James City County
VIRGINIA
Jamestown 1607

CERTIFICATE OF AUTHENTICITY

THIS IS TO CERTIFY THAT THE FOLLOWING ELECTRONIC RECORDS ARE TRUE AND ACCURATE REPRODUCTIONS OF THE ORIGINAL RECORDS OF JAMES CITY COUNTY GENERAL SERVICES DEPARTMENT- STORMWATER DIVISION; WERE SCANNED IN THE REGULAR COURSE OF BUSINESS PURSUANT TO GUIDELINES ESTABLISHED BY THE LIBRARY OF VIRGINIA AND ARCHIVES; AND HAVE BEEN VERIFIED IN THE CUSTODY OF THE INDIVIDUAL LISTED BELOW.

BMP NUMBER: **SC-012**

DATE VERIFIED: **May 9, 2012**

QUALITY ASSURANCE TECHNICIAN: **Leah Hardenbergh**

Leah Hardenbergh

LOCATION: WILLIAMSBURG, VIRGINIA

Stormwater Division

MEMORANDUM

DATE: March 11, 2010

TO: Michael J. Gillis, Virginia Correctional Enterprises Document Management Services

FROM: Jo Anna Ripley, Stormwater

PO: 270712

RE: Files Approved for Scanning

General File ID or BMP ID: SC012

PIN: 6010100010

Subdivision, Tract, Business or Owner Name (if known): Walmart

Property Description: Lot 2 Green Mount

Site Address: 9305 Pocahontas Trail

(For Internal use only) **Box** 18 **Drawer:** N/A

Agreements: (in file as of scan date) **Y** **Book or Doc#:** 040027475 000009492 **Page:** 658 565

Comments

Inspection Maintenance Agreements for SC009 through SC013 and SC019 through SC024 are located in file 99122 General File

McCALLUM
TESTING LABORATORIES, INC.
Geotechnical Engineering, Materials Testing & Environmental Services

February 17, 2006

Glover Construction Co., Inc.
P.O. Box 40
Pleasant Hill, NC 27866

Note: This was first received via email 4/17/09 after surety inquiry. Our Division has no record of ever receiving this particular document in Feb 2006. Was one of the issues for holding $170,000. 4/27/09

Attention: Ed Marks

Subject: Stormwater Management / BMP Facilities
Wal-Mart Distribution Center - Phase I & II
James City County, Virginia
MTL Project 067515

Dear Mr. Marks:

Post-Construction Certification for BMP's SC 009 through SC 013

Firm Name: McCallum Testing Laboratories, Inc.
Mailing Address: 1808 Hayward Avenue, Chesapeake, Virginia 23320
Phone: 757-420-2520
Fax: 757-424-2872
Name: Scott A. Deese, P.E.
Title: Project Engineer
Signature:
Date: 2/17/06

I hereby certify to the best of my knowledge and belief that these Stormwater Management / BMP Facilities were constructed in accordance with the provisions of the approved design plans, specifications and stormwater management plan, except as specifically noted:

1. The installation of outfall pipes through the dam or below the roadways could not be observed post-construction.

COMMONWEALTH OF VIRGINIA
SCOTT A. DEESE
No. 033934
2/17/06
PROFESSIONAL ENGINEER

Scott A. Deese, P.E.
Project Engineer

McCALLUM
TESTING LABORATORIES, INC.
Geotechnical Engineering, Materials Testing & Environmental Services

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COMMONWEALTH OF VIRGINIA
SCOTT A. DEESE
No. 033934
2/17/06
PROFESSIONAL ENGINEER

Scott A. Deese, P.E.
Project Engineer

Section 4 - Professional Certifications:

Certifying Professionals: *(Note: A Registered Professional Engineer or Certified Land Surveyor is responsible for preparation of a Record Drawing, sometimes referred to as an As-Built plan, for the drainage system for the project including any Stormwater Management/BMP Facilities. A Registered Professional Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during its construction.)*

Record Drawing and Construction Certifications for Stormwater Management / BMP Facilities

Record Drawing Certification

Firm Name: Glover Const. Co., Inc.
Mailing Address: P.O. Box 40
Pleasant Hill, N.C. 27866
Business Phone: 252-536-2660
Fax: 252-536-4600

Name: Ed Marks
Title: Engineer / Estimator
Signature: ed marks
Date: 12/20/05

I hereby certify to the best of my knowledge and belief that this record drawing represents the actual condition of the Stormwater Management / BMP facility. The facility appears to conform with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.

Field shots taken of outlet structures on 11-30-05 and ponds "C" + "D" dams on 12-8-05.
Actual field elevations noted in red.

(Seal)
Virginia Registered Professional Engineer or Certified Land Surveyor

Construction Certification

Firm Name: McCallum Testing Lab, Inc.
Mailing Address: 1808 HAYWARD AVE
CHESAPEAKE, VA 23320
Business Phone: 757-420-2520
Fax: 757-424-2874

Name: Scott A. DEESE
Title: PROJECT ENGINEER
Signature: Scott A. Deese
Date: 2/17/06

I hereby certify to the best of my knowledge and belief that this Stormwater Management/BMP facility was monitored and constructed in accordance with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.

(1) OUTFALL STRUCTURES THROUGH DAM AND BELOW ROADWAYS COULD NOT BE OBSERVED POST CONSTRUCTION.

COMMONWEALTH OF VIRGINIA
SCOTT A. DEESE
No. 033934
PROFESSIONAL ENGINEER

(Seal)
Virginia Registered Professional Engineer

Section 4 - Professional Certifications:

Certifying Professionals: *(Note: A Registered Professional Engineer or Certified Land Surveyor is responsible for preparation of a Record Drawing, sometimes referred to as an As-Built plan, for the drainage system for the project including any Stormwater Management/BMP Facilities. A Registered Professional Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during its construction.)*

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Construction Certification

Firm Name: _____
Mailing Address: _____
_____
Business Phone: _____
Fax: _____

Name: _____
Title: _____

Signature: _____
Date: _____

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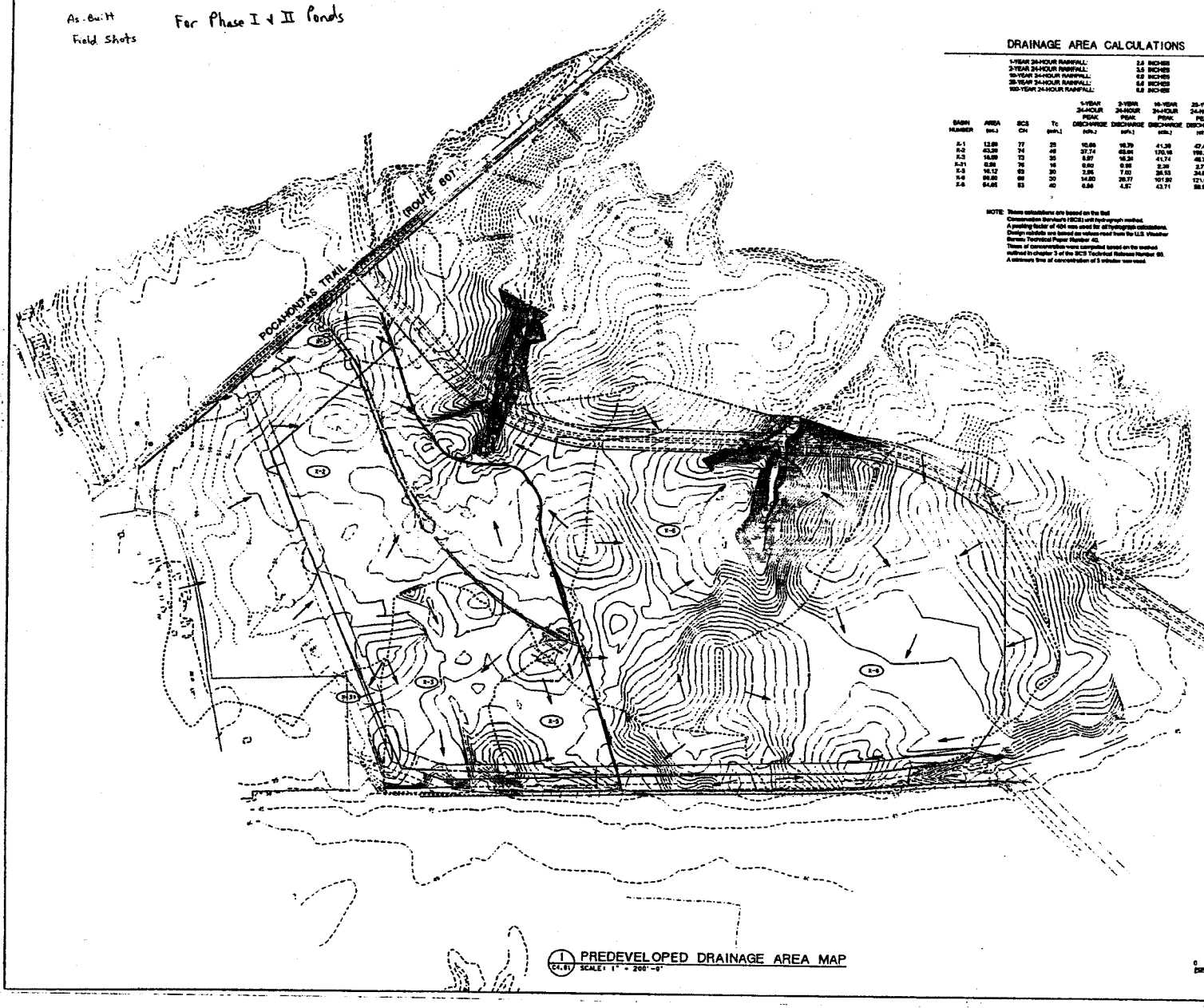
Field shots taken of outlet structures on 11-30-05 and ponds "C" + "D" dams on 12-8-05.
Actual field elevations noted in red.

_____ (Seal)
Virginia Registered Professional Engineer or Certified Land Surveyor

_____ (Seal)
Virginia Registered Professional Engineer

As-built
Field Shots

For Phase I & II Ponds



DRAINAGE AREA CALCULATIONS

1-YEAR 24-HOUR RAINFALL:	2.6 INCHES
2-YEAR 24-HOUR RAINFALL:	3.5 INCHES
10-YEAR 24-HOUR RAINFALL:	5.0 INCHES
25-YEAR 24-HOUR RAINFALL:	5.8 INCHES
100-YEAR 24-HOUR RAINFALL:	6.8 INCHES

BASIN NUMBER	AREA (ac.)	SCS CN	Tc (min.)	1-YEAR 24-HOUR PEAK DISCHARGE (cfs.)	2-YEAR 24-HOUR PEAK DISCHARGE (cfs.)	10-YEAR 24-HOUR PEAK DISCHARGE (cfs.)	25-YEAR 24-HOUR PEAK DISCHARGE (cfs.)	100-YEAR 24-HOUR PEAK DISCHARGE (cfs.)
E-1	12.09	77	25	10.69	16.79	41.36	47.47	62.91
E-2	43.28	74	45	27.74	45.64	170.16	198.32	268.12
E-3	16.09	73	35	8.97	14.34	41.74	48.74	65.46
E-31	0.96	79	15	0.93	0.95	2.36	2.73	3.58
E-5	16.12	83	20	2.85	7.10	34.53	24.60	49.63
E-6	66.20	88	30	14.80	28.77	101.92	121.69	170.51
E-6	54.65	83	40	6.86	4.57	43.71	58.92	90.86

NOTE: These calculations are based on the Soil Conservation Service's (SCS) unit hydrograph method. A peaking factor of 484 was used for all hydrograph calculations. Design rainfalls are based on values read from the U.S. Weather Bureau Technical Paper Number 40. Time of concentration was calculated based on the method outlined in chapter 3 of the SCS Technical Release Number 55. A minimum time of concentration of 5 minutes was used.

PROJECT RECORD

Date NOV 11 2000
Wal-Mart BSF #88, James City County VA
Miller Building Corporation
2581 Blue Ridge Rd G-100, Raleigh, NC 27607
Tel: (919) 782-1604
This Plan, with the as-built [illegible] accurately reflects the [illegible]
Signature

1 PREDEVELOPED DRAINAGE AREA MAP
C4.01 SCALE: 1" = 200'-0"

PLAN NORTH
-27° 18' 49" TRUE NORTH

0 200 400 600 800
GRAPHIC SCALE IN FEET

NO.	DATE	ISSUE
1	10/27/00	ISSUE FOR CONSTRUCTION

WAL-MART STORES, INC.
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

PREDEVELOPED DRAINAGE AREA MAP

Carter & Burgess
CARTER & BURGESS, INC.
Consultants in Planning, Research and Development, Engineering, Architecture, Environmental Services, Construction Management, Operations Management
2000 HOLMES, Greenville, SC 29607 (864) 232-2000
RALEIGH, NORTH CAROLINA, SUITE 300
RICHMOND, VIRGINIA, SUITE 200

SHEET C4.01

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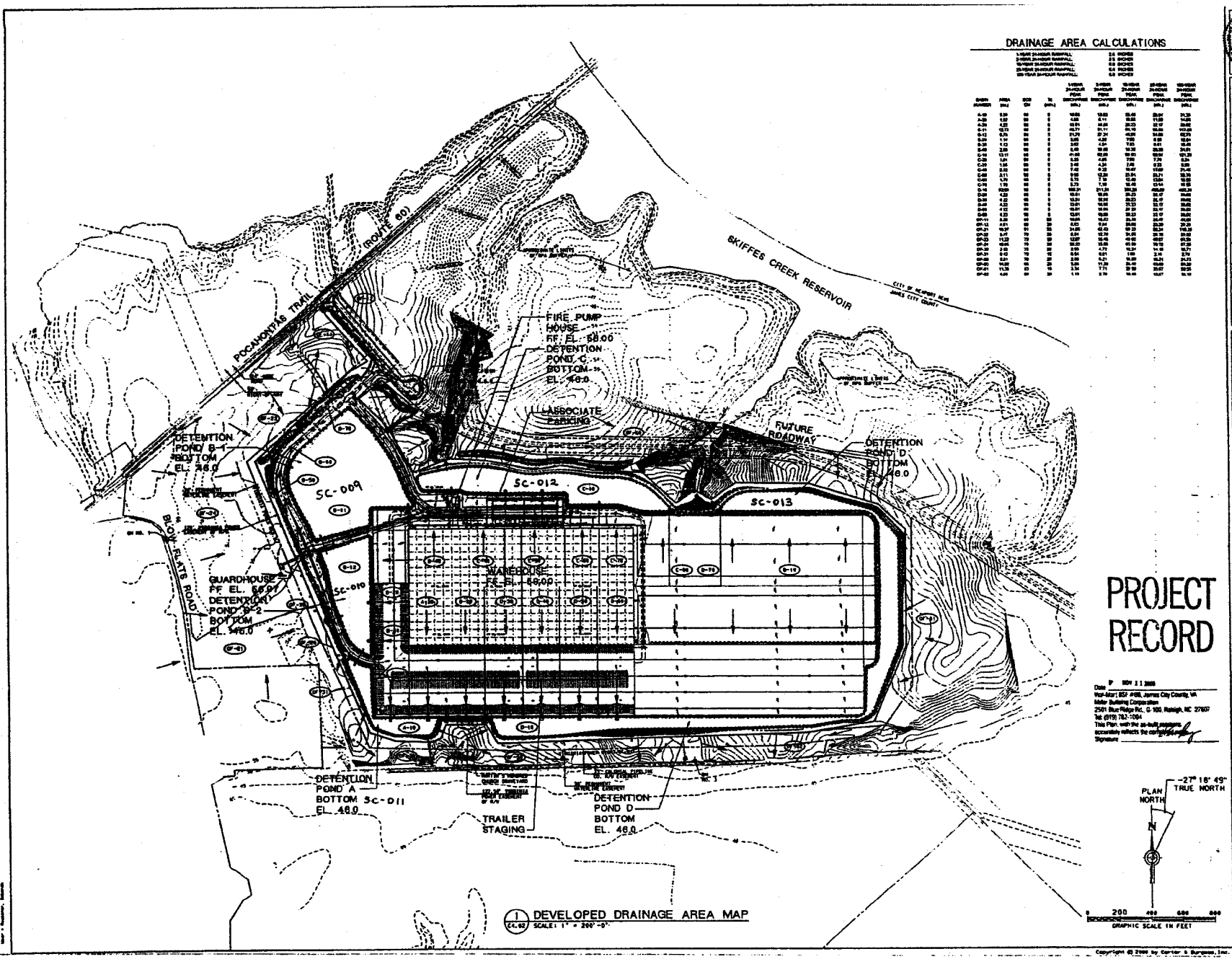
G:\PROJECTS\PREDEV\DRAINAGE.DWG

DRAINAGE AREA CALCULATIONS

1-YEAR 24-HOUR RAINFALL							2.6 INCHES				
2-YEAR 24-HOUR RAINFALL							3.0 INCHES				
10-YEAR 24-HOUR RAINFALL							4.6 INCHES				
25-YEAR 24-HOUR RAINFALL							5.5 INCHES				
100-YEAR 24-HOUR RAINFALL							6.8 INCHES				
BASIN NUMBER	AREA (AC)	CN	CN	Tc (MIN.)	1-YEAR 24-HOUR PEAK DISCHARGE (CFS)	2-YEAR 24-HOUR PEAK DISCHARGE (CFS)	10-YEAR 24-HOUR PEAK DISCHARGE (CFS)	25-YEAR 24-HOUR PEAK DISCHARGE (CFS)	100-YEAR 24-HOUR PEAK DISCHARGE (CFS)		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		



1 DEVELOPED DRAINAGE AREA MAP
C4.02 SCALE: 1" = 200'-0"

PROJECT RECORD

Date: NOV 11 2008
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G 100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built revisions accurately reflects the completed work.
Signature

NO.	DATE	ITEM
1	REVISED FOR CONSTRUCTION	

WAL-MART
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

DEVELOPED DRAINAGE AREA MAP

Carter & Burgess
CARTER & BURGESS, INC.
Consultants in Planning, Design, Construction Management, Operations and Maintenance
2800 NATIONAL CORPORATE PARK DR.
SUITE 200
NORFOLK, VA 23502-3100

SHEET
C4.02

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10 YEAR STORM DRAIN HYDRAULIC CALCULATIONS

ACTUAL PIPE SLOPE FOR PARTIAL FLOW (FT/FT)	MANHOLE OR INLET DESIGN POINT		DISTANCE BETWEEN POINTS (FEET)	DRAINAGE AREA			RUNOFF COEFF. C	INCRE-MENTAL CA	TOTAL CA	TIME OF CONCENTRATION			DESIGN FREQ-UENCY (YR)	INTEN-SITY (IN/HR)	PEAK FLOW IN PIPE (CFS)	PIPE SIZE (IN)	FRICTION SLOPE Sf (FT/FT)	HYDRAULIC GRADIENT ELEVATIONS		HEAD LOSS AT CHANGE IN SECTION							ELEV. OF HYD. GRADE (FT)	ELEV. OF INVERT AT DESIGN POINT		REMARKS
	FROM	TO		INCREMENTAL AREA NO.	AREA (ACRE)	TOTAL AREA (ACRE)				INLET TIME (MIN)	FLOW TIME IN SEWER (MIN)	TOTAL TIME (MIN)						UP-STREAM (FT MSL)	DOWN-STREAM (FT MSL)	V1 FLOW IN (FPS)	V2 FLOW OUT (FPS)	V2**2 2g (FT)	V1**2 2g (FT)	Rj (CONST)	Rj*V1**2 2g (FT)	HEAD LOSS Hj (FT)		PIPE IN (FT MSL)	PIPE OUT (FT MSL)	
0.0054	4+17.50	1+17.50	300.00	B-40	2.85	2.85	1.00	2.85	2.85	5.0	—	5.0	10	7.2	16.1	24	0.0071	56.09	49.47	6.0	6.1	—	—	1.00	—	P.F.	56.59	53.59	47.47	LINE B-4
0.0125	1+17.50	0+00.00	117.50	NONE	0.00	2.85	1.00	0.00	2.85	5.0	0.6	5.6	10	7.1	18.8	24	0.0069	49.47	47.94	6.1	6.0	—	—	0.25	—	P.F.	49.47	47.47	46.00	LINE B-6
0.0158	5+83.46	1+99.21	384.25	C-60	3.11	3.11	1.00	3.11	3.11	5.0	—	5.0	10	7.2	22.4	24	0.0086	55.59	49.99	—	7.1	—	—	1.00	—	P.F.	55.59	53.59	47.99	LINE C-1
0.0075	1+99.21	0+00.00	199.21	C-40	2.32	5.43	1.00	2.32	5.43	5.0	0.8	5.8	10	7.1	38.9	30	0.0068	49.99	47.76	7.1	7.9	—	—	0.25	—	FULL	49.99	47.49	46.00	LINE C-1
0.0024	3+48.75	0+00.00	348.75	C-40	2.32	2.32	1.00	2.32	2.32	5.0	—	5.0	10	7.2	16.7	24	0.0055	55.56	49.99	0.0	5.3	—	—	1.00	—	P.F.	55.56	53.56	47.99	LINE C-2
0.0089	3+44.30	1+96.80	217.50	C-70	1.79	1.79	1.00	1.79	1.79	5.0	—	5.0	10	7.2	12.9	24	0.0032	55.75	49.90	0.0	4.1	—	—	1.00	—	P.F.	55.75	53.75	47.90	LINE C-4
0.0160	1+96.80	0+00.00	196.80	C-60	1.79	3.58	1.00	1.79	3.58	5.0	0.9	5.9	10	7.1	25.4	24	0.0126	49.90	47.76	4.1	8.1	—	—	0.25	—	P.F.	49.90	47.90	46.00	LINE C-4
0.0201	1+94.87	0+00.00	194.87	C-60	1.79	1.79	1.00	1.79	1.79	5.0	—	5.0	10	7.2	12.9	24	0.0032	55.76	49.90	0.0	4.1	—	—	1.00	—	P.F.	55.76	53.76	47.90	LINE C-6

10 YEAR CULVERT HYDRAULIC CALCULATIONS

CULVERT NAME	PIPE SIZE (IN.)	PIPE MATERIAL	MANNING'S n	PIPE LENGTH (FT.)	UP STREAM FLOWLINE (FT.)	DOWN STREAM FLOWLINE (FT.)	MAXIMUM 10-YEAR DISCHARGE (cfs.)	MAXIMUM HEADWATER ELEVATION (FT.)	MAXIMUM TAILWATER ELEVATION (FT.)	℄ ROADWAY TOP OF DECK ELEVATION (FT.)	PIPE SLOPE (FT./FT.)	PIPE CAPACITY (cfs)	VELOCITY (fps)
LINE B-1	24	R.C.P.	0.013	66.00	46.90	46.00	9.00	48.29	48.25	52.73	.0050	17.23	5.48
LINE B-1	36	R.C.P.	0.013	77.00	47.75	46.00	48.31	51.50	48.25	52.73	.0227	188.50	14.95
LINE B-2	36	R.C.P.	0.013	182.13	48.00	46.00	51.01	52.05	47.94	53.05	.0187	91.21	13.28
LINE B-3	24	R.C.P.	0.013	57.18	46.00	45.00	26.94	52.45	47.94	52.53	.0206	32.47	11.34
LINE B-4	18	R.C.P.	0.013	93.78	46.50	45.40	16.13	47.94	46.96	52.00	.0117	11.38	7.27
LINE B-5	24	R.C.P.	0.013	94.11	46.00	45.00	11.00	48.25	47.94	52.00	.0106	EQUALIZER	3.71
LINE C-3	18	R.C.P.	0.013	48.12	46.30	45.20	5.83	47.78	46.79	51.00	.0207	17.09	8.76
LINE B-1	36	R.C.P.	0.013	68.32	43.50	42.64	42.98	46.76	45.64	51.00	.0143	49.95	11.27

10 YEAR FLUME CALCULATIONS

CAPACITY FOR CURB OPENING:

Q = C * L * H^(3/2) = 1.7 CFS/FOOT OF OPENING (WEIR FORMULA)

MAXIMUM Q10 TO 10" FLUME OPENING = 7.3 CFS (11 (AREA C-24)

MAXIMUM Q10 TO 10" FLUME OPENING = 7.8 CFS (11 (AREA C-34)

MAXIMUM Q10 TO 10" FLUME OPENING = 8.3 CFS (11 (AREA B-24)

MAXIMUM Q10 TO 10" FLUME OPENING = 8.1 CFS (11 (AREA B-34)

MAXIMUM Q10 TO 10" FLUME OPENING = 10.0 CFS (11 (AREA A-24)

MAXIMUM Q10 TO 30" FLUME OPENING = 34.4 CFS (33 (AREAS A-20, B-20 TO B-60)

FOR WEIR FORMULA:

Q= DISCHARGE, CFS
C= WEIR COEFFICIENT, USE C= 3.1
L= LENGTH OF OPENING, FT.
H= HEIGHT OF CURB, FT.

2 YEAR OPEN CHANNEL HYDRAULIC CALCULATIONS

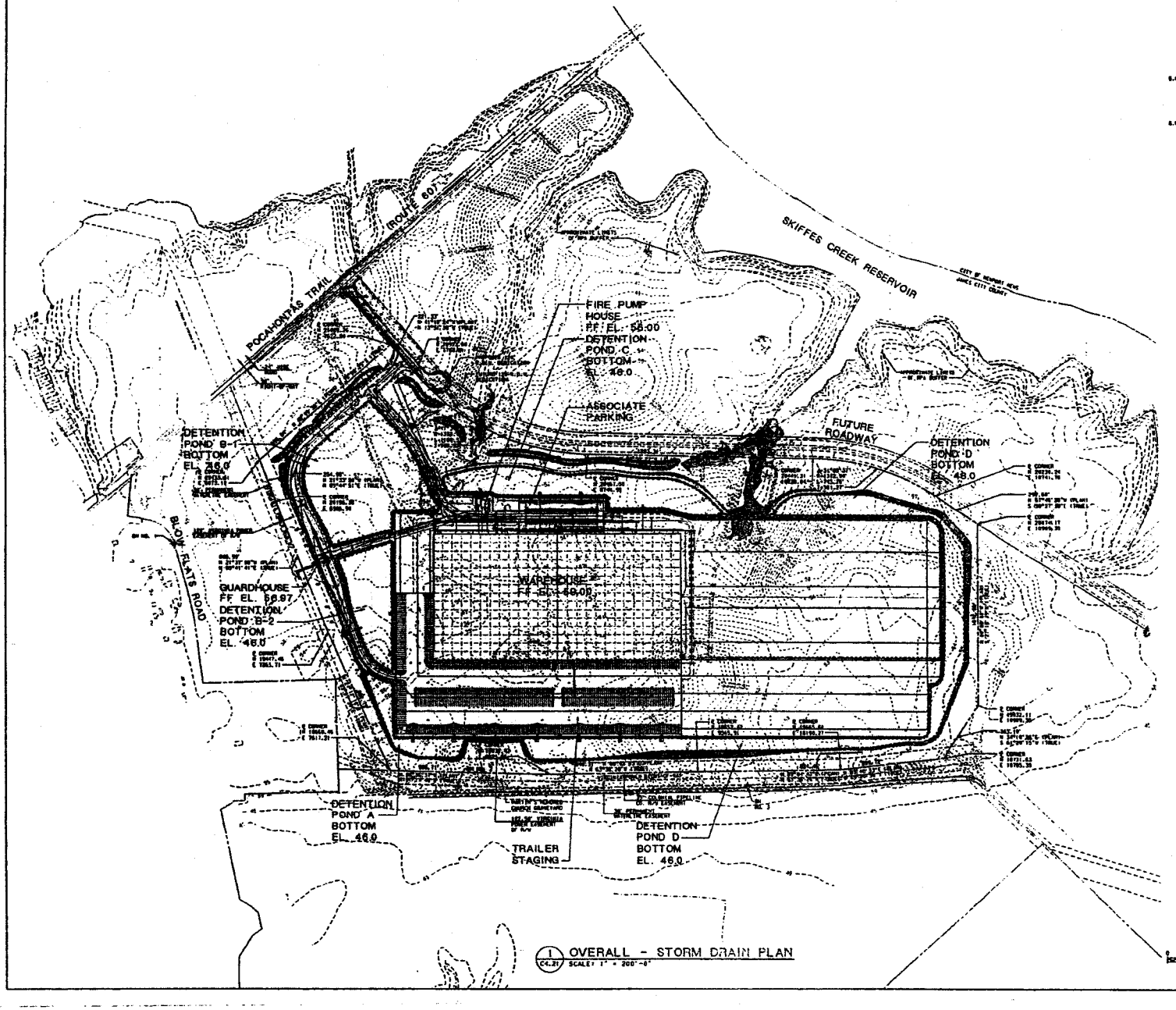
COMPUTATIONS OF RECTANGULAR, 'V' OR TRAPEZOIDAL CHANNEL PROPERTIES

CHANNEL NAME	DEPTH	SIDE #1	SIDE #2	BOTTOM WIDTH	MANNING'S "n"	CHANNEL SLOPE (FT/FT)	Q REQ'D (CFS)	AREA (FT.²)	CRITICAL SLOPE (FT/FT)	HYDRAULIC RADIUS (FT.)	TOP WIDTH (FT.)	VELOCITY (FPS)	Q PROV'D (CFS)	FLOW REGIME	CHANNEL LINING
CH-B50	0.52	3:1	3:1	5.00	0.035	0.005	5.63	3.41	0.0510	0.412	8.12	1.67	5.68	SUBCRITICAL	GRASS
CH-B70	0.33	3:1	3:1	5.00	0.035	0.005	2.49	1.90	0.0706	0.279	6.98	1.29	2.54	SUBCRITICAL	GRASS
CH-C80	0.34	3:1	3:1	5.00	0.035	0.0334	6.79	2.05	0.0481	0.286	7.04	3.30	6.92	SUBCRITICAL	GRASS
CH-D70	0.34	3:1	3:1	5.00	0.035	0.0334	6.79	2.05	0.0481	0.286	7.04	3.30	6.92	SUBCRITICAL	GRASS
CH-D80	0.32	3:1	3:1	5.00	0.035	0.005	2.37	1.91	0.0639	0.272	6.92	1.26	2.41	SUBCRITICAL	GRASS
CH-OF25	0.53	3:1	3:1	5.00	0.035	0.0058	6.83	3.49	0.0486	0.418	8.18	1.96	6.86	SUBCRITICAL	GRASS
CH-OF26	0.18	3:1	3:1	5.00	0.035	0.006	0.92	1.00	0.0957	0.162	6.00	0.90	0.94	SUBCRITICAL	GRASS
CH-OF11	0.42	2.5:1	2.5:1	5.00	0.035	0.0357	10.07	2.54	0.0372	0.350	7.33	3.99	10.15	UNSTABLE	GRASS

PROJECT RECORD

Date In NOV 13 2000
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
250" Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations, accurately reflects the completed work.
Signature

Copyright © 2000 by Carter & Burgess, Inc



1 OVERALL - STORM DRAIN PLAN
C4.21 SCALE: 1" = 200'-0"

BENCH MARKS:

B.M. 1: STATION NO. 700 - A 3½" DISC IN CONCRETE, SET APPROX. 2" BELOW THE GROUND SURFACE. STAMPED "STATION NO. 700". THE DISC IS LOCATED ON THE EAST SIDE OF BLOW FLATS ROAD, APPROX. 0.1 MILE SOUTH OF U.S. ROUTE 60 (POCAHONTAS TRAIL), 15' EAST OF THE CENTER LINE OF THE PAVEMENT OF BLOW FLATS ROAD, 11.2' NORTHEAST OF UTILITY POLE "C&P-31" AND 37.1' NORTHEAST OF THE CORNER OF A SANITARY HANDLE ON BLOW FLATS ROAD. ELEV. = 55.95.

B.M. 2: TEMPORARY BENCHMARK DISC ON TOP OF CONCRETE WITNESS POST, STAMPED "100+11". THE POST IS LOCATED APPROXIMATELY 264' EAST & 87' SOUTH OF TOWER #-4261 APPROXIMATELY 331' WEST AND 84' SOUTH OF TOWER #-67. ELEV. = 51.61.

B.M. 3: TEMPORARY BENCHMARK DISC ON TOP OF CONCRETE WITNESS POST, STAMPED "100+11". THE POST IS LOCATED APPROXIMATELY 264' EAST & 87' SOUTH OF TOWER #-4261 APPROXIMATELY 341' WEST AND 87' SOUTH OF TOWER #-67. ELEV. = 54.63.

PROJECT RECORD

Date: NOV 14-97
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built revisions accurately reflects the completed work.
Signature

NO.	DATE	REVISION
1	09/17/97	ISSUE FOR CONSTRUCTION

WAL-MART
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

OVERALL - STORM DRAIN PLAN

Carter & Burgess
CARTER & BURGESS, INC.

SHEET C4.21

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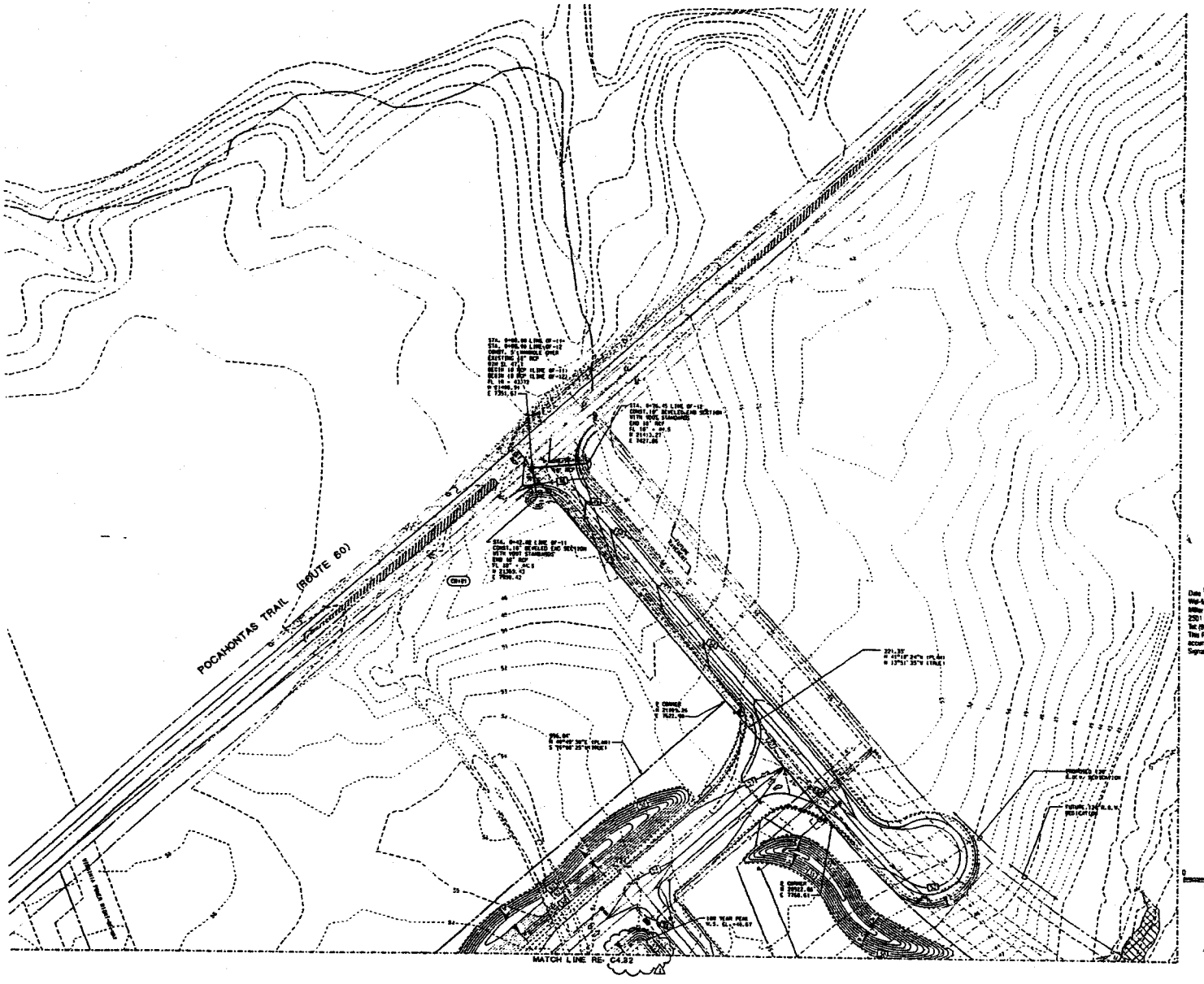
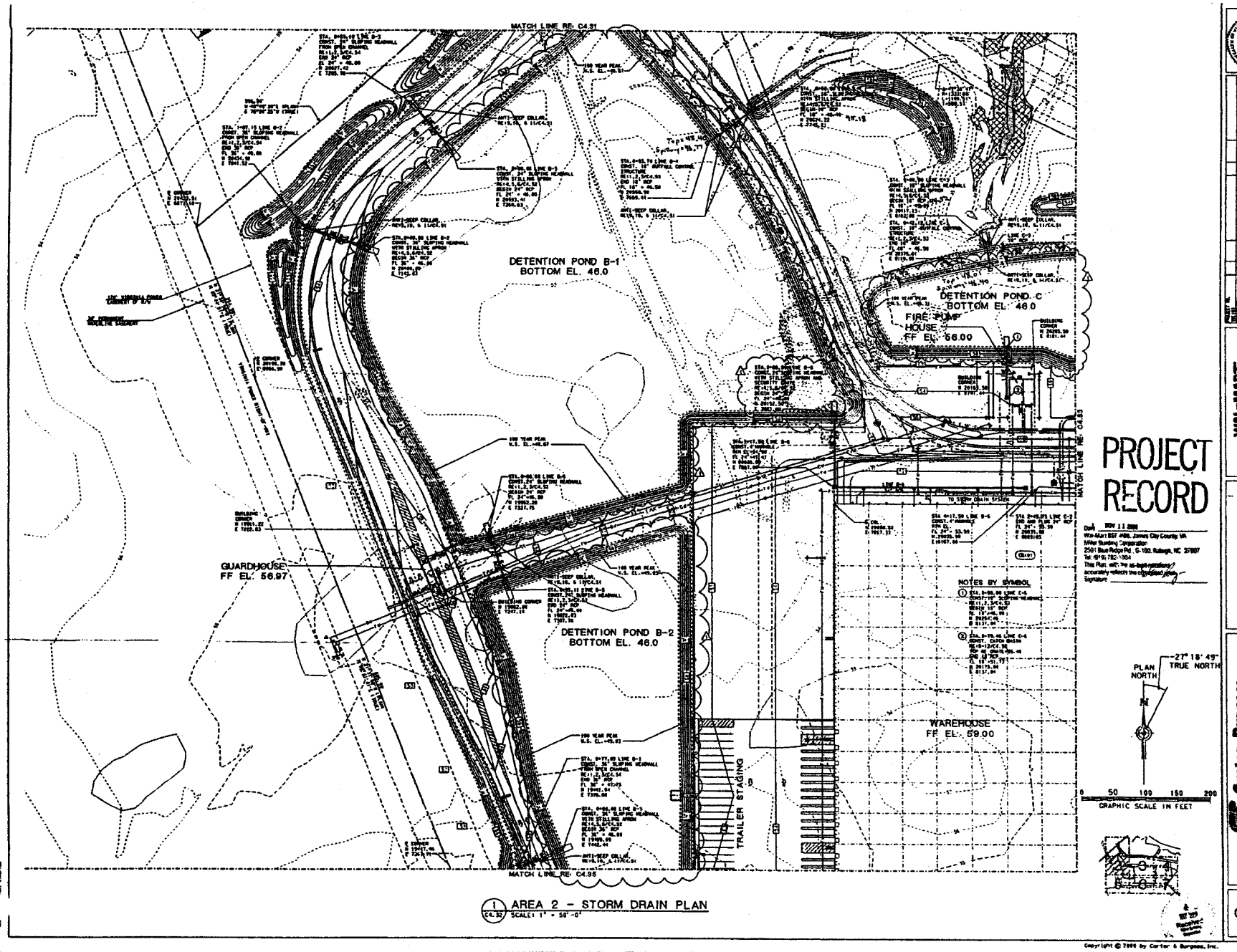


1 (C4.31) AREA 1 - STORM DRAIN PLAN
SCALE: 1" = 50'-0"

PROJECT RECORD

Date NOV 11 2000
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built revisions accurately reflects the construction
Signature

Copyright © 2000 by Carter & Burgess, Inc



1 AREA 2 - STORM DRAIN PLAN
C4.32 SCALE: 1" = 50'-0"

PROJECT RECORD

Date NOV 11 2000
Wal-Mart BST #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1364
This Plan, with the as-built revisions, accurately reflects the completed work.
Signature

WAL-MART
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

AREA 2 -
STORM DRAIN PLAN

Carter & Burgess
CARTER & BURGESS, INC.

SHEET
C4.32

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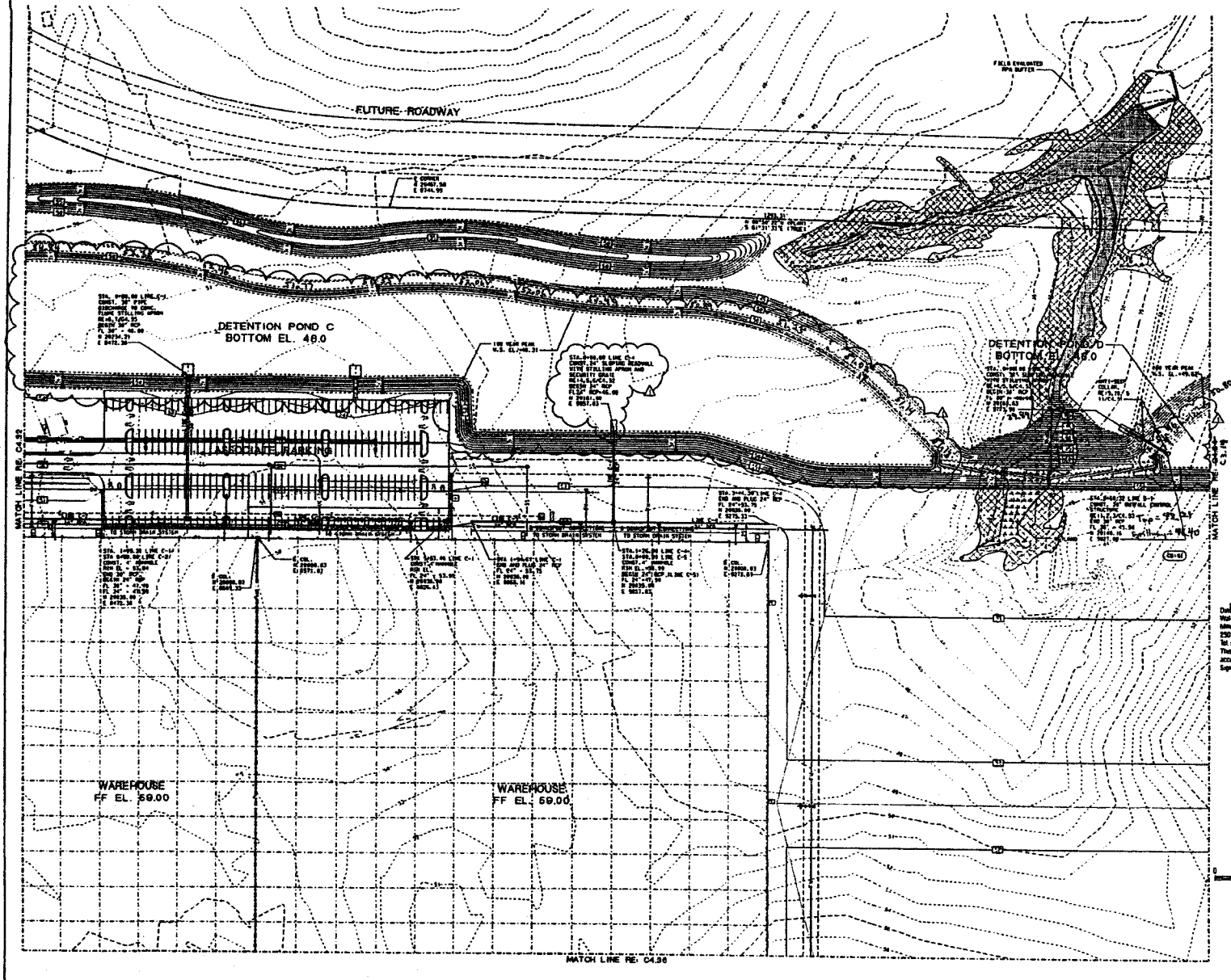

1 AREA 3 - STORM DRAIN PLAN
C4.33 SCALE: 1" = 50'-0"

PROJECT RECORD

Date: NOV 11 2008
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd. G-100, Raleigh, NC 27607
Tel (919) 792-1204
This Plan, with the as-built additions accurately reflects the conditions with.
Signature

WAL-MART
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

AREA 3 -
STORM DRAIN PLAN

Carter & Burgess
Consultants in Planning, Engineering, Architecture, Construction Management, and Related Services
CARTER & BURGESS, INC.
2800 MACKAY BOULEVARD, SUITE 300
FORT WORTH, TX 76137 - 7199

SHEET
C4.33

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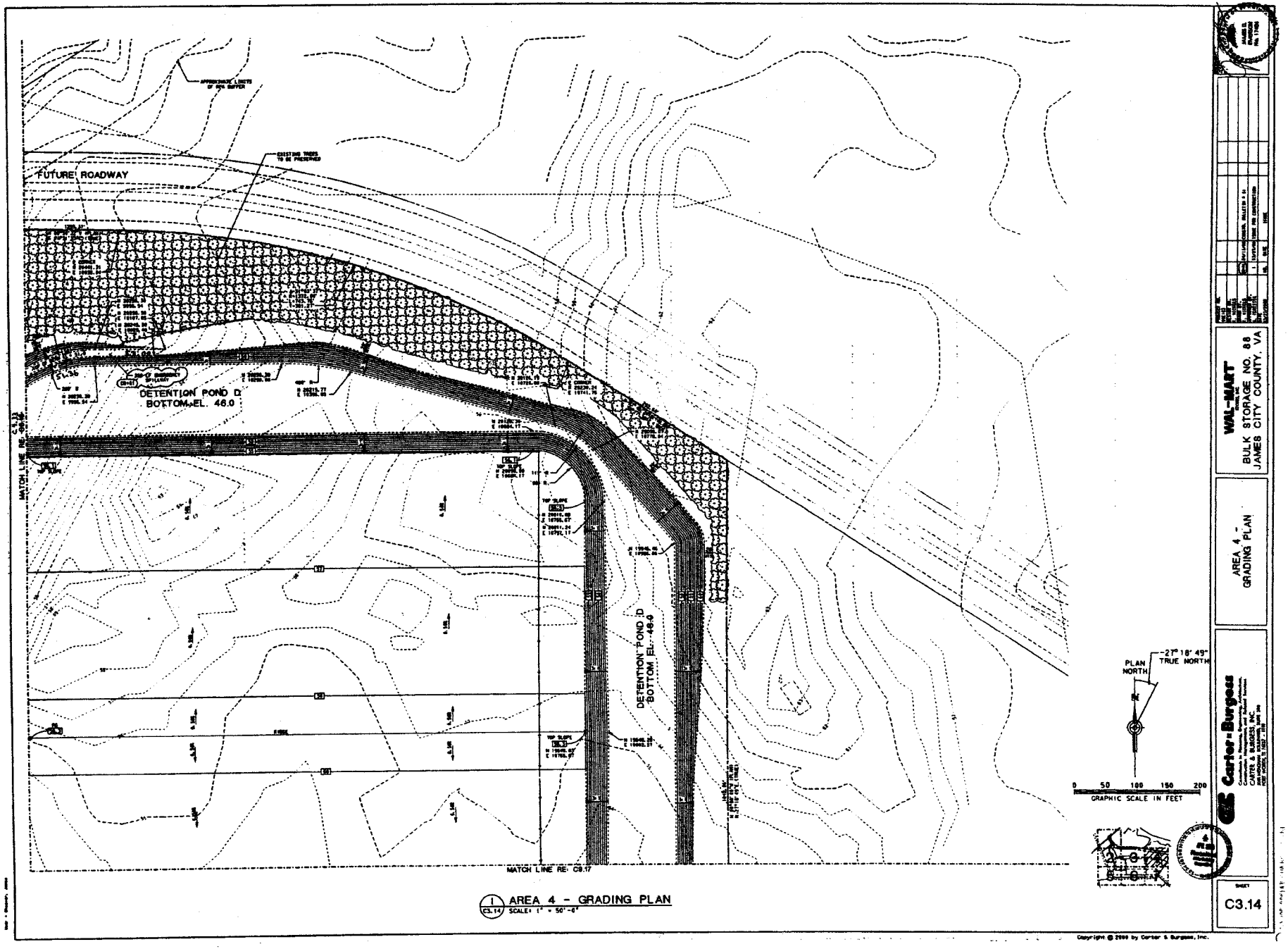
Inserted This Page To Show
Continuation of Dam at Pond "D"



1 C3.14 AREA 4 - GRADING PLAN
SCALE: 1" = 50'-0"

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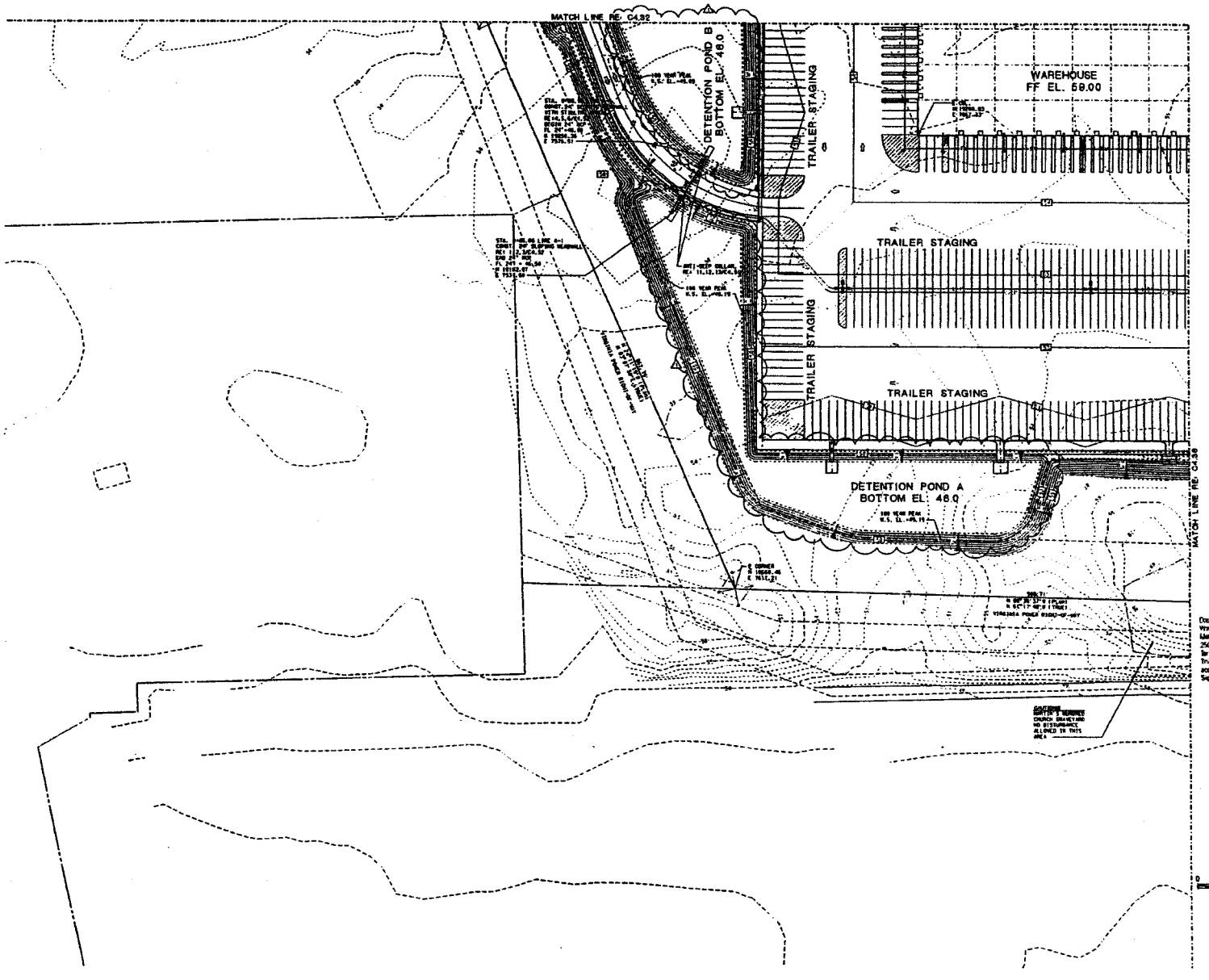
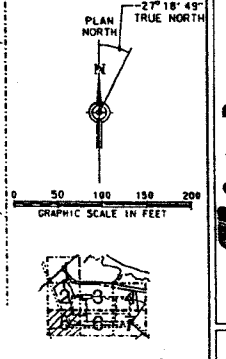


1 C4.35 AREA 5 - STORM DRAIN PLAN
SCALE: 1" = 50'-0"

PROJECT RECORD

Date: NOV 11 2008
Wal-Mart BSF #88, James City County, VA
Mike Sturdivant Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations accurately reflects the [illegible]
Signature



WAL-MART
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

AREA 5 -
STORM DRAIN PLAN

Carter & Burgess
CARTER & BURGESS, INC.

SHEET
C4.35

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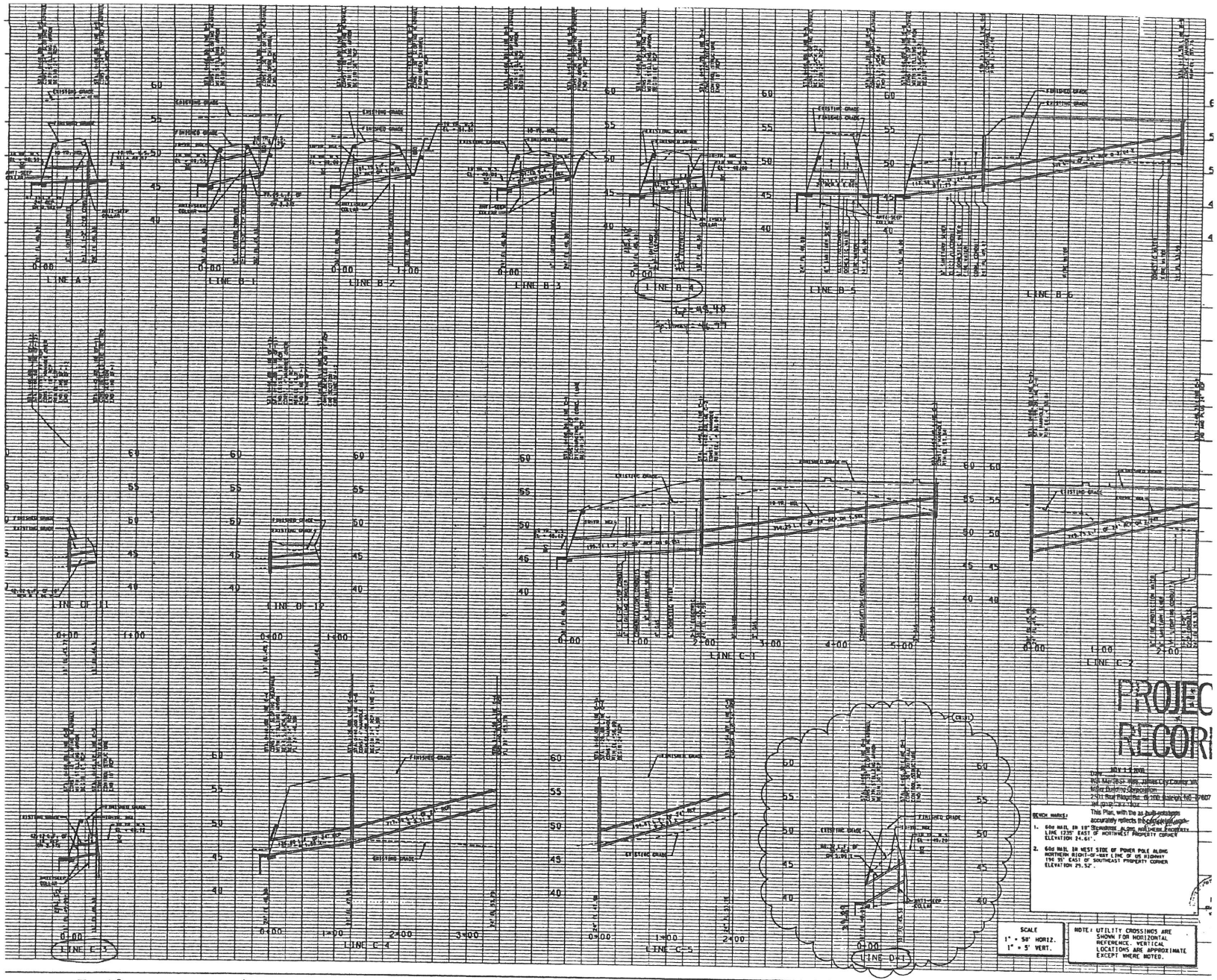

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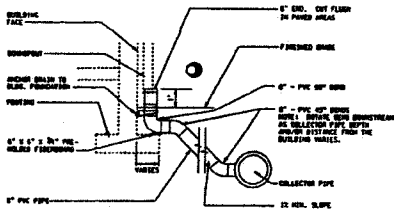
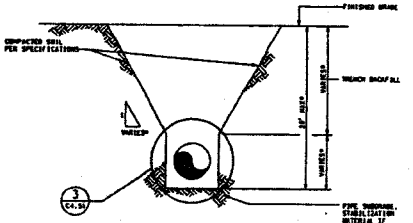


DETAIL NOTES:

1. THERE ARE 54 DOWNSPOUT CONNECTIONS TO BE MADE ON THIS PROJECT. SEE METAL BUILDING PACKAGE FOR DOWNSPOUT LOCATIONS.
2. IN PAVED AREAS, GC TO EXTEND PIPE ABOVE FINISH GRADE FOR GC TO CUT FLUSH AND CAP. REFER TO SHEET A1-32.
3. CONTRACTOR TO COORDINATE WITH FIRE PROTECTION LINE INSTALLATION TO ENSURE GRAVITY FLOW IN DOWNSPOUT COLLECTOR.

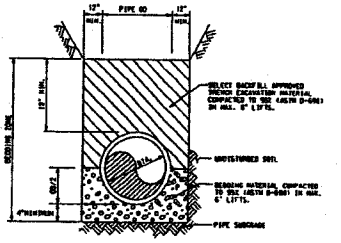
DOWNSPOUT COLLECTOR
NOT TO SCALE



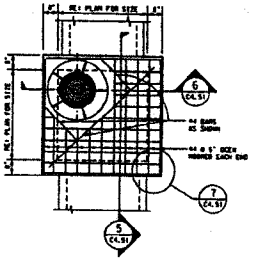
DETAIL NOTES:

1. ALL CONSTRUCTION, INSPECTION AND MONITORING SHALL COMPLY WITH ALL DOHA, STATE AND LOCAL ORDINANCES, LAWS AND PROCEDURES. THIS SHALL INCLUDE ALL CONSTRUCTION METHODS, MATERIALS AND SAFETY PROCEDURES. ADDITIONAL TRENCH SAFETY, INSPECTION AND MONITORING SHALL BE DESIGNED AND FURNISHED BY THE CONTRACTOR AS REQUIRED BY DOHA, STATE AND LOCAL ORDINANCES, LAWS AND PROCEDURES.

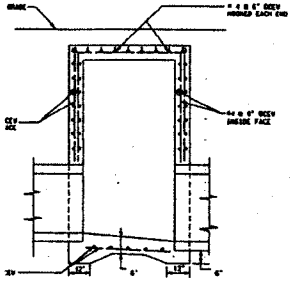
2 TRENCHING DETAIL
NOT TO SCALE



3 BEDDING ZONE
C4.51 NOT TO SCALE



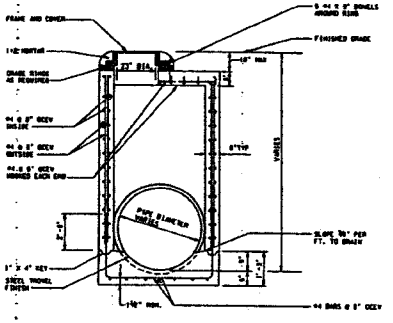
4 STORM DRAIN MANHOLE
NOT TO SCALE



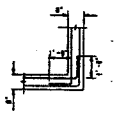
DETAIL NOTES:

1. SLOPE INVERT OF MANHOLE AS INDICATED ON PROFILE SHEET.
2. PROVIDE 1½" MIN. CLEARANCE FROM ALL REINFORCEMENT TO FACE OF CONCRETE.
3. PROVIDE STEEL REBAR SPACERS FOR WALLS WHEN MANHOLE HEIGHT EXCEEDS 6'.
4. PROVIDE MANHOLE STEPS @ 15" OC STAGGERED (C1 OR PLASTIC) PLACE TOP STEP 30" MAX FROM FINISHED GRADE.
5. PRECAST MANHOLE CONFORMING TO VIRGINIA DOT STANDARD DETAIL IS AN ACCEPTABLE ALTERNATIVE.

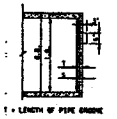
5 SECTION
C4.51 NOT TO SCALE



6 SECTION
C4.51 NOT TO SCALE



7 CORNER DETAIL
C4.51 NOT TO SCALE



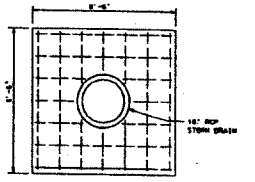
PLUG REINFORCEMENT SCHEDULE			
PIPE SIZE	REINF. BAR	SPACING	S
12"-33"	#2	12" BOTH WAYS	1/2 T
36"-54"	#3	12" BOTH WAYS	1/3 T
60"-84"	#4	12" BOTH WAYS	1/4 T

T = LENGTH OF PIPE GROOVE

DETAIL NOTES:

1. STEEL MANHOLE FOR REINF. CONC. PIPE PLUG SHALL BE LOCATED ¼ I.D. ABOVE CENTER POINT OF PLUG. TWO STEEL MANHOLES WILL BE REQUIRED ON PLUGS OF 36" PIPES OR LARGER AND SHALL BE PLACED ¼ I.D. APART AND ¼ I.D. ABOVE CENTER.

8 REINFORCED CONCRETE PIPE PLUG DETAIL
NOT TO SCALE

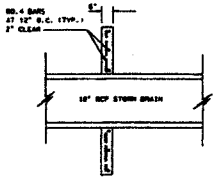


ELEVATION

DETAIL NOTES:

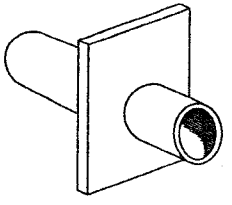
1. CONCRETE COLLARS TO BE CAST-IN-PLACE USING 3000 PSI CONCRETE

9 ANTI-SEEP COLLAR ELEVATION
NOT TO SCALE



PLAN

ANTI-SEEP COLLAR SECTION
NOT TO SCALE



11 ANTI-SEEP COLLAR PERSPECTIVE
NOT TO SCALE

PROJECT RECORD

Date NOV 11 2000
Wal-Mart BSF #86, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations, accurately reflects the [illegible]
Signature [signature]

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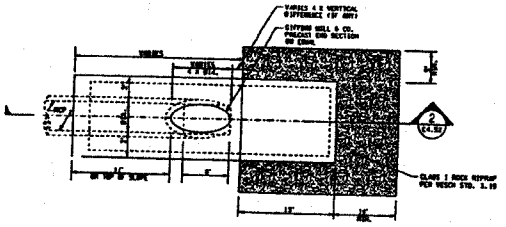
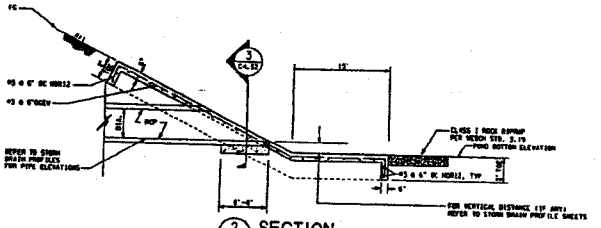
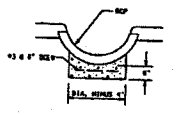


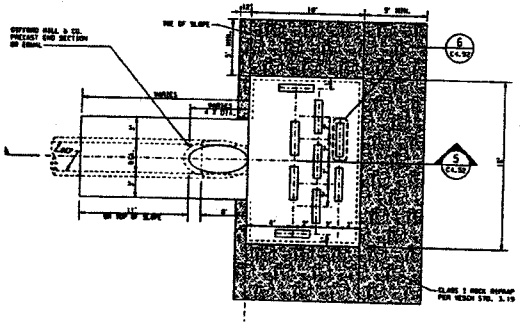
1 SLOPING HEADWALL DETAIL
NOT TO SCALE



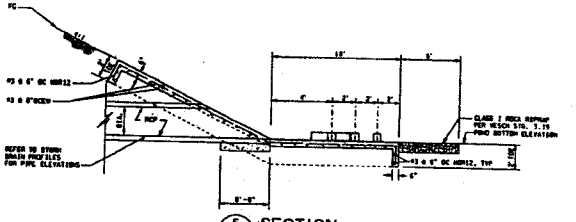
2 SECTION
C4.52 NOT TO SCALE



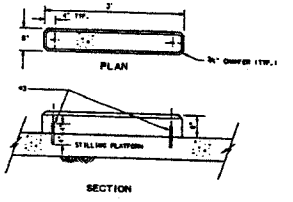
3 SECTION
C4.52 NOT TO SCALE



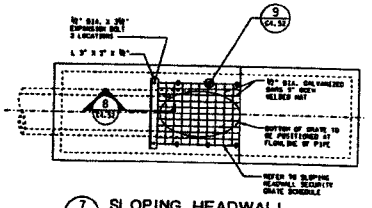
4 SLOPING HEADWALL WITH STILLING APRON
NOT TO SCALE



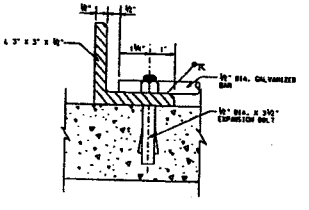
5 SECTION
C4.52 NOT TO SCALE



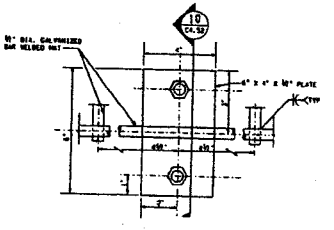
6 CONCRETE BAFFLE
C4.52 NOT TO SCALE



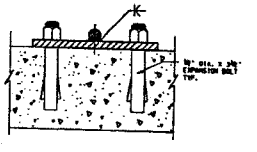
7 SLOPING HEADWALL SECURITY GRATE DETAIL
NOT TO SCALE



8 SECTION
C4.52 NOT TO SCALE



9 SECURITY GRATE FASTENER
C4.52 NOT TO SCALE



10 SECTION
C4.52 NOT TO SCALE

SLOPING HEADWALL SECURITY GRATE SCHEDULE						
PIPE SIZE (INCHES)	1/2" DIA. GALVANIZED BARS				L 3 x 3 x 1/2	
	LONGITUDINAL		LATERAL			
	NO.	LENGTH (IN.)	NO.	LENGTH (IN.)	NO.	LENGTH (INCHES)
18	6	81	9	46	1	52
21	6	90	10	46	1	52
24	7	100	12	55	1	61
36	8	152	17	64	1	70
42	9	180	20	73	1	70
48	9	207	23	73	1	79

1

PROJECT RECORD

Date NOV 11 2000
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations, accurately reflects the circumstances.
Signature

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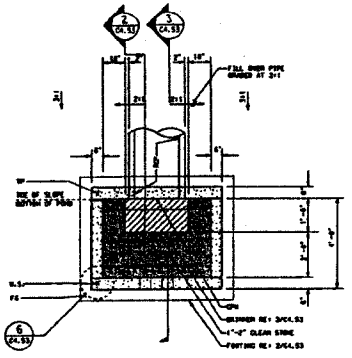
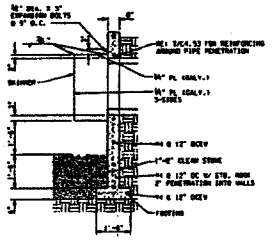
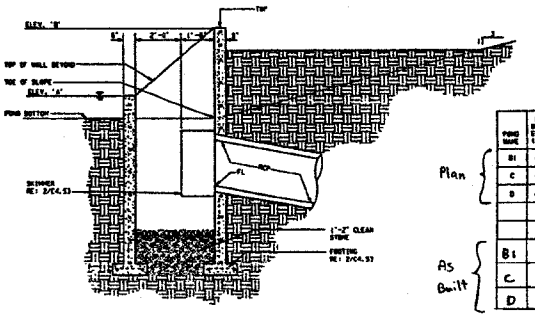


1 OUTFALL CONTROL STRUCTURE
NOT TO SCALE



2 TYPICAL SKIMMER AND FOOTING SECTION
NOT TO SCALE

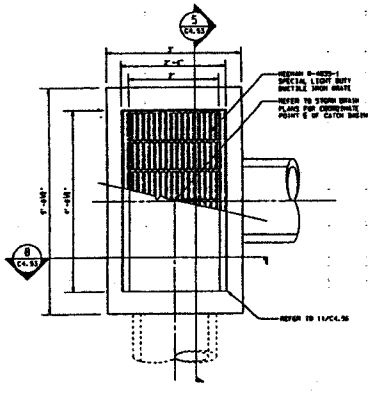


DETAIL NOTES:
1. SKIMMER PLATES AND FOOTINGS ARE INTENDED TO BE PERMANENT INSTALLATIONS AT THE OUTFALL STRUCTURES.

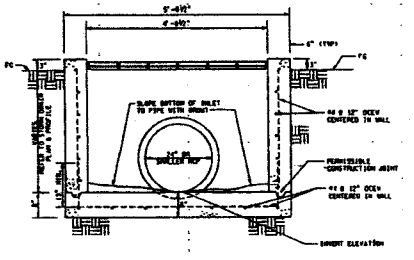
3 SECTIONS
NOT TO SCALE

	POND NAME	POND BOTTOM ELEV. (FT.)	ELEV. "A" (FT.)	ELEV. "B" (FT.)	PIPE LINE (FT.)	COMMENTS	Spillway Top	Inv. In		
Plan	B1	46.0	46.5	48.25	46.5	LINE B-1				
	C	46.0	46.5	48.25	46.5	LINE C-1				
	D	46.0	47.0	48.15	43.5	LINE D-1				
As Built	B1		46.77	49.46	—	As-Built	45.18	45.40		Plan
	C		46.40	48.01	—	As-Built	44.52	45.28		Plan
	D		46.40	48.31	—	As-Built	39.39	40.00		Plan
			Spillway Top		Inv. In		Actual Invert	Plan Invert		

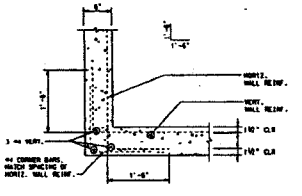
(inside of skimmer plate)



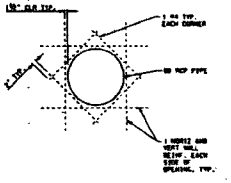
4 CATCH BASIN
NOT TO SCALE



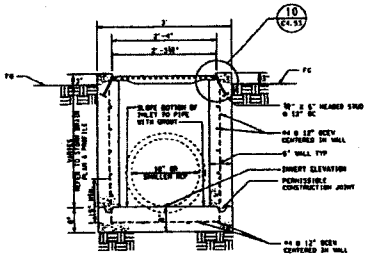
5 SECTION
NOT TO SCALE



6 CORNER BAR DETAIL
NOT TO SCALE



7 WALL OPENING REINFORCING DETAIL
NOT TO SCALE



8 SECTION
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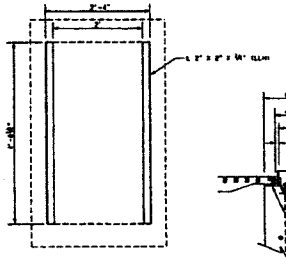
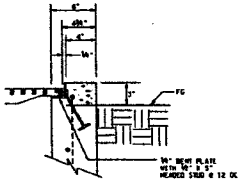


9 FRAME
NOT TO SCALE



10 ANCHOR DETAIL
NOT TO SCALE

PROJECT RECORD

Date: NOV 11 2006
Job: 4537-BSF #83 James City County VA
Noor Building Corporation
2501 Blue Ridge Rd. G-130 Raleigh NC 27607
Tel: (919) 782-1704
This Plan was the as-built drawing as accurately reflects the construction
Sign:

Carter-Burgess
Consultants in Planning, Engineering, Architecture, Construction Management and Related Services
CARTER & BURGESS, INC.
1000 Corporate Boulevard, Suite 100
New Orleans, LA 70123 • 504

NO.	DATE	REVISIONS
1	06/27/06	CODE AND CORRECTION

WAL-MART STORES, INC.
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

STORM DRAIN DETAILS
SHEET 3 OF 5

SHEET
C4.53

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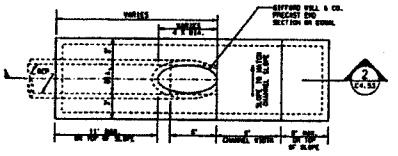
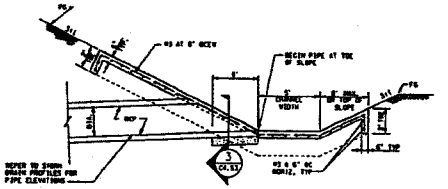
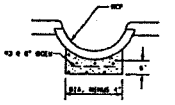


1 SLOPING HEADWALL DISCHARGE FROM OPEN CHANNEL
NOT TO SCALE



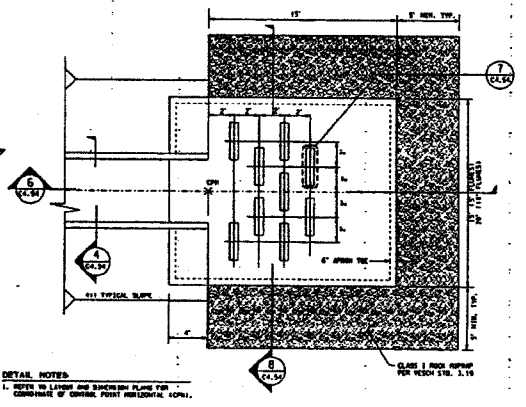
2 SECTION C4.53
NOT TO SCALE



3 SECTION C4.53
NOT TO SCALE

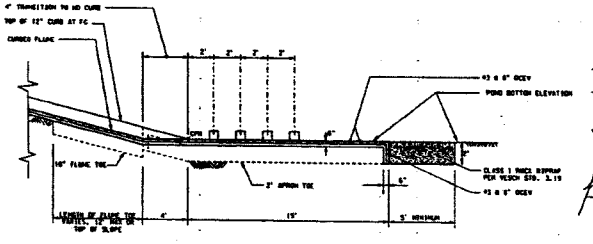
SLOPING HEADWALL SECURITY GRATE SCHEDULE						
PIPE SIZE (INCHES)	½" DIA. GALVANIZED BARS				L 3 x 3 x ¼	
	LONGITUDINAL		LATERAL			
	NO.	LENGTH (IN.)	NO.	LENGTH (IN.)	NO.	LENGTH (INCHES)
18	6	61	9	46	1	52
21	6	70	10	46	1	52
24	7	108	12	55	1	61
36	8	153	17	64	1	70
42	9	189	20	73	1	79
48	9	207	23	73	1	79

4 SECTION C4.54
NOT TO SCALE

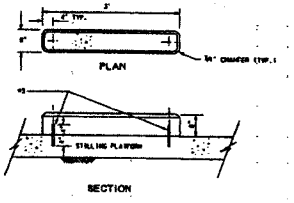


DETAIL NOTES:
1. REFER TO LAYOUT AND DIMENSION PLANS FOR COORDINATES OF CONTROL POINT HORIZONTAL ALIGN.

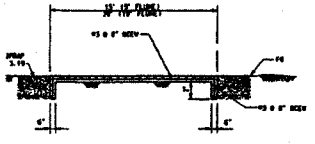
5 FLUME STILLING APRON DETAIL
NOT TO SCALE



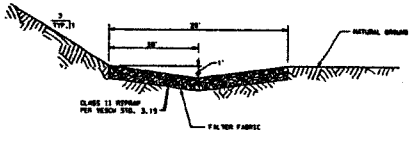
6 SECTION C4.54
NOT TO SCALE



7 CONCRETE BAFFLE C4.54
NOT TO SCALE



8 SECTION C4.54
NOT TO SCALE



DETAIL NOTES:
1. REFERENCE GRADING PLANS FOR FLOW LINE OF ROCK CHANNEL.

9 ROCK CHANNEL DETAIL
NOT TO SCALE

PROJECT RECORD

Date: NOV 13 2008
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., S-100, Raleigh, NC 27607
Tel: (919) 782-1001
This Plan, with the as-built notations, accurately reflects the completed work.
Signature

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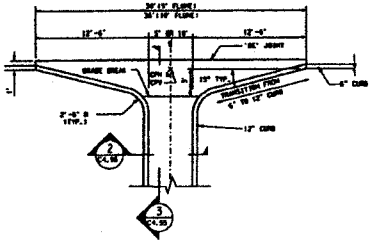
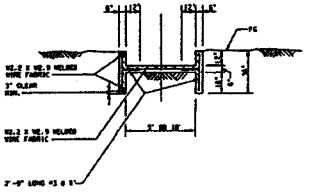


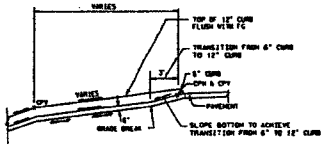
DETAIL NOTES:

1. FLUME LENGTH AND SLOPE VARIES. REFER TO LAYOUT AND DIMENSION PLANS, AND GRADING PLANS.
2. REFER TO LAYOUT AND DIMENSION PLANS FOR COORDINATE OF CONTROL POINT HORIZONTAL (CPH).
3. REFER TO GRADING PLANS FOR ELEVATION OF CONTROL POINT VERTICAL (CPV).
4. REFER TO LAYOUT AND DIMENSION PLANS TO DETERMINE FLUME VIEW 13' OR 19'.

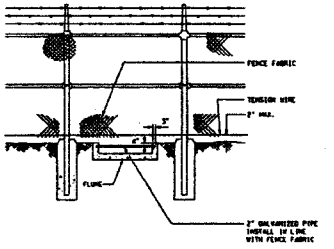
1 FLUME DETAIL
NOT TO SCALE



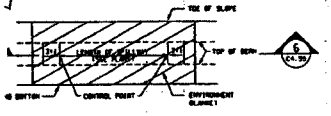
2 SECTION
C4.55 NOT TO SCALE



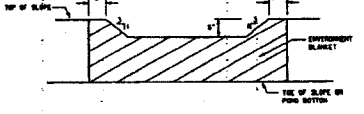
3 SECTION
C4.55 NOT TO SCALE



4 SECURITY PIPE FOR FLUMES UNDER SECURITY FENCE
NOT TO SCALE



5 EMERGENCY SPILLWAY
C4.55 NOT TO SCALE



6 SECTION
C4.55 NOT TO SCALE

PROJECT RECORD

Date NOV 11 2008
Wal-Mart SSF #53, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., S-100, Raleigh, NC 27607
Tel (919) 782-1004
The Plan, with the as-built notations, accurately reflects the completed work.
Signature

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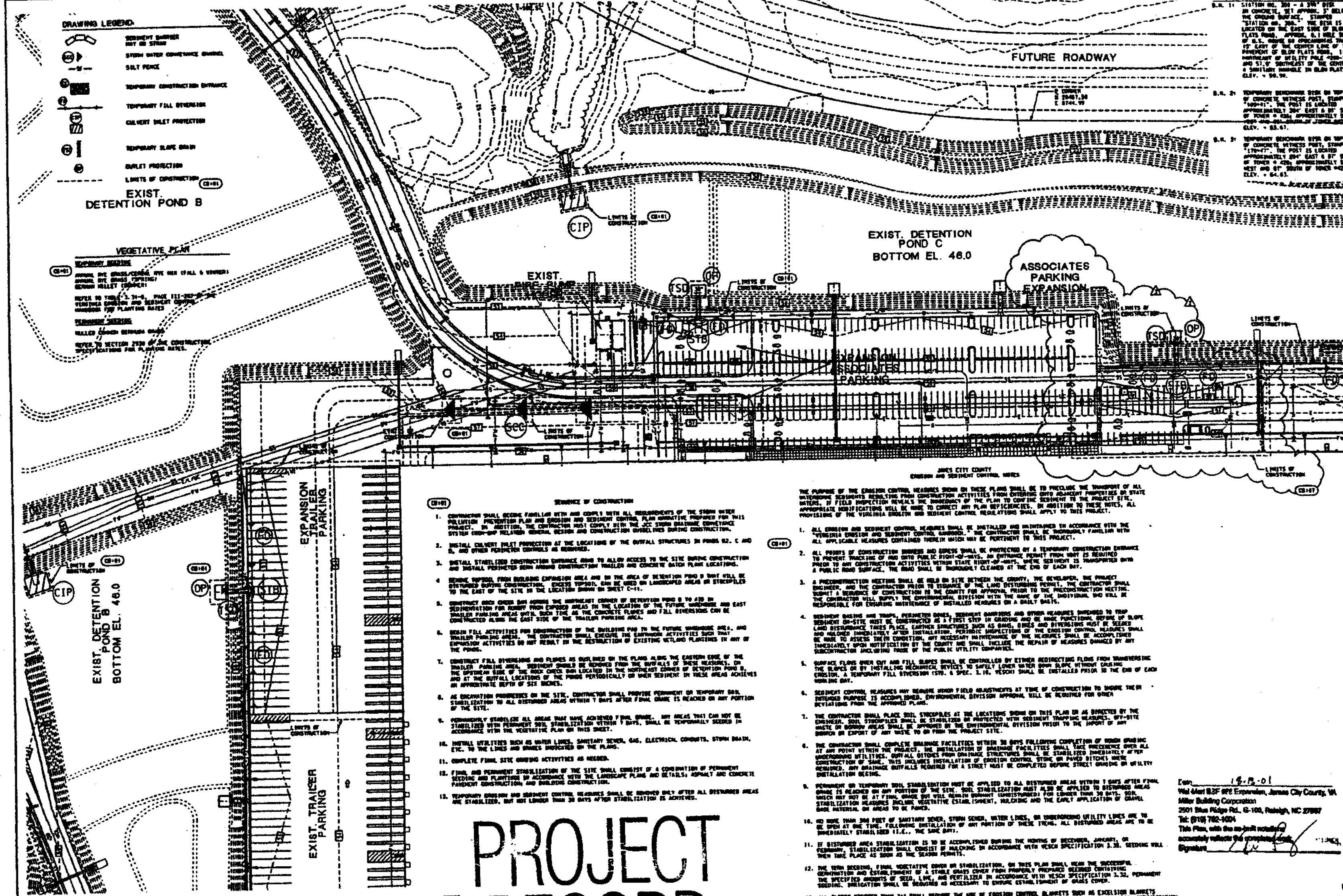


DRAWING LEGEND
- SEDIMENT BARRIER HAY OR STRAW
- STORM WATER CONVEYANCE CHANNEL
- SILT FENCE
- TEMPORARY CONSTRUCTION ENTRANCE
- TEMPORARY FILL DIVERSION
- CULVERT INLET PROTECTION
- TEMPORARY SLOPE DRAIN
- OUTLET PROTECTION
- LIMITS OF CONSTRUCTION

VEGETATIVE PLAN

TEMPORARY SEEDING

ANNUAL RYE GRASS/CEREAL RYE MIX (FALL & WINTER)
ANNUAL RYE GRASS (SPRING)
GERMAN MILLET (SUMMER)

REFER TO TABLE 3.31-B, PAGE III-287 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK FOR PLANTING RATES

PERMANENT SEEDING

HULLED COMMON BERMUDA GRASS

REFER TO SECTION 2930 OF THE CONSTRUCTION SPECIFICATIONS FOR PLANTING RATES.

BENCH MARKS:

B.M. 1: STATION NO. 300 - A 3½" DISK IN CONCRETE, SET APPROX. 3" BELOW THE GROUND SURFACE. STAMPED "STATION NO. 300." THE DISK IS LOCATED ON THE EAST SIDE OF BLOW FLATS ROAD, APPROX. 0.1 MILE SOUTH OF U.S. ROUTE 60 (POCAHONTAS TRAIL), 15' EAST OF THE CENTER LINE OF THE PAVEMENT OF BLOW FLATS ROAD, 113.7' NORTHEAST OF UTILITY POLE #300-34, AND 51.9' SOUTHEAST OF THE CENTER OF A SANITARY MANHOLE IN BLOW FLATS ROAD. ELEV. = 50.50.

B.M. 2: TEMPORARY BENCHMARK DISK ON TOP OF CONCRETE WITNESS POST, STAMPED "149+41". THE POST IS LOCATED APPROXIMATELY 304' EAST & 80' SOUTH OF TOWER # 428; APPROXIMATELY 525' ... ELEV. = 83.67.

B.M. 3: TEMPORARY BENCHMARK DISK ON TOP OF CONCRETE WITNESS POST, STAMPED "170+77". THE POST IS LOCATED APPROXIMATELY 284' EAST & 87' SOUTH OF TOWER # 428; APPROXIMATELY 541' WEST AND 87' SOUTH OF TOWER #429. ELEV. = 64.63.

SEQUENCE OF CONSTRUCTION

1. CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLAN AND EROSION AND SEDIMENT CONTROL PLAN NARRATIVE PREPARED FOR THIS PROJECT. IN ADDITION, THE CONTRACTOR MUST COMPLY WITH THE JCC STORM DRAINAGE CONVEYANCE SYSTEM (NON-BMP RELATED) GENERAL DESIGN AND CONSTRUCTION GUIDELINES DURING CONSTRUCTION.
2. INSTALL CULVERT INLET PROTECTION AT THE LOCATIONS OF THE OUTFALL STRUCTURES IN PONDS B2, C AND B, AND OTHER PERIMETER CONTROLS AS REQUIRED.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE ROAD TO ALLOW ACCESS TO THE SITE DURING CONSTRUCTION AND INSTALL PERIMETER BERM AROUND CONSTRUCTION TRAILER AND CONCRETE BATCH PLANT LOCATIONS.
4. REMOVE TOPSOIL FROM BUILDING EXPANSION AREA AND IN THE AREA OF DETENTION POND B THAT WILL BE DISTURBED DURING CONSTRUCTION. EXCESS TOPSOIL CAN BE USED ON LANDSCAPED AREAS OR STOCKPILED TO THE EAST OF THE SITE IN THE LOCATION SHOWN ON SHEET C-11.
5. CONSTRUCT ROCK CHECK DAM ACROSS THE NORTHEAST CORNER OF DETENTION POND B TO AID IN SEDIMENTATION FOR RUNOFF FROM EXPOSED AREAS IN THE LOCATION OF THE FUTURE WAREHOUSE AND EAST TRAILER PARKING AREAS UNTIL SUCH TIME AS THE CONCRETE FLUMES AND FILL DIVERSIONS CAN BE CONSTRUCTED ALONG THE EAST SIDE OF THE TRAILER PARKING AREA.
6. BEGIN FILL ACTIVITIES FOR CONSTRUCTION OF THE BUILDING PAD IN THE FUTURE WAREHOUSE AREA, AND TRAILER PARKING AREAS. THE CONTRACTOR SHALL EXECUTE THE EARTHWORK ACTIVITIES SUCH THAT EXPANSION ACTIVITIES DO NOT RESULT IN THE DESTRUCTION OF EXISTING WETLAND PLANTINGS IN ANY OF THE PONDS.
7. CONSTRUCT FILL DIVERSIONS AND FLUMES AS OUTLINED ON THE PLANS ALONG THE EASTERN EDGE OF THE TRAILER PARKING AREA. SEDIMENT SHOULD BE REMOVED FROM THE OUTFALLS OF THESE MEASURES, ON THE UPSTREAM SIDE OF THE ROCK CHECK DAM LOCATED IN THE NORTHEAST CORNER OF DETENTION POND B, AND AT THE OUTFALL LOCATIONS OF THE PONDS PERIODICALLY OR WHEN SEDIMENT IN THESE AREAS ACHIEVES AN APPROXIMATE DEPTH OF SIX INCHES.
8. AS EXCAVATION PROGRESSES ON THE SITE, CONTRACTOR SHALL PROVIDE PERMANENT OR TEMPORARY SOIL STABILIZATION TO ALL DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.
9. PERMANENTLY STABILIZE ALL AREAS THAT HAVE ACHIEVED FINAL GRADE. ANY AREAS THAT CAN NOT BE STABILIZED WITH PERMANENT SOIL STABILIZATION WITHIN 7 DAYS, SHALL BE TEMPORARILY SEEDED IN ACCORDANCE WITH THE VEGETATIVE PLAN ON THIS SHEET.
10. INSTALL UTILITIES SUCH AS WATER LINES, SANITARY SEWER, GAS, ELECTRICAL CONDUITS, STORM DRAIN, ETC. TO THE LINES AND GRADES INDICATED ON THE PLANS.
11. COMPLETE FINAL SITE GRADING ACTIVITIES AS NEEDED.
12. FINAL AND PERMANENT STABILIZATION OF THE SITE SHALL CONSIST OF A COMBINATION OF PERMANENT SEEDING AND PLANTINGS IN ACCORDANCE WITH THE LANDSCAPE PLANS AND DETAILS; ASPHALT AND CONCRETE PAVEMENT CONSTRUCTION; AND BUILDING CONSTRUCTION.
13. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED ONLY AFTER ALL DISTURBED AREAS ARE STABILIZED, BUT NOT LONGER THAN 30 DAYS AFTER STABILIZATION IS ACHIEVED.

JAMES CITY COUNTY
EROSION AND SEDIMENT CONTROL NOTES

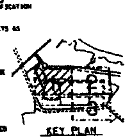
THE PURPOSE OF THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES FROM ENTERING ONTO ADJACENT PROPERTIES OR STATE WATERS. IF FIELD INSPECTION REVEALS THE INADEQUACY OF THE PLAN TO CONFINE SEDIMENT TO THE PROJECT SITE, APPROPRIATE MODIFICATIONS WILL BE MADE TO CORRECT ANY PLAN DEFICIENCIES. IN ADDITION TO THESE NOTES, ALL PROVISIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS SHALL APPLY TO THIS PROJECT.

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK." THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL APPLICABLE MEASURES CONTAINED THEREIN WHICH MAY BE PERTINENT TO THIS PROJECT.
2. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED BY A TEMPORARY CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS. AN ENTRANCE PERMIT FROM VDOT IS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN STATE RIGHT-OF-WAYS. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE THOROUGHLY CLEANED AT THE END OF EACH DAY.
3. A PRECONSTRUCTION MEETING SHALL BE HELD ON SITE BETWEEN THE COUNTY, THE DEVELOPER, THE PROJECT ENGINEER, AND THE CONTRACTOR PRIOR TO ISSUANCE OF THE LAND DISTURBING PERMIT. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE COUNTY FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING. THE CONTRACTOR WILL SUPPLY THE ENVIRONMENTAL DIVISION WITH THE NAME OF THE INDIVIDUAL WHO WILL BE RESPONSIBLE FOR ENSURING MAINTENANCE OF INSTALLED MEASURES ON A DAILY BASIS.
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE MUST BE CONSTRUCTED AS A FIRST STEP IN GRADING AND BE MADE FUNCTIONAL BEFORE UP SLOPE LAND DISTURBANCE TAKES PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER INSTALLATION. PERIODIC INSPECTIONS OF THE EROSION CONTROL MEASURES SHALL BE MADE TO ASSESS THEIR CONDITION. ANY NECESSARY MAINTENANCE OF THE MEASURES SHALL BE ACCOMPLISHED IMMEDIATELY UPON NOTIFICATION BY THE COUNTY AND SHALL INCLUDE THE REPAIR OF MEASURES DAMAGED BY ANY SUBCONTRACTOR INCLUDING THOSE OF THE PUBLIC UTILITY COMPANIES.
5. SURFACE FLOWS OVER CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER REDIRECTING FLOWS FROM TRANSVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO SAFELY LOWER WATER DOWN SLOPE WITHOUT CAUSING EROSION. A TEMPORARY FILL DIVERSION (STD. & SPEC. 3.10, VESCH) SHALL BE INSTALLED PRIOR TO THE END OF EACH WORKING DAY.
6. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT TIME OF CONSTRUCTION TO INSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENVIRONMENTAL DIVISION APPROVAL WILL BE REQUIRED FOR OTHER DEVIATIONS FROM THE APPROVED PLANS.
7. THE CONTRACTOR SHALL PLACE SOIL STOCKPILES AT THE LOCATIONS SHOWN ON THIS PLAN OR AS DIRECTED BY THE ENGINEER. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. OFF-SITE WASTE OR BORROW AREAS SHALL BE APPROVED BY THE ENVIRONMENTAL DIVISION PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.
8. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT. THE INSTALLATION OF DRAINAGE FACILITIES SHALL TAKE PRECEDENCE OVER ALL UNDERGROUND UTILITIES. OUTFALL DITCHES FROM DRAINAGE STRUCTURES SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION OF SAME. THIS INCLUDES INSTALLATION OF EROSION CONTROL STONE OR PAVED DITCHES WHERE REQUIRED. ANY DRAINAGE OUTFALLS REQUIRED FOR A STREET MUST BE COMPLETED BEFORE STREET GRADING OR UTILITY INSTALLATION BEGINS.
9. PERMANENT OR TEMPORARY SOIL STABILIZATION MUST BE APPLIED TO ALL DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
10. NO MORE THAN 300 FEET OF SANITARY SEWER, STORM SEWER, WATER LINES, OR UNDERGROUND UTILITY LINES ARE TO BE OPEN AT ONE TIME. FOLLOWING INSTALLATION OF ANY PORTION OF THESE ITEMS, ALL DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED (I.E., THE SAME DAY).
11. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY, OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING IN ACCORDANCE WITH VESCH SPECIFICATION 3.35. SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.
12. THE TERM SEEDING, FINAL VEGETATIVE COVER OR STABILIZATION, ON THIS PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNTS OF SEED, LIME, AND FERTILIZER IN ACCORDANCE WITH VESCH SPECIFICATION 3.32, PERMANENT SEEDING. IRRIGATION SHALL BE REQUIRED AS NECESSARY TO ENSURE ESTABLISHMENT OF GRASS COVER.
13. ALL SLOPES STEEPER THAN 3:1 SHALL REQUIRE THE USE OF EROSION CONTROL BLANKETS SUCH AS EXCELSIOR BLANKETS TO AID IN THE ESTABLISHMENT OF A VEGETATIVE COVER. INSTALLATION SHALL BE IN ACCORDANCE WITH VESCH SPECIFICATION 3.36, MULCHING AND MANUFACTURE'S INSTRUCTIONS. NO SLOPES SHALL BE CREATED STEEPER THAN 2:1.
14. INLET PROTECTION IN ACCORDANCE WITH VESCH SPECIFICATION 3.07 SHALL BE PROVIDED FOR ALL STORM DRAIN INLETS AS SOON AS PRACTICAL FOLLOWING CONSTRUCTION OF SAME.
15. TEMPORARY LINERS, SUCH AS POLYETHYLENE SHEETS, SHALL BE PROVIDED FOR ALL PAVED DITCHES UNTIL THE PERMANENT CONCRETE LINER IS INSTALLED.
16. PAVED DITCHES SHALL BE REQUIRED WHEREVER EROSION IS EVIDENT. PARTICULAR ATTENTION SHALL BE PAID TO THOSE AREAS WHERE GRADES EXCEED 3 PERCENT.
17. TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. AFTER STABILIZATION IS COMPLETE, MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEEDED.
18. AS-BUILT DRAWINGS MUST BE PROVIDED FOR ALL DETENTION/BMP FACILITIES. ALSO UPON COMPLETION, THE CONSTRUCTION OF ALL DETENTION/BMP FACILITIES SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER WHO INSPECTED THE STRUCTURE DURING CONSTRUCTION. THE CERTIFICATION SHALL STATE THAT TO THE BEST OF HIS/HER JUDGMENT, KNOWLEDGE, AND BELIEF, THE STRUCTURE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVAL PLANS AND SPECIFICATIONS.

PROJECT RECORD
PROJECT RECORD

Date: 12-18-01
Wal-Mart BSF #6 Expansion, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations accurately reflects the completed work.
Signature

1 AREA 1 - STORM DRAIN PLAN
C-10 SCALE: 1" = 50'-0"



PLAN NORTH
-27° 18' 49" TRUE NORTH

0 50 100 150 200
GRAPHIC SCALE IN FEET

WAL-MART STORES, INC.
BULK STORAGE NO. 6088 EXPANSION
JAMES CITY COUNTY, VA

AREA 1 -
STORM DRAIN &
EROSION CONTROL PLAN

Carter::Burgess
CARTER & BURGESS, INC.

SHEET
C-10

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DRAWING LEGEND:

SEDIMENT BARRIER (SILT OR STRAW)
STORM WATER CONVEYANCE CHANNEL
SILT FENCE
TEMPORARY CONSTRUCTION ENTRANCE
TEMPORARY FILL DIVERSION
CULVERT INLET PROTECTION
TEMPORARY SLOPE DRAIN
INLET PROTECTION
LIMITS OF CONSTRUCTION
SLOPES OF 25% OR GREATER

NOTE:
THE ENVIRONMENTAL INVENTORY AS REQUIRED BY SECTION 23-10(2) OF THE CHESAPEAKE BAY PRESERVATION ORDINANCE WAS PREVIOUSLY PROVIDED ON SHEETS C5.01 & C5.02 OF APPROVED PLAN SP-45-00.

BENCH MARKS:

B.M. 1: STATION NO. 200 - A 3/4" BTSM IN CONCRETE, SET APPROX. 3" BELOW THE GROUND SURFACE, STAMPED "STATION NO. 200." THE BTSM IS LOCATED ON THE EAST SIDE OF BLOW FLATS ROAD, APPROX. 0.1 MILE SOUTH OF R.L. HOWE, AND APPROXIMATELY 1.5 EAST OF THE NORTHERN LINE OF THE PAVEMENT OF BLOW FLATS ROAD. 113.2' NORTHEAST OF UTILITY POLE #200-21, AND 51.5' NORTHEAST OF THE CORNER OF A SANITARY MANHOLE ON BLOW FLATS ROAD. ELEV. = 39.00.

B.M. 2: TEMPORARY BENCHMARK SET ON TOP OF CONCRETE WITNESS POST, STAMPED "102+41". THE POST IS LOCATED APPROXIMATELY 204' EAST & 93' SOUTH OF TOWER 4-402, APPROXIMATELY 325' WEST AND 87' SOUTH OF TOWER 4-401. ELEV. = 33.67.

B.M. 3: TEMPORARY BENCHMARK SET ON TOP OF CONCRETE WITNESS POST, STAMPED "103+07". THE POST IS LOCATED APPROXIMATELY 204' EAST & 87' SOUTH OF TOWER 4-402, APPROXIMATELY 341' WEST AND 87' SOUTH OF TOWER 4-401. ELEV. = 34.63.

FUTURE ROADWAY

VEGETATIVE PLAN

EXIST. DETENTION POND D
BOTTOM EL. 46.0

EXPANSION DETENTION POND D
BOTTOM EL. 46.0

EXPANSION AREA C WAREHOUSE
FF EL. 59.00

EXPANSION AREA D WAREHOUSE
FF EL. 59.00

MATCH LINE REF. C-14

PROJECT RECORD

PROJECT RECORD

Date: 10/09/01
Wal-Mart BSF #88 Expansion, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 790-1004
This Plan, with the as-built notations accurately reflects the completed work.
Signature

1 / C-11 AREA 2 - STORM DRAIN PLAN
SCALE: 1" = 50'-0"

KEY PLAN

PLAN NORTH

-27° 18' 49"
TRUE NORTH

0 50 100 150 200
GRAPHIC SCALE IN FEET

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REVISIONS	
1	ADDITIONAL BULLETIN #03
2	INCORPORATE CHANGES FOR CONSTRUCTION

PROJECT NO. 0100-0-0
DATE 10/09/01
DRAWN BY
CHECKED BY
APPROVED BY
DATE

WAL-MART
BULK STORAGE NO. 6088
EXPANSION
JAMES CITY COUNTY, VA

AREA 2 -
STORM DRAIN &
EROSION CONTROL PLAN

Carter & Burgess

SHEET
C-11

PROJECT RECORD

Date 11-15-97
Wal-Mart SSF #68 Expansion, James City County, VA
Miller Building Corporation
3201 Blue Ridge Rd., S-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations accurately reflects the completed work.
Signature

DRAWING LEGEND

VEGETATIVE PLAN

BENCH MARKS

MATCH LINE RE: C-13

EXPANSION AREA C WAREHOUSE FF. EL. 53.00

EXPANSION AREA D WAREHOUSE EL. 54.00

EXPANSION TRAILER PARKING

OFFICE TRAILERS

CONCRETE PLANT

BACKLINE

POND D BOTTOM EL. 46.0

DETENTION POND D BOTTOM EL. 46.0

EXIST DETENTION POND D BOTTOM EL. 47.0

PROJECT RECORD

1 / C-12 AREA 3 - STORM DRAIN PLAN
SCALE: 1" = 50'-0"

KEY PLAN

PLAN NORTH

-27° 18' 49" TRUE NORTH

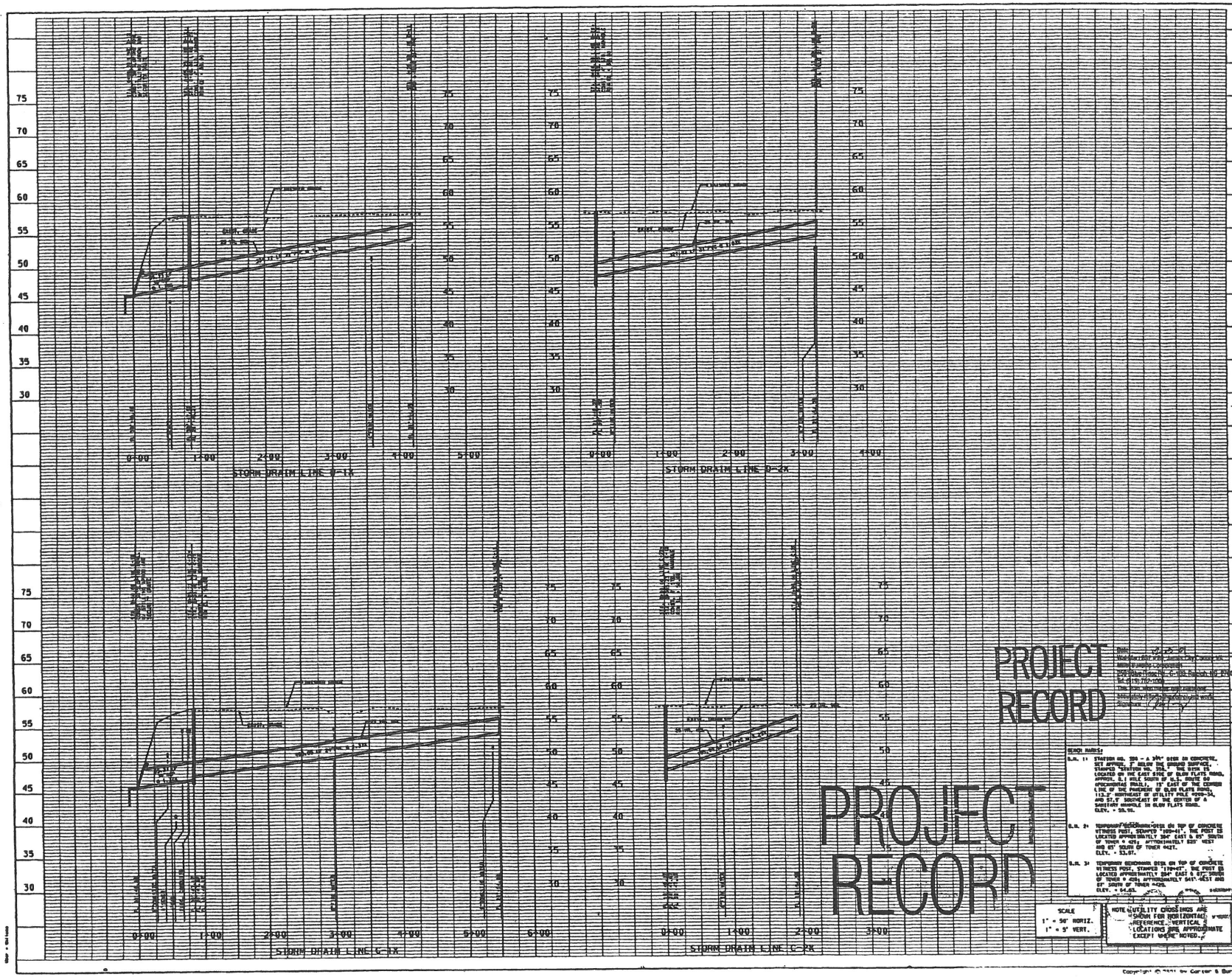
0 50 100 150 200
GRAPHIC SCALE IN FEET

WAL-MART
BULK STORAGE NO. 6088
EXPANSION
JAMES CITY COUNTY, VA

AREA 3 - STORM DRAIN & EROSION CONTROL PLAN

Carter-Burgess

SHEET C-12



WAL-MART
BULK STORAGE NO. 6088
EXPANSION
JAMES CITY COUNTY, VA

STORM DRAIN PROFILES
LINES C-1X, C-2X,
D-1X & D-2X

Carter & Burgess
CARTER & BURGESS, INC.

SHEET
C-13

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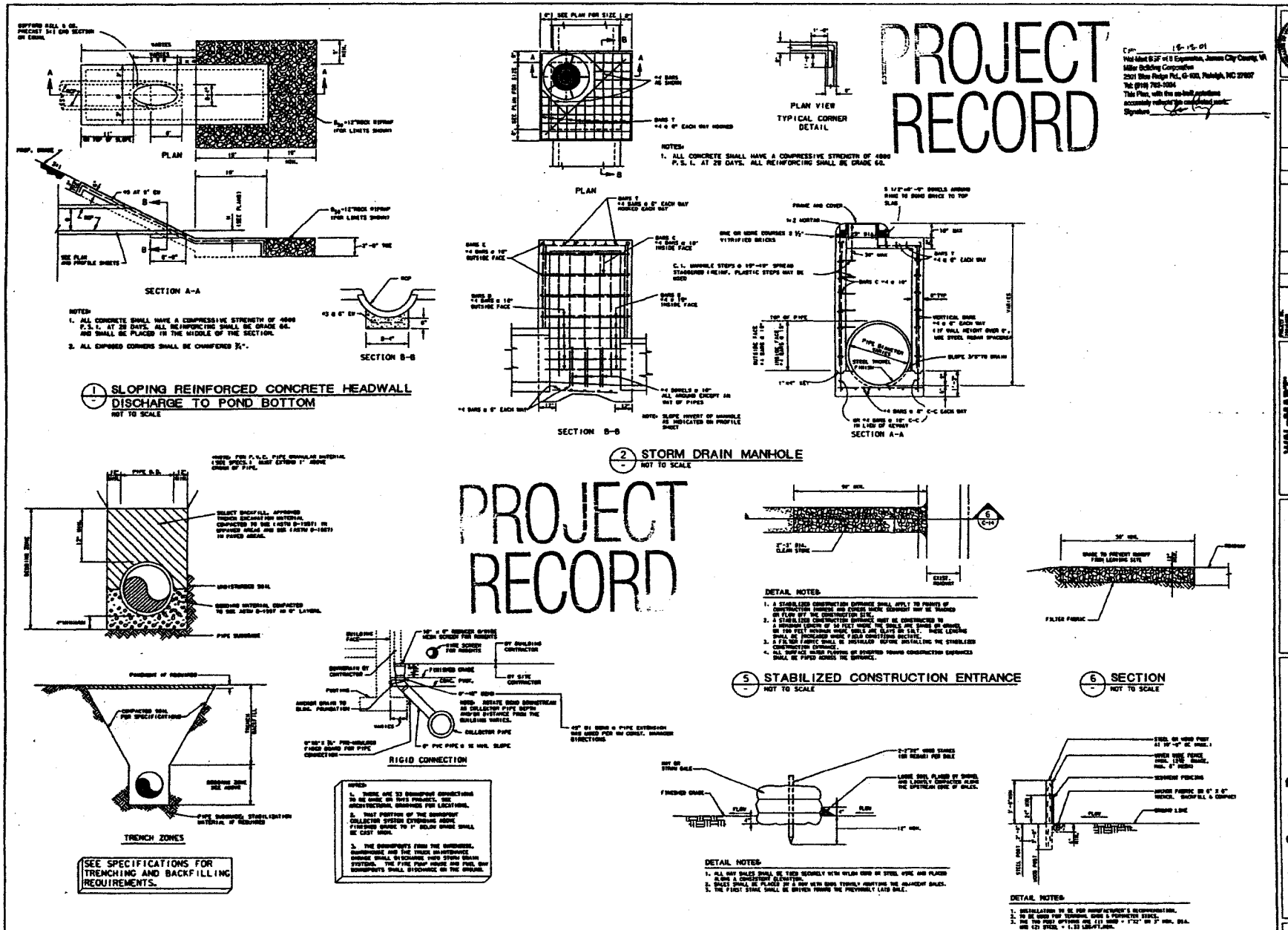
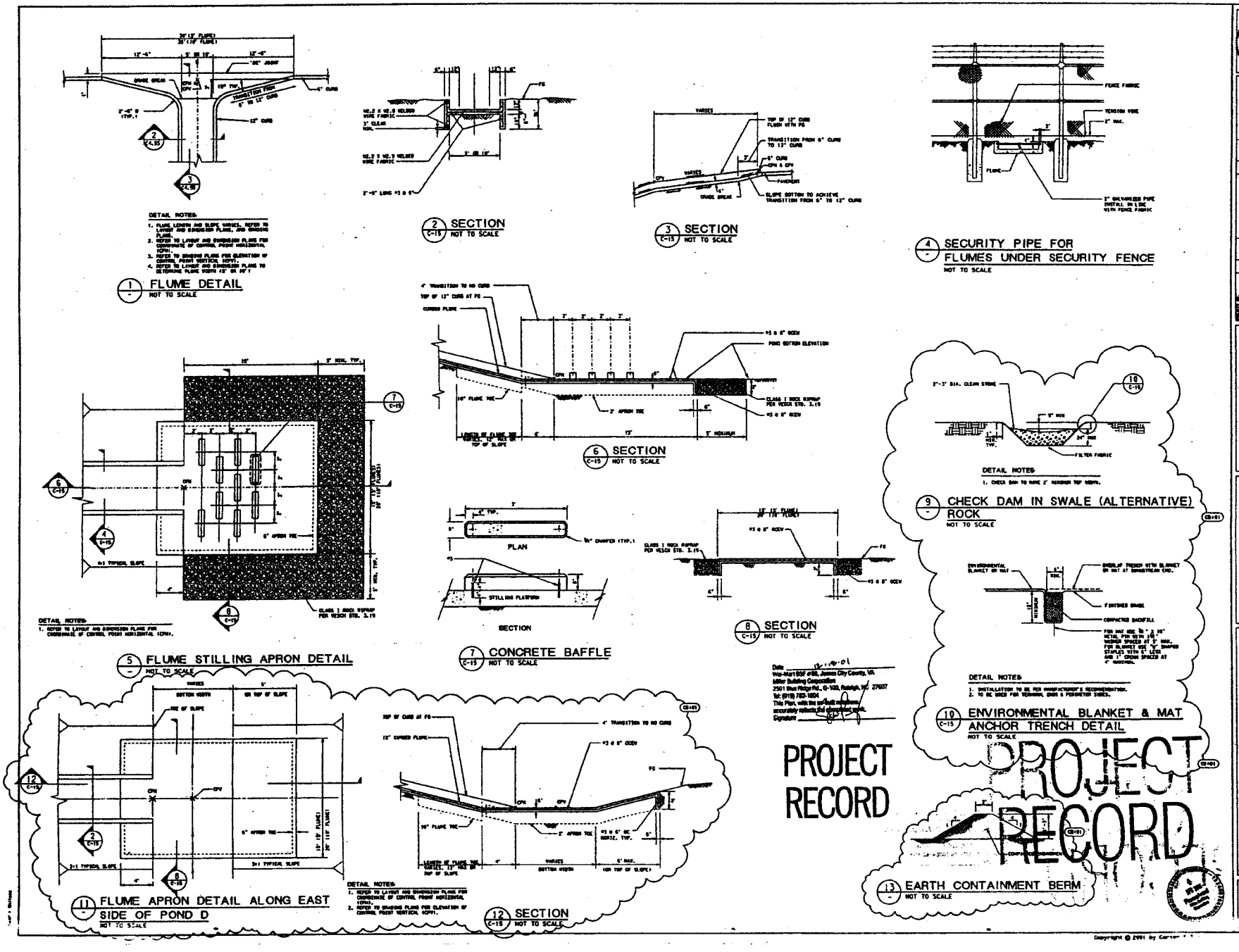
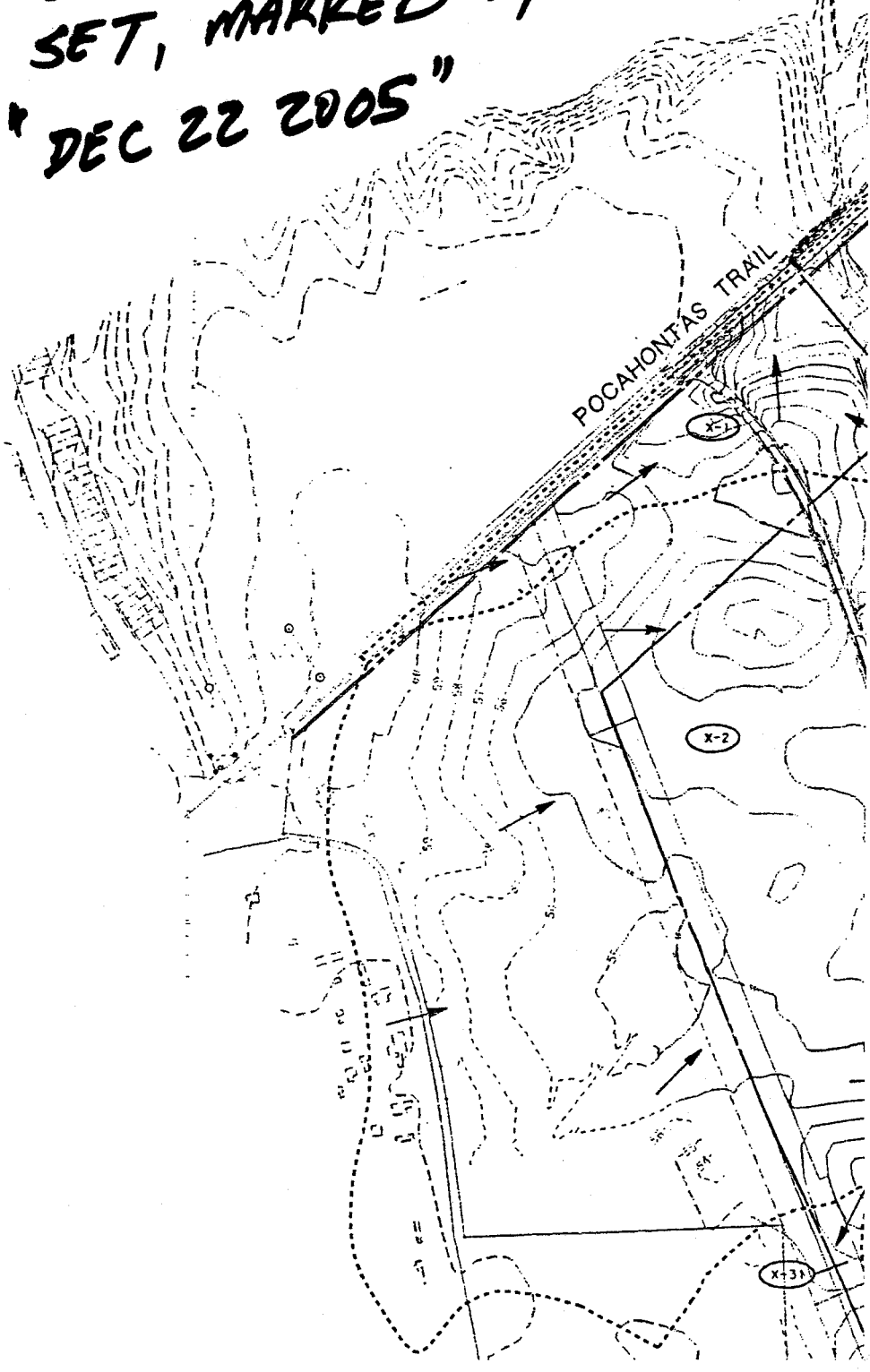

PROJECT RECORD
PLAN
SECTION A-A
SECTION B-B
NOTES:
1. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 P.S.I. AT 28 DAYS. ALL REINFORCING SHALL BE GRADE 60.
2. ALL EXPOSED CORNERS SHALL BE CHAMFERED ¾".
1 SLOPING REINFORCED CONCRETE HEADWALL DISCHARGE TO POND BOTTOM
NOT TO SCALE
PLAN VIEW
TYPICAL CORNER DETAIL
SECTION B-B
SECTION A-A
2 STORM DRAIN MANHOLE
NOT TO SCALE
PROJECT RECORD
TRENCH ZONES
SEE SPECIFICATIONS FOR TRENCHING AND BACKFILLING REQUIREMENTS.
3 STORM DRAIN BEDDING DETAILS
NOT TO SCALE
RIGID CONNECTION
4 DOWNSPOUT COLLECTOR
NOT TO SCALE
DETAIL NOTES:
5 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE
6 SECTION
NOT TO SCALE
DETAIL NOTES:
7 SEDIMENT BARRIER (ALTERNATIVE) BALED STRAW OR HAY BARRIER
NOT TO SCALE
DETAIL NOTES:
8 SEDIMENT BARRIER (ALTERNATIVE) SEDIMENT FENCE
NOT TO SCALE
WAL-MART
BULK STORAGE NO. 6068 EXPANSION
JAMES CITY COUNTY, VA.
STORM DRAIN & EROSION CONTROL DETAILS SHEET 1 OF 2
Carter=Burgess
C-14


1 FLUME DETAIL
NOT TO SCALE
2 SECTION
C-15 NOT TO SCALE
3 SECTION
C-15 NOT TO SCALE
4 SECURITY PIPE FOR FLUMES UNDER SECURITY FENCE
NOT TO SCALE
5 FLUME STILLING APRON DETAIL
NOT TO SCALE
6 SECTION
C-15 NOT TO SCALE
7 CONCRETE BAFFLE
C-15 NOT TO SCALE
8 SECTION
C-15 NOT TO SCALE
9 CHECK DAM IN SWALE (ALTERNATIVE) ROCK
NOT TO SCALE
10 ENVIRONMENTAL BLANKET & MAT ANCHOR TRENCH DETAIL
C-15 NOT TO SCALE
11 FLUME APRON DETAIL ALONG EAST SIDE OF POND D
NOT TO SCALE
12 SECTION
C-15 NOT TO SCALE
13 EARTH CONTAINMENT BERM
NOT TO SCALE
PROJECT RECORD
PROJECT RECORD
WAL-MART
BULK STORAGE NO. 6088
EXPANSION
JAMES CITY COUNTY, VA
STORM DRAIN & EROSION CONTROL DETAILS
SHEET 2 OF 2
Carter-Burgess
C-15

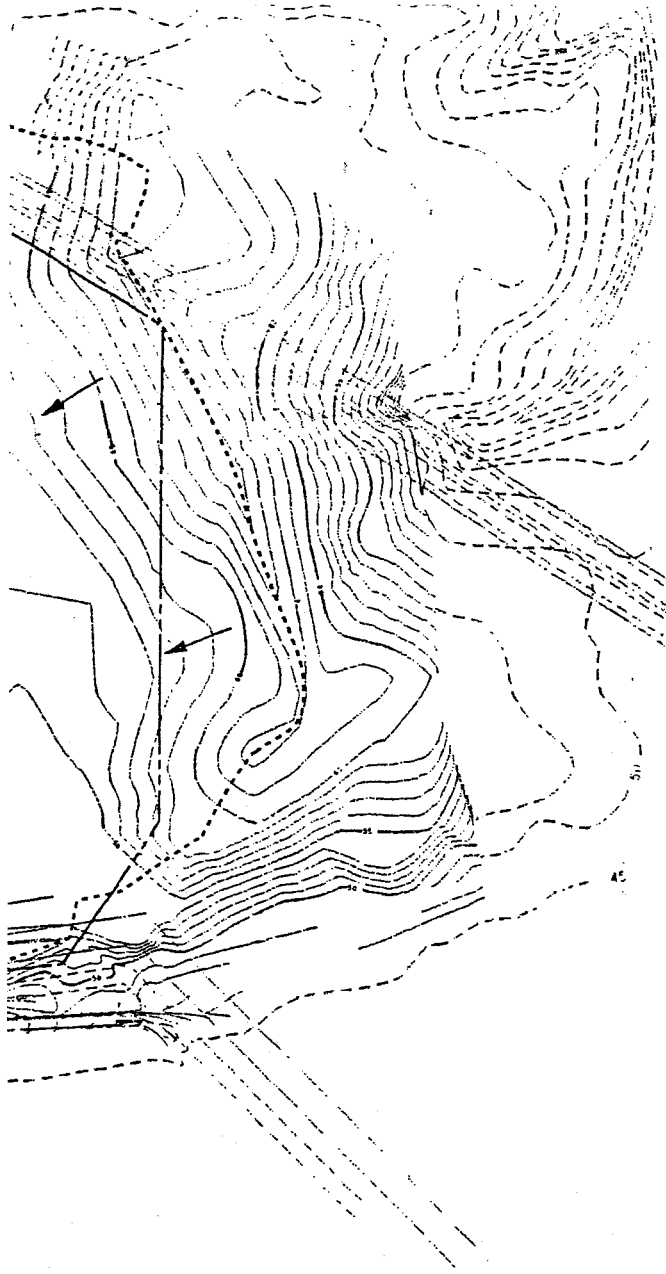
As-Built
Field Shots

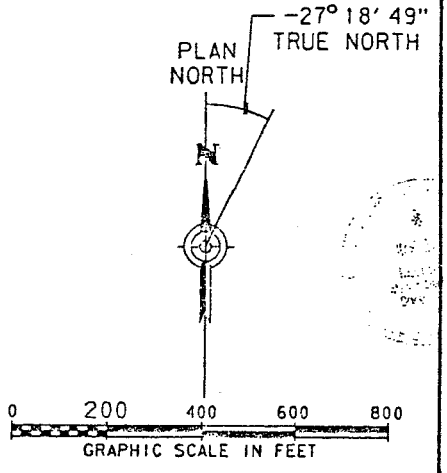
SEE MASTER "RED LINE" PROJECT RECORD SET, MARKED W/ AB ELEV "DEC 22 2005"



PROJECT RECORD

Date NOV 11 2000
Wal-Mart BSF #88, James City County, VA
Miller Building Corporation
2501 Blue Ridge Rd., G-100, Raleigh, NC 27607
Tel: (919) 782-1004
This Plan, with the as-built notations, accurately reflects the completed work.
Signature





WAL-
BULK STOR
JAMES CITY

PREDEVELOPED DRAINAGE AREA MAP

Carter & Burgess
Consultants in Planning, Engineering, Architecture, Construction Management, and Related Services
CARTER & BURGESS, INC.
3001 MEACHAM BOULEVARD, SUITE 200
FORT WORTH, TX 76137 - ????

SHEET
C4.01

G:\JOB\99E103\CIV\b0xcpdr.sht

3001 Meacham Blvd., Suite 200, Fort Worth, Texas 76137

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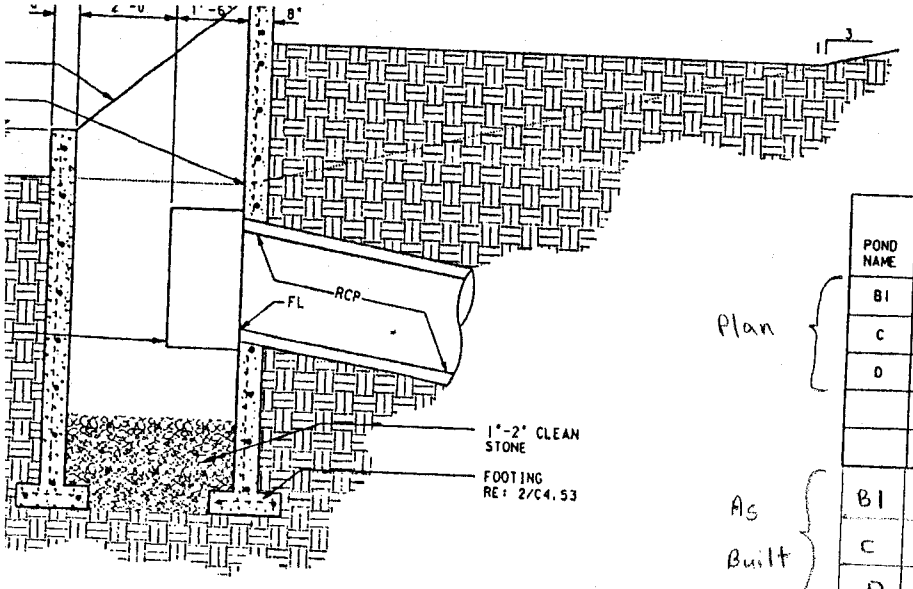
RECEIVED
DEC 22 2005
ENVIRONMENTAL DIVISION



DETAIL NOTES:

1. SKIMMER PLATES AND FOOTINGS ARE INTENDED TO BE PERMANENT INSTALLATIONS AT THE OUTFALL STRUCTURES.

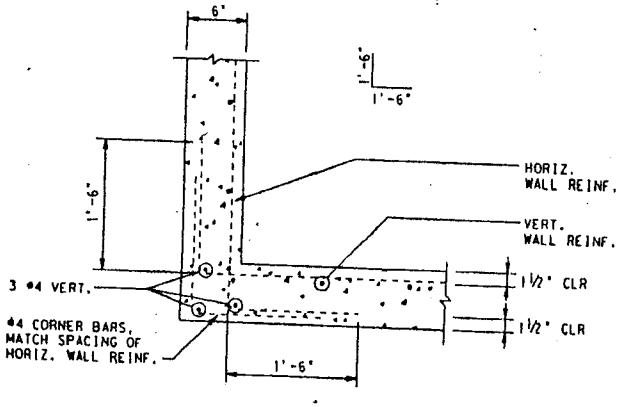
3 / C4.53 SECTIONS
NOT TO SCALE

Spillway Top Inv. In

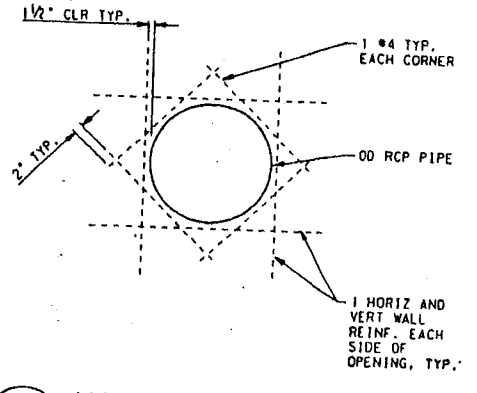
	POND NAME	POND BOTTOM ELEV. (FT.)	ELEV. 'A' (FT.)	ELEV. 'B' (FT.)	FLOW LINE (FT.)	COMMENTS			
Plan	B1	46.0	46.5	48.25	46.5	LINE B-4			
	C	46.0	46.5	48.25	46.5	LINE C-3			
	D	46.0	47.0	48.75	43.5	LINE D-1			
As Built	B1		46.77	48.40	-	As-Built	45.18	45.40	Plan
	C		46.40	48.01	-	As-Built	44.52	45.29	Plan
	D		46.40	48.21	-	As-Built	39.89	40.00	Plan

Spillway Top Inv. In Actual Inv. Out Plan Inv. Out

⟨Inside of Skimmer Plate⟩



6 CORNER BAR DETAIL



7 WALL OPENING

PROJECT NO. 99E103
DESIGN BY. P. HASSELL
DRAWN BY. E. ROBERTSON
APPROVED BY. S. FERRITTA
DATE 03/27/2000

NO.	DATE	ISSUE
1	03/27/00	ISSUE FOR CONSTRUCTION

WAL-MART STORES, INC.
BULK STORAGE NO. 88
JAMES CITY COUNTY, VA

AIN DETAILS
3 OF 5

LETTER OF TRANSMITTAL

GLOVER CONSTRUCTION COMPANY, INC.
P.O. Box 40 - Hwy. 301 North & NC 48 East
PLEASANT HILL, NORTH CAROLINA 27866
Phone (252) 536-2660
Fax (252) 536-4600

JOB NO. J.C.C. Wal-Mart
DATE Tues. 12-20-05
ATTENTION Scott Thomas
RE: Pond As-Builts

TO
Scott J. Thomas, P.E., Senior Engineer
James City County Environmental Division
101 Mounts Bay Road; P.O. Box 8784
Williamsburg, VA 23187-8784

RECEIVED
DEC 22 2005
ENVIRONMENTAL DIVISION

WE ARE SENDING YOU the following:

- [ ] Attached
- [ ] Under separate cover via _____
- [ ] Shop Drawings
- [ ] Specifications
- [ ] Copy of letter
- [ ] Change order
- [x] Prints
- [ ] Plans
- [ ] Samples
- [x] As-Built Drawings Phases I & II

COPIES	DATE	NUMBER	DESCRIPTION

THESE TRANSMISSIONS ARE:

- [ ] For your approval
- [ ] For your use
- [x] As per your request
- [ ] For your review and comment(s)
- [ ] Approved as submitted
- [ ] Approved as noted
- [ ] Corrections noted
- [ ] Resubmit with _____ copies for approval
- [ ] Submit _____ copies for distribution
- [ ] Return _____ corrected prints
- [ ] FOR BIDS DUE _____ 19 _____
- [ ] PRINTS RETURNED AFTER LOAN TO US

REMARKS:

Enclosed are the as-built pond drawings for Phases I & II with actual field shots, shown in red, which were taken after dams and structures were cleaned up per your request. I have spoken with Scott Deese of McCallum and have been informed that you are trying to obtain some test results (compaction, etc.) from Wal-Mart for tests taken on the dams, etc. Unfortunately, I do not have any other information to share with you. I hope Wal-Mart will cooperate.

Also, the Phase III certified drawings and mylars should be here any day.

Thanks for all your help.

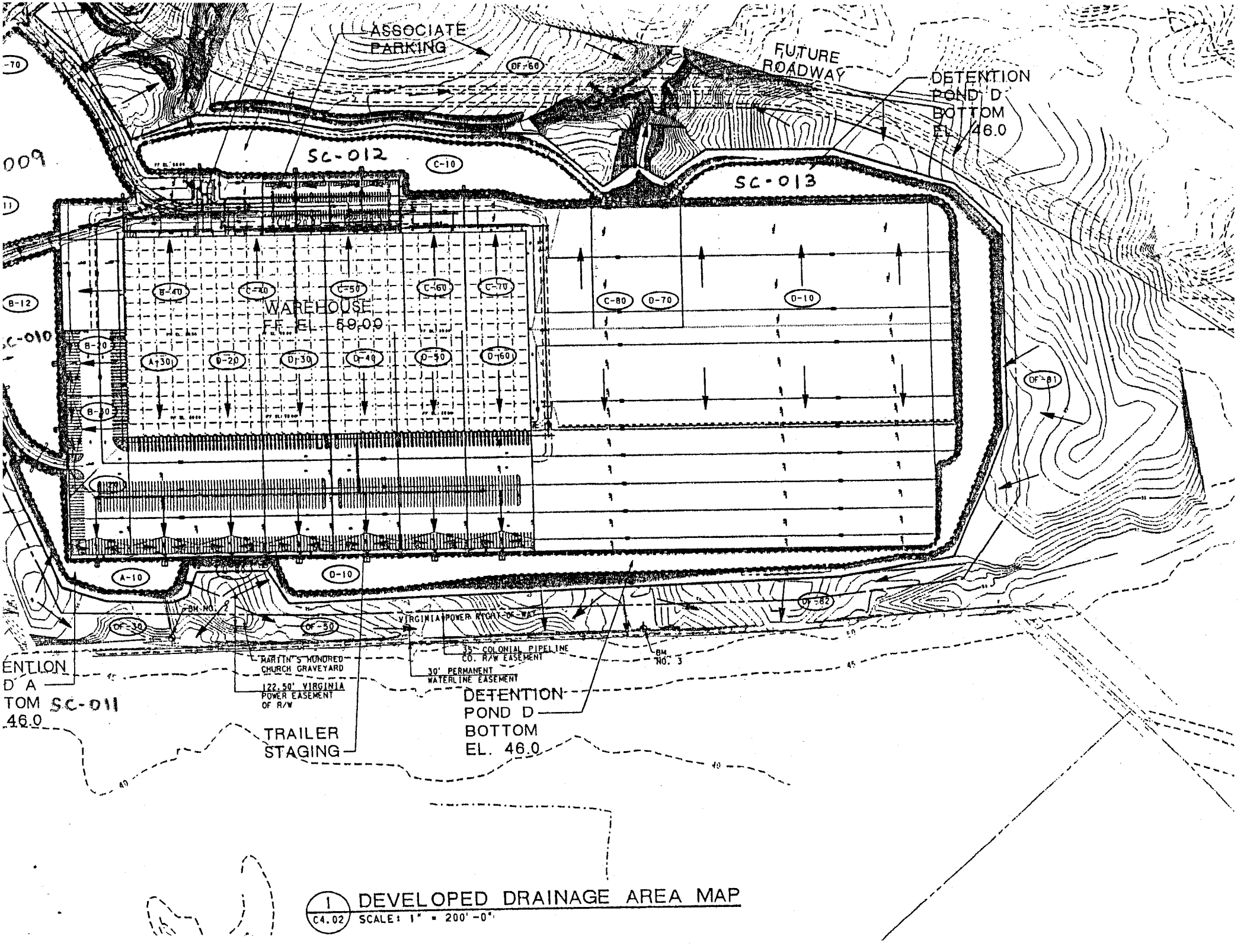
COPY TO: Scott Deese of McCallum

SIGNATURE: Ed Make

FORM 705-2

McBee - 1055 East State St. - Athens, Ohio 45701
PLEASE ORDER FROM McBEE REORDER EXPRESS 1-800-662-2331

IF ENCLOSURES ARE NOT AS DESCRIBED, PLEASE NOTIFY US IMMEDIATELY



1 C4.02 DEVELOPED DRAINAGE AREA MAP

SCALE: 1" = 200'-0"

No. Pond Outlet Structs.
Date Page

No. S.C.C. Wal-Mart Phase 1 & 2 Pond
Date Wed. 11-30-05 Page 5

Reuben + Ed #2

Location	+	H I	-	Actual Elev.	Theory Elev.	Diff.		Notes					
T.B.M.	5.97	62.11			56.14	Assumed		Flume	Flowline				
0+60.32			13.90	48.21	48.75	-.54	Pond	"D"	Outlet	Ctrl.	Struct.	B	Top
✓			15.71	46.40	47.00	-.60	✓	✓	✓	✓	✓	A	~~Flow~~ Spillway
0+00			22.22	39.89	40.00	-.11	✓	✓	Sloping H/W				Flow
T.B.M.	3.27	59.27			56.00			F.F.	Firehouse				
			12.87	46.40	46.50	-.10	Pond	"C"				A	Spillway
			11.26	48.01	48.25	-.24	✓	✓				B	Top
			14.75	44.52	45.29	-.77	✓	✓	Sloping H/W				Flow
C	5.58	57.53	7.32	51.95									
			10.76	46.77	46.50	+.27	Pond	"B1"				A	Spillway
			9.13	48.40	48.25	+.15	✓	✓				B	Top
			12.35	45.18	45.40	-.22	✓	✓					Flow
E	7.08	60.08	4.53	53.00				S.B. Lid @ Light #4					
			4.08	56.00	56.00	Flat							
			15.49	44.59	45.29	-.70	re ✓ ok	"C" Outlet					

No. Pond "D" Dam

Date Page

No. S.C.C. Phase I & II Dam behind Pond "D"

Date Thurs. 12-8-05 Page 6

Harold + Ed #2

Location	+	HI	-	Actual Elev.	Theory Elev.	Diff.		Notes
Spillway Flume	6.03'	62.17			56.14			Assumed T.B.M. @ "D" Outlet End
Dam			10.71	51.46	51.00	+.46		@ Pond "D" Outlet Street.
100'			11.37	50.80	51.00	-.20		Going East ↓
200'			10.81	51.36	51.00	+.36		
~~300'~~ 250'			9.17	53.00	51.00	+2.00		tie to O.G.
✓-in			6.09	56.08	56.14	-.06 ✓	OK	Next ~~spillway~~ Flume headed east
			6.04	56.13	✓	-.01 ✓	↓	Down .05 Due to Pole

No. Pond "C" Dam

Date Page

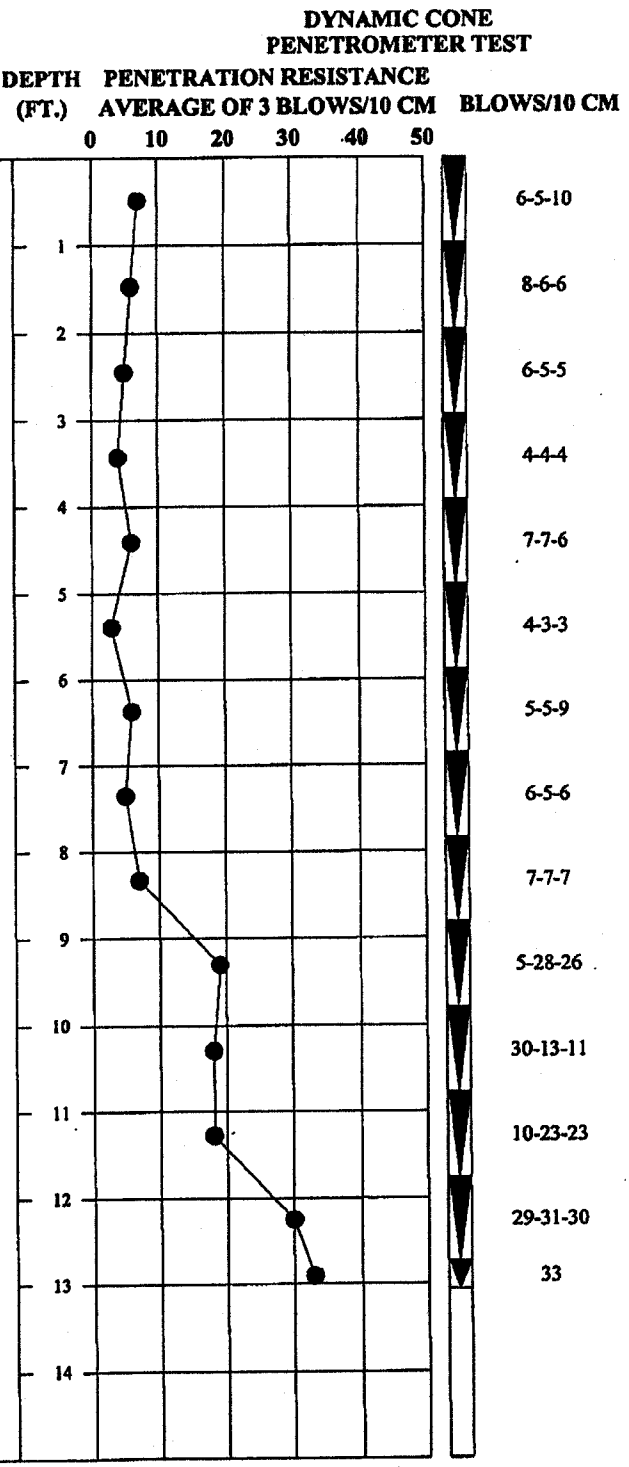
No. S.C.C. Wal-Mart Phase I + II Pond "C" Dam

Date Thurs. 12-8-05 Page 7

Harold + Ed #2

Location	+	H.I	-	Actual Elev.	Theory Elev.	Diff.		Notes		
T.B.M.	4.91	57.91			53.00			S.B. Lid @ #4 Light Pole		
West End			5.99	51.92	51.00	+.92				
100'			4.65	53.26	↓	+2.26				
C 200'	7.02	59.88	5.05	52.86		+1.86				
↓ 300'			5.91	53.97		+2.97				
400'			5.04	54.84		+3.84				
500'			6.52	53.36		+2.36				
C 600'	4.53	56.99	7.42	52.46		+1.46				
700'			5.22	51.77		+.77				
800'			5.44	51.55		+.55				
900'			4.93	52.06		+1.06				
C 1000'	4.72	56.78	4.93	52.06		+1.06				
1100'			5.29	51.49		+.49				
1200'			5.89	50.89		-.11				
C 1300'	6.63	57.88	5.53	51.25		+.25				
1400'			6.86	51.02		+.02				
1500'			6.74	51.14	↑	+.14				
1530'			6.75	51.13	51.00	+.13		tie back @ parking lot		
Flume ~~Spillway~~			1.60	56.28	56.14	+.14	✓-ok for	tie		

DEPTH (FT.)	DESCRIPTION
0.0	
0.5	Brown, silty fine sand with traces of clay, moist, SM
	Brown, silty clayey fine sand, moist, SC
3.0	
	Brown, silty fine sandy clay, moist, CL
5.0	
	Brown, silty clayey fine sand, moist, SC
9.0	
	Brown, silty fine sand, moist, SP-SM
11.0	
	Brown, silty clayey fine sand, moist, SC
12.0	
	Hand Auger Boring Terminated at 12.0 ft. Dynamic Cone Penetrometer Test Terminated at 13.12 ft.



NOTES: *Groundwater Not Encountered within Depth of Boring.*

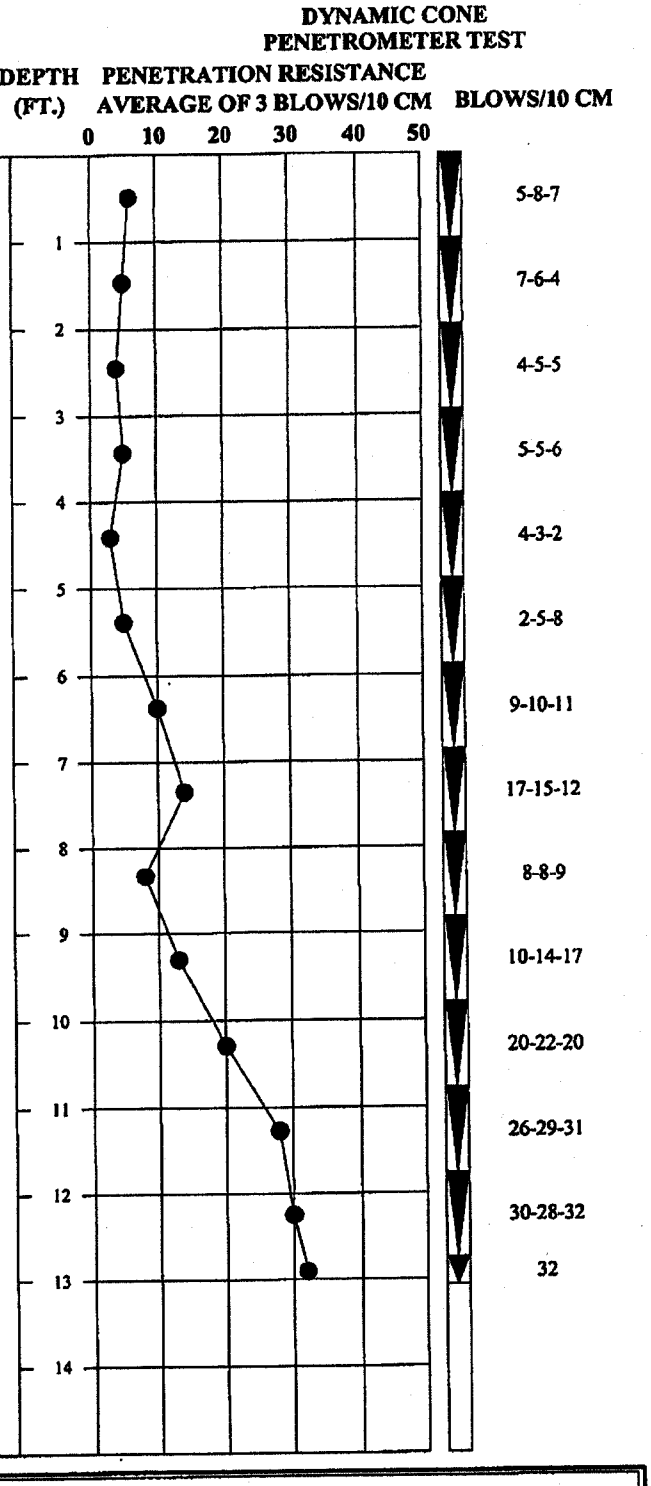
- Stratum Change
- Groundwater Level at Time of Drilling
- Cone Penetration Resistance Average of 3 Blows/10 cm Increment
- Dynamic Cone Penetrometer Test Blows per 10 cm Increment

HAND AUGER BORING RECORD

BORING NUMBER	HA-1
DATE DRILLED	January 24, 2006
PROJECT NUMBER	06-7515
PROJECT	Wal-Mart Distribution Center - Phase I & II
LOCATION	James City County, Virginia

McCALLUM TESTING LABORATORIES, INC.

DEPTH (FT.)	DESCRIPTION
0.0	
0.5	Brown, clayey silty fine sand, moist, SM-SC
	Brown, silty clayey fine sand, moist, SC
7.0	
7.2	Brown, silty fine sand with traces of clay, moist, SM
	Hand Auger Boring Terminated at 7.2 ft. Due to Obstruction Dynamic Cone Penetrometer Test Terminated at 13.12 ft.



NOTES: *Groundwater Not Encountered within Depth of Boring.*

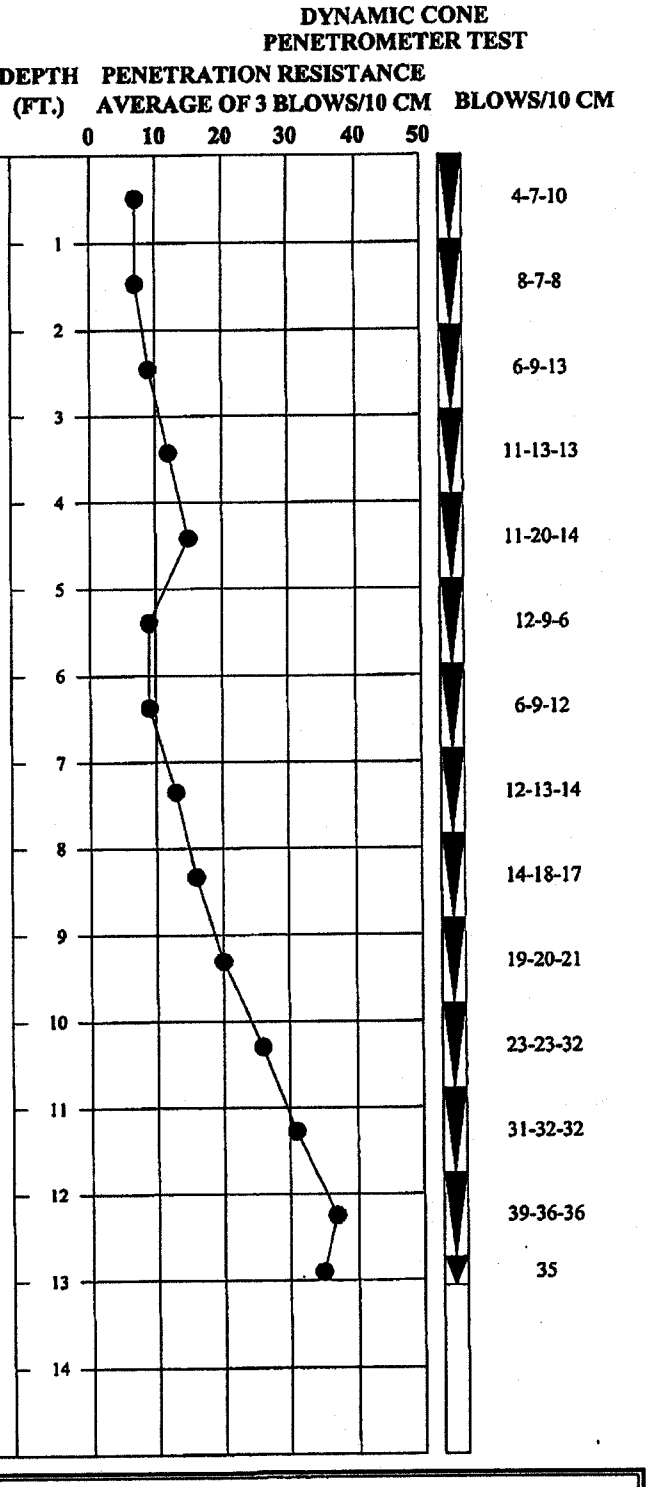
- Stratum Change
- Groundwater Level at Time of Drilling
- Cone Penetration Resistance Average of 3 Blows/10 cm Increment
- Dynamic Cone Penetrometer Test Blows per 10 cm Increment

HAND AUGER BORING RECORD

BORING NUMBER	HA-2
DATE DRILLED	January 24, 2006
PROJECT NUMBER	06-7515
PROJECT	Wal-Mart Distribution Center - Phase I & II
LOCATION	James City County, Virginia

McCALLUM TESTING LABORATORIES, INC.

DEPTH (FT.)	DESCRIPTION
0.0 – 0.3	Brown, clayey silty fine sand, moist, SM-SC
0.3 – 2.0	Brown, silty clayey fine sand, moist, SC
2.0 – 4.0	Brown, silty fine sand with traces of clay, moist, SM
4.0 – 6.0	Brown, silty fine sand, moist, SP-SM
6.0 – 12.0	Reddish brown, silty clayey fine sand, moist, SC
12.0	Hand Auger Boring Terminated at 12.0 ft. Dynamic Cone Penetrometer Test Terminated at 13.12 ft.



NOTES: *Groundwater Not Encountered within Depth of Boring.*

- Stratum Change
- Groundwater Level at Time of Drilling
- Cone Penetration Resistance Average of 3 Blows/10 cm Increment
- Dynamic Cone Penetrometer Test Blows per 10 cm Increment

HAND AUGER BORING RECORD

BORING NUMBER	HA-3
DATE DRILLED	January 24, 2006
PROJECT NUMBER	06-7515
PROJECT	Wal-Mart Distribution Center - Phase I & II
LOCATION	James City County, Virginia

McCALLUM TESTING LABORATORIES, INC.

Scott Thomas

From: Melanie Davis
Sent: Friday, April 17, 2009 1:51 PM
To: Scott Thomas
Subject: FW: Erosion and Sediment Control Bond Bond # 81456700
Attachments: mcall cert.pdf; as built.pdf

Importance: High

Scott – Are these documents all that was required for release of the Wal-Mart bonds?

From: Angela King
Sent: Friday, April 17, 2009 1:46 PM
To: Melanie Davis
Subject: FW: Erosion and Sediment Control Bond Bond # 81456700

Just received this response from Chubb.

From: bmarx@chubb.com [mailto:bmarx@chubb.com]
Sent: Friday, April 17, 2009 1:35 PM
To: Angela King
Cc: mglover@gloverconstruction.com; emartin@gloverconstruction.com; rtowle@chubb.com
Subject: Erosion and Sediment Control Bond Bond # 81456700

Dear Ms. King:

In response to your inquiry to Mr. Towle, Glover has provided the as-built drawings and construction certificate, both of which are attached. Your claim letter of December 8, 2008 indicated that these two documents, which Glover advised were already provided to James City, would satisfy your claim. As such, no obligation is owed under the bond.

This letter and all prior or subsequent communications are made with express reservation of all rights and defenses that may be available to Federal Insurance Company under the terms and provisions of the bond, contract documents and applicable law.

Very truly yours,

Brian Marx CPCU, CSRP, MA
Surety Bond Claims Examiner

New Jersey and Specialty Claims
P.O. Box 1616
Warren NJ 07059-1616
phone 908-903-5632
fax 800-664-5358
e-mail: bmarx@chubb.com

(See attached file: mcall cert.pdf) (See attached file: as built.pdf)

Glover
Construction Co., Inc.
P. O. Box 40 • Highway 301 N.
Pleasant Hill, North Carolina 27866
(252) 536-2660 • Fax (252) 536-4600

June 18, 2004

Mr. Scott J. Thomas, P.E.
PO Box 8784
Williamsburg, Virginia 23187-8784

Re: Wal-Mart Bulk Storage Facility #88
Green Mount Industrial Park, US route 60
Phase I (County Plan No. SP-45-00)
Phase II (County Plan No. SP-24-01, amended SP-81-01)

Dear Mr. Thomas

Enclosed are the AS-Built Drawings of the BMP facilities at the referenced site. As you know we have had a hard time getting the required information from Wal-Mart. We are still trying to get the certification from the parties responsible for inspection of the site on behalf of Wal-Mart. I know this isn't your concern as to how our subcontract was written, but the problem we have is that inspection and as-built drawings were excluded from our subcontract. Therefore we are depending on others whom we have no control over to provide the required information to release these bonds. To further complicate matters, the general contractor for whom we worked is no longer in business, but all the documentation should have been turned over to Wal-Mart if we can just motivate them to find it. However the problem lies in the fact that they have no motivation to cooperate and search their records for this information, since they have no financial exposure as we do. They have told us that they will continue to search the project records for the inspection reports so they can certify the facilities, but so far nothing has been given to us except the as-built drawings. In the mean time is there a possibility of lowering the bond amounts since this is a completed and active facility with little actual exposure. We would be glad to meet with you to further discuss how to resolve this matter.

If you have any questions, please call me.

LOG IN

Very truly yours,

Ed Martin

need constcerts!

GLOVER CONSTRUCTION CO., INC
Ed Martin, Chief Engineer

SJT FILE

DEVELOPMENT MANAGEMENT

101-E MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784
(757) 253-6671 Fax: (757) 253-6850 E-MAIL: devtman@james-city.va.us

CODE COMPLIANCE
(757) 253-6626
codecomp@james-city.va.us

ENVIRONMENTAL DIVISION
(757) 253-6670
environ@james-city.va.us

PLANNING
(757) 253-6685
planning@james-city.va.us

COUNTY ENGINEER
(757) 253-6678

INTEGRATED PEST MANAGEMENT
(757) 253-2620

May 15, 2002

Mr. Ed Martin
Glover Construction
P.O. Box 40
Pleasant Hill, NC 27866

Re: Wal-Mart Bulk Storage Facility # 88
Green Mount Industrial Park, US Route 60
Phase I (County Plan No. SP-45-00)
Phase II Expansion (County Plan No. SP-24-01, amended SP-81-01)

Dear Mr. Martin:

At your request, the Environmental Division has identified items which pertain to release or reduction of erosion and sediment control bond being held for the above referenced projects.

Record Drawings and Construction Certifications:

Note # 18 of the Erosion and Sediment Control Notes on Sheet C5.01 of the approved plan for Phase I required as-built drawings and construction certification for BMP facilities following completion. The note on the approved plan is as follows:

> ***"As-built drawings must be provided for all detention/BMP facilities. Also upon completion, the construction of all detention/BMP facilities shall be certified by a professional engineer who inspected the structure during construction. The certification shall state that to the best of his/her judgement, knowledge and belief, the structure was constructed in accordance with the approval plans and specifications".***

Note # 18 on Sheet C-10 of the Phase II expansion plan also relayed this same information. In Phase II, Pond D was expanded in size to service additional impervious area associated with the building and parking lot expansion. Therefore, record drawings (as-builts) would need to reflect expansion of the Pond D. To date, no record drawings or construction certifications have been received for any of the BMP facilities at the site.

There are five (5) identified pond cells around the perimeter of the Phase I Wal-mart Bulk Storage Facility # 88 and the Phase II expansion site. The wet extended detention ponds are further identified as Ponds A, B-1, B-2, C and D. Although there are five pond cells, two of the ponds, A and B-2 are interconnected to the larger Pond B-1. Interconnected cells will also require record drawings (as-builts) and construction certification, as necessary.

The following matrix provides useful information relative to the onsite BMP's. This will aid in proper submission, review and approval of certification information.

BMP Facility	Location	**Assigned County BMP ID Code**
Detention Pond B-1	Large pond, NW corner of site.	**SC 009**
Detention Pond B-2	West part of site, interconnected to Pond B-1.	**SC 010**
Detention Pond A	SW corner of site, interconnected to Pond B-2.	**SC 011**
Detention Pond C	North-central part of site, next to parking lot.	**SC 012**
Detention Pond D	NE and SE corners of site.	**SC 013**

To aid in the understanding current requirements for submission of record drawings (as-builts) and construction certifications, I have attached the following information packet entitled ***James City County, Environmental Division, Stormwater Management/BMP Facilities, Record Drawing and Construction Certification, Standard Forms and Instructions.*** Each facility will require proper information and documentation including fully completed forms from the packet, record drawing(s) and a construction certification using the assigned County BMP ID Code number.

Once information as such is received, our division can proceed with a final (detailed) field inspection of each of the BMP facilities. A final field inspection will determine if any construction-related items are necessary for BMP completion. It is our normal process to not proceed with final inspection of stormwater management facilities until such time as the record drawings are received, reviewed and compared for consistency to approved design plan requirements.

(Note: One issue that will need to be addressed upon final inspection of the onsite BMPs is the condition of wetland plantings and the landscaping plan associated with Detention Pond B-1. This is the largest of the ponds situated in the front of the site closest to Route 60. Sheets C9.01 and C9.02 of approved Phase I plan SP-45-00 called for three zones of wetland plants to be incorporated into this pond. Based on our monitoring efforts since the pond was constructed and our more recent site inspections, wetland plantings at this cell are considerably deficient, mainly due to geese activity and other circumstances. In order to meet the County 10 point system requirements for stormwater management, this facility was intended be a County type A-3 wet extended detention pond facility. Normally, wet extended detention facilities are required to have permanent pools ranging from 3 to 8 feet in depth. As site earthwork and other design constraints prohibited use of a deeper permanent pool, a shallower permanent was allowed by the Environmental Division with the understanding that the facility would be supplemented with wetland plantings for water quality purposes. The current condition of wetland vegetation for this pond would not appear to meet approved stormwater management plan requirements for the site or guidelines of the County BMP manual. Alternatives for replanting based on approved specifications, a modified planting plan which is more adaptable to current conditions or modification of the pond with a deeper pool should be investigated.)

Site - Related Issues:

Phase I (SP-45-00)

1. The eastern shoulder of the paved entrance road between Route 60 and the cul-de-sac requires stabilization. Use of stone is preferred as trucks are heavily utilizing this area for off-road parking.

2. The eastern most temporary slope drain (TSD) on Detention Pond C is still in place. It appears the slope drain is adequately protecting the slope from concentrated runoff; therefore, the pipe can be left in place as a permanent stormwater conveyance. However, if left in place, the outfall end of the slope drain will require riprap outlet protection.

3. Two temporary slope drains along the northern most part of Pond D are still in place. Again, it appears the slope drains are adequately protecting the slope from concentrated runoff; therefore, the pipes can be left in place as permanent stormwater conveyances. However, if left in place the outfall ends of each of the slope drains will require riprap outlet protection.

Phase II Expansion Site (SP-24-01)

4. Bare soil areas in regraded portions of the emergency spillway for Detention Pond C requires stabilization with seed and mulch or matting.

5. The location of the construction entrance in the back portion of the expansion project (ie. over the gas pipeline) requires stabilization with seed and mulch.

Certification materials and any construction-related items that may be necessary for the onsite BMP facilities when final inspections are performed will remain associated with bond being held for the Phase I portion of the site. Therefore, it appears that upon completion of the site-related issues for Phase II as outlined above, the Phase II bond can be substantially reduced or released in full.

Please contact me at 757-253-6639 or the assigned Environmental Division inspector, Mike Woolson, at 757-253-6823 if you have any further comments or questions.

Sincerely,

Scott J. Thomas, P.E.
Civil Engineer
Environmental Division

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Date Record Created:

Created By: Scott Thomas

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Print Record

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Thursday, March 11, 2010
2:55:26 PM

WATERSHED	SC
BMP ID NO	012
PLAN NO	SP-45-00
TAX PARCEL	
PIN NO	6010100010
CONSTRUCTION DATE	
PROJECT NAME	Walmart Bulk Storage Facility # 88
FACILITY LOCATION	9305 Pocahontas Trail
CITY-STATE	Williamsburg, VA 23185
CURRENT OWNER	Wal-Mart Stores East LP
OWNER ADDRESS	P.O. Box 8050 MS0555
OWNER ADDRESS 2	
CITY-STATE-ZIP CODE	Bentonville, AR 72712
OWNER PHONE	
MAINT AGREEMENT	Yes
EMERG ACTION PLAN	No

Get Last BMP No

Return to Menu

MAINTENANCE PLAN	Yes	CTRL STRUC DESC	Skimmer
SITE AREA acre	89.29	CTRL STRUC SIZE inches	
LAND USE	Industrial	OTLT BARRL DESC	RCP
old BMP TYP	Wet Pond	OTLT BARRL SIZE inch	18
JCC BMP CODE	A3 Wet ED Pond		
POINT VALUE	10	EMERG SPILLWAY	Yes
		DESIGN HW ELEV	48.31
		PERM POOL ELEV	46.5
SVC DRAIN AREA acres	24.21	2-YR OUTFLOW cfs	0.00
		10-YR OUTFLOW cfs	0.00
		REC DRAWING	Yes
SERVICE AREA DESCRI	Building & Truck Parking Area		
IMPERV AREA acres	0.00	CONSTR CERTIF	Yes
RECV STREAM			
EXT DET-WQ-CTRL	Yes	LAST INSP DATE	Inspected by:
WTR QUAL VOL acre-ft		INTERNAL RATING	
CHAN PROT CTRL	Yes	MISC/COMMENTS	
CHAN PROT VOL acre-ft	12	Pond C (north).	
SW/FLOOD CONTROL	Yes		
GEOTECH REPORT	Yes		

Additional Comments:

Construction Experience Of Principal Individuals

Name, Position, Time Employed in Current Position: **J. M. Glover, President** – ***30 Years***
Construction Experience, Aggregate Dollar Amount: **47 Years Experience / 400 Million Plus**
Classification Of Work: **All types of highway construction, landfill construction, airports, water and sewer treatment plants, golf courses, large industrial sites, buildings, dams, bridges, major utility lines. Involved in all phases of construction management, field work, design of alternate construction methods and negotiations.**

Name, Position, Time Employed in Current Position: **J. Mark Glover, Vice President** – ***27 Years***
Construction Experience, Aggregate Dollar Amount: **32 Years Experience / 300 Million Plus**
Classification Of Work: **All types of highway construction, landfill construction, airports, water and sewer treatment plants, golf courses, large industrial sites, buildings, dams, bridges, major utility lines. Currently as Vice President, he supervises several projects working closely with all of the superintendents from start to finish on their projects.**

Name, Position, Time Employed in Current Position: ***Matt B. Glover,*** **Vice President** – 25 Years
Construction Experience, Aggregate Dollar Amount: **30 Years Experience / 300 Million Plus**
Classification Of Work: **All types of highway construction, landfill construction, airports, water and sewer treatment plants, golf courses, large industrial sites, buildings, dams, bridges, major utility lines. Has experience in field operations, and served as a field superintendent for three years prior to being placed in charge of office operations. Involved in estimating, project management, contract negotiations, legal matters, company policy, and subcontractor negotiations.**

Name Present Position, & Time Employed: **Durwood Jeffries, Superintendent**-31 Years
Construction Experience, Aggregate Dollar Amount: **40 Years Experience/300 Million Plus**
Classification of Work: **All phases of highway construction, landfill construction, and mass excavation projects, canal construction, dredging, mining operations, golf courses, large industrial sites, buildings, dams, bridges, major utility lines, has experience in field operations, and served a s a field superintendent for the past twenty five years after coming to work as a highly talented equipment operator and drainage expert.**

Name Present Position, & Time Employed: **Wayne Clements, Superintendent**-19 Years
Construction Experience, Aggregate Dollar Amount: **18 Years Construction Experience 5 Years Logging Experience/150 Million Plus**
Classification of Work: **Several Large highway projects, landfill construction, very large utility relocation projects involving deep lines and pile supported encasement pipes, and airport construction. Superintendent for the past 16 years and has been instrumental in the successful completion of several fast track projects.**

Name Present Position & Time Employed: **Jerry Walski, Superintendent**-19 Years
Construction Experience, Aggregate Dollar Amount: **24 years Experience/200 Million Plus**
Classification of Work: **All types of highway construction, landfill construction, airports, water and sewer treatment plants, golf courses, large industrial sites, buildings, dams, bridges, major utility lines. Superintendent for the past 16 years and prior to that he was a self employed concrete contractor.**

Name Present Position & Time Employed: **Ed Martin, Chief Engineer/Estimator**-17 Years
Construction Experience, Aggregate Dollar Amount: **20 Years Experience/500 Million Plus**
Classification of Work: **Highway construction, landfill construction, utility and building construction. Chief estimator, involved in all phases of bidding, contract management, subcontract negotiation, planning, project meetings, and is our DBE Liaison Officer.**

Name Present Position & Tome Employed: **Armon Pfeifer, Engineer/Estimator** – 13 Years
Construction Experience, Aggregate Dollar Amount: **23 Years Experience/300 Million Plus**
Classification of Work: **Highway construction, landfill construction, utility and building construction. Involved in estimating, bidding, subcontractor scheduling, and project management.**

Name Present Position, & Time Employed: **Reuben Williams, Superintendent** – 8 Years
Construction Experience, Aggregate Dollar Amount: **18 Years Experience/150 Million Plus**
Classification of Work: **All types of highway construction, landfill construction, airports, water and sewer treatment plants, large industrial sites, buildings, dams, bridges, major utility lines. Superintendent for the past 5 years and prior to that he was an inspector for the NCDOT.**

Name Present Position, & Time Employed: **Harold Powell, Superintendent** – 11 Years
Construction Experience, Aggregate Dollar Amount: **20 Years Experience/125 Million Plus**
Classification of Work: **All types of highway construction, landfill construction, airports, water and sewer treatment plants, large industrial sites, buildings, dams, bridges, major utility lines. Superintendent for the past 10 years, prior to that he worked as a superintendent on similar projects.**

Name Present Position, & Time Employed: **Ed Marks, Engineer/Estimator** – 9 Months
Construction Experience, aggregate Dollar Amount: **19 Years Experience/200 Million Plus**
Classification of Work: **Highway construction, surveying, and utility construction. Involved in estimating, bidding, subcontractor scheduling, and project management.**