

2419 N FEDERAL HIGHWAY

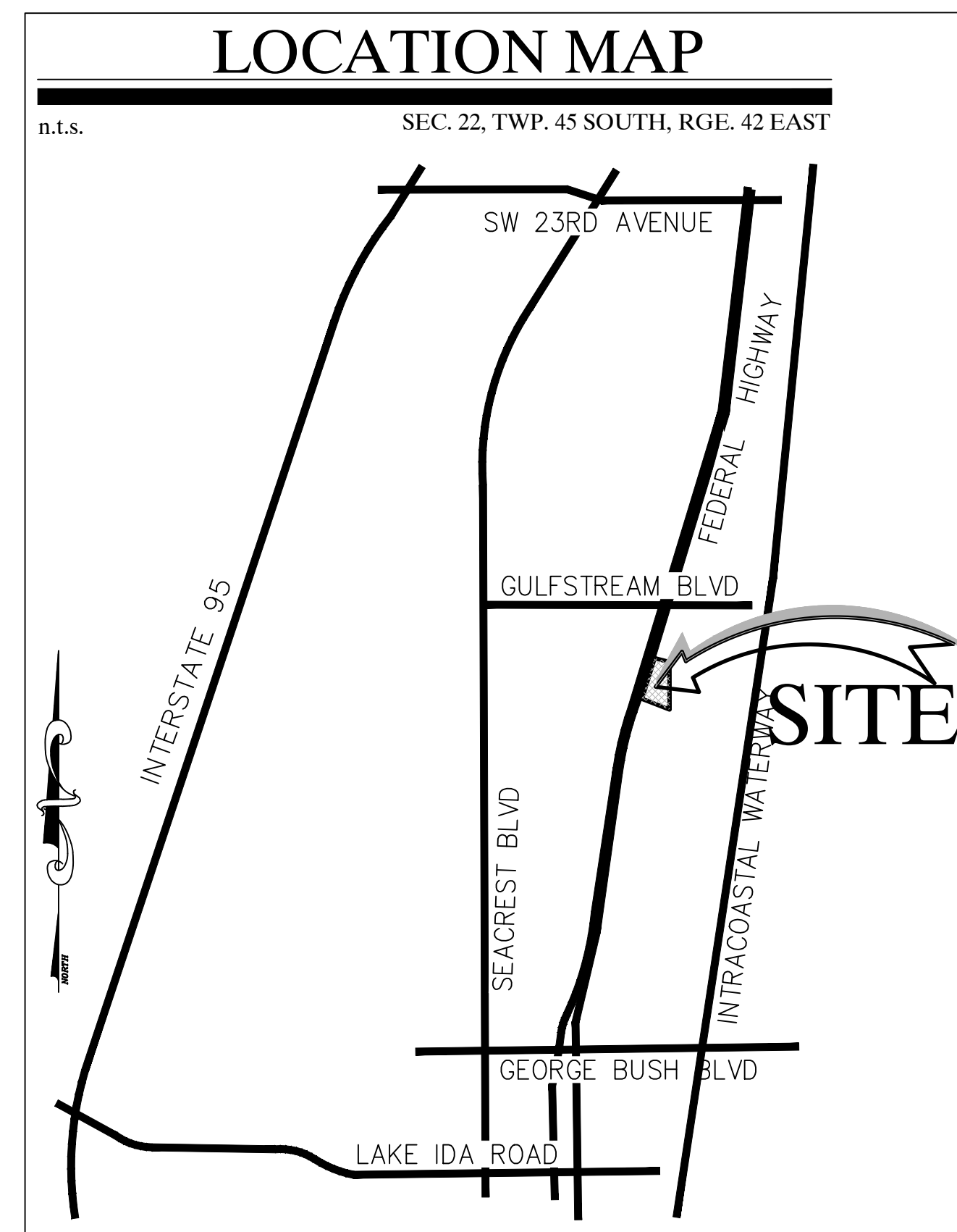
MULTI-FAMILY RESIDENTIAL

Delray Beach, Florida

CIVIL SITE PLAN PACKAGE

REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY
FILE NAME: 10908ENG.dwg		

INDEX

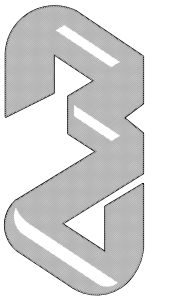


C-01.....	Cover Page
C-02.....	Demolition Plan
C-03.....	Overall Paving, Grading, & Drainage Plans
C-04 - C-05.....	Paving, Grading, & Drainage Plans (South/North)
C-06.....	Overall Pavement Marking & Signage Plans
C-07 - C-08.....	Pavement Marking & Signage Plans (South/North)
C-09 - C-11.....	Paving, Grading, & Drainage Details
C-12.....	Pollution Prevention Plan
C-13.....	Overall Water Distribution, Sanitary Sewer, & Utility Plan
C-14 - C-15.....	Water Distribution, Sanitary Sewer, & Utility Plans (South/ North)
C-16 - C-18.....	Composite Utility Plan
C-19 - C-20.....	Sanitary Sewer Profiles
C-21 - C-23.....	Water Distribution/Sanitary Sewer Details
LS-1.....	Lift Station Details
VM-01- VM-04.....	Vehicle Movement Plans

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 592-1991 / FAX (561) 750-4452



2419 N FEDERAL HWY
 COVER PAGE
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./ PG. N/A
 SCALE N.T.S.

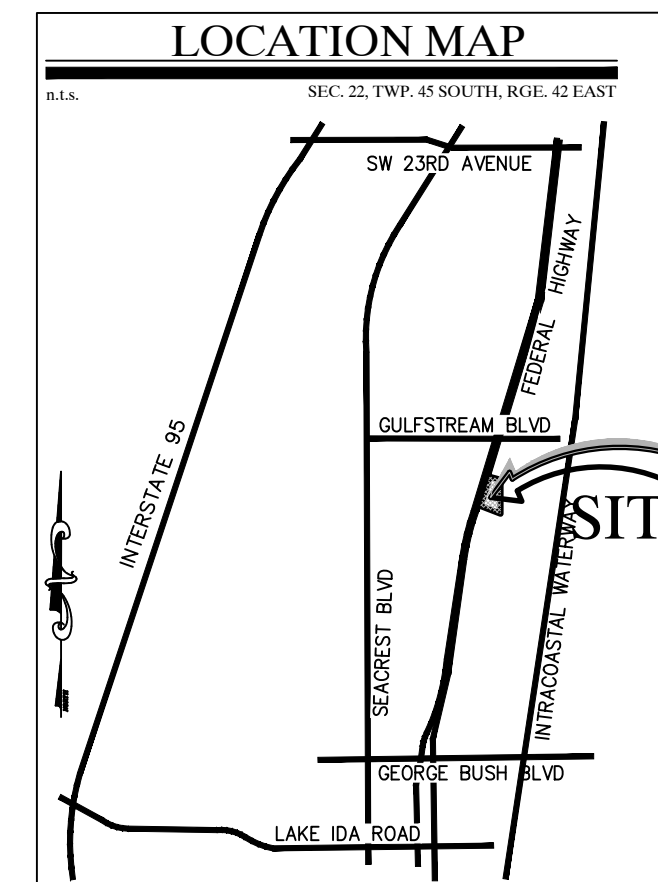
MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 - FOR THE FIRM -
 DATE

JOB # 10908
 SHT.NO.
C-01
 OF 27 SHEETS

Drawing: P:\10908-00-00\10908.dwg, User: jkahn, V:\10908.dwg, Plot: C-01-COVER

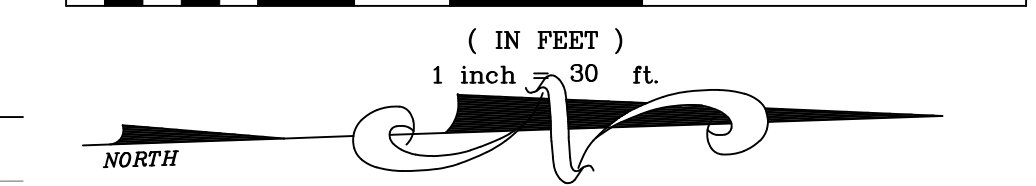
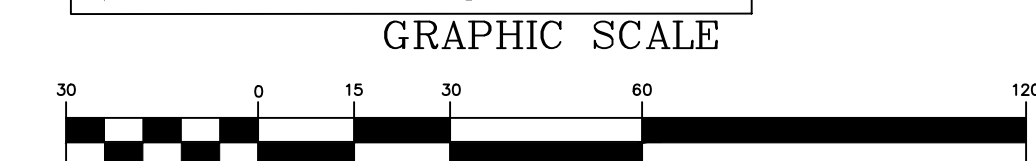
U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

100' PUBLIC RIGHT-OF-WAY
 FLORIDA DEPARTMENT OF TRANSPORTATION
 MAP SECTION 93010-2205



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS		

FILE NAME: 10908ENG.dwg



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED DRAINAGE PIPE
- PROPOSED FORCE MAIN (SIZE NOTED)
- PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- PROPOSED WATER LINE (SIZE NOTED)
- PROPOSED FPL ELEC. LINE
- PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM - EXISTING WATER LINE
- EXGM - EXISTING GATE VALVE
- EXSD - EXISTING PIPE AND INLET
- EXSS - EXISTING SANITARY SEWER LINE
- TBR - TO BE REMOVED
- TR - TO REMAIN

- GENERAL NOTES:
- 1.) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2.) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3.) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4.) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5.) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6.) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7.) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8.) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

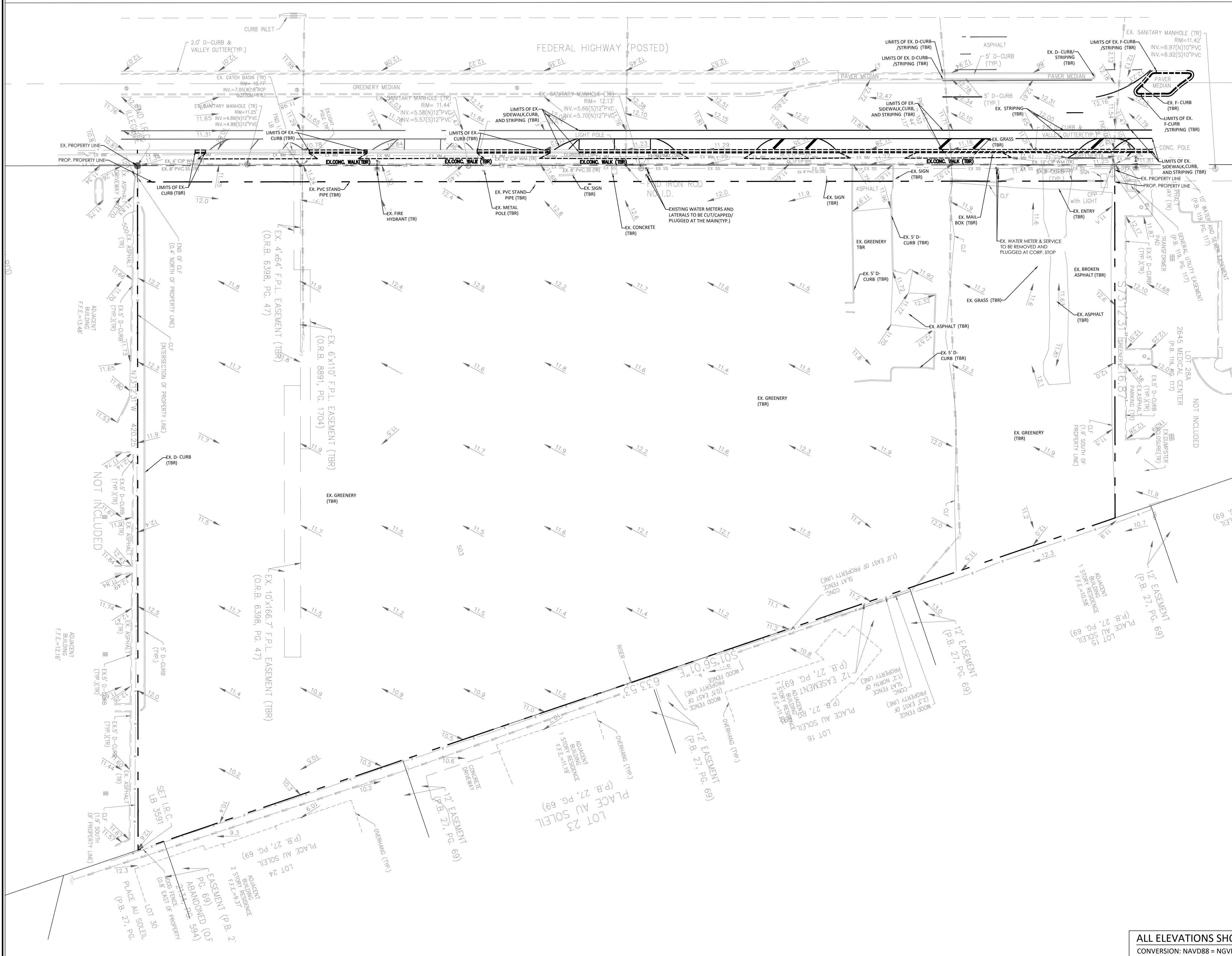
CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 992-1991 / FAX (561) 750-4525

2419 N FEDERAL HWY
 DEMOLITION PLAN
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./PG. N/A
 SCALE 1"=30'

MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM -
 DATE

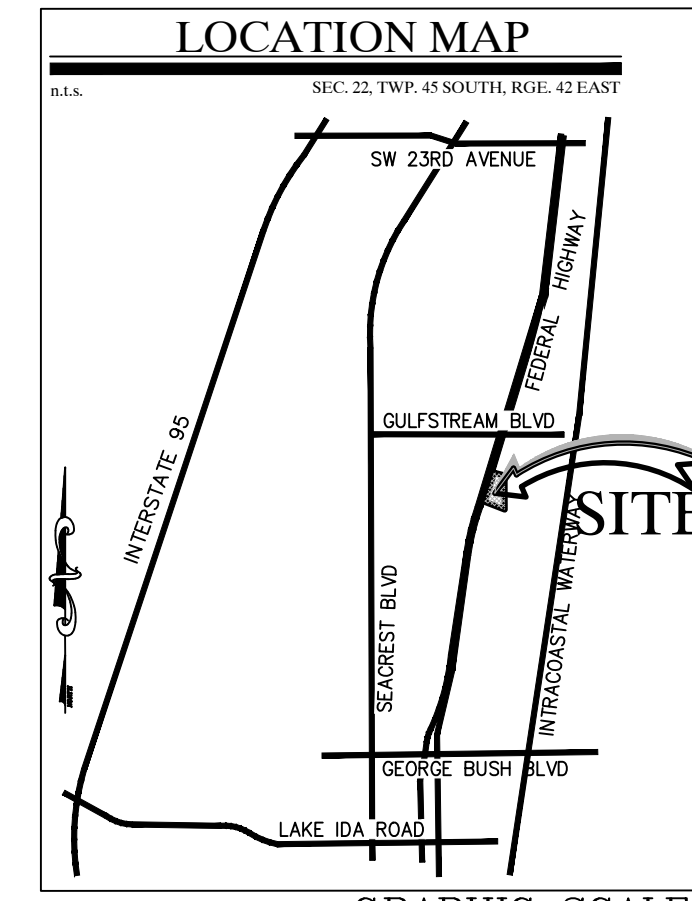
JOB # 10908
 SHT. NO.
C-02
 OF 27 SHEETS



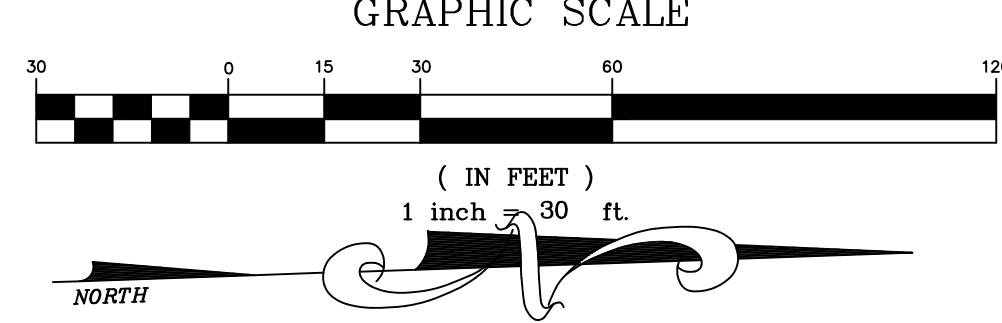
U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

100' PUBLIC RIGHT-OF-WAY

FLORIDA DEPARTMENT OF TRANSPORTATION
MAP SECTION 93010-2205



REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY
FILE NAME: 10908ENG.dwg		



IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE 0-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS

LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- M.E.E. MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- SD PROPOSED DRAINAGE PIPE
- FM PROPOSED FORCE MAIN (SIZE NOTED)
- RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- W PROPOSED WATER LINE (SIZE NOTED)
- FPL PROPOSED FPL ELEC. LINE
- E PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXGM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE TO BE REMOVED
- TR TO REMAIN

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
1-800-432-4770

Sunshine State One Call of Florida, Inc.

NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

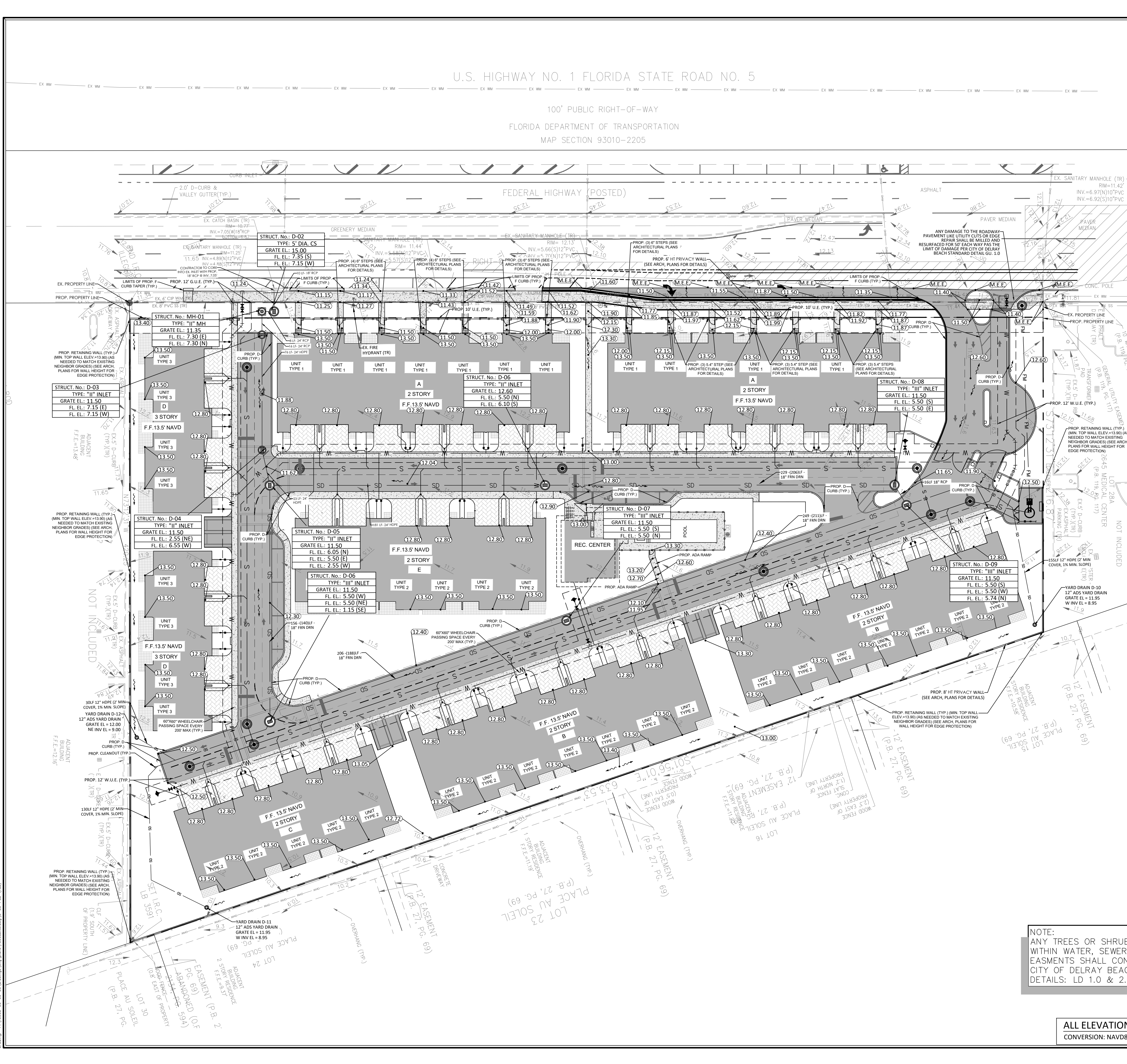
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

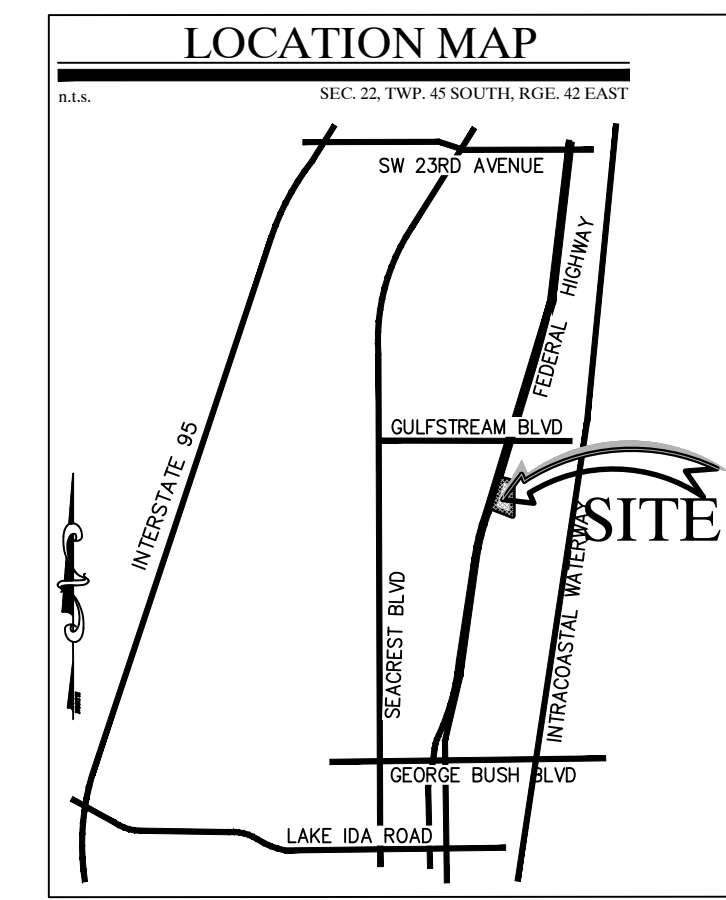
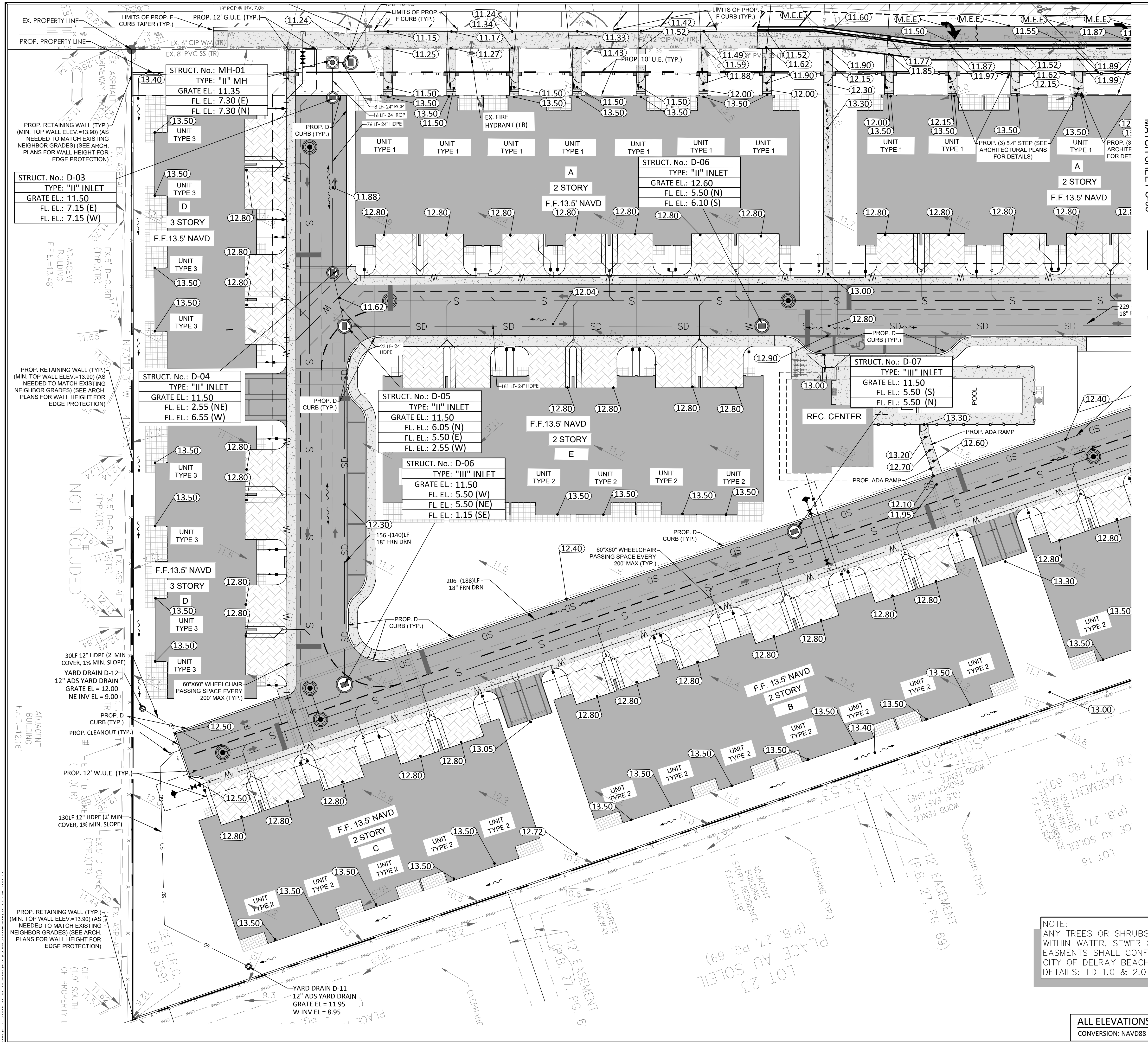
2419 N FEDERAL HWY
OVERALL PAVING, GRADING & DRAINAGE PLAN
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. N/A
SCALE 1"=30'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

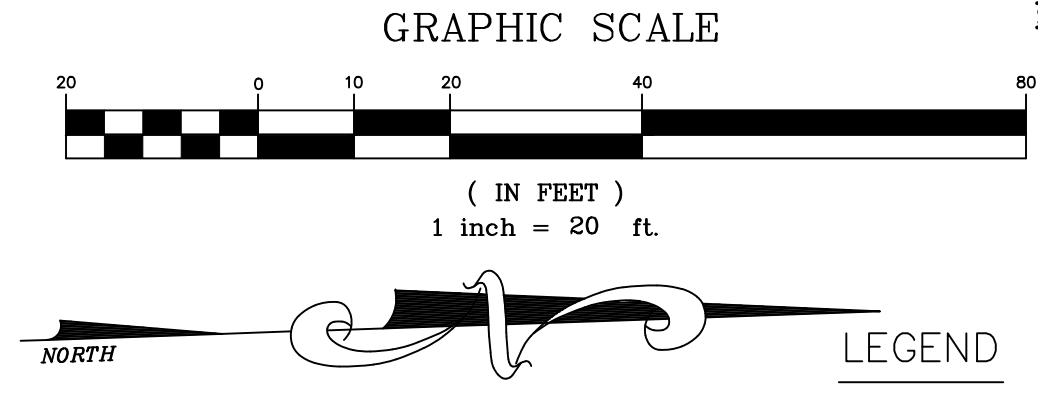
JOB # 10908
SHT. NO.
C-03
OF 27 SHEETS





REV	PER	UPDATED SITE PLAN	DATE	BY
04	17/26	JRH		
03	11/26	JRH		
12	16/25	JRH		
09	18/25	RCW		
			DATE	BY

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND	
[Symbol]	EXISTING CONCRETE
[Symbol]	PROPOSED PAVEMENT
[Symbol]	PROPOSED 4" CONCRETE
[Symbol]	PROPOSED PAVER DRIVEWAY
[Symbol]	PROPOSED PAVER WALKWAY
[Symbol]	PROPOSED BUILDING
[Symbol]	M.E.E. MATCH EXISTING ELEVATION
[Symbol]	PROPOSED GRADE
[Symbol]	EXISTING GRADE
[Symbol]	GRADING CROSS-SECTION
[Symbol]	FLOW ARROW
[Symbol]	WHEEL STOP
[Symbol]	DRAINAGE STRUCTURE
[Symbol]	PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
[Symbol]	EXISTING PROPERTY LINE
[Symbol]	PROPOSED PROPERTY LINE
[Symbol]	PROPOSED DRAINAGE PIPE
[Symbol]	PROPOSED FORCE MAIN (SIZE NOTED)
[Symbol]	PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
[Symbol]	PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
[Symbol]	PROPOSED WATER LINE (SIZE NOTED)
[Symbol]	PROPOSED FPL ELEC. LINE
[Symbol]	PROPOSED ELEC. LINE
[Symbol]	PROPOSED GATE VALVE AND BOX
[Symbol]	PROPOSED REDUCER
[Symbol]	FIRE HYDRANT
[Symbol]	SAMPLE POINT
[Symbol]	EXISTING WATER LINE
[Symbol]	EXISTING GATE VALVE
[Symbol]	EXISTING PIPE AND INLET
[Symbol]	EXISTING SANITARY SEWER LINE
[Symbol]	TO BE REMOVED
[Symbol]	TO REMAIN

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NOTE:
 ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERS AND PLANNERS
 LANDSCAPE ARCHITECTS
 7900 GLADES ROAD, SUITE 100
 BOCA RATON, FLORIDA 33424
 PHONE (561) 592-1991 / FAX (561) 750-4152

2419 N FEDERAL HWY
 PAVING, GRADING & DRAINAGE PLAN(SOUTH)
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./P.G. N/A
 SCALE 1"=20'

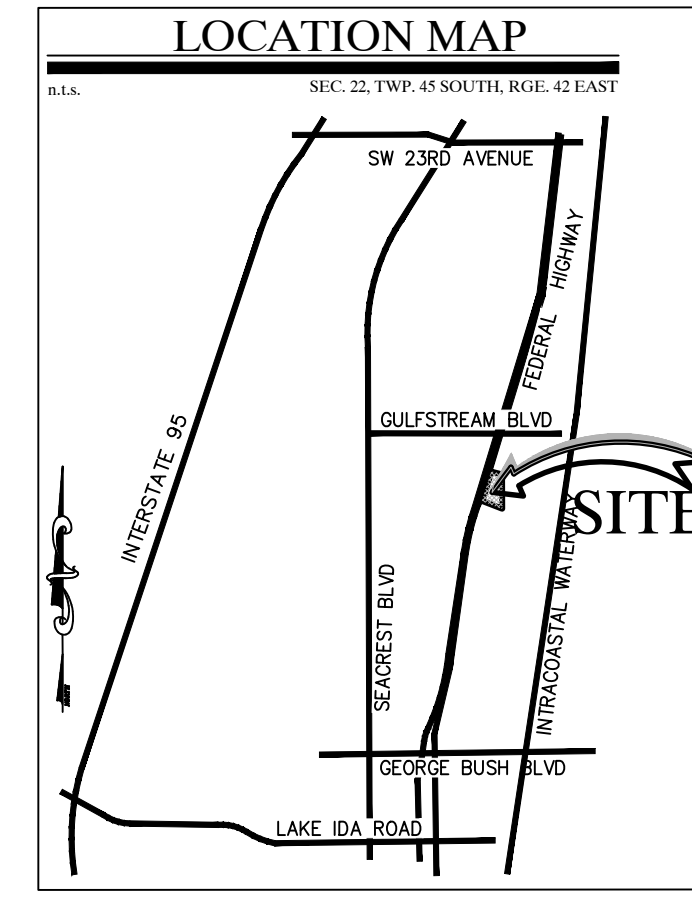
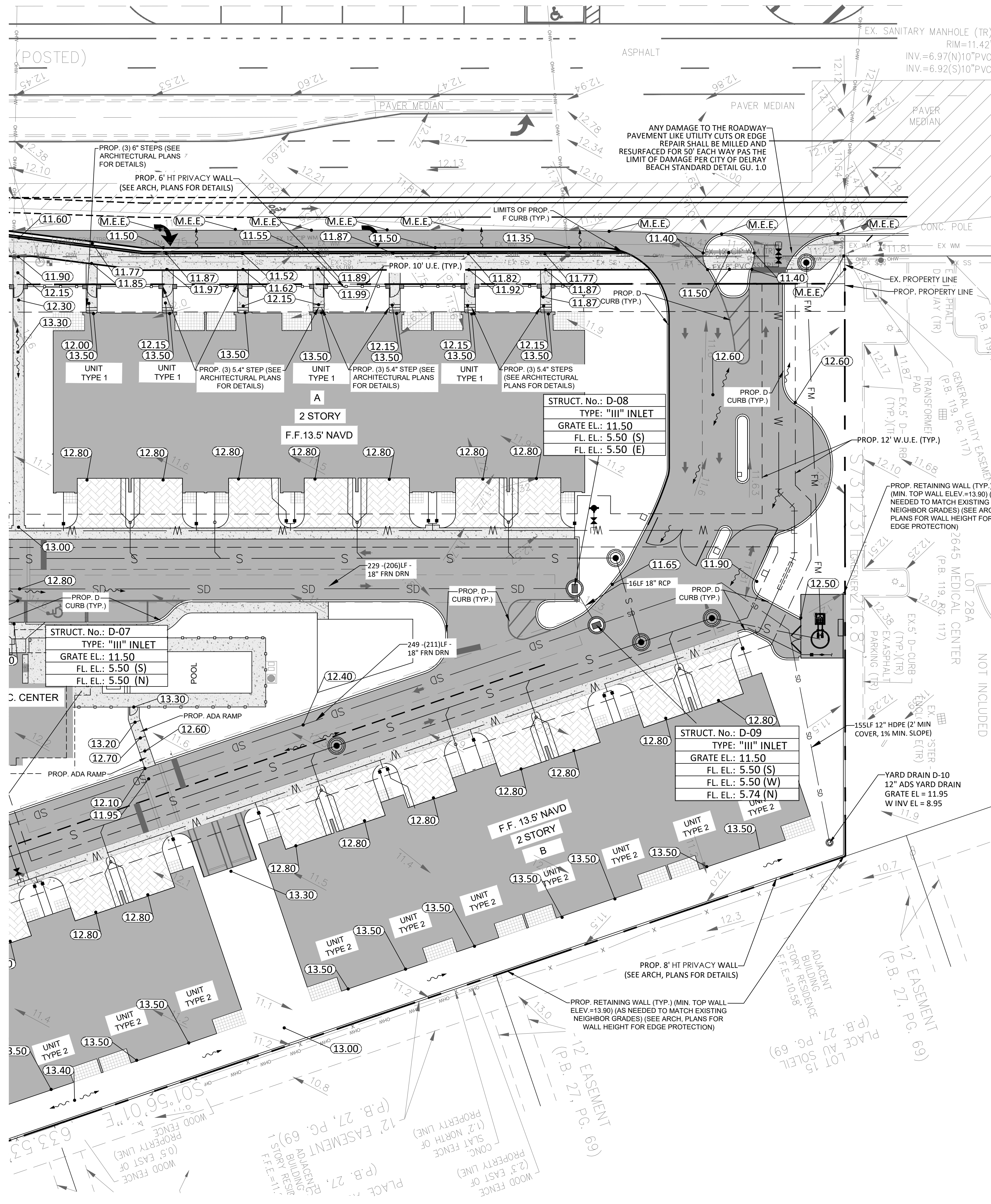
MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM -
 DATE

JOB # 10908
 SHT. NO.
C-04
 OF 27 SHEETS

Call 48 hours before you dig
 It's the Law!
 1-800-432-4770
 Sunshine State One Call of Florida, Inc.

MATCH SHEET C-04

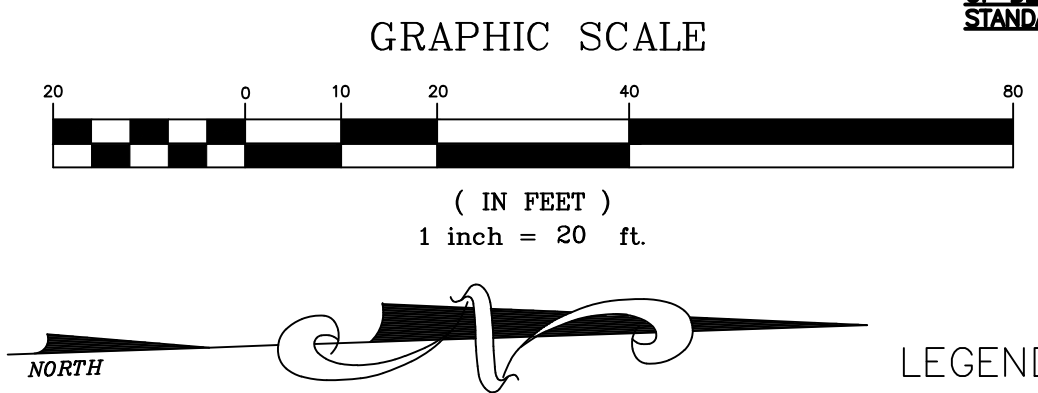
MATCH SHEET C-04



REV	DESCRIPTION	DATE	BY
REV PER UPDATED SITE PLAN		04/17/26	JRH
REV PER CITY COMMENTS		03/11/26	JRH
REV PER CITY COMMENTS		12/16/25	JRH
REV PER CITY COMMENTS		09/18/25	RCW
REVISIONS			BY

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- M.E.E. MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED DRAINAGE PIPE
- PROPOSED FORCE MAIN (SIZE NOTED)
- PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- PROPOSED WATER LINE (SIZE NOTED)
- PROPOSED FPL ELEC. LINE
- PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXGM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE
- TBR TO BE REMOVED
- TR TO REMAIN

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
1-800-432-4770

Sunshine State One Call of Florida, Inc.

NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 992-1991 / FAX (561) 750-4652

2419 N FEDERAL HWY
PAVING, GRADING & DRAINAGE PLAN (NORTH)

2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

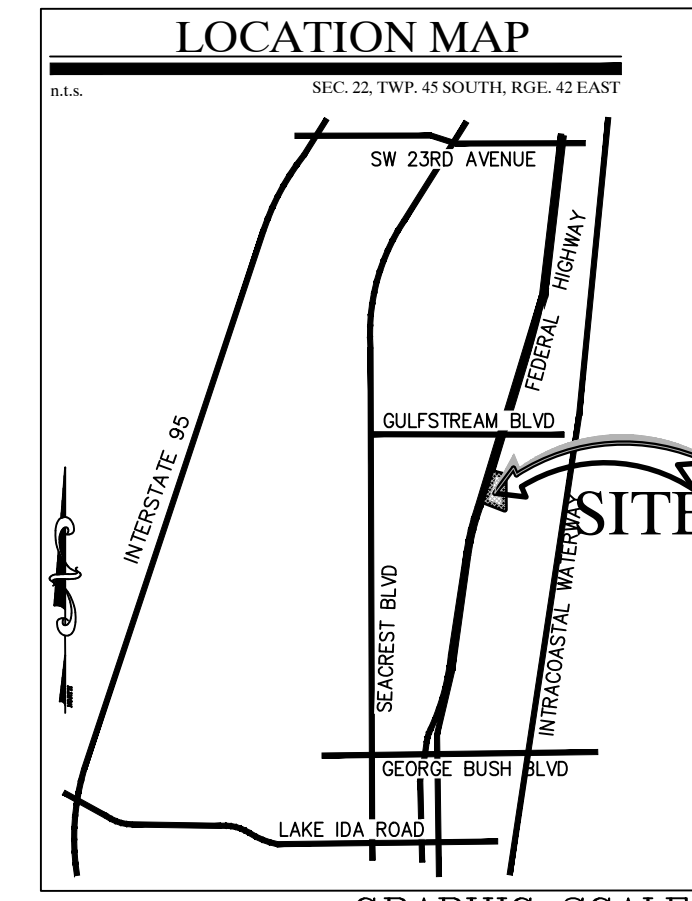
DATE 03/21/2025
DRAWN BY RCW
F.B./PG. N/A
SCALE 1"=20'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-05
OF 27 SHEETS

U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

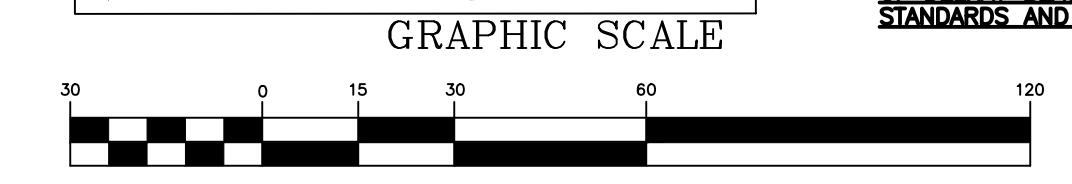
100' PUBLIC RIGHT-OF-WAY
 FLORIDA DEPARTMENT OF TRANSPORTATION
 MAP SECTION 93010-2205



REV	DESCRIPTION	DATE	BY
REV PER UPDATED SITE PLAN		04/17/26	JRH
REV PER CITY COMMENTS		03/11/26	JRH
REV PER CITY COMMENTS		12/16/25	JRH
REV PER CITY COMMENTS		09/18/25	RCW
REVISIONS		DATE	BY

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- | | | | |
|--|---|--|--------------------------------|
| | EXISTING CONCRETE | | PAVEMENT MARKING LEGEND |
| | PROPOSED PAVEMENT | | A - 4" SOLID WHITE |
| | PROPOSED 4" CONCRETE | | B - 6" SOLID WHITE |
| | PROPOSED PAVER DRIVEWAY | | C - 8" SOLID WHITE |
| | PROPOSED PAVER WALKWAY | | D - 12" SOLID WHITE |
| | PROPOSED BUILDING | | E - 18" SOLID WHITE |
| | M.E.E. MATCH EXISTING ELEVATION | | F - 24" SOLID WHITE |
| | PROPOSED GRADE | | G - 6" WHITE - SKIP (10'-30') |
| | EXISTING GRADE | | H - 6" WHITE - SKIP (6'-10') |
| | GRADING CROSS-SECTION | | I - 6" WHITE - SKIP (2'-4') |
| | FLOW ARROW | | J - 4" SOLID YELLOW |
| | WHEEL STOP | | K - 6" SOLID YELLOW |
| | DRAINAGE STRUCTURE | | L - 18" SOLID YELLOW |
| | PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS) | | M - 6" DOUBLE SOLID YELLOW |
| | EXISTING PROPERTY LINE | | N - 6" YELLOW - SKIP (10'-30') |
| | PROPOSED PROPERTY LINE | | O - 6" YELLOW - SKIP (6'-10') |
| | PROPOSED DRAINAGE PIPE | | P - 6" YELLOW - SKIP (2'-4') |
| | PROPOSED FORCE MAIN (SIZE NOTED) | | |
| | PROPOSED RECLAIMED WATER LINE (SIZE NOTED) | | |
| | PROPOSED GRAVITY SEWER LINE (SIZE NOTED) | | |
| | PROPOSED WATER LINE (SIZE NOTED) | | |
| | PROPOSED FPL ELEC. LINE | | |
| | PROPOSED ELEC. LINE | | |
| | PROPOSED GATE VALVE AND BOX | | |
| | PROPOSED REDUCER | | |
| | FIRE HYDRANT | | |
| | SAMPLE POINT | | |
| | EXISTING WATER LINE | | |
| | EXISTING GATE VALVE | | |
| | EXISTING PIPE AND INLET | | |
| | EXISTING SANITARY SEWER LINE | | |
| | TO BE REMOVED | | |
| | TO REMAIN | | |

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PAVED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
 CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
 1-800-432-4770

Sunshine State One Call of Florida, Inc.

NOTE:
 ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

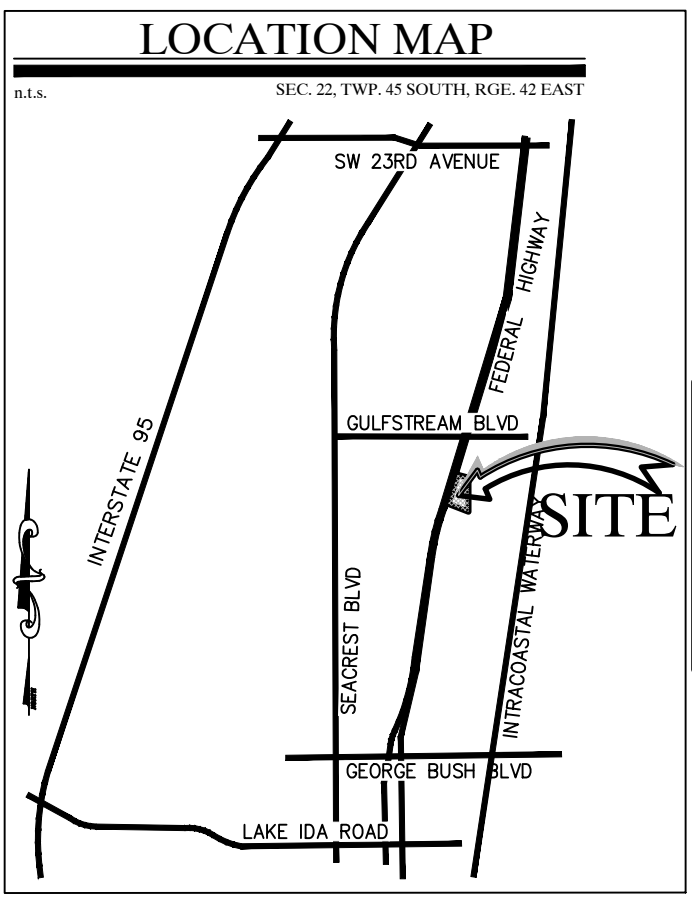
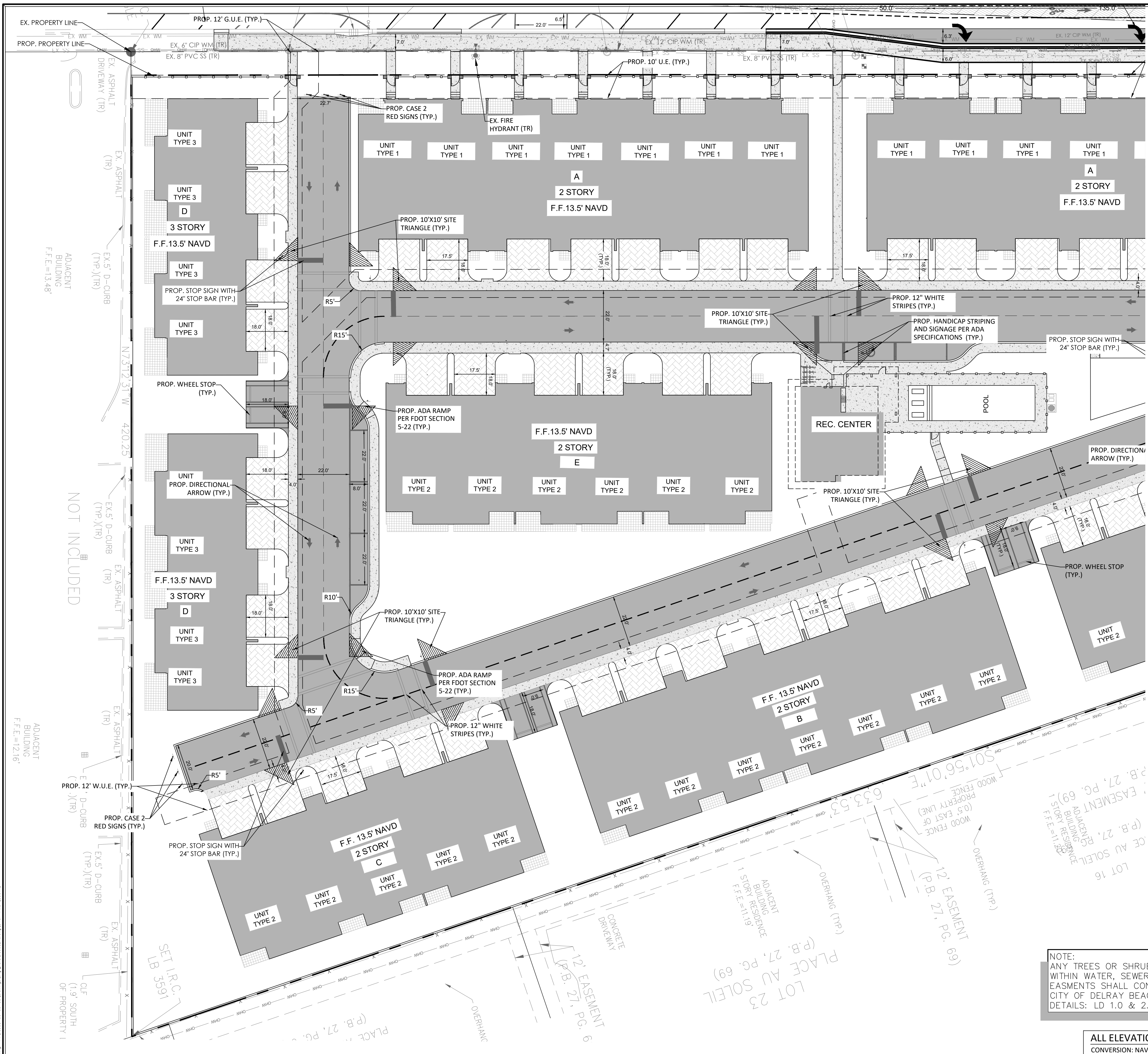
CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
 OVERALL PAVEMENT MARKING & SIGNAGE PLAN
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./ PG. N/A
 SCALE 1"=30'

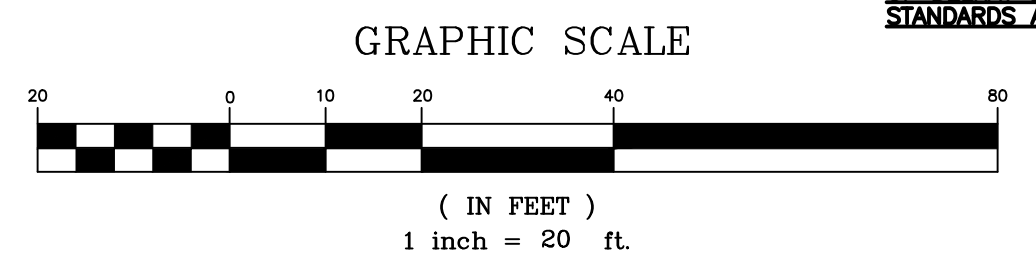
MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM -
 DATE

JOB # 10908
 SH.T. NO.
 C-06
 OF 27 SHEETS



REV	PER	UPDATED SITE PLAN	DATE	BY
04/17/26	JRH			
03/11/26	JRH			
12/16/25	JRH			
09/18/25	RCW			
		REVISIONS	DATE	BY
		FILE NAME 10908ENG.dwg		

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND	
[Symbol]	EXISTING CONCRETE
[Symbol]	PROPOSED PAVEMENT
[Symbol]	PROPOSED 4" CONCRETE
[Symbol]	PROPOSED PAVER DRIVEWAY
[Symbol]	PROPOSED PAVER WALKWAY
[Symbol]	PROPOSED BUILDING
[Symbol]	MATCH EXISTING ELEVATION
[Symbol]	PROPOSED GRADE
[Symbol]	EXISTING GRADE
[Symbol]	GRADING CROSS-SECTION
[Symbol]	FLOW ARROW
[Symbol]	WHEEL STOP
[Symbol]	DRAINAGE STRUCTURE
[Symbol]	PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
[Symbol]	EXISTING PROPERTY LINE
[Symbol]	PROPOSED PROPERTY LINE
[Symbol]	PROPOSED DRAINAGE PIPE
[Symbol]	PROPOSED FORCE MAIN (SIZE NOTED)
[Symbol]	PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
[Symbol]	PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
[Symbol]	PROPOSED WATER LINE (SIZE NOTED)
[Symbol]	PROPOSED FPL ELEC. LINE
[Symbol]	PROPOSED ELEC. LINE
[Symbol]	PROPOSED GATE VALVE AND BOX
[Symbol]	PROPOSED REDUCER
[Symbol]	FIRE HYDRANT
[Symbol]	SAMPLE POINT
[Symbol]	EXISTING WATER LINE
[Symbol]	EXISTING GATE VALVE
[Symbol]	EXISTING PIPE AND INLET
[Symbol]	EXISTING SANITARY SEWER LINE
[Symbol]	TO BE REMOVED
[Symbol]	TO REMAIN

PAVEMENT MARKING LEGEND	
A	4" SOLID WHITE
B	6" SOLID WHITE
C	8" SOLID WHITE
D	12" SOLID WHITE
E	18" SOLID WHITE
F	24" SOLID WHITE
G	6" WHITE - SKIP (10'-30')
H	6" WHITE - SKIP (6'-10')
I	6" WHITE - SKIP (2'-4')
J	4" SOLID YELLOW
K	6" SOLID YELLOW
L	18" SOLID YELLOW
M	6" DOUBLE SOLID YELLOW
N	6" YELLOW - SKIP (10'-30')
O	6" YELLOW - SKIP (6'-10')
P	6" YELLOW - SKIP (2'-4')

- GENERAL NOTES:**
- CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - ALL SIDEWALKS SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

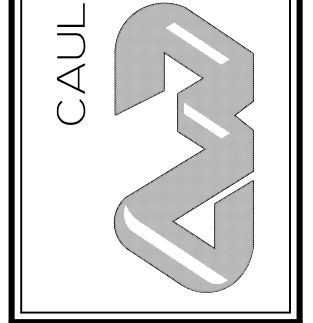
CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.



NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-9991 / FAX (561) 750-4652



2419 N FEDERAL HWY
PAVEMENT MARKING & SIGNAGE PLAN (SOUTH)
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./PG. N/A
SCALE 1"=20'

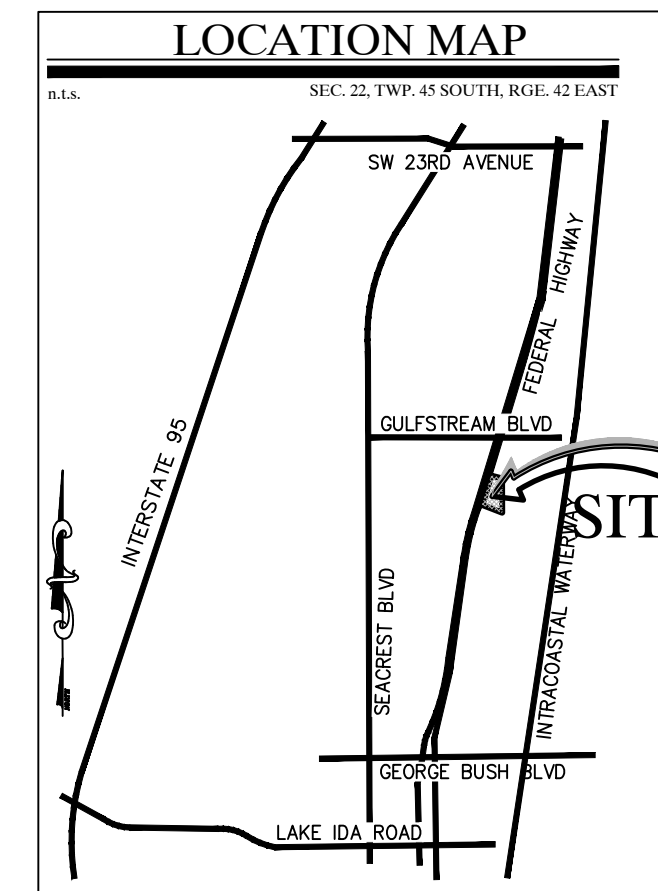
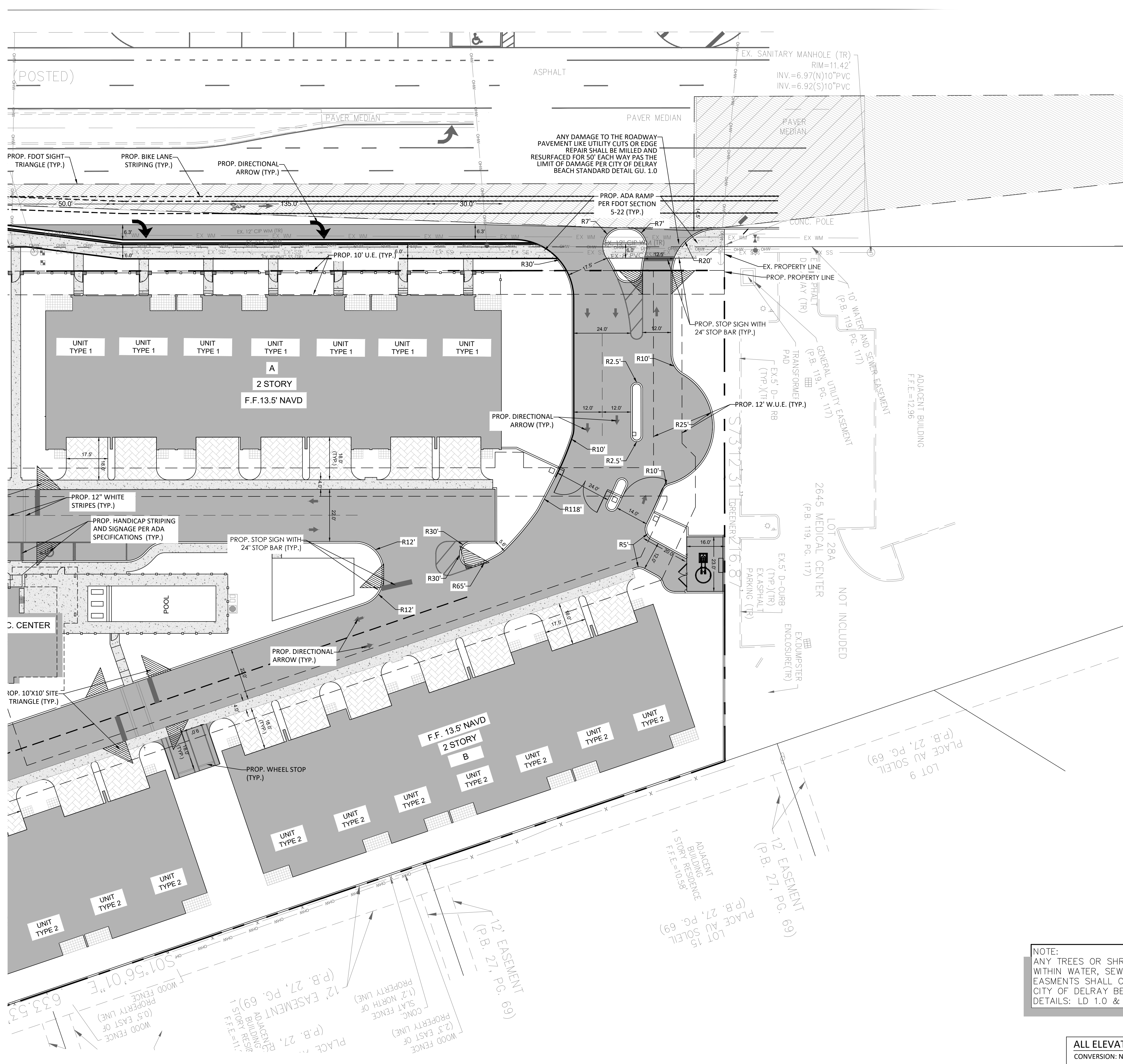
MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

JOB # 10908
SHT NO.
C-07
OF 27 SHEETS

Drawing: P:\10908-00-00-00\10908-00-00-00\10908ENG.dwg (C-07) (REV: 10/20/25)

MATCH SHEET C-07

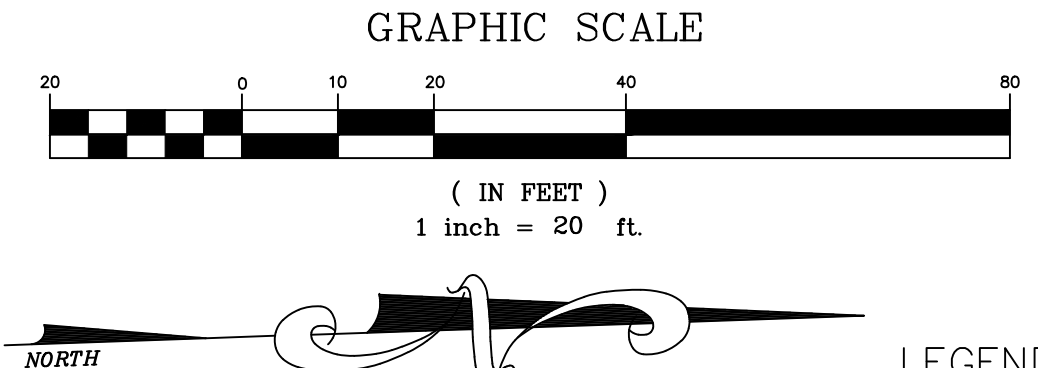
MATCH SHEET C-07



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS		

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



PAVEMENT MARKING LEGEND		LEGEND	
A - 4" SOLID WHITE	[Symbol]	[Symbol]	EXISTING CONCRETE
B - 6" SOLID WHITE	[Symbol]	[Symbol]	PROPOSED PAVEMENT
C - 8" SOLID WHITE	[Symbol]	[Symbol]	PROPOSED 4" CONCRETE
D - 12" SOLID WHITE	[Symbol]	[Symbol]	PROPOSED PAVER DRIVEWAY
E - 18" SOLID WHITE	[Symbol]	[Symbol]	PROPOSED PAVER WALKWAY
F - 24" SOLID WHITE	[Symbol]	[Symbol]	PROPOSED BUILDING
G - 6" WHITE - SKIP (10'-30')	[Symbol]	[Symbol]	MATCH EXISTING ELEVATION
H - 6" WHITE - SKIP (6'-10')	[Symbol]	[Symbol]	PROPOSED GRADE
I - 6" WHITE - SKIP (2'-4')	[Symbol]	[Symbol]	EXISTING GRADE
J - 4" SOLID YELLOW	[Symbol]	[Symbol]	GRADING CROSS-SECTION
K - 6" SOLID YELLOW	[Symbol]	[Symbol]	FLOW ARROW
L - 18" SOLID YELLOW	[Symbol]	[Symbol]	WHEEL STOP
M - 6" DOUBLE SOLID YELLOW	[Symbol]	[Symbol]	DRAINAGE STRUCTURE
N - 6" YELLOW - SKIP (10'-30')	[Symbol]	[Symbol]	PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
O - 6" YELLOW - SKIP (6'-10')	[Symbol]	[Symbol]	EXISTING PROPERTY LINE
P - 6" YELLOW - SKIP (2'-4')	[Symbol]	[Symbol]	PROPOSED PROPERTY LINE
		[Symbol]	PROPOSED DRAINAGE PIPE
		[Symbol]	PROPOSED FORCE MAIN (SIZE NOTED)
		[Symbol]	PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
		[Symbol]	PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
		[Symbol]	PROPOSED WATER LINE (SIZE NOTED)
		[Symbol]	PROPOSED FPL ELEC. LINE
		[Symbol]	PROPOSED ELEC. LINE
		[Symbol]	PROPOSED GATE VALVE AND BOX
		[Symbol]	PROPOSED REDUCER
		[Symbol]	FIRE HYDRANT
		[Symbol]	SAMPLE POINT
		[Symbol]	EXISTING WATER LINE
		[Symbol]	EXISTING GATE VALVE
		[Symbol]	EXISTING PIPE AND INLET
		[Symbol]	EXISTING SANITARY SEWER LINE
		[Symbol]	TO BE REMOVED
		[Symbol]	TO REMAIN

- GENERAL NOTES:
- 1.) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2.) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3.) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4.) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5.) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6.) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PAVED PAVEMENT OR FOUNDATION AREAS.
 - 7.) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8.) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 992-1991 / FAX (561) 750-0452

2419 N FEDERAL HWY
PAVEMENT MARKING & SIGNAGE PLAN(NORTH)
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

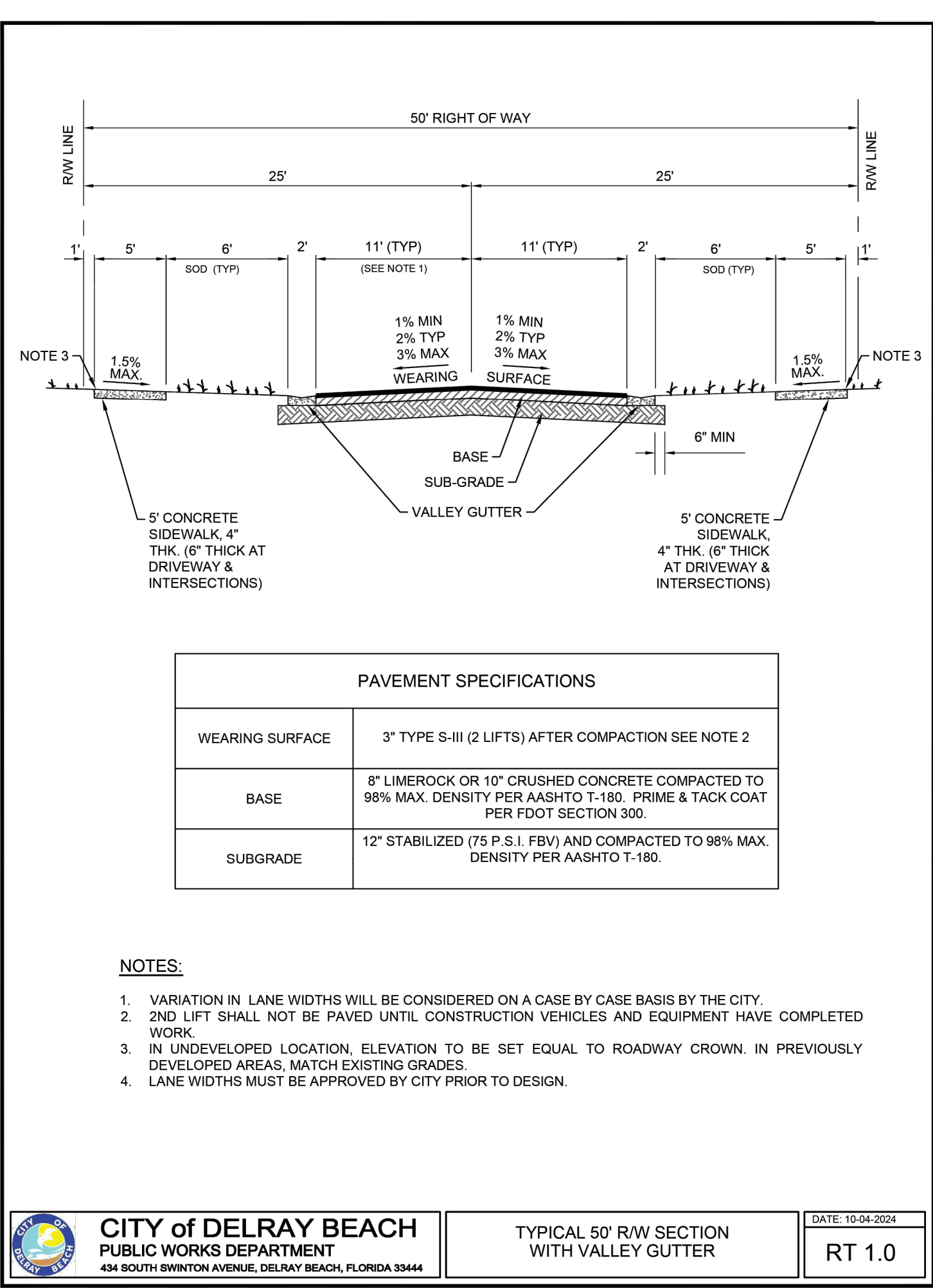
DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. N/A
SCALE 1"=20'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-08
OF 27 SHEETS

Call 48 hours before you dig

It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

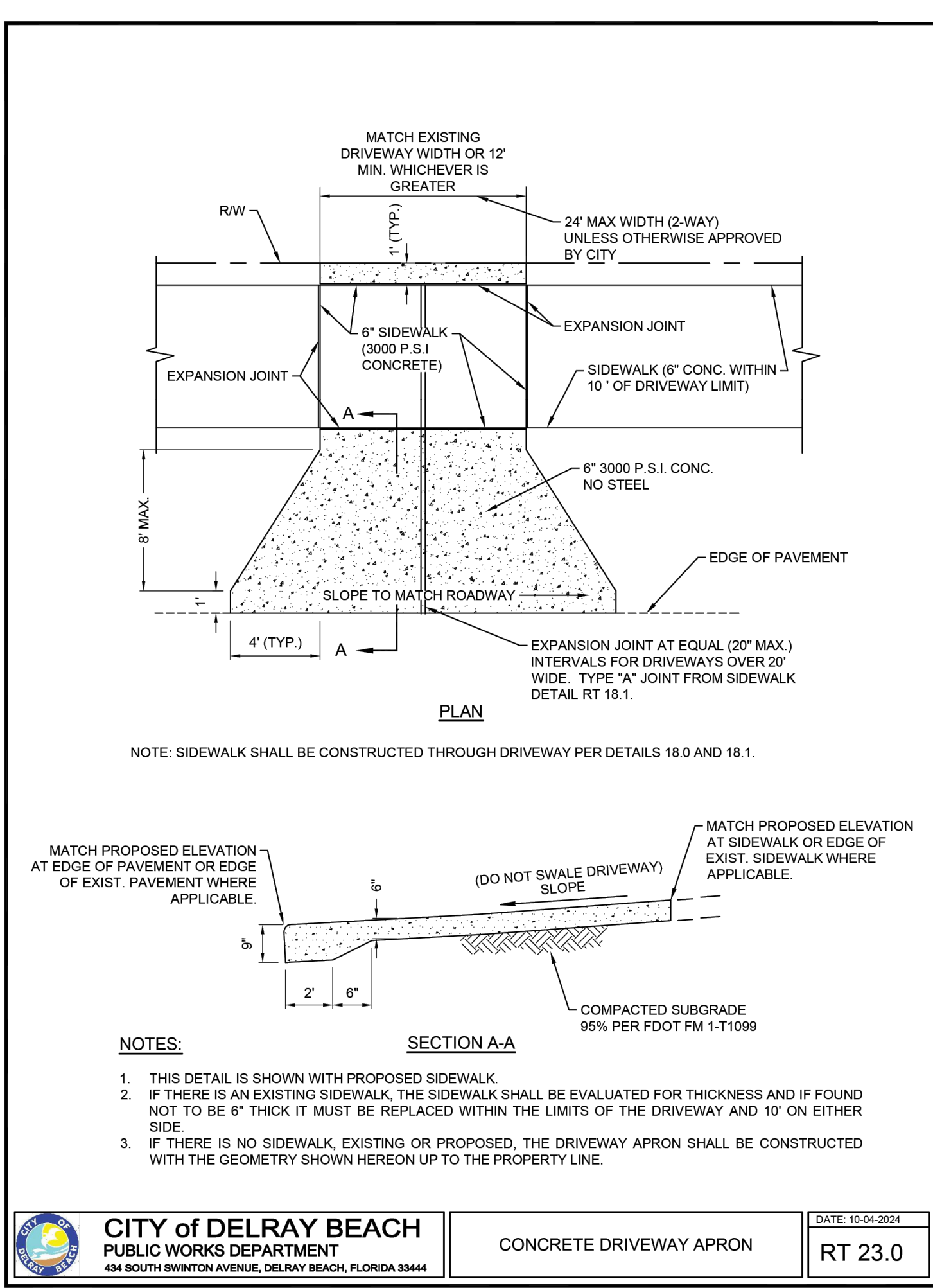


CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL 50' R/W SECTION WITH VALLEY GUTTER

DATE: 10-04-2024

RT 1.0

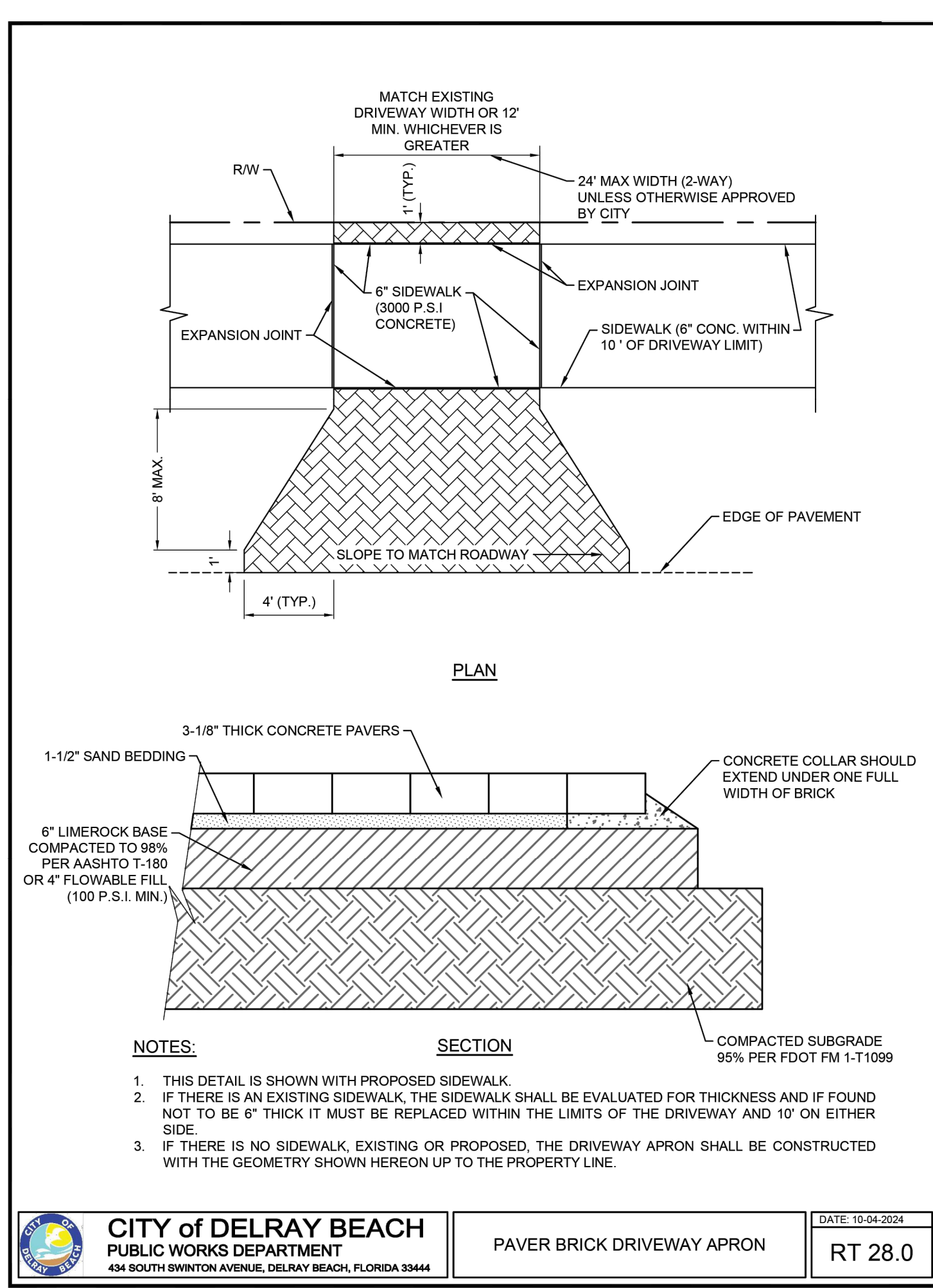


CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

CONCRETE DRIVEWAY APRON

DATE: 10-04-2024

RT 23.0

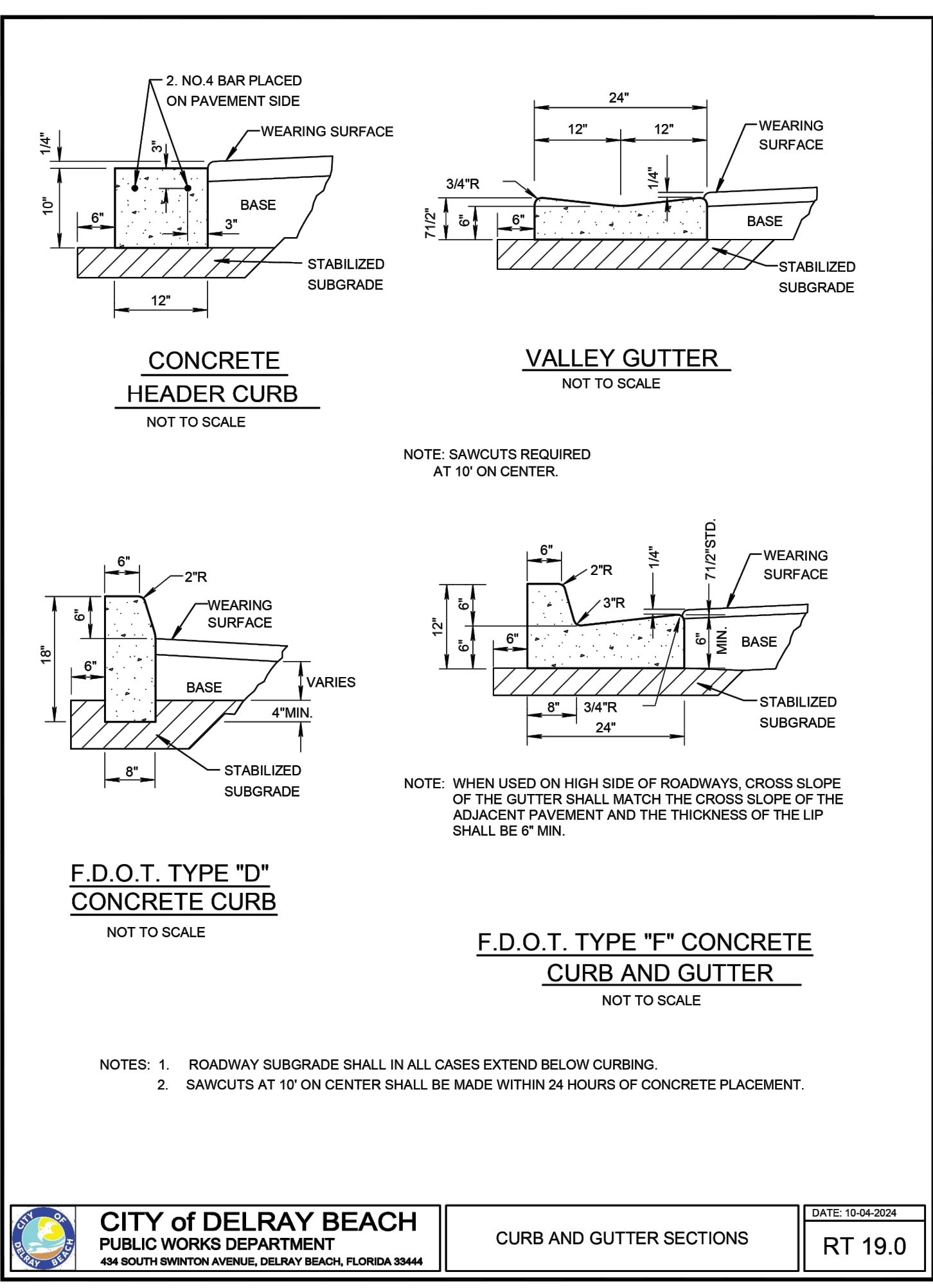


CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PAVER BRICK DRIVEWAY APRON

DATE: 10-04-2024

RT 28.0

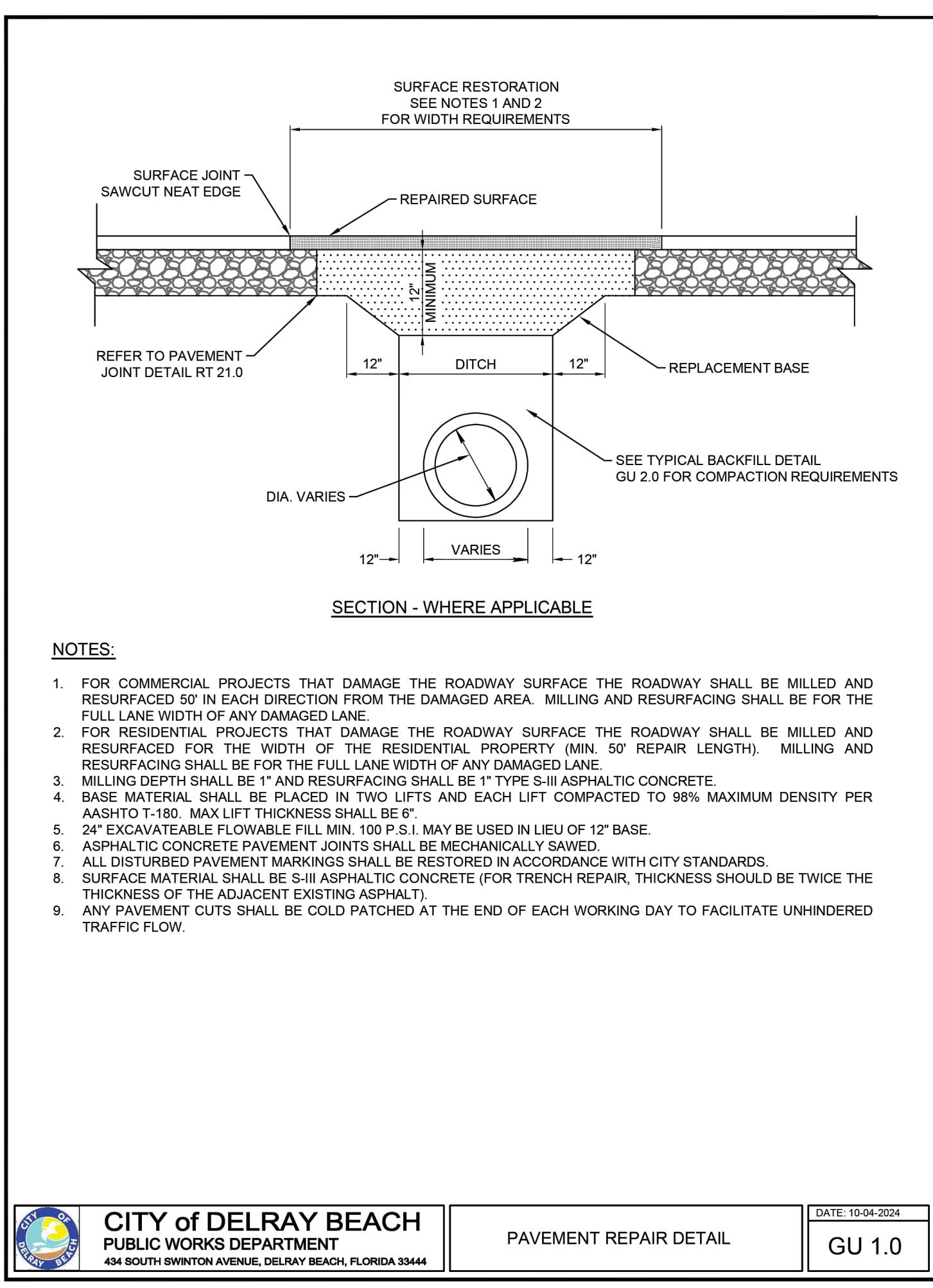


CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

CURB AND GUTTER SECTIONS

DATE: 10-04-2024

RT 19.0

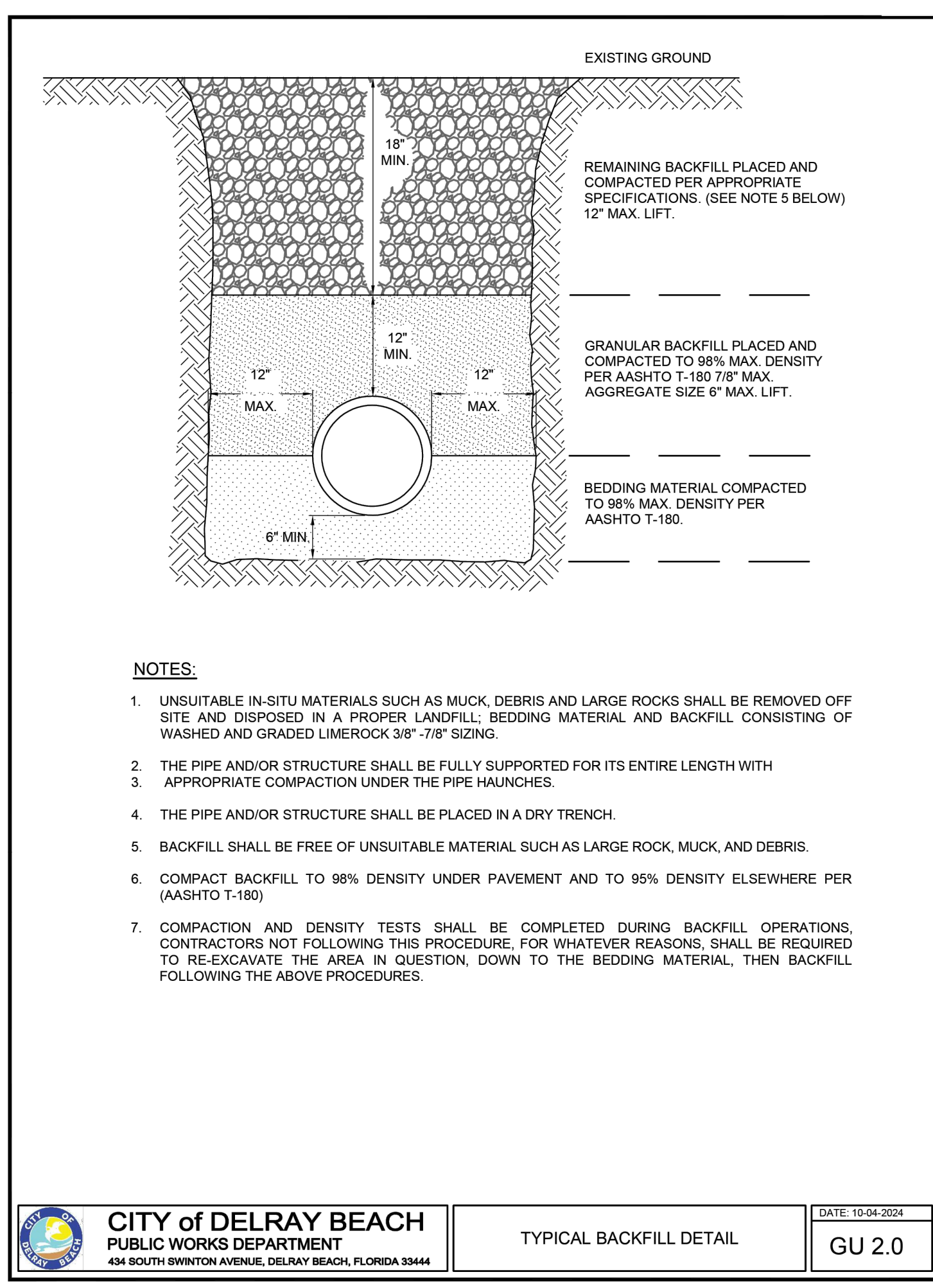


CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PAVEMENT REPAIR DETAIL

DATE: 10-04-2024

GU 1.0



CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL BACKFILL DETAIL

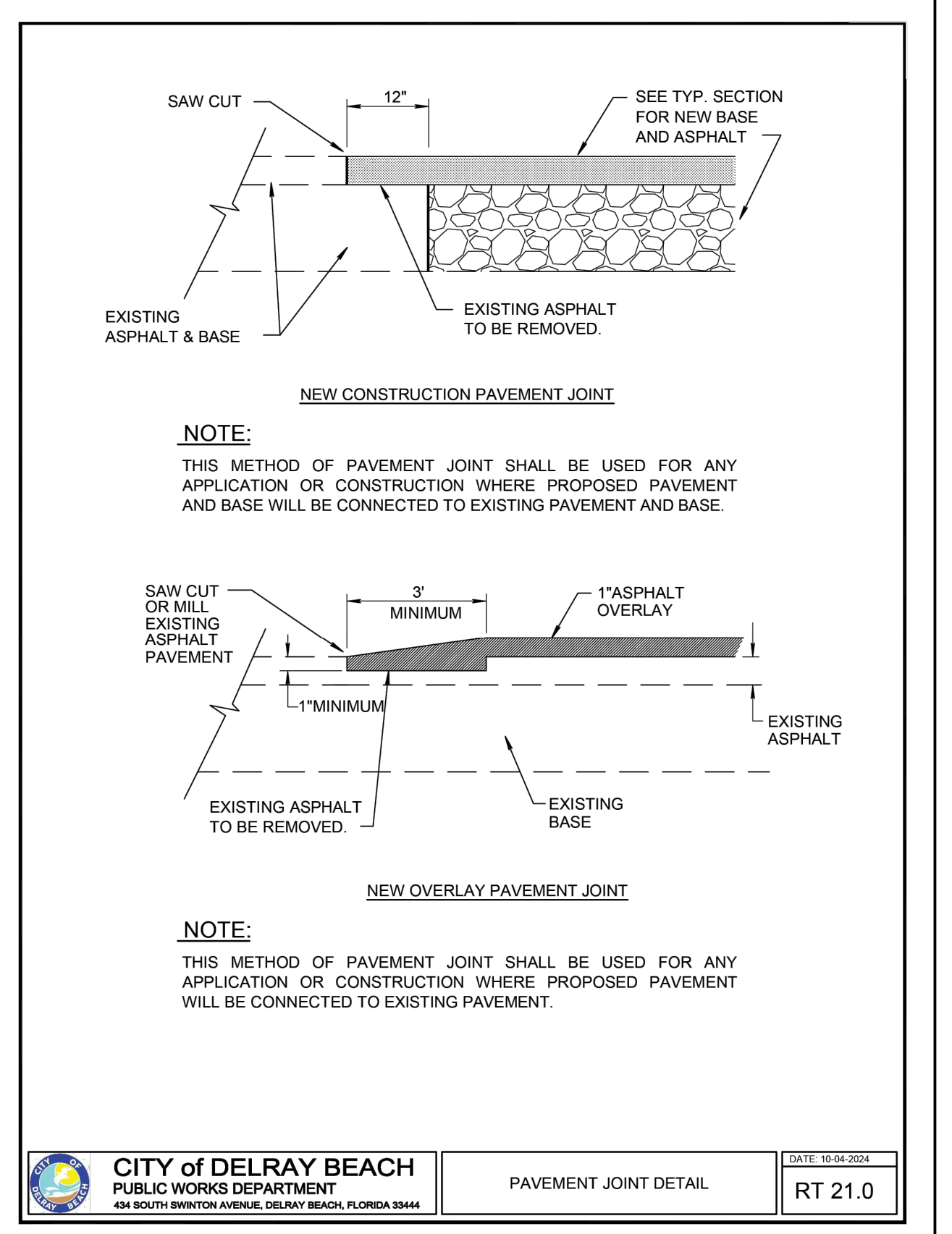
DATE: 10-04-2024

GU 2.0

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

REV PER	UPDATED SITE PLAN	DATE	BY
REV PER	CITY COMMENTS	04/17/26	JRH
REV PER	CITY COMMENTS	03/11/26	JRH
REV PER	CITY COMMENTS	12/16/25	JRH
REV PER	CITY COMMENTS	09/18/25	RCW
REVISIONS		DATE	BY
FILE NAME 10908ENG.dwg			

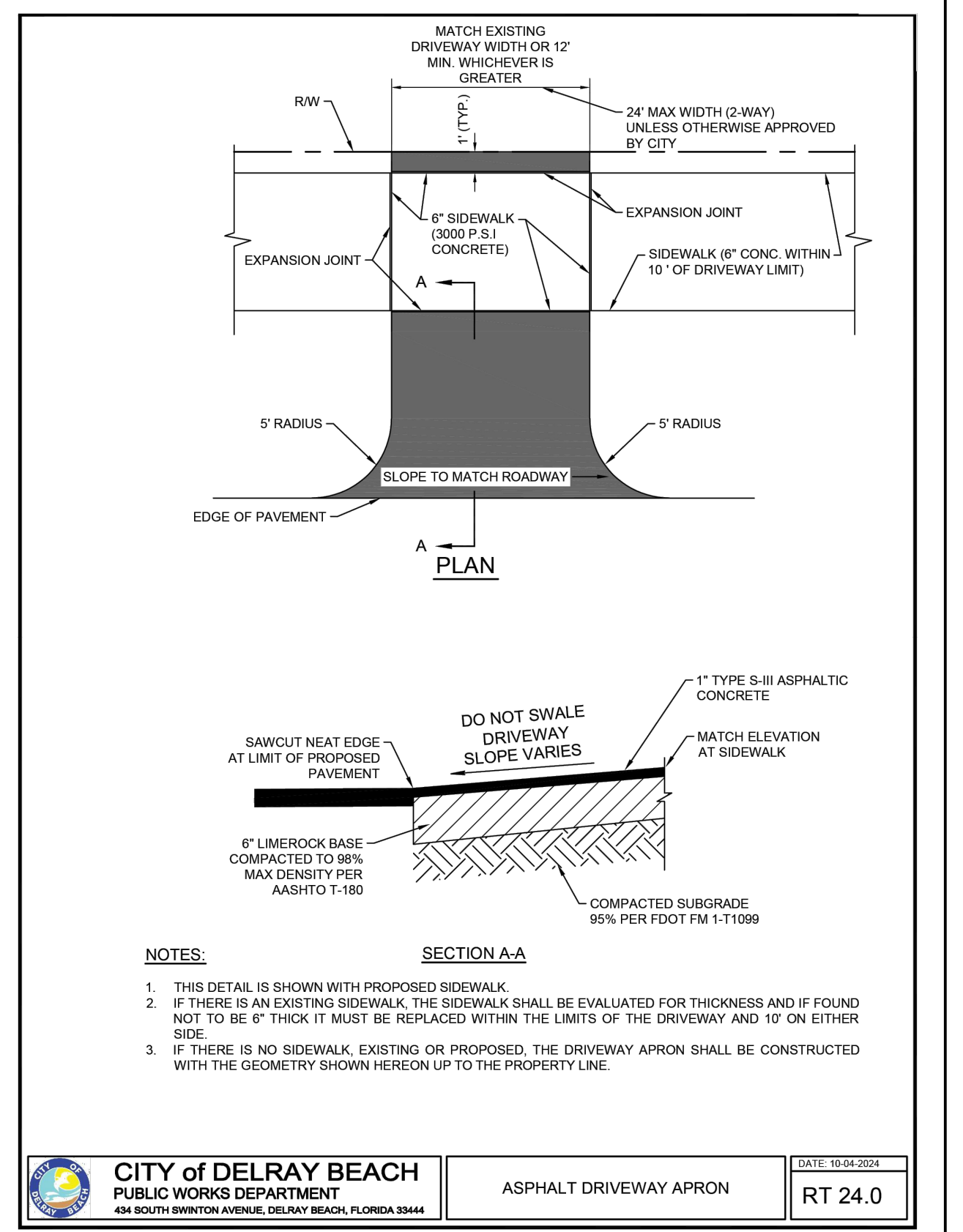


CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PAVEMENT JOINT DETAIL

DATE: 10-04-2024

RT 21.0



CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

ASPHALT DRIVEWAY APRON

DATE: 10-04-2024

RT 24.0

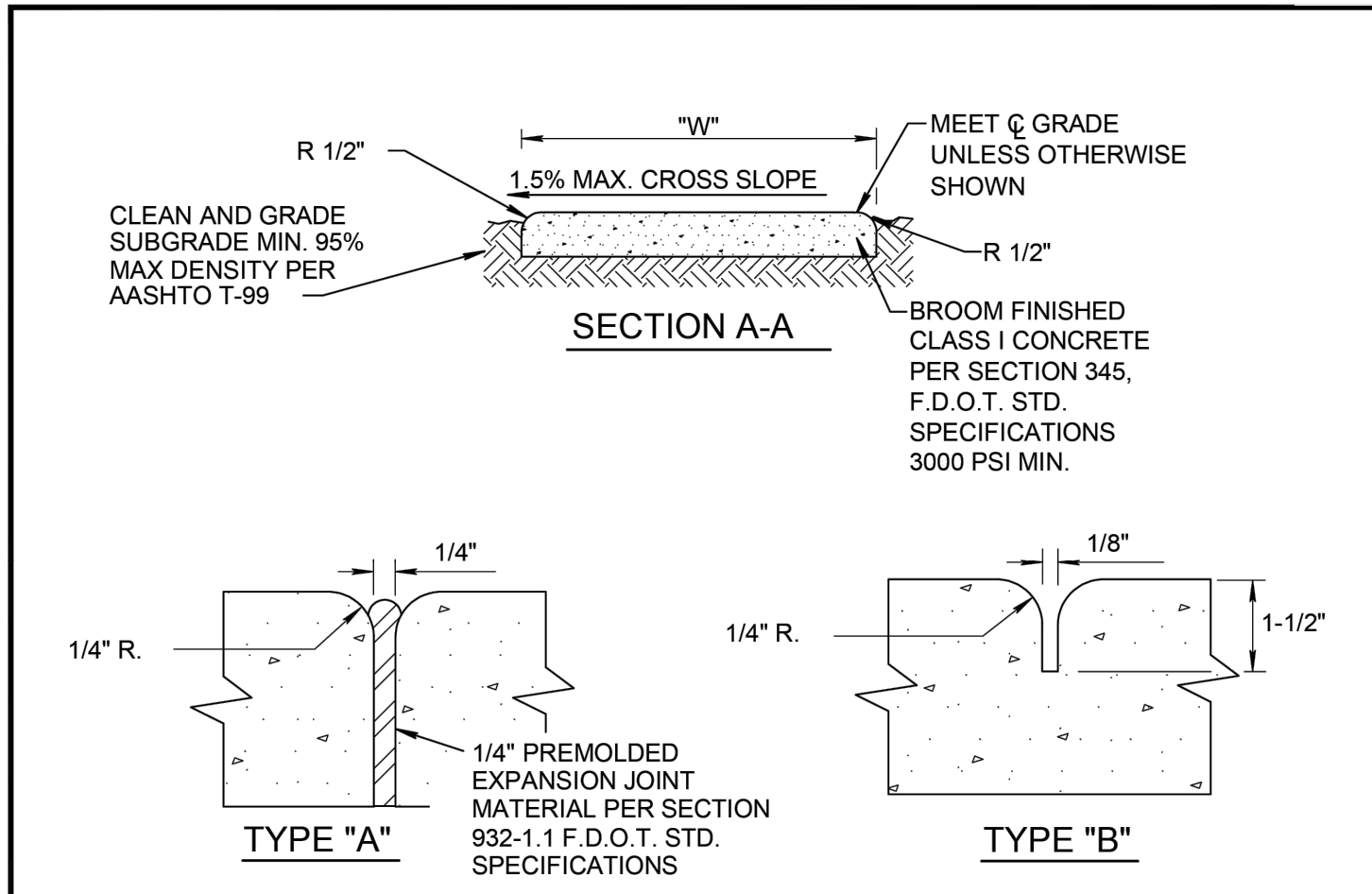
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - SURVEYING
LANDSCAPE ARCHITECTURE - SUITE 100
7900 GLADES ROAD - SUITE 334-34
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
PAVING, GRADING & DRAINAGE DETAILS
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./PG. ---
SCALE N/A

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-09
OF 27 SHEETS



SIDEWALK JOINTS

NOTE:

1. ALL SIDEWALKS SHALL BE CONSTRUCTED THRU DRIVEWAYS.
2. ALL SIDEWALKS SHALL INCLUDE ADA COMPLIANT RAMP @ INTERSECTIONS.
3. ALL SIDEWALKS SHALL INCLUDE CROSS SLOPE AND RUNNING SLOPE IN ACCORDANCE WITH ADA REQUIREMENTS.
4. CURB RAMP DETECTABLE WARNING SURFACE SHALL EXTEND THE FULL WIDTH OF THE RAMP AND 24" DEEP.
5. SIDEWALK SHALL BE 6" THICK FOR 2' AT THE CONNECTION TO ROADWAYS WITH A 6" TRANSITION TO 6" FOR THE REMAINDER OF THE REQUIRED 10'.

TABLE OF SIDEWALK THICKNESS - "T"	
GENERAL AREAS	4"
WITHIN 10' OF CROSS-STREETS, AT DRIVEWAYS & OTHER AREAS	6"

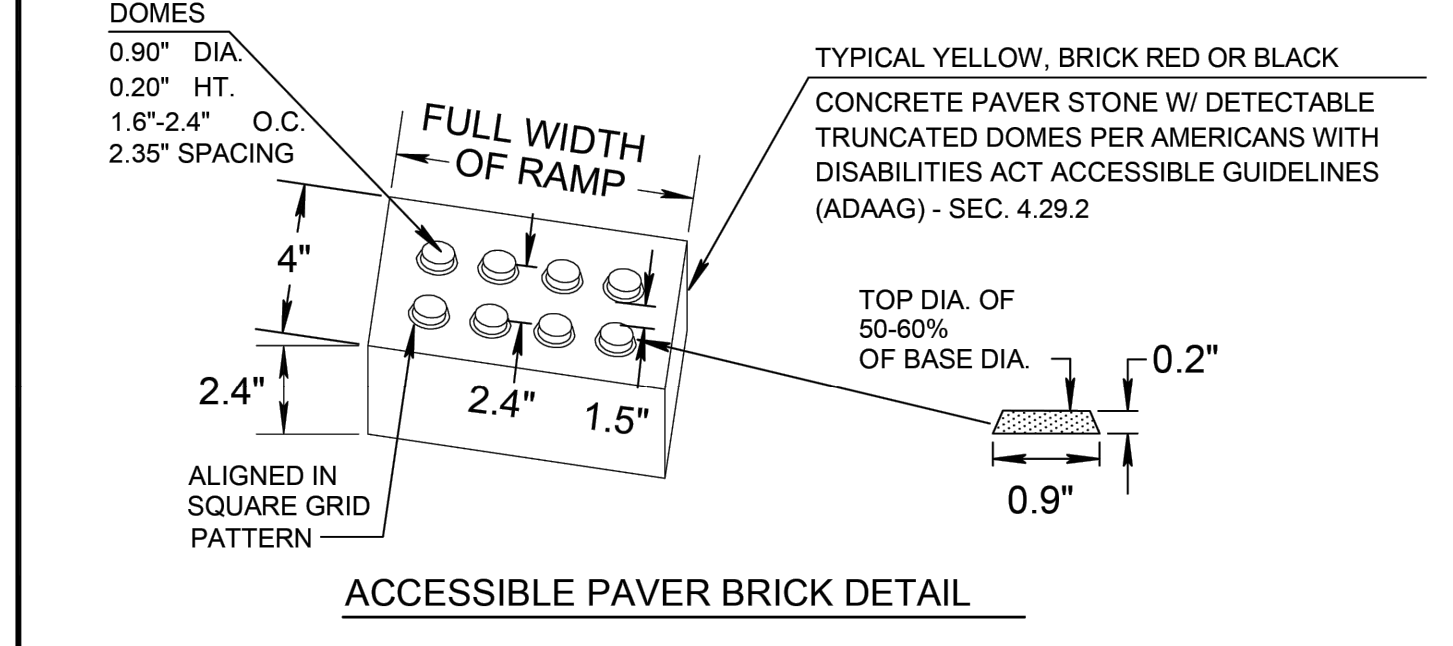
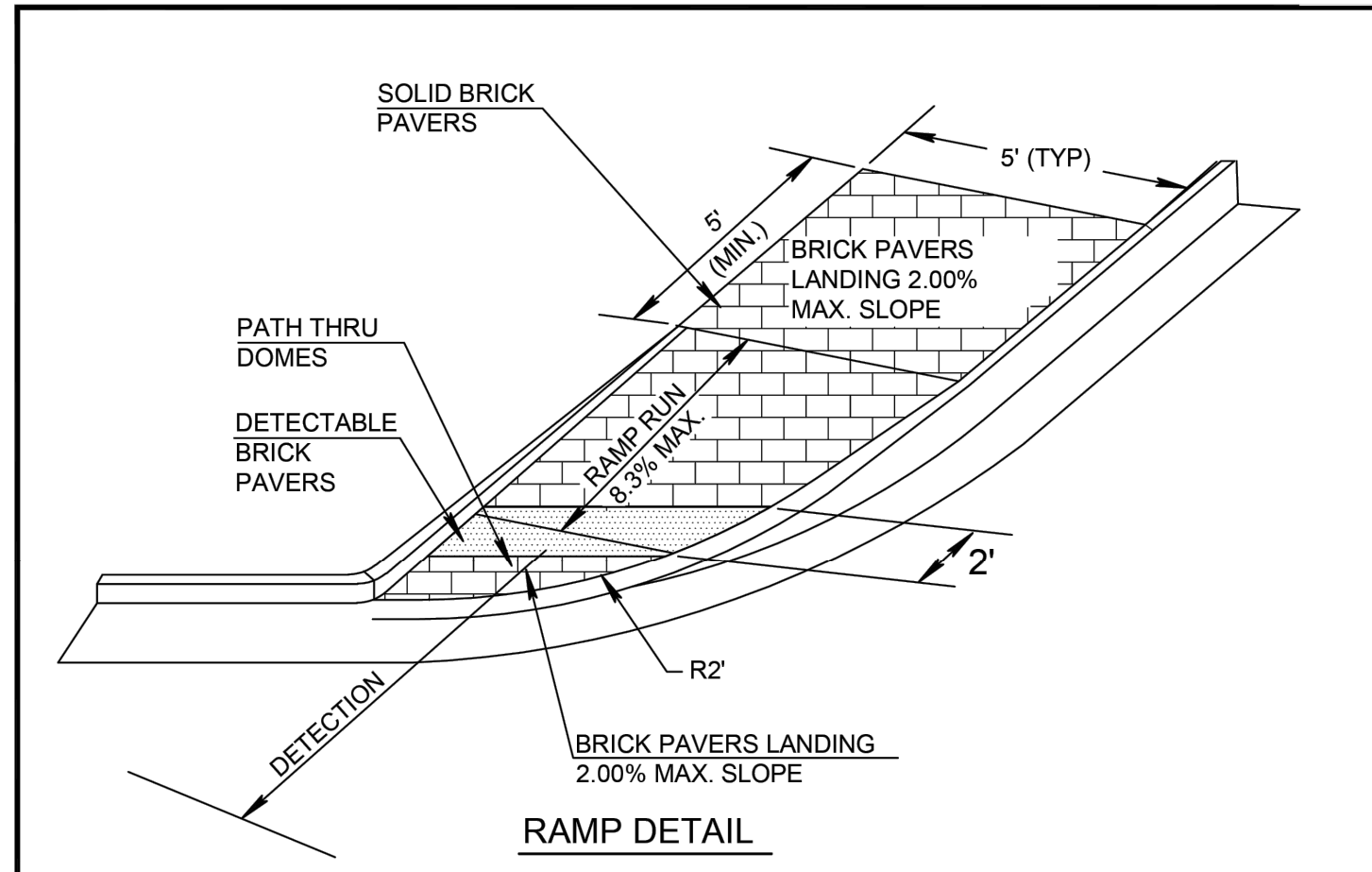
TABLE OF SIDEWALK WIDTHS - "W"	
SINGLE-FAMILY AREAS	5'
MULTI-FAMILY AREAS	5'
OTHER AREAS AS SPECIFIED BY THE CITY.	

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES JUNCTION OF EXISTING & NEW SIDEWALKS & EVERY 30'
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS SCORED DURING PLACEMENT OR SAWCUT WITHIN 24 HOURS OF PLACEMENT.
"A"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SIDEWALK CONSTRUCTION

DATE: 10-04-2024
RT 18.1

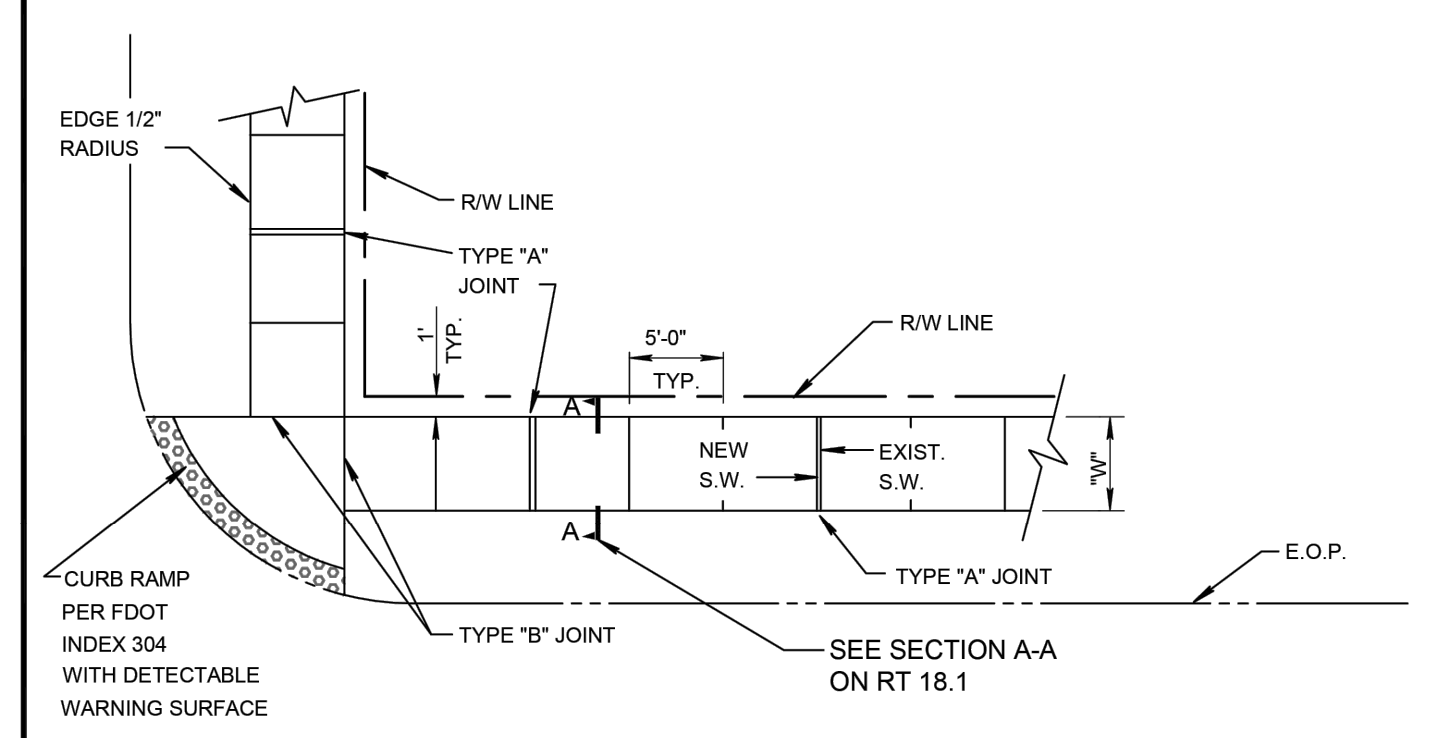
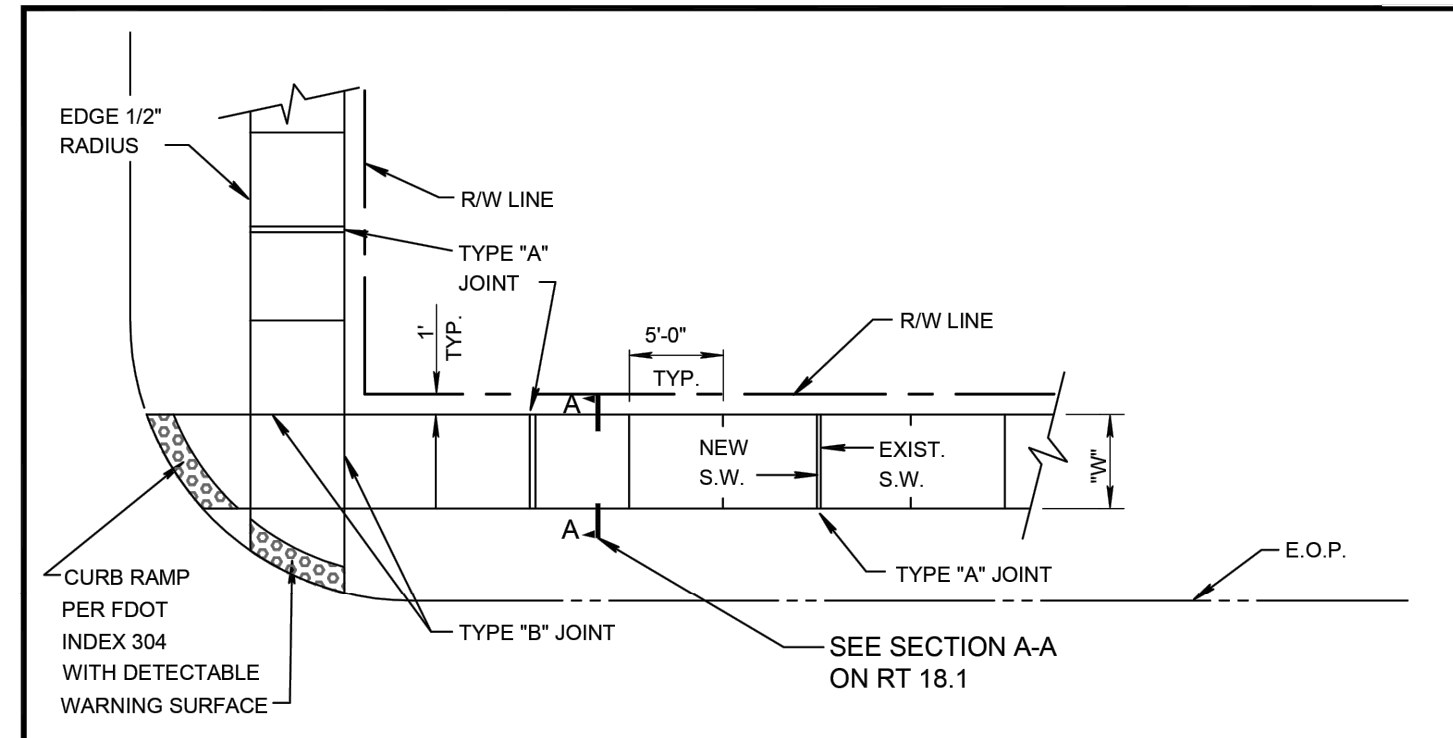


1. IN ADDITION TO CURB RAMP TRUNCATED DOMES ARE REQUIRED AT ALL AREAS OF PERIL. NOT REQUIRED AT RESIDENTIAL DRIVEWAYS CROSSINGS OR CUT-THROUGH REFUGE ISLANDS LESS THAN 6' IN LENGTH.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

DETECTABLE WARNING RAMP IN PAVER SIDEWALK TYPICAL DETAIL

DATE: 10-04-2024
RT 29.0



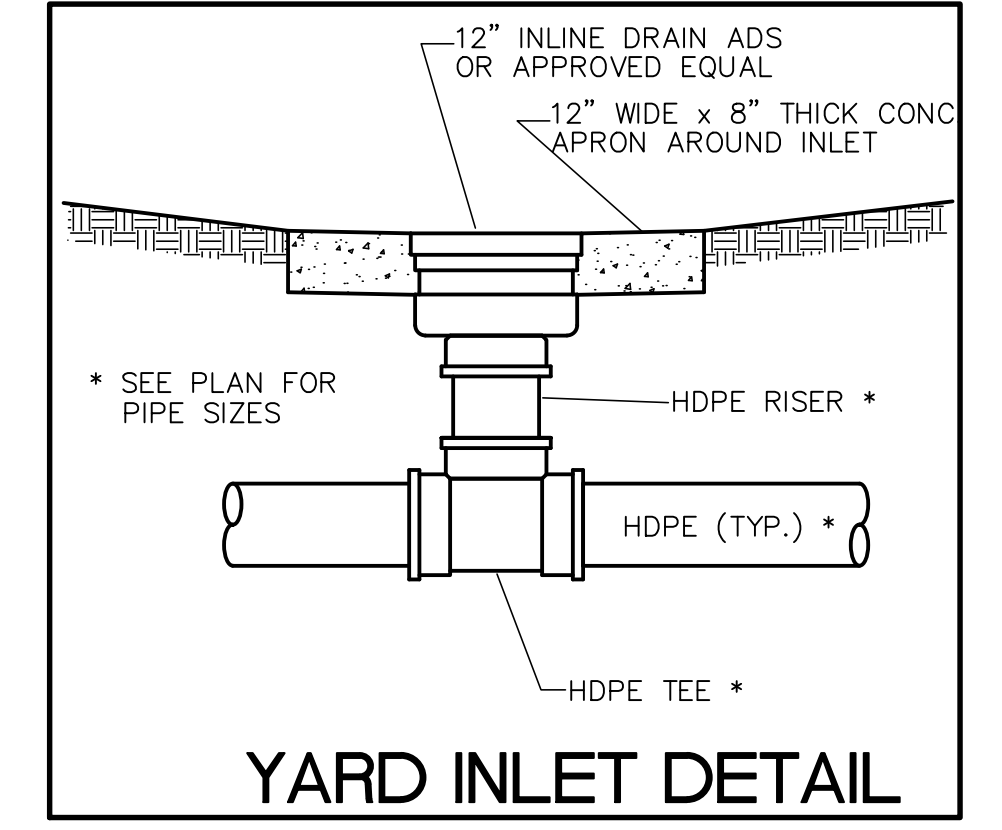
CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SIDEWALK CONSTRUCTION DETAIL

DATE: 10-04-2024
RT 18.0

REV	PER	DATE	BY
04/17/26	JRH	REV PER UPDATED SITE PLAN	
03/11/26	JRH	REV PER CITY COMMENTS	
12/16/25	JRH	REV PER CITY COMMENTS	
09/18/25	RCW	REV PER CITY COMMENTS	
		DATE	BY

FILE NAME 10908ENG.dwg



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - SURVEYING
LANDSCAPE ARCHITECTURE - SUITE 100
7900 GLADES ROAD - BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

PAVEMENT MARKING SPECIFICATIONS

All Pavement markings to be installed per these typicals, plans and specifications, and as directed by the City and shall conform to the requirements of F.D.O.T. and the manual on uniform traffic control devices, (MUTCD).

PERMANENT MARKINGS

Installation:

- All markings shall be installed by the extruded method.
- Markings shall be free of weaves, bows, drips, drags, and other degrading items.
- Chalk shall be used for all layout markings.

Materials:

- All materials shall be alkyl or hydrocarbon thermoplastic meeting all FDOT specifications.

Thickness:

- All markings shall be installed to yield 90 mils of material measured above the pavement surface.

Spheres:

- Reflective glass spheres are to be applied to all stripes and markings per FDOT specifications.

Alternate Material:

- STAYMARK marking tape, or equivalent may be used, as approved or directed by the City.

Layout:

- Layout shall be made using marking chalk.
- It is recommended that marking layout be inspected by the City prior to the placement of final markings.

TEMPORARY MARKINGS

Temporary markings may be used only as specified in this section, or as approved or directed by the City.

Final Pavement Surface:

- Only foil backed marking tape is allowed.
- All tape shall be totally removed concurrent with permanent marking placement.

Other Pavement Surfaces:

- Intermediate pavement surfaces may be marked with FDOT approved materials, designs, and specifications.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PAVEMENT MARKING SPECIFICATIONS (SHEET 1 OF 2)

DATE: 10-04-2024
RT 22.0

ALL PAVEMENT MARKINGS

All paved surfaces shall be properly marked prior to the hours of darkness.

RAISED PAVEMENT MARKERS

- R.P.M.s shall be installed on all lane lines and centerlines, spaced at 20' or 40'.
- R.P.M.s shall be a 4 x 4 type class "B" marker meeting F.D.O.T. specifications and shall be approved by the City prior to use.
- R.P.M.s shall be installed using alkyl thermoplastic on asphalt and epoxy on concrete.

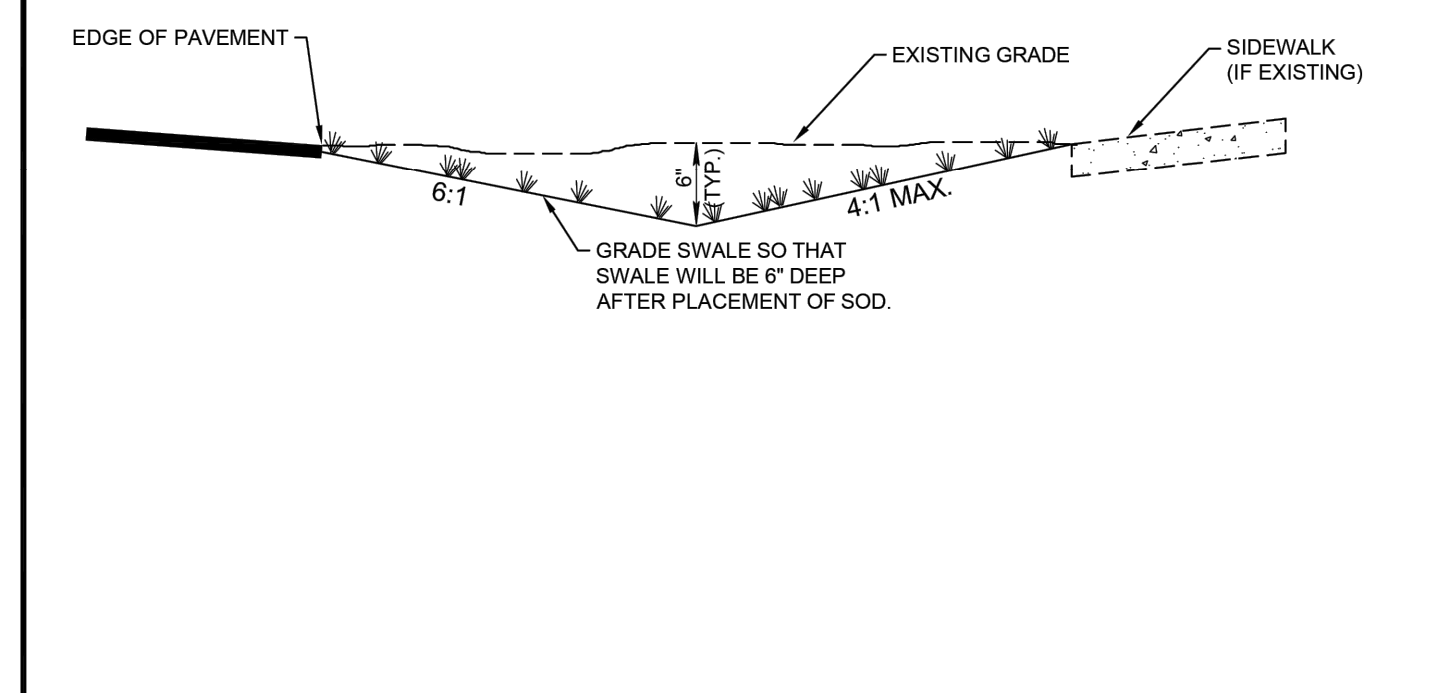
OTHER NOTES

- All Materials within right-of-way shall be thermoplastic and per F.D.O.T. specifications.
- Pavement marking within private parking lots may be painted according to F.D.O.T. specifications, except for all stop bars adjacent to public right-of-way.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PAVEMENT MARKING SPECIFICATIONS (SHEET 2 OF 2)

DATE: 10-04-2024
RT 22.1



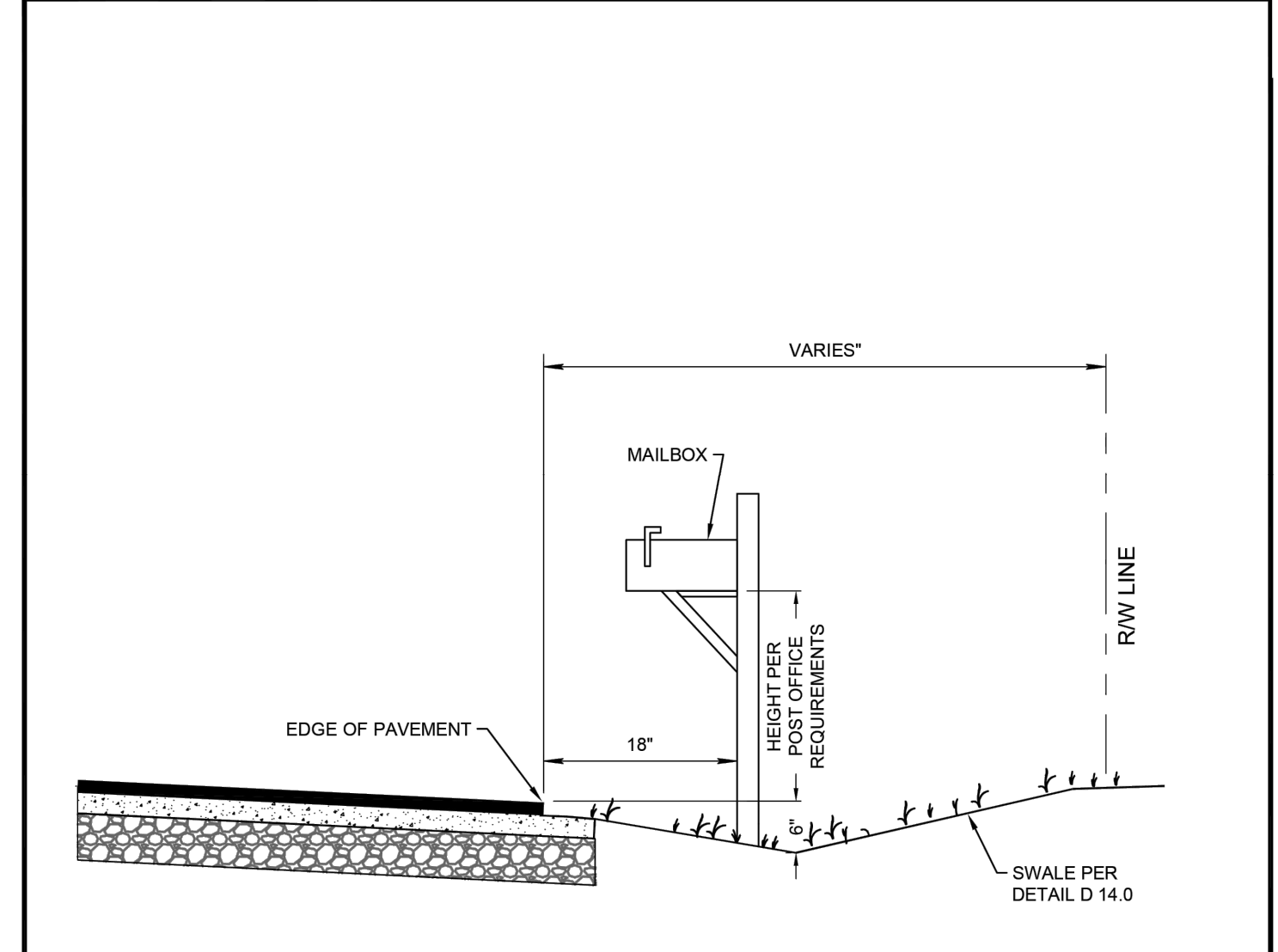
NOTE:

1. CONTRACTOR TO REPLACE ALL IRRIGATION, TREES & SHRUBBERY IN SWALES DAMAGED DURING CONSTRUCTION.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SWALE REPLACEMENT DETAIL

DATE: 10-04-2024
D 14.0



NOTE:

MAILBOX SHALL BE LOCATED NEAR THE DRIVEWAY ON THE WIDEST SIDE OF THE FRONTAGE

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

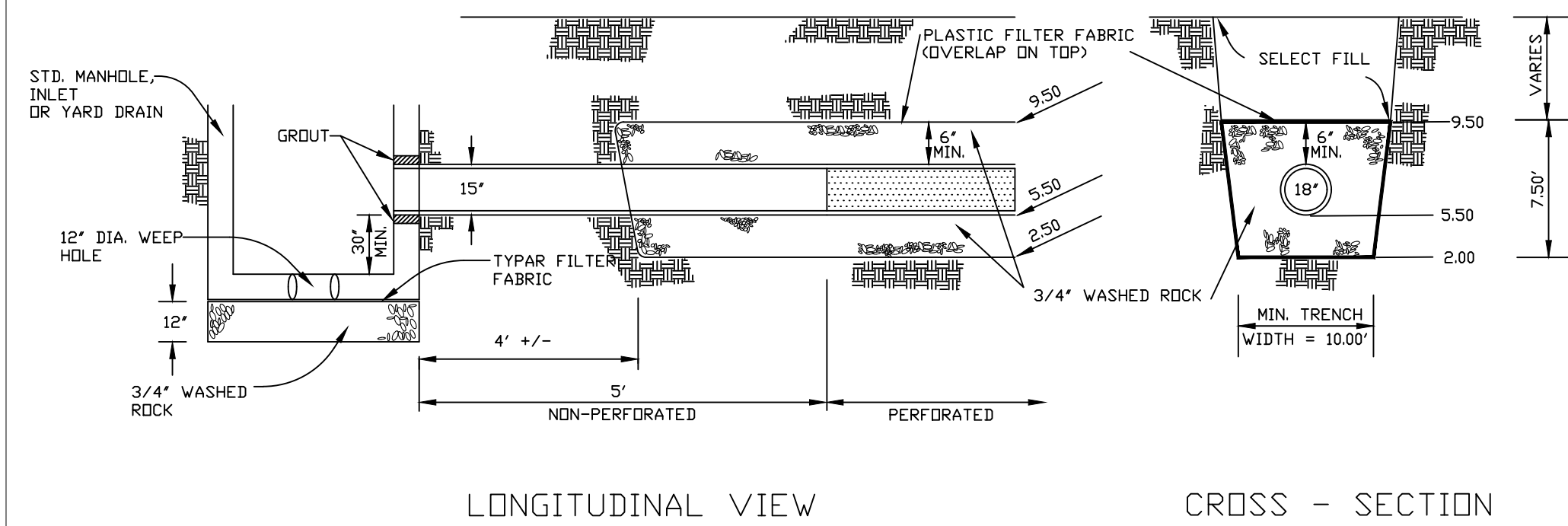
MAILBOX REPLACEMENT AND 6\"/>

2419 N FEDERAL HWY
PAVING, GRADING & DRAINAGE DETAILS
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE	03/21/2025
DRAWN BY	RCW
F.B. / PG.	---
SCALE	N/A

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-10
OF 27 SHEETS



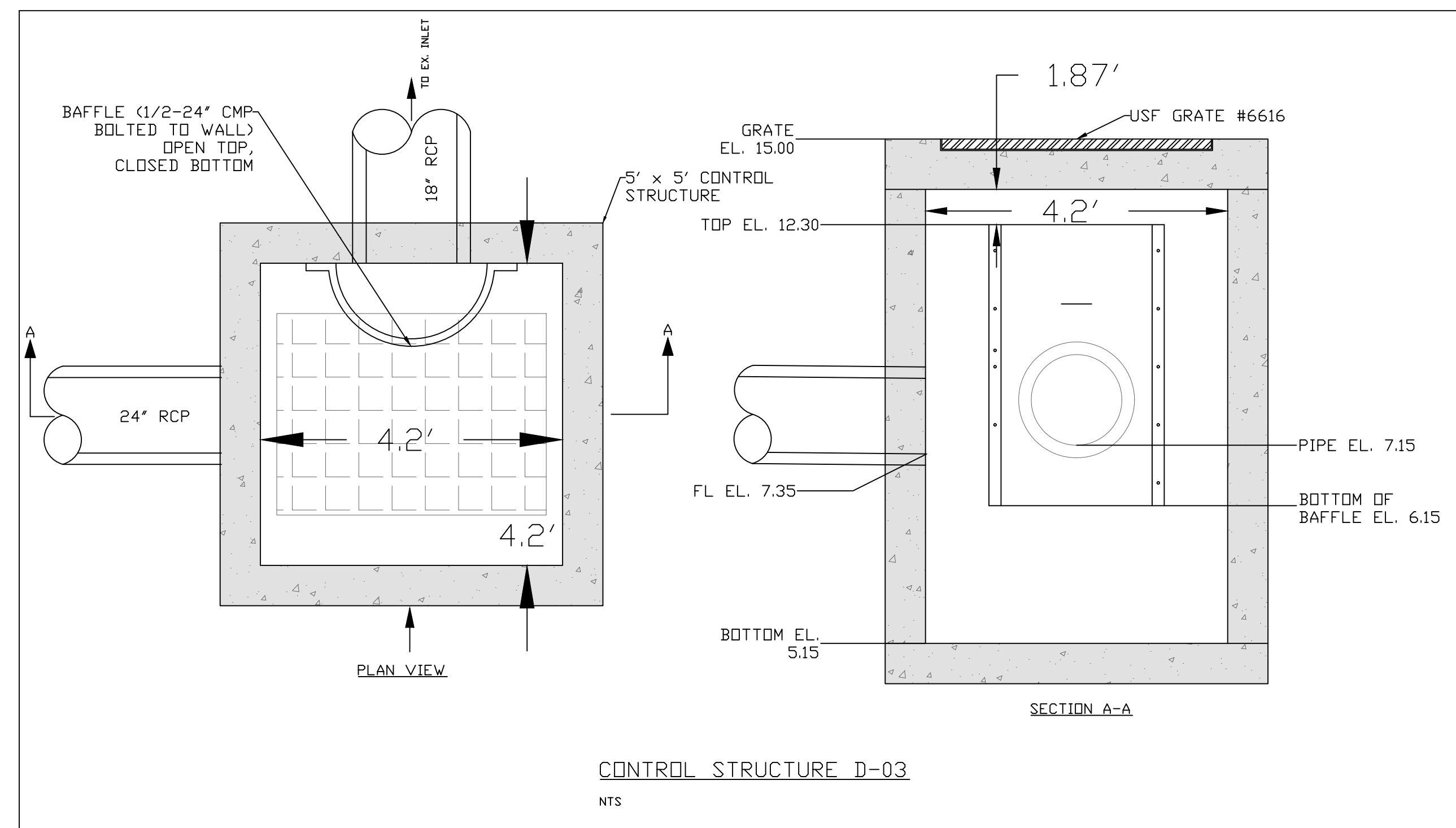
NOTES:

1. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT CONTAMINATION OF THE TRENCH BY SAND, SILT, OR OTHER MATERIAL.
2. THE CONTRACTOR SHALL INSTALL:
 - A. PERFORATED RCP IN ACCORDANCE WITH F.D.O.T. REQUIREMENTS.
 - B. 'HP STORM' IN ACCORDANCE WITH F.D.O.T. REQUIREMENTS.
3. NO PIPE PERFORATIONS FOR THE FIRST 5 FEET FROM THE INLET OR MANHOLE.
4. PIPE PERFORATIONS SHALL BE PER FDOT REQUIREMENTS
5. SEE DETAILS OF MANHOLE AND/OR INLET FOR CONSTRUCTION DETAILS OF SAME.
6. PLASTIC FILTER FABRIC SHALL CONFORM TO D.O.T. SECTION 985 OR APPROVED EQUAL.
7. PRIOR TO BACKFILLING ANY DRAINAGE STRUCTURES, THE CITY ENGINEERING DEPARTMENT SHALL BE GIVEN 24 HOURS NOTICE IN ORDER TO SCHEDULE AN INSPECTION OF THE FACILITY.

FRENCH DRAIN DETAIL

N.T.S.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



CONTROL STRUCTURE D-03

N.T.S.

REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY
FILE NAME 10908ENG.dwg		

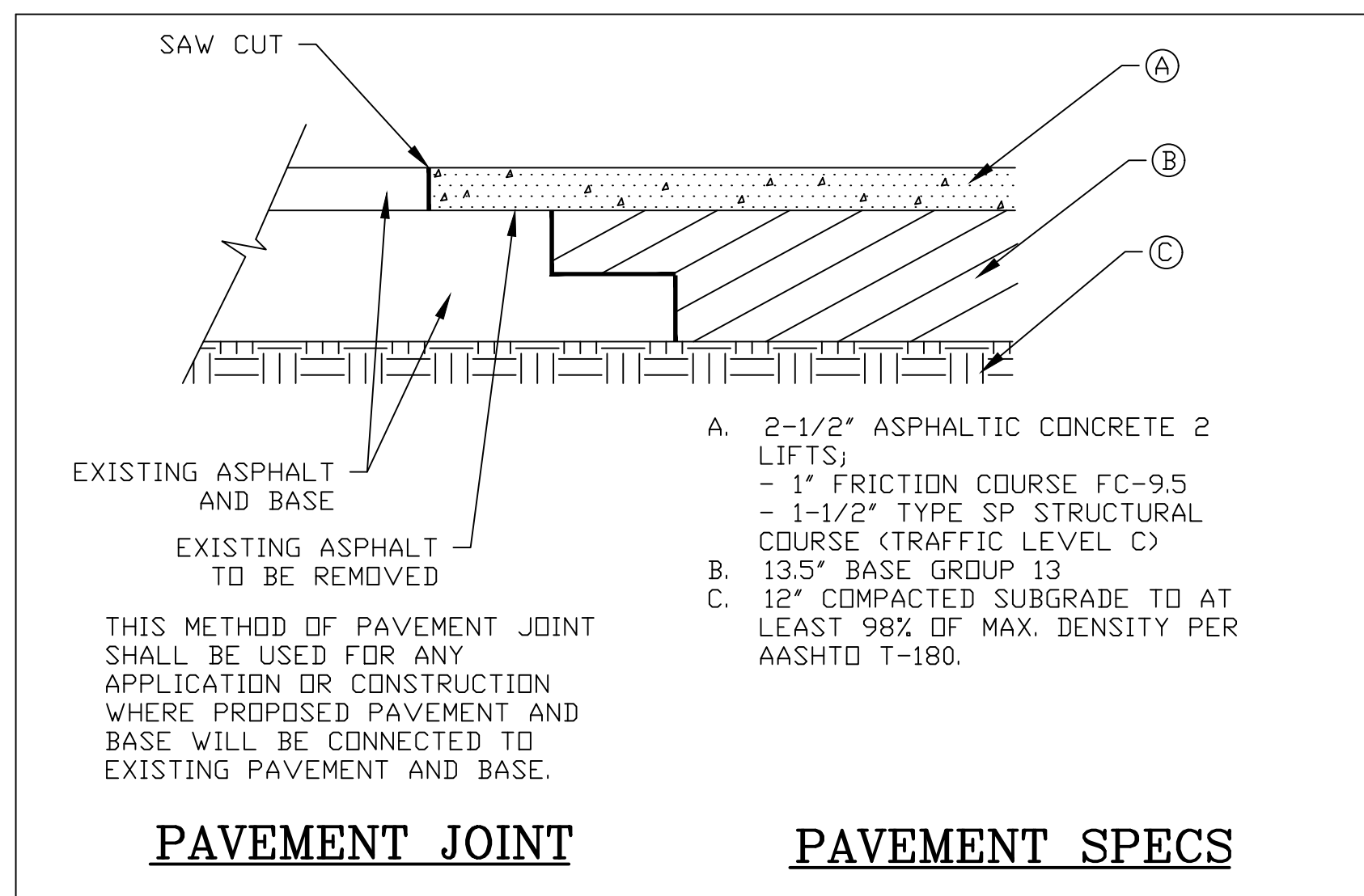
CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - SURVEYING
 LANDSCAPE ARCHITECTURE - SUITE 100
 7900 GLADES ROAD - BOCA RATON, FLORIDA 33434
 PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
 PAVING, GRADING & DRAINAGE DETAILS
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE	03/21/2025
DRAWN BY	RCW
F.B./ PG.	---
SCALE	N/A

MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 - FOR THE FIRM -
 DATE

JOB # 10908
 SHI.NO.
C-11
 OF 27 SHEETS

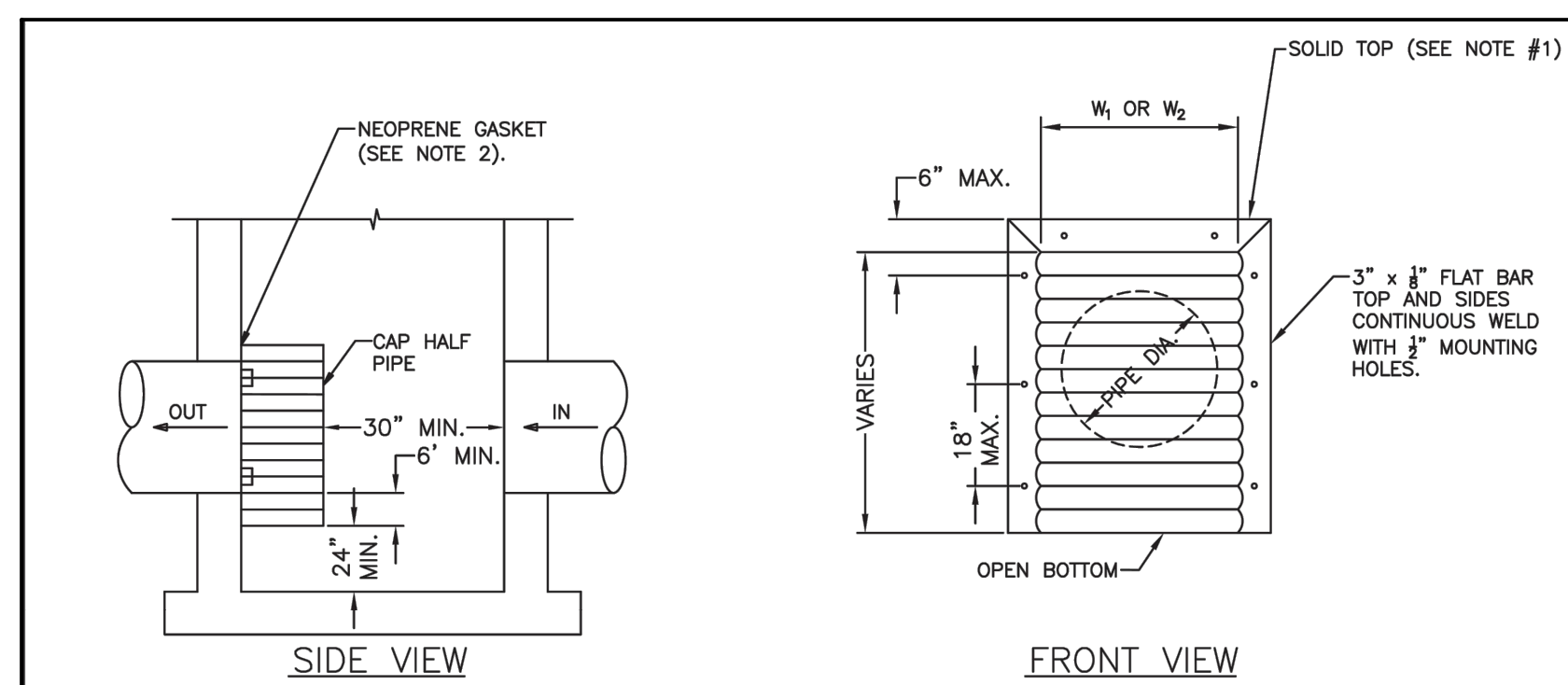


PAVEMENT JOINT

PAVEMENT SPECS

ASPHALT ROAD PAVEMENT SPECIFICATIONS (FOR DRIVEWAYS IN FDOT ROW)

N.T.S.

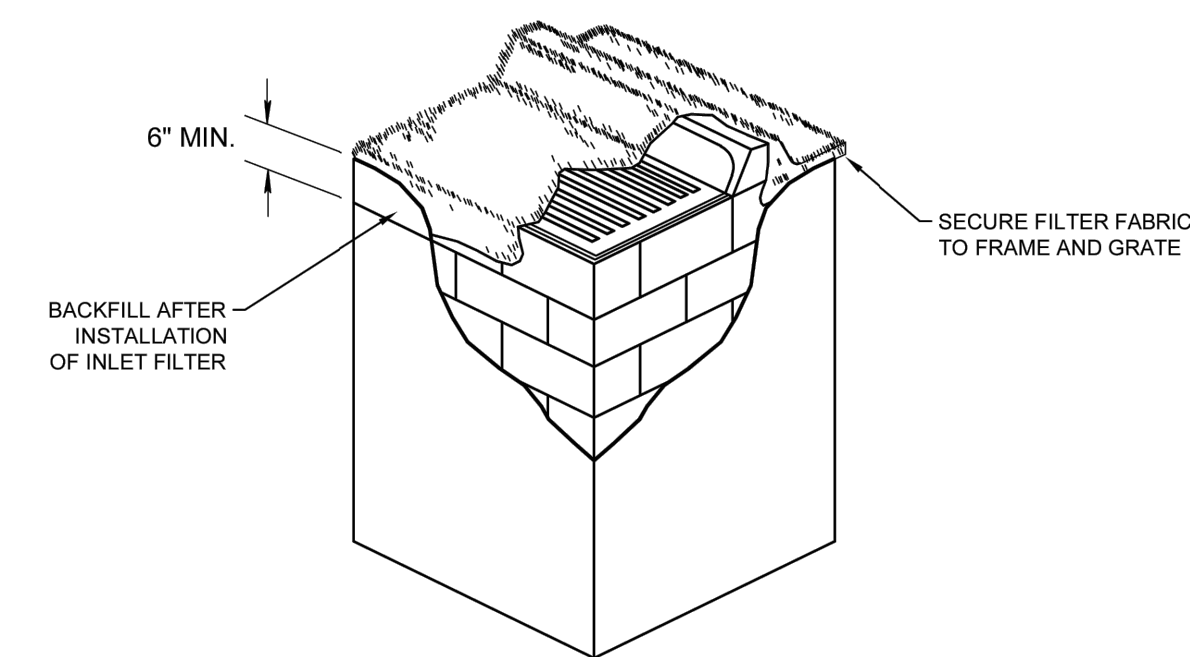
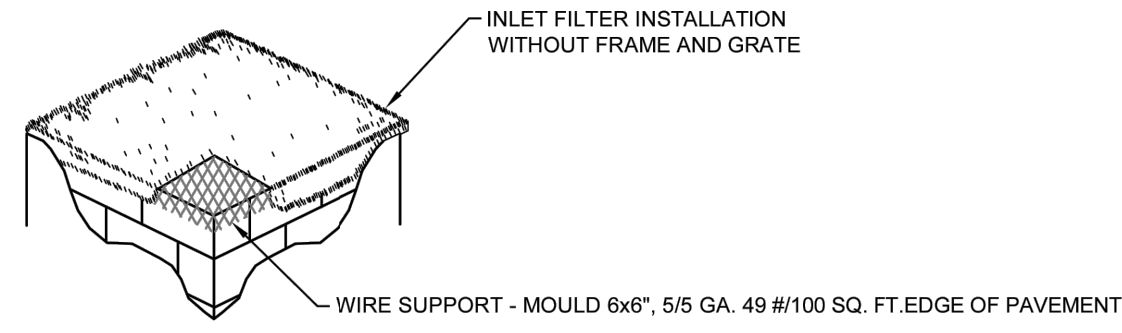


DISCHARGE PIPE DIAMETER	WEIR DIAMETER (W ₁)	WEIR DIAMETER (W ₂)	GAUGE (G)
15"	21"	21"	18
18"	24"	24"	18
24"	30"	36"	16
30"	36"	42"	14
36"	42"	48"	14
42"	48"	54"	14
48"	54"	60"	14
54"	60"	66"	14

- NOTES:
1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE THE OPENING AT THE TOP.
 2. NEOPRENE ADHESIVE BACKED GASKET, OR APPROVED EQUAL (1"x3") SHALL BE INSTALLED ON THE SIDES AND TOP OF ALL BAFFLES.
 3. POLLUTION RETARDANT BAFFLE TO BE FASTENED IN PLACE WITH 3/8"x4" STAINLESS STEEL "RED HEADS," OR APPROVED EQUAL.
 4. MOUNTING BRACKETS MAY BE ADDED TO FLAT BARS TO EASE INSTALLATION IN ROUND STRUCTURES. SPACING TO MATCH HOLES IN FLAT BARS.

POLLUTANT RETARDANT BAFFLE DETAIL

N.T.S.



NOTES:

1. CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM.
2. CONTRACTOR TO REMOVE FABRIC JUST PRIOR TO PAVING.

A SEDIMENT TRAP WILL BE EXCAVATED BEHIND THE CURB AT THE INLET. THE BASIN SHALL BE AT LEAST 12 TO 14 INCHES IN DEPTH, APPROXIMATELY 36 INCHES IN WIDTH, AND APPROXIMATELY 7 TO 10 FEET IN LENGTH PARALLEL TO THE CURB.

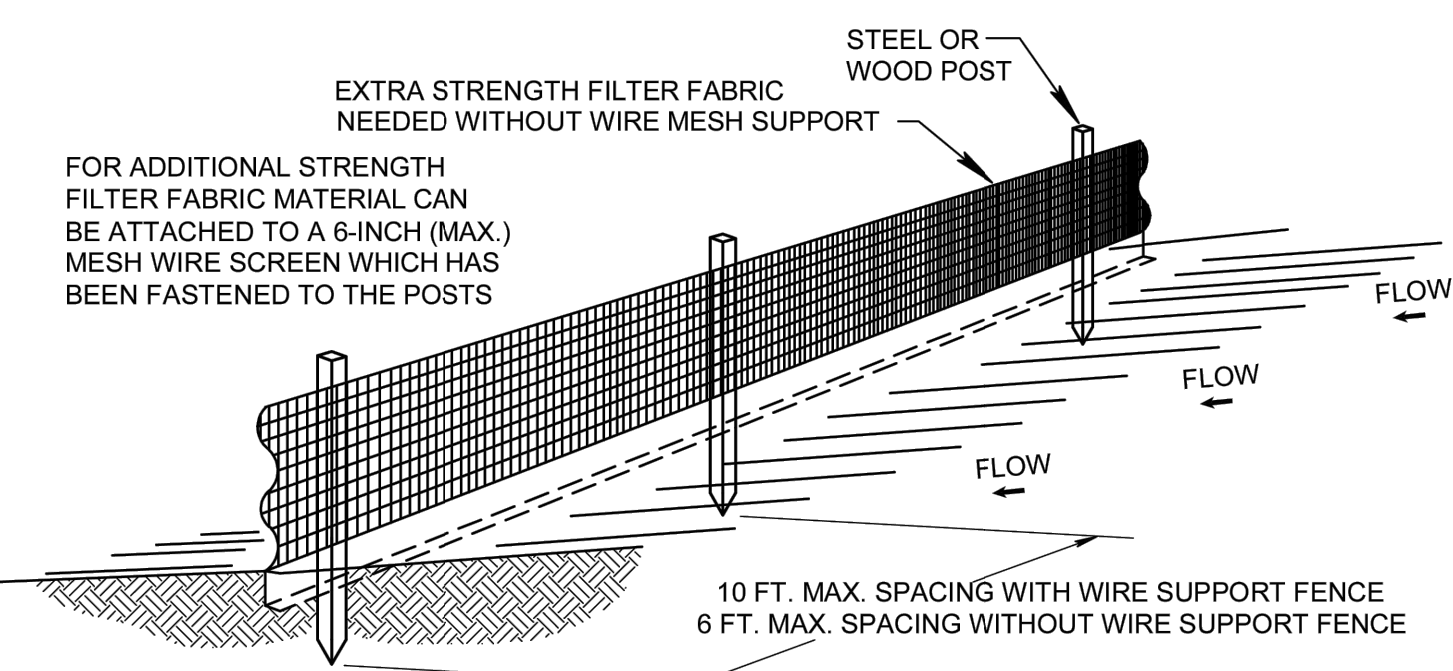
STORM WATER WILL REACH THE SEDIMENT TRAP VIA CURB CUTS ADJACENT TO EACH SIDE OF THE INLET STRUCTURE. THESE OPENINGS SHALL BE AT LEAST 12 INCHES IN LENGTH. STORM WATER MAY ALSO REACH THE BASIN VIA OVERLAND FLOW LAND AREA BEHIND THE CURB. THE CURB CUTS SHALL BE REPAIRED WHEN THE SEDIMENT TRAP IS REMOVED.

NOT TO SCALE

	CITY of DELRAY BEACH PUBLIC WORKS DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	INLET FILTER DETAIL	DATE: 10-04-2024
			D10.0

1. THE INTENT OF EROSION CONTROL MEASURES INDICATED GRAPHICALLY ON PLANS IS TO PROVIDE A BARRIER TO CONTAIN SILT AND SEDIMENT ON THE PROJECT SITE. THIS REPRESENTATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE TEST OF EROSION CONTROL EFFECTIVENESS IS NOT TO BE DETERMINED BY ADHERENCE TO THE REPRESENT SET FORTH ON THE DRAWINGS AND SPECIFICATIONS, BUT BY MEETING THE REGULATIONS SET FORTH BY THE AUTHORITY HAVING JURISDICTION OVER WATER QUALITY CONTROL AND OTHER SEDIMENTATION RESTRICTION REQUIREMENTS IN THE REGION.
2. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING, OR OTHER LAND DISTURBANCE ACTIVITIES, EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES.
3. INSPECTION OF ALL EROSION CONTROL MEASURES SHALL BE CONDUCTED WEEKLY, OR AFTER EACH RAINFALL EVENT. REPAIR, AND/OR REPLACEMENT OF SUCH MEASURES SHALL BE MADE PROMPTLY, AS NEEDED.
4. KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS.
5. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED IF DEEMED NECESSARY BY ONSITE INSPECTION.
6. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED.
7. DRAINAGE INLETS SHALL BE PROTECTED BY FILTER AND GRADED ROCK AS PER INLET PROTECTION DETAIL.
8. ANY ACCESS ROUTES TO SITE SHALL BE BASED WITH CRUSHED STONE, WHERE PRACTICAL.
9. EROSION CONTROL MEASURES ARE TO BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
10. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
11. ALL WORK IS TO BE IN COMPLIANCE WITH THE RULES AND REGULATIONS SET FORTH BY THE STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE CITY OF DELRAY BEACH.
12. DISCHARGE FROM DEWATERING OPERATIONS SHALL BE RETAINED ONSITE IN A CONTAINMENT AREA.

	CITY of DELRAY BEACH PUBLIC WORKS DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	EROSION CONTROL NOTES DETAIL	DATE: 10-04-2024
			D 11.0



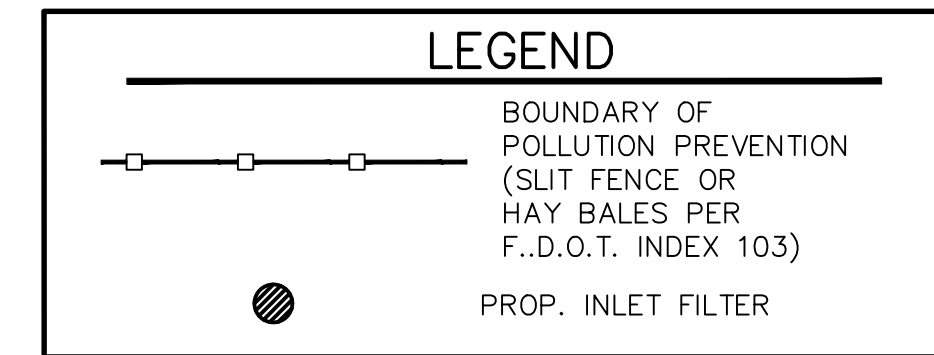
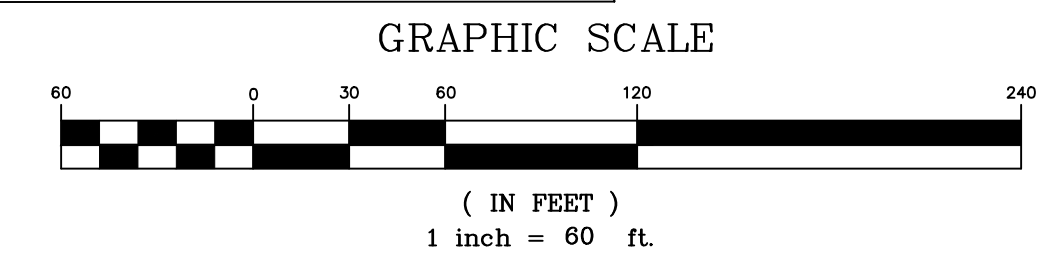
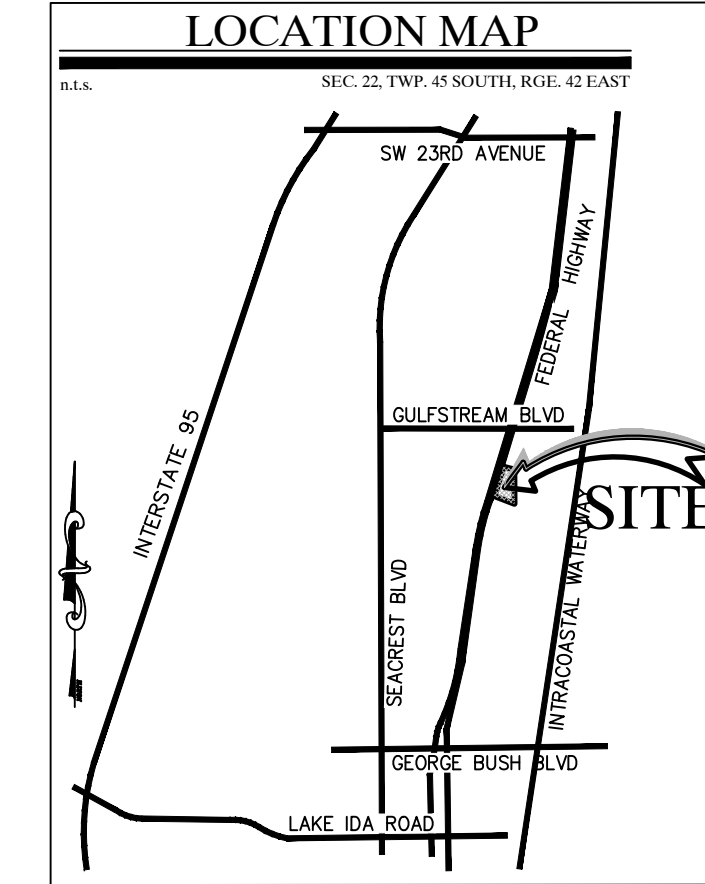
NOTES:

1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES.
2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
8. ALL PROJECTS REQUIRE SUBMITTAL OF POLLUTION PREVENTION PLAN (PPP).
9. ALL PROJECTS 1 AC. OR MORE MUST SUBMIT NOTICE OF INTENT (NOI) TO FDEP.

	CITY of DELRAY BEACH PUBLIC WORKS DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	SILT FENCE INSTALLATION DETAIL (SHEET 1 of 2)	DATE: 10-04-2024
			D12.0

REV PER	UPDATED SITE PLAN	DATE	BY
REV PER	CITY COMMENTS	04/17/26	JRH
REV PER	CITY COMMENTS	03/11/26	JRH
REV PER	CITY COMMENTS	12/16/25	JRH
REV PER	CITY COMMENTS	09/18/25	RCW
REVISIONS		DATE	BY

FILE NAME: 10908ENG.dwg

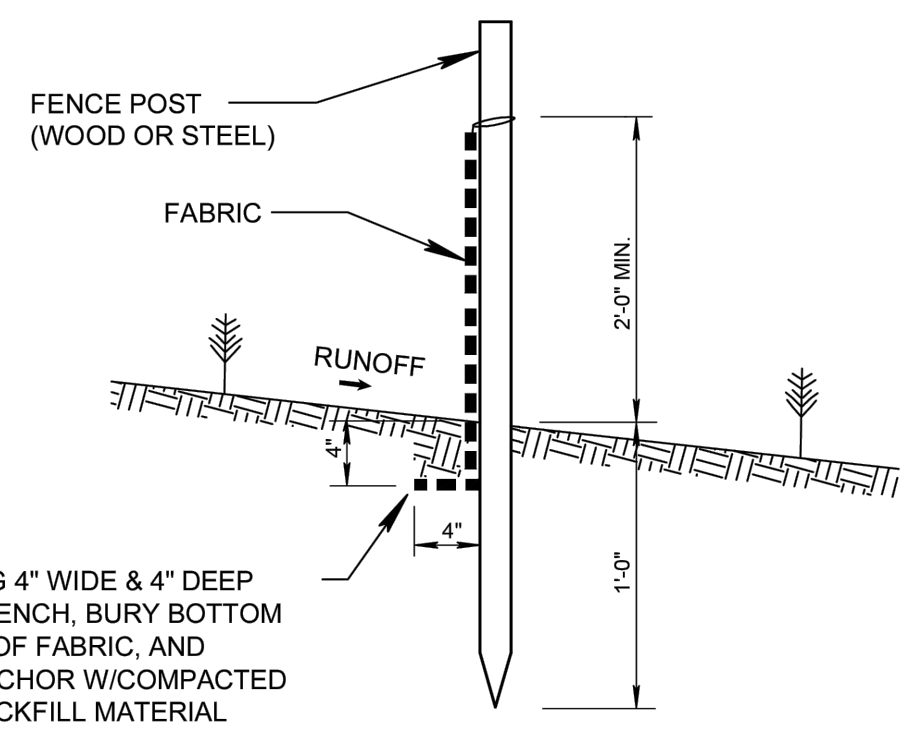


CAULFIELD & WHEELER, INC.

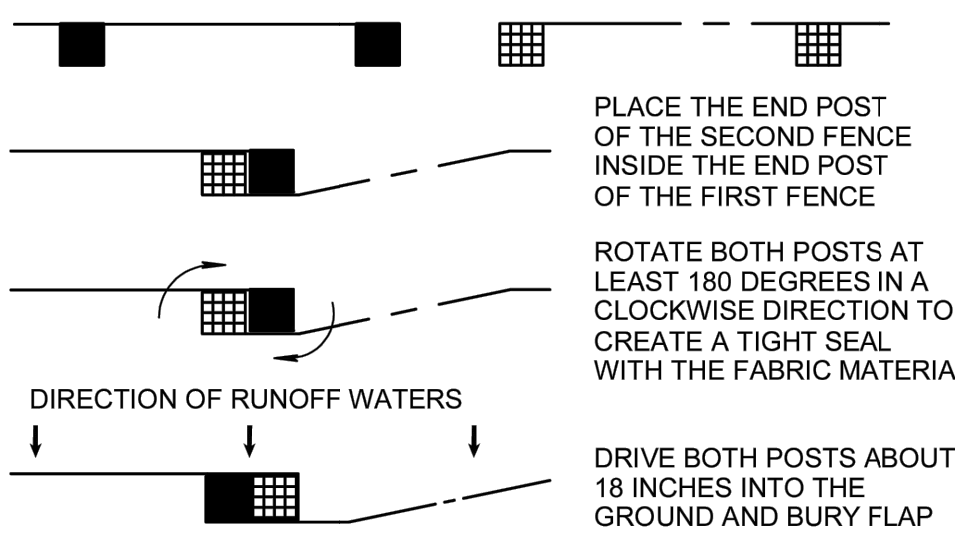
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING

7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434

PHONE (561) 292-1991 / FAX (561) 750-1452

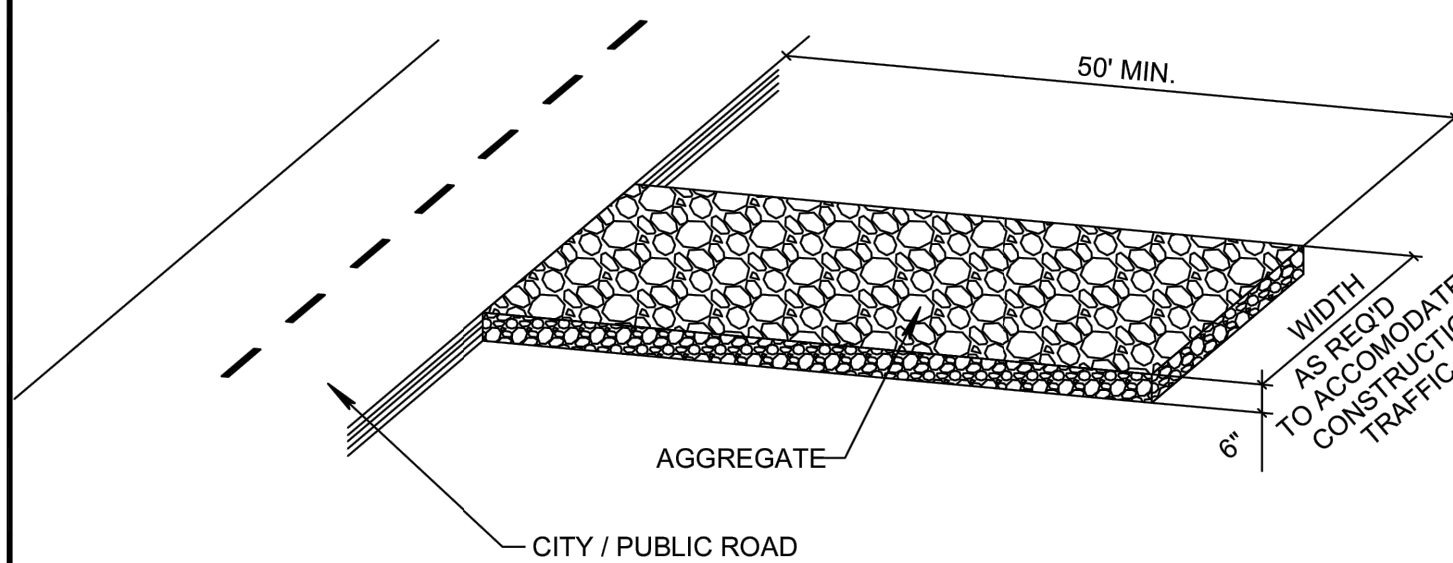


SILT FENCE SECTION
NOT TO SCALE



ATTACHING TWO SILT FENCES
NOT TO SCALE

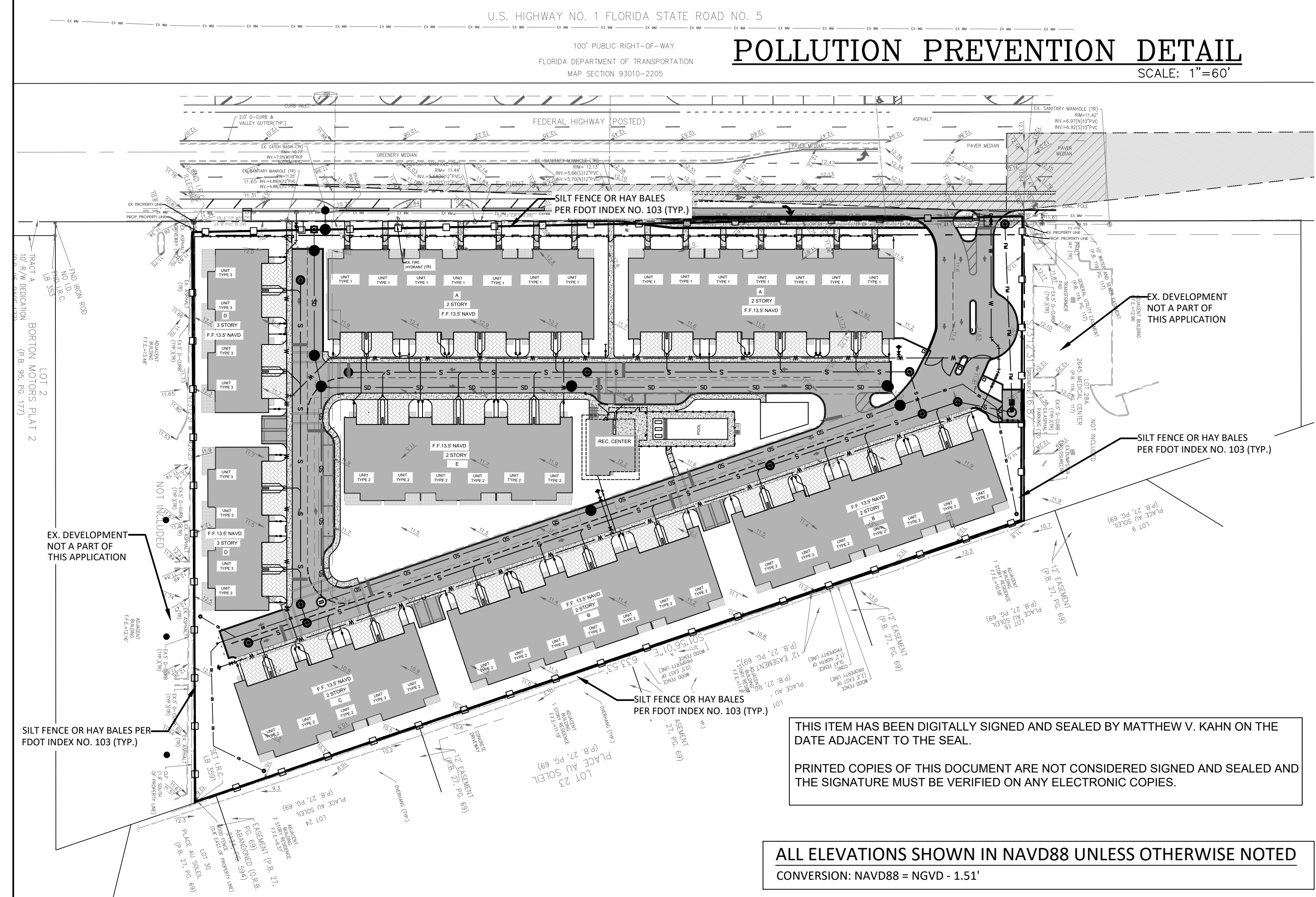
	CITY of DELRAY BEACH PUBLIC WORKS DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	SILT FENCE INSTALLATION DETAIL (SHEET 2 OF 2)	DATE: 10-04-2024
			D 12.1



NOTE:

A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND CONTAIN AN AGGREGATE LAYER (FDOT AGGREGATE NO. 1), AT LEAST 6-INCHES THICK. IT MUST EXTEND TO THE WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA.

	CITY of DELRAY BEACH PUBLIC WORKS DEPARTMENT 434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444	STABILIZED CONSTRUCTION ENTRANCE DETAIL	DATE: 10-04-2024
			D 13.0



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

2419 N FEDERAL HWY
POLLUTION PREVENTION PLAN
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33448

DATE: 03/21/2025
DRAWN BY: RCW
F.B./PG.: N/A
SCALE: 1"=60'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM
DATE

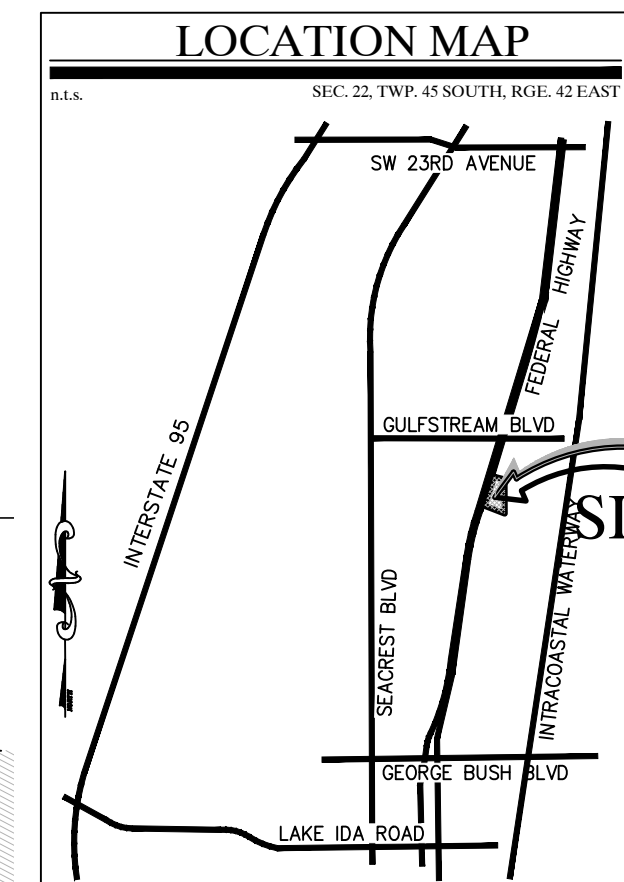
JOB # 10908
SHT. NO.
C-12
OF 27 SHEETS

U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

100' PUBLIC RIGHT-OF-WAY

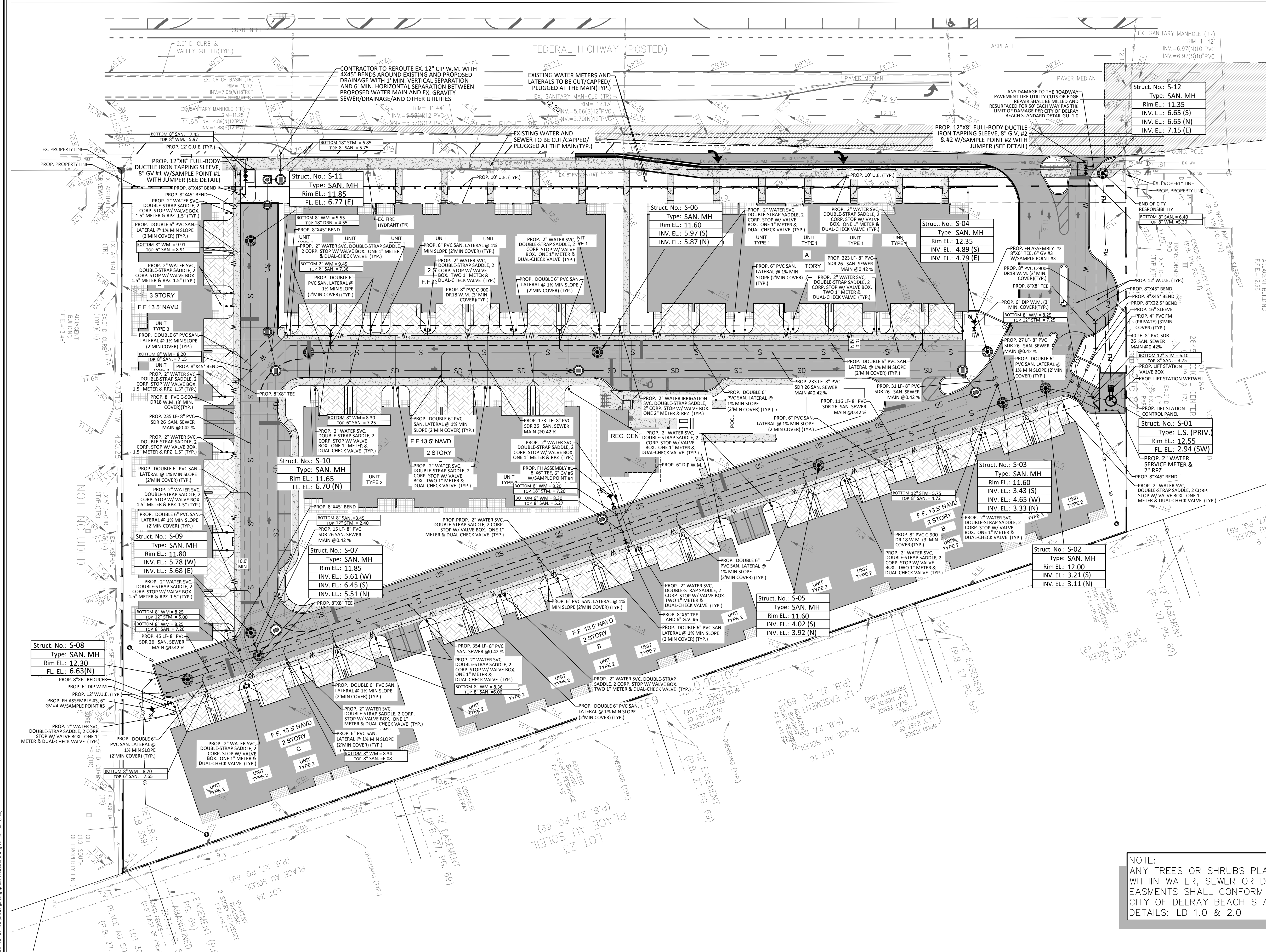
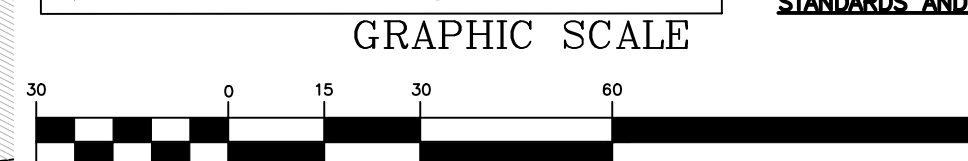
FLORIDA DEPARTMENT OF TRANSPORTATION
MAP SECTION 93010-2205

*PRE AND POST TV INSPECTION REQUIRED
PRIOR TO AND AFTER CONNECTION TO
THE SANITARY SEWER SYSTEM



REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY
FILE NAME: 10908ENG.dwg		

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED DRAINAGE PIPE
- PROPOSED FORCE MAIN (SIZE NOTED)
- PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- PROPOSED WATER LINE (SIZE NOTED)
- PROPOSED FPL ELEC. LINE
- PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM - EXISTING WATER LINE
- EXGM - EXISTING GATE VALVE
- EXSD - EXISTING PIPE AND INLET
- EXSS - EXISTING SANITARY SEWER LINE TO BE REMOVED
- TR - TO REMAIN

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
OVERALL WATER DISTRIBUTION,
SANITARY SEWER PLAN

DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. N/A
SCALE 1"=30'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-13
OF 27 SHEETS

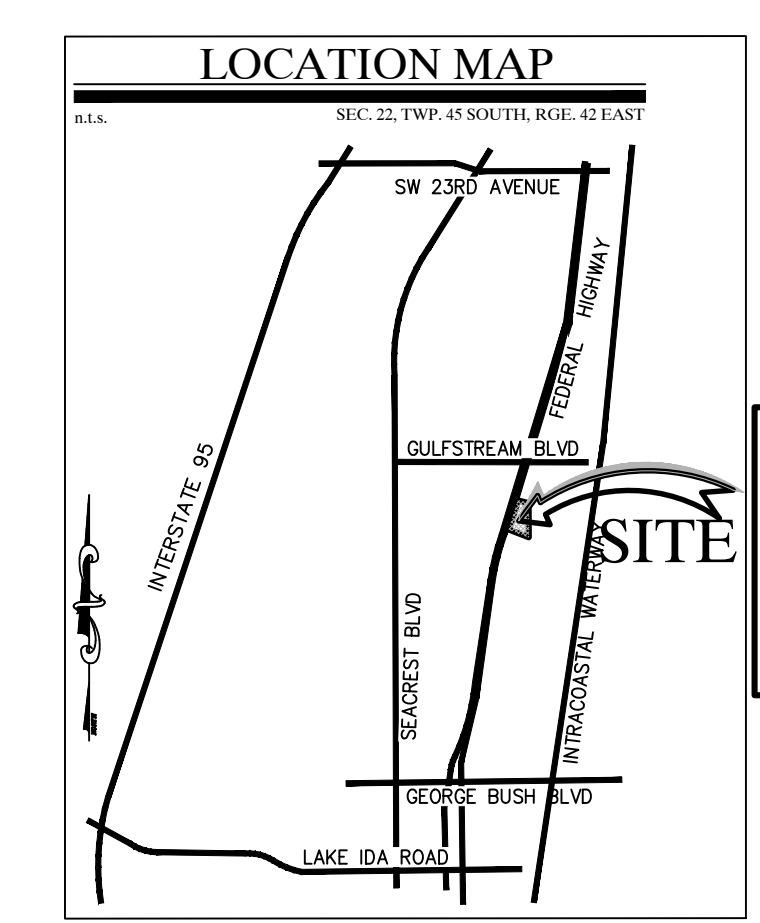
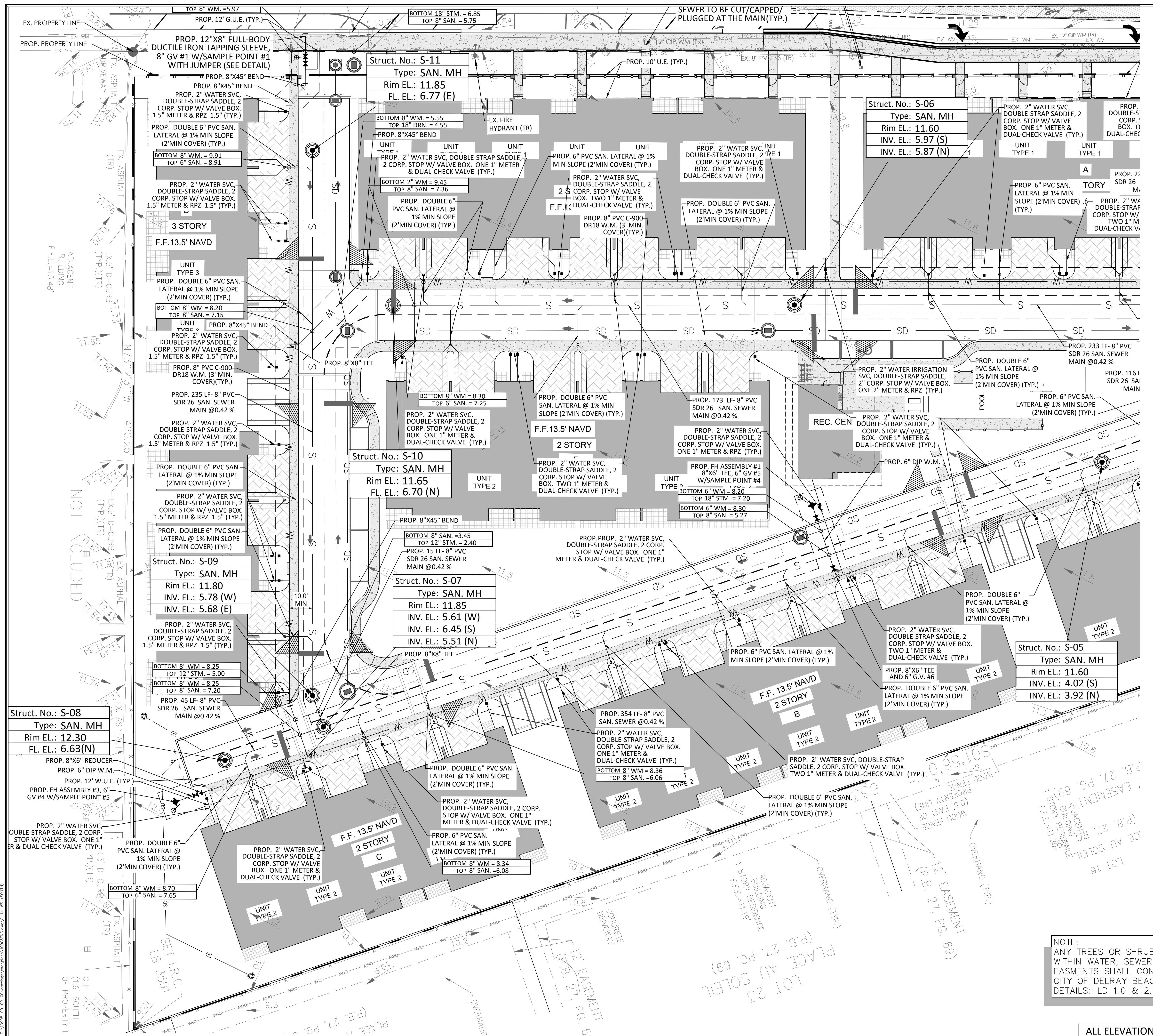
NOTE:
ANY TREES OR SHRUBS PLACED
WITHIN WATER, SEWER OR DRAINAGE
EASEMENTS SHALL CONFORM TO THE
CITY OF DELRAY BEACH STANDARD
DETAILS: LD 1.0 & 2.0

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE
DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND
THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND
LOCATION OF EXISTING UTILITIES PRIOR
TO ANY CONSTRUCTION.

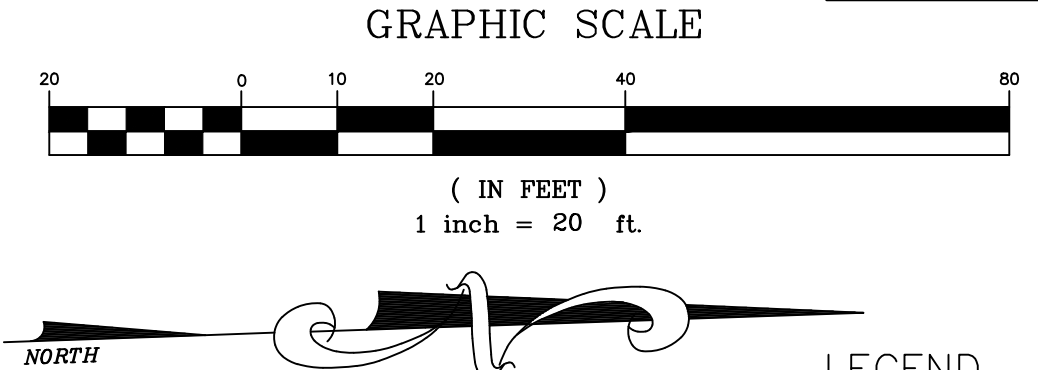


ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'



REV	PER	UPDATED SITE PLAN	DATE	BY
04/17/26	JRH			
03/11/26	JRH			
12/16/25	JRH			
09/18/25	RCW			
		REVISIONS	DATE	BY
FILE NAME 10908ENG.dwg				

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



*PRE AND POST TV INSPECTION REQUIRED PRIOR TO AND AFTER CONNECTION TO THE SANITARY SEWER SYSTEM

LEGEND

[Symbol]	EXISTING CONCRETE
[Symbol]	PROPOSED PAVEMENT
[Symbol]	PROPOSED 4" CONCRETE
[Symbol]	PROPOSED PAVER DRIVEWAY
[Symbol]	PROPOSED PAVER WALKWAY
[Symbol]	PROPOSED BUILDING
[Symbol]	MATCH EXISTING ELEVATION
[Symbol]	PROPOSED GRADE
[Symbol]	EXISTING GRADE
[Symbol]	GRADING CROSS-SECTION
[Symbol]	FLOW ARROW
[Symbol]	WHEEL STOP
[Symbol]	DRAINAGE STRUCTURE
[Symbol]	PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
[Symbol]	EXISTING PROPERTY LINE
[Symbol]	PROPOSED PROPERTY LINE
[Symbol]	PROPOSED DRAINAGE PIPE
[Symbol]	PROPOSED FORCE MAIN (SIZE NOTED)
[Symbol]	PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
[Symbol]	PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
[Symbol]	PROPOSED WATER LINE (SIZE NOTED)
[Symbol]	PROPOSED FPL ELEC. LINE
[Symbol]	PROPOSED ELEC. LINE
[Symbol]	PROPOSED GATE VALVE AND BOX
[Symbol]	PROPOSED REDUCER
[Symbol]	FIRE HYDRANT
[Symbol]	SAMPLE POINT
[Symbol]	EXISTING WATER LINE
[Symbol]	EXISTING GATE VALVE
[Symbol]	EXISTING PIPE AND INLET
[Symbol]	EXISTING SANITARY SEWER LINE
[Symbol]	TO BE REMOVED
[Symbol]	TO REMAIN

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 992-0991 / FAX (561) 992-0452

2419 N FEDERAL HWY
 WATER DISTRIBUTION, SANITARY SEWER PLAN (SOUTH)
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./PG. N/A
 SCALE 1"=20'

MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 - FOR THE FIRM -
 DATE

JOB # 10908
 SHT. NO.
C-14
 OF 27 SHEETS

NOTE:
 ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

CONTRACTOR NOTE:
 CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.



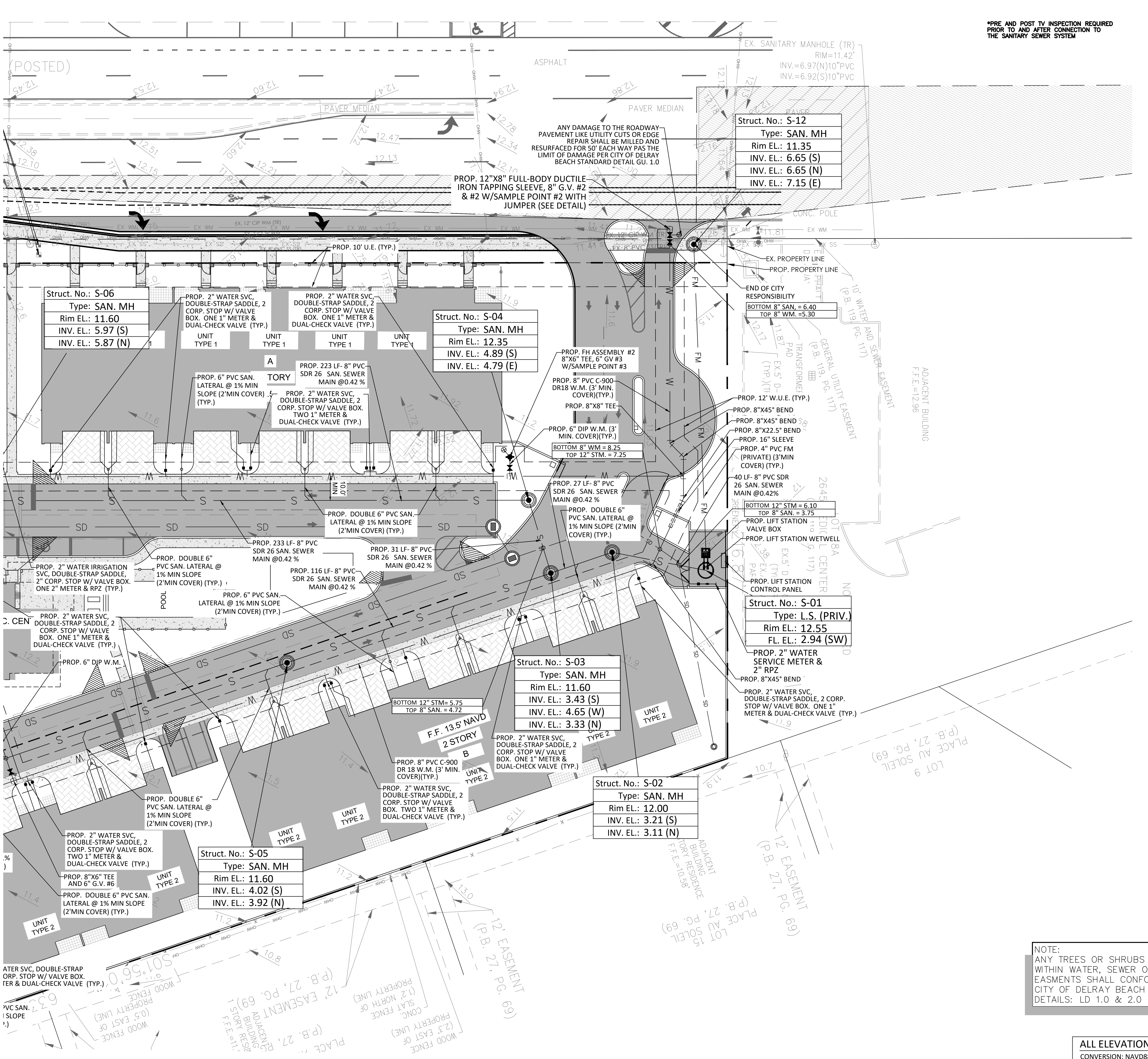
NOT INCLUDED

MATCH SHEET C-18

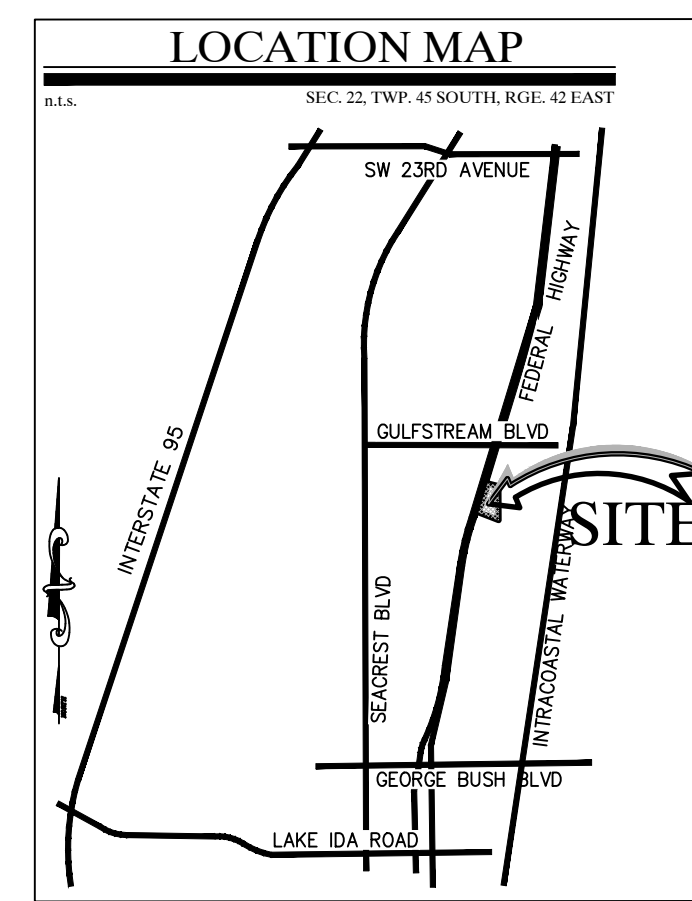
MATCH SHEET C-18

MATCH SHEET C-17

MATCH SHEET C-17



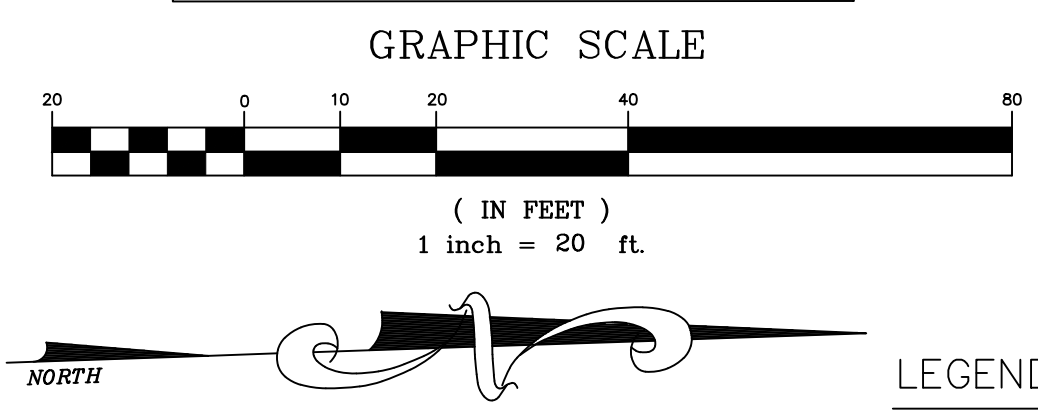
*PRE AND POST TV INSPECTION REQUIRED
PRIOR TO AND AFTER CONNECTION TO
THE SANITARY SEWER SYSTEM



REVISIONS	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXEMPT THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

	EXISTING CONCRETE
	PROPOSED PAVEMENT
	PROPOSED 4" CONCRETE
	PROPOSED PAVER DRIVEWAY
	PROPOSED PAVER WALKWAY
	PROPOSED BUILDING
	MATCH EXISTING ELEVATION
	PROPOSED GRADE
	EXISTING GRADE
	GRADING CROSS-SECTION
	FLOW ARROW
	WHEEL STOP
	DRAINAGE STRUCTURE
	PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE
	PROPOSED DRAINAGE PIPE
	PROPOSED FORCE MAIN (SIZE NOTED)
	PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
	PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
	PROPOSED WATER LINE (SIZE NOTED)
	PROPOSED FPL ELEC. LINE
	PROPOSED ELEC. LINE
	PROPOSED GATE VALVE AND BOX
	PROPOSED REDUCER
	FIRE HYDRANT
	SAMPLE POINT
	EXISTING WATER LINE
	EXISTING GATE VALVE
	EXISTING PIPE AND INLET
	EXISTING SANITARY SEWER LINE TO BE REMOVED
	EXISTING SANITARY SEWER LINE TO REMAIN

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-9991 / FAX (561) 750-1452

2419 N FEDERAL HWY
WATER DISTRIBUTION, SANITARY SEWER PLAN (NORTH)
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./PG. C-15
SCALE 1"=20'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

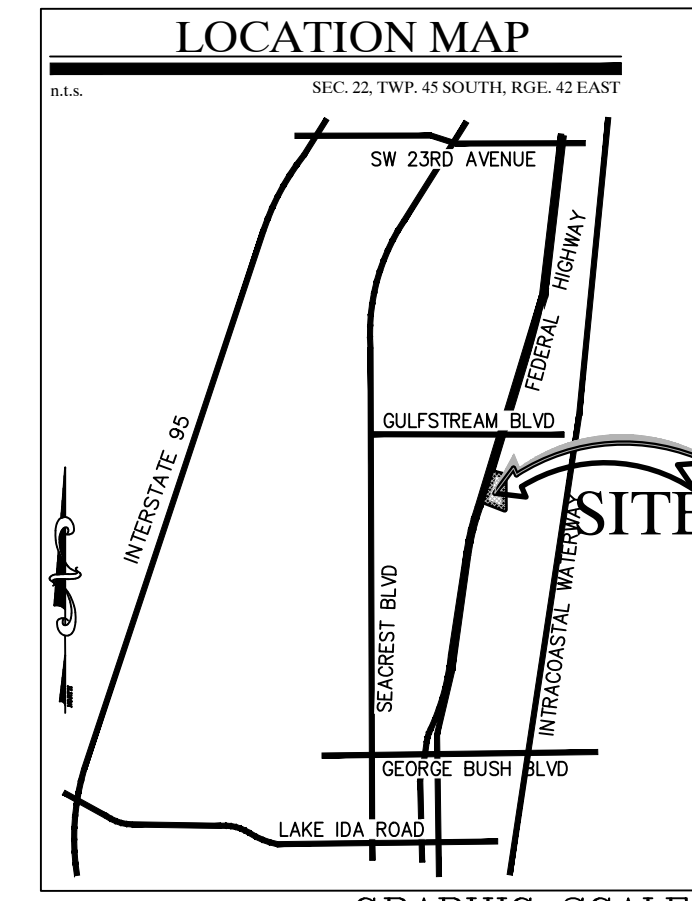
JOB # 10908
SHT. NO.
C-15
OF 27 SHEETS

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

100' PUBLIC RIGHT-OF-WAY

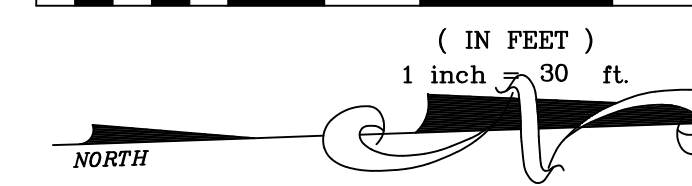
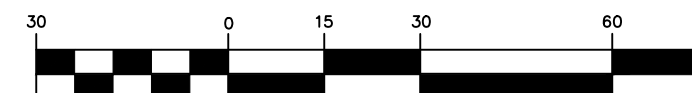
FLORIDA DEPARTMENT OF TRANSPORTATION
MAP SECTION 93010-2205



REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY
FILE NAME: 10908ENG.dwg		

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS

GRAPHIC SCALE



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED DRAINAGE PIPE
- PROPOSED FORCE MAIN (SIZE NOTED)
- PROPOSED REINFORCED WATER LINE (SIZE NOTED)
- PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- PROPOSED WATER LINE (SIZE NOTED)
- PROPOSED FPL ELEC. LINE
- PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXISTING WATER LINE
- EXISTING GATE VALVE
- EXISTING PIPE AND INLET
- EXISTING SANITARY SEWER LINE TO BE REMOVED
- EXISTING SANITARY SEWER LINE TO REMAIN

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. N/A
SCALE 1"=30'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

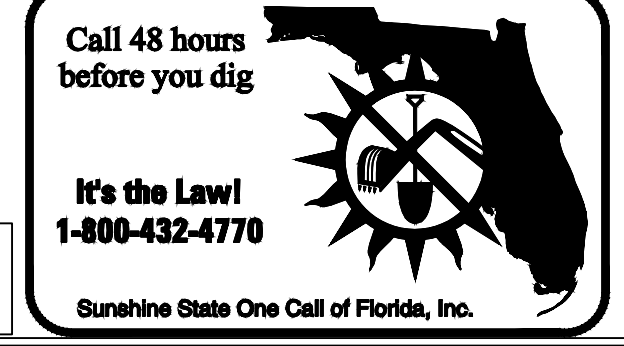
JOB # 10908
SHT. NO.
C-16
OF 27 SHEETS

NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

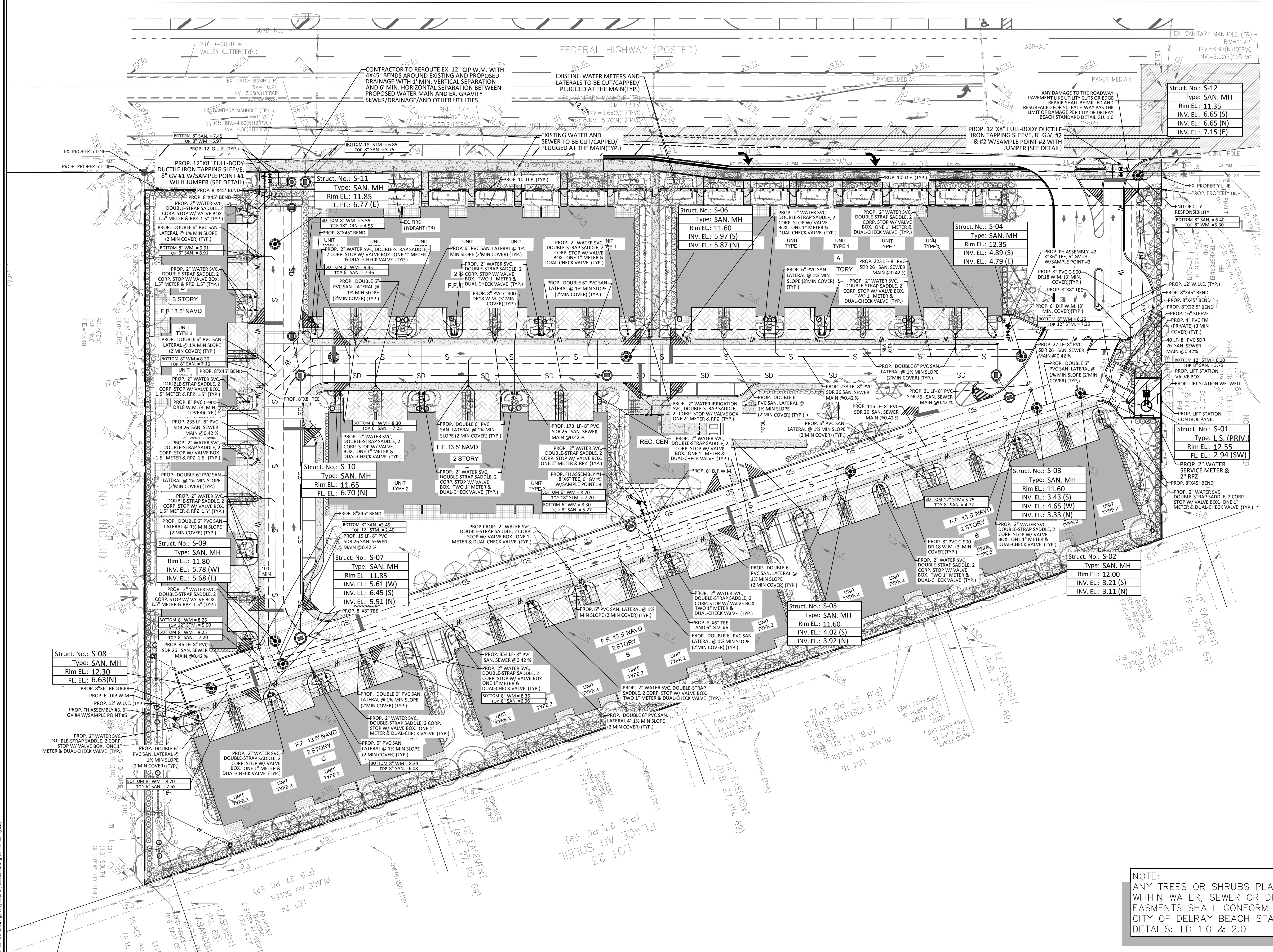
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

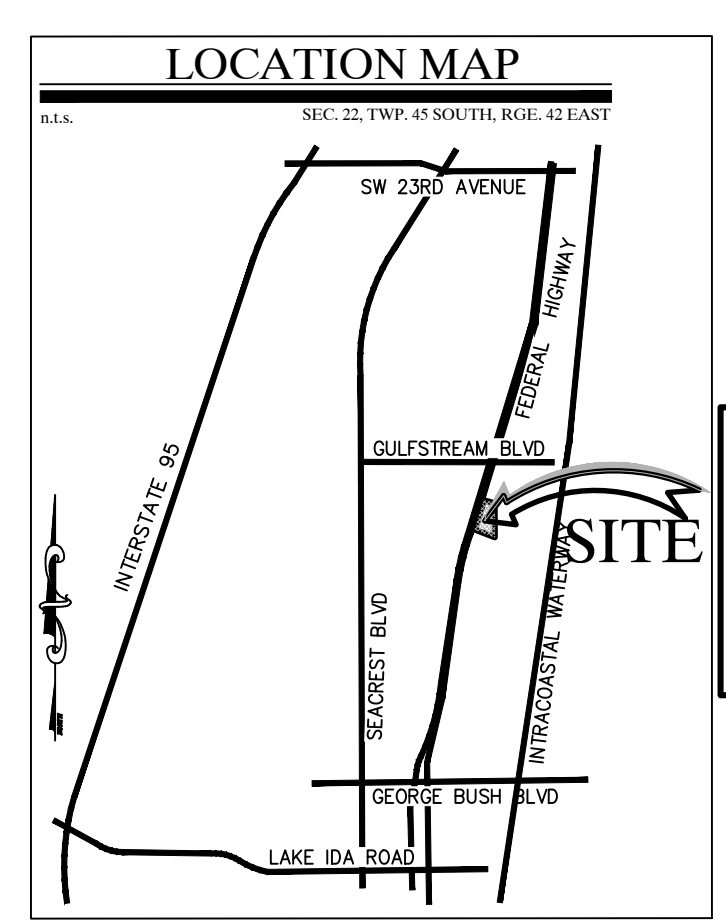


NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

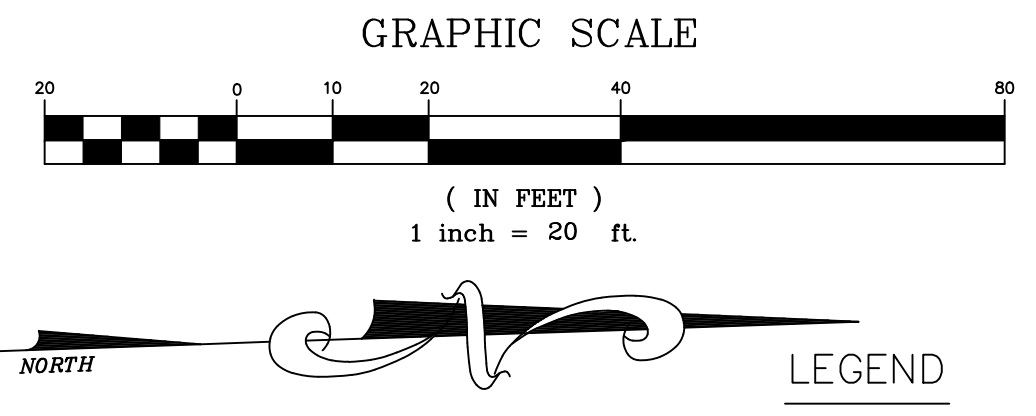


NOT INCLUDED



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- SD PROPOSED DRAINAGE PIPE
- FM PROPOSED FORCE MAIN (SIZE NOTED)
- RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- W PROPOSED WATER LINE (SIZE NOTED)
- FPL PROPOSED FPL ELEC. LINE
- E PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXVM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE
- TO BE REMOVED
- TO REMAIN

NOTE: ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NOTE: ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 992-0991 / FAX (561) 750-4452

2419 N FEDERAL HWY
 COMPOSITE UTILITY PLAN (SOUTH)
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./PG. N/A
 SCALE 1"=20'

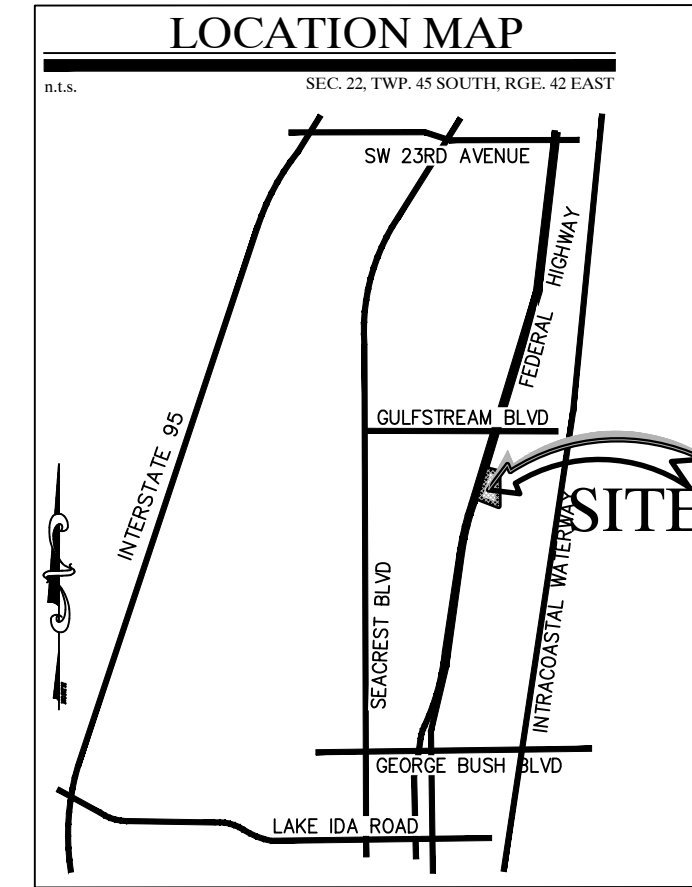
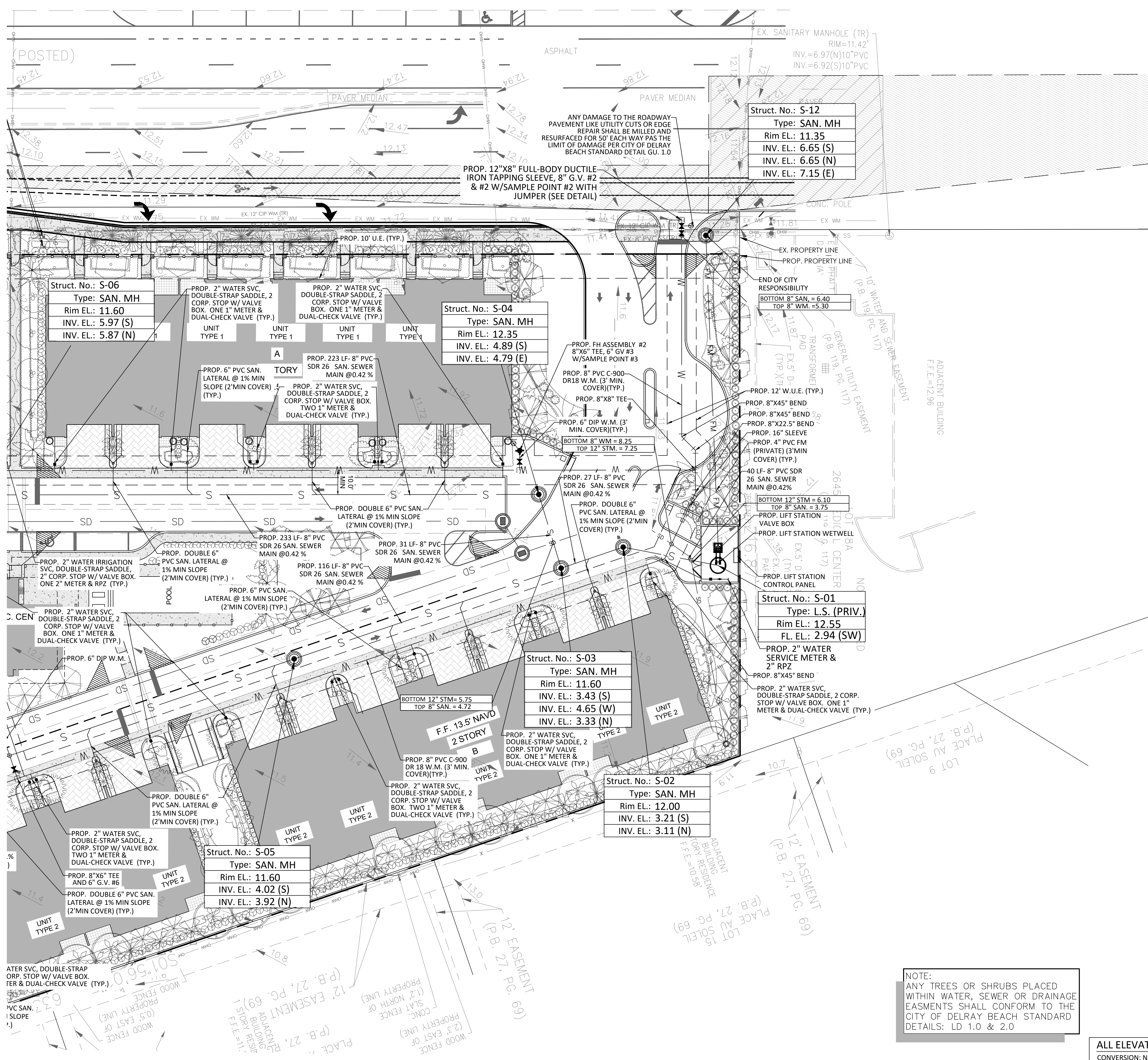
MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM
 DATE

JOB # 10908
 SHT. NO. C-17
 OF 27 SHEETS



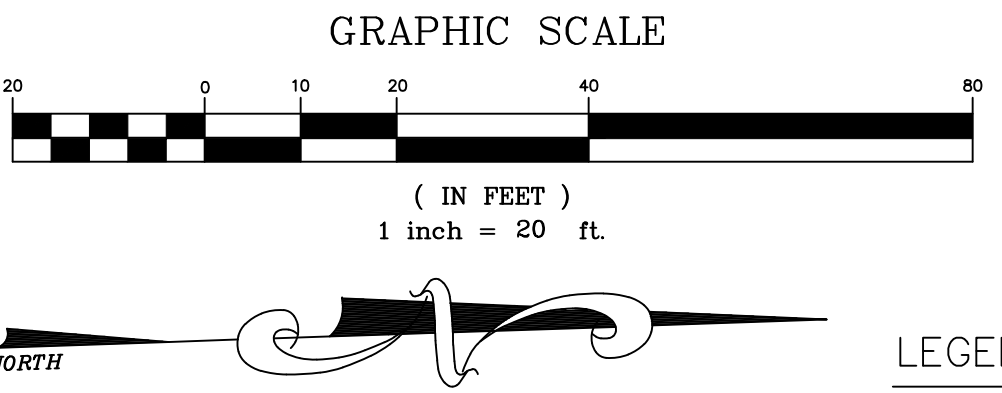
MATCH SHEET C-17

MATCH SHEET C-17



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- [Symbol] EXISTING CONCRETE
- [Symbol] PROPOSED PAVEMENT
- [Symbol] PROPOSED 4" CONCRETE
- [Symbol] PROPOSED PAVER DRIVEWAY
- [Symbol] PROPOSED PAVER WALKWAY
- [Symbol] PROPOSED BUILDING
- [Symbol] MATCH EXISTING ELEVATION
- [Symbol] PROPOSED GRADE
- [Symbol] EXISTING GRADE
- [Symbol] GRADING CROSS-SECTION
- [Symbol] FLOW ARROW
- [Symbol] WHEEL STOP
- [Symbol] DRAINAGE STRUCTURE
- [Symbol] PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- [Symbol] EXISTING PROPERTY LINE
- [Symbol] PROPOSED PROPERTY LINE
- [Symbol] SD PROPOSED DRAINAGE PIPE
- [Symbol] FM PROPOSED FORCE MAIN (SIZE NOTED)
- [Symbol] RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- [Symbol] S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- [Symbol] W PROPOSED WATER LINE (SIZE NOTED)
- [Symbol] FPL PROPOSED FPL ELEC. LINE
- [Symbol] E PROPOSED ELEC. LINE
- [Symbol] PROPOSED GATE VALVE AND BOX
- [Symbol] PROPOSED REDUCER
- [Symbol] FIRE HYDRANT
- [Symbol] SAMPLE POINT
- [Symbol] EXWM EXISTING WATER LINE
- [Symbol] EXGM EXISTING GATE VALVE
- [Symbol] EXSD EXISTING PIPE AND INLET
- [Symbol] EXSS EXISTING SANITARY SEWER LINE TO BE REMOVED
- [Symbol] TBR TO BE REMOVED
- [Symbol] TR TO REMAIN

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.



NOTE:
ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & 2.0

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 992-9991 / FAX (561) 750-1452

2419 N FEDERAL HWY
COMPOSITE UTILITY PLAN (NORTH)
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. C-15
SCALE 1"=20'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-18
OF 27 SHEETS

PRESSURE PIPE NOTES:

- FOR PIPE SIZES 4"-8" THERE SHALL BE 30" MINIMUM COVER FROM FINISHED GRADE TO TOP OF PIPE. FOR PIPE SIZE 10" AND LARGER THERE SHALL BE 36" MINIMUM COVER.
- DUCTILE IRON PIPE (DIP) FOR FORCE MAINS SHALL BE CLASS 350 WITH 401 EPOXY LINED IN ACCORDANCE WITH AWWA C550.
- DUCTILE IRON PIPE (DIP) FOR WATER MAINS SHALL BE CLASS 350 IN ACCORDANCE WITH AWWA C151 (ANSI A21.51), AND SHALL HAVE AN INTERNAL LINING OF CEMENT MORTAR IN ACCORDANCE WITH AWWA C104/A21.4.
- C-900 PVC PRESSURE PIPE MAY BE USED IN LIEU OF DIP WATER MAIN WITH METAL TAPE AND WIRE ABOVE THE PIPE.
- ALL FITTINGS FOR FORCE MAIN SHALL BE CLASS 350 DUCTILE IRON WITH MECHANICAL JOINTS AND 401 EPOXY LINING.
- WATER MAIN VALVES 12 INCHES AND SMALLER SHALL BE RESILIENT-SEAL WEDGE GATE VALVES IN ACCORDANCE WITH AWWA C509. WATER MAIN VALVES LARGER THAN 12 INCHES SHALL BE BUTTERFLY VALVES IN ACCORDANCE WITH AWWA C504. SEWAGE FORCE MAIN VALVES SHALL BE RESILIENT-SEAL PLUG VALVES IN ACCORDANCE WITH AWWA C517.
- ALL TRENCHING, PIPE-LAYING, BACKFILL, PRESSURE TESTING, AND DISINFECTION MUST COMPLY WITH CITY AND LOCAL GOVERNMENTAL REGULATIONS AND STANDARDS.
- WATER AND FORCE MAINS SHALL BE PIGGED A MINIMUM OF TWO TIMES, AND ADDITIONALLY, IF REQUIRED BY ENGINEER OF RECORD, AS WELL AS, PRESSURE TESTED FOR A PERIOD OF NOT LESS THAN TWO HOURS AT 150 PSI IN ACCORDANCE WITH ANSI/AWWA C600 LATEST STANDARDS. ALLOWABLE LEAKAGE SHALL BE DETERMINED AS FOLLOWS:

$$L = \frac{SD\sqrt{P}}{148,000}$$

WHERE:

- L = ALLOWABLE LEAKAGE (GALLONS PER HOUR)
- S = PIPE LENGTH (FEET)
- D = NOMINAL DIAMETER OF PIPE (INCHES)
- P = AVERAGE TEST PRESSURE (PSI)

- RESTRAINTS SHALL BE PROVIDED AT ALL FITTINGS AS SHOWN ON PP 2.0 AND 2.1
- PRIOR TO ANY TESTING UNDER FUTURE PAVEMENT, ROCK SHALL BE FINISHED & PRIMED OR 1ST LIFT OF ASPHALT PLACED.
- PIG SIZE SHALL BE PIPE DIAMETER PLUS 2" OR NEXT LARGER DIAMETER.
- NO PROPOSED STRUCTURES SHALL BE INSTALLED WITHIN A HORIZONTAL DISTANCE OF 10-FEET FROM ANY EXISTING OR PROPOSED WATER OR FORCE MAINS.
- LINE STOPS SHALL BE INSTALLED A MINIMUM OF 3 PIPE LENGTHS FROM LOCATION OF PIPE REMOVED AND PROVIDE NECESSARY JOINT RESTRAINTS.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PRESSURE PIPE NOTES

DATE: 10-04-2024
PP 1.0

MINIMUM LENGTHS OF PIPE (FT) TO BE RESTRAINED

FITTING TYPE	PIPE SIZE								
	4"	6"	8"	10"	12"	16"	20"	24"	
90° HORIZ. BEND	14	20	25	30	35	45	54	62	
45° HORIZ. BEND	6	8	11	13	15	19	22	26	
22.5° HORIZ. BEND	3	4	5	6	7	9	11	12	
11.25° HORIZ. BEND	1	2	3	3	4	4	5	6	
90° VERT. OFFSET	UPPER BEND	55	79	103	125	147	189	228	266
	LOWER BEND	22	38	49	59	69	88	106	123
45° VERT. OFFSET	UPPER BEND	22	32	42	51	60	77	93	109
	LOWER BEND	10	14	19	23	28	35	43	50
22.5° VERT. OFFSET	UPPER BEND	7	12	17	21	26	34	42	49
	LOWER BEND	2	4	6	8	10	14	17	21
11.25° VERT. OFFSET	UPPER BEND	3	4	6	9	11	15	19	22
	LOWER BEND	1	1	2	3	5	7	8	8
PLUG (DEAD END)	32	45	59	70	83	107	129	151	
INLINE VALVE	32	45	59	70	83	107	129	151	
TEE (BRANCH RESTRAINT)	4" X Ø"	23							
	6" X Ø"	21	35						
	8" X Ø"	18	34	47					
	10" X Ø"	16	32	46	58				
	12" X Ø"	13	30	44	57	69			
	16" X Ø"	7	26	41	55	67	90		
REDUCER (LARGER PIPE RESTRAINT)	20" X Ø"	1	21	38	52	65	88	109	
	24" X Ø"	1	16	34	49	62	86	108	
	6" X Ø"	23							
	8" X Ø"	38	25						
	10" X Ø"	57	43	24					
	12" X Ø"	72	60	44	41				
REDUCER (SMALLER PIPE RESTRAINT)	16" X Ø"	99	90	78	75	45			
	20" X Ø"	123	116	107	105	81	45		
	24" X Ø"	146	140	132	131	111	82	45	
	24" X Ø"	146	140	132	131	111	82	45	

RESTRAIN PIPE ONE BELL PAST MINIMUM DISTANCE

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PIPE RESTRAINT TABLE
PRESSURE PIPE
(SHEET 1 OF 2)

DATE: 10-04-2024
PP 2.0

NOTES:

- THE DATA IN THE PREVIOUS TABLE IS BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:
SOIL TYPESAND
TEST PRESSURE150 PSI, 200 PSI FOR PIPES LARGER THAN 24"
DEPTH OF BURY3'
TRENCH TYPE3
SAFETY FACTOR1.5
VERTICAL OFF-SET3'
MINIMUM PIPE LENGTHS ALONG TEE RUN5'
- THE RESTRAINED PIPE LENGTHS APPLY TO DUCTILE IRON PIPE AND PVC PIPE.
- ALL JOINTS BETWEEN UPPER AND LOWER BENDS SHALL BE RESTRAINED.
- RESTRAINED PIPE LENGTHS FOR VALVES APPLY TO PIPE ON BOTH SIDES OF VALVES
- THE PREVIOUS TABLE SHALL SERVE AS A GENERAL DESIGN GUIDE ONLY. IT IS THE ENGINEER OF RECORD'S RESPONSIBILITY TO JUSTIFY AND DOCUMENT ANY DEVIATIONS FROM THE PIPE LENGTHS SPECIFIED IN THE PREVIOUS TABLE.
- SOURCES: EBAA IRON RESTRAINT LENGTH CALCULATION PROGRAM FOR PVC PIPE, RELEASE 3.1 (LATEST EDITION) AND DIPRA RESTRAINT FOR DUCTILE IRON PIPE, RELEASE 3.2 (LATEST EDITION).
- RESTRAINED JOINTS SHALL EXTEND ONE JOINT BEYOND MINIMUM LENGTH REQUIRED.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

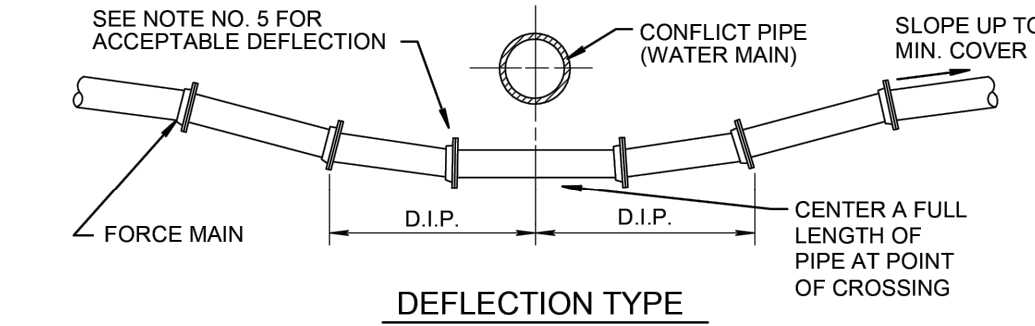
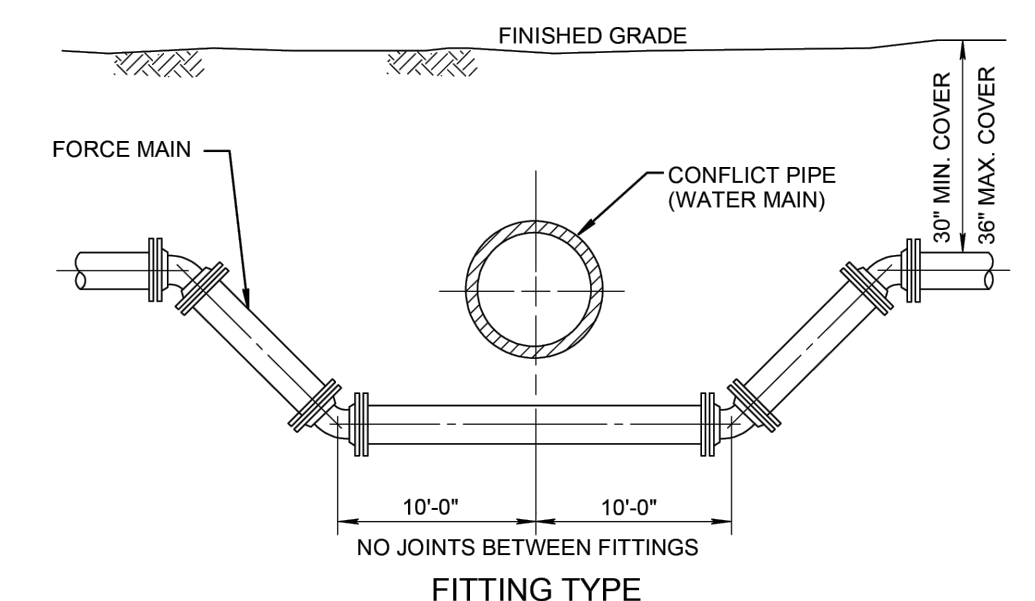
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PIPE RESTRAINT TABLE
PRESSURE PIPE
(SHEET 2 OF 2)

DATE: 10-04-2024
PP 2.1

REV	PER UPDATED SITE PLAN	DATE	BY
REV PER CITY COMMENTS	04/17/26	JRH	
REV PER CITY COMMENTS	03/11/26	JRH	
REV PER CITY COMMENTS	12/16/25	JRH	
REV PER CITY COMMENTS	09/08/25	RCW	
REVISIONS	DATE	BY	
FILE NAME 10908ENG.dwg			

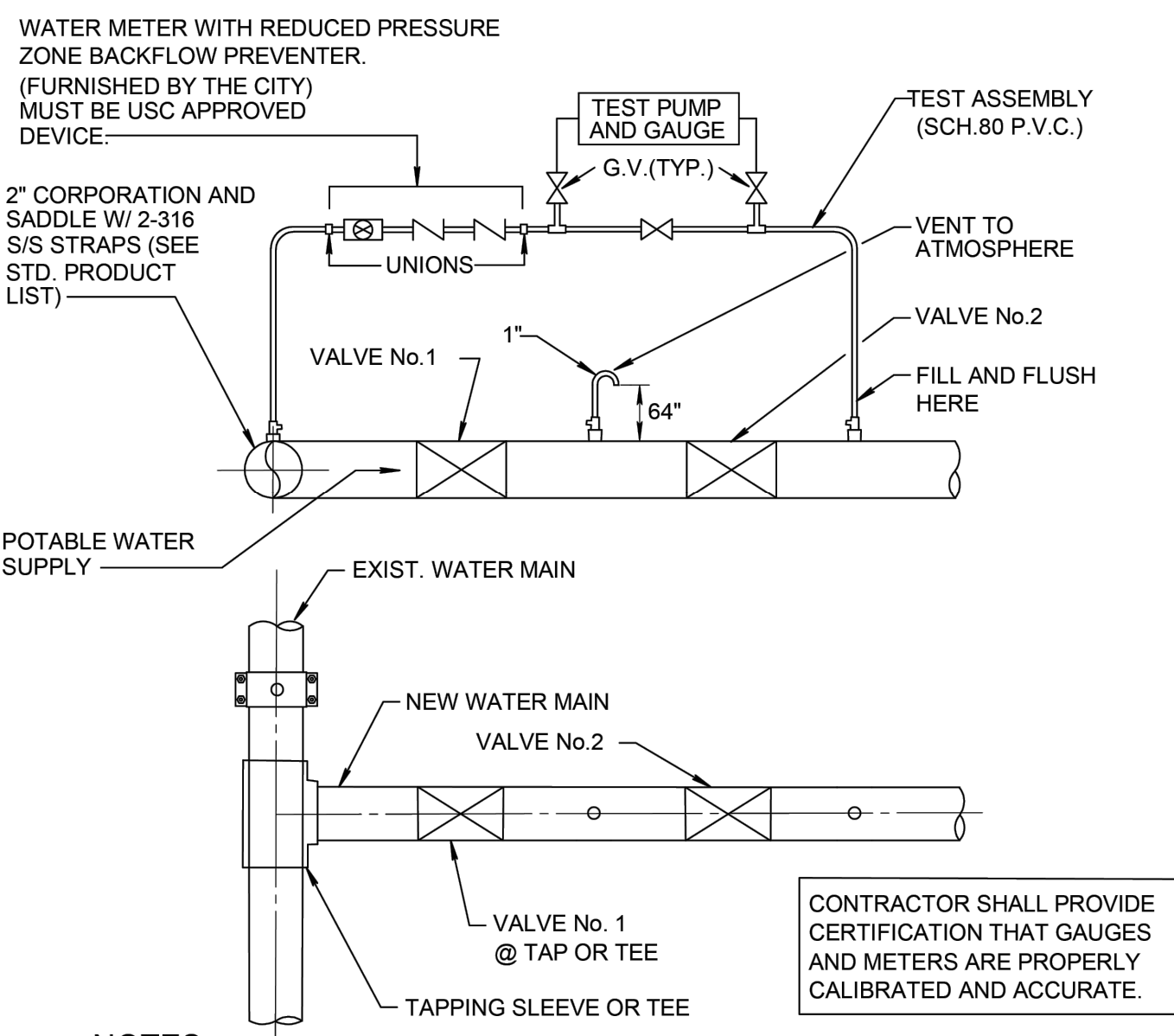


- NOTES:**
- THERE SHALL BE IN ALL CASES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN WATER MAINS AND FORCE MAINS.
 - WHEREVER POSSIBLE WATER MAINS SHALL PASS OVER FORCE MAINS OR STORM SEWERS.
 - FITTINGS SHALL BE RESTRAINED WITH MECHANICAL JOINT RESTRAINTS.
 - THE DEFLECTION TYPE CROSSING IS PREFERRED.
 - DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
 - REFER TO TYPICAL RESTRAINING DETAIL PP 2.0 AND 2.1

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

PRESSURE PIPE CONFLICT DETAIL

DATE: 10-04-2024
PP 3.0

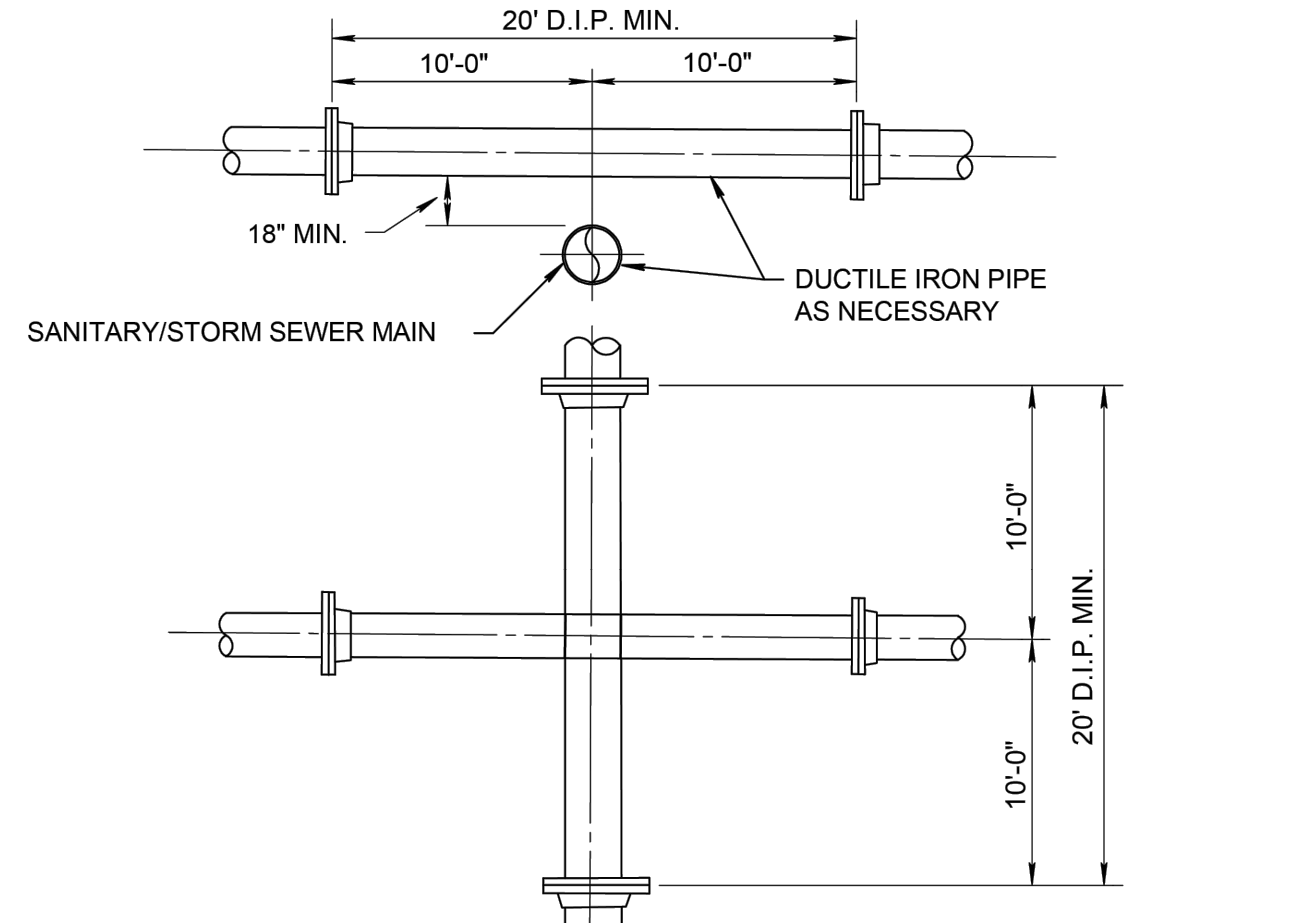


- NOTES:**
- BOTH VALVES SHALL BE KEPT CLOSED UNTIL FILLING, FLUSHING, AND BACTERIOLOGICAL TESTING IS COMPLETED AND APPROVED.
 - GAUGE AND RISER TO BE REMOVED AFTER PRESSURE TEST.
 - CITY SHALL BE NOTIFIED BEFORE FILLING AND FLUSHING.
 - AFTER RELEASE FROM THE HEALTH DEPARTMENT, BOTH VALVES TO BE LEFT OPEN WITH VALVE BOX INSTALLED ON BOTH VALVES.
 - PRESSURE TEST PUMP MAY CONNECT TO SERVICE LINE, FIRE HYDRANTS OR BLOWOFF. NO EXTRA TAPS ARE PERMITTED SOLELY FOR TESTING PURPOSES UNLESS PRECEDING ARE NOT PRESENT IN TEST SECTION.
 - TAPPING SADDLE OR SLEEVE (PER CURRENT CITY PRODUCT LIST) IS REQUIRED ON EXISTING MAIN.
 - SETUP FOR ALL DOUBLE VALVE CONNECTIONS TO INCLUDE ATMOSPHERE VENTS AS SHOWN ABOVE.
 - OUTLET ON VENT TO ATMOSPHERE A MINIMUM 24" ABOVE EXISTING GRADE.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

FILL & FLUSH DETAIL

DATE: 10-04-2024
PW 1.0

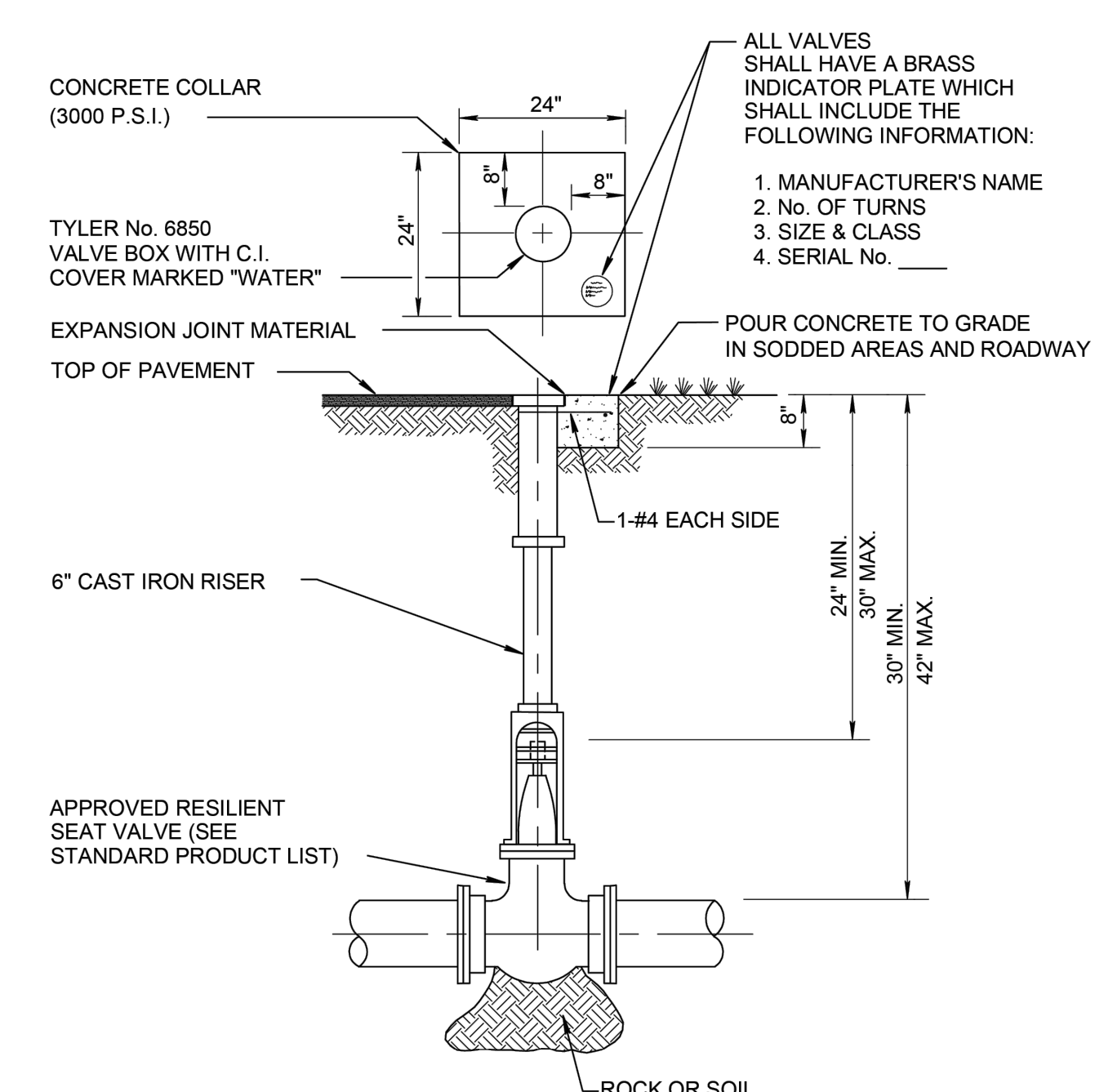


- NOTES:**
- STORM AND SANITARY SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM POINT OF CROSSING WITH NO LESS THAN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.I.P. AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER A WATER MAIN, THE CRITERIA FOR MINIMUM 18" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT AS STARTED ABOVE, SHALL BE REQUIRED AND BOTH PIPES SHALL BE CLASS 350 D.I.P. IRRESPECTIVE OF SEPARATION. D.I.P. IS NOT REQUIRED FOR STORM SEWERS.
 - MAINTAIN (10) FEET HORIZONTAL DISTANCE BETWEEN WATER MAIN AND STORM OR SANITARY SEWER MAIN, AS A MINIMUM.
 - FORCE MAIN CROSSING WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND THE OUTSIDE OF THE WATER MAIN WITH WATER MAIN CROSSING OVER FORCE MAIN.
 - SEWER SERVICE LATERALS SHALL CROSS UNDER WATERMAINS WITH A MINIMUM VERTICAL SEPARATION OF EIGHTEEN (18) INCHES. IF EIGHTEEN (18) INCHES VERTICAL SEPARATION CANNOT BE MAINTAINED, THEN THE WATERMAIN SHALL BE D.I.P. AND THE SANITARY LATERAL C-900 SDR18 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 WATERMAIN SHALL BE D.I.P. AND THE SEWER LATERAL SHALL BE C-900 SDR-18 OR BETTER.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

WATER MAIN & SEWER CONFLICTS

DATE: 10-04-2024
PW 2.0

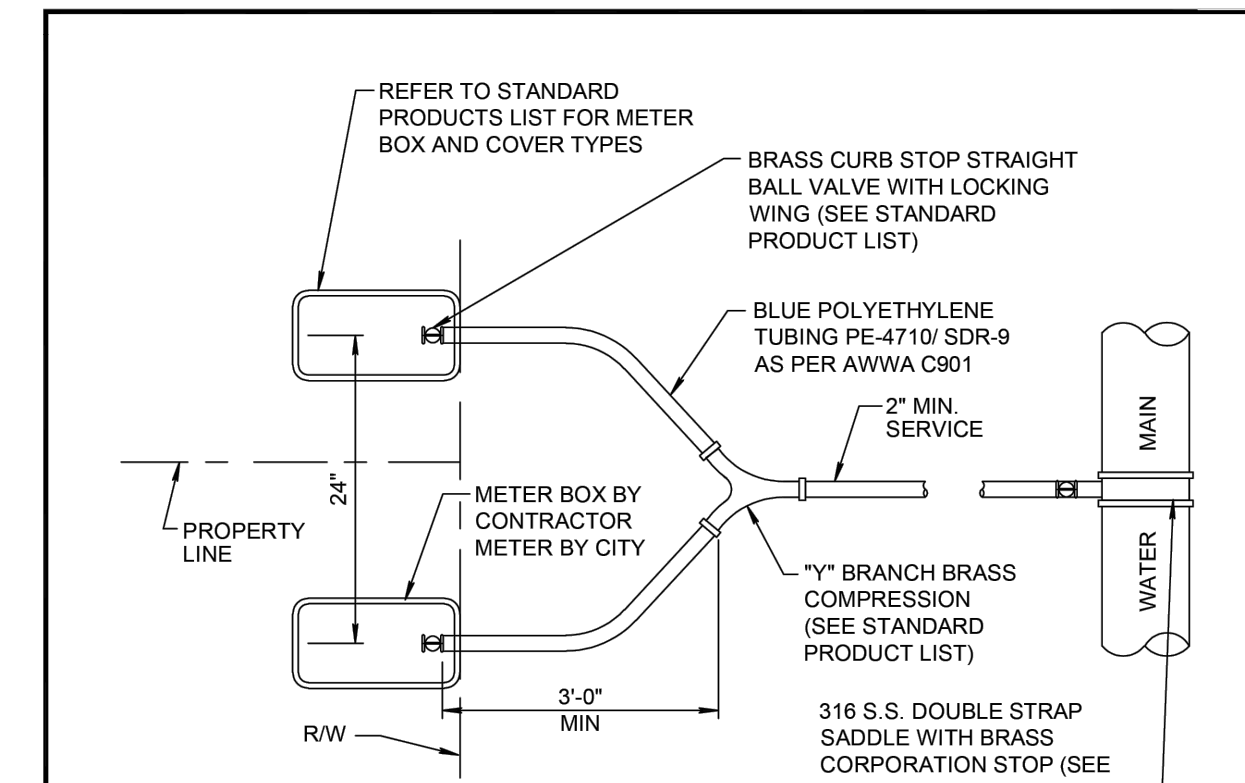


- NOTES:**
- WHEN VALVE IS DEEPER THAN 30" AN EXTENSION WITH UNIVERSAL JOINT SHALL BE REQUIRED TO BRING OPERATING NUT 24"-30" BELOW FINISHED GRADE EXTENSION BOLTS & NUTS SHALL BE 316 STAINLESS STEEL. A 316 STAINLESS STEEL CENTERING PLATE SHALL ALSO BE REQUIRED.
 - AT DEAD END OR WHERE MAIN LINES CHANGE DIRECTION, VALVES SHALL BE RESTRAINED USING MECHANICAL JOINT RESTRAINTS, TIE RODS, OR OTHER RESTRAINT APPROVED BY UTILITIES DEPARTMENT (NO THRUST BLOCKS ALLOWED).

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL GATE VALVE DETAIL
4" THRU 12"

DATE: 10-04-2024
PW 3.0



- NOTES:**
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" ON CENTER.
 - SERVICE LINES SHALL NOT BE PLACED UNDER DRIVEWAYS.
 - ALL METERS REQUIRE A LOCKING BRASS CURB STOP WITH LOCK WING (1" MIN.).
 - NO FITTINGS BETWEEN CORPORATION STOP AND BRANCH ASSEMBLY.
 - MAXIMUM SERVICE LENGTH IS 100' TO METER.
 - CASING PIPE I.D. SHALL BE SERVICE O.D. PLUS 1" MINIMUM.
 - MINIMUM BEND RADIUS ON SERVICES SHALL BE 4" ON ALL SERVICES BEHIND METER.
 - METER SIZE WILL BE DETERMINED BY PUBLIC UTILITIES DEPT. UPON APPLICATION FOR SERVICE.
 - ALL VALVES TO BE BALL VALVES.
 - METER BOX SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
 - ABOVE CONFIGURATION APPLIES TO PLACEMENT AT SINGLE FAMILY RESIDENCES. FOR DOUBLE SERVICES PLACED AT MULTI-FAMILY RESIDENCES THE TWO SERVICES SHALL BE PLACED WITHIN A DOUBLE METER BOX.
 - ALL EXISTING SERVICES TO BE FIELD VERIFIED BY BUILDER/CONTRACTOR/DEVELOPER. IF EXISTING SERVICE IS GALVANIZED, BUILDER/CONTRACTOR/DEVELOPER SHALL REPLACE WITH POLYETHYLENE PIPING FROM MAIN TO METER.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL DOUBLE SERVICE CONNECTION

DATE: 10-04-2024
PW 14.0

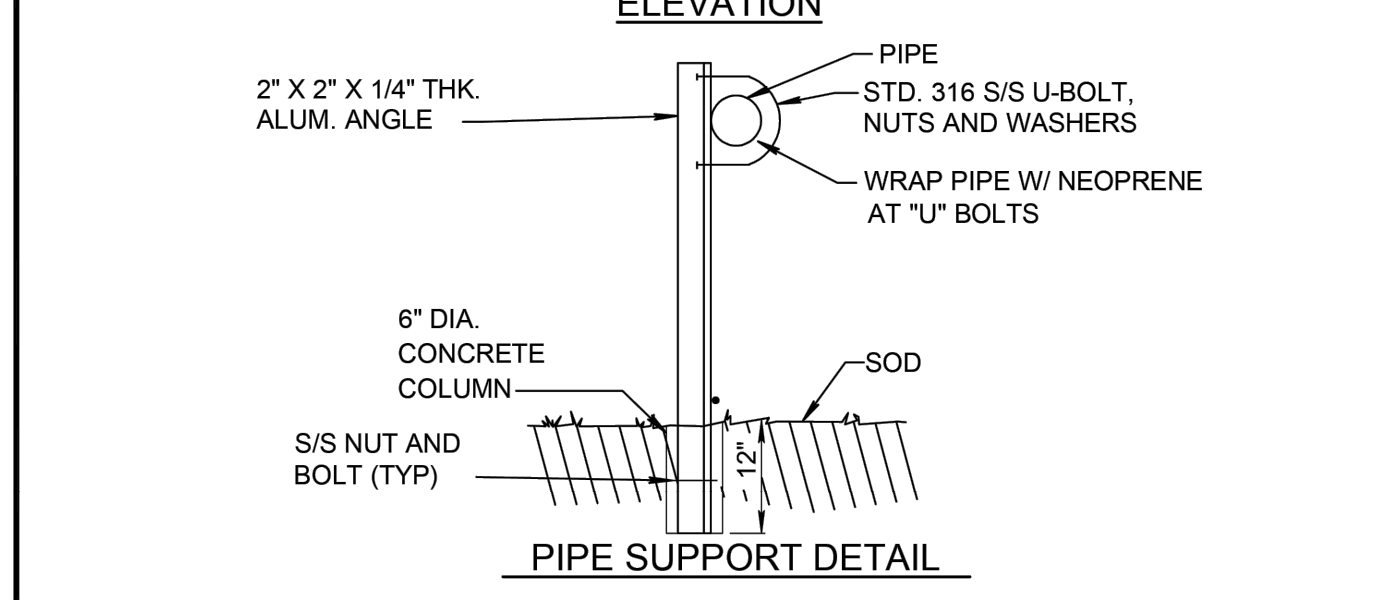
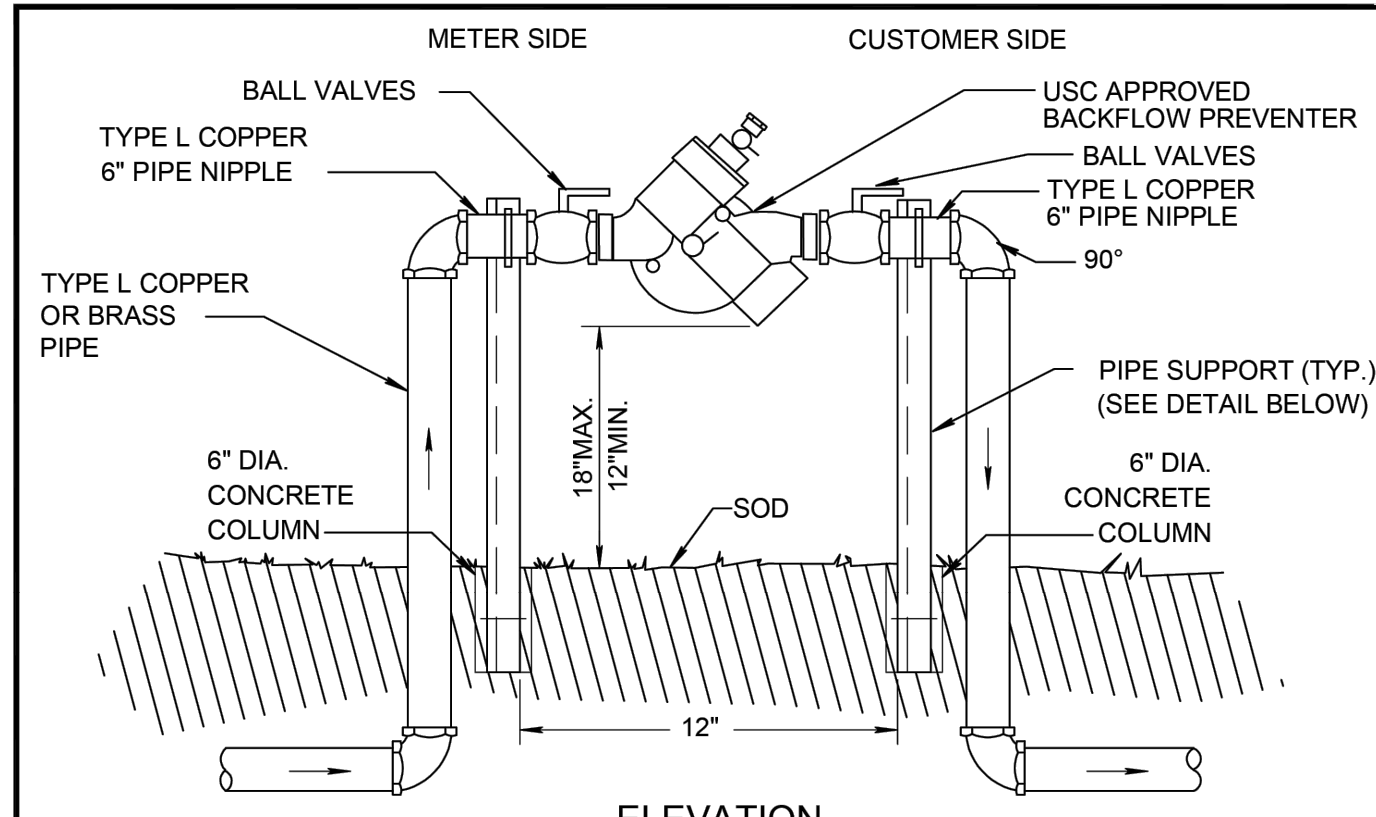
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - SURVEYING
LANDSCAPE ARCHITECTURE - SUITE 100
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

2419 N FEDERAL HWY
WATER DISTRIBUTION & SANITARY SEWER DETAILS
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./PG. ---
SCALE N/A

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-21
OF 27 SHEETS

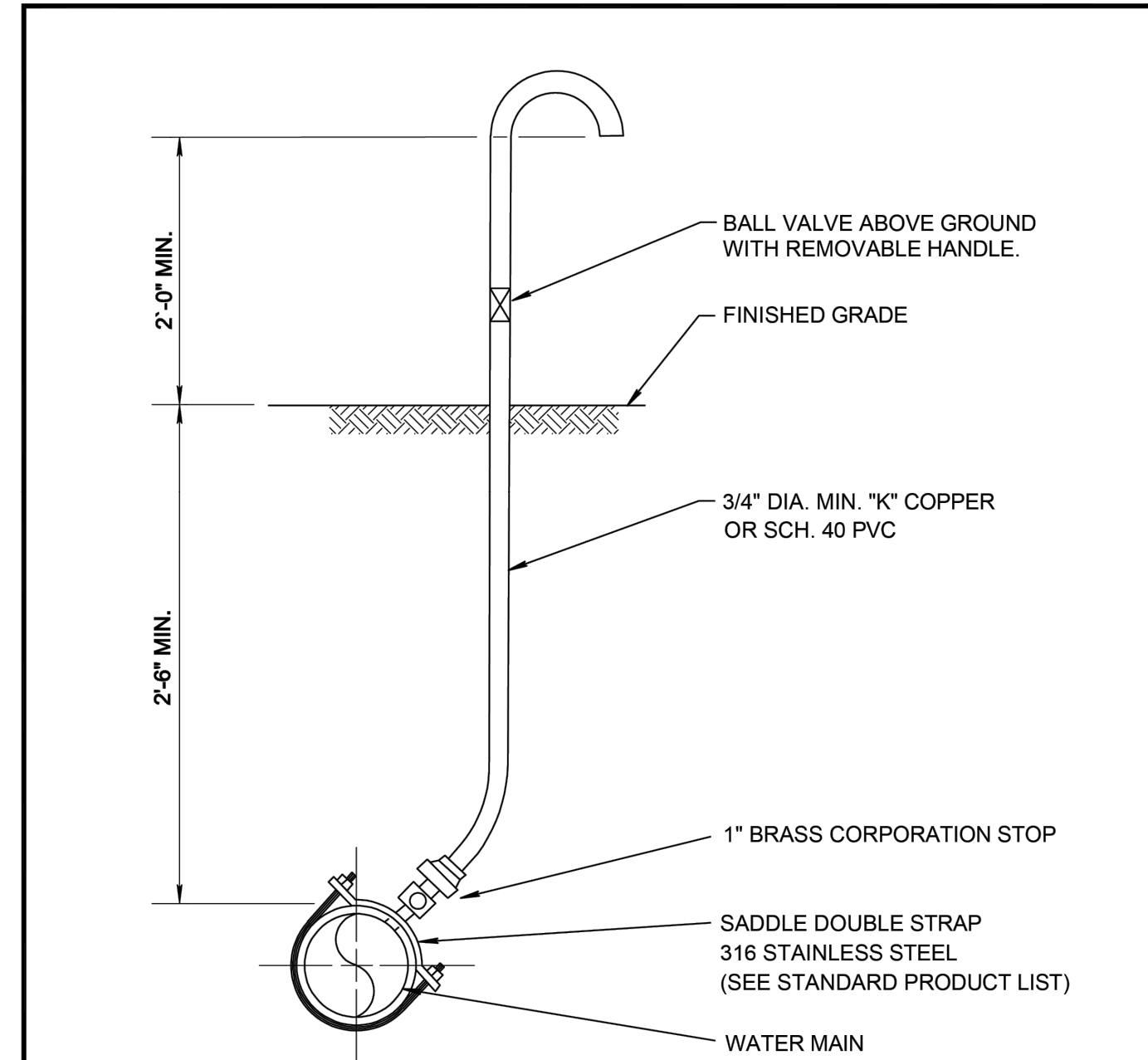


- NOTES:**
- FOR ALL SERVICES LESS THAN OR EQUAL TO 2" DIA.
 - ABOVE GRADE PIPING SHALL BE BRASS OR TYPE "L" COPPER OR BRASS TUBING.
 - ALL COPPER JOINTS SHALL BE MADE WITH 95/5 SOLDER.
 - USC APPROVED RPZ BACKFLOW PREVENTER IS REQUIRED IN ACCORDANCE WITH CITY OF DELRAY BEACH CODE OF ORDINANCES TITLE V, CHAPTER 52.83.
 - USC APPROVED RPZ BACKFLOW PREVENTER IS REQUIRED FOR ALL COMMERCIAL PROPERTIES AND ALL RESIDENTIAL PROPERTIES WITH FIRE SPRINKLER SYSTEMS.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

REDUCED PRESSURE ZONE BACKFLOW PREVENTER

DATE: 10-04-2024
PW 16.0

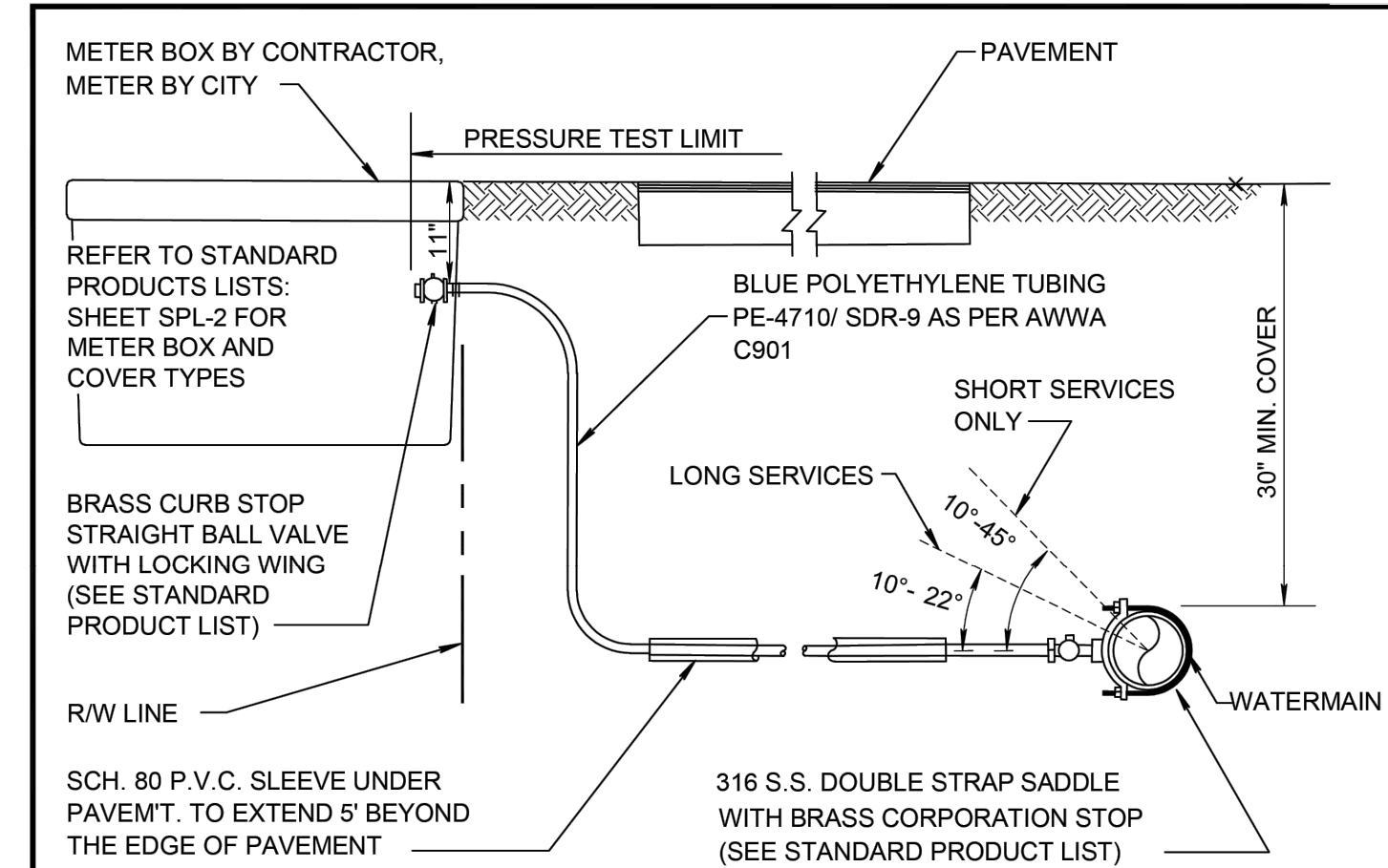


- NOTES:**
- SAMPLE POINT SHOULD BE AT SERVICE LINE OR FIRE HYDRANT IF POSSIBLE.
 - IF SAMPLE POINT IS NOT AT SERVICE LINE OR FIRE HYDRANT, CORP. STOP SHALL BE SHUT OFF AT MAIN AND ALL TUBING SHALL BE REMOVED, AND CORP. STOP SHALL HAVE A BRASS PLUG OR CAP INSTALLED AFTER RELEASE OF WATER MAIN BY PALM BEACH COUNTY HEALTH DEPARTMENT.
 - IF AT ALL POSSIBLE SAMPLE POINT SHALL NOT BE LOCATED IN A TRAFFIC AREA.
 - SAMPLE POINTS SHALL KEEP RUNNING UNTIL PALM BEACH COUNTY HEALTH DEPARTMENT RELEASE AND ALL MAIN LINE VALVES ARE OPENED.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL SAMPLE POINT

DATE: 10-04-2024
PW 10.0



- NOTES:**
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" ON CENTER.
 - SERVICE LINES SHALL NOT BE PLACED UNDER DRIVEWAYS.
 - ALL METERS REQUIRE A LOCKING BRASS CURB STOP WITH LOCK WING (1" MIN.).
 - NO FITTINGS BETWEEN CORPORATION STOP AND BRANCH ASSEMBLY.
 - MAXIMUM SERVICE LENGTH IS 100' TO METER.
 - CASING PIPE I.D. SHALL BE SERVICE O.D. PLUS 1" MINIMUM.
 - MINIMUM BEND RADIUS ON SERVICES SHALL BE 14" ON ALL SERVICES BEHIND METER.
 - METER SIZE WILL BE DETERMINED BY PUBLIC UTILITIES DEPT. UPON APPLICATION FOR SERVICE.
 - ALL VALVES TO BE BALL VALVES.
 - METER BOX SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
 - ALL SERVICES UNDER ROADWAYS ARE TO BE INSTALLED BY TRENCHLESS METHOD, UNLESS OTHERWISE APPROVED.
 - ALL EXISTING SERVICES TO BE FIELD VERIFIED BY BUILDER/CONTRACTOR/ DEVELOPER; IF EXISTING SERVICE IS GALVANIZED, BUILDER/CONTRACTOR/ DEVELOPER SHALL REPLACE WITH POLYETHYLENE PIPING FROM MAIN TO THE METER.
 - ALL WATER SERVICE SHALL BE A MINIMUM OF 2".
 - WATER METERS SHALL BE LOCATED OUTSIDE ANY DRIVEWAYS BY 2'

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL URBAN/REDEVELOPMENT AREA SERVICE CONNECTION

DATE: 10-04-2024
PW 12.0

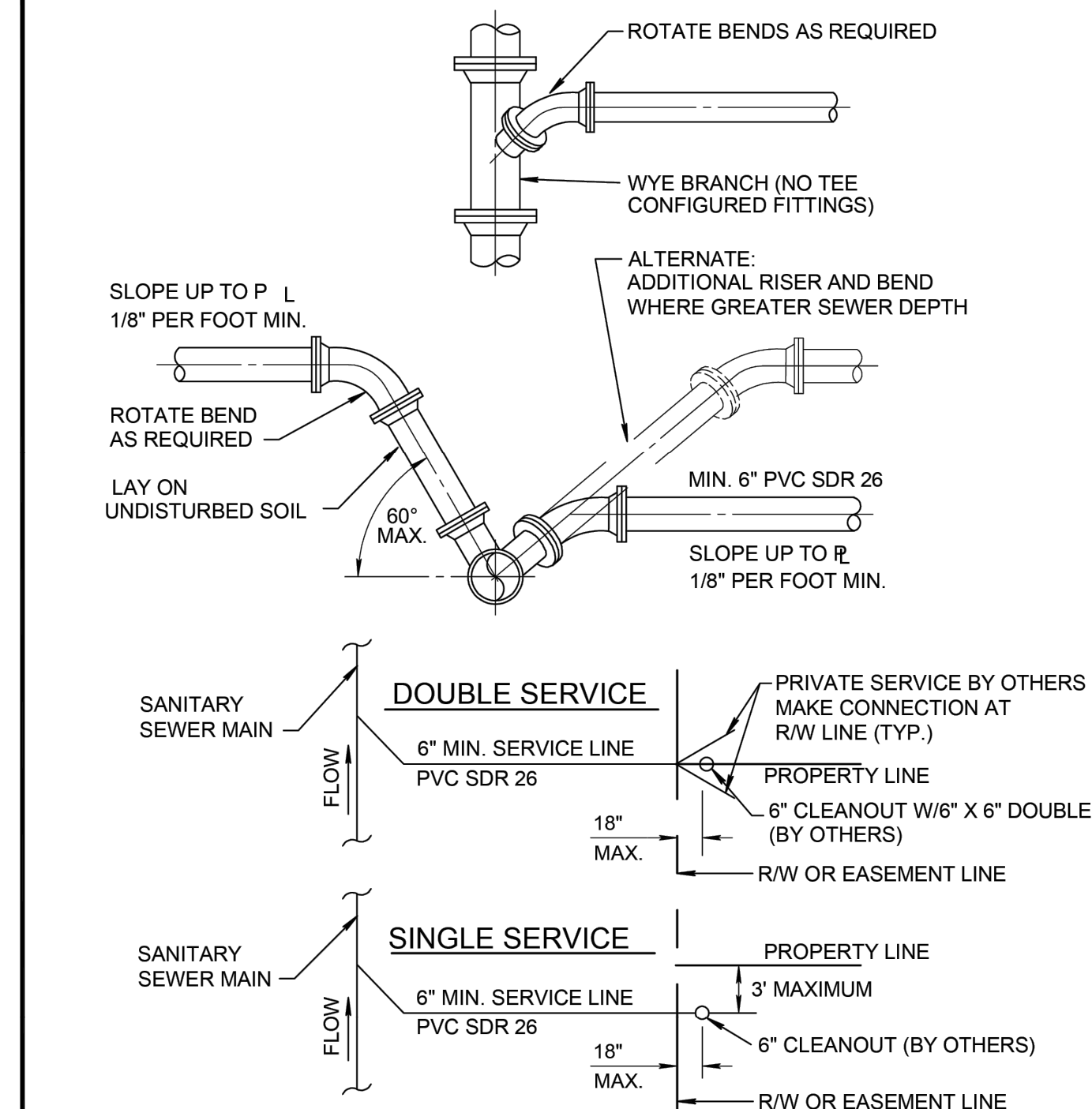
GRAVITY SEWER NOTES

- MANHOLES SHALL BE INSPECTED BY THE ENGINEER BEFORE PLACEMENT AND SURFACE TREATMENT.
- ALL OPENINGS IN PRECAST MANHOLES SHALL BE CAST AT TIME OF MANUFACTURE. CONNECTIONS TO EXISTING MANHOLES SHALL BE CORE ENTRY ONLY.
- ALL MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE.
- (PVC) GRAVITY SEWER PIPE SHALL CONFORM TO ASTM D 3034, SDR 26, LATEST REVISIONS, WITH PUSH ON RUBBER GASKET JOINTS.
- (DIP) GRAVITY SEWER PIPE SHALL BE CLASS 350, 401 EPOXY LINED OR AS OTHERWISE APPROVED BY UTILITIES DEPARTMENT.
- NO SERVICE CONNECTIONS, WYES, SERVICES OR VALVES WILL BE PERMITTED IN RESIDENTIAL DRIVEWAYS.
- MANHOLE FRAMES SHALL BE ATTACHED TO THE PRECAST STRUCTURE WITH A MINIMUM OF TWO 3/4" 316 STAINLESS STEEL BOLTS, NUTS AND WASHERS. FRAMES SHALL BE SEALED WITH A MINIMUM OF TWO 1/2" BEADS OF RAM-NEK CAULKING.
- TRENCHES SHALL BE DE-WATERED TO ENABLE PIPE AND APPURTENANCES TO BE INSTALLED FREE OF WATER ON UNDISTURBED SOIL. IF UNSUITABLE SUBSURFACE MATERIAL IS ENCOUNTERED, EXCAVATE EXTRA 6" AND BACKFILL WITH 3/4" GRAVEL.
- PVC SHALL BE LAID IN STRICT CONFORMANCE TO MANUFACTURER'S SPEC (JOHNS MANVILLE RING TITE PVC PIPE INSTALLATION GUIDE OR EQUAL). BACKFILLING OF UTILITY TRENCHES WILL NOT BE ALLOWED UNTIL INSPECTED BY THE ENGINEER.
- BACKFILL MATERIAL FOR SEWER MAIN AND LINES SHALL BE NON-COHESIVE, NON PLASTIC MATERIAL FREE OF ALL DEBRIS, LUMPS AND ORGANIC MATTER. BACKFILL MATERIAL PLACED WITHIN ONE (1) FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO (2) INCHES IN DIAMETER (1" FOR PVC PIPE) AND NO STONES LARGER THAN SIX (6) INCHES IN DIAMETER WILL BE PERMITTED IN ANY BACKFILL.
- ALL EXCAVATION IN EXISTING RIGHT OF WAY SHALL BE BACKFILLED AND STABILIZED AT THE END OF EACH DAY TO PERMIT PEDESTRIAN AND VEHICULAR TRAFFIC PRIOR TO THE CONTRACTOR LEAVING THE SITE.
- WHERE SEWER IS NOT WITHIN PUBLIC R/W, IT IS TO BE LOCATED IN A 12' UTILITY EASEMENT. CITY MAINTENANCE RESPONSIBILITY IS MANHOLE TO MANHOLE ONLY.
- UPON COMPLETION OF THE WORK AND PRIOR TO PLACEMENT OF ASPHALT A VISUAL INSPECTION BY THE ENGINEER SHALL BE MADE OF THE COMPLETED SYSTEM ALONG WITH A LOW PRESSURE AIR TEST, AFTER ROCK BASE FINISHED & PRIMED, OR 1ST LIFT OF ASPHALT PLACED. AFTER ALL OTHER TESTING HAS BEEN COMPLETED, A CD VIDEO RECORDING SHALL BE MADE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER, BEFORE THE LENGTHS ARE ACCEPTED FOR MAINTENANCE.
- EACH LINE SEGMENT SHALL BE LAMPED TO DETERMINE PROPER ROUNDNESS.
- COMPLETE "AS BUILT" INFORMATION RELATIVE TO MANHOLES, VALVES, SERVICES FITTINGS, PIPE LENGTHS, INVERTS AND SLOPES SHALL BE ACCURATELY RECORDED & SUBMITTED TO THE ENGINEER CITY SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
- AT THE END OF THE ONE (1) YEAR WARRANTY PERIOD THE DEVELOPER/CONTRACTOR WILL T.V. INSPECT, AIR TEST EVERY JOINT, AND CHECK MANHOLE JOINTS AND CONNECTIONS TO DETERMINE IF REPAIRS ARE NECESSARY BEFORE THE WARRANTY BOND IS RELEASED.
- NO PROPOSED STRUCTURES SHALL BE INSTALLED WITHIN A HORIZONTAL DISTANCE OF 10-FEET FROM ANY EXISTING OR PROPOSED SANITARY SEWER FACILITY.
- ANY PIPE INTRODUCED INTO AN EXISTING MANHOLE MUST HAVE CARBOLINE BITUMASTIC 300M OR APPROVED EQUAL APPLIED EXTERNALLY WITHIN A MINIMUM 2-FOOT RADIUS OF OPENING AND THE ENTIRE MANHOLE MUST HAVE SEWPER COAT OR APPROVED EQUAL APPLIED INTERNALLY.
- ANY REHABILITATION TO AN EXISTING MANHOLE MUST BE INTERNALLY STRIPPED AND LINED WITH SEWPER COAT OR APPROVED EQUAL.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

GRAVITY SEWER NOTES

DATE: 10-04-2024
WW 1.0



- NOTE:**
- SERVICE LATERALS SHALL TERMINATE INSIDE PROPERTY LINE A DEPTH OF 3 FEET AND MARKED WITH A 2"x4" TREATED STAKE.
 - CLEANOUT INSTALLATION SHALL BE PROPERTY OWNERS RESPONSIBILITY AND SHALL BE INSTALLED BY LICENSED PLUMBER.
 - SEE DETAIL PW 2.0 FOR SEPARATION REQUIREMENTS.

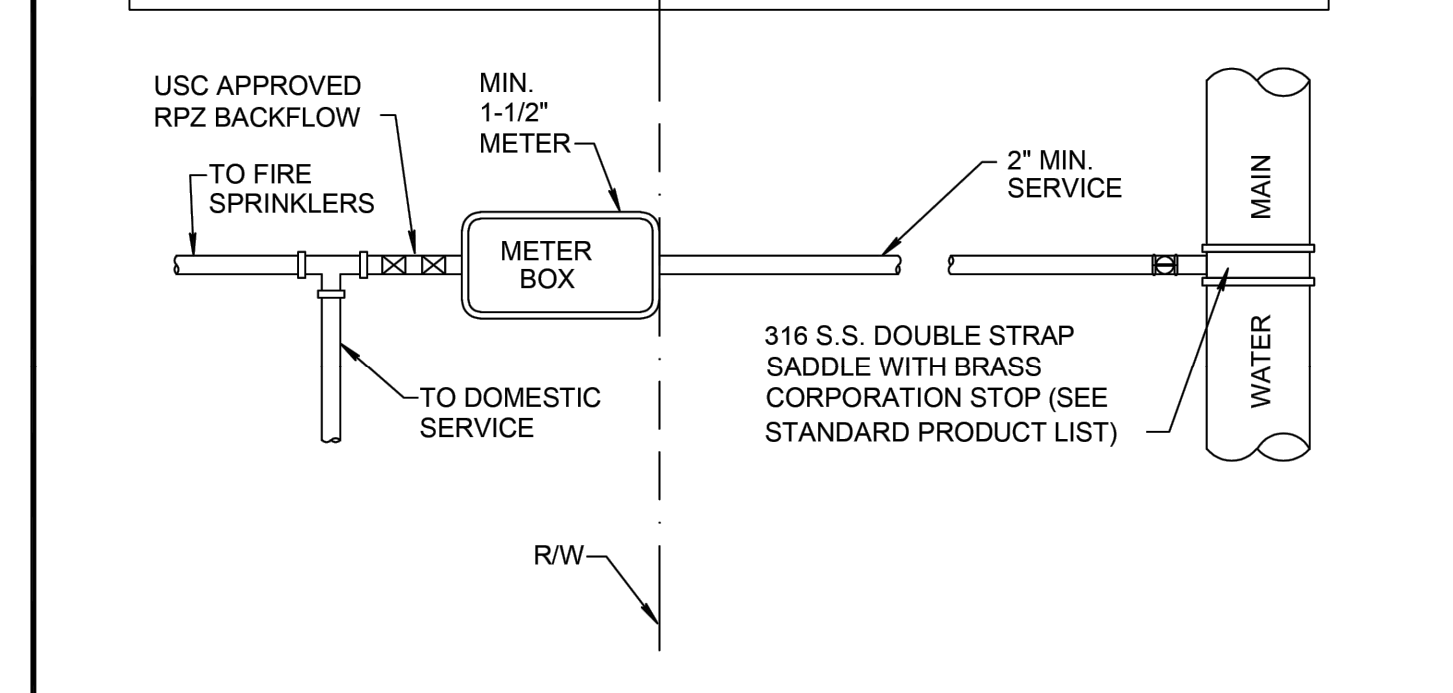
CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SEWER SERVICE CONNECTION

DATE: 10-04-2024
WW 8.0

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



- NOTES:**
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" ON CENTER.
 - SERVICE LINES SHALL NOT BE PLACED UNDER DRIVEWAYS.
 - ALL SERVICE LINES REQUIRE A LOCKING BRASS CURB STOP WITH LOCK WING (1" MIN.).
 - NO FITTINGS BETWEEN CORPORATION STOP AND BRANCH ASSEMBLY.
 - MAXIMUM SERVICE LENGTH IS 100' TO METER.
 - CASING PIPE I.D. SHALL BE SERVICE O.D. PLUS 1" MINIMUM.
 - MINIMUM BEND RADIUS ON SERVICES SHALL BE 14" ON ALL SERVICES BEHIND METER.
 - ALL VALVES TO BE BALL VALVES.
 - METER BOX SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
 - ALL EXISTING SERVICES TO BE FIELD VERIFIED BY BUILDER/ CONTRACTOR/DEVELOPER; IF EXISTING SERVICE IS GALVANIZED, BUILDER/CONTRACTOR/DEVELOPER SHALL REPLACE WITH POLYETHYLENE PIPING FROM MAIN TO METER.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL FIRE SERVICE CONNECTION

DATE: 09-15-2021
PW 13.0

REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/08/25	RCW
REVISIONS	DATE	BY
FILE NAME 10908ENG.dwg		

ITEM	BOX COMPLETE EXTENSION IN INCHES	WT	TOP SECTION WILD LENGTH	WT	BOTTOM LENGTH	WT	PIECES PER PKG.
461-S	19-22	60	10	35	15	25	
462-S	27-32	70	10	35	24	35	
563-S	27-37	80	18	45	24	35	
563-S	33-43	85	18	45	30	40	20
564-S	38-50	90	18	45	36	40	20
662-S	36-62	105	28	65	30	40	20
664-S	38-60	110	28	65	36	40	20
666-S	51-71	135	28	65	*48	70	20
668-S	62-82	145	28	65	*60	80	20

*MAY BE FURNISHED IN TWO PIECES SCREWED TOGETHER TO MAKE THE LENGTH REQUIRED.

5 1/4" DROP LID VARIABLE SKIRT DEPTHS

ITEM	HEIGHT INCREASE	WT.	ITEM	HEIGHT INCREASE	WT.
58	14	25	60	24	35
59	18	30	60	35	45

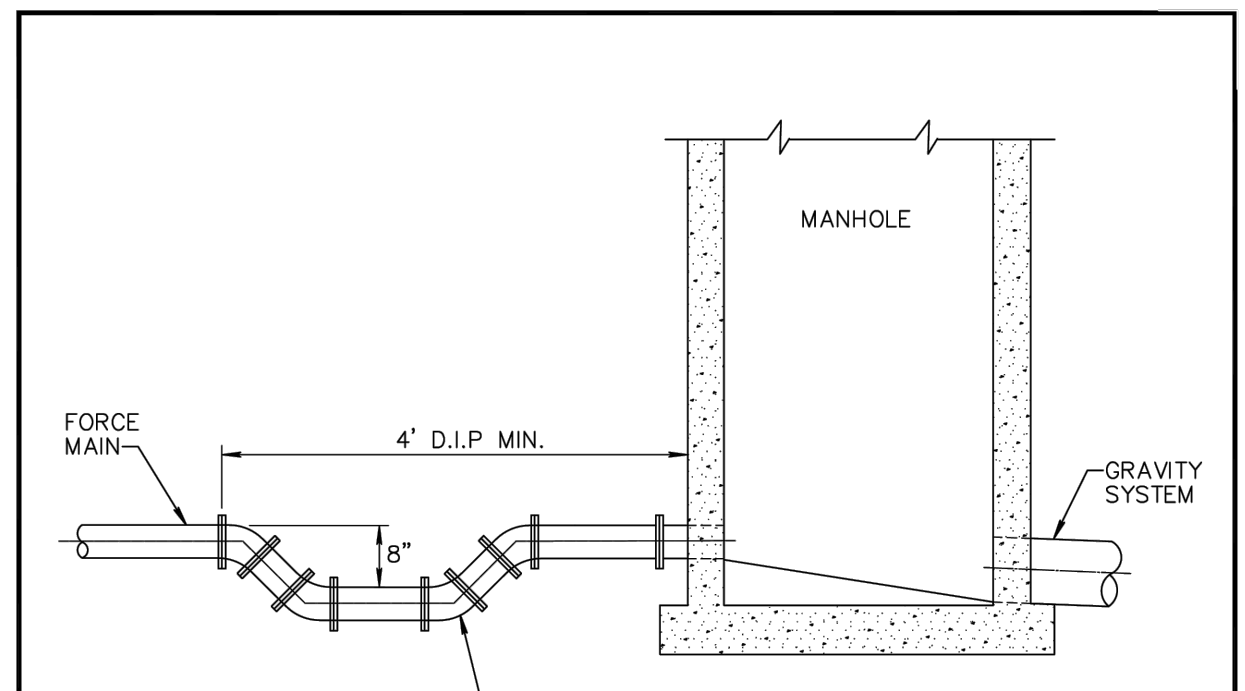
THESE EXTENSIONS ALSO FIT SERIES 6600 THREE-PIECE VALVE BOXES.

NOTE: LOCKING LIDS WILL NOT BE ACCEPTED.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

CAST IRON VALVE BOXES TWO PIECE

DATE: 10-04-2024
PW 4.0



- NOTES:**
- FORCE MAIN TO ENTER MANHOLE AS CLOSE AS POSSIBLE TO 180° TO GRAVITY OUTLET.
 - THE INVERT LEVEL OF FORCE MAIN AT POINT OF ENTRY SHALL BE 6" ABOVE HIGHEST INVERT OF MANHOLE.
 - CORE ENTRY ONLY INTO EXISTING MANHOLES.
 - IF ELEVATION DROP IS REQUIRED TO ENTER MANHOLE, APPROVAL SHALL BE OBTAINED FROM ENGINEER.
 - FLOW CHANNEL REQUIRED (SEE DETAIL WW 5.0).
 - PAINT MANHOLE OUTSIDE WITH ONE (1) COAT RED CARBOLINE BITUMASTIC 300M, THEN ONE (1) COAT BLACK 300M OR APPROVED EQUAL, 8-10 MILS D.F.T./COAT, FIRST COAT RED THEN BLACK.
 - INSIDE SHALL BE LINED WITH SEWPER COAT OR EQUAL SYSTEM AFTER PRESSURE WASHING.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

FORCE MAIN ENTERING MANHOLE

DATE: 09-15-2021
WW 7.0

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - SURVEYING
LANDSCAPE ARCHITECTURE - SUITE 100
7900 GLADES ROAD - BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

2419 N FEDERAL HWY
WATER DISTRIBUTION & SANITARY SEWER DETAILS
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. ---
SCALE N/A

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-22
OF 27 SHEETS

GRAVITY SEWER NOTES

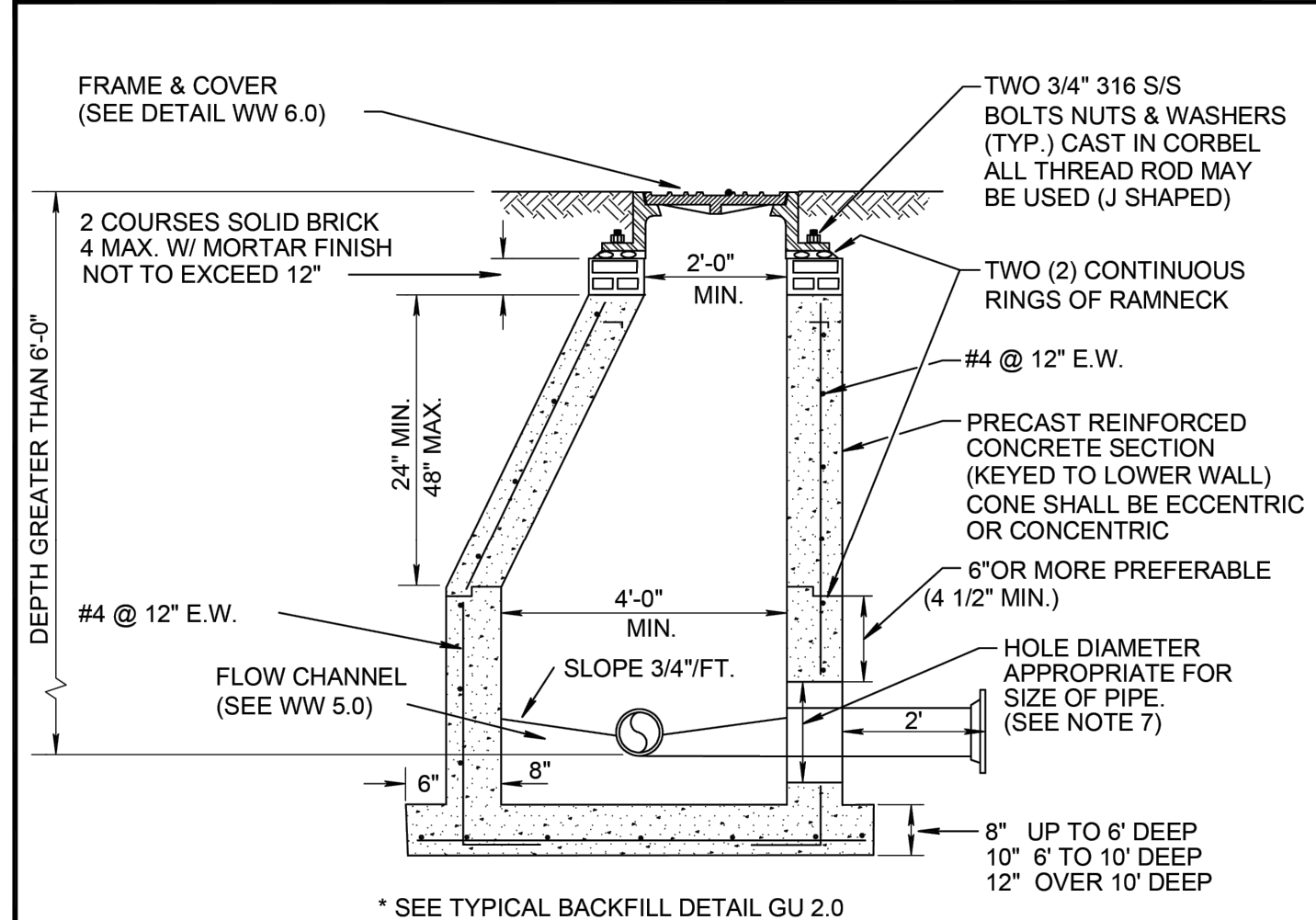
- MANHOLES SHALL BE INSPECTED BY THE ENGINEER BEFORE PLACEMENT AND SURFACE TREATMENT.
- ALL OPENINGS IN PRECAST MANHOLES SHALL BE CAST AT TIME OF MANUFACTURE. CONNECTIONS TO EXISTING MANHOLES SHALL BE CORE ENTRY ONLY.
- ALL MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE.
- (PVC) GRAVITY SEWER PIPE SHALL CONFORM TO ASTM D 3034, SDR 26, LATEST REVISIONS, WITH PUSH ON RUBBER GASKET JOINTS.
- (DIP) GRAVITY SEWER PIPE SHALL BE CLASS 350, 401 EPOXY LINED OR AS OTHERWISE APPROVED BY UTILITIES DEPARTMENT.
- NO SERVICE CONNECTIONS, WYES, SERVICES OR VALVES WILL BE PERMITTED IN RESIDENTIAL DRIVEWAYS.
- MANHOLE FRAMES SHALL BE ATTACHED TO THE PRECAST STRUCTURE WITH A MINIMUM OF TWO 3/4" 316 STAINLESS STEEL BOLTS, NUTS AND WASHERS. FRAMES SHALL BE SEALED WITH A MINIMUM OF TWO 1/2" BEADS OF RAM-NEK CAULKING.
- TRENCHES SHALL BE DE-WATERED TO ENABLE PIPE AND APPURTENANCES TO BE INSTALLED FREE OF WATER ON UNDISTURBED SOIL. IF UNSUITABLE SUBSURFACE MATERIAL IS ENCOUNTERED, EXCAVATE EXTRA 6" AND BACKFILL WITH 3/4" GRAVEL.
- PVC SHALL BE LAID IN STRICT CONFORMANCE TO MANUFACTURER'S SPEC (JOHNS MANVILLE RING TITE PVC PIPE INSTALLATION GUIDE OR EQUAL). BACKFILLING OF UTILITY TRENCHES WILL NOT BE ALLOWED UNTIL INSPECTED BY THE ENGINEER.
- BACKFILL MATERIAL FOR SEWER MAIN AND LINES SHALL BE NON-COHESIVE, NON PLASTIC MATERIAL FREE OF ALL DEBRIS, LUMPS AND ORGANIC MATTER. BACKFILL MATERIAL PLACED WITHIN ONE (1) FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO (2) INCHES IN DIAMETER (1" FOR PVC PIPE) AND NO STONES LARGER THAN SIX (6) INCHES IN DIAMETER WILL BE PERMITTED IN ANY BACKFILL.
- ALL EXCAVATION IN EXISTING RIGHT OF WAY SHALL BE BACKFILLED AND STABILIZED AT THE END OF EACH DAY TO PERMIT PEDESTRIAN AND VEHICULAR TRAFFIC PRIOR TO THE CONTRACTOR LEAVING THE SITE.
- WHERE SEWER IS NOT WITHIN PUBLIC R.W. IT IS TO BE LOCATED IN A 12' UTILITY EASEMENT. CITY MAINTENANCE RESPONSIBILITY IS MANHOLE TO MANHOLE ONLY.
- UPON COMPLETION OF THE WORK AND PRIOR TO PLACEMENT OF ASPHALT A VISUAL INSPECTION BY THE ENGINEER SHALL BE MADE OF THE COMPLETED SYSTEM ALONG WITH A LOW PRESSURE AIR TEST, AFTER ROCK BASE FINISHED & PRIMED, OR 1ST LIFT OF ASPHALT PLACED. AFTER ALL OTHER TESTING HAS BEEN COMPLETED, A CD VIDEO RECORDING SHALL BE MADE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER, BEFORE THE LENGTHS ARE ACCEPTED FOR MAINTENANCE.
- EACH LINE SEGMENT SHALL BE LAMPED TO DETERMINE PROPER ROUNDNESS.
- COMPLETE "AS BUILT" INFORMATION RELATIVE TO MANHOLES, VALVES, SERVICES FITTINGS, PIPE LENGTHS, INVERTS AND SLOPES SHALL BE ACCURATELY RECORDED & SUBMITTED TO THE ENGINEER CITY SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR.
- AT THE END OF THE ONE (1) YEAR WARRANTY PERIOD THE DEVELOPER/CONTRACTOR WILL T.V. INSPECT, AIR TEST EVERY JOINT, AND CHECK MANHOLE JOINTS AND CONNECTIONS TO DETERMINE IF REPAIRS ARE NECESSARY BEFORE THE WARRANTY BOND IS RELEASED.
- NO PROPOSED STRUCTURES SHALL BE INSTALLED WITHIN A HORIZONTAL DISTANCE OF 10-FEET FROM ANY EXISTING OR PROPOSED SANITARY SEWER FACILITY.
- ANY PIPE INTRODUCED INTO AN EXISTING MANHOLE MUST HAVE CARBOLINE BITUMASTIC 300M OR APPROVED EQUAL APPLIED EXTERNALLY WITHIN A MINIMUM 2-FOOT RADIUS OF OPENING AND THE ENTIRE MANHOLE MUST HAVE SEWPER COAT OR APPROVED EQUAL APPLIED INTERNALLY.
- ANY REHABILITATION TO AN EXISTING MANHOLE MUST BE INTERNALLY STRIPPED AND LINED WITH SEWPER COAT OR APPROVED EQUAL.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

GRAVITY SEWER NOTES

DATE: 10-04-2024

WW 1.0



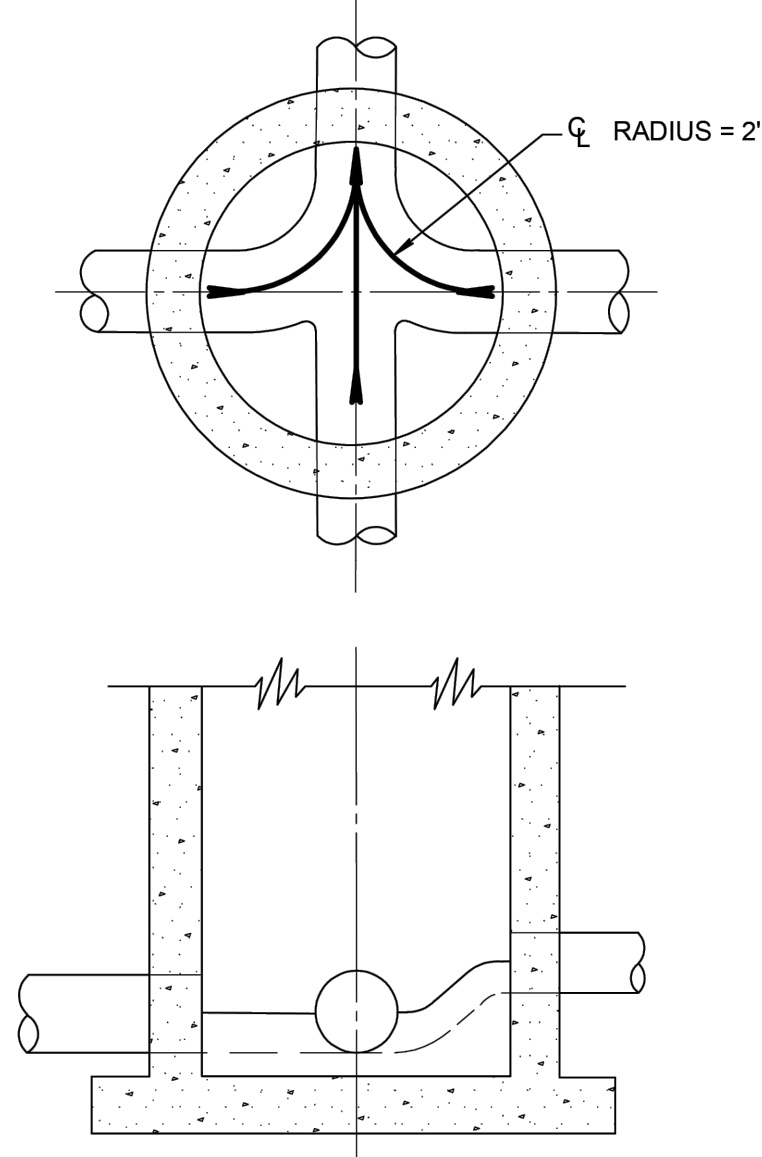
- NOTES:**
- PRECAST CONCRETE TYPE II 4000 P.S.I.
 - RAMNECK AT ALL RISER JOINTS WITH GROUT ON INSIDE AND OUTSIDE AT ALL RISER JOINTS.
 - ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
 - FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM.
 - LIFT HOLES SHALL BE FILLED WITH EXPANDABLE GROUT.
 - ALL PIPE HOLES SHALL BE PRECAST.
 - CAST IN PLACE FLEXIBLE PIPE-TO MANHOLE CONNECTOR (LOCK JOINT FLEXIBLE SLEEVE ELASTOMER EPDM OR RUBBER GASKET WITH GLASS FIBER REINFORCED NYLON 6/6 INTERNAL EXPANSION RING) INSTALLED PER MANUFACTURER.
 - PAINT MANHOLE INSIDE AND OUTSIDE WITH ONE (1) COAT RED CARBOLINE BITUMASTIC 300M THEN ONE (1) COAT BLACK OR APPROVED EQUAL, TO 8-10 MILS D.F.T/COAT, FIRST COAT RED THEN BLACK.
 - MANHOLE FABRICATION SHALL BE IN ACCORDANCE W/ ASTM C-478, LATEST STANDARD.
 - IF THE STRUCTURE IS INSTALLED IN WATER TABLE MUST HAVE BEDDING. (SEE DETAIL BEDDING WW 11.0)

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

STANDARD MANHOLE DETAIL

DATE: 10-04-2024

WW 2.0



- NOTES:**
- ALL INVERT CHANNELS ARE TO BE CONSTRUCTED FOR SMOOTH FLOW WITHOUT OBSTRUCTION OR TURBULENCE.
 - PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
 - SERVICE LATERALS SHALL NOT ENTER MANHOLES.
 - 2500 PSI CONCRETE ONLY PERMITTED AS FLOW CHANNEL BUILDUP.
 - NO DOG HOUSE MANHOLE ALLOWED.

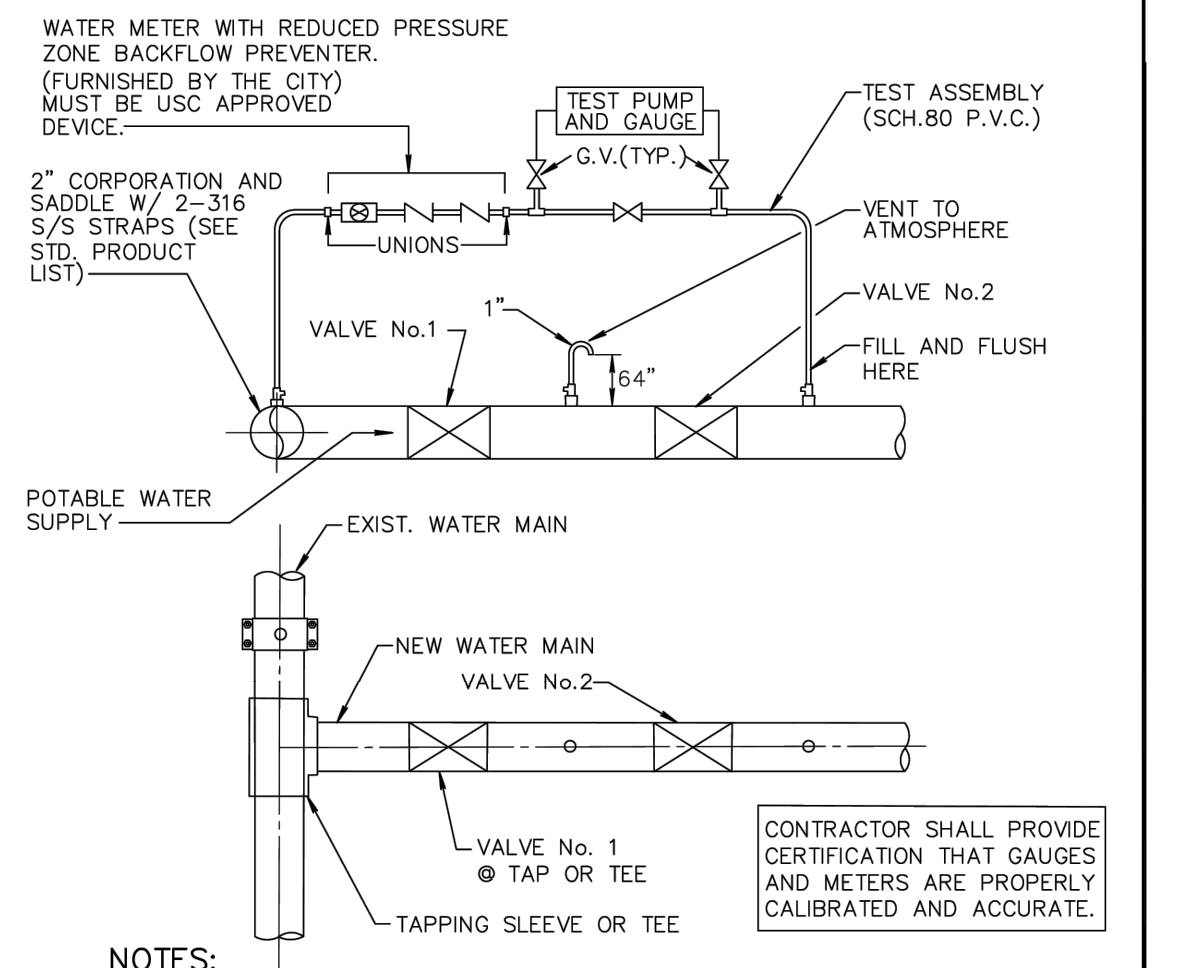
CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

INVERT FLOW CHANNELS

DATE: 10-04-2024

WW 5.0

REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/08/25	RCW
REVISIONS	DATE	BY
FILE NAME 10908ENG.dwg		



- NOTES:**
- BOTH VALVES SHALL BE KEPT CLOSED UNTIL FILLING, FLUSHING, AND BACTERIOLOGICAL TESTING IS COMPLETED AND APPROVED.
 - GAUGE AND RISER TO BE REMOVED AFTER PRESSURE TEST.
 - CITY SHALL BE NOTIFIED BEFORE FILLING AND FLUSHING.
 - AFTER RELEASE FROM THE HEALTH DEPARTMENT, BOTH VALVES TO BE LEFT OPEN WITH VALVE BOX INSTALLED ON BOTH VALVES.
 - PRESSURE TEST PUMP MAY CONNECT TO SERVICE LINE, FIRE HYDRANTS OR BLOWOFF. NO EXTRA TAPS ARE PERMITTED SOLELY FOR TESTING PURPOSES UNLESS PRECEDING ARE NOT PRESENT IN TEST SECTION.
 - TAPPING SADDLE OR SLEEVE (PER CURRENT CITY PRODUCT LIST) IS REQUIRED ON EXISTING MAIN.
 - SETUP FOR ALL DOUBLE VALVE CONNECTIONS TO INCLUDE ATMOSPHERE VENTS AS SHOWN ABOVE.
 - OUTLET ON VENT TO ATMOSPHERE A MINIMUM 24" ABOVE EXISTING GRADE.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

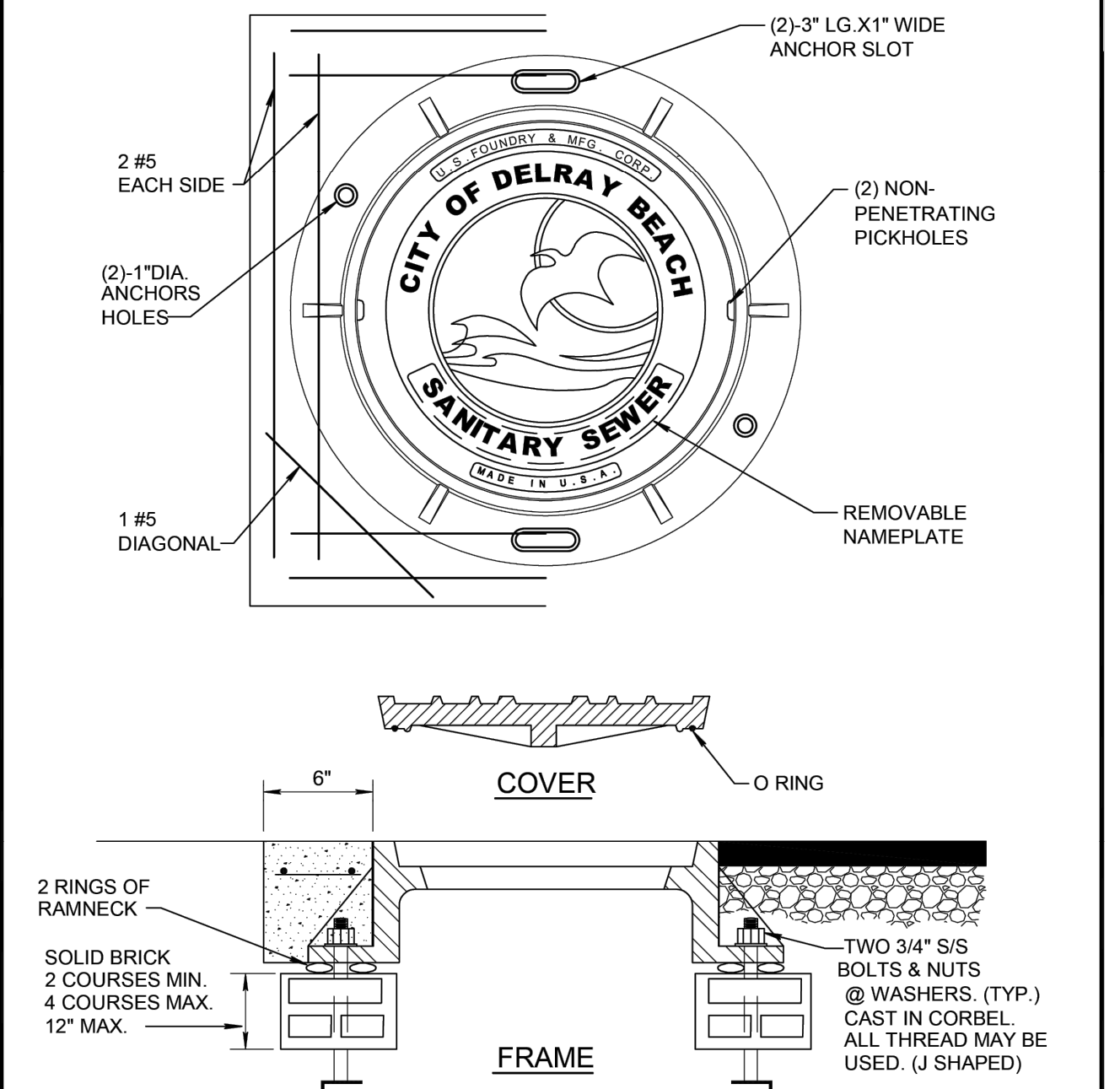
FILL & FLUSH DETAIL

DATE: 09-15-2021

PW 1.0

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



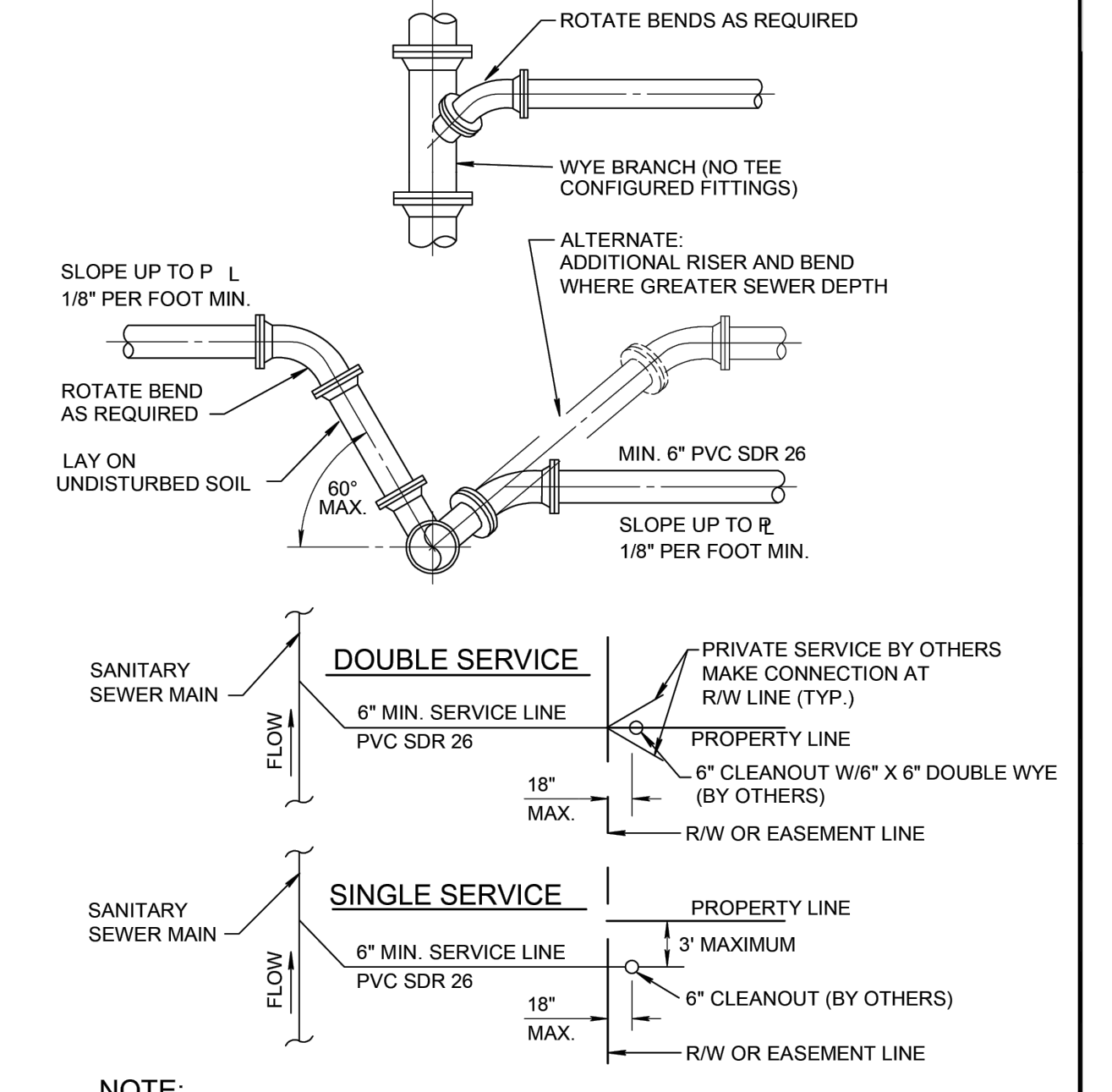
- NOTES:**
- COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
 - COVER SHALL BE U.S. MR-ORS AND RING SHALL BE USF 576 RING WITH BITUMASTIC COAL TAR.
 - MANHOLE ADJUSTING RINGS SHALL BE CAST IRON, USF TYPE MR.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SANITARY SEWER MANHOLE FRAME AND COVER

DATE: 10-04-2024

WW 6.0



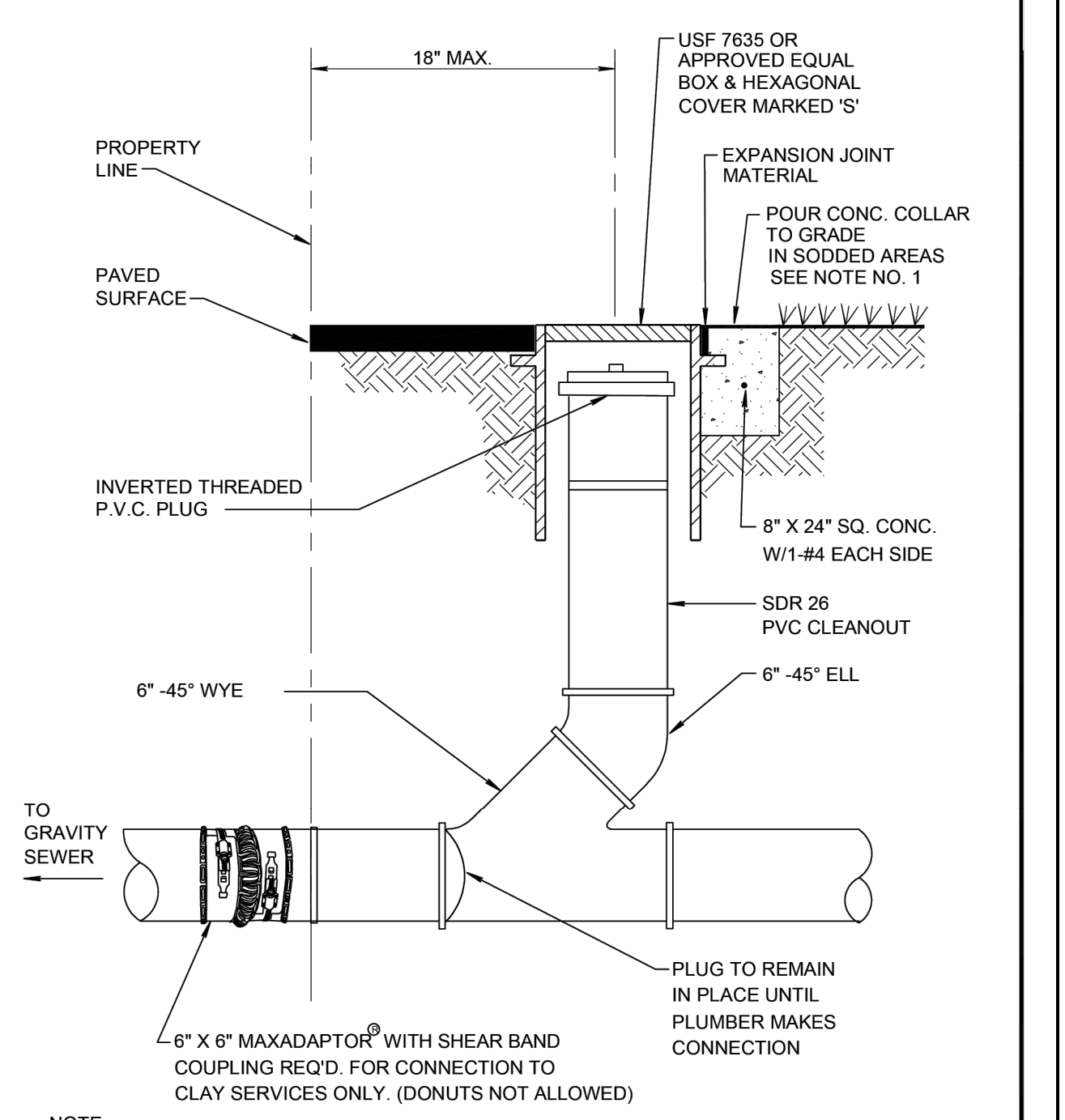
- NOTE:**
- SERVICE LATERALS SHALL TERMINATE INSIDE PROPERTY LINE A DEPTH OF 3 FEET AND MARKED WITH A 2" X 4" TREATED STAKE.
 - CLEANOUT INSTALLATION SHALL BE PROPERTY OWNERS RESPONSIBILITY AND SHALL BE INSTALLED BY LICENSED PLUMBER.
 - SEE DETAIL PW 2.0 FOR SEPARATION REQUIREMENTS.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

SEWER SERVICE CONNECTION

DATE: 10-04-2024

WW 8.0



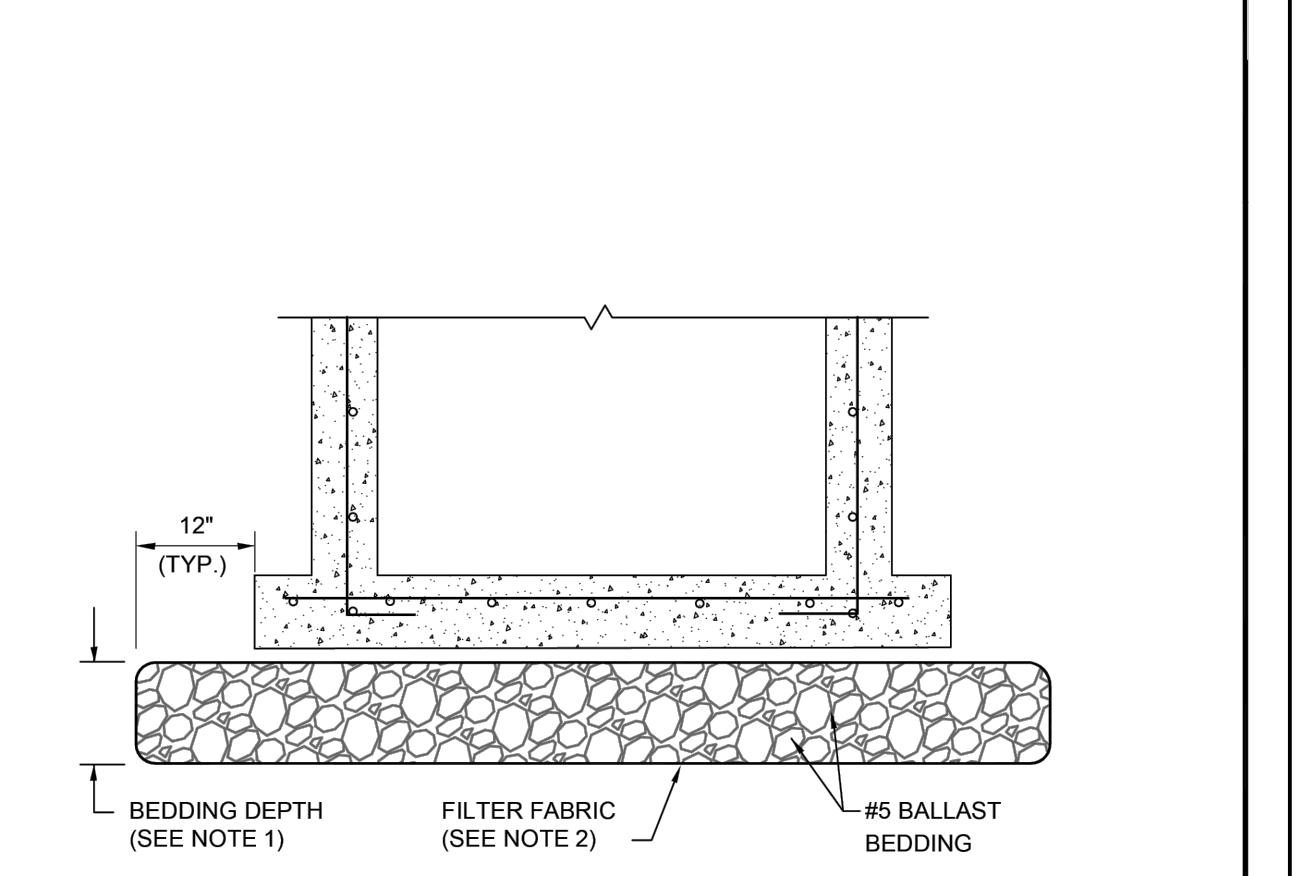
- NOTE:**
- ALL SANITARY SEWER LATERALS AND CLEANOUT TO BE MINIMUM 6" DIAMETER IN SIZE UNLESS OTHERWISE PREVIOUSLY APPROVED BY THE DEPARTMENT.
 - MINIMUM DEPTH OF SERVICE LATERAL SHALL BE 3 FEET.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

TYPICAL CLEANOUT

DATE: 10-04-2024

WW 10.0



- NOTES:**
- BEDDING DEPTH SHALL BE 10" UNDER DRAINAGE STRUCTURES AND 18" UNDER SANITARY STRUCTURES.
 - ROCK SHALL BE WRAPPED IN FILTER FABRIC THAT MEETS THE REQUIREMENTS OF F.D.O.T. SPECIFICATION SECTION 985.

CITY of DELRAY BEACH
PUBLIC WORKS DEPARTMENT
434 SOUTH SWINTON AVENUE, DELRAY BEACH, FLORIDA 33444

STANDARD BEDDING DETAIL

DATE: 10-04-2024

WW 11.0

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - SURVEYING
LANDSCAPE ARCHITECTURE - SUITE 100
7900 GLADES ROAD - BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
WATER DISTRIBUTION & SANITARY SEWER DETAILS
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

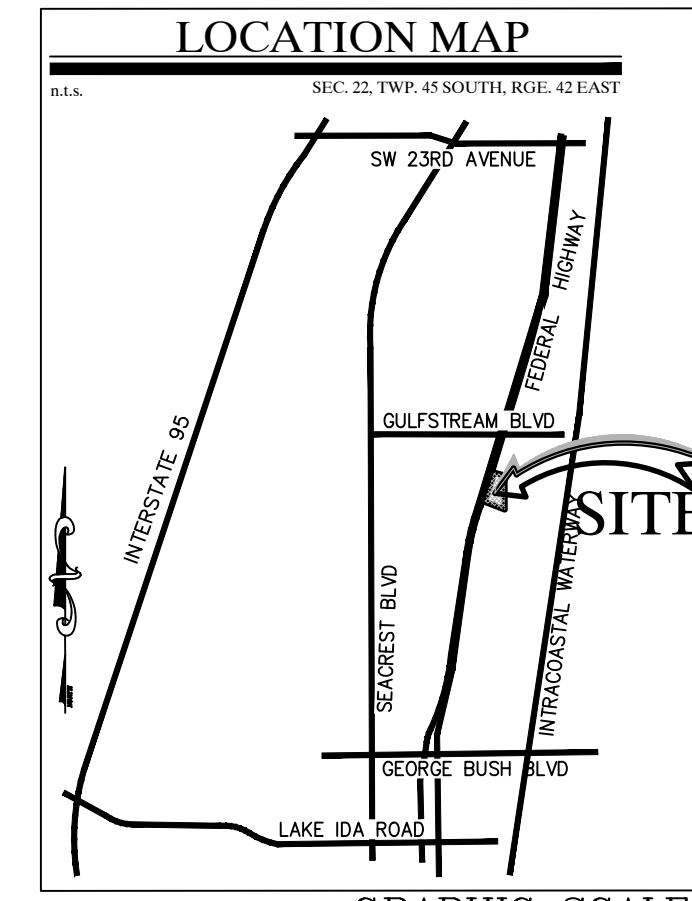
DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. ---
SCALE N/A

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
C-23
OF 27 SHEETS

U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

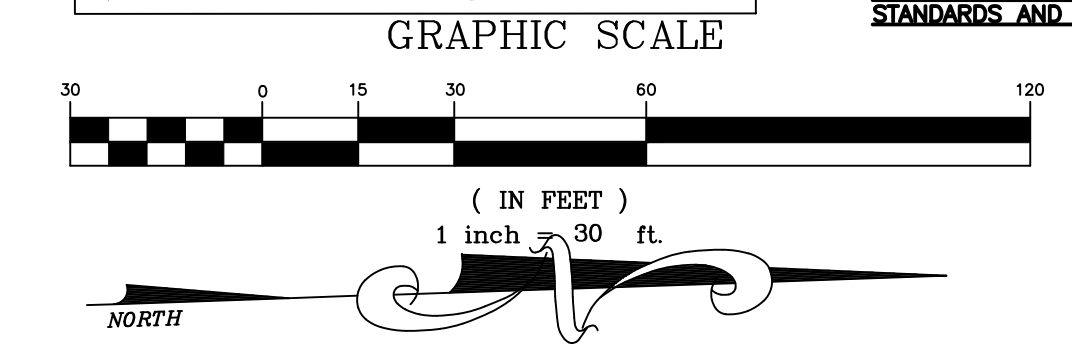
100' PUBLIC RIGHT-OF-WAY
 FLORIDA DEPARTMENT OF TRANSPORTATION
 MAP SECTION 93010-2205



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS		

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE 0-14 FROM THE CITY OF PALM BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- M.E.E.D MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- SD PROPOSED DRAINAGE PIPE
- FM PROPOSED FORCE MAIN (SIZE NOTED)
- RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- W PROPOSED WATER LINE (SIZE NOTED)
- FPL PROPOSED FPL ELEC. LINE
- E PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXGM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE TO BE REMOVED
- TR TO REMAIN

- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.

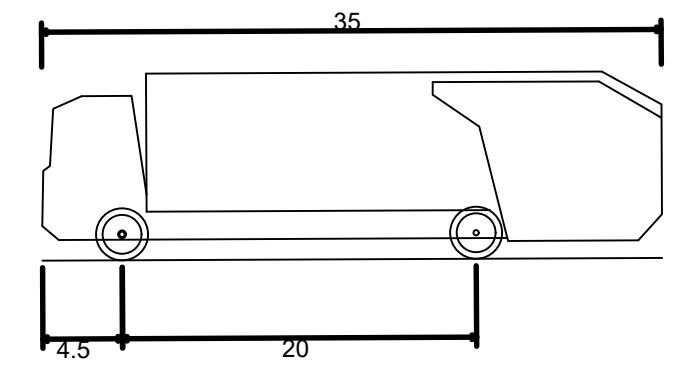
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
 CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
 1-800-432-4770

Sunshine State One Call of Florida, Inc.



Rear-Load Garbage Truck
 Overall Length 35.000ft
 Overall Width 8.375ft
 Overall Body Height 10.546ft
 Min Body Ground Clearance 1.000ft
 Track Width 8.375ft
 Lock-to-lock time 6.00s
 Curb to curb Turning Radius 29.300ft

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
 OVERALL VEHICULAR MOVEMENT PLAN - GARBAGE TRUCK
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

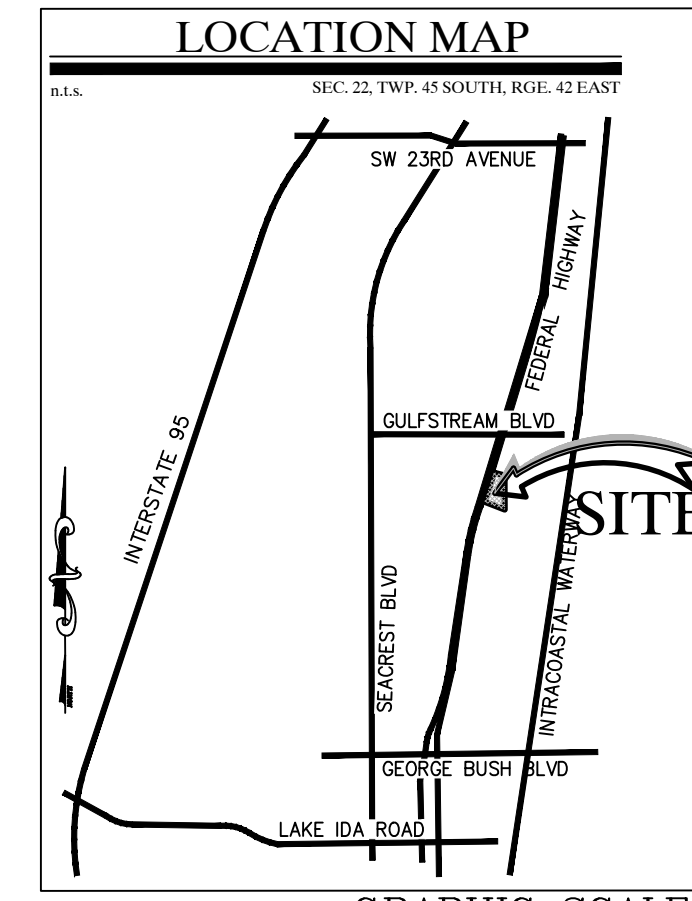
DATE 03/21/2025
 DRAWN BY RCW
 F.B./ PG. N/A
 SCALE 1"=30'

MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM -
 DATE

JOB # 10908
 SH.T. NO.
 VM-01
 OF 27 SHEETS

U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

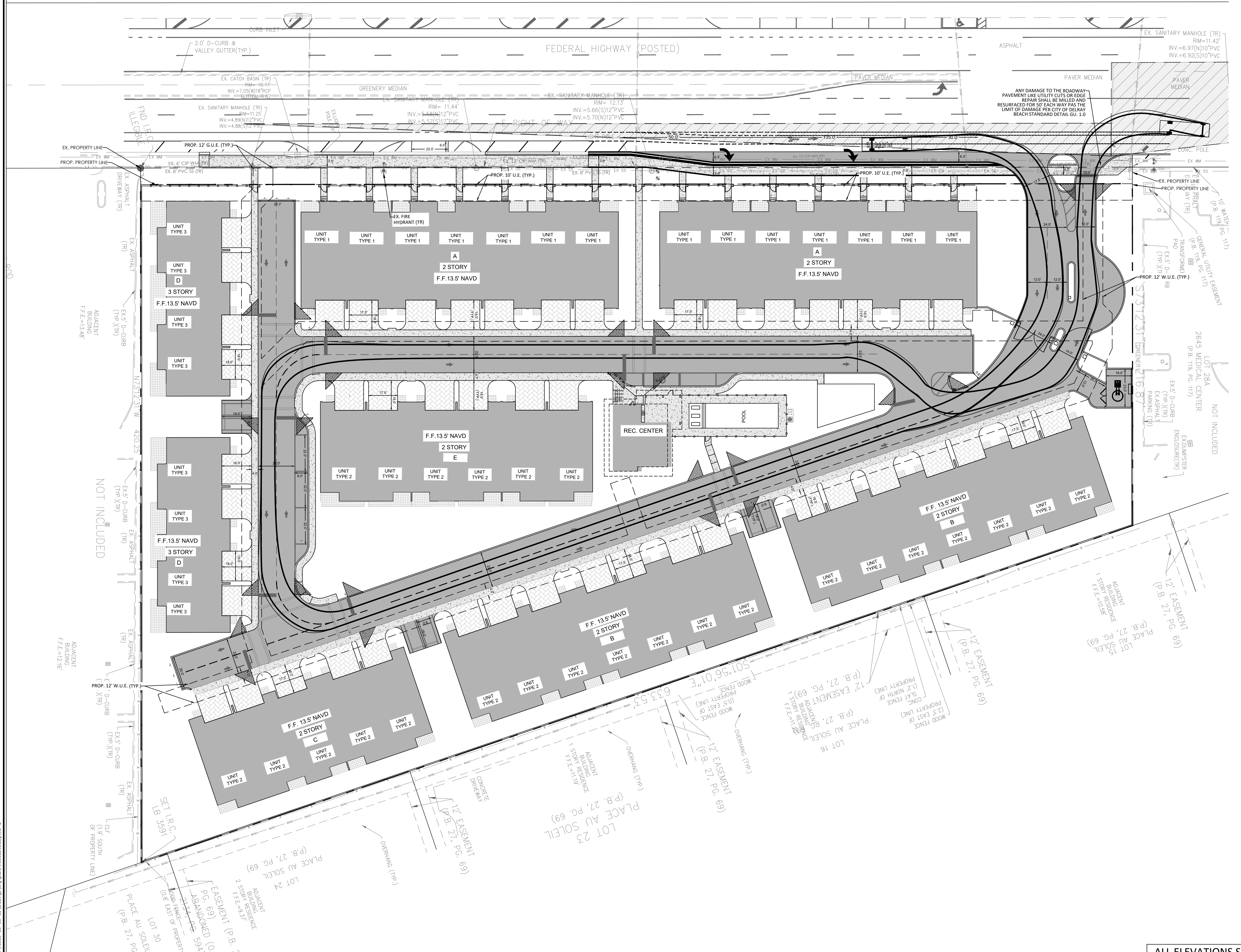
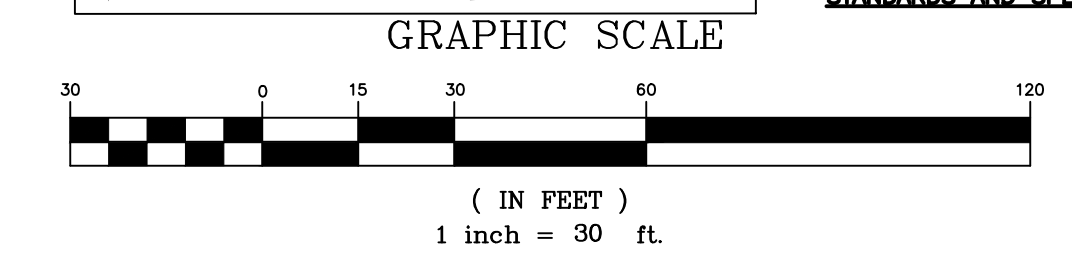
100' PUBLIC RIGHT-OF-WAY
 FLORIDA DEPARTMENT OF TRANSPORTATION
 MAP SECTION 93010-2205



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE 0-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- M.E.E.D MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- SD PROPOSED DRAINAGE PIPE
- FM PROPOSED FORCE MAIN (SIZE NOTED)
- RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- W PROPOSED WATER LINE (SIZE NOTED)
- FPL PROPOSED FPL ELEC. LINE
- E PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXGM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE TO BE REMOVED
- TR TO REMAIN

- GENERAL NOTES:
- 1.) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2.) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3.) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4.) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5.) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6.) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7.) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8.) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
 CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
 1-800-432-4770
 Sunshine State One Call of Florida, Inc.

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 - NGVD - 1.51'

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
 OVERALL VEHICULAR MOVEMENT PLAN - LOADING TRUCK
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

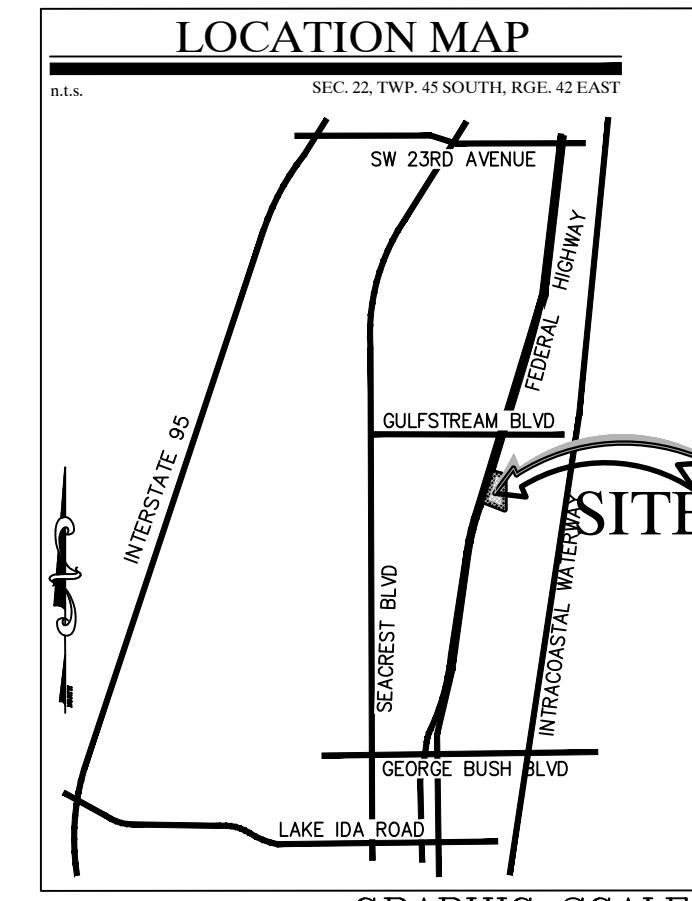
DATE 03/21/2025
 DRAWN BY RCW
 F.B./ PG. N/A
 SCALE 1"=30'

MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM -
 DATE

JOB # 10908
 SHT. NO. VM-02
 OF 27 SHEETS

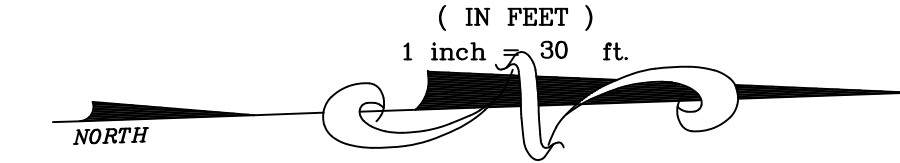
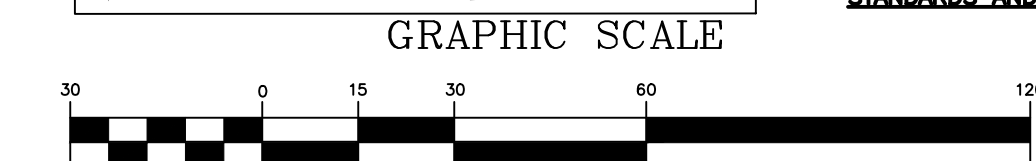
U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

100' PUBLIC RIGHT-OF-WAY
 FLORIDA DEPARTMENT OF TRANSPORTATION
 MAP SECTION 93010-2205



REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY
FILE NAME: 10908ENG.dwg		

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- M.E.E. MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- SD PROPOSED DRAINAGE PIPE
- FM PROPOSED FORCE MAIN (SIZE NOTED)
- RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- W PROPOSED WATER LINE (SIZE NOTED)
- FPL PROPOSED FPL. LINE
- E PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXGM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE TO BE REMOVED
- TR TO REMAIN

- GENERAL NOTES:
- 1.) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2.) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3.) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4.) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5.) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY, AND OTHER STRUCTURAL ELEMENTS.
 - 6.) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PAVED PAVEMENT OR FOUNDATION AREAS.
 - 7.) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8.) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

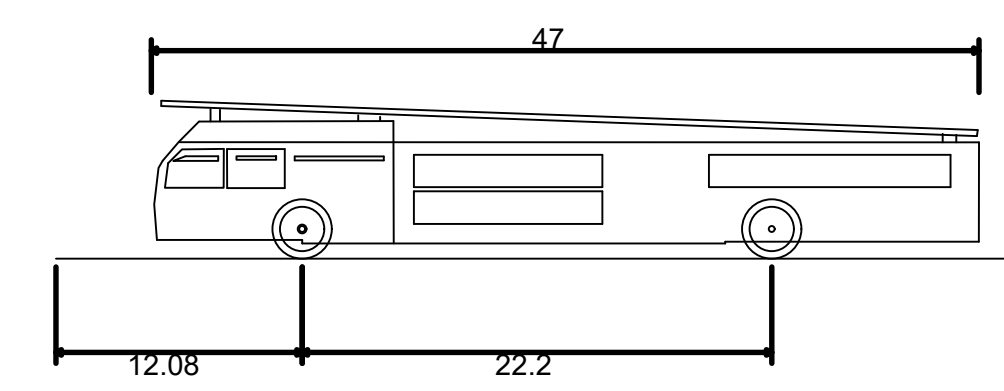
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
 CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
 1-800-432-4770

Sunshine State One Call of Florida, Inc.



Copy of Delray Fire Truck
 Overall Length 47.000ft
 Overall Width 12.16ft
 Overall Body Height 22.16ft
 Min Body Ground Clearance 0.721ft
 Track Width 8.000ft
 Lock-to-lock time 5.00s
 Max Wheel Angle 45.00°

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
 CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
 CIVIL ENGINEERING - LAND PLANNING
 LANDSCAPE ARCHITECTURE - SURVEYING
 7900 GLADES ROAD - SUITE 100
 BOCA RATON, FLORIDA 33434
 PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
 OVERALL VEHICULAR MOVEMENT PLAN - FIRE TRUCK
 2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
 DRAWN BY RCW
 F.B./ PG. N/A
 SCALE 1"=30'

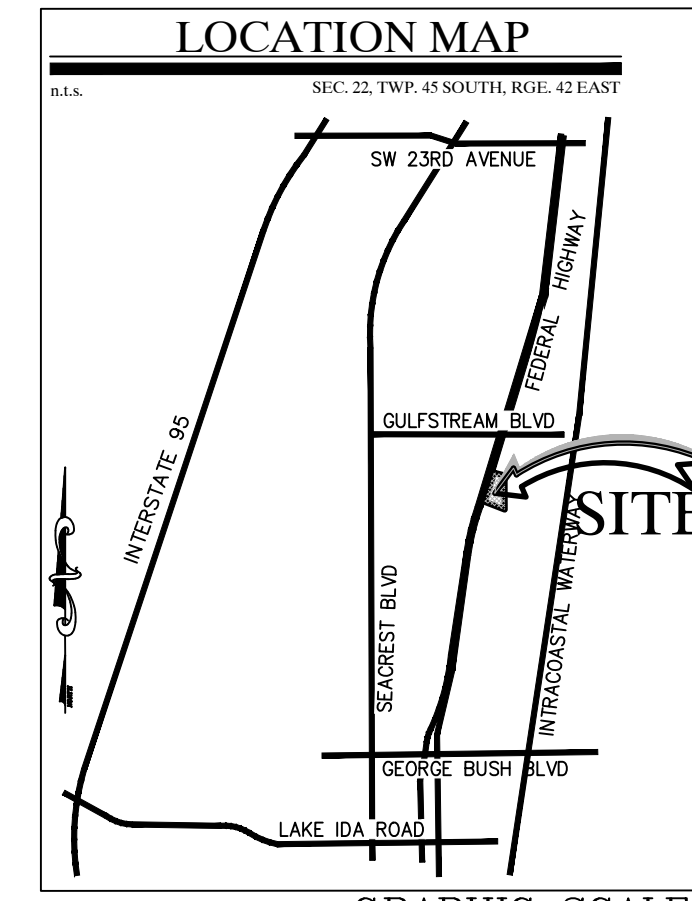
MATTHEW V. KAHN
 PROFESSIONAL ENGINEER
 LICENSE NO. 82227
 STATE OF FLORIDA
 FOR THE FIRM -
 DATE

JOB # 10908
 SHT. NO. VM-03
 OF 27 SHEETS

U.S. HIGHWAY NO. 1 FLORIDA STATE ROAD NO. 5

100' PUBLIC RIGHT-OF-WAY

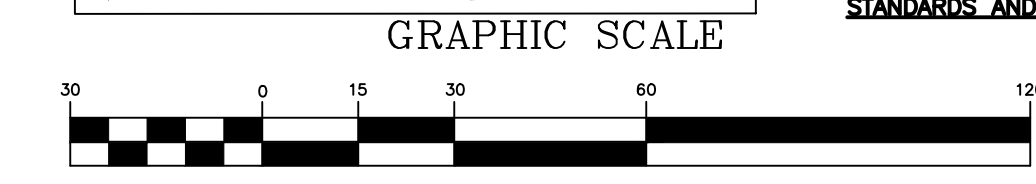
FLORIDA DEPARTMENT OF TRANSPORTATION
MAP SECTION 93010-2205



REV PER	DATE	BY
REV PER UPDATED SITE PLAN	04/17/26	JRH
REV PER CITY COMMENTS	03/11/26	JRH
REV PER CITY COMMENTS	12/16/25	JRH
REV PER CITY COMMENTS	09/18/25	RCW
REVISIONS	DATE	BY

FILE NAME: 10908ENG.dwg

IT IS THE RESPONSIBILITY OF THE OWNERS ENGINEER TO PROVIDE SITE OBSERVATION AND INSPECTIONS IN ORDER FOR THE OWNERS ENGINEER TO EXECUTE THE ENGINEERS CERTIFICATIONS OF COMPLETION EXACTLY AS STATED ON PAGE C-14 FROM THE CITY OF DELRAY BEACH CURRENT MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS



LEGEND

- EXISTING CONCRETE
- PROPOSED PAVEMENT
- PROPOSED 4" CONCRETE
- PROPOSED PAVER DRIVEWAY
- PROPOSED PAVER WALKWAY
- PROPOSED BUILDING
- MATCH EXISTING ELEVATION
- PROPOSED GRADE
- EXISTING GRADE
- GRADING CROSS-SECTION
- FLOW ARROW
- WHEEL STOP
- DRAINAGE STRUCTURE
- PROPOSED LIGHT POLE (SEE LIGHTING DESIGNER PLANS FOR DETAILS)
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- SD PROPOSED DRAINAGE PIPE
- FM PROPOSED FORCE MAIN (SIZE NOTED)
- RCWM PROPOSED RECLAIMED WATER LINE (SIZE NOTED)
- S PROPOSED GRAVITY SEWER LINE (SIZE NOTED)
- W PROPOSED WATER LINE (SIZE NOTED)
- FPL PROPOSED FPL ELEC. LINE
- E PROPOSED ELEC. LINE
- PROPOSED GATE VALVE AND BOX
- PROPOSED REDUCER
- FIRE HYDRANT
- SAMPLE POINT
- EXWM EXISTING WATER LINE
- EXGM EXISTING GATE VALVE
- EXSD EXISTING PIPE AND INLET
- EXSS EXISTING SANITARY SEWER LINE
- TO BE REMOVED
- TO REMAIN

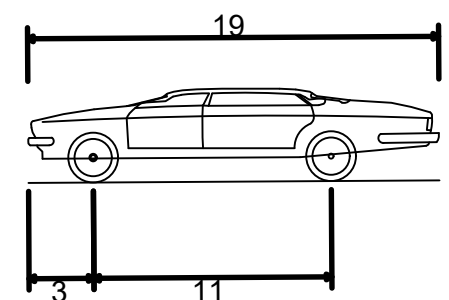
- GENERAL NOTES:
- 1) CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.
 - 2) ALL DRAINAGE SYSTEMS SHALL BE PUMPED COMPLETELY DRY AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTIONS.
 - 3) ALL SIDEWALK SHALL BE CONSTRUCTED AT 1.5% MAXIMUM CROSS SLOPE.
 - 4) SIDEWALKS ABUTTING LOTS/UNITS/CLUBHOUSE TO BE CONSTRUCTED AT TIME OF BUILDING CONSTRUCTION, WHILE COMMON AREA SIDEWALK WILL BE INSTALLED FROM START OF JOB.
 - 5) STRUCTURAL FILL WILL BE REQUIRED TO BE USED UNDER ALL BUILDING PADS, RIGHTS-OF-WAY AND OTHER STRUCTURAL ELEMENTS.
 - 6) THE MUCK AND GUMBO SHALL BE REMOVED IN THE AREA OF AND WITHIN 10 FEET OF PROPOSED PAVEMENT OR FOUNDATION AREAS.
 - 7) PAVEMENT MARKINGS AND GEOMETRICS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-18.
 - 8) ALL ADA ACCESSIBLE PARKING AREAS AND RAMP LANDINGS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MATTHEW V. KAHN ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CONTRACTOR NOTE:
CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION.

Call 48 hours before you dig

It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.



P - Passenger Car
Overall Length
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Max Steering Angle (Virtual)

19.000ft
7.000ft
4.300ft
1.115ft
6.000ft
4.00s
31.60°

ALL ELEVATIONS SHOWN IN NAVD88 UNLESS OTHERWISE NOTED
CONVERSION: NAVD88 = NGVD - 1.51'

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING - LAND PLANNING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

2419 N FEDERAL HWY
OVERALL VEHICULAR MOVEMENT PLAN - PASSENGER CAR
2419 N FEDERAL HWY DELRAY BEACH, FLORIDA 33483

DATE 03/21/2025
DRAWN BY RCW
F.B./ PG. N/A
SCALE 1"=30'

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
FOR THE FIRM -
DATE

JOB # 10908
SHT. NO.
VM-04
OF 27 SHEETS