

SUBMITTAL FORM

General Information

Project Name: Phase 3 Expansion Submittal Number: 018
CRSWMA Tuscarora Landfill
Craven County, North Carolina

JEI Project Number: 618.1101.02 Date: 2/1/12

Submittal Description: Leachate Collection System -
Jet Cleaning & Video Report

Contractor's Certification

Technical Specification No.: 02712

This Submittal has been reviewed for accuracy of content. It is my opinion that the material and/or equipment are in compliance with the Contract Drawings and Technical Specifications. The information contained herein has been fully coordinated with all involved subcontractors.

Contractor: Glover Construction
Signed: [Signature]
Date: 2/1/12

Engineer's Review

No Exceptions Taken Engineer: Joyce Engineering, Inc.
Make Corrections Noted Signed: [Signature]
Amend and Resubmit Date: FEB 2, 2012
Rejected - See Remarks

Review is for general compliance with the design concept and the contract documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. No responsibility is assumed for the correctness of dimensions or details.

Permit No.	Date	Document ID No.
25-09	February 10, 2012	16088

RECEIVED - via an e-mail message
Date: February 10, 2012
Solid Waste Section
Raleigh Central Office

JETCLEAN AMERICA

HIGH PRESSURE WATER JETTING
VIDEO PIPELINE INSPECTION
NO DIG POINT REPAIRS
WWW.JETCLEANAMERICA.COM

19019 FERN MEADOW LOOP
LUTZ, FL 33558
TEL: 800-226-8013 FAX: 813-926-4616
JETCLEANAMERICA@YAHOO.COM

Glover Construction Coastal Regional - Tuscarora Landfill Phase 3 LCS Piping High-pressure Water-jetting & Explosion-proof Video-inspection

Work Performed December 2011

Conducted By:
Jetclean America
800-226-8013

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JETCLEANAMERICA@YAHOO.COM

DATE : 1/5/2012
TO : Mark Short – Glover Construction
FROM : Ralph Calistri (jetcleanamerica@yahoo.com)
SUBJECT : Coastal Regional - Tuscarora Landfill – Phase 3 Expansion Report

Jetclean America completed the high-pressure water-jetting and explosion-proof video-inspection of the new Phase 3 leachate collection piping at the above landfill on 12/6/2011. Included in this package is the written report, jetcleaning log, video inspection logs, and the DVD inspection footage.

High-pressure Water-jetting:

All collection pipes were cleaned in their entirety via high-pressure water-jetting nozzle, with achieved distances documented in the attached jetcleaning log.

LOCATION	DISTANCE
NEW CELL:	
Cleanout 1	700'
Cleanout 2	490'
Cleanout 3	550'
Cleanout 4	590'
Cleanout 5	590'
Cleanout 6	700'
Sump A	43'
Sump B	43'

Explosion-proof Video-inspection

After jetcleaning was completed, all pipes were video-inspected as far as possible from all available access points using certified explosion-proof camera equipment. There were no specific defects that were noted during the video-inspection activities (see pipe graphic reports for each video inspection setup and inspection footage).

Based on successful jetcleaning of the entire piping system, and confirmation of defect-free piping in the areas viewed with the inspection camera, we believe that the system is clean, blockage free, and without any visible defects. It appears to flow and drain properly and looks to be in sound condition to deliver leachate.

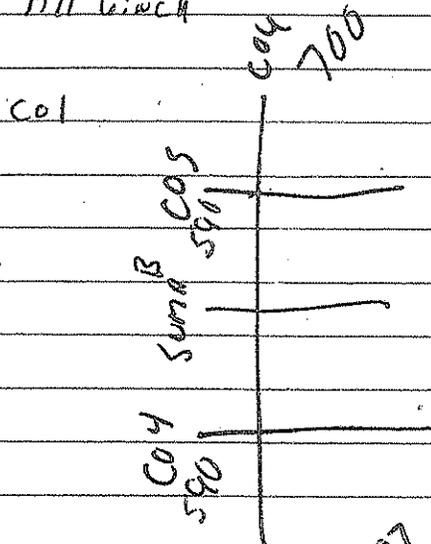
Regards,



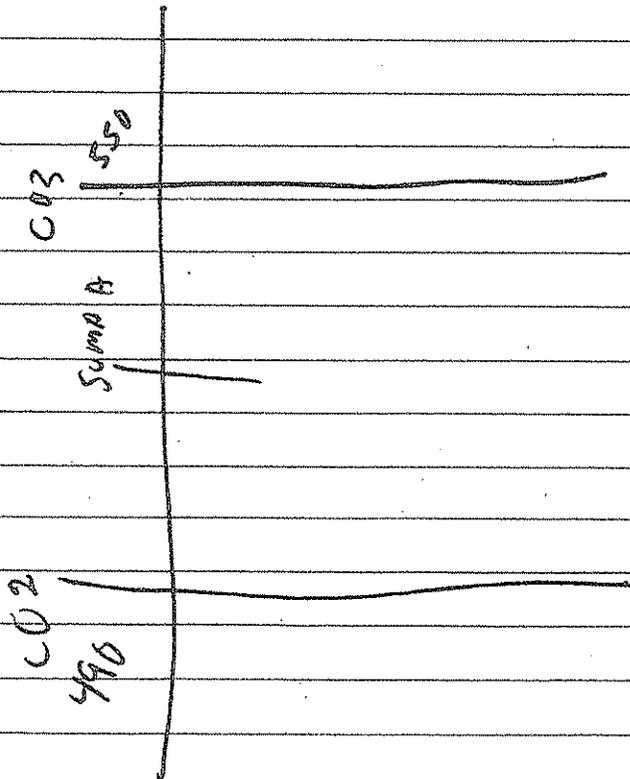
Ralph Calistri – Jetclean America - 800-226-8013

Gloven 12-5-11 New cell @ Coastal Carolina Landfill
New bern

All Geiuch



CO7



3620 Jet
86 sumps
3706 Jet total
2741.0 video

CCTV Surveys List for GLOVER CONSTRUCTION

Number of surveys in this list is 9 as of Thursday, December 08, 2011

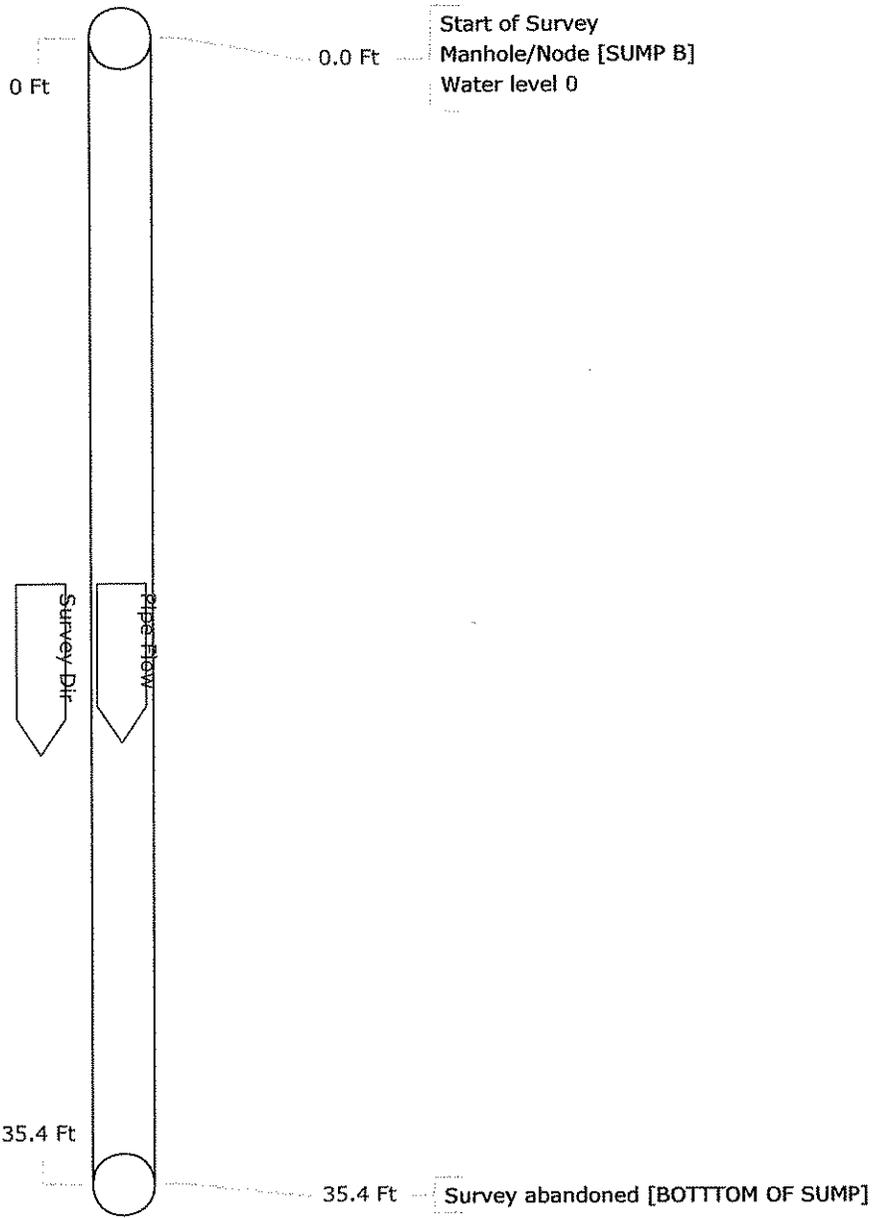
Unit of measure: ft

Setup Date	Street	Start MH	Finish MH	Dir	Size inch	Pre Clean	Vid Cassette	Scheduled Length	Surveyed Length
12/6/2011	COASTAL REGIONAL	SUMP B	SUMP BA	D	18	Y	2		35.4
12/6/2011	COASTAL REGIONAL	CO 1	CO 1A	D	6	Y	1		340.0
12/6/2011	COASTAL REGIONAL	CO 2	CO 2A	U	6	Y	1		406.6
12/6/2011	COASTAL REGIONAL	CO 3	CO 3A	U	6	Y	1		388.0
12/6/2011	COASTAL REGIONAL	CO 7	CO 1A	U	6	Y	1		329.2
12/6/2011	COASTAL REGIONAL	CO 4	CO 4A	U	6	Y	1		398.3
12/6/2011	COASTAL REGIONAL	CO 5	CO 5A	U	6	Y	1		384.4
12/6/2011	COASTAL REGIONAL	CO 6	CO 6A	D	6	Y	1		415.4
12/6/2011	COASTAL REGIONAL	SUMP A	SUMP AA	D	18	Y	2		43.7

Total Scheduled Length 0.0
Total Length Surveyed 2,741.0

Pipe Graphic Report of PLR SUMP B X for GLOVER CONSTRUCTION

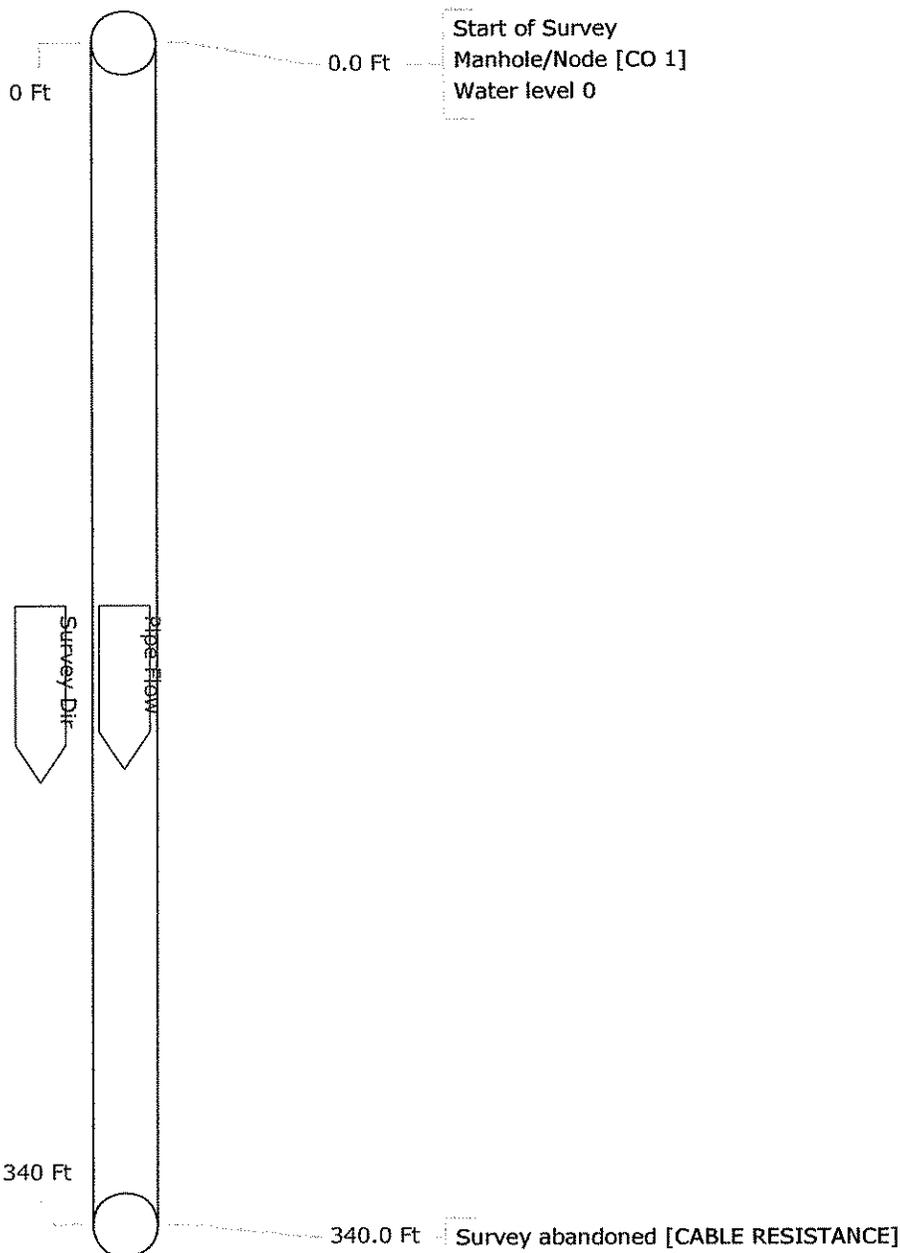
Work Order	Contract	Video 2	Setup 1
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 18 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From	SUMP B Depth Ft
		To	SUMP BA Depth Ft
		Direction	Downstream
		Pre-clean	Y Last cleaned
General note			
Location note			



Pipe Graphic Report of PLR CO 1 X

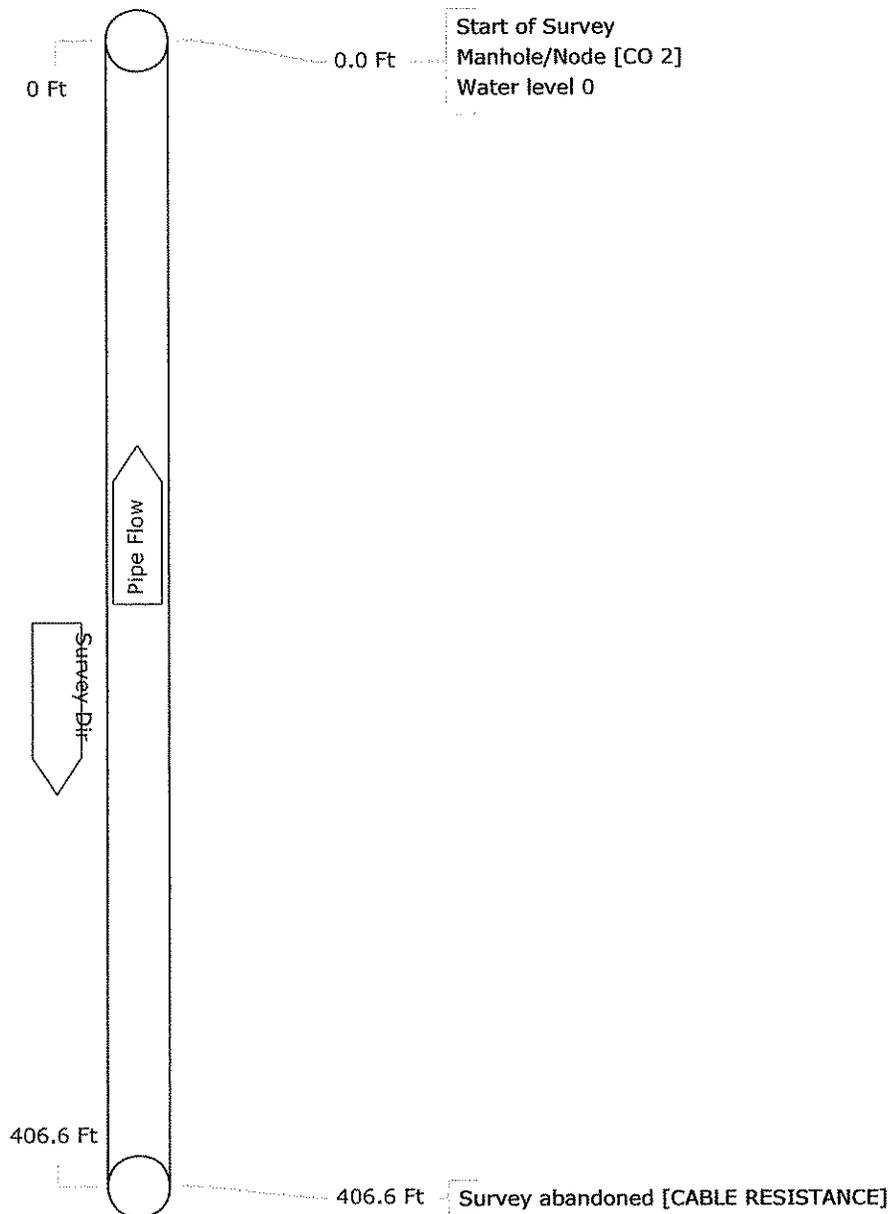
for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 2
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From CO 1	Depth Ft
		To CO 1A	Depth Ft
		Direction	Downstream
		Pre-clean Y	Last cleaned
General note			
Location note			



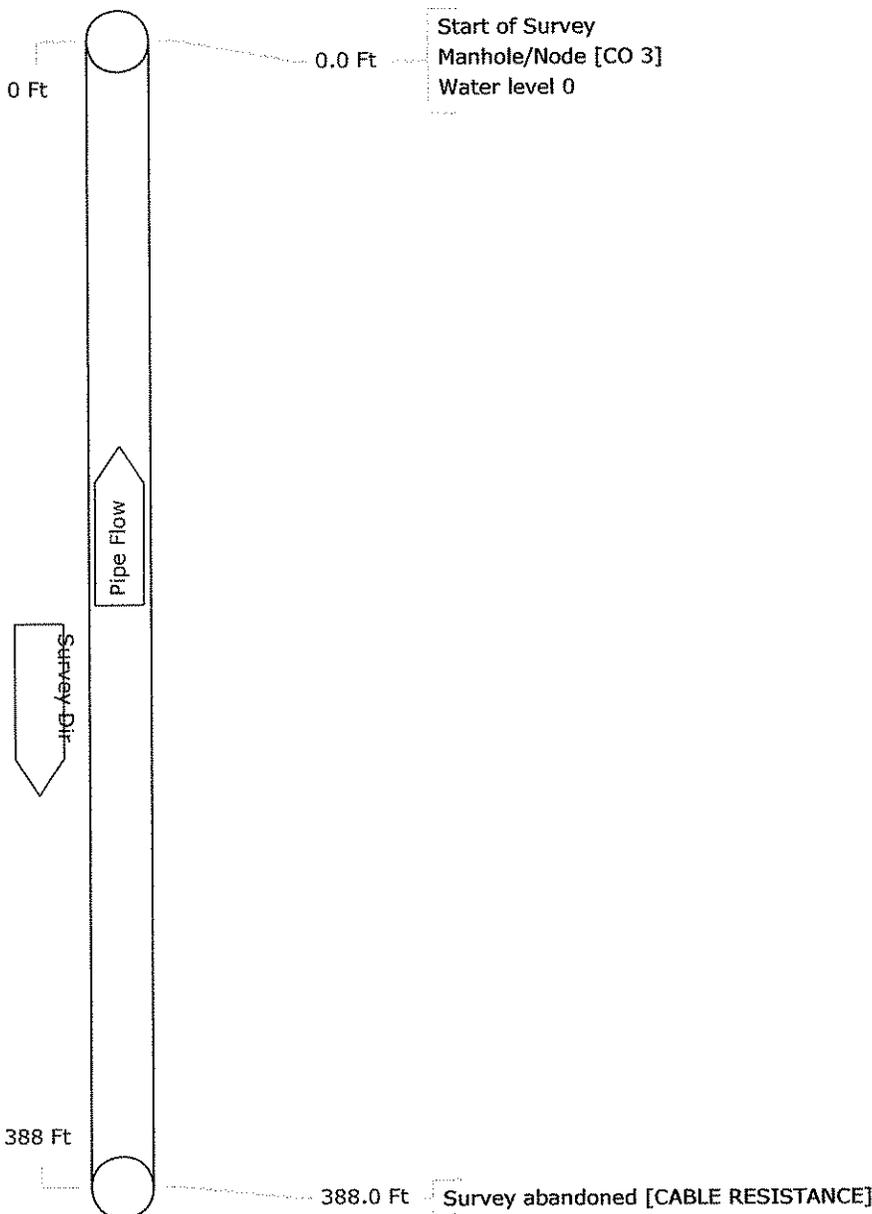
Pipe Graphic Report of PLR CO 2A X for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 3
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From CO 2	Depth Ft
		To CO 2A	Depth Ft
		Direction	Upstream
		Pre-clean	Y
		Last cleaned	
General note			
Location note			



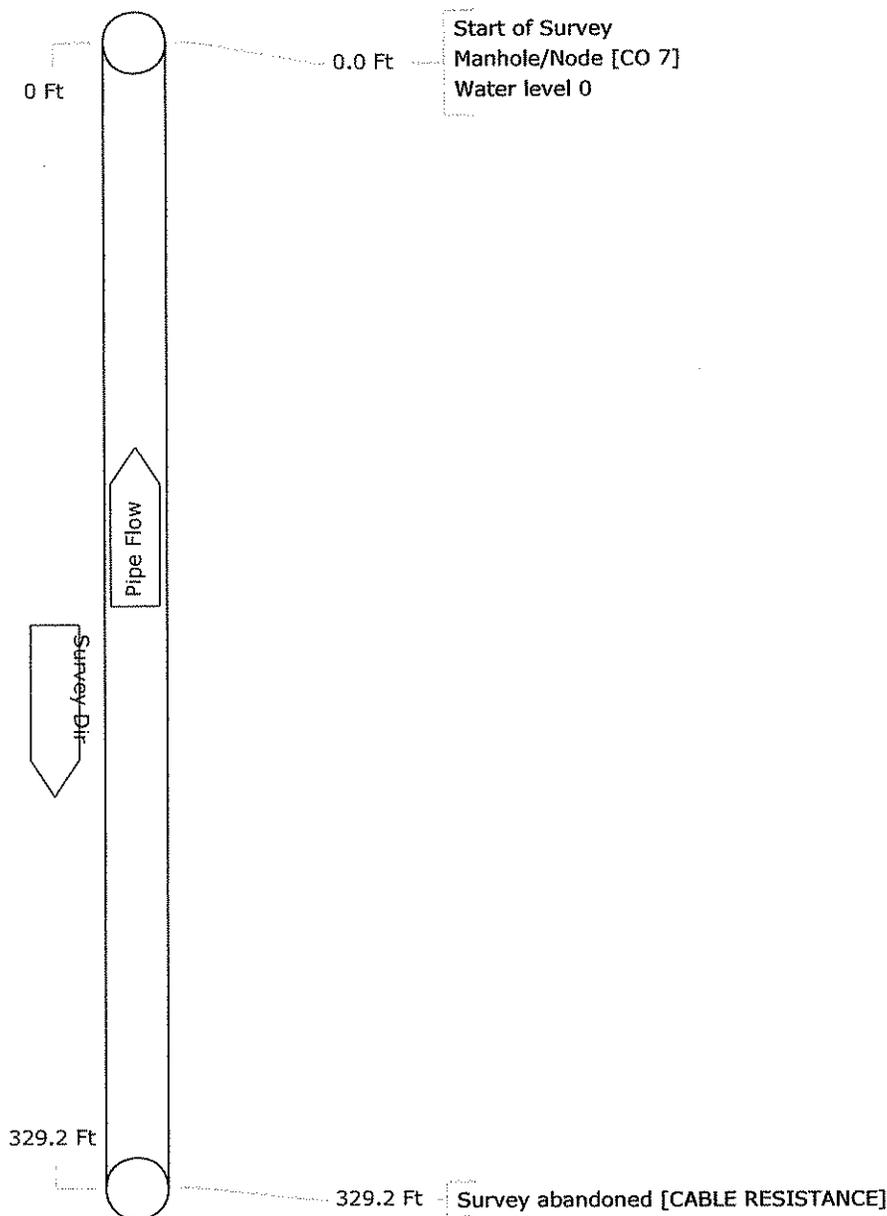
Pipe Graphic Report of PLR CO 3A X for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 4
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From CO 3	Depth Ft
		To CO 3A	Depth Ft
		Direction	Upstream
		Pre-clean	Y
		Last cleaned	
General note			
Location note			



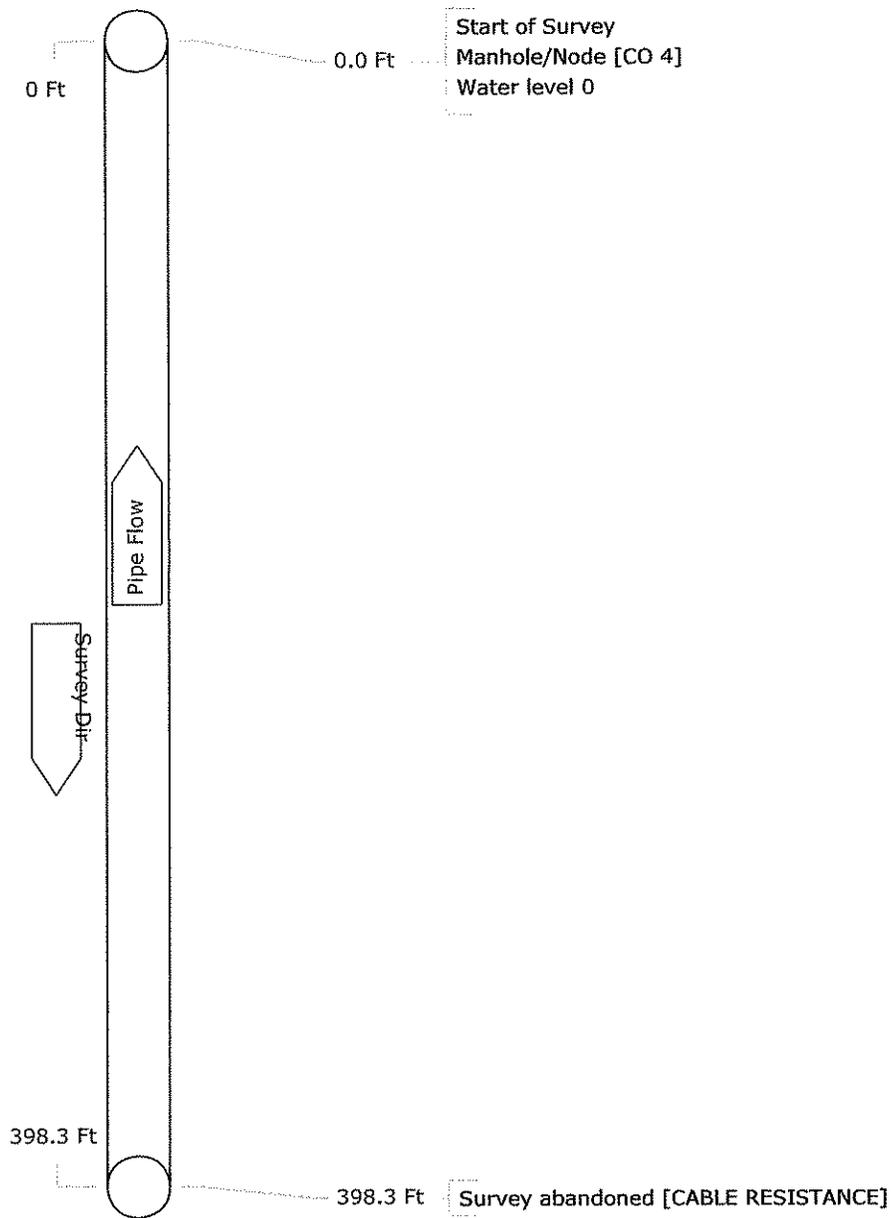
Pipe Graphic Report of PLR CO 1A X for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 5
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid 2011	
		From CO 7	Depth Ft
		To CO 1A	Depth Ft
		Direction	Upstream
		Pre-clean Y	Last cleaned
General note			
Location note			



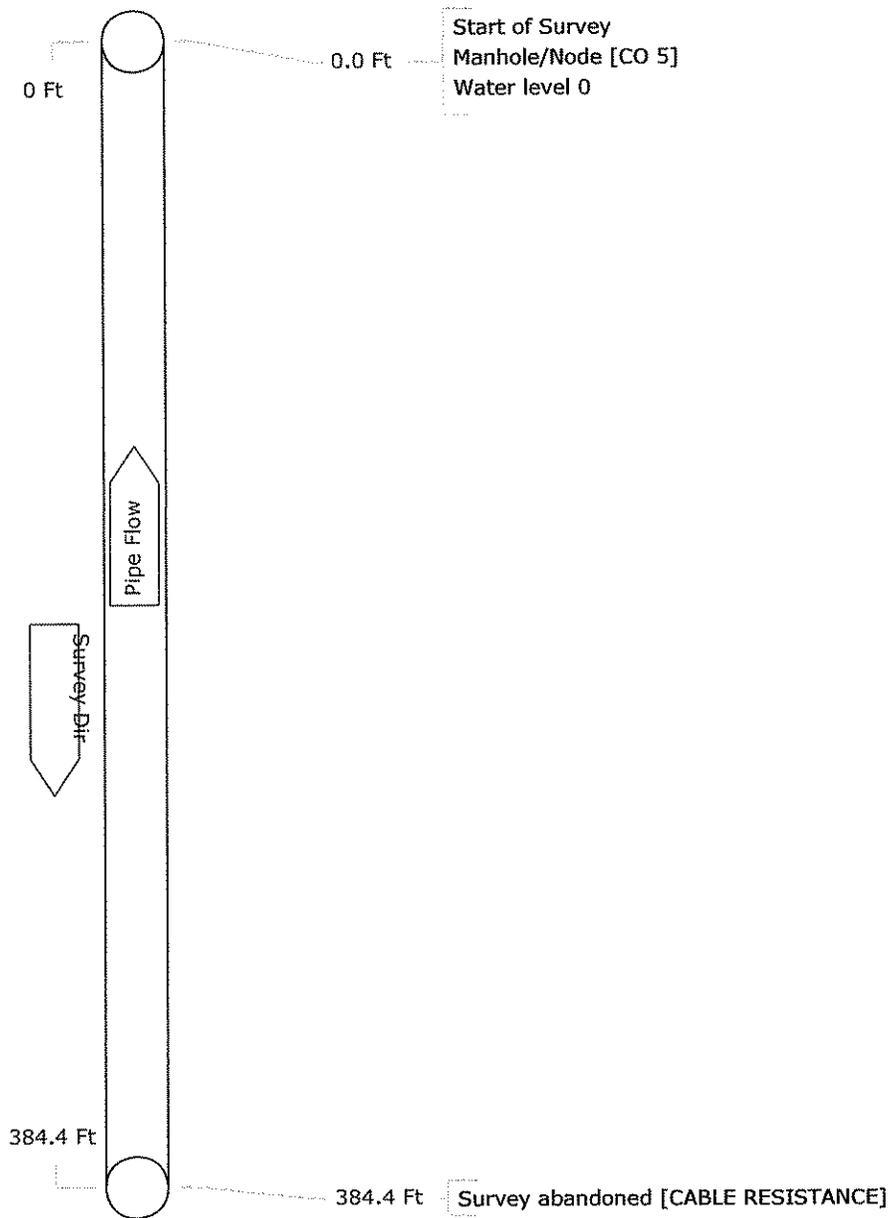
Pipe Graphic Report of PLR CO 4A X for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 6
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From CO 4	Depth Ft
		To CO 4A	Depth Ft
		Direction	Upstream
		Pre-clean Y	Last cleaned
General note			
Location note			



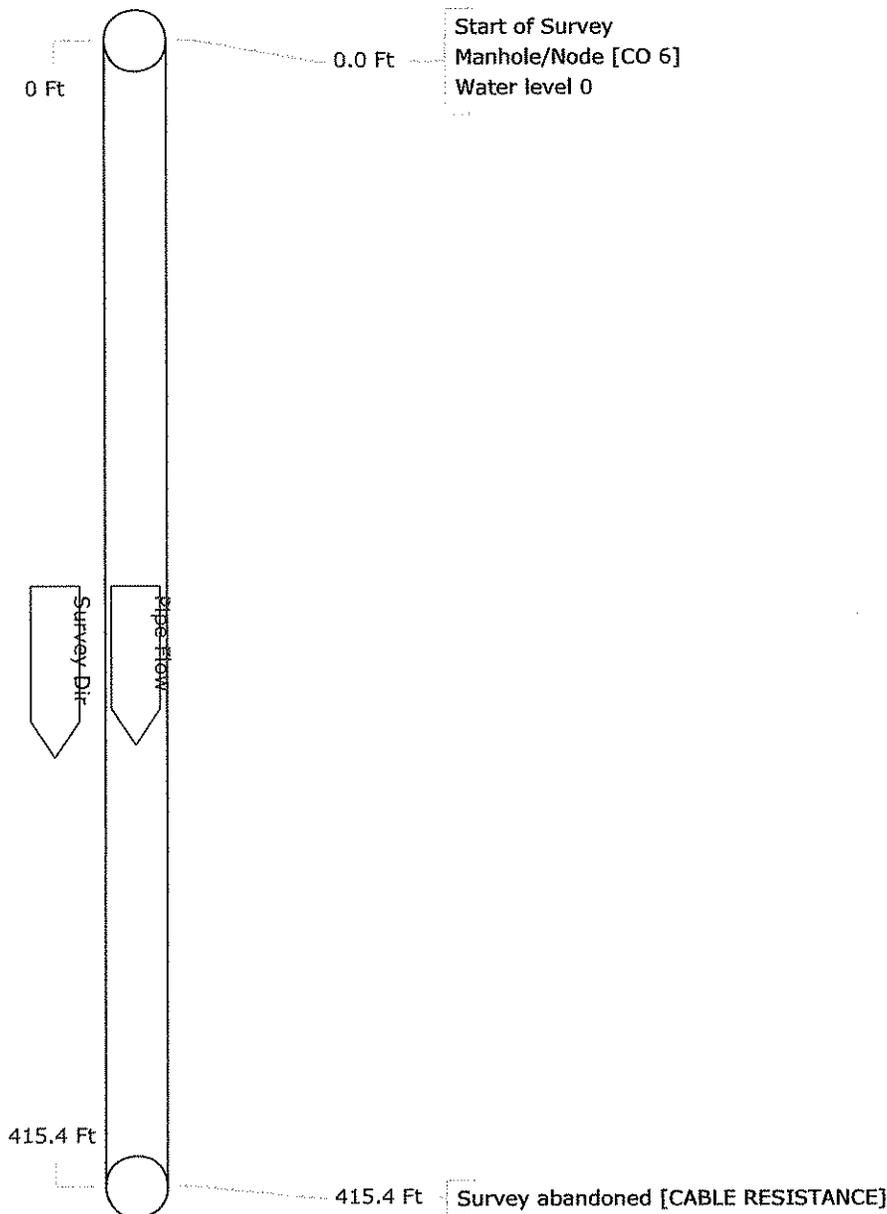
Pipe Graphic Report of PLR CO 5A X for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 7
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From CO 5	Depth Ft
		To CO 5A	Depth Ft
		Direction	Upstream
		Pre-clean	Y
		Last cleaned	
General note			
Location note			



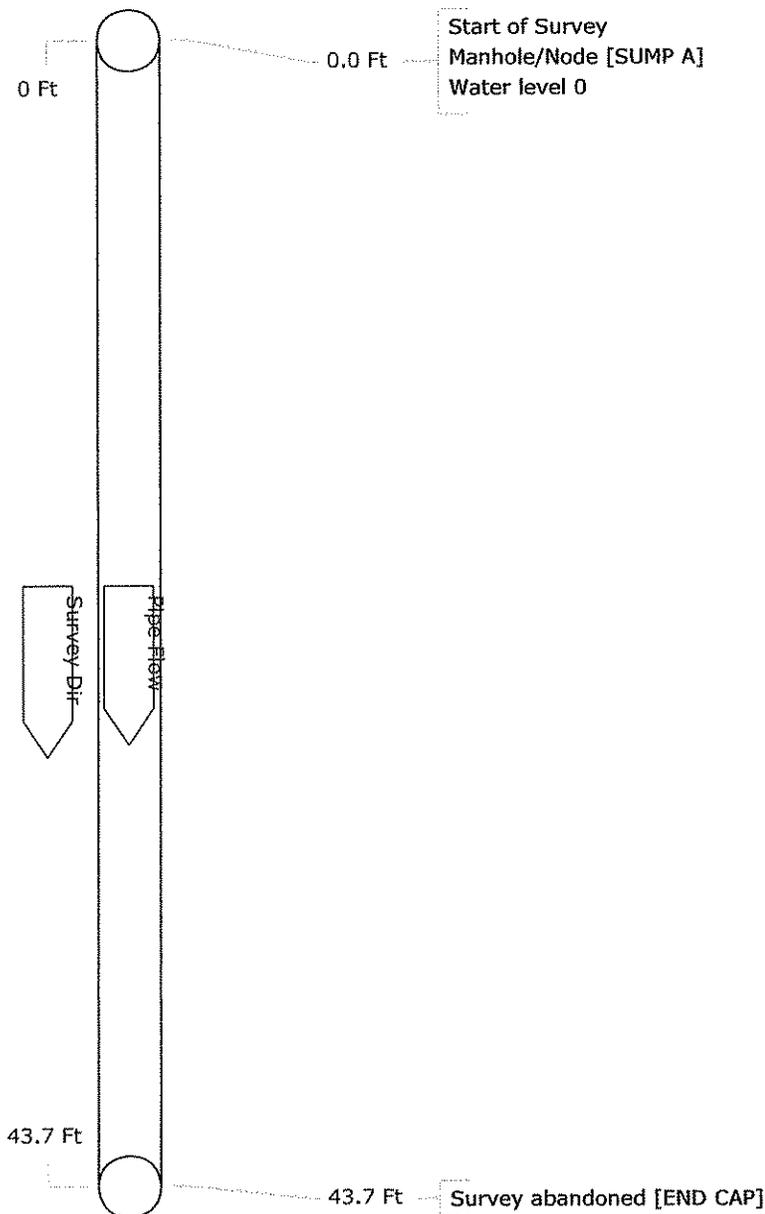
Pipe Graphic Report of PLR CO 6 X for GLOVER CONSTRUCTION

Work Order	Contract	Video 1	Setup 8
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		Weather Dry
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 6 by	ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From CO 6	Depth Ft
		To CO 6A	Depth Ft
		Direction	Downstream
		Pre-clean	Y
		Last cleaned	
General note			
Location note			



Pipe Graphic Report of PLR SUMP A X for GLOVER CONSTRUCTION

Work Order	Contract	Video 2	Setup 9
Facility	Operator David	Van Ref NC-2	Surveyed On 12/06/2011
Street Name	COASTAL REGIONAL	City	
Location type	Near environmentally sensitive area		
Surface			
Survey purpose	Pre-acceptance - normally new sewers for adoption or private line goin		
Weather	Dry		
Pipe Use	Foul Water	Schedule length	Ft
Shape	Circular	Size 18	by ins
Material	Polyethylene - High density	Joint spacing	Ft
Lining		Year laid	2011
		From	SUMP A
		To	SUMP AA
		Depth	Ft
		Direction	Downstream
		Pre-clean	Y
		Last cleaned	
General note			
Location note			



Chao, Ming-tai

From: Carrie Mitchell [cmitchell@joyceengineering.com]
Sent: Friday, February 10, 2012 9:14 AM
To: Chao, Ming-tai
Cc: Ritter, Christine
Subject: RE: CRSWMA MSWL - Phase 3, 25-09
Attachments: CRSWMA Well Abandonment Record 2011.pdf; JetClean Video Report.pdf

Categories: Red Category

Ming,

The background monitoring report was submitted to Ervin Lane at the end of January. I have attached a copy of the CRSWMA well abandonment records. In addition to the well abandonment records, I've attached a copy of the Phase 3 leachate pipe video report. Please feel free to contact me if you need any additional information.

Carrie Mitchell, P.E.
Project Consultant

JOYCE ENGINEERING, INC.
2211 W. Meadowview Road, Suite 101
Greensboro, NC 27407
tel: (336) 323-0092
direct: (336) 790-0038
fax: (336) 323-0093
www.JoyceEngineering.com

From: Chao, Ming-tai [<mailto:ming.chao@ncdenr.gov>]
Sent: Thursday, February 02, 2012 4:37 PM
To: Carrie Mitchell
Cc: Ritter, Christine
Subject: CRSWMA MSWL - Phase 3, 25-09

Hey Carrie:

To comply with the Permit Conditions 6, 7, & 23e of PTC for Phase 3, please submit the well/piezometers abandonment logs (Table 16, the Volume 3 – Design Hydro, PTC Application), and the baseline data for new installed monitoring wells (Table 16, the Volume 3 – Design Hydro, PTC Application). The DWM records indicate the referred documents have not been received, reviewed, & approved by the Solid Waste Section's Hydrogeologist. Please contact myself or Christine Ritter (919-707-8254) if you have any questions related to this matter.

Ming-Tai Chao, P.E.
Environmental Engineer
Permitting Branch, Solid Waste Section
Division of Waste Management
(Mailing Address)

**1646 Mail Service Center
Raleigh, NC 27699-1646**

(Street Address)

Green Square, 217 West Jones Street

Raleigh, NC 27603

Tel. 919-707-8251

ming.chao@ncdenr.gov

<http://portal.ncdenr.org/web/wm/sw>

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