

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

JACKSON COUNTY

LOCATION: US 23/74 FROM SOUTHWEST OF HAYWOOD COUNTY
LINE TO SR 1527 (SCOTTS CREEK RD)

TYPE OF WORK: GRADING, PAVING AND GUARDRAIL

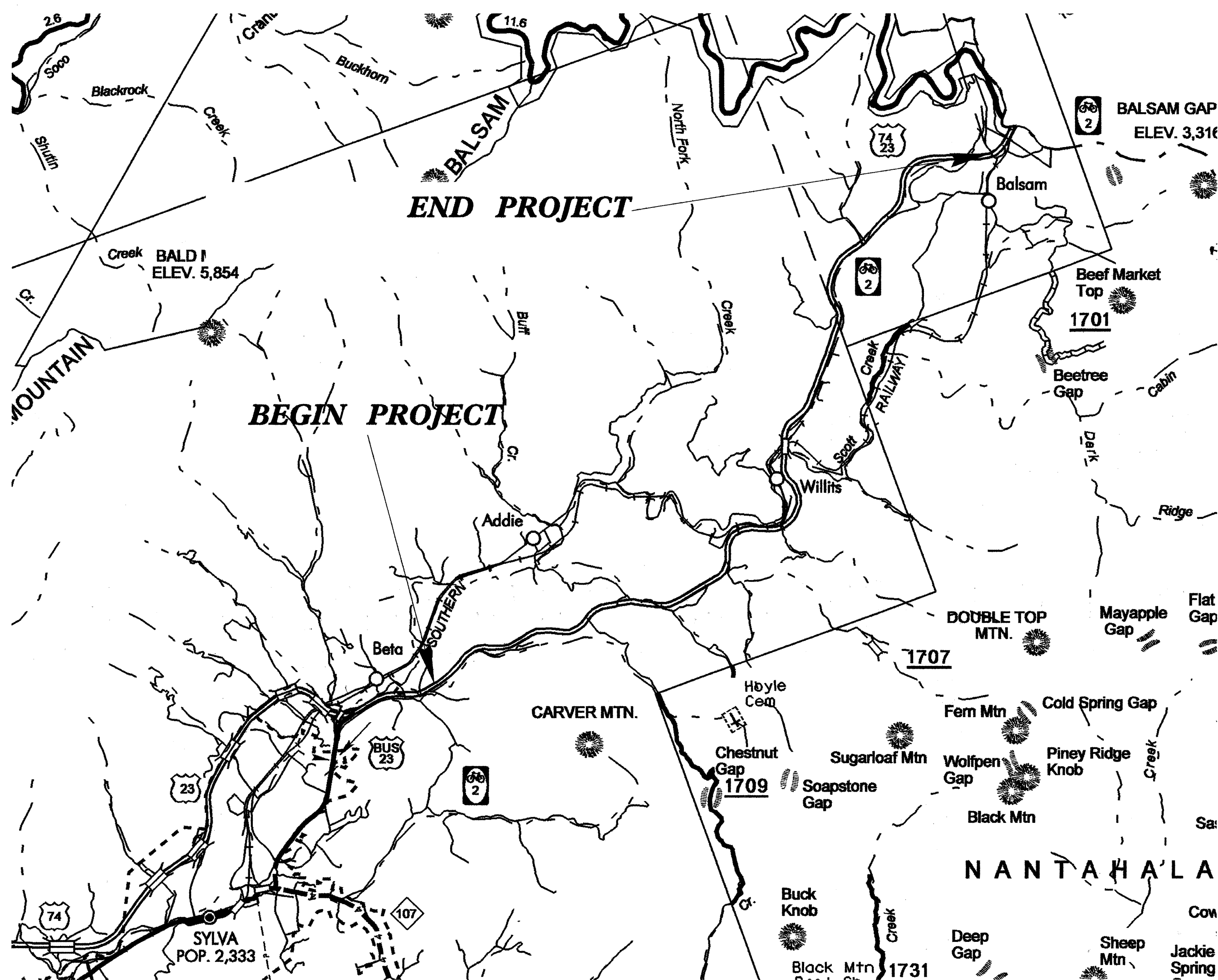
| | | | |
|-----------------|-----------------------------|--------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | W-5015 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 41815.1.1 | | PE | |
| 41815.3.1 | STPNHS-0023(19) | CONSTRUCTION | |
| | | | |
| | | | |
| | | | |
| | | | |

W-5015

TIP PROJECT:

C201961

CONTRACT:



GRAPHIC SCALES



DESIGN DATA

PROJECT LENGTH

7.5 Miles

Prepared in the Office of:
DIVISION OF HIGHWAYS

253 Webster Rd., Sylva NC 28779

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

J. B. Setzer, P.E.
DIVISION ENGINEER

LETTING DATE:

June 17, 2008

J. L. Woodard, P.E.
DISTRICT ENGINEER

ROADWAY DESIGN
ENGINEER

J. L. Woodard
SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

| | |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5015 | I-A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| <i>J. H. Woodard</i> 4/23/08 | |

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

| SHEET NUMBER | INDEX OF SHEETS SHEET |
|------------------|---|
| 1 | TITLE SHEET |
| 1-A | INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS |
| 1-B | CONVENTIONAL SYMBOLS |
| 2 | TYPICAL SECTION |
| 2-A | EROSION CONTROL DETAILS |
| 3 | SUMMARY OF QUANTITIES |
| 3-A | GUARDRAIL SUMMARY |
| 4-14 | PLAN SHEETS |
| TCP-1 thru TCP-3 | TRAFFIC CONTROL |

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

GUARDRAIL: THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

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 8 - INCIDENTALS | |
| 862.01 | Guardrail Placement |
| 862.02 | Guardrail Installation |

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

| | |
|--|----------|
| State Line | ----- |
| County Line | ----- |
| Township Line | ----- |
| City Line | ----- |
| Reservation Line | ----- |
| Property Line | ----- |
| Existing Iron Pin | ○ EIP |
| Property Corner | ----- |
| Property Monument | □ ECM |
| Parcel/Sequence Number | ①②③ |
| Existing Fence Line | -x-x-x- |
| Proposed Woven Wire Fence | ○----- |
| Proposed Chain Link Fence | □----- |
| Proposed Barbed Wire Fence | ◇----- |
| Existing Wetland Boundary | -WLB- |
| Proposed Wetland Boundary | -WLB- |
| Existing High Quality Wetland Boundary | -HQ WLB- |
| Existing Endangered Animal Boundary | -EAB- |
| Existing Endangered Plant Boundary | -EPB- |

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:

| | |
|------------------------------------|-------|
| Stream or Body of Water | ----- |
| Hydro, Pool or Reservoir | ▭ |
| River Basin Buffer | -RBB- |
| Flow Arrow | ← |
| Disappearing Stream | → |
| Spring | ○ |
| Swamp Marsh | ⋆ |
| Proposed Lateral, Tail, Head Ditch | ▭ |
| False Sump | ▽ |

RAILROADS:

| | |
|--------------------|-------|
| Standard Gauge | ----- |
| RR Signal Milepost | ○ |
| Switch | □ |
| RR Abandoned | ----- |
| RR Dismantled | ----- |

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 | -E- |
| Proposed Temporary Construction Easement | -E- |
| Proposed Temporary Drainage Easement | -TDE- |
| Proposed Permanent Drainage Easement | -PDE- |
| Proposed Permanent Utility Easement | -PUE- |

ROADS AND RELATED FEATURES:

| | |
|--------------------------------------|-------|
| Existing Edge of Pavement | ----- |
| Existing Curb | ----- |
| Proposed Slope Stakes Cut | -C- |
| Proposed Slope Stakes Fill | -F- |
| Proposed Wheel Chair Ramp | ⊕ |
| Curb Cut for Future Wheel Chair Ramp | ⊕ |
| Existing Metal Guardrail | ----- |
| Proposed Guardrail | ----- |
| Existing Cable Guiderail | ----- |
| Proposed Cable Guiderail | ----- |
| Equality Symbol | ⊕ |
| Pavement Removal | ⊗ |

VEGETATION:

| | |
|--------------|-------|
| Single Tree | ⊕ |
| Single Shrub | ⊕ |
| Hedge | ----- |
| Woods Line | ----- |
| Orchard | ⊕ |
| Vineyard | ▭ |

EXISTING STRUCTURES:

| | |
|--|-------------|
| MAJOR: | |
| Bridge, Tunnel or Box Culvert | ▭ CONC |
| Bridge Wing Wall, Head Wall and End Wall | ⌋ CONC WW ⌋ |
| MINOR: | |
| Head and End Wall | ▭ CONC HW |
| Pipe Culvert | ----- |
| Footbridge | ----- |
| Drainage Box: Catch Basin, DI or JB | □ CB |
| Paved Ditch Gutter | ----- |
| Storm Sewer Manhole | ⊕ |
| Storm Sewer | ----- |

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:

| | |
|-------------------------------------|-------|
| 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:

| | |
|--|-------|
| 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:

| | |
|-----------------------------------|-------|
| Gas Valve | ◇ |
| Gas Meter | ⊕ |
| Recorded U/G Gas Line | ----- |
| Designated U/G Gas Line (S.U.E.*) | ----- |
| Above Ground Gas Line | ----- |

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:

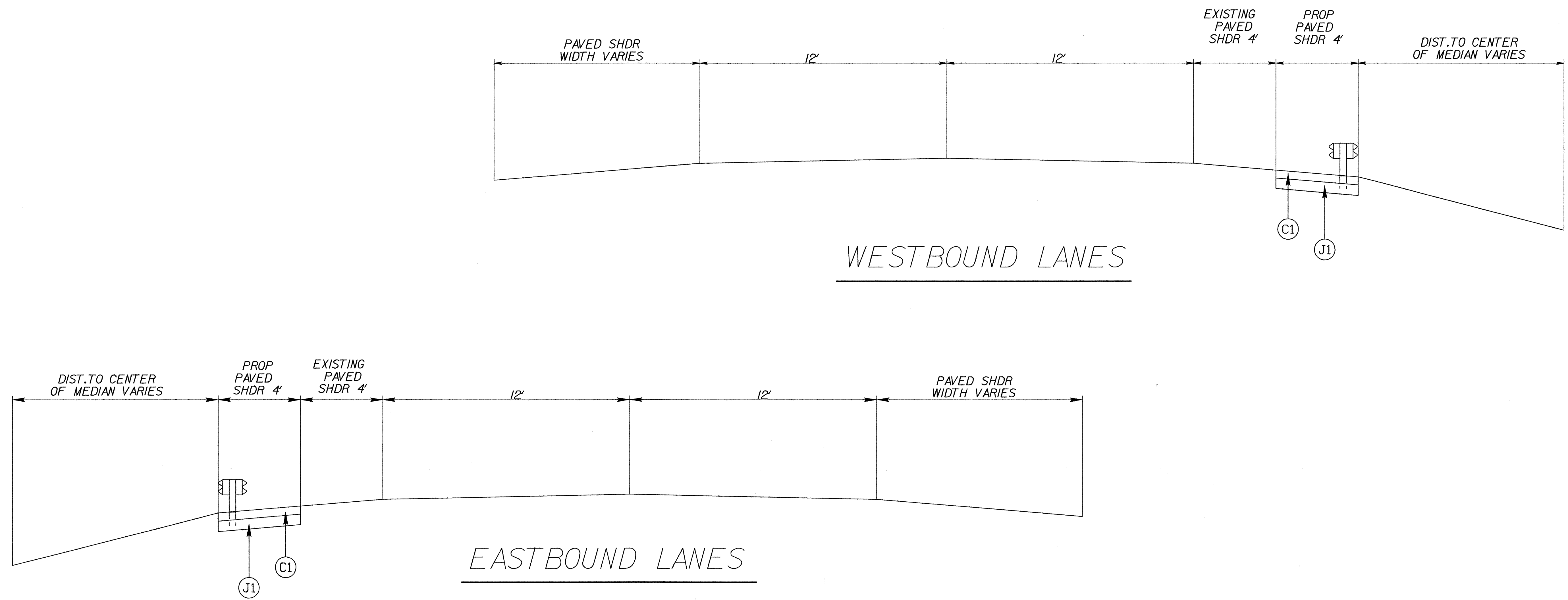
| | |
|--|--------|
| Utility Pole | ● |
| Utility Pole with Base | □ |
| Utility Located Object | ○ |
| Utility Traffic Signal Box | ⊕ |
| Utility Unknown U/G Line | ----- |
| U/G Tank; Water, Gas, Oil | ▭ |
| A/G Tank; Water, Gas, Oil | ▭ |
| U/G Test Hole (S.U.E.*) | ⊕ |
| Abandoned According to Utility Records | AATUR |
| End of Information | E.O.I. |

| | |
|--|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 2 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER <i>J. D. [Signature]</i> 4/28/08 | HYDRAULICS ENGINEER |

| PAVEMENT SCHEDULE | |
|-------------------|--|
| C1 | PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5 B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD |
| J1 | PROP. 6" COMPACTED AGGREGATE BASE COURSE |

NOTE: SEE GUARDRAIL SUMMARY FOR TYPICAL SECTIONS STATIONS.

TYPICAL SECTION

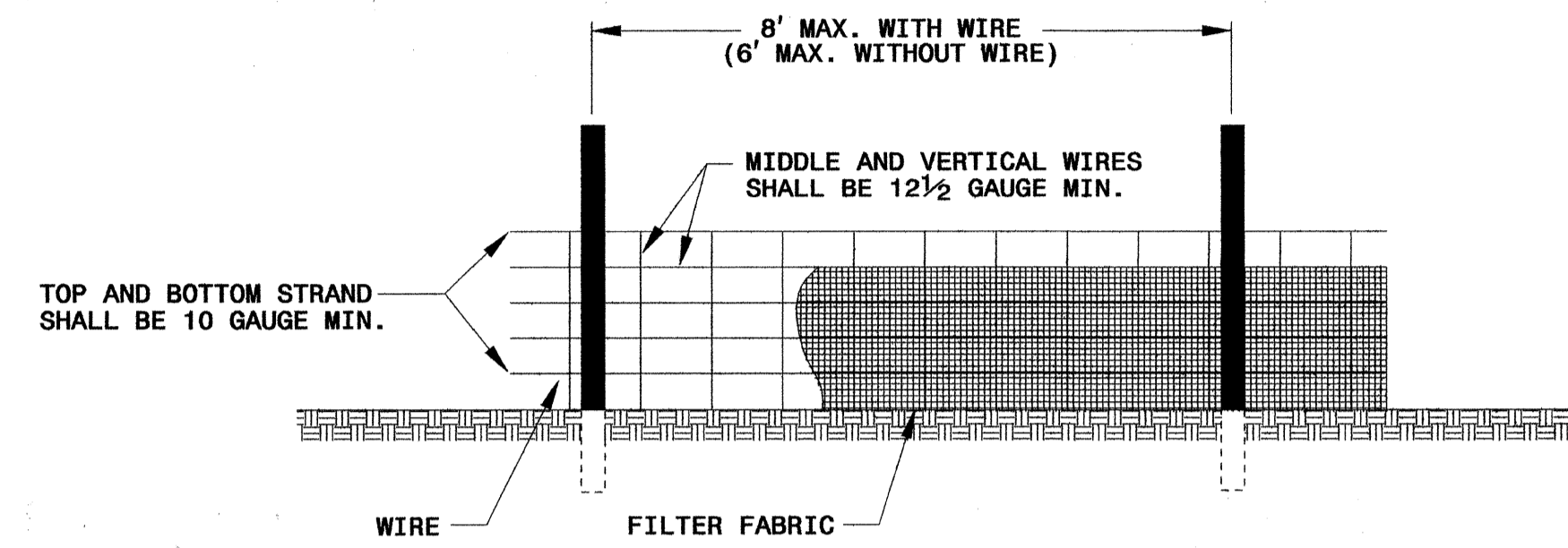


8/17/99

24-APR-2008 09:03
 d:\revised\plan_sheets\5015.dgn
 of engineer: AT-DIC00231630

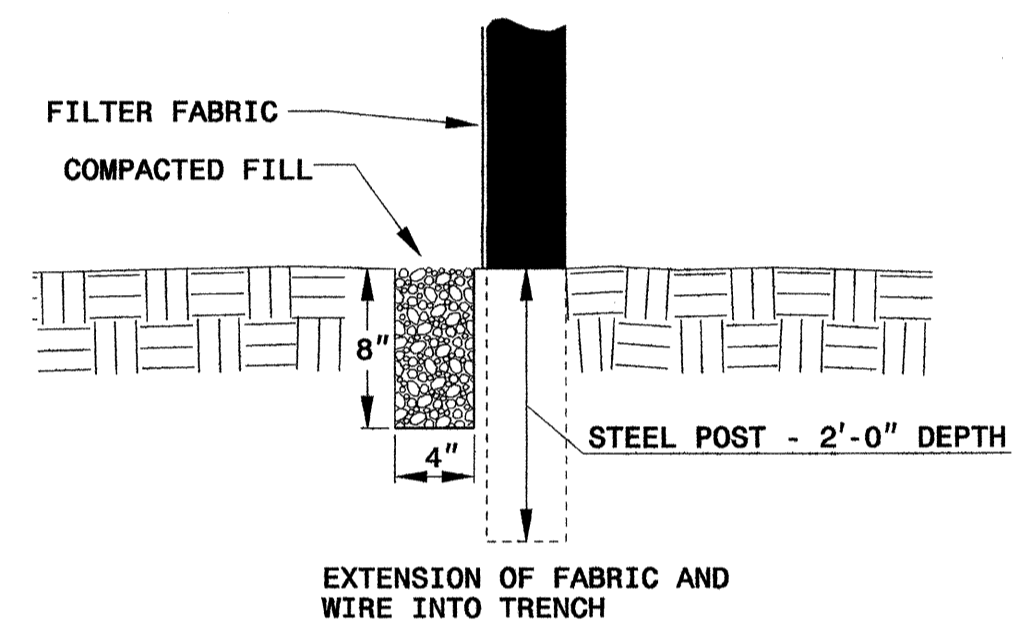
| | |
|--|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5015 | 2-A |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/10/08 J. Woodard | HYDRAULICS ENGINEER |

EROSION CONTROL DETAILS



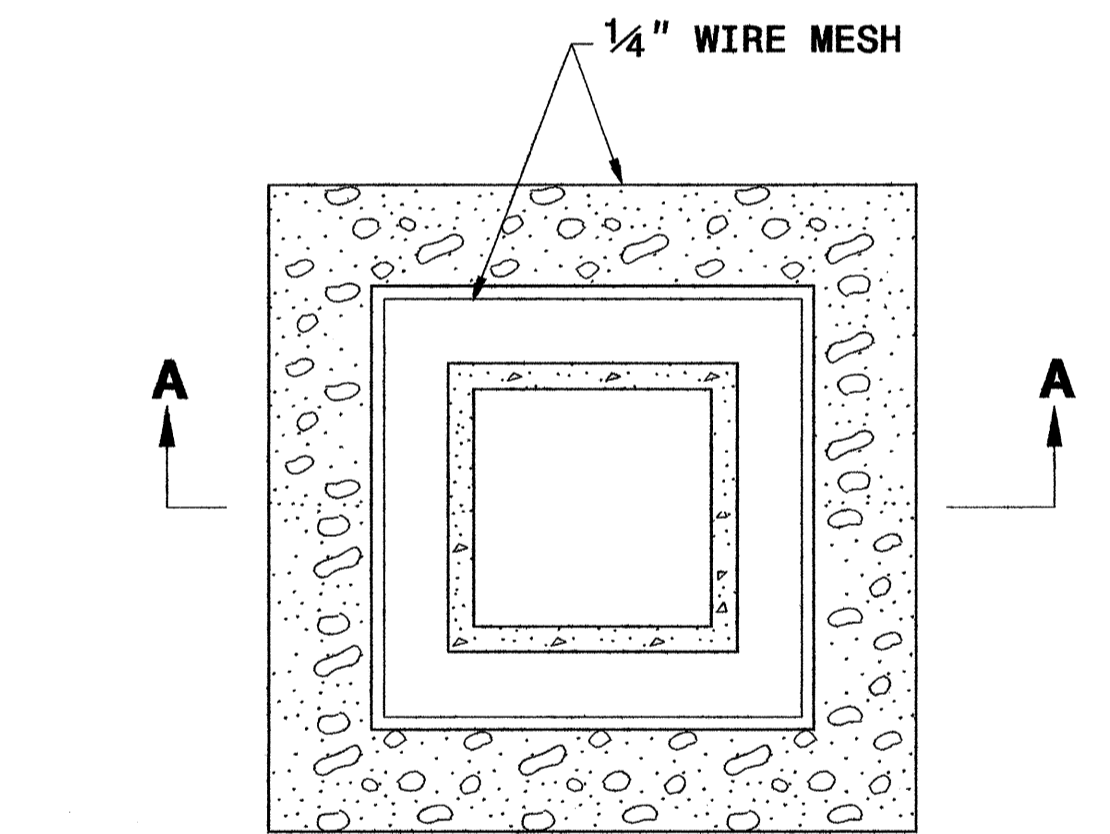
NOTES

- USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
- USE FILTER FABRIC A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
- PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

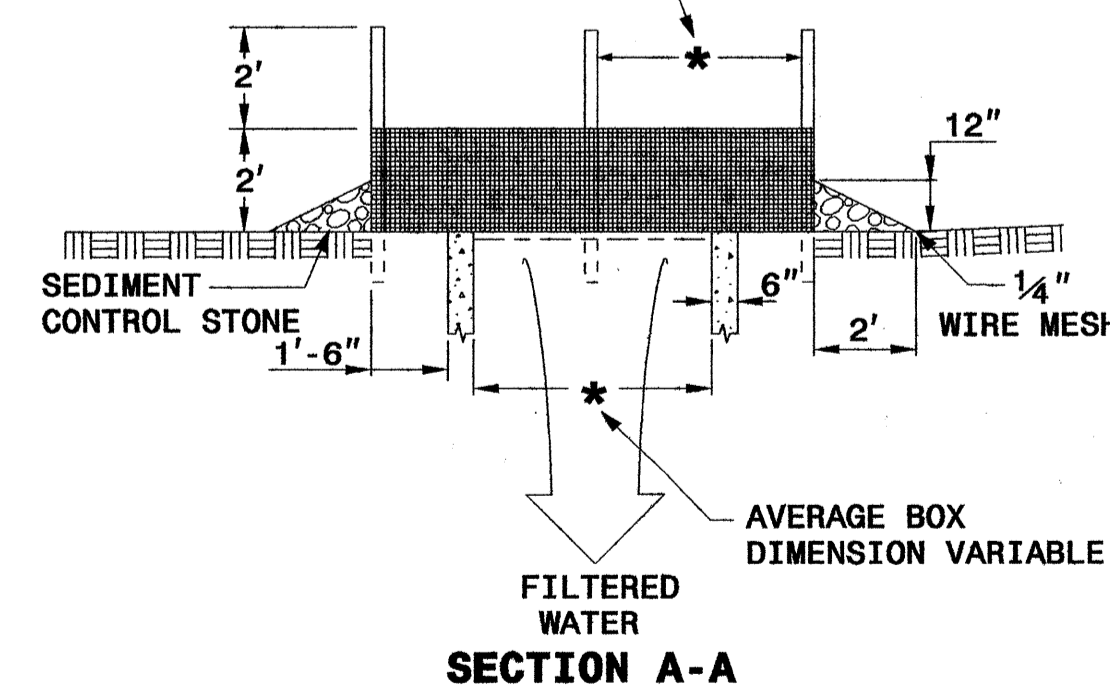


TEMPORARY SILT FENCE

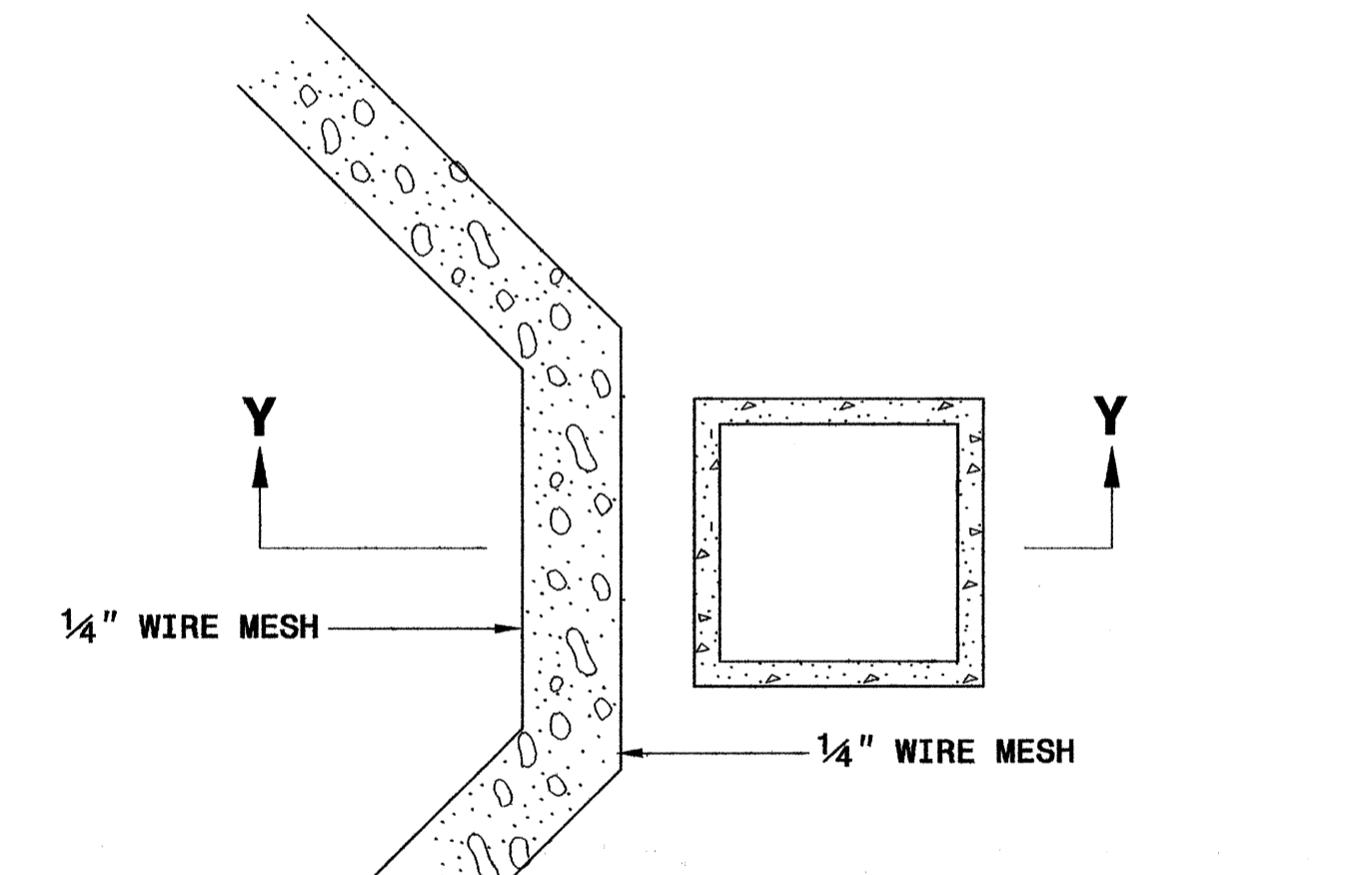
ROCK INLET SEDIMENT TRAP TYPE 'C'



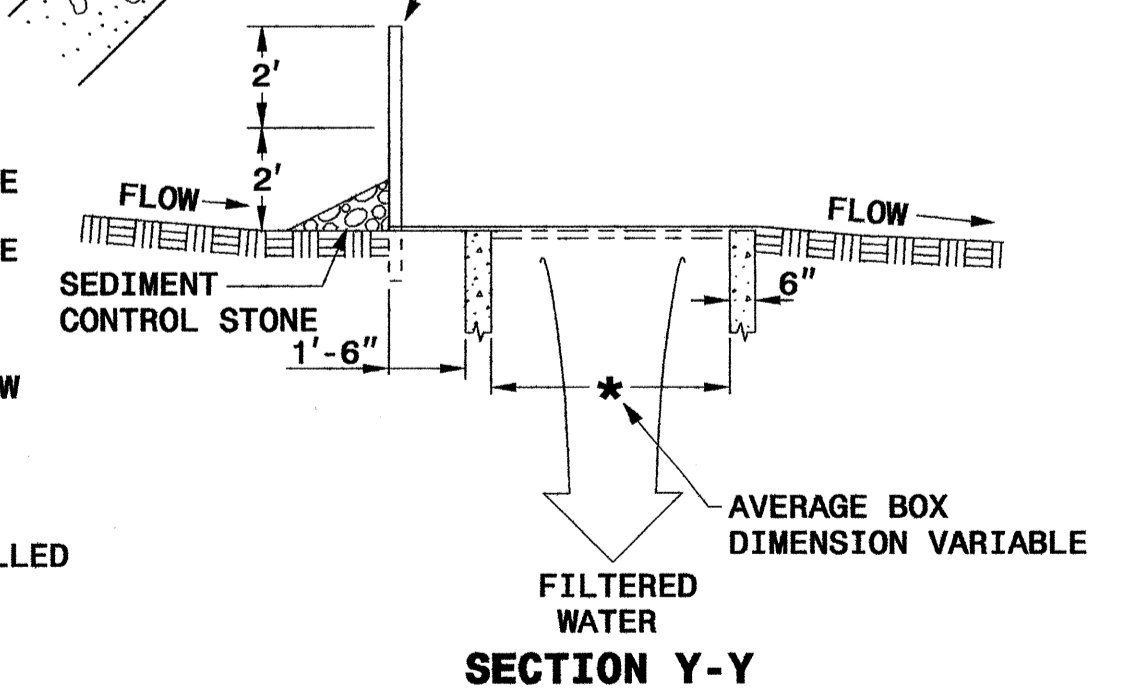
MAXIMUM POST SPACING 4 FT.



MULTI-DIRECTIONAL FLOW



SEE NOTE FOR POST DESCRIPTION



NOTE

- USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
- USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH ¼ INCH MESH OPENINGS.
- PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
- INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
- USE 5' STEEL POST, INSTALLED 1.5' DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
- SPACE POST A MAXIMUM OF 4'.

SINGLE-DIRECTIONAL FLOW

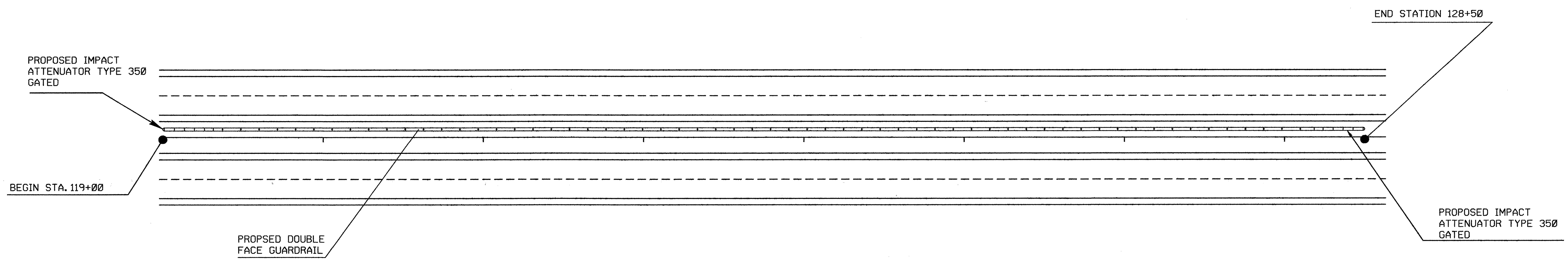
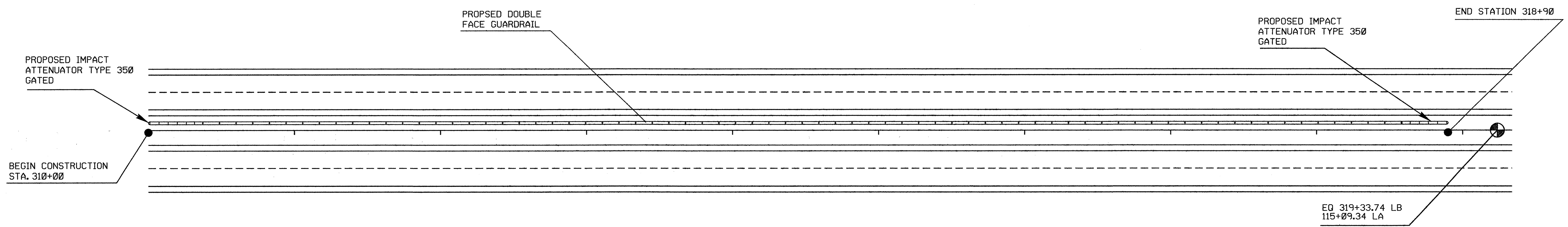
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201961

| ItemNumber | Sec # | Quantity | Unit | Description |
|--------------|-------|----------|------|---|
| 0000100000-N | 800 | Lump Sum | | MOBILIZATION |
| 1121000000-E | 520 | 3,349 | TON | AGGREGATE BASE COURSE |
| 1243000000-E | SP | 4.27 | SMI | SHOULDER CONSTRUCTION |
| 1519000000-E | 610 | 720 | TON | ASPHALT CONC SURFACE COURSE, TYPE S9.5B |
| 1560000000-E | 620 | 44 | TON | ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22 |
| 3000000000-N | SP | 36 | EA | IMPACT ATTENUATOR UNIT, TYPE 350 |
| 3060000000-E | 862 | 22,266 | LF | STEEL BM GUARDRAIL, DOUBLE FACED |
| 3105000000-N | 862 | 4 | EA | STEEL BM GUARDRAIL TERMINAL SECTIONS |
| 3210000000-N | 862 | 4 | EA | GUARDRAIL ANCHOR UNITS, TYPE CAT-1 |
| 4400000000-E | 1110 | 560 | SF | WORK ZONE SIGNS (STATIONARY) |
| 4405000000-E | 1110 | 180 | SF | WORK ZONE SIGNS (PORTABLE) |
| 4415000000-N | 1115 | 2 | EA | FLASHING ARROW PANELS, TYPE C |
| 4420000000-N | 1120 | 2 | EA | CHANGEABLE MESSAGE SIGN |
| 4430000000-N | 1130 | 428 | EA | DRUMS |
| 4480000000-N | 1165 | 2 | EA | TMA |
| 6000000000-E | 1605 | 9,400 | LF | TEMPORARY SILT FENCE |
| 6012000000-E | 1610 | 38 | TON | SEDIMENT CONTROL STONE |
| 6030000000-E | 1630 | 100 | CY | SILT EXCAVATION |
| 6042000000-E | 1632 | 750 | LF | 1/4" HARDWARE CLOTH |

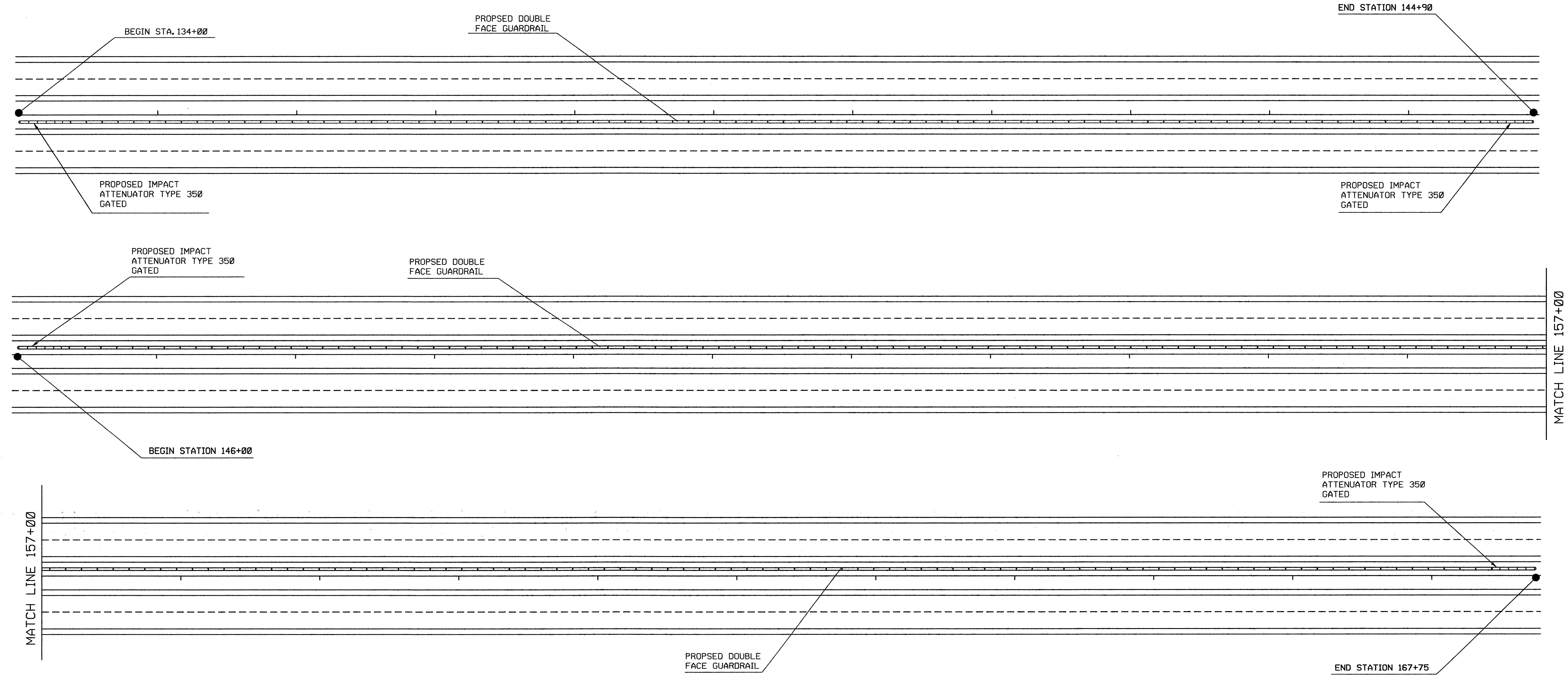
| | | | |
|-----------------------|--------|-------------------------|---|
| PROJECT REFERENCE NO. | W-5015 | SHEET NO. | 4 |
| RW SHEET NO. | | ROADWAY DESIGN ENGINEER | |
| | | HYDRAULICS ENGINEER | |
| 4/10/08 | | <i>J. L. Woodard</i> | |



8/17/99

09-APR-2008 14:51
 i:\us74-guar-draw.dgn
 115+09.34 LA

| | |
|---|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5015 | 5 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/16/08 <i>J. Woodard</i> | HYDRAULICS ENGINEER |

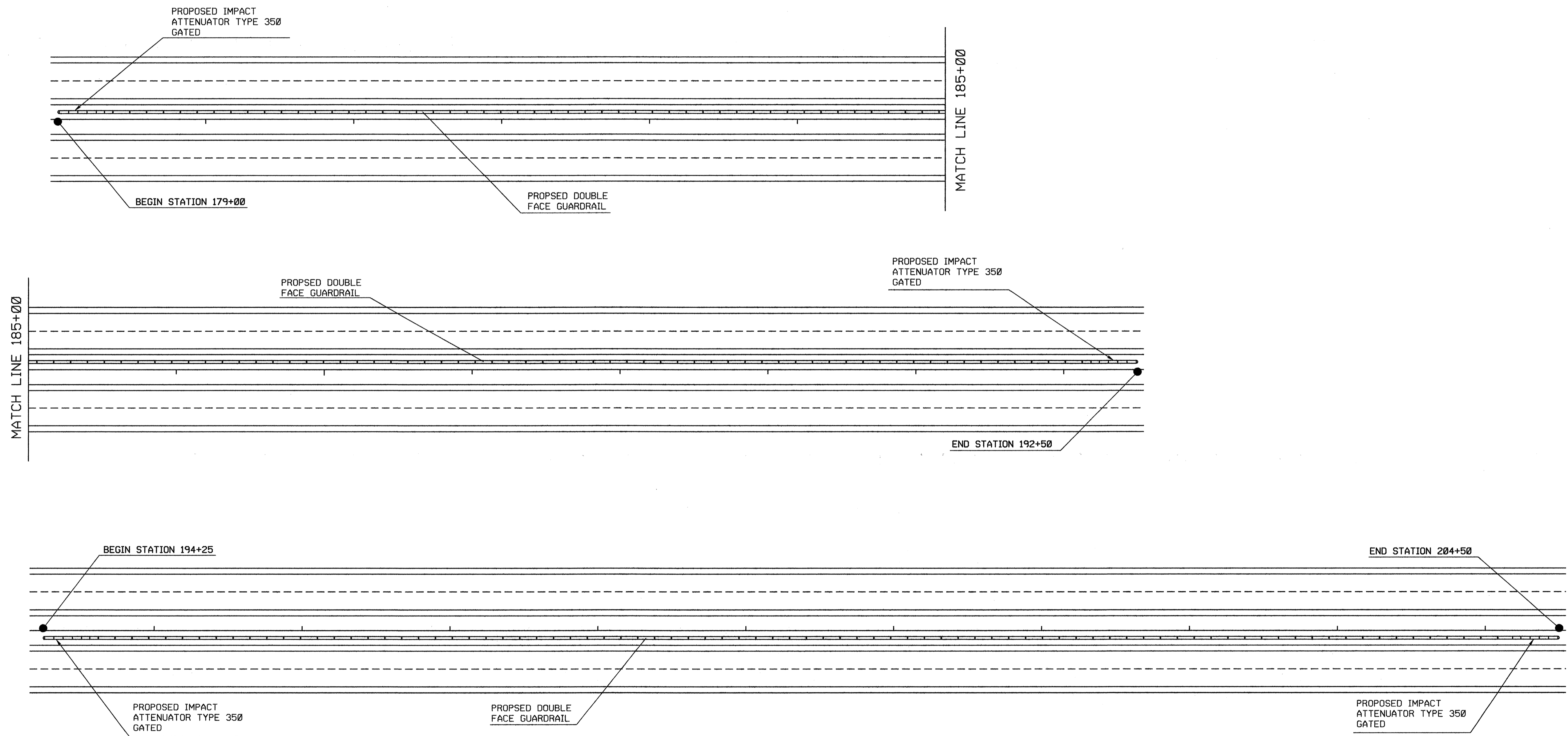


8/17/99

08-APR-2008 14:51
 i:\us74\over\ra1.dgn
 ofspringer_01_012008.dwg

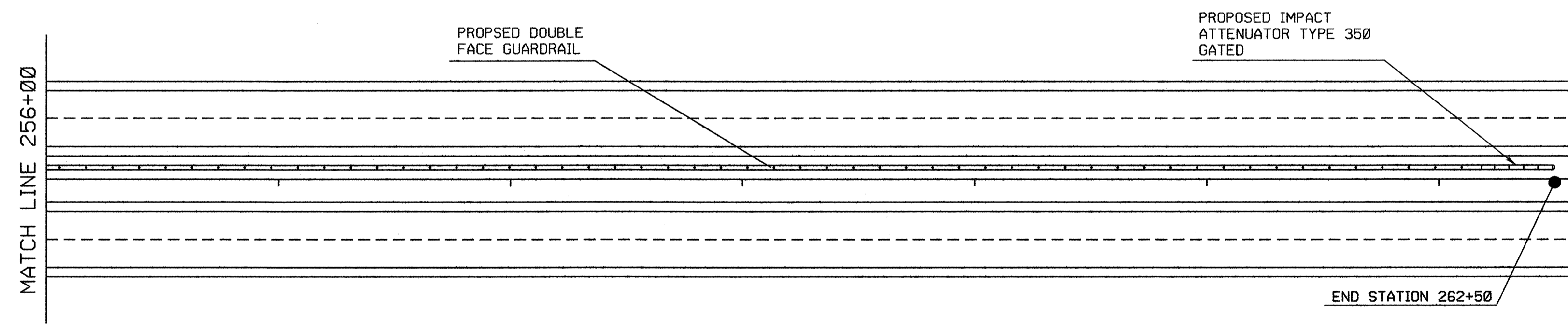
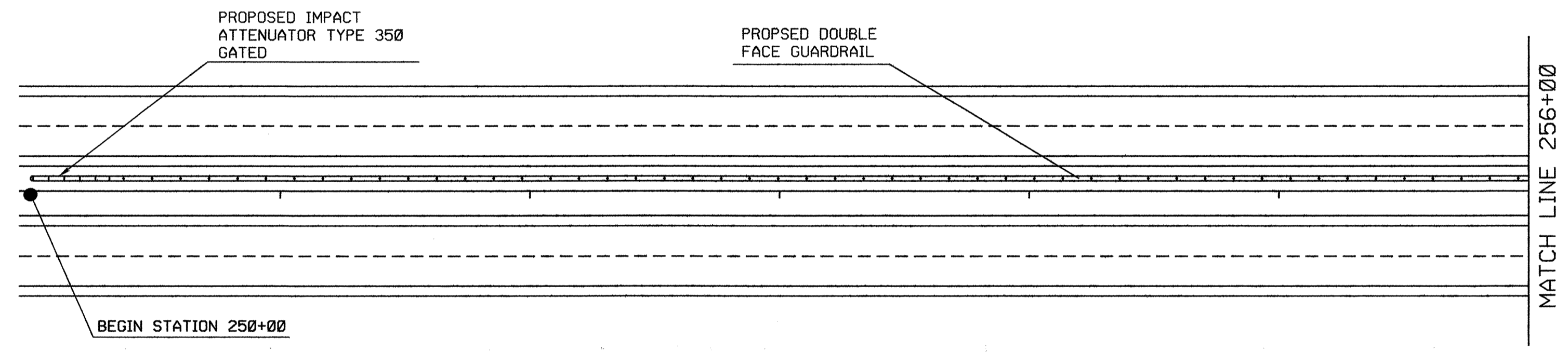
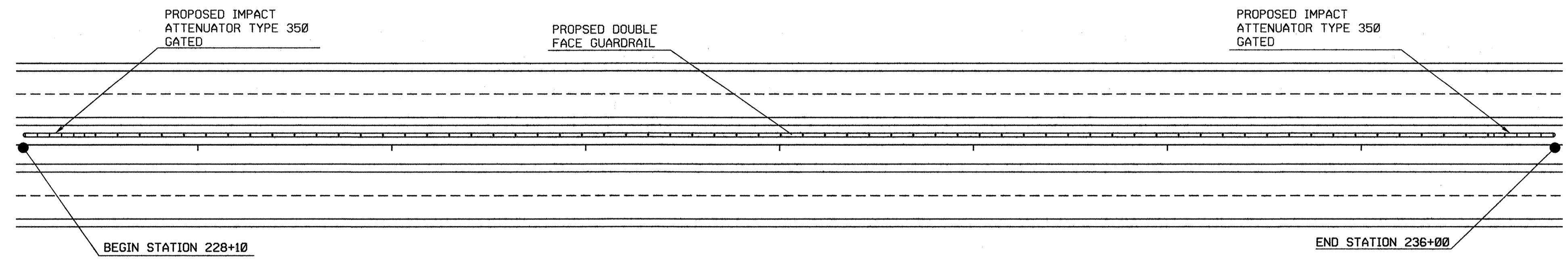
| | |
|---|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5015 | 6 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/19/08 <i>J. W. Wood</i> | HYDRAULICS ENGINEER |

8/17/99

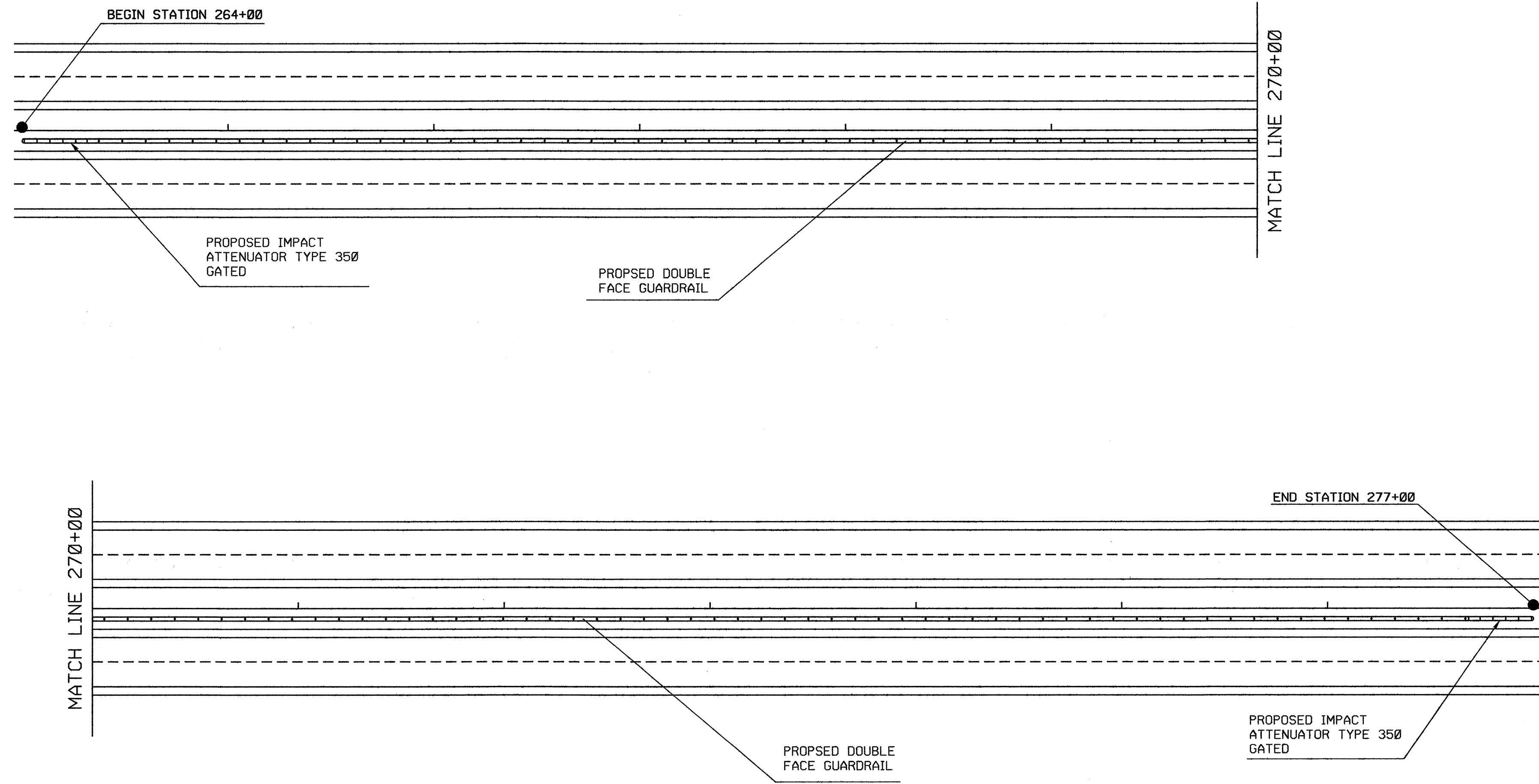


09-APR-2008 14:51
 i:\us74\quer\d01.dgn
 ofspinder_21_0120.d0239690

| | |
|--|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 7 |
| ROADWAY DESIGN ENGINEER 4/10/08 <i>[Signature]</i> | HYDRAULICS ENGINEER |

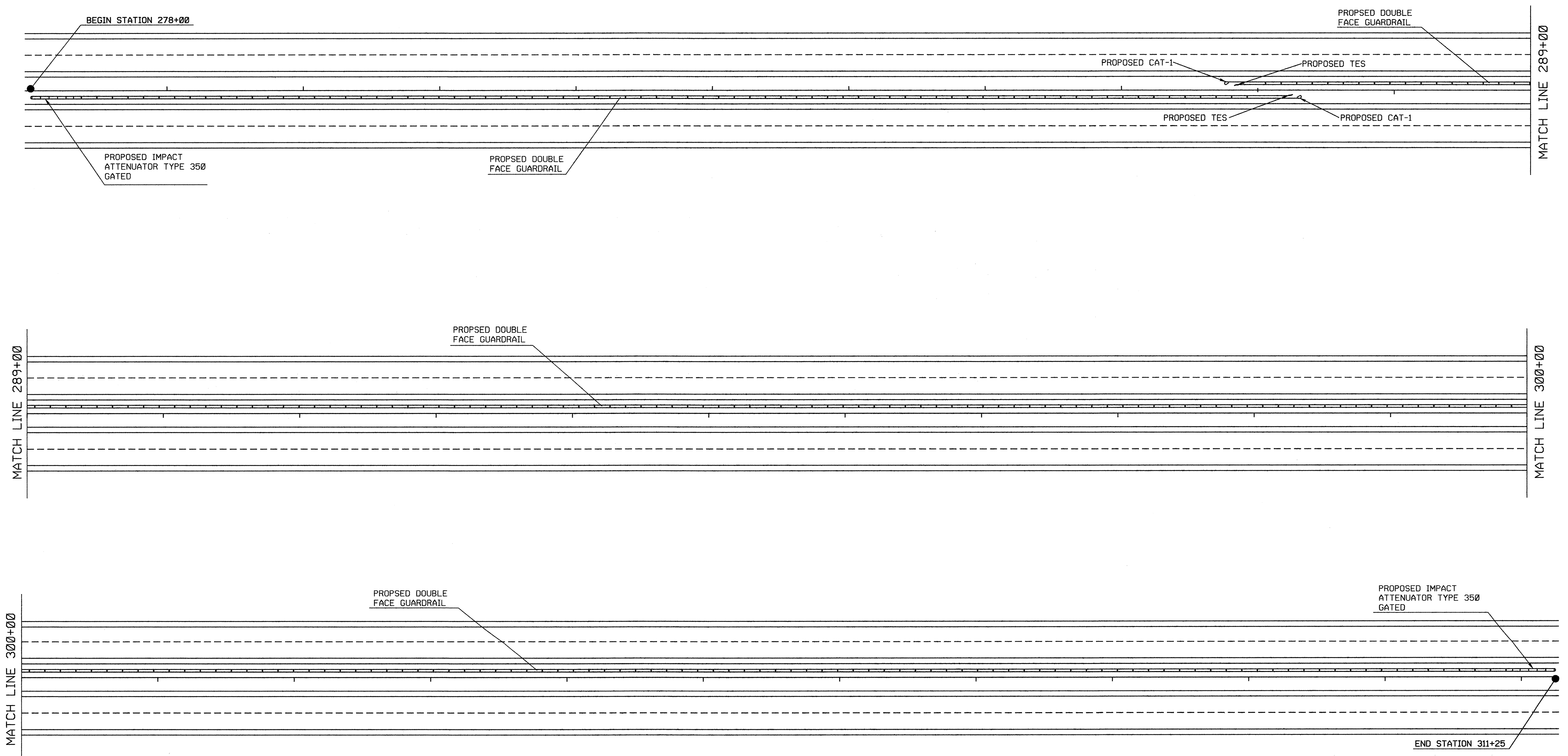


| | |
|--|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 8 |
| R/W. SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/16/08 J. Woodard | HYDRAULICS ENGINEER |



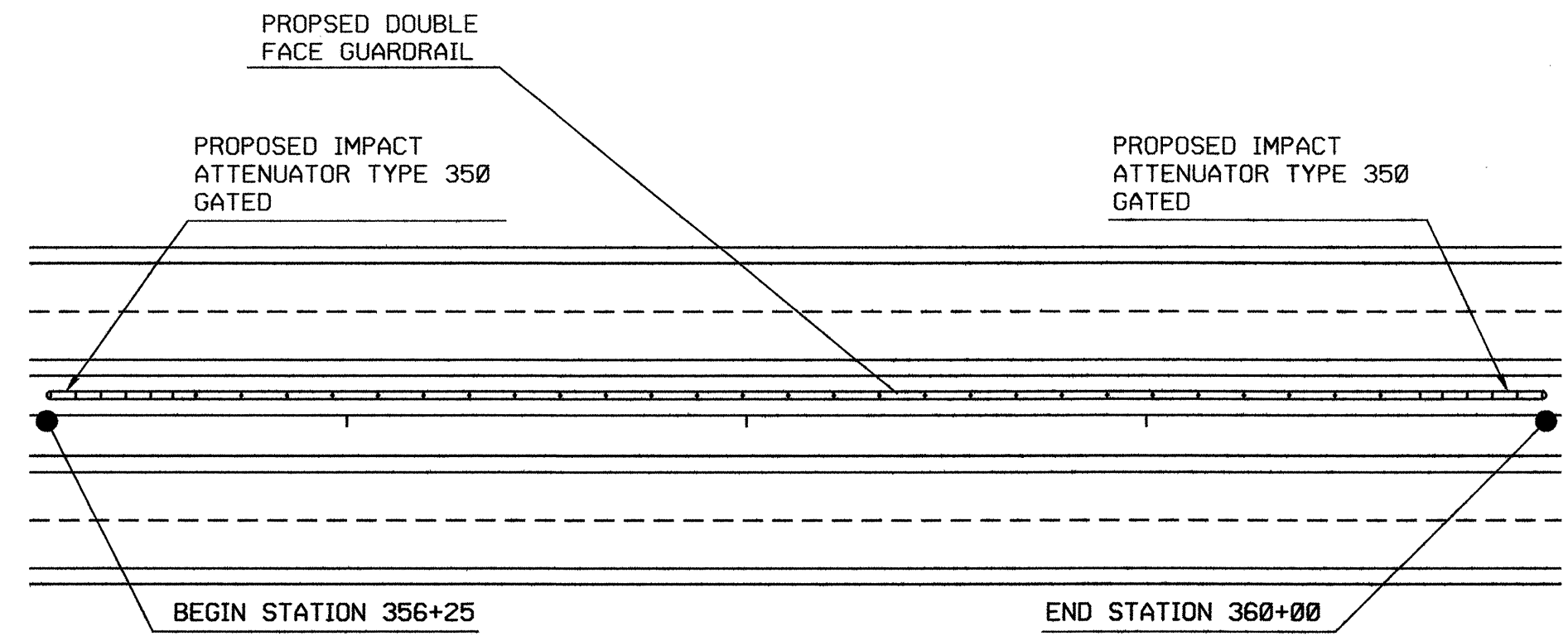
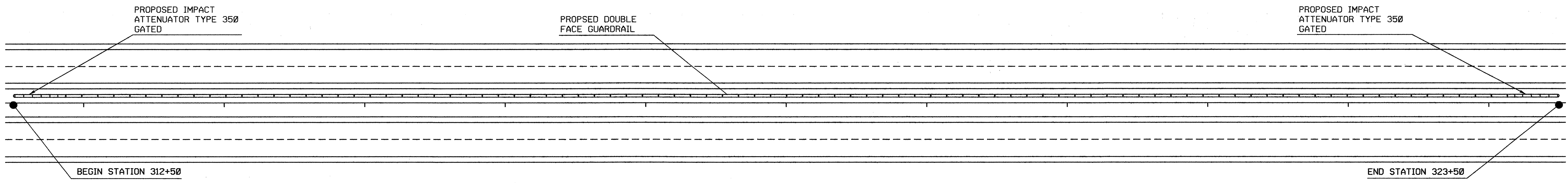
8/17/99

| | |
|---|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 9 |
| RW - SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/16/08 <i>J. Woodard</i> | HYDRAULICS ENGINEER |



08-APR-2008 14:53
 I:\us74\over-draw\1.dgn
 of sorinder AT D:\C:\AD235630

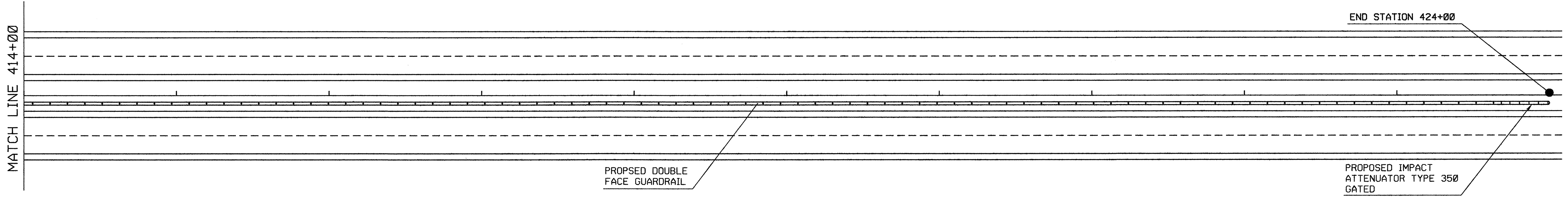
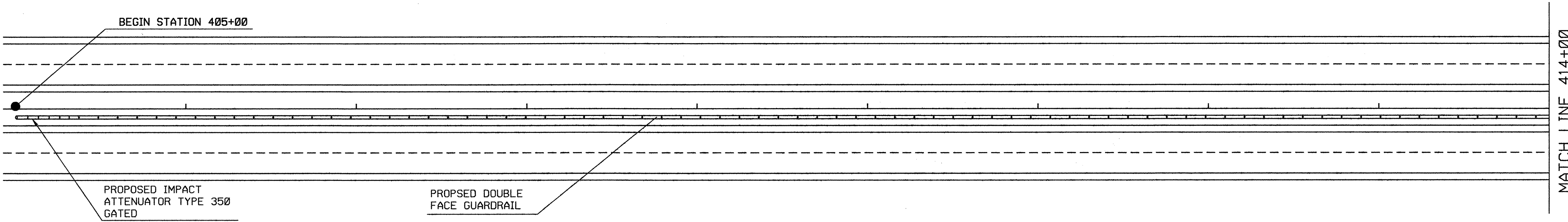
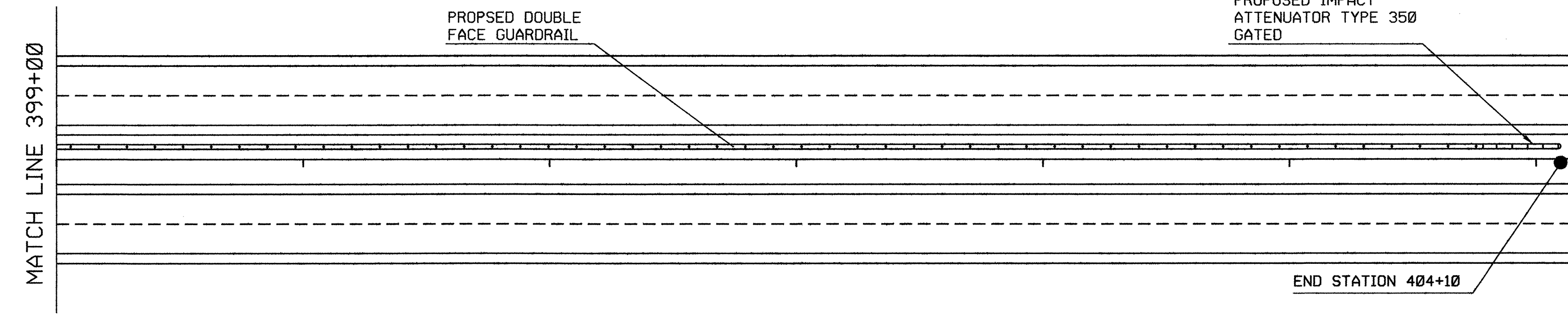
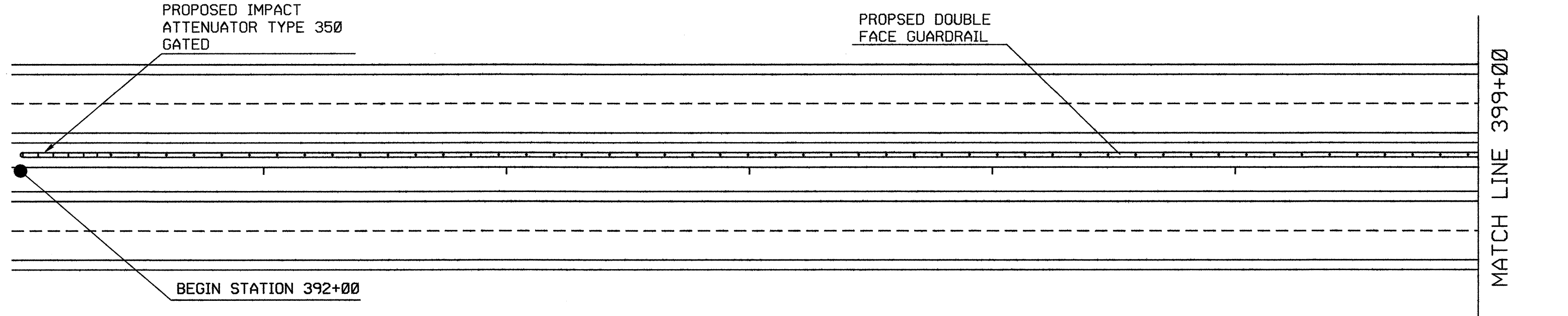
| | |
|---|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 10 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/10/08 <i>J. Woodard</i> | HYDRAULICS ENGINEER |



B.17/99

09-APR-2008 14:53
 D:\us74\cwg\ch01\ch01.dgn
 plspringer At DTC AD239630

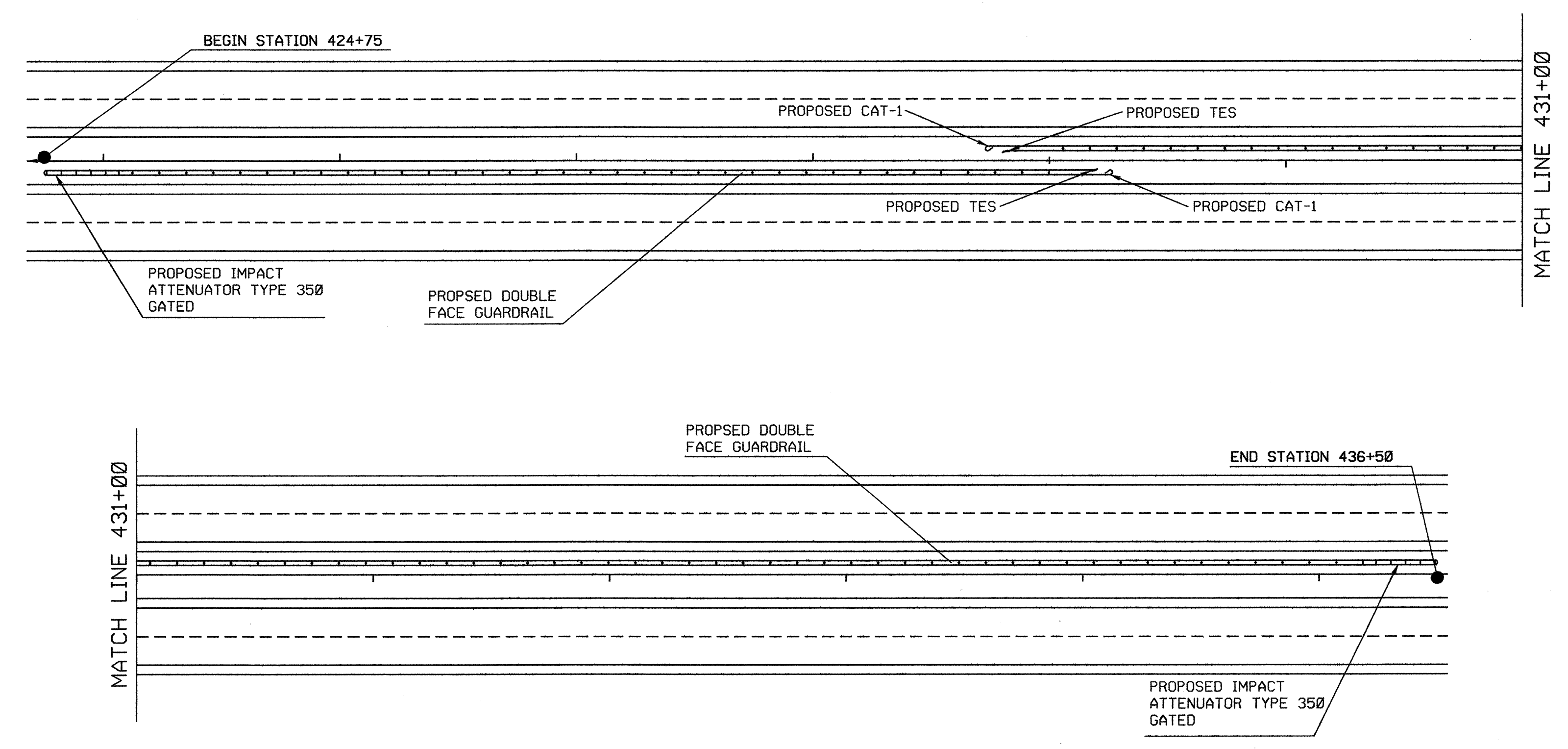
| | |
|--|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 11 |
| RW. SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/10/08 <i>J. K. [Signature]</i> | HYDRAULICS ENGINEER |



8/17/99

09-APR-2008 14:54
 D:\us74\09-dr-01.dwg
 of sprinder

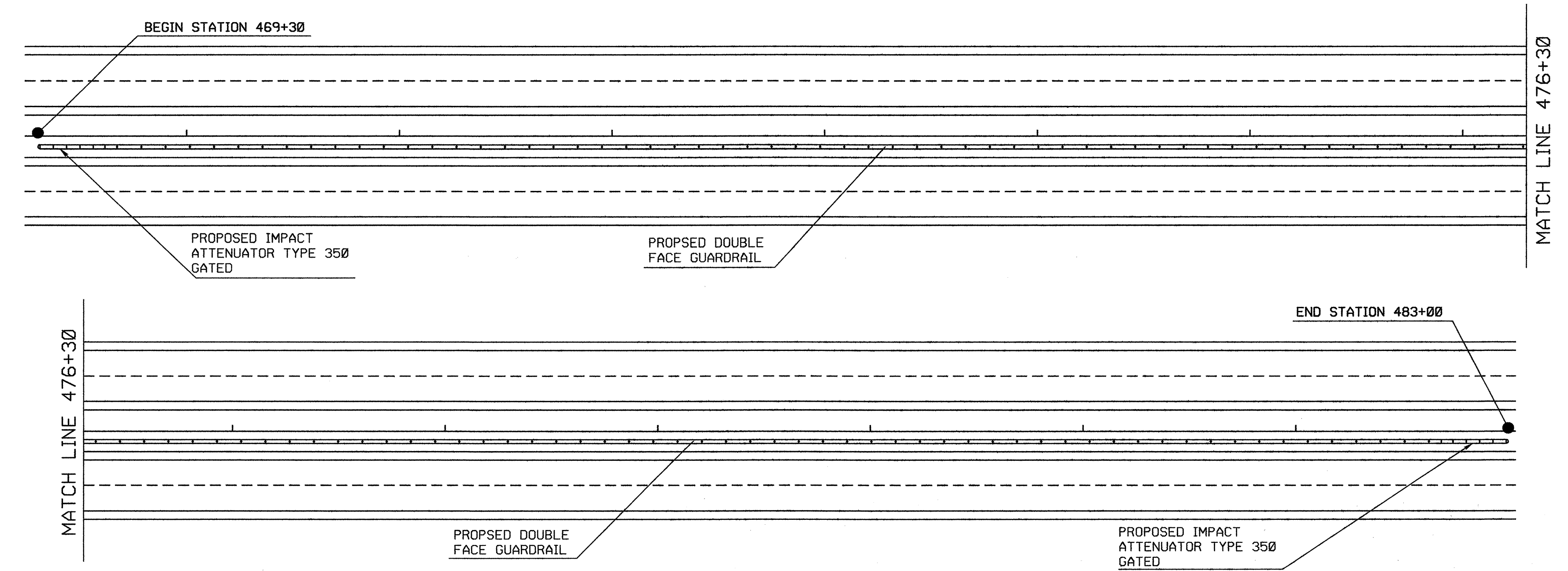
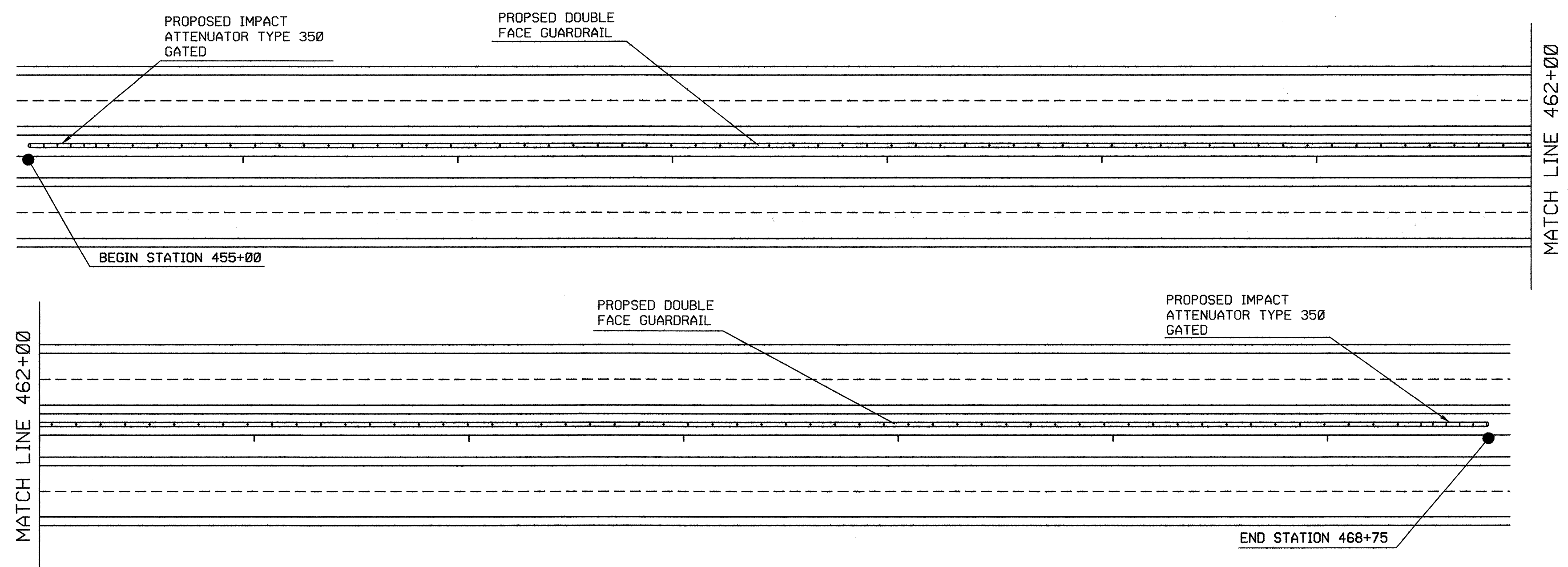
| | |
|---|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5015 | 12 |
| RAW. SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/10/08 <i>J. Woodard</i> | HYDRAULICS ENGINEER |



8/17/99

09-APR-2008 14:54
 D:\us74\civ\dr\51.dgn
 p1.spc:ender

| | |
|---|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 13 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/10/08 <i>J. Woodard</i> | HYDRAULICS ENGINEER |



8/17/99

09-APR-2008 14:55
 215us71 200c dr-33
 6400
 AT: 02C:AD239390

| | |
|--|---------------------|
| PROJECT REFERENCE NO. W-5015 | SHEET NO. 14 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER 4/10/02 <i>[Signature]</i> | HYDRAULICS ENGINEER |

