

STEEP SLOPE & ERODABLE SOILS ANALYSIS

For

COLEMAN ROAD TRACT

Located in Land Lots 233, 234, 270  
12th District  
Fulton County, GA

August 6, 2014



**Watts & Browning  
Engineers, Inc.**

*Civil Engineering · Land Planning · Land Surveying*  
*Phone: 678-324-6192 Fax: 678-694-6870*

**Narrative:**

The subject property is located in the northeast quadrant of the intersection of Marietta Highway and Coleman Road in Land Lots 233, 234, and 270 of the 12<sup>th</sup> District, Fulton County, GA.

The existing site is partially developed and heavily wooded.

The purpose of a steep slope and erodible soils analysis is to protect health, safety, and property from instability and erosion due to inappropriate use or over-development of land within 500-ft of state waters. A steep slope and erodible soils analysis is necessary to determine the land development potential for land within 500-ft of state waters. This development is based on the following scoring system:

1. A segment score of 35 or greater shall be designated as part of the buffer and no development shall be approved in that segment
2. A segment score of 25 or 30 shall require the application of additional protective measures as required by the Engineering Division Manager of the Community Development Department. Additionally, development shall not be prohibited and that area shall not be part of the buffer
3. A segment score of 20 or less shall be developed with standard protective measures and that area shall not be part of the buffer.

**Conclusion:**

The steep slope and erodible soils analysis was performed in accordance with City of Roswell's standards and guidelines.

The following slope analysis data tables show that for all segments on the subject property the scores range from 25 to 10; which requires additional protective measures and standard protective measures respectively. The additional protective measures will include berms and diversions, Pam, slope stabilization (matting), and vegetation, or other measures as required by the Engineering Division Manager of the Community Development Department. Additionally, no portion of the property that falls within 500-ft of state waters is considered a buffer.

Note: None of the property drains to the nearby lake on the northwest side of Coleman Road, rather the site drains via a 700-ft +/- ditch that runs southerly along the southeast side of Coleman Road to the intersection of Coleman Road and Marietta Highway then through a road culvert to the stream below the lake.

**EVALUATION OF STEEP SLOPES & ERODABLE SOILS****Project:** Coleman Road Tract**Date:** 8/6/2014**Cross-Section:** A

Segment	1		2		3	
Factor	Value	Score	Value	Score	Value	Score
Slope	7	0	21	10	10	5
Slope Length (ft)	760	10	819	10	915	10
K Factor	0.24	5	0.28	5	0.28	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1039	0	980	0	884	0
<b>Total Score</b>		15		25		20

Segment	4		5		6	
Factor	Value	Score	Value	Score	Value	Score
Slope	7	0	2	0	1	0
Slope Length (ft)	1064	10	1524	10	1799	10
K Factor	0.28	5	0.28	5	0.28	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	735	0	275	5	0	10
<b>Total Score</b>		15		20		25

Segment						
Factor	Value	Score	Value	Score	Value	Score
Slope						
Slope Length (ft)						
K Factor						
Cover						
Sediment Delivery						
<b>Total Score</b>		0		0		0

**EVALUATION OF STEEP SLOPES & ERODABLE SOILS****Project:** Coleman Road Tract**Date:** 8/6/2014**Cross-Section:** B

Segment	1		2		3	
Factor	Value	Score	Value	Score	Value	Score
Slope	4	0	11	5	3	0
Slope Length (ft)	125	5	195	5	283	10
K Factor	0.24	5	0.24	5	0.24	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1573	0	1503	0	1415	0
<b>Total Score</b>		10		15		15

Segment	4		5		6	
Factor	Value	Score	Value	Score	Value	Score
Slope	15	5	39	10	5	0
Slope Length (ft)	358	10	413	10	453	10
K Factor	0.24	5	0.24	5	0.24	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1340	0	1285	0	1245	0
<b>Total Score</b>		20		25		15

Segment	7		8		9	
Factor	Value	Score	Value	Score	Value	Score
Slope	16	5	38	10	16	5
Slope Length (ft)	513	10	528	10	568	10
K Factor	0.24	5	0.24	5	0.24	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1185	0	1170	0	1130	0
<b>Total Score</b>		20		25		20

Segment	10		11		12	
Factor	Value	Score	Value	Score	Value	Score
Slope	8	0	19	5	2	0
Slope Length (ft)	618	10	683	10	761	10
K Factor	0.28	5	0.28	5	0.28	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1080	0	1015	0	937	0
<b>Total Score</b>		15		20		15

**EVALUATION OF STEEP SLOPES & ERODABLE SOILS****Project:** Coleman Road Tract**Date:** 8/6/2014**Cross-Section:** B

Segment	13		14		15	
Factor	Value	Score	Value	Score	Value	Score
Slope	23	10	11	10	2	0
Slope Length (ft)	813	10	888	10	1423	10
K Factor	0.28	5	0.28	5	0.28	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	885	0	810	0	275	5
<b>Total Score</b>		25		25		20

Segment	16					
Factor	Value	Score				
Slope	1	0				
Slope Length (ft)	1698	10				
K Factor	0.28	5				
Cover	Woods	0				
Sediment Delivery	0	10				
<b>Total Score</b>		25				

**EVALUATION OF STEEP SLOPES & ERODABLE SOILS****Project:** Coleman Road Tract**Date:** 8/6/2014**Cross-Section:** C

Segment	1		2		3	
Factor	Value	Score	Value	Score	Value	Score
Slope	3	0	9	0	4	0
Slope Length (ft)	92	5	200	5	314	10
K Factor	0.24	5	0.24	5	0.24	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1682	0	1574	0	1460	0
<b>Total Score</b>		10		10		15

Segment	4		5		6	
Factor	Value	Score	Value	Score	Value	Score
Slope	21	10	2	0	1	0
Slope Length (ft)	1004	10	1499	10	1774	10
K Factor	0.24	5	0.28	5	0.28	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	770	0	275	5	0	10
<b>Total Score</b>		25		20		25

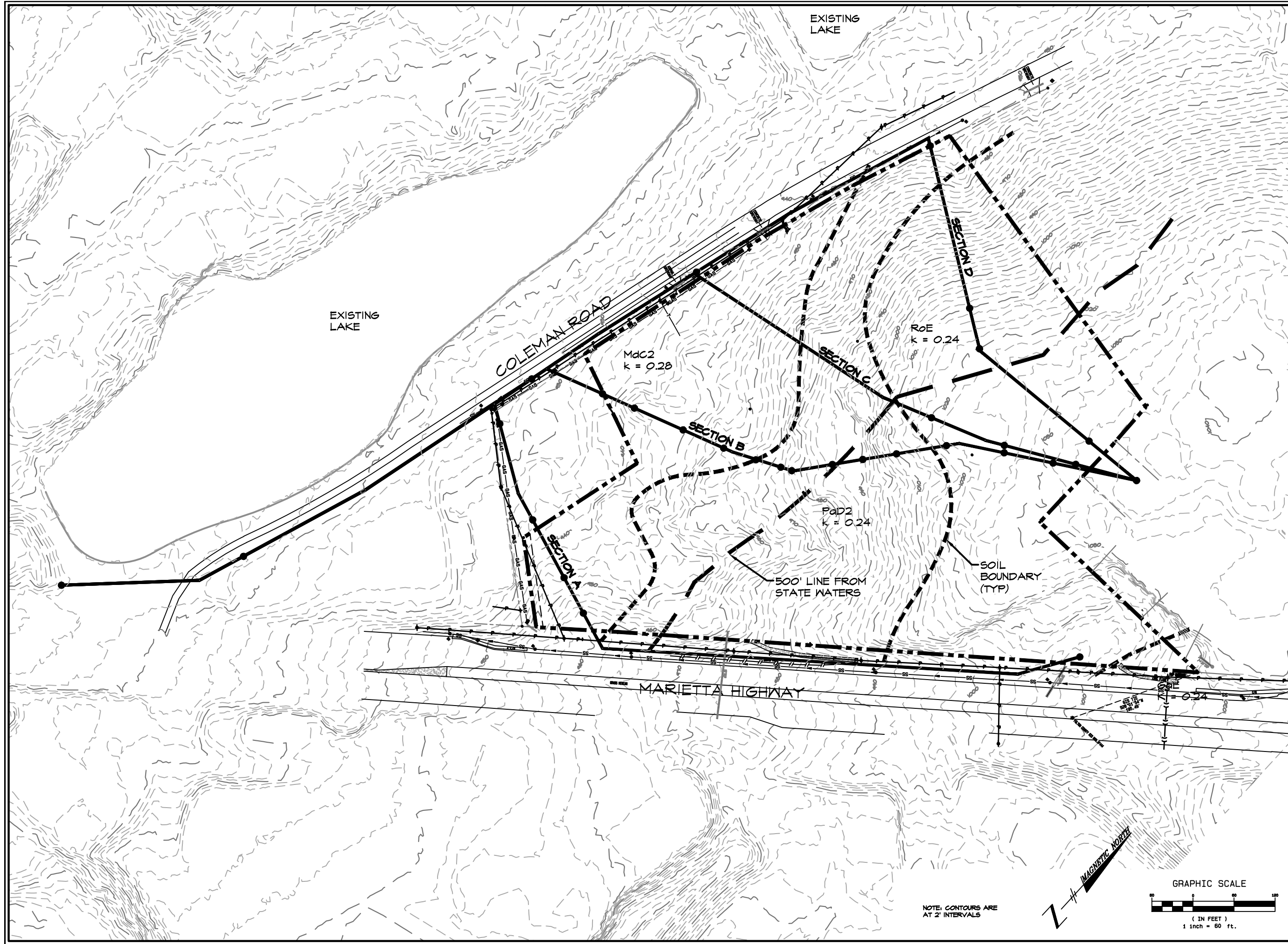
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Factor	Value	Score	Value	Score	Value	Score
Slope						
Slope Length (ft)						
K Factor						
Cover						
Sediment Delivery						
<b>Total Score</b>		0		0		0

**EVALUATION OF STEEP SLOPES & ERODABLE SOILS****Project:** Coleman Road Tract**Date:** 8/6/2014**Cross-Section:** D

Segment	1		2		3	
Factor	Value	Score	Value	Score	Value	Score
Slope	3	0	7	0	17	5
Slope Length (ft)	90	5	361	10	605	10
K Factor	0.24	5	0.24	5	0.24	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1975	0	1704	0	1460	0
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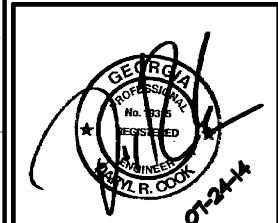
Segment	4		5		6	
Factor	Value	Score	Value	Score	Value	Score
Slope	26	10	3	0	1	0
Slope Length (ft)	1008	10	1790	10	2065	10
K Factor	0.28	5	0.28	5	0.28	5
Cover	Woods	0	Woods	0	Woods	0
Sediment Delivery	1057	0	275	5	0	10
<b>Total Score</b>		25		20		25

Segment						
Factor	Value	Score	Value	Score	Value	Score
Slope						
Slope Length (ft)						
K Factor						
Cover						
Sediment Delivery						
<b>Total Score</b>		0		0		0



STEEP SLOPE & ERODABLE SOILS EVALUATION PLAN

FOR  
**COLEMAN ROAD TRACT**  
LOCATED IN  
LAND LOTS 283, 284, 270 12TH DISTRICT  
FORSYTH COUNTY, GEORGIA



SSWCC LEVEL II CERTIFICATION NO. 31408  
EXPIRES: 01-13-2016

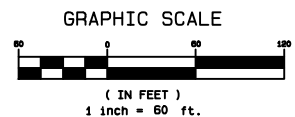
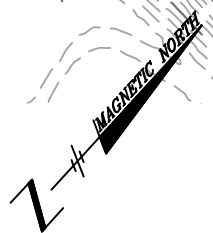
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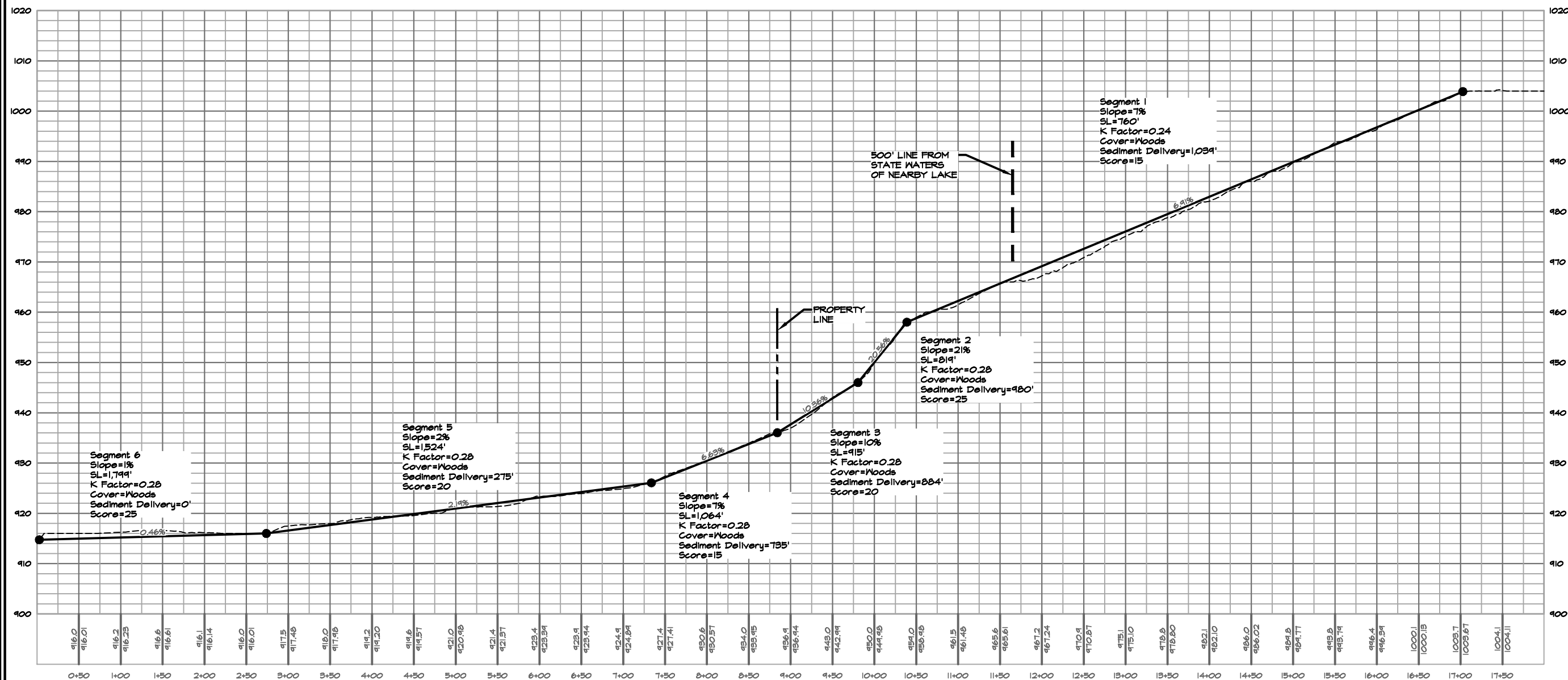
**WATTS & BROWNING ENGINEERS, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS  
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SURVEYED BY:	N/A
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COUNTY/LL/D/S:	FULTON/233, 234, 270/12/
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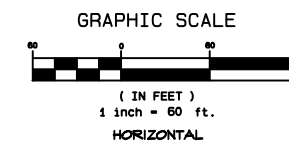
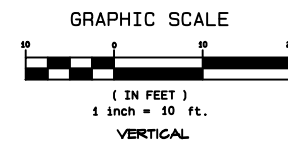
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AT 2' INTERVALS







SECTION A



# SECTION PROFILES

FOR  
**COLEMAN ROAD TRACT**  
LOCATED IN  
LAND LOTS 233, 234, 270 12th DISTRICT  
FORSYTH COUNTY, GEORGIA



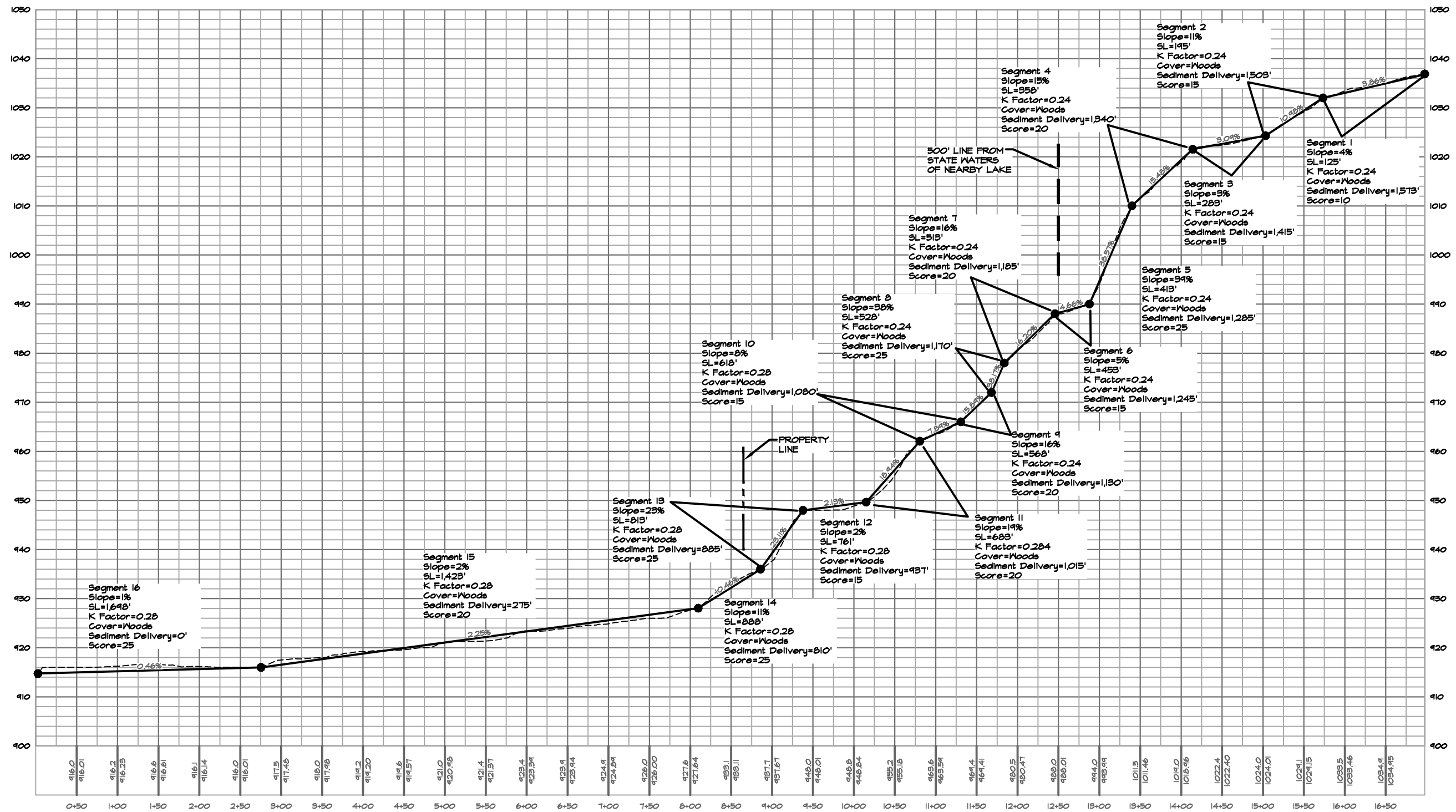
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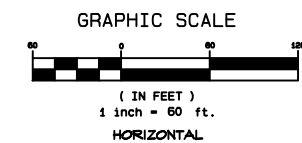
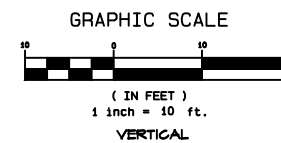


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PLAT FILE:	N/A
SHEET:	2 OF 6



SECTION B



# SECTION PROFILES

FOR  
**COLEMAN ROAD TRACT**  
LOCATED IN  
**LAND LOTS 283, 284, 270 12th DISTRICT  
FORSYTH COUNTY, GEORGIA**



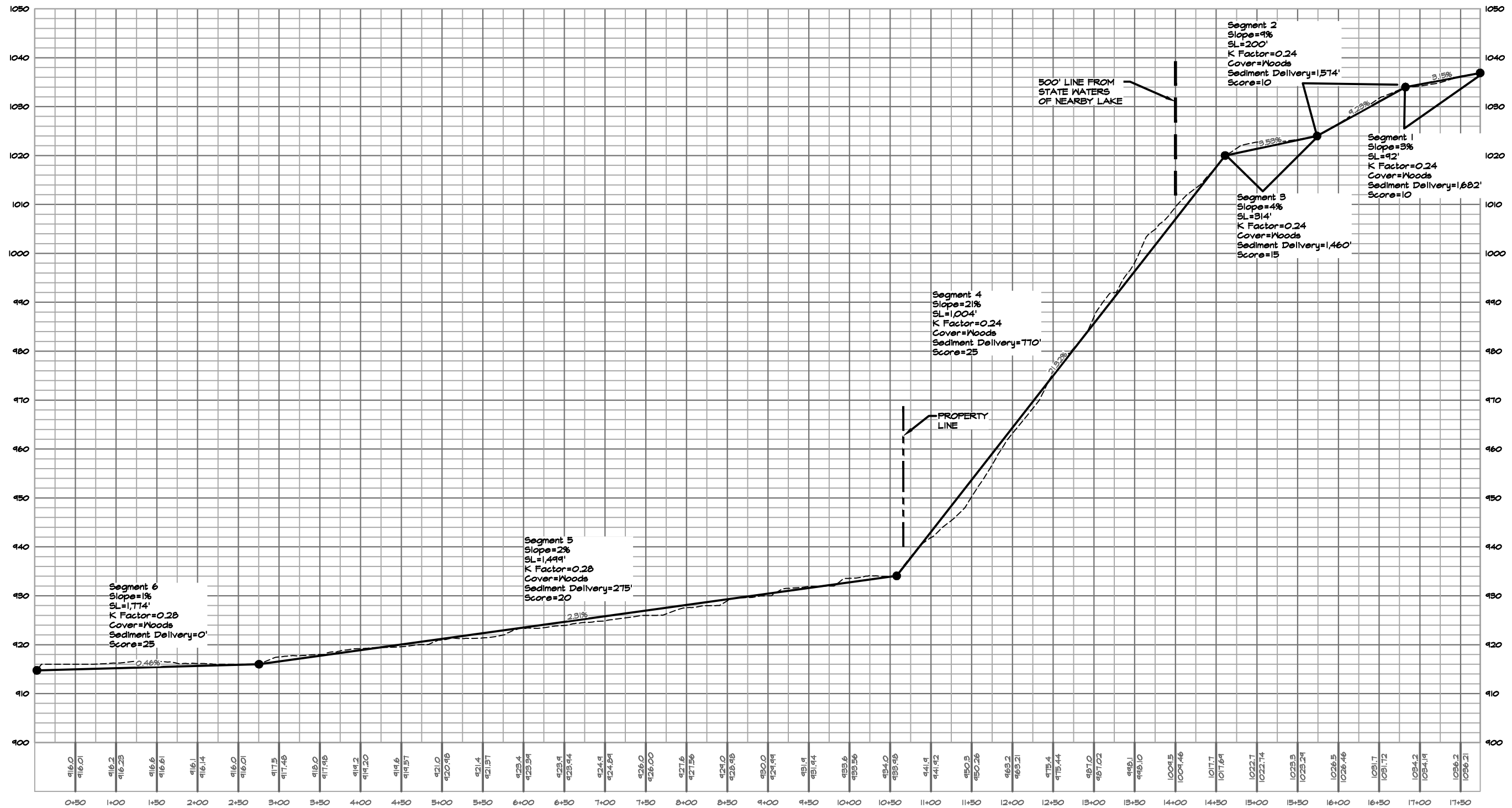
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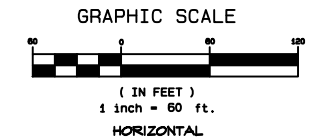
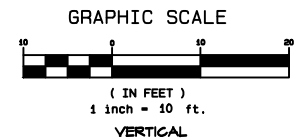


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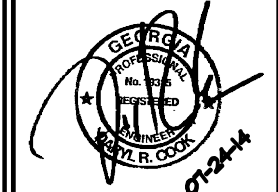
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PLAT FILE:	N/A
SHEET:	3 OF 6



SECTION C



SECTION PROFILES  
FOR  
**COLEMAN ROAD TRACT**  
LOCATED IN  
**LAND LOTS 283, 284, 270 12th DISTRICT  
FORSYTH COUNTY, GEORGIA**

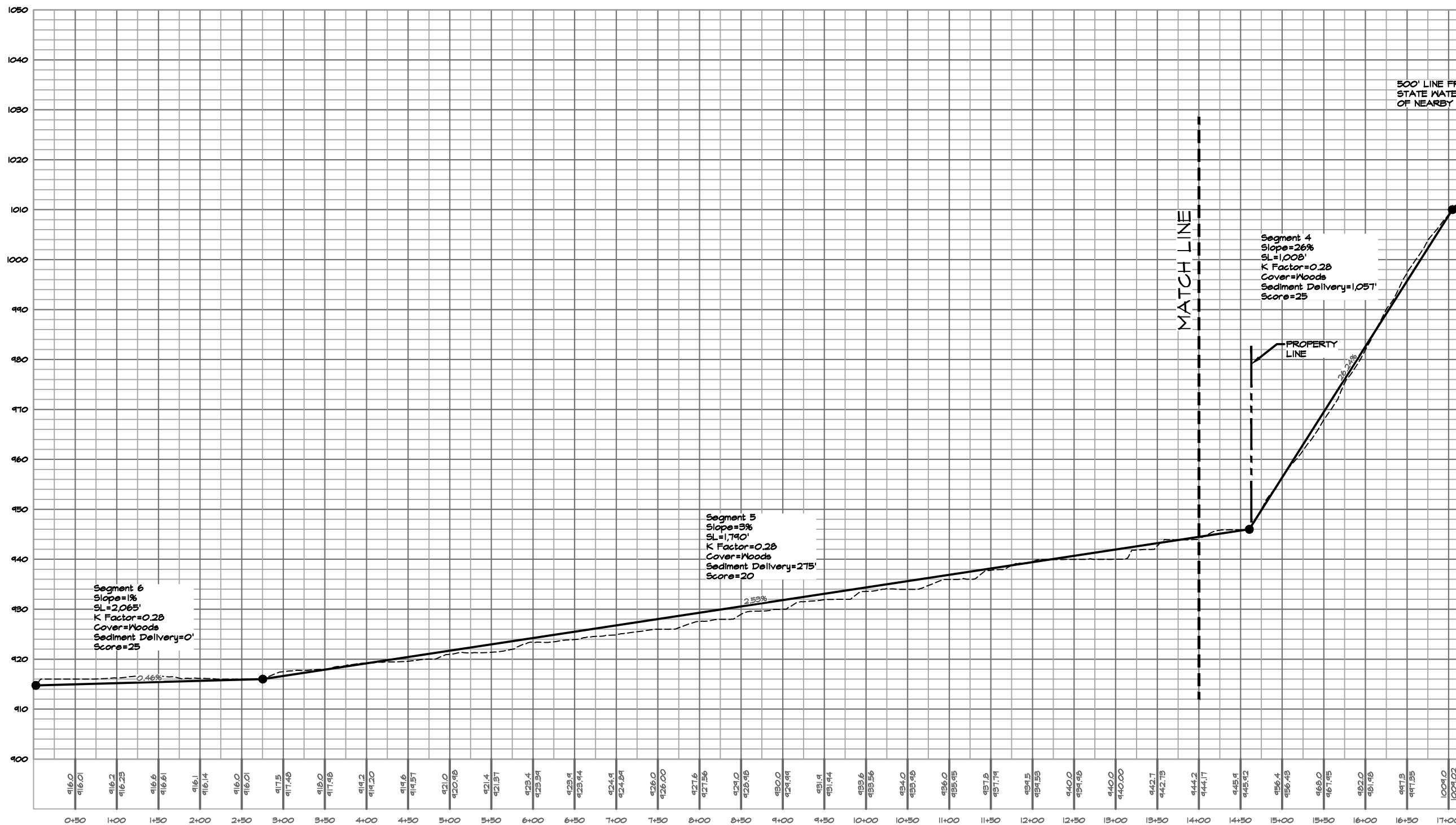


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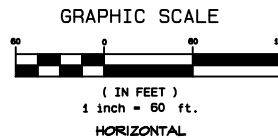
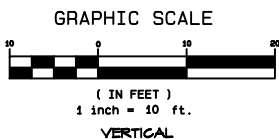
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NO.	DESCRIPTION
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2	8/4/14 2K Addressed Comments
3	8/6/14 2K Addressed Comments

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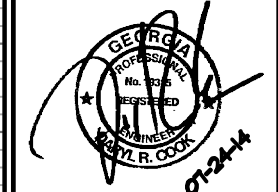
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SHEET:	4 OF 6



SECTION D



SECTION PROFILES  
FOR  
**COLEMAN ROAD TRACT**  
LOCATED IN  
**LAND LOTS 233, 234, 270 12th DISTRICT  
FORSYTH COUNTY, GEORGIA**

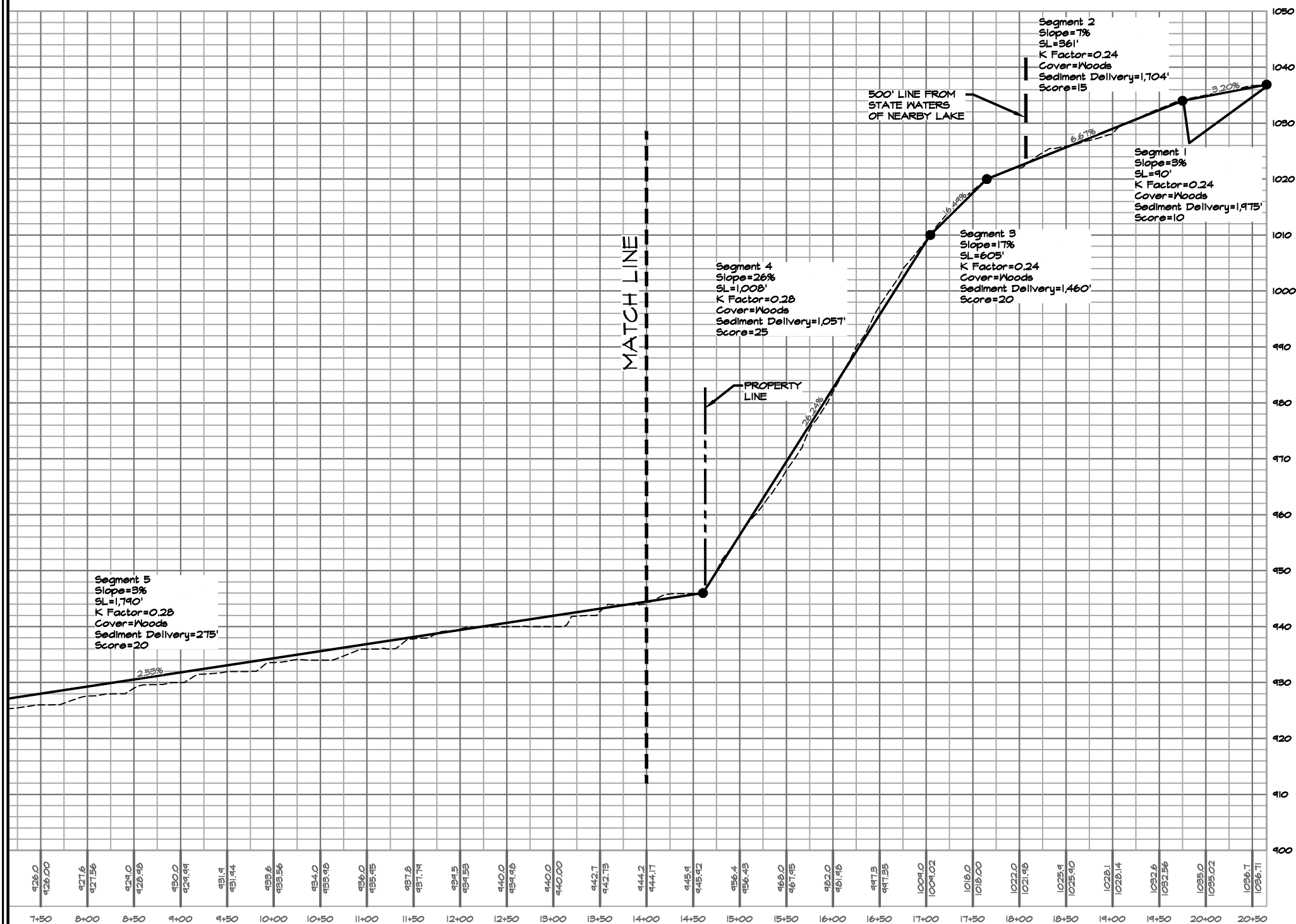


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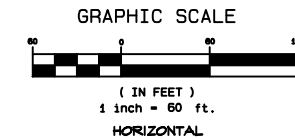
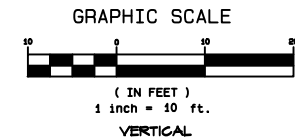
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2	8/4/14	ZK	Addressed Comments
3	8/6/14	ZK	Addressed Comments

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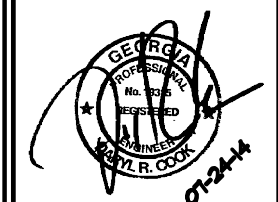


SECTION D



SECTION PROFILES

FOR  
**COLEMAN ROAD TRACT**  
LOCATED IN  
LAND LOTS 233, 234, 270 12th DISTRICT  
FORSYTH COUNTY, GEORGIA



GSWCC LEVEL II CERTIFICATION NO. 31908  
EXPIRES: 01-13-2016

REVISIONS/MILESTONES		
NO.	DATE	DESCRIPTION
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2	8/4/14	2K Addressed Comments
3	8/6/14	2K Addressed Comments

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