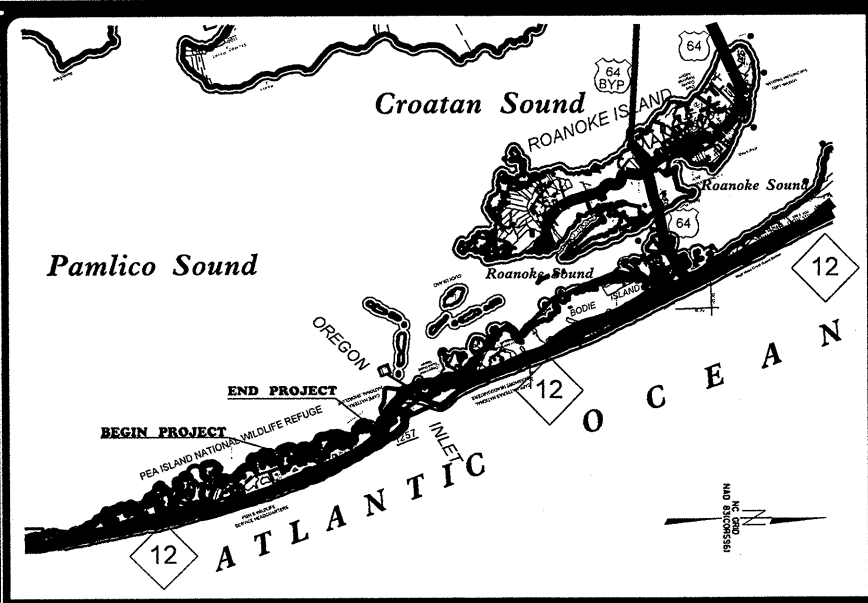


CONTRACT: C202643 TIP PROJECT: R-5310



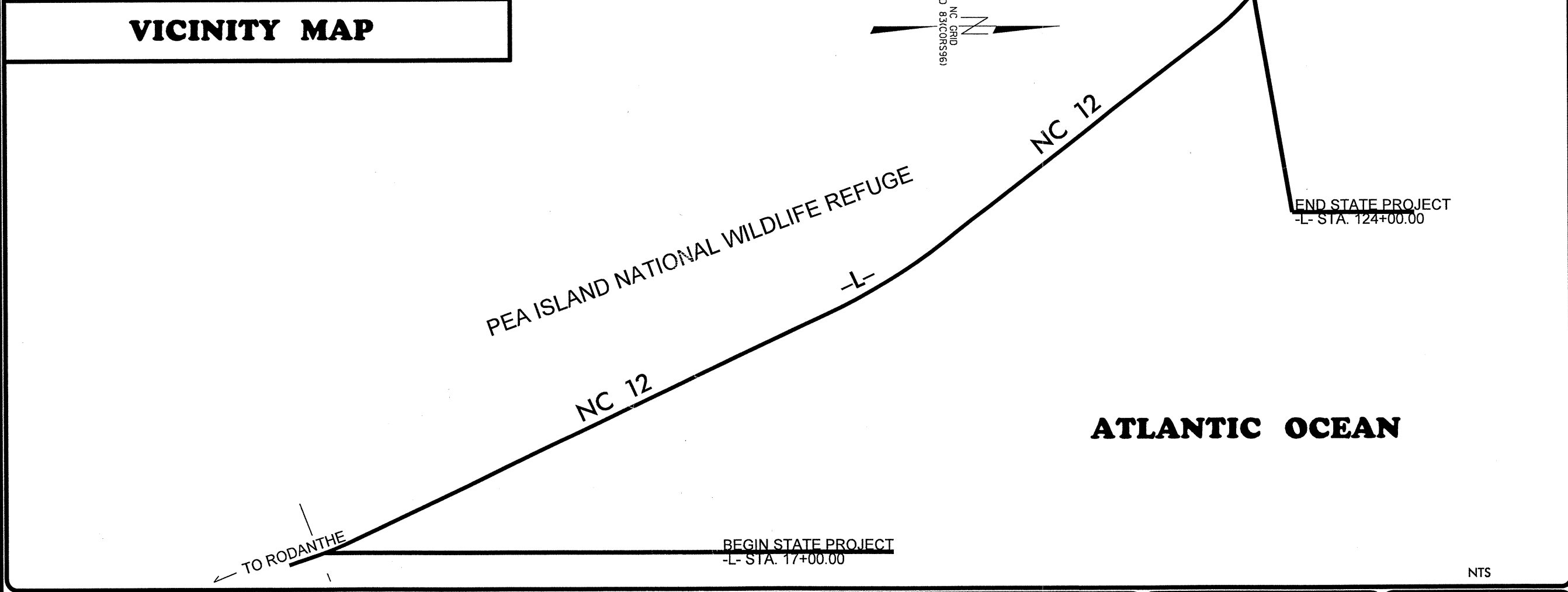
VICINITY MAP

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
DARE COUNTY

LOCATION: NC 12 FROM 2 MILES SOUTH OF SR 1257 TO SR 1257

TYPE OF WORK: GRADING AND RESURFACING

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | R-5310 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 45436.1.1 | | PE | |
| 45436.3.1 | | CONST. | |



NTS

GRAPHIC SCALES

NTS

PROJECT LENGTH

TOTAL LENGTH STATE PROJECT R-5310 = 2 MILES

Prepared in the Office of
DIVISION OF HIGHWAYS
 113 Airport Dr., Edenton NC, 27932

2006 STANDARD SPECIFICATIONS

LETTING DATE:
 DECEMBER 21, 2010

BARRY HOBBS, PE
 DIVISION PROJECT MANAGER

CHRIS SLACHTA
 DIVISION PROPOSALS ENGINEER

S. P. FENWICK, PLS
 DIVISION DESIGN
 CONSTRUCT ENGINEER

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA

\$\$\$SYTIME\$\$\$
 \$\$\$CDGN\$\$\$
 \$\$\$NAME\$\$\$
 \$\$\$USERNAME\$\$\$

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| SHEET NUMBER | SHEET |
|----------------|---|
| 1 | TITLE SHEET |
| 1-A | INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS |
| 1-B | CONVENTIONAL SYMBOLS |
| 2 | PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS |
| 3 | SUMMARY OF QUANTITIES |
| 3A | EARTHWORK SUMMARY |
| 4 THRU 5 | PROFILE SHEETS |
| EC-1 THRU EC-5 | EROSION CONTROL PLANS |
| X-0 | CROSS-SECTION SUMMARY |
| X-1 THRU X-14 | CROSS-SECTIONS |

GENERAL NOTES: 2006 SPECIFICATIONS
 EFFECTIVE: 07-18-06
 REVISED: 07-30-08

GRADE LINE: GRADING AND SURFACING:
 THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

EFF. 07-18-06
 REV. 01-02-07

2006 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

| STD.NO. | TITLE |
|--|---|
| DIVISION 2 - EARTHWORK | |
| 225.04 | Method of Obtaining Superelevation - Two Lane Pavement |
| DIVISION 5 - SUBGRADE, BASES AND SHOULDERS | |
| 560.01 | Method of Shoulder Construction - High Side of Superelevated Curve - Method I |
| DIVISION 11 - WORK ZONE TRAFFIC CONTROL | |
| 1101.01 | Work Zone Advance Warning Signs |
| 1101.02 | Temporary Lane Closures |
| 1101.03 | Temporary Road Closures |
| 1101.04 | Temporary Shoulder Closures |
| 1101.05 | Work Zone Vehicle Accesses |
| 1101.11 | Traffic Control Design Tables |
| 1110.01 | Stationary Work Zone Signs - Mounting Height & Lateral Clearance |
| 1110.02 | Portable Work Zone Signs - Mounting Height & Lateral Clearance |
| 1115.01 | Flashing Arrow Panels |
| 1130.01 | Drum |
| 1135.01 | Cones |
| 1145.01 | Barricades - Type III |
| 1150.01 | Flagging Devices |
| 1160.01 | Temporary Crash Cushion - Reflective End Treatment |
| 1165.01 | Truck Mounted Impact Attenuator - Delineation |
| 1180.01 | Skinny Drum |
| DIVISION 12 - PAVEMENT MARKINGS, MARKERS AND DELINEATION | |
| 1205.01 | Pavement Markings - Line Types and Offsets |
| 1205.02 | Pavement Markings - Divided and Undivided Roadways |

05/08/09

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for boundaries and property: State Line, County Line, Township Line, City Line, Reservation Line, Property Line, Existing Iron Pin, Property Corner, Property Monument, Parcel/Sequence Number, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for buildings and other culture: Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for hydrology: Stream or Body of Water, Hydro, Pool or Reservoir, Jurisdictional Stream, Buffer Zone 1, Buffer Zone 2, Flow Arrow, Disappearing Stream, Spring, Wetland, Proposed Lateral, Tail, Head Ditch, False Sump.

RAILROADS:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY:

Table listing symbols for right of way: Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Drainage / Utility Easement, Proposed Permanent Utility Easement, Proposed Temporary Utility Easement, Proposed Permanent Easement with Iron Pin and Cap Marker.

ROADS AND RELATED FEATURES:

Table listing symbols for roads and related features: Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Wheel Chair Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Equality Symbol, Pavement Removal.

VEGETATION:

Table listing symbols for vegetation: Single Tree, Single Shrub, Hedge, Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for existing structures: MAJOR: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall; MINOR: Head and End Wall, Pipe Culvert, Footbridge, Drainage Box: Catch Basin, DI or JB, Paved Ditch Gutter, Storm Sewer Manhole, Storm Sewer.

UTILITIES:

Table listing symbols for utilities: POWER: Existing Power Pole, Proposed Power Pole, Existing Joint Use Pole, Proposed Joint Use Pole, Power Manhole, Power Line Tower, Power Transformer, U/G Power Cable Hand Hole, H-Frame Pole, Recorded U/G Power Line, Designated U/G Power Line (S.U.E.*); TELEPHONE: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, Recorded U/G Telephone Cable, Designated U/G Telephone Cable (S.U.E.*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.*).

WATER:

Table listing symbols for water: Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.*), Above Ground Water Line.

TV:

Table listing symbols for TV: TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.*).

GAS:

Table listing symbols for gas: Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.*), Above Ground Gas Line.

SANITARY SEWER:

Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.*).

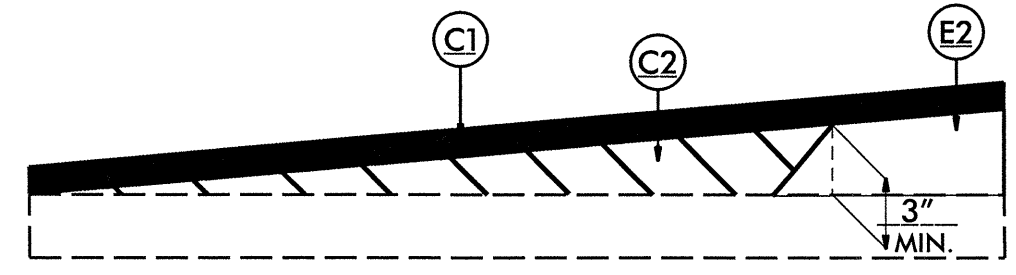
MISCELLANEOUS:

Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, A/G Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information.

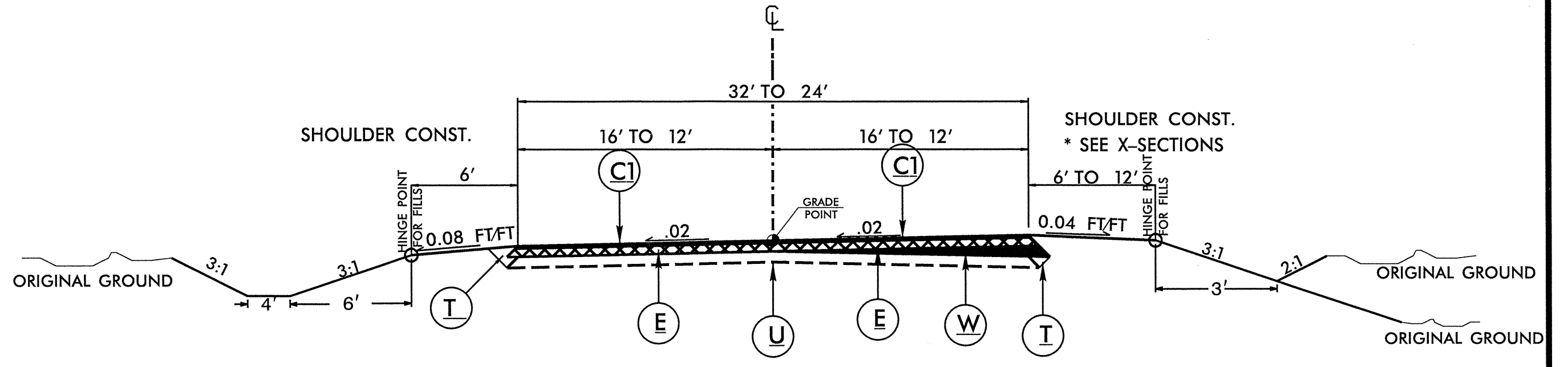
PAVEMENT SCHEDULE

| | |
|----|--|
| C1 | PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, TO BE PLACED IN TWO 1½" LAYERS, EACH 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 TO EXCEED 2" IN DEPTH. |
| E | PROP. APPROX. 9" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, TO BE PLACED IN TWO 4½" LAYERS, EACH AT AN AVERAGE RATE OF 513 LBS. PER SQ. YD. |
| E2 | PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH. |
| T | EARTH MATERIAL. |
| U | EXISTING PAVEMENT. |
| W | VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL) |

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



Wedging Detail For Resurfacing



TYPICAL SECTION NO. 1

USE WITH:

-L- STA. 17+00.00 TO -L- STA. 124+00.00

6/27/99
 SYSTEMS
 DESIGN
 CONSULTANTS
 INC.
 1000
 W. 10th St.
 Suite 100
 Denver, CO 80202
 Phone: 303.733.8800
 Fax: 303.733.8801
 www.systemsdesign.com

| | |
|-------------|-----------|
| PROJECT NO. | SHEET NO. |
| R-5310 | 3 |

SUMMARY OF QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP | FINAL SURFACE TESTING REQUIRED | LENGTH MI | WIDTH FT | MOBILIZATION LS | BORROW CY | UNCLASSIFIED EXCAVATION CY | SHOULDER CONSTRUCTION SMI | BASE COURSE, B25.0B TONS | SURFACE COURSE, S9.5B TONS | PG 64-22 PLANT MIX TONS | TEMPORARY SILT FENCE LF | MATTING FOR EROSION CONTROL SY | WATTLE LF | POLYACRYLAMIDE (PAM) LB | SEEDING & MULCHING ACR |
|----------------------------------|--------|--------|-------|-----------------------|-----|--------------------------------|-----------|----------|-----------------|-------------|----------------------------|---------------------------|--------------------------|----------------------------|-------------------------|-------------------------|--------------------------------|------------|-------------------------|------------------------|
| R-5310 | Dare | 1 | NC12 | Grading & Resurfacing | 1 | NO | 2 | 24 | 1 | 4000 | 4000 | 4 | 16,719 | 5,258 | 1,034 | 11,000 | 320 | 100 | 10 | 3.0 |
| TOTAL FOR PROJ NO. R-5310 | | | | | | | 2 | | 1 | 4000 | 4000 | 4 | 16,719 | 5,258 | 1,034 | 11,000 | 320 | 100 | 10 | 3.0 |
| GRAND TOTAL | | | | | | | 2 | | 1 | 4000 | 4000 | 4 | 16,719 | 5,258 | 1,034 | 11,000 | 320 | 100 | 10 | 3.0 |

THERMOPLASTIC AND PAINT QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP | FINAL SURFACE TESTING REQUIRED | LENGTH MI | WIDTH FT | 4589000000-N | 4685000000-E | 4686000000-E | 4810000000-E | |
|----------------------------------|--------|--------|-------|-----------------------|-----|--------------------------------|-----------|----------|--|---------------------------|-----------------------------|-------------------|--------------------|
| | | | | | | | | | GENERIC TRAFFIC CONTROL ITEM (LUMP SUM) LS | 4" X 90 M WHITE THERMO LF | 4" X 120 M YELLOW THERMO LF | 4" WHITE PAINT LF | 4" YELLOW PAINT LF |
| R-5310 | Dare | 1 | NC12 | Grading & Resurfacing | 1 | NO | 2 | 24 | 1.00 | 21,520 | 13,200 | 21,520 | 13,200 |
| TOTAL FOR PROJ NO. R-5310 | | | | | | | 2 | | 1 | 21,520 | 13,200 | 21,520 | 13,200 |
| GRAND TOTAL | | | | | | | 2 | | 1 | 21,520 | 13,200 | 34,720 | 34,720 |

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK
IN CUBIC YARDS

SUMMARY OF EARTHWORK

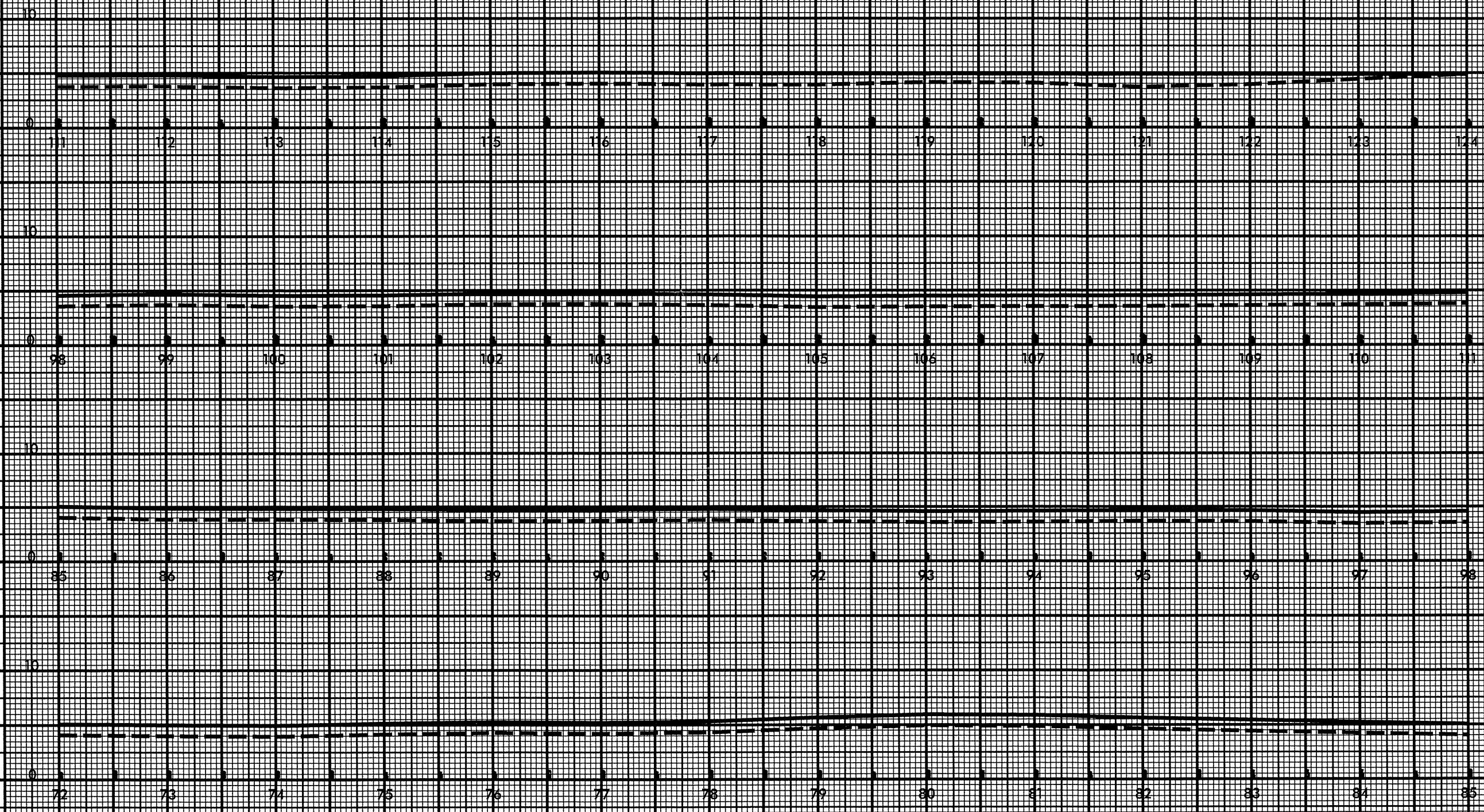
| STATION | STATION | UNCL. EXCAV. | EMBANK. | BORROW | WASTE |
|-----------------|-----------|--------------|---------|--------|-------|
| 17+00.00 | 47+00.00 | 1355 | 1807 | 452 | |
| 47+00.00 | 77+00.00 | 665 | 2158 | 1493 | |
| 77+00.00 | 107+00.00 | 915 | 2636 | 1721 | |
| 107+00.00 | 123+00.00 | 991 | 1020 | 29 | |
| | | | | | |
| | | | | | |
| PROJECT TOTALS: | | 3926 | 7621 | 3695 | |
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| | | | | | |
| GRAND TOTALS: | | 3926 | 7621 | 3695 | |
| | | | | | |
| SAY: | | 4000 | | 4000 | |

5/28/99

 CUSTOMER'S USE ONLY

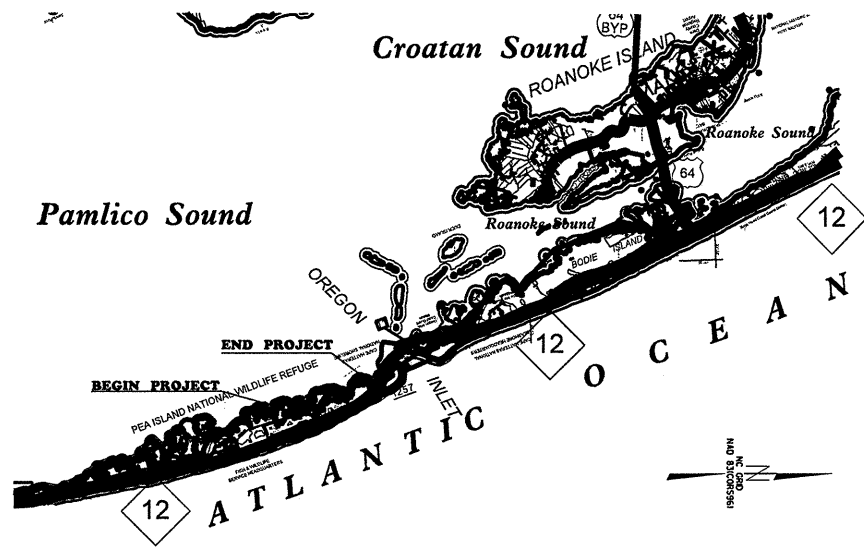
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CENTERLINE PROFILE



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CHECKED BY: [illegible]
SCALE: [illegible]

TIP PROJECT: R-5310

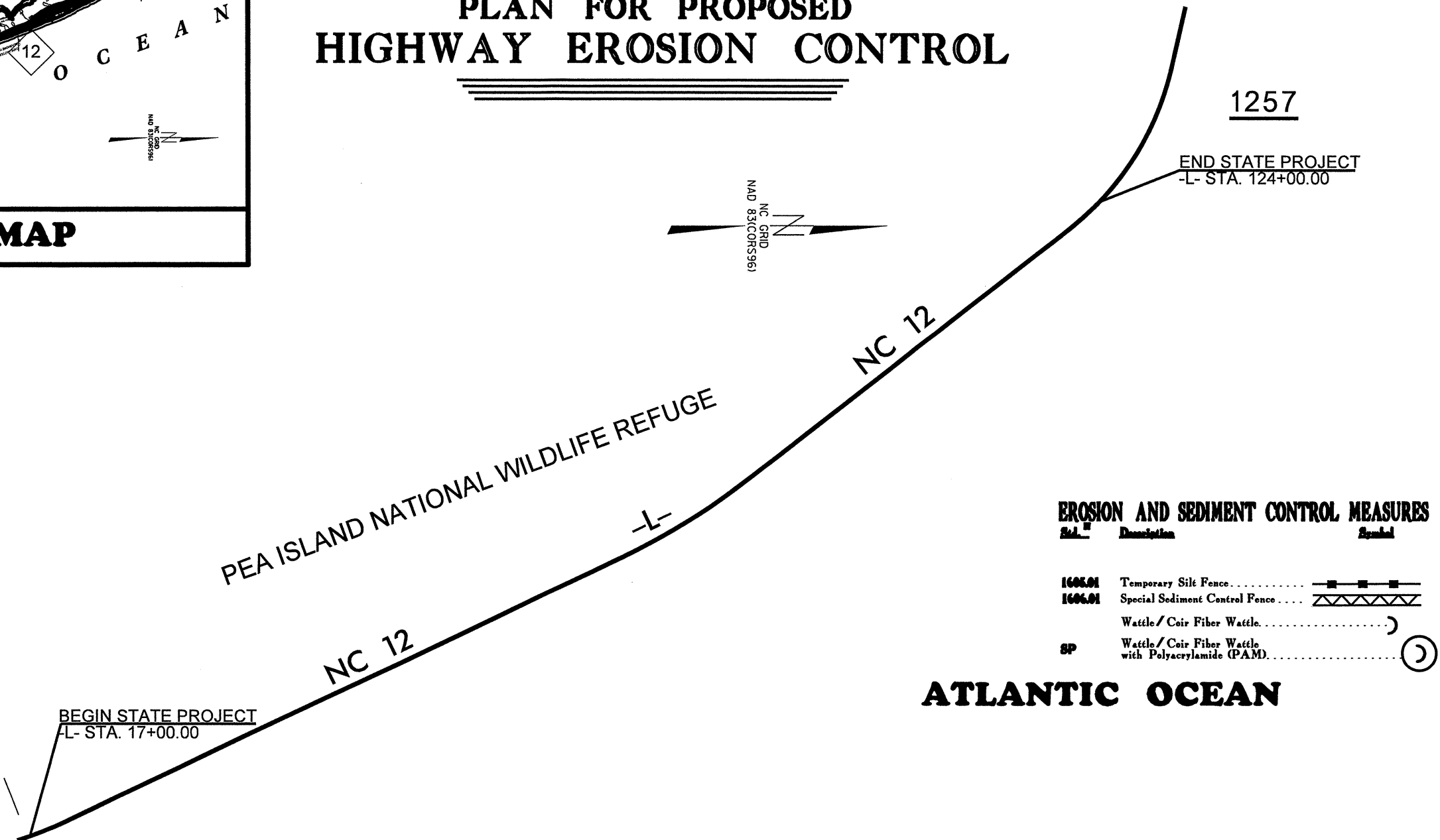


VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

| | | | |
|-----------------|-----------------------------|-------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | R-5310 | EC-1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 45436.1.1 | | PE | |
| 45436.3.1 | | CONST. | |
| | | | |



EROSION AND SEDIMENT CONTROL MEASURES

| St. No. | Description | Symbol |
|---------|--|------------|
| 1605.01 | Temporary Silt Fence | —■—■—■— |
| 1606.01 | Special Sediment Control Fence | —▲▲▲▲— |
| | Wattle / Coir Fiber Wattle | —))))) |
| SP | Wattle / Coir Fiber Wattle with Polyacrylamide (PAM) | —))))) |

ATLANTIC OCEAN

GRAPHIC SCALE

NTS

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

**LEVEL III-A: DESIGNER OF EROSION
AND SEDIMENT CONTROL PLANS**

SCOTT FENWICK

CERTIFICATION NUMBER: 267

Prepared in the Office of:
DIVISION OF HIGHWAYS
113 Airport Dr.
Edenton, NC 27932
2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"— Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

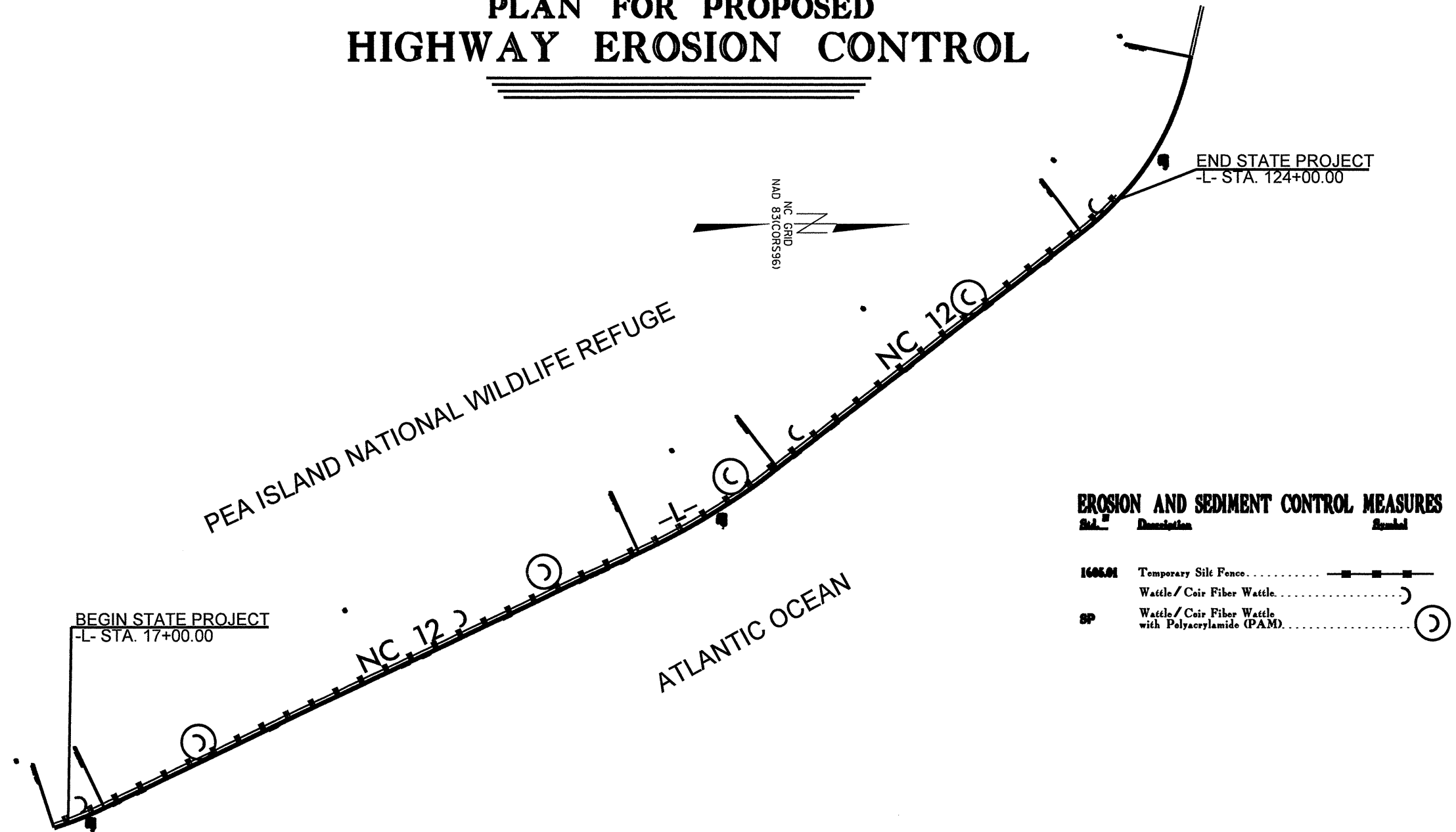
| | |
|--|--|
| 1604.01 Railroad Erosion Control Detail | 1630.06 Special Stilling Basin |
| 1605.01 Temporary Silt Fence | 1632.01 Rock Inlet Sediment Trap Type A |
| 1606.01 Special Sediment Control Fence | 1632.02 Rock Inlet Sediment Trap Type B |
| 1607.01 Gravel Construction Entrance | 1632.03 Rock Inlet Sediment Trap Type C |
| 1622.01 Temporary Berms and Slope Drains | 1633.01 Temporary Rock Silt Check Type A |
| 1630.01 Riser Basin | 1634.01 Temporary Rock Sediment Dam Type A |
| 1630.03 Temporary Silt Ditch | 1634.02 Temporary Rock Sediment Dam Type B |
| 1630.04 Stilling Basin | 1635.01 Rock Pipe Inlet Sediment Trap Type A |
| 1630.05 Temporary Diversion | 1635.02 Rock Pipe Inlet Sediment Trap Type B |

TIP PROJECT: R-5310

| | | | |
|-----------------|-----------------------------|-------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | R-5310 | EC-2 | |
| STATE PROJ. NO. | P.A. PROJ. NO. | DESCRIPTION | |
| 45436.1.1 | | PF | |
| 45436.3.1 | | CONST. | |
| | | | |
| | | | |

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL



EROSION AND SEDIMENT CONTROL MEASURES

| Sta. # | Description | Symbol |
|---------|--|---------|
| 1605.01 | Temporary Silt Fence | —■—■—■— |
| | Wattle / Coir Fiber Wattle | —○—○—○— |
| SP | Wattle / Coir Fiber Wattle with Polyacrylamide (PAM) | —○—○—○— |

GRAPHIC SCALE

NTS

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

**LEVEL III-A: DESIGNER OF EROSION
AND SEDIMENT CONTROL PLANS**

SCOTT FENWICK

CERTIFICATION NUMBER: 267

Prepared in the Office of:
DIVISION OF HIGHWAYS
 113 Airport Dr.
 Edenton, NC 27932
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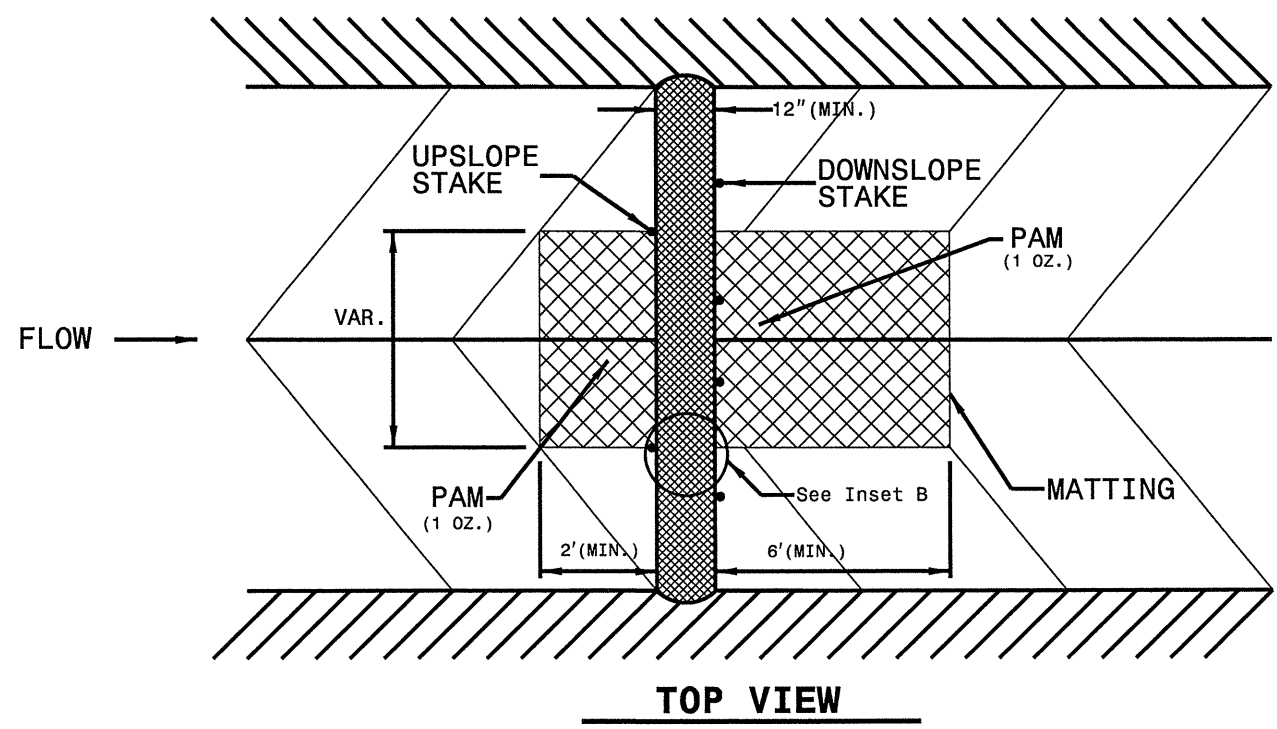
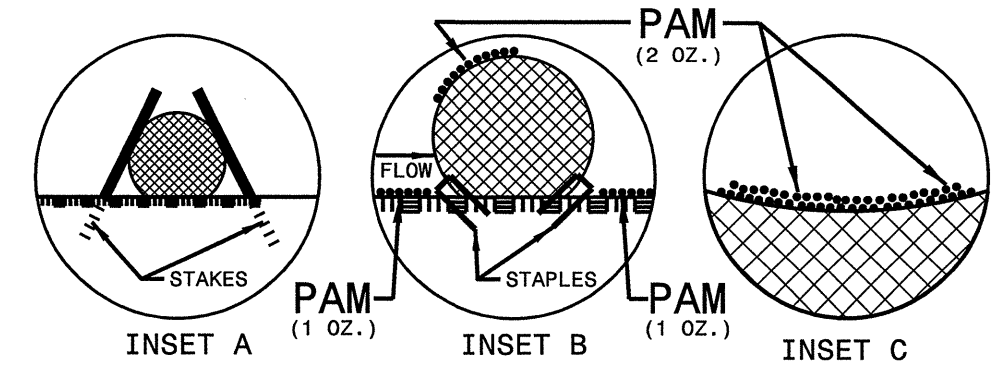
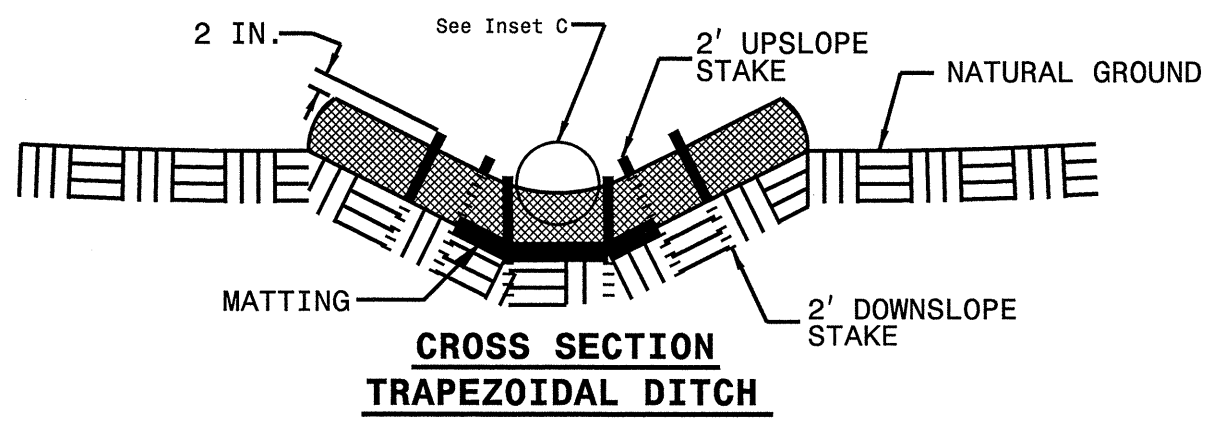
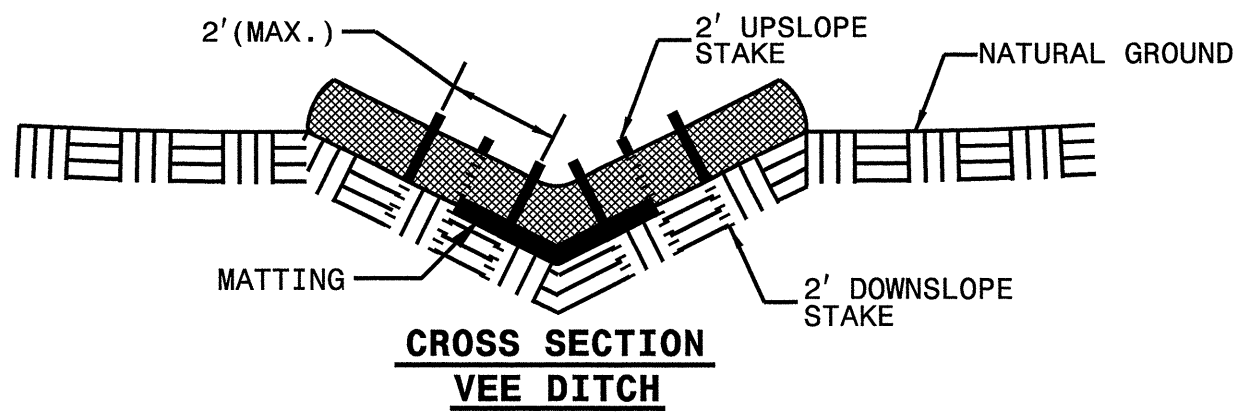
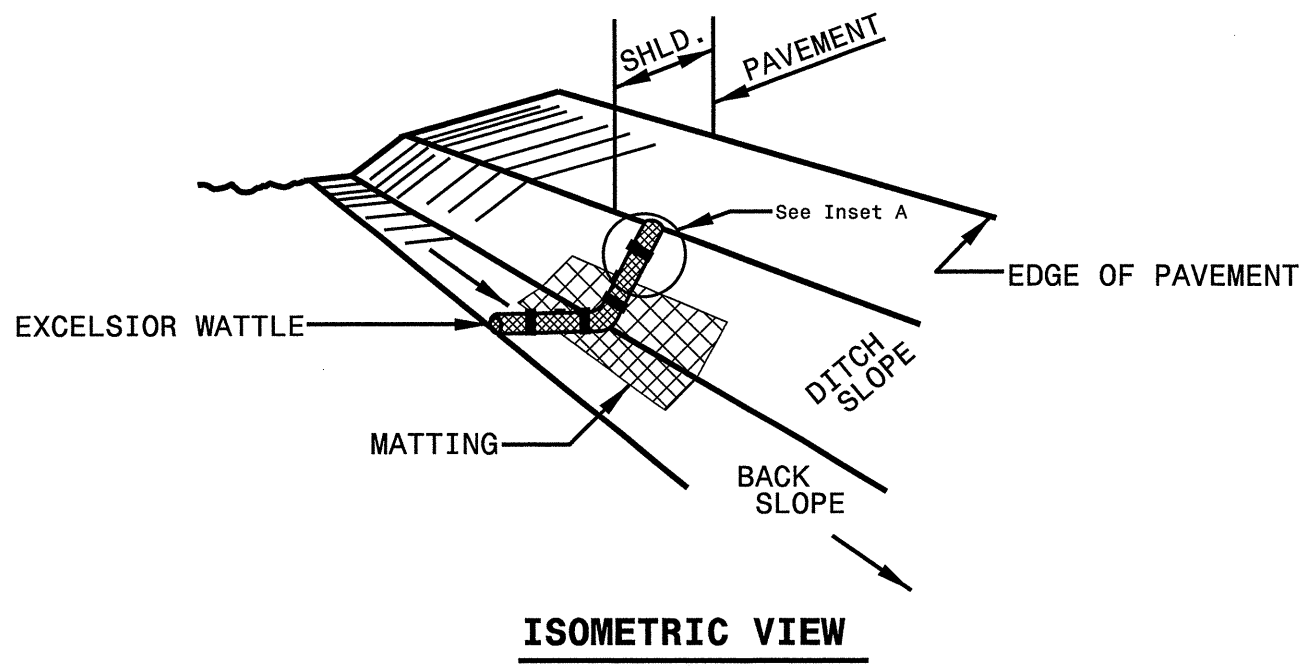
| | |
|--|--|
| 1604.01 Railroad Erosion Control Detail | 1630.06 Special Stilling Basin |
| 1605.01 Temporary Silt Fence | 1632.01 Rock Inlet Sediment Trap Type A |
| 1606.01 Special Sediment Control Fence | 1632.02 Rock Inlet Sediment Trap Type B |
| 1607.01 Gravel Construction Entrance | 1632.03 Rock Inlet Sediment Trap Type C |
| 1622.01 Temporary Berms and Slope Drains | 1633.01 Temporary Rock Silt Check Type A |
| 1630.01 Riser Basin | 1634.01 Temporary Rock Sediment Dam Type A |
| 1630.03 Temporary Silt Ditch | 1634.02 Temporary Rock Sediment Dam Type B |
| 1630.04 Stilling Basin | 1635.01 Rock Pipe Inlet Sediment Trap Type A |
| 1630.05 Temporary Diversion | 1635.02 Rock Pipe Inlet Sediment Trap Type B |

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. R-5310 | SHEET NO. EC-3 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

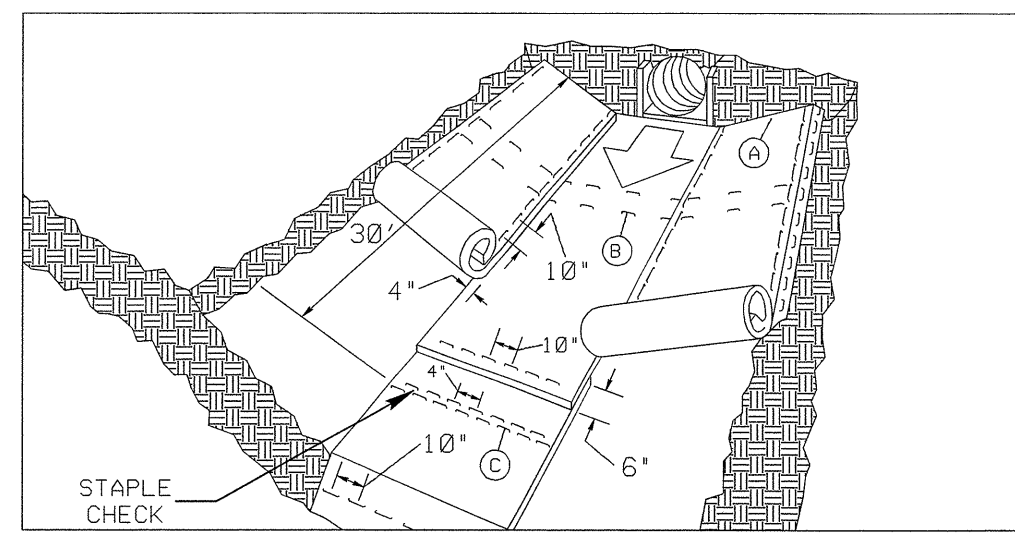
NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.
- PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
- INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



| | |
|--|--------------------------|
| PROJECT REFERENCE NO. R-5310 | SHEET NO. EC-4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

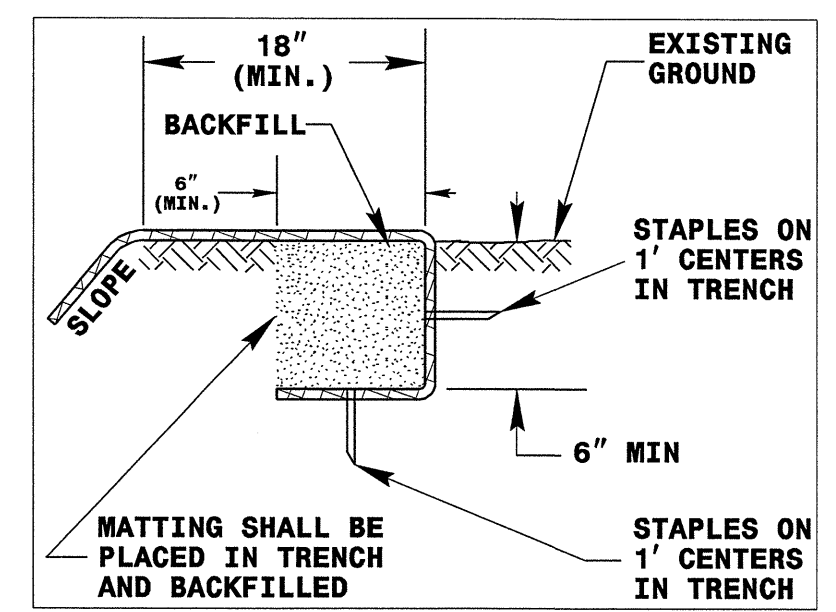
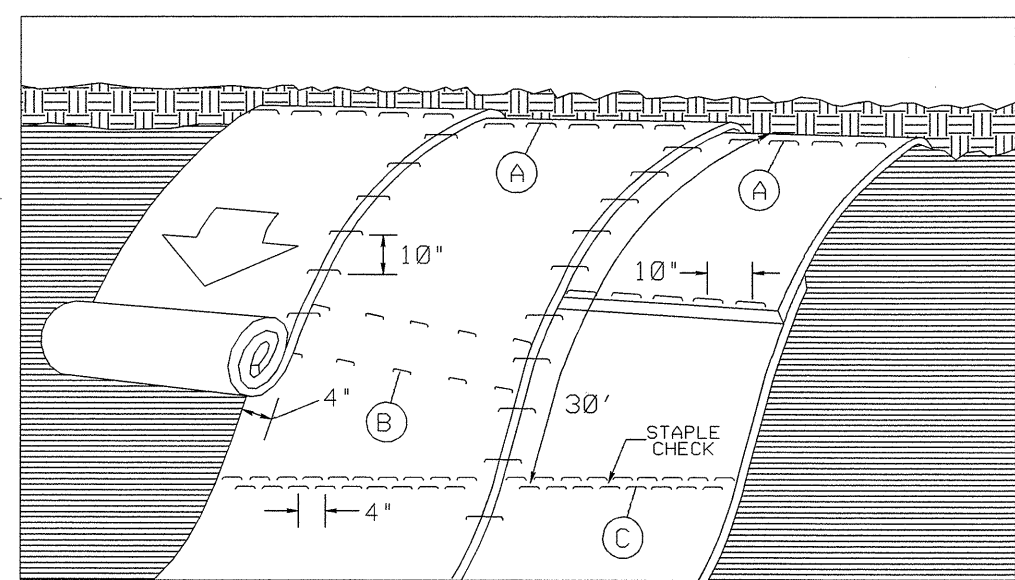


DIAGRAM (A)



MATTING ON SLOPES

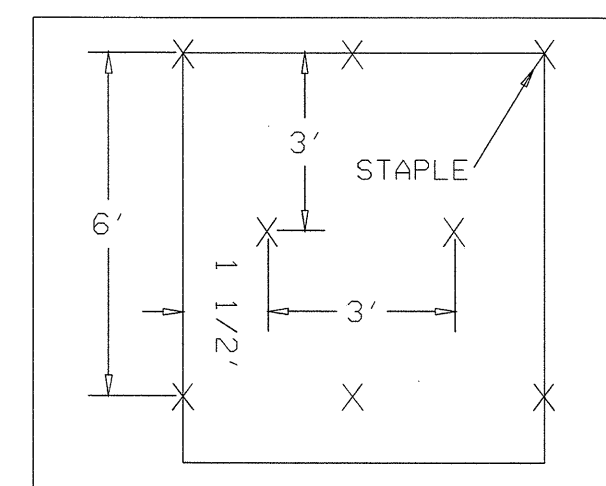


DIAGRAM (B)

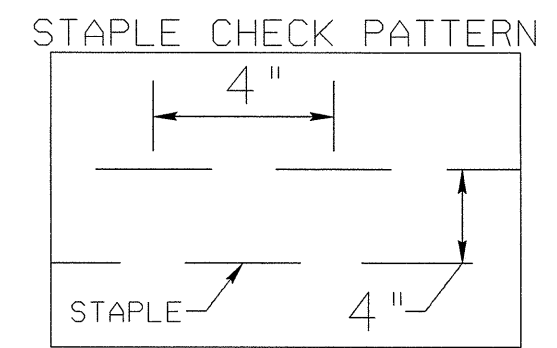


DIAGRAM (C)

NOTES:
 THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.
 STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

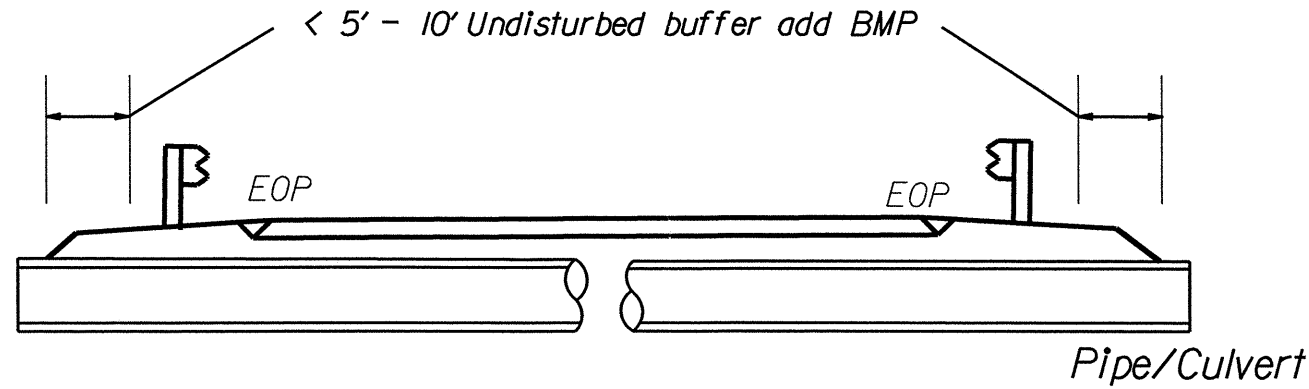
NOT TO SCALE

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| R-5310 | EC-5 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

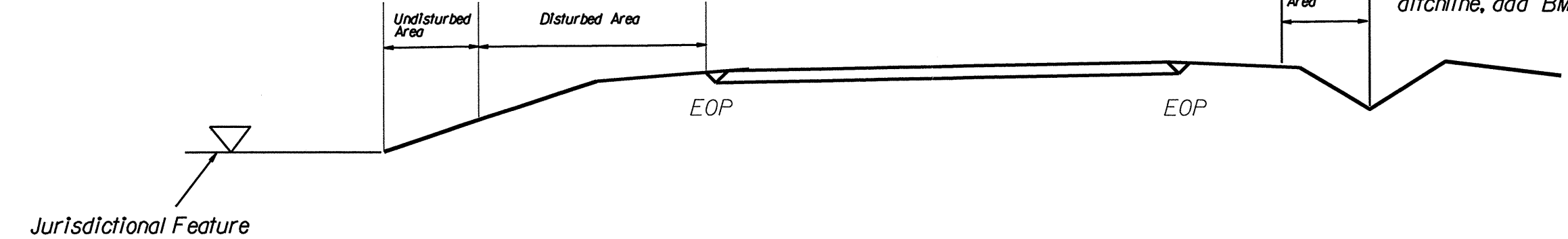
EROSION CONTROL DETAIL

BMP Options: Wattle or Silt Fence

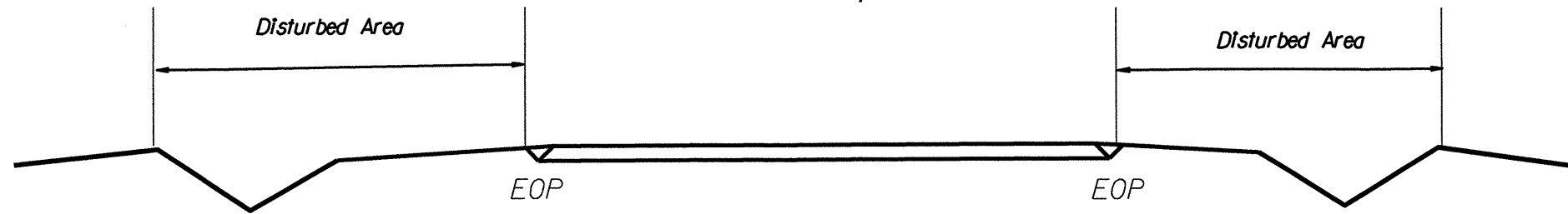


< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP

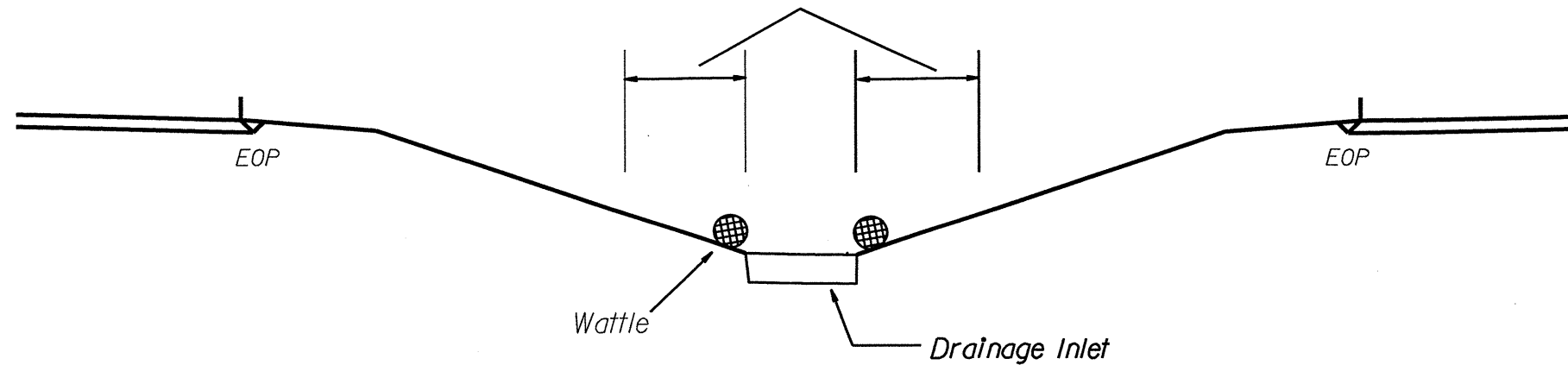
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Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

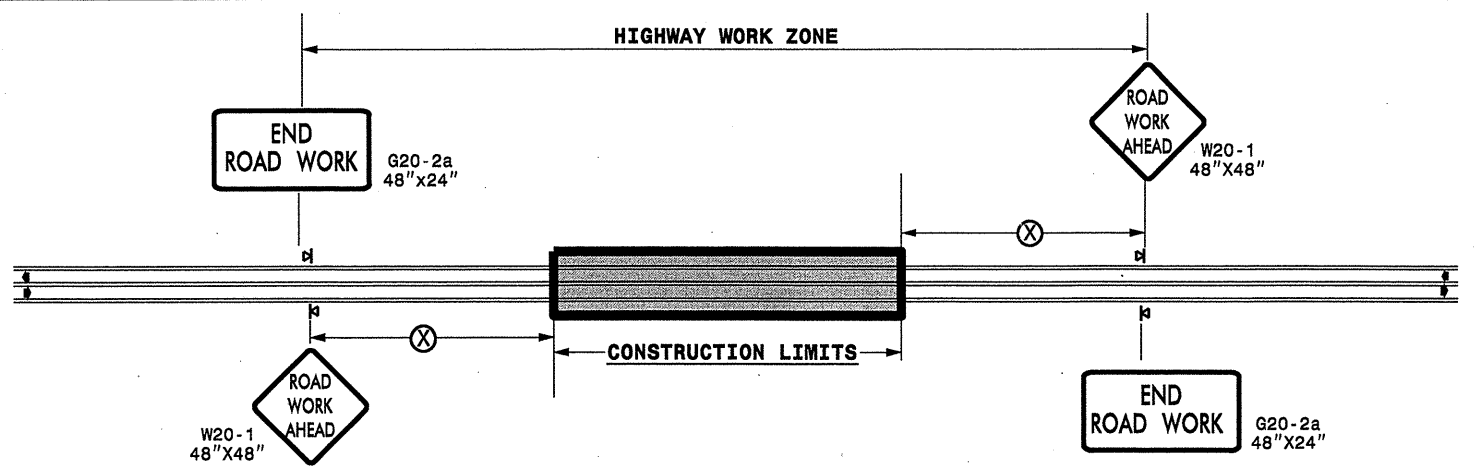


< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

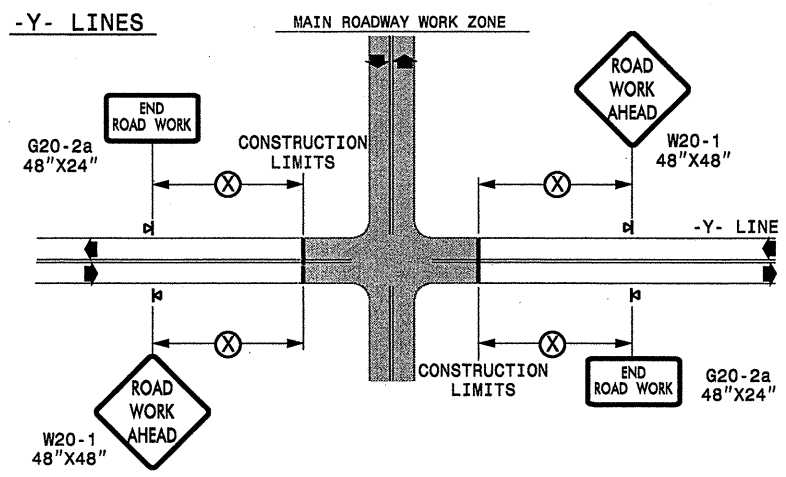
TWO-WAY UNDIVIDED ** (L-LINES)



| POSTED SPEED LIMIT (M.P.H.) | RECOMMENDED MINIMUM SIGN SPACING |
|-----------------------------|----------------------------------|
| ≤ 50 | 500' |
| ≥ 55 | 1000' |

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCE WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

PORTABLE SIGN
 DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING
FOR TWO-WAY UNDIVIDED
WORK ZONE WARNING SIGNS

| | | | |
|-----------------|-------------|---|-----------|
| APPROVED: _____ | DATE: _____ | DETAIL DRAWING FOR TWO-WAY UNDIVIDED ADVANCED WORK ZONE WARNING SIGNS | |
| SEAL | SCALE: NONE | | REVISIONS |
| | DATE: 10/10 | | |
| | DWG. BY: | | |
| | DESIGN BY: | | |
| REVIEWED BY: | | | |

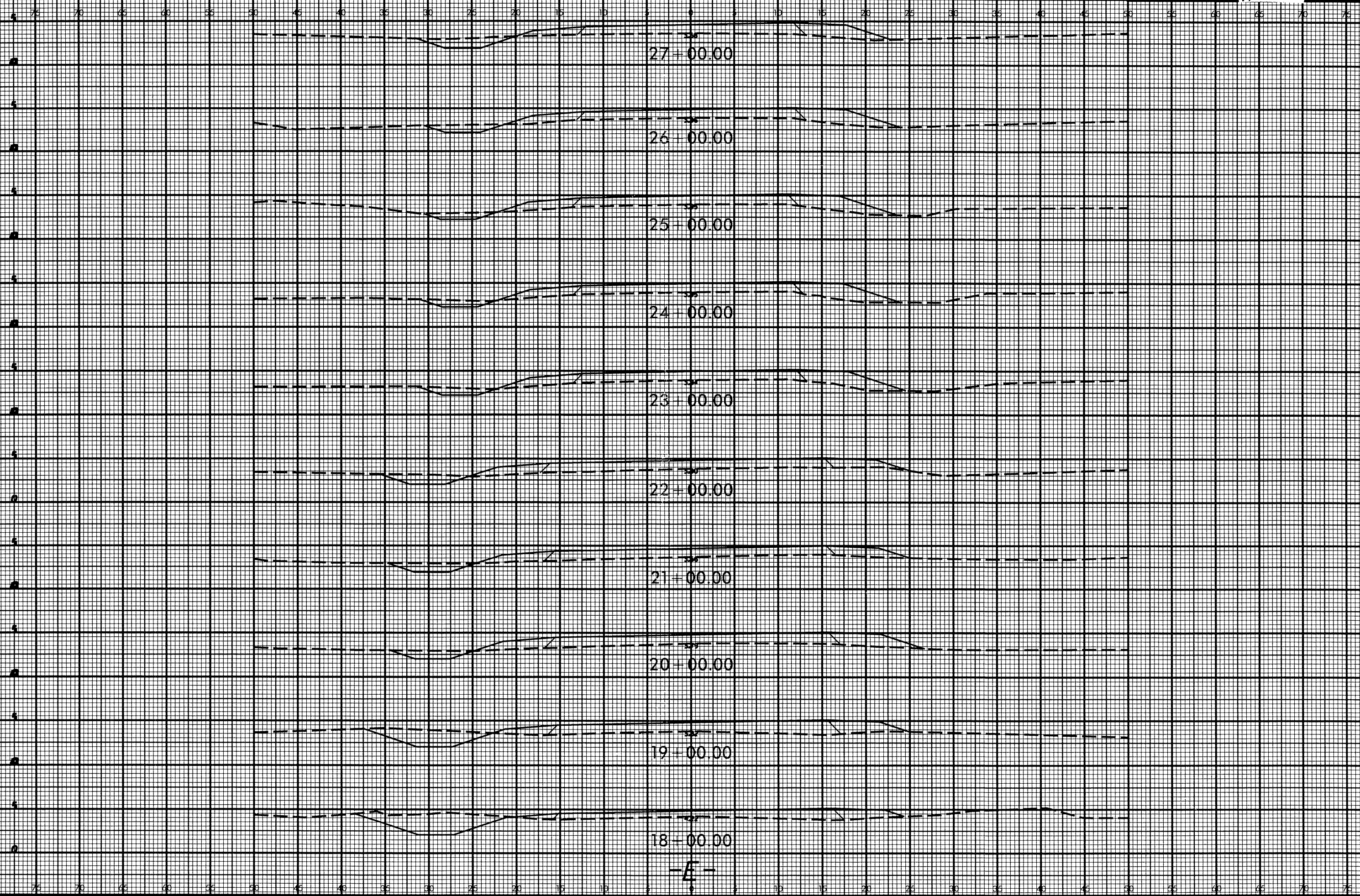
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 25-OCT-2010 09:08 C:\GROUPS-WZTCC\M&S Division\Share\Resurfacing\2010Easterr\2010Easterr\2010Div\202xxx-45436.3.1.Dore-NCI2ml_AKP\202xxx-45436.3.1.2wayundivurbf\wys\July2006-portable.dgn

8/23/99



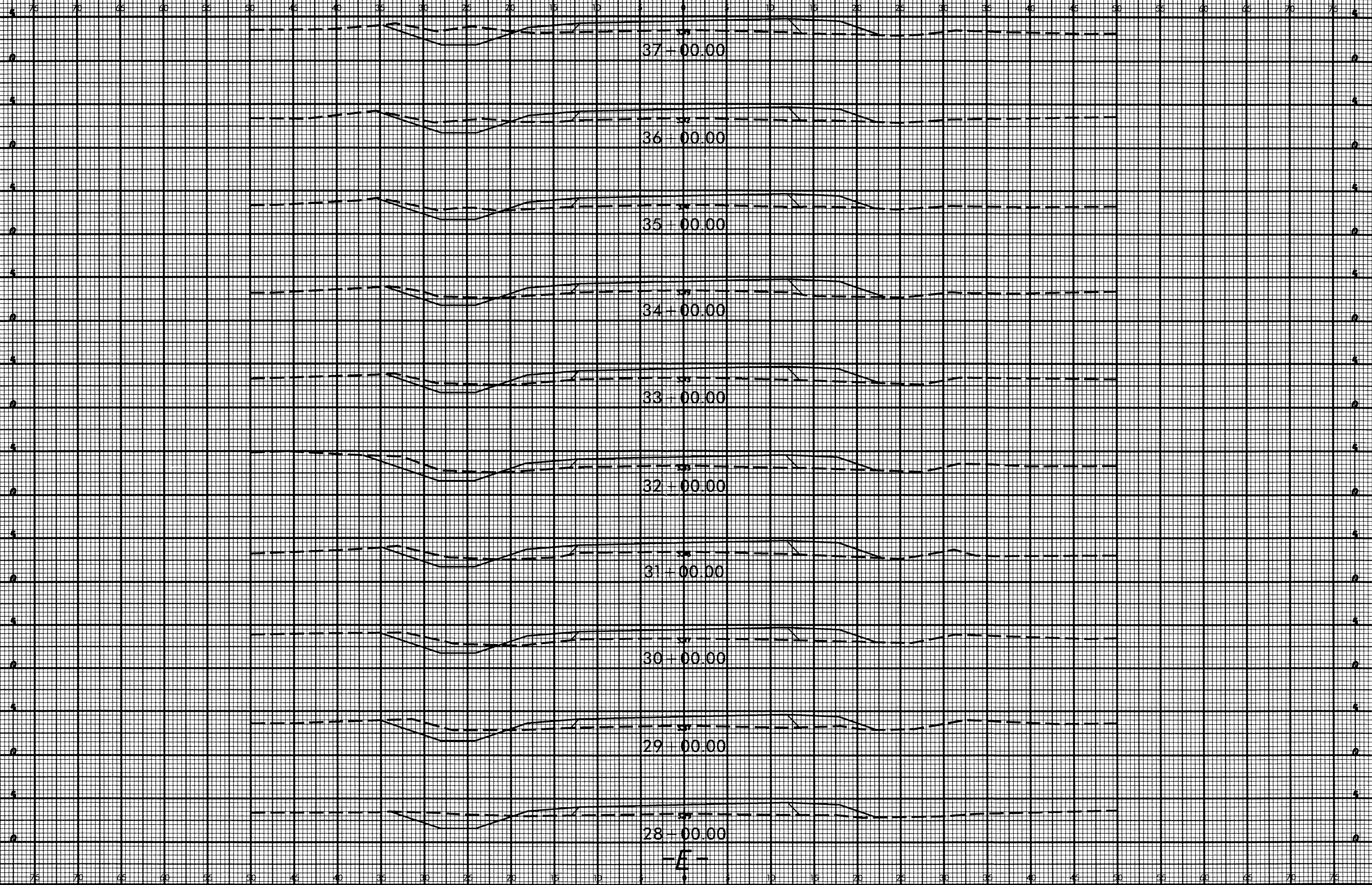
PROJ. REFERENCE NO. R-5310

SHEET NO. X-1



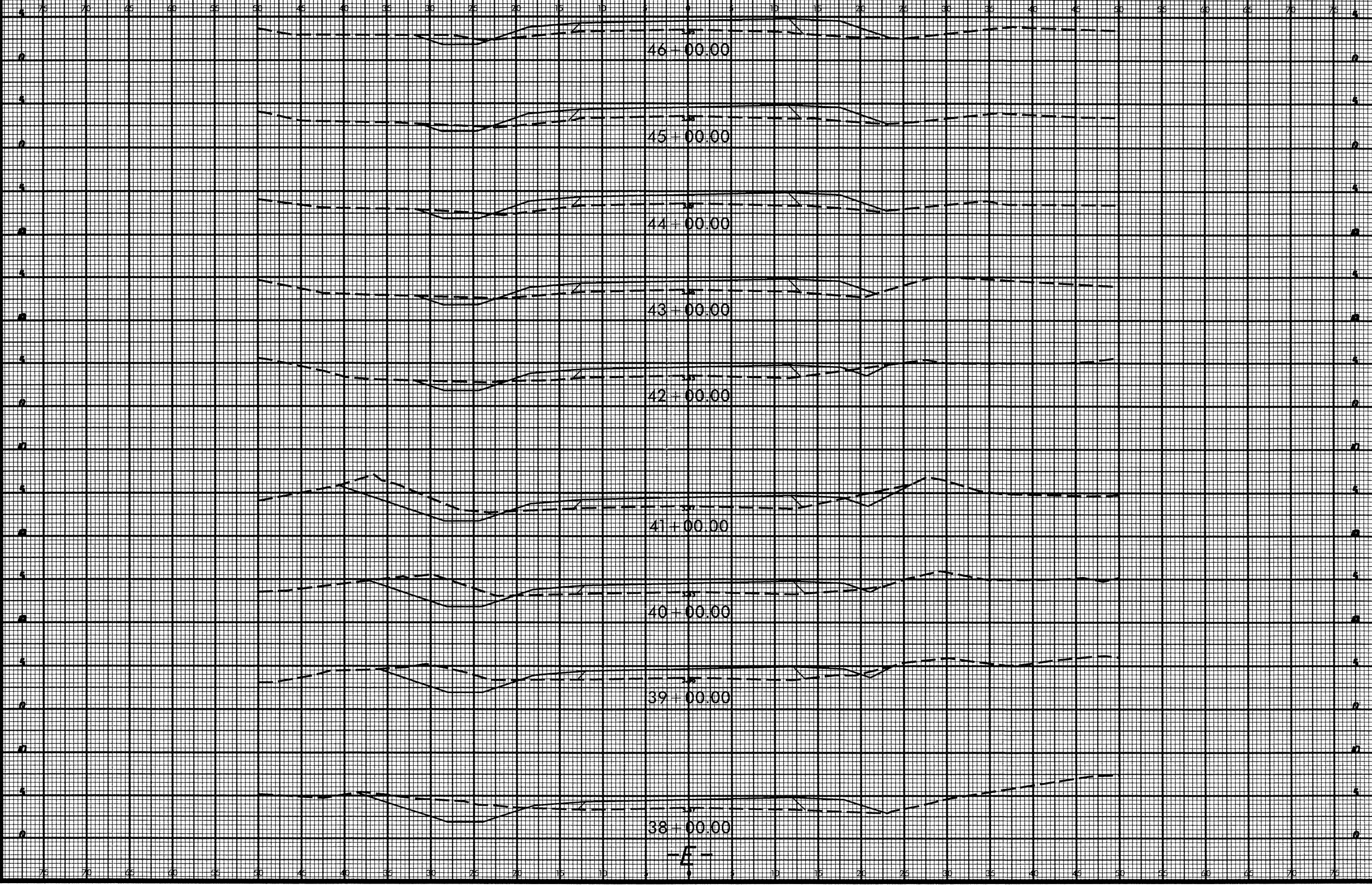
SYTIME

-E-



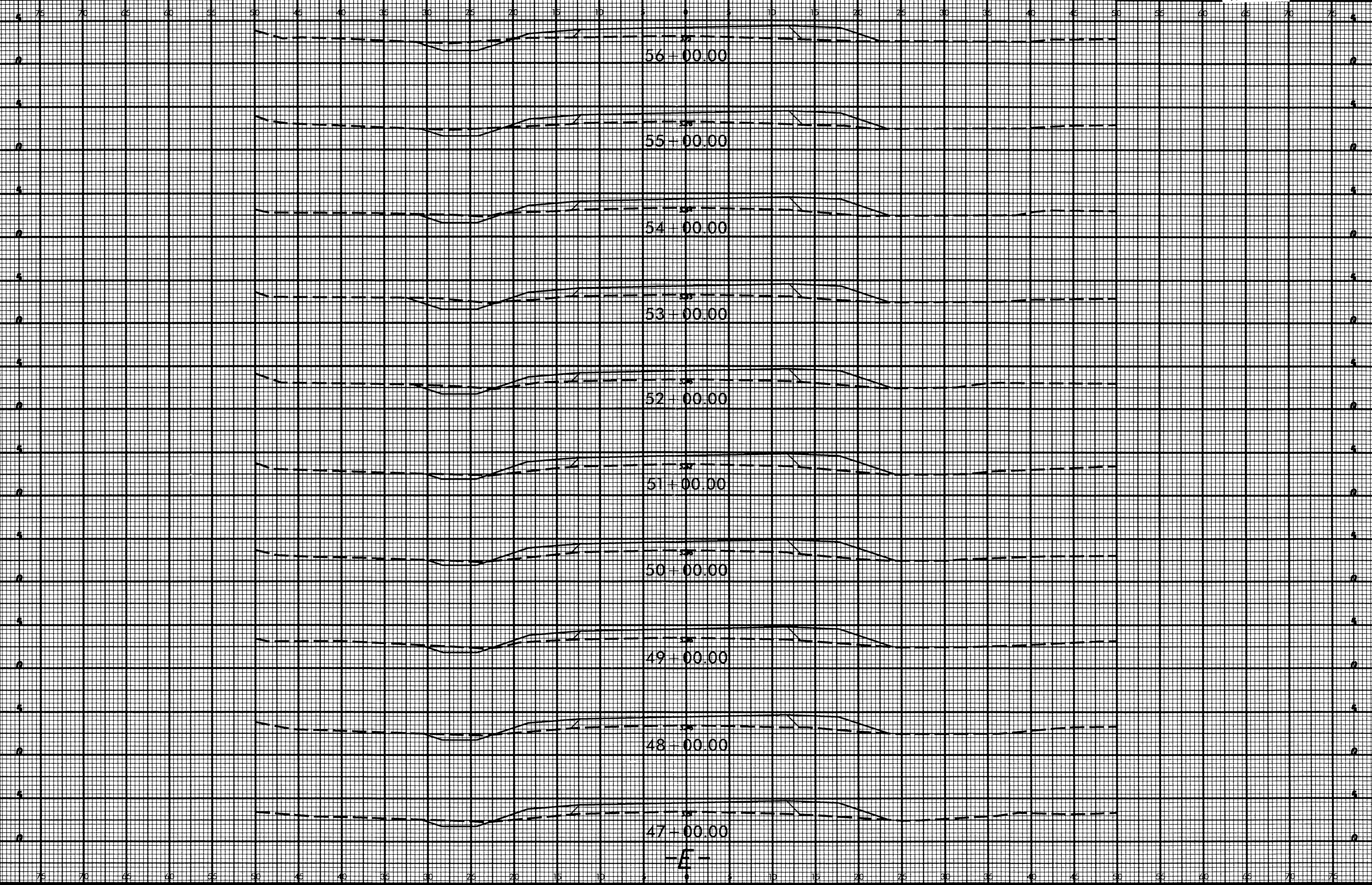
SYSTEMS
CONSULTANTS

8/23/98



-E-

DATE: 8/23/98
DRAWN BY: [illegible]
CHECKED BY: [illegible]
SCALE: AS SHOWN
SHEET NO.: 8-5
PROJECT NO.: R-5310

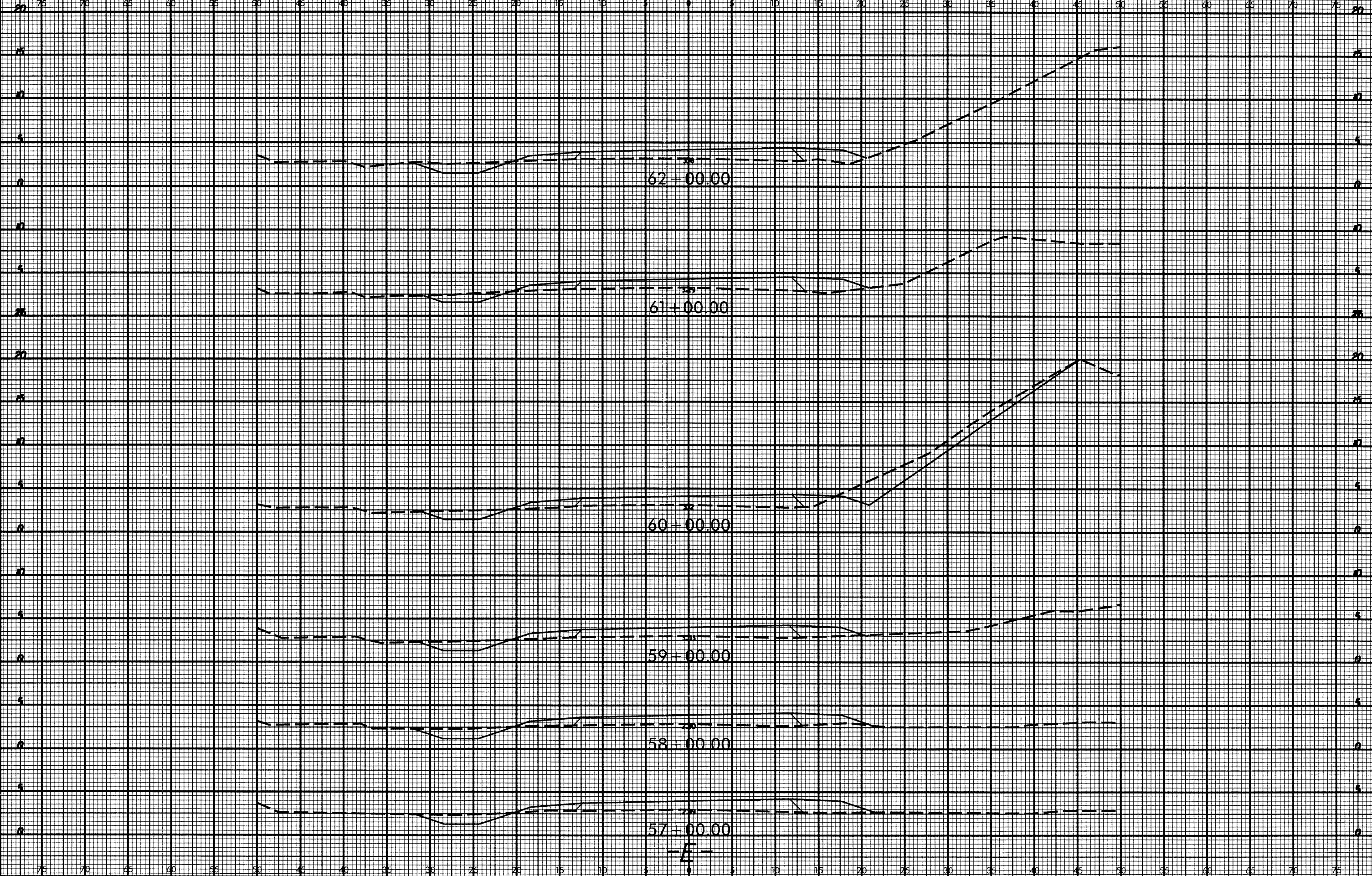


SEES SYSTEMS
CONSULTANTS
INCORPORATED
1000 WEST 10TH AVENUE
DENVER, COLORADO 80202
TEL: (303) 733-1100
FAX: (303) 733-1101
WWW.SSEESYSTEMS.COM

R-5310

R-5310

X-5



SYSTEMS
CONSULTANTS
INCORPORATED

8/23/99

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



PROJ. REFERENCE NO. R-5310 SHEET NO. 8-6

70+00.00

69+00.00

68+00.00

67+00.00

66+00.00

65+00.00

64+00.00

63+00.00

-A-

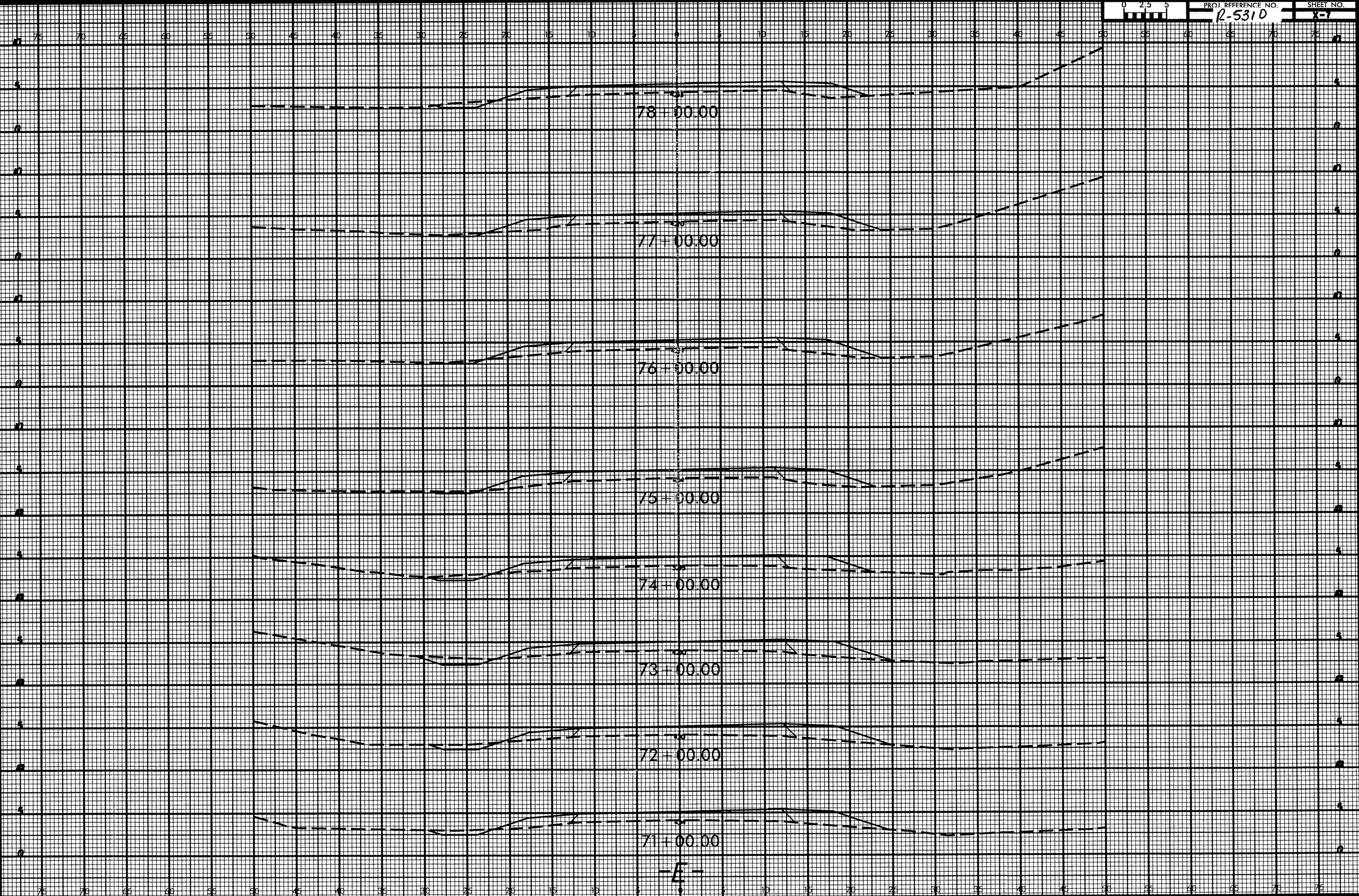
SYSTEMS
SOLUTIONS
CORPORATION

B/23/99



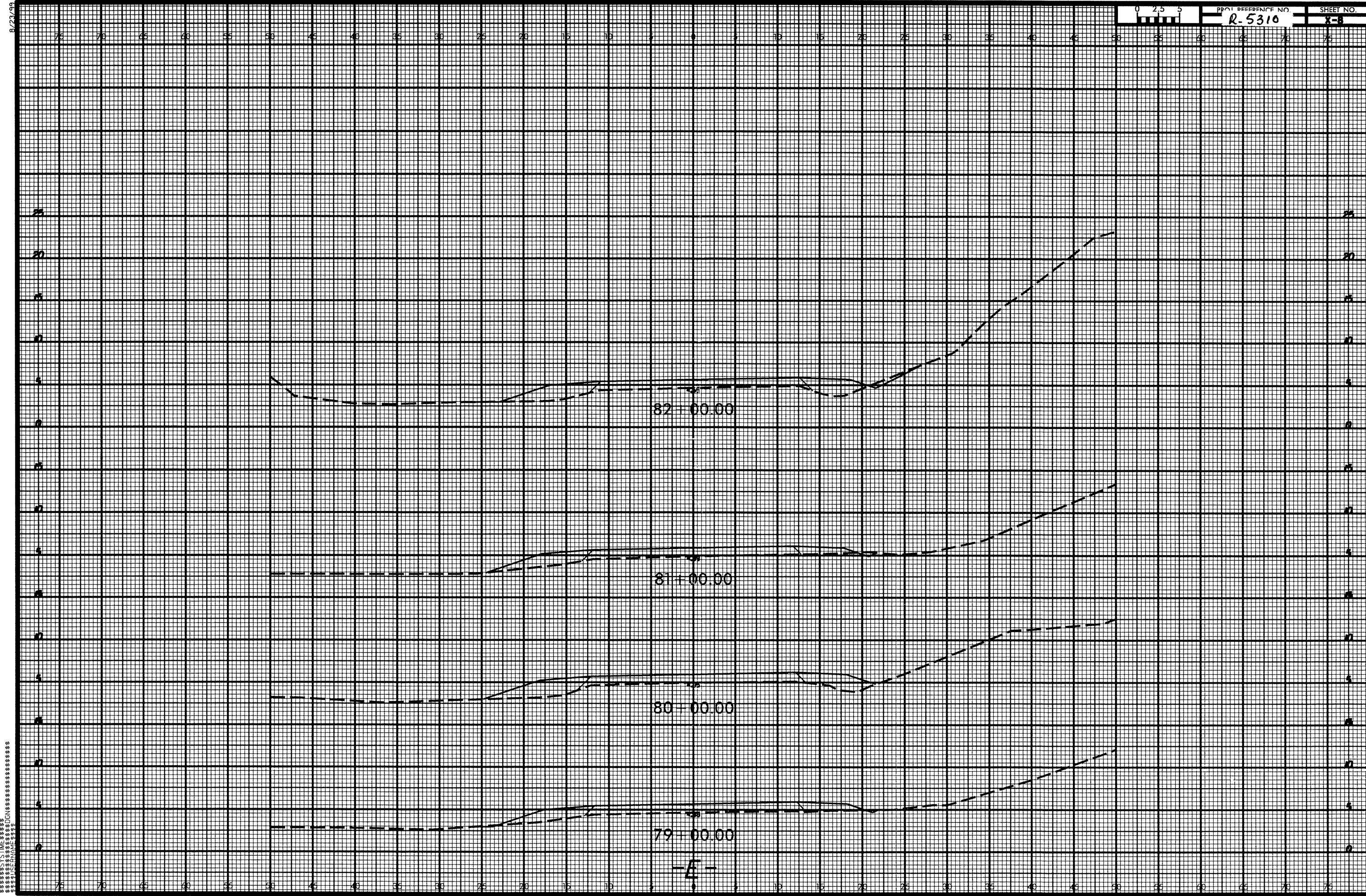
PROJ. REFERENCE NO. 12-5310

SHEET NO. 8-1



11
 10
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8/23/99

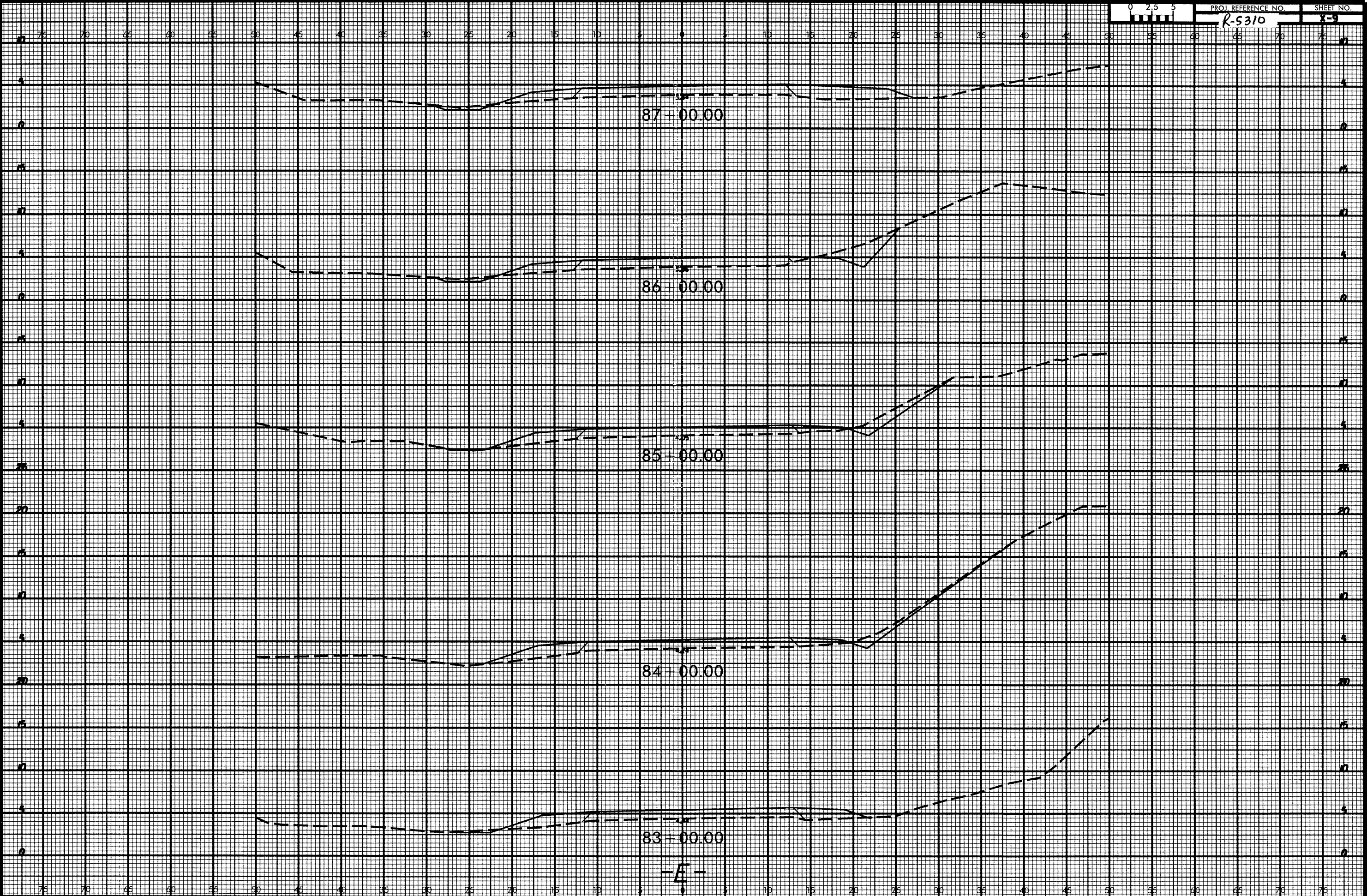


SECT. TYPE
SECTION
USER NAME

8/23/99



PROJ. REFERENCE NO. R-5310 SHEET NO. X-9



87+00.00

86+00.00

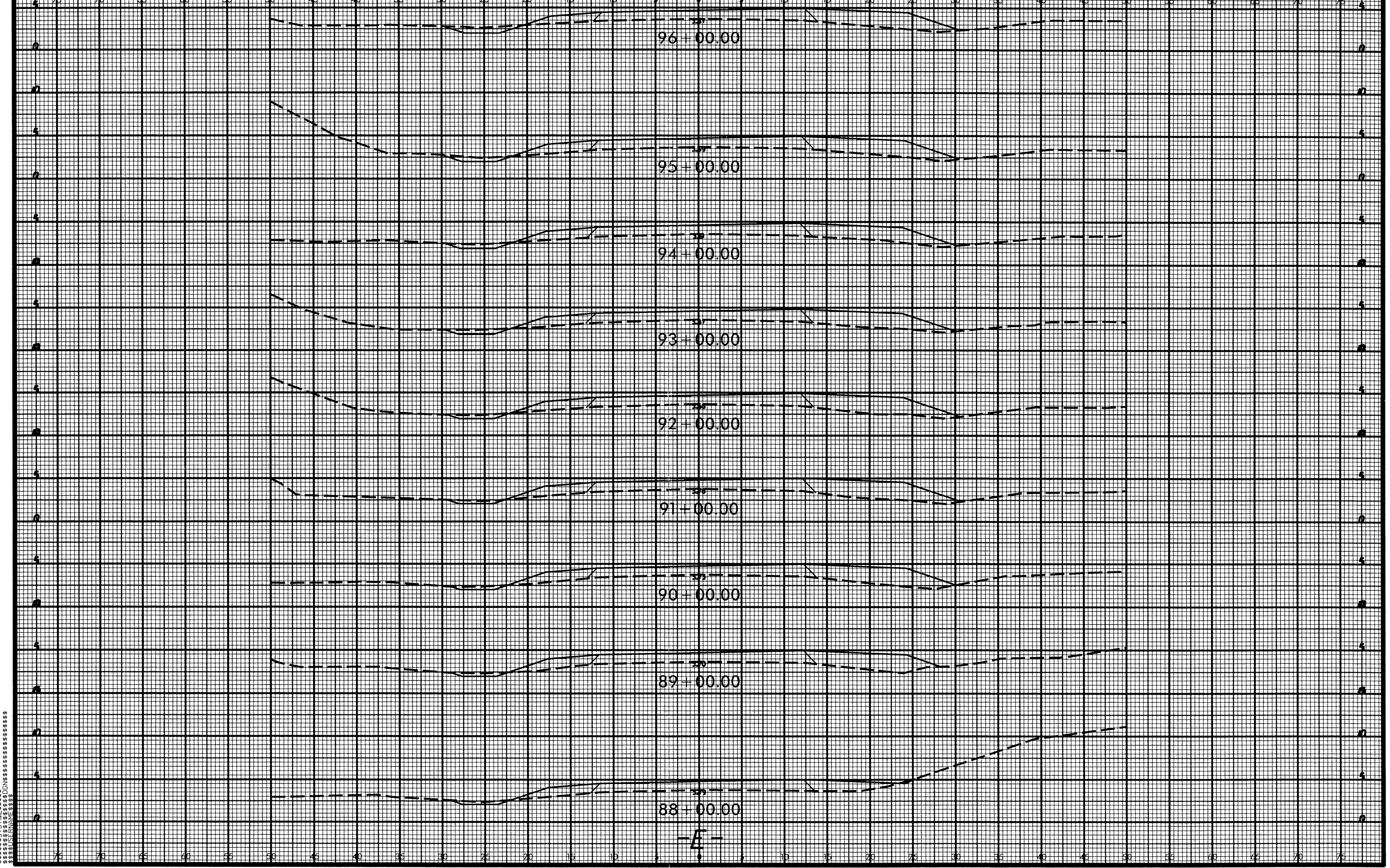
85+00.00

84+00.00

83+00.00

-E-

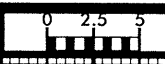
SYSTEMS TIME 8/23/99 10:00 AM



DATE TIME
DRAWN
CHECKED
APPROVED

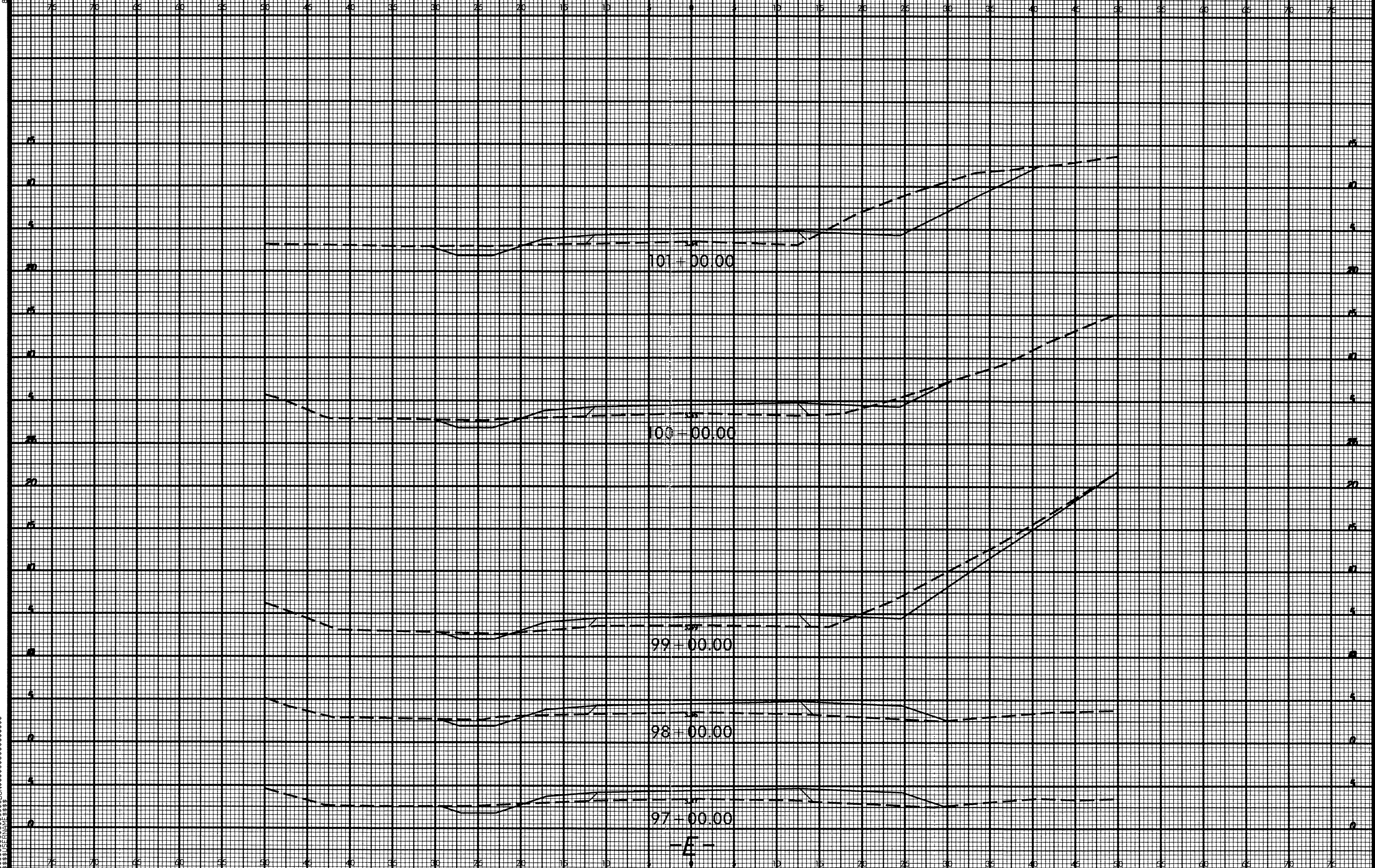
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8/23/95



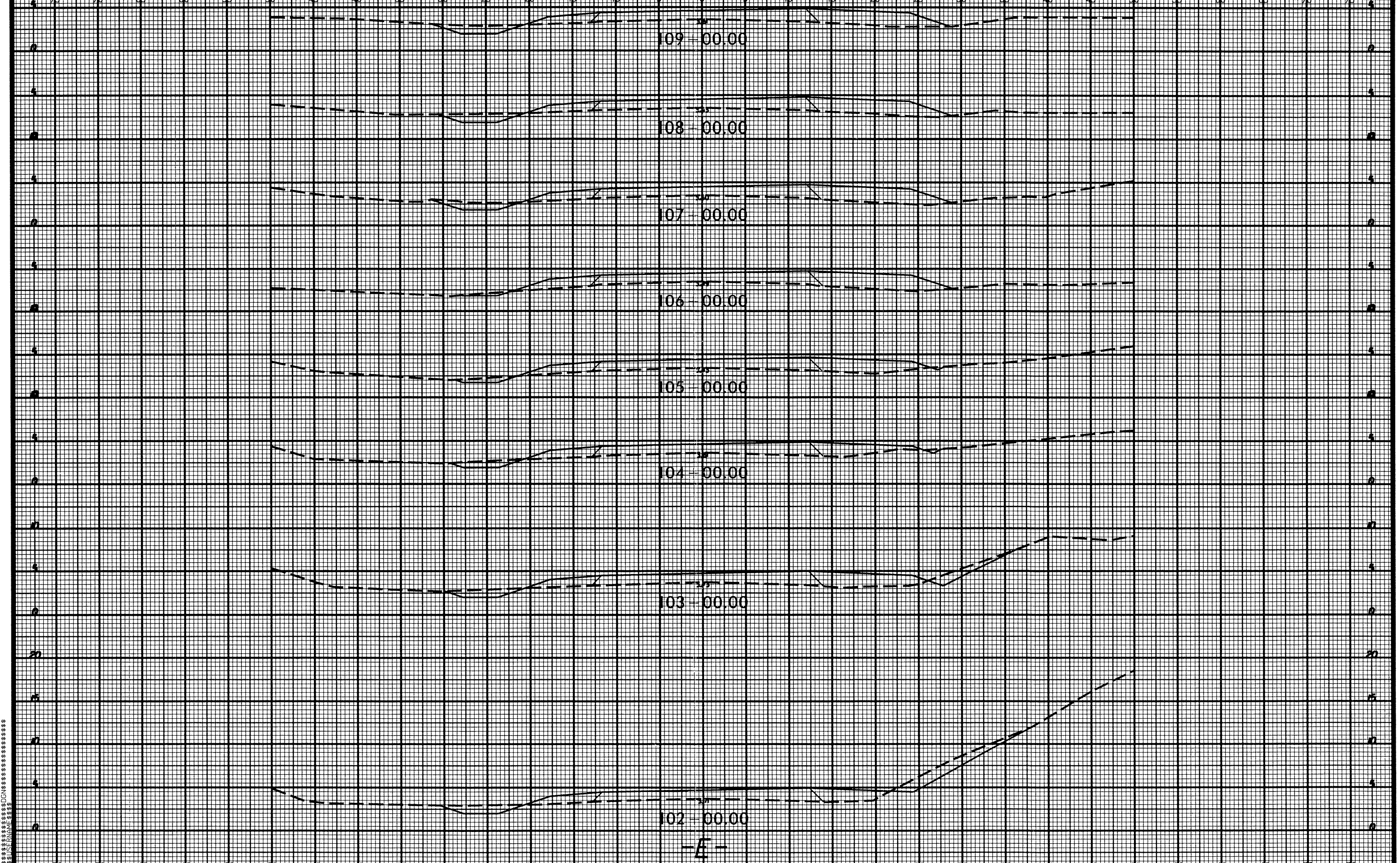
PROJ. REFERENCE NO.
R-5310

SHEET NO.
X-11

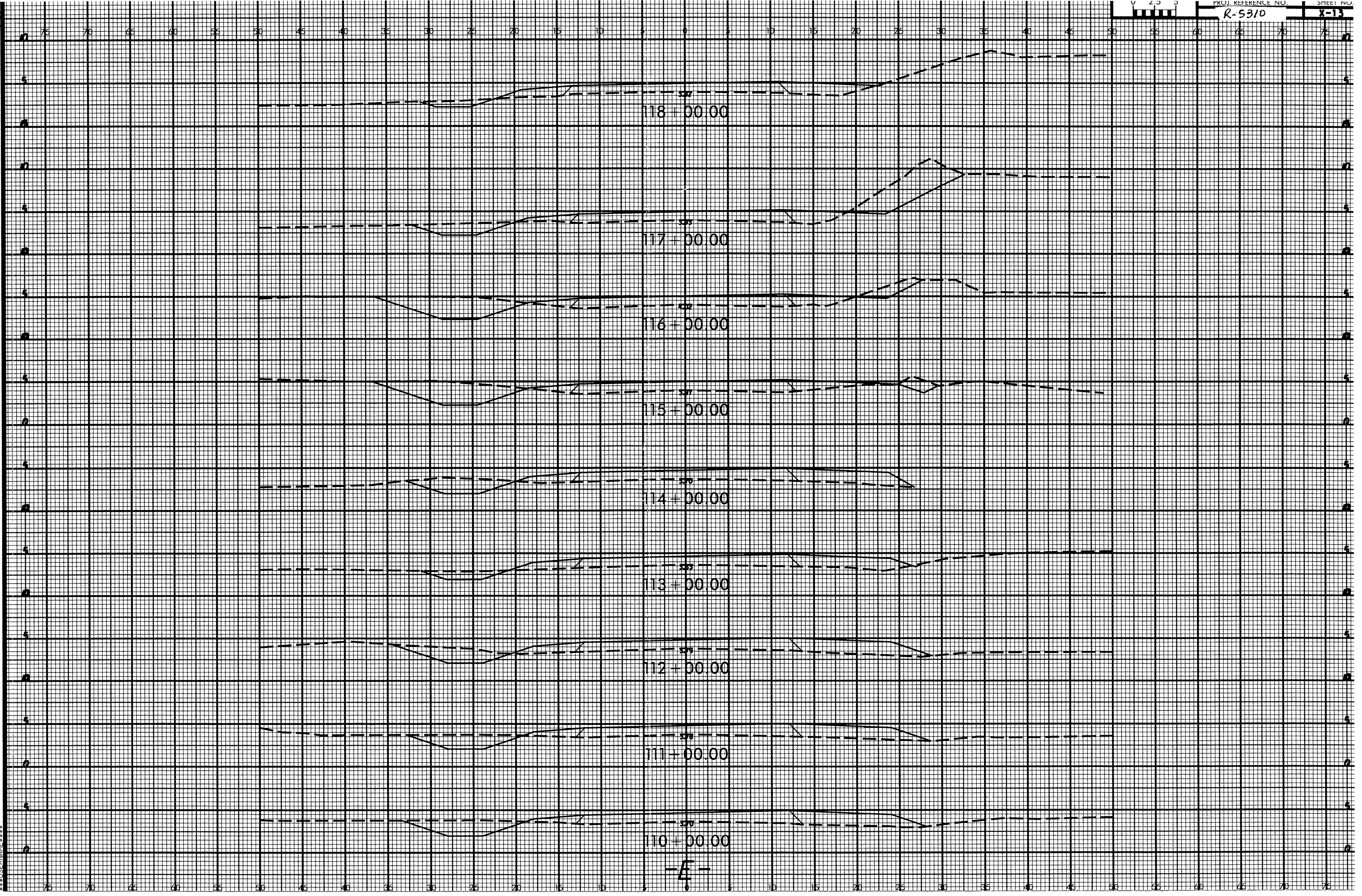


-E-

PLANNING & CONSTRUCTION SERVICES

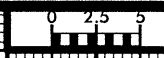


PLANNING DIVISION



\$\$\$SHEET TIME\$\$\$\$
 \$\$\$DATE\$\$\$\$
 \$\$\$DRAWN BY\$\$\$\$
 \$\$\$CHECKED BY\$\$\$\$
 \$\$\$SCALE\$\$\$\$
 \$\$\$PROJECT\$\$\$\$

8/23/99

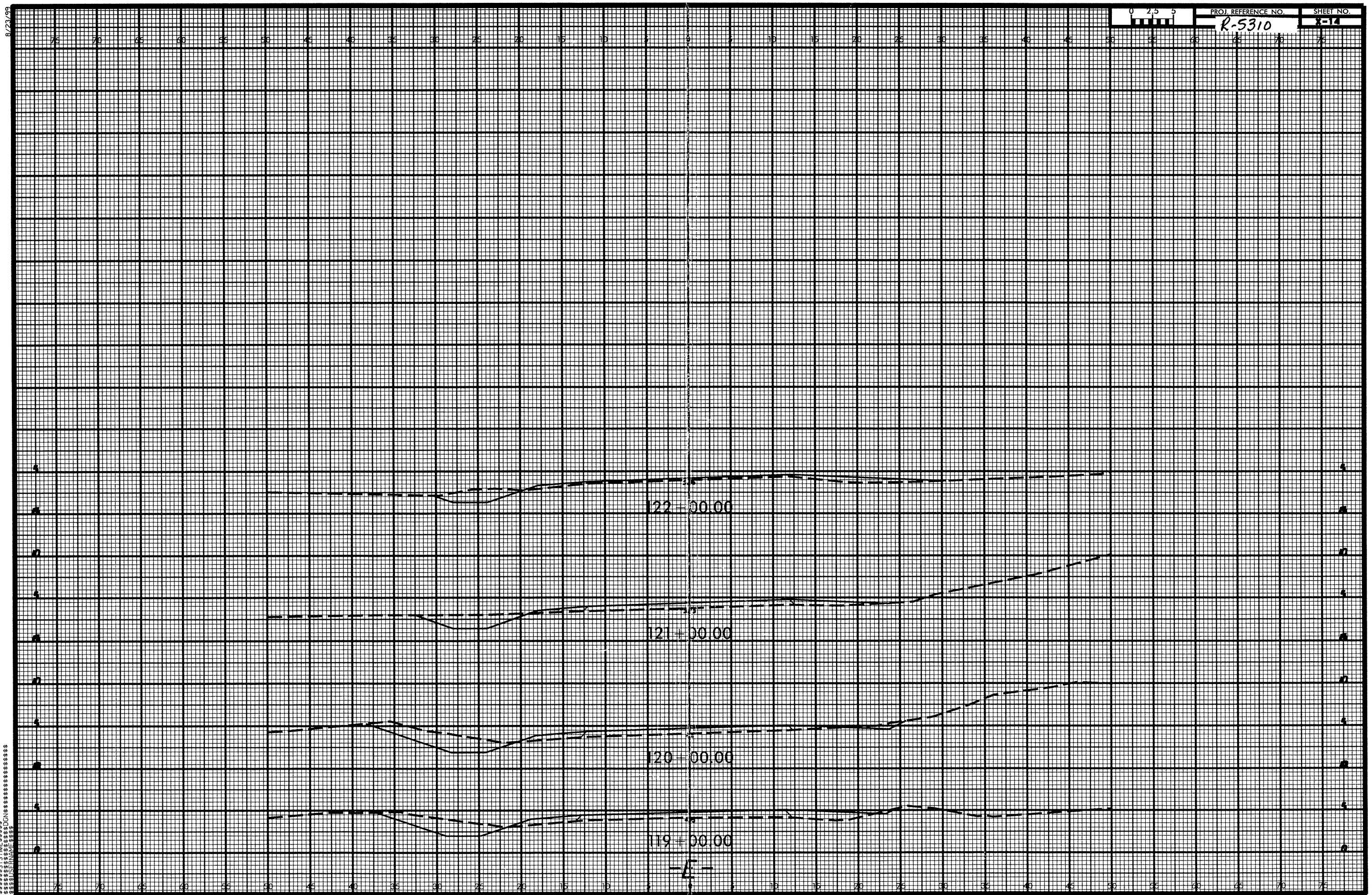


PROJ. REFERENCE NO.

SHEET NO.

R-5310

8-14



SYSTEMS
CONSULTANTS
INCORPORATED