RESOLUTION 2016-024

RESOLUTION OF THE BORDENTOWN SEWERAGE AUTHORITY, IN THE COUNTY OF BURLINGTON, STATE OF NEW JERSEY AUTHORIZING THE RELEASE OF A PERFORMANCE BOND FOR BORDENTOWN WATERFRONT COMMUNITY, LLC

WHEREAS, Bordentown Waterfront Community, LLC ("BWC") has requested a full refund of the performance bond it previously placed in connection with the work it performed for the Phase I on site and Route 130 Conveyance System Extension improvements; and

WHEREAS, the Bordentown Sewerage Authority's Consulting Engineer by letter dated March 16, 2016 has reported that the BWC work has been completed in an acceptable manner;

WHEREAS, the Authority's Consulting Engineer has recommended the full release of the performance guarantee in the amount of \$420,687.30 provided all payments of outstanding fees have been resolved and the conditions set forth below are satisfied; and

NOW, THEREFORE, BE IT RESOLVED by The Board of the Bordentown Sewerage Authority this 21st day of March, 2016, that:

- 1. The aforementioned performance bond shall be released subject to BWC's completion of the following conditions:
 - a. BWC shall satisfactorily address the December 18, 2015 letter from Mr. Rick Czekanski, P.E. to the Bordentown Sewerage Authority concerning on-site sanitary sewer mains as-built, a copy of which is attached hereto as Exhibit A;
 - b. BWC shall satisfactorily address Rich Czekanski, P.E.'s March 15, 2016
 correspondence to the Bordentown Sewerage Authority concerning force main
 as-built comments and project closeout items, a copy of which is attached hereto
 as Exhibit B;

- c. BWC shall televise all sanitary sewer mains and provide documented evidence that there are no open issues with respect to the construction of these mains; and
- d. Any deed, easement and access issues as set forth in Rick Czekanski, P.E.'s

 March 16, 2016 letter a copy of which is attached hereto as Exhibit C is
 satisfactorily addressed. Specifically, BWC must provide a pump station deed,
 provide an on-site blanket easement and provide an acceptable written
 commitment on operation and maintenance of the private access road extending
 from Rivergate Boulevard to the pump station lot and a secondary access not
 involving the Rivergate Boulevard extending from Route 130 to the pump station
 lot.
- 2. A maintenance bond in the amount of \$168,294.92 shall be required to be posted by BWC upon its satisfaction of all of the conditions set forth in Paragraph 3 (a), (b), (c) and (d) above.
- 3. Any and all resolutions inconsistent with this resolution are hereby repealed to the extent of such inconsistencies.

Dated: March 21, 2016

THE BORDENTOWN SEWERAGE AUTHORITY

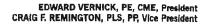
By:

James E. Lynch, Jr. Chairman

Attest:

Stephen Monson, Secretary

EXHIBIT "A"





EXECUTIVE VICE PRESIDENTS
Michael D. Vena, PE, PP, CME (deceased 2006)
Edward J. Walberg, PE, PP, CME

Thomas F. Beach, PE, CME Richard G. Arango, PE, CME

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The Presidential Center Lincoln Building, Suite 600 101 Route 130 Cinnaminson, NJ 08077 (856) 303-1245 (856) 303-1249 (fax)

300 Penhorn Avenue, 3rd Floor Secaucus, NJ 07094 (201) 624-2137 (201) 624-2136 ((AX)) December 18, 2015

Richard D. Eustace, Executive Director Bordentown Sewerage Authority PO Box 396 954 Farnsworth Avenue Bordentown, NJ 08505

Re:

Bordentown Sewerage Authority
Bordentown Waterfront Community
Phases 1A (Southern Portion) and 1B, East Village
(Rivergate) Apartments, Sanitary Sewer As-Builts
Bordentown Township, Burlington County, New Jersey
Our File No. 0304N056

Dear Mr. Eustace:

This correspondence summarizes gravity on-site sanitary sewer as-built status as follows:

AS-BUILTS

The basis of our review is the enclosed Sanitary As-Built for Bordentown Waterfront Community Phase 1; dated 1/20/15; unrevised and prepared by James A. Sassano Associates, Inc. Our review generated the following comments and action items which are to be addressed by the Applicant's representatives:

1. A stub was shown on the Final Major Site Plan out of MHS-B-4 for a future connection. No such stub is shown on the As-Built.

As-Built Action Item: Writer noted the presence of the stub during a recent site visit. Surveyor to determine depth and add to the as-built. From contractor obtain stub length and installed slope and note on plans. This information can be referenced as being obtained from the contractor.

2. The 4" stub left in MHS-B-5 is of considerably shorter length than that shown on the Final Major Site Plan.

As-Built Action Item: Show revised stub length on As-Built. We understand the stub length was shortened due to possible interferences with future work crossing the NJ Transit rail tracks.

(201) 624-2136 (fax) water/facilities06on/nj purlington/0304 bordentown saldevelopments/n058 - phase 1b and off-site work; bwc/correspondence/corres to eustace 12-18-2015, san sewer as - built

Page 2 December 18, 2015 BSA-Waterfront Community Phases 1A and 1B

3. The first-floor elevation of the Pump Station is not shown on the As-Built.

As-Built Action Item: Show the first-floor elevation of the Pump Station on the As-Built. On Sassano's force main as-built drawings this is shown as 15.51'.

4. The invert of the Bioxide solution pipe into manhole MHS-B-2 is not shown on the As-Built.

As-Built Action Item: Show the diameter and invert elevation of the Bioxide solution pipe at manhole MHS-B-2 on the As-Built.

5. All manhole covers lower than the floor elevation of the pump station (15.51') are to be provided with watertight manhole covers. Based on the submitted as-built plans these are definitely manholes MHS-B-2 and MHS-B-2A.

As-Built Action Item: Verify the covers for manholes MHS-B-2 and MHS-B-2A are the watertight type with hold down bolts and indicate "(Watertight cover)" with the manhole data. If not, contractor to provide the approved watertight frame/cover. Manhole MHS-B-5 has been reset and is not a watertight cover. Surveyor's personnel to determine the rim elevation and Contractor to provide a watertight cover if the final rim elevation is below the pump station floor elevation.

One of these required watertight manhole covers is required within the paved pump station site at manhole MHS-B-2. Contractor to discuss with the Authority the proposed methodology to be utilized so to minimize the disruption to the pavement.

Contractor to alert the surveyor of any rim elevations that have been modified in the past year so the surveyor can reshoot to obtain the permanent rim elevation.

- 6. Proposed manhole MHS-B-1 upstream of MHS-B-2A has not been constructed. The design length of this sewer main section was 89 LF but according to the as-built information only 57 LF was constructed. Any future acceptance of the on-site sanitary sewer system should not include this section as no slope information is known.
- 7. There is a coupling in the sewer main that at one point had to be adjusted in order to pass the air test. We believe this is in manhole section MHS-B-3 to MHS-B-4.

As-Built Action item: Contractor to provide dimensional information as to the coupling location to the surveyor.

8. The distance between manholes is typically four-linear feet greater than the actual length of pipe installed between manholes. To represent the true slope the interior diameter of a manhole is deducted from the total as-builted length.

As-Built Action Item: The gradients of the sewer pipes on the As-Built Drawing should be revised where they differ from the Calculated Gradient shown below:

MHS#	Invert(out)	MHS#	Invert(in)	LF Pipe on Dwg & Dist. Bet, MH's	LF Pipe Minus 4'	Calculated Gradient (%)	Gradient on Dwg (%)
A-1	23.39	A-2	21.83	186	182	0.86	0.84
A-2	19.98	A-3	19.28	48	44	1.59	1.46
A-3	18.47	A-4	16.90	250	246	0.64	0.63
A-4	15.77	A-5	14.92	214	210	0.40	0.40
A-5	12.92	B-5	11.24	141	137	1.23	1.19
B-5	8.97	B-4	8.32	151	147	0.44	0.43
B-4	8.28	B-3	7.29	386	382	0.26	0.26
B-3	7.25	B-2B	6.84	76	72	0.57	0.54
B-2B	6.78	B-2A	6.66	48	44	0.27	0.25
B-2A	6.55	B-2	5.69	45	41	2.10	1.90
B-2	5.28	PS Wet Well	5.00	7	5	5.60	4.00

9. Based on the Pumping Station design drawings, the operating depth of the wet well was from the influent pipe invert elevation of 5.56' to a varying elevation of the wet well bottom of -2.92' to -3.00', resulting in an overall wet well operating depth of 8.48' to 8.56'. The influent pipe invert elevation at the wet well shown on the As-Built is 5.00' and the bottom of the wet well is elevation -3.19'. Therefore, the overall depth of the wet well is 8.19', approximately 0.37' less than design depth. Even though the wet well operating depth is 3½" less than the design depth, due to some adjustments in the high-water alarm setting, this deficiency will not be significant.

Page 4
December 18, 2015
BSA-Waterfront Community
Phases 1A and 1B

Applicant's representatives to revise and resubmit 3 paper copies of the as-built; one PDF; and one mylar copy.

Should you have any questions concerning this review, please feel free to contact us Sincerely,

REMINGTON, VERNICK & ARANGO ENGINEERS

By:

Richard B. Czekanski, P.E., BCEE, C.M.E.

RBC/jer/gar

CC:

Craig Dansbury, BSA, Director of Operations Matt Mitcham, Blenheim Construction (w/encl) Jeff Albert, Bordentown Waterfront Community Sean Savage, MatrixNewWorld Ray Longmore, RVA (w/encl) James A. Sassano, PLS Tom Coleman, BSA Solicitor

EXHIBIT "B"



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PRINCIPALS

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Annina Hogan, PE, RA, CME, CPWM, LEED-AP
Kenneth C. Ressler, PF, CME, NBIS
Gregory J. Sullivan, PE, PP, CME, CEA

PLEASE REPLY TO THE NOTED OFFICE

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> Remington, Vernick & Walberg Engineers 845 North Main Street Pleasantville, NJ 08232 (609) 645-7110

> 4907 New Jersey Avenue Wildwood City, NJ 08260 (609) 522-5150

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> 300 Penhorn Avenue, 3rd Floor Secaucus, NJ 07094 ☐ (201) 624-2137

March 15, 2016

Richard D. Eustace, Executive Director Bordentown Sewerage Authority PO Box 396 954 Farnsworth Avenue Bordentown, New Jersey 08505

Re: Bordentown Sewerage Authority
Bordentown Waterfront Development
Phase I Route 130 Force Main Extension
Review of Sanitary Sewer Force Main As-Built Drawings;
Testing Summary; and Project Close-out Items
Our File No. 0304N058

Dear Mr. Eustace:

1.0 GENERAL AS-BUILT REVIEW COMMENTS TO BE ADDRESSED BY APPLICANT'S REPRESENTATIVES

The subject as-built drawings titled, "Force Main As Built for Bordentown Waterfront Community, Phase 1, Lots 5-8; Block 140", prepared by James Sassano Associates, dated 01/30/15 (JSA Project No. 3089), including pages 1 through 11, inclusive, have been reviewed. This correspondence details the results and comments developed during that review. The comments are generally arranged to correspond with the sequence of the drawings, starting with drawing number 1 of 11. A copy of the as-built drawings can be provided independent of this correspondence.

A summary of these general comments is provided below:

- Add a note to all sheets indicating, "8. All HDPE force main pipe is 7410 DIPS SDR-11 as supplied by Flying W Plastics, Inc".
- Add a note to all sheets indicating, "9. At intermediate air relief and cleanout manholes, all bends and connecting pipe through the structure is minimum Class 52, Ductile Iron and is provided with a Protecto 401 liner."
- Add a note to all sheets indicating, "10. With all HDPE force main piping is a 12 AWG copper clad steel wire as provided by Copperhead Industries, LLC. Tracer wire terminates at each valve box located on each side of each force main air release and clean out chamber."
- For the 30" by 42" Drawing Size sheets 1 and 2 of 11 have graphic scales and possibly drawing information that is not to scale. The scale measures correctly starting on Drawing 3 of 11. Please inform us why Drawings 1 and 2 differ and what is the required drawing size?

t:\water\facilities06on\nj burlington\0304 bordentown sa\developments\n058 - phase 1b and off-site work; bwc\correspondence\corres to eustace 2-1-2016 fin as-built review comments.doc

Page 2
March 15, 2016
BSA
Phase I Route 130 Force Main Extension
Review of As-Built Drawings; Testing Summary and Project Close-out Items

- Site easement and access issues shall be satisfactorily addressed as follows:
 - Provide on-site blanket easements for personnel/vehicle access; sanitary sewer main; force main; and pump station storm water piping. There is more than one lot south of Rivergate Boulevard. The Authority's blanket easements shall be applicable to all the lots. These documents to be reviewed and filed by the Authority's solicitor.
 - Provide acceptable commitment on operation and maintenance of private access road extending from Rivergate Boulevard to the pump station lot and a secondary access not involving Rivergate Boulevard extending from Route 130 to the pump station lot. This document to be reviewed and approved by the Authority's solicitor.

1.1 DETAILED AS-BUILT REVIEW COMMENTS TO BE ADDRESSED BY APPLICANT'S REPRESENTATIVES

Drawing 1 of 11

This drawing is provided as a site plan for the southern half of the development and shows buildings, parking areas, and streets. We have the following comments to be addressed by the Applicant's representatives:

- 1. Provide North Arrow.
- 2. Provide Plan View Station Indicators at Maximum 100' Intervals Corresponding to the Profile: The drawing shows the location of the force main as designed and as built. However, there is no station line on this plan view that corresponds to the profile stations shown on the subsequent Sheet 2 of 11.
- 3. Clarify Station Designations: This station numbering format is redundant in that station 0+00 is shown starting at both the new Pump Station as well as at the intersection of NJSH 130 and Rivergate Boulevard. Therefore at the pump station provide a note as follows: "Station 0+00 Rivergate Boulevard". At the common point on Route 130 label as follows: "Station 7+70 Rivergate Boulevard = Station 0+00 Route 130".
- 4. The pump station finish floor elevation is shown as 15.51'. The design elevation was 15.52'. This is provided for general information only and no action is required.
- 5. The Bioxide Pipe Invert Elevation in Manhole MHS-B-2 is not referenced on the drawings. Provide. Verify diameter and provide pipe material. Based on contractor's information show the pipe alignment between the bioxide slab and the manhole.
- 6. In pump station vicinity provide station where pipe switches from ductile iron to HDPE and where the HDPE anchor is located.
- 7. Indicate where force main tracer wire ends in the vicinity of the pump station.

Page 3
March 15, 2016
BSA
Phase I Route 130 Force Main Extension
Review of As-Built Drawings; Testing Summary and Project Close-out Items

Drawing 2 of 11

1. Implement the station 0+00 labeling as this letter noted under Drawing 1 of 11; Note 3; to this drawing also.

2. As noted under Drawing 1 of 11 add stations for both conversion of ductile iron to HDPE and HDPE anchor.

Drawing 3 of 11

- 1. Left Side of Sheet: At the common point on Route 130 label as follows: "Station 7+70 Rivergate Boulevard = Station 0+00 Route 130".
- 2. Right Side of Sheet: At the common point on Route 130 label as follows "Station 8+06 Route 130 = Station 0+00 New Route 130 Baseline"

Drawing 4 of 11

1. Left Side of Sheet: At the common point on Route 130 label as follows "Station 8+06 Route 130 = Station 0+00 New Route 130 Baseline"

Drawing 5 of 11

NJSH 130 Station Scale, Station 12+60 shows a sleeve for a crossing of a gas utility pipe. The narrative calls out dimensions but the 45" dimension scales 36". Adjust profile as required. The as-built should indicate what is used as a cap on each end of the casing pipe (concrete) and what was the extra pipe wrapping at each cap to protect the piping service. We were informed the sleeve was centered over the gas main. A copy of the contractor provided detail of the gas line casing is attached herein. A copy within our email which is clearer can be forwarded to the Applicant's representatives upon request.

Drawing 6 of 11

1. No comments.

Drawing 7 of 11

1. The FM pipe marker indicated on the design drawing is not shown on the as-built. Reference NJSH 130 Station 39+00. Verify the as-built station.

Drawing 8 of 11

1. The FM pipe marker indicated on the design drawing is not shown on the as-built. Reference NJSH 130 Station 50+50. Verify the as-built station.

Page 4
March 15, 2016
BSA
Phase I Route 130 Force Main Extension
Review of As-Built Drawings; Testing Summary and Project Close-out Items

Drawing 9 of 11

- 1. The pipe classification with DR number of the HDPE casing pipe at NJSH 130 Station 54+00 and 58+50 shall be provided on the Drawings. The as-built should indicate what is used as a cap on each end of the casing pipes and what was the extra pipe wrapping at each cap.
- 2. The FM pipe marker indicated on the design drawing is not shown on the as-built. Reference NJSH 130 Station 57+00. Verify the as-built station.

Drawing 10 of 11

- 1. NJSH 130 Station 66+50; Pipe classification with DR number of the HDPE casing pipe at NJSH 130 Station 66+50 shall be provided on the Drawings. The as-built should indicate what is used as a cap on each end of the casing pipes and what was the extra pipe wrapping at each cap.
- 2. JSA to review field notes from station 65+00 match line. Based on the Drawing ending at station 65+00 this creates a one foot belly right before the air release manhole.
- 3. The FM pipe marker indicated on the design drawing is not shown on the as-built. Reference NJSH 130 Station 65+70. Verify the as-built station.

Drawing 11 of 11

- 1. Gravity Sewer: There are multiple notes indicating the gravity piping is PVC. We understood the piping is directional drilled HDPE. Please revise all references upon confirmation from the Contractor. Provide DR number.
- 2. Provide sanitary sewer main length from center to center of manhole and slope.
- 3. Existing Manhole Elevations: Please confirm 12" PVC sewer main connecting to manhole MHS 5027 is present and not an old design note. Shown as invert 21.56' in plan.
- 4. The FM pipe marker indicated on the design drawing is not shown on the as-built. Reference NJSH 130 Station 79+00. Verify its as-built presence.
- 5. Clean up overextended piping lines extending into proposed manhole.
- 6. Clarify where force main tracer wire ends. Indicate if included on HDPE sanitary sewer main.

2.0 SUMMARY OF FORCE MAIN/ROUTE 130 SANITARY SEWER PRESSURE TESTING

Pressure testing of the force main was conducted in six phases as provided in the table below. Test pressure is 160 psi unless otherwise noted. Test duration is 1-hour at constant pressure. All pipe sections passed pressure testing.

Date	Start Location	End Location	Pass/ Fail	Comment
12/4/13	M.H. 4, Station 37+20 NJSH 130 Scale	FM to Gravity M.H., Station 79+75 NJSH 130	Pass	Required several attempts to achieve PASS results due to FM leaks in manholes.
12/5/13	M.H. 4, Station 37+20 NJSH 130 Scale	M.H. 1A, Station 5+00 NJSH 130	Pass	Required several attempts to achieve PASS results due to FM leaks in manholes.
12/20/13	M.H. 1A, Station 5+00 NJSH 130 Scale	M.H. 1, Station 2+40, Rivergate Boulevard	Pass	Required several attempts to achieve PASS results due to FM leaks in manholes.
8/27/14	FM to Gravity M.H., Station 79+75 NJSH 130 Scale	Approx. Station 76+00 NJSH 130	Pass @ 27 PSI AIR	6-inch HDPE FM was re-bored and reinstalled. Test section was approximately 400 L.F. Pipe was pressure tested above ground prior to installation.
8/28/14	Approx. Station 80+82 NJSH 130 Scale	Approx. Station 79+75 NJSH 130	Pass @ 26 PSI AIR	6-inch HDPE FM was re-bored and reinstalled. Test section was approximately 106 L.F. Pipe was pressure tested above ground prior to installation.
11/20/14	Pump Station	M.H. 1 Station 2+40 Rivergate Boulevard	Pass	FM was tested at 100 psi due to pressure relief valve setting in pump station of 109 psi. See 12/2/14 below.
12/2/14	Pump Station	M.H. 1 Station 2+40 Rivergate Boulevard	Pass	Tested through pump station to bypass pumping flange. 160 PSI for 2 hours. Retest performed since last test was at 100 psi. Surge relief valve with a 109 psi setting was removed for this test.

Page 6
March 15, 2016
BSA
Phase I Route 130 Force Main Extension
Review of As-Built Drawings; Testing Summary and Project Close-out Items

2.1 SUMMARY OF SANITARY SEWER MAIN TESTING

Enclosed in Appendix B. All testing to be completed. Reference Manhole MHS B5.

3.0 PUMP STATION AS-BUILT INFORMATION

Information/Actions that are recommended on behalf of the Authority for action by the Applicant's representatives are as follows:

- 1. Authority to be provided with a plan of survey and a deed solely of the pump station lot. Authority solicitor will file deed at the County courthouse. Authority solicitor may request additional deed/plan copies for filing and distribution.
- 2. Plan (SP-1) indicates one property corner monument to be placed on one of the northern corners of the pump station property. Install monument if this has not already been accomplished.
- 3. Plan (SP-1) Retaining Wall: Applicant's representatives to note the retaining wall was installed under the inspection of the Township engineer while the retaining wall design shop drawings were undergoing revisions based on Authority review comments. Therefore, the pump station property boundaries shall not include the wall. This will continue under the ownership of whoever owns the remaining portions of the wall. Applicant's representatives to prepare an easement for the tie backs to be issued by the Authority to the wall owner.
- 4. As-built the 12 inch diameter condensate drain line.
- 5. As-built bioxide tank concrete slab corners and verify it is within the property lines. Identify top of slab elevation.
- 6. As-built HVAC units concrete slab corners and top of slab elevations.
- 7. Based on contractor information identify location of conduits/drains between the pump station and bioxide slab, and between site light and building. Confirm bioxide slab drain piping was not installed and a stub piece of pipe installed at wet well penetration to fill the opening.
- 8. Contractor to identify any changes to the piping layouts shown on drawings P-1 and P-2.
- 9. Besides the force main/sanitary sewer other utilities that are aligned outside of the pump station lot require blanket easements/clarifications as follows:
 - 12" Condensate (Stormwater) Line: Resolve with Authority ownership of the condensate line once off the pump station lot. Clarify the Authority does not own the terminal stormwater manhole located outside the pump station lot.

Page 7
March 15, 2016
BSA
Phase I Route 130 Force Main Extension
Review of As-Built Drawings; Testing Summary and Project Close-out Items

- Electrical Lines: Need to clarify who owns the pole and where does PSE&G ownership end? If PSE&G owns all electrical lines outside of the pump station lot, then no Authority easements are required.

4.0 DIRECTIONAL DRILLING BACKUP INFORMATION

Per Spec Section 02511:

Section 1.3.H. and J.: Data logger and joint calibration information; provide to the Authority.

Per Spec Section 15080:

 Section 1.5.G: Manufacturer's rep on site visits: Site visit letter enclosed in Attachment Section at end of the letter.

5.0 PROJECT CLOSE-OUT INFORMATION

Per Spec Section 02505:

 Section 3.10: Provide television video of all sewer mains. Conduct based on NASSCO standards.

Uncompleted Work:

• The sanitary sewer section between manholes MHS B2A and MHS B1 does not possess an upstream terminal manhole. The sewer main section has not been air or mandrel tested. In addition, the pipe slope is unknown. Authority/Applicant to resolve eventual ownership of this sewer main section.

WQM-005 Certification:

Our office to address upon your direction.

Page 8 March 15, 2016 **BSA** Phase I Route 130 Force Main Extension Review of As-Built Drawings; Testing Summary and Project Close-out Items

If you have any questions concerning this correspondence, please feel free to contact us. If any supplemental additional items have not been documented we will address to your attention prior to the Authority March meeting.

Sincerely,

REMINGTON, VERNICK & ARANGO ENGINEERS

By:

Richard B. Czekanski, P.E., BCEE, C.M.E.

RBC/rbc

cc w/encl:

Elizabeth Kwelty, BSA; Craig Dansbury, BSA, Director of Operations

Matt Mitcham, Blenheim Construction

Jeff Albert, Bordentown Waterfront Community

Sean Savage, Matrix New World

Richard Revolinsky, Kmetz Construction

Ray Longmore, RVA James A. Sassano, PLS



12/03/14

KMETZ INC.

KANT BRUNSWICK, N.J. 08816 O MERSH PONDS ROAD

PH: (732) 821-0533 FAN: (732) 821-5099

AS-BUILT DRAWING FORM

PROJECT NAME. LOCATION CUSTOMER

SEOTHER CONDITIONS MINIMITAL COVER. TVPE & SIZE

Evisting 30 steel casing/24 gas inside 8-7 Top

Shoulder John Le

6"HOPE 10" × 10" long steel casing

THE WAS STAND WITH WITH THE WITH Exercise the specimental the provide

MODEST O STATE OF STATES

574 12+75

KMETZ INC. REPRESENTATIVE

Page 10
March 15, 2016
BSA
Phase I Route 130 Force Main Extension
Review of As-Built Drawings; Testing Summary and Project Close-out Items

Attachment 2– Sanitary Sewer Test Reports

Bordentown Sewerage Authority Construction Administration Log

Name of Development:

Bordentown Waterfront Community Phase I

Pipe Type: Location:

Gravity Sewer Main

Rivergate Boulevard and South; and End of Force Main

R&V Project #:

0304N058

Facility Testing Items R	tequired Prior to Fina	I Construction Approval
	teference BSA standa 3.12) (Test Pressure	ard specifications, section = 4 psi)
	Date Complete	Comments
Wet Well - MHS B2 (12")	Not Tested	
MHS 2 - MHS 2A (12")	12/3/2014	11.5 Minutes
MHS 2A - MHS 2B (12")	12/3/2014	11.5 Minutes
MHS 2A - MHS 1 (10")	Not Tested	Manhole MHS 1 not installed
MHS 2B - MHS 3 (10")	12/3/2014	11.5 Minutes
MHS 3 - MHS 4 (12")	12/3/2014	11.5 Minutes
MHS 4 - MHS 5 (10")	12/3/2014	11.5 Minutes
End of Force Main (12")	8/28/2014	26 PSI for 16.5 hours with no loss of watter/pressure (3:00 PM-7:30 AM)
		=======================================
PVC F	Pipe - Mandrell Testin	g (5%)
	Date Complete	Comments
Wet well - MHS B2	N/A	Pipe is DI
MHS 2 - MHS 2A	12/4/2014	
MHS 2A - MHS 2B	12/4/2014	
		Manhole MHS 1 not
MHS 2A - MHS 1	Not Performed	installed
MSH 2B - MHS 3 (10")	12/3/2014	11.5 Minutes
MHS 3 - MHS 4	12/4/2014	11.5 Minutes
MHS 4 - MHS 5	12/4/2014	22
End of Force Main	N/A	HDPE Pipe

Video: 9/17/2014 103' Sanitary Sewer Televised by American Pipe Cleaning; Applicant to provide video; observation summary received

Bordentown Sewerage Authority Construction Administration Log

Name of Development: Pipe Type: Location: R&V Project #:

Bordentown Waterfront Community Phase I

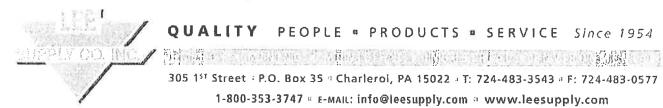
Gravity Sewer Main

Rivergate Boulevard and South; and End of Force Main 0304N058

	02560, 3.6)	<u> </u>
	Date Complete	Comments
Wet Well		.75
MHS B1	Not Performed	Manhole not installed
MHS B2	12/4/2014	899
MHA B2A	12/4/2014	===
MHS B2B	12/4/2014	
MHS B3	12/4/2014	
MHS B4	12/4/2014	
MHS B5	Testing Required	Force main manhole to the northwest (MHS-2) no installed

Page 11 March 15, 2016 BSA Phase I Route 130 Force Main Extension Review of As-Built Drawings; Testing Summary and Project Close-out Items

Attachment 3- HDPE Joint Fusion QA/QC



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February 1, 2016

Kevin Kmetz Kmetz Inc. 10 Fresh Ponds Roads East Brunswick, NJ 08816

RE: Rt/30 Bordentown 6" DR11 Dips FM

Kevin,

Rick Kemp, our sales representative, was on site at least six times to observe fusion process, inspect the fusion equipment, and ensure the proper handling of the pipe. The dates on record are 9-4-13, 9-27-13, 10-9-13, 10-21-13, 11-4-13, 12-19-13, and 9-2-14. Rick noted that while on site all proper procedures were adhered to.

Todd-Dooley Lee Supply Co., Inc.

EXHIBIT "C"



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PRINCIPALS

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Richard B. Czekanski, PE, CME, BCEE
Annina Hogan, PE, RA, CME, CPWM, LEED-AP
Kenneth C., Ressler, PE, CME
Frank J. Seney, Jr., PE, PP, CME, NBIS
Gregory J. Sullivan, PE, PP, CME, CEA

PLEASE REPLY TO THE NOTED OFFICE

Remington & Vernick Engineers 232 Kings Highway East Haddonfield, NJ 08033

> Remington, Vernick & Vena Engineers 9 Allen Street Toms River, NJ 08753 (732) 286-9220

3 Jocama Boulevard, Sulte 300-400 Old Bridge, NJ 08857 (732) 955-8000

> Remington, Vernick & Walberg Engineers 845 North Main Street Pleasantville, NJ 08232 (2) (609) 645-7110

> 4907 New Jersey Avenue Wildwood City, NJ 08260 (609) 522-5150

> Melford Plaza I, Suite 400 16701 Melford Boulevard Bowie, MD 20715 (240) 544-5382

> Remington, Vernick & Beach Engineers 922 Fayette Street Conshohocken, PA 19428 (610) 940-1050

1000 Church Hill Road, Suite 220 Pittsburgh, PA 15205 [] (412) 263-2200

Univ. Office Plaza, Bellevue Building 262 Chapman Road, Suite 105 Newark, DE 19702 (302) 266-0212

Remington, Vernick & Arango Engineers

The Presidential Center, Lincoln Building Suite 600, 101 Route 130, Cinnaminson, NJ 08077 (856) 303-1245

> 300 Penhorn Avenue, 3rd Floor Secaucus, NJ 07094 (201) 624-2137

March 16, 2016

Richard D. Eustace, Executive Director Bordentown Sewerage Authority PO Box 396 954 Farnsworth Avenue Bordentown, NJ 08505

Re: Bordentown Sewerage Authority
Bordentown Waterfront Development
Phase I On-Site and Route 130 Conveyance System Extension
Second Bond Reduction Request
Our File No. 0304N058

Via 2/26/2016 email the Applicant requested a complete performance bond release for the above referenced project. Pertinent information is as follows:

• The total Phase 1 bond value including the 20% bond guarantee is \$1,682,749.20. This bond includes the pump station; on-site and off-site sanitary sewer main work; and on-site and off-site force main piping. It does not include any New Jersey Transit rail crossing work.

Per April 20, 2015 Authority Board action (Resolution 2015-041 referencing Phase 1A) this bond was reduced 75 % to \$420,680.30.

 A separate bond is in place for the sanitary sewer mains in the East Village apartment area with a value of \$110,041.20. This bond is not part of this bond reduction request.

A bond reduction limit of 75 percent is the maximum permitted reduction. Therefore, no future bond reductions will be made. Therefore based on current conditions the only permitted steps are either rejection or complete release of the performance bond to a two year maintenance bond at 10% of the original value of the performance bond (\$168,294.92).

At this time we recommend <u>conditional</u> complete release of the performance bond based on the following:

- Applicant satisfactory addresses our December 18, 2015 correspondence to the Authority mainly regarding on-site sanitary sewer main as-built comments.
- Applicant satisfactory addresses our March 15, 2016 correspondence to the Authority mainly regarding force main as-built comments and project closeout items.

t:\water\facilities06on\nj burlington\0304 bordentown sa\developments\n058 - phase 1b and off-site work; bwc\correspondence\bond reductions\3-16-2016 second reduction corres.doc

Page 2 of 2 Bordentown Waterfront Community Phase 1 Performance Bond Release March 16, 2016

- 3. All sanitary sewer mains are successfully televised with no apparent issues.
- 4. Deed, easement and access issues are satisfactorily addressed as follows:
 - Provide pump station deed with a northwest limit at the pump station side face of the retaining wall. The Authority is not to own the wall.
 - Provide on-site blanket easements for personnel/vehicle access; sanitary sewer main; force main; and pump station storm water piping. There is more than one lot south of Rivergate Boulevard. The Authority's blanket easements shall be applicable to all the lots. The Authority solicitor will add easement restrictions.
 - Provide acceptable commitment on operation and maintenance of private access road extending from Rivergate Boulevard to the pump station lot and a secondary access not involving Rivergate Boulevard extending from Route 130 to the pump station lot.

A maintenance bond should not be physically provided until the conditions are satisfied.

Should you have any questions concerning this correspondence, please feel free to contact us Sincerely,

REMINGTON, VERNICK & ARANGO ENGINEERS

By:

Richard B. Czekanski, P.E., BCEE, C.M.E.

RBC/rbc

CC:

Elizabeth Kwelty, BSA

Craig Dansbury, BSA, Director of Operations

Matt Mitchan, Blenheim Construction

Jeffrey B. Albert, Bordentown Waterfront Community

Sean Savage, Matrix New World

Ray Longmore, RVA

Tom Coleman, BSA Solicitor