

WINNEBAGO COUNTY

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH-II ~~STH~~ 150 - USH 10

(WEST SIDE ARTERIAL)

CTH CB

WINNEBAGO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4619-02-71		

1996 CONSTRUCTION GRADING AS-BUILT
 PRIME CONTRACTOR: WONDRA EXCAVATING
 CONST. MANAGEMENT: WISDOT #3 & OMNI ASSOC.

INDEX OF SHEETS

Sheet No.	Title
1	
2-2.25	Typical Sections and Details (Includes Erosion Control Plan)
3A-3E	Estimate of Quantities
3A-3E	Miscellaneous Quantities
5-5.7	Right of Way Plat
5-5.7	Plan and Profile
5-5.7	Standard Detail Drawings
5-5.7	Sign Plates
5-5.7	Structure Plans
9-9.1	Computer Earthwork Data
9.2-9.19	Cross Sections

TOTAL SHEETS =

AS BUILT PLAN

NO.

SUPERVISOR H. B. LENKIE

RESIDENT MARIE DOBSON

CONTRACTOR WONDRA EXC. INC.

COMPLETED 6-25-97

STATE PROJECT NUMBER
4619-02-71



EXCEPTION TO NET LENGTH OF CENTERLINE

STA 335+47.81 TO STA 336+79.06

BEGIN PROJECT STA 308+80.00

END PROJECT STA 371+32.86

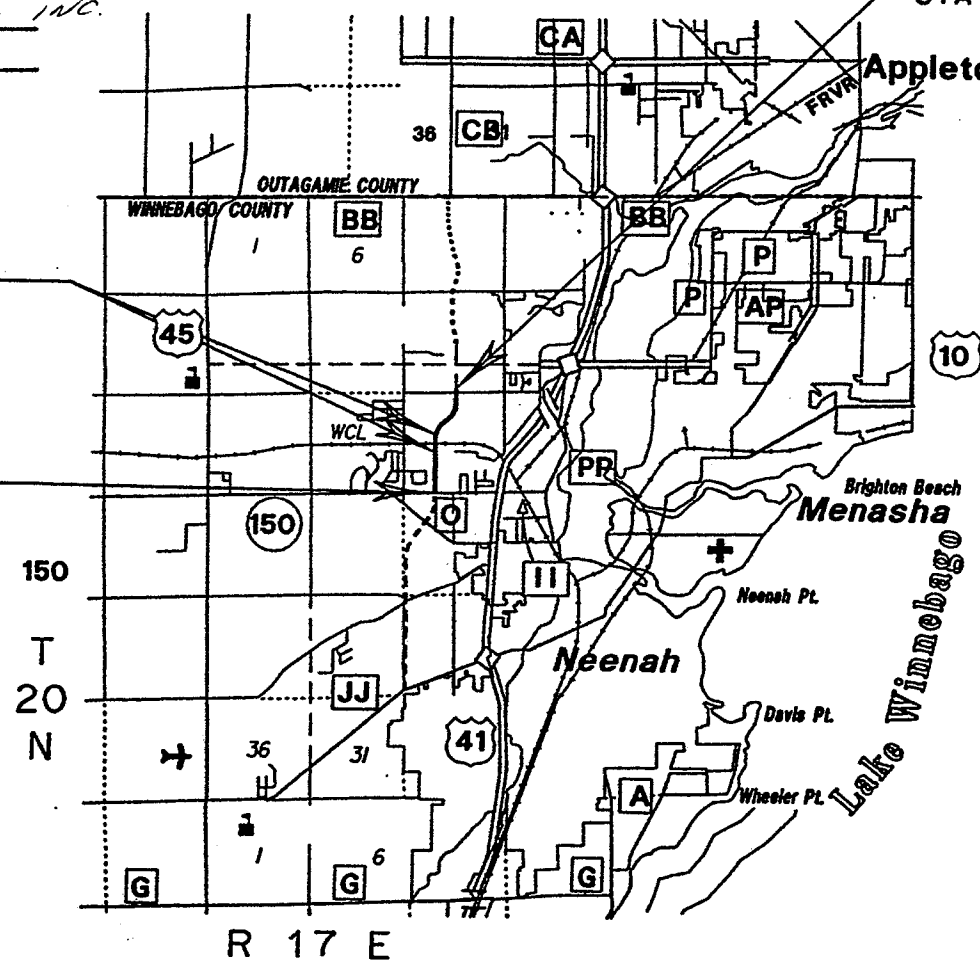
DESIGN DESIGNATION

A.D.T. (1995)	= 14,100
A.D.T. (2015)	= 20,600
D.H.V. (2015)	= 1566
D.	= 55-45%
T.	= 9.5%
DESIGN SPEED	= 45 MPH
ESALS	= 6,978,800

CONVENTIONAL SIGNS

COUNTY LINE	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SURVEY LINE	
SLOPE INTERCEPT	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
CULVERT (Profile View)	

COMBUSTIBLE FLUIDS	
UNDERGROUND UTILITIES	
GAS	
ELECTRIC	
TELEPHONE OR TELEGRAPH	
SERVICE PEDESTAL	
CABLE MARKER	
POWER POLE	
TELEPHONE POLE	
RAILROAD	
MARSH AREA	
WOODED OR SHRUB AREA	



TOTAL NET LENGTH OF CENTERLINE = 1.159 MI.

APPROVED FOR WINNEBAGO COUNTY

1-3-96 DATE

Ray Meier HIGHWAY COMMISSIONER

PLANS PREPARED BY

MEAD & HUNT CONSULTING ENGINEERS

GREEN BAY, WISCONSIN

1-2-96 DATE

Thomas Janssen CONSULTING ENGINEER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor MEAD & HUNT, INC.

Designer MEAD & HUNT, INC.

District Examiner M. W. DOBSON

District Supervisor J. C. LAMERS

Proj. Dev. Engineer _____

C.O. Examiner _____

APPROVED FOR DISTRICT OFFICE

DATE: _____ (Signature)

AUTHORIZED FOR CENTRAL OFFICE DESIGN

DATE: _____ (Signature)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO U.S.G.S. DATUM.

ALL COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, SOUTHERN ZONE.

4619-02-71

GENERAL NOTES

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

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

ALL DISTANCES ARE GROUND DISTANCES.

ALL TIES ON THIS PLAN ARE HORIZONTAL UNLESS DESCRIBED OTHERWISE.

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

CURB AND GUTTER RADII ARE SHOWN TO THE EDGE OF PAVEMENT

LIMITED EASEMENTS FOR PRIVATE ENTRANCE AND DRAINAGE CONSTRUCTION HAVE BEEN OBTAINED AND THESE RIGHTS HAVE BEEN EXTENDED TO THE CONTRACTOR.

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

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS AND AS LOCATED IN THE MISCELLANEOUS QUANTITIES. JOINT TIES SHALL BE INCIDENTAL TO VARIOUS ITEMS.

FINAL ADJUSTMENT OF MANHOLE AND INLET COVERS WILL PERFORMED BY OTHERS UNDER THE 1997 PAVING CONTRACT.

EROSION CONTROL FEATURES AS SHOWN ON THE EROSION CONTROL PLAN ARE SUGGESTED LOCATIONS. THEIR EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

UPON COMPLETION OF EACH INLET INSTALLATION, EROSION CONTROL FILTER BAG INLET PROTECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL SHOWN ON THE PLAN TO MINIMIZE SEDIMENTATION IN THE INLET.

ALL SILT FENCE REQUIRED FOR THIS PROJECT SHALL MEET THE REQUIREMENTS OF SILT FENCE FOR SILTY SOILS.

THE WETLANDS SHOWN ON THE PLAN REPRESENT THOSE DELINEATED BY REPRESENTATIVES OF WINNEBAGO COUNTY AND THE WDNR. THE LIMITS SHOWN ARE APPROXIMATE. THESE MAY OR MAY NOT REPRESENT ALL OF THE WETLAND AREAS ALONG THE PROJECT CORRIDOR.

WETLAND AREAS OUTSIDE THE GRADING LIMITS SHALL BE AVOIDED DURING CONSTRUCTION ACTIVITIES UNDER THIS CONTRACT. NO MATERIALS SHALL BE STOCKPILED IN WETLAND AREAS OUTSIDE THE GRADING LIMITS.

THE ITEM "REMOVING OLD CULVERTS" WILL PERTAIN ONLY TO THOSE CULVERTS ENUMERATED IN THE SUMMARY OF MISCELLANEOUS QUANTITIES. ALL OTHER CULVERTS TO BE REMOVED WILL BE INCIDENTAL TO COMMON EXCAVATION.

EXCAVATION BELOW SUBGRADE (E.B.S.) AS SHOWN ON THE PLAN SHALL BE MEASURED AND PAID FOR AS COMMON EXCAVATION. THE EXACT LIMITS AND LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

FILL AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENT CONSTRUCTED FROM BORROW EXCAVATION OR COMMON EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 1.15 FOR BORROW EXCAVATION AND 1.30 FOR COMMON EXCAVATION.

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. THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE SUBGRADE SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

DISTURBED AREAS THAT WERE PREVIOUSLY LAWNS SHALL BE SEEDED WITH SEED MIXTURE NO. 40. SEED MIXTURE NO. 30 SHALL BE USED ON ALL REMAINING CUT AND FILL SLOPES.

STANDARD DETAIL DRAWINGS

8A5-11a	INLET COVERS
8A5-11b	INLET COVERS
8A5-11d	INLET AND MANHOLE COVERS
8B6-3	MANHOLES TYPE 1
8B7-3	MANHOLES TYPE 2 & 3
8C1-5	INLETS TYPE 1,2,3 & 4
8C5-2	INLETS TYPE 8,9,10 AND 11
8E9-4	SILT FENCE
8F1-11	APRON ENDWALLS FOR CULVERT PIPE
8F2-1	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
8F4-5	JOINT TIES FOR CONCRETE PIPE
9A1-9a	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B", "C" AND "D"
9A1-9b	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A" AND PASSING LANE
15A1-6	MARKER POST FOR RIGHT OF WAY
15C2-3	BARRICADES AND SIGNS FOR ROAD CLOSURES
15C12-2	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
16A1-5	LANDMARK REFERENCE MONUMENTS AND COVERS

UTILITIES

WISCONSIN ELECTRIC POWER COMPANY
ATTN: JOHN THIEL
P.O. BOX 1699
APPLETON, WI 54913-1699
(414) 730-4554

CABLEVISION
ATTN: BRUCE MORRISSEY
1001 KENNEDY AVENUE
KIMBERLY, WI 54136
(414) 738-3160

WISCONSIN NATURAL GAS COMPANY
ATTN: DAVE BROOKS
800 S. LYNNDALE DRIVE
APPLETON, WI 54912
(414) 735-8357

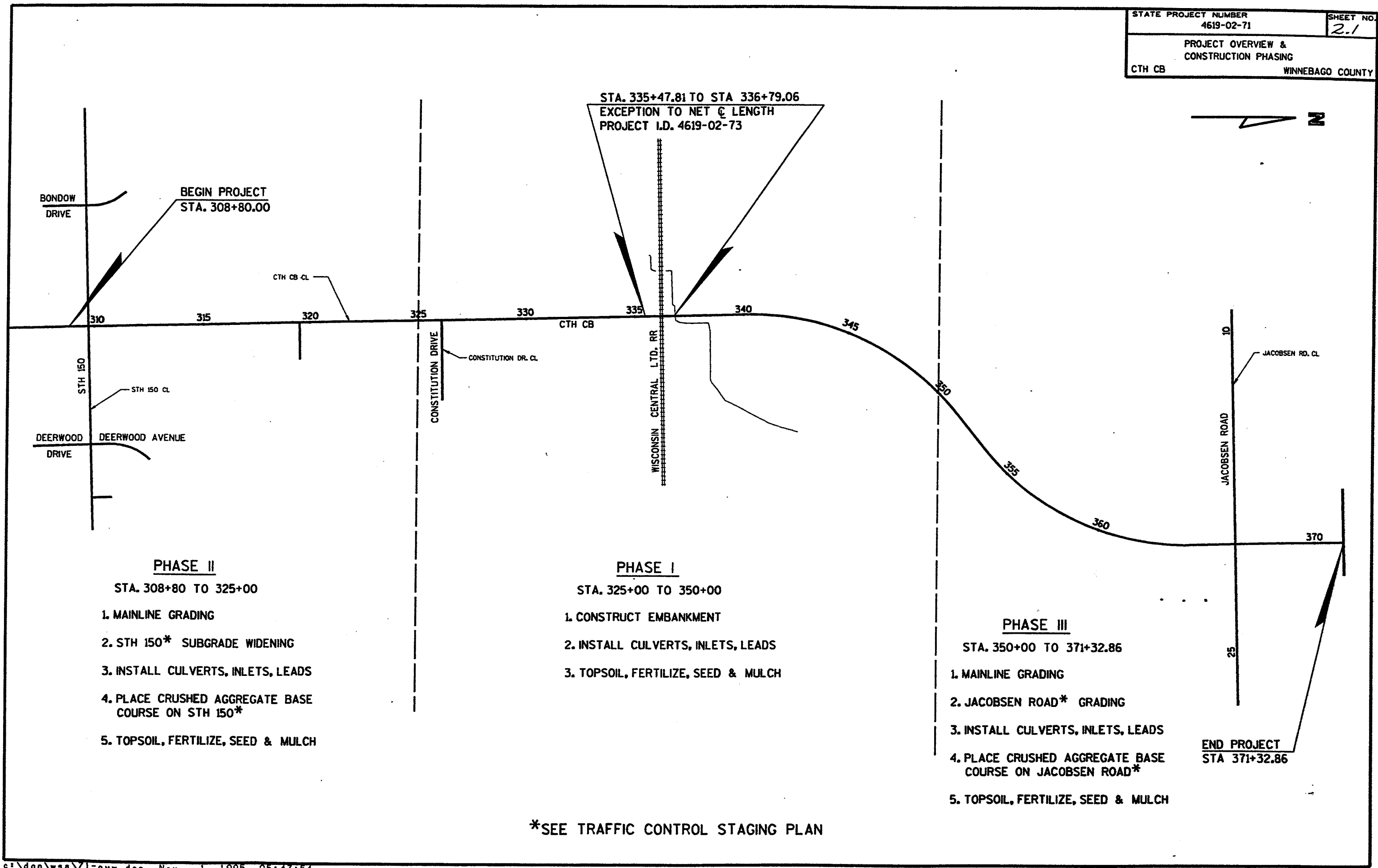
ANR PIPELINE COMPANY
ATTN: JERRY BINOTTO
W3925 PIPELINE LANE
P.O. BOX 145
EDEN, WI 53019
(414) 477-4211

AMERTECH
ATTN: JOHN STUMPF
221 W. WASHINGTON ST., 4TH FLOOR
APPLETON, WI 54911
(414) 735-3255

TOWN OF MENASHA
ATTN: STEVEN LAABES
SANITARY DISTRICT NO. 4
2340 AMERICAN DRIVE
NEENAH, WI 54956
(414) 739-5128

STANDARD ABBREVIATIONS

Δ	CENTRAL ANGLE OR DELTA
B	BUILDING
B.M.	BENCH MARK
C&G	CURB AND GUTTER
C.E.	COMMERCIAL ENTRANCE
CONC.	CONCRETE
CL	CENTERLINE
CMP	CORRUGATED METAL CULVERT PIPE
CSCP	CORRUGATED STEEL CULVERT PIPE
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
F.E.	FIELD ENTRANCE
EL. OR ELEV.	ELEVATION
E.O.P.	EDGE OF PAVEMENT
e	EXTERNAL DISTANCE
H	HOUSE
L	LENGTH
L.T.	LEFT
L.F.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MIN.	MINIMUM
NC	NORMAL CROWN
NB	NORTHBOUND
NTS.	NOT TO SCALE
PAV'T	PAVEMENT
P.E.	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
R/W	RIGHT OF WAY
R	RADIUS
RL	REFERENCE LINE
RT.	RIGHT
REQ'D	REQUIRED
RCCP	REINFORCED CONCRETE CULVERT PIPE
REM.	REMOVE
RCHEP	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CULVERT PIPE
R.R.	RAILROAD
RO	RUNOUT
SB	SOUTHBOUND
SE	SUPERELEVATION
S.F. OR SQ. FT.	SQUARE FOOT
STA.	STATION
S.Y. OR SQ. YD.	SQUARE YARD
T	TANGENT
TYP.	TYPICAL
YD	YARD



STA. 335+47.81 TO STA 336+79.06
EXCEPTION TO NET \bar{C} LENGTH
PROJECT I.D. 4619-02-73

BEGIN PROJECT
STA. 308+80.00



PHASE II

STA. 308+80 TO 325+00

1. MAINLINE GRADING
2. STH 150* SUBGRADE WIDENING
3. INSTALL CULVERTS, INLETS, LEADS
4. PLACE CRUSHED AGGREGATE BASE COURSE ON STH 150*
5. TOPSOIL, FERTILIZE, SEED & MULCH

PHASE I

STA. 325+00 TO 350+00

1. CONSTRUCT EMBANKMENT
2. INSTALL CULVERTS, INLETS, LEADS
3. TOPSOIL, FERTILIZE, SEED & MULCH

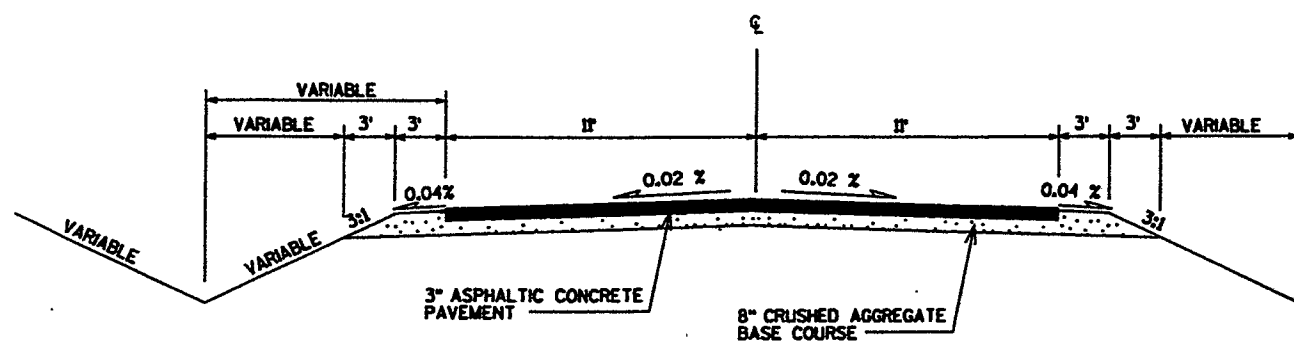
PHASE III

STA. 350+00 TO 371+32.86

1. MAINLINE GRADING
2. JACOBSEN ROAD* GRADING
3. INSTALL CULVERTS, INLETS, LEADS
4. PLACE CRUSHED AGGREGATE BASE COURSE ON JACOBSEN ROAD*
5. TOPSOIL, FERTILIZE, SEED & MULCH

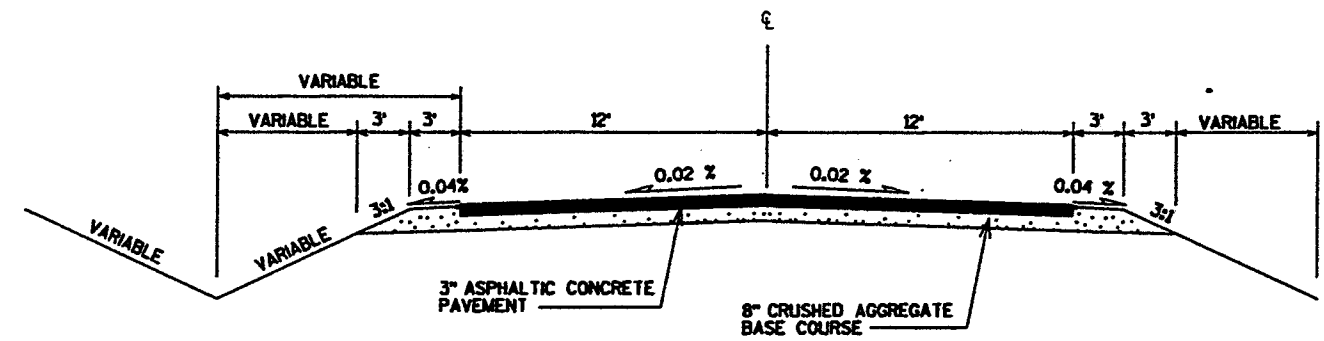
END PROJECT
STA 371+32.86

*SEE TRAFFIC CONTROL STAGING PLAN



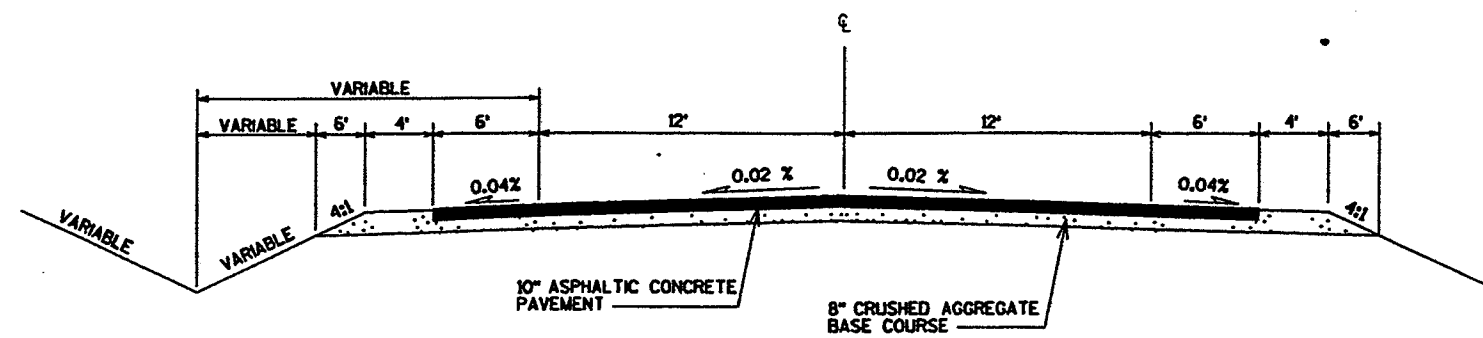
EXISTING TYPICAL SECTION

DEERWOOD DRIVE/AVENUE



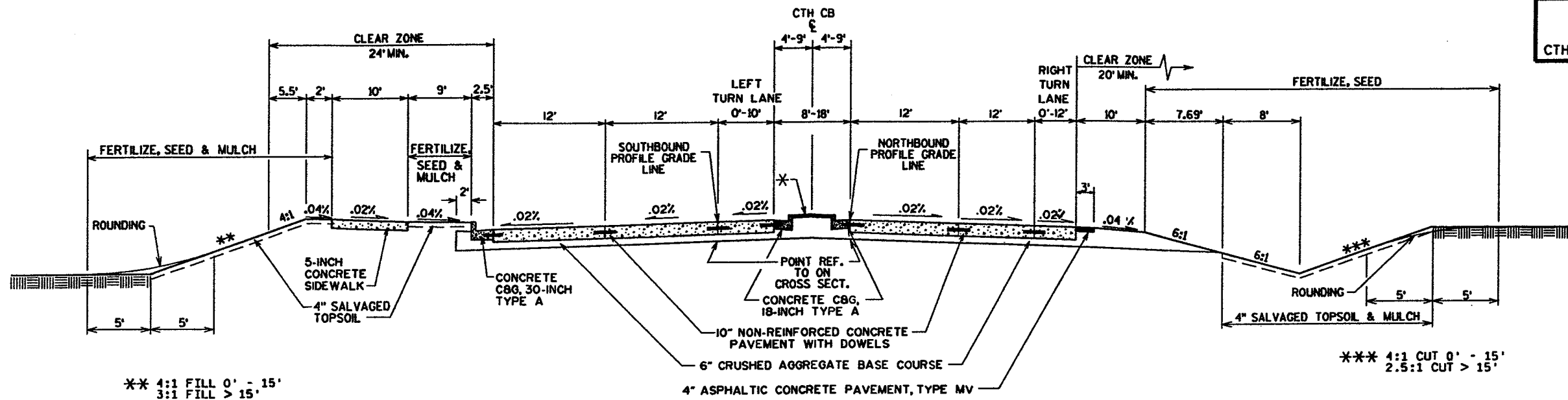
EXISTING TYPICAL SECTION

JACOBSEN ROAD
BONDOW DRIVE



EXISTING TYPICAL SECTION

STH 150



** 4:1 FILL 0' - 15'
3:1 FILL > 15'

*** 4:1 CUT 0' - 15'
2.5:1 CUT > 15'

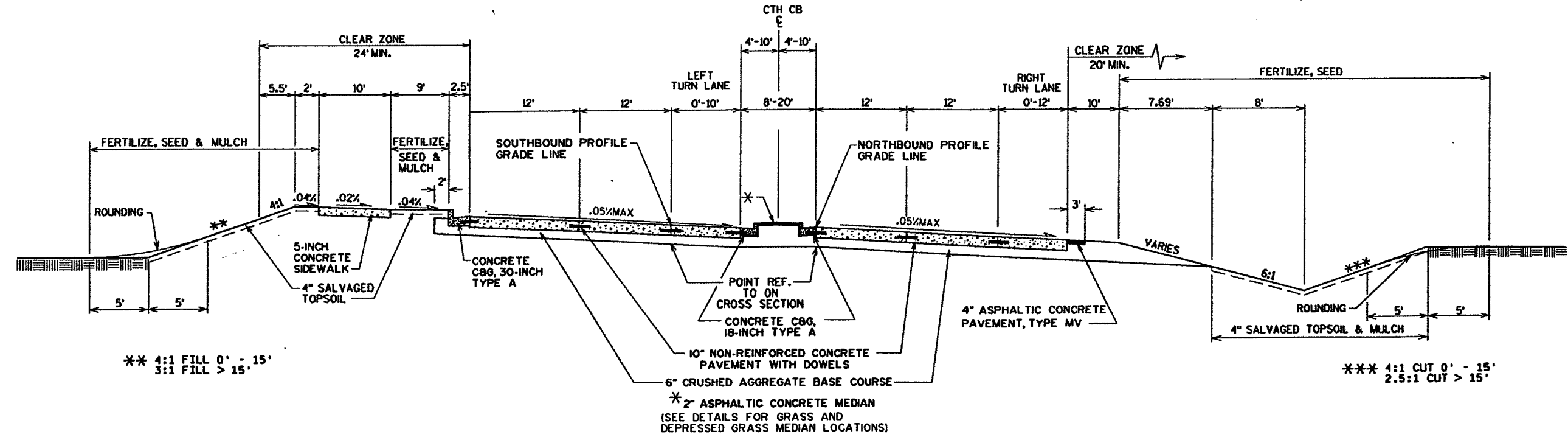
* 2" ASPHALTIC CONCRETE MEDIAN
(SEE DETAILS FOR GRASS AND
DEPRESSED GRASS MEDIAN LOCATIONS)

INDICATES THAT THIS ITEM IS
NOT PART OF THIS CONTRACT

PROPOSED TYPICAL SECTION

CTH CB

STA. 308+80.00 TO STA. 338+73.50



** 4:1 FILL 0' - 15'
3:1 FILL > 15'

*** 4:1 CUT 0' - 15'
2.5:1 CUT > 15'

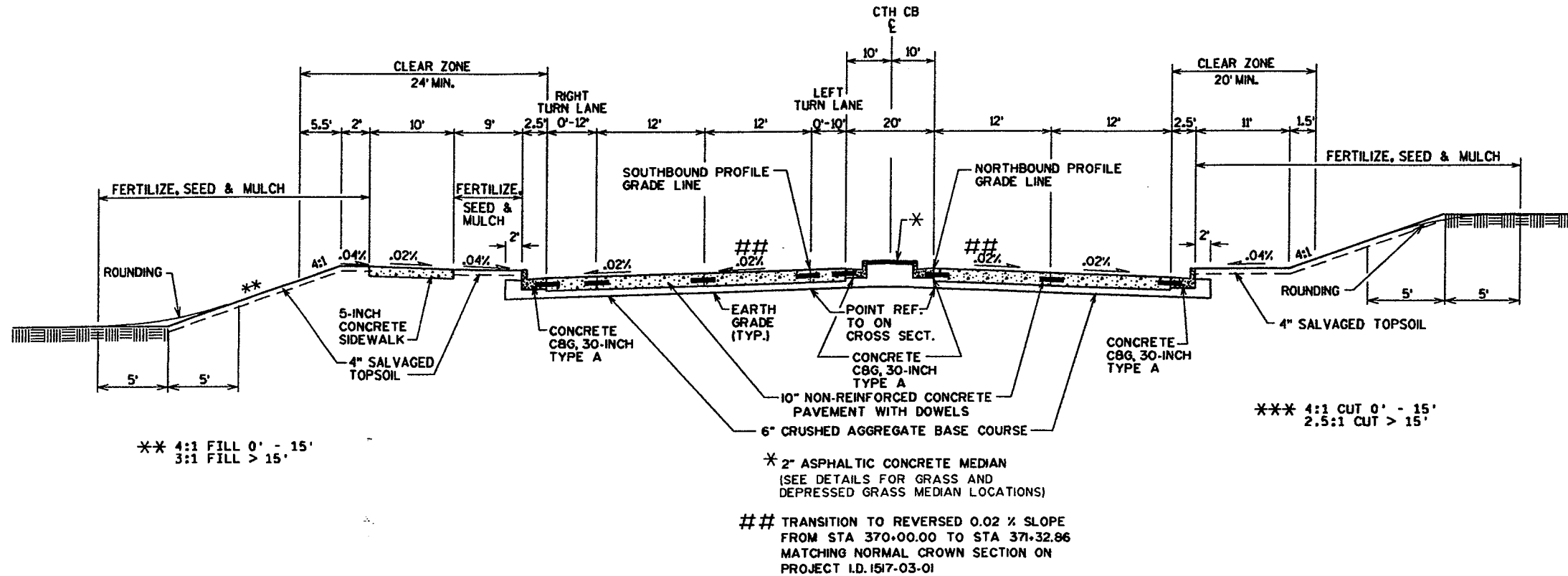
* 2" ASPHALTIC CONCRETE MEDIAN
(SEE DETAILS FOR GRASS AND
DEPRESSED GRASS MEDIAN LOCATIONS)

PROPOSED TYPICAL SECTION (SUPERELEVATED)

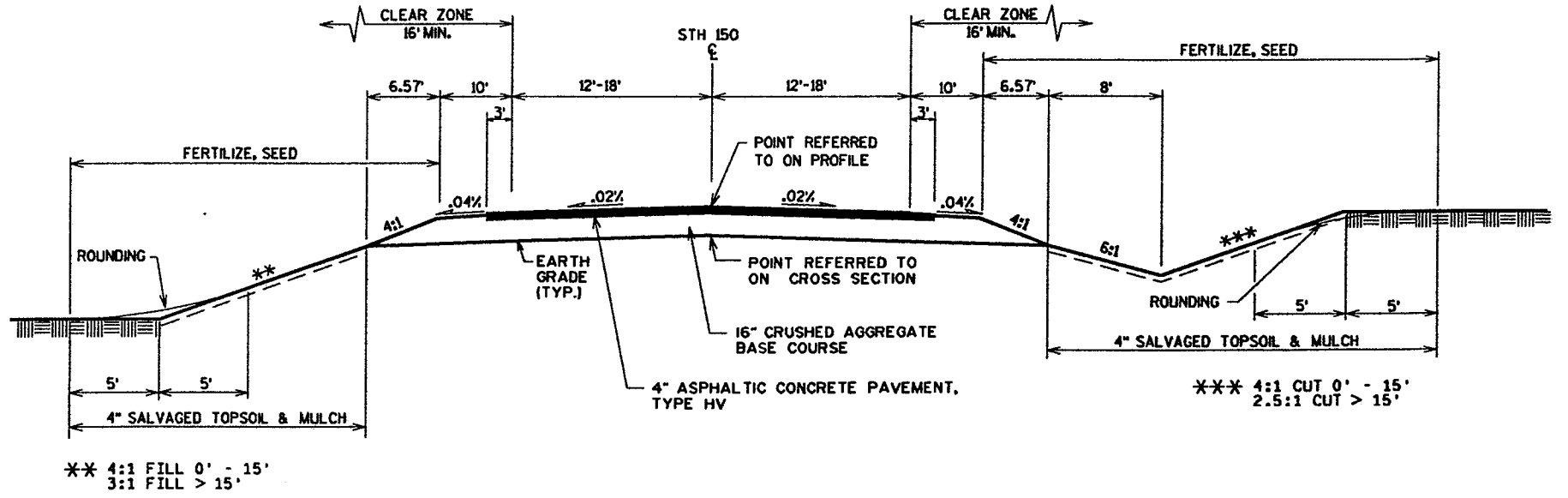
CTH CB

STA. 338+73.50 TO STA. 365+82.40

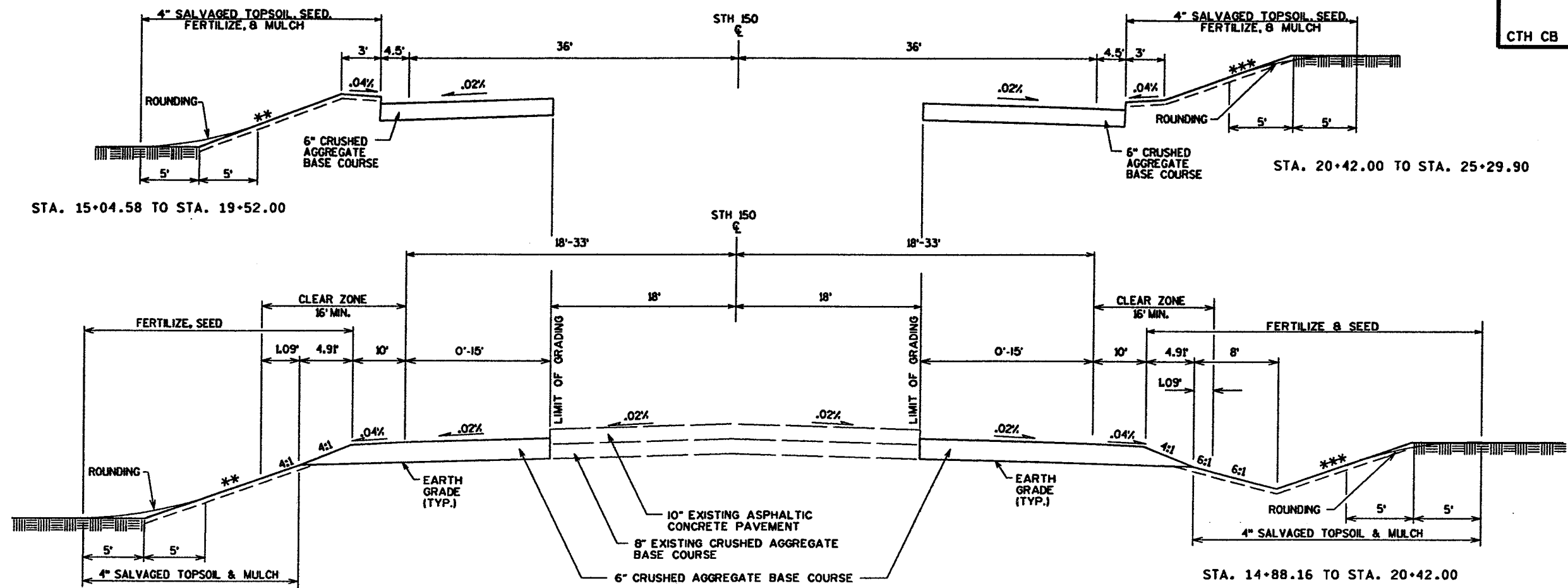
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



PROPOSED TYPICAL SECTION
 CTH CB
 STA. 365+82.40 TO STA. 371+32.86



PROPOSED TYPICAL SECTION - STH 150
 S.T.H. 150
 STA. 11+86.18 TO STA. 14+88.16
 STA. 25+29.90 TO STA. 30+01.73



STA. 15+04.58 TO STA. 19+52.00

STA. 20+42.00 TO STA. 25+29.90

STA. 19+52.00 TO STA. 24+83.14

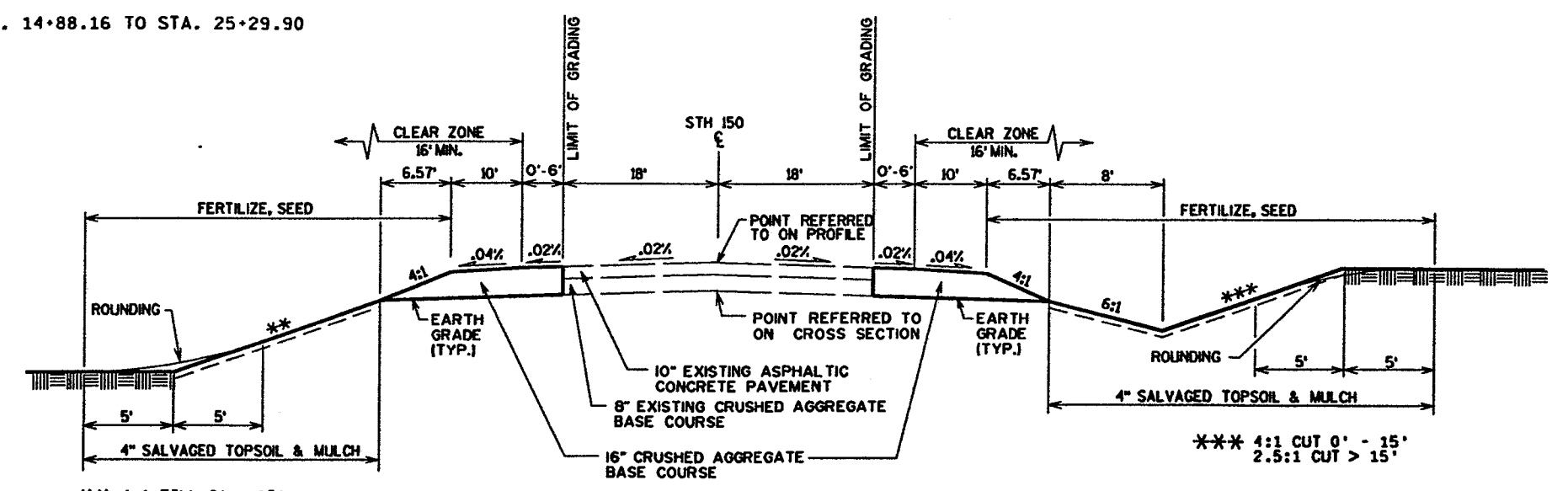
** 4:1 FILL 0' - 15'
3:1 FILL > 15'

PROPOSED TYPICAL GRADING SECTION - STH 150

STA. 14+88.16 TO STA. 25+29.90

STA. 14+88.16 TO STA. 20+42.00

*** 4:1 CUT 0' - 15'
2.5:1 CUT > 15'



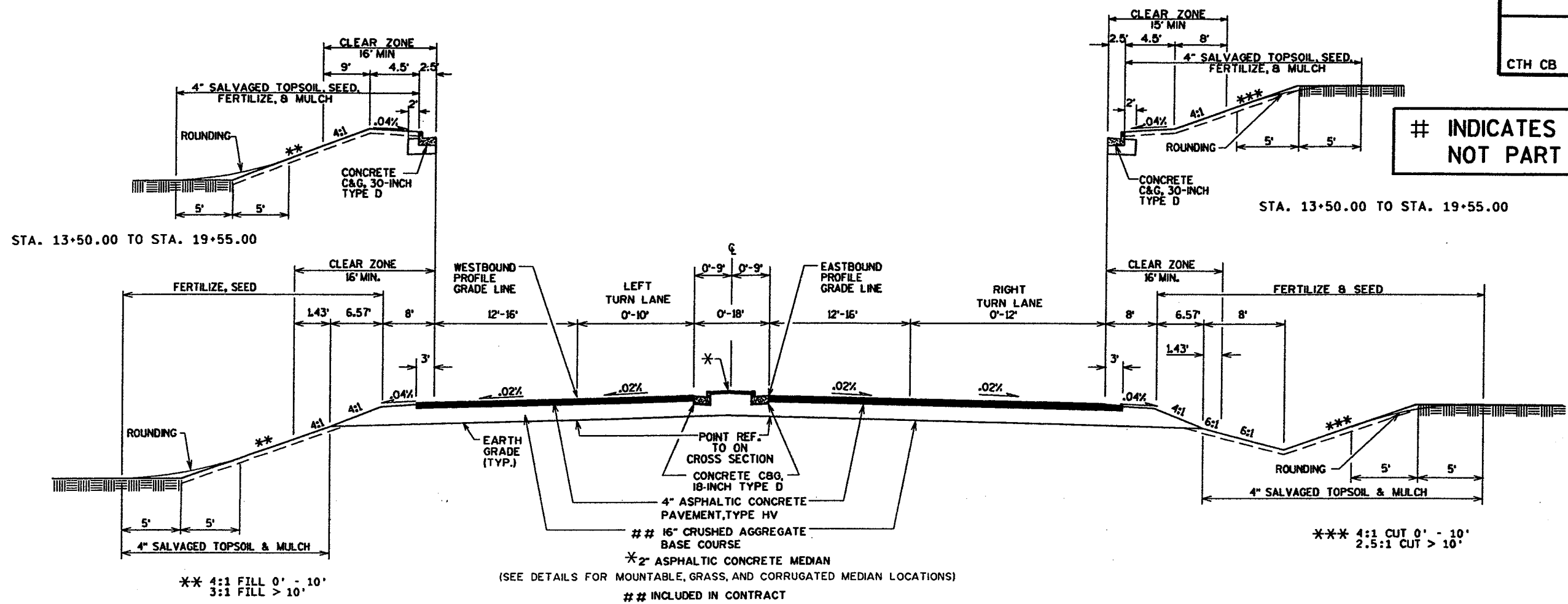
** 4:1 FILL 0' - 15'
3:1 FILL > 15'

*** 4:1 CUT 0' - 15'
2.5:1 CUT > 15'

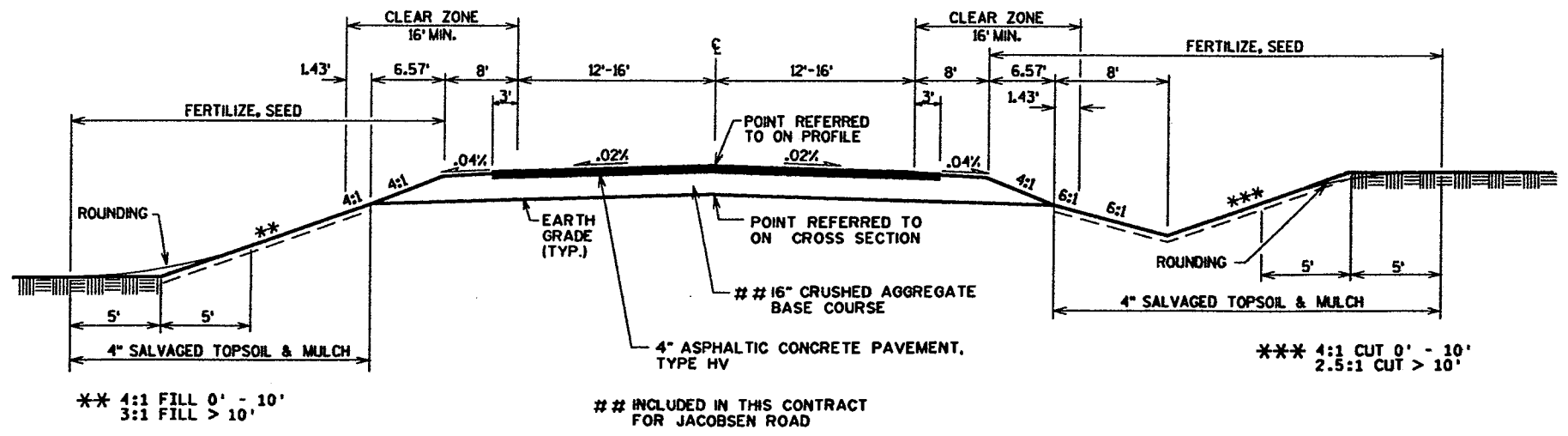
PROPOSED TYPICAL GRADING SECTION - STH 150

STA. 11+86.18 TO STA. 14+88.16
STA. 25+29.90 TO STA. 30+01.73

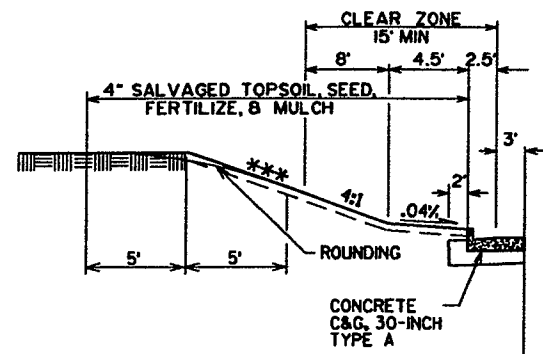
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



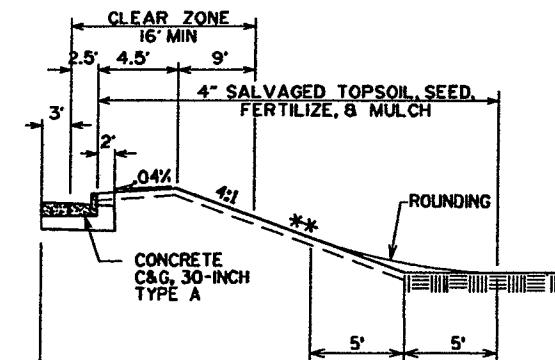
PROPOSED TYPICAL SECTION - JACOBSEN ROAD



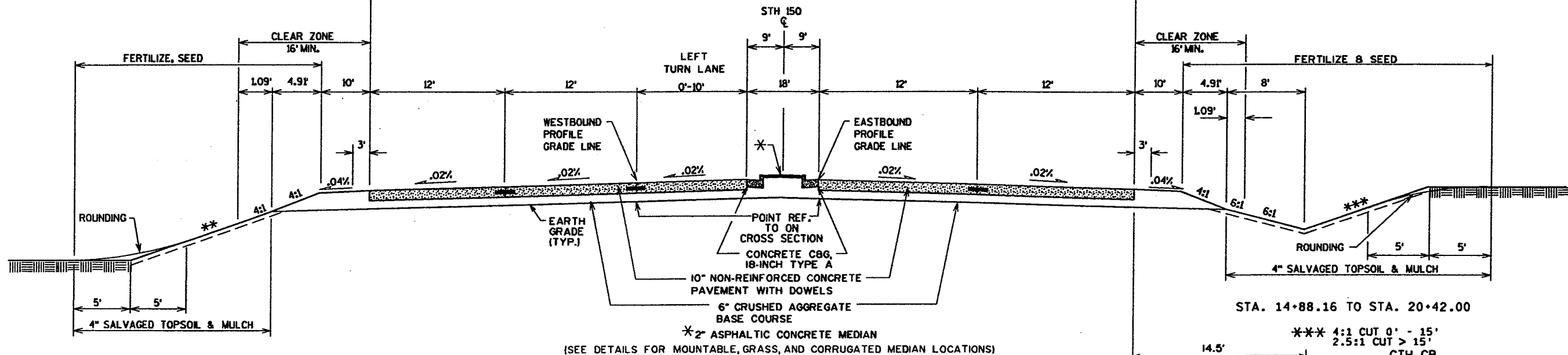
PROPOSED TYPICAL SECTION - SIDE ROADS



STA. 20+42.00 TO STA. 25+29.90



STA. 15+04.58 TO STA. 19+52.00



STA. 19+52.00 TO STA. 24+83.14

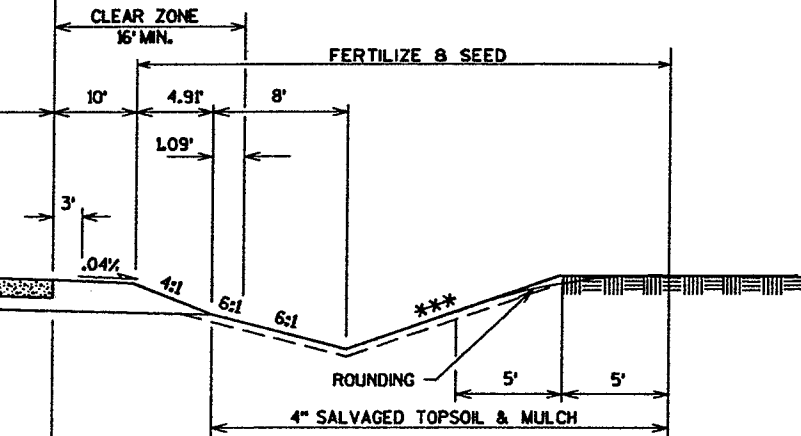
** 4:1 FILL 0' - 15'
3:1 FILL > 15'

* 2" ASPHALTIC CONCRETE MEDIAN
(SEE DETAILS FOR MOUNTABLE, GRASS, AND CORRUGATED MEDIAN LOCATIONS)

PROPOSED TYPICAL SECTION - STH 150

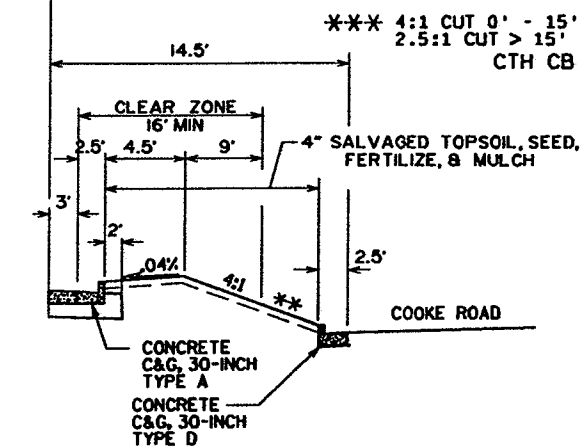
STA. 14+88.16 TO STA. 25+29.90

**THIS SHEET IS FOR
INFORMATION ONLY**

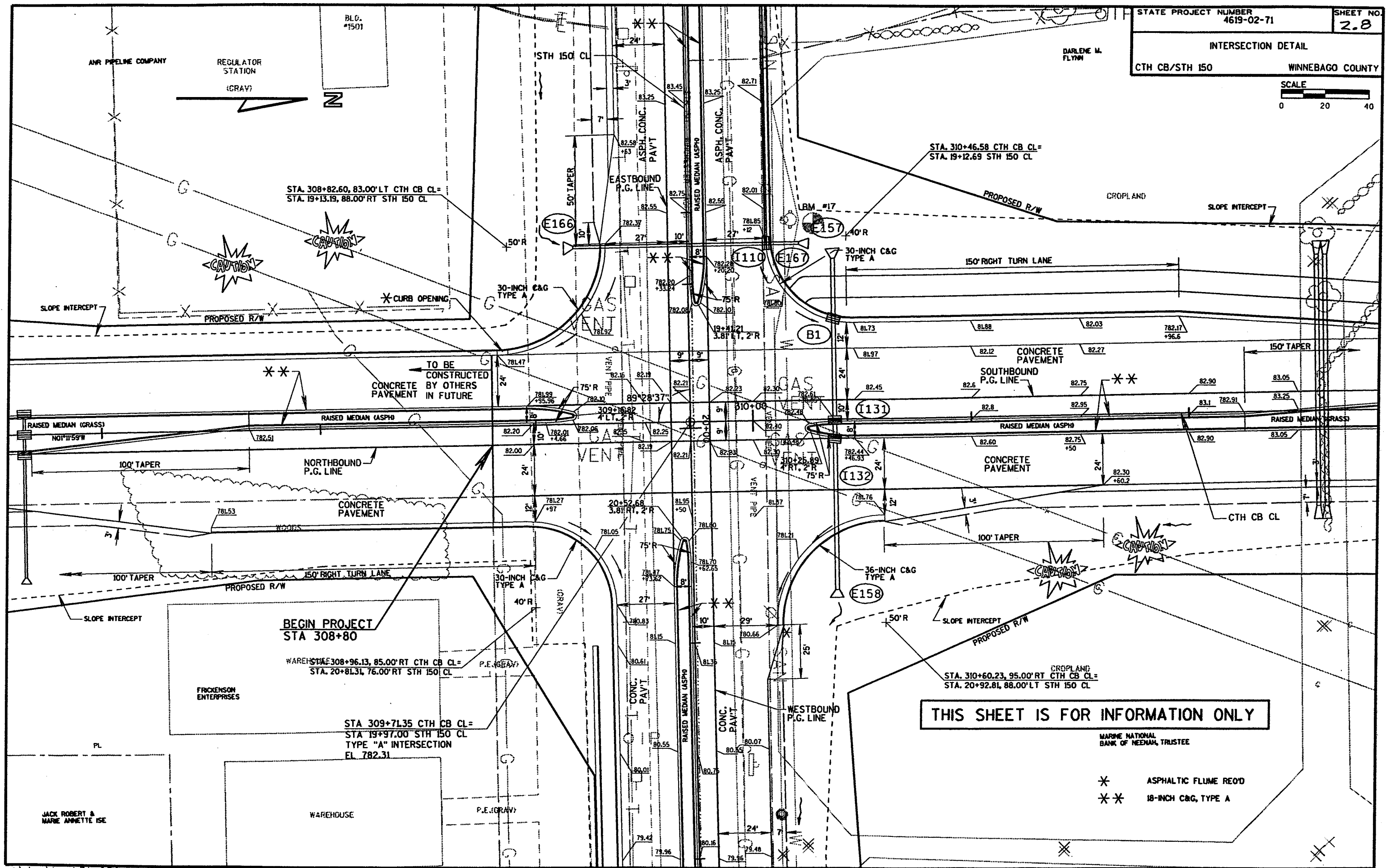
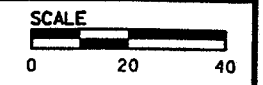


STA. 14+88.16 TO STA. 20+42.00

*** 4:1 CUT 0' - 15'
2.5:1 CUT > 15'
CTH CB



STA. 22+00.00 TO STA. 25+34.00



MARINE NATIONAL BANK OF NEENAH, TRUSTEE
 * ASPHALTIC FLUME REOD
 ** 18-INCH C&G, TYPE A

THIS SHEET IS FOR INFORMATION ONLY

CURVE 124
 PI= 20+97.75
 R= 204.63
 L= 121.37
 T= 62.53
 D= 28°00'00"
 Δ= 33°58'57"
 E= 62.53
 PC= 20+35.23
 PT= 21+56.60
 SE= NC

STA. 13+80 STH 150
 1-15"x84" RCCP CLASS III REQ'D.
 2-CONC. APRON ENDWALLS REQ'D
 INL. 784.1
 DISCH. 783.6

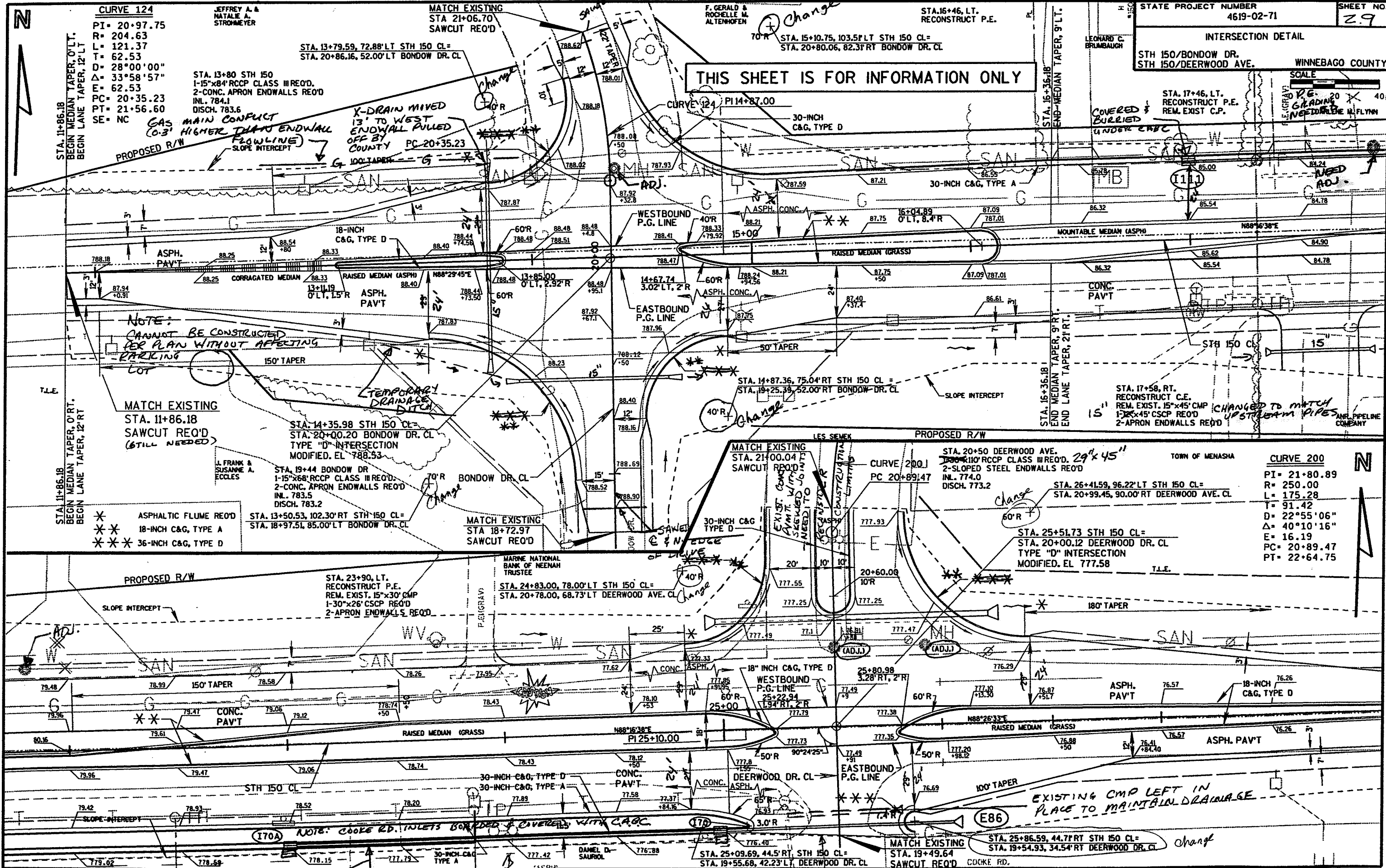
STA. 13+79.59, 72.88' LT STH 150 CL=
 STA. 20+86.16, 52.00' LT BONDOW DR. CL

STA. 15+46, LT.
 RECONSTRUCT P.E.

STA. 15+10.75, 103.5' LT STH 150 CL=
 STA. 20+80.06, 82.3' RT BONDOW DR. CL

STA. 17+46, LT.
 RECONSTRUCT P.E.
 REM. EXIST. C.P.

STA. 17+58, RT.
 RECONSTRUCT C.E.
 REM. EXIST. 15"x45' CMP
 1-15"x45' CSCP REQ'D
 2-APRON ENDWALLS REQ'D



NOTE:
 CANNOT BE CONSTRUCTED
 PER PLAN WITHOUT AFFECTING
 PARKING LOT

MATCH EXISTING
 STA. 11+86.18
 SAWCUT REQ'D
 (STILL NEEDED)

STA. 14+35.98 STH 150 CL=
 STA. 20+00.20 BONDOW DR. CL
 TYPE "D" INTERSECTION
 MODIFIED. EL. 788.53

STA. 19+44 BONDOW DR
 1-15"x68" RCCP CLASS III REQ'D.
 2-CONC. APRON ENDWALLS REQ'D
 INL. 783.5
 DISCH. 783.2

STA. 13+50.53, 102.30' RT STH 150 CL=
 STA. 18+97.51, 85.00' LT BONDOW DR. CL

MATCH EXISTING
 STA. 18+72.97
 SAWCUT REQ'D

STA. 24+83.00, 78.00' LT STH 150 CL=
 STA. 20+78.00, 68.73' LT DEERWOOD AVE. CL

MATCH EXISTING
 STA. 21+00.04
 SAWCUT REQ'D

CURVE 200
 PC 20+89.47

STA. 20+50 DEERWOOD AVE.
 1-15"x110" RCCP CLASS III REQ'D.
 2-SLOPED STEEL ENDWALLS REQ'D
 INL. 774.0
 DISCH. 773.2

STA. 26+41.59, 96.22' LT STH 150 CL=
 STA. 20+99.45, 90.00' RT DEERWOOD AVE. CL

STA. 25+51.73 STH 150 CL=
 STA. 20+00.12 DEERWOOD DR. CL
 TYPE "D" INTERSECTION
 MODIFIED. EL. 777.58

STA. 23+90, LT.
 RECONSTRUCT P.E.
 REM. EXIST. 15"x30' CMP
 1-30"x26' CSCP REQ'D
 2-APRON ENDWALLS REQ'D

PROPOSED R/W
 SLOPE INTERCEPT

150' TAPER
 CONC. PAVT

SLOPE INTERCEPT

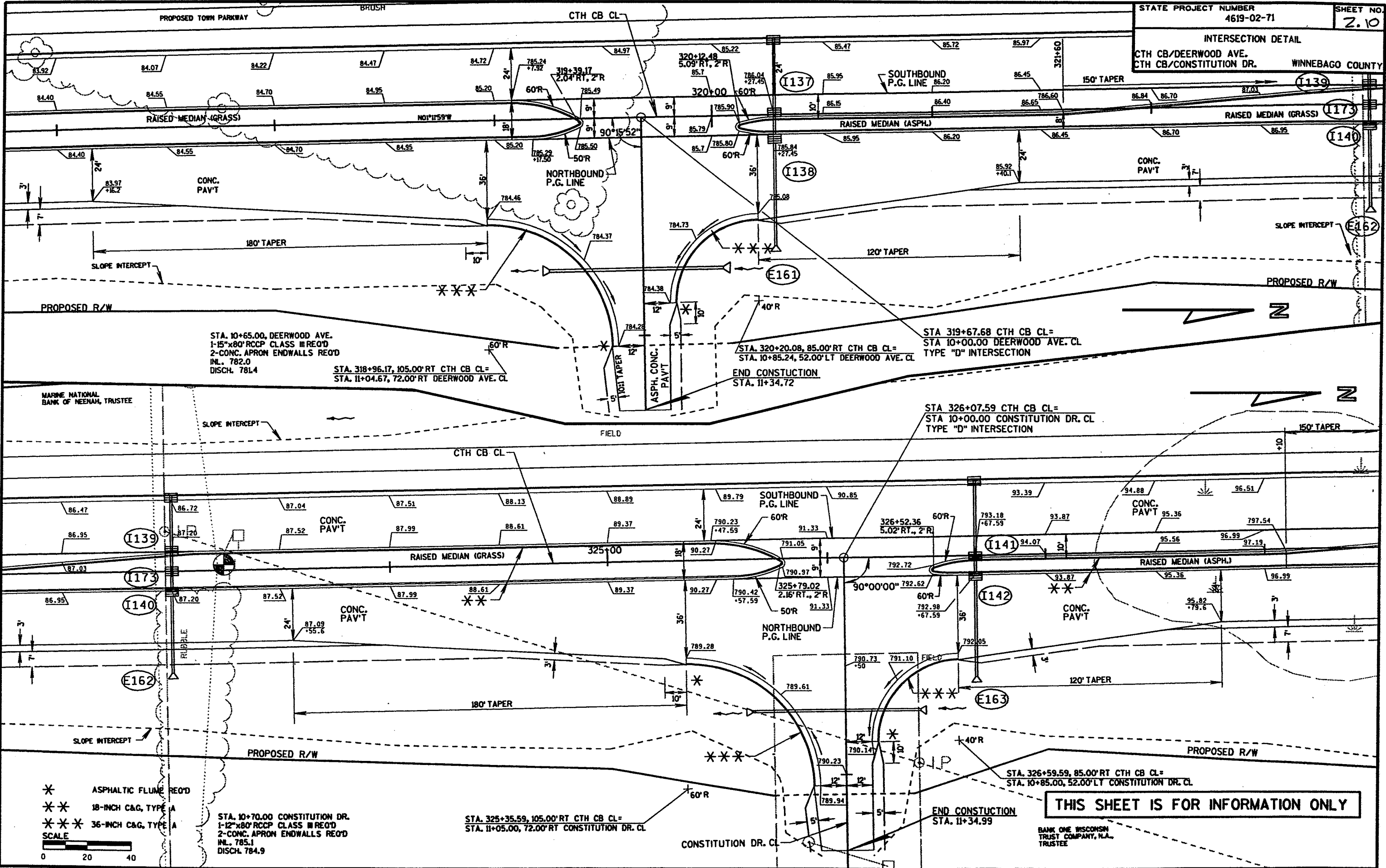
NOTE: COOKE RD. INLETS BORED & COVERED WITH C&G

EXISTING CMP LEFT IN PLACE TO MAINTAIN DRAINAGE

MATCH EXISTING
 STA. 19+49.64
 SAWCUT REQ'D COOKE RD.

STA. 25+09.69, 44.5' RT, STH 150 CL=
 STA. 19+55.68, 42.23' LT, DEERWOOD DR. CL

SAWCUT - PAVING CONTRACT WILL NEED TO INCLUDE...



* ASPHALTIC FLUME REQ'D
 ** 18-INCH C&G, TYPE A
 *** 36-INCH C&G, TYPE A
 SCALE
 0 20 40

STA. 10+70.00 CONSTITUTION DR.
 1-12"x80" RCCP CLASS III REQ'D
 2-CONC. APRON ENDWALLS REQ'D
 INL. 785.1
 DISCH. 784.9

STA. 325+35.59, 105.00' RT CTH CB CL=
 STA. 11+05.00, 72.00' RT CONSTITUTION DR. CL

CONSTITUTION DR. CL
 END CONSTRUCTION
 STA. 11+34.99

STA. 326+59.59, 85.00' RT CTH CB CL=
 STA. 10+85.00, 52.00' LT CONSTITUTION DR. CL

THIS SHEET IS FOR INFORMATION ONLY

BANK ONE WISCONSIN
 TRUST COMPANY, N.A.
 TRUSTEE

CURVE 101
 PI= 359+32.77
 R= 1175.30
 L= 1090.11
 T= 587.81
 D= 4°52'30"
 Δ= 53°08'34"
 E= 138.79
 PC= 353+44.96
 PT= 364+35.07
 SE= 0.050'
 RO= 137.50'

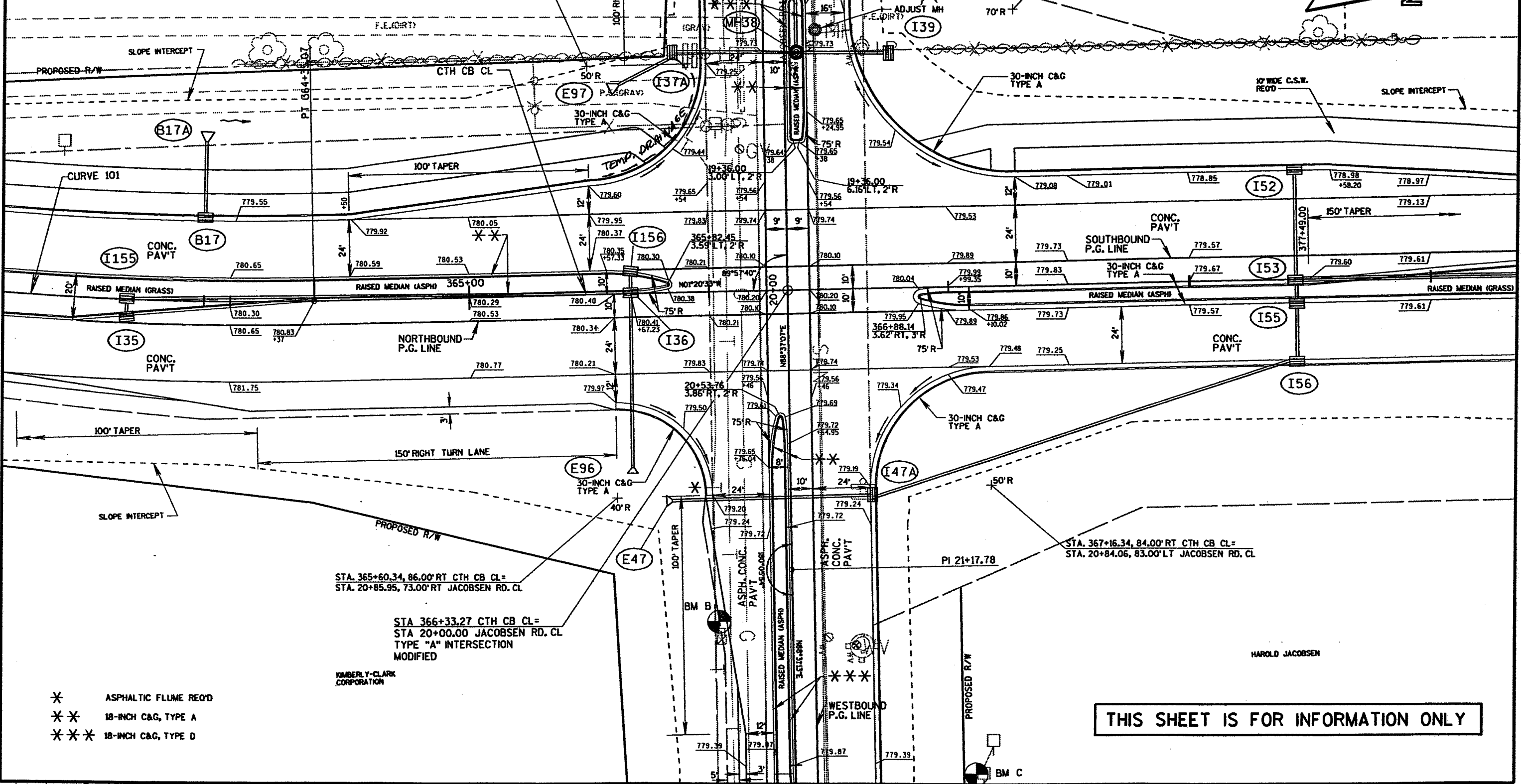
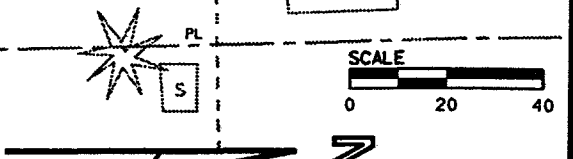
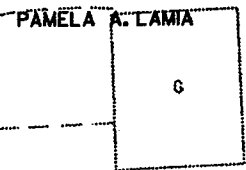
ZAC INVESTMENT CORP.

STA. 18+88, RT.
 REMOVE F.E.
 REM. EXIST. 15"x25' CMP

STA. 19+20, RT.
 REMOVE P.E.
 REM. EXIST. 15"x20' CMP

STA. 18+32, LT.
 RECONSTRUCT P.E.
 REM. EXIST. 15"x20' CMP

STA. 18+65, LT.
 REMOVE F.E.
 REM. EXIST. 15"x16' CMP



- * ASPHALTIC FLUME ROAD
- * * 18-INCH C&G, TYPE A
- * * * 18-INCH C&G, TYPE D

STA. 365+60.34, 86.00' RT CTH CB CL=
 STA. 20+85.95, 73.00' RT JACOBSEN RD. CL

STA. 366+33.27 CTH CB CL=
 STA. 20+00.00 JACOBSEN RD. CL
 TYPE "A" INTERSECTION
 MODIFIED

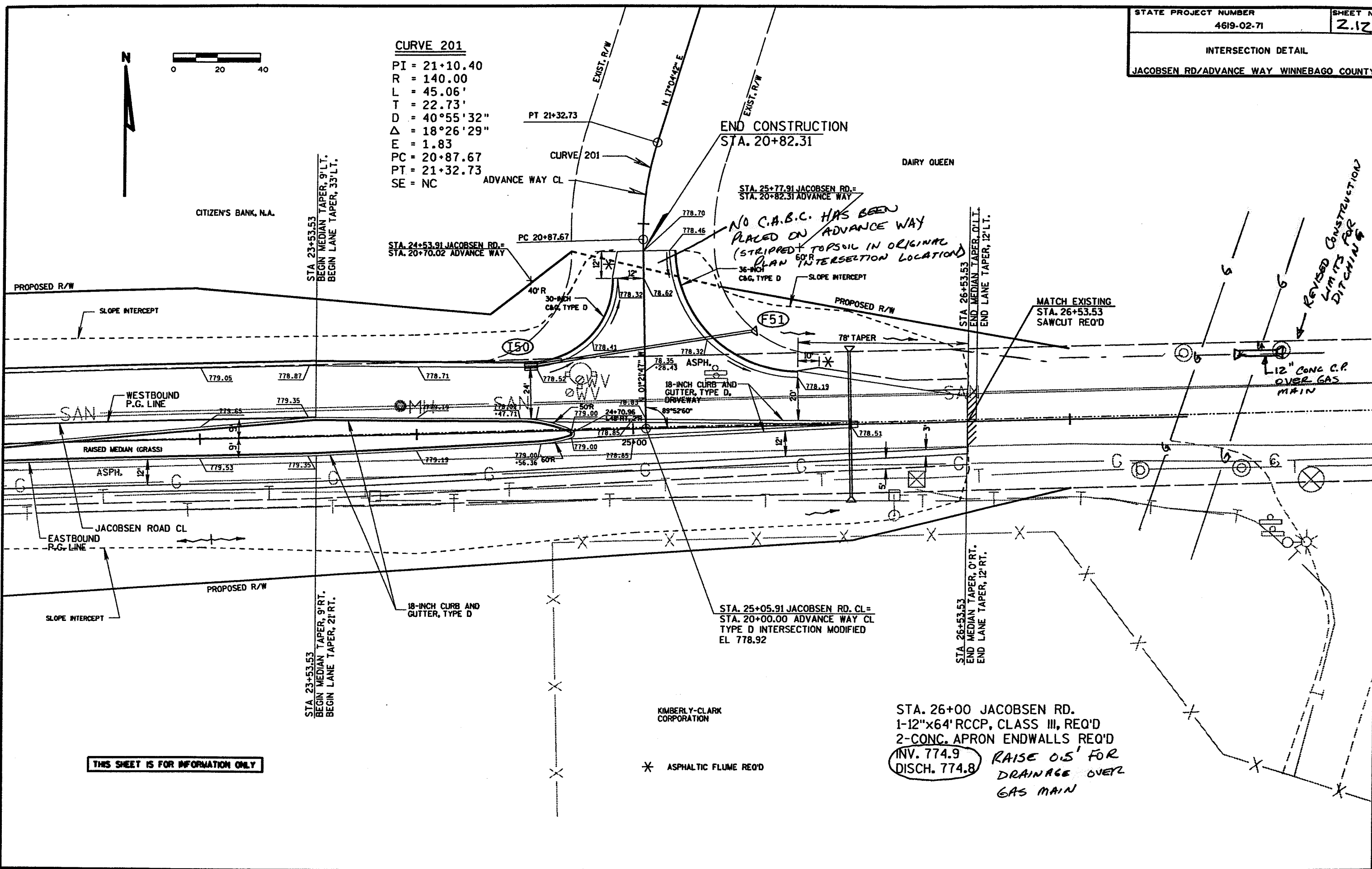
KIMBERLY-CLARK CORPORATION

THIS SHEET IS FOR INFORMATION ONLY

HAROLD JACOBSEN

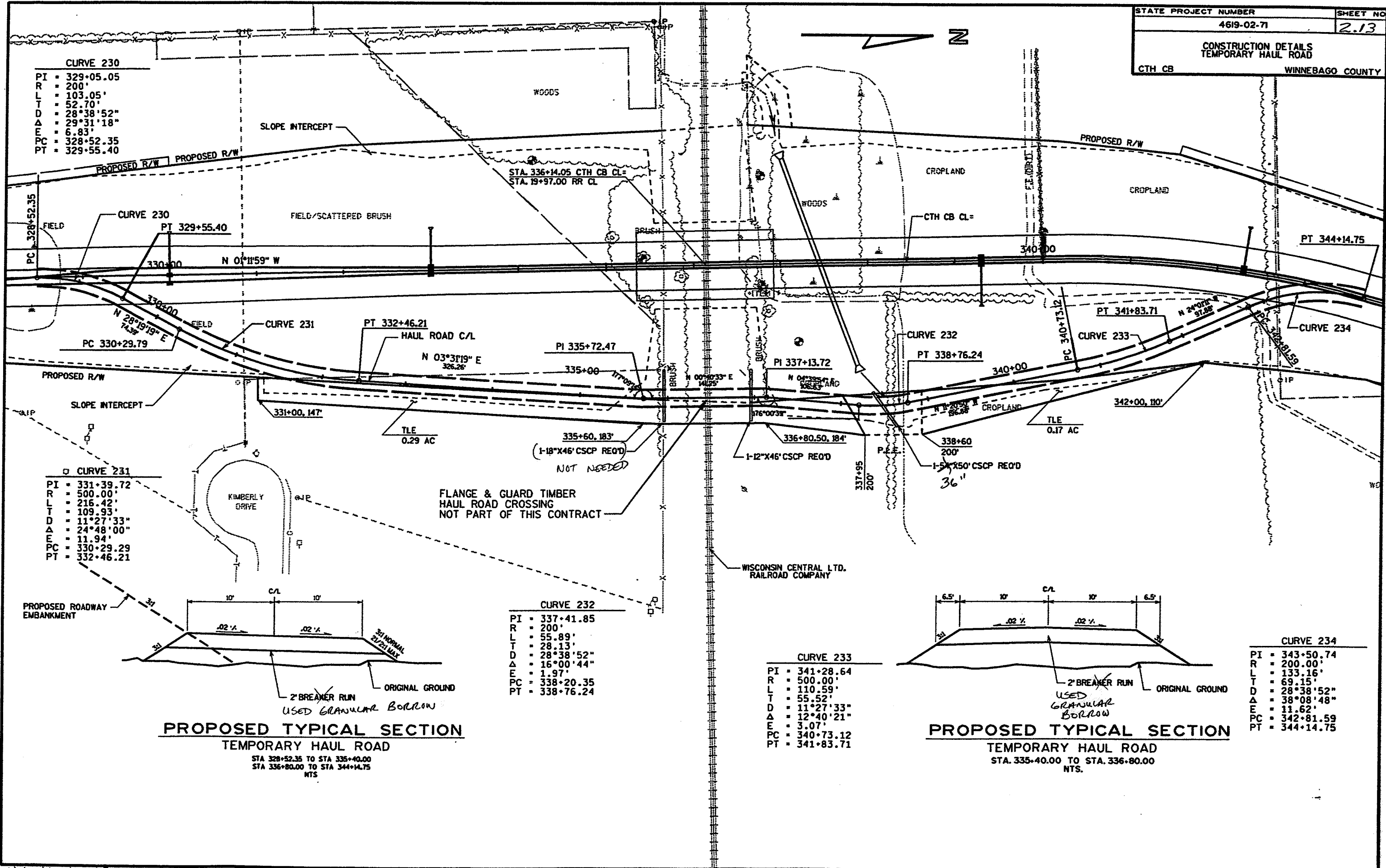


CURVE 201
 PI = 21+10.40
 R = 140.00
 L = 45.06'
 T = 22.73'
 D = 40°55'32"
 Δ = 18°26'29"
 E = 1.83
 PC = 20+87.67
 PT = 21+32.73
 SE = NC



THIS SHEET IS FOR INFORMATION ONLY

STA. 26+00 JACOBSEN RD.
 1-12"x64" RCCP, CLASS III, REQ'D
 2-CONC. APRON ENDWALLS REQ'D
 INV. 774.9
 DISCH. 774.8
 RAISE 0.5' FOR DRAINAGE OVER GAS MAIN



CURVE 230

PI	329+05.05
R	200'
L	103.05'
T	52.70'
D	28°38'52"
Δ	29°31'18"
E	6.83'
PC	328+52.35
PT	329+55.40

CURVE 231

PI	331+39.72
R	500.00'
L	216.42'
T	109.93'
D	11°27'33"
Δ	24°48'00"
E	11.94'
PC	330+29.29
PT	332+46.21

CURVE 232

PI	337+41.85
R	200'
L	55.89'
T	28.13'
D	28°38'52"
Δ	16°00'44"
E	1.97'
PC	338+20.35
PT	338+76.24

CURVE 233

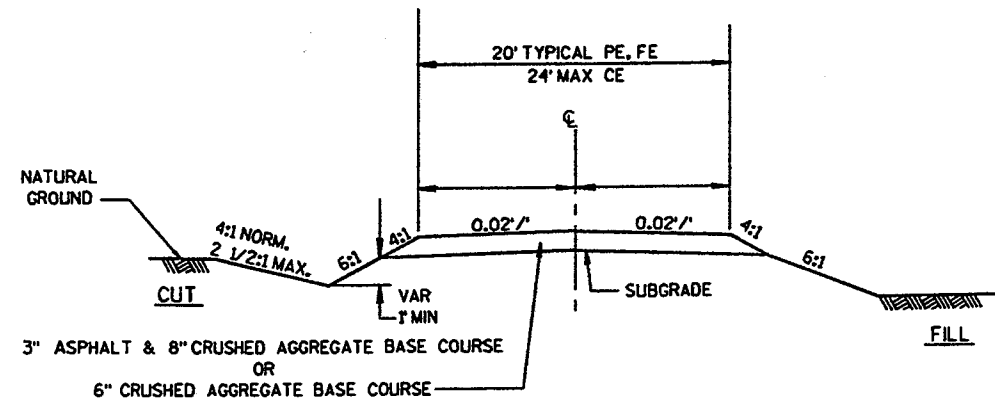
PI	341+28.64
R	500.00'
L	110.59'
T	55.52'
D	11°27'33"
Δ	12°40'21"
E	3.07'
PC	340+73.12
PT	341+83.71

CURVE 234

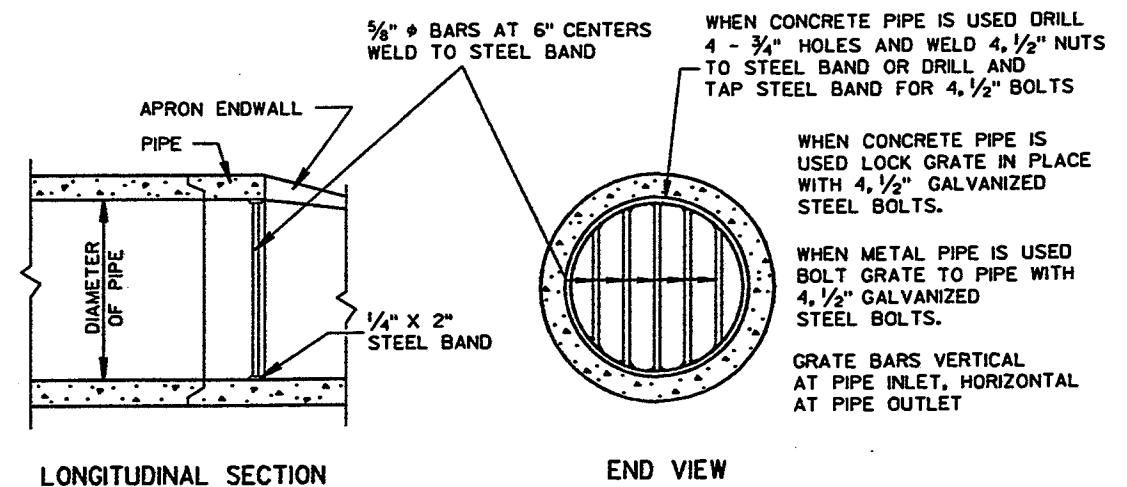
PI	343+50.74
R	200.00'
L	133.16'
T	69.15'
D	28°38'52"
Δ	38°08'48"
E	11.62'
PC	342+81.59
PT	344+14.75

PROPOSED TYPICAL SECTION
TEMPORARY HAUL ROAD
STA 328+52.35 TO STA 335+40.00
STA 336+80.00 TO STA 344+14.75
NTS

PROPOSED TYPICAL SECTION
TEMPORARY HAUL ROAD
STA 335+40.00 TO STA 336+80.00
NTS

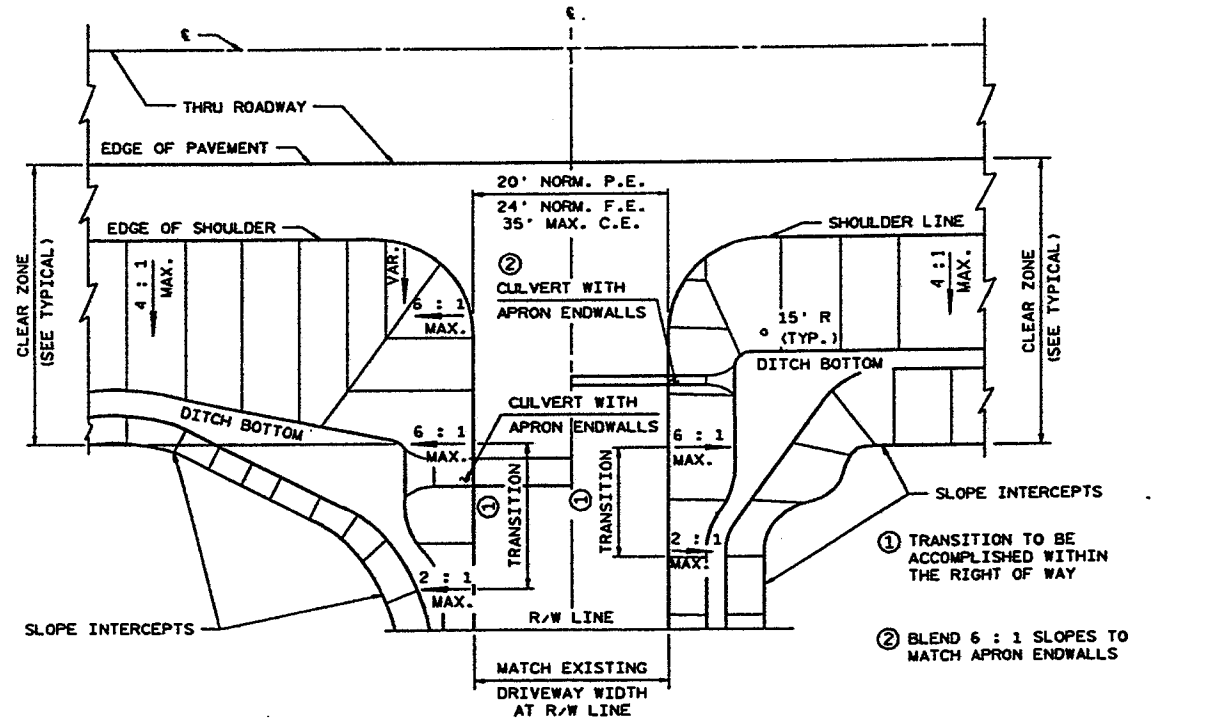


TYPICAL SECTION - DRIVEWAY

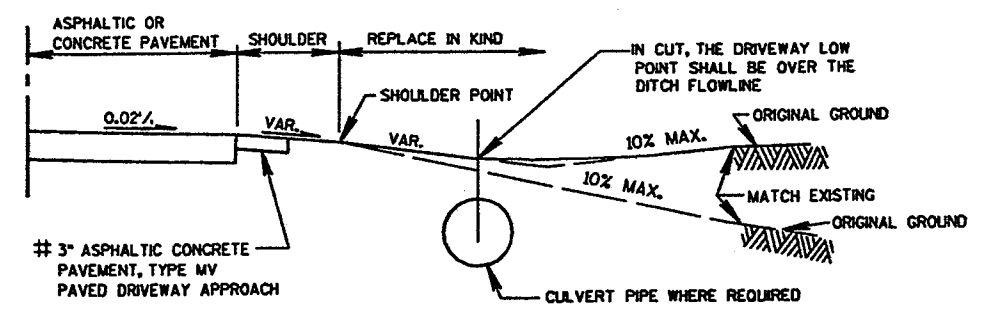


PIPE (END) GRATE DETAIL

NOT USED

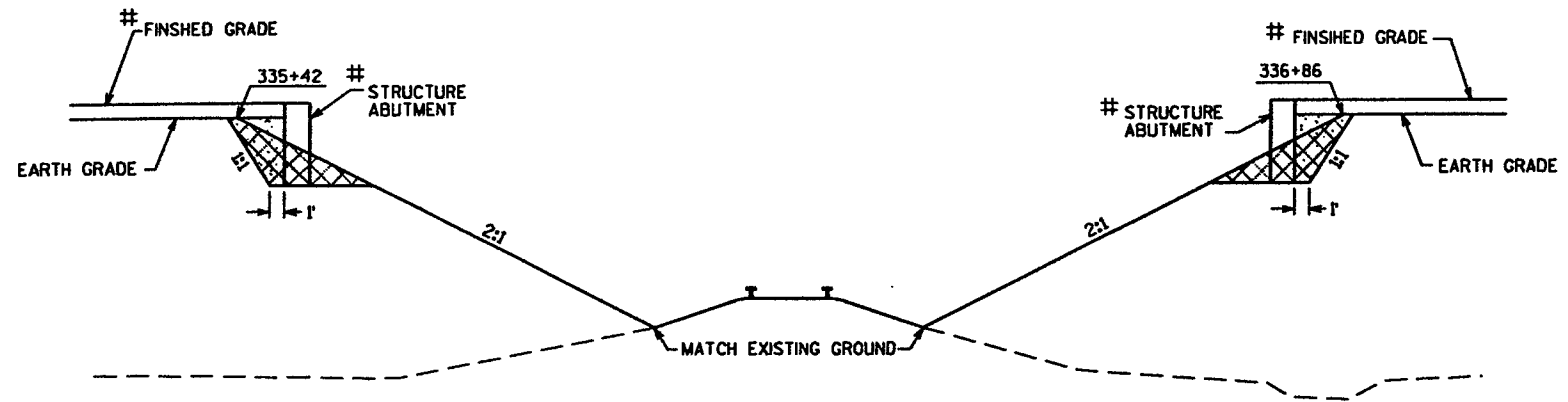


PLAN VIEW - DRIVEWAY



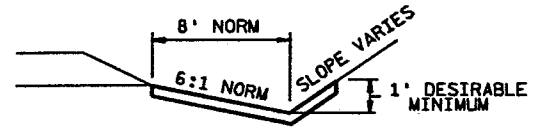
PROFILE VIEW
 TYPICAL DRIVEWAY DETAIL

* INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



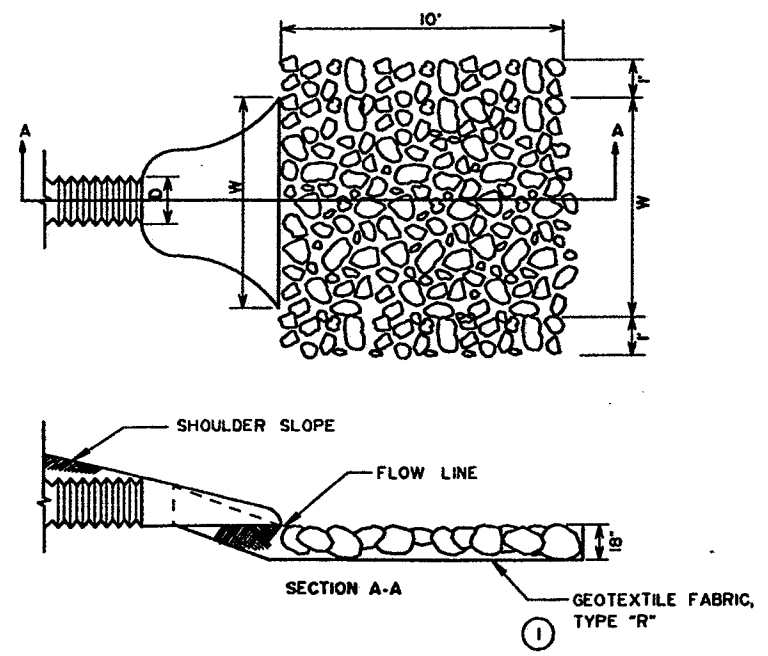
- FILL - THIS CONTRACT
- EXCAVATION FOR STRUCTURE
- GRANULAR BACKFILL

EMBankment Detail
 ABUTMENT FILL SLOPES AT B-70-183

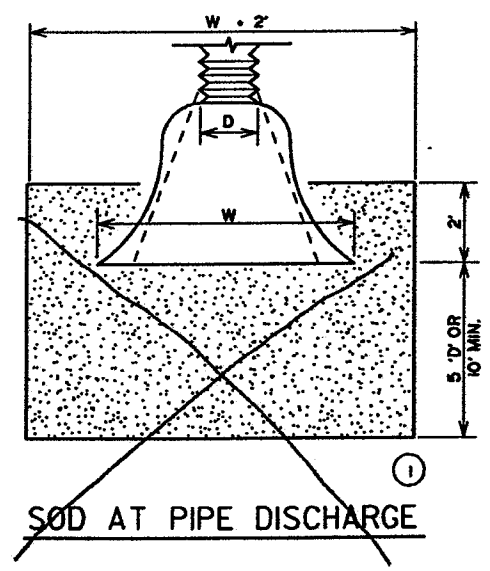


SOD Detail for Ditches

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

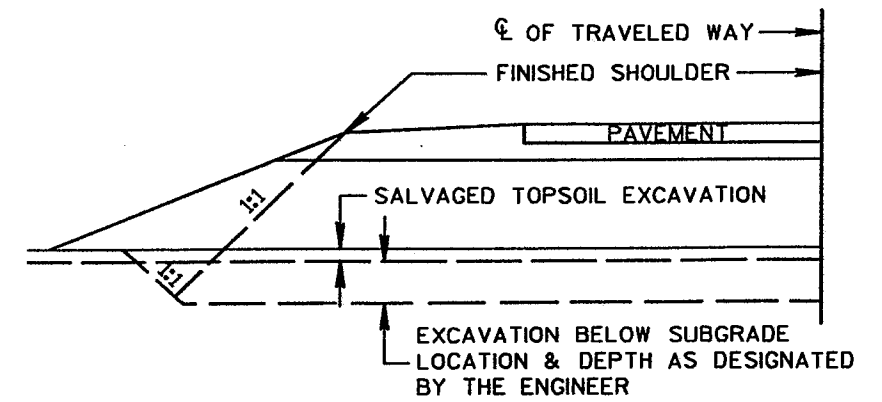


MEDIUM RANDOM RIPRAP AT PIPE DISCHARGE



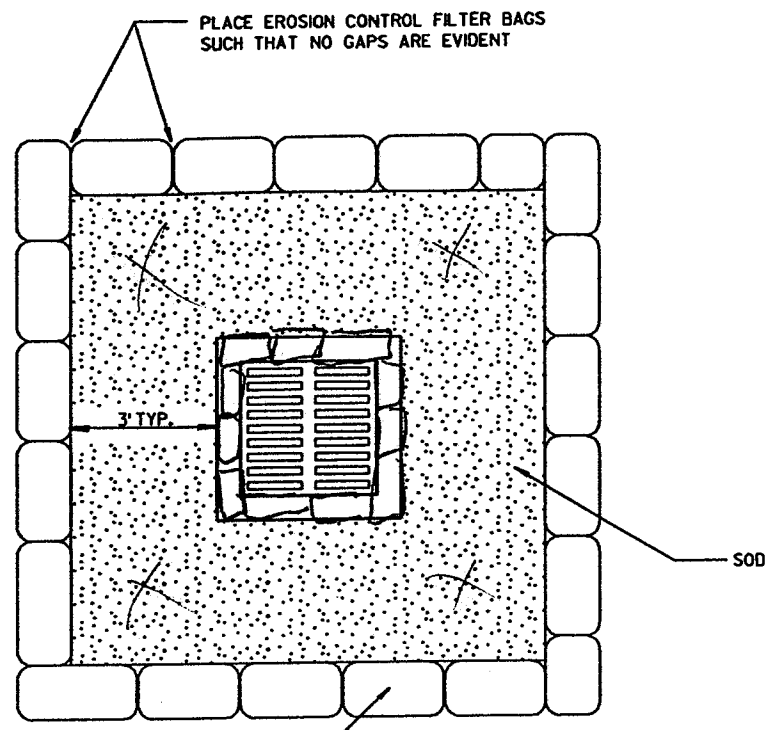
~~SOD AT PIPE DISCHARGE~~

REPLACED SOD WITH EROSION MAT, CLASS II, TYPE B "COCONUT MAT"



DETAIL FOR EXCAVATION BELOW SUBGRADE

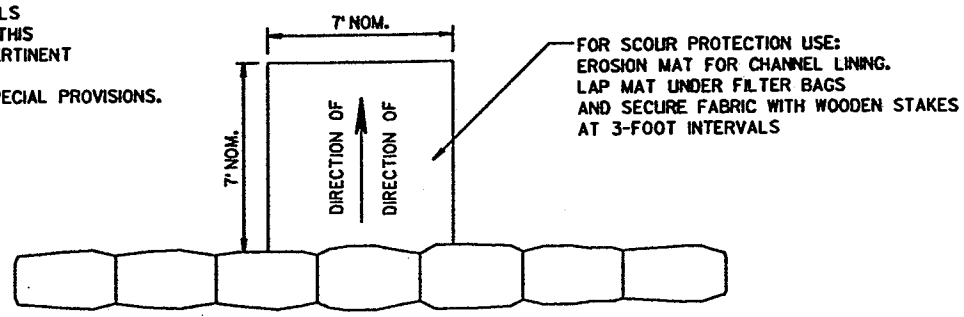
① SEE EROSION CONTROL PLANS FOR LOCATIONS



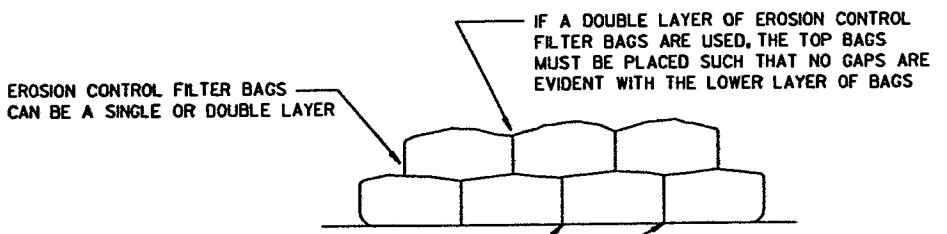
COARSE AGGREGATE FOR CONCRETE MASONRY, SIZE 1, CONTAINED IN PERVIOUS BURLAP BAGS OR SYNTHETIC NET BAGS (1/8-INCH MESH) APPROXIMATELY 24 INCHES LONG, 12 INCHES WIDE AND 6 INCHES HIGH

NOTE: EROSION CONTROL FILTER BAGS MAY BE USED ON PAVEMENT OR BARE GROUND. TREAT INLETS THAT ARE SPACED 8 FEET OR LESS AS ONE INLET FOR EROSION CONTROL.

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

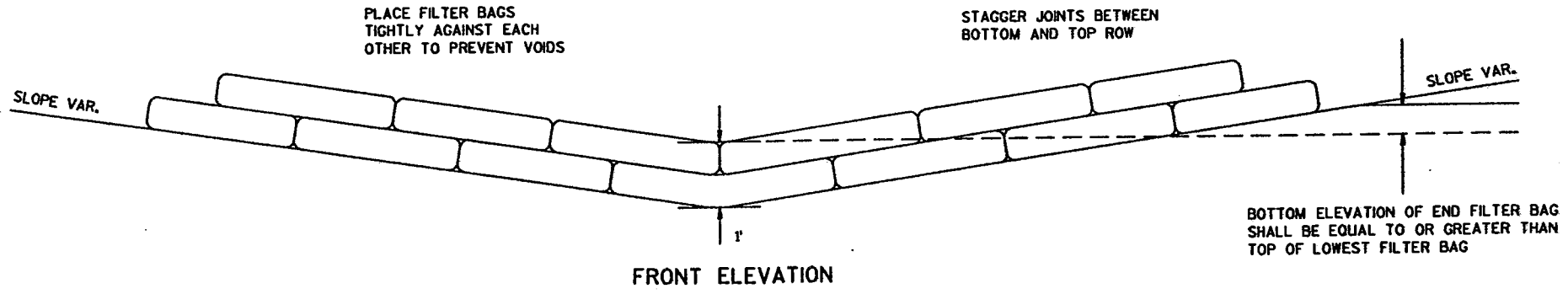


PLAN VIEW



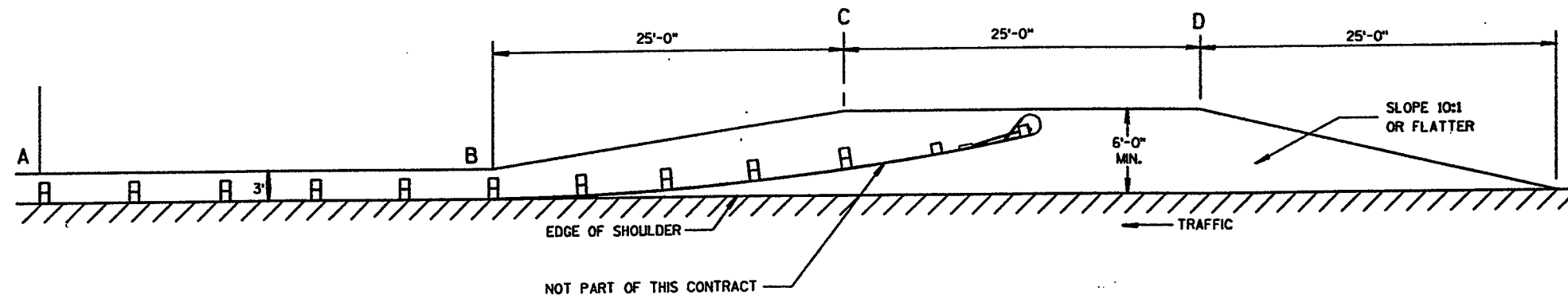
EROSION CONTROL FILTER BAGS CAN BE A SINGLE OR DOUBLE LAYER

DETAIL FOR EROSION CONTROL
(FILTER BAGS & SOD FOR AREA INLETS)



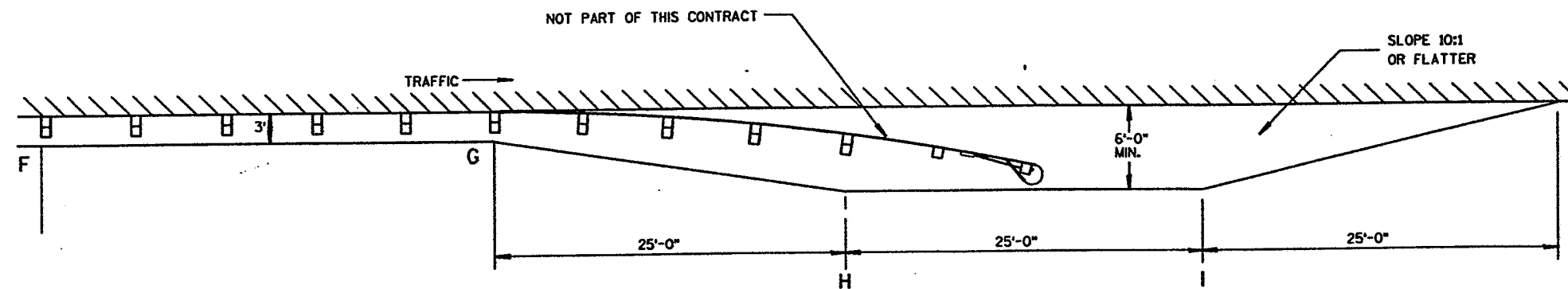
FRONT ELEVATION

FILTER BAG DITCH CHECK DETAIL



	POINT A	POINT B	POINT C	POINT D	POINT E
CTH CB, RT	335+30.00	331+90.50	331+65.50	331+40.50	331+15.50
CTH CB, LT	336+99.00	340+13.50	340+38.50	340+63.50	340+88.50

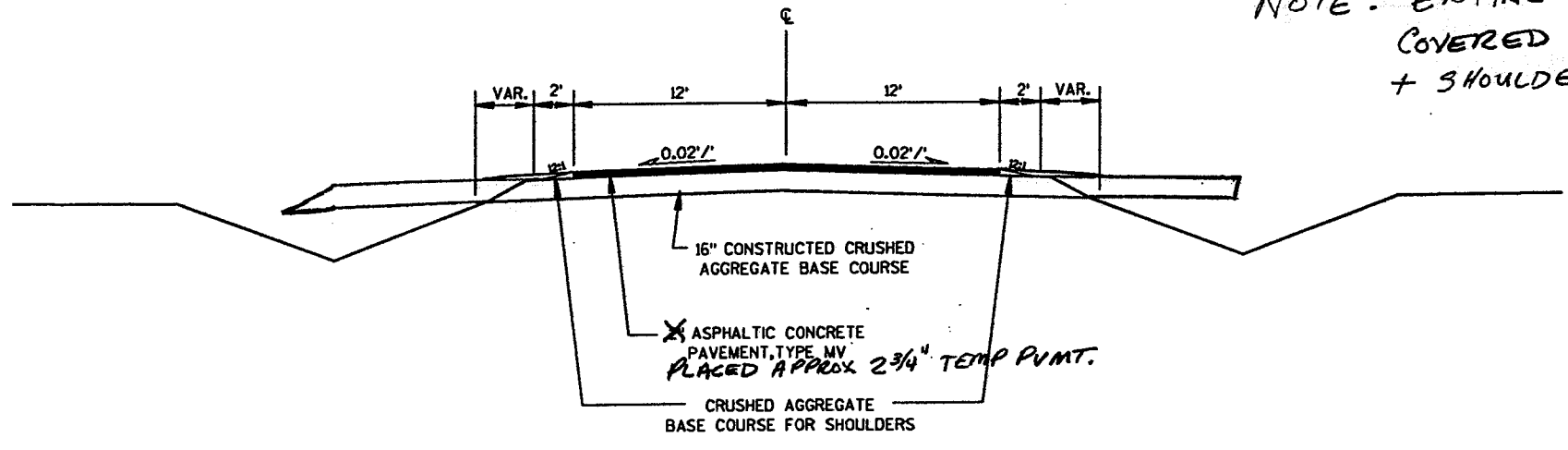
	POINT F	POINT G	POINT H	POINT I	POINT J
CTH CB, RT	336+99.00	340+13.50	340+38.50	340+63.50	340+88.50
CTH CB, LT	335+30.00	331+90.50	331+65.50	331+40.50	331+15.50



PLAN VIEW

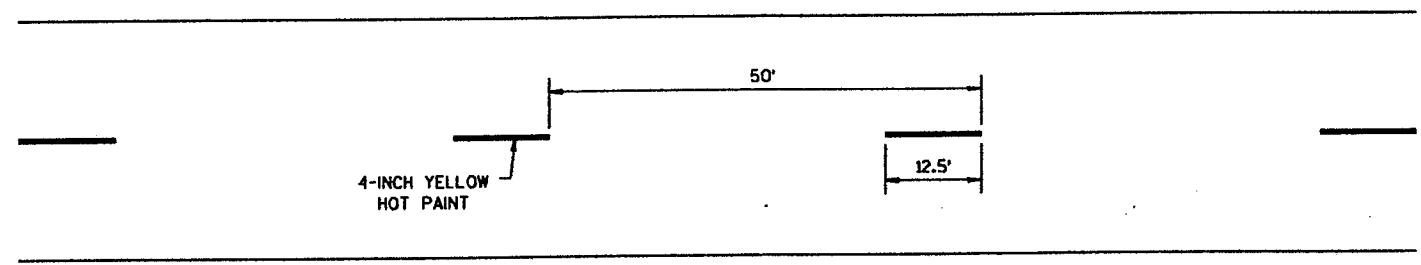
ROADWAY WIDENING FOR STEEL PLATE BEAM GUARD, CLASS A, AND TYPE 3 ANCHORAGE

NOTE: ENTIRE SUBGRADE COVERED WITH 16" C.A.B.C. + SHOULDERS



TEMPORARY ASPHALTIC CONCRETE PAVEMENT

- JACOBSEN ROAD
STA. 13+46.47 TO STA. 26+53.53
- BONDOW DRIVE
STA. 18+81.40 TO STA. 19+82.00
STA. 20+18.00 TO STA. 21+06.70
- DEERWOOD DRIVE
STA. 19+48.50 TO STA. 19+82.0
- DEERWOOD AVENUE
STA. 20+18.00 TO STA. 21+00.00

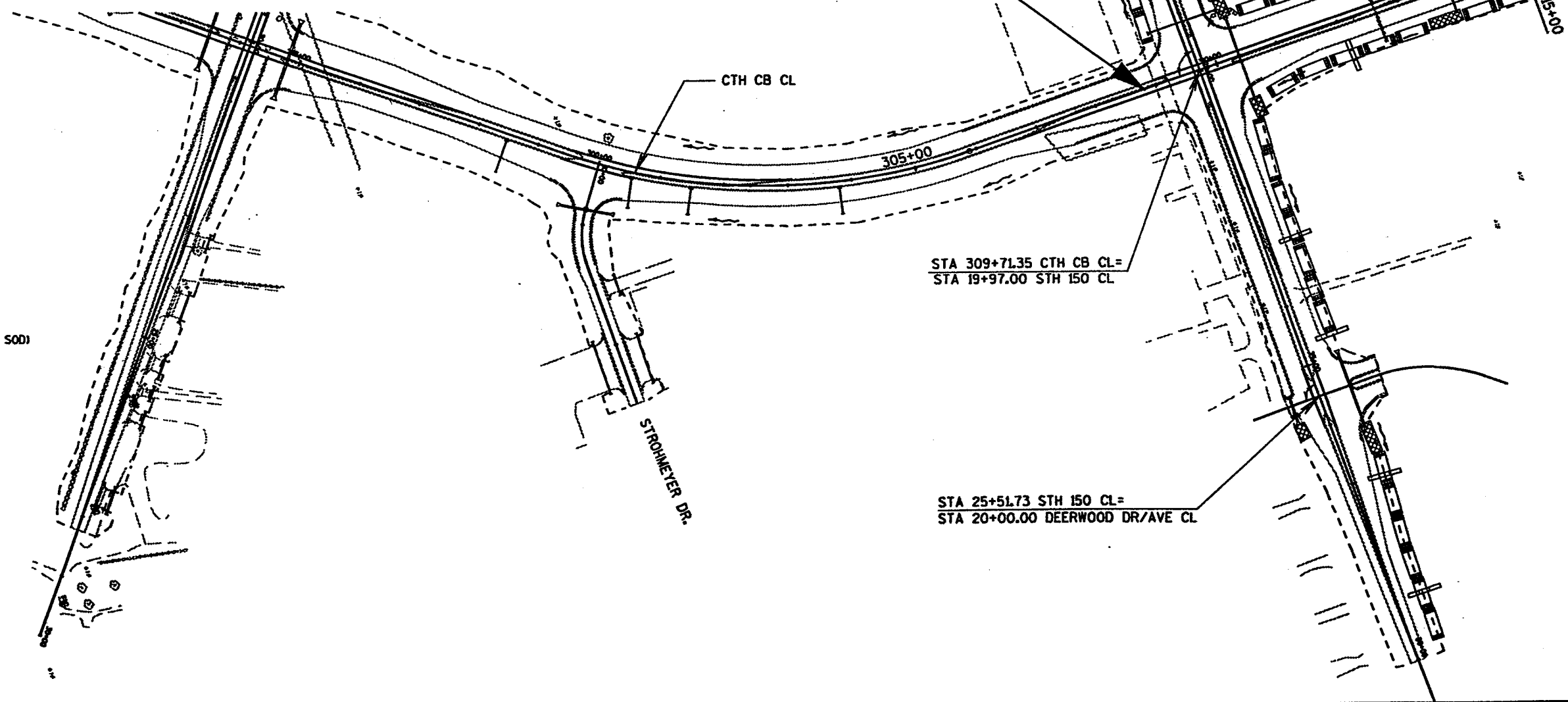


PAVEMENT MARKING DETAIL







- JACOBSEN ROAD
STA. 13+46 TO STA. 26+54
- BONDOW DRIVE
STA. 18+81 TO STA. 19+66
STA. 20+28 TO STA. 21+57
- ADVANCE WAY
STA. 20+28 TO STA. 21+07

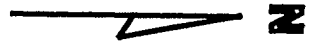
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.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 = 34.8 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 31.8 ACRES



LEGEND

-  EROSION MAT, CLASS I- TYPE B
-  EROSION MAT, CLASS II- TYPE A (WITH SOD)
-  SILT FENCE
-  MEDIUM RANDOM RIP RAP
-  FILTER BAG DITCH CHECK
-  DIRECTION OF FLOW

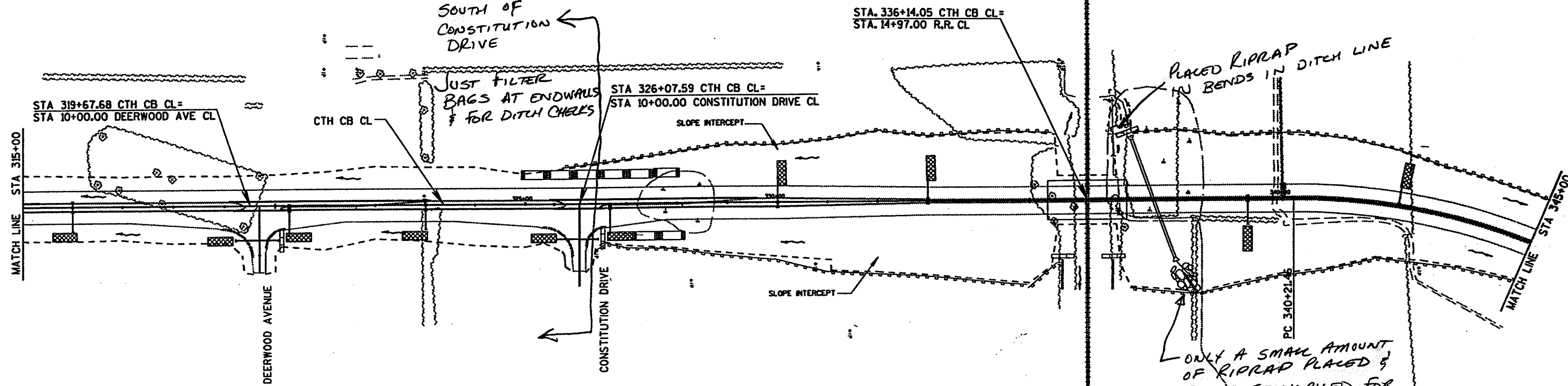


RESTORATION
& EROSION
CONTROL
NOT FINISHED
SOUTH OF
CONSTITUTION
DRIVE

JUST FILTER
BAGS AT ENDWALLS
& FOR DITCH CHECKS

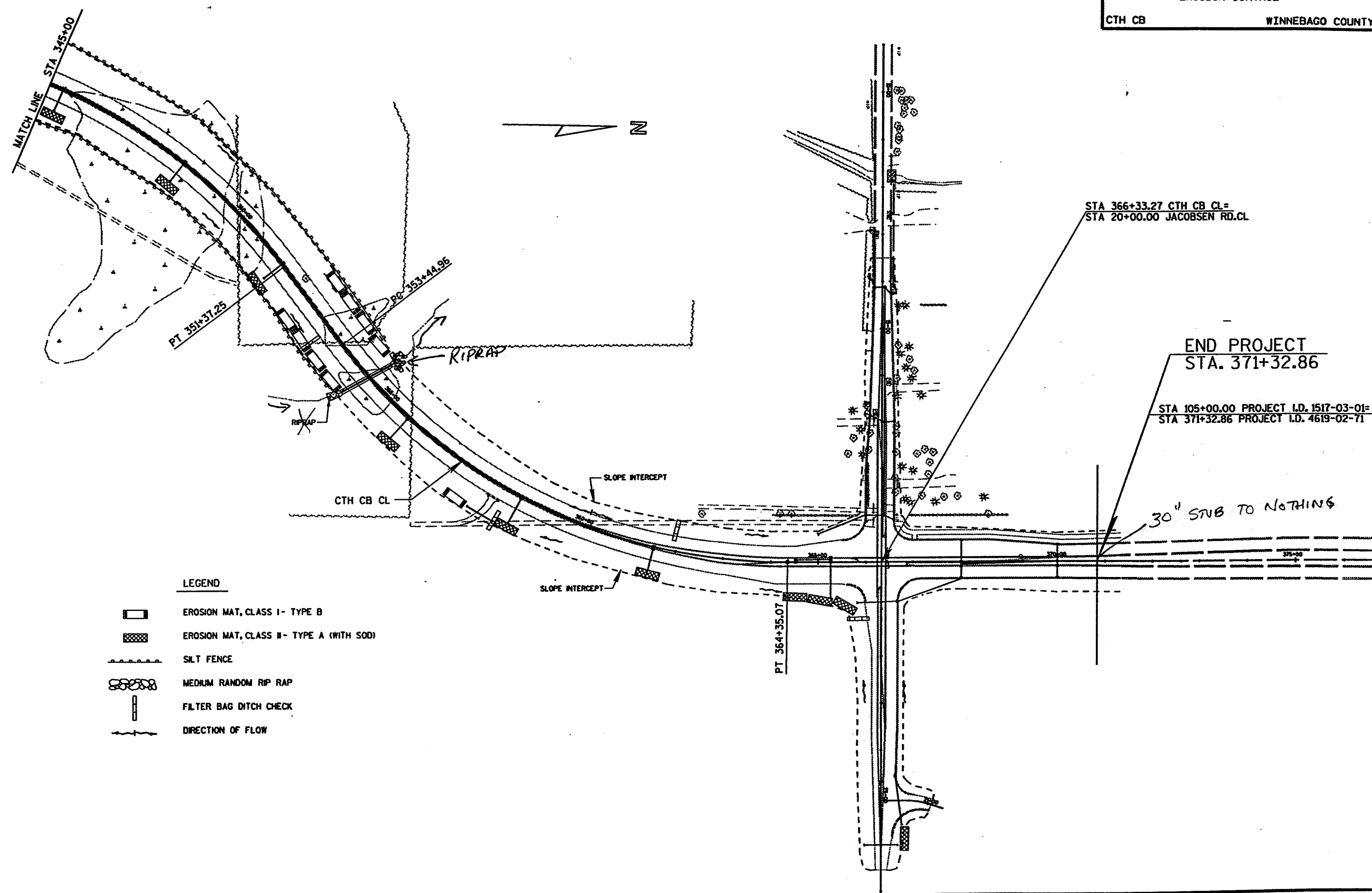
PLACED RIPRAP
IN BENDS IN DITCH LINE






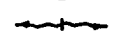
ONLY A SMALL AMOUNT
OF RIPRAP PLACED &
SOME STOCK PILED FOR
USE WHEN HAUL ROAD
IS REMOVED



LEGEND

- EROSION MAT, CLASS I - TYPE B
- EROSION MAT, CLASS II - TYPE A (WITH SOD)
- SILT FENCE
- MEDIUM RANDOM RIP RAP
- FILTER BAG DITCH CHECK
- DIRECTION OF FLOW



- LEGEND**
-  EROSION MAT, CLASS I- TYPE B
 -  EROSION MAT, CLASS II- TYPE A (WITH SOD)
 -  SILT FENCE
 -  MEDIUM RANDOM RIP RAP
 -  FILTER BAG DITCH CHECK
 -  DIRECTION OF FLOW

STA 366+33.27 CTH CB CL=
STA 20+00.00 JACOBSEN RD.CL

END PROJECT
STA. 371+32.86

STA 105+00.00 PROJECT I.D. 1517-03-01=
STA 371+32.86 PROJECT I.D. 4619-02-71

30" STUB TO NOTHING

GENERAL TRAFFIC CONTROL NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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

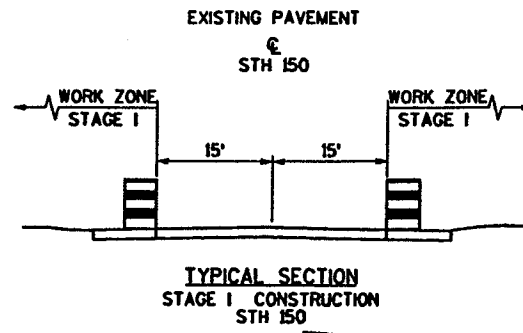
"W" SIGNS ARE THE SAME AS "A" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ACCESS MUST BE PROVIDED FOR ALL BUSINESSES AND RESIDENCES AT ALL TIMES DURING ALL STAGES OF CONSTRUCTION.

ALL TRAFFIC CONTROL DRUMS ARE TO BE PLACED AT 100 FOOT INTERVALS FOR TANGENT SECTIONS AND 50 FOOT INTERVALS FOR TAPERS UNLESS NOTED OTHERWISE ON PLANS

W020-4 AND W020-7 SIGNS SHALL BE REMOVED OR COVERED WHEN FLAGGING OPERATIONS ARE NOT IN USE.

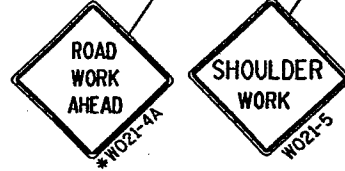
ALL TEMPORARY TRAVEL LANES SHALL BE A MINIMUM OF 10 FEET WIDE.



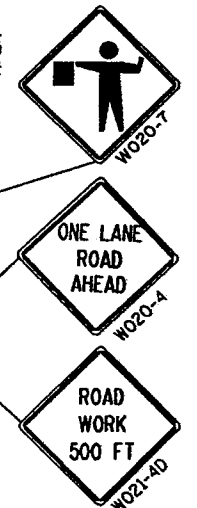
STH 150 - STAGE I

SNOW FENCE & 3 PERMANENT BARRICADES

END CONSTRUCTION
 *G20-2
 60" X 24"



END CONSTRUCTION
 *G20-2
 60" X 24"



STAGE I CONSTRUCTION NOTES

1. GRADE AND INSTALL STORM SEWER AND DRAINAGE STRUCTURES ON CTH CB FROM STA. 309+90 TO STA. 366+20
2. GRADE, INSTALL DRAINAGE STRUCTURES AND PLACE CRUSHED AGGREGATE BASE COURSE ON BONDOW DRIVE, DEERWOOD DRIVE AND DEERWOOD AVENUE.
3. GRADE, INSTALL DRAINAGE STRUCTURES AND PLACE CRUSHED AGGREGATE BASE COURSE ON STH 150 NORTH AND SOUTH OF EXISTING LANES, SEE PLAN FOR DIMENSIONS.
4. CONSTRUCT 24 FT. WIDE ASPHALTIC PAVEMENT ON BONDOW DRIVE, DEERWOOD DRIVE AND DEERWOOD AVENUE.

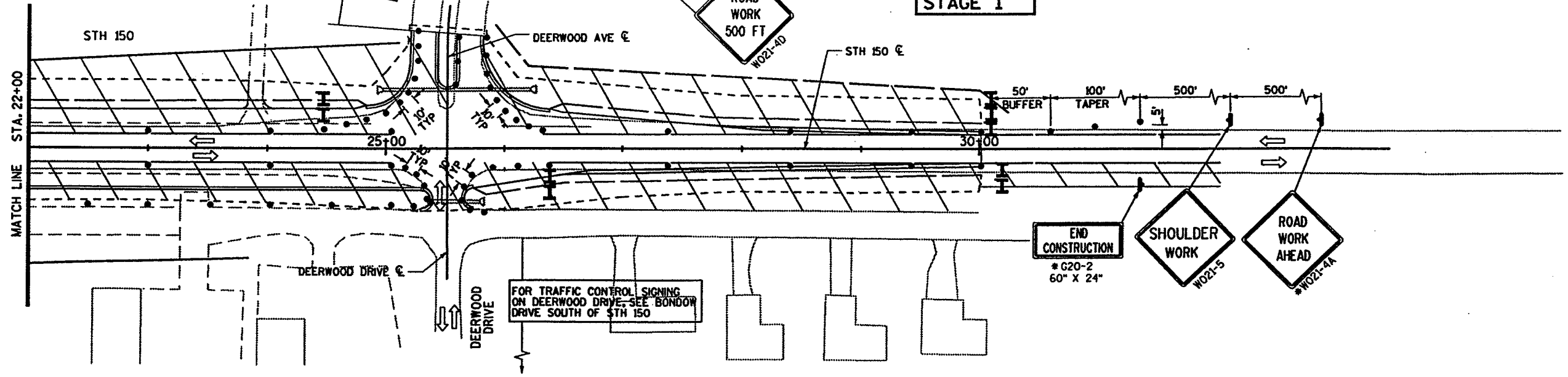
STAGE I

BEGIN PROJECT
 STA. 308+80.00

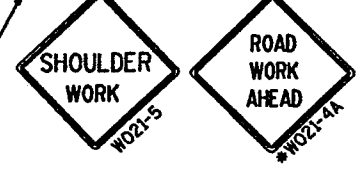
TRAFFIC CONTROL LAYOUT-FLAGGING PERIODS
 FOR TRAFFIC CONTROL SIGNING ON DEERWOOD AVE., SEE BONDOW DRIVE SOUTH OF STH 150

LEGEND

- ▬ EXISTING SIGN
- ▬ CONSTRUCTION SIGN
- ▨ WORK ZONE
- ⊥ TYPE III BARRICADE AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
- ⊥ TYPE III BARRICADE WITH SIGN AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
- ⊥ FLAGGER
- ↔ DIRECTION OF TRAVEL
- TRAFFIC CONTROL DRUMS
- ⊙ TYPE "A" WARNING LIGHT (FLASHING)
- * SIGNS THAT ARE TO REMAIN IN PLACE FOR DURATION OF PROJECT



END CONSTRUCTION
 *G20-2
 60" X 24"



FOR TRAFFIC CONTROL SIGNING ON DEERWOOD DRIVE, SEE BONDOW DRIVE SOUTH OF STH 150

JACOBSEN ROAD - STAGE I

END PROJECT
 LD. 4619-02-71
 STA. 371+32.86



GENERAL TRAFFIC CONTROL NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

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

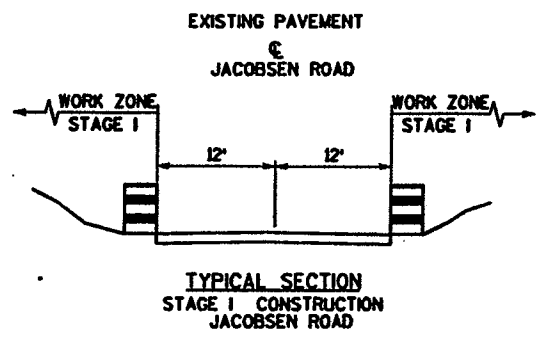
"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ACCESS MUST BE PROVIDED FOR ALL BUSINESSES AND RESIDENCES AT ALL TIMES DURING ALL STAGES OF CONSTRUCTION.

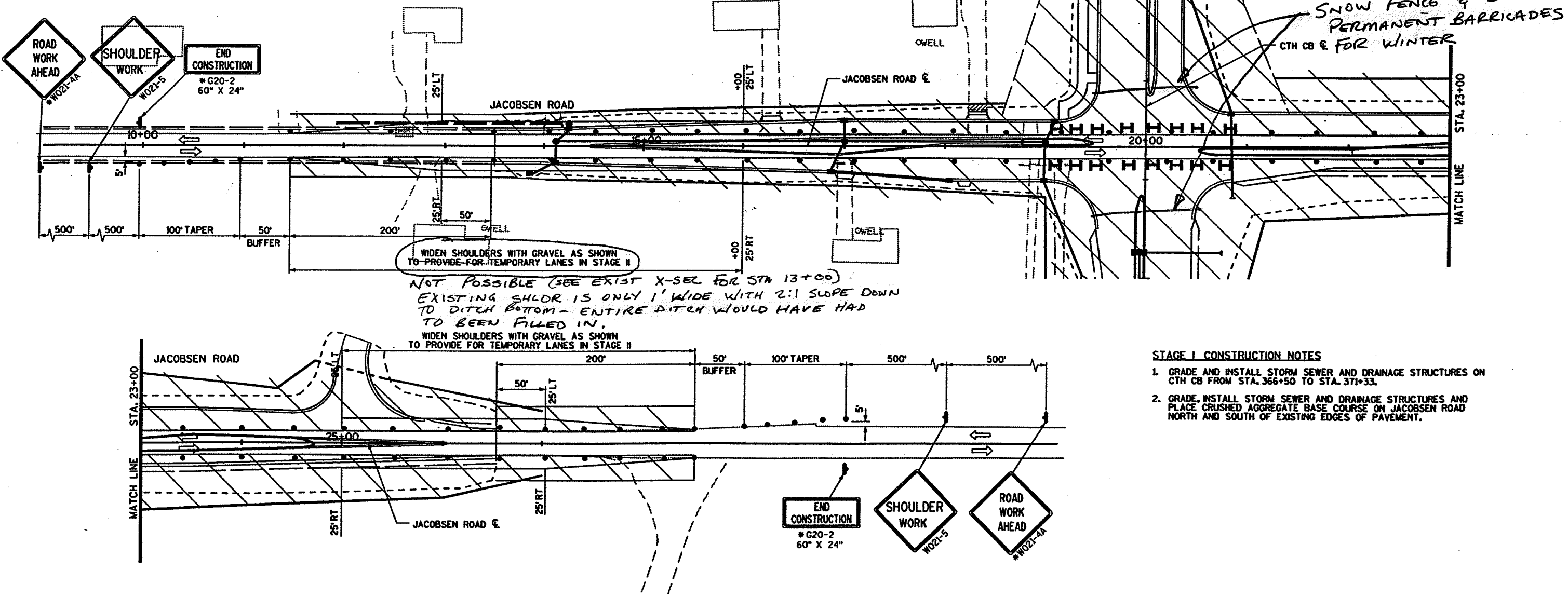
ALL TRAFFIC CONTROL DRUMS ARE TO BE PLACED AT 50 FOOT INTERVALS FOR TANGENT SECTIONS AND 25 FOOT INTERVALS FOR TAPERS UNLESS NOTED OTHERWISE ON PLANS

ALL TEMPORARY TRAVEL LANES SHALL BE A MINIMUM OF 10 FEET WIDE.

- LEGEND
- EXISTING SIGN
 - CONSTRUCTION SIGN
 - WORK ZONE
 - TYPE III BARRICADE AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
 - TYPE III BARRICADE WITH SIGN AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
 - DIRECTION OF TRAVEL
 - TRAFFIC CONTROL DRUMS
 - TYPE "A" WARNING LIGHT (FLASHING)
 - SIGNS THAT ARE TO REMAIN IN PLACE FOR DURATION OF PROJECT



STAGE I



STAGE I CONSTRUCTION NOTES

1. GRADE AND INSTALL STORM SEWER AND DRAINAGE STRUCTURES ON CTH CB FROM STA. 366+50 TO STA. 371+33.
2. GRADE, INSTALL STORM SEWER AND DRAINAGE STRUCTURES AND PLACE CRUSHED AGGREGATE BASE COURSE ON JACOBSEN ROAD NORTH AND SOUTH OF EXISTING EDGES OF PAVEMENT.

JACOBSEN ROAD - STAGE II

END PROJECT
 LD. 4619-02-71
 STA. 371+32.86

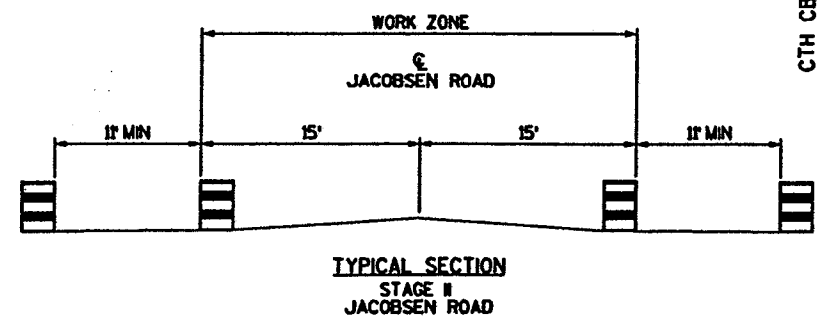


GENERAL TRAFFIC CONTROL NOTES

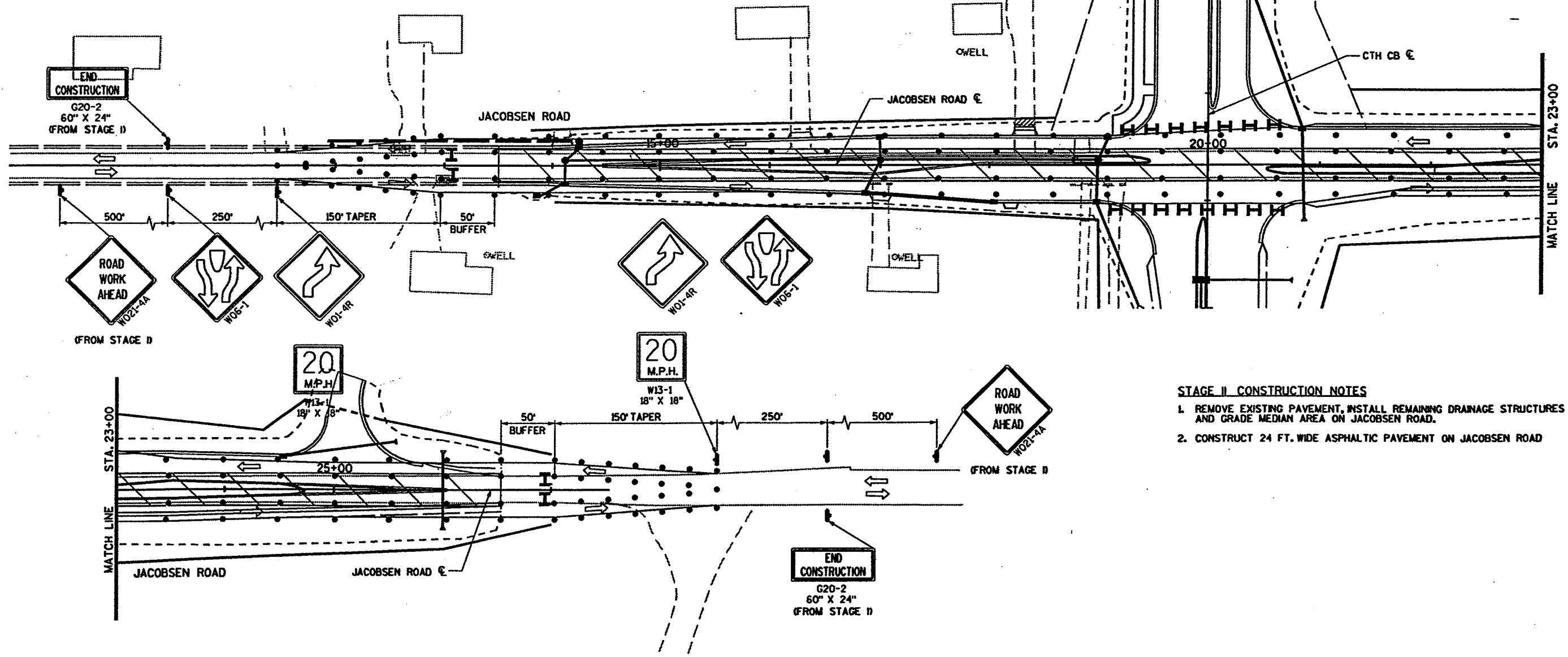
THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
 ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/ OR SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
 ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.
 "W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
 ACCESS MUST BE PROVIDED FOR ALL BUSINESSES AND RESIDENCES AT ALL TIMES DURING ALL STAGES OF CONSTRUCTION.
 ALL TRAFFIC CONTROL DRUMS ARE TO BE PLACED AT 50 FOOT INTERVALS FOR TANGENT SECTIONS AND 25 FOOT INTERVALS FOR TAPERS UNLESS NOTED OTHERWISE ON PLANS.
 ALL TEMPORARY TRAVEL LANES SHALL BE A MINIMUM OF 10 FEET WIDE.

LEGEND

- EXISTING SIGN
- CONSTRUCTION SIGN
- WORK ZONE
- TYPE III BARRICADE AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
- DIRECTION OF TRAVEL
- TRAFFIC CONTROL DRUMS
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGNS THAT ARE TO REMAIN IN PLACE FOR DURATION OF PROJECT



STAGE II



- STAGE II CONSTRUCTION NOTES
1. REMOVE EXISTING PAVEMENT, INSTALL REMAINING DRAINAGE STRUCTURES AND GRADE MEDIAN AREA ON JACOBSEN ROAD.
 2. CONSTRUCT 24 FT. WIDE ASPHALTIC PAVEMENT ON JACOBSEN ROAD

ALIGNMENT DIAGRAM DETAIL

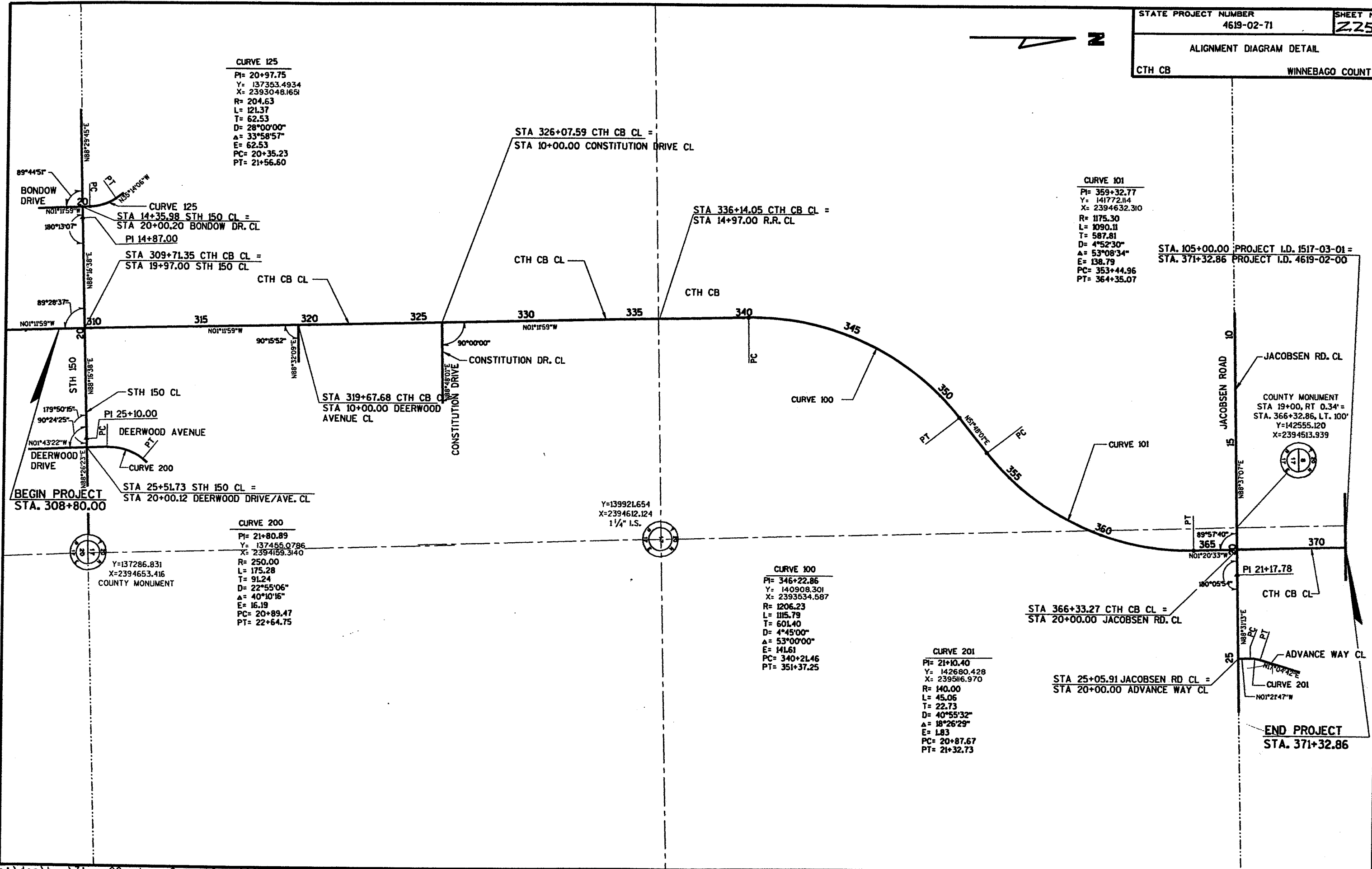
CTH CB WINNEBAGO COUNTY



CURVE 125
 PI= 20+97.75
 Y= 137353.4934
 X= 2393048.1651
 R= 204.63
 L= 121.37
 T= 62.53
 D= 28°00'00"
 Δ= 33°58'57"
 E= 62.53
 PC= 20+35.23
 PT= 21+56.60

CURVE 101
 PI= 359+32.77
 Y= 141772.114
 X= 2394632.310
 R= 1175.30
 L= 1090.11
 T= 587.81
 D= 4°52'30"
 Δ= 53°08'34"
 E= 138.79
 PC= 353+44.96
 PT= 364+35.07

STA. 105+00.00 PROJECT I.D. 1517-03-01 =
 STA. 371+32.86 PROJECT I.D. 4619-02-00



CURVE 200
 PI= 21+80.89
 Y= 137455.0786
 X= 2394159.3140
 R= 250.00
 L= 175.28
 T= 91.24
 D= 22°55'06"
 Δ= 40°10'16"
 E= 16.19
 PC= 20+89.47
 PT= 22+64.75

Y=139921.654
 X=2394612.124
 1/4" I.S.

CURVE 100
 PI= 346+22.86
 Y= 140908.301
 X= 2393534.587
 R= 1206.23
 L= 1115.79
 T= 601.40
 D= 4°45'00"
 Δ= 53°00'00"
 E= 141.61
 PC= 340+21.46
 PT= 351+37.25

CURVE 201
 PI= 21+10.40
 Y= 142680.428
 X= 2395116.970
 R= 140.00
 L= 45.06
 T= 22.73
 D= 40°55'32"
 Δ= 18°26'29"
 E= 1.83
 PC= 20+87.67
 PT= 21+32.73

Y=137286.831
 X=2394653.416
 COUNTY MONUMENT

COUNTY MONUMENT
 STA 19+00, RT 0.34' =
 STA. 366+32.86, LT. 100'
 Y=142555.120
 X=2394513.939

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	CLEARING STA.	GRUBBING STA.	GROUP CODE
312+00 - 313+00	CTH CB	1	1	010
316+00 - 320+00	CTH CB	4	4	010
323+00 - 324+00	CTH CB	1	1	010
333+00 - 339+00	CTH CB	6	6	010
339+00 - 340+00	CTH CB	1	1	020
342+00 - 357+00	CTH CB	15	15	020
12+00 - 15+00	STH 150	3	3	020
16+00 - 18+00	STH 150	2	2	020
13+00 - 15+00	JACOBSEN RD.	2	2	020
17+00 - 19+00	JACOBSEN RD.	2	2	020
TOTAL		37	37	

TOPSOIL, MULCHING, FERTILIZER & SEEDING

USED #20

STATION TO STATION	LOCATION	SALVAGE TOPSOIL S.Y.	MULCHING S.Y.	FERTILIZER TYPE B CWT.	SEEDING NO.40 LB.	SEEDING NO.30 LB.	GROUP CODE
309+71.4 - 336+14.1	CTH CB/HAUL RD.	24444	24444	15.4		440	010
336+14.1 - 339+00.0	CTH CB/HAUL RD.	5023	5023	3.2		90	010
339+00.0 - 364+50.0	CTH CB/HAUL RD.	19936	19936	12.9		360	020
364+50.0 - 366+33.3	CTH CB	1247	1247	0.8		20	020
366+33.3 - 371+32.9	CTH CB	2804	2804	1.8		50	020
13+46.5 - 26+53.5	JACOBSEN RD.	4937	4937	3.1	90		020
11+86.2 - 30+01.7	STH 150	7674	7674	4.8	140		010
TOTAL		66065	66065	42.0	230	960	

~~SOD & EROSION MAT, CLASS II TYPE A~~
 USED EROSION MAT, CLASS II, TYPE B

STATION - STATION	LOCATION	ROAD	SOD S.Y.	EROSION DELIVERED S.Y.	EROSION MAT INSTALLED S.Y.	GROUP CODE
25+70 AT OUTFALL	28 FT RT	STH 150	8	8	8	010
26+20 AT OUTFALL	28 FT LT	STH 150	8	8	8	010
310+35 AT OUTFALL	40 FT RT	CTH CB	8	8	8	010
319+10 AT OUTFALL	40 FT LT	CTH CB	8	8	8	010
325+50 AT OUTFALL	40 FT RT	CTH CB	8	8	8	010
313+80 AT OUTFALL	50 FT RT	CTH CB	8	8	8	010
316+00 AT OUTFALL	50 FT RT	CTH CB	8	8	8	010
320+28 AT OUTFALL	55 FT RT	CTH CB	8	8	8	010
323+00 AT OUTFALL	55 FT RT	CTH CB	8	8	8	010
326+68 AT OUTFALL	60 FT RT	CTH CB	8	8	8	010
330+00 AT OUTFALL	55 FT LT	CTH CB	8	8	8	010
333+00 AT OUTFALL	55 FT LT	CTH CB	8	8	8	010
339+30 AT OUTFALL	50 FT RT	CTH CB	8	8	8	020
342+30 AT OUTFALL	50 FT LT	CTH CB	8	8	8	020
345+30 AT OUTFALL	50 FT RT	CTH CB	8	8	8	020
348+30 AT OUTFALL	50 FT RT	CTH CB	8	8	8	020
351+30 AT OUTFALL	50 FT RT	CTH CB	8	8	8	020
355+50 AT OUTFALL	60 FT RT	CTH CB	8	8	8	020
358+60 AT OUTFALL	60 FT RT	CTH CB	8	8	8	020
361+60 AT OUTFALL	60 FT RT	CTH CB	8	8	8	020
364+53 AT OUTFALL	75 FT RT	CTH CB	8	8	8	020
365+26 AT OUTFALL	75 FT RT	CTH CB	8	8	8	020
20+80 AT OUTFALL	50 FT RT	JACOBSEN RD	8	8	8	020
11+90 AT OUTFALL	28 FT LT	JACOBSEN RD	8	8	8	020
26+00 AT OUTFALL	50 FT LT	JACOBSEN RD	8	8	8	020
UNDISTRIBUTED			13	13	13	010
UNDISTRIBUTED			13	13	13	020
TOTAL			226	226	226	

PAVEMENT MARKING, HOT PAINT

STATION TO STATION	LOCATION	TYPE	HOT PAINT L.F.
13+46 - 26+54	JACOBSEN	YELLOW DASH	327
18+81 - 19+66	BONDOW DRIVE	YELLOW DASH	21
20+28 - 21+57	BONDOW DRIVE	YELLOW DASH	32
20+28 - 21+07	ADVANCE WAY	YELLOW DASH	20
TOTAL			400

CRUSHED AGGREGATE BASE COURSE

LOCATION	C.A.B.C. TONS	C.A.B.C. DETOURS TONS	CALCIUM CHLORIDE SURFACE TREATMENT TONS	STAGE CONSTRUCTION	GROUP CODE
STH 150	2730	0	4	I	010
BONDOW DRIVE	693	0	1	I	010
DEERWOOD AVE.	482	0	1	I	010
DEERWOOD DRIVE	55	0	0	I	010
JACOBSEN ROAD, LT	2017	341	3	I	020
JACOBSEN ROAD, RT	2078	341	3	I	020
TOTAL	8055	682	12		

WATER

LOCATION	WATER MGAL	GROUP CODE
CTH CB	26	010
CTH CB	13	020
STH 150	14	010
JACOBSEN ROAD	26	020
UNDISTRIBUTED	1	020
TOTAL	80	

REMOVING FENCING

STATION TO STATION	LOCATION	L.F.	GROUP CODE
349+70	CTH CB, LT & RT	250	020
359+40	CTH CB, LT & RT	430	020
17+90 - 18+30	STH 150, LT	85	010
24+65 - 26+05	JACOBSEN RD, RT	160	020
TOTAL		925	

BREAKER RUN STONE

STATION TO STATION	LOCATION	TONS	REMARKS	GROUP CODE
329+50 - 343+50	CTH CB, RT	6000	TEMP. HAUL ROAD	010

SAWING EXISTING PAVEMENT

STATION	LOCATION	L.F.	GROUP CODE
11+86	CENTERLINE, STH 150	36	010
18+81	CENTERLINE, BONDOW DR.	24	010
21+07	CENTERLINE, BONDOW DR.	24	010
19+49	CENTERLINE, DEERWOOD AVE.	45	010
21+00	CENTERLINE, DEERWOOD AVE.	44	010
30+02	CENTERLINE, STH 150	36	010
13+46	CENTERLINE, JACOBSEN RD.	24	020
26+54	CENTERLINE, JACOBSEN RD.	24	020
18+30	PE, LT, JACOBSEN RD.	18	020
TOTAL		275	

EARTHWORK SUMMARY

LOCATION	COMMON EXCAVATION C.Y.	EBS C.Y.	BORROW C.Y.	ROCK EXCAVATION C.Y.	GROUP CODE
CTH CB	7,021	0	224,789	206	010
CTH CB	444	9,941	163,179		020
STH 150	4,304	0	0		010
JACOBSEN RD.	2,360	0	0		020
TEMP. HAUL ROAD	1,502	0	2,657		010
TOTAL	15,631	9,941	390,625	206	

ASPHALTIC CONCRETE PAVEMENT

STATION TO STATION	LOCATION	TYPE MV TONS	ASPH. MAT. FOR PLANT MIXES 6XAC TONS	REMARKS	GROUP CODE
13+47 - 26+54	JACOBSEN ROAD	452	27.1	TEMP. PAVEMENT	020
20+26 - 21+07	ADVANCE WAY	25	1.5	TEMP. PAVEMENT	020
19+48 - 21+00	DEERWOOD AVE	38	2.2	TEMP. PAVEMENT	010
18+81 - 21+07	BONDOW DRIVE	66	3.8	TEMP. PAVEMENT	010
19+15	STH 150	3	0.2	TEMP. PAVEMENT	010
TOTAL		584	34.8		

HAVE NOT BEEN INSTALLED

LANDMARK REFERENCE MONUMENTS

STATION TO STATION	LOCATION	EACH	GROUP CODE
30+39.84	STH 150, 2.31' RT	4	010
366+32.86	CTH CB, 100' LT	4	020
TOTAL		8	

EROSION MAT, CLASS I - TYPE B

STATION - STATION LOCATION	ROAD	DELIVERED	INSTALLED	GROUP CODE
17+50 - 19+30	RT STH 150	120	120	010
21+00 - 24+60	LT STH 150	240	240	010
26+50 - 30+00	LT STH 150	235	235	010
310+50 - 315+00	LT CTH CB	300	300	010
310+50 - 315+00	RT CTH CB	300	300	010
325+00 - 328+00	LT CTH CB	200	200	010
326+80 - 328+20	RT CTH CB	90	90	010
UNDISTRIBUTED		265	265	010
352+30 - 354+30	LT CTH CB	135	135	020
352+30 - 354+30	RT CTH CB	135	135	020
357+00 - 357+50	RT CTH CB	30	30	020
UNDISTRIBUTED		50	50	020
TOTAL		2100	2100	

INCLUDED IN STORM SEWER TABLE

CROSS DRAINS

STATION	LOCATION	DIA INCHES	LENGTH FEET	TYPE	CLASS	INLET ELEV.	DISCHARGE ELEV.	REINF. CONC. APRON ENDWALLS EACH	JOINT TIES EACH	GROUP CODE
312+62	CTH CB	21	117	RCCP	III	779.1	778.4	2	12	010
312+62	CTH CB	21	117	RCCP	III	779.1	778.4	2	12	010
337+45	CTH CB	54	270	RCCP	IV	780.95	780.85	2	12	010
354+34	CTH CB	24 X 38	140	RCHECP	III	777.4	777.1	2	12	020
354+34	CTH CB	24 X 38	140	RCHECP	III	777.4	777.1	2	12	020
10+65	DEERWOOD AVE	15	80	RCCP	III	782.0	781.4	2	12	010
20+50	DEERWOOD AVE	29 X 45	110	RCHECP	III	774.0	773.2	2	12	010
10+70	CONSTITUTION DR	12	80	RCCP	III	785.1	784.9	2	12	010
26+00	JACOBSEN RD	12	64	RCCP	III	774.9	774.8	2	12	020
20+43	ADVANCE WAY	12	84	RCCP	III	775.7	775.6	2	12	020
13+80	STH 150	15	84	RCCP	III	784.1	783.6	2	12	010
29+50	STH 150	19 X 30	56	RCHECP	III	771.7	771.2	2	12	010
29+50	STH 150	19 X 30	56	RCHECP	III	771.7	771.2	2	12	010
19+44	BONDDOW DR	15	68	RCCP	III	783.5	783.2	2	12	010

SILT FENCE, SILTY SOIL

STATION - STATION	LOCATION	ROAD	DELIVERED	INSTALLED	MAINTENANCE	GROUP CODE
17+40 AT INFLOW	RT	STH 150	20	20	40	010
310+35 AT INFLOW	LT	CTH CB	20	20	40	010
326+00 - 335+50	LT	CTH CB	950	950	1900	010
326+50 - 335+50	RT	CTH CB	900	900	1800	010
337+00 - 339+00	LT	CTH CB	200	200	400	010
337+00 - 339+00	RT	CTH CB	200	200	400	010
UNDISTRIBUTED			360	360	720	010
339+00 - 354+50	LT	CTH CB	1550	1550	3100	020
339+00 - 354+50	RT	CTH CB	1550	1550	3100	020
UNDISTRIBUTED			450	450	900	020
TOTAL			6200	6200	12400	

CULVERT PIPES PRIVATE, FIELD AND COMMERCIAL ENTRANCES

STATION	LOCATION	DIA INCHES	LENGTH FEET	TYPE	CLASS	STEEL ELEV.	THICKNESS ALUM. ELEV.	APRON ENDWALLS EACH	GROUP CODE
17+58	STH 150, RT	12	45	CP	III	0.064	0.060	2	010
23+90	STH 150, LT	30	26	CP	III	0.079	0.075	2	010
358+00	CTH CB, RT	15	60	CP	III	0.064	0.060	2	020

TEMPORARY CULVERT PIPE

STATION	LOCATION	DIAMETER INCHES	LENGTH FEET	REMARKS	GROUP CODE
335+65	CTH CB, 150' RT	18	46	TEMP. HAUL ROAD	010 NOT NEEDED
336+68	CTH CB, 150' RT	12	46	TEMP. HAUL ROAD	010
338+20	CTH CB, 170' RT	36	50	TEMP. HAUL ROAD	010

TRAFFIC CONTROL, BARRICADES TYPE III AND DRUMS

LOCATION	STAGE	APPROXIMATE SERVICE PERIOD DAYS	BARRICADES NUMBER IN SERVICE	BARRICADES DAYS	DRUMS NUMBER IN SERVICE	DRUMS DAYS	GROUP CODE	PERMANENT BARRICADES
STH 150	I	113	18	2034	120	13560	010	18 3
JACOBSEN ROAD	I	113	16	1808	80	9040	020	16 6
JACOBSEN ROAD	II	37	27	999	160	5920	020	
TOTAL				4841		28520		34

MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC

STATION	LOCATION	ROAD	RIPRAP C.Y.	GEOTEXTILE FABRIC TYPE R S.Y.	GROUP CODE
338+00	RT	CTH CB	10	20	010
354+25	RT	CTH CB	20	40	020
TOTAL			30	60	

TRAFFIC CONTROL, SIGNS AND WARNING LIGHTS

LOCATION	STAGE	APPROXIMATE SERVICE PERIOD DAYS	SIGNS NUMBER IN SERVICE	SIGNS DAYS	WARNING LIGHTS TYPE A NUMBER IN SERVICE	WARNING LIGHTS TYPE A DAYS	WARNING LIGHTS TYPE C NUMBER IN SERVICE	WARNING LIGHTS TYPE C DAYS	GROUP CODE
STH 150	I	113	22	2486	86	9718	18	2034	010
JACOBSEN ROAD	I	113	6	678	56	6328	6	678	020
JACOBSEN ROAD	II	37	10	370	54	1998	56	2072	020
TOTAL				3534		18044		4784	

CONSTRUCTION STAKING, INLETS AND MANHOLES

STATION	LOCATION	STRUCTURE TYPE	EACH	GROUP CODE
339+30	LT, 3.5'	INLET	1	020
342+30	LT, 3.5'	INLET	1	020
345+30	LT, 3.5'	INLET	1	020
348+30	LT, 3.5'	INLET	1	020
351+30	LT, 3.5'	INLET	1	020
355+53	LT, 3.5'	INLET	1	020
358+53	LT, 3.5'	INLET	1	020
361+53	RT, 4.6'	INLET	1	020
363+57	RT, 7.5'	INLET	1	020
365+67	LT, 0.5'	INLET	1	020
18+88	JACOBSEN RD RT, 48.0'	INLET	1	020
19+00	JACOBSEN RD LT, 5.0'	MANHOLE	1	020
19+00	JACOBSEN RD RT, 42.0'	INLET	1	020
17+50	JACOBSEN RD RT, 37.0'	INLET	1	020
16+85	JACOBSEN RD RT, 26.0'	INLET	1	020
17+00	JACOBSEN RD LT, 5.0'	MANHOLE	1	020
17+00	JACOBSEN RD LT, 26.5'	INLET	1	020
14+12	JACOBSEN RD LT, 5.0'	MANHOLE	1	020
14+12	JACOBSEN RD RT, 17.5'	INLET	1	020
14+25	JACOBSEN RD LT, 18.5'	INLET	1	020
19+15	STH 150 LT, 37.0'	INLET	1	010
17+00	STH 150 LT, 37.0'	INLET	1	010
19+00	JACOBSEN RD RT, 39.0'	MANHOLE	1	020
24+54	JACOBSEN RD LT, 32.0'	INLET	1	020
368+44	LT, 47.5'	INLET	1	020
368+44	CENTERLINE	INLET	1	020
368+44	RT, 8.5'	INLET	1	020
368+44	RT, 35.5'	INLET	1	020
370+00	LT, 37.0'	INLET	1	020
370+00	LT, 7.5'	INLET	1	020
370+00	CENTERLINE	MANHOLE	1	020
370+00	RT, 8.5'	INLET	1	020
370+00	RT, 35.5'	INLET	1	020
23+00	STH 150 RT, 46.5'	INLET	1	010
310+37	RT, 1.5'	INLET	1	010
310+37	RT, 8.5'	INLET	1	010
313+80	LT, 8.5'	INLET	1	010
313+80	RT, 8.5'	INLET	1	010
316+00	LT, 8.5'	INLET	1	010
316+00	RT, 8.5'	INLET	1	010
320+28	RT, 1.5'	INLET	1	010
320+28	RT, 8.5'	INLET	1	010
323+00	LT, 8.5'	INLET	1	010
323+00	RT, 8.5'	INLET	1	010
326+68	RT, 1.5'	INLET	1	010
326+68	RT, 8.5'	INLET	1	010
330+00	LT, 8.5'	INLET	1	010
330+00	RT, 8.5'	INLET	1	010
333+00	LT, 3.7'	INLET	1	010
333+00	RT, 3.7'	INLET	1	010
339+30	RT, 3.5'	INLET	1	010
342+30	RT, 3.5'	INLET	1	020
345+30	RT, 3.5'	INLET	1	020
348+30	RT, 3.5'	INLET	1	020
351+30	RT, 3.5'	INLET	1	020
355+53	LT, 3.5'	INLET	1	020
358+53	LT, 3.5'	INLET	1	020
361+53	CENTERLINE	INLET	1	020
363+57	CENTERLINE	INLET	1	020
365+67	LT, 9.2'	INLET	1	020
313+80	CENTERLINE	INLET	1	010
316+00	CENTERLINE	INLET	1	010
323+00	CENTERLINE	INLET	1	010
330+00	CENTERLINE	INLET	1	010
13+85	JACOBSEN RD RT, 28.0'	INLET	1	020
24+98	STH 150 RT, 46.5'	INLET	1	010
TOTAL			66	

CONSTRUCTION STAKING, PIPE CULVERTS

STATION	LOCATION	EACH	GROUP CODE
20+43	ADVANCE WAY	1	020
15+46	STH 150, LT	1	010
17+46	STH 150, LT	1	010
17+58	STH 150, RT	1	010
23+98	STH 150, LT	1	020
335+65	CTH CB, RT, TEMP	1	010
337+45	CTH CB	1	010
336+68	CTH CB, RT, TEMP	1	010
338+20	CTH CB, RT, TEMP	1	010
354+34	CTH CB	2	020
358+00	CTH CB, RT	1	020
20+50	DEERWOOD AVE	1	010
10+70	CONSTITUTION DRIVE	1	010
10+65	DEERWOOD AVE	1	010
20+80	JACOBSEN RD	1	020
13+80	STH 150	1	010
29+50	STH 150	2	010
19+44	BONDOW DRIVE	1	010
TOTAL	JACOBSEN RD	20	

PAID AS^o S/S. URBAN SECTION
NOT RESTORED - NOT INSTALLED
STORM SEWER

CONSTRUCTION STAKING, SUBGRADE

STATION TO STATION	LOCATION	TRAFFIC CONTROL STAGE	STA	GROUP CODE
309+80 - 335+50	CTH CB	I	51.4	010
336+80 - 339+00	CTH CB	I	4.4	010
339+00 - 371+33	CTH CB	I	64.6	020
11+86 - 30+02	STH 150	I	36.4	010
13+46 - 26+54	JACOBSEN ROAD	I	26.2	020
18+81 - 21+07	BONDOW DRIVE	I	2.3	010
19+49 - 20+98	DEERWOOD DRIVE/AVE	I	1.5	010
10+00 - 11+35	DEERWOOD AVE	I	1.4	010
10+00 - 11+35	CONSTITUTION DRIVE	I	1.4	010
20+00 - 21+10	ADVANCE WAY	I	1.1	020
TOTAL			190.7	

MARKER POSTS FOR RIGHT-OF-WAY

STATION	LOCATION	EACH	GROUP CODE
308+70.00	CTH CB, 70.00 RIGHT	1	010
311+65.00	CTH CB, 75.00 RIGHT	1	010
318+00.00	CTH CB, 85.00 RIGHT	1	010
319+28.17	CTH CB, 105.00 RIGHT	1	010
320+08.17	CTH CB, 105.00 RIGHT	1	010
322+00.00	CTH CB, 80.00 RIGHT	1	010
325+00.00	CTH CB, 95.00 RIGHT	1	010
325+75.06	CTH CB, 110.00 RIGHT	1	010
326+41.06	CTH CB, 110.00 RIGHT	1	010
327+00.00	CTH CB, 90.00 RIGHT	1	010
335+64.42	CTH CB, 55.00 RIGHT	1	010
336+64.43	CTH CB, 60.00 RIGHT	1	010
340+21.46	CTH CB, 140.00 RIGHT	1	020
342+00.00	CTH CB, 110.00 RIGHT	1	020
344+00.00	CTH CB, 90.00 RIGHT	1	020
346+00.00	CTH CB, 75.00 RIGHT	1	020
349+00.00	CTH CB, 75.00 RIGHT	1	020
351+37.25	CTH CB, 75.00 RIGHT	1	020
353+44.96	CTH CB, 85.00 RIGHT	1	020
355+00.00	CTH CB, 85.00 RIGHT	1	020
356+37.94	CTH CB, 84.53 RIGHT	1	020
357+12.42	CTH CB, 194.55 RIGHT	1	020
358+58.90	CTH CB, 90.00 RIGHT	1	020
359+00.00	CTH CB, 90.00 RIGHT	1	020
362+00.00	CTH CB, 75.00 RIGHT	1	020
364+35.06	CTH CB, 85.00 RIGHT	1	020
308+70.00	CTH CB, 50.00 LEFT	1	010
311+40.00	CTH CB, 90.00 LEFT	1	010
318+00.00	CTH CB, 70.00 LEFT	1	010
323+00.00	CTH CB, 90.00 LEFT	1	010
325+00.00	CTH CB, 75.00 LEFT	1	010
332+00.00	CTH CB, 145.00 LEFT	1	010
335+63.69	CTH CB, 155.00 LEFT	1	010
336+63.68	CTH CB, 160.00 LEFT	1	010
340+21.46	CTH CB, 135.00 LEFT	1	020
341+50.00	CTH CB, 125.00 LEFT	1	020
345+00.00	CTH CB, 95.00 LEFT	1	020
348+00.00	CTH CB, 95.00 LEFT	1	020
349+50.00	CTH CB, 90.00 LEFT	1	020
351+37.25	CTH CB, 90.00 LEFT	1	020
353+44.96	CTH CB, 80.00 LEFT	1	020
356+00.00	CTH CB, 75.00 LEFT	1	020
359+00.00	CTH CB, 70.00 LEFT	1	020
361+00.00	CTH CB, 70.00 LEFT	1	020
362+08.63	CTH CB, 73.97 LEFT	1	020
365+82.48	CTH CB, 99.30 LEFT	1	020
12+60.00	STH 150, 36.50 RIGHT	1	010
12+80.00	STH 150, 60.00 RIGHT	1	010
13+59.00	STH 150, 70.00 RIGHT	1	010
15+02.64	STH 150, 80.00 RIGHT	1	010
21+60.00	STH 150, 48.00 RIGHT	1	010
23+85.06	STH 150, 48.00 RIGHT	1	010
23+85.24	STH 150, 32.94 RIGHT	1	010
11+50.00	STH 150, 37.52 LEFT	1	010
15+19.69	STH 150, 53.19 LEFT	1	010
16+30.20	STH 150, 52.79 LEFT	1	010
18+66.81	STH 150, 51.93 LEFT	1	010
21+25.00	STH 150, 70.00 LEFT	1	010
25+11.20	STH 150, 89.60 LEFT	1	010
25+10.99	STH 150, 32.60 LEFT	1	010
21+00.00	BONDOW DRIVE, 35.15 LEFT	1	010
21+00.00	BONDOW DRIVE, 32.85 RIGHT	1	010
17+00.00	JACOBSEN RD, 33.54 RIGHT	1	020
17+00.00	JACOBSEN RD, 40.00 RIGHT	1	020
21+17.85	JACOBSEN RD, 75.00 RIGHT	1	020
26+00.00	JACOBSEN RD, 55.00 RIGHT	1	020
27+00.00	JACOBSEN RD, 33.03 RIGHT	1	020
27+00.00	JACOBSEN RD, 32.97 LEFT	1	020
25+42.37	JACOBSEN RD, 65.00 LEFT	1	020
24+73.03	JACOBSEN RD, 82.99 LEFT	1	020
24+35.00	JACOBSEN RD, 55.00 LEFT	1	020
23+00.00	JACOBSEN RD, 70.00 LEFT	1	020
21+26.65	JACOBSEN RD, 70.00 LEFT	1	020
18+60.86	JACOBSEN RD, 44.00 LEFT	1	020
15+00.00	JACOBSEN RD, 37.00 LEFT	1	020
13+80.00	JACOBSEN RD, 32.45 LEFT	1	020
TOTAL		76	

CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE

STATION TO STATION	LOCATION	TRAFFIC CONTROL STAGE	STA	GROUP CODE
11+86 - 30+02	STH 150	I	36.4	010
13+46 - 26+54	JACOBSEN ROAD	I	26.2	020
18+81 - 20+07	BONDOW DRIVE	I	2.3	010
19+49 - 20+98	DEERWOOD DRIVE/AVE	I	1.5	010
10+00 - 11+35	DEERWOOD AVE	I	1.4	010
10+00 - 11+35	CONSTITUTION DRIVE	I	1.4	010
20+00 - 21+10	ADVANCE WAY	I	1.1	020
TOTAL			70.3	

INLETS & MANHOLES

NO.	STATION	LOCATION	STRUCTURE	TYPE	COVER	GRATE FLOWLINE ELEV.	INVERT ELEV.	(1) DEPTH TO FLOWLINE	GROUP CODE	REMARKS
I27	339+30	LT, 3.5'	INLET	1	A-LT	814.39	809.18	4.3	020	
I28	342+30	LT, 3.5'	INLET	1	A-LT	803.33	797.84	4.6	020	
I29	345+30	LT, 3.5'	INLET	1	A-LT	792.99	787.08	5.0	020	
I30	348+30	LT, 3.5'	INLET	1	A-LT	788.13	782.48	4.7	020	
I31	351+30	LT, 3.5'	INLET	1	A-LT	787.25	782.06	4.3	020	
I32	355+53	LT, 3.5'	INLET	1	A-RT	785.90	781.46	3.5	020	
I33	358+53	RT, 3.5'	INLET	1	A-RT	783.93	779.31	3.7	020	
I34	361+53	RT, 4.6'	INLET	1	A-RT	781.48	778.30	2.2	020	
I35	363+57	RT, 7.5'	INLET	1	A-RT	780.89	778.38	1.6	020	
I36	365+67	LT, 0.5'	INLET	1	A-RT	780.25	777.88	1.4	020	
I37A	19+00	JACOBSEN RD RT, 48.0'	INLET	8	MS	778.00	776.13	1.9	020	(2)
MH38	19+00	JACOBSEN RD LT, 5.0'	MANHOLE	1	J	780.31	776.00	2.8	020	
I39	19+00	JACOBSEN RD RT, 42.0'	INLET	8	MS	777.95	776.10	1.9	020	
I43A	17+50	JACOBSEN RD RT, 37.0'	INLET	8	MS	777.25	775.66	1.6	020	(2)
I41	16+85	JACOBSEN RD RT, 26.0'	INLET	3	H-RT	778.63	775.60	2.2	020	(2)
MH42	17+00	JACOBSEN RD LT, 5.0'	MANHOLE	1	J	779.23	775.50	2.2	020	
I43	17+00	JACOBSEN RD LT, 26.5'	INLET	3	H-LT	778.66	775.56	2.3	020	(2)
MH44	14+12	JACOBSEN RD LT, 5.0'	MANHOLE	1	J	778.15	774.39	2.3	020	
I45	14+12	JACOBSEN RD RT, 17.5'	INLET	3	H-RT	777.76	774.45	2.5	020	
I46	14+25	JACOBSEN RD LT, 18.5'	INLET	3	H-LT	777.75	774.35	2.6	020	
I110	19+15	STH 150 LT, 37.5'	INLET	3	H-S	781.64	778.37	2.4	010	
I111	17+00	STH 150 LT, 37.5'	INLET	3	H-RT	784.83	779.42	4.6	010	(2)
I50	24+54	JACOBSEN RD LT, 32.0'	INLET	3	H-RT	778.24	775.80	1.6	020	(2)
I52	368+44	LT, 47.5'	INLET	3	H-S	778.61	775.21	2.6	020	
I53	368+44	CENTERLINE	INLET	3	H-S	779.53	775.00	3.7	020	
I55	368+44	RT, 8.5'	INLET	3	H-S	779.33	775.12	3.4	020	

REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER

* ON MCMAHONS TABLE

* I143-B7-E164
 * I145-B8-E165

NOT ON PLAN &
 NOT IN STR. TABLE

STATION TO STATION	LOCATION & STRUCT. TO STRUCT.	PIPE SIZE					12-INCH EACH	ENDWALLS 15-INCH EACH	21-INCH EACH	JOINT TIES EACH	PIPE GRATES 15-INCH EACH	INLET	ELEVATIONS DISCHARGE	GROUP CODE
		12-INCH L.F.	15-INCH L.F.	18-INCH L.F.	21-INCH L.F.	30-INCH L.F.								
* 310-37 - 310-37	E157 - B1													
* 310-37 - 310-37	B1 E157 - I131													
310-37 - 310-37	I131 - I132									1	6	778.29	778.21	010
310-37 - 310-37	I132 - E158											778.21	777.94	010
310-37 - 310-37	I132 - E158											777.94	777.90	010
313-80 - 313-80	I133 - I170											777.90	777.50	010
313-80 - 313-80	I133 - I170	8								1	6	779.68	779.66	010
313-80 - 313-80	I134 - E159	38										779.64	779.50	010
313-80 - 313-80	I170 - I134	8										779.66	779.64	010
316-00 - 316-00	I135 - I171	8										780.38	780.36	010
316-00 - 316-00	I171 - I136	8										780.36	780.34	010
316-00 - 316-00	I136 - E160	38										780.34	780.20	010
320-28 - 320-28	I137 - I138	5										782.52	782.48	010
320-28 - 320-28	I138 - E161	38										782.48	782.30	010
323-00 - 323-00	I139 - I173	8										783.98	783.96	010
323-00 - 323-00	I173 - I140	8										783.96	783.94	010
323-00 - 323-00	I140 - E162	38										783.94	783.85	010
326-68 - 326-68	I141 - I142	5										789.52	789.47	010
326-68 - 326-68	I142 - E163	46										789.47	789.30	010
330-00 - 330-00	I144 - I175	8										799.17	799.15	010
330-00 - 330-00	I175 - I143	8										799.15	799.13	010
330-00 - 330-00	I143 - E164	42										799.13	799.00	010
* 333-00 - 333-00	I146 - I145	5										810.55	810.45	010
* 333-00 - 333-00	I145 - E165	42										810.45	810.00	010
339-30 - 339-30	I27 - I147	5										809.18	809.15	020
339-30 - 339-30	I147 - E87	48										809.15	809.00	020
342-30 - 342-30	I148 - I28	5										798.00	797.84	020
342-30 - 342-30	I28 - E88	70										797.84	797.00	020
345-30 - 345-30	I29 - I149	5										787.08	787.00	020
345-30 - 345-30	I149 - E89	40										787.00	786.80	020
348-30 - 348-30	I30 - I150	5										782.48	782.40	020
348-30 - 348-30	I150 - E90	42										782.40	782.00	020
351-30 - 351-30	I31 - I151	5										782.06	781.98	020
351-30 - 351-30	I151 - E91	44										781.98	781.50	020
355-53 - 355-53	I152 - I32	5										781.52	781.46	020
355-53 - 355-53	I32 - E92	56										781.46	781.16	020
358-53 - 358-53	I153 - I33	5										779.39	779.31	020
358-53 - 358-53	I33 - E93	56										779.31	779.00	020
361-53 - 361-53	I154 - I34	6										778.32	778.30	020
361-53 - 361-53	I34 - E94	50										778.30	777.70	020
363-57 - 363-57	I155 - I36	210										778.30	777.88	020
363-57 - 363-57	I35 - I155	5										778.30	778.30	020
365-67 - 365-67	I156 - I36	7										777.92	777.88	020
365-67 - 365-67	I36 - E96	74										777.88	777.60	020
366-96 - 367-17	E130 - I61	12										775.37	775.33	020
368-44 - 368-44	I52 - I53	44										775.21	775.12	020
368-44 - 368-44	I56 - I55	24										775.17	775.12	020
368-44 - 368-44	I55 - I53	7										775.12	775.00	020
368-44 - 370-00	I53 - MH59			156								775.00	774.70	020
370-00 - 370-00	I57 - I58	24										774.77	774.72	020
370-00 - 370-00	I58 - MH59	6										774.72	774.70	020
370-00 - 370-00	I61 - I60	24										774.77	774.72	020
370-00 - 370-00	I60 - MH59		2									774.72	774.70	020
370-00 - 378-00	* MH59 - STUB					8						774.20	-	020
17-00 - 19-15	STH 150, I111-I110	210										779.42	778.37	010
19-15 - 19-15	STH 150, E166-I110	88										778.80	778.37	010
19-15 - 19-15	STH 150, I110-E167	14										778.37	778.34	010
23-00 - 24-98	STH 150, I70A-I70	198										774.90	773.65	010
24-98 - 26-05	STH 150, I70 - E86	107										773.65	773.30	010
365-00 - 19-00	JACOBSEN RD, E97 - I37A	26										776.20	776.13	020
19-00 - 19-00	JACOBSEN RD, I39 - MH38	40										776.10	776.00	020
19-00 - 17-00	JACOBSEN RD, MH38 - MH42	196										776.00	775.50	020
16-85 - 17-00	JACOBSEN RD, I41 - MH42	26										775.60	775.50	020
17-00 - 17-00	JACOBSEN RD, I43 - MH42	18										775.56	775.50	020
17-00 - 14-12	JACOBSEN RD, MH42 - MH44	284										774.45	774.39	020
14-12 - 14-12	JACOBSEN RD, I45 - MH44	32										774.39	774.35	020
14-12 - 14-25	JACOBSEN RD, MH44 - I46											774.35	774.20	020
14-25 - 14-25	JACOBSEN RD, I46 - EXIST. MH	10										775.60	775.47	020
20-83 - 20-83	JACOBSEN RD, E47 - I47A	83										775.80	775.50	020
24-54 - 25-54	JACOBSEN RD, I50 - E51	100										774.55	774.45	020
13-85 - 14-12	JACOBSEN RD, I184 - I45	42										776.13	776.00	020
19-00 - 19-00	JACOBSEN RD, I37A - MH38	53										775.66	775.56	020
17-50 - 17-00	JACOBSEN RD, I43A - I43	50										775.47	775.17	020
20-83 - 368-44	I47A - I56	184												

TOTAL 2986 56 156 139 8 21 2 2 144 1

* PLUG AT END OF STUB IS INCIDENTAL
 MH #4 (MCMAHON) TO STUB

30'-15" (MCMAHON)
 FOR TEMP TIE-IN TO EXIST. DITCH

FILTER BAGS

STATION	PURPOSE	LOCATION	ROAD	DELIVERED EACH	INSTALLED EACH	MAINTENANCE EACH	GROUP CODE
23+00	DITCH CHECK	LT	STH 150	13	13	26	010
25+00	DITCH CHECK	LT	STH 150	13	13	26	010
27+00	DITCH CHECK	LT	STH 150	13	13	26	010
29+00	DITCH CHECK	LT	STH 150	13	13	26	010
310+37	INLET PROTECTION	MEDIAN	CTH CB	24	24	48	010
312+00	DITCH CHECK	LT	CTH CB	13	13	26	010
312+00	DITCH CHECK	RT	CTH CB	13	13	26	010
313+80	INLET PROTECTION	MEDIAN	CTH CB	32	32	64	010
316+00	INLET PROTECTION	MEDIAN	CTH CB	32	32	64	010
320+00	DITCH CHECK	RT	CTH CB	13	13	26	010
320+28	INLET PROTECTION	MEDIAN	CTH CB	24	24	48	010
323+00	INLET PROTECTION	MEDIAN	CTH CB	32	32	64	010
326+00	DITCH CHECK	RT	CTH CB	13	13	26	010
326+68	INLET PROTECTION	MEDIAN	CTH CB	24	24	48	010
330+00	INLET PROTECTION	MEDIAN	CTH CB	32	32	64	010
333+00	INLET PROTECTION	MEDIAN	CTH CB	18	18	36	010
335+50	DITCH CHECK	RT	CTH CB	13	13	26	010
336+20	DITCH CHECK	RT	CTH CB	13	13	26	010
337+00	DITCH CHECK	LT	CTH CB	13	13	26	010
339+30	INLET PROTECTION	MEDIAN	CTH CB	24	24	48	020
342+30	INLET PROTECTION	MEDIAN	CTH CB	20	20	40	020
345+30	INLET PROTECTION	MEDIAN	CTH CB	20	20	40	020
348+30	INLET PROTECTION	MEDIAN	CTH CB	20	20	40	020
351+30	INLET PROTECTION	MEDIAN	CTH CB	20	20	40	020
354+50	DITCH CHECK	LT	CTH CB	13	13	26	020
355+53	INLET PROTECTION	MEDIAN	CTH CB	20	20	40	020
358+25	DITCH CHECK	RT	CTH CB	13	13	26	020
358+53	INLET PROTECTION	MEDIAN	CTH CB	20	20	40	020
361+53	INLET PROTECTION	MEDIAN	CTH CB	21	21	42	020
362+00	DITCH CHECK	LT	CTH CB	13	13	26	020
364+53	INLET PROTECTION	MEDIAN	CTH CB	21	21	42	020
365+26	INLET PROTECTION	MEDIAN	CTH CB	26	26	52	020
367+00	INLET PROTECTION	LT	CTH CB	18	18	36	020
367+17	INLET PROTECTION	MEDIAN	CTH CB	25	25	50	020
367+17	INLET PROTECTION	RT	CTH CB	18	18	36	020
367+78	INLET PROTECTION	MEDIAN	CTH CB	25	25	50	020
367+78	INLET PROTECTION	LT	CTH CB	18	18	36	020
367+78	INLET PROTECTION	RT	CTH CB	18	18	36	020
370+00	INLET PROTECTION	LT	CTH CB	18	18	36	020
370+00	INLET PROTECTION	LT	CTH CB	18	18	36	020
370+00	INLET PROTECTION	RT	CTH CB	18	18	36	020
370+00	INLET PROTECTION	RT	CTH CB	18	18	36	020
14+00	INLET PROTECTION	RT	JACOBSEN RD.	18	18	36	020
14+25	INLET PROTECTION	LT	JACOBSEN RD.	18	18	36	020
16+85	INLET PROTECTION	RT	JACOBSEN RD.	18	18	36	020
17+00	INLET PROTECTION	LT	JACOBSEN RD.	18	18	36	020
18+05	INLET PROTECTION	RT	JACOBSEN RD.	18	18	36	020
19+02	INLET PROTECTION	RT	JACOBSEN RD.	18	18	36	020
19+13	INLET PROTECTION	LT	JACOBSEN RD.	18	18	36	020
19+57	INLET PROTECTION	LT	JACOBSEN RD.	18	18	36	020
21+00	DITCH CHECK	LT	JACOBSEN RD.	13	13	26	020
21+00	DITCH CHECK	RT	JACOBSEN RD.	13	13	26	020
UNDISTRIBUTED				39	39	78	010
UNDISTRIBUTED				85	85	170	020
TOTAL:				1100	1100	2200	

STOCKPILING SALVAGED TOPSOIL

STATION	LOCATION	C.Y.	REMARKS	GROUP CODE
307+00	CTH CB, RT/LT	1120	STOCKPILE LOCATION	010
364+00	CTH CB, LT	1015	STOCKPILE LOCATION	020
TOTAL		2135		

McManon 8/15

STATE PROJECT NUMBER	SHEET NO.
4619-02-71	SE 3F
MISCELLANEOUS QUANTITIES	
CTH CB	WINNEBAGO COUNTY

INLETS AND MANHOLES AND CONSTRUCTION STAKING, INLETS AND MANHOLES

NO.	STATION	LOCATION	ROAD	STRUCTURE	TYPE	COVER	GRATE FLOWLINE ELEV.	INVERT ELEV.	TOP OF STRUCTURE ELEV.	(1) DEPTH TO FLOWLINE	CONSTRUCTION STAKING EACH	GROUP CODE
B1	310+37	LT, 46.5'	CTH CB	INLET	3	H-LT.	781.53	778.26	780.60	2.3	1	010
B2	313+80	LT, 34.5'	CTH CB	INLET	3	H-LT.	782.80	779.78	781.87	2.0	1	010
B3	316+00	LT, 34.5'	CTH CB	INLET	3	H-LT.	783.46	780.50	782.53	2.0	1	010
B4	320+28	LT, 34.5'	CTH CB	INLET	3	H-LT.	785.20	782.82	784.27	1.7	1	010
B5	323+00	LT, 34.5'	CTH CB	INLET	3	H-LT.	786.56	784.06	785.63	1.6	1	010
B6	326+68	LT, 34.5'	CTH CB	INLET	3	H-LT.	792.35	789.83	791.42	1.8	1	010
B7	330+00	LT, 34.5'	CTH CB	INLET	3	H-LT.	804.06	799.05	803.13	4.1	1	010
B8	333+00	LT, 29.5'	CTH CB	INLET	3	H-LT.	814.77	810.17	813.84	3.7	1	010
B9	339+30	LT, 29.5'	CTH CB	INLET	3	H-RT.	814.45	809.26	813.52	4.2	1	020
B10	342+30	LT, 29.5'	CTH CB	INLET	3	H-RT.	804.54	797.36	803.59	6.2	1	020
B11	345+30	LT, 29.5'	CTH CB	INLET	3	H-RT.	794.20	787.23	793.27	6.0	1	020
B12	348+30	LT, 29.5'	CTH CB	INLET	3	H-RT.	789.34	782.72	788.41	5.7	1	020
B13	351+30	LT, 29.5'	CTH CB	INLET	3	H-RT.	788.11	782.33	787.18	4.8	1	020
B14	355+53	LT, 29.5'	CTH CB	INLET	3	H-RT.	784.72	779.00	783.79	4.8	1	020
B15	358+53	LT, 29.5'	CTH CB	INLET	3	H-RT.	782.71	778.50	781.78	3.3	1	020
B16	361+53	LT, 32.5'	CTH CB	INLET	3	H-RT.	780.84	777.53	779.71	2.2	1	020
B17	363+89	LT, 35.5'	CTH CB	INLET	3	H-RT.	779.52	776.96	778.59	1.6	1	020

* LOCATION SHOWN IS TO CENTER OF STRUCTURE

(1) DEPTH TO FLOWLINE SHOWN DOES NOT INCLUDE THE 6-INCH ADJUSTMENT BELOW CASTING FOR INLETS. MINIMUM STRUCTURE DEPTH OF 3.5 FEET EXCLUDES COVER AND ADJUSTMENT.

FILTER BAGS

STATION	PURPOSE	LOCATION	ROAD	DELIVERED EACH	INSTALLED EACH	MAINTAINED EACH	GROUP CODE
310+37	INLET PROTECTION	LT.	CTH CB	8	8	16	010
313+80	INLET PROTECTION	LT.	CTH CB	8	8	16	010
316+00	INLET PROTECTION	LT.	CTH CB	8	8	16	010
320+28	INLET PROTECTION	LT.	CTH CB	8	8	16	010
323+00	INLET PROTECTION	LT.	CTH CB	8	8	16	010
326+68	INLET PROTECTION	LT.	CTH CB	8	8	16	010
330+00	INLET PROTECTION	LT.	CTH CB	8	8	16	010
333+00	INLET PROTECTION	LT.	CTH CB	8	8	16	010
339+30	INLET PROTECTION	LT.	CTH CB	8	8	16	020
342+30	INLET PROTECTION	LT.	CTH CB	8	8	16	020
345+30	INLET PROTECTION	LT.	CTH CB	8	8	16	020
348+30	INLET PROTECTION	LT.	CTH CB	8	8	16	020
351+30	INLET PROTECTION	LT.	CTH CB	8	8	16	020
355+53	INLET PROTECTION	LT.	CTH CB	8	8	16	020
358+53	INLET PROTECTION	LT.	CTH CB	8	8	16	020
361+53	INLET PROTECTION	LT.	CTH CB	8	8	16	020
363+89	INLET PROTECTION	LT.	CTH CB	8	8	16	020
TOTALS				136	136	272	

REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER

STATION	LOCATION & STR.-STR.	RCP, CLASS III		ENDWALLS 12-INCH RCCP EACH	JOINT TIES EACH	ELEVATIONS		GROUP CODE
		STORM SEWER 12-INCH L.F.	STORM SEWER 21-INCH L.F.			INLET	DISCHARGE	
310+37	CTH CB, E157 - B1		28 (14)			778.32	778.26	010
310+37	CTH CB, B1 - I131		46 (0)			778.26	778.17	010
313+80	CTH CB, B2 - B2A	28 (28)		1 (1)	4	779.78	779.70	010
316+00	CTH CB, B3 - B3A	27 (27)		1 (1)	4	780.50	780.40	010
320+28	CTH CB, B4 - I137	35 (35)				782.62	782.52	010
323+00	CTH CB, B5 - I139	26 (26)				784.06	783.98	010
326+68	CTH CB, B6 - I141	35 (35)				789.63	789.52	010
330+00	CTH CB, I143 - B7	28 (0)				799.13	799.05	010
330+00	CTH CB, B7 - E164	34 (11)		1 (0)	4	799.05	799.00	010
333+00	CTH CB, I145 - B8	28 (0)				810.45	810.17	010
333+00	CTH CB, B8 - E165	30 (9)		1 (0)	4	810.17	810.00	010
339+30	CTH CB, B9 - I27	26 (26)				809.26	809.18	020
342+30	CTH CB, I28 - B10	26 (26)				797.84	797.36	020
342+30	CTH CB, B10 - E88	41 (3)		1 (0)	4	797.36	797.00	020
345+30	CTH CB, B11 - I29	28 (26)				787.23	787.08	020
348+30	CTH CB, B12 - I30	26 (26)				782.72	782.48	020
351+30	CTH CB, B13 - I31	26 (26)				782.33	782.06	020
355+53	CTH CB, B14 - B14A	37 (37)		1 (1)	4	779.00	778.50	020
358+53	CTH CB, B15 - B15A	31 (31)		1 (1)	4	778.50	778.24	020
361+53	CTH CB, B16 - B16A	26 (26)		1 (1)	4	777.53	777.30	020
363+89	CTH CB, B17 - B17A	32 (32)		1 (1)	4	776.96	776.80	020
TOTALS		564 (430)	74 (14)	9 (6)				

(TO BE PAID FOR BY THE TOWN OF MENASHA)

SALVAGED TOPSOIL, SEED, MULCH, AND FERTILIZER

STA.-STA.	LOCATION	SALVAGED TOPSOIL S.Y.	MULCHING S.Y.	FERTILIZER TYPE B CWT.	SEEDING NO. 30 (LBS)	GROUP CODE
309+00-339+00	C.T.H. CB	3572	3572	2.25	64	010
339+00-366+00	C.T.H. CB	2195	2195	1.38	40	020

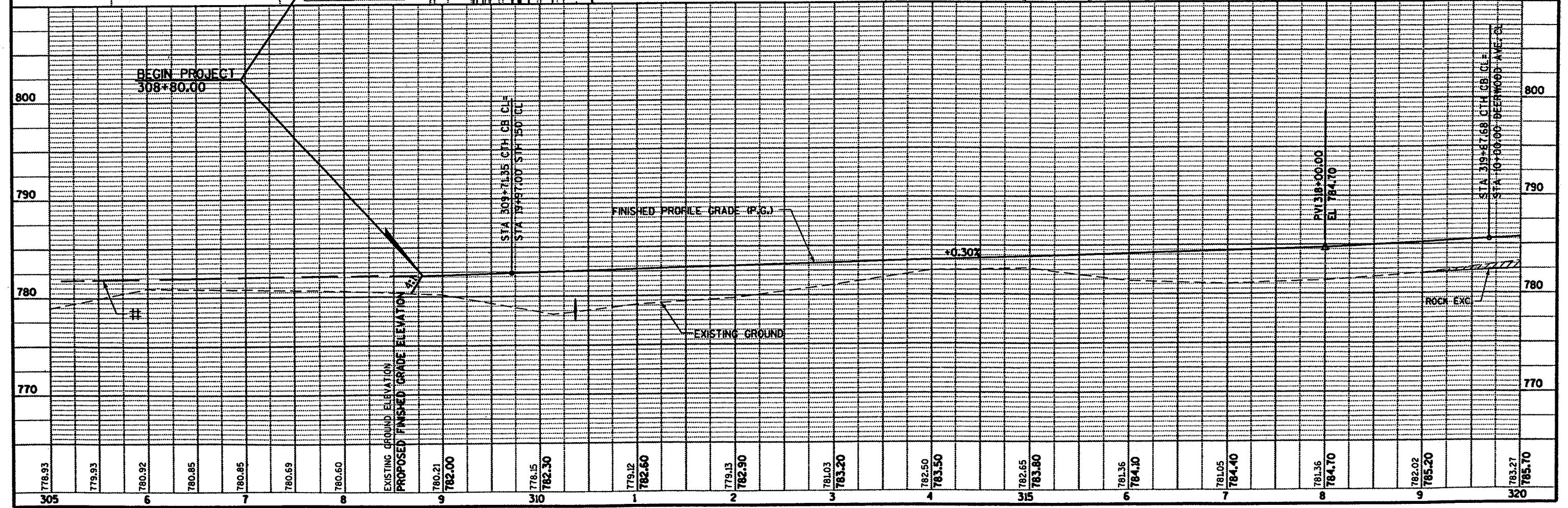
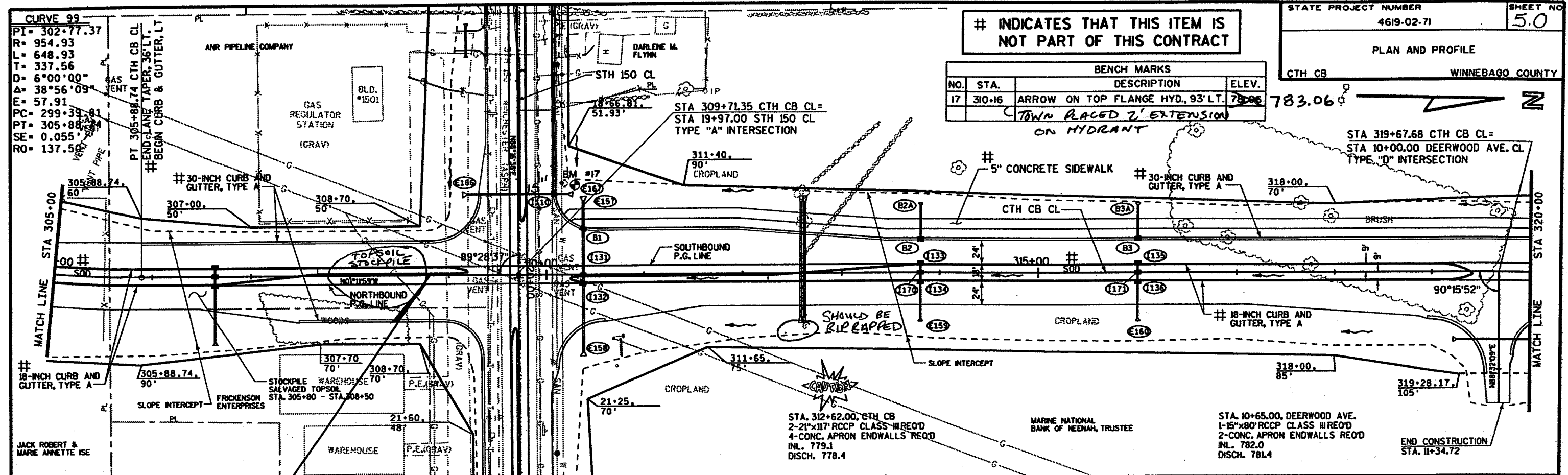
SOD & EROSION MAT, CLASS II - TYPE A

STATION	LOCATION	ROAD	DELIVERED S.Y.	INSTALLED S.Y.	SOD	GROUP CODE
313+80	OUTFALL- LT.	CTH CB	8	8	8	010
316+00	OUTFALL- LT.	CTH CB	8	8	8	010
355+53	OUTFALL- LT.	CTH CB	8	8	8	020
358+53	OUTFALL- LT.	CTH CB	8	8	8	020
361+53	OUTFALL- LT.	CTH CB	8	8	8	020
363+48	OUTFALL- LT.	CTH CB	8	8	8	020
TOTALS			48	48	48	

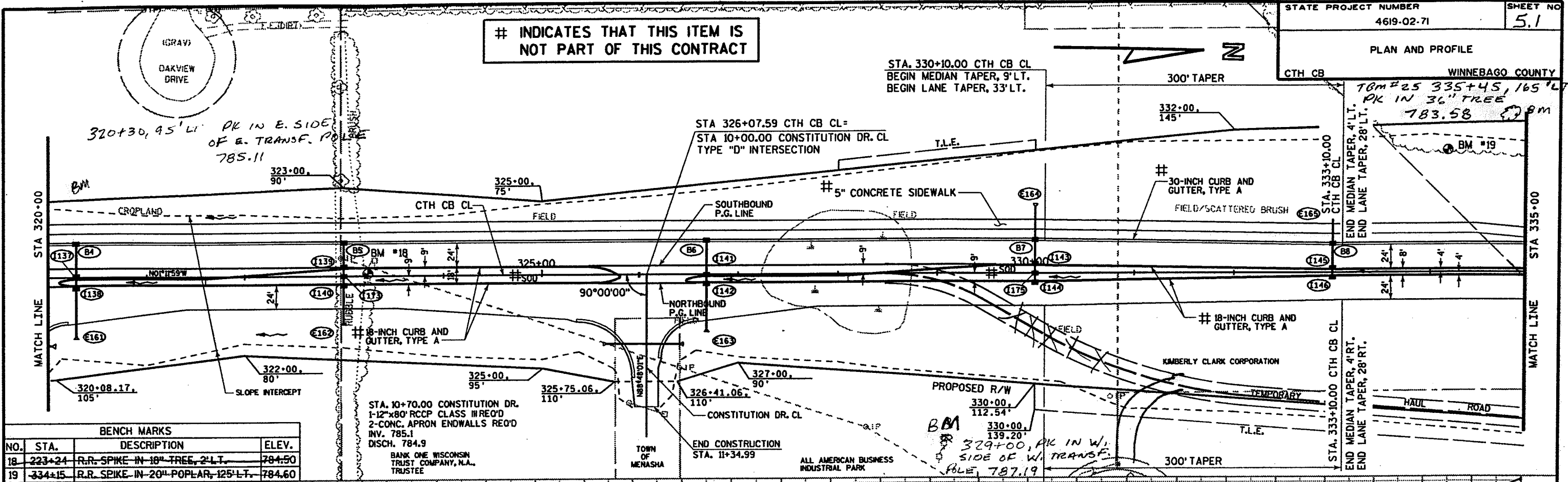
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
17	310+16	ARROW ON TOP FLANGE HYD., 93' LT.	783.06
		TOWN PLACED 2' EXTENSION ON HYDRANT	

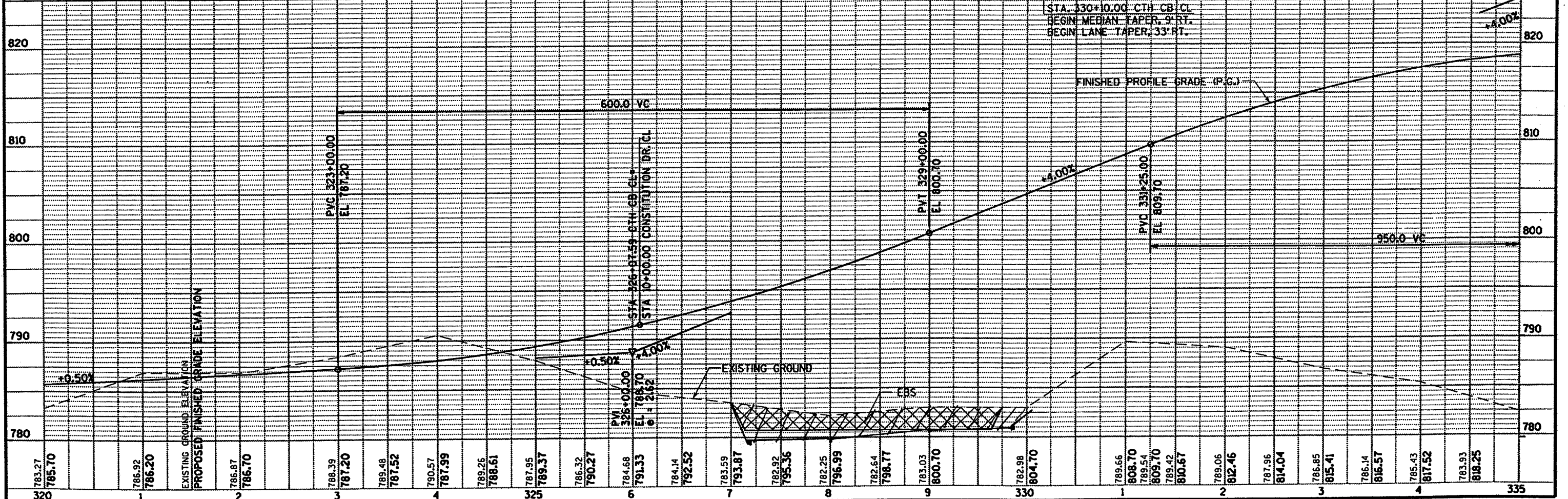
CURVE 99
 PI= 302+77.37
 R= 954.93
 L= 648.93
 T= 337.56
 D= 6°00'00"
 Δ= 38°56'09"
 E= 57.91
 PC= 299+39.81
 PT= 305+88.74
 SE= 0.055'
 RO= 137.50



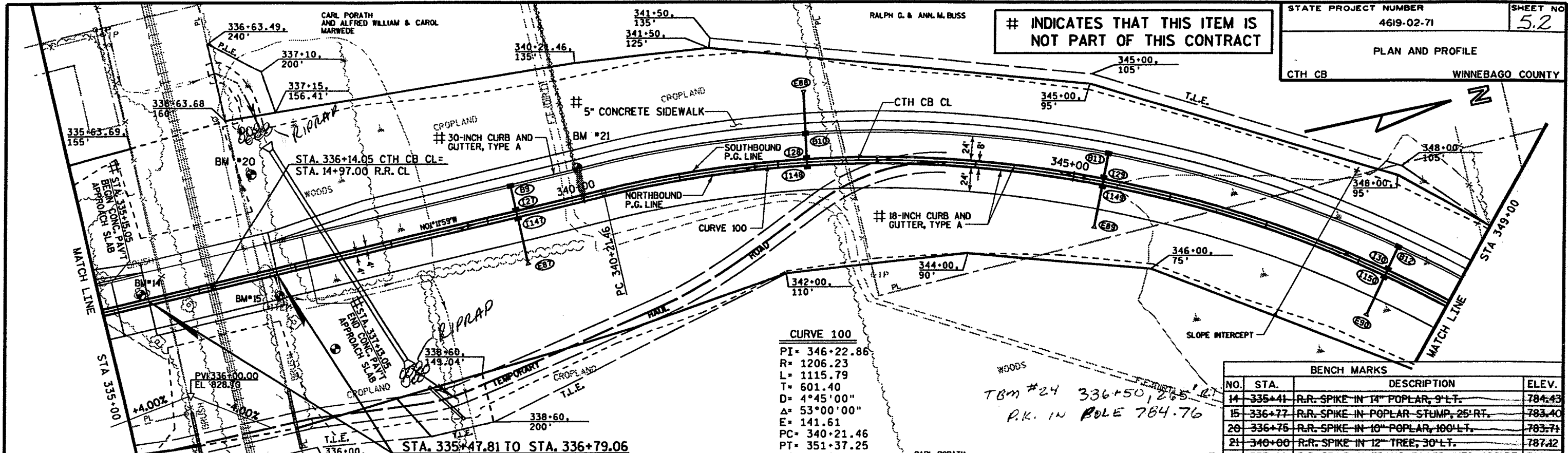
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
18	223+24	R.R. SPIKE IN 18" TREE, 2' LT.	784.50
19	334+15	R.R. SPIKE IN 20" POPLAR, 125' LT.	784.60



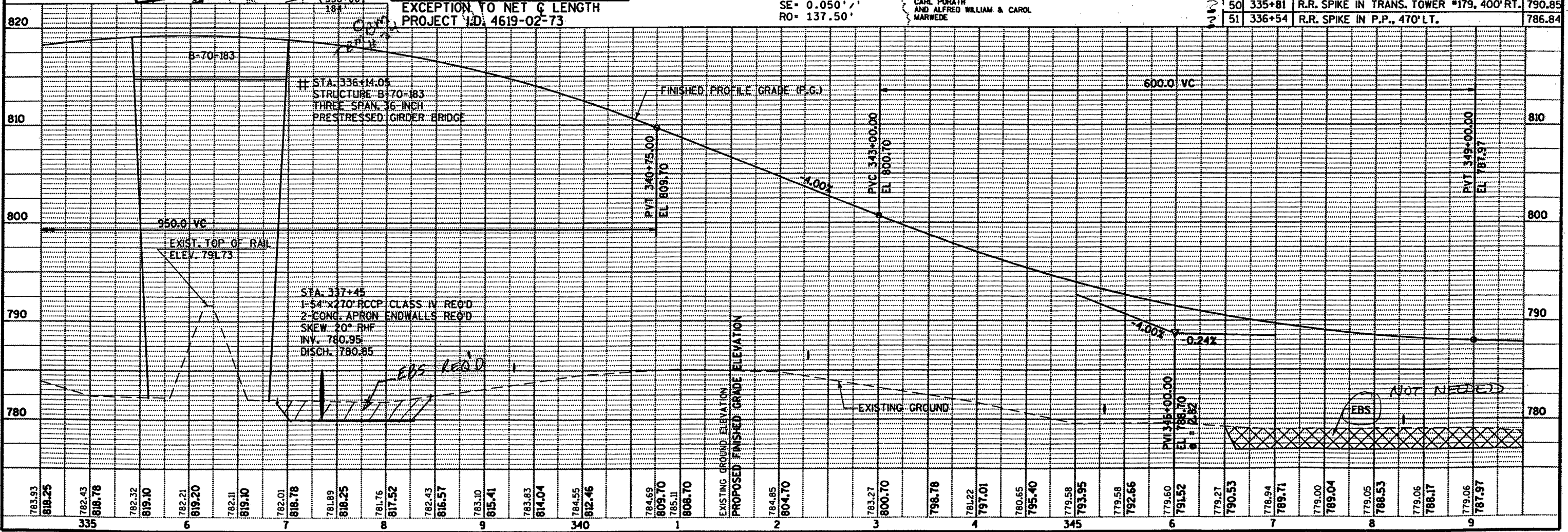
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
14	335+41	R.R. SPIKE IN 14\"/>	

CURVE 100
 PI= 346+22.86
 R= 1206.23
 L= 1115.79
 T= 601.40
 D= 4°45'00\"/>

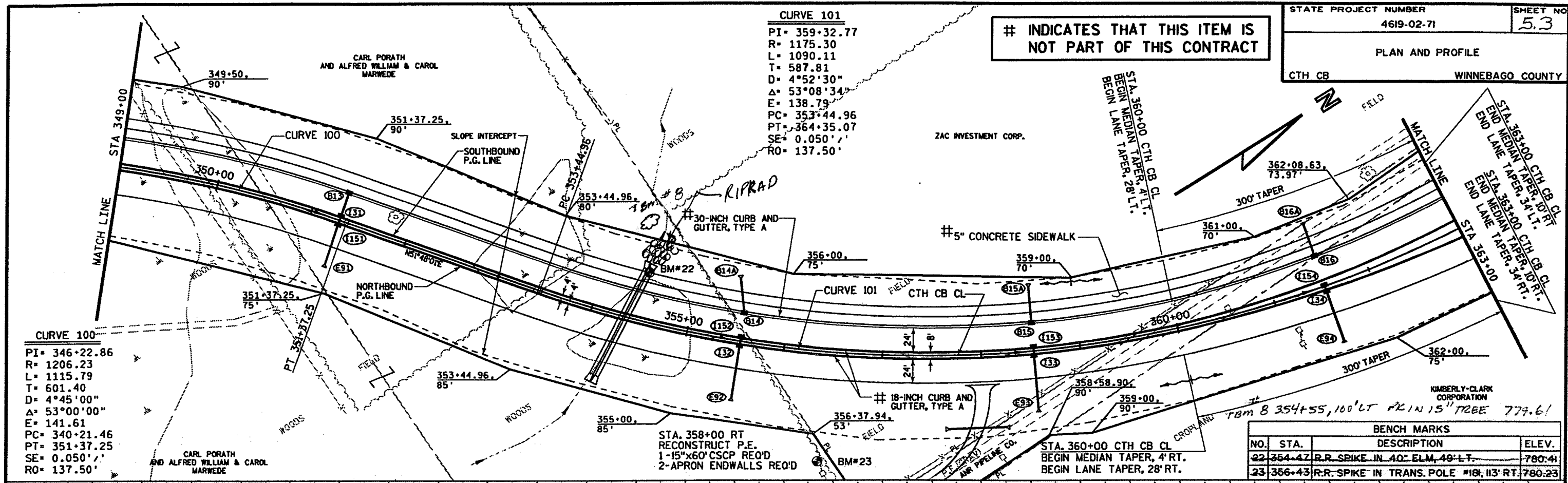
TBM #24 336+50, 265' LT
 P.K. IN POLE 784.76



INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

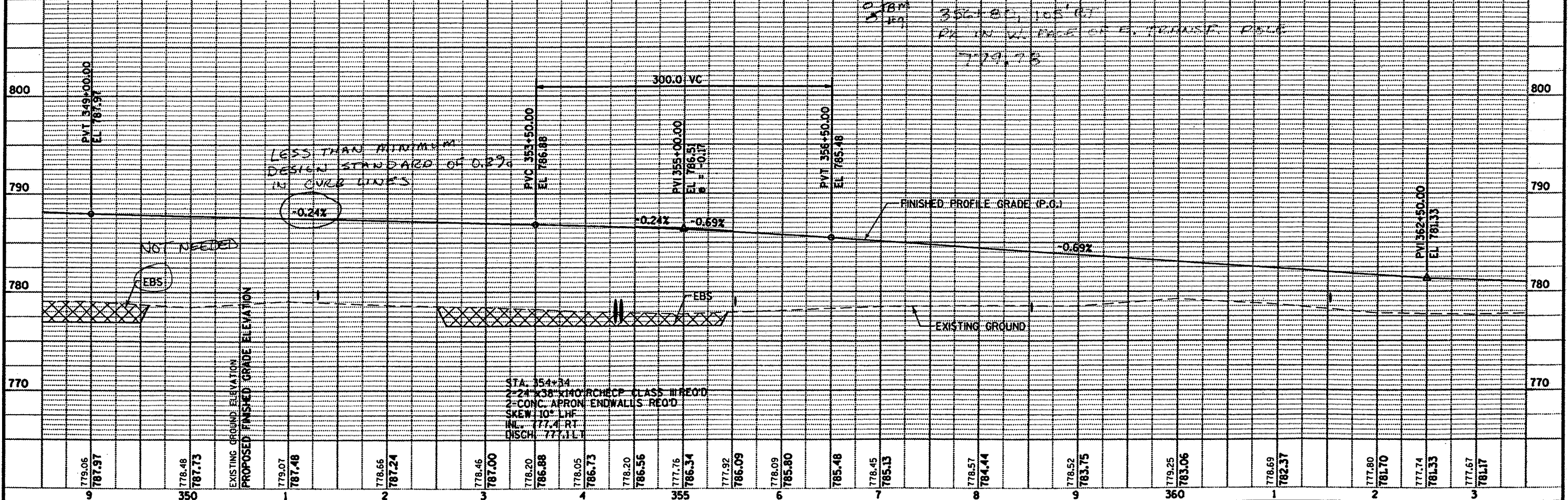
CURVE 101
 PI = 359+32.77
 R = 1175.30
 L = 1090.11
 T = 587.81
 D = 4°52'30"
 Δ = 53°08'34"
 E = 138.79
 PC = 353+44.96
 PT = 364+35.07
 SE = 0.050' / 1'
 RO = 137.50'

CURVE 100
 PI = 346+22.86
 R = 1206.23
 L = 1115.79
 T = 601.40
 D = 4°45'00"
 Δ = 53°00'00"
 E = 141.61
 PC = 340+21.46
 PT = 351+37.25
 SE = 0.050' / 1'
 RO = 137.50'



BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
22	354+47	R.R. SPIKE IN 40' ELM, 49' LT.	780.41
23	356+43	R.R. SPIKE IN TRANS. POLE #18, 113' RT.	780.23

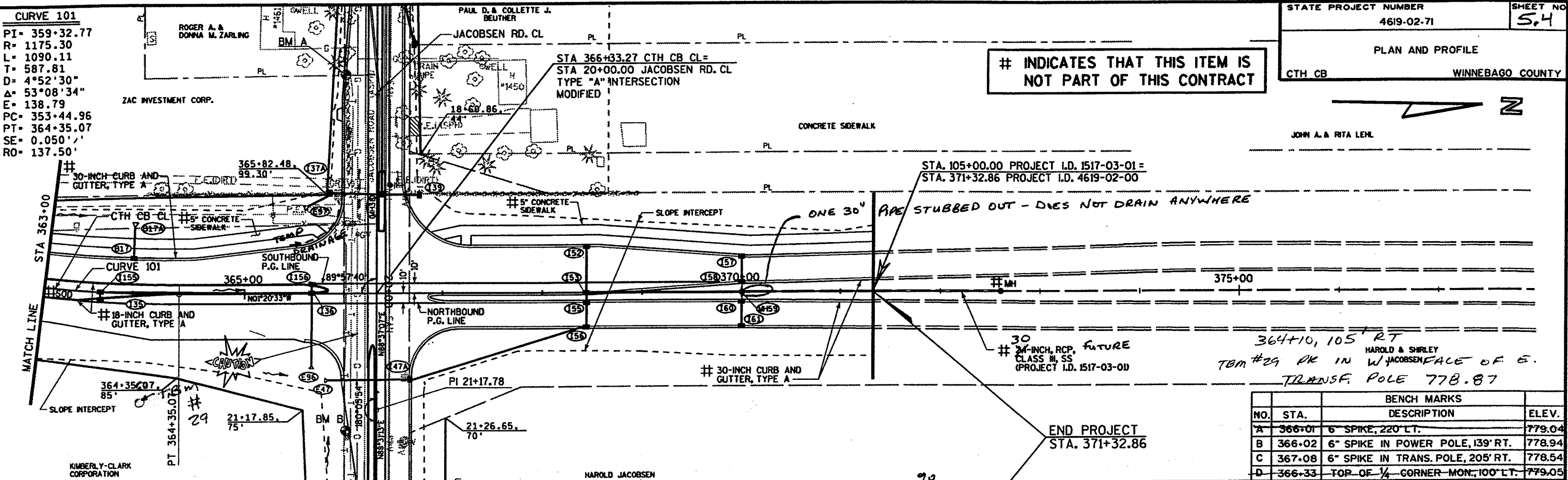


CURVE 101
 PI= 359+32.77
 R= 1175.30
 L= 1090.11
 T= 587.81
 D= 4°52'30"
 Δ= 53°08'34"
 E= 138.79
 PC= 353+44.96
 PT= 364+35.07
 SE= 0.050'
 RO= 137.50'

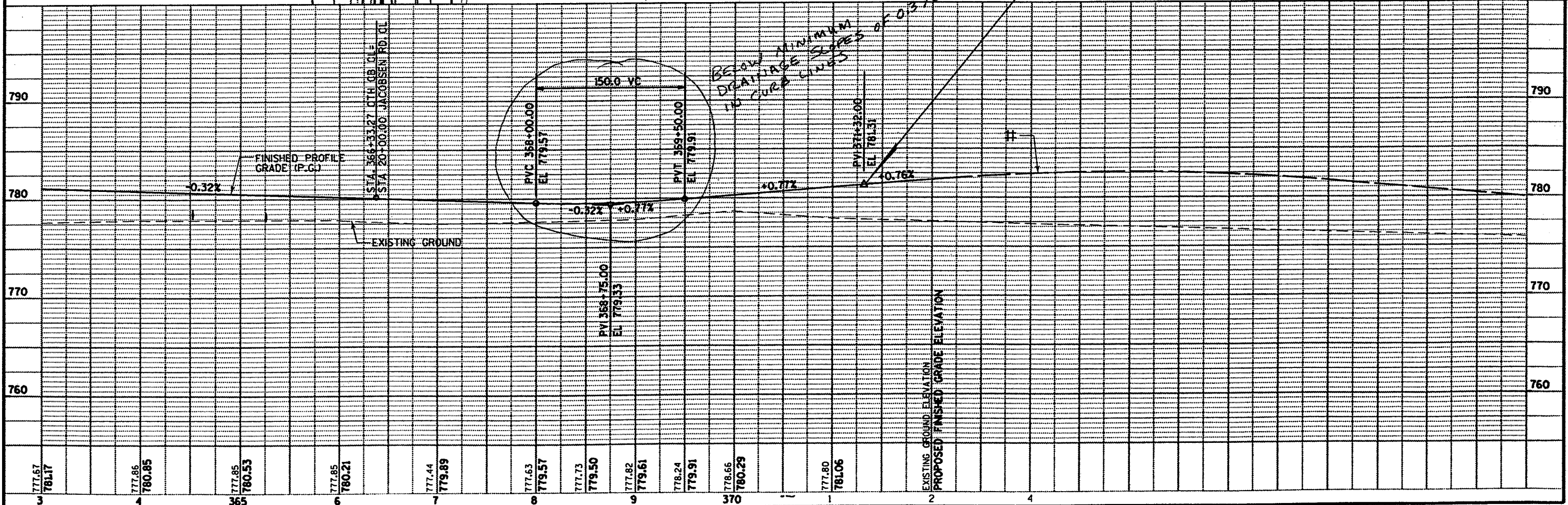
STATE PROJECT NUMBER
 4619-02-71
 SHEET NO.
 5.4
 PLAN AND PROFILE
 CTH CB WINNEBAGO COUNTY

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

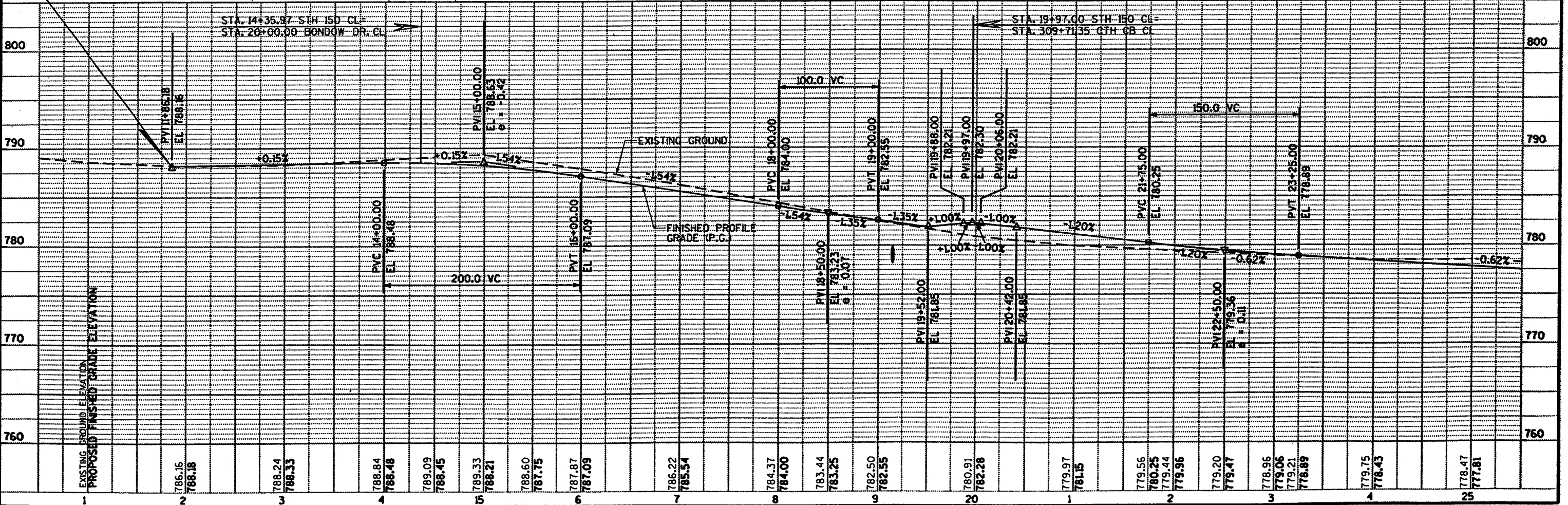
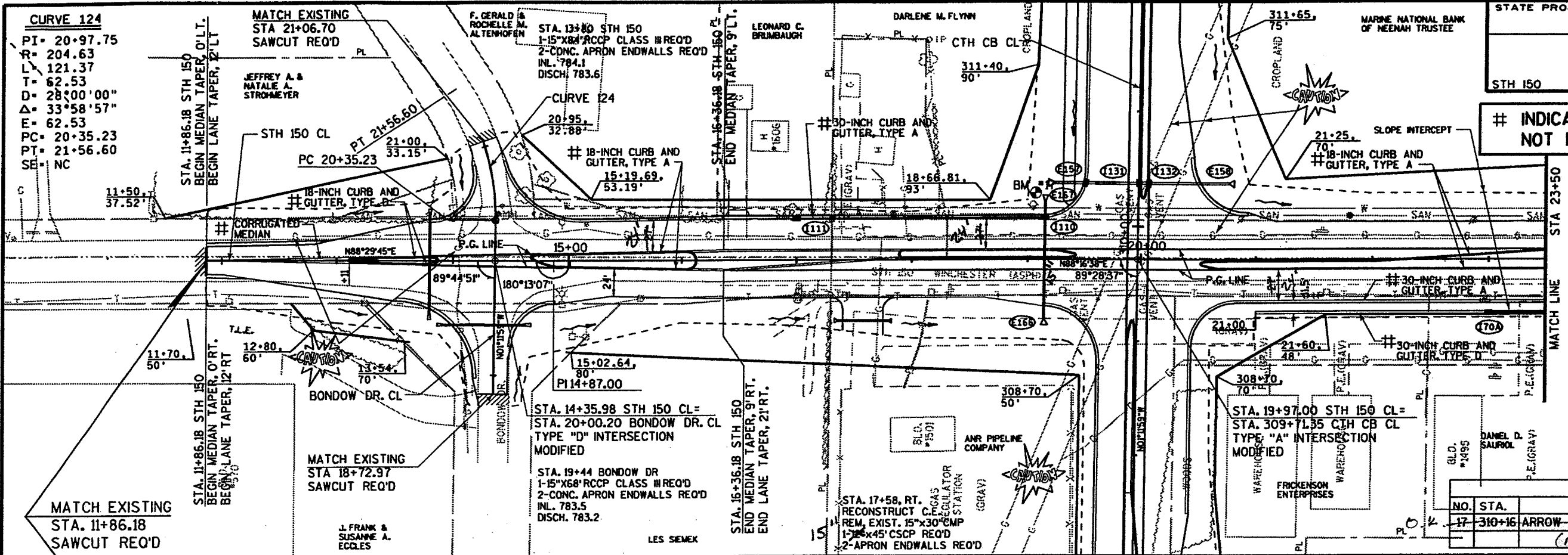
JOHN A. & RITA LEHL



BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
A	366+01	6" SPIKE, 220' LT.	779.04
B	366+02	6" SPIKE IN POWER POLE, 139' RT.	778.94
C	367+08	6" SPIKE IN TRANS. POLE, 205' RT.	778.54
D	366+33	TOP OF 1/4 CORNER-MON, 100' LT.	779.05



INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

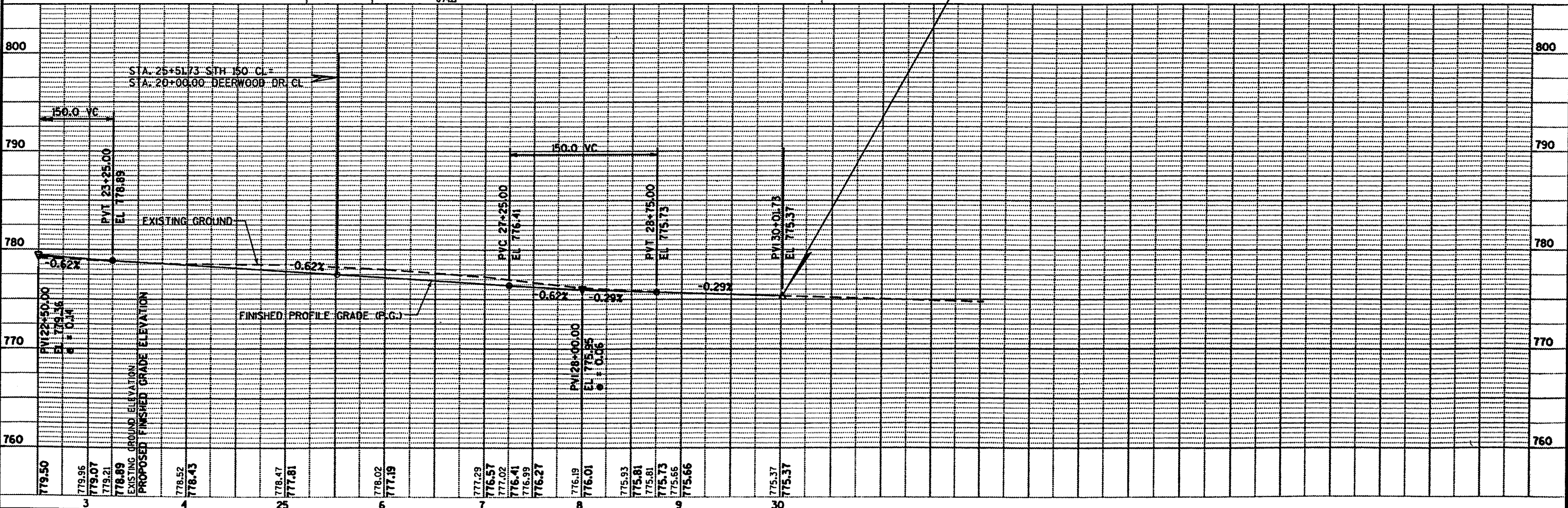
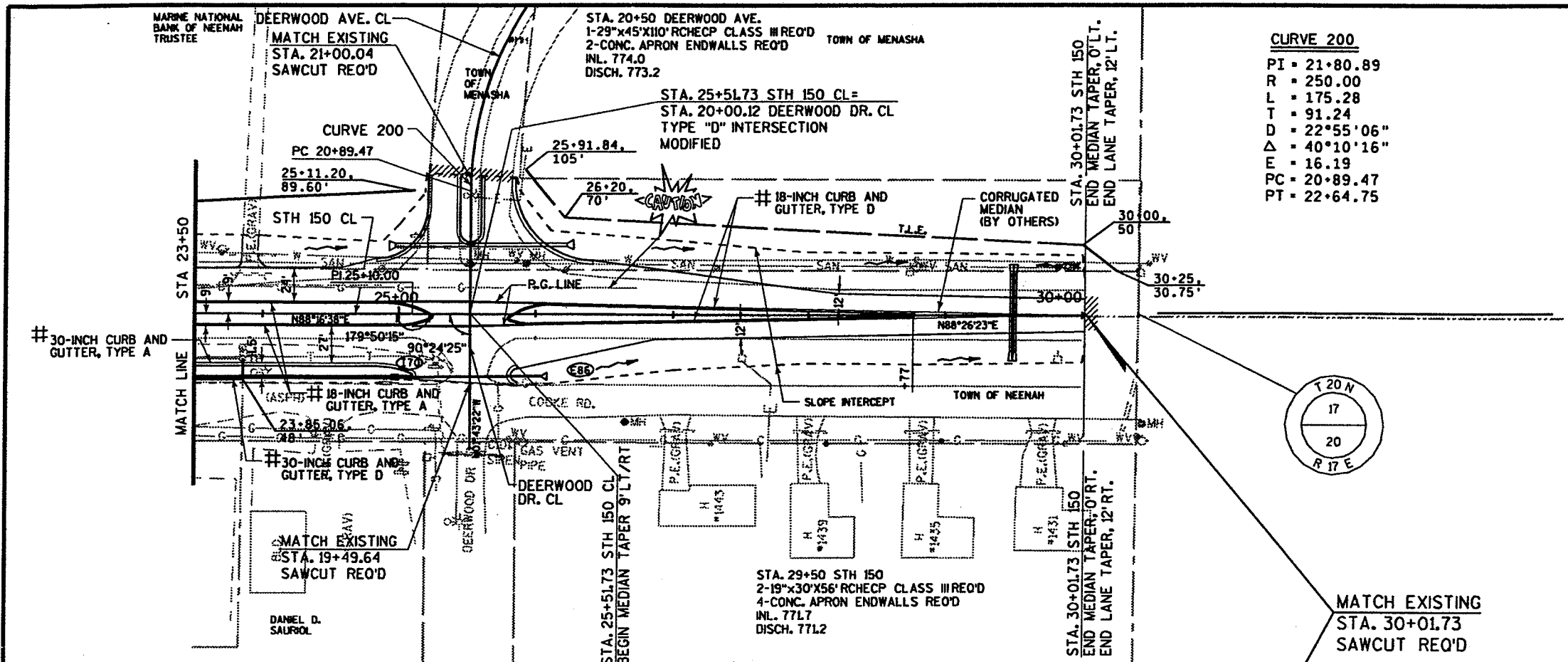


BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
17	310+16	ARROW-ON-TOP-FLANGE-HYD., 93' LT. (RAISED)	781.06
			783.06

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

CURVE 200
 PI = 21+80.89
 R = 250.00
 L = 175.28
 T = 91.24
 D = 22°55'06"
 Δ = 40°10'16"
 E = 16.19
 PC = 20+89.47
 PT = 22+64.75



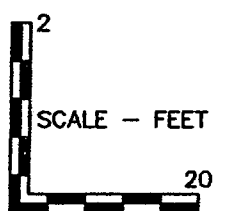
BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
17	310+16	ARROW ON TOP FLANGE HYD. 93' LT.	781.06 783.06 (RAISED)

BARWICK, TERRY
1532



BARWICK, PETER
1532

BENCH MARK:
TOP OF HYDRANT
ELEV.= 780.13



← 20' DRAINAGE EASEMENT

GRAV. DR.

STA 14+25, 18.5' LT
INLET 46
FL= 778.27
INV.= 774.28

30' - 15" STUBBED
TO EXIST. DITCH
(NO ENDWALL)

OPEN GRATE STO MH #4
STA 14+25, 28' LT
RIM= 777.65
INV.= 774.26
W. INV.= 774.80
D.= 3.39'(RIM TO INV.)

120.00' 4" STO

120.00'

MATCH EXIST. DITCH
ELEV.= 774.73

30' STO MH 4
24' - 15" STO

IC. WALL

18" CMP

12" WM

21" SAN

SAN. ME. 18"
EXISTING RIM = 778.33
PROPOSED RIM = 777.17

ROADWAY
CONSTRUCTION
BY OTHERS

21
UNDER D.O.T.
CONTRACT

STA 14+12
5' LT
STO MH 44
RIM= 778.26
INV.= 774.32

ROAD

STA 14+12, 17.5' RT
INLET 45
FL= 778.34
INV.= 774.38

STA 13+85, 28' RT
INLET 184
FL= 775.93
INV.= 774.43

STORM SEWER CONSTRUCTION
UNDER D.O.T. CONTRACT

354.00'

4" STO

18" CMP

GRAV. DR.

INC. WALL

NO.	DATE	REVISION

McMAHON
ASSOCIATES, INC. ■ ENGINEERS
■ ARCHITECTS
■ SCIENTISTS
■ SURVEYORS

1445 McMahon Drive Neenah, WI 54956
Mailing Address:
P.O. Box 1025 Neenah, WI 54957-1025
TEL: 414-751-4200 FAX: 414-751-4284



AVERAGE END AREA VOLUMES

CTH CB

STATION	END AREA		VOLUME INCREMENTAL		VOLUME CUMULATIVE		EXP FAC	M A S H A U L
	CUT	FILL	CUT	FILL	CUT	FILL		
308 + 80	0.0	0.0	0.0	148.9	0.0	193.6	1.3	-193.6
309 + 00	7.4	80.4	13.7	859.1	13.7	1116.8	1.3	-1103.1
310 + 00	0.0	383.5	40.4	1091.9	54.1	2536.2	1.3	-2482.1
311 + 00	21.8	206.1	78.5	683.5	132.6	3424.8	1.3	-3292.2
312 + 00	20.6	163.0	87.6	481.9	220.2	4051.2	1.3	-3831.0
313 + 00	26.7	97.2	96.1	192.2	316.3	4301.1	1.3	-3984.8
314 + 00	25.2	6.6	178.3	129.6	494.6	4469.6	1.3	-3975.0
315 + 00	71.1	63.4	225.4	360.0	720.0	4937.6	1.3	-4217.6
316 + 00	50.6	131.0	150.9	550.7	870.9	5653.6	1.3	-4782.6
317 + 00	30.9	166.4	79.3	663.9	950.2	6516.6	1.3	-5566.4
318 + 00	11.9	192.1	41.7	690.7	991.9	7414.6	1.3	-6422.7
319 + 00	10.6	180.9	104.3	546.9	1096.1	8125.5	1.3	-7029.4
320 + 00	45.7	114.4	883.5	263.9	1979.6	8468.5	1.3	-6488.9
321 + 00	431.4	28.1	1239.3	52.0	3218.9	8536.2	1.3	-5317.3
322 + 00	237.8	0.0	1016.1	0.0	4235.0	8536.2	1.3	-4301.2
323 + 00	310.9	0.0	1535.6	0.0	5770.6	8536.2	1.3	-2765.6
324 + 00	518.3	0.0	1105.2	134.4	6875.7	8711.0	1.3	-1835.2
325 + 00	78.5	72.6	145.4	2008.0	7021.1	11321.3	1.3	-4300.2
326 + 00	0.0	1011.7	0.0	4531.1	7021.1	17211.8	1.3	-10190.6
327 + 00	0.0	1435.1	0.0	6684.6	7021.1	25901.8	1.3	-18880.7
328 + 00	0.0	2174.6	0.0	9376.3	7021.1	38091.0	1.3	-31069.9
329 + 00	0.0	2888.6	0.0	11957.6	7021.1	53635.8	1.3	-46614.7
330 + 00	0.0	3568.5	0.0	13802.4	7021.1	71579.0	1.3	-64557.9
331 + 00	0.0	3884.8	0.0	14587.6	7021.1	90542.8	1.3	-83521.7
332 + 00	0.0	3992.5	0.0	16734.1	7021.1	112297.1	1.3	-105276.0
333 + 00	0.0	5043.9	0.0	19930.7	7021.1	138207.1	1.3	-131186.0
334 + 00	0.0	5718.7	0.0	21529.4	7021.1	166195.4	1.3	-159174.3
335 + 00	0.0	5907.2	0.0	23818.9	7021.1	197159.9	1.3	-190138.8
337 + 00	0.0	6955.0	0.0	25811.3	7021.1	230714.6	1.3	-223693.5
338 + 00	0.0	6983.1	0.0	23396.5	7021.1	261130.0	1.3	-254108.9
339 + 00	0.0	5651.0	0.0	19557.8	7021.1	286555.1	1.3	-279534.0
340 + 00	0.0	4910.2	0.0	16503.0	7021.1	308009.0	1.3	-300987.9
341 + 00	0.0	4001.4	0.0	13048.1	7021.1	324971.6	1.3	-317950.5
342 + 00	0.0	3044.6	0.0	9920.2	7021.1	337867.8	1.3	-330846.7
343 + 00	0.0	2312.3	0.0	7936.7	7021.1	348185.5	1.3	-341164.4
344 + 00	0.0	1973.5	0.0	7073.1	7021.1	357380.6	1.3	-350359.5
345 + 00	0.0	1846.0	0.0	6111.5	7021.1	365325.5	1.3	-358304.4
346 + 00	0.0	1454.2	0.0	5450.6	7021.1	372411.2	1.3	-365390.1
347 + 00	0.0	1489.1	0.0	5265.4	7021.1	379256.2	1.3	-372235.1
348 + 00	0.0	1354.2	0.0	4836.7	7021.1	385543.9	1.3	-378522.8
349 + 00	0.0	1257.6	0.0	4674.1	7021.1	391620.2	1.3	-384599.1
350 + 00	0.0	1266.4	0.0	4140.9	7021.1	397003.4	1.3	-389982.3
351 + 00	0.0	969.7	0.0	3529.3	7021.1	401591.4	1.3	-394570.3
352 + 00	0.0	936.1	0.0	4004.4	7021.1	406797.2	1.3	-399776.1
353 + 00	0.0	1226.3	0.0	4553.9	7021.1	412717.3	1.3	-405696.1
354 + 00	0.0	1232.8	5.7	4503.7	7026.9	418572.1	1.3	-411545.2
355 + 00	3.1	1199.2	10.2	3765.9	7037.0	423467.8	1.3	-416430.7

356 + 00	2.4	834.4	10.2	3765.9	7037.0	423467.8	1.3	-416430.7
357 + 00	1.1	729.1	6.5	2895.4	7043.5	427231.8	1.3	-420188.2
358 + 00	0.7	677.7	3.3	2605.2	7046.9	430618.5	1.3	-423571.6
359 + 00	3.7	482.9	8.1	2149.3	7055.0	433412.5	1.3	-426357.5
360 + 00	4.3	364.4	14.8	1569.1	7069.8	435452.3	1.3	-428382.5
361 + 00	6.0	300.4	19.1	1231.1	7088.9	437052.8	1.3	-429963.9
362 + 00	8.0	324.4	25.9	1157.0	7114.8	438556.9	1.3	-431442.1
363 + 00	7.1	297.9	28.0	1152.4	7142.8	440055.1	1.3	-432912.3
364 + 00	12.0	276.3	35.4	1063.3	7178.1	441437.4	1.3	-434259.2
365 + 00	22.9	186.2	64.6	856.5	7242.8	442550.8	1.3	-435308.0
366 + 00	0.0	42.0	42.4	422.6	7285.2	443100.2	1.3	-435815.0
367 + 00	0.0	162.9	0.0	379.4	7285.2	443593.5	1.3	-436308.3
368 + 00	42.1	79.9	78.0	449.6	7363.1	444178.0	1.3	-436814.8
369 + 00	3.2	67.7	83.9	273.3	7447.0	444533.3	1.3	-437086.3
370 + 00	3.2	83.8	11.9	280.6	7458.9	444898.0	1.3	-437439.1
371 + 00	0.0	292.6	5.9	697.0	7464.8	445804.2	1.3	-438339.4
371 + 33	0.0	0.0	0.0	178.8	7464.8	446036.6	1.3	-438571.8

AVERAGE END AREA VOLUMES

STH 150

STATION	END AREA		VOLUME INCREMENTAL		VOLUME CUMULATIVE		EXP FAC	M A S H A U L
	CUT	FILL	CUT	FILL	CUT	FILL		
12 + 00	61.4	0.0	113.7	0.0	113.7	0.0	1.3	113.7
13 + 00	66.1	0.0	236.1	0.0	349.8	0.0	1.3	349.8
15 + 00	201.6	0.0	991.5	0.0	1341.3	0.0	1.3	1341.3
16 + 00	128.7	0.0	611.7	0.0	1953.0	0.0	1.3	1953.0
17 + 00	92.3	0.0	409.3	0.0	2362.2	0.0	1.3	2362.2
18 + 00	89.8	1.3	337.2	2.4	2699.4	3.1	1.3	2696.3
19 + 00	58.6	51.2	274.8	97.2	2974.3	129.5	1.3	2844.7
20 + 00	0.0	0.0	108.5	94.8	3082.8	252.8	1.3	2830.0
21 + 00	2.5	109.6	4.6	203.0	3087.4	516.6	1.3	2570.8
22 + 00	14.1	40.0	30.7	277.0	3118.1	876.8	1.3	2241.4
23 + 00	23.6	28.1	69.8	126.1	3188.0	1040.7	1.3	2147.2
24 + 00	65.6	20.0	165.2	89.1	3353.1	1156.5	1.3	2196.6
25 + 00	49.9	31.0	213.9	94.4	3567.0	1279.3	1.3	2287.7
26 + 00	23.8	47.8	136.5	145.9	3703.5	1469.0	1.3	2234.5
27 + 00	45.1	4.6	127.6	97.0	3831.1	1595.1	1.3	2236.0
28 + 00	42.3	0.0	161.9	8.5	3993.0	1606.2	1.3	2386.7
29 + 00	41.8	0.0	155.7	0.0	4148.7	1606.2	1.3	2542.5
30 + 00	42.1	0.0	155.4	0.0	4304.1	1606.2	1.3	2697.9

AVERAGE END AREA VOLUMES

JACOBSEN ROAD

STATION	END AREA		VOLUME INCREMENTAL		VOLUME CUMULATIVE		EXP FAC	MASS HAUL
	CUT	FILL	CUT	FILL	CUT	FILL		
14 + 00	66.4	30.4	123.0	56.3	123.0	73.2	1.3	49.8
15 + 00	76.5	19.5	141.7	36.1	141.7	46.9	1.3	94.7
16 + 00	72.0	12.2	275.0	58.7	416.7	123.3	1.3	293.4
17 + 00	87.5	2.0	295.4	26.3	712.0	157.4	1.3	554.6
18 + 00	40.2	19.0	236.5	38.9	948.5	208.0	1.3	740.5
19 + 00	26.4	39.3	123.3	108.0	1071.9	348.4	1.3	723.5
20 + 00	0.0	0.0	48.9	72.8	1120.7	443.0	1.3	677.8
21 + 00	46.8	18.1	86.7	33.5	1207.4	486.5	1.3	720.9
22 + 00	29.2	23.1	140.7	76.3	1348.1	585.7	1.3	762.4
23 + 00	54.3	11.2	154.6	63.5	1502.8	668.3	1.3	834.5
24 + 00	62.8	12.1	216.9	43.1	1719.6	724.4	1.3	995.2
25 + 00	80.3	0.0	265.0	22.4	1984.6	753.5	1.3	1231.1
26 + 00	122.4	0.0	375.4	0.0	2360.0	753.5	1.3	1606.5

ROCK EXCAVATION

CTH CB

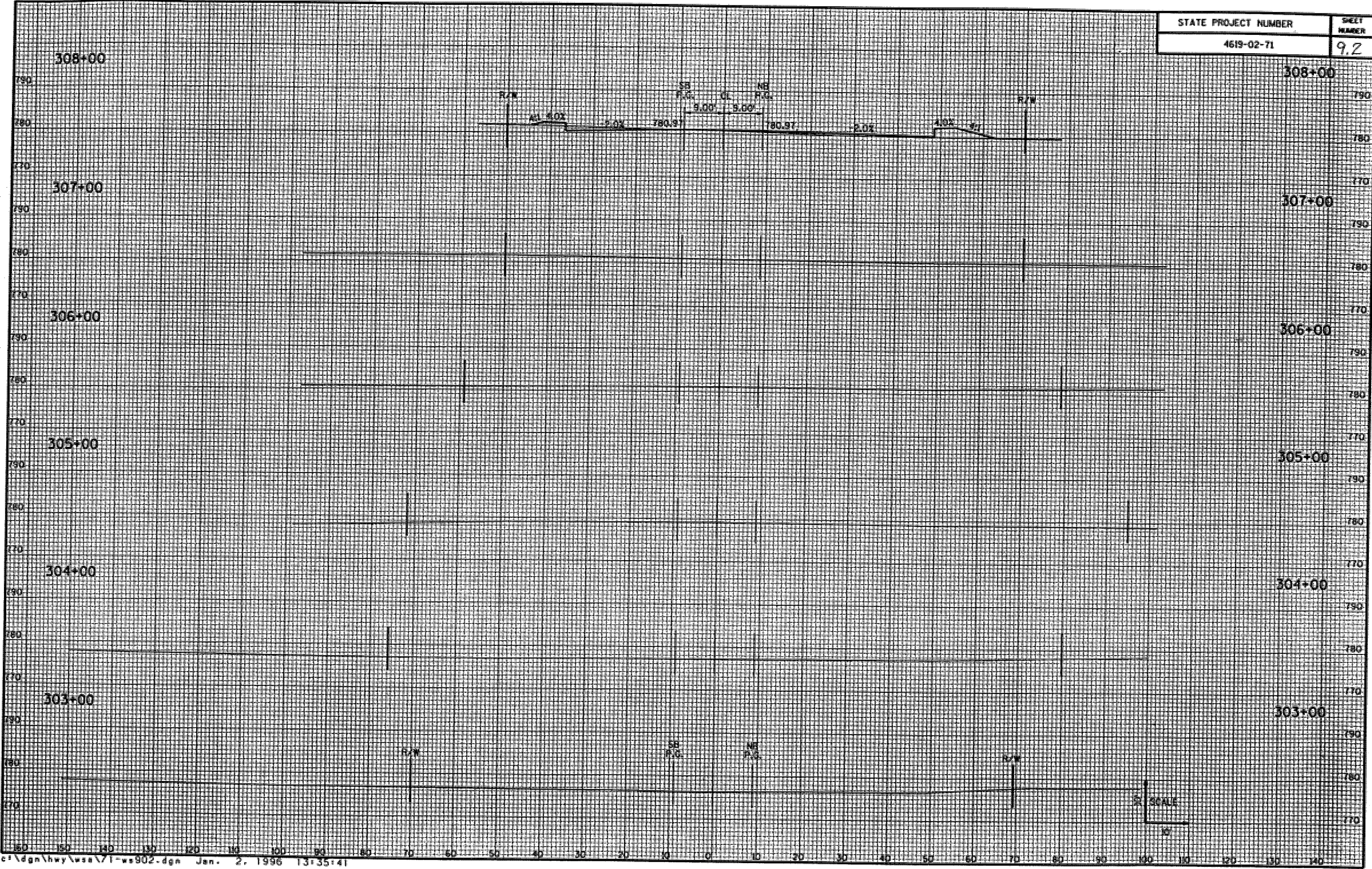
STATION	LOCATION	END AREA	INCREMENTAL VOLUME	CUMULATIVE VOLUME
318+00	CTH CB, LT	0.0	7.4	7.4
319+00	CTH CB, LT	4.0	27.8	35.2
320+00	CTH CB, LT	11.0	29.6	64.8
321+00	CTH CB, LT	5.0	9.3	74.1
322+00	CTH CB, LT	0.0	0.0	74.1
318+00	CTH CB, RT	0.0	1.9	75.9
319+00	CTH CB, RT	1.0	20.4	96.3
320+00	CTH CB, RT	10.0	24.1	120.4
321+00	CTH CB, RT	3.0	5.6	125.9
322+00	CTH CB, RT	0.0	0.0	125.9
UNDISTRIBUTED			80.0	205.9

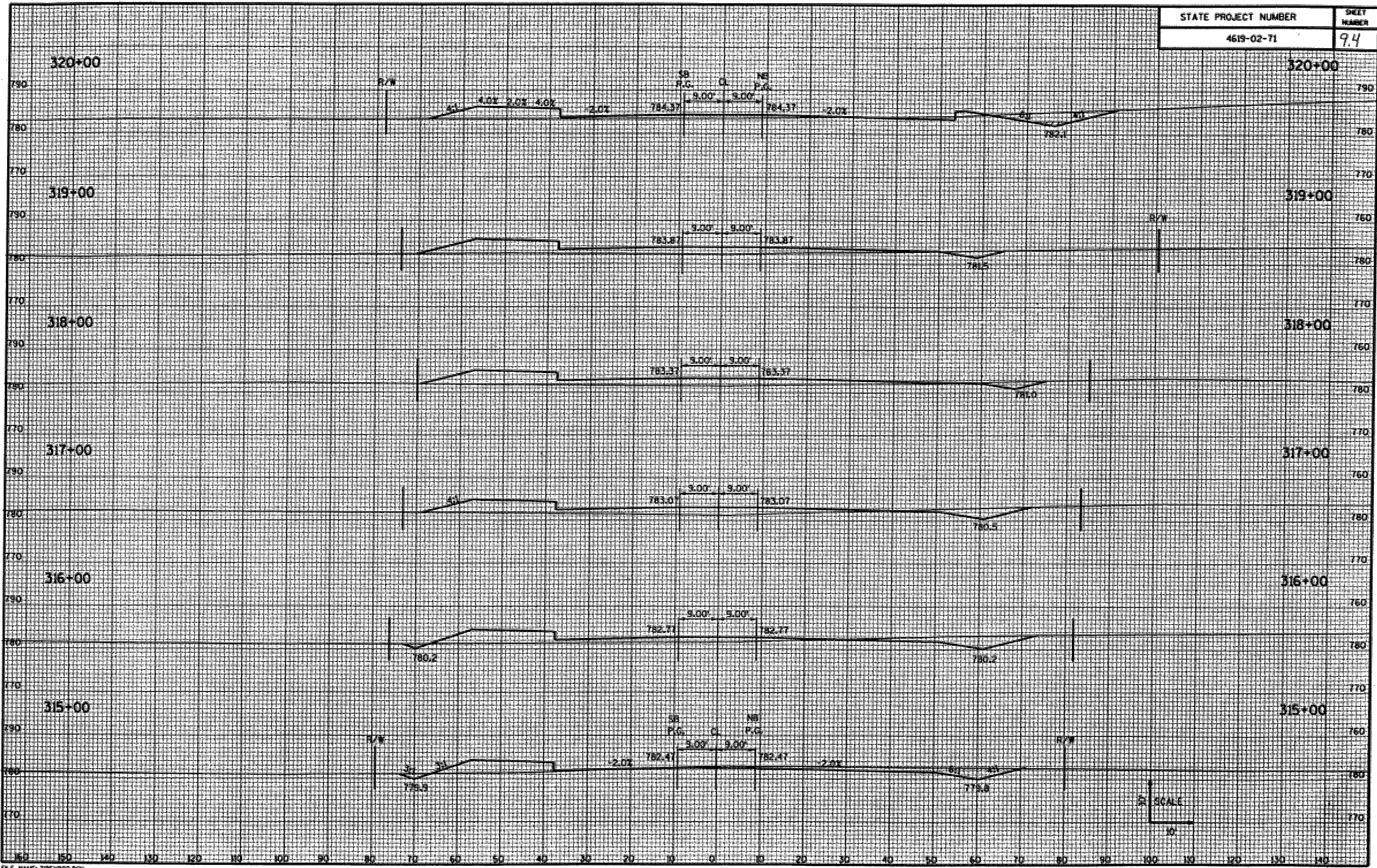
EXCAVATION BELOW SUBGRADE (EBS)

CTH CB

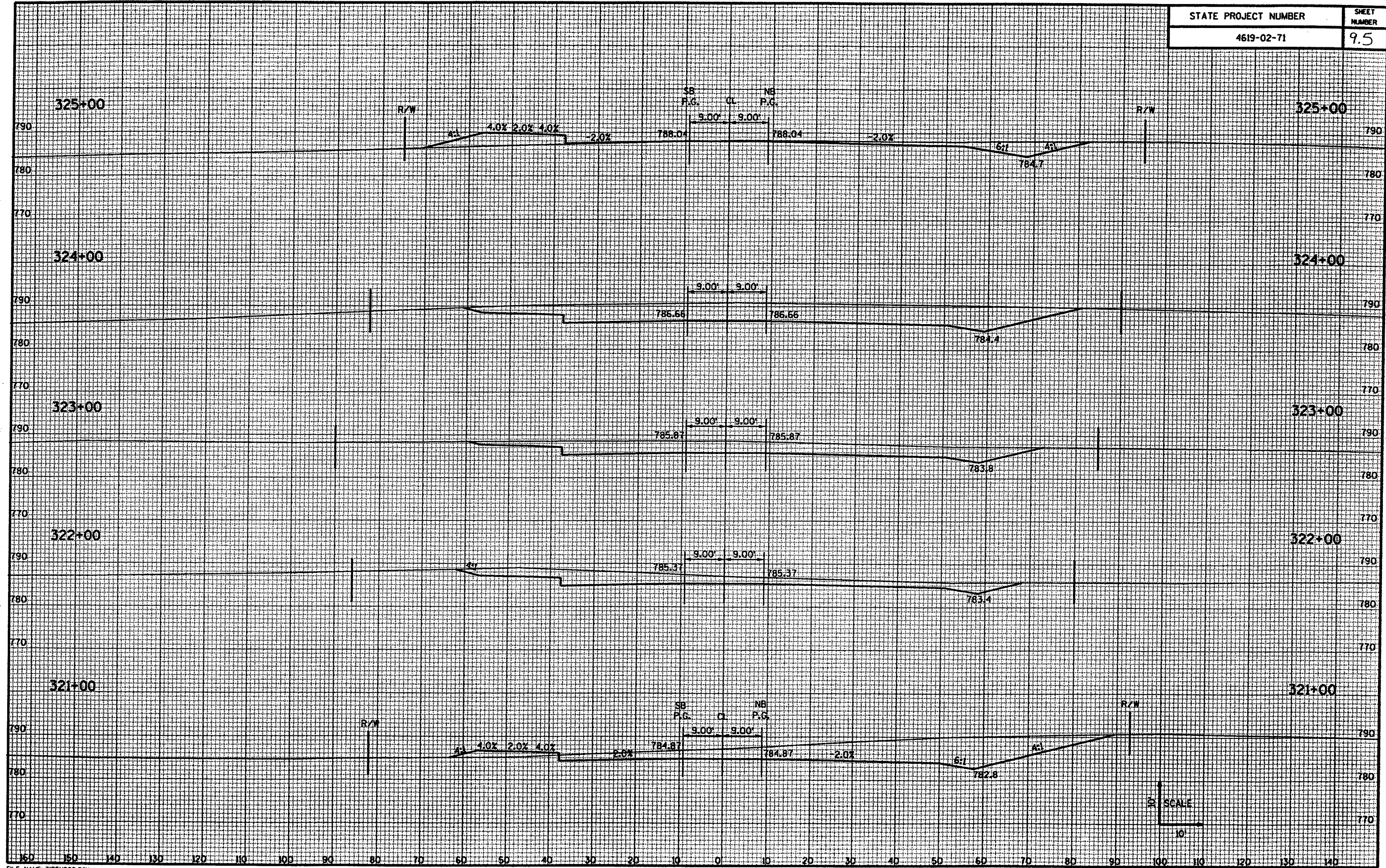
STATION	END AREA	INCREMENTAL VOLUME	CUMULATIVE VOLUME
336 + 00	0.0	381.5	381.5
327 + 00	206.0	659.3	1040.7
328 + 00	150.0	407.4	1448.1
329 + 00	70.0	129.6	1577.8
330 + 00	0.0	0.0	1577.8
336 + 00	0.0	433.3	2011.1
337 + 00	234.0	859.3	2870.4
338 + 00	230.0	425.9	3296.3
339 + 00	0.0	0.0	3296.3
346 + 00	0.0	240.7	3537.0
347 + 00	130.0	474.1	4011.1
348 + 00	126.0	463.0	4474.1
349 + 00	124.0	451.9	4925.9
350 + 00	120.0	444.4	5370.4
353 + 00	120.0	388.9	5759.3
354 + 00	90.0	388.9	6148.1
355 + 00	120	222.2	6370.4
356 + 00	0		
TOTAL			6370.4

STATE PROJECT NUMBER	SHEET NUMBER
4619-02-71	9.2

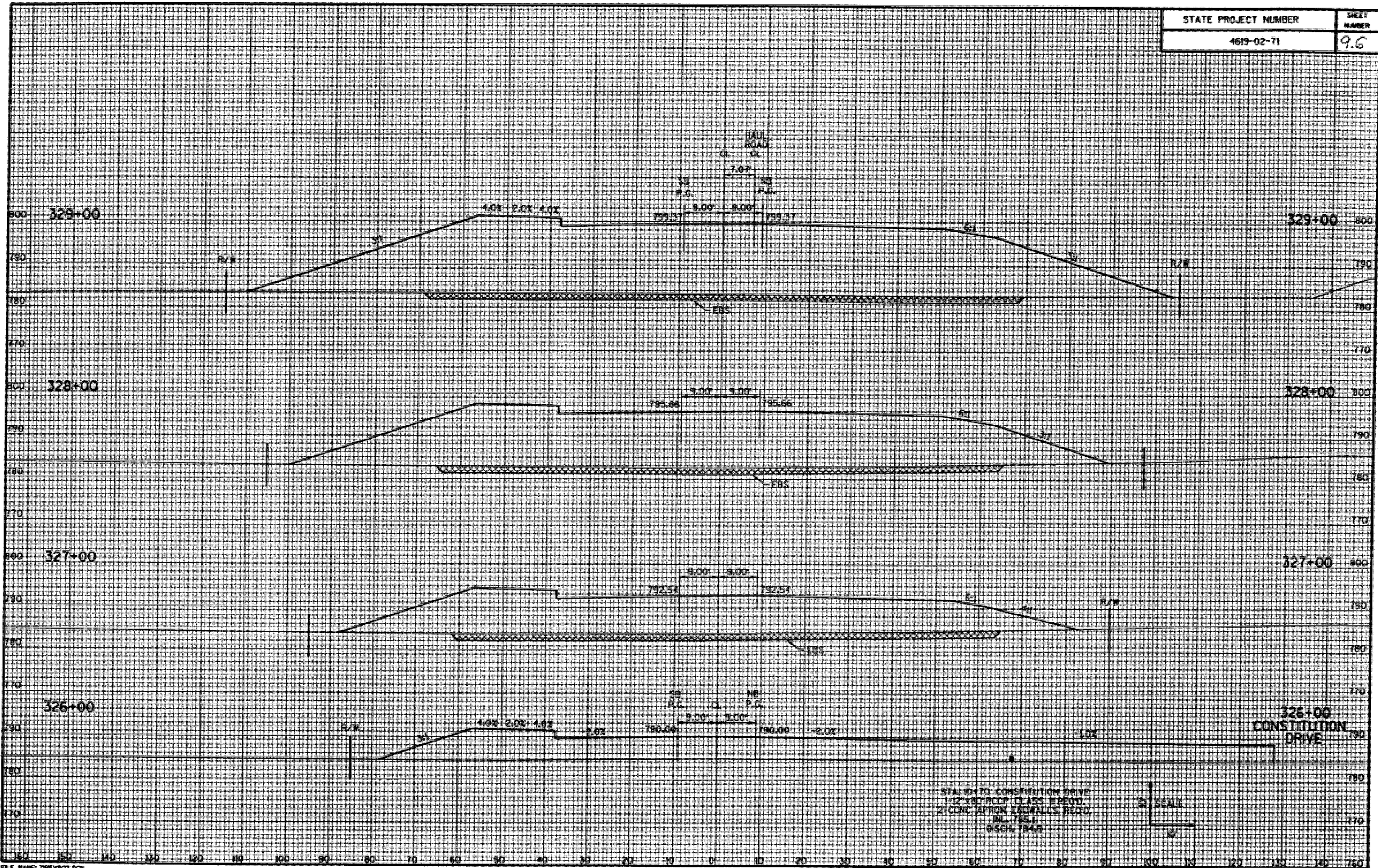


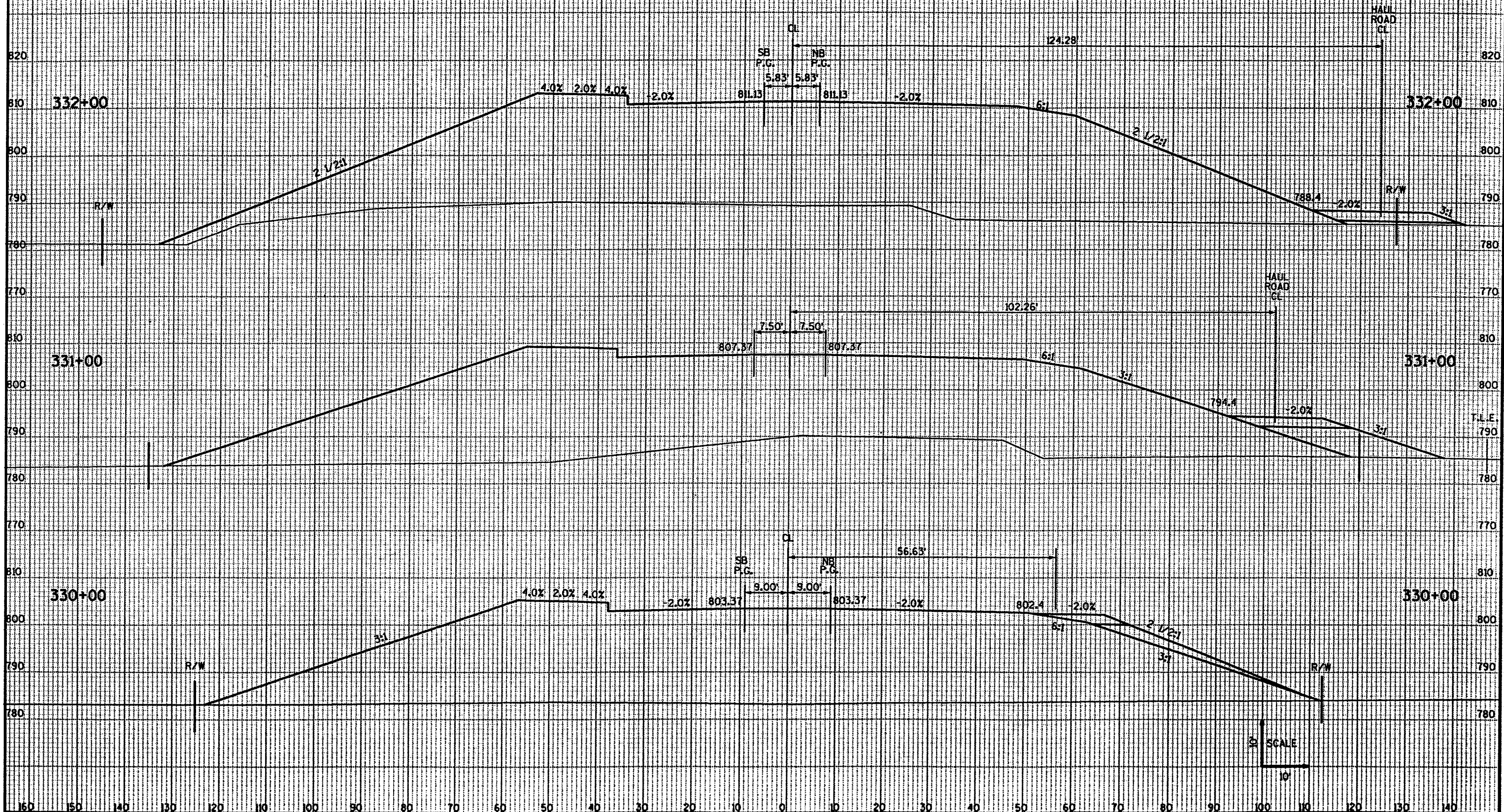


SCALE
1" = 10'

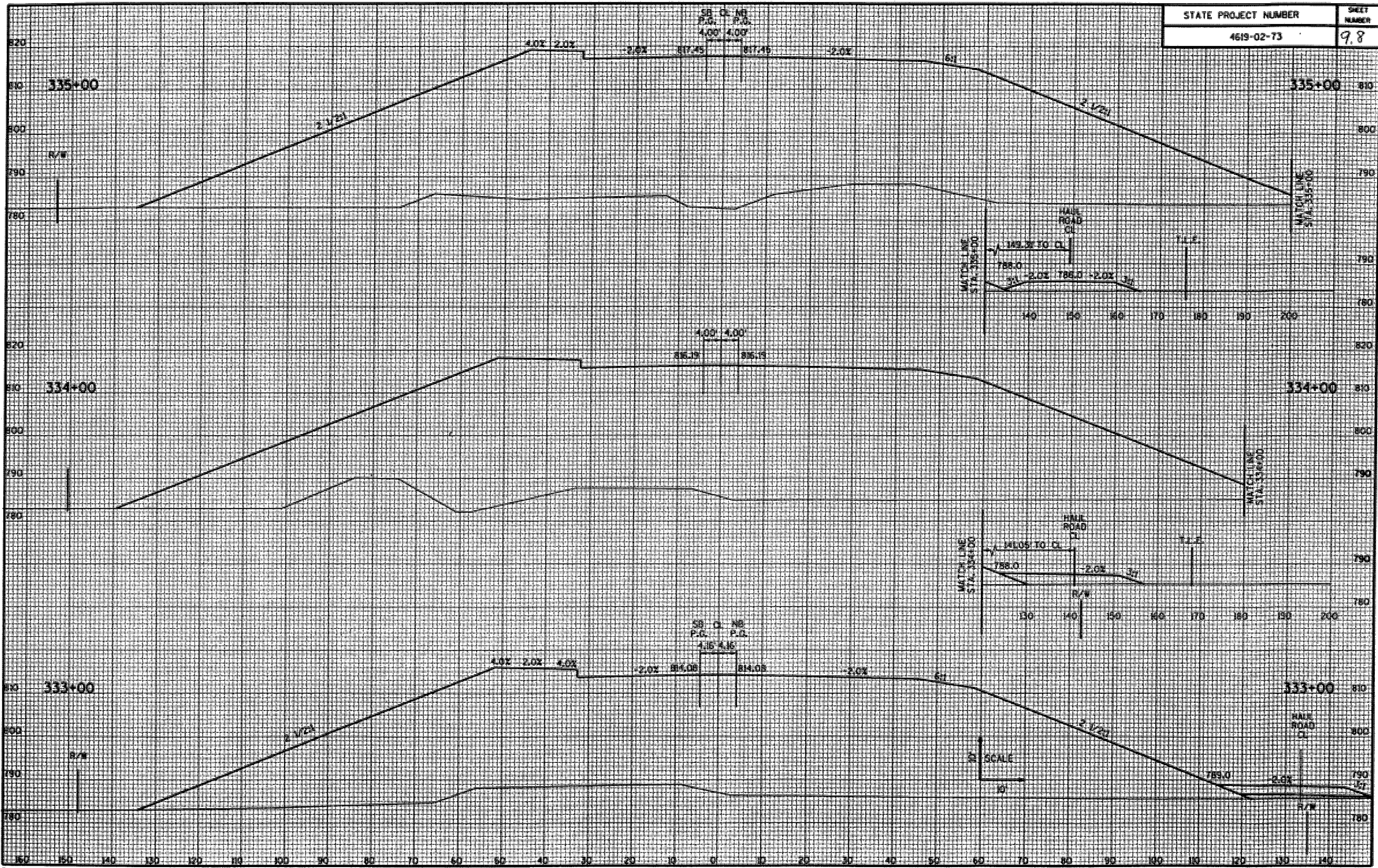


SCALE
1" = 10'





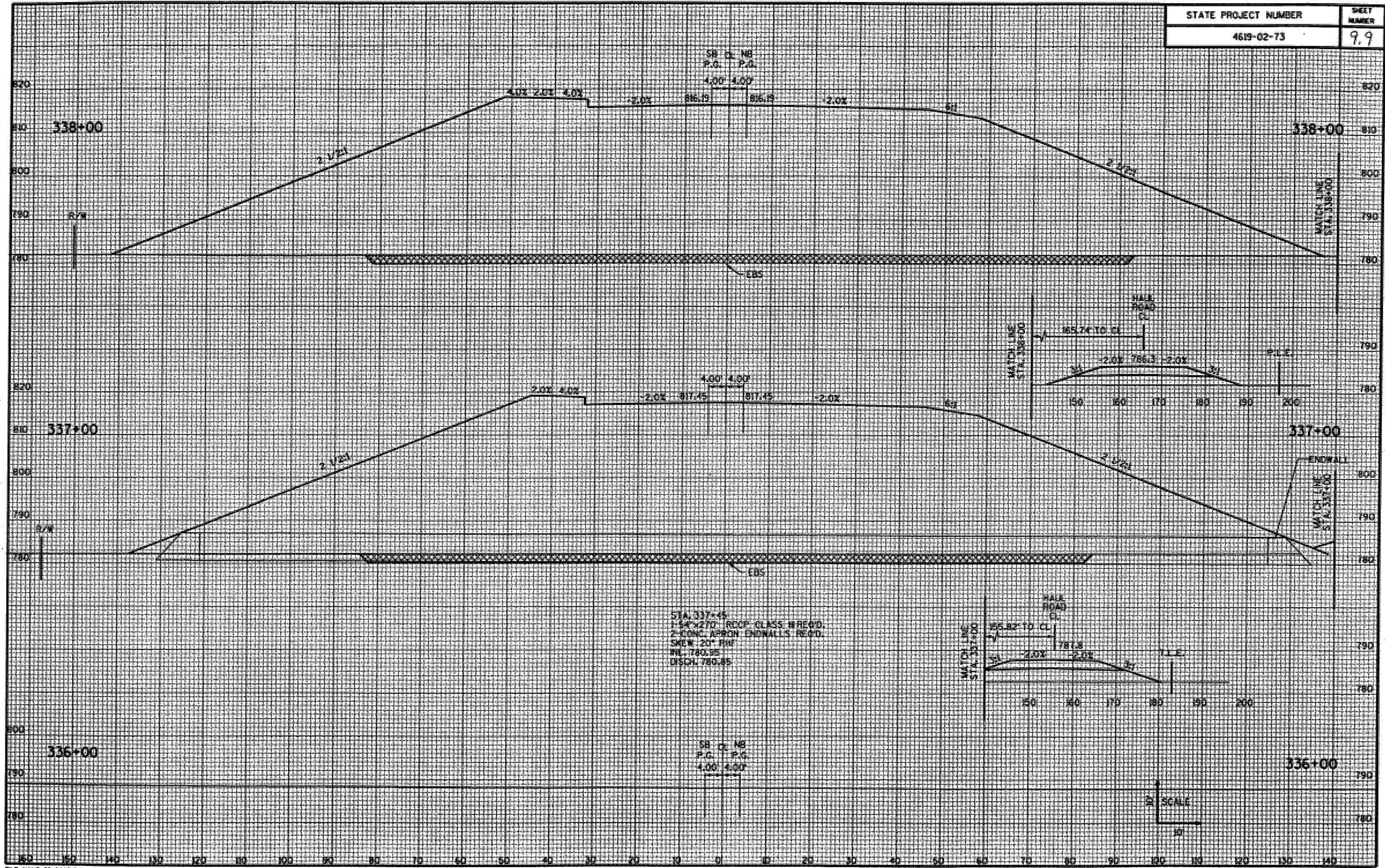
SCALE
10'



SB CL NB
P.C. P.O.
4.00 4.00

4.00 4.00
88.19 88.19

SB CL NB
P.C. P.O.
4.16 4.16

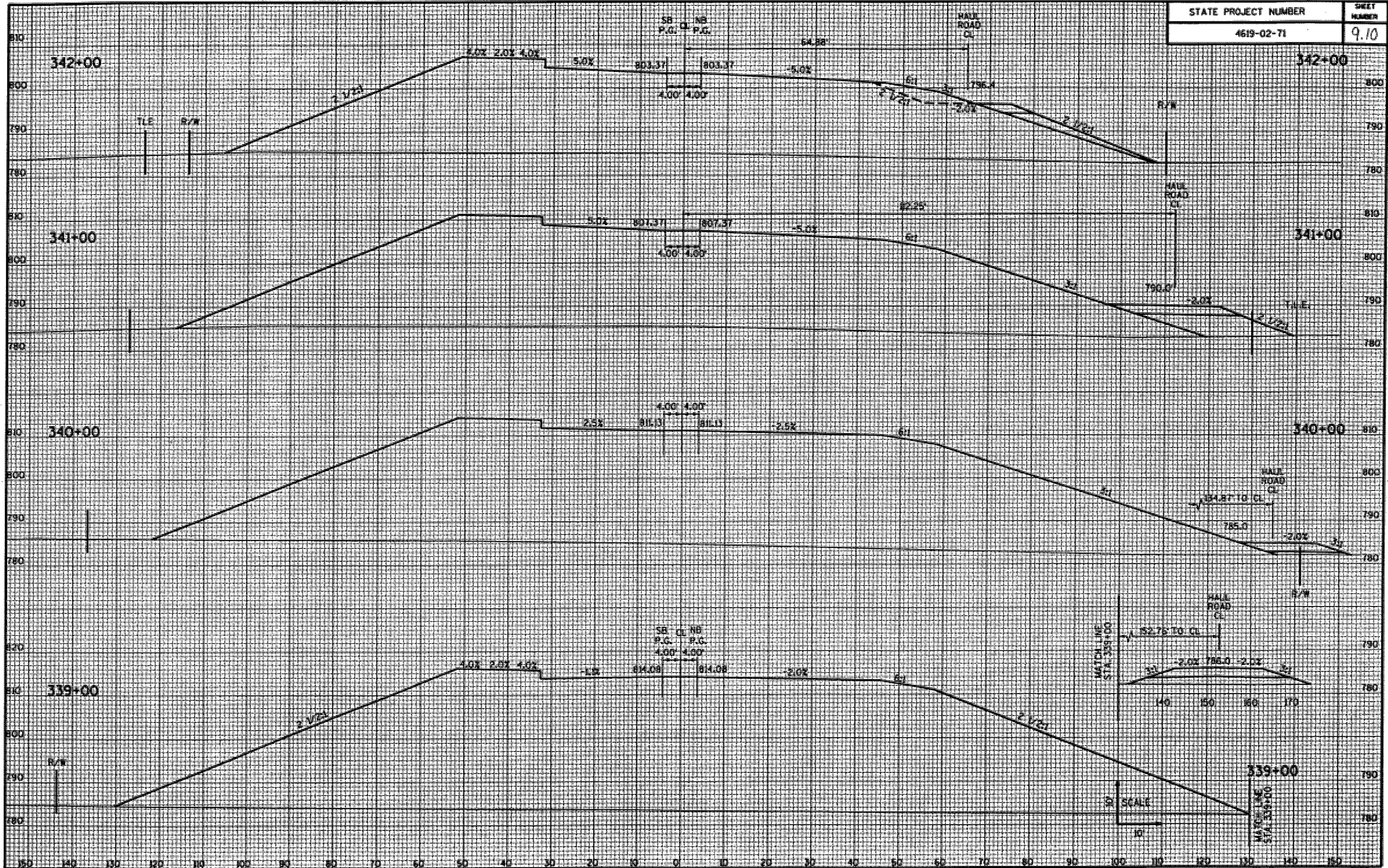


STA 337+45
 1-54" x 270" ROOF GLASS W/REED.
 2-CONC APRON ENDWALLS REED.
 SKEW 20° FINI
 W/L 783.95
 DISCH 790.85

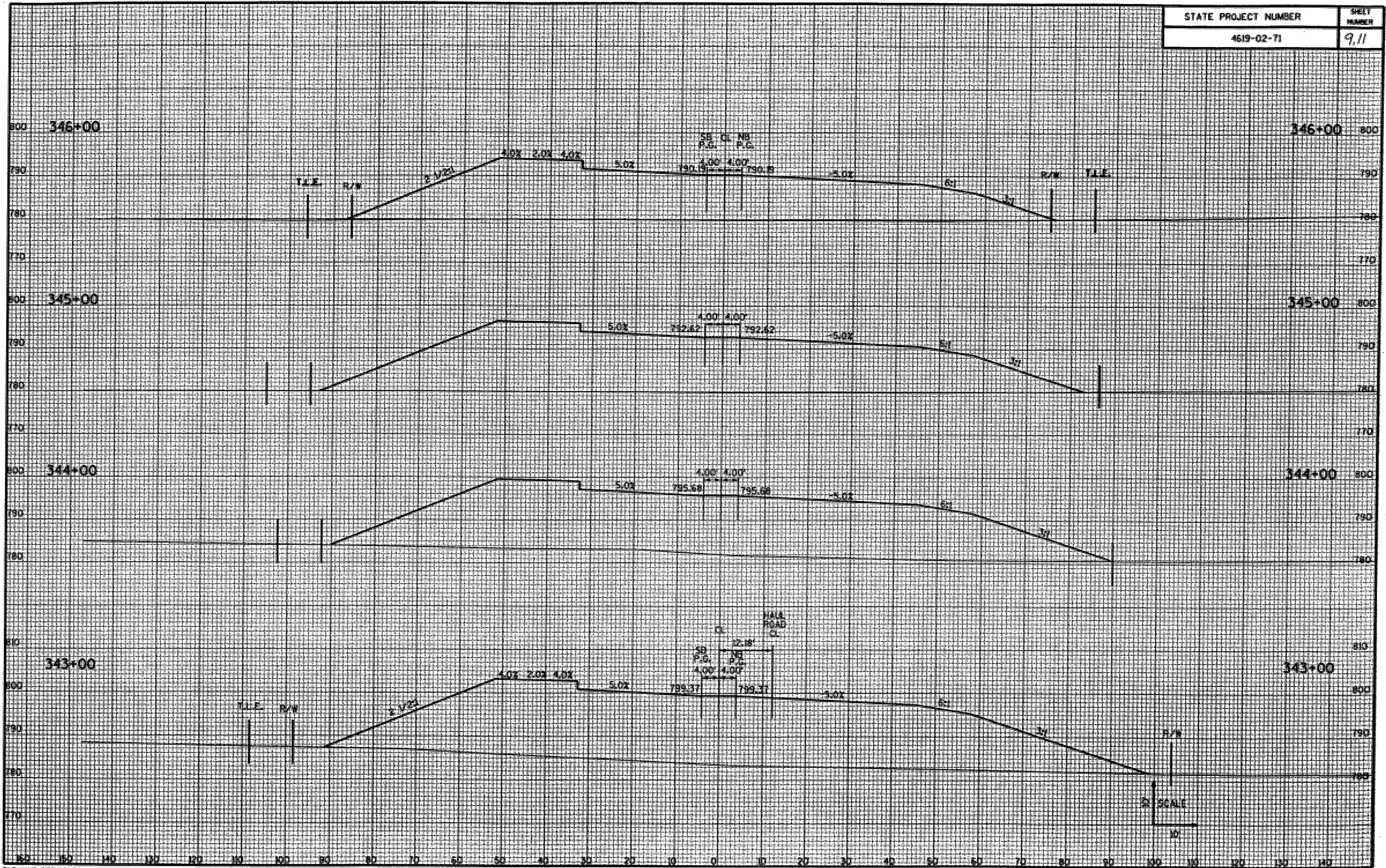
SB CL NB
 P.G. 1 P.G.
 4.00 4.00

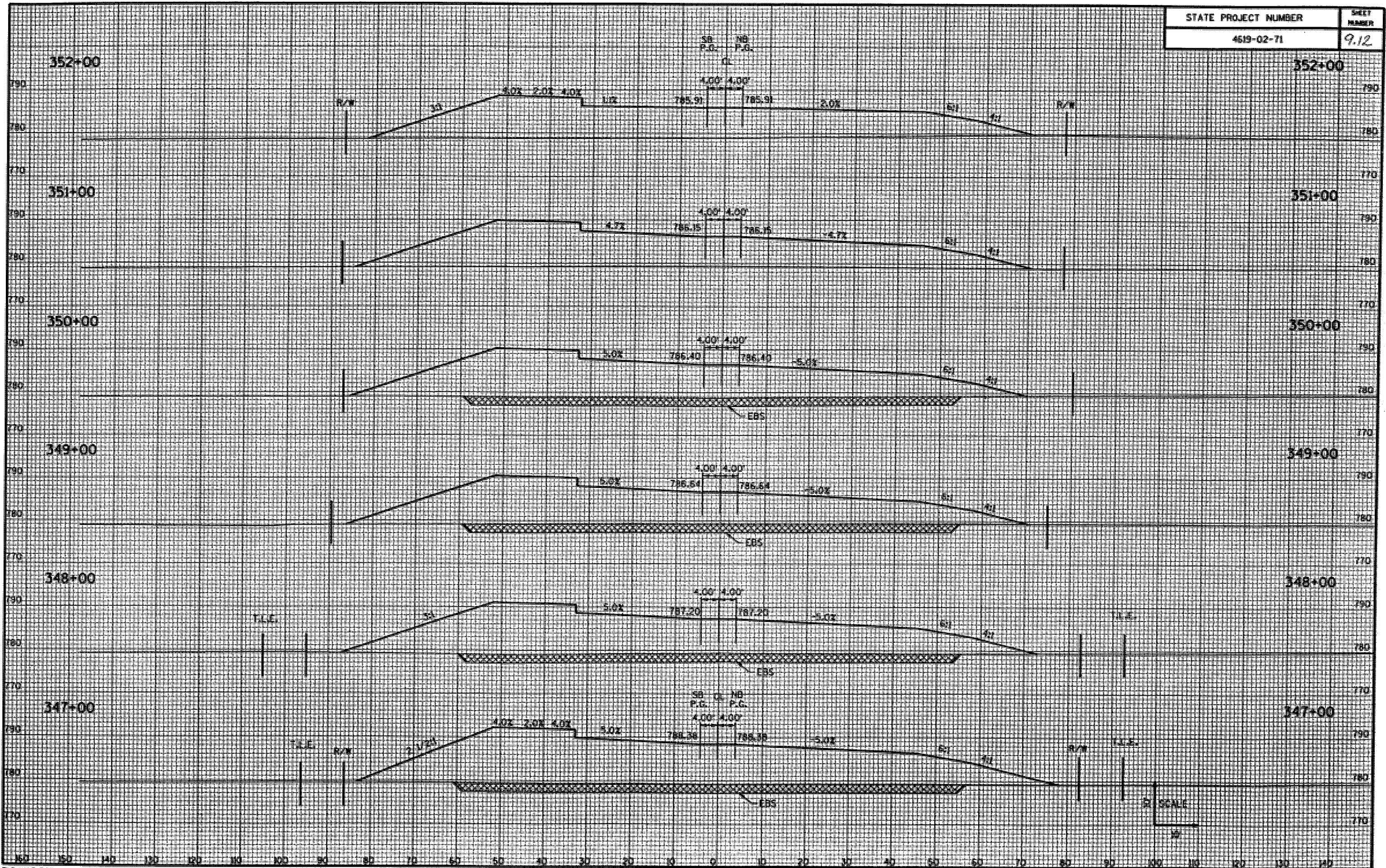
SCALE
 1" = 10'

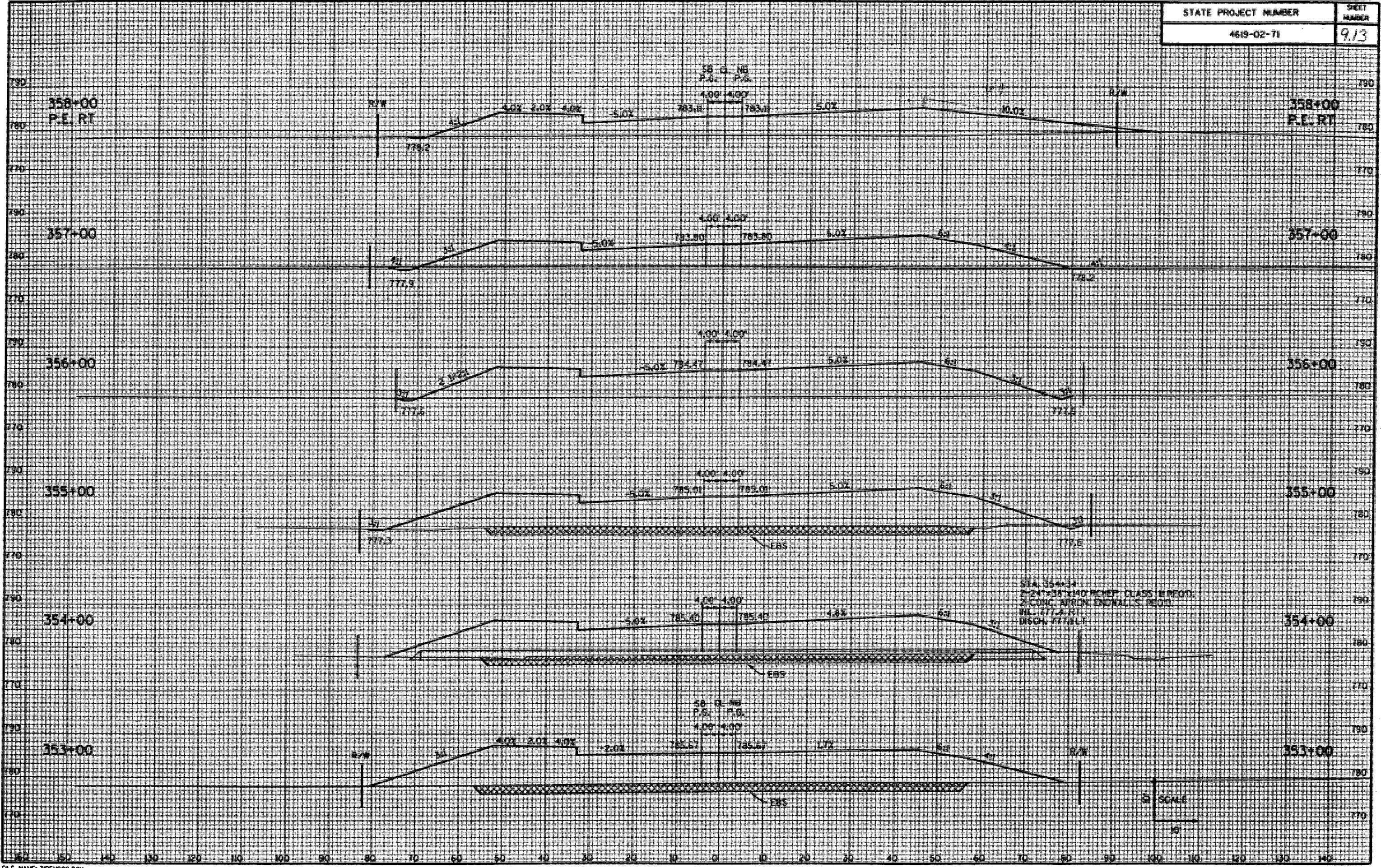
STATE PROJECT NUMBER	SHEET NUMBER
4619-02-71	9.10

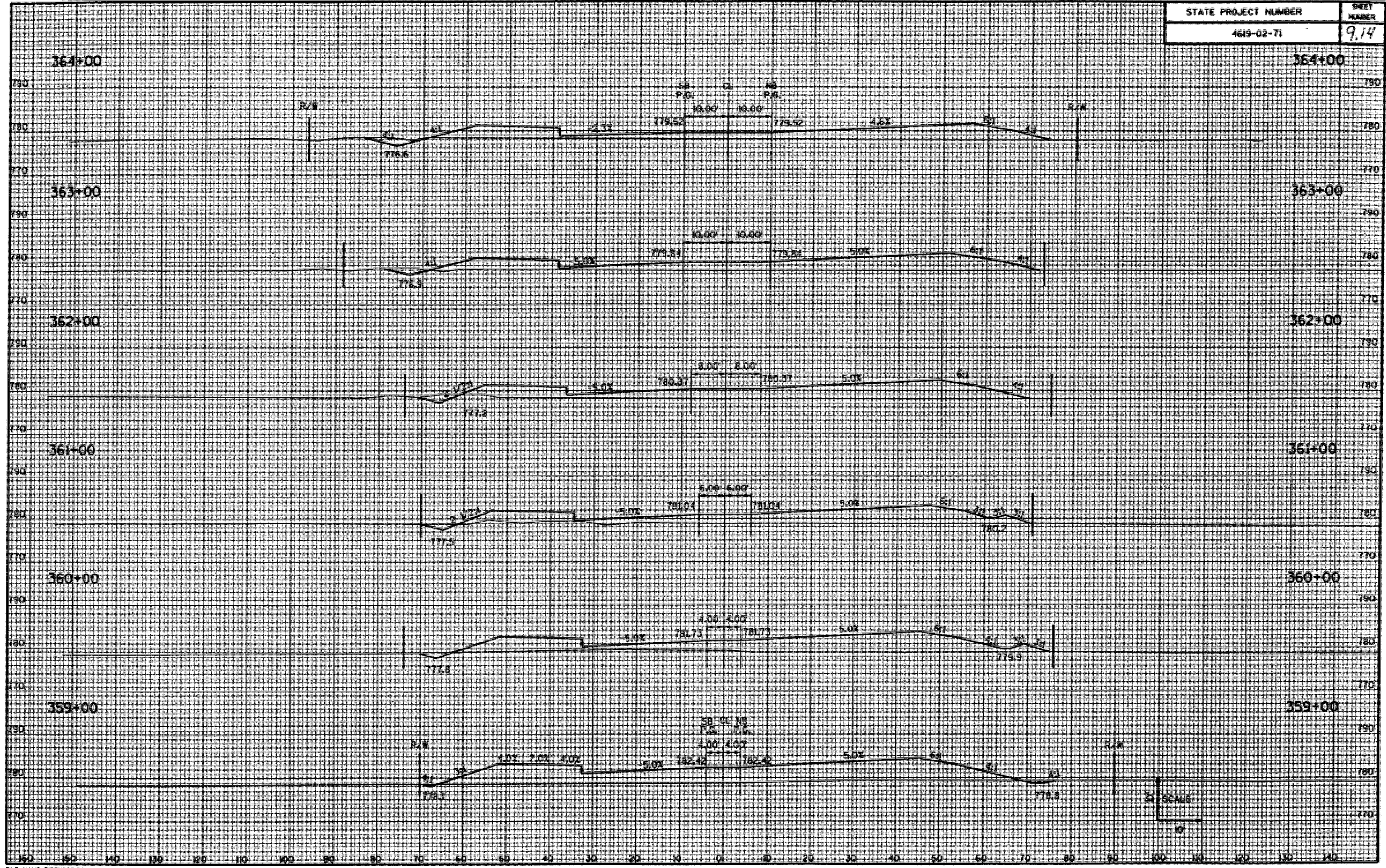


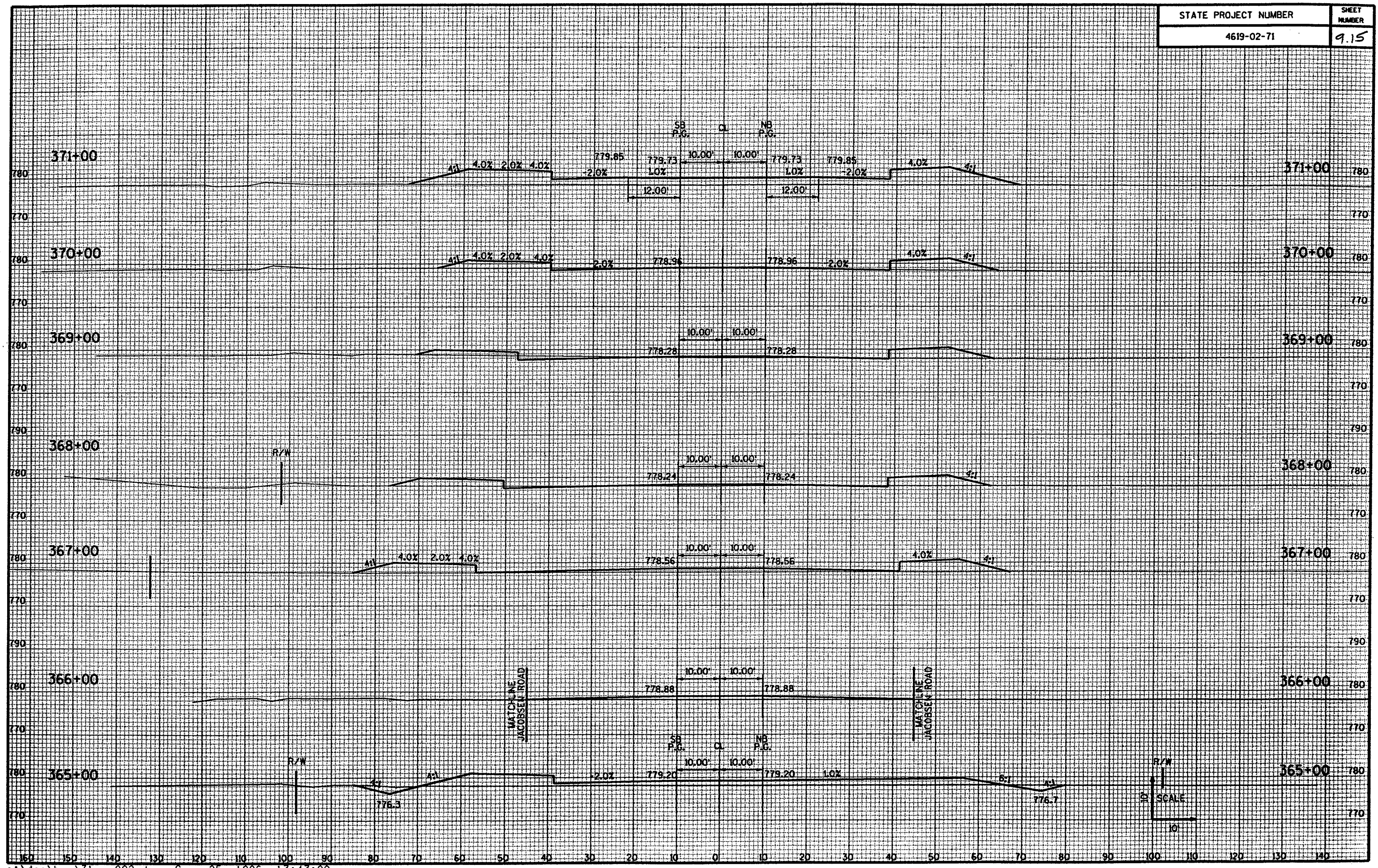
STATE PROJECT NUMBER	SHEET NUMBER
4519-02-71	9.11

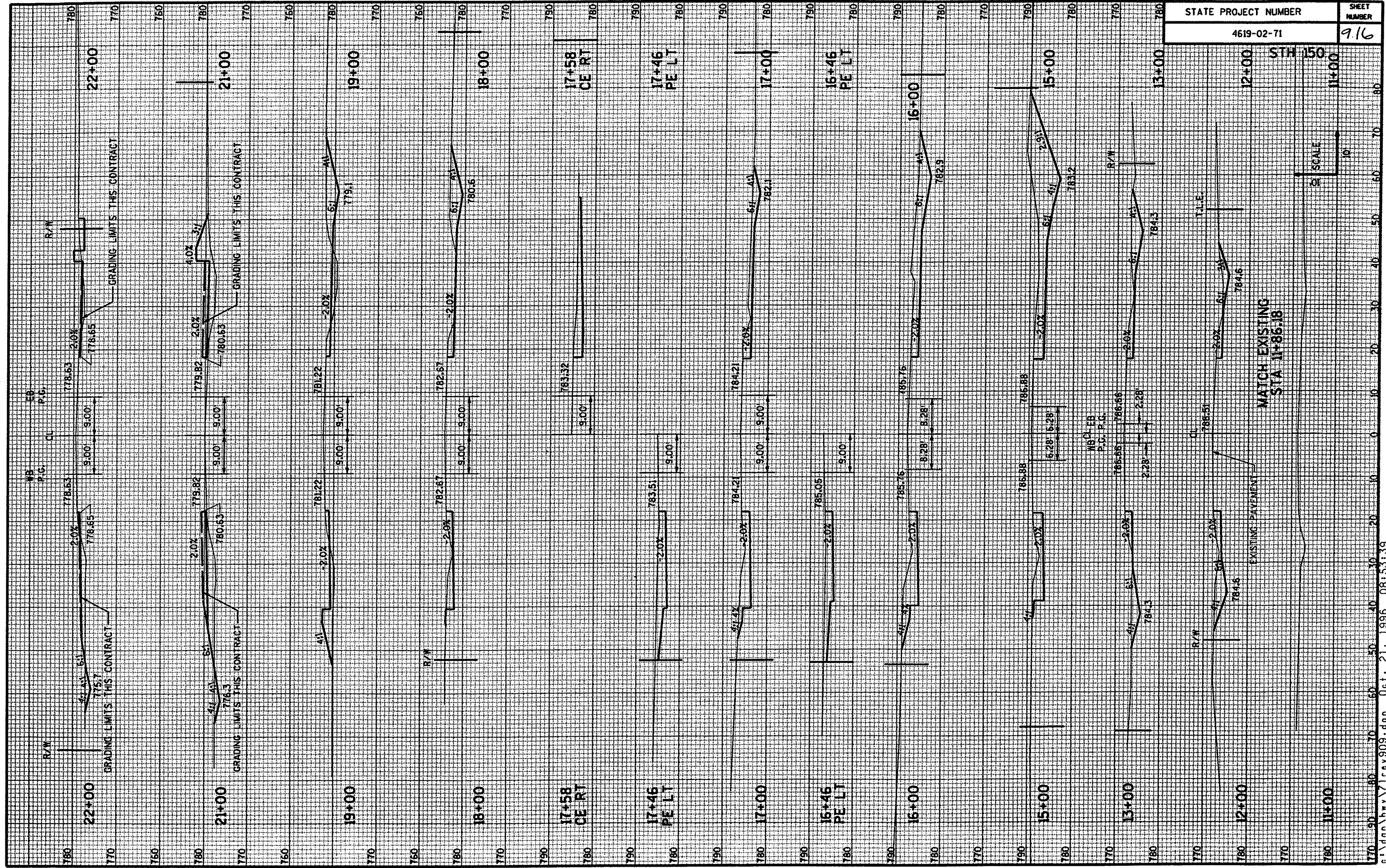








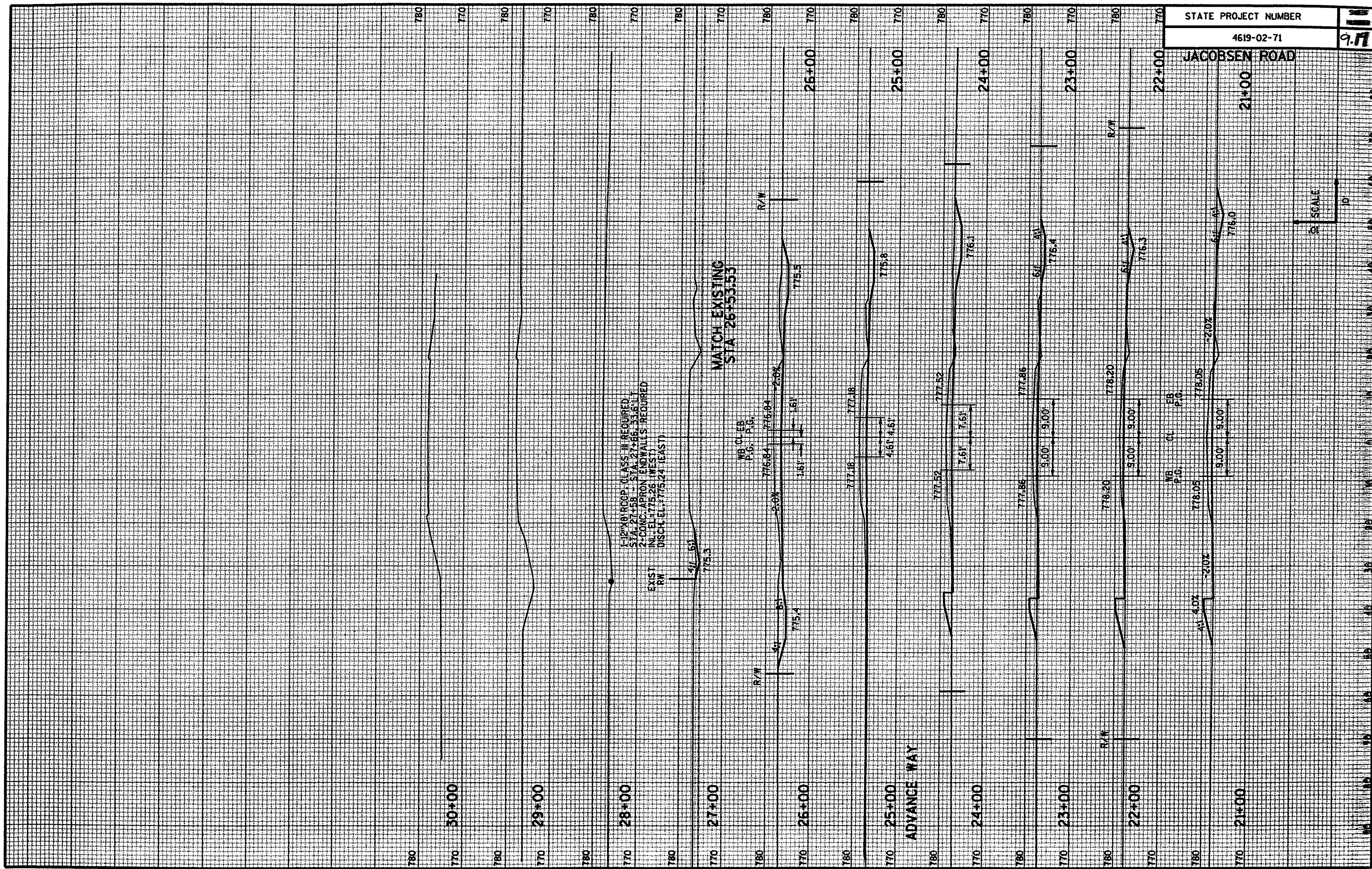




MATCH EXISTING
STA 11+86.18

SCALE
1" = 10'

Handwritten notes on the left margin, including a signature and the date "10/1/96".



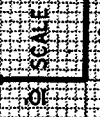
STATE PROJECT NUMBER	4619-02-71
SHEET NUMBER	9.77

JACOBSEN ROAD

12" X 18" RIGID CLASS II REQUIRED
STA 27+45.8 - STA 27+56.1 5.6 LLT
2" CONC. APRON ENDWALLS REQUIRED
INCL. EL: 775.26 (WEST)
DISCH. EL: 775.24 (EAST)

MATCH EXISTING
STA 26+53.53

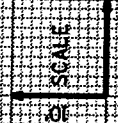
ADVANCE WAY



JACOBSEN ROAD

14+00

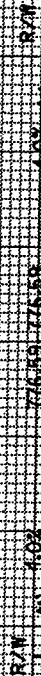
13+00



MATCH EXISTING STA 13+50.00

14+00

13+00



R/W

MB P.C. EB P.C.

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14+10 PE LT

14+10 PE LT

776.59

14+10 PE LT

MB P.C. EB P.C.

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15+00

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MB P.C. EB P.C.

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16+00

16+00

777.29

16+00

777.49

16+29 PE LT

MB P.C. EB P.C.

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MB P.C. EB P.C.

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18+00

MB P.C. EB P.C.

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18+20

18+20

MB P.C. EB P.C.

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18+33

18+33

MB P.C. EB P.C.

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19+00

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MB P.C. EB P.C.

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MB P.C. EB P.C.

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