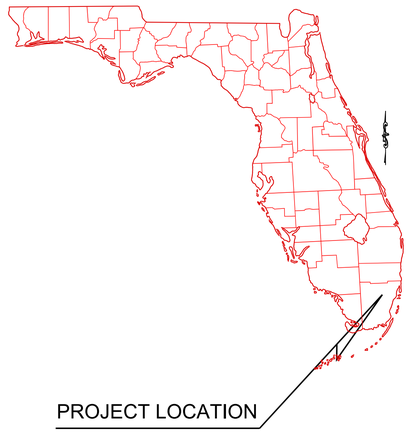
CITY OF NORTH MIAMI

776 NE 125th STREET, NORTH MIAMI, FL 33161

FORCE MAIN REHABILITIATON PROJECT

NE 131st STREET BETWEEN NE 8th AVENUE AND NE 12th AVENUE
NE 12th AVENUE BETWEEN NE 131st STREET AND NE 130th STREET



DECEMBER 2013

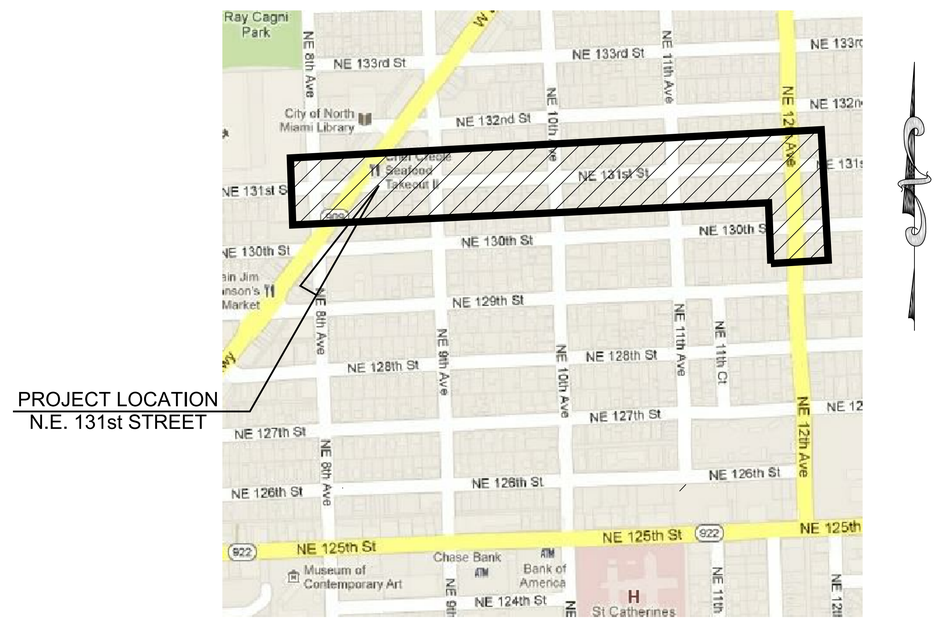
PROJECT TEAM

SURVEYOR
A. R. Toussaint & Associates, Inc.
620 NE 126TH Street
North Miami, FL 33161
Phone: (305) 891-7340
Contact: Albert R. Toussant, P.E.

CIVIL ENGINEER:
Kimley-Horn and Associates, Inc.
5200 NW 33rd Avenue
Suite 109
Ft. Lauderdale, FL 33309
Phone: (954) 535-5100
Fax: (954) 739-2247
Contact: Gary R. Ratay, P.E.

PUBLIC WORKS
City of North Miami
Aleem Ghany
Director
776 NE 125th Street 3rd Floor
North Miami, FL 33161
Phone: (305) 895-9830
Fax: (305) 893-4658

CLIENT
City of North Miami
Stephen E. Johnson
City Manager
776 NE 125th Street
North Miami, FL 33161
Phone: (305) 895-9888
Fax: (305) 893-1367



LOCATION MAP
SCALE 1" = 300'

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COMMUNITY OFFICIALS

LUCIE M. TONDREAU, MAYOR

SCOTT GALVIN, COMMISSIONER
CAROL KEYS, ESQ., COMMISSIONER
PHILLIPE BIEN-AIME, COMMISSIONER
MARIE ERLANDE STERIL, COMMISSIONER

THE PUBLIC ROADWAY(S) INDICATED IN THESE PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS – STATE OF FLORIDA

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA

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5200 NW 33rd Avenue, Suite 109, Fort Lauderdale, FL 33309
PHONE (954) 535-5100 FAX (954) 739-2247
WWW.KIMLEY-HORN.COM CA 00000696

BID SET

Drawing name: K:\FTL_Civil\043 jobs\04326800-North Miami Forcemain Transmission Piping\Cadd\NE 131st Street\Plan Sheets\C-000.0 Cover131.dwg C000.0COV Dec 16, 2013 1:22pm by: thomas.whalen
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GENERAL NOTES

I. APPLICABLE CODES

A. GENERAL

1. COUNTY IN THESE NOTES REFERS TO THE MIAMI–DADE COUNTY.
2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.
3. THE FDOT INDICES REFERRED TO IN THE DRAWINGS AND NOTES REFERS TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND FDOT DESIGN STANDARDS LATEST EDITION.
4. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST STANDARDS, CODES, REGULATIONS AND SPECIFICATIONS OF THE COUNTY, STATE AND FEDERAL CODES WHERE APPLICABLE.
5. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE AND COUNTY LAWS, CODES, ORDINANCES AND REGULATIONS.
6. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATIONS BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION TO THE ENGINEER.
7. ALL HANDICAP ACCESSIBLE ACCESS TO CONFORM WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND LOCAL, STATE AND FEDERAL CODES, LATEST EDITIONS.
8. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL PERMITS AND LICENSES, PAY ALL APPLICABLE CHARGES, TAXES, ROYALTIES & FEES, AND GIVE ALL NOTICES NECESSARY TO COMPLETE THIS PROJECT.
9. RADII DIMENSIONS AND ELEVATIONS ARE TO BE EDGE OF PAVEMENT AND FINISH GRADE UNLESS NOTED OTHERWISE.
10. IF ABANDONED GAS, WATER AND SEWER SERVICE LATERALS ARE ENCOUNTERED DURING EXCAVATION, THE SECTION IN THE EXCAVATED ENVELOPE WILL BE REMOVED AND THE STUB ON THE SIDE CONNECTED TO THE MAIN WILL BE CAPPED, PLUGGED OR OTHERWISE SEALED.
11. CONTRACTOR TO MAINTAIN ACCESS TO BUSINESS AND RESIDENTIAL LOCATIONS BY NORMAL MEANS AND METHODS, I.E. TEMPORARY STEEL PLATES, LIMEROCK, ETC ALL ASSOCIATED COST TO BE INCLUDED IN M.O.T. PAY ITEM.
12. CONTRACTOR SHALL NOTIFY MIAMI–DADE COUNTY TRAFFIC ENGINEERING DIVISION 72 HOURS PRIOR TO WORK WITHIN COUNTY RIGHT–OF–WAY.
13. CONTRACTOR SHALL NOTIFY THE FLORIDA DEPARTMENT OF TRANSPORTATION 72 HOURS PRIOR TO WORK WITHIN STATE RIGHT–OF–WAY.
14. ITEMS IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES, PAVEMENT AND BASE AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE UNLESS THE ITEMS ARE TO BE REUSED ON THE PROJECT.
15. EXCESS MATERIAL REMOVED BY THE CONTRACTOR WILL BE DISPOSED OF IN AREAS PROVIDED BY THE CONTRACTOR.
16. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE SITE CONDITIONS OF THE PROJECT AND FULLY SATISFY THEMSELVES OF BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE THEIR PRICING ACCORDINGLY. GEOTECHNICAL REPORT IS INCLUDED IN THE CONTRACT DOCUMENTS.
17. CONTRACTOR SHALL PRESERVE ALL STREET SIGNS, BENCHES, TRAFFIC CONTROL SIGNS, LANDSCAPING, ETC. WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REINSTALL OR DELIVER SAID PUBLIC PROPERTY TO THE COUNTY.
18. THE CONTRACTOR SHALL TAKE SPECIAL NOTE OF ANY SPECIAL EQUIPMENT SHORING, SHEETING OR OTHER PROCEDURES NECESSARY TO PROTECT ADJACENT PROPERTY, EITHER PUBLIC OR PRIVATE, DURING EXCAVATION OF SUBSOIL MATERIAL OR DURING THE FILLING OF ANY AREA, OR FOR ANY OPERATION DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
19. APPARENT ERRORS, DISCREPANCIES, OR OMISSIONS ON THE DRAWING SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY.
20. THE AMOUNT OF EACH OF THE MATERIALS PROVIDED IS THE ESTIMATED AMOUNT REQUIRED TO COMPLETE THE JOB. THESE QUANTITIES ARE ESTIMATED ONLY AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE THE JOB IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SHOULD ADDITIONAL MATERIALS BE REQUIRED THEY WILL BE PAID FOR AT THE CONTRACT UNIT PRICES AS DESCRIBED IN THE BID DOCUMENTS.
21. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT REMAIN IN PLACE.
22. ALL ROAD CROSSINGS ARE OPEN CUT UNLESS OTHERWISE NOTED ON THE DRAWINGS.
23. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, GRAVITY SEWER, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
24. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
25. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT WITHOUT OBTAINING WRITTEN PERMISSION FROM THE OWNER.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC WITHIN THE PROJECT LIMITS. THE COSTS TO REPLACE, REMOVE OR MODIFY IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES SHALL BE CONSIDERED INCIDENTAL TO AND SHALL BE INCLUDED IN THE OTHER ITEMS OF RELATED WORK. ALL COSTS DUE TO DAMAGE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS OF EXISTING PAVEMENT, PIPES, CONDUITS, CURBS, CABLES, TREES, SOD, LANDSCAPE ITEMS, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF THEIR SUBCONTRACTORS. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC.., PRIOR TO BEGINNING WORK IN ANY AREA.
28. CONTRACTOR IS RESPONSIBLE TO REMOVE AND REINSTALL ALL BRICK OR PAVER DRIVEWAYS IMPACTED BY CONSTRUCTION, REPAIR OR REPLACE ALL ASPHALT, CONCRETE, OR STAMPED CONCRETE DRIVEWAYS IMPACTED BY CONSTRUCTION. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED AS PART OF THE OVERALL BID.
29. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE ENGINEER, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS/HER WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL (DETERMINED BY THE ENGINEER OF RECORD) TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.
31. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND LICENSES. THE CONTRACTOR SHALL PAY ALL GOVERNMENTAL CHARGES AND INSPECTIONS NECESSARY.

B. CONSTRUCTION SAFETY

1. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.

C. TRENCH SAFETY ACT

1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA TRENCH SAFETY ACT.
2. WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5') ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID:
   A. A REFERENCE TO THE TRENCH SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
   B. WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXCAVATION THAT SUCH CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
   C. A SEPARATE ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
3. THE CONTRACTOR SHALL SUBMIT THE INFORMATION LISTED IN ITEM 2 TO THE ENGINEER PRIOR TO STARTING WORK.

D. SURVEY DATA

1. ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD).
2. ALL EXISTING CONTROL POINTS AND/OR REFERENCE MARKERS SHALL BE RAISED TO FINAL GRADE. THESE POINTS AND REFERENCE MARKERS SHALL BE LOCATED AND NOTED ON THE AS–BUILTS.
3. THE LOCATION OF EXISTING RIGHT–OF–WAY LINES, CENTERLINES, ROADWAY PAVEMENT, UTILITIES, TREES, AND OTHER PHYSICAL ABOVE–GROUND FEATURES SHOWN ON THE PLANS WERE TAKEN FROM THE SPECIFIC SURVEY PREPARED BY:

   A.R. TOUSSAINT & ASSOCIATES
   620 NE 126th STREET
   NORTH MIAMI, FK, 33161
   TELEPHONE NO. (305) 891–7340
   ALBERT R. TOUSSAINT, P.E.

4. ALL STATIONS AND OFFSETS ARE REFERENCED TO BASELINE OF SURVEY/CONSTRUCTION BASELINE.
5. EXISTING SECTION CORNERS AND ¼ SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND REPLACED IF DISTURBED BY THE CONTRACTORS SURVEY OR UNDER THE DIRECTION OF A REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA.
6. ANY NGVD – 1929 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, NOTIFY:

   GEODETIC INFORMATION CENTER
   ATTEN: MARK MAINTENANCE SECTION N/CG–162
   6001 EXECUTIVE BLVD...
   ROCKVILLE, MARYLAND 20852
   TELEPHONE NO. (301) 443–8319

MAINTENANCE OF TRAFFIC

1. TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, THE CURRENT EDITION OF THE FLORIDA D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARD INDEXES (600 SERIES), THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2003 (REV. 2 DATED 12/07) AS MINIMUM CRITERIA.

2. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ALL POTHOLES THAT DEVELOP WITHIN THE PROJECT LIMITS AND WILL MAINTAIN A SUPPLY OF COLD MIX ON THE PROJECT SITE TO EXPEDITE THOSE REPAIRS. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED AS PART OF THE OVERALL BID.

3. REQUEST FOR PROPOSED LANE CLOSURES OR TEMPORARY DETOURS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO ROADWAY'S MAINTAINING AGENCY (MIAMI–DADE COUNTY–ALL ROADWAYS) TO CLOSURE OR DETOUR.

4. AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSURE CAUSES EXTENDED CONGESTION OR DELAY, THE CONTRACTOR SHALL BE DIRECTED TO REOPEN THE CLOSED LANE(S) UNTIL SUCH TIME THAT TRAFFIC FLOW HAS RETURNED TO AN ACCEPTABLE LEVEL.

5. THE TRAFFIC AND TRAVEL WAYS SHALL NOT BE ALTERED BY THE CONTRACTOR TO CREATE A WORK ZONE UNTIL ALL LABOR AND MATERIAL ARE AVAILABLE FOR THE CONSTRUCTION IN THAT AREA.

6. THE CONTRACTOR SHALL REMOVE ANY EXISTING OR PROPOSED PAVEMENT MARKINGS THAT CONFLICT WITH THE TRAFFIC CONTROL. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE PAVEMENT MARKINGS TO THEIR ORIGINAL POSITION. REMOVAL OF EXISTING AND/OR TEMPORARY PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY FOLLOWING METHODS: BY MILLING AND ASPHALT OVERLAY, BY GRINDING AND ASPHALT OVERLAY, SAND OR WATER BLASTING, OR BY OTHER MEANS APPROVED BY THE ENGINEER, GRINDING (WITHOUT ASPHALT OVERLAY) SHALL ONLY BE PERMITTED IN NON–TRAFFIC AREAS AS DESIGNATED BY THE ENGINEER. ALL COSTS OF PAVEMENT MARKING REMOVAL, INCLUDING THE COST OF ASPHALT OVERLAY REQUIRED WHEN MILLING OR GRINDING IS USED IN TRAFFIC AREAS, SHALL BE INCLUDED. USE OF BLACK PAINT TO COVER EXISTING AND/OR TEMPORARY PAVEMENT MARKINGS IS PROHIBITED.

7. CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL. WHEN THE CONFLICT NO LONGER EXISTS, CONTRACTOR SHALL RESTORE THE SIGNS TO THEIR ORIGINAL POSITION. COST TO BE INCLUDED IN THE BID.

8. ALL EXISTING STREET NAMES AND STOP SIGNS AFFECTED BY CONSTRUCTION SHALL BE RELOCATED TO AND MAINTAINED IN A VISIBLE LOCATION FOR THE DURATION OF THE PROJECT. WHEN NO LONGER AFFECTED BY CONSTRUCTION THEY SHALL BE RESTORED TO THEIR FINAL POSITION. COST TO BE INCLUDED IN THE BID.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF STORMWATER FROM ROADWAYS UTILIZED FOR TRAFFIC MAINTENANCE IN A MANNER APPROVED BY THE ENGINEER. COST TO BE INCLUDED IN THE BID.

10. AT THE END OF EACH WORK PERIOD, ANY DROP–OFF IN THE AREA ADJACENT TO THE TRAVEL WAY SHALL BE BACK–FILLED IN ACCORDANCE WITH STANDARD INDEX 600 OR SHALL BE OTHERWISE PROTECTED WITH TEMPORARY BARRIER AT THE CONTRACTOR'S EXPENSE.

11. CONTRACTOR SHALL NOTIFY MIAMI–DADE COUNTY TRAFFIC ENGINEERING 48 HOURS PRIOR TO ANY MODIFICATION AND/OR CHANGES OF AN EXISTING TRAFFIC SIGNAL (e.g. TAKING THE SIGNALS OFF–LINE, REMOVING OR REPLACING LOOP ASSEMBLIES OR REARRANGING TRAFFIC SIGNAL HEADS). THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR THE NORMAL MAINTENANCE OF THE EXISTING TRAFFIC SIGNAL(S) WITHIN THE PROJECT LIMITS. COST IF REARRANGING TRAFFIC SIGNAL HEADS AND MAINTAINING TRAFFIC SIGNALS TO BE INCLUDED IN THE BID.

12. CONTRACTOR TO MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES ALONG THE PROJECT. CONTRACTOR IS TO SUBMIT A PROPOSED METHOD OF MAINTAINING ACCESS TO THESE PROPERTIES TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION. ALL COSTS WITH MAINTAINING ACCESS TO BE INCLUDED IN THE BID.

13. M.O.T. TRANSITIONS AND TEMPORARY INTERSECTION CROSSOVERS WHERE CONSTRUCTION HAS CAUSED GRADE DIFFERENCES BETWEEN THE EXISTING AND NEW ROADWAYS SHALL BE CONSTRUCTED USING 1:20 SLOPE TO ACCOMMODATE VEHICULAR TRAFFIC FROM ANY DIRECTION. WORK SHALL BE DONE WITH ASPHALTIC CONCRETE TYPE "S" AND SHALL INCLUDE ASPHALT SLOPE REMOVAL WHEN NO LONGER NEEDED. ALL COSTS WITH MAINTAINING CROSSOVER SLOPE GRADE AND REMOVAL TO BE INCLUDED IN THE BID.

14. CONTRACTOR SHALL MAINTAIN A CONTINUOUS PEDESTRIAN WAY ON ONE SIDE OF THE ROADWAY AT ALL TIMES. PEDESTRIAN WAY SHALL HAVE SMOOTH SURFACE AND BE GRADED ON CONFORMANCE WITH THE AMERICAN DISABILITIES ACT (ADA) REQUIREMENTS. ALL COSTS TO BE INCLUDED IN THE BID.

15. AT THE END OF EACH WORK DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE, ANY DROP–OFF ADJACENT TO THE PEDESTRIAN, BICYCLE OR WHEELCHAIR TRAVEL PATHS SHALL BE BACKFILLED FLUSH WITH THE TRAVEL PATH OR SHALL BE PROTECTED WITH BARRICADES, TEMPORARY BARRIER WALL, OR APPROVED HANDRAIL. COST TO BE INCLUDED IN THE BID.

16. PEDESTRIAN, BICYCLE AND WHEELCHAIR TRAFFIC SHALL BE GUIDED AND MAINTAINED USING APPROVED WARNING LIGHTS, SIGNING AND CHANNELIZATION DEVICES. SUCH CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH FDOT SPECIFICATIONS AND MUTCD SECTIONS ON WORK ZONE TRAFFIC CONTROL. COST TO BE INCLUDED IN THE BID.

17. IF THERE ARE UNEVEN PAVEMENT SURFACES DURING CONSTRUCTION, THE VERTICAL "DROP OFF" DIFFERENCE SHALL NOT BE MORE THAN 3" INCHES IN HEIGHT BETWEEN THE ADJACENT SURFACES.

18. CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES FOR GARBAGE/SANITATION PICK UP ALONG THE PROJECT. ALL COSTS WITH MAINTAINING ACCESS TO BE INCLUDED IN THE BID.

No.	REVISIONS	DATE	BY

Kimley-Horn and Associates, Inc.
© 2010 KIMLEY–HORN AND ASSOCIATES, INC.
5200 NW 33rd AVENUE, SUITE 109, FT. LAUDERDALE, FL 33309
PHONE: 954–335–5100 FAX: 954–739–2247
WWW.KIMLEY–HORN.COM CA 00000696

LICENSED PROFESSIONAL
GARY R. RATAY, P.E.
FL LICENSE NUMBER 46682
DATE: 12/16/2013

KHA PROJECT 043268001
DATE 12/16/2013
SCALE AS SHOWN
DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY GRR

GENERAL NOTES

FORCE MAIN REHABILITATION PROJECT
PREPARED FOR
CITY OF NORTH MIAMI
MIAMI–DADE COUNTY FLORIDA

SHEET NUMBER
C001

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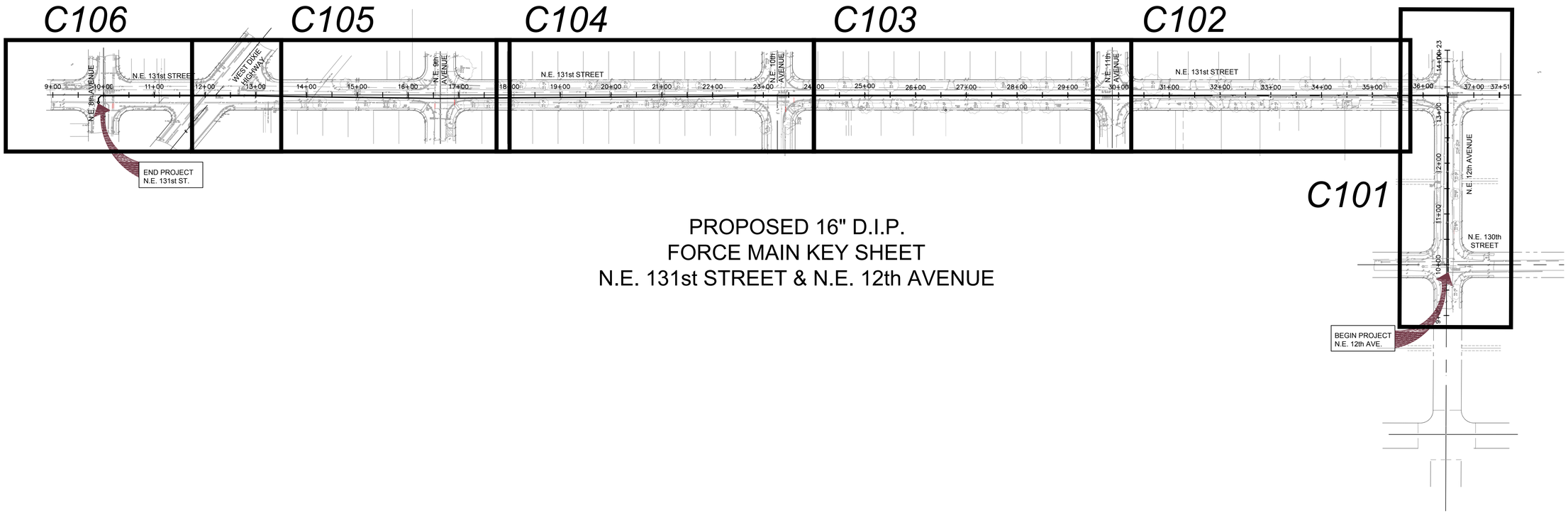

PROPOSED 16" D.I.P.
FORCE MAIN KEY SHEET
N.E. 131st STREET & N.E. 12th AVENUE

No.	REVISIONS	DATE	BY

Kimley-Horn and Associates, Inc.
5200 NW 33rd AVENUE, SUITE 109, FT. LAUDERDALE, FL 33309
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

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DATE: 12/16/2013

KHA PROJECT 043268001
DATE 12/16/2013
SCALE AS SHOWN
DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY GRR

KEY SHEET

FORCE MAIN REHABILITATION PROJECT
PREPARED FOR
CITY OF NORTH MIAMI
MIAMI-DADE COUNTY FLORIDA

SHEET NUMBER
C100

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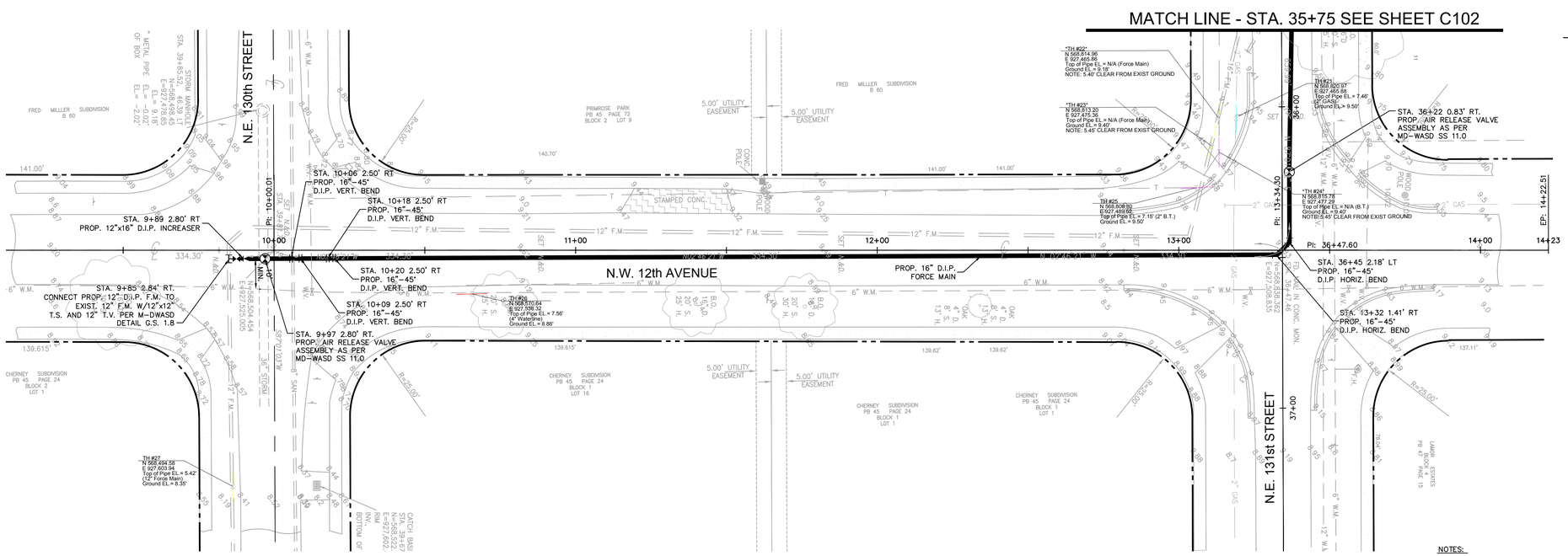
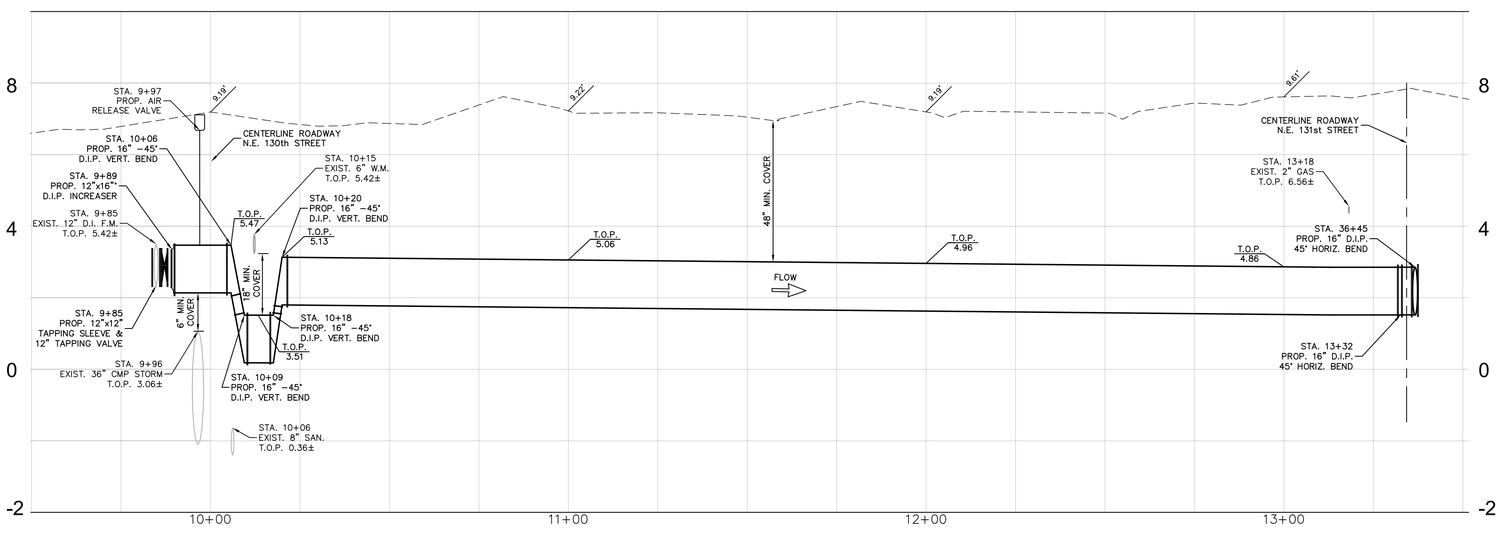


PROPOSED 16" D.I.P. FORCE MAIN PLAN

NOTES:

1. ALL EXISTING FORCE MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0
2. PAVEMENT RESTORATION FOR ROADWAY INTERSECTIONS AND FOR TRENCH CUTS SHALL BE IN ACCORDANCE WITH MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT STANDARD DETAIL R21.1 AND FDOT STANDARDS FOR STATE ROADS.



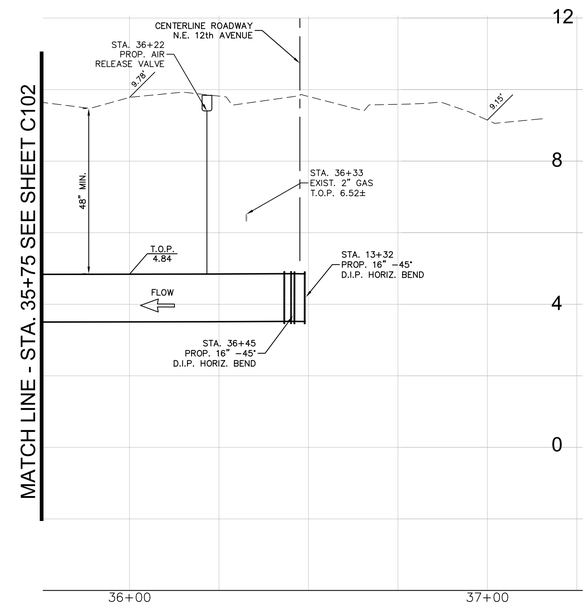
PROPOSED 16" D.I.P. FORCE MAIN PROFILE N.E. 12th AVENUE

GRAPHIC SCALE IN FEET 0 10 20 40

HORIZ. SCALE

GRAPHIC SCALE IN FEET 0 1 2 4

VERT. SCALE



PROPOSED 16" D.I.P. FORCE MAIN PROFILE N.E. 131st STREET

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No.	REVISIONS	DATE	BY

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5200 NW 33rd AVENUE, SUITE 109, FT. LAUDERDALE, FL 33309
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

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DESIGNED BY TJW
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CHECKED BY GRR

UTILITY PLAN & PROFILE
NE 12TH AVENUE

FORCE MAIN REHABILITATION PROJECT
PREPARED FOR
CITY OF NORTH MIAMI
MIAMI-DADE COUNTY FLORIDA

SHEET NUMBER
C101

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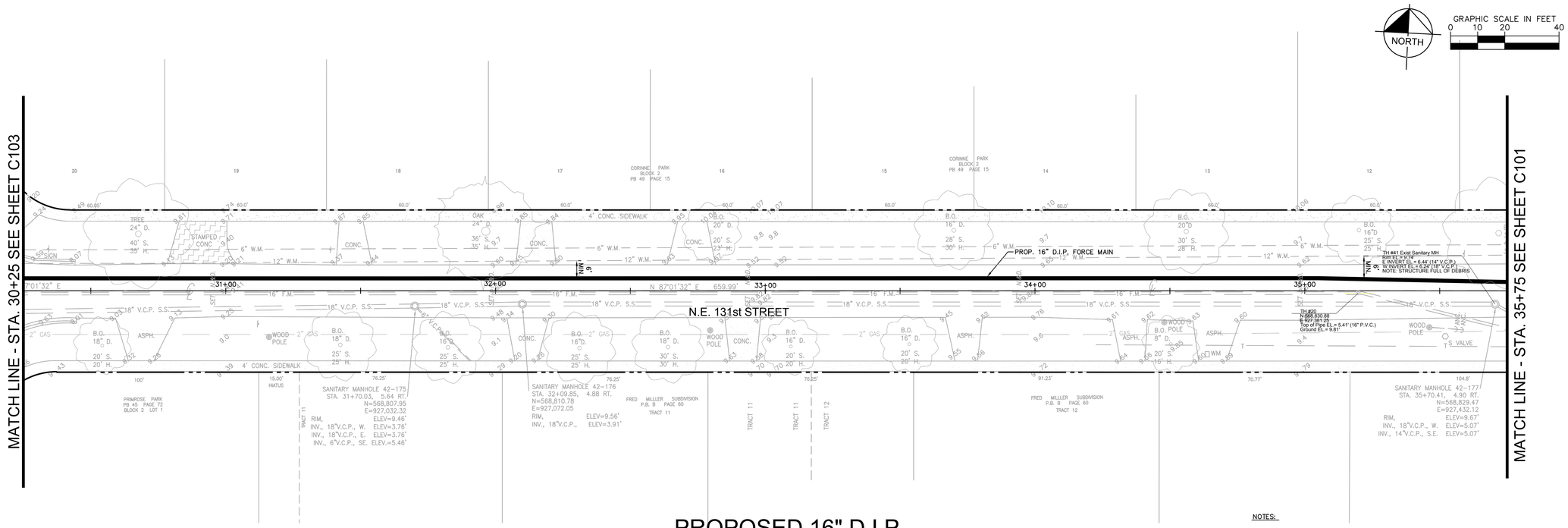
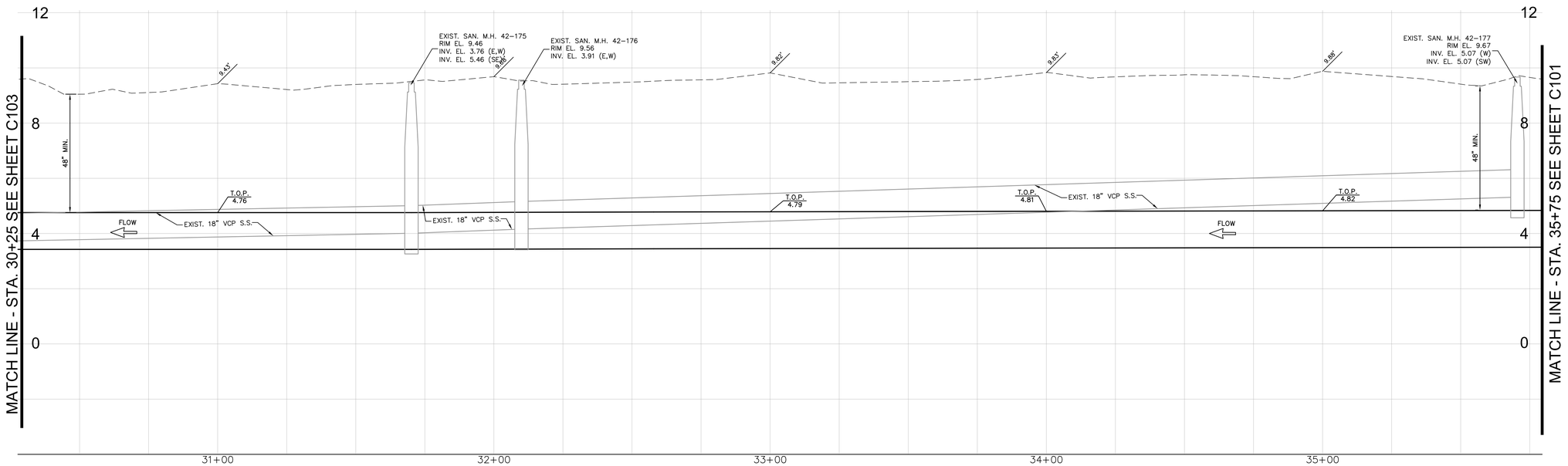


PROPOSED 16" D.I.P. FORCE MAIN PLAN

NOTES:

1. ALL EXISTING FORCE MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0
2. PAVEMENT RESTORATION FOR ROADWAY INTERSECTIONS AND FOR TRENCH CUTS SHALL BE IN ACCORDANCE WITH MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT STANDARD DETAIL R21.1 AND FDOT STANDARDS FOR STATE ROADS.



GRAPHIC SCALE IN FEET
0 10 20 40
HORIZ. SCALE

GRAPHIC SCALE IN FEET
0 1 2 4
VERT. SCALE

PROPOSED 16" D.I.P. FORCE MAIN PROFILE N.E. 131st STREET

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No.	REVISIONS	DATE	BY

Kimley-Horn and Associates, Inc.
5200 NW 33rd AVENUE, SUITE 109, FT. LAUDERDALE, FL 33309
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

LICENSED PROFESSIONAL
GARY R. RATAY, P.E.
FL LICENSE NUMBER 46682
DATE: 12/16/2013

KHA PROJECT 043268001
DATE 12/16/2013
SCALE AS SHOWN
DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY GRR

UTILITY PLAN & PROFILE
NE 131ST STREET

FORCE MAIN REHABILITATION PROJECT
PREPARED FOR
CITY OF NORTH MIAMI
MIAMI-DADE COUNTY FLORIDA

SHEET NUMBER
C102

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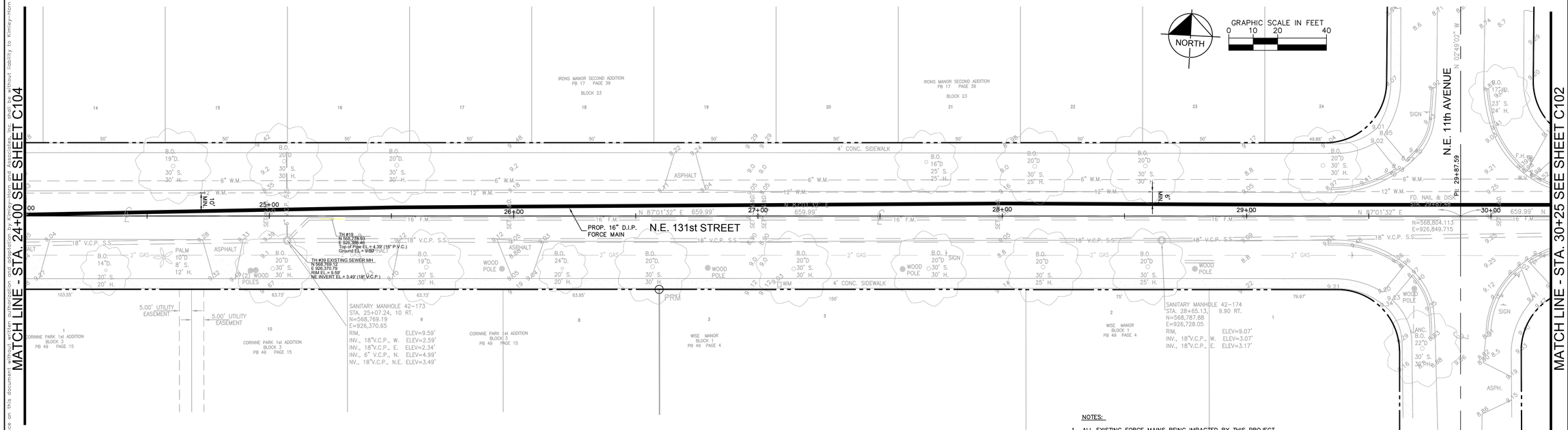

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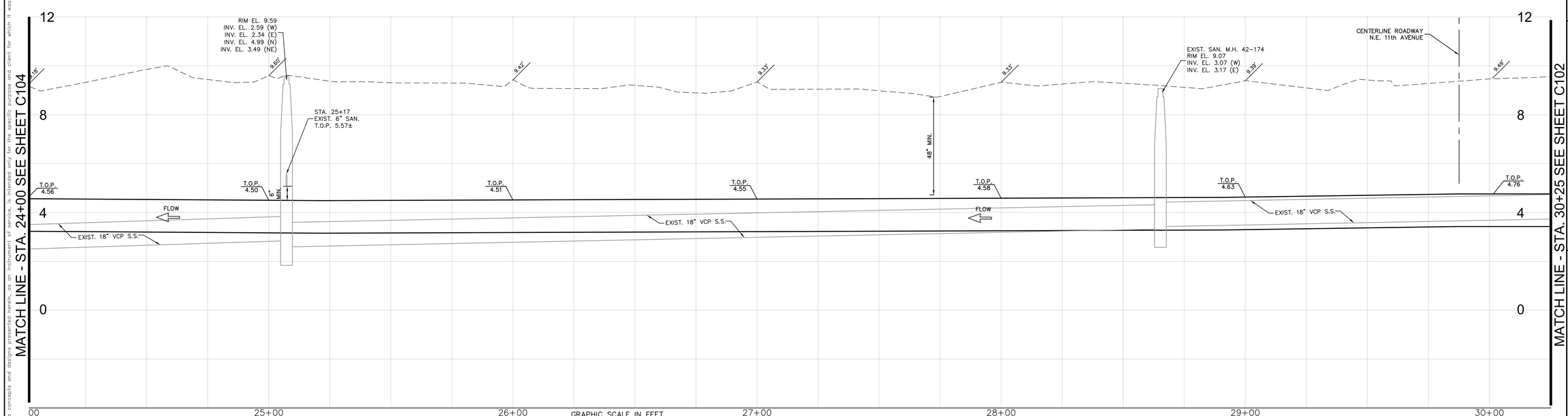

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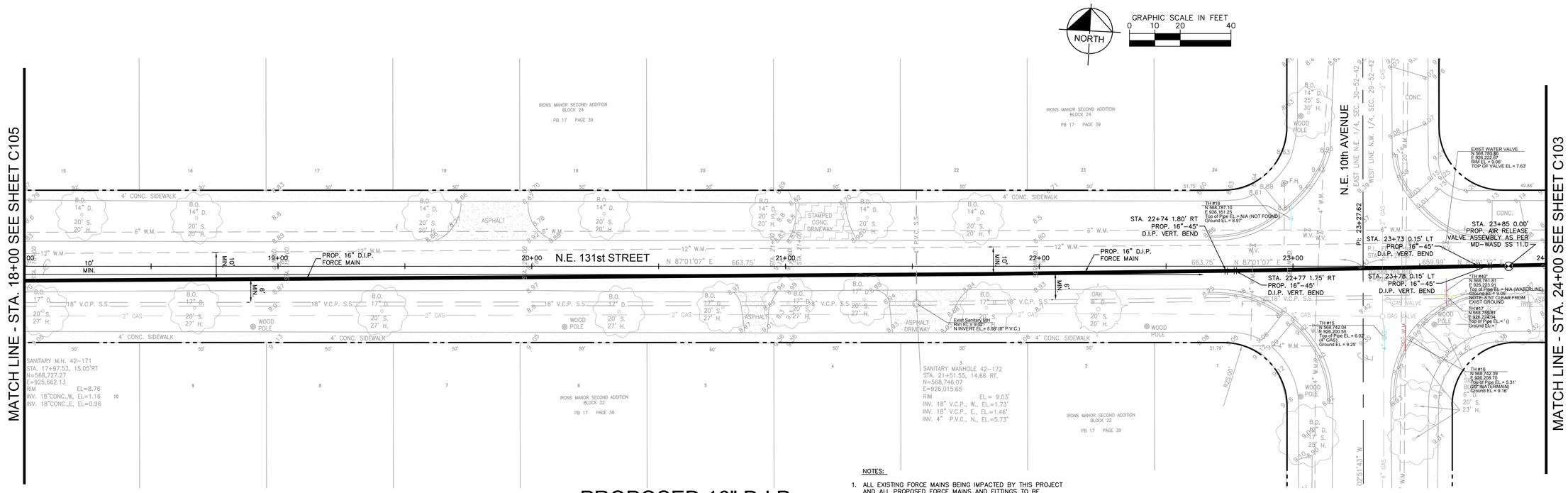

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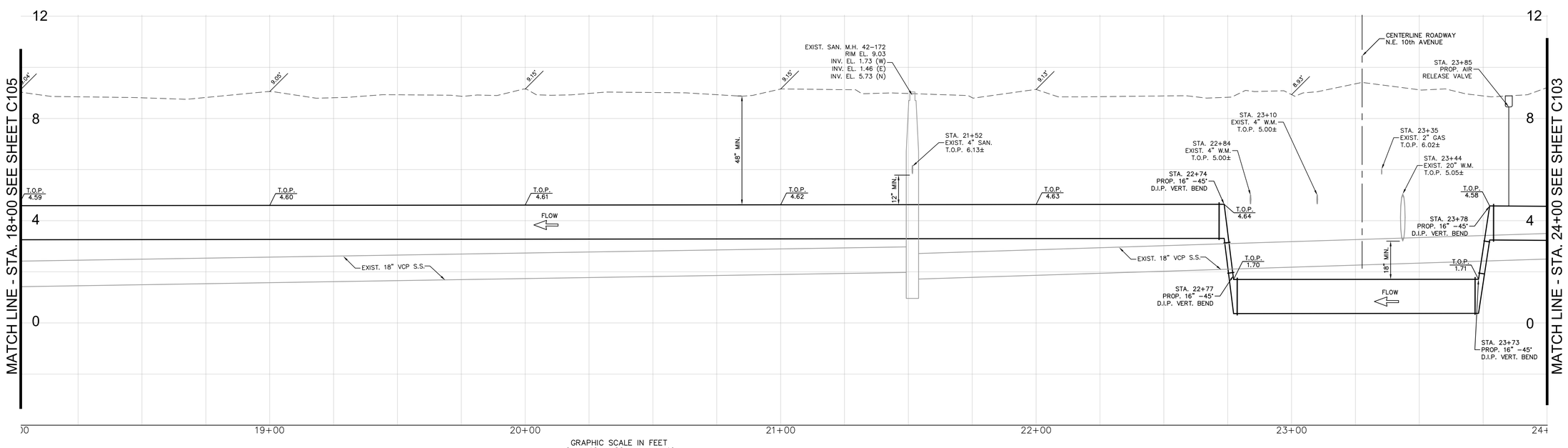

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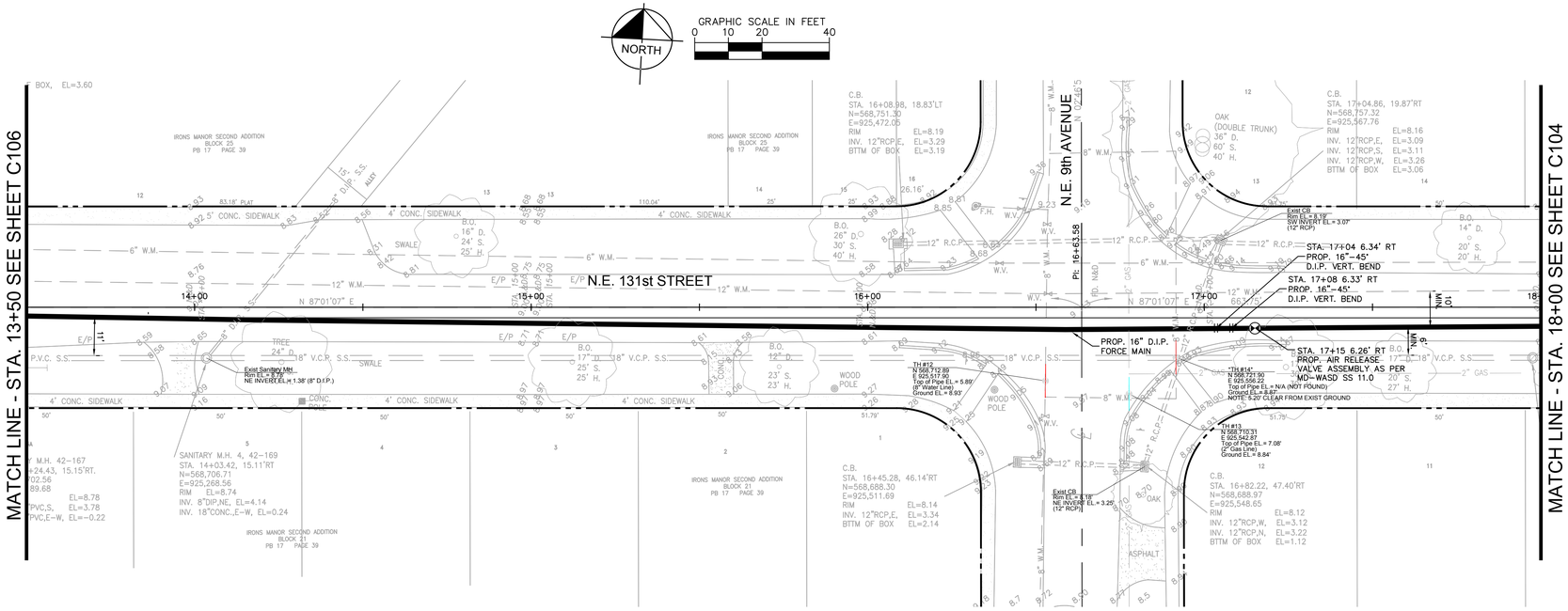

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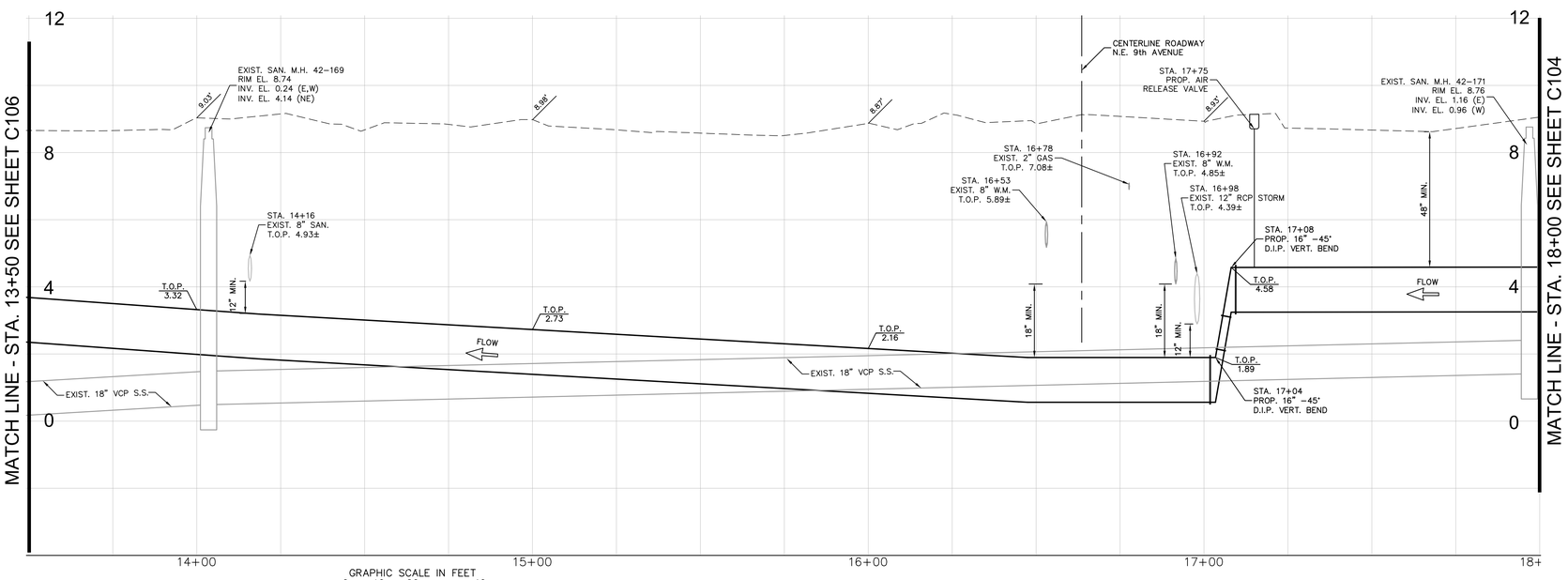

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GS 0.5 SHEET 1 OF 2:
STANDARD REQUIREMENTS WATER & SEWER CONSTRUCTION:

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 16" 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 & 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. CONTRACTOR INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THIS 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 & APPROVED THE DEPARTMENT.
    a. EASEMENT, IF REQUIRED
    b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN
    c. ABSOLUTE BILL OF SALE
    d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT)
       ii. DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT)
    e. "AS–BUILT PRINTS 24"x36" SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED FLORIDA SURVEYOR, ALONG WITH PRINTS OF "AS–BUILT" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR. (No. OF PRINTS 3–FOR WATER, 4–FOR GRAVITY SEWER AND 5–FOR FORCE MAIN OR PUMP STATION PROJECTS). THE DEPARTMENT RESERVES THE RIGHT TO REQUIRE SUBMITTAL OR ELECTRONIC MEDIA IN ACCORDANCE WITH SEC. 01175 "MAGNETIC MEDIA SUBMITTAL".
    f. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS.
    g. BILL OF SALE SKETCH (8 1/2"x11") FOR WATER AND SEWER, SEPARATELY.
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 DEPARMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE.

STANDARD WASD DETAILS

ALL CONSTRUCTION OF THE PROPOSED WATER DISTRIBUTION SYSTEM AND SEWAGE COLLECTION SYSTEM SHALL BE IN STRICT ACCORDANCE WITH MIAMI–DADE COUNTY/ WATER AND SEWER DEPARTMENT, MIAMI–DADE COUNTY PUBLIC WORKS DEPARTMENT SPECIFICATIONS AND STANDARD DETAILS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING DETAILS HEREBY INCORPORATED BY REFERENCE:

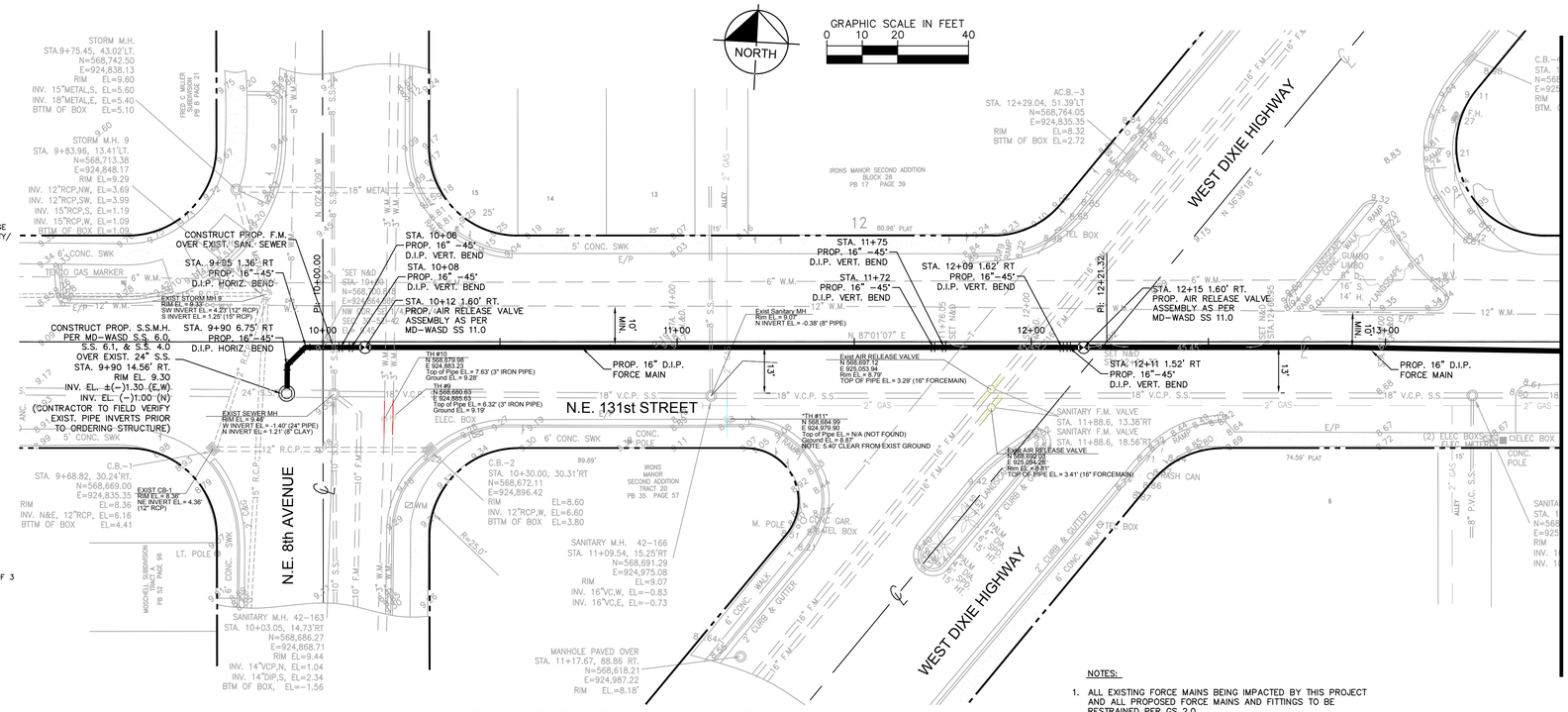
DETAIL	DESCRIPTION	PAGE
GS 1.5	WATER AND GRAVITY SEWER MAIN CROSSINGS	1 OF 1
GS 1.8	TAPPING SLEEVE AND VALVE INSTALLATION	1 OF 1
WS 0.5	"AS–BUILT" REQUIREMENTS	2 OF 2

SEWER DETAILS

DETAIL	DESCRIPTION	PAGE
SS 0.5	"AS–BUILT" REQUIREMENTS	2 OF 2
SS 11.0	AIR RELEASE VALVE ASSEMBLY–SEWAGE FORCE MAINS	1 OF 2
SS 13.0	NO. 53 C.I. VALVE BOX AND LID	1 OF 1
SS 16.0	6" PLUG VALVE AND CHECK VALVE MANHOLE	1 OF 1
SS 19.1	TYPICAL PLUG VALVE INSTALLATION	1 OF 1
SS 4.0	MANHOLE TYPE 'A' COVER & FRAME	1 OF 2
SS 6.0	STANDARD MANHOLE	1 OF 1
SS 6.1	STANDARD MANHOLE, FLOW CHANNELS	1 OF 1

ACCESSORY DETAILS

DETAIL	DESCRIPTION	PAGE
A 1.0	PAVEMENT RESTORATION – TYPE I	1 OF 1
A 1.1	PAVEMENT RESTORATION – TYPE V	1 OF 1
A 1.2	PAVEMENT RESTORATION (STATE ROAD) TYPE II	1 OF 1
A 2.0	PAVEMENT RESTORATION TYPE III	1 OF 1
A 3.0	PAVEMENT RESTORATION TYPE IV	1 OF 1
A 4.0	PAVEMENT RESTORATION TYPE M	1 OF 1
A 10.0	ABBREVIATIONS FOR DEPARMENT'S PROJECTS	1,2&3 OF 3



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GS 0.5 SHEET 2 OF 2:
STANDARD REQUIREMENTS WATER & SEWER CONSTRUCTION:

1. AT THE COMPLETION OF THE ANY WATER AND SEWER JOB, EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT.
    a. "AS–BUILT" PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. (QTY. OF PRINTS, AS REQUIRED BY THE DEPARTMENT).
2. "AS–BUILT" FORMAT:
    a. 24" X 36" PRINTS
    b. LOCATION OF MAP SCALE SHOULD BE 1"=300' AND SECTION–TOWNSHIP–RANGE SHOULD BE SHOWN
    c. THE WORD "AS–BUILT" IN LARGE LETTERS.
    d. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION.
    e. PREFERRED SCALE TO BE 1"–40' HORIZONTALLY AND 1"=4' VERTICALLY.*
    f. STREET NOMENCLATURE.
    g. SEPARATE AS–BUILTS FOR WATER AND SEWER.
    h. SEPARATE WATER AND SEWER PROFILE.
    i. STATIONING STARTING WITH 0 + 00 AT PERMANENT REFERENCE POINT (I.E. ℄, §, ETC.), OR AS SHOWN ON DESIGN PERMITS PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN.
    j. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT.
    k. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.).
    l. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY "AS–BUILT" INFORMATION REFLECTED IN DRAWINGS.
3. WATER "AS–BUILTS" MUST INCLUDE:
    a. PLANS SHOWING 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 REFERENCED TO PLAN.
4. SEWER "AS–BUILTS" MUST INCLUDE:
    a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND 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 ABOVE.
6. EACH AS–BUILT SHALL SHOW THE FLORIDA STATE PLAN COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.

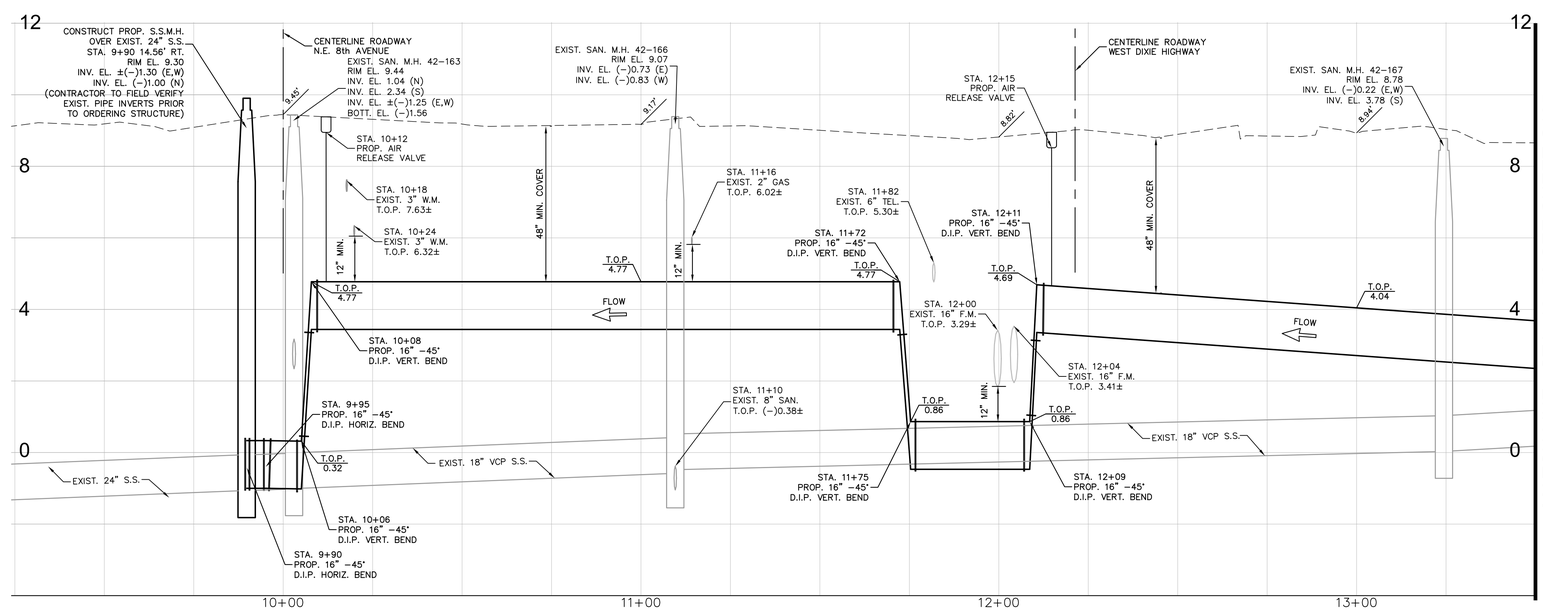
* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPARTMENT PRIOR TO PREPARATION OF DRAWINGS.

DEPARTMENT OF HEALTH REQUIREMENTS

STORM DRAINAGE LINES ARE TREATED THE SAME AS SANITARY SEWER LINES.
EXFILTRATION DRAINAGE TRENCHES ARE EXEMPTED.
MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SEWER LINES IS REQUIRED. IF UNABLE TO MAINTAIN MINIMUM SEPARATION HORIZONTALLY, EACH PIPE SHALL BE SHELVED A MINIMUM 18 INCHES VERTICAL SEPARATION.
FORCE MAINS MUST HAVE AN 18 INCH VERTICAL SEPARATION FROM WATER LINES. NO EXCEPTIONS.
SEWER LINES, INCLUDING LATERALS, MUST HAVE 18 INCH VERTICAL CLEARANCE BETWEEN WATER MAINS AND/OR 6 INCHES MINIMUM CLEARANCE IF SEWER LINE IS DIP AND HAS NO JOINTS WITHIN 10 FEET OF INTERSECTION (I.E. ONE 20 FT. JOINT DIP CENTERED ON INTERSECTION). STORM DRAINAGE LINES ARE EXEMPT IF DIP WATER MAIN SEPARATION OF 6" IS MAINTAINED AND BOTH PIPES HAVE NO JOINTS WITHIN 10 FEET OF INTERSECTION.

REGULATORY AND ECONOMIC RESOURCES RER NOTES ON WATER–SEWER INSTALLATION
(NOT A PART OF M–DWASD REVIEW NOR APPROVAL)

1. A PREFERRED HORIZONTAL DISTANCE (OUTSIDE TO OUTSIDE) OF 10 FEET OR MINIMUM OF 6 FEET SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE SEWER PIPES AND WATER MAINS. THE HORIZONTAL SEPARATION CAN BE REDUCED TO A MINIMUM OF 3 FEET ONLY FOR GRAVITY SEWER PIPES WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER. WHEN THE ABOVE SPECIFIED HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF:
   - THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
   - THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
   - THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER PIPE.
2. A VERTICAL DISTANCE OF AT LEAST 12 INCHES (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS WITH SEWER PIPES PREFERABLY CROSSING UNDER WATER MAINS. THE MINIMUM VERTICAL SEPARATION CAN BE REDUCED TO 6 INCHES FOR GRAVITY SEWERS WHERE THE SEWER PIPE IS CROSSING BELOW THE WATER MAIN. THE CROSSING SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 6 FEET FROM ALL JOINTS IN GRAVITY AND PRESSURE SEWER PIPES. WHEN THE ABOVE SPECIFIED VERTICAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF:
   - THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
   - THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
3. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, AND CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
4. ALL OTHER PUBLIC OR PRIVATE UTILITY FACILITIES SHALL BE CONSTRUCTED AT LEAST 5 FEET FROM ANY WATER AND SEWER MAIN AS MEASURED FROM THE OUTSIDE BELL OF THE WATER OF THE UTILITY PIPE.
5. 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.
6. 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 3, 4 AND 5 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.
7. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING OR THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO SUBMITTAL OF DOCUMENTATION SHOWING THAT THE PROPOSED ALTERNATIVE WILL RESULT IN AN EQUIVALENT LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION.
8. THE MAXIMUM ALLOWABLE EXFILTRATION, INFILTRATION, OR LEAKAGE FOR GRAVITY SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD 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 NON–RESIDENTIAL LAND USE WITH NO ALLOWANCES FOR MANHOLES OR LATERALS. THE MAXIMUM ALLOWABLE EXFILTRATION, INFILTRATION, OR LEAKAGE IN GRAVITY SANITARY SEWERS CONSTRUCTED OUTSIDE A PUBLIC WELLFIELD PROTECTION AREA SHALL BE ONE HUNDRED (100) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY. THE DURATION OF ALL TESTS SHALL BE A MINIMUM OF TWO (2) HOURS. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
9. FORCE MAIN SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD 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 (AWWA) C600–10 AT A TEST PRESSURE OF 100 PSI.
   - FOR REINFORCED CONCRETE PRESSURE SANITARY SEWER EXFILTRATION RATE SHALL NOT BE GREATER THAN HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600–10 AT A TEST PRESSURE OF 100 PSI.
10. A NON–RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AT EACH PUMP TO RECORD THE TOTAL NUMBER OF OPERATING HOURS OF THE STATION.



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HORIZ. SCALE

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0 1 2 4
VERT. SCALE

PROPOSED 16" D.I.P. FORCE MAIN PROFILE N.E. 131st STREET

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MATCH LINE - STA. 13+50 SEE SHEET C105

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PHONE: 954–535–5100 FAX: 954–739–2247
WWW.KIMLEY–HORN.COM CA 00000696

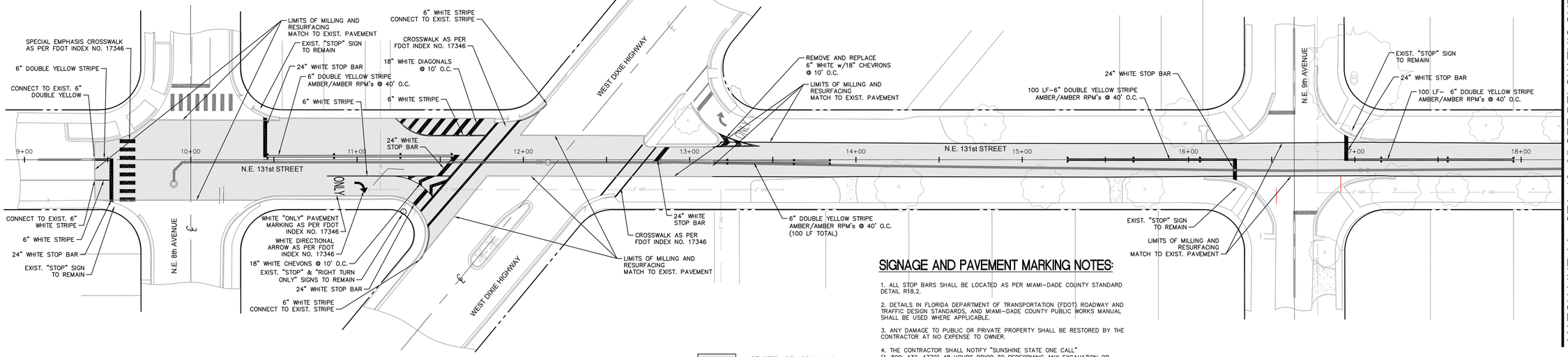
LICENSED PROFESSIONAL
GARY R. RATAY, P.E.
FL LICENSE NUMBER 46682
DATE: 12/16/2013

KHA PROJECT 043268001
DATE 12/16/2013
SCALE AS SHOWN
DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY GRR

FORCE MAIN REHABILITATION PROJECT
PREPARED FOR
CITY OF NORTH MIAMI
MIAMI–DADE COUNTY FLORIDA

UTILITY PLAN & PROFILE
NE 131ST STREET

SHEET NUMBER
C106



MATCH LINE AA - STA. 18+25 SEE BELOW THIS SHEET

SIGNAGE AND PAVEMENT MARKING NOTES:

1. ALL STOP BARS SHALL BE LOCATED AS PER MIAMI-DADE COUNTY STANDARD DETAIL R18.2.

2. DETAILS IN FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) ROADWAY AND TRAFFIC DESIGN STANDARDS, AND MIAMI-DADE COUNTY PUBLIC WORKS MANUAL SHALL BE USED WHERE APPLICABLE.

3. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY SHALL BE RESTORED BY THE CONTRACTOR AT NO EXPENSE TO OWNER.

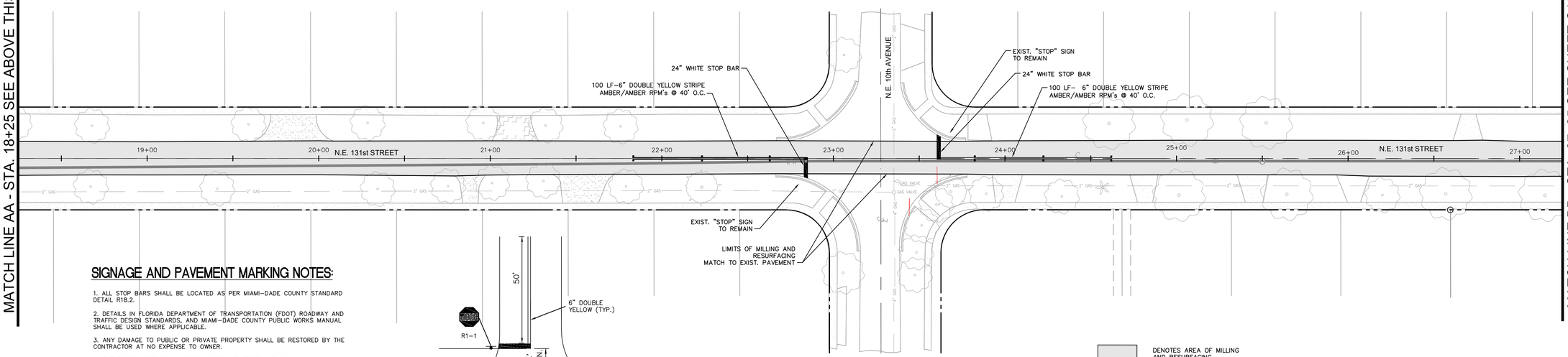
4. THE CONTRACTOR SHALL NOTIFY "SUNSHINE STATE ONE CALL" (1-800-432-4770) 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION OR GRADING OPERATIONS.

5. REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED AS NOTED IN PLANS AND DETAILS. ALL STRIPING SHALL BE THERMOPLASTIC.

6. REPAIR ANY POTHOLES IN AREA TO BE RESURFACED PRIOR TO RESURFACING.

7. ALL EXISTING SIGNS SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL REMAIN. CONTRACTOR IS RESPONSIBLE TO REPLACE/REPAIR ANY DAMAGE TO SIGNAGE AS A RESULT OF CONSTRUCTION AT NO COST TO THE OWNER.

MATCH LINE AA - STA. 18+25 SEE ABOVE THIS SHEET



MATCH LINE BB - STA. 27+25 SEE SHEET C108

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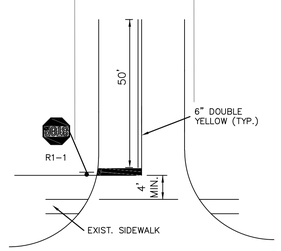

STOP BAR + STRIPING MARKING DETAIL

N.T.S.

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Kimley-Horn and Associates, Inc.
5200 NW 33rd AVENUE, SUITE 109, FT. LAUDERDALE, FL 33309
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

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KHA PROJECT 043268001
DATE 12/16/2013
SCALE AS SHOWN
DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY GRR

PAVEMENT RESTORATION & STRIPING PLAN NE 131ST STREET

FORCE MAIN REHABILITATION PROJECT

PREPARED FOR

CITY OF NORTH MIAMI

MIAMI-DADE COUNTY FLORIDA

SHEET NUMBER
C107

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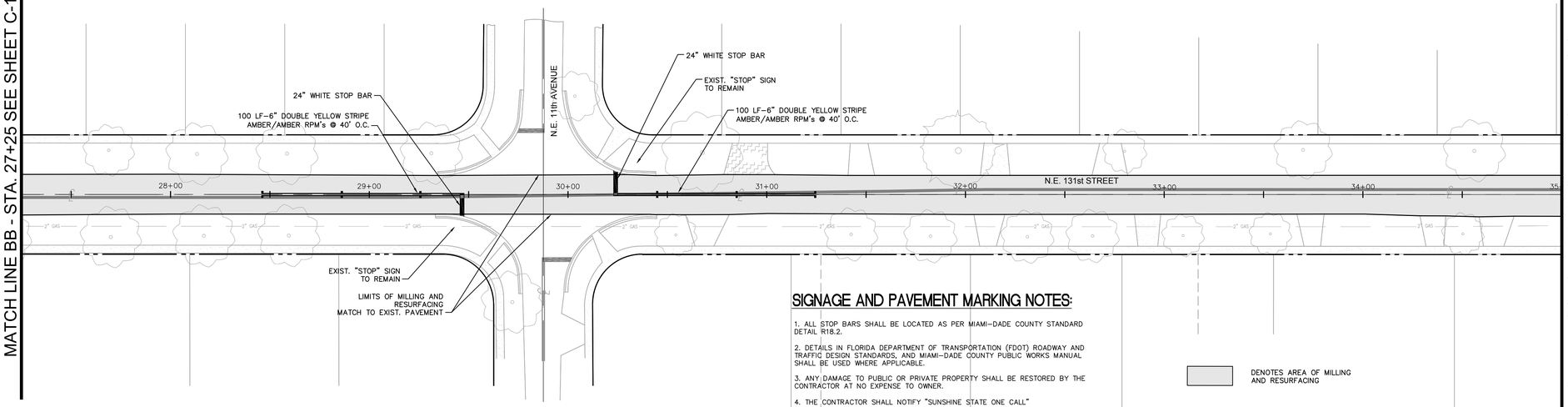

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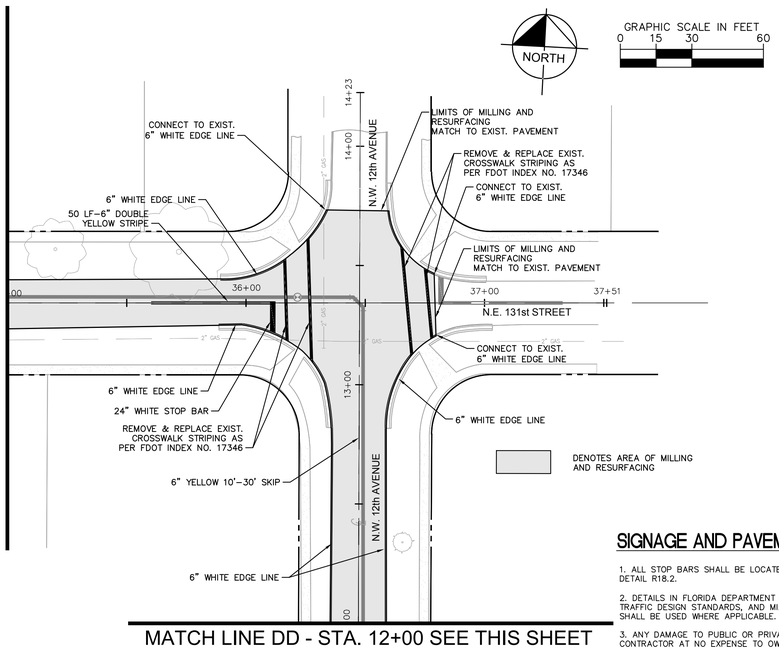

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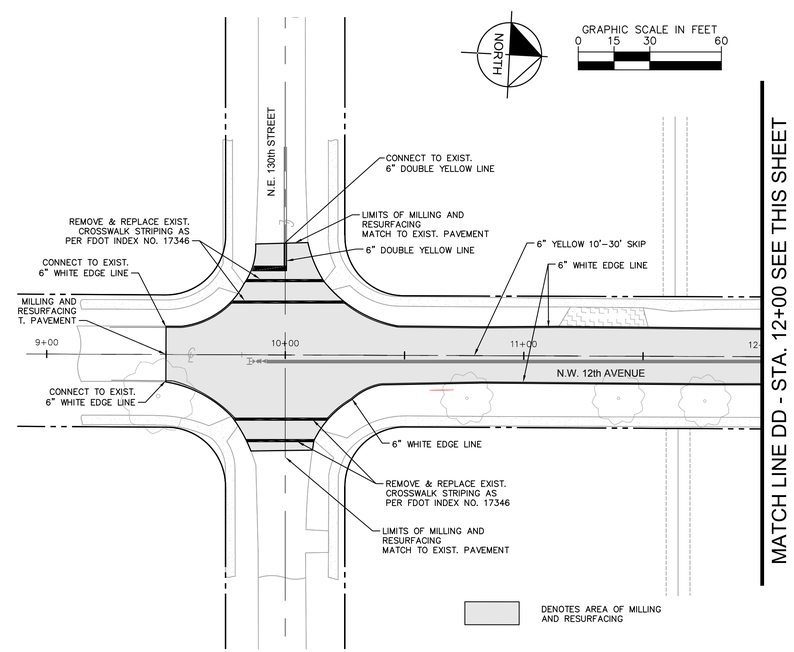

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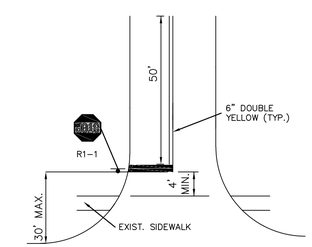

STOP BAR + STRIPING MARKING DETAIL

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KHA PROJECT 043268001
DATE 12/16/2013
SCALE AS SHOWN
DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY GRR

PAVEMENT RESTORATION & STRIPING PLAN NE 131ST ST. & NE 12TH AVE.

FORCE MAIN REHABILITATION PROJECT

PREPARED FOR

CITY OF NORTH MIAMI

MIAMI-DADE COUNTY FLORIDA

SHEET NUMBER
C108

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SITE DESCRIPTION

PROJECT NAME: CITY OF NORTH MIAMI FORCE MAIN REHABILITATION PROJECT

PROJECT LOCATION: City of North Miami, Florida

OWNER LOCATION: City of North Miami

OWNER ADDRESS: 776 N.E. 125th Street
North Miami, FL 33161

PROJECT DESCRIPTION AND SOIL DISTRIBUTING ACTIVITIES:

This project consists of force main rehabilitation and associated pavement and striping restoration. New roadway pavement includes limerock base and asphaltic concrete as well as areas of milling existing asphaltic concrete and resurfacing.

SEQUENCE OF MAJOR ACTIVITIES:

1. Install structural erosion control measures. Contractor required to protect all existing inlets in project area.
2. Install utility improvements as shown on plans.
3. Install paving where shown on plans.
4. Install striping throughout project.

CONTROLS

TEMPORARY STABILIZATION:

Disturbed portions of site where construction activity temporarily ceases for at least 21 days, shall be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area.

PERMANENT STABILIZATION:

Disturbed portions of the site where construction activity permanently ceases shall be stabilized with sod no later than 14 days after the last construction activity.

STRUCTURAL PRACTICES

Baled hay will be placed around all drainage structures in the flow pattern of the area that is disturbed, or excavated gravel and filter fabric protection will be installed in the drainage structures.

Floating trubidity barrier will be installed around canal bank area to be disturbed during outfall and endwall construction.

STORM WATER MANAGEMENT

Stormwater drainage from the completed project will be provided by curb and gutter, catch basins and storm sewer. As part of the storm sewer installation, exfiltration trench will be constructed with pollution retardant baffles. and will discharge overflow into retention areas located within the project boundaries.

WASTE DISPOSAL:

Waste Materials:

Any waste materials will be handled and disposed of according to local ordinances. The contractor will be required to uphold and enforce any such ordinances.

Sanitary Waste:

All sanitary waste will be collected from the portable units by a licensed sanitary waste management contractor as required by local regulations.

Dewatering of Excavation:

All dewatering will use the well point system.

OFF-SITE VEHICLE TRACKING:

Dump trucks hauling material from the construction site will be covered with a tarpaulin. Prior to leaving the site, excess sediment shall be removed from trucks in the cleansing area indicated on the plans.

TIMING OF CONTROLS AND MEASURES

Baled hay or excavated gravel and filter fabric protection shall be placed at inlets where the possibility of runoff from a disturbed area exist, whether the runoff is generated by utility or dewatering activities.

Floating turbidity barrier shall be installed prior to construction and installation of drainage outfall pipe and endwall (if applicable).

Existing drainage flow patterns and positive drainage to existing outfalls shall be maintained throughout construction.

CERTIFICATION OF COMPLIANCE WITH
FEDERAL, STATE AND LOCAL REGULATIONS

The stormwater pollution prevention plan reflects requirements for stormwater management and erosion and sediment control. This project complies with SFWMD, DPEP, FDEP and FDOT requirements.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND
MAINTENANCE PRACTICES

The erosion control features installed by the contractor shall be acceptably maintained by the contractor during the construction period.
Inspection of erosion measures (baled hay and turbidity barriers and silt fences) will occur daily throughout the construction period.

A maintenance inspection report will be made after each inspection, and the contractor will be responsible for keeping a weekly log of stormwater pollution and prevention control activities.

All measures will be maintained in good working order; if repair is necessary, it will be initiated within 24 hours of the report.

NON-STORMWATER DISCHARGES

It is expected that the following non-stormwater discharges will occur from the site during the construction period:

Uncontaminated groundwater (from dewatering excavation or truck cleansing)

All non-stormwater discharges will be directed through the baled hay and turbidity barriers.

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present on-site during construction:

Concrete	Reinforcing Steel	Landscape and Plant Materials
Asphaltic Concrete	Concrete Drainage Structures	Polyethelene pipe
Asphalt	Concrete Pipe	PVC Conduit
Limerock	Sign Materials	
Pavement Marking Materials		

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

GOOD HOUSEKEEPING:

The following good housekeeping practices will be followed on-site during the construction project.

An effort will be made to store only enough product required to do the job.
All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
Products will be kept in their original containers with the original manufacturer's label.
Whenever possible, all of a product will be used up before disposing of the container.
Manufacturers' recommendations for proper use and disposal will be followed.
The site superintendent will inspect daily to ensure proper use and disposal of materials on-site.

HAZARDOUS PRODUCTS:

These practices are used to reduce the risks associated with hazardous materials.

Products will be kept in original containers unless they are not resealable.
Original labels and material safety data will be retained; they contain important product information.
If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

PETROLEUM PRODUCTS:

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

FERTILIZERS:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

PAINTS AND PAVEMENT MARKING MATERIAL:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or State and local regulations.

CONCRETE TRUCKS:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

SPILL CONTROL PRACTICES

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

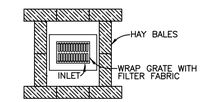
Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

All spills will be cleaned up immediately after discovery.

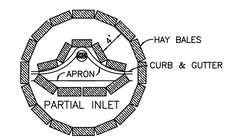
The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

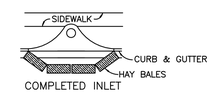
Spills of toxic of hazardous material will be reported to the appropriate State or local government agency, regardless of the size.

The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.



INLET





COMPLETED INLET

BALED HAY AROUND DRAINAGE STRUCTURES

MATERIALS

-HARDWARE CLOTH OR WIRE MESH WITH ½ INCH OPENINGS.

-FILTER FABRIC CONSISTING OF A PERVIOUS SHEET OF POLYPROPYLENE, NYLON, POLYESTER, OR POLYETHYLENE YARN CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	75%-85% (MINIMUM)
TENSILE STRENGTH AT 20% (MAXIMUM) ELONGATION	30 LB/ LINEAR INCH (MINIMUM)
SLURRY FLOW RATE	0.3 GAL/SQ. FT/ MIN. (MINIMUM)

-WASHED GRAVEL ¾ INCHES TO 4 INCHES IN DIAMETER

CONSTRUCTION SPECIFICATIONS

-REMOVE ANY OBSTRUCTIONS TO EXCAVATION AND GRADING. EXCAVATED SUMP AREA, GRADE SLOPES AND PROPERLY DISPOSE OF SOIL.

-THE INLET GRATE SHOULD BE SECURED TO PREVENT SEEPAGE OF SEDIMENT LADEN WATER.

-PLACE WIRE MESH OVER THE INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. OVERLAP STRIPS OF MESH IF MORE THAN ONE IS NECESSARY.

-PLACE FILTER FABRIC OVER THE MESH EXTENDING AT LEAST 18 INCHES BEYOND THE INLET OPENING ON ALL SIDES. ENSURE ANY WEEP HOLES IN INLET ARE PROTECTED BY FILTER FABRIC AND GRAVEL.

-PLACE GRAVEL OVER THE FABRIC/ WIRE MESH TO A DEPTH OF AT LEAST ONE FOOT.

EXCAVATED GRAVEL AND FILTER FABRIC PROTECTION OF DRAINAGE STRUCTURES

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STORMWATER POLLUTION PREVENTION PLAN

FORCE MAIN REHABILITATION PROJECT
PREPARED FOR
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MIAMI-DADE COUNTY FLORIDA

SHEET NUMBER
C109