

SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN
COMPLETE THE APPROPRIATE DETAIL SPECIFICATIONS FOR THE CHANNEL CROSS-SECTION OF CHECKDAM:

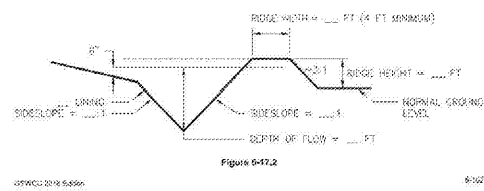
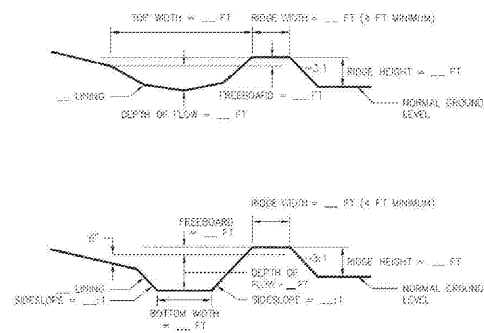
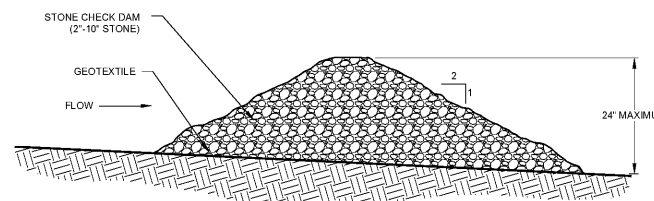
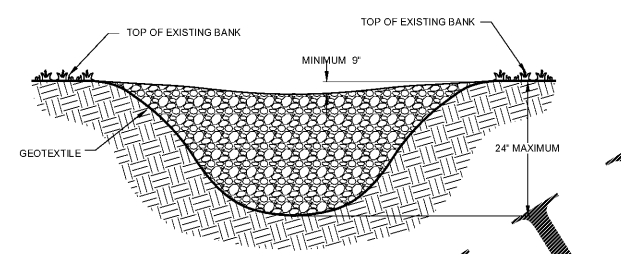


Figure 6-47.2
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STONE CHECKDAM

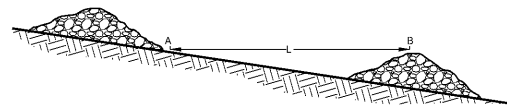


PROFILE VIEW



CROSS SECTION

Cd-S STONE CHECK DAM
NOT TO SCALE



SPACING BETWEEN CHECK DAMS

A = THE TOE OF THE UPSTREAM CHECK DAM.
B = TOP OF THE DOWNSTREAM CHECK DAM.
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION.

MAINTENANCE:
PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE ORIGINAL DAM HEIGHT OR BEFORE IF THE AREA IS TO BE MOWED. CHECK DAMS SHALL BE REMOVED ONCE FINAL STABILIZATION HAS OCCURRED. OTHERWISE CHECK DAMS MAY REMAIN IN PLACE PERMANENTLY. AFTER REMOVAL, THE AREA BENEATH THE DAM SHALL BE SEEDED AND MULCHED IMMEDIATELY.

SPECIFICATIONS:

- CHECK DAMS SHALL BE USED ONLY IN SMALL CHANNELS (THEY ARE NOT TO BE USED IN LIVESTOCK CHANNELS).
- THE DRAINAGE AREA FOR ONE CHECK DAM SHALL NOT EXCEED TWO ACRES.
- THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
- THE DAM HEIGHT SHALL BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
- STONE CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED SIZE 2-10 IN. STONE. MECHANICAL OR PLACEMENT SHALL BE REQUIRED TO INSURE COMPLETE COVERAGE OF THE ENTIRE WIDTH OF THE DITCH OR SWALE AND THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
- TO PREVENT CHECK DAMS IN A SERIES SHALL BE USED FOR DRAINAGE AREAS GREATER THAN ONE ACRE, MAXIMUM SPACING BETWEEN DAMS SHOULD BE SUCH THAT THE TOW OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
- A GEOTEXTILE SHALL BE USED AS A SEPARATOR BETWEEN THE GRADED STONE AND THE SOIL BASE AND ABUTMENTS. IT SHALL BE SELECTED/SPECIFIED IN ACCORDANCE WITH AASHTO M288-06 SECTION 7.3. SEPARATION REQUIREMENTS. TABLE 3. THE GEOTEXTILE SHALL BE "SET" INTO THE SUBGRADE SOILS. IT SHALL BE PLACED IMMEDIATELY ADJACENT TO THE SUBGRADE WITHOUT ANY VOIDS AND EXTEND FIVE FEET BEYOND THE DOWNSTREAM TOW OF THE DAM TO PREVENT SCOUR.

Channel Report

Di-1

Trapezoidal Bottom Width (ft)	= 2.00
Slope (z)	= 2.00, 2.00
Total Depth (ft)	= 2.00
Invert Elev. (ft)	= 1061.00
Slope (%)	= 12.00
N-Value	= 0.025
Calculations Computed by:	Known Q
Known Q (cfs)	= 0.30

Highlighted

Depth (ft)	= 0.06
Q (cfs)	= 0.300
Area (sqft)	= 0.13
Velocity (ft/s)	= 2.36
Wetted Perim. (ft)	= 2.27
Crit. Depth, Yc (ft)	= 0.09
Top Width (ft)	= 2.24
EGL. (ft)	= 0.15

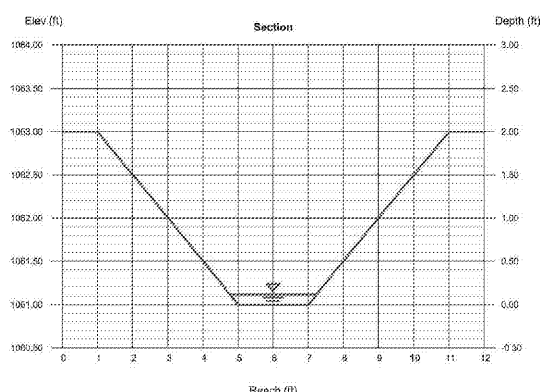
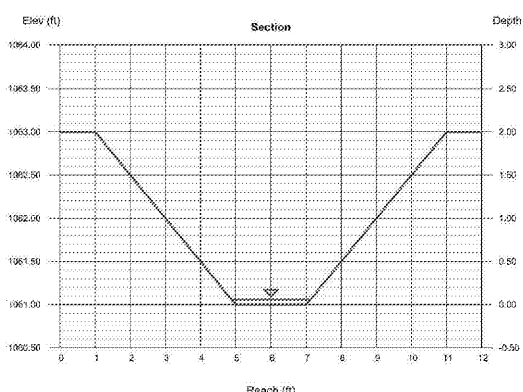
Channel Report

Di-2

Trapezoidal Bottom Width (ft)	= 2.00
Slope (z)	= 2.00, 2.00
Total Depth (ft)	= 2.00
Invert Elev. (ft)	= 1061.00
Slope (%)	= 2.30
N-Value	= 0.025
Calculations Computed by:	Known Q
Known Q (cfs)	= 0.50

Highlighted

Depth (ft)	= 0.12
Q (cfs)	= 0.800
Area (sqft)	= 0.27
Velocity (ft/s)	= 1.66
Wetted Perim. (ft)	= 2.54
Crit. Depth, Yc (ft)	= 0.12
Top Width (ft)	= 2.48
EGL. (ft)	= 0.17



TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

1. cfs in the channel/ditch that the check dam is being used in: 0.30 CFS

2. Above 2.0 cfs: Yes _____ No X

3. If Yes, list BMP being used in conjunction with check dams: N/A

TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

1. cfs in the channel/ditch that the check dam is being used in: 0.50 CFS

2. Above 2.0 cfs: Yes _____ No X

3. If Yes, list BMP being used in conjunction with check dams: N/A

GWINNETT COUNTY STAMP AREA (4" X 4")
PROJECT # CDP2019-00035

Order Plans

ENGINEER
FORESITE group
Foresite Group, Inc. | www.fg-inc.net
3740 Davinci Ct. | 770.368.1399
Suite 100 | 770.368.1944
Peachtree Corners, GA 30092

DEVELOPER
GWINNETT COUNTY - GEORGIA
ESTABLISHED 1828
75 LANGLEY DR.
LAWRENCEVILLE, GEORGIA 30046
770-822-8864
CONTACT: MR. REX SCHUDER

PROJECT:
ELISHA WINN HOUSE
SITE IMPROVEMENTS
908 DACULA RD
DACULA, GA 30019
LL # 1, DISTRICT 2, ZONE R-100
PARCEL #R2001 158

SEAL:
GEORGIA REGISTERED
No. 038546
Professional Seal
LUISA C. MAZZISI
ENGINEER
4/08/19
GEORGIA LEVEL II CERTIFIED
PROFESSIONAL # 0000058923
EXPIRATION DATED: 08/21/2021

REVISIONS	DATE
GWINNETT CO. RESUBMITTAL	03/20/2019
PROJECT MANAGER:	AWP
DRAWING BY:	SSH
JURISDICTION:	GWINNETT COUNTY
DATE:	08/10/2018
SCALE:	AS SHOWN
TITLE:	

ESPC DETAILS
SHEET NUMBER:
C-4.9
COMMENTS: RELEASED FOR CONSTRUCTION
JOB/FILE NUMBER: 223.082