
CITY COUNCIL AGENDA ITEM

TO: Mayor & City Council **DATE:** November 3, 2010
FROM: John McDonough, City Manager
AGENDA ITEM: T-0034 Morgan Falls Road Improvements – Wall Design Options
MEETING DATE: For Submission onto the November 16, 2010, City Council Work Session Meeting Agenda

BACKGROUND INFORMATION: (Attach additional pages if necessary)

See attached:

Memorandum
Retaining Wall Options

APPROVAL BY CITY MANAGER: JMM APPROVED

_____ NOT APPROVED

PLACED ON AGENDA FOR: 11/16/2010

CITY ATTORNEY APPROVAL REQUIRED: () YES () NO

CITY ATTORNEY APPROVAL: _____

REMARKS:

TO: John McDonough, City Manager

FROM: Greg Ramsey, P.E., CIP Project Manager 3

DATE: November 2, 2010, for Submission onto the Agenda of the November 16, 2010, City Council Work Session

ITEM: T-0034 Morgan Falls Road Improvements – Wall Design Options

Background:

Mayor and City Council allocated \$1.5 million within the FY11 CIP budget for conceptual design and construction of improvements to Morgan Falls Road between Morgan Falls Park and Overlook Park. As the concept design has progressed, choices need to be made on the design, location and finish of retaining walls along some portions of the road.

Discussion:

Please see the attached layout for wall locations. Also, this package includes descriptions and images of various types of wall structures and wall finishes. Costs of each wall are shown in comparison.

Alternatives:

Several wall design alternatives are available, please see attached descriptions.

Financial Impact:

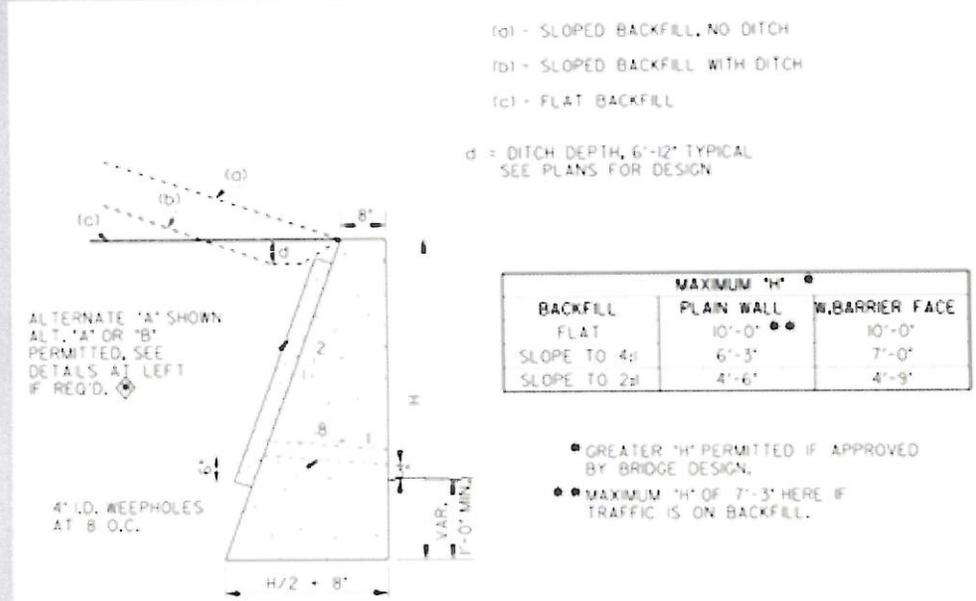
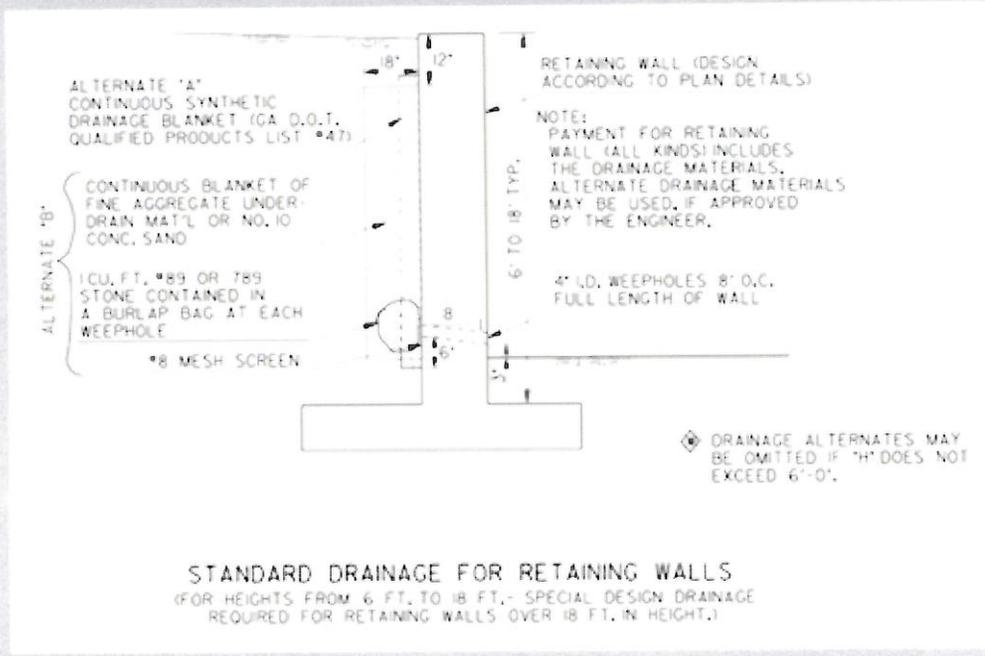
See attached funding breakdown.

RETAINING WALL OPTIONS
FOR
CITY OF SANDY SPRINGS
MORGAN FALLS ROADWAY IMPROVEMENTS
Project #T-0034

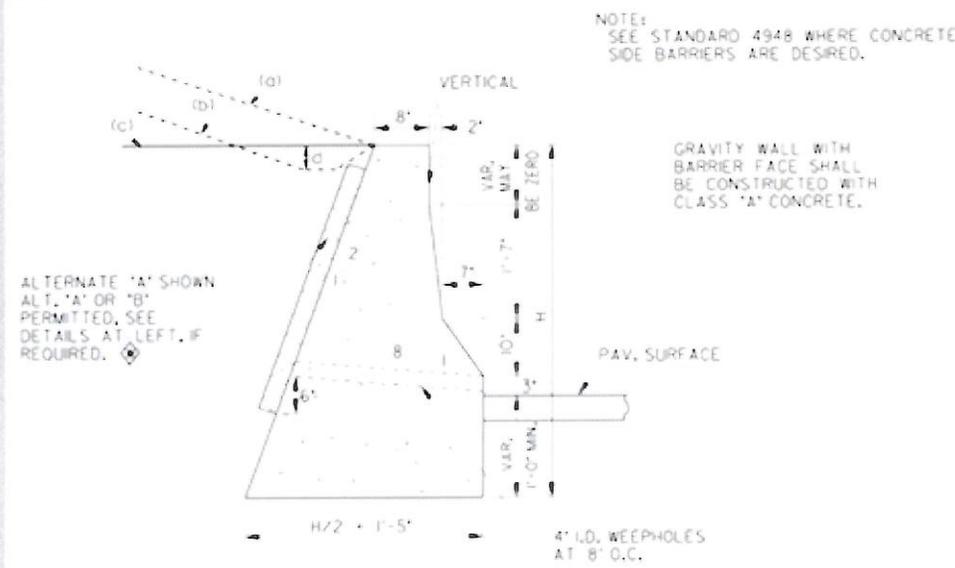


GDOT STANDARD FOR GRAVITY WALL

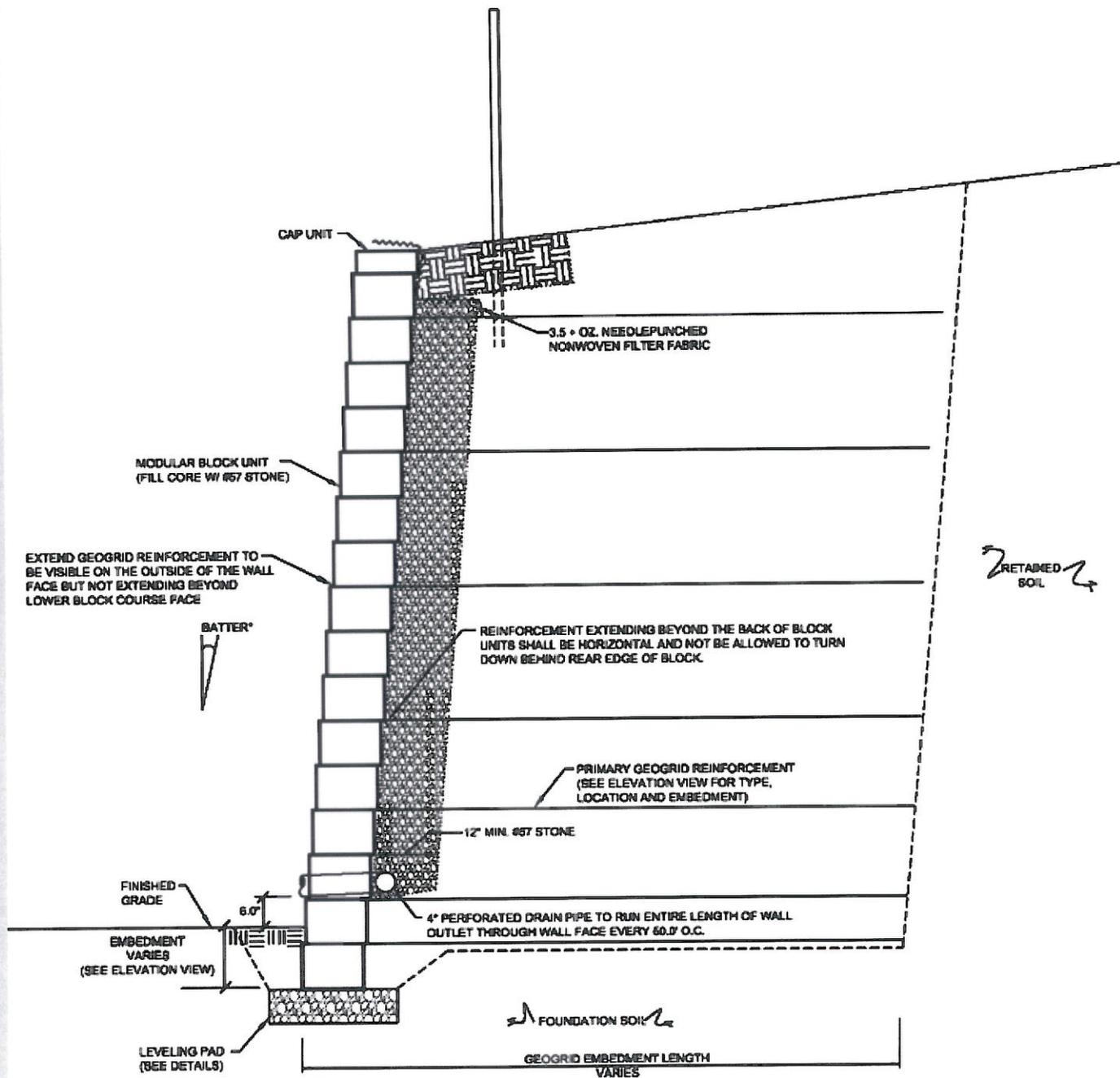
9031L



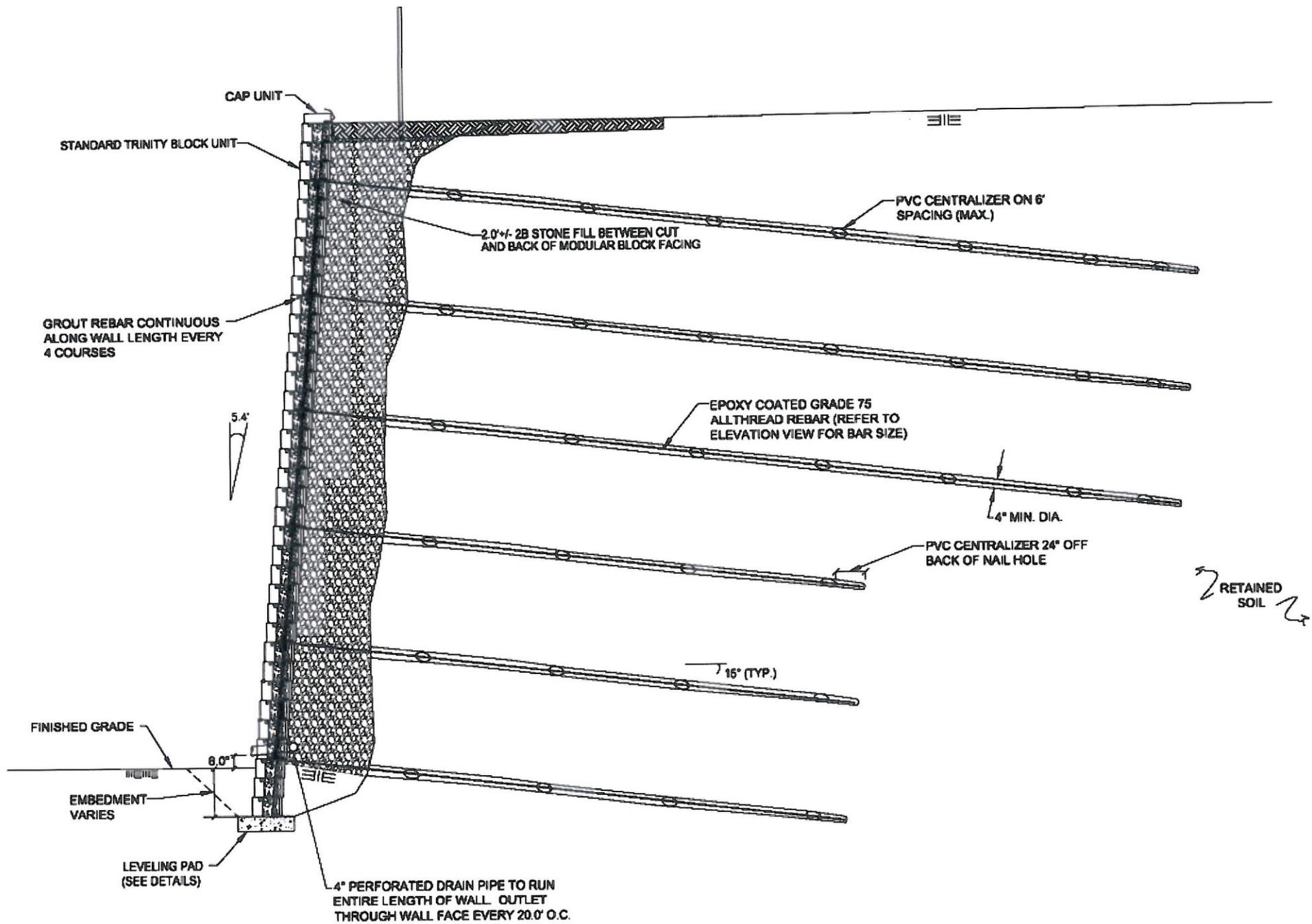
TYPICAL SECTION FOR GRAVITY TYPE WALL
MATERIALS: CLASS 'B' CONC. OR MORTAR RUBBLE MASONRY.



TYPICAL SECTION FOR GRAVITY WALL WITH BARRIER FACE



TYPICAL CROSS-SECTION
GEOGRID
 NOT TO SCALE



**TYPICAL SOIL NAIL REINFORCED
CROSS SECTION**
NOT TO SCALE

RETAINING WALL OPTIONS

Veneer Options - Modular



STRAIGHT FACE - GRAY

RETAINING WALL OPTIONS

Veneer Options - Modular



- STRAIGHT FACE –GRAY WITH IVEY

RETAINING WALL OPTIONS

Veneer Options - Modular



SCORED (MULTI-PIECE) – GRANITE BLEND

RETAINING WALL OPTIONS

Veneer Options - Modular



STRAIGHT FACE – CUSTOM COLOR

RETAINING WALL OPTIONS

SHOTCRETE VENEERS WITH SOIL NAIL REINFORCEMENT



SCREED FACE



RETAINING WALL OPTIONS

SHOTCRETE VENEERS WITH SOIL NAIL REINFORCEMENT



CONTEMPORARY INLAY

RETAINING WALL OPTIONS

SHOTCRETE VENEERS WITH SOIL NAIL REINFORCEMENT



ROCK PATTERNS

RETAINING WALL OPTIONS

SHOTCRETE VENEERS WITH SOIL NAIL REINFORCEMENT



ROCK PATTERNS

RETAINING WALL OPTIONS

SHOTCRETE VENEERS WITH SOIL NAIL REINFORCEMENT



ROCK PATTERNS

SOIL NAILED WALL
CASE STUDY



BEFORE



UNDER CONSTRUCTION



UNDER CONSTRUCTION



UNDER CONSTRUCTION



BEFORE



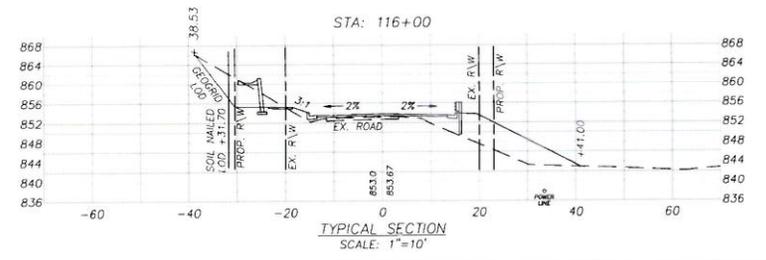
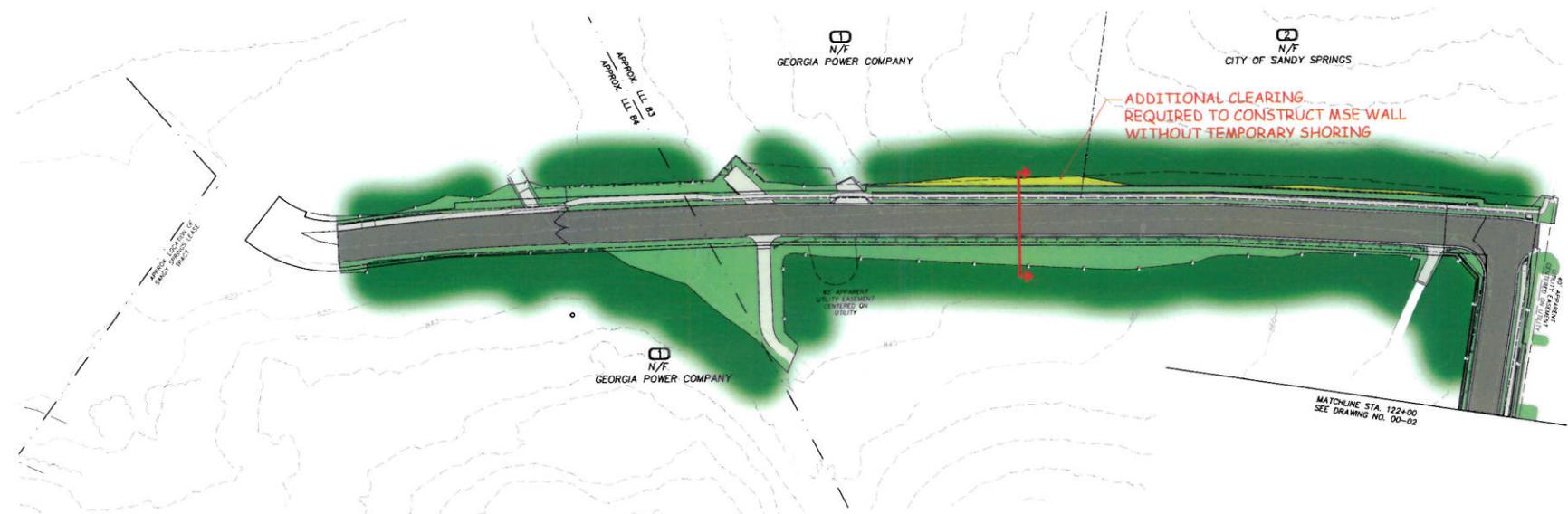
UNDER CONSTRUCTION



AFTER

RETAINING WALL COST MATRIX

WALL TYPE	WALL FINISH		
	CHEAPEST	DECORATIVE	COLORS / PATTERNS
	No Finish	Masonry Units	Gunite
Tie back (Soil Nailed)	\$50 / SF Gunite	\$60 / SF	\$75 / SF
MSE (Geogrid)	\$13 / SF + \$	\$18 / SF + \$	\$35 / SF + \$
	Reinforced Slope Rock Basket $[(.0741) (H^2) (Y)] / H = \$$ H = Height Wall Y = Cost per CYD		
Gravity Wall (GDOT # 9031L) (Fill applications only)	\$25 / SF Exposed Concrete	N/A	N/A
Gravity Wall Reinforced For Load Bearing (Fill applications Only)	\$35 / SF Exposed Concrete	N/A	N/A



SANDY SPRINGS, GEORGIA: 2015/05/20 10:00 AM. PROJECT NO. 7-0034. SHEET NO. 00-01. TOTAL SHEETS: 3.

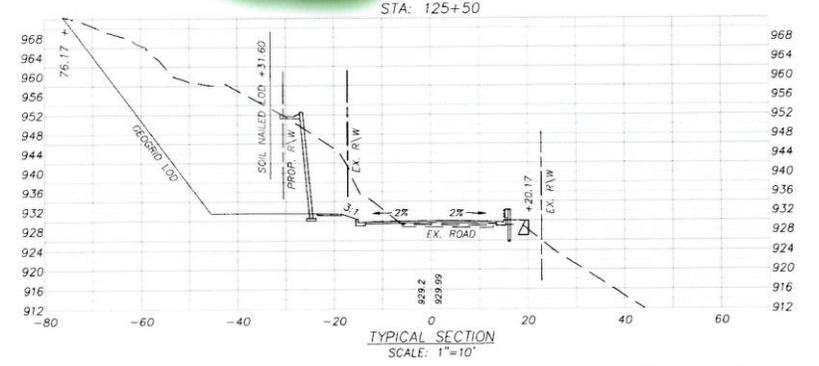
PROPERTY AND EX. R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
PERMANENT EASEMENT FOR MAINTENANCE	
TEMPORARY EASEMENT FOR CONSTRUCTION	

STORM LINE	
TELEPHONE LINE	
OH POWER LINE	
UG POWER LINE	
WATER LINE	
FIBER OPTIC LINE	
ONE LINE	
SANITARY SEWER LINE	
LIGHTING CONDUIT	
RETAINING WALL	



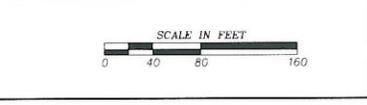
REVISION DATES

CITY OF SANDY SPRINGS PUBLIC WORKS DEPARTMENT
OFFICE: PUBLIC WORKS
WALL DISTURBANCE EXHIBIT
MORGAN FALLS RD. IMPROVEMENTS
SHEET NO. 00-01



PROPERTY AND EX. P.W. LINE	
REQUIRED P.W. LINE	
CONSTRUCTION LIMITS	
PERMANENT EASEMENT FOR MAINTENANCE	
TEMPORARY EASEMENT FOR CONSTRUCTION	

STORM LINE	
SEWERING LINE	
OH POWER LINE	
UG POWER LINE	
WATER LINE	
FIBER OPTIC LINE	
Gas LINE	
SANITARY SEWER LINE	
LIGHTING CONDUIT	
RETAINING WALL	



REVISION DATES

CITY OF SANDY SPRINGS PUBLIC WORKS DEPARTMENT	
OFFICE:	PUBLIC WORKS
WALL DISTURBANCE EXHIBIT	
MORGAN FALLS RD. IMPROVEMENTS	
SHEET NO.	00-02

SANDY SPRINGS, GEORGIA: PROJECT NO. 1-0024, MORGAN FALLS RD. IMPROVEMENTS EXHIBIT 00-02, SHEET NO. 00-02

