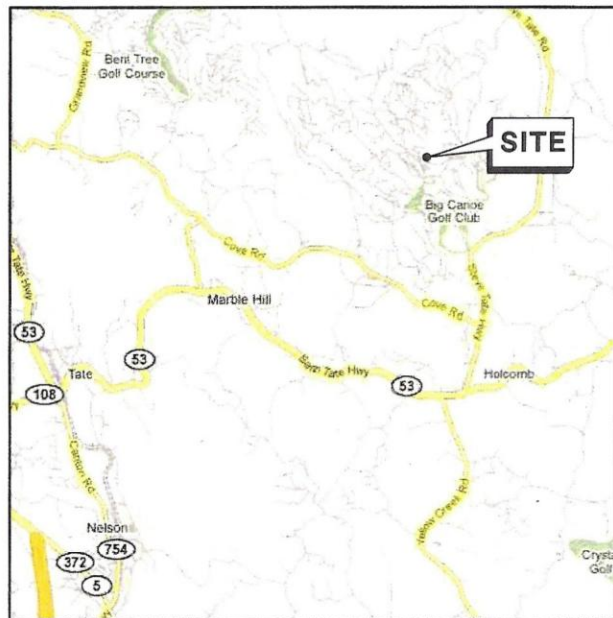


MARBLE HILL, GEORGIA

JULY 2009

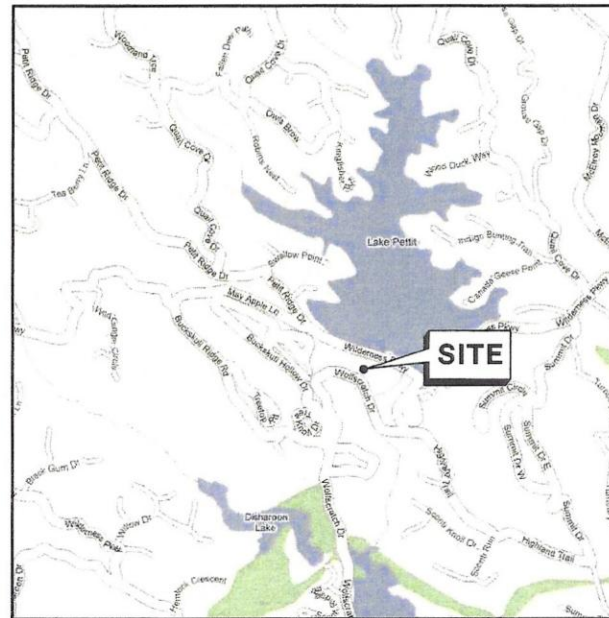
PROJECT NO. GR4222



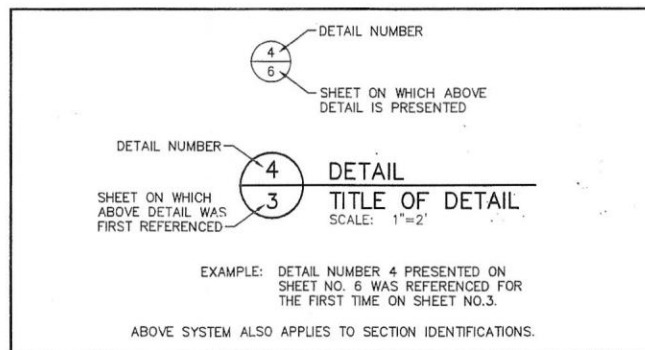
LOCATION MAP

LIST OF DRAWINGS

DRAWING NO.	DRAWING TITLE
1	COVER SHEET
2	SITE PLAN AND PROFILES
3	TAILWATER OUTFALL PLAN
4	CONSTRUCTION DETAILS I
5	CONSTRUCTION DETAILS II
6	UPSTREAM SHORELINE REPAIR MAP



VICINITY MAP



DETAIL IDENTIFICATION LEGEND

PREPARED FOR:



BIG CANOE PROPERTY OWNERS ASSOCIATION

10586 BIG CANOE
LACRED, GA 30147

PREPARED BY:



GEOSYNTEC CONSULTANTS

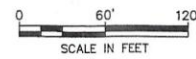
1255 ROBERTS BOULEVARD, NW, SUITE 200
KENNESAW, GEORGIA 30144 7604

REV	DATE	DESCRIPTION	DRN	APP
1255 ROBERTS BOULEVARD, N.W., SUITE 200 KENNESAW, GEORGIA 30144 USA PHONE: 678.202.9500				
TITLE:		COVER SHEET		
PROJECT:		LAKE PETIT DAM – 2009 MAINTENANCE ACTIVITIES		
SITE:		LAKE PETIT DAM, MARBLE HILL, GEORGIA		

CONSTRUCTION/LAKE PETIT DAM BRIDGE IMPROVEMENTS BR-222 (3) VIEW-14-222(80)

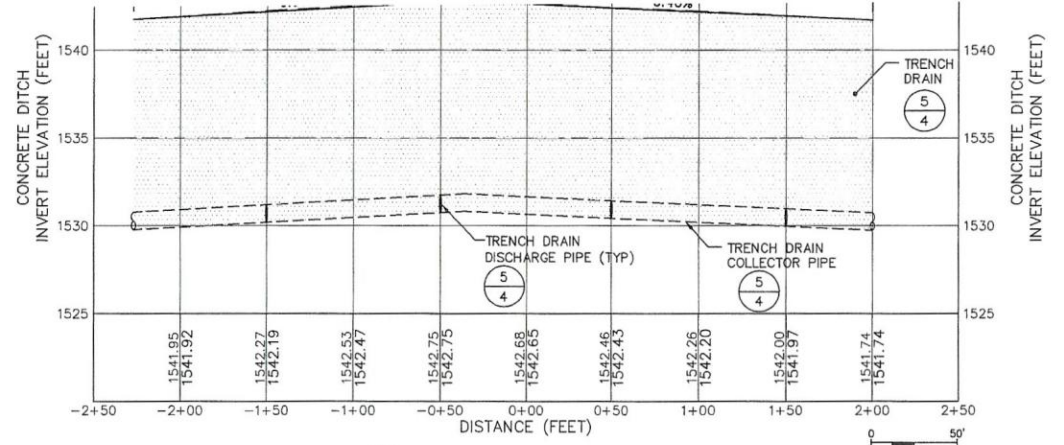
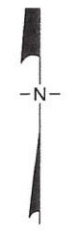


1 SITE PLAN
SCALE: 1" = 60'

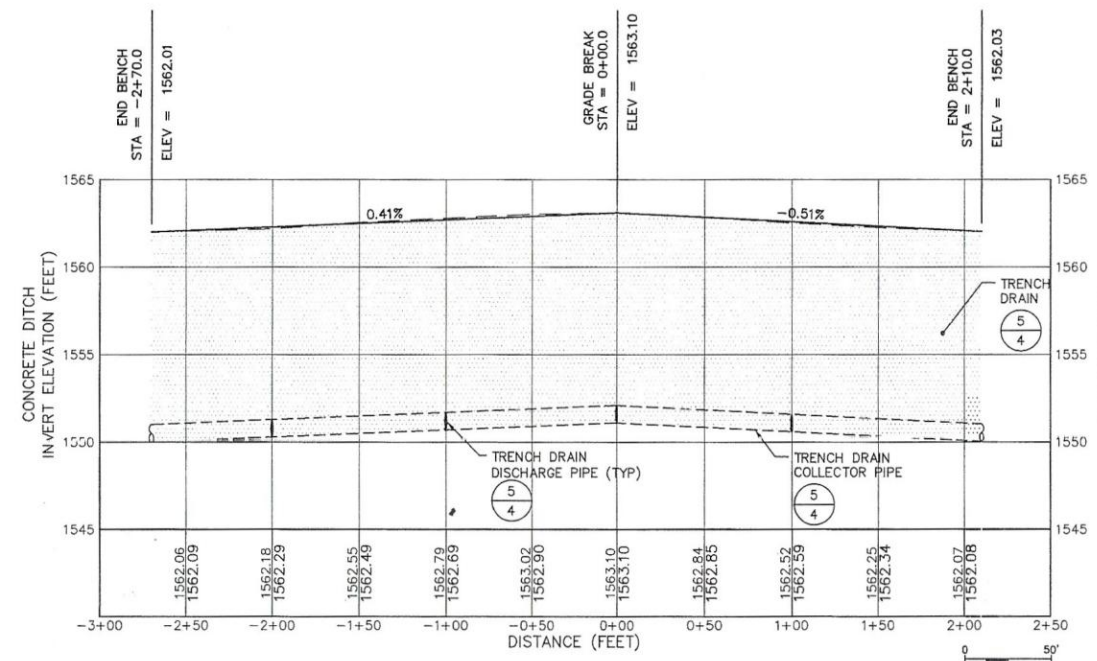


NOTES:

1. DRAWING INDICATES PLAN VIEW OF DAM SHOWING STATIONING USED ON LOWER PAVED BENCHES. ALL STATIONING MEASURED PERPENDICULAR TO ALIGNMENT OF EXISTING PIEZOMETER.



2 PROFILE
BENCH 1 (NOTES 3 AND 5)
SCALE: 1" = 50' (HOR) : 1" = 5' (VERT)

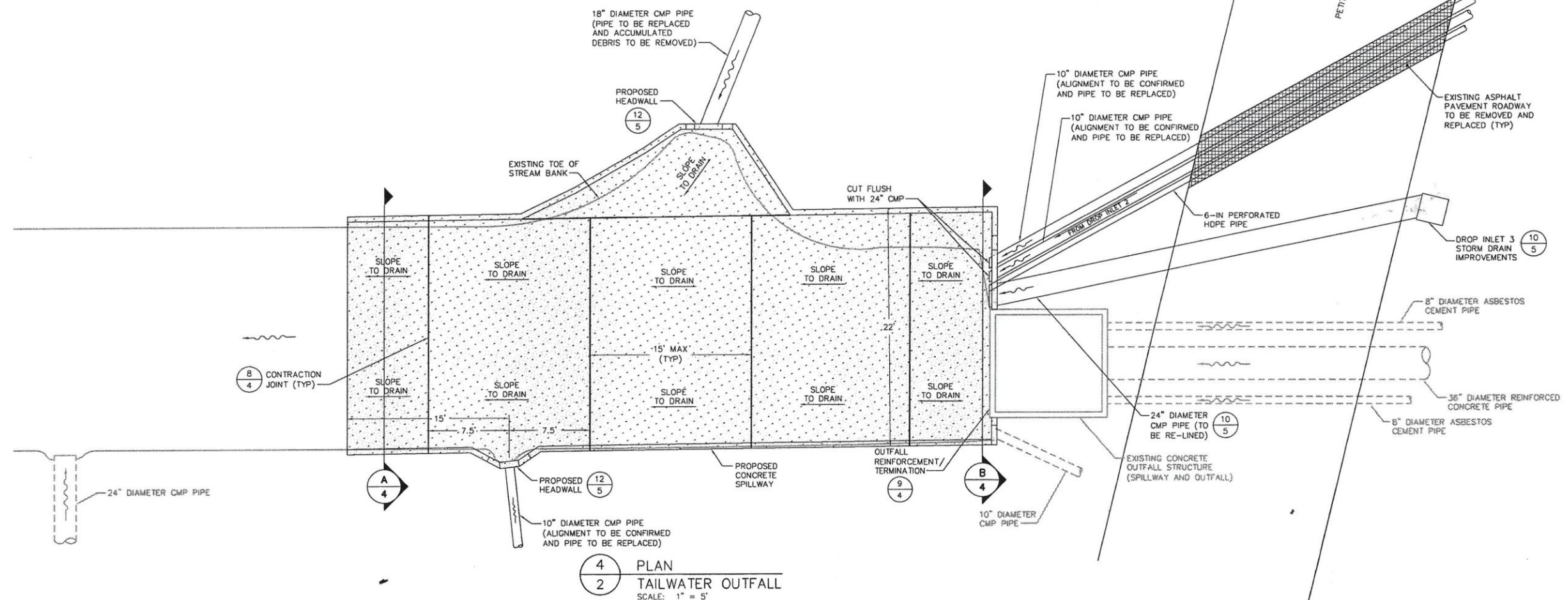


3 PROFILE
BENCH 2 (NOTES 4 AND 5)
SCALE: 1" = 50' (HOR) : 1" = 5' (VERT)

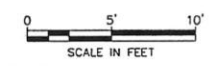
- LEGEND**
- EXISTING PIEZOMETER
 - DROP INLET / MANHOLE
 - EXISTING GROUND
 - PROPOSED GROUND
 - PROPOSED ELEVATION
 - EXISTING GROUND ELEVATION

REV	DATE	DESCRIPTION	DRN	APP
TITLE: SITE PLAN AND PROFILES				
PROJECT: LAKE PETIT DAM - 2009 MAINTENANCE ACTIVITIES				
SITE: LAKE PETIT DAM, MARBLE HILL, GEORGIA				

1255 ROBERTS BOULEVARD, N.W., SUITE 200
KENNESAW, GEORGIA 30144 USA
PHONE: 678.202.8500

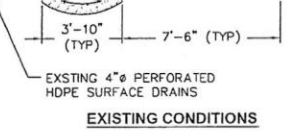


4 PLAN
2 TAILWATER OUTFALL
SCALE: 1" = 5'



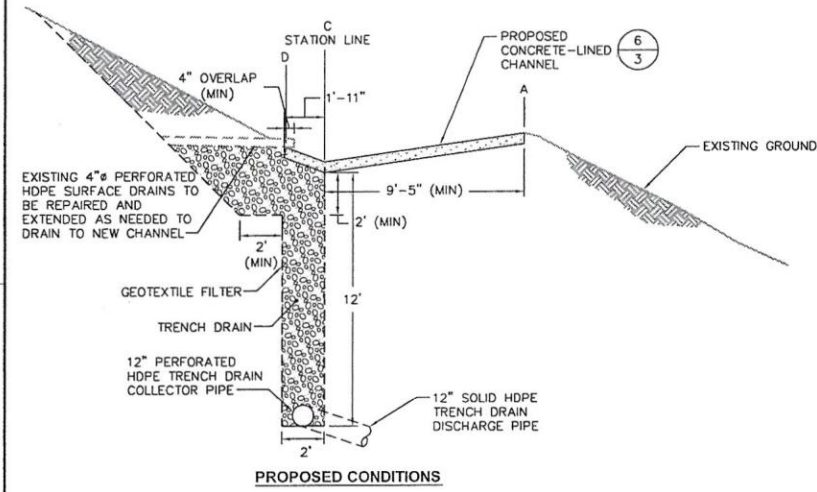
REV	DATE	DESCRIPTION	DRN	APP
Geosyntec consultants				
		1255 ROBERTS BOULEVARD, N.W., SUITE 200 KENNESAW, GEORGIA 30144 USA PHONE: 678.202.9500		
TITLE: TAILWATER OUTFALL PLAN				
PROJECT: LAKE PETIT DAM - 2009 MAINTENANCE ACTIVITIES				
SITE: LAKE PETIT DAM, MARBLE HILL, GEORGIA				
<small>THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.</small>		<small>DESIGN BY:</small> MI/NLB	<small>DATE:</small> JULY 2009	<small>APP</small>

D:\CONSTRUCTION\LAKE PETIT DAM BRANZE IMPROVEMENTS GR422.03\REV-3\422909.dwg



EXISTING 4" PERFORATED HDPE SURFACE DRAINS

EXISTING CONDITIONS



PROPOSED CONDITIONS

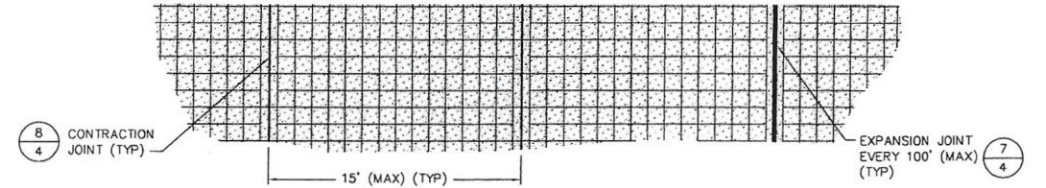
5
2
DETAIL (TYP)
DRAINAGE BENCH IMPROVEMENTS AND TRENCH DRAIN
SCALE: 1" = 4'

BENCH 1

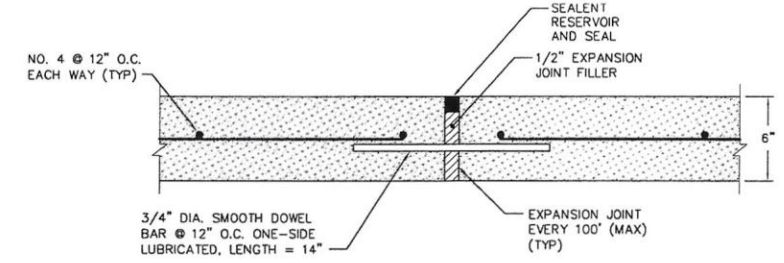
0+50 R	b	1543.56	1543.56
	c	1543.56	1543.56
	d	1543.56	1543.56
	e	1543.56	1543.56
1+00 R	a	1543.21	1543.21
	b	1542.87	1542.87
	c	1542.28	1542.28
	d	1542.28	1542.28
	e	1542.28	1542.28
1+50 R	a	1542.80	1542.80
	b	1542.80	1542.80
	c	1542.00	1542.00
	d	1542.57	1542.57
	e	1542.57	1542.57
2+00 R	a	1542.62	1542.62
	b	1542.30	1542.30
	c	1541.74	1541.74
	d	1542.38	1542.38
	e	1542.38	1542.38
0+50 L	a	1543.68	1543.68
	b	1543.32	1543.32
	c	1542.75	1542.75
	d	1543.38	1543.38
	e	1543.42	1543.42
1+00 L	a	1543.21	1543.21
	b	1541.53	1541.53
	c	1541.23	1541.23
	d	1541.23	1541.23
	e	1541.23	1541.23
1+50 L	a	1542.27	1542.27
	b	1542.84	1542.84
	c	1542.27	1542.27
	d	1542.81	1542.81
	e	1542.81	1542.81
2+27 L	a	1542.75	1542.75
	b	1542.70	1542.70
	c	1542.77	1542.77
	d (End Bench)	1542.75	1542.75

BENCH 2

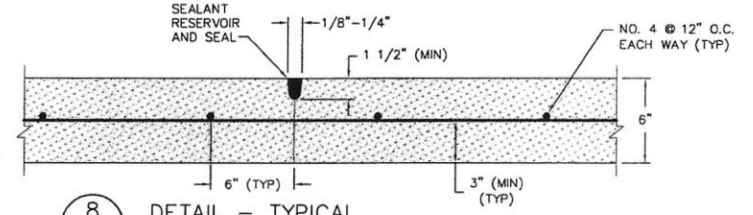
0+50 R	a	1563.93	1563.93
	b	1563.53	1563.53
	c	1562.84	1562.85
	d	1563.67	1563.67
	e	1563.70	1563.70
1+00 R	a	1563.16	1563.16
	b	1562.52	1562.59
	c	1563.34	1563.34
	d	1563.27	1563.27
	e	1562.95	1562.95
1+50 R	a	1562.73	1562.73
	b	1562.03	1562.03
	c	1562.03	1562.03
	d	1562.73	1562.73
	e	1562.73	1562.73
2+10 R	a	1564.00	1564.00
	b	1563.70	1563.70
	c	1563.02	1562.90
	d	1563.74	1563.74
	e	1564.10	1564.10
1+00 L	a	1563.50	1563.50
	b	1562.79	1562.69
	c	1563.50	1563.50
1+10.2 L	G-3 - Top of Flush Pad	1564.03	1564.03
	a	1563.74	1563.74
	b	1563.22	1563.22
	c	1562.55	1562.49
	d	1563.28	1563.28
1+50 L	a	1563.14	1563.14
	b	1562.80	1562.80
	c	1562.18	1562.29
	d	1562.83	1562.83
	e	1562.86	1562.86
2+00 L	a	1562.68	1562.68
	b	1561.99	1562.01
	c	1562.65	1562.65
	d (End Bench)	1562.65	1562.65



6
4
DETAIL - TYPICAL
DRAINAGE BENCH REBAR
AND JOINT LAYOUT
SCALE: 1" = 5'

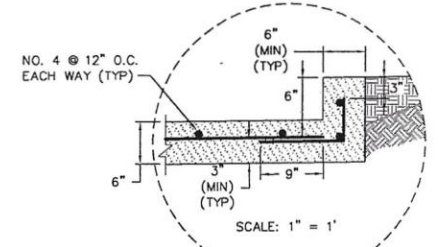


7
3
DETAIL - TYPICAL
DRAINAGE BENCH EXPANSION/
CONSTRUCTION JOINT
SCALE: 1" = 0.5'

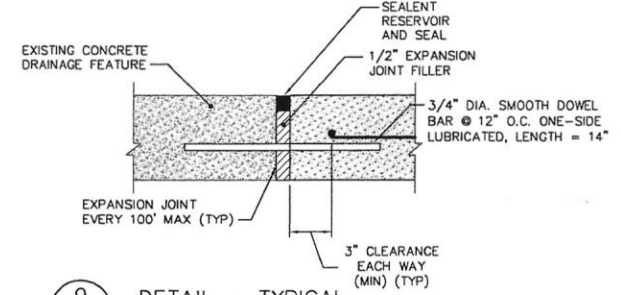
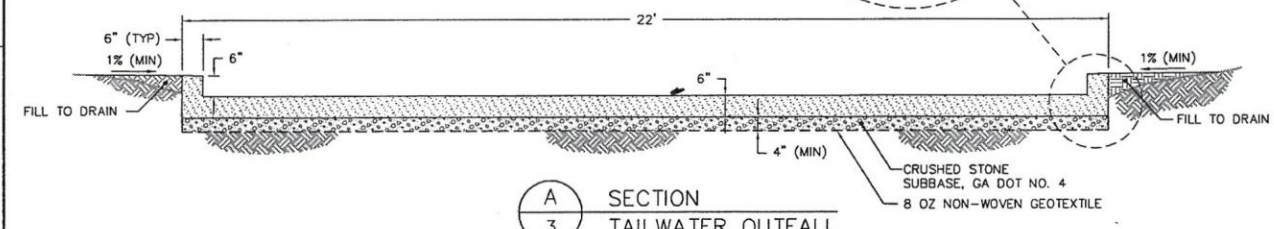


8
3
DETAIL - TYPICAL
OUTFALL AND DRAINAGE BENCH
REINFORCEMENT/CONTRACTION JOINT
SCALE: 1" = 0.5'

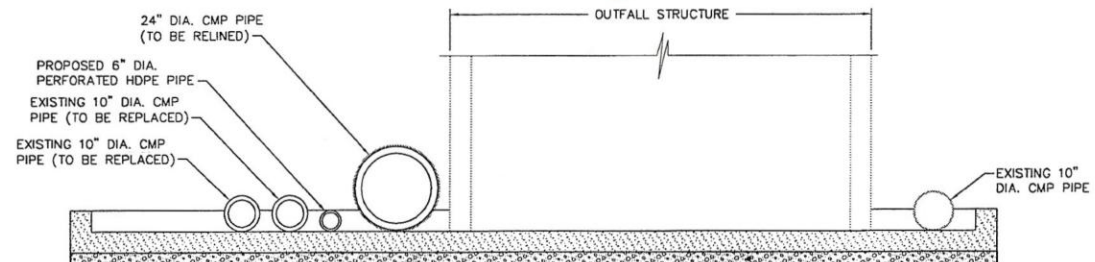
- NOTES:
- CONCRETE SHALL BE 6-INCH THICK WITH A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI WHEN TESTED IN ACCORDANCE WITH ASTM C39. CONCRETE SHALL HAVE A 4% TO 6% AIR ENTRAINMENT, 3-INCH TO 5-INCH SLUMP, AND CONTAIN NO CALCIUM CHLORIDE. JOINTS SHALL BE FILLED WITH PRE-MOLDED BITUMINOUS EXPANSION JOINT FILLER. JOINT FILLER SHALL BE CONSTRUCTED TO THE FULL DEPTH OF THE SLAB.
 - REINFORCING STEEL BARS SHALL MEET THE REQUIREMENTS OF ASTM A 615, GRADE 60 (60 KSI YIELD GRADE), MODIFIED IN ACCORDANCE WITH ACI 318.
 - PIPE AND FITTINGS SHALL BE HDPE SDR 11 AND CONFORM TO ASTM F 714. PIPING, FITTINGS, COUPLINGS, VALVES AND APPURTENANCES SHALL BE NEW, FREE FROM DEFECTS OR CONTAMINATION, AND WHEREVER POSSIBLE, BE STANDARD OFF-THE-SHELF ITEMS.
 - GRANULAR PIPE EMBEDMENT FILL SHALL CLASSIFY AS A SANDY GRAVEL ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM. EMBEDMENT FILL AND TRENCH BACKFILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS WITH A LOOSE THICKNESS OF 4 INCHES ± 1 INCH AND BE COMPACTED TO AT LEAST 95 PERCENT OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN A MOISTURE CONTENT RANGE DETERMINED BY THE CQA CONSULTANT BASED ON TESTING RESULTS (ASTM D 698).



A
3
SECTION
TAILWATER OUTFALL
SCALE: 1" = 2'

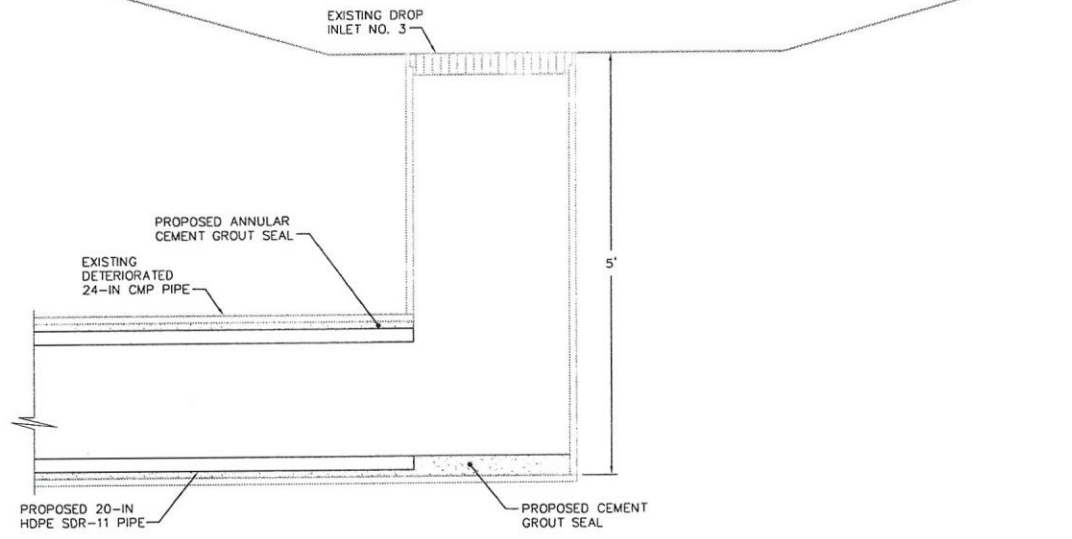


9
3
DETAIL - TYPICAL
OUTFALL AND DRAINAGE BENCH
REINFORCEMENT/TERMINATION
SCALE: 1" = 0.5'

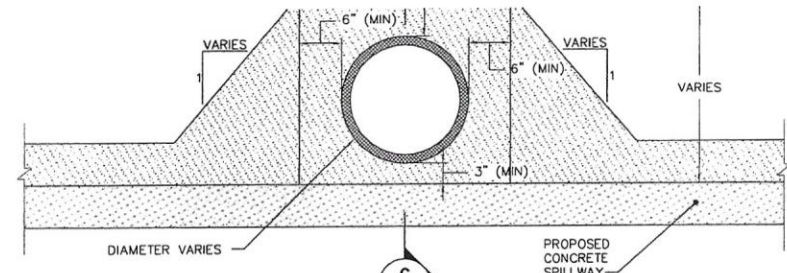


REV	DATE	DESCRIPTION	DRN	APP
TITLE:		CONSTRUCTION DETAILS I		
PROJECT:		LAKE PETIT DAM - 2009 MAINTENANCE ACTIVITIES		
SITE:		LAKE PETIT DAM, MARBLE HILL, GEORGIA		
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: MI/NLB	DATE: JULY 2009	
		DRAWN BY: JHS	PROJECT NO.: GD4222.01	

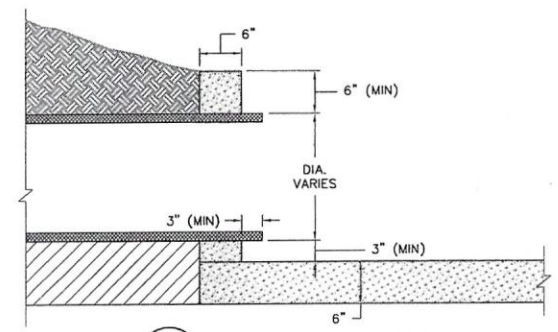
I:\CONSTRUCTION\LAKE PETIT DAM DRANGE IMPROVEMENTS BR4222.03\REV-B\4222B001



10
3 **DETAIL**
STORM DRAIN IMPROVEMENTS
(24"Ø CMP PIPE AND MANHOLE NO.3)
SCALE: 1" = 1'



12
5 **DETAIL - TYPICAL**
HEADWALL
SCALE: 1" = 1'



C
5 **SECTION - TYPICAL**
HEADWALL
SCALE: 1" = 1'

NOTES:

1. CONCRETE SHALL BE 6-INCH THICK WITH A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI WHEN TESTED IN ACCORDANCE WITH ASTM C39. CONCRETE SHALL HAVE A 4% TO 6% AIR ENTRAINMENT, 3-INCH TO 5-INCH SLUMP, AND CONTAIN NO CALCIUM CHLORIDE. JOINTS SHALL BE FILLED WITH PRE-MOLDED BITUMINOUS EXPANSION JOINT FILLER. JOINT FILLER SHALL BE CONSTRUCTED TO THE FULL DEPTH OF THE SLAB.
2. REINFORCING STEEL BARS SHALL MEET THE REQUIREMENTS OF ASTM A 615, GRADE 60 (60 KSI YIELD GRADE), MODIFIED IN ACCORDANCE WITH ACI 318.

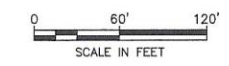
DAM CONSTRUCTION LAKE PETIT DAM DRAINAGE IMPROVEMENTS GR4322.03/REV-B/12228001

REV	DATE	DESCRIPTION	DRN	APP
Geosyntec consultants				
1255 ROBERTS BOULEVARD, N.W., SUITE 200 KENNESAW, GEORGIA 30144 USA PHONE: 678.202.9500				
TITLE: CONSTRUCTION DETAILS II				
PROJECT: LAKE PETIT DAM - 2009 MAINTENANCE ACTIVITIES				
SITE: LAKE PETIT DAM, MARBLE HILL, GEORGIA				
THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.		DESIGN BY: MI/NLB		DATE: JULY 2009



ADDITIONAL RIPRAP PLACEMENT

Additional Localized Riprap Placement		
Station		Width (Approximate) (ft)
From (ft)	To (ft)	
0+00	0+33	10
0+33	0+72	5
1+20	1+44	5
1+60	1+94	5
2+07	2+54	5
2+73	2+99	5
3+10	4+05	5
4+28	4+49	5
5+38	5+57	3
7+42	7+90	10



REV	DATE	DESCRIPTION	DRN	APP
		1255 ROBERTS BOULEVARD, N.W., SUITE 200 KENNESAW, GEORGIA 30144 USA PHONE: 678.202.9500		
TITLE:		UPSTREAM SHORELINE REPAIR MAP		
PROJECT:		LAKE PETIT DAM - 2009 MAINTENANCE ACTIVITIES		
SITE:		LAKE PETIT DAM, MARBLE HILL, GEORGIA		

INSTRUCTION/LAKE PETIT DAM DRAINAGE IMPROVEMENTS GR4222.03/REV-B/1222009