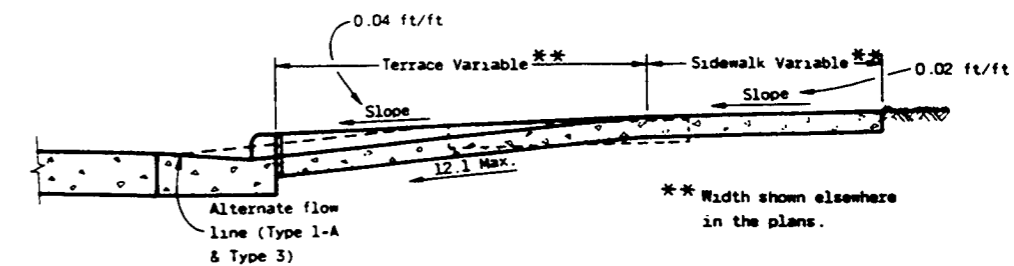
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)

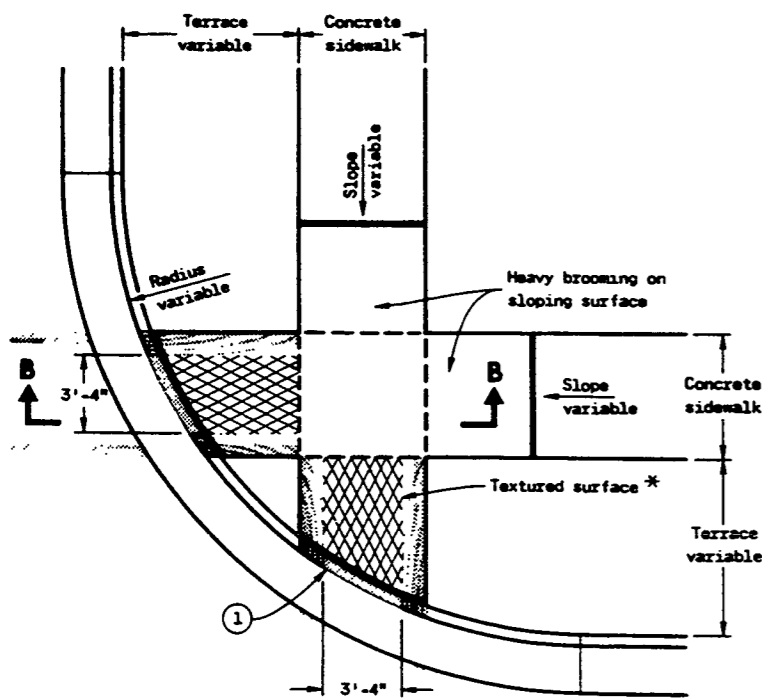


VIEW A-A

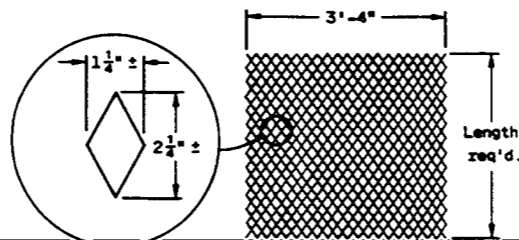


SECTION B-B

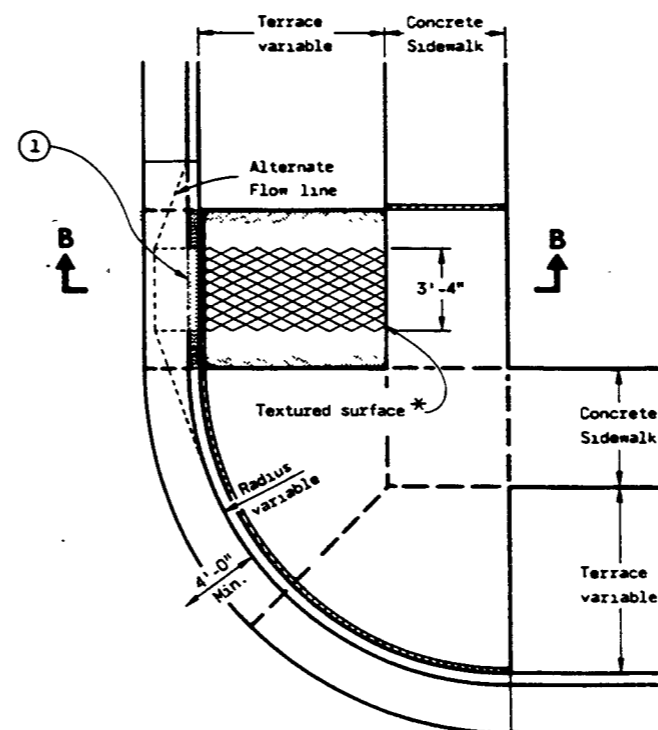
1/2" EXPANSION JOINTS - SIDEWALK
 --- CONTRACTION JOINTS
 Location of joints may be varied from those shown to better fit site conditions and/or local government preference.



PLAN-VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN *



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

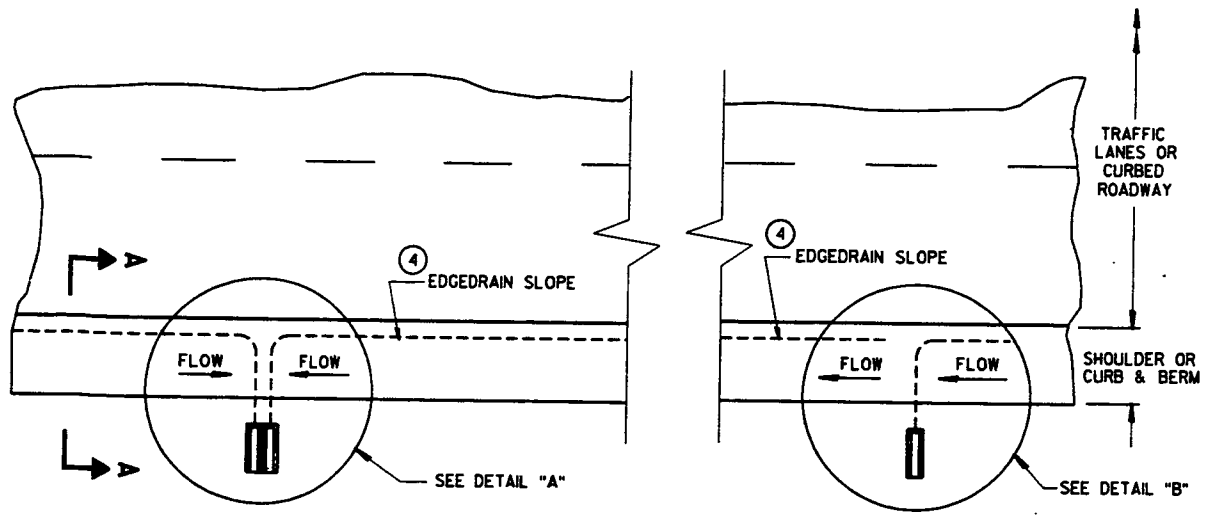
GENERAL NOTES

- 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 12:1 or flatter. When necessary, the sidewalk elevation may be lowered to meet the high point on the ramp.
- Type 1 or Type 1-A Ramps shall have a normal sidewalk apron and curb on both sides of ramp.
- Curb ramps shall be measured and paid for as Concrete Sidewalk and Concrete Curb and Gutter.
- Surface texturing shall consist of linear impressions approximately 1/4 inch to 3/8 inch in depth and width, oriented to provide a uniform pattern of diamond shapes measuring approximately 1 1/4 inches in width by 2 1/2 inches in length, with the length being parallel to the direction of pedestrian movement. This surface texture may be achieved by impressing and removing a piece of expanded metal regular industrial mesh into the surface of the ramp while the concrete is in a plastic state.
- The ramp shall be bordered on both sides and on the curb line with a 4 inch wide yellow stripe or with brick of a contrasting color. Normally the paint stripe alternate will be used. The municipality or the department will apply this striping unless otherwise specified in the contract.
- If a municipality requires the brick alternate, special details and provisions are shown elsewhere in the plans.

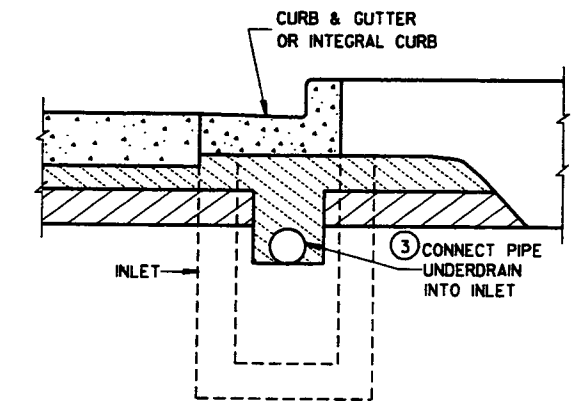
CURB RAMPS	
State of Wisconsin Department of Transportation	
APPROVED 10-23-84 DATE	 CHIEF DESIGN ENGINEER
FHWA	

S.D.D. 8 D 5-8

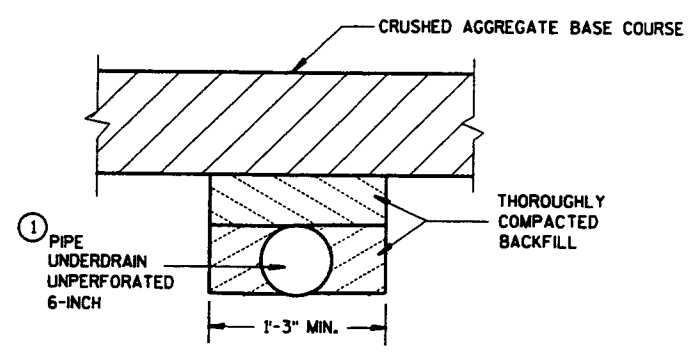
S.D.D. 8 D 5-8



PLAN VIEW
ROADWAY WITH SHOULDERS OR CURBS
 (EDGEDRAIN OUTLETS TO ROADSIDE) ②



SECTION B-B
URBAN CROSS SECTION

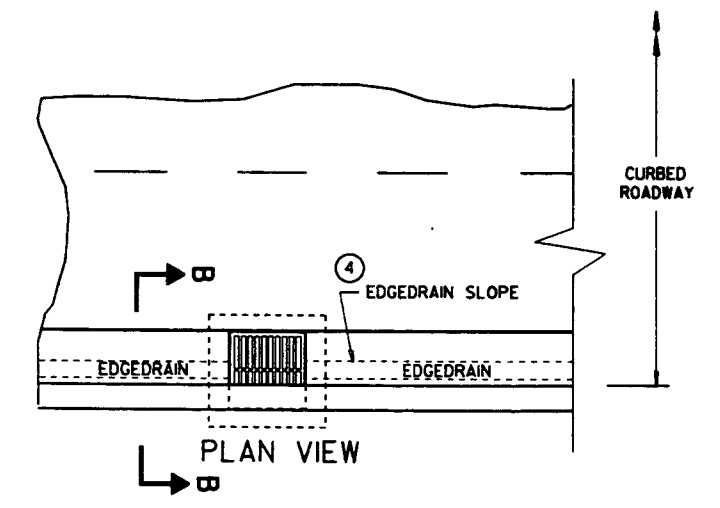


SECTION C-C
(TRENCH FOR OUTFALL PIPE)

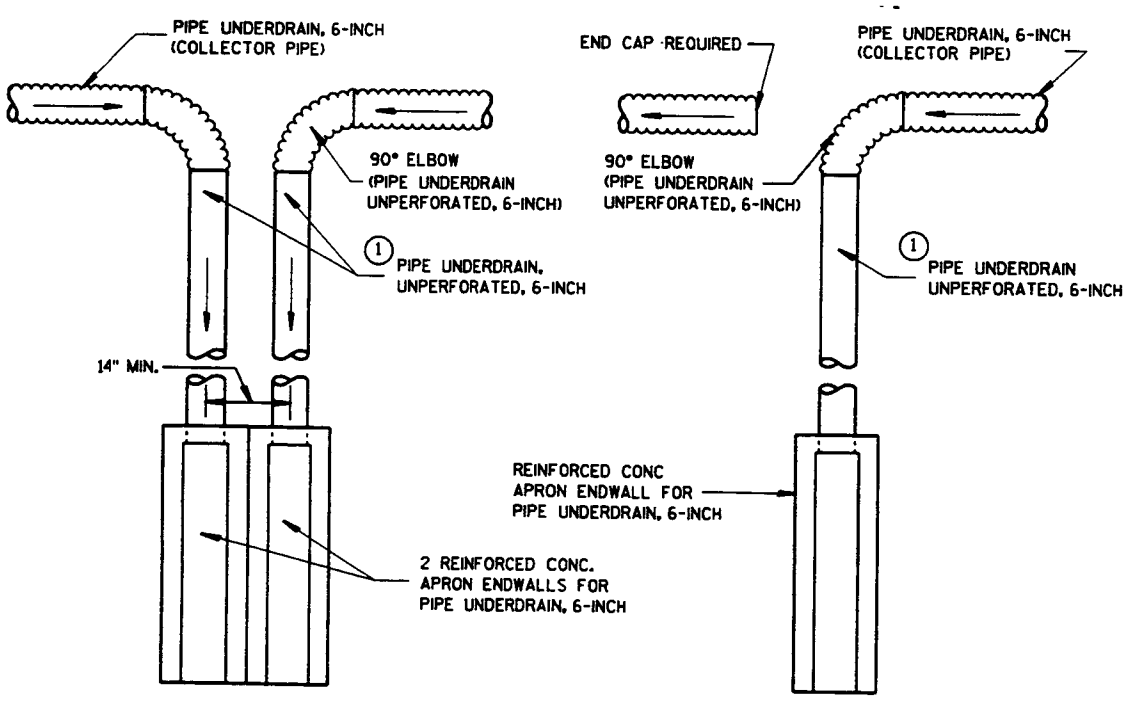
GENERAL NOTES

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

- ① UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:
 POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.
 TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.
- ② MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.
- ③ EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.
- ④ EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



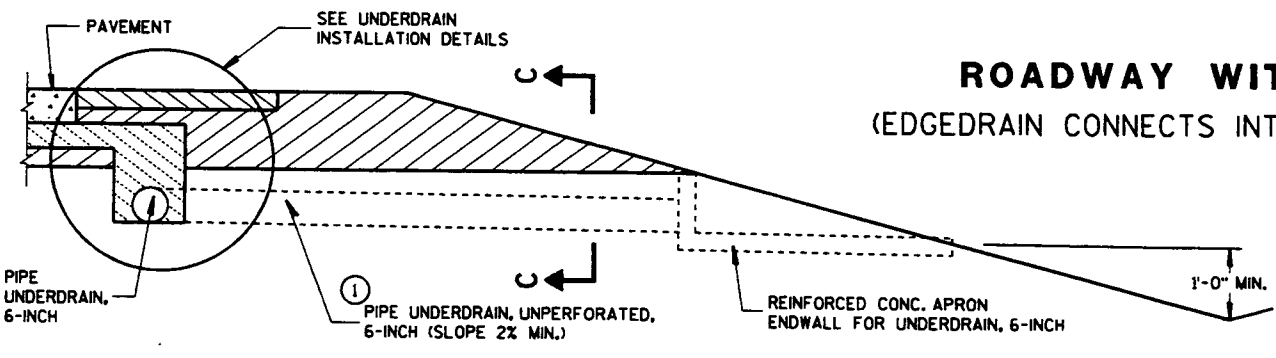
PLAN VIEW
ROADWAY WITH CURBS
 (EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



DETAIL "A"
 TO BE USED AT LOW POINT LOCATIONS

DETAIL B
 TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS

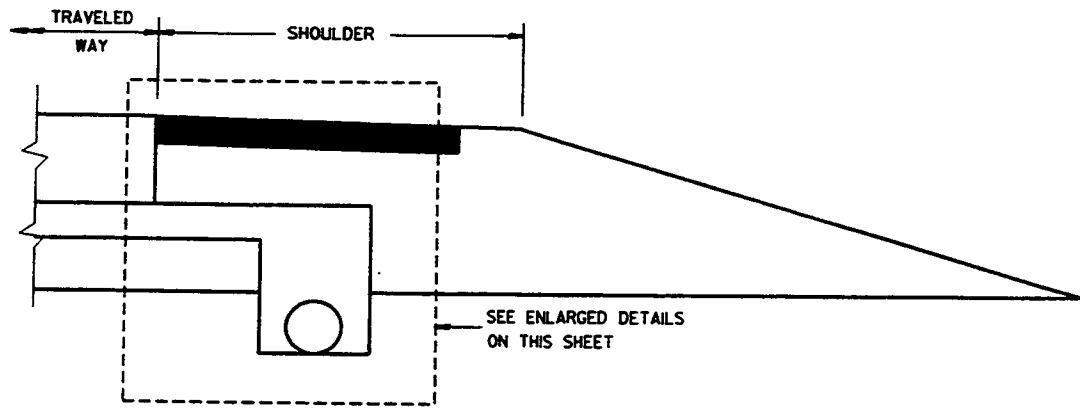


SECTION A-A
RURAL CROSS SECTION

NOTE:
 SDD BFG-X AND SDD BD15-1b or SDD BD15-1c ARE REQUIRED WITH THIS DRAWING IN CONTRACT PLANS.

EDGEDRAIN OUTLET DETAILS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 15-10



RURAL CROSS SECTION

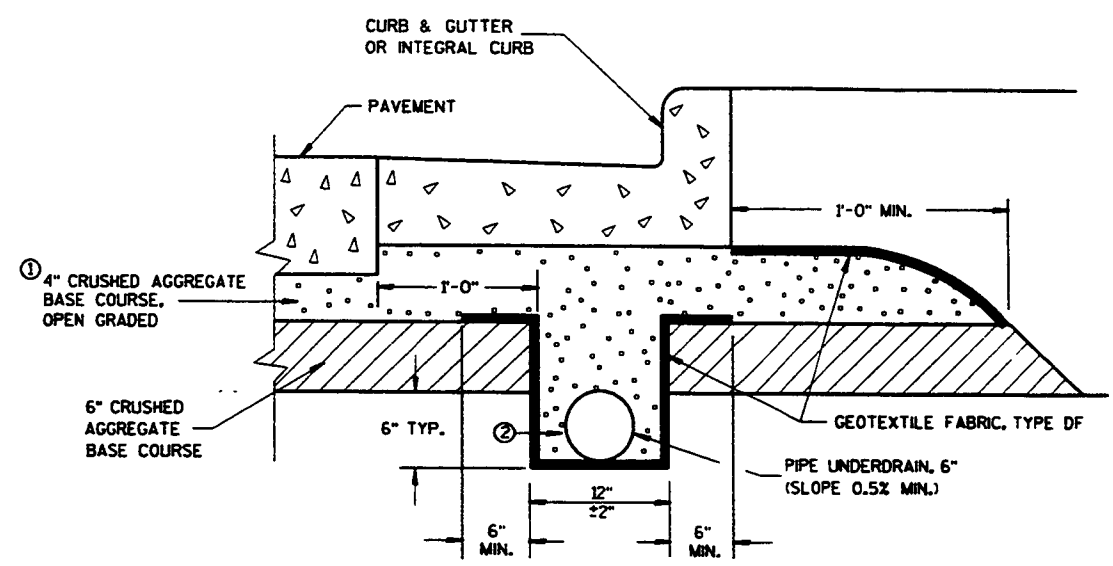
NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

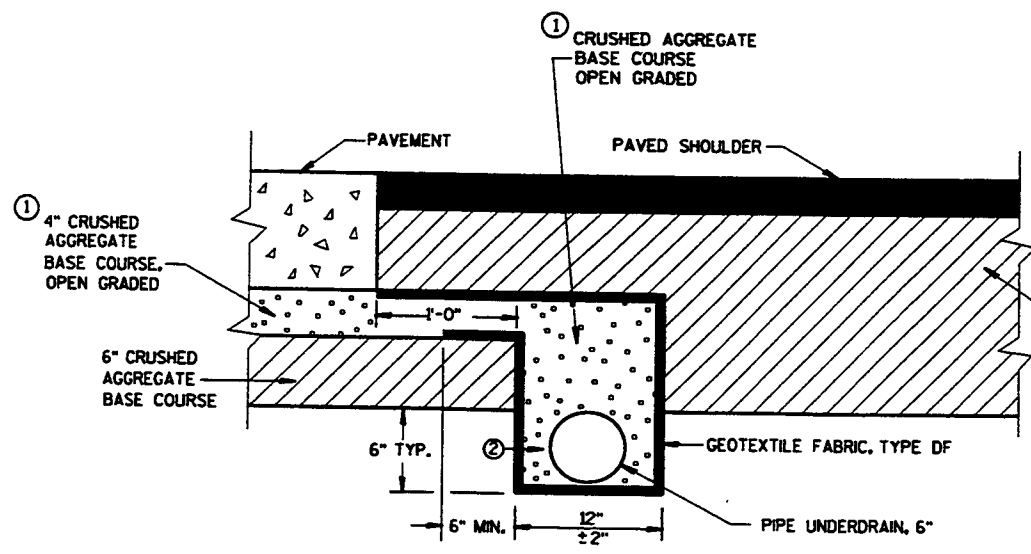
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

① THE GRADATION OF THE OPEN GRADED BASE COURSE SHALL BE EITHER NO. 1 OR NO. 2 AS SPECIFIED ELSEWHERE IN THE CONTRACT.

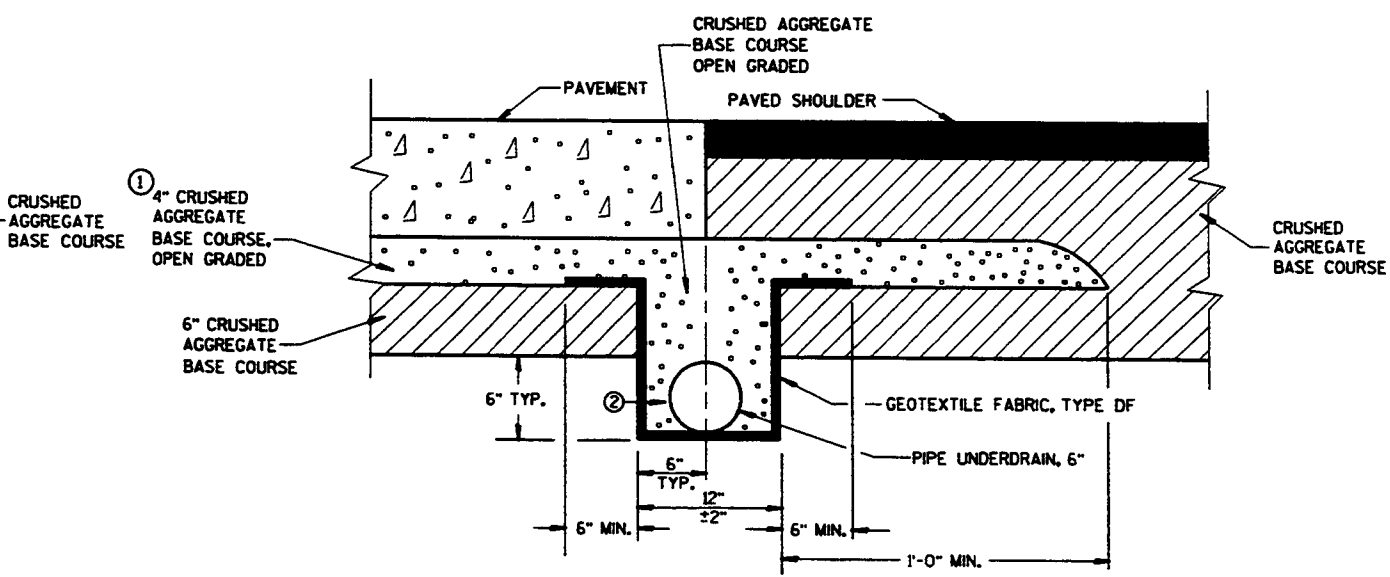
② TRENCH BACKFILL WILL BE PAID FOR AS CRUSHED AGGREGATE BASE COURSE, OPEN GRADED NO. 1 OR NO. 2 AS SPECIFIED.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

NOTE:
SDD 8D15-1a IS REQUIRED WITH THIS DRAWING IN CONTRACT PLANS.

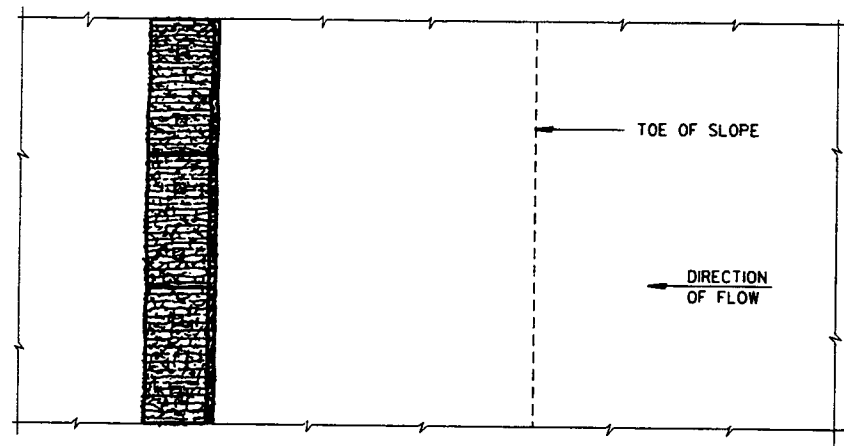
EDGEDRAIN AND CRUSHED AGGREGATE BASE COURSE, OPEN GRADED NO. 1 OR NO. 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

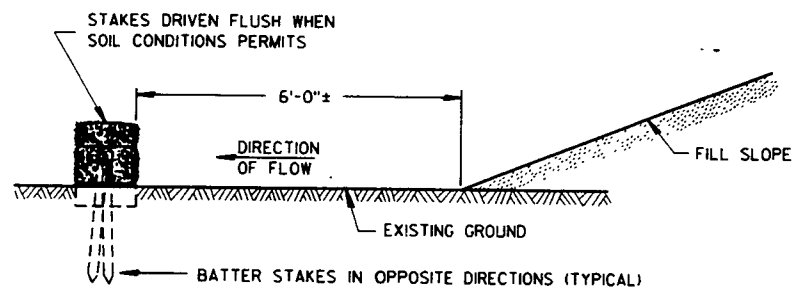
APPROVED
12/7/93 *Roy J. Thompson*
DATE *Roy J. Thompson*
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 D 15-1b

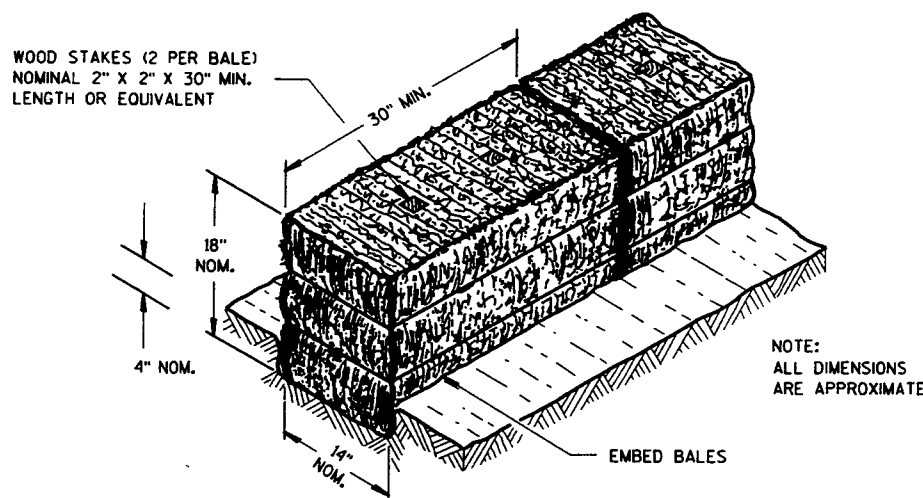
S.D.D. 8 D 15-1b



PLAN VIEW

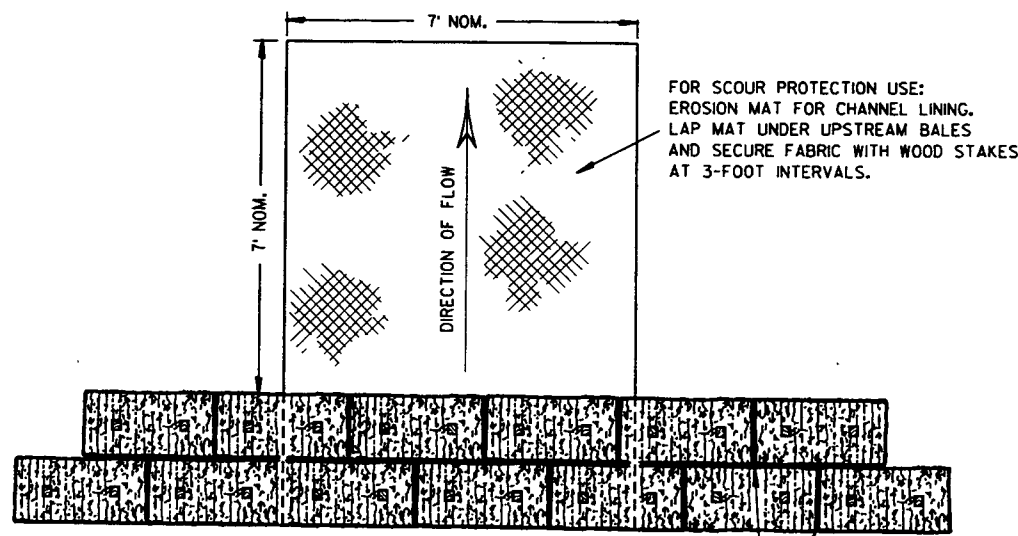


FRONT ELEVATION
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE
EROSION BALES FOR SHEET FLOW

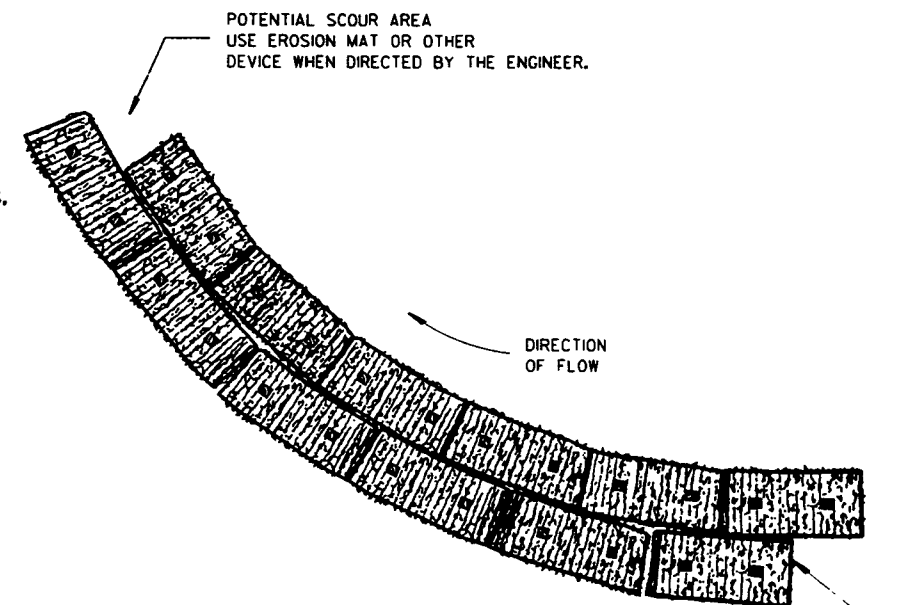


GENERAL NOTES

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

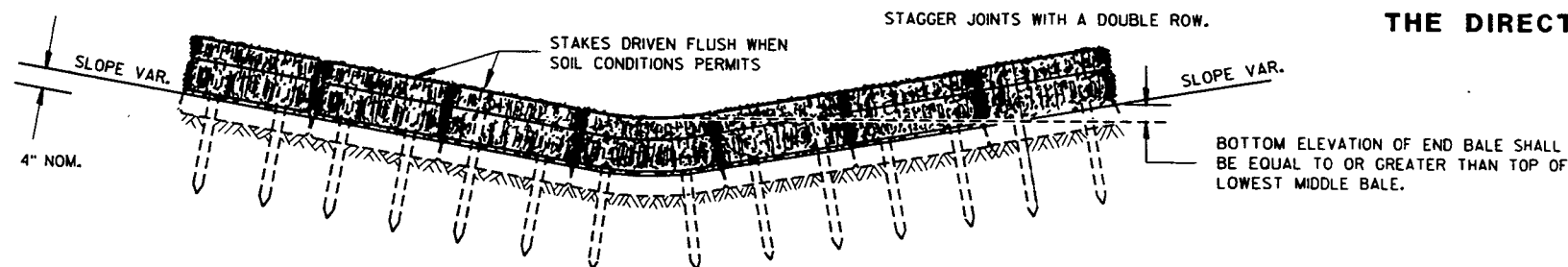


PLAN VIEW



PLAN VIEW

EROSION BALES WHEN ALTERING
THE DIRECTION OF FLOW



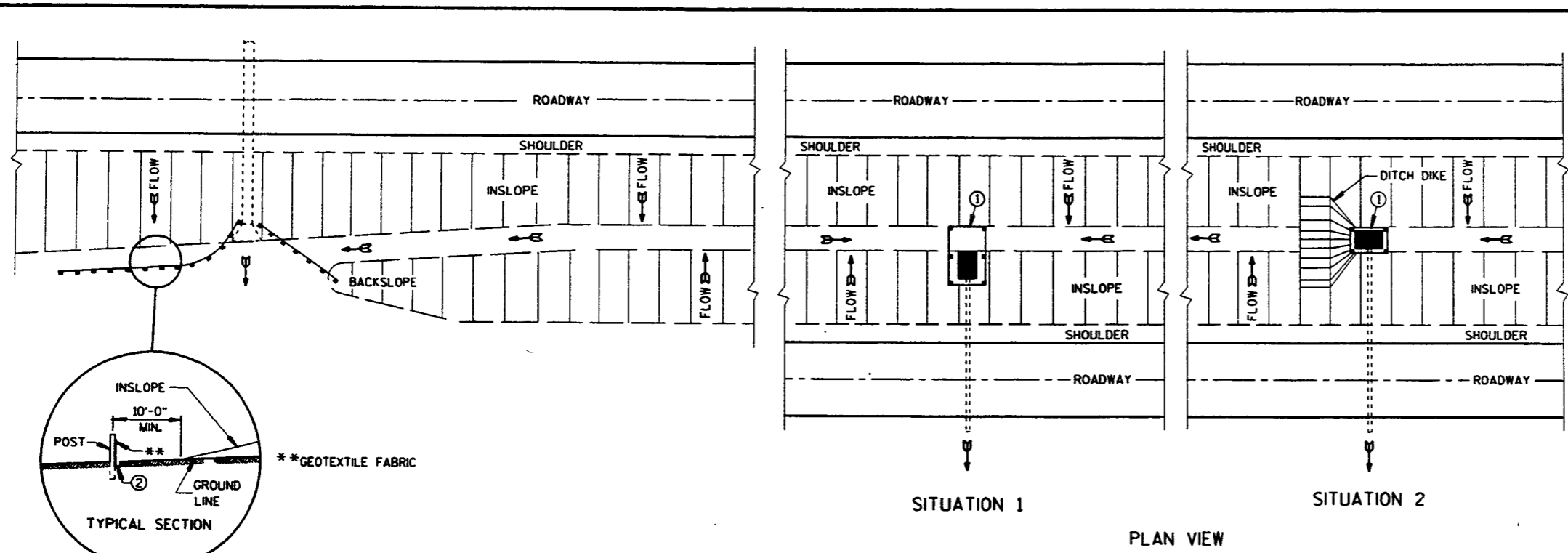
FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW

TYPICAL INSTALLATIONS
OF EROSION BALES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 4/29/94
DATE
FHW A
CHIEF ROADWAY DEVELOPMENT ENGINEER



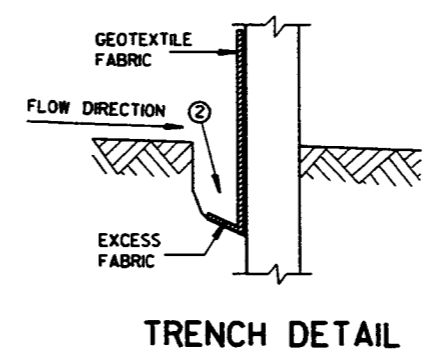
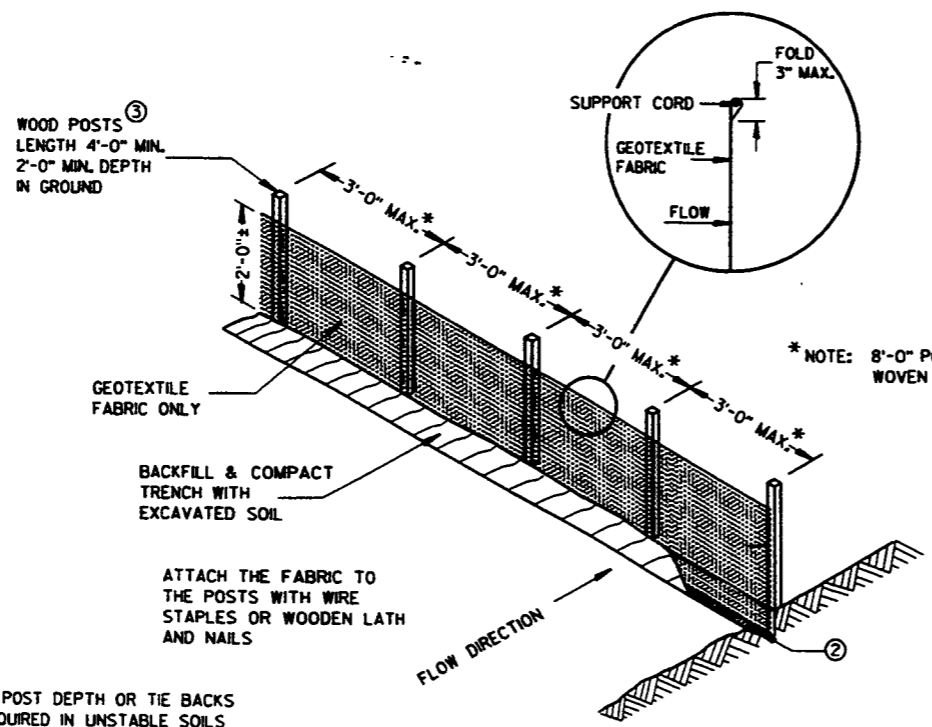
GENERAL NOTES

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

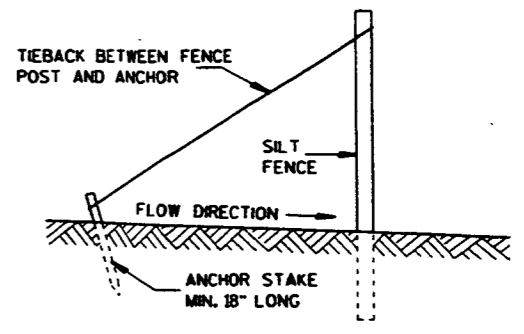
- ① HORIZONTAL BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
- ② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.

SITUATION 1
SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

PLAN VIEW
TYPICAL APPLICATIONS OF SILT FENCE



TRENCH DETAIL



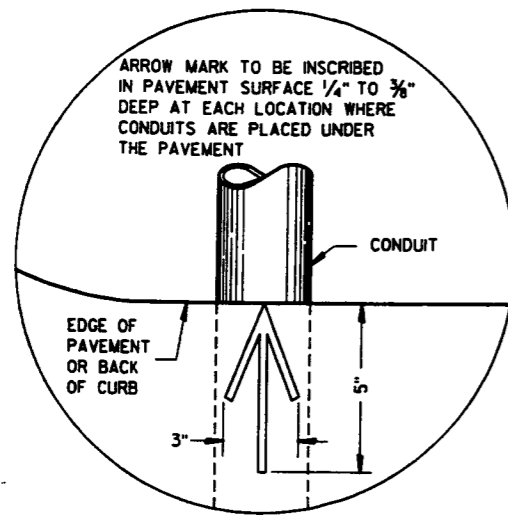
SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

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

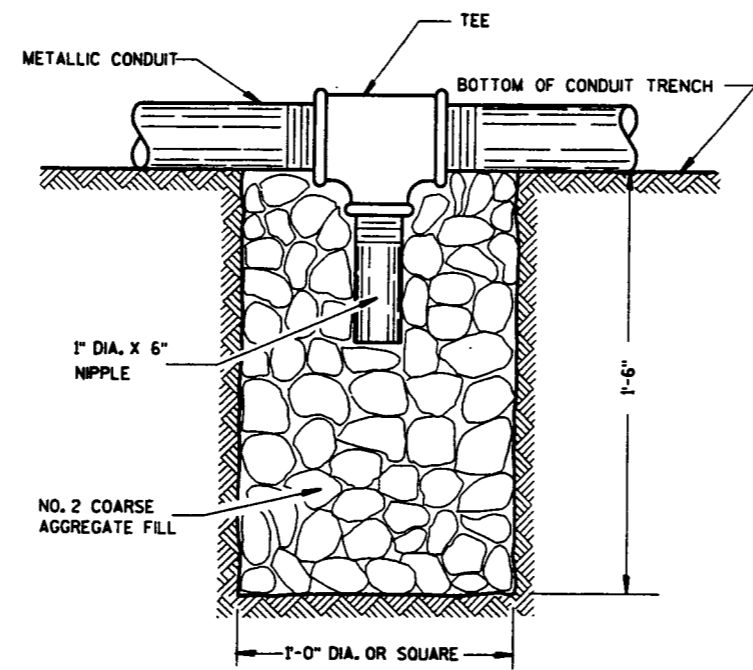
SILT FENCE
(NON-REINFORCED)

SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED <i>[Signature]</i> DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA

S.D.D. 8 E 9-4

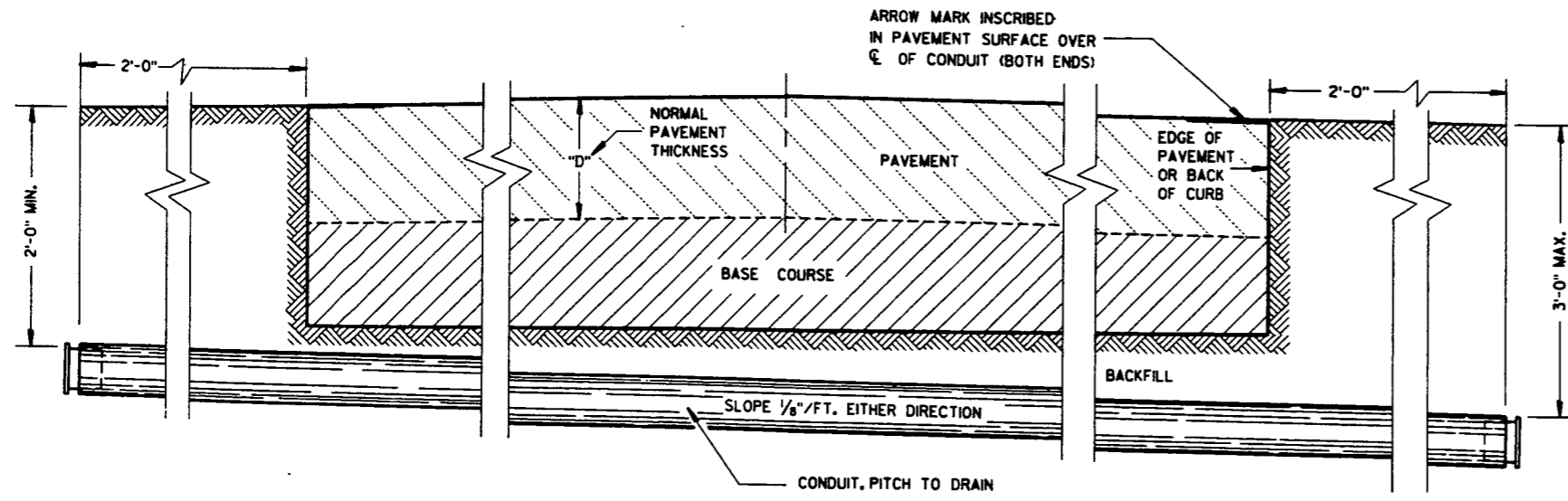


PLAN VIEW
ARROW MARK



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

DRAIN SUMP FOR CONDUIT



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- METALLIC (STANDARD SPECIFICATION 613.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 613.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.
- DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.
- DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.
- ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.
- THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.
- ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.
- ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.
- ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.
- ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION.
- NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
- WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.
- PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.
- ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.
- CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX).
- A #12 GAUGE, GALVANIZED PULL WIRE SHALL BE INSTALLED IN EACH RUN OF CONDUIT THAT DOES NOT RECEIVE CABLE OR WIRE UNDER THIS CONTRACT. THE PULL WIRE SHALL BE DOUBLED BACK 2 FEET AT EACH END CAP OF THE CONDUIT RUN.
- BENDING OF PVC SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.
- ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.
- ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

CONDUIT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 9/15/92	<i>Dale J. Miller</i> STATE ELECTRICAL ENGINEER FOR HWYS <i>Robert R. Rensch</i> STATE TRAFFIC ENGINEER FOR HWYS
FHWA	

S.D.D. 9 B 2-5

S.D.D. 9 B 2-5

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

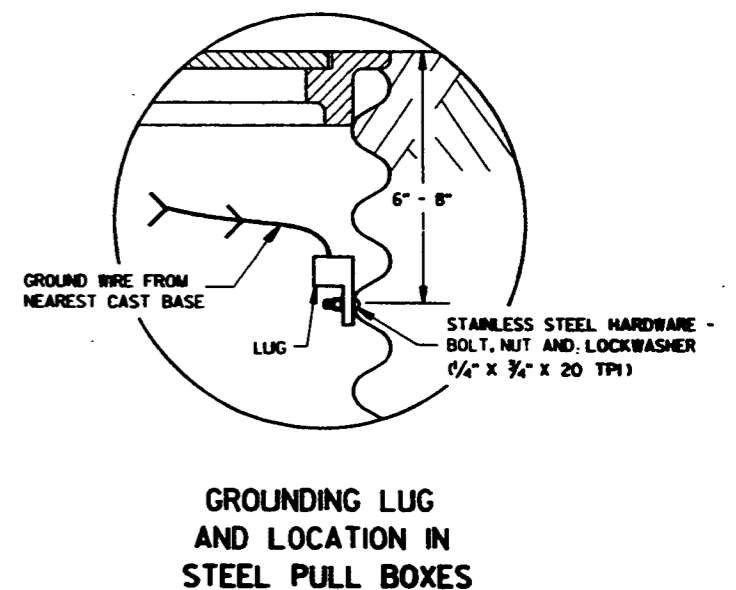
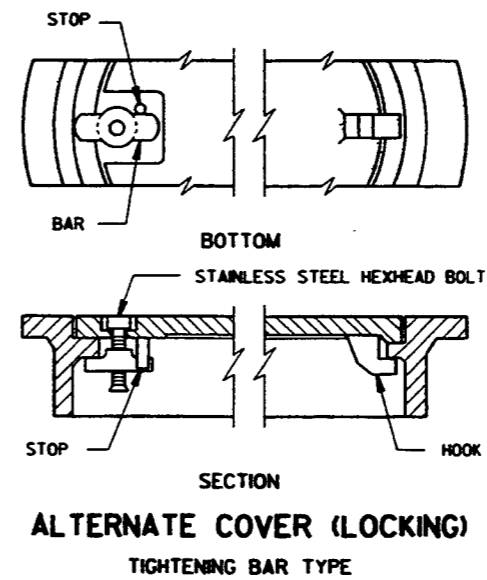
DIMENSION IN INCHES	TYPE OF PIPE	CORRUGATED STEEL						POLYETHYLENE SDR 32.5
		A	12	12	18	18	24	24
PIPE DIAMETER (INSIDE)	A	12	12	18	18	24	24	12
PIPE LENGTH **	B	24	36	24	36	24	36	24
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.4
COVER	D	10 1/4	10 1/4	16 1/4	16 1/4	22 1/4	22 1/4	10 1/4
FRAME	E	14 1/2	14 1/2	20 1/2	20 1/2	26 1/2	26 1/2	14 1/2
FRAME	F	8 1/2	8 1/2	14 1/2	14 1/2	20 1/2	20 1/2	8 1/2
FRAME	G	11 1/2	11 1/2	17 1/2	17 1/2	23 1/2	23 1/2	11 1/2
WEIGHT IN POUNDS *								
FRAME AND COVER		60	60	100	100	155	155	60

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

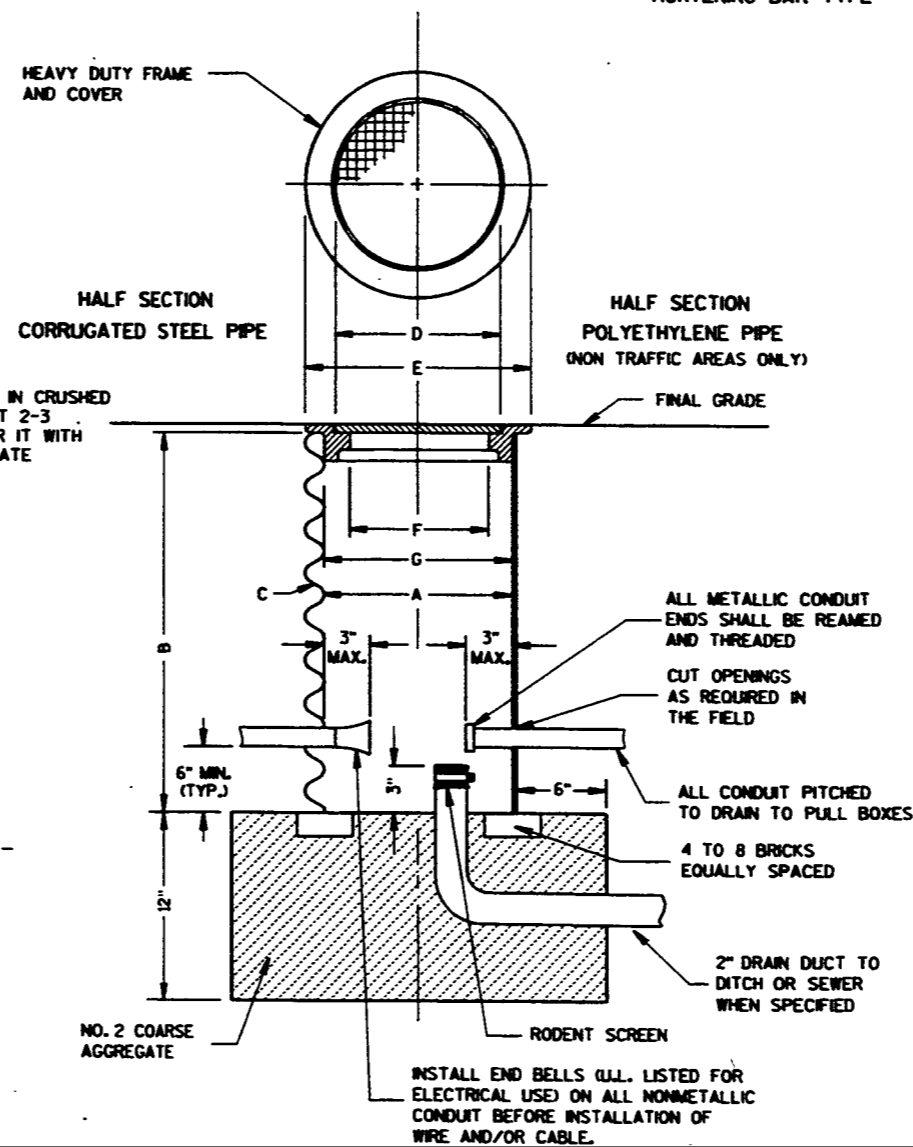
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED)

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.
- POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY 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 SCREEN SHALL BE 1/8" GALVANIZED 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.



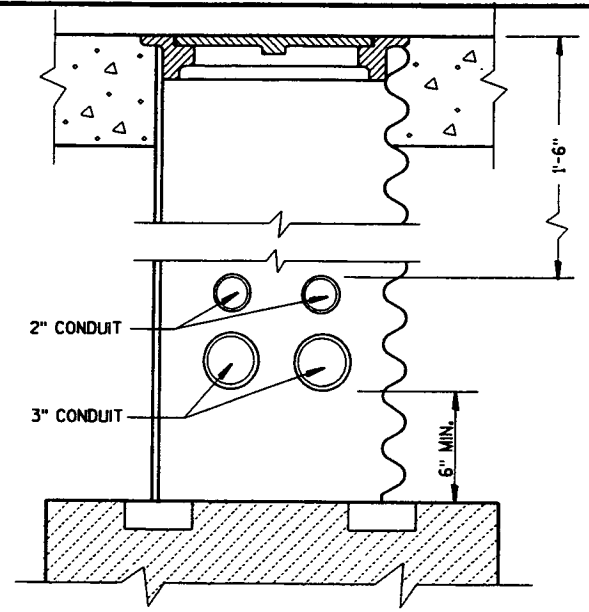
WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/21/93 DATE	<i>Bahn</i> STATE ELECTRICAL ENGINEER FOR HWY'S

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.32

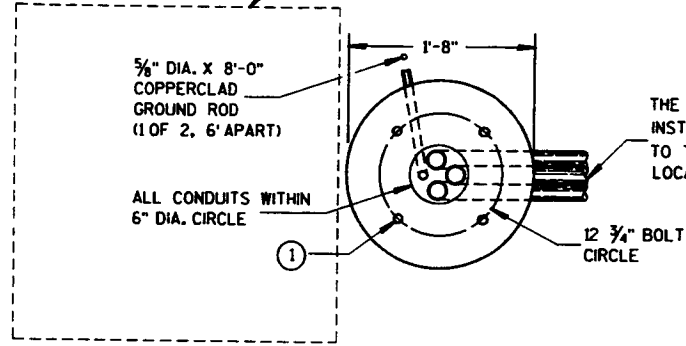


CONDUIT LOCATIONS IN 24" X 36" PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)

GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR BOLTS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.
- WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
- CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.
- DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.
- DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.
- ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.
- CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.
- WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND 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.
- 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.
- ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLANS.
- BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.
- CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
- WHEN ANCHOR BOLTS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR BOLT BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.
- STRAIGHT ANCHOR BOLTS SHALL BE THREADED 8" IN LENGTH ON EACH END OF THE BOLT.
- FOUR (4) ANCHOR BOLTS, 1" DIA. X 3'-6" ANCHOR BOLTS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 640.2.9 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449.

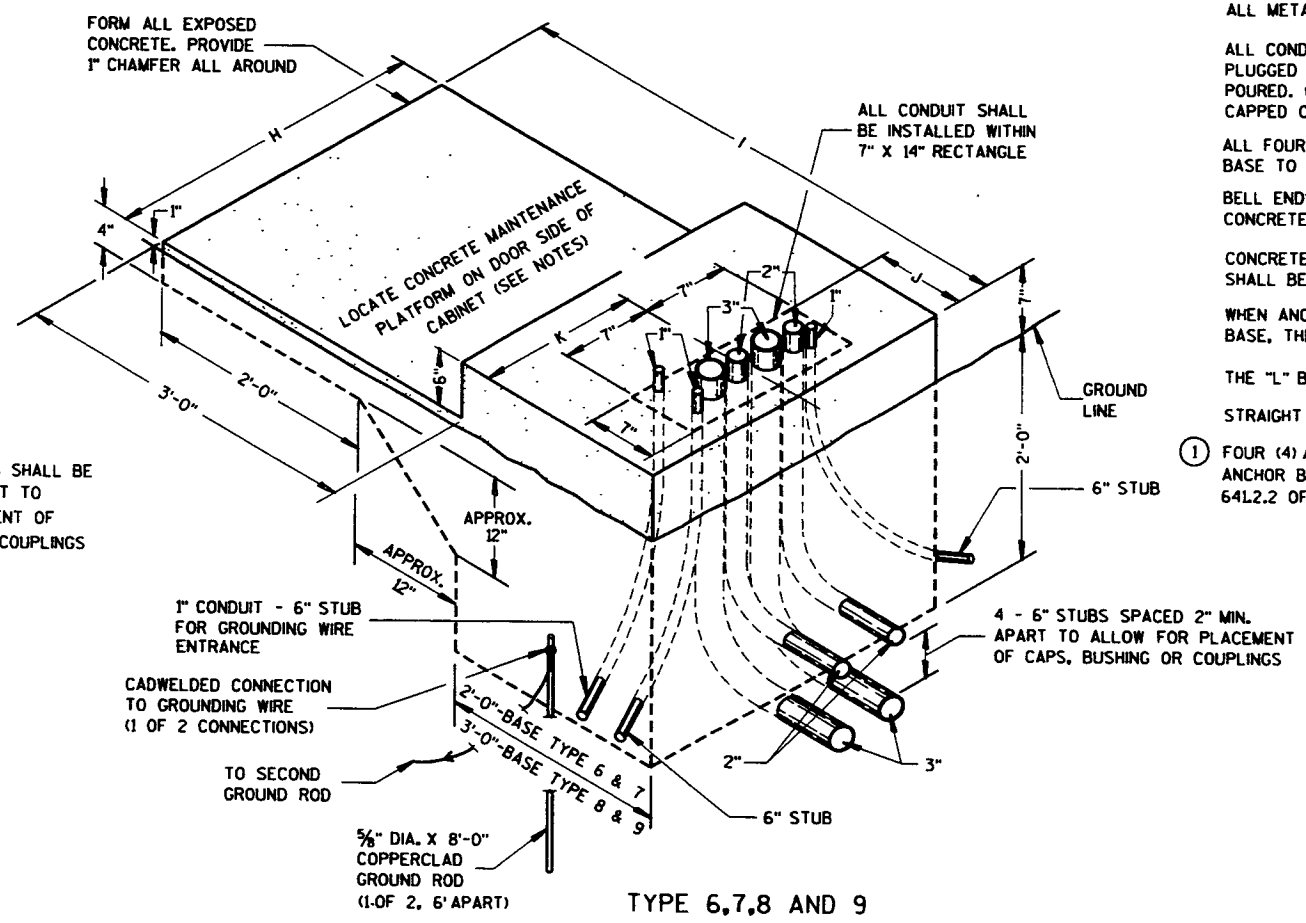
TYPICAL 3'-0" X 3'-0" MAINTENANCE PLATFORM. LOCATION TO BE DETERMINED IN THE FIELD.



THE THREE CONDUITS SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLAN

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

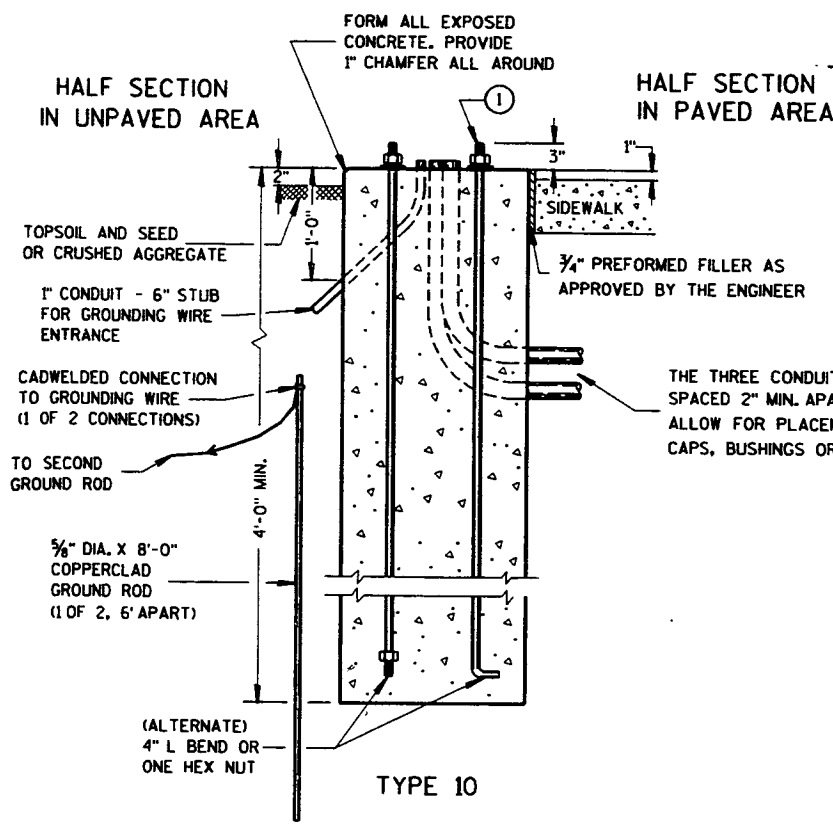
ALL CONDUIT SHALL BE INSTALLED WITHIN 7" X 14" RECTANGLE



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

HALF SECTION IN UNPAVED AREA

HALF SECTION IN PAVED AREA



TYPE 10

CONCRETE CONTROL CABINET BASES

S.D.D. 9 C 5-1

CONCRETE CONTROL CABINET BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/21/93 DATE	<i>[Signature]</i> STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE	<i>[Signature]</i> STATE TRAFFIC ENGINEER FOR HWYS
FHWA	

GENERAL NOTES

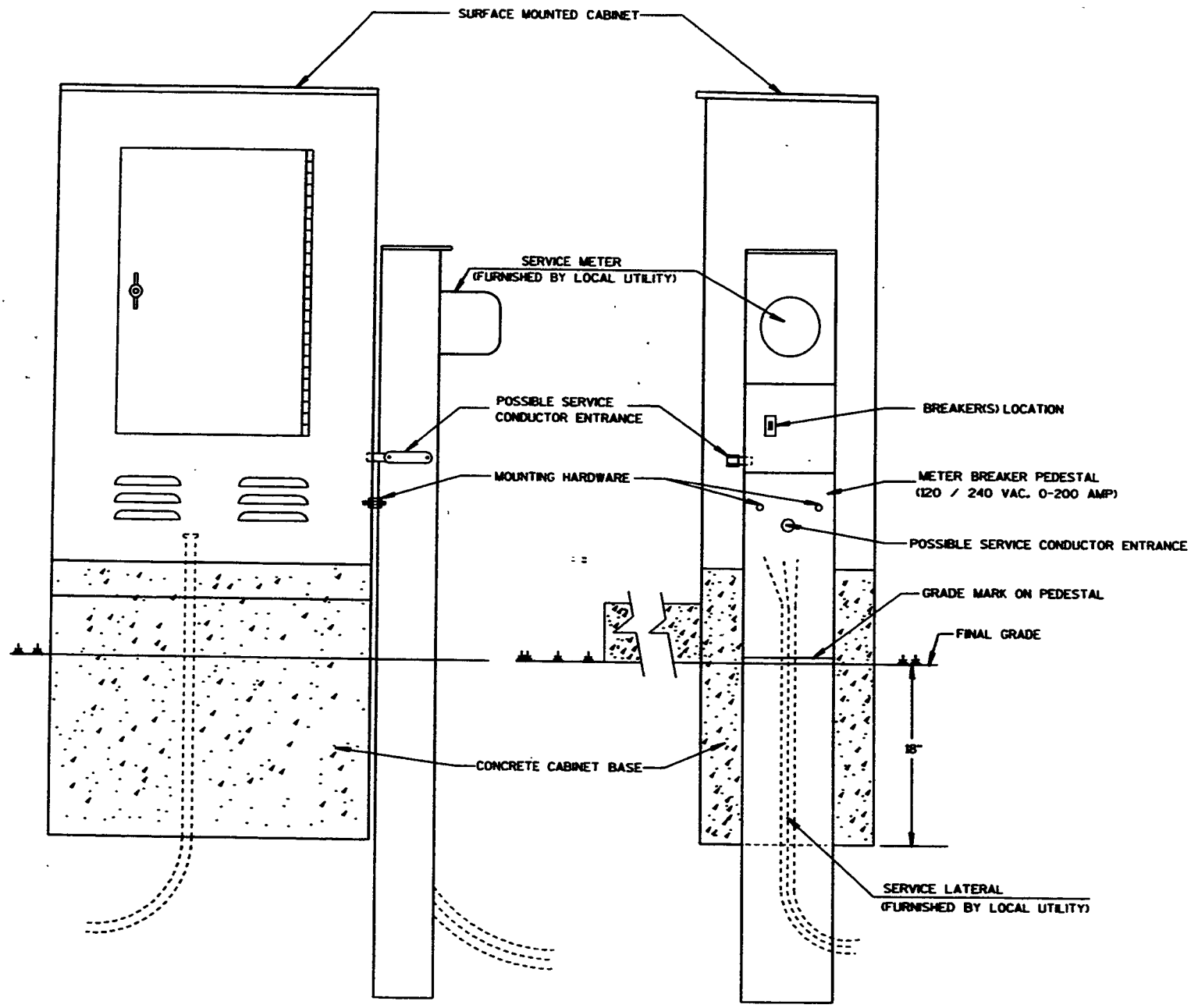
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AS REQUIRED AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.



TYPICAL CABINET SERVICE INSTALLATION

CABINET SERVICE INSTALLATION

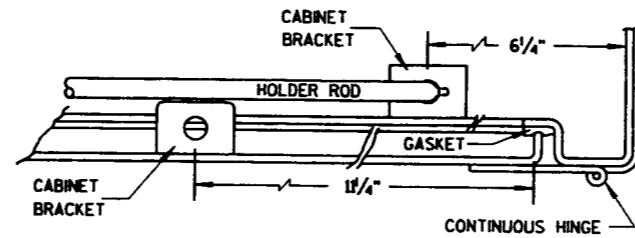
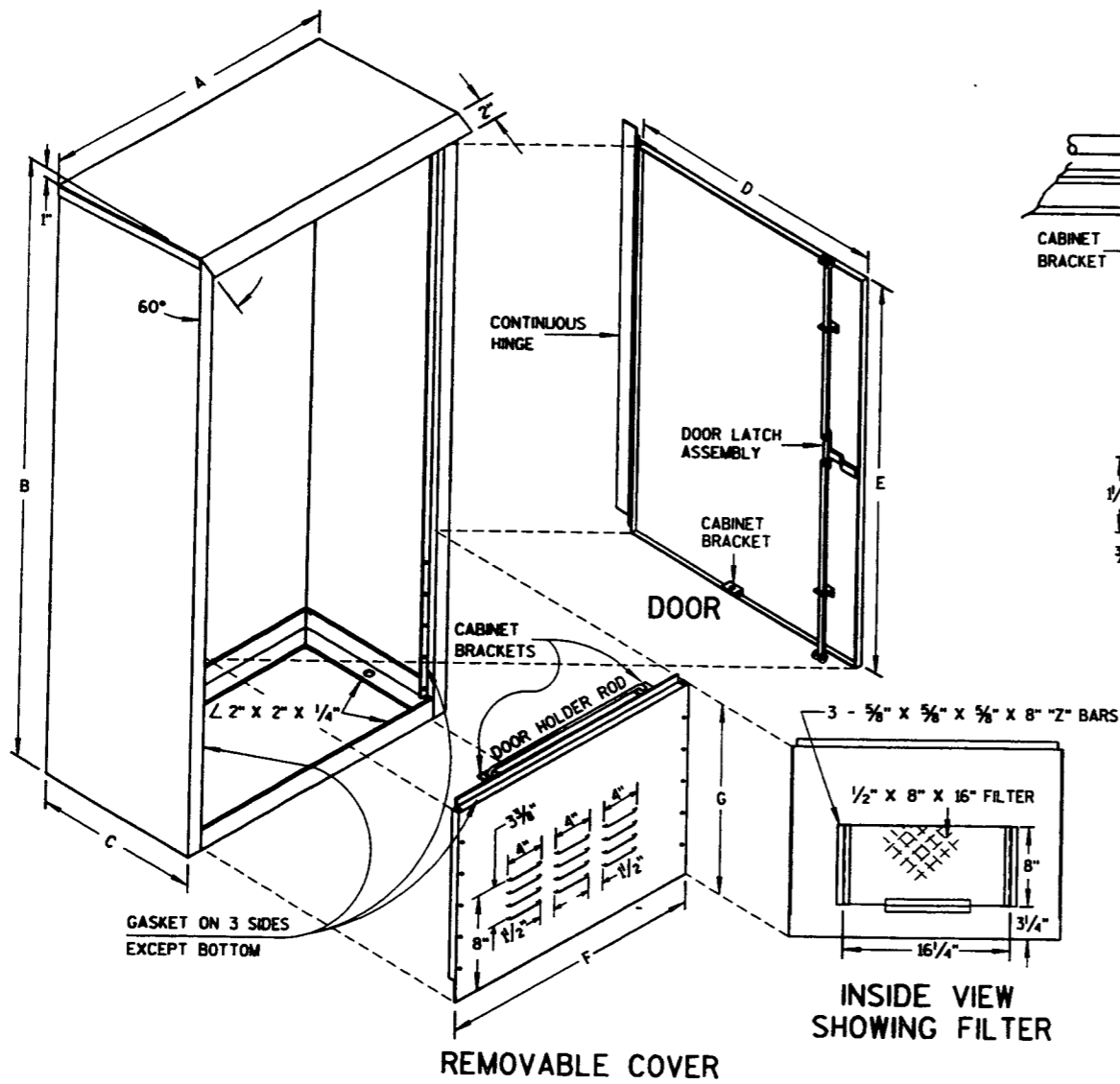
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/21/93
DATE
4/21/93
DATE
FWHA

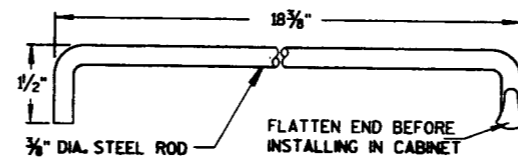
Bala
STATE ELECTRICAL ENGR FOR HWYS

John
STATE TRAFFIC ENGINEER FOR HWYS

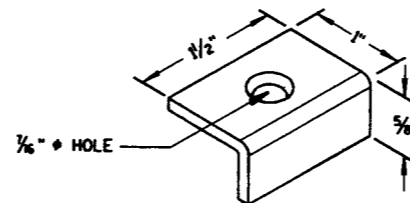
S.D.D. 9 D 1-1



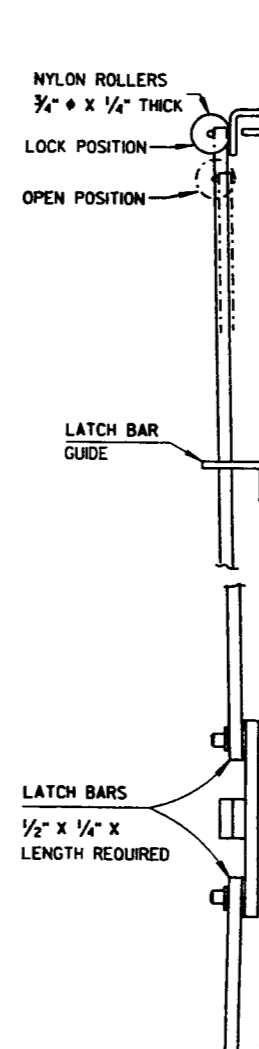
HINGE & DOOR HOLDER



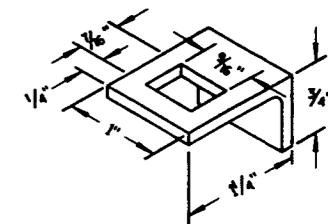
HOLDER ROD



CABINET BRACKET



LATCH ASSEMBLY



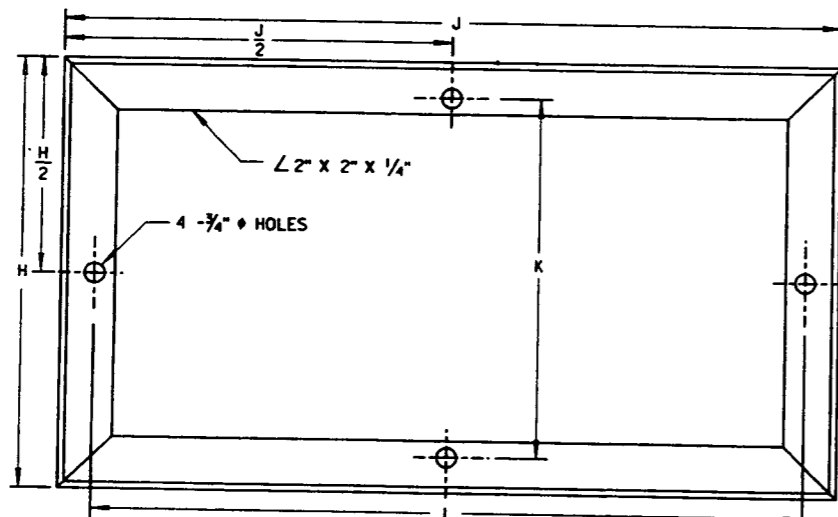
LATCH BAR GUIDE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
 PRIME WITH PHOSPHATE TREATMENT AND PRIMER.
 FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.
 FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.
 ALL SHEET METAL PARTS SHALL BE 12 GA. HRP&O.

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



MOUNTING BASE

S.D.D. 9 D 2-1

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

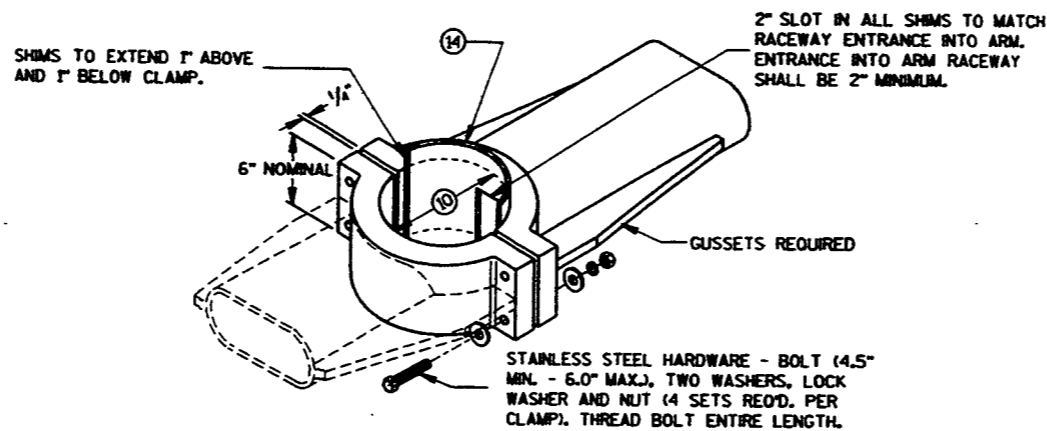
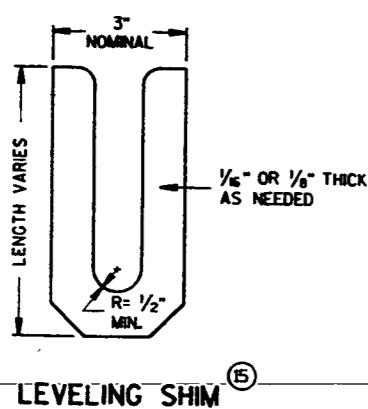
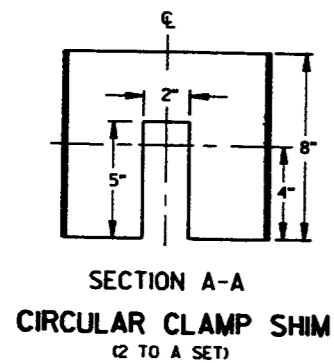
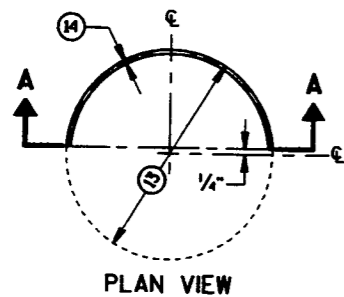
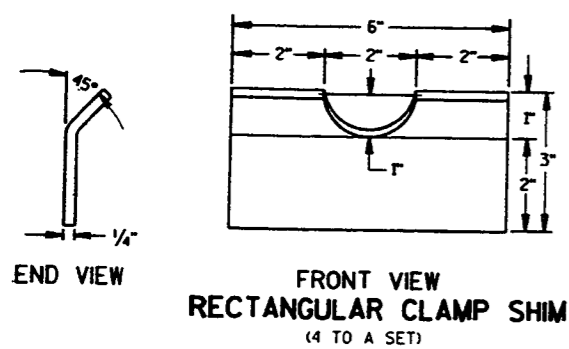
APPROVED
4/21/93
DATE
4/22/93
DATE

[Signature]
STATE ELECTRICAL ENGR. FOR HWYS

[Signature]
STATE TRAFFIC ENGINEER FOR HWYS

FNWA

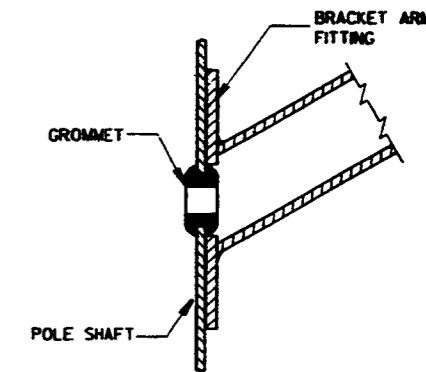
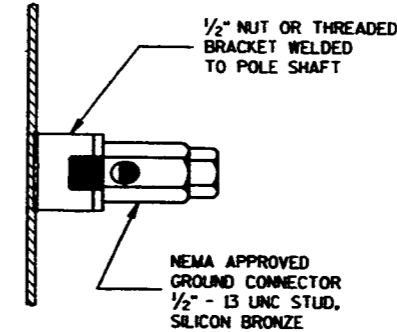
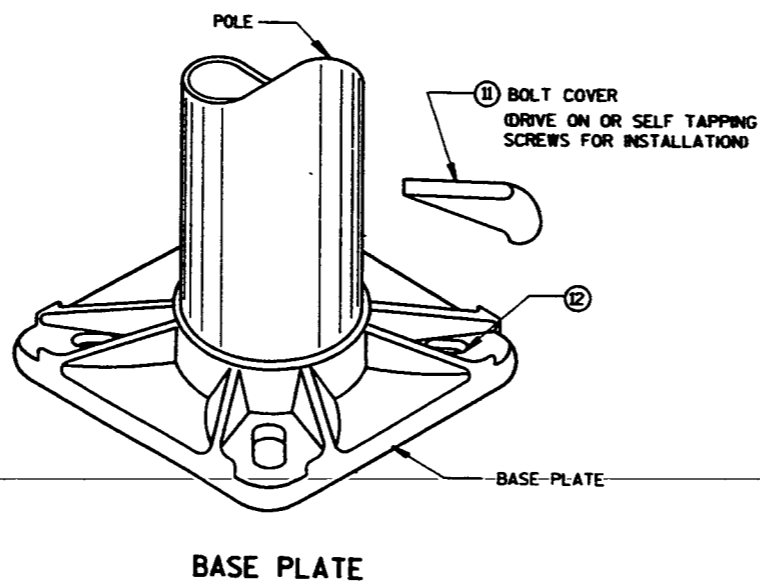
S.D.D. 9 D 2-1



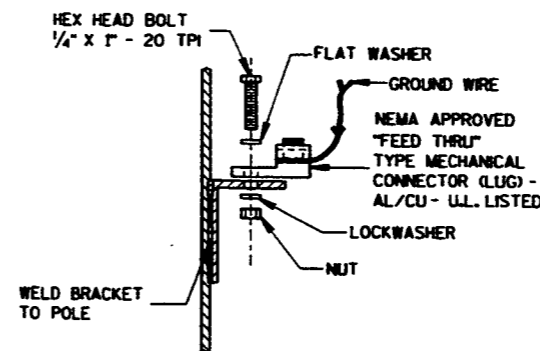
TYPICAL TROMBONE MAST ARM AND LUMINAIRE MAST ARM MOUNTING CLAMP

GENERAL NOTES

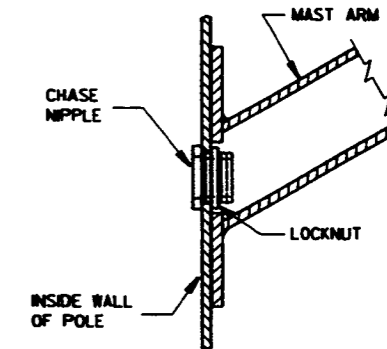
- (10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- (11) INDIVIDUAL BASE PLATE ANCHOR BOLT COVERS. (4 REQUIRED)
- (12) BASE PLATE SLOTTED TO ACCEPT 12" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR BOLTS.
- (13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM 6.625" O.D. FOR TROMBONE MAST ARM)
- (14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")
SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.35", 0.53" OR 0.70".
SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.
SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.
- (15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.
SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



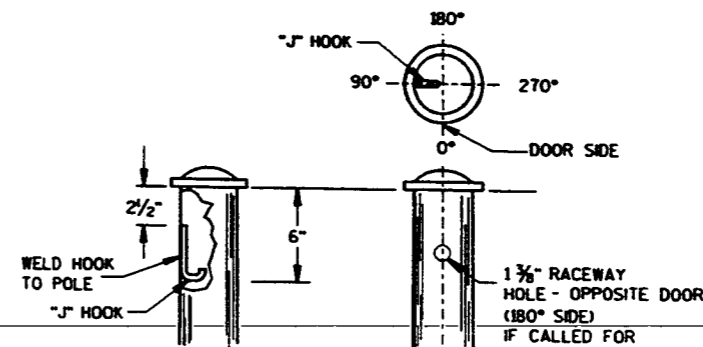
TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



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



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT



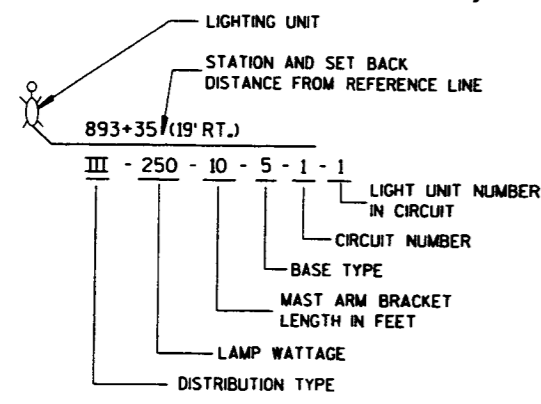
TYPICAL "J" HOOK LOCATION

NOTE:
THIS DRAWING IS REQUIRED WHEN DRAWINGS SDD 9 E 1-10, b.c. OR d IS CALLED FOR IN THE PLANS.

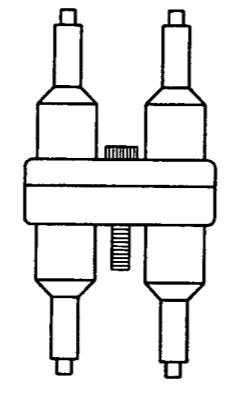
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

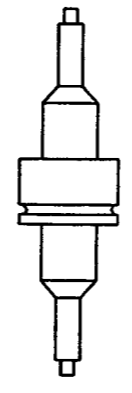
APPROVED
9/21/93 DATE
1/21/93 DATE
STATE ELECTRICAL ENGR FOR HWYS
STATE TRAFFIC ENGINEER FOR HWYS
FWRA



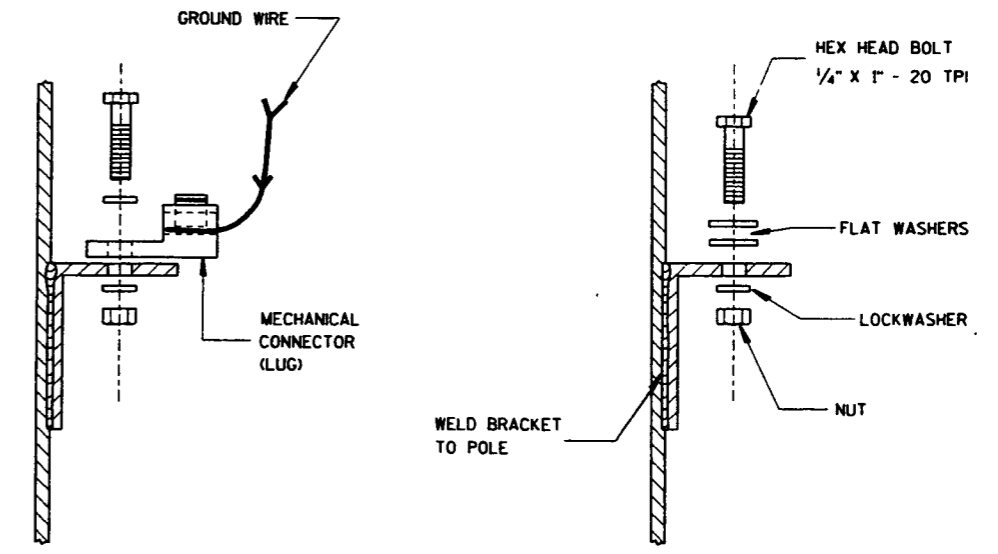
LIGHTING UNIT CODE



**DETAIL "A"
DOUBLE POLE**



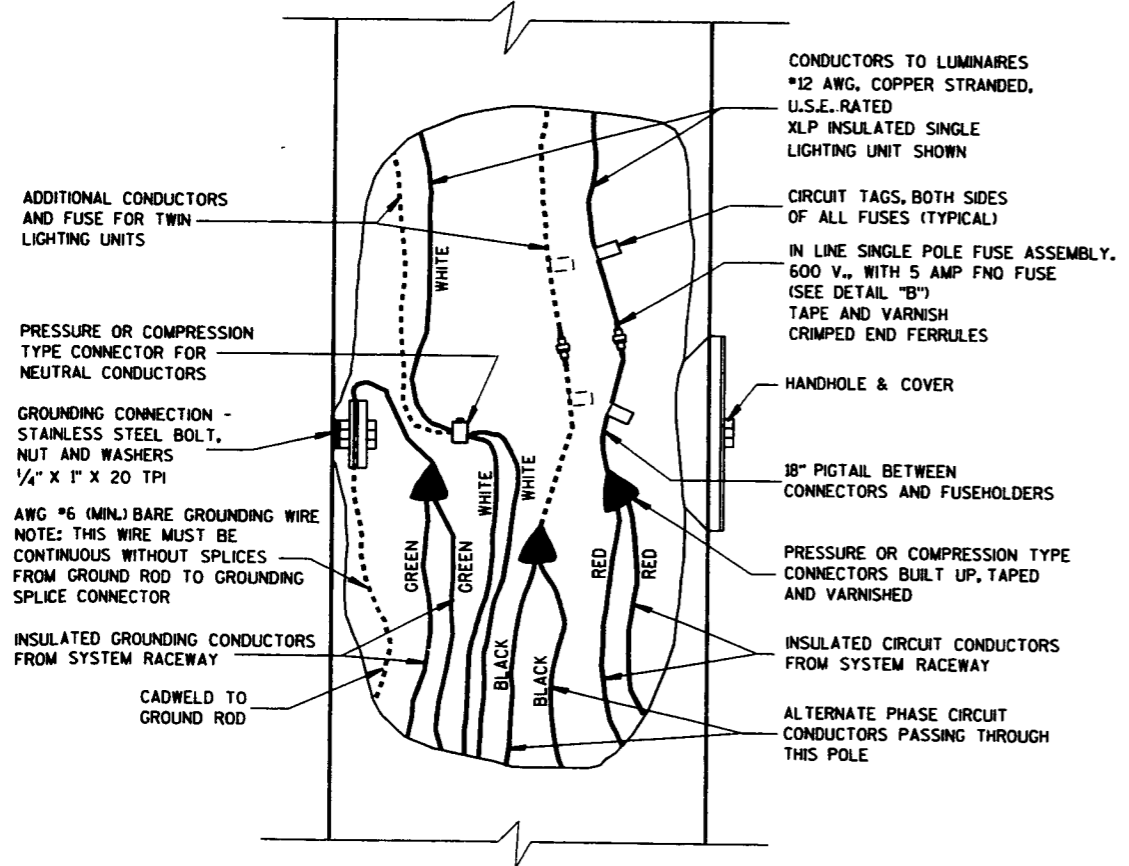
**DETAIL "B"
SINGLE POLE**



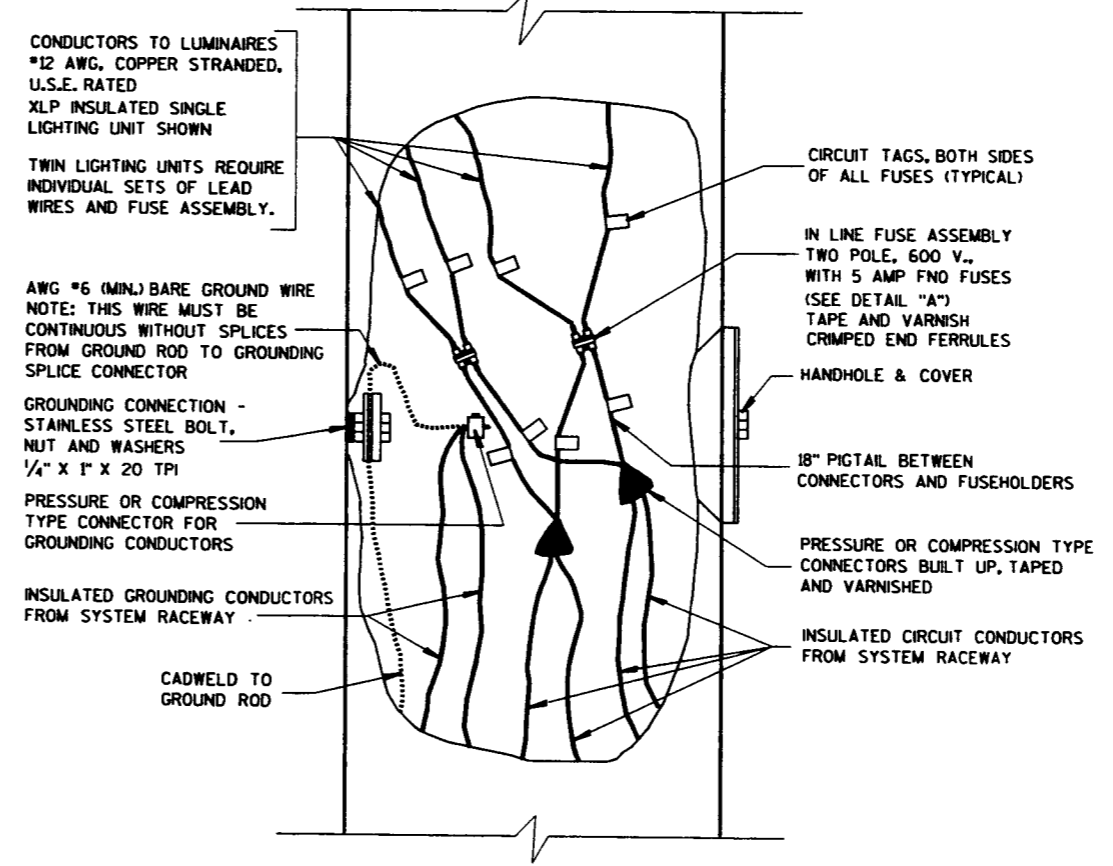
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

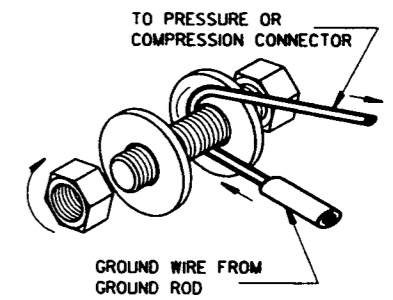
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.



3 WIRE - 120, 240 OR 480 VOLTS TO GROUND
2 WIRE - 120 VOLTS TO GROUND



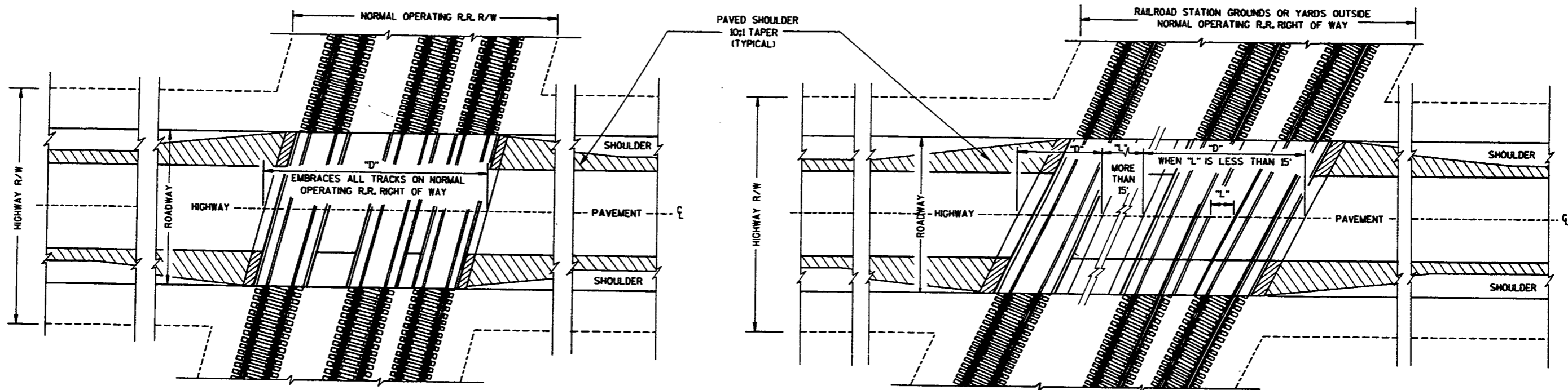
2 WIRE - 240 OR 480 VOLTS (UNGROUND)



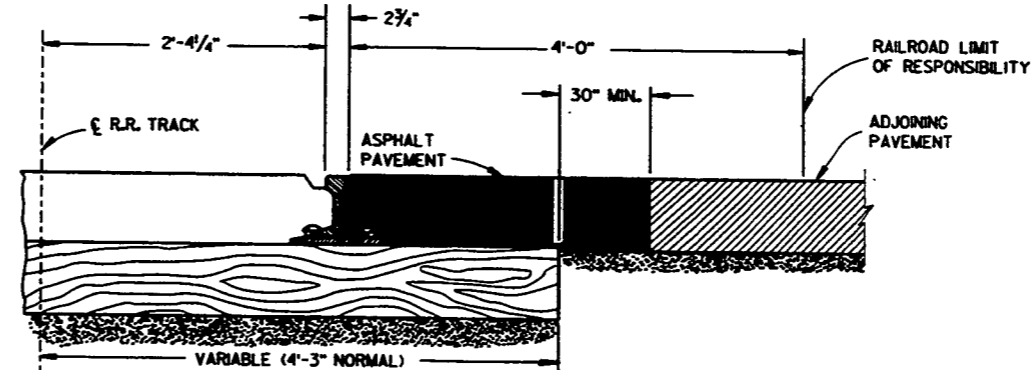
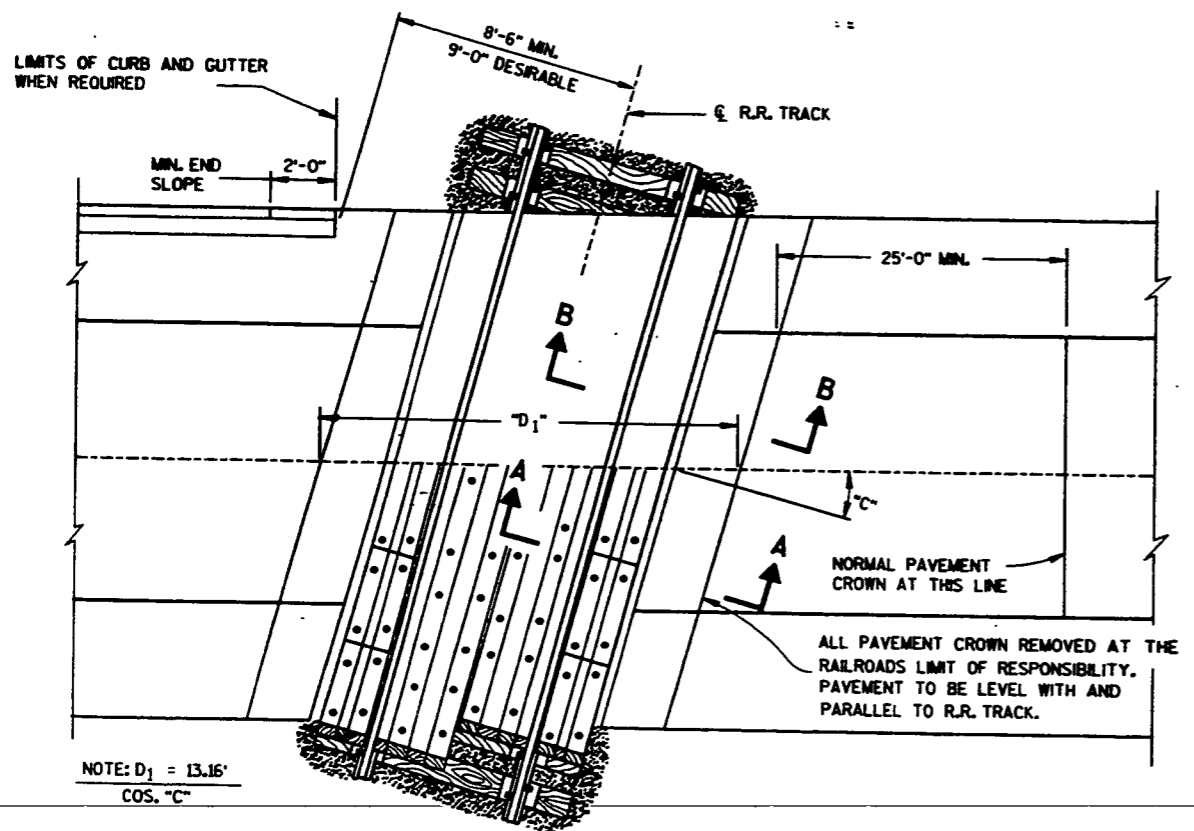
**GROUND WIRE INSTALLATION
BETWEEN TWO WASHERS**

NON-FREEWAY LIGHTING UNIT POLE WIRING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/21/93 DATE	<i>Bah An</i> STATE ELECTRICAL ENGR FOR HWYS
4/21/93 DATE	<i>Steve Bush</i> STATE TRAFFIC ENGINEER FOR HWYS
FHWA	

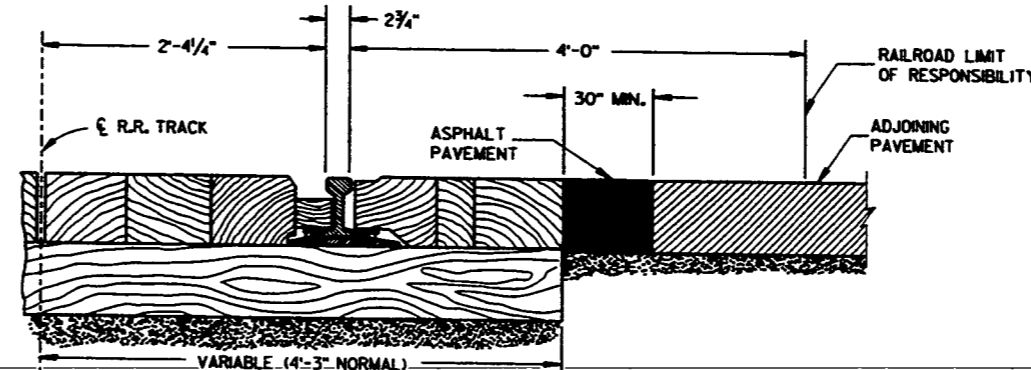
S.D.D. 9 E 3-1



**TYPICAL TYPES OF RAILROAD GRADE CROSSING
SHOWING THE RAILROAD'S LIMIT OF RESPONSIBILITY
AND MEASUREMENT DETAILS**



SECTION B-B



SECTION A-A

RAILROAD APPROACH CONSTRUCTION DETAILS

GENERAL NOTES

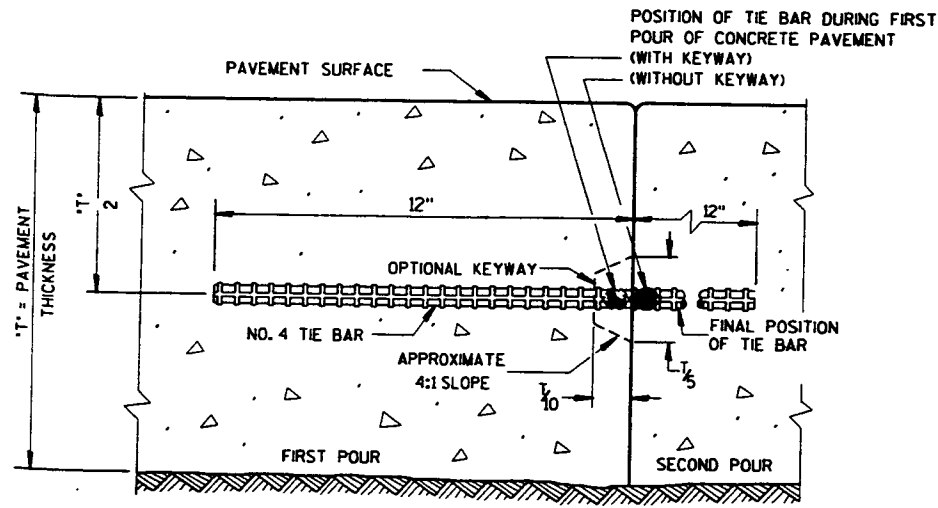
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

"D" & "D₁" = EXCEPTION TO NET LENGTH OF ϵ . PAVING OR SURFACING AND SHOULDER MATERIAL WITHIN LIMITS DESIGNATED BY "D" OR "D₁" TO BE AT EXPENSE OF RAILROAD COMPANY. TRACKAGE TO INDUSTRIAL SITES TO BE TREATED SAME AS TRACKAGE TO R.R. STATION GROUNDS OR YARDS OUTSIDE OF NORMAL OPERATING R/W.

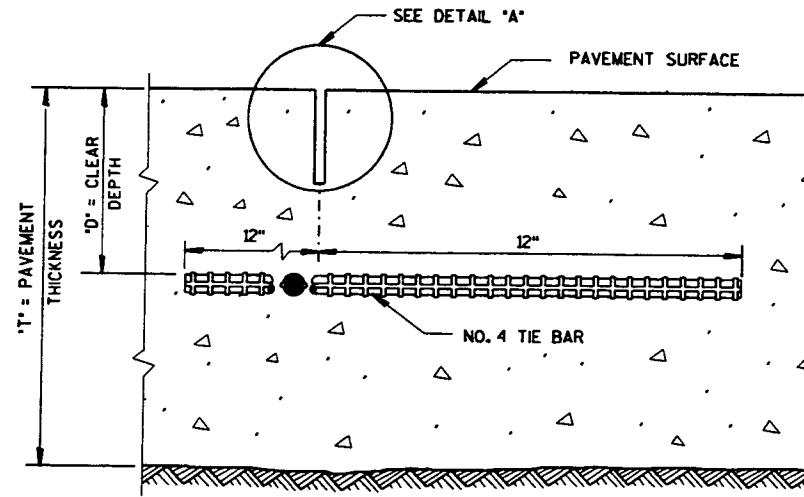
MODULAR CROSSINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

PAVEMENT DETAILS FOR RAILROAD APPROACH	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/08/64 DATE	<i>Roy A. Hines</i> CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

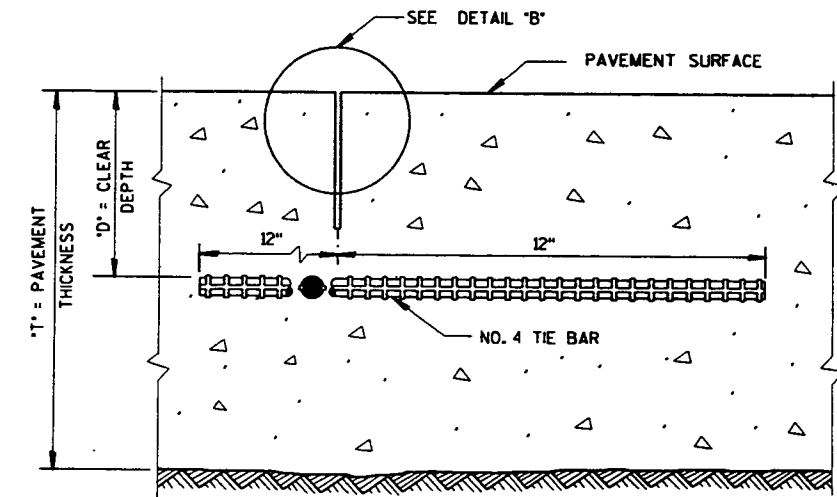
S.D.D. 13 B 1-4



CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

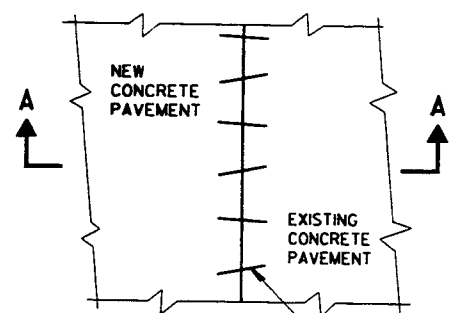
GENERAL NOTES

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

DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

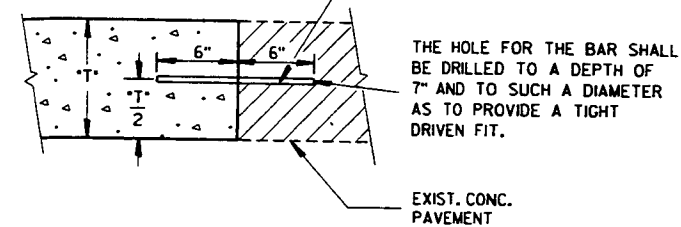
LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

TIE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.

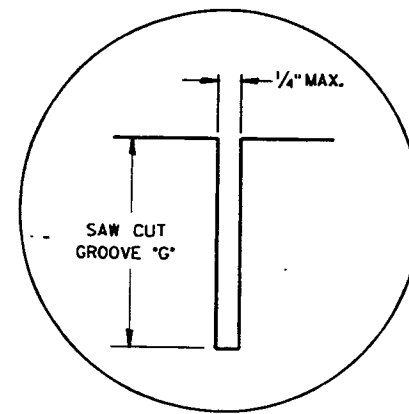


PLAN VIEW

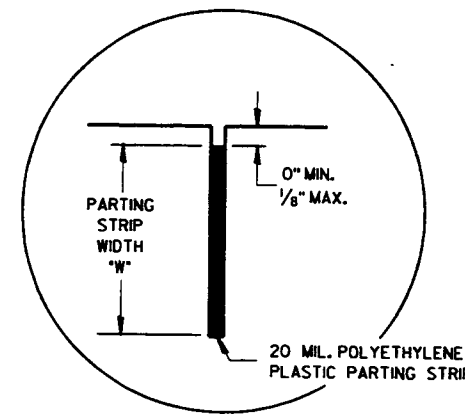
NO. 6 TIE BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



SECTION A-A PAVEMENT TIES

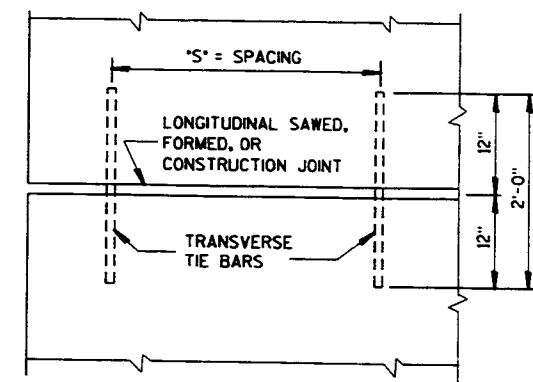


DETAIL 'A'



DETAIL 'B'

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



PLAN VIEW SHOWING LOCATION OF TIE BARS

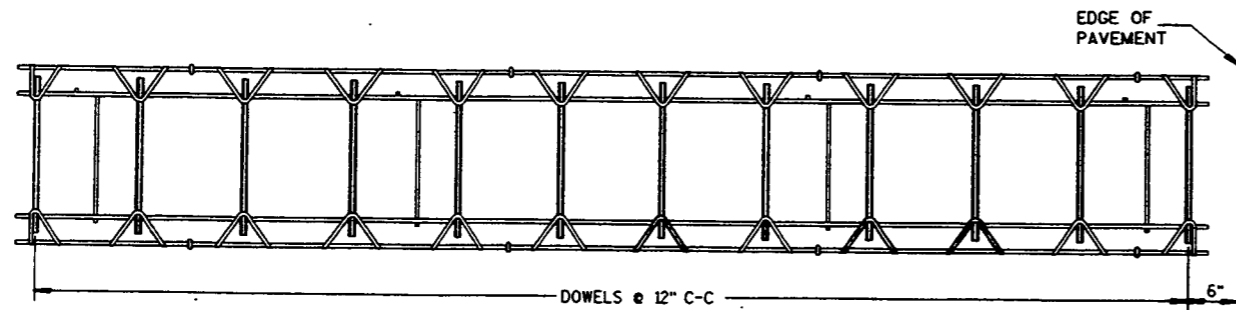
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 3/16/92 DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA



PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY^①

DOWEL BAR SIZE TABLE

PAVEMENT DEPTH	DOWEL BAR DIAMETER
9" OR LESS	1 1/4"
MORE THAN 9"	1 1/2"

GENERAL NOTES

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

CONTRACTION JOINTS

UNLESS OTHERWISE SPECIFIED OR SHOWN IN THE CONTRACT, CONTRACTION JOINTS MAY BE ORIENTED EITHER NORMAL TO THE CENTERLINE AS SHOWN OR SKEWED 6:1 RIGHT HAND FORWARD. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

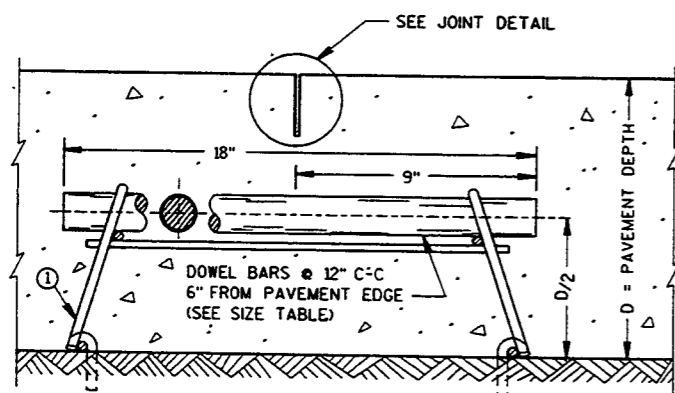
CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

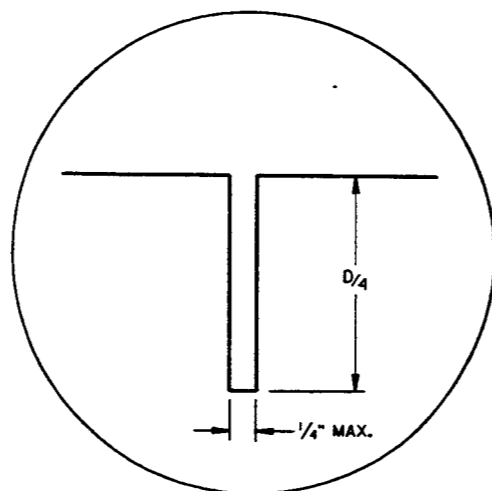
TIE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

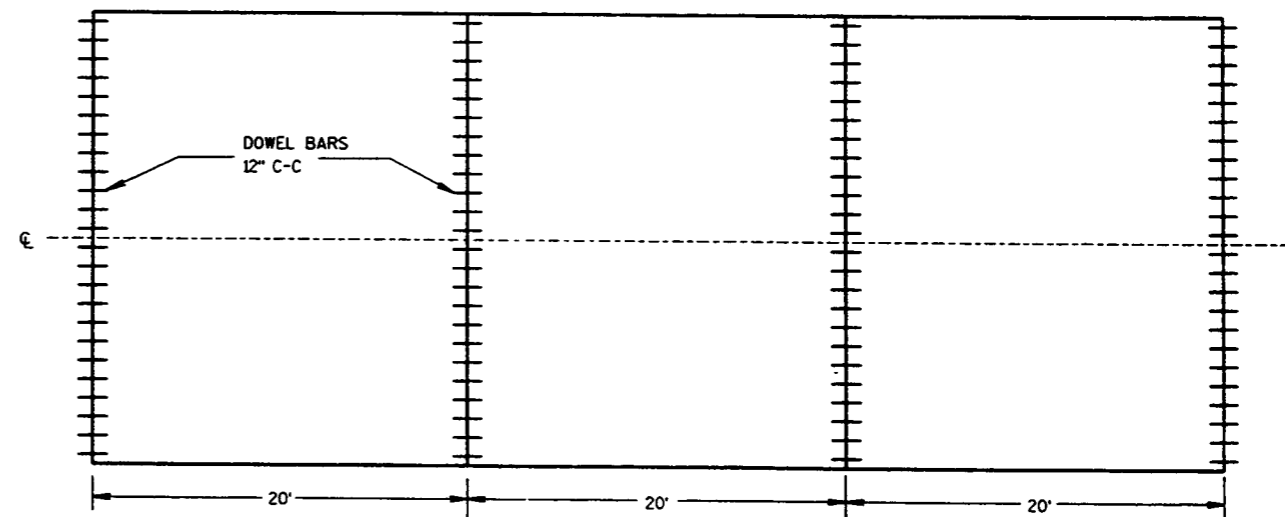
^① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.



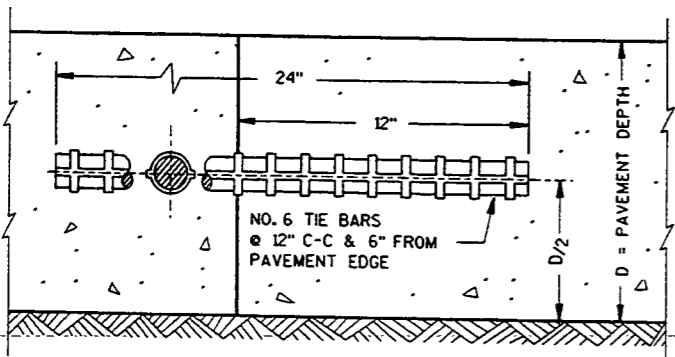
DOWELED CONTRACTION JOINT



JOINT DETAIL



CONTRACTION JOINT LOCATIONS



CONSTRUCTION JOINT

**DOWELED NON-REINFORCED
CONCRETE PAVEMENT**
(TRANSVERSE JOINTS SPACED AT 20' & NORMAL)

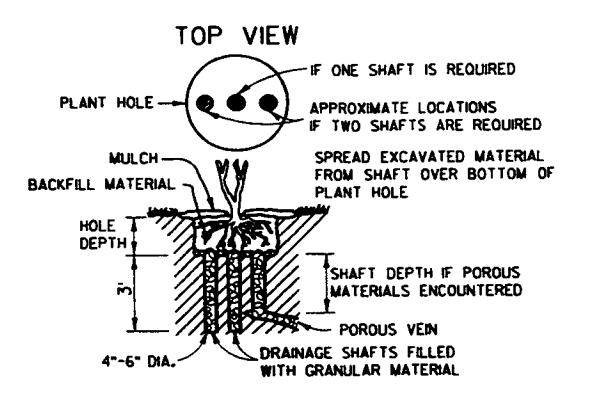
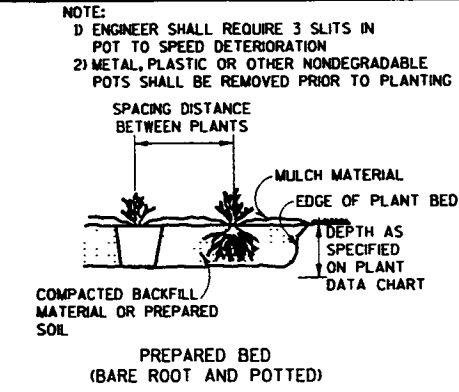
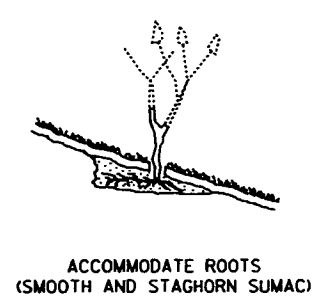
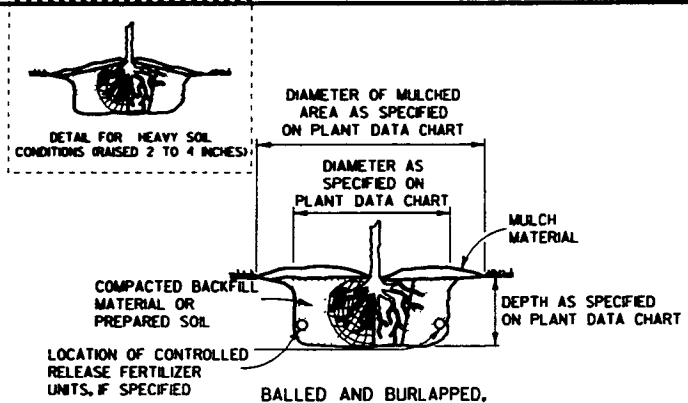
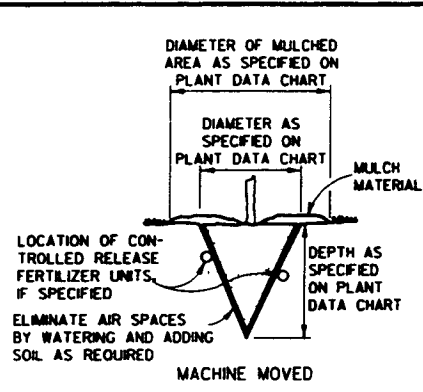
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/90
DATE

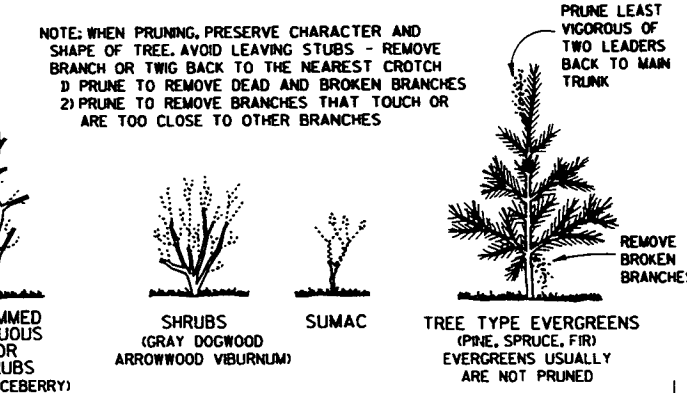
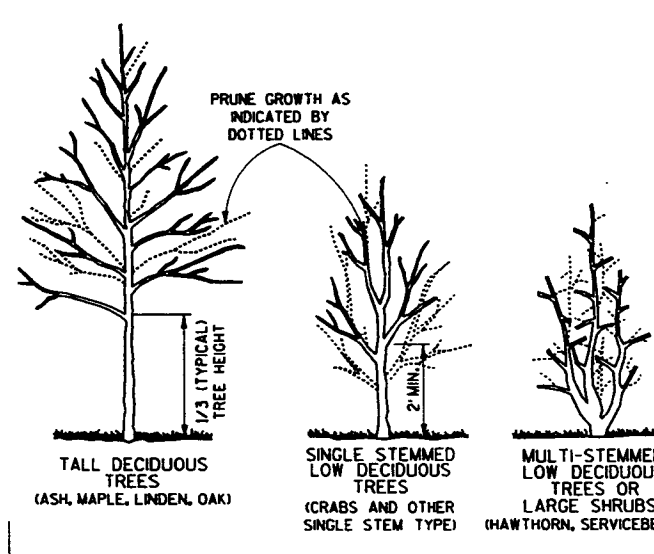
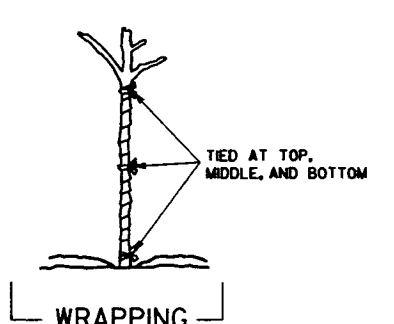
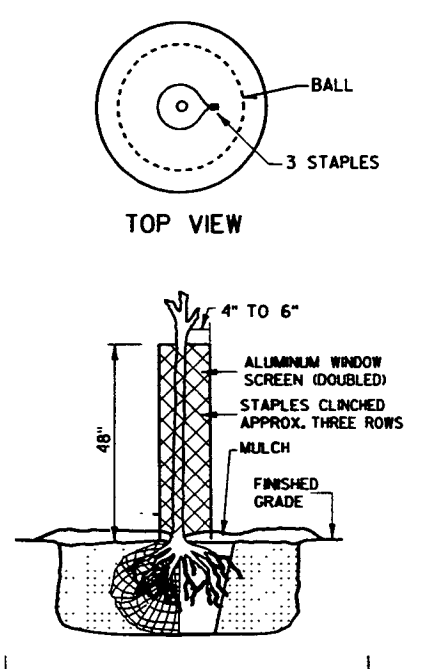
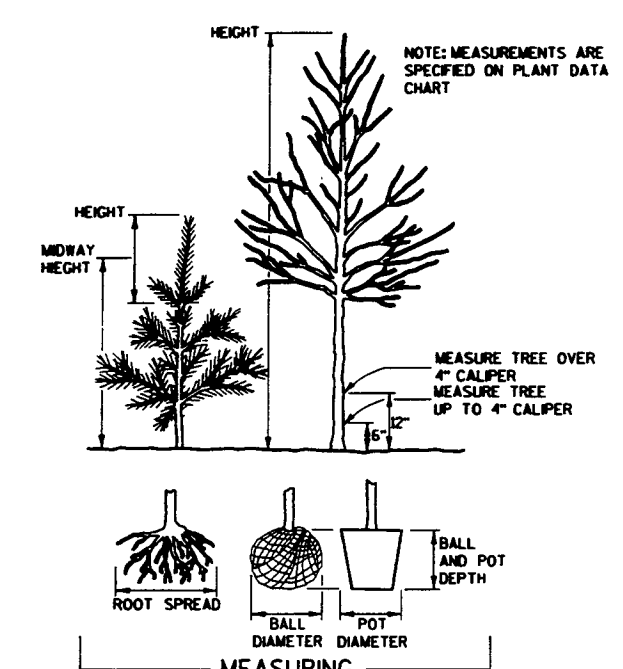
[Signature]
STATE DESIGN ENGINEER FOR HWYS

FHWA

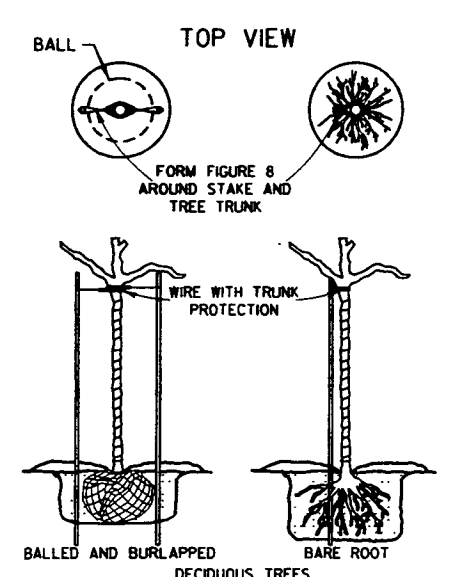
S.D.D. 13 C 13-1



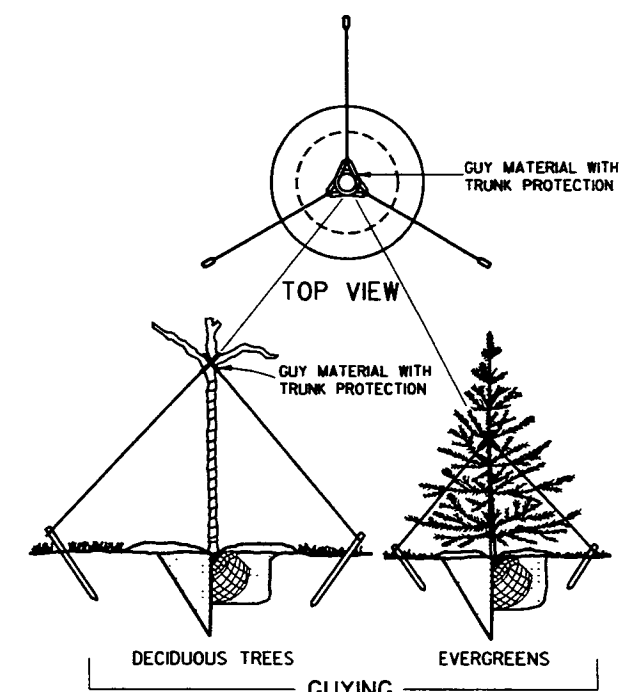
PLANTING



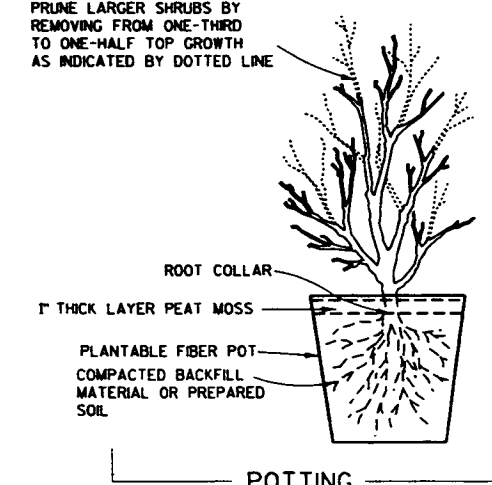
PRUNING



NOTE: BRACING STAKE
 1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
 2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
 3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
 4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.



PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE

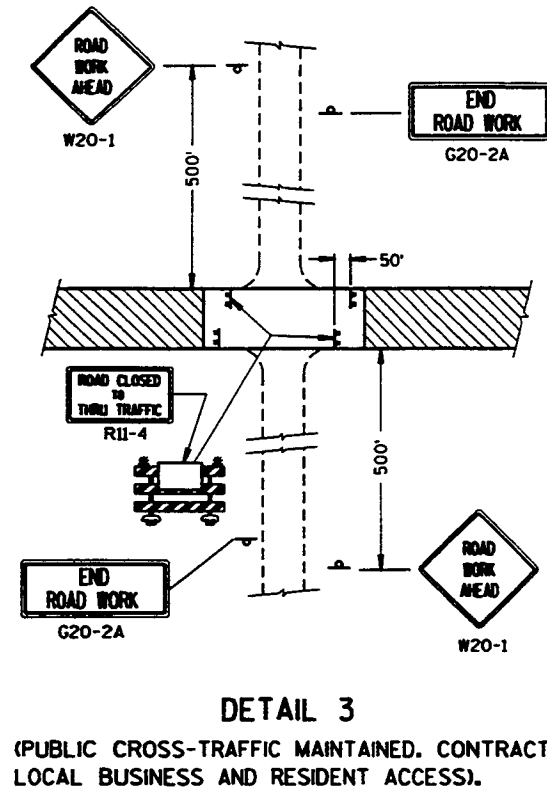
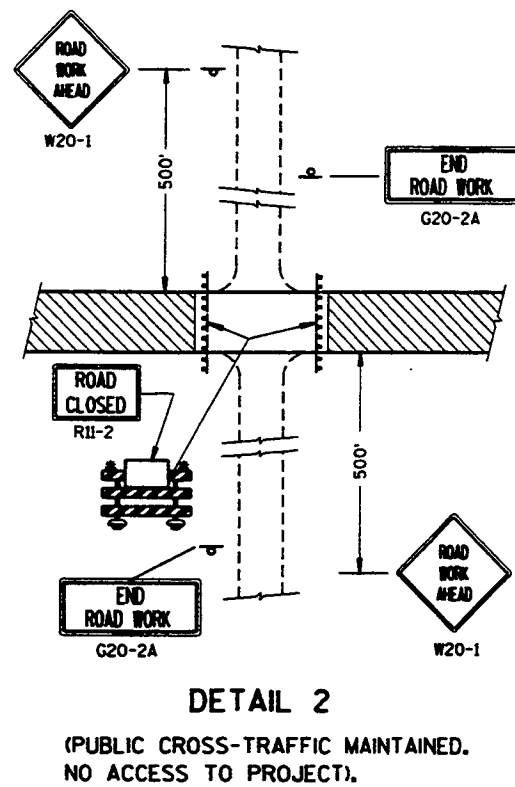
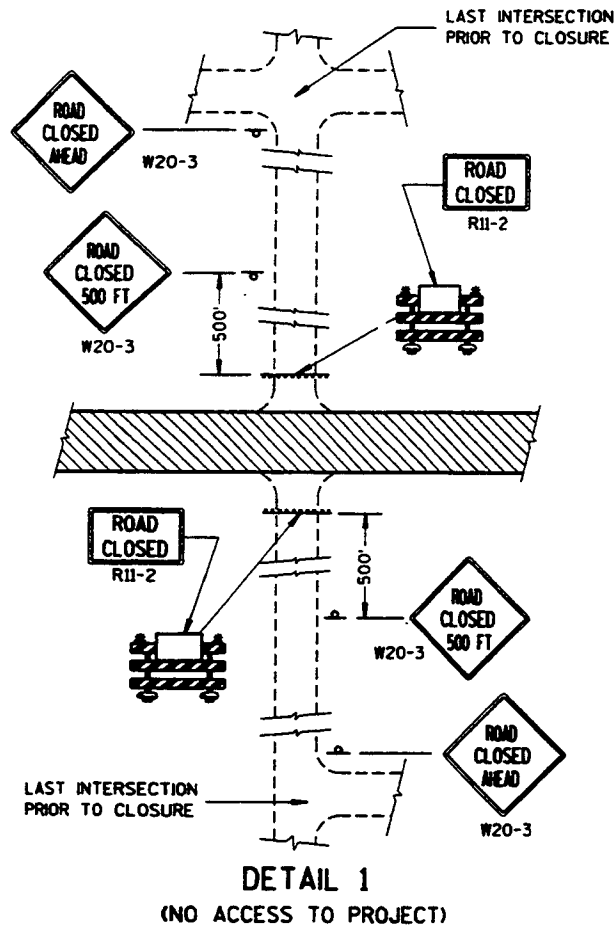


POTTING

NOTES
 DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
 BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/11/94 DATE	<i>Roy J. Thomas</i> CHIEF, METHODS DEVELOPMENT ENGINEER
FHWA	

S.D.D. 14 A 2-1



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

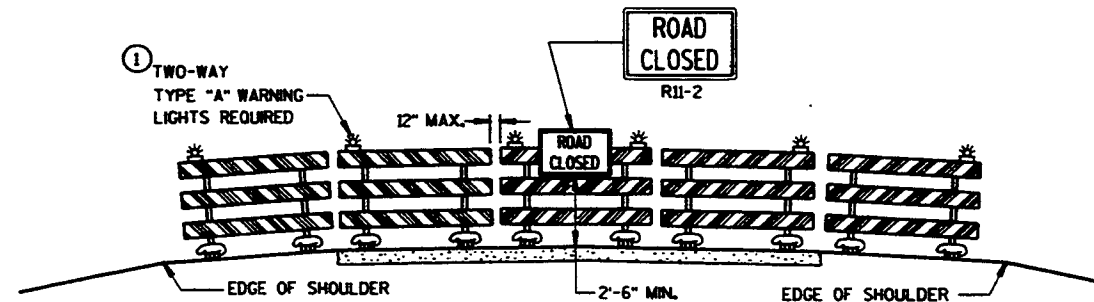
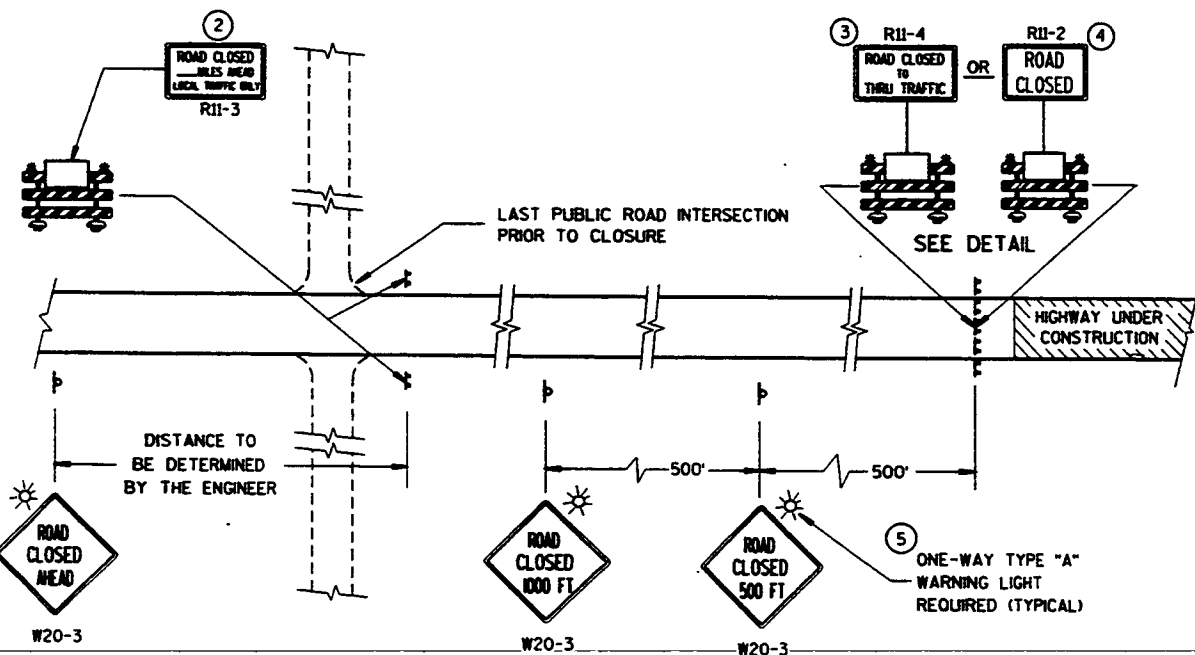
THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED _____ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

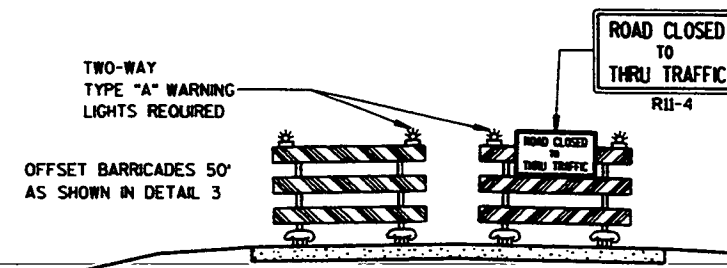
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
 R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".
 R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".
 G20-2A SIGNS SHALL BE 48" X 24".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.
- ④ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.
- ⑤ ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

SIDEROAD CLOSURES



ROAD CLOSURE BARRICADE DETAIL



LANE CLOSURE BARRICADE DETAIL

- LEGEND**
- ⊥ POST MOUNTED WARNING SIGN
 - ⊥ TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
 - ⊙ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
 - ▨ WORK AREA

BARRICADES AND SIGNS FOR ROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 8-10-95
 DATE
 [Signature]
 DIRECTOR, OFFICE OF TRAFFIC

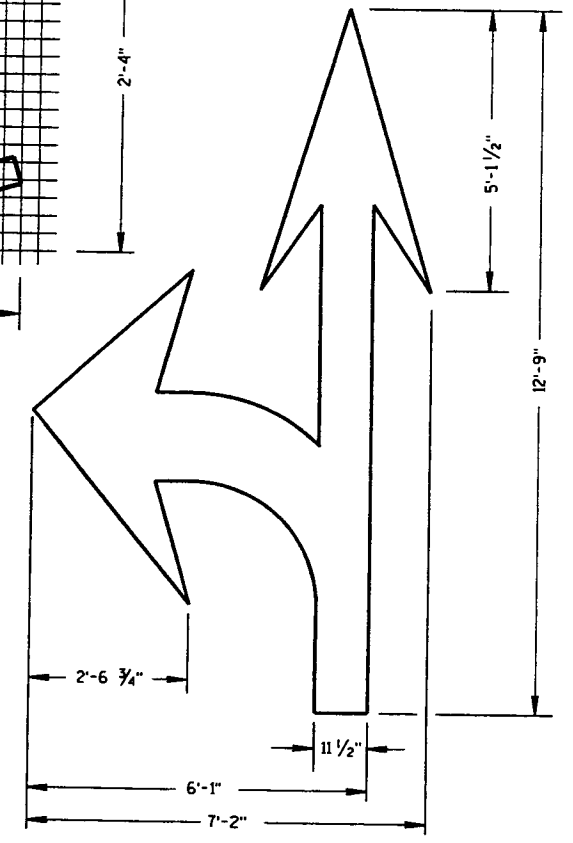
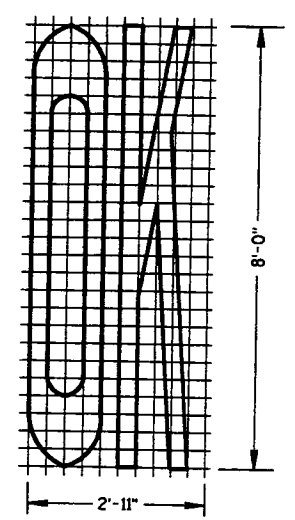
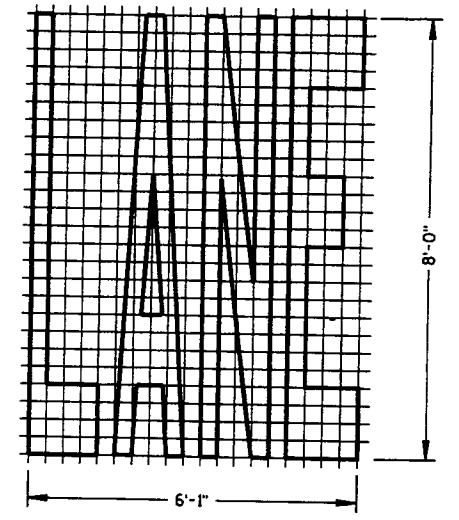
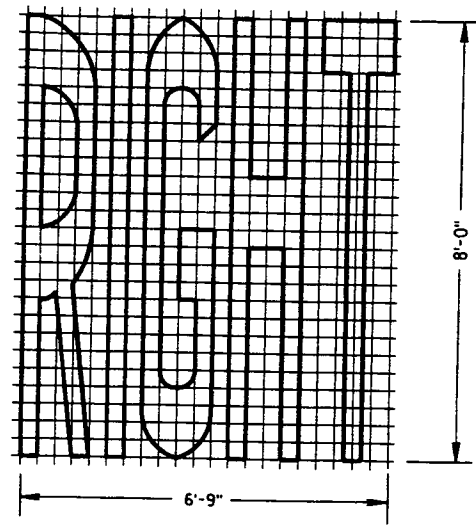
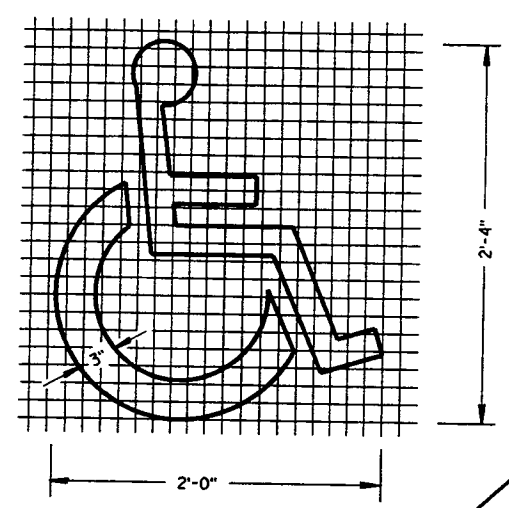
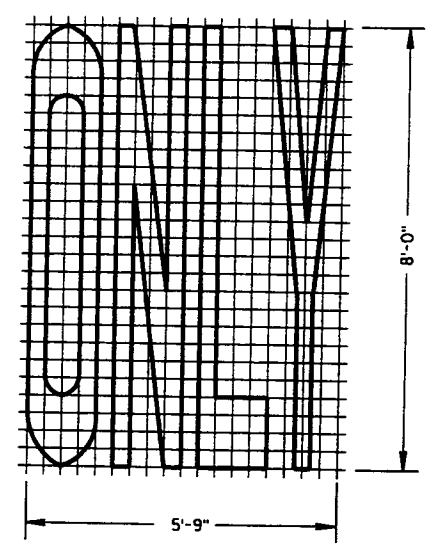
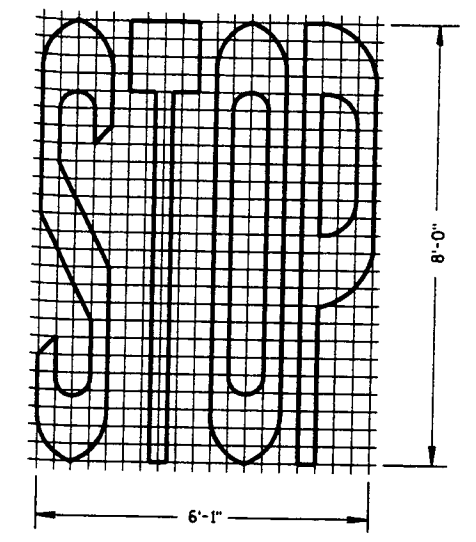
FHWA

GENERAL NOTES

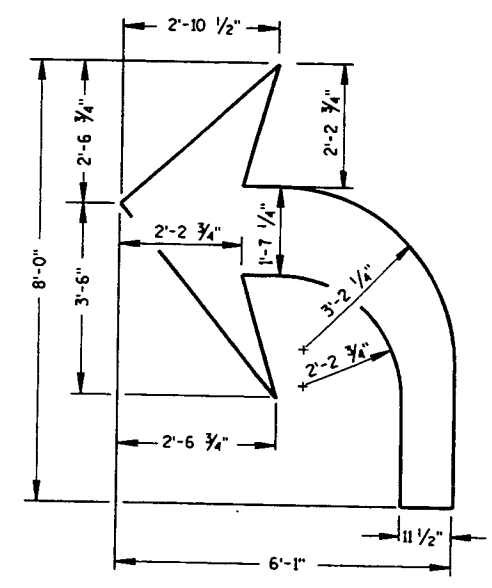
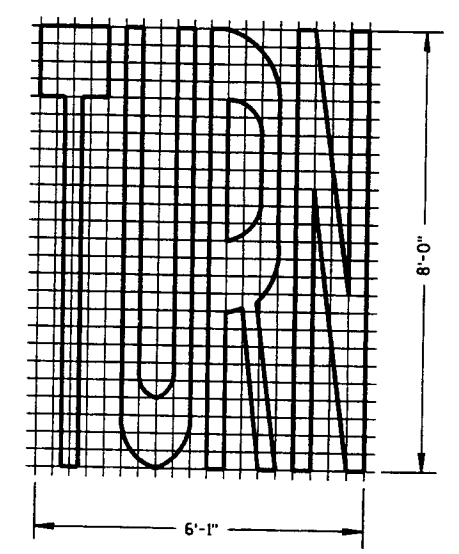
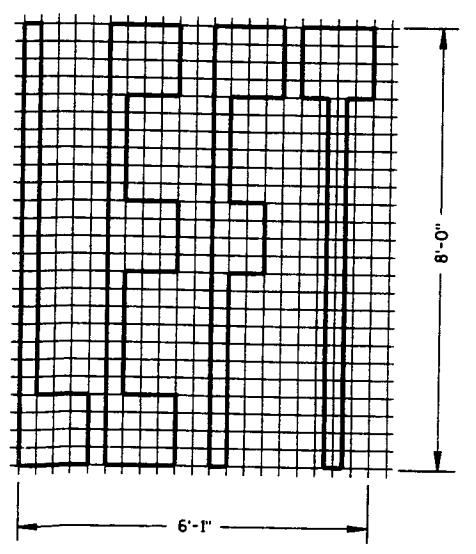
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

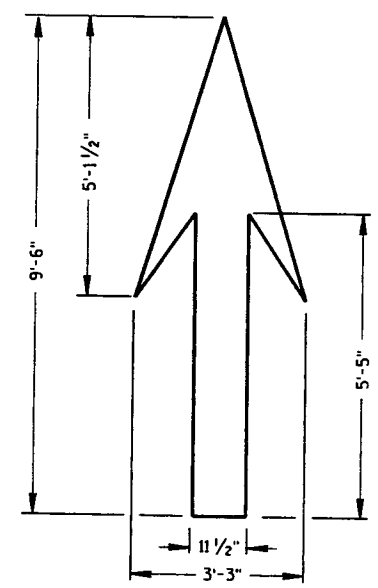
A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.



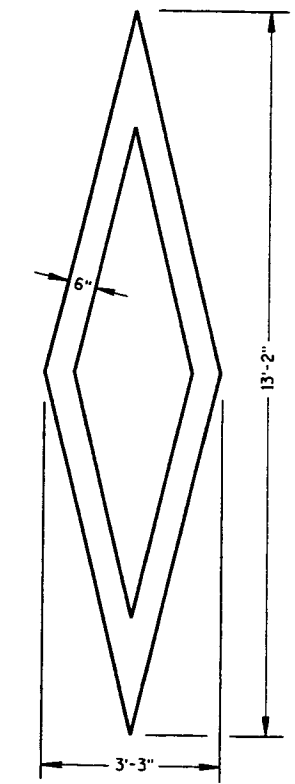
TYPE 3



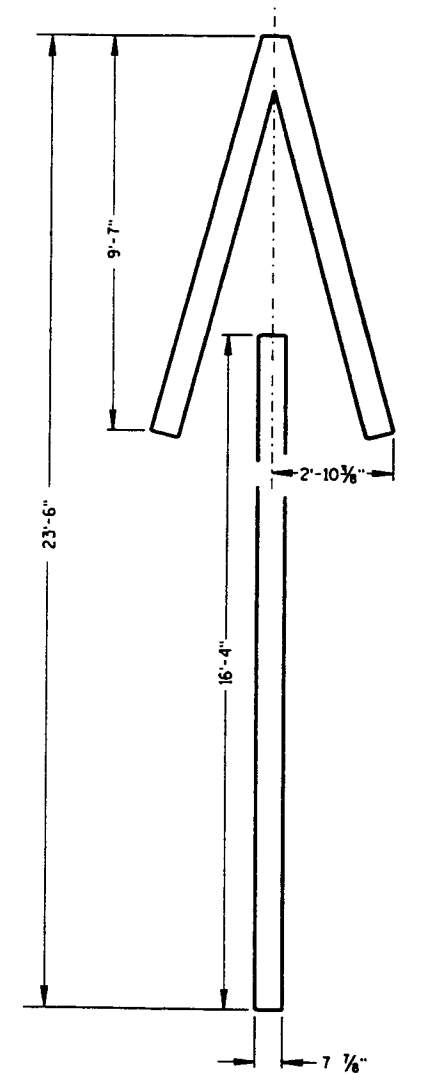
TYPE 2



TYPE 1



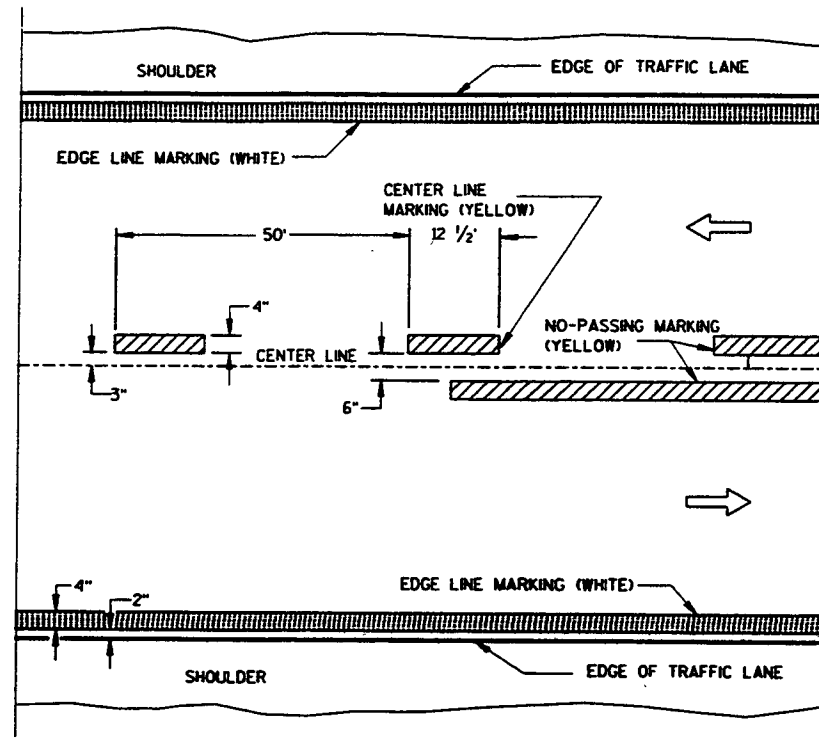
PREFERENTIAL LANE SYMBOL



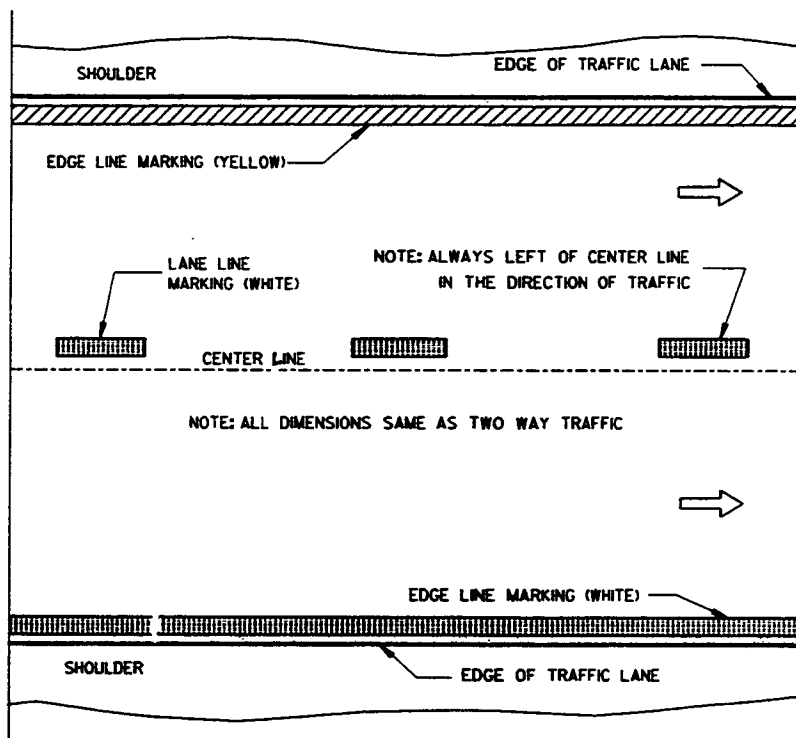
TYPE 4

S.D.D. 15 C 7-40

PAVEMENT MARKING SYMBOLS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 6-29-94	 STATE TRAFFIC ENGINEER FOR HWYS
FHWA	



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

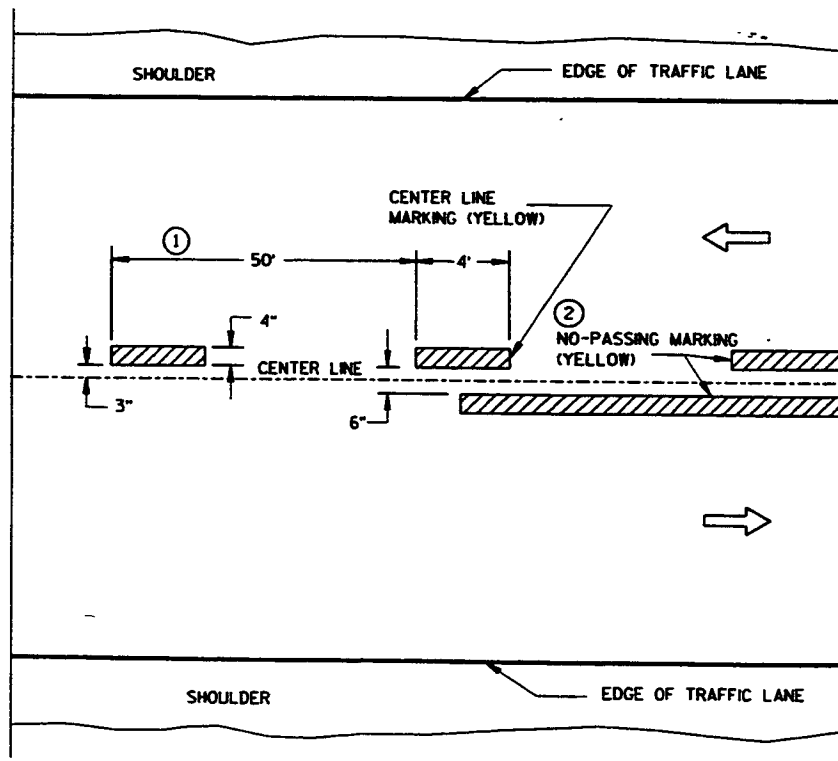
GENERAL NOTES

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

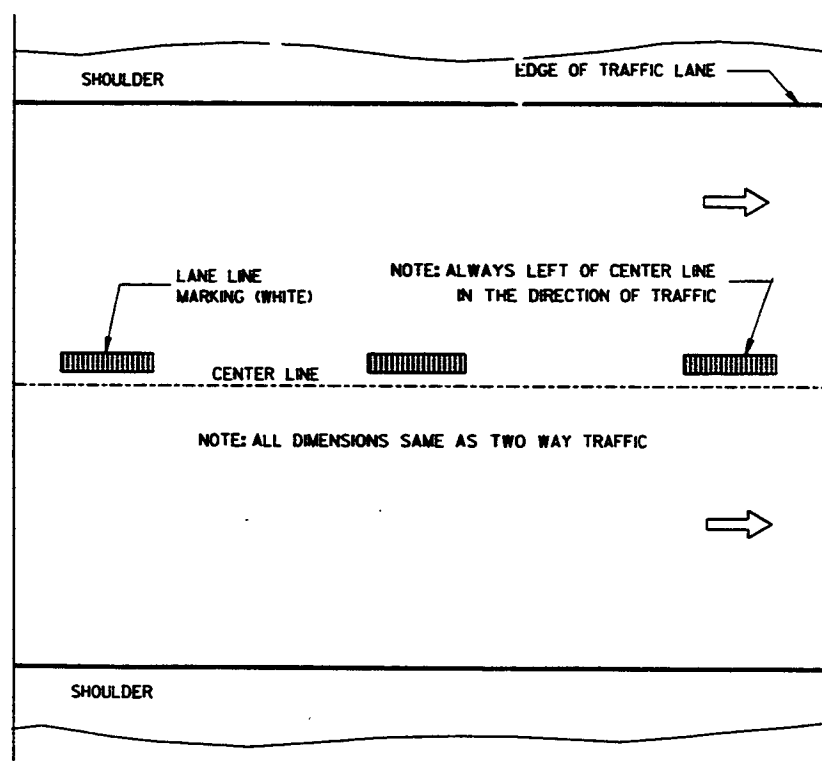
- ① HALF CYCLE LENGTHS (25'-±) WITH 2" MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING 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



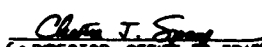
TWO WAY TRAFFIC



ONE WAY TRAFFIC

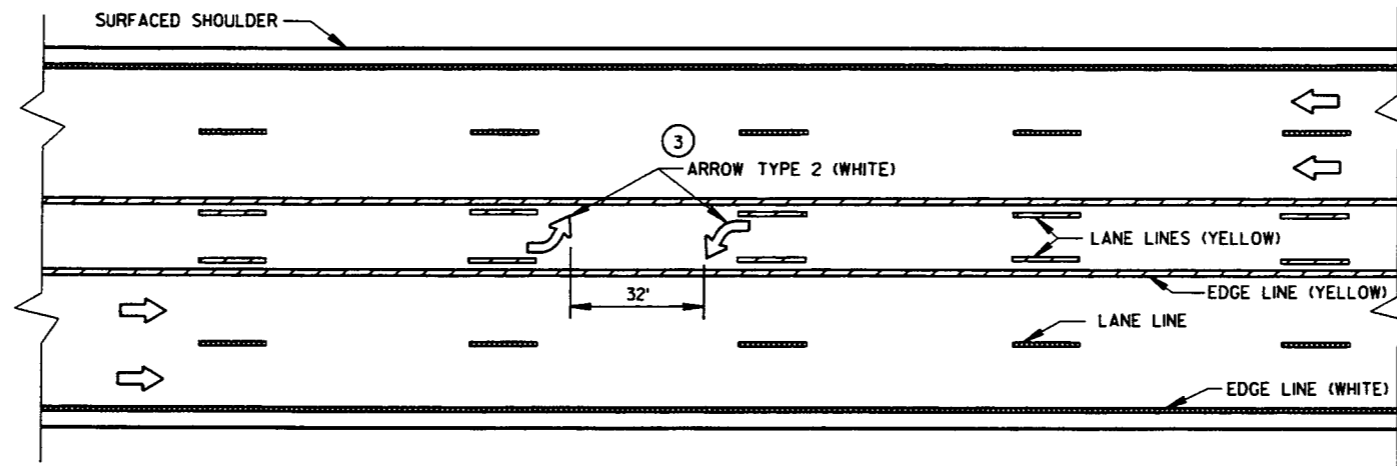
TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

S.D.D. 15 C 8-70

PAVEMENT MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-7-93 DATE	 DIRECTOR, OFFICE OF TRAFFIC <small>FWBA</small>

S.D.D. 15 C 8-70

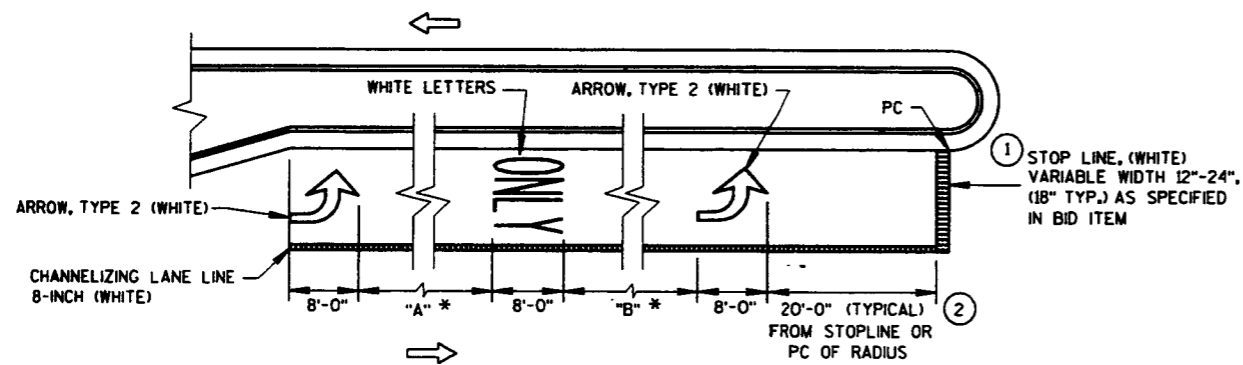
NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

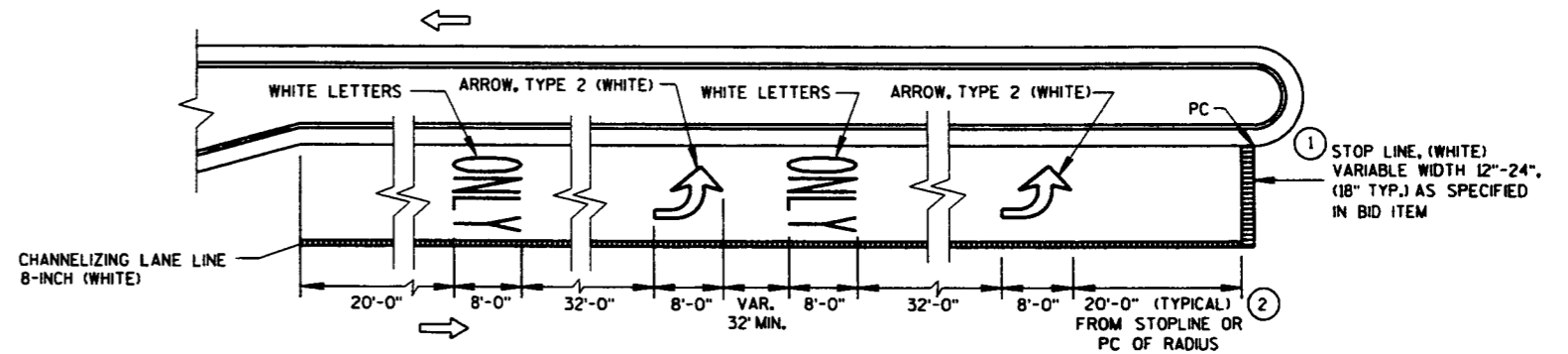
NOTES:

- ① STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DISTANCE MAY BE ADJUSTED TO ACCOMMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

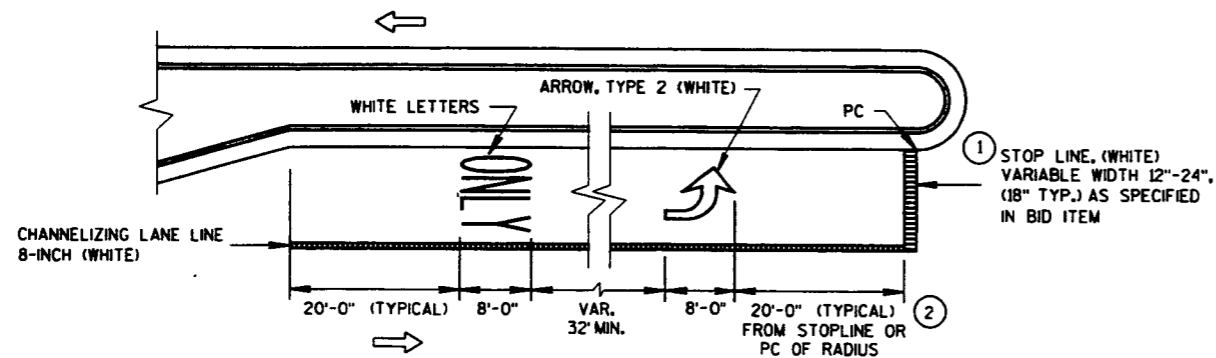


* VARIABLE, 32' MIN.
"A" = "B" (TYPICAL)

LEFT TURN LANE
(LENGTH 108' TO 167')



LEFT TURN LANE
(LENGTH OVER 167')

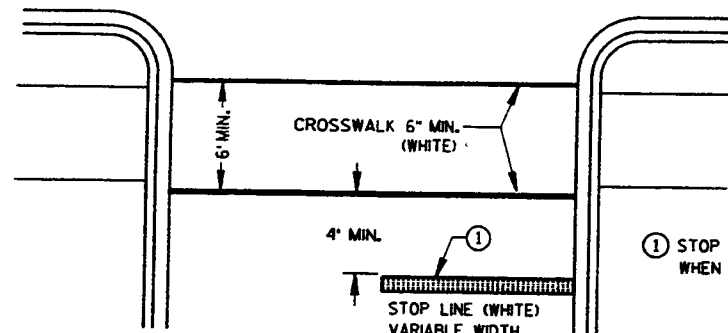


LEFT TURN LANE
(LENGTH UNDER 108')

NOTE:
SDD 15 C 8-7a AND SDD 15 C 7 IS REQUIRED
WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

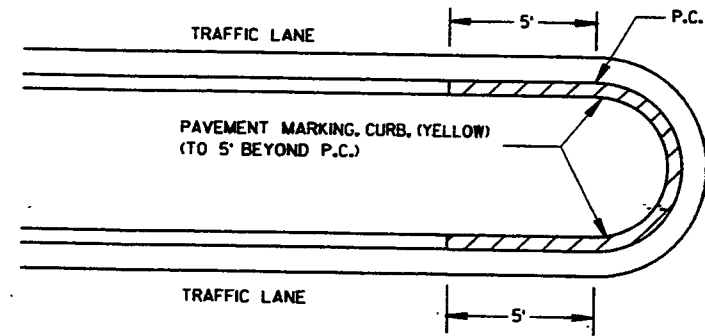
**PAVEMENT MARKING
(LEFT TURN LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

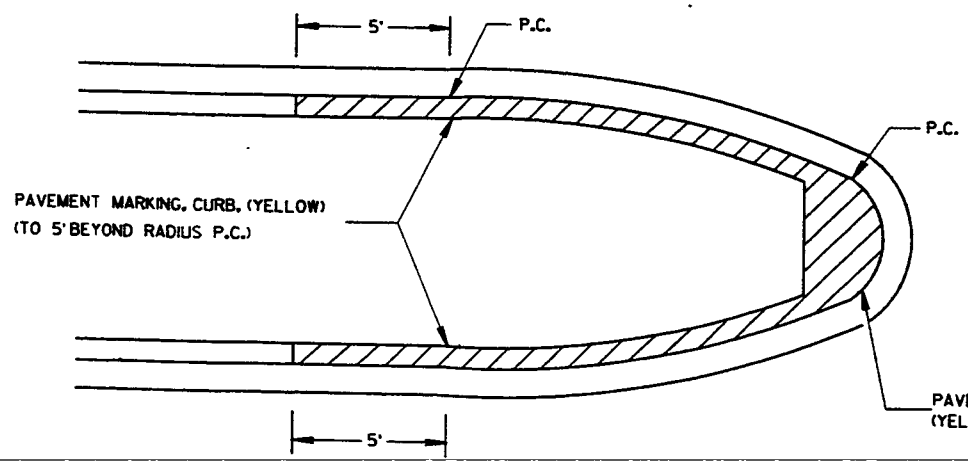


STOP LINE AND CROSSWALK

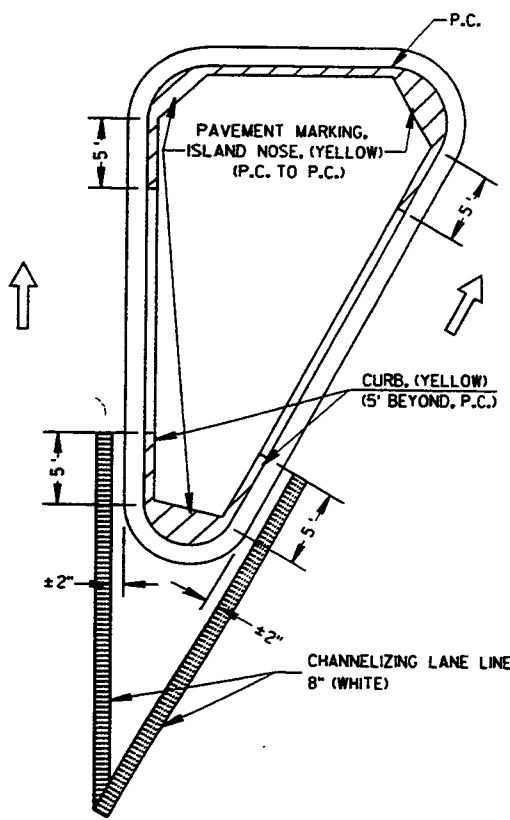
① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT



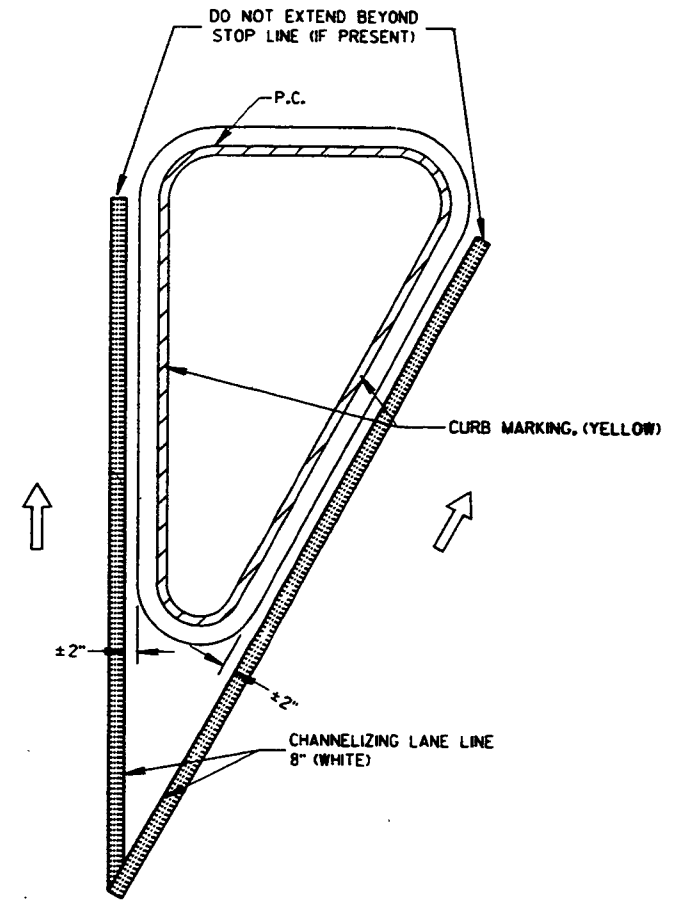
MEDIAN CURB



BULLET NOSE ISLAND



LARGE ISLAND
(GREATER THAN 50' PERIMETER OR ANY SIDE
GREATER THAN 25' BETWEEN CURVES)



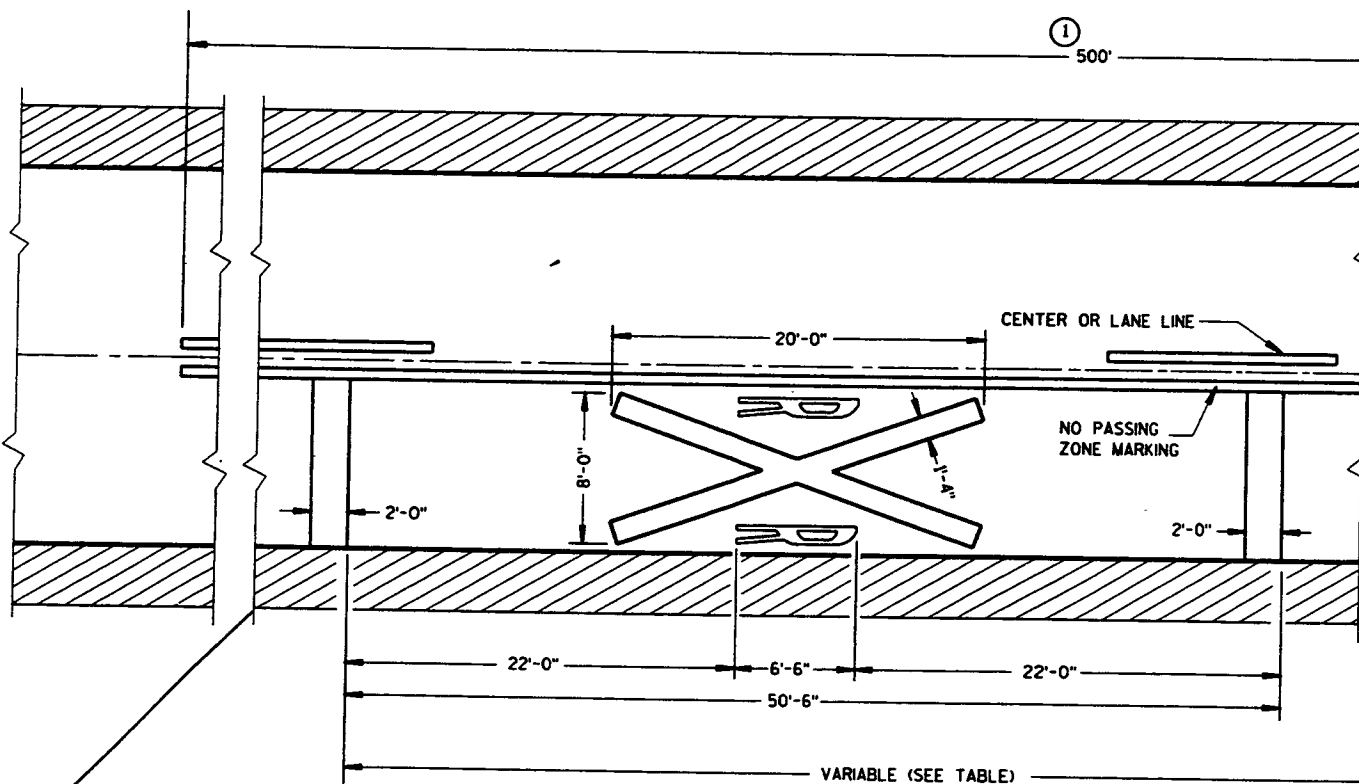
SMALL ISLAND
(LESS THAN 50' PERIMETER OR ANY SIDE
LESS THAN 25' BETWEEN CURVES)

NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL

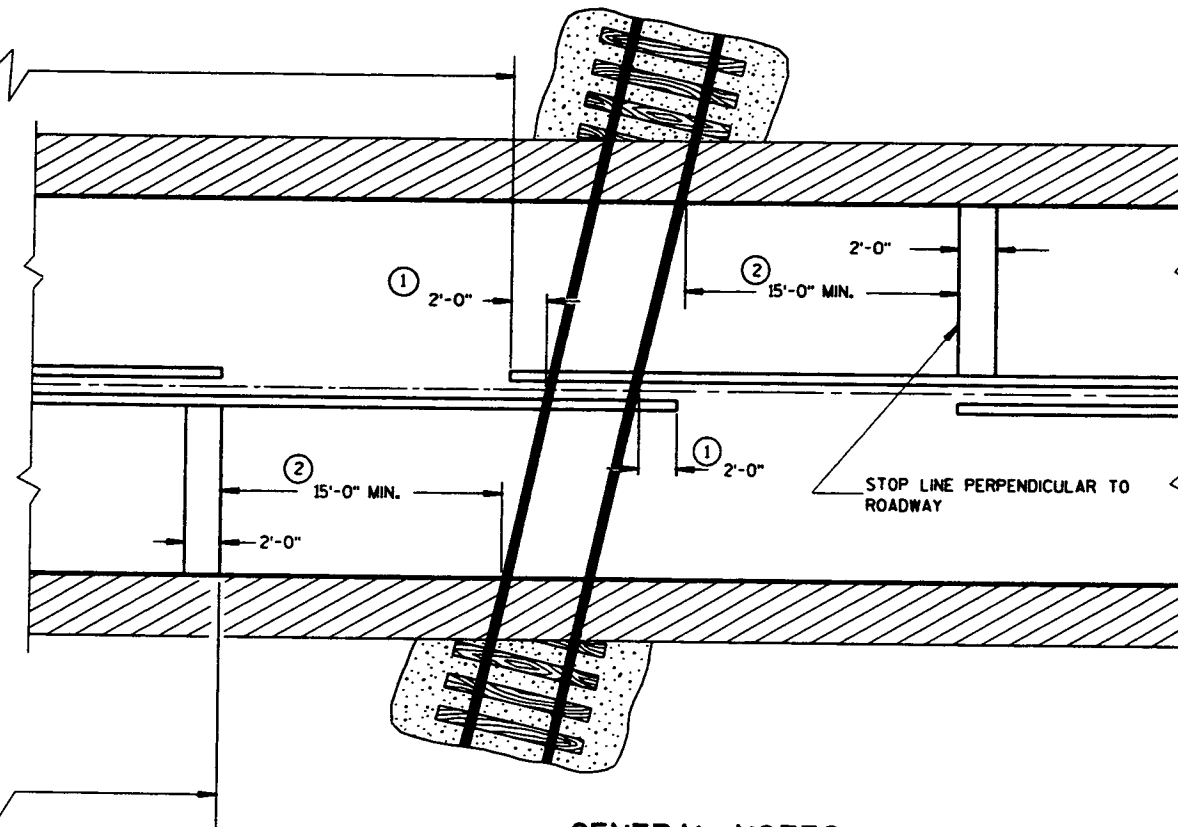
S.D.D. 15 C 8-7d

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-7-93 DATE	<i>Christie J. Spang</i> DIRECTOR, OFFICE OF TRAFFIC
FHWA	

S.D.D. 15 C 8-7d



PAVEMENT MARKING



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 DISTANCE FROM THE RAILROAD CROSSING MARKING TO THE NEAREST TRACK WILL VARY ACCORDING TO THE APPROACH SPEED AND THE SIGHT DISTANCE OF THE VEHICULAR TRAFFIC. DIMENSIONS SHOWN IN THE TABLE SHALL BE USED UNLESS OTHERWISE SHOWN ON THE PLANS.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

TRANSVERSE BANDS AND R X R SYMBOL ARE REFLECTIVE WHITE. SOLID LONGITUDINAL LINE IS REFLECTIVE YELLOW ON BIDIRECTIONAL TRAVELED WAYS AND IS OMITTED ON UNIDIRECTIONAL TRAVELED WAYS. DASHED LONGITUDINAL LINE IS REFLECTIVE YELLOW WHEN IT IS BETWEEN LANES OF TRAFFIC MOVING IN OPPOSITE DIRECTIONS AND REFLECTIVE WHITE WHEN IT IS BETWEEN LANES OF TRAFFIC MOVING IN THE SAME DIRECTION.

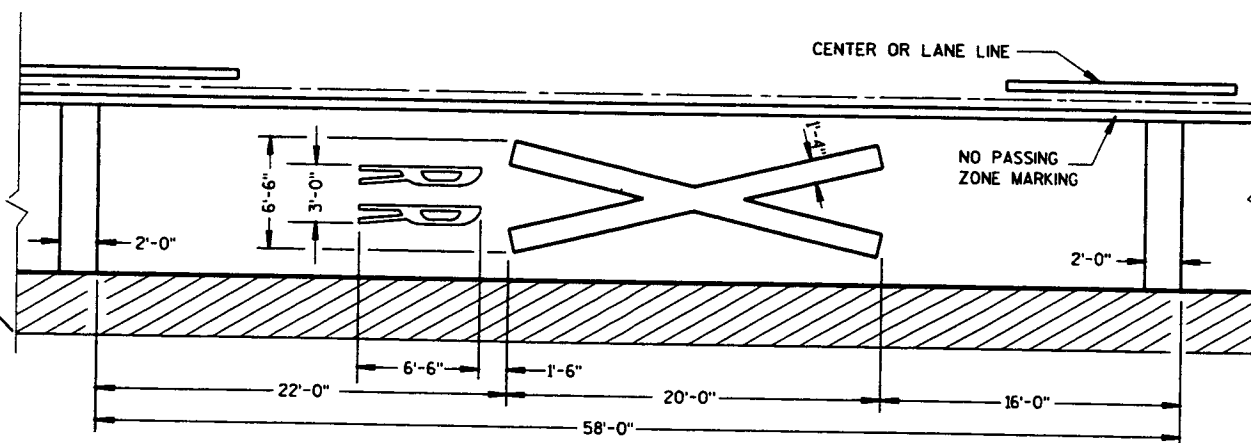
CENTER OR LANE LINES AND NO PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

① MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO PASSING ZONE MARKINGS.

② MINIMUM 8' TO GATE IF PRESENT.

Posted Speed (M.P.H.)	Variable Dimension (Feet)
25	150
30	200
35	250
40	325
45	400
50	475
55	550

MATCH LINE



ALTERNATE PAVEMENT MARKING

S.D.D. 15 C 9-3

PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

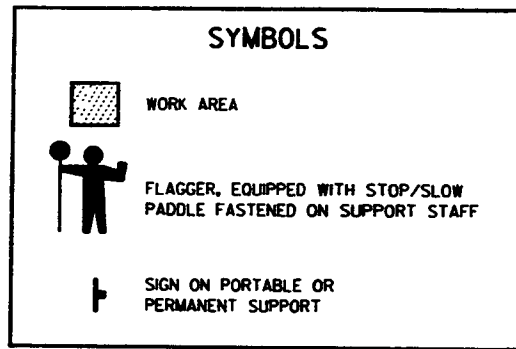
8-10-95
DATE

Charles J. Spang
DIRECTOR, OFFICE OF TRAFFIC

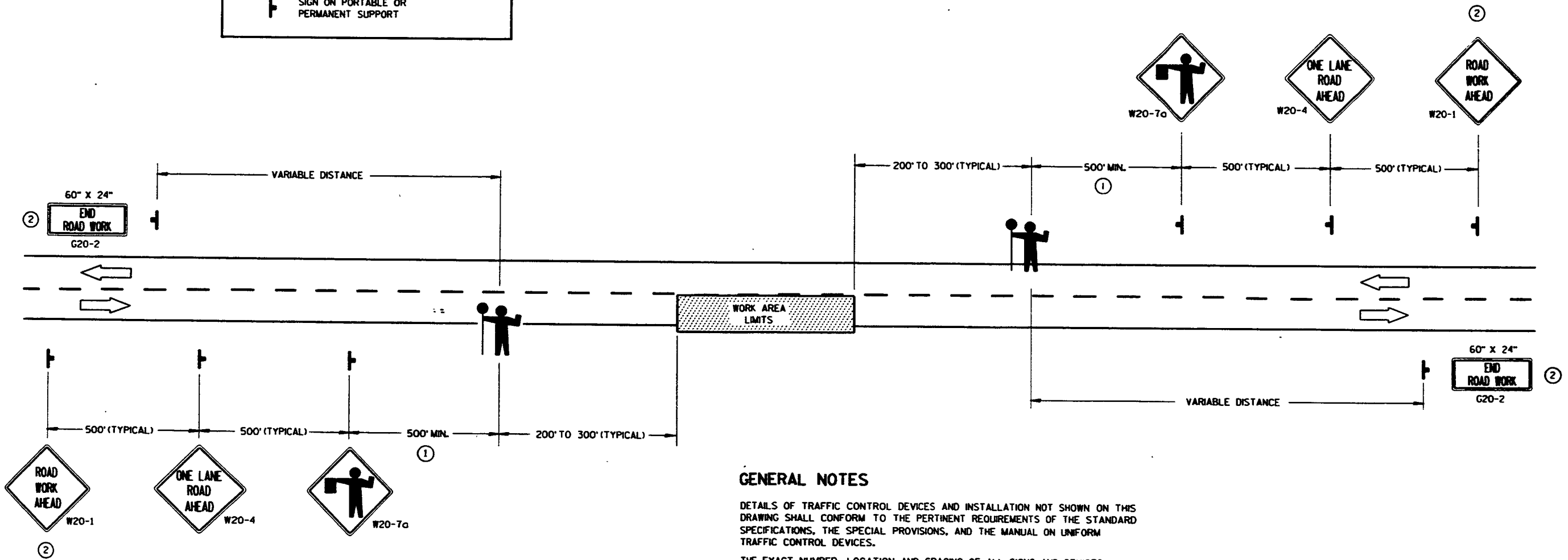
FHWA

S.D.D. 15 C 9-3

TWO-LANE ROADWAY



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7g AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE "ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

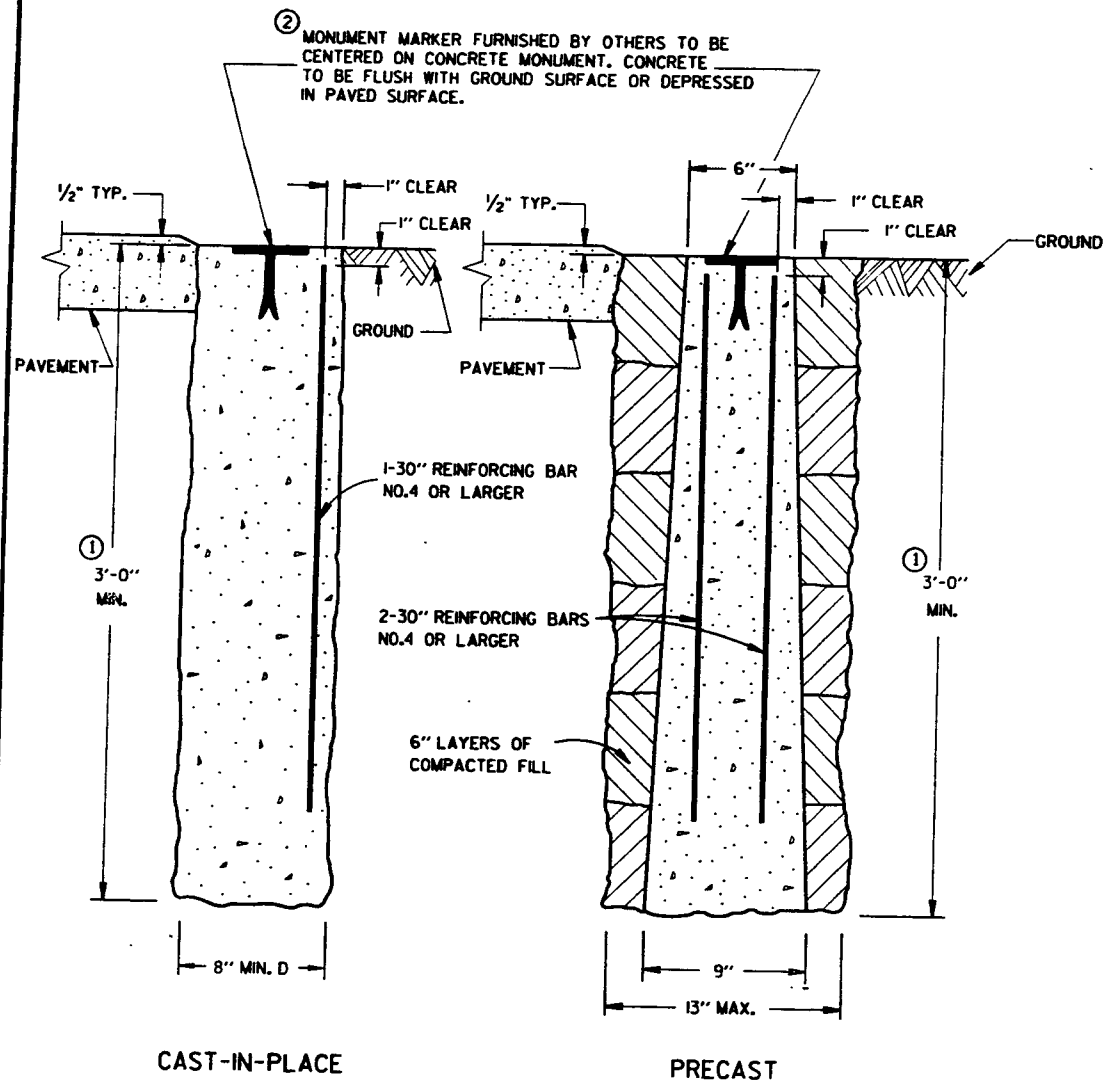
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

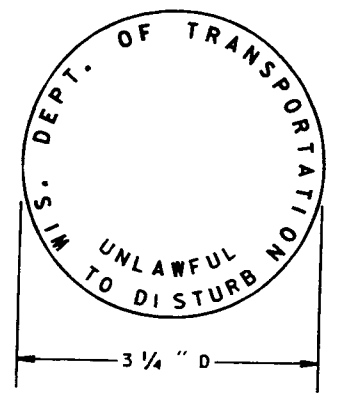
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 2/17/94	<i>Edward F. Rusch</i> STATE TRAFFIC ENGINEER FOR HWYS
<small>FHWA</small>	

S.D.D. 15 C 12-2

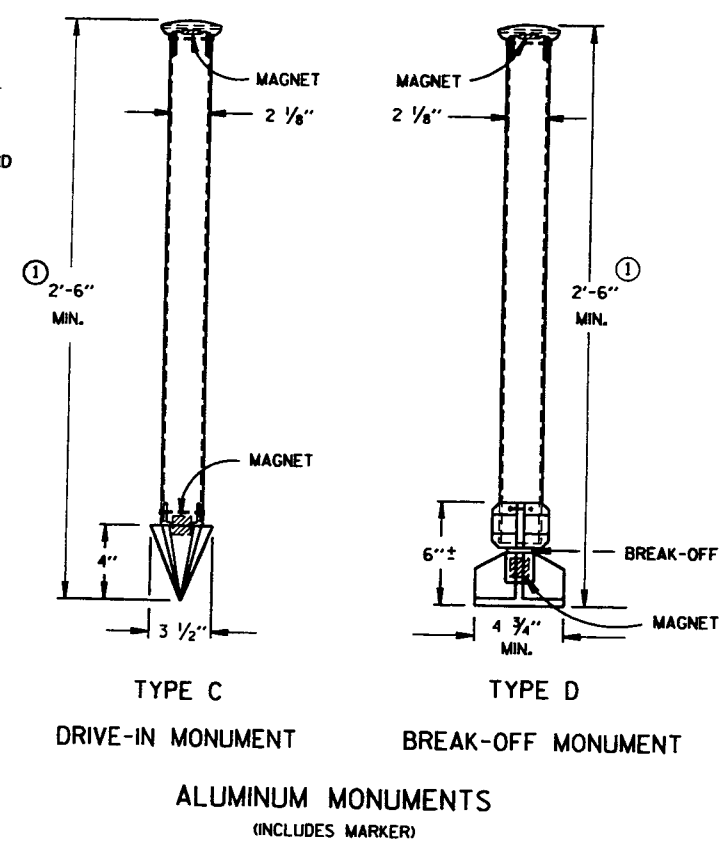
S.D.D. 15 C 12-2



CAST-IN-PLACE
PRECAST
CONCRETE MONUMENTS
TYPE A



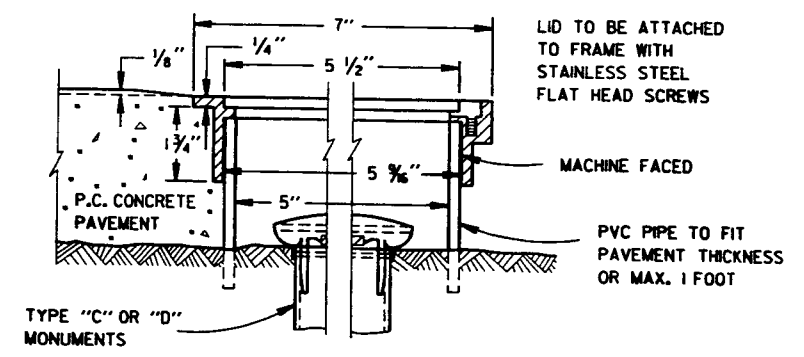
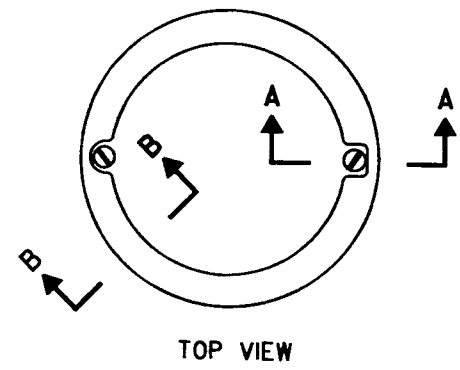
WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"



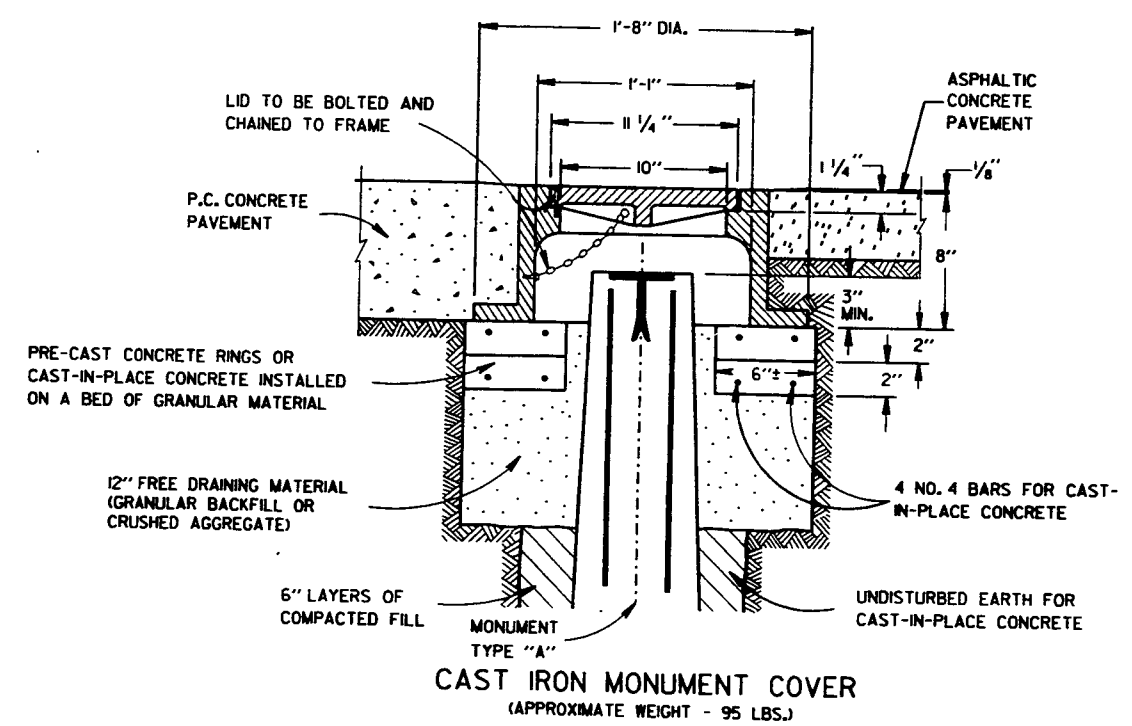
TYPE C
DRIVE-IN MONUMENT
TYPE D
BREAK-OFF MONUMENT
ALUMINUM MONUMENTS
(INCLUDES MARKER)

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.



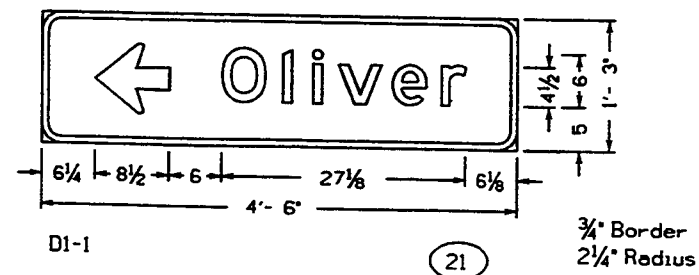
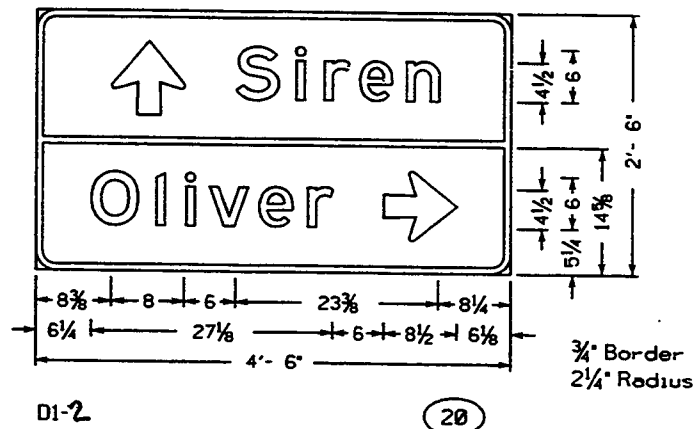
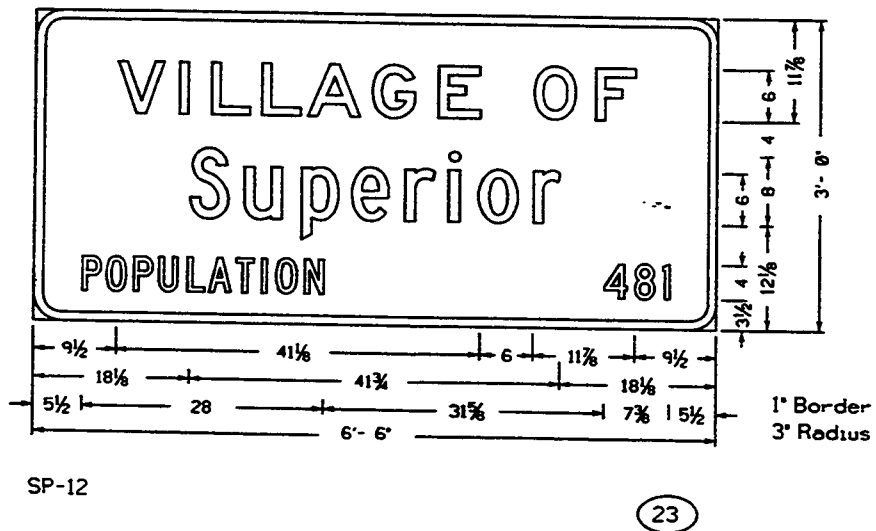
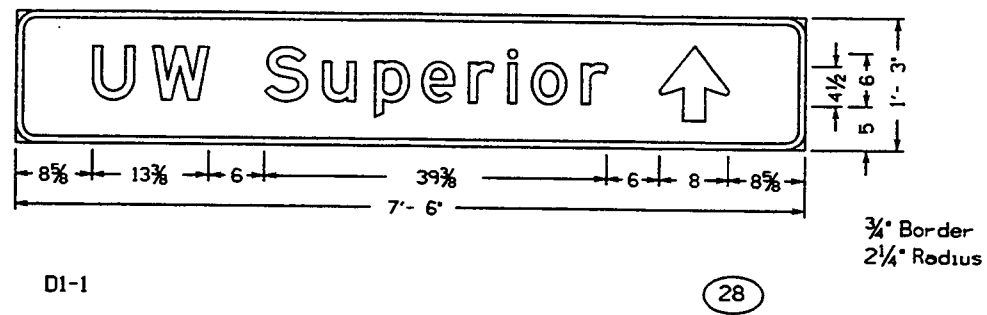
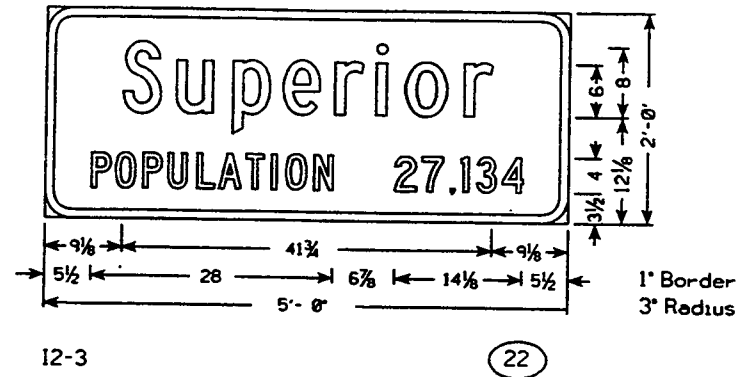
SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT - 95 LBS.)

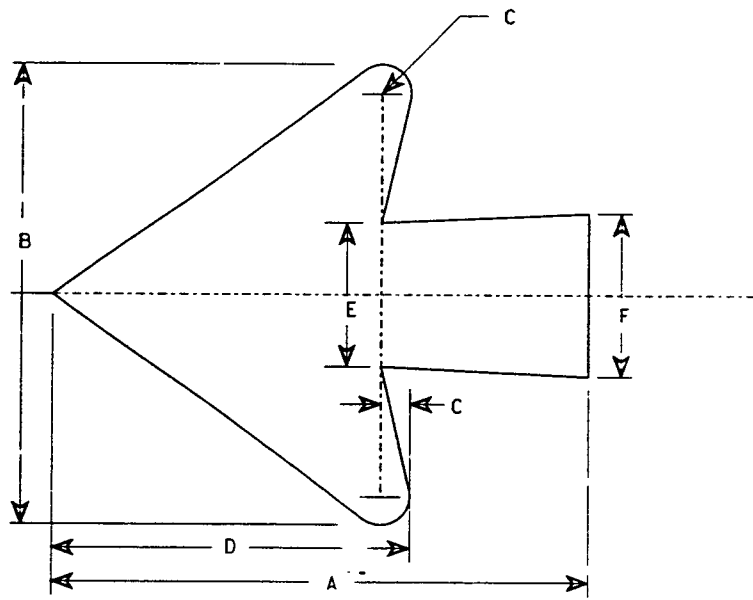
LANDMARK REFERENCE MONUMENTS AND COVERS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/31/92 DATE	 STATE DESIGN ENGINEER FOR HWYS
FHWA	

S.D.D. 16 A 1-5



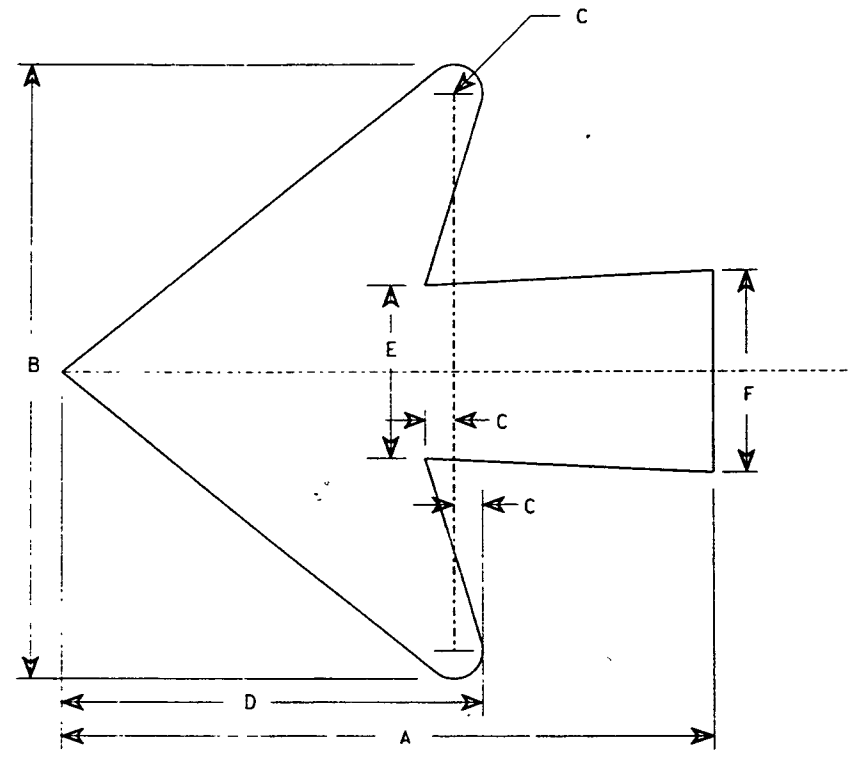
NOTES

1. All Signs Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. All Letters are Series E, except for sign 22 the first line is Series D and bottom line is Series C. Also sign 23 the second line is Series D and bottom line is Series C.



Lower Case Copy Size	Right or Left	A		B	C	D	E	F
		* 2 Town	* 3 Town					
3 3/4 Series C		7	11	6	3/8	4 5/8	1 7/8	2 1/8

* Indicates Ahead and Tilt for 2 & 3 Town applications.



Lower Case Copy Size	Right or Left	A		B	C	D	E	F
		* 2 Town	* 3 Town					
4 1/2 Series D&E		8 1/2	11	8	3/8	5 1/2	2 1/4	2 5/8
6 Series D&E		12	18	10 3/4	1/2	7 3/8	3 1/4	3 1/2
8 Series E		15 1/2	24	14 1/4	3/4	9 3/4	4 1/4	4 1/2

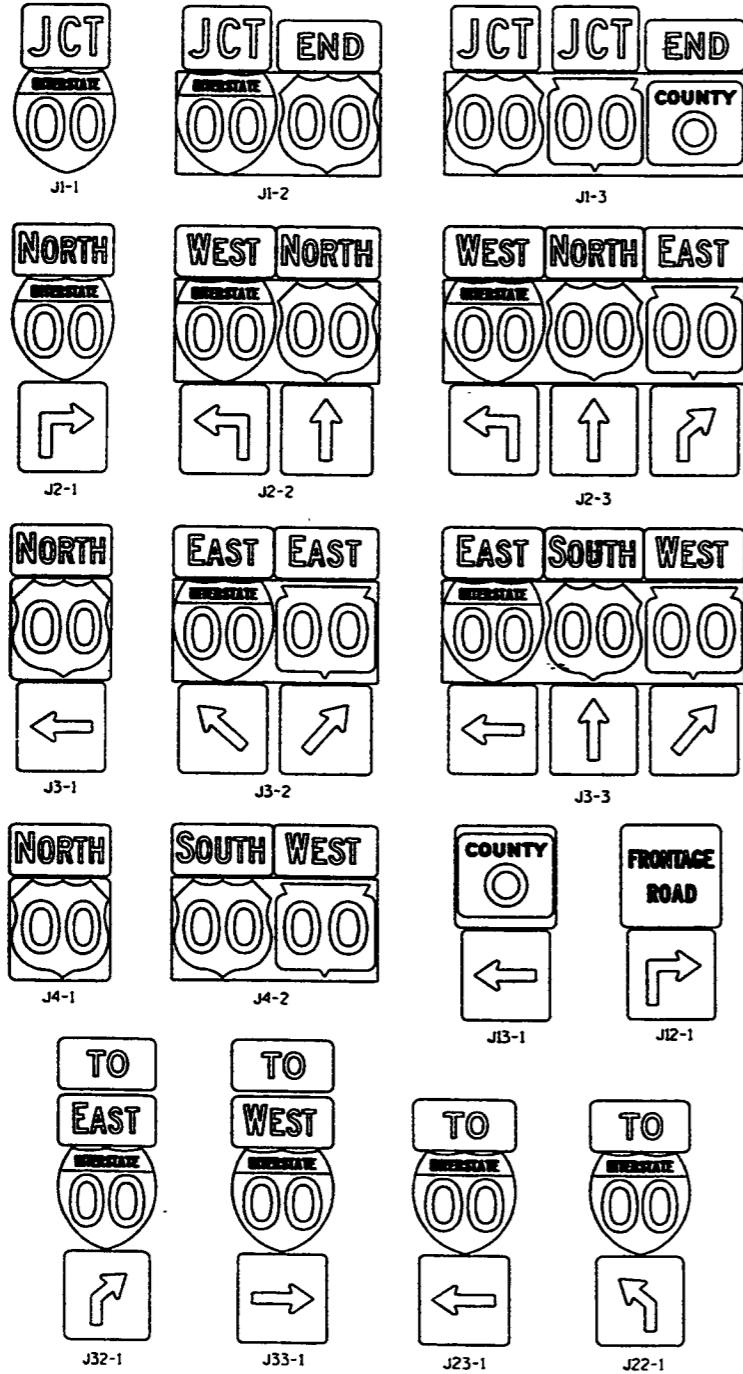
* Indicates Ahead and Tilt for 2 & 3 Town applications.

DATE DRAWN 7-28-93 DATE REDRAWN _____
 DATE REVISED _____
STANDARD ARROWS FOR D1 GUIDE SIGNS
 WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Steven P. Busch*
State Traffic Engineer
 DATE 8/10/93 PLATE NO. A1-2.3

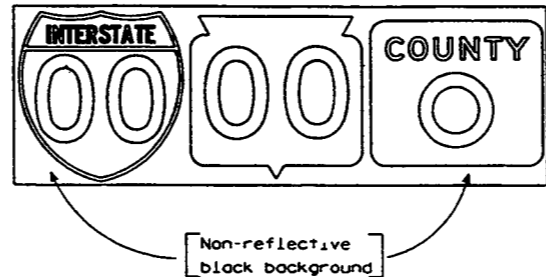
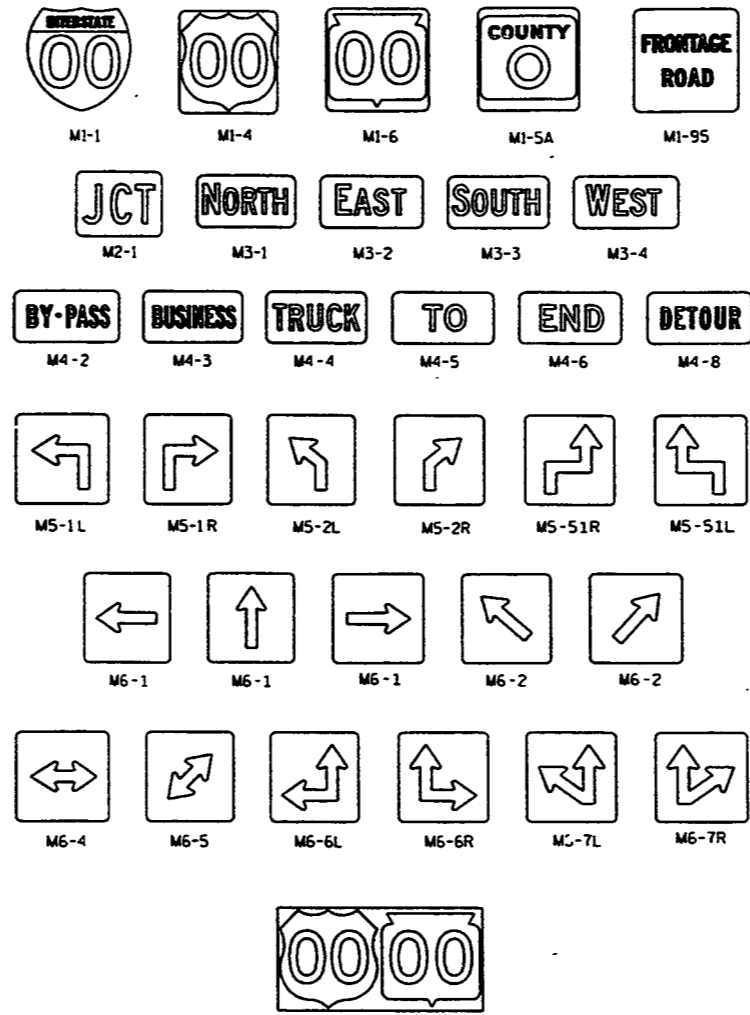
58 59

LEVELS ON 1, 2, 5, 6

TYPICAL ASSEMBLIES



INDIVIDUAL COMPONENTS OF ASSEMBLIES



STATE PROJECT NUMBER SHEET NO.

GENERAL NOTES

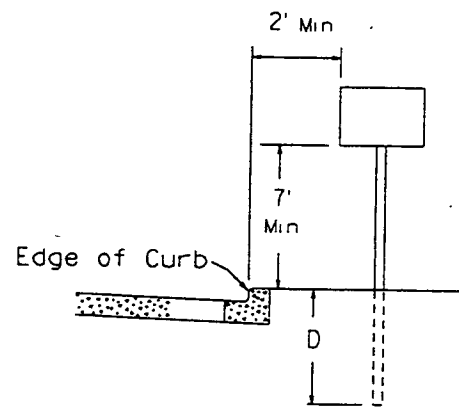
1. All components within any individual assembly shall be the same "size". The following table illustrates that situation:

SIZE	M1'S	M2	M3'S & M4'S	M5'S & M6'S
2	24 x 24	21 x 15	24 x 12	21 x 21
3,4-5	36 x 36	30 x 21	30 x 15	30 x 30

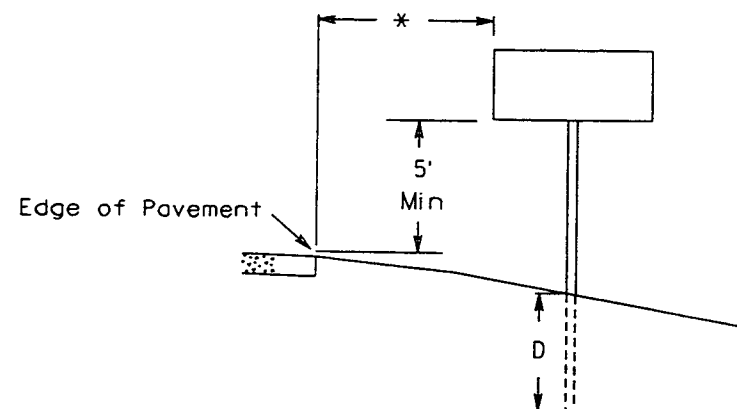
2. For any assembly containing two or more route markers, the route markers SHALL be placed on a single PLYWOOD panel. All other materials within the assembly can be either plywood or aluminum.
3. Certain marker heads require the component pieces to be the same color. As an example, all the componets used with an M1-1 marker shall be blue.

DATE DRAWN 4-19-93 DATE REDRAWN _____
 DATE REVISED _____
 ROUTE MARKERS & COMPONENTS
 IN TYPICAL ASSEMBLIES
 WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Steve Busch*
 State Traffic Engineer
 DATE 8/9/93 PLATE NO. A2-L4

URBAN AREA



RURAL AREA

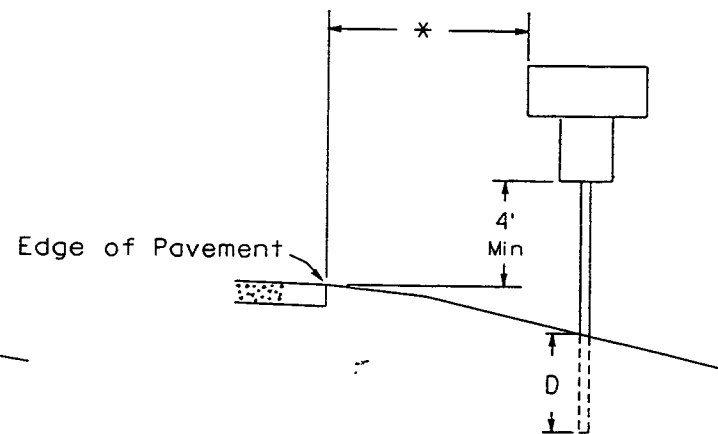
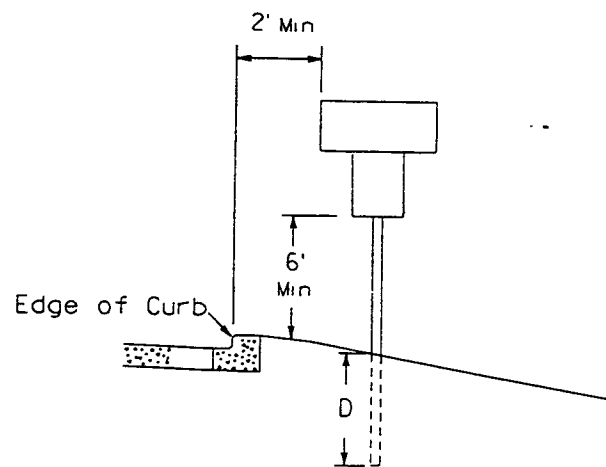


GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

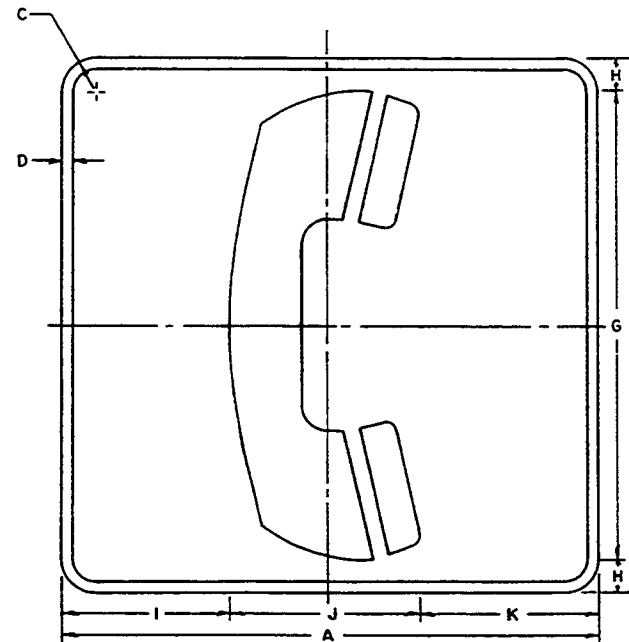


* 12 feet minimum from edge of pavement. Where there is a paved shoulder, 6' minimum from edge of paved shoulder, but at least 12 feet from edge of pavement.

DATE DRAWN 9-12-91 DATE REDRAWN _____
 DATE REVISED 1-14-92 _____
 TYPICAL INSTALLATION OF TYPE II SIGNS ON SINGLE POSTS
 WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Peter F. Pusch*
 State Traffic Engineer
 DATE 1/21/92 PLATE NO. A4-3.8

NOTES:

- 1 Sign is Type II
- 2 Color
Background - Blue
Message - White reflective
- 3 Face Material - Reflective sheeting
- 4 Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



D9-1

SIZE	CODE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Bid Area Sq. Ft.
Minimum	1																											
Standard	2	24		1 1/2	1 1/2			21	1 1/2	7 9/16	8 1/2	7 15/16																4.0
Oversize	3	30		1 7/8	3/4			26	2	9 7/16	10 5/8	9 15/16																6.25
Exp way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											
		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	
Minimum	1																											
Standard	2																											
Oversize	3																											
Exp way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											

CV	RA	RA

Date Drawn - 3-24-80⁰⁸ Date Redrawn - _____

Date Revised - _____

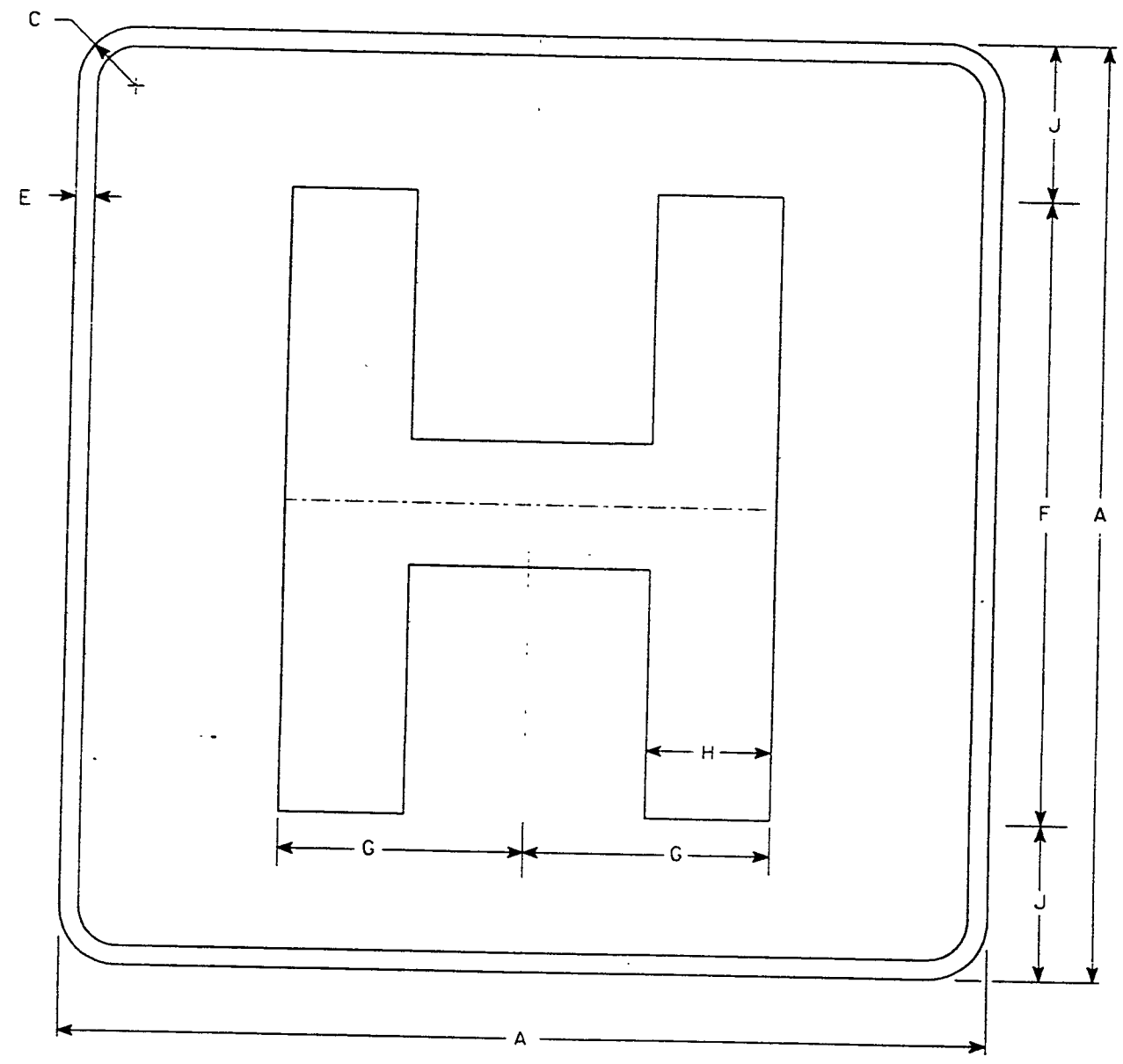
STANDARD SIGN
D9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____

Chief Traffic Engineer

DATE _____ PLATE NO D9-1.1



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Blue
Message - White
3. Message Series - E modified
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 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

D9-2

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		3/8	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

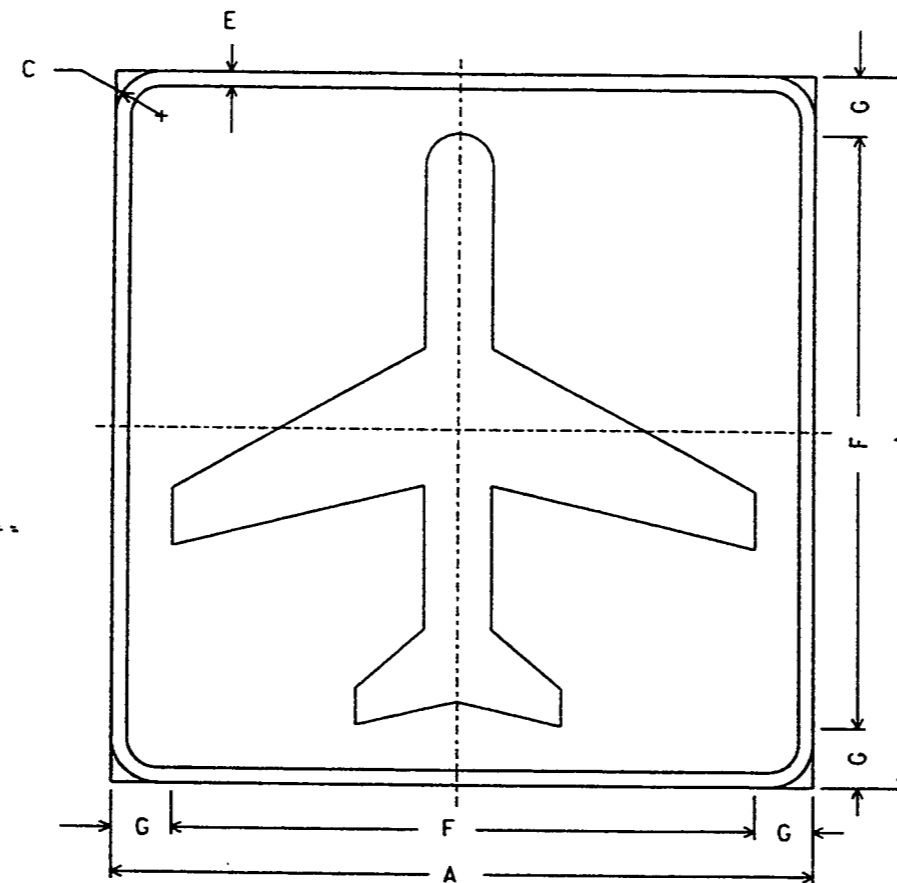
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Pete Rusch
Director, Office of Traffic

DATE 1-17-95 PLATE NO. D9-2.3

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
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.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1/8		3/8	15	1 1/2																				2.25
2	24		1 1/2		1/2	20	2																				4.0
3	30		2 1/4		3/4	25	2 1/2																				6.25
4																											

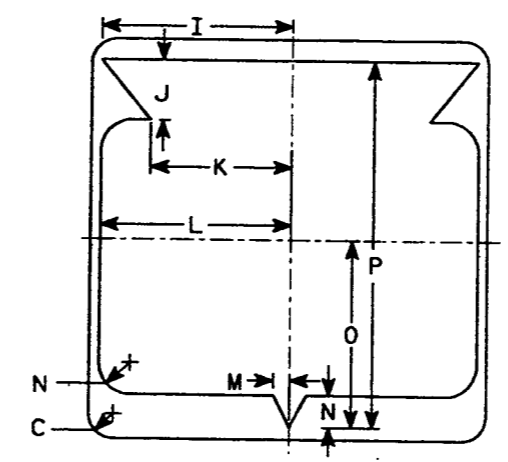
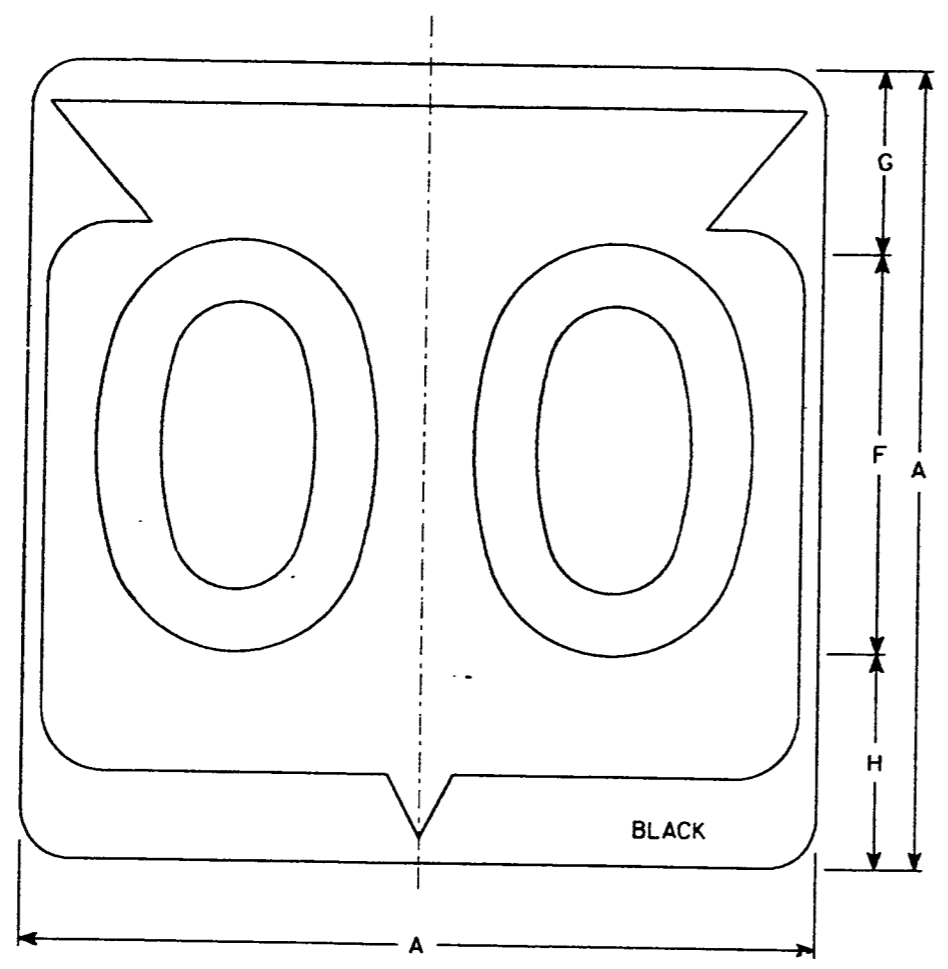
DATE DRAWN 12-10-90 DATE REDRAWN _____
 DATE REVISED _____

STANDARD SIGN
 I5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
 State Traffic Engineer

DATE _____ PLATE NO. I5-11



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Substitute appropriate numerals & adjust spacing as per plate A10-1.

24.35
 LEVELS ON - 2, 3, 4, 6, 8, 10

Metric equivalent for this sign is:

SIZE	
1	
2	600 mmX 600 mm
3	900 mmX 900 mm
4	900 mmX 900 mm
5	900 mmX 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.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 3/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 1/4	9 3/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 1/4	9 3/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 1/4	9 3/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

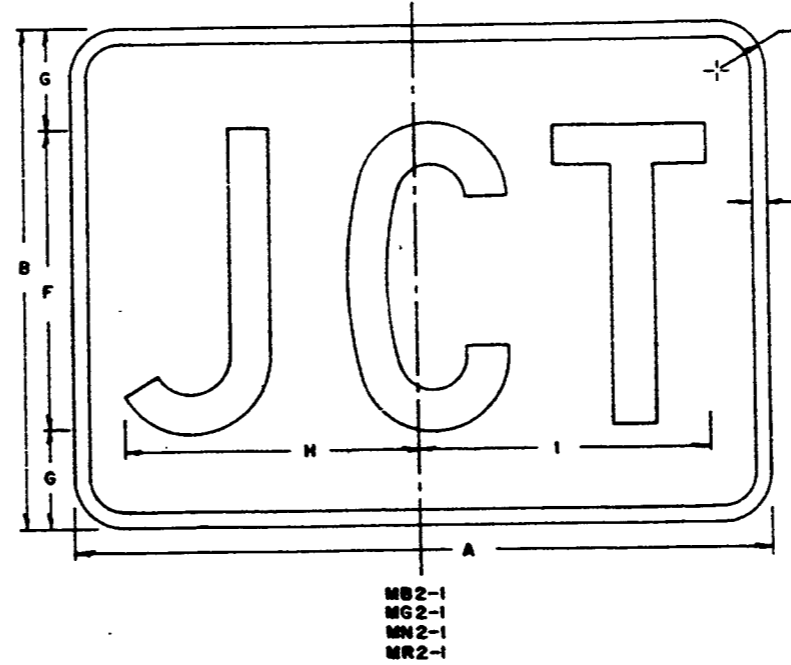
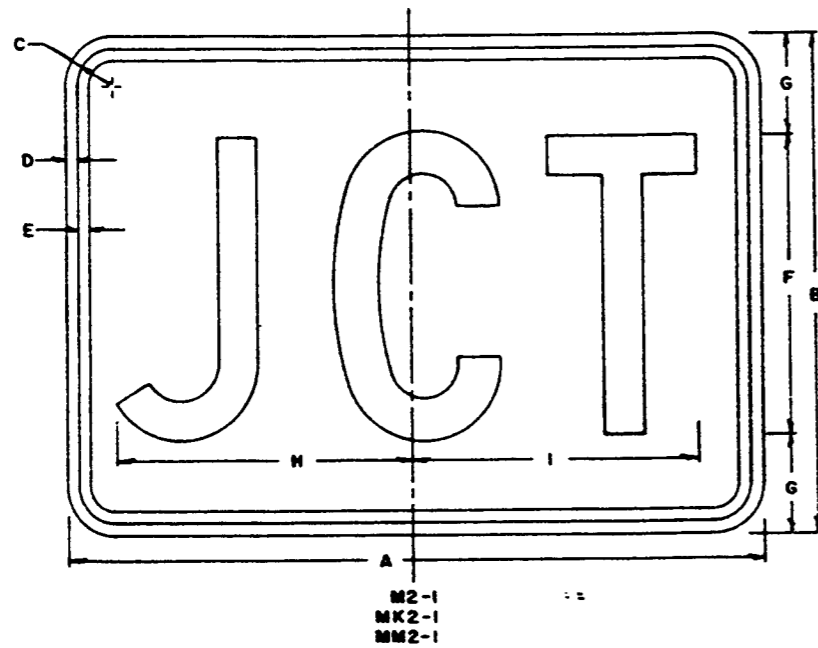
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Pete Ruch*
Director, Office of Traffic

DATE 1-17-93 PLATE NO. M1-6.6

NOTES

1. Sign is Type II - See note 5 - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
 - Background - } See Note 5
 - Message - }
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal the corners and borders shall be rounded.
5. M2-1: Background - ReflectORIZED White
 Message - Black
 MB2-1: Background - Reflective Blue
 Message - ReflectORIZED White
 MG2-1: Background - Reflective Green
 Message - ReflectORIZED White
 MK2-1: Background - Non-reflective Green
 Message - Non-reflective White
 MM2-1: Background - ReflectORIZED White
 Message - Reflective Green
 MN2-1: Background - Reflective Brown
 Message - ReflectORIZED White
 MR2-1: Background - Non-reflective Brown
 Message - Non-reflective Yellow
6. Border shall be omitted on MM2-1.
7. Drawing may be scaled for standard size only.



SIZE	CODE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Std Area Sq Ft
Minimum	1																											
Standard	2	21	15	1 1/8	3/8	3/8	9	3	8 1/2	8 1/2																1 1/2	1 1/2	2.187
Oversee	3																											
Exp way	4	30	21	1 1/2	3/4	1 1/4	13	4	12 1/2	12 1/2																1 1/2	1 1/2	4.375
Freeway	5	30	21	1 1/2	3/4	1 1/4	13	4	12 1/2	12 1/2																1 1/2	1 1/2	4.375
Bicycle	6																											
Signmobile	7																											
		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	
Minimum	1																											
Standard	2																											
Oversee	3																											
Exp way	4																											
Freeway	5																											
Bicycle	6																											
Signmobile	7																											

Date Drawn - _____ Date Reborn - 11-23-81

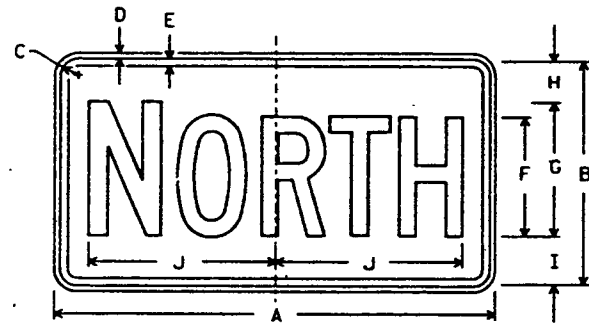
Date Revised - 11-23-81

STANDARD SIGN
M2-1

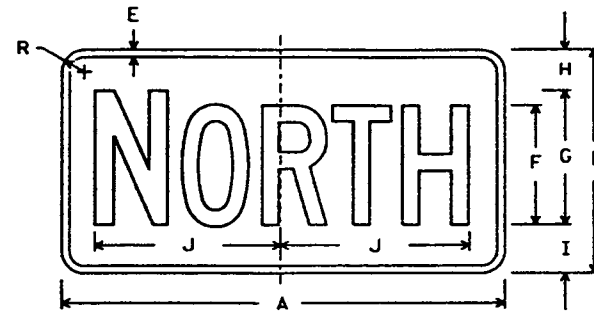
WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
Chief Traffic Engineer

DATE 4-7-82 PLATE NO 322-1.4



M3-1
MK3-1
M03-1



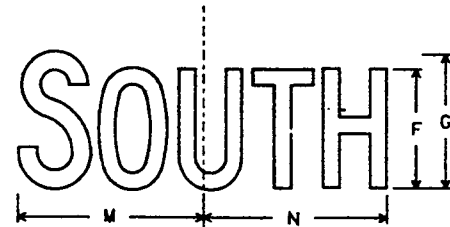
MB3-1
MG3-1
MM3-1*
MN3-1



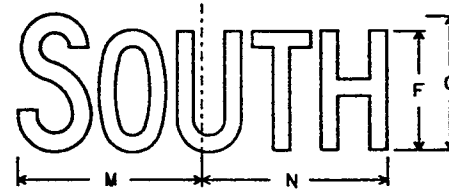
M3-2
MK3-2
M03-2



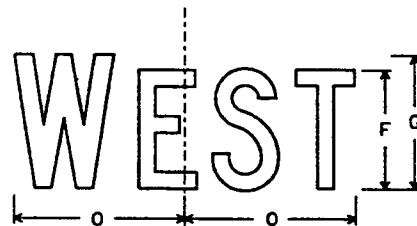
MB3-2
MG3-2
MM3-2*
MN3-2



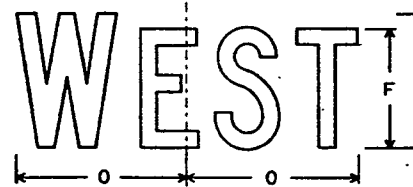
M3-3
MK3-3
M03-3



MB3-3
MG3-3
MM3-3*
MN3-3



M3-4
MK3-4
M03-4



MB3-4
MG3-4
MM3-4*
MN3-4

NOTES

- Signs are Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
- Color:
Background - See note 5
Message - See note 5
- Message Series - C
- 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.
- M3-1 thru M3-4 Background - Reflective white
Message - Black
MB3-1 thru MB3-4 Background - Reflective blue
Message - Reflective white
MG3-1 thru MG3-4 Background - Reflective green
Message - Reflective white
MK3-1 thru MK3-4 Background - Non-Reflective green
Message - Non-Reflective white
MM3-1 thru MM3-4 Background - Reflective white
Message - Reflective green
MN3-1 thru MN3-4 Background - Reflective brown
Message - Reflective white
M03-1 thru M03-4 Background - Reflective Orange
Message - Black
- Border shall be omitted on MM series.
- Note the first letter of each direction is larger than the remainder of the message.

* See Note 6

Metric equivalent for this sign is:

SIZE	A	B
1		
2	600mm x	300mm
3	750mm x	375mm
4	750mm x	375mm
5	750mm x	375mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
2	24	12	1/8	3/8	1/2	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	30	15	1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13
4	30	15	1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13
5	30	15	1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

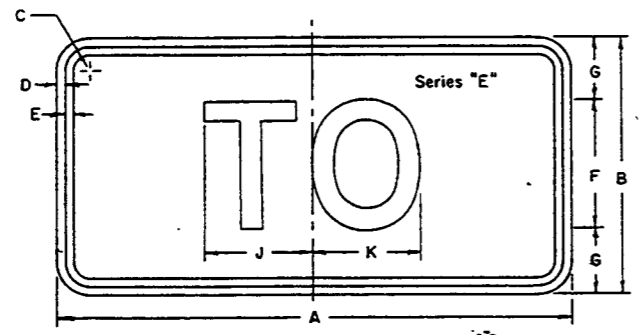
APPROVED *Peter J. Busch*
State Traffic Engineer

DATE 3/25/94 PLATE NO. M3-1.6

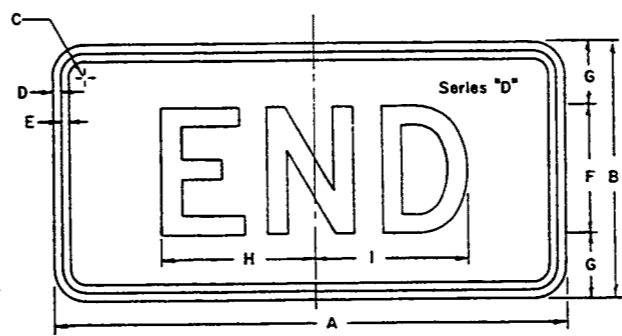
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
PROJECT DESIGNATION		

NOTES:

- Sign is Type II
- Color.
 - Background - } See NOTE 5
 - Message - }
- Face Material - }
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. M4-5 and M4-6:
 - Background - ReflectORIZED White
 - Message - Black
 - Face Material - Reflective Sheeting
- MK4-5 and MK4-6:
 - Background - Non-reflective Green
 - Message - Non-reflective White
 - Face Material - Paint
6. Drawing may be scaled for standard size only.



M4-5



M4-6
MK4-6

SIZE	CODE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Minimum	1	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	5 3/16	5															
Standard	2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	5 3/16	5															
Oversize	3	30	15	1 1/8	3/8	1/2	8	3 1/2	9 5/16	9 21/32	6 23/32	6 21/32															
Exp-way	4	30	15	1 1/8	3/8	1/2	8	3 1/2	9 5/16	9 21/32	6 23/32	6 21/32															
Freeway	5	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	5 3/16	5															
		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ
Minimum	1																										
Standard	2																										
Oversize	3																										
Exp-way	4																										
Freeway	5																										

Date Drawn - 12-15-64 Date Redrawn - 2-23-72 c²

Date Revised 1-13-72 _____
 10-12-72 _____

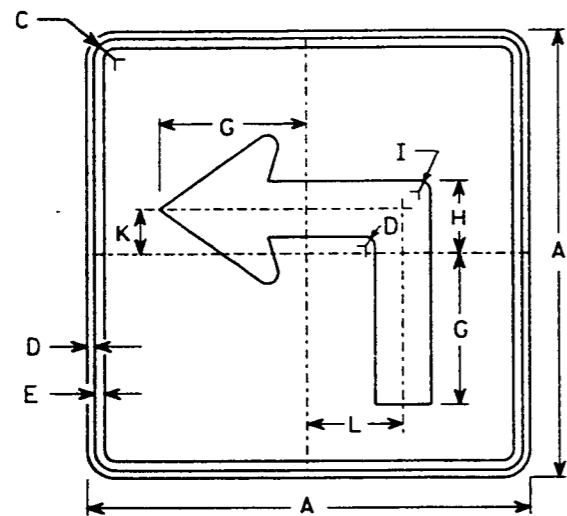
STANDARD SIGN
M4-5, M4-6
 Old Codes M2-52-M7-1

WISCONSIN DIVISION OF HIGHWAYS

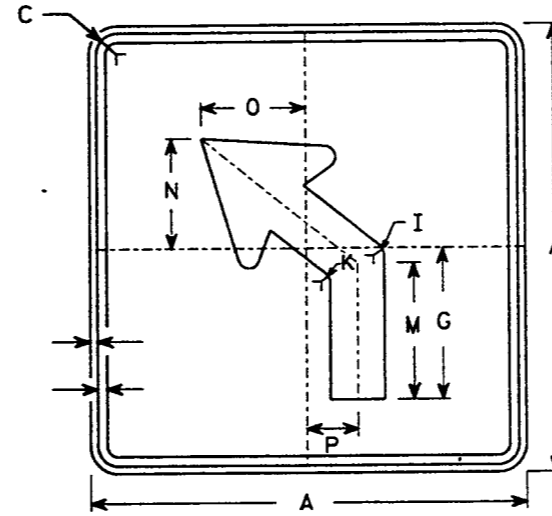
APPROVED *D. E. Hicks*
 STATE HIGHWAY ENGINEER

DATE 9/18/72 PLATE NO. M4-5.5

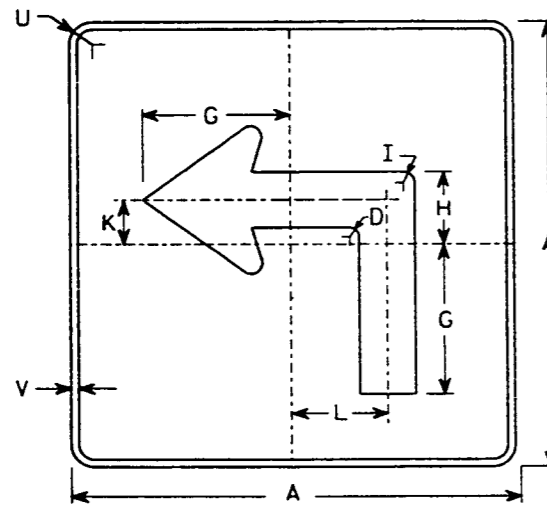
Replaces in part Old Plate M2-12



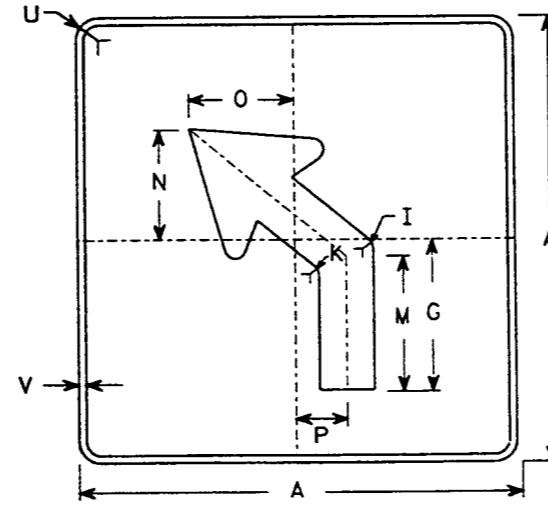
M5-1L
MK5-1L
MM5-1L (See Note 7)
M05-1L



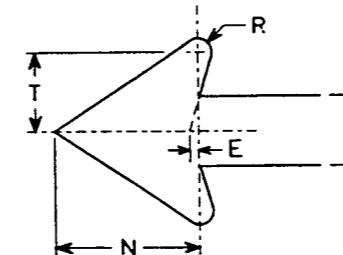
M5-2L
MK5-2L
MM5-2L (See Note 7)
M05-2L



MB5-1L
MG5-1L
MN5-1L
MR5-1L



MB5-2L
MG5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
- Color:
Background - See note 4
Message - See note 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.
- M5-1 and M5-2 Background - Reflective white
Message - Black
MB5-1 and MB5-2 Background - Reflective blue
Message - Reflective white
MG5-1 and MG5-2 Background - Reflective green
Message - Reflective white
MK5-1 and MK5-2 Background - Non-Reflective green
Message - Non-Reflective white
MM5-1 and MM5-2 Background - Reflective white
Message - Reflective green
MN5-1 and MN5-2 Background - Reflective brown
Message - Reflective white
M05-1 and M05-2 Background - Reflective orange
Message - Black
MR5-1 and MK5-2 Background - Non-Reflective brown
Message - Non-Reflective yellow
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.
- Border shall be omitted on MM series.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
2	21		1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	21		1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

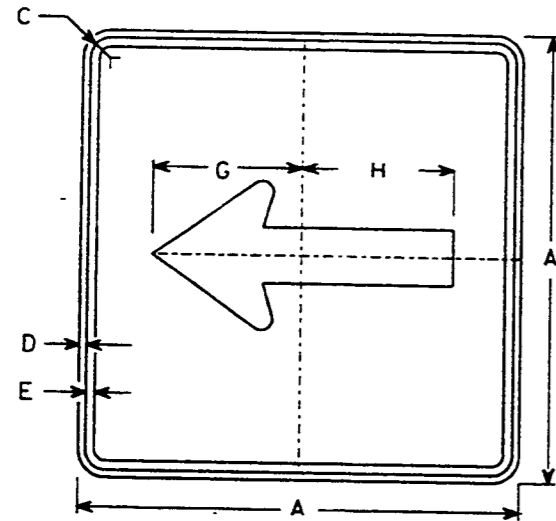
DATE DRAWN 2-1-93 DATE REDRAWN _____
DATE REVISED _____

**STANDARD SIGNS
M5-1 & M5-2
SERIES**

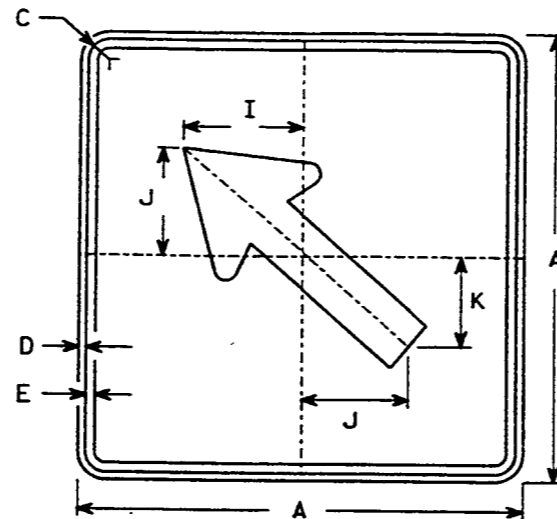
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Robert J. Busch*
State Traffic Engineer

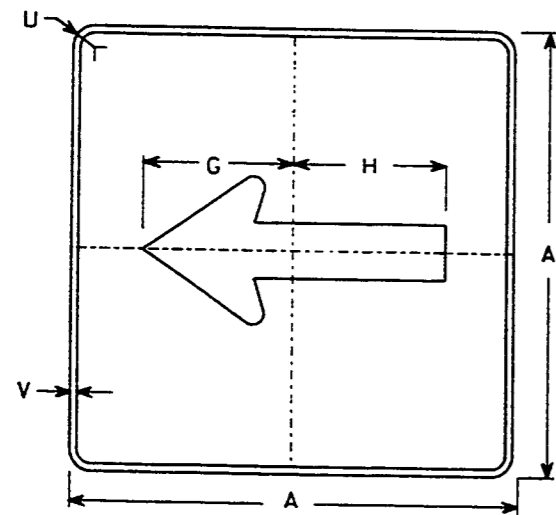
DATE 2/12/93 PLATE NO. M5-1.3



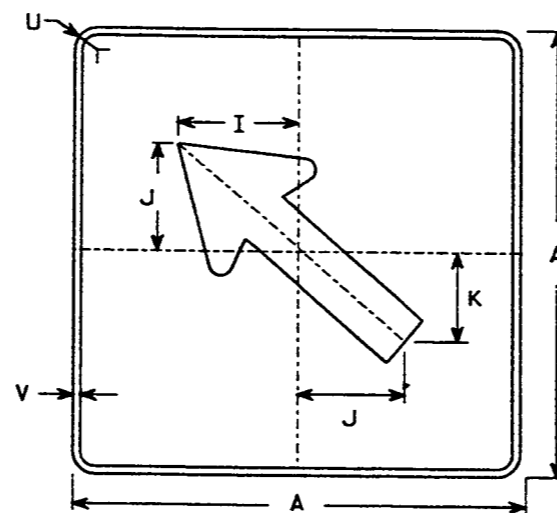
M6-1
MK6-1
MM6-1 (See Note 5)
M06-1



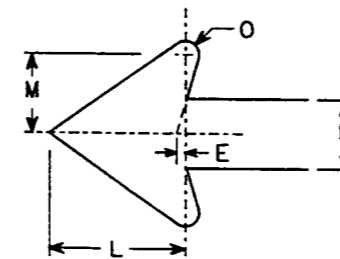
M6-2
MK6-2
MM6-2 (See Note 5)
M06-2



MB6-1
MG6-1
MN6-1
MR6-1



MB6-2
MG6-2
MN6-2
MR6-2

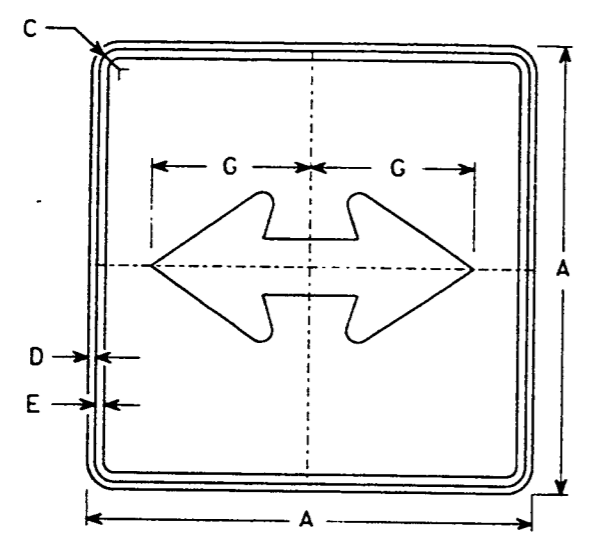


NOTES

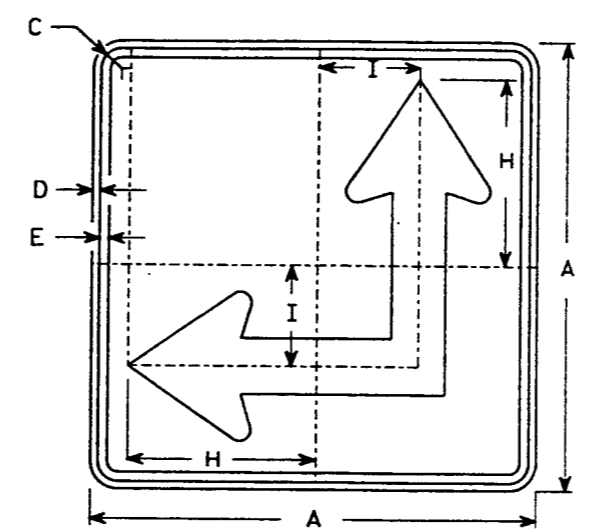
- Signs are Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - Reflective white
Message - Black
MB6-1 and MB6-2 Background - Reflective blue
Message - Reflective white
MG6-1 and MG6-2 Background - Reflective green
Message - Reflective white
MK6-1 and MK6-2 Background - Non-Reflective green
Message - Non-Reflective white
MM6-1 and MM6-2 Background - Reflective white
Message - Reflective green
MN6-1 and MN6-2 Background - Reflective brown
Message - Reflective white
M06-1 and M06-2 Background - Reflective orange
Message - Black
MR6-1 and MR6-2 Background - Non-Reflective brown
Message - Non-Reflective yellow
- Border shall be omitted on MM series.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
2	21		1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	21		1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

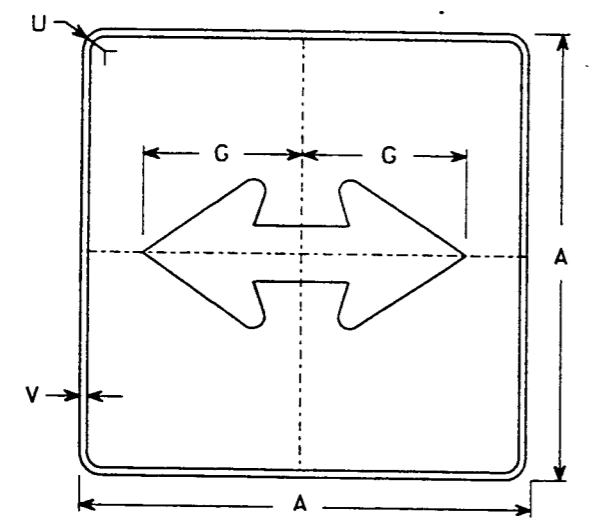
DATE DRAWN 2-4-93 DATE REDRAWN _____
 DATE REVISED _____
STANDARD SIGNS
M6-1 & M6-2
SERIES
 WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *[Signature]*
 DATE 2/12/93 PLATE NO. M6-1.6



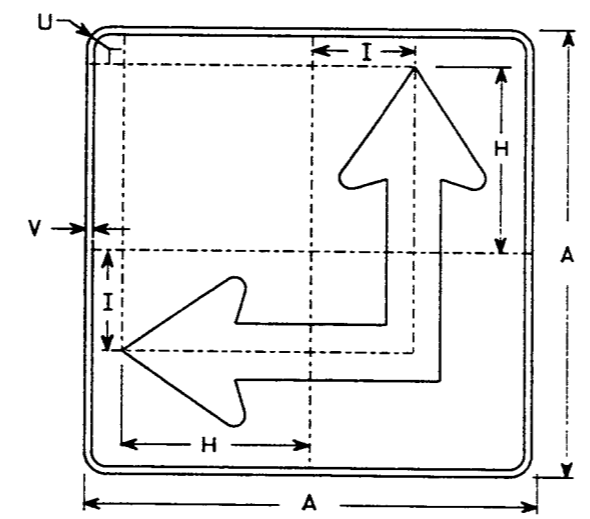
M6-4
MK6-4
MM6-4 (See Note 6)
MO6-4



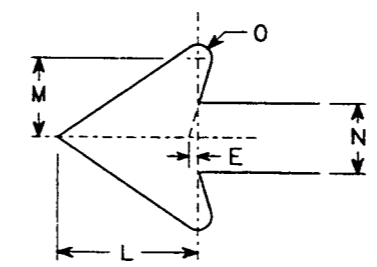
M6-6L
MK6-6L
MM6-6L (See Note 6)
MO6-6L



MB6-4
MG6-4
MN6-4
MR6-4



MB6-6L
MG6-6L
MN6-6L
MR6-6L



NOTES

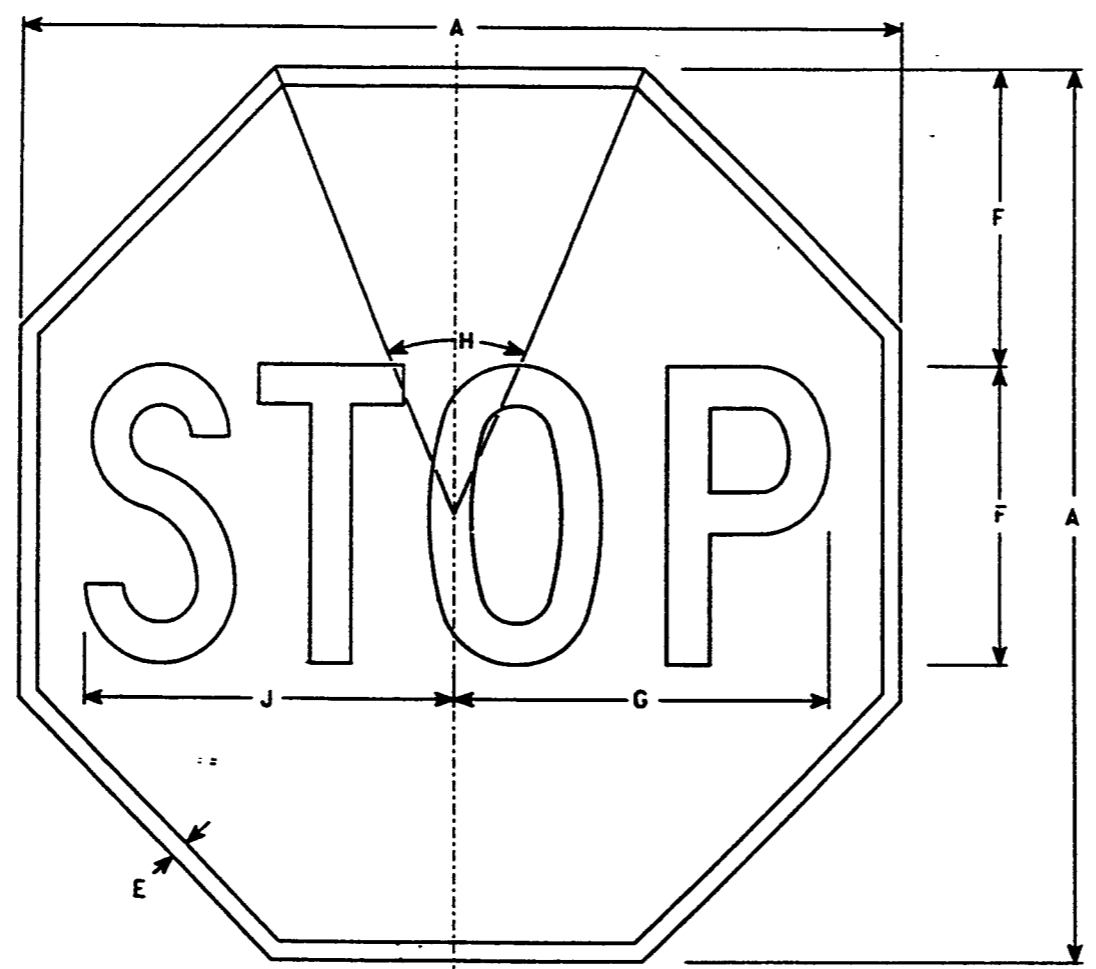
- Signs are Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - Reflective white
Message - Black
MB6-4 and MB6-6 Background - Reflective blue
Message - Reflective white
MG6-4 and MG6-6 Background - Reflective green
Message - Reflective white
MK6-4 and MK6-6 Background - Non-Reflective green
Message - Non-Reflective white
MM6-4 and MM6-6 Background - Reflective white
Message - Reflective green
MN6-4 and MN6-6 Background - Reflective brown
Message - Reflective white
MO6-4 and MO6-6 Background - Reflective orange
Message - Black
MR6-4 and MR6-6 Background - Non-Reflective brown
Message - Non-Reflective yellow
- M6-6R same as M6-6L except arrow points ahead and right.
- Border shall be omitted on MM series.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
2	21		1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	21		1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

DATE DRAWN 2-4-93 DATE REDRAWN _____
 DATE REVISED _____
STANDARD SIGNS
M6-4 & M6-6
SERIES
 WISCONSIN DEPT OF TRANSPORTATION
 APPROVED _____
 State Traffic Engineer
 DATE 2/12/93 PLATE NO. M6-4.2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Letter - Series C.



RI-1

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	1200 mm X 1200 mm
5	1200 mm X 1200 mm
6	450 mm X 450 mm
7	300 mm X 300 mm

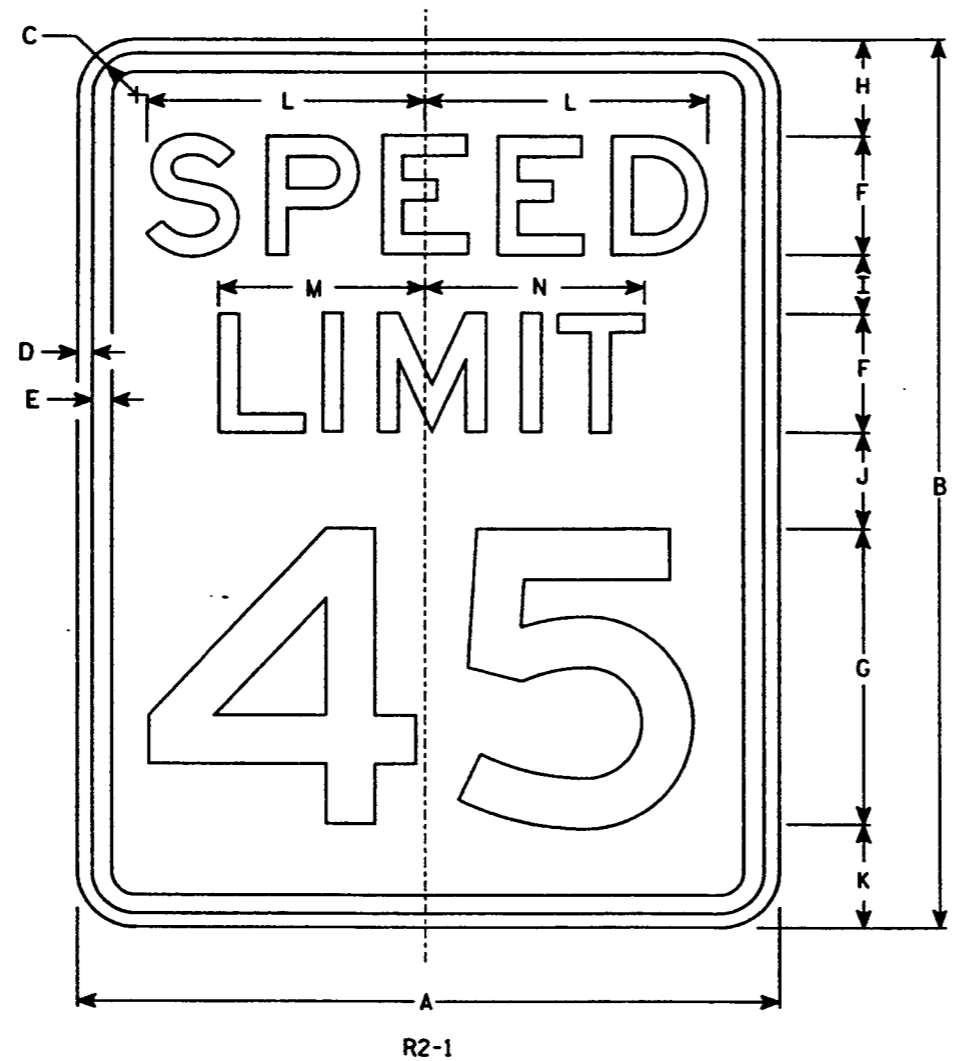
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	24				3/8	8	10	45°		10 1/4																	3.31	.36
2	30				5/8	10	12 1/2	45°		12 3/4																	5.18	.56
3	36				3/4	12	15	45°		15 3/8																	7.46	.81
4	48				1	16	20	45°		20 1/2																	13.25	1.44
5	48				1	16	20	45°		20 1/2																	13.25	1.44
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86	.20
7	12				1/4	4	5	45°		5 1/8																	0.78	.09

STANDARD SIGN
RI - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chuck Spang*
Director, Office of Traffic

DATE 7-16-95 PLATE NO. RI-L10



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - 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. Letters and numerals for sizes "1 & 4" shall be series D, for sizes "2 & 5" they shall be series E.
6. Substitute appropriate numerals and adjust spacing as required.

Metric Equivalent for this sign is:

SIZE	
1	450 mm x 610 mm
2	610 mm x 760 mm
3	910 mm x 1210 mm
4	910 mm x 1210 mm
5	1210 mm x 1510 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	Req. Pl.
1	18	24	1 1/8	3/8	1/2	3	8	2 1/2	1 1/2	1 3/4	2 1/4	7 3/8	5 3/8	5 5/8													3.0
2	24	30	1 1/8	3/8	1/2	4	10	3 1/4	2	3 1/4	3 1/2	9 5/8	7 1/8	7 1/2													5.0
3	36	48	1 3/8	1/2	5/8	6	14	5	3	3 1/2	4 1/2	14 3/4	10 5/8	11 1/4													12.0
4	36	48	1 3/8	1/2	5/8	6	14	5	3	3 1/2	4 1/2	14 3/4	10 5/8	11 1/4													12.0
5	48	60	2 1/4	3/4	1	8	16	6 1/2	4	6 1/2	7	19 1/4	14 1/4	15													20.0

STANDARD SIGN
R2-1

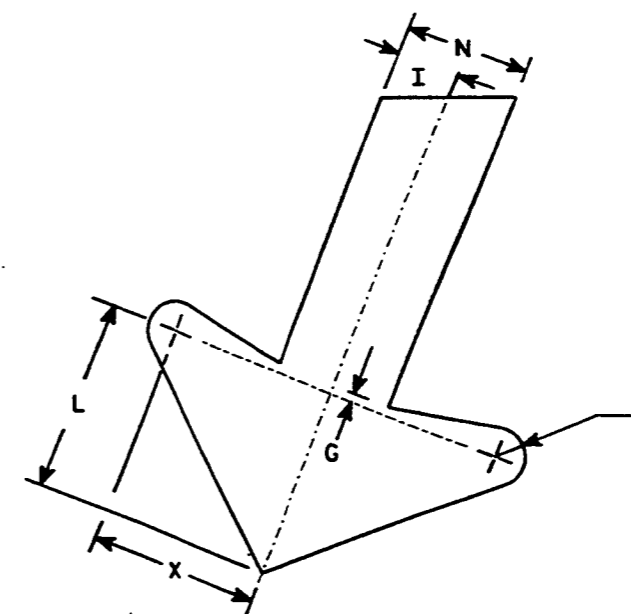
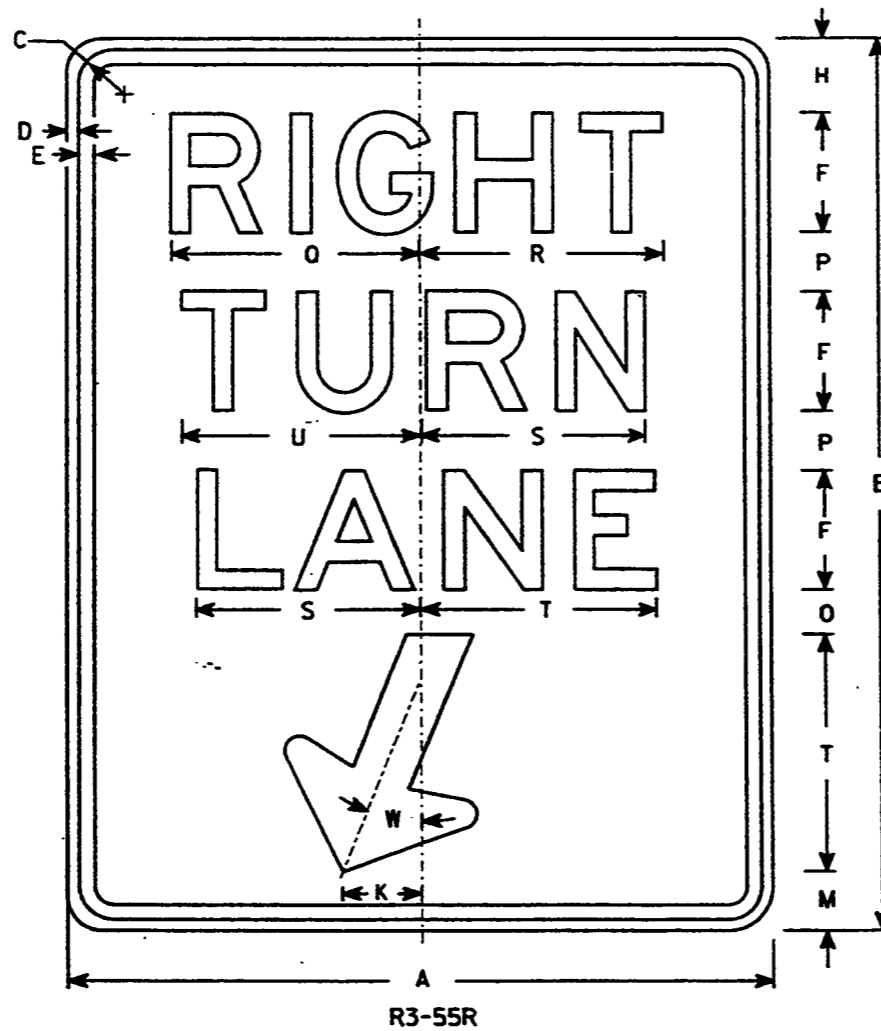
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *John K. Kuech*
Director, Office of Traffic

DATE 12/16/93 PLATE NO. R2-1.7

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	
2	600mm X 750mm
3	900mm X 1200mm
4	
5	

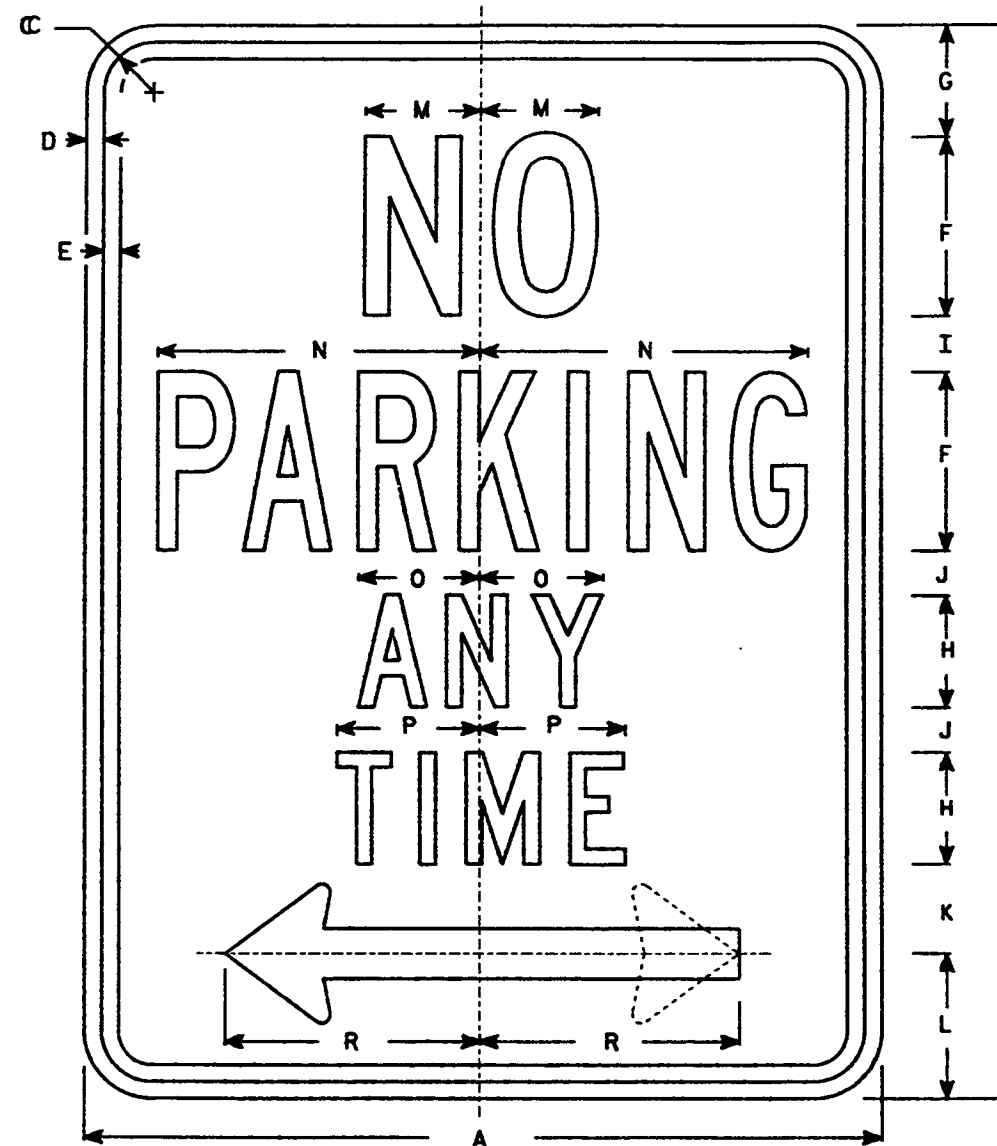
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	2	1 1/2	2	8 1/2	8 1/4	7 5/8	8	8 1/8	1/2	22°				5.0
3	36	48	1 3/4	1/2	5/8	6	3/8	4 1/4	1 1/2	4 1/4	4	4 7/8	3 1/4	3	3	3 3/4	12 3/4	12 1/2	11 1/2	12	12 1/4	3/4	22°				12.0
4																											
5																											

STANDARD SIGN
R3-55R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Peter F. Busch*
Director, Office of Traffic

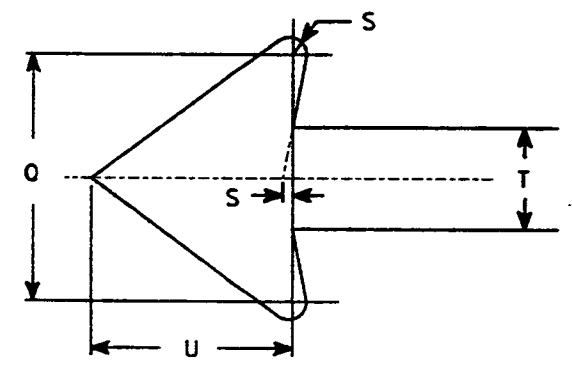
DATE 2/25/94 PLATE NO. R3-55R.3



R7-1

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
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. Lines 1, 3 & 4 are series C, line 2 is series B.
6. R7-ID (double arrow)
R7-IL (left arrow)
R7-IR (right arrow)



Metric equivalent for this sign is:

SIZE	A	B
1	300 mm x 450 mm	
2	450 mm x 600 mm	
3	600 mm x 750 mm	
4	mm x mm	
5	mm x mm	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	4 7/8	2 1/4	2 5/8	1 3/4	3 7/8	1/8	3/4	1 1/2						15
2	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 5/8	7 3/8	2 3/4	3 1/4	2 5/8	5 7/8	1/4	1 1/8	2 1/4						3
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 3/8	9 1/4	3 3/8	4 3/8	3 1/2	7 3/4	1/4	1 1/2	3						5
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Peter F. Busch*
Director, Office of Traffic

DATE 3/2/94 PLATE NO. R7- L5

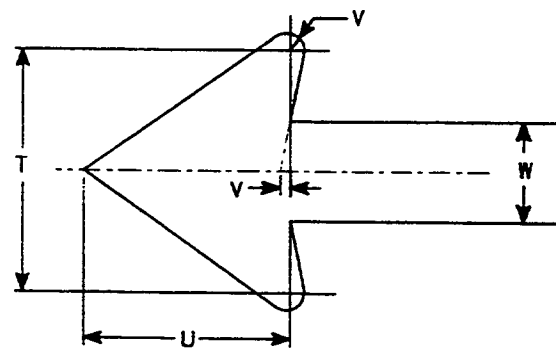


R7-2

* - VARIES

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
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 1 is series C, line 2, 3 & 4 are series B.
6. Substitute appropriate numerals as required and adjust spacing to achieve proper balance.
7. R7-2D (double arrow)
R7-2L (left arrow)
R7-2R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. Ft.
1	12	18	1/8	3/8	3/8	3	1 1/8	2	7/8	5/8	1 1/2	2 1/2	2	4 7/8					3 7/8	1 3/4	1 1/2	1/8	3/4				1.5
2	18	24	1/8	3/8	3/8	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 5/8	7 3/8					5 5/8	2 5/8	2 1/4	1/4	1 1/8				3.0
3	24	30	1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 3/8	9 1/4					7 3/4	3 1/2	3	1/4	1 1/2				5.0
4																											
5																											

STANDARD SIGN
R7-2

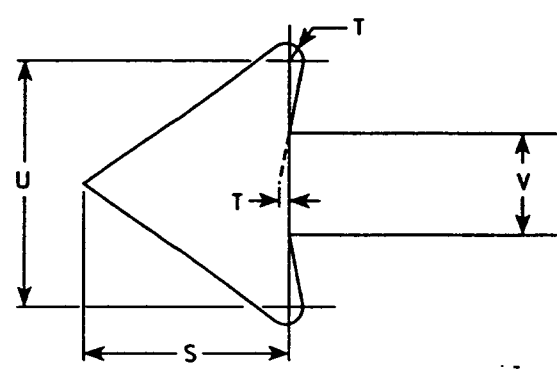
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *John Busch*
Director, Division of Traffic

DATE 10/26/93 PLATE NO. R7- 2.4

56.59

LEVELS ON 2 5.6 10



ARROW DETAIL



R7-7

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
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. R7-7D (double arrow)
R7-7R (right arrow)
R7-7L (left arrow)
6. Lines 1, 3 and 4 are Series C.
Line 2 is Series B.

Metric equivalent for this sign is:

SIZE	
1	300 mm X 450 mm
2	450 mm X 600 mm
3	600 mm X 750 mm
4	
5	

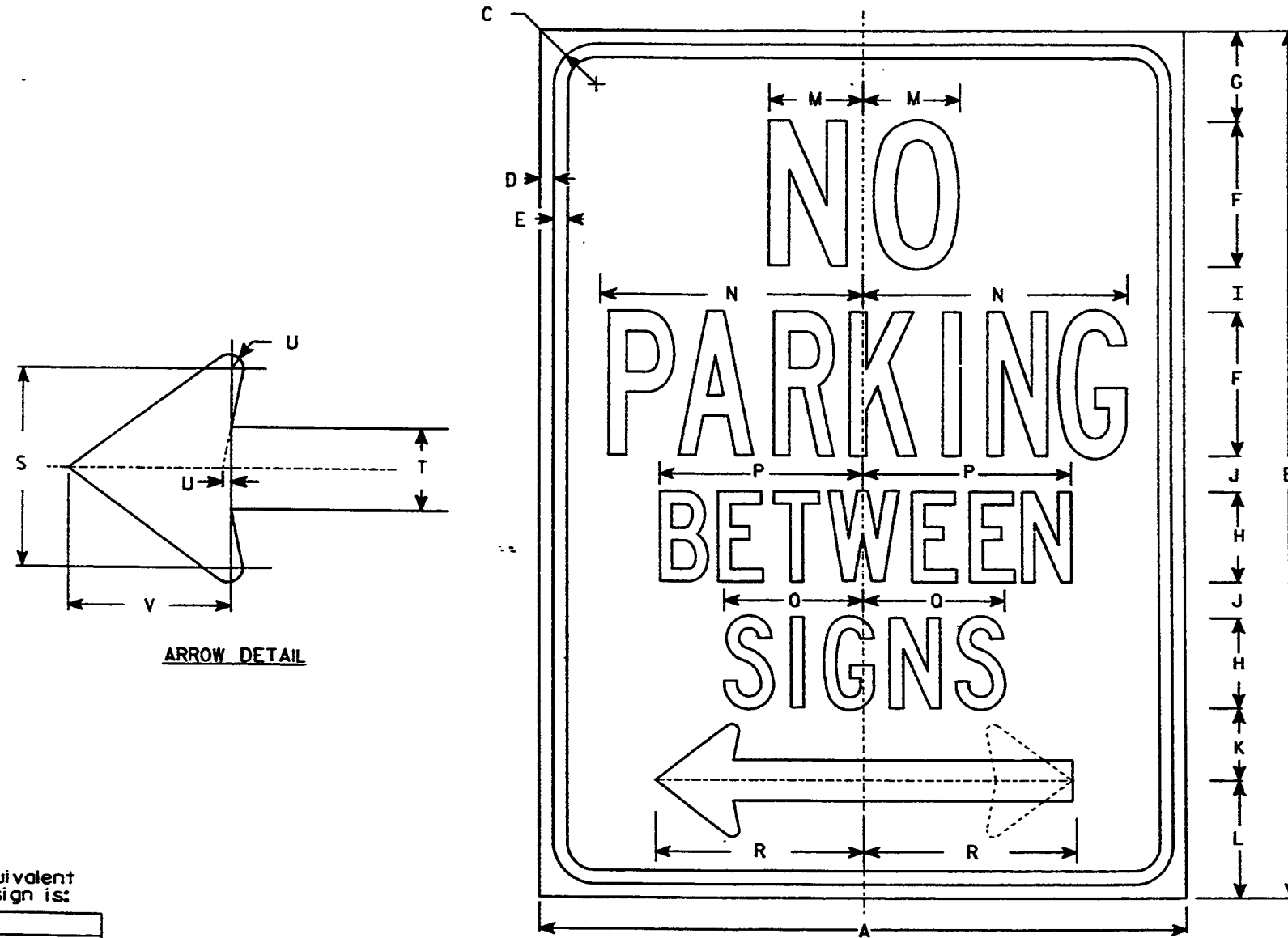
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	2	1 7/8	7/8	5/8	1 1/2	2 1/2	2	4 7/8		2 1/8	2 5/8	3 7/8	1 1/2	1/8	1 3/4	3/4					1.5
2	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 5/8	7 3/8		2 1/2	3 1/4	5 7/8	2 1/4	1/4	2 5/8	1 1/8					3.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 3/8	9 1/4		3 1/8	3 7/8	7 3/4	3	1/4	3 1/2	1 1/2					5.0
4																											
5																											

STANDARD SIGN
R7-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Pete Ruesch*
Director, Office of Traffic

DATE 1-20-95 PLATE NO. R7-7.4



ARROW DETAIL

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - Lines 1, 3 and 4 are Series C and Line 2 is Series B.
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. R7-52L (left arrow)
R7-52R (right arrow)
R7-52D (double arrow)

Metric equivalent for this sign is:

SIZE	
1	300mm X 450mm
2	450mm X 600mm
3	600mm X 750mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	4 7/8		4 5/8	3 1/8	3 7/8	1 3/4	3/4	1/8	1 1/2					1.5
2	18	24	1 1/8	3/8	3/8	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 5/8	7 3/8		5 3/4	3 7/8	5 7/8	2 5/8	1 1/8	1/4	2 1/4					3.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 3/8	9 1/4		6 7/8	4 5/8	7 3/4	3 1/2	1 1/2	1/4	3					5.0
4																											
5																											

STANDARD SIGN
R7-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

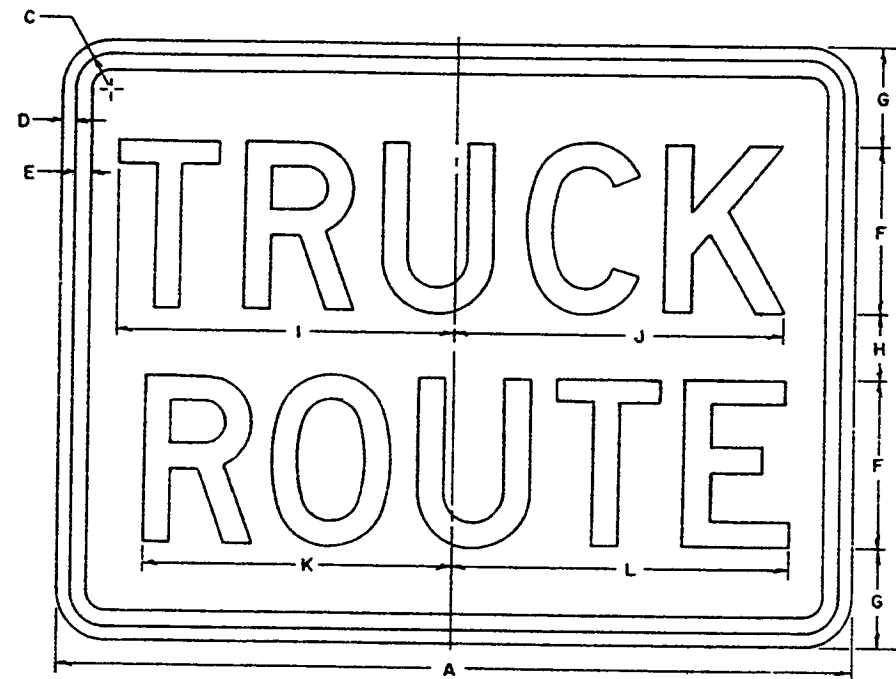
Peter F. Rusch
Director, Office of Traffic

DATE 3/7/94

PLATE NO. R7-52.3

NOTES

1. Sign is Type II - Reflective - reference
WIS D.O.T. Standard Specification for
ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series "D".
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



RI4-1

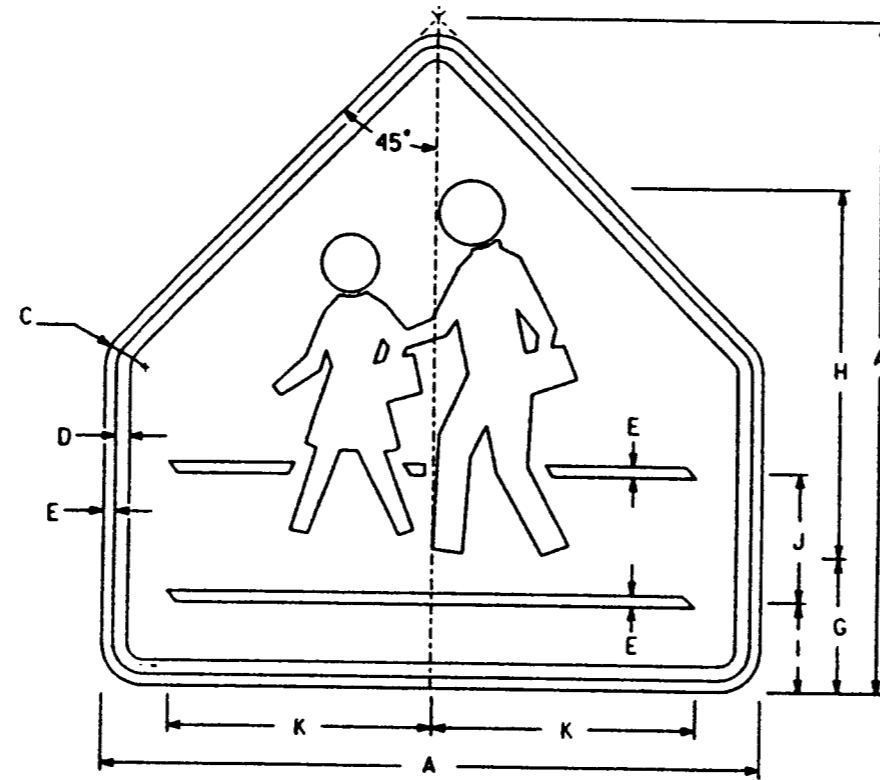
SIZE	CODE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Std Area Sq. Ft.
Minimum	1																											
Standard	2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
Oversize	3																											
Exp. Way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											
		AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	
Minimum	1																											
Standard	2																											
Oversize	3																											
Exp. Way	4																											
Freeway	5																											
Bicycle	6																											
Snowmobile	7																											

Date Drawn: 1-6-54 Date Revised: 9-14-81
 Date Revised: 3-6-75

STANDARD SIGN
RI4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED: *[Signature]*
 DATE: 10-27-81



S2-1

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
Standard	2	30		1 3/8	1/2	5/8		6	16 1/2	4	5 3/4	12																4.69
Over-size	3	36		1 5/8	5/8	3/4		7 1/4	19 3/4	4 3/4	6 7/8	14 3/8																6.75
Express	4																											
Freeway	5																											

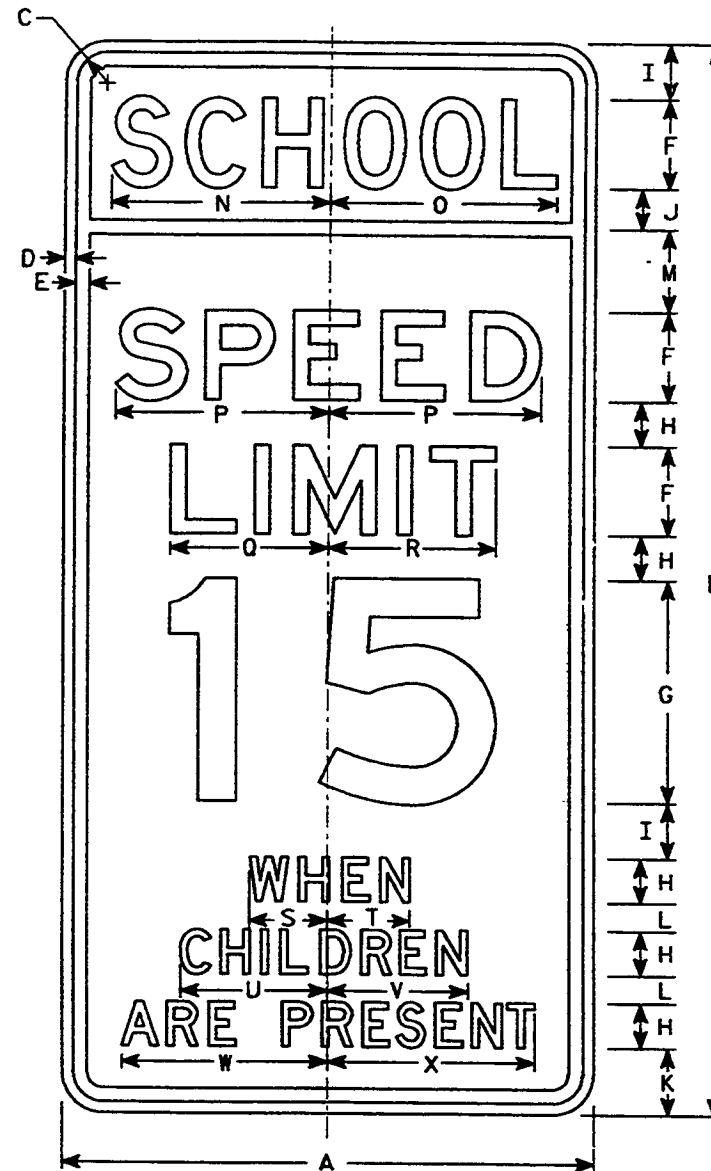
DATE DRAWN 10-4-88 DATE REDRAWN _____
 DATE REVISED _____

**STANDARD SIGN
S2-1**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED _____
State Traffic Engineer

DATE 10-12-88 PLATE NO. S2-13



S4-51

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
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
Lower panel background - White
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	600mm X 1200mm
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.
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 7/8	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	
3																											
4																											
5																											

STANDARD SIGN
S4-51

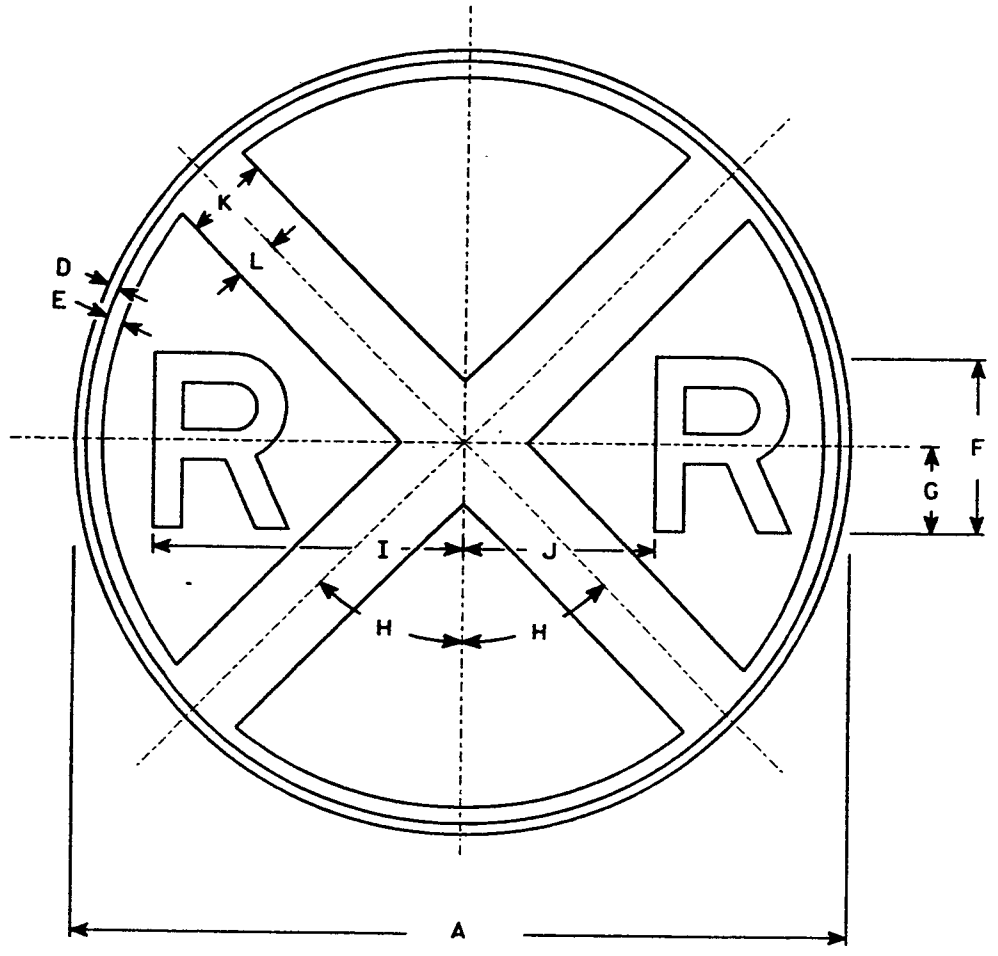
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Robert F. Ruesch*
Director, Office of Traffic

DATE 7/27/94 PLATE NO. S4-514

58.59.

LEVELS ON - 2, 5, 10.



W10-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - E

Metric equivalent for this sign is:

SIZE	
1	750mm
2	900mm
3	
4	1200mm
5	

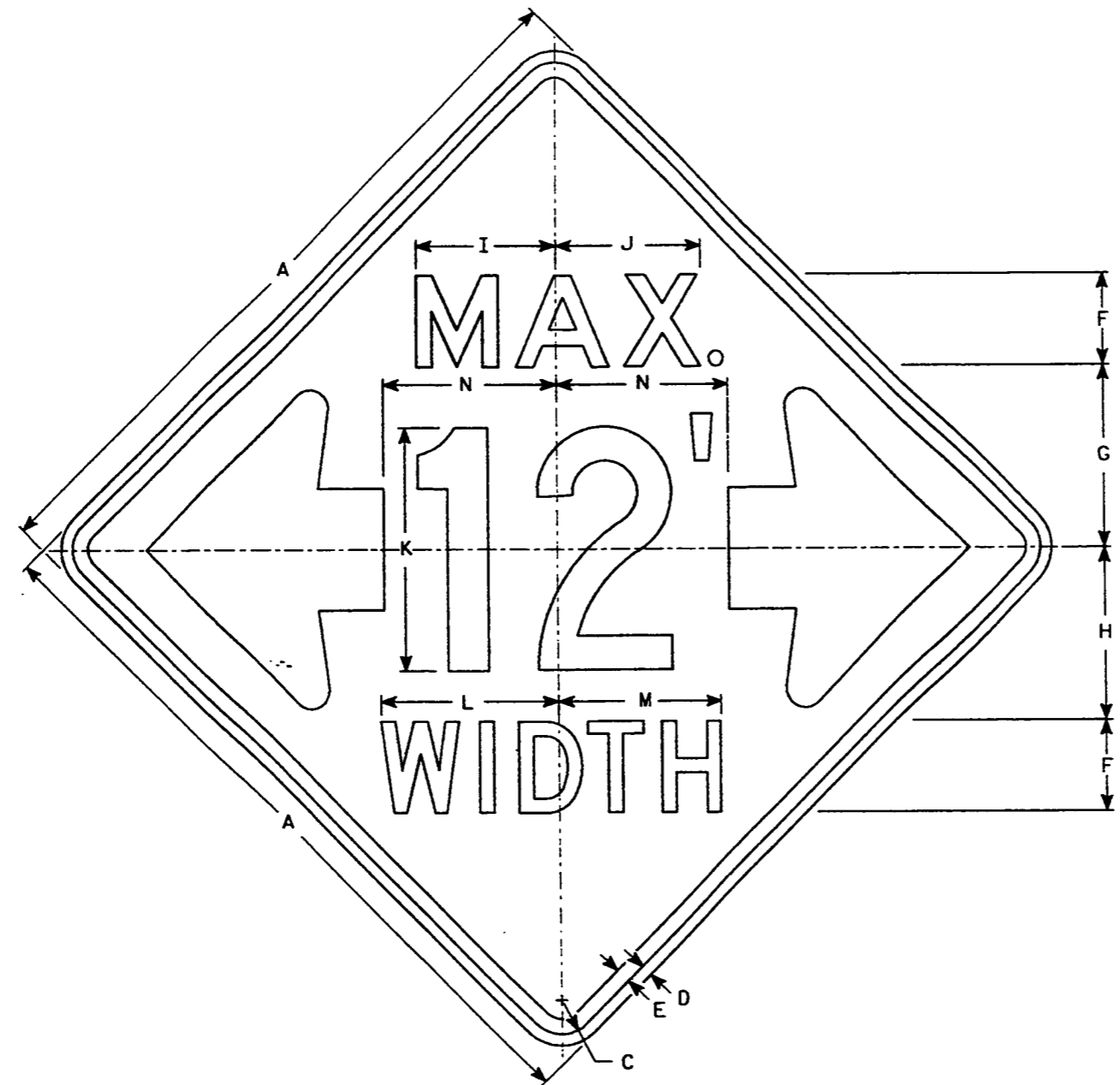
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

STANDARD SIGN
W10-1

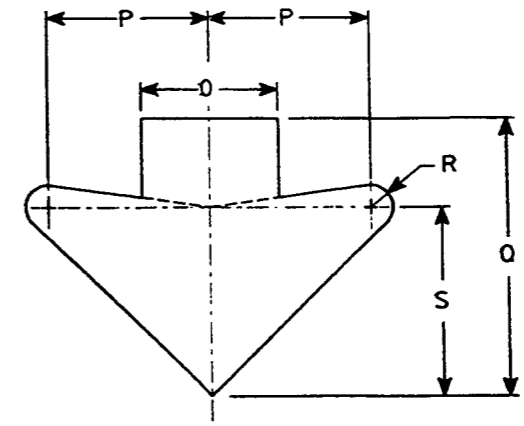
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Peter F. Ruzick*
Director, Office of Traffic

DATE 4/15/94 PLATE NO. W10-15



- NOTES**
1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
 2. Color:
Background - Yellow
Message - Black
 3. Message Series - See note 5
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. The top line is series E, the numerals are series C, and the bottom line is series D.
 6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 1200 mm
3	
4	
5	

W12-52

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	48		2 1/4	3/4	1	6	12	11 3/8	9 1/4	9 5/8	16	11 3/4	10 7/8	11 1/2	8	9 1/4	15 5/8	1 1/4	10 5/8							16.0	
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT. OF TRANSPORTATION

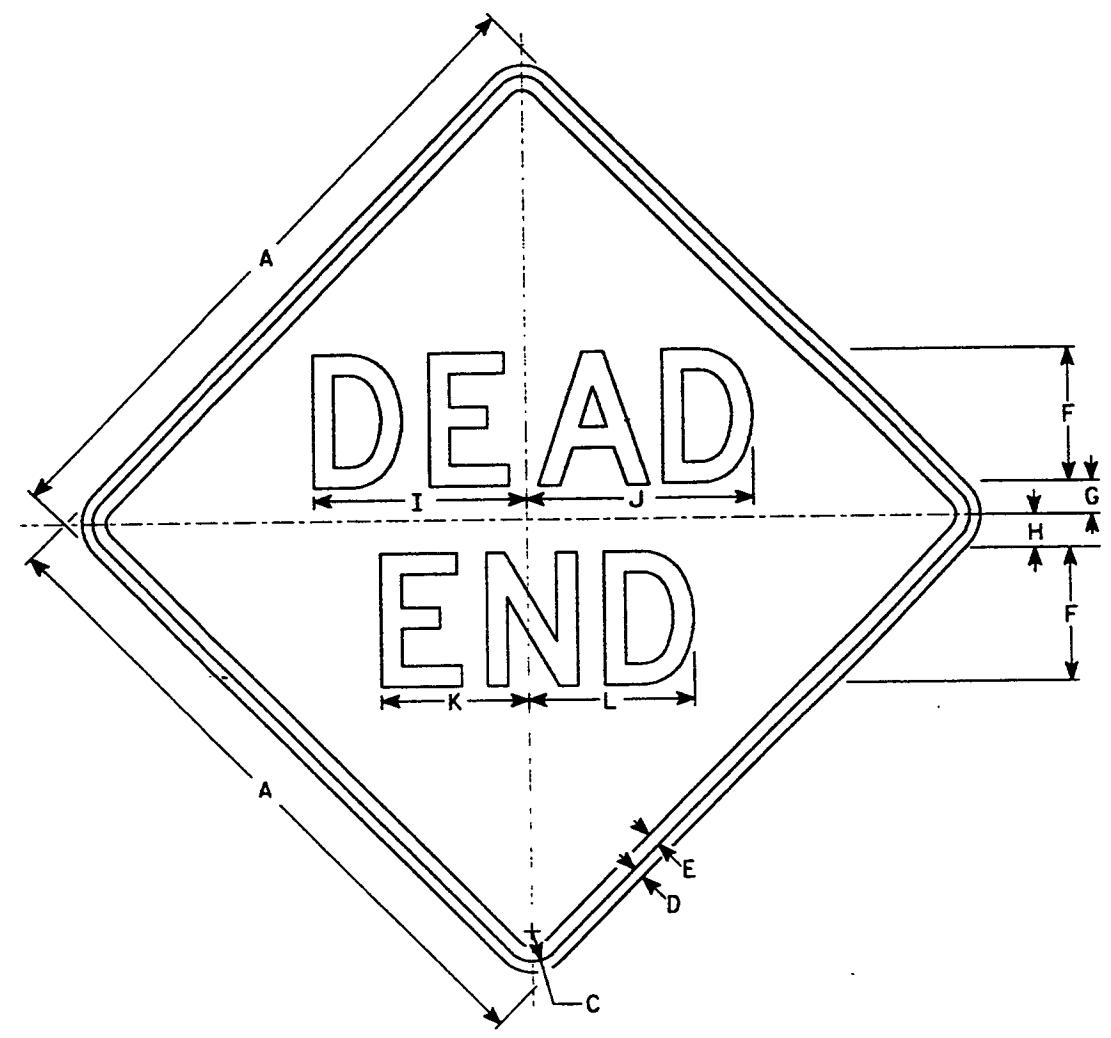
APPROVED *Pete Rusch*
Director, Office of Traffic

DATE 1-17-95 PLATE NO. W12-52.3

56.59
LEVLIS ON • 2.1. 5.6. 10.

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - 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.



W14-1

Metric equivalent for this sign is:

SIZE	
1	600mm X 600mm
2	750mm X 750mm
3	900mm X 900mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 3/8	8 3/4															9.0
4																											
5																											

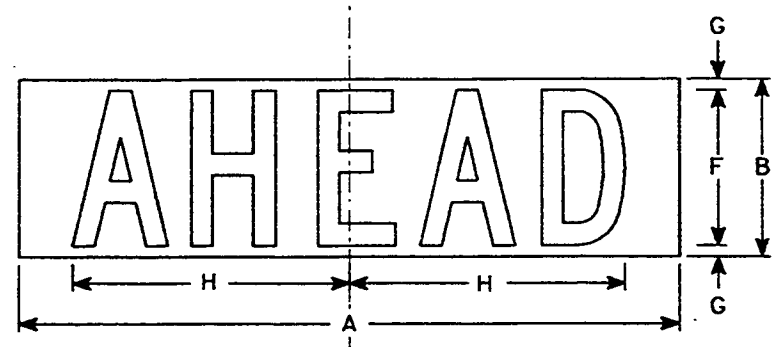
STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

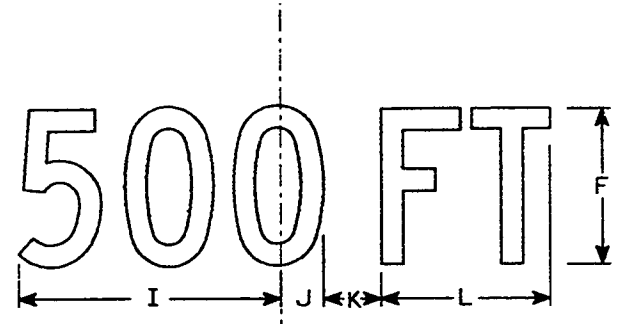
APPROVED *[Signature]*
Director, Office of Traffic

DATE 7/29/94 PLATE NO. WM-13

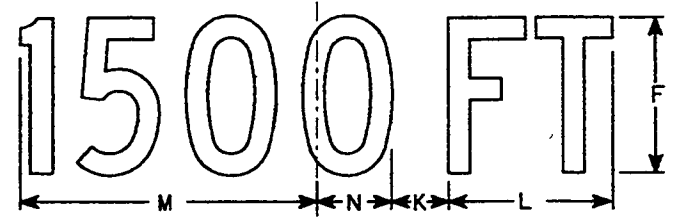
LEVELS DW - P.1, 5.6, 10, 56.99



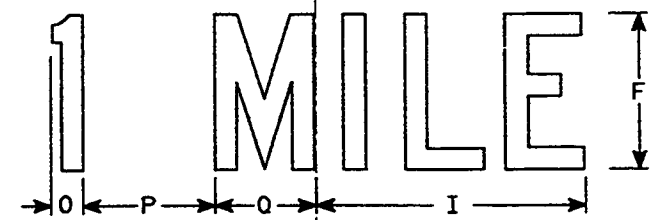
W20-50A



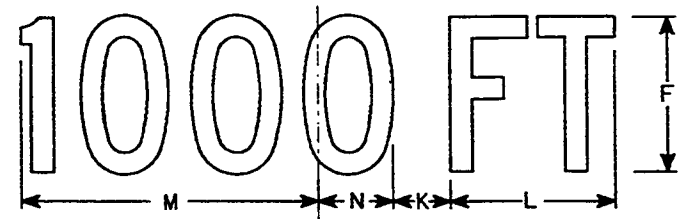
W20-50D



W20-50B



W20-50F



W20-50C



W20-50G

- NOTES**
1. Sign is Type II - Type D Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. These plaques are for changing the distance shown on signs W20 series of signs.

LEVELS 0M - 2.3, 5.6, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

Metric equivalent for this sign is:

SIZE	
1	
2	750 mmX 225 mm
3	750 mmX 225 mm
4	750 mmX 225 mm
5	750 mmX 225 mm

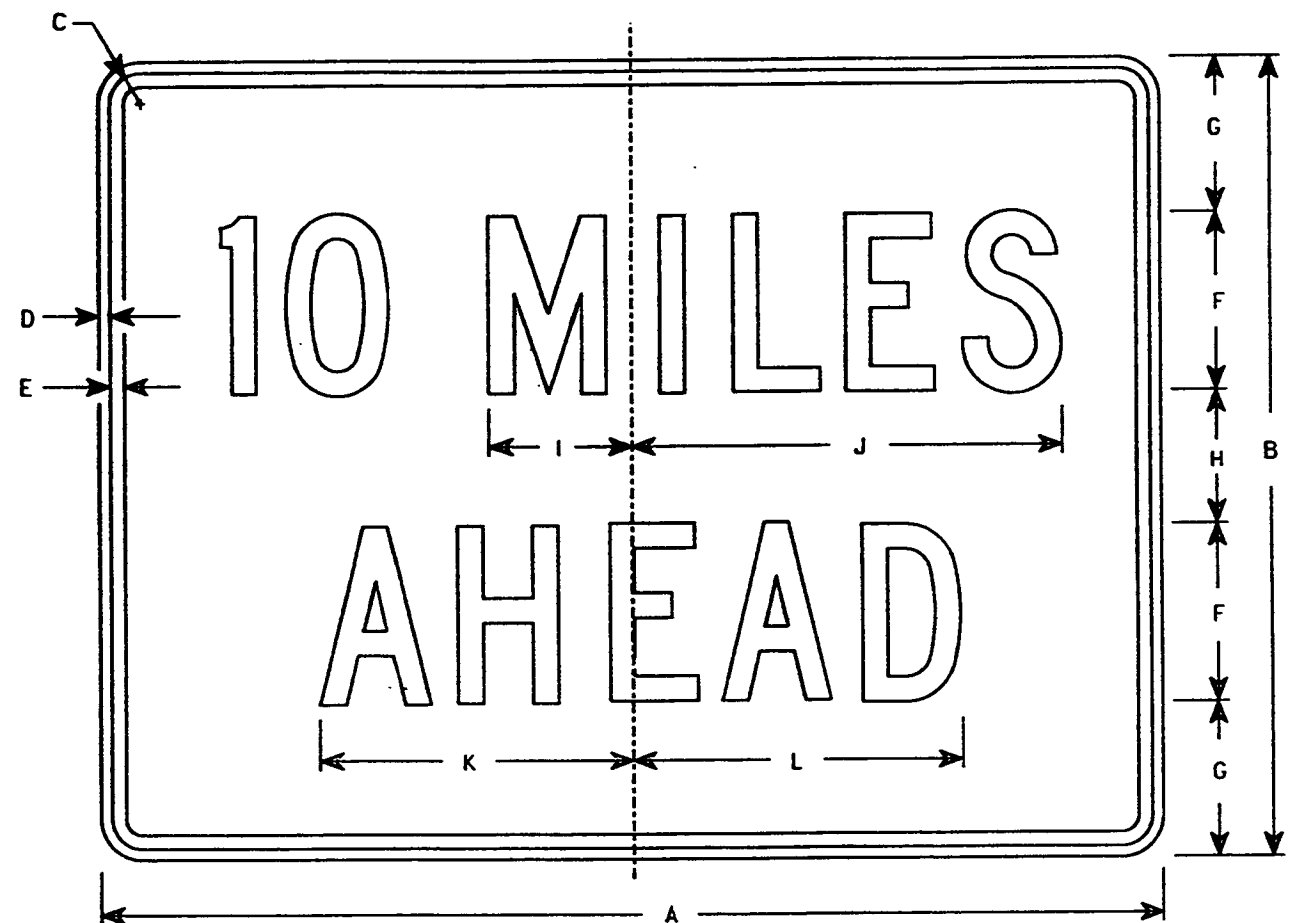
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	22	6				5	1/2	9	9	1 3/8	1 3/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2		8	1 3/4	10 3/4						.92
2	30	8				7	1/2	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8		10 5/8	2 3/8	14 3/8						1.67
3	30	8				7	1/2	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8		10 5/8	2 3/8	14 3/8						1.67
4	30	8				7	1/2	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8		10 5/8	2 3/8	14 3/8						1.67
5	30	8				7	1/2	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8		10 5/8	2 3/8	14 3/8						1.67

SUPPLEMENTARY MESSAGES
W20-50A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED: *Pete Ruchon*
Director, Office of Traffic

DATE 1-17-95 PLATE NO. W20-50.4



NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for ROAD and BRIDGE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - "C"
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
2	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8															6.0
3	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8															6.0
4	48	36	1 3/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15															12.0
5	48	36	1 3/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15															12.0

DATE DRAWN 10-27-92 DATE REDRAWN _____
 DATE REVISED _____

STANDARD SIGN
W57 - 52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Robert F. Rusch*
State Traffic Engineer

DATE 11/2/92 PLATE NO. W57-52.3

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

DETAIL SUMMARY SHEET OF MAINLINE EARTHWORK QUANTITIES (FILL QUANTITIES INCLUDE 25% SHRINKAGE)

STATION	PHASE EXC. CONTAIN.	E.B.S.	RETRO. CONTAIN.	PHASE I FILL	SR & PE EXC.	PHASE II FILL	SR & PE EXC.
474+42		94.9	44.1	3.0	64.3	14.7	3.0
474+89	22.5	134.4	134.6	3.8	64.3	44.9	63.8
475+50	33.2	125	110.4	3.1	107.8	36.8	63.8
476+00	16.5	81.4	17.7	1.8	64	5.9	22.8
476+28	13	70.9		1.4	54.3		7.8
476+50	29	178.7		3.1	142.4		3.9
477+00	27.6	204.6		3.1	154.6		6.0
477+50	27.8	207.4	122.5	3.1	162.2		4.8
478+00	7.5	96.8	91	1.6	42.9		5.0
478+26	8.3	86.7	66.5	1.5	36.4		2.1
478+50	38.6	176.9		3.1	140.8		2.4
479+00	16.2	123.9		2.4	103.3		4.9
479+38	27.5	189.4	82	3.9	164.1		2.4
480+00	22	162	82	0.3	43.7		17.4
480+50	46.3	147.2		0.3	113		
481+00	43.5	136.1		0.3	107.9		
481+50	40.3	129.6		0.3	105.1		
482+00	40.3	121.3		1.1	106.5		
482+50	38.9	108.3		7.5	95.4		
483+00	31.7	102.6		6.4	102.7		61
483+63	10.6	85.3		6.4	57.6		61
484+00	33.8	54.4		8.6	66.7	63.7	
484+50	32.9	103.7		34.0	46.3	63.8	
485+00	18	58.8		22.6	51.9	63.7	
485+50	14	80.6		56.6	67.6	63.8	
486+0	14	76.9		67.1	68.5	128	
486+50		83.6		25.0	77.5	127	
486+97		135.5		4.1	108.2		
487+56		92.9		2.0	85.6		86.9
488+0		140		0.0	132.2		86.9
488+60		105.9	75.7	0.9	95.6		
489+0		267.7	118.3	4.6	242		0.9
489+99		145.5	63.7	1.1	133.2		4.6
490+50		147.2	63.8		135.2		1.1
491+0		135.8	56.3		121.7		7.3
491+45		273.9	68.8		113.9		1.4
492+31		236.4			113.9		2.1
493+0		175.9			226.2		119
493+50		174.1			162		
494+0		165.7			153.7	91.8	23
494+50		181.1			144.4	145.2	6.5
495+10		124.2			162.2		6.5
495+55		112.1			113.3		4.4
496+0		146.2		1.6	111.7		1.0
496+53		127.9		0.6	129.6		1.0
497+0		126.4		2.1	115.8		
497+50		129.2		2.4	116.2	63.7	101.8
498+0		132.4			112.5	63.8	13
498+50		127.3			115.7	63.7	
499+0		112		0.6	121.8	63.7	
499+50		49.8		0.3	43.6		3
499+74		58.3		0.3	42.6		3
500+0		131.9		0.6	99.5		5.9

STATE PROJECT NUMBER
8010-13-71
EARTHWORK QUANTITIES
SHEET 1 OF 2

SHEET NO.
9-



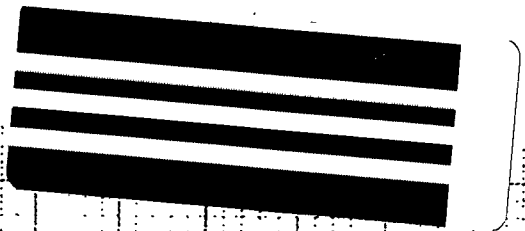
LEVELS ON - 42.3.4.5.6

FILE NAME: H0CND8 80101300=TOTRHWK.DC

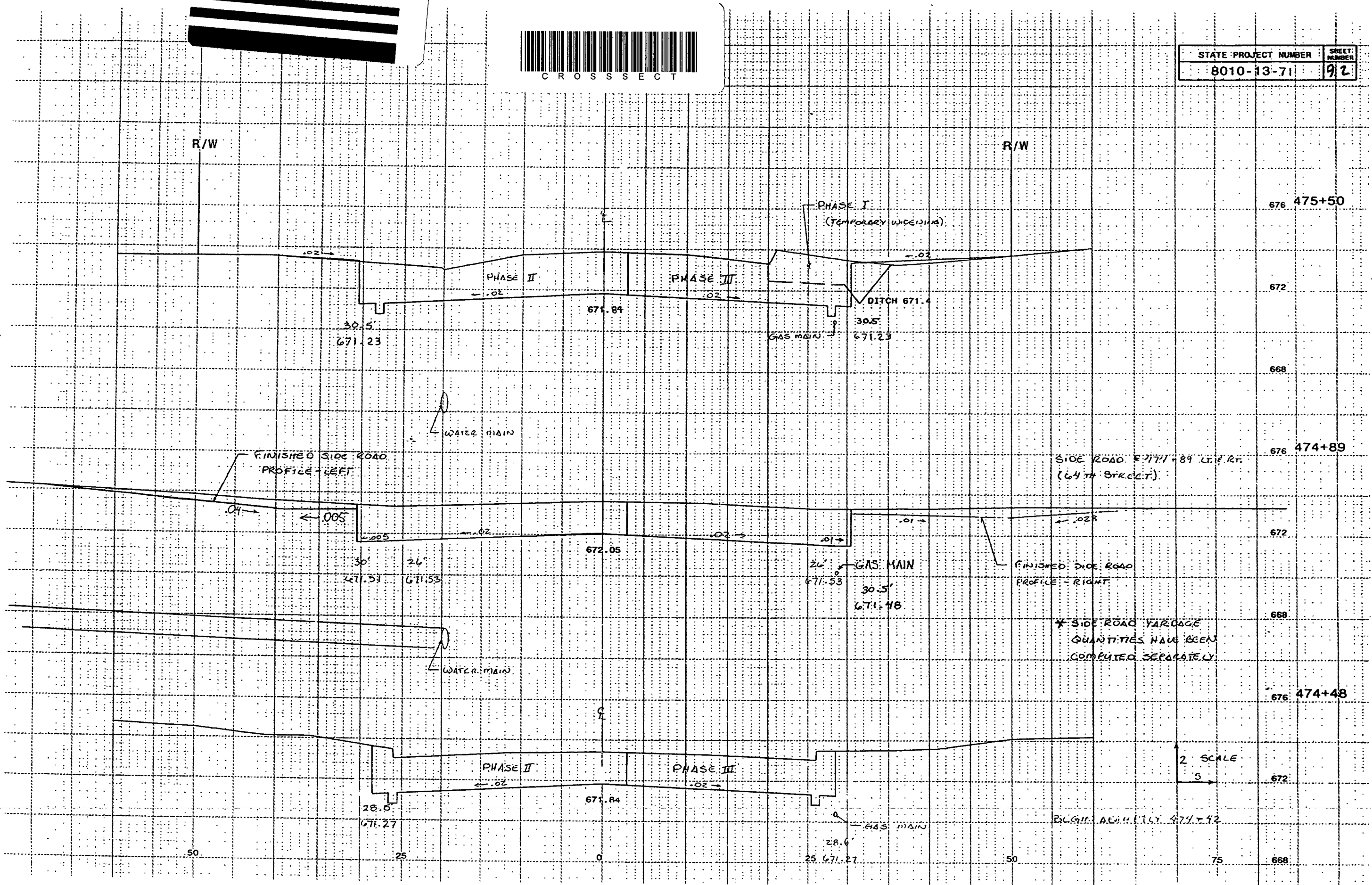
DETAIL SUMMARY SHEET OF MAINLINE EARTHWORK QUANTITIES (FILL QUANTITIES INCLUDE 25% SHRINKAGE)

STATION	PHASE UNC. EXC. PETRO. CONTAM.	UNC. EXC.	E.B.S.	PETRO. CONTAM.	PHASE FILL SR & PE EXC.	UNC. EXC.	E.B.S.	PHASE FILL CONTAM.	PHASE FILL SR & PE EXC.
500+50		126.6			0.6	108.7			1.1
501+0		109.6		12.9		97.5			63.9
501+46		155.1		126.9		112.5			63.9
502+5	15.3	119.2		32.2		72.5			1.4
502+50	25.4	132.9			0.6	90.7			1.6
503+0	32.9	41.2			0.1	33.6			2.9
503+16	9.2	91				69.6			2.0
503+50	23.6	143.1				84.3			5.9
504+0	51.9	140.7		35.6		67.1		11.9	13.3
504+50	57.4	161.1		93.8		72.2		31.2	22.6
505+0	57.9	174.1	11.6	50.6		77.8	11.6	16.9	31.3
505+50	61.1	175.1	41.8			109	41.8		39.9
506+11	59.3	232.4	14.1			181.3	14.1		41.6
507+0	79.9	144.9				101.9			53.6
507+50	55.1	156.9				107.4			30.1
508+0	44.4	166.2				108.8			19.6
508+50	35.6	162.5				102.8			12.8
509+0	30.6	164.9				106.9			9.3
509+58	18.8	110.4				68.1			5.6
510+0	16.7	136.1			1.1	78.7			3.8
510+50	34.7	246.2	27.5		0.8	181.3	27.5		6.6
511+46	34.7	148.5				112.5			7.0
512+0	11.5	151.4				97.2			88.9
512+50	77.2	151.9				91.7			1.1
513+0	103.2	105				70			10.4
513+36	108.2	24.6			0.4	18.9			12.5
516+31	155	155.3			1.9	113.1			3.8
514+0	210.6	151.4				101.4			4.1
514+50	268	156				100.9			26.8
515+0	321.7	154.2				100.9			23.8
515+50	384.7	225.8				150.8			27.8
516+31	449.4	236	66.1			165.3			28.9
517+23	40.2	99.5	35			72.9	56.5		41.3
517+41	72.1	149.7	91.5			107.1	29		43.6
518+0	65.7	143.5				100	75.8		20.9
518+50	58.3	148.1				103.7			20.9
519+0	53.7	154.6				109.3			13.9
519+50	53.7	159.3				115.7			9.3
520+0	45.4	157.4				112			7.0
520+50	61.9	228				167.5			4.6
521+26	61.7	202.8				146.6			5.3
522+0	40.3	119				84.3			5.1
522+50	38	119.4				86.6			64.5
523+0	36.1	136.6				92.6			64.5
523+50	38.4	147.7				104.2			4.6
524+0	24.8	154.2				114.8			4.6
524+50	34.7	219.4				166			4.0
525+25	38.9	200.7	14.3		1.8	148.6	10.4		2.4
526+0	39.8	123.6	36.1		1.1	94.4	27.8		1.8
526+50	30.1	112	52.8		1.1	80.1	40.7		67.8
527+0	4.2	26.6	13.4		0.6	17.1	10.1		2.6
527+25									0.3
UNDISTR.		2150				1840			

STATE PROJECT NUMBER 8010-13-71	SHEET NO. 9.1
EARTHWORK QUANTITIES SHEET 2 OF 2	



STATE PROJECT NUMBER	SHEET NUMBER
8010-13-71	92



STATE PROJECT NUMBER	SHEET NUMBER
8010-13-71	93

R/W

R/W

676 476+50

PHASE II

PHASE III

PHASE I
(TEMPORARY WIDENING)

DITCH 671.9

30.5'
670.87

30.5'
670.87

WATER MAIN

GAS MAIN

R/W

R/W

668

676 476+28

CE @ 476+34.1E

30.5'
670.85

30.5'
670.95

FINISHED CE PROFILE
* CE VARIATION QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY

671.56

DITCH 671.8

R/W

R/W

668

676 476+00

CE @ 475+96.4E

30.5'
671.05

30.5'
671.05

FINISHED CE PROFILE
* CE VARIATION QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY

671.66

DITCH 671.6

WATER MAIN

GAS MAIN

50

25

0

25

50

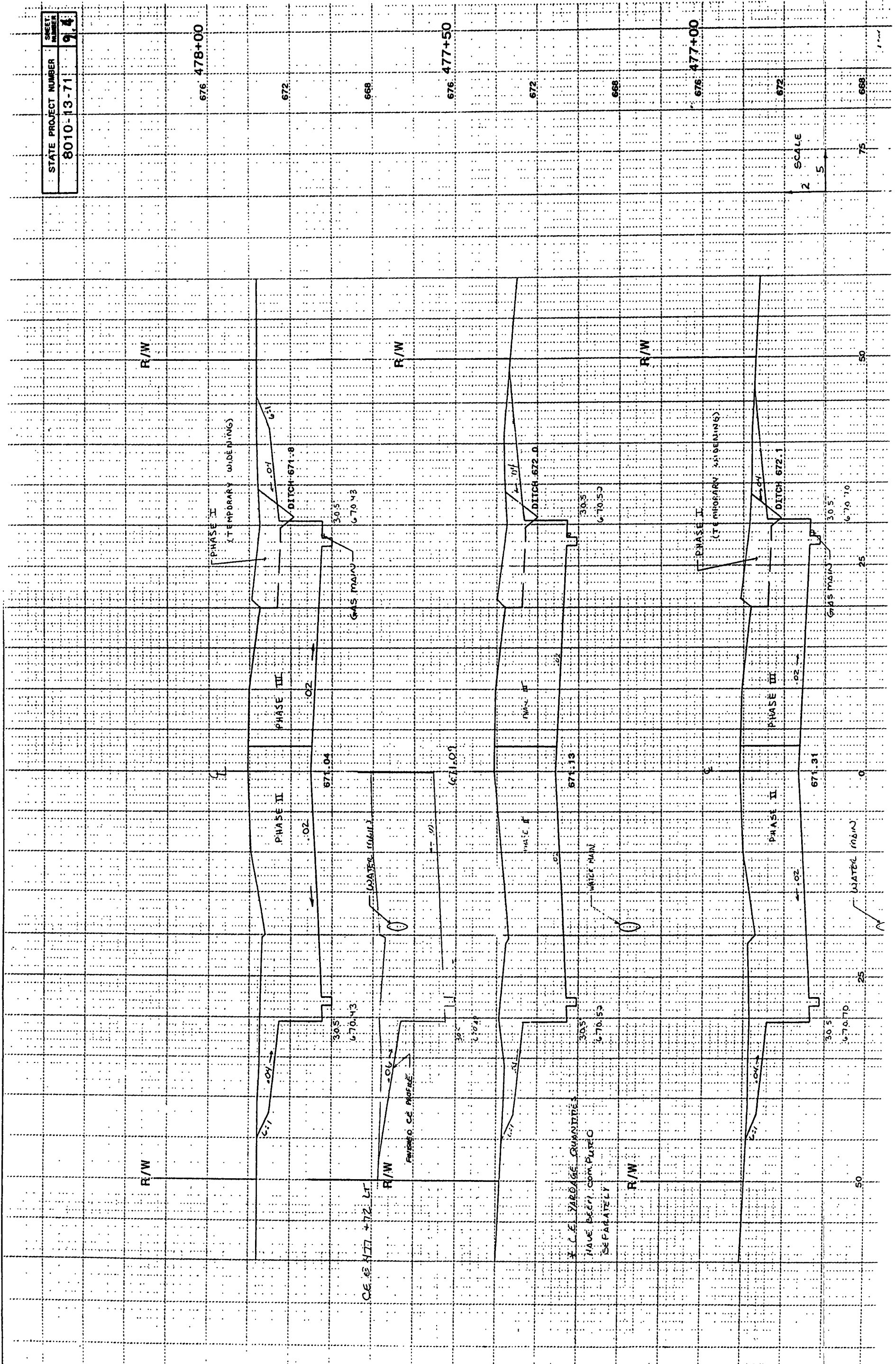
2 SCALE
5

75

668

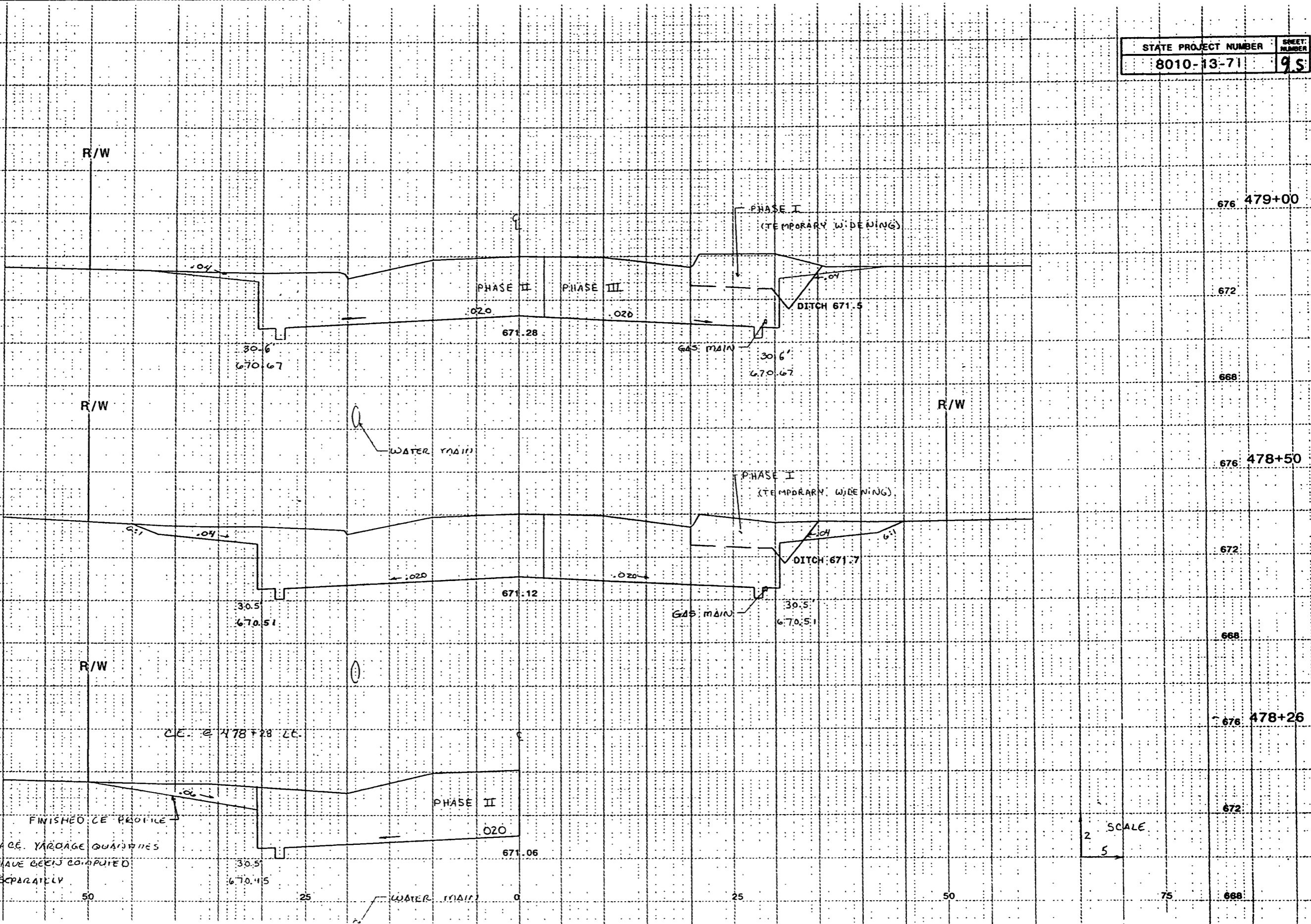
11/1/71
10003

STATE PROJECT NUMBER	SHEET NUMBER
8010-13-71	94



11/1/71
1000

110%



FINISHED CE PROFILE
 * CE YARDAGE QUANTITIES
 HAVE BEEN COMPUTED
 SEPARATELY

SCALE
 2
 5

11/1/11

11/1/11

STATE PROJECT NUMBER
8010-13-71

SHEET NUMBER
96

676 480+33

672

668

676 480+00

672

668

676 479+38

672

668

R/W

R/W

R/W

CE @ 180.54 5.46

FIXED CE PROFILE

* CE YARDAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY

PHASE II

0.020

671.72

WATER MAIN

30.5
671.11

PHASE III

671.61

GAS MAIN

30.5
671.00

PHASE I
TEMPORARY (480+00)

DITCH 871.1

* SIDE ROAD YARDAGE
QUANTITIES HAVE BEEN
COMPUTED SEPARATELY

SIDE ROAD @ 479+38
(63.00 STREET)

FINISHED SIDE ROAD
PROFILE - LEFT

30.5
670.88

670.90

WATER MAIN

PHASE II

0.020

671.41

PHASE III

0.020

670.85

GAS MAIN

30.5
670.85

FINISHED SIDE ROAD
PROFILE - RIGHT

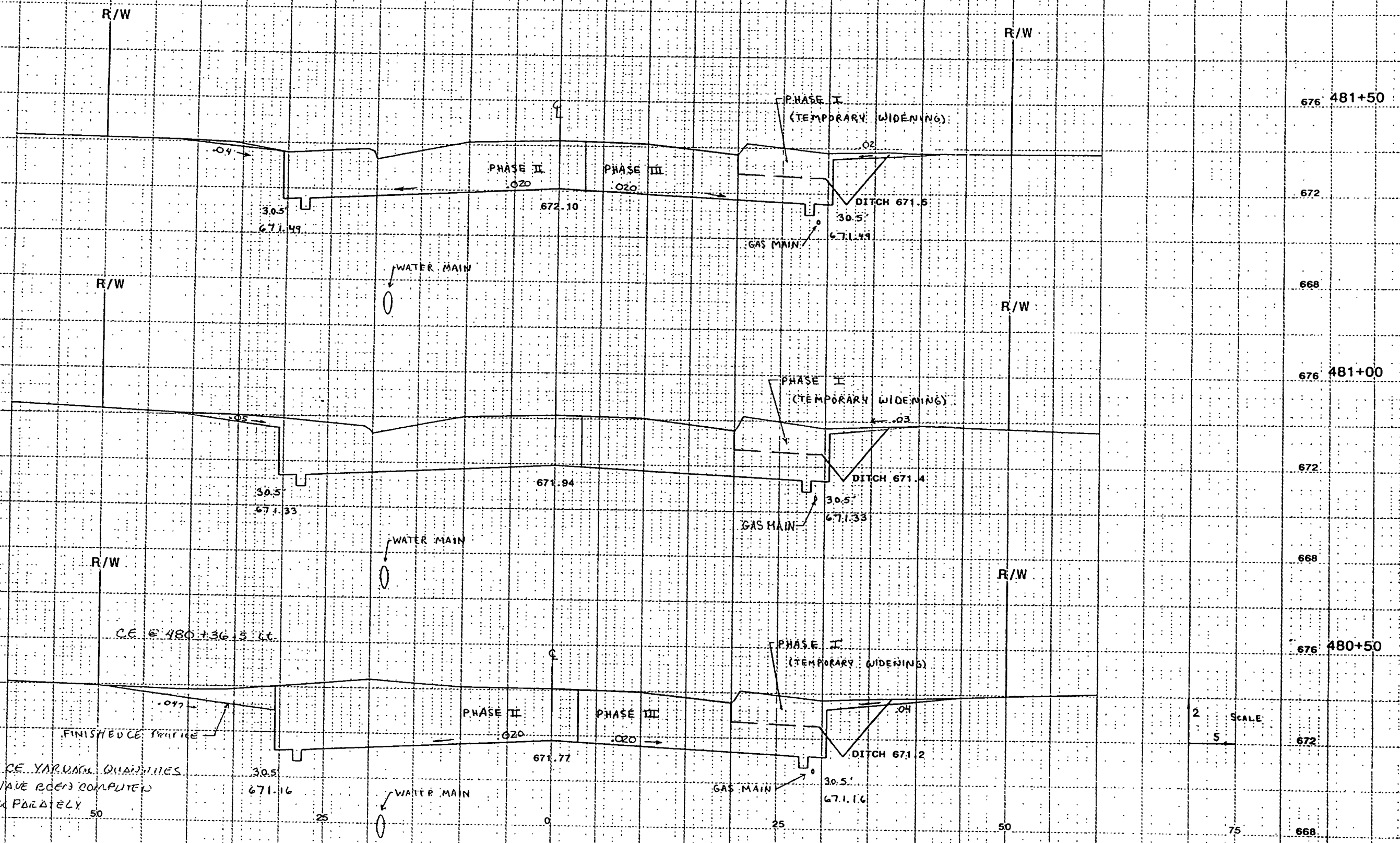
30.5

670.75

75

50

50



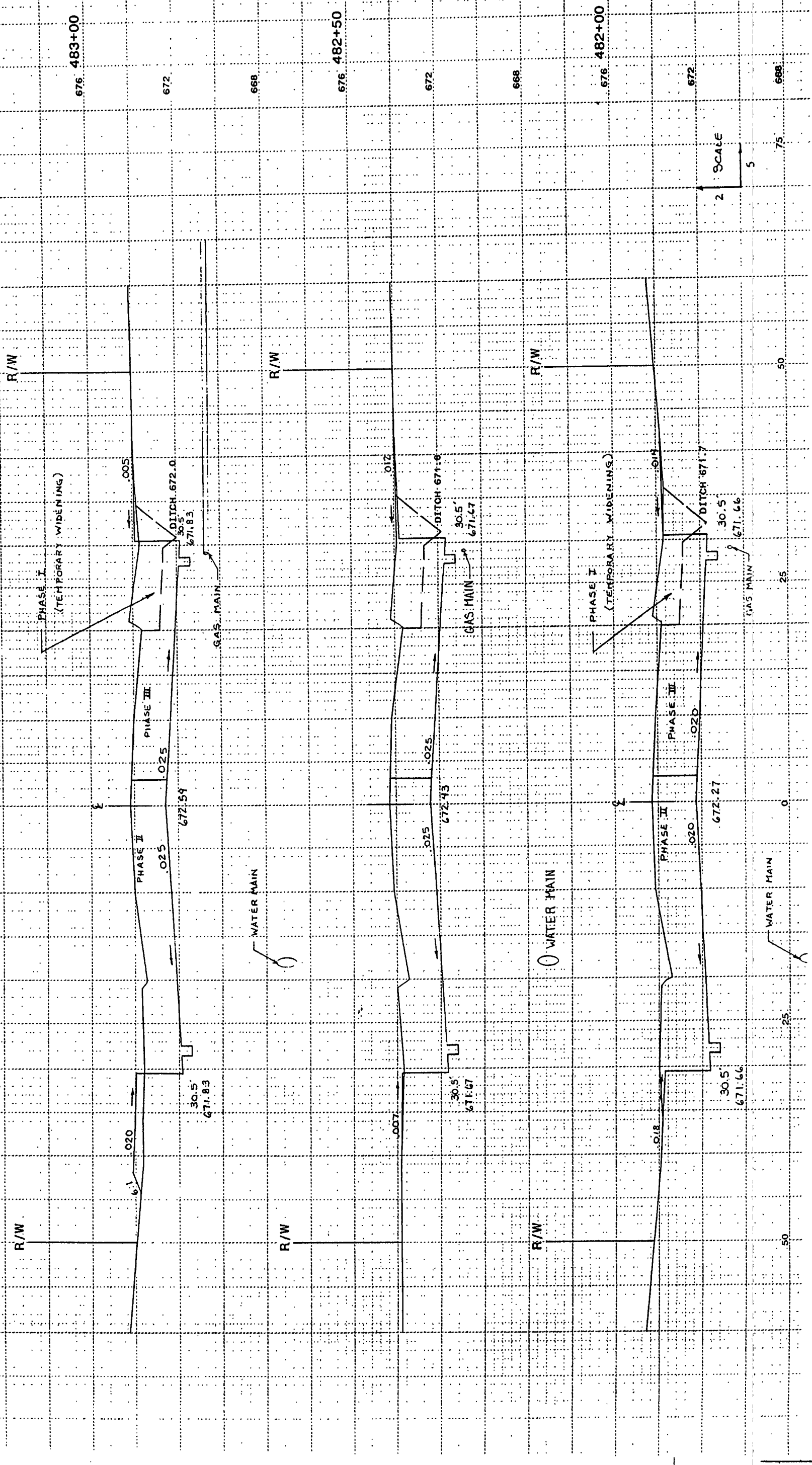
* CE YARDAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY 50

2 SCALE
5

11.2 1/2

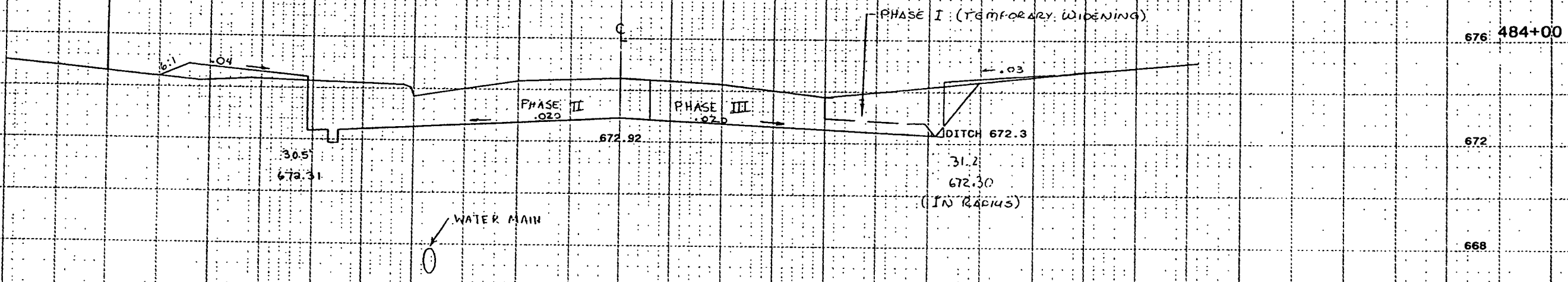
10 1/2
6.1 1/2

STATE PROJECT NUMBER	8010-13-00
SHEET NUMBER	9.8



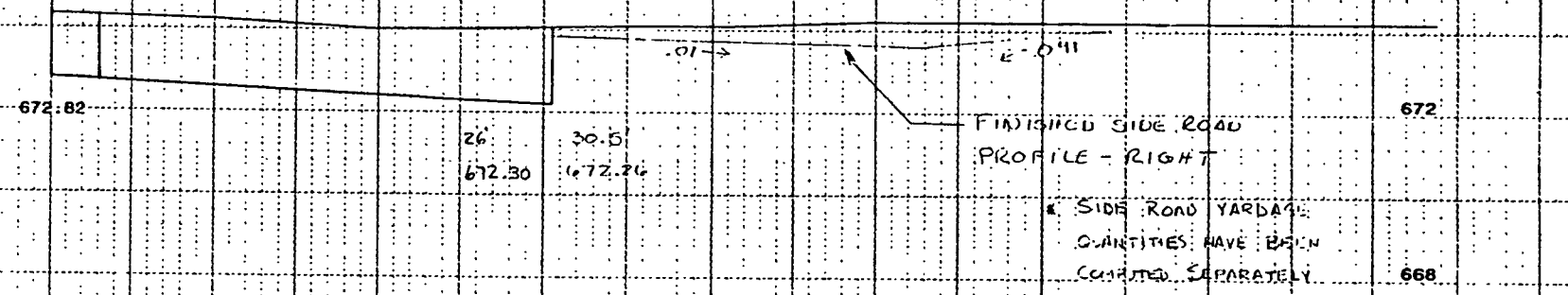
111 8/

R/W

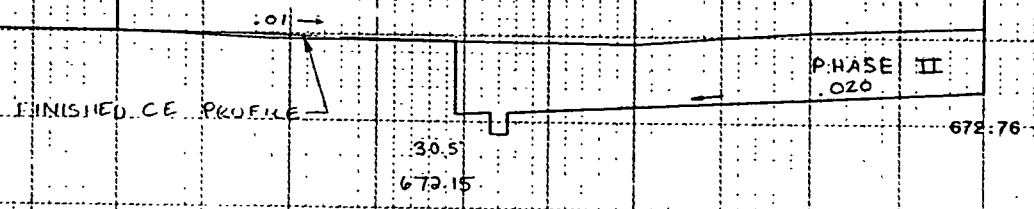


SIDE ROAD @ 483+63 LT.
(G2 NO STREET)

676 483+63



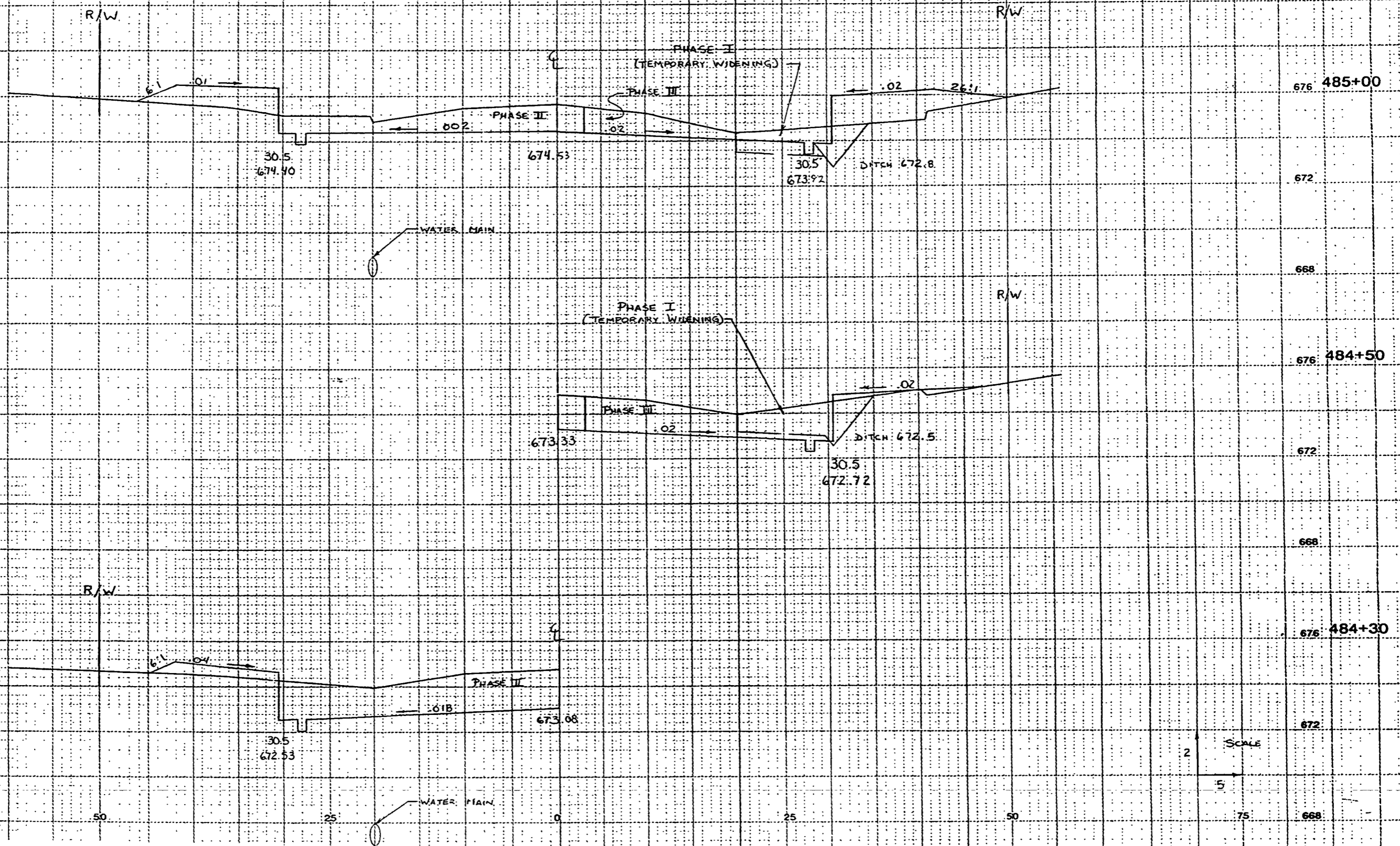
R/W CE @ 483+76 Lt.
+ CE YARDAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY



SCALE
2
5

H.C. 46

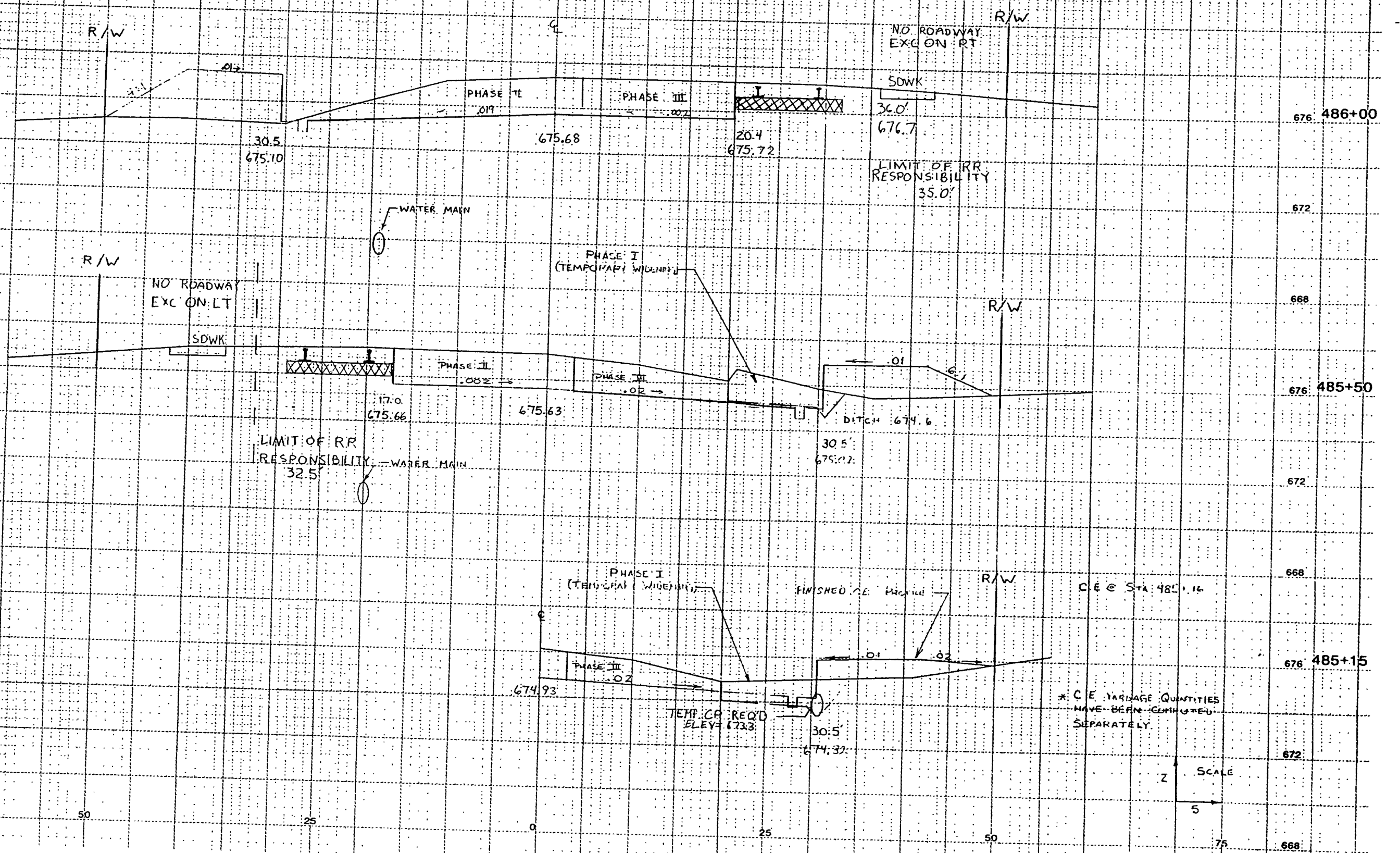
70 5
11/17/66



SCALE
2
5
75

7/11

7/11/5



1/2" = 1'

1/2" = 1'

* C.E. YARNAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY.

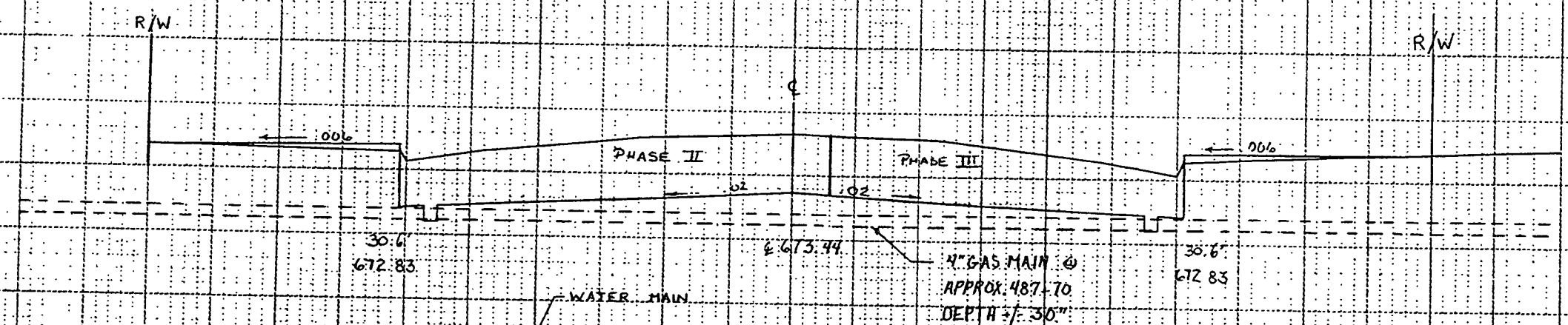
SCALE

2

5

75

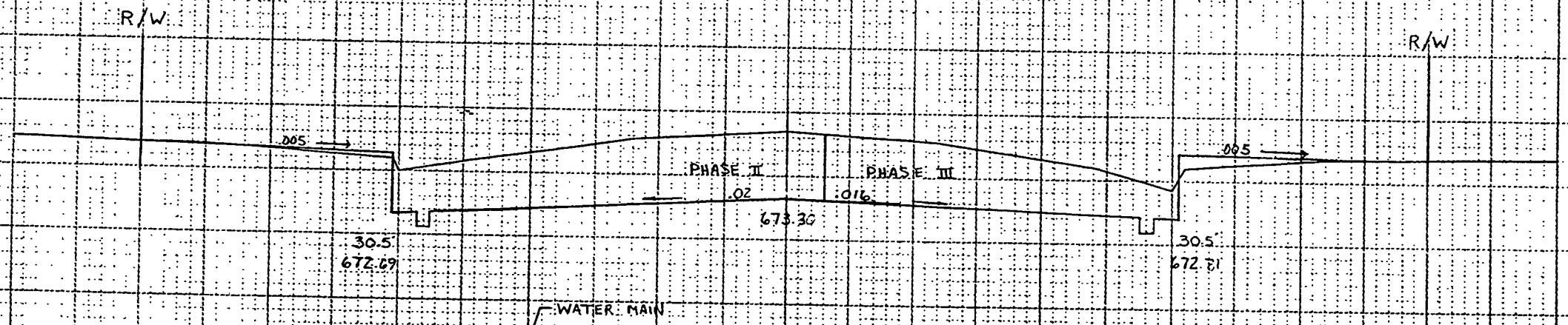
C.E. @ Sta 485+16



676 487+56

672

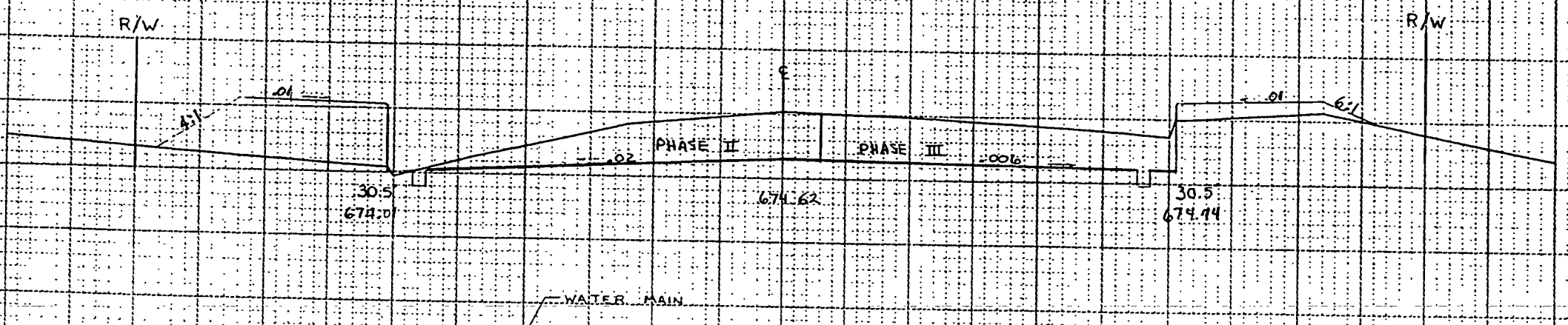
668



676 486+97

672

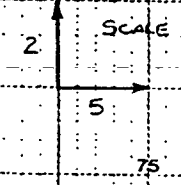
668



676 486+50

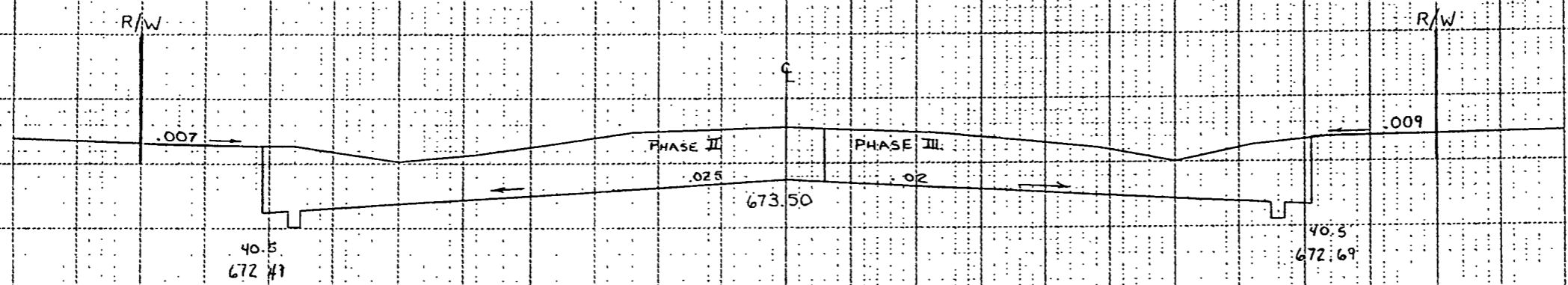
672

668



1/2" = 1'

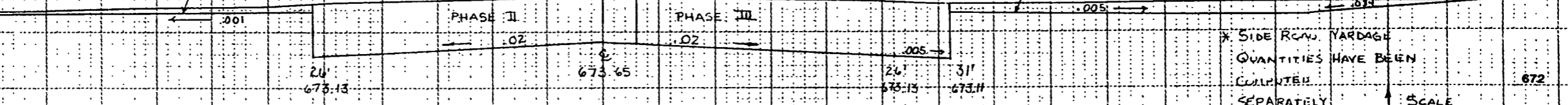
1/2" = 1'



FINISHED SIDE ROAD
PROFILE LEFT

FINISHED SIDE ROAD
PROFILE RIGHT

SIDE ROAD Sta. 487+91 LT./RT.
(Sta. 105' LT. / 615' STREET RT.)



* SIDE ROW YARDAGE
QUANTITIES HAVE BEEN
COMPUTED
SEPARATELY

SCALE

2

5

75

50

25

0

25

50

75

668

676 488+60

672

668

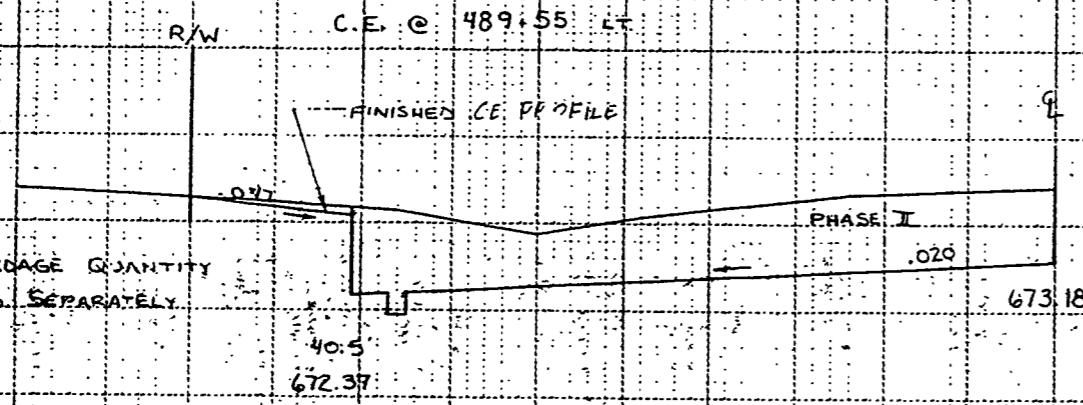
676 488+00

672

668

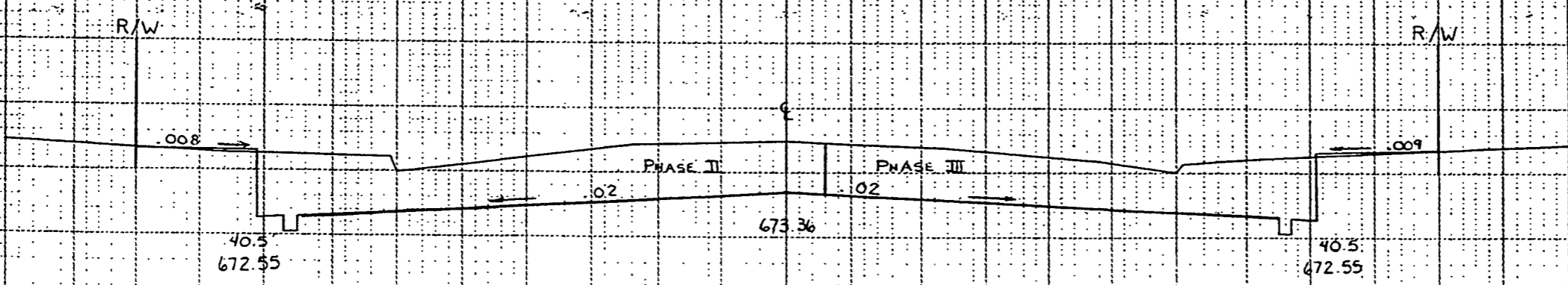
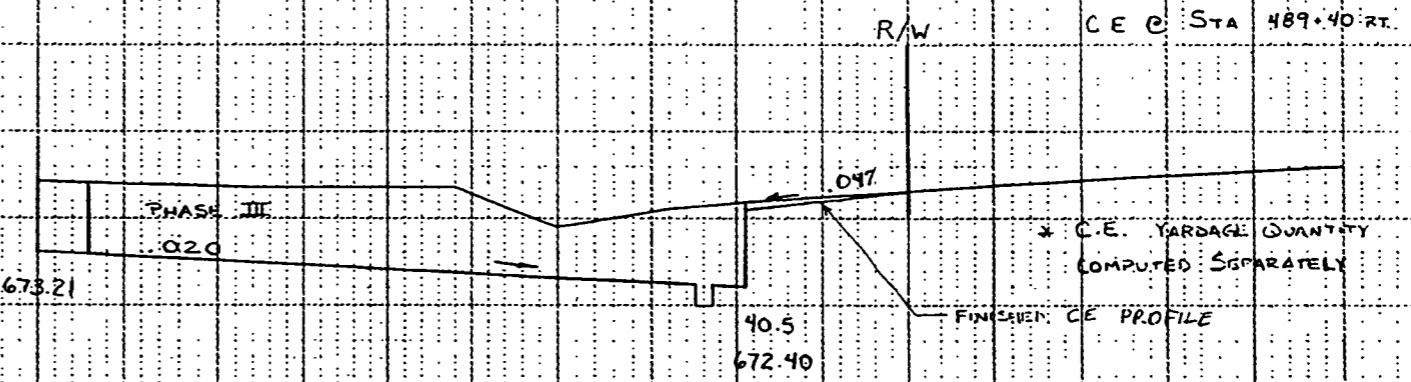
11.96

11.96



WATER MAIN

ALLEYS @ 489+85 LT & RT
(NO X-SECT. OR PROFILE)



WATER MAIN

SCALE
2
5
75

11-7-71

11-7-71

676 489+50

672

668

676 489+40

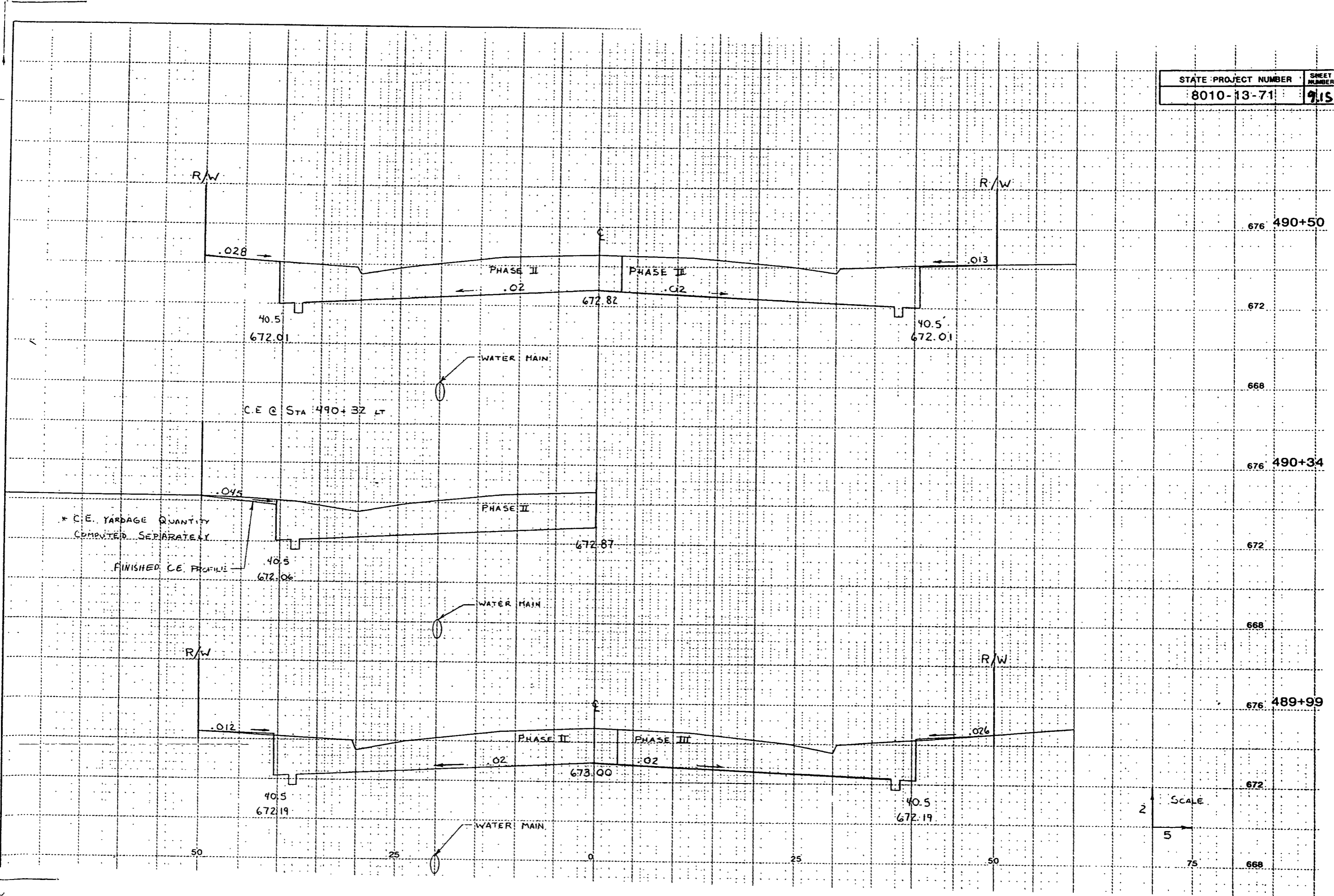
672

668

676 489+00

672

668



* C.E. YARDAGE QUANTITY
COMPUTED SEPARATELY

FINISHED C.E. PROFILE

C.E. @ STA 490+32 LT

SCALE
2
5
75

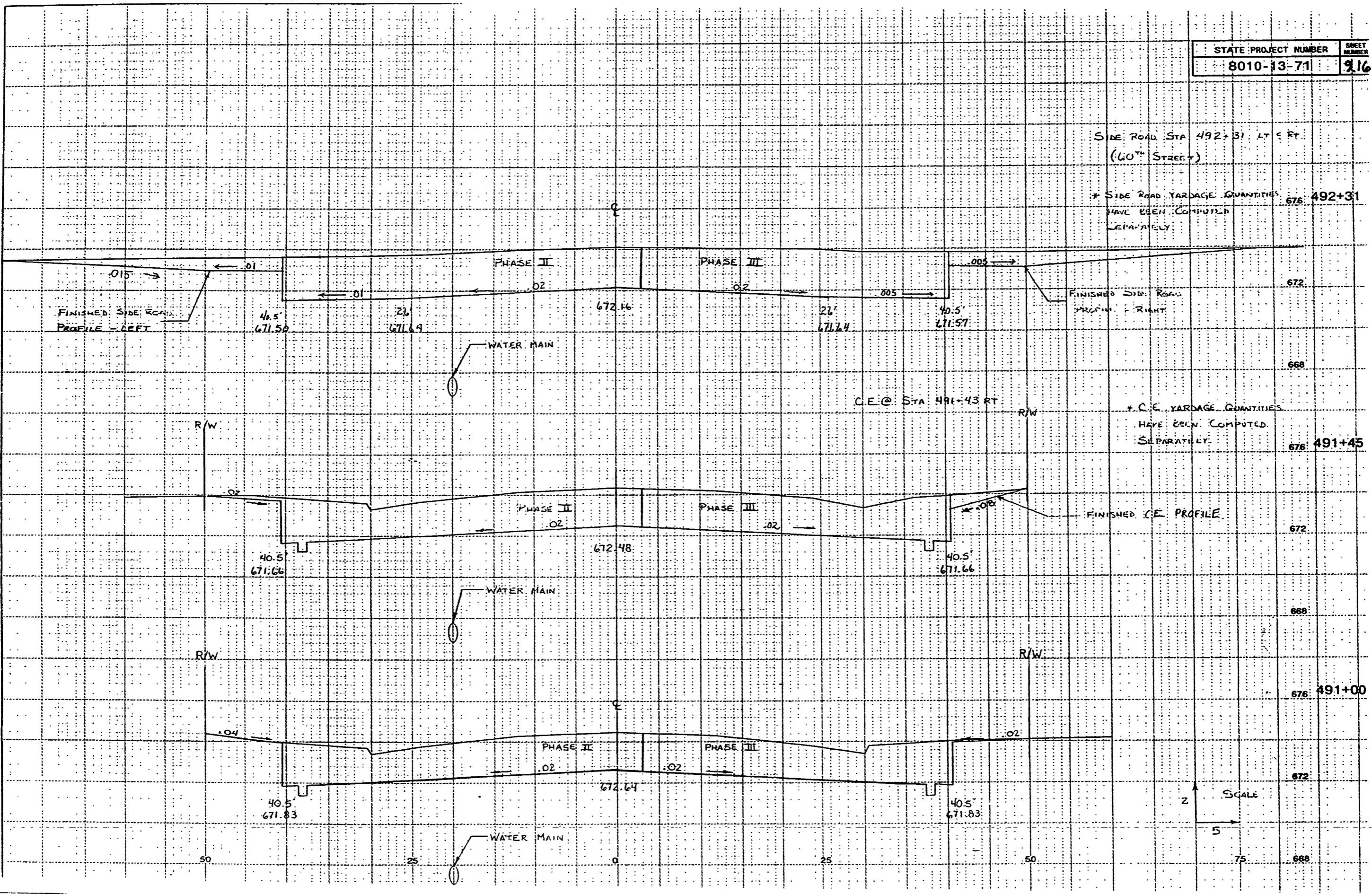
1/2" = 1'

1/4" = 1'

SIDE ROAD STA 492+31 LT & RT
(60TH STREET)

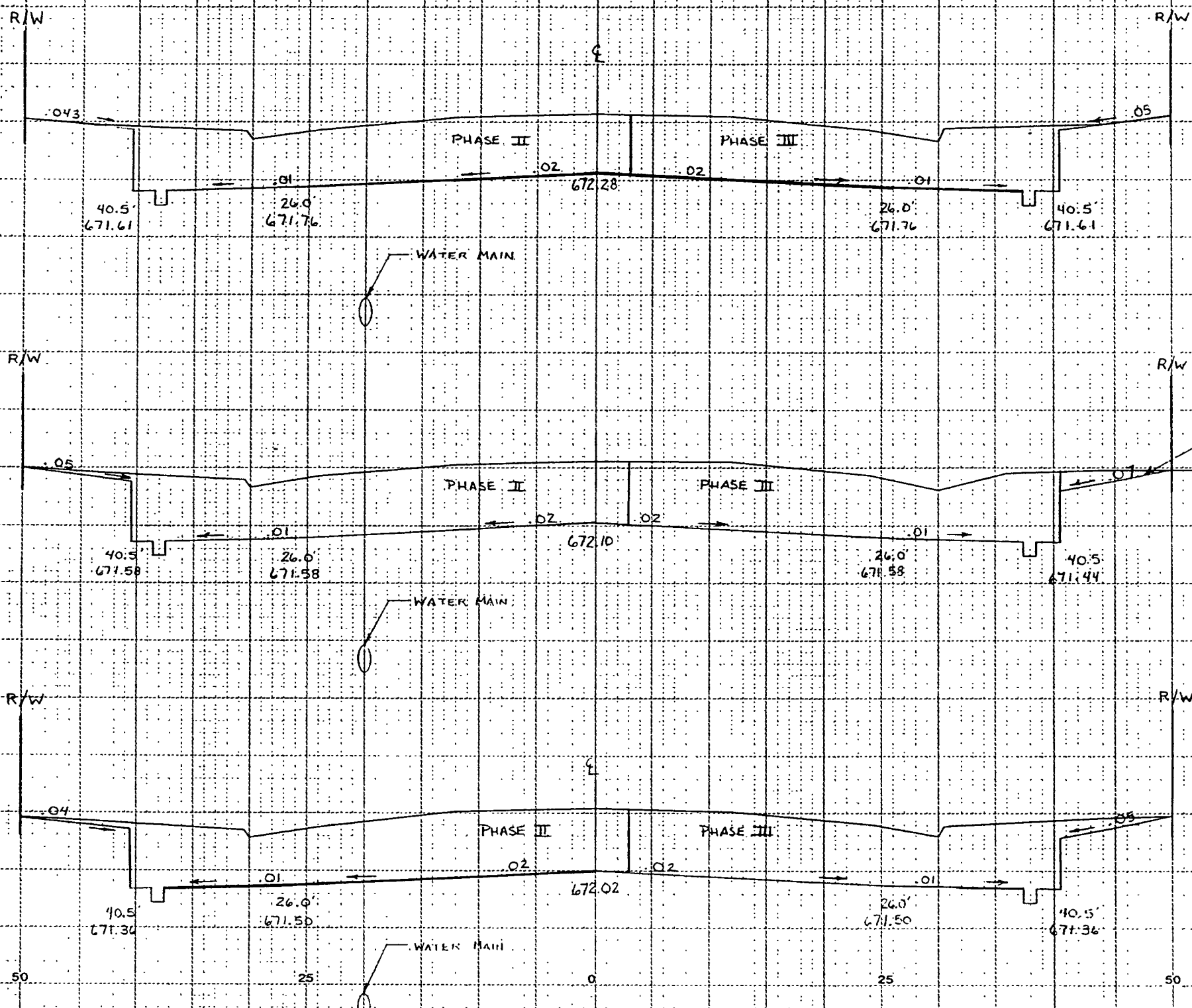
* SIDE ROAD YARDAGE QUANTITIES 676: 492+31
HAVE BEEN COMPUTED
SEPARATELY.

* C.E. YARDAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY. 676: 491+45



SCALE
1" = 5'

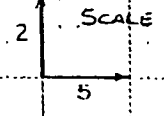
11:54



C.E. @ Sta. 493+68 RT.

FINISHED CE PROFILE

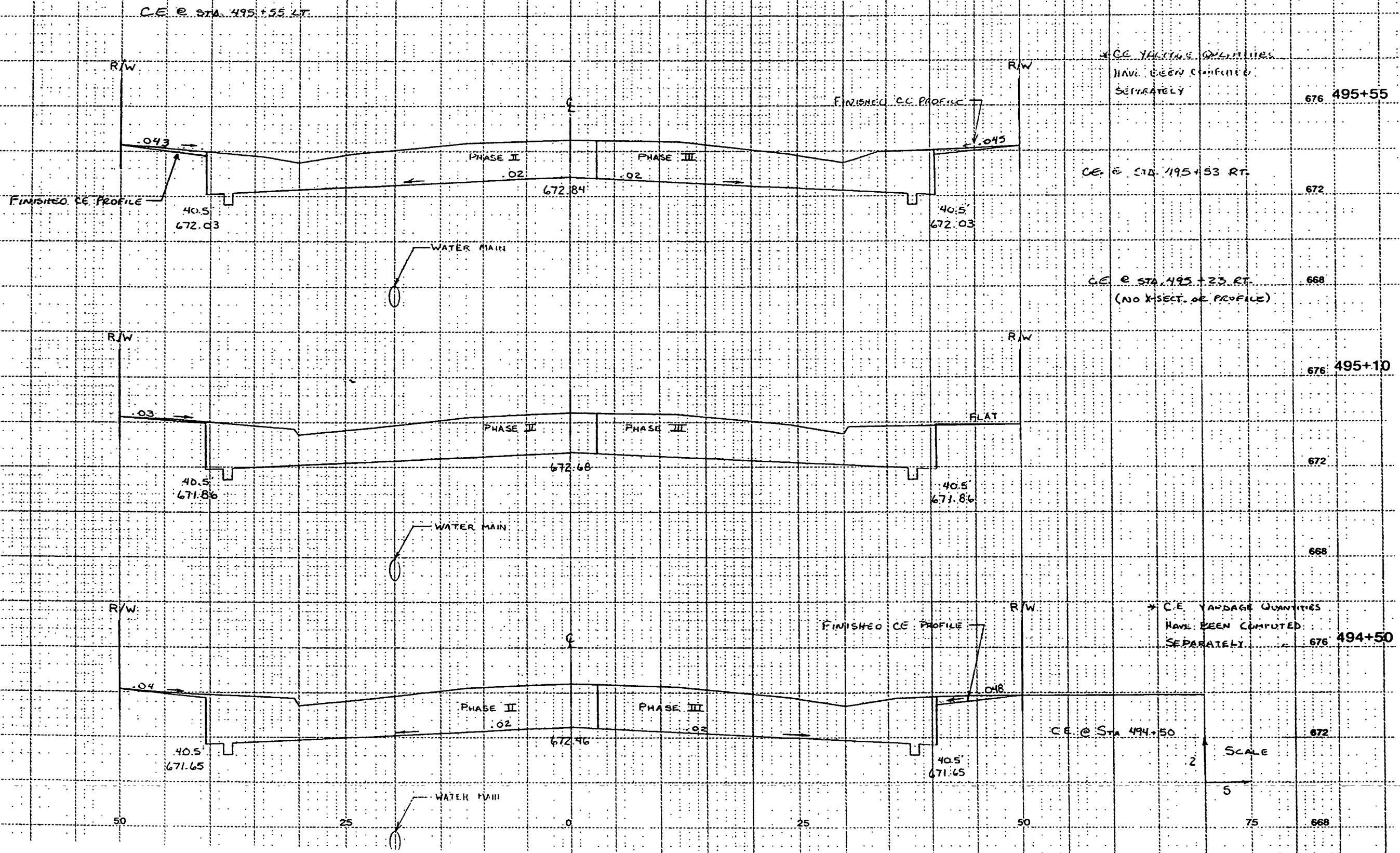
* C E YARDAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY



2/2 3/11

10
6/17

676 494+00
672
668
676 493+50
672
668
676 493+00
672
668

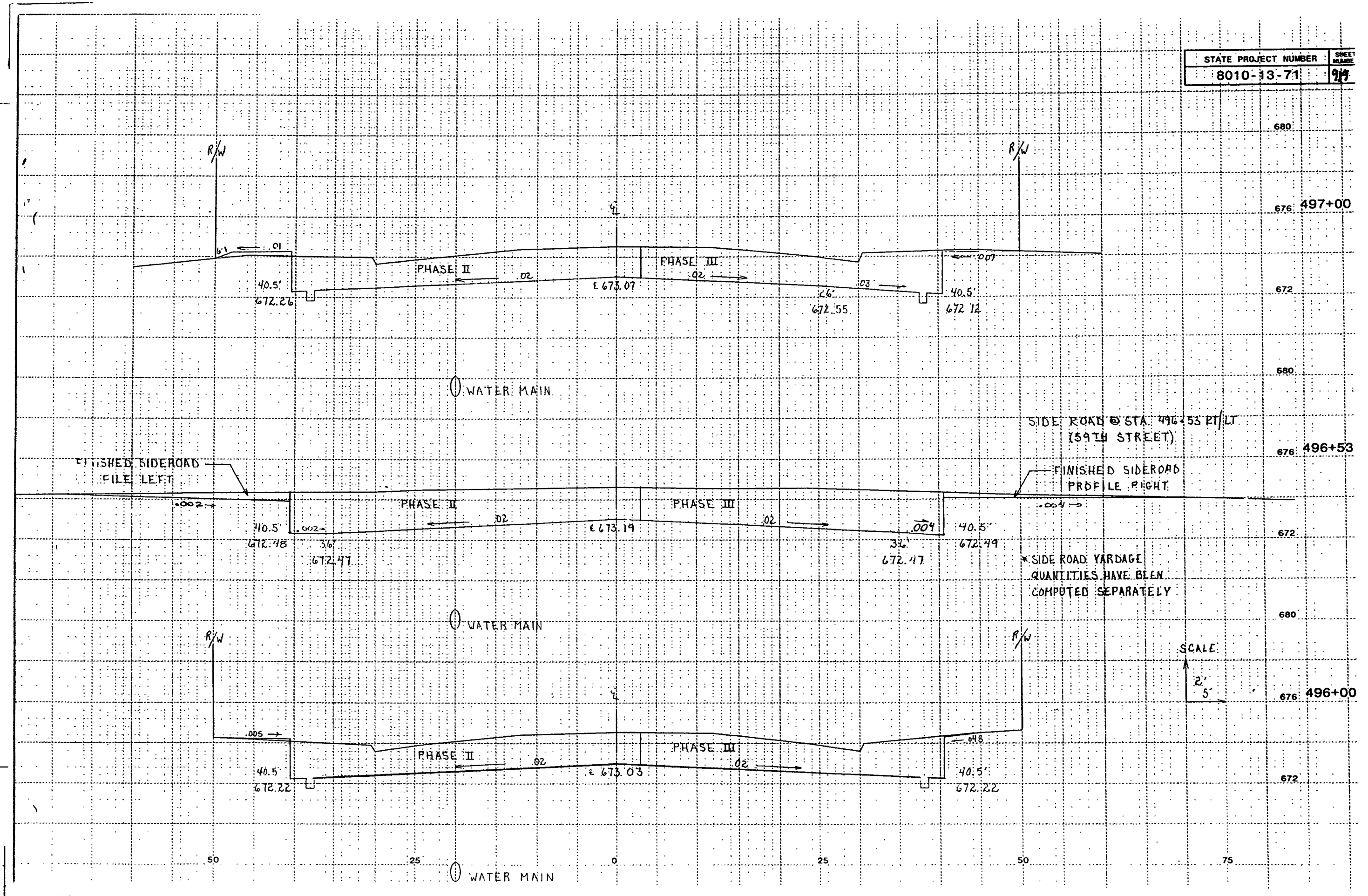


* C.C. YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY

* C.E. YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY

11.5

11.5



680

676 497+00

672

680

676 496+53

672

680

676 496+00

672

50 25 0 25 50 75

SIDE ROAD @ STA. 496+53 RT/LT
(59TH STREET)

* SIDE ROAD YARDAGE
QUANTITIES HAVE BEEN
COMPUTED SEPARATELY

SCALE:
2' = 5'

FINISHED SIDEROAD
PROFILE LEFT

FINISHED SIDEROAD
PROFILE RIGHT

WATER MAIN

WATER MAIN

WATER MAIN

R/W

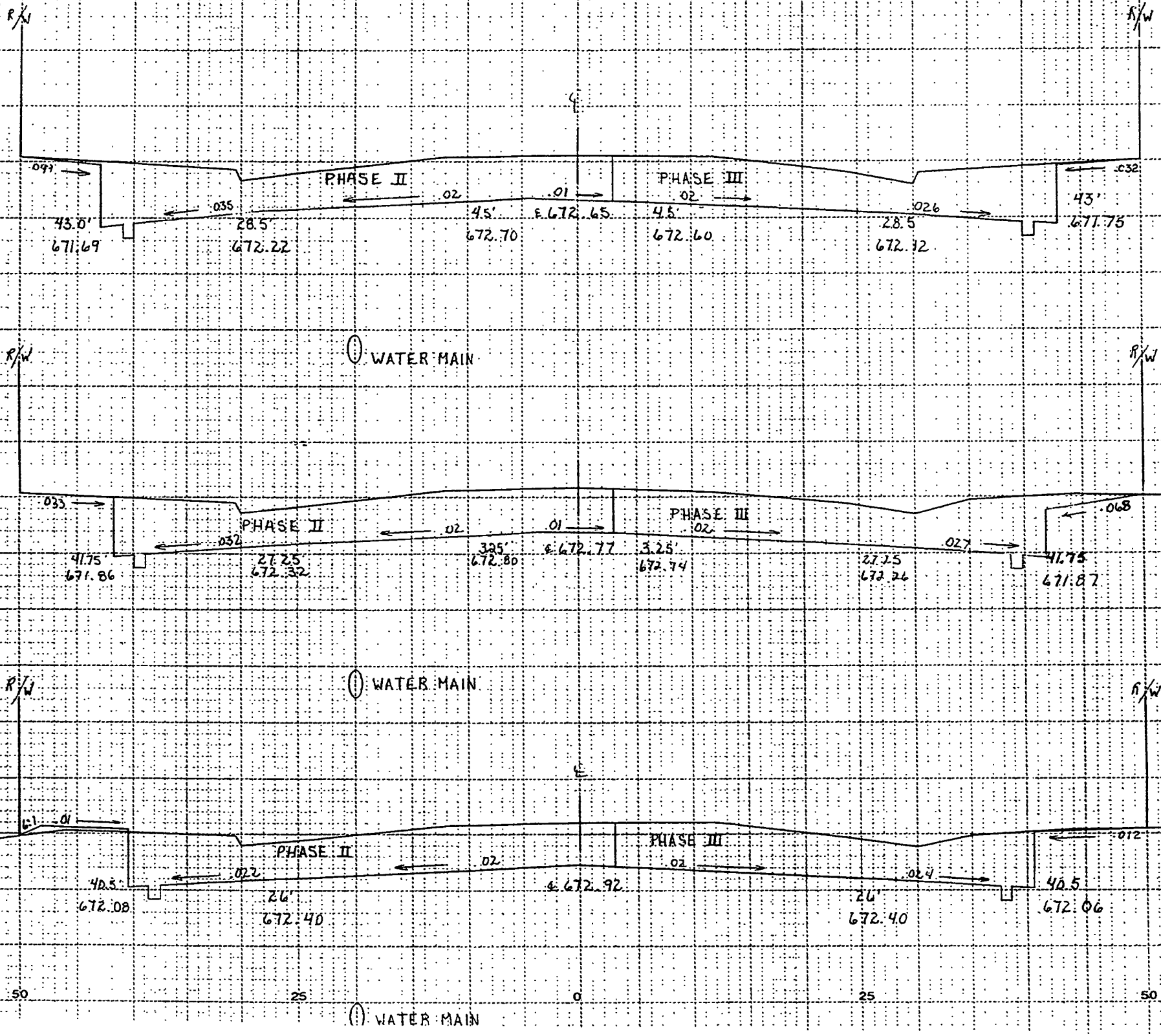
R/W

R/W

R/W

1/16 8/6

1/16 8/6



C.E. STA 499+90 RT

*C.E. YARDAGE QUANTITIES
HAVE BEEN COMPUTED SEPARATELY

2" SCALE
5'

680
676 498+50
672
680
676 498+00
672
680
676 497+50
672

WATER MAIN

WATER MAIN

WATER MAIN

R/W

R/W

R/W

R/W

R/W

R/W

50

25

0

25

50

75

7/5 7/11

1/21/16

ALLEY @ STA. 499+72:RT/LT

FINISHED ALLEY PROFILE LT.

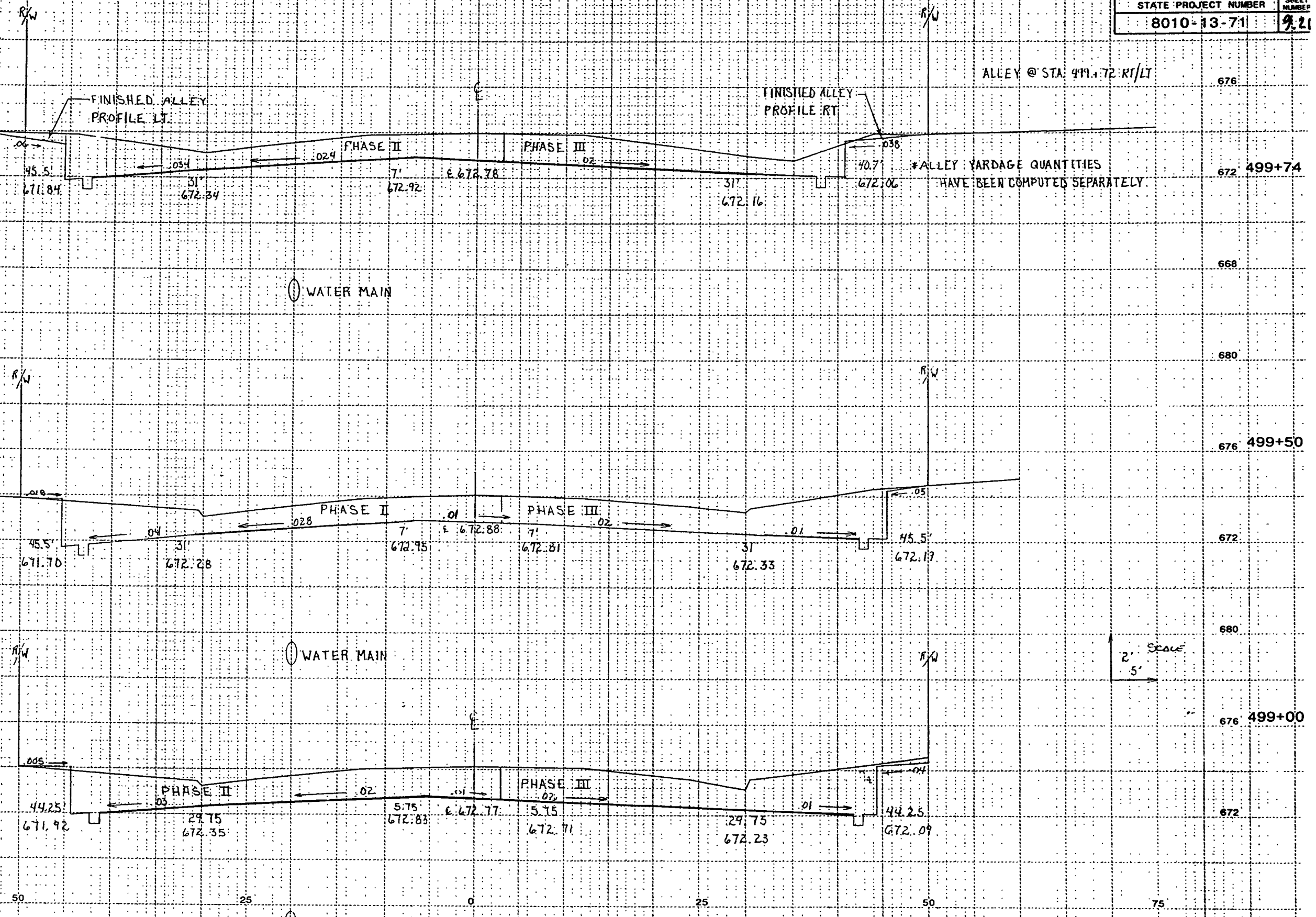
FINISHED ALLEY PROFILE RT.

*ALLEY YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY.

WATER MAIN

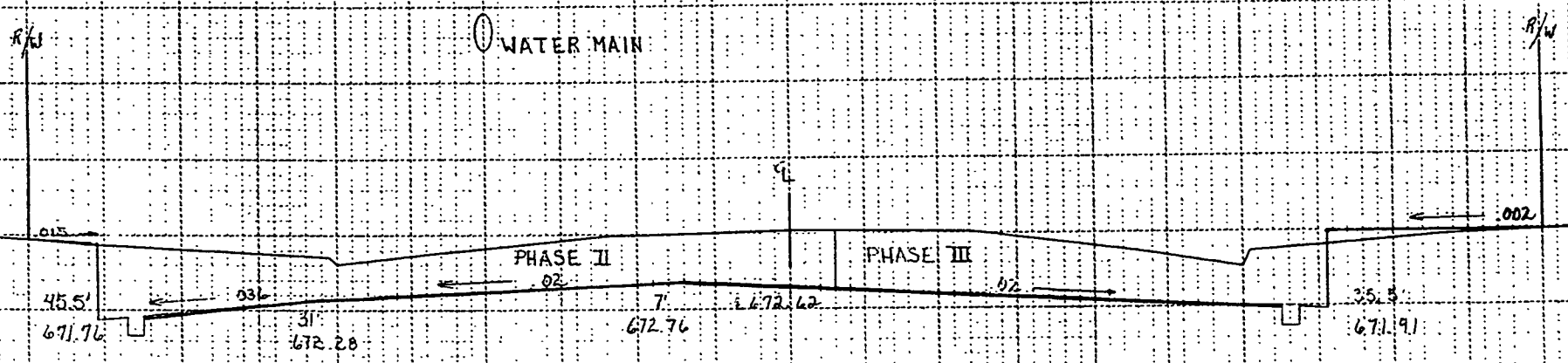
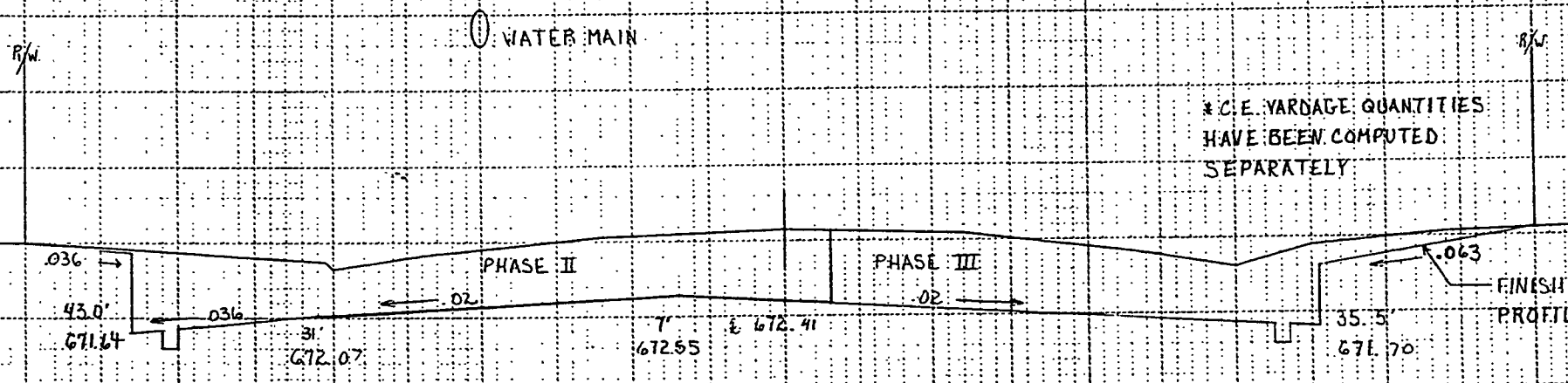
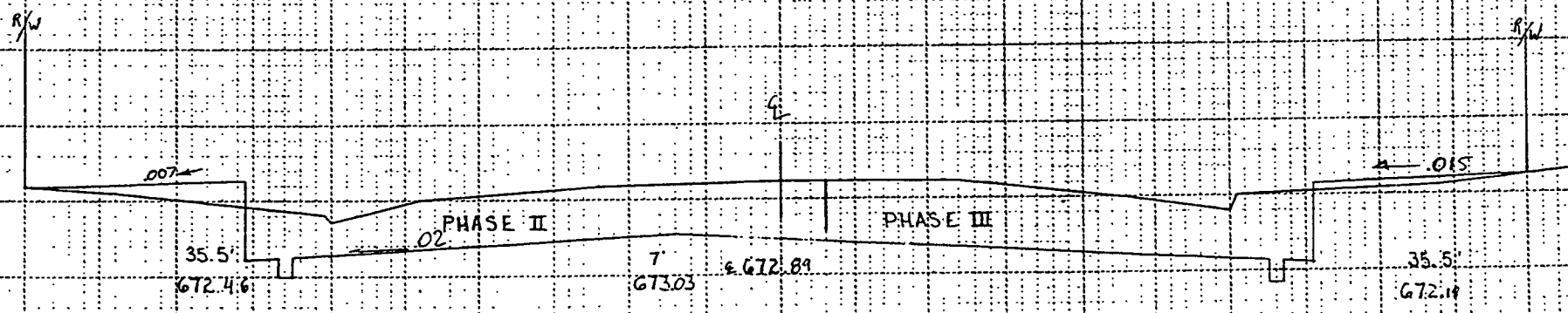
WATER MAIN

SCALE
2'
5'



676
672 499+74
668
680
676 499+50
672
680
676 499+00
672

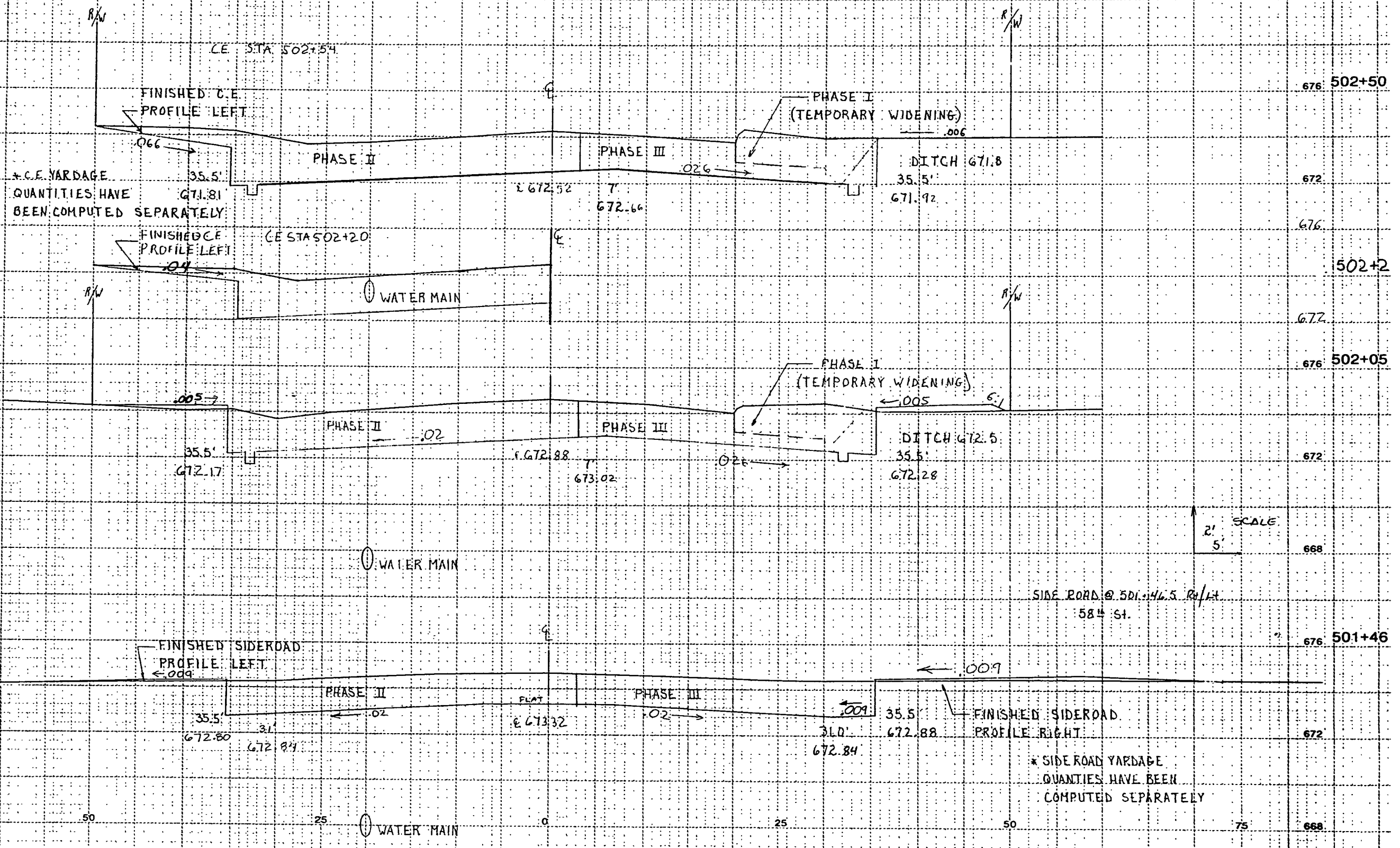
10.2
11.1



SCALE
2'
5'

50 25 0 25 50 75

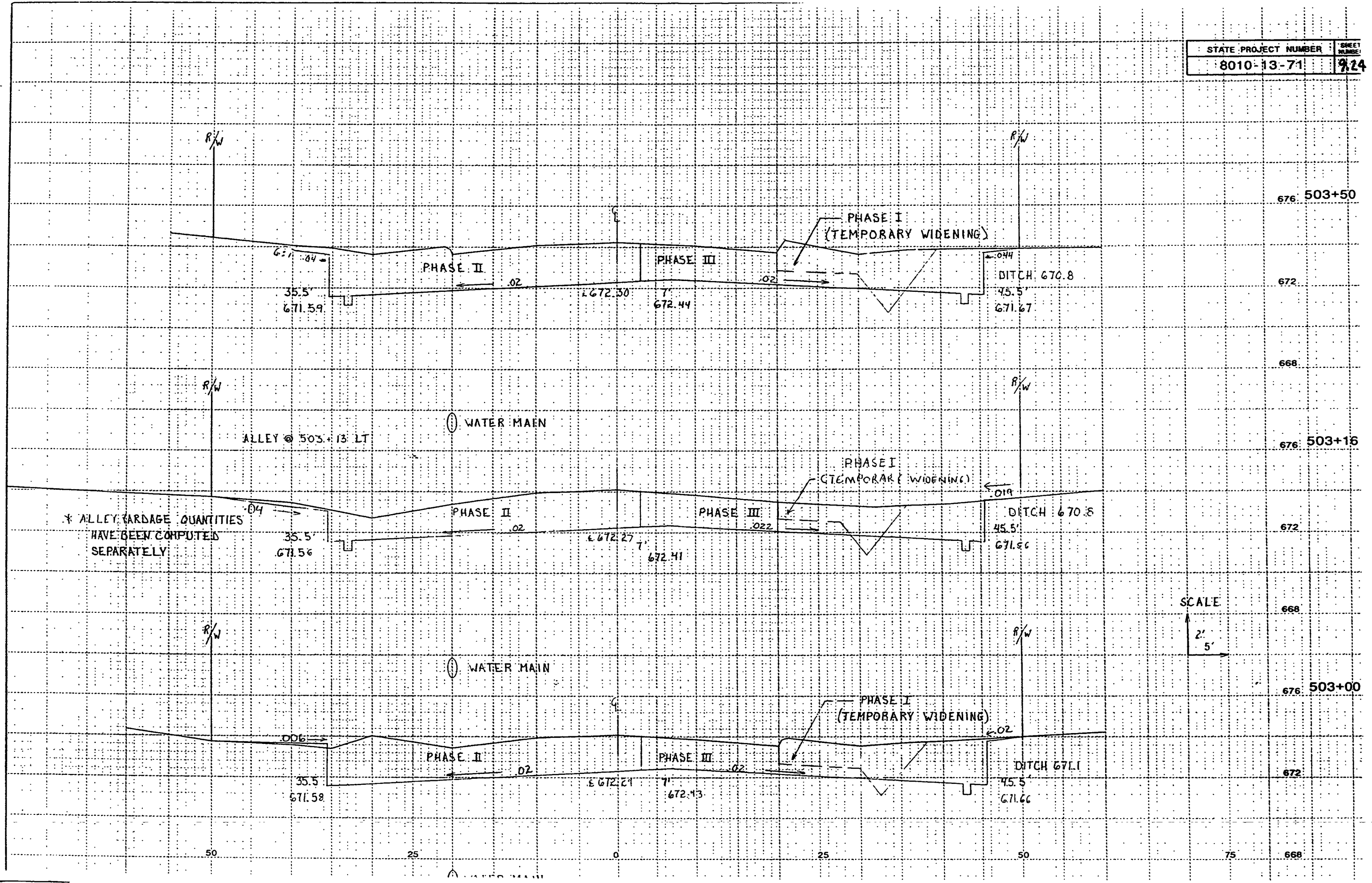
7/11



* C.E. YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY

* SIDE ROAD YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY

10 3/4
1 1/2



SCALE
2'
5'

* ALLEY GARDAGE QUANTITIES
HAVE BEEN COMPUTED
SEPARATELY

ALLEY @ 503+13 LT

WATER MAIN

WATER MAIN

PHASE II

PHASE III

PHASE I
(TEMPORARY WIDENING)

PHASE I
(TEMPORARY WIDENING)

PHASE II

PHASE III

PHASE I
(TEMPORARY WIDENING)

DITCH 670.8

DITCH 670.8

DITCH 671.1

676 503+50

676 503+16

676 503+00

672

672

672

668

668

668

R/W

R/W

R/W

R/W

R/W

R/W

50

25

0

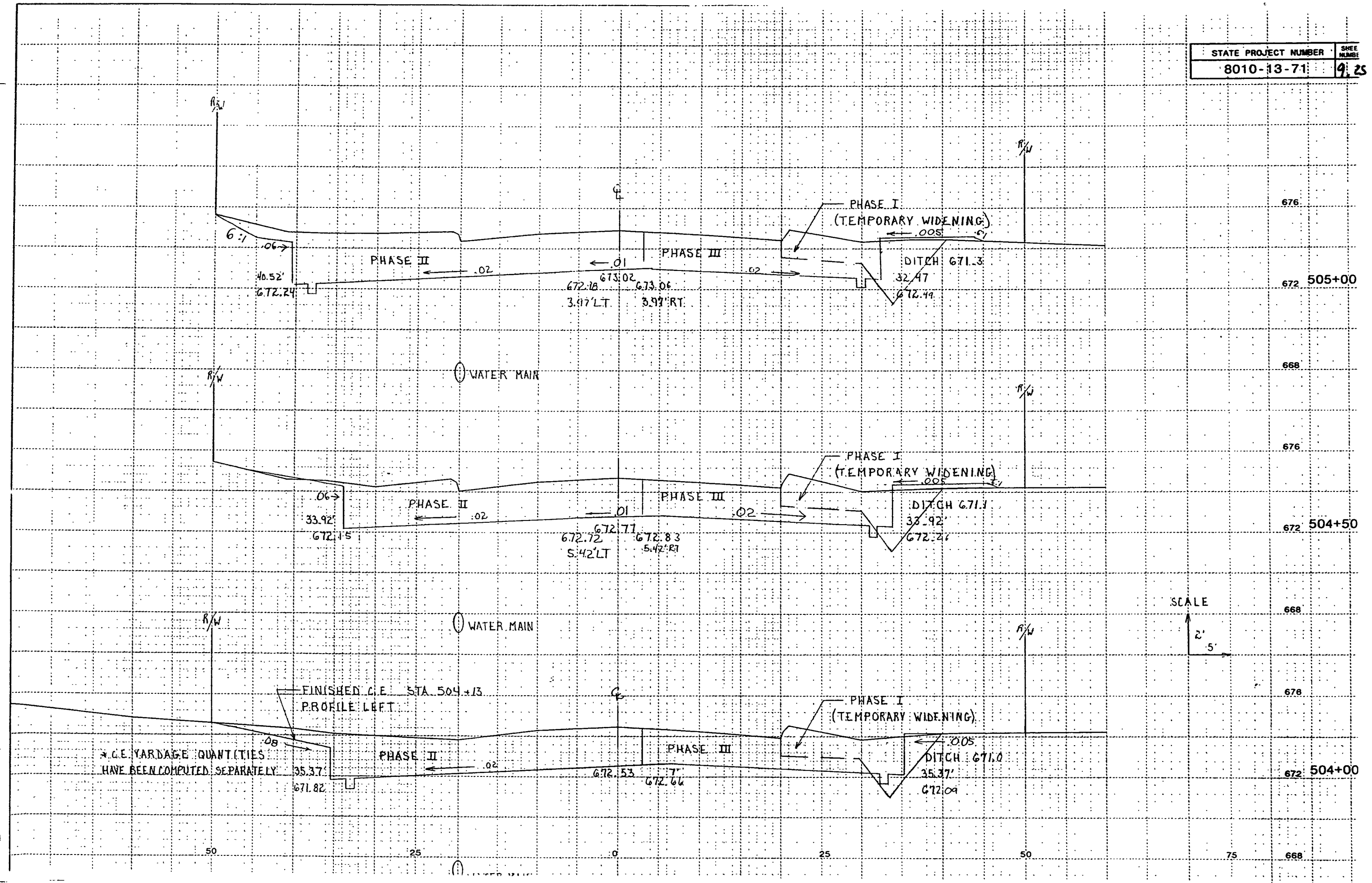
25

50

75

112.44

112.44



SCALE
2'
5'

* C.E. YARDAGE QUANTITIES
HAVE BEEN COMPUTED SEPARATELY.

FINISHED C.E. STA. 504+13
PROFILE LEFT

WATER MAIN

WATER MAIN

PHASE I
(TEMPORARY WIDENING)

PHASE III

PHASE II

PHASE I
(TEMPORARY WIDENING)

PHASE III

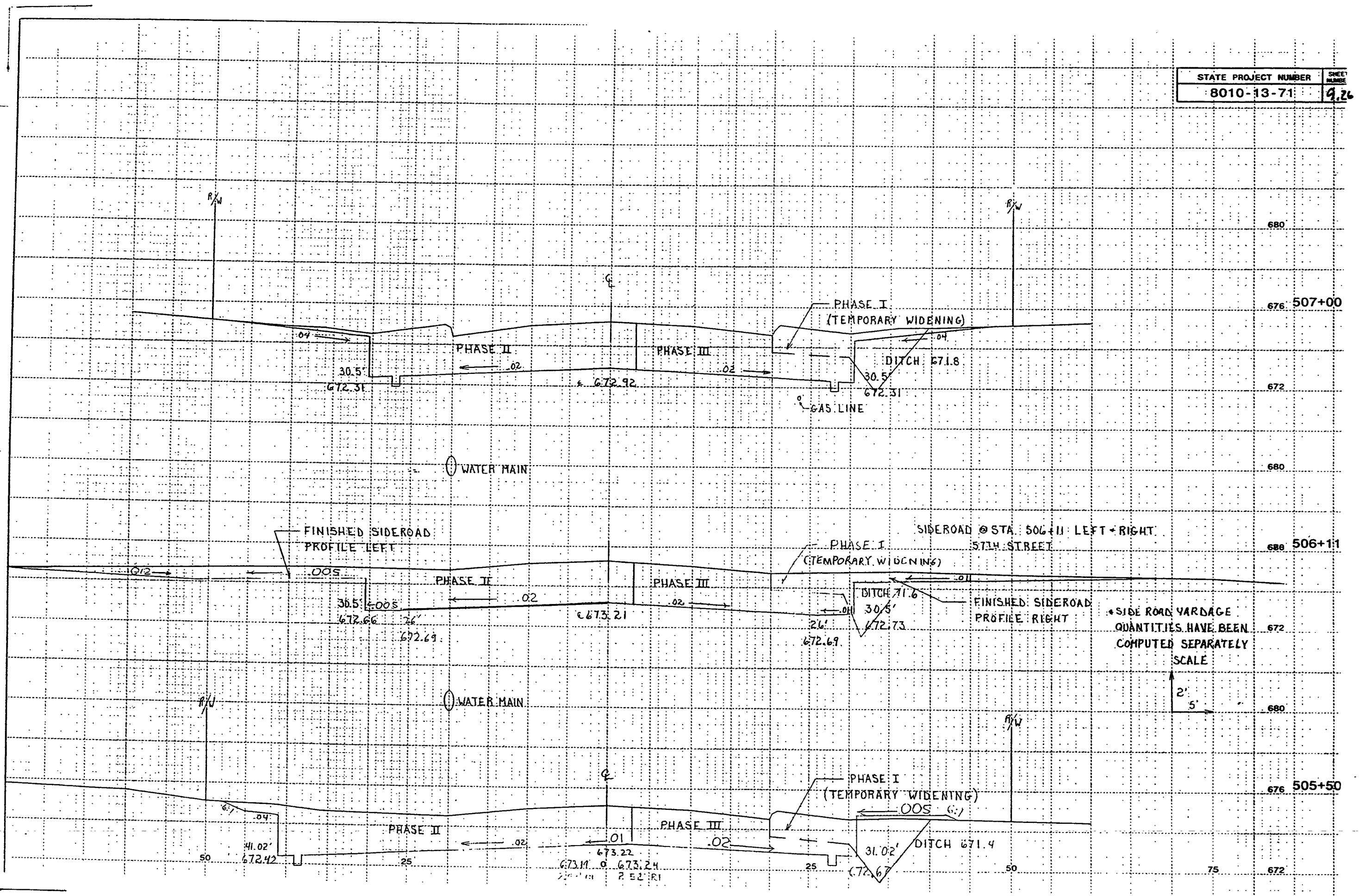
PHASE II

PHASE I
(TEMPORARY WIDENING)

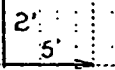
PHASE III

PHASE II

1/2" = 1'

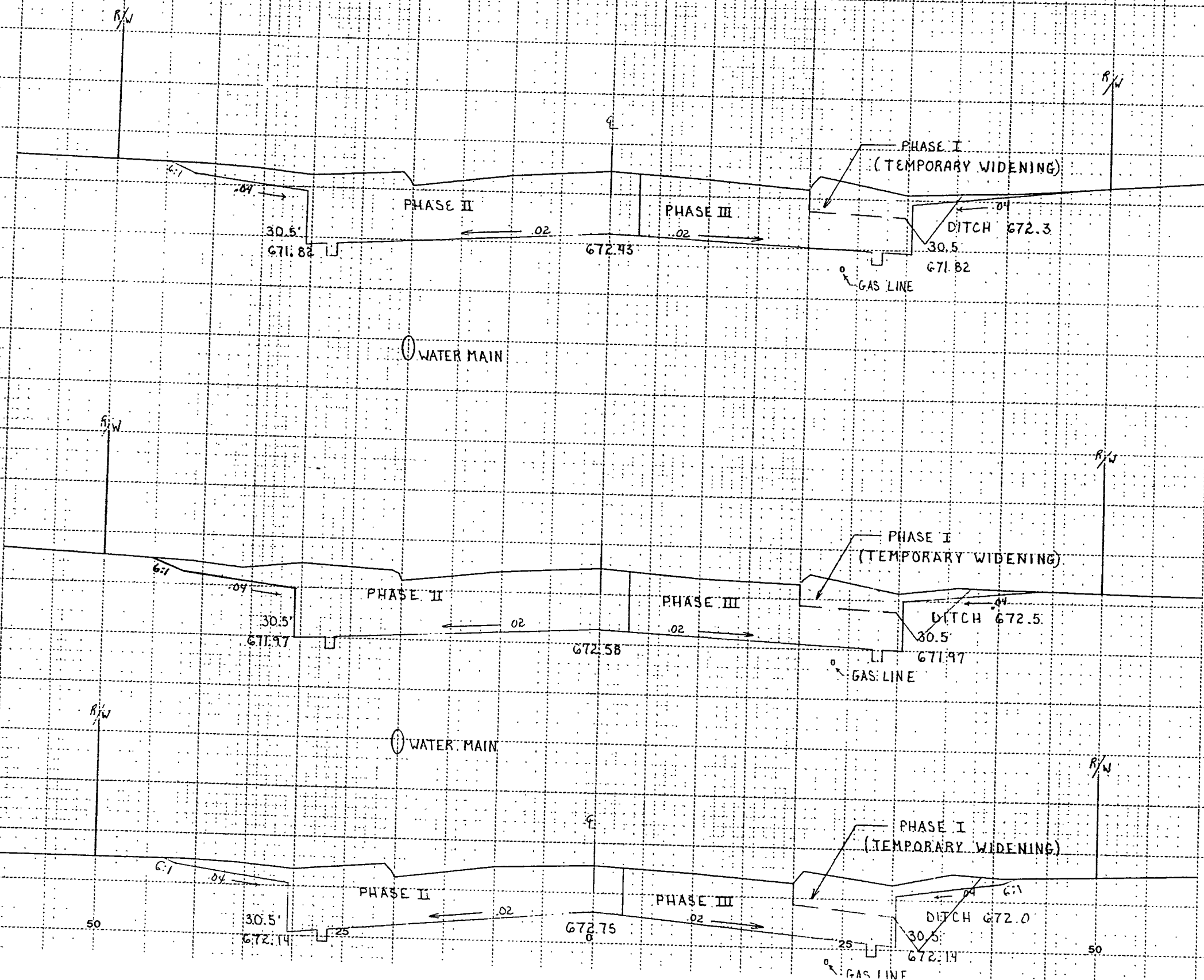


*SIDE ROAD YARDAGE
QUANTITIES HAVE BEEN
COMPUTED SEPARATELY
SCALE



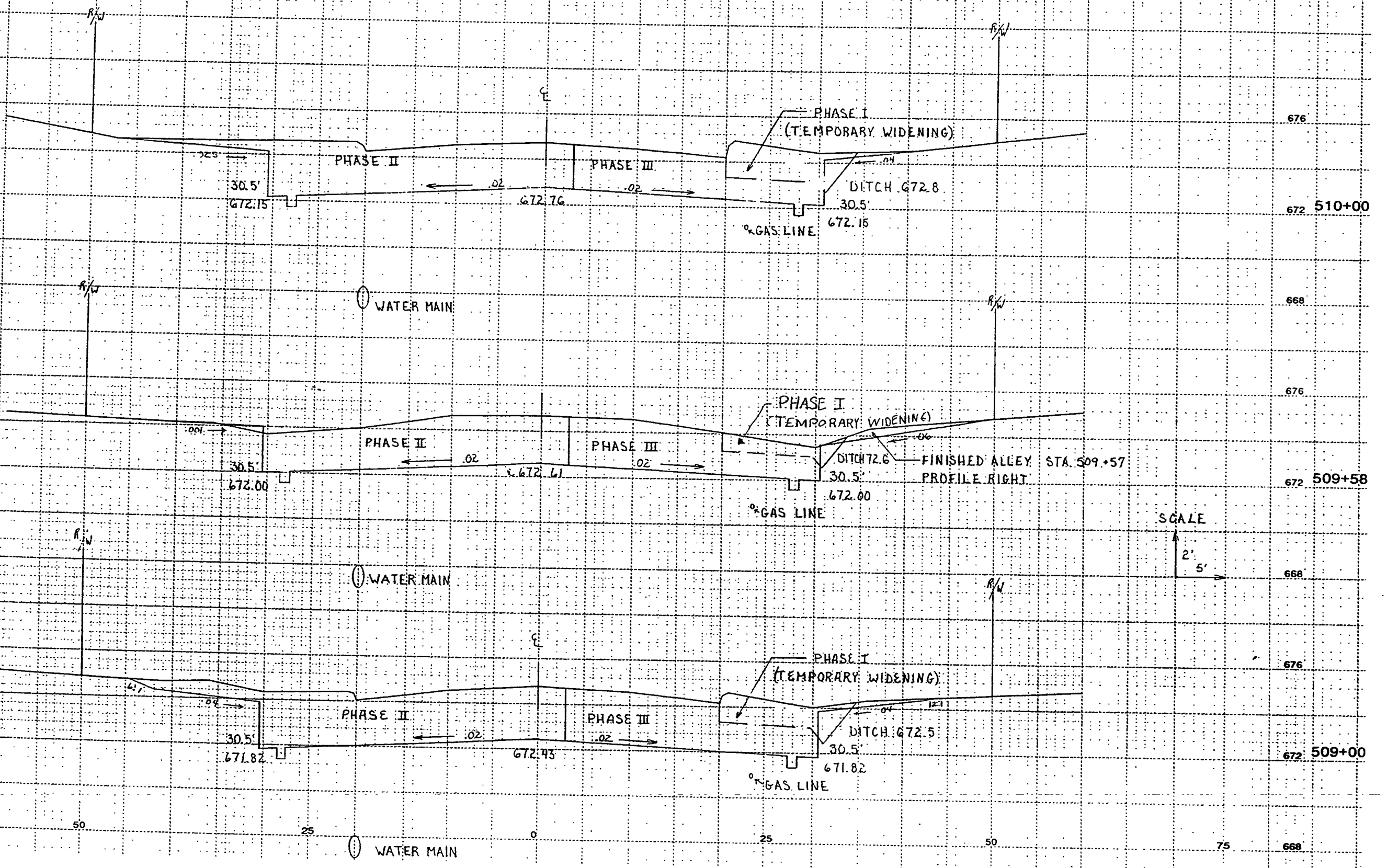
116 711

116 711



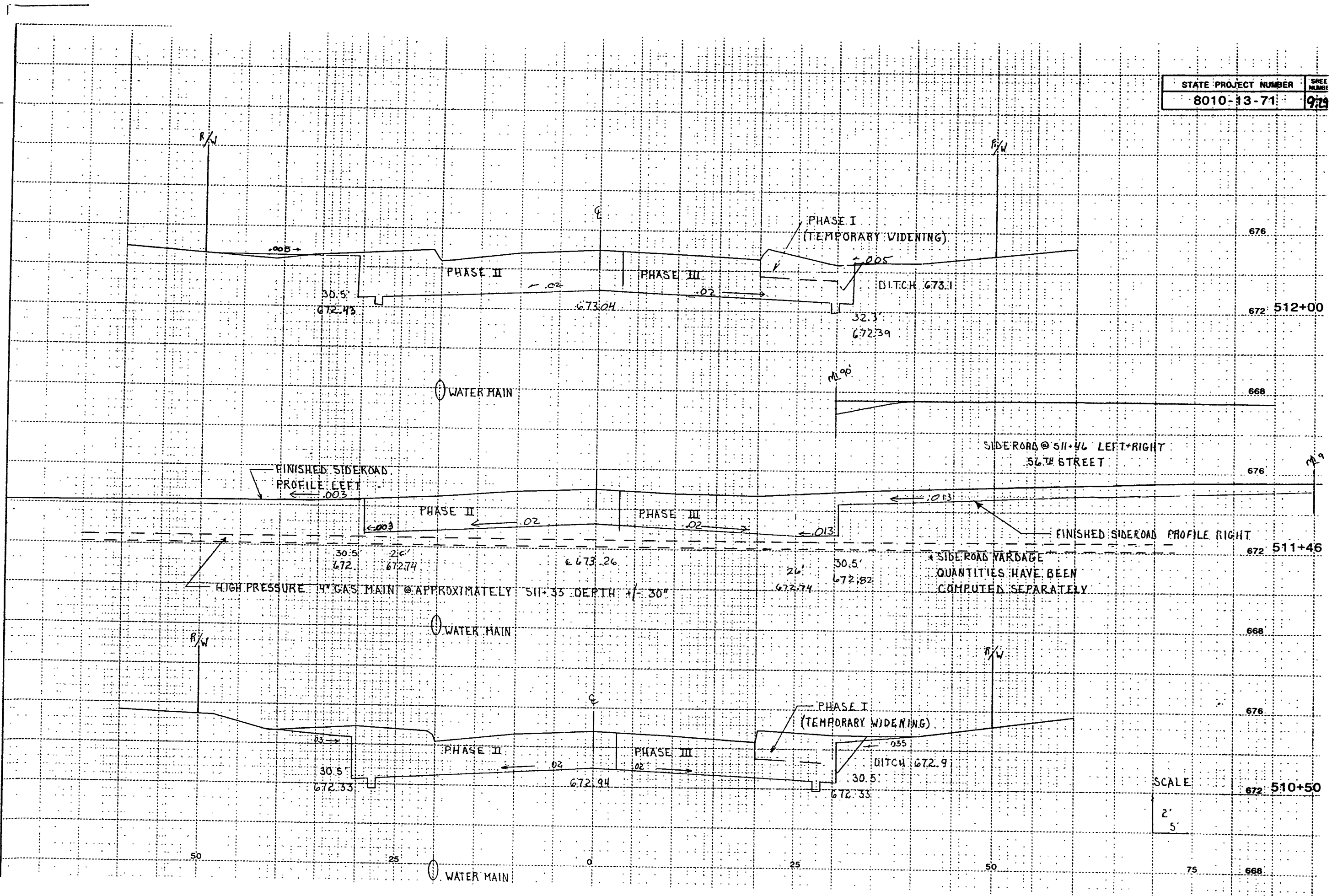
11.7.76

11.7.76



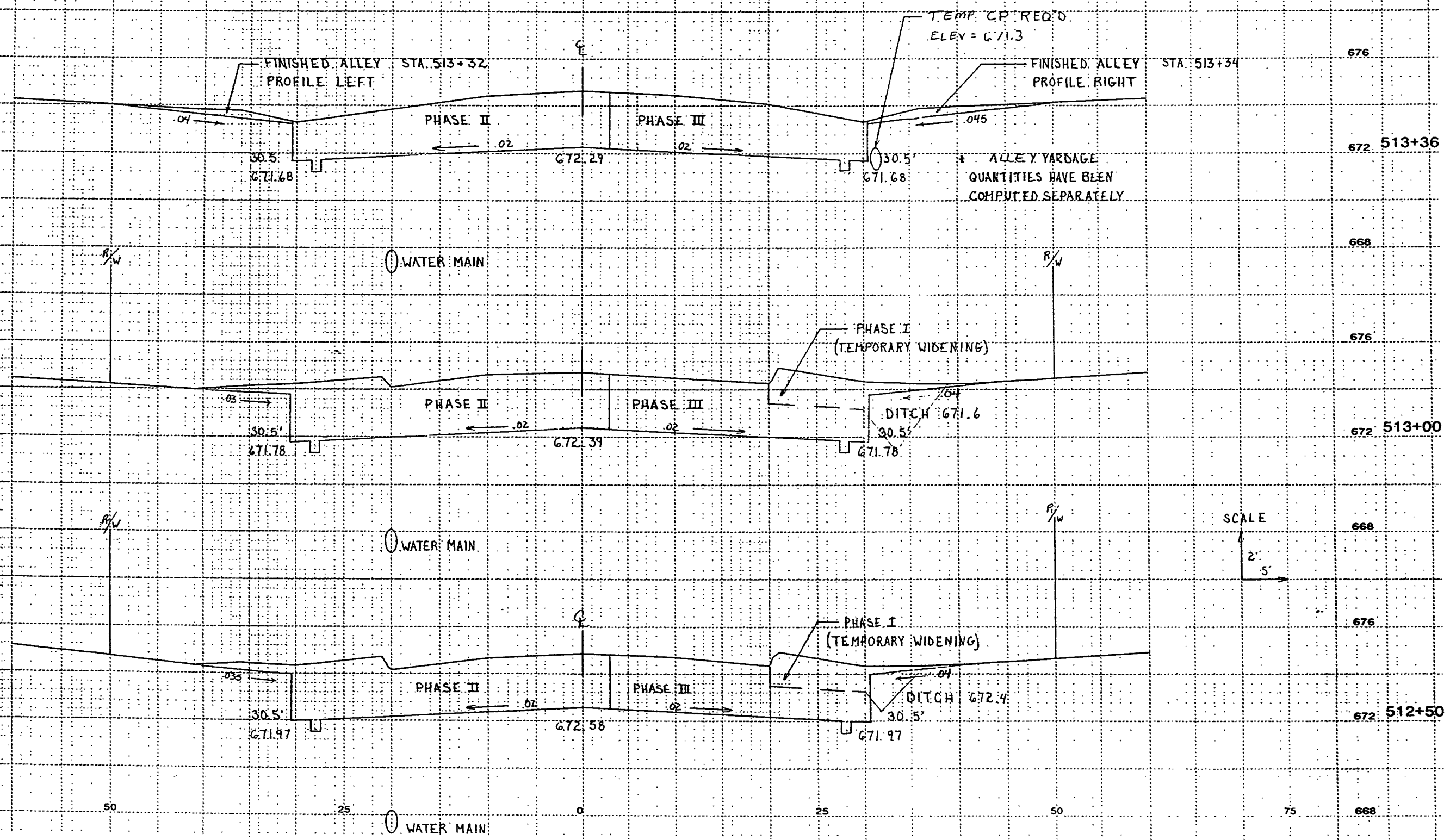
118-711

2
1-11-66



HC 5/2

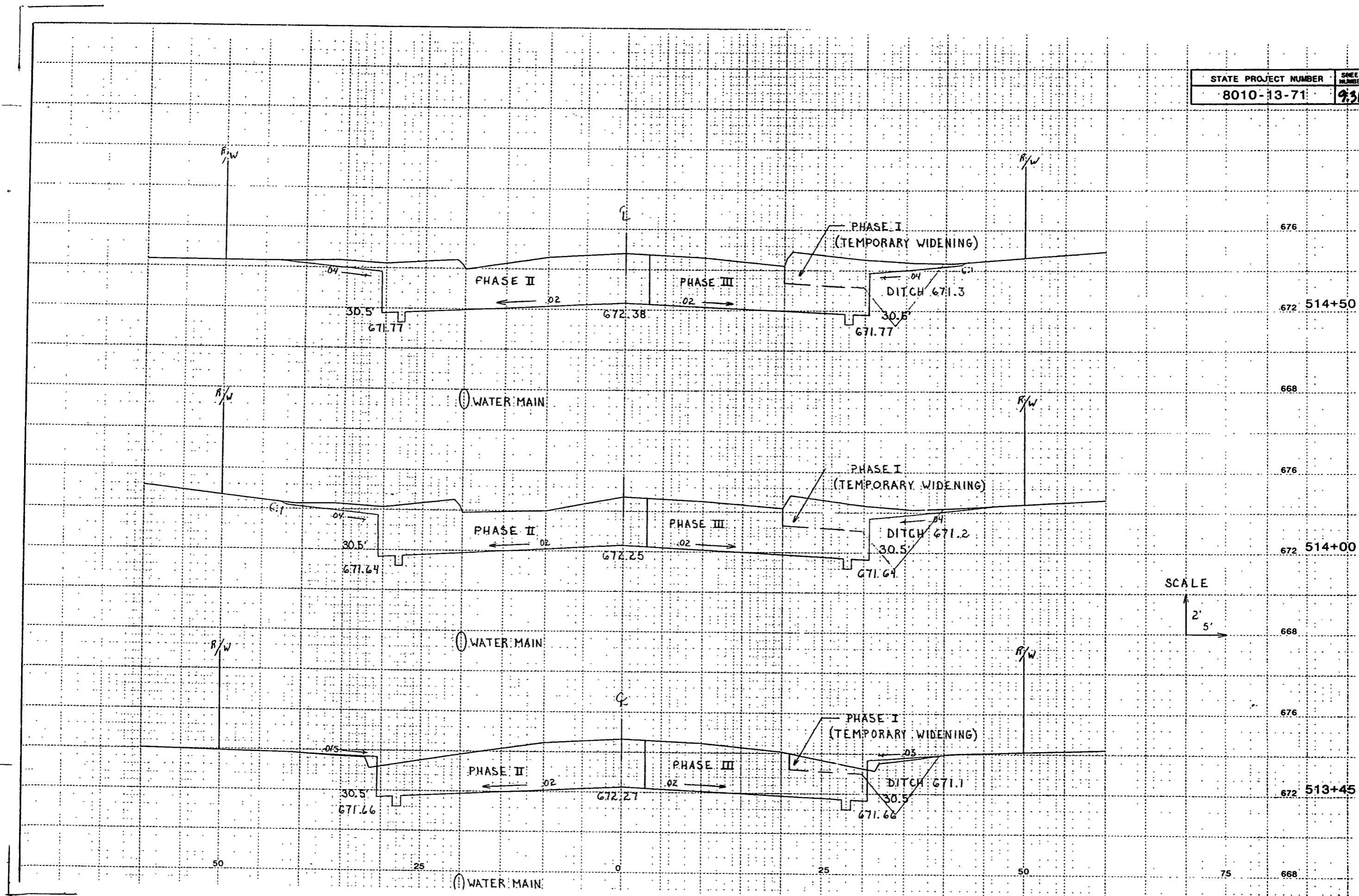
10 1/2
5 1/2



SCALE
2"
5'

11.6 3/4

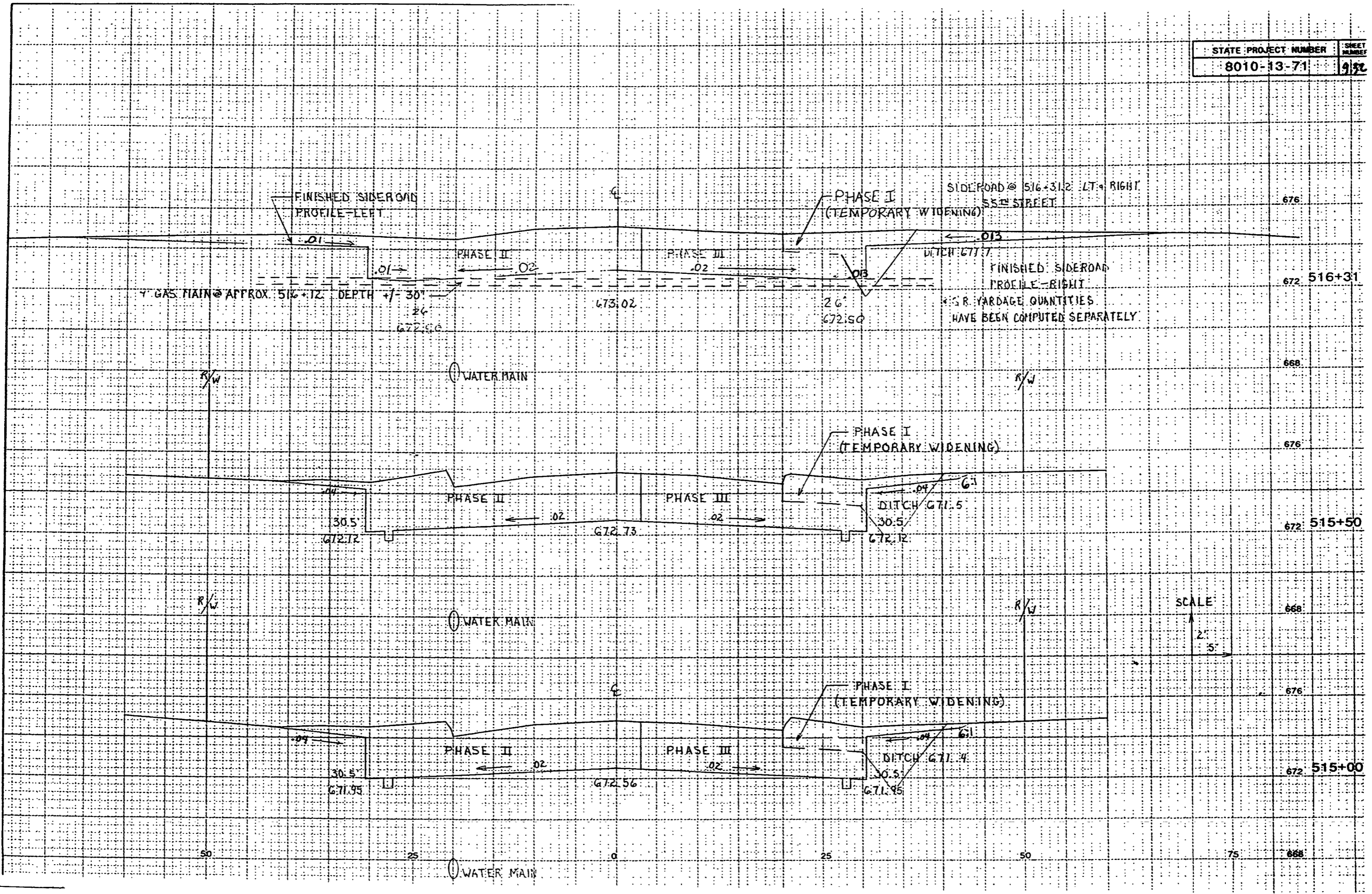
11.6 3/4



SCALE
 2'
 5'

11.71

12 11
 14 11



SCALE
2"
5'

1/2" W

1/2" W

R/W

* P.E. YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY.

FINISHED P.I. STA 517+54.5
PROFILE LEFT

PHASE III

30.5
672.79

.02

EBS

675.40

WATER MAIN

PHASE I
(TEMPORARY WIDENING)

PHASE III

DITCH 671.9
30.5
672.76

675.37

EBS

.02

.04

SCALE
2'
5'

R/W

PHASE I
(TEMPORARY WIDENING)

PHASE II

PHASE III

0035

30.5
672.65

.02

EBS

.02

DITCH 671.8
30.5
672.65

675.26

.04

50

50

75

680

676 517+50

672

680

676 517+41

672

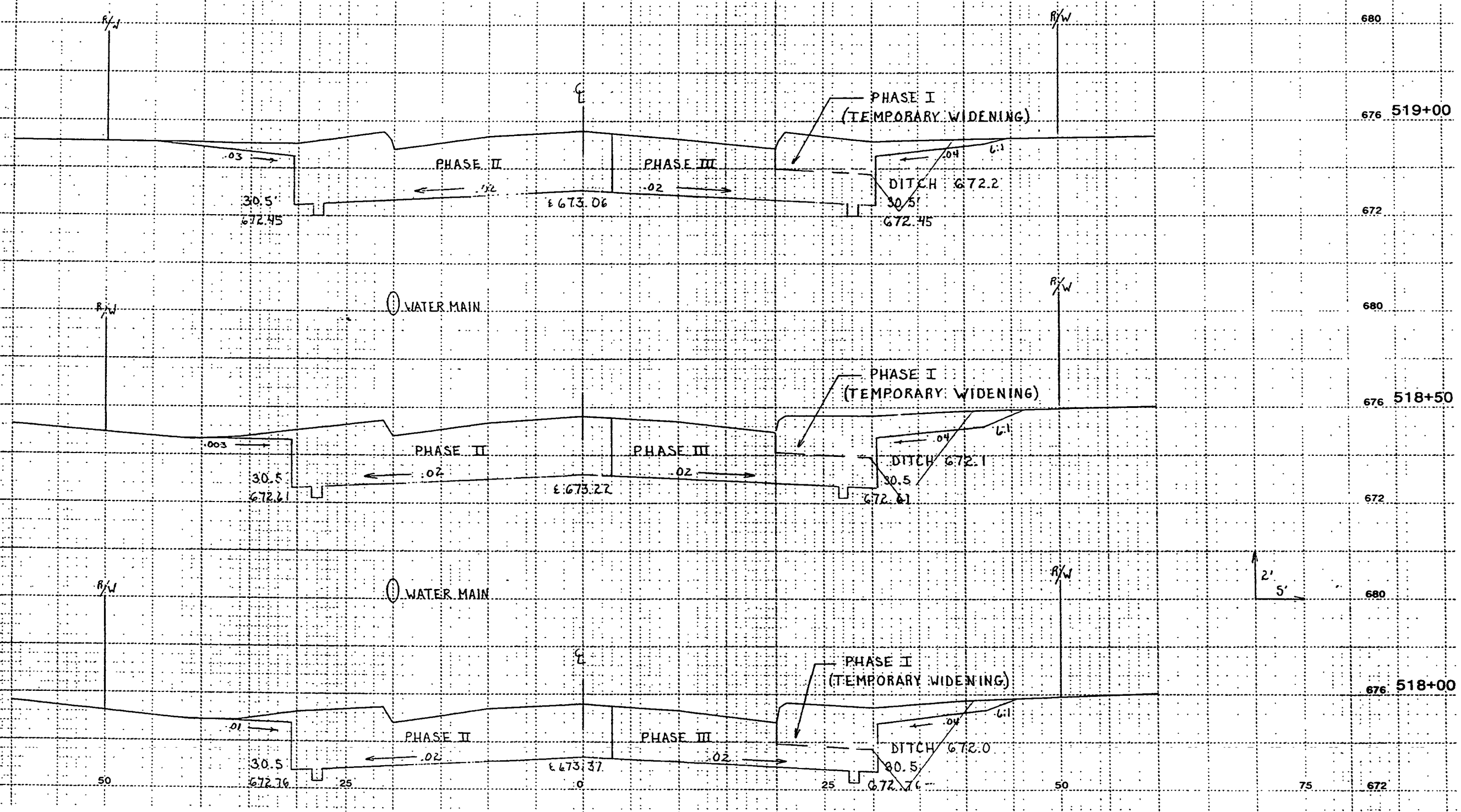
680

676 517+00

672

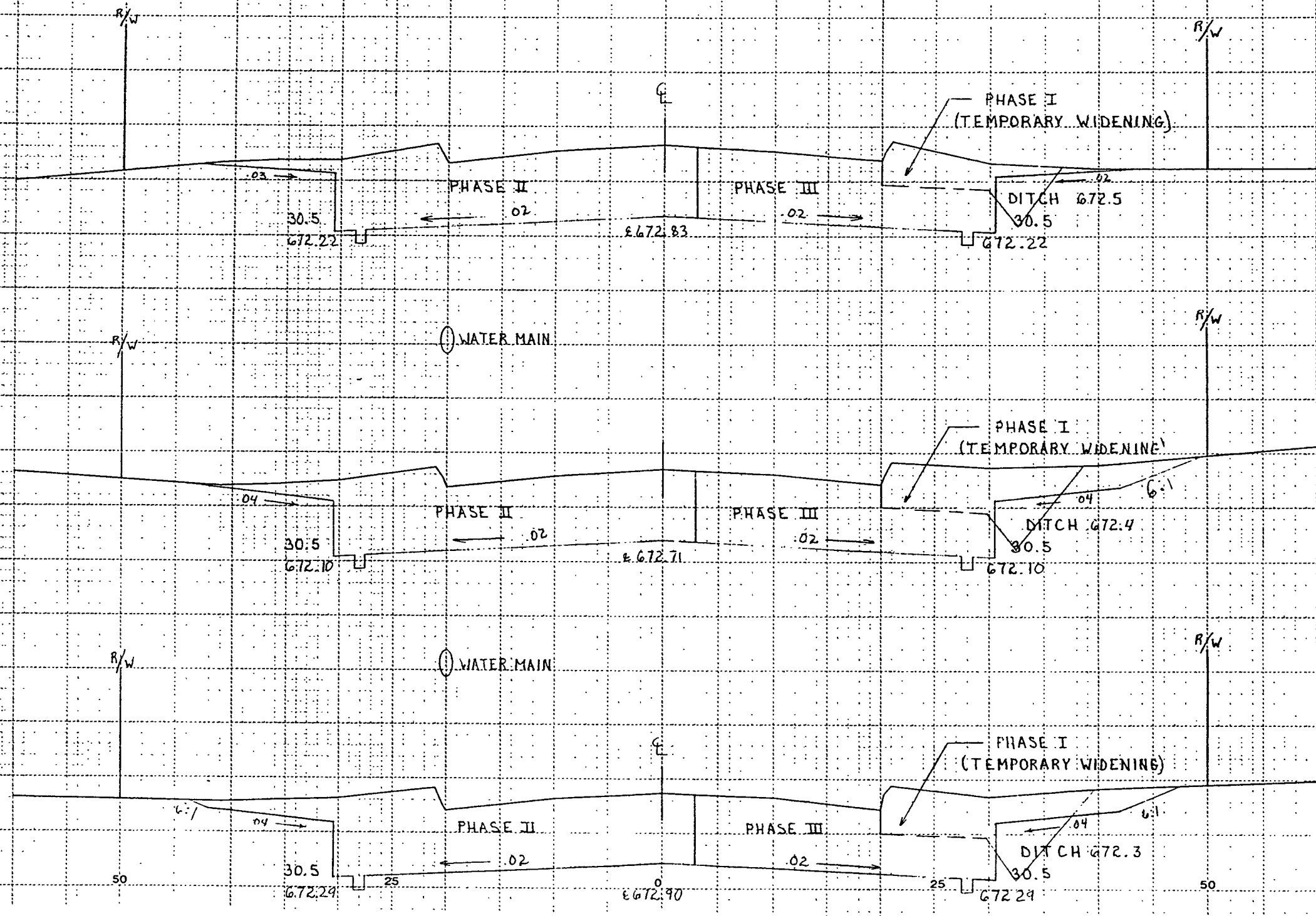
11/24

10.1.1
11/24



11.5%

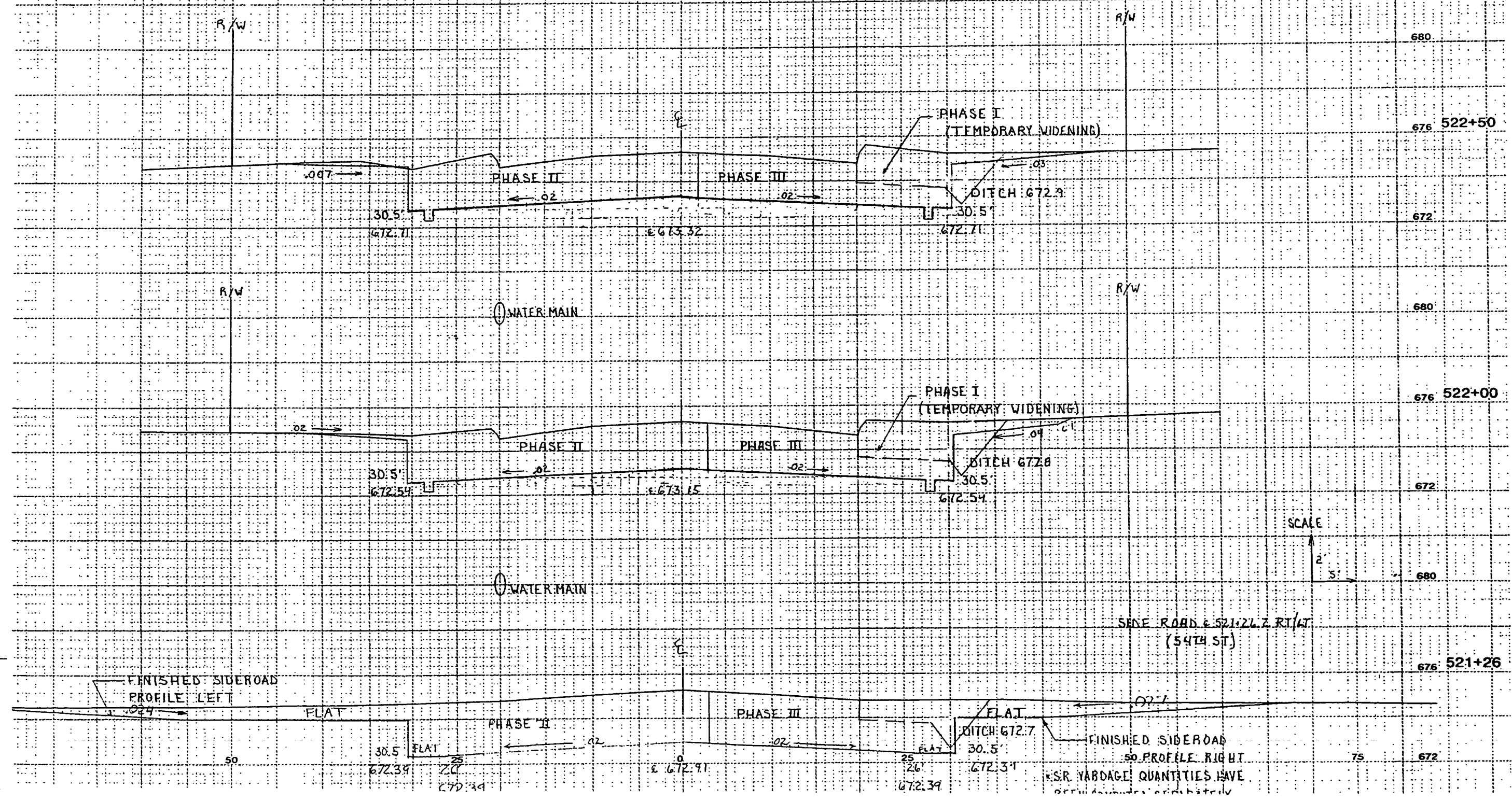
1/16/71
1:00



SCALE
2'
5'

11.4.76

11.4.76



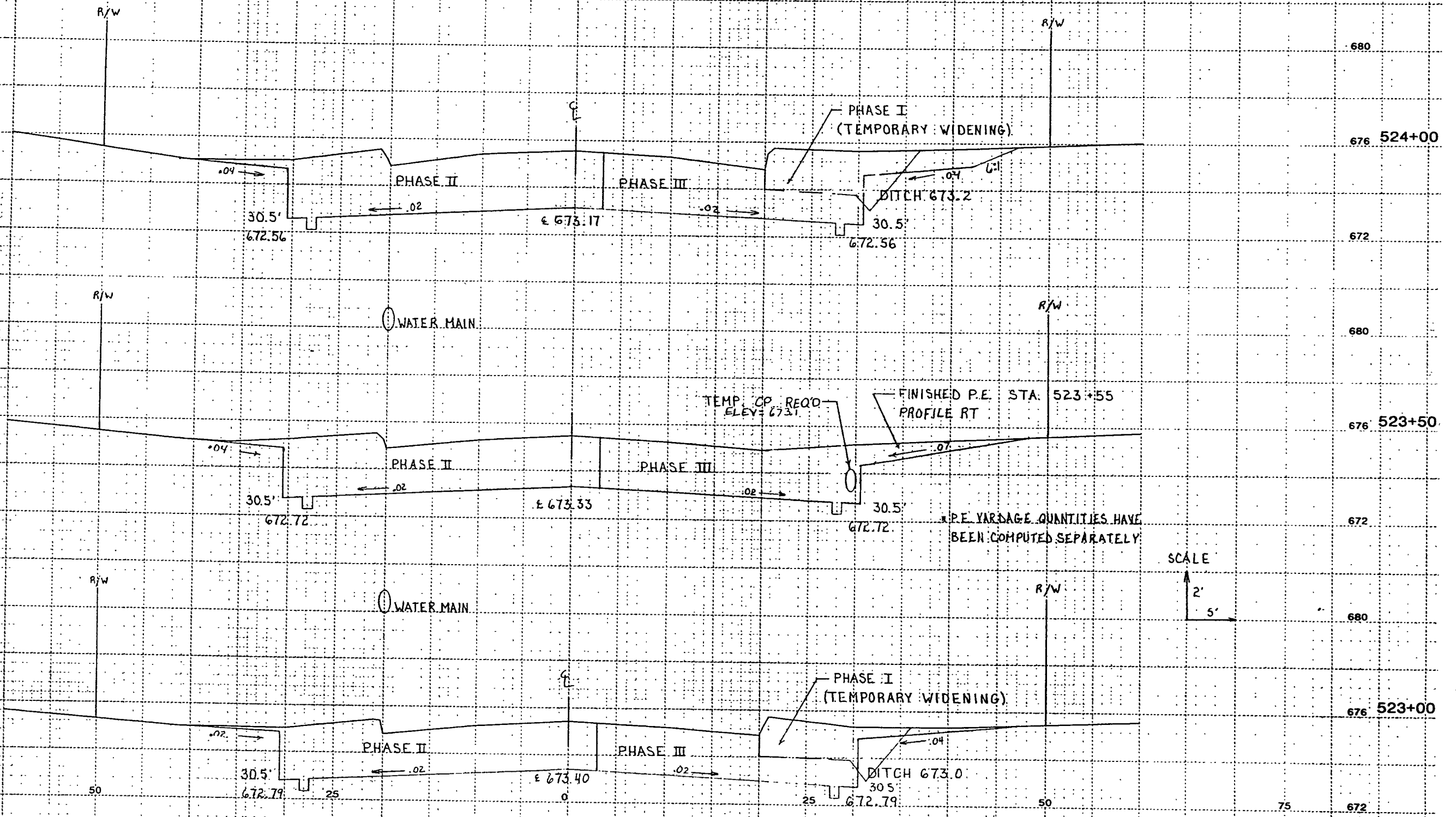
SCALE
2"
5'

SIDE ROAD @ 521+26.2 RT/W
(54TH ST)

*SR YARDAGE QUANTITIES HAVE BEEN DETERMINED ARBITRARILY

11.11

11.11

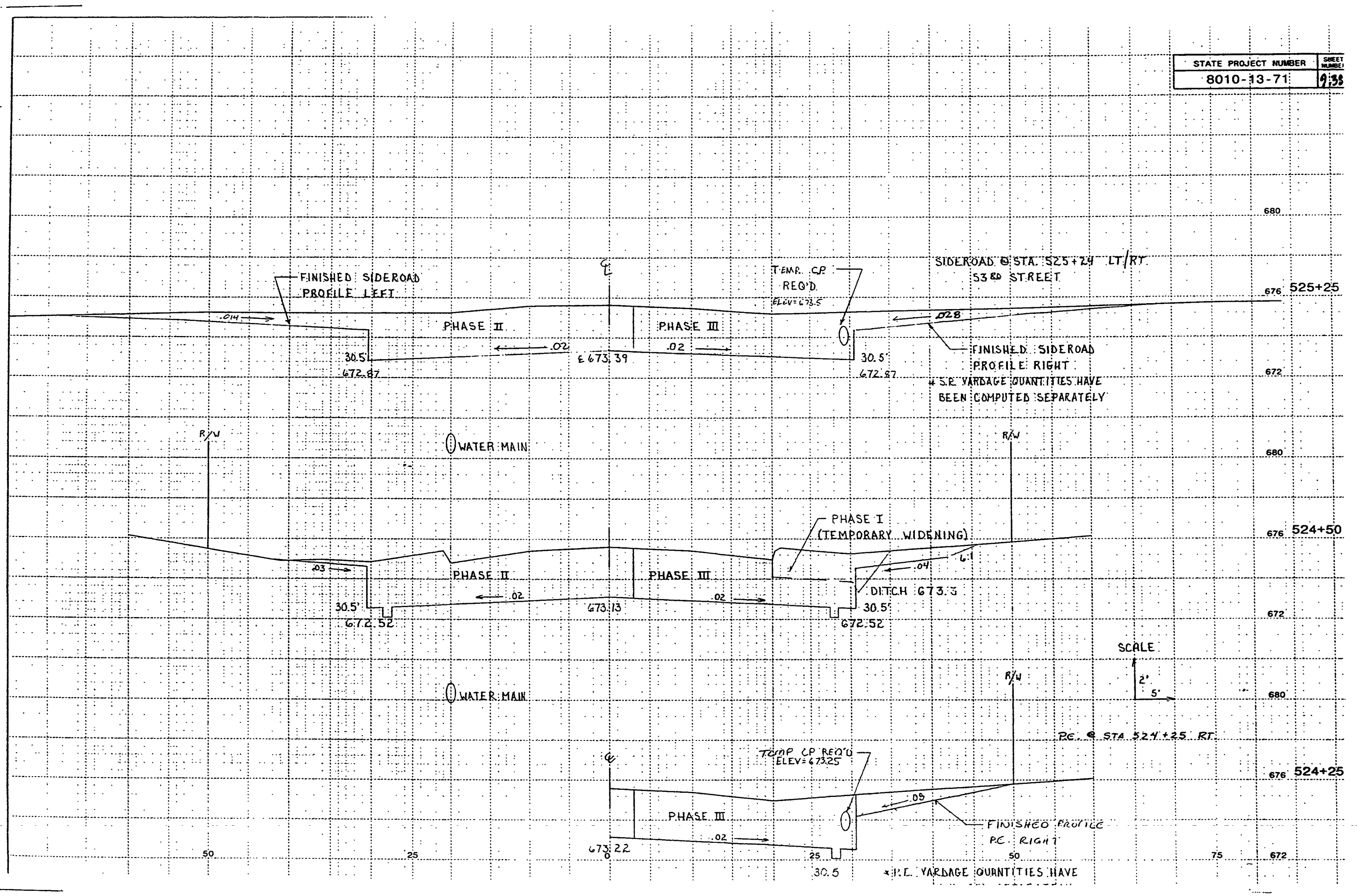


* P.E. VARIANCE QUANTITIES HAVE BEEN COMPUTED SEPARATELY

SCALE
2'
5'

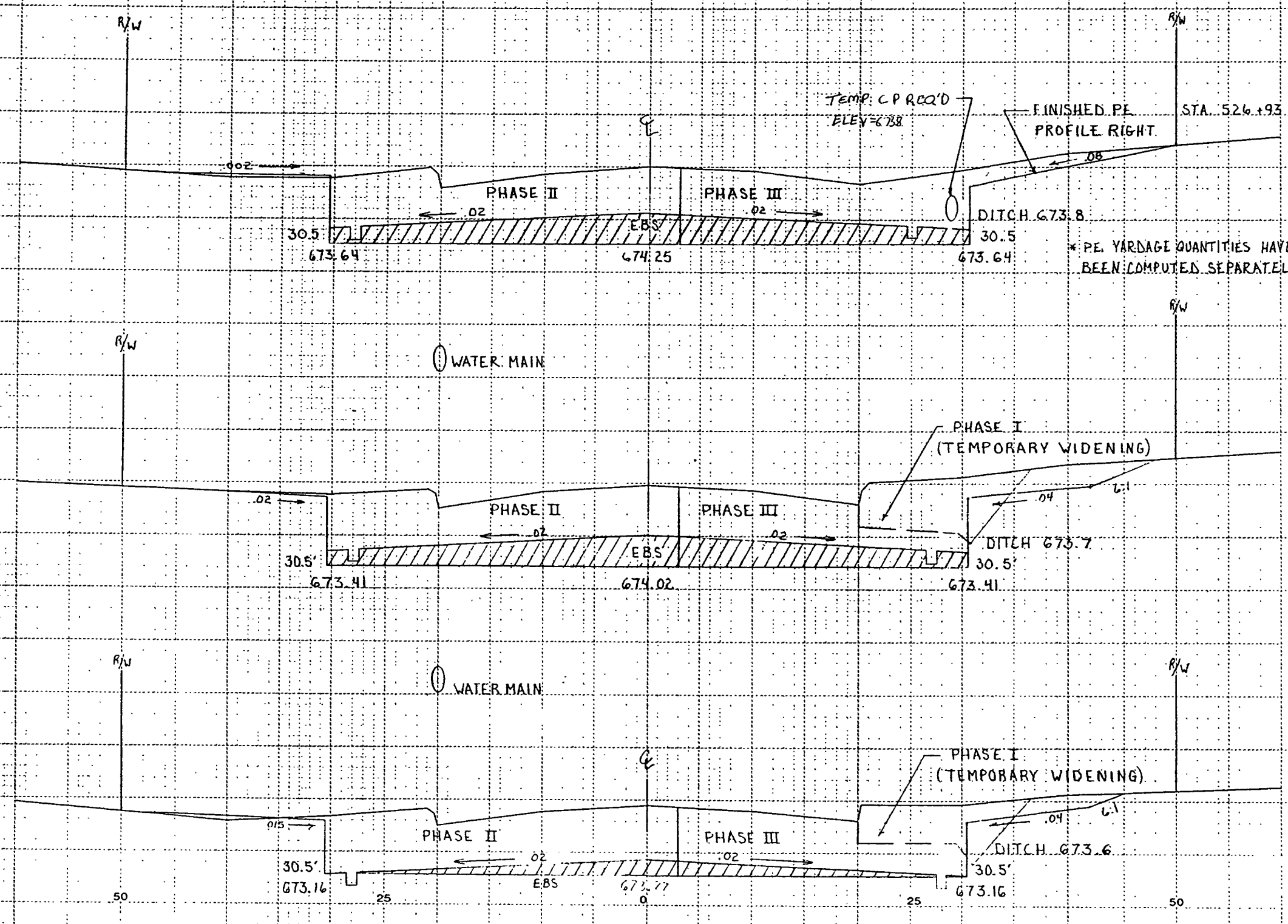
Handwritten mark

Handwritten mark



1/2" = 1'

END ABUTMENT 527+25



* PE YARDAGE QUANTITIES HAVE BEEN COMPUTED SEPARATELY

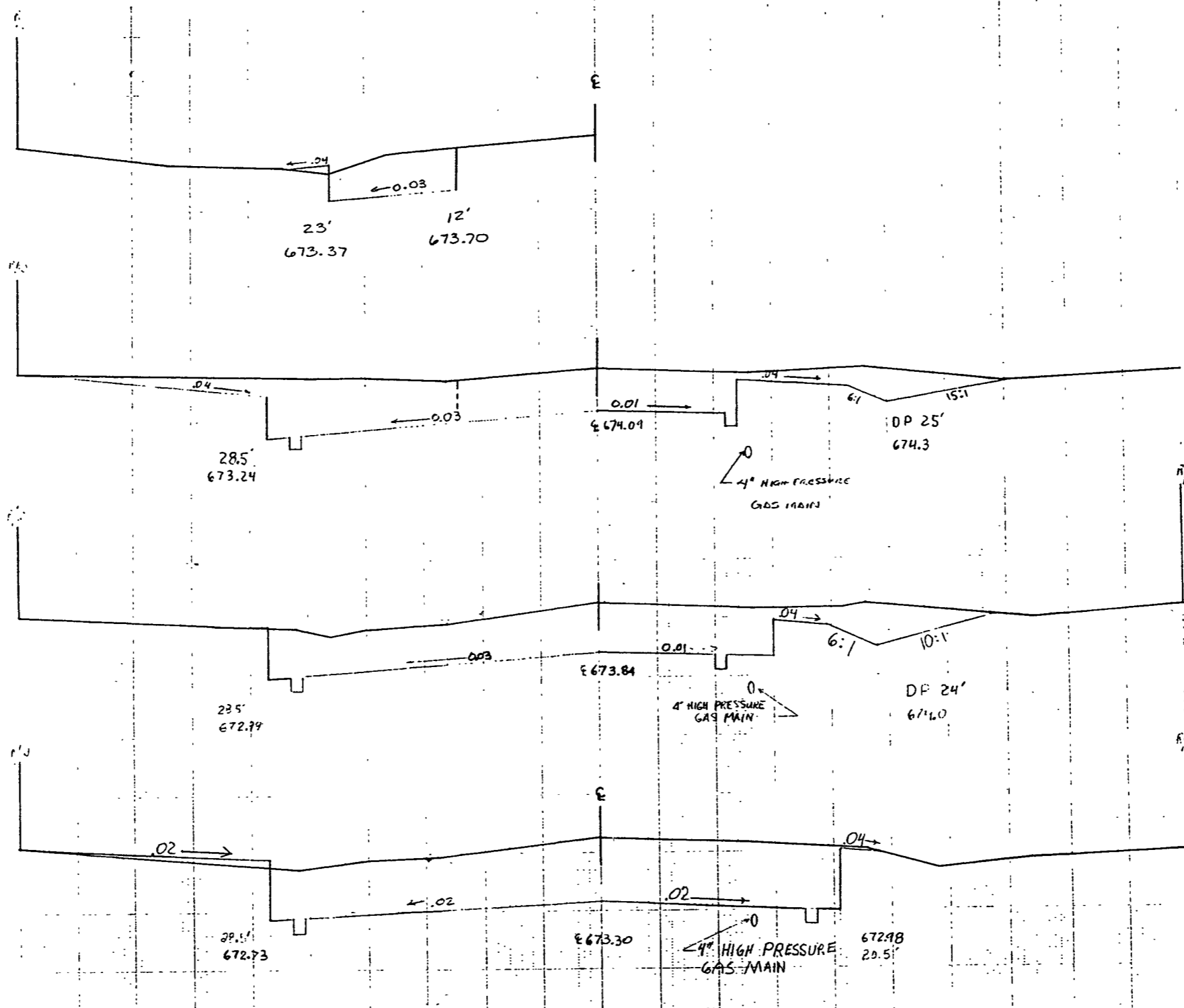
SCALE
2"
5'

680
676 527+00
672
680
676 526+50
672
680
676 526+00
672

11/1/71

10
11/1/71

STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
11+50	675		
11+25	675		
11+00	675		
10+68	675		
SHEET TOTAL			



11+50
675

11+25
675

11+00
675

10+68
675

SCALE
2
5

BEGIN ABRUPTLY @ 10+30.5 S.P.
 C (END AREA) = 200 SF

56TH STREET EAST

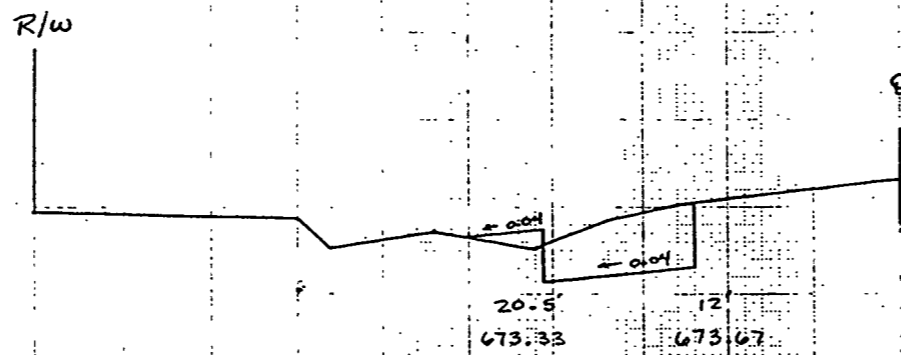
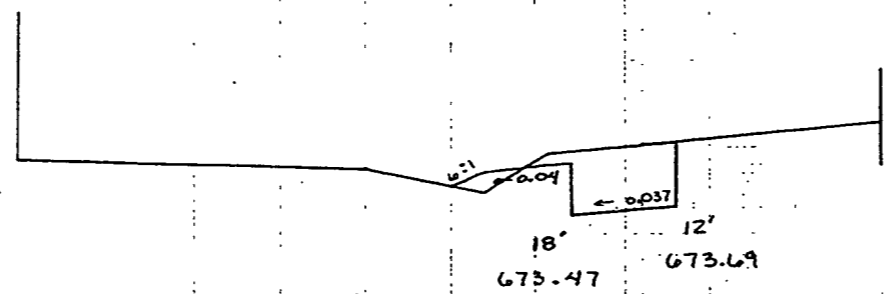
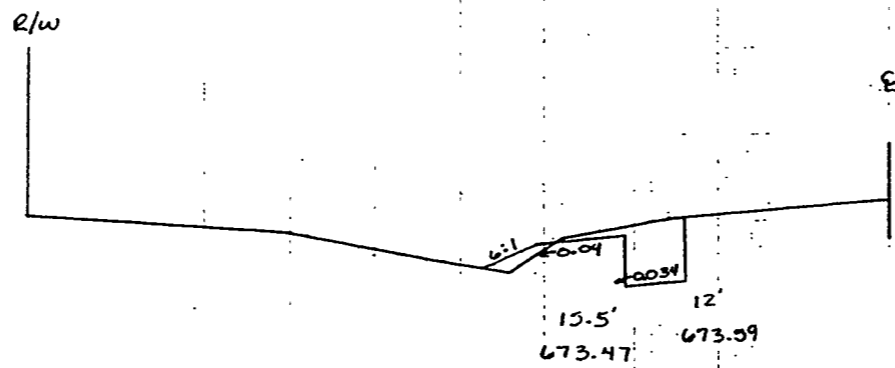
SHEET TOTAL

110 96

100 sheets

STATE PROJECT NUMBER: 8010 13 71
 SHEET NUMBER: 9.42

STATION DISTANCE	YARDAGE	
	EXCAVATION	FILL



1/2" = 6'-23 3/4"
 2
 5 SCALE

56TH STREET EAST

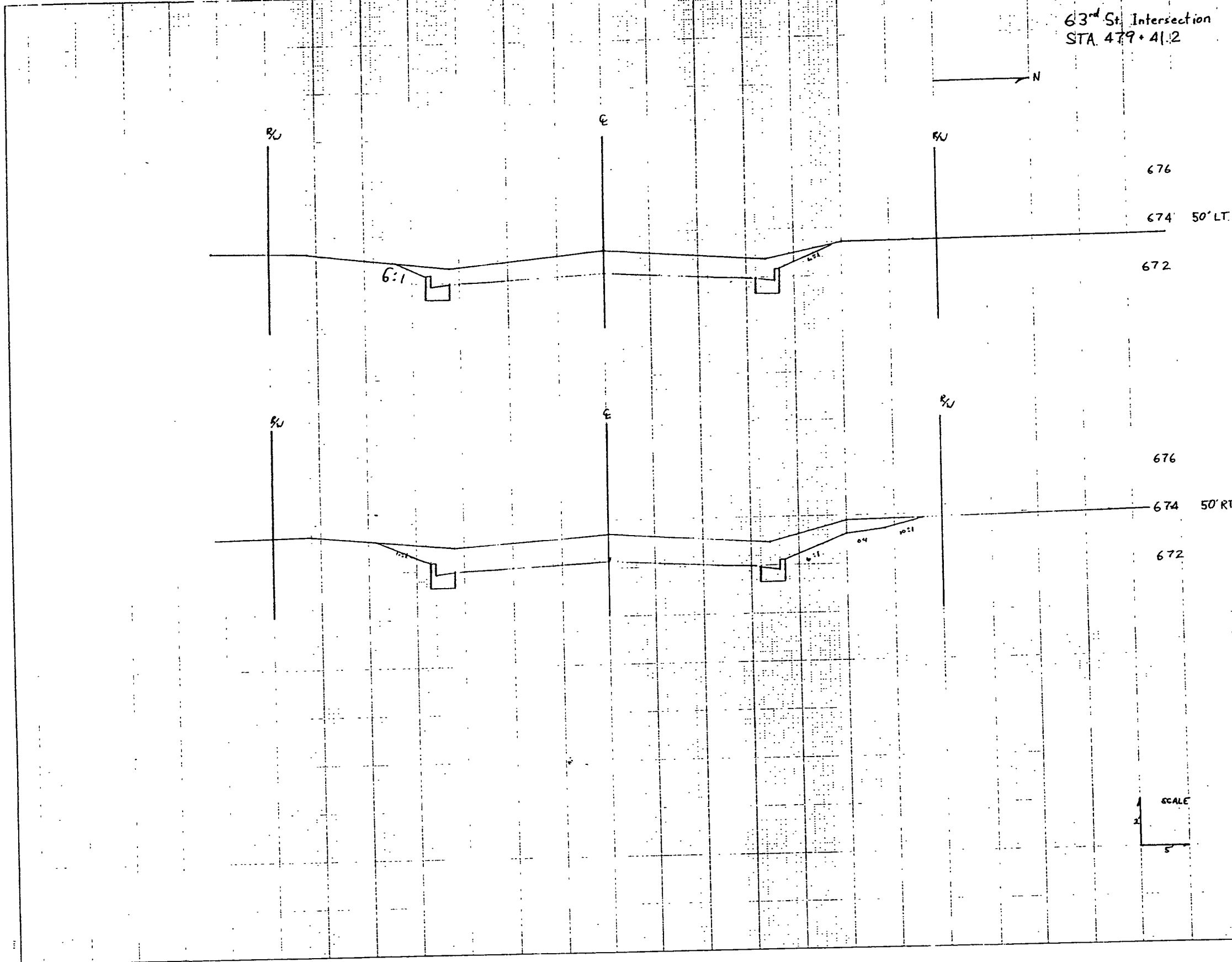
SHEET TOTAL

Catalog No. 2130-C12

110 96

SHEET
100 01

63rd St. Intersection
STA. 479+41.2



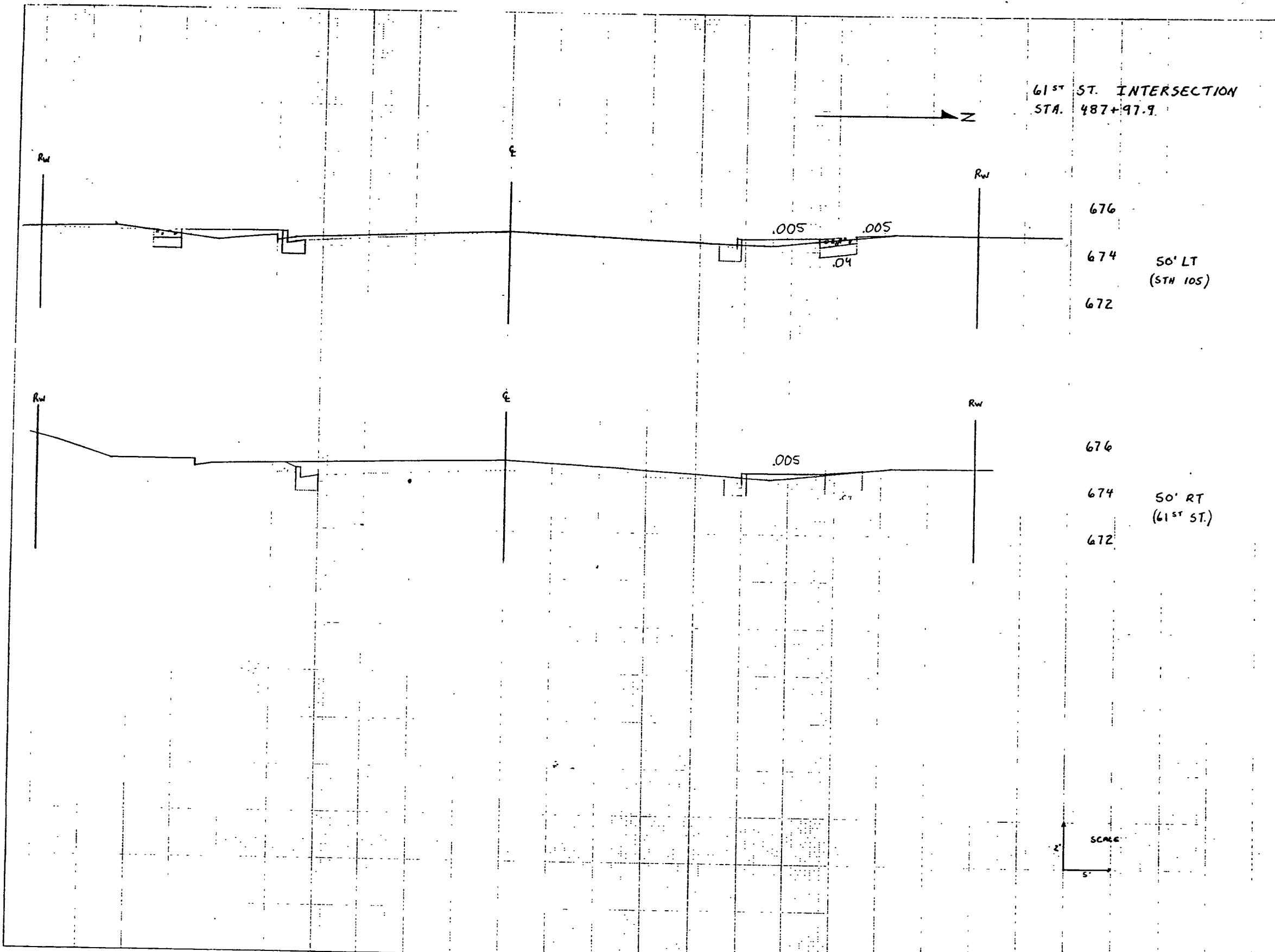
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL

SHEET TOTAL

110%

SHEETS
150 sheets

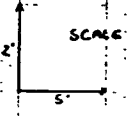
F



61ST ST. INTERSECTION
STA. 487+97.9

676
674 50' LT (STH 105)
672

676
674 50' RT (61ST ST.)
672

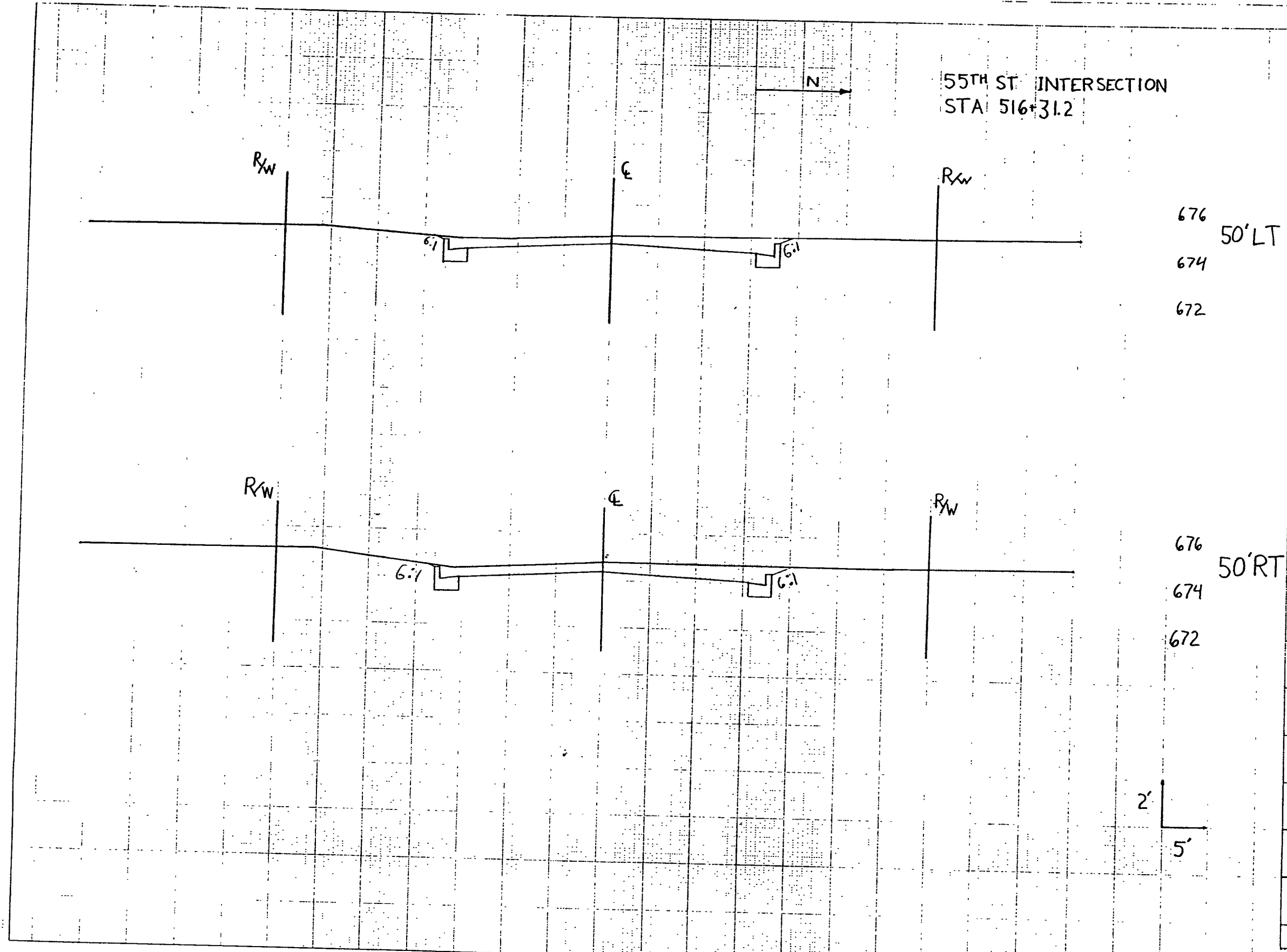


STATE PROJECT NUMBER		SHEET NUMBER	
		2.97	
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
SHEET TOTAL			

110.96

1006/a
SHEETS

T



55TH ST INTERSECTION
 STA 516+31.2

STATE PROJECT NUMBER
 8010-13-00

SHEET NUMBER
 9.53

STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
676	50' LT		
674			
672			
676	50' RT		
674			
672			
SHEET TOTAL			

110
 96 011

10001
 SHEETS
 10 of 10

12

13

14