GENERAL NOTES
C-001

GENERAL NOTES:

1. THE CONTRACTOR AND C/M ARE SYNONYMOUS.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION ACTIVITY FOR DIG PERMITS, ELECTRICAL PERMITS OR OTHER PERMITS AS APPLICABLE. CONTRACTOR IS ALSO TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES AND ANY UTILITY ADJUSTMENT REQUIRED. UTILITY COMPANIES SHALL BE NOTIFIED A MINIMUM OF THREE WORKING DAYS PRIOR TO EXCAVATION.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS WERE DEPICTED FROM INFORMATION PROVIDED BY **MARTIN COUNTY**. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND CONFIRM THE LOCATION OF EXISTING UTILITIES TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED CONSTRUCTION AND TO COORDINATE WITH THE UTILITY OWNERS TO RESOLVE THESE CONFLICTS.
4. THE SUBSURFACE INFORMATION FOR THIS PROJECT WAS OBTAINED FOR DESIGN PURPOSES AND MAY NOT BE AN ADEQUATE REPRESENTATION OF ACTUAL CONDITIONS FOR PROJECT CONSTRUCTION. INFORMATION SHOWN, INCLUDING WATER LEVELS, REPRESENTS EXISTING CONDITIONS AT THE SPECIFIC BORING LOCATIONS AT THE TIME THE BORINGS WERE MADE.
5. GEOTECHNICAL REPORT INFORMATION:
    1) PREPARED BY: PACIFICA ENGINEERING SERVICES
    2) DATE: FEBRUARY 5, 2026
    3) PROJECT #: 320-26632
    4) TITLE: REPORT OF GEOTECHNICAL ENGINEERING SERVICES
    MARTIN COUNTY SCHOOL DISTRICT (MCSD) MURRAY
    MIDDLE SCHOOL MODERNIZATION
    4400 SE MURRAY STREET
    STUART, FLORIDA 34997

6. ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER, IN WRITING, PER CONTRACT DOCUMENTS. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO SUCH DIFFERING CONDITIONS WILL BE ALLOWED IF HE OR SHE FAILS TO PROVIDE THE WRITTEN NOTIFICATION.
7. ALL MATERIALS, INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS ALONG WITH **MARTIN COUNTY** AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. WHERE THE SPECIFICATIONS CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
8. THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING AND BRACING REQUIRED TO PROTECT ADJACENT STRUCTURES AND UTILITIES OR MINIMIZE TRENCH WIDTH AS REQUIRED. SHEETING AND SHORING SHALL BE DESIGNED BY A STATE OF FLORIDA PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
10. ALL DEBRIS AND WASTE MATERIALS GENERATED BY CLEARING OR SUBSEQUENT CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OFF-SITE IN A LEGAL MANNER AT AN APPROVED DISPOSAL FACILITY.
11. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED FOR CLEARING, CONSTRUCTION WORK AND HAULING WASTE MATERIAL. ALL ASSOCIATED COSTS AND PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
12. ANY PUBLIC LAND CORNER, WITHIN THE LIMITS OF CONSTRUCTION, IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING ALTERED AND HAS NOT YET BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT WITHOUT DELAY.
13. COORDINATE VALUES ARE BASED ON A LOCAL GRID ESTABLISHED BY THE SURVEY.
14. ALL REFERENCES TO PROPOSED CONSTRUCTION INDICATES CONSTRUCTION INCLUDED IN THIS CONTRACT.
15. ALL PIPING TO HAVE A MINIMUM OF THREE (3) FEET COVER UNLESS OTHERWISE NOTED ON PLANS.
16. EXISTING ROADWAY BASE MATERIALS SUCH AS SHELL OR LIMEROCK MAY BE UTILIZED IN STABILIZATION IF SUITABLE FOR MIXING.
17. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY STRIPING, TRAFFIC CONTROL AND SAFETY DEVICES IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," LATEST EDITION, AND THE LATEST FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY DESIGN STANDARDS."
18. MAINTENANCE OF TRAFFIC: ACCESS FOR LOCAL TRAFFIC SHALL BE MAINTAINED. IF, DURING CONSTRUCTION, ACCESS FOR LOCAL TRAFFIC IS CHANGED, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE JURISDICTIONAL AGENCY A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH INDEX NO. 102-000 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS AND **MARTIN COUNTY**. CONTRACTOR IS ADVISED THAT TEMPORARY CONSTRUCTION ACCESS WILL BE PROVIDED, AND MAINTAINED, BY THE DEVELOPER, THROUGHOUT THE DURATION OF CONSTRUCTION. CONTRACTOR IS REQUIRED TO COORDINATE WITH DEVELOPER AS REQUIRED.
19. REFER TO FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS FOR THE FOLLOWING:
    * TYPE C INLET (INDEX NO. 425-010 & 425-052)
    * TYPE E INLET (INDEX NO. 425-010 & 425-052)
    * TYPE G INLET (INDEX NO. 425-010 & 425-053)
    * CURB RAMP (INDEX NO. 522-002)
    * TYPE D CURB (INDEX NO. 520-001)
    * TYPE F CURB & GUTTER (INDEX NO. 520-001)
    * CURB TRANSITION (INDEX NO. 520-001)
    * CROSSWALK, STOP BAR (INDEX NO. 711-001)
    * PAVEMENT ARROWS (INDEX NO. 711-001)
    * SPECIAL MARKING AREAS (INDEX NO. 711-001)
    * CONCRETE PAVEMENT JOINTS (INDEX NO. 350-001)
    * CONCRETE SIDEWALK (INDEX NO. 522-001)
    * FDOT SITE DISTANCE FDM 210
    * MAINTENANCE OF TRAFFIC (INDEX NO. 102-000)
20. **THIS PROJECT IS IN FLOOD ZONE 'X' PER FEMA FIRM PANELS #12085C0164H. MAP PANEL DATE: FEB. 19, 2020.**
21. ALL STORM, SANITARY AND WATER INSTALLATION NOT LOCATED ON PUBLIC R.O.W. OR DEEDED EASEMENTS SHALL COMPLY WITH FLORIDA BUILDING CODES-PLUMBING.
22. VIBRATORY COMPACTION IS NOT PERMITTED.

GRADING AND DRAINAGE NOTES:

1. ALL GRADING AND SITE PREPARATION SHALL CONFORM TO SPECIFICATIONS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATION SECTIONS 31 AND 33, UNLESS INDICATED OTHERWISE. MOST STRINGENT REQUIREMENT SHALL APPLY.
2. CONTRACTOR SHALL VERIFY EXISTING TOPOGRAPHIC DATA, LOCATION OF EXISTING UTILITIES AND ALL OTHER SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
3. ALL CONSTRUCTION WITHIN STREET RIGHT-OF-WAY SHALL CONFORM TO **MARTIN COUNTY** CODE AND REQUIREMENTS.
4. ALL GRADES SHOWN, WITH THE EXCEPTION OF THOSE INDICATED ON THE SURVEY BASE DRAWING, ARE FINISHED GRADES UNLESS INDICATED OTHERWISE.
5. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE GRADED TO ORIGINAL GROUND LINES AND FINISHED WITH SOD PER PROJECT SPECIFICATIONS UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL MAINTAIN ALL AREAS UNTIL FINAL ACCEPTANCE.
6. STORMWATER COLLECTION SYSTEM TO BE PRIVATELY OWNED AND MAINTAINED.
7. CONTRACTOR SHALL GRADE FROM GRADE POINT TO GRADE POINT IN A UNIFORM MANNER UNLESS OTHERWISE INDICATED ON THE PLANS. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE.
8. CONTRACTOR IS RESPONSIBLE TO DEVELOP, CONSTRUCT AND MAINTAIN ANY TEMPORARY DEWATERING REQUIRED FOR CONSTRUCTION OF PROJECT IMPROVEMENTS. NO OFFSITE DISCHARGE OF DEWATERING IS ALLOWED, UNLESS ALLOWED BY **SFWMD** AND FDEP. ANY TEMPORARY IMPROVEMENTS SHALL BE REMOVED AFTER USE AND THE AREA RESTORED TO THE CONDITION SHOWN ON THE PLANS.

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF THE **MARTIN COUNTY**, AND **SOUTH FLORIDA** WATER MANAGEMENT DISTRICT.
2. EROSION AND SEDIMENT CONTROL BEST PRACTICES ARE DICTATED BY FDEP NPDES CONSTRUCTION GENERIC PERMIT, 62-621.300(4)(a) FAC. BEST MANAGEMENT PRACTICES (BMP)S USED ON SITE MUST MEET THE MINIMUM SPECIFICATIONS IN THE 2013 STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL. (REFER TO PART 5.1 OF THE NPDES CONSTRUCTION GENERIC PERMIT.)
3. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP, IN CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
4. SOIL MATERIALS FROM WORK ON THIS PROJECT SHALL BE CONTAINED AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
5. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF EROSION/SEDIMENT CONTROL EFFORTS. ANY NECESSARY REMEDIES SHALL BE PERFORMED WITHOUT DELAY.
6. ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC OR PRIVATE ROADS AND FACILITIES FROM THIS SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN A STABILIZED CONSTRUCTION ACCESS/ SOIL TRACKING PREVENTION DEVICE (STPD) TO ASSIST WITH THE REMOVAL OF SOIL MATERIAL CAPTURED ON VEHICLE TIRES ENTERING AND LEAVING THE CONSTRUCTION SITE. THE SOIL TRACKING PREVENTION DEVICE SHALL MEET THE MINIMUM SPECIFICATIONS OF THE 2013 STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWERS MANUAL AND FDOT SPECIFICATION 104.
8. ALL PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS AND ANY DISTURBED LAND AREAS SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS AFTER FINAL GRADING.
9. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED. TIME FRAMES FOR PERMANENT AND TEMPORARY STABILIZATION MUST CONFORM WITH REQUIREMENTS SET FORTH IN THE NPDES CONSTRUCTION GENERIC PERMIT SECTION 5.4. STABILIZATION MEASURES MUST BE INITIATED WITHIN 7 CALENDAR DAYS WHERE ACTIVITIES HAVE EITHER PERMANENTLY OR TEMPORARILY CEASED.
10. THE EROSION CONTROL MEASURES ARE INTENDED AS MINIMUM STANDARDS. ANY EROSION CONTROL REQUIRED BEYOND THAT SPECIFIED SHALL BE CONSIDERED AS INCLUDED WITHIN THIS CONTRACT.

VERTICAL DATUM NOTE:

1. ALL ELEVATIONS SHOWN WITHIN THIS PLAN SET ARE RELATIVE TO THE **NORTH AMERICAN VERTICAL DATUM OF NAVD88**.
2. BASED ON THE VERTCON SOFTWARE, THE VERTICAL DATUM CONVERSION IS **-1.470** FOR THIS PROJECT SITE.
3. DATUM CONVERSION EXAMPLE: **100.00' NAVD 88 - -1.470' = 101.470' NGVD 29.**
4. CONTRACTOR SHALL CONFIRM THAT ALL WORK BY THE DEVELOPER IN OFF-SITE PERIMETER AREA ARE COORDINATED AND ARE BEING CONSTRUCTED ON THE SAME DATUM.

NPDES PERMIT:

1. CONTRACTOR SHALL PREPARE AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE "NOTICE OF INTENT" AND "NOTICE OF TERMINATION" FOR "STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES," PER FLORIDA ADMINISTRATIVE CODE 62-621.300(4). IN ACCORDANCE WITH FDEP REQUIREMENTS, THE CONTRACTOR SHALL PREPARE AND SUBMIT WITH THE APPLICATION, AN APPROVED "STORMWATER POLLUTION PREVENTION PLAN" AND PERFORM/CERTIFY ALL INSPECTIONS AND RETAIN ALL INSPECTION REPORTS AND DOCUMENTATION ON FILE AS REQUIRED FOR DEP REVIEW. ALL FEES SHALL BE PAID BY THE CONTRACTOR, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PENALTIES OR FINES DEP MAY LEVY FOR FAILURE TO COMPLY WITH THE PERMITTING REQUIREMENTS. CONTRACTOR SHALL PROVIDE A COPY OF THE NOI AND THE NOT TO THE MS4 OPERATOR.

DEWATERING NOTES:

1. IF ONSITE DEWATERING MAY OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL REFER TO THE DEWATERING REQUIREMENTS IN 62-621.300(4)(a) CONSTRUCTION GENERIC PERMIT OR 62-621.300(2)(a) DEWATERING GENERIC PERMIT AS APPLICABLE. APPROPRIATE BEST MANAGEMENT PRACTICES MUST BE IMPLEMENTED TO ENSURE THAT DISCHARGES DO NOT EXCEED SURFACE WATER QUALITY STANDARDS PER THE CONSTRUCTION GENERIC PERMIT. IF DEWATERING OFFSITE OR INTO THE COUNTY MS4, TURBIDITY MUST BE MONITORED TO ENSURE THAT DISCHARGES DO NOT EXCEED 29 NTU OVER BACKGROUND PER 62-302.530 FAC. THE DISCHARGE OF GROUNDWATER DURING DEWATERING ACTIVITIES TO COUNTY RIGHT-OF-WAY REQUIRES A RIGHT-OF-WAY UTILIZATION PERMIT.

GEOMETRY NOTES:

1. THREE (3) FOOT CURB TRANSITIONS SHALL BE PROVIDED AT ALL CURB TERMINATIONS AND DROP CURB INTERFACES.
2. DETECTABLE SURFACE ON CURB RAMP WALKING SURFACE (REFER TO FDOT INDEX 522-002).
3. POINTS SHOWN ON THE PLANS HAVE BEEN SET AT EDGE OF PAVEMENT PC, PT, CURB MIDPOINT AND INTERSECTION LOCATIONS. POINTS SHOWN ON UTILITY STRUCTURES ARE AT THE CENTER OF THE STRUCTURE.

STORM LEGEND:

12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
~→	PROPOSED DRAINAGE FLOW
Ⓓ	MANHOLE
▥	INLET
▣	NYLO/LAST DRAIN
━	PVC
═	HDPE
▬	RCP
●	CLEANOUT

WATER / SEWER LEGEND:

—WM—	WATER LINE
—SAN—	SANITARY LINE
—FIRE—	FIRE LINE
—FDC—	FDC FIRE LINE
HYD	FIRE HYDRANT ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
⧗	GATE VALVE
Ⓢ	SANITARY MANHOLE
▣	SANITARY CLEANOUT

UTILITY NOTES:

1. ALL WATER MAIN MATERIALS AND APPURTENANCES SHALL CONFORM TO AND SHALL BE INSTALLED, TESTED AND CLEARED FOR SERVICE IN ACCORDANCE **WITH THE STANDARDS OF MARTIN COUNTY AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.**

2. HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

    A. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER, REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

    B. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

    C. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST TWELVE (12) INCHES ABOVE THE TOP OF THE SEWER.

    D. WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN (10) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM.

3. VERTICAL SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

    A. WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE (12) INCHES ABOVE THE OUTSIDE OF THE OTHER PIPELINE.

    B. WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE (12) INCHES ABOVE THE OUTSIDE OF THE OTHER PIPELINE.

    C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.

4. ALL UTILITIES LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.

5. BACTERIOLOGICAL SAMPLE POINTS SHALL BE AS DESCRIBED IN THE FDEP PERMIT CONDITIONS.

6. A MINIMUM COVER OF THREE (3) FEET SHALL BE PROVIDED OVER ALL PROPOSED UTILITIES.

7. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF CONNECTION POINTS TO WATER AND WASTEWATER WITH THE DEVELOPER. POINTS SHOWN ARE BASED ON LATEST AVAILABLE DESIGN INFORMATION.

8. CONTRACTOR TO PROVIDE TEMPORARY SUPPORT, ADEQUATE PROTECTION, AND MAINTENANCE OF ALL UNDERGROUND AND SURFACE UTILITY STRUCTURES DURING CONSTRUCTION.

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

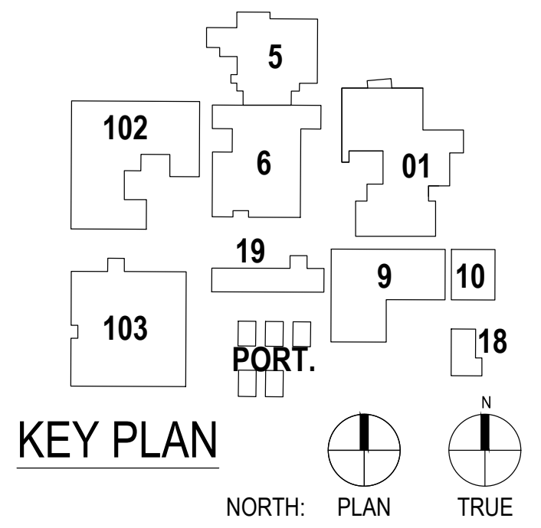
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

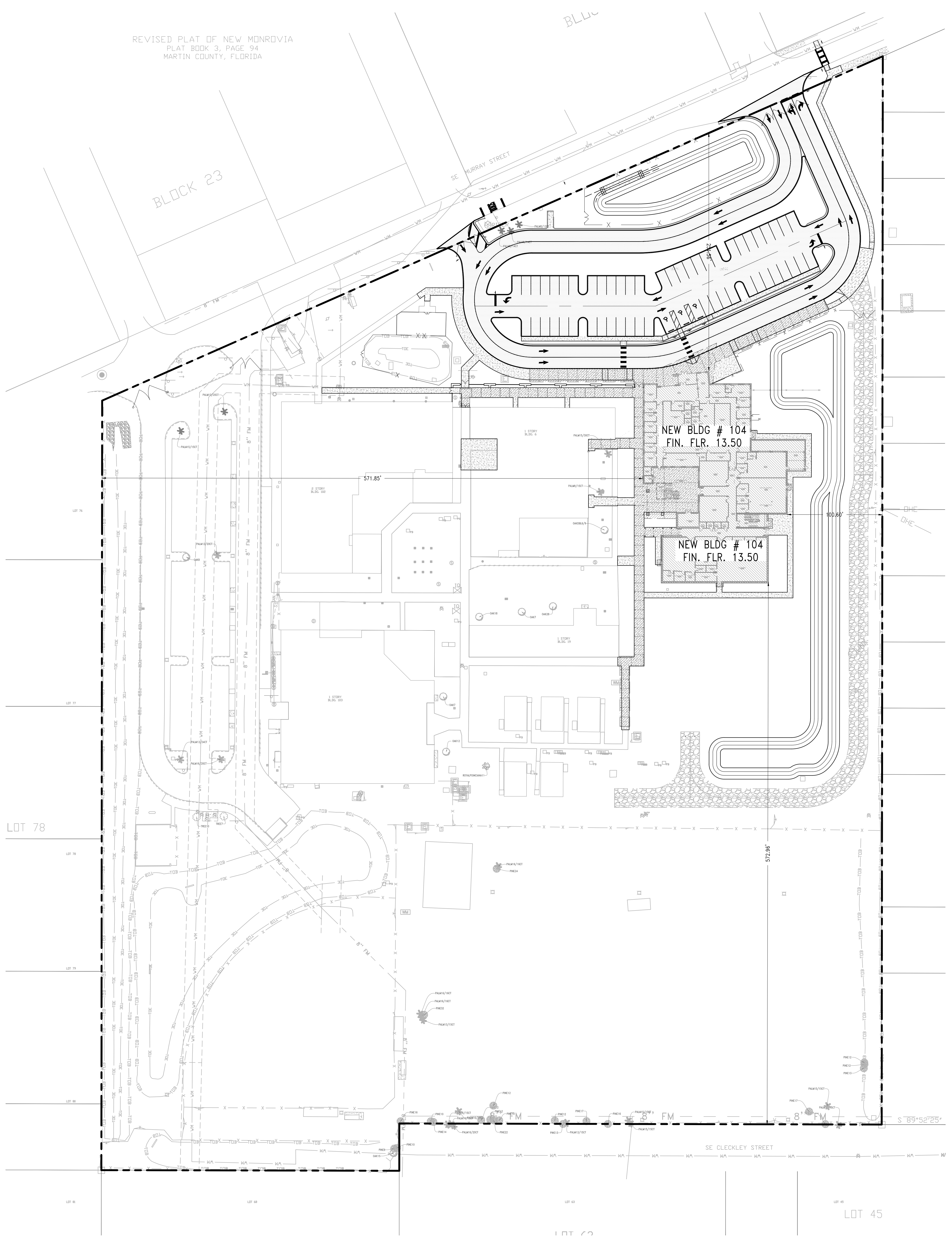
GENERAL NOTES

C-001

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:30 AM

CIVIL SITE PLAN
C-100



N
0' 25 50 100
GRAPHIC SCALE IN FEET
NAVD 88

PROPERTY:
4400 SE MURRAY ST
STUART, FL 34997

PARCEL ID:
25-38-41-001-000-00461-2

ZONING:
PS-1

PROPERTY USE:
8300-8300 PUBLIC COUNTY SCHOOLS

SITE SETBACKS:

GEOGRAPHIC LOCATION:	BUILDING LOCATION:	REQUIRED (IN FEET):	PROVIDED (IN FEET):
NORTH			251.56
EAST			100.60
SOUTH			572.96
WEST			571.85

EXISTING ADJACENT ZONING:
NORTH
EAST
SOUTH
WEST

UTILITY PROVIDERS

WATER:	MARTIN COUNTY UTILITIES
WASTEWATER:	MARTIN COUNTY UTILITIES
RECLAIM:	

EXISTING SITE AREA:	SF	AC	% OF PARCEL
IMPERVIOUS:	0	0.00	0.00%
PERVIOUS:	1,632,891	37.49	100.00%
TOTAL:	1,632,891	37.49	100.00%

PROPOSED SITE AREA:			
IMPERVIOUS:	1,000	0.02	0.06%
PERVIOUS:	1,631,891	37.46	99.94%
TOTAL:	1,632,891	37.49	100.00%

BUILDING

PROPOSED BUILDING FLOOR AREA:	115,764 SF
MAX BUILDING HEIGHT:	
PROPOSED FBC BUILDING TYPE:	IIB SPRINKLED

F.A.R.
BUILDING AREA/SITE AREA= 0.07

PARKING SPACES:
PER FBC 453.10.2.8:

1 SPACE PER STAFF MEMBER:	71 STAFF MEMBERS	71
1 SPACE PER VOCATIONAL STUDENT:	1,110 STUDENTS	555
TOTAL SPACES REQUIRED:		126
TOTAL SPACES PROVIDED:		
ADA SPACES REQUIRED PER FBC TABLE 208.2:		
ADA SPACES PROVIDED:		

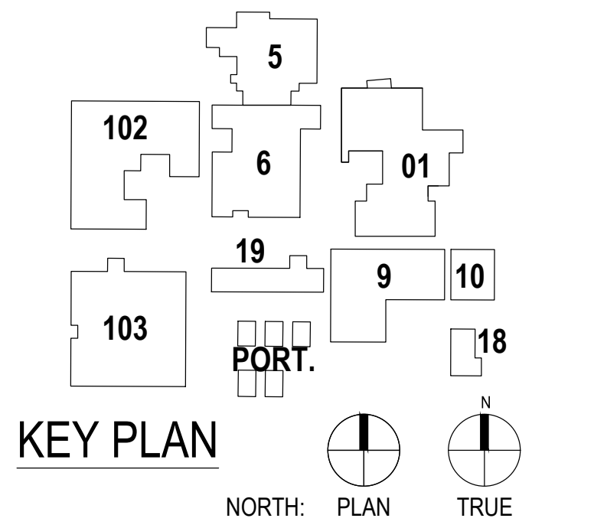
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

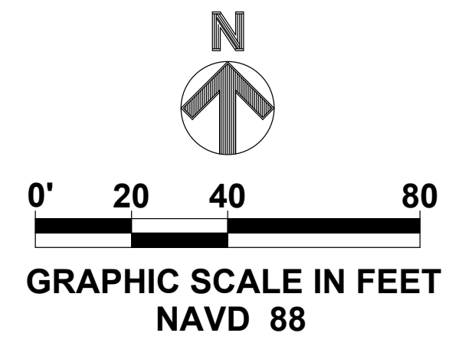
CIVIL SITE PLAN

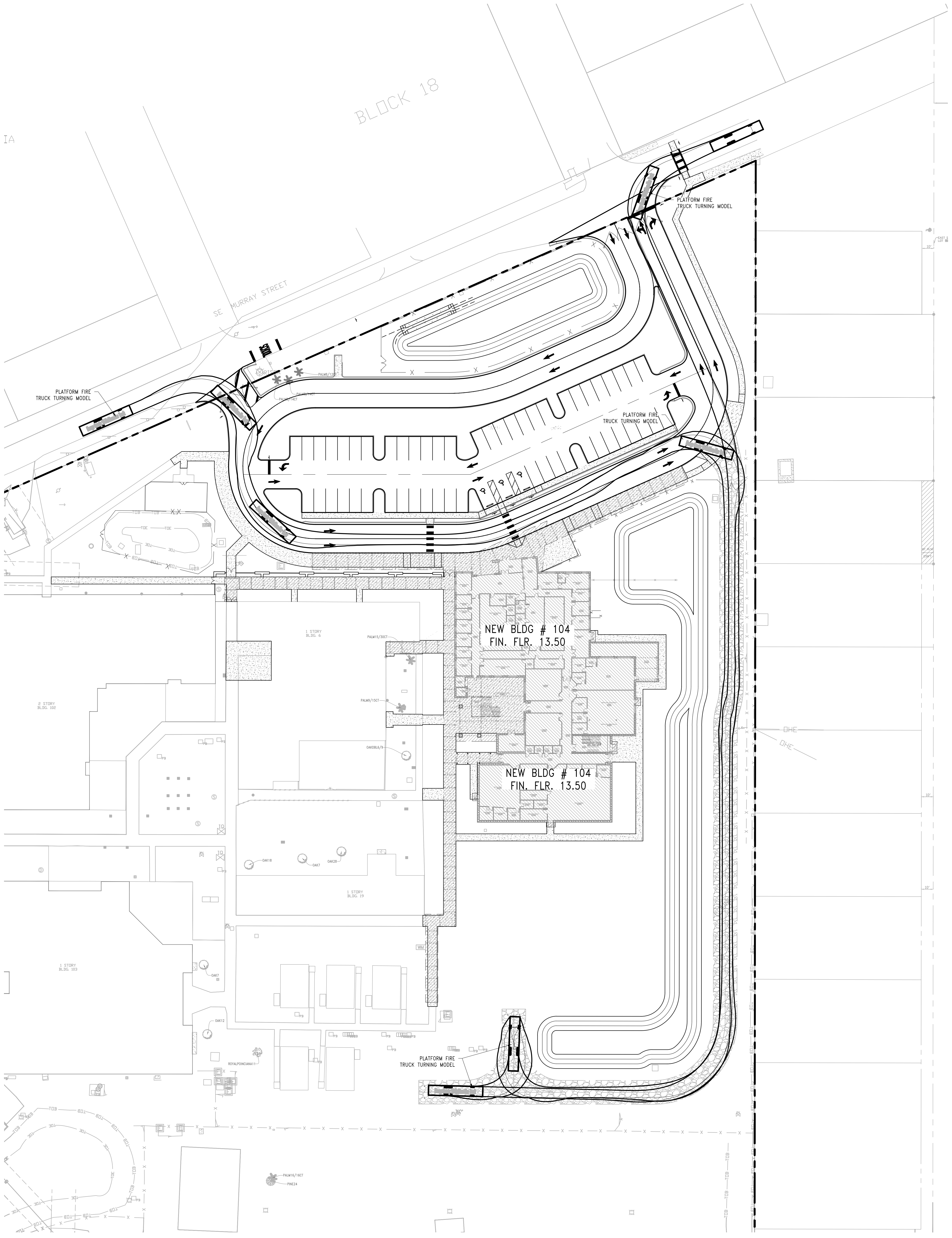
C-100

XX CIVIL SITE PLAN
1" = 50'

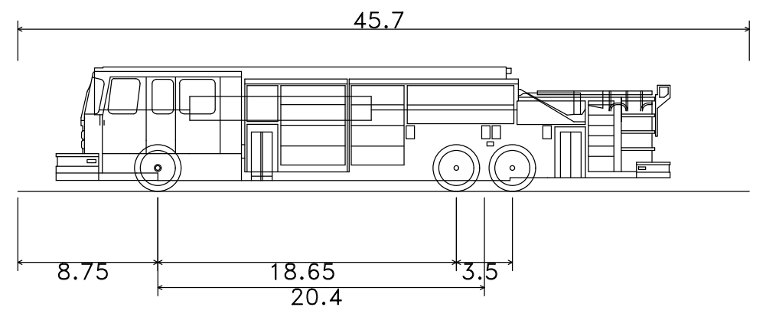
Plot Stamp:
5/29/2026 9:21:33 AM

HB ESTIMATING REC'D 06.01.2026




BLOCK 18
SE MURRAY STREET
PLATFORM FIRE TRUCK TURNING MODEL
PLATFORM FIRE TRUCK TURNING MODEL
PLATFORM FIRE TRUCK TURNING MODEL
PLATFORM FIRE TRUCK TURNING MODEL
NEW BLDG # 104
FIN. FLR. 13.50
NEW BLDG # 104
FIN. FLR. 13.50
OHE

XX CIVIL SITE PLAN
1" = 50'



Orange County 95-Platform Fire Truck	
Overall Length	45.700ft
Overall Width	8.330ft
Overall Body Height	7.773ft
Min Body Ground Clearance	0.684ft
Track Width	8.330ft
Lock-to-lock time	6.00s
Max Wheel Angle	44.20°

PLATFORM FIRE TRUCK
N.T.S.

PBK

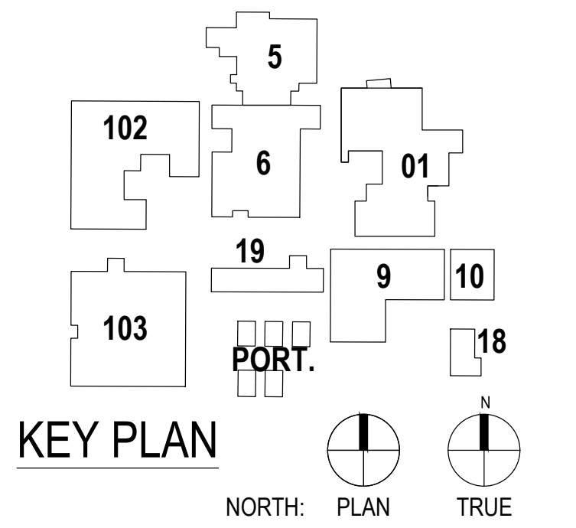
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

JAY A. KLIMA
LICENSE
No. 49945
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.

DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

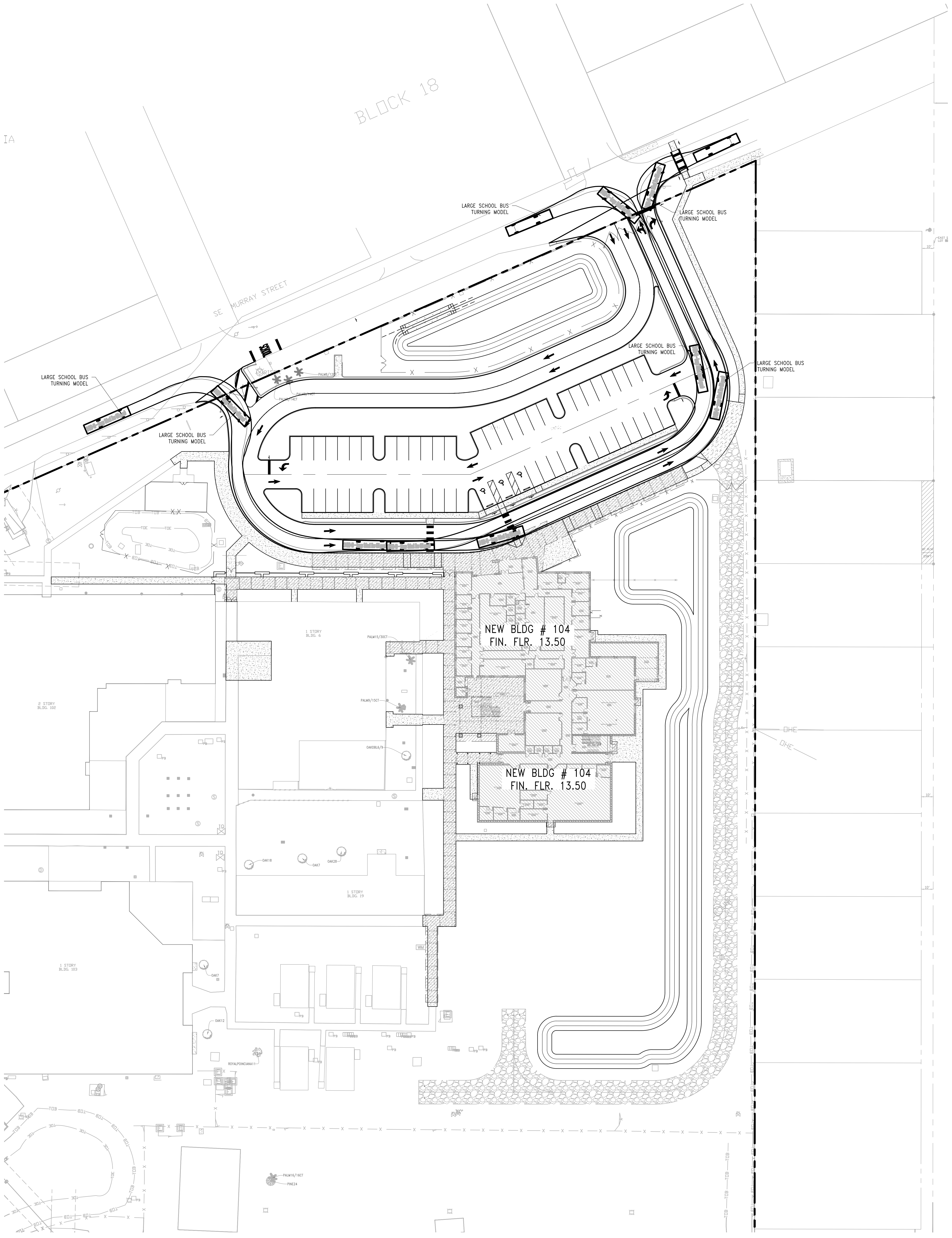
Klima Weeks
CIVIL ENGINEERING

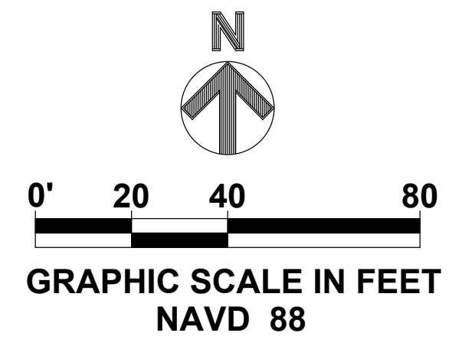
VEHICLE TURNING MODEL

C-101

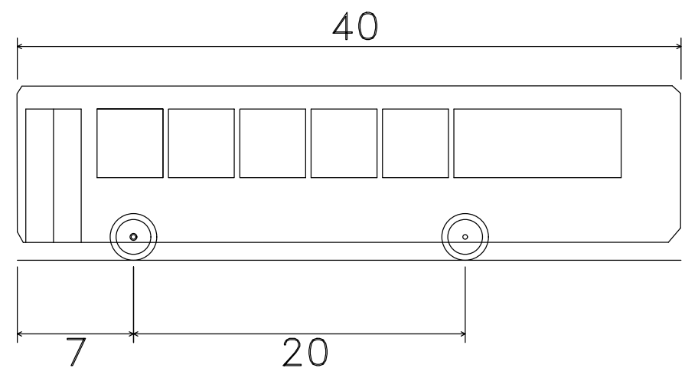
HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:38 AM


BLOCK 18
IA
SE MURRAY STREET
LARGE SCHOOL BUS TURNING MODEL
LARGE SCHOOL BUS TURNING MODEL
LARGE SCHOOL BUS TURNING MODEL
LARGE SCHOOL BUS TURNING MODEL
LARGE SCHOOL BUS TURNING MODEL
LARGE SCHOOL BUS TURNING MODEL
NEW BLDG # 104
FIN. FLR. 13.50
NEW BLDG # 104
FIN. FLR. 13.50
OHE
OHE



GRAPHIC SCALE IN FEET
NAVD 88



S-BUS-40 - Large School Bus (84 pass.)	
Overall Length	40.000ft
Overall Width	8.000ft
Overall Body Height	10.500ft
Min Body Ground Clearance	1.070ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	34.40°

LARGE 84 PASSENGER SCHOOL BUS
N.T.S.

PBK

WEST PALM BEACH, FL
561-478-4457

FL FIRM: AR 0013140

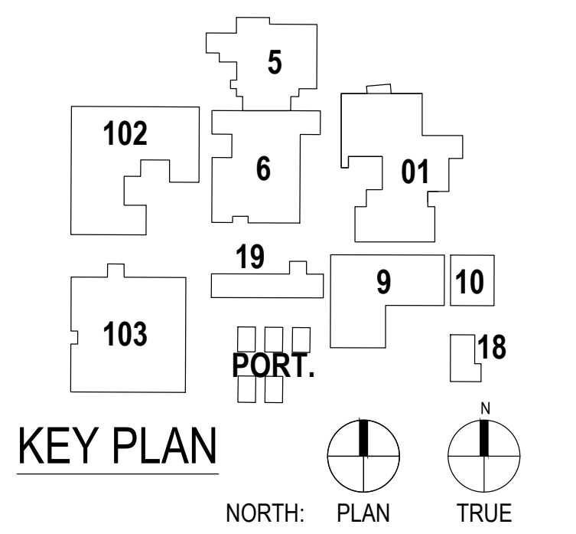
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

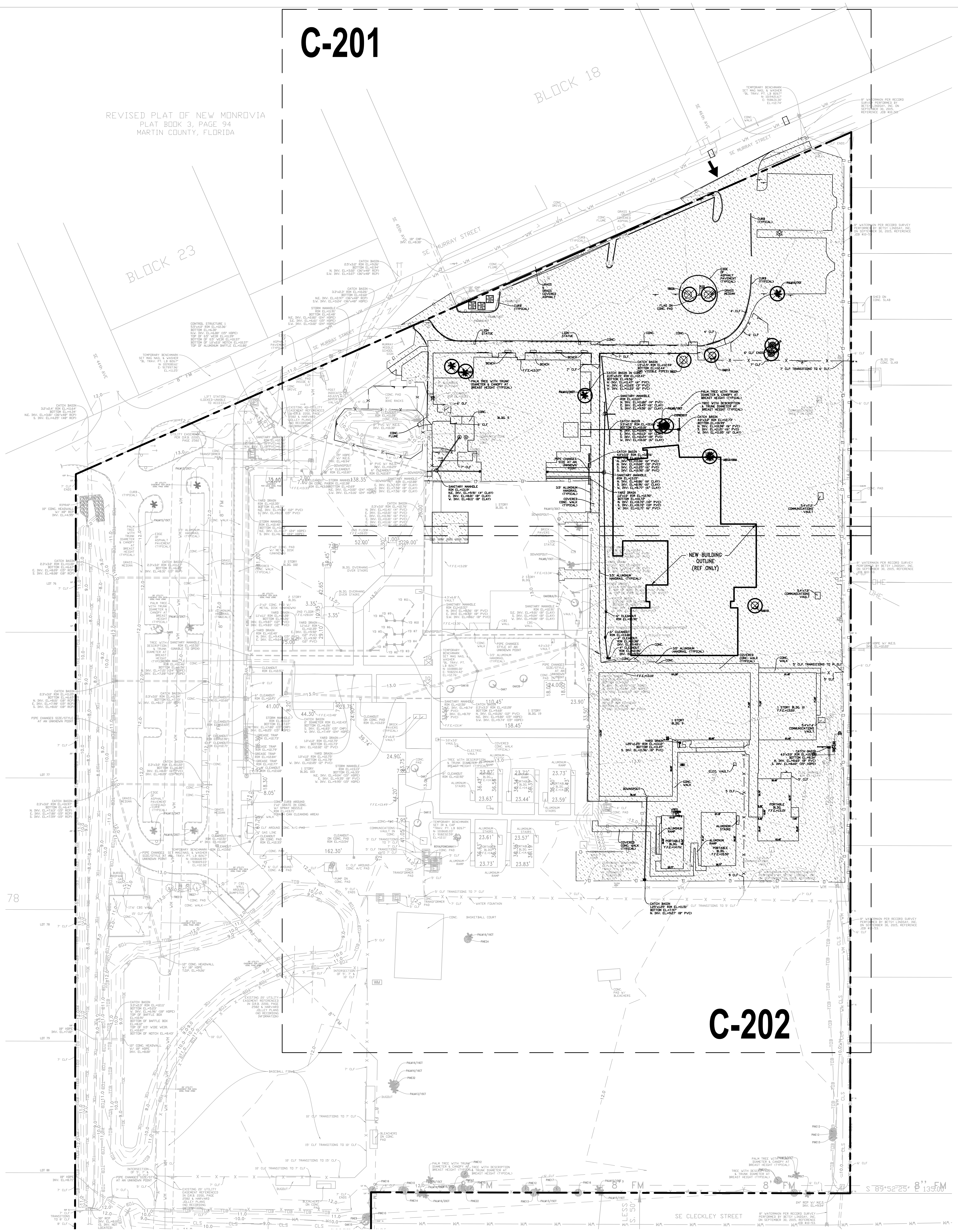
XX CIVIL SITE PLAN
1" = 50'

HB ESTIMATING REC'D 06.01.2026

VEHICLE TURNING MODEL

Plot Stamp:
5/29/2026 9:21:39 AM

OVERALL CIVIL DEMOLITION PLAN
C-200



N
0' 25 50 100
GRAPHIC SCALE IN FEET
NAVD 88

DEMOLITION LEGEND

▨ LIMITS OF CLEARING (REMOVAL OF SITE DEBRIS, CONCRETE, PAVEMENT, WALKS, FENCE, BUILDING, TREES, ETC.) ALL IMPROVEMENTS IN THIS AREA, SHALL BE REMOVED AS NOTED ON THESE PLANS.

—▫—▫— SILT FENCE (SEE SHEET C-203 FOR DETAIL)

☐ EXISTING TREE(S) TO REMAIN

⊗ EXISTING TREE(S) TO BE REMOVED (LARGER THAN 4")

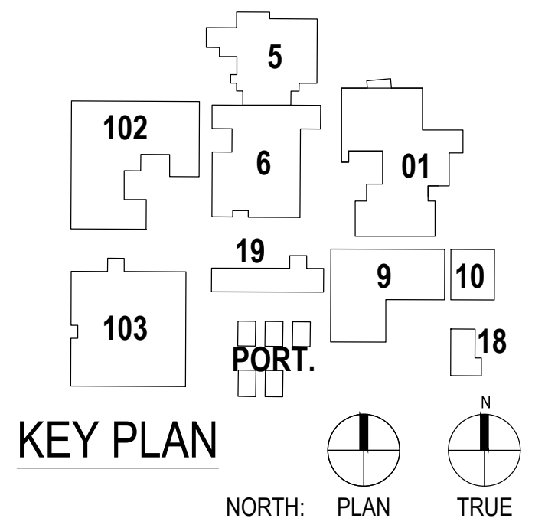
↑ CONSTRUCTION ENTRANCE

PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045
100% CONSTRUCTION DOCUMENTS



KEY PLAN
NORTH: PLAN TRUE

JAY A. KLIMA
No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

OVERALL CIVIL
DEMOLITION PLAN

C-200

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:44 AM

CIVIL DEMOLITION PLAN
C-201

0"
1"

KEY NOTES:

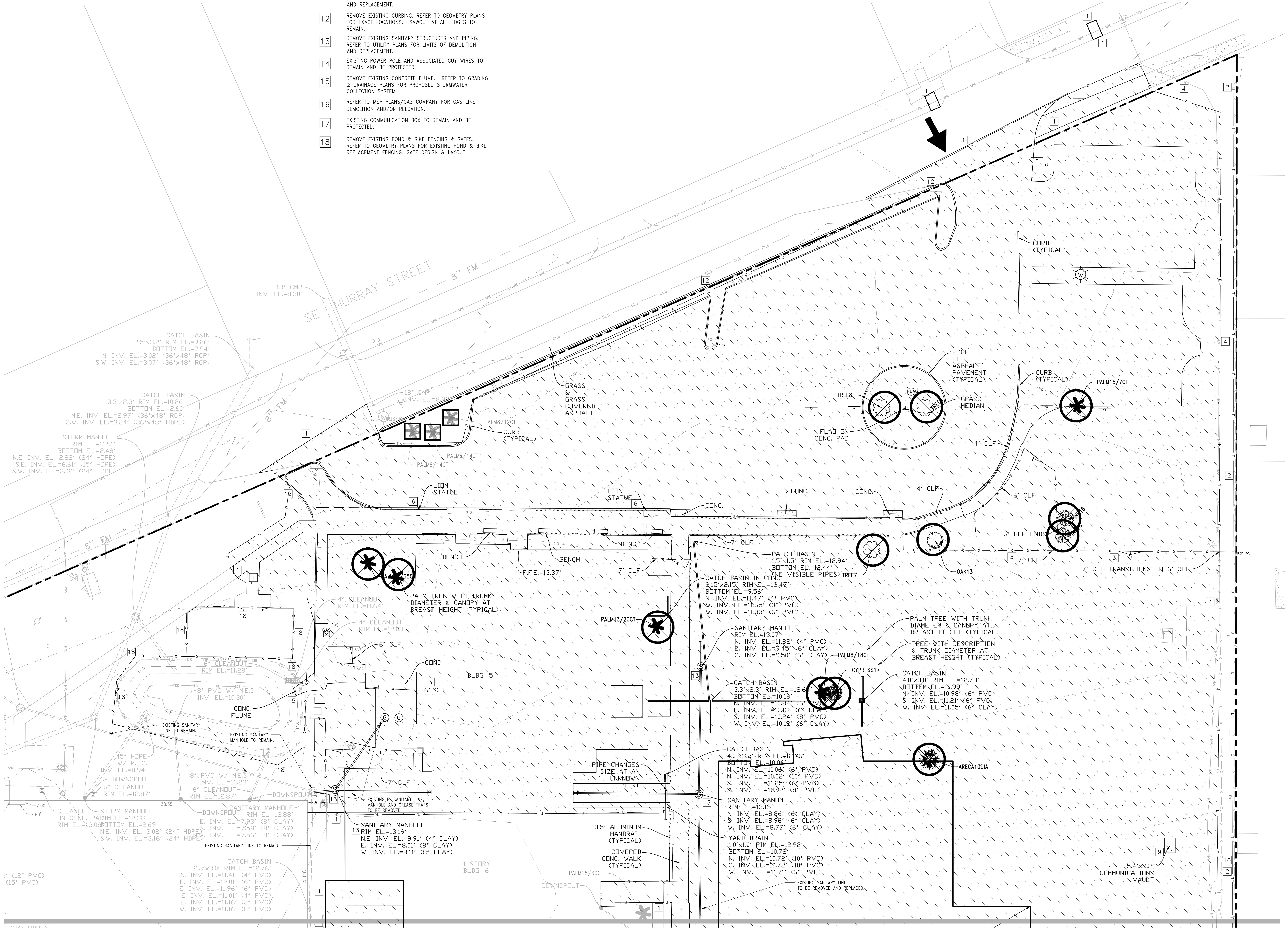
1 SAW CUT (SEE DETAIL SHEET C203).
2 FDOT TYPE III SILT FENCE & INLET PROTECTION (SEE DETAIL SHEET C203).
3 REMOVE FENCING & GATES. REFER TO GEOMETRY PLANS FOR EXACT LOCATION AND LIMITS.
4 EXISTING WATER MAIN TO REMAIN.
5 EXISTING FIRE HYDRANT TO REMAIN.
6 REMOVE/ RELOCATE EXISTING LION STATUES. COORDINATE WITH ARCHITECT/ MARTIN CO. SCH. DISTRICT.
7 EXISTING INLET AND ASSOCIATED PIPING TO REMAIN. REFER TO GRADING & DRAINAGE SHEETS FOR LIMITS OF EXISTING COLLECTION SYSTEM TO REMAIN.
8 REMOVE EXISTING INLET AND ASSOCIATED PIPING.
9 REFER TO MEP PLANS FOR ELECTRICAL/ COMMUNICATION DEMOLITION AND /OR RELCATION.
10 EXISTING FENCING TO REMAIN. REFER TO GEOMETRY PLANS FOR EXACT LOCATIONS.
11 REMOVE EXISTING WATER UTILITY FIXTURE AND ASSOCIATED PIPING. REFER TO UTILITY PLANS FOR EXACT LOCATIONS AND REPLACEMENT.
12 REMOVE EXISTING CURBING, REFER TO GEOMETRY PLANS FOR EXACT LOCATIONS. SAWCUT AT ALL EDGES TO REMAIN.
13 REMOVE EXISTING SANITARY STRUCTURES AND PIPING. REFER TO UTILITY PLANS FOR LIMITS OF DEMOLITION AND REPLACEMENT.
14 EXISTING POWER POLE AND ASSOCIATED GUY WIRES TO REMAIN AND BE PROTECTED.
15 REMOVE EXISTING CONCRETE FLUME. REFER TO GRADING & DRAINAGE PLANS FOR PROPOSED STORMWATER COLLECTION SYSTEM.
16 REFER TO MEP PLANS/GAS COMPANY FOR GAS LINE DEMOLITION AND/OR RELCATION.
17 EXISTING COMMUNICATION BOX TO REMAIN AND BE PROTECTED.
18 REMOVE EXISTING POND & BIKE FENCING & GATES. REFER TO GEOMETRY PLANS FOR EXISTING POND & BIKE REPLACEMENT FENCING, GATE DESIGN & LAYOUT.

DEMOLITION LEGEND

▨	LIMITS OF CLEARING (REMOVAL OF SITE DEBRIS, CONCRETE, PAVEMENT, WALKS, FENCE, BUILDING, TREES, ETC.) ALL IMPROVEMENTS IN THIS AREA, SHALL BE REMOVED AS NOTED ON THESE PLANS.
—▫—▫—	SILT FENCE (SEE SHEET C-203 FOR DETAIL)
⊡	EXISTING TREE(S) TO REMAIN (SEE DETAIL SHEET C203)
⊗	EXISTING TREE(S) TO BE REMOVED (LARGER THAN 4")
↑	CONSTRUCTION ENTRANCE

N

0' 25 50 100
GRAPHIC SCALE IN FEET
NAVD 88



MURRAY MIDDLE SCHOOL MODERNIZATION
4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045
100% CONSTRUCTION DOCUMENTS

PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

KEY PLAN
5
102
6
01
19
9
10
103
PORT.
18
NORTH: PLAN TRUE

JAY A. KLIMA
No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

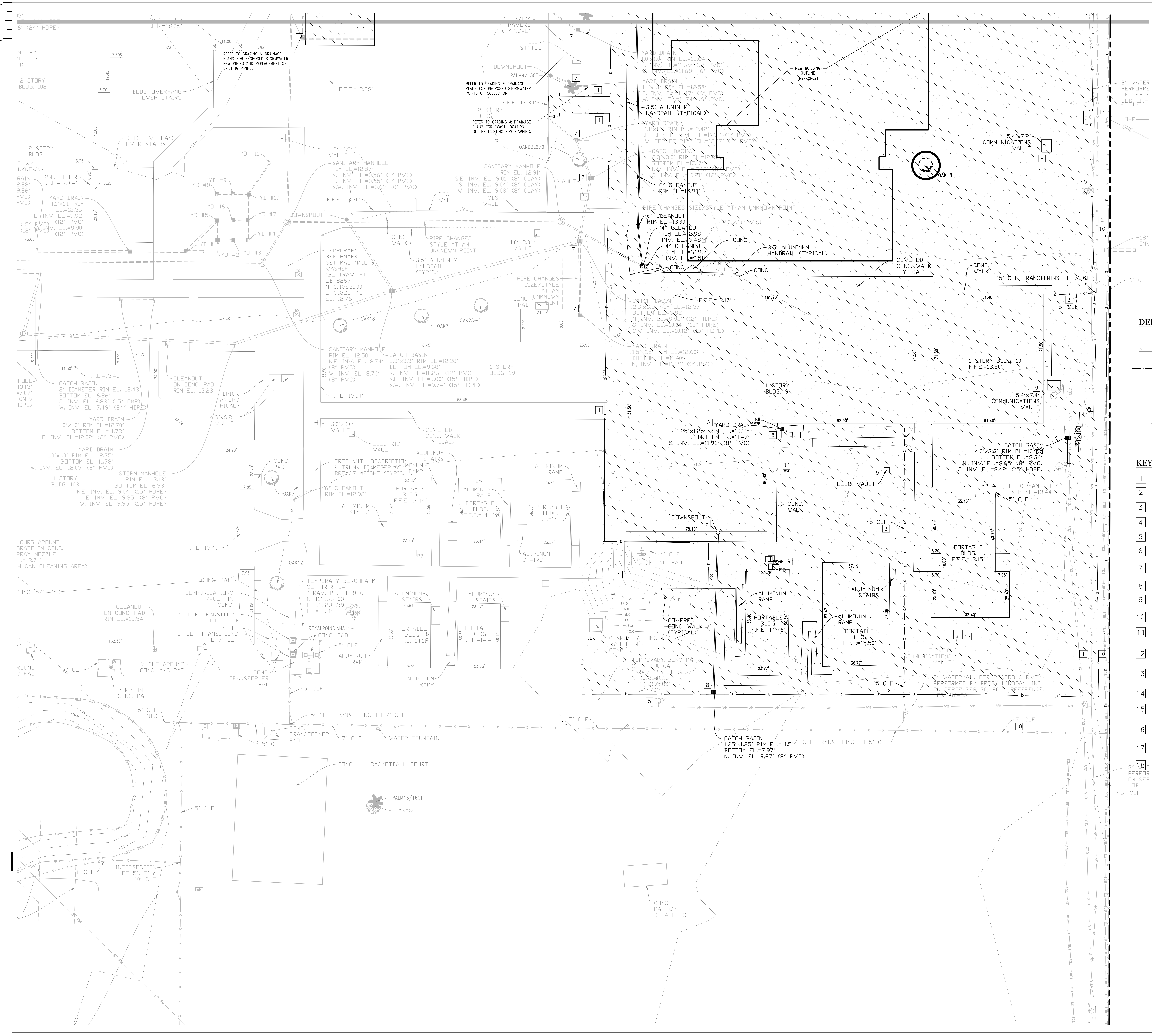
CIVIL DEMOLITION PLAN

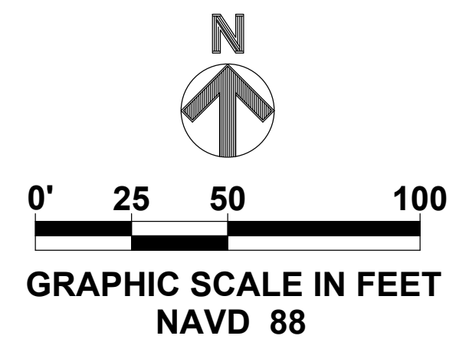
C-201

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:46 AM

CIVIL DEMOLITION PLAN
C-202


REFER TO GRADING & DRAINAGE PLANS FOR PROPOSED STORMWATER NEW PIPING AND REPLACEMENT OF EXISTING PIPING.
REFER TO GRADING & DRAINAGE PLANS FOR PROPOSED STORMWATER POINTS OF COLLECTION.
REFER TO GRADING & DRAINAGE PLANS FOR EXACT LOCATION OF THE EXISTING PIPE CAPPING.
NEW BUILDING OUTLINE (REF ONLY)
2 STORY BLDG. 102
BLDG. OVERHANG OVER STAIRS
LION STATUE
DOWNSPOUT
PALM9/15CT
OAKDBL6/9
SANITARY MANHOLE
VAULT
CBS WALL
3.5' ALUMINUM HANDRAIL (TYPICAL)
6" CLEANOUT
4" CLEANOUT
PIPE CHANGES SIZE/STYLE AT AN UNKNOWN POINT
5.4'x7.2' COMMUNICATIONS VAULT
OAK18
COVERED CONC. WALK (TYPICAL)
CONC. WALK
5' CLF TRANSITIONS TO 7' CLF
TEMPORARY BENCHMARK SET MAG NAIL
CATCH BASIN
YARD DRAIN
1 STORY BLDG. 9
1 STORY BLDG. 10
1 STORY BLDG. 19
1 STORY BLDG. 103
5.4'x7.4' COMMUNICATIONS VAULT
STORM MANHOLE
ELEC. VAULT
PORTABLE BLDG.
ALUMINUM RAMP
ALUMINUM STAIRS
COMMUNICATIONS VAULT IN CONC.
TREE WITH DESCRIPTION & TRUNK DIAMETER AT BREAST HEIGHT (TYPICAL)
OAK7
OAK12
OAK28
ROYALPOINCIANA11
CONC. PAD
TRANSFORMER PAD
PUMP ON CONC. PAD
CURB AROUND GRATE IN CONC. SPRAY NOZZLE (TRASH CAN CLEANING AREA)
5' CLF TRANSITIONS TO 7' CLF
WATER FOUNTAIN
BASKETBALL COURT
PALM16/16CT
PINE24
CONC. PAD W/ BLEACHERS
INTERSECTION OF 5', 7' & 10' CLF
8" WATERMAIN PER RECORD SURVEY PERFORMED BY BETSY LINDSAY, INC. ON SEPTEMBER 30, 2015. REFERENCE
CATCH BASIN 1.25'x1.25' RIM EL.=11.51' BOTTOM EL.=7.97' N. INV. EL.=9.27' (8" PVC)
YARD DRAIN 1.25'x1.25' RIM EL.=13.12' BOTTOM EL.=11.47' S. INV. EL.=11.96' (8" PVC)
CATCH BASIN 4.0'x3.3' RIM EL.=10.93' BOTTOM EL.=8.34' N. INV. EL.=8.65' (8" PVC) S. INV. EL.=8.42' (15" HDPE)
F.F.E.=13.10'
F.F.E.=13.20'
F.F.E.=15.50'
F.F.E.=13.15'
F.F.E.=14.76'



GRAPHIC SCALE IN FEET
NAVD 88

DEMOLITION LEGEND

▨	LIMITS OF CLEARING (REMOVAL OF SITE DEBRIS, CONCRETE, PAVEMENT, WALKS, FENCE, BUILDING, TREES, ETC.) ALL IMPROVEMENTS IN THIS AREA, SHALL BE REMOVED AS NOTED ON THESE PLANS.
—▫—▫—	SILT FENCE (SEE SHEET C-203 FOR DETAIL)
☐	EXISTING TREE(S) TO REMAIN (SEE DETAIL SHEET C203)
⊗	EXISTING TREE(S) TO BE REMOVED (LARGER THAN 4")
↑	CONSTRUCTION ENTRANCE

KEY NOTES:

1	SAW CUT (SEE DETAIL SHEET C203).
2	FDOT TYPE III SILT FENCE & INLET PROTECTION (SEE DETAIL SHEET C203).
3	REMOVE FENCING & GATES. REFER TO GEOMETRY PLANS FOR EXACT LOCATION AND LIMITS.
4	EXISTING WATER MAIN TO REMAIN.
5	EXISTING FIRE HYDRANT TO REMAIN.
6	REMOVE/ RELOCATE EXISTING LION STATUES. COORDINATE WITH ARCHITECT/ MARTIN CO. SCH. DISTRICT.
7	EXISTING INLET AND ASSOCIATED PIPING TO REMAIN. REFER TO GRADING & DRAINAGE SHEETS FOR LIMITS OF EXISTING COLLECTION SYSTEM TO REMAIN.
8	REMOVE EXISTING INLET AND ASSOCIATED PIPING.
9	REFER TO MEP PLANS FOR ELECTRICAL/ COMMUNICATION DEMOLITION AND /OR RELCATION.
10	EXISTING FENCING TO REMAIN. REFER TO GEOMETRY PLANS FOR EXACT LOCATIONS.
11	REMOVE EXISTING WATER UTILITY FIXTURE AND ASSOCIATED PIPING. REFER TO UTILITY PLANS FOR EXACT LOCATIONS AND REPLACEMENT.
12	REMOVE EXISTING CURBING, REFER TO GEOMETRY PLANS FOR EXACT LOCATIONS. SAWCUT AT ALL EDGES TO REMAIN.
13	REMOVE EXISTING SANITARY STRUCTURES AND PIPING. REFER TO UTILITY PLANS FOR LIMITS OF DEMOLITION AND REPLACEMENT.
14	EXISTING POWER POLE AND ASSOCIATED GUY WIRES TO REMAIN AND BE PROTECTED.
15	REMOVE EXISTING CONCRETE FLUME. REFER TO GRADING & DRAINAGE PLANS FOR PROPOSED STORMWATER COLLECTION SYSTEM.
16	REFER TO MEP PLANS/GAS COMPANY FOR GAS LINE DEMOLITION AND/OR RELCATION.
17	EXISTING COMMUNICATION BOX TO REMAIN AND BE PROTECTED.
18	REMOVE EXISTING POND FENCING & GATES. REFER TO GEOMETRY PLANS FOR EXISTING POND REPLACEMENT FENCING AND GATE DESIGN & LAYOUT.

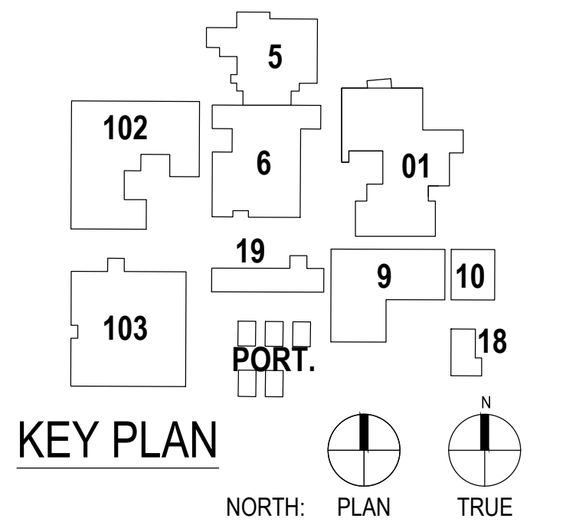
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com
Klima Weeks
CIVIL ENGINEERING

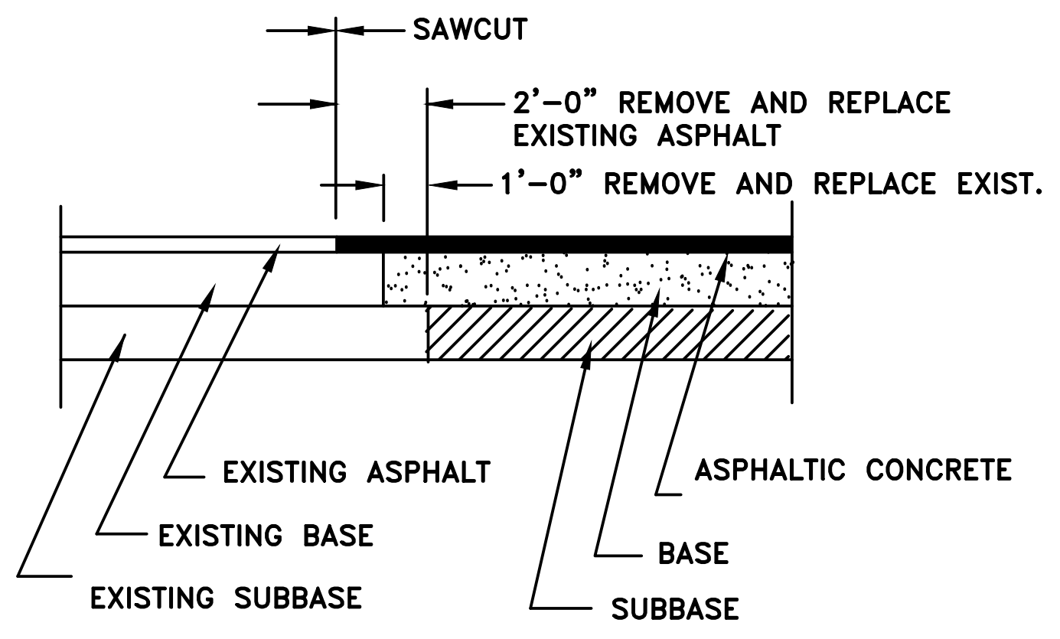
CIVIL DEMOLITION PLAN

C-202

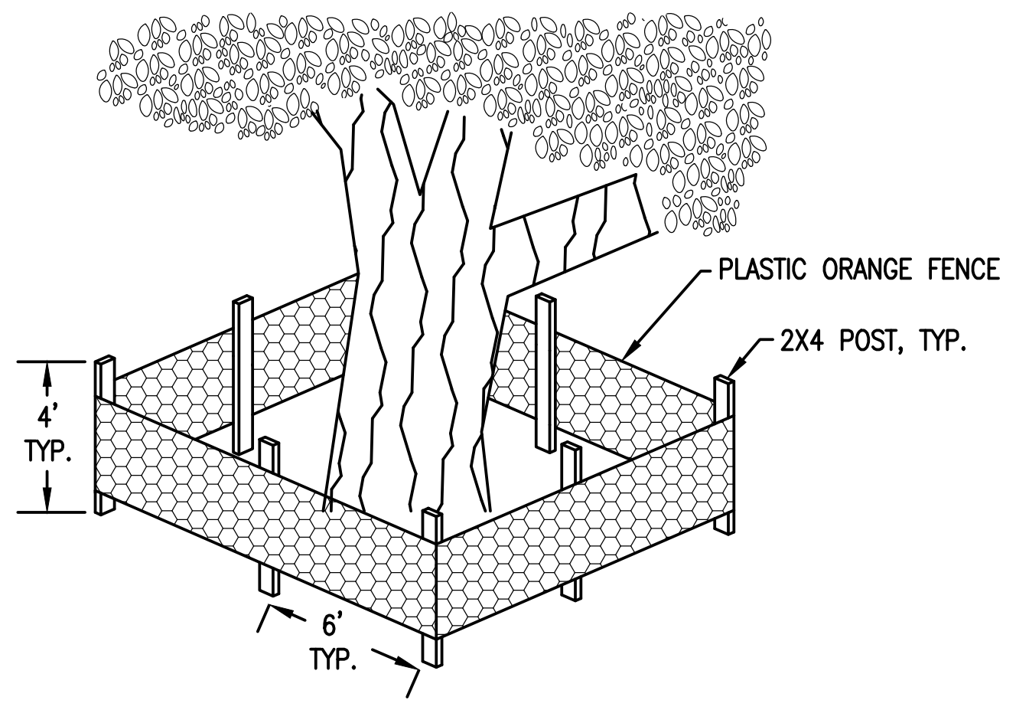
Plot Stamp:
5/29/2026 9:21:47 AM

HB ESTIMATING REC'D 06.01.2026

0"
1"

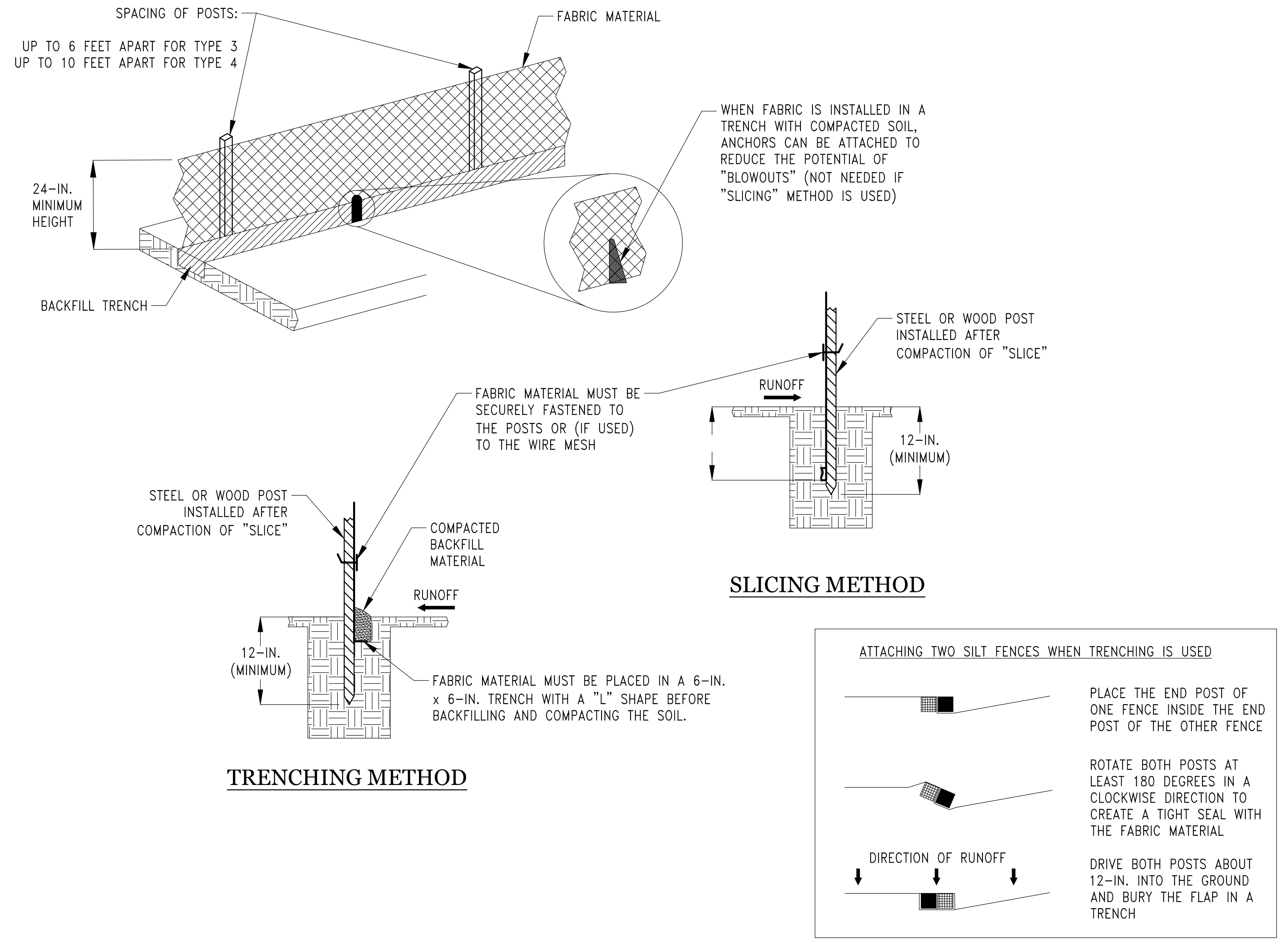


SAWCUT DETAIL
N.T.S.



NOTE: FENCING TO FOLLOW DRIPLINE.

TREE BARRIER DETAIL
N.T.S.


SPACING OF POSTS:
UP TO 6 FEET APART FOR TYPE 3
UP TO 10 FEET APART FOR TYPE 4
FABRIC MATERIAL
24-IN. MINIMUM HEIGHT
BACKFILL TRENCH
STEEL OR WOOD POST INSTALLED AFTER COMPACTION OF "SLICE"
RUNOFF
12-IN. (MINIMUM)
STEEL OR WOOD POST INSTALLED AFTER COMPACTION OF "SLICE"
COMPACTED BACKFILL MATERIAL
RUNOFF
12-IN. (MINIMUM)
DIRECTION OF RUNOFF

WHEN FABRIC IS INSTALLED IN A TRENCH WITH COMPACTED SOIL, ANCHORS CAN BE ATTACHED TO REDUCE THE POTENTIAL OF "BLOWOUTS" (NOT NEEDED IF "SLICING" METHOD IS USED)

FABRIC MATERIAL MUST BE SECURELY FASTENED TO THE POSTS OR (IF USED) TO THE WIRE MESH

FABRIC MATERIAL MUST BE PLACED IN A 6-IN. x 6-IN. TRENCH WITH A "L" SHAPE BEFORE BACKFILLING AND COMPACTING THE SOIL.

SLICING METHOD

TRENCHING METHOD

ATTACHING TWO SILT FENCES WHEN TRENCHING IS USED

PLACE THE END POST OF ONE FENCE INSIDE THE END POST OF THE OTHER FENCE

ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL

DRIVE BOTH POSTS ABOUT 12-IN. INTO THE GROUND AND BURY THE FLAP IN A TRENCH

SILT FENCE BARRIER INSTALLATION
N.T.S.

WEST PALM BEACH, FL
561-478-4457

FL FIRM: AR 0013140

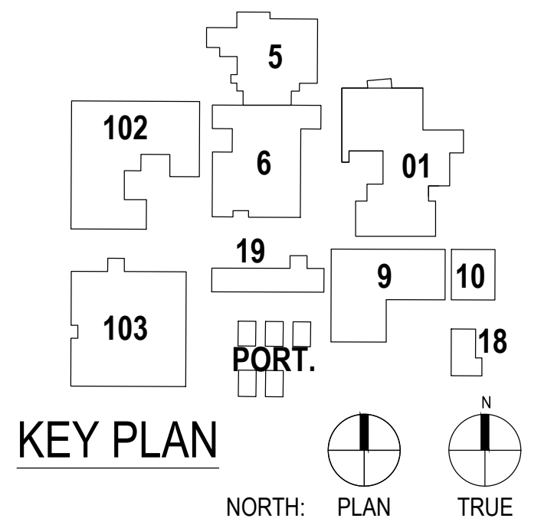
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

JAY A. KLIMA
LICENSE No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE
2026/05/25

PROJECT NUMBER
25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.

DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

CIVIL ENGINEERING

CIVIL DEMOLITION DETAILS

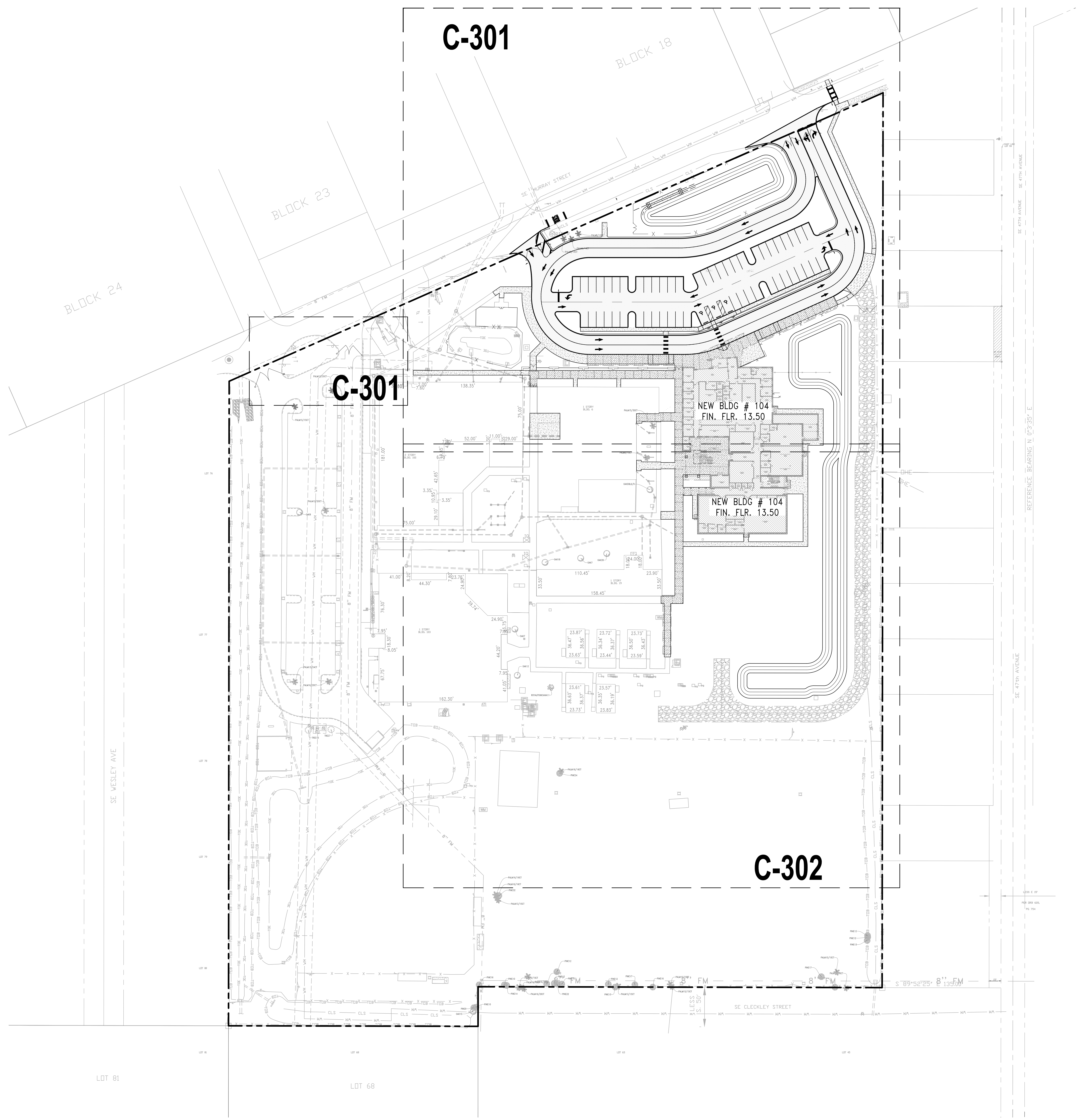
C-203

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:47 AM

OVERALL GEOMETRY & STRIPING PLAN
C-300

0"
1"



N

0' 25 50 100

GRAPHIC SCALE IN FEET
NAVD 88

LEGEND

▬ ‒ ‒ ▬	PROPERTY LINE
── x ──	CHAIN LINK FENCE (BLACK VINYL COATED)
▨	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
▨	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

PBK

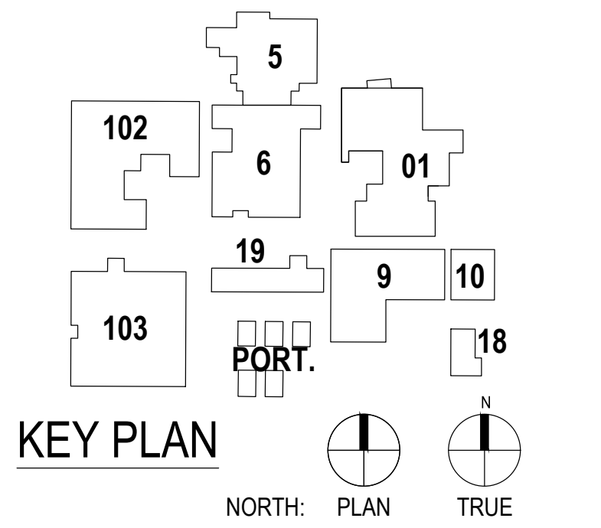
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

OVERALL GEOMETRY AND STRIPING PLAN

C-300

Plot Stamp:
5/29/2026 9:21:52 AM

HB ESTIMATING REC'D 06.01.2026

KEY NOTES:

CURBING - A

A01	FDOT TYPE D CURB, REFER TO FDOT INDEX #520-001.
A02	FDOT TYPE F CURB AND GUTTER, REFER TO FDOT INDEX #520-001.
A03	FDOT CURB TRANSITION, REFER TO FDOT INDEX #520-001.
A04	FDOT VALLEY GUTTER, REFER TO FDOT INDEX #520-001.
A05	12"x8" RIBBON CURB, REFER TO DETAIL ON SHEET C600.
A06	FDOT TYPE F CURB FLARED END, REFER TO FDOT INDEX #520-001.

STRIPING - B

B01	4" SOLID WHITE STRIPE – TRAFFIC PAINT.
B02	6" SOLID WHITE STRIPE – TRAFFIC PAINT.
B03	6" SOLID WHITE, 10' STRIPE, 10' SKIP – TRAFFIC PAINT
B04	"NO PARKING" W/12" CHEVRON @45°, 10' D.C. W/YELLOW TRAFFIC PAINT
B05	6" SOLID, DOUBLE YELLOW STRIPE – TRAFFIC PAINT
B06	6" SOLID YELLOW STRIPE w/ 18" CHEVRONS @ 45°, 10' O.C. – TRAFFIC PAINT.
B07	24" STOP BAR, PAINTED ONSITE – THERMOPLASTIC OFFSITE.
B08	DIRECTIONAL ARROW AND/OR PAVEMENT MESSAGE REFER TO FDOT INDEX #711-001.
B09	CROSSWALK, PAINTED ONSITE – THERMOPLASTIC OFFSITE, REFER TO FDOT INDEX #711-001.
B10	6' RAMP, 20' FLUSH LOADING ZONE w/ 4' SOLID YELLOW TRAFFIC PAINT BORDER AND 12" SOLID YELLOW STRIPE @ 45°, 5' O.C. (TYP.) SEE SHEET C600
B11	HANDICAP PARKING STRIPING AND SIGNAGE, REFER TO DETAIL ON SHEET C600.

SIGNAGE - C

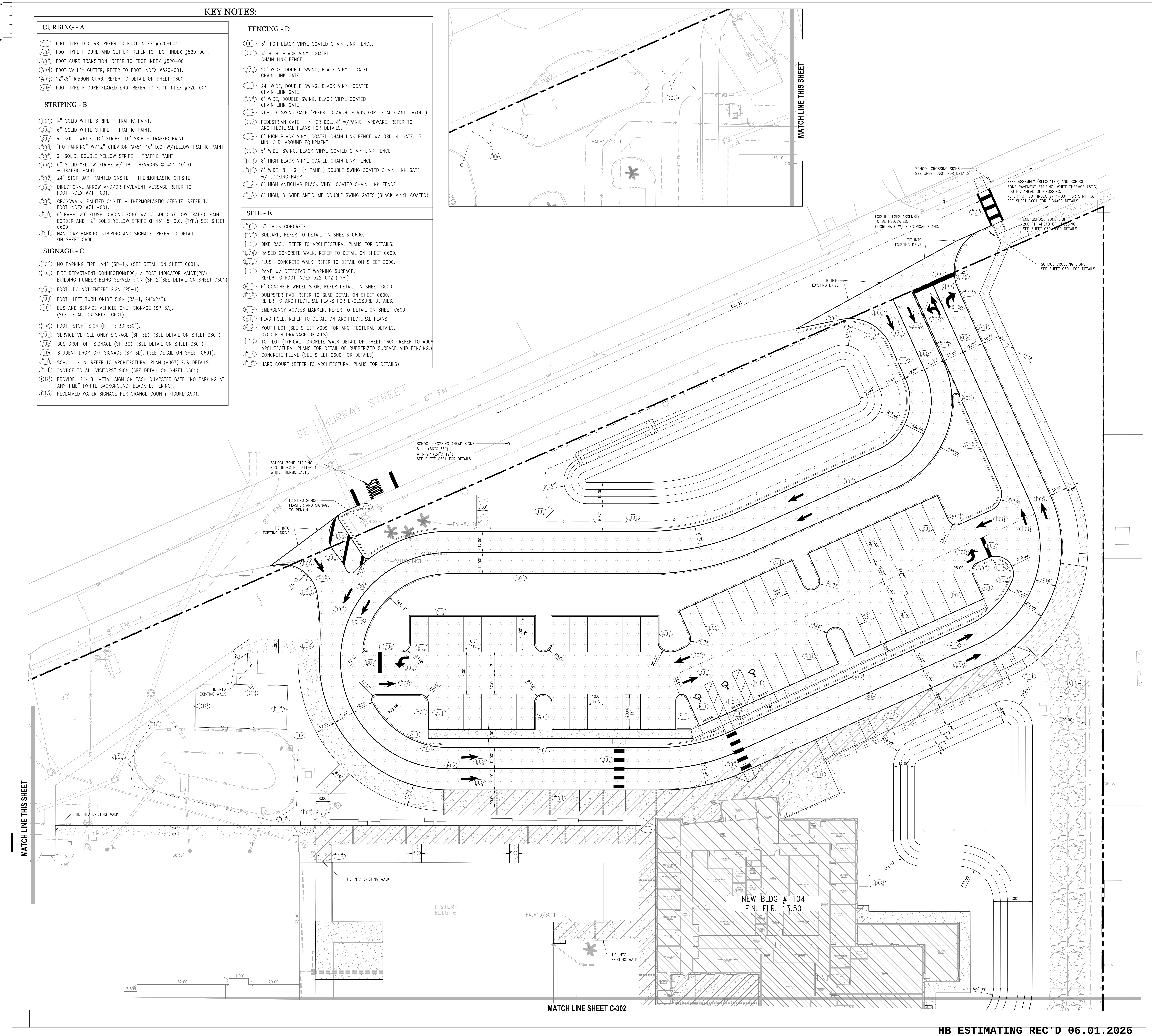
C01	NO PARKING FIRE LANE (SP-1). (SEE DETAIL ON SHEET C601).
C02	FIRE DEPARTMENT CONNECTION(FDC) / POST INDICATOR VALVE(PIV) BUILDING NUMBER BEING SERVED SIGN (SP-2)(SEE DETAIL ON SHEET C601).
C03	FDOT "DO NOT ENTER" SIGN (R5-1).
C04	FDOT "LEFT TURN ONLY" SIGN (R3-1, 24"x24").
C05	BUS AND SERVICE VEHICLE ONLY SIGNAGE (SP-3A). (SEE DETAIL ON SHEET C601).
C06	FDOT "STOP" SIGN (R1-1; 30"x30").
C07	SERVICE VEHICLE ONLY SIGNAGE (SP-3B). (SEE DETAIL ON SHEET C601).
C08	BUS DROP-OFF SIGNAGE (SP-3C). (SEE DETAIL ON SHEET C601).
C09	STUDENT DROP-OFF SIGNAGE (SP-3D). (SEE DETAIL ON SHEET C601).
C10	SCHOOL SIGN, REFER TO ARCHITECTURAL PLAN (A007) FOR DETAILS.
C11	"NOTICE TO ALL VISITORS" SIGN (SEE DETAIL ON SHEET C601)
C12	PROVIDE 12"x18" METAL SIGN ON EACH DUMPSTER GATE "NO PARKING AT ANY TIME" (WHITE BACKGROUND, BLACK LETTERING).
C13	RECLAIMED WATER SIGNAGE PER ORANGE COUNTY FIGURE A501.

FENCING - D

D01	6' HIGH BLACK VINYL COATED CHAIN LINK FENCE.
D02	4' HIGH, BLACK VINYL COATED CHAIN LINK FENCE
D03	20' WIDE, DOUBLE SWING, BLACK VINYL COATED CHAIN LINK GATE
D04	24' WIDE, DOUBLE SWING, BLACK VINYL COATED CHAIN LINK GATE
D05	6' WIDE, DOUBLE SWING, BLACK VINYL COATED CHAIN LINK GATE
D06	VEHICLE SWING GATE (REFER TO ARCH. PLANS FOR DETAILS AND LAYOUT).
D07	PEDESTRIAN GATE – 4' OR DBL. 4' w/PANIC HARDWARE, REFER TO ARCHITECTURAL PLANS FOR DETAILS.
D08	6' HIGH BLACK VINYL COATED CHAIN LINK FENCE w/ DBL. 4' GATE,, 3' MIN. CLR. AROUND EQUIPMENT
D09	5' WIDE, SWING, BLACK VINYL COATED CHAIN LINK FENCE
D10	8' HIGH BLACK VINYL COATED CHAIN LINK FENCE
D11	8' WIDE, 8' HIGH (4 PANEL) DOUBLE SWING COATED CHAIN LINK GATE w/ LOCKING HASP
D12	8' HIGH ANTICLIMB BLACK VINYL COATED CHAIN LINK FENCE
D13	8' HIGH, 8' WIDE ANTICLIMB DOUBLE SWING GATES (BLACK VINYL COATED)

SITE - E

E01	6" THICK CONCRETE
E02	BOLLARD, REFER TO DETAIL ON SHEETS C600.
E03	BIKE RACK, REFER TO ARCHITECTURAL PLANS FOR DETAILS.
E04	RAISED CONCRETE WALK, REFER TO DETAIL ON SHEET C600.
E05	FLUSH CONCRETE WALK, REFER TO DETAIL ON SHEET C600.
E06	RAMP w/ DETECTABLE WARNING SURFACE, REFER TO FDOT INDEX 522-002 (TYP.)
E07	6' CONCRETE WHEEL STOP, REFER DETAIL ON SHEET C600.
E08	DUMPSTER PAD, REFER TO SLAB DETAIL ON SHEET C600. REFER TO ARCHITECTURAL PLANS FOR ENCLOSURE DETAILS.
E09	EMERGENCY ACCESS MARKER, REFER TO DETAIL ON SHEET C600.
E11	FLAG POLE, REFER TO DETAIL ON ARCHITECTURAL PLANS.
E12	YOUTH LOT (SEE SHEET A009 FOR ARCHITECTURAL DETAILS, C700 FOR DRAINAGE DETAILS)
E13	TOT LOT (TYPICAL CONCRETE WALK DETAIL ON SHEET C600. REFER TO A009 ARCHITECTURAL PLANS FOR DETAIL OF RUBBERIZED SURFACE AND FENCING.)
E14	CONCRETE FLUME (SEE SHEET C600 FOR DETAILS)
E15	HARD COURT (REFER TO ARCHITECTURAL PLANS FOR DETAILS)


MATCH LINE THIS SHEET
SE MURRAY STREET
8" FM
SCHOOL CROSSING SIGNS SEE SHEET C601 FOR DETAILS
ESFS ASSEMBLY (RELOCATED) AND SCHOOL ZONE PAVEMENT STRIPING (WHITE THERMOPLASTIC) 200 FT. AHEAD OF CROSSING. REFER TO FDOT INDEX #711-001 FOR STRIPING. SEE SHEET C601 FOR SIGNAGE DETAILS.
EXISTING ESFS ASSEMBLY TO BE RELOCATED. COORDINATE W/ ELECTRICAL PLANS.
END SCHOOL ZONE SIGN 200 FT. AHEAD OF CROSSING SEE SHEET C601 FOR DETAILS
TIE INTO EXISTING DRIVE
300 FT.
SCHOOL CROSSING AHEAD SIGNS S1-1 (36"X 36") W16-9P (24"X 12") SEE SHEET C601 FOR DETAILS
SCHOOL ZONE STRIPING FDOT INDEX No. 711-001 WHITE THERMOPLASTIC
SCHOOL
EXISTING SCHOOL FLASHER AND SIGNAGE TO REMAIN
RISER
PALM8/12CT
PALM8/14CT
PALM12/20CT
PALM15/30CT
TIE INTO EXISTING WALK
NEW BLDG # 104 FIN. FLR. 13.50
1 STORY BLDG. 6
MATCH LINE SHEET C-302

GRAPHIC SCALE IN FEET
NAVD 88

LEGEND

▬ ▬ ▬	PROPERTY LINE
—x—	CHAIN LINK FENCE (BLACK VINYL COATED)
▨	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
▨	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)

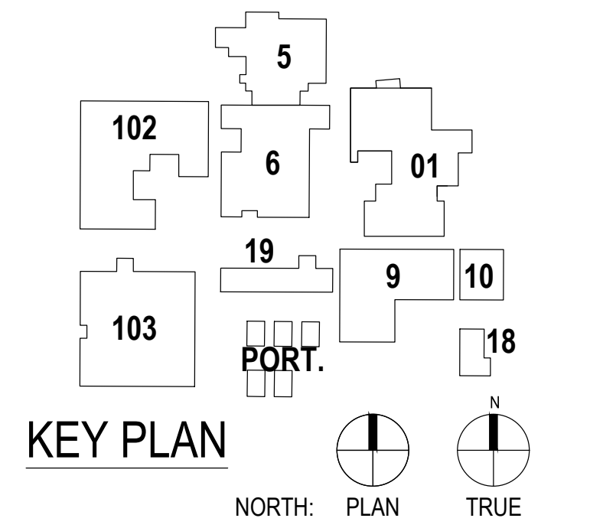
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com
Klima Weeks
CIVIL ENGINEERING

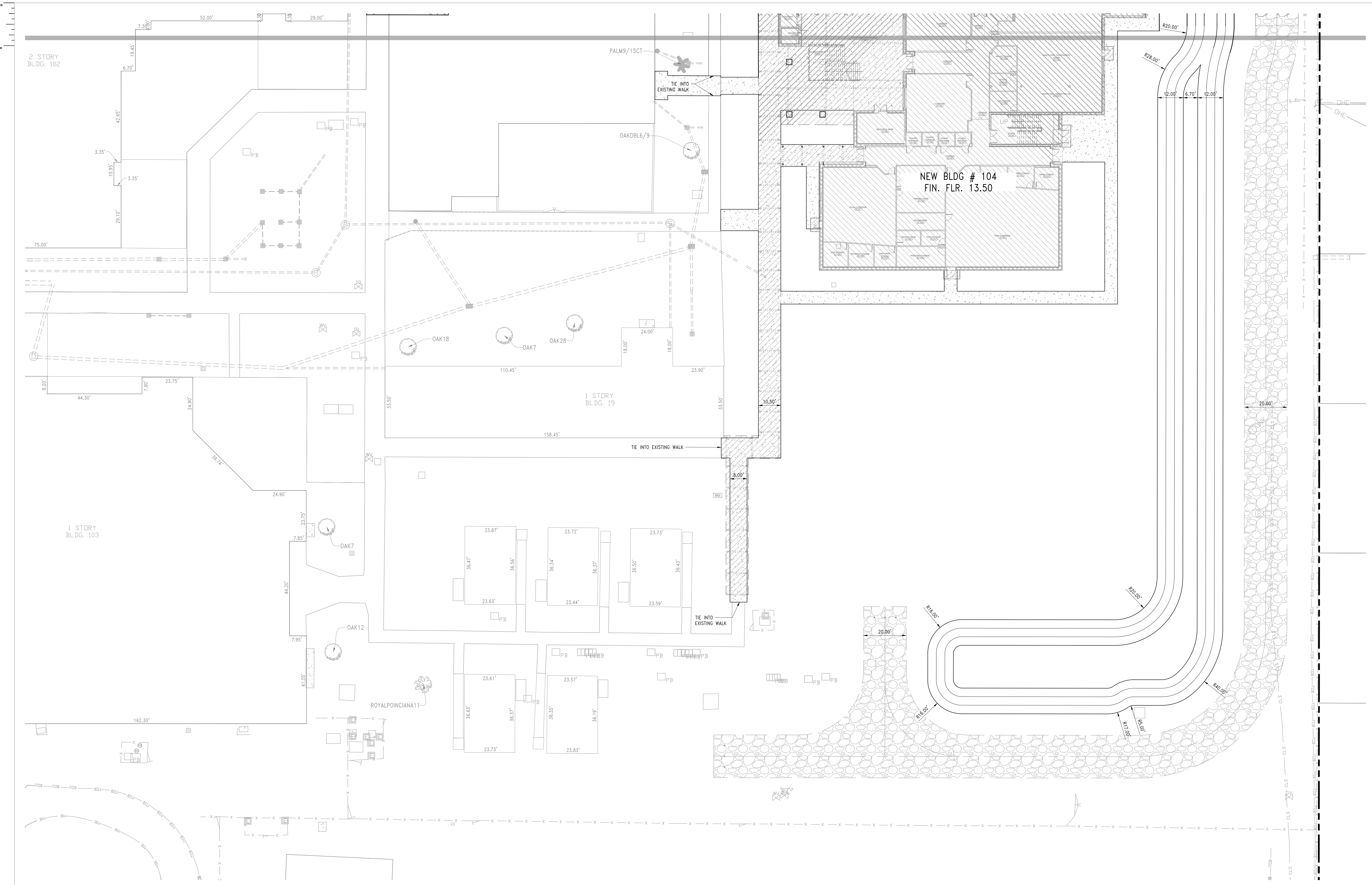
GEOMETRY AND STRIPING PLAN

C-301

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:55 AM

GEOMETRY & STRIPING PLAN
C-302



GRAPHIC SCALE IN FEET
NAVD 88
0' 10 20 40

LEGEND

▬ ▬ ▬	PROPERTY LINE
——x——	CHAIN LINK FENCE (BLACK VINYL COATED)
░	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
░	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)

KEY NOTES:

CURBING - A

A01	FDOT TYPE D CURB, REFER TO FDOT INDEX #520-001.
A02	FDOT TYPE F CURB AND GUTTER, REFER TO FDOT INDEX #520-001.
A03	FDOT CURB TRANSITION, REFER TO FDOT INDEX #520-001.
A04	FDOT VALLEY GUTTER, REFER TO FDOT INDEX #520-001.
A05	12"x8" RIBBON CURB, REFER TO DETAIL ON SHEET C600.

STRIPING - B

B01	4" SOLID WHITE STRIPE – TRAFFIC PAINT.
B02	6" SOLID WHITE STRIPE – TRAFFIC PAINT.
B03	6" SOLID WHITE, 10' STRIPE, 10' SKIP – TRAFFIC PAINT
B04	"NO PARKING" W/12" CHEVRON @45°, 10' D.C. W/YELLOW TRAFFIC PAINT
B05	6" SOLID, DOUBLE YELLOW STRIPE – TRAFFIC PAINT
B06	6" SOLID YELLOW STRIPE w/ 18" CHEVRONS @ 45°, 10' O.C. – TRAFFIC PAINT.
B07	24" STOP BAR, PAINTED ONSITE – THERMOPLASTIC OFFSITE.
B08	DIRECTIONAL ARROW AND/OR PAVEMENT MESSAGE REFER TO FDOT INDEX #711-001.
B09	CROSSWALK, PAINTED ONSITE – THERMOPLASTIC OFFSITE, REFER TO FDOT INDEX #711-001.
B10	6' RAMP, 20' FLUSH LOADING ZONE w/ 4' SOLID YELLOW TRAFFIC PAINT BORDER AND 12" SOLID YELLOW STRIPE @ 45°, 5' O.C. (TYP.) SEE SHEET C600
B11	HANDICAP PARKING STRIPING AND SIGNAGE, REFER TO DETAIL ON SHEET C601.

SIGNAGE - C

C01	NO PARKING FIRE LANE (SP-1). (SEE DETAIL ON SHEET C601).
C02	FIRE DEPARTMENT CONNECTION(FDC) / POST INDICATOR VALVE(PIV) BUILDING NUMBER BEING SERVED SIGN (SP-2)(SEE DETAIL ON SHEET C601).
C03	FDOT "DO NOT ENTER" SIGN (R5-1).
C04	FDOT "LEFT TURN ONLY" SIGN (R3-1, 24"x24").
C05	BUS AND SERVICE VEHICLE ONLY SIGNAGE (SP-3A). (SEE DETAIL ON SHEET C601).
C06	FDOT "STOP" SIGN (R1-1; 30"x30").
C07	SERVICE VEHICLE ONLY SIGNAGE (SP-3B). (SEE DETAIL ON SHEET C601).
C08	BUS DROP-OFF SIGNAGE (SP-3C). (SEE DETAIL ON SHEET C601).
C09	STUDENT DROP-OFF SIGNAGE (SP-3D). (SEE DETAIL ON SHEET C601).
C10	SCHOOL SIGN, REFER TO ARCHITECTURAL PLAN (A007) FOR DETAILS.
C11	"NOTICE TO ALL VISITORS" SIGN (SEE DETAIL ON SHEET C601)
C12	PROVIDE 12"x18" METAL SIGN ON EACH DUMPSTER GATE "NO PARKING AT ANY TIME" (WHITE BACKGROUND, BLACK LETTERING).
C13	RECLAIMED WATER SIGNAGE PER ORANGE COUNTY FIGURE A501.

FENCING - D

D01	6' HIGH BLACK VINYL COATED CHAIN LINK FENCE.
D02	4' HIGH, BLACK VINYL COATED CHAIN LINK FENCE
D03	20' WIDE, DOUBLE SWING, BLACK VINYL COATED CHAIN LINK GATE
D04	24' WIDE, DOUBLE SWING, BLACK VINYL COATED CHAIN LINK GATE
D05	6' WIDE, DOUBLE SWING, BLACK VINYL COATED CHAIN LINK GATE
D06	VEHICLE SWING GATE (REFER TO ARCH. PLANS FOR DETAILS AND LAYOUT).
D07	PEDESTRIAN GATE – 4' OR DBL. 4' w/PANIC HARDWARE, REFER TO ARCHITECTURAL PLANS FOR DETAILS.
D08	6' HIGH BLACK VINYL COATED CHAIN LINK FENCE w/ DBL. 4' GATE,, 3' MIN. CLR. AROUND EQUIPMENT
D09	5' WIDE, SWING, BLACK VINYL COATED CHAIN LINK FENCE
D10	8' HIGH BLACK VINYL COATED CHAIN LINK FENCE
D11	8' WIDE, 8' HIGH (4 PANEL) DOUBLE SWING COATED CHAIN LINK GATE w/ LOCKING HASP

SITE - E

E01	6" THICK CONCRETE
E02	BOLLARD, REFER TO DETAIL ON SHEETS C600.
E03	BIKE RACK, REFER TO ARCHITECTURAL PLANS FOR DETAILS.
E04	RAISED CONCRETE WALK, REFER TO DETAIL ON SHEET C600.
E05	FLUSH CONCRETE WALK, REFER TO DETAIL ON SHEET C600.
E06	RAMP w/ DETECTABLE WARNING SURFACE, REFER TO FDOT INDEX 522-002 (TYP.)
E07	6' CONCRETE WHEEL STOP, REFER DETAIL ON SHEET C600.
E08	DUMPSTER PAD, REFER TO SLAB DETAIL ON SHEET C600. REFER TO ARCHITECTURAL PLANS FOR ENCLOSURE DETAILS.
E09	EMERGENCY ACCESS MARKER, REFER TO DETAIL ON SHEET C600.
E11	FLAG POLE, REFER TO DETAIL ON ARCHITECTURAL PLANS.
E12	YOUTH LOT (SEE SHEET A009 FOR ARCHITECTURAL DETAILS, C700 FOR DRAINAGE DETAILS)
E13	TOT LOT (TYPICAL CONCRETE WALK DETAIL ON SHEET C600. REFER TO A009 ARCHITECTURAL PLANS FOR DETAIL OF RUBBERIZED SURFACE AND FENCING.)
E14	CONCRETE FLUME (SEE SHEET C600 FOR DETAILS)
E15	HARD COURT (REFER TO ARCHITECTURAL PLANS FOR DETAILS)

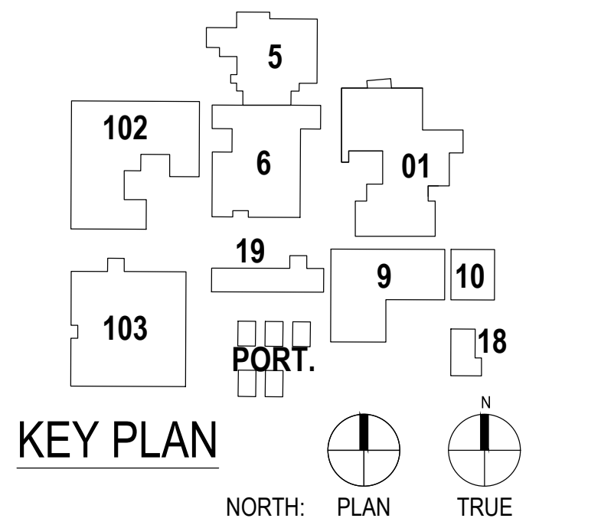
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

JAY A. KLIMA
No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com
Klima Weeks
CIVIL ENGINEERING

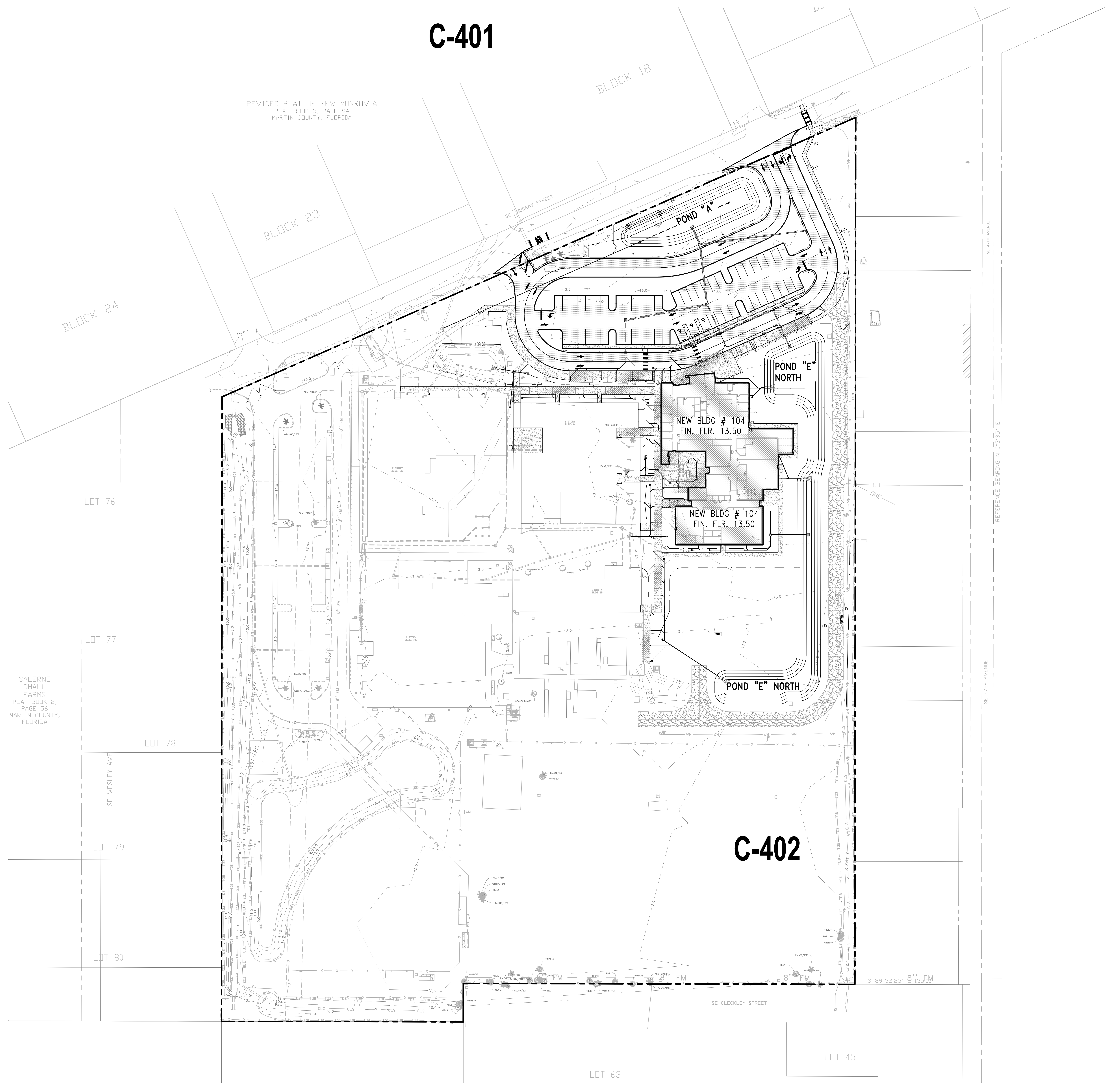
GEOMETRY AND STRIPING PLAN

C-302

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:21:57 AM

OVERALL GRADING & DRAINAGE PLAN
C-400



N

0' 25 50 100

GRAPHIC SCALE IN FEET
NAVD 88

LEGEND:

12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
⟿	PROPOSED DRAINAGE FLOW
◎	MANHOLE
▭ ▣	INLET
⊡	CLEAN OUT
▬	PVC
═	CPP
▨	RCP

LEGEND:

━ ‒ ‒ ━	PROPERTY LINE
— x — x —	CHAIN LINK FENCE (BLACK VINYL COATED)
░	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
░	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)

PBK

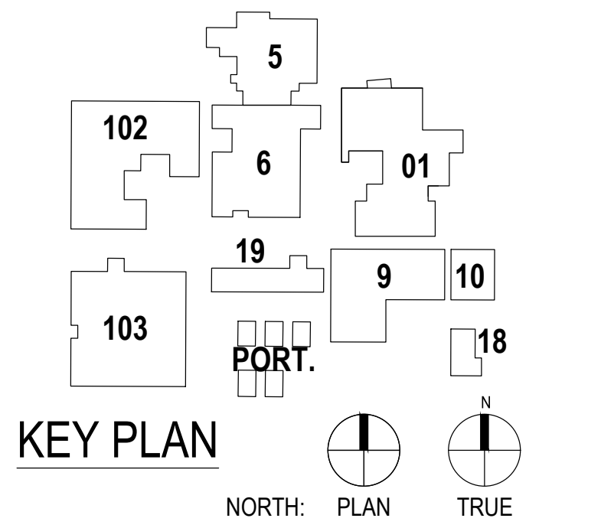
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.

DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

OVERALL GRADING AND DRAINAGE PLAN

C-400

HB ESTIMATING REC'D 06.01.2026

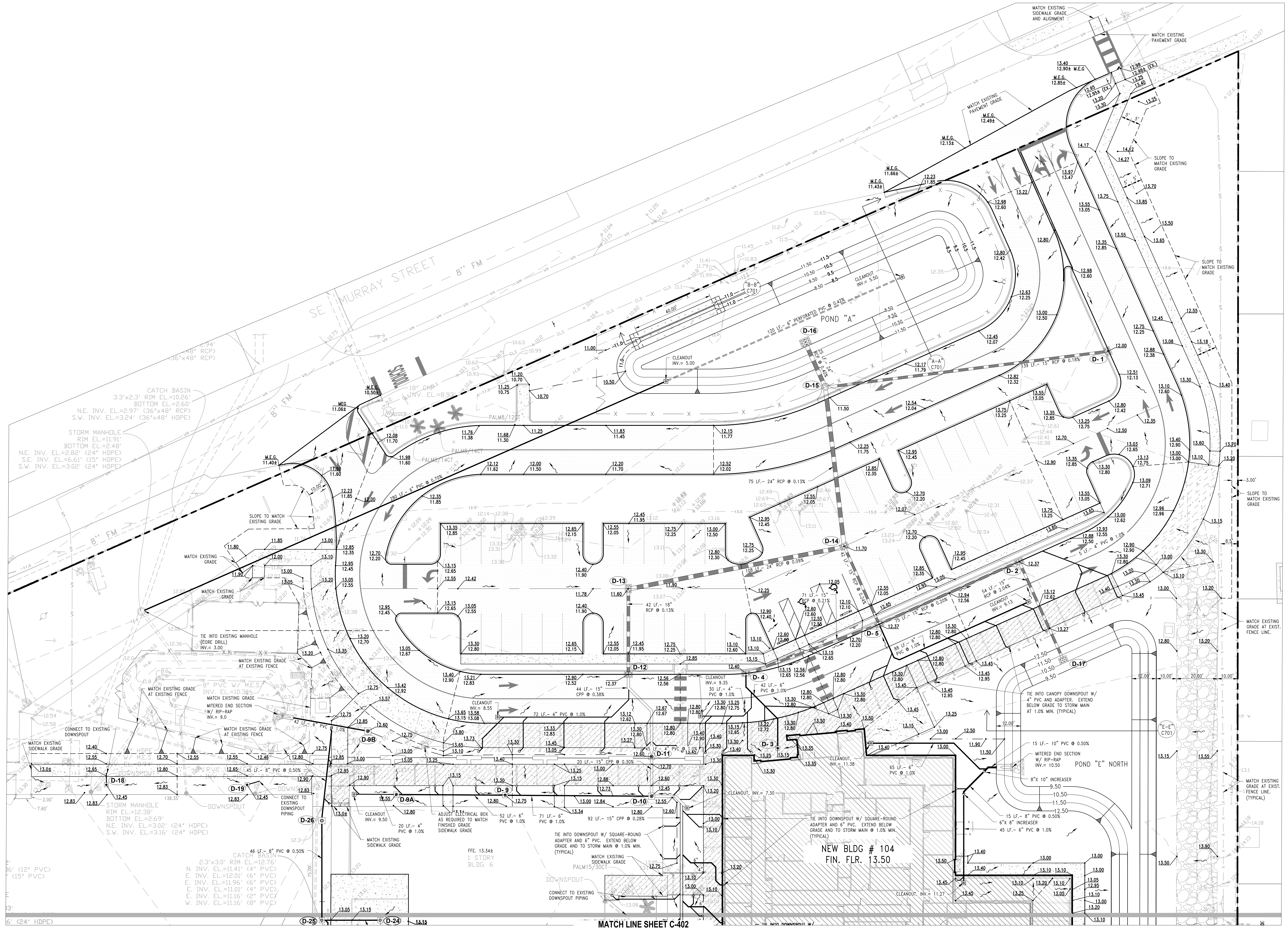
Plot Stamp:
5/29/2026 9:22:05 AM

LEGEND:

─ · ─ · ─	PROPERTY LINE
— x — x —	CHAIN LINK FENCE (BLACK VINYL COATED)
▭	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
▭	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)

N

0' 10 20 40
GRAPHIC SCALE IN FEET
NAVD 88


SE MURRAY STREET
8" FM
POND "A"
POND "E" NORTH
NEW BLDG # 104
FIN. FLR. 13.50
1 STORY BLDG. 6
MATCH LINE SHEET C-402
MATCH EXISTING SIDEWALK GRADE AND ALIGNMENT
MATCH EXISTING PAVEMENT GRADE
SLOPE TO MATCH EXISTING GRADE
MATCH EXISTING GRADE AT EXIST. FENCE LINE.
TIE INTO EXISTING MANHOLE (CORE DRILL) INV.= 3.00
TIE INTO CANOPY DOWNSPOUT W/ 4" PVC AND ADAPTER. EXTEND BELOW GRADE TO STORM MAIN AT 1.0% MIN. (TYPICAL)
TIE INTO DOWNSPOUT W/ SQUARE-ROUND ADAPTER AND 6" PVC. EXTEND BELOW GRADE AND TO STORM MAIN @ 1.0% MIN. (TYPICAL)
CONNECT TO EXISTING DOWNSPOUT
ADJUST ELECTRICAL BOX AS REQUIRED TO MATCH FINISHED GRADE
MITERED END SECTION W/ RIP-RAP INV.= 10.50
CATCH BASIN 3.3'x2.3' RIM EL.=10.26' BOTTOM EL.=2.60'
STORM MANHOLE RIM EL.=11.91' BOTTOM EL.=2.48'
STORM MANHOLE RIM EL.=12.38' BOTTOM EL.=2.69'
D-1
D-2
D-3
D-4
D-5
D-9
D-9A
D-9B
D-10
D-11
D-12
D-13
D-14
D-15
D-16
D-17
D-18
D-19
D-24
D-25
D-26
"A-A" C701
"B-B" C701
"E-E" C701

LEGEND:

12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
∿→	PROPOSED DRAINAGE FLOW
◎	MANHOLE
▭ ▣	INLET
⊡	CLEAN OUT
━━	PVC
═	CPP
▬	RCP

STORM STRUCTURE TABLE:

D-1
TYPE "P-9" CURB INLET
TOP: 12.38
GRATE: 12.00
NW. INV: 7.65

D-2
TYPE "P-9" CURB INLET
TOP: 12.75
GRATE: 12.37
NE. INV: 8.85
SE. INV: 7.90
SW. INV: 7.80

D-3
12" INLINE DRAIN W/ PEDESTRIAN GRATE
TOP: 13.15
N. INV: 9.00

D-4
TYPE "P-9" CURB INLET
TOP: 12.78
GRATE: 12.40
S. INV: 8.58
E. INV: 7.85

D-5
TYPE "P-9" CURB INLET
TOP: 12.75
GRATE: 12.37
S. INV: 8.25
W. INV: 7.70
NE. INV: 7.65
NW. INV: 7.55

D-6 THRU D-8: REFER TO SHEET C-402

D-9
12" DRAIN BASIN W/ DOMED GRATE
TOP: 12.75
W. INV: 8.70
E. INV: 8.61

D-9A
12" DRAIN BASIN W/ DOMED GRATE
TOP: 12.55
W. INV: 9.40
E. INV: 9.22

D-9B
15" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.60
W. INV: 9.23

D-10
18" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.45
W. INV: 7.90
E. INV: 7.25
N. INV: 7.10

D-11
18" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.60
S. INV: 7.04
N. INV: 6.97

D-12
TYPE "P-9" CURB INLET
TOP: 12.75
GRATE: 12.37
S. INV: 5.01
N. INV: 4.76

D-13
TYPE "F" INLET
TOP: 11.60
S. INV: 4.71
E. INV: 4.21

D-14
TYPE "G" INLET
TOP: 11.70
W. INV: 4.11
SE. INV: 7.45
N. INV: 4.01

D-15
TYPE "P-4" CURB INLET
TOP: 11.88
THROAT: 11.50
S. INV: 3.91
SE. INV: 7.40
N. INV: 3.81

D-16
TYPE "E" INLET (BUBBLE-UP)
TOP: 9.50
S. INV: 3.71

D-17
(CONTROL STRUCTURE)
TOP: 12.25
NW. INV: 9.00
(6" WIDE WEIR-SOUTH STR. SURFACE, BTM. EL.= 11.30)

D-18
12" INLINE DRAIN W/ DOMED GRATE
TOP: 12.45
N. INV: 10.25

D-19
12" INLINE DRAIN W/ DOMED GRATE
TOP: 12.45
NE. INV: 10.25

D-26
15" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.20
N. INV: 9.34
S. INV: 9.82

D-20 THRU D-25 REFER TO SHEET C-402

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS

KEY PLAN

NORTH: PLAN TRUE

JAY A. KLIMA
LICENSE No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

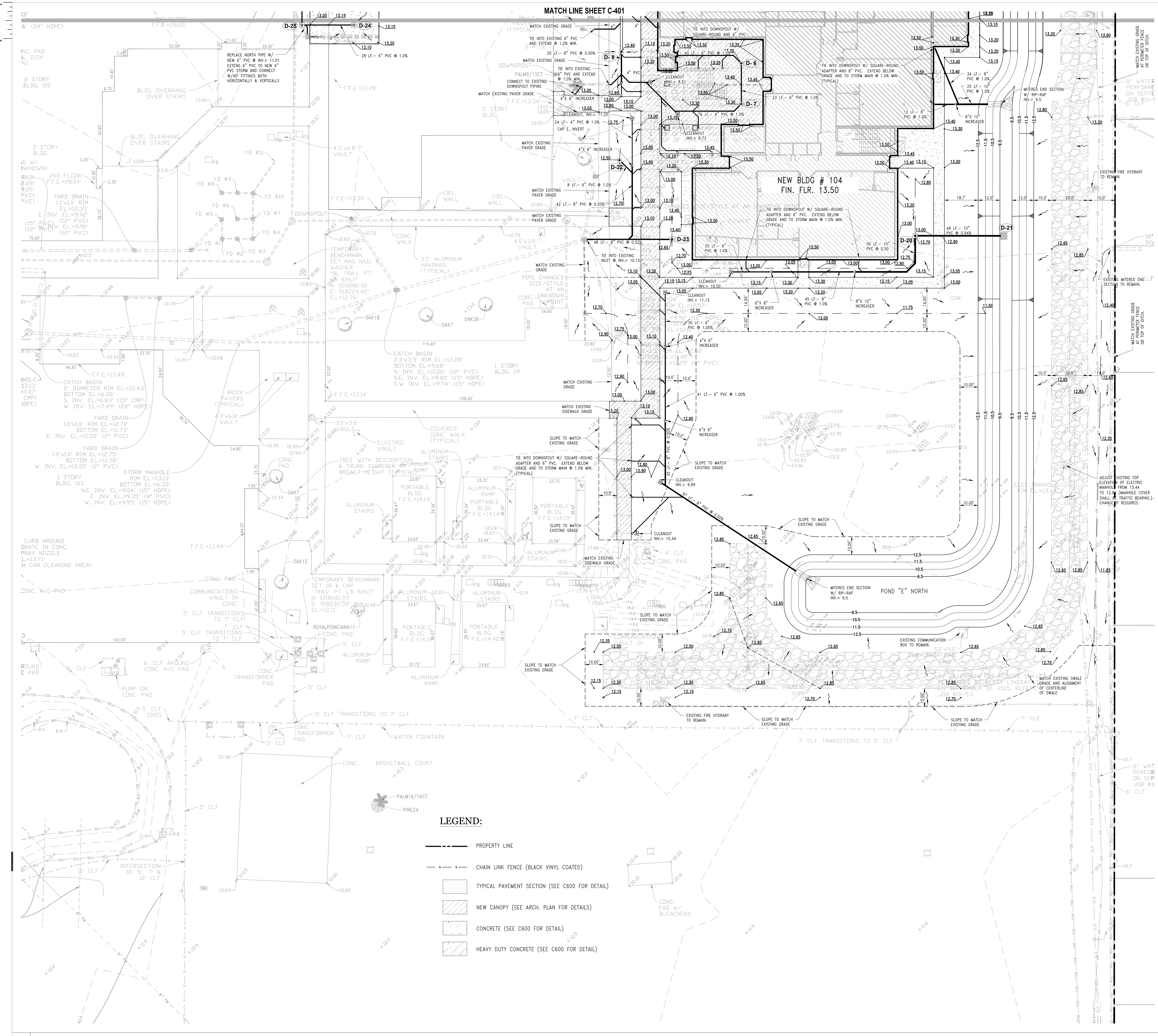
GRADING AND DRAINAGE PLAN

C-401

Plot Stamp:
5/29/2026 9:22:09 AM

HB ESTIMATING REC'D 06.01.2026

GRADING & DRAINAGE PLAN
C-402



LEGEND:

▬ ▬ ▬	PROPERTY LINE
—x—x—	CHAIN LINK FENCE (BLACK VINYL COATED)
░	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
░	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)

N

0' 10 20 40

GRAPHIC SCALE IN FEET
NAVD 88

LEGEND:

12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
∿→	PROPOSED DRAINAGE FLOW
◎	MANHOLE
▭ ▣	INLET
⊡	CLEAN OUT
━	PVC
═	CPP
▬	RCP

STORM STRUCTURE TABLE:

D-1 THRU D-5: REFER TO SHEET C401

D-6
12" DRAIN BASIN W/ PEDESTRIAN GRATE
TOP: 13.20
NW. INV: 9.70
S. INV: 9.60

D-7
12" DRAIN BASIN W/ PEDESTRIAN GRATE
TOP: 13.30
N. INV: 9.37
SW. INV: 8.75

D-8
15" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.60
S. INV: 7.94
N. INV: 7.50

D-9 THRU D-19: REFER TO SHEET C401

D-20
15" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.70
S. INV: 9.43
E. INV: 7.10

D-21
24" DRAIN BASIN W/ STANDARD GRATE (BUBBLE-UP)
TOP: 9.50
W. INV: 6.65

D-22
12" INLINE DRAIN W/ DOMED GRATE
TOP: 12.50
SE. INV: 10.60

D-23
15" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.65
W. INV: 10.40

D-24
15" DRAIN BASIN W/ PEDESTRIAN GRATE
TOP: 13.00
W. INV: 10.50

D-25
15" DRAIN BASIN W/ STANDARD GRATE
TOP: 12.20
W. INV: 10.22
N. INV: 10.05

D-26: REFER TO SHEET C401

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

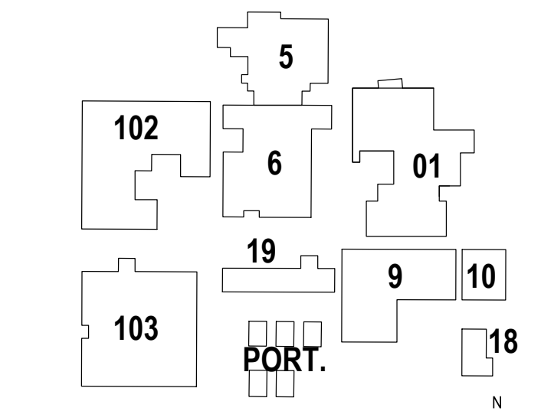
Klima Weeks
CIVIL ENGINEERING

PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION
4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

JAY A. KLIMA
LICENSE No. 49945
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE 2026/05/25
PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

GRADING AND DRAINAGE PLAN

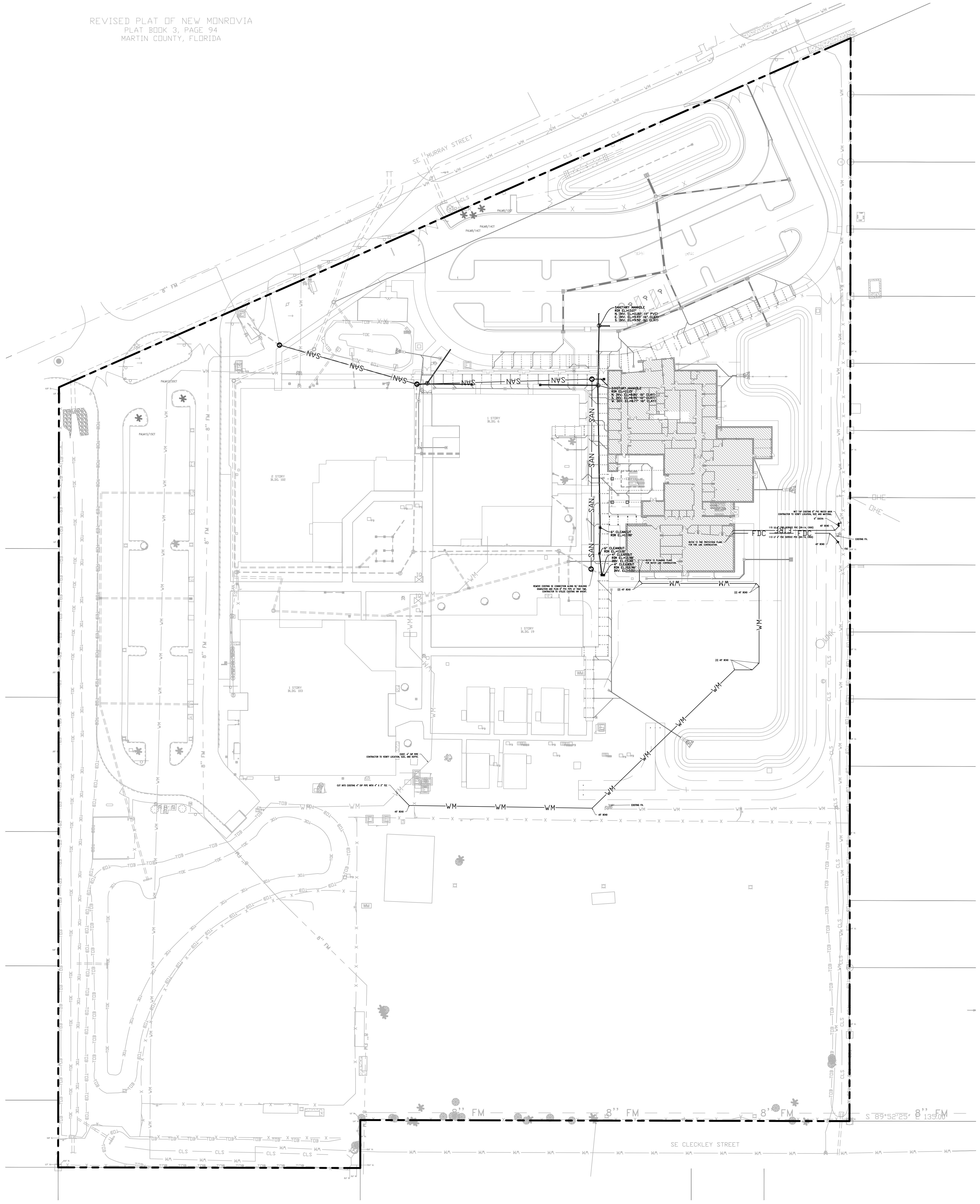
C-402

Plot Stamp:
5/29/2026 9:22:12 AM

HB ESTIMATING REC'D 06.01.2026

OVERALL UTILITY PLAN
C-500

0"
1"



N
0' 25 50 100
GRAPHIC SCALE IN FEET
NAVD 88

LEGEND

— — —	PROPERTY LINE
—x—	CHAIN LINK FENCE (BLACK VINYL COATED)
▨	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
▨	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)
12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
∼→	PROPOSED DRAINAGE FLOW
◎	MANHOLE
▭ ⊡	INLET
⊡	CLEAN OUT
━	PVC
═	CPP
═	RCP
—WM—	WATER LINE
—SAN—	SANITARY LINE
—FIRE—	FIRE LINE
—FDC—	FDC FIRE LINE
HYD	FIRE HYDRANT ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
⧖	GATE VALVE
Ⓢ	SANITARY MANHOLE
⊡	SANITARY CLEANOUT

TYPICAL PIPE BENDS

90° BEND
45° BEND
TEE

NOTE: ALL OTHER PIPE BENDS USED IN DESIGN OF THIS PROJECT ARE NOTED ON THE PLANS

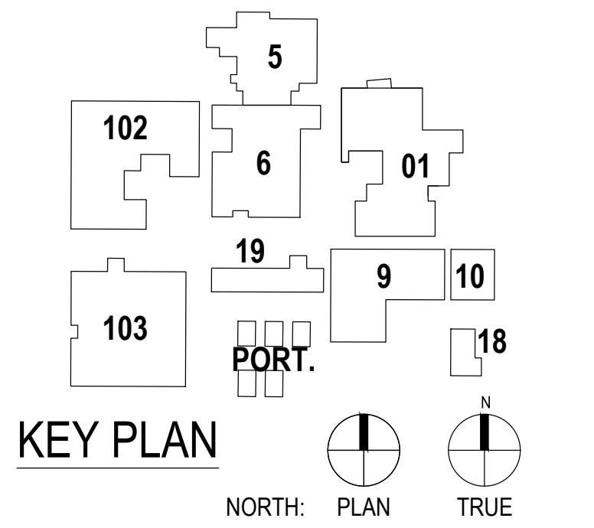
PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

OVERALL UTILITY PLAN

C-500

XX UTILITY PLAN
1" = 60'

Plot Stamp:
5/29/2026 9:22:21 AM

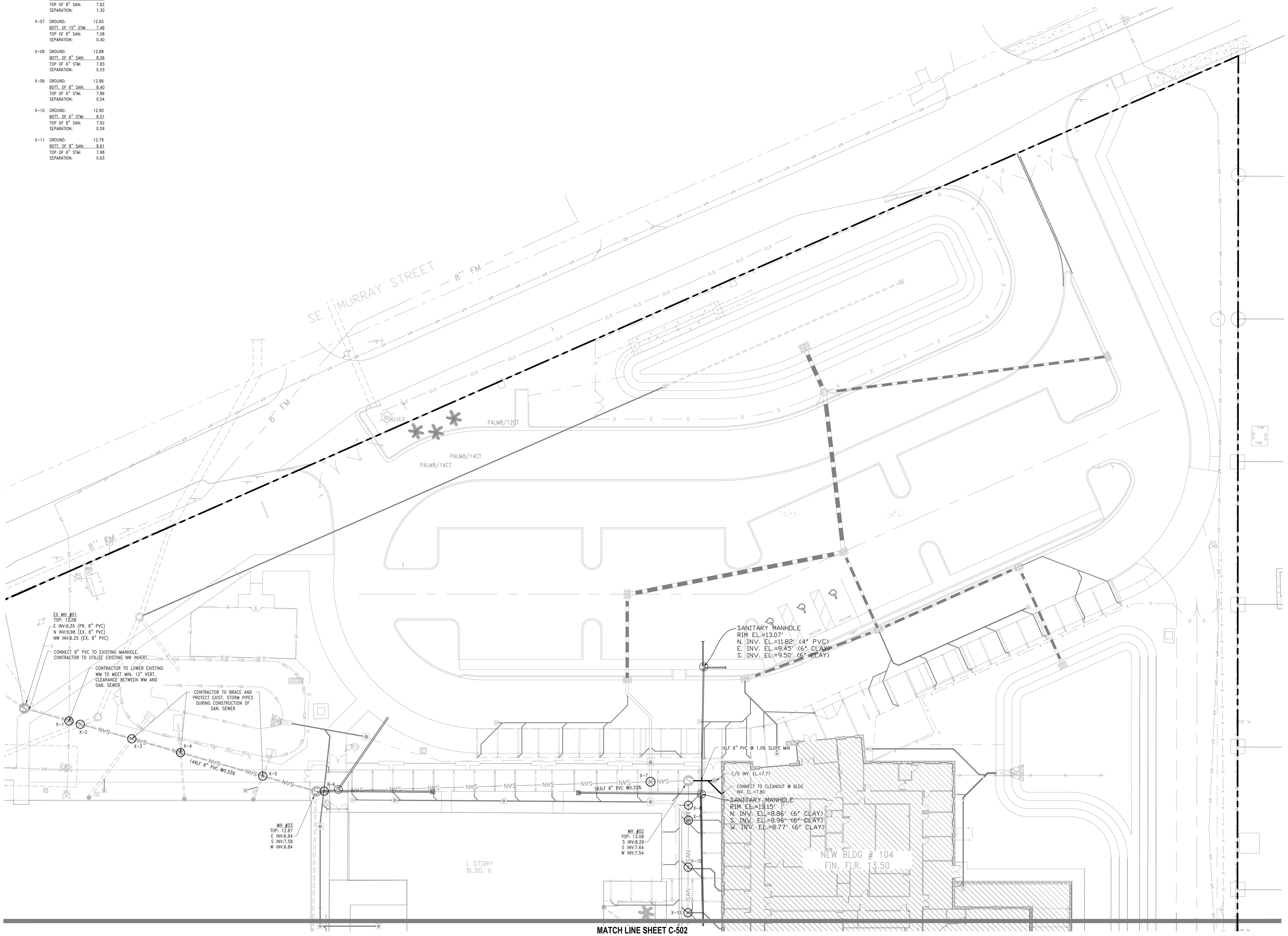
HB ESTIMATING REC'D 06.01.2026

UTILITY PLAN
C-501

CROSSINGS

X-01	GROUND:	12.35
	BOTT. OF 8" SAN:	6.42
	TOP OF WM:	5.42
	SEPARATION:	1.00
X-02	GROUND:	12.31
	BOTT. OF 8" SAN:	6.44
	TOP OF 24" STM:	5.16
	SEPARATION:	1.28
X-03	GROUND:	12.20
	BOTT. OF 15" STM:	9.09
	TOP OF 8" SAN:	7.20
	SEPARATION:	1.89
X-04	GROUND:	12.43
	BOTT. OF 8" STM:	10.44
	TOP OF 8" SAN:	7.28
	SEPARATION:	3.16
X-05	GROUND:	12.77
	BOTT. OF 8" STM:	10.42
	TOP OF 8" SAN:	7.42
	SEPARATION:	3.00
X-06	GROUND:	12.92
	BOTT. OF 8" STM:	8.92
	TOP OF 8" SAN:	7.62
	SEPARATION:	1.30
X-07	GROUND:	12.65
	BOTT. OF 15" STM:	7.48
	TOP OF 8" SAN:	7.08
	SEPARATION:	0.40
X-08	GROUND:	12.88
	BOTT. OF 8" SAN:	8.36
	TOP OF 6" STM:	7.83
	SEPARATION:	0.53
X-09	GROUND:	12.86
	BOTT. OF 8" SAN:	8.40
	TOP OF 6" STM:	7.86
	SEPARATION:	0.54
X-10	GROUND:	12.90
	BOTT. OF 6" STM:	8.51
	TOP OF 8" SAN:	7.92
	SEPARATION:	0.59
X-11	GROUND:	12.79
	BOTT. OF 8" SAN:	8.61
	TOP OF 6" STM:	7.98
	SEPARATION:	0.63

N
0' 10 20 40
GRAPHIC SCALE IN FEET
NAVD 88



EX MH #01
TOP: 12.58
E INV:6.35 (PR. 8" PVC)
N INV:9.98 (EX. 8" PVC)
NW INV:6.25 (EX. 8" PVC)

CONNECT 8" PVC TO EXISTING MANHOLE.
CONTRACTOR TO UTILIZE EXISTING NW INVERT.

CONTRACTOR TO LOWER EXISTING WM TO MEET MIN. 12" VERT. CLEARANCE BETWEEN WM AND SAN. SEWER

CONTRACTOR TO BRACE AND PROTECT EXIST. STORM PIPES DURING CONSTRUCTION OF SAN. SEWER

149LF 8" PVC @0.33%

183LF 8" PVC @0.33%

MH #03
TOP: 12.87
E INV:6.94
S INV:7.58
W INV:6.84

MH #02
TOP: 13.08
S INV:8.29
E INV:7.64
W INV:7.54

SANITARY MANHOLE
RIM EL.=13.07'
N. INV. EL.=11.82' (4" PVC)
E. INV. EL.=9.45' (6" CLAY)
S. INV. EL.=9.50' (6" CLAY)

16LF 6" PVC @ 1.0% SLOPE MIN

C/O INV. EL.=7.71

CONNECT TO CLEANOUT @ BLDG
INV. EL.=7.80

SANITARY MANHOLE
RIM EL.=13.15'
N. INV. EL.=8.86' (6" CLAY)
S. INV. EL.=8.96' (6" CLAY)
W. INV. EL.=8.77' (6" CLAY)

MATCH LINE SHEET C-502

LEGEND

▬ ▬ ▬	PROPERTY LINE
—x—	CHAIN LINK FENCE (BLACK VINYL COATED)
▨	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
▨	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)
12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
→	PROPOSED DRAINAGE FLOW
◎	MANHOLE
▭ ▣	INLET
▣	CLEAN OUT
▬	PVC
═	CPP
▬	RCP
—WM—	WATER LINE
—SAN—	SANITARY LINE
—FIRE—	FIRE LINE
—FDC—	FDC FIRE LINE
HYD	FIRE HYDRANT ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
⧗	GATE VALVE
Ⓢ	SANITARY MANHOLE
▣	SANITARY CLEANOUT

TYPICAL PIPE BENDS

┌	90° BEND
╲	45° BEND
├	TEE

NOTE: ALL OTHER PIPE BENDS USED IN DESIGN OF THIS PROJECT ARE NOTED ON THE PLANS

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

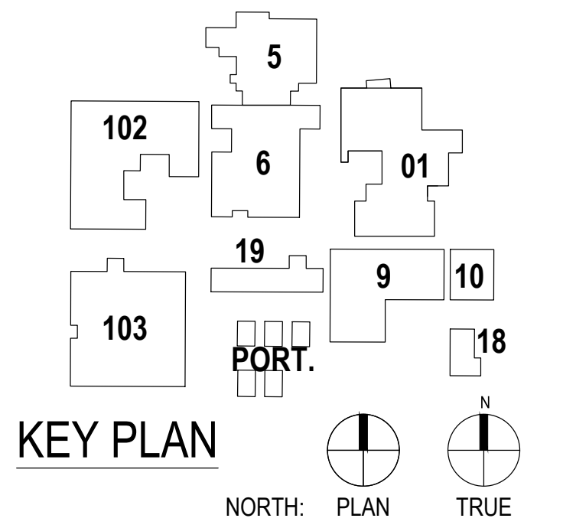
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.

DRAWN BY: RZ

UTILITY PLAN

C-501

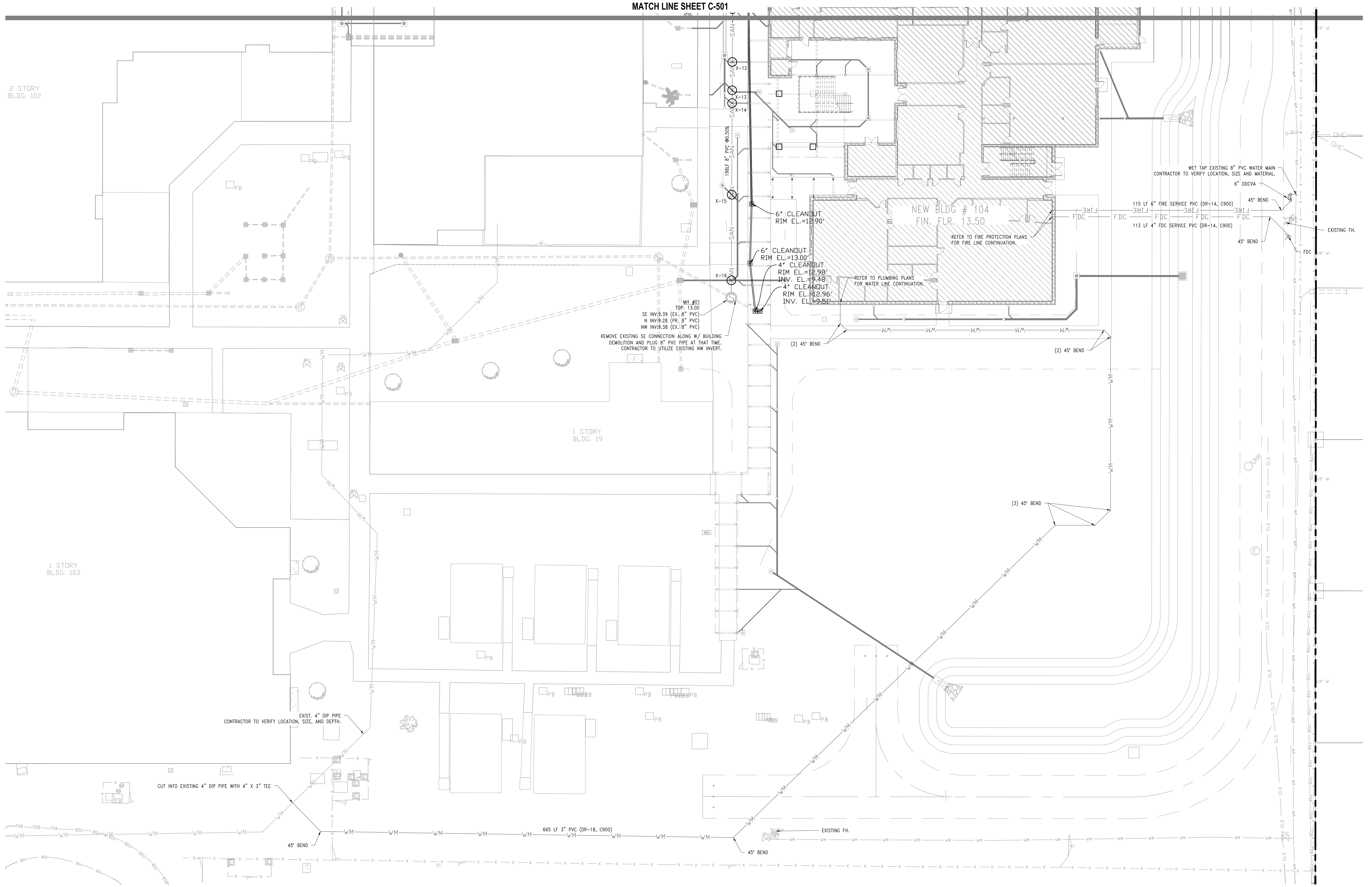
Plot Stamp:
5/29/2026 9:22:23 AM

HB ESTIMATING REC'D 06.01.2026

UTILITY PLAN
C-502

0"
1"

MATCH LINE SHEET C-501


2 STORY
BLDG. 102
1 STORY
BLDG. 19
1 STORY
BLDG. 103
NEW BLDG # 104
FIN. FLR. 13.50
198LF 8" PVC @0.50%
SAN
X-12
X-13
X-14
X-15
X-16
6" CLEANOUT
RIM EL.=12.90'
6" CLEANOUT
RIM EL.=13.00'
4" CLEANOUT
RIM EL.=12.98'
INV. EL.=9.48
4" CLEANOUT
RIM EL.=12.96'
INV. EL.=9.51'
MH #01
TOP: 13.00
SE INV:9.39 (EX. 8" PVC)
N INV:9.28 (PR. 8" PVC)
NW INV:9.38 (EX. 8" PVC)
REMOVE EXISTING SE CONNECTION ALONG W/ BUILDING DEMOLITION AND PLUG 8" PVC PIPE AT THAT TIME. CONTRACTOR TO UTILIZE EXISTING NW INVERT.
REFER TO PLUMBING PLANS FOR WATER LINE CONTINUATION.
REFER TO FIRE PROTECTION PLANS FOR FIRE LINE CONTINUATION.
WET TAP EXISTING 8" PVC WATER MAIN CONTRACTOR TO VERIFY LOCATION, SIZE AND MATERIAL.
6" DDCVA
45° BEND
115 LF 6" FIRE SERVICE PVC (DR-14, C900)
113 LF 4" FDC SERVICE PVC (DR-14, C900)
FIRE
FDC
EXISTING FH.
45° BEND
FDC
(2) 45° BEND
(2) 45° BEND
(3) 45° BEND
WM
OHE
EXIST. 4" DIP PIPE
CONTRACTOR TO VERIFY LOCATION, SIZE, AND DEPTH.
CUT INTO EXISTING 4" DIP PIPE WITH 4" X 3" TEE
45° BEND
665 LF 3" PVC (DR-18, C900)
EXISTING FH.
45° BEND
PB

N

0' 10 20 40

GRAPHIC SCALE IN FEET
NAVD 88

LEGEND

▬ ▬ ▬	PROPERTY LINE
——x——	CHAIN LINK FENCE (BLACK VINYL COATED)
▨	TYPICAL PAVEMENT SECTION (SEE C600 FOR DETAIL)
▨	NEW CANOPY (SEE ARCH. PLAN FOR DETAILS)
▨	CONCRETE (SEE C600 FOR DETAIL)
▨	HEAVY DUTY CONCRETE (SEE C600 FOR DETAIL)
12.00± M.E.G.	MATCH EXISTING GRADE
12.00	PROPOSED SPOT GRADE
× 11.00	EXISTING SPOT GRADE
⟶	PROPOSED DRAINAGE FLOW
◎	MANHOLE
▭ ⊡	INLET
⊡	CLEAN OUT
━━━	PVC
═══	CPP
▬▭▬	RCP
——WM——	WATER LINE
——SAN——	SANITARY LINE
——FIRE——	FIRE LINE
——FDC——	FDC FIRE LINE
HYD	FIRE HYDRANT ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
⧗	GATE VALVE
Ⓢ	SANITARY MANHOLE
⊡	SANITARY CLEANOUT

TYPICAL PIPE BENDS

90° BEND

45° BEND

TEE

NOTE: ALL OTHER PIPE BENDS USED IN DESIGN OF THIS PROJECT ARE NOTED ON THE PLANS

CROSSINGS

X-12	GROUND:	12.79
	BOTT. OF 8" SAN:	8.73
	TOP OF 4" STM:	8.31
	SEPARATION:	0.42
X-13	GROUND:	12.99
	BOTT. OF 8" SAN:	8.80
	TOP OF 6" STM:	8.55
	SEPARATION:	0.25
X-14	GROUND:	12.97
	BOTT. OF 8" SAN:	8.83
	TOP OF 4" STM:	8.41
	SEPARATION:	0.42
X-15	GROUND:	12.68
	BOTT. OF 6" STM:	10.55
	TOP OF 8" SAN:	9.71
	SEPARATION:	0.84
X-16	GROUND:	12.61
	BOTT. OF 8" STM:	10.27
	TOP OF 8" SAN:	9.91
	SEPARATION:	0.36

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

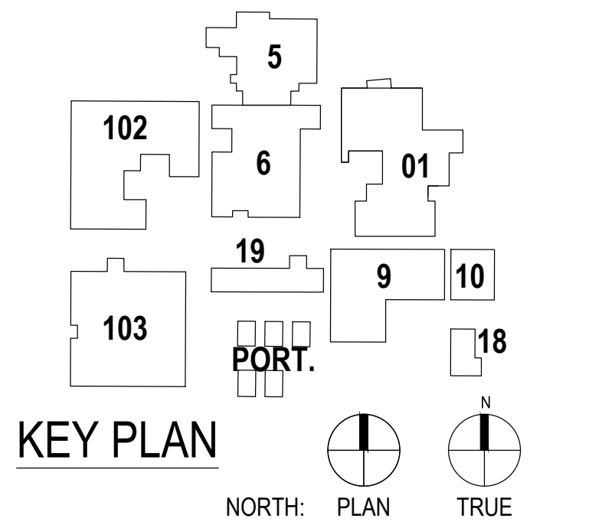
PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

No. 49945
JAY A. KLIMA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

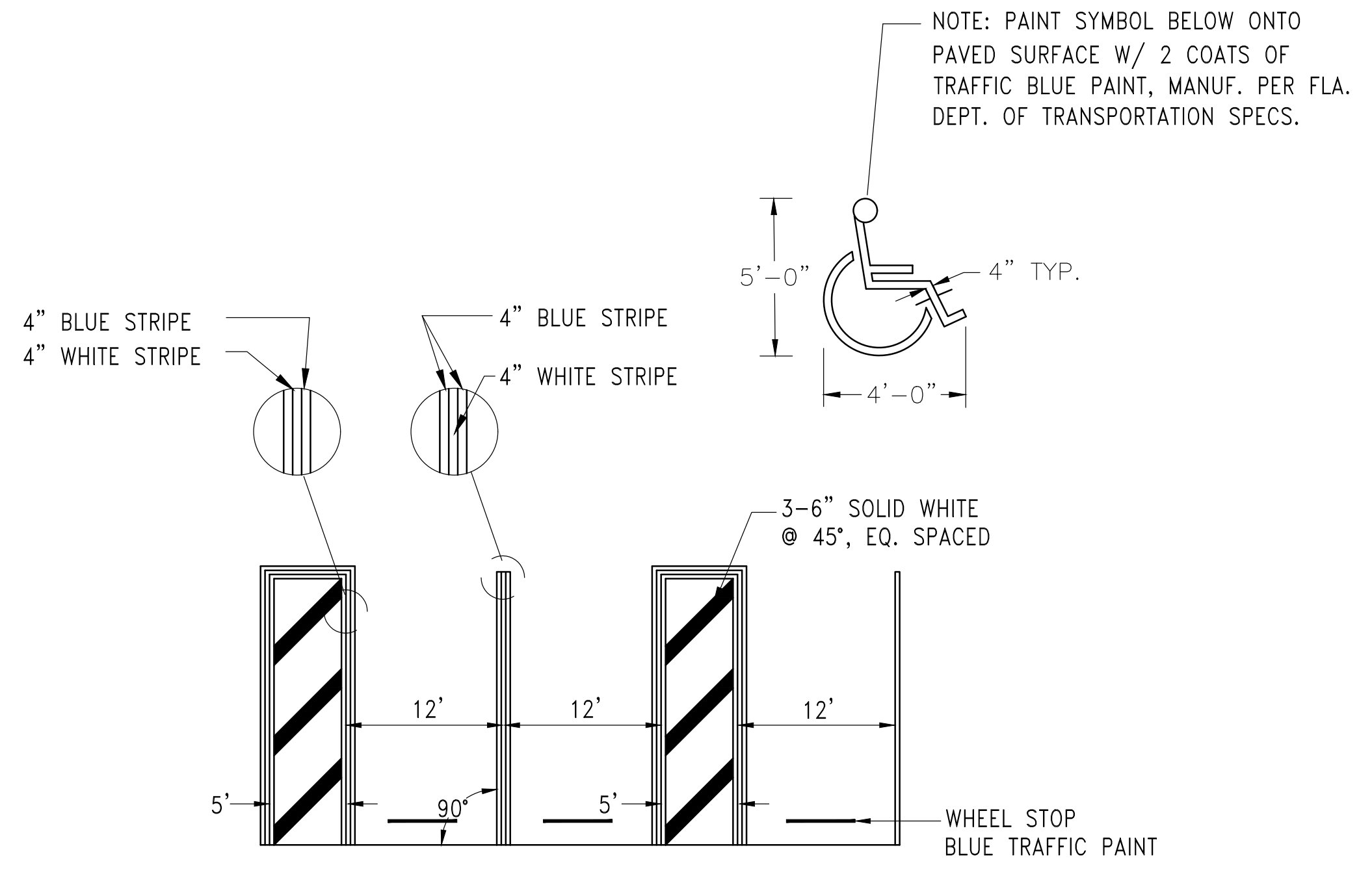
UTILITY PLAN

C-502

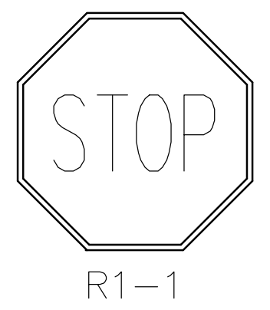
Plot Stamp:
5/29/2026 9:22:25 AM

HB ESTIMATING REC'D 06.01.2026

SITE DETAILS
C-600

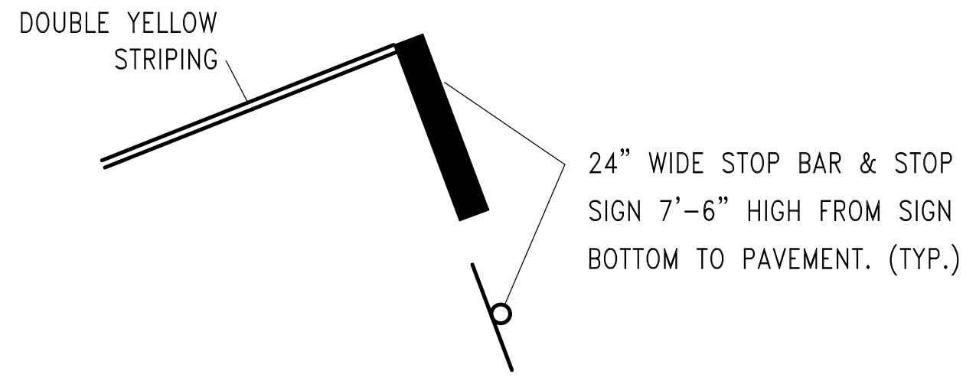

NOTE: PAINT SYMBOL BELOW ONTO PAVED SURFACE W/ 2 COATS OF TRAFFIC BLUE PAINT, MANUF. PER FLA. DEPT. OF TRANSPORTATION SPECS.
5'-0"
4" TYP.
4'-0"
4" BLUE STRIPE
4" WHITE STRIPE
4" BLUE STRIPE
4" WHITE STRIPE
3-6" SOLID WHITE @ 45°, EQ. SPACED
12'
12'
12'
5'
90°
5'
WHEEL STOP BLUE TRAFFIC PAINT

ADA PARKING DETAILS
N.T.S

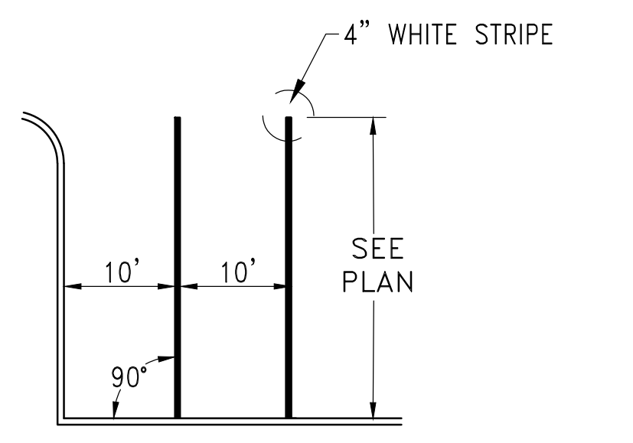


STOP SIGN
N.T.S

(7'-6" FROM PAVEMENT TO BOTTOM OF SIGN).

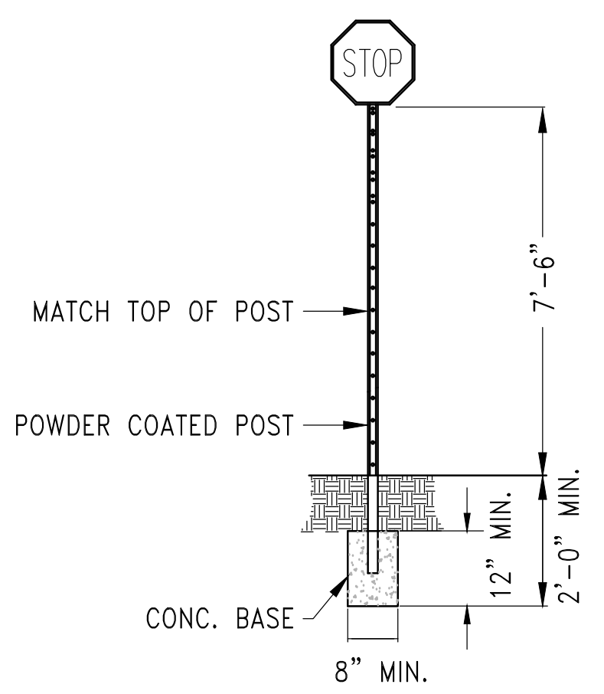

DOUBLE YELLOW STRIPING
24" WIDE STOP BAR & STOP SIGN 7'-6" HIGH FROM SIGN BOTTOM TO PAVEMENT. (TYP.)

STOP SIGN AND STOP BAR DETAIL
N.T.S.

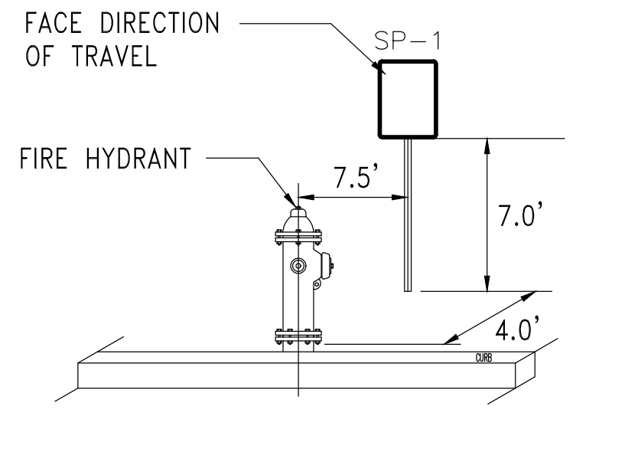


TYPICAL PARKING STALL STRIPING DETAIL
N.T.S.

NOTES
1. SEE PLANS FOR SIGNAGE TYPES AND LOCATIONS
2. SIGNAGE TO CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

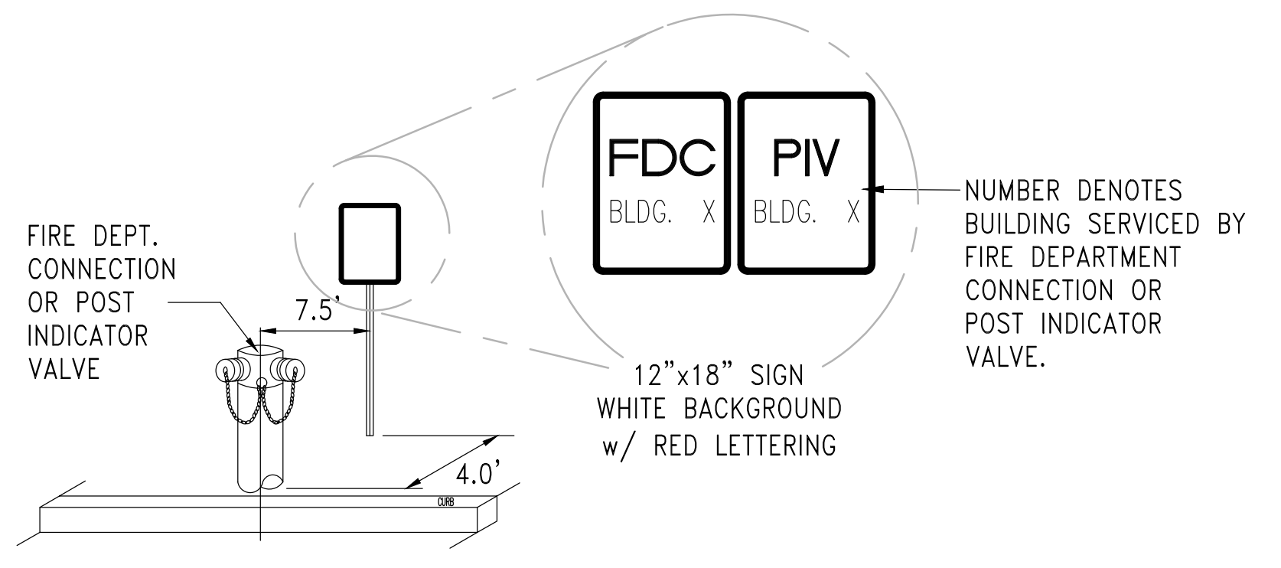


SIGN DETAIL
N.T.S.



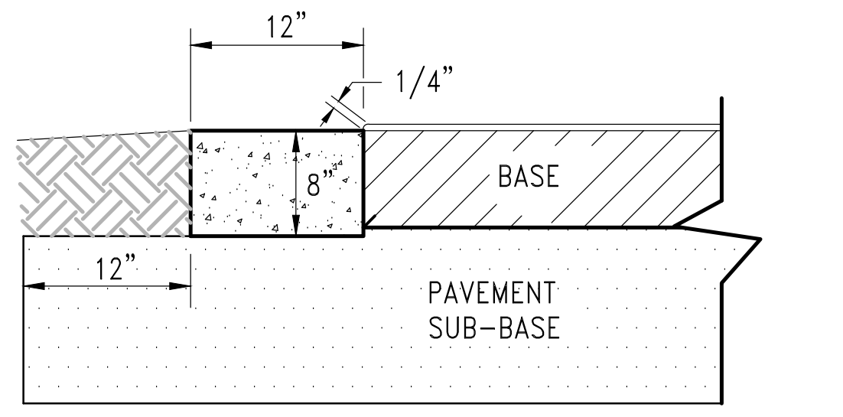
NOTE: REFER TO C300 & C500 SERIES OF SHEETS FOR SIGNAGE PLACEMENT.

FIRE HYDRANT MARKING DETAIL
N.T.S.

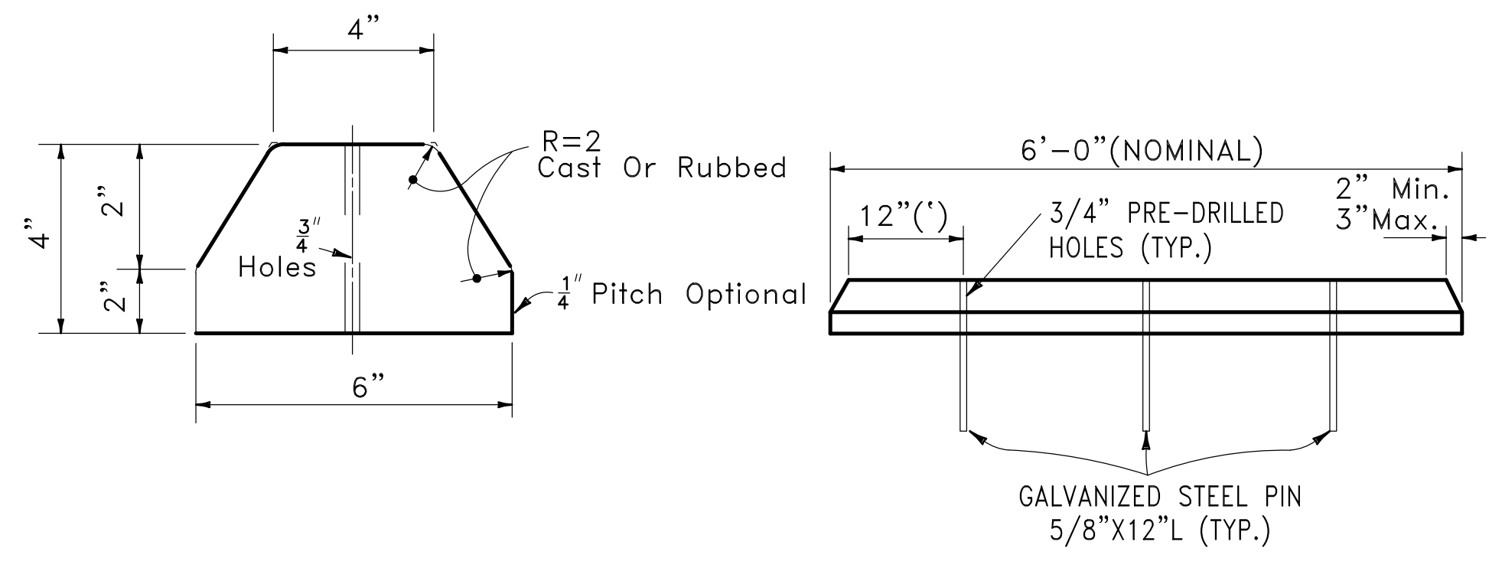

FIRE DEPT. CONNECTION OR POST INDICATOR VALVE
7.5'
4.0'
CURB
FDC
BLDG. X
PIV
BLDG. X
NUMBER DENOTES BUILDING SERVICED BY FIRE DEPARTMENT CONNECTION OR POST INDICATOR VALVE.
12"x18" SIGN WHITE BACKGROUND w/ RED LETTERING

NOTE: REFER TO C300 & C500 SERIES OF SHEETS FOR SIGNAGE PLACEMENT.

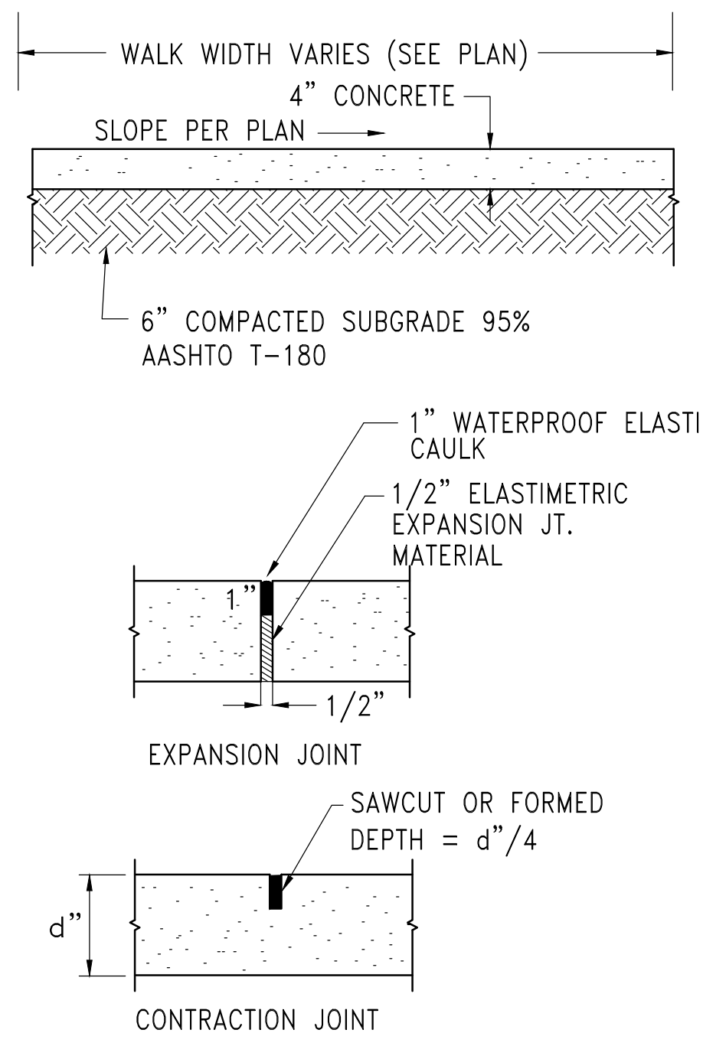
FIRE DEPT. CONNECTION / POST INDICATOR VALVE DETAIL
N.T.S.

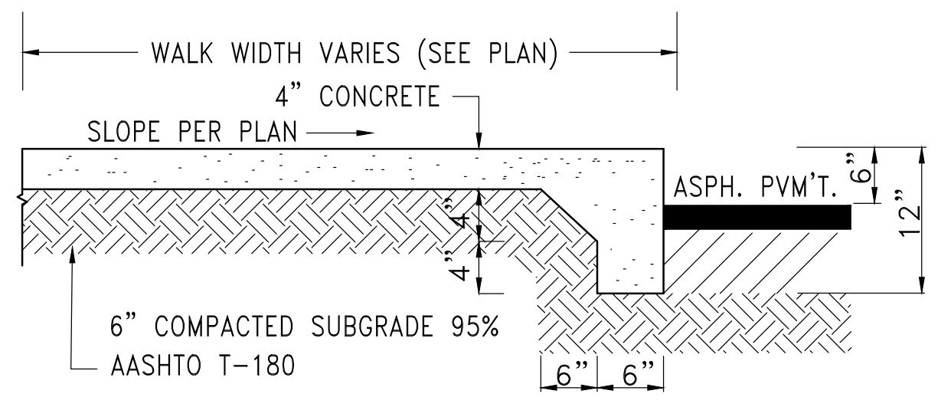


CONCRETE RIBBON CURB
N.T.S.

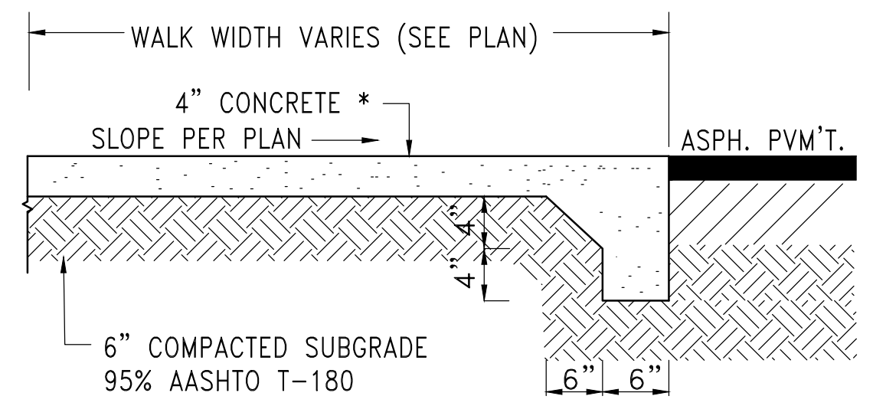


CONCRETE WHEEL STOP


WALK WIDTH VARIES (SEE PLAN)
4" CONCRETE
SLOPE PER PLAN
6" COMPACTED SUBGRADE 95% AASHTO T-180
1" WATERPROOF ELASTIC CAULK
1/2" ELASTIMETRIC EXPANSION JT. MATERIAL
1"
1/2"
EXPANSION JOINT
SAWCUT OR FORMED DEPTH = d"/4
d"
CONTRACTION JOINT


WALK WIDTH VARIES (SEE PLAN)
4" CONCRETE
SLOPE PER PLAN
ASPH. PVM'T.
6"
12"
4"
4"
6" COMPACTED SUBGRADE 95% AASHTO T-180
6"
6"

THICKENED EDGE RAISED CONCRETE WALK

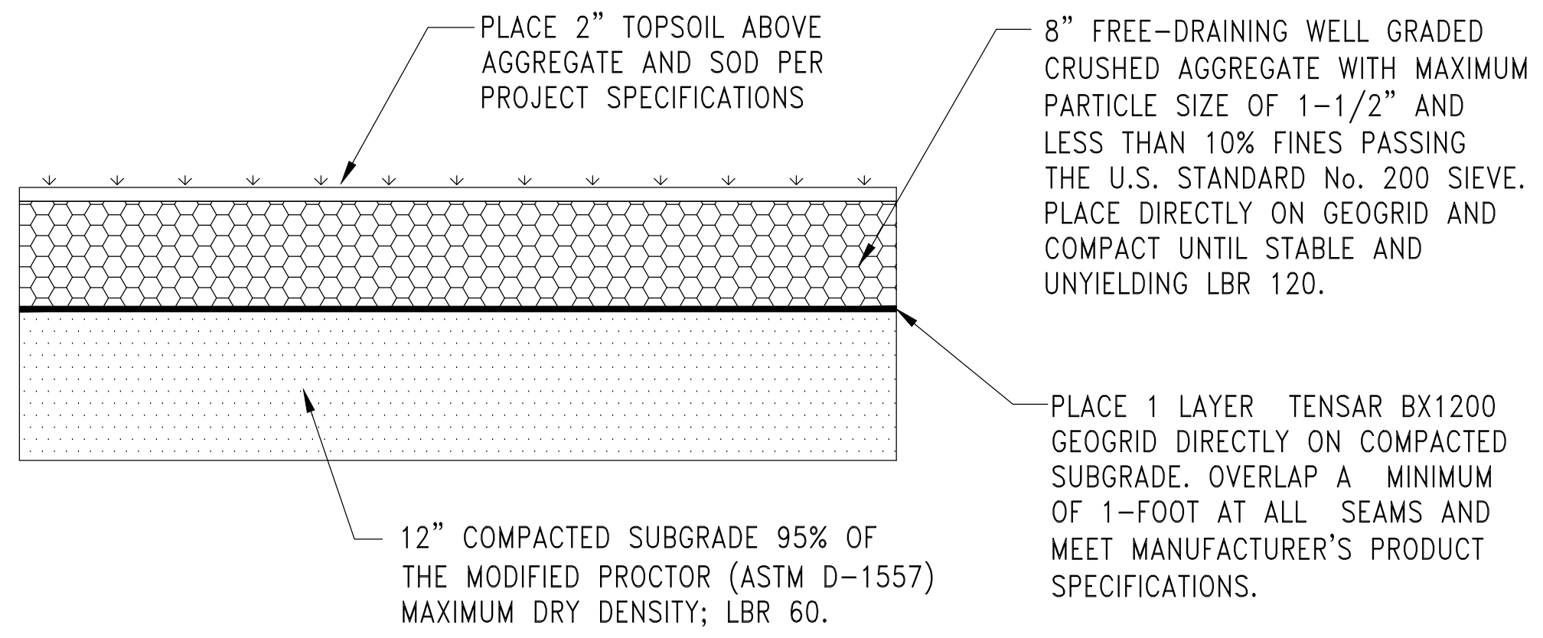

WALK WIDTH VARIES (SEE PLAN)
4" CONCRETE *
SLOPE PER PLAN
ASPH. PVM'T.
4"
4"
6" COMPACTED SUBGRADE 95% AASHTO T-180
6"
6"

THICKENED EDGE FLUSH CONCRETE WALK

NOTE: 4" THICK SIDEWALK W/LIGHT BROOM FINISH & TROWELED EDGE.

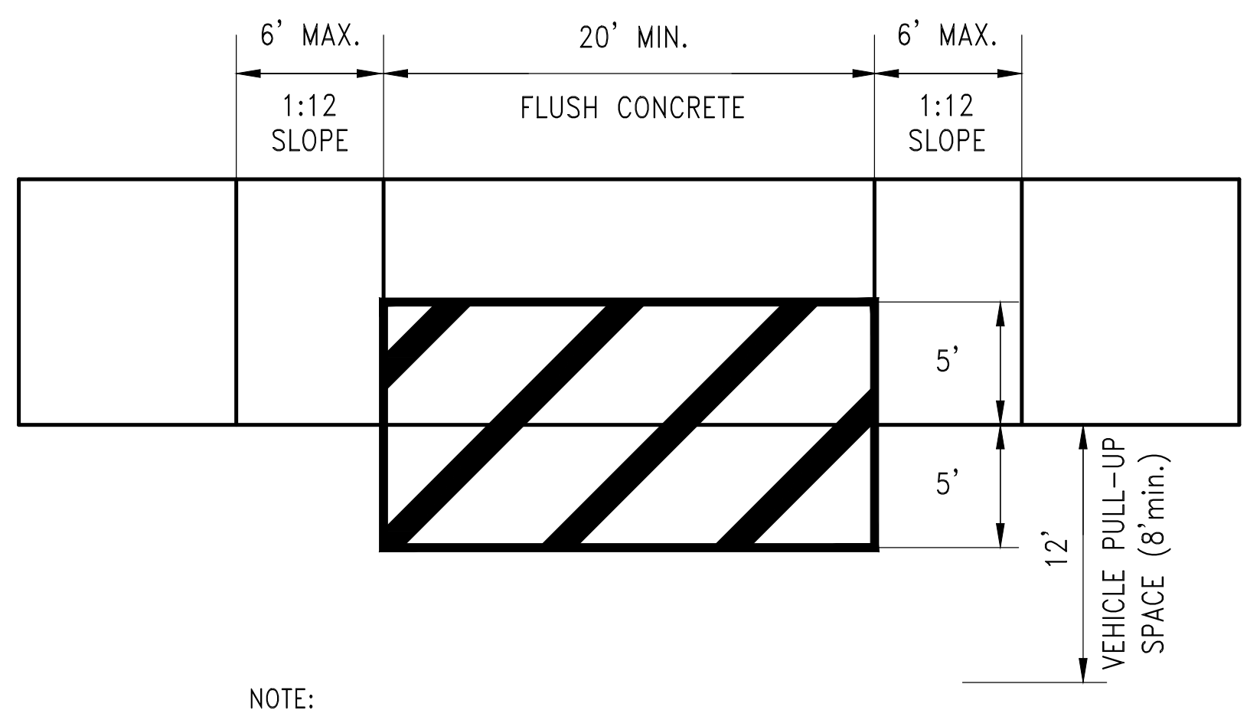
NOTE:
1. ALL CONCRETE SIDEWALKS SHALL HAVE A FULL 1/2" EXPANSION JOINT AT A MAXIMUM DISTANCE OF 40 LINEAR FEET AND A SAW CUT OR FORMED DUMMY CONTRACTION JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED 8 LINEAR FEET.
2. CONTR. SHALL PROVIDE A MINIMUM OF 5 FT. ON EITHER SIDE OF WALKS ADJACENT TO GRASS AREAS THAT HAVE A MAX. SLOPE OF 3% DOWNWARD.

CONCRETE WALK DETAILS
N.T.S.

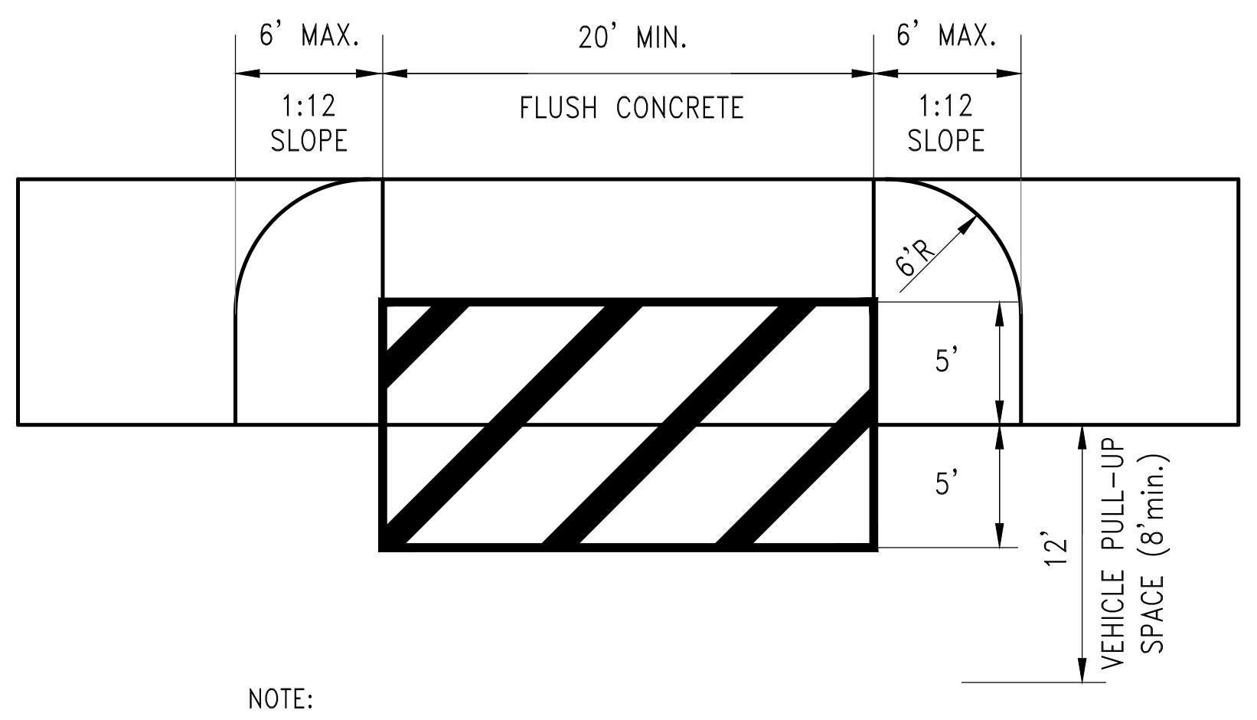

PLACE 2" TOPSOIL ABOVE AGGREGATE AND SOD PER PROJECT SPECIFICATIONS
8" FREE-DRAINING WELL GRADED CRUSHED AGGREGATE WITH MAXIMUM PARTICLE SIZE OF 1-1/2" AND LESS THAN 10% FINES PASSING THE U.S. STANDARD No. 200 SIEVE. PLACE DIRECTLY ON GEOGRID AND COMPACT UNTIL STABLE AND UNYIELDING LBR 120.
PLACE 1 LAYER TENSAR BX1200 GEOGRID DIRECTLY ON COMPACTED SUBGRADE. OVERLAP A MINIMUM OF 1-FOOT AT ALL SEAMS AND MEET MANUFACTURER'S PRODUCT SPECIFICATIONS.
12" COMPACTED SUBGRADE 95% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY; LBR 60.

NOTE:
1. ACCESS ROAD SECTION SHALL BE CONSTRUCTED IN (3) LIFTS. EACH LIFT SHALL BE TESTED FOR DENSITY VALUES EVERY 250LF.
2. ACCESS ROAD SHALL SUPPORT A VEHICLE WEIGHT OF 42 TONS.
3. EMERGENCY ACCESS ROADS SHALL HAVE 12" X 18" 'NO PARKING – FIRE LANE" SIGNS FACING ONCOMING TRAFFIC AS SHOWN.

STABILIZED ROAD
N.T.S.

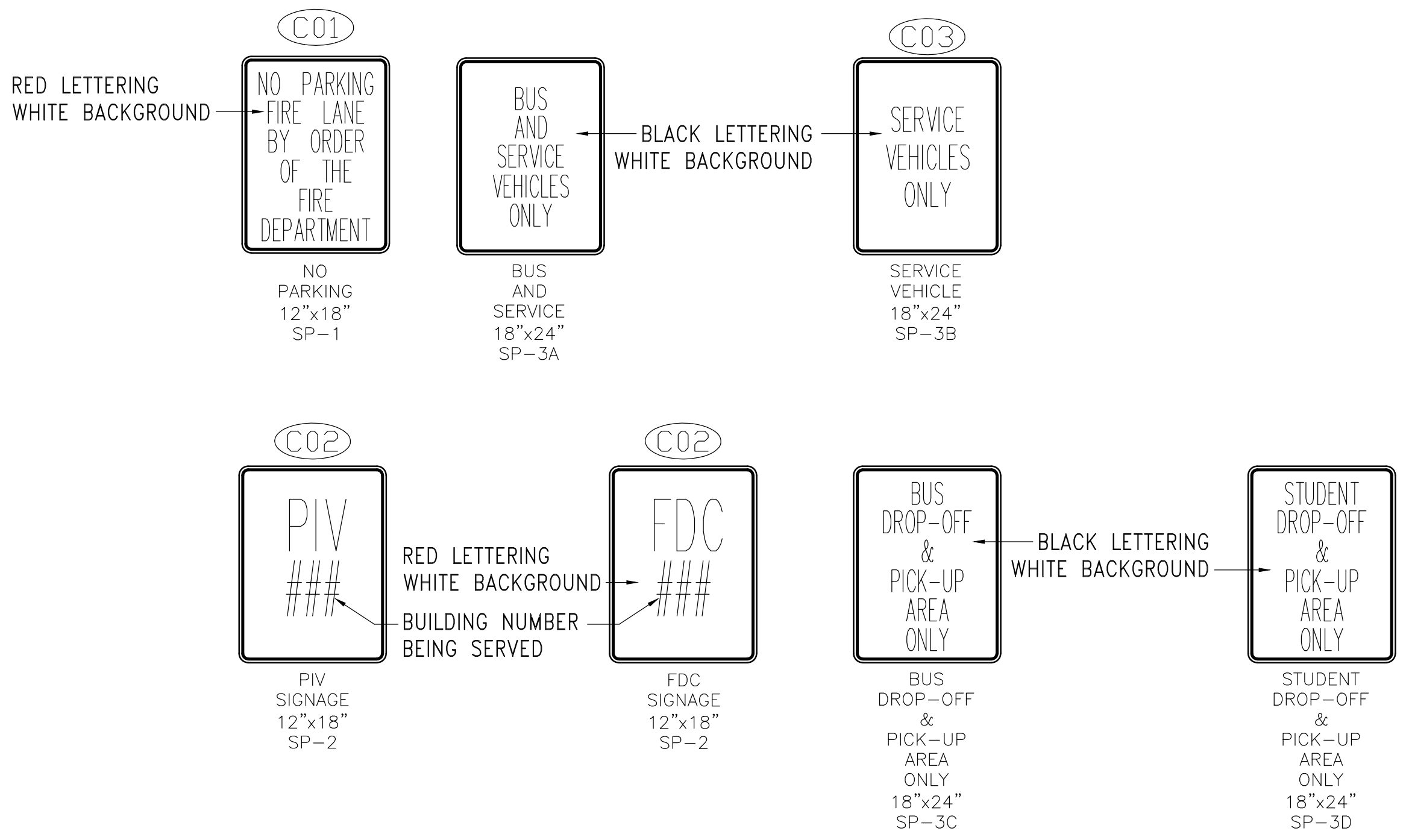


NOTE:
6' RAMP, 20' FLUSH LOADING ZONE w/ 4" SOLID YELLOW TRAFFIC PAINT BORDER AND 12" SOLID YELLOW STRIPE @ 45°, 5' O.C. (TYP.)

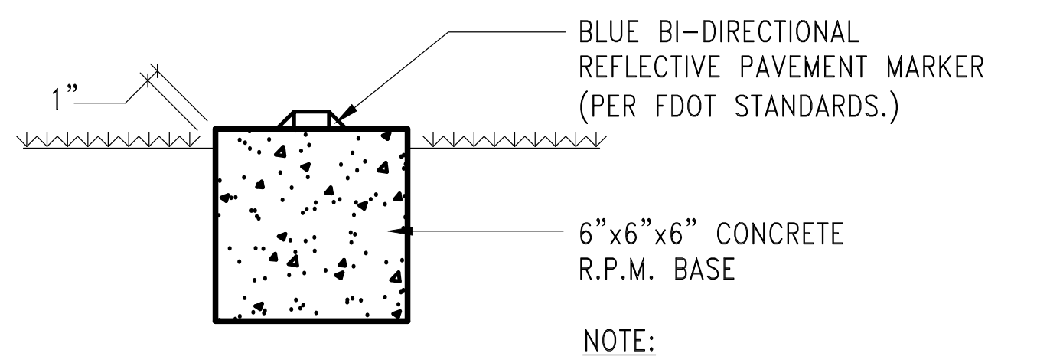


NOTE:
6' RAMP, 20' FLUSH LOADING ZONE w/ 4" SOLID YELLOW TRAFFIC PAINT BORDER AND 12" SOLID YELLOW STRIPE @ 45°, 5' O.C. (TYP.)

LOADING ZONE DETAIL
N.T.S.

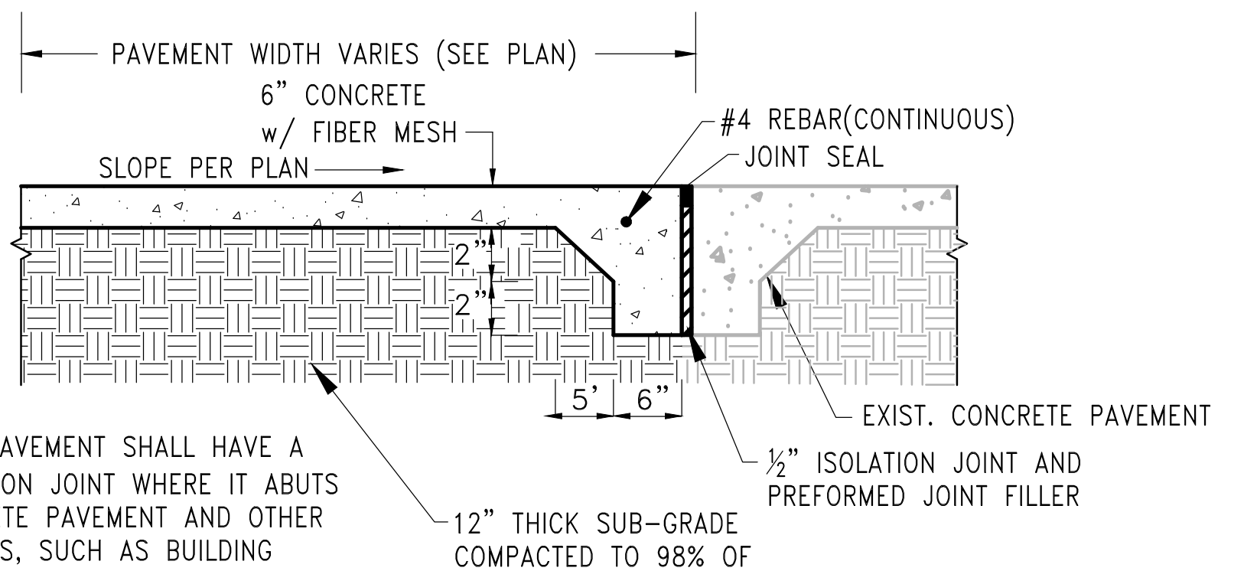

C01
RED LETTERING WHITE BACKGROUND
NO PARKING FIRE LANE BY ORDER OF THE FIRE DEPARTMENT
NO PARKING 12"x18" SP-1
BUS AND SERVICE VEHICLES ONLY
BLACK LETTERING WHITE BACKGROUND
BUS AND SERVICE 18"x24" SP-3A
C03
SERVICE VEHICLES ONLY
SERVICE VEHICLE 18"x24" SP-3B
C02
PIV ###
PIV SIGNAGE 12"x18" SP-2
RED LETTERING WHITE BACKGROUND
BUILDING NUMBER BEING SERVED
C02
FDC ###
FDC SIGNAGE 12"x18" SP-2
BUS DROP-OFF & PICK-UP AREA ONLY
BUS DROP-OFF & PICK-UP AREA ONLY 18"x24" SP-3C
BLACK LETTERING WHITE BACKGROUND
STUDENT DROP-OFF & PICK-UP AREA ONLY
STUDENT DROP-OFF & PICK-UP AREA ONLY 18"x24" SP-3D

SPECIAL SIGNAGE LEGEND
N.T.S.


1"
BLUE BI-DIRECTIONAL REFLECTIVE PAVEMENT MARKER (PER FDOT STANDARDS.)
6"x6"x6" CONCRETE R.P.M. BASE

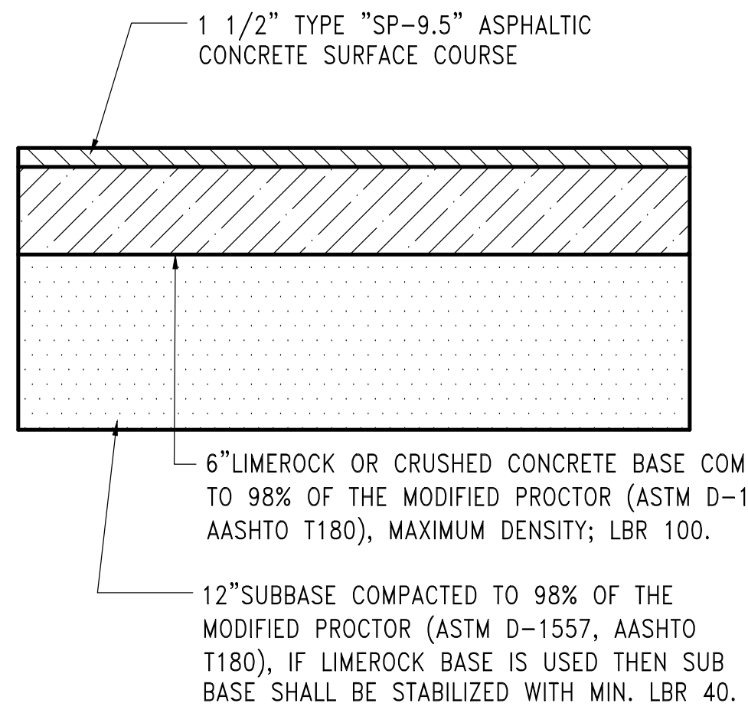
NOTE:
1). 50'O.C.(25'O.C. ON CORNERS)

EMERGENCY ACCESS MARKER DETAIL
N.T.S.


PAVEMENT WIDTH VARIES (SEE PLAN)
6" CONCRETE w/ FIBER MESH
SLOPE PER PLAN
#4 REBAR(CONTINUOUS)
JOINT SEAL
2"
2"
5'
6"
EXIST. CONCRETE PAVEMENT
½" ISOLATION JOINT AND PREFORMED JOINT FILLER
12" THICK SUB-GRADE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T-180), MIN. DENSITY.

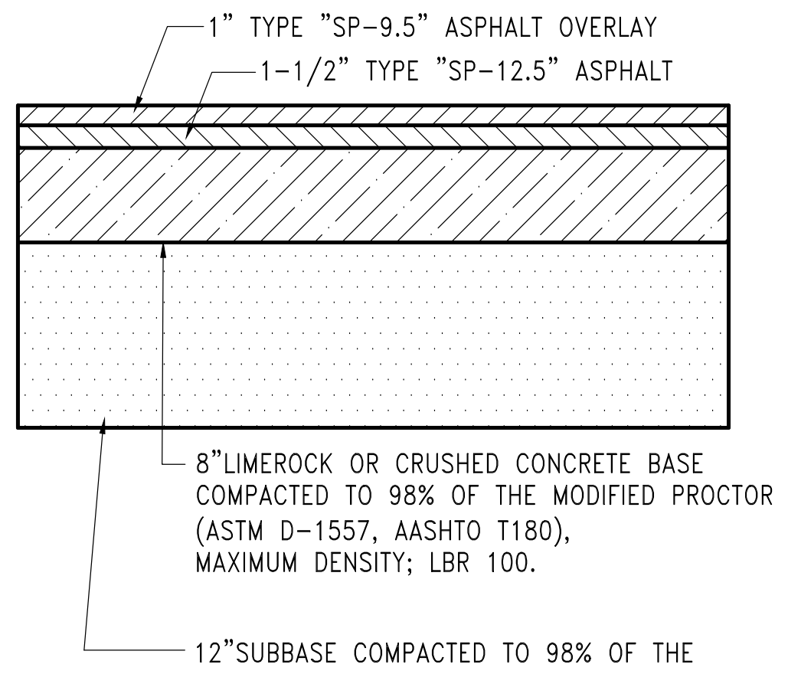
NOTES:
1. ALL CONCRETE PAVEMENT SHALL HAVE A FULL, ½" ISOLATION JOINT WHERE IT ABUTS EXISTING CONCRETE PAVEMENT AND OTHER RIGID STRUCTURES, SUCH AS BUILDING FOUNDATIONS AND WALLS. PROVIDE 2" SAW CUT OR DUMMY CONTRACTION JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED 20 FEET.
2. PORTLAND CEMENT CONCRETE PAVEMENT TO BE 4,000-PSI COMPRESSIVE STRENGTH, MIN.

CONCRETE PAVEMENT DETAIL
N.T.S.


1 1/2" TYPE "SP-9.5" ASPHALTIC CONCRETE SURFACE COURSE
6"LIMEROCK OR CRUSHED CONCRETE BASE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T180), MAXIMUM DENSITY; LBR 100.
12"SUBBASE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T180), IF LIMEROCK BASE IS USED THEN SUB BASE SHALL BE STABILIZED WITH MIN. LBR 40.

NOTE:
1 – IN LIEU OF LIMEROCK BASE, A 6" CRUSHED CONCRETE BASE CAN BE UTILIZED WITH SAME COMPACTION REQUIREMENTS, LBR 120. CRUSHED CONCRETE SHALL MEET GRADATION REQUIREMENTS OF FDOT SPEC SECTION 204.
2 – TYPE ASPHALTIC CONCRETE SHALL USE ASPHALT BINDER GRADE PG67-22 AND NO MORE TAN 15 PERCENT RECYCLED ASPHALT PAVEMENT (RAP) AGGREGATE.

TYPICAL PAVEMENT SECTION
N.T.S.


1" TYPE "SP-9.5" ASPHALT OVERLAY
1-1/2" TYPE "SP-12.5" ASPHALT
8"LIMEROCK OR CRUSHED CONCRETE BASE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T180), MAXIMUM DENSITY; LBR 100.
12"SUBBASE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T180), IF LIMEROCK BASE IS USED THEN SUB BASE SHALL BE STABILIZED WITH MIN. LBR 40.

NOTE:
1 – IN LIEU OF LIMEROCK BASE, A 6" CRUSHED CONCRETE BASE CAN BE UTILIZED WITH SAME COMPACTION REQUIREMENTS, LBR 120. CRUSHED CONCRETE SHALL MEET GRADATION REQUIREMENTS OF FDOT SPEC SECTION 204.
2 – TYPE ASPHALTIC CONCRETE SHALL USE ASPHALT BINDER GRADE PG67-22 AND NO MORE TAN 15 PERCENT RECYCLED ASPHALT PAVEMENT (RAP) AGGREGATE.

HEAVY DUTY PAVEMENT SECTION
N.T.S.

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:22:30 AM

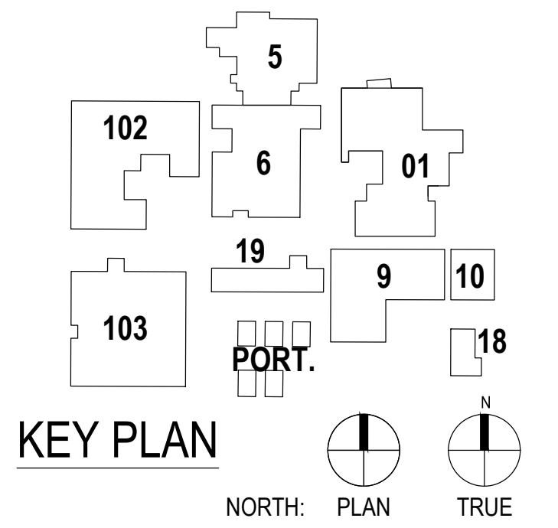
PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

JAY A. KLIMA
LICENSE No. 49945
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT
MARTIN COUNTY SCHOOL DISTRICT

DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

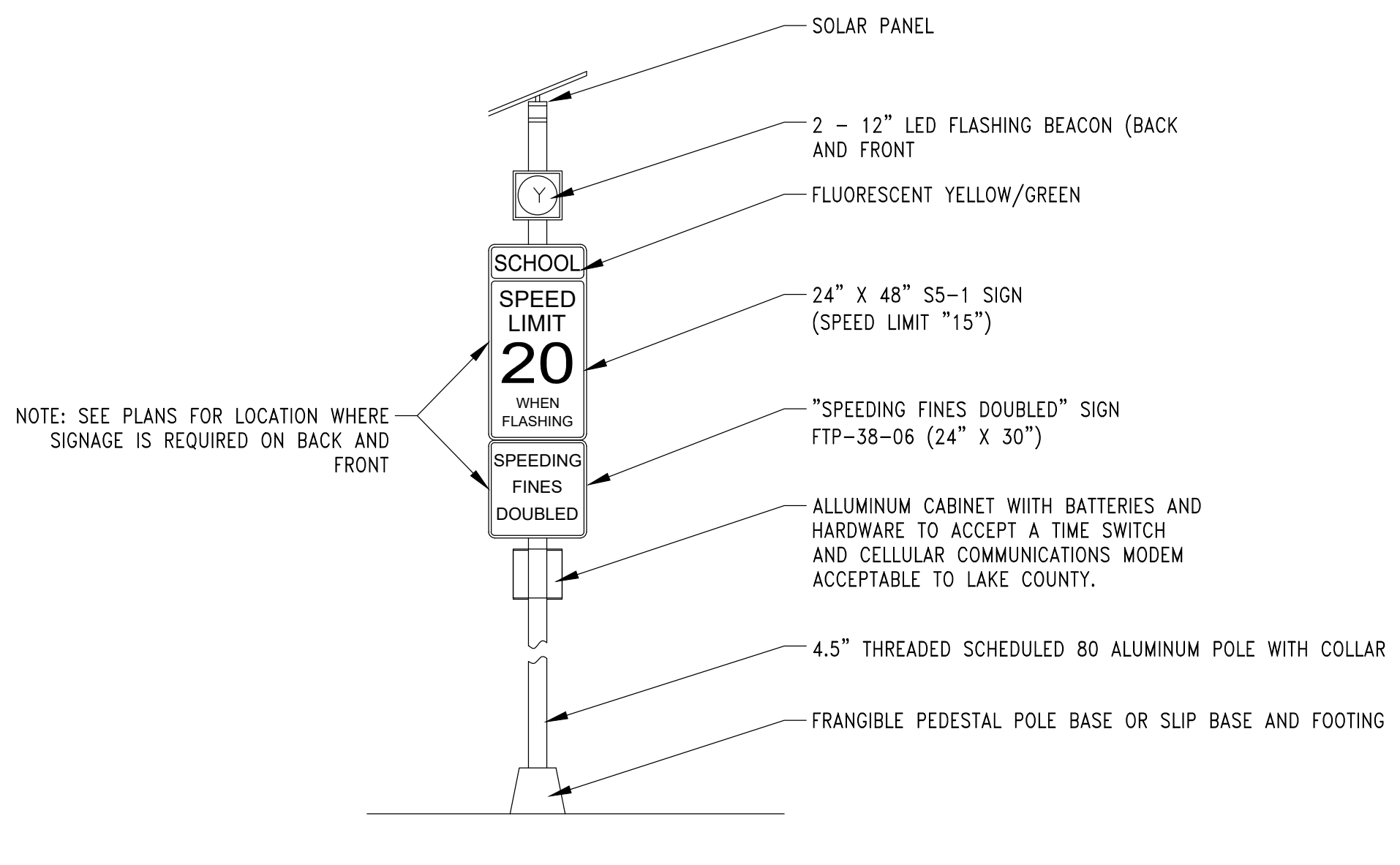
CHECKED BY: J.A.K.
DRAWN BY: RZ

SITE DETAILS

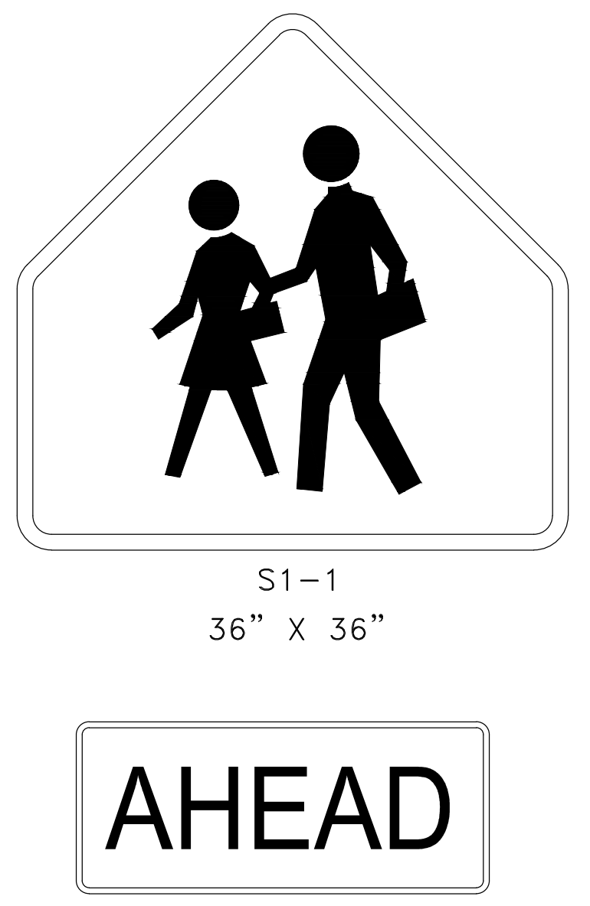
C-600

SITE DETAILS
C-601

0"
1"


SOLAR PANEL
2 – 12" LED FLASHING BEACON (BACK AND FRONT
Y
FLUORESCENT YELLOW/GREEN
SCHOOL
SPEED LIMIT
20
WHEN FLASHING
24" X 48" S5-1 SIGN (SPEED LIMIT "15")
SPEEDING FINES DOUBLED
"SPEEDING FINES DOUBLED" SIGN FTP-38-06 (24" X 30")
ALLUMINUM CABINET WIITH BATTERIES AND HARDWARE TO ACCEPT A TIME SWITCH AND CELLULAR COMMUNICATIONS MODEM ACCEPTABLE TO LAKE COUNTY.
4.5" THREADED SCHEDULED 80 ALUMINUM POLE WITH COLLAR
FRANGIBLE PEDESTAL POLE BASE OR SLIP BASE AND FOOTING
NOTE: SEE PLANS FOR LOCATION WHERE SIGNAGE IS REQUIRED ON BACK AND FRONT

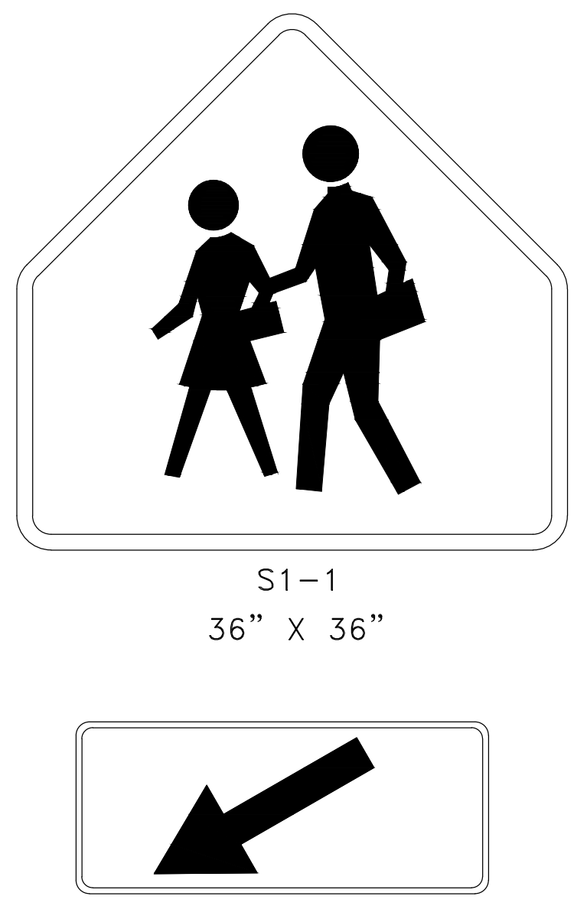
ESFS ASSEMBLY
N.T.S.



S1–1
36" X 36"

W16–9P
24" X 12"

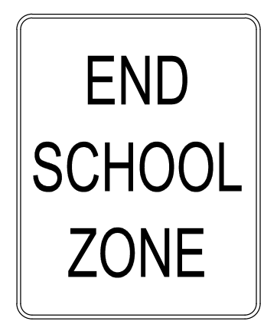
SCHOOL AHEAD SIGNAGE
N.T.S.



S1–1
36" X 36"

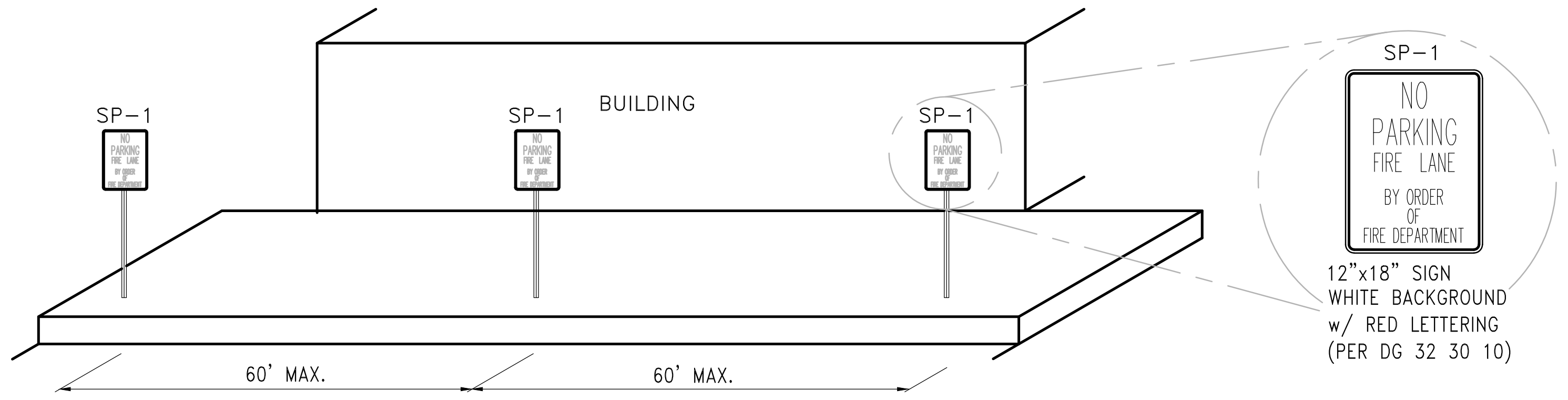
W16–7
24" X 12"

SCHOOL CROSSING SIGNAGE
N.T.S.

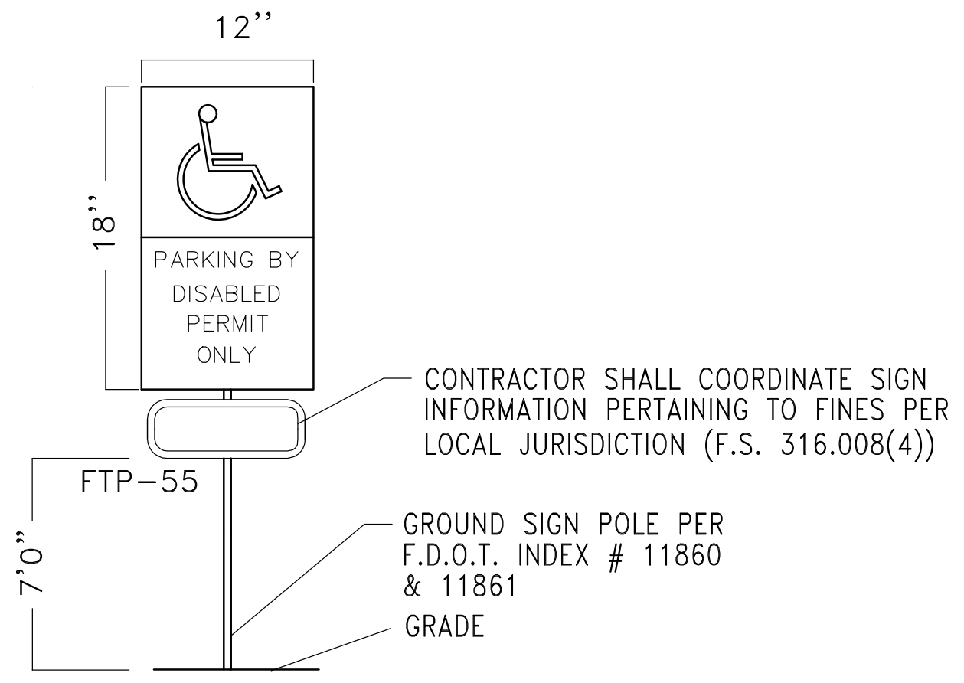


FTP–34–06
24" X 30"

END SCHOOL ZONE
N.T.S.

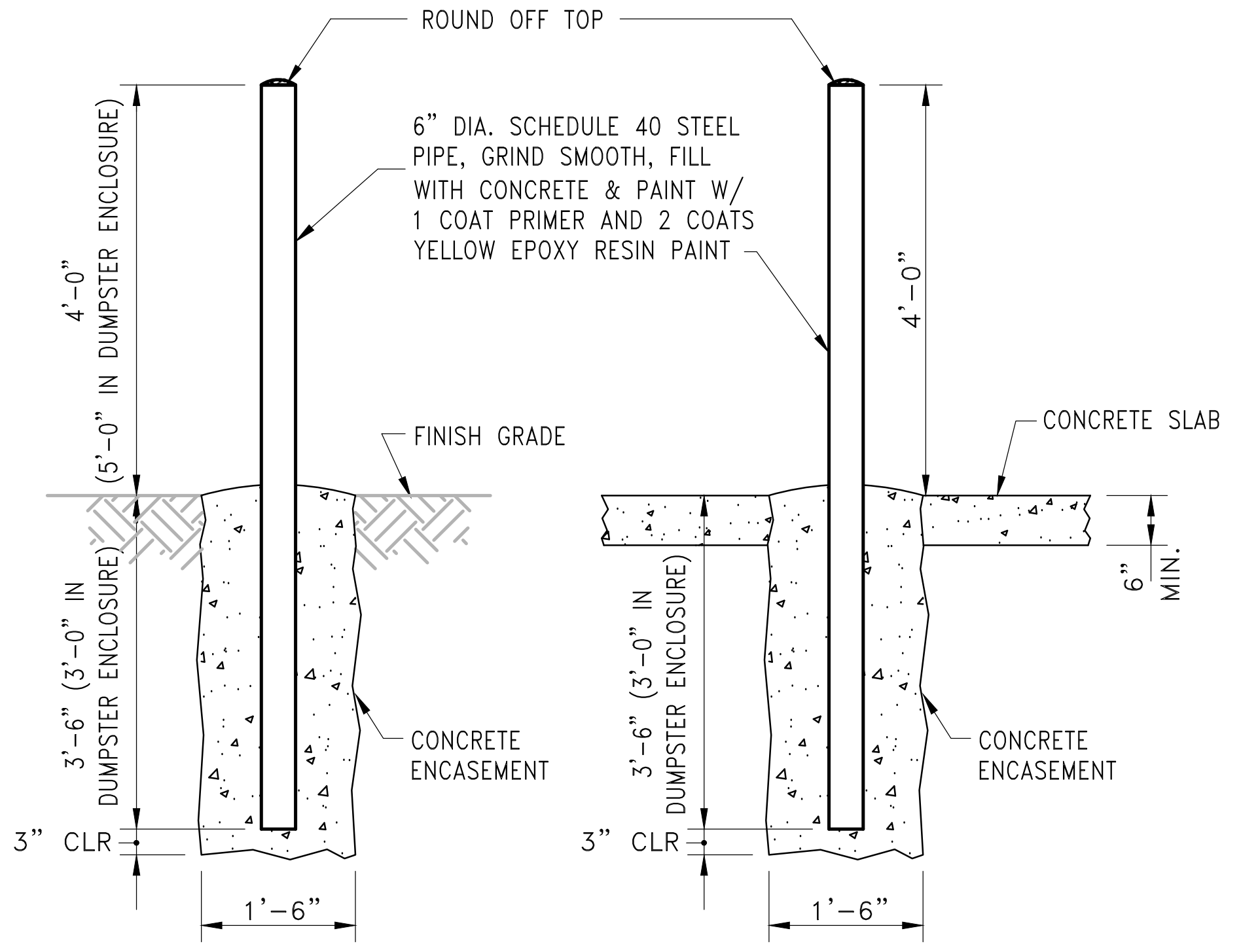

BUILDING
SP–1
SP–1
SP–1
SP–1
NO PARKING
FIRE LANE
BY ORDER OF FIRE DEPARTMENT
12"x18" SIGN WHITE BACKGROUND w/ RED LETTERING (PER DG 32 30 10)
60' MAX.
60' MAX.

FIRE LANE DETAIL
N.T.S.


12''
18''
PARKING BY DISABLED PERMIT ONLY
CONTRACTOR SHALL COORDINATE SIGN INFORMATION PERTAINING TO FINES PER LOCAL JURISDICTION (F.S. 316.008(4))
FTP–55
7'0"
GROUND SIGN POLE PER F.D.O.T. INDEX # 11860 & 11861
GRADE

NOTES
1. TOP PORTION OF FTP 25 & 26 SHALL HAVE A REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 25 & 26 MAY BE FABRICATED ON ONE PANEL OR TWO.
4. FTP 25 MAY BE SUBSTITUTED FOR THE FTP 26 IN AREAS WHERE SPACE IS LIMITED.
5. SIGNS ARE TO BE MOUNTED AT STANDARD HEIGHT.

ADA PARKING SIGN – DETAIL
N.T.S

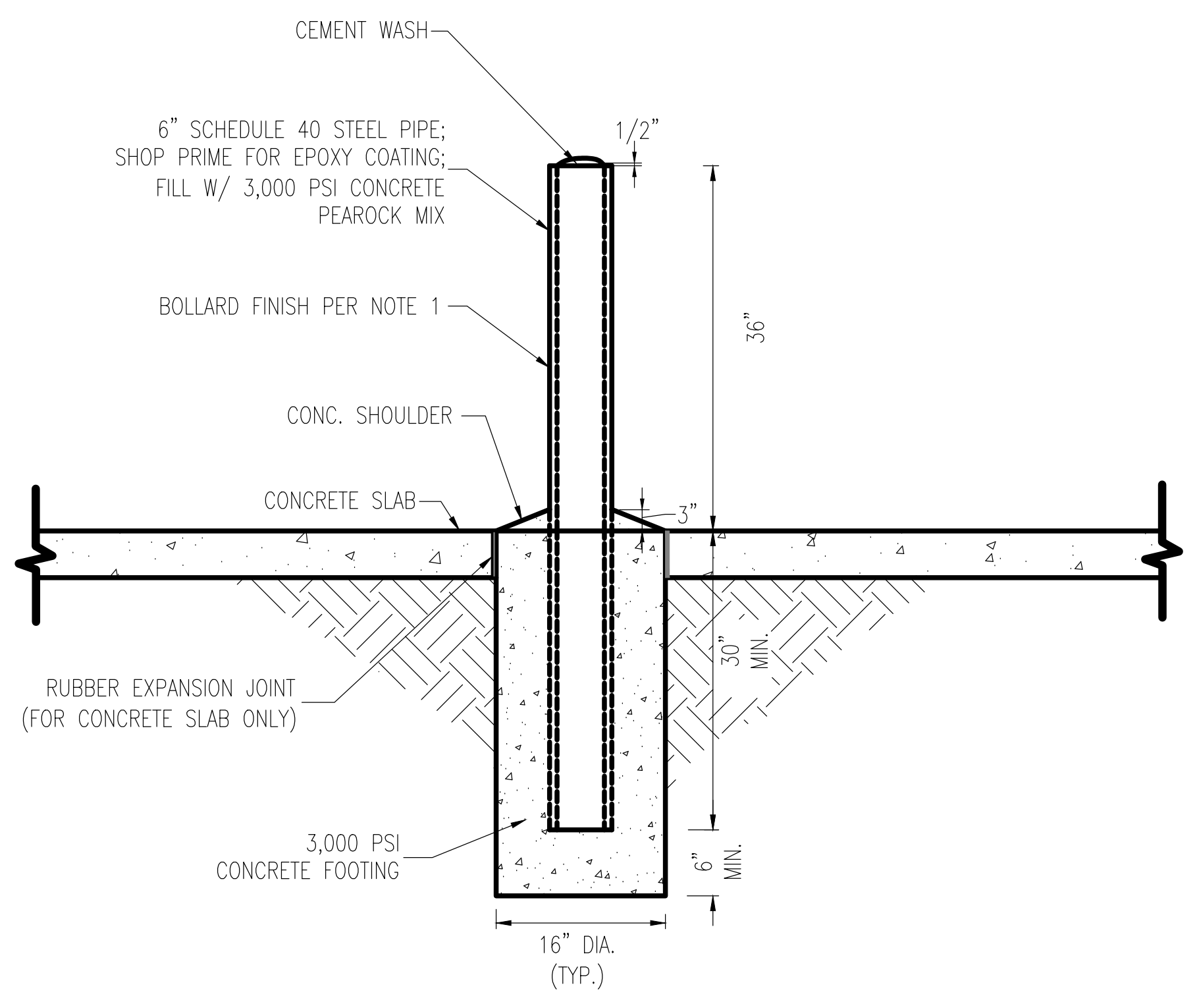

ROUND OFF TOP
6" DIA. SCHEDULE 40 STEEL PIPE, GRIND SMOOTH, FILL WITH CONCRETE & PAINT W/ 1 COAT PRIMER AND 2 COATS YELLOW EPOXY RESIN PAINT
4'-0" (5'-0" IN DUMPSTER ENCLOSURE)
FINISH GRADE
3'-6" (3'-0" IN DUMPSTER ENCLOSURE)
CONCRETE ENCASEMENT
3" CLR
1'-6"
4'-0"
CONCRETE SLAB
6" MIN.
3'-6" (3'-0" IN DUMPSTER ENCLOSURE)
CONCRETE ENCASEMENT
3" CLR
1'-6"

EARTHEN INSTALLATION

SLAB INSTALLATION

BOLLARD DETAIL

N.T.S.


CEMENT WASH
6" SCHEDULE 40 STEEL PIPE; SHOP PRIME FOR EPOXY COATING; FILL W/ 3,000 PSI CONCRETE PEAROCK MIX
1/2"
BOLLARD FINISH PER NOTE 1
36"
CONC. SHOULDER
CONCRETE SLAB
3"
RUBBER EXPANSION JOINT (FOR CONCRETE SLAB ONLY)
30" MIN.
3,000 PSI CONCRETE FOOTING
6" MIN.
16" DIA. (TYP.)

NOTE:

1. BOLLARD FINISH SHALL HAVE A PVC COVER OR ENAMEL PAINT. COLOR SHALL BE "SAFETY YELLOW" WITH A MINIMUM OF TWO (2) RETROREFLECTIVE BANDS.

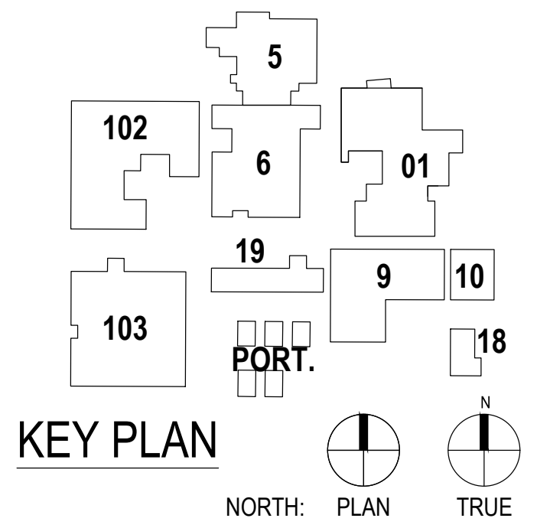
G:\mc_library\mc_logo\mc_logo.jpg	**MARTIN COUNTY PUBLIC WORKS - STANDARD DETAILS**	**DETAIL** **P-15**
	FIXED BOLLARD	**DATE: 12/03/19**

PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045
100% CONSTRUCTION DOCUMENTS



KEY PLAN

JAY A. KLIMA
No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

SITE DETAILS

C-601

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:22:31 AM

MOT DETAILS
C-602

0"

1"

NOTES:

1. This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.

2. L = Taper Length
   X = Work Zone Sign Spacing
   B = Buffer Length
   See Index 102-600 for "L", "X", "B", and channelizing device spacing values.

3. For incidental work (e.g. mowing or litter removal), only the Road Work Ahead sign is required.

4. When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.

5. For work less than two feet from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.

6. The "Speeding Fines Doubled When Workers Present"signs (MOT-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the temporary condition is in place for 24 hours or less.

7. Temporary pavement markings may be omitted when the work zone is in place for 3 days or less.

8. If the work encroaches on a marked bicycle lane or ridable shoulder, close the lane or shoulder in accordance with the Plans.

9. Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median

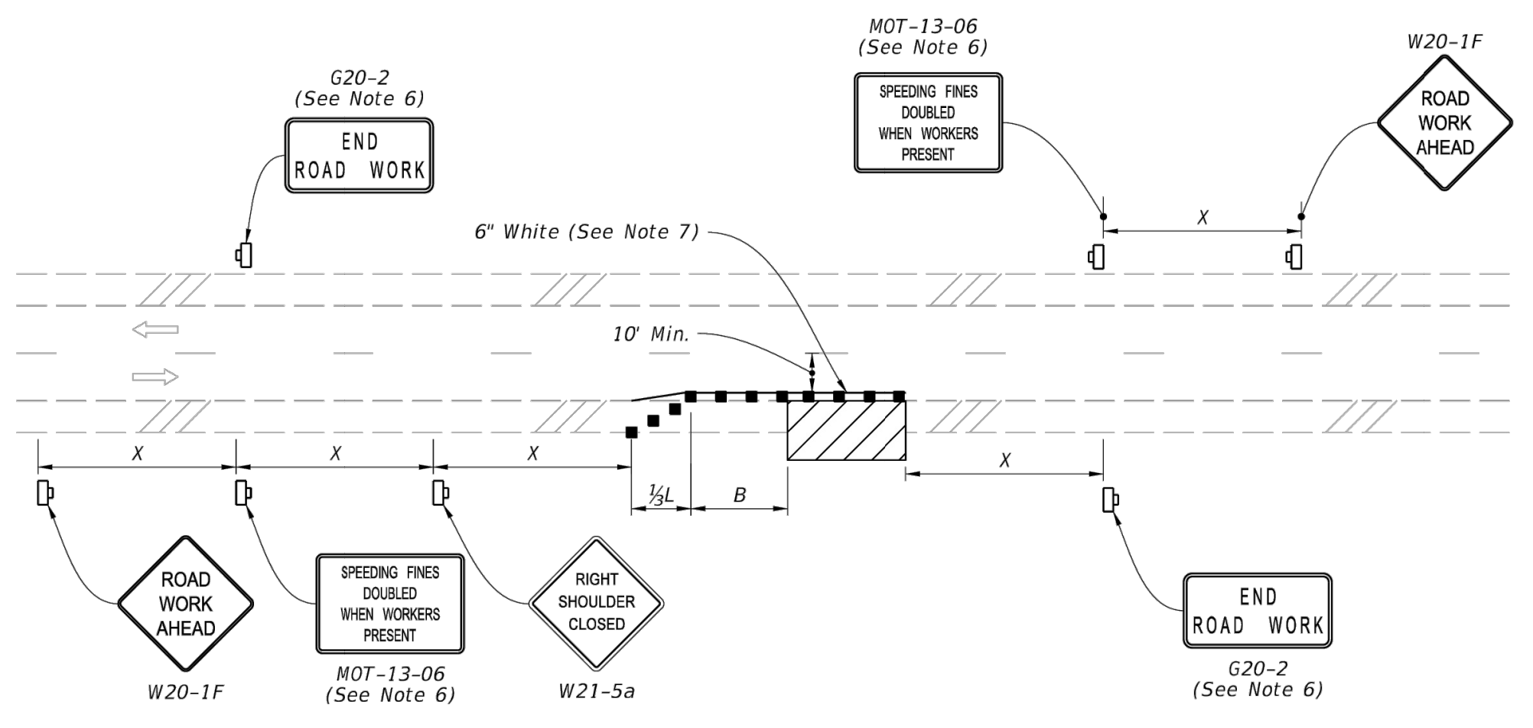
SYMBOLS:

▨ Work Area

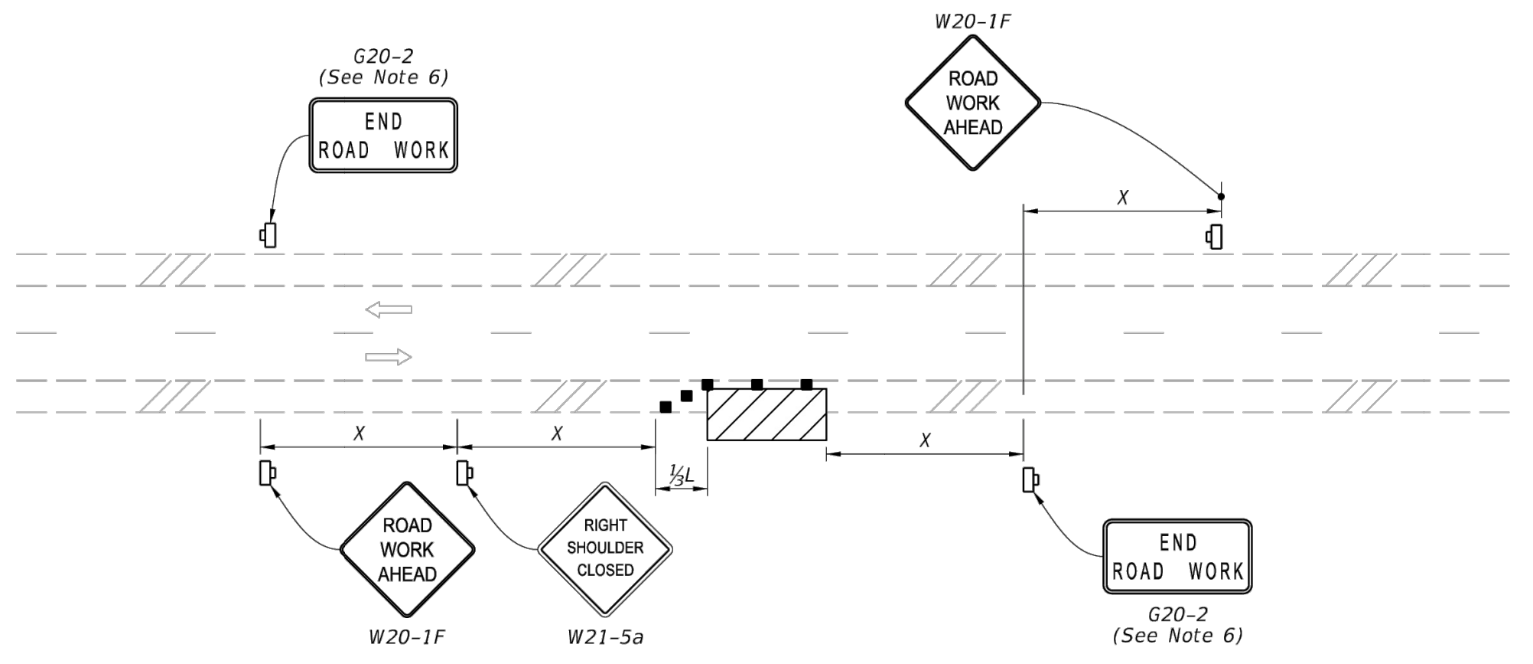
■ Channelizing Device (See Index 102-600)

Work Zone Sign

⇨ Lane Identification and Direction of Traffic

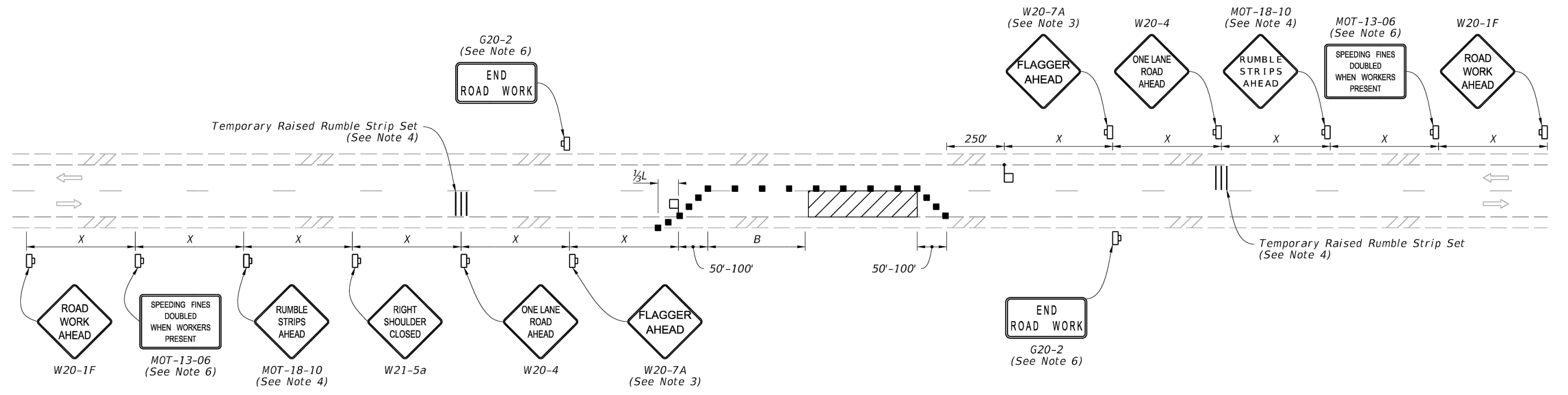


TWO-LANE ROADWAY
SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY
WITH WORK ZONE SPEED OF 45 MPH OR LESS



TWO-LANE ROADWAY
SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX 102-602	SHEET 1 of 2



NOTES:

1. This Index applies to Two-Lane, Two-Way Roadways with work within the traveled way.

2. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Spacing
   See Index 102-600 for "L", "B", "X" and channelizing device spacing values.

3. Optionally, use "Flagger Ahead" sign with symbol (W20-7) instead of "Flagger Ahead" sign with text (W20-7A).

4. Use temporary raised rumble when the existing posted speed is 55 mph or greater and the work duration is greater than 60 minutes. If temporary raised rumble strips are not used, omit "Rumble Strips Ahead" signs (MOT-18-10) and associated work zone sign spacing.

5. Additional one-way control may be provided by the following means:
   a. Flag-carrying vehicle
   b. Official vehicle
   c. Pilot vehicles
   d. Traffic signals

   When flaggers are the sole means of one-way control, the flaggers must be in sight of each other or in direct communication at all times.

6. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign spacing, may be omitted when the work zone will be in place for 24 hours or less.

7. Automated Flagger Assistance Devices (AFADs) may be used in accordance with Specification Sections 102, 990 and the APL vendor drawings.

8. Special Conditions may be required in accordance with these notes and the following sheets:

   A. Railroad Crossings:
      a. If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 2.
      b. If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.

   B. If the Work Area encroaches on the Centerline, use the Layout for Temporary Lane Shift to Shoulder on Sheet 2 only if the Existing Paved Shoulder width is sufficient to provide for an 11' lane between the Work Area and the Edge of Existing Paved Shoulder and the Work Zone will be in place for 24 hours or less. Reduce the posted speed when appropriate.

9. If the work encroaches on a marked bicycle lane or ridable shoulder, close the lane or shoulder in accordance with the Plans.

SYMBOLS:

▨ Work Area

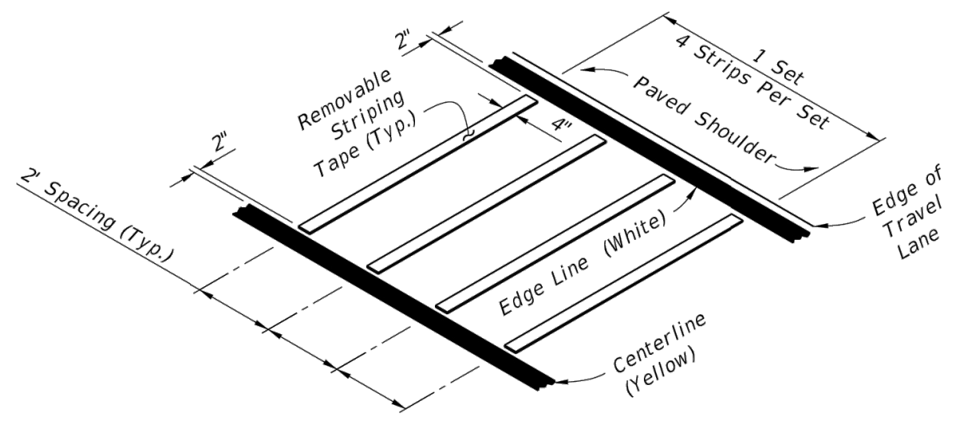
■ Channelizing Device (See Index 102-600)

Work Zone Sign

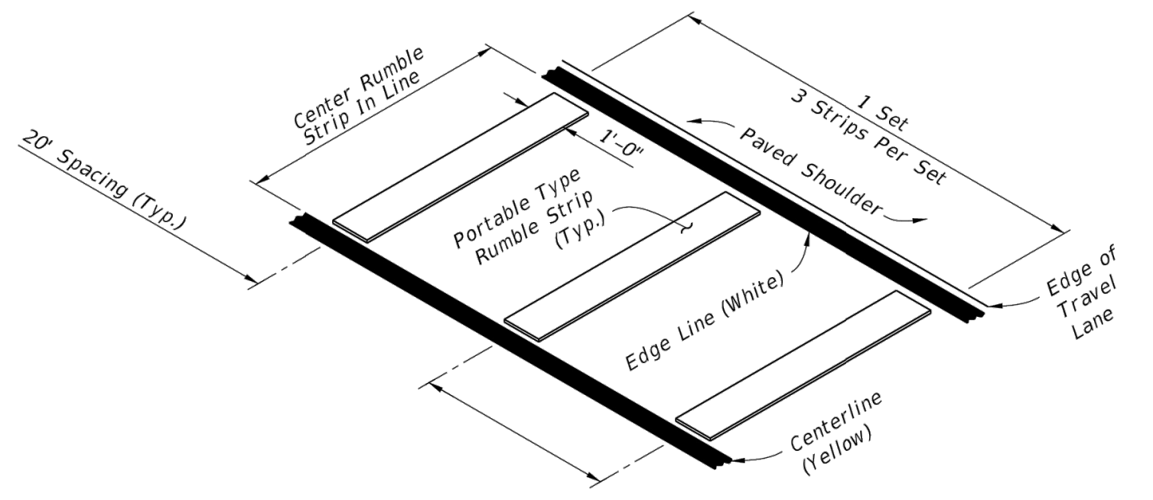
⇨ Lane Identification and Direction of Traffic

Flagger

10/12/2020 6:15:07 AM



OPTION - 1
REMOVABLE STRIPING TYPE



OPTION - 2
PORTABLE TYPE

RUMBLE STRIP SETS

LAST REVISION 11/01/20	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	INDEX 102-603	SHEET 1 of 2

PBK

www.pbk.com

FL FIRM: AR 0013140

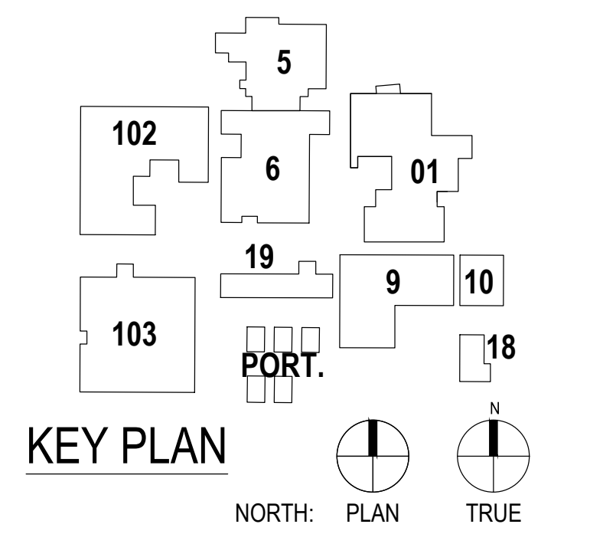
WEST PALM BEACH, FL
561-478-4457

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #518260045

100% CONSTRUCTION DOCUMENTS



No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.

DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

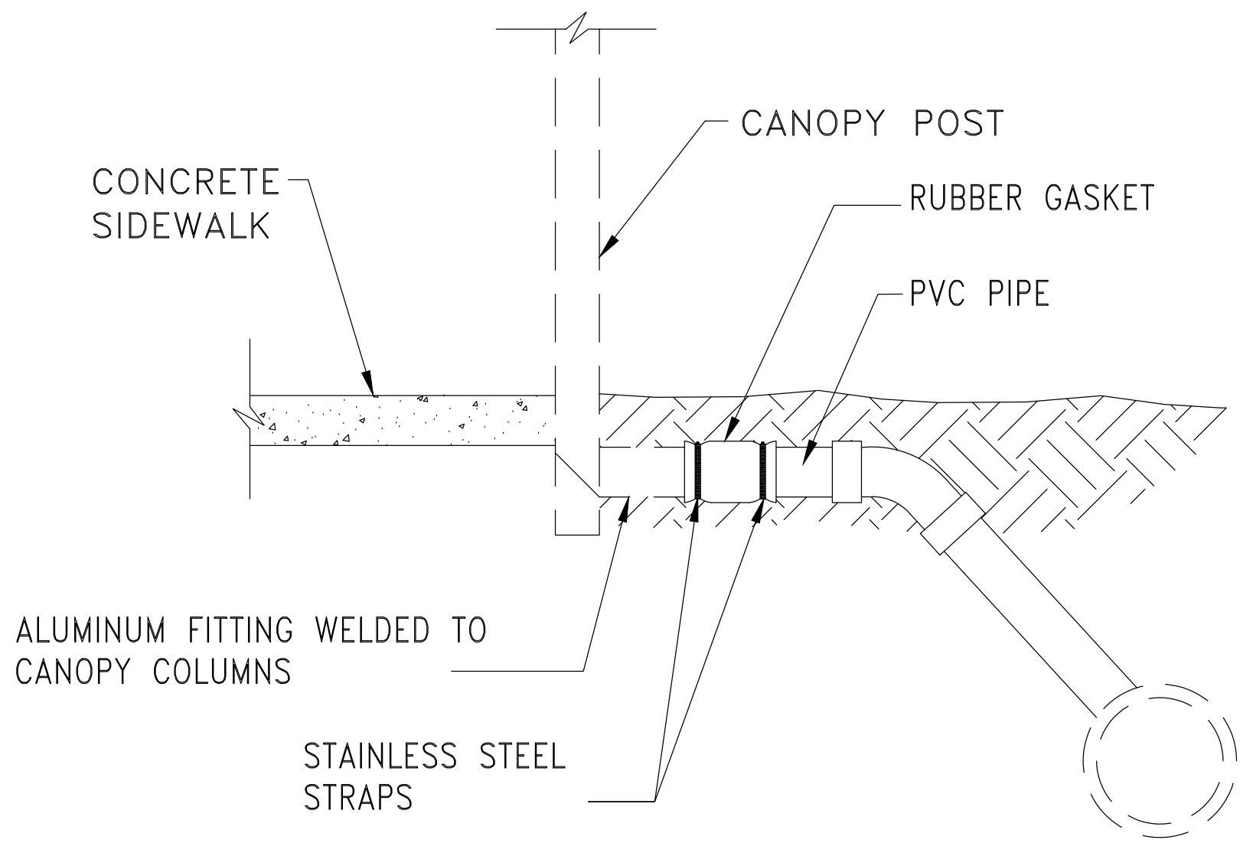
Klima Weeks
CIVIL ENGINEERING

MOT DETAILS

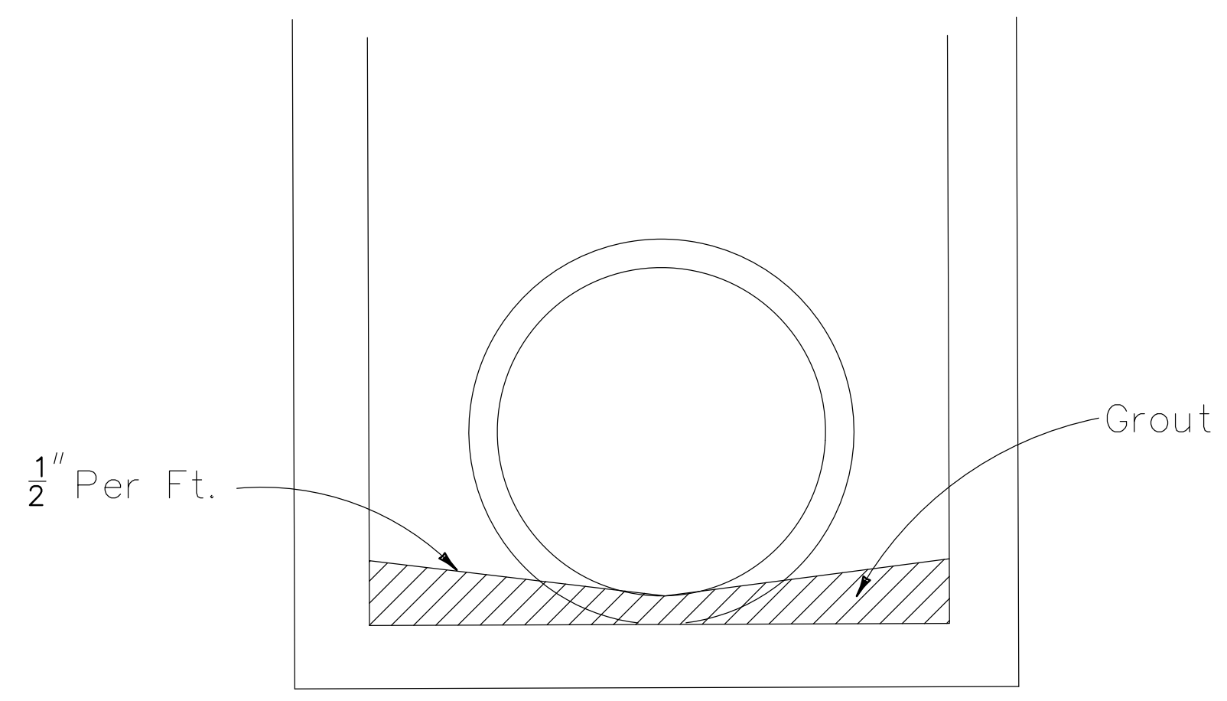
C-602

Plot Stamp:
5/29/2026 9:22:31 AM

HB ESTIMATING REC'D 06.01.2026

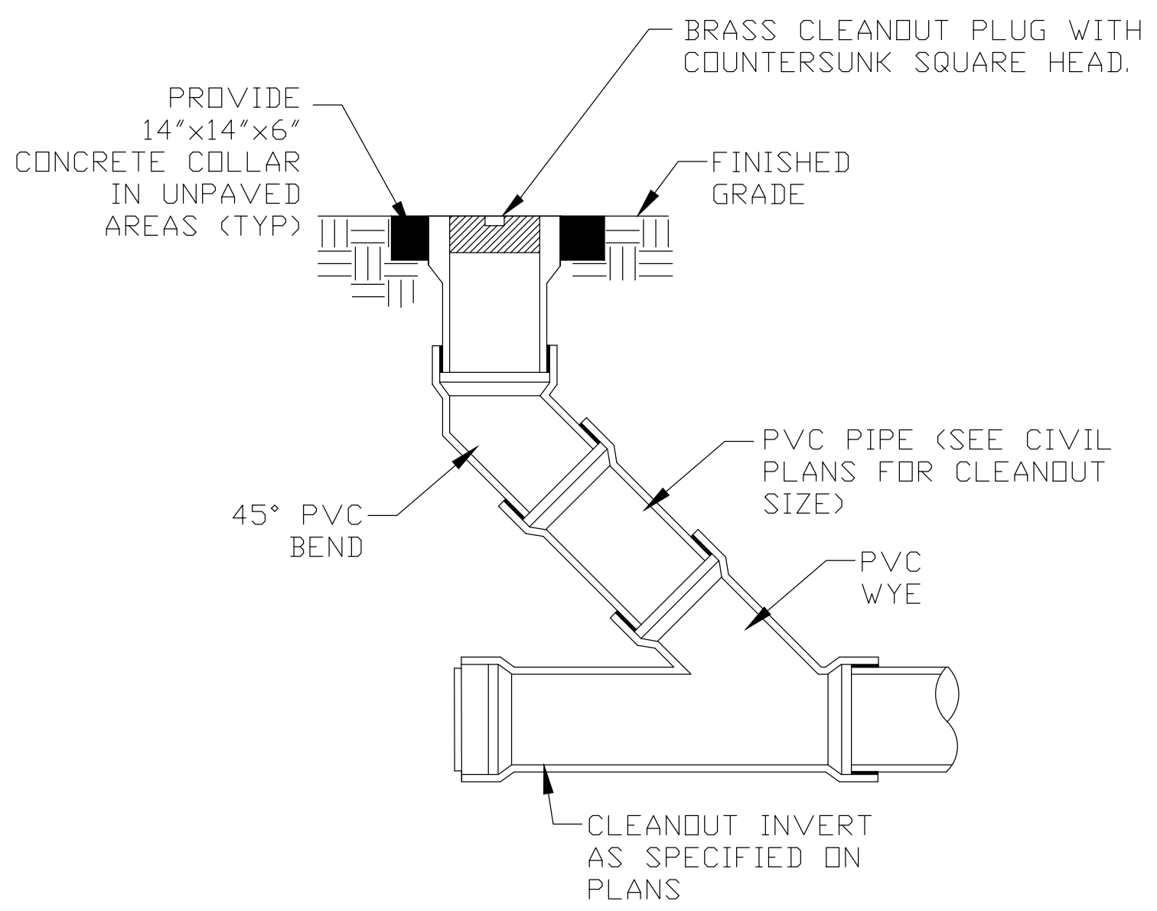


CANOPY CONNECTION DETAIL
N.T.S.

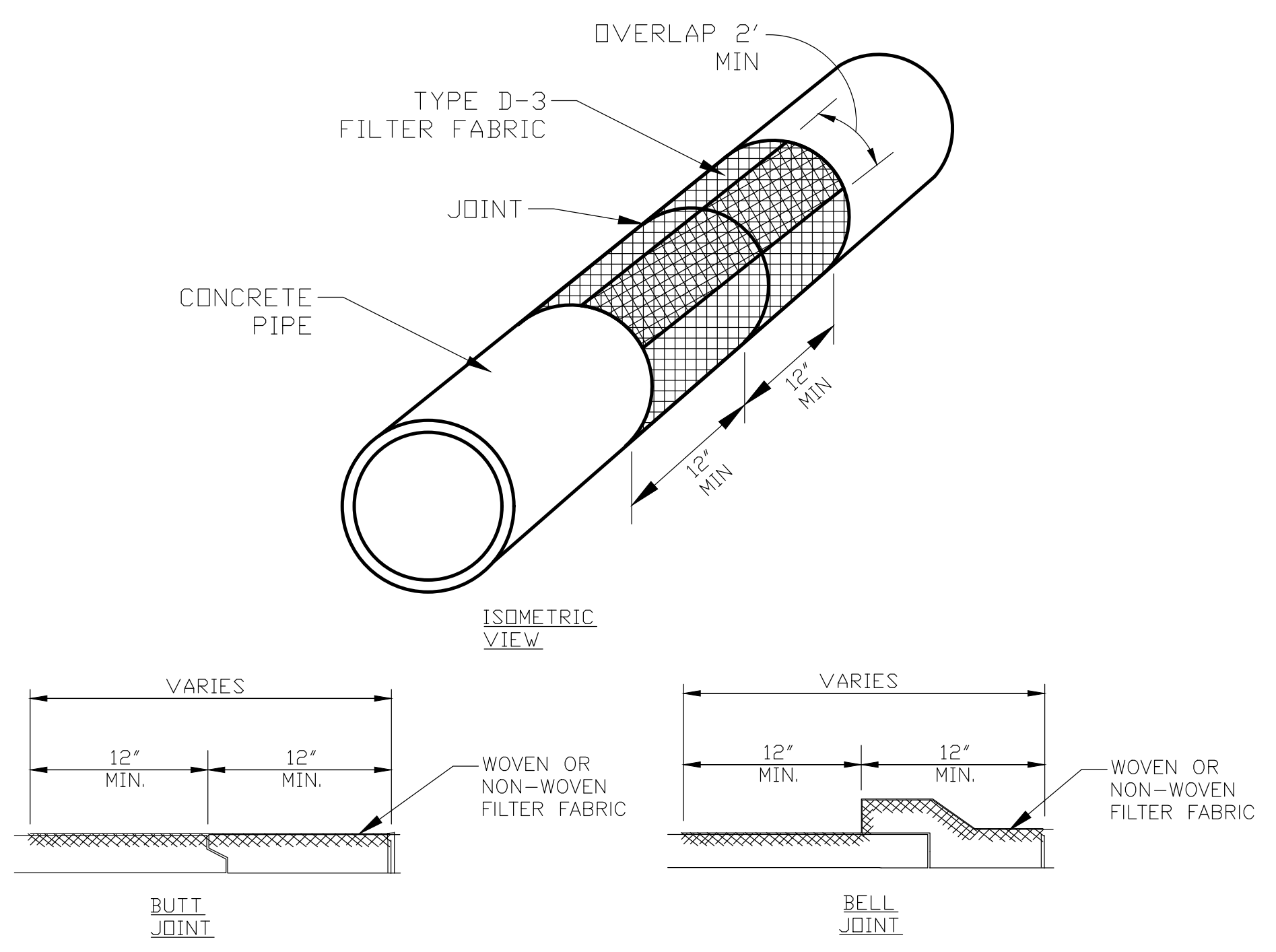


Note: Grout to consist of 3:1 Sand-Cement Mixture or any Class Concrete.
FOR ALL STRUCTURES UNLESS EXCLUDED BY SPECIAL DETAIL

DRAINAGE STRUCTURE INVERT
N.T.S.


BRASS CLEANOUT PLUG WITH COUNTERSUNK SQUARE HEAD.
PROVIDE 14"×14"×6" CONCRETE COLLAR IN UNPAVED AREAS (TYP)
FINISHED GRADE
45° PVC BEND
PVC PIPE (SEE CIVIL PLANS FOR CLEANOUT SIZE)
PVC WYE
CLEANOUT INVERT AS SPECIFIED ON PLANS

STORM CLEANOUT DETAIL
N.T.S.



FILTER FABRIC JACKET DETAIL

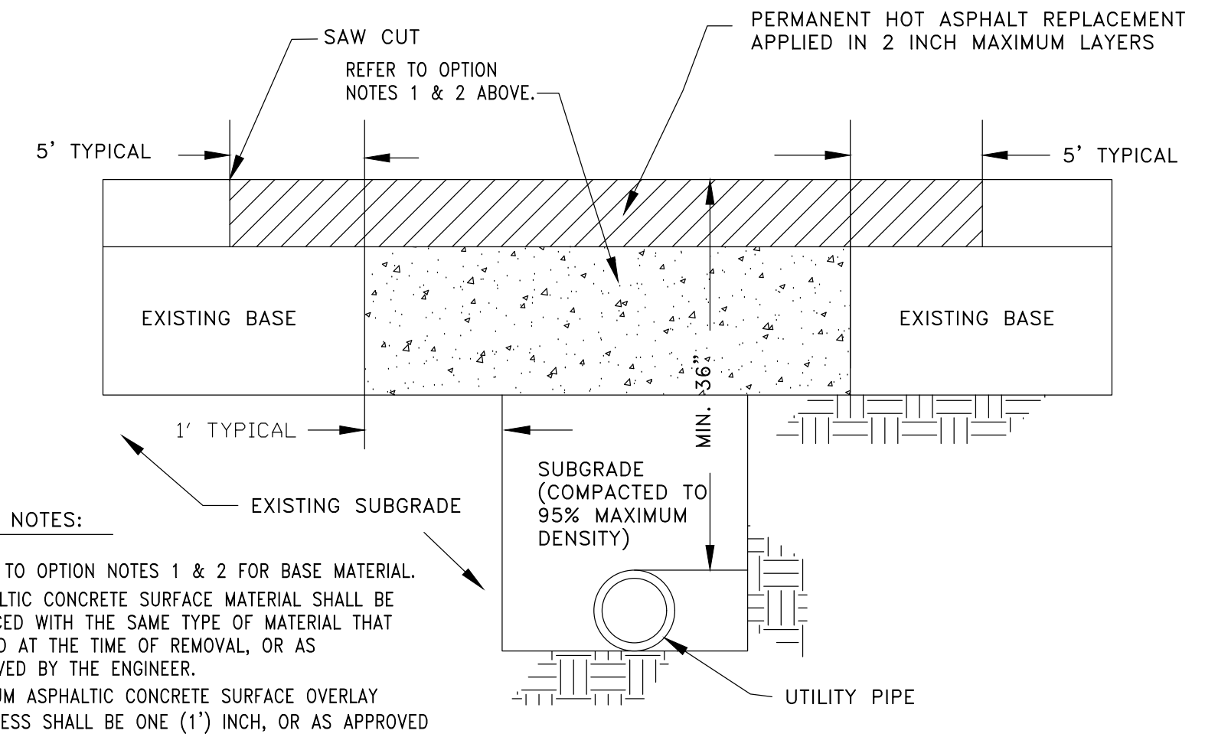
NOTES:

1. FILTER FABRIC MATERIAL MUST MEET THE FOLLOWING ASTM REQUIREMENTS:
   D-4595, D-4632, D-4533, D-4833, D-4491
2. FILTER FABRIC IS NOT REQUIRED WHEN AN O-RING GASKET IS USED.
3. FILTER FABRIC FOR THIS APPLICATION SHALL BE FDOT TYPE D-3.

OPTION 1 & 2 NOTES:

OPTION 1: 8"LIMEROCK BASE COMPACTED TO 98% OF THE MODIFIED PROCTOR (ASTM D-1557, AASHTO T134), MAXIMUM DENSITY.

OPTION 2: 8" FREE-DRAINING WELL GRADED CRUSHED AGGREGATE WITH MAXIMUM PARTICLE SIZE OF 1-1/2" AND LESS THAN 10% FINES PASSING THE U.S. STANDARD No. 200 SIEVE. PLACE DIRECTLY ON GEOGRID AND COMPACT UNTIL STABLE AND UNYIELDING.

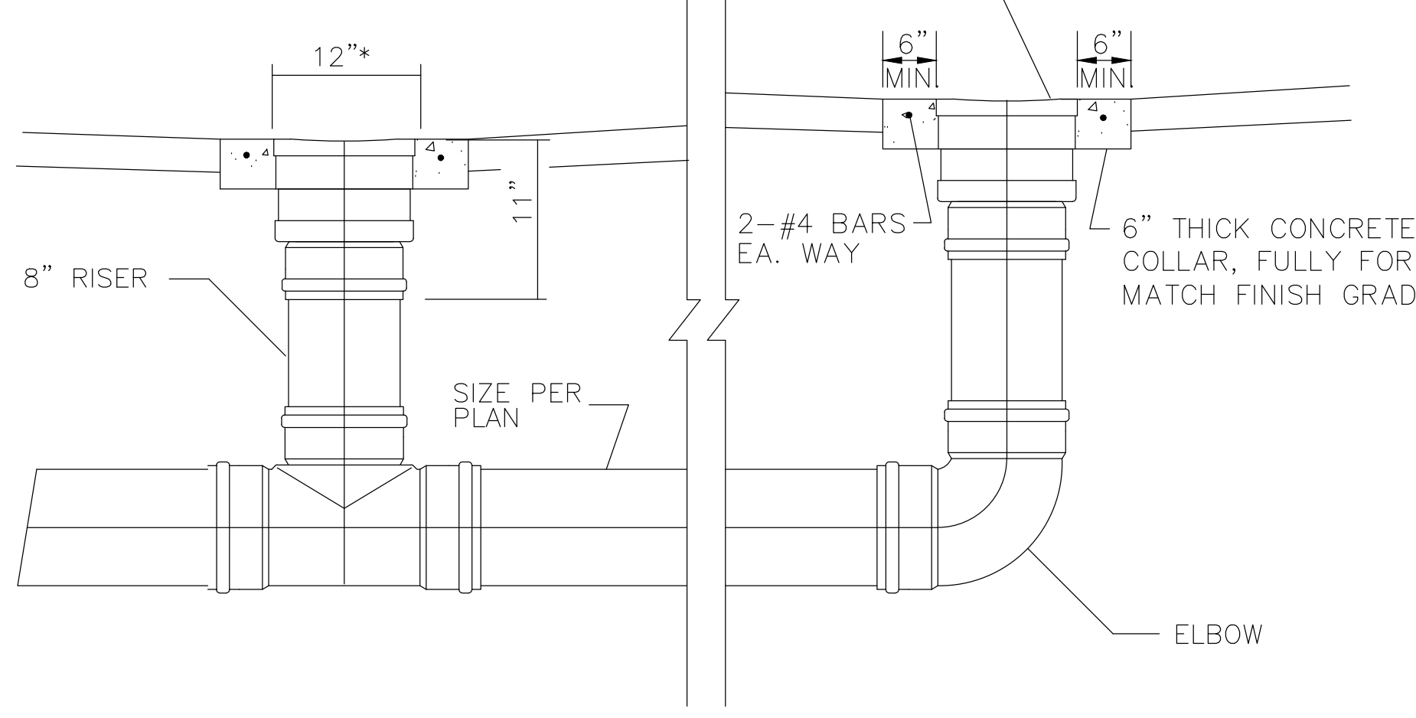

SAW CUT
REFER TO OPTION NOTES 1 & 2 ABOVE.
PERMANENT HOT ASPHALT REPLACEMENT APPLIED IN 2 INCH MAXIMUM LAYERS
5' TYPICAL
5' TYPICAL
EXISTING BASE
EXISTING BASE
1' TYPICAL
MIN. 36"
EXISTING SUBGRADE
SUBGRADE (COMPACTED TO 95% MAXIMUM DENSITY)
UTILITY PIPE

GENERAL NOTES:

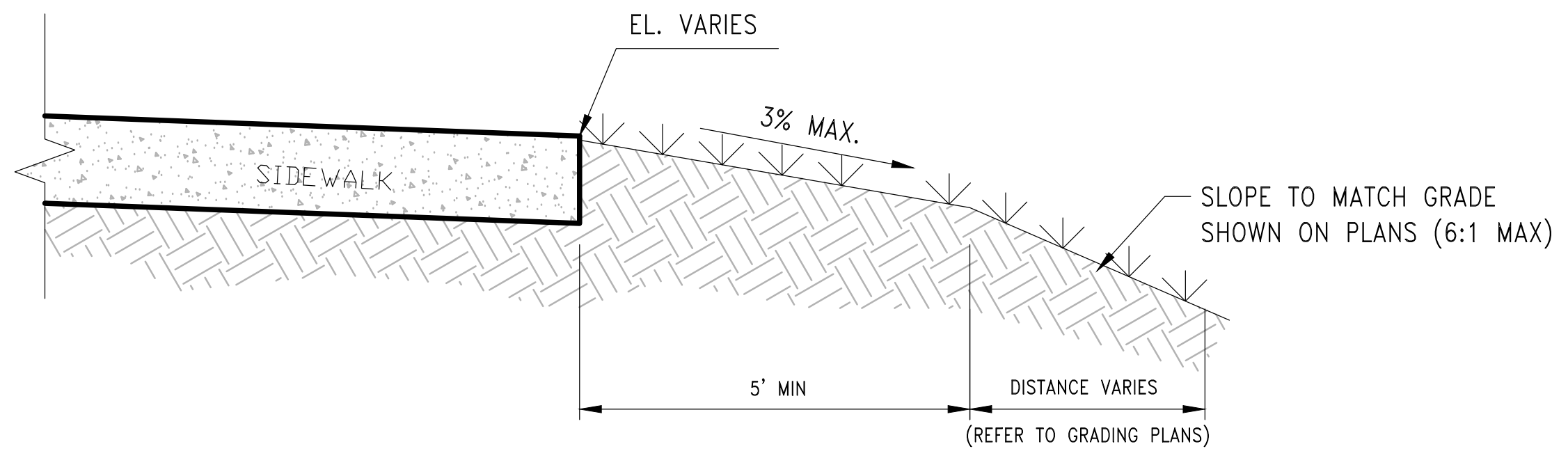
1. REFER TO OPTION NOTES 1 & 2 FOR BASE MATERIAL.
2. ASPHALTIC CONCRETE SURFACE MATERIAL SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL THAT EXISTED AT THE TIME OF REMOVAL, OR AS APPROVED BY THE ENGINEER.
3. MINIMUM ASPHALTIC CONCRETE SURFACE OVERLAY THICKNESS SHALL BE ONE (1') INCH, OR AS APPROVED BY THE ENGINEER.
4. ALL JOINT CUTS SHALL BE MECHANICALLY SAW CUT.

⁘	OPTION 1: 8"LIMEROCK BASE OPTION 2: 8" CRUSHED AGREGATE
▨	HOT PATCH

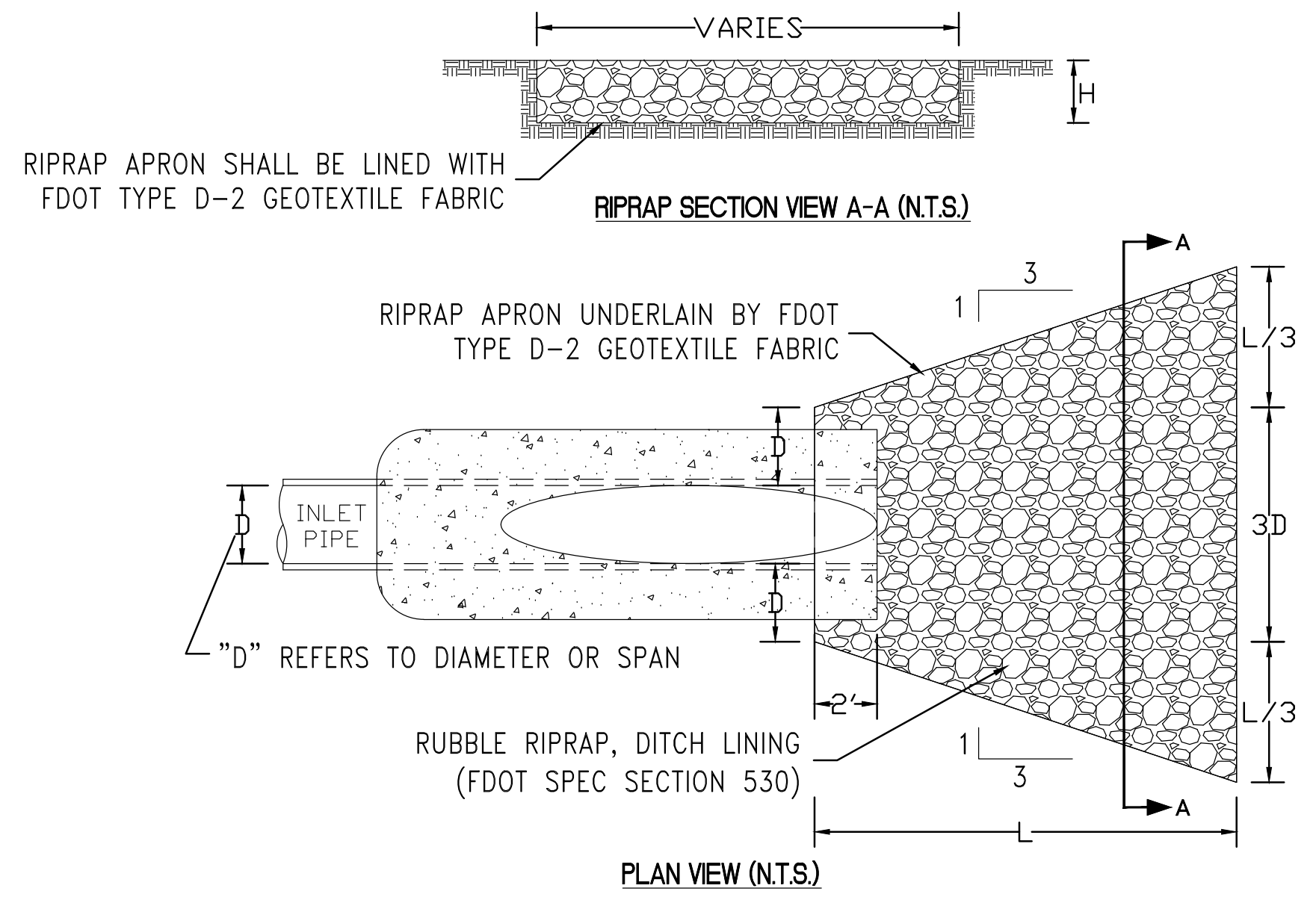
OPEN-CUT DETAIL
N.T.S.


*UNLESS OTHERWISE NOTED
12"*
11"
8" RISER
SIZE PER PLAN
2-#4 BARS EA. WAY
6" MIN.
6" MIN.
NYLOPLAST INLINE STANDARD (LOCKED) CAST IRON GRATE OR APPROVED EQUAL (TYP.) 12" UNLESS OTHERWISE NOTED)
6" THICK CONCRETE COLLAR, FULLY FORMED. MATCH FINISH GRADE.
ELBOW

INLINE DRAIN / DRAIN BASIN DETAIL
N.T.S.



DETAIL 1 - MAX. GRADING OFF SIDEWALK
N.T.S.


VARIES
H
RIPRAP APRON SHALL BE LINED WITH FDOT TYPE D-2 GEOTEXTILE FABRIC
RIPRAP SECTION VIEW A-A (N.T.S.)
A
1
3
RIPRAP APRON UNDERLAIN BY FDOT TYPE D-2 GEOTEXTILE FABRIC
L/3
3D
L/3
D
INLET PIPE
D
D
"D" REFERS TO DIAMETER OR SPAN
2'
RUBBLE RIPRAP, DITCH LINING (FDOT SPEC SECTION 530)
1
3
A
L
PLAN VIEW (N.T.S.)

RIPRAP APRON DIMENSIONS AND ESTIMATED QUANTITIES				
INLET PIPE SIZE "D" (IN)	LENGTH OF APRON "L" (FT)	DEPTH OF APRON "H" (FT)	ESTIMATED RIPRAP (CY)	ESTIMATED GEOTEXTILE (SY)
18	7	1.5	2.7	11
24	9	1.5	4.5	16
36	16	2	17	40
48	25	2.5	47.1	83

RIPRAP PLACEMENT AT MITERED END SECTION
N.T.S.

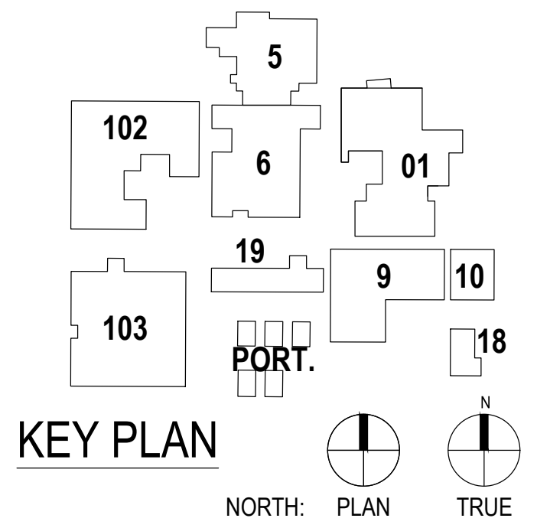
495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION
4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045
100% CONSTRUCTION DOCUMENTS



KEY PLAN

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

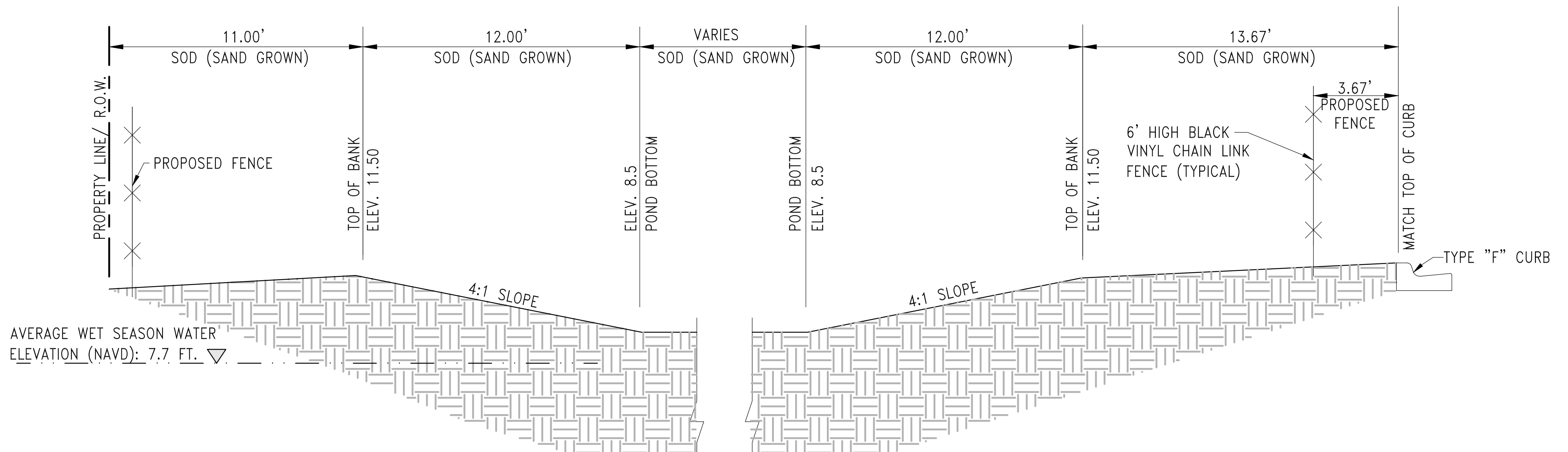
CHECKED BY: J.A.K.
DRAWN BY: RZ

DRAINAGE DETAILS

C-700

HB ESTIMATING REC'D 06.01.2026

DRAINAGE DETAILS
C-701

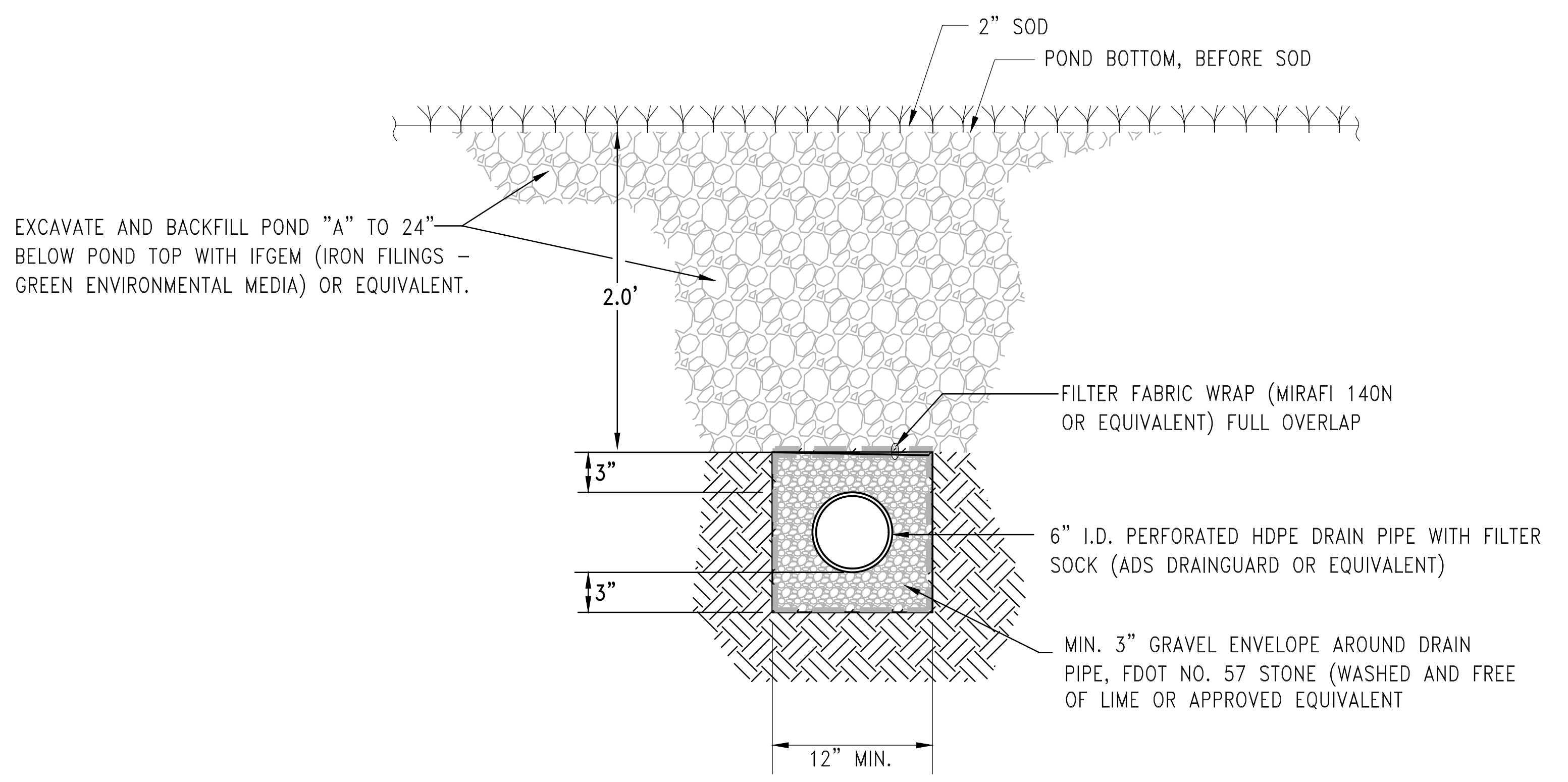


MAXIMUM POND DESIGN STORM EVENTS STAGES (FT., NAVD):

DESIGN STORM	MAX. STAGE ELEV.
100 YR.-72 HR.	11.27
10 YR.-24 HR.	11.18
25 YR.-72 HR.	11.24

POND "A" (PARKING LOT) CROSS SECTION "A-A"

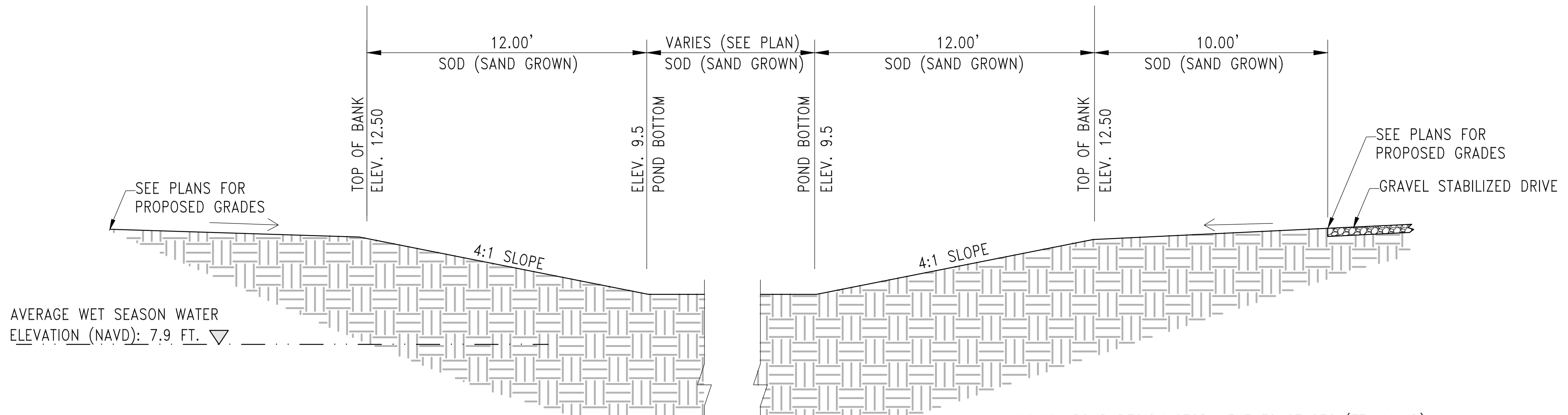
N.T.S.


2" SOD
POND BOTTOM, BEFORE SOD
EXCAVATE AND BACKFILL POND "A" TO 24" BELOW POND TOP WITH IFGEM (IRON FILINGS - GREEN ENVIRONMENTAL MEDIA) OR EQUIVALENT.
2.0'
FILTER FABRIC WRAP (MIRAFI 140N OR EQUIVALENT) FULL OVERLAP
3"
3"
6" I.D. PERFORATED HDPE DRAIN PIPE WITH FILTER SOCK (ADS DRAINGUARD OR EQUIVALENT)
MIN. 3" GRAVEL ENVELOPE AROUND DRAIN PIPE, FDOT NO. 57 STONE (WASHED AND FREE OF LIME OR APPROVED EQUIVALENT
12" MIN.

POND "A" UNDERDRAIN DETAIL

N.T.S.

NOTE:
REFER TO THIS SHEET C700 UNDERDRAIN CLEANOUT DETAIL.

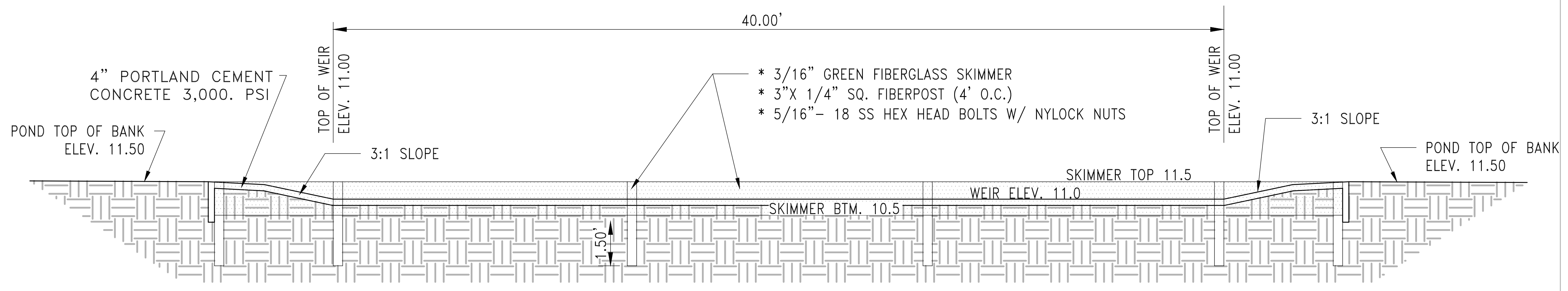


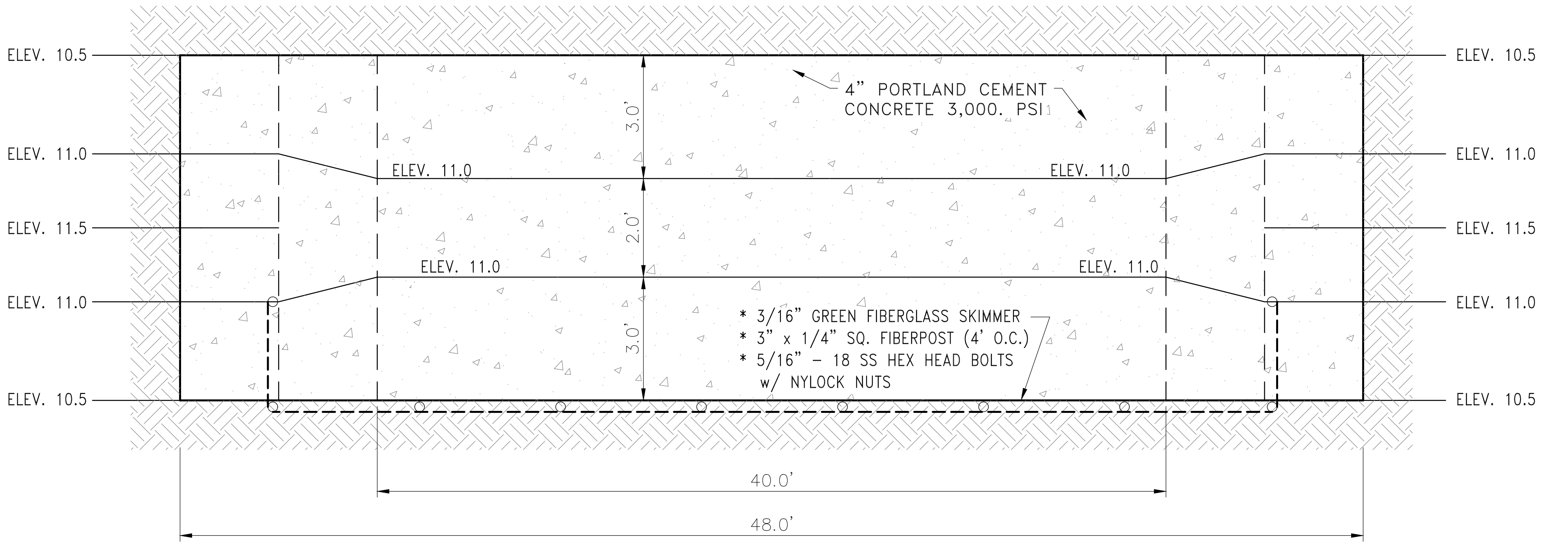
MAXIMUM POND DESIGN STORM EVENTS STAGES (FT., NAVD):

DESIGN STORM	MAX. STAGE ELEV.
100 YR.-72 HR.	12.59
10 YR.-24 HR.	11.72
25 YR.-72 HR.	12.36

POND "E" NORTH (BUILDING POND) CROSS SECTION "E-E"

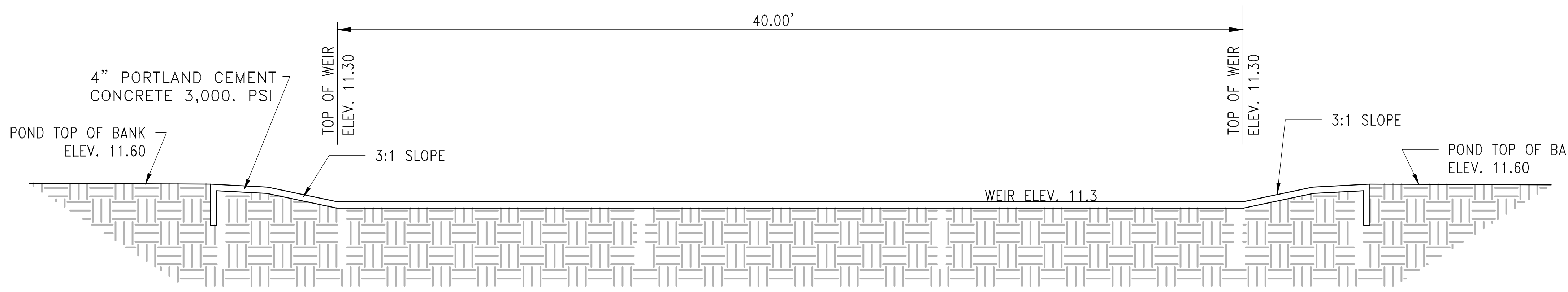
N.T.S.

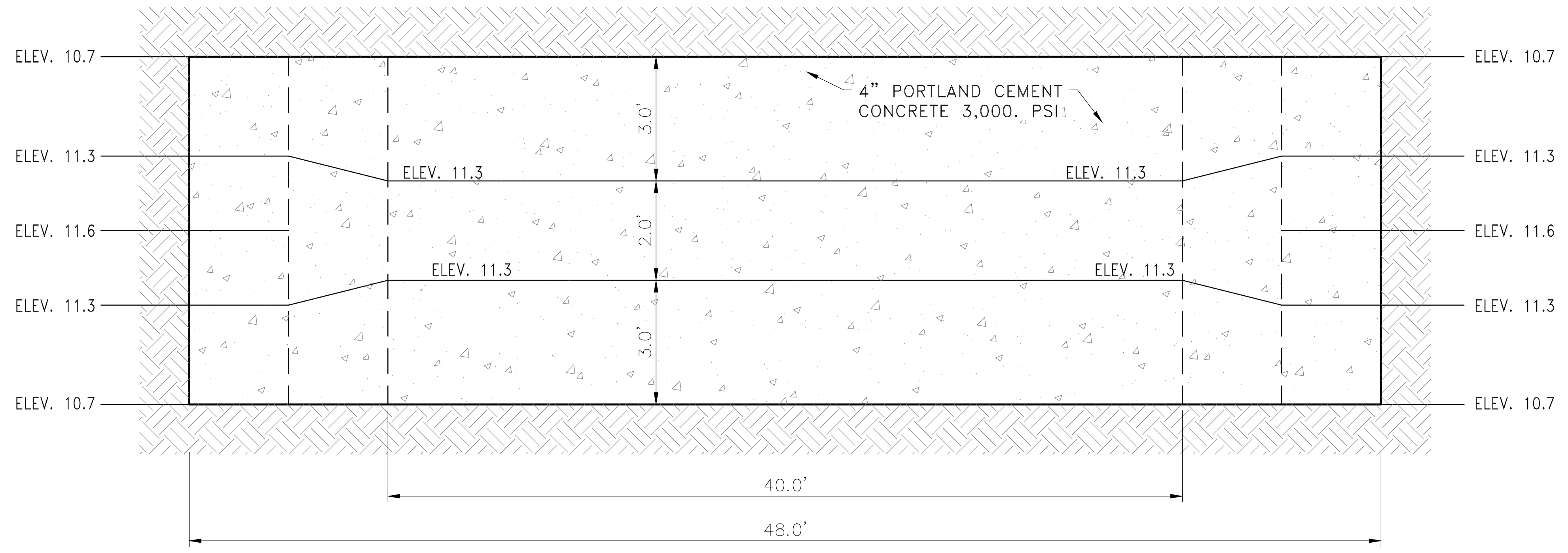

40.00'
4" PORTLAND CEMENT CONCRETE 3,000. PSI
TOP OF WEIR ELEV. 11.00
TOP OF WEIR ELEV. 11.00
* 3/16" GREEN FIBERGLASS SKIMMER
* 3"X 1/4" SQ. FIBERPOST (4' O.C.)
* 5/16"- 18 SS HEX HEAD BOLTS W/ NYLOCK NUTS
3:1 SLOPE
3:1 SLOPE
POND TOP OF BANK ELEV. 11.50
POND TOP OF BANK ELEV. 11.50
SKIMMER TOP 11.5
WEIR ELEV. 11.0
SKIMMER BTM. 10.5
1.50'



SECTION "B-B" POND "A" WEIR OUTFALL DETAIL

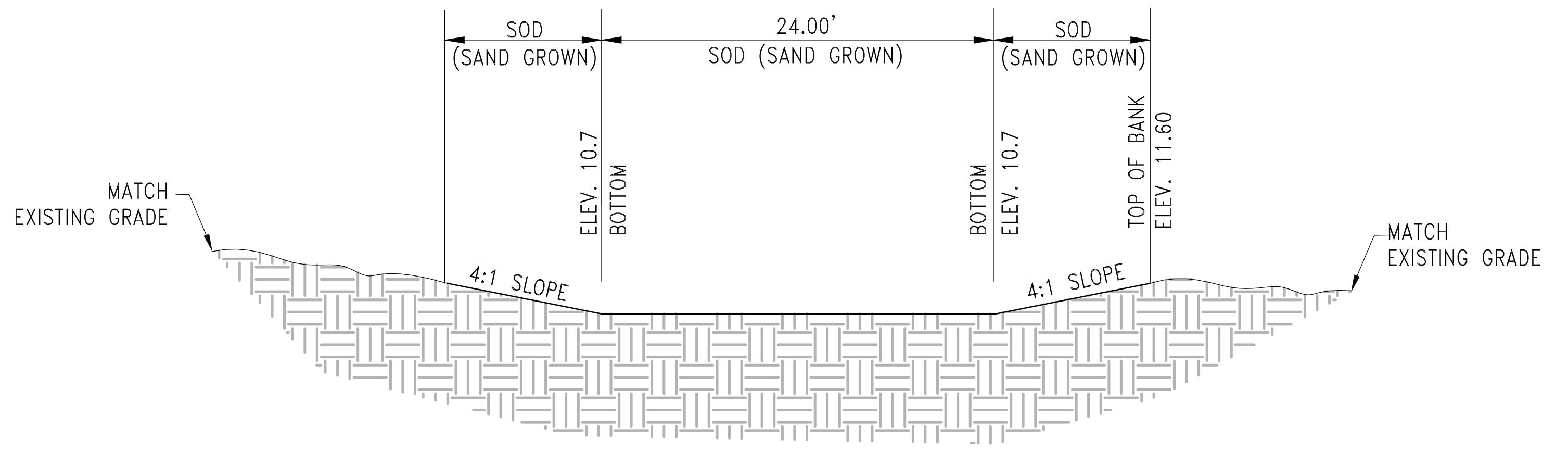
N.T.S.


40.00'
4" PORTLAND CEMENT CONCRETE 3,000. PSI
POND TOP OF BANK ELEV. 11.60
TOP OF WEIR ELEV. 11.30
TOP OF WEIR ELEV. 11.30
3:1 SLOPE
3:1 SLOPE
POND TOP OF BANK ELEV. 11.60
WEIR ELEV. 11.3



SECTION "D-D" POND "E" SOUTH - WEIR OUTFALL DETAIL

N.T.S.



POND "E" SOUTH CROSS SECTION "C-C"

N.T.S.

PBK
www.pbk.com
FL FIRM: AR 0013140
WEST PALM BEACH, FL
561-478-4457

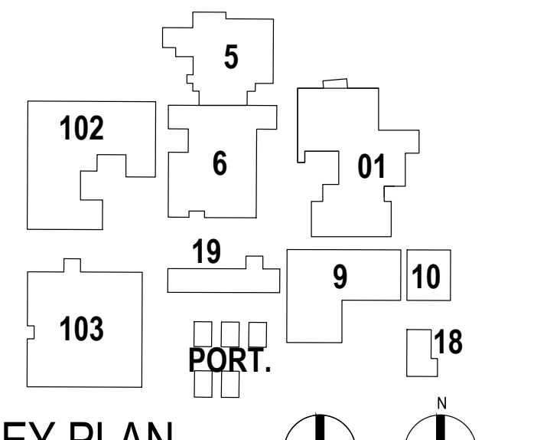
MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #518260045

100% CONSTRUCTION DOCUMENTS

MARTIN COUNTY SCHOOL DISTRICT



KEY PLAN

NORTH: PLAN TRUE

JAY A. KLIMA
LICENSE No. 49945
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE	PROJECT NUMBER
2026/05/25	25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

DRAINAGE DETAILS

C-701

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:22:36 AM

UTILITY DETAILS
C-800

GENERAL NOTES:

FOR THE PURPOSE OF THE GENERAL NOTES BELOW, THE TERM DEPARTMENT SHALL MEAN "MARTIN COUNTY UTILITIES & SOLID WASTE DEPARTMENT".

1. ALL CONNECTIONS TO EXISTING MAINS SHALL BE OBSERVED BY THE DEPARTMENT. VALVES ON EXISTING MAINS SHALL BE OPERATED BY DEPARTMENT PERSONNEL OR UNDER THEIR DIRECT SUPERVISION. TAPPING SLEEVE AND VALVE SHALL BE PRESSURE TESTED PRIOR TO TAPPING. IF SERVICE MUST BE CUT OFF TO EXISTING CUSTOMERS, THE DEPARTMENT MUST HAVE THREE DAYS NOTICE TO MAKE NECESSARY NOTIFICATIONS. THE CONTRACTOR MAY BE REQUIRED TO ASSIST IN NOTIFICATIONS. IN THIS EVENT, CONTRACTOR SHALL BE READY TO PROCEED WITH AS MUCH MATERIAL PREASSEMBLED AS POSSIBLE AT THE SITE TO MINIMIZE THE LENGTH OF SERVICE INTERRUPTION. THE DEPARTMENT WILL POSTPONE A SERVICE CUT OFF IF THE CONTRACTOR IS NOT READY TO PROCEED ON SCHEDULE. SUCH CONNECTIONS SHALL BE MADE AT NIGHT TO MINIMIZE EFFECTS UNLESS OTHERWISE AUTHORIZED BY THE DEPARTMENT. NO CUSTOMER SHOULD BE WITHOUT SERVICE FOR MORE THAN FOUR HOURS.

LOCAL CHLORINATION WILL BE REQUIRED FOR ALL PIPE AND FITTINGS USED TO COMPLETE CONNECTIONS WITH POTABLE WATER.

2. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF MARTIN COUNTY UTILITIES MINIMUM DESIGN AND CONSTRUCTION STANDARDS, ONE COPY OF THE CONTRACT DOCUMENTS, INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.

3. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.

4. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHOD AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

5. LOCATION OF PROPOSED FACILITIES WILL BE STAKED BY CONTRACTOR. CONTRACTOR MUST GIVE 48 HOURS NOTICE TO THE DEPARTMENT IN ADVANCE OF LAYOUT.

6. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE–CONSTRUCTION MEETINGS. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT BY LETTER PRIOR TO THE PRE–CONSTRUCTION MEETING APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATIONS. IN THE EVENT THE SUPERINTENDENT WILL NOT BE PRESENT FOR ANY PERIOD OF TIME DURING CONTRACT WORK THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE IN WRITING TO THE DEPARTMENT, INCLUDING THE APPOINTMENT OF A QUALIFIED REPLACEMENT SUPERINTENDENT WHO WILL BE PRESENT DURING THE CONSTRUCTION. WORK SHALL NOT BE ALLOWED TO PROCEED UNLESS THE ASSIGNED SUPERINTENDENT IS PRESENT.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE.

WARNING: EXACT LOCATION OF UNDERGROUND UTILITIES IS NOT KNOWN NOR IS THIS DRAWING TO BE CONSTRUED AS DEPICTING THE LOCATION OF ALL UNDERGROUND UTILITIES OR STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF LOCATION PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS RESPONSIBLE, THEREFORE, FOR ALL DAMAGE AND REPAIR COSTS.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1A

GENERAL NOTES (Cont.):

8. DENSITY TESTS OF TRENCH BACKFILL MATERIAL SHALL BE REQUIRED AT INTERVALS OF NOT MORE THAN 500 FEET. DENSITY TESTS OF PAVEMENT OPEN–CUT AREAS INCLUDING ROADS, TURNLANES, AND DRIVES SHALL BE REQUIRED AT EACH OPEN–CUT AT INTERVALS OF NOT MORE THAN 50 FEET. ALL TESTS SHALL COMMENCE AT THE TOP OF CONDUIT AND EVERY 12 INCHES TO THE FINISH GRADE. COMPACTION SHALL BE IN ACCORDANCE WITH MARTIN COUNTY UTILITIES CONSTRUCTION STANDARDS "TYPICAL TRENCH DETAIL" AND "FLEXIBLE PAVEMENT REPLACEMENT DETAIL". FLORIDA BEARING TESTS FOR THE STABILITY OF EXISTING SUBSOIL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 500 FEET, AND CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN THE STRATA. A CERTIFIED COPY OF THE TESTS SHALL BE PROVIDED TO THE DEPARTMENT AND THE FLORIDA DEPARTMENT OF TRANSPORTATION OR MARTIN COUNTY ENGINEERING DEPARTMENT DEPENDING ON JURISDICTION. CONTRACTORS BID PRICE SHALL INCLUDE PAYMENT FOR ALL TESTS CONDUCTED BY AN INDEPENDENT TESTING LAB.

9. ANY LANDSCAPING DISTURBED, UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTORS EXPENSE.

10. ANY SIDEWALK, CURB AND GUTTER OR PAVEMENT DISTURBED, UNLESS OTHERWISE SHOWN ON PLANS, SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi AT 28 DAYS AND ALL CONCRETE WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA. ALL CONSTRUCTION SHALL MEET ADA REQUIREMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, DETECTABLE WARNING SURFACES.

11. ALL SOD IS TO BE PLACED FOR THE FULL WIDTH DISTURBED AT THE PER LINEAR FOOT UNIT PRICE FOR SOD. SOD SHALL BE REPLACED TO MATCH EXISTING KIND UNLESS OTHERWISE SHOWN ON PLANS.

12. CONTRACTOR SHALL PROVIDE PROPER BENDS TO MAINTAIN REQUIRED DEPTH AND ALIGNMENT OF PIPE. COST OF BENDS NOT DESIGNATED ON PLANS SHALL BE INCLUDED WITH THE UNIT PRICE FOR PIPE.

13. ANY TREES AND/OR SCRUB OR OTHER VEGETATION NOT TO BE REPLACED SHALL BE REMOVED FROM THE PROJECT AT THE CONTRACTOR'S EXPENSE.

14. ALL RUBBLE AND UNSUITABLE MATERIAL MUST BE REMOVED FROM THE PROJECT AND DISPOSED OF PROPERLY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

15. MAILBOXES MUST BE CAPABLE OF RECEIVING MAIL AT ALL TIMES.

16. DEFLECT PIPE AS NECESSARY TO OBTAIN THE REQUIRED ALIGNMENT. USE APPROPRIATE FITTINGS WHEN DEFLECTION EXCEEDS 75% OF MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.

17. ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED. REFER TO MARTIN COUNTY UTILITIES DEPARTMENT MINIMUM DESIGN & CONSTRUCTION STANDARDS (LATEST EDITION).

18. ALL CONSTRUCTION DEWATERING (WELL POINTS, SUMPS, ETC.) WILL REQUIRE A DEWATERING PERMIT FROM SOUTH FLORIDA WATER MANAGEMENT DISTRICT. THIS SHALL BE OBTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE PRIOR TO BEGINNING OF CONSTRUCTION.

19. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.

20. A U–2 PERMIT IS REQUIRED FOR ALL WORK WITHIN COUNTY RIGHT–OF–WAY. THIS PERMIT MUST BE OBTAINED BY THE CONTRACTOR FROM THE MARTIN COUNTY ENGINEERING DEPARTMENT. ALL COSTS PAYABLE BY THE CONTRACTOR. A COPY OF THIS PERMIT MUST BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

21. ALL CONCRETE AND ASPHALT DRIVES MUST BE REPLACED FROM SAW CUT TO EDGE OF PAVEMENT.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1B

GENERAL NOTES (Cont.):

22. LOCATIONS OF FIRE HYDRANTS AND AIR RELEASE VALVES ARE APPROXIMATE ONLY. FINAL LOCATIONS WILL BE DETERMINED BY DEPARTMENT PERSONNEL IN FIELD.

23. MAXIMUM LENGTH OF WATER MAIN AND FORCE MAIN PRESSURE TEST SHALL BE 1500 FEET. WATER SOURCE FOR FLUSHING, FILLING AND PRESSURE TESTING THE WATER MAIN SHALL BE FROM A TREATED SOURCE APPROVED BY THE DEPARTMENT.

24. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND RESTORATION (IF DAMAGED) OF ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT, INCLUDING BUT NOT LIMITED TO WALLS, FENCES, POWER POLES, MAIL BOXES, DRAINAGE PIPES AND STRUCTURES, ETC.

25. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING WATER SERVICES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT THE EXISTING WATER SERVICES FROM DAMAGE AND REPAIR ANY BREAKS IMMEDIATELY.

26. "RECORD DRAWINGS" SHALL INCLUDE FURNISHING MARTIN COUNTY UTILITIES DEPARTMENT WITH ALL INFORMATION NECESSARY FOR A COMPLETE SET OF RECORD DRAWINGS AS STIPULATED IN THE MARTIN COUNTY UTILITIES DEPARTMENT MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION).

27. MECHANICALLY RESTRAIN LENGTHS, AS INDICATED ON DRAWING No. 20, ON EACH SIDE OF ALL BENDS AND AS INSTRUCTED IN MARTIN COUNTY UTILITIES DEPARTMENT SPECIFICATIONS. MECHANICAL RESTRAINTS SHALL BE EITHER MEG–A–LUG, TYLER OR UNIFLANGE. THE CONTRACTORS BID PRICE FOR PIPE, GATE VALVES AND FITTINGS SHALL INCLUDE MECHANICAL RESTRAINT.

28. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL SUPPORT UTILITIES AND SHORE TRENCH AS REQUIRED TO PROTECT AND MAINTAIN EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY EACH UTILITY PRIOR TO ATTEMPTING TO SUPPORT THEIR FACILITIES. IF THE UTILITY REQUIRES THAT ONLY THEIR CREWS SHALL BE ALLOWED TO SUPPORT THEIR FACILITIES, THEN IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE WORK AND PAY THE UTILITY FOR THEIR EXPENSES IF REQUIRED. ALL COSTS FOR THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE AND INCLUDED IN THE CONTRACTORS BID PRICE.

29. ALL PRESSURE TESTS SHALL BE IN ACCORDANCE WITH AWWA STANDARDS.

30. AIR RELEASE VALVE VAULT COVERS SHALL BE CONSTRUCTED PER DETAIL AS SHOWN IN THE DEPARTMENTS MINIMUM DESIGN AND CONSTRUCTION STANDARDS.

31. ALL WATER SERVICES SHALL BE DIRECTIONALLY DRILLED UNDER EXISTING PAVEMENT.

32. VALVE STEM RISER SHALL BE REQUIRED WHERE OPERATING NUT DEPTH EXCEEDS 4 FEET. THE RISER SHALL BE BOLTED TO THE VALVE NUT. METHOD AND MATERIALS SHALL BE APPROVED BY THE DEPARTMENT. COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACTORS BID UNIT PRICE FOR GATE VALVES.

33. THE CONTRACTOR SHALL CLEAN MAINS USING APPROVED POLYURETHANE PIG(S). TEMPORARY CLEANING STATIONS SHALL BE CONSTRUCTED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CLEANING PLAN SHOWING METHOD OF FILLING AND CLEANING MAINS PRIOR TO START OF CONSTRUCTION. THE CLEANING PLAN SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO CONSTRUCTION. ALL COSTS FOR FILLING AND CLEANING SHALL BE AT THE CONTRACTORS EXPENSE.

34. A FLORIDA DEPARTMENT OF TRANSPORTATION PERMIT IS REQUIRED FOR ALL WORK, EXCEPT PERPENDICULAR CONNECTIONS, WITHIN THE STATE RIGHT–OF–WAY. A COPY OF THIS PERMIT MUST BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

35. THE CONTRACTOR SHALL INSTALL TESTING POINTS FOR PRESSURE & BACTERIOLOGICAL TESTING OF WATER MAINS. THE CONTRACTOR SHALL INSTALL AND REMOVE AND PLUG CORP. STOPS PER MARTIN COUNTY UTILITIES STANDARDS "SAMPLE POINT DETAIL". THE LOCATION OF TEST POINTS SHALL BE APPROVED BY THE DEPARTMENT.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1C

GENERAL NOTES (Cont.):

36. WATER MAIN DISINFECTION SHALL BE IN ACCORDANCE WITH CURRENT AWWA, BULLETIN C–651.

37. WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH CURRENT AWWA, FDEP AND NSF STANDARDS.

38. MINIMUM COVER TO FINISHED GRADE OVER WATER MAINS SHALL BE 30 INCHES UP TO 8" DIAMETER; 10" OR LARGER SHALL HAVE 36" COVER OR GREATER TO PROVIDE A MINIMUM 18" COVER OVER OPERATING NUT OF GATE VALVES.

39. ALL MAINS SHALL BE TESTED FOR LEAKAGE. WATER SHALL BE SUPPLIED TO THE MAIN AND PUMPED TO THE REQUIRED 150 PSI PRESSURE. THE MAIN TESTED SHALL EITHER BE ISOLATED FROM PRESENTLY POTABLE LINES OR PROTECTED FROM LEAKAGE BY A DOUBLE VALVE ARRANGEMENT.

40. NEWLY CONSTRUCTED FIRE HYDRANTS THROUGHOUT THE PROJECT SHALL HAVE A RED "OUT OF SERVICE" DISK (JOSEPH G. POLLARD CO. OR EQUAL) ATTACHED TO 4" PUMPER NOZZLE CAP. DISK TO BE REMOVED AFTER WATER SYSTEM HAS BEEN APPROVED FOR SERVICE BY THE DEPARTMENT.

THE DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY TESTING PROCEDURES. AFTER FLUSHING IS COMPLETED, LINE PRESSURE SHALL BE APPLIED TO THE WATER SYSTEM TO DETERMINE IF ANY MAJOR DEFECTS ARE PRESENT. THE COMPLETE WATER SYSTEM SHALL THEN BE TESTED AT A PRESSURE OF 150 PSI FOR A PERIOD OF NOT LESS THAN TWO HOURS. THE DEPARTMENT MAY, AT ITS DISCRETION, INCREASE THE PERIOD TO FOUR HOURS. MAXIMUM LENGTH OF LINE TO BE TESTED AT ONE TIME SHALL NOT EXCEED 1500 LINEAR FEET. AN OIL FILLED PRESSURE GAUGE UP TO 200 PSI AT 2 POUND INCREMENTS SHALL BE USED FOR ALL PRESSURE TESTS. NO VISIBLE MOVEMENT OF THE SYSTEM SHALL OCCUR AND LEAKAGE SHALL NOT EXCEED:

$$L=\frac{ND\sqrt{P}}{7400} \text{ PER HOUR}$$

WHERE:
L= LEAKAGE IN GALLONS
N= NUMBER OF JOINTS IN TEST SECTION
P= TEST PRESSURE IN PSI.
D= DIAMETER OF PIPE IN INCHES

NOTE: MARTIN COUNTY UTILITIES DEPARTMENT'S MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION), ARE TO BE ADHERED TO AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.

48 HOURS BEFORE DIGGING
CALL TOLL–FREE
1-800-432-4770
SUNSHINE STATE ONE CALL
OF FLORIDA, INC
UNDERGROUND UTILITIES NOTIFICATION CENTER

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1D

STANDARD WATER/SEWER SEPARATION STATEMENT

62–555.314 Location of Public Water System Mains.
For the purpose of this section, the phrase water mains shall mean mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water; fire hydrant leads; and service lines that are under the control of a public water system and that have an inside diameter of three inches or greater.

(1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On–Site Sewage Treatment and Disposal Systems.

(a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed storm sewer, Stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62–610, F.A.C.

(b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed vacuum–type sanitary sewer.

(c) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed gravity– or pressure–type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62–610, F.A.C. The minimum horizontal separation distance between water mains and gravity–type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.

(d) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed on–site sewage treatment and disposal system as defined in Section 381.0065(2), F.S., and Rule 64E–6.002, F.A.C.

(2) Vertical Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, and Reclaimed Water Pipelines.

(a) New or relocated, underground water mains crossing any existing or proposed gravity– or vacuum–type sanitary sewer or storm sewer shall be laid so the outside of the water main is at least six inches, and preferably 12 inches, above or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(b) New or relocated, underground water mains crossing any existing or proposed pressure–type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water shall be laid so the outside of the water main is at least 12 inches above or below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(c) At the utility crossings described in paragraphs (a) and (b) above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum–type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62–610, F.A.C., and at least six feet from all joints in gravity– or pressure–type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62–610, F.A.C.

(3) Separation Between Water Mains and Sanitary or Storm Sewer Manholes.

(a) No water main shall pass through, or come into contact with, any part of a sanitary sewer manhole.

(b) Effective August 28, 2003, water mains shall not be constructed or altered to pass through, or come into contact with, any part of a storm sewer manhole or inlet structure. Where it is not technically feasible or economically sensible to comply with this requirement (i.e., where there is a conflict in the routing of a water main and a storm sewer and where alternative routing of the water main or the storm sewer is not technically feasible or is not economically sensible), the Department shall allow exceptions to this requirement (i.e., the Department shall allow construction of conflict manholes), but suppliers of water or persons proposing to construct conflict manholes must first obtain a specific permit from the Department in accordance with Part V of this chapter and must provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application the following information:

1. Technical or economic justification for each conflict manhole.
2. A statement identifying the party responsible for maintaining each conflict manhole.
3. Assurance of compliance with the design and construction requirements in sub–subparagraphs a. through d. below.

a. Each water main passing through a conflict manhole shall have a flexible, watertight joint on each side of the manhole to accommodate differential settling between the main and the manhole.

b. Within each conflict manhole, the water main passing through the manhole shall be installed in a watertight casing pipe having high impact strength (i.e., having an impact strength at least equal to that of 0.25–inch–thick ductile iron pipe).

c. Each conflict manhole shall have an access opening, and shall be sized, to allow for easy cleaning of the manhole.

d. Gratings shall be installed at all storm sewer inlets upstream of each conflict manhole to prevent large objects from entering the manhole.

(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On–Site Sewage Treatment and Disposal Systems. New or relocated fire hydrants with underground drains shall be located so that the drains are at least three feet from any existing or proposed storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62–610, F.A.C.; at least three feet, and preferably ten feet, from any existing or proposed vacuum–type sanitary sewer; at least six feet, and preferably ten feet, from any existing or proposed gravity– or pressure–type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62–610, F.A.C.; and at least ten feet from any existing or proposed on–site sewage treatment and disposal system as defined in Section 381.0065(2), F.S., and Rule 64E–6.002, F.A.C.

(5) Exceptions. Where it is not technically feasible or economically sensible to comply with the requirements in subsection (1) or (2) above, the Department shall allow exceptions to these requirements if suppliers of water or construction permit applicants provide technical or economic justification for each exception and provide alternative construction features that afford a similar level of reliability and public health protection. Acceptable alternative construction features include the following:

(a) Where an underground water main is being laid less than the required minimum horizontal distance from another pipeline and where an underground water main is crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline:

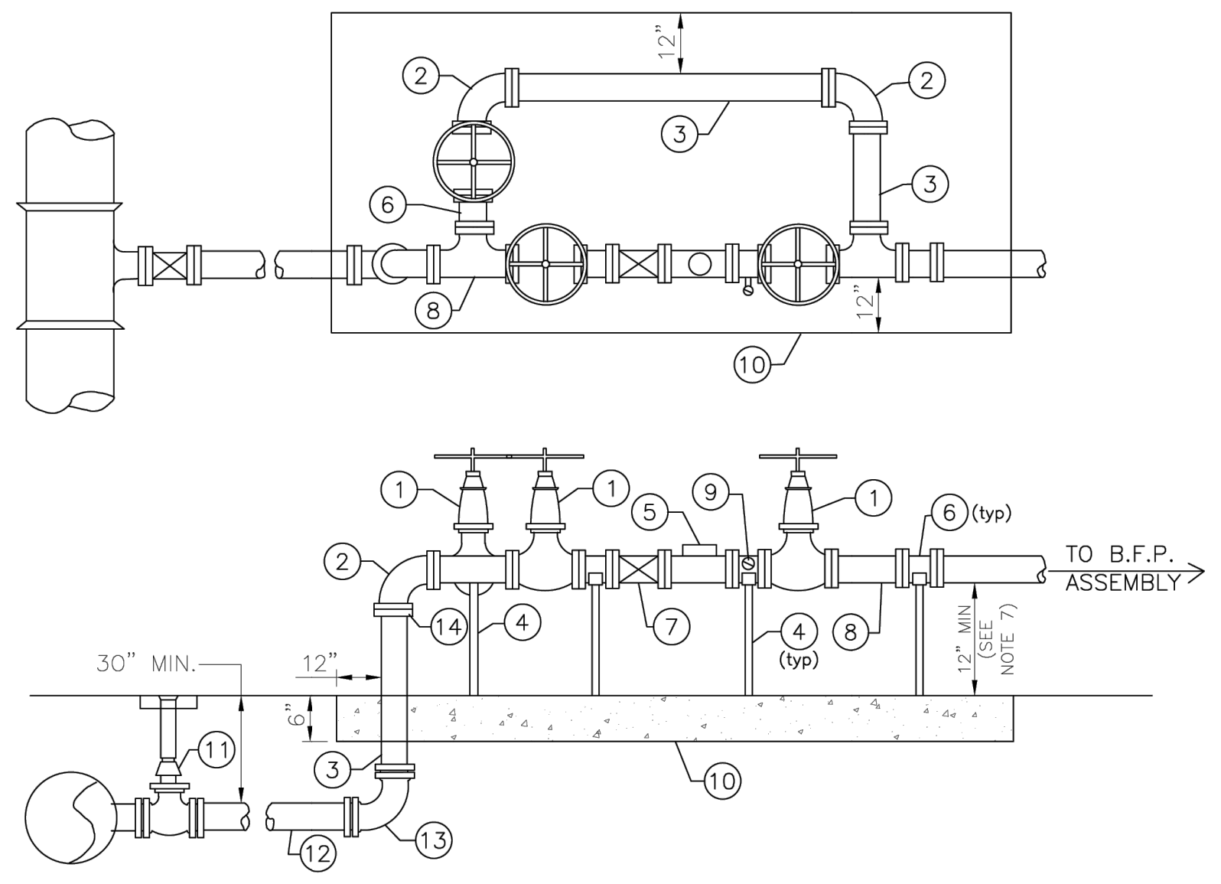
1. Use of pressure–rated pipe conforming to the American Water Works Association standards incorporated into Rule 62–555.330, F.A.C., for the other pipeline if it is a gravity– or vacuum–type pipeline;
2. Use of welded, fused, or otherwise restrained joints for either the water main or the other pipeline; or
3. Use of watertight casing pipe or concrete encasement at least four inches thick for either the water main or the other pipeline.

(b) Where an underground water main is being laid less than three feet horizontally from another pipeline and where an underground water main is crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline:

1. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25–inch–thick ductile iron pipe) or concrete encasement at least four inches thick for the water main; and
2. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25–inch–thick ductile iron pipe) or concrete encasement at least four inches thick for the other pipeline if it is new and is conveying wastewater or reclaimed water.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1E



MATERIAL

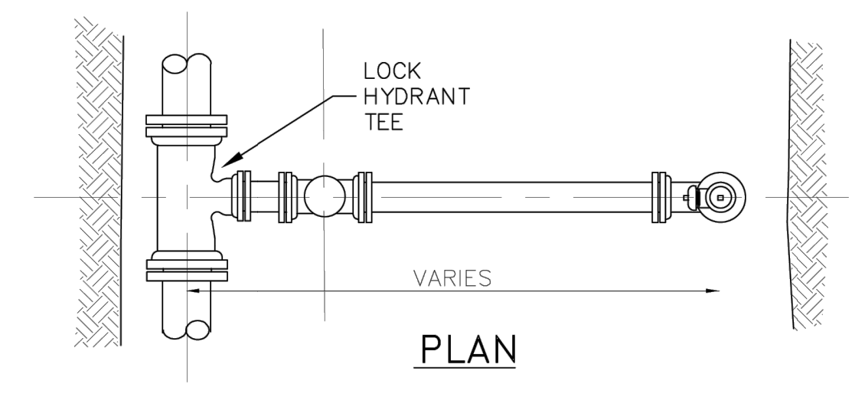
ITEM	QUANT.	DESCRIPTION
1	3	4",6",8" VALVE, GATE, C.I., (FLANGE – FLANGE) OS&Y
2	3	4",6",8" BEND – 90 , (FLANGE – FLANGE)
3	VARIES	4",6",8" PIPE, DUCTILE IRON, (FLANGE – FLANGE)
4	4	ADJUSTABLE PIPE SUPPORTS (316 SS)
5	1	3",4",6",8" METER, (FLANGE – FLANGE)
6	4	4",6",8" D.I. SPOOL PIECE, 12" MIN. LENGTH, F – F
7	1	3",4",6",8" WATER METER STRAINER, (FLANGE – FLANGE)
8	2	D.I. BYPASS TEE, (FLANGE – FLANGE), (SIZE VARIES)
9	1	2" TAP WITH LOCKING BALL VALVE
10	*	CONC. SLAB, 2500# PSI
11	1	4",6",8" VALVE, GATE, MJ
12	VARIES	4",6",8" PIPE
13	1	4",6",8" BEND–90°, (MJ–MJ) W/ RETAINER GLANDS
14	1	4",6",8" ADAPTER, FLANGE, DIP

NOTES:

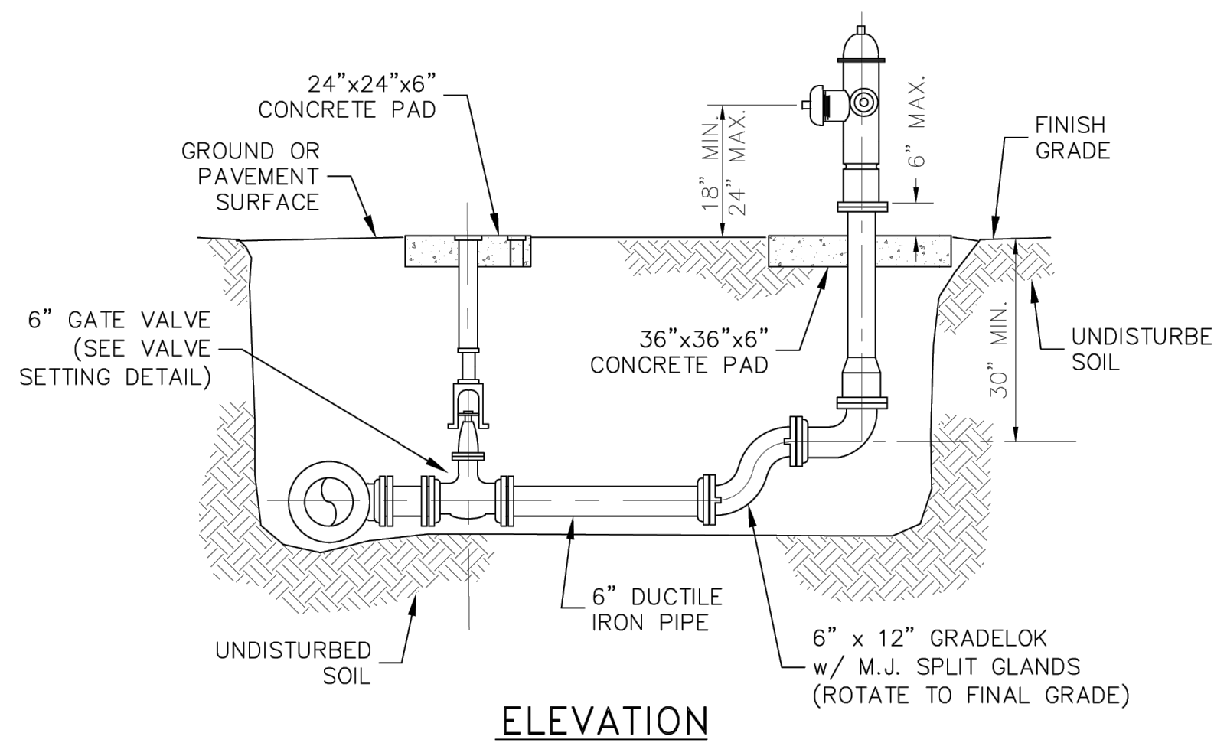
1. ALL ABOVE GRADE PIPING SHALL BE DUCTILE IRON WITH FLANGED ENDS
2. FOR 3" METER AND STRAINER, USE 4" D.I. PIPE WITH 4"x3" REDUCER WITH FLANGED ENDS ON BOTH SIDES OF THE METER/STRAINER ASSEMBLY.
3. FIELD ADJUST AND CUT D.I. PIPE TO THE PROPER LENGTH AS REQUIRED.
4. METER BYPASS SHALL BE A MIN. OF 4" DIA. AND SIZED TO MEET REQUIRED FLOWS
5. ALL EXPOSED DUCTILE IRON PIPING AND FITTINGS SHALL BE PAINTED "BLUE". PAINT SPECIFICATIONS MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO APPLICATION.
6. METER SHALL BE BADGER COMPOUND METER, BRONZE BODY, POLYMER BOTTOM PLATE WITH INTEGRAL MOUNT ITRON 100W FN ENDPOINT.
7. HEIGHT SHALL ALLOW A MINIMUM OF 12" FROM TOP OF SLAB TO THE BOTTOM OF THE BLOWDOWN OF THE B.F.P.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	TYPICAL ABOVE GROUND METER (3" OR LARGER)	6



PLAN



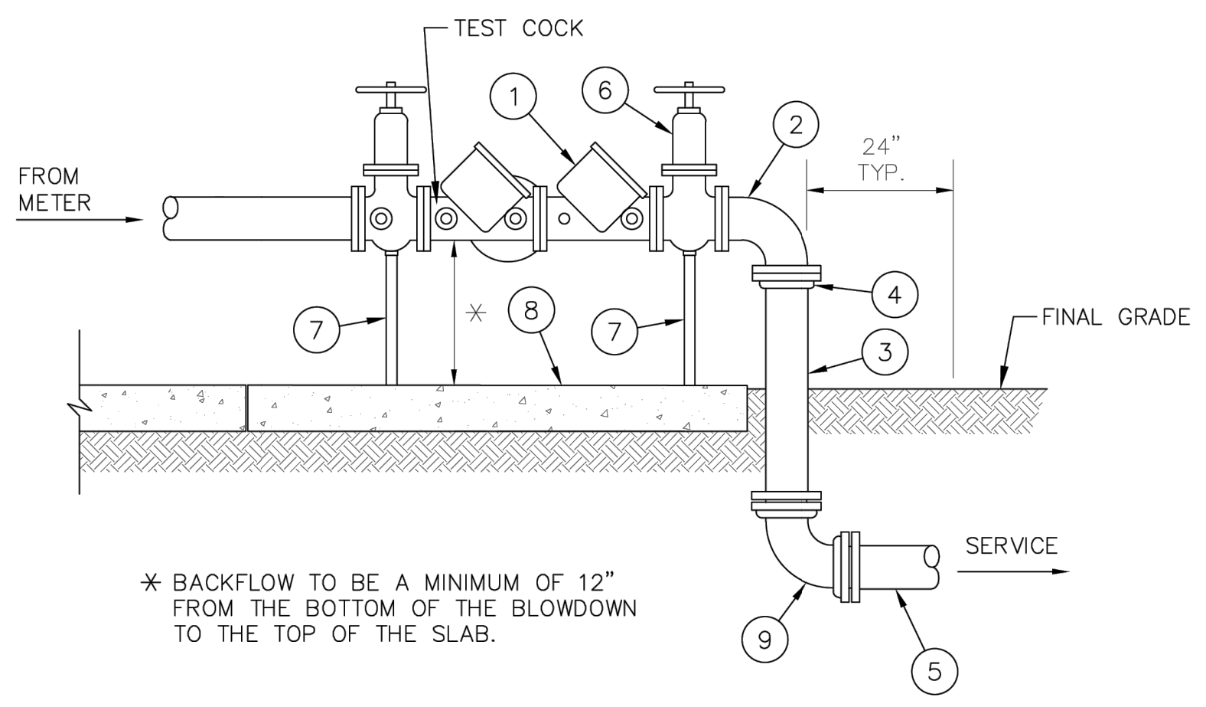
ELEVATION

NOTES:

1. HYDRANTS SHALL BE INSTALLED PLUMB AND TRUE.
2. VALVES SHALL BE PLACED ADJACENT TO MAIN, AND TIED TO TEE.
3. ANCHOR TEES ARE REQUIRED.
4. ALL HYDRANTS SHALL BE TEE'D OFF OF MAIN.
5. HYDRANTS SHALL NOT BE PLACED IN SIDEWALK, ROADWAYS OR BIKEPATHS.
6. PIPE FROM VALVE TO HYDRANT SHALL BE RESTRAINED.
7. HYDRANT BARREL AND BONNET COLOR TO BE OSHA YELLOW.
8. THE CONNECTOR PIPE SHALL BE CEMENT LINED DUCTILE IRON, CLASS 350 AND POSITIONED BETWEEN THE FIRE HYDRANT AND GATE VALVE.
9. THE CONNECTOR PIPE SHALL HAVE AN ANCHORING FEATURE AT BOTH ENDS SO THAT WHEN USED WITH M.J. SPLIT GLANDS A RESTRAINED JOINT IS PROVIDED.
10. HYDRANT EXTENSIONS SHALL NOT BE ALLOWED.
11. NEWLY CONSTRUCTED FIRE HYDRANTS THROUGHOUT THE PROJECT SHALL HAVE A RED "OUT OF SERVICE" DISK (JOSEPH G. POLLARD CO. OR EQUAL) ATTACHED TO 4" PUMPER NOZZLE CAP. DISK TO BE REMOVED AFTER WATER SYSTEM HAS BEEN APPROVED FOR SERVICE BY THE DEPARTMENT.
12. A MAXIMUM OF 20 FEET OF HORIZONTAL PIPE SHALL TYPICALLY BE INSTALLED BETWEEN THE 6" GATE VALVE AT THE WATER MAIN AND THE HYDRANT. IF IT IS NECESSARY TO INSTALL MORE THAN 20 FEET OF HORIZONTAL PIPE, AN ADDITIONAL 6" GATE VALVE WILL BE REQUIRED AT THE HYDRANT LOCATION.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	FIRE HYDRANT INSTALLATION DETAIL AND NOTES	7



✱ BACKFLOW TO BE A MINIMUM OF 12" FROM THE BOTTOM OF THE BLOWDOWN TO THE TOP OF THE SLAB.

MATERIAL

ITEM	QUANT.	DESCRIPTION
1	1	3", 4", 6", 8" VALVE, O.C. BACKFLOW PREVENTER
2	2	4", 6", 8" BEND _ 90° (FLANGE–FLANGE)
3	*	4", 6", 8" PIPE, DUCTILE IRON (CLASS 350)
4	2	4", 6", 8" ADAPTER, FLANGE, D.I.P.
5	2	4", 6", 8" PIPE, P.V.C. (DR–18)
6	2	3", 4", 6", 8" GATE VALVE, C.I., (FLANGE–FLANGE)
7	2	ADJUSTABLE PIPE SUPPORTS (316 SS)
8	1	6" CONCRETE SLAB
9	2	BEND – 90° (MJ–MJ)

NOTES:

1. FIELD ADJUST AND CUT ITEM 3 TO PROPER LENGTH. THIS TYPE OF CONSTRUCTION IS DESIGNED FOR LIMITED WORKING AREA.

2. ALL EXPOSED DUCTILE IRON PIPES AND FITTINGS SHALL BE PAINTED "BLUE". PAINT SPECIFICATIONS MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO APPLICATION.

3. FOR 3" BACKFLOW ASSEMBLY, USE 4" D.I. PIPE WITH 4"x3" REDUCER WITH FLANGED ENDS ON BOTH SIDES OF THE BACKFLOW ASSEMBLY.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	REDUCED PRESSURE BACKFLOW PREVENTER SINGLE SERVICE (3" OR LARGER–90° ELL)	16

---

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

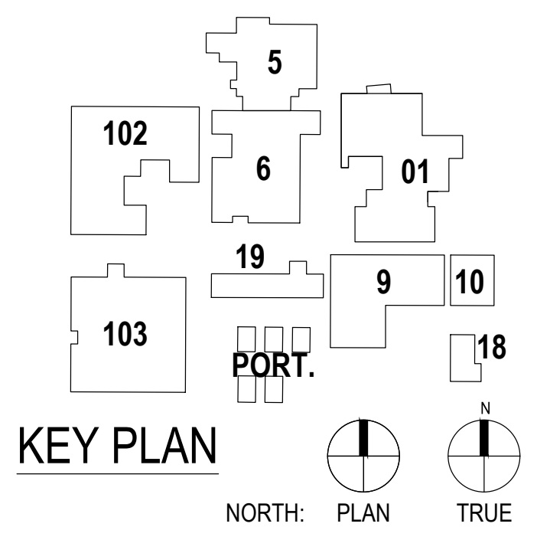
PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

JAY A. KLIMA
LICENSE No. 49945
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

UTILITY DETAILS

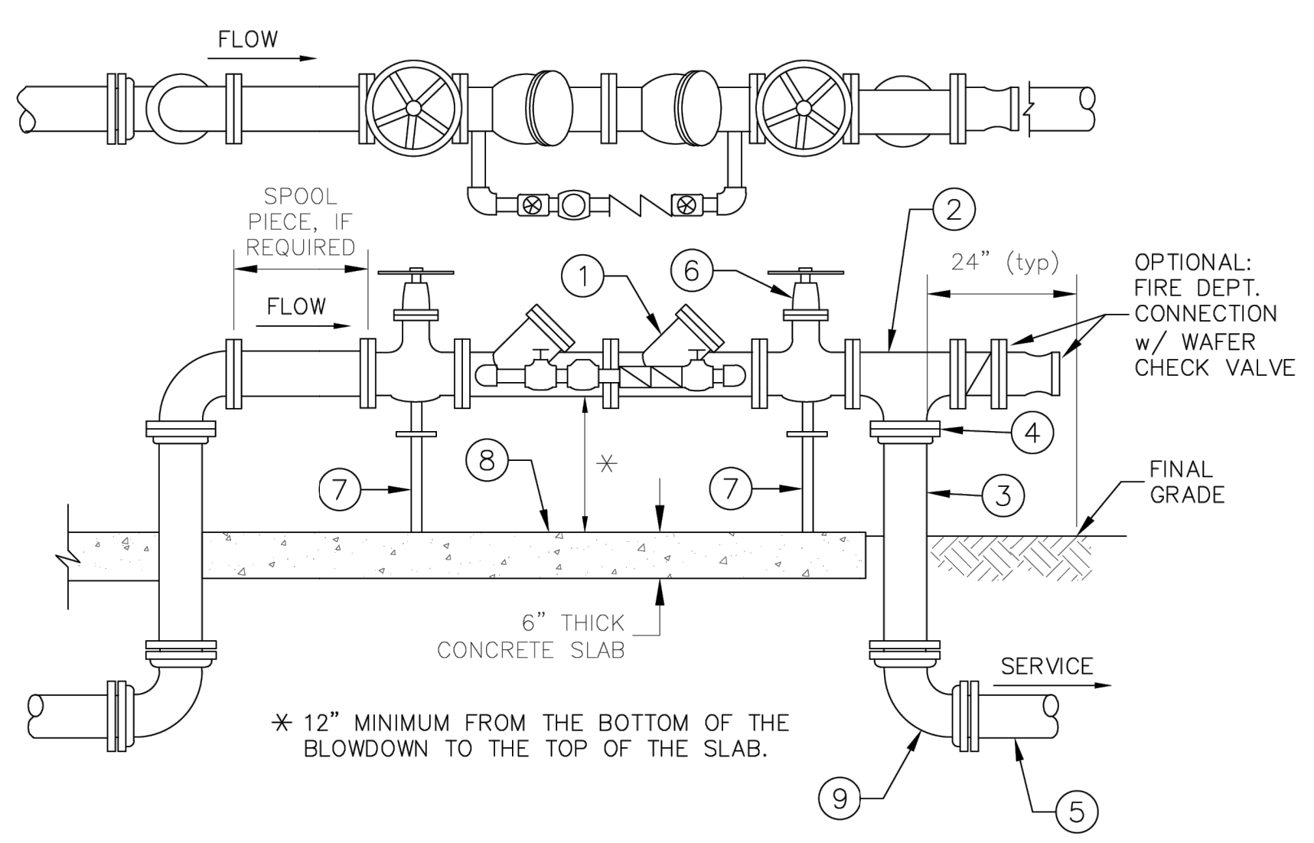
C-800

HB ESTIMATING REC'D 06.01.2026

Plot Stamp:
5/29/2026 9:22:43 AM

UTILITY DETAILS
C-801

0"
1"



✱ 12" MINIMUM FROM THE BOTTOM OF THE BLOWDOWN TO THE TOP OF THE SLAB.

MATERIAL

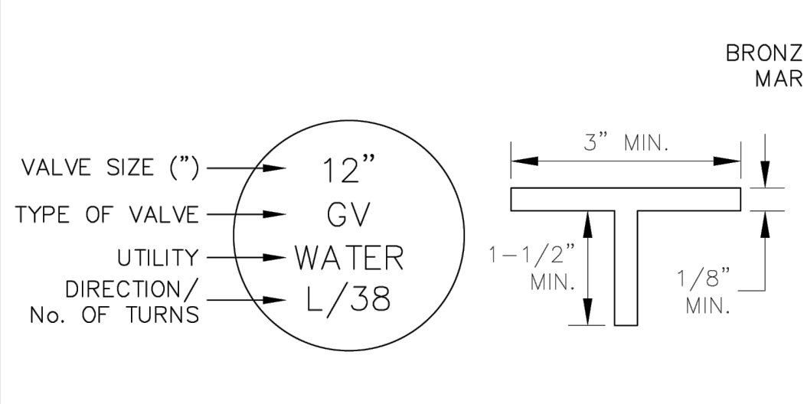
ITEM	QUANT.	DESCRIPTION	
1	1	2", 4", 6", 8"	DOUBLE CHECK DETECTOR BACKFLOW PREVENTER
2	2	2", 4", 6", 8"	TEE (FLANGE–FLANGE)
3	*	2", 4", 6", 8"	PIPE, DUCTILE IRON (CLASS 350)
4	2	2", 4", 6", 8"	ADAPTER, FLANGE, D.I.P.
5	2	2", 4", 6", 8"	PIPE
6	2	2", 4", 6", 8"	GATE VALVE, C.I., (FLANGE–FLANGE) OS&Y
7	2		ADJUSTABLE PIPE SUPPORTS (316 SS)
8	1	6"	CONCRETE SLAB
9	3		BEND – 90° (MJ–MJ)

NOTES:

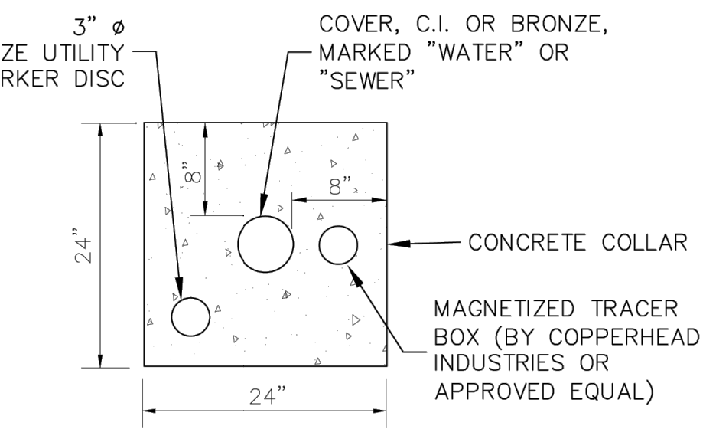
1. FIELD ADJUST AND CUT ITEM 3 TO PROPER LENGTH. THIS TYPE OF CONSTRUCTION IS DESIGNED FOR LIMITED WORKING AREA.
2. ALL EXPOSED DUCTILE IRON PIPES AND FITTINGS SHALL BE PAINTED "RED". PAINT SPECIFICATIONS MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO APPLICATION.
3. DETECTOR METER SHALL READ IN GALLONS AND SHALL BE 5/8" NEPTUNE MAGNETIC DRIVE, MODEL T–10.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

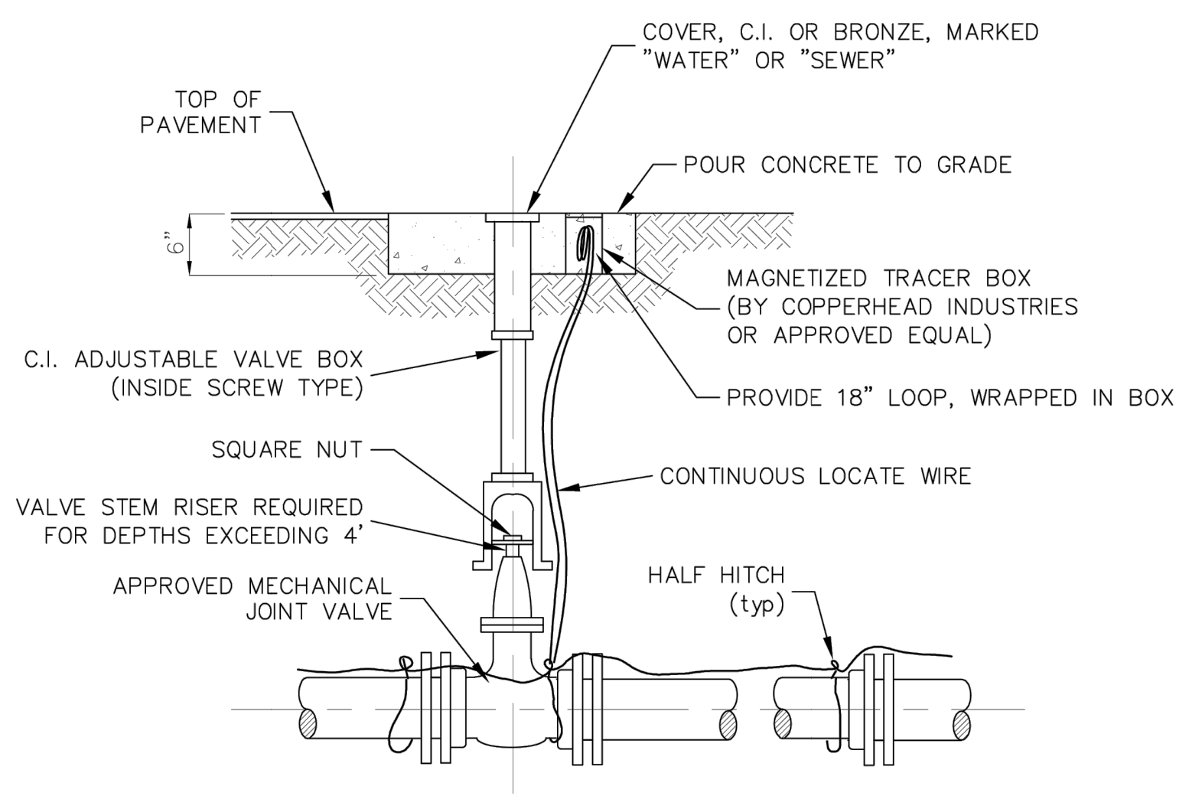
REVISION		DWG No.
AUGUST 2016	FIRE LINE DOUBLE CHECK DETECTOR ASSEMBLY	17



UTILITY MARKER DISC


3" ø BRONZE UTILITY MARKER DISC
COVER, C.I. OR BRONZE, MARKED "WATER" OR "SEWER"
8"
8"
24"
24"
CONCRETE COLLAR
MAGNETIZED TRACER BOX (BY COPPERHEAD INDUSTRIES OR APPROVED EQUAL)

PLAN


COVER, C.I. OR BRONZE, MARKED "WATER" OR "SEWER"
TOP OF PAVEMENT
POUR CONCRETE TO GRADE
6"
MAGNETIZED TRACER BOX (BY COPPERHEAD INDUSTRIES OR APPROVED EQUAL)
C.I. ADJUSTABLE VALVE BOX (INSIDE SCREW TYPE)
PROVIDE 18" LOOP, WRAPPED IN BOX
SQUARE NUT
CONTINUOUS LOCATE WIRE
VALVE STEM RISER REQUIRED FOR DEPTHS EXCEEDING 4'
APPROVED MECHANICAL JOINT VALVE
HALF HITCH (typ)

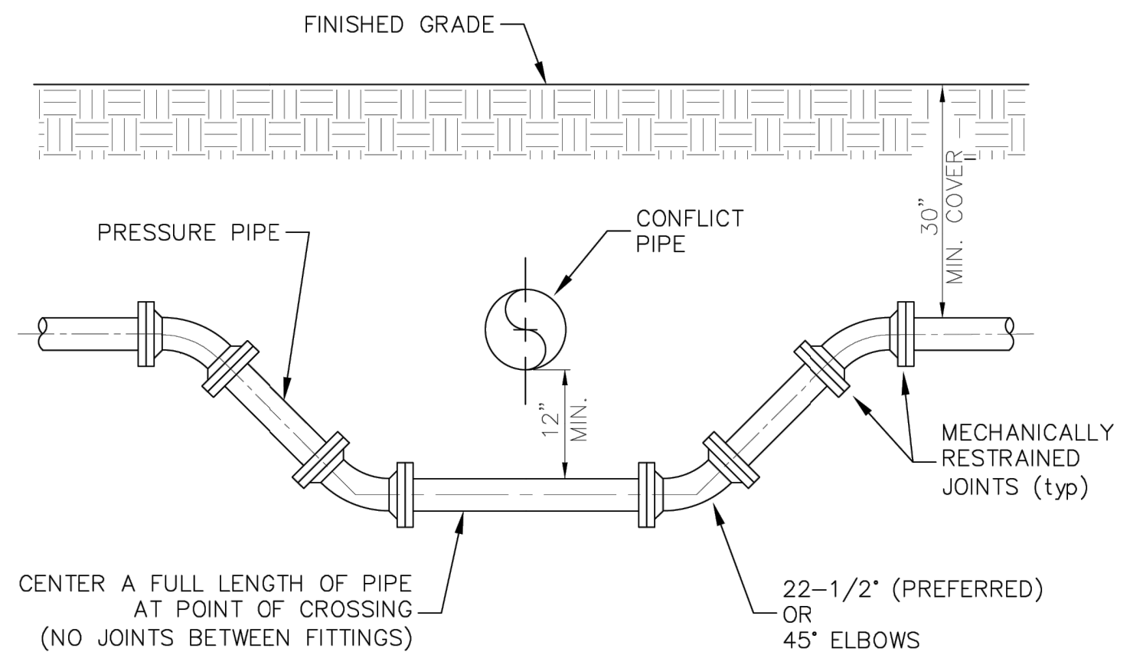
ELEVATION

NOTES:

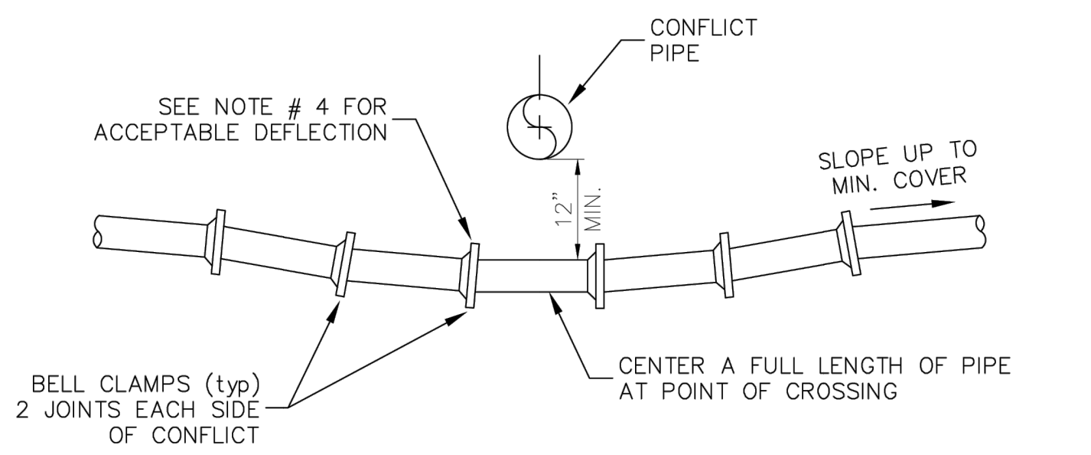
1. A LOCATION BALL (3M EMS BALL MARKERS; WATER/BLUE, MODEL No. 1403–XR; SEWER/GREEN, MODEL No. 1404–XR OR EQUAL) SHALL BE INSTALLED AT EACH FITTING AND/OR EVERY 100 FEET OF SEPARATION.
2. FOR DEEP VALVE INSTALLATIONS, A 6" C–900 PVC EXTENSION MAY BE USED TO BRING VALVE BOX TO GRADE.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	VALVE SETTING DETAIL	18


FINISHED GRADE
30" MIN. COVER
PRESSURE PIPE
CONFLICT PIPE
12" MIN.
MECHANICALLY RESTRAINED JOINTS (typ)
CENTER A FULL LENGTH OF PIPE AT POINT OF CROSSING (NO JOINTS BETWEEN FITTINGS)
22–1/2° (PREFERRED) OR 45° ELBOWS

FITTING TYPE


CONFLICT PIPE
SEE NOTE # 4 FOR ACCEPTABLE DEFLECTION
12" MIN.
SLOPE UP TO MIN. COVER
BELL CLAMPS (typ) 2 JOINTS EACH SIDE OF CONFLICT
CENTER A FULL LENGTH OF PIPE AT POINT OF CROSSING

DEFLECTION TYPE

NOTES:

1. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6" VERTICAL SEPARATION AND MAINTAIN REQUIRED COVER TO FINISHED GRADE.
2. FITTINGS SHALL BE RESTRAINED WITH RETAINER GLANDS.
3. THE DEFLECTION TYPE CROSSING IS PREFERRED.
4. DO NOT EXCEED 50% OF MANUFACTURER'S RECOMMENDED MAXIMUM JOINT DEFLECTION.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	PRESSURE PIPE CONFLICT DETAIL	20

MIN. LENGTH (IN FEET) OF PIPE TO BE RESTRAINED
(SOURCES: EBAA IRON RESTRAINT LENGTH CALCULATION PROGRAM FOR PVC PIPE, RELEASE 3.1, AND DIPRA THRUST RESTRAINT FOR DUCTILE IRON PIPE, RELEASE 3.2)

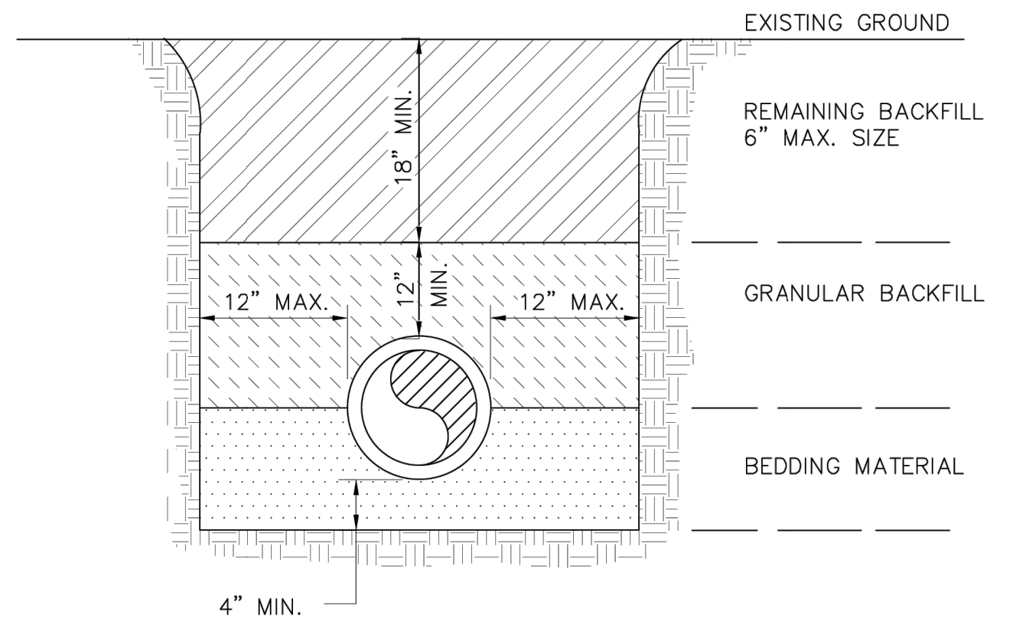
FITTING TYPE		PIPE SIZE							
		4"	6"	8"	10"	12"	16"	20"	24"
90° HORIZ. BEND		14	20	25	30	35	45	54	62
45° HORIZ. BEND		6	8	11	13	15	19	22	26
22.5° HORIZ. BEND		3	4	5	6	7	9	11	12
11.25° HORIZ. BEND		1	2	3	3	4	4	5	6
90° VERT. OFFSET	UPPER BEND	29	41	53	64	74	95	115	134
	LOWER BEND	7	10	13	16	19	25	30	35
45° VERT. OFFSET	UPPER BEND	12	19	24	29	34	39	48	56
	LOWER BEND	3	4	6	7	8	10	12	15
22.5° VERT. OFFSET	UPPER BEND	6	9	12	14	17	19	23	27
	LOWER BEND	1	2	4	4	4	5	6	7
11.25° VERT. OFFSET	UPPER BEND	3	4	6	7	8	9	11	13
	LOWER BEND	1	1	1	2	2	2	3	3
PLUG (DEAD END)		32	45	59	70	83	107	129	151
IN–LINE VALVE		32	45	45	45	45	55	65	80
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	–	–
	20" x ø	1	21	38	52	65	88	109	–
	24" x ø	1	16	34	49	62	86	108	129
	30" x ø	1	8	28	44	58	83	106	127
	36" x ø	1	1	22	39	54	80	103	124
	42" x ø	1	1	15	33	49	77	100	122
	48" x ø	1	1	7	27	44	73	97	120
REDUCER (LARGER PIPE RESTRAINT)	6" x ø	23	–	–	–	–	–	–	–
	8" x ø	38	25	–	–	–	–	–	–
	10" x ø	57	43	24	–	–	–	–	–
	12" x ø	72	60	44	41	–	–	–	–
	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	–

NOTES:

1. THE DATA IN THE ABOVE TABLE ARE BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:
   SOIL TYPE–SAND TEST PRESSURE–150 PSI DEPTH OF BURY–3'
   TRENCH TYPE–3 SAFETY FACTOR– 1.5 VERTICAL OFFSET–3'
   MINIMUM PIPE LENGTH ALONG TEE RUN–5'
2. THE RESTRAINED PIPE LENGTHS APPLY TO DUCTILE IRON AND PVC PIPE.
3. ALL JOINTS BETWEEN UPPER AND LOWER BENDS SHALL BE RESTRAINED.
4. RESTRAINED PIPE LENGTHS APPLY TO PIPE ON BOTH SIDES OF VALVES AND FITTINGS.
5. DESIGN ENGINEER SHALL BE RESPONSIBLE FOR PROPERLY SIZING THE LENGTH OF PIPE TO BE RESTRAINED.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	MECHANICAL JOINT ANCHORING REQUIREMENTS	21

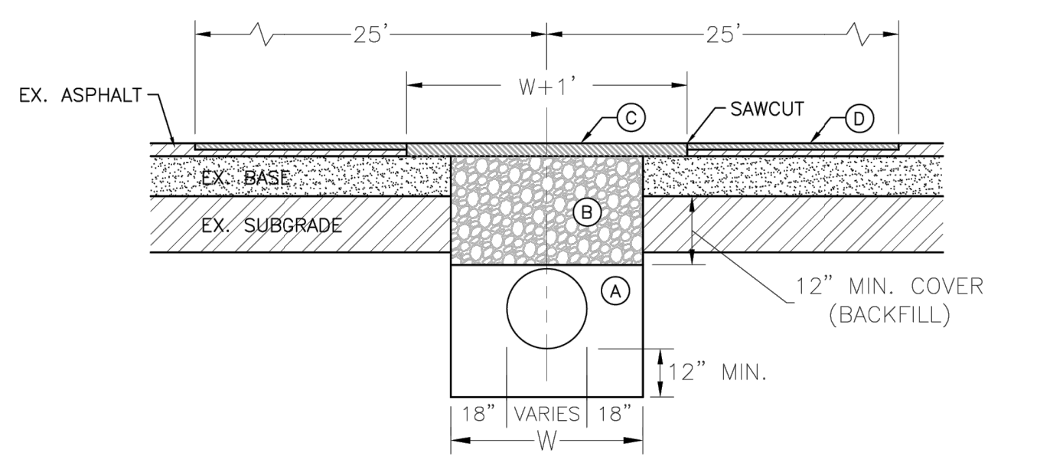


NOTES:

1. BEDDING MATERIAL SHALL BE HAND PLACED IN 6" LIFTS AND SHALL CONSIST OF IN–SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8"–7/8" SIZING. UNSUITABLE IN–SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE DONE WITH APPROVED MATERIAL, CLEAN AND FREE OF ROCKS, MUCK AND OTHER DELETERIOUS MATTER AND COMPACTED BENEATH THE HAUNCHES OF THE PIPE USING MECHANICAL TAMPERS TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T–99.
5. BACKFILL TO BE COMPACTED ALONG THE SIDES OF THE PIPE AND TO A POINT ONE FOOT ABOVE THE TOP OF THE PIPE TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T–99.
6. A. WHERE PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING BACKFILL SHALL BE COMPACTED IN 6 INCH LAYERS AND COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T–180.
   B. WHERE "NO" PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING FILL SHALL BE COMPACTED IN 6 INCH LAYERS TO A DENSITY 90% MAXIMUM DENSITY AS DETERMINED BY AASHTO T–180.
7. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL TRENCH SAFETY REGULATIONS

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	TYPICAL TRENCH DETAIL	23



TRENCH DETAIL
N.T.S.

BACKFILL AND BASE

A. PROVIDE CLEAN BACKFILL. BACKFILL SHALL BE REPLACED IN 6" LAYERS. EACH LAYER SHALL BE MECHANICALLY COMPACTED TO A MINIMUM 100% DENSITY AS DETERMINED BY AASHTO T–99, METHOD "C" (MINIMUM LBR OF 40).
B. BASE ROCK MATERIAL SHALL BE A MINIMUM OF 2' THICK AND BE PLACED IN 6" LAYERS OR AS OTHERWISE APPROVED AND EACH LAYER THOROUGHLY MECHANICALLY COMPACTED TO (98%) DENSITY AS DETERMINED BY AASHTO T–180. ALL BASE MATERIAL MUST MEET FDOT SPECIFICATIONS FROM A CERTIFIED MINING OPERATION. DEPTH OF BASE MATERIAL VARIES ON ROADWAY TYPE AS PER MARTIN COUNTY ENGINEERING STANDARD DETAIL R–10.

PAVING

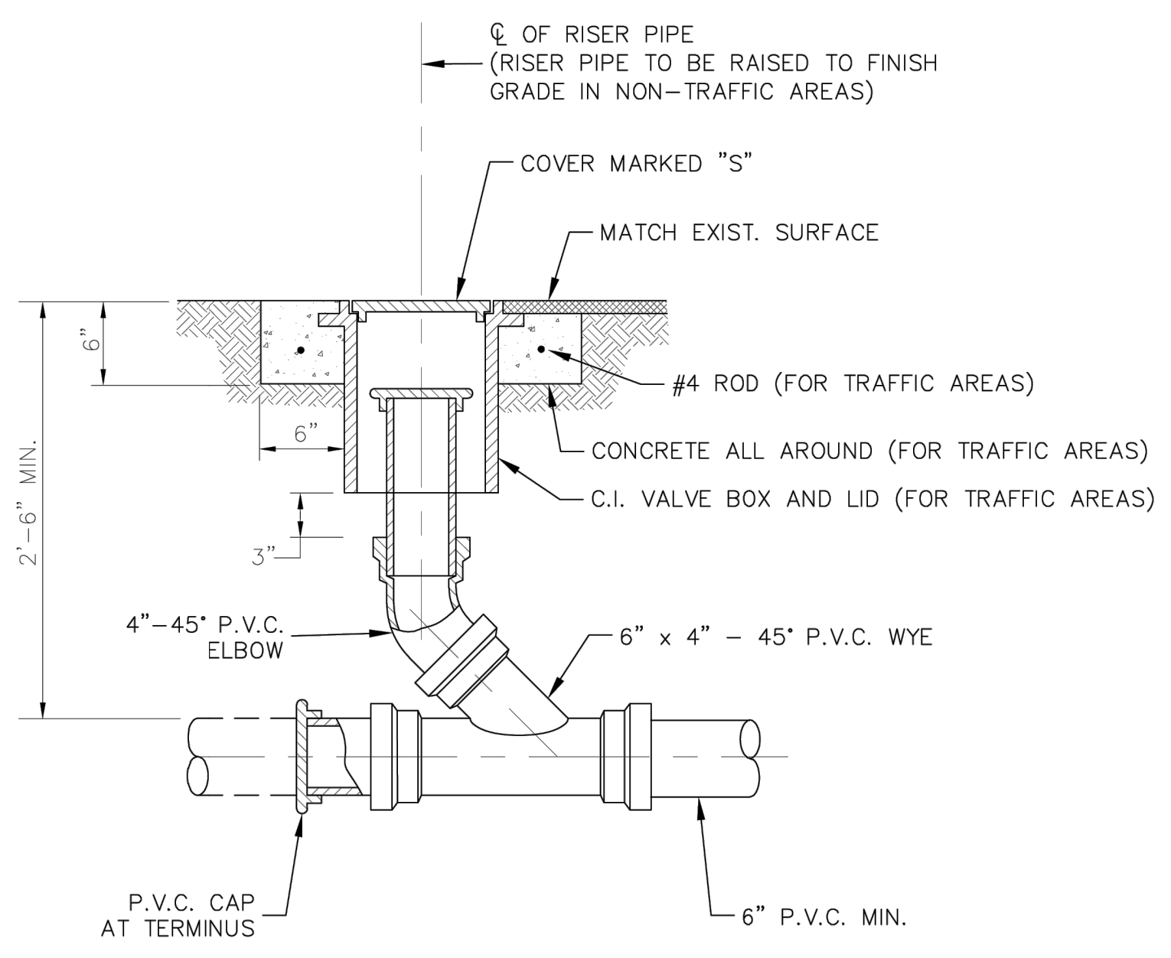
C. A TEMPORARY PATCH SHALL BE NO LESS THAN 2" THICK OR MATCHING EXISTING PAVEMENT THICKNESS, WHICHEVER IS GREATER. ASPHALT PATCHES MUST BE OF A HOT MIX TYPE FRICTION COURSES. MARTIN COUNTY DOES NOT ALLOW COLD PATCH IN COUNTY MAINTAINED ROADWAYS. THE PATCH IS TO REMAIN 30 DAYS AT MINIMUM TO ASSURE ANY SETTLING OF THE ROADWAY TRENCH HAS TAKEN PLACE.
D. MILL 1 INCH OF ASPHALT A MINIMUM OF 25' FROM CENTER OF TRENCH ON BOTH SIDES, SEE NOTE #1. PAVE AND COMPACT 1" OF SP–9.5 OR MATCH EXISTING TYPE OF FRICTION COURSE.

NOTES:

1. ALL OPEN CUT OF PAVEMENT MUST BE REVIEWED BY MARTIN COUNTY ENGINEERING PRIOR TO ANY WORK BEING DONE IN COUNTY MAINTAINED RIGHT–OF–WAY. DEPENDING ON THE LOCATION OF THE OPEN CUT ADDITIONAL MILLING AND PAVING MAY BE REQUIRED; ALL PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
2. ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT.
3. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH SIX (6) INCH LIFT OF SUB GRADE AND EACH OPEN CUT CROSSING. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE–HALF (6 ½") INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK–FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE COUNTY ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.
4. MARTIN COUNTY DOES NOT ALLOW CRUSHED CONCRETE WITHIN COUNTY MAINTAINED ROADWAY.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	FLEXIBLE PAVEMENT REPLACEMENT DETAIL	24

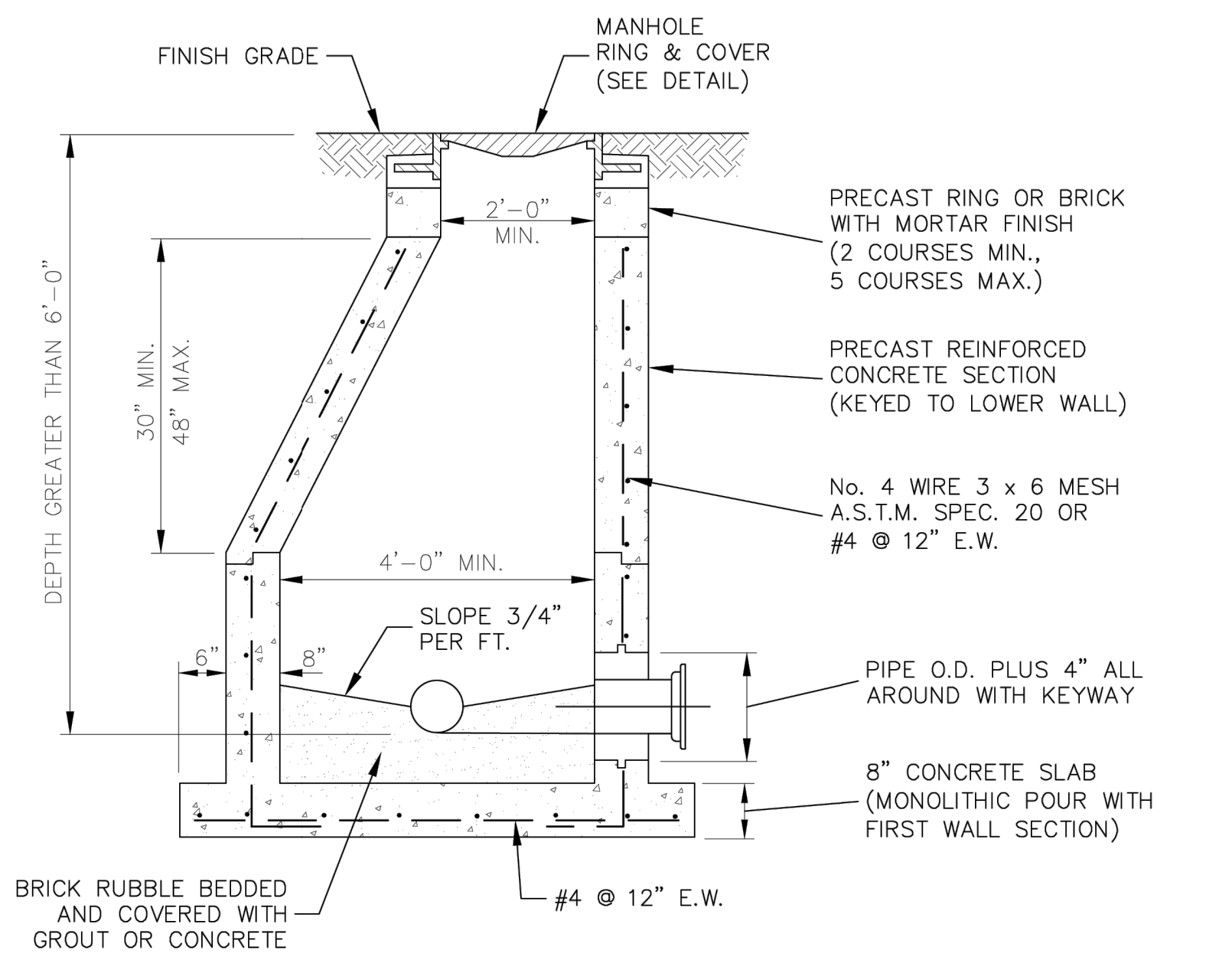

℄ OF RISER PIPE (RISER PIPE TO BE RAISED TO FINISH GRADE IN NON–TRAFFIC AREAS)
COVER MARKED "S"
MATCH EXIST. SURFACE
6"
#4 ROD (FOR TRAFFIC AREAS)
6"
CONCRETE ALL AROUND (FOR TRAFFIC AREAS)
2'–6" MIN.
C.I. VALVE BOX AND LID (FOR TRAFFIC AREAS)
3"
4"–45° P.V.C. ELBOW
6" x 4" – 45° P.V.C. WYE
P.V.C. CAP AT TERMINUS
6" P.V.C. MIN.

NOTES:

1. CONCRETE PAD w/ REBAR AND CAST IRON VALVE BOX TO BE INSTALLED IN TRAFFIC AREAS ONLY.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SEWER SERVICE CLEANOUT	33


FINISH GRADE
MANHOLE RING & COVER (SEE DETAIL)
2'–0" MIN.
PRECAST RING OR BRICK WITH MORTAR FINISH (2 COURSES MIN., 5 COURSES MAX.)
PRECAST REINFORCED CONCRETE SECTION (KEYED TO LOWER WALL)
DEPTH GREATER THAN 6'–0"
30" MIN. 48" MAX.
No. 4 WIRE 3 x 6 MESH A.S.T.M. SPEC. 20 OR #4 @ 12" E.W.
4'–0" MIN.
SLOPE 3/4" PER FT.
6"
8"
PIPE O.D. PLUS 4" ALL AROUND WITH KEYWAY
8" CONCRETE SLAB (MONOLITHIC POUR WITH FIRST WALL SECTION)
BRICK RUBBLE BEDDED AND COVERED WITH GROUT OR CONCRETE
#4 @ 12" E.W.

NOTES:

1. PROVIDE 0.1' DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON–SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE–DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW–1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, i.e. THE LAST MANHOLE PRIOR TO DISCHARGE TO A LIFT STATION, SHALL RECEIVE 2 COATS OF WATER BASED EPOXY ON THE EXTERIOR (PRO TECH EW–1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E–125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5–10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	STANDARD MANHOLE	34

---

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

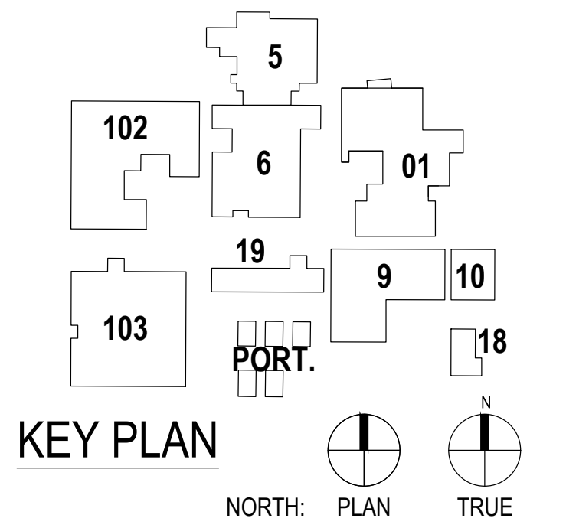
PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN
NORTH: PLAN TRUE

JAY A. KLIMA
No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E. ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

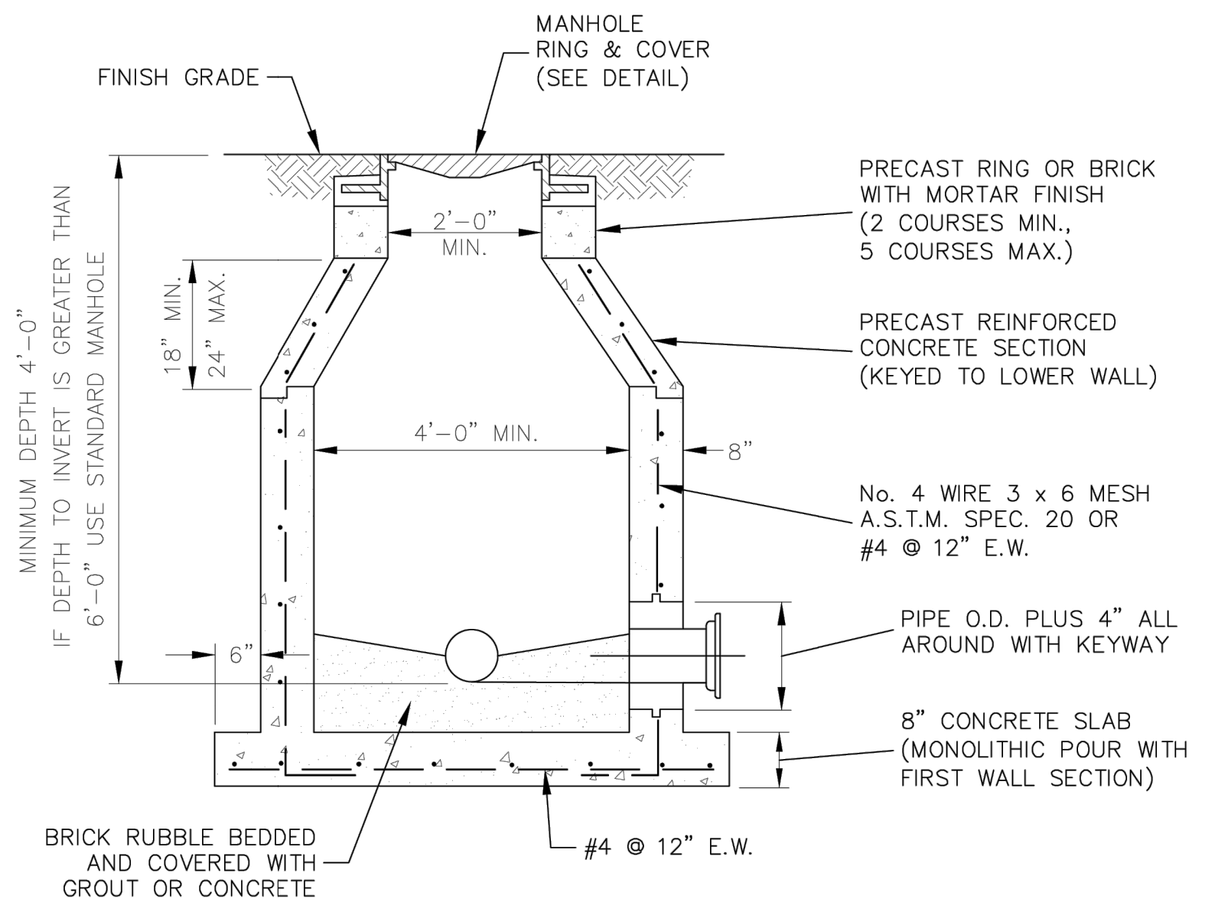
UTILITY DETAILS

C-801

Plot Stamp:
5/29/2026 9:22:50 AM

HB ESTIMATING REC'D 06.01.2026

0"
1"

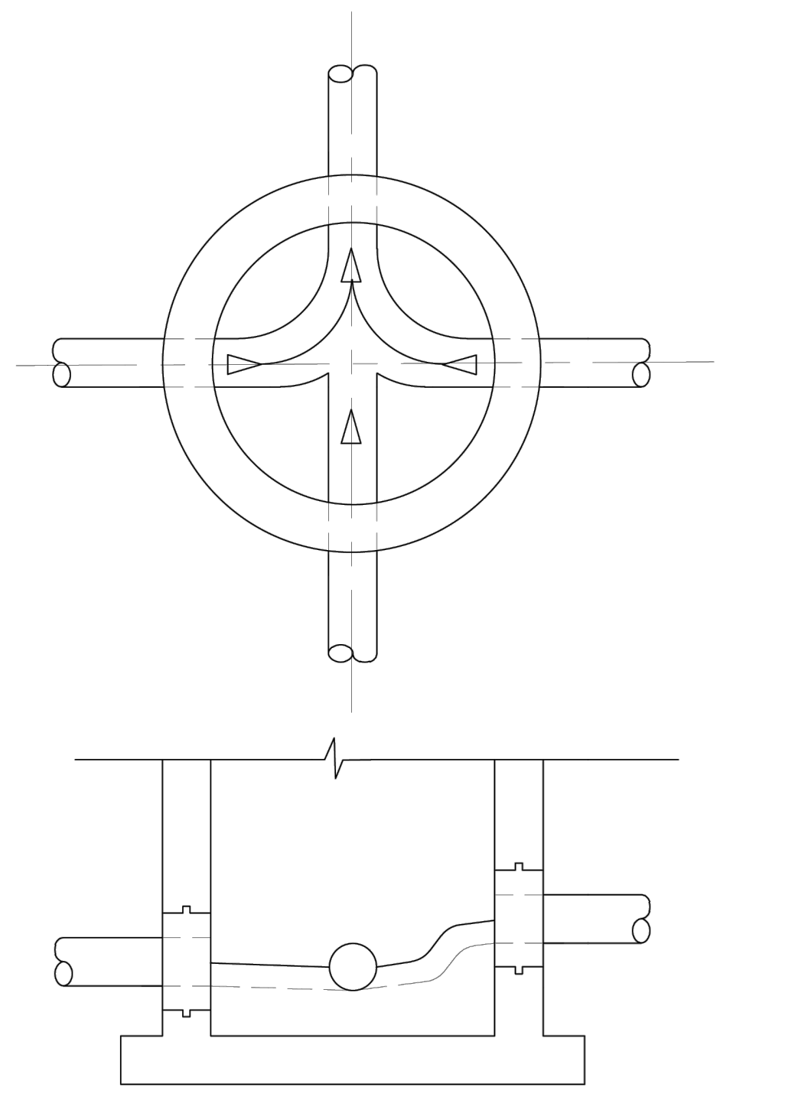

MANHOLE RING & COVER (SEE DETAIL)
FINISH GRADE
PRECAST RING OR BRICK WITH MORTAR FINISH (2 COURSES MIN., 5 COURSES MAX.)
2'-0" MIN.
PRECAST REINFORCED CONCRETE SECTION (KEYED TO LOWER WALL)
MINIMUM DEPTH 4'-0" IF DEPTH TO INVERT IS GREATER THAN 6'-0" USE STANDARD MANHOLE
18" MIN.
24" MAX.
4'-0" MIN.
8"
No. 4 WIRE 3 x 6 MESH A.S.T.M. SPEC. 20 OR #4 @ 12" E.W.
6"
PIPE O.D. PLUS 4" ALL AROUND WITH KEYWAY
8" CONCRETE SLAB (MONOLITHIC POUR WITH FIRST WALL SECTION)
BRICK RUBBLE BEDDED AND COVERED WITH GROUT OR CONCRETE
#4 @ 12" E.W.

NOTES:

1. PROVIDE 0.1' DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, i.e. THE LAST MANHOLE PRIOR TO DISCHARGE TO A LIFT STATION, SHALL RECEIVE 2 COATS OF WATER BASED EPOXY ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SHALLOW MANHOLE	35

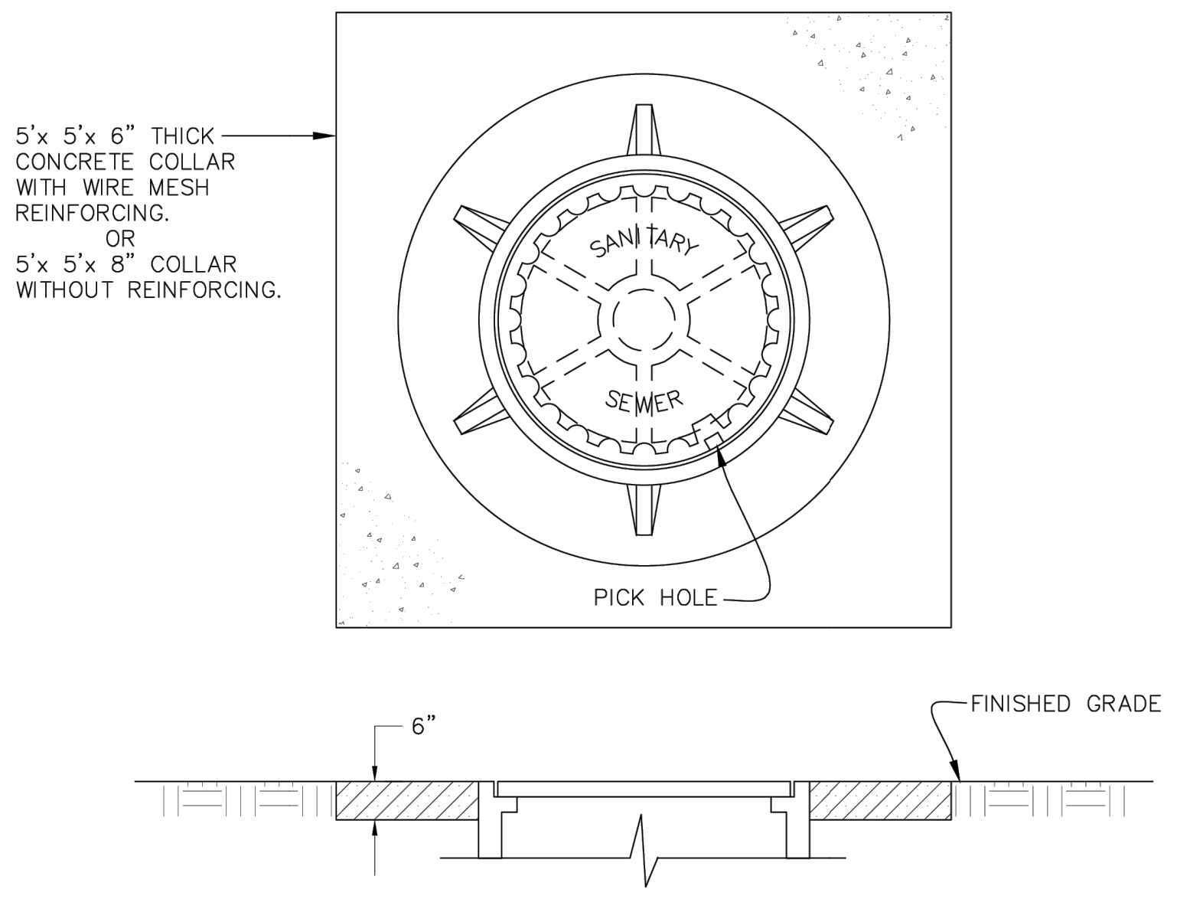


NOTES:

1. ALL INVERT CHANNELS ARE TO BE CONSTRUCTED FOR SMOOTH FLOW WITHOUT OBSTRUCTION.
2. PROPERLY SHAPED SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
3. BRICK AND CONCRETE RUBBLE PERMITTED AS FLOW CHANNEL BUILDUP.
4. SIDEWALLS OF FLOW CHANNEL SHALL BE AT LEAST HALF OF PIPE HEIGHT AT ALL POINTS.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	INVERT FLOW CHANNEL DETAIL	37

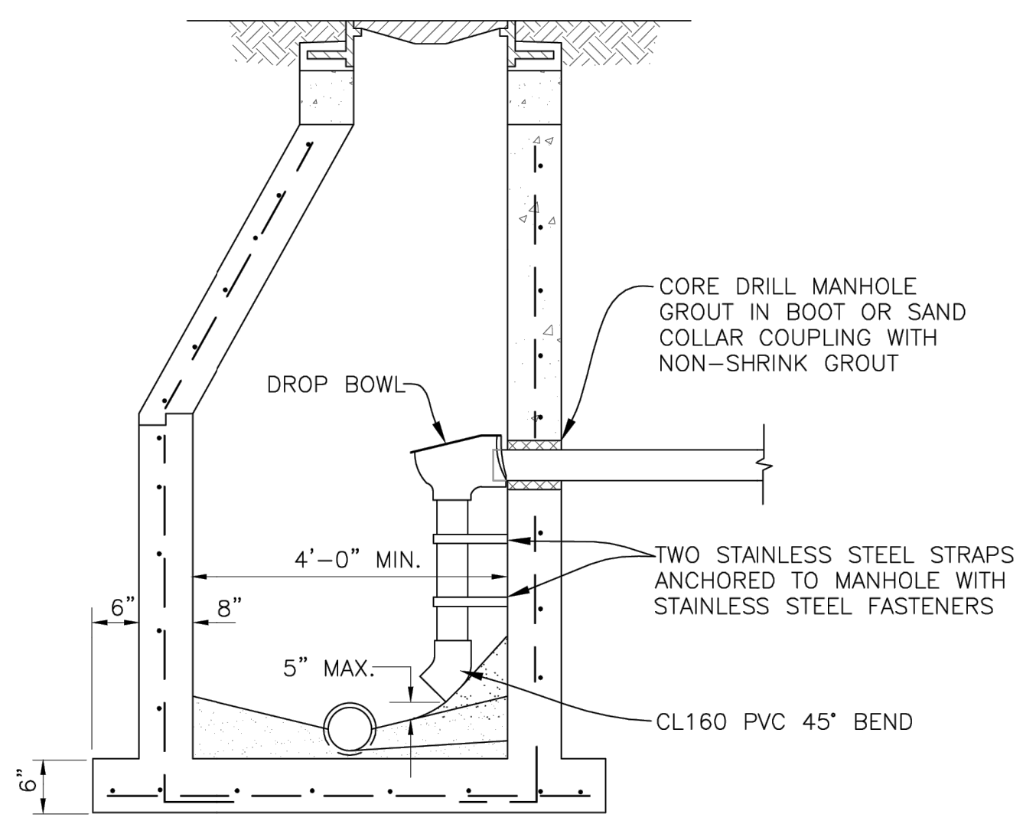

5'x 5'x 6" THICK CONCRETE COLLAR WITH WIRE MESH REINFORCING. OR 5'x 5'x 8" COLLAR WITHOUT REINFORCING.
SANITARY
SEWER
PICK HOLE
6"
FINISHED GRADE

NOTES:

1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
2. MINIMUM WEIGHTS: COVER – 160 LBS., FRAME – 240 LBS.
3. RING AND COVER SHALL BE U.S. FOUNDRY 420-C, VULCAN FOUNDRY V-101 OR APPROVED EQUAL.
4. MANHOLE COVER SHALL HAVE THE WORDS "SANITARY SEWER" CAST IN METAL.
5. MANHOLE COVER SHALL MEET H-20 TRAFFIC LOADING.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SANITARY SEWER MANHOLE RING AND COVER	38


CORE DRILL MANHOLE GROUT IN BOOT OR SAND COLLAR COUPLING WITH NON-SHRINK GROUT
DROP BOWL
4'-0" MIN.
TWO STAINLESS STEEL STRAPS ANCHORED TO MANHOLE WITH STAINLESS STEEL FASTENERS
6"
8"
5" MAX.
CL160 PVC 45° BEND
6"

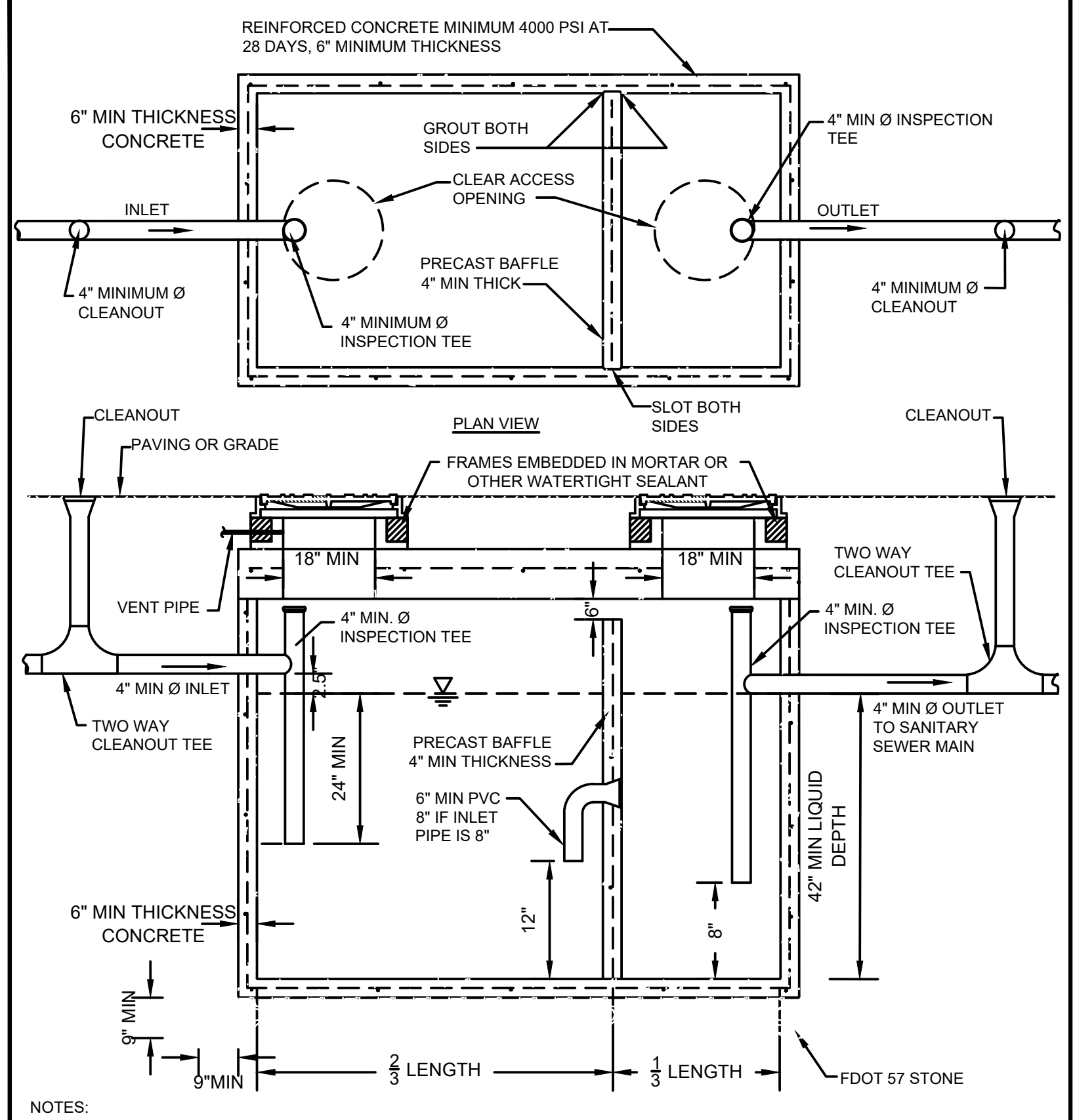
NOTES:

1. ALL DETAILS AND SPECIFICATIONS FOR STANDARD MANHOLES ARE APPLICABLE EXCEPT FOR REFERENCES TO DROP ASSEMBLY AND COATINGS.
2. THE PRECAST BASE SHALL EXTEND FULLY UNDER THE DROP ASSEMBLY.
3. MASONRY CONSTRUCTION ABOVE THE EXTENDED PRECAST BASE IS PERMISSIBLE IF FILLED WITH CONCRETE.
4. BRICK AND CONCRETE RUBBLE ARE PERMITTED AS FILLER IN DROP ENCASEMENT.
5. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT INVERT IS LOCATED 2.0 FEET OR MORE ABOVE THE MAIN INVERT CHANNEL. DROP CONNECTIONS SHOULD NOT BE DESIGNED FOR LESS THAN A 24-INCH DROP.
6. SOLVENT TYPE JOINT P.V.C. FITTINGS MAY BE UTILIZED IN THE DROP ASSEMBLY ONLY.
7. THE EXTERIOR SHALL RECEIVE 2 COATS OF WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	DROP MANHOLE AND SERVICE DROP	39

GREASE INTERCEPTOR



NOTES:
1. SPECIFIC DESIGN DETAILS MUST IN ALL ASPECTS MEET APPLICABLE FLORIDA PLUMBING AND ADMINISTRATIVE CODE.
3. INTERCEPTORS SHALL BE WATER AND GAS TIGHT.
4. ALL FIXTURES LOCATED IN FOOD AND BEVERAGE PREPARATION AREAS SHALL BE ROUTED THOUGH GREASE INTERCEPTOR. RESTROOM WASTE SHALL NOT BE ROUTED THROUGH INTERCEPTOR.
5. BAFFLE REQUIRED; ALTERNATIVE DESIGNS ARE ACCEPTABLE. DESIGN MUST MEET FLORIDA PLUMBING AND ADMINISTRATIVE CODE.
6. LOADS: H-20 TRUCK WHEELS WITH 30% IMPACT PER AASHTO. TRAFFIC BEARING FRAME AND COVER TO MEET FDOT STANDARDS IF APPLICABLE.

GREASE INTERCEPTOR SIZING FORMULA

EFFECTIVE CAPACITY OF GREASE INTERCEPTOR (GALLONS)

= (M) x (GM) x (LF)

M = MEALS PREPARED PER DAY
GM = GALLONS OF WATER PER MEAL: USE OF 5 GALLONS
LF = LODING FACTOR: USE 1.00 WITH DISHWASHING AND 0.75 WITHOUT DISHWASHING.

= (1,000 MEALS / DAY) x (5 GALLONS / MEAL) x (0.75)
= 3,750 GALLONS PER DAY / USE
= (3) 1,250 GAL. INTERCEPTORS (3,750 TOTAL CAPACITY)

(IN ACCORDANCE WITH FLORIDA ADMINISTRATION CODE 64E-6).
GREASE INTERCEPTORS SHALL BE WATER AND GAS TIGHT. EACH INTERCEPTOR SHALL BE ENGINEERED TO WITHSTAND THE LOAD, SUCH AS FROM VEHICULAR TRAFFIC, TO BE PLACED ON THE INTERCEPTOR. THE MINIMUM TANK VOLUME OF GREASE INTERCEPTORS SHALL BE 750 GALLONS AND THE MAXIMUM VOLUME SHALL BE 1,250 GALLONS. INTERCEPTORS SHALL BE PERMITTED TO BE INSTALLED IN SERIES.

GREASE TRAP DETAIL

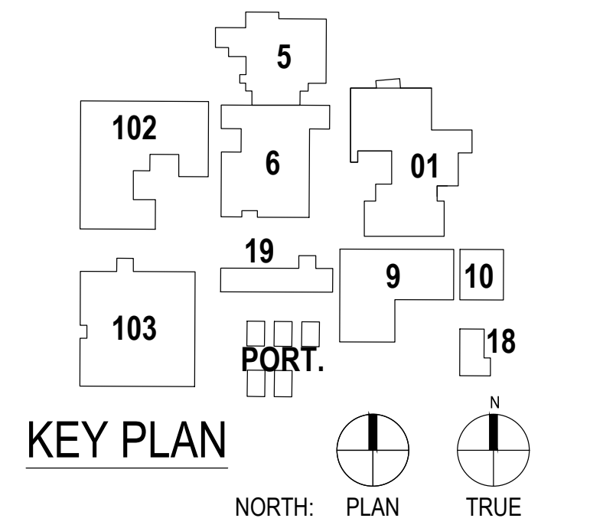
PBK
WEST PALM BEACH, FL
561-478-4457
FL FIRM: AR 0013140
www.pbk.com

MURRAY MIDDLE SCHOOL MODERNIZATION

4400 SE MURRAY STREET
STUART, FLORIDA 34997

CLIENT PROJECT NUMBER: PO #5182600045

100% CONSTRUCTION DOCUMENTS



KEY PLAN

NORTH: PLAN TRUE

No. 49945

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JAY A. KLIMA P.E.
ON THE DATE ADJACENT TO THE SEAL.
SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

CLIENT	
MARTIN COUNTY SCHOOL DISTRICT	
DATE 2026/05/25	PROJECT NUMBER 25064.00

DRAWING HISTORY

No.	Description	Date

CHECKED BY: J.A.K.
DRAWN BY: RZ

495 MONTGOMERY PLACE
ALTAMONTE SPRINGS, FL 32714
TELEPHONE 407.478.8750
www.klimaweeks.com

Klima Weeks
CIVIL ENGINEERING

UTILITY DETAILS

C-802

HB ESTIMATING REC'D 06.01.2026