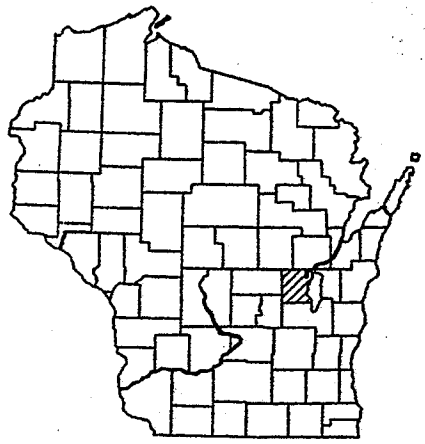


WINNEBAGO COUNTY

INDEX OF SHEETS

- Sheet No. 1 Title
- Sheet No. 2-2.19 Typical Sections and Details (Includes Erosion Control Plan)
- Sheet No. Estimate of Quantities
- Sheet No. 3A-3C Miscellaneous Quantities
- Sheet No. Right of Way Plat
- Sheet No. 5-5.7 Plan and Profile
- Sheet No. Standard Detail Drawings
- Sheet No. Sign Plates
- Sheet No. 8-8.4 Structure Plans
- Sheet No. 9-9.1 Computer Earthwork Data
- Sheet No. 9.2-9.18 Cross Sections

TOTAL SHEETS =



DESIGN DESIGNATION

- A.D.T. (1995) = 14,100
- A.D.T. (2015) = 20,600
- D.H.V. (2015) = 1,566
- D. = 55-45%
- T. = 9.5%
- DESIGN SPEED = 45 MPH
- ESALS = 6,978,800

CONVENTIONAL SIGNS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT
USH 10 - CTH BB
(WEST SIDE ARTERIAL)
CTH CB
WINNEBAGO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4619-02-76		

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

AS BUILT PLAN
NO.

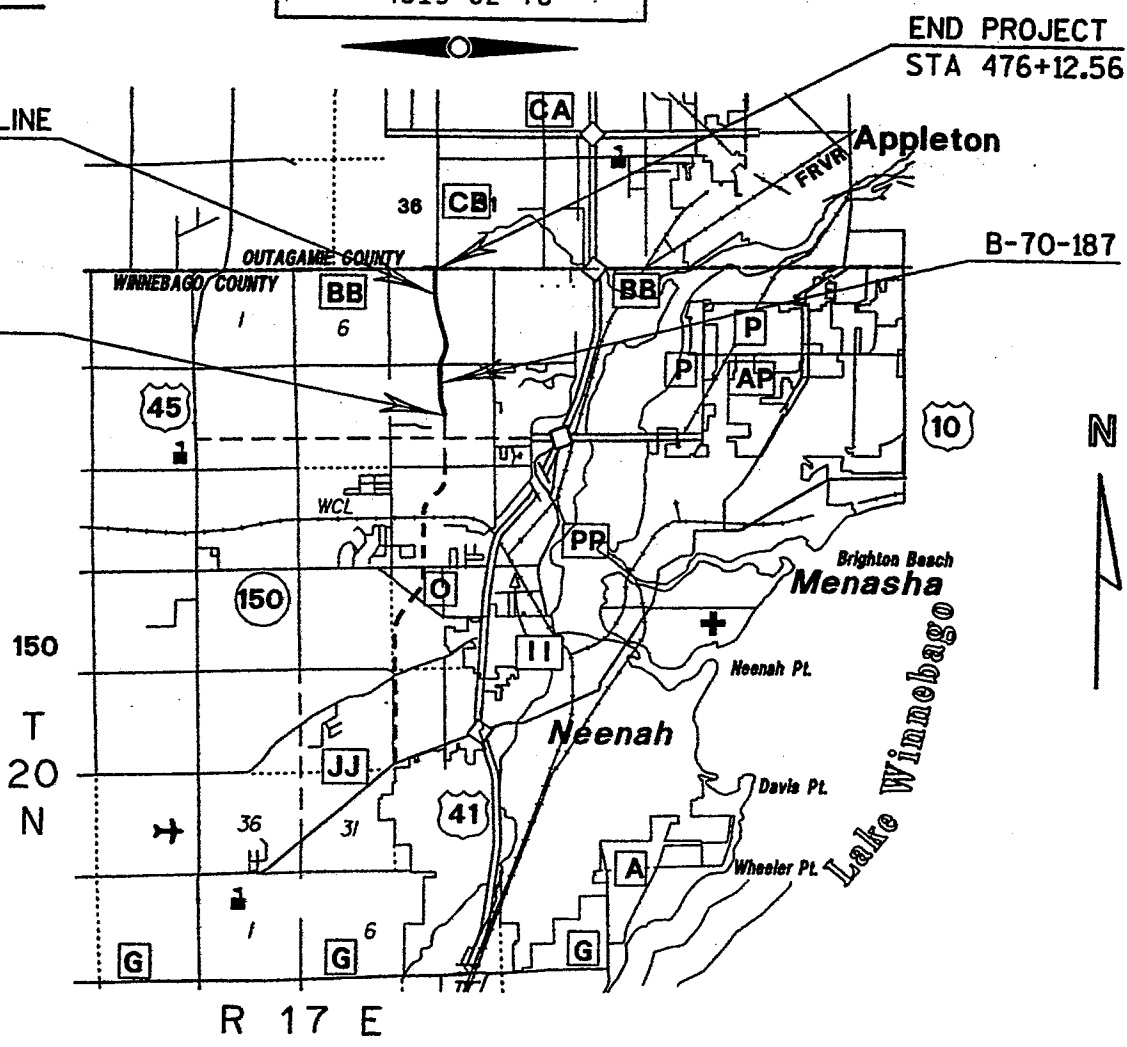
SUPERVISOR H. A. ENKIE
RESIDENT MARCO DOBSON
CONTRACTOR WONDRA INC. INC.
COMPLETED 6-25-97

STATE PROJECT NUMBER
4619-02-76

EXCEPTION TO NET LENGTH OF CENTERLINE
STA 460+19.64 TO STA 461+20.54

BEGIN PROJECT
STA 397+82.86

END PROJECT
STA 476+12.56



LAYOUT
SCALE 0 1 MI.

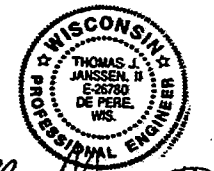
TOTAL NET LENGTH OF CENTERLINE = 1.464 MI.

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.

APPROVED FOR WINNEBAGO COUNTY
DATE 1-3-96
HIGHWAY COMMISSIONER

PLANS PREPARED BY
MEAD & HUNT CONSULTING ENGINEERS
GREEN BAY, WISCONSIN



DATE 1-2-1996
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)

4619-02-76

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 RADIARE 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 1.5 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
8C1-5	INLETS TYPE 1,2,3 & 4
8C5-2	INLETS TYPE 8,9,10AND 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
12A3-4	NAME PLATE (STRUCTURE)
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

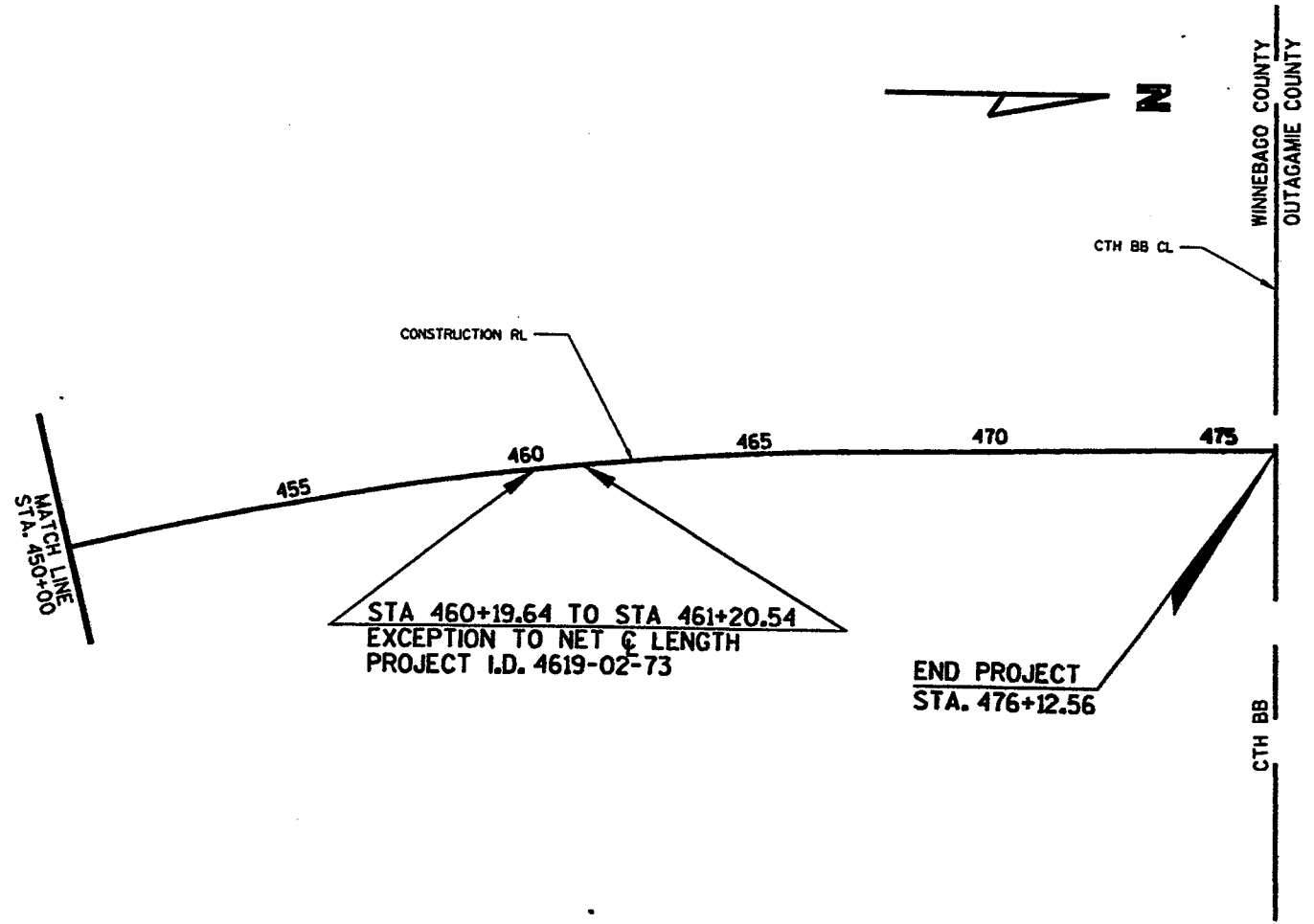
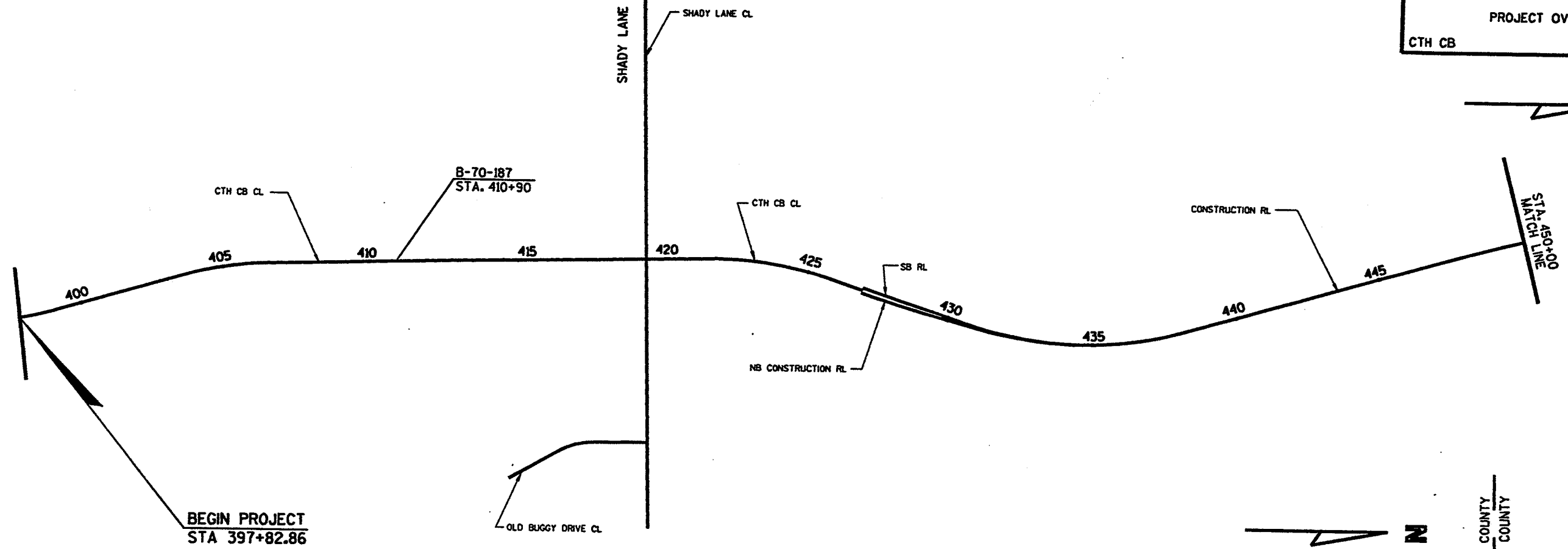
ANR PIPELINE COMPANY
ATTN: GARY R. KLITZKE
BOX 398
BONDUEL, WI 54107
(715) 758-2131

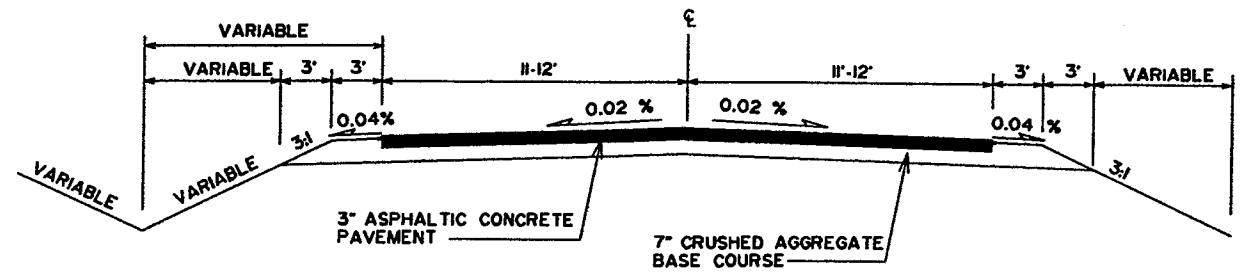
AMERITECH
ATTN: JOHN STUMPF
221 W. WASHINGTON ST., 4TH FLOOR
APPLETON, WI 54911
(414) 735-3255

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

STANDARD ABBREVIATIONS

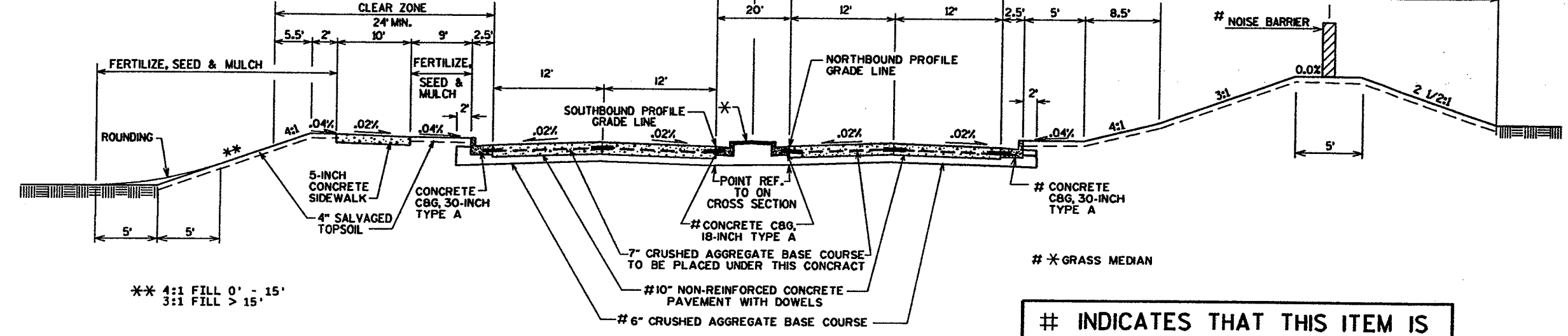
Δ	CENTRAL ANGLE OR DELTA
B	BUILDING
B.M.	BENCH MARK
C&G	CURB AND GUTTER
C.E.	COMMERCIAL ENTRANCE
CONC.	CONCRETE
CL	CENTERLINE
CMP	CORRUGATED METAL CULVERT PIPE
CSCP	CORRUGATED STEEL CULVERT PIPE
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
F.E.	FIELD ENTRANCE
EL. OR ELEV.	ELEVATION
E.O.P.	EDGE OF PAVEMENT
e	EXTERNAL DISTANCE
H	HOUSE
L	LENGTH
LT.	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





EXISTING TYPICAL SECTION

SHADY LANE
 CTH BB
 OLD BUGGY DRIVE



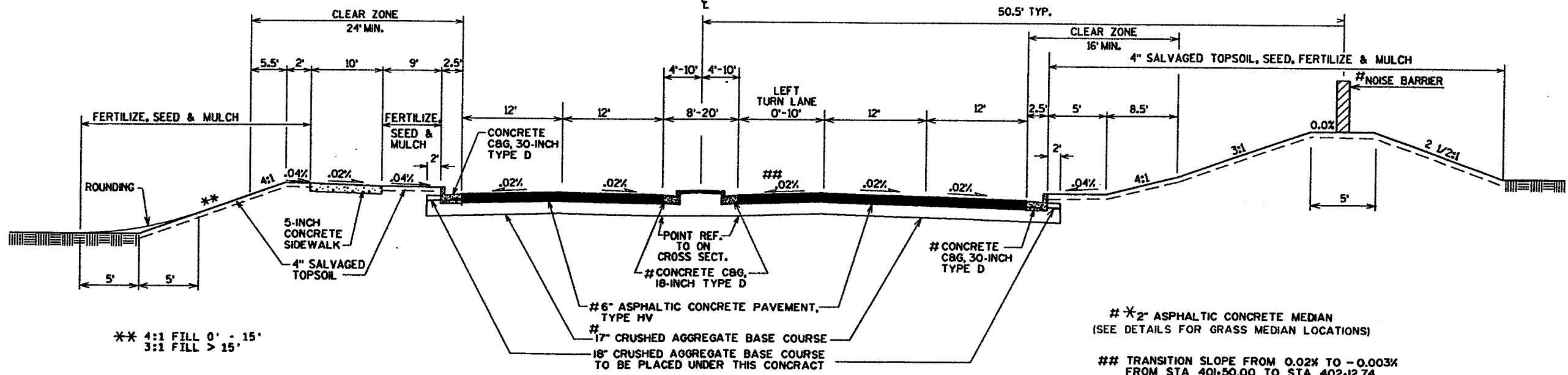
PROPOSED TYPICAL SECTION

CTH CB

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

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

STA. 397+82.86 TO STA. 400+00.00



PROPOSED TYPICAL SECTION

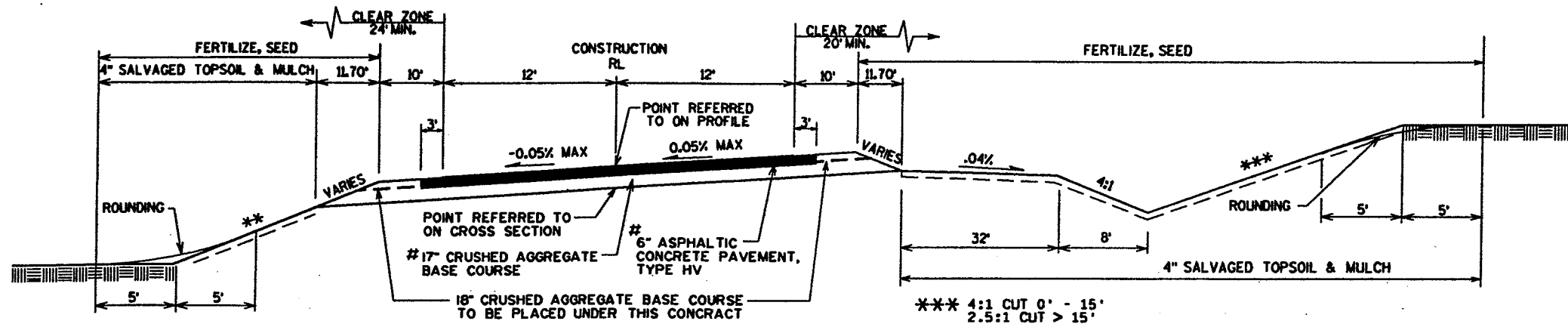
CTH CB

STA. 400+00.00 TO STA. 402+12.74
 STA. 408+06.33 TO STA. 419+10.00

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

** TRANSITION SLOPE FROM 0.02% TO -0.003%
 FROM STA 401+50.00 TO STA 402+12.74

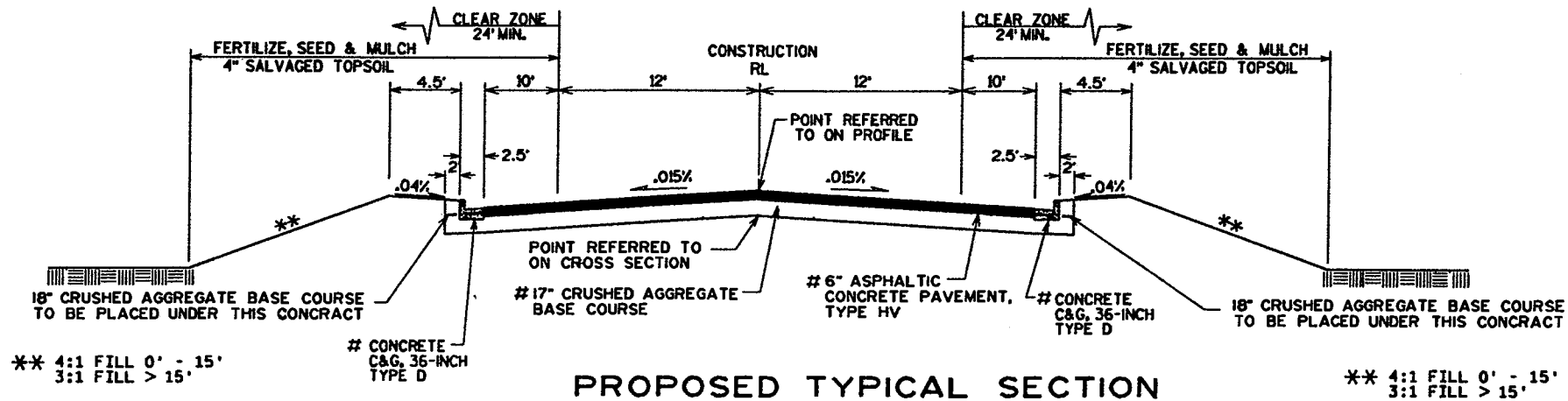
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



PROPOSED TYPICAL SECTION (SUPERELEVATED)

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

CTH CB
STA. 432+93.66 TO STA. 439+65.31

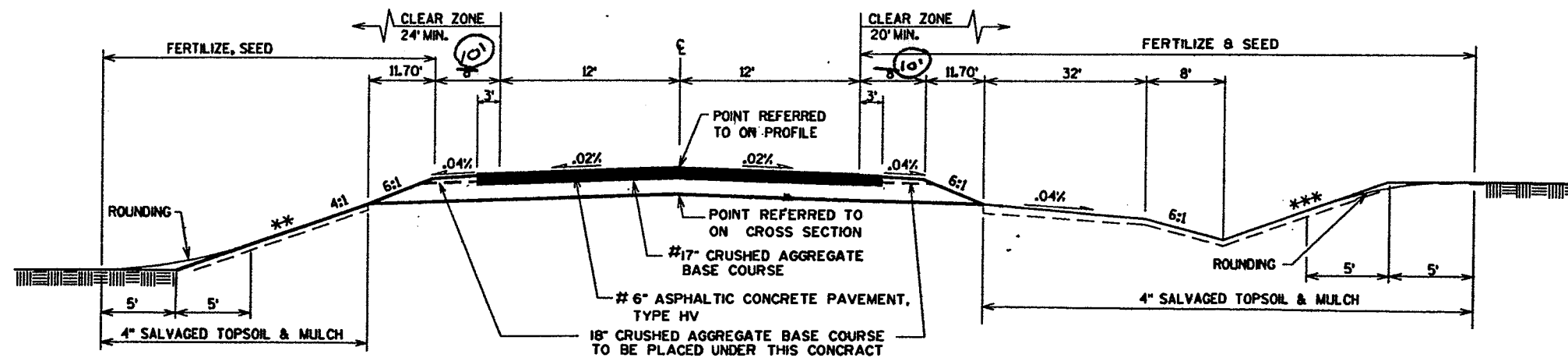


PROPOSED TYPICAL SECTION

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

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

CTH CB
STA. 440+00.00 TO STA. 442+00.00

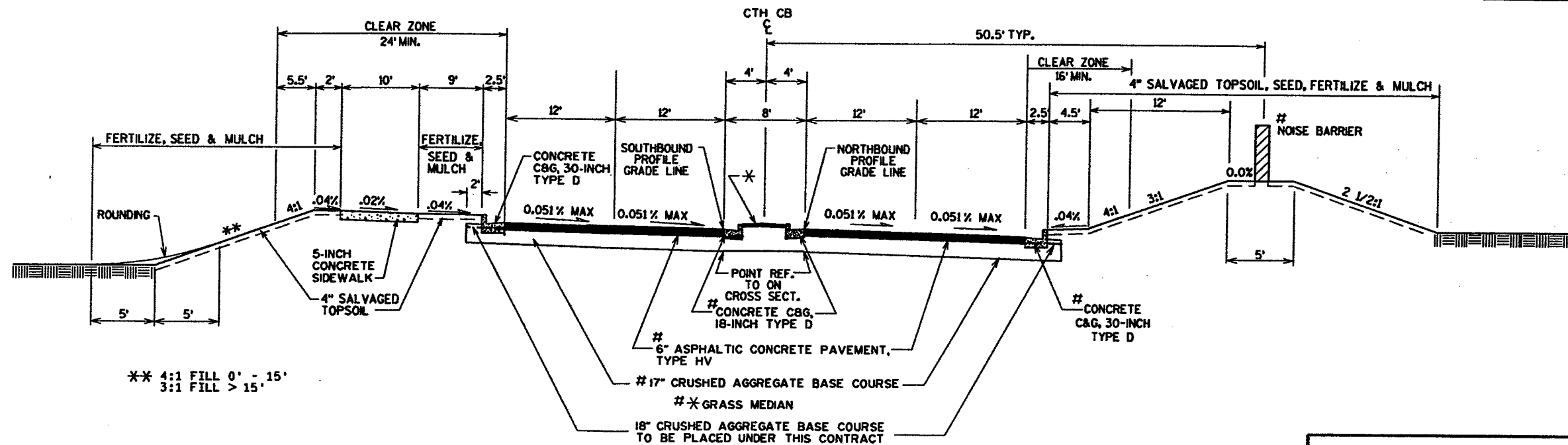


PROPOSED TYPICAL SECTION

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

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

STA. 439+65.31 TO STA. 440+00.00
STA. 442+00.00 TO STA. 475+88.56

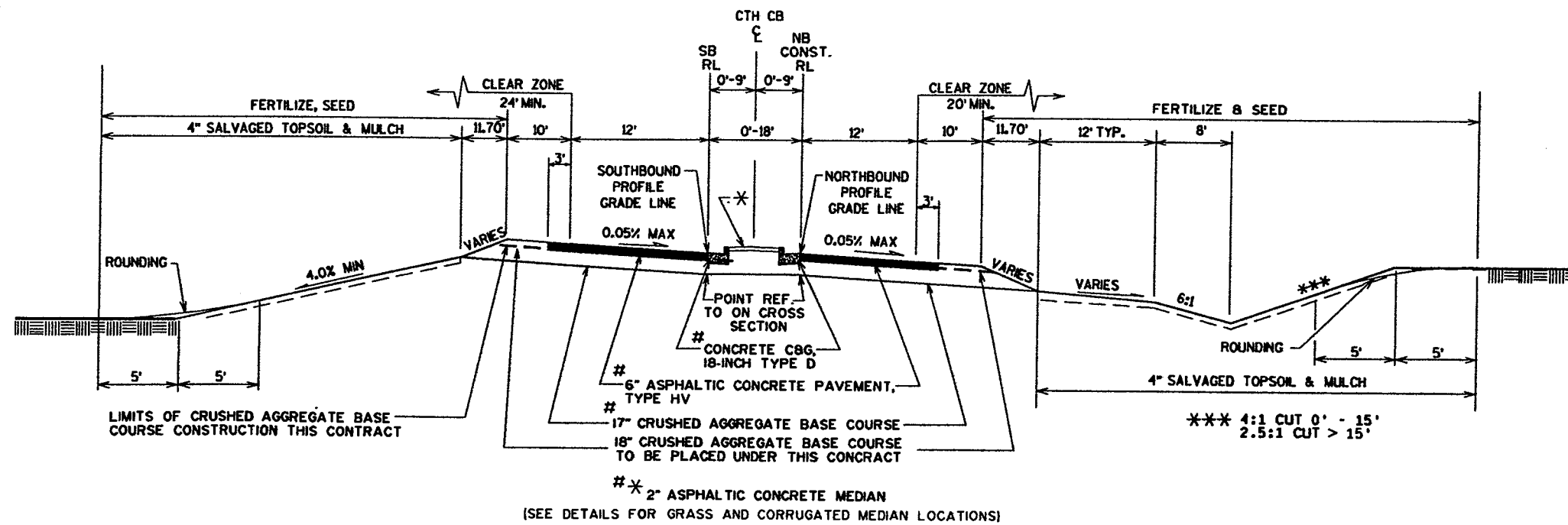


PROPOSED TYPICAL SECTION (SUPERELEVATED)

CTH CB

STA. 402+12.74 TO STA. 408+06.33

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

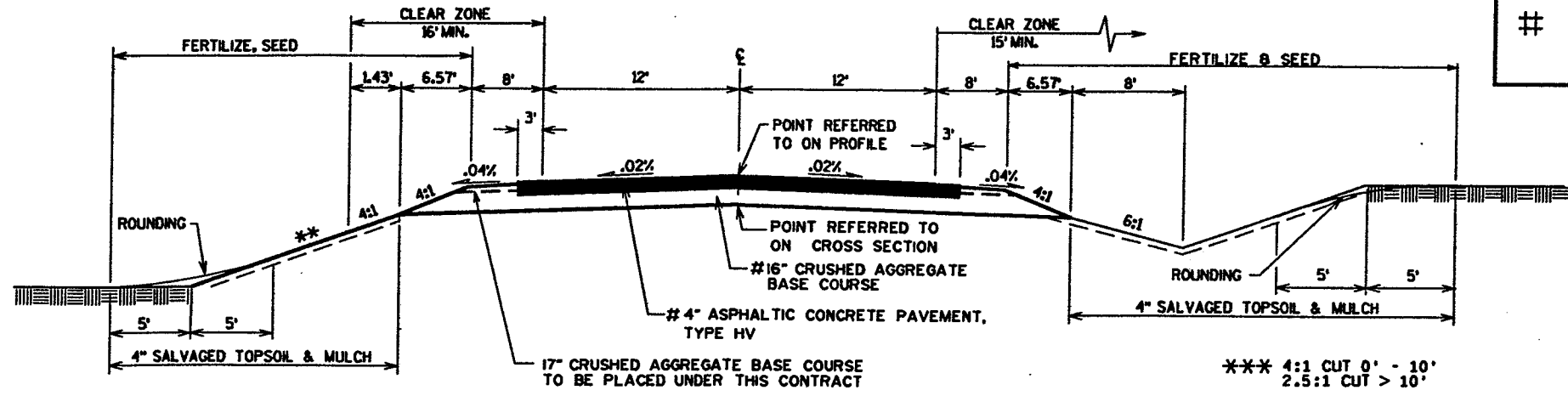


PROPOSED TYPICAL SECTION (SUPERELEVATED)

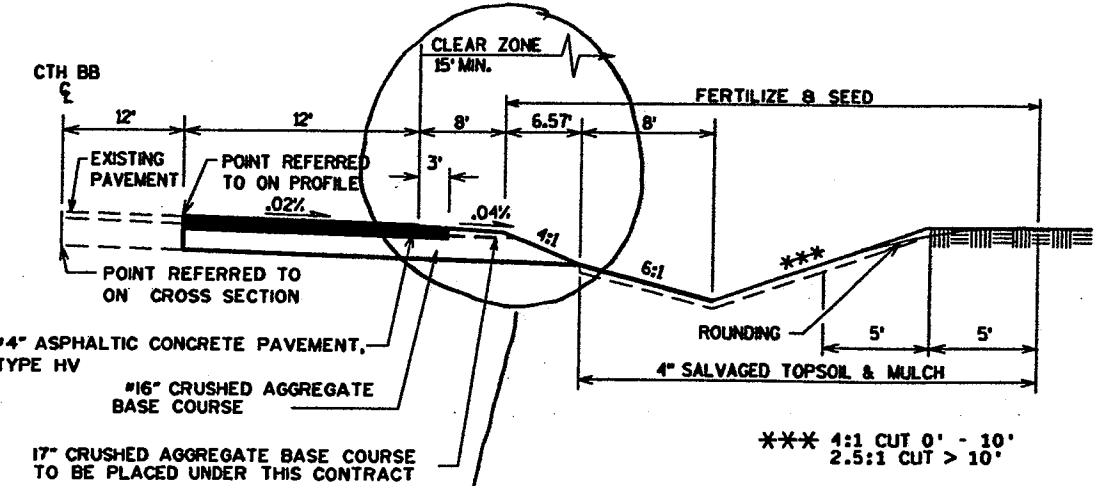
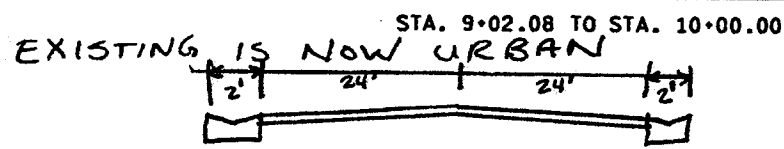
CTH CB

STA. 420+11.07 TO STA. 432+93.66

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



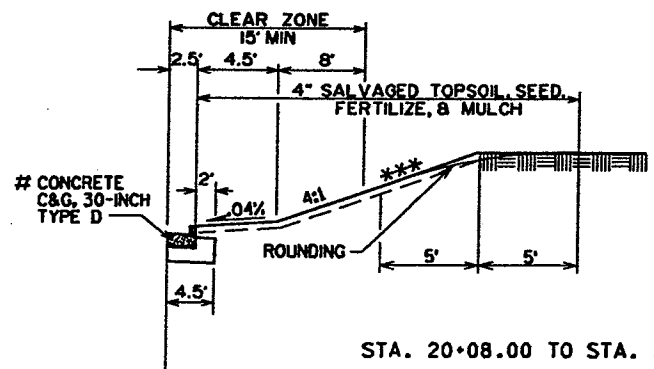
PROPOSED TYPICAL SECTION - OLD BUGGY DRIVE



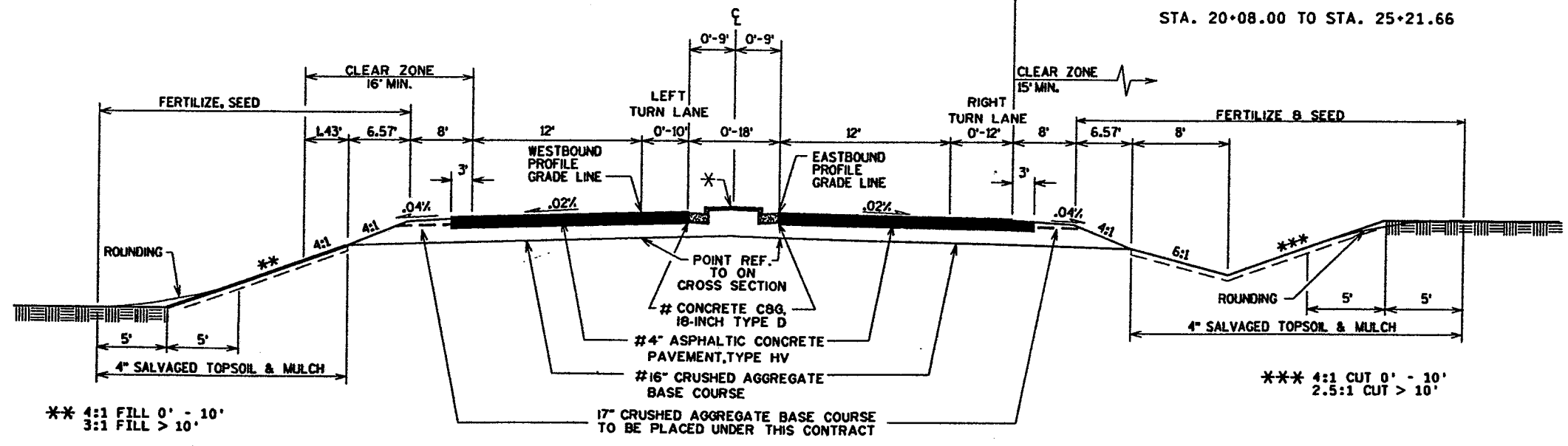
PROPOSED TYPICAL SECTION-CTH BB

STA. 14+51.61 TO STA. 21+89.63

NO PAVED SHLDR
 ONLY 3' GRAN. SHLDR
 (SEE INTERSECTION DETAIL)



STA. 20+08.00 TO STA. 25+21.66

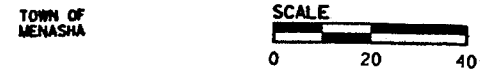


PROPOSED TYPICAL SECTION - SHADY LANE

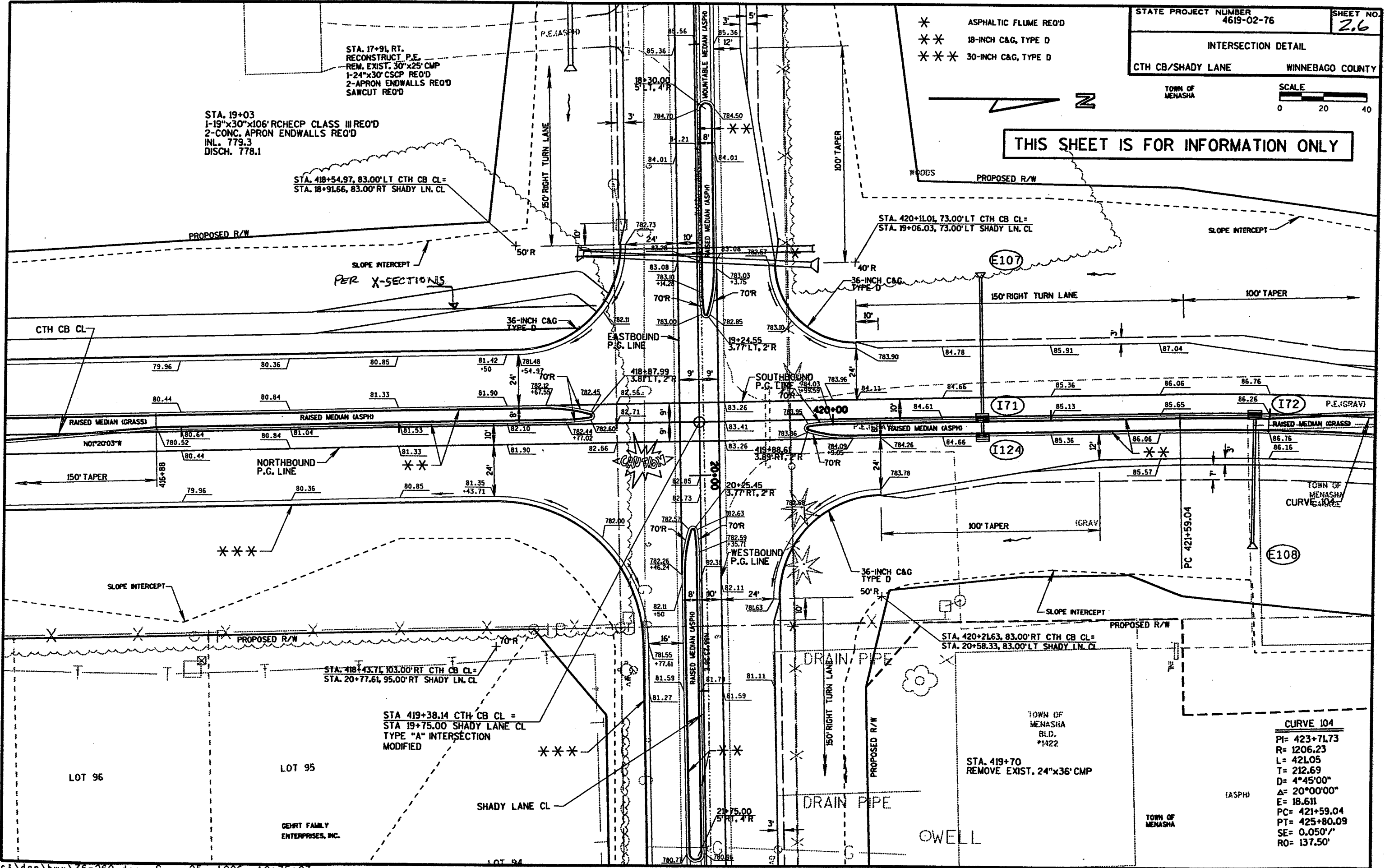
STA. 11+64.28 TO STA. 28+26.33

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

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

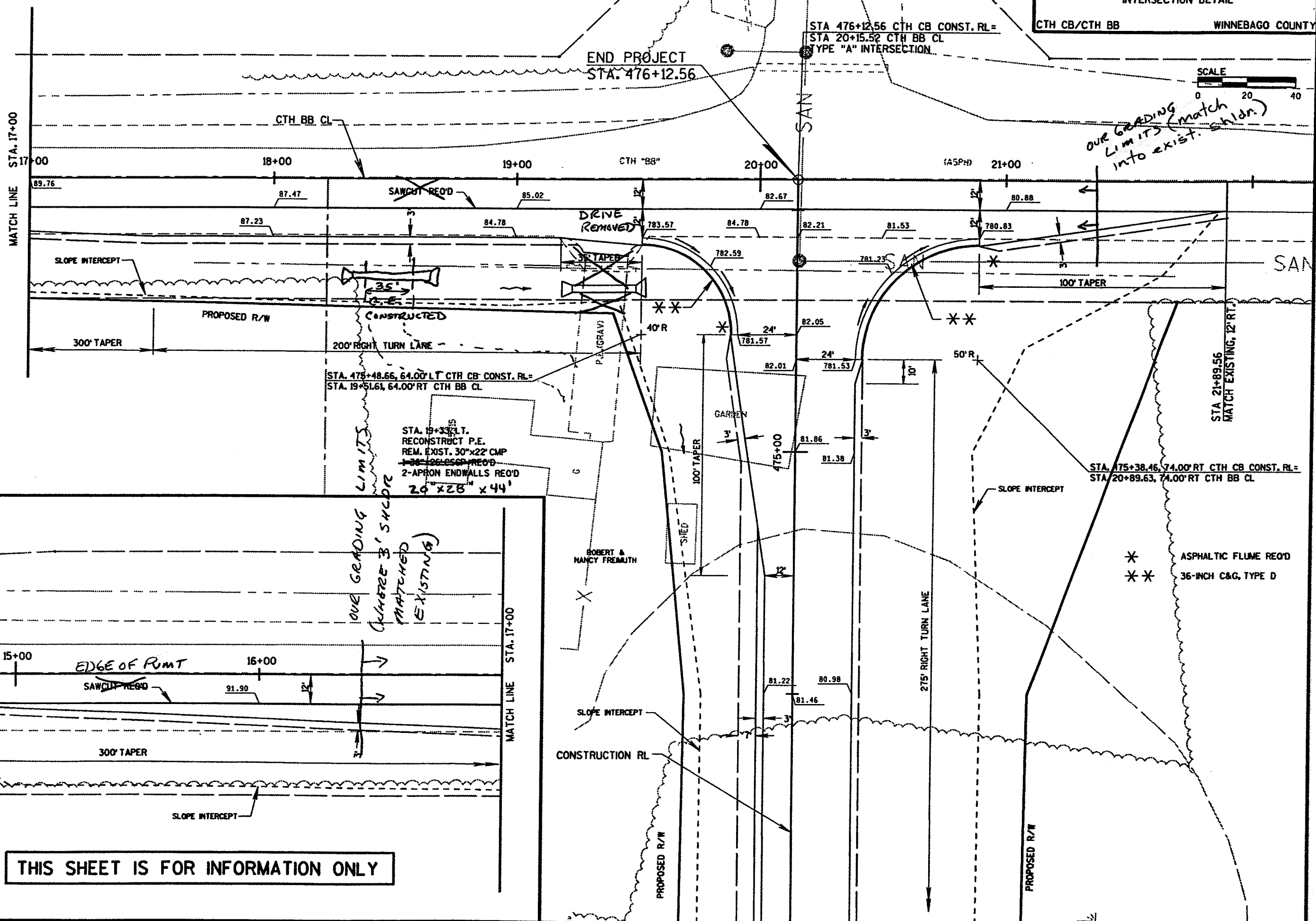
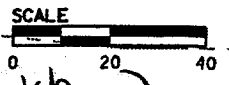


THIS SHEET IS FOR INFORMATION ONLY



CURVE 104

PI=	423+71.73
R=	1206.23
L=	421.05
T=	212.69
D=	4°45'00"
Δ=	20°00'00"
E=	18.611
PC=	421+59.04
PT=	425+80.09
SE=	0.050'/'
RO=	137.50'



OUR GRADING LIMITS (match into exist. shldr.)

STA. 475+48.66, 64.00' LT CTH CB CONST. RL=
 STA. 19+51.61, 64.00' RT CTH BB CL

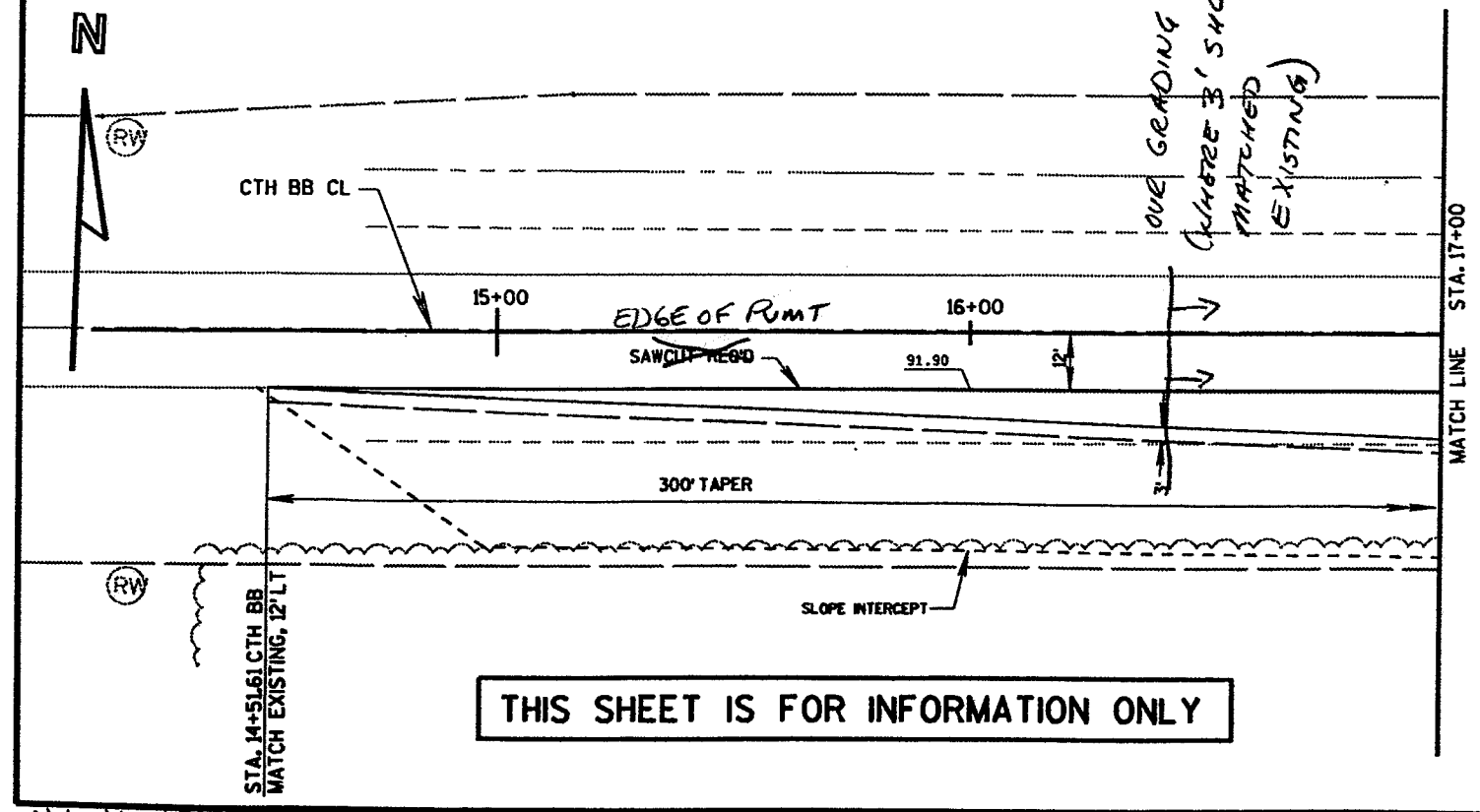
STA. 19+33.15
 RECONSTRUCT P.E.
 REM. EXIST. 30"x22" CMP
 1-36" 126" ESCP REOD
 2-APRON ENDWALLS REOD
 20"x28"x44"

STA. 175+38.46, 74.00' RT CTH CB CONST. RL=
 STA. 20+89.63, 74.00' RT CTH BB CL

ROBERT & NANCY FREMUTH

* ASPHALTIC FLUME REOD
 ** 36-INCH C&G, TYPE D

THIS SHEET IS FOR INFORMATION ONLY



#1386

DEAN M. & SALLY A. HOKS

N

TOWN OF MENASHA

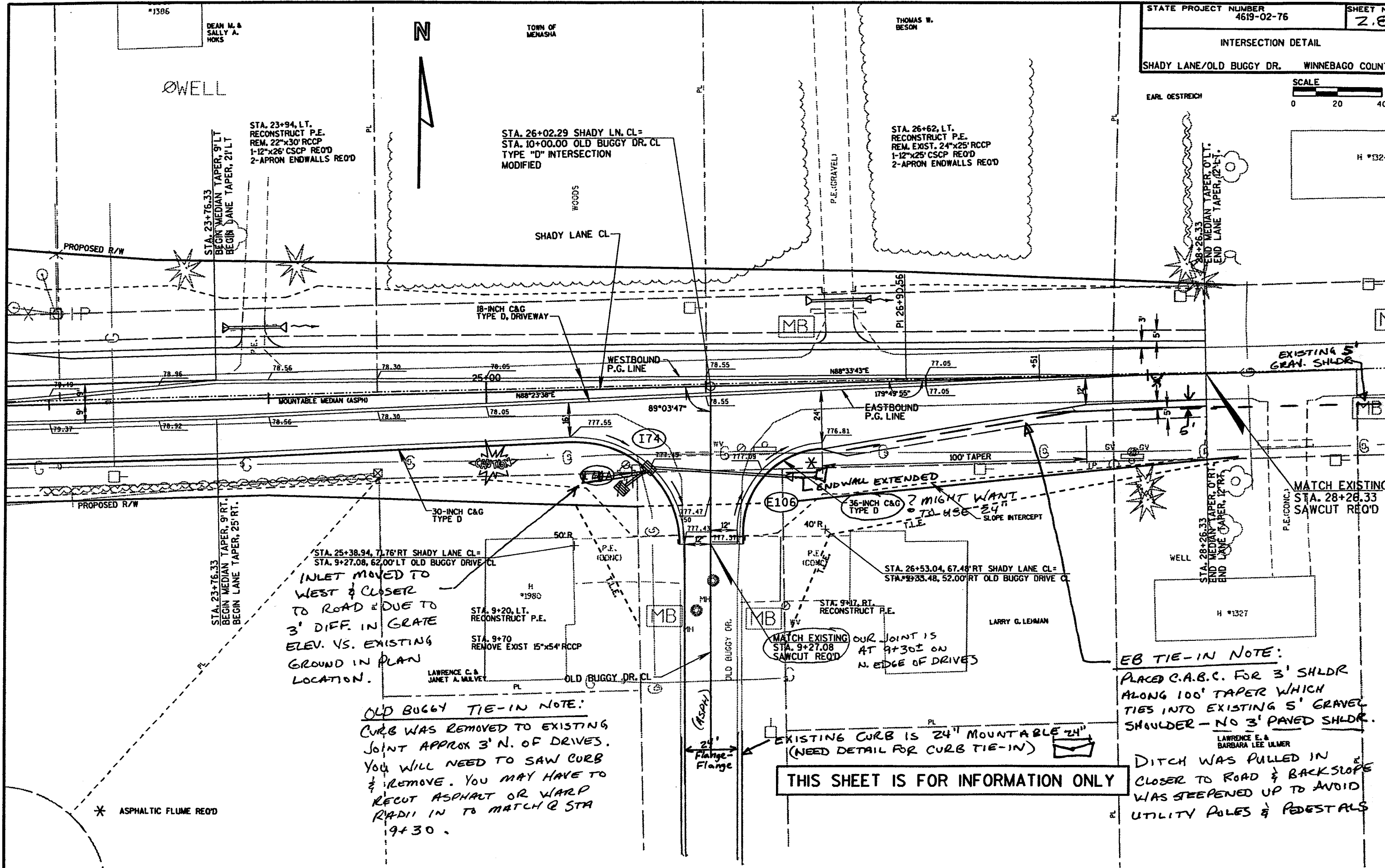
THOMAS W. BESON

STATE PROJECT NUMBER 4619-02-76 SHEET NO. 2.8

INTERSECTION DETAIL SHADY LANE/OLD BUGGY DR. WINNEBAGO COUNTY

EARL OESTREICH SCALE 0 20 40

H #324



STA. 23+94, LT. RECONSTRUCT P.E. REM. 22"x30" RCCP 1-12"x26" CSCP REO'D 2-APRON ENDWALLS REO'D

STA. 26+02.29 SHADY LN. CL = STA. 10+00.00 OLD BUGGY DR. CL TYPE "D" INTERSECTION MODIFIED

STA. 26+62, LT. RECONSTRUCT P.E. REM. EXIST. 24"x25" RCCP 1-12"x25" CSCP REO'D 2-APRON ENDWALLS REO'D

STA. 25+38.94, 71.76' RT SHADY LANE CL = STA. 9+27.08, 62.00' LT OLD BUGGY DRIVE CL

STA. 9+20, LT. RECONSTRUCT P.E.

STA. 9+70 REMOVE EXIST 15"x54" RCCP

STA. 26+53.04, 67.48' RT SHADY LANE CL = STA. 9+33.48, 52.00' RT OLD BUGGY DRIVE CL

STA. 9+17, RT. RECONSTRUCT P.E.

INLET MOVED TO WEST & CLOSER TO ROAD & DUE TO 3' DIFF. IN GRATE ELEV. VS. EXISTING GROUND IN PLAN LOCATION.

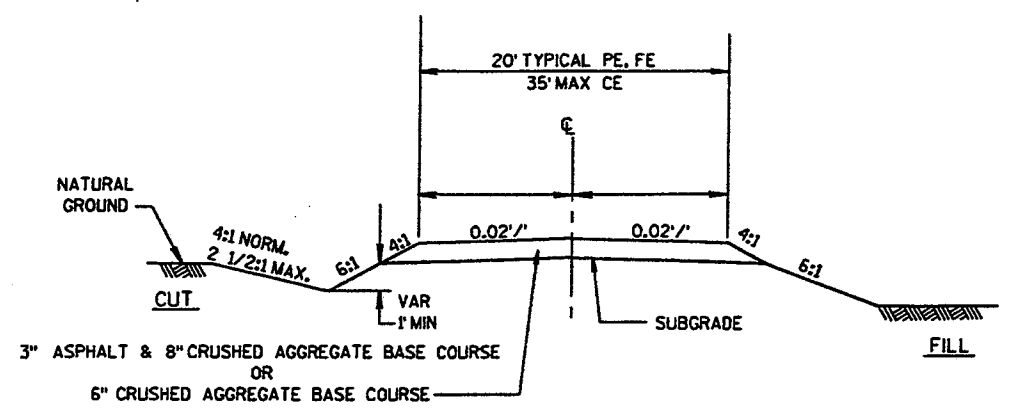
OLD BUGGY TIE-IN NOTE:
CURB WAS REMOVED TO EXISTING JOINT APPROX 3' N. OF DRIVES. YOU WILL NEED TO SAW CURB & REMOVE. YOU MAY HAVE TO RECUT ASPHALT OR WARP RADII IN TO MATCH @ STA 9+30.

MATCH EXISTING STA. 9+27.08 SAWCUT REO'D OUR JOINT IS AT 9+30± ON N. EDGE OF DRIVES

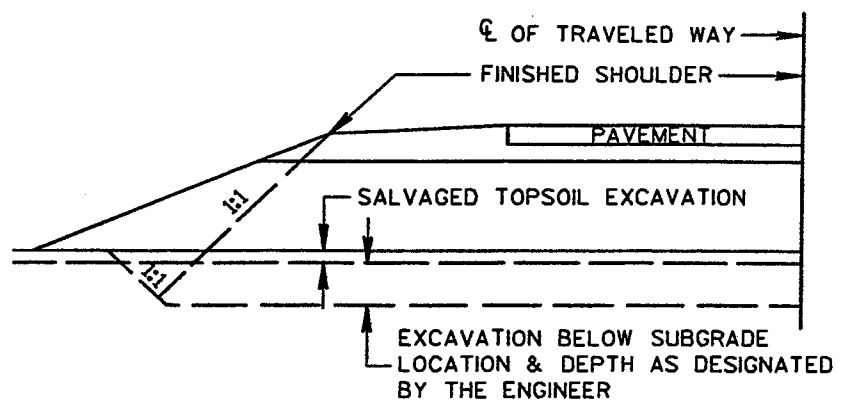
EB TIE-IN NOTE:
PLACED C.A.B.C. FOR 3' SHLDR ALONG 100' TAPER WHICH TIES INTO EXISTING 5' GRAVEL SHOULDER - NO 3' PAVED SHLDR.

THIS SHEET IS FOR INFORMATION ONLY

DITCH WAS PULLED IN CLOSER TO ROAD & BACKSLOPE WAS STEEPENED UP TO AVOID UTILITY POLES & PEDESTALS

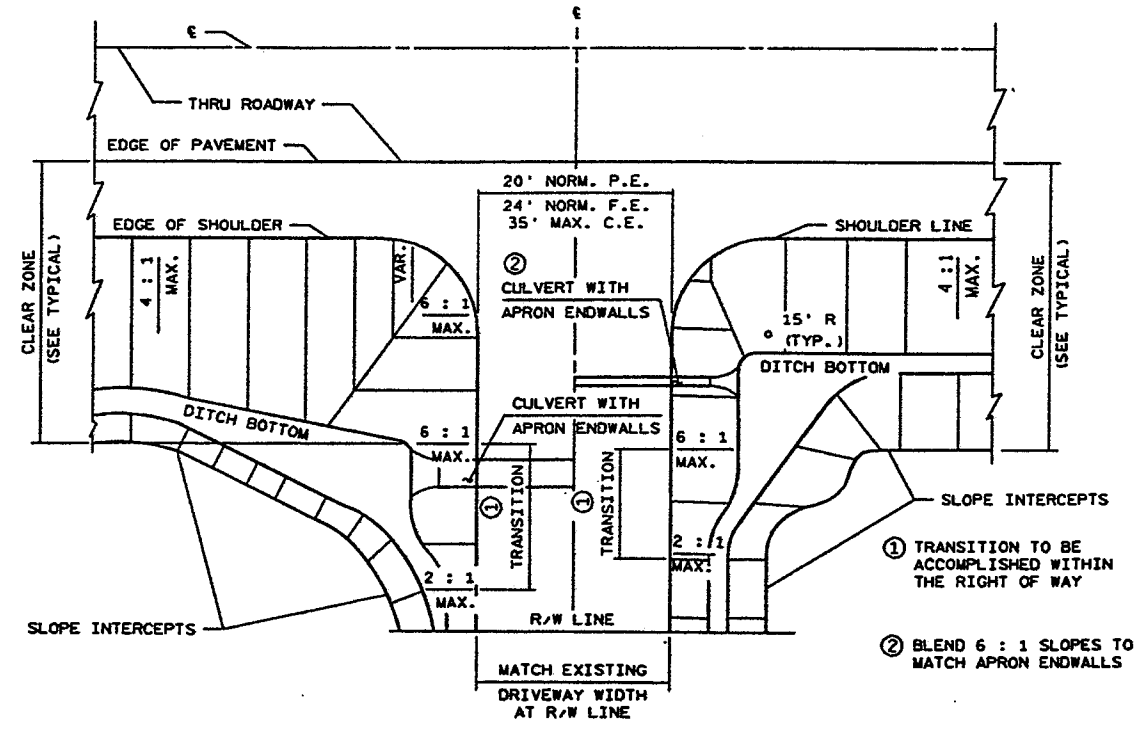


TYPICAL SECTION - DRIVEWAY



DETAIL FOR EXCAVATION BELOW SUBGRADE

STA 401+00 TO STA 411+00, LT & RT
 STA 429+00 TO STA 434+00, LT & RT

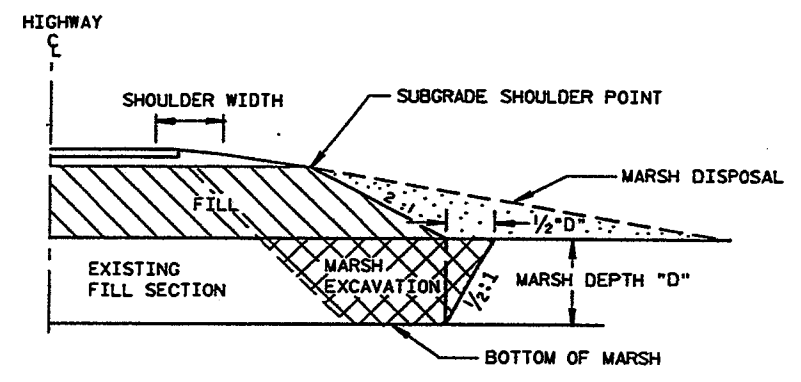


PLAN VIEW - DRIVEWAY

FOR CULVERTS OVER 24" DIAMETER

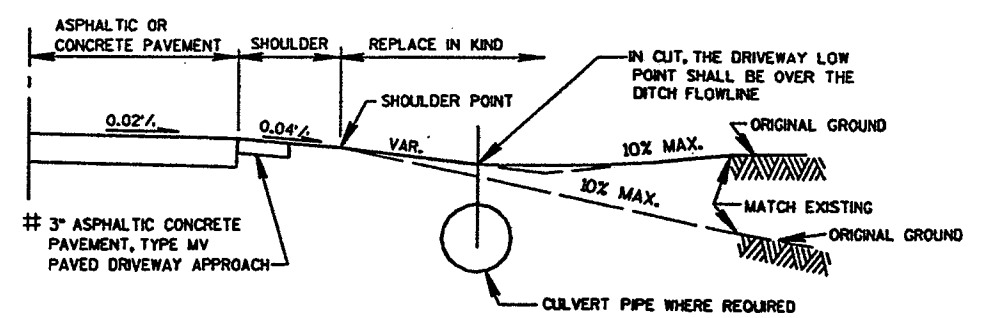
FOR CULVERTS 24" DIAMETER & LESS

*** INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT**

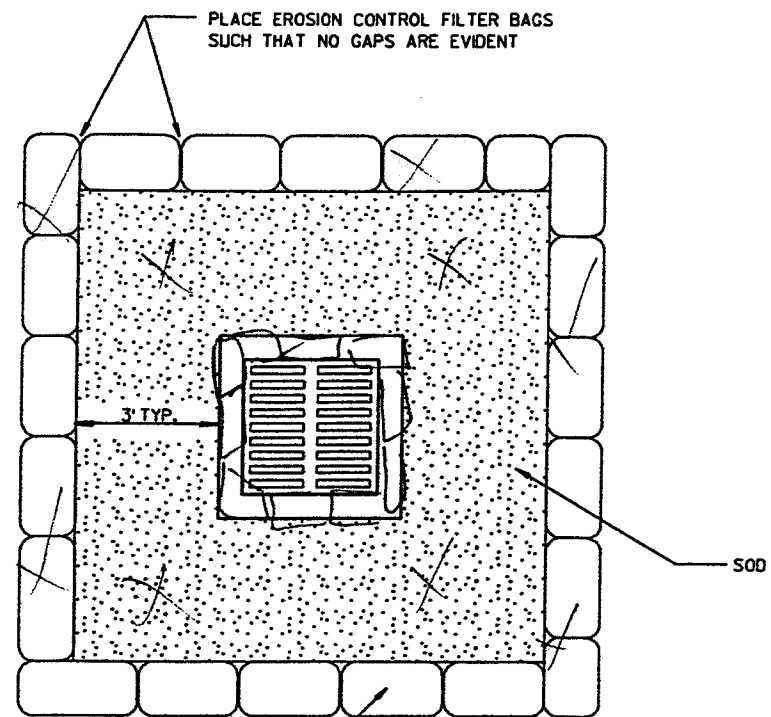


TYPICAL MARSH EXCAVATION

STA 459+00 TO STA 464+00, LT & RT
 STA 467+00 TO STA 475+00, LT & RT



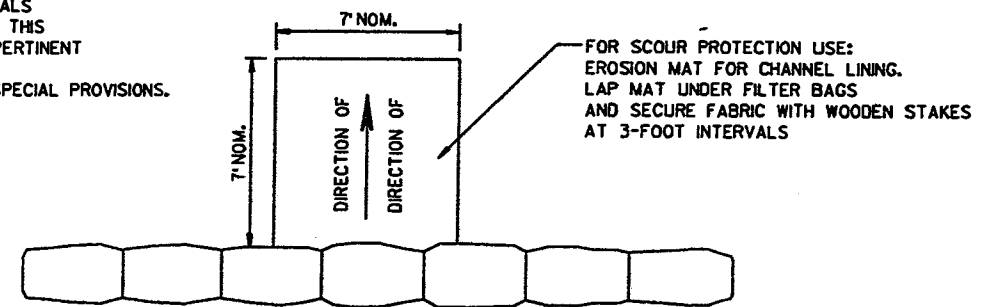
PROFILE VIEW
 TYPICAL DRIVEWAY DETAIL



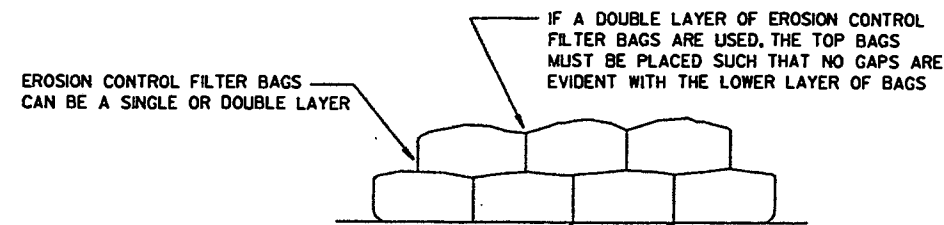
COARSE AGGREGATE FOR CONCRETE MASONRY, SIZE 1, CONTAINED IN PERVIOUS BURLAP BAGS OR SYNTHETIC NET BAGS (1/8-INCH MESH) APPROXIMATELY 24 INCHES LONG, 12 INCHES WIDE AND 6 INCHES HIGH

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.

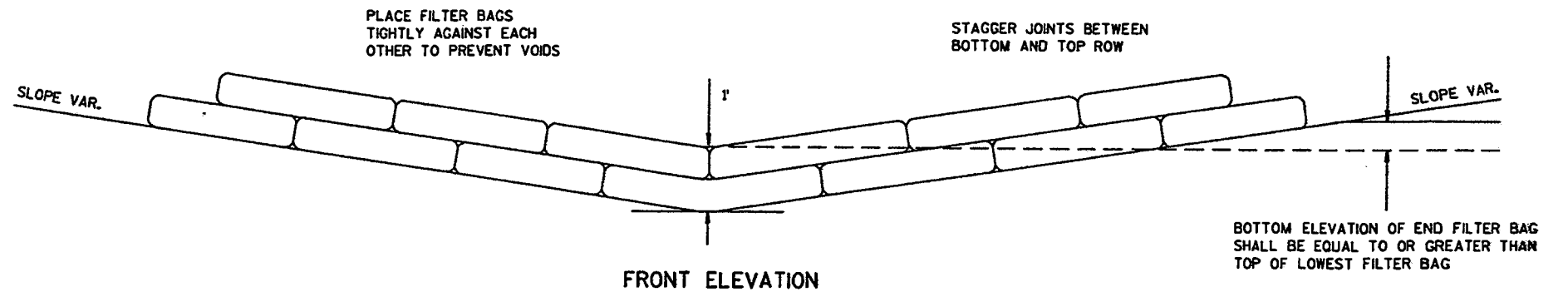


PLAN VIEW



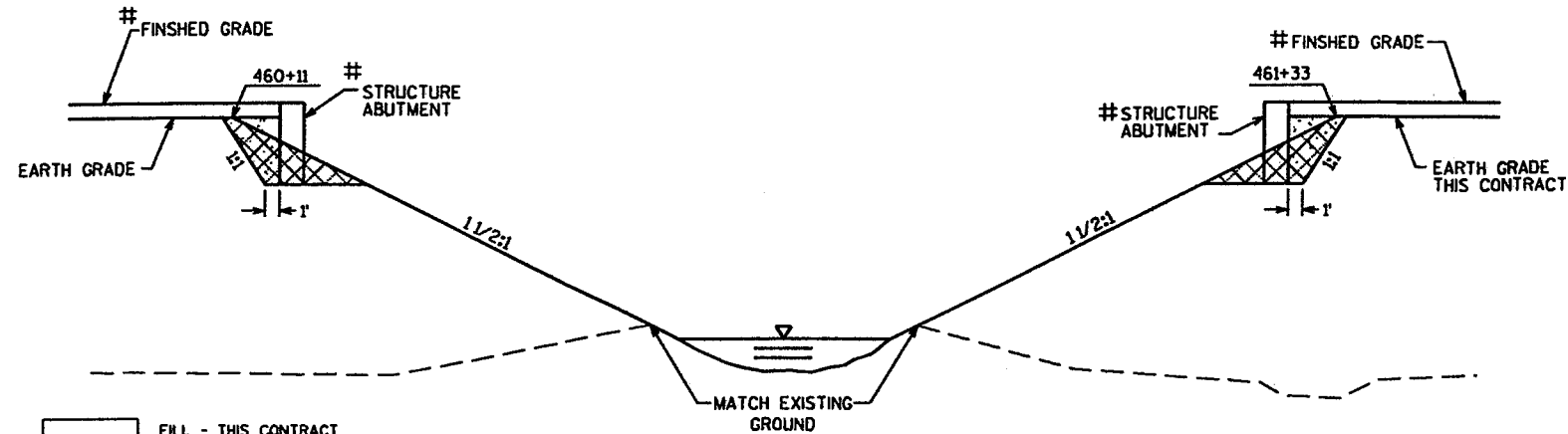
PLACE EROSION CONTROL FILTER BAGS SUCH THAT NO GAPS ARE EVIDENT

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



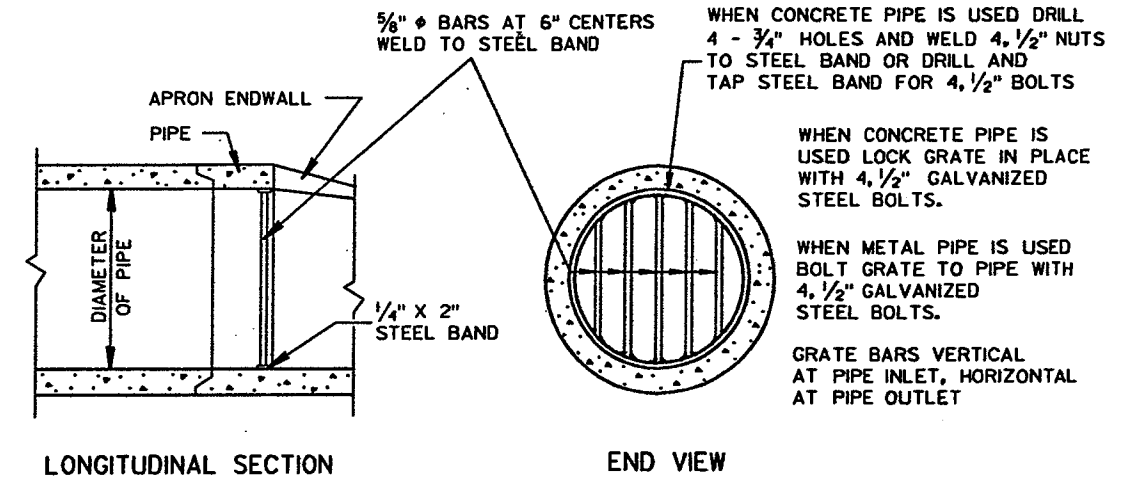
FRONT ELEVATION

FILTER BAG DITCH CHECK DETAIL



[Symbol] FILL - THIS CONTRACT
 [Symbol] # EXCAVATION FOR STRUCTURE
 [Symbol] # GRANULAR BACKFILL

EMBANKMENT DETAIL
ABUTMENT FILL SLOPES AT B-70-186



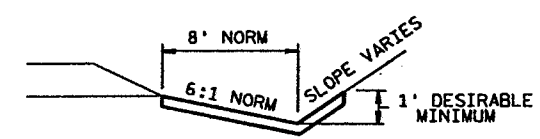
LONGITUDINAL SECTION

END VIEW

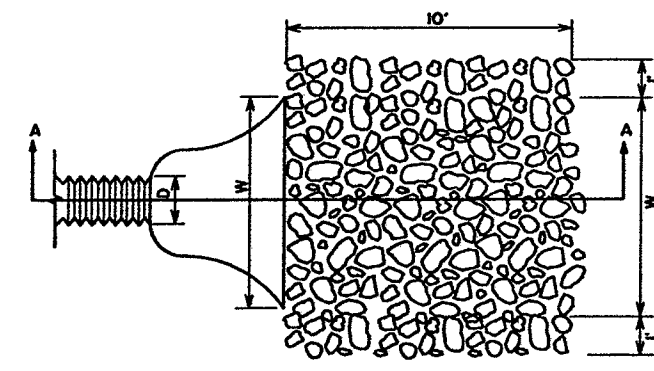
PIPE (END) GRATE DETAIL

NOT USED

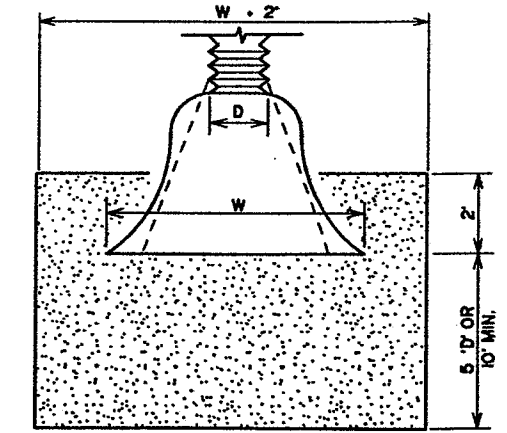
INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



SOD DETAIL FOR DITCHES

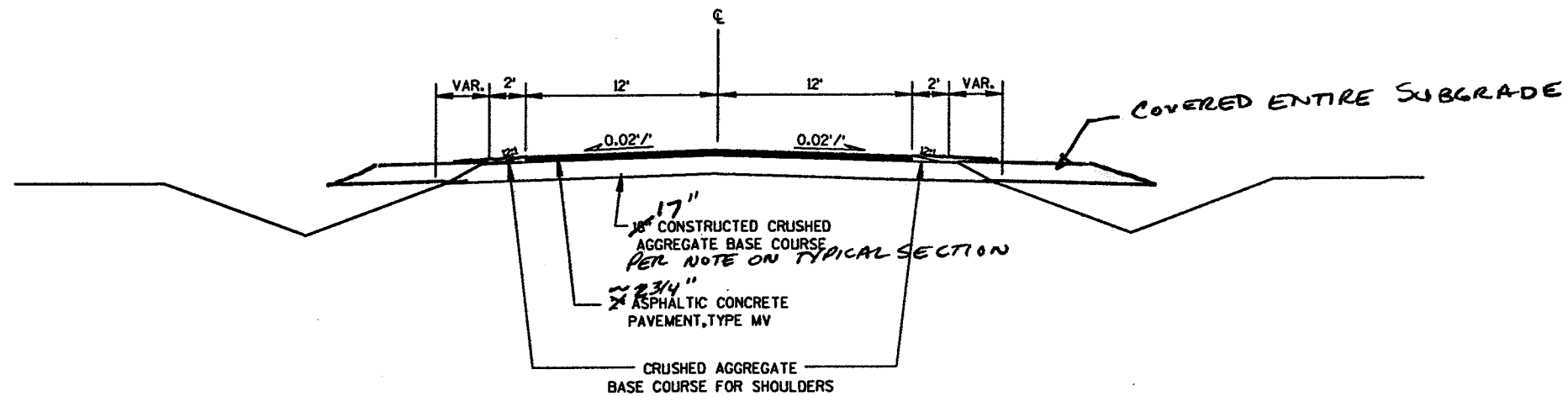


MEDIUM RANDOM RIPRAP AT PIPE DISCHARGE



SOD AT PIPE DISCHARGE ①

① SEE EROSION CONTROL PLANS FOR LOCATIONS



TEMPORARY ASPHALTIC CONCRETE PAVEMENT

SHADY LANE

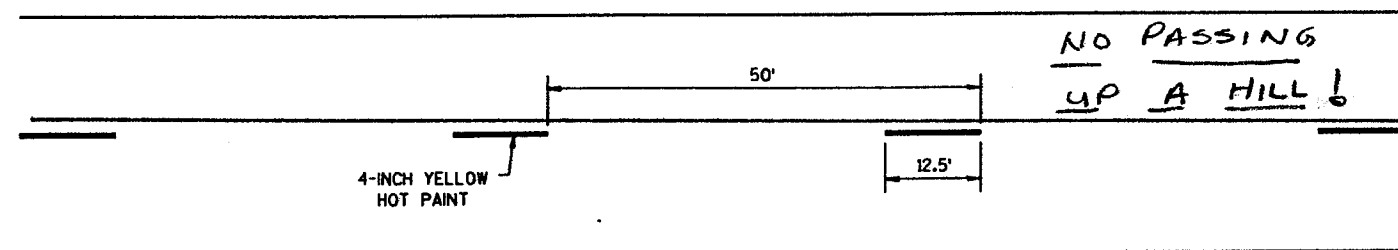
STA. 11+64.28 TO STA. 28+26.33

OLD BUGGY DRIVE

STA. 9+02.08 TO STA. 9+80.00

CTH BB (RIGHT)

STA. 14+51.61 TO STA. 21+89.63



PAVEMENT MARKING DETAIL

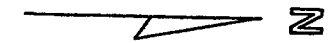
SHADY LANE

STA. 11+64 TO STA. 28+26

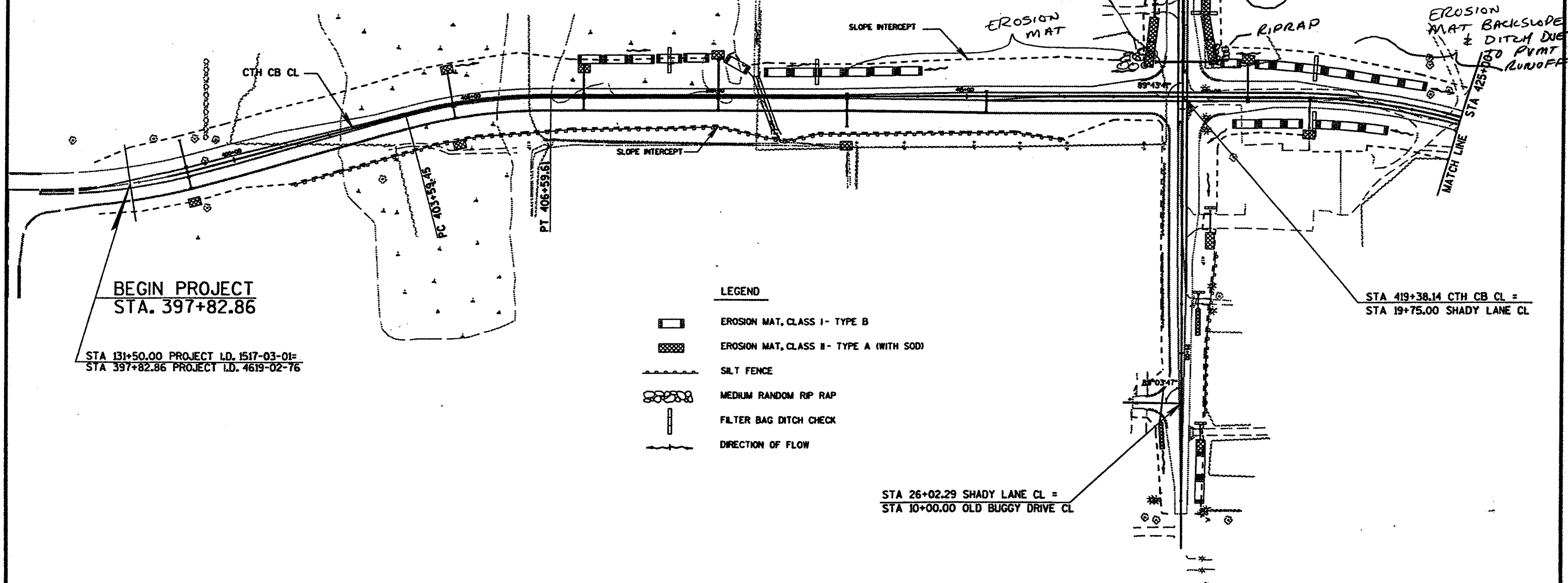
OLD BUGGY DRIVE

STA. 9+02 TO STA. 9+80

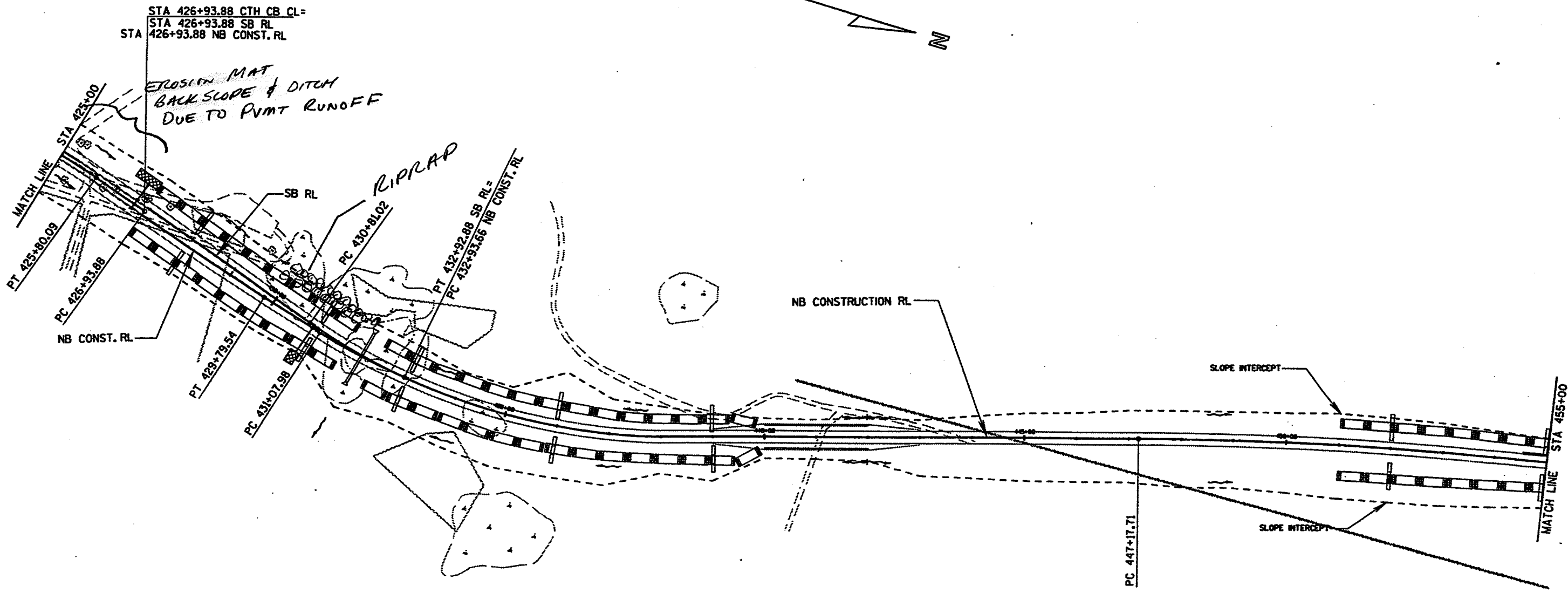
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.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 = 34.2 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 29.6 ACRES

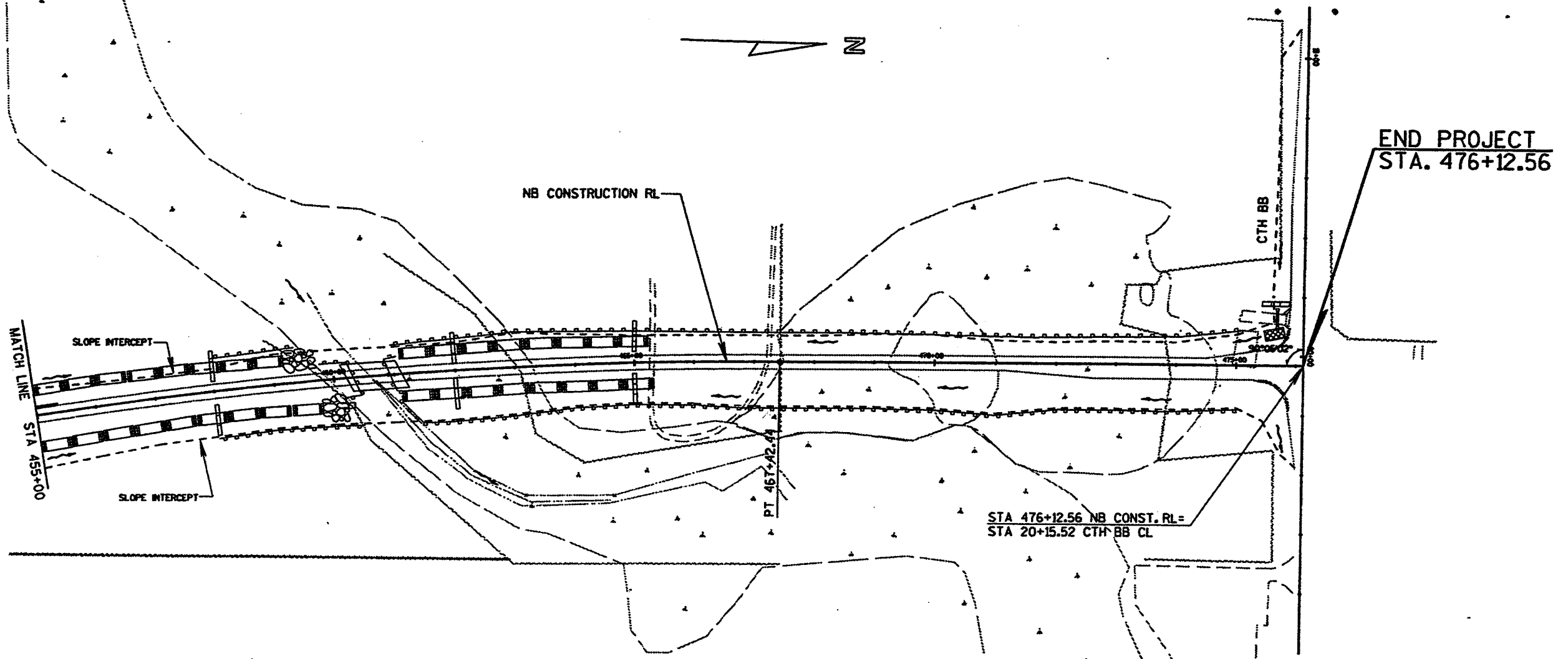
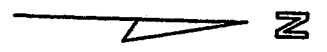


- LEGEND**
- EROSION MAT, CLASS I - TYPE B
 - EROSION MAT, CLASS II - TYPE A (WITH SOD)
 - SILT FENCE
 - MEDIUM RANDOM RIP RAP
 - FILTER BAG DITCH CHECK
 - DIRECTION OF FLOW









LEGEND

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



STA 476+12.56 NB CONST. RL=
STA 20+15.52 CTH BB CL

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

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.

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

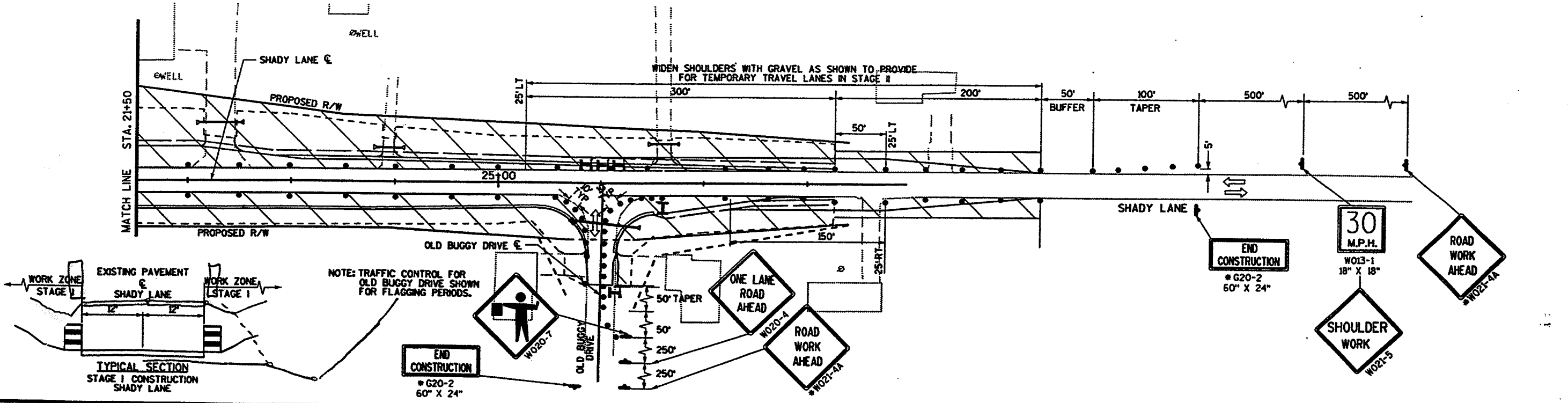
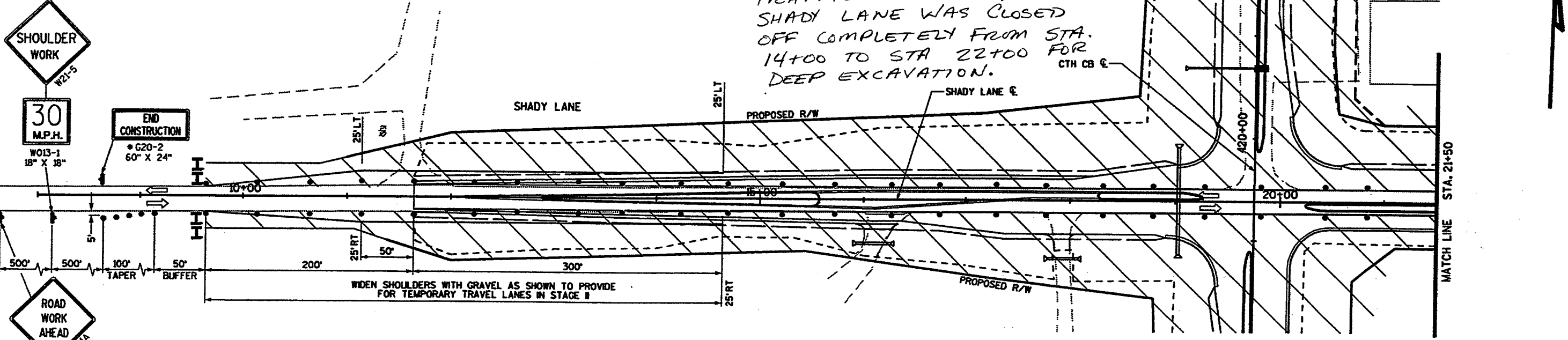
LEGEND

- 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

STAGE I CONSTRUCTION NOTES

1. CONSTRUCT CTH CB FROM STA. 397+82.86 TO STA. 419+25
2. CONSTRUCT CTH CB FROM STA. 419+50 TO STA. 476+00
3. GRADE, INSTALL DRAINAGE STRUCTURES AND CONSTRUCT EAST HALF OF OLD BUGGY DRIVE TO CRUSHED AGGREGATE BASE COURSE AND GRADE TO MATCH EXISTING PAVEMENT. UPON COMPLETION, CONSTRUCT WEST HALF AND USE IDENTICAL TRAFFIC CONTROL.
4. GRADE, INSTALL DRAINAGE STRUCTURES AND CONSTRUCT SHADY LANE TO CRUSHED AGGREGATE BASE COURSE NORTH AND SOUTH OF EXISTING EDGES OF PAVEMENT.

COULD NOT CONSTRUCT AS DESIGNED. (DUE TO CUTS UP TO 6' DEEP OFF EDGE OF TRAFFIC IN STAGE I). SHADY LANE WAS CLOSED OFF COMPLETELY FROM STA. 14+00 TO STA. 22+00 FOR DEEP EXCAVATION.



CTH BB-STAGE I



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.

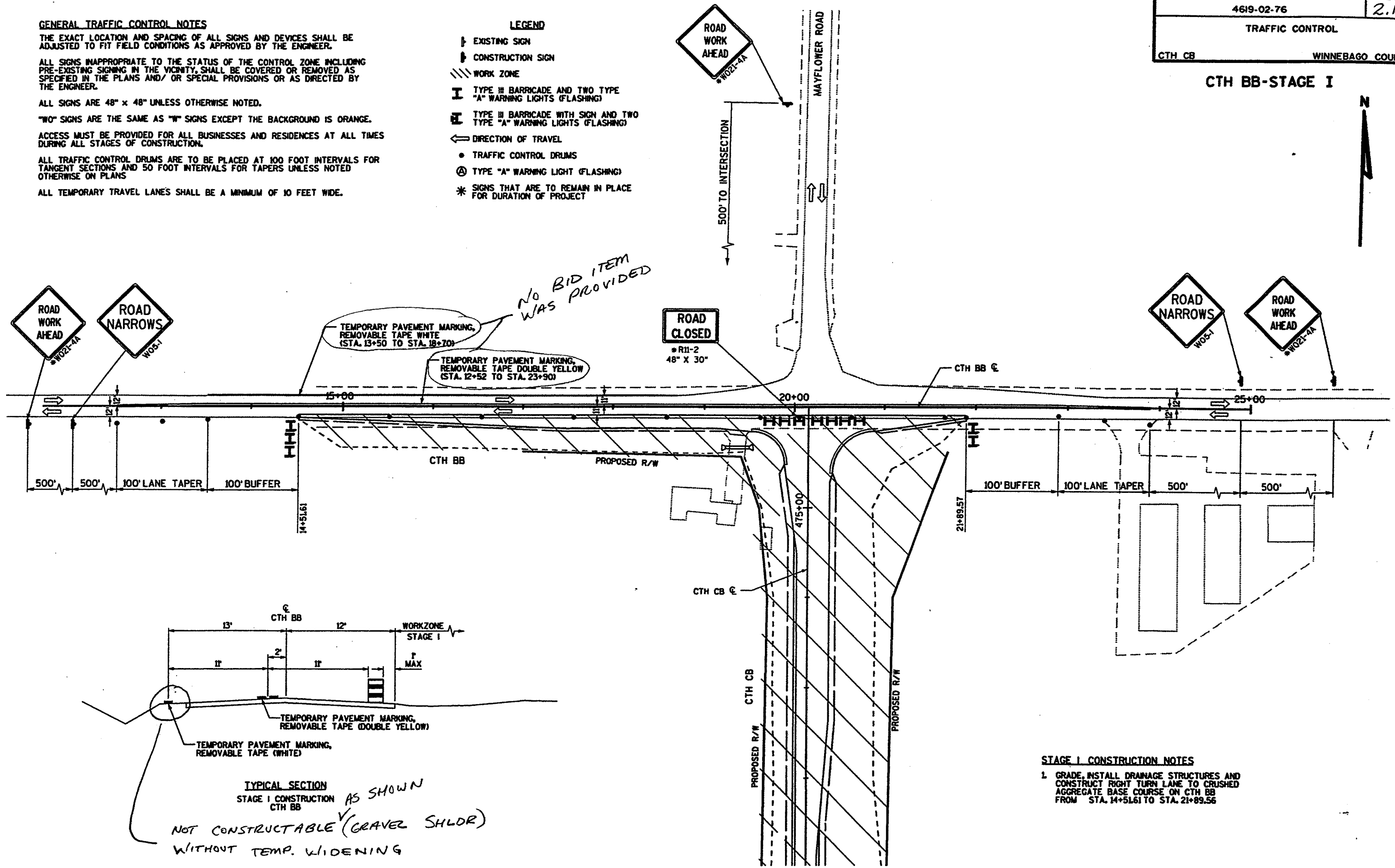
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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 100 FOOT INTERVALS FOR TANGENT SECTIONS AND 50 FOOT INTERVALS FOR TAPERS UNLESS NOTED OTHERWISE ON PLANS

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

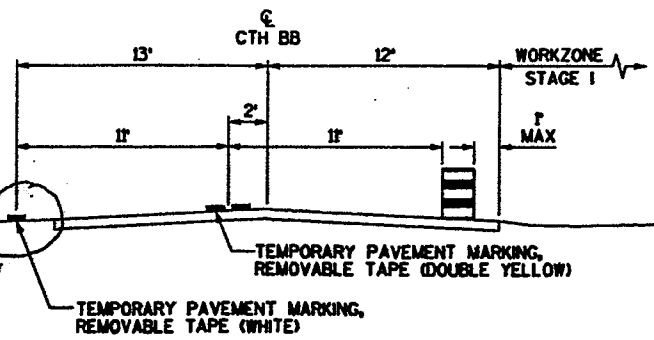
- LEGEND**
- EXISTING SIGN
 - CONSTRUCTION SIGN
 - WORK ZONE
 - TYPE III BARRICADE AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
 - TYPE III BARRICADE WITH SIGN AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
 - DIRECTION OF TRAVEL
 - TRAFFIC CONTROL DRUMS
 - TYPE "A" WARNING LIGHT (FLASHING)
 - SIGNS THAT ARE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



TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE WHITE (STA. 13+50 TO STA. 18+70)

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE DOUBLE YELLOW (STA. 12+52 TO STA. 23+90)

No BID ITEM WAS PROVIDED



TYPICAL SECTION
STAGE I CONSTRUCTION
CTH BB

AS SHOWN

NOT CONSTRUCTABLE (GRAVEL SHOULDER) WITHOUT TEMP. WIDENING

- STAGE I CONSTRUCTION NOTES**
- GRADE, INSTALL DRAINAGE STRUCTURES AND CONSTRUCT RIGHT TURN LANE TO CRUSHED AGGREGATE BASE COURSE ON CTH BB FROM STA. 14+51.61 TO STA. 21+89.56

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.

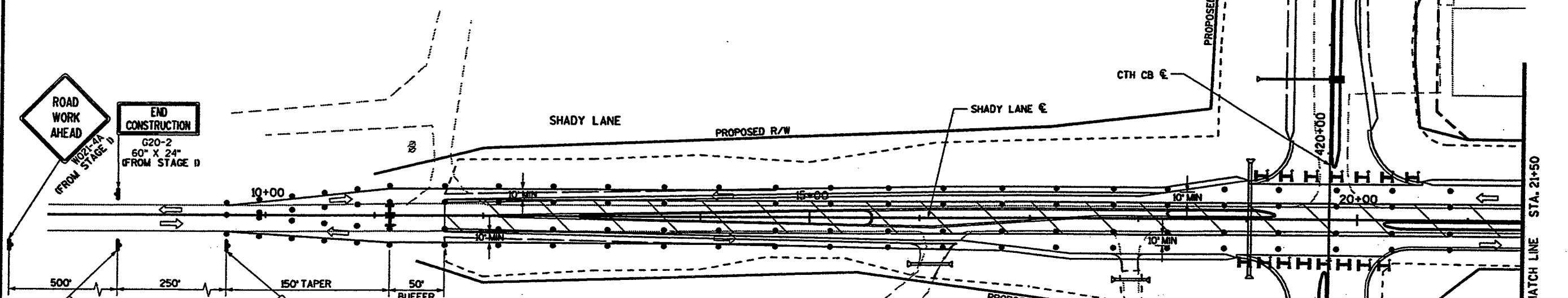
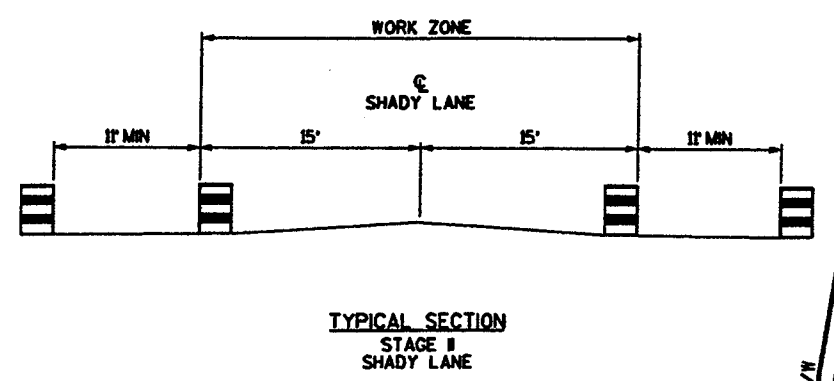
"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

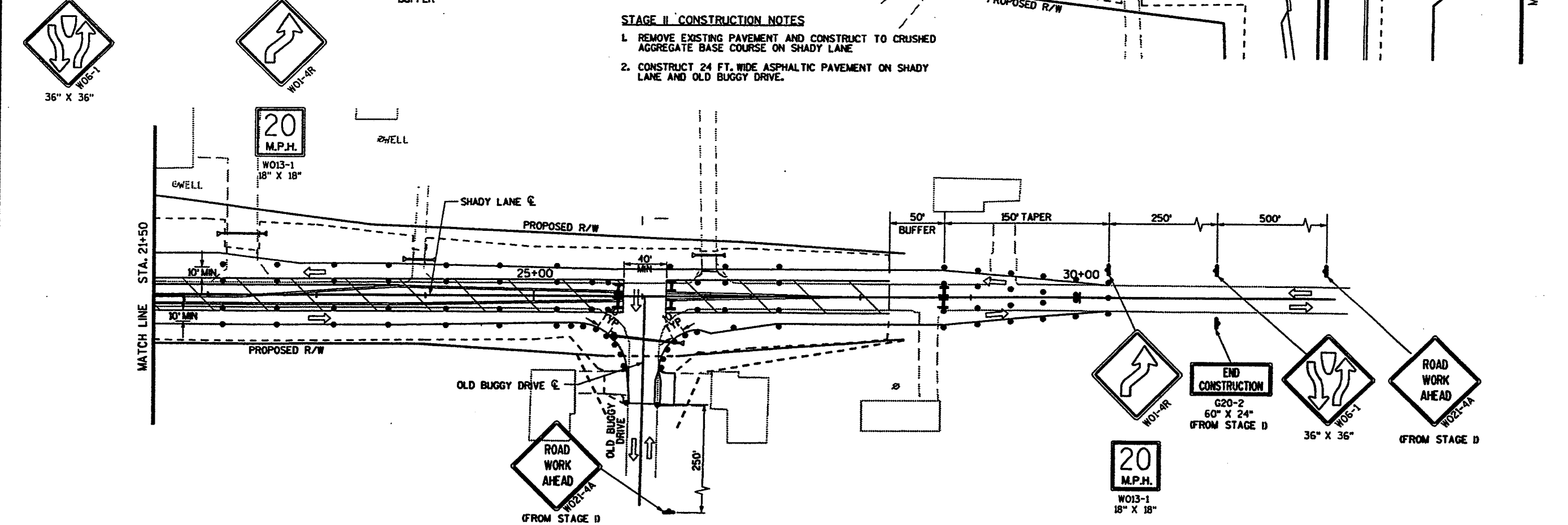
ALL TRAFFIC CONTROL DRUMS ARE TO BE PLACED AT 50 FOOT INTERVALS FOR TANGENT SECTIONS AND 25 FOOT INTERVALS FOR TAPERS UNLESS NOTED OTHERWISE ON PLANS.

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 CONSTRUCTION NOTES**
1. REMOVE EXISTING PAVEMENT AND CONSTRUCT TO CRUSHED AGGREGATE BASE COURSE ON SHADY LANE
 2. CONSTRUCT 24 FT. WIDE ASPHALTIC PAVEMENT ON SHADY LANE AND OLD BUGGY DRIVE.





CURVE 102
 PI= 397+59.45
 R= 1206.23
 L= 203.58
 T= 102.03
 D= 4°45'00"
 Δ= 9°40'12"
 E= 4.31
 PC= 397+12.86
 PT= 399+16.44

STA. 131+50.00 PROJECT I.D. 1517-03-01=
 STA. 397+82.86 PROJECT I.D. 4619-02-00

CURVE 103
 PI= 405+10.40
 Y= 146405.332
 X= 2394328.864
 R= 1145.92
 L= 300.16
 T= 150.95
 D= 5°00'00"
 Δ= 15°00'29"
 E= 9.90
 PC= 403+59.45
 PT= 406+59.61

CURVE 104
 PI= 423+71.73
 Y= 148267.784
 X= 2394285.484
 R= 1206.23
 L= 421.05
 T= 212.69
 D= 4°45'00"
 Δ= 20°00'00"
 E= 18.611
 PC= 421+59.04
 PT= 425+80.09

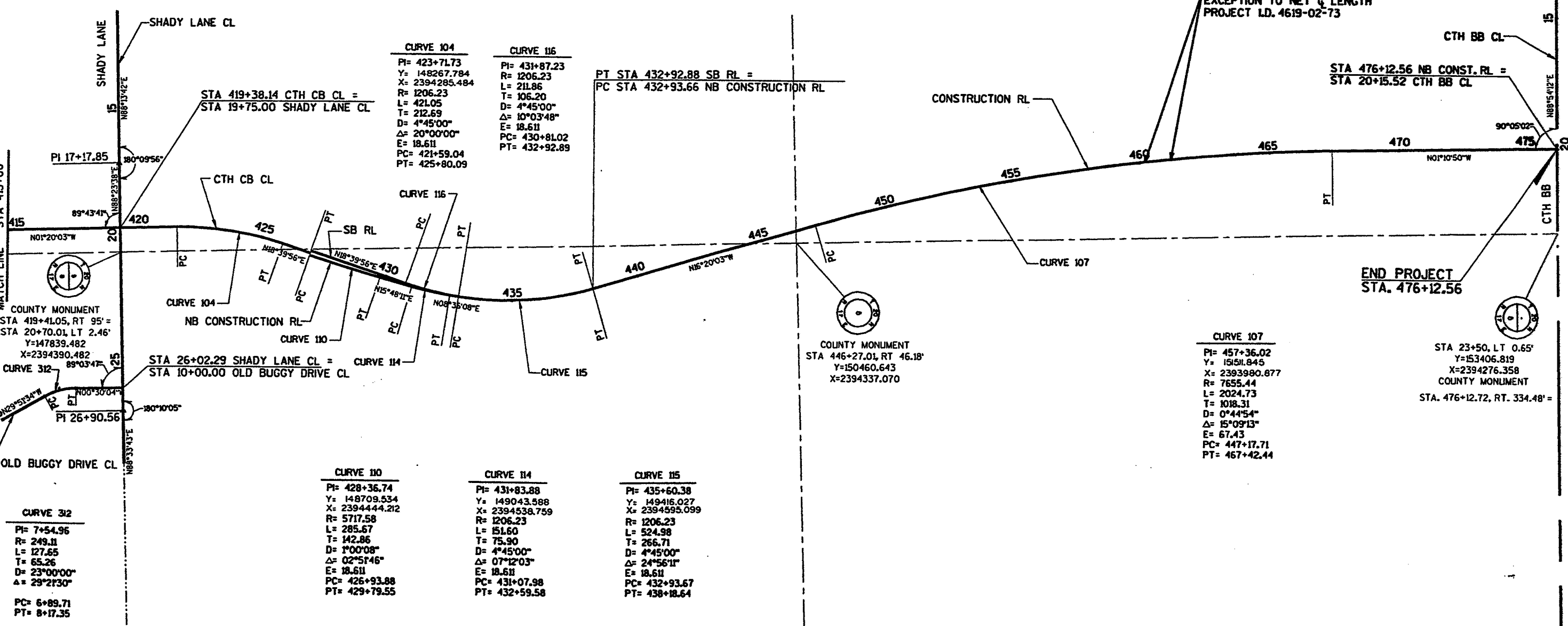
CURVE 116
 PI= 431+87.23
 R= 1206.23
 L= 211.86
 T= 106.20
 D= 4°45'00"
 Δ= 10°03'48"
 E= 18.611
 PC= 430+81.02
 PT= 432+92.89

STA 460+19.64 TO STA 461+20.54
 EXCEPTION TO NET G LENGTH
 PROJECT I.D. 4619-02-73

STA 476+12.56 NB CONST. RL =
 STA 20+15.52 CTH BB CL

CURVE 107
 PI= 457+36.02
 Y= 151511.845
 X= 2393980.877
 R= 7655.44
 L= 2024.73
 T= 1018.31
 D= 0°44'54"
 Δ= 15°09'13"
 E= 67.43
 PC= 447+17.71
 PT= 467+42.44

STA 23+50, LT 0.65'
 Y=153406.819
 X=2394276.358
 COUNTY MONUMENT
 STA. 476+12.72, RT. 334.48' =



COUNTY MONUMENT
 STA 419+41.05, RT 95'
 STA 20+70.01, LT 2.46'
 Y=147839.482
 X=2394390.482

COUNTY MONUMENT
 STA 446+27.01, RT 46.18'
 Y=150460.643
 X=2394337.070

CURVE 312
 PI= 7+54.96
 R= 249.11
 L= 127.65
 T= 65.26
 D= 23°00'00"
 Δ= 29°21'30"
 PC= 6+89.71
 PT= 8+17.35

CURVE 110
 PI= 428+36.74
 Y= 148709.534
 X= 2394444.212
 R= 5717.58
 L= 285.67
 T= 142.86
 D= 1°00'08"
 Δ= 02°51'46"
 E= 18.611
 PC= 426+93.88
 PT= 429+79.55

CURVE 114
 PI= 431+83.88
 Y= 149043.588
 X= 2394538.759
 R= 1206.23
 L= 151.60
 T= 75.90
 D= 4°45'00"
 Δ= 07°12'03"
 E= 18.611
 PC= 431+07.98
 PT= 432+59.58

CURVE 115
 PI= 435+60.38
 Y= 149416.027
 X= 2394595.099
 R= 1206.23
 L= 524.98
 T= 266.71
 D= 4°45'00"
 Δ= 24°56'11"
 E= 18.611
 PC= 432+93.67
 PT= 438+18.64

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	CLEARING STA.	GRUBBING STA.
399+00 - 401+00	CTH CB	2	2
401+00 - 407+00	CTH CB	6	6
410+00 - 420+00	CTH CB	10	10
420+00 - 422+00	CTH CB	2	2
424+00 - 429+00	CTH CB	5	5
433+00 - 435+00	CTH CB	2	2
443+00 - 447+00	CTH CB	4	4
459+00 - 464+00	CTH CB	5	5
467+00 - 474+00	CTH CB	7	7
11+00 - 14+00	SHADY LN	3	3
15+00 - 18+00	SHADY LN	3	3
18+00 - 19+00	SHADY LN	1	1
TOTAL		50	50
<i>MISSED CTH BB</i> 15+00 - 19+00	CTH BB, RT	4	4

EARTHWORK SUMMARY

LOCATION	COMMON EXCAVATION C.Y.	MARSH EXCAVATION C.Y.	EBS C.Y.	BORROW C.Y.	ROCK EXCAVATION C.Y.
CTH CB	35,243	8959	8374	92,725	854
SHADY LANE	13,258	0	0	0	0
CTH BB	739	0	0	0	0
TOTALS	49,240	8959	8374	92,725	854

SAWING EXISTING PAVEMENT

STATION	LOCATION	L.F.
11+64	SHADY LANE	24
17+91	PE RT, SHADY LANE	16
22+30	PE LT, SHADY LANE	30
28+26	SHADY LANE	24
9+02	OLD BUGGY DRIVE	24
TOTAL		118

ASPHALTIC CONCRETE PAVEMENT

STATION TO STATION	LOCATION	TYPE MV TONS	ASPH. MAT. FOR PLANT MIXES AC @ 6% TONS
11+64.3 - 28+26.3	SHADY LANE	605	37
TOTALS		605	37

MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC

STATION	LOCATION	ROAD	RIPRAP C.Y.	GEOTEXTILE FABRIC TYPE R S.Y.
459+50	LT	CTH CB	22	45
460+00	RT	CTH CB	23	45
TOTALS			45	90

WATER AND CALCIUM CHLORIDE SURFACE TREATMENT

LOCATION	WATER MGAL	CALCIUM CHLORIDE SURFACE TREATMENT TONS
CTH CB	210	36
SHADY LANE	45	8
CTH BB	5	1
TOTALS	260	45

SOD & EROSION MAT, CLASS II - TYPE A

STATION - STATION	LOCATION	ROAD	DELIVERED S.Y.	INSTALLED S.F.	SOD S.Y.
399+00 AT OUTFALL	40 FT RT	CTH CB	8	8	8
404+70 AT OUTFALL	40 FT LT	CTH CB	8	8	8
404+70 AT OUTFALL	40 FT RT	CTH CB	8	8	8
407+40 AT OUTFALL	40 FT LT	CTH CB	8	8	8
410+00 AT OUTFALL	40 FT LT	CTH CB	8	8	8
412+50 AT OUTFALL	40 FT RT	CTH CB	8	8	8
15+50 TO 19+00	LT SIDE	SHADY LN	233	233	233
16+35 TO 19+20	RT SIDE	SHADY LN	190	190	190
22+60 AT OUTFALL	28 FT LT	SHADY LN	8	8	8
24+20 AT OUTFALL	40 FT LT	SHADY LN	8	8	8
26+30 AT OUTFALL	40 FT RT	SHADY LN	8	8	8
26+70 AT OUTFALL	28 FT LT	SHADY LN	8	8	8
420+70 AT OUTFALL	40 FT LT	CTH CB	8	8	8
421+90 AT OUTFALL	40 FT RT	CTH CB	8	8	8
426+70 AT OUTFALL	40 FT LT	CTH CB	8	8	8
430+90 AT OUTFALL	50 FT RT	CTH CB	8	8	8
19+50 AT OUTFALL	28 FT RT	CTH BB	8	8	8
UNDISTRIBUTED			57	57	57
TOTALS			600	600	600

REMOVING FENCE

STATION TO STATION	LOCATION	L.F.
401+45	CTH CB, LT & RT	620
418+55 - 420+40	CTH CB, RT	185
444+50	CTH CB, LT & RT	525
450+80	CTH CB, LT & RT	180
460+00	CTH CB, LT & RT	200
467+90	CTH CB, LT & RT	140
11+60 - 23+10	SHADY LANE, LT	1150
TOTAL		3000

SILT FENCE

STATION TO STATION	LOCATION	ROAD	DELIVERED L.F.	INSTALLED L.F.	MAINTENANCE L.F.
401+00 TO 417+00	RT	CTH CB	1600	1600	3200
23+00 TO 26+50	LT	SHADY LN	350	350	700
458+00 TO 459+50	LT	CTH CB	150	150	300
458+00 TO 460+20	RT	CTH CB	220	220	440
460+50 AT BRIDGE		CTH CB	100	100	200
461+00 AT BRIDGE		CTH CB	100	100	200
461+00 TO 475+50	LT	CTH CB	1450	1450	2900
461+30 TO 475+50	RT	CTH CB	1420	1420	2840
UNDISTRIBUTED			1010	1010	2020
TOTALS			6400	6400	12800

EROSION MAT, CLASS I - TYPE B

STATION - STATION	LOCATION	ROAD	DELIVERED S.Y.	INSTALLED S.Y.
407+20 - 409+70	LT	CTH CB	170	170
410+00 - 414+00	LT	CTH CB	270	270
27+00 - 28+00	LT	SHADY LN	70	70
420+00 - 424+30	LT	CTH CB	290	290
420+30 - 423+60	RT	CTH CB	220	220
427+00 - 431+60	LT	CTH CB	310	310
427+00 - 431+60	RT	CTH CB	310	310
432+30 - 440+00	LT	CTH CB	510	510
432+30 - 440+00	RT	CTH CB	510	510
451+00 - 459+30	LT	CTH CB	550	550
451+00 - 459+70	RT	CTH CB	580	580
461+00 - 465+40	LT	CTH CB	290	290
461+00 - 465+40	RT	CTH CB	290	290
UNDISTRIBUTED			630	630
TOTALS			5000	5000

CRUSHED AGGREGATE BASE COURSE

STATION TO STATION	LOCATION	C.A.B.C. TONS
397+82.9 - 419+38.1	CTH CB	15758
419+38.1 - 476+12.6	CTH CB	35911
11+64.3 - 28+26.3	SHADY LANE	8421
14+52.0 - 21+90.0	CTH BB	1369
TOTAL		61459

NOTE: SALVAGED TOPSOIL QUANTITY DID NOT INCLUDE QUANTITY FOR SUBGRADE WIDENING FOR FUTURE ROADWAY EXPANSION. → ALL QUANTITIES HAVE SUBSTANTIAL OVERRUN.

TOPSOIL, MULCHING, FERTILIZER & SEEDING

STATION TO STATION	LOCATION	SALVAGED TOPSOIL S.Y.	MULCHING S.Y.	FERTILIZER TYPE B CWT.	SEEDING NO. 40 LB.	SEEDING NO. 30 LB.
397+82.9 - 419+38.1	CTH CB	15664	15664	10.0		280
419+38.1 - 476+12.6	CTH CB	30614	30614	19.3		550
11+64.3 - 28+26.3	SHADY LANE	8232	8232	5.2	150	
14+52.0 - 21+90.0	CTH BB	1225	1225	0.8		20
TOTALS		55735	55735	35.3	150	850

CULVERT PIPES, CLASS III PRIVATE, FIELD AND COMMERCIAL ENTRANCES

STATION	LOCATION	DIAM. INCHES	LENGTH FEET	TYPE	CLASS	THICKNESS		APRON ENDWALLS EACH
						STEEL INCH	ALUM. INCH	
16+15	SHADY LN, RT	24	36	CP	III	0.064	0.075	2
17+91	SHADY LN, RT	24	30	CP	III	0.064	0.075	2
22+30	SHADY LN, LT	12	40	CP	III	0.064	0.060	2
23+93	SHADY LN, LT	12	24	CP	III	0.064	0.060	2
26+62	SHADY LN, LT	12	26	CP	III	0.064	0.060	2
19+33	CTH BB, RT	20x28	44	MC	III	0.079	0.105	2

INLETS & MANHOLES

NO.	STATION	LOCATION	ROAD	STRUCTURE	TYPE	COVER	GRATE FLOWLINE ELEV.	INVERT ELEV.	DEPTH*
-162	399+00	RT, 35.0'		CTH CB INLET	3	H-RT	778.94	773.55	4.6
-163	401+00	RT, 33.0'		CTH CB INLET	3	H-LT	779.37	774.42	4.1
164	401+00	RT, 8.0'		CTH CB INLET	1	A-RT	779.37	772.84	5.6
-165	406+14	RT, 29.0'		CTH CB INLET	3	H-S	777.96	772.93	4.2
166	406+14	LT, 4.0'		CTH CB INLET	1	A-S	779.18	772.74	5.5
-167	410+45	RT, 29.0'		CTH CB INLET	3	H-LT	778.91	772.67	5.4
-168	413+00	RT, 30.0'		CTH CB INLET	3	H-S	778.14	774.70	2.6
-169	415+40	RT, 33.0'		CTH CB INLET	3	H-RT	779.03	775.41	2.8
I71	420+67	RT, 1.0'		CTH CB INLET	1	A-RT	784.61	782.02	2.0
I72	421+93	RT, 1.0'		CTH CB INLET	1	A-RT	785.99	781.76	4.3
I73	426+72	LT, 9.0'		CTH CB INLET	1	A-LT	788.19	784.40	2.9
I74	9+40	LT, 28.0'	OLD BUGGY DR	CTH CB INLET	3	H-LT	777.32	773.90	2.6
I116	401+00	RT, 8.0'		CTH CB INLET	1	A-RT	779.37	773.29	5.1
I117	406+14	RT, 4.0'		CTH CB INLET	1	A-S	779.18	772.78	5.5
I118	410+45	LT, 4.0'		CTH CB INLET	1	A-LT	779.39	772.50	5.9
I119	410+45	RT, 4.0'		CTH CB INLET	1	A-RT	779.39	772.54	5.9
I120	413+00	LT, 5.0'		CTH CB INLET	1	A-S	778.62	774.87	2.8
I121	413+00	RT, 5.0'		CTH CB INLET	1	A-S	778.62	774.83	2.8
I122	415+40	LT, 9.0'		CTH CB INLET	1	A-RT	779.51	775.62	2.9
I123	415+40	RT, 9.0'		CTH CB INLET	1	A-LT	779.51	775.54	3.0
I124	420+67	RT, 9.0'		CTH CB INLET	1	A-LT	784.73	782.06	1.7
I126	426+72	RT, 9.0'		CTH CB INLET	1	A-RT	788.19	784.50	2.8
I128	430+90	CENTERLINE		CTH CB INLET	1	A-RT	784.89	779.91	4.1
I178	399+00	CENTERLINE		CTH CB INLET	8	MS	778.94	773.40	5.5
I181	415+40	CENTERLINE		CTH CB INLET	8	MS	779.68	775.58	4.1
I183	426+72	CENTERLINE		CTH CB INLET	8	MS	788.36	784.46	3.9
I114	399+00	LT, 10.0'		CTH CB INLET	1	A-RT	778.77	773.37	4.5
I115	399+00	RT, 10.0'		CTH CB INLET	1	A-LT	778.77	773.42	4.4
I127	430+90	LT, 2.5'		CTH CB INLET	1	A-LT	784.89	779.96	4.0
I74A	25+60	RT, 45.0'	SHADY LANE	CTH CB INLET	8	MS	775.60	773.95	1.7

* DEPTH SHOWN DOES NOT INCLUDE 6-INCH ADJUSTMENT BELOW CASTING.

FILTER BAGS

STATION	PURPOSE	LOCATION	ROAD	DELIVERED EACH	INSTALLED EACH	MAINTENANCE EACH
399+00	INLET PROTECTION	MEDIAN	CTH CB	34	34	68
399+00	INLET PROTECTION	RT	CTH CB	18	18	36
404+60	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
404+60	INLET PROTECTION	RT	CTH CB	18	18	36
407+25	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
407+25	INLET PROTECTION	RT	CTH CB	18	18	36
410+00	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
410+00	INLET PROTECTION	RT	CTH CB	18	18	36
412+60	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
412+60	INLET PROTECTION	RT	CTH CB	18	18	36
415+40	INLET PROTECTION	MEDIAN	CTH CB	34	34	68
415+40	INLET PROTECTION	RT	CTH CB	18	18	36
420+70	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
421+90	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
426+70	INLET PROTECTION	MEDIAN	CTH CB	34	34	68
430+90	INLET PROTECTION	MEDIAN	CTH CB	28	28	56
409+00	DITCH CHECK	LT	CTH CB	13	13	26
412+00	DITCH CHECK	LT	CTH CB	13	13	26
15+90	DITCH CHECK	RT	SHADY LANE	13	13	26
16+00	DITCH CHECK	LT	SHADY LANE	13	13	26
17+80	DITCH CHECK	RT	SHADY LANE	13	13	26
18+00	DITCH CHECK	LT	SHADY LANE	13	13	26
22+00	DITCH CHECK	LT	SHADY LANE	13	13	26
23+75	DITCH CHECK	LT	SHADY LANE	13	13	26
26+50	DITCH CHECK	LT	SHADY LANE	13	13	26
422+00	DITCH CHECK	LT	CTH CB	13	13	26
422+00	DITCH CHECK	RT	CTH CB	13	13	26
428+00	DITCH CHECK	LT	CTH CB	13	13	26
428+00	DITCH CHECK	RT	CTH CB	13	13	26
431+00	DITCH CHECK	LT	CTH CB	13	13	26
431+00	DITCH CHECK	RT	CTH CB	13	13	26
433+00	DITCH CHECK	LT	CTH CB	13	13	26
433+00	DITCH CHECK	RT	CTH CB	13	13	26
436+00	DITCH CHECK	LT	CTH CB	13	13	26
436+00	DITCH CHECK	RT	CTH CB	13	13	26
439+00	DITCH CHECK	LT	CTH CB	13	13	26
439+00	DITCH CHECK	RT	CTH CB	13	13	26
452+00	DITCH CHECK	LT	CTH CB	13	13	26
452+00	DITCH CHECK	RT	CTH CB	13	13	26
455+00	DITCH CHECK	LT	CTH CB	13	13	26
455+00	DITCH CHECK	RT	CTH CB	13	13	26
458+00	DITCH CHECK	LT	CTH CB	13	13	26
458+00	DITCH CHECK	RT	CTH CB	13	13	26
462+00	DITCH CHECK	LT	CTH CB	13	13	26
462+00	DITCH CHECK	RT	CTH CB	13	13	26
465+00	DITCH CHECK	LT	CTH CB	13	13	26
465+00	DITCH CHECK	RT	CTH CB	13	13	26
19+20	DITCH CHECK	RT	CTH CB	13	13	26
UNDISTRUB.	DITCH CHECK			13	13	26
TOTAL				835	835	1670

CROSS DRAINS

STATION	LOCATION	DIAMETER INCHES	LENGTH FEET	TYPE	CLASS	INLET ELEV.	DISCHARGE ELEV.	APRON ENDWALLS EACH	JOINT TIES EACH
432+00	CTH CB	12	100	RCCP	III	779.8	779.6	2	12
19+03	SHADY LN	19 X 30	106	RCHECP	III	779.3	778.1	2	12

REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER

* IN MCMAHONS TABLE

STATION TO STATION	LOCATION & STRUCT. TO STRUCT.	RCP, CLASS III STORM SEWER 12-INCH L.F.	ENDWALLS 12-INCH EACH	JOINT TIES EACH	ELEVATIONS INLET	DISCHARGE
399+00 - 399+00	CTH CB, I62 - I115	26			773.55	773.42
399+00 - 399+00	CTH CB, I114 - E99	54	1	6	773.37	773.10
399+00 - 399+00	CTH CB, I115 - I178	5			773.42	773.40
399+00 - 399+00	CTH CB, I178 - I114	5			773.40	773.37
401+00 - 401+00	CTH CB, I63 - I116	26			774.42	773.29
401+00 - 401+00	CTH CB, I116 - I64	16			773.29	772.84
401+00 - 401+00	CTH CB, I64 - E101	68	1	6	772.84	772.50
406+50 - 406+50	CTH CB, I65 - I117	26			772.93	772.78
406+50 - 406+50	CTH CB, I117 - I66	8			772.78	772.74
406+50 - 406+50	CTH CB, I66 - E103	60	1	6	772.74	772.30
410+45 - 410+45	CTH CB, I118 - E104	60	1	6	772.50	772.20
410+45 - 410+45	CTH CB, I119 - I118	8			772.54	772.50
410+45 - 410+45	CTH CB, I67 - I119	26			772.67	772.54
413+00 - 413+00	CTH CB, I68 - E105	39	1	6	774.70	774.50
413+00 - 413+00	CTH CB, I120 - I121	9			774.87	774.83
413+00 - 413+00	CTH CB, I121 - I68	26			774.83	774.70
415+40 - 413+00	CTH CB, I69 - I68	240			775.41	774.70
415+40 - 415+40	CTH CB, I122 - I181	9			775.62	775.58
415+40 - 415+40	CTH CB, I181 - I123	9			775.58	775.54
415+40 - 415+40	CTH CB, I123 - I69	26			775.54	775.41
420+67 - 420+67	CTH CB, I71 - E107	64	1	6	782.02	781.70
420+67 - 420+67	CTH CB, I124 - I71	9			782.06	782.02
421+93 - 421+93	CTH CB, I72 - E108	55	1	6	781.76	781.50
426+72 - 426+72	CTH CB, I73 - E109	40	1	6	784.40	784.20
426+72 - 426+72	CTH CB, I126 - I183	9			784.50	784.46
426+72 - 426+72	CTH CB, I183 - I73	9			784.46	784.40
430+90 - 430+90	CTH CB, I127 - I128	4			779.96	779.91
430+90 - 430+90	CTH CB, I128 - E129	64	1	6	779.91	778.40
9+40 - 9+45	OLD BUGGY DR, I74 - E106	60	1	6	773.90	773.75
25+60 - 9+40	SHADY/OLD BUGGY DR, I74A - I74	15			773.95	773.90
TOTAL		1075	10	60		

TRAFFIC CONTROL, BARRICADES, DRUMS, SIGNS, AND WARNING LIGHTS TYPE A & C

STATE PROJECT NUMBER 4619-02-76	SHEET NO 3C
MISCELLANEOUS QUANTITIES	
CTH CB	WINNEBAGO COUNTY

LOCATION	STAGE	APPROXIMATE SERVICE PERIOD DAYS	BARRICADES TYPE III NUMBER IN SERVICE	BARRICADES TYPE III DAYS	PERMANENT BARRICADES	DRUMS NUMBER IN SERVICE	DRUMS 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
SHADY LANE	I	140	8	1120	8	100	14000	6	840	16	2240	6	840
CTH BB	I	140	9	1260	9	15	2100	8	1120	24	3360	6	840
OLD BUGGY DRIVE	I	140	2	280	2	24	3360	4	560	18	2520	3	420
MAYFLOWER ROAD	I	140	0	0	0	0	0	1	140	0	0	0	0
SHADY LANE	II	50	23	1150	14	168	8400	14	700	54	2700	48	2400
OLD BUGGY DRIVE	II	50	0	0	0	14	700	1	50	0	0	0	0
TOTAL				3810	33		28560		3410		10820		4500

CONSTRUCTION STAKING, INLETS

STATION	LOCATION	ROAD	EACH
399+00	RT, 35.0'	CTH CB	1
401+00	RT, 33.0'	CTH CB	1
401+00	RT, 8.0'	CTH CB	1
406+14	RT, 29.0'	CTH CB	1
406+14	LT, 4.0'	CTH CB	1
410+45	RT, 29.0'	CTH CB	1
413+00	RT, 30.0'	CTH CB	1
415+40	RT, 33.0'	CTH CB	1
420+67	RT, 1.0'	CTH CB	1
421+93	RT, 1.0'	CTH CB	1
426+72	LT, 9.0'	CTH CB	1
9+40	LT, 28.0'	OLD BUGGY DR	1
401+00	RT, 8.0'	CTH CB	1
406+14	RT, 4.0'	CTH CB	1
410+45	LT, 4.0'	CTH CB	1
410+45	RT, 4.0'	CTH CB	1
413+00	LT, 5.0'	CTH CB	1
413+00	RT, 5.0'	CTH CB	1
415+40	LT, 9.0'	CTH CB	1
415+40	RT, 9.0'	CTH CB	1
420+67	RT, 9.0'	CTH CB	1
426+72	RT, 9.0'	CTH CB	1
430+90	LT, 0.5'	CTH CB	1
399+00	CENTERLINE	CTH CB	1
415+40	CENTERLINE	CTH CB	1
426+72	CENTERLINE	CTH CB	1
399+00	LT, 10.0'	CTH CB	1
399+00	RT, 10.0'	CTH CB	1
430+90	LT, 5.0'	CTH CB	1
25+60	RT, 45.0'	SHADY LN	1
TOTAL			30

MARKER POSTS FOR RIGHT-OF-WAY

STATION	LOCATION	EACH
403+59.45	CTH CB, 85.00 RIGHT	1
405+00.00	CTH CB, 84.72 RIGHT	1
406+59.61	CTH CB, 95.00 RIGHT	1
420+40.00	CTH CB, 95.29 RIGHT	1
421+59.04	CTH CB, 95.64 RIGHT	1
424+00.00	CTH CB, 90.00 RIGHT	1
425+80.09	CTH CB, 85.00 RIGHT	1
431+07.98	CTH CB, 75.00 RIGHT	1
432+93.66	CTH CB, 100.00 RIGHT	1
435+00.00	CTH CB, 120.00 RIGHT	1
437+50.00	CTH CB, 115.00 RIGHT	1
440+00.00	CTH CB, 80.00 RIGHT	1
447+17.71	CTH CB, 95.00 RIGHT	1
453+00.00	CTH CB, 115.00 RIGHT	1
456+00.00	CTH CB, 95.00 RIGHT	1
459+00.00	CTH CB, 85.00 RIGHT	1
464+00.00	CTH CB, 80.00 RIGHT	1
467+42.44	CTH CB, 85.00 RIGHT	1
474+00.00	CTH CB, 95.00 RIGHT	1
398+80.00	CTH CB, 69.57 LEFT	1
403+59.45	CTH CB, 70.00 LEFT	1
405+00.00	CTH CB, 75.00 LEFT	1
406+59.61	CTH CB, 75.00 LEFT	1
410+40.00	CTH CB, 100.00 LEFT	1
411+30.00	CTH CB, 65.00 LEFT	1
420+40.00	CTH CB, 110.00 LEFT	1
421+59.04	CTH CB, 105.00 LEFT	1
423+00.00	CTH CB, 90.00 LEFT	1
425+80.09	CTH CB, 80.00 LEFT	1
429+79.54	CTH CB, 90.00 LEFT	1
432+59.57	CTH CB, 75.00 LEFT	1
435+00.00	CTH CB, 65.00 LEFT	1
438+18.64	CTH CB, 65.00 LEFT	1
440+00.00	CTH CB, 45.00 LEFT	1
444+00.00	CTH CB, 50.00 LEFT	1
447+17.71	CTH CB, 65.00 LEFT	1
452+00.00	CTH CB, 70.00 LEFT	1
457+00.00	CTH CB, 50.00 LEFT	1
459+00.00	CTH CB, 60.00 LEFT	1
463+00.00	CTH CB, 70.00 LEFT	1
467+42.44	CTH CB, 55.00 LEFT	1
474+00.00	CTH CB, 45.00 LEFT	1
475+00.00	CTH CB, 55.00 LEFT	1
11+40.00	SHADY LANE, 39.81 RIGHT	1
12+00.00	SHADY LANE, 60.00 RIGHT	1
15+45.00	SHADY LANE, 50.00 RIGHT	1
17+17.75	SHADY LANE, 75.00 RIGHT	1
18+80.00	SHADY LANE, 95.00 RIGHT	1
20+69.63	SHADY LANE, 77.54 RIGHT	1
21+10.00	SHADY LANE, 45.00 RIGHT	1
24+00.00	SHADY LANE, 45.00 RIGHT	1
25+67.87	SHADY LANE, 55.00 RIGHT	1
26+33.87	SHADY LANE, 55.00 RIGHT	1
28+40.00	SHADY LANE, 39.60 RIGHT	1
17+17.98	SHADY LANE, 85.00 LEFT	1
26+90.63	SHADY LANE, 50.00 LEFT	1
28+40.00	SHADY LANE, 40.40 LEFT	1
23+50.00	SHADY LANE, 65.00 LEFT	1
12+00.00	SHADY LANE, 65.00 LEFT	1
11+00.00	SHADY LANE, 40.14 LEFT	1
17+00.00	CTH BB, 49.50 RIGHT	1
19+40.00	CTH BB, 55.00 RIGHT	1
21+70.00	CTH BB, 49.64 RIGHT	1
TOTAL		63

CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE

STATION TO STATION	LOCATION	STA
397+83 - 433+00	CTH CB	70.3
433+00 - 460+20	CTH CB	27.2
461+20 - 476+13	CTH CB	14.9
11+64 - 28+26	SHADY LANE	33.2
14+52 - 21+90	CTH BB	7.4
9+02 - 10+00	OLD BUGGY DRIVE	1.0
TOTAL		154.0

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	EACH
419+41.05	CTH CB, RT 95.00'	4
446+27.01	CTH CB, RT 46.18'	4
TOTAL		8

HAS NOT BEEN DONE

CONSTRUCTION STAKING, PIPE CULVERTS

STATION	LOCATION	EACH
432+00	CTH CB	1
16+15	SHADY LANE, RT	1
17+91	SHADY LANE, RT	1
19+03	SHADY LANE, RT	1
22+30	SHADY LANE, LT	1
23+93	SHADY LANE, LT	1
26+62	SHADY LANE, LT	1
19+33	CTH BB, RT	1
TOTAL		8

CONSTRUCTION STAKING, SUBGRADE

STATION TO STATION	LOCATION	STA
397+83 - 433+00	CTH CB	70.3
433+00 - 460+20	CTH CB	27.2
461+20 - 476+13	CTH CB	14.9
11+64 - 28+26	SHADY LANE	33.2
14+52 - 21+90	CTH BB	7.4
9+02 - 10+00	OLD BUGGY DRIVE	1.0
TOTAL		154.0

STOCKPILING SALVAGED TOPSOIL

STATION TO STATION	LOCATION	C.Y.
403+00 - 411+00	RT	1553

No Room in THIS LOCATION

PAVEMENT MARKING, HOT PAINT

STATION TO STATION	LOCATION	L.F.
11+64 - 28+26	SHADY LANE	415
8+02 - 9+80	OLD BUGGY DRIVE	20
TOTAL		435

Should have called for solid yellow (no passing) for W.B.

McMahon 8/15

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
B18	399+00	LT, 35.5'	CTH CB	INLET	3	H-LT.	778.30	773.24	777.37	4.1	1
B19	401+00	LT, 29.5'	CTH CB	INLET	3	H-LT.	778.91	773.10	777.98	4.9	1
B20	408+05	LT, 29.5'	CTH CB	INLET	3	H-S	779.07	774.00	778.14	4.1	1
B21	410+45	LT, 29.5'	CTH CB	INLET	3	H-RT.	778.92	772.40	777.99	5.6	1
B22	413+00	LT, 29.8'	CTH CB	INLET	3	H-S	778.15	775.00	777.22	2.2	1
B23	415+40	LT, 34.5'	CTH CB	INLET	3	H-LT.	779.04	775.67	778.11	2.4	1

* 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
399+00	INLET PROTECTION	LT.	CTH CB	8	8	16
401+00	INLET PROTECTION	LT.	CTH CB	8	8	16
408+05	INLET PROTECTION	LT.	CTH CB	8	8	16
410+45	INLET PROTECTION	LT.	CTH CB	8	8	16
413+00	INLET PROTECTION	LT.	CTH CB	8	8	16
415+40	INLET PROTECTION	LT.	CTH CB	8	8	16
TOTALS				48	48	96

REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER

STATION	LOCATION & STR.-STR.	RCP, CLASS III STORM SEWER 12-INCH L.F.	RCP, CLASS III STORM SEWER 15-INCH L.F.	ENDWALLS 12-INCH RCCP EACH	ENDWALLS 15-INCH RCCP EACH	JOINT TIES EACH	ELEVATIONS	
							INLET	DISCHARGE
399+00	CTH CB, I114 - B18	26 (0)					773.37	773.24
399+00	CTH CB, B18 - E99	34 (7)				4	773.24	773.10
401+00	CTH CB, I64 - B19	26 (0)		1 (0)			773.25	773.10
401+00	CTH CB, B19 - E101					4	773.10	772.90
408+05	CTH CB, B20 - B20A	36 (36)		1 (1)		4	774.00	773.70
410+45	CTH CB, I118 - B21	26 (0)					772.50	772.40
410+45	CTH CB, B21 - E104	39 (6)		1 (0)		4	772.40	772.20
413+00	CTH CB, B22 - B22A	26 (26)		1 (1)		4	775.00	774.80
415+40	CTH CB, B23 - B23A	26 (26)		1 (1)		4	775.67	775.40
TOTALS		239 (101)	37 (9)	5 (3)	1 (0)			

() TO BE PAID FOR BY THE TOWN OF MENASHA
 * ORIGINAL PLAN CALLED FOR 12-INCH

SALVAGED TOPSOIL, SEED, MULCH, AND FERTILIZER

STA.-STA.	LOCATION	SALVAGED TOPSOIL S.Y.	MULCHING S.Y.	FERTILIZER TYPE B CWT.	SEEDING NO. 30 (LBS)
397+83-418+50	C.T.H. CB	4134	4134	2.60	74

REPLACED WITH E.M. CL II TYPE B

SOD & EROSION MAT CLASS II - TYPE A

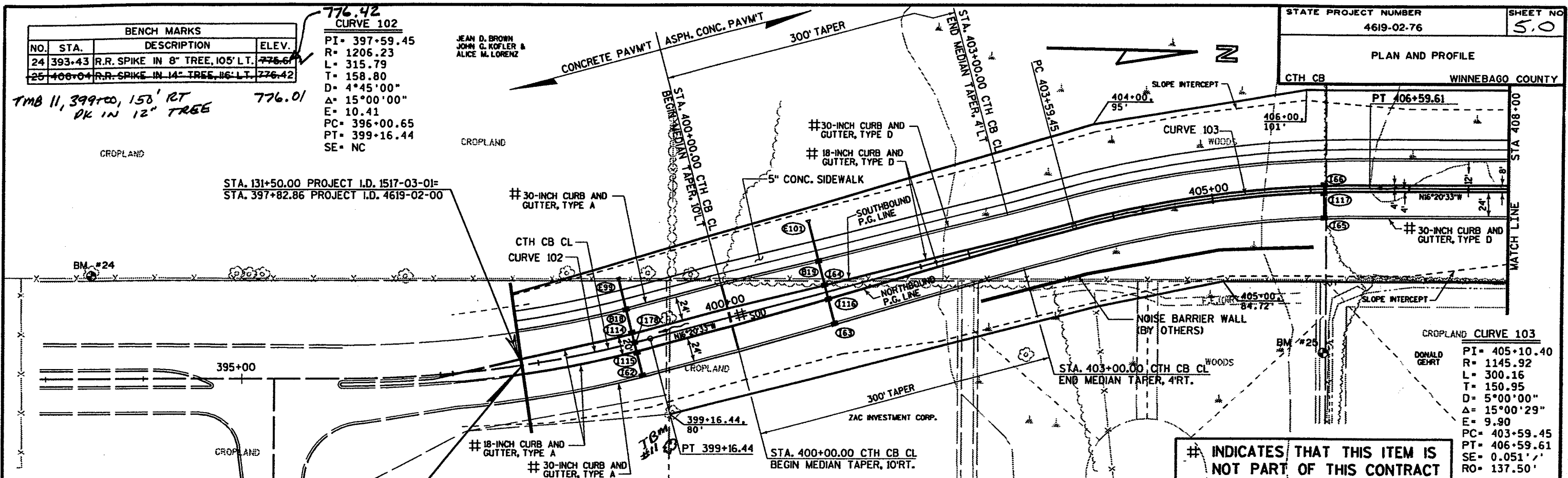
STATION	LOCATION	ROAD	DELIVERED S.Y.	INSTALLED S.Y.	SOD
408+05	OUTFALL- LT.	CTH CB	8	8	8
413+00	OUTFALL- LT.	CTH CB	8	8	8
415+40	OUTFALL- LT.	CTH CB	8	8	8
TOTALS			24	24	24

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
24	393+43	R.R. SPIKE IN 8" TREE, 105' LT.	775.61
25	406+04	R.R. SPIKE IN 14" TREE, 116' LT.	776.42

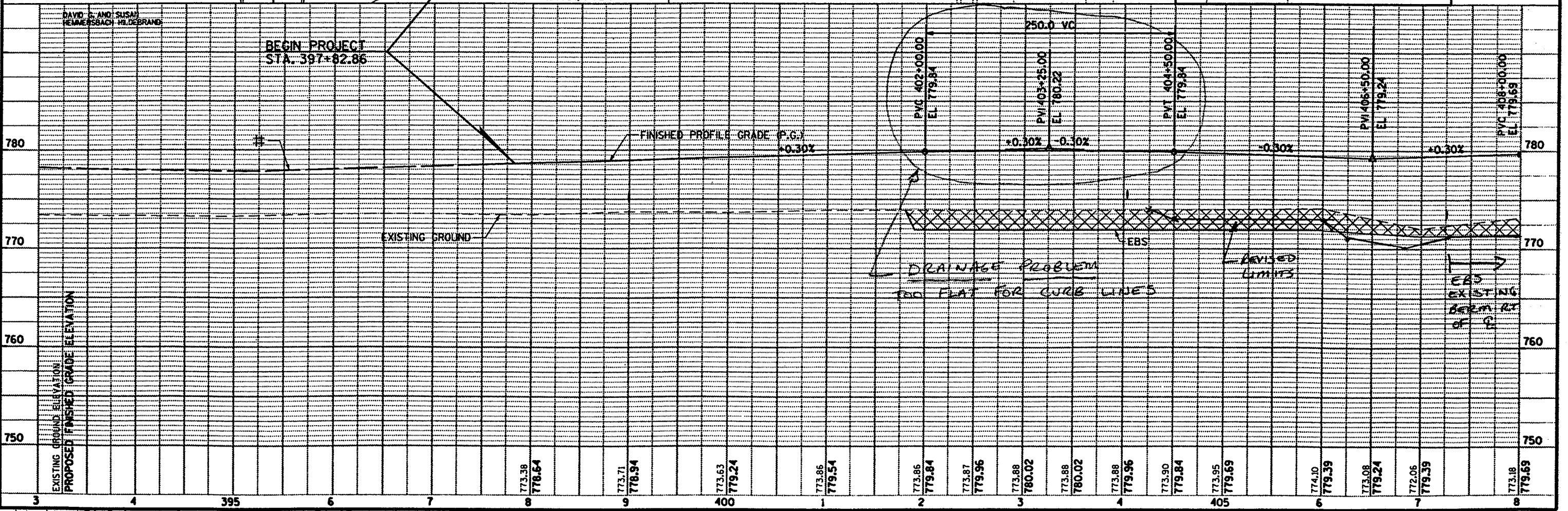
776.42
CURVE 102
 PI= 397+59.45
 R= 1206.23
 L= 315.79
 T= 158.80
 D= 4°45'00"
 Δ= 15°00'00"
 E= 10.41
 PC= 396+00.65
 PT= 399+16.44
 SE= NC

TMB 11, 399+00, 150' RT
 DK IN 12" TREE 776.01

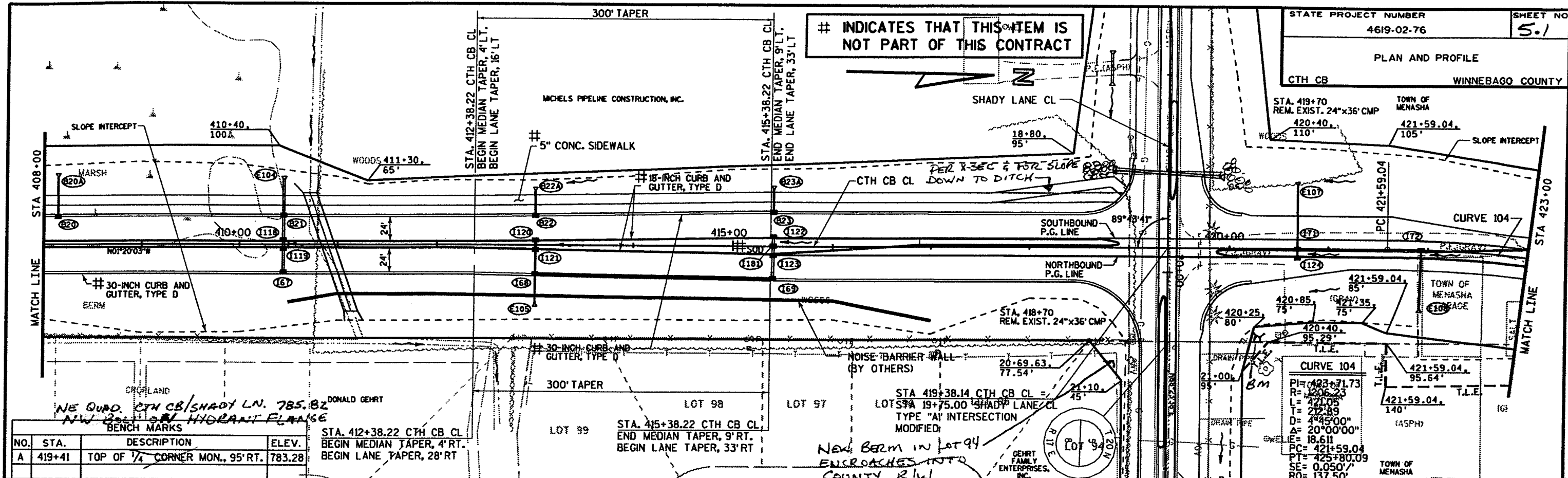
JEAN D. BROWN
 JOHN G. KOFLER &
 ALICE M. LORENZ



INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT



BENCH MARKS

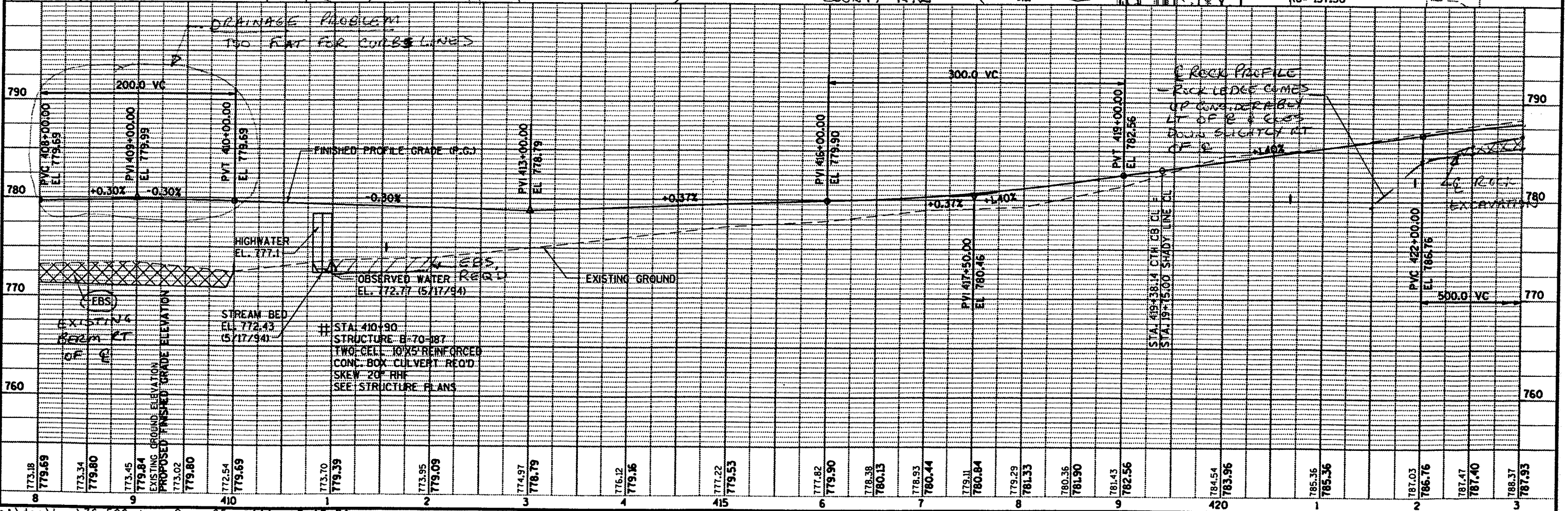
NO.	STA.	DESCRIPTION	ELEV.
A	419+41	TOP OF 1/4 CORNER MON., 95' RT.	783.28

STATIONING DATA

STA. 412+38.22 CTH CB CL BEGIN MEDIAN TAPER, 4' RT. BEGIN LANE TAPER, 16' LT.	LOT 98 STA. 415+38.22 CTH CB CL END MEDIAN TAPER, 9' RT. BEGIN LANE TAPER, 33' RT.
---	---

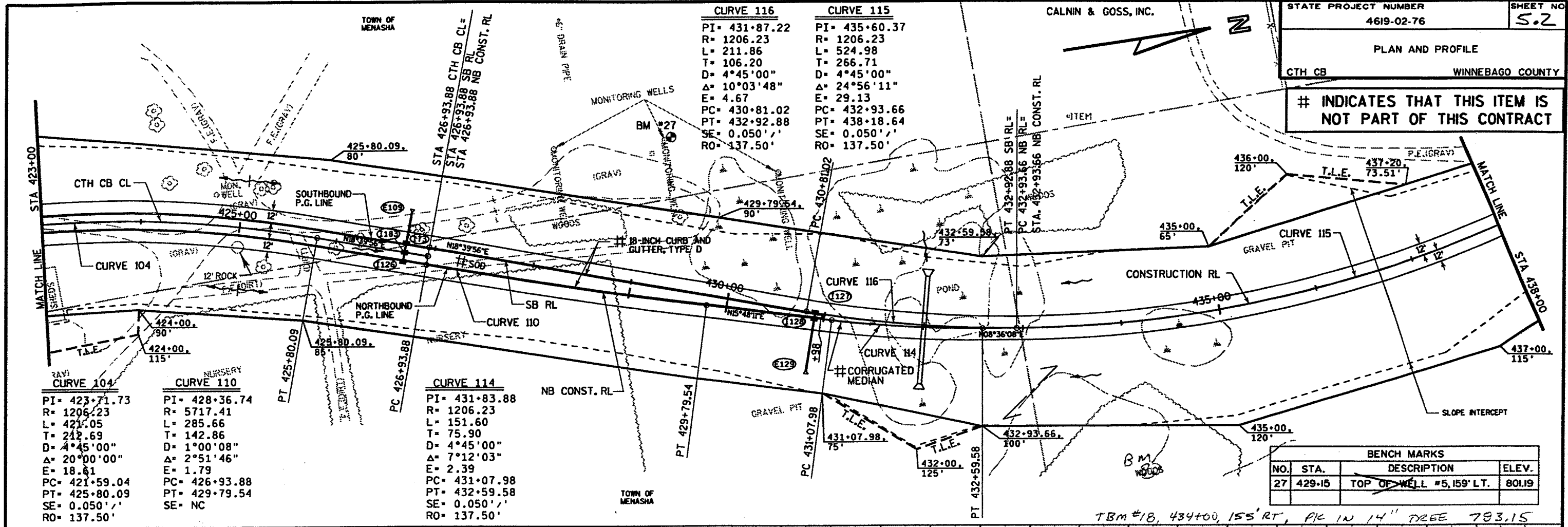
CURVE 104

PI= 423+71.73	R= 1206.23
L= 421.05	T= 272.89
D= 445'00"	A= 20°00'00"
IE= 18.611	PC= 421+59.04
PT= 425+80.09	SE= 0.050/1
RO= 137.50'	



INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

CURVE 116	CURVE 115
PI= 431.87.22	PI= 435.60.37
R= 1206.23	R= 1206.23
L= 211.86	L= 524.98
T= 106.20	T= 266.71
D= 4°45'00"	D= 4°45'00"
Δ= 10°03'48"	Δ= 24°56'11"
E= 4.67	E= 29.13
PC= 430.81.02	PC= 432.93.66
PT= 432.92.88	PT= 438.18.64
SE= 0.050'/'	SE= 0.050'/'
RO= 137.50'	RO= 137.50'

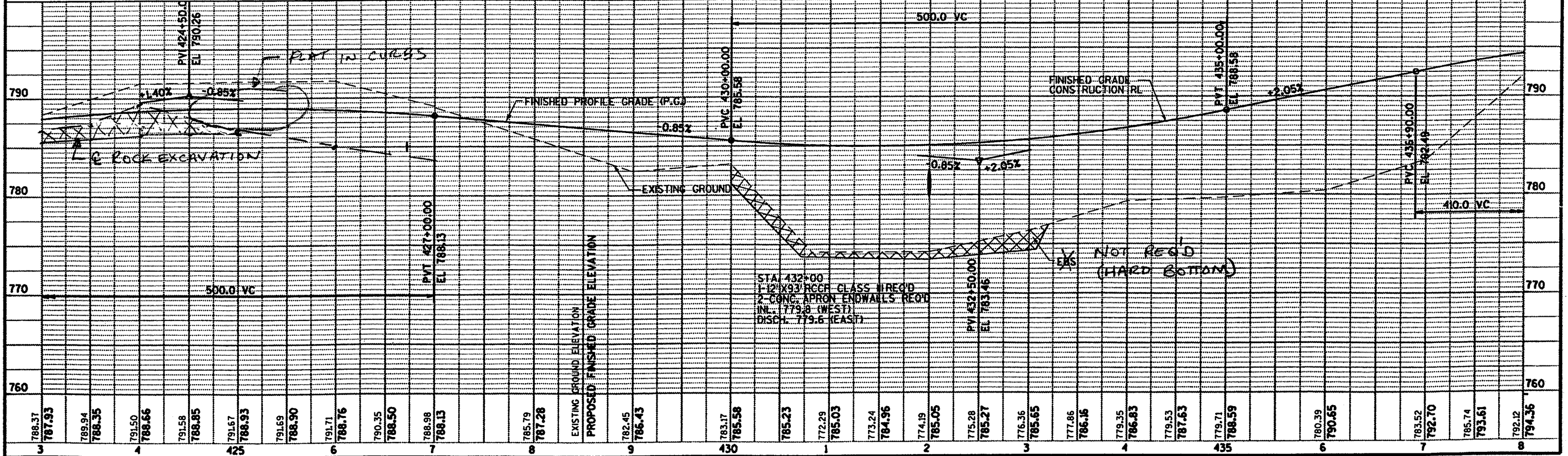


CURVE 104	CURVE 110
PI= 423.71.73	PI= 428.36.74
R= 1206.23	R= 5717.41
L= 421.05	L= 285.66
T= 212.69	T= 142.86
D= 4°45'00"	D= 1°00'08"
Δ= 20°00'00"	Δ= 2°51'46"
E= 18.61	E= 1.79
PC= 421.59.04	PC= 426.93.88
PT= 425.80.09	PT= 429.79.54
SE= 0.050'/'	SE= NC
RO= 137.50'	

CURVE 114
PI= 431.83.88
R= 1206.23
L= 151.60
T= 75.90
D= 4°45'00"
Δ= 7°12'03"
E= 2.39
PC= 431.07.98
PT= 432.59.58
SE= 0.050'/'
RO= 137.50'

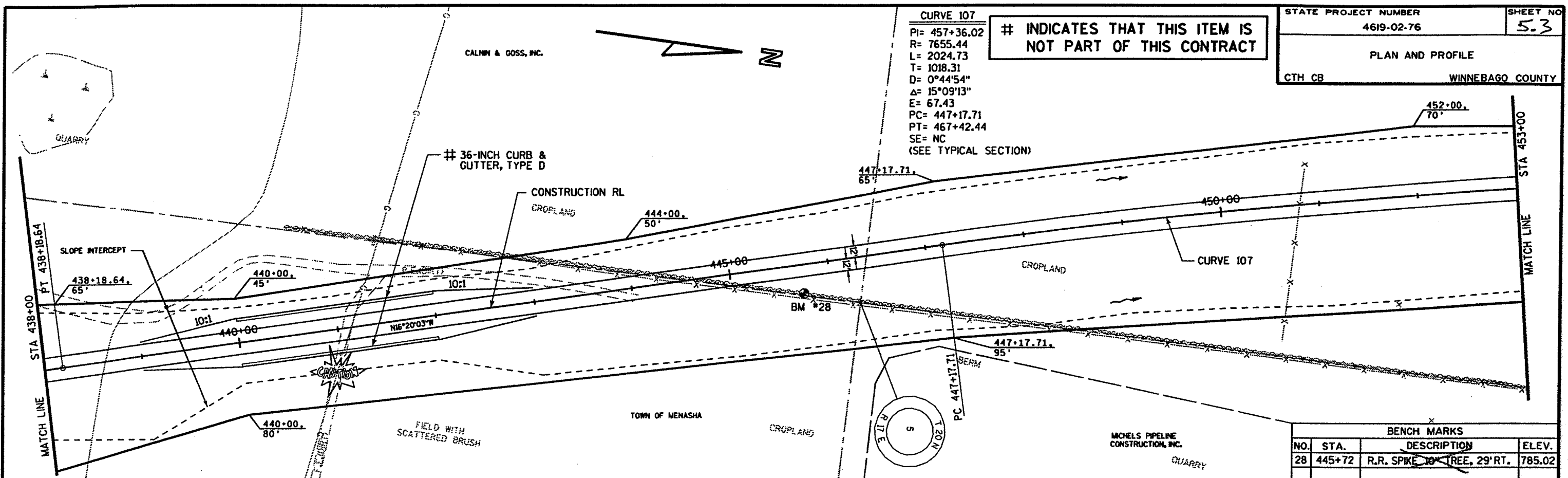
BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
27	429+15	TOP OF WELL #5, 159' LT.	801.19

TBM #18, 434+00, 155' RT, PK IN 14" TREE 793.15

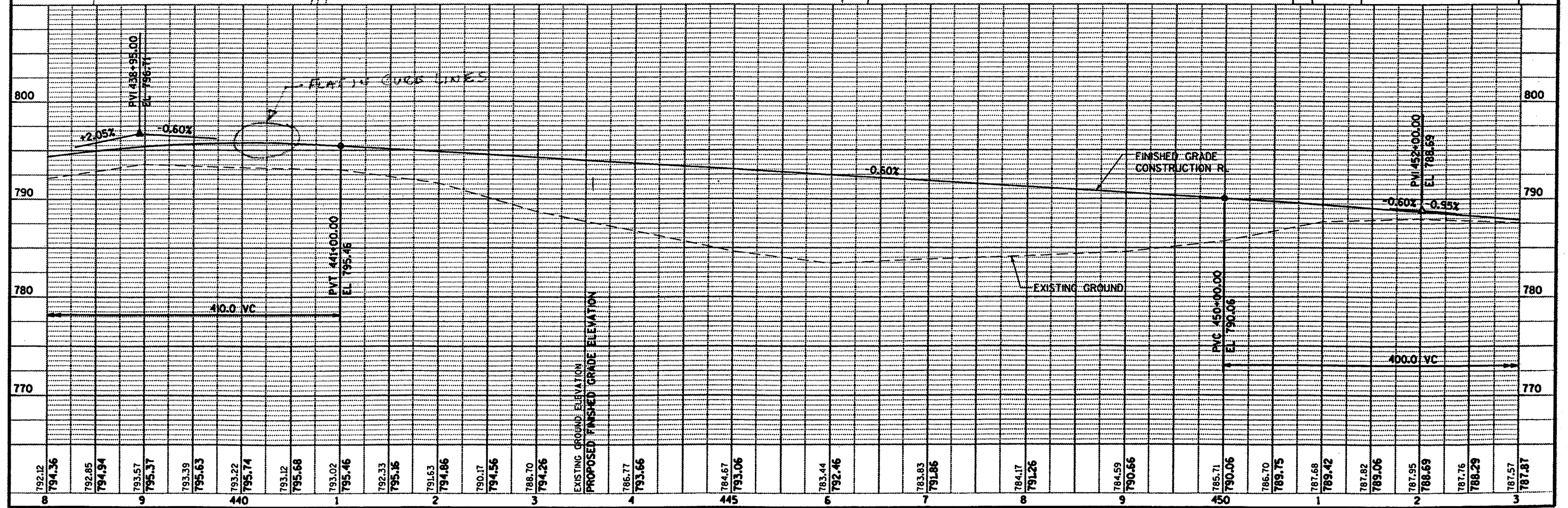


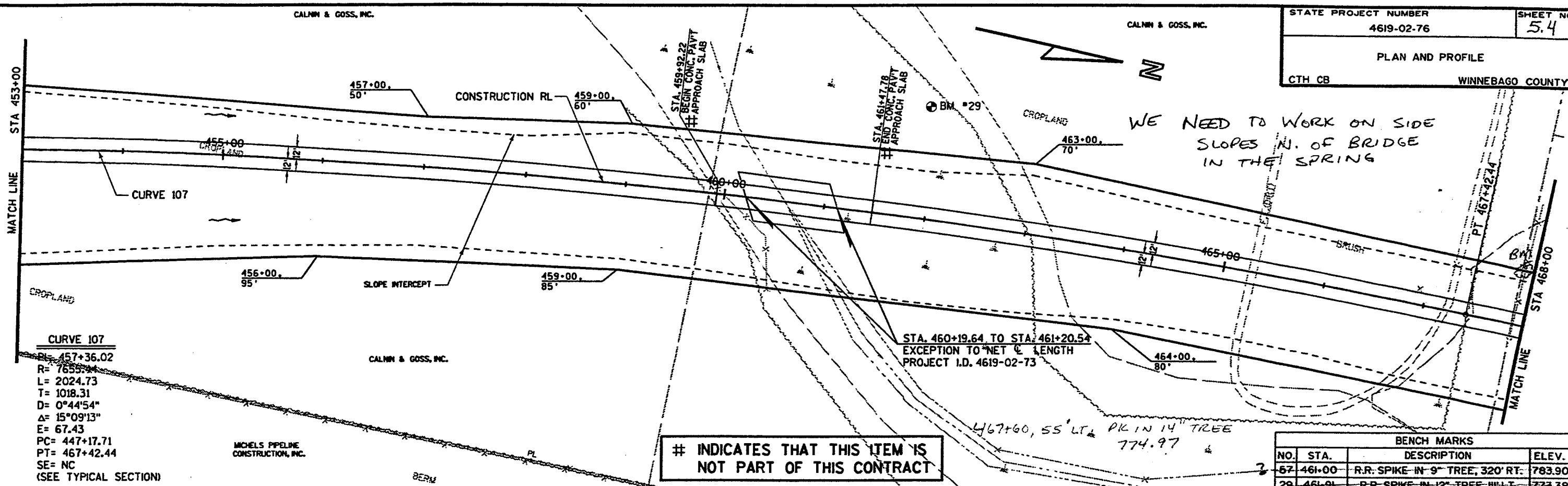
CURVE 107
 PI= 457+36.02
 R= 7655.44
 L= 2024.73
 T= 1018.31
 D= 0°44'54"
 Δ= 15°09'13"
 E= 67.43
 PC= 447+17.71
 PT= 467+42.44
 SE= NC
 (SEE TYPICAL SECTION)

INDICATES THAT THIS ITEM IS NOT PART OF THIS CONTRACT

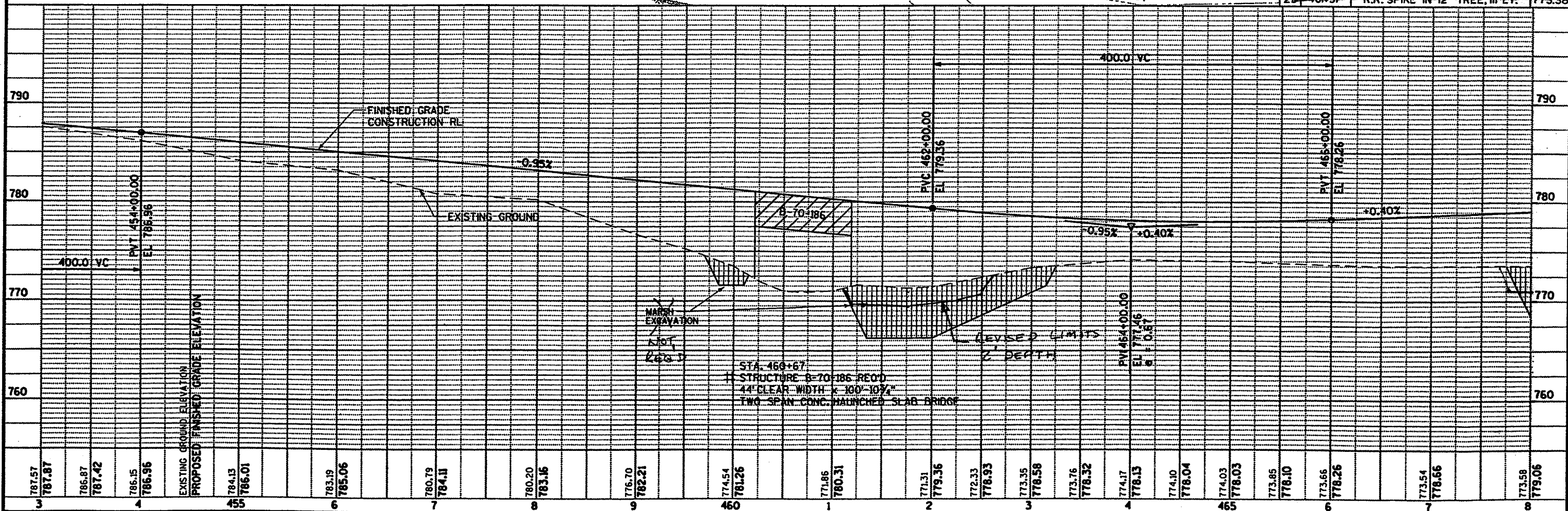


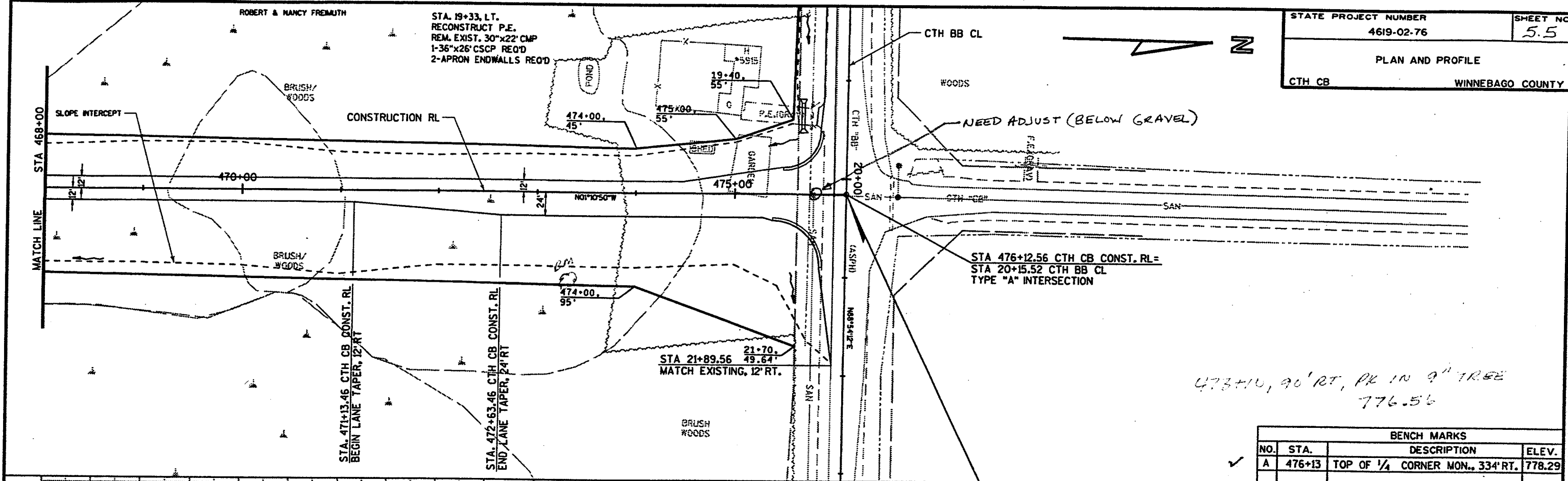
BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
28	445+72	R.R. SPIKE TO TREE, 29' RT.	785.02





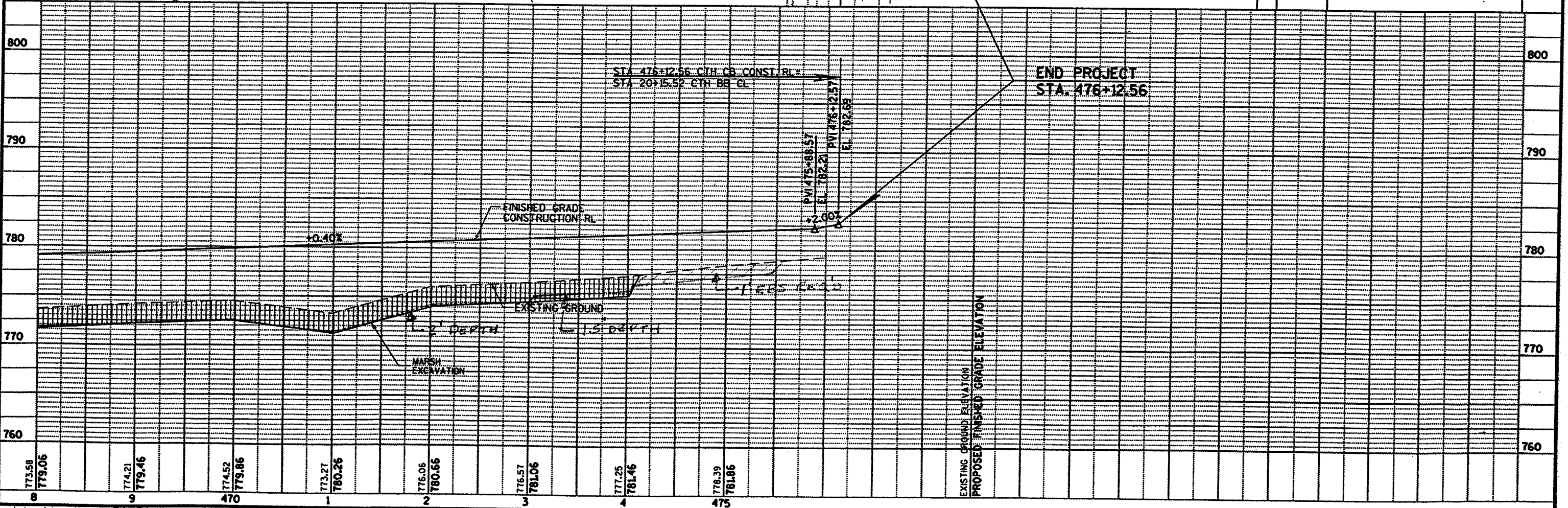
BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
57	461+00	R.R. SPIKE IN 9" TREE, 320' RT.	783.90
29	461+91	R.R. SPIKE IN 12" TREE, 11' LT.	773.38





473+10, 90' RT, PK IN 9" TREE
 776.56

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
✓ A	476+13	TOP OF 1/4 CORNER MON., 334' RT.	778.29

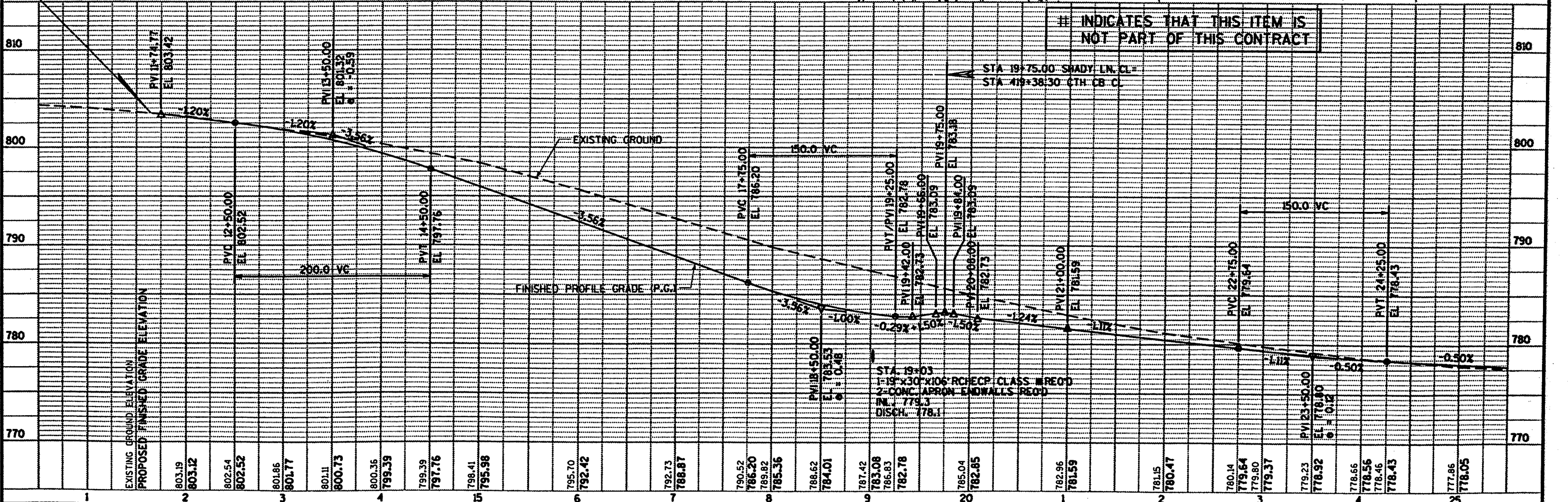
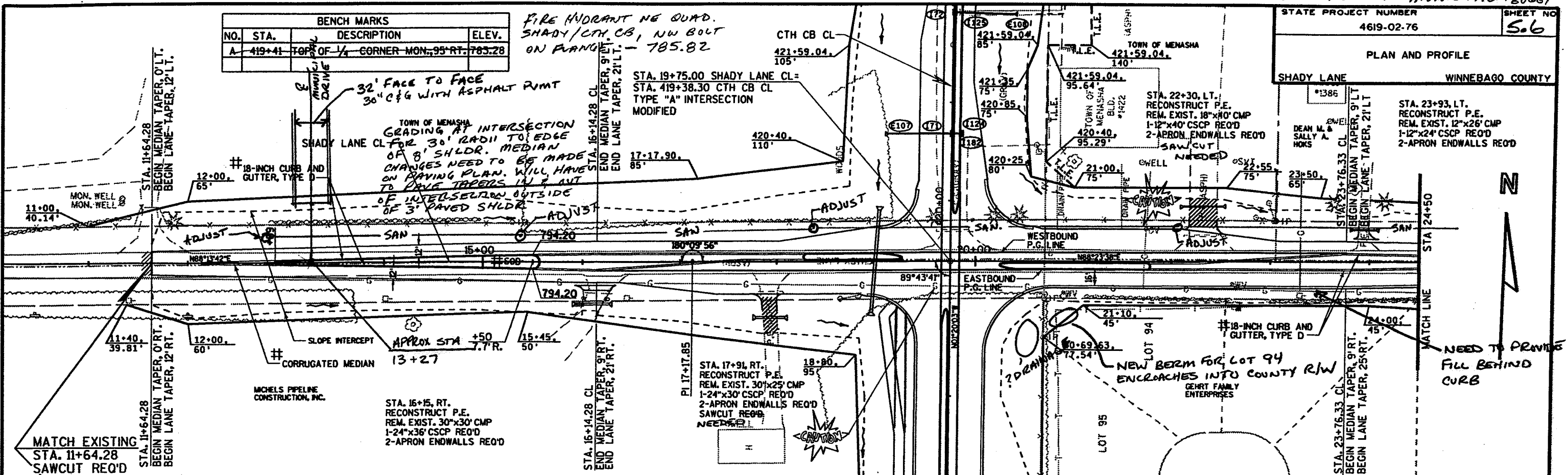


TEMP ASPHALT - 24' WIDE & APPROX 2 3/4" THICK ON SHADY LN. + TEMP ASPH AT MUNICIPAL # 80667

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
A	419+41	TOP OF 1/4 CORNER MON. 95' RT.	785.28

FIRE HYDRANT NE QUAD. SHADY/CTH CB, NW BOLT ON PLANK - 785.82

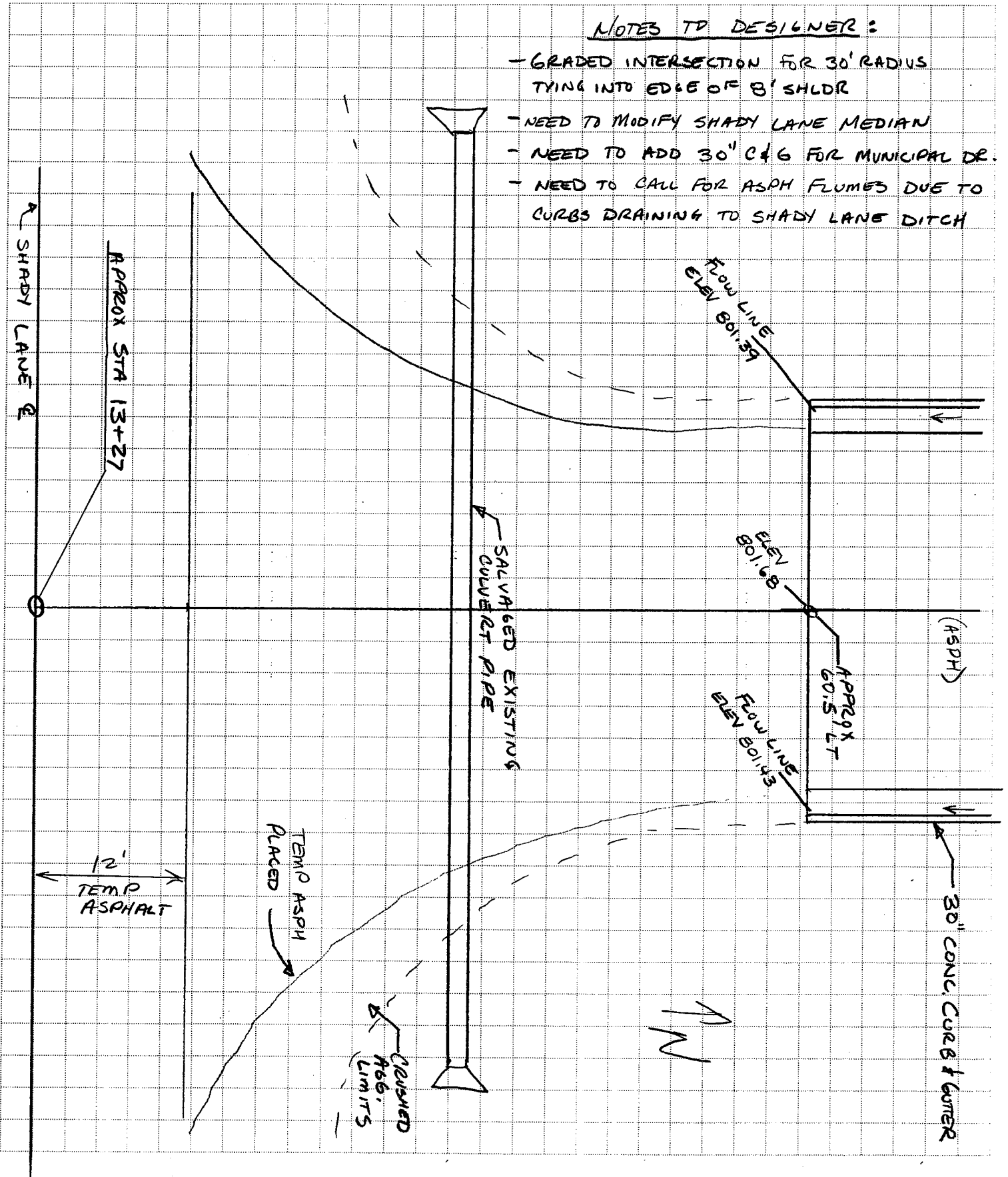
STATE PROJECT NUMBER	4619-02-76	SHEET NO	5.6
PLAN AND PROFILE			
SHADY LANE		WINNEBAGO COUNTY	

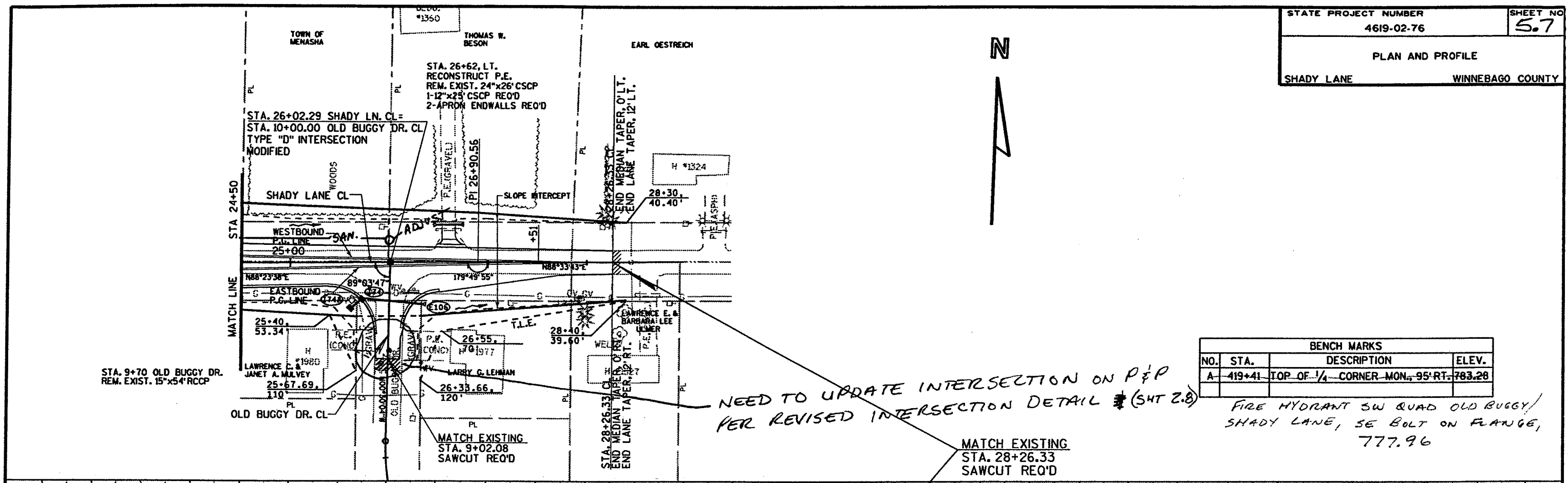


MUNICIPAL DRIVE INFORMATION

NOTES TO DESIGNER:

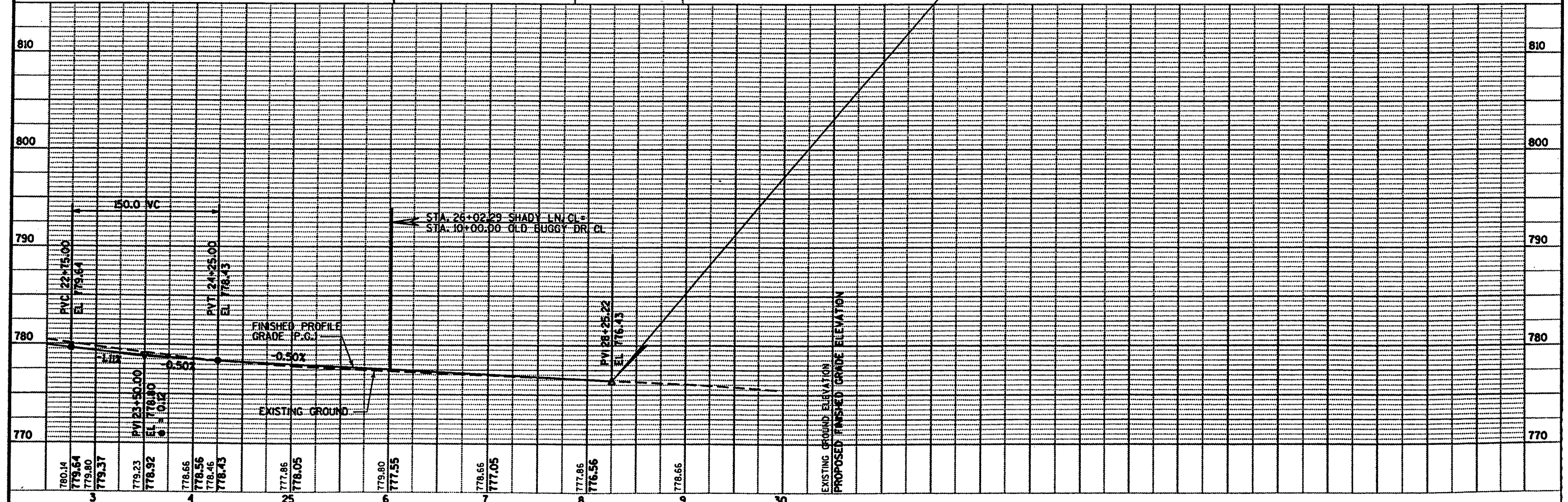
- GRADED INTERSECTION FOR 30' RADIUS TYING INTO EDGE OF 8' SHLDR
- NEED TO MODIFY SHADY LANE MEDIAN
- NEED TO ADD 30" C&G FOR MUNICIPAL DR.
- NEED TO CALL FOR ASPH FLUMES DUE TO CURBS DRAINING TO SHADY LANE DITCH





BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
A	419+41	TOP OF 1/4 CORNER MON., 95' RT.	783.28

FIRE HYDRANT SW QUAD OLD BUGGY/
 SHADY LANE, SE BOLT ON FLANGE,
 777.96



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
 THE EXISTING GROUNDLINE WAS USED AS THE UPPER LIMITS OF 'EXCAVATION FOR STRUCTURES'.
 WITHIN THE LENGTH OF THE BOX ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW BOX SHALL BE BACKFILLED WITH GRANULAR BACKFILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION. HOWEVER IF THE EXISTING GROUND IS ABOVE THE TOP OF BOX, GRANULAR BACKFILL WILL STOP AT THE TOP OF BOX.
 THE CONCRETE IN CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

TRAFFIC DATA

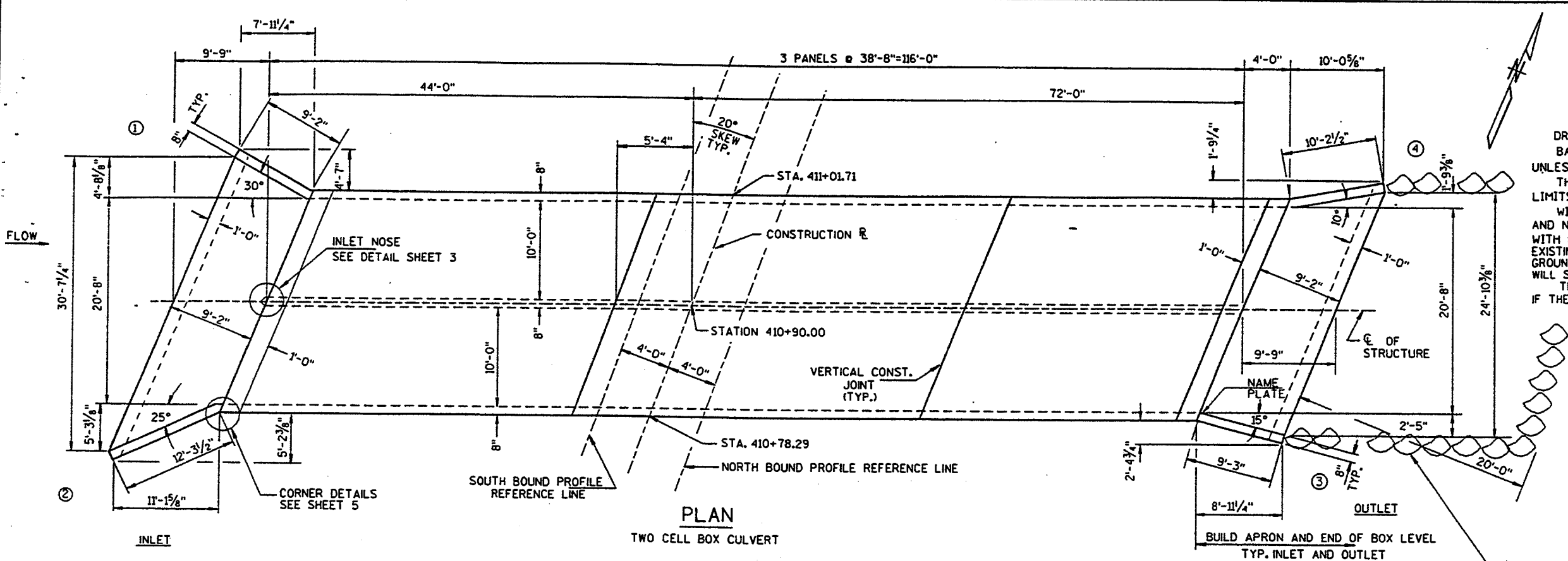
ADT= 12,950 (1995)
 ADT= 17,800 (2015)

HYDRAULIC DATA

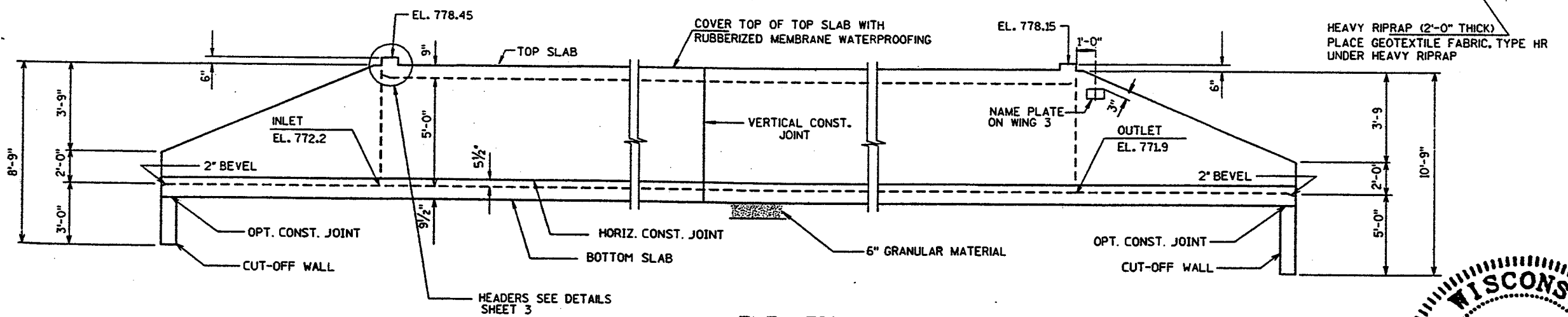
Q₁₀₀ _____ 560 C.F.S.
 VELOCITY _____ 9.8 F.P.S.
 HIGH WATER _____ EL. 777.1
 DRAINAGE AREA _____ 1.1 SQ. MILES
 ROADWAY DESIGN FREQUENCY _____ N/A

DESIGN DATA

LIVE LOAD _____ HS20
 EARTH LOAD _____ 1.5 FEET OF FILL.
 ULTIMATE DESIGN STRESSES:
 CONCRETE MASONRY _____ f'c = 3,500 psi
 HIGH STRENGTH BAR _____
 STEEL REINFORCEMENT _____ fy = 60,000 psi



PLAN
TWO CELL BOX CULVERT



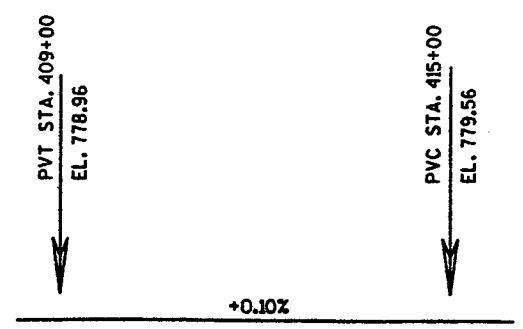
ELEVATION

TOTAL ESTIMATED QUANTITIES

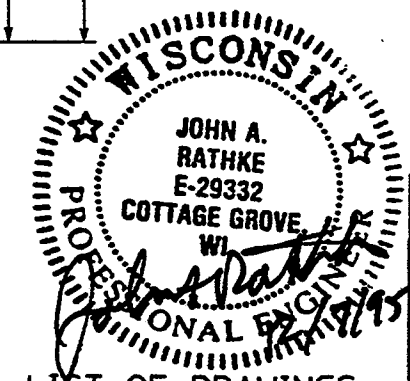
- (BID ITEMS)
- EXCAVATION FOR STRUCTURES, CULVERTS B-70-187 _____ 11 L.S.
 - CONCRETE MASONRY, CULVERTS _____ 217 C.Y.
 - HIGH STRENGTH BAR STEEL REINFORCEMENT, CULVERTS _____ 40,500 LBS.
 - HEAVY RIPRAP _____ 45 CY.
 - GEOTEXTILE FABRIC, TYPE HR _____ 65 SY.
 - RUBBERIZED MEMBRANE WATERPROOFING _____ 285 SY.
- (NON-BID ITEMS)
- FILLER _____ 3/4" SIZE _____ 21 L.F.
 - POLYVINYL CHLORIDE WATERSTOP _____

BENCH MARKS

NO.	STATION	DESCRIPTION	EL.
A	419+41	TOP OF 1/4 CORNER MONUMENT 95' RT.	783.28
25	406+04	RR SPIKE IN 14" TREE 116' LT.	776.42



PROPOSED GRADE LINE
NORTH AND SOUTH BOUND PROFILE REFERENCE LINES



LIST OF DRAWINGS

1. GENERAL PLAN
2. SUBSURFACE EXPLORATION
3. DETAILS
4. DETAILS
5. DETAILS

BRIDGE OFFICE CONTACT
 G. ANDERSON 608-266-8488

PLANS BY
MEAD & HUNT, INC.
 MADISON, WISCONSIN
 6501 WATTS ROAD, SUITE 101
 608-273-6380

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-187			
GTH CB OVER UNNAMED TRIBUTARY OF LITTLE LAKE BUTTE DES MORTES			
COUNTY	WINNEBAGO	TOWN/VILLAGE	MENASHA
DESIGN SPEC.	AASHTO '93	LOAD	HS20
DESIGNED BY	CJB	DESIGN GAR	CK'D
DRAWN BY	NJA	PLANS CK'D	CJB
APPROVED		DATE	
STATE BRIDGE ENGINEER			
GENERAL PLAN			SHEET 1 OF 5

BORINGS BY
RIVER VALLEY TESTING CORPORATION
APPLETON, WISCONSIN
ON JULY 21, 1994

STATE PROJECT NUMBER SHEET NO.

4619-02-76

8,1

ABBREVIATIONS

F---FINE M---MEDIUM C---COARSE
Ws---WEATHERED So---SOUND

MATERIAL SYMBOLS

Topsoil Silt Sandstone
Sand Peat Limestone
Gravel Clay Igneous Rock

LEGEND OF PROBING

Probing No.
Sta.
Elevation
95/6-95 Blows for 6'
Penetration
Probing taken with a
350# wt.
Falling 18" on a 2"
O.D. Point.
7 Average blows per foot
Refusal 95/6

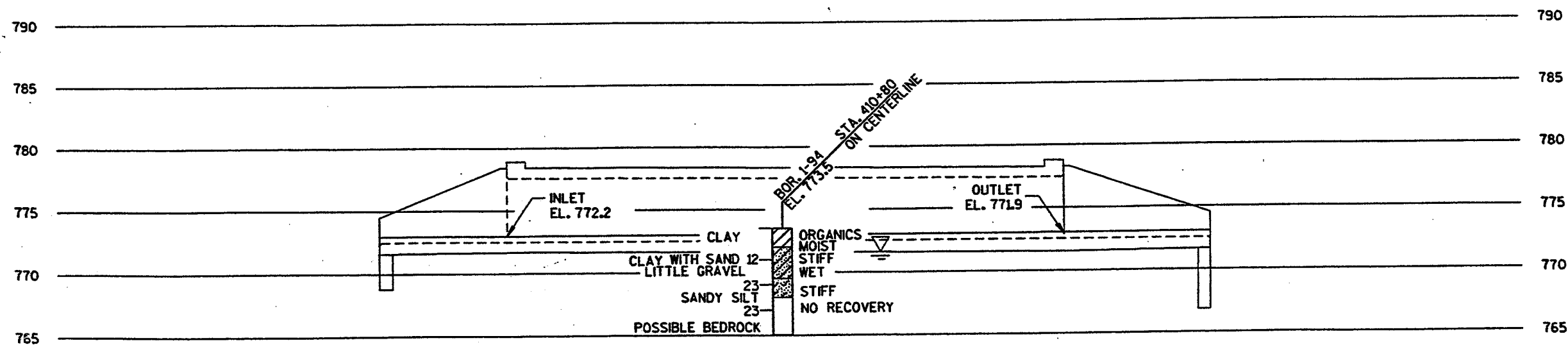
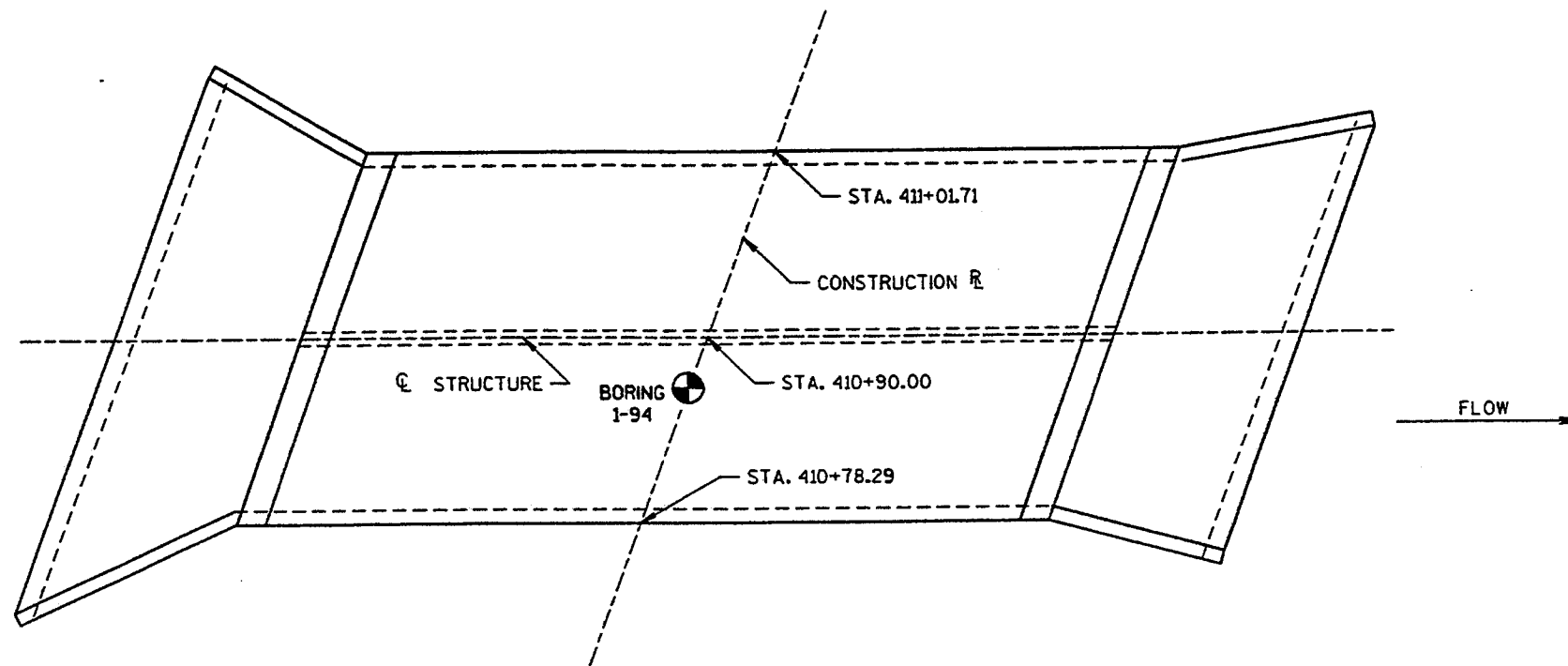
LEGEND OF BORING

Elevation Boring No.
Sta.
Unconfined strength → 7.7
Blows per foot using 140# wt. falling 30" → 7
Wash sample → *
Shelby Tube → S.T.
Ground Water Elevation
No Ground Water Observed Above This Elevation
Sandy Gravel
F.
Boulders or Cobbles
Sand
Silty Clay
So
Limestone

Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D. x 1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-70-187

CONST. SPEC. 1989 DRAWN BY NJA PLANS CK'D. CJB

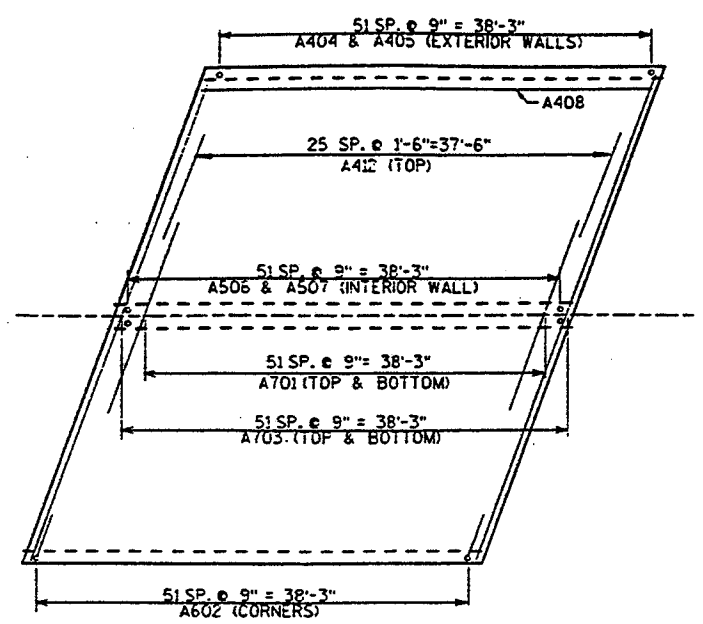
SUBSURFACE EXPLORATION

SHEET 2 OF 5

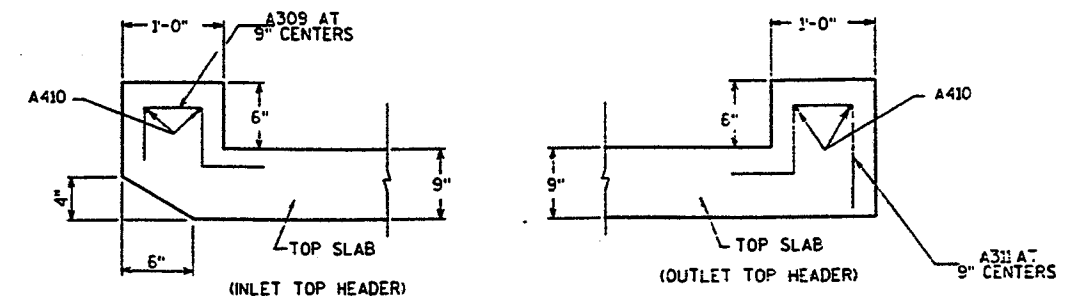
BILL OF BARS

THE FIRST DIGIT OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. DIM.S IN BENDING DETAILS ARE OUT TO OUT OF BAR.

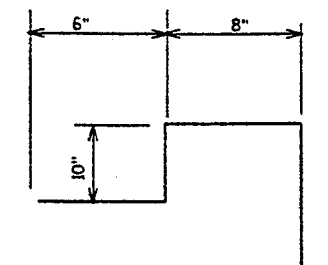
MARK	NO. RECD	LENGTH	BENT	CUT DIAGR.	LOCATION
A701	312	7-6			SLAB TOP & BOTTOM ALL PANELS TRANSVERSE
A602	624	7-8	X		SLAB CORNERS ALL PANELS
A703	312	23-0			SLAB TOP & BOTTOM ALL PANELS TRANSVERSE
A404	312	2-0			SLAB EXTERIOR WALLS ALL PANELS VERTICAL
A405	312	4-10			SLAB EXTERIOR WALLS ALL PANELS VERTICAL
A506	312	3-1	X		SLAB INTERIOR WALLS ALL PANELS VERTICAL
A507	312	5-8	X		SLAB INTERIOR WALLS ALL PANELS VERTICAL
A408	258	38-4			SLAB TOP, BOTTOM & WALLS ALL PANELS LONGITUDINAL
A309	32	2-5	X		HEADERS INLET
A410	4	23-0			HEADERS INLET AND OUTLET
A311	32	2-8	X		HEADERS OUTLET
A412	156	6-3			SLAB TOP ALL PANELS TRANSVERSE
A514	120	4-0			VERTICAL CONSTRUCTION JOINT



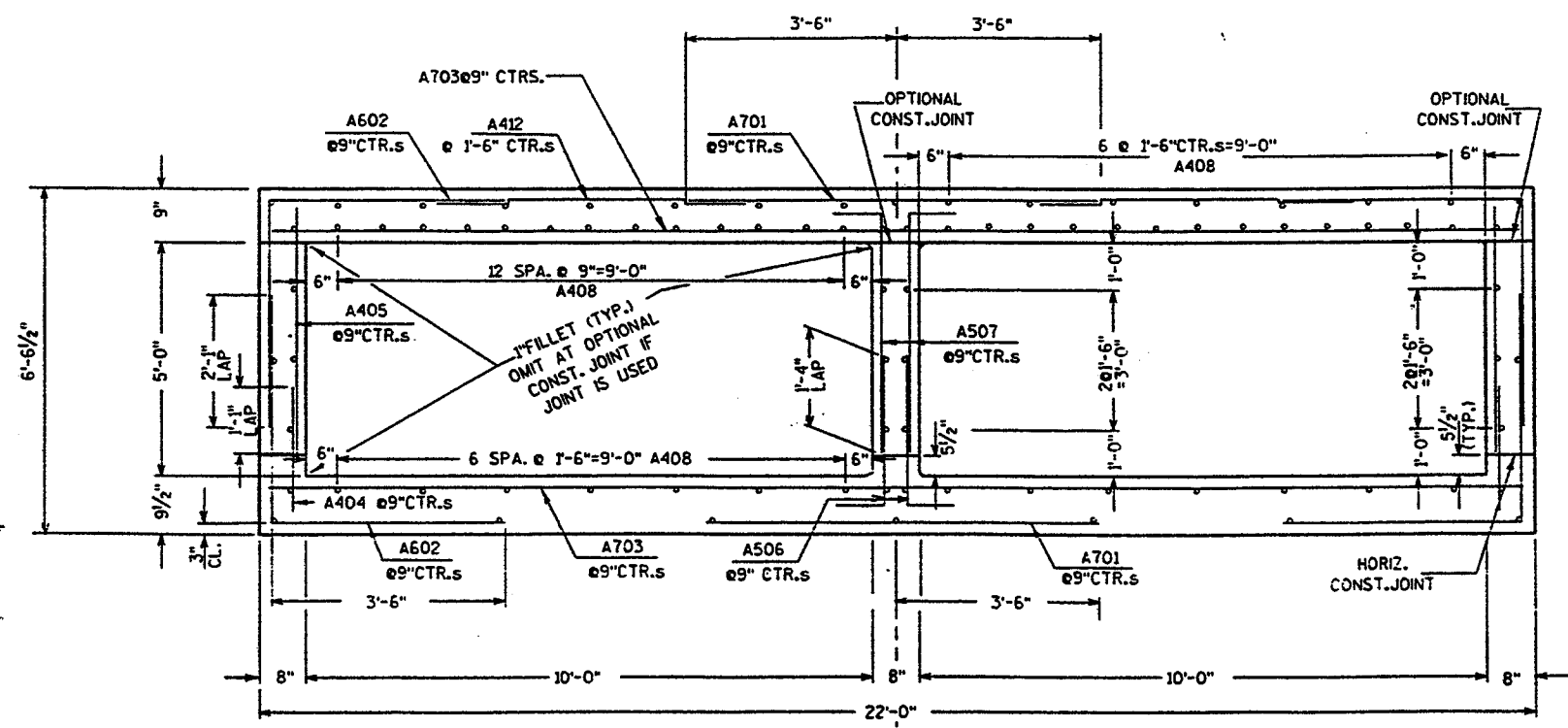
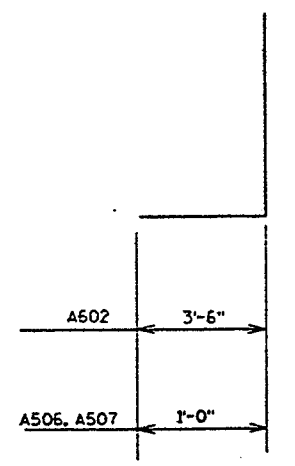
PLAN SHOWING BAR STEEL REINFORCEMENT
ALL PANELS SIMILAR



HEADER DETAILS



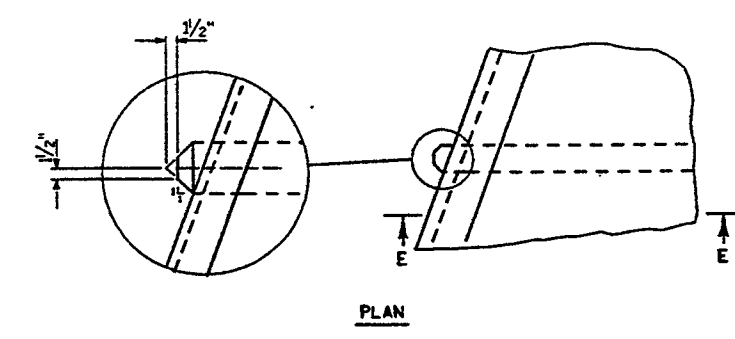
A311, A309



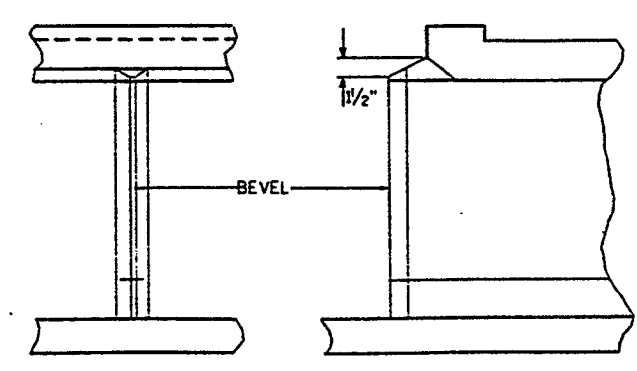
SECTION THRU BOX

*ALL LONGIT. REINF. NOT LABELLED ARE A408 BARS

SYMMETRIC ABOUT Q STRUCTURE EXCEPT AS SHOWN OR NOTED OTHERWISE



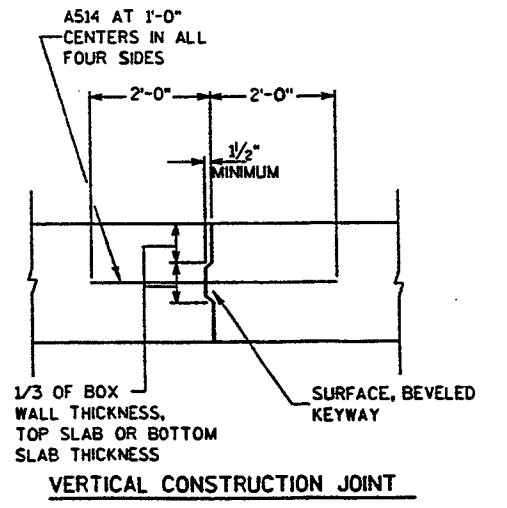
PLAN



FRONT ELEVATION

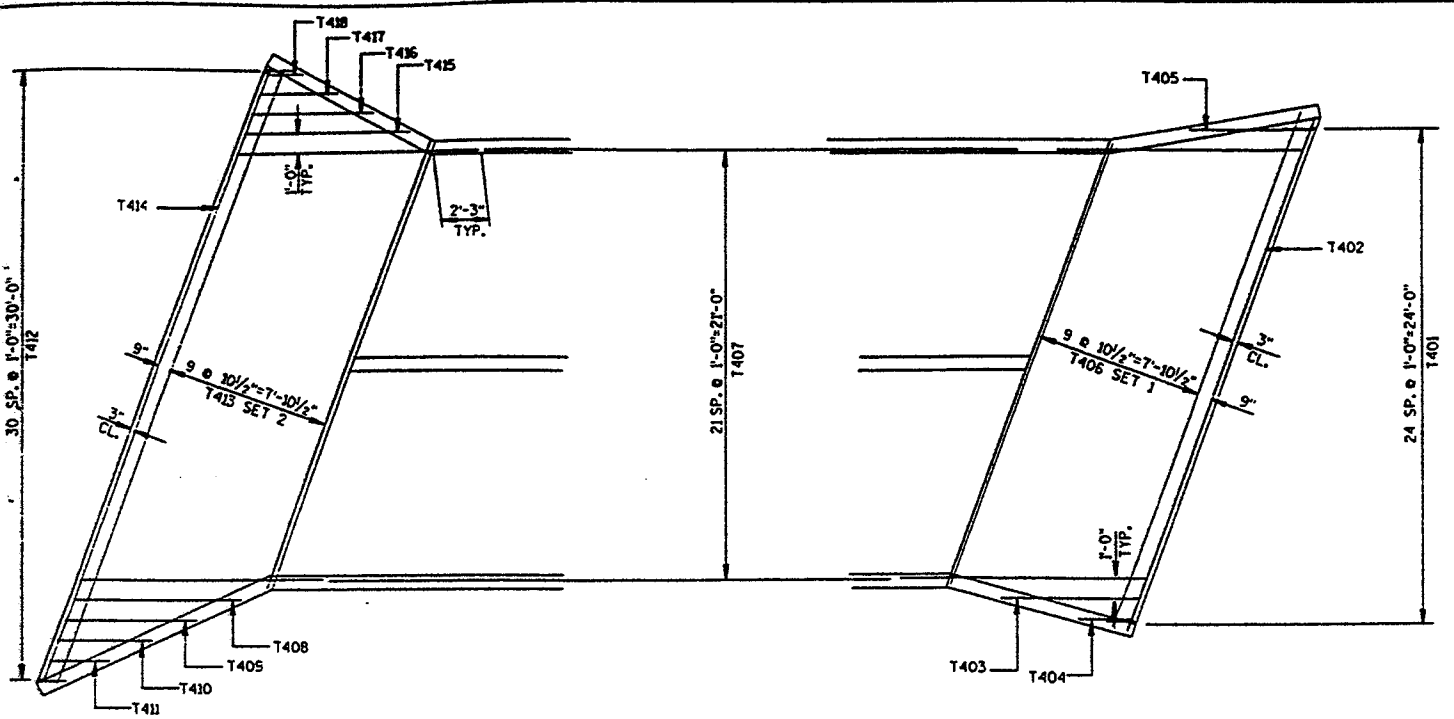
SECTION E-E

INLET NOSE DETAILS

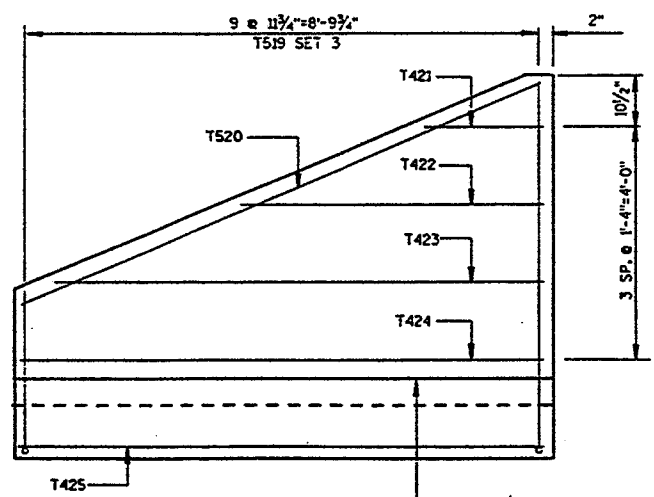


VERTICAL CONSTRUCTION JOINT

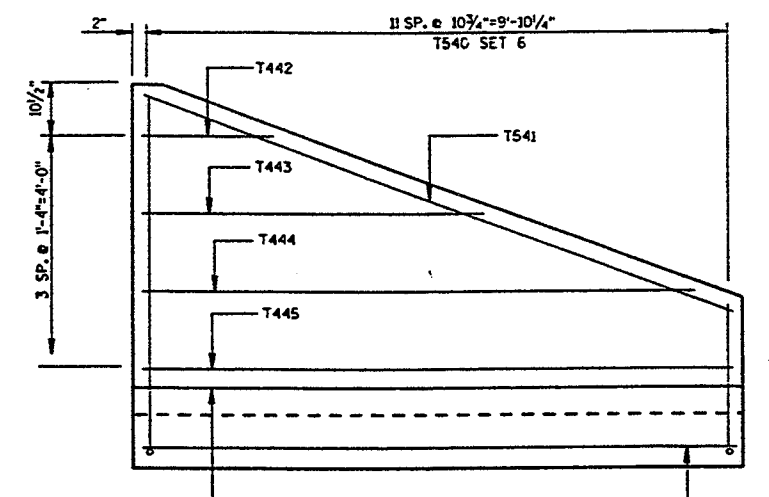
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-187			
CONST. SPEC.	1989	DRAWN BY NJA	PLANS CKB
DETAILS			SHEET 3 OF 5



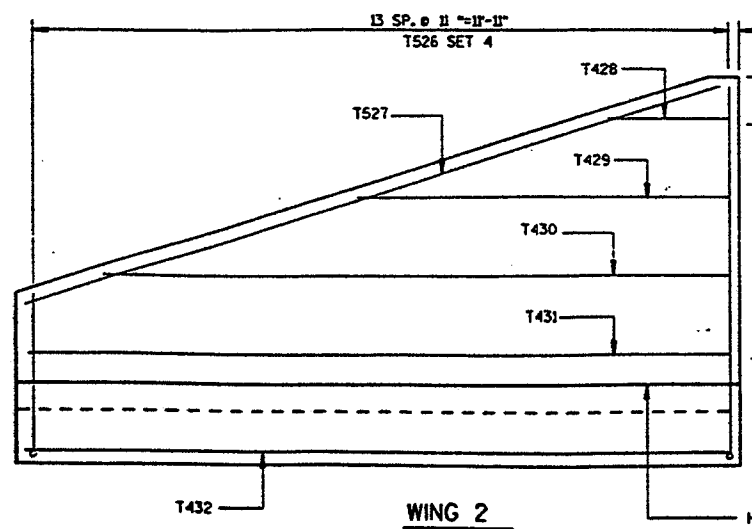
APRON REINFORCEMENT



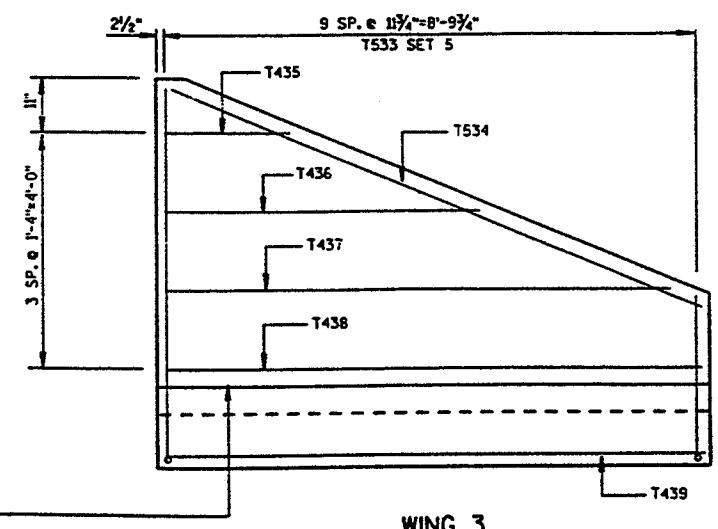
WING 1



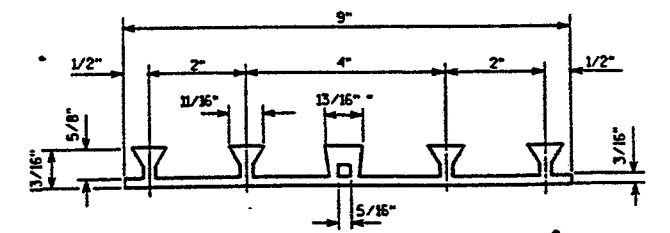
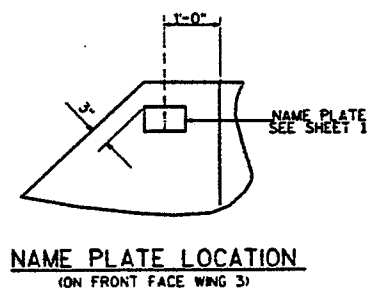
WING 4



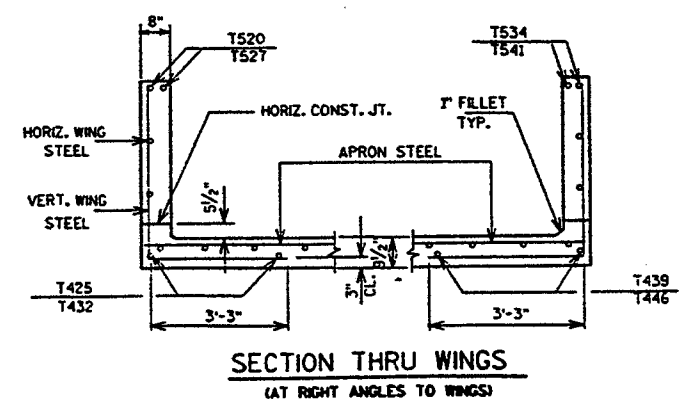
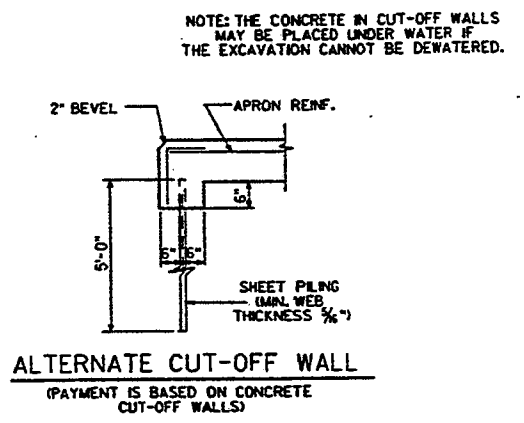
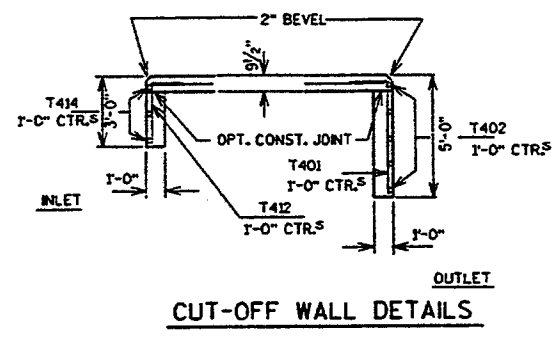
WING 2



WING 3



POLYVINYL CHLORIDE WATERSTOP



SECTION THRU WINGS
(AT RIGHT ANGLES TO WINGS)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-187			
CONST. SPEC.	1989	DRAWN BY NJA	PLANS CKD. CJB
DETAILS			SHEET 4 OF 5

BILL OF BARS

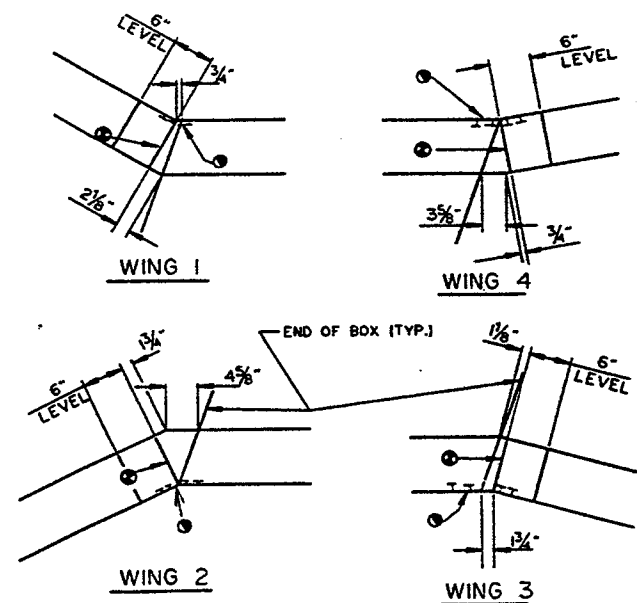
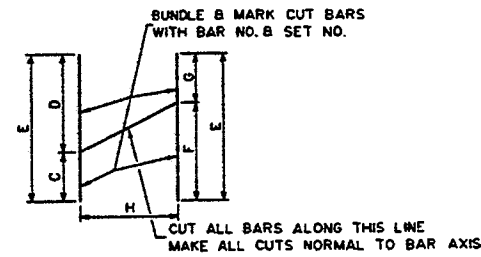
THE FIRST DIGIT OR THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFY THE BAR SIZE. DIM. IN BENDING DETAILS ARE OUT TO OUT OF BAR. BENT BARS USED IN CUTTING DIAGRAMS SHALL BE BENT AFTER CUTTING

MARK	NO. REQ'D	LENGTH	BENT	CUT DIAGR.	LOCATION
T401	25	5-6	*		OUTLET APRON AND CUTOFF WALL
T402	5	26-10			OUTLET APRON AND CUTOFF WALL
T403	1	6-8			OUTLET APRON
T404	1	2-7			OUTLET APRON
T405	1	5-10			OUTLET APRON
T406	5	49-10	*	*	OUTLET APRON
T407	44	11-8			OUTLET AND INLET APRONS
T408	1	8-2			INLET APRON
T409	1	6-5			INLET APRON
T410	1	4-7			INLET APRON
T411	1	2-10			INLET APRON
T412	31	3-6	*		INLET APRON AND CUTOFF WALL
T413	5	55-4		*	INLET APRON
T414	3	32-4			INLET APRON AND CUTOFF WALL
T415	1	8-0			INLET APRON
T416	1	5-11			INLET APRON
T417	1	3-10			INLET APRON
T418	1	2-0			INLET APRON
T519	5	14-8	*	*	WING 1
T520	2	9-7			WING 1
T421	1	2-0			WING 1
T422	1	5-2			WING 1
T423	1	8-3			WING 1
T424	1	8-10			WING 1
T425	2	9-1			WING 1
T526	7	14-8	*	*	WING 2
T527	2	12-4			WING 2
T428	1	2-0			WING 2
T429	1	6-3			WING 2
T430	1	10-7			WING 2
T431	1	8-11			WING 2
T432	2	12-3			WING 2
T533	5	14-8	*	*	WING 3
T534	2	9-7			WING 3
T435	1	2-1			WING 3
T436	1	5-3			WING 3
T437	1	8-5			WING 3
T438	1	8-11			WING 3
T439	2	9-1			WING 3
T540	6	14-8	*	*	WING 4
T541	2	10-6			WING 4
T442	1	2-2			WING 4
T443	1	5-8			WING 4
T444	1	9-3			WING 4
T445	1	9-10			WING 4
T446	2	10-2			WING 4

CUTTING DIAGRAM

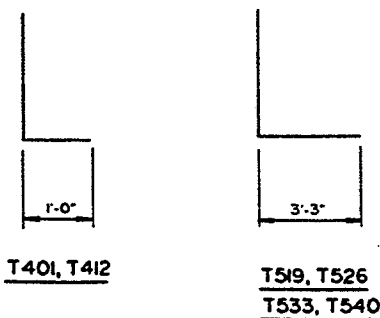
MARK SET NO.	C	D	E	F	G	H	SETS
T406 1	23-0	26-10	49-10	24-6	25-2	5	1
T413 2	23-0	32-4	55-4	27-2	28-2	5	1
T519 3	5-5	9-3	14-8	7-2	7-6	5	1
T526 4	5-5	9-3	14-8	7-2	7-6	7	1
T533 5	5-5	9-3	14-8	7-2	7-6	5	1
T540 6	5-5	9-3	14-8	7-2	7-6	6	1

"H" IS NUMBER OF BARS REQ'D BEFORE CUTTING



CORNER DETAILS

- POLYVINYL CHLORIDE WATERSTOP- EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING. FLUSH WITH FACE OF CONC. SEE DETAIL SHEET 4.
- 3/4" FILLER- EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING. DO NOT RUN BAR STEEL THRU JOINT.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-187			
CONST. SPEC.	1989	DRAWN BY NJA	PLANS CK'D CJB
DETAILS			SHEET 5 OF 5

AVERAGE END AREA VOLUMES

STATION	END AREA		VOLUME INCREMENTAL		VOLUME CUMULATIVE		EXP FAC	MASS HAUL
	CUT	FILL	CUT	FILL	CUT	FILL		
398 + 00	0.0	568.8	0.0	1053.3	0.0	1369.3	1.3	-1369.3
399 + 00	0.9	583.6	1.6	2134.1	1.6	4143.6	1.3	-4142.0
400 + 00	1.8	556.2	4.9	2110.7	6.6	6887.6	1.3	-6881.0
401 + 00	6.7	558.1	15.7	2063.5	22.3	9570.2	1.3	-9547.9
402 + 00	6.8	914.9	25.0	2727.8	47.3	13116.3	1.3	-13069.0
403 + 00	6.3	1001.7	24.3	3549.3	71.6	17730.3	1.3	-17658.8
404 + 00	8.2	992.2	26.9	3692.4	98.4	22530.4	1.3	-22432.0
405 + 00	10.1	948.8	33.9	3594.4	132.3	27203.2	1.3	-27070.9
406 + 00	12.1	1188.7	41.1	3958.3	173.4	32349.1	1.3	-32175.6
407 + 00	0.5	1083.2	23.3	4207.2	196.7	37818.4	1.3	-37621.7
408 + 00	3.5	839.1	7.4	3559.8	204.1	42446.2	1.3	-42242.1
409 + 00	12.2	934.3	29.1	3284.1	233.2	46715.5	1.3	-46482.3
410 + 00	9.1	984.9	39.4	3554.1	272.7	51335.8	1.3	-51063.1
411 + 00	0.7	692.9	18.1	3107.0	290.8	55374.9	1.3	-55084.1
412 + 00	1.2	635.9	3.5	2460.7	294.3	58573.9	1.3	-58279.6
413 + 00	1.3	438.1	4.6	1988.9	299.0	61159.5	1.3	-60860.5
414 + 00	8.8	313.8	18.7	1392.4	317.7	62969.6	1.3	-62651.9
415 + 00	47.6	219.9	104.4	988.3	422.1	64254.4	1.3	-63832.3
416 + 00	56.2	171.1	192.2	724.1	614.3	65195.7	1.3	-64581.4
417 + 00	58.1	169.5	211.7	630.7	826.0	66015.7	1.3	-65189.7
418 + 00	80.3	39.8	256.3	387.6	1082.3	66519.6	1.3	-65437.3
419 + 00	90.3	13.8	315.9	99.3	1398.2	66648.6	1.3	-65250.4
420 + 00	455.9	0.0	1011.5	25.6	2409.7	66681.8	1.3	-64272.1
421 + 00	600.0	0.0	1955.4	0.0	4365.1	66681.8	1.3	-62316.7
422 + 00	677.7	0.0	2366.1	0.0	6731.2	66681.8	1.3	-59950.6
423 + 00	724.0	0.0	2595.7	0.0	9326.9	66681.8	1.3	-57354.9
424 + 00	769.3	0.0	2765.4	0.0	12092.3	66681.8	1.3	-54589.5
425 + 00	826.1	0.0	2954.4	0.0	15046.7	66681.8	1.3	-51635.1
426 + 00	688.8	0.0	2805.4	0.0	17852.1	66681.8	1.3	-48829.7
427 + 00	564.8	0.0	2321.5	0.0	20173.6	66681.8	1.3	-46508.2
428 + 00	211.9	0.0	1438.4	0.0	21612.0	66681.8	1.3	-45069.8
429 + 00	148.7	71.8	667.9	133.0	22279.9	66854.7	1.3	-44574.8
430 + 00	198.8	76.0	643.5	273.7	22923.4	67210.5	1.3	-44287.1
431 + 00	74.7	255.9	506.5	614.6	23429.9	68009.5	1.3	-44579.6
432 + 00	368.5	1703.8	820.7	3629.1	24250.6	72727.3	1.3	-48476.7
433 + 00	27.5	1024.6	733.3	5052.6	24983.9	79295.7	1.3	-54311.7
434 + 00	120.9	565.3	274.8	2944.3	25258.7	83123.2	1.3	-57864.5
435 + 00	16.4	1006.7	254.3	2911.1	25513.0	86907.6	1.3	-61394.6
436 + 00	485.5	973.5	929.4	3667.0	26442.4	91674.8	1.3	-65232.4
437 + 00	0.0	1052.0	899.1	3750.9	27341.5	96551.0	1.3	-69209.5
438 + 00	5.9	265.7	10.9	2440.2	27352.4	99723.2	1.3	-72370.8
439 + 00	82.9	97.3	164.4	672.2	27516.9	100597.1	1.3	-73080.2
440 + 00	13.0	35.9	177.6	246.7	27694.5	100917.8	1.3	-73223.3
441 + 00	24.9	36.2	70.2	133.5	27764.7	101091.4	1.3	-73326.7
442 + 00	4.3	83.8	54.1	222.2	27818.7	101380.3	1.3	-73561.5

443 + 00	0.0	280.4	8.0	674.4	27826.7	102257.0	1.3	-74430.3
444 + 00	0.0	444.8	0.0	1343.0	27826.7	104002.9	1.3	-76176.2
445 + 00	0.0	652.9	0.0	2032.8	27826.7	106645.5	1.3	-78818.8
446 + 00	0.0	714.6	0.0	2532.4	27826.7	109937.6	1.3	-82110.9
447 + 00	4.1	599.9	7.6	2434.3	27834.3	113102.2	1.3	-85267.9
448 + 00	4.4	467.6	15.7	1976.9	27850.0	115672.1	1.3	-87822.0
449 + 00	18.1	352.5	41.7	1518.7	27891.7	117646.4	1.3	-89754.7
450 + 00	66.0	144.5	155.7	920.4	28047.4	118842.9	1.3	-90795.4
451 + 00	224.7	0.0	538.3	267.6	28585.8	119190.7	1.3	-90605.0
452 + 00	358.9	0.0	1080.7	0.0	29666.5	119190.7	1.3	-89524.2
453 + 00	391.4	0.0	1389.4	0.0	31056.0	119190.7	1.3	-88134.8
454 + 00	304.3	0.0	1288.3	0.0	32344.3	119190.7	1.3	-86846.4
455 + 00	171.7	0.0	881.5	0.0	33225.8	119190.7	1.3	-85965.0
456 + 00	140.7	1.6	578.5	3.0	33804.3	119194.6	1.3	-85390.3
457 + 00	67.0	91.2	384.6	171.9	34188.9	119418.0	1.3	-85229.1
458 + 00	76.1	96.3	265.0	347.2	34453.9	119869.4	1.3	-85415.5
459 + 00	10.1	355.5	159.6	836.7	34613.6	120957.1	1.3	-86343.5
460 + 00	10.7	507.9	38.5	1598.9	34652.1	123035.6	1.3	-88383.5
461 + 00	0.0	0.0	19.8	940.6	34671.9	124258.3	1.3	-89586.4
462 + 00	0.0	588.8	0.0	1090.4	34671.9	125675.8	1.3	-91003.9
463 + 00	34.2	235.9	63.3	1527.2	34735.2	127661.2	1.3	-92926.0
464 + 00	30.8	108.4	120.4	637.6	34855.6	128490.1	1.3	-93634.5
465 + 00	15.3	124.0	85.4	430.4	34941.0	129049.6	1.3	-94108.6
466 + 00	9.9	175.9	46.7	555.4	34987.6	129771.5	1.3	-94783.9
467 + 00	4.7	248.0	27.0	785.0	35014.7	130792.0	1.3	-95777.4
468 + 00	3.9	277.7	15.9	973.5	35030.6	132057.6	1.3	-97027.0
469 + 00	5.9	243.6	18.1	965.4	35048.7	133312.6	1.3	-98263.9
470 + 00	4.5	280.5	19.3	970.6	35068.0	134574.3	1.3	-99506.3
471 + 00	0.0	460.5	8.3	1372.2	35076.3	136358.2	1.3	-101281.9
472 + 00	2.5	178.6	4.6	1183.5	35081.0	137896.8	1.3	-102815.8
473 + 00	3.9	160.5	11.9	628.0	35092.8	138713.1	1.3	-103620.3
474 + 00	5.7	137.1	17.8	551.1	35110.6	139429.6	1.3	-104319.0
475 + 00	33.0	63.0	71.7	370.6	35182.3	139911.3	1.3	-104729.0
476 + 00	0.0	0.0	61.1	116.7	35243.4	140063.0	1.3	-104819.6

AVERAGE END AREA VOLUMES

SHADY LANE

STATION	END AREA		VOLUME INCREMENTAL		VOLUME CUMULATIVE		EXP FAC	MASS HAUL
	CUT	FILL	CUT	FILL	CUT	FILL		
12 + 00	184.2	24.3						
13 + 00	160	14.2	637.4	71.3	637.4	92.7	1.3	544.7
14 + 00	240.3	8.1	741.3	41.3	1378.7	146.4	1.3	1232.3
15 + 00	37.6	85.4	514.6	173.1	1893.3	371.5	1.3	1521.9
16 + 00	283.7	44.2	595.0	240.0	2488.3	683.5	1.3	1804.9
17 + 00	429.7	0	1321.1	81.9	3809.4	789.9	1.3	3019.6
18 + 00	768.2	0	2218.3	0.0	6027.8	789.9	1.3	5237.9
19 + 00	573.1	0	2483.9	0.0	8511.7	789.9	1.3	7721.8
20 + 00	0	0	1497.8	44.8	10009.4	848.1	1.3	9161.3
21 + 00	235.7	24.2	329.6	53.9	10339.1	918.2	1.3	9420.9
22 + 00	178	29.1	766.1	98.7	11105.2	1046.5	1.3	10058.7
23 + 00	116.8	35.6	545.9	119.8	11651.1	1202.3	1.3	10448.9
24 + 00	120.8	30.6	440.0	122.6	12091.1	1361.6	1.3	10729.5
25 + 00	52	40.8	320.0	132.2	12411.1	1533.5	1.3	10877.6
26 + 00	95.7	10.7	273.5	95.4	12684.6	1657.5	1.3	11027.1
27 + 00	72.4	13.5	311.3	44.8	12995.9	1715.8	1.3	11280.2
28 + 00	69.2	5.1	262.2	34.4	13258.1	1760.5	1.3	11497.6

MARSH EXCAVATION

CTH CB

STATION	END AREA	INCREMENTAL VOLUME	CUMULATIVE VOLUME
459 + 00	0.0		
460 + 00	238.0	440.7	440.7
461 + 00	0.0	440.7	881.5
462 + 00	685.0	1268.5	2150.0
463 + 00	330.0	1879.6	4029.6
464 + 00	0.0	611.1	4640.7
465 + 00		0.0	4640.7
466 + 00	0.0	407.4	5048.1
467 + 00	220.0	713.0	5761.1
468 + 00	165.0	614.8	6375.9
469 + 00	167.0	529.6	7005.6
470 + 00	173.0	625.9	7631.5
471 + 00	165.0	609.3	8240.7
472 + 00	164.0	511.1	8751.9
473 + 00	112.0	207.4	8959.3
474 + 00	0.0		
475 + 00			
TOTAL			8959.3

AVERAGE END AREA VOLUMES

CTH BB

STATION	END AREA		VOLUME INCREMENTAL		VOLUME CUMULATIVE		EXP FAC	MASS HAUL
	CUT	FILL	CUT	FILL	CUT	FILL		
16 + 00	46.2	2	85.6	3.7	85.6	4.8	1.3	80.7
17 + 00	42.3	6.5	163.9	15.7	249.4	25.3	1.3	224.2
18 + 00	45.1	5.5	161.9	22.2	411.3	54.2	1.3	357.1
19 + 00	44.2	5.9	165.4	21.1	576.7	81.6	1.3	495.1
20 + 00	0	0	81.9	10.9	658.5	95.8	1.3	562.7
21 + 00	43.6	6.5	80.7	12.0	739.3	111.5	1.3	627.8

EXCAVATION BELOW SUBGRADE (EBS)

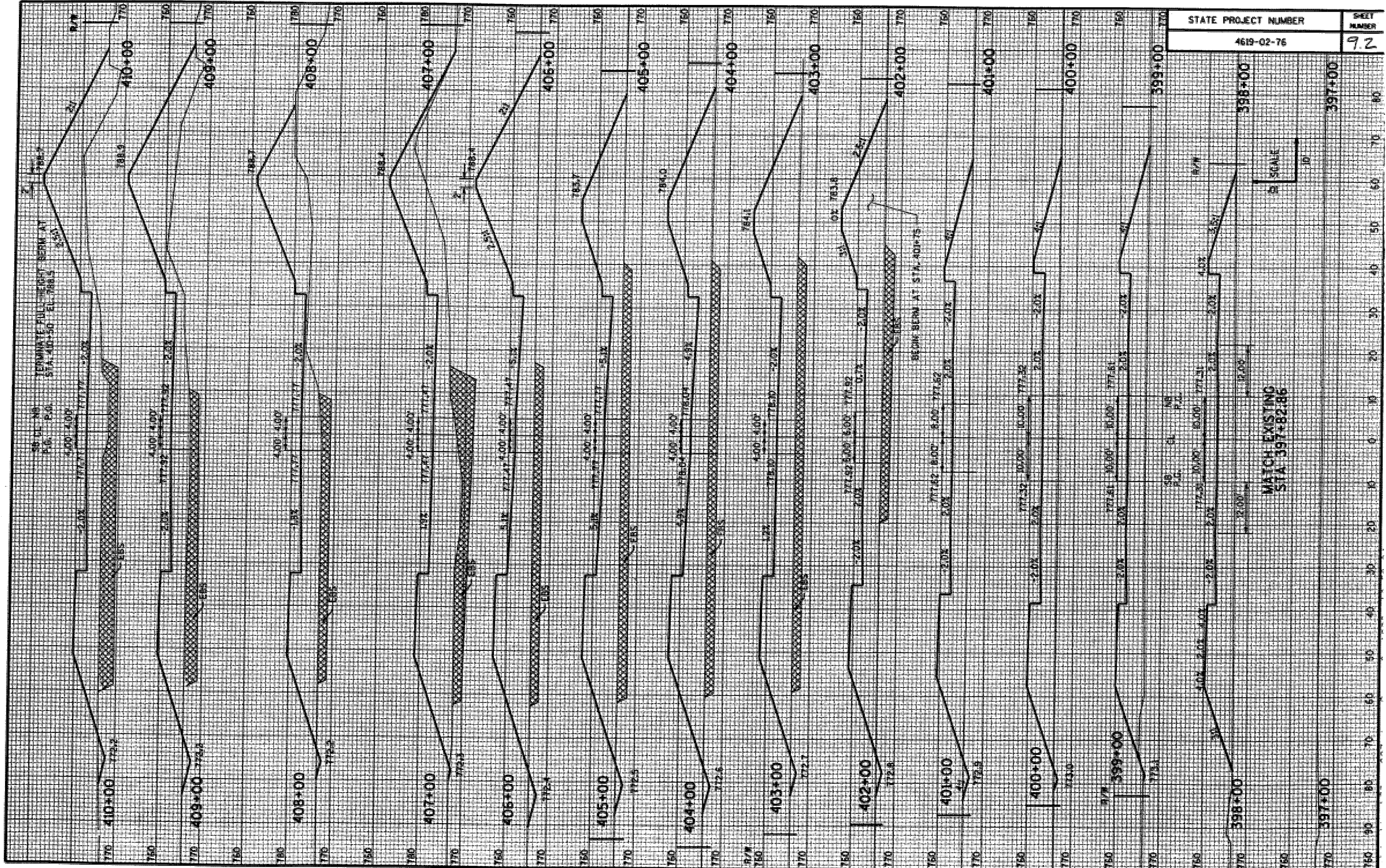
CTH CB

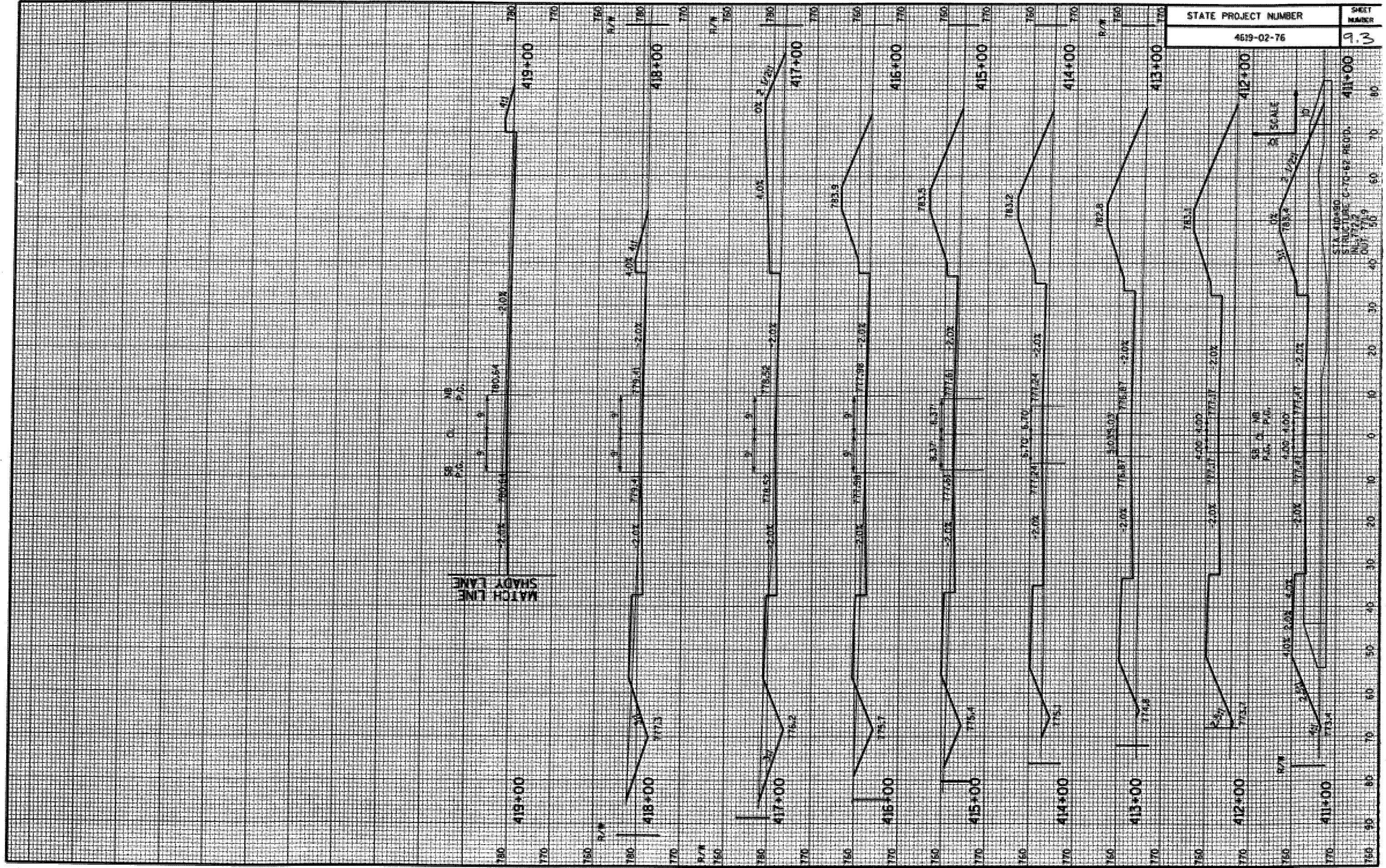
STATION	END AREA	INCREMENTAL VOLUME	CUMULATIVE VOLUME
401 + 00	0.0		
402 + 00	93.0	172.2	172.2
403 + 00	138.0	427.8	427.8
404 + 00	147.0	527.8	955.6
405 + 00	147.0	544.4	1500.0
406 + 00	117.0	488.9	1988.9
407 + 00	96.0	394.4	2383.3
408 + 00	98.0	359.3	2742.6
409 + 00	90.0	348.1	3090.7
410 + 00	90.0	287.0	3377.8
411 + 00	65.0	287.0	3498.1
412 + 00	0.0	0.0	3498.1
429 + 00	0.0	83.3	3581.5
430 + 00	45.0	361.1	3942.6
431 + 00	150.0	546.3	4488.9
432 + 00	145.0	433.3	4922.2
433 + 00	89.0	164.8	5087.0
434 + 00	0.0		
TOTAL			5087.0

ROCK EXCAVATION

CTH CB

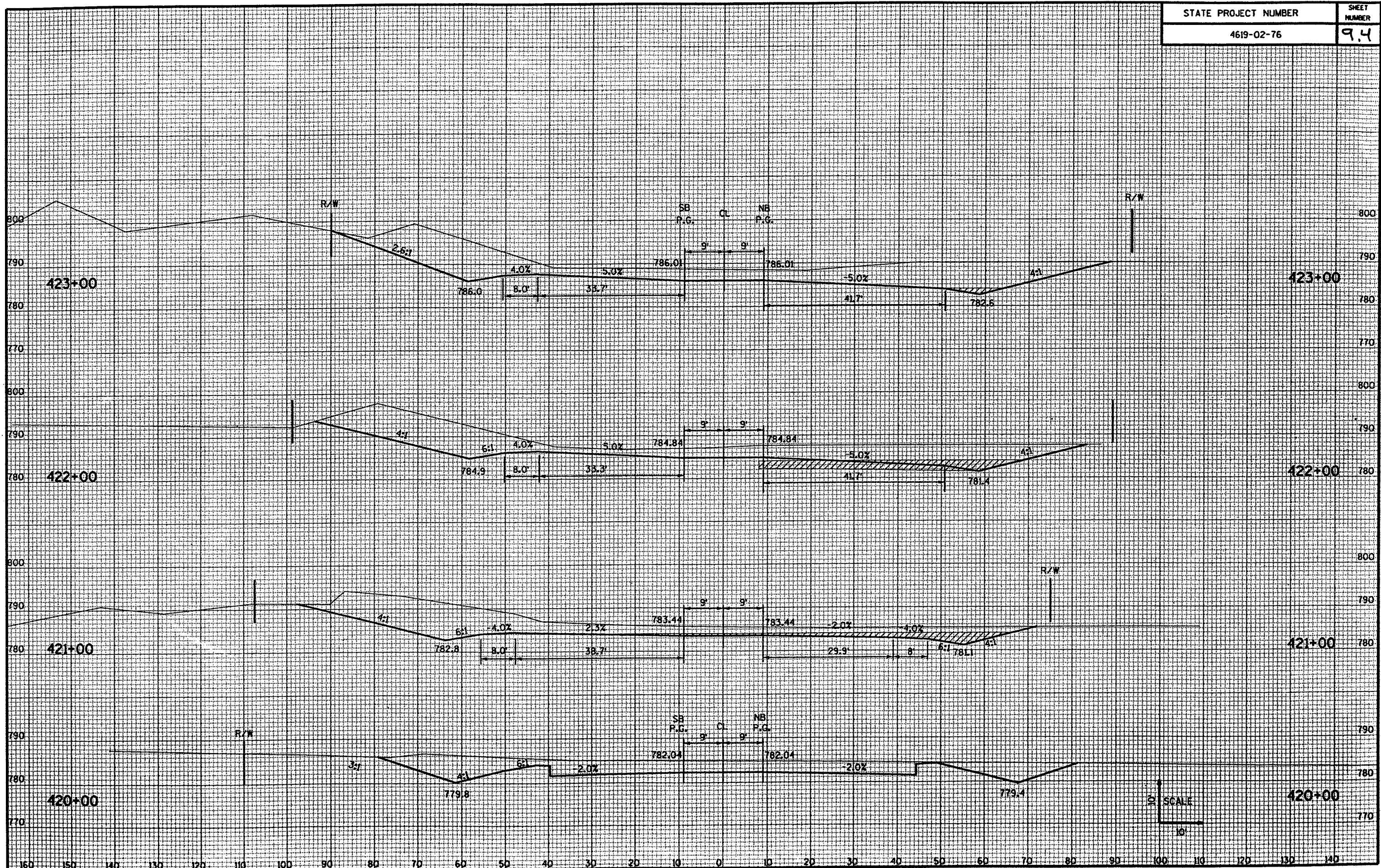
STATION	LOCATION	END AREA	INCREMENTAL VOLUME	CUMULATIVE VOLUME
420+00	CTH CB, RT	0.0		
421+00	CTH CB, LT/RT	104.0	192.6	192.6
422+00	CTH CB, LT/RT	102.0	381.5	574.1
423+00	CTH CB, LT/RT	10.0	207.4	781.5
424+00	CTH CB, LT/RT	1.3	20.9	802.4
425+00	CTH CB, LT/RT	0.8	3.9	806.3
426+00	CTH CB, LT/RT	0.0	1.5	803.9
			0.0	803.9
UNDISTRIBUTED			50.0	853.9

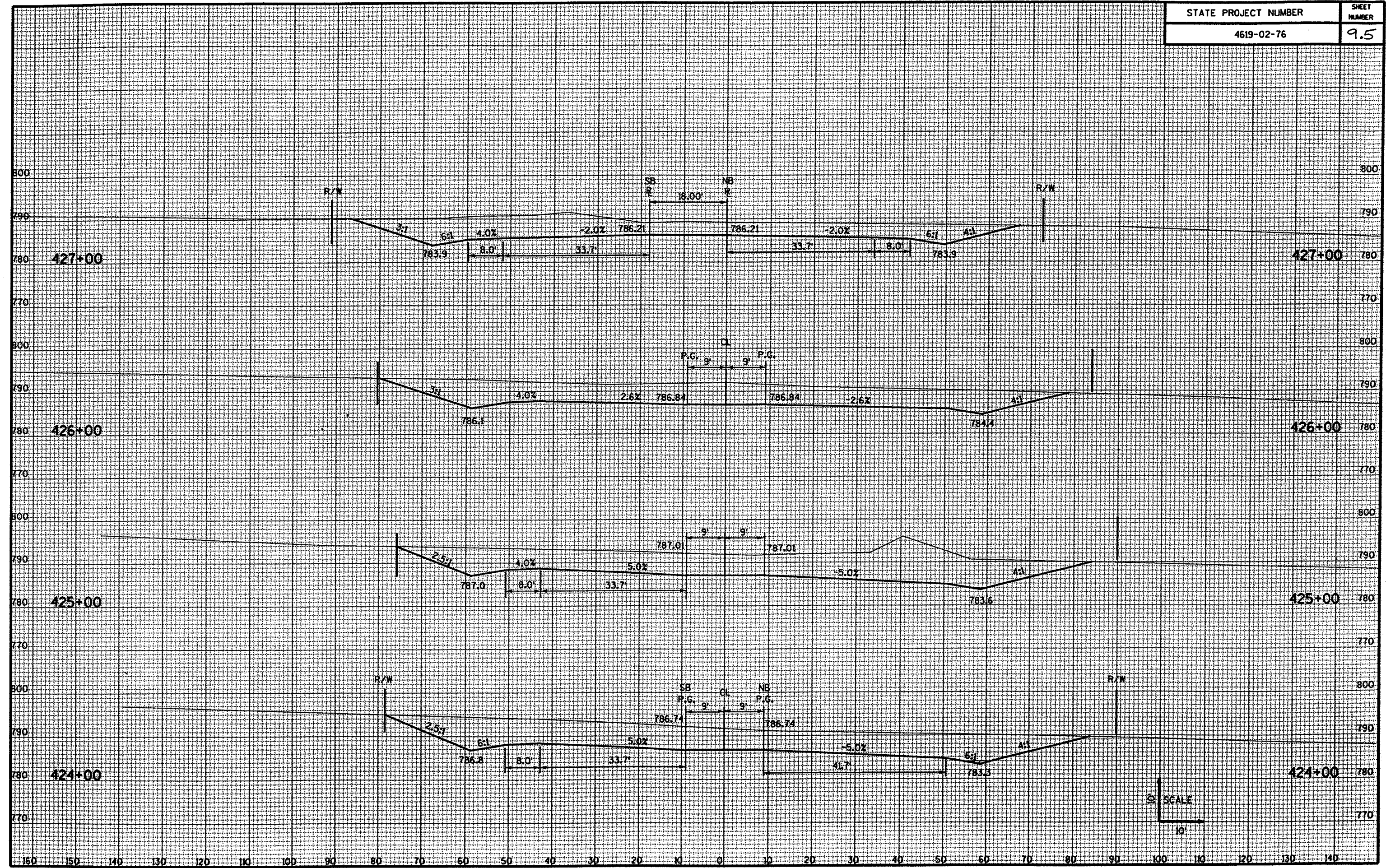


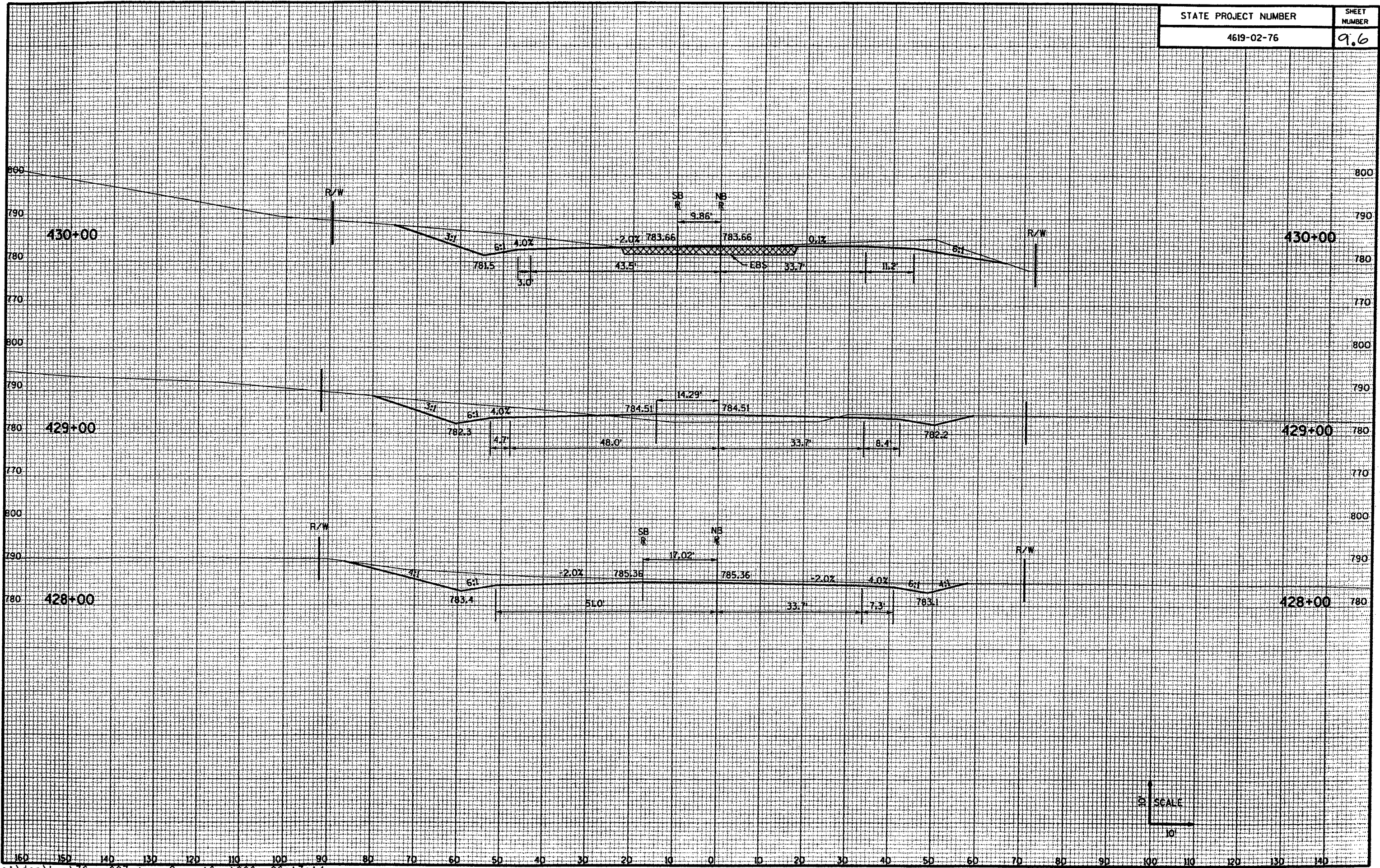


STATE PROJECT NUMBER	SHEET NUMBER
4619-02-76	93

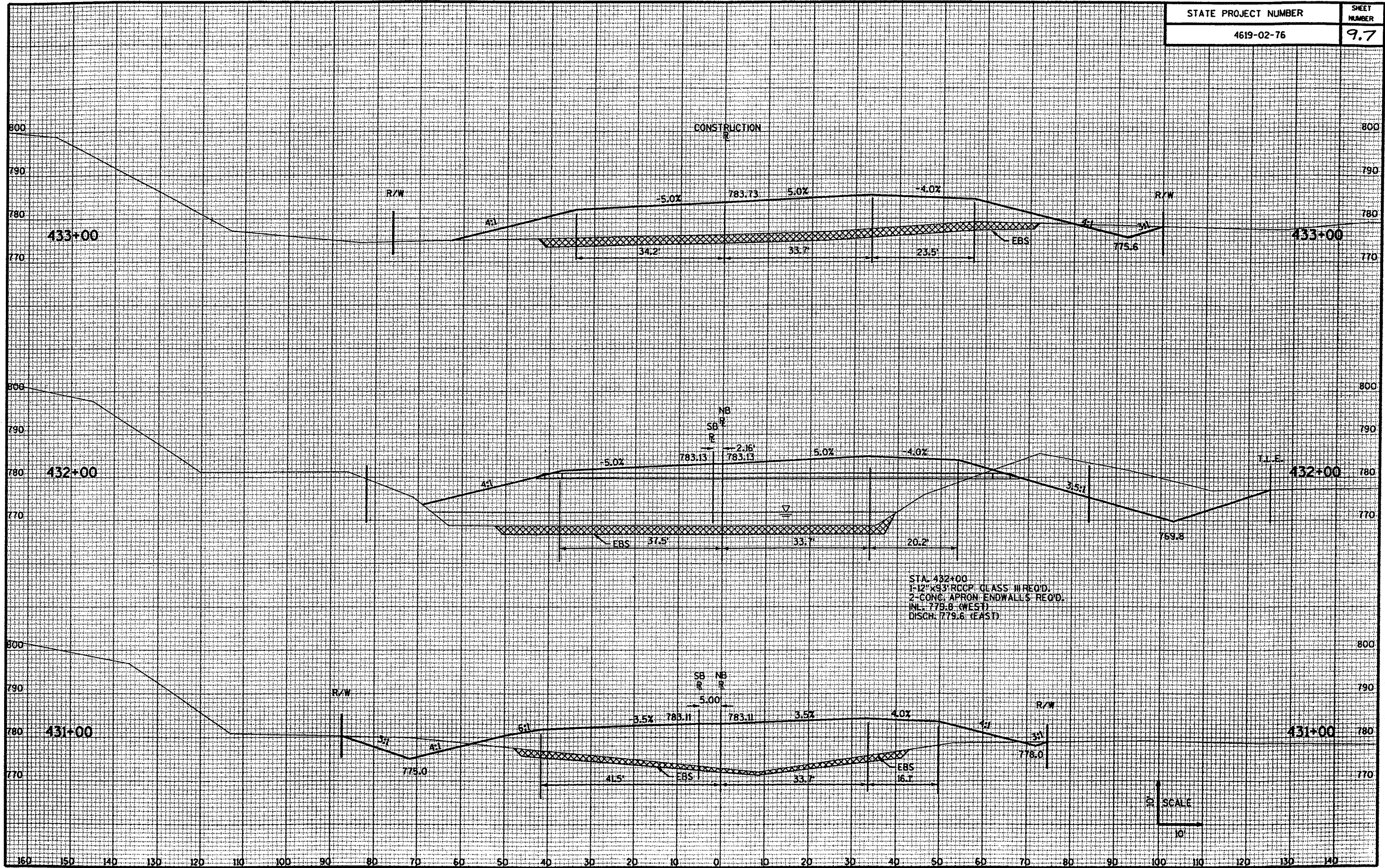
STA 410+50
STRUCTURE C-70-62 RECD.
DATE 11/29/79
DRAWN BY 58

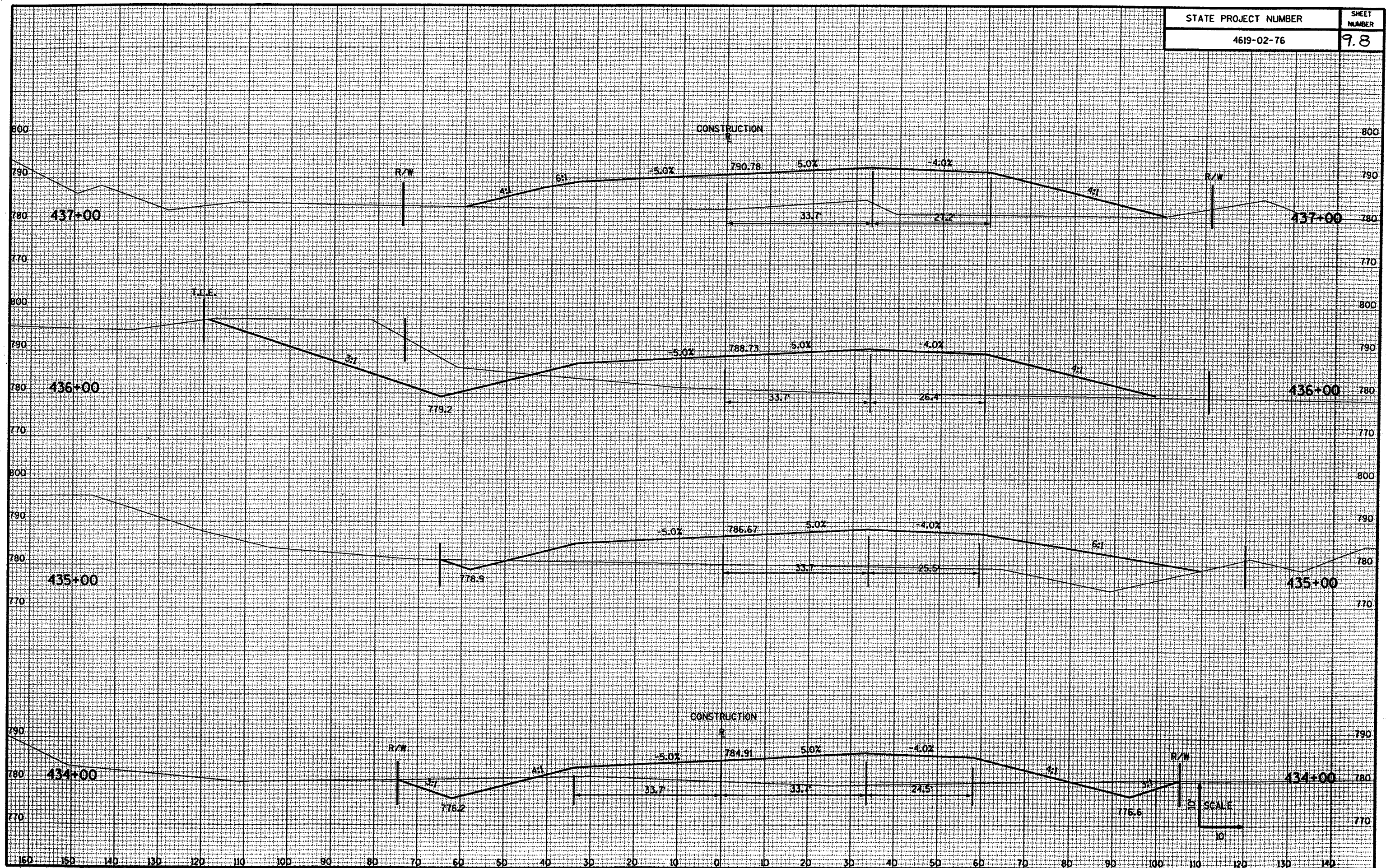




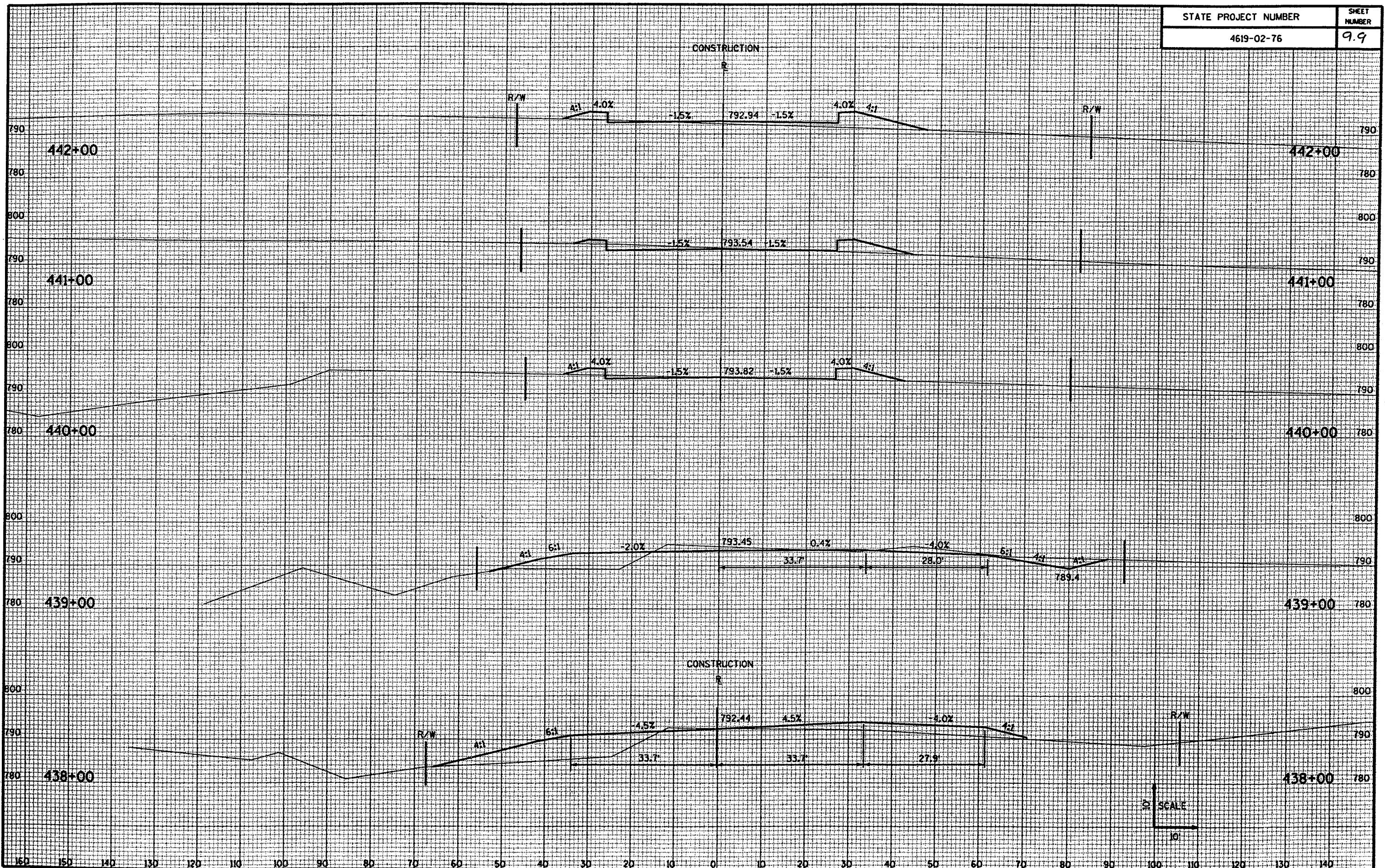


SCALE
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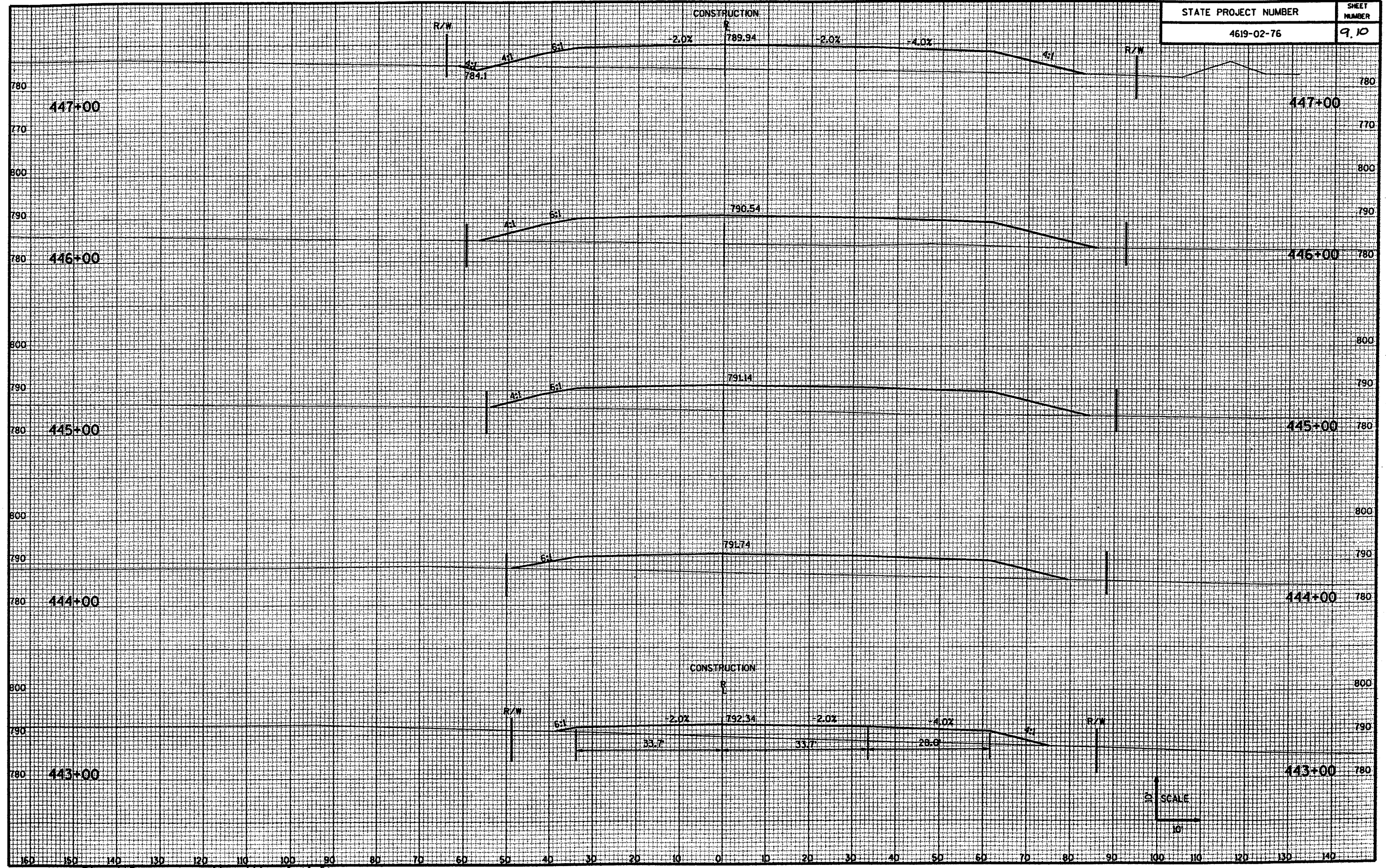


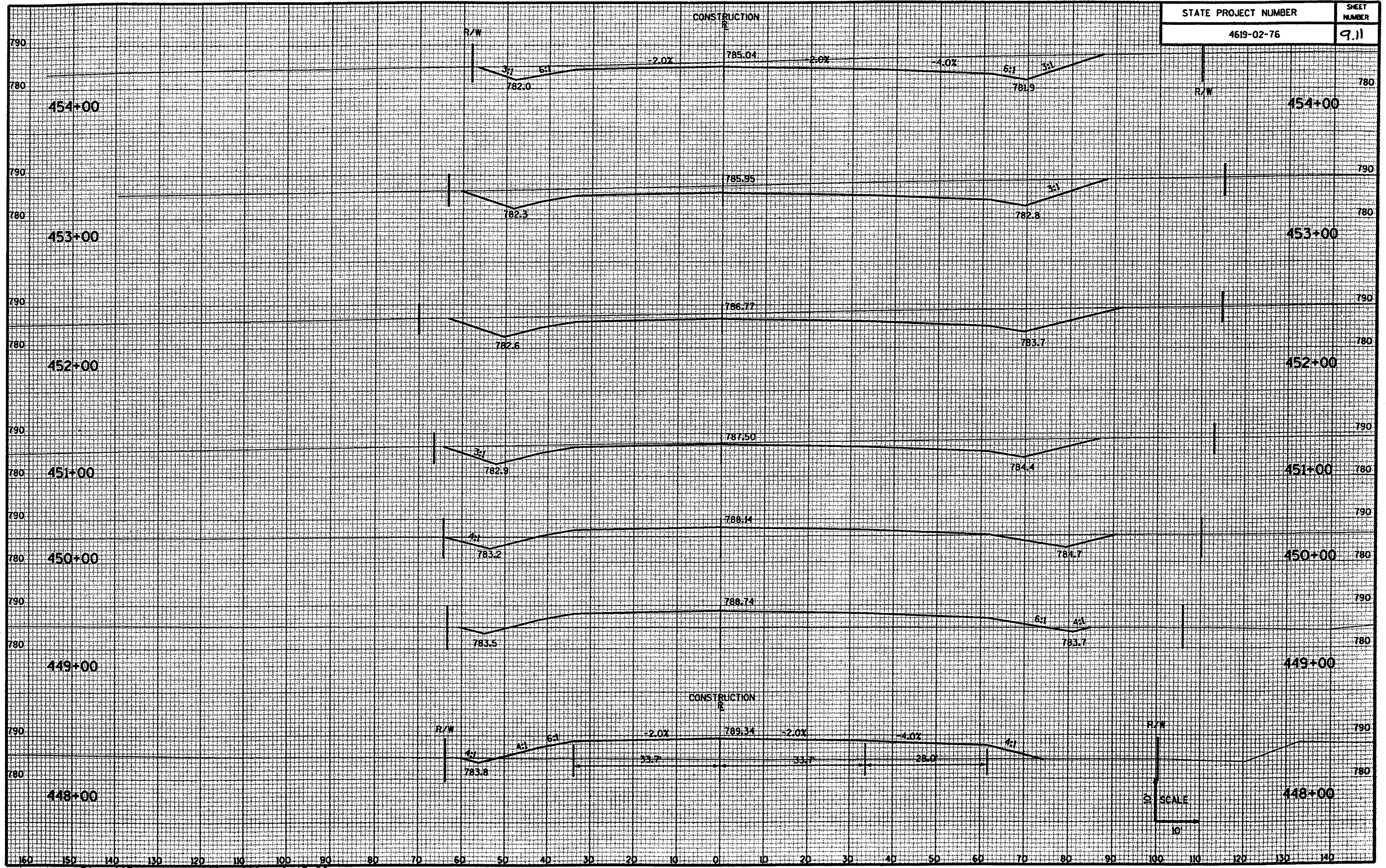


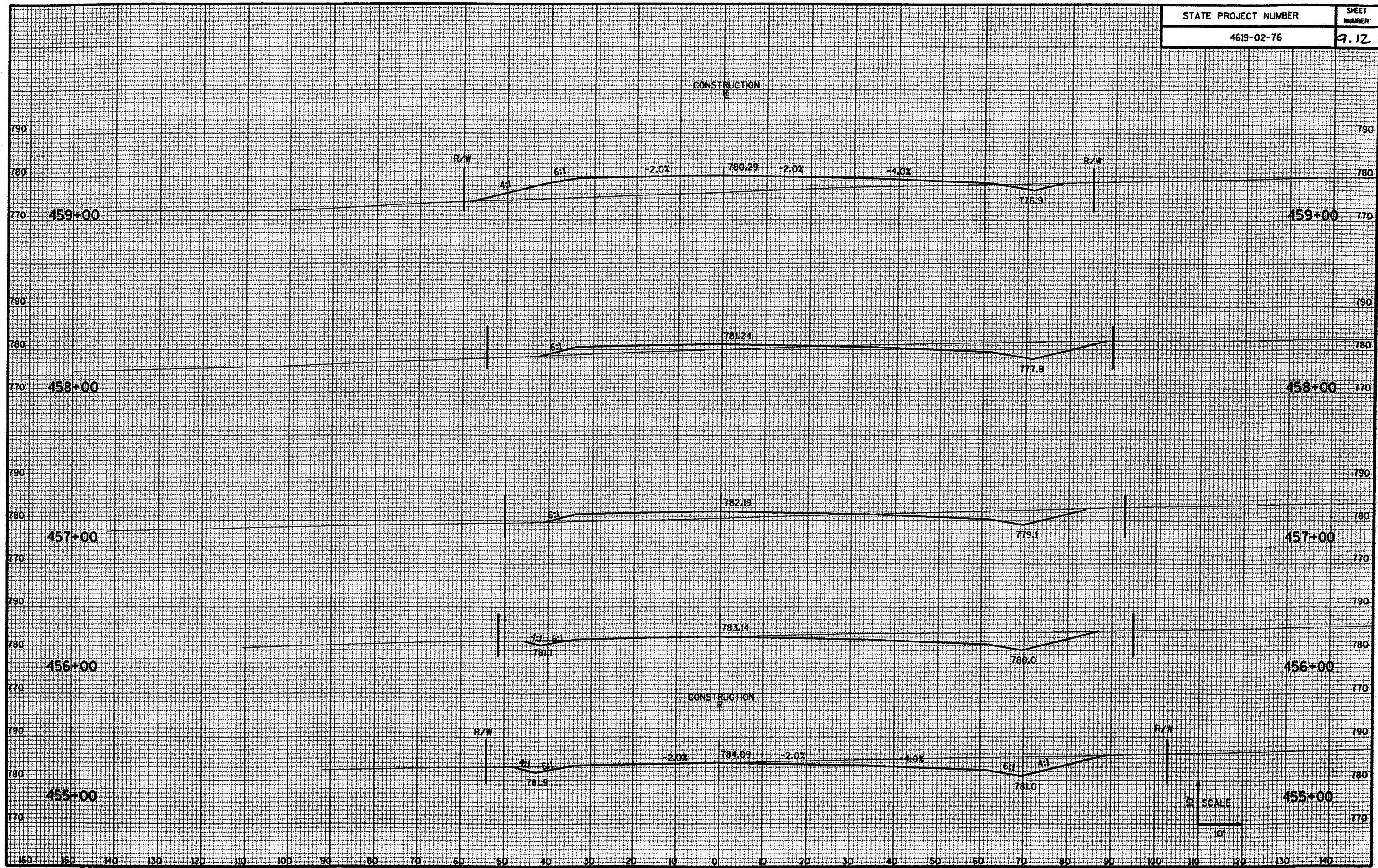
SCALE
10'

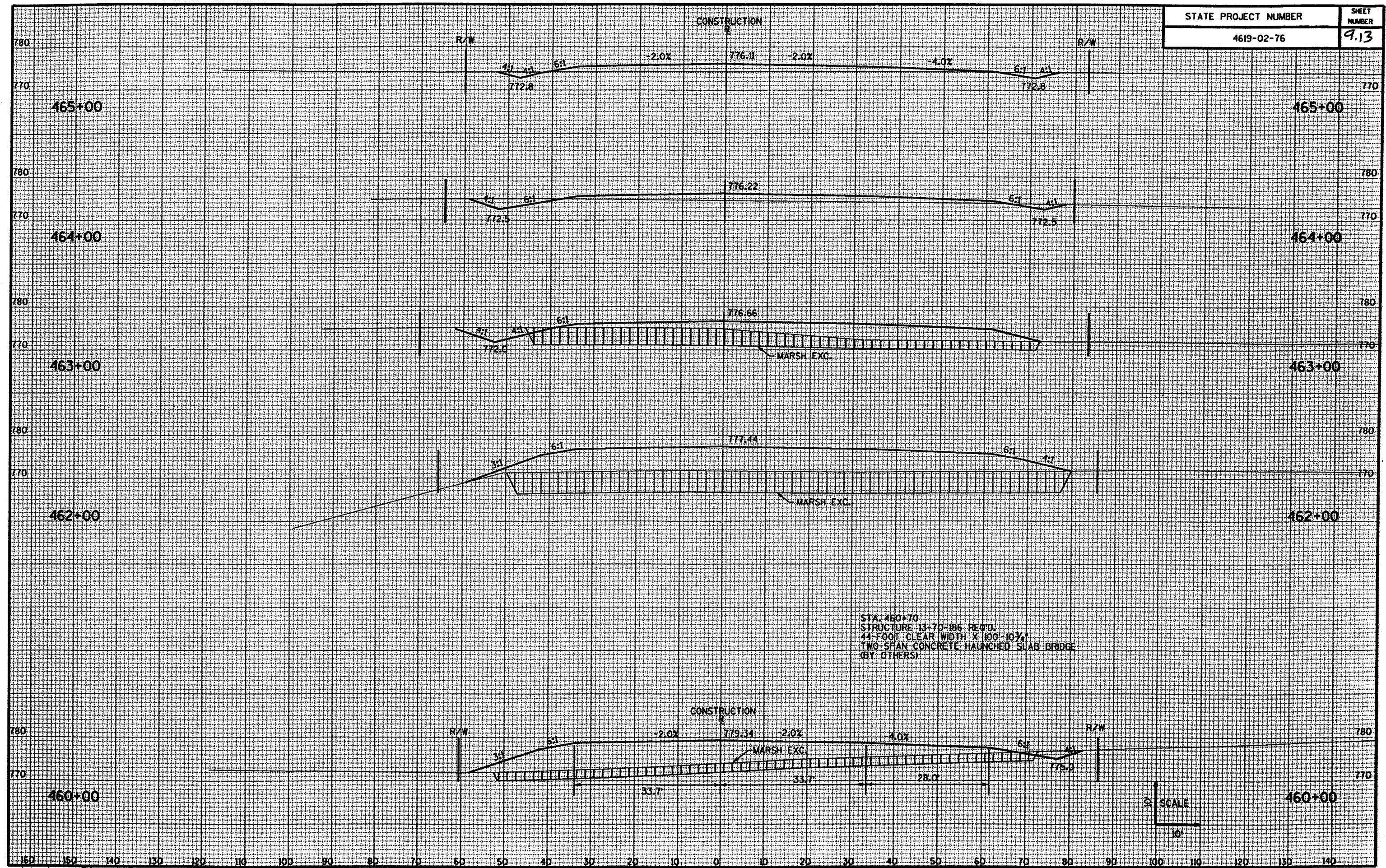


STATE PROJECT NUMBER	SHEET NUMBER
4619-02-76	9.10

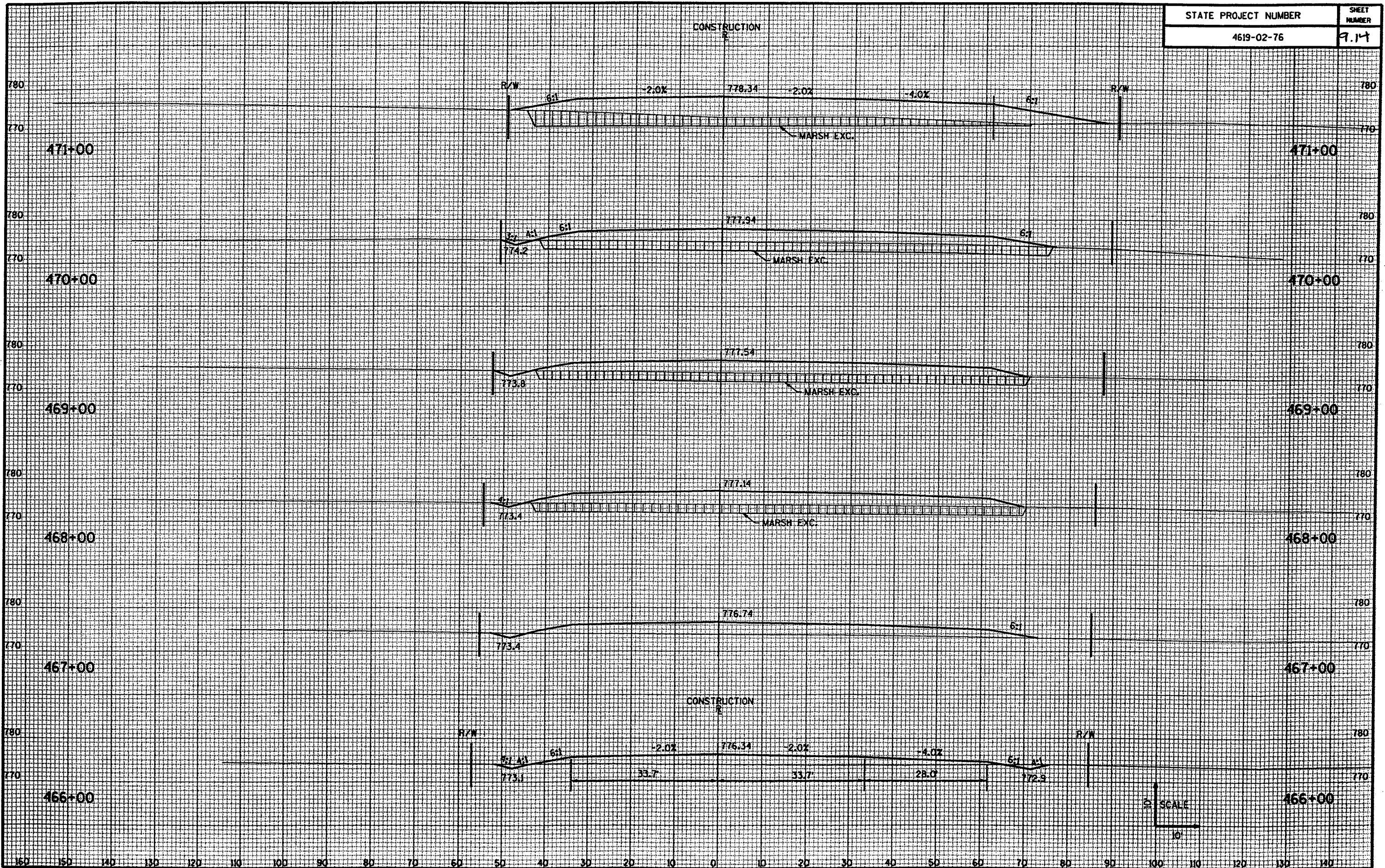


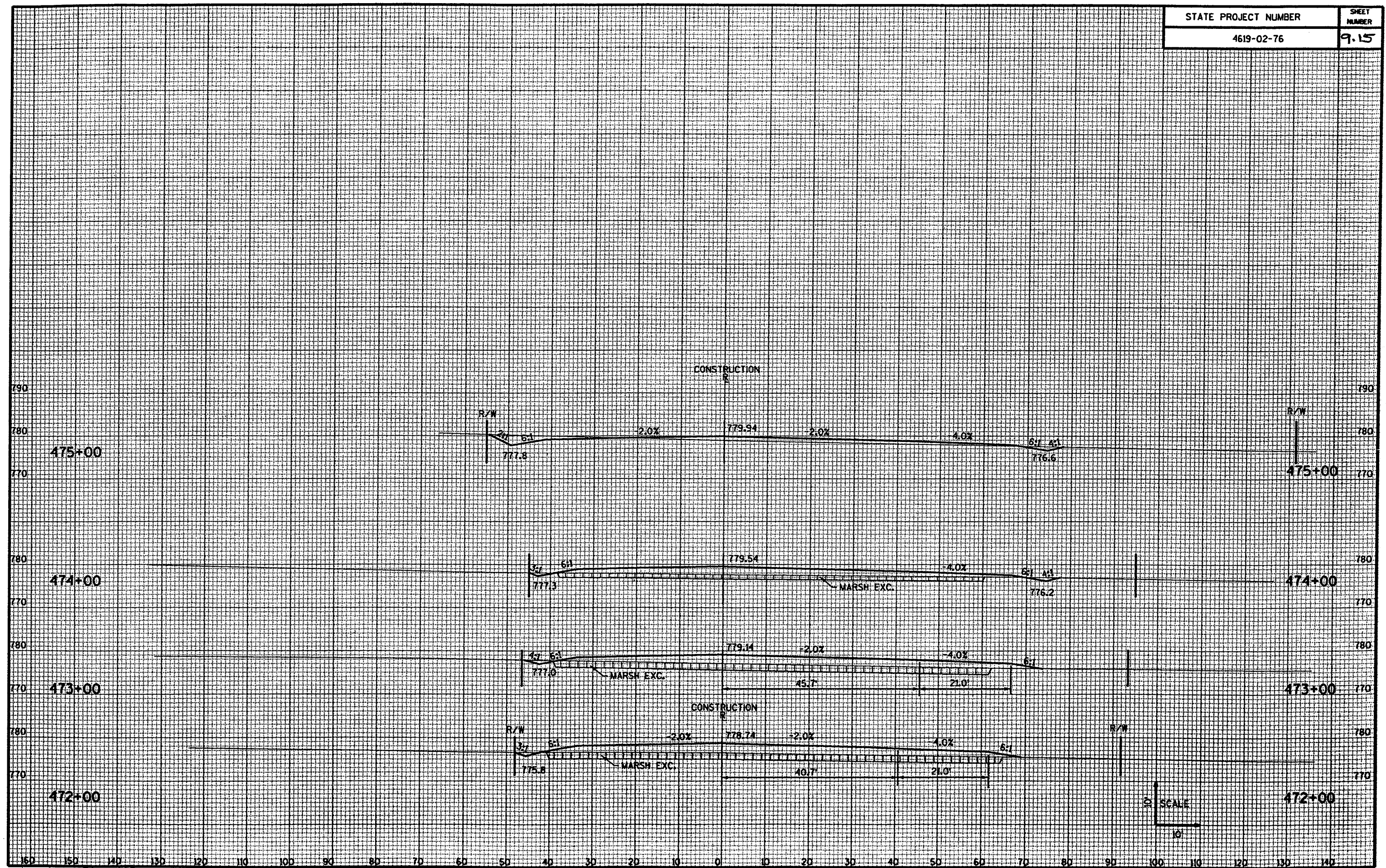






SCALE
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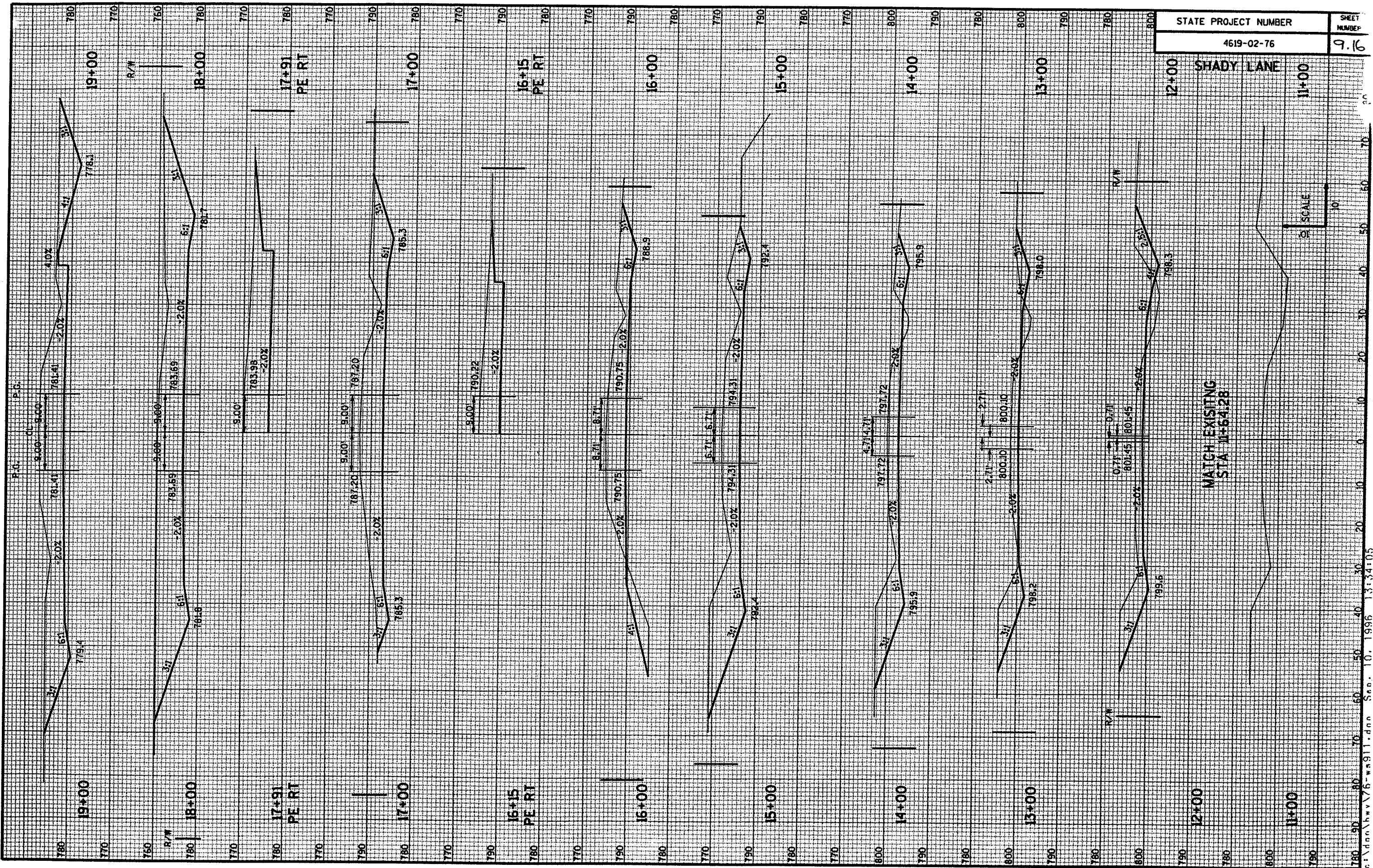




SHADY LANE

MATCH EXISTING STA #+64.28

SCALE 1" = 10'



SHADY LANE

OLD BUGGY DRIVE

MATCH EXISTING
STA. 28+26.33

