

PRELIMINARY SITE/CONSTRUCTION SITE PLANS/ STORMWATER PLANS

for:

BROTHERS INVESTMENTS

SECTIONS 24, TOWNSHIP 26 S., RANGE 18 E. PASCO COUNTY, FLORIDA

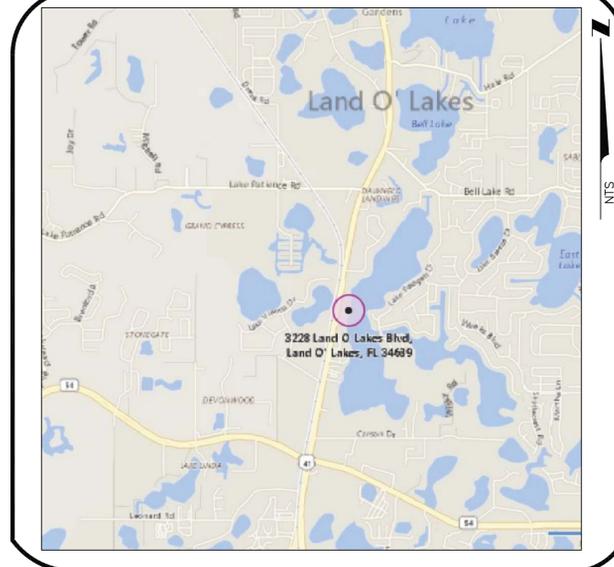
LEGAL DESCRIPTION

LEGAL DESCRIPTION:
THE SOUTH TWO HUNDRED TWENTY-EIGHT (S. 228) FEET OF THE NORTHEAST QUARTER (NE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION TWENTY-FOUR (24) TOWNSHIP TWENTY-SIX (26) SOUTH, RANGE EIGHTEEN (18) EAST, LESS THAT CERTAIN PIECE, PARCEL OR TRACT THEREOF LYING EAST OF STATE HIGHWAY NO. 45, DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT WHERE THE EAST BOUNDARY OF THE RIGHT OF WAY OF STATE HIGHWAY NO. 45 INTERSECTS THE SOUTH LINE OF THE AFORESAID SECTION, RUN THENCE IN A NORTHERLY DIRECTION ALONG THE EAST LINE OF SAID STATE HIGHWAY NO. 45 TWENTY (20) FEET MORE OR LESS; THENCE IN AN EASTERLY DIRECTION TO A POINT ON THE WEST SHORE OF LAKE PADGETT, WHICH SAID POINT IS TWENTY-EIGHT AND SIX-TENTHS (28.6) FEET MORE OR LESS NORTH OF THE AFORESAID SECTION LINE; THENCE IN A SOUTHERLY DIRECTION ALONG THE WEST SHORE OF LAKE PADGETT TO THE SAID SECTION LINE; THENCE WEST ALONG SAID SECTION LINE TO THE POINT OF BEGINNING; THE ABOVE TRACT BEING BOUNDED ON THE NORTH BY A FENCE AS NOW LOCATED, ON THE EAST BY THE WEST SHORE OF LAKE PADGETT, ON THE SOUTH BY THE SOUTH BOUNDARY OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE AFORESAID SECTION, TOWNSHIP AND RANGE, AND ON THE WEST BY THE EAST BOUNDARY LINE OF STATE HIGHWAY NO. 45; AND LESS ALSO THE RIGHT-OF-WAY OF STATE HIGHWAY NO. 45.

LESS ORDER OF TAKING TO STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION RECORDED IN OFFICIAL RECORDS BOOK 3670, PAGE 1753.

LESS THE SOUTH TWO HUNDRED TWENTY-EIGHT FEET OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 24, TOWNSHIP 26 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA, LYING WEST OF THE SEABOARD COASTLINE RAILROAD RIGHT-OF-WAY, FORMERLY SEABOARD AIR LINE RAILWAY.

LOCATION MAP



INDEX OF SHEETS

SHEET NO.	DESCRIPTION:
C-1	COVER SHEET
C-2	STORMWATER POLLUTION PREVENTION PLAN
C-3	EXISTING CONDITIONS
C-4	SITE GEOMETRY PLAN
C-5	PAVING, GRADING, DRAINAGE AND CONSTRUCTION SURFACE WATER MANAGEMENT PLAN
C-6	UTILITY PLAN
C-6A	UTILITY PROFILE
C-7	LANDSCAPE PLAN
C-8	SITE DETAILS
C-9	UTILITY DETAILS
C-10	UTILITY DETAILS
C-11	LIFT STATION DETAILS

UTILITY PROVIDERS

POTABLE WATER AND SANITARY SEWER	PASCO COUNTY UTILITIES - 9626 HANDCRAFT RD DADE CITY, FL 33523
FIRE SERVICE	- PASCO COUNTY 8731 CITIZENS DRIVE NEW PORT RICHEY, FL 34654
SOLID WASTE	- PROGRESS ENERGY PO BOX 14042 ST. PETERSBURG, FL 33733
ELECTRIC SERVICE	- VERIZON, DAVID WYNNIS 1909 US HWY 301 N, BLDG D TAMPA, FL 33619

SITE DATA TABLE

FOLIO NUMBER: 24-26-18-0000-03300-0000
 LATITUDE: 28° 12' 17" LONGITUDE: 82° 27' 45"
 FLOOD ZONE: ZONE X & AE (EL. 71.6)
 COMMUNITY PANEL NO. 1210103404F
 MAP REVISED: SEPTEMBER 26, 2014

PROJECT SUMMARY & SITE DATA:	EXISTING	PROPOSED (INCLUDES EXISTING TO REMAIN)
TOTAL BUILDING AREA (FIRST FLOOR)	= 1,830 SF (1.2%)	16,896 SF (10.8%)
TOTAL BUILDING AREA (INCLUDING 2ND FLOOR 1,000 SF STORAGE MEZANINE)		17,896 SF (11.4%)
TOTAL ASPHALT/CONCRETE AREA	= 850 SF (0.5%)	25,000 SF (15.9%)
TOTAL IMPERVIOUS AREA	= 2,680 SF (1.7%)	41,896 SF (26.7%)
TOTAL GREEN AREA	= 154,136 SF (98.3%)	114,920 SF (73.3%)
TOTAL SITE AREA	= 156,816 SF (3.6 ACRES)	
	(INCLUDES 1.9 ACRES WETLANDS)	
BUILDING COVERAGE:	16,896/156,816 = 0.11	FAR: 17,896/156,816 = 0.12
ZONING: C-3; FUU ROR;	PROPOSED USE: FLEX SPACE	

RZ/SE/CU PETITION #	Pet/Mon	Action	Date	Request
RZ/181	APP W/ COND		1/25/16	RZ/R3 TO C-3

SETBACKS:
 FRONT (LAND O LAKES BLVD.) 25 FT
 SIDE (NORTH) 0 FT
 SIDE (SOUTH) 0 FT
 REAR (EAST) 0 FT

MAXIMUM BUILDING HEIGHTS PROPOSED: 25 FEET (2-STORY)

PARKING CALCULATIONS:
 PARKING REQUIRED = 1 PER 500 SF FOR FLEX-SPACE
 PARKING REQUIRED = 1/500 * 17,896 = 36 SPACES
 PARKING PROVIDED = 36 SPACES (INCLUDING 2 1/2 SPACES AND 16 SPACES INSIDE THE BUILDING)
 BICYCLE SPACES REQUIRED=37*0.02 = 1 SPACE; PROVIDED=2 SPACES

DUMPSTERS NOTES: 1. ALL DUMPSTERS TO BE SCREENED PER PASCO COUNTY LDC.
 2. ALL DUMPSTERS WILL BE SCREENED FROM VIEW BY AN ENCLOSURE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE FRONT OF THE PRIMARY BUILDING.

OWNER

BROTHERS INVESTMENTS LLC
 3228 LAND O LAKES BLVD
 LAND O LAKES, FL 34639

GEOTECHNICAL RECOMMENDATIONS

THE CONTRACTOR SHALL FOLLOW ALL THE RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT PREPARED BY BTL ENGINEERING SERVICES DATED MAY 9, 2016 (BTL JOB NO. 5325-16-0726)

"INVESTIGATE BEFORE YOU EXCAVATE"

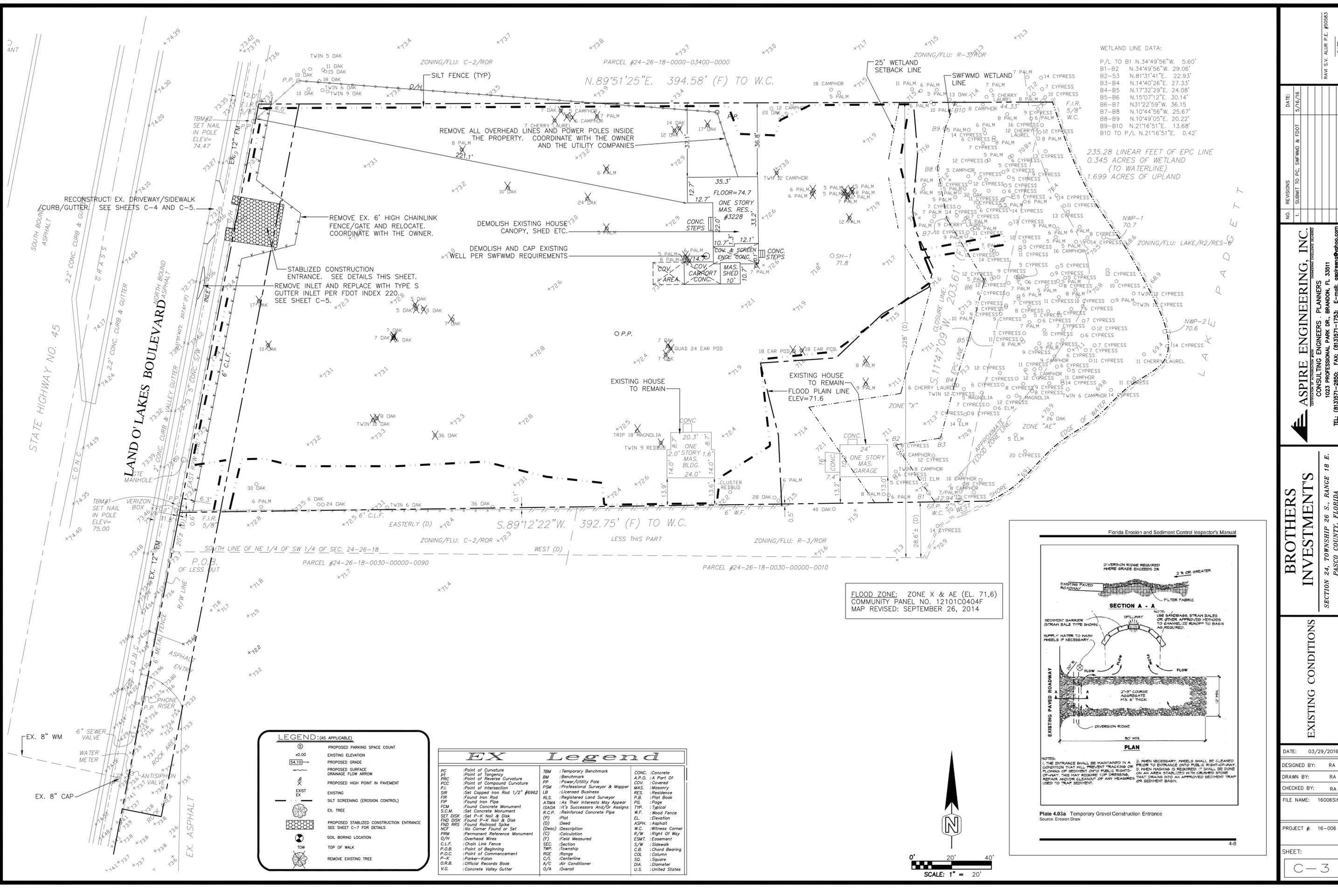


CALL SUNSHINE @ 1-800-432-4770

FL. STATUTE 553.851 (1979) REQUIRES A MIN. OF 2 DAYS AND MAX. OF 5 DAYS NOTICE BEFORE YOU EXCAVATE.

NOTE

DIMENSION INFORMATION SHOULD NOT BE OBTAINED BY SCALING THE PLANS. DIMENSION INFORMATION NOT PROVIDED HEREIN CAN BE OBTAINED BY CONTACTING ASPIRE ENGINEERING, INC. AT (813)571-2850



WETLAND LINE DATA:
 P/L TO B1 N.34°49'56"W. 5.60'
 B1-B2 N.34°49'56"W. 29.06'
 B2-53 N.81°31'41"E. 22.93'
 B3-B4 N.14°40'26"E. 27.33'
 B4-B5 N.17°32'29"E. 24.08'
 B5-B6 N.15°07'12"E. 30.14'
 B6-B7 N.31°22'59"W. 36.15'
 B7-B8 N.10°44'56"W. 25.67'
 B8-B9 N.10°49'05"E. 20.22'
 B9-B10 N.21°16'51"E. 13.68'
 B10 TO P/L N.21°16'51"E. 0.42'

235.28 LINEAR FEET OF EPC LINE
 0.345 ACRES OF WETLAND
 (TO WATERLINE)
 1.699 ACRES OF UPLAND

FLOOD ZONE: ZONE X & AE (EL. 71.6)
 COMMUNITY PANEL NO. 12101C0404F
 MAP REVISED: SEPTEMBER 26, 2014

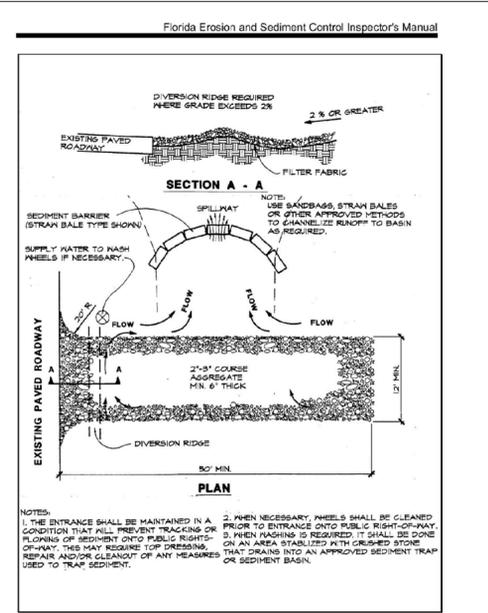


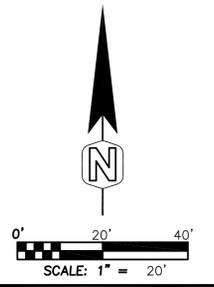
Plate 4.03a Temporary Gravel Construction Entrance
 Source: Erosion Draw

LEGEND: (AS APPLICABLE)

	PROPOSED PARKING SPACE COUNT
	EXISTING ELEVATION
	PROPOSED GRADE
	PROPOSED SURFACE DRAINAGE FLOW ARROW
	PROPOSED HIGH POINT IN PAVEMENT
	EXISTING
	SILT SCREENING (EROSION CONTROL)
	EX. TREE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE SEE SHEET C-7 FOR DETAILS
	SOIL BORING LOCATION
	TOP OF WALK
	REMOVE EXISTING TREE

EX Legend

PC : Point of Curvature	TBM : Temporary Benchmark	CONC. : Concrete
PI : Point of Intersection	BM : Benchmark	A.P.O. : A Part Of
PRC : Point of Reverse Curvature	UP : Utility Pole	COV. : Covered
PP : Point of Compound Curvature	PSM : Professional Surveyor & Mapper	MAS. : Masonry
P.I. : Point of Intersection	LB : Licensed Business	RES. : Residence
SIR : Set Capped Iron Rod 1/2" #8692	RLS : Registered Land Surveyor	P.B. : Plot Book
FIP : Found Iron Pipe	ATMA : As Their Interests May Appear	PG. : Page
FIM : Found Iron Monument	ISAOA : It's Successors And/Or Assigns	TYP. : Typical
S.C.M. : Set Concrete Monument	R.C.P. : Reinforced Concrete Pipe	W.F. : Wood Fence
SET DISK : Set P-K Nail & Disk	(P) : Plat	EL. : Elevation
FND DISK : Found P-K Nail & Disk	(D) : Dead	ASPH. : Asphalt
FND RRS : Found Railroad Spike	(Desc) : Description	W.C. : Witness Corner
NCF : No Corner Found or Set	(C) : Calculation	R/W : Right Of Way
PRM : Permanent Reference Monument	(F) : Field Measured	ESMT. : Easement
O/H : Overhead Wires	SEC. : Section	S/W : Sidewalk
C.L.F. : Chain Link Fence	TWP. : Township	C.B. : Chain Bearing
P.O.B. : Point of Beginning	ROE : Range	COL. : Column
P.O.C. : Point of Commencement	A/C : Centerline	SD. : Square
P-K : Parker-Kalon	DIA. : Diameter	U.S. : United States
O.R.B. : Official Records Book	O/A : Overall	
V.G. : Concrete Valley Gutter		



DATE: 03/29/2016

DESIGNED BY: RA

DRAWN BY: RA

CHECKED BY: RA

FILE NAME: 16006Site

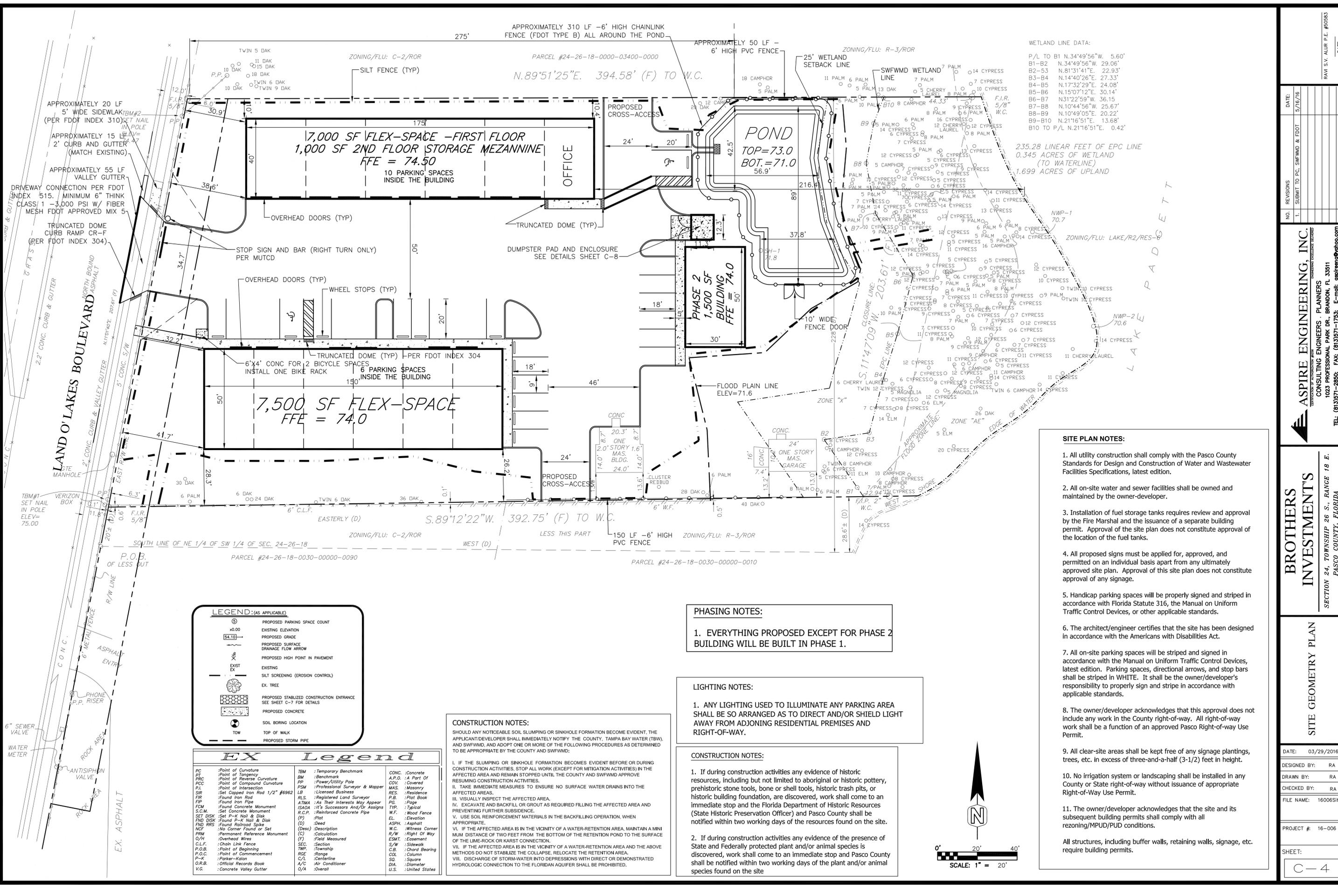
PROJECT #: 16-006

SHEET: C-3

ASPIRE ENGINEERING, INC.
 CONSULTING ENGINEERS - PLANNERS
 1023 PROFESSIONAL PARK DR., BRANDON, FL 33511
 TEL: (813)571-2850; FAX: (813)571-1755; E-mail: aspireeng@att.net

BROTHERS INVESTMENTS
 SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
 PASCO COUNTY, FLORIDA

EXISTING CONDITIONS



WETLAND LINE DATA:

P/L TO B1	N.34°49'56"W.	5.60'
B1-B2	N.34°49'56"W.	29.06'
B2-53	N.81°31'41"E.	22.93'
B3-B4	N.14°40'26"E.	27.33'
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B8-B9	N.10°19'05"E.	20.22'
B9-B10	N.21°16'51"E.	13.68'
B10 TO P/L	N.21°16'51"E.	0.42'

235.28 LINEAR FEET OF EPC LINE
0.345 ACRES OF WETLAND
(TO WATERLINE)
1.699 ACRES OF UPLAND

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 site plan does not constitute approval of any signage.
- Handicap parking spaces will be properly signed and striped in accordance with Florida 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 in accordance with applicable standards.
- The owner/developer acknowledges that this approval does not include any work in the County right-of-way. All right-of-way work shall be a function of an approved Pasco 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 (3-1/2) 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 building permits.

PHASING NOTES:

- EVERYTHING PROPOSED EXCEPT FOR PHASE 2 BUILDING WILL BE BUILT IN PHASE 1.

LIGHTING NOTES:

- ANY LIGHTING USED TO ILLUMINATE ANY PARKING AREA SHALL BE SO ARRANGED AS TO DIRECT AND/OR SHIELD LIGHT AWAY FROM ADJOINING RESIDENTIAL PREMISES AND RIGHT-OF-WAY.

CONSTRUCTION NOTES:

- 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.
- If during construction activities any evidence of the presence of State and Federally protected plant and/or animal species is discovered, work shall come to an immediate stop and Pasco County shall be notified within two working days of the plant and/or animal species found on the site.

CONSTRUCTION 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:

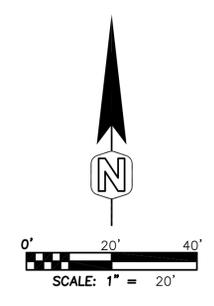
- IF THE SLUMPING OR SINKHOLE FORMATION BECOMES EVIDENT BEFORE OR DURING CONSTRUCTION ACTIVITIES, STOP ALL WORK (EXCEPT FOR MITIGATION ACTIVITIES) IN THE AFFECTED AREA AND REMAIN STOPPED UNTIL THE COUNTY AND SWFWMD APPROVE RESUMING CONSTRUCTION ACTIVITIES.
- TAKE IMMEDIATE MEASURES TO ENSURE NO SURFACE WATER DRAINS INTO THE AFFECTED AREAS.
- VISUALLY INSPECT THE AFFECTED AREA.
- EXCAVATE AND BACKFILL OR GROUT AS REQUIRED FILLING THE AFFECTED AREA AND PREVENTING FURTHER SUBSIDENCE.
- USE SOIL REINFORCEMENT MATERIALS IN THE BACKFILLING 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 LIME-ROCK 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 FLORIDAN AQUIFER SHALL BE PROHIBITED.

LEGEND (AS APPLICABLE)

⊙	PROPOSED PARKING SPACE COUNT
±0.00	EXISTING ELEVATION
54.10	PROPOSED GRADE
→	PROPOSED SURFACE DRAINAGE FLOW ARROW
⊕	PROPOSED HIGH POINT IN PAVEMENT
⊗	EXISTING SILT SCREENING (EROSION CONTROL)
⊕	EXISTING EX. TREE
⊕	PROPOSED STABILIZED CONSTRUCTION ENTRANCE SEE SHEET C-7 FOR DETAILS
⊕	PROPOSED CONCRETE
⊕	SOIL BORING LOCATION
⊕	TOP OF WALK
⊕	PROPOSED STORM PIPE

EX Legend

PC	:Point of Curvature	TBM	:Temporary Benchmark	CONC.	:Concrete
PT	:Point of Tangency	BM	:Benchmark	A.P.O.	:A Part Of
PRC	:Point of Reverse Curvature	PP	:Power/Utility Pole	COV.	:Covered
PCC	:Point of Compound Curvature	PSM	:Professional Surveyor & Mapper	MAS.	:Masonry
PI	:Point of Intersection	RES.	:Registered Land Surveyor	RES.	:Residence
SIR	:Set Capped Iron Rod 1/2" #9962	R.L.S.	:Registered Land Surveyor	P.B.	:Plot Book
FR	:Found Iron Rod	ATMA	:As Their Interests May Appear	PG.	:Page
FIP	:Found Iron Pipe	ISADA	:It's Successors And/Or Assigns	TYP.	:Typical
FMC	:Found Concrete Monument	R.C.P.	:Reinforced Concrete Pipe	W.F.	:Wood Fence
S.C.M.	:Set Concrete Monument	(P)	:Plot	EL.	:Elevation
SET DISK	:Set P-K Nail & Disk	(D)	:Deed	ASPH.	:Asphalt
FND DISK	:Found P-K Nail & Disk	(Obsc)	:Description	W.C.	:Witness Corner
FND RRS	:Found Railroad Spike	(C)	:Calculation	R/W	:Right Of Way
NCF	:No Corner Found or Set	(F)	:Field Measured	ESMT.	:Easement
PRM	:Permanent Reference Monument	SEC.	:Section		
O/H	:Overhead Wires	TWP.	:Township		
C.L.F.	:Chain Link Fence	ROE	:Range		
P.O.B.	:Point of Beginning	C/L	:Centerline		
P.O.C.	:Point of Commencement	SO.	:Square		
P-K	:Parker-Kalon	DA.	:Diameter		
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V.G.	:Concrete Valley Gutter	O/A	:Overall		
		U.S.	:United States		



DATE: 03/29/2016

DESIGNED BY: RA

DRAWN BY: RA

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FILE NAME: 16006Site

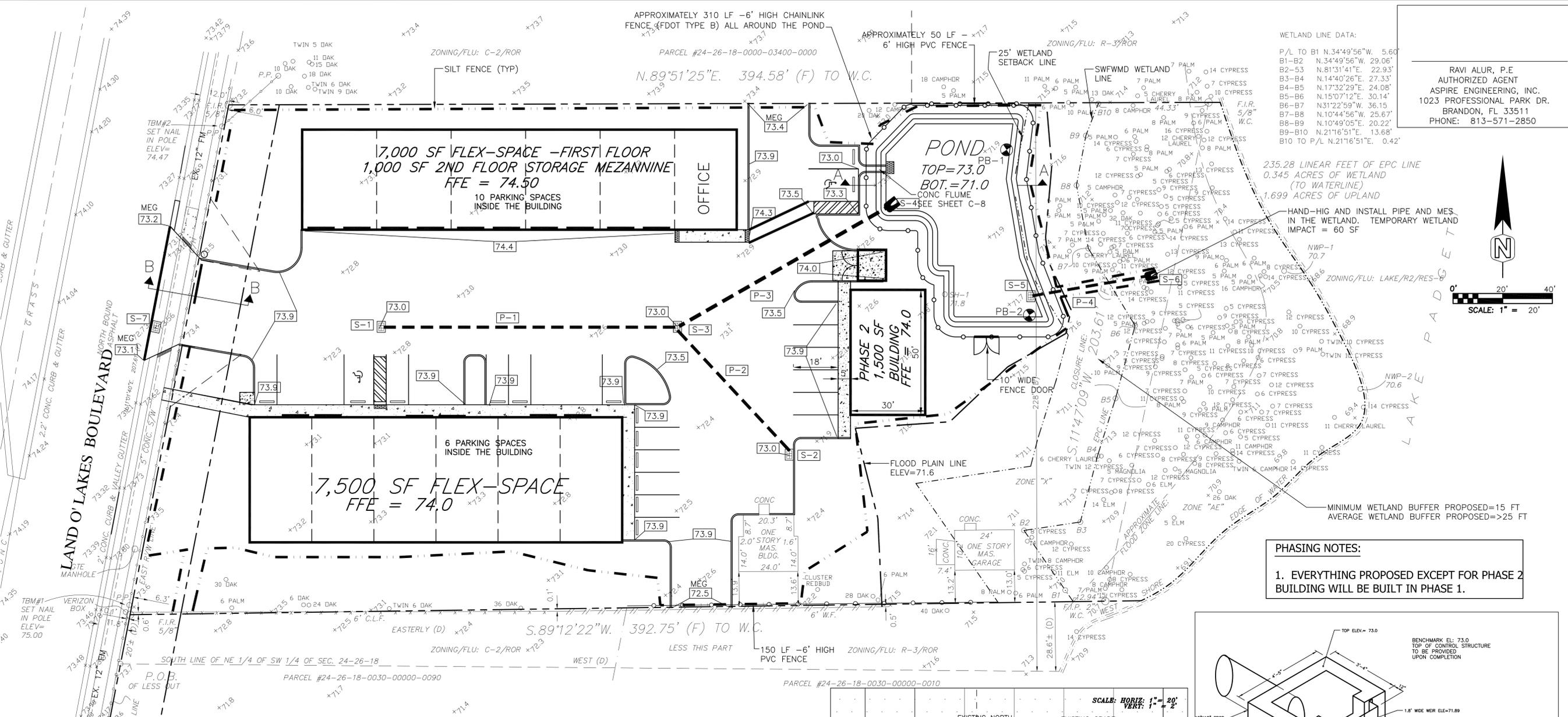
PROJECT #: 16-006

SHEET: C-4

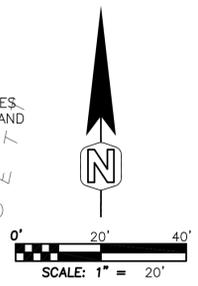
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CONSULTING ENGINEERS - PLANNERS
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TEL: (813)571-2850; FAX: (813)571-1755; E-mail: aspireeng@choo.com

BROTHERS INVESTMENTS
SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
PASCO COUNTY, FLORIDA

SITE GEOMETRY PLAN



RAVI ALUR, P.E.
 AUTHORIZED AGENT
 ASPIRE ENGINEERING, INC.
 1023 PROFESSIONAL PARK DR.
 BRANDON, FL 33511
 PHONE: 813-571-2850



WETLAND LINE DATA:
 P/L TO B1 N.34°49'56"W. 5.60'
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235.28 LINEAR FEET OF EPC LINE
 0.345 ACRES OF WETLAND
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 1.699 ACRES OF UPLAND

HAND-HIG AND INSTALL PIPE AND MES.
 IN THE WETLAND. TEMPORARY WETLAND
 IMPACT = 60 SF

MINIMUM WETLAND BUFFER PROPOSED=15 FT
 AVERAGE WETLAND BUFFER PROPOSED=>25 FT

PHASING NOTES:
 1. EVERYTHING PROPOSED EXCEPT FOR PHASE 2 BUILDING WILL BE BUILT IN PHASE 1.

LEGEND: (AS APPLICABLE)

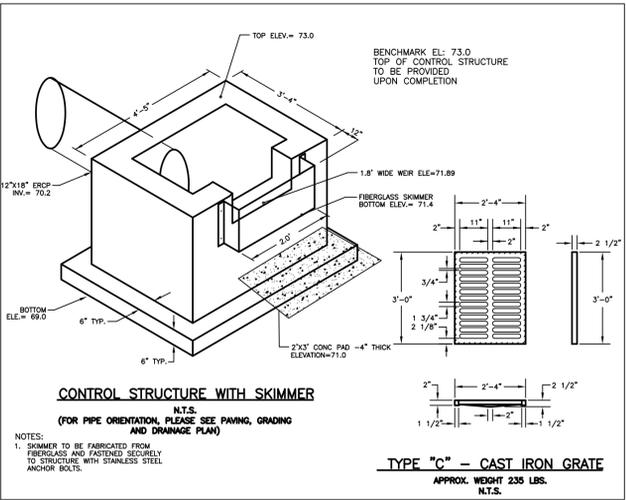
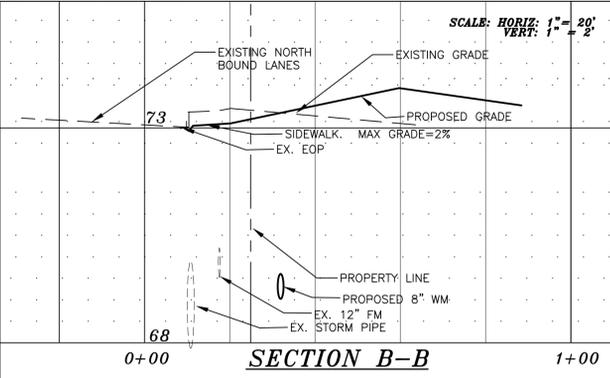
⊙	PROPOSED PARKING SPACE COUNT
⊙	EXISTING ELEVATION
—	PROPOSED GRADE
→	PROPOSED SURFACE DRAINAGE FLOW ARROW
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⊗	EXISTING
⊗	SILT SCREENING (EROSION CONTROL)
⊗	EX. TREE
⊗	PROPOSED STABILIZED CONSTRUCTION ENTRANCE SEE SHEET C-7 FOR DETAILS
⊗	SOIL BORING LOCATION
⊗	TOP OF WALK
—	PROPOSED STORM PIPE

STORM SEWER STRUCTURE CHART

STRUCTURE #	TOP ELE.	INVERT ELE.	TYPE
S-1	73.0	70.4	TYPE D INLET W/ TRAFFIC BEARING GRATE (FDOT INDEX 232)
S-2	73.0	70.4	TYPE D INLET W/ TRAFFIC BEARING GRATE (FDOT INDEX 232)
S-3	73.0	70.2	TYPE D INLET W/ TRAFFIC BEARING GRATE (FDOT INDEX 232)
S-4		70.0	MES W/ 3X3 SUMP; FDOT INDEX 272 RIP RAP -D50 ROCK, 3 CY W/ FILTER FABRIC CONTROL STRUCTURE SEE DETAILS THIS SHEET
S-5		70.0	MES W/ 3X3 SUMP; FDOT INDEX 272 RIP RAP -D50 ROCK, 3 CY W/ FILTER FABRIC
S-6		70.0	MES W/ 3X3 SUMP; FDOT INDEX 272 RIP RAP -D50 ROCK, 3 CY W/ FILTER FABRIC
S-7	72.9	EXISTING	REPLACE EXISTING INLET WITH TYPE S INLET FDOT INDEX 220. MAINTAIN EXISTING PIPE INVS.

STORM SEWER PIPE CHART

PIPE #	LENGTH (FT)	SLOPE (%)	TYPE AND SIZE OF PIPE
P-1	118	0.17	12"x18" ERCP
P-2	66	0.3	12"x18" ERCP
P-3	100	0.2	14"x23" ERCP
P-4	50	0.4	12"x18" ERCP



EX Legend

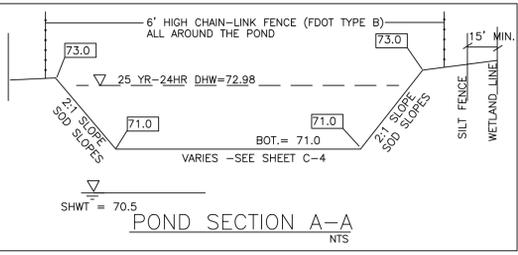
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PCC	:Point of Compound Curvature	PSM	:Professional Surveyor & Mapper	MAS.	:Masonry
PI	:Point of Intersection	LB	:Licensed Business	RES.	:Residence
SIR	:Set Capped Iron Rod 1/2" #8962	RLS	:Registered Land Surveyor	P.B.	:Plot Book
FIP	:Found Iron Pipe	ATMA	:As They Interests May Appear	PG.	:Page
FIP	:Found Iron Pipe	ISADA	:It's Successors And/Or Assigns	TP.	:Typical
FCM	:Found Concrete Monument	R.C.P.	:Reinforced Concrete Pipe	W.F.	:Wood Fence
S.C.M.	:Set Concrete Monument	(P)	:Plot	EL.	:Elevation
SET DISK	:Set P-K Nail & Disk	(D)	:Dead	ASPH.	:Asphalt
FND DISK	:Found P-K Nail & Disk	(Obsc)	:Obscured	W.C.	:Witness Corner
FND RRS	:Found Railroad Spike	(C)	:Calculation	R/W	:Right Of Way
NCF	:No Corner Found or Set	(F)	:Field Measured	ESMT.	:Easement
PRM	:Permanent Reference Monument	SEC.	:Section	S/W	:Sidewalk
O/H	:Overhead Wire	TMF	:Township	C.B.	:Chord Bearing
C.L.F.	:Chain Link Fence	ROE	:Range	COL.	:Column
P.O.B.	:Point of Beginning	W.P.	:Width	SO.	:Square
P.O.C.	:Point of Commencement	R.C.	:Range	DA.	:Diameter
P-K	:Parker-Kalon	A/C	:Air Conditioner	U.S.	:United States
O.R.B.	:Official Records Book	O/A	:Overall		
V.G.	:Concrete Valley Gutter				

MAINTENANCE & OPERATION INSTRUCTIONS:
 1. ALL ON-SITE PORTION OF THE STORMWATER SYSTEM SHALL BE MAINTAINED BY THE OWNER OF THE PROPERTY.
 2. WHERE VEGETATION, OR DEBRIS OR SEDIMENT HAS ACCUMULATED IN SUCH A MANNER AS TO INTERFERE WITH THE FREE FLOW OF WATER OR ADEQUATE FUNCTIONING OF DRAINAGE FACILITIES, THE OWNER SHALL REMOVE THE DEBRIS OR OBSTRUCTION SO AS TO ALLOW THE DRAINAGE SYSTEM TO FUNCTION AS PERMITTED.

EROSION & SEDIMENT CONTROL
 (1) ALL POSSIBLE EFFORTS SHALL BE MADE TO CONTROL EROSION AND SEDIMENT TRANSPORT BOTH ON AND OFFSITE.
 (2) STAKED HAYBALES OF FILTER FABRIC SILT FENCE SHALL BE CONSTRUCTED (PER DETAIL) AT SPECIFIED LOCATIONS PRIOR TO EXCAVATING OR GRADING TO REMAIN UNTIL VEGETATION ESTABLISHES.
 (3) PLACE HAYBALES OR FILTER FABRIC AROUND THE PERIMETER OF ALL NEW AND EXISTING INLETS, PIPES AND CONDUIT STRUCTURES TO REMAIN UNTIL VEGETATION ESTABLISHES.

ELEVATION DATUM NOTE:
 ELEVATIONS SHOWN HEREIN ARE BASED ON NAVD 1988.
 NGVD 1929 TO NAVD 1988 CONVERSION (PER NATIONAL GEODETIC SURVEY):
 ELEVATION IN NGVD 1929, FEET = (ELEVATION IN NAVD 1988 + 0.82) FEET

ROOF DRAIN NOTES:
 CONTRACTOR TO DIVERT ALL ROOF RUNOFF TO THE PROPOSED STORMWATER SYSTEM

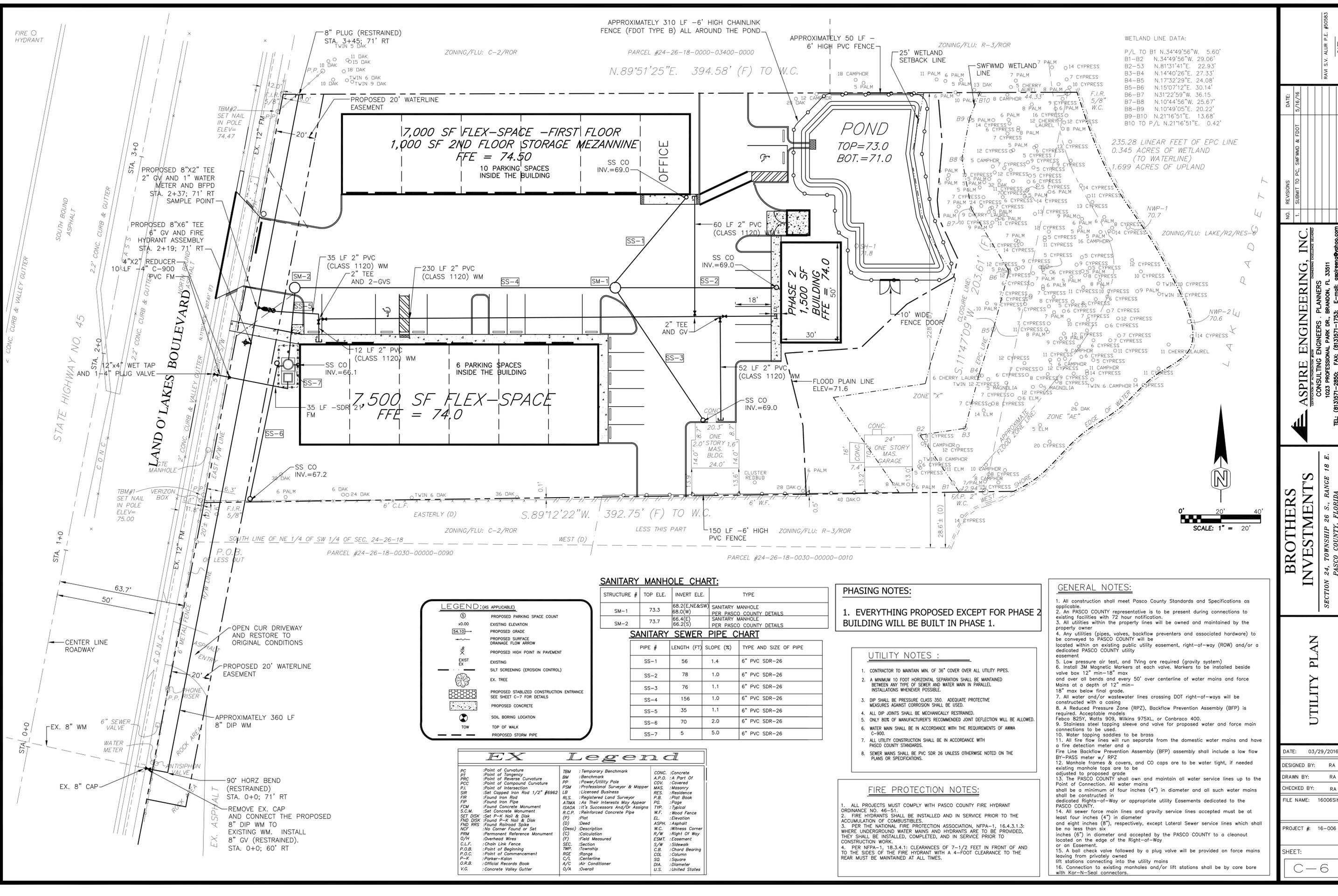


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 TEL: (813) 571-2850; FAX: (813) 571-1755; E-mail: aspireeng@bellsouth.com

BROTHERS INVESTMENTS
 SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
 PASCO COUNTY, FLORIDA

PAVING, GRADING, DRAINAGE AND CONSTRUCTION SURFACE WATER MANAGEMENT PLAN

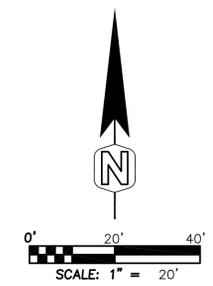
DATE: 03/29/2016
 DESIGNED BY: RA
 DRAWN BY: RA
 CHECKED BY: RA
 FILE NAME: 16006Site
 PROJECT #: 16-006
 SHEET: C-5



WETLAND LINE DATA:

P/L TO B1	N.34°49'56"W. 5.60'
B1-B2	N.34°49'56"W. 29.06'
B2-B3	N.81°31'41"E. 22.93'
B3-B4	N.14°40'26"E. 27.33'
B4-B5	N.17°32'29"E. 24.08'
B5-B6	N.15°07'12"E. 30.14'
B6-B7	N.31°22'59"W. 36.15'
B7-B8	N.10°44'56"W. 25.67'
B8-B9	N.10°49'05"E. 20.22'
B9-B10	N.21°16'51"E. 13.68'
B10 TO P/L	N.21°16'51"E. 0.42'

235.28 LINEAR FEET OF EPC LINE
0.345 ACRES OF WETLAND
(TO WATERLINE)
1.699 ACRES OF UPLAND



SANITARY MANHOLE CHART:

STRUCTURE #	TOP ELE.	INVERT ELE.	TYPE
SM-1	73.3	68.2(E,NE&SW) 68.0(W)	SANITARY MANHOLE PER PASCO COUNTY DETAILS
SM-2	73.7	66.4(E) 66.2(S)	SANITARY MANHOLE PER PASCO COUNTY DETAILS

SANITARY SEWER PIPE CHART

PIPE #	LENGTH (FT)	SLOPE (%)	TYPE AND SIZE OF PIPE
SS-1	56	1.4	6" PVC SDR-26
SS-2	78	1.0	6" PVC SDR-26
SS-3	76	1.1	6" PVC SDR-26
SS-4	156	1.0	6" PVC SDR-26
SS-5	35	1.1	6" PVC SDR-26
SS-6	70	2.0	6" PVC SDR-26
SS-7	5	5.0	6" PVC SDR-26

PHASING NOTES:
1. EVERYTHING PROPOSED EXCEPT FOR PHASE 2 BUILDING WILL BE BUILT IN PHASE 1.

UTILITY NOTES:
1. CONTRACTOR TO MAINTAIN MIN. OF 36" COVER OVER ALL UTILITY PIPES.
2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
3. DIP SHALL BE PRESSURE CLASS 350. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED.
4. ALL DIP JOINTS SHALL BE MECHANICALLY RESTRAINED.
5. ONLY BOX OF MANUFACTURER'S RECOMMENDED JOINT DEFLECTION WILL BE ALLOWED.
6. WATER MAIN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ANWA C-900.
7. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH PASCO COUNTY STANDARDS.
8. SEWER MAINS SHALL BE PVC SDR 26 UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS.

FIRE PROTECTION NOTES:
1. ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
3. PER THE NATIONAL FIRE PROTECTION ASSOCIATION, 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.
4. PER NFPA-1, 18.3.4.1: CLEARANCES OF 7-1/2 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4-FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.

GENERAL NOTES:

- All construction shall meet Pasco County Standards and Specifications as applicable.
- All PASCO COUNTY Representative is to be present during connections to existing facilities with 72 hour notification.
- All utilities within the property lines will be owned and maintained by the property owner.
- Any utilities (pipes, valves, backflow preventers and associated hardware) to be conveyed to PASCO COUNTY will be located within an existing public utility easement, right-of-way (ROW) and/or a dedicated PASCO COUNTY utility easement.
- Low pressure air test, and TVing are required (gravity system).
- Install 3M Magnetic Markers at each valve. Markers to be installed beside valve box 12" min-18" max and over all bends and every 50' over centerline of water mains and force mains at a depth of 12" min-18" max below final grade.
- All water and/or wastewater lines crossing DOT right-of-ways will be constructed with a casing.
- A Reduced Pressure Zone (RPZ), Backflow Prevention Assembly (BFP) is required. Acceptable models: Febo B25Y, Watts 909, Wilkins 975XL, or Conbraco 400.
- Stainless steel tapping sleeve and valve for proposed water and force main connections to be used.
- Water tapping saddles to be brass.
- All fire flow lines will run separate from the domestic water mains and have a fire detection meter and a Fire Line Backflow Prevention Assembly (BFP) assembly shall include a low flow BY-PASS meter w/ RPZ.
- Manhole frames & covers, and CO caps are to be water tight, if needed existing manhole tops are to be adjusted to proposed grade.
- The PASCO COUNTY shall own and maintain all water service lines up to the Point of Connection. All water mains shall be a minimum of four inches (4") in diameter and all such water mains shall be constructed in dedicated Rights-of-Way or appropriate utility Easements dedicated to the PASCO COUNTY.
- All sewer force main lines and gravity service lines accepted must be at least four inches (4") in diameter and eight inches (8"), respectively, except Lateral Sewer service lines which shall be no less than six inches (6") in diameter and accepted by the PASCO COUNTY to a cleanout located on the edge of the Right-of-Way or an Easement.
- A ball check valve followed by a plug valve will be provided on force mains leaving from privately owned lift stations connecting into the utility mains.
- Connection to existing manholes and/or lift stations shall be by core bore with Cor-N-Seal connectors.

LEGEND: (AS APPLICABLE)

⊙	PROPOSED PARKING SPACE COUNT
x0.00	EXISTING ELEVATION
54.10	PROPOSED GRADE
→	PROPOSED SURFACE DRAINAGE FLOW ARROW
↑	PROPOSED HIGH POINT IN PAVEMENT
EXIST	EXISTING
⊗	SILT SCREENING (EROSION CONTROL)
EX. TREE	EXISTING TREE
⊕	PROPOSED STABILIZED CONSTRUCTION ENTRANCE SEE SHEET C-7 FOR DETAILS
⊕	PROPOSED CONCRETE
⊕	SOIL BORING LOCATION
⊕	TOP OF WALK
⊕	PROPOSED STORM PIPE

EX Legend

PC :Point of Curvature	TBM :Temporary Benchmark	CONC. :Concrete
PT :Point of Tangency	BM :Benchmark	A.P.O. :A Part Of
PRC :Point of Reverse Curvature	PP :Power Utility Pole	COV. :Covered
PCC :Point of Compound Curvature	PSM :Professional Surveyor & Mapper	MAS. :Masonry
PI :Point of Intersection	LB :Licensed Business	RES. :Residence
SIR :Set Capped Iron Rod 1/2" #6962	R.L.S. :Registered Land Surveyor	P.B. :Pit Book
FIP :Found Iron Pipe	ATMA :As Their Interests May Appear	PG. :Page
FIP :Found Iron Pipe	ISAOA :It's Successors And/Or Assigns	TP. :Typical
FCM :Found Concrete Monument	R.C.P. :Reinforced Concrete Pipe	W.F. :Wood Fence
S.C.M. :Set Concrete Monument	(P) :Pit	EL. :Elevation
SET DISK :Set P-K Nail & Disk	(D) :Dead	ASPH. :Asphalt
FND DISK :Found P-K Nail & Disk	(Desc) :Description	W.C. :Witness Corner
FND RRS :Found Railroad Spike	(C) :Calculation	R/W :Right Of Way
NCE :No Corner Found or Set	(F) :Field Measured	ESMT. :Easement
PERM :Permanent Reference Monument	SEC. :Section	S/W :Sikewalk
O/H :Overhead Wires	TWP. :Township	C.B. :Chain Bearing
C.L.F. :Chain Link Fence	ROE :Range	COL. :Column
P.O.C. :Point of Beginning	C/L :Centerline	SO. :Square
P.O.C. :Point of Commencement	A/C :Air Conditioner	DIA. :Diameter
P-K :Parker-Kalon	O/A :Overall	U.S. :United States
O.R.B. :Official Records Book		
V.G. :Concrete Valley Gutter		

DATE: 03/29/2016

DESIGNED BY: RA

DRAWN BY: RA

CHECKED BY: RA

FILE NAME: 16006Site

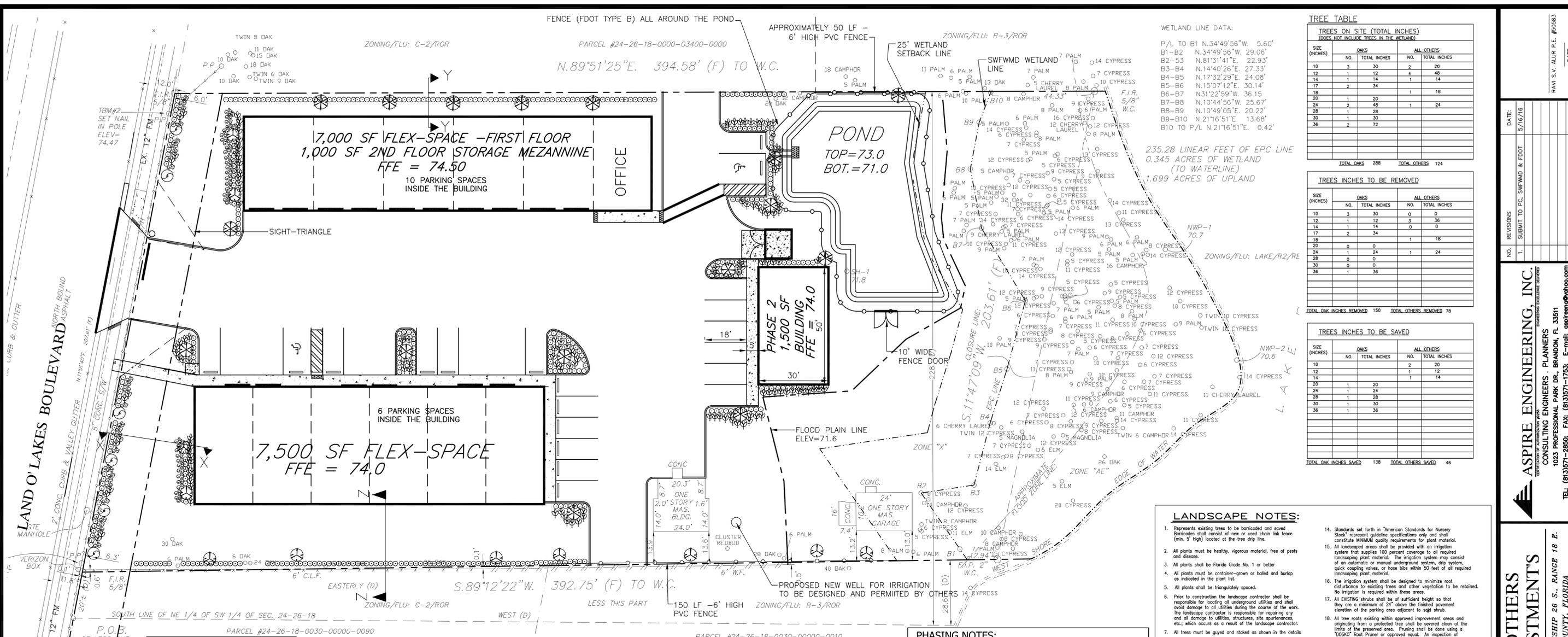
PROJECT #: 16-006

SHEET: C-6

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BROTHERS INVESTMENTS
SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
PASCO COUNTY, FLORIDA

UTILITY PLAN



TREE TABLE

TREES ON SITE (TOTAL INCHES)
DOES NOT INCLUDE TREES IN THE WETLAND

SIZE (INCHES)	NO.	TOTAL INCHES	NO.	TOTAL INCHES
		OAKS		ALL OTHERS
10	3	30	2	20
12	1	12	4	48
14	1	14	1	14
17	2	34	4	68
18	1	18	1	18
20	1	20	1	20
24	2	48	1	24
28	1	28		
30	1	30		
36	2	72		
TOTAL	288	288	124	124

TREES INCHES TO BE REMOVED

SIZE (INCHES)	NO.	TOTAL INCHES	NO.	TOTAL INCHES
		OAKS		ALL OTHERS
10	3	30	0	0
12	1	12	3	36
14	1	14	0	0
17	2	34	1	18
18	0	0	1	18
20	0	0	1	20
24	1	24	1	24
28	0	0		
30	0	0		
36	1	36		
TOTAL	150	150	78	78

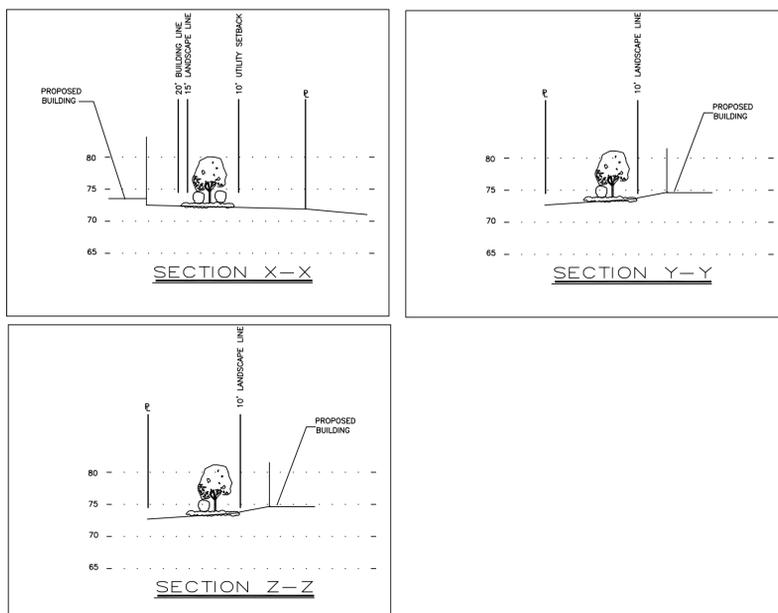
TREES INCHES TO BE SAVED

SIZE (INCHES)	NO.	TOTAL INCHES	NO.	TOTAL INCHES
		OAKS		ALL OTHERS
10	0	0	2	20
12	0	0	1	12
14	0	0	1	14
20	1	20	1	20
24	1	24		
28	1	28		
30	1	30		
36	1	36		
TOTAL	138	138	46	46

- LANDSCAPE NOTES:**
- Represents existing trees to be banded and saved. Banding shall consist of new or used chain link fence (min. 5' high) located at the tree drip line.
 - All plants must be healthy, vigorous material, free of pests and disease.
 - All plants shall be Florida Grade No. 1 or better.
 - All plants must be container-grown or balled and burlapped as indicated in the plant list.
 - All plants shall be triangulated spaced.
 - Prior to construction the landscape contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. The landscape contractor is responsible for repairing any and all damage to utilities, structures, site furnishings, etc., which occurs as a result of the landscape contractor.
 - All trees must be guyed and staked as shown in the details.
 - The landscape contractor is responsible for verifying all quantities shown on these plans, before pricing the work.
 - All planting shall be done in accordance with acceptable Horticultural practices. This is to include proper planting mix, plant bed and tree pit preparation, grading, watering, weeding, spraying, fertilization, staking and adequate maintenance until acceptance by the owner.
 - Any tree not designated for removal from the site and is removed by the contractor will result in the contractor having to either compensate the owner for similar replacement of tree(s) destroyed, or replacement of identical size and species of tree removed. Further, any additional requirements by regulatory agencies having jurisdiction over such matters will be incurred by the contractor. Compensatory damages against the contractor are not limited in this situation.
 - A MAXIMUM OF 50% OF THE PLANT MATERIALS USED, OTHER THAN TREES, MAY BE NON-DRAUGHT TOLERANT.
 - Stabilization shall be done by using vegetative ground cover.
 - ALL NEWLY DEVELOPED AND REDEVELOPED ABOVE GROUND UTILITY APPURTENANCES VISIBLE FROM THE PUBLIC RIGHT-OF-WAY, INCLUDING PEDESTALS, UTILITY METERS, TRANSFORMERS, BACK-FLOW PREVENTION DEVICES ETC., SHALL BE SCREENED PER PASCO COUNTY LDC.

- PHASING NOTES:**
- EVERYTHING PROPOSED EXCEPT FOR PHASE 2 BUILDING WILL BE BUILT IN PHASE 1.

- DEVELOPMENT CALCULATIONS:**
- BUFFER REQUIRED ALONG LAND O' LAKES BLVD - TYPE D - 15' WIDE MINIMUM; SHADE AND UNDERSTORY TREES SHALL BE PLANTED AN AVERAGE OF THIRTY (30) FEET APART; MINIMUM SPACING TWENTY (20) FEET; MAXIMUM FORTY-FIVE (45) FEET. THE REMAINDER OF THE BUFFER SHALL BE LANDSCAPED WITH SHRUBS AT A MINIMUM RATE OF FIVE (5) SHRUBS PER TREE OR PALM AND GROUND COVER PLANTS.
REQUIRED: 173 LF (EXCLUDING DRIVEWAY) @ 1 TREE PER 30 FEET = 6 TREES PROVIDED: 6 TREES, 30 SHRUBS AND GROUND COVER.
 - BUFFER ALONG THE NORTH (ABUTTING COMMERCIAL) - TYPE A - MIN. 10' WIDE WITH A SINGLE ROW OF TREES WITH A MAXIMUM 60 FEET ON CENTER, WITH A CONTINUOUS ROW OF EVERGREEN SHRUBS.
REQUIRED: 275 LF @ 1 TREE PER 60' = 5 TREES PROVIDED: 5 TREES AND EVERGREEN SHRUBS.
 - BUFFER ALONG THE SOUTH (ABUTTING RESIDENTIAL) - TYPE B - MIN. 15' WIDE WITH A SINGLE ROW OF TREES WITH A MAXIMUM 60 FEET ON CENTER, VISUAL SCREEN DESIGNED TO BE EIGHTY (80) PERCENT OPAQUE WITHIN ONE (1) YEAR. SCREENING A MINIMUM OF SIX (6) FEET IN HEIGHT AT THE TIME OF THE INSTALLATION.
REQUIRED: 50 LF @ 1 TREE PER 60' = 1 TREE PROVIDED: 1 TREE, EVERGREEN SHRUBS AND 6' HIGH PVC FENCE.
 - BUFFER ALONG THE WEST (ABUTTING COMMERCIAL) - TYPE A - MIN. 10' WIDE WITH A SINGLE ROW OF TREES WITH A MAXIMUM 60 FEET ON CENTER, WITH A CONTINUOUS ROW OF EVERGREEN SHRUBS.
REQUIRED: 200 LF @ 1 TREE PER 60' = 4 TREES PROVIDED: 4 TREES AND EVERGREEN SHRUBS.
 - BUFFER ALONG THE SOUTH (ABUTTING RESIDENTIAL) - TYPE B - MIN. 15' WIDE WITH A SINGLE ROW OF TREES WITH A MAXIMUM 60 FEET ON CENTER, VISUAL SCREEN DESIGNED TO BE EIGHTY (80) PERCENT OPAQUE WITHIN ONE (1) YEAR. SCREENING A MINIMUM OF SIX (6) FEET IN HEIGHT AT THE TIME OF THE INSTALLATION.
REQUIRED: 108 LF @ 1 TREE PER 60' = 3 TREES PROVIDED: 3 TREES, EVERGREEN SHRUBS AND 6' HIGH PVC FENCE.
 - 100% OF THE PROPOSED SHRUBS AND GROUND COVER ARE DROUGHT-TOLERANT.
 - INTERIOR LANDSCAPE AREA REQUIREMENTS:
REQUIRED: 10% OF 4,000 SF OFFICE = 400 SF PROPOSED = 500 SF WITH 3 TREES AND SHRUBS AND GROUND COVER
PROPOSED = 2,600 SF
 - BUILDING PERIMETER PLANTING:
REQUIRED: 10% OF 4,000 SF OFFICE = 400 SF PROPOSED = 500 SF WITH 3 TREES AND SHRUBS AND GROUND COVER
 - ALL PROPOSED TREES, PLANTS, SHRUBS AND GROUND COVER ARE NATIVE.



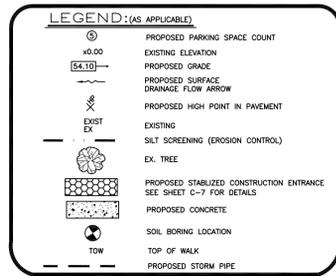
LIGHTING NOTES:
NO LIGHTING IS PROPOSED. IF REQUIRED, FIXTURE HEIGHTS SHALL NOT EXCEED 30 FEET. FULL HORIZONTAL CUT-OFF OPTICS ON ALL FIXTURES MOUNTED ON POLES, WALLS, AND ANYWHERE OUTDOORS.

IRRIGATION NOTES:
IRRIGATION WILL BE BY USING SHALLOW WELL.

PLANT & MATERIAL LIST:

SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	NATIVE FLORIDA	DROUGHT TOLERANT	REMARKS
OOOOOO	LL	LIGUSTRUM LUCIDUM	LIGUSTRUM HEDGE	300	3-7 GAL	YES	YES	MIN. 24", 3 FT O/C
QV	QV	QUERCUS VIRGINIANA	LIVE OAK	15	2" CAL	YES	YES	MIN. 6' HIGH
MG	MG	MAGNOLIA GRANDIFLORA	LITTLE GEM MAGNOLIA	6	2" CAL	YES	YES	MIN. 6' HIGH
MC	MC	MYRTICA CERIFERA	WAX MYRTLE	11	2" CAL	YES	YES	MIN. 6' HIGH
TD	TD	TRIPSSACUM DACTYLOIDES	FAKAHATCHEE GRASS	260		YES	YES	MIN. 3 GAL CONTAINER
ZP	ZP	ZAMIA PUMILA	COONHTE	200		YES	YES	MIN. 3 GAL CONTAINER

1. ALL PLANT MATERIALS SHALL BE FLORIDA GRADE 1.



FX Legend

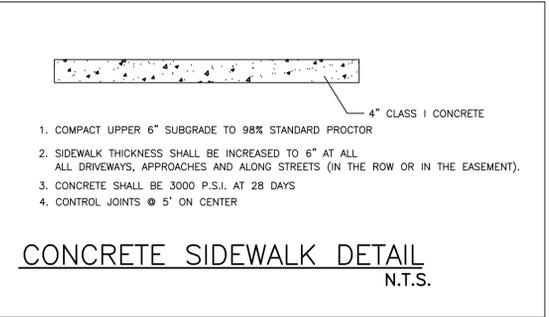
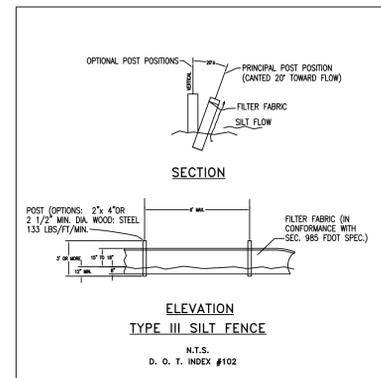
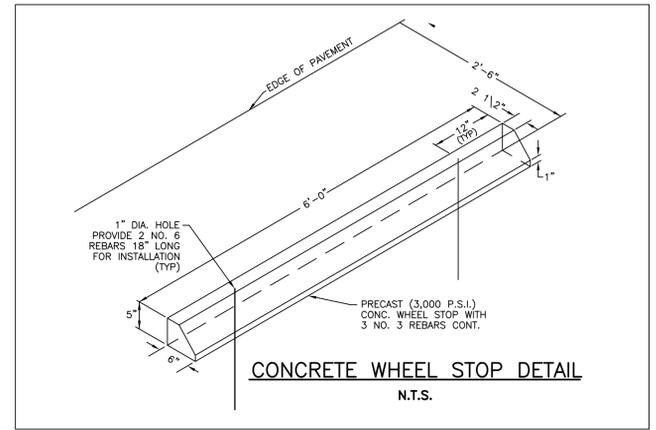
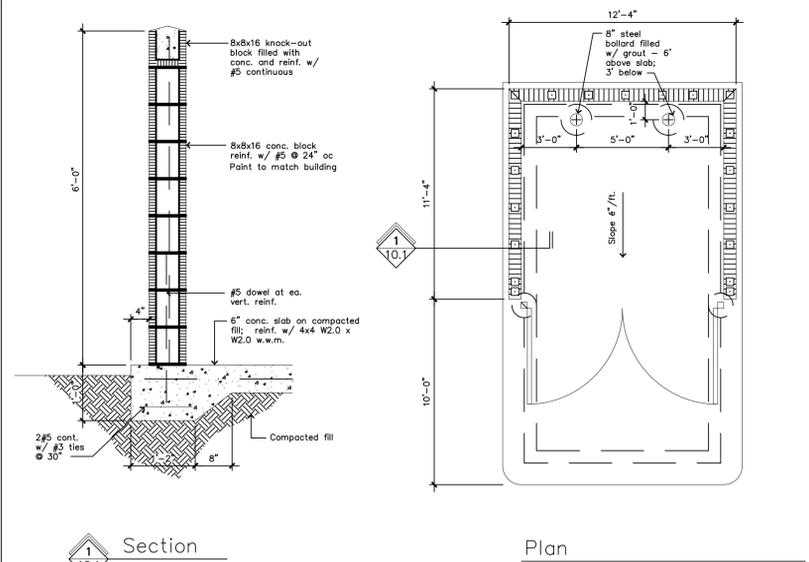
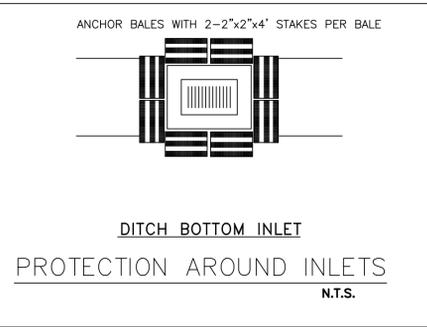
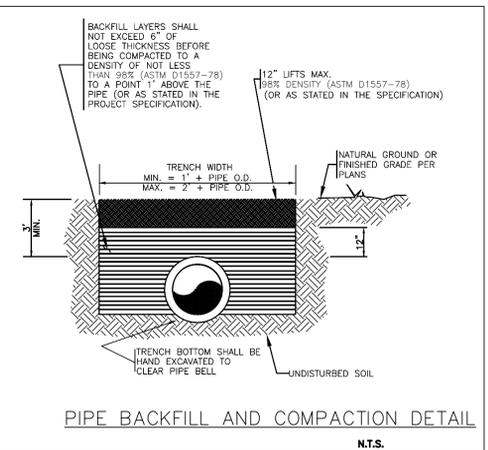
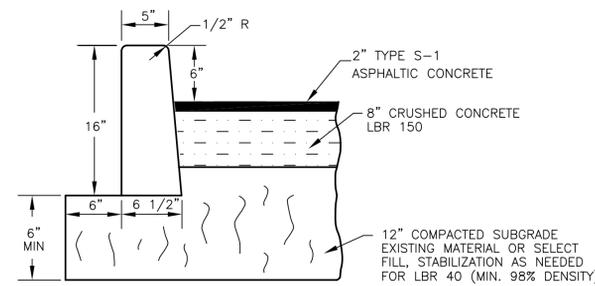
PC	Point of Curvature	TBM	Temporary Benchmark	CONC.	Concrete
PI <th>Point of Intersection</th> <td>BM <th>Benchmark</th> <td>A.P.O. <th>A Part Of</th> </td></td>	Point of Intersection	BM <th>Benchmark</th> <td>A.P.O. <th>A Part Of</th> </td>	Benchmark	A.P.O. <th>A Part Of</th>	A Part Of
PCC <th>Point of Compound Curvature</th> <td>PP <th>Power/Utility Pole</th> <td>COV. <th>Covered</th> </td></td>	Point of Compound Curvature	PP <th>Power/Utility Pole</th> <td>COV. <th>Covered</th> </td>	Power/Utility Pole	COV. <th>Covered</th>	Covered
PI <th>Point of Intersection</th> <td>PSM <th>Professional Surveyor & Mapper</th> <td>MAS. <th>Masonry</th> </td></td>	Point of Intersection	PSM <th>Professional Surveyor & Mapper</th> <td>MAS. <th>Masonry</th> </td>	Professional Surveyor & Mapper	MAS. <th>Masonry</th>	Masonry
SIR <th>Set Capped Iron Rod 1/2" #9@2'</th> <td>LB <th>Licensed Business</th> <td>RES. <th>Residence</th> </td></td>	Set Capped Iron Rod 1/2" #9@2'	LB <th>Licensed Business</th> <td>RES. <th>Residence</th> </td>	Licensed Business	RES. <th>Residence</th>	Residence
PIP <th>Found Iron Pipe</th> <td>PLB <th>Plat Book</th> <td>P.B. <th>Plat Book</th> </td></td>	Found Iron Pipe	PLB <th>Plat Book</th> <td>P.B. <th>Plat Book</th> </td>	Plat Book	P.B. <th>Plat Book</th>	Plat Book
FCM <th>Found Concrete Monument</th> <td>ATMA <th>As Their Interests May Appear</th> <td>PG. <th>Page</th> </td></td>	Found Concrete Monument	ATMA <th>As Their Interests May Appear</th> <td>PG. <th>Page</th> </td>	As Their Interests May Appear	PG. <th>Page</th>	Page
SET DISK <th>Set P-K Nail & Disk</th> <td>ISAGA <th>It's Successors And/Or Assigns</th> <td>TP. <th>Topography</th> </td></td>	Set P-K Nail & Disk	ISAGA <th>It's Successors And/Or Assigns</th> <td>TP. <th>Topography</th> </td>	It's Successors And/Or Assigns	TP. <th>Topography</th>	Topography
FND DISK <th>Found Nail & Disk</th> <td>R.C.P. <th>Reinforced Concrete Pipe</th> <td>W.F. <th>Wood Fence</th> </td></td>	Found Nail & Disk	R.C.P. <th>Reinforced Concrete Pipe</th> <td>W.F. <th>Wood Fence</th> </td>	Reinforced Concrete Pipe	W.F. <th>Wood Fence</th>	Wood Fence
FND R/S <th>Found Railroad Spike</th> <td>(D) <th>Dead</th> <td>EL. <th>Elevation</th> </td></td>	Found Railroad Spike	(D) <th>Dead</th> <td>EL. <th>Elevation</th> </td>	Dead	EL. <th>Elevation</th>	Elevation
PRM <th>Permanent Reference Monument</th> <td>(O) <th>Overhead</th> <td>W.C. <th>Witness Corner</th> </td></td>	Permanent Reference Monument	(O) <th>Overhead</th> <td>W.C. <th>Witness Corner</th> </td>	Overhead	W.C. <th>Witness Corner</th>	Witness Corner
OWH <th>Overhead Wire</th> <td>(C) <th>Calculation</th> <td>ESMT. <th>Easement</th> </td></td>	Overhead Wire	(C) <th>Calculation</th> <td>ESMT. <th>Easement</th> </td>	Calculation	ESMT. <th>Easement</th>	Easement
C.L.F. <th>Chain Link Fence</th> <td>(M) <th>Measured</th> <td>SEC. <th>Section</th> </td></td>	Chain Link Fence	(M) <th>Measured</th> <td>SEC. <th>Section</th> </td>	Measured	SEC. <th>Section</th>	Section
P.O.B. <th>Point of Beginning</th> <td>TP. <th>Township</th> <td>CO. <th>Chord Bearing</th> </td></td>	Point of Beginning	TP. <th>Township</th> <td>CO. <th>Chord Bearing</th> </td>	Township	CO. <th>Chord Bearing</th>	Chord Bearing
P.C. <th>Point of Commencement</th> <td>ESMT. <th>Easement</th> <td>CO. <th>Column</th> </td></td>	Point of Commencement	ESMT. <th>Easement</th> <td>CO. <th>Column</th> </td>	Easement	CO. <th>Column</th>	Column
P-K <th>Parker-Kalon</th> <td>SEC. <th>Section</th> <td>S/W <th>Sidewalk</th> </td></td>	Parker-Kalon	SEC. <th>Section</th> <td>S/W <th>Sidewalk</th> </td>	Section	S/W <th>Sidewalk</th>	Sidewalk
O.R.B. <th>Official Records Book</th> <td>R/W <th>Right Of Way</th> <td>C.B. <th>Chord Bearing</th> </td></td>	Official Records Book	R/W <th>Right Of Way</th> <td>C.B. <th>Chord Bearing</th> </td>	Right Of Way	C.B. <th>Chord Bearing</th>	Chord Bearing
V.G. <th>Concrete Valley Gutter</th> <td>CO. <th>Column</th> <td>CO. <th>Column</th> </td></td>	Concrete Valley Gutter	CO. <th>Column</th> <td>CO. <th>Column</th> </td>	Column	CO. <th>Column</th>	Column
		S/Q <th>Square</th> <td>DA. <th>Diameter</th> </td>	Square	DA. <th>Diameter</th>	Diameter
		O/A <th>Overall</th> <td>U.S. <th>United States</th> </td>	Overall	U.S. <th>United States</th>	United States

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BROTHERS INVESTMENT'S
SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
PASCO COUNTY, FLORIDA

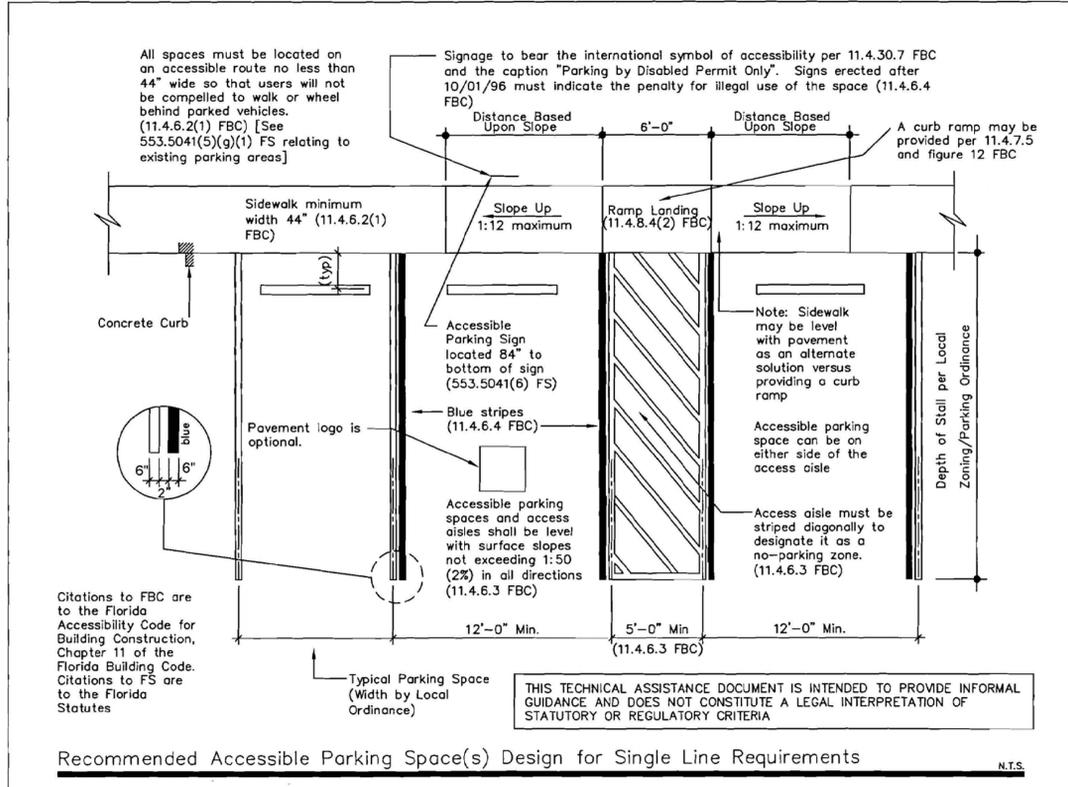
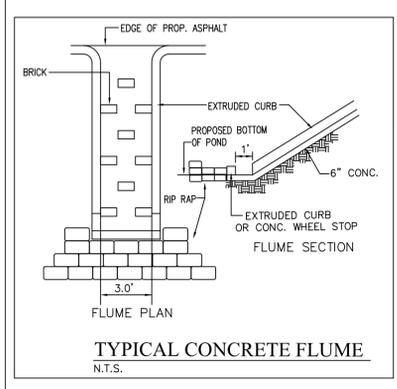
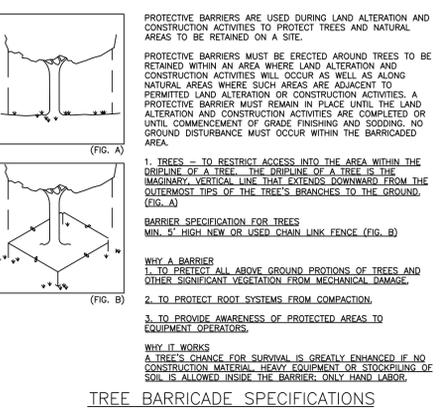
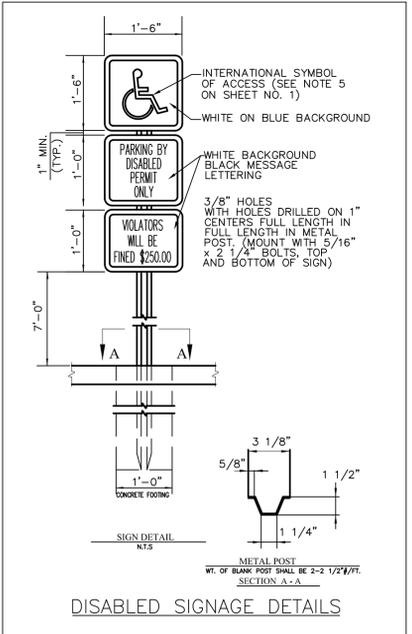
LANDSCAPE PLAN

DATE: 03/29/2016
DESIGNED BY: RA
DRAWN BY: RA
CHECKED BY: RA
FILE NAME: 16006Site
PROJECT #: 16-006
SHEET: C-7



GENERAL NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH PASCO COUNTY STANDARDS AND SPECIFICATIONS.
- LOCATIONS OF EXISTING UTILITIES AND FACILITIES SHOWN ARE APPROXIMATE AND ARE BASED ON TOPO DATA AND RECORD INFORMATION. ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND FACILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSULT WITH THE ENGINEER BEFORE MAKING ANY AND ALL INTERPRETATIONS OF THE PLANS. THIS IN NO WAY RELIEVES THE CONTRACTOR OF HIS RESPONSIBILITY FOR CONSTRUCTING THE PROJECT TO ACCOMPLISH THE INTENT OF THE PLANS.
- CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL REMOVED DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE PLANS. REPAIR AND REPLACEMENT OF ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THE WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ORIGINAL CONDITIONS PRIOR TO CONSTRUCTION UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ALL SURVEY CONTROLS DISTURBED AND/OR REMOVED DURING CONSTRUCTION WILL BE REPLACED BY A REGISTERED SURVEYOR. COST TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION IS TO BE ALLOWED.
- ALL EROSION CONTROL MEASURES MUST BE COMPLETE BEFORE CONSTRUCTION ACTIVITIES CAN BEGIN.
- EROSION/SEDIMENTATION CONTROL: THE CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIERS (HAY BALES OR SILTATION CURTAINS). IF REQUIRED, TO PREVENT SILTATION OF THE ADJACENT PROPERTY, STREET, STORM SEWERS AND WATERWAYS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON THE GROUND AS REQUIRED, IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF SITE, EITHER BY NATURAL DRAINAGE OR VEHICLE TRAFFIC, THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER LOCAL AUTHORITIES.
- CONTRACTOR SHALL CONTACT ALL OWNERS OF UTILITIES, EASEMENTS AND/OR RIGHTS-OF-WAYS, PUBLIC OR PRIVATE, PRIOR TO ANY WORK IN OR OVER THESE AREAS.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY THE VARIOUS UTILITY COMPANIES WITH AT LEAST 48 HOURS ADVANCE NOTICE FOR UTILITY VERIFICATION.
- UNLESS OTHERWISE RECOMMENDED BY THE SOILS ENGINEER, EXCAVATIONS AND EMBANKMENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF FOOT SECTION 120, TO ACHIEVE THE PLAN ELEVATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EASEMENTS BEFORE BEGINNING CONSTRUCTION.
- PRIOR TO STARTING CONSTRUCTION THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AGENCIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY ANY REGULATORY AUTHORITY.
- ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED AND MULCH OR AS NOTED ON THE LANDSCAPE PLAN. DISTURBED AREAS WITHIN R/W SHALL BE SOODED.
- ANY TREE NOT DESIGNATED FOR REMOVAL FROM THE SITE AND IS REMOVED BY THE CONTRACTOR WILL RESULT IN THE CONTRACTOR HAVING TO EITHER COMPENSATE THE OWNER FOR SIMILAR REPLACEMENT OR (IF TREE) DESTROYED, OR REPLACEMENT OF IDENTICAL SIZE AND SPECIES OF TREE REMOVED. FURTHER, ANY ADDITIONAL REQUIREMENTS BY REGULATORY AGENCIES HAVING JURISDICTION OVER SUCH MATTERS WILL BE INCURRED BY THE CONTRACTOR. COMPENSATORY DAMAGES AGAINST THE CONTRACTOR ARE NOT LIMITED IN THIS SITUATION.
- NO GROUND DISTURBING ACTIVITIES OR VEHICLE TRAVEL WILL OCCUR WITHIN THE DRIP LINE OF THE EXISTING TREES THAT WILL BE PRESERVED.
- ANY WELL DISCOVERED DURING LAND CLEARING SHALL BE PROTECTED OR ABANDONED IN ACCORDANCE WITH SWFWMD RULE CHAPTER 40D.

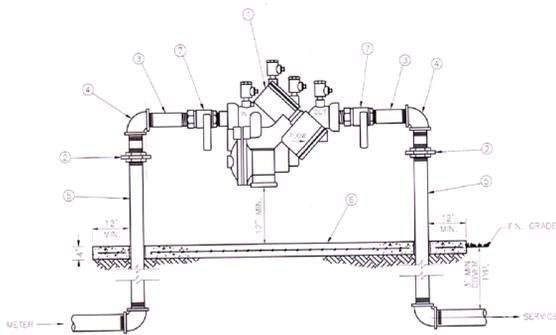


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BROTHERS INVESTMENT'S
SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
PASCO COUNTY, FLORIDA

SITE DETAILS

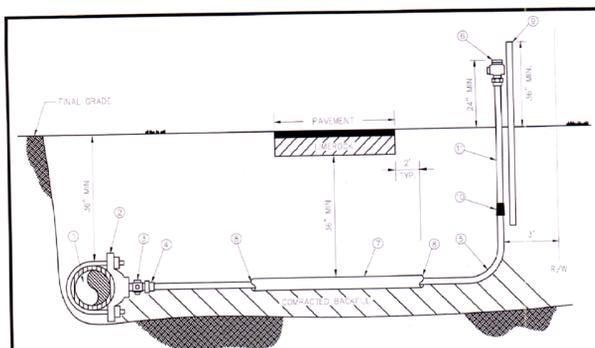
DATE: 03/29/2016
DESIGNED BY: RA
DRAWN BY: RA
CHECKED BY: RA
FILE NAME: 16006Site
PROJECT #: 16-006
SHEET: C-8



ITEM	QTY	DESCRIPTION
1	1	BACKFLOW PREVENTER ASSEMBLY, REDUCED PRESSURE ZONE
2	2	ELBOWS - GALV.
3	2	ELBOWS - BRASS
4	2	ELBOWS - GALV. 90°
5	2	WASER - GALV.
6	4	CONCRETE SLABS
7	2	BALL VALVES - BRASS OR S.S. (PROVIDED WITH BPT ASS'Y)

NOTE: - FIELD ADJUST AND CUT TEE & TO THE PROPER LENGTH;
 - MINIMUM CLEARANCE OF 24" TO BE MAINTAINED AROUND DEVICE FOR TESTING;
 - ENTIRE ASSEMBLY TO BE PAINTED SAFETY BLUE;
 - CONCRETE SLAB TO EXTEND 12" MIN. AROUND ENTIRE DEVICE;
 - DEVICE MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.

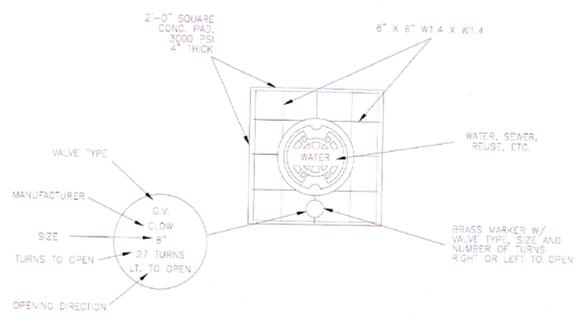
CREATED	02/24/03	REDUCED PRESSURE BACKFLOW PREVENTER (SINGLE SERVICE: 3/4", 1", 1-1/2", 2")	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		PASCO COUNTY UTILITIES	DETAIL 12



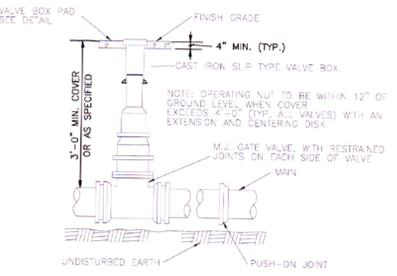
ITEM	QTY	DESCRIPTION
1	1	PIPE, PVC (1/2" - 1") OR SLIP
2	1	SADDLE SERVICE W/ 1" TYP. TUBING
3	1	WATER STOP (W.P. & C.O.P.)
4	1	WASER (STAINLESS STEEL)
5	1	TUBING, POLYETHYLENE
6	1	3/4" WATER OR TUBING CURB STOP BALL
7	1	2" CASING, PAD OR HERE - 2' BEYOND EDGE PAVEMENT
8	1	SLATER, GALV-NEK
9	1	2" x 4" S.P. MARKER STAKE
10	1	3/4" x 3/4" COLLARS (COMP. & COMP.) WATER ONLY
11	1	3/4" WATER OR 1" SLEEV. TUBING, POLYETHYLENE

NOTES: - ALL FITTINGS FOR POLYETHYLENE TUBING ARE BRASS COMPRESSION TYPE;
 - A VALVE BOX MAY BE REQUIRED AS SPECIFIED BY THE ENGINEER;
 - CURB STOP TO TERMINATE 24" ABOVE GROUND AT R/W LINE;
 - REUSE CURB STOPS = 1" / WATER CURB STOPS = 3/4";
 - TUBING TO BE YARDLEY 3/4" OR EQUAL;
 - SADDLES 2" - 4" TO BE BRASS FULL GROUND TYPE;
 - SADDLES 4" AND LARGER TO BE D. DUAL STRAP TYPE;
 - CURB STOPS TO BE TIED TO MARKER STAKE;
 - SADDLE MAY BE INSTALLED AT ANGLE (WITHIN 45° OF HORIZONTAL);
 - MARKER STAKES PAINTED SAFETY BLUE FOR WATER, PURPLE FOR REUSE.

CREATED	02/24/03	SINGLE FAR SIDE WATER SERVICE - 3/4" SINGLE FAR SIDE REUSE SERVICE - 1"	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		POLYETHYLENE TUBING	DETAIL 18
		PASCO COUNTY UTILITIES	



TYPICAL CONCRETE VALVE PAD



VALVE BOX DETAIL SLIP TYPE

CREATED	02/24/03	VALVE BOX DETAIL SLIP TYPE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		PASCO COUNTY UTILITIES	DETAIL 30

PIPE RESTRAINT LENGTHS IN FEET COMMON FITTINGS

WATER MAINS - TEST PRESSURE 150 PSI					
PIPE SIZE	FITTING TYPE				
	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					
PIPE SIZE	FITTING TYPE				
	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).

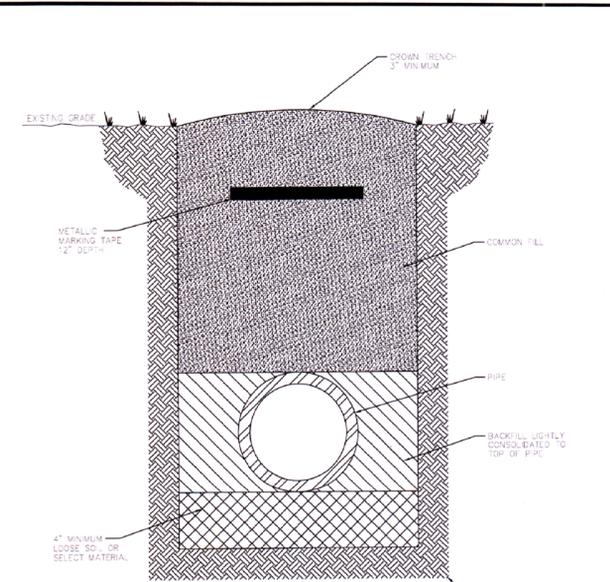
CREATED	02/24/03	RESTRAINED JOINT TABLE COMMON FITTINGS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		PASCO COUNTY UTILITIES	DETAIL 31

PIPE RESTRAINT LENGTHS IN FEET TEES (BRANCH SIDE)

WATER MAINS - TEST PRESSURE 150 PSI									
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'

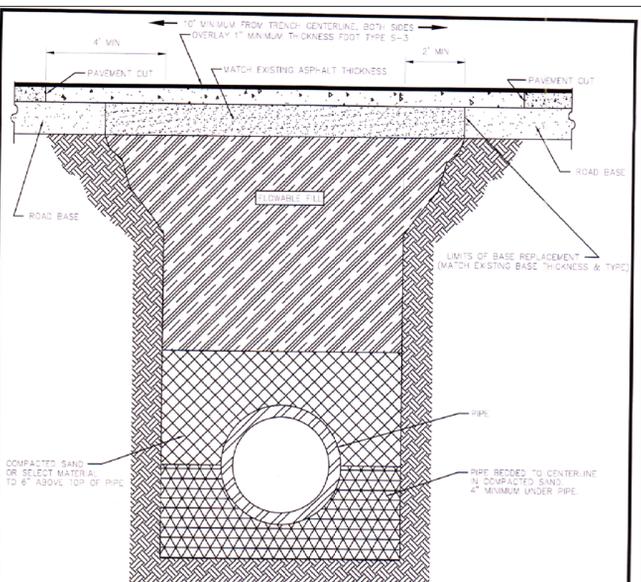
RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE TEE ALONG THE BRANCH FOR THE DISTANCE INDICATED. A MINIMUM OF 5 FEET OF RESTRAINED PIPE MUST BE INSTALLED ON BOTH RUNS OF THE TEE. MEGALIG TYPE RESTRAINERS ARE REQUIRED ON ALL JOINTS.

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



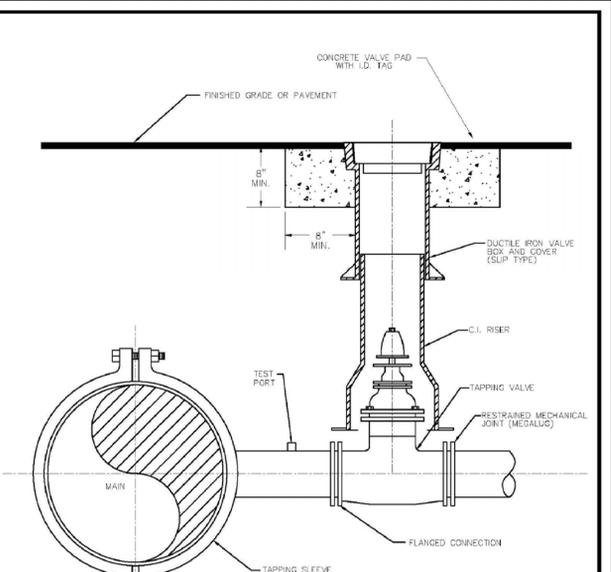
NOTES: - LOOSE SOIL OR SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ROCKS AND FOREIGN MATERIAL;
 - COMMON FILL SHALL NOT BE USED FOR COMPACTION UNTIL A MINIMUM OF 18" OF COMMON FILL HAS BEEN PLACED AND COMPACTED OVER THE PIPE. THREE FEET OF FILL SHALL BE PLACED BEFORE A HYDROMAMMER MAY BE USED FOR COMPACTION.

CREATED	02/24/03	PIPE LAYING CONDITIONS STANDARD UNPAVED AREAS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		PASCO COUNTY UTILITIES	DETAIL 35



NOTE: - SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ROCKS AND FOREIGN MATERIAL;
 - COMPACTION TO TOP OF PIPE SHALL BE APPROXIMATELY 80% STANDARD PROCTOR, AASHTO T-99;
 - EXISTING CONCRETE/ASPHALT PAVEMENT SURFACE AND BASE TO BE CUT SQUARE WITH CONCRETE SLAB.

CREATED	03/05/03	PIPE LAYING CONDITIONS FLOWABLE FILL BACKFILL STANDARD EXISTING PAVED AREAS & ROADWAYS	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		PASCO COUNTY UTILITIES	DETAIL 36



NOTES: - SADDLE CONNECTION WILL BE TESTED TO 150 PSI PRIOR TO TAPPING MAIN;
 - MECHANICAL JOINTS/UNDERGROUND PIPING SHALL BE RESTRAINED AS SPECIFIED BY COUNTY/ENGINEER;
 - VALVE EXTENSION ROD SHALL BE UTILIZED, AS NECESSARY, SO THAT VALVE OPERATING NUT IS A MAXIMUM OF 3' BELOW GRADE.

CREATED	02/24/03	WATER, REUSE, AND FORCE MAIN TAPPING DETAIL W/ VALVE LOCATION	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL.
REVISED		PASCO COUNTY UTILITIES	DETAIL 37

DATE: 5/16/16

NO. REVISIONS
1. SUBMIT TO PC, SW/FWD & FOOT

DATE: 03/29/2016

DESIGNED BY: RA
DRAWN BY: RA
CHECKED BY: RA

FILE NAME: 16006Site

PROJECT #: 16-006

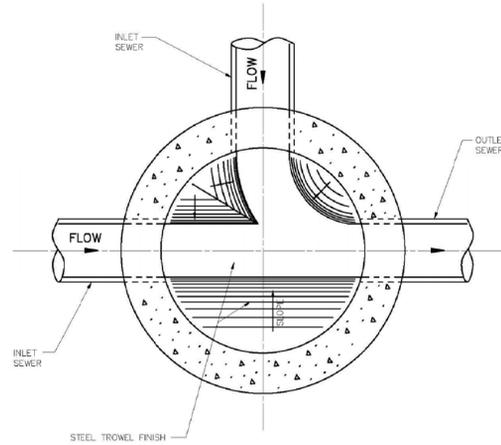
SHEET: C-9

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TEL: (813) 571-2860; FAX: (813) 571-1755; E-mail: aspireeng@pcu.com

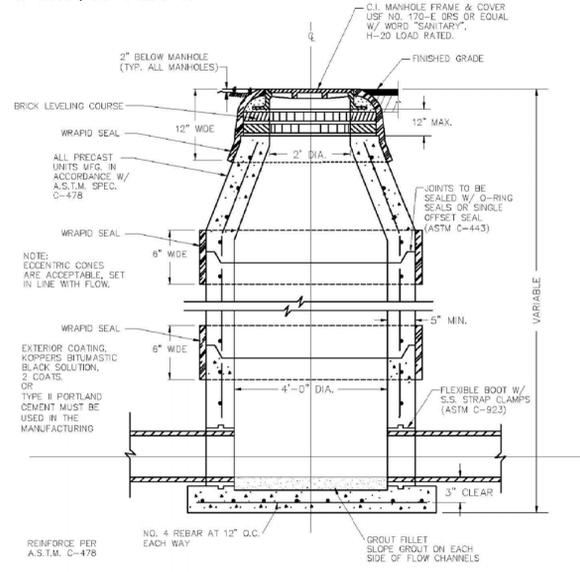
BROTHERS INVESTMENTS

SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
PASCO COUNTY, FLORIDA

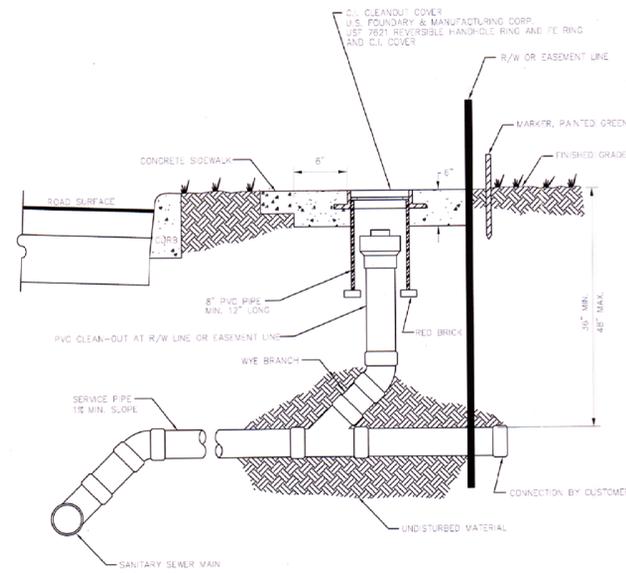
UTILITY DETAILS



NOTE:
 PRECAST CONCRETE
 SHALL ATTAIN A MINIMUM
 COMPRESSIVE STRENGTH
 OF 4,000 p.s.i. AT 28 DAYS.



- NOTE: 1. WRAP-AROUND SEAL MUST BE USED ON ALL JOINTS, CASTINGS AND RISER RINGS; ON ALL JOINTS ON AIR RELEASES, MANHOLES, GREASE/WATER, OIL/WATER SEPARATORS, AND WETWELLS.
 2. WRAP-AROUND SEAL MUST BE USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 3. PASCO COUNTY SHALL HAVE THE OPTION OF SPECIFYING THE TYPE OF INTERIOR LINING TO BE INSTALLED FOR EACH INDIVIDUAL MANHOLE.
 4. PASCO COUNTY SHALL HAVE THE OPTION OF REQUIRING A NEGATIVE PRESSURE TEST PER ASTM C-1244.
 5. LIFT HOLES MUST NOT PENETRATE THE WALLS.



CREATED 02/24/03	STANDARD MANHOLE (BENCH AND INVERTS)	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISIONS	PASCO COUNTY UTILITIES	DETAIL 39

CREATED 02/24/03	STANDARD MANHOLE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISIONS	PASCO COUNTY UTILITIES	DETAIL 41

CREATED 02/24/03	SANITARY SEWER - SINGLE WYE CONNECTION AND TYPICAL CLEAN-OUT	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL
REVISIONS	PASCO COUNTY UTILITIES	DETAIL 45

NO. REVISIONS	DATE:
1.	5/16/16

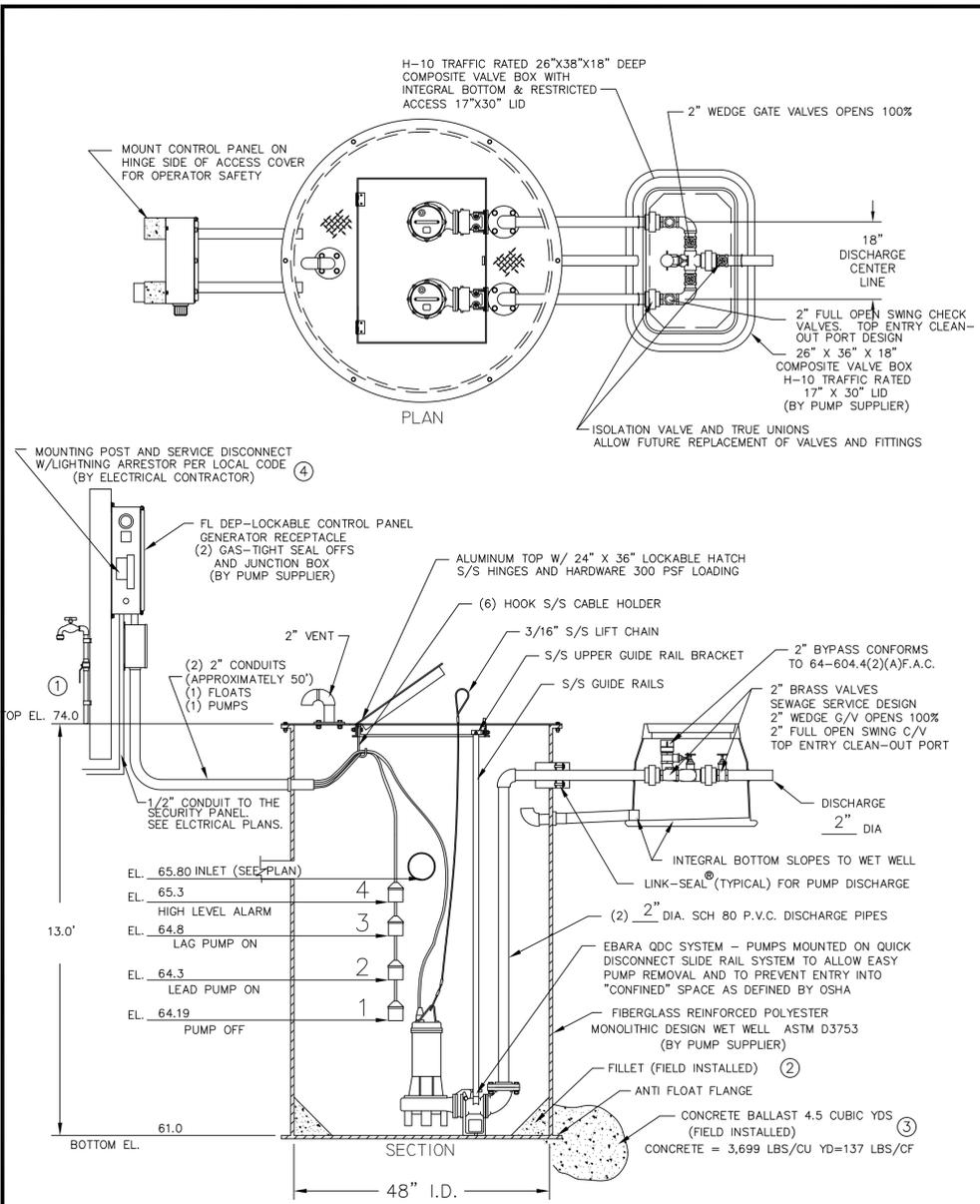
NO. REVISIONS	DATE:
1.	5/16/16

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BROTHERS INVESTMENT'S
 SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
 PASCO COUNTY, FLORIDA

DATE:	03/29/2016
DESIGNED BY:	RA
DRAWN BY:	RA
CHECKED BY:	RA
FILE NAME:	16006Site
PROJECT #:	16-006

SHEET:
 C-10



48" DUPLEX STATION - 2" PIPING WITH SLIDE RAIL SYSTEM, V.B. AND F.D.E.P. PANEL

4. MOUNTING POST, SERVICE DISCONNECT AND LIGHTING ARRESTOR PER LOCAL CODE
3. CONCRETE BALLAST AS REQUIRED
2. GROUT FILLET (1 TO 1 SLOPE TO "HOPPER" BOTTOM)
1. HOSE BIBB WITH REDUCED PRESSURE BACK FLOW PREVENTER FIELD INSTALL BY CONTRACTOR

GENERAL NOTES

FURNISH AND INSTALL EBARA SUBMERSIBLE PUMPS:

DESIGN CONDITION:

MODEL	EBARA 32 DGII	2	HP
GPM	40 GPM @ 35 FT & 42 GPM @ 28 FT		FT/TDH
VOLTAGE	208/230	THREE	PHASE
DISCHARGE	2"	143 MM	IMPELLER

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 BEARING - SINGLE ROW AND LOWER BEARINGS - DOUBLE 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 SPECIFICATIONS SHALL BE REQUIRED AS MINIMUM.

ALUMINUM HATCH: TSC MODEL-54R (54") ROUND WITH 24" X 36" 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" X 36" X 18" WITH 17" X 30" 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 BRASS SWING CHECK VALVES WITH TOP ENTRY CLEAN-OUT PORT AND BRASS WEDGE GATE VALVES OPEN 100%.

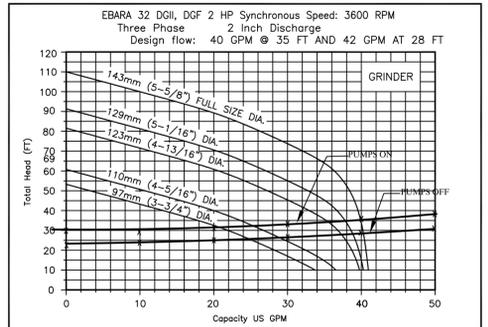
PIPING: 2" SCHEDULE 80 PVC.

FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL (SJ 30 SWENO).

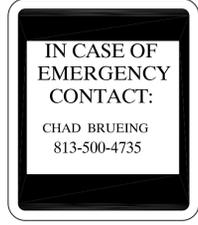
PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, ALUMINUM HATCH AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY.

THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, SLIDE RAIL ASSEMBLIES AND DISCHARGE PIPING ASSEMBLED BY TECHNICAL SALES CORPORATION READY TO SHIP FOR FIELD INSTALLATION.

THE STOCKING DISTRIBUTOR FOR EBARA SUBMERSIBLE PUMPS: TECHNICAL SALES CORPORATION, 4621 N. HALE AVE TAMPA, FL 33614 (813)876-9256



PUMP PERFORMANCE CURVE



SIGN DETAILS

SIGN NOTES:
MIN. LETTER SIZE: 2"

CONTROL PANEL -SHALL CONFORM TO FL DEP 64-604.42(A)

CONTROL PANEL SHALL BE TSC MODEL # 38-D IN NEMA 4X FIBERGLASS ENCLOSURE. THE PANEL SHALL MEET STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), ENVIRONMENTAL PROTECTION COMMISSION (EPC) AND LOCAL CODE REQUIREMENTS GOVERNING PRIVATE LIFT STATIONS.

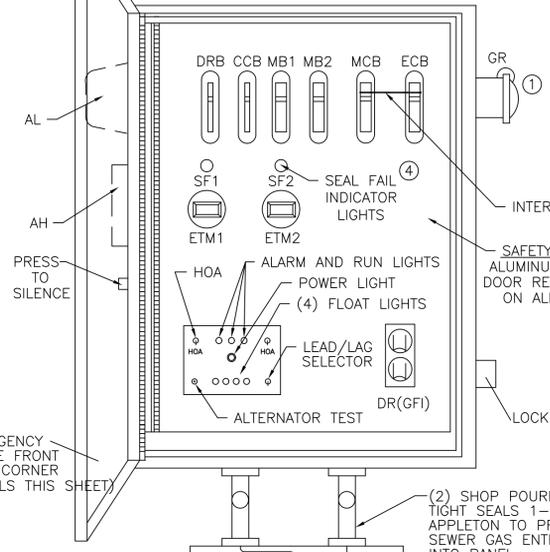
FLOAT SWITCHES AND CONTROL SYSTEM SHALL BE UL LISTED AND INTRINSICALLY SAFE. ALL COMPONENTS SHALL BE UL LISTED.

A JUNCTION BOX IS REQUIRED, WITH SHOP POURED SEALS BETWEEN BOX AND CONTROL PANEL TO PREVENT SEWER GAS ENTRY INTO CONTROL PANEL.

ELECTRICAL CONTRACTOR TO PROVIDE SERVICE DISCONNECT WITH LIGHTNING ARRESTOR MOUNTED PER LOCAL CODES.

THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING.

CONTROL PANEL LAYOUT



NEMA 4X 12 X 12 X 6 FIBERGLASS JUNCTION BOX W/ALUMINUM SUB PANEL AND (5) TERMINAL STRIPS SHOWN OPEN FOR CLARITY

(2) SHOP POURED GAS TIGHT SEALS 1-1/4" APPLINGTON TO PREVENT SEWER GAS ENTRY INTO PANEL

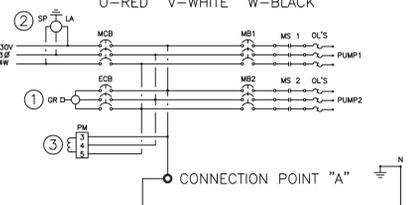
SEPARATE CONDUITS REQUIRED BY NEC (1) FLOAT CONTROL CABLES (1) PUMP POWER CABLES

FURNISH (2) CONDUITS TO WETWELL 2" MIN

LEGEND

- AH ALARM HORN
- AL ALARM LIGHT
- ASB ALARM SILENCE BUTTON
- ATS ALTERNATOR TEST SWITCH
- CCB CONTROL CIRCUIT BREAKER
- DR DUPLEX RECEPTACLE
- DRB DUPLEX RECEPTACLE BREAKER
- ECB EMERGENCY CIRCUIT BREAKER
- ETM ELAPSED TIME METER
- F FUSE
- FL FLASHER
- FS FLOAT SWITCH (REGULATOR)
- GR GENERATOR RECEPTACLE
- GRD GROUND
- HOA HAND-OFF-AUTOMATIC SELECTOR
- LA LIGHTNING ARRESTOR
- MB MOTOR BREAKER
- MCB MAIN CIRCUIT BREAKER
- MS MOTOR STARTER
- MS NEUTRAL
- OL'S OVERLOAD HEATERS
- PM PHASE MONITOR
- PTS PUMP TERMINAL STRIP
- R RELAY
- RC RUN CAPACITOR
- RD DISCHARGE RESISTOR
- RL PUMP RUN INDICATORS
- RTS REGULATOR TERMINAL STRIP
- SC START CAPACITOR
- SF SEAL FAIL
- SR START RELAY
- SP SURGE PROTECTOR
- TTS THERMAL TERMINAL STRIP

THREE PHASE WIRING DIAGRAM



PANEL WIRING DIAGRAM

PANELS SHALL CONFORM TO FLORIDA DEP 64-604.400

1. GENERATOR RECEPTACLE FOR EMERGENCY POWER CONNECTION WITH INTERLOCK
 2. SURGE PROTECTION AND LIGHTNING PROTECTION ON ALL INCOMING LEGS
 3. PHASE PROTECTION SHALL BE PROVIDED
 4. SEAL FAIL DETECTING
- PANEL MANUFACTURER SHALL BE A "UL" LISTED SHOP.

EBARA DUPLEX GRINDER PUMP STATION
FIBERGLASS WET WELL

TECHNICAL SALES CORPORATION

TSC PRE-FAB PUMP SOLUTIONS®

WATERWORKS & WASTEWATER SPECIALTIES

Representing Innovative Manufacturers

MODEL TSC2-40.1®

4621 N. HALE AVENUE PH (813)876-9256
TAMPA, FL 33614 FAX (813)874-1194
EMAIL: Sales@TSCtampa.com
REV 0102 SCALE: N.T.S.

DATE: 5/16/16
NO. REVISIONS
1. SUBMIT TO PC, SW/MD & FOOT

ASPIRE ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
1023 PROFESSIONAL PARK DR., BRANDON, FL 33511
TEL: (813)971-2860; FAX: (813)971-1755; E-mail: aspireeng@bnc.com

BROTHERS INVESTMENTS
SECTION 24, TOWNSHIP 26 S., RANGE 18 E.
PASCO COUNTY, FLORIDA

LIFT STATION DETAILS

DATE: 03/29/2016
DESIGNED BY: RA
DRAWN BY: RA
CHECKED BY: RA
FILE NAME: 16006Site
PROJECT #: 16-006
SHEET: C-11