See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

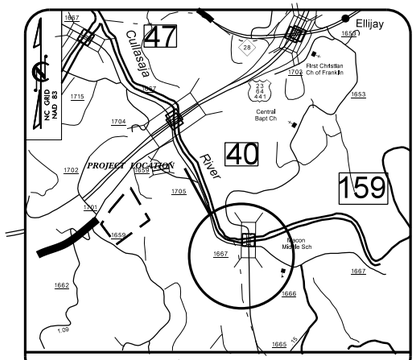
MACON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS#: 41804	1	

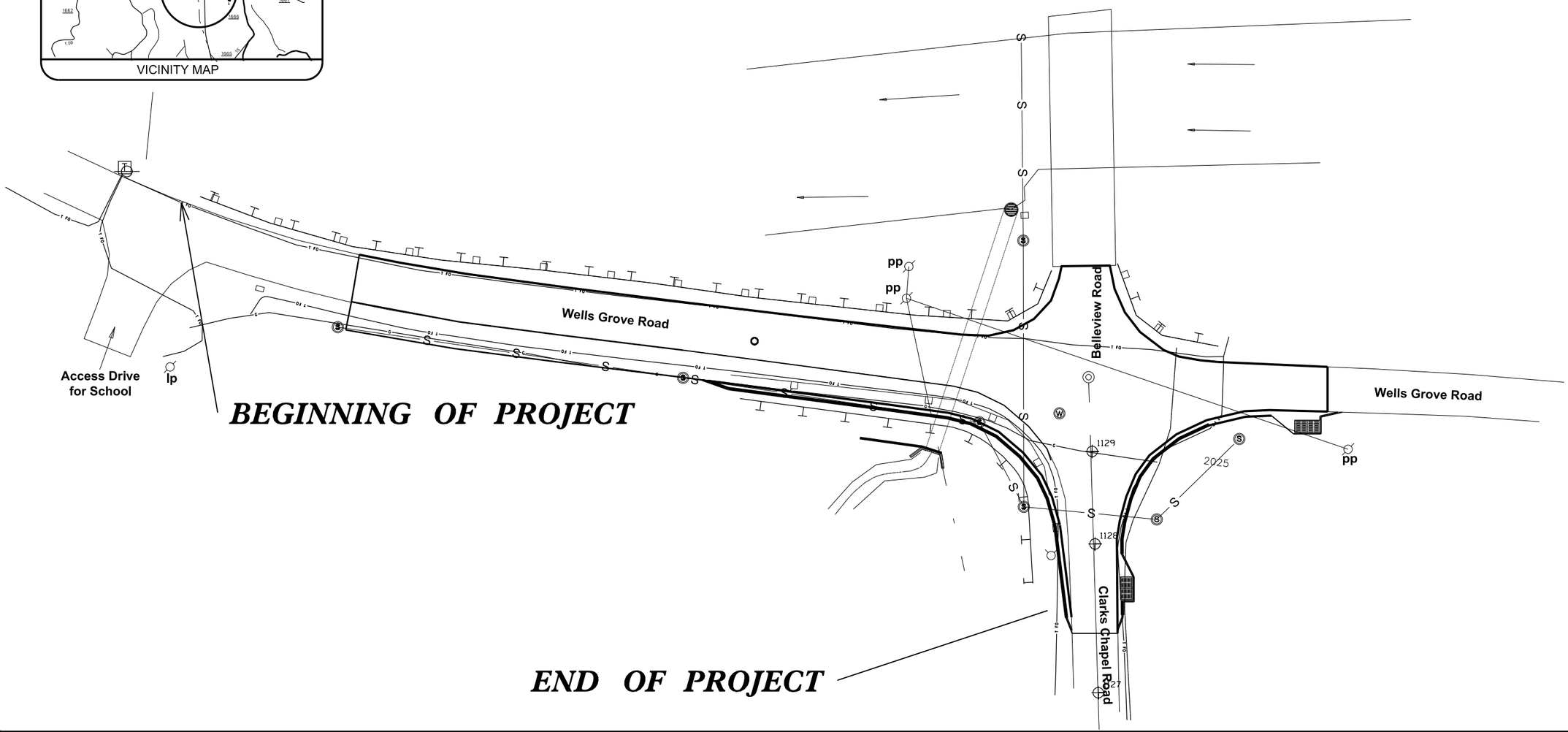
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

LOCATION: INTERSECTION OF NC SR 1667 (WELLS GROVE) AND NC SR 1653 (CLARKS CHAPEL)

TYPE OF WORK: GRADING, RETAINING WALL, ASPHALT, PAVEMENT MARKINGS, GUARDRAIL



VICINITY MAP



GRAPHIC SCALES

50 25 0 50 100

PLANS

PROJECT LENGTH

TOTAL LENGTH STATE PROJECT = .09 MILES

Prepared In the Office of:

DIVISION OF HIGHWAYS

191 Robbinsville Rd., Andrews, NC 28901

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

WESLEY GRINDSTAFF, P.E.
PROJECT ENGINEER

ADAM DOCKERY
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

CONTRACT: DN00336 PROJECT: WBS#: 41804

PROJECT REFERENCE NO.	SHEET NO.
WBS#: 41804	1-A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

INDEX OF SHEETS

1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARDS
1-B	CONVENTIONAL SYMBOLS
2	TYPCIAL SECTION, PAVEMENT SCHEDULE
3	SUMMARY OF EARTHWORK QUANTITIES
4	PLAN SHEET
PM-1 thru PM-2	PAVEMENT MARKING PLANS
EC-1 thru EC-3	EROSION CONTROL PLANS
X1 thru X4	CROSS SECTIONS

GENERAL NOTES

GENERAL NOTES: 2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012

1 CARE SHALL BE TAKEN TO PREVENT DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO THESE UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

2 THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY.

LIST OF ROADWAY STANDARDS

2012 ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" - Highway Design Branch - N.C. Department of Transportation - Raleigh, N.C., dated January 17, 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

STD. NO.	TITLE
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 8 - INCIDENTALS	
840.31	Concrete Junction Box - 12" thru 66" Pipe
852.01	Concrete Islands
DIVISION 11- WORK ZONE TRAFFIC CONTROL	
1110.01	Stationary Work Zone Signs
1110.02	Portable Work Zone Signs
1150.01	Flagging Devices
DIVISION 12- PAVEMENT MARKERS AND DELINEATION	
1205.05	Turn Lanes
DIVISION 16- EROSION CONTROL AND ROADSIDE DEVELOPMENT	
1605.01	Temporary Silt Fence
1632.02	Rock inlet Sediment Trap Type A

04/16/11

PROJECT REFERENCE NO.	SHEET NO.
WBS#:41804	1-B

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
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — 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 — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- 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 — 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 — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

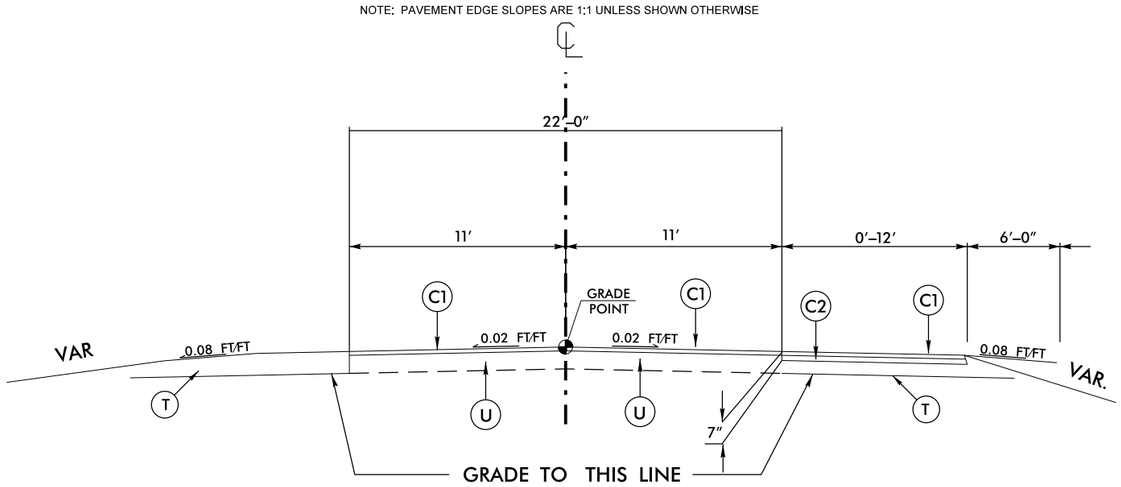
PROJECT REFERENCE NO.	SHEET NO.
WBS#: 41804	2
ROADWAY DESIGN ENGINEER	

PAVEMENT SCHEDULE

(FINAL PAVEMENT DESIGN)

C1	PROP. APPROX. 2"ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.	T	EARTH MATERIAL.
C2	PROP. APPROX. 5"ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
E1	2'6" Curb and Gutter (STD 846.01)		

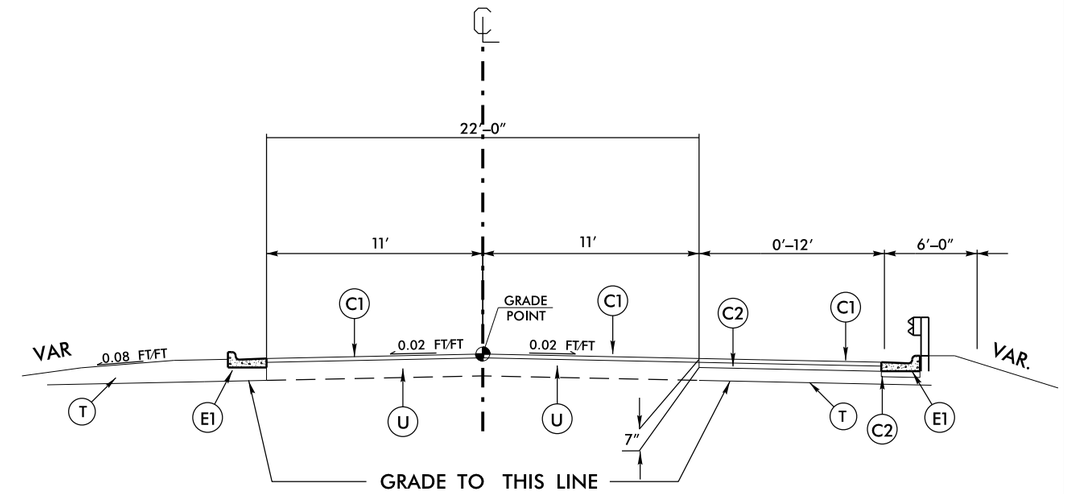
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION NO. 1

–L– Sta. 0+00 to Sta. 1+50

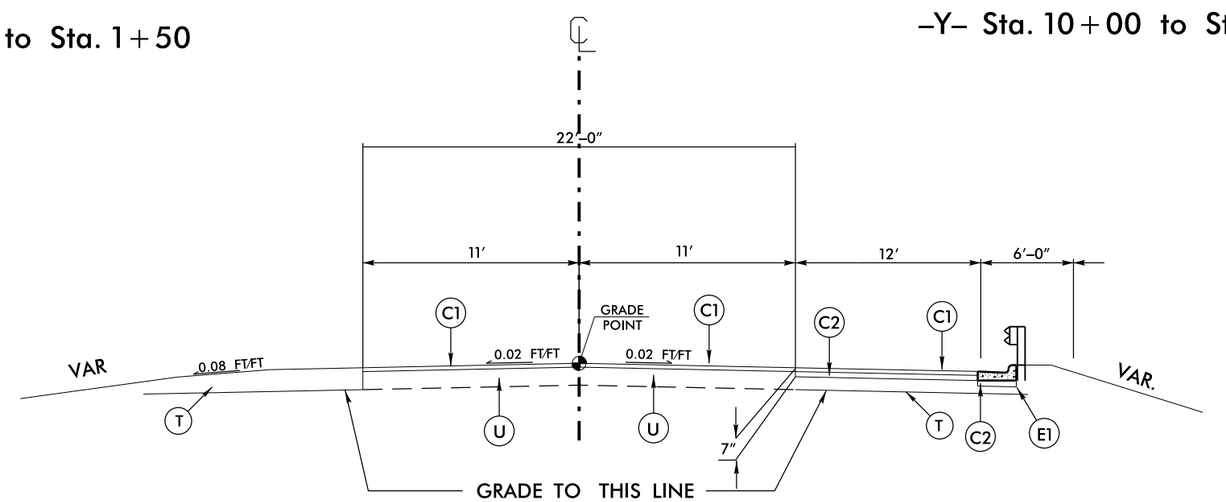
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION NO. 3

–Y– Sta. 10+00 to Sta. 11+50

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



TYPICAL SECTION NO. 2

–L– Sta. 1+50 to Sta. 4+00

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

6/2/99
16-MAY-2014 07:53
S:\Dis-4\Wells Grove Road\dgn\Title Sheets and Quantity Sheets\TYPICAL PAVEMENT SECTIONS @WELLSGROVE.dgn
s1bjoyce at 141.82.0.22216

COMPUTED BY: ARB DATE: 04/17/14
CHECKED BY: JAD DATE: 04/17/14

PROJECT REFERENCE NO.	SHEET NO.
WBS#:41804	3

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUMMARY OF EARTHWORK

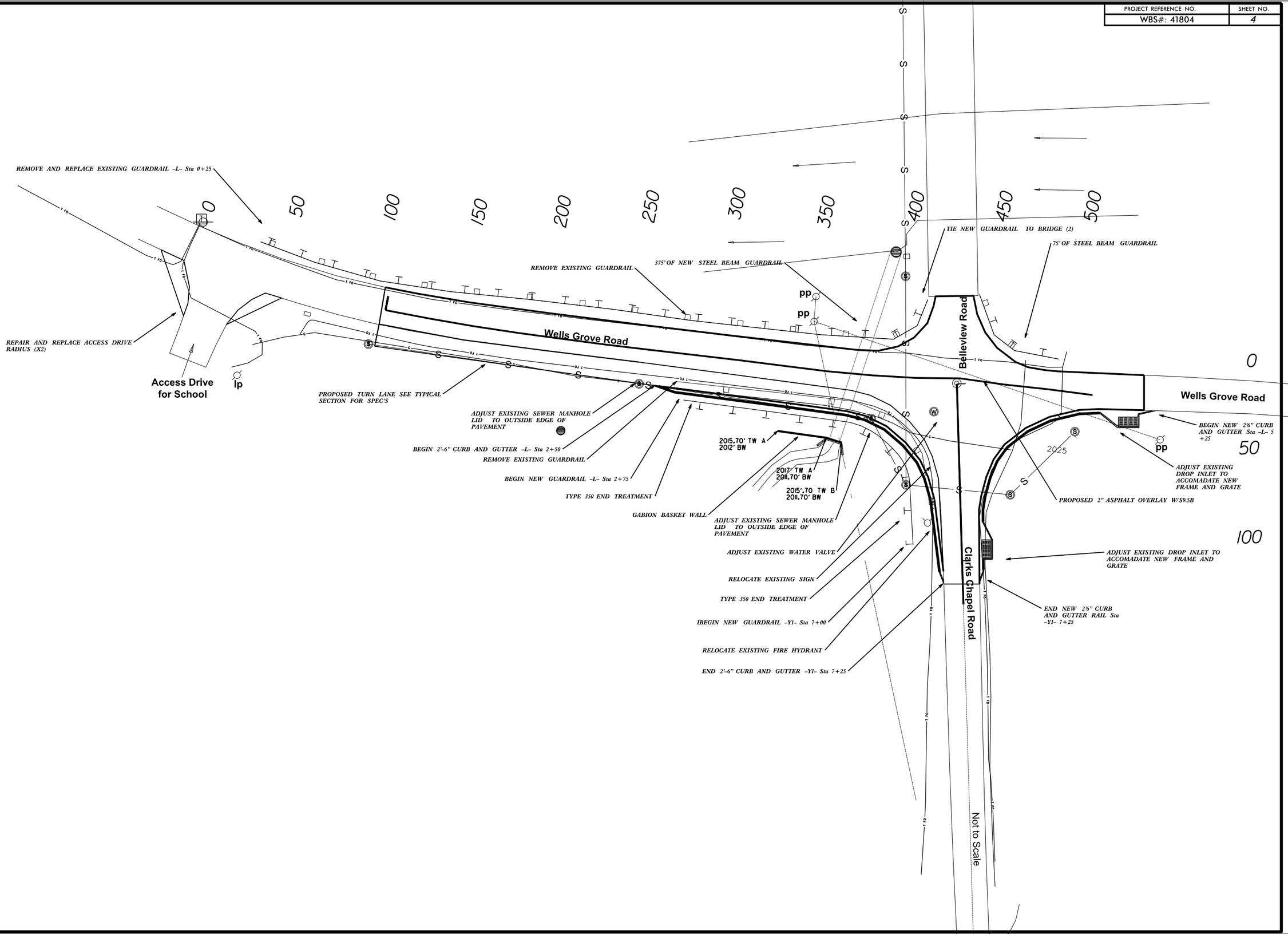
IN CUBIC YARDS

LOCATION	UNDERCUT	EMBT+%	BORROW	WASTE
–L– STA. 0+50.00 to STA. 0+75.00			4	
–L– STA. 0+75.00 to STA. 1+00.00			5	
–L– STA. 1+00.00 to STA. 1+25.00			13	
–L– STA. 1+25.00 to STA. 1+50.00			21	
–L– STA. 1+50.00 to STA. 1+75.00			18	
–L– STA. 1+75.00 to STA. 2+00.00			19	
–L– STA. 2+00.00 to STA. 2+25.00			27	
–L– STA. 2+25.00 to STA. 2+50.00			43	
–L– STA. 2+50.00 to STA. 2+75.00			51	
–Y– STA. 10+50.00 to STA. 10+75.00			11	
–Y– STA. 10+75.00 to STA. 11+00.00			10	
TOTAL			222	

NOTE: Approximate quantities only. Unclassified excavation, borrow excavation, fine grading, clearing, grubbing, and removal of existing pavement will be paid for at the contract lump sum price for "grading"

5/9/06
16-MAY-2014 07:56
S:\Dist3\Macon\Wells Grove Road\dgn\Title Sheets and Quantity Sheets\Wells Grove Turn Lane summary of earthwork quantities.dgn
arbrown4 AT D14CAD272166

PROJECT REFERENCE NO.	SHEET NO.
WBS#: 41804	4



STATE PROJECT REFERENCE NO.	SHEET NO.
WBS#:41804	PM-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAVEMENT MARKING PLAN
MACON COUNTY

LOCATION: INTERSECTION OF NC 1667 (WELLS GROVE) AND NC 1653 (CLARKS CHAPEL)

TYPE OF WORK: GRADING, RETAINING WALL, ASPHALT, PAVEMENT MARKINGS, GUARDRAIL

CONTRACT: DN00336 PROJECT: WBS#: 41804

GENERAL NOTES

GENERAL NOTES: 2012 SPECIFICATIONS
EFFECTIVE: 01-17-2012

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLANS, OR DIRECTED BY THE ENGINEER.

A INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US-64	THERMOPLASTIC	SNOWPLOWABLE

B ON ASPHALT SURFACES, USE HEATED-IN-PLACE THERMOPLASTIC OR EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS.

C TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

D REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

E PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.

LIST OF ROADWAY STANDARDS

2012 ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" – Highway Design Branch – N.C. Department of Transportation – Raleigh, N.C., dated January 17, 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

STD. NO.	TITLE
1205.01	Pavement Markings – Line Types and Offsets
1205.04	Pavement Markings – Intersections
1205.05	Pavement Markings – Turn Lanes
1205.08	Pavement Markings – Symbols and Word Messages
1205.13	Pavement Markings – New Interchanges and Intersections

LEGEND

PAVEMENT MARKINGS

CRYSTAL/CRYSTAL PAVEMENT MARKER

YELLOW/YELLOW PAVEMENT MARKER

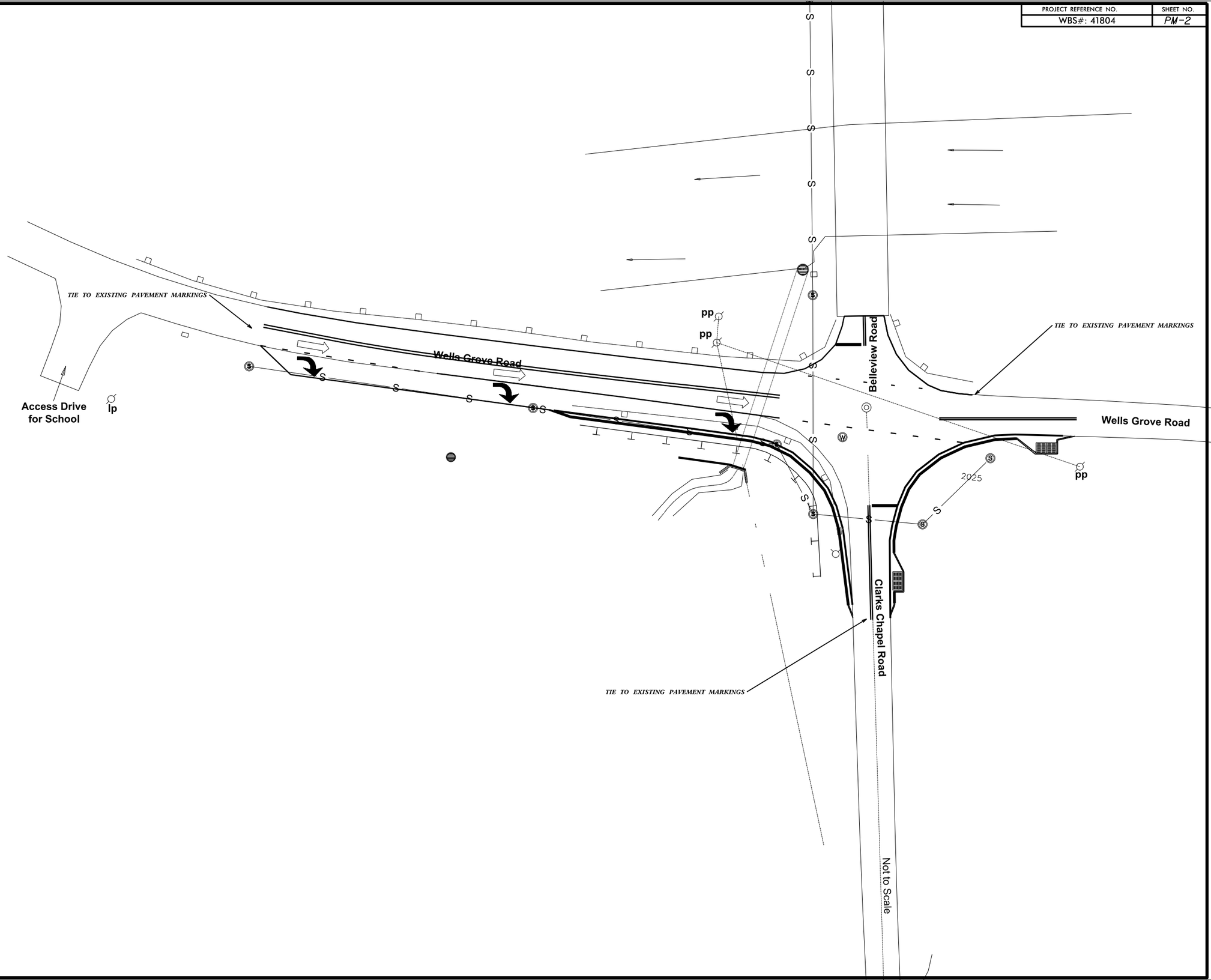
CRYSTAL/RED PAVENMENT MARKER

PAVEMENT MARKING SYMBOL

Prepared In the Office of:
DIVISION 14 DISTRICT III
191 Robbinsville Rd., Andrews, NC 28901

2012 STANDARD SPECIFICATIONS

PROJECT REFERENCE NO.	SHEET NO.
WBS#: 41804	PM-2



See Sheet 1-A For Index of Sheets

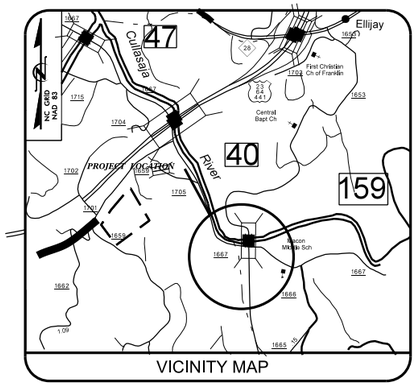
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOPSED EROSION CONTROL

MACON COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS#:41804	EC-1	

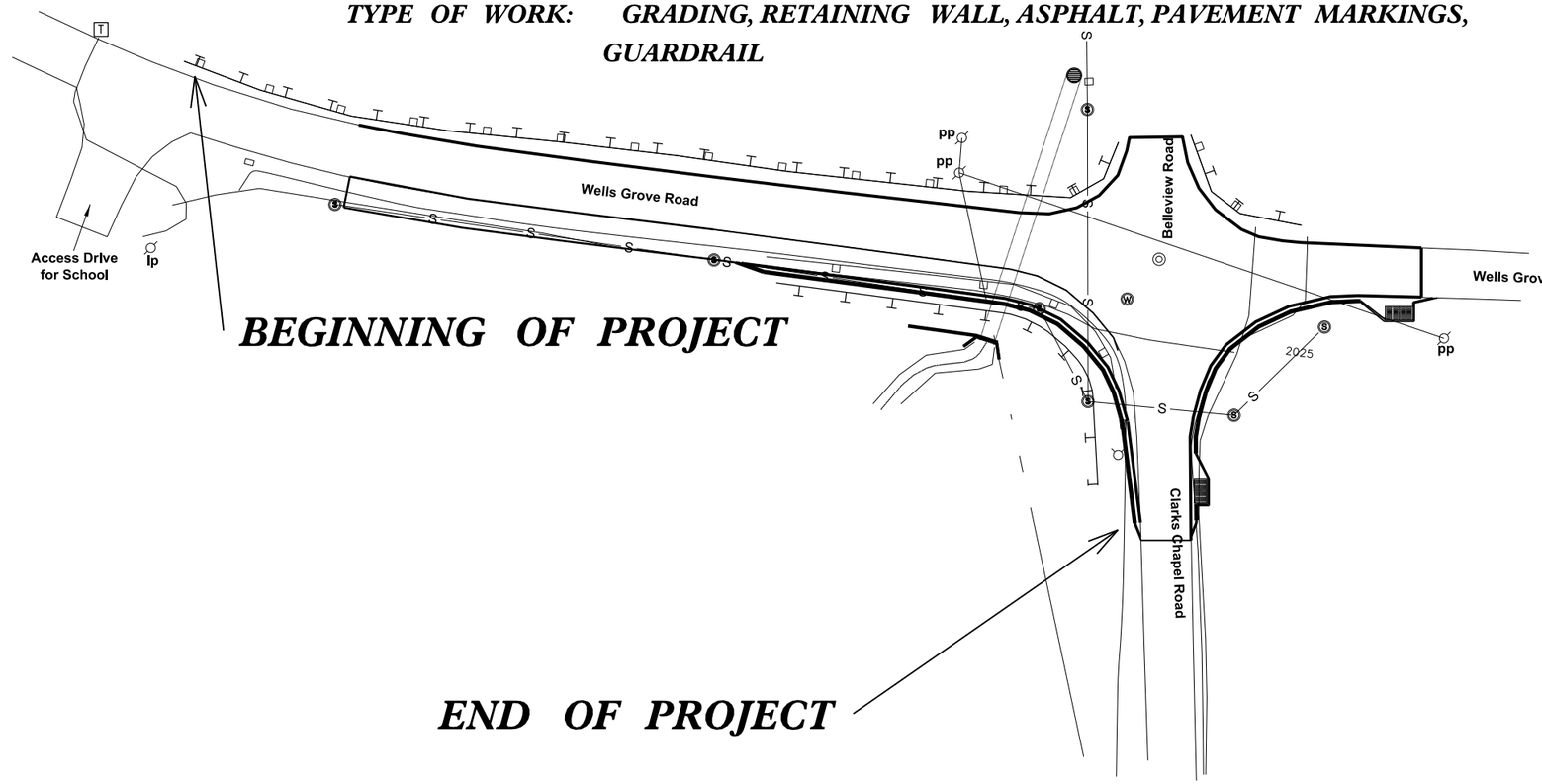
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION



VICINITY MAP

LOCATION: ***INTERSECTION OF NC SR 1667 (WELLS GROVE) AND NC SR 1653 (CLARKS CHAPEL)***

TYPE OF WORK: ***GRADING, RETAINING WALL, ASPHALT, PAVEMENT MARKINGS, GUARDRAIL***



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
	Wattle // Coir Fiber Wattle	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

CONTRACT: DN00336 PROJECT: WBS#: 41804

GRAPHIC SCALES

0 50 100
PLANS

0
PROFILE (HORIZONTAL)

0
PROFILE (VERTICAL)

DESIGN DATA

ADT _____= _____
ADT _____= _____
DHV = ___ %
D = ___ %
T = ___ % *
V = ___ MPH
* TTST = __ DUAL __
FUNC CLASS =
_____
_____ TIER

PROJECT LENGTH

TOTAL LENGTH STATE PROJECT = 0.08 MILES

Prepared In the Office of:
DIVISION OF HIGHWAYS
191 Robbinsville Rd., Andrews, NC 28901

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

WESLEY GRINDSTAFF, P.E.
PROJECT ENGINEER

ADAM DOCKERY
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

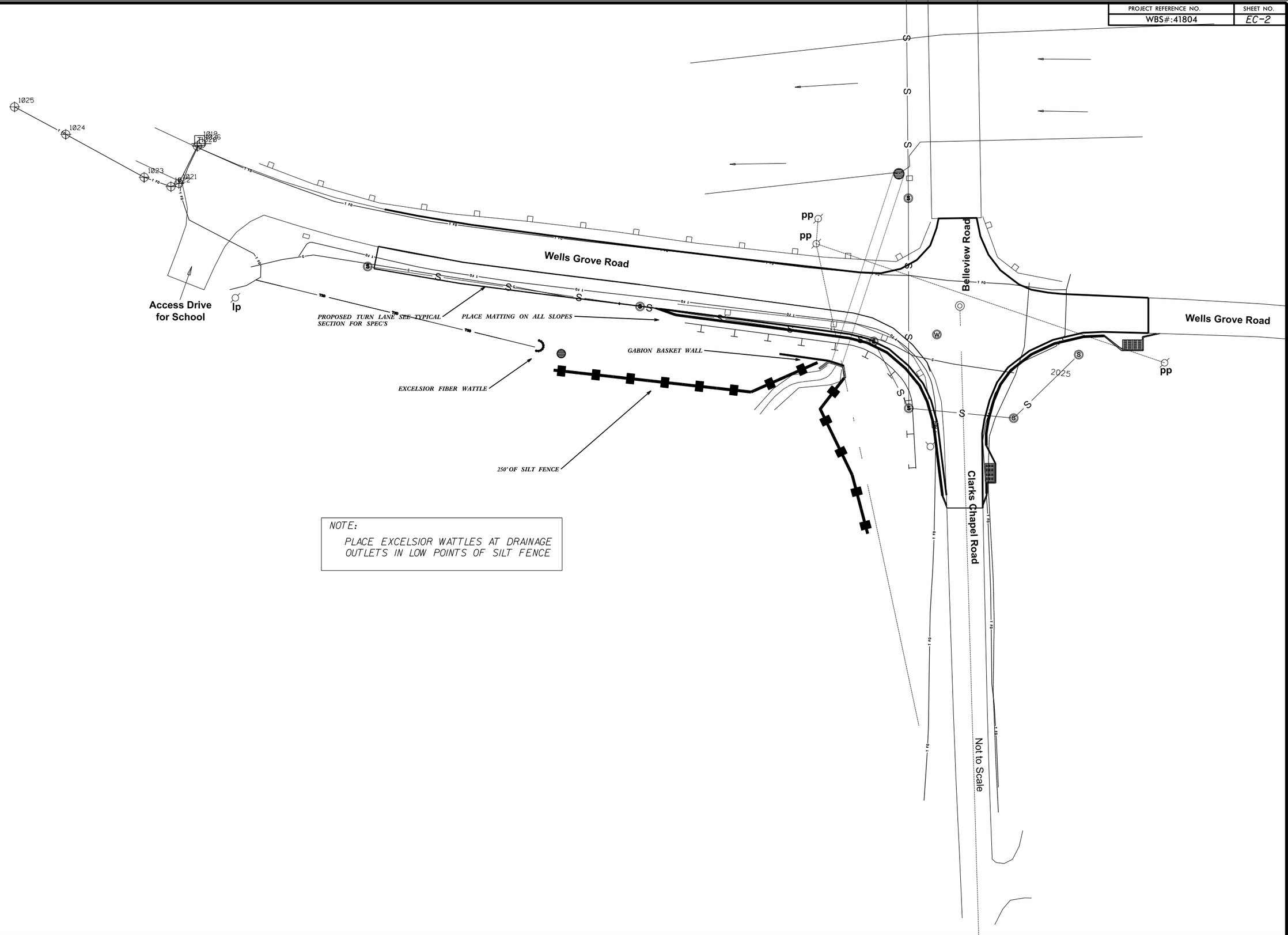
SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROJECT REFERENCE NO.	SHEET NO.
WBS#:41804	EC-2

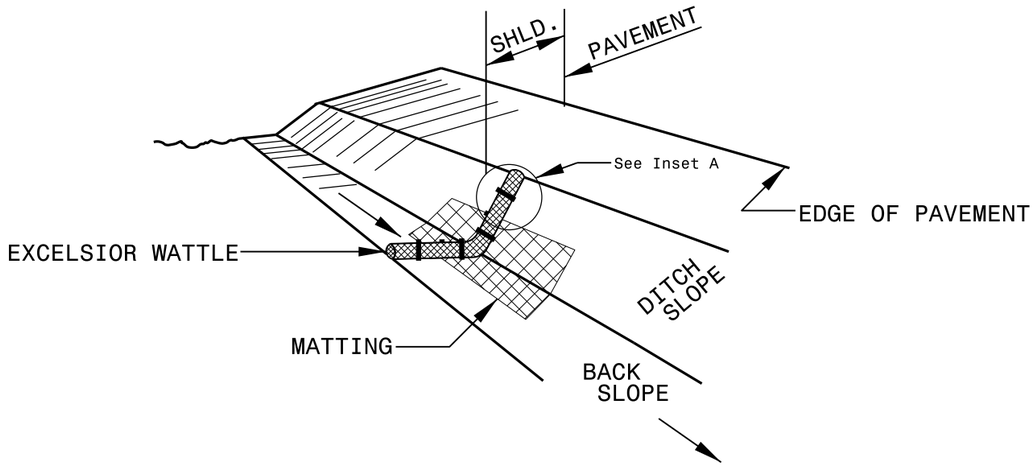


NOTE:

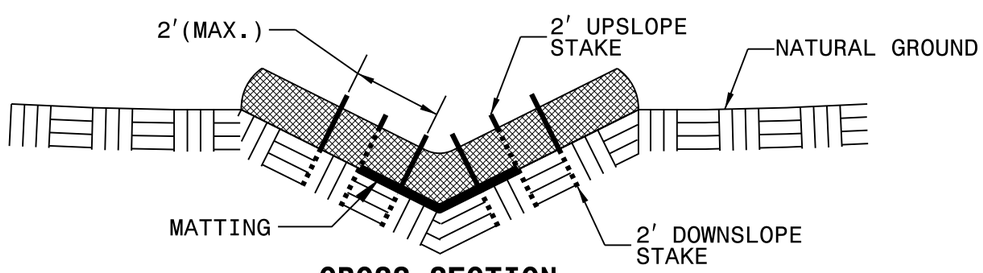
PLACE EXCELSIOR WATTLES AT DRAINAGE OUTLETS IN LOW POINTS OF SILT FENCE

PROJECT REFERENCE NO.	SHEET NO.
WBS#: 41804	EC-3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	

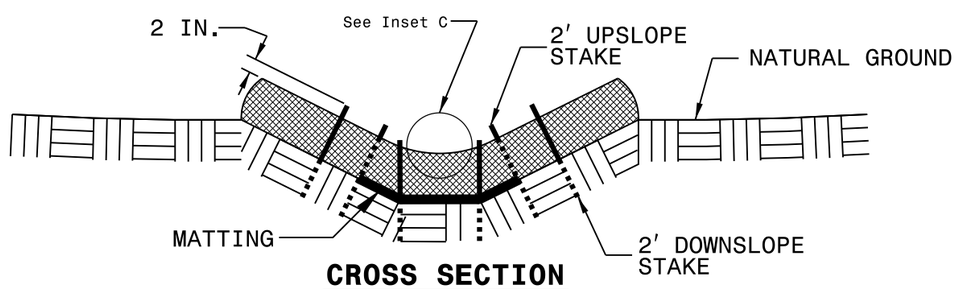
WATTLE WITH POLYACRYLAMIDE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. 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.

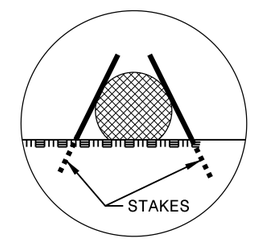
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

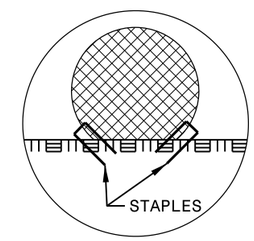
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

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.

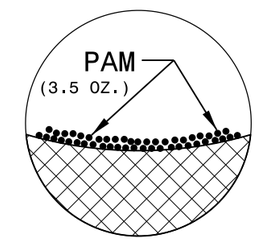
INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



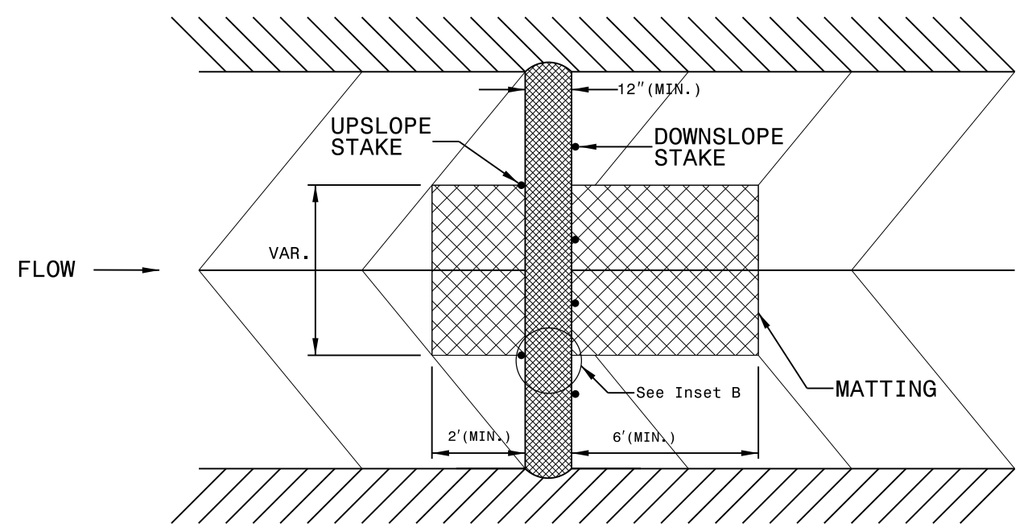
INSET A



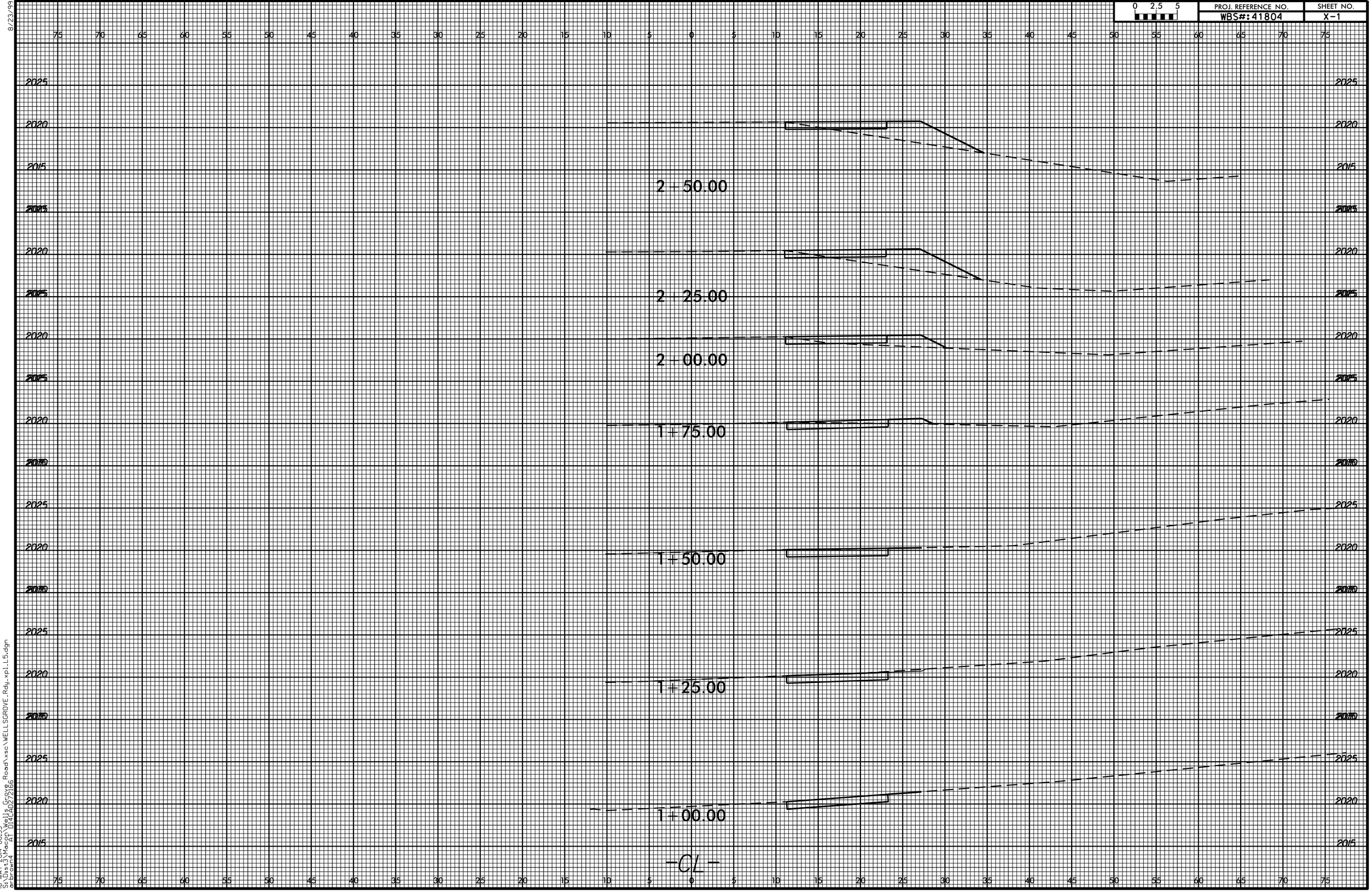
INSET B



INSET C



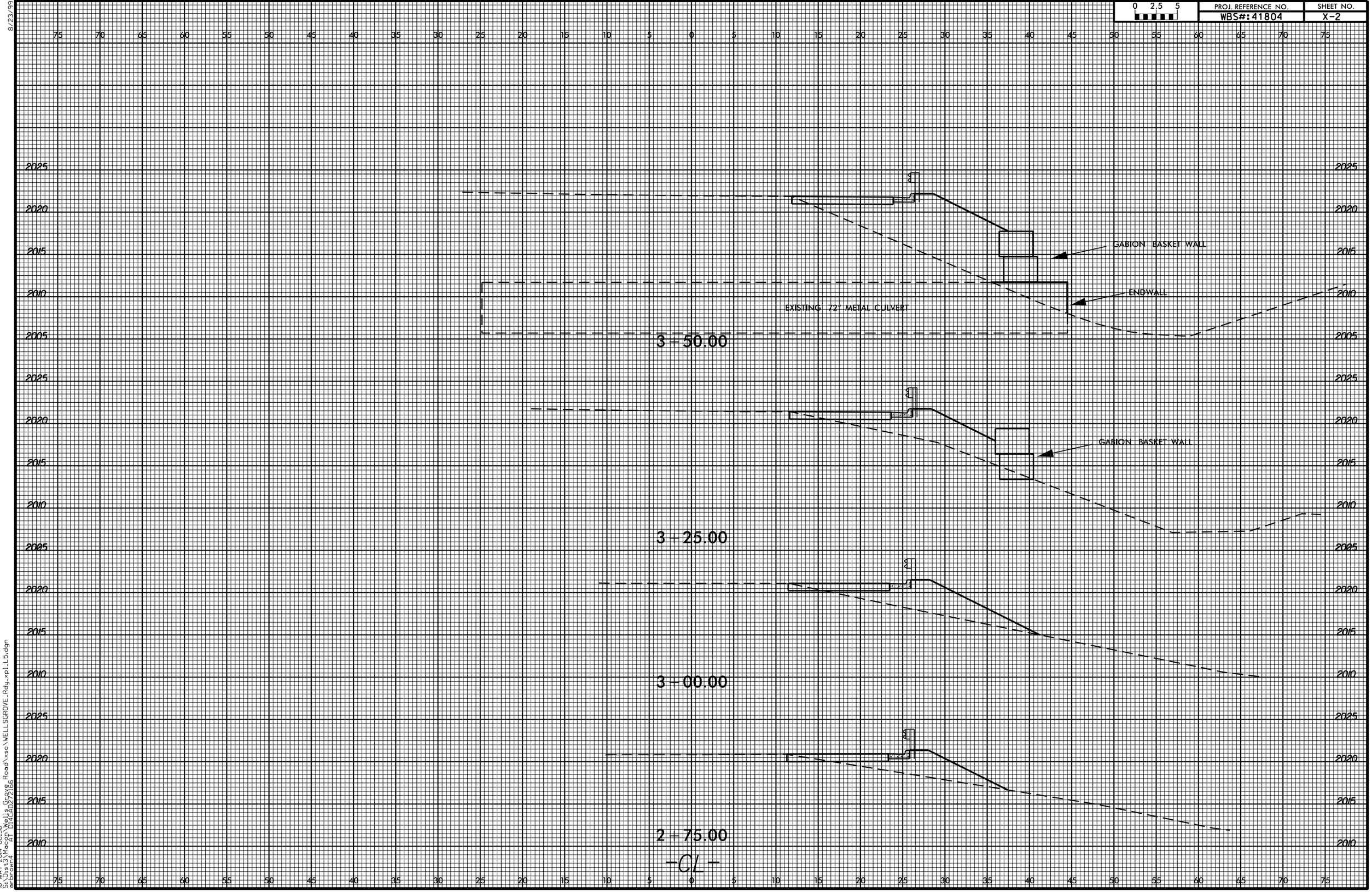
TOP VIEW



8/23/99

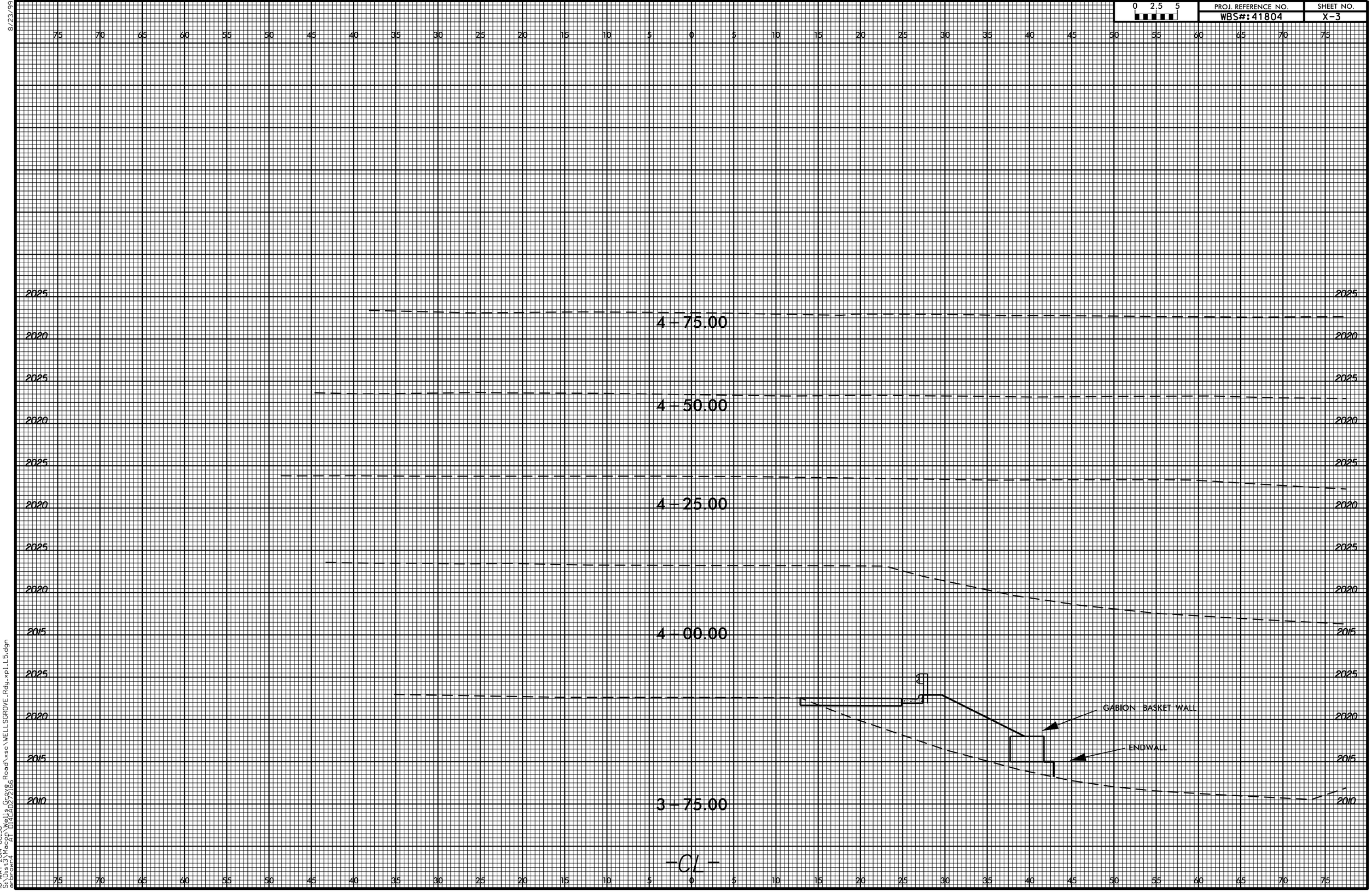
16-MAY-2014 08:35
S:\Dist3\Macon\Wells Grove Road\xsc\WELLSGROVE_Rdy_xpl_L5.dgn
arbrown4 AT D14CAD272166

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	WBS#:41804	X-2



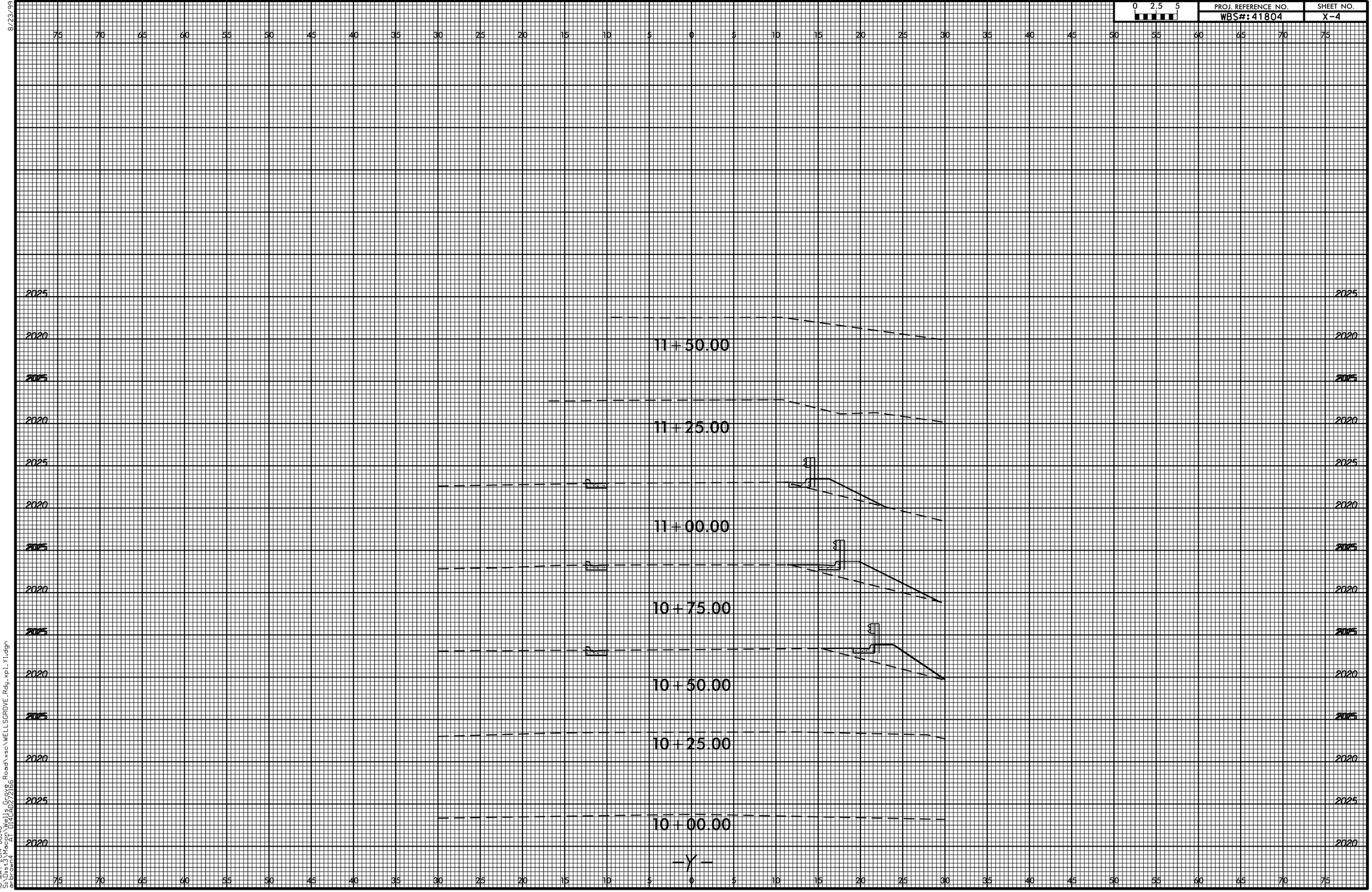
8/23/99

16-MAY-2014 08:36
S:\Dist5\Mono\Wells Grove Road\xsc\WELLSGROVE_Rdy.xpl.L5.dgn
or brown4 AT D14CAD272166



8/23/99

16-MAY-2014 08:38
S:\Dist3\Macon\Wells Grove Road\xsc\WELLSGROVE_Rdy_xpl_L5.dgn
arbrown4 AT D14CAD272166



8/23/99
16-MAY-2014 08:48
S:\Dist3\Macon\Wells Grove Road\xsc\WELLSGROVE_Rdy_xpl_Y1.dgn
arbrown4 AT D14CAD272166