



North Bay Village

Administrative Offices

1666 Kennedy Causeway, Suite 300 North Bay Village, FL 33141

Tel: (305) 756-7171 Fax: (305) 756-7722 Website: www.nbvillage.com

Addendum 2
Issued on January 8, 2016

BID NO. NBV 2015-001
FOR
SANITARY SEWER REHABILITATION
PROGRAM

Issued by: North Bay Village

Notice to all Bidders:

All addenda must be acknowledged and be submitted with the Bid Package.

1. Construction Documents – Sanitary Sewer Rehabilitation Project
Plans Dated 8/03/2015 – Sheets CS, C-00, C-01 through C-06.

These plans supplement and are part of the RFP and construction specifications.

PROOF OF RECEIPT

Recipient

Signature:

Print Name:

Company:

Date:

SUBMIT WITH RFP RESPONSE

Mayor
Connie Leon-Kreps

Vice Mayor
Jorge Gonzalez

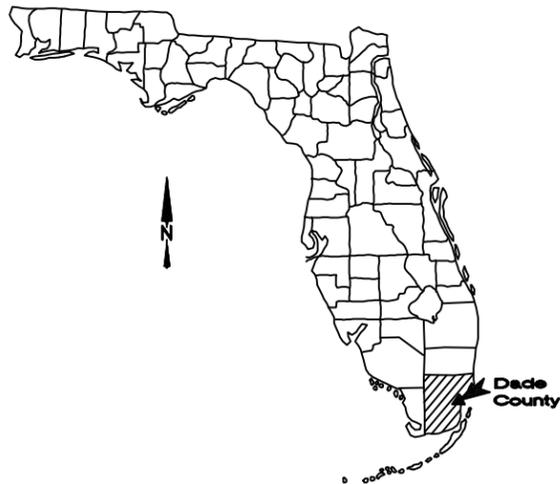
Commissioner
Dr. Richard Chervony

Commissioner
Andreana Jackson

Commissioner
Eddie Lim

K:\FTL\Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\CS COVER SHEET.dwg

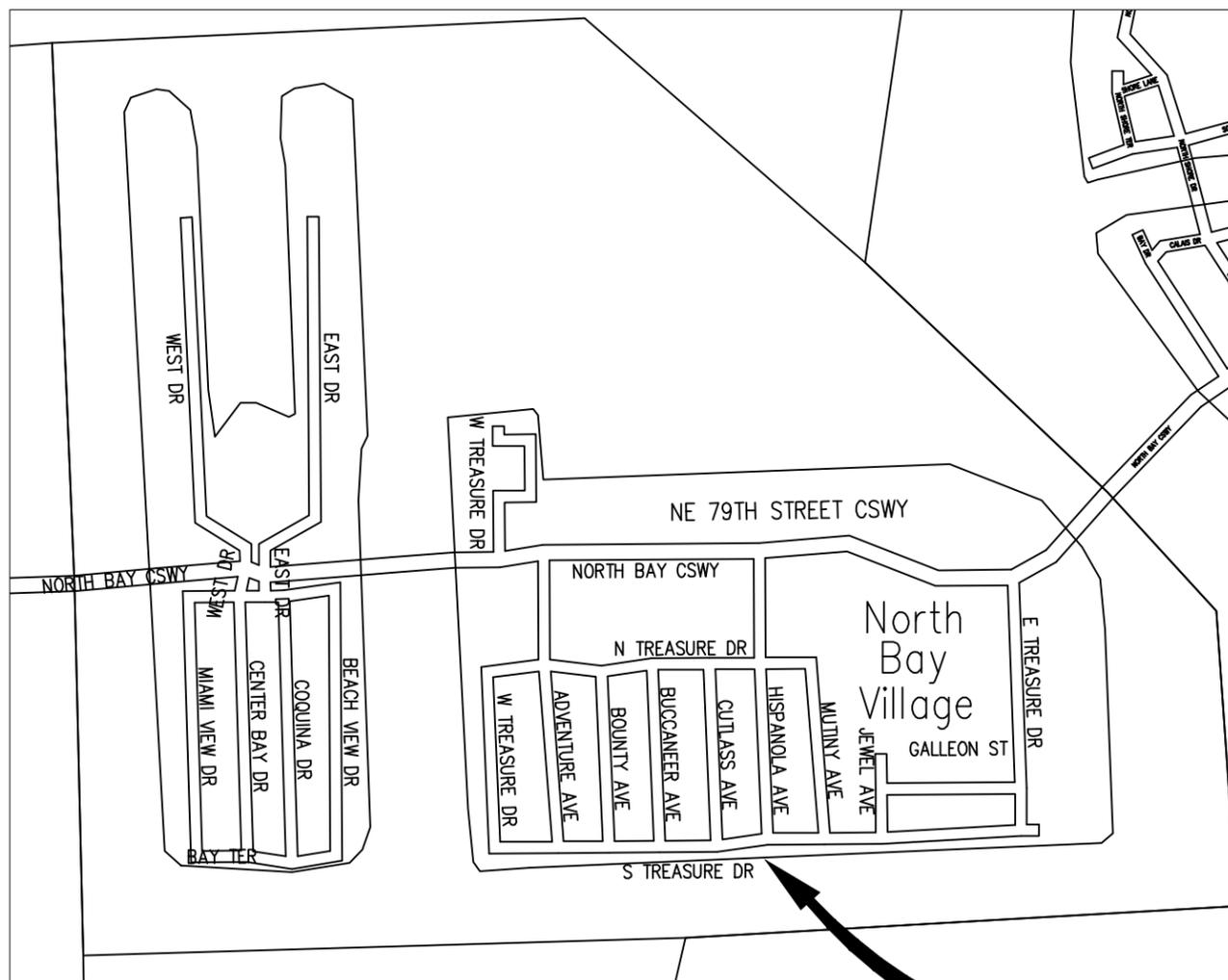
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH BAY VILLAGE

MIAMI-DADE COUNTY, FLORIDA

SANITARY SEWER REHABILITATION PROJECT



VICINITY MAP
N.T.S.

**PROJECT
LOCATION**

SHEET INDEX	
SHEET NO.	DESCRIPTION
CS	COVER SHEET
C-00	GENERAL NOTES
C-01	BASIN 1 & 2 IMPROVEMENTS
C-02	BASIN 3 IMPROVEMENTS
C-03	BASIN 4 & 5 IMPROVEMENTS
C-04	BASIN 6 IMPROVEMENTS
C-05	BASIN 7 IMPROVEMENTS
C-06	SANITARY SEWER INFORMATION TABLE

ELECTED OFFICIALS

CONNIE LEON-KREPS	MAYOR
JORGE GONZALES	VICE-MAYOR
EDDIE LIM	COMMISSIONER
DR. RICHARD CHERVONY	COMMISSIONER
WENDY DUVALL	COMMISSIONER

CITY OFFICIALS

FRANK ROLLASON	CITY MANAGER
RODNEY CARRERO-SANTANA	PUBLIC WORKS DIRECTOR

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT
043138027
DATE
08/03/2015
SCALE AS SHOWN
DESIGNED BY GR
DRAWN BY AL
CHECKED BY GR

**SANITARY SEWER
REHABILITATION PROJECT**
PREPARED FOR
NORTH BAY VILLAGE

MIAMI-DADE COUNTY

LICENSED PROFESSIONAL
GARY RATAY, P.E.
46682
DATE: 08/03/2015

FLORIDA

COVER SHEET

SHEET NUMBER

CS

K:\FTL_Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-00 GENERAL NOTES.dwg

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and reliance on this document without written authorization and adoption by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

1. All materials and labor under this project shall be in strict accordance with the requirements of the Miami-Dade Water and Sewer Department and shall conform to the standards and specifications available and on file with the Department. Submit shop drawings for all materials.
2. Cover over water or sewer force mains shall be 4'-0" min.
3. All main line valves shall be installed complete with 10" riser pipes and No. 3 or 53 valve boxes. Fire hydrants and service valves shall be installed complete with 6" riser pipes and No. 2 valve boxes.
4. All force main service connections into pressure transmission mains shall have a shut off valve and check valve at the point of entry.
5. All gravity systems shall be constructed in accordance with Department standards.
6. All water meters will be installed by the Miami-Dade Water and Sewer Department providing the appropriate charges have been prepaid.
7. Fire hydrant requirements (number and location) shall be as required by Dade County Fire Department or the appropriate Fire agency with installation in accordance with Department standards.
8. Contractor MUST CALL M-DWASD Inspection Division to arrange for a preconstruction meeting 2 full business days prior to proposed start of construction. Contact One Call Center 48 hrs prior to excavation.
9. Contract Inspector will inspect any facilities approved by the Department. All other requirements of the permitting agency shall be in accordance with their standards and requirements.
10. Work performed under this Project will not be considered as complete until final acceptance of the system by the Department and until the following documents are received and approved by the Department.
 1. Easements, if required
 2. Contractor's Waiver and Release of Lien.
 3. Absolute Bill of Sale.
 4. Contractor's Letter of Warranty (i.e., Letter Agreement)
 5. Developer's Contract Bond (i.e., Contract Agreement)
 6. "As-Built" 4 mil mylar 24"x 36" showing specific locations, depth, etc. of all water and sewer facilities as located by licensed surveyor, along with prints of "as-built" which have been signed and sealed by a Registered Surveyor or Engineer of Record, and endorsed by the Contractor. (No. of prints: 3-for water, 4-for gravity sewer and 5-for force main or pump station projects).
 7. H.R.S. Letter of Release required for all water projects.
11. All new connections from existing Department mains to be made by Department forces ONLY. The Contractor to excavate at required locations, provide and install material with fittings, prior to tap.
12. An approved paving and drainage plan must be submitted to MDWASD for all new subdivisions prior to approval of water and sewer permit plans, upon request.
13. Unless otherwise specified, all taps 20 inches and smaller for connections to existing mains will require a tapping sleeve and tapping valve provided and installed by Department forces. Under no circumstances will the Contractor be permitted to tap existing mains in the size range specified above.

MIAMI-DADE COUNTY Delivering Excellence Every Day		ISSUE DATE	APPROVED BY	STANDARD DETAIL	CROSS REF.	SPEC. REF.
		11/01/2006	V.E.F.	STANDARD REQUIREMENTS WATER AND SEWER CONSTRUCTION	GS	0.5
						SHEET 1 OF 2

1. At the completion of any water and sewer job either Donation or Contract, the Contractor shall submit.
 - a. "As-Built" mylar 24"x 36" (min. 4 mil thickness) for each phase.
 - b. Blue line (from mylar) which has been signed and sealed by Registered Survey or Engineer of Record, and endorsed by the Contractor. (Qty. of prints, as required by the Department.)
2. "As-Built" Format:
 - a. 24"x 36" mylar
 - b. The word "As-Built" in large letters.
 - c. Title block with Department E.R. number and pertinent information.
 - d. Preferred scale to be 1"= 40' horizontally and 1"= 4' vertically.*
 - e. Street nomenclature.
 - f. Separate water and sewer profile.
 - g. Station main starting with 0 + 00 at permanent reference point (i.e. C, S, etc.) and to run continuously to end of main at center line of pipe.
 - h. Easements, if any, tied to permanent reference point.
 - i. Identify all control lines (i.e. bldg. line, property line, R/W, etc).
 - j. All "proposed" information to be removed from mylar, leaving only "as-built" information reflected in drawings.
3. Water "As-Built" must include:
 - a. Plans showing pipe size, material and offset of main, deflections (if any), station of services, hydrants and fittings at the mainline (if perpendicular to it), and at main and end of services if any, other angle, and deflection of pipe, if any.
 - b. Profile showing top of ground and top of pipe elevations at every 100' station and at any change in grade (with corresponding station), pipe size and pipe materials reference to plan.
4. Sewer "As-Built" must include:
 - a. Plan showing manhole number, pipe size and pipe material of pipe, deflection, if any (force main only), and location of laterals with reference to manhole.
 - b. Profile showing manhole number (as per plan), rim and invert elevations (if more than one invert, label north, south, etc), and station starting at 0+00 at downstream manhole.
5. Force main "As-Built" same as water main.

* Other scale may be permitted, but must be approved by the Department prior to preparation of drawings.

MIAMI-DADE COUNTY Delivering Excellence Every Day		ISSUE DATE	APPROVED BY	STANDARD DETAIL	CROSS REF.	SPEC. REF.
		11/01/2006	V.E.F.	"AS-BUILT" REQUIREMENTS	GS	0.5
						SHEET 2 OF 2

GENERAL NOTES

1. CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN PER APPLICABLE FDOT STANDARD INDEXES FOR APPROVAL PRIOR TO START OF WORK.
2. CONNECTIONS TO EXISTING UTILITIES SHALL NOT BE MADE UNTIL ALL NECESSARY CERTIFICATIONS AND APPROVALS HAVE BEEN OBTAINED FROM THE APPROPRIATE AGENCIES. EXISTING UTILITIES MUST REMAIN IN SERVICE UNTIL NEW UTILITIES ARE READY FOR CONNECTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING PLAN THAT WILL PROVIDE PRETREATMENT OF EFFLUENT PRIOR TO DISCHARGE INTO THE EXISTING DRAINAGE SYSTEM. COST FOR DEWATERING TO BE INCLUDED IN THE RELATED BID ITEM FOR THE WORK BEING DONE.
4. ALL APPLICABLE PERMITS MUST BE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND ALL APPLICABLE FEES AND CHARGES MUST BE PAID PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL UTILITIES AND NOTIFICATION OF SUNSHINE STATE ONE CALL.
6. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION PLANS ON SITE. THE PLANS ARE TO BE MADE AVAILABLE TO THE ENGINEERING INSPECTOR OR HIS DESIGNEE UPON REQUEST.
7. ALL CONSTRUCTION, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF M-DWASD, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FDOT AND ALL OTHER LOCAL AND NATIONAL CODES WHERE APPLICABLE.
8. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE STRICTLY OBSERVED.
9. EXISTING UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES WITHIN THE AREAS OF CONSTRUCTION.
10. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
11. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER.
12. THE CONTRACTOR SHALL SUPPORT ANY UTILITIES UNCOVERED DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE CITY.
13. CONTRACTOR SHALL MAINTAIN REQUIRED COVER AND UTILITY SEPARATION AS SHOWN AND SPECIFIED FOR ALL UTILITY IMPROVEMENTS.
14. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO LOCATE, EXCAVATE AND PREPARE FOR CONNECTIONS TO EXISTING SYSTEMS AS SHOWN ON THE DRAWINGS. CONNECTIONS INCLUDE BUT ARE NOT LIMITED TO WATER MAIN AND FORCE MAIN. THE COST FOR THIS WORK AND FOR THE ACTUAL CONNECTION TO THE EXISTING SYSTEMS SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED MATERIAL FOR THE PROJECT AND SHALL NOT BE INCLUDED IN ANY ADDITIONAL COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE COMPLETE FINAL RECORD DRAWINGS TO THE OWNER AS SPECIFIED. ALL AS-BUILT MEASUREMENTS AND ELEVATIONS TO BE SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
16. ALL PIPING TO BE RESTRAINED.
17. CONTRACTOR TO REMOVE AND DISPOSE OF IN A LEGAL MANNER EXISTING WATER MAIN, FORCE MAIN, MOUNTING BRACKET, AND HANGERS ONCE THE NEW UTILITIES ARE INSTALLED AND OPERATIONAL.
18. ALL ROADWAY, PARKING LOT, AND AREAS OF THE PROJECT SITE IMPACTED BY CONSTRUCTION MUST BE RESTORED TO EQUAL OR BETTER CONDITION AND IN COMPLIANCE WITH THE EXISTING CITY OF NORTH BAY VILLAGE CONTRACT AND THE CITY OF MIAMI BEACH REQUIREMENTS.
20. REFERENCE MEASUREMENT AND PAYMENT SECTION 01150 FOR ADDITIONAL PROJECT/CONSTRUCTION INFORMATION.

DERM NOTES ON WATER-SEWER INSTALLATION (NOT PART OF M-DWASD NOTES FOR APPROVAL)

1. A HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. WHEN THE 10 FEET HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH SLIP-ON OR MECHANICAL JOINTS AND PRESSURE TESTED AT 150 PSI.
2. A VERTICAL DISTANCE OF AT LEAST 12 INCHES SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS. THE SEWER SHALL BE A DUCTILE IRON SINGLE 20 FEET PIPE LENGTH CENTERED ON THE CROSSING IF THE MINIMUM VERTICAL DISTANCE IS LESS THAN 12 INCHES OR IF THE SEWER IS INSTALLED ABOVE THE WATER MAIN (REGARDLESS OF SEPARATION).
3. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING IF THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO A COMPLETE EVALUATION OF THE CONDITIONS.
4. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELL FIELD PROTECTION AREA SHALL BE FIFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY FOR RESIDENTIAL LAND USE AND TWENTY (20) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY FOR NONRESIDENTIAL LAND USE.
5. FORCE MAIN SEWERS CONSTRUCTED IN A PUBLIC WELL FIELD PROTECTION AREA SHALL BE EITHER DUCTILE IRON OR REINFORCED CONCRETE PRESSURE SEWER PIPES. FOR DUCTILE IRON PIPE EXFILTRATION RATE SHALL NOT BE GREATER THAN THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWAS) C600-82 AT A TEST PRESSURE OF 100 PSI FOR REINFORCED CONCRETE PRESSURE SANITARY SEWER FORCE MAIN EXFILTRATION RATE SHALL NOT BE GREATER THAN HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 PSI.
6. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH AND CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
7. ALL OTHER PUBLIC OR PRIVATE UTILITY FACILITIES SHALL BE CONSTRUCTED AT LEAST 5 FEET FROM ANY SEWER MAIN AS MEASURED FROM THE OUTSIDE BELL OF THE UTILITY PIPES.
8. WHEN THE 5 FEET SEPARATION BETWEEN PROPOSED AND EXISTING LINE IS NOT POSSIBLE, THE CONTRACTOR SHALL HAND DIG OR EXPOSE THE WATER AND SEWER PIPES BEFORE PROCEEDING WITH POWER EQUIPMENT EXCAVATION.
9. IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE SAME TRENCH PARALLEL AND ABOVE AN EXISTING WATER OR SEWER PIPE EXCEPT WHERE THEY CROSS. ANY DEVIATION FROM NOTES 6, 7 AND 8 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.
10. A NON-RESETTABLE ELAPSE TIME METER SHALL BE INSTALLED AT EACH PUMP TO RECORD THE TOTAL OPERATING HOURS OF THE STATION.

NOTES BY M-DWASD FOR PROPOSED REMOVAL OF UTILITY LINE

1. ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN IN EFFECT AND IN SERVICE UNTIL SUCH TIME WHEN PROPOSED REPLACING UTILITIES HAVE BEEN INSTALLED, TESTED, ACCEPTED, AND READY FOR CONNECTION TO THE EXISTING SYSTEM. AFTER PROPOSED UTILITIES ARE CONNECTED TO THE EXISTING SYSTEM AND IN SERVICE, THE EXISTING UTILITIES ARE TO BE REMOVED. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ALL ABANDONED OR REPLACED UTILITY LINES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AND CAPPED AT MAIN, WHEN APPLICABLE. AFTER ALL INSTALLED SERVICES TO OR FROM THEM HAVE BEEN TRANSFERRED TO THE ALREADY INSTALLED AND IN SERVICE PROPOSED UTILITY LINES, ANY RELATED EASEMENT SHALL BE RELEASED AND VACATED AFTER REMOVAL OF LINES AND RESTORATION OF SITE, IF APPLICABLE, HAVE BEEN COMPLETED.
3. FOR RELOCATION OF EXIST. WATER SERVICES TO THE PROP. WM. INSPECTOR TO COORDINATE WITH M-DWASD WATER DISTRIBUTION DIVISION.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT 043138027
DATE 08/03/2015
SCALE AS SHOWN
DESIGNED BY GR
DRAWN BY AL
CHECKED BY GR

**SANITARY SEWER
REHABILITATION PROJECT**

PREPARED FOR
NORTH BAY VILLAGE

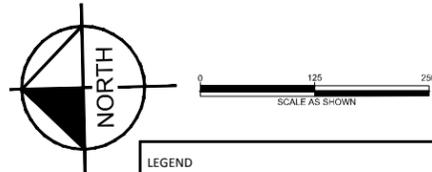
MIAMI-DADE COUNTY FLORIDA

LICENSED PROFESSIONAL
GARY RATAY, P.E.
46682
DATE: 08/03/2015

GENERAL NOTES

SHEET NUMBER
C-00

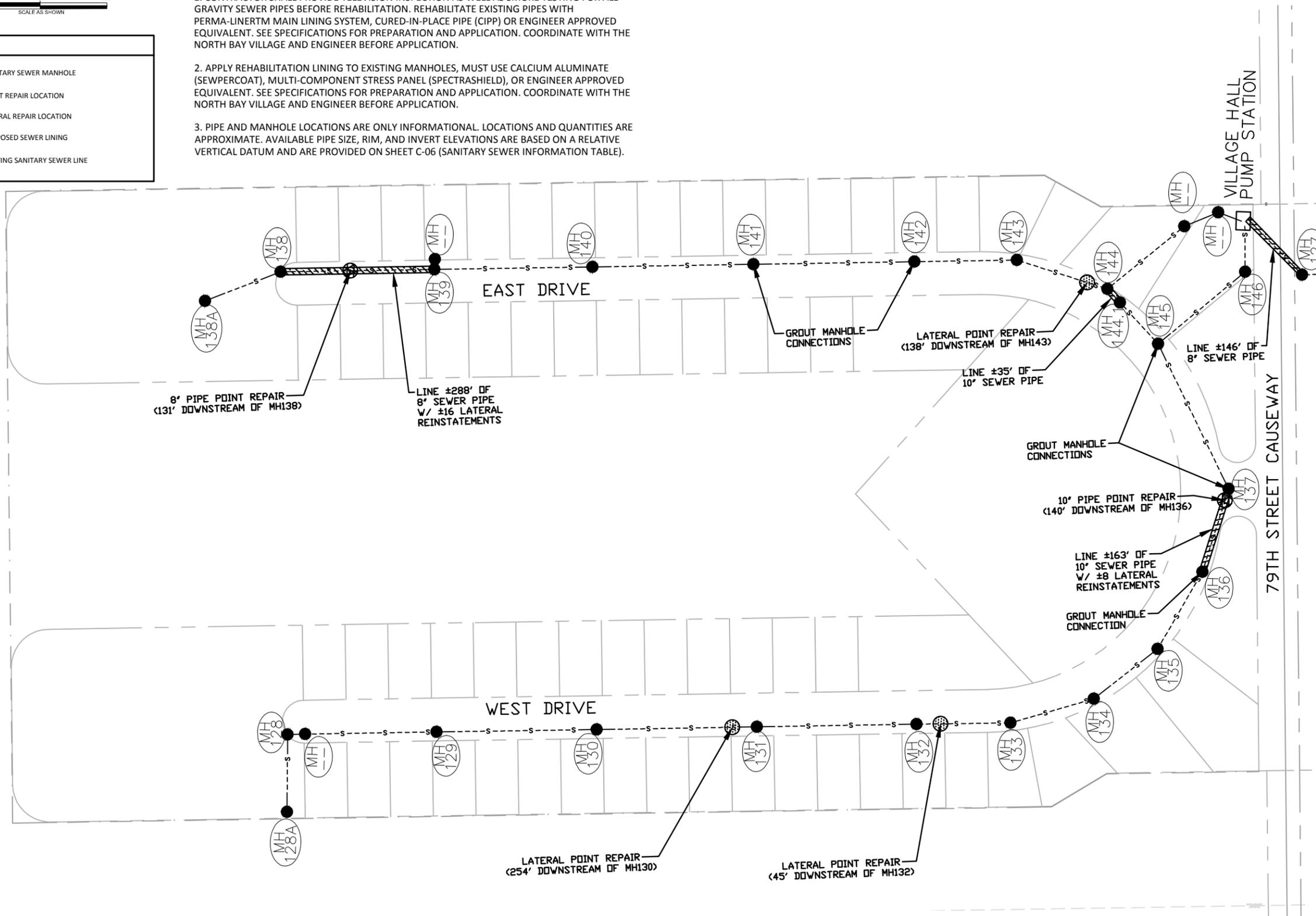
K:\FTL\Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-01 BASIN 1 IMPROVEMENTS.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND	
	SANITARY SEWER MANHOLE
	POINT REPAIR LOCATION
	LATERAL REPAIR LOCATION
	PROPOSED SEWER LINING
	EXISTING SANITARY SEWER LINE

REHABILITATION NOTES:

1. CONTRACTOR SHALL PROVIDE TELEVISION INSPECTION AS WELL AS SMOKE TESTING FOR ALL GRAVITY SEWER PIPES BEFORE REHABILITATION. REHABILITATE EXISTING PIPES WITH PERMA-LINERTM MAIN LINING SYSTEM, CURED-IN-PLACE PIPE (CIPP) OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
2. APPLY REHABILITATION LINING TO EXISTING MANHOLES, MUST USE CALCIUM ALUMINATE (SEWPERCOAT), MULTI-COMPONENT STRESS PANEL (SPECTRASHIELD), OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
3. PIPE AND MANHOLE LOCATIONS ARE ONLY INFORMATIONAL. LOCATIONS AND QUANTITIES ARE APPROXIMATE. AVAILABLE PIPE SIZE, RIM, AND INVERT ELEVATIONS ARE BASED ON A RELATIVE VERTICAL DATUM AND ARE PROVIDED ON SHEET C-06 (SANITARY SEWER INFORMATION TABLE).



No.	REVISIONS	DATE	BY

Kimley»Horn
 © 2015 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	043138027
DATE	08/03/2015
SCALE	AS SHOWN
DESIGNED BY	GR
DRAWN BY	AL
CHECKED BY	GR

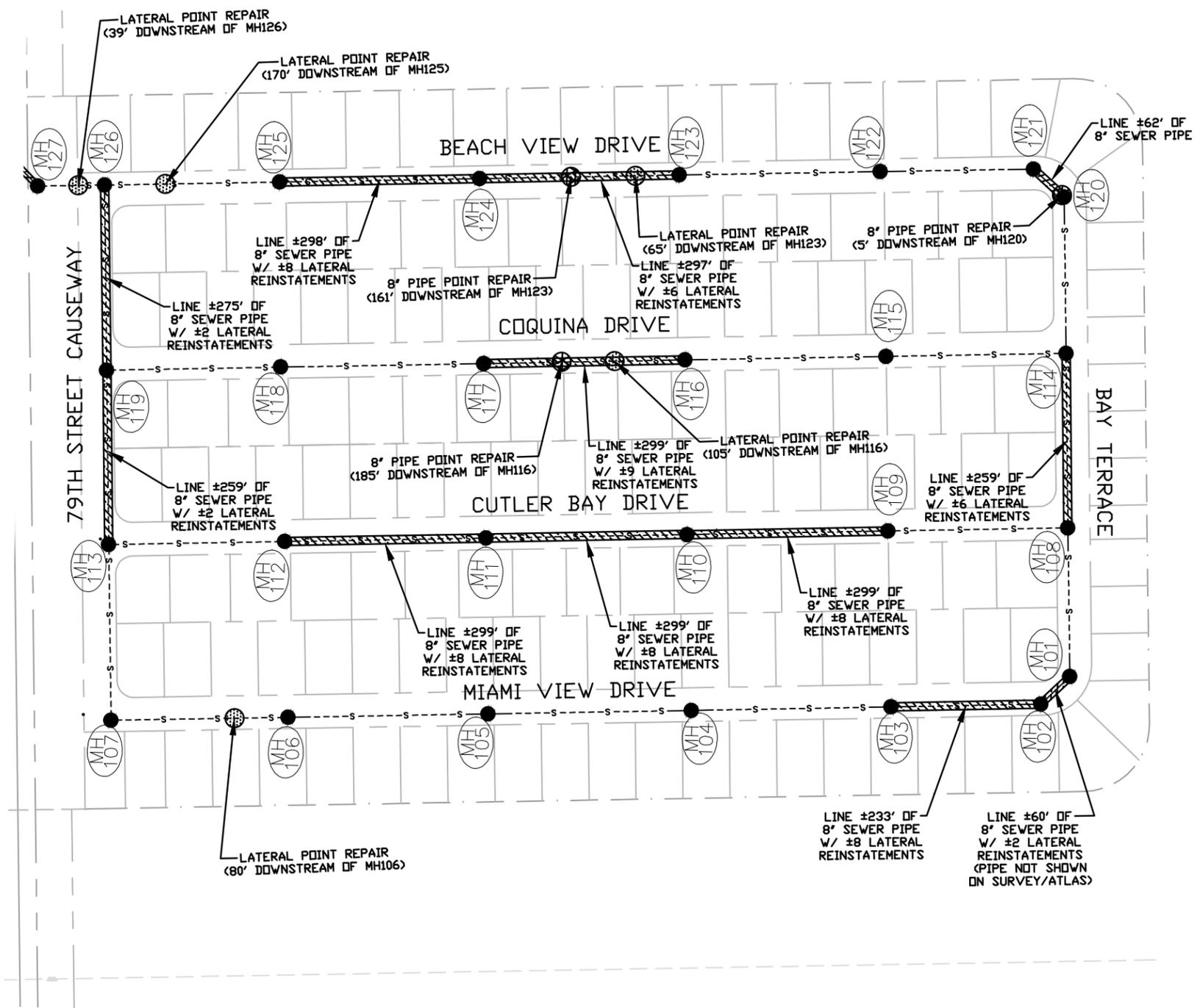
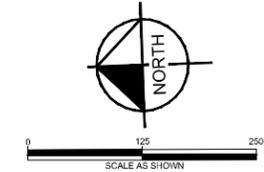
SANITARY SEWER REHABILITATION PROJECT
 PREPARED FOR
NORTH BAY VILLAGE
 MIAMI-DADE COUNTY FLORIDA

LICENSED PROFESSIONAL	GARY RATAY, P.E.
46682	DATE: 08/03/2015

BASIN 1 & 2 IMPROVEMENTS

SHEET NUMBER	C-01
--------------	------

K:\FTL\Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-01 BASIN 1 IMPROVEMENTS.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND	
	SANITARY SEWER MANHOLE
	POINT REPAIR LOCATION
	LATERAL REPAIR LOCATION
	PROPOSED SEWER LINING
	EXISTING SANITARY SEWER LINE

REHABILITATION NOTES:

1. CONTRACTOR SHALL PROVIDE TELEVISION INSPECTION AS WELL AS SMOKE TESTING FOR ALL GRAVITY SEWER PIPES BEFORE REHABILITATION. REHABILITATE EXISTING PIPES WITH PERMA-LINERTM MAIN LINING SYSTEM, CURED-IN-PLACE PIPE (CIPP) OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
2. APPLY REHABILITATION LINING TO EXISTING MANHOLES, MUST USE CALCIUM ALUMINATE (SEWPERCOAT), MULTI-COMPONENT STRESS PANEL (SPECTRASHIELD), OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
3. PIPE AND MANHOLE LOCATIONS ARE ONLY INFORMATIONAL. AVAILABLE PIPE SIZE, RIM, AND INVERT ELEVATIONS ARE BASED ON A RELATIVE VERTICAL DATUM AND ARE PROVIDED ON SHEET C-06 (SANITARY SEWER INFORMATION TABLE).

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	043138027
DATE	08/03/2015
SCALE	AS SHOWN
DESIGNED BY	GR
DRAWN BY	AL
CHECKED BY	GR

**SANITARY SEWER
 REHABILITATION PROJECT**

PREPARED FOR
NORTH BAY VILLAGE

MIAMI-DADE COUNTY
 FLORIDA

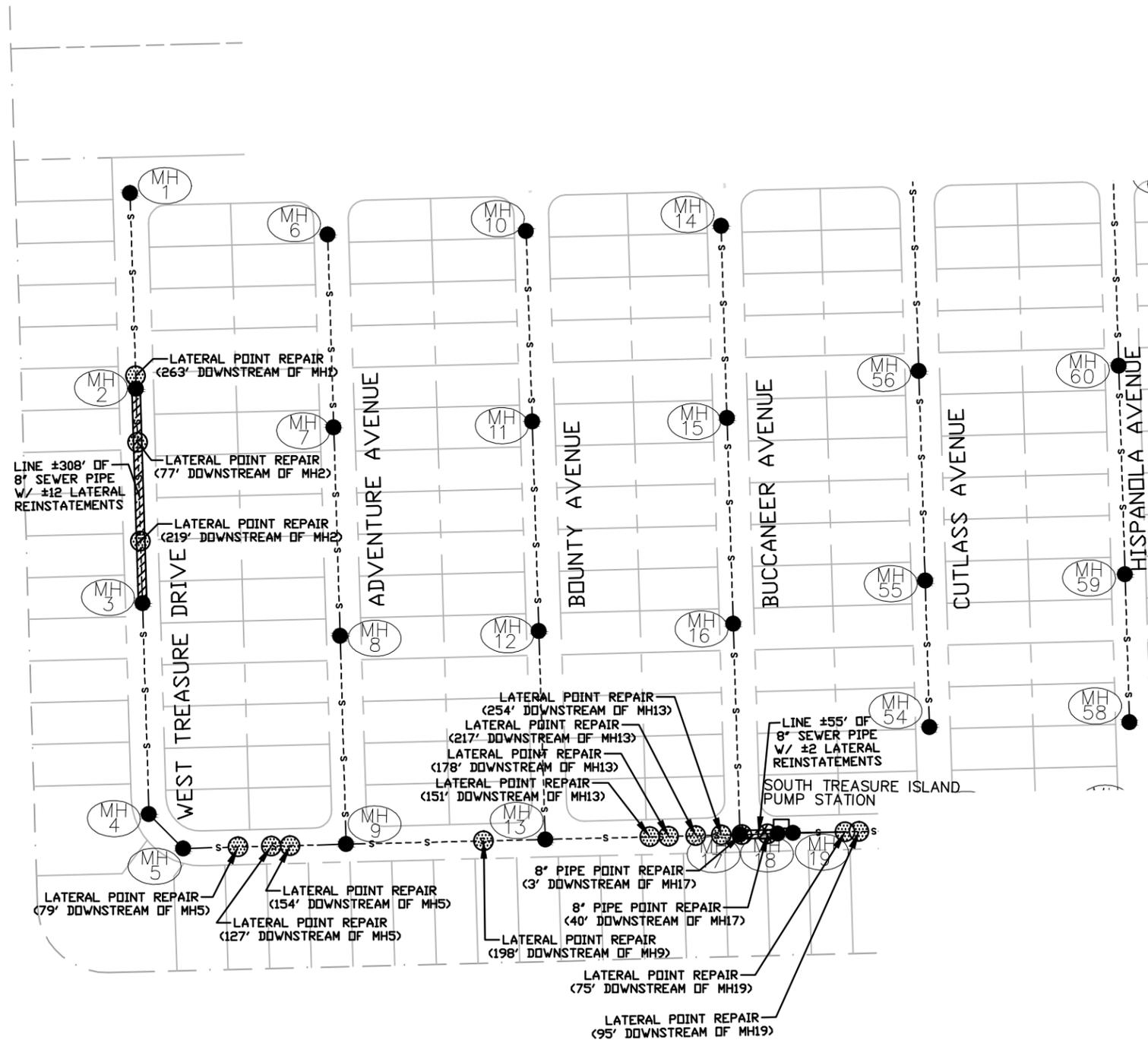
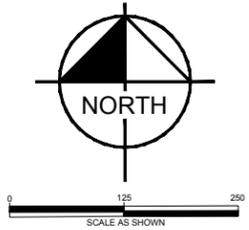
LICENSED PROFESSIONAL	GARY RATAY, P.E.
	46682
DATE:	08/03/2015

BASIN 3 IMPROVEMENTS

SHEET NUMBER
C-02

K:\FTL\Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-01 BASIN 1 IMPROVEMENTS.dwg

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND	
	SANITARY SEWER MANHOLE
	POINT REPAIR LOCATION
	LATERAL REPAIR LOCATION
	PROPOSED SEWER LINING
	EXISTING SANITARY SEWER LINE

REHABILITATION NOTES:

1. CONTRACTOR SHALL PROVIDE TELEVISION INSPECTION AS WELL AS SMOKE TESTING FOR ALL GRAVITY SEWER PIPES BEFORE REHABILITATION. REHABILITATE EXISTING PIPES WITH PERMA-LINERTM MAIN LINING SYSTEM, CURED-IN-PLACE PIPE (CIPP) OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
2. APPLY REHABILITATION LINING TO EXISTING MANHOLES, MUST USE CALCIUM ALUMINATE (SEWPERCOAT), MULTI-COMPONENT STRESS PANEL (SPECTRASHIELD), OR ENGINEER APPROVED EQUIVALENT PRIOR TO BIDDING. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
3. PIPE AND MANHOLE LOCATIONS ARE ONLY INFORMATIONAL. LOCATIONS AND QUANTITIES ARE APPROXIMATE. AVAILABLE PIPE SIZE, RIM, AND INVERT ELEVATIONS ARE BASED ON A RELATIVE VERTICAL DATUM AND ARE PROVIDED ON SHEET C-06 (SANITARY SEWER INFORMATION TABLE).

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT 043138027
DATE 08/03/2015
SCALE AS SHOWN
DESIGNED BY GR
DRAWN BY AL
CHECKED BY GR

**SANITARY SEWER
REHABILITATION PROJECT**

PREPARED FOR
NORTH BAY VILLAGE

MIAMI-DADE COUNTY
FLORIDA

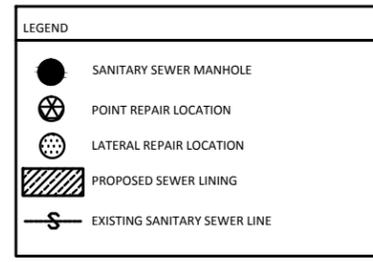
LICENSED PROFESSIONAL
GARY RATAY, P.E.
46682
DATE: 08/03/2015

BASIN 4 & 5 IMPROVEMENTS

SHEET NUMBER
C-03

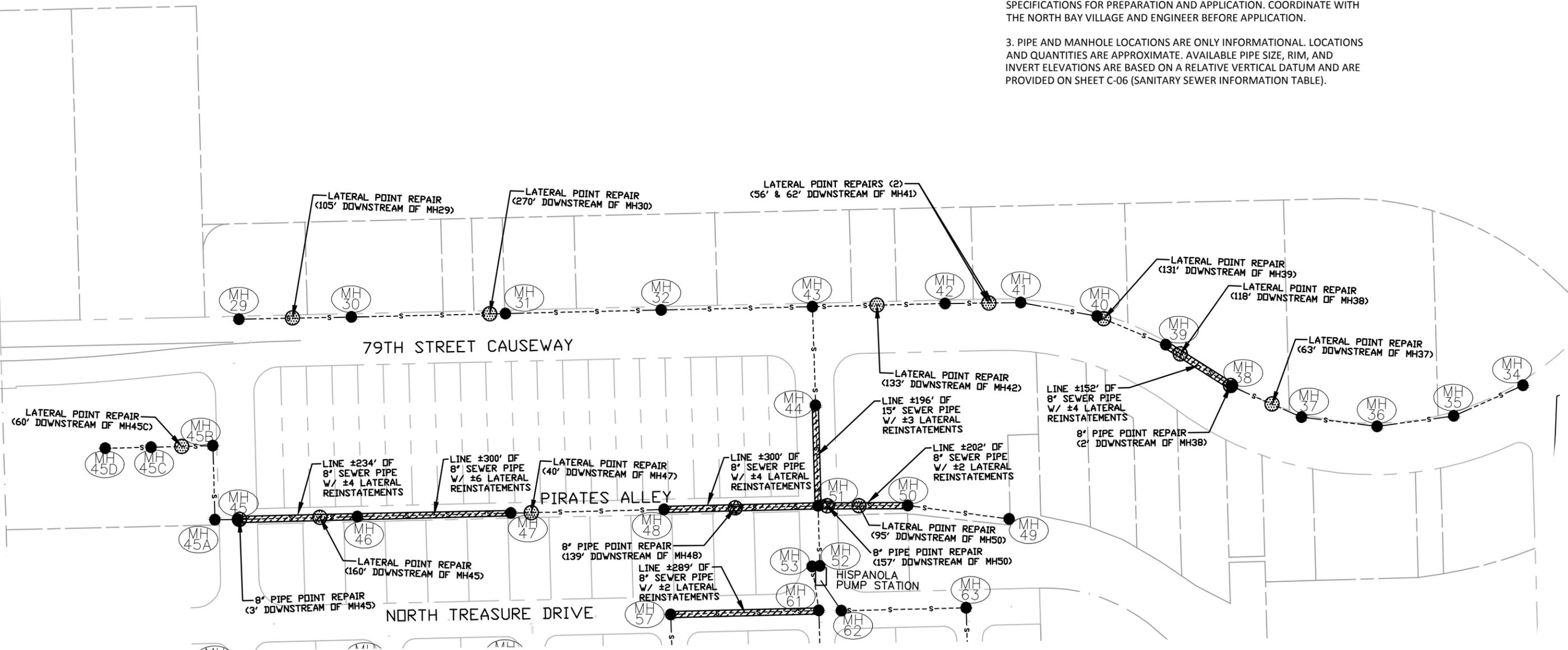
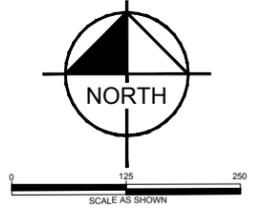
K:\FTL\Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-01 BASIN 1 IMPROVEMENTS.dwg

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and approval by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



REHABILITATION NOTES:

- CONTRACTOR SHALL PROVIDE TELEVISION INSPECTION AS WELL AS SMOKE TESTING FOR ALL GRAVITY SEWER PIPES BEFORE REHABILITATION. REHABILITATE EXISTING PIPES WITH PERMA-LINERTM MAIN LINING SYSTEM, CURED-IN-PLACE PIPE (CIPP) OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
- APPLY REHABILITATION LINING TO EXISTING MANHOLES, MUST USE CALCIUM ALUMINATE (SEWPERCOAT), MULTI-COMPONENT STRESS PANEL (SPECTRASHIELD), OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
- PIPE AND MANHOLE LOCATIONS ARE ONLY INFORMATIONAL. LOCATIONS AND QUANTITIES ARE APPROXIMATE. AVAILABLE PIPE SIZE, RIM, AND INVERT ELEVATIONS ARE BASED ON A RELATIVE VERTICAL DATUM AND ARE PROVIDED ON SHEET C-06 (SANITARY SEWER INFORMATION TABLE).



No.	REVISIONS	DATE	BY

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	043138027
DATE	08/03/2015
SCALE	AS SHOWN
DESIGNED BY	GR
DRAWN BY	AL
CHECKED BY	GR

**SANITARY SEWER
REHABILITATION PROJECT**

PREPARED FOR
NORTH BAY VILLAGE

MIAMI-DADE COUNTY FLORIDA

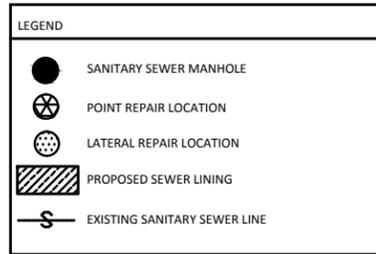
LICENSED PROFESSIONAL	GARY RATAY, P.E.
	46682
	DATE: 08/03/2015

BASIN 6 IMPROVEMENTS

SHEET NUMBER
C-04

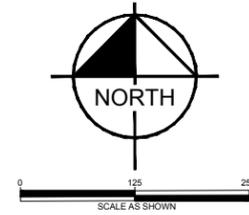
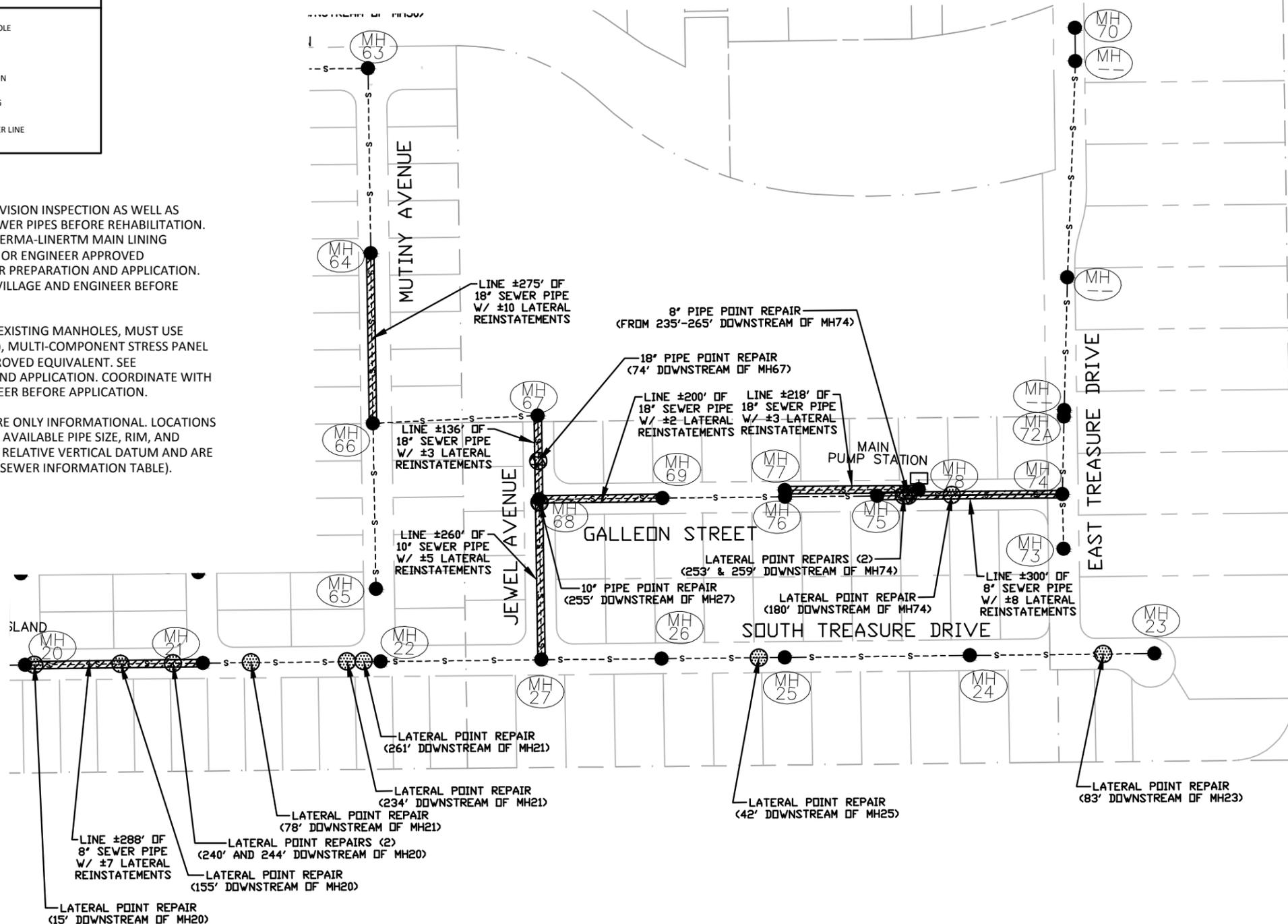
K:\FTL_Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-01 BASIN 1 IMPROVEMENTS.dwg

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adoption by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



REHABILITATION NOTES:

- CONTRACTOR SHALL PROVIDE TELEVISION INSPECTION AS WELL AS SMOKE TESTING FOR ALL GRAVITY SEWER PIPES BEFORE REHABILITATION. REHABILITATE EXISTING PIPES WITH PERMA-LINERTM MAIN LINING SYSTEM, CURED-IN-PLACE PIPE (CIPP) OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
- APPLY REHABILITATION LINING TO EXISTING MANHOLES, MUST USE CALCIUM ALUMINATE (SEWPERCOAT), MULTI-COMPONENT STRESS PANEL (SPECTRASHIELD), OR ENGINEER APPROVED EQUIVALENT. SEE SPECIFICATIONS FOR PREPARATION AND APPLICATION. COORDINATE WITH THE NORTH BAY VILLAGE AND ENGINEER BEFORE APPLICATION.
- PIPE AND MANHOLE LOCATIONS ARE ONLY INFORMATIONAL. LOCATIONS AND QUANTITIES ARE APPROXIMATE. AVAILABLE PIPE SIZE, RIM, AND INVERT ELEVATIONS ARE BASED ON A RELATIVE VERTICAL DATUM AND ARE PROVIDED ON SHEET C-06 (SANITARY SEWER INFORMATION TABLE).



No.	REVISIONS	DATE	BY

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	043138027
DATE	08/03/2015
SCALE	AS SHOWN
DESIGNED BY	GR
DRAWN BY	AL
CHECKED BY	GR

SANITARY SEWER REHABILITATION PROJECT

PREPARED FOR
NORTH BAY VILLAGE

MIAMI-DADE COUNTY FLORIDA

LICENSED PROFESSIONAL	GARY RATAY, P.E.
46682	DATE: 08/03/2015

BASIN 7 IMPROVEMENTS

SHEET NUMBER	C-05
--------------	------

K:\FTL\Civil\043_jobs\043138027-Wk Autho 15-01 Sanitary Sewer Rehab - State Revolving\CAD\Plansheets\C-07 STRUCTURES TABLE.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adoption by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION	MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION	MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION	MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION	MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION	MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION	MANHOLE NUMBER	RIM ELEV.	PIPE SIZE	INVERT ELEVATION
1	3.55	6"	0.11 S	21	3.98	8" 8"	-1.20 E -1.20 W	41	7.10	10" 10"	- E - W	57	5.00	6" 8"	-3.52 S -3.52 E	76	6.09	18" 8" 18"	- NE -3.06 E - W	118	4.27	8" 8"	-3.03 N -3.02 S	137	6.93	10" 10"	-1.09 NE -1.08 NW
2	3.88	6" 8"	-1.34 N -1.36 S	22	4.84	8" 8"	-2.06 E -2.06 W	42	5.93	10" 10"	- E - W	58	4.23	6"	0.82 N	77	5.88	18" 18"	- E - SW	119	4.70	8" 8" 8"	-3.55 S -3.65 E -3.64 W	138	7.27	8" 8"	- N 2.18 S
3	3.78	8" 8"	-2.58 N -2.58 S	23	5.49	8"	1.67 W	43	5.18	15" 10" 12"	-1.90 S - E - W	59	*3.64	6" 6"	-0.31 N -0.28 S	78	5.32	18" 18"	- N - E	120	4.03	8" 8'	-0.24 NE -0.23 W	138 A	7.41	8"	- S
4	3.30	6" 8"	-3.63 N -3.63 SE	24	4.96	8" 8"	-0.10 E -0.10 W	44	6.18	15" 15"	-2.19 N -2.19 S	60	3.97	6" 6"	-1.83 N -1.81 S	101	4.18	8"	- NW 0.24 E	121	4.15	8" 8"	-0.37 N -0.36 SW	139	7.04	8" 8"	1.58 N 1.57 S
5	3.43	8" 8"	-3.94 E -3.94 NW	25	4.88	8" 8"	-1.33 E -1.33 W	45	4.31	8" 8"	0.83 E - W	61	4.65	12" 6" 8"	-4.86 N -3.33 S -4.96 W	102	3.11	8"	- SE 0.61 N	122	4.67	8" 8"	-0.83 N -0.82 S	140	6.95	8" 10"	0.97 N 0.93 S
6	3.91	6"	0.52 S	26	4.99	8" 8"	-2.19 E -2.23 W	45 A	4.65	8" 8"	- N - E	62	5.06	18" 15"	0.07 E - NW	103	4.83	8" 8"	0.13 N 0.16 S	123	3.78	8" 8"	-1.44 N -1.43 S	141	7.12	10" 10"	0.48 N 0.47 S
7	4.44	6" 6"	-0.86 N -0.89 S	27	4.81	10" 8" 8"	-2.93 N -2.83 E -2.83 W	45 B	4.97	8" 8"	- S - W	63	5.14	18" 18"	-0.32 S -0.31 W	104	4.38	8" 8"	-0.74 N -0.73 S	124	4.56	8" 8"	-2.05 N -2.04 S	142	*6.88	10" 10"	0.02 N 0.01 S
8	4.29	6" 6"	-2.39 N -2.41 S	28	-	-	- NE - W	45 C	5.71	8" 8"	- E - W	64	4.66	18" 18"	-0.77 N -0.77 S	105	4.62	8" 8"	-1.35 N -1.34 S	125	4.10	8" 8"	-2.66 N -2.65 S	143	7.00	10" 10"	-0.28 N -0.27 S
9	3.42	6" 8" 8"	-1.39 N -4.93 E -4.88 W	29	6.18	12" 12"	0.54 E 0.54 SW	45 D	5.65	8"	- E	65	4.38	6"	1.55 N	106	4.65	8" 8"	-1.96 N -1.95 S	126	4.42	8" 8" 8"	-4.18 N -3.18 S -4.17 W	144	7.43	10" 10"	-0.52 NE -0.53 SW
10	4.56	6"	1.12 S	30	5.34	12" 12"	- E - W	46	5.05	8" 8"	-0.77 E -0.74 W	66	4.16	18" 6" 18"	-1.18 N 0.25 S -1.18 E	107	4.12	8" 8"	-2.48 S -2.49 E	127	6.80	8" 8"	-4.39 N -4.38 S	145	6.63	10" 10" 10"	-0.74 NE -1.54 SW -1.55 SE
11	5.05	6" 6"	-0.26 N -0.29 S	31	4.78	12" 12"	- E - W	47	6.05	8" 8"	-2.29 E -2.27 W	67	6.06	18" 18"	-1.58 S -1.58 W	108	4.11	8" 8" 8"	-0.21 N 0.13 E -0.20 W	128	7.23	8" 8"	2.37 S - W	146	7.33	10" 10"	2.88 E -1.84 NW
12	4.61	6" 6"	-1.79 N -1.81 S	32	5.22	12" 12"	- E - W	48	5.73	8" 8"	-3.52 E -3.49 W	68	5.20	18" 10" 18"	-1.77 N -3.71 S -4.21 E	109	4.91	8" 8"	-0.76 N -0.75 S	128 A	5.46	8'	- E				
13	*3.40	6" 8" 8"	-1.66 N -5.83 E -5.79 W	33	-	8"	- W	49	6.21	8"	-0.17 W	69	5.49	18" 18"	-4.51 E -4.51	110	4.27	8" 8"	-1.36 N -1.36 S	129	7.62	8" 8"	1.77 N 1.76 S				
14	5.06	6"	1.71 S	34	6.13	8" 8"	- E - W	50	7.06	8" 8"	-0.70 E -0.72 W	70	-	8"	- S	111	*4.45	8" 8"	-1.98 N -1.97 S	130	7.19	8" 10"	1.16 N 1.12 S				
15	4.76	6" 6"	0.33 N 0.36 S	35	5.40	8" 8"	- E - W	51	4.85	15" 18" 8" 8"	-2.48 N -4.47 S - E -4.42 W	71	*4.73	8" 8"	0.29 N 0.13 S	112	4.64	8" 8"	-2.59 N -2.58 S	131	7.31	10" 10"	0.67 N 0.86 S				
16	4.18	8" 8"	-1.14 N -1.16 S	36	5.44	8" 8"	- E - W	52	5.16	18" 12" 12"	-4.65 N -4.65 S -4.65 W	72	*5.02	8" 8"	-0.77 N -0.81 S	113	4.56	8" 8" 8"	-3.11 S -3.12 E -3.01 W	132	7.14	10" 10"	0.21 N 0.20 S				
17	3.73	8" 8" 8"	-6.67 N -6.70 E -6.67 W	37	5.09	8" 8"	- E - W	53	4.33	12" 12"	-4.68 S -4.68 E	72 A	-	8" 8"	- N - S	114	3.99	8" 8" 8"	-0.65 N 0.23 E -0.39 W	133	7.27	10" 10"	-0.07 N -0.06 S				
18	3.75	8" 8"	-6.85 E -6.85 W	38	6.01	8" 8"	- E - W	54	4.02	6"	0.63 N	73	4.97	8"	0.85 N	115	4.82	8" 8"	-1.20 N -1.19 S	134	7.19	10" 10"	-0.32 NW -0.32 SE				
19	3.83	8" 8"	0.30 E 0.97 W	39	6.80	8" 10"	- E - W	55	3.94	6" 6"	-0.50 N -0.47 S	74	5.03	8" 8" 8"	-1.67 N 0.43 S -1.70 W	116	3.91	8" 8"	-1.81 N -1.80 S	135	7.28	10" 10"	-0.56 NW -0.57 SE				
20	4.04	8" 8"	-0.34 E -0.34 W	40	7.22	10" 10"	- E - W	56	4.53	6" 6"	-2.00 N -2.02 S	75	5.68	8" 8"	-2.61 E -2.61 W	117	4.99	8" 8"	-2.41 N -2.43 S	136	*6.78	10" 10"	-0.82 NW -0.83 SE				

NOTE: RIM ELEVATIONS MARKED WITH A * ARE FROM THE CITY SEWER ATLAS (UNABLE TO FIELD VERIFY)

No.	REVISIONS	DATE	BY


 © 2015 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT
 043138027
 DATE
 08/03/2015
 SCALE AS SHOWN
 DESIGNED BY GR
 DRAWN BY AL
 CHECKED BY GR

**SANITARY SEWER
 REHABILITATION PROJECT**
 PREPARED FOR
NORTH BAY VILLAGE
 MIAMI-DADE COUNTY

LICENSED PROFESSIONAL
 GARY RATAY, P.E.
 46682
 DATE: 08/03/2015

**SANITARY SEWER INFORMATION
 TABLE**

SHEET NUMBER
C-06