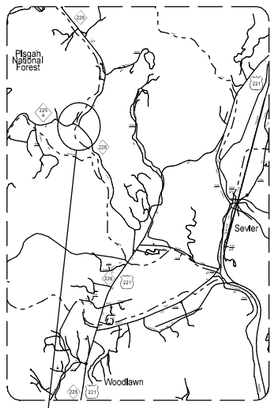
040397

PROJECT: NC 226 – NC 226A INTERSECTION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS # 43515	1	17

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

See Sheet 3 For Conventional Symbols



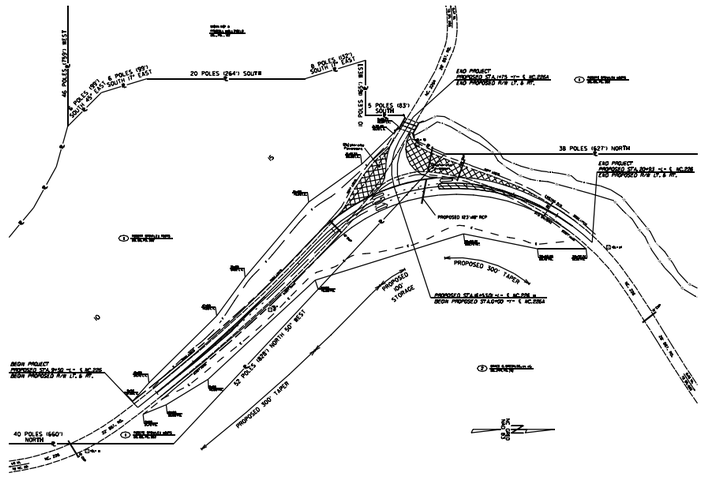
VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

McDOWELL COUNTY

LOCATION: NC 226 – NC 226A INTERSECTION

TYPE OF WORK: GRADING, DRAINAGE, BASE AND PAVING



GRAPHIC SCALES

100′ 50′ 0 100′ 200′
PLANS

0
PROFILE (HORIZONTAL)

0
PROFILE (VERTICAL)

DESIGN DATA

ADT =
ADT =
DHV = %
D = %
T = % *
V = MPH

* TTST % DUAL %

PROJECT LENGTH

NC. 226 LENGTH OF PROJECT ——— 0.216 MILES

NC. 226A LENGTH OF PROJECT ——— 0.033 MILES

Prepared in the Office of:

DIVISION OF HIGHWAYS

2007 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

PROJECT ENGINEER

PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN

P.E.
SIGNATURE:

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

P.E.
STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR *DATE*

$$$$$$SYSTIME$$$$$
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040397

PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	2 OF 17

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

RIGHT OF WAY AREA DATA SHEET

PARCEL NO.	PROPERTY OWNERS NAME	TOTAL ACREAGE	TOTAL AREA TAKEN	TOTAL AREA REMAINING		TOTAL AREA TAKEN	NEW ACQUIRING R/W TOTAL	NEW ACQUIRING R/W LEFT	NEW ACQUIRING R/W RIGHT	PARCEL NO.	PROPERTY OWNERS NAME	TOTAL ACREAGE	TOTAL AREA TAKEN	NEW ACQUIRING R/W TOTAL	NEW ACQUIRING R/W LEFT	NEW ACQUIRING R/W RIGHT	TEMPORARY CONSTR. EASEMENT TOTAL	TEMPORARY CONSTR. EASEMENT LEFT	TEMPORARY CONSTR. EASEMENT RIGHT
1	ROBERT BRINKLEY HEIRS	20.000 ACRES	1.084 ACRES	18.916 ACRES		1.084 ACRES	47,208 S.F.	23,682 S.F.	23,526 S.F.										
2	GRACE G. GREENLEE, ETAL	480.000 ACRES	1.011 ACRES	478.989 ACRES		1.011 ACRES	44,048 S.F.	0 S.F.	44,048 S.F.										
	TOTAL OF ALL PROPERTIES	500.000 ACRES	2.095 ACRES	497.905 ACRES		2.095 ACRES	91,256 S.F.	23,682 S.F.	67,574 S.F.										

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$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	3 OF 17

*S.U.E = SUBSURFACE UTILITY ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL SYMBOLS

ROADS & RELATED ITEMS

- Edge of Pavement
- Curb
- Prop. Slope Stakes Cut (C)
- Prop. Slope Stakes Fill (F)
- Prop. Woven Wire Fence
- Prop. Chain Link Fence
- Prop. Barbed Wire Fence
- Prop. Wheelchair Ramp (WCR)
- Exist. Guardrail
- Prop. Guardrail
- Equality Symbol
- Pavement Removal

RIGHT OF WAY

- Baseline Control Point
- Existing Right of Way Marker
- Exist. Right of Way Line w/Marker
- Prop. Right of Way Line with Proposed R/W Marker (Iron Pin & Cap)
- Prop. Right of Way Line with Proposed (Concrete or Granite) R/W Marker
- Exist. Control of Access Line (CA)
- Prop. Control of Access Line (CA)
- Exist. Easement Line (E)
- Prop. Temp. Construction Easement Line (E)
- Prop. Temp. Drainage Easement Line (TDE)
- Prop. Perm. Drainage Easement Line (PDE)

HYDROLOGY

- Stream or Body of Water
- Flow Arrow
- Disappearing Stream
- Spring
- Swamp Marsh
- Shoreline
- Falls, Rapids
- Prop Lateral, Tail, Head Ditches (FLOW)

STRUCTURES

MAJOR

- Bridge Wing Wall, Head Wall and End Wall (CONC WW)

MINOR

- Head & End Wall (CONC HW)
- Pipe Culvert
- Footbridge
- Drainage Boxes (CB)
- Paved Ditch Gutter

UTILITIES

- Exist. Pole
- Exist. Power Pole
- Prop. Power Pole
- Exist. Telephone Pole
- Prop. Telephone Pole
- Exist. Joint Use Pole
- Prop. Joint Use Pole
- Telephone Pedestal (T)
- Cable TV Pedestal (C)
- Hydrant
- Satellite Dish
- Exist. Water Valve
- Sewer Clean Out
- Power Manhole (P)
- Telephone Booth
- Water Manhole (W)
- Light Pole
- H-Frame Pole
- Power Line Tower
- Pole with Base
- Gas Valve
- Gas Meter
- Telephone Manhole (T)
- Power Transformer
- Sanitary Sewer Manhole
- Storm Sewer Manhole (S)
- Tank; Water, Gas, Oil
- Water Tank With Legs
- Traffic Signal Junction Box (S)
- Fiber Optic Splice Box (F)
- Television or Radio Tower
- Utility Power Line Connects to Traffic Signal Lines Cut Into the Pavement (TS TS)
- Recorded Water Line (W W)
- Designated Water Line (S.U.E.*) (W W)
- Sanitary Sewer (SS SS)
- Recorded Sanitary Sewer Force Main (FSS FSS)
- Designated Sanitary Sewer Force Main(S.U.E.*) (FSS FSS)
- Recorded Gas Line (G G)
- Designated Gas Line (S.U.E.*) (G G)
- Storm Sewer (S S)
- Recorded Power Line (P P)
- Designated Power Line (S.U.E.*) (P P)
- Recorded Telephone Cable (T T)
- Designated Telephone Cable (S.U.E.*) (T T)
- Recorded U/G Telephone Conduit (TC TC)
- Designated U/G Telephone Conduit (S.U.E.*) (TC TC)
- Unknown Utility (S.U.E.*) (2UTL 2UTL)
- Recorded Television Cable (TV TV)
- Designated Television Cable (S.U.E.*) (TV TV)
- Recorded Fiber Optics Cable (FO FO)
- Designated Fiber Optics Cable (S.U.E.*) (FO FO)
- Exist. Water Meter (0)
- U/G Test Hole (S.U.E.*)
- Abandoned According to U/G Record (ATTUR)
- End of Information (E.O.I.)

BOUNDARIES & PROPERTIES

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Property Line Symbol (PL)
- Exist. Iron Pin (EIP)
- Property Corner
- Property Monument (ECM)
- Property Number (123)
- Parcel Number (6)
- Fence Line (WW & ISBW)
- Existing Wetland Boundaries (WLB)
- Proposed Wetland Boundaries (WLB)
- Existing Endangered Animal Boundaries (EAB)
- Existing Endangered Plant Boundaries (EPB)

BUILDINGS & OTHER CULTURE

- Buildings
- Foundations
- Area Outline
- Gate
- Gas Pump Vent or U/G Tank Cap
- Church
- School
- Park
- Cemetery
- Dam
- Sign (S)
- Well (W)
- Small Mine
- Swimming Pool

TOPOGRAPHY

- Loose Surface
- Hard Surface
- Change in Road Surface
- Curb
- Right of Way Symbol (R/W)
- Guard Post (GP)
- Paved Walk
- Bridge
- Box Culvert or Tunnel
- Ferry
- Culvert
- Footbridge
- Trail, Footpath
- Light House

VEGETATION

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard (VINEYARD)

RAILROADS

- Standard Gauge (CSX TRANSPORTATION)
- RR Signal Milepost (MILEPOST 35)
- Switch (SWITCH)

revised 03/26/97

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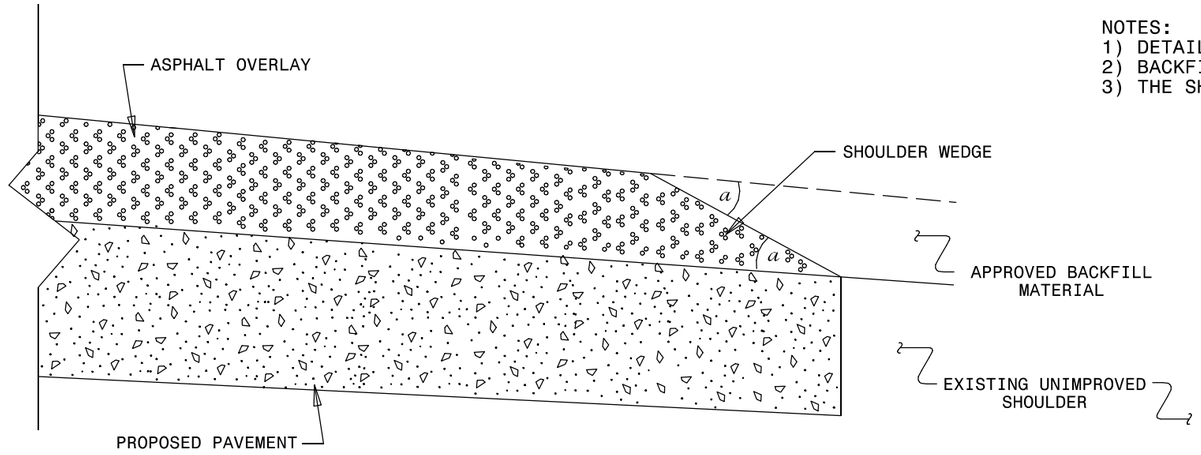
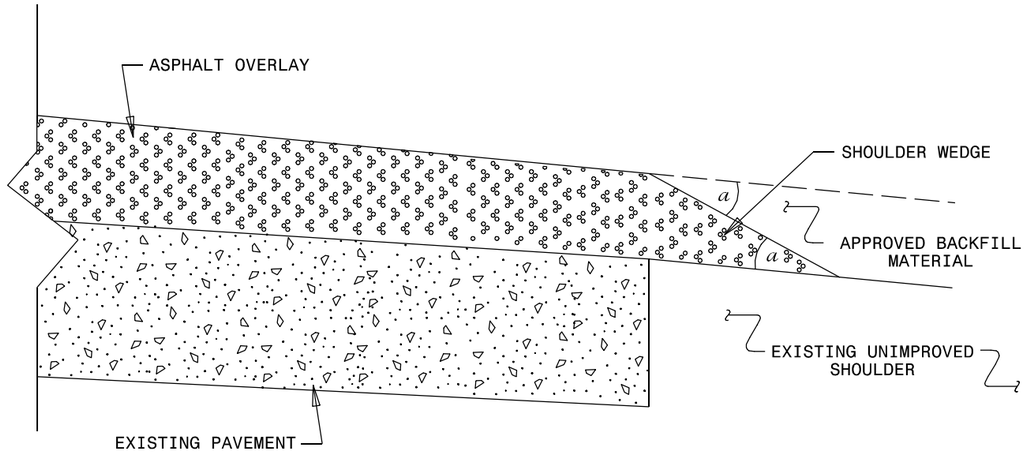
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	4 OF 17



NOTES:
1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.

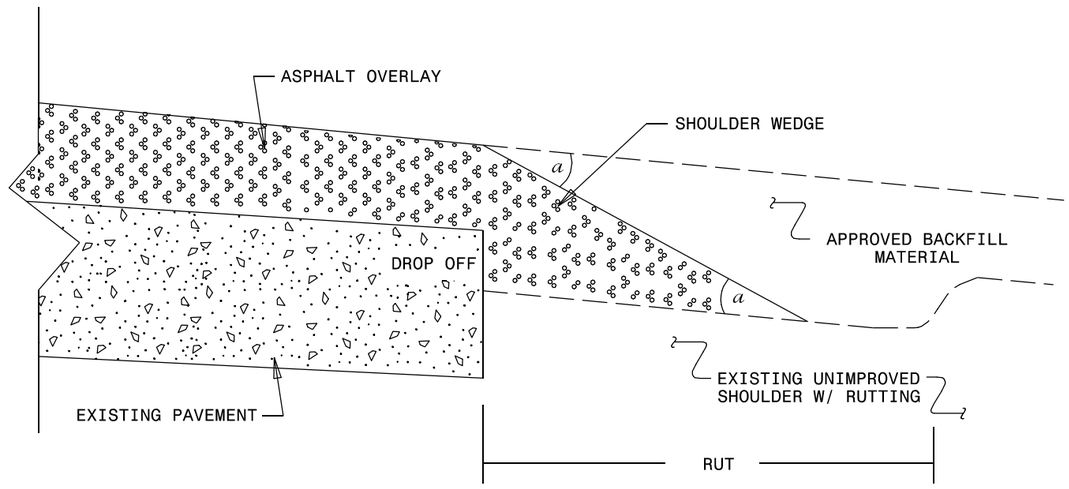
SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL

(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SHOULDER WEDGE DETAILS

ORIGINAL BY: T.SPELL DATE: 7-19-11
MODIFIED BY: _____ DATE: 10/16/12
CHECKED BY: _____ DATE: _____
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn

$$$$$$SYSTIME$$$$$

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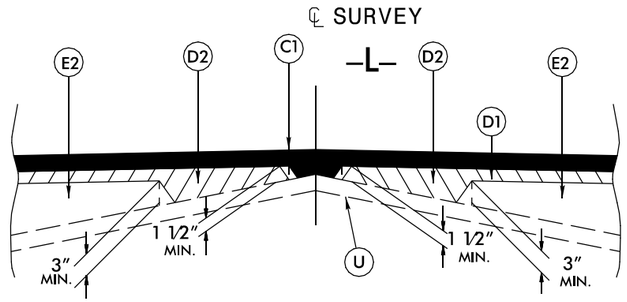
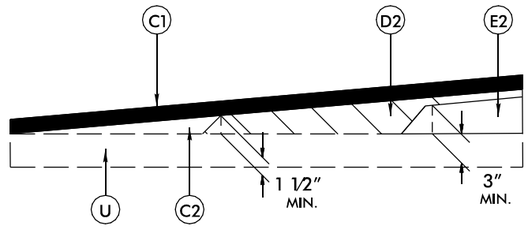
PROJECT REFERENCE NO.	SHEET NO.
NC 226 – NC 226A – 59	5 OF 17
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



–L– Detail Showing Method of Wedging

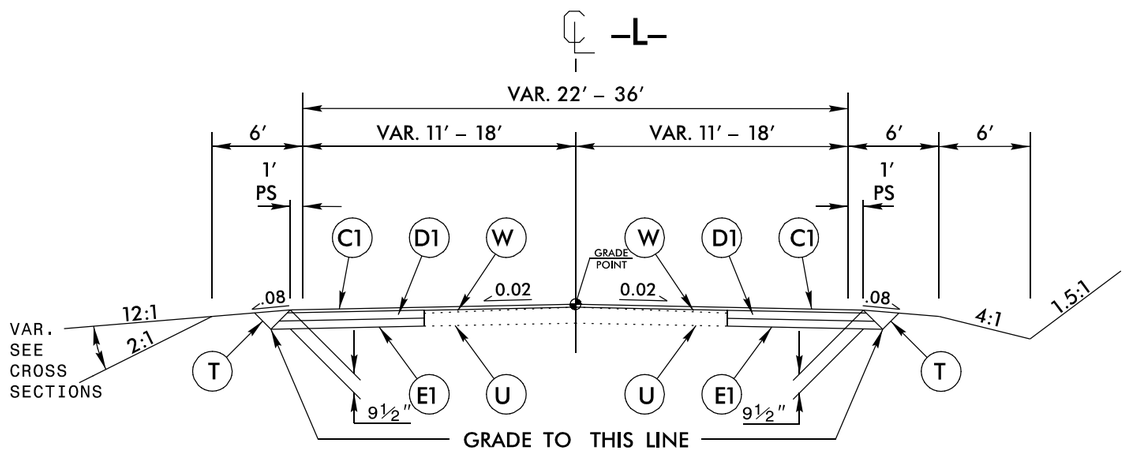


–L– Detail Showing Method of Wedging

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1.5" IN DEPTH OR GREAQTER THAN 2.0" IN DEPTH.
D1	PROP. APPROX. 4.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
T	EARTH MATERIAL.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL).
U	EXIST. PAVEMENT

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

–L– Sta. 9+50 to Sta. 15+95
–L– Sta. 17+90 to Sta. 20+93

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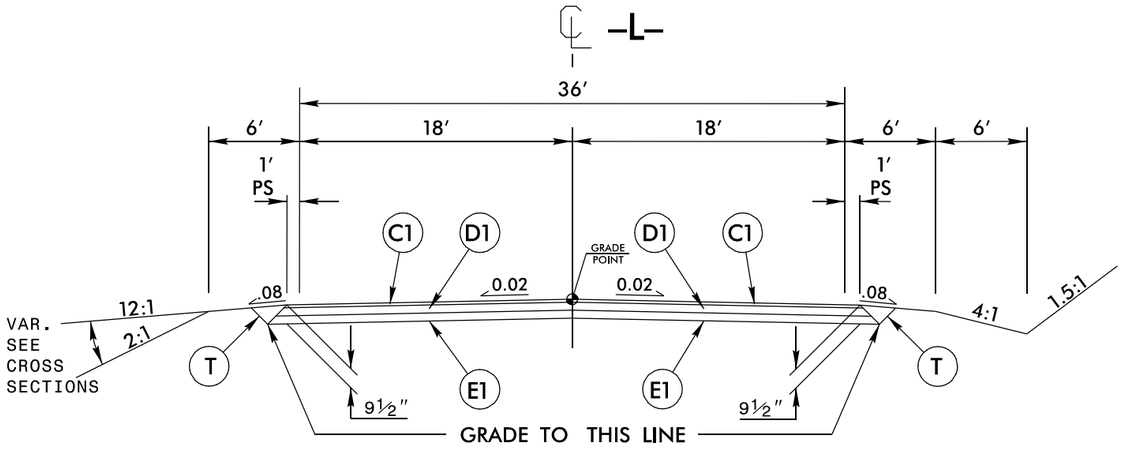
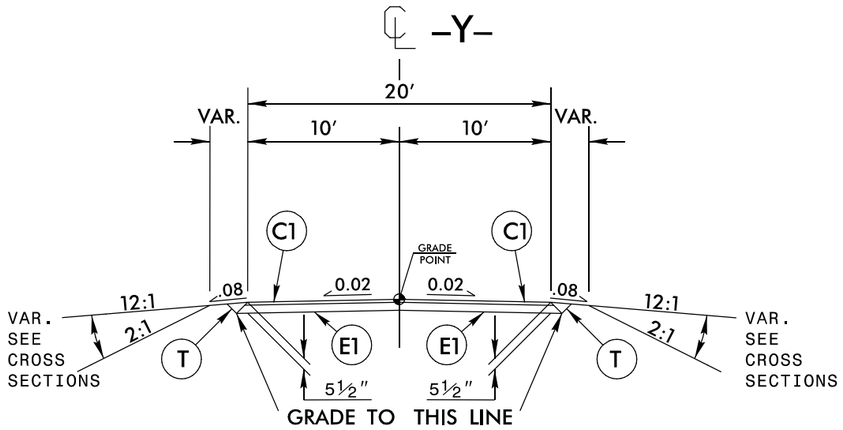
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
NC 226 – NC 226A – 59	6 OF 17
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



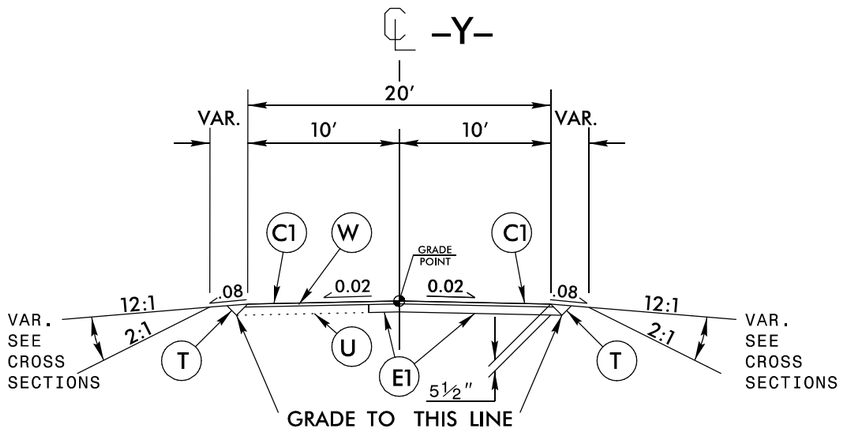
TYPICAL SECTION NO. 2

–L– Sta. 15+95 to Sta. 17+90



TYPICAL SECTION NO. 3

–Y– Sta. 0+00 to Sta. 0+30



TYPICAL SECTION NO. 4

–Y– Sta. 0+30 to Sta. 1+75

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1″ DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1.5″ IN DEPTH OR GREAQTER THAN 2.0″ IN DEPTH.
D1	PROP. APPROX. 4.0″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1″ DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1.5″ IN DEPTH OR GREATER THAN 4″ IN DEPTH.
E1	PROP. APPROX. 4″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1″ DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3″ IN DEPTH OR GREATER THAN 5½″ IN DEPTH.
T	EARTH MATERIAL.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL).
U	EXIST. PAVEMENT

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

$$$$$$$SYSTIME$$$$$
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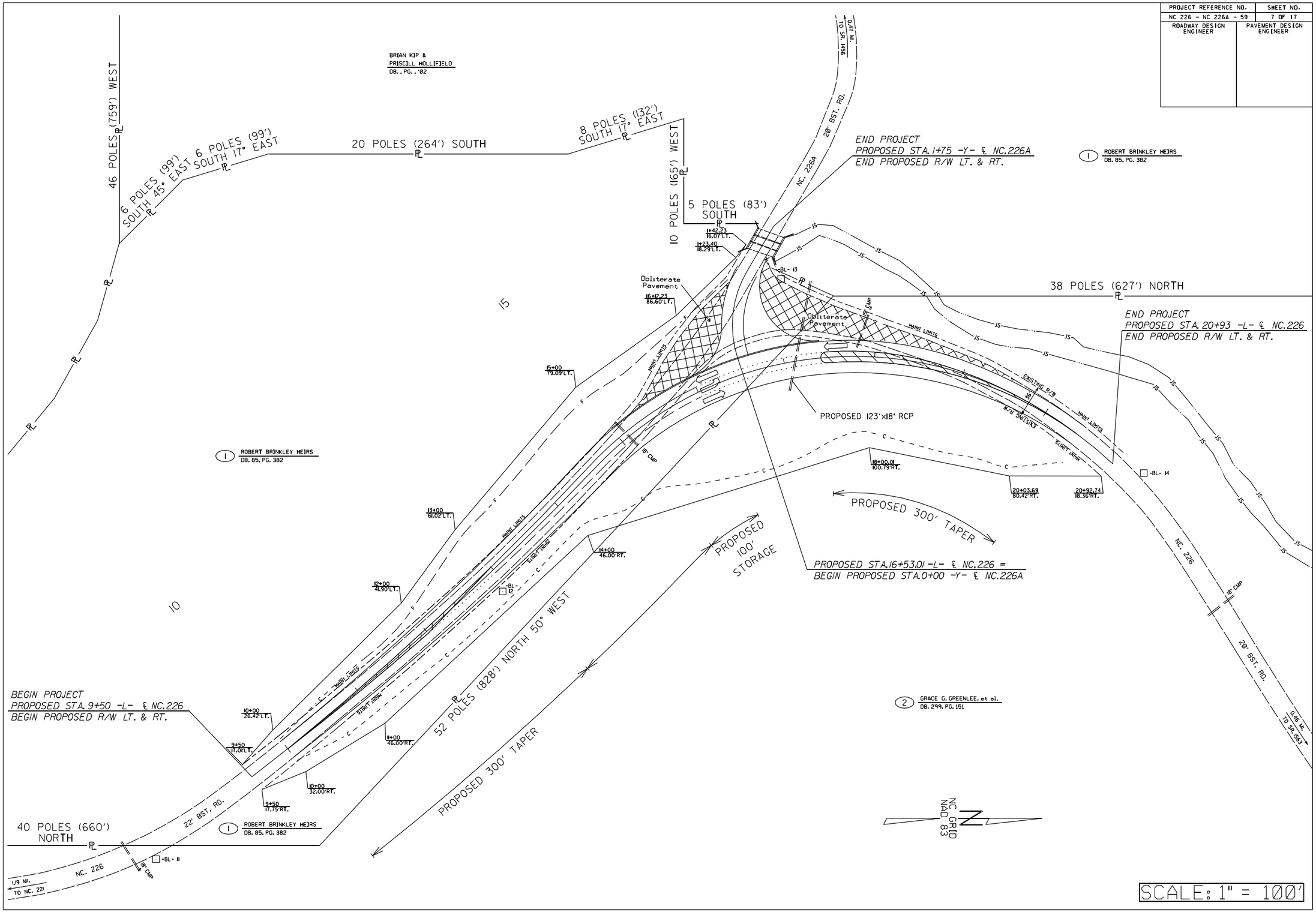
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	7 OF 17
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER



SCALE: 1" = 100'

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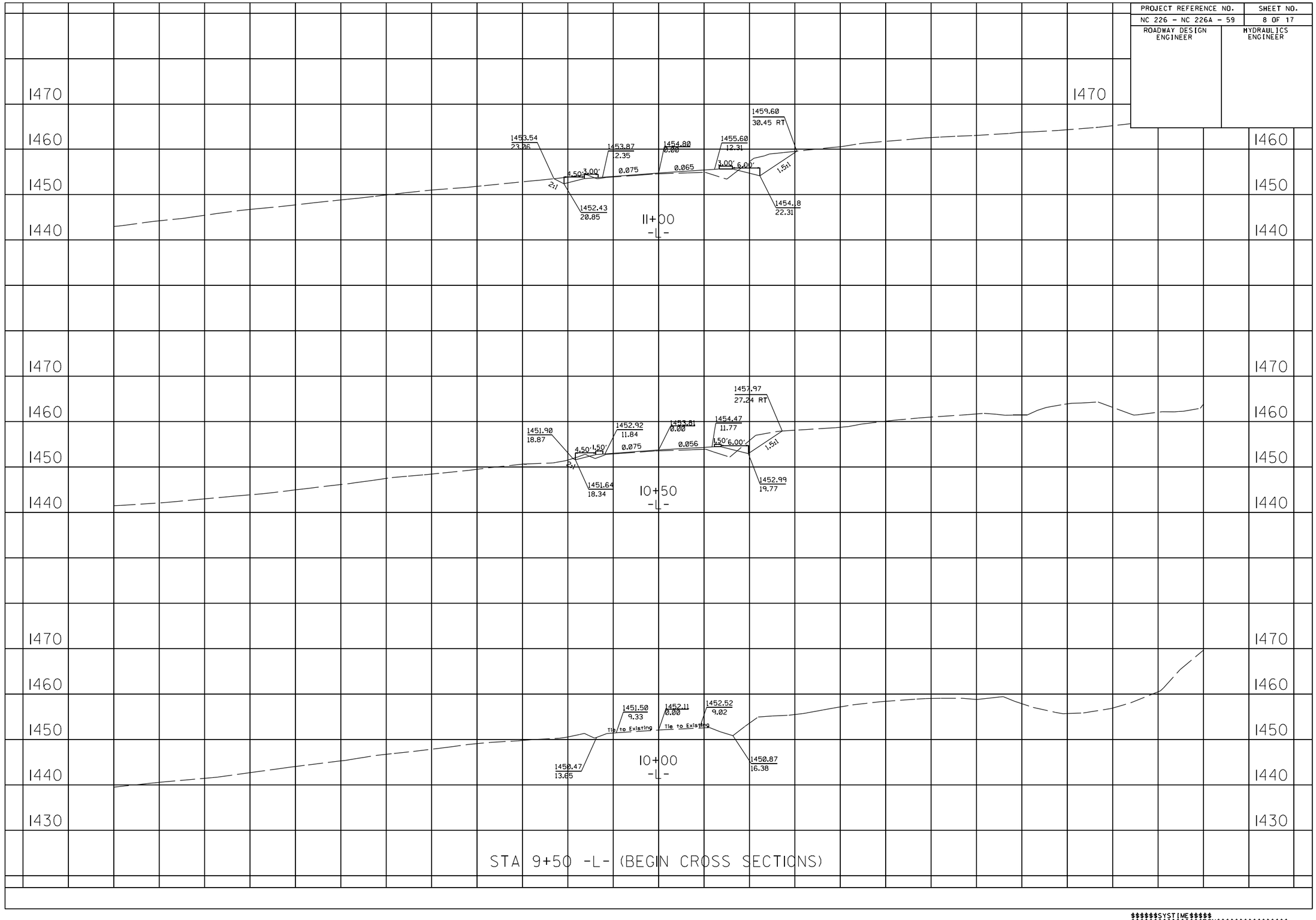
PROJECT REFERENCE NO.	SHEET NO.
NC 226 – NC 226A – 59	8 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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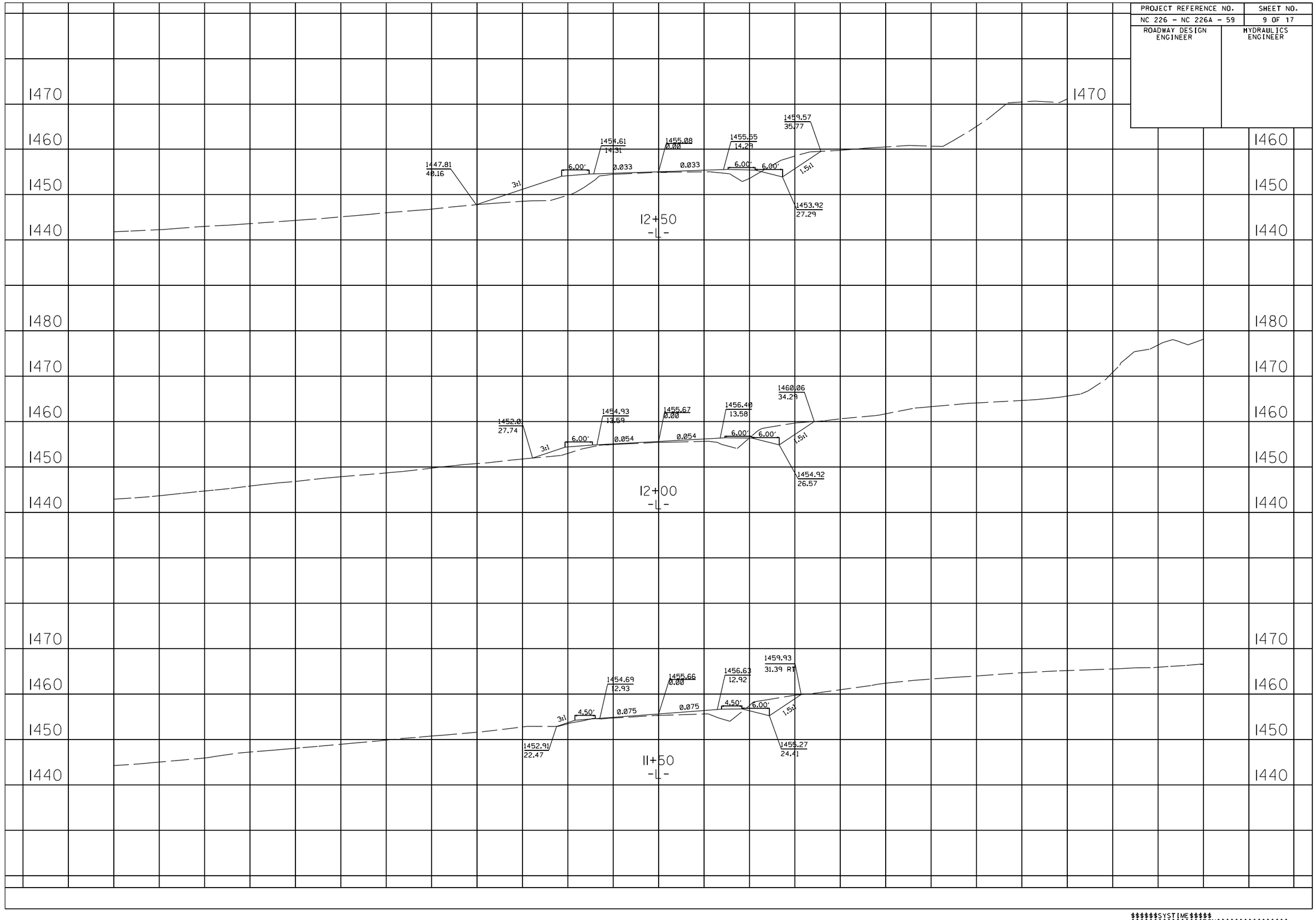
PROJECT REFERENCE NO.	SHEET NO.
NC 226 – NC 226A – 59	9 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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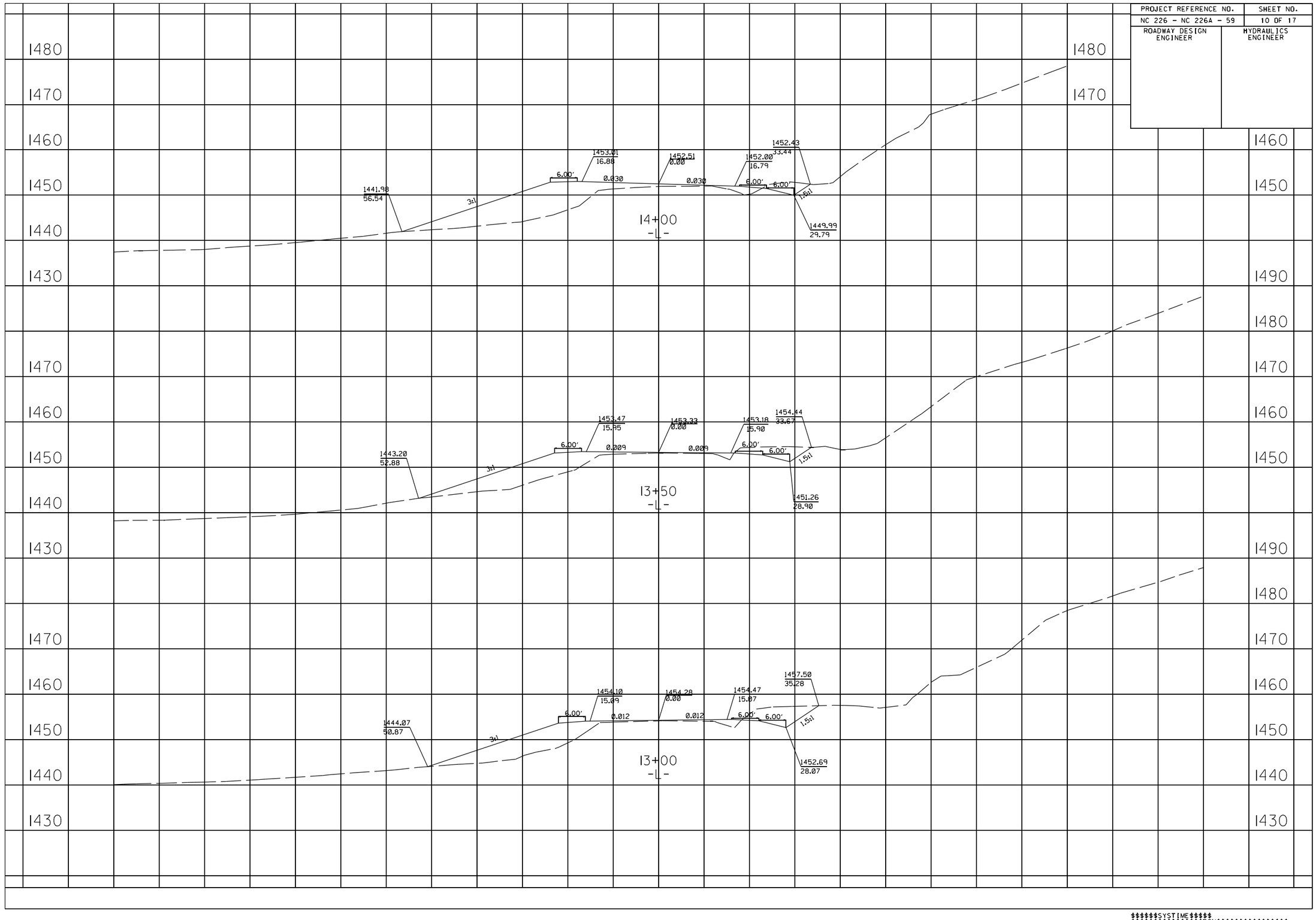
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	10 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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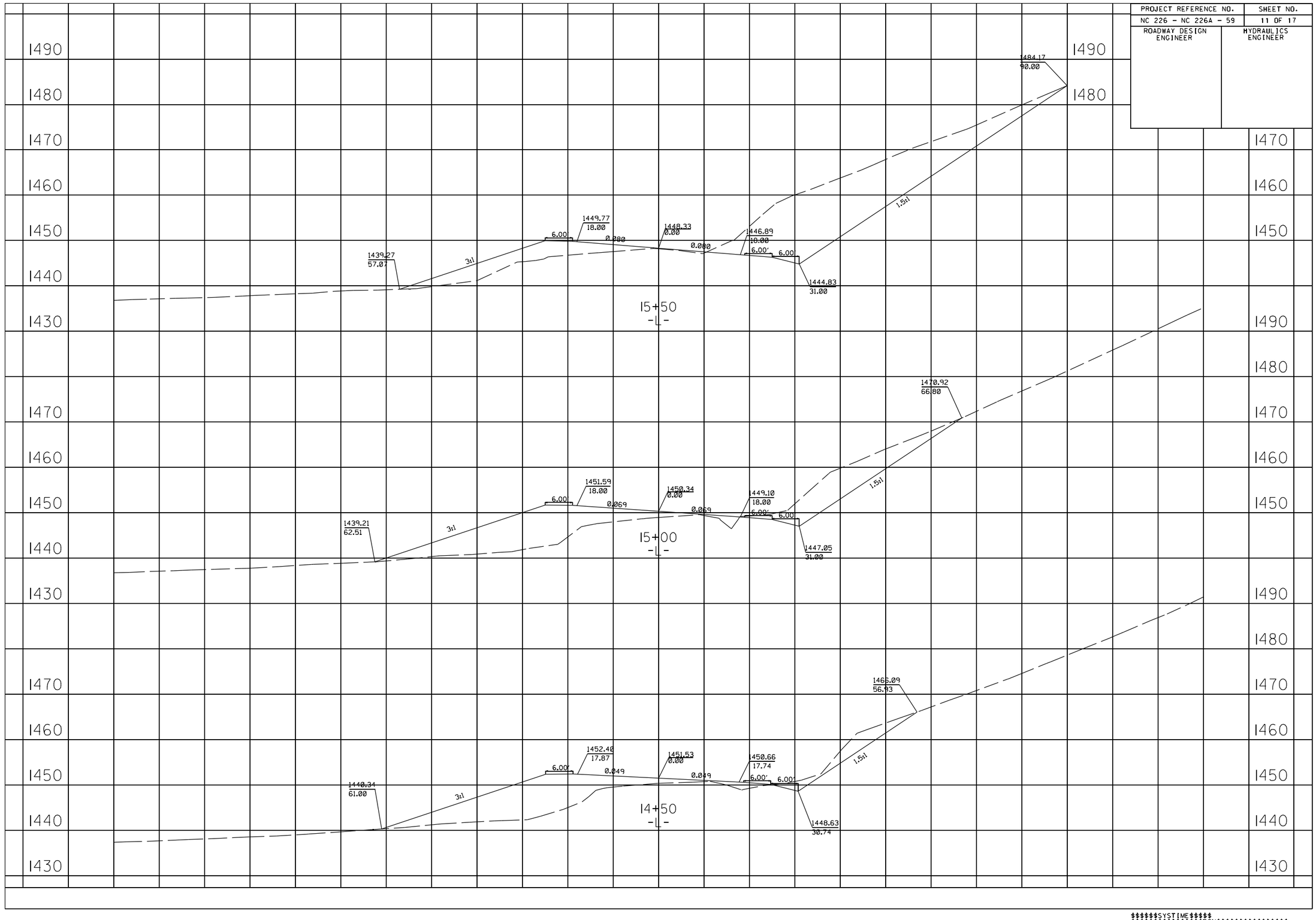
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	11 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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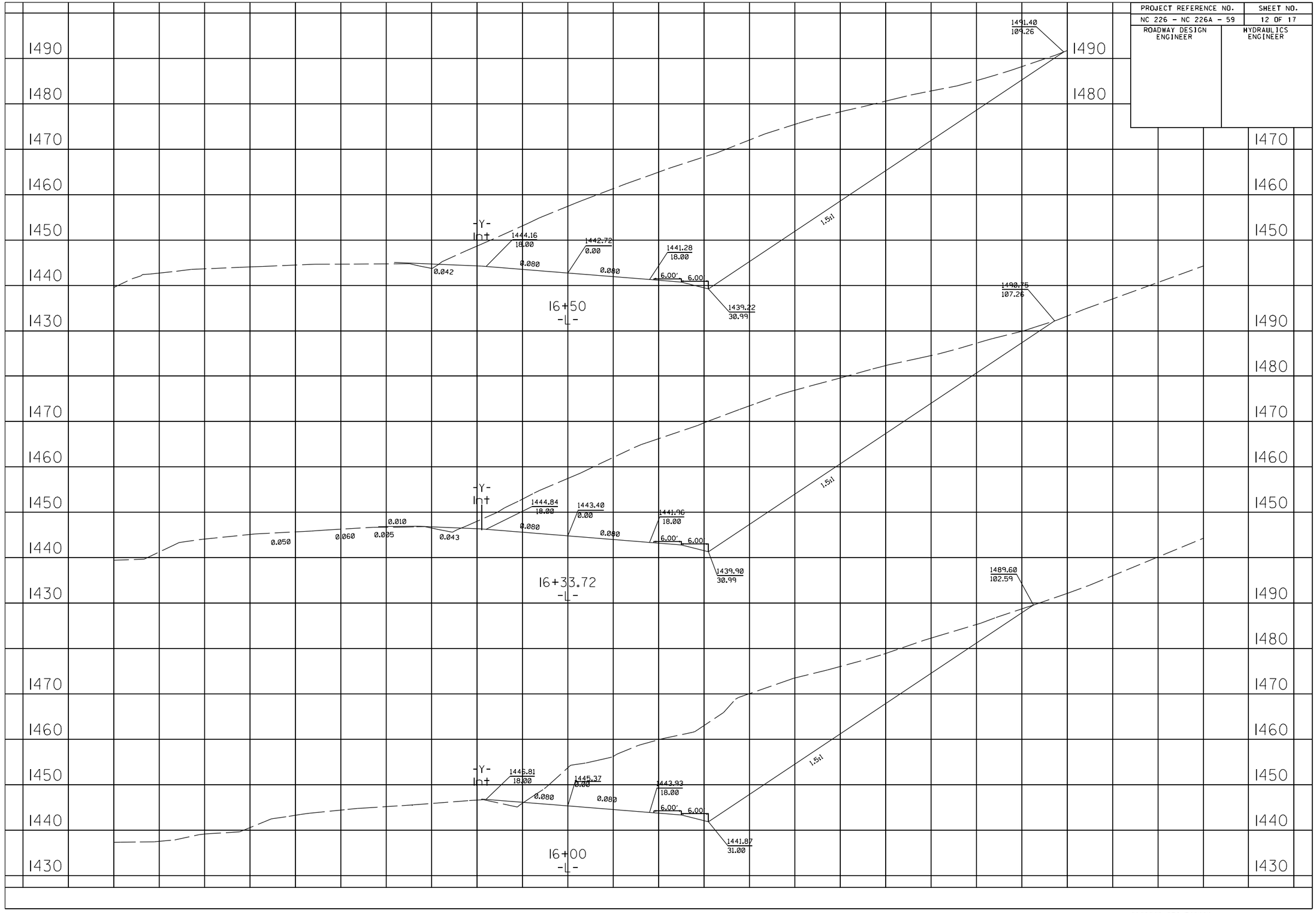
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	12 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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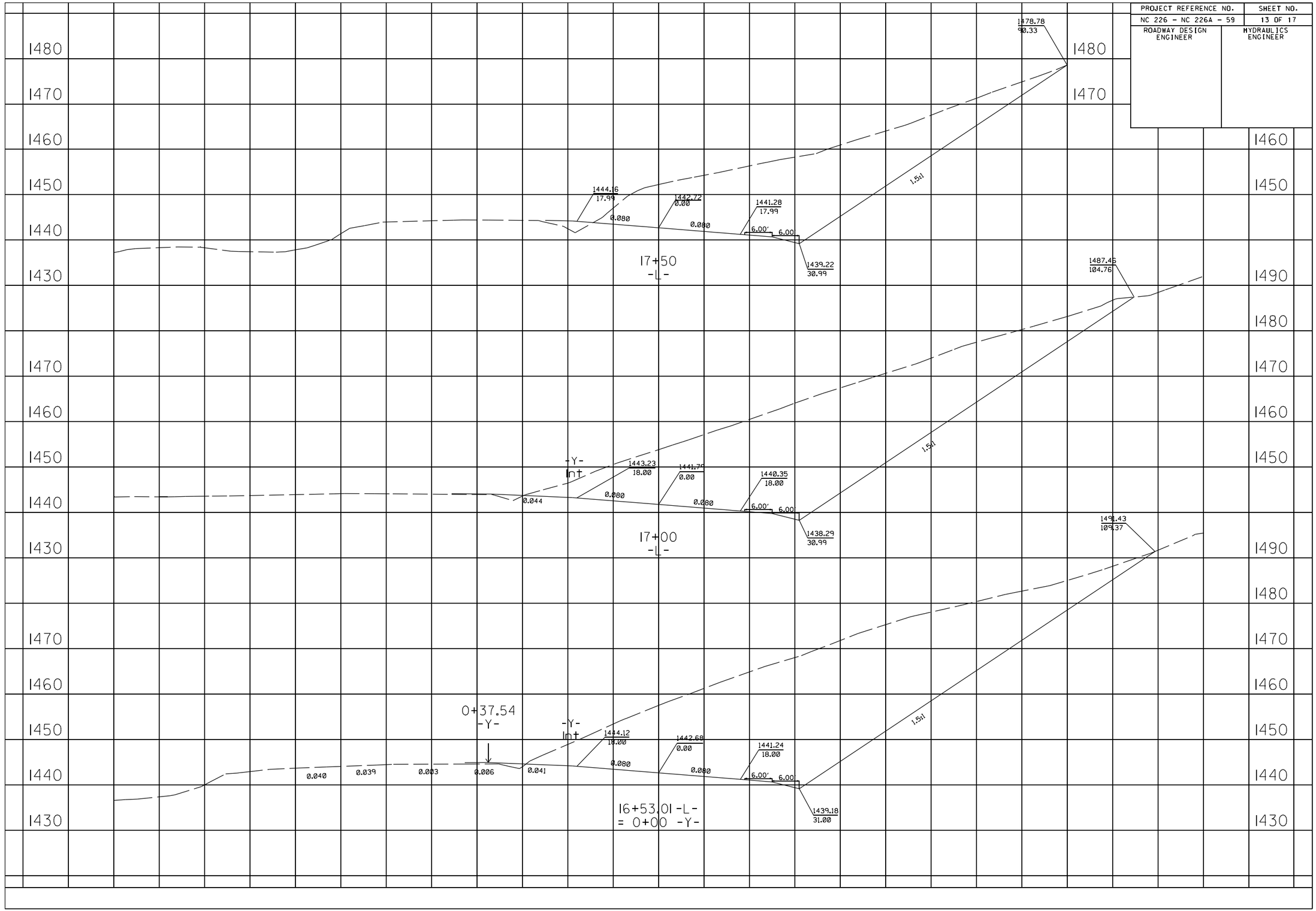
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	13 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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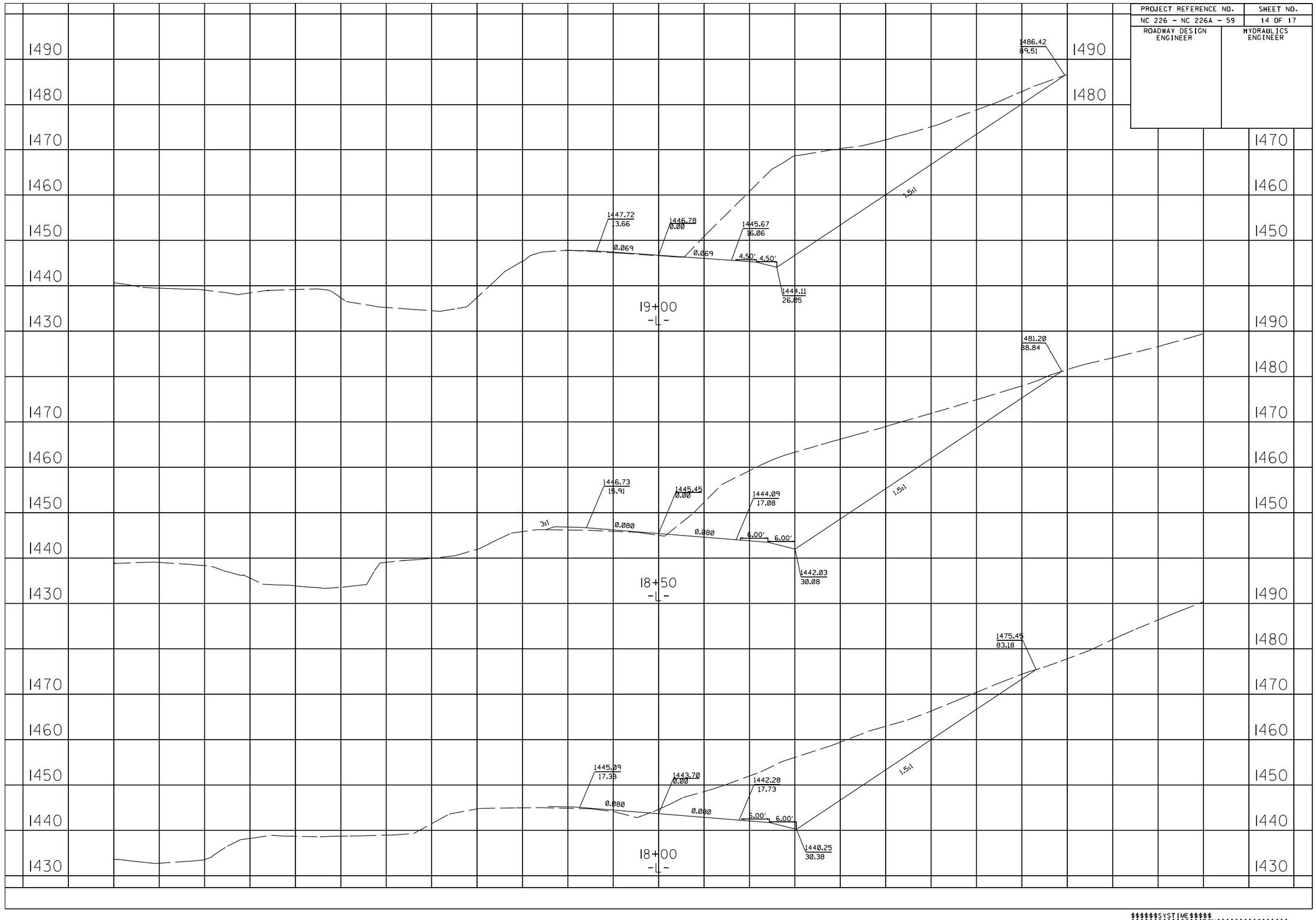
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	14 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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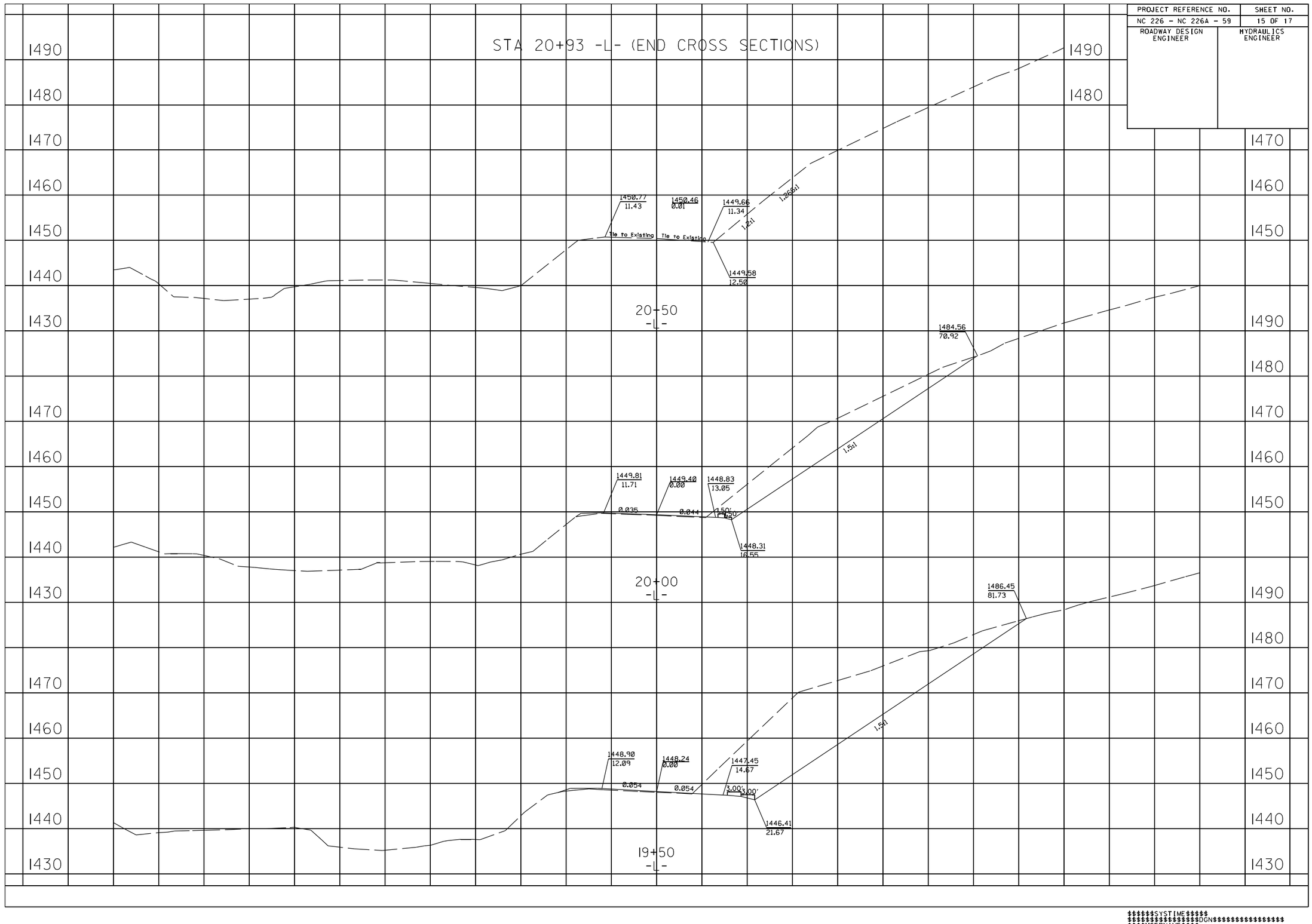
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	15 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STA 20+93 -L- (END CROSS SECTIONS)



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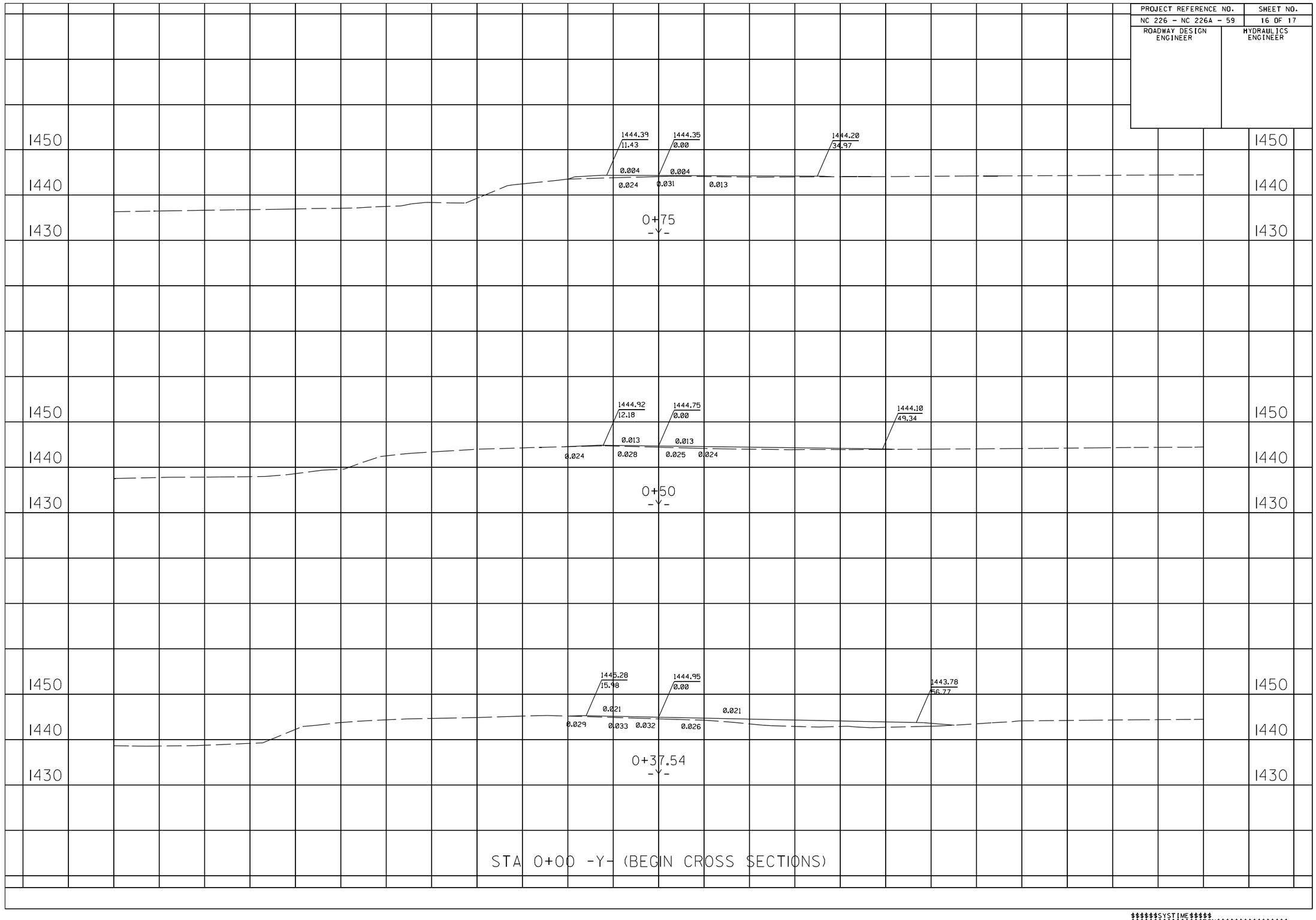
PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	16 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



$$$$$$SYSTIME$$$$$
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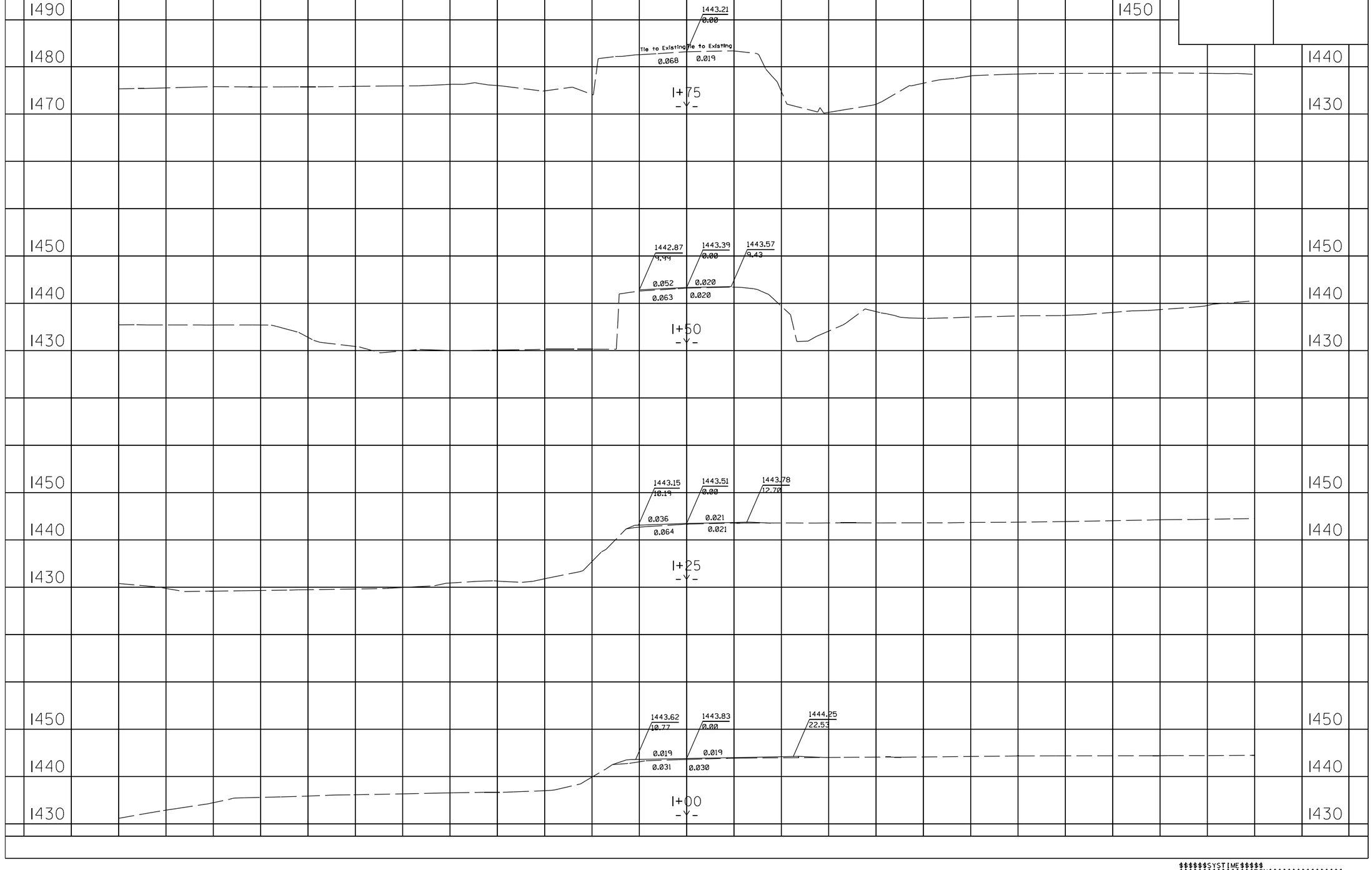
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
NC 226 - NC 226A - 59	17 OF 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STA 1+75 -Y- (END CROSS SECTIONS)



$$$$$$SYSTIME$$$$$
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