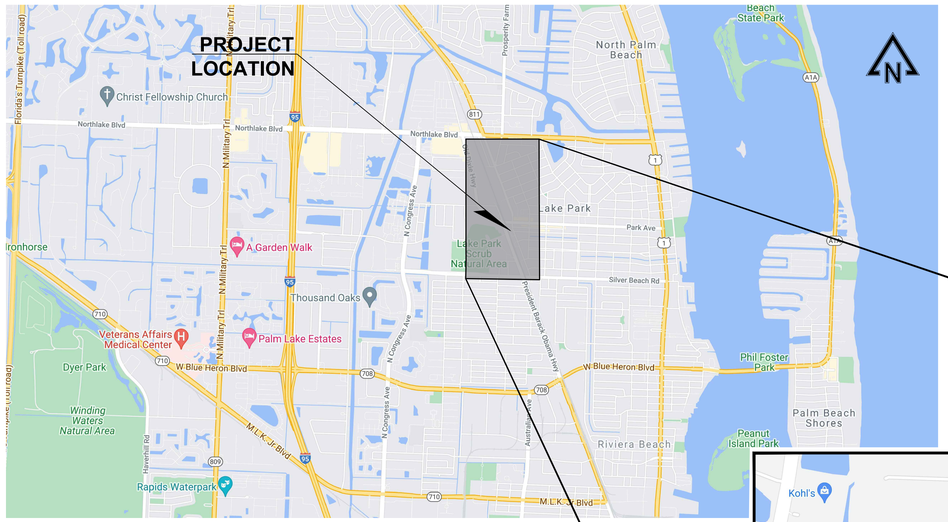
OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS

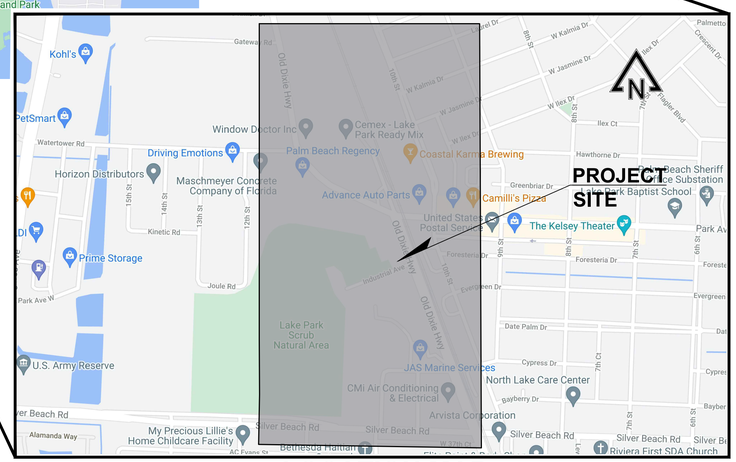
PREPARED FOR

TOWN OF LAKE PARK

01/15/2024



VICINITY MAP
NTS



LOCATION MAP
NTS

SHEET INDEX:

0	COVER SHEET
1	KEY SHEET
2-11	SECTION I - TRI CITY INDUSTRIAL PARK UTILITY PLANS
12-15	SECTION II - LAKE PARK PUBLIC WORKS UTILITY PLANS
16-17	SECTION III - WATERTOWER ROAD UTILITY PLANS
18-23	UTILITY DETAILS
24	PALM BEACH COUNTY R/W DETAILS

TOTAL NO. OF SHEETS - 25

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

REVISIONS

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
COVER

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH: (561) 855-1455 FAX: (561) 855-1950
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

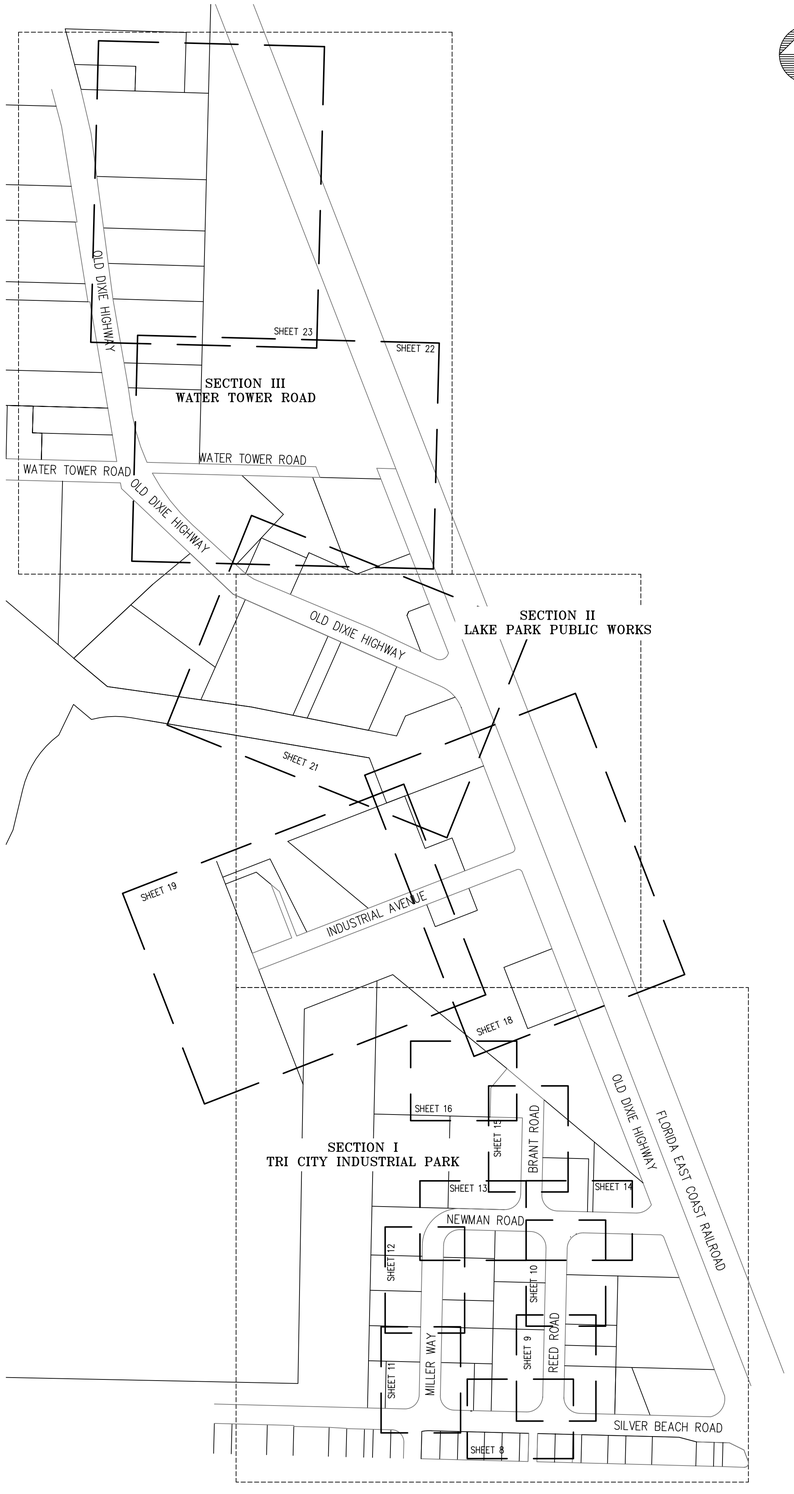
DATE	DRAWN	APRIL
PROJECT ENGINEER	MK	
PROJECT MANAGER	MK	
CHECKED	ACS	ACS

SHEET NO. COV 24

JOB NO. 18187.01

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 COVER.dwg DATE: 1/29/2025 3:12 PM

PLOT: 1/29/2025 3:20:48 PM



KEY MAP (N.T.S)

SHEET INDEX:

0	COVER SHEET
1	KEY SHEET
2-11	SECTION I - TRI CITY INDUSTRIAL PARK UTILITY PLANS
12-15	SECTION II - LAKE PARK PUBLIC WORKS UTILITY PLANS
16-17	SECTION III - WATERTOWER ROAD UTILITY PLANS
18-23	UTILITY DETAILS
24	PALM BEACH COUNTY R/W DETAILS

TOTAL NO. OF SHEETS - 25

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REVISIONS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS

KEY SHEET

engenuity group inc.
A Higher Standard of Excellence
ENGINEERS + SURVEYORS + GIS MAPPERS
1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH: (561) 855-1455 FAX: (561) 855-1490
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

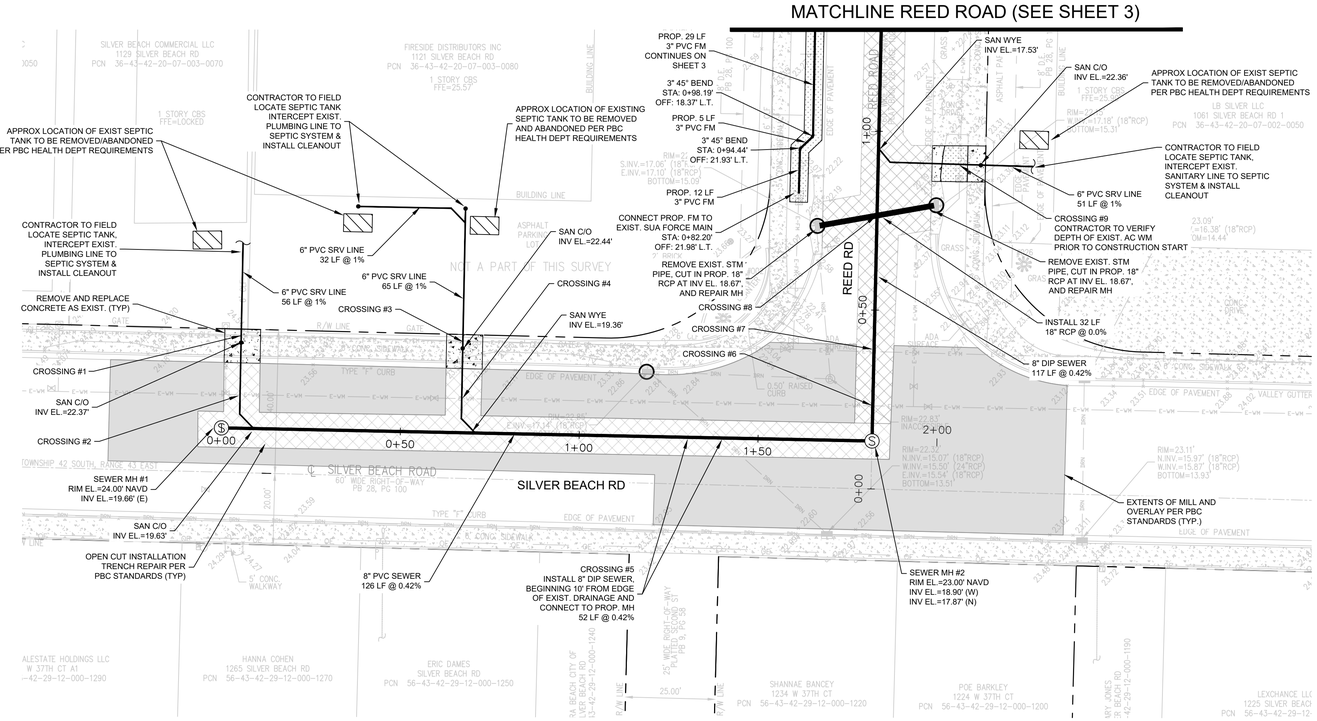
DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	
PROJECT MANAGER	ACS	
CHECKED	ACS	

SHEET NO. 1 / 24

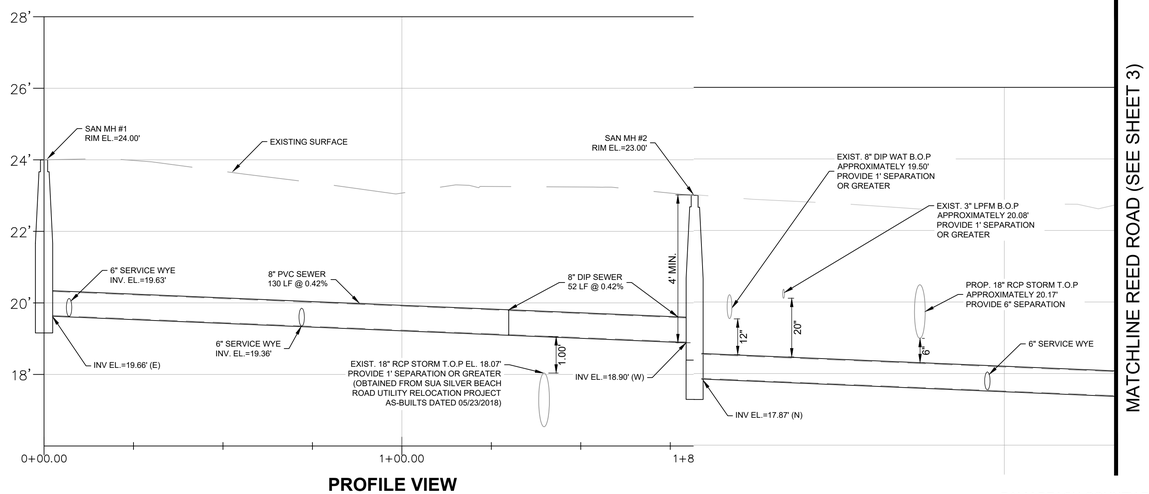
JOB NO. 18187.01

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 KEY SHEET.dwg DATE: 1/29/2025 3:12 PM

PLOT: 1/29/2025 3:20:55 PM

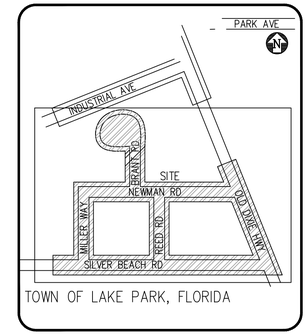


PLAN VIEW
SCALE 1" = 20'



PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- S — SANITARY MANHOLE
- SANITARY CLEANOUT
- SF — SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
1	PROP. 6" SAN SRV EL.=22.39'	EXST. 3" FM EL.=21.20'	1.00'
2	PROP. 6" SAN SRV EL.=22.23'	EXST. 8" DIP WM EL.=21.23'	1.00'
3	PROP. 6" SAN SRV EL.=22.46'	EXST. 3" LPFM EL.=21.04'	1.00'
4	PROP. 6" SAN SRV EL.=22.30'	EXST. 8" DIP WM EL.=21.30'	1.00'
5	PROP. 8" DIP GSM EL.=19.07'	EXST. 18" RCP STM EL.=18.07'	1.00'
6	EXST. 8" DIP WM EL.=19.50'	PROP. 8" DIP GSM EL.=18.50'	1.00'
7	EXST. 3" LPFM EL.=20.08'	PROP. 8" DIP GSM EL.=18.44'	1.64'
8	PROP. 8" DIP GSM EL.=17.50'	EXST. 18" RCP STM EL.=±18.64'	0.50'
9	EXST. 6" AC WM EL.=±20.08'	PROP. 6" SAN SRV EL.=19.81'	1.00'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 18.023(NAVD88) + 1.524 = 19.547(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL CONSTRUCTION DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.
6. CONSTRACTOR TO CONFIRM THAT CONSTRUCTION AUTHORIZATION DOCUMENTS HAVE BEEN SECURED FOR EACH PRIVATE PROPERTY PRIOR TO ANY CONSTRUCTION OUTSIDE OF PUBLIC RIGHT-OF-WAYS.
7. CONTRACTOR TO CONFIRM PLUMBING LINE ELEVATION TIE IN POINTS WILL WORK FOR THE PROPOSED GRAVITY SERVICE/MAIN LINE ELEVATIONS PROPOSED PRIOR TO COMMENCING ANY CONSTRUCTION.

PALM BEACH COUNTY RIGHT OF WAY NOTES:

1. MAINTAIN HORIZONTAL SEPARATION OF 4' AND VERTICAL SEPARATION OF 1' BETWEEN ALL PROPOSED UTILITIES AND PALM BEACH COUNTY UTILITY STRUCTURES, CONDUITS, AND PIPES.
2. ANY AND ALL PB COUNTY STORM DRAIN / SIDEWALK / PATHWAY / C&G / ADA AND OR ADDITIONAL ROADWAY THAT IS AFFECTED BY THE PROPOSED CONSTRUCTION MUST BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ALL APPLICABLE FDOT / PB COUNTY DETAILS AND SPECIFICATIONS (APPLICABLE THOROUGHFARE / NON-THOROUGHFARE).
3. SIDEWALK AFFECTED TO INCLUDE ONE FLAG ON EITHER SIDE OF THE DISTRUBED AREA. SIDEWALKS WILL BE RESTORED BY REPLACING; TWO FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED AT A CONTROL JOINT AND THREE FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS. NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)
4. ROADWAY LANES AFFECTED WILL REQUIRE THE AFFECTED LANES AND/OR ADDITIONAL LANES BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION AND TO EQUAL DIMENSIONS AS THE ADJACENT LANES (EOP TO EOP)
5. ALL AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' IN EITHER DIRECTION (THROUGHFARE) AND 25' MIN. RESTORATION (NON-THOROUGHFARE).
6. MILL AND PAVE TRANSITION AREA IN PALM BEACH COUNTY R/W, (SILVER BEACH ROAD AND PRESIDENT BARACK OBAMA HWY) WILL BE REQUIRED TO INCLUDE THE INTERSECTION IN ITS ENTIRETY, (25' IN ALL DIRECTIONS).
7. FLOWABLE FILL IS NOT AN APPROVED WEAR COURSE IN PB COUNTY. PBC THOROUGHFARE ROAD RESTORATION DETAIL / LANE WIDTH NEEDS TO REFLECT A MIN. 50' OUTSIDE THE PC IN ALL DIRECTIONS.
8. IF PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN PIPE/STRUCTURES ARE AFFECTED IN ANY WAY. PB COUNTY R&B REQUIRES FULL RESOTRATION OF THE AFFECTED SYSTEM TO LIKE OR BETTER THEN LIKE CONDITION AND TO PB COUNTY/FDOT STANDARD.
9. ANY DRAINAGE SWALES AFFECTED BY THE PROPOSED CONSTRUCTION, SHALL BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ORIGINAL DESIGN ELEVATIONS.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REVISIONS	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - SILVER BEACH ROAD

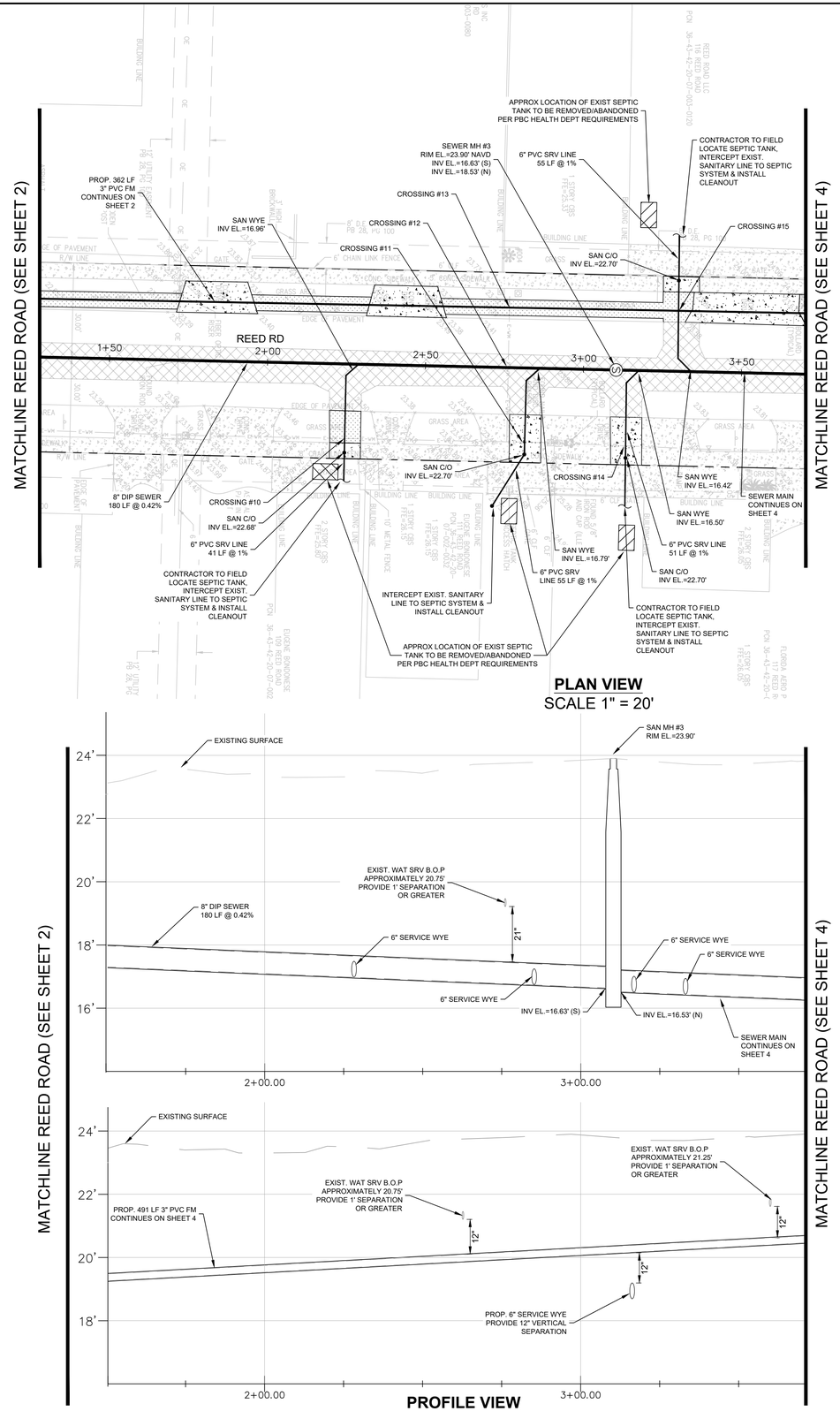
engenuity group inc.
A Higher Standard of Excellence
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)855-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	
PROJECT MANAGER	ACS	
CHECKED	ACS	

SHEET NO. 2 / 24
JOB NO. 18187.27

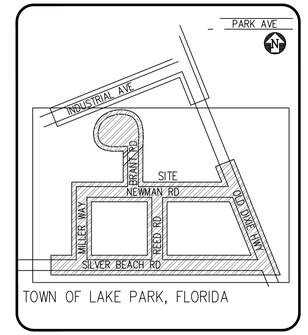
PLOT: 1/29/2025 3:21:11 PM



PLAN VIEW
SCALE 1" = 20'

PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- S — SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
10	EXST. 6" AC WM EL.=±20.75'	PROP. 6" SAN SRV EL.=19.08'	1.67'
11	EXST. 6" AC WM EL.=±20.50'	PROP. 6" SAN SRV EL.=19.00'	1.50'
12	EXST. (") WAT SRV EL.=±20.75'	PROP. 8" DIP GSM EL.=17.45'	3.30'
13	EXST. (") WAT SRV EL.=±20.75'	PROP. 3" LPFM EL.=19.75'	1.00'
14	EXST. 6" AC WM EL.=±20.50'	PROP. 6" SAN SRV EL.=19.00'	1.50'
15	PROP. 3" LPFM EL.=21.40'	PROP. 6" SAN SRV EL.=18.90'	2.50'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REMARKS	BY

REVISIONS

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - REED ROAD

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE., SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)855-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

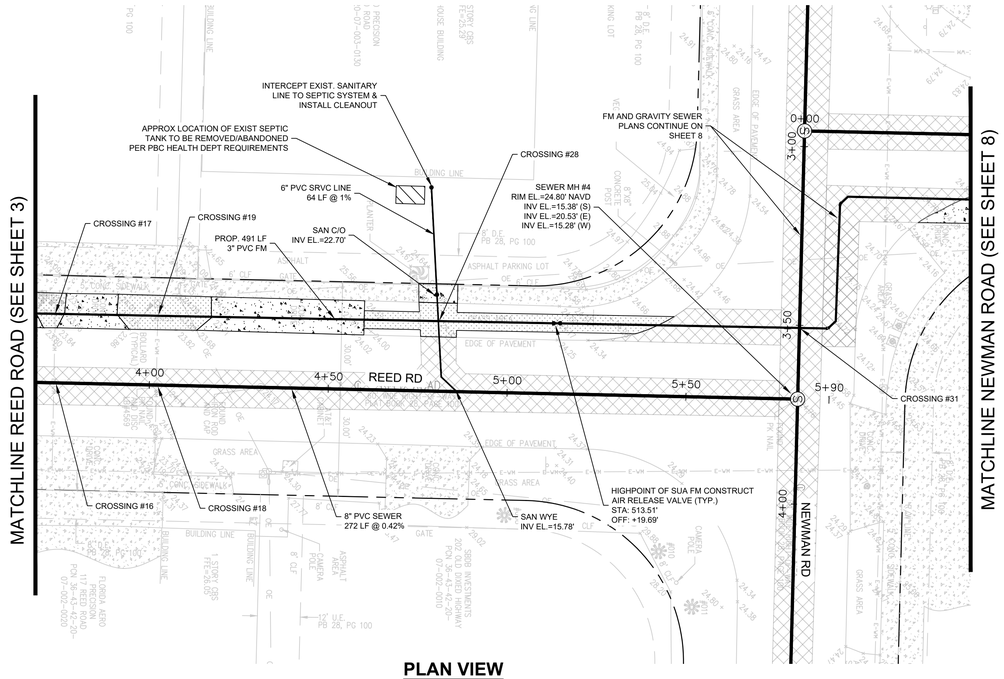
	DATE	DRAWN	PROJECT ENGINEER	PROJECT MANAGER	CHECKED
	APRIL	MK	MK	ACS	ACS

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

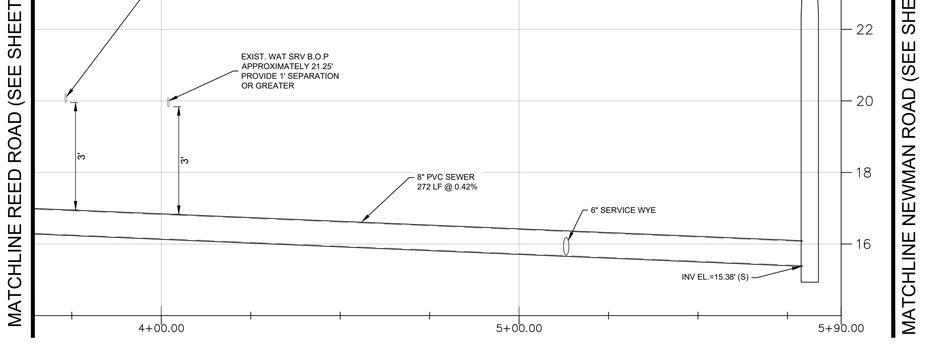
SHT. NO. 3
24

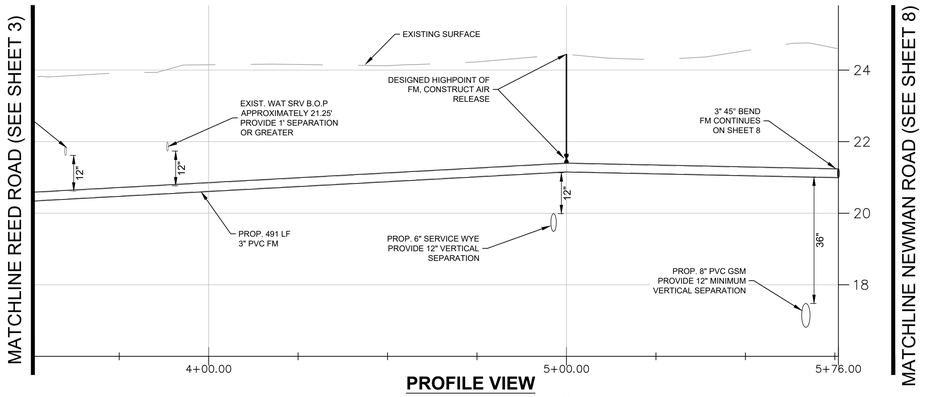
JOB NO.
18187.27

PLOT: 1/29/2025 3:21:26 PM



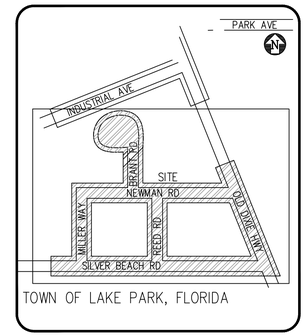
PLAN VIEW
SCALE 1" = 20'





PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- S — SANITARY MANHOLE
- SANITARY CLEANOUT
- SF — SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
16	EXST. (") WAT SRV EL.=±21.25'	PROP. 8" PVC GSM EL.=16.92'	4.33'
17	EXST. (") WAT SRV EL.=±21.25'	PROP. 3" LPFM EL.=20.25'	1.00'
18	EXST. (") WAT SRV EL.=±21.25'	PROP. 8" PVC GSM EL.=16.80'	4.45'
19	EXST. (") WAT SRV EL.=±21.25'	PROP. 3" LPFM EL.=20.25'	1.00'
28	PROP. 3" LPFM EL.=21.93'	EXST. (") WAT SRV EL.=20.79'	1.14'
31	PROP. 3" LPFM EL.=20.48'	PROP. 8" PVC GSM EL.=15.87'	4.61'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - REED ROAD

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE., SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH. (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

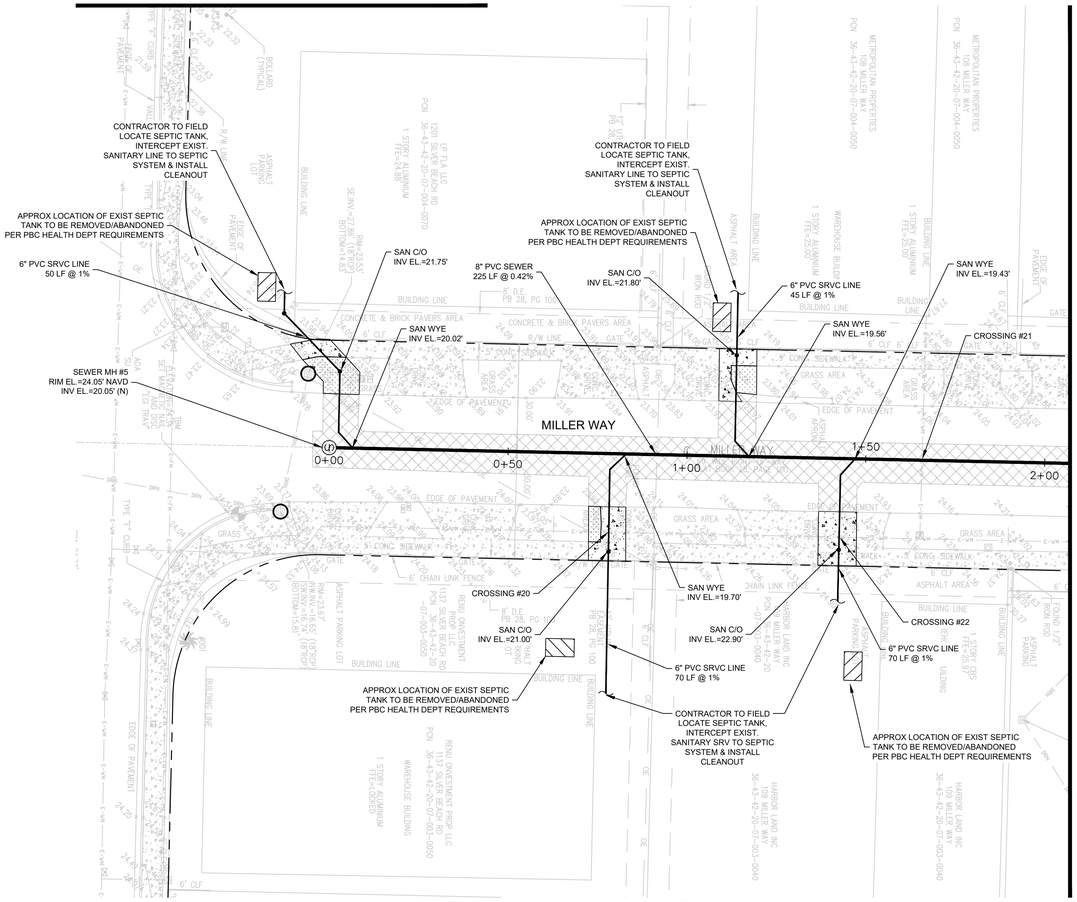
DATE	APRIL		
DRAWN	MK		
PROJECT ENGINEER	MK		
PROJECT MANAGER	ACS		
CHECKED	ACS		

SHEET NO. 4 / 24
JOB NO. 18187.27

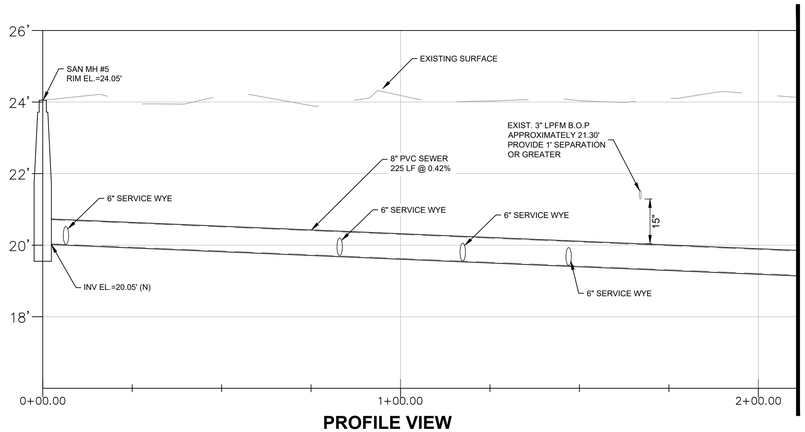
J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM
PLOT: 1/29/2025 3:21:38 PM

CONSTRUCTION, NOT FOR

MATCHLINE SILVER BEACH ROAD (SEE SHEET 11)

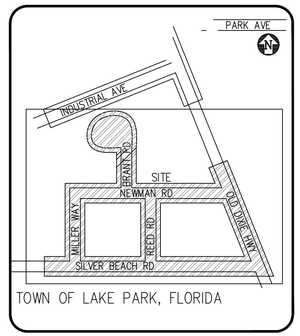


PLAN VIEW
SCALE 1" = 20'



PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE			
CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
20	EXST. 4" AC WM EL.=±22.50'	PROP. 6" SAN SRV EL.=21.50'	1.00'
21	EXST. 6" FIRE EL.=±22.33'	PROP. 8" PVC GSM EL.=20.02'	2.31'
22	EXST. 4" AC WM EL.=±21.67'	PROP. 6" SAN SRV EL.=20.67'	1.00'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

NO.	DATE	REVISIONS	BY
		REMARKS	

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. UNPUBLISHED. PREPARED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - MILLER WAY

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-3390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

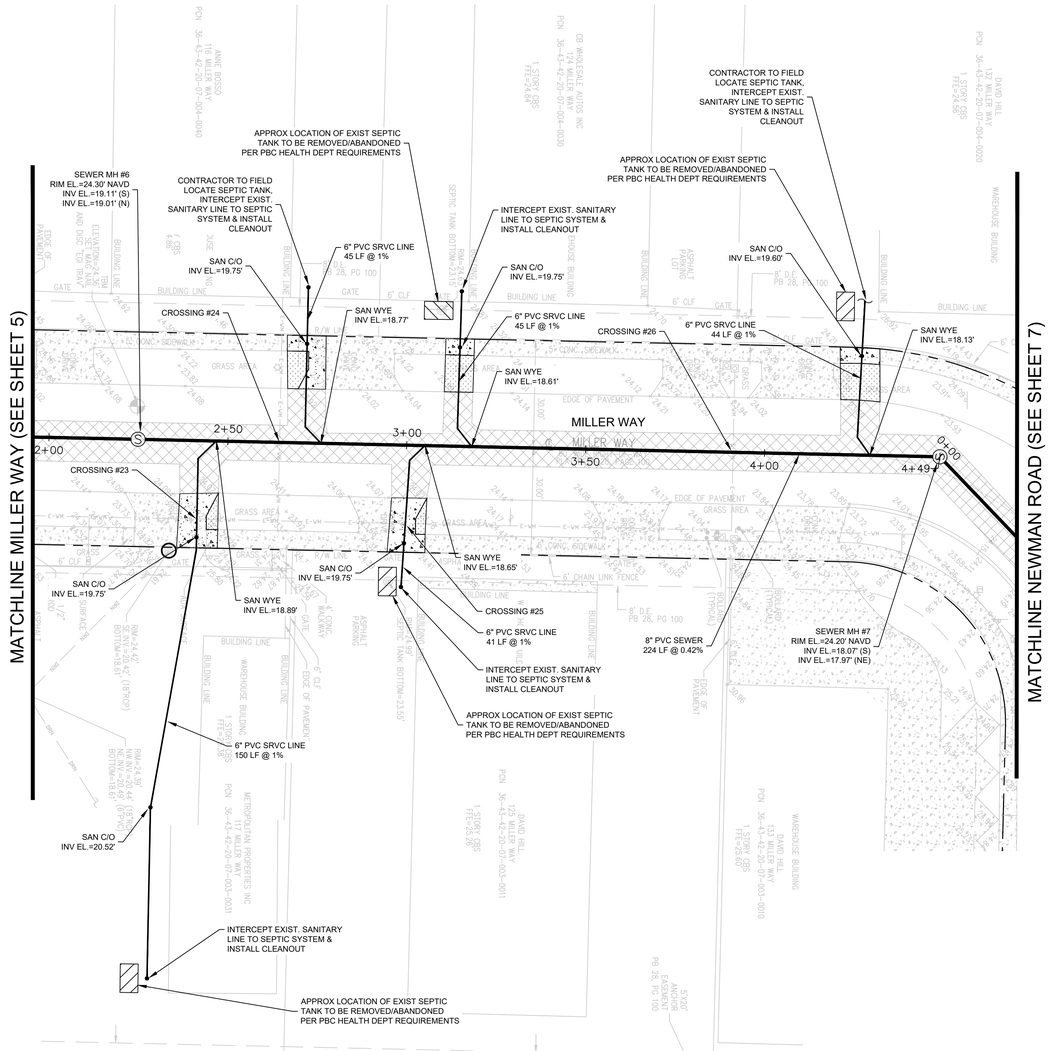
DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

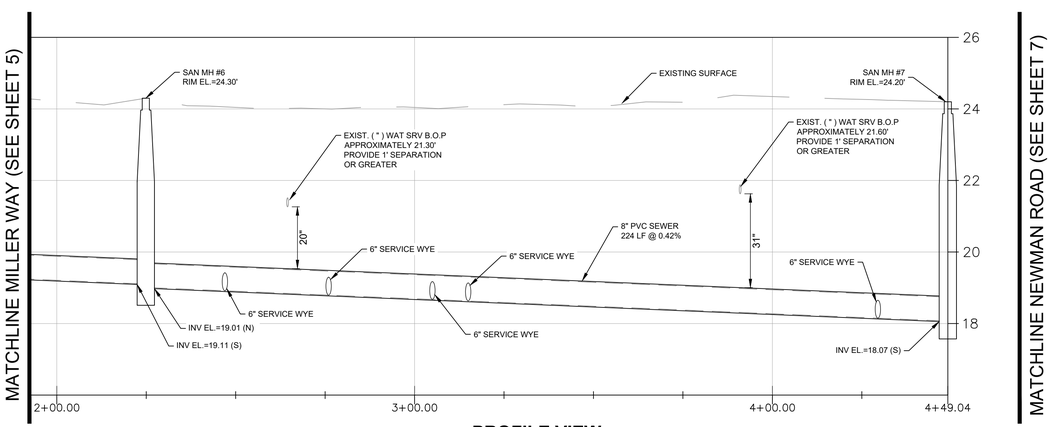
SHEET NO. 5
TOTAL SHEETS 24
JOB NO. 18187.27

PLOT: 1/29/2025 3:21:47 PM

CONSTRUCTION, NOT FOR

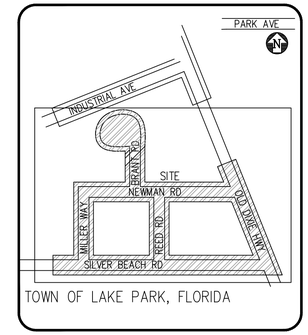


PLAN VIEW
SCALE 1" = 20'



PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- S — SANITARY MANHOLE
- SANITARY CLEANOUT
- SF — SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
23	EXST. 4" AC WM EL.=±20.70'	PROP. 6" SAN SRV EL.=19.70'	1.00'
24	EXST. (") WAT SRV EL.=±21.30'	PROP. 8" PVC GSM EL.=19.53'	1.77'
25	EXST. 4" AC WM EL.=±22.00'	PROP. 6" SAN SRV EL.=21.00'	1.00'
26	EXST. (") WAT SRV EL.=±21.60'	PROP. 8" PVC GSM EL.=18.98'	2.62'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

PLOT: 1/29/2025 3:21:57 PM

REVISIONS

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - MILLER WAY

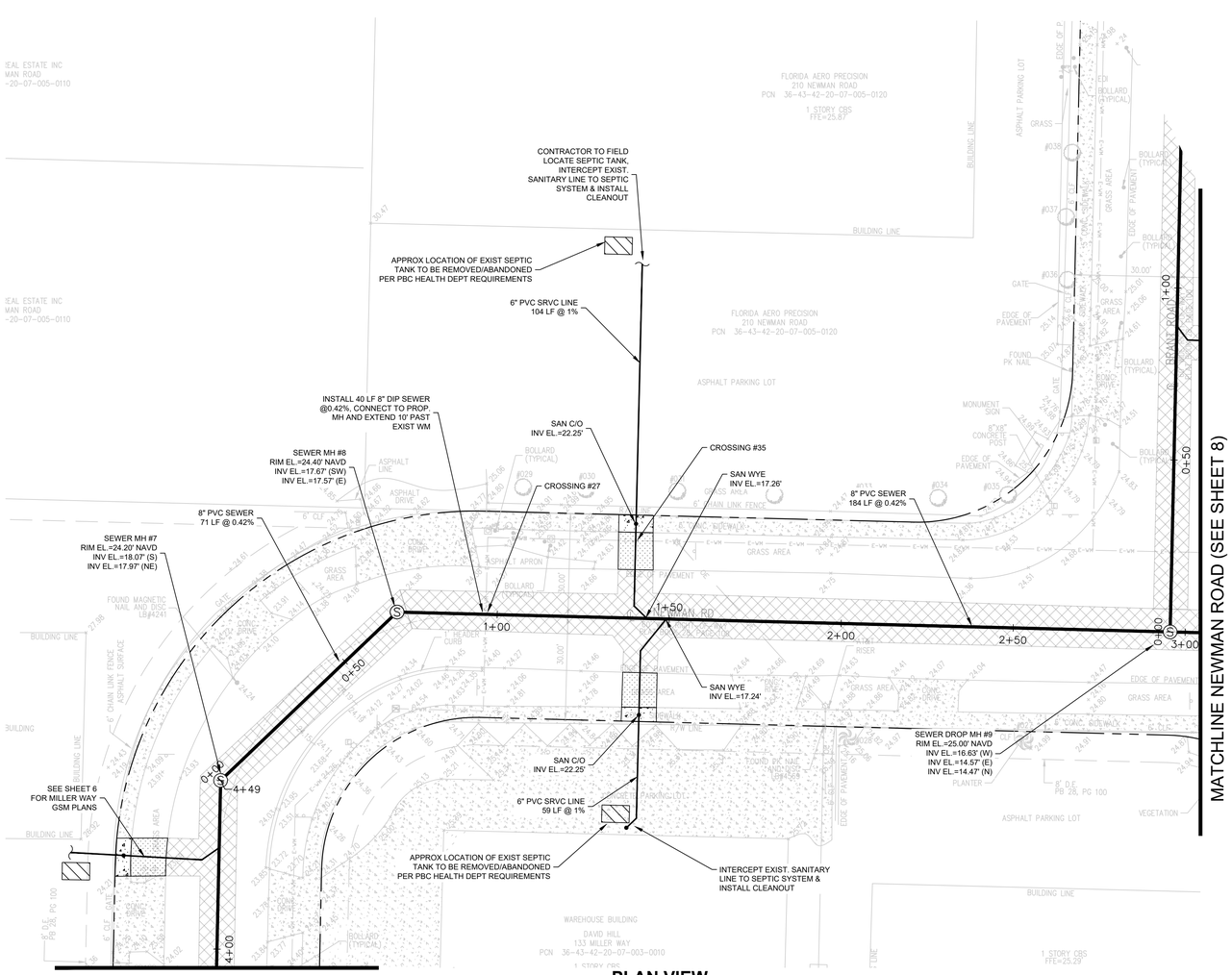
A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH: (561)655-1151 • FAX (561)832-3390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

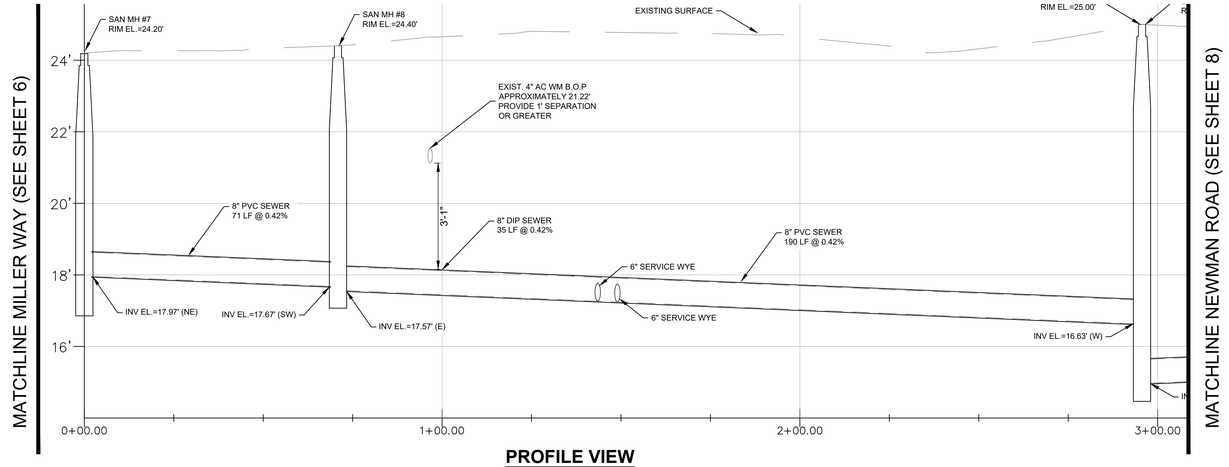
DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	
PROJECT MANAGER	MARCH	
CHECKED	ACS	

SHEET NO. 6 of 24

JOB NO. 18187.27

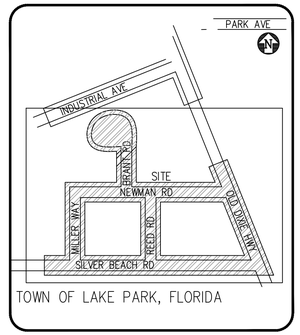


PLAN VIEW
SCALE 1" = 20'



PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
27	EXST. 4" AC WM EL.=±21.22'	PROP. 8" PVC GSM EL.=18.13'	3.09'
35	EXST. 4" AC WM EL.=±21.30'	PROP. 6" SAN SRV EL.=20.05'	1.25'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REVISIONS	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER RESPONSIBLE TO ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - NEWMAN ROAD

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-3390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

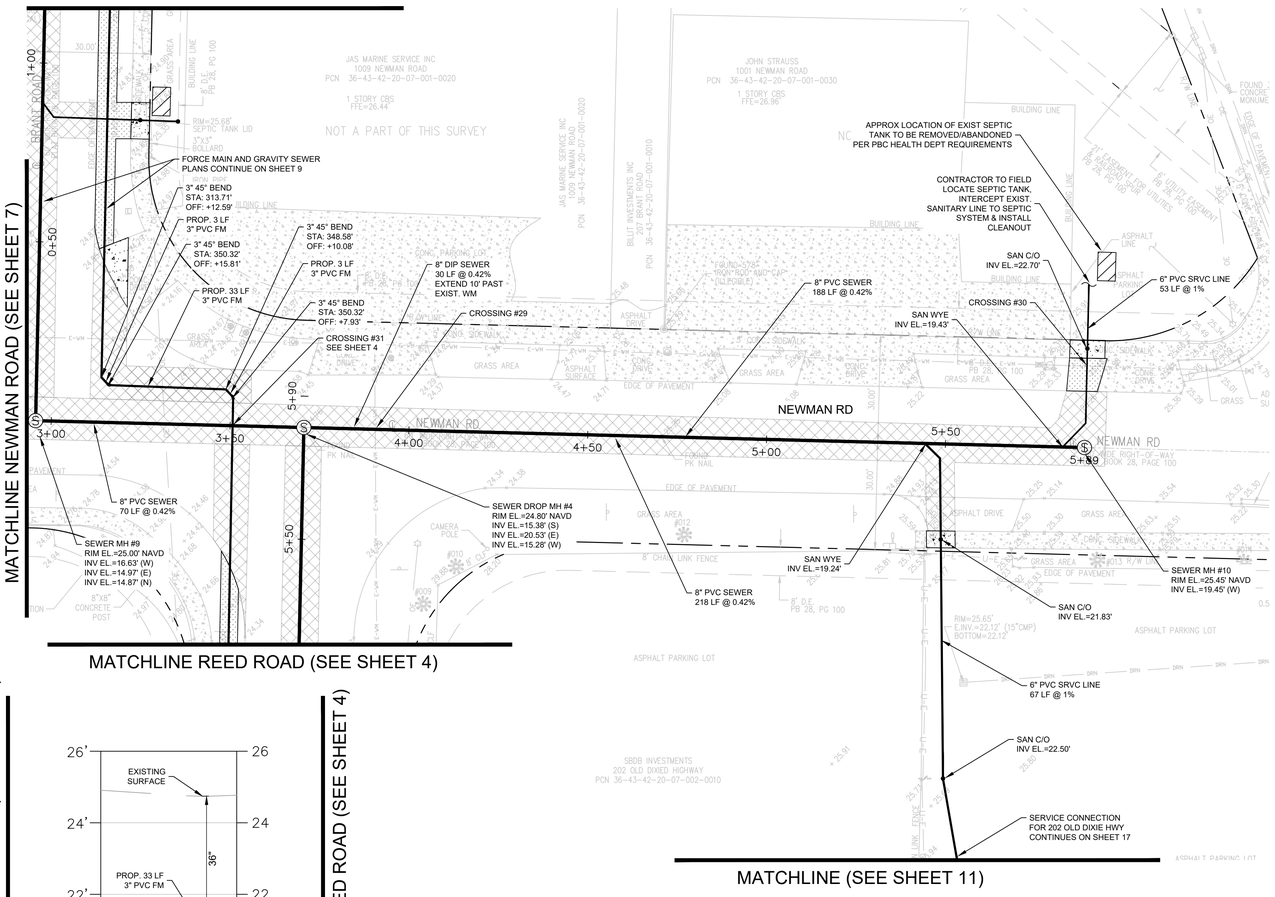
	DATE	
DRAWN	APRIL	
PROJECT ENGINEER	MK	
PROJECT MANAGER	MK	
CHECKED	ACS	
	ACS	

SHEET NO. 7 / 24

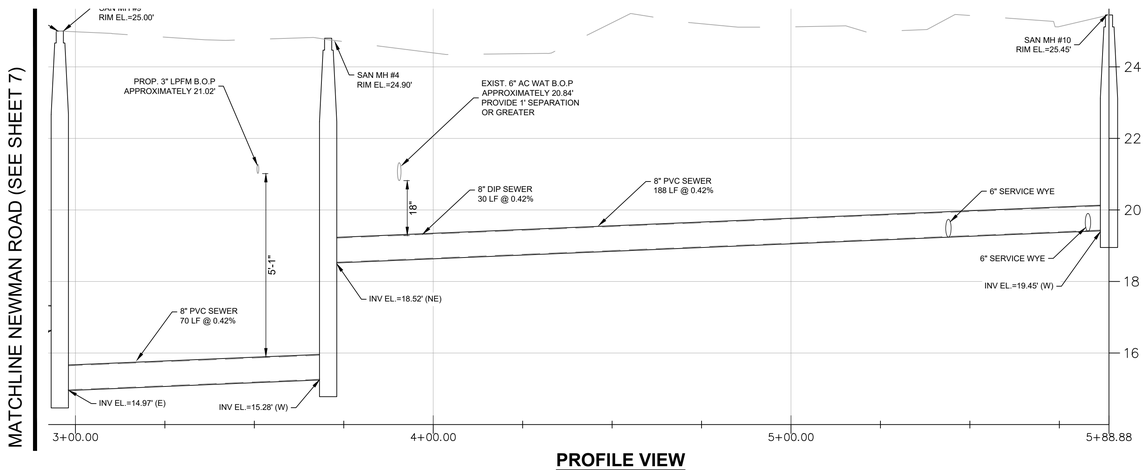
JOB NO. 18187.27

J:\Land Projects R2\18187 27 Lake Park Septic to Sewer\18187 27 Sewer Plans.dwg DATE: 1/29/2026 3:11 PM

PLOT: 1/29/2025 3:22:08 PM

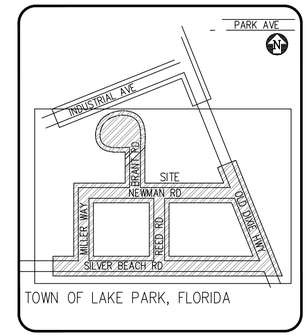


PLAN VIEW
SCALE 1" = 20'



PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
29	EXST. 6" AC WM EL.=20.84'	PROP. 8" DIP GSM EL.=19.34'	1.50'
30	EXST. 8" DIP WM EL.=22.23'	PROP. 6" SAN SRV EL.=19.43'	2.80'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - NEWMAN ROAD

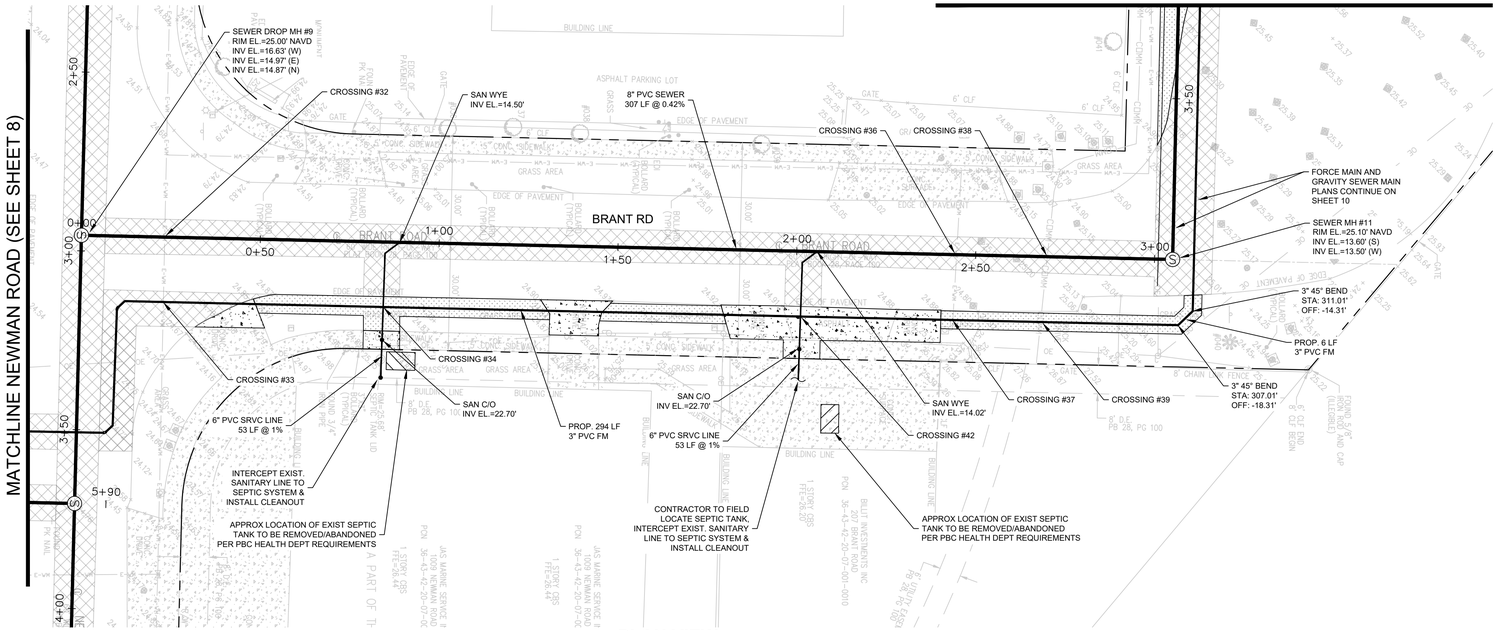
A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH: (561)655-1151 • FAX: (561)832-9390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

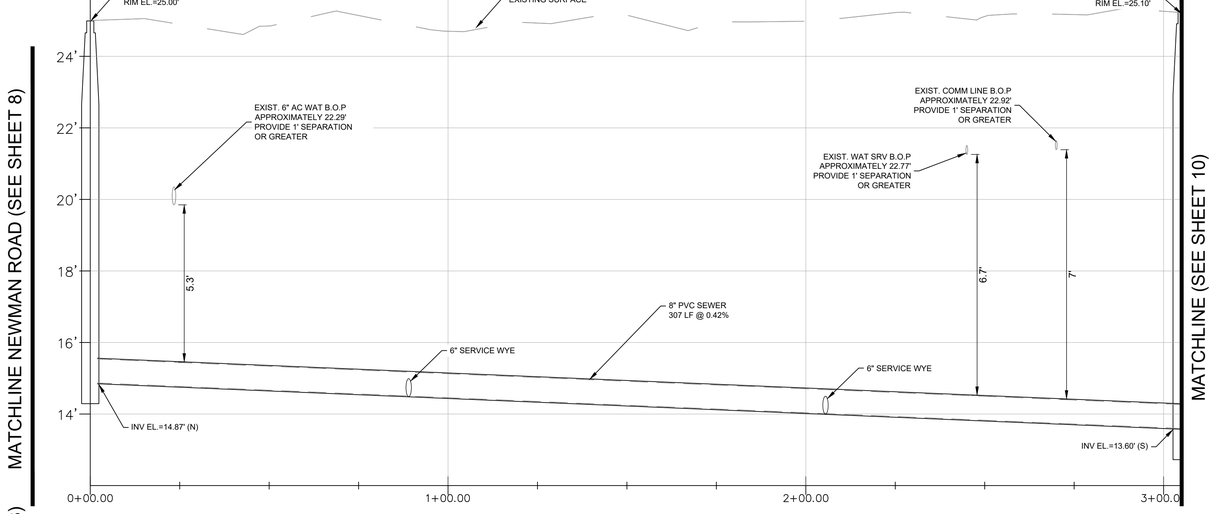
DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

SHEET NO. 8
TOTAL SHEETS 24
JOB NO. 18187.27

PLOT: 1/29/2025 3:22:18 PM

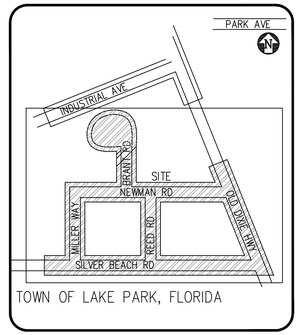


PLAN VIEW
SCALE 1" = 20'



PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
32	EXST. 6" AC WM EL.=±22.29'	PROP. 8" PVC GSM EL.=15.44'	6.85'
33	EXST. 6" AC WM EL.=±22.29'	PROP. 3" LPFM EL.=21.23'	1.06'
34	PROP. 3" LPFM EL.=±20.17'	PROP. 6" SAN SRV EL.=21.17'	1.00'
36	EXST. (") WAT SRV EL.=±22.77'	PROP. 8" PVC GSM EL.=14.52'	8.25'
37	EXST. (") WAT SRV EL.=±22.77'	PROP. 3" LPFM EL.=21.77'	1.00'
38	EXST. COMM LINE EL.=±22.92'	PROP. 8" PVC GSM EL.=14.41'	8.51'
39	EXST. COMM LINE EL.=±22.92'	PROP. 3" LPFM EL.=21.82'	1.10'
42	PROP. 3" LPFM EL.=21.42'	PROP. 6" SAN SRV EL.=20.42'	1.00'

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

REVISIONS			
NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR THIS INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

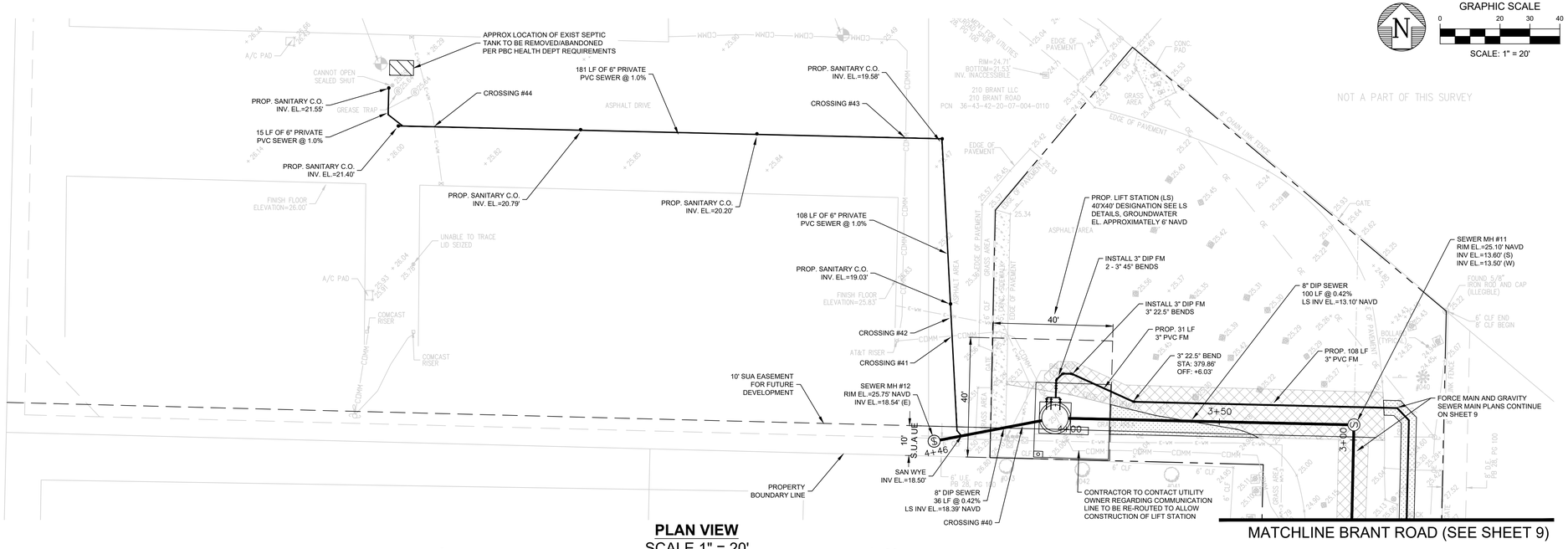
OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - BRANT ROAD

engenuity group inc.
A Higher Standard of Excellence
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-3390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

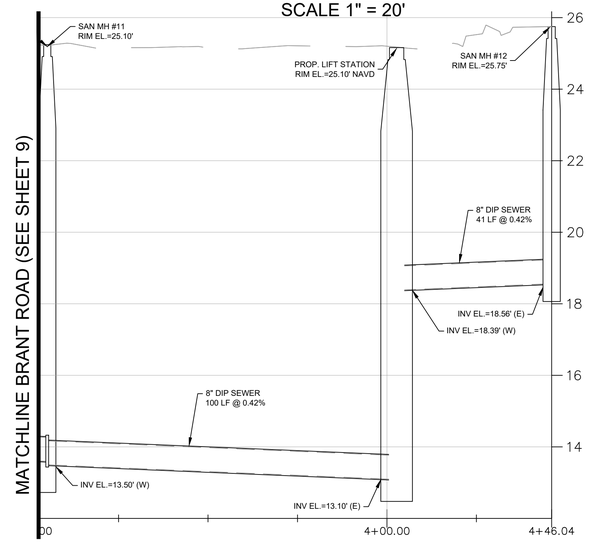
DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	ACS
PROJECT MANAGER	ACS	
CHECKED		

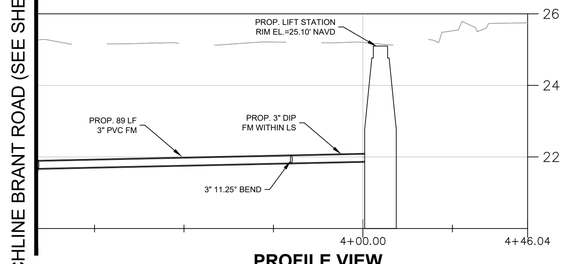
SHEET NO. 9 / 24
JOB NO. 18187.27

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM
PLOT: 1/29/2025 3:22:28 PM

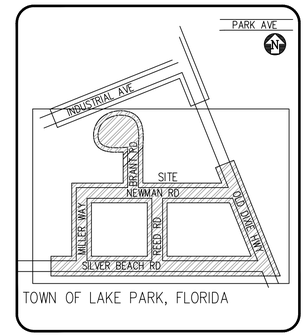


PLAN VIEW
SCALE 1" = 20'





PROFILE VIEW
VERTICAL SCALE 1" = 2'
HORIZONTAL SCALE 1" = 20'



LOCATION MAP
N.T.S.

CROSSING TABLE

CROSSING #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
40	EXST. WAT SRV EL.=±22.08'	PROP. 8" DIP GSM EL.=19.10'	2.98'
41	EXST. COMM LINE EL.=±23.26'	PROP. 6" SAN SRV EL.=19.42'	3.84'
42	EXST. WAT SRV EL.=±22.26'	PROP. 6" SAN SRV EL.=19.49'	2.77'
43	EXST. COMM LINE EL.=±23.17'	PROP. 6" SAN SRV EL.=20.70'	2.47'
44	EXST. WAT SRV EL.=±23.36'	PROP. 6" SAN SRV EL.=22.27'	1.09'

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- (S) SANITARY MANHOLE
- SANITARY CLEANOUT
- SF — SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

REVISIONS

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - BRANT ROAD

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE., SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH. (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

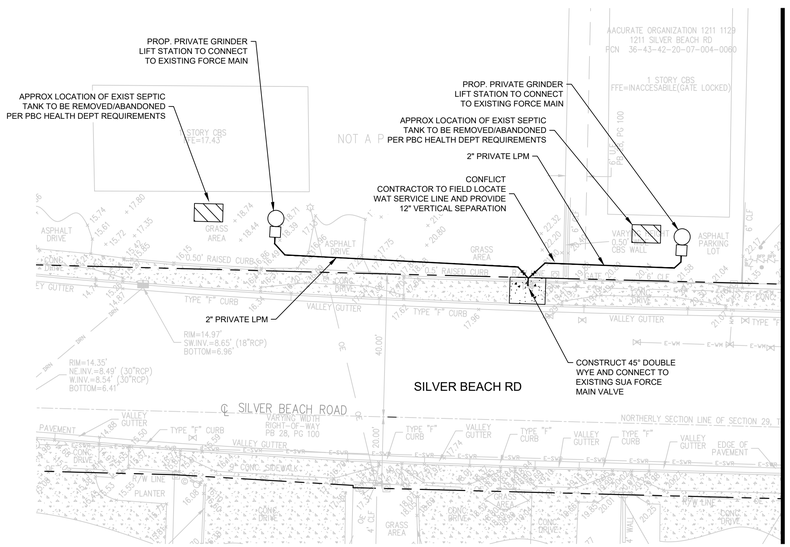
J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

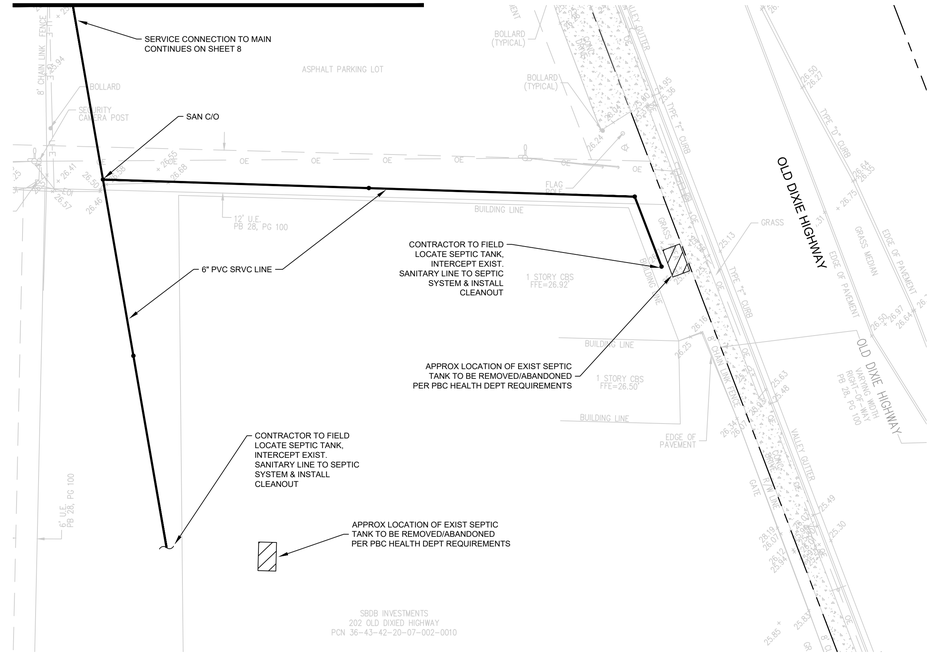
DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	
PROJECT MANAGER	ACS	
CHECKED	ACS	

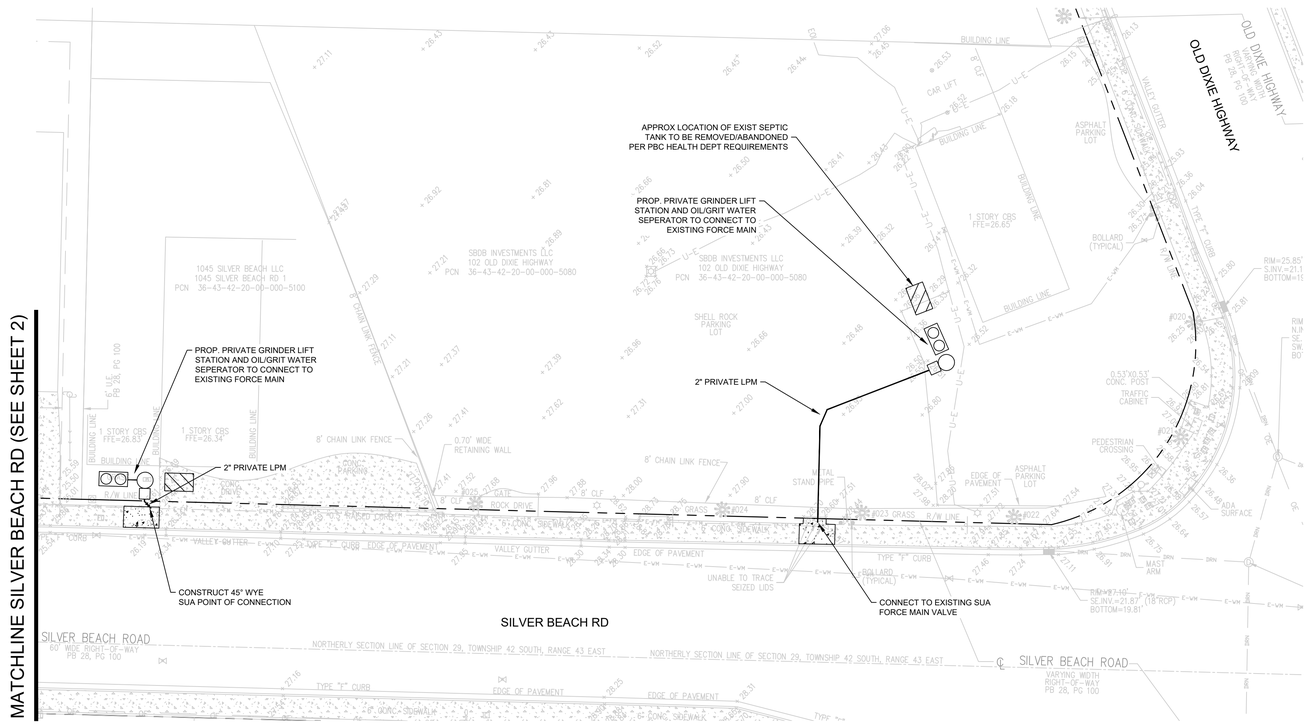
SHEET NO. 10 / 24

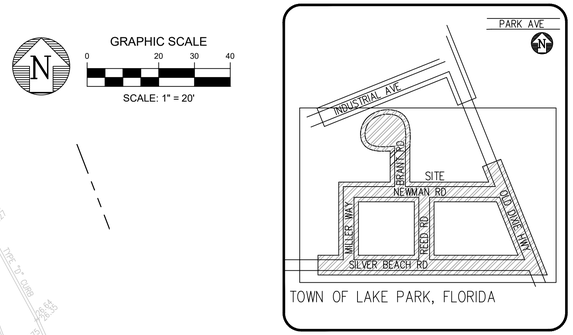
JOB NO. 18187.27

PLOT: 1/29/2025 3:22:38 PM









LOCATION MAP
N.T.S.

GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REMARKS	BY

REVISIONS

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER AFFILIATED WITH ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

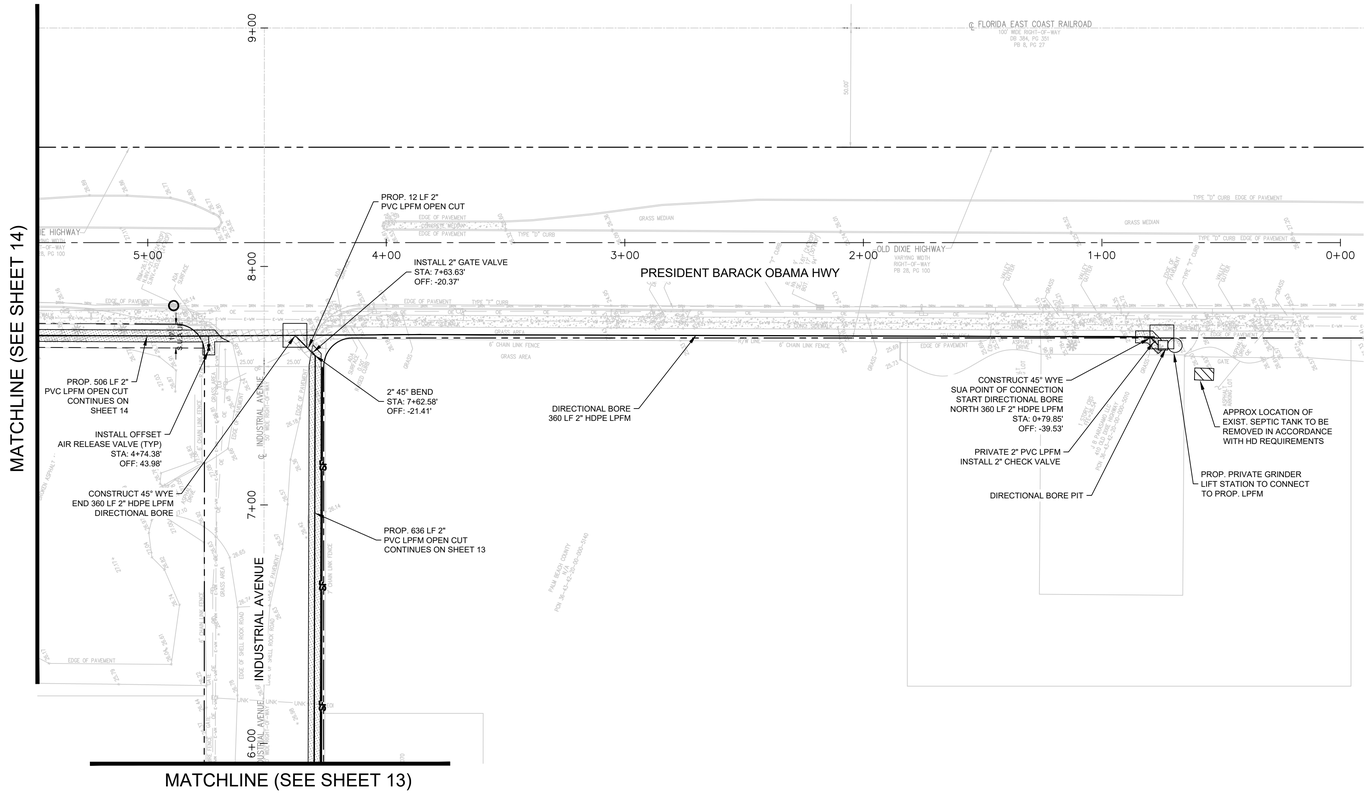
OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION I - TRI CITY INDUSTRIAL PARK

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH: (561)655-1151 • FAX (561)832-9390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

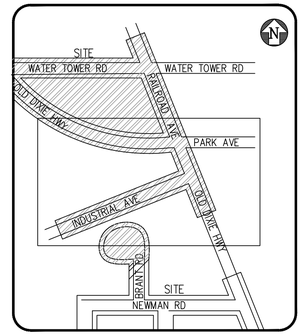
DRAWN	APRIL	
PROJECT ENGINEER	MK	
PROJECT MANAGER	MK	
CHECKED	ACS	
DATE	ACS	

SHEET NO. 11
OF 24
JOB NO. 18187.27

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM
PLOT: 1/29/2025 3:22:50 PM



GRAPHIC SCALE
0 30 45 60
SCALE: 1" = 30'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

PALM BEACH COUNTY RIGHT OF WAY NOTES:

1. MAINTAIN HORIZONTAL SEPARATION OF 4' AND VERTICAL SEPARATION OF 1' BETWEEN ALL PROPOSED UTILITIES AND PALM BEACH COUNTY UTILITY STRUCTURES, CONDUITS, AND PIPES.
2. ANY AND ALL PB COUNTY STORM DRAIN / SIDEWALK / PATHWAY / C&G / ADA AND OR ADDITIONAL ROADWAY THAT IS AFFECTED BY THE PROPOSED CONSTRUCTION MUST BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ALL APPLICABLE FDOT / PB COUNTY DETAILS AND SPECIFICATIONS (APPLICABLE THOROUGHFARE / NON-THOROUGHFARE).
3. SIDEWALK AFFECTED TO INCLUDE ONE FLAG ON EITHER SIDE OF THE DISTRUBED AREA. SIDEWALKS WILL BE RESTORED BY REPLACING: TWO FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED AT A CONTROL JOINT AND THREE FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS. NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)
4. ROADWAY LANES AFFECTED WILL REQUIRE THE AFFECTED LANES AND/OR ADDITIONAL LANES BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION AND TO EQUAL DIMENSIONS AS THE ADJACENT LANES (EOP TO EOP)
5. ALL AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' IN EITHER DIRECTION (THROUGHFARE) AND 25' MIN. RESTORATION (NON-THOROUGHFARE).
6. MILL AND PAVE TRANSITION AREA IN PALM BEACH COUNTY R/W, (SILVER BEACH ROAD AND PRESIDENT BARACK OBAMA HWY) WILL BE REQUIRED TO INCLUDE THE INTERSECTION IN ITS ENTIRETY, (25' IN ALL DIRECTIONS).
7. FLOWABLE FILL IS NOT AN APPROVED WEAR COURSE IN PB COUNTY. PBC THOROUGHFARE ROAD RESTORATION DETAIL / LANE WIDTH NEEDS TO REFLECT A MIN. 50' OUTSIDE THE PC IN ALL DIRECTIONS.
8. IF PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN PIPE/STRUCTURES ARE AFFECTED IN ANY WAY. PB COUNTY R&B REQUIRES FULL RESOTRATION OF THE AFFECTED SYSTEM TO LIKE OR BETTER THEN LIKE CONDITION AND TO PB COUNTY/FDOT STANDARD.
9. ANY DRAINAGE SWALES AFFECTED BY THE PROPOSED CONSTRUCTION, SHALL BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ORIGINAL DESIGN ELEVATIONS.

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

811 Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

REVISIONS

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION II - LAKE PARK PUBLIC WORKS

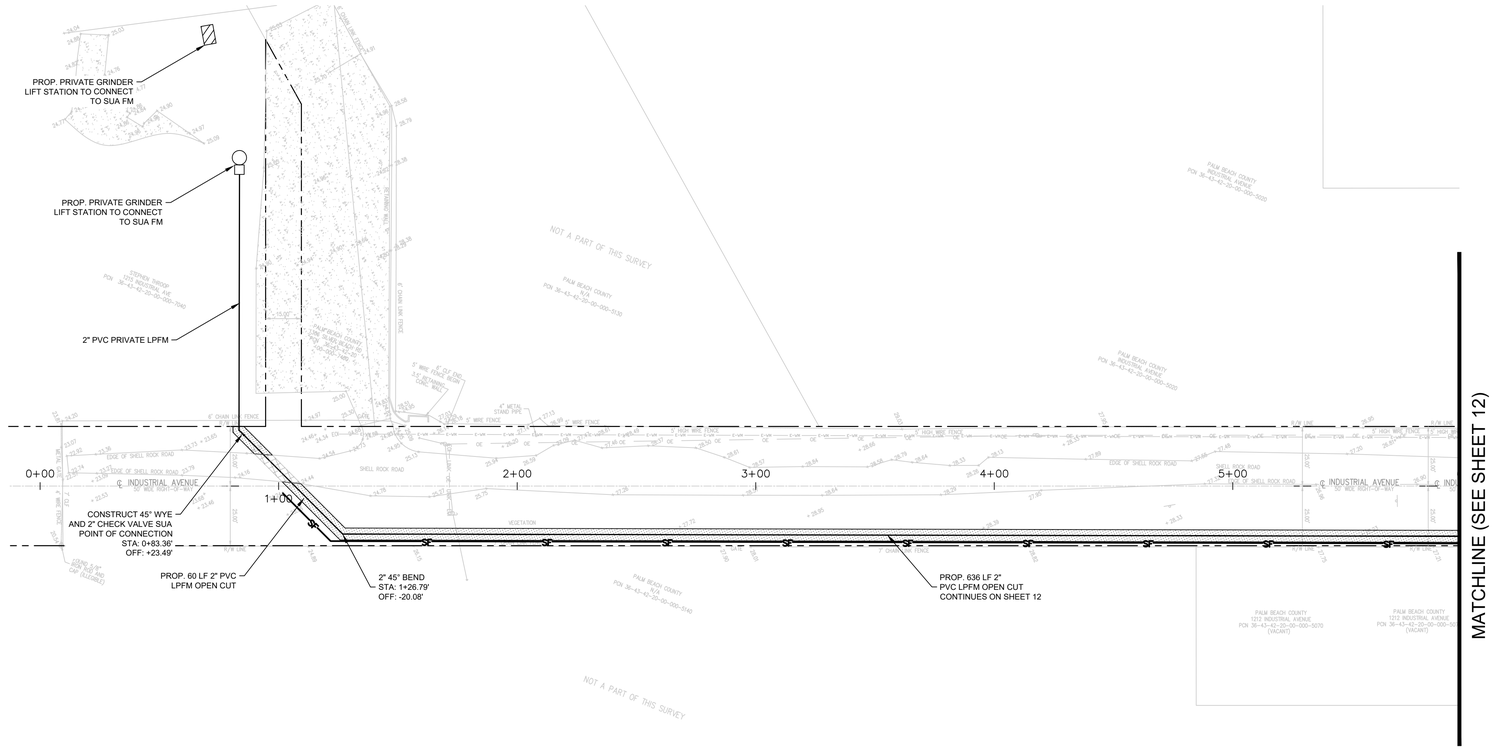
DATE	APRIL		
DRAWN	MK		
PROJECT ENGINEER	MK		
PROJECT MANAGER	ACS		
CHECKED	ACS		

SHEET NO. 12 / 24
JOB NO. 18187.27

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

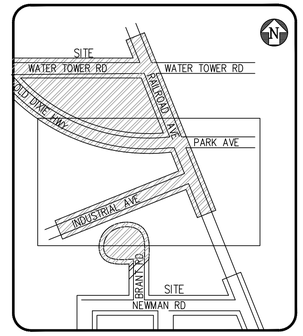
PLOT: 1/29/2025 3:22:55 PM



GRAPHIC SCALE

0 30 45 60

SCALE: 1" = 30'



LOCATION MAP

N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

PLOT: 1/29/2025 3:23:00 PM

NO.	DATE	REVISIONS	BY
		REMARKS	

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION II - LAKE PARK PUBLIC WORKS

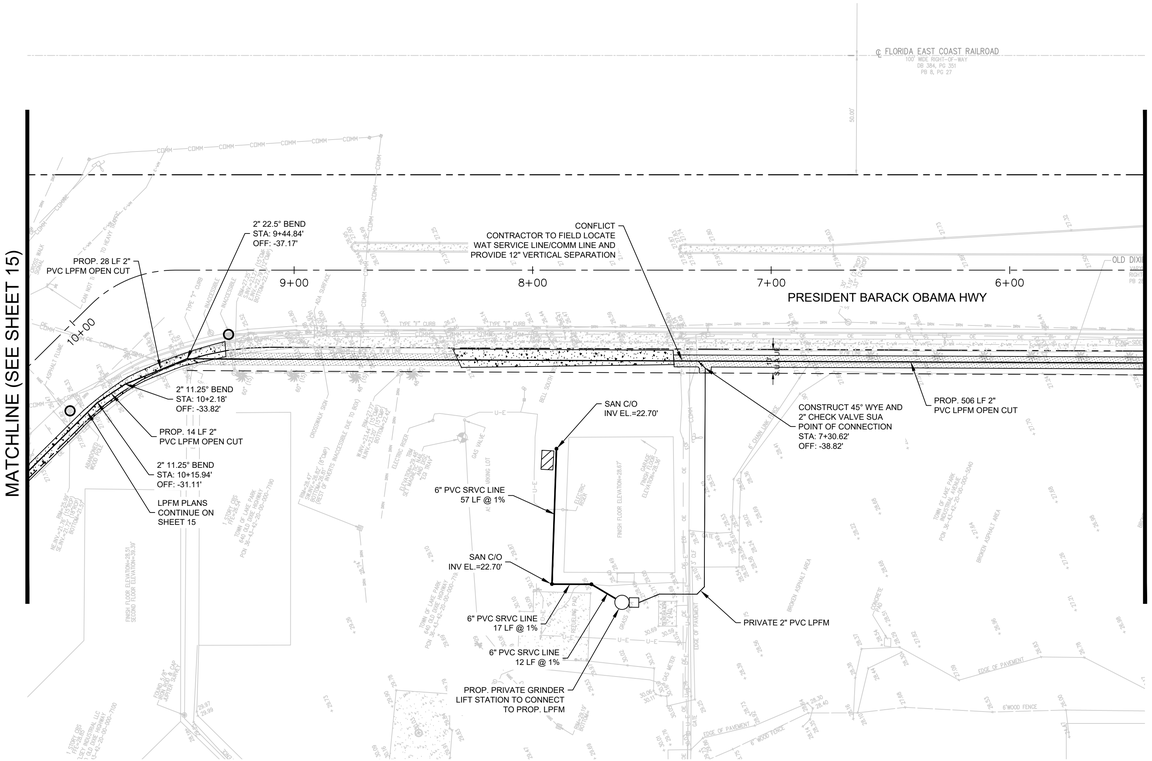
A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1200 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	
PROJECT MANAGER	ACS	
CHECKED	ACS	

SHEET NO. 13 / 24

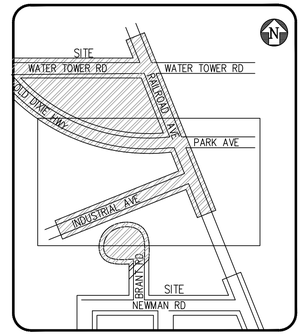
JOB NO. 18187.27



GRAPHIC SCALE

0 30 45 60

SCALE: 1" = 30'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

PALM BEACH COUNTY RIGHT OF WAY NOTES:

1. MAINTAIN HORIZONTAL SEPARATION OF 4' AND VERTICAL SEPARATION OF 1' BETWEEN ALL PROPOSED UTILITIES AND PALM BEACH COUNTY UTILITY STRUCTURES, CONDUITS, AND PIPES.
2. ANY AND ALL PB COUNTY STORM DRAIN / SIDEWALK / PATHWAY / C&G / ADA AND OR ADDITIONAL ROADWAY THAT IS AFFECTED BY THE PROPOSED CONSTRUCTION MUST BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ALL APPLICABLE FDOT / PB COUNTY DETAILS AND SPECIFICATIONS (APPLICABLE THOROUGHFARE / NON-THOROUGHFARE).
3. SIDEWALK AFFECTED TO INCLUDE ONE FLAG ON EITHER SIDE OF THE DISTRUBED AREA. SIDEWALKS WILL BE RESTORED BY REPLACING: TWO FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED AT A CONTROL JOINT AND THREE FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS. NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)
4. ROADWAY LANES AFFECTED WILL REQUIRE THE AFFECTED LANES AND/OR ADDITIONAL LANES BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION AND TO EQUAL DIMENSIONS AS THE ADJACENT LANES (EOP TO EOP)
5. ALL AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' IN EITHER DIRECTION (THROUGHFARE) AND 25' MIN. RESTORATION (NON-THOROUGHFARE).
6. MILL AND PAVE TRANSITION AREA IN PALM BEACH COUNTY R/W, (SILVER BEACH ROAD AND PRESIDENT BARACK OBAMA HWY) WILL BE REQUIRED TO INCLUDE THE INTERSECTION IN ITS ENTIRETY, (25' IN ALL DIRECTIONS).
7. FLOWABLE FILL IS NOT AN APPROVED WEAR COURSE IN PB COUNTY. PBC THOROUGHFARE ROAD RESTORATION DETAIL / LANE WIDTH NEEDS TO REFLECT A MIN. 50' OUTSIDE THE PC IN ALL DIRECTIONS.
8. IF PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN PIPE/ISTRUCTURES ARE AFFECTED IN ANY WAY. PB COUNTY R&B REQUIRES FULL RESOTRATION OF THE AFFECTED SYSTEM TO LIKE OR BETTER THEN LIKE CONDITION AND TO PB COUNTY/FDOT STANDARD.
9. ANY DRAINAGE SWALES AFFECTED BY THE PROPOSED CONSTRUCTION, SHALL BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ORIGINAL DESIGN ELEVATIONS.

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REVISIONS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR THIS INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

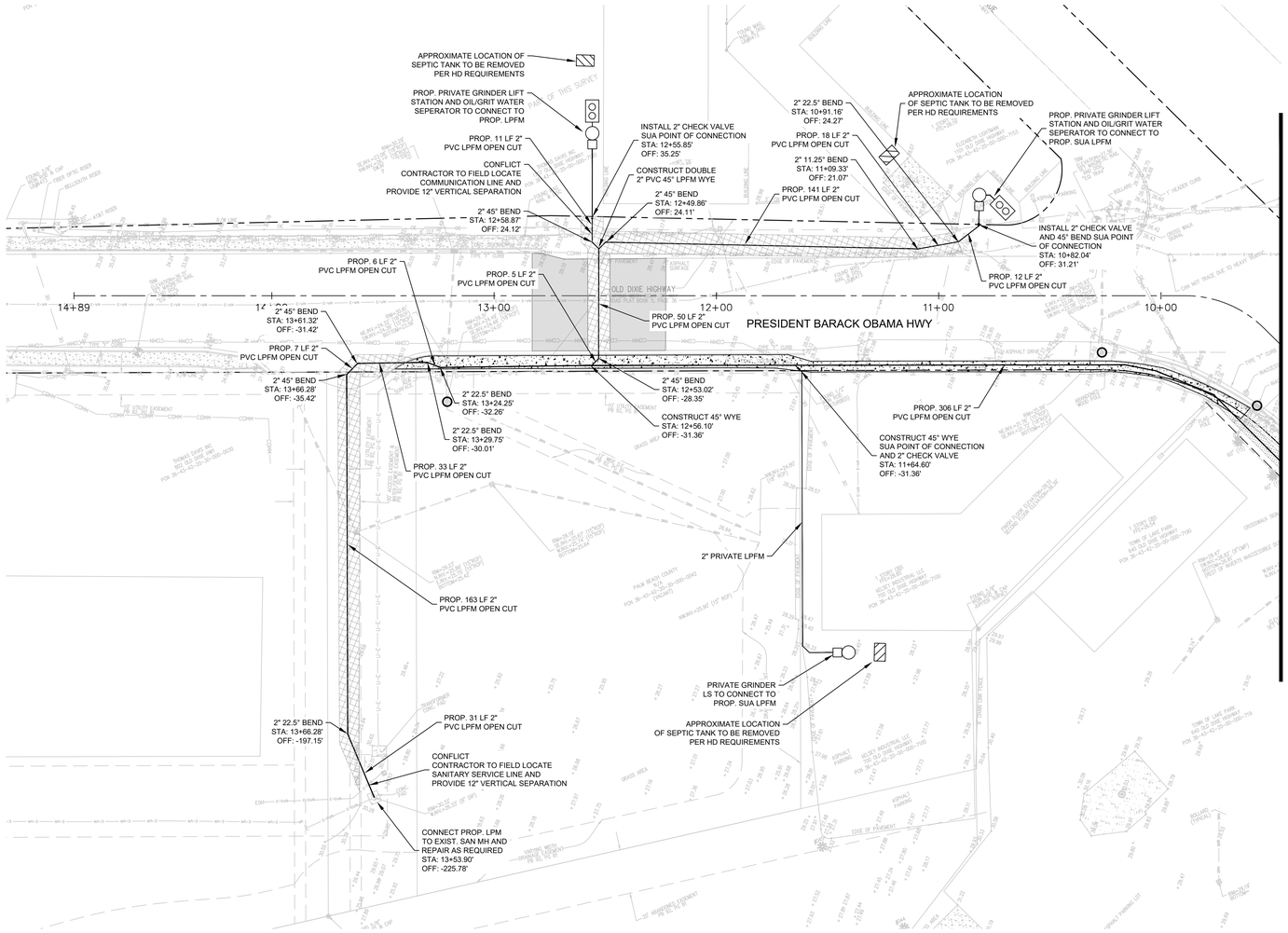
OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION II - LAKE PARK PUBLIC WORKS

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPING
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS
SHEET NO.	14 / 24
JOB NO.	18187.27

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

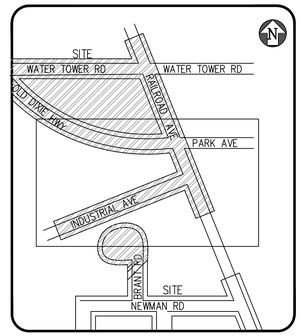
PLOT: 1/29/2025 3:23:05 PM



GRAPHIC SCALE

0 30 45 60

SCALE: 1" = 30'



LOCATION MAP

N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

PALM BEACH COUNTY RIGHT OF WAY NOTES:

1. MAINTAIN HORIZONTAL SEPARATION OF 4' AND VERTICAL SEPARATION OF 1' BETWEEN ALL PROPOSED UTILITIES AND PALM BEACH COUNTY UTILITY STRUCTURES, CONDUITS, AND PIPES.
2. ANY AND ALL PB COUNTY STORM DRAIN / SIDEWALK / PATHWAY / C&G / ADA AND OR ADDITIONAL ROADWAY THAT IS AFFECTED BY THE PROPOSED CONSTRUCTION MUST BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ALL APPLICABLE FDOT / PB COUNTY DETAILS AND SPECIFICATIONS (APPLICABLE THOROUGHFARE / NON-THOROUGHFARE).
3. SIDEWALK AFFECTED TO INCLUDE ONE FLAG ON EITHER SIDE OF THE DISTRUBED AREA. SIDEWALKS WILL BE RESTORED BY REPLACING: TWO FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED AT A CONTROL JOINT AND THREE FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS. NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)
4. ROADWAY LANES AFFECTED WILL REQUIRE THE AFFECTED LANES AND/OR ADDITIONAL LANES BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION AND TO EQUAL DIMENSIONS AS THE ADJACENT LANES (EOP TO EOP)
5. ALL AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' IN EITHER DIRECTION (THROUGHFARE) AND 25' MIN. RESTORATION (NON-THOROUGHFARE).
6. MILL AND PAVE TRANSITION AREA IN PALM BEACH COUNTY R/W, (SILVER BEACH ROAD AND PRESIDENT BARACK OBAMA HWY) WILL BE REQUIRED TO INCLUDE THE INTERSECTION IN ITS ENTIRETY, (25' IN ALL DIRECTIONS).
7. FLOWABLE FILL IS NOT AN APPROVED WEAR COURSE IN PB COUNTY. PBC THOROUGHFARE ROAD RESTORATION DETAIL / LANE WIDTH NEEDS TO REFLECT A MIN. 50' OUTISIDE THE PC IN ALL DIRECTIONS.
8. IF PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN PIPE/STRUCTURES ARE AFFECTED IN ANY WAY. PB COUNTY R&B REQUIRES FULL RESOTRATION OF THE AFFECTED SYSTEM TO LIKE OR BETTER THEN LIKE CONDITION AND TO PB COUNTY/FDOT STANDARD.
9. ANY DRAINAGE SWALES AFFECTED BY THE PROPOSED CONSTRUCTION, SHALL BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ORIGINAL DESIGN ELEVATIONS.

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REMARKS	BY
		REVISIONS	

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION II - LAKE PARK PUBLIC WORKS

engenuity group inc.
A Higher Standard of Excellence
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	APRIL			
DRAWN	MK			
PROJECT ENGINEER	MK			
PROJECT MANAGER	ACS			
CHECKED	ACS			

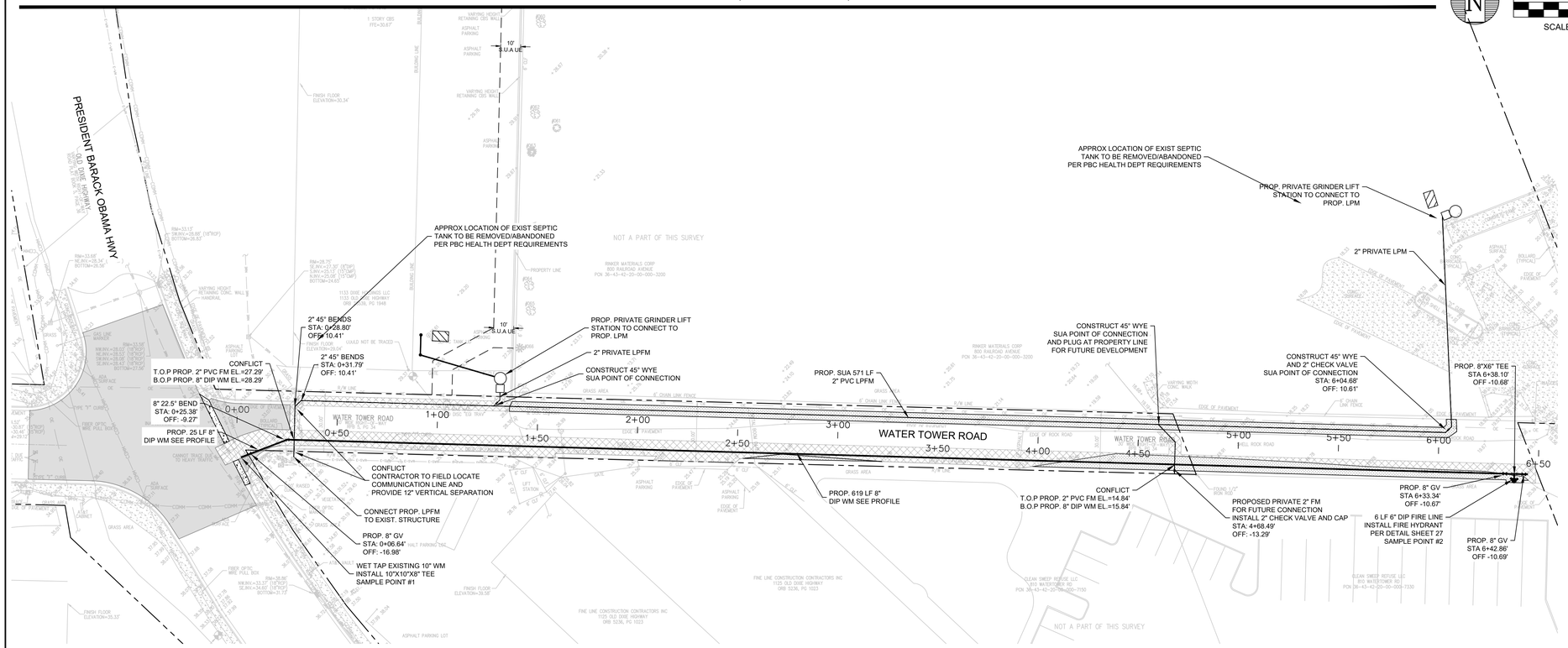
SHEET NO. 15 / 24

JOB NO. 18187.27

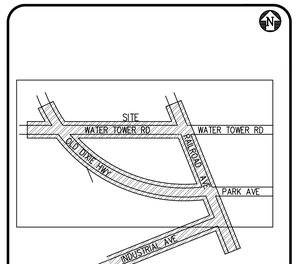
J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

PLOT: 1/29/2025 3:23:10 PM

MATCHLINE (SEE SHEET 17)



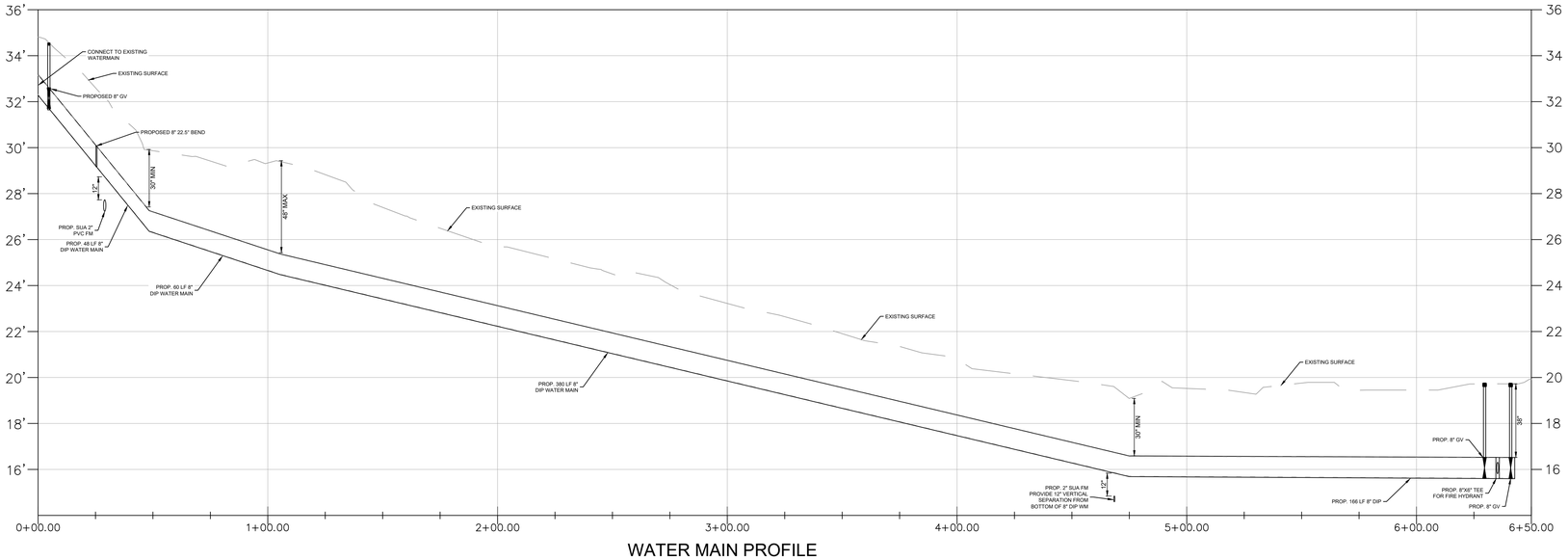
GRAPHIC SCALE
0 30 45 60
SCALE: 1" = 30'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SF — SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION



WATER MAIN PROFILE

PALM BEACH COUNTY RIGHT OF WAY NOTES:

1. MAINTAIN HORIZONTAL SEPARATION OF 4' AND VERTICAL SEPARATION OF 1' BETWEEN ALL PROPOSED UTILITIES AND PALM BEACH COUNTY UTILITY STRUCTURES, CONDUITS, AND PIPES.
2. ANY AND ALL PB COUNTY STORM DRAIN / SIDEWALK / PATHWAY / C&G / ADA AND OR ADDITIONAL ROADWAY THAT IS AFFECTED BY THE PROPOSED CONSTRUCTION MUST BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ALL APPLICABLE FDOT / PB COUNTY DETAILS AND SPECIFICATIONS (APPLICABLE THOROUGHFARE / NON-THOROUGHFARE).
3. SIDEWALK AFFECTED TO INCLUDE ONE FLAG ON EITHER SIDE OF THE DISTRUBED AREA. SIDEWALKS WILL BE RESTORED BY REPLACING: TWO FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED AT A CONTROL JOINT AND THREE FLAGS IF THE POINT OF CONSTRUCTION IS LOCATED BETWEEN CONTROL JOINTS. NO PARTIAL JOINTS ACCEPTED. (PER SITUATION)
4. ROADWAY LANES AFFECTED WILL REQUIRE THE AFFECTED LANES AND/OR ADDITIONAL LANES BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION AND TO EQUAL DIMENSIONS AS THE ADJACENT LANES (EOP TO EOP)
5. ALL AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP, LANE WIDTH MIN. AND 50' IN EITHER DIRECTION (THROUGHFARE) AND 25' MIN. RESTORATION (NON-THOROUGHFARE).
6. MILL AND PAVE TRANSITION AREA IN PALM BEACH COUNTY R/W, (SILVER BEACH ROAD AND PRESIDENT BARACK OBAMA HWY) WILL BE REQUIRED TO INCLUDE THE INTERSECTION IN ITS ENTIRETY, (25' IN ALL DIRECTIONS).
7. FLOWABLE FILL IS NOT AN APPROVED WEAR COURSE IN PB COUNTY. PBC THOROUGHFARE ROAD RESTORATION DETAIL / LANE WIDTH NEEDS TO REFLECT A MIN. 50' OUTSIDE THE PC IN ALL DIRECTIONS.
8. IF PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN PIPE/STRUCTURES ARE AFFECTED IN ANY WAY, PB COUNTY R&B REQUIRES FULL RESOTRATION OF THE AFFECTED SYSTEM TO LIKE OR BETTER THEN LIKE CONDITION AND TO PB COUNTY/FDOT STANDARD.
9. ANY DRAINAGE SWALES AFFECTED BY THE PROPOSED CONSTRUCTION, SHALL BE RESTORED TO LIKE OR BETTER THEN LIKE CONDITION TO INCLUDE ORIGINAL DESIGN ELEVATIONS.

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REVISIONS	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

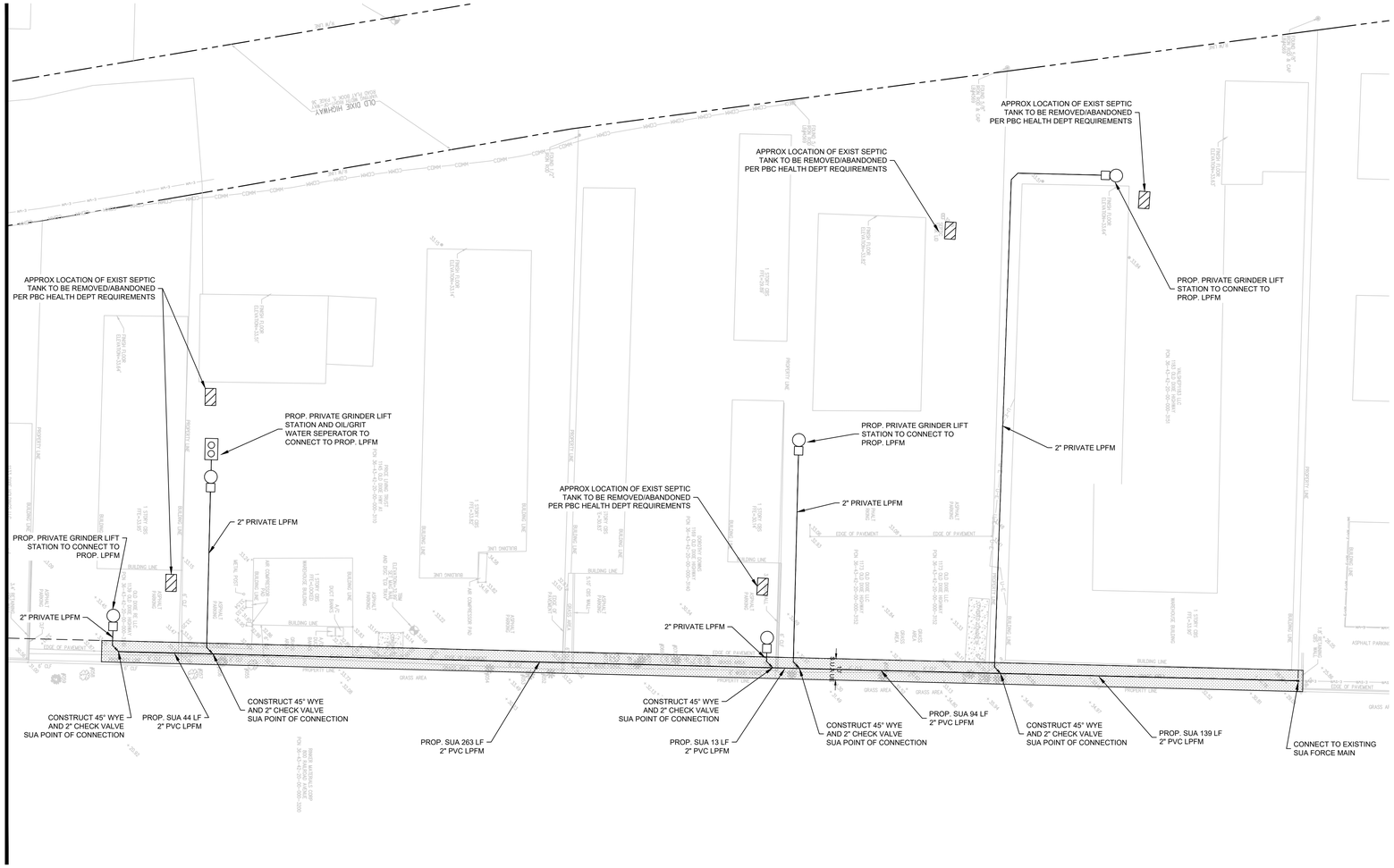
OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION III - WATER TOWER ROAD

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

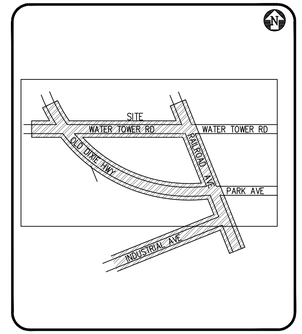
DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

SHEET NO. 16 / 24
JOB NO. 18187.27

J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2026 3:11 PM
PLOT: 1/29/2025 3:23:18 PM



GRAPHIC SCALE
0 30 45 60
SCALE: 1" = 30'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FULL DEPTH ASPHALT REPAIR
- MILL/OVERLAY PER PBC STANDARDS
- CONCRETE RESTORATION
- FM — EXISTING FORCE MAIN
- WM — EXISTING WATER MAIN
- PROPERTY / ROW LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- SF — SILT FENCE
- INLET PROTECTION
- PROPOSED SOD RESTORATION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
   CONVERSION FACTOR
   FRIDGE: 13.103(NAVD88) + 1.524 = 14.627(NGVD29)
2. ALL AREAS DISTURBED BY CONSTRUCTION WHICH INCLUDES ALL DRIVEWAYS, PAVERS, ASPHALT, CONCRETE AND VEGETATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
3. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
4. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
5. CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

NOT FOR CONSTRUCTION

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

CONSTRUCTION, NOT FOR

NO.	DATE	REVISIONS	BY
		REMARKS	

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION III - WATER TOWER ROAD

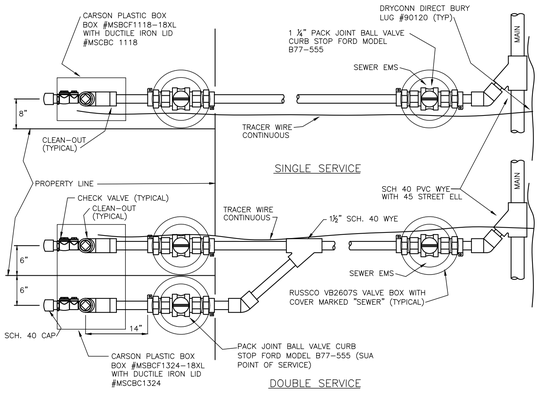
A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)855-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

SHEET NO. 17
JOB NO. 18187.27

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 1/29/2025 3:11 PM

PLOT: 1/29/2025 3:23:25 PM

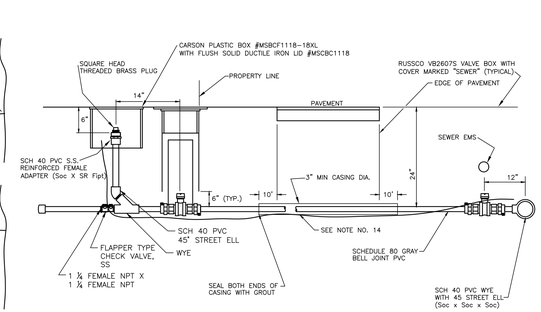


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. SERVICE PIPE FITTINGS AND VALVES FOR SIMPLEX STATION SHALL BE 1¼" AND FOR DUPLEX STATION SHALL BE 1½" SCHEDULE 80 GRAY BELL JOINT PVC, 400 PSI (CHARLOTTE PIPE). NO SLIP X SLIP COUPLINGS ALLOWED.
2. SERVICE FITTINGS SHALL BE SPEARS MANUFACTURING COMPANY OR EQUAL, SCHEDULE 40 PVC. NO DWV FITTINGS, SCHEDULE 40 MALE ADAPTERS, SLIP COUPLINGS, SLIP BUSHINGS, OR SCHEDULE 80 PVC FITTINGS ARE ALLOWED.
3. VALVE BOXES REQUIRED FOR BALL VALVE AT TEE NEXT TO MAIN ON SHORT SIDE SERVICES UNLESS SPECIFICALLY INDICATED AND NOTED ON THE PLANS.
4. TRACER WIRE TO BE #6 AWG, STRANDED COPPER, TYPE THHN WITH GREEN INSULATION. USE 11" CABLE TIES TO CONNECT TO PVC PIPE AND FITTINGS. TRACER WIRE SHALL WRAP AROUND AND TERMINATE INSIDE CLEAN OUT BOX WITH ENOUGH SLACK TO EXTEND 2-3' ABOVE GRADE.
5. PVC PRIMER AND CEMENT SHALL BE OATEY MEDIUM-BODIED.
6. CURB STOPS SHALL BE FULL PORT BALL VALVES WITH PACK JOINT FOR PVC PIPE BOTH ENDS, FORD METER BOX COMPANY MODEL B77-555.
7. SHORT SIDE SINGLE SERVICE MAY REQUIRE ONLY ONE BALL VALVE. LONG SIDE SINGLE SERVICE REQUIRES TWO BALL VALVES.
8. ZIP TIE TRACER WIRE TO PIPE EVERY 5'.

Low Pressure Sewer Service

MAY 24, 2023 (Rev B-18)

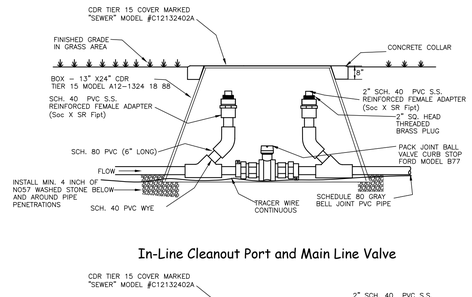


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

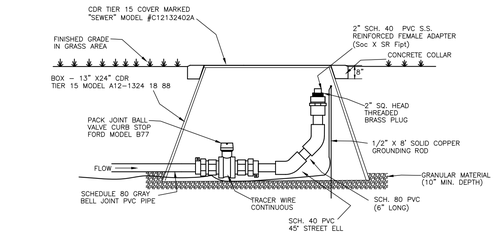
1. CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.
2. SUCCESSIVE SERVICE LINES OFF THE LOW PRESSURE FORCE MAIN SHALL BE SPACED A MINIMUM OF 18" APART.
3. WHERE NO SIDEWALK EXISTS, VALVE BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
4. SERVICE PIPE SHALL BE SCHEDULE 80 GRAY BELL JOINT PVC, 400 PSI (CHARLOTTE PIPE). NO SLIP X SLIP COUPLINGS ALLOWED.
5. SERVICE FITTINGS SHALL BE SPEARS MANUFACTURING COMPANY ONLY, SCHEDULE 40 PVC. NO DWV FITTINGS, SCHEDULE 40 MALE ADAPTERS, SLIP COUPLINGS, SLIP BUSHINGS, OR SCHEDULE 80 PVC FITTINGS ARE ALLOWED.
6. VALVE BOXES NOT REQUIRED FOR BALL VALVE AT TEE NEXT TO MAIN ON LONG SIDE SERVICES UNLESS SPECIFICALLY INDICATED AND NOTED ON THE PLANS.
7. CONTRACTOR SHALL UTILIZE FULL LENGTHS OF BELL JOINT PIPE WHENEVER POSSIBLE UNDER ROAD CROSSINGS.
8. PLUGS SHALL BE SCHEDULE 40 RED BRASS, SOLID TYPE WITH SQUARE HEAD.
9. TRACER WIRE TO BE #6 AWG, STRANDED COPPER, TYPE THHN WITH GREEN INSULATION. USE 11" CABLE TIES TO CONNECT TO PVC PIPE AND FITTINGS. TRACER WIRE SHALL WRAP AROUND AND TERMINATE INSIDE CLEANOUT BOX WITH ENOUGH SLACK TO EXTEND 2-3' ABOVE GRADE.
10. PVC PRIMER AND CEMENT SHALL BE OATEY MEDIUM BODIED.
11. THREAD SEALING COMPOUND – PTFE PASTE SHALL BE LA-CO SLIC-TITE OR HERCULES REAL-TUFF.
12. CURB STOPS SHALL BE FULL PORT BALL VALVES WITH PACK JOINT FOR PVC PIPE BOTH ENDS, FORD METER BOX COMPANY MODEL B77-555.
13. SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
14. GALVANIZED CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE, SCHEDULE 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF SUA, CASING SHOULD EXTEND TEN (10) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
    A.) 2" MAIN USE 4" CASING
    B.) 3" MAIN USE 6" CASING
15. ALL OTHER UTILITIES SHALL BE LOCATED 4' MINIMUM CLEAR OF ALL LOW PRESSURE MAINS AND SERVICES.
16. ZIP TIE TRACER WIRE TO PIPE EVERY 5'.

Low Pressure Sewer Service Installation

MAY 24, 2023 (Rev B-18)



In-Line Cleanout Port and Main Line Valve



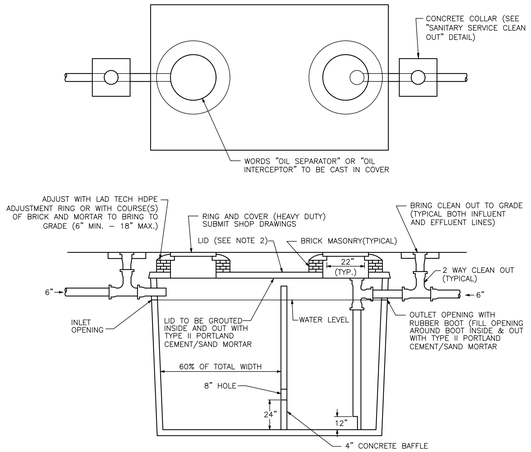
Terminal Cleanout Port and Main Line Valve

NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. MAINLINE VALVES SHALL BE FULL PORT BALL VALVES WITH PACK JOINT FOR PVC PIPE BOTH ENDS, FORD METER BOX B77
2. PIPE AND FITTING SIZE WILL BE DETERMINED BY PROJECT FLOW CALCULATIONS.
3. DEPTH SHALL BE 24" UNLESS OTHERWISE REQUIRED BY ROAD PERMITTING AGENCY.
4. ZIP TRACER WIRE TO PIPE EVERY 10'.

Low Pressure Sewer Cleanout Port with Valve

MAY 24, 2023 (Rev C-19)

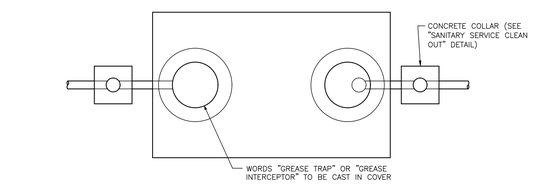


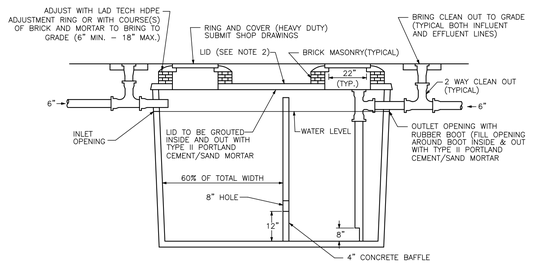
NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. SHOP DRAWINGS FOR PRECAST TANKS SHALL BEAR THE FOLLOWING STATEMENT:"THIS CONCRETE STRUCTURE MEETS OR EXCEEDS ALL THE REQUIREMENTS FOR GREASE INTERCEPTORS/SEPTIC TANKS AS IN THE FLORIDA ADMINISTRATIVE CODE, CHAPTER 10D-6 AND 64E-6, AND SUA "SPECIFICATIONS AND STANDARDS". THE SHOP DRAWINGS (3 COPIES MINIMUM) SHALL THEN BE SIGNED AND SEALED BY THE ENGINEER OF RECORD AND FORWARDED TO SUA FOR APPROVAL.
2. LID TYPES:
    A) 4" REGULAR LID
    B) 8" TRAFFIC BEARING LID
3. INTERIOR PIPING SHALL BE SOLVENT WELD PVC PIPE.
4. ALL TANKS IN TRAFFIC AREA SHALL BE H20 WHEEL LOAD BEARING.
5. INSPECTION OF TANK REQUIRED BY SUA PRIOR TO PLACEMENT.
6. INSPECTION OF TANK REQUIRED BY SUA AFTER TANK IS PIPED.

Oil Separator

MAY 24, 2023 (Rev B-18)



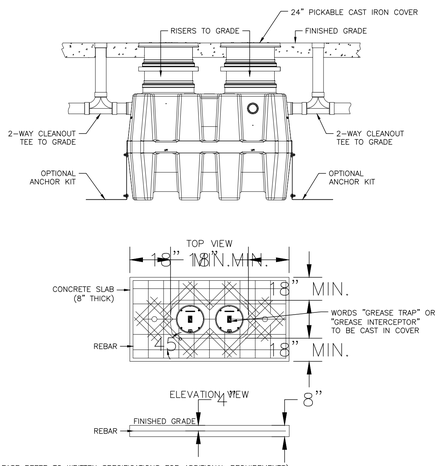


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. SHOP DRAWINGS FOR PRECAST TANKS SHALL BEAR THE FOLLOWING STATEMENT:"THIS CONCRETE STRUCTURE MEETS OR EXCEEDS ALL THE REQUIREMENTS FOR GREASE INTERCEPTORS/SEPTIC TANKS AS IN THE FLORIDA ADMINISTRATIVE CODE, CHAPTER 10D-6 AND 64E-6, AND SUA "SPECIFICATIONS AND STANDARDS". THE SHOP DRAWINGS (3 COPIES MINIMUM) SHALL THEN BE SIGNED AND SEALED BY THE ENGINEER OF RECORD AND FORWARDED TO SUA FOR APPROVAL.
2. LID TYPES:
    A) 4" REGULAR LID
    B) 8" TRAFFIC BEARING LID
3. ALL PIPING SHALL BE SOLVENT WELD PVC.
4. ALL TANKS IN TRAFFIC AREA SHALL BE H20 WHEEL LOAD BEARING.
5. INSPECTION OF TANK REQUIRED BY SUA PRIOR TO PLACEMENT.
6. INSPECTION OF TANK REQUIRED BY SUA AFTER TANK IS PIPED.
7. TANKS IN SERIES SHALL HAVE BAFFLE IN LAST TANK ONLY.

Concrete Grease Trap

MAY 24, 2023 (Rev C-18)

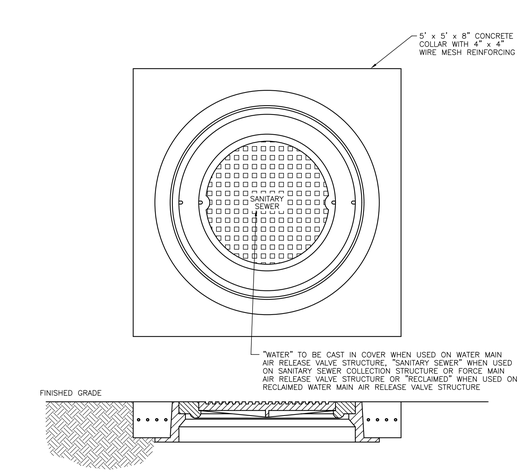


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. ALL PIPING SHALL BE SOLVENT WELD PIPE.
2. ALL INTERCEPTORS IN TRAFFIC AREA SHALL BE H2O WHEEL LOAD BEARING.
3. INSPECTION OF INTERCEPTORS REQUIRED BY SUA PRIOR TO PLACEMENT.
4. INSPECTION OF INTERCEPTORS REQUIRED BY SUA AFTER TANK IS PIPED.

Polyethylene Grease Interceptor

MAY 24, 2023 (Rev C-23)

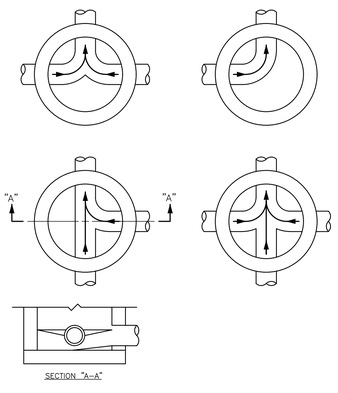


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. IN GREEN AREAS OR ANY AREA DEEMED TO HAVE QUESTIONABLE DRAINAGE, A WATER TIGHT MANHOLE INSERT SUCH AS "SEWER GUARD" OR APPROVED EQUAL WILL BE REQUIRED.
2. APPROVED MANHOLES (DOUBLE COVER TYPE):
    A.) U.S. FOUNDRY MODEL No. 230-AB-M
    B.) VULCAN FOUNDRY MODEL No. VM-101
3. CONCRETE COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.

Manhole Frame and Cover (30" Opening)

MAY 24, 2023 (Rev A-15)



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
3. CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
4. SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
5. INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP, WHICHEVER IS GREATER.

Flow Patterns for Invert Channels

MAY 24, 2023 (Rev B-23)

NO.	DATE	REMARKS	BY

REVISIONS

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
UTILITY DETAILS

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1289 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 - FAX (561)832-9390 -
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

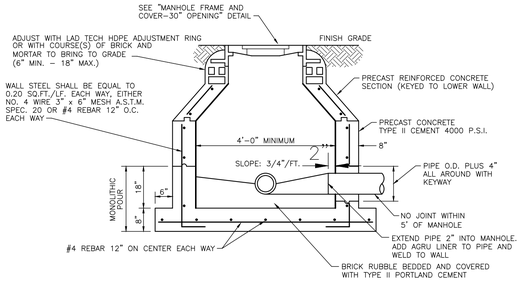
DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

SHEET NO. 24 / 30

JOB NO. 18187.27

PLOT: 1/29/2025 3:23:40 PM

CONSTRUCTION, NOT FOR

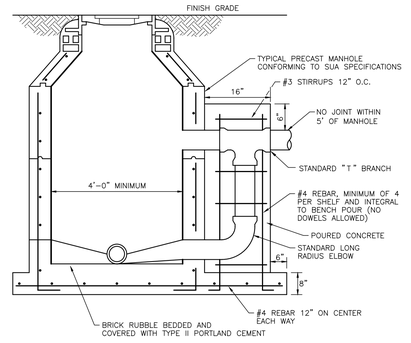


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. MANHOLES SHALL CONFORM TO A.S.T.M. C478.(MIN.)
2. WALL REINFORCEMENTS A.S.T.M. DESIGNATION A185–64.(LATEST REVISION)(MIN.)
3. IF TWO CAGES OF WIRE MESH ARE USED, ONE SHALL BE POSITIONED 3" FROM THE INSIDE SURFACE AND ONE 3" FROM THE OUTSIDE SURFACE. IF A SINGLE CAGE OR REBAR IS USED, IT SHALL BE CENTERED WITHIN WALL THICKNESS. NO EXPOSED STEEL SHALL BE PERMITTED.
4. LIFT HOLES THROUGH PRECAST STRUCTURE ARE PERMITTED.
5. A MINIMUM OF SEVEN DAYS CURE TIME IS REQUIRED PRIOR TO DELIVERY.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE DRILLED. OVERSIZED HOLES WILL BE REJECTED.
7. ANY VISIBLE REINFORCING WIRE, STEEL OR HONEYCOMBS SHALL BE CAUSE FOR REJECTION.
8. SEE TECHNICAL SPECIFICATIONS FOR BEDDING REQUIREMENTS.
9. "RAM–NEK" OR APPROVED EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
10. ALL OPENINGS SHALL BE SEALED USING ONLY TYPE II PORTLAND CEMENT/SAND MORTAR AND POTABLE WATER FOR MUD WORK ON JOINTS, LIFTING HOLES, INVERTS, ETC. WHEN AN ACCELERATOR IS NECESSARY, "ANTI HYDRO" IS THE ONLY PRODUCT APPROVED.
11. BRICK MASONRY CONSTRUCTION TO BE STUCCOED WITH 3/4" TYPE II CEMENT INSIDE AND OUTSIDE, AND INSIDE TO BE COATED WITH TWO COATS OF KOPPERS 300 OR APPROVED EQUAL.
12. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM, AND COATED WITH TWO COATS OF KOPPERS 300 OR APPROVED EQUAL
13. INTERIOR OF ALL SANITARY MANHOLES SHALL HAVE AGRU SURE GRIP CONCRETE PROTECTIVE LINER INSTALLED AT THE TIME OF MANUFACTURING. SEE "AGRU SURE GRIP LINER DETAILS" DRAWING FOR ADDITIONAL AGRU SURE GRIP REQUIREMENTS.

Standard Precast Manhole

JANUARY 17, 2024 (Rev C-24)

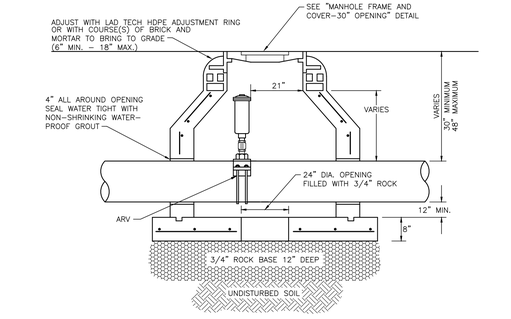


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. CONCRETE ENCASEMENT FOR DROP CONNECTION TO BE FIELD POURED.
2. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO (2) FEET OR MORE ABOVE THE MAIN INVERT CHANNEL.
3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
4. WHEN PVC IS USED IN SANITARY SEWER LINES, SOLVENT TYPE JOINT PVC FITTINGS MAY BE UTILIZED IN THE DROP ASSEMBLY ONLY.
5. MINIMUM PIPE SIZE FOR DROP IS 8".
6. SEE "STANDARD PRECAST MANHOLE" DETAIL FOR ADDITIONAL REQUIREMENTS.

Precast Manhole - Drop Connection Type A

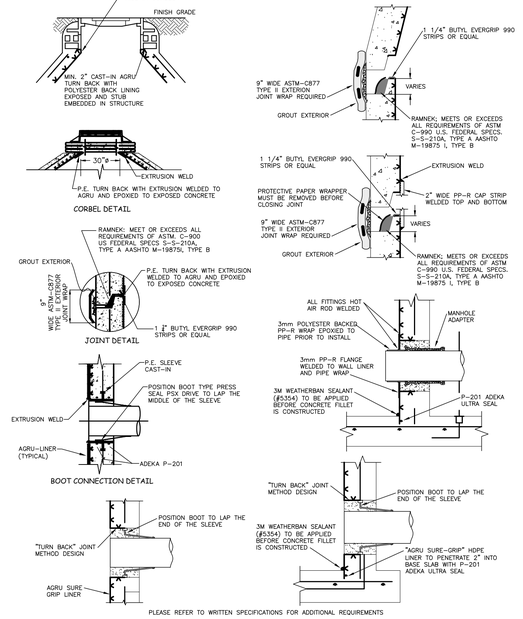
MAY 24, 2023 (Rev A-15)



PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

Air Release Valve (Underground Force Main)

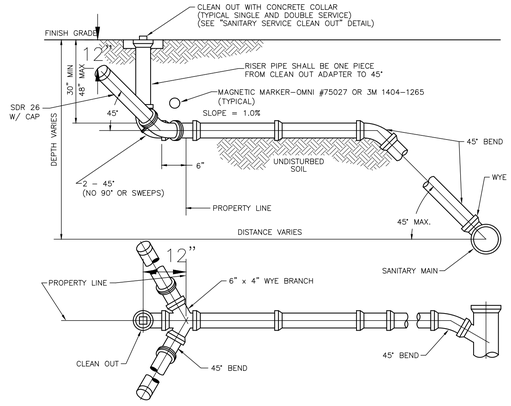
JANUARY 17, 2024 (Rev F-24)



PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

Agru Sure Grip Liner Details

MAY 24, 2023 (Rev D-15)

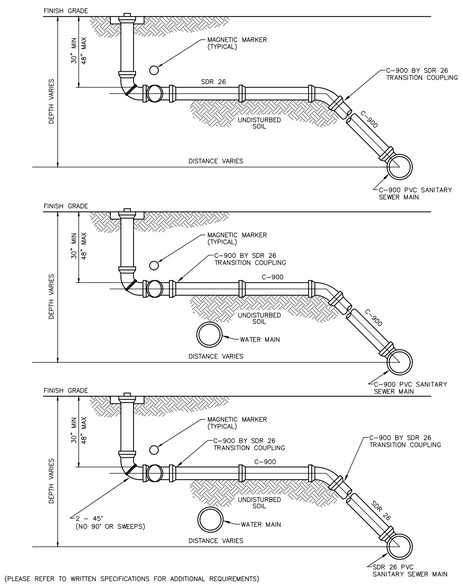


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2" x 2" TREATED WOOD STAKE AND AN E.M.S. SANITARY SEWER MARKER.
2. EACH SERVICE CONNECTION SHALL BE PLUGGED WATERTIGHT WITH AN APPROVED CAP OR PLUG.
3. CUT OFF BELL END WHEN USING FERNCO COUPLING FOR VCP (FOR EXISTING SERVICES ONLY)
4. FOR PVC INSTALLATIONS, CONNECT TO EXISTING "BELL END" AND CONNECT OPPOSITE END WITH PVC TO PVC KNOCK ON SLEEVE.
5. SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON "PAVEMENT REPLACEMENT" DETAIL.
6. CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.
7. ANY DEVIATION FROM THESE METHODS MUST BE APPROVED BY SUA.
8. THE USE OF UNNECESSARY FITTINGS ON THE CUSTOMERS LINE TO REDUCE EXCAVATION EFFORTS WILL BE CAUSE FOR REJECTION.
9. THE USE OF 90° SWEEPS ON THE CUSTOMERS LINE IN LIEU OF 45° BENDS WILL REQUIRE AN ADDITIONAL CLEAN OUT AS SHOWN ON "SANITARY SERVICE CLEAN OUT DETAIL". THE CLEAN OUT SHALL BE ON THE HOUSE SIDE OF THE TOP SWEEP WITHIN 2' OF THE SWEEP.

Sewer Service Connection (Wye Branch)

JANUARY 17, 2024 (Rev C-24)

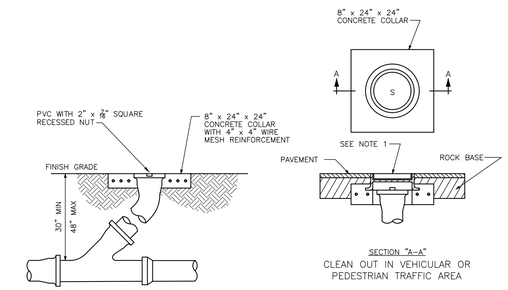


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

SEWER SERVICE LATERALS SHALL CROSS UNDER WATER MAINS WITH A MINIMUM VERTICAL SEPARATION OF TWELVE (12) INCHES. IF 12" VERTICAL SEPARATION CANNOT BE MAINTAINED, THEN THE WATER MAIN SHALL BE D.I.P. AND THE SEWER SERVICE LATERAL SHALL BE C-900 SDR 18 OR BETTER AND THE MINIMUM SEPARATION SHALL BE SIX (6) INCHES. WHEN IT IS NOT POSSIBLE FOR THE WATER MAIN TO CROSS OVER THE SEWER SERVICE LATERAL A MINIMUM VERTICAL SEPARATION OF AT LEAST TWELVE (12) INCHES MUST BE MAINTAINED, THE WATER MAIN SHALL BE D.I.P. AND THE SEWER LATERAL SHALL BE C-900 SDR 18 OR BETTER.

C-900 Sewer Service Transition

MAY 24, 2023 (Rev B-18)

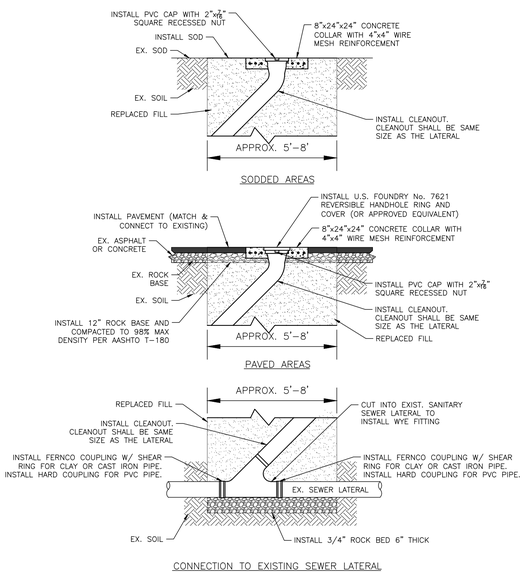


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. U.S. FOUNDRY NO. 7621 REVERSIBLE HANDHOLE RING AND COVER OR APPROVED EQUAL SHALL BE USED, COVER TO BE CAST WITH "S" IN THE CENTER.
2. CLEAN OUT REQUIRED ON ALL SERVICES AT PROPERTY LINE OR EASEMENT LINE WHERE APPLICABLE.
3. STANDARD WYE SHALL BE USED AT CLEAN OUT.

Sanitary Service Clean Out

MAY 24, 2023 (Rev C-20)



CONNECTION TO EXISTING SEWER LATERAL

NOTES:
1. EXCAVATION DEPTH VARIES WITH DEPTH OF EXISTING SEWER LATERAL AND EXISTING SURFACE ELEVATIONS.
2. CONCRETE COLLARS SHALL BE MATCHED TO EXISTING GRADES IN WORK AREA.

Clean Out Connection to Existing Lateral

JANUARY 17, 2024 (Rev B-24)

NO.	DATE	REMARKS	BY

REVISIONS

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY P.E. NO. 79235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
UTILITY DETAILS

engenuity group inc.
A Higher Standard of Excellence
ENGINEERS • SURVEYORS • GIS MAPPING
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655–1151 • FAX (561)832–9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

SHEET NO. 25 / 30

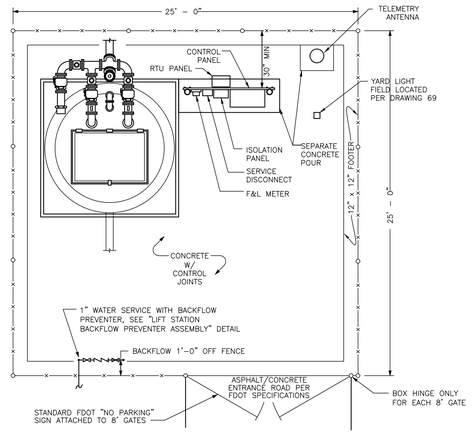
JOB NO. 18187.27

J:\Land Projects PZ\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

PLOT: 1/29/2025 3:23:48 PM

CONSTRUCTION, NOT FOR

THIS DRAWING DEPICTS A GENERAL SITE PLAN ONLY. THE ENGINEER OF RECORD SHALL COORDINATE THE SPECIFIC SITE PLAN REQUIREMENTS WITH SUA

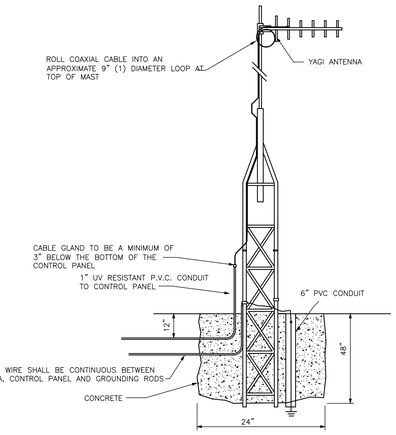


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. COLLECTOR MANHOLE SHALL NOT BE PLACED IN TRAVEL LANE OR AREAS THAT WOULD LIMIT ACCESS.
2. GROUND COVER WITHIN FENCED AREA SHALL BE 6" THICK CONCRETE (4000psi) WITH A 12" x 12" FOOTER AND 6" x 6" WIRE MESH AND BE SLOPED IN SUCH A WAY TO PROMOTE RUNOFF AND PREVENT PUDDLES. FIBER CONCRETE SHALL NOT BE ALLOWED AS AN ALTERNATIVE TO WIRE MESH.
3. LANDSCAPING SHALL BE A MINIMUM OF 2' FROM FENCE. TREE PLACEMENT AND LANDSCAPING SHALL CONFORM TO SUA SETBACK REQUIRMENTS AND BE APPROVED BY SUA.
4. FENCE SHALL BE INSTALLED PER DRAWING 17.

Typical Lift Station Site Plan

MAY 24, 2023 (Rev E-23)

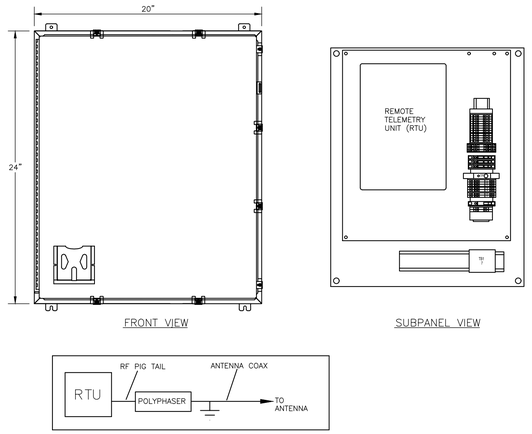


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. ANTENNA HEIGHT SHALL CONFORM TO F.C.C. AND TELEMETRY MANUFACTURERS REQUIREMENTS AND SPECIFICATIONS.
2. TELEMETRY ANTENNA AND RELATED EQUIPMENT AS MANUFACTURED BY DATA FLOW SYSTEMS, INC. SHALL BE COMPATIBLE WITH EXISTING SUA TELEMETRY SYSTEM.
3. GROUND WIRE SHALL BE CONTINUOUS FROM FIRST GROUND ROD TO SERVICE DISCONNECT, TO CONTROL PANEL, TO ANTENNA BASE, TO SECOND GROUND ROD 6' TO 8' FROM FIRST GROUND ROD.
4. ANTENNA AND ROHN TOWER SHALL BE INSTALLED TO WITHSTAND 150 MPH WINDS.

Telemetry Antenna General Requirements

MAY 24, 2023 (Rev F-23)



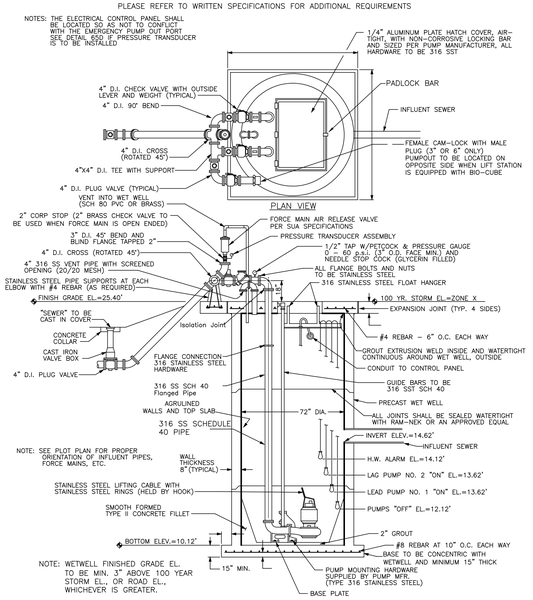
NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. TELEMETRY CONTROL UNIT SUPPLIED WITH PANEL. (ANTENNA SUPPLIED BY OTHERS)
2. MINIMUM ENCLOSURE 24x20x10.
3. LEAVE MINIMUM 6" SPACE AT BOTTOM OF ENCLOSURE.
4. CONTROL WIRE TO BE AWG 14 MINIMUM.
5. LAMINATED SCHEMATIC TO BE 11X17.
6. NEMA TYPE 4X 316 S.S. ENCLOSURE WITH CONTINUOUS HINGE.
7. ALL HARDWARE TYPE 316 S.S.
8. TYPICAL, ACTUAL LAYOUT MAY VARY WITH HORSEPOWER.

Lift Station Remote Telemetry Unit (RTU) Panel Layout

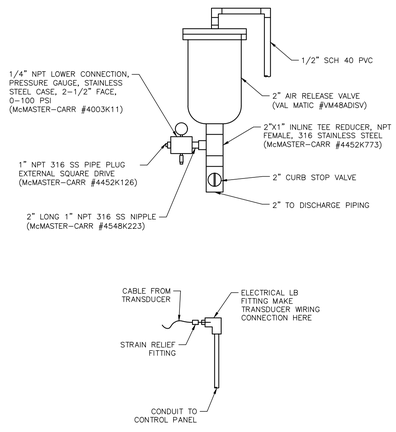
MAY 24, 2023 (Rev A-20)

PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS



Lift Station Detail

MAY 24, 2023 (Rev E-23)



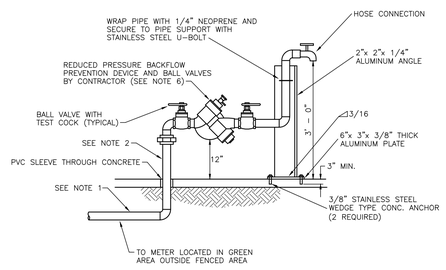
NOTES:

1. WIKA PART NUMBER 52831470 WITH THE FOLLOWING ATTRIBUTES:

   MODEL S-20 PRESSURE TRANSMITTER
   0-100 PSIG RANGE
   4-20 mA OUTPUT
   1/4" NPT CONDUIT MALE, WITH CABLE OUTLET

Diaphragm Seal Installation Detail

MAY 24, 2023 (Rev E-23)

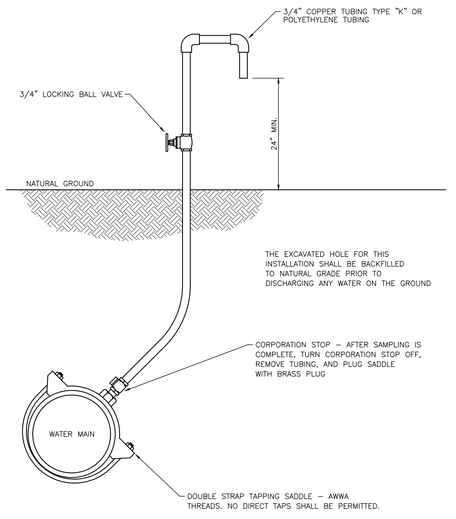


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. TYPE "K" COPPER TUBING (SOFT DRAWN).
2. BOTH RISERS SHALL BE TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS SOLDER FITTINGS AND ADAPTERS. ONLY LEAD FREE PIPE, FITTINGS, VALVES, SOLDER AND FLUX SHALL BE PERMITTED.
3. BACKFLOW PREVENTION DEVICE SHALL BE EQUIPPED WITH BALL VALVES.
4. FOR PLACEMENT OF BACKFLOW ASSEMBLY WITHIN FENCED AREA SEE "TYPICAL LIFT STATION SITE PLAN" DETAIL.
5. BACKFLOW PREVENTION DEVICE SHALL BE SUPPORTED AT BOTH RISERS WITH ALUMINUM ANGLE AS SHOWN ABOVE. RISERS TO BE SECURED TO ANGLE WITH TYPE 304 SST MOUNTING HARDWARE AND NEOPRENE INSULATORS.
6. APPROVED BACKFLOW PREVENTION DEVICES WITH SILICONE RUBBER SEAL RINGS OR DISCS; 3/4" TO 2"
   A.) AMES LF4000B
   B.) APOLLO RPLF 4A
   C.) WATTS LF919
   D.) ZURN 975XL2

Lift Station Backflow Preventer Assembly

MAY 24, 2023 (Rev D-23)

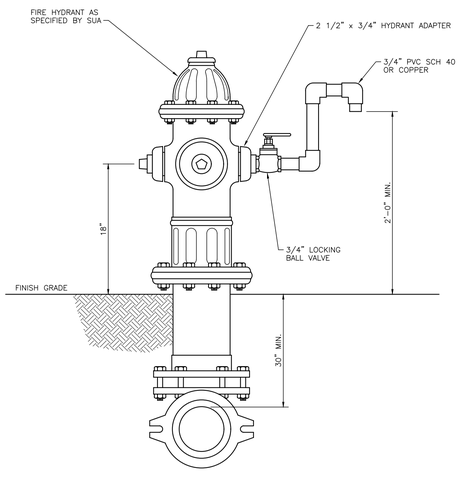


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. WHERE POSSIBLE, SERVICE TAPS OR FIRE HYDRANTS (SEE "SAMPLE POINT - FIRE HYDRANT" DETAIL) SHALL BE USED AS SAMPLING POINTS.

Sample Point - In Line

MAY 24, 2023 (Rev A-15)



PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

Sample Point - Fire Hydrant

MAY 24, 2023 (Rev A-15)

REVISIONS			
NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
UTILITY DETAILS

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects RO\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

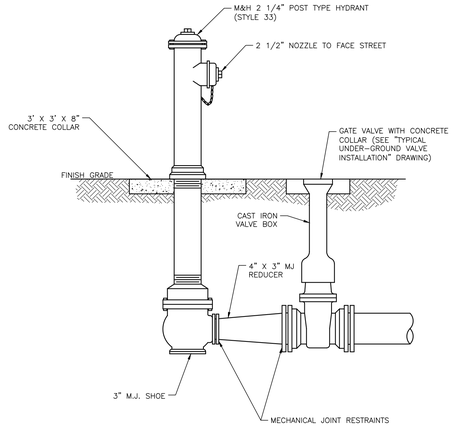
	DATE	
DRAWN	APRIL	
PROJECT ENGINEER	MK	
PROJECT MANAGER	MK	
CHECKED	ACS	
	ACS	

SHEET NO. 26 / 30

JOB NO. 18187.27

PLOT: 1/29/2025 3:23:57 PM

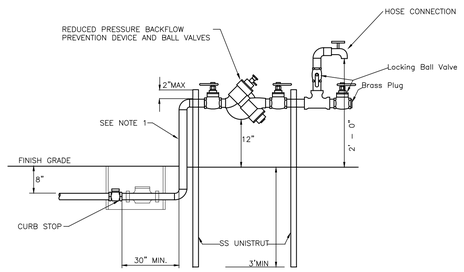
CONSTRUCTION, NOT FOR



PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

Flushing Hydrant

JANUARY 17, 2024 (Rev D-24)



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. BOTH RISERS SHALL BE TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS SOLDER FITTINGS AND ADAPTERS. ONLY LEAD FREE SOLDER AND FLUX SHALL BE PERMITTED.
2. BACKFLOW PREVENTION DEVICE SHALL BE SUPPORTED AT BOTH RISERS WITH SS UNISTRUT AS SHOWN ABOVE. RISERS TO BE SECURED TO ANGLE WITH TYPE 304 SST MOUNTING HARDWARE AND NEOPRENE INSULATORS.
3. BACKFLOW DEVICE SHALL BE MINIMUM OF 3' FROM BACK OF CURB AND/OR SIDEWALK
4. APPROVED BACKFLOW PREVENTION DEVICES WITH SILICONE RUBBER SEAL RINGS OR DISCS; 3/4" TO 2"
   A.) AMES LF4000B
   B.) APOLLO RPLF 4A
   C.) WATTS LF919
   D.) ZURN 975XL2

Sampling / Flushing Station

MAY 24, 2023 (Rev D-23)

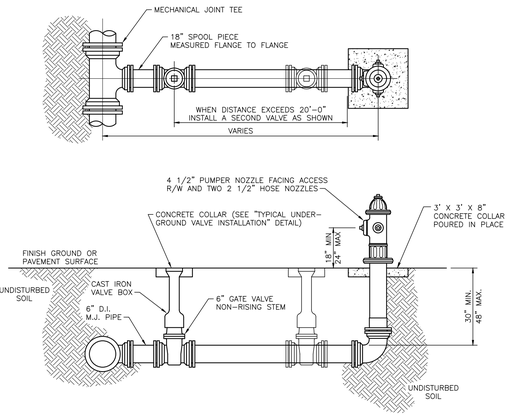
NOTE: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. MOUNT SIGN TO HOT DIPPED GALVANIZED STANDARD U-CHANNEL SIGN POST WITH STAINLESS STEEL HARDWARE.
2. SIGN SHALL BE .080 GAUGE ALUMINUM, WITH UV RESISTANT POLYURETHANE COATING.
3. COLOR SHALL BE WHITE LETTERS ON DARK BLUE BACKGROUND. COLORS MAY VARY WITH PRIOR APPROVAL OF SUA.



Sampling / Flushing Water Sign

MAY 24, 2023 (Rev D-23)

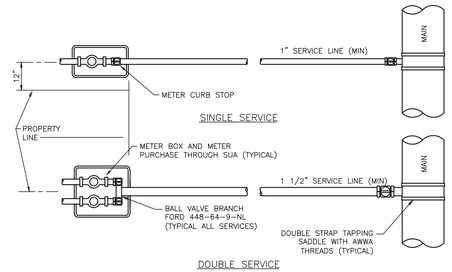


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. DRAINS OR WEEP HOLES ON HYDRANT BARREL SHALL BE PLUGGED.
2. FIRE HYDRANT SHALL BE INSTALLED PLUMB AND TRUE.
3. REFER TO EXHIBIT "D" SHOP SPECIFICATION LIST FOR ACCEPTABLE FIRE HYDRANTS.
4. TWO OF THE FOLLOWING FORMS OF RESTRAINT SHALL BE USED WHEN PIPE IS GREATER THAN 12".
   A) APPROVED MECHANICAL JOINT RESTRAINT (i.e. MEGALUG)
   B) TIE RODS AND NUTS EQUAL IN DIA. TO TEE BOLTS AND NUTS, COATED WITH KOP-COAT 300-M OR APPROVED EQUAL.

Typical Fire Hydrant Installation

JANUARY 17, 2024 (Rev C-24)

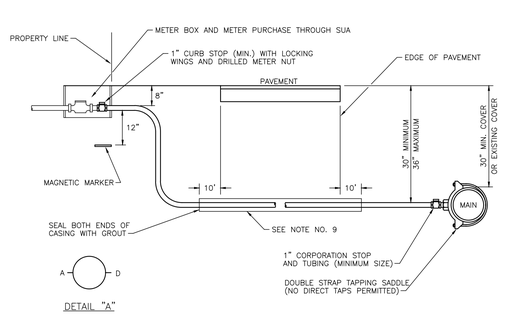


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. AUTHORIZED SERVICE LINE MATERIAL:
   A) TYPE "K" COPPER TUBING WITH COMPRESSION FITTINGS.
   B) POLYETHYLENE TUBING SDR 9, COPPER TUBE SIZE.
2. METER CURB STOP SHALL BE WITH LOCKING WINGS AND DRILLED METER NUT, 1" MINIMUM.
3. 1" METER CURB STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
4. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" IN DIAMETER SHALL BE APPROVED ON AN INDIVIDUAL BASIS.
5. METER CURB STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH A METER FLANGE.
6. SERVICE LINE SHALL BE CONTINUOUS BETWEEN CORP STOP AND CURB STOP WITH THE EXCEPTION OF THE "Y" BRANCH.
7. SERVICE TAPS SHALL BE SPACED AT A MINIMUM DISTANCE OF 18 INCHES.

Typical Water Service

JANUARY 17, 2024 (Rev D-24)

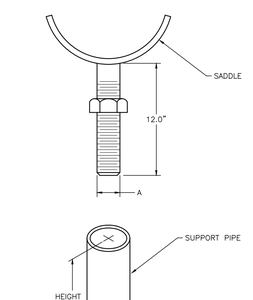


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.
2. SUCCESSIVE TAPS ON THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT 90° FROM THE CENTERLINE AS SHOWN ON DETAIL "A".
3. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
4. COPPER TUBING SHALL BE TYPE "K" WITH COMPRESSION FITTINGS.
5. POLYETHYLENE TUBING SHALL BE SDR 9, COPPER TUBE SIZE.
6. ROTATE THE CORPORATION STOP SO THAT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL POSITION.
7. BOTH COPPER AND POLYETHYLENE TUBING SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO CURB STOP WITH NO FITTINGS IN BETWEEN.
8. TAPPING SADDLES AND CORPORATION STOPS SHALL HAVE AWWA INLET THREADS.
9. SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
10. GALVANIZED SCHEDULE 40 CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE , SCHEDULE 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF SUA, CASING SHOULD EXTEND TEN (10) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
    A.) 1" SERVICE USE 2" CASING
    B.) 1 1/2" SERVICE USE 3" CASING
    C.) 2" SERVICE USE 4" CASING

Typical Water Service Installation

MAY 24, 2023 (Rev B-23)



PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

PIPE SIZE	A	SUPPORT PIPE	SADDLE	PLATE	HEIGHT
3"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
4"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
6"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
8"	3/4"	1"	1/4" x 2"	4" x 4"	1' - 0"
10"	1"	1 1/4"	3/8" x 3"	6" x 6"	1' - 0"
12"	1"	1 1/4"	3/8" x 3"	6" x 6"	1' - 0"
14"	1"	1 1/4"	3/8" x 3"	6" x 6"	1' - 0"
16"	1 1/4"	1 1/2"	1/2" x 3"	6" x 6"	1' - 0"
18"	1 1/4"	1 1/2"	1/2" x 3"	6" x 6"	1' - 0"

NOTE: ALL MATERIAL SHALL BE 316 STAINLESS STEEL

Pipe Support

MAY 24, 2023 (Rev B-16)

STANDARD WATER, RECLAIMED WATER AND SEWER SEPARATION STATEMENT

1. STORM SEWER, GRAVITY WASTEWATER, FORCE MAINS AND RECLAIMED WATER MAINS CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED BETWEEN GRAVITY SEWER OR STORM SEWER, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/GRAVITY SEWER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN SIX (6) FEET BETWEEN ANY TWO JOINTS, BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE SIX (6) INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/FORCE MAIN/RECLAIMED WATER MAINS CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM TWELVE (12) INCH VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED, AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION, IN ALL OF THE ABOVE CASES D.I.P. IS NOT REQUIRED FOR STORM SEWER PIPE.
2. FORCE MAINS CROSSING RECLAIMED WATER MAINS OR STORM SEWER SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND THE OUTSIDE OF THE RECLAIMED WATER MAIN OR STORM SEWER AND THE RECLAIMED WATER MAIN SHALL CROSS OVER THE FORCE MAIN.
3. AT THE UTILITY CROSSING DESCRIBED IN ITEMS 1 AND 2 ABOVE, ONE FULL LENGTH OF DUCTILE IRON WATER MAIN PIPE SHALL BE CENTERED SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE JOINTS. WHERE THIS IS NOT POSSIBLE, JOINTS SHALL BE AT LEAST THREE (3) FEET FROM STORM SEWERS AND SIX (6) FEET FROM GRAVITY SEWER MAINS, FORCE MAINS AND RECLAIMED WATER MAINS.
4. SEWER SERVICE LATERALS SHALL CROSS UNDER WATER MAINS WITH A MINIMUM VERTICAL SEPARATION OF TWELVE (12) INCHES. IF (12") VERTICAL SEPARATION CANNOT BE MAINTAINED, THEN THE WATER MAIN SHALL BE D.I.P. AND THE SEWER SERVICE LATERAL SHALL BE C-900 SDR 18 OR BETTER AND THE MINIMUM SEPARATION SHALL BE SIX (6) INCHES. WHEN IT IS NOT POSSIBLE FOR THE WATER MAIN TO CROSS OVER THE SEWER SERVICE LATERAL A MINIMUM VERTICAL SEPARATION OF AT LEAST TWELVE (12) INCHES MUST BE MAINTAINED, THE WATER MAIN SHALL BE D.I.P. AND THE SEWER LATERAL SHALL BE C-900 SDR 18 OR BETTER.
5. MAINTAIN MINIMUM TEN (10) FEET HORIZONTAL DISTANCE BETWEEN POTABLE WATER MAIN OR FORCE MAIN, RECLAIMED WATER MAIN, STORM SEWER OR GRAVITY SEWER MAIN OR ON SITE SEWAGE DISPOSAL SYSTEMS. ADDITIONAL SEPARATION MAY BE REQUIRED AS OUTLINED IN SECTION II OF SUA STANDARDS.

Water, Reclaimed Water, and Sewer Separation Statement

MAY 24, 2023 (Rev B-18)

REVISIONS

NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED ONLY FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER EMPLOYED BY ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
UTILITY DETAILS

engenuity group inc.
A Higher Standard of Excellence
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	APRIL		
DRAWN	MK		
PROJECT ENGINEER	MK		
PROJECT MANAGER	ACS		
CHECKED	ACS		

SHEET NO. 27 / 30

JOB NO. 18187.27

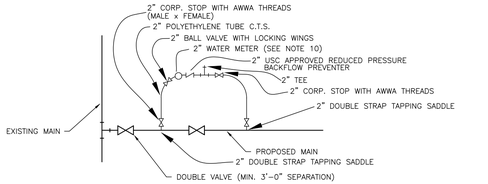
J:\Land Projects R2\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

PLOT: 1/29/2025 3:24:07 PM

CONSTRUCTION, NOT FOR

NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

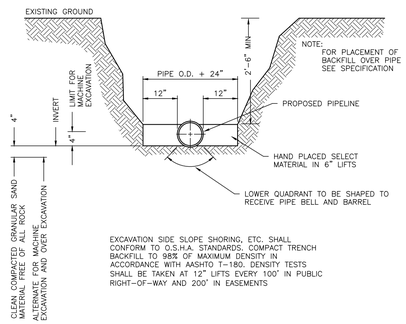
1. THIS METHOD SHALL BE COMPLIED WITH WHEN CONNECTING TO AN EXISTING WATER MAIN, (ONE THAT HAS ALREADY BEEN BACTERIOLOGICALLY CLEARED OR IS IN USE) WHETHER BY TEE AND VALVE OR BY CONTINUATION OF A PLUGGED STUB OUT WITH AN EXISTING GATE VALVE.
2. THESE REQUIREMENTS ARE BASED ON PALM BEACH COUNTY HEALTH DEPARTMENT REQUIREMENTS.
3. WHEN A TAPPING TEE AND VALVE IS INSTALLED, A PRESSURE/LEAKAGE TEST SHALL BE PERFORMED ON THE ASSEMBLY IN THE PRESENCE OF AN AUTHORIZED SUA REPRESENTATIVE PRIOR TO PERFORMING THE ACTUAL TAP.
4. DOUBLE VALVING PERMITS PHYSICAL CONNECTION TO AN EXISTING WATER MAIN WHEN USED IN CONJUNCTION WITH A BYPASS LINE.
5. A 2" BYPASS LINE (MAXIMUM) SHALL BE INSTALLED AS SHOWN BELOW PRIOR TO CANNON FLUSHING.
6. THE 2" TEE SHALL BE USED FOR FEEDING CHLORINE SOLUTION AND FOR ATMOSPHERIC VENT DURING PRESSURE/LEAKAGE TESTS.
7. UNDER NO CIRCUMSTANCES SHALL VALVES BE OPERATED WITHOUT AN AUTHORIZED SUA REPRESENTATIVE PRESENT.
8. ALL WATER MAINS SHALL BE FILLED WITH WATER UTILIZING JUMPER METER AND THEN BE THOROUGHLY CANNON FLUSHED IN ACCORDANCE WITH SEACOAST SPECIFICATIONS PRIOR TO PRESSURE/LEAKAGE TESTING. THE PROCEDURE SHALL BE DONE ONLY IN THE PRESENCE OF AN AUTHORIZED SUA REPRESENTATIVE.
9. FOLLOWING INITIAL CANNON FLUSHING, ALL WATER FOR PRESSURE/LEAKAGE TESTING AND BACTERIOLOGICAL CLEARANCES MUST BE DRAWN FROM THE BYPASS LINE WITH METER AND REDUCED PRESSURE BACKFLOW PREVENTER IN PLACE. THE 2" INCH WATER METER SHALL BE PROVIDED BY SUA UPON APPLICATION BY EITHER THE CONTRACTOR OR DEVELOPER. ALL WATER USED FOR THE CONSTRUCTION OF THE WATER AND SEWER MAINS SHALL BE PAID FOR BY THE ABOVE PARTIES PRIOR TO ANY SERVICE BEING PROVIDED. METER, BALL VALVE, REDUCED PRESSURE BACKFLOW PREVENTER AND TEE SHALL INSTALLED AT LEAST 18" ABOVE EXISTING GRADE, SUPPORTED, AND PROTECTED FROM DAMAGE. ANY DAMAGE SHALL BE APPLICANT'S RESPONSIBILITY AND SHALL BE CHARGED ACCORDINGLY.
10. EXCEPT DURING CANNON FLUSHING VALVES SHALL NOT BE OPENED UNTIL AFTER AN APPROVED PRESSURE/ LEAKAGE TEST, BACTERIOLOGICAL CLEARANCE, CERTIFICATION BY THE ENGINEER OF RECORD, RELEASE FROM THE PALM BEACH COUNTY HEALTH DEPARTMENT AND APPROVAL BY SUA.
11. DISINFECTION AND BACTERIOLOGICAL CLEARANCES SHALL COMPLY WITH CURRENT AWWA PROCEDURES, PALM BEACH COUNTY HEALTH DEPARTMENT, AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.



Tapping and Main Clearing Procedure

MAY 24, 2023 (Rev B-18)

(PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

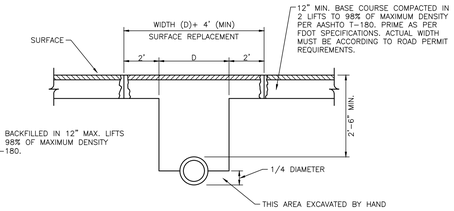


EXCAVATION SIDE SLOPE SHORING, ETC. SHALL CONFORM TO O.S.H.A. STANDARDS. COMPACT TRENCH BACKFILL TO 98% OF MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180. DENSITY TESTS SHALL BE TAKEN AT 12" LIFTS EVERY 100' IN PUBLIC RIGHT-OF-WAY AND 200' IN EASEMENTS

CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.

Standard Trenching Procedure

MAY 24, 2023 (Rev C-20)



TRENCH TO BE BACKFILLED IN 12" MAX. LIFTS COMPACTED TO 98% OF MAXIMUM DENSITY PER AASHTO T-180.

NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. REPLACED BASE MATERIAL OVER DITCH SHALL BE A MINIMUM OF TWICE THE THICKNESS OF THE ORIGINAL BASE.
2. BASE MATERIAL SHALL BE PLACED IN A MINIMUM OF 2 LIFTS AND THOROUGHLY ROLLED OR TAMPED TO 98% OF MAXIMUM DENSITY PER AASHTO T-180.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE MATERIAL SHALL BE CONSISTENT WITH EXISTING SURFACE, WITH ASPHALT A MINIMUM OF 2" THICK.
5. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6") INCH LIFT OF SUBGRADE AND EACH OPEN CUT CROSSING. ROAD CROSSINGS GREATER THAN 24 FEET IN WIDTH SHALL REQUIRE ONE ADDITIONAL TEST SITE FOR EACH ADDITIONAL 12 FEET OF PAVEMENT. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE-HALF (6 1/2") INCHES, THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO SUA UPON REQUEST, BACKFILL COMPACTION SHALL BE 98% OF MAXIMUM DENSITY PER AASHTO T-180.
6. ANY DAMAGE TO TRAFFIC SIGNALIZATION EQUIPMENT SHALL BE REPAIRED BY THE PALM BEACH TRAFFIC DIVISION AT THE CONTRACTORS EXPENSE.
7. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE PERMITTING AGENCY.
8. TEMPORARY ASPHALT OR CONCRETE PATCH MUST BE APPLIED THE SAME DAY AS THE BACKFILL.
9. TRAFFIC AREAS OR WHERE SAFETY TO THE PUBLIC IS AT ISSUE A TEMPORARY ASPHALT OR CONCRETE PATCH MUST BE IMMEDIATELY PLACED.

Pavement Replacement

MAY 24, 2023 (Rev A-15)

LENGTH OF PIPE RESTRAINT REQUIREMENTS AT ALL PIPE JOINTS

PIPE SIZE	90° BEND	45° BEND	22½° BEND	11¼° BEND	REDUCER	VALVE	DEAD END	TEE
4"	54'	54'	36'	36'	54'	72'	72'	72'
6"	54'	54'	36'	36'	54'	72'	72'	72'
8"	54'	54'	36'	36'	54'	72'	72'	72'
10"	54'	54'	36'	36'	54'	108'	108'	108'
12"	72'	72'	54'	54'	72'	108'	108'	108'
14"	72'	72'	54'	54'	72'	108'	108'	108'
16"	72'	72'	54'	54'	72'	154'	154'	154'
18"	72'	72'	54'	54'	72'	154'	154'	154'
20"	90'	90'	54'	54'	90'	154'	154'	154'
24"	90'	90'	54'	54'	90'	172'	172'	172'
30"	90'	90'	54'	54'	90'	180'	180'	180'
36"	90'	90'	54'	54'	90'	270'	270'	270'
42"	108'	108'	54'	54'	108'	270'	270'	270'
48"	108'	108'	54'	54'	108'	270'	270'	270'
54"	108'	108'	54'	54'	108'	270'	270'	270'

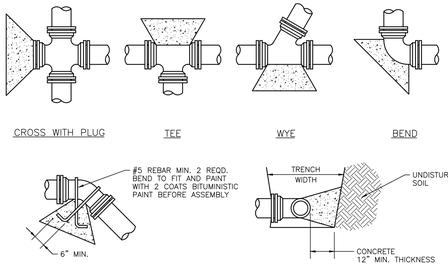
MINIMUM LENGTH OF PUSH ON JOINT PIPE WITH SPECIAL RESTRAINING GASKETS

NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. ALL BURIED PRESSURE MAINS SHALL INCLUDE A RESTRAINED JOINT SYSTEM. THE CONTRACTOR SHALL USE A DUCTILE IRON RESTRAINING SYSTEM AS MANUFACTURED BY EBAA IRON, INC. (MEGALUG) OR APPROVED EQUAL FOR ALL MECHANICAL JOINT FITTINGS AND LOCKING GASKETS FOR PUSH-ON JOINT PIPE.
2. RESTRAINING LENGTHS SHOWN ARE THE MINIMUM LENGTH REQUIRED BASED ON A TEST PRESSURE OF 150 P.S.I.G.
3. THRUST BLOCKS, IN ADDITION TO THE ABOVE OUTLINED RESTRAINTS, SHALL ALSO BE REQUIRED AT ALL TIE-INS TO EXISTING LINES, ALL TAPPING TEES ON EXISTING LINES, ALL NEW HYDRANTS, ALL ABOVE-GROUND ASSEMBLIES 3" AND LARGER AND MAINS GREATER THAN 12" IN DIAMETER.
4. FOR ALL C900 PVC PIPE. ADD A SAFETY FACTOR OF 1.1 TO THE ABOVE LENGTHS

Pipe Restraint Table

MAY 24, 2023 (Rev D-23)



ALL THRUST BLOCKS SHALL BE FORMED. LAID FORMS SHALL BE INSPECTED BY SUA PRIOR TO THE POURING OF CONCRETE AND SHALL ALSO BE INSPECTED BY SUA PRIOR TO COVERING. TYPICAL LOCATIONS WHICH REQUIRE CONCRETE THRUST BLOCKS, FOR PRESSURE MAINS FOUR INCHES (4") AND GREATER CONCRETE SHALL HAVE 2500 P.S.I. MINIMUM STRENGTH AT TWENTY EIGHT (28) DAYS AND BEAR AGAINST UNDISTURBED STABLE SOILS, AREA OF CONTACT SHALL BE GOVERNED BY PIPE SIZE, MAXIMUM PRESSURE IN PIPE, AND BEARING CAPACITY OF SOIL. PROTECT FITTINGS, BOLTS, ETC. BY COVERING WITH VISQUINE OR OTHER ACCEPTABLE MATERIAL. CONCRETE SHALL BE A MINIMUM OF TWELVE INCHES (12") THICK. THRUST BLOCKS SHALL NOT BE AN ALTERNATIVE TO RESTRAINING GUARDS OR RESTRAINING GASKETS. THRUST BLOCKS MAY BE USED WHERE A SECOND FORM OF RESTRAINT IS REQUIRED AND WHEN TYING INTO EXISTING WHERE NO OTHER ALTERNATIVE EXISTS.

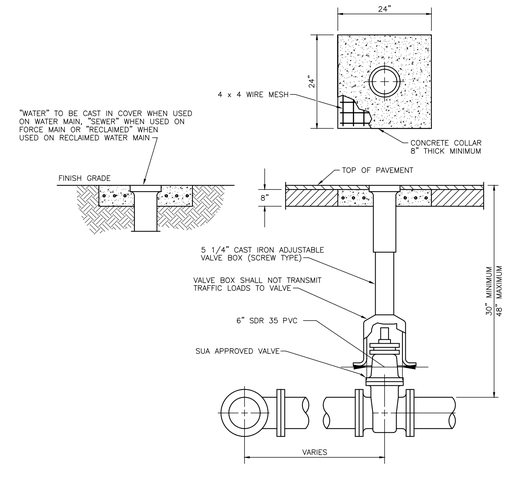
(PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

PIPE	THRUST BLOCK SOIL BEARING AREA REQUIRED	PIPE	THRUST BLOCK SOIL BEARING AREA REQUIRED	REMARKS
4"	2.0 SQ. FT.	18"	30.0 SQ. FT.	VALUES ARE FOR 90° BEND, BASED ON 2000 P.S.F. SAFE BEARING LOAD AND PIPE PRESSURE OF 150 P.S.I. PLUS 33% SAFETY FACTOR FOR OTHER SOILS AND PRESSURES.
6"	4.0 SQ. FT.	20"	37.0 SQ. FT.	
8"	6.6 SQ. FT.	24"	53.0 SQ. FT.	
10"	10.0 SQ. FT.	27"	80.0 SQ. FT.	
12"	14.0 SQ. FT.	30"	98.0 SQ. FT.	
14"	18.0 SQ. FT.	36"	127.0 SQ. FT.	
16"	24.0 SQ. FT.			

* THE ENGINEER OF RECORD SHALL CALCULATE THE SIZE OF THE DEADMAN REQUIRED AS WELL AS ANY INSTALLATION WHICH IS NOT COVERED BY THE ABOVE.

Thrust Blocks

MAY 24, 2023 (Rev B-23)

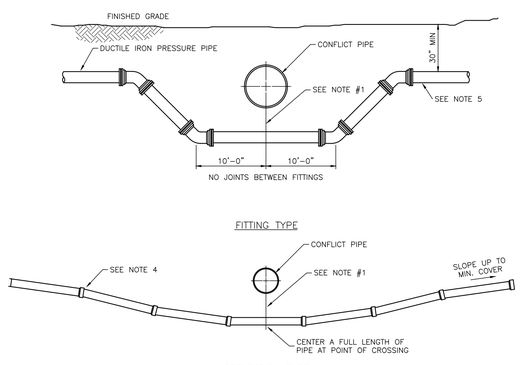


NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. CONCRETE COLLAR MAY NOT BE REQUIRED IN PAVED AREAS IF PAVEMENT SURFACE IS FINISHED PRIOR TO FINAL INSPECTION AND VALVE BOX LID IS AT FINISHED GRADE.
2. WHEN VALVE IS DEEPER THAN 48" AN EXTENSION WILL BE REQUIRED TO BRING OPERATING NUT TO 24" OF FINISHED GRADE.
3. TWO OF THE FOLLOWING FORMS OF RESTRAINT SHALL BE USED WHEN PIPE IS GREATER THAN 12".
   A.) APPROVED MECHANICAL JOINT RESTRAINT (i.e. MEGALUG)
   B.) TIE RODS AND NUTS EQUAL IN DIA. TO TEE BOLTS AND NUTS, COATED WITH KOP-COAT 300-M OR APPROVED EQUAL.

Typical Underground Valve Installation

MAY 24, 2023 (Rev B-23)



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

1. FOR VERTICAL SEPARATION SEE "WATER, RECLAIMED WATER AND SEWER SEPARATION STATEMENT" DRAWING #2.
2. ONE OF THE FOLLOWING FORMS OF RESTRAINT SHALL BE USED FROM FITTING TO FITTING FOR PIPE SIZES UP TO AND INCLUDING 12", FOR PIPE SIZES GREATER THAN 12" TWO FORMS OF RESTRAINT SHALL BE USED.
   A.) APPROVED MECHANICAL JOINT RESTRAINT. (i.e. MEGALUG)
   B.) TIE RODS AND NUTS EQUAL IN DIA. TO TEE BOLTS AND NUTS, COATED WITH KOP-COAT 300-M OR APPROVED EQUAL.
   C.) THRUST BLOCKS – ADVANCE APPROVAL BY SUA REQUIRED.
3. THE DEFLECTION TYPE CROSSING IS PREFERRED, BUT IN INSTANCES WHERE THE FITTING TYPE DEFLECTION IS USED, 22 1/2° BENDS ARE PREFERRED.
4. DEFLECTION SHALL NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
5. PIPE SHALL BE RESTRAINED FOR EACH FITTING TYPE DEFLECTION PER "PIPE RESTRAINT TABLE" DETAIL.
6. ALL JOINTS IN DEFLECTIONS SHALL BE AS-BUILT ON THE RECORD DRAWINGS

Pressure Pipe Deflection

MAY 24, 2023 (Rev D-23)

INSTALLATION PROTOCOL

1. ALL PIPE IS TO BE LAID IN A CLEAN DRY TRENCH.
2. ALL MUCK AND UNSUITABLE MATERIALS ENCOUNTERED IN TRENCH BOTTOM SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR MATERIAL TO 98% OF MAXIMUM DENSITY PER AASHTO T-180. PROCTOR AND DENSITY TEST RESULTS SHALL BE SUBMITTED TO EOR WITH A COPY TO AUTHORITY.
3. ALL BACKFILL SHALL BE PLACED IN 12 INCH LIFTS AND COMPACTED BY MECHANICAL MEANS TO 98% OF MAXIMUM DENSITY PER AASHTO T-180 OR AS OTHERWISE REQUIRED BY THE PERMITTING AGENCY.
4. UTILITIES CROSSING ROAD RIGHT-OF-WAY SHALL BE INSTALLED PRIOR TO ROAD CONSTRUCTION AND BACKFILLED AND COMPACTED WITHIN RIGHT-OF-WAY LIMITS IN STRICT ACCORDANCE WITH THE DIRECTIONS OF THE EOR AND REQUIREMENTS OF ALL AGENCIES OF JURISDICTION.
5. EMBEDMENT MATERIALS BELOW PIPE SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION SYSTEM (U.S.C.S.) SOIL CLASSIFICATION CLASS I OR II AS NOTED IN ASTM D2321.
6. ALL LINES UNDER CONSTRUCTION SHALL BE PLUGGED WITH A WING PLUG, AND ALL PRESSURE PIPES ARE TO BE PLUGGED WITH A MECHANICAL PLUG OR CAP AT THE END OF THE WORKING DAY TO PREVENT GROUND WATER AND POTENTIAL CONTAMINANTS FROM ENTERING COMPLETED LINES AND LINES UNDER CONSTRUCTION.
7. ABOVE GROUND PIPING, INCLUDING BUT NOT LIMITED TO, AERIAL CROSSINGS, LIFT STATION PIPING, FIRE LINES, METER/BACKFLOW PREVENTION DEVICE ASSEMBLIES, ETC. SHALL BE FLANGED AND BE COATED IN ACCORDANCE WITH SECTION 2 OF SEACOAST UTILITY AUTHORITY CONSTRUCTION STANDARDS.
   THE FINISHED COAT OF PAINT SHALL BE GREEN IN COLOR FOR SANITARY SEWER, LAVENDER FOR RECLAIMED APPURTENANCES AND BLUE FOR POTABLE WATER APPURTENANCES.
8. ALL FLANGED PIPE SHALL BE CAULKED BETWEEN EACH FLANGE AND THREADS WITH SIKA 1 A URETHANE CAULK AFTER BLASTING AND PRIOR TO PRIMING.
9. ALL TIE RODS, BOLTS, NUTS, ETC. INSTALLED UNDERGROUND MUST BE COR TEN OR APPROVED EQUAL AND SHALL BE PAINTED WITH KOPPERS 300-M OR AN AUTHORITY APPROVED EQUAL. BRASS AND STAINLESS STEEL HARDWARE IS EXEMPT FROM THIS REQUIREMENT.
10. COATINGS AND LININGS DAMAGED DUE MISHANDLING OR OTHERWISE, MUST BE REPLACED. COATING AND LININGS DAMAGED DUE TO FIELD CUTTING SHALL BE REPAIRED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, CEMENT MORTAR AND POLYETHYLENE PIPE LININGS, PROTECTO 401, GALVANIZED COATINGS, PVC FENCE COATINGS AND OTHER TYPE COATINGS. APPROVAL MUST BE OBTAINED FROM AUTHORITY PRIOR TO PERFORMING COATING AND LINING REPAIRS. INSPECTIONS OF ALL REPAIRS ARE REQUIRED.
11. ALL STAINLESS STEEL NUTS, BOLTS AND HARDWARE REFERENCED IN THESE STANDARDS, SHALL BE SS 316 GRADE AND SHALL BE SO STAMPED BY THE MANUFACTURER TO VERIFY ALLOY. THE USE OF ANY OTHER STAINLESS STEEL ALLOY WILL REQUIRE SPECIFIC APPROVAL BY AUTHORITY. IN GENERAL, STAINLESS STEEL NUTS, BOLTS AND HARDWARE ARE REQUIRED IN AND AROUND LIFT STATIONS AND FOR FACILITIES INSTALLED OVER OR UNDER BRACKISH OR MARINE WATERS. THIS REQUIREMENT APPLIES TO FLANGE BOLTS AND NUTS ON FLANGED PIPING, MOUNTING BRACKETS, ALL THREAD ROD, ANCHOR BOLTS, WASHERS, CLAMPS AND OTHER MISCELLANEOUS HARDWARE. ANTI-GALLING COMPOUND ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO THE THREADS OF ALL STAINLESS STEEL BOLTS PRIOR TO INSTALLATION.

    ANTI-SEIZE LUBRICANT SHALL BE GRAPHITE 50 ANTI-SEIZE BY LOCTITE CORPORATION, 1000 ANTI-SEIZE PASTE BY DOW CORNING OR 3M LUBE AND ANTI-SEIZE BY 3M.
12. ALL RUBBER AND SYNTHETIC ELASTOMERIC COMPONENTS OF PRODUCTS THAT COME IN CONTACT WITH POTABLE WATER SHALL BE MANUFACTURED WITH CHLORAMINE RESISTANT ELASTOMERS AND SHALL BEAR NSF APPROVAL.
13. ALL MAIN, INCLUDING FITTINGS, SHALL BE EASILY IDENTIFIABLE AS TO THEIR CONTENTS AND SHALL BE COLOR CODED OR MARKED USING THE UNIVERSAL COLOR CODE OF BLUE FOR WATER, GREEN FOR SEWER AND LAVENDER FOR RECLAIMED. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

Installation Protocol

MAY 24, 2023 (Rev D-23)

CONSTRUCTION, NOT FOR

REVISIONS			
NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS FOR THIS PROJECT INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER AND REGISTERED WITH ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
UTILITY DETAILS

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE., SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

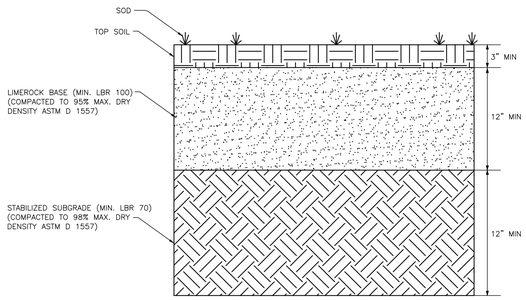
J:\Land Projects PZ\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

DATE	APRIL
DRAWN	MK
PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS

SHEET NO. 28 / 30

JOB NO. 18187.27

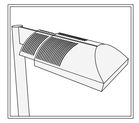
PLOT: 1/29/2025 3:24:16 PM



Stabilized SUA Easement Section

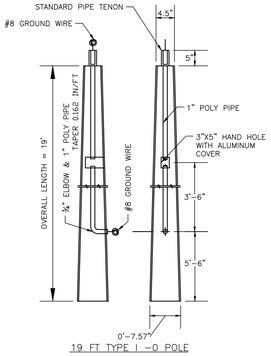
MAY 24, 2023 (Rev A-19)

SITE LIGHT



SPEC. LIGHTING FIXTURES TO BE KIM LIGHTING THE ARCHETYPE SERIES
MODEL: ARX16-3-4K-35-UV-BL-ST-A30-FGL-SVSF

CONFIGURATION: 1SA
FIXTURE: ARX16
DISTRIBUTION: 3 - TYPE III
COLOR TEMPERATURE: 4K - 4000K
DRIVE CURRENT: 35 - 350mA
VOLTAGES: UV - 120-277V
FIXTURE FINISH: BL - BLACK
ARM SUPPORT: ST - STRAIGHT
PHOTOCELL OPTIONS: A30 - 120V BUTTON PHOTOCELL
LENS OPTION: FGL - FLAT GLASS LENS
MOUNTING OPTIONS: SVSF - VERTICAL SLIPFITTER MOUNT SQUARE FOR 2" PIPE TENON, (2-3/8" O.D.)



19 FT TYPE I -0 POLE

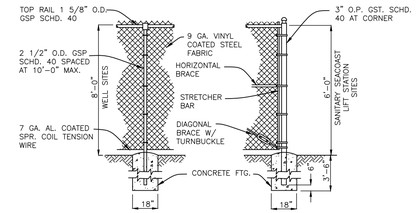
LENGTH OF POLE	19 FT			
EMBEDMENT SPECIFIED	7 FT			
HEIGHT ABOVE GROUND	12 FT			
WEIGHT	818 LBS			
WIND VELOCITY (MPH)	150	160	170	180
MAXIMUM EPA* (SQ FT)				

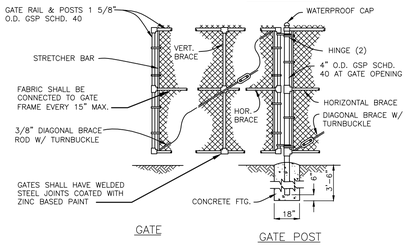
ABOVE EMBEDMENT SHOWN IN SAND. OTHER EMBEDMENT DEPTH MAY BE REQUIRED FOR OTHER SOIL CONDITION.

STANDARD PIPE TENON SIZE	
NOMINAL DIAMETER (IN)	OUTSIDE DIAMETER (IN)
2"	2 ⅜"

Lift Station Yard Light

MAY 24, 2023 (Rev C-23)





NOTES:

1. GATE TO BE SIZED PER REQUIREMENTS.
2. VINYL COATED STEEL WOVEN WIRE FABRIC TO BE STRETCHED TAUT W/ STRETCHER BARS AND STRAPS AND FASTENED TOP & BOTTOM AND AT LINE POSTS WITH GALV. PIG RING TIES.
3. GATE TO BE SECURED OPEN WITH GATE STOP SET IN CONCRETE.
4. ALL RAILS, POSTS AND HARDWARE TO BE BLACK VINYL COATED.
5. WHERE POSTS COME IN CONTACT WITH CONCRETE THEY SHALL BE COATED WITH KOPPERS 300M OR APPROVED EQUAL.
6. GA. CALL-OUTS ARE FOR WIRE BEFORE VINYL COATING.
7. VERTICAL BLACK PVC FENCE SLATS REQUIRED.

Fence Detail

MAY 24, 2023 (Rev B-23)

REVISIONS			
NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
UTILITY DETAILS

J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

	DATE	APRIL
	DRAWN	MK
	PROJECT ENGINEER	MK
	PROJECT MANAGER	ACS
	CHECKED	ACS

SHEET NO. 29 / 30

JOB NO. 18187.27

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS

1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

PLOT: 1/29/2025 3:24:26 PM

CONSTRUCTION, NOT FOR

FORM 3605.1

CONSTRUCTION PROCEDURES

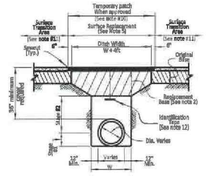
THE BACKFILL FOR THE FIRST AND SECOND STAGES SHALL BE PLACED IN 6" LAYERS COMPACTED THOROUGHLY AND SHALL BE COMPACTED TO 100% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO-T-99.

STAGE 1:

THE CONTRACTOR SHALL PROVIDE ADEQUATE COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING REQUIRED.

STAGE 2:

THE CONTRACTOR SHALL OBTAIN A WELL-COMPACTED BED AND FILL ALONG THE SIDES OF THE PIPE AND TO A POINT INDICATING THE TOP OF SUB-GRADE MATERIAL.



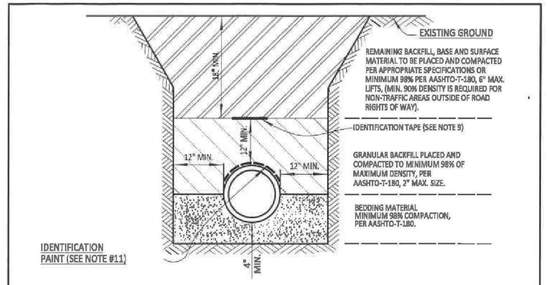
REPLACEMENT OF FLEXIBLE PAVEMENT FOR PERMITTED PAVEMENT CUT

NOTES

1) BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8" - 7/8" SIZING WITH EQUAL OR GREATER STRUCTURAL ADEQUACY AS EXISTING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
2) REPLACED BASE MATERIAL OVER DITCH SHALL BE 18" LIMEROCK (LBR100) MINIMUM FOR THOROUGHFARE PLAN ROADS. ANY ALTERNATE BASE MATERIAL REQUESTED BY THE ENGINEER OF RECORD REQUIRES APPROVAL BY THE ROADWAY PRODUCTION DIVISION.
3) ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED AND BUTT-JOINTED.
4) BASE MATERIAL (PER ROADWAY PRODUCTION DESIGN STANDARDS) SHALL BE PLACED IN TWO OR THREE LAYERS (6" MAX. PER LAYER) AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO THE SPECIFIED DENSITY. (MINIMUM 98% AASHTO - T-180)
5) 1" FRICTION COURSE FC-9.5 OVER 1-1/2" TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL C) WITH TACK EQAT AT 0.05 GAL/SY AND RC-70 PRIME COAT AT 0.10 GAL/SY FOR LIMEROCK BASE. FOLLOW THE LATEST FDOT SPECIFICATIONS FOR APPLICATION RATES OF PRIME AND TACK COATS. CONTRACTOR TO SUBMIT MATERIALS AND RATES TO ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK
6) PIPE SHALL BE PLACED IN A DRY TRENCH.
7) ALL ROADWAY REPAIR WORK SHALL BE PERFORMED IN CONFORMANCE WITH APPLICABLE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND COUNTY PPM# EL-0-3605.
8) DENSITY TESTS SHALL BE TAKEN IN 1 FT LIFTS ABOVE THE PIPE AT INTERVALS OF 400 FT MAXIMUM (1 SET MINIMUM) OR AS DIRECTED BY THE CONSTRUCTION COORDINATION DIVISION. RESULTS SHALL BE SUBMITTED TO CONSTRUCTION COORDINATION DIVISION AS PART OF THEIR FIELD REVIEW.
9) ENGINEER-OF-RECORD SHALL PROVIDE FULL-TIME INSPECTION DURING THE ENTIRETY OF THE OPEN-CUT OPERATION, BEGINNING WITH THE EXCAVATION AND CONTINUING THROUGH THE COMPLETION OF THE PAVING.
10) IF THE PAVEMENT IS NOT COMPLETELY RESTORED IMMEDIATELY FOLLOWING THE OPEN CUT, A SMOOTH TEMPORARY PATCH (MINIMUM 1.5" SP 12.5 STRUCTURAL COURSE ASPHALT) SHALL BE INSTALLED, PROPERLY MATCHING THE EXISTING GRADES. THIS TEMPORARY PATCH SHALL BE MAINTAINED, OR REINSTALLED, PROPERLY IN PLACE AS MAY BE NECESSARY FOR A PERIOD NO LONGER THAN 45 DAYS. THE COUNTY RETAINS THE RIGHT TO USE POSTED SAFETY PLATES TO COMPLETE ANY RESTORATION WORK THAT HAS NOT BEEN COMPLETED IN THE 45 DAY PERIOD. ALTERNATIVE TEMPORARY TRENCH PROTECTION (STEEL PLATES OR OTHERS) MAY BE APPROVED BY THE CONSTRUCTION COORDINATION DIVISION .
11) FOR FINAL RESTORATION (INCLUDES THE PATCHED/SURFACE REPLACEMENT AREA OVER THE TRENCH), THE ROAD SHALL BE MILLED/RESURFACED PER NOTE 5 ABOVE FOR A FULL LANE WIDTH OF THE TRAVEL LANES ENCROACHED BY THE TRENCH AREA, INCLUDING A TRANSITION AREA OF 50 FT ON EACH SIDE MEASURED FROM TOP OF TRENCH.
12) APPROVED MAGNETIC TAPE IS REQUIRED FOR ALL MAIN PRESSURE PIPES AND CONDUIT IN THE COUNTY'S RIGHT-OF-WAY. INSTALL TAPE 24" BELOW FINISHED GRADE.
13) CONTINUOUS 4" WIDE PAINT STRIPING IS REQUIRED FOR DIP/PCCP WATER MAINS (BLUE), SANITARY MAINS (GREEN),DIP RECLAIMED WATER MAINS (PURPLE), GAS MAINS (YELLOW), OR AS REQUIRED BY THE APWA.

FILEPATH: P:/DGN/ENG_SER/LAND DEVELOPMENT STANDARDS/2.DGN

PALM BEACH COUNTY DEPARTMENT OF ENGINEERING & PUBLIC WORKS				OPEN CUT DETAIL FOR THOROUGHFARE ROADS (PAVED AREAS)		DRAWING NO.
DRAWN BY:	DATE:	REVISED BY:	DATE:	APPROVED:	EFFECTIVE:	2
K.L.	06/25/93	J.M.K.	02/01/2018	COUNTY ENGINEER OR DESIGNEE	4/27/18	



NOTES:

1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8" - 7/8" SIZING WITH EQUAL OR GREATER STRUCTURAL ADEQUACY AS EXISTING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK AND DEBRIS.
5. DENSITY TESTS SHALL BE TAKEN IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 400' MAXIMUM, (MINIMUM 1 SET) OR AS DIRECTED BY THE CONSTRUCTION COORDINATION DIVISION. RESULTS SHALL BE SUBMITTED TO CONSTRUCTION COORDINATION AS PART OF THEIR FIELD REVIEW.
6. THE PERMITTEE/DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH ALL TRENCH SAFETY LAWS AND REGULATIONS.
7. SEE SEPARATE DETAIL FOR PAVED AREAS (OPEN CUT FOR THOROUGHFARE AND NON-THOROUGHFARE ROADS).
8. THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION OR AS SPECIFIED IN PERMIT/CONTRACT DOCUMENTS.
9. APPROVED MAGNETIC TAPE IS REQUIRED FOR ALL MAIN PRESSURE PIPES AND CONDUIT IN THE COUNTY'S RIGHT-OF-WAY. INSTALL TAPE 18" BELOW FINISHED GRADE.
10. ROOT BARRIER IS REQUIRED FOR APPROVED PIPE INSTALLATION CLOSER THAN 10 FEET FROM AN EXISTING TREE. SEE SEPARATE DETAIL FOR ROOT BARRIER.
11. CONTINUOUS 4" WIDE PAINT STRIPING IS REQUIRED FOR DIP/PCCP WATER MAINS (BLUE), DIP SANITARY FORCE MAINS (GREEN),DIP RECLAIMED WATER MAINS (PURPLE), GAS MAINS (YELLOW), OR AS REQUIRED BY THE APWA.
12. PERMANENT ABOVE GROUND UTILITY MARKER SHALL BE INSTALLED IF REQUIRED.

FILEPATH: P:/DGN/ENG_SER/LAND DEVELOPMENT STANDARDS/1.DGN

PALM BEACH COUNTY DEPARTMENT OF ENGINEERING & PUBLIC WORKS				TYPICAL TRENCH DETAIL (NON-PAVED AREAS)		DRAWING NO.
DRAWN BY:	DATE:	REVISED BY:	DATE:	APPROVED:	EFFECTIVE:	1
K.L.	05/23/90	J.M.K.	02/01/2018	COUNTY ENGINEER OR DESIGNEE	4/27/18	

REVISIONS			
NO.	DATE	REMARKS	BY

©COPYRIGHT 2023 BY ENGENUITY GROUP, INC. THIS DRAWING IS PROTECTED. FOR INFORMATIONAL PURPOSES ONLY, UNLESS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING ENGENUITY GROUP, INC.

ADAM SWANEY, P.E.
NO. 72235

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
PALM BEACH COUNTY ROW DETAILS

J:\Land Projects RZ\18187.27 Lake Park Septic to Sewer\18187.27 DETAILS.dwg DATE: 12/17/2024 11:02 AM

DATE	APRIL	
DRAWN	MK	
PROJECT ENGINEER	MK	
PROJECT MANAGER	ACS	
CHECKED	ACS	

SHEET NO. 24 / 24

JOB NO. 18187.27

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

PLOT: 1/29/2025 3:27:35 PM

CONSTRUCTION, NOT FOR