

ZONING COMPLIANCE NOTES
 LAND DEVELOPMENT CODE:

- THE EXISTING AND PROPOSED ZONING FOR THIS SITE IS A-C - AGRICULTURAL COMMERCIAL.
- EXISTING AND PROPOSED LAND USE PLAN DESIGNATION = ROR - RESIDENTIAL OFFICE RETAIL RES-9
- PROPOSED USE: PRIVATE EDUCATION CAMPUS
- TOTAL SITE AREA = 275,199 S.F., 6.318 Ac.
- BUILDING GROUND COVERAGE = 33,507 S.F., 0.769 Ac.
- TOTAL BUILDING FLOOR AREA = 46,920 S.F., 1.077 Ac.
- ALLOWABLE FLOOR AREA RATIO = 0.27
 PROPOSED FLOOR AREA RATIO = 0.17
- PROPOSED BUILDING HEIGHT = TWO STORY (35' MAXIMUM)
- REQUIRED PARKING:
 1 SPACE PER FACULTY PLUS ADEQUATE PARKING FOR SPECIAL EVENTS
 108 FACULTY MEMBERS x 1 SPACE = 108 SPACES REQUIRED
 TOTAL NUMBER OF PARKING SPACES PROPOSED = 175 SPACES
 BICYCLE PARKING REQUIRED: 0.5 SPACE PER PARKING SPACE PROVIDED
 175 x 0.5 = 88 BICYCLE SPACES REQUIRED

USE	EXISTING AREAS			PROPOSED AREAS		
	SQUARE FEET	ACRES	PERCENT OF TOTAL	SQUARE FEET	ACRES	PERCENT OF TOTAL
1. IMPERVIOUS AREAS	36,858 S.F.	0.846 Acres	13.39%	114,391 S.F.	2.626 Acres	41.57%
A. BUILDING GROUND COVERAGE	5,127 S.F.	0.118 Acres	1.87%	33,507 S.F.	0.769 Acres	12.18%
B. CONCRETE WALKS, CURBS & SLABS	2,073 S.F.	0.047 Acres	0.74%	7,324 S.F.	0.168 Acres	2.66%
C. PAVEMENT	29,658 S.F.	0.681 Acres	10.78%	73,560 S.F.	1.689 Acres	26.73%
2. OPEN SPACE	238,341 S.F.	5.472 Acres	86.61%	160,808 S.F.	3.692 Acres	58.43%
A. DETENTION AREA WATER SURFACE	0 S.F.	0.000 Acres	0.00%	21,008 S.F.	0.482 Acres	7.63%
B. GRASS AND LANDSCAPE AREAS	238,341 S.F.	5.472 Acres	86.61%	139,800 S.F.	3.209 Acres	50.80%
3. TOTAL	275,199 S.F.	6.318 Acres	100.00%	275,199 S.F.	6.318 Acres	100.00%

DESCRIPTION:
 A portion of the North ¼ of the Northeast ¼ of Section 23, Township 26 South, Range 16 East, Pasco County, Florida, being further described as follows:
 Commence at the Northeast corner of Section 23, thence run West along the boundary line of said Section 23, a distance of 659.7 feet, thence run parallel with the East line boundary line of Section 23, South 00 degrees 24 minutes 40 seconds East, a distance of 50 feet to the southerly right of way line, State Road No. 54 (Gunn Highway) as it now established for the POINT OF BEGINNING, thence continue South 00 degrees 24 minutes 40 seconds East, a distance of 312.60 feet, thence West, a distance of 227.33 feet, thence run parallel with the West boundary line of the Northeast ¼ of the Northeast ¼ of Section 23, South 00 degrees 17 minutes 21 seconds East, a distance of 631.19 feet to the South boundary line of the North ¼ of the Northeast ¼ of the Northeast ¼ of said Section 23, thence along said South line, North 89 degrees, 58 minutes 45 seconds West, a distance of 216.00 feet, to the East boundary line of the West 216 feet of the North ¼ of the Northeast ¼ of the Northeast ¼ of said Section 23, thence along the East boundary line, North 00 degrees 17 minutes 21 seconds West, a distance of 943.71 feet to the Southerly right of way line of said State Road No. 54, thence along said Southerly right-of-way line, East, a distance of 442.67 feet to the POINT OF BEGINNING.

Legal Description taken from the deed published in O.R. Book 9374, Pages 3065 and 3066, Pasco County Official Records.

GENERAL NOTES:

- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988. CONTOUR INTERVAL = ONE FOOT.
- ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS ACCORDING TO A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY, BY KNOW IT NOW, INC., DATED APRIL 4, 2016, PROVIDED BY THE OWNER.
- ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
- THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
- THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.

KEY MAP
 SCALE: 1" = 60'

NATIONAL FIRE PROTECTION ASSOCIATION NOTES:

- PER NFPA-1; 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
- FIRE HYDRANTS SHALL BE IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
- A SEPARATE PLAN AND PERMIT, ISSUED TO A CONTRACTOR LICENSED BY THE FLORIDA STATE MARSHAL'S OFFICE, IS REQUIRED FOR THE INSTALLATION OF UNDERGROUND FIRE LINES.
- FIRE HYDRANTS SHALL BE COLOR CODED IN ACCORDANCE WITH NFPA 291.

DEDICATION:
 ALL STREETS ARE PRIVATE.

FINISHED LAND SURFACES:
 ALL PERVIOUS AREAS SHALL BE SODDED OR SEEDDED AND MULCHED AT THE OWNER'S DISCRETION AT THE TIME OF BUILDING CONSTRUCTION. ALL DETENTION AREA SLOPES AND SWALES, SHALL BE SODDED.

TREE NOTE:
 TREE REMOVAL WILL BE IN ACCORDANCE WITH THE PASCO COUNTY LAND DEVELOPMENT CODE.

EROSION CONTROL NOTE:
 THE SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION, AND UNTIL THE SITE IS PERMANENTLY STABILIZED.

DEBRIS NOTE:
 ALL DEMOLITION DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.

PEGGED SOD NOTE:
 ALL SODDED SLOPES OVER 4 TO 1, SHALL BE INSTALLED WITH SOD PEGS.

STORMWATER SYSTEM MAINTENANCE NOTE:
 IT IS THE OWNER'S RESPONSIBILITY TO INSPECT AND MAINTAIN THE STORMWATER DETENTION SYSTEM ON A REGULAR BASIS.

MAINTENANCE NOTE:
 ALL IMPROVEMENTS SHOWN SHALL BE PRIVATELY MAINTAINED.

NOTE:
 ALL UTILITY MATERIAL AND WORKMANSHIP MUST COMPLY WITH "STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER AND RECLAIMED WATER FACILITIES SPECIFICATIONS" (CURRENT EDITION).

NOTE:
 CONNECTIONS INTO EXISTING COUNTY-OWNED SYSTEM SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED BY PASCO COUNTY UTILITIES SERVICES BRANCH AT THE DEVELOPER'S EXPENSE. EXCAVATION, BACKFILL AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MATERIAL FOR WET TAPS LARGER THAN 2" SHALL BE PROVIDED AND INSTALLED BY THE PROJECT CONTRACTOR.

NOTE:
 PRIOR TO CONSTRUCTION, A BUILDING PERMIT SHALL BE OBTAINED FOR ALL STRUCTURES THAT HAVE A FOOTER, REGARDLESS OF SIZE, THROUGH PASCO COUNTY CENTRAL PERMITTING. (IE. INCLUDING BUT NOT INCLUSIVE: BUILDINGS, ACCESSORIES, AND RETAINING WALLS.)

TRAFFIC CONTROL, PARKING AND STRIPING NOTE:

- FLORIDA STATE STATUTE 316.0745 REQUIRES THAT ALL TRAFFIC CONTROL SIGNING AND MARKINGS ON PRIVATE PROPERTY OPENED TO THE GENERAL PUBLIC BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
- ALL PARKING SPACES, PAVEMENT ARROWS AND STOP BARS SHALL BE STRIPED WHITE PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL HANDICAP PARKING SPACES SHALL BE SIGNED AND MARKED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS INDEX.
- IF THE SITE HAS ANY INTERNAL ROADS THAT ARE TO BE NAMED, STREET NAME SIGNS WILL BE REQUIRED PER THE FOLLOWING STANDARDS.
 STREET NAME SIGNS SHALL BE 9" ON ALL ROAD CLASSIFICATIONS. ALL SIGNS SHALL HAVE 8-INCH SERIES "B" LETTERS. ALL STREET NAME SIGNS ON PRIVATE ROADS SHALL BE STANDARD D3 STREET NAME SIGNS WITH THE COLORS REVERSED. WHITE BACKGROUND WITH GREEN LETTERS AND BORDER, AT INTERSECTIONS WITH COUNTY MAINTAINED ROADS, THE COUNTY MAINTAINED ROAD SHALL BE GREEN BACKGROUND WITH WHITE LETTERS AND BORDER.
- FOR IMPROVEMENTS WITHIN THE COUNTY RIGHT-OF-WAY WITH TRAFFIC CONTROL DEVICES, THE SUBMITTAL DATA FORM SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION OF ANY TRAFFIC CONTROL DEVICES IN THE COUNTY RIGHT-OF-WAY.

ARCHEOLOGICAL AND HISTORIC RESOURCE NOTE:
 IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

ON-SITE BURNING NOTE:
 ON-SITE BURNING SHALL NOT BE USED TO DISPOSE OF CLEARED MATERIAL OR DEBRIS WITHOUT A SPECIFIC BURN PERMIT ISSUED BY PASCO COUNTY.

FUGITIVE DUST CONTROL:
 FUGITIVE DUST CONTROL IS NOT ANTICIPATED TO BE A PROBLEM AT THIS SITE. IF HOWEVER, THE MOISTURE CONTENT OF THE FILL MATERIAL REACHES A LEVEL LOW ENOUGH THAT FUGITIVE DUST BECOMES A CONCERN, IT WILL BE CONTROLLED IN ACCORDANCE WITH D.O.T. STANDARD SPECIFICATIONS.

EXCESS FILL:
 THIS PLAN DOES NOT REQUIRE REMOVAL OF MORE THAN 30,000 C.Y. FROM THIS SITE. ALL SUITABLE EXCAVATED MATERIAL SHALL BE USED ON-SITE FOR FILL IN THOSE AREAS DESIGNATED TO RECEIVE FILL. ANY EXCESS MATERIAL WILL BE STOCKPILED ON-SITE, IN CLEAR UPLAND AREAS ABOVE THE LIMITS OF THE 100 YEAR FLOOD PLAN FOR USE IN FUTURE DEVELOPMENT AREAS. BECAUSE THE GRADING SHOWN DOES NOT RESULT IN AN EXCESS OF MATERIAL TO BE REMOVED FROM THIS SITE, NEITHER A CLASS I MINING PERMIT OR A CONDITIONAL USE PERMIT IS REQUIRED.

FIRE SERVICE NOTE:
 FIRE SERVICE FOR THE SITE SHALL BE PROVIDED BY PASCO COUNTY EMERGENCY SERVICES.

ELECTRICAL SERVICE NOTE:
 ELECTRICAL SERVICE FOR THE SITE SHALL BE PROVIDED BY WITHLACOOCHEE RIVER ELECTRIC COOPERATIVE, INC.

UTILITY LOCATION NOTE:
 THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN HEREON IS APPROXIMATE. THIS DRAWING WAS PREPARED USING UTILITY ATLAS MAPS AND LIMITED FIELD INFORMATION. NO EXCAVATION WAS DONE TO VERIFY EXACT LOCATION OR SIZE OF LINE. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY IMPROVEMENTS WHICH HAVE NOT BEEN SHOWN HEREON.

FLOOD ZONE NOTE:
 THIS SITE LIES WITHIN F.E.M.A. FLOOD ZONE AE, EL. 27, AND ZONE X (SHADED) AS APPROXIMATELY SHOWN HEREON, ACCORDING TO FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 12101C0360F, DATED SEPTEMBER 26, 2014.

EASEMENT NOTE:
 ALL INTERNAL WATER AND SANITARY SEWER FACILITIES ARE PRIVATE. EASEMENTS WILL BE GRANTED AS REQUIRED TO PROVIDERS OF ELECTRIC, TELEPHONE AND CABLE TV SERVICE.

GEOTECHNICAL NOTES:
 SHOULD ANY NOTICEABLE SOIL SLUMPING OR SINKHOLE FORMATION BECOME EVIDENT, THE APPLICANT/DEVELOPER SHALL IMMEDIATELY NOTIFY THE COUNTY, TAMPA BAY WATER (TBW), AND SWFWMD, AND ADOPT ONE OR MORE OF THE FOLLOWING PROCEDURES AS DETERMINED TO BE APPROPRIATE BY THE COUNTY AND SWFWMD:

- IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SWFWMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
- TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
- VISUALLY INSPECT THE AFFECTED AREA.
- EXCAVATE AND BACK-FILL OR GROUT AS REQUIRED TO FILL THE AFFECTED AREA AND PREVENT FURTHER SUBSIDENCE.
- USE SOIL REINFORCEMENT MATERIALS IN THE BACK-FILLING OPERATION, WHEN APPROPRIATE.
- IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER-RETENTION AREA, MAINTAIN A MINIMUM DISTANCE OF TWO FEET FROM THE BOTTOM OF THE RETENTION POND TO THE SURFACE OF THE LIMERICK OR KARST CONNECTION.
- IF THE AFFECTED AREA IS IN THE VICINITY OF A WATER RETENTION AREA AND THE ABOVE METHODS DO NOT STABILIZE THE COLLAPSE, RELOCATE THE RETENTION AREA.
- DISCHARGE OF STORM WATER INTO DEPRESSIONS WITH DIRECT OR DEMONSTRATED HYDROLOGIC CONNECTION TO THE FLORIDIAN AQUIFER SHALL BE PROHIBITED.

PASCO COUNTY DEVELOPMENT REVIEW - STANDARD SITE PLAN NOTES:

- ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PASCO COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.
- ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER/DEVELOPER.
- INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.
- ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY-APPROVED SITE PLAN. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.
- HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATE STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.
- THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.
- ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPER'S RESPONSIBILITY TO PROPERLY SIGN AND STRIPE THE SITE IN ACCORDANCE WITH APPLICABLE STANDARDS.
- THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN COUNTY RIGHT-OF-WAY. ALL RIGHT-OF-WAY WORK SHALL BE A FUNCTION OF AN APPROVED PASCO COUNTY RIGHT-OF-WAY USE PERMIT.
- ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE, PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3½) FEET IN HEIGHT.
- NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT.
- THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.
- ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE SEPARATE BUILDING PERMITS.

PROJECT OWNER/DEVELOPER:
 SUPERIOR SCHOOLS CORP.
 c/o PETER CHRISTOPOULOS
 MANAGER OF PLATO ACADEMY SCHOOLS CORP.
 ARCADIA DEVELOPMENT, LLC
 2045 PALMETTO STREET
 CLEARWATER, FL 33765
 Phone: (727) 799-1200 ext. 1041

PROJECT ENGINEER:
 LLOVERAS, BAUR AND STEVENS
 29228 U.S. HIGHWAY 19 NORTH
 CLEARWATER, FL 33761
 Phone: (727) 784-3965

SITE ADDRESS:
 8812 OLD COUNTY ROAD 54
 NEW PORT RICHEY, FL 34653

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

TEMPORARY BENCH MARK #1
 ELEVATION = 27.78
 TOP OF CLEANOUT LOCATED ALONG GUNN HIGHWAY SOUTH OF THE ENTRANCE TO SUBJECT PROPERTY

TEMPORARY BENCH MARK #2
 ELEVATION = 27.59
 TOP OF NAIL LOCATED AT THE NORTHWEST CORNER OF THE PARKING AREA ON SUBJECT PROPERTY

TEMPORARY BENCH MARK #3
 ELEVATION = 25.90
 SPIKE IN POWER POLE LOCATED OFF-SITE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

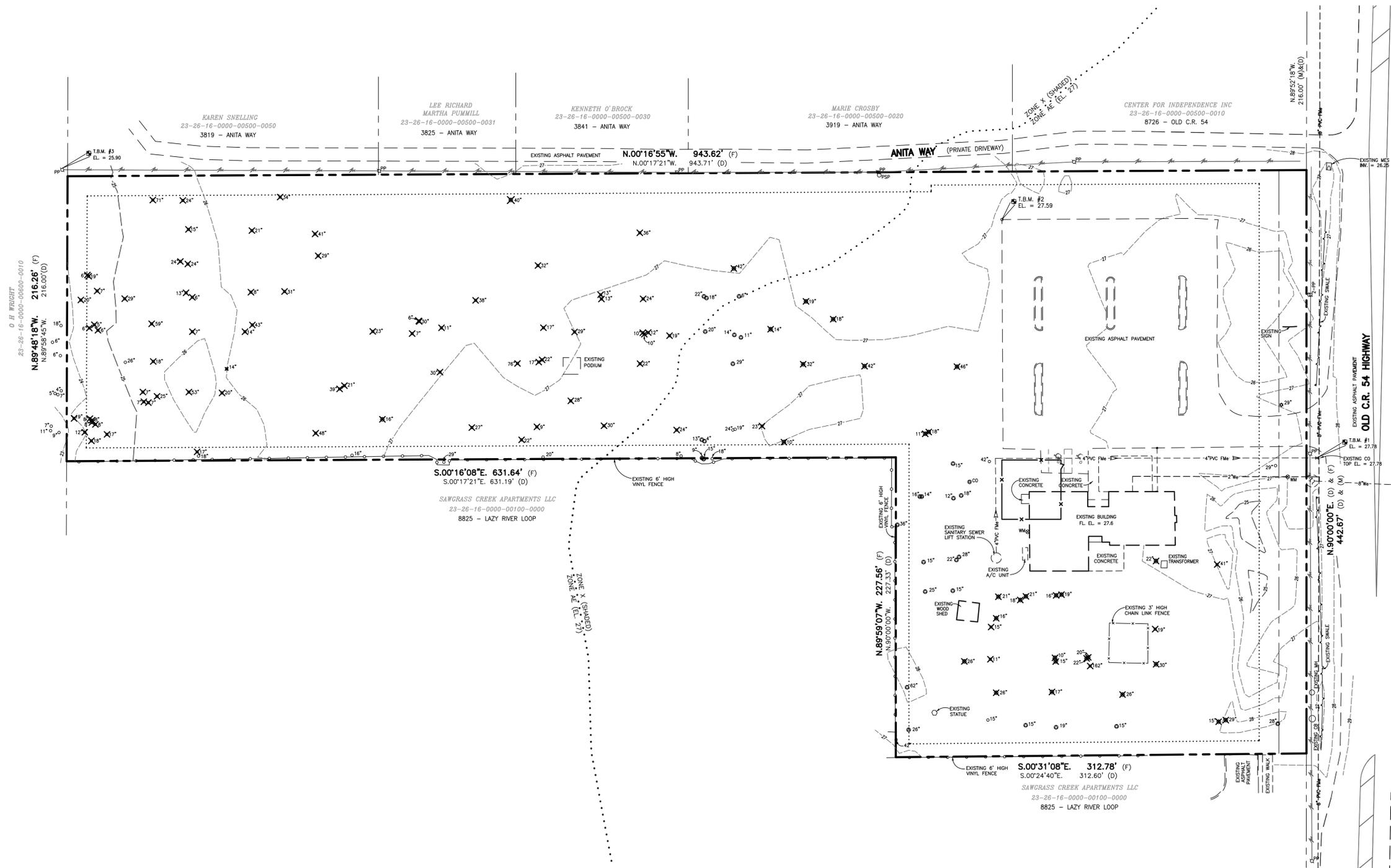
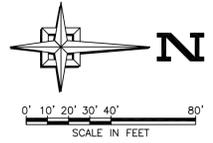
PASCO COUNTY
 SUPERIOR SCHOOLS CORP.
 PETER CHRISTOPOULOS
 MANAGER OF PLATO ACADEMY SCHOOLS CORP.
 ARCADIA DEVELOPMENT, LLC
 2045 PALMETTO STREET
 CLEARWATER, FL 33765
 PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
 DES.: T.G. Radcliffe
 DRN.: RRD
 CKD.: RRD
 SCALE: 1" = 60'
 JOB No.: 38156

APPROVED BY:
 THOMAS G. RADCLIFFE
 FL ENGINEER'S LICENSE No. PE 42044

LLOVERAS, BAUR & STEVENS
 ENGINEERS - SURVEYORS - PLANNERS
 Phone: (727) 784-3965 #LB 000208
 29228 U.S. HIGHWAY 19 N. CLEARWATER, FLORIDA 33761

SHEET 1 OF 12



INDEX OF DRAWINGS	
SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

BENCH MARK NOTE:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM—1988, ADJUSTED.

- TEMPORARY BENCH MARK #1**
ELEVATION = 27.78
TOP OF CLEANOUT LOCATED ALONG GUNN HIGHWAY SOUTH OF THE ENTRANCE TO SUBJECT PROPERTY
- TEMPORARY BENCH MARK #2**
ELEVATION = 27.59
TOP OF NAIL LOCATED AT THE NORTHWEST CORNER OF THE PARKING AREA ON SUBJECT PROPERTY
- TEMPORARY BENCH MARK #3**
ELEVATION = 25.90
SPIKE IN POWER POLE LOCATED OFF-SITE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

TREE LEGEND	
SYMBOL	DESCRIPTION
○	LAUREL OAK
⊙	MYRTLE OAK
⊛	LIVE OAK
SIZES AS SHOWN	

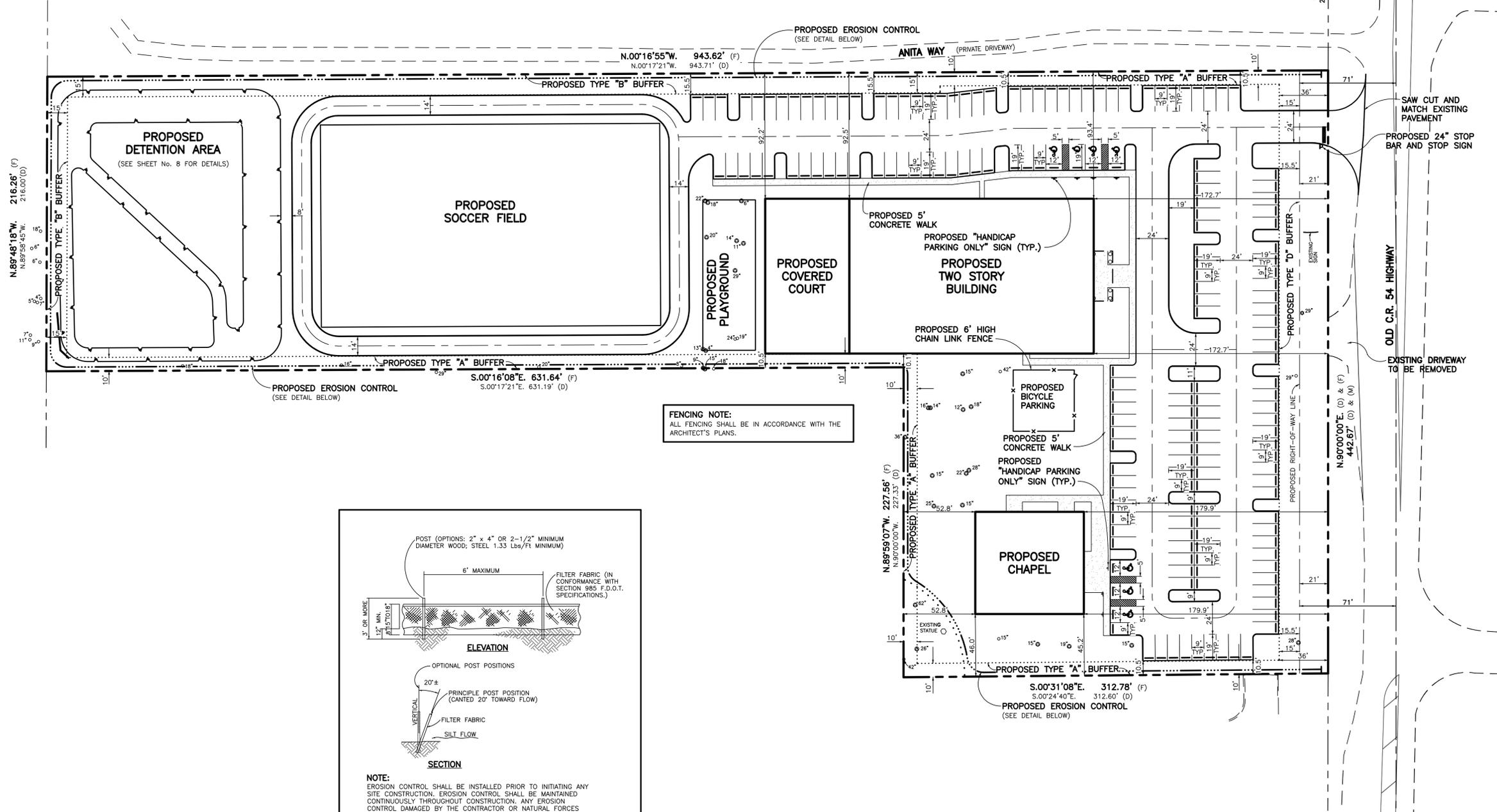
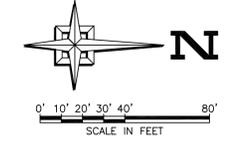
GENERAL LEGEND		
EXISTING	DENOTES	PROPOSED
--- OR ---	Right-of-Way or Property Line	--- OR ---
•	Spot Elevation	•
—	Contour	—
—	Pavement	—
—	Storm Drainage	—
—	Sanitary Gravity Main	—
—	Water Main	—
—	Force Main	—
—	Sub-Drain	—
—	Water Meter	—

- GENERAL NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM—1988. CONTOUR INTERVAL = ONE FOOT.
 - ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS ACCORDING TO A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY, BY KNOW IT NOW, INC., DATED APRIL 4, 2016, PROVIDED BY THE OWNER.
 - ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
 - THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
 - THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.

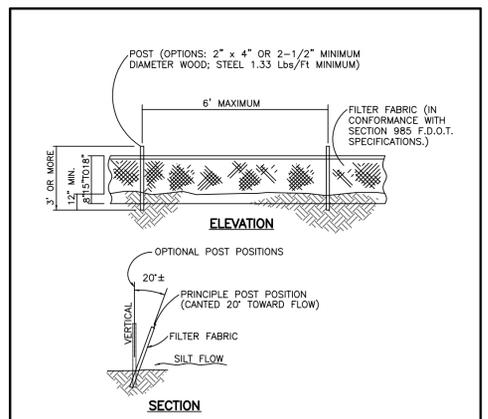


This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

No.		DATE	REVISIONS	DRN./CKD./APP.
PLATO ACADEMY — PASCO COUNTY				
EXISTING CONDITIONS PLAN				
PASCO COUNTY		FLORIDA		
PREPARED FOR: SUPERIOR SCHOOLS CORP. PETER CHRISTOPOULOS MANAGER OF PLATO ACADEMY SCHOOLS CORP.		DATE: OCT. 17, 2016 DES.: T.G. Radcliffe DRN.: KB CKD.: KB	APPROVED BY: THOMAS G. RADCLIFFE FL ENGINEER'S LICENSE No. PE 42044	
ARCADIA DEVELOPMENT, LLC 2045 PALMETTO STREET CLEARWATER, FL 33765 PHONE: (727) 799-1200 ext. 1041		SCALE: 1" = 40' JOB No.: 38156		
LLOVERAS, BAUR & STEVENS				
ENGINEERS — SURVEYORS — PLANNERS				
Phone: (727) 784-3965 29228 U.S. HIGHWAY 19 N.		Fax: (727) 784-8153 CLEARWATER, FLORIDA 33761		



FENCING NOTE:
ALL FENCING SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S PLANS.



TYPICAL EROSION CONTROL
NOT TO SCALE

NOTE:
EROSION CONTROL SHALL BE INSTALLED PRIOR TO INITIATING ANY SITE CONSTRUCTION. EROSION CONTROL SHALL BE MAINTAINED CONTINUOUSLY THROUGHOUT CONSTRUCTION. ANY EROSION CONTROL DAMAGED BY THE CONTRACTOR OR NATURAL FORCES SHALL BE REPLACED IMMEDIATELY AND ALL EROSION CONTROL SHALL REMAIN UNTIL FINAL ACCEPTANCE.

BENCH MARK NOTE:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988, ADJUSTED.

- TEMPORARY BENCH MARK #1**
ELEVATION = 27.78
TOP OF CLEANOUT LOCATED ALONG GUNN HIGHWAY SOUTH OF THE ENTRANCE TO SUBJECT PROPERTY
- TEMPORARY BENCH MARK #2**
ELEVATION = 27.59
TOP OF NAIL LOCATED AT THE NORTHWEST CORNER OF THE PARKING AREA ON SUBJECT PROPERTY
- TEMPORARY BENCH MARK #3**
ELEVATION = 25.90
SPIKE IN POWER POLE LOCATED OFF-SITE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

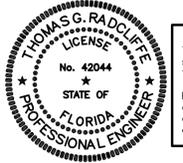
TREE LEGEND	
SYMBOL	DESCRIPTION
○	LAUREL OAK
⊙	MYRTLE OAK
⊛	LIVE OAK
SIZES AS SHOWN	

GENERAL LEGEND		
EXISTING	DENOTES	PROPOSED
---	Right-of-Way or Property Line	---
•	Spot Elevation	•
—	Contour	—
—	Pavement	—
—	Storm Drainage	—
—	Sanitary Gravity Main	—
—	Water Main	—
—	Force Main	—
—	Sub-Drain	—
—	Water Meter	—

- GENERAL NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988. CONTOUR INTERVAL = ONE FOOT.
 - ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS ACCORDING TO A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY, BY KNOW IT NOW, INC., DATED APRIL 4, 2016, PROVIDED BY THE OWNER.
 - ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
 - THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
 - THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.

OWNER'S ACKNOWLEDGEMENT OF PROPOSED EROSION CONTROL REQUIREMENTS

SUPERIOR SCHOOLS CORP.
By: PETER CHRISTOPOULOS
MANAGER OF PLATO ACADEMY SCHOOLS CORP.
ARACADIA DEVELOPMENT, LLC



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code must be verified on any electronic copies.

INDEX OF DRAWINGS	
SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

No.	DATE	REVISIONS	DRN./CKD./APP.

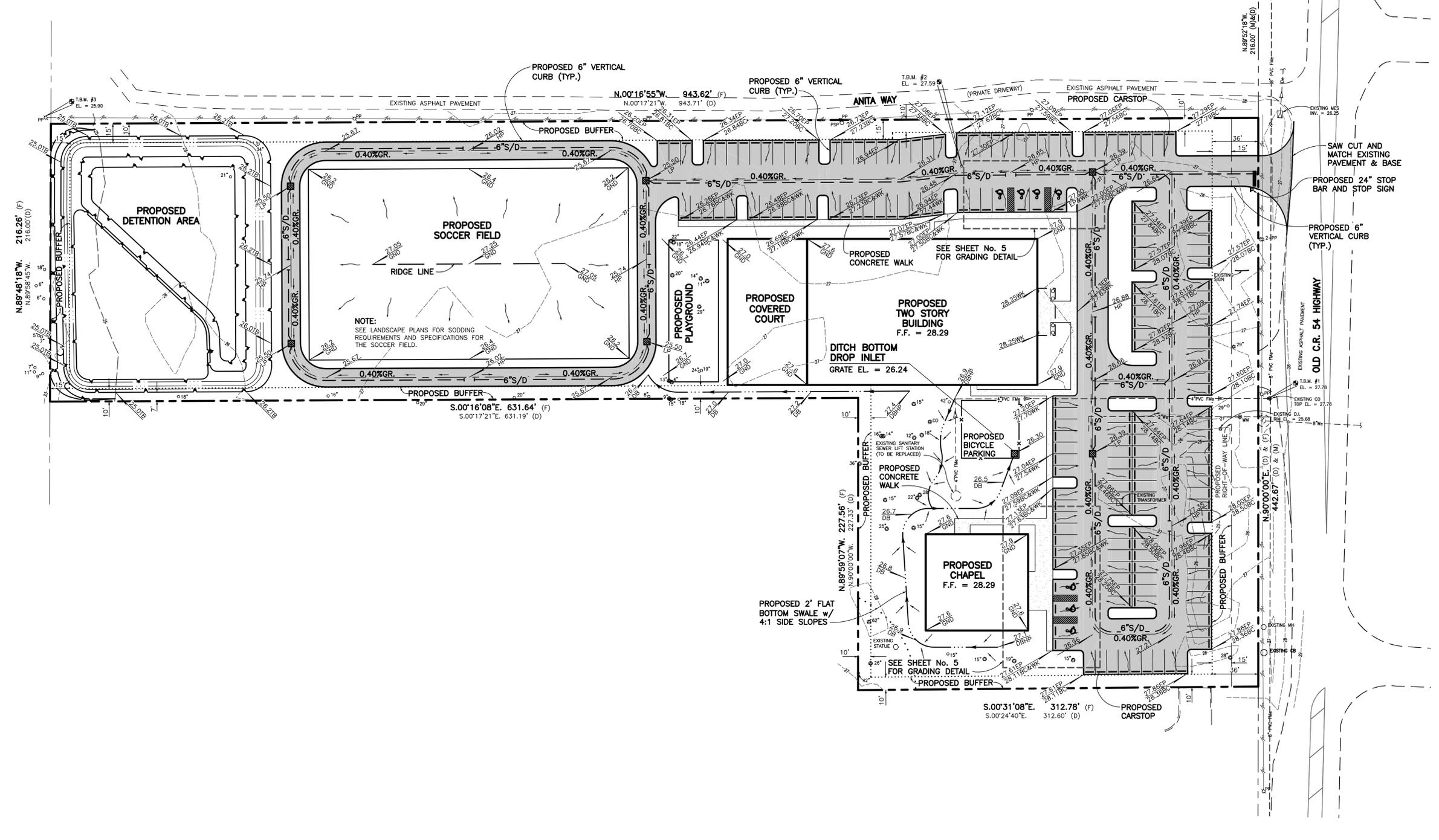
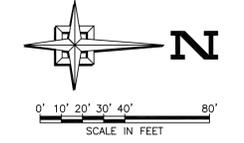
PLATO ACADEMY - PASCO COUNTY
LAYOUT AND EROSION CONTROL PLAN

PASCO COUNTY
PREPARED FOR:
SUPERIOR SCHOOLS CORP.
PETER CHRISTOPOULOS
MANAGER OF PLATO ACADEMY SCHOOLS CORP.
ARACADIA DEVELOPMENT, LLC
2045 PALMETTO STREET
CLEARWATER, FL 33765
PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
DES.: T.G. Radcliffe
DRN.: KB
CKD.: KB
SCALE: 1" = 40'

APPROVED BY:
THOMAS G. RADCLIFFE
FL ENGINEER'S LICENSE No. PE 42044

LLOVERAS, BAUR & STEVENS
ENGINEERS - SURVEYORS - PLANNERS
Phone: (727) 784-3965
29228 U.S. HIGHWAY 19 N.
#LB 000208
Fax: (727) 784-8153
CLEARWATER, FLORIDA 33761



RIGHT-OF-WAY NOTE:
 A PASCO COUNTY RIGHT-OF-WAY PERMIT IS REQUIRED FOR ALL WORK WITHIN THE PASCO COUNTY RIGHT-OF-WAY. ALL AREAS WITHIN THE PASCO COUNTY RIGHT-OF-WAY SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION IMMEDIATELY FOLLOWING PROJECT COMPLETION.

INDEX OF DRAWINGS	
SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

BENCH MARK NOTE:
 ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988, ADJUSTED.

- TEMPORARY BENCH MARK #1**
 ELEVATION = 27.78
 TOP OF CLEANOUT LOCATED ALONG GUNN HIGHWAY SOUTH OF THE ENTRANCE TO SUBJECT PROPERTY
- TEMPORARY BENCH MARK #2**
 ELEVATION = 27.59
 TOP OF NAIL LOCATED AT THE NORTHWEST CORNER OF THE PARKING AREA ON SUBJECT PROPERTY
- TEMPORARY BENCH MARK #3**
 ELEVATION = 25.90
 SPIKE IN POWER POLE LOCATED OFF-SITE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

TREE LEGEND	
SYMBOL	DESCRIPTION
○	LAUREL OAK
⊙	MYRTLE OAK
⊛	LIVE OAK
SIZES AS SHOWN	

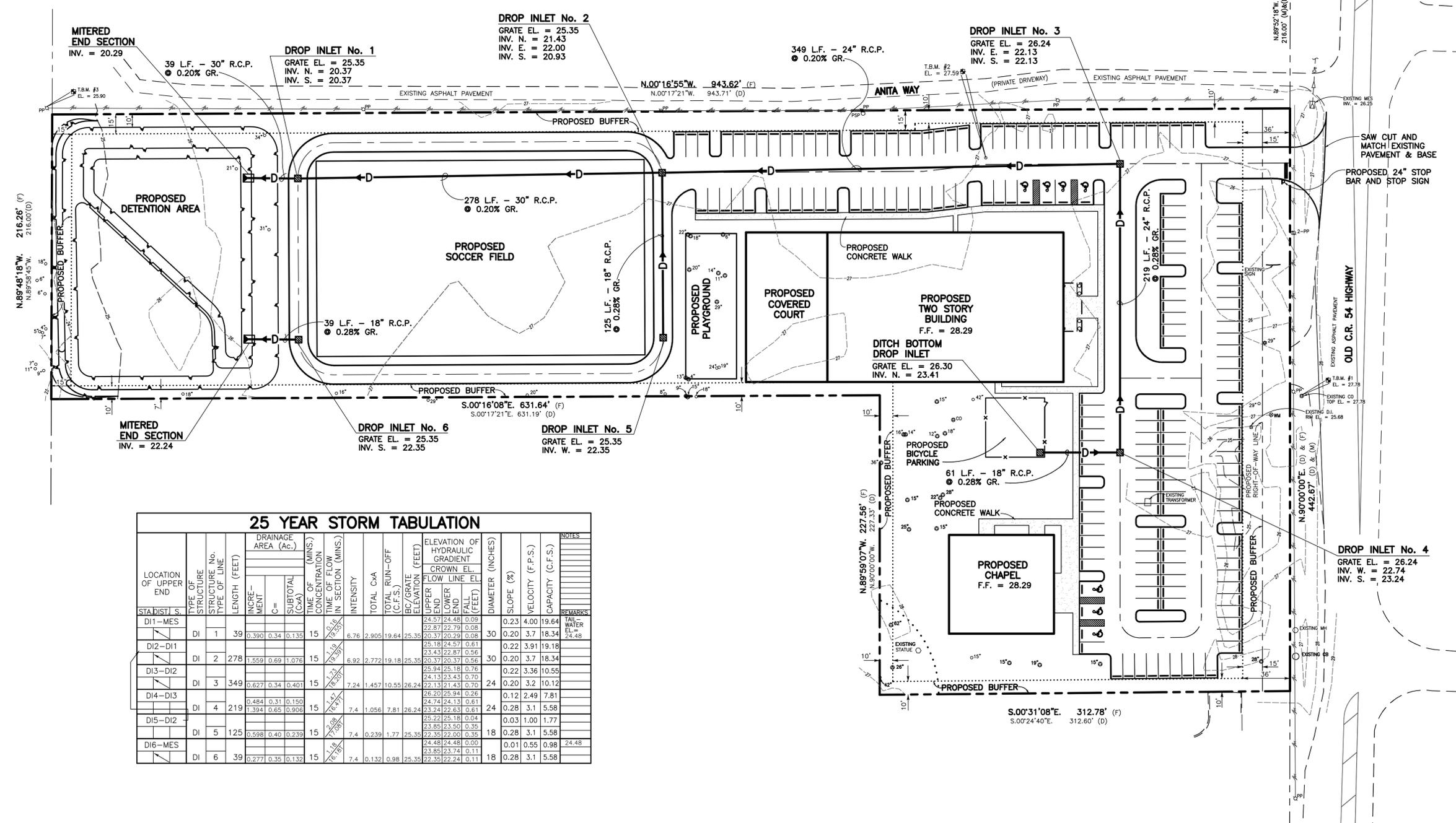
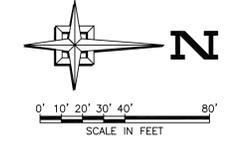
GENERAL LEGEND		
EXISTING	DENOTES	PROPOSED
---	Right-of-Way or Property Line	---
24	Spot Elevation	24
---	Contour	---
---	Pavement	---
---	Storm Drainage	---
---	Sanitary Gravity Main	---
---	Water Main	---
---	Force Main	---
---	Sub-Drain	---
---	Water Meter	---

- GENERAL NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988. CONTOUR INTERVAL = ONE FOOT.
 - ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS ACCORDING TO A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY, BY KNOW IT NOW, INC., DATED APRIL 4, 2016, PROVIDED BY THE OWNER.
 - ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
 - THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
 - THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

No.	DATE	REVISIONS	DRN./CKD./APP.
PLATO ACADEMY - PASCO COUNTY			
GRADING PLAN			
PASCO COUNTY SUPERIOR SCHOOLS CORP. PETER CHRISTOPOULOS MANAGER OF PLATO ACADEMY SCHOOLS CORP.		DATE: OCT. 17, 2016 DES.: T.G. Radcliffe DRN.: KB CKD.: KE	APPROVED BY: THOMAS G. RADCLIFFE FL ENGINEER'S LICENSE No. PE 42044
2045 PALMETTO STREET CLEARWATER, FL 33765 PHONE: (727) 799-1200 ext. 1041		SCALE: 1" = 40' JOB No.: 38156	FLORIDA #LB 000208 33761
LLOVERAS, BAUR & STEVENS			SHEET 4 OF 12
ENGINEERS - SURVEYORS - PLANNERS			CONSTRUCTION PLANS
Phone: (727) 784-3965 29228 U.S. HIGHWAY 19 N.			Fax: (727) 784-8153 CLEARWATER, FLORIDA 33761



25 YEAR STORM TABULATION

LOCATION OF UPPER END	STA. DIST. S.	TYPE OF STRUCTURE	STRUCTURE No. TYPE OF LINE	LENGTH (FEET)	DRAINAGE AREA (Ac.)			TIME OF CONCENTRATION (MINS.)	TIME OF FLOW IN SECTION (MINS.)	INTENSITY	TOTAL C.A.	TOTAL RUN-OFF (C.F.S.)	BO/GRATE ELEVATION (FEET)	ELEVATION OF HYDRAULIC GRADIENT			DIAMETER (INCHES)	SLOPE (%)	VELOCITY (F.P.S.)	CAPACITY (C.F.S.)	NOTES
					INCR- MENT	C=	SUBTOTAL (C+A)							UPPER END	LOWER END	FALL (FEET)					
D11-MES		DI	1	39	0.390	0.34	0.135	15	19.19	6.76	2,905	19.64	25.35	24.57	24.48	0.09	30	0.23	4.00	19.64	TAIL-WATER EL. 24.48
D12-D11		DI	2	278	1.559	0.69	1.076	15	19.19	6.92	2,772	19.18	25.35	25.18	24.57	0.61	30	0.22	3.91	19.18	
D13-D12		DI	3	349	0.627	0.34	0.401	15	19.19	7.24	1,457	10.55	26.24	24.13	23.43	0.70	24	0.20	3.7	18.34	
D14-D13		DI	4	219	0.484	0.31	0.150	15	19.19	7.4	1,056	7.81	26.24	23.24	22.63	0.61	24	0.28	3.1	5.58	
D15-D12		DI	5	125	0.598	0.40	0.239	15	19.19	7.4	0,239	1.77	25.35	22.35	22.00	0.35	18	0.28	3.1	5.58	
D16-MES		DI	6	39	0.277	0.35	0.132	15	19.19	7.4	0.132	0.98	25.35	22.35	22.24	0.11	18	0.28	3.1	5.58	24.48

RIGHT-OF-WAY NOTE:
 A PASCO COUNTY RIGHT-OF-WAY PERMIT IS REQUIRED FOR ALL WORK WITHIN THE PASCO COUNTY RIGHT-OF-WAY. ALL AREAS WITHIN THE PASCO COUNTY RIGHT-OF-WAY SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION IMMEDIATELY FOLLOWING PROJECT COMPLETION.

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

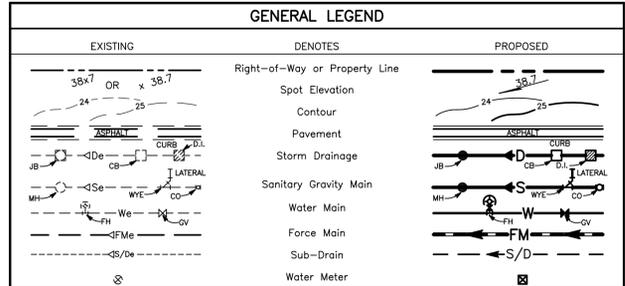
BENCH MARK NOTE:
 ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988, ADJUSTED.

- TEMPORARY BENCH MARK #1**
 ELEVATION = 27.78
 TOP OF CLEANOUT LOCATED ALONG GUNN HIGHWAY SOUTH OF THE ENTRANCE TO SUBJECT PROPERTY
- TEMPORARY BENCH MARK #2**
 ELEVATION = 27.59
 TOP OF NAIL LOCATED AT THE NORTHWEST CORNER OF THE PARKING AREA ON SUBJECT PROPERTY
- TEMPORARY BENCH MARK #3**
 ELEVATION = 25.90
 SPIKE IN POWER POLE LOCATED OFF-SITE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

TREE LEGEND

SYMBOL	DESCRIPTION
○	LAUREL OAK
⊙	MYRTLE OAK
⊛	LIVE OAK

SIZES AS SHOWN

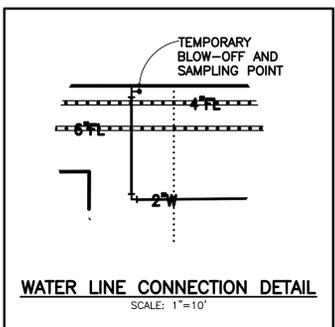
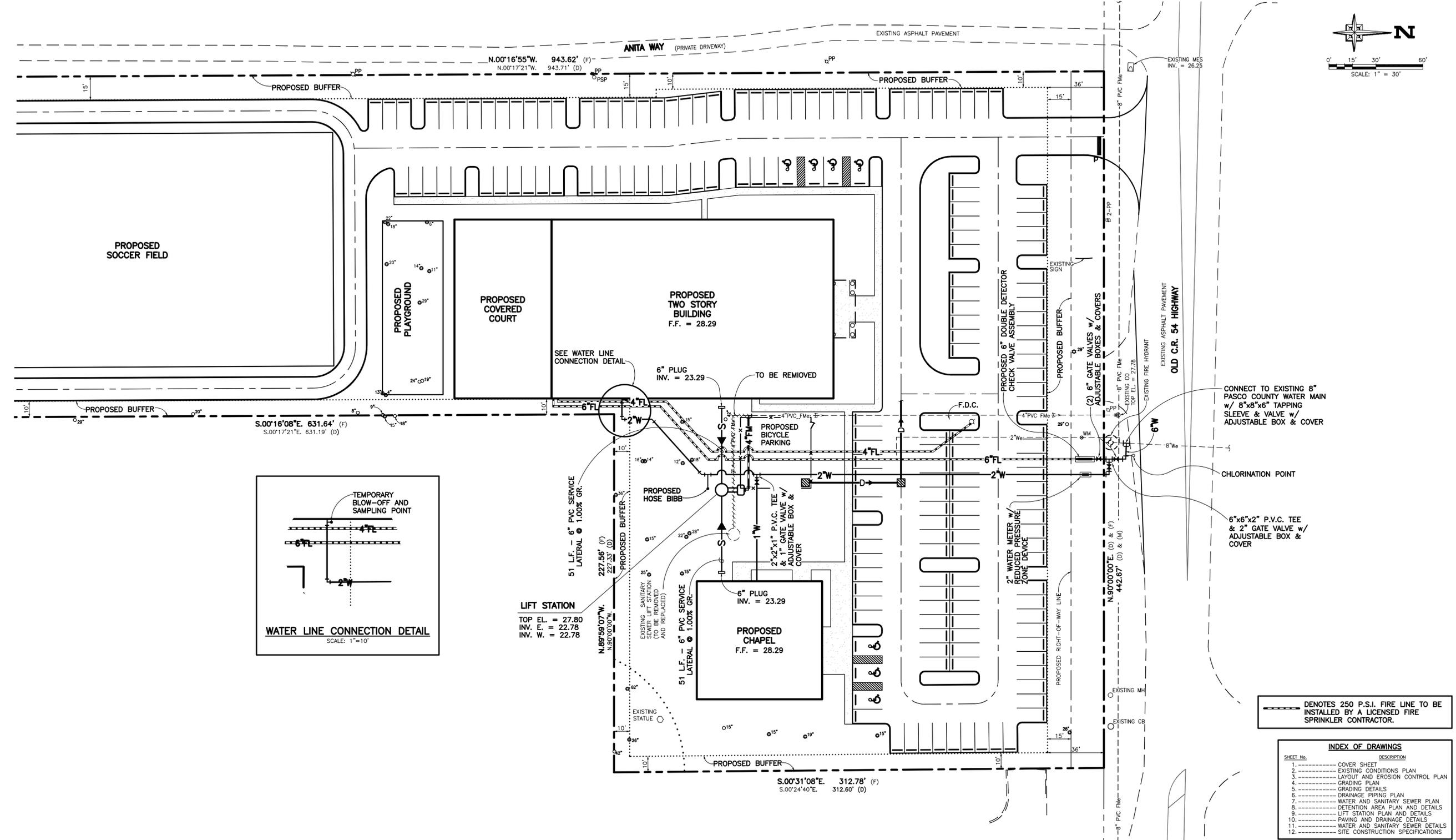
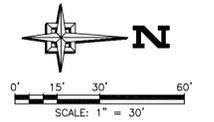


- GENERAL NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988. CONTOUR INTERVAL = ONE FOOT.
 - ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS ACCORDING TO A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY, BY KNOW IT NOW, INC., DATED APRIL 4, 2016, PROVIDED BY THE OWNER.
 - ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
 - THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
 - THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code must be verified on any electronic copies.

No.	DATE	REVISIONS	DRN./CKD./APP.
PLATO ACADEMY - PASCO COUNTY			
DRAINAGE PIPING PLAN			
PASCO COUNTY SUPERIOR SCHOOLS CORP. PETER CHRISTOPOULOS MANAGER OF PLATO ACADEMY SCHOOLS CORP.		DATE: OCT. 17, 2016 DES.: T.G. Radcliffe DRN.: KB CKD.:	APPROVED BY: THOMAS G. RADCLIFFE FL ENGINEER'S LICENSE No. PE 42044
LLOVERAS, BAUR & STEVENS ENGINEERS - SURVEYORS - PLANNERS Phone: (727) 784-3965 29228 U.S. HIGHWAY 19 N.		SCALE: 1" = 40' JOB No.: 38156 #LB 000208	FLORIDA SHEET 6 OF 12 12



LIFT STATION
 TOP EL. = 27.80
 INV. E. = 22.78
 INV. W. = 22.78

--- DENOTES 250 P.S.I. FIRE LINE TO BE INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.

INDEX OF DRAWINGS	
SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

BENCH MARK NOTE:
 ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988, ADJUSTED.

- TEMPORARY BENCH MARK #1**
 ELEVATION = 27.78
 TOP OF CLEANOUT LOCATED ALONG GUNN HIGHWAY SOUTH OF THE ENTRANCE TO SUBJECT PROPERTY
- TEMPORARY BENCH MARK #2**
 ELEVATION = 27.59
 TOP OF NAIL LOCATED AT THE NORTHWEST CORNER OF THE PARKING AREA ON SUBJECT PROPERTY
- TEMPORARY BENCH MARK #3**
 ELEVATION = 25.90
 SPIKE IN POWER POLE LOCATED OFF-SITE AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY

TREE LEGEND	
SYMBOL	DESCRIPTION
○	LAUREL OAK
⊙	MYRTLE OAK
⊛	LIVE OAK

SIZES AS SHOWN

GENERAL LEGEND		
EXISTING	DENOTES	PROPOSED
---	Right-of-Way or Property Line	---
24	Spot Elevation	24
---	Contour	---
ASPHALT	Pavement	ASPHALT
---	Storm Drainage	---
---	Sanitary Gravity Main	---
---	Water Main	---
---	Force Main	---
---	Sub-Drain	---
---	Water Meter	---

- GENERAL NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988. CONTOUR INTERVAL = ONE FOOT.
 - ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BOUNDARY SHOWN IS ACCORDING TO A BOUNDARY SURVEY PROVIDED BY THE OWNER.
 - ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
 - THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
 - THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code.
 Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

No.	DATE	REVISIONS	DRN./CKD./APP.

PLATO ACADEMY - PASCO COUNTY
WATER AND SANITARY SEWER PLAN

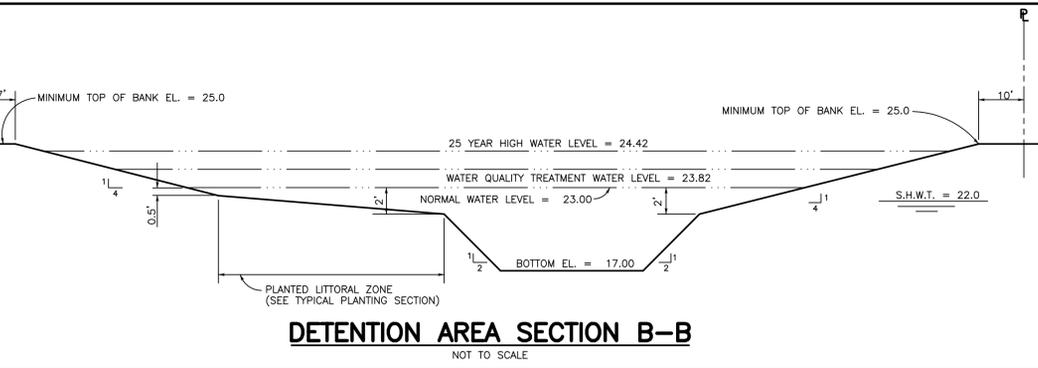
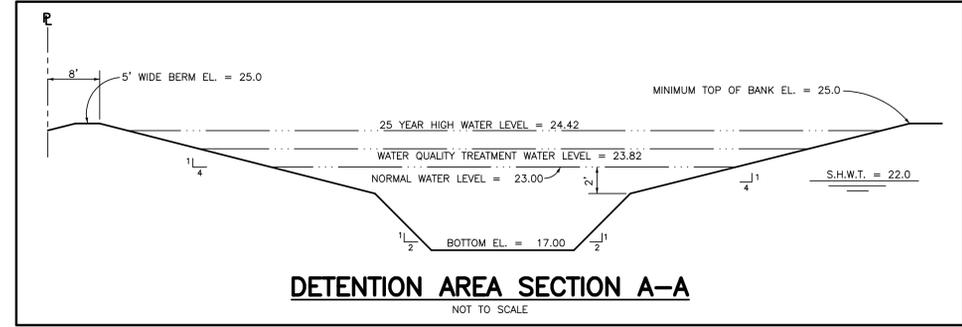
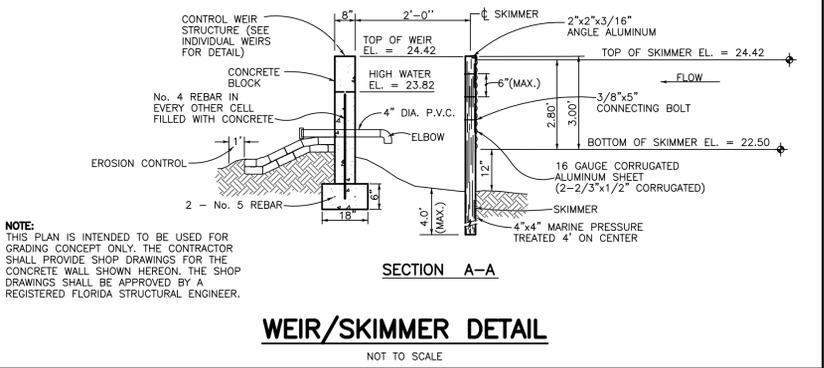
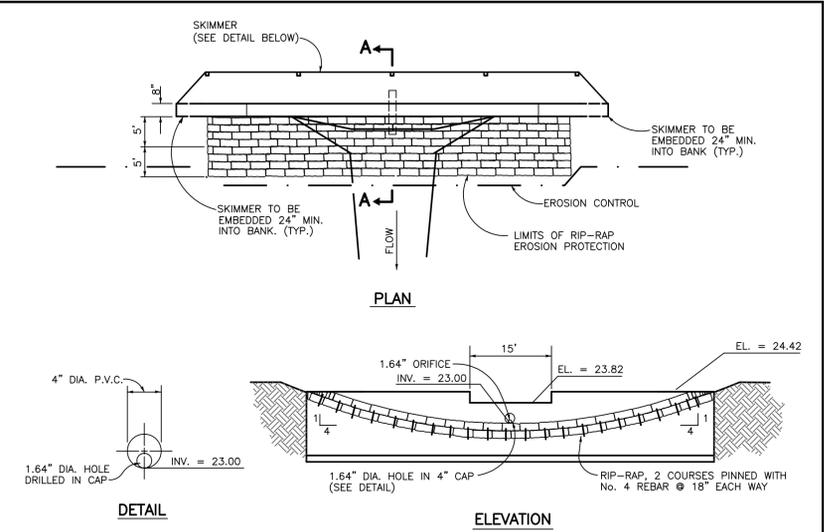
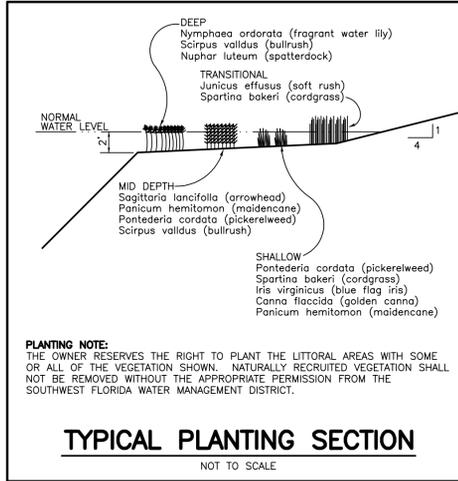
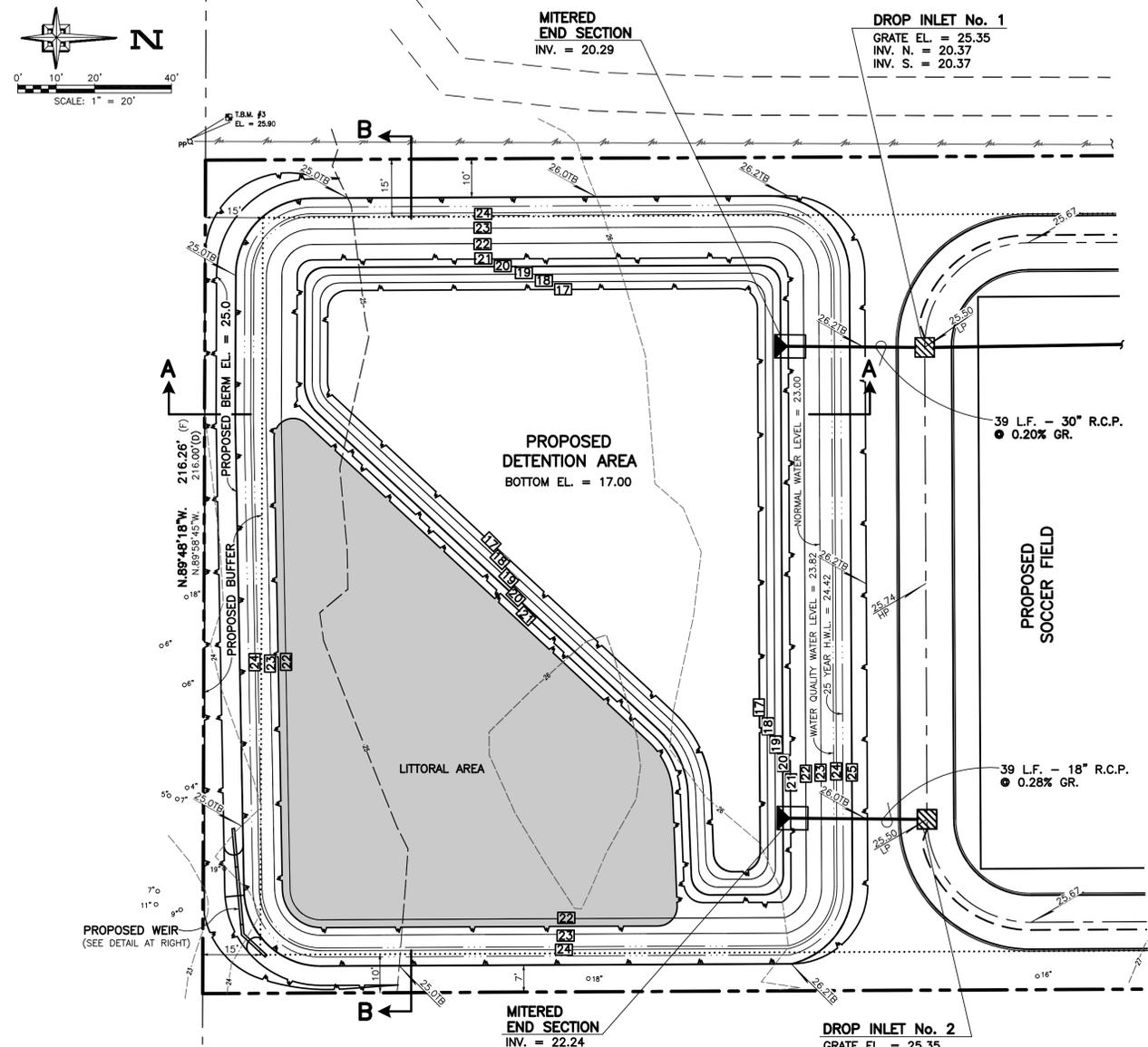
PASCO COUNTY
 PREPARED FOR: SUPERIOR SCHOOLS CORP.
 PETER CHRISTOPOULOS
 MANAGER OF PLATO ACADEMY SCHOOLS CORP.
 ARCADIA DEVELOPMENT, LLC
 2045 PALMETTO STREET
 CLEARWATER, FL 33765
 PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
 DES.: T.G. Radcliffe
 DRN.: KB
 CKD.:
 SCALE: 1" = 30'

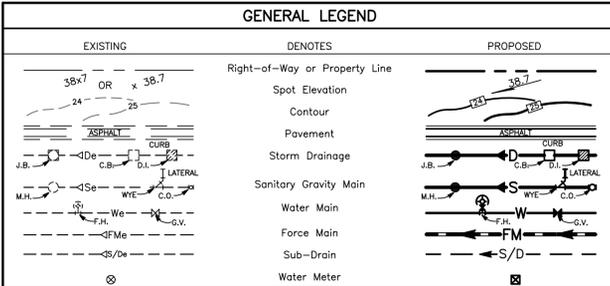
APPROVED BY:
 THOMAS G. RADCLIFFE
 FL ENGINEER'S LICENSE No. PE 42044

LLOVERAS, BAUR & STEVENS
 ENGINEERS - SURVEYORS - PLANNERS
 Phone: (727) 784-3965 #LB 0000208
 29228 U.S. HIGHWAY 19 N. CLEARWATER, FLORIDA 33761

SHEET 7 OF 12



- GENERAL NOTES:**
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM-1988. CONTOUR INTERVAL = ONE FOOT.
 - ALL DIMENSIONS ARE APPROXIMATE SUBJECT TO FIELD SURVEY.
 - ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND HAVE BEEN TAKEN FROM A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY PROVIDED BY THE OWNER. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS ACCORDING TO A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY, BY KNOW IT NOW, INC., DATED APRIL 4, 2016, PROVIDED BY THE OWNER.
 - ALL EXISTING UTILITIES SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES, BOTH PUBLIC AND PRIVATE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION SO THAT THEY MAY STAKE THE EXACT LOCATION OF ANY AND ALL UTILITIES THEY MAY HAVE AFFECTING CONSTRUCTION.
 - THIS SITE LIES WITHIN THE PASCO COUNTY SANITARY SEWER SERVICE AREA.
 - THIS SITE LIES WITHIN THE PASCO COUNTY WATER SERVICE AREA.



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

SOD NOTE:
ANY AREA SUBJECT TO EROSION SHALL BE STABILIZED BY SOLID SOD. THIS APPLIES TO DETENTION, SWALE AND DITCH EMBANKMENTS. SEED AND MULCH WILL NOT BE ALLOWED IN THOSE AREAS SUBJECT TO EROSION.

RIGHT-OF-WAY NOTE:
A PASCO COUNTY RIGHT-OF-WAY PERMIT NOTE IS REQUIRED FOR ALL WORK WITHIN THE PASCO COUNTY RIGHT-OF-WAY. ALL AREAS WITHIN THE PASCO COUNTY RIGHT-OF-WAY SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION IMMEDIATELY FOLLOWING PROJECT COMPLETION.

INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

No. DATE REVISIONS DRN.CKD.JAPP

PLATO ACADEMY - PASCO COUNTY
DETENTION AREA PLAN AND DETAILS

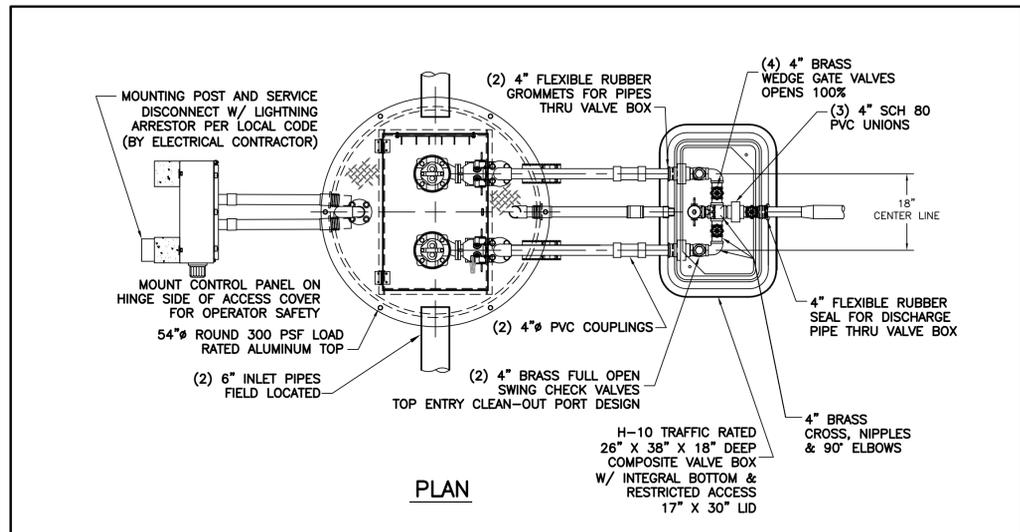
PASCO COUNTY
PREPARED FOR:
SUPERIOR SCHOOLS CORP.
PETER CHRISTOPOULOS
MANAGER OF PLATO ACADEMY
SCHOOLS CORP.
ARCADIA DEVELOPMENT, LLC
2045 PALMETTO STREET
CLEARWATER, FL 33765
PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
DES.: T.G. Radcliffe
DRN.: KB
CKD.: KB
SCALE: 1" = 20'
JOB No.: 38156

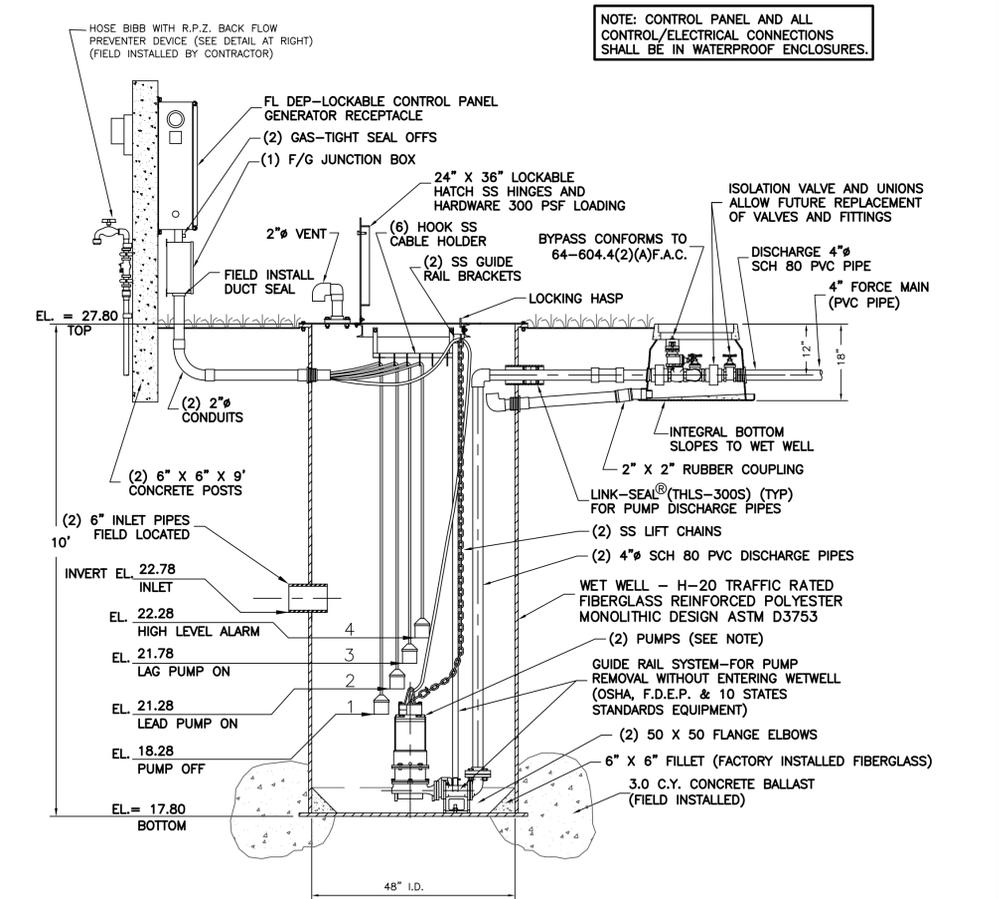
APPROVED BY:
THOMAS G. RADCLIFFE
FL ENGINEER'S LICENSE No. PE 42044

LLOVERAS, BAUR & STEVENS
ENGINEERS - SURVEYORS - PLANNERS
Phone: (727) 784-3965 #LB 000208
29228 U.S. HIGHWAY 19 N. CLEARWATER, FLORIDA 33761

FLORIDA
SHEET 8 OF 12



PLAN

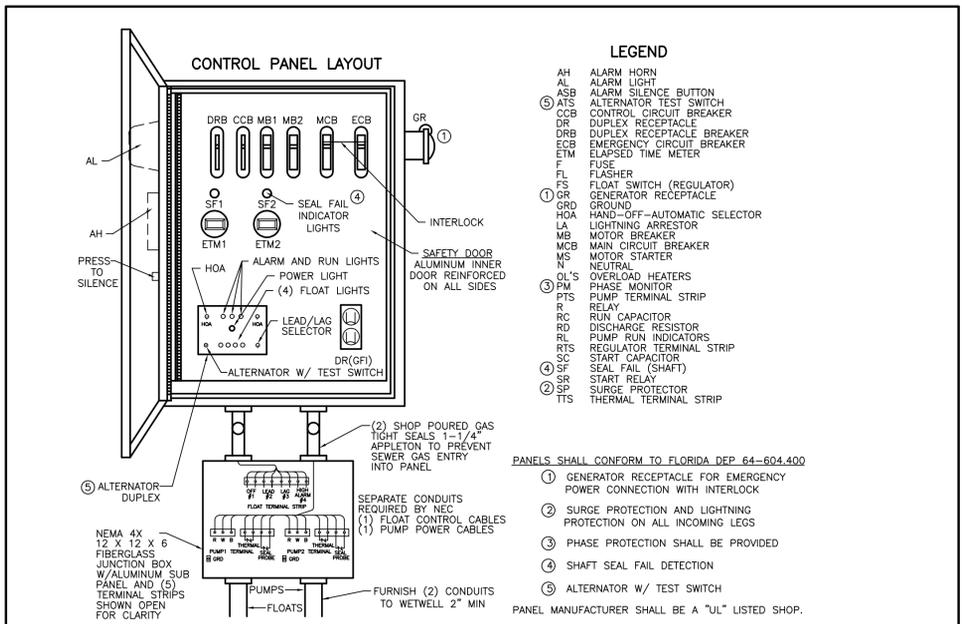


SECTION

LIFT STATION FLOTATION CALCULATIONS:
 MAXIMUM EXPECTED WATER TABLE ELEVATION = 1' BELOW GRADE
 BOTTOM ELEVATION = 17.80
 WEIGHT OF WATER DISPLACED:
 9 V.F. x 2' x 11 x 62.4 LBS./C.F. = 7,057 LBS.
 EFFECTIVE WEIGHT OF CONCRETE IN WATER:
 150 LBS./C.F. - 62.4 LBS./C.F. = 87.6 LBS./C.F.
 BALLAST REQUIRED:
 7,057 LBS. ÷ 87.6 LBS./C.F. = 80.56 C.F. BALLAST REQUIRED
 80.56 C.F. ÷ 27 C.F./C.Y. = 3.0 C.Y. CONCRETE BALLAST REQUIRED

NOTE:
 THIS DRAWING HAS BEEN ADAPTED FROM A TYPICAL MASTER DRAWING SUPPLIED BY TECHNICAL SALES CORPORATION, TAMPA, FLORIDA. ALL EQUIPMENT SPECIFIED IS ILLUSTRATIVE OF THE REQUIRED SPECIFICATION AND "EQUAL" ALTERNATES MAY BE USED SUBJECT TO THE ENGINEER'S APPROVAL. THE CONTRACTOR IS CAUTIONED THAT ALTERNATES MAY OR MAY NOT BE APPROVED AT THE ENGINEER'S SOLE DISCRETION AND ALL PRICING SHALL REFLECT THE MATERIALS, DEVICES, APPURTENANCES AND ACCESSORIES SHOWN HEREON.

LIFT STATION DETAIL
 NOT TO SCALE



LIFT STATION
 POWER CONTROL PANEL DETAIL
 NOT TO SCALE

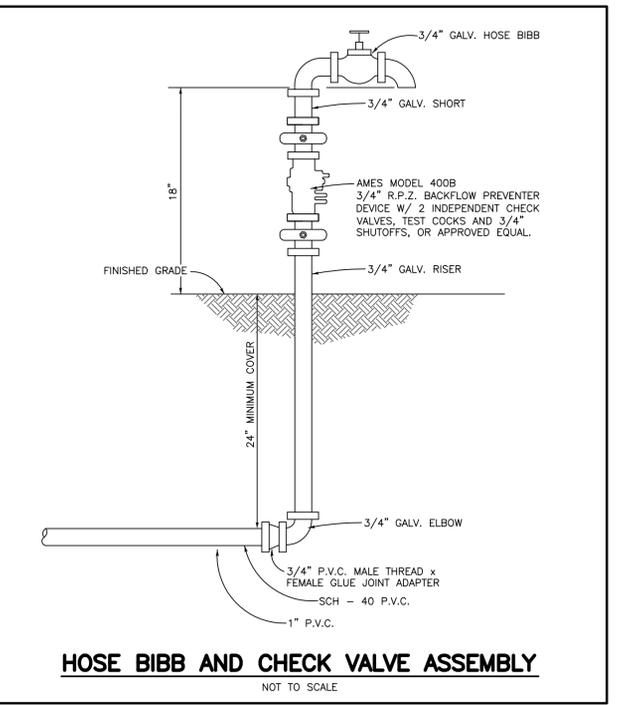
GENERAL NOTES
SEWAGE PUMP:
 1. RATED FOR TWENTY (20) STARTS PER HOUR.
 2. AIR FILLED MOTOR DESIGNED FOR SEWAGE APPLICATION WITH CLASS F INSULATION.
 3. DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE / SILICON CARBIDE) LOCATED OUT OF THE PUMPAGE, IN A SEPARATE OIL FILLED CHAMBER.
 4. HIGH TEMPERATURE BALL BEARINGS B-10 RATING OF 60,000 HOURS. UPPER AND LOWER BEARINGS - SINGLE ROW TYPE.
 5. PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSEPOWER THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE.
 6. SINGLE PHASE MOTORS SHALL BE DUAL WOUND, CAPACITOR START-RUN AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260). THREE PHASE MOTORS SHALL BE DUAL WOUND AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260) OR OPERATE ON 460 VOLT BY CHANGING THE MOTOR LEADS INSIDE THE PUMP.
FIBERGLASS WET WELL: SHALL BE A ONE PIECE UNIT WITH INTEGRAL BOTTOM, WALL AND UPPER FLANGE. THE ENTIRE FIBERGLASS WET WELL SHALL HAVE A DYNAMIC LOAD RATING OF 16,000 FT/LBS. EACH UNIT MUST BE SERIAL NUMBERED TO IDENTIFY THE TEST PROCEDURE. ASTM D 3753 & H-20 SPECIFICATIONS SHALL BE REQUIRED AS MINIMUM.
ALUMINUM HATCH: TSC MODEL-54R (54") ROUND WITH 24"x36" LOCKABLE HATCH, REINFORCED FOR LOAD RATING OF 300 LBS/FT WITH HOLD OPEN SAFETY ARM, LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE.
VALVE BOX: FIBERGLASS COMPOSITE (H-10 TRAFFIC RATED) WITH INTEGRAL BOTTOM. (FOR 1 1/4" AND 2" DISCHARGE PIPING SXS HEADER SYSTEM) SHALL BE 26"x38"x18" WITH 17"x30" LIMITED ACCESS LID.
ACCESSORIES: #304 S/S - GUIDE RAILS, UPPER GUIDE RAIL BRACKETS, CABLE HOLDER, ANCHOR BOLTS AND PUMP LIFTING CHAINS.
VALVES: SHALL BE SEWAGE SERVICE DESIGN LEVER AND WEIGHT CHECK VALVES AND RESILIENT SEAT GATE VALVES OPEN 100%.
PIPING: 4" SCHEDULE 80 PVC OR 4" D.I.P.
FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL (SJ 30 SWENO).
 PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, ALUMINUM HATCHES AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY. THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, SLIDE RAIL ASSEMBLIES AND DISCHARGE PIPING.

LIFT STATION NOTE:
 As part of the Pasco County Utilities approval process, pressures and details of the connection point have been requested. The lift station pumps will be selected based on that information when it becomes available and the design will provide for the capacity outlined below. This plan will be revised as required to include that final design information prior to submission for D.F.E.P. approval.

LIFT STATION DESIGN CRITERIA:
FLOW DATA:
 School:
 Total number of Students = 750 Students
 Total number of Staff = 108 Staff
 Days of use: Weekdays, normal school hours and limited evening activities.
 Chapel:
 Occupancy = 500 seats
 Days of use: Weekends and limited evening activities.
 Anticipated flow:
 750 Students x 14 GPD per Student = 10,500 GPD
 105 Staff x 15 GPD per Staff = 1,620 GPD
 Total flow = 12,120 GPD
 Chapel:
 500 seats x 3 GPD per seat = 1,500 GPD Since the chapel flow is less than the school flow and is not coincident with the school flow it has been ignored.
LIFT STATION FLOW:
 12,120 GPD / 1,440 mins. per day x 4.0 (peak factor) = 33.67 GPM
 A 4" dia. Force main requires a minimum flow of 100 GPM for a 2.5 FPS velocity therefore, the lift station design will be based on 100 GPM.
 The 4' dia. wetwell provides 94 gallons of storage per vertical foot and a minimum pump time of 2.5 mins. is desired
 Three vertical feet of storage (282 gallons) of storage is provided.



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on DATE using a SHA-1 authentication code.
 Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.



HOSE BIBB AND CHECK VALVE ASSEMBLY
 NOT TO SCALE

NOTES:
 1. ELEVATIONS SHALL BE MEAN SEA LEVEL DATUM.
 2. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES BEFORE WORK IS STARTED.
 3. CONTRACTOR SHALL VERIFY DIMENSIONS, CLEARANCES, ORIENTATIONS AND LOCATIONS OF ALL EQUIPMENT WITH THE RESPECTIVE CONTRACTORS.
 4. INSTALLATION OF COVER, PUMP ANCHOR BOLTS, GUIDE RAILS, AND RELATED COMPONENTS SHALL BE COORDINATED WITH APPROPRIATE SUPPLIERS.
 5. THE WETWELL EXCAVATION SHALL REMAIN EQUIPPED UNTIL BACKFILLING IS COMPLETED.
 6. A 1" WATER SERVICE SHALL BE INSTALLED WITH A 3/4" RPZ B.P.D.
 7. CONTRACTOR SHALL VERIFY POWER SUPPLY AND COORDINATE WITH POWER COMPANY AND INSTALL ELECTRIC SERVICE TO LIFT STATION.
 8. PANEL DEADFRONT CONFIGURATION MAY DIFFER FROM THAT SHOWN ABOVE.
 9. ELECTRICAL CONTROLS SHALL BE AS RECOMMENDED BY THE LIFT STATION MANUFACTURER.
 10. PUMP CONTROLS SHALL BE SET FOR ALTERNATING SEQUENCE.
 11. PROVIDE WEATHERPROOF WIRING DIAGRAM ON INSIDE OF CONTROL PANEL DOOR.
 12. SENSOR CABLES AND POWER CABLES ARE NOT TO BE POSITIONED ON OR NEAR GUIDE RAILS.
 13. EQUIPMENT SHALL BE A MANUFACTURED BY "EBARA". OTHER EQUIPMENT MAY BE USED SUBJECT TO THE APPROVAL OF THE ENGINEER, OWNER, AND GOVERNING AGENCIES. IF OTHER EQUIPMENT IS USED, FULL SPECIFICATIONS SHOULD BE INCLUDED WITH SHOP DRAWING SUBMITTALS.
 14. ALL INTERIOR PIPING SHALL BE FLANGED JUNE DUCTILE IRON.
 15. PIPE NUMBERS SHALL BE LABELLED ON PIPING IN VALVE BOX.
 16. PUMPS SHALL BE SET FOR PROPER ROTATION.
 17. ALL EXPOSED MATERIAL SURFACES OTHER THAN STAINLESS STEEL OF ALUMINUM SHALL BE PAINTED TO GOVERNING AGENCIES SPECIFICATIONS.
 18. FURNISH OPERATING MANUAL AND WARRANTY TO THE OWNER AND INCLUDE A COPY TO THE ENGINEER.
 19. CONTRACTOR SHALL SUBMIT 4 SETS OF SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO THE ORDERING OF EQUIPMENT. EACH SET OF THESE DRAWINGS SHALL INCLUDE A MINIMUM OF THE FOLLOWING:
 A. JOB NAME, DATE & CONTRACTOR'S STAMP APPROVAL.
 B. DETAILED DIMENSIONS OF ALL PROPOSED EQUIPMENT.
 C. DETAILED DIMENSIONS AND SPECIFICATIONS OF ALL RELATED STRUCTURES, IF DIFFERENT THAN SHOWN HEREON.
 D. MATERIALS OF ALL EQUIPMENT, STRUCTURES AND PIPING.
 E. TYPES & COLORS OF FINISHING MATERIALS REQUIRED.
 F. VERIFIED PUMPING CURVES & TECHNICAL DATA.

SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

No.	DATE	REVISIONS	DRN./CKD./APP.

PLATO ACADEMY - PASCO COUNTY
LIFT STATION PLAN AND DETAILS

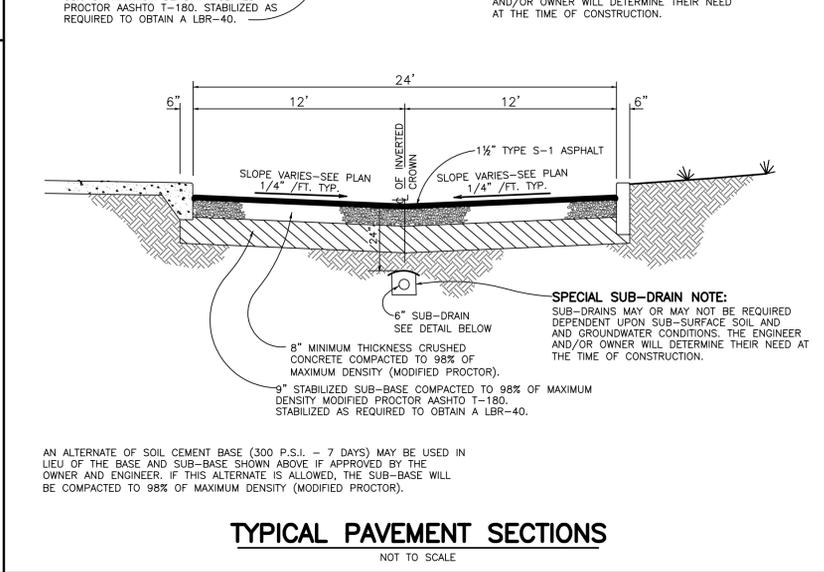
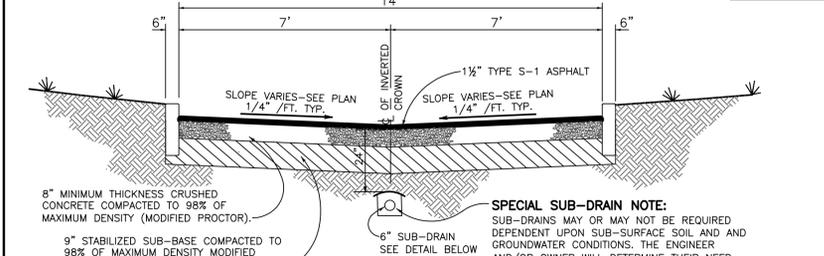
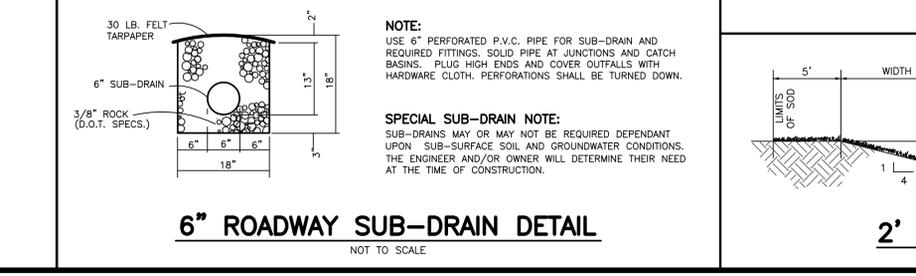
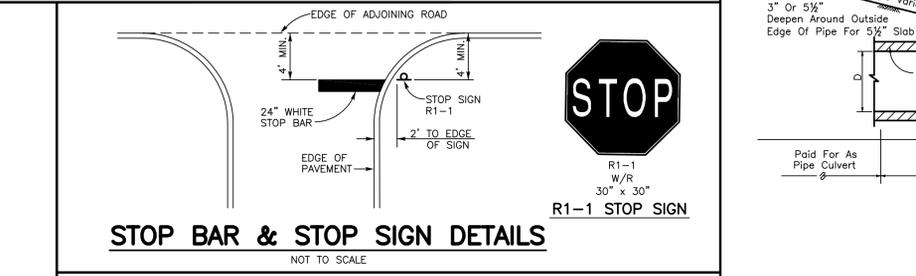
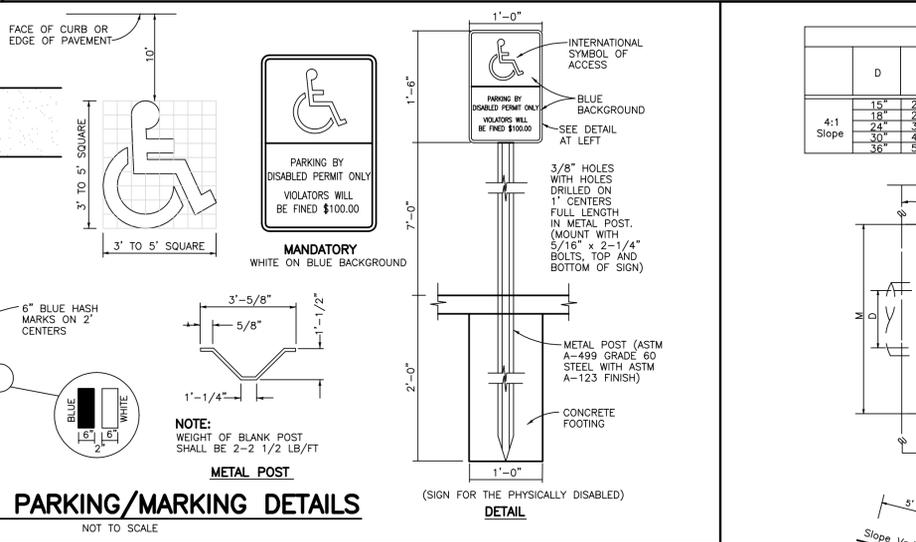
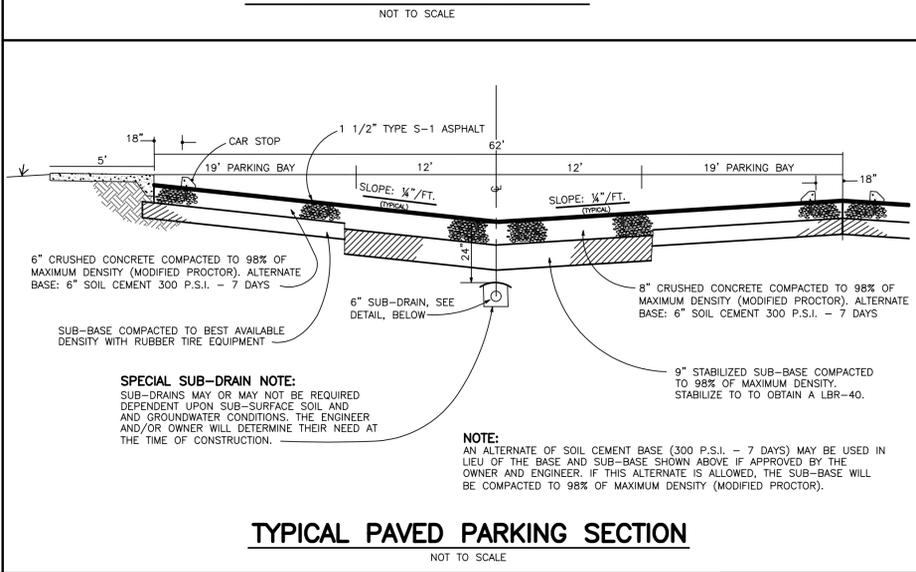
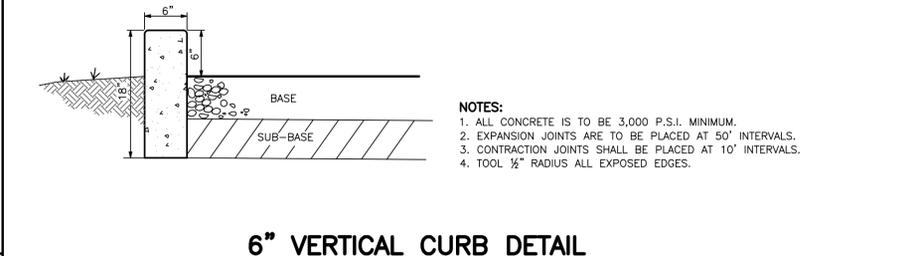
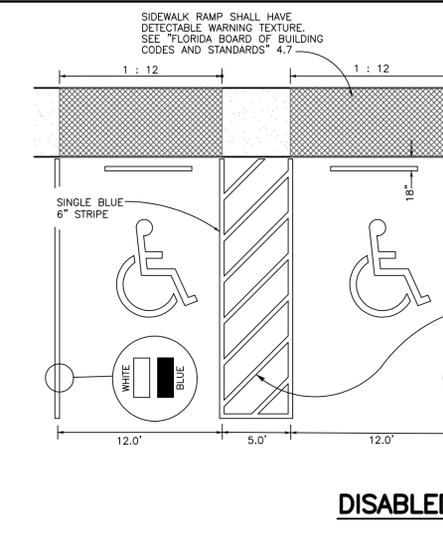
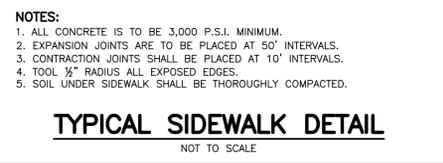
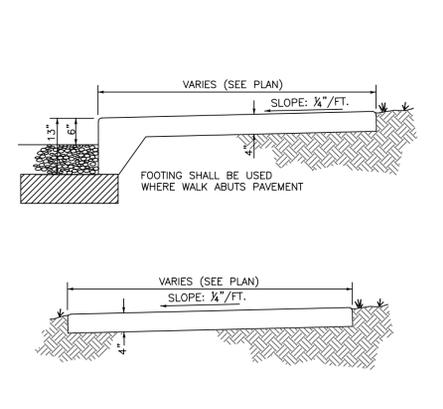
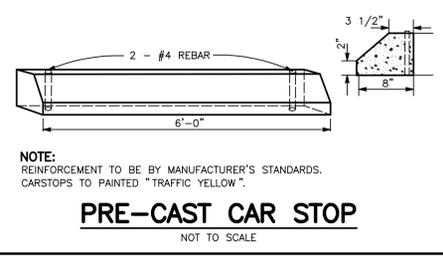
PASCO COUNTY
 PREPARED FOR: SUPERIOR SCHOOLS CORP.
 PETER CHRISTOPOULOS
 MANAGER OF PLATO ACADEMY SCHOOLS CORP.
 ARCADIA DEVELOPMENT, LLC
 2045 PALMETTO STREET
 CLEARWATER, FL 33765
 PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
 DES.: T.G. Radcliffe
 DRN.: KB
 CKD.:
 SCALE: AS SHOWN
 JOB No.: 38156

APPROVED BY: THOMAS G. RADCLIFFE
 FL ENGINEER'S LICENSE No. PE 42044

LLOVERAS, BAUR & STEVENS
 ENGINEERS - SURVEYORS - PLANNERS
 Phone: (727) 784-3965 #LB 000208
 29228 U.S. HIGHWAY 19 N. CLEARWATER, FLORIDA 33761

SHEET 9 OF 12

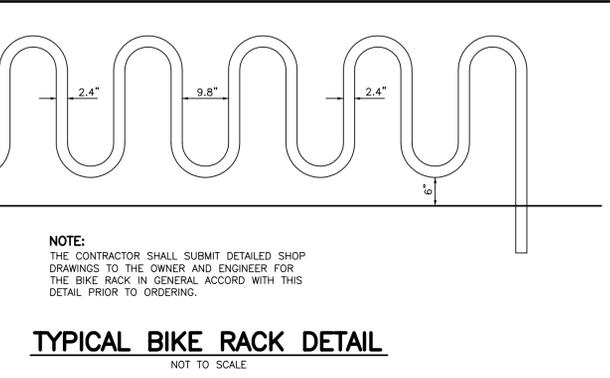
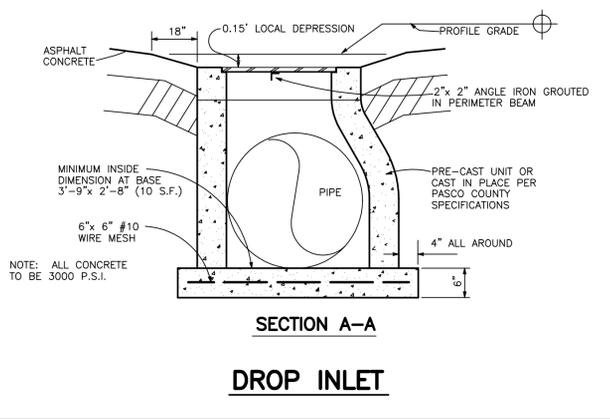
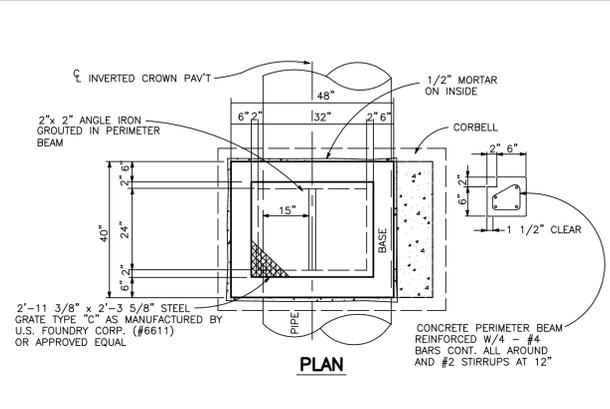
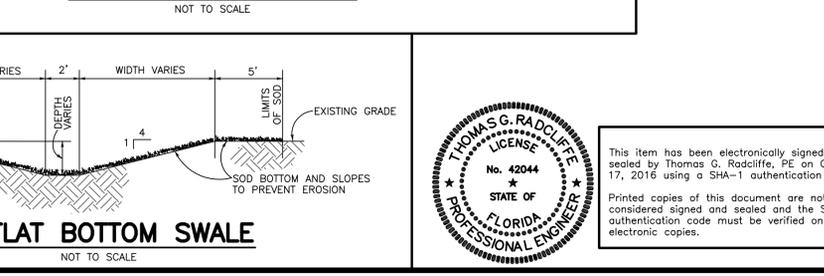
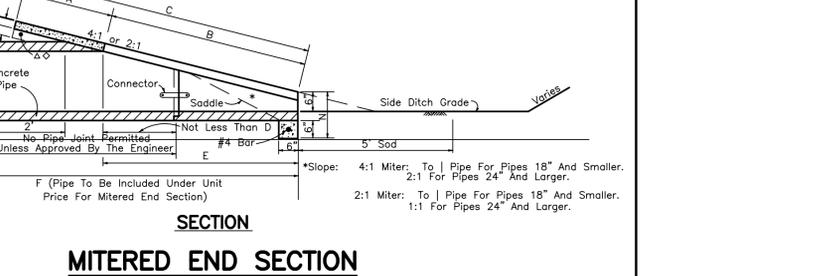


DIMENSIONS

SLOPE	D	X	A	B	C	E	F	G	M				N
									Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	
4:1	15"	2'-9"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	7.21'	9.79'	12.37'	1.39'
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.50'	10.08'	13.22'	1.51'
	24"	3'-0"	2.63'	7.18'	9.71'	7.03'	11'	1.73'	5.50'	8.32'	12.33'	15.75'	1.75'
	30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58'	18.83'	1.99'
	36"	5'-1"	2.87'	11.31'	14.18'	11.03'	15'	2.24'	6.67'	11.75'	16.83'	21.92'	2.33'

TOP VIEW-SINGLE PIPE

SECTION MITERED END SECTION
NOT TO SCALE



INDEX OF DRAWINGS

SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

PLATO ACADEMY - PASCO COUNTY
PAVING AND DRAINAGE DETAILS

PASCO COUNTY
PREPARED FOR: SUPERIOR SCHOOLS CORP.
PETER CHRISTOPOULOS
MANAGER OF PLATO ACADEMY SCHOOLS CORP.
ARCADIA DEVELOPMENT, LLC
2045 PALMETTO STREET
CLEARWATER, FL 33765
PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
DES.: T.G. Radcliffe
DRN.: RRD
CKD.: [Signature]
SCALE: AS SHOWN
JOB No.: 38156

APPROVED BY:
THOMAS G. RADCLIFFE
FL ENGINEER'S LICENSE No. PE 42044

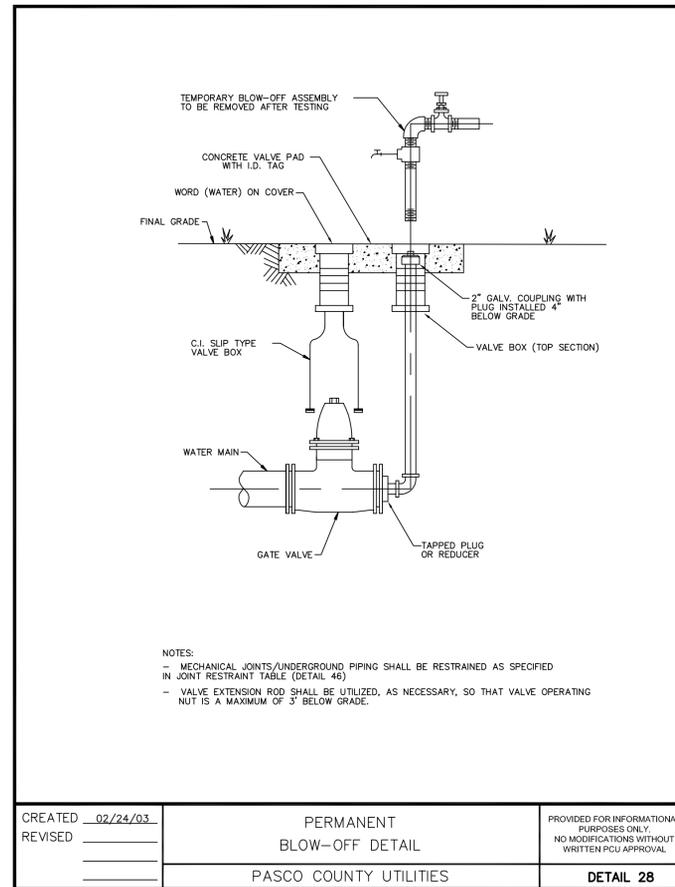
LLOVERAS, BAUR & STEVENS
ENGINEERS - SURVEYORS - PLANNERS
Phone: (727) 784-3965 #LB 000208
29228 U.S. HIGHWAY 19 N.
CLEARWATER, FLORIDA 33761

FLORIDA PROFESSIONAL ENGINEER
No. 42044
STATE OF FLORIDA

This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

No. DATE REVISIONS DRN.,CKD.,APP.

SHEET 10 OF 12



PIPE RESTRAINT LENGTHS IN FEET COMMON FITTINGS

WATER MAINS - TEST PRESSURE 150 PSI						
FITTING TYPE						
PIPE SIZE	11-1/4°	22-1/2°	45°	90°	DEAD END	
4"	2'	4'	8'	20'	45'	
6"	3'	6'	12'	28'	63'	
8"	4'	7'	15'	36'	82'	
10"	4'	9'	18'	43'	98'	
12"	5'	10'	21'	50'	116'	
16"	6'	13'	26'	63'	148'	
20"	7'	15'	31'	76'	179'	
24"	9'	17'	36'	87'	208'	

FORCE MAINS - TEST PRESSURE 100 PSI						
FITTING TYPE						
PIPE SIZE	11-1/4°	22-1/2°	45°	90°	DEAD END	
4"	1'	3'	6'	13'	30'	
6"	2'	4'	8'	19'	42'	
8"	2'	5'	10'	24'	55'	
10"	3'	6'	12'	29'	66'	
12"	3'	7'	14'	34'	77'	
16"	4'	8'	18'	42'	99'	
20"	5'	10'	21'	50'	119'	
24"	6'	11'	24'	58'	139'	

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE FITTING ALONG THE PIPE IN BOTH DIRECTIONS (EXCEPT DEAD ENDS).

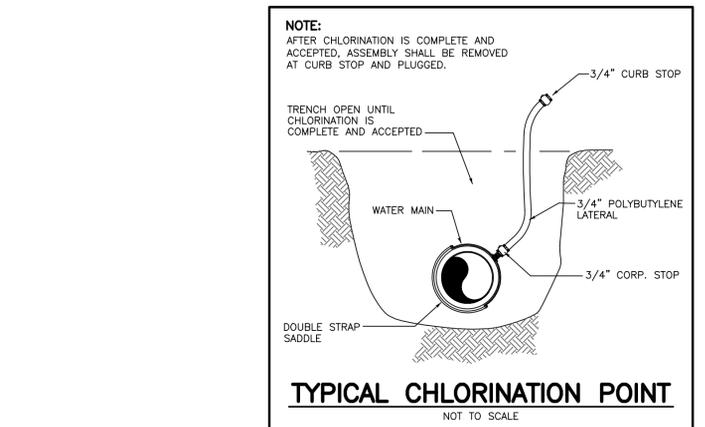
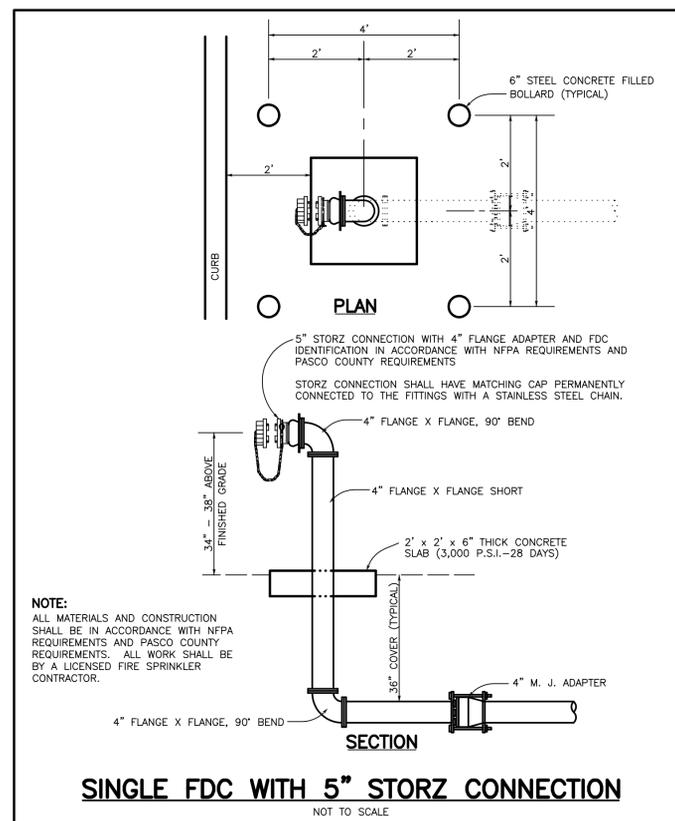
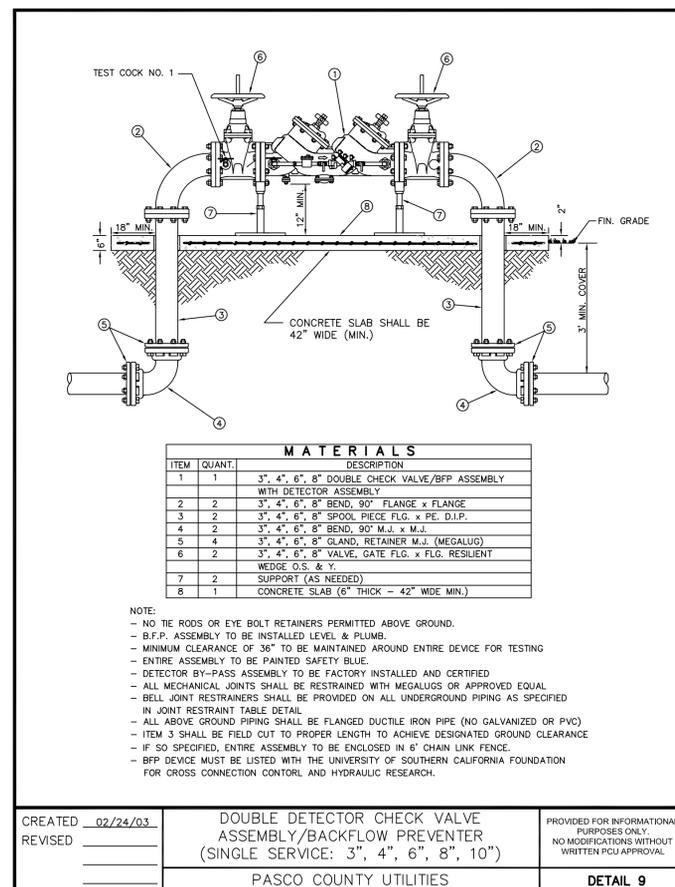
CREATED	02/24/03	RESTRAINED JOINT TABLE COMMON FITTINGS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISOR		PASCO COUNTY UTILITIES	DETAIL 31

PIPE RESTRAINT LENGTHS IN FEET TEES (BRANCH SIDE)

WATER MAINS - TEST PRESSURE 150 PSI										
BRANCH SIZE										
RUN SIZE	BRANCH SIZE									
	3"	4"	6"	8"	10"	12"	16"	20"	24"	
3"	6'	14'	30'	—	—	—	—	—	—	
4"	2'	11'	28'	44'	—	—	—	—	—	
6"	1'	2'	22'	40'	52'	—	—	—	—	
8"	1'	1'	16'	35'	48'	62'	—	—	—	
10"	1'	1'	10'	30'	44'	58'	83'	—	—	
12"	1'	1'	3'	25'	40'	55'	80'	103'	—	
16"	1'	1'	1'	14'	31'	48'	75'	98'	119'	
20"	1'	1'	1'	2'	22'	40'	69'	94'	116'	
24"	1'	1'	1'	1'	11'	31'	63'	89'	111'	

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE TEE ALONG THE BRANCH FOR THE DISTANCE INDICATED. A MINIMUM OF 5 FEET OF RESTRAINED PIPE MUST BE INSTALLED ON BOTH RUNS OF THE TEE. MEGALUG TYPE RESTRAINERS ARE REQUIRED ON ALL JOINTS.

CREATED	02/24/03	RESTRAINED JOINT TABLE TEES (BRANCH SIDE)	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISOR		PASCO COUNTY UTILITIES	DETAIL 32



SHEET No.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT AND EROSION CONTROL PLAN
4	GRADING PLAN
5	GRADING DETAILS
6	DRAINAGE PIPING PLAN
7	WATER AND SANITARY SEWER PLAN
8	DETENTION AREA PLAN AND DETAILS
9	LIFT STATION PLAN AND DETAILS
10	PAVING AND DRAINAGE DETAILS
11	WATER AND SANITARY SEWER DETAILS
12	SITE CONSTRUCTION SPECIFICATIONS

No.	DATE	REVISIONS	DRN./CKD./APP.

PLATO ACADEMY - PASCO COUNTY WATER AND SANITARY SEWER DETAILS

PASCO COUNTY
 PREPARED FOR: SUPERIOR SCHOOLS CORP.
 PETER CHRISTOPOULOS, MANAGER OF PLATO ACADEMY SCHOOLS CORP.
 ARCADIA DEVELOPMENT, LLC
 2045 PALMETTO STREET, CLEARWATER, FL 33765
 PHONE: (727) 799-1200 ext. 1041

DATE: OCT. 17, 2016
 DES.: T.G. Radcliffe
 DRN.: RRD
 CKD.: [Signature]
 SCALE: AS SHOWN
 JOB No.: 38156

APPROVED BY: THOMAS G. RADCLIFFE
 FL ENGINEER'S LICENSE No. PE 42044

FLORIDA

LLOVERAS, BAUR & STEVENS
 ENGINEERS - SURVEYORS - PLANNERS
 Phone: (727) 784-3965 #LB 000208
 29228 U.S. HIGHWAY 19 N. CLEARWATER, FLORIDA 33761

SHEET 11 OF 12



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code.
 Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

SITE CONSTRUCTION SPECIFICATIONS

I. GENERAL

A. DEFINITIONS

Reference is made in the construction specifications, standards and plans to some agencies and entities that might have jurisdiction over this project. The agencies and entities are abbreviated by the tabulation below and shall mean the latest requirements, editions and/or amendments of each:

Section numbers referencing Florida Department of Transportation Standard Specifications for Road and Bridge Construction are given herein according to the number system used in the 1991 Edition. Subsequent editions may be renumbered. The intent is the appropriate section as stated and shall apply in spite of any renumbering.

ABBREVIATION	AGENCY OR ENTITY
F.D.E.P. -----	Florida Department of Environmental Protection
F.D.O.T. -----	Florida Department of Transportation
COUNTY -----	A political subdivision of the State of Florida
MUNICIPALITY -----	County, city or town
FDHJ -----	Florida Department of Health
CHU -----	County Health Unit
ASTM -----	American Society of Testing and Materials
AWWA -----	American Water Works Association
USASI -----	United States of America Standards Institute
NSF -----	National Sanitation Foundation
SWFWM -----	Southwest Florida Water Management District
AASHTO -----	American Association of State Highway & Transportation Officials
CS -----	U. S. Department of Commerce, Commercial Standards
EPA -----	Environmental Protection Agency
ANSI -----	American National Standards Institute (formerly U.S.A.S.I. & A.S.A.)

The words "shall" and "will" are mandatory. The word "may" is optional. Where a particular brand name appears with "or equal", the intent is to denote a product of quality standard; therefore another brand of equal quality may be used, subject to the Engineer's approval.

The Engineer shall mean Lloveras, Baur and Stevens.

The Contractor shall mean the person or firm performing the proposed installations.

The Owner shall mean the person, persons, firm, company, partnership or corporation developing the project.

The Plans shall mean the site construction (working) designed drawings prepared by Lloveras, Baur and Stevens. The Plans depict the locations and elevations of each of the facilities, and are exclusive of these specifications in the specification of material types.

The Specifications shall mean the written detailed particulars of the project facilities which are, although part of the Plans, not intended to supercede plan notations regarding general material types.

B. INTENT OF PLANS AND SPECIFICATIONS

The intent of the plans and specifications is to develop a project by acceptable engineering practice that is respectful of the public's safety, health and welfare, and conforms to the requirements of any agency or entity having jurisdiction.

The Contractor shall obtain all permits, licenses and approvals required of the Contractor by the governing authority and from any and all agencies having jurisdiction on the project prior to proceeding with any portion or portions of the project. The Contractor shall also comply with the requirements of the Owner or any governmental agency regarding bonds, insurance, etc., if required.

The Contractor is governed by the requirements of all permits, licenses, approvals, etc., that have been secured for the construction whether obtained by the Contractors' forces or by others.

The contents of the plans, details and specifications prepared by the Engineer shall be used with due regard to their meaning, function and purpose. The Engineer shall not be responsible for any deviations, unless written approval is granted by the Engineer.

All work or materials shown on the plans and not mentioned in the specifications, or any work specified and not shown on the plans, shall be furnished, performed, and done by the Contractor as if the same were both mentioned in the specifications and shown on the plans.

Should the Contractor, in preparing his bid, find anything necessary for the construction of the project that is not mentioned in the specifications or shown on the plans, or find any other discrepancy in the specifications and plans, he shall notify the Engineer who will furnish an explanation.

Material types shall be as shown on the plans. All material types shown in the specifications are not applicable to each and every project or situation, and the specified material shown on the plan sheets shall govern. The plans do not necessarily denote actual pipe lengths. The actual length between any junctions shall be established on the site.

The Contractor shall examine the plans, specifications and site conditions in detail, both prior to commencing construction, and also continually until the site construction is complete.

The Contractor shall insure paving and drainage improvements for a period of 18 months, and all other improvements for a period of 18 months after final governmental acceptance and the Owner's and Engineer's acceptance of all workmanship, materials and equipment which he installed and furnished. Any defects caused by the Contractor's forces or suppliers within the period specified shall be corrected without additional cost to the Owner. Any defects that occur within the period specified, which are proven beyond the Contractor's control, will not be the Contractor's responsibility to correct.

The Engineer shall not be responsible for any acts or omissions of any Contractor or Contractors or any other person performing work on this project. The Engineer also will not be responsible for the construction procedures, safety precautions and programs incident thereto.

Acceptance by the Owner, Engineer and/or governing authority shall not warrant the quality of the work.

Each Contractor shall comply with all applicable ordinances and laws regarding fire prevention and conduction, dust, noise, safety, sanitary and similar public health and safety aspects. He shall also supply the Engineer, governing agency, and owner a set of As-Built Plans (Record Drawings) of each utility he installs at no extra cost.

C. JURISDICTION

The Contractor shall be responsible for coordinating his work to ascertain that all requirements of duly authorized agencies, entities, political subdivisions of the State of Florida, municipalities or their administrative divisions (sections) have been met.

II. DETAILED SPECIFICATIONS

A. TREE PROTECTION AND REMOVAL

The Contractor shall obtain any and all necessary tree permits.

Tree removal shall be done in a manner whereby the remaining trees will not be damaged. Should damage occur to any protected tree, the Contractor doing said damage shall satisfy the requirements of the County or municipality. The Engineers will not locate or designate the trees to remain or to be removed.

Existing trees which have been designated to remain shall be protected per the requirements of the municipality and/or agency having jurisdiction.

B. CLEARING AND GRUBBING

Site conditions shall include existing utilities, either aerial or underground. The exact locations of existing utilities shall be determined by the Contractor. The Contractor shall also be responsible for notifying all existing utility companies prior to and during construction. The Contractor shall be responsible for the protection of all utilities, and shall also comply with the requirements of all affected utility companies, public or private.

Clearing and grubbing shall proceed with due regard for all permits, ordinances and laws that may apply to trees, trash or other unsuitable material disposal. All trash or tree burning, if allowed, shall be performed in a manner that does not create a public nuisance and shall be properly permitted. No unsuitable materials, such as vegetation, trash, trees or clay, shall be disposed of by burying unless approval is obtained from the Engineer. Additional permitting may be required by a proposal to bury.

C. GRADING

All earth moving shall be completed as indicated on the paving, drainage and detail Sheets. The Engineer shall be notified of any known or encountered "sinkhole" or other unusual natural fault development so that he may notify any applicable public authority.

The Contractor shall be responsible for dust control, erosion control, and any other measures necessary to protect adjacent property or the environment from harm due to the work.

D. DRAINAGE

The storm drainage system shall be installed as shown on the plans and as specified.

Storm drainage pipe material shall be of the sizes and material as shown on the plans. The pipe material shall be reinforced concrete unless otherwise shown on the plans.

The trench widths shall be as narrow as possible, and bedding shall be well compacted around and above the haunches as required to stabilize the pipe.

Installation shall conform to the F.D.O.T. Specifications, Sections 125 and 430. All pipe shall be installed with proper fittings at plan grade. All discharge open ends of pipe are to be protected with headwalls, mitered ends and/or rip-rap with additional rip-rap as required by the Engineer or governing agency to prevent erosion. Rip-rap shall conform to the plans or F.D.O.T. Specifications, Section 530. All pipe and appurtenances (structures) shall be clean and free of debris upon completion.

Circular reinforced concrete pipe shall conform to ASTM Specifications C-76, Class III, Wall B. Elliptical concrete pipe shall conform to ASTM Specifications C-507. Gaskets shall conform to F.D.O.T. Specifications, Section 942, the specifications of ASTM C-361, and the manufacturer's recommendations. Circular and elliptical pipe lifting holes shall be permanently mortar closed before backfilling.

Corrugated steel metal pipe and pipe arch shall have one-half inch minimum deep corrugations, and shall be galvanized and hot dip asphalt coated conforming to AASHTO M-36 and AASHTO M-190 (Type A) specifications unless otherwise indicated on the plans. All joints shall be water tight and resist leakage at a hydrostatic pressure of 2 psi. Gauges shall be shown on the plans; gauges are F.D.O.T. specifications.

Corrugated aluminum alloy pipe and pipe arch shall conform to the F.D.O.T. specifications, Section 945 and also to AASHTO M-196. The pipe and pipe arches shall not be asphalt coated unless shown on the plans or as required by the governing agency.

Gaskets for corrugated steel or aluminum pipe shall be in accordance with the manufacturer's recommendations and shall be a minimum width of six inches and a minimum thickness of three-eighth inches.

Underdrain pipe shall conform to the specifications of ASTM D-3033 and F.D.O.T. specifications, Section 440. All material and installation shall be as shown on the plans or per the governing agency and Engineer's requirements. The perforations shall be turned down and conform to the specifications of AASHTO M-189.

Catch basins shall be constructed of precast concrete. Precast concrete catch basins shall conform to ASTM C-76, Table III, Wall B, F.D.O.T. Index No. 200-F.

The catch basin top may be cast in place or precast. Each top shall contain a two-foot diameter minimum cast iron frame and cover placed within the concrete.

The bottom of the throat opening shall be below the flow line of the curb, and the throat vertical height cannot vary more than one-half inch from the detailed plan dimension.

Drop inlets shall be constructed of precast concrete. Precast concrete drop inlets shall conform to ASTM C-76, Table III, Wall B.

Junction boxes may be constructed of the same materials as catch basins, drop inlets or sanitary manholes. An inside or outside drop unit is not required. A two-foot diameter minimum cast iron frame and cover is required.

All covers shall be traffic bearing unless otherwise noted on the plan and in accordance with the governing agencies' requirements.

E. EXCAVATION

All unsuitable material shall be removed such that no material remains within a field determined dimension of the outer limits of any pavement, curb or building pad. Unsuitable material shall include, but not be limited to, vegetation, palmets, trash, trees, tree limbs, tree stumps, tree roots or clay. All clay, clayey, impervious soils or unsuitable soils shall be removed from paved areas to a minimum depth of 24 inches from the bottom of the pavement base, and shall be replaced with suitable material for compaction. The suitable material shall be compacted in layers to meet the required density. Subdrains may be installed as necessary to meet the required density. In no case shall any impervious material remain in the pavement area such that water will be required from entering the subdrain system.

F. SANITARY SEWERS

The entire sanitary sewer system shall conform to the requirements of the F.D.E.P., and also the requirements of the local utility receiving the wastewater. The system shall be constructed as shown on the plans, including the details.

Sanitary sewer pipe material shall be of the sizes and material as shown on the plans. The pipe material shall be polyvinyl-chloride (P.V.C.), unless otherwise shown on the plans.

Main line pipe shall either be polyvinyl-chloride P.V.C., ductile iron, cast iron or vitrified clay.

P.V.C. sanitary sewer pipe shall conform to specifications and ASTM D-3034 SDR-26.

Ductile iron pipe and cast iron pipe, fittings, specials, joints and tbe for p?nstallation shall conform to the specifications for the water distribution system as mentioned herein. Ductile iron pipe and cast iron pipe do not have to be cement-lined unless required by the local utility receiving the wastewater.

Vitrified clay pipe, fittings, specials and joints shall be extra strength and shall conform to ASTM C-700, ASTM C-301, ASTM C-425 and ASTM C-594 specifications.

Joints shall be Type III, compression "O" ring or Type B, compression sleeve. Infiltration shall not exceed ASTM C-425 or governing agency's specifications. Connections to cast iron shall be by use of adapters or per the manufacturer's recommendations. Installation shall conform to ASTM C-12 specifications, governing agencies' requirements, and/or manufacturer's recommendations.

The trench for the sewer line shall be excavated to a minimum width and depth. Pipe laying shall commence at the lowest point so that the spigot ends point downstream in the direction of flow. The trench shall then be backfilled, protecting the pipe from vertical or lateral movement. All lines and laterals shall be installed in straight lines with proper fittings at the plan grade. The grade shall not rise or sag more than one inch vertically between two successive manholes; the horizontal alignment between two successive manholes shall not vary more than three inches.

Gravily sanitary sewers (and force mains) crossing under water mains shall be laid to provide 18 inches minimum vertical clearance between the invert of the higher pipe to the crown of the lower pipe. The crossing shall be arranged so that the sewer joints and the water joints are equidistant from the point of crossing with no less than 10 feet between any two joints. Where the minimum 18 inch vertical separation cannot be maintained, the sanitary sewer shall be placed in a sleeve or encased in concrete for 20 feet centered on the point of crossing.

Where the sanitary sewer must cross over a water main, the pipes shall be centered as indicated above, and the water main shall be placed in a sleeve or encased in concrete for 20 feet centered on the point of crossing.

Gravily sanitary sewers shall be installed at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge-to-edge. In cases where it is not practical to maintain the 10 foot separation, the water main shall be installed in a separate trench, or on an undisturbed earth shelf located on one side of the sewer, and at an elevation so that the bottom of the water main is at least 18 inches above the top of the sanitary sewer. The water and sanitary sewer joints shall be staggered.

Force mains shall be installed at least 10 feet horizontally from any existing or proposed water main.

At road crossings with less than 30 inches of cover, and any part of the sewer line that may have less than 12 inches of cover, the sanitary sewer shall be installed in a sleeve or concrete encased vitrified clay pipe for the length the condition exists. Where trenches cross existing roads by the open-cut method, the backfill shall be placed in 12 inch layers, and carefully tamped until compacted to the same density of the undisturbed soil.

The ends of pipe shall be well marked for later identification and location. These, as well as the location of manholes, wyes and service laterals, shall be shown on the As-Built Plans. The As-Built data shall be furnished to the Engineer and Owner by the Contractor upon completion of the work.

Manholes may be constructed of solid clay brick or precast reinforced concrete. Solid clay brick shall conform to the specifications of ASTM C-32. Precast reinforced concrete shall conform to the specifications of ASTM C-478.

All manholes are to be water tight as required by the utility and as shown on the Plans, and also have channeled inverts as shown on the plans. Brick manholes shall be made water tight for p? on the outside walls only, as shown on the plans. Precast reinforced concrete manholes are to be made water tight by a coat(s) of bituminous material and other acceptable methods at the joints of sections. The manholes shall be constructed so that the rim may be adjusted to comply with the different finish grade conditions which may arise. Each manhole shall contain a two-foot diameter minimum cast iron frame and cover. Ladder rungs or steps are not to be installed in any manhole.

A drop pipe unit shall be provided for a sewer line entering a manhole at an elevation more than 24 inches above the lowest manhole channel invert.

Cleanouts shall be constructed as shown on the plans. The entire system shall be flushed, lamped, television inspected (including tape), and visually inspected prior to acceptance.

Force mains shall be constructed using the same material and installation specifications (including thrust blocks and fittings) as the water distribution system as mentioned herein and shown on the plans.

G. WATER DISTRIBUTION SYSTEM

The entire water distribution system shall conform to the requirements of the FDHJ, and also the requirements of the local utility supplying the water and fire protection. The system shall be constructed as shown on the plans, including the details.

Water main pipe material shall be of the sizes and material as shown on the plans. The pipe material shall be polyvinyl-chloride (P.V.C.) unless otherwise shown on the plans.

Main line pipe and fittings shall be DR-26 P.V.C., DR-21 P.V.C., DR-18 P.V.C., cast iron pipe (C.I.P.), or ductile iron pipe (D.I.P.).

Metallic tape or wire shall be placed in the same trench with all P.V.C. water mains in accordance with the governmental agencies' requirements.

All P.V.C. water mains two inches and smaller shall be DR-21. The DR-21 P.V.C. pipe shall be designed in accordance with AWWA C-900 standards. P.V.C. pipe shall be made from Class 12454-A or Class 12454-B virgin compounds conforming to AWWA C-900, Table 2, P.V.C., 1120, DR-21 as defined in ASTM D-1785. The pipe shall be color coded with a stamp thereon denoting a pressure rating of 160 psi at 73.4 degrees Fahrenheit (23 degrees Centigrade). The pipe, fittings and specials shall conform to the NSF specifications, and shall bear the NSF approval label for potable water. The DR-21 P.V.C. couplings and joining materials shall conform to AWWA C-900. All DR-21 pipe, couplings and fittings shall be adaptable for use with cast iron pipe or ductile iron pipe.

All four inch P.V.C. water mains shall be DR-18. The DR-18 P.V.C. pipe shall be designed in accordance with AWWA C-900 standards. P.V.C. pipe shall be made from Class 12454-A or Class 12454-B virgin compounds conforming to AWWA C-900, Table 2, P.V.C., 1120, DR-18, as defined in ASTM D-1785. The pipe shall be color coded with a stamp thereon denoting a pressure rating of 200 psi at 73.4 degrees Fahrenheit (23 degrees Centigrade). The pipe, fittings and specials shall conform to the NSF specifications, and shall bear the NSF approval label for potable water. The DR-18 P.V.C. couplings and joining materials shall conform to AWWA C-900. All DR-18 pipe, couplings and fittings shall be adaptable for use with cast iron pipe or ductile iron pipe.

All P.V.C. water mains six inches and larger shall be DR-18. The DR-18 P.V.C. pipe shall be designed in accordance with AWWA C-900 standards. P.V.C. pipe shall be made from Class 12454-A or Class 12454-B virgin compounds conforming to AWWA C-900, Table 2, P.V.C., 1120, DR-18 as defined in ASTM D-1785. The pipe shall be color coded with a stamp thereon denoting a pressure rating of 150 psi at 73.4 degrees Fahrenheit (23 degrees Centigrade). The pipe, fittings and specials shall conform to the NSF specifications, and shall bear the NSF approval label for potable water. The DR-18 P.V.C. couplings and joining materials shall conform to bel for AWWA C-900. All DR-18 pipe, couplings and fittings shall be adaptable for use with cast iron pipe or ductile iron pipe.

The cast iron pipe and fittings shall be Class 22 (150 psi pressure rating), and shall be cement mortar lined with push-on or approved alternate joints. The cast iron pipe, fittings, joints and gaskets shall conform to the specifications of ANSI A21.1, ANSI A21.4, ANSI A21.6, ANSI A21.8, ANSI A21.10, ANSI A21.11, and AWWA C-600. Installation shall conform to ANSI A21.1 specifications for laying condition "B" with tamped backfill and the manufacturer's recommendations.

The ductile iron pipe and fittings shall be designed in accordance with ANSI specification A21.50, and shall conform to ANSI Specification A25.51. The minimum thickness Class for pipe four inches and smaller shall be Class 51. The minimum thickness Class for pipe six inches and larger shall be Class 50.

Ductile iron pipe shall be coated as specified for cast iron pipe. Mechanical joints and slip-on type joints shall conform to ANSI Specification A21.11. Mechanical joint glands shall be grey cast iron. Flanged piping shall have 125 pound flanges conforming to the requirements of ANSI Specification B16.1.

Fittings shall be rated for not less than 150 psi working pressure, shall be suitable for the service required, and shall conform to the requirements of ANSI Specification A21.10. Fittings shall be lined and coated as specified for cast iron pipe.

Unless otherwise shown on the plans, all pipe including P.V.C., D.I.P., and C.I.P. shall have a minimum cover of 24 inches in unpaved finish grade areas, and a minimum cover of 36 inches in paved areas and public rights-of-way.

The interior of all pipe and fittings shall be kept clean and free from dirt or foreign matter at all times. Thrust blocks shall be installed at all fittings as shown in the table of the plans. Precast thrust blocks may be allowed subject to Engineer's and governing agency's approval.

Upon completion of the mains, the water system shall be subjected to a hydrostatic pressure test. All air shall be expelled from the system, and the system shall be pressure tested by means of an accurate gauge. The pressure test shall be as specified by the Engineer, typically 150 psi for one hour minimum for the uncovered joints, and 24-hour minimum for covered joints. Uncovered joints are recommended. All leakage shall be corrected whereby the pressure test will be acceptable; thereafter, the leakage shall not be more than 23 gallons/24-hours/inch of diameter/mile or less as determined by the water system's inspector. The water system shall be flushed prior to and subsequent to each sterilization procedure that might be required for acceptance. Initial flushing shall be done after completion of the hydrostatic test. All lines will be sterilized in accordance with AWWA C-601 specifications and local governing authorities' requirements.

Gate valves three inches and smaller shall have a bronze or iron body and shall be bronze mounted, designed to operate at 200 psi working pressure. Gate valves four inches and larger shall conform to the specifications of AWWA C-500, "Class 150" with an iron body, bronze mounted, non-rising stem designed to open counter-clockwise. All valves shall have ends or joints to match the pipe to which they are to be connected. Each gate valve shall be installed with an adjustable cast iron valve box and cover set at finished grade and well marked.

Fire hydrants shall conform to AWWA C-502 specifications and the local fire district requirements. Each hydrant shall connect to a six inch minimum water distribution main. A gate valve with cast iron box and cover shall be placed between the main and hydrant, unless the main is a "fire line" only. The hydrant valve shall be 5 1/2 inches, with two - 2 1/2 inch nozzles and one - 4 1/2 inch pumper nozzle. The hydrant shall be installed plumb, and the pumper nozzle shall face the hydrant. The pumper nozzle shall be 18 inches above finished grade, and shall open counter-clockwise. The hose threads and final joint shall conform to local fire district requirements. The hydrants shall be compression type with "break-away" facilities, and the operating stem threads shall not be located in the waterway.

Water service pavement conduits shall conform to the plans and the requirements of the water utility supplying and/or maintaining the system. The conduits shall be P.V.C. or an approved equal, and will be placed as shown on the plans.

Water service pipe material shall be galvanized steel, P.V.C., polyethylene, polybutylene or an alternate approved by the utility and Engineer.

Galvanized steel pipe shall be standard weight Schedule 40 with threaded connections. P.V.C. pipe shall be the same as the main line pipe. Polyethylene shall be Type III, Grade 3, Class C material, and shall conform to ASTM D-1248 and ASTM PE-3506. The tubing shall also be manufactured in accordance with Commercial Standard No. CS 255, or an approved equal. Polybutylene tubing shall conform to AWWA C-902. All fittings shall conform to the particular type service pipe material. Each service shall have a corporation stop at the main, and all service connections and appurtenances shall be subject to the approval of the Engineer and/or the water system supplying the water. Water service locations will be marked on the curb with a durable point.

All building connections shall conform to the architectural plans and specifications, the governing agencies' requirements, and the Engineer.

Water meter and backflow prevention device size, material and installation shall conform to the requirements of the utility, the plans, and the Engineer's specifications.

H. IRRIGATION SYSTEM

Irrigation pipe material shall be polyvinyl-chloride (P.V.C.), and shall conform to the same specifications as the water main pipe. Other material may be used subject to the utility's, Owner's and Engineer's written approval.

All fittings and testing shall be as indicated on the plans. All valves shall conform to the specifications for water valves.

I. PAVING

This section shall include the vehicular and pedestrian areas within the limits of rights-of-way or other areas as shown on the plans. The areas are to be graded and constructed as shown on the plans, details and typical Sections.

All backfill over any pipe within roadway areas shall be compacted per F.D.O.T. specifications, section 125-8.3.

Telephone, electric, irrigation and water service pavement conduits shall be placed prior to installation of the subbase. The Contractor shall coordinate these services.

Subbase shall be stabilized within the dimensions shown on the plans. The minimum Limerock Bearing Ratio (L.B.R.) and density shall be as shown on the plans, and shall be done in accordance with F.D.O.T. specifications, Section 160 (also AASHTO T-180). The percent of density refers to the standard method of testing using the Modified Proctor. The location and frequency of tests shall be as determined by the Engineer and/or the governing agency having jurisdiction. Subbase shall be of native material, only if it meets the required bearing value. Should native material fail the required bearing values, acceptable and approved material shall be mixed until the bearing value is obtained.

Underdrain pipe shall conform to the specifications of ASTM D-3033 and F.D.O.T. specifications, Section 440. All material and installation shall be as shown on the plans or per the governing agency and Engineer's requirements. The perforations shall be turned down and conform to the specifications of AASHTO M-189.

Bases shall be limerock, oyster shell, soil cement or an approved alternate. Limerock base material, installation and density shall conform to the F.D.O.T. specifications, Section 230. Oyster shell, if allowed, shall conform to F.D.O.T. specifications, Section 250 and the governing agency's requirements. Soil cement base, if allowed, shall conform to F.D.O.T. specifications, Section 270, and the governing agency's requirements. Alternate bases, if approved, shall conform to the requirements of the Engineer, governing agency, and the respective sections of the F.D.O.T. specifications. The base material shall be placed on the subbase only upon completion and acceptance of the subbase.

The minimum base density shall be as shown on the plans, and as required by the Engineer and governing agency. Base material shall be thoroughly clean and free of debris prior to application of the prime coat. The base shall be primed with a rapid cure type sealer at a rate of 0.10 gallons per square yard. All materials and installation shall conform to F.D.O.T. specifications, Section 300, the Engineer's and the governing agency's requirements. The prime coat shall be covered with sand or screenings per F.D.O.T. requirements, Section 300. Alternate cover material may be used subject to approval of the Engineer and the governing agency. Excess material shall be removed by a drag broom or equal.

INDEX OF DRAWINGS	
SHEET No.	DESCRIPTION
1	----- COVER SHEET
2	----- EXISTING CONDITIONS PLAN
3	----- LAYOUT AND EROSION CONTROL PLAN
4	----- GRADING PLAN
5	----- GRADING DETAILS
6	----- DRAINAGE PIPING PLAN
7	----- WATER AND SANITARY SEWER PLAN
8	----- DETENTION AREA PLAN AND DETAILS
9	----- LIFT STATION PLAN AND DETAILS
10	----- PAVING AND DRAINAGE DETAILS
11	----- WATER AND SANITARY SEWER DETAILS
12	----- SITE CONSTRUCTION SPECIFICATIONS

No.	DATE	REVISIONS	DRN./CKD./APP.
PLATO ACADEMY -- PASCO COUNTY			
SITE CONSTRUCTION SPECIFICATIONS			
PASCO COUNTY PREPARED FOR: SUPERIOR SCHOOLS CORP. PETER CHRISTOPOULOS MANAGER OF PLATO ACADEMY SCHOOLS CORP. ARCADIA DEVELOPMENT, LLC 2045 PALMETTO STREET CLEARWATER, FL 33765 PHONE: (727) 799-1200 ext. 1041		DATE: OCT. 17, 2016 DES.: T.G. Radcliffe DRN.: RRD CKD.: SCALE: AS SHOWN JOB No.:38156	APPROVED BY: THOMAS G. RADCLIFFE FLORIDA ENGINEER'S LICENSE NO. PE 42044
LLOVERAS, BAUR & STEVENS			SHEET 12 OF 12
ENGINEERS -- SURVEYORS -- PLANNERS Phone: (727) 784-3965 #LB 000208 29228 U.S. HIGHWAY 19 N. CLEARWATER, FLORIDA 33761 Fax: (727) 784-8153 CLEARWATER, FLORIDA 33761			



This item has been electronically signed and sealed by Thomas G. Radcliffe, PE on October 17, 2016 using a SHA-1 authentication code.
Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.