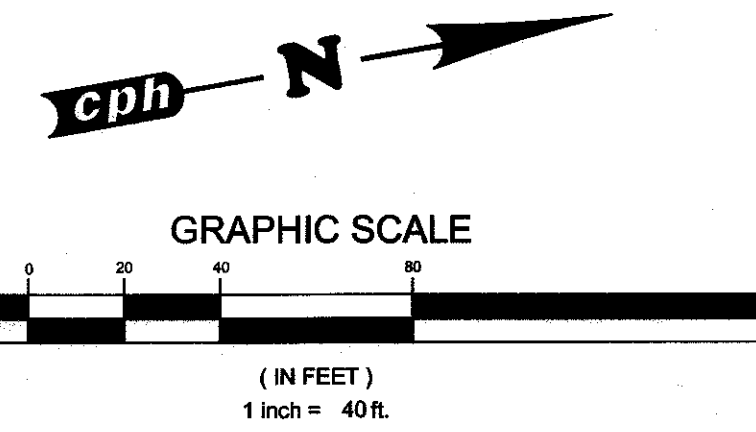


SEE SHEET C-9Q FOR CONTINUATION



R.O.W. STRIPING NOTES

- ALL MARKINGS ARE TO CONFORM TO THE MOST CURRENT ISSUE OF F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ALONG WITH THE MOST CURRENT ISSUE OF FLORIDA'S DESIGN STANDARD HANDBOOKS.
- ALL PAVEMENT STRIPING AND MARKINGS ARE TO BE THERMOPLASTIC WITH RAISED PAVEMENT MARKERS WHERE APPLICABLE TO MEET F.D.O.T. STANDARDS AND SPECIFICATIONS AS APPROPRIATE.
- ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.
- REMOVAL OF EXISTING STRIPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD.
- ARROW SPACING TO CONFORM WITH F.D.O.T. INDEX NO. 17346.
- TEMPORARY TAPE TO BE INSTALLED PRIOR TO DARKNESS ON DAY OF EXISTING MARKINGS REMOVAL. NO CONFLICTING MARKINGS PERMITTED.
- THE SIGNING AND STRIPING DETAILS SHOWN ON THESE PLANS PROVIDE GENERAL GUIDELINES ONLY. THE CONTRACTOR WILL FOLLOW THE LATEST EDITION OF F.D.O.T. DESIGN STANDARDS (F.D.O.T. D.S.) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) FOR ADDITIONAL DETAILS.
- THE PHYSICAL CONSTRUCTION OF ALL SIGNS, PAVEMENT MARKINGS, DELINEATORS, ETC., ARE TO BE IN CONFORMANCE WITH F.D.O.T. STANDARD SPECIFICATIONS AS APPROPRIATE.
- REFLECTIVE PAVEMENT MARKERS WILL BE INSTALLED ACCORDING TO THE F.D.O.T. D.S. (LATEST EDITION) THE FOLLOWING F.D.O.T. NUMBER IS APPLICABLE: 17352
- THE LOCATIONS OF ALL SIGNS, STRIPING, AND PAVEMENT MARKINGS ARE TO BE DELINEATED BY THE CONTRACTOR BY STAKING AND APPLICATIONS OF A LIGHT COAT OF TEMPORARY PAINT FOR FINAL APPROVAL BY THE PROJECT ENGINEER, F.D.O.T. MAINTENANCE ENGINEER AND THE CITY OF ALACHUA AS APPROPRIATE PRIOR TO FINAL CONSTRUCTION.
- PAVEMENT MARKING AT CURBED MEDIANS AND ISLANDS
  - REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS: ON TOP OF TYPE D AND F CURB, ON FACE AND TOP OF TRAFFIC SEPARATORS, ON PAVEMENT 1' FROM EDGLINE OR EDGE OF PAVEMENT IF NO EDGLINE IS USED FOR TYPE E CURB FOR THE LIMITS OF CURVE TANGENT OR AS SHOWN ON PLANS.
  - BI-DIRECTIONAL YELLOW RPMS SHALL BE INSTALLED AT 90° AND FACING AWAY FROM MEDIAN, TRAFFIC SEPARATORS OR GORE. BI-DIRECTIONAL WHITE / RED RPMS SHALL BE ORIENTED SO THE WHITE SIDE FACES APPROACHING TRAFFIC.
  - REFLECTIVE NOSE PAINT SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS: ON THE FACE OF TYPE D AND F CURB, ON FACE AND TOP OF TRAFFIC SEPARATORS EXCEPT WITHIN 2 INCHES OF RPMS, ON THE TOP AND FACE OF TYPE E CURB FOR THE LIMITS OF CURVE TANGENT OR AS SHOWN ON PLANS.

LEGEND

- DYSL-T6" DOUBLE YELLOW SOLID LINE- (THERMO.) / 6" WIDE  
SYSL-T6" SINGLE YELLOW SOLID LINE- (THERMO.) / 6" WIDE  
SWSL-T6" SINGLE WHITE SOLID LINE- (THERMO.) / 6" WIDE  
SWSL-T6" SINGLE WHITE SOLID LINE- (THERMO.) / 6" WIDE

SEE SHEET C-9Q FOR CONTINUATION

LEASE LOT

ENTRANCE ROAD

MATCHLINE - SEE ABOVE

MATCHLINE - SEE BELOW

cph  
www.cphcorp.com

A Full Service  
A & E Firm

Architects  
Engineers  
Environmental  
Landscape Architects  
M/E/P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland



Designed by:	B.P.C.	Drawn by:	P.W.R.	Checked by:	H.L.W.	Approved by:	B.P.C.	Scale:	1" = 40'	Date:	2/17/15	Job No.:	W13392.1	No.	Date

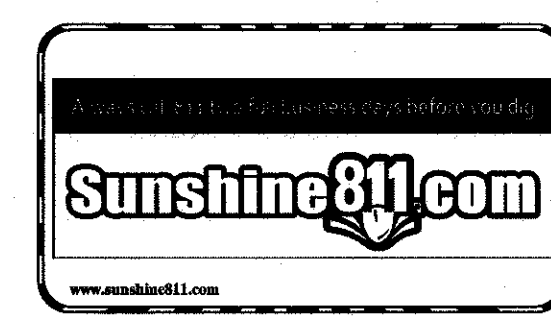
Plans Prepared By:  
CPH, Inc.  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.S. No. 7143  
Arch. Lic. No. AA2600926  
Landscape Lic. No. LC0000288

ENTRANCE ROAD AND 151ST BLVD  
SIGNING AND PAVEMENT MARKING PLAN

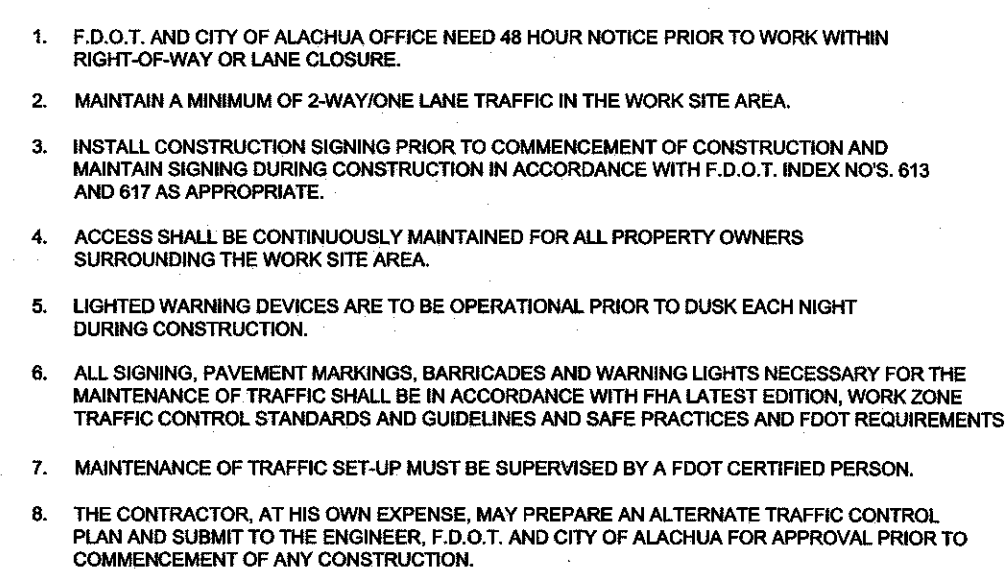
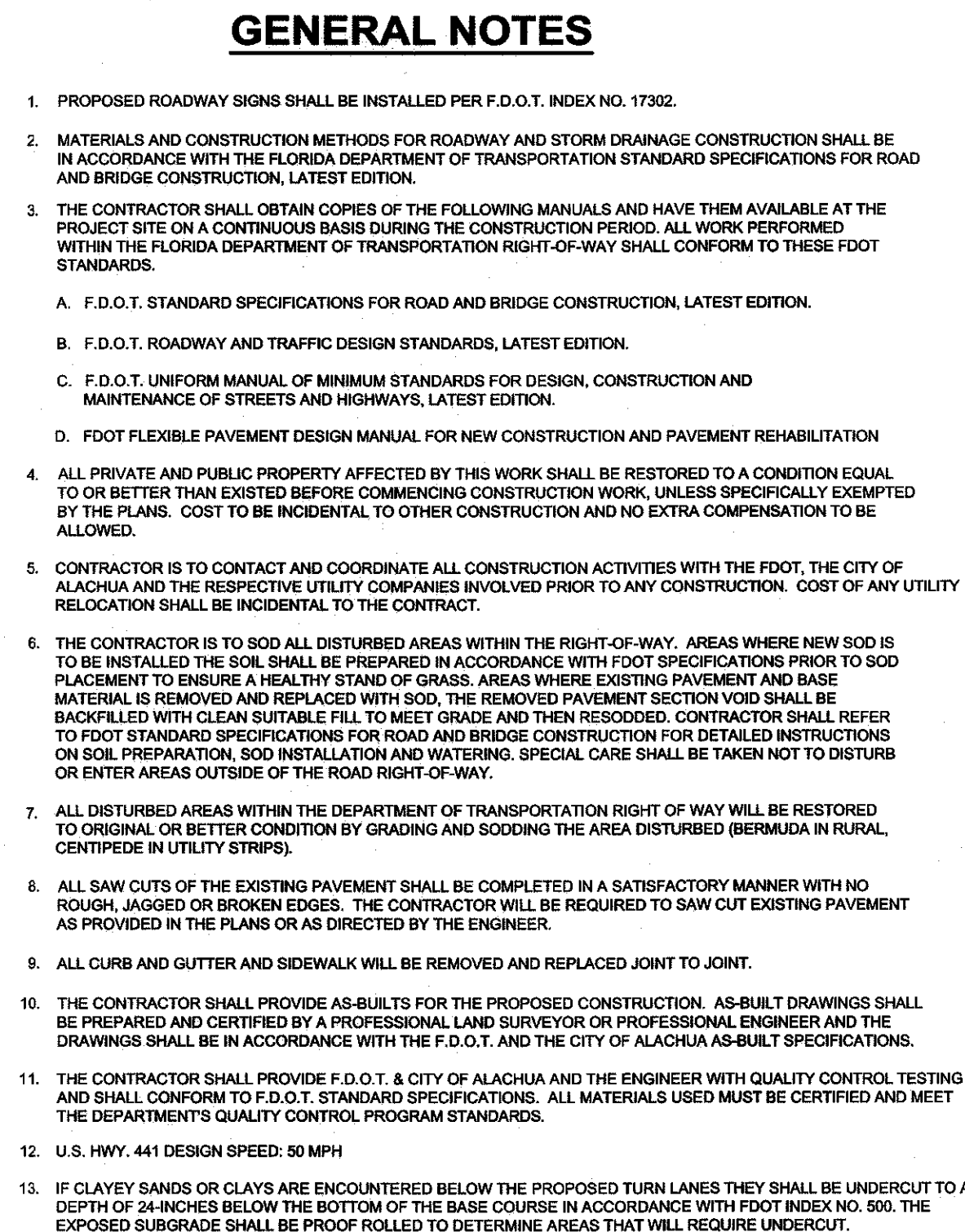
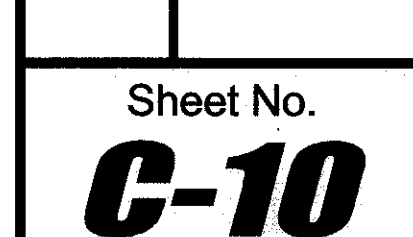
Walmart

STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

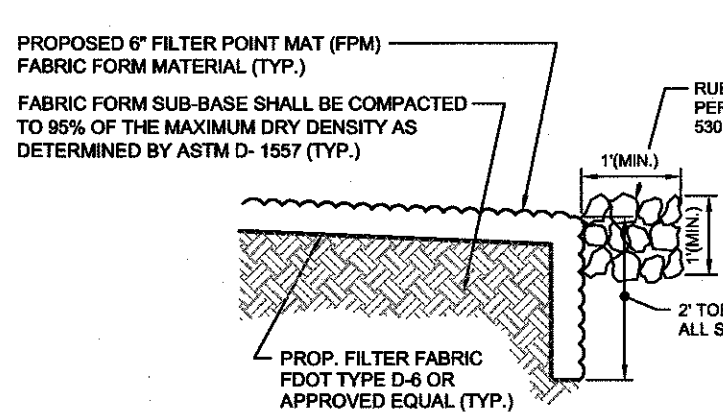
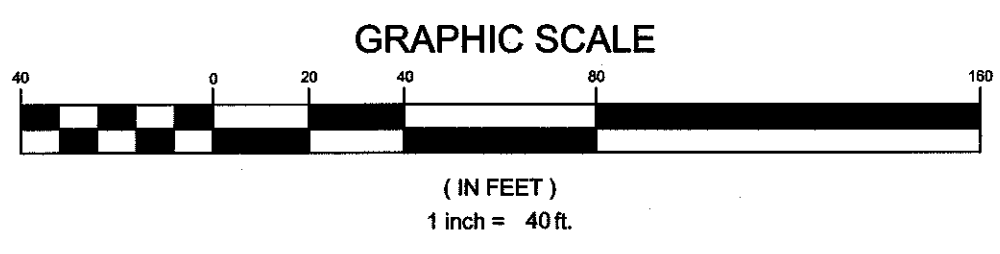
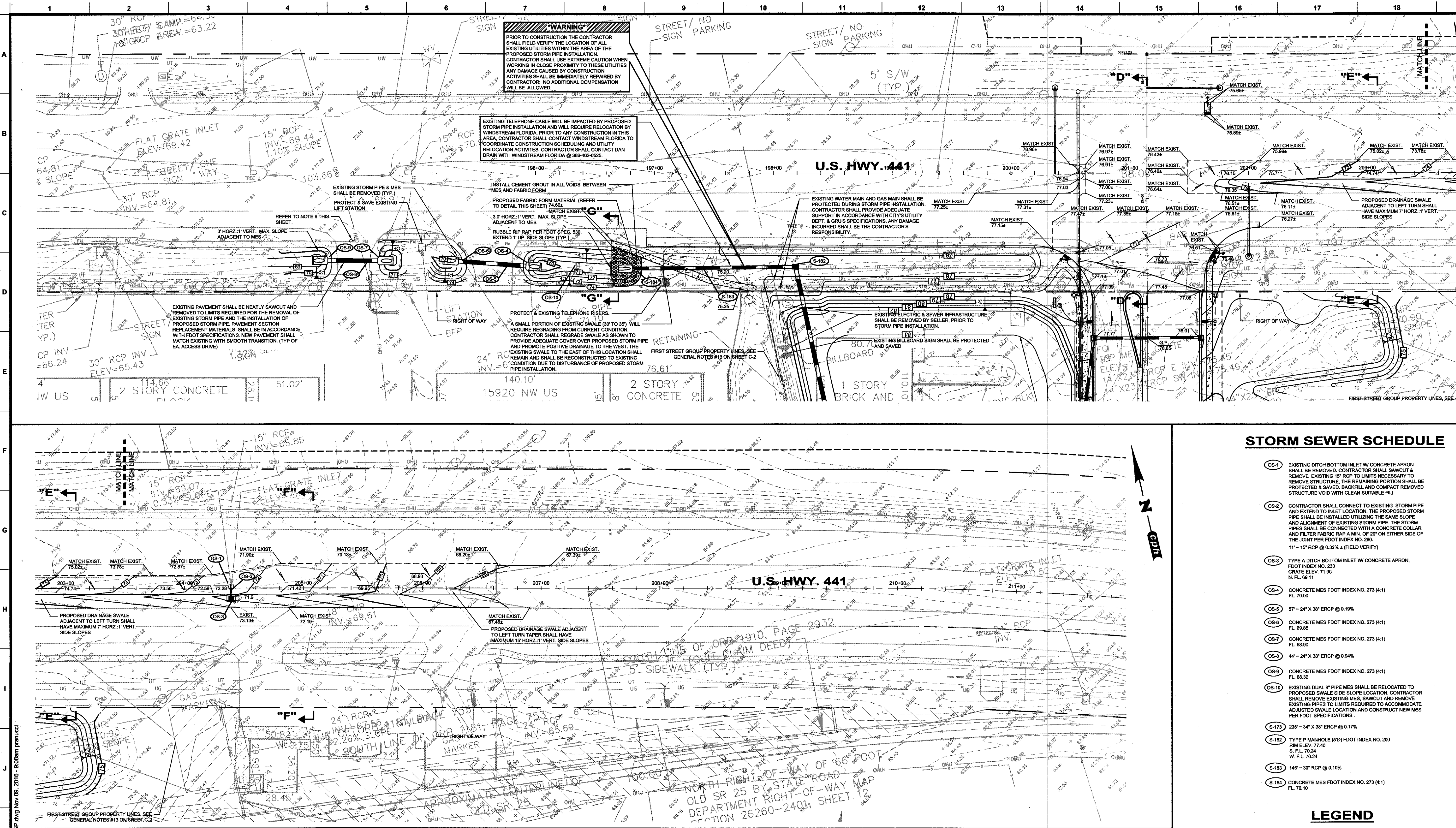
Sheet No.  
C-9R











FABRIC FORM DETAIL

NOTES:

1. ALL DISTURBED AREAS WITHIN THE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SOILING THE AREA DISTURBED (BERMUDA IN RURAL, CENTPEDE IN UTILITY STRIPS).
2. REFER TO GRADING & STORM DRAINAGE PLAN SHEET C-7 & C-7A FOR ADDITIONAL INFORMATION.
3. PIPE LENGTHS ASSOCIATED WITH MITERED END SECTIONS DO NOT INCLUDE SEGMENT TO BE INCLUDED UNDER UNIT PRICE FOR M.E.S. (A.K.A. DIMENSION F, F.D.O.T. INDEX NO. 273)
4. REFER TO SHEET C-10C FOR CROSS SECTIONS.
5. REFER TO EROSION AND SEDIMENTATION PLANS, SHEETS (SW-3) TO (SW-10) FOR EROSION CONTROL LOCATIONS & SPECIFICATIONS.
6. CONTRACTOR SHALL BE LIMITED TO ONE ACCESS DRIVE CLOSURE FOR THE INSTALLATION OF PROPOSED CULVERT STORM PIPES. ONE ACCESS DRIVE SHALL BE MAINTAINED FOR THROUGH TRAFFIC AT ALL TIMES DURING THE PHASES OF DEMOLITION AND CONSTRUCTION. CONTRACTOR SHALL PROVIDE MOT IN ACCORDANCE WITH FDOT SPECIFICATIONS.

STORM SEWER SCHEDULE

- (S-1) EXISTING DITCH BOTTOM INLET W/ CONCRETE APRON SHALL BE REMOVED. CONTRACTOR SHALL SAWCUT & REMOVE EXISTING 15\"/>
- (S-2) CONTRACTOR SHALL CONNECT TO EXISTING STORM PIPE AND EXTEND TO INLET LOCATION. THE PROPOSED STORM PIPE SHALL BE INSTALLED UTILIZING THE SAME SLOPE AND ALIGNMENT OF EXISTING STORM PIPE. THE STORM PIPES SHALL BE CONNECTED WITH A CONCRETE COLLAR AND FILTER FABRIC R/P A MIN. OF 20' ON EITHER SIDE OF THE JOINT PER FDOT INDEX NO. 280. 11\"/>
- (S-3) TYPE A DITCH BOTTOM INLET W/ CONCRETE APRON, FDOT INDEX NO. 230 GRATE ELEV. 71.90 N. FL. 69.11
- (S-4) CONCRETE MES FOOT INDEX NO. 273 (4-1) FL. 70.00
- (S-5) 57\"/>
- (S-6) CONCRETE MES FOOT INDEX NO. 273 (4-1) FL. 69.90
- (S-7) CONCRETE MES FOOT INDEX NO. 273 (4-1) FL. 69.90
- (S-8) 44\"/>
- (S-9) CONCRETE MES FOOT INDEX NO. 273 (4-1) FL. 69.30
- (S-10) EXISTING DUAL 6\"/>
- (S-11) 235\"/>
- (S-12) TYPE P MANHOLE (60) FDOT INDEX NO. 200 RM ELEV. 77.40 S. FL. 70.24 W. FL. 70.24
- (S-13) 145\"/>
- (S-14) CONCRETE MES FOOT INDEX NO. 273 (4-1) FL. 70.10

LEGEND

- (T.C.) TOP OF CURB
- (E.P.) EDGE OF PAVEMENT
- PROP. FLOW DIRECTION
- PROP. STORM PIPE
- PROP. CONTOUR

EROSION AND SEDIMENTATION CONTROL NOTES

THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES, WITH THE SILT FENCE TO CONFORM TO F.D.O.T. INDEX NO. 102 WITH FILTER FABRIC IN ACCORDANCE WITH SECTION 986 OF THE F.D.O.T. STANDARD SPECIFICATIONS.

BEFORE YOU DIG!  
CALL SUNSHINE STATE ONE CALL OF FLORIDA  
AT LEAST TWO FULL BUSINESS DAYS BEFORE  
DIGGING OR DISTURBING EARTH

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

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland

PAUL CASSIDY  
No. 67373  
STATE OF FLORIDA  
ENGINEER

Designed by:	Drawn by:	Checked by:	Approved by:	Scale:	Date:	Job No.:	©	Revised	By
B.P.C.	P.W.R.	H.L.W.	B.P.C.	1\"/>	2/17/15	W13392.1	© 2015		

Plans Prepared By:  
**CPH, Inc.**

5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.333.0999

Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7149  
Arch. Lic. No. AA2609926  
Landscape Lic. No. LC0000298

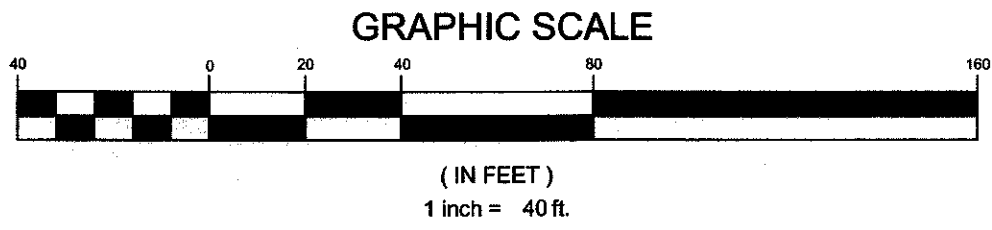
U.S. HIGHWAY 441 OFF-SITE ROADWAY  
IMPROVEMENT (GRADING & DRAINAGE PLAN)

STORE NO. 3873-00, ALACHUA (SEC 17-5 HWY 441), FLORIDA

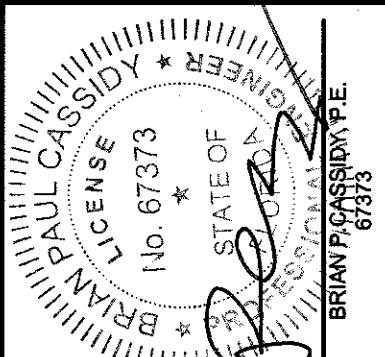
Sheet No.  
**C-10A**

J:\W\13392.1\CH\DWG\Design\W13392.1 - C-10A US HWY 441 OFF SITE RD - SQP.dwg Nov 09, 2016 - 9:08am pmlm





1. ALL MARKINGS ARE TO CONFORM TO THE MOST CURRENT ISSUE OF F.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION ALONG WITH THE MOST CURRENT ISSUE OF FLORIDA'S DESIGN STANDARD HANDBOOKS.
2. ALL PAVEMENT STRIPING AND MARKINGS ARE TO BE THERMOPLASTIC WITH RAISED PAVEMENT MARKERS WHERE APPLICABLE TO MEET F.D.O.T. STANDARDS AND SPECIFICATIONS AS APPROPRIATE.
3. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC.
4. REMOVAL OF EXISTING STRIPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD.
5. ARROW SPACING TO CONFORM WITH F.D.O.T. INDEX NO. 17346.
6. TEMPORARY TAPE TO BE INSTALLED PRIOR TO DARKNESS ON DAY OF EXISTING MARKINGS REMOVAL. NO CONFLICTING MARKINGS PERMITTED.
7. THE SIGNING AND STRIPING DETAILS SHOWN ON THESE PLANS PROVIDE GENERAL GUIDELINES ONLY. THE CONTRACTOR WILL FOLLOW THE LATEST EDITION OF F.D.O.T. DESIGN STANDARDS (F.D.O.T. D.S.) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) FOR ADDITIONAL DETAILS.
8. THE PHYSICAL CONSTRUCTION OF ALL SIGNS, PAVEMENT MARKINGS, DELINEATORS, ETC., ARE TO BE IN CONFORMANCE WITH F.D.O.T. STANDARD SPECIFICATIONS AS APPROPRIATE.
9. EXISTING SIGNS TO BE RELOCATED AND/OR REMOVED PER CITY OF ALACHUA AND F.D.O.T. SPECIFICATIONS.
10. REFLECTIVE PAVEMENT MARKERS WILL BE INSTALLED ACCORDING TO THE F.D.O.T. D.S. (LATEST EDITION) THE FOLLOWING F.D.O.T. NUMBER IS APPLICABLE: 17352
11. CONTRACTOR IS TO PROVIDE FLAGMEN, AND OTHER TRAFFIC CONTROL MEASURES NECESSARY TO PROTECT AND FACILITATE TRAFFIC MOVEMENT DURING CONSTRUCTION.
12. THE LOCATIONS OF ALL SIGNS, STRIPING, AND PAVEMENT MARKINGS ARE TO BE DELINEATED BY THE CONTRACTOR BY STAKES AND APPLICATIONS OF A LIGHT COAT OF TEMPORARY PAINT FOR FINAL REVIEW BY THE PROJECT ENGINEER, F.D.O.T. MAINTENANCE ENGINEER, AND THE CITY OF ALACHUA AS APPROPRIATE PRIOR TO FINAL CONSTRUCTION.
13. PROPOSED ROADWAY SIGNS SHALL BE INSTALLED PER F.D.O.T. INDEX NO. 17302.



Designed by:	B.P.C.	<input checked="" type="checkbox"/>
Drawn by:	P.W.R.	<input checked="" type="checkbox"/>
Checked by:	H.L.W.	<input checked="" type="checkbox"/>
Approved by:	B.P.C.	<input checked="" type="checkbox"/>
Scale:		<input checked="" type="checkbox"/>
Date:	2/17/15	<input checked="" type="checkbox"/>
Job No.:	W13392.1	<input checked="" type="checkbox"/>
© 2016		
Revision		Bv

**Plans Prepared By:**  
**CPH, Inc.**  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0998  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600926  
Lndscp. Lic. No. LC0000298

**U.S. HIGHWAY 441 OFF-SITE ROADWAY  
IMPROVEMENT (SIGNING & PAVEMENT  
MARKING PLAN)**



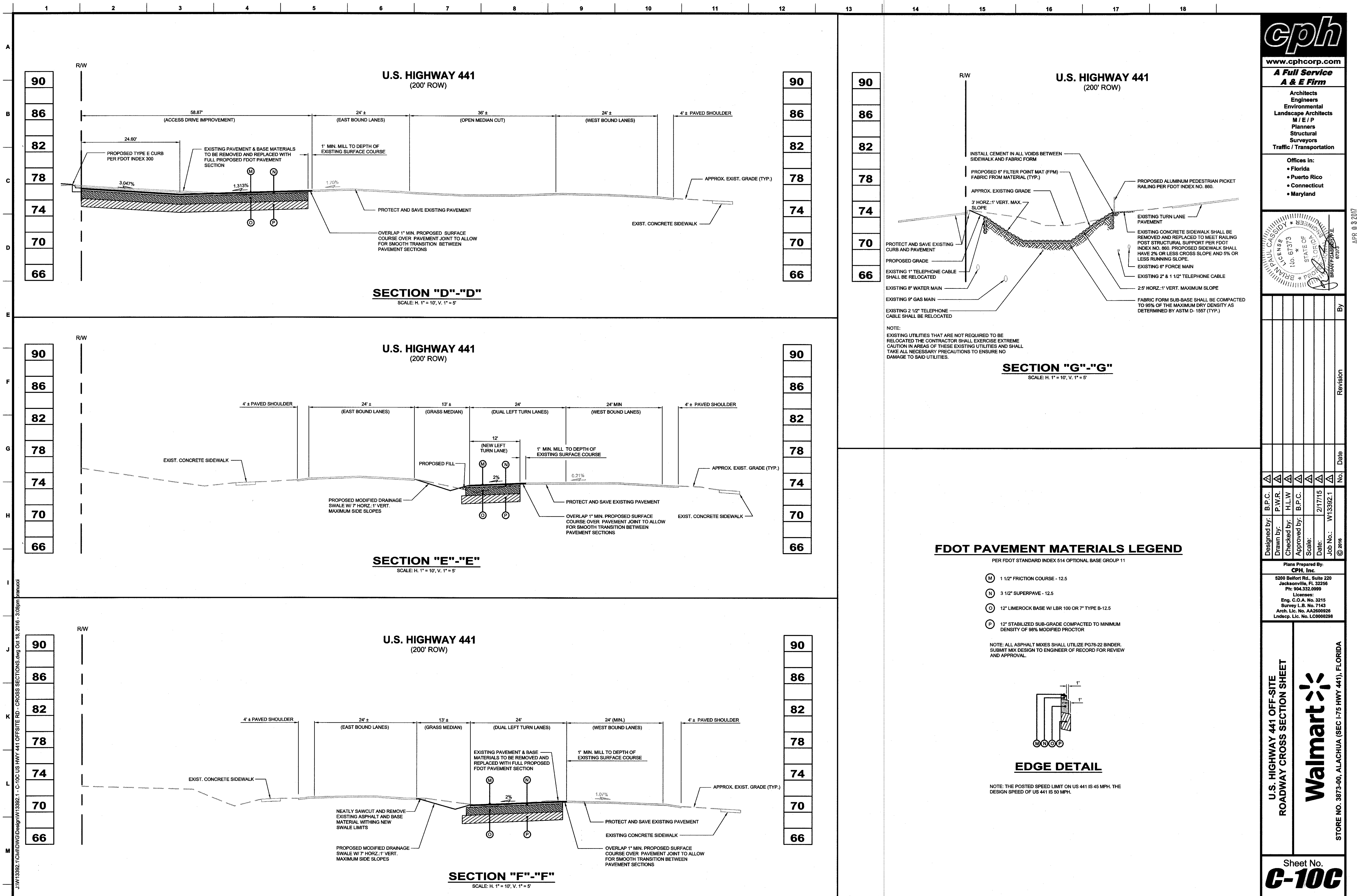
STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

Sheet No.

# C-10B

J:\W13392.1\Civil\DWG\Design\W13392.1 - C-10B US HWY 441 OFFSITE RD - Signage-striping.dwg Nov 09 2016 - 9:11am prapnucci





www.cphcorp.com

**A Full Service  
A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland

APR 0 8 2017

By		Revision		Date	
No.	Date	No.	Date	No.	Date
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	
6		6		6	
7		7		7	
8		8		8	
9		9		9	
10		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15		15		15	
16		16		16	
17		17		17	
18		18		18	

Designed by:	B.P.C.
Drawn by:	P.W.R.
Checked by:	H.L.W.
Approved by:	B.P.C.
Scale:	2/17/15
Date:	2/17/15
Job No.:	W13392.1
© 2016	

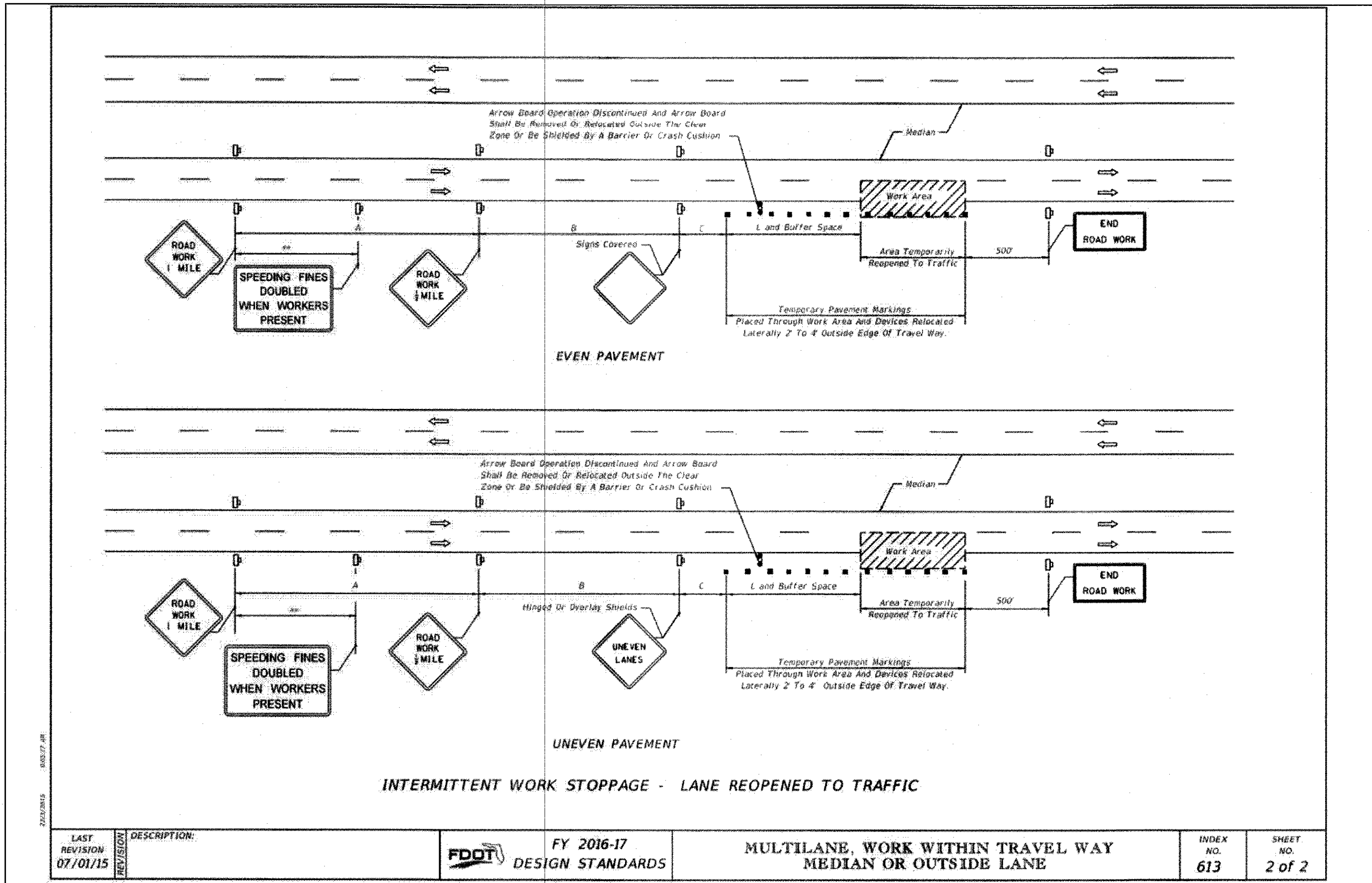
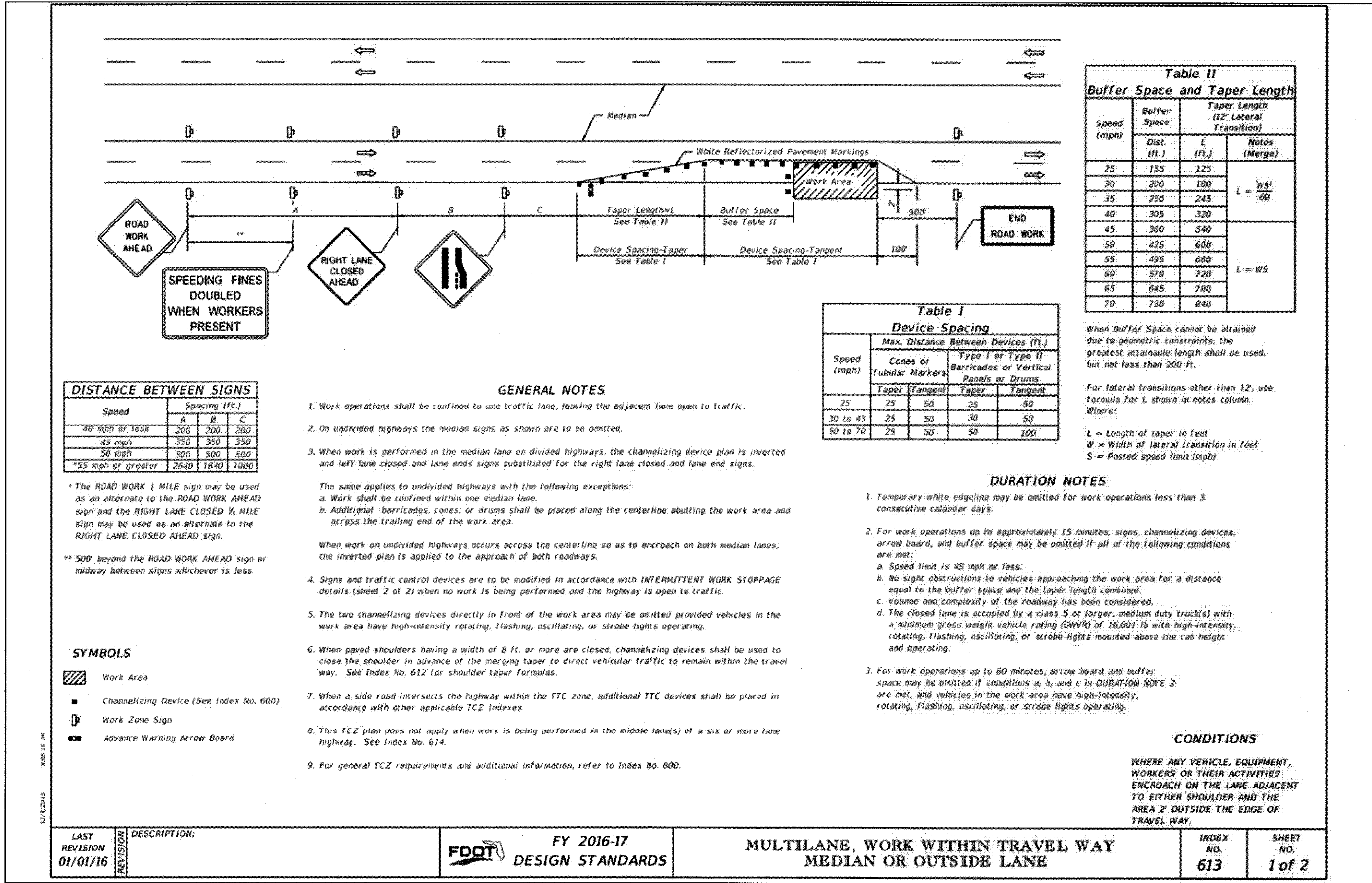
Plans Prepared By:  
**CPH, Inc.**  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2606928  
Landscape Lic. No. LC2000288

U.S. HIGHWAY 441 OFF-SITE  
ROADWAY CROSS SECTION SHEET

STORE NO. 3873-00, ALACHUA (SEC 1-75 HWY 441), FLORIDA

Sheet No.  
**C-10C**





www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland

DESIGNED BY: B.P.C.  
DRAWN BY: P.W.R.  
CHECKED BY: H.L.W.  
APPROVED BY: B.P.C.  
SCALE: 2/17/15  
DATE: 2/17/15  
JOB NO.: W13392.1  
© 2016

Planned By: CPH, Inc.  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2000926  
Landscape Lic. No. LC0000298

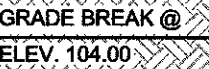
U.S. HIGHWAY 441 OFF-SITE  
ROADWAY MOT DETAIL SHEET

**Walmart**

STORE NO. 3873-00, ALACHUA (SEC 1-75 HWY 441), FLORIDA

Sheet No.  
**C-100**





1. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ITS WORK FOR THE STORMWATER POND EXCAVATION AND FILL PLACEMENT WITH THE ENGINEER AND GEOTECHNICAL INSPECTOR. FAILURE TO SCHEDULE FOR INSPECTIONS MAY RESULT IN UNCOVERING ANY EARTHWORK FOR INSPECTION.
2. THE EXCAVATION SHALL BE STRIPPED OF ALL UNSUITABLE SOILS AND ORGANIC MATERIAL. THE ENGINEER OR INSPECTOR WILL BE AT THE SITE DAILY FOR VISUAL INSPECTION OF THE EARTHWORK OPERATIONS. COORDINATE COMPACTION TESTING WITH THE GEOTECHNICAL ENGINEER EMPLOYED BY WALMART.
3. THE WIDTH OF THE POND BERM ALONG THE SOUTHERN AND EAST SIDES SHALL BE BENCH OUT AS SPECIFIED AND INDICATED ON THE DRAWINGS. THE BERM SHALL BE STRIPPED TO THE PLACEMENT OF ANY FILL MATERIAL.
4. WALMART TESTING AGENCY SHALL PROBE ALL EXPOSED SUBGRADE AREAS TO VERIFY ALL SUBSURFACE MATERIALS ARE REMOVED AND TO ASSURE THAT THERE IS NO SEEPAGE PATH THROUGH THE FILL OR THE BOTTOM OF THE BERMS.
5. ALL FILL MATERIAL FOR CONSTRUCTION OF THE POND BERM SHALL CONSIST OF CLAYEY SANDS (SC) WITH A MINIMUM OF 25% PASSING THE #20 SIEVE. MAXIMUM LIQUID LIMIT AND A MAXIMUM PLASTIC LIMIT OF 10. IN-SITU CLAYEY SANDS EXCAVATED FROM THE SITE MAY BE UTILIZED AS FILL PROVIDED IT MEETS ALL THE SPECIFICATIONS. THE PLACEMENT OF THE FILL MATERIAL SHALL BE CONSTANTLY MONITORED BY THE CONTRACTOR TO AVOID ANY CONTAMINATION OF THE MATERIAL WITH SANDS TO PREVENT THE FORMATION OF A SEEPAGE PATH THROUGH THE CLAYEY SANDS.
6. FILL MATERIAL SHALL BE PLACED AT THE BENCH CUTS IN 10-INCH MAXIMUM LIFTS. COMPACTED WITH A MEDIUM WEIGHT RUBBER-TIRED OR ROLLER FOOT ROLL. EACH LIFT SHALL BE COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR DRY DENSITY. WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT AND TESTED FOR COMPACTION BY THE GEOTECHNICAL ENGINEER EMPLOYED BY WALMART.

1. FILTER FABRIC SHALL CONSIST OF NON-WOVEN FABRIC, MARAFI 160N OR APPROVED EQUAL. IMPERMEABLE LINERS AND BIODEGRADABLE FABRICS ARE NOT PERMITTED. FABRIC SHALL CONFORM TO PHYSICAL REQUIREMENTS IN TABLE 1.1, SECTION 808S OF F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. TRAILER SHALL BE MADE OF 1/2" THICK PLATE. ROCK ANGULAR COARSE AGGREGATE MEETING F.D.O.T. SECTION 801 AND ASTM C-33S SHALL BE WASHED, AND FREE OF DELETERIOUS MATERIAL, CRUSHED RECYCLED CONCRETE IS ACCEPTABLE. CALCIUM CARBONATE IS NOT AN ACCEPTABLE FILTER MEDIA.
3. FINE AGGREGATE SHALL BE QUARTZ SAND MEETING THE REQUIREMENTS OF SECTION 902A OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CUBIC YARD).
4. FILTER MEDIA SHALL BE TESTED BY WYM TESTING LAB PRIOR TO INSTALLATION TO VERIFY MINIMUM PERMEABILITY RATES.
5. CONTRACTOR MUST CONTACT SJRWMD STAFF BRIAN BROOKER 386-362-1001 AT LEAST 48 HOURS PRIOR TO INSTALLATION OF THE

1. SLOPE SHALL BE SODDED. SODDING SHALL BE IN ACCORDANCE WITH SECTION 575 OF FDOT STANDARD SPECIFICATIONS. SODDING SLOPE MAY REQUIRE NETTING AND PEGGING OR STAPLING. PREPARE A 4-INCH THICK LAYER OF MIXED MATERIAL FAVORABLE TO GRASS GROWTH IN ACCORDANCE WITH SECTION 162 OF FDOT STANDARD SPECIFICATIONS.
2. EROSION CONTROL BLANKETS (MADE FROM BIODEGRADABLE SUBSTANCE) SHALL BE PROVIDED TO PREVENT WASHING AWAY SOIL AND TO ENCOURAGE THE RAPID ESTABLISHMENT OF PERMANENT VEGETATION.

**PROPOSED FILL**

PROPOSED GRADE (TYP.)

- PROPOSED 6' HIGH BLACK PAINTED  
STEEL PICKET FENCE. (TYP.)

10' BERM @  
ELEV. 86.00

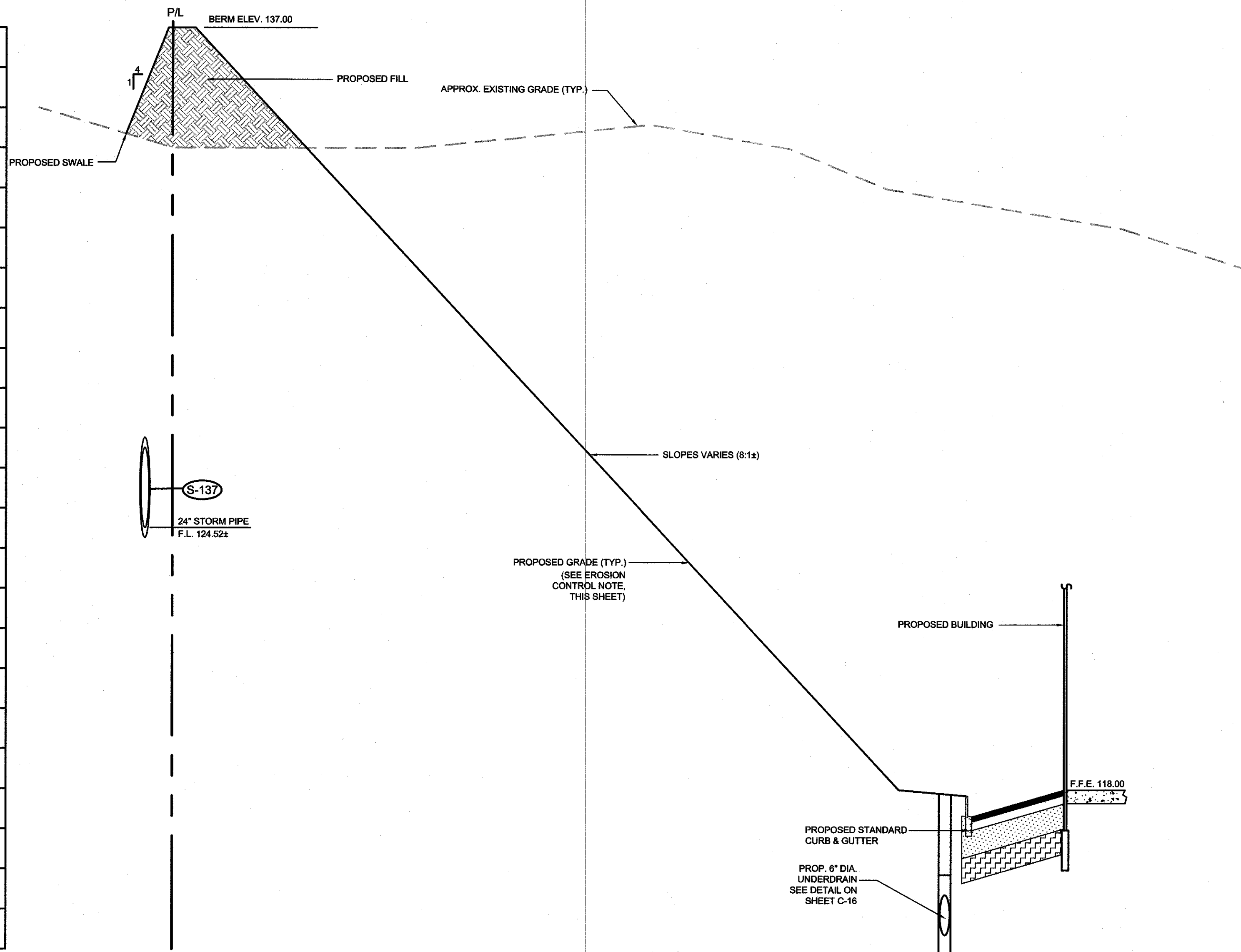
POND BOTTOM @  
ELEV. 80.00

NOTES:

1. SOD ALL SIDE SLOPES AND ALL DISTURBED AREAS.
2. REFER TO SHEETS C-6B & C-13.1 FOR PAVEMENT TYPES AND MATERIALS

## SECTION "A"-"A"

SCALE: H. 1" = 20', V. 1" = 2'



NOTES:

1. SOD ALL SIDE SLOPES AND ALL DISTURBED AREAS.
2. REFER TO SHEETS C-6B & C-13.1 FOR PAVEMENT TYPES AND MATERIALS

**SECTION "C"-"C"**

SCALE: H. 1" = 20'. V. 1" = 2'

—PROP. 8" WATER MAIN  
(3' COVER, MIN.)

PROPOSED 6' HIGH BLACK PAINTED  
STEEL PICKET FENCE. (TYP.)

EXISTING FENCE TO BE REMOVED

PROPOSED GRADE (TYP.)

10' BERM @  
ELEV. 86.00

- PROTECT & SAVE EXISTING FENCE
- PROPOSED SILT FENCE

PROP. 16" P.V.C. WATER  
MAIN (3' COVER, MIN.)

PA

IF SURFICIAL SANDS ARE REQUIRED  
TO BE REMOVED PER THE NOTES ON  
THIS PAGE, ALL FILL MATERIAL AND  
BENCH CUT DETAILS AS SHOWN ON  
SHT. C-11B SHALL BE UTILIZED

**NOTES:**

1. SOD ALL SIDE SLOPES AND ALL DISTURBED AREAS.
2. REFER TO SHEETS C-6B & C-13.1 FOR PAVEMENT TYPES AND MATERIALS.

## SECTION "A"-"A"

SCALE: H. 1" = 20', V. 1" = 2'

Designed by:	B.P.C.	△			
Drawn by:	P.W.R.	△			
Checked by:	H.L.W.	△			
Approved by:	B.P.C.	△			
Scale:	AS NOTED	△			
Date:	2/17/15				
Job No.:	WF3392.1	△			

**Plans Prepared By:**  
**CPH, Inc.**  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600926  
Lndscp. Lic. No. LC0000298

## SECTIONS SHEET



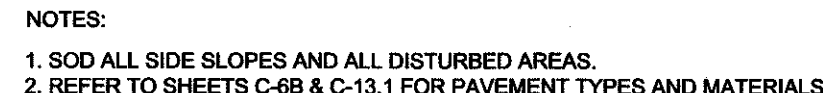
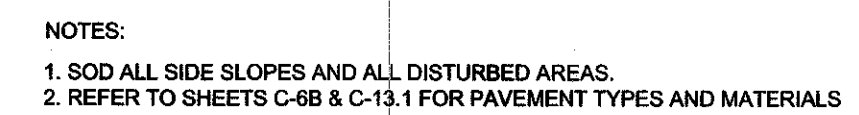
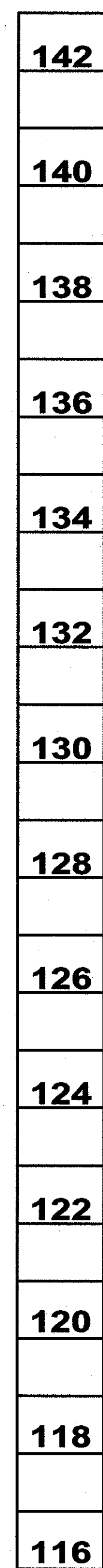
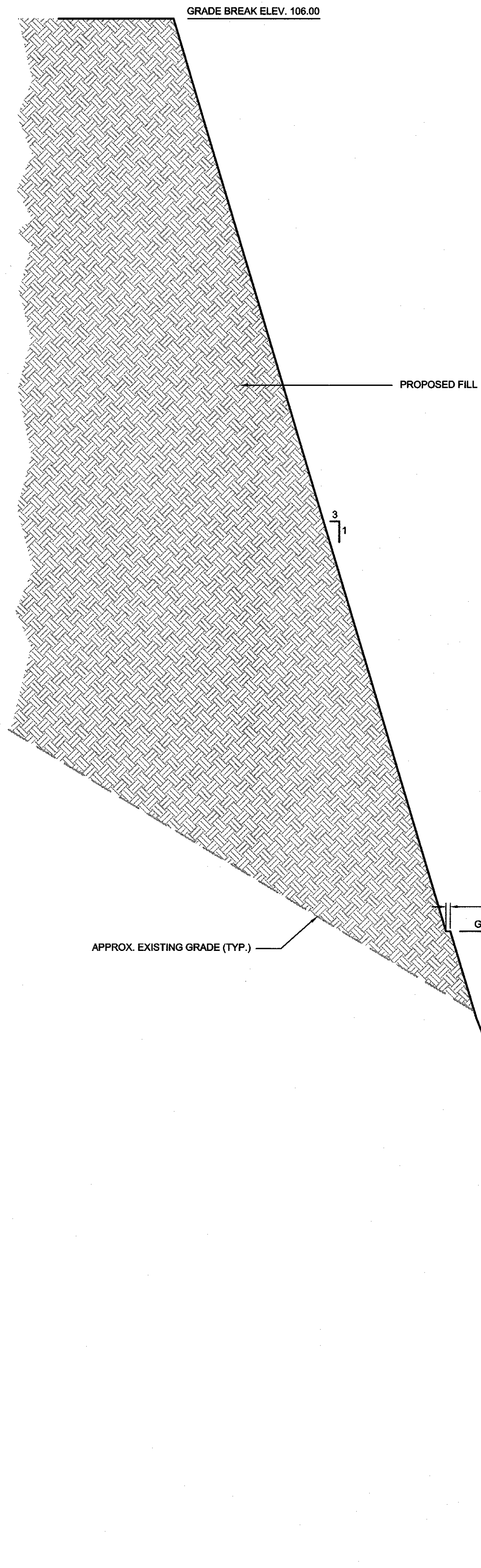
STORE NO 3873-00 AI ACHIA (SEC I-75 HWY 441) EI ORIDA

Sheet No.

**C-11**

APR 03 2017





- POND BERM NOTES:**
1. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ITS WORK FOR THE STORMWATER POND EXCAVATION AND FILL PLACEMENT WITH THE ENGINEER AND GEOTECHNICAL INSPECTOR. FAILURE TO SCHEDULE FOR INSPECTIONS MAY RESULT IN UNCOVERING ANY EARTHWORK FOR INSPECTION.
  2. ALL EXPOSED SUBGRADE SHALL BE STRIPPED OF ALL UNSUITABLE SOILS AND ORGANIC MATERIAL. THE ENGINEER OR INSPECTOR WILL BE AT THE SITE DAILY FOR VISUAL INSPECTION OF THE EARTHWORK OPERATIONS. ORGANIC MATERIAL COMPACTION TESTING WITH THE GEOTECHNICAL ENGINEER EMPLOYED BY WALMART.
  3. THE WIDTH OF THE POND BERM ALONG THE SOUTH AND EAST SIDES SHALL BE BENCH CUT AS SPECIFIED AND INDICATED ON THE DRAWINGS. THESE AREAS SHALL BE INSPECTED PRIOR TO PLACEMENT OF ANY FILL MATERIAL.
  4. WALMART TESTING AGENT SHALL PROBE ALL EXPOSED SUBGRADE AREAS TO ENSURE ALL SURFICIAL SANDS ARE REMOVED AND TO ASSURE THAT THERE IS NO SEEPAGE PATH THROUGH THE FILL OR THE BOTTOM OF THE BERMS.
  5. ALL EXPOSED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 95% (SC) WITH A MINIMUM OF 25% PASSING THE #20 SIEVE, MAXIMUM LIQUID LIMIT OF 40 AND A MAXIMUM PLASTIC LIMIT OF 20. IN-SITU CLAYEY SANDS EXCAVATED FROM THE SITE MAY BE UTILIZED AS FILL PROVIDED IT MEETS THE STATED SPECIFICATIONS. PLACEMENT OF THE FILL MATERIAL SHALL BE VISUALLY INSPECTED BY THE ENGINEER OR INSPECTOR TO ENSURE ANY CONTAMINATION OF THE MATERIAL WITH SANDS TO PREVENT THE FORMATION OF A SEEPAGE PATH THROUGH THE CLAYEY SANDS.
  6. FILL MATERIAL SHALL BE PLACED ATOP THE BENCH CUTS IN 10-INCH MAXIMUM LIFTS, COMPACTED WITH A MEDIUM WEIGHT RUBBER-TIRED TAMPING FOOT ROLLER. FILL SHALL BE COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR DRY DENSITY, WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT AND TESTED TO MEET THE SPECIFICATIONS.

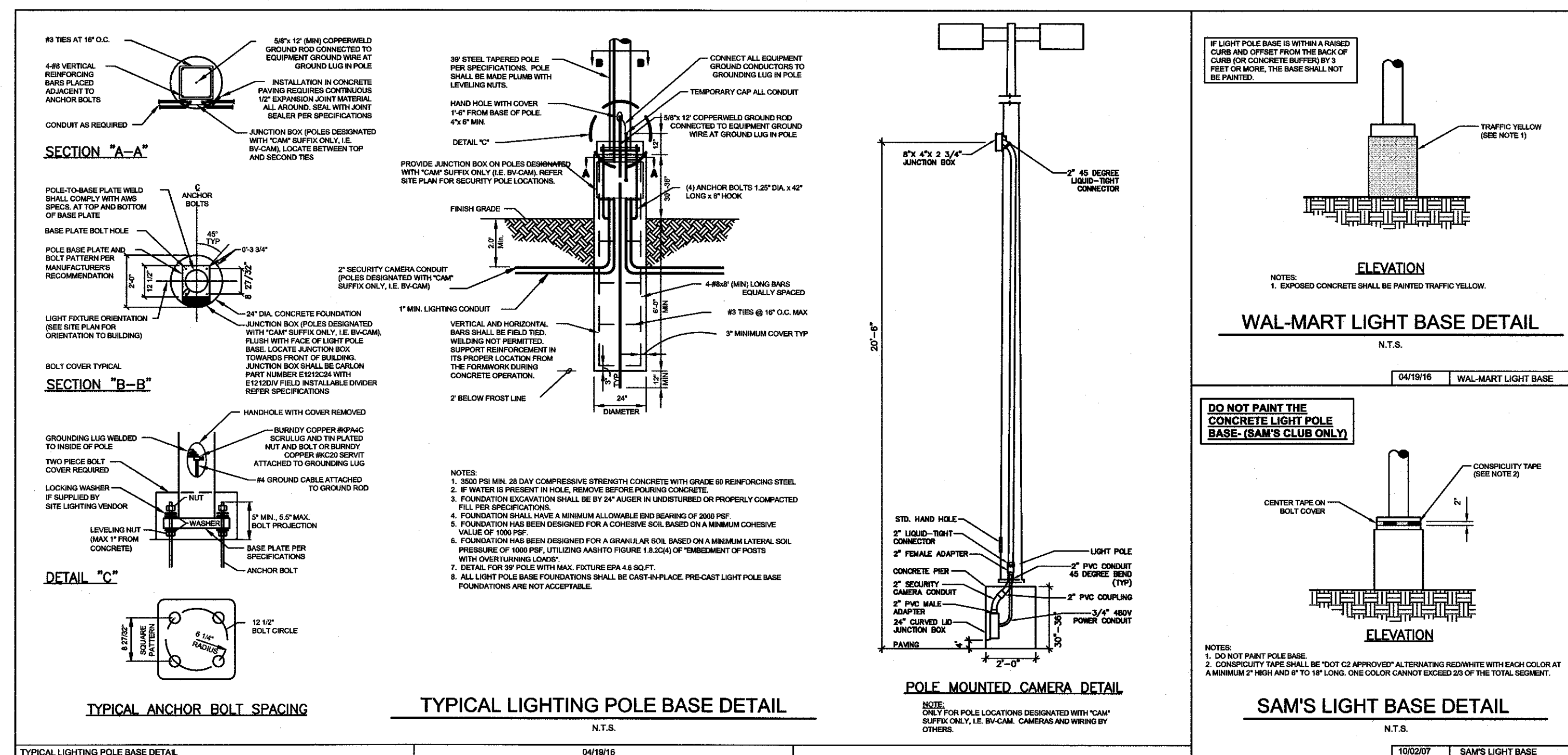
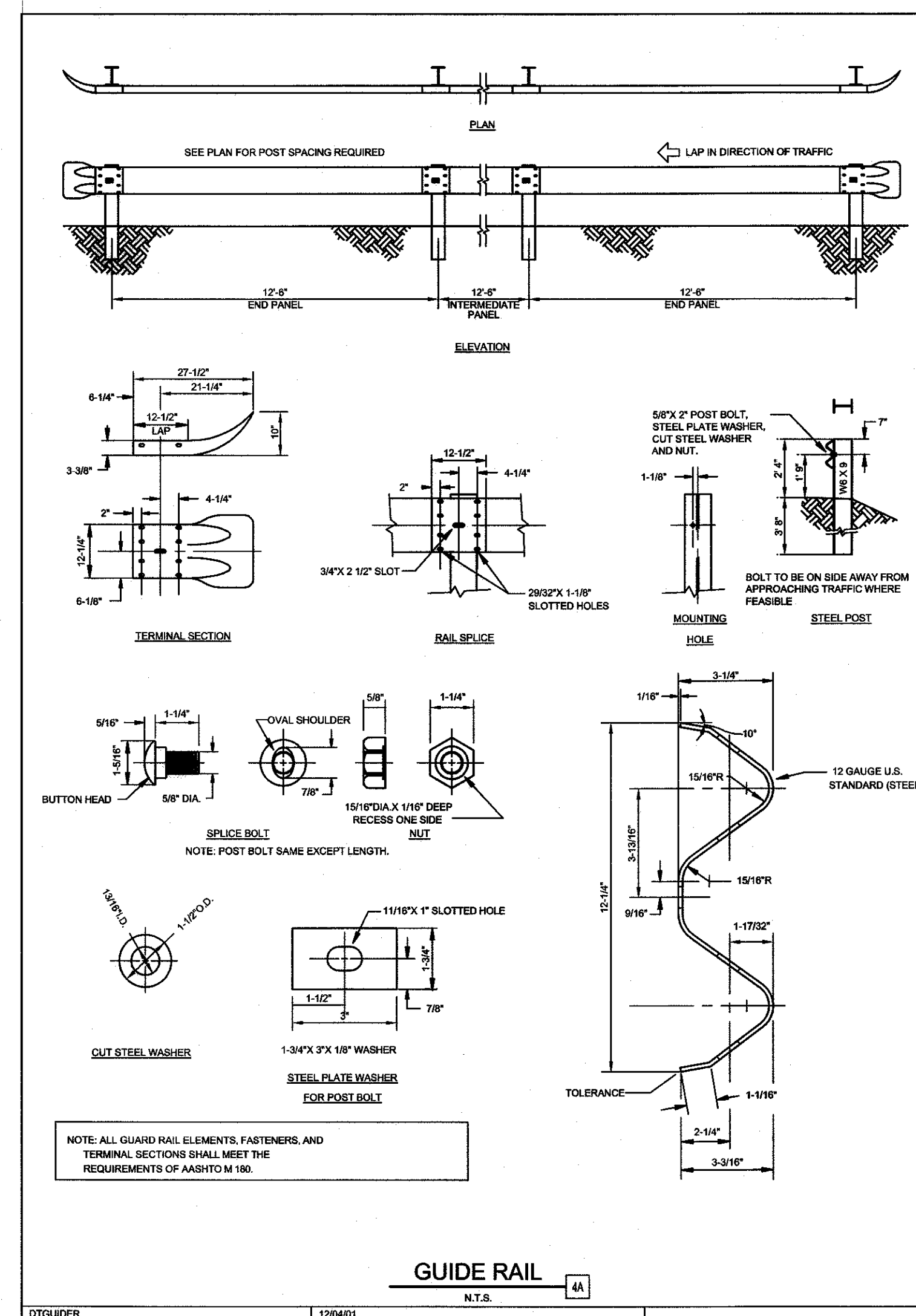
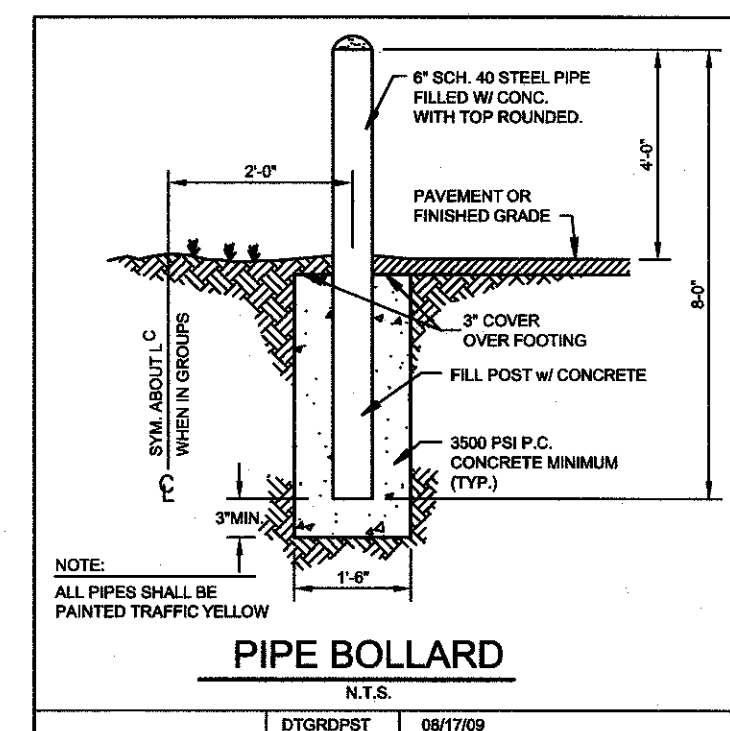
- POND SIDE BANK & VERTICAL FILTER NOTES:**
1. FILTER FABRIC SHALL CONSIST OF NON-WOVEN FABRIC, MARAFI 160N OR APPROVED EQUAL. IMPERMEABLE LINERS AND BIODEGRADABLE FILTER ARE NOT PERMITTED. FABRIC SHALL CONFORM TO PHYSICAL REQUIREMENTS IN TABLE 1.1, SECTION 985 OF F.D.O.T STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
  2. TRENCH MATERIAL SHALL CONSIST OF 1/4" TO 1-1/2" HARDROCK ANGULAR COARSE AGGREGATE MEETING F.D.O.T. SECTION 901 AND ASTM C-33 AND SHALL BE WASHED, AND FREE OF DELETERIOUS MATERIAL, CRUSHED RECYCLED CONCRETE IS ACCEPTABLE. CALCIUM CARBONATE IS NOT AN ACCEPTABLE FILTER MEDIA.
  3. FINE AGGREGATE SHALL BE QUARTZ SAND MEETING THE REQUIREMENTS OF SECTION 902-4 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION).
  4. FILTER SHALL BE TESTED BY WM TESTING LAB PRIOR TO INSTALLATION TO VERIFY MINIMUM PERMEABILITY RATES.
  5. CONTRACTOR MUST CONTACT SURVIMD STAFF BRIAN BROOKER 386-362-1001 AT LEAST 48 HOURS PRIOR TO INSTALLATION OF THE UNDERDRAINS.
- EROSION CONTROL:**
1. SLOPE SHALL BE SODDED. SODDING SHALL BE IN ACCORDANCE WITH SECTION 575 OF FDOT STANDARD SPECIFICATIONS. SODDING SLOPE MAY REQUIRE NETTING AND PEGGING OR STAPLING. PREPARE A 6-INCH THICK LAYER OF MIXED MATERIAL FAVORABLE TO GRASS GROWTH IN ACCORDANCE WITH SECTION 162 OF FDOT STANDARD SPECIFICATIONS.
  2. EROSION CONTROL BLANKETS (MADE FROM BIODEGRADABLE SUBSTANCE) SHALL BE PROVIDED TO PREVENT WASHING AWAY SOIL AND TO ENCOURAGE THE RAPID ESTABLISHMENT OF PERMANENT VEGETATION.





APR 03 2017













NOTES:

ISOLATION JOINT TO BE USED FOR FIXED STRUCTURES SUCH AS BUILDINGS,  
RETAINING WALLS/DOCK WALLS, DROP INLETS, MANHOLES, LIGHT POLE BASES AND  
BOLLARDS.

PAVEMENT IS NOT CONSIDERED A FIXED STRUCTURE.

### ISOLATION JOINT DETAILS



### KEYNOTE LEGEND

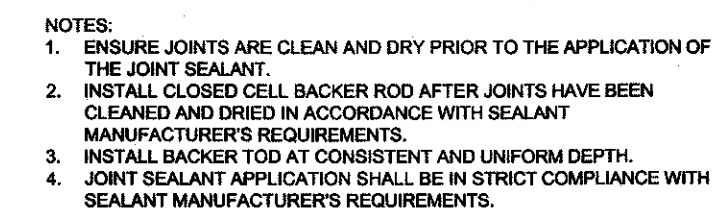
- A CONCRETE CURB AND GUTTER (SEE PLAN)  
B LIMITS OF DETECTABLE WARNING AREA (3' PER ADA ON-SITE OR AS REQUIRED BY FDOT INDEX #304 WITHIN R/W)  
C LIMITS OF RAMPED SIDEWALK, 1:12 (8.33%) SLOPE MAXIMUM  
D LIMITS OF LANDING AREA (5' ON-SITE OR AS REQUIRED BY FDOT INDEX #304 WITHIN R/W)

## NOTES

1. DETECTABLE WARNING AREA (INCLUDING COLOR, TRUNCATED DOMES, SPECIFICATIONS, ETC.) SHALL BE IN ACCORDANCE WITH FOOT INDEX #304 (LATEST EDITION)
2. ALL MATERIALS FOR TRUNCATED DOMES WITHIN THE FOOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE FOOT QUALIFIED PRODUCT LIST (QPL)
3. **ACCEPTANCE CRITERIA FOR DETECTABLE WARNING:**
  - (A) THE RAMP DETECTABLE WARNING SURFACE SHALL BE COMPLETE AND UNIFORM IN COLOR AND TEXTURE
  - (B) 90% OF THE INDIVIDUAL TRUNCATED DOMES MUST COMPLY WITH THE DESIGN CRITERIA
  - (C) THERE MAY BE NO MORE THAN 4 NON-COMPLYING DOMES IN ANY ONE (1) 1' X 1' AREA OF SURFACE
  - (D) NO TWO ADJACENT DOMES MAY BE NON-COMPLIANT
  - (E) SURFACE MAY NOT VARIATE MORE THAN 0.10" FROM A TRUE PLANE



## CONTRACTION JOINT



PCC JOINT DETAIL BLOW-UP (TYP.)

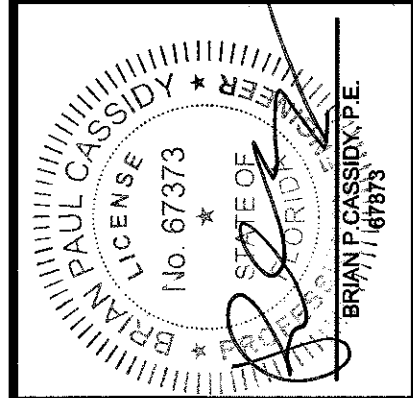
## CONCRETE JOINT DETAILS



### OFFSITE CONCRETE SIDEWALK



### STANDARD PEDESTRIAN ISLAND



Designed by:	B.P.C.	Δ		
Drawn by:	P.W.R.	Δ		
Checked by:	H.L.W.	Δ		
Approved by:	B.P.C.	Δ		
Scale:	NTS	Δ		
Date:	2/17/15	Δ		
Job No.:	W13392.1	Δ		
© 2016	No.	Date	Revision	By

**Plans Prepared By:**

**5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600926  
Lndscp. Lic. No. LC0000298**

## PARKING LOT PAVEMENT DETAILS



STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

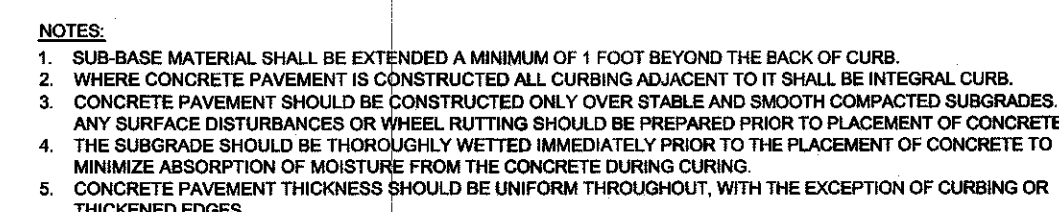
Sheet No.





1. THE CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "T" CONCRETE, AND HAVE A COMPRESSIVE STRENGTH OF 3500 PSI.
2. ALL CURBS SHALL HAVE CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10' 0" ON CENTERS FOR ALL CURBS.

**Rinker**  
**PERVIOUS CONCRETE PAVEMENT DETAILS**  
N.T.S.



## HEAVY DUTY

- A** 1.5" ASPHALT WEARING SURFACE, TYPE FDOT SP-9.5 (MAX 2% RECYCLE) WITH 99% (TOLERANCE  $\pm 2\%$ ) LAB MAX DENSITY (gmm) MAX TO BE APPROVED BY SOIL ENGINEER THE MINIMUM DENSITY (gmm) SHALL BE 95% OF THE MAXIMUM DENSITY FOR ROAD AND BRIDGE CONSTRUCTION.
- B** 1.5" MINIMUM STRUCTURAL COURSE, TYPE FDOT SP-12.5 (MAX 50% RECYCLE) WITH 99% (TOLERANCE  $\pm 2\%$ ) LAB MAX DENSITY (gmm) MAX TO BE APPROVED BY SOIL ENGINEER THE MINIMUM DENSITY (gmm) SHALL BE 95% OF THE MAXIMUM DENSITY FOR ROAD AND BRIDGE CONSTRUCTION.
- C** 6" MINIMUM MODIFIED BASE COURSE WITH A 96% MODIFIER PROCTOR TEST MAXIMUM DRY DENSITY AND A MODIFIER BEARING RATIO (LBR) OF AT LEAST 100 COMPLYING WITH THE REQUIREMENTS OF THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- D** 6" MINIMUM STABILIZED SUBGRADE MATERIAL WITH A 96% MODIFIER PROCTOR TEST MAXIMUM DRY DENSITY AND A MODIFIER BEARING RATIO (LBR) OF AT LEAST 100 COMPLYING WITH THE REQUIREMENTS OF THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

- (D) 1" ASPHALT WEARING SURFACE, TYPE S-III (MAX 25% RECYCLE) WITH 50% (TOLERANCE  $\pm 2\%$ ) LA MAX DENSITY (Gmm) (MAX) TO BE APPROVED BY SOIL ENGINEER PER CURRENT FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- (E) 2" ASPHALT STRUCTURAL COARSE, TYPE S-4 (MAX 50% RECYCLE) WITH 83% (TOLERANCE  $\pm 2\%$ ) LA MAX DENSITY (Gmm) (MAX) TO BE APPROVED BY SOIL ENGINEER PER THE CURRENT FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- (F) 6" MINIMUM LIME/CEMENT BASE COURSE WITH A 98% MODIFIER PROCTOR TEST MAXIMUM DRY DENSITY AND A LIME/CEMENT BEARING RATIO (LBR) OF AT LEAST 100. COMPLYING WITH THE REQUIREMENTS OF THE CURRENT FOOT STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION.
- (G) 6" MINIMUM STABILIZED SUBGRADE MATERIAL WITH A 98% MODIFIER PROCTOR TEST MAXIMUM DRY DENSITY AND A LIME/CEMENT BEARING RATIO (LBR) OF AT LEAST 150; (ASPHALT 1180) AND A LIME/CEMENT BEARING RATIO (LBR) OF 40 AS SPECIFIED BY FOOT REQUIREMENTS FOR ROADWAY AND BRIDGE CONSTRUCTION.

- (G) 5" PORTLAND CEMENT CONCRETE PROVIDING A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI. PORTLAND CEMENT SHOULD BE TYPE I. REFER TO CONSTRUCTION SPECIFICATIONS FOR CONTRACTION JOINT SPACINGS & DEPTH.
- (H) THE BASE COURSE SHOULD BE A MINIMUM OF 4" THICK AND THE BASE MATERIAL SHOULD BE FREE DRAINING AND HAVE A MINIMUM PERCENT OF 100. THE BASE MATERIAL MUST BE DESIGNED TO AT LEAST 95% OF MODIFIED PROCTOR TEST MAXIMUM DRY DENSITY (ASTM D 1557, AASHTO T 180).
- (I) THE STABILIZED SUBGRADE MATERIAL SHOULD BE A MINIMUM OF 4" THICK, SHOULD BE FREE DRAINING AND HAVE A MINIMUM LLR VALUE OF 40. THE STABILIZED SUBGRADE MATERIAL MUST BE DESIGNED TO AT LEAST 95% OF MODIFIED PROCTOR TEST MAXIMUM DRY DENSITY (ASTM D 1557, AASHTO T 180).

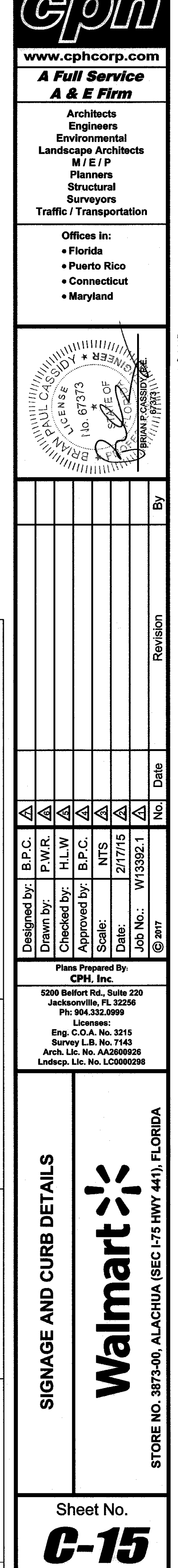
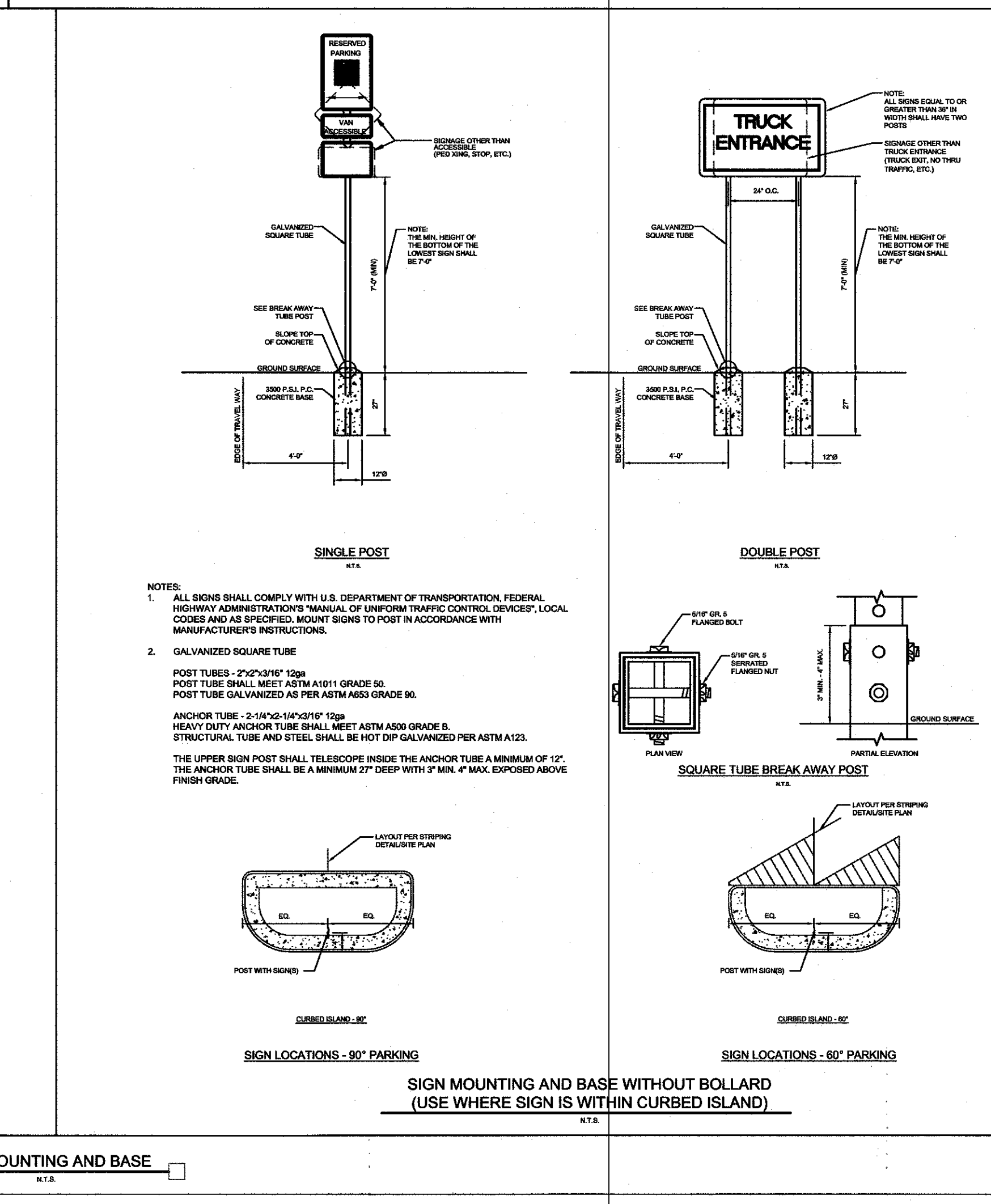
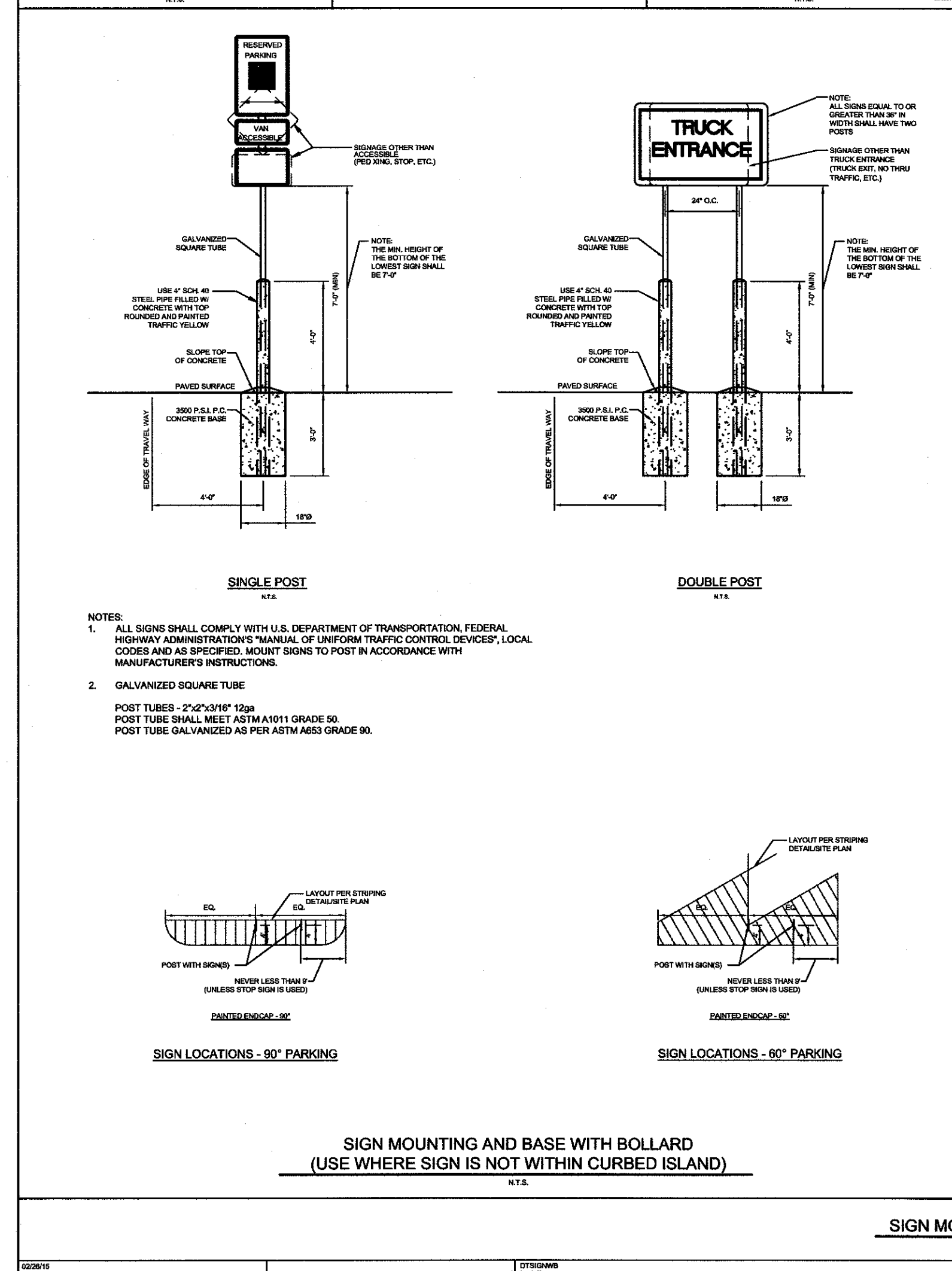
- 6) PORTLAND CEMENT CONCRETE PROVIDING A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI PORTLAND CEMENT SHOULD BE TYPE I. REFER TO CONSTRUCTION SPECIFICATIONS FOR CONTRACTION JOINT SPACINGS & DEPTH.
- X THE BASE COURSE SHOULD BE A MINIMUM OF 4" THICK ABOVE THE BASE MATERIAL. SHOULD BE FINE DRAINING AND HAVE A MINIMUM LBT OF 100. THE BASE MATERIAL MUST BE DESIGNED TO AT LEAST 98% OF MODIFIED PROCTOR TEST MAXIMUM DRY DENSITY (ASTM D 1557, AASHTO T 99).
- THE STABILIZED SUBGRADE MATERIAL SHOULD BE A MINIMUM OF 4" THICK. SHOULD BE FINE DRAINING AND HAVE A MINIMUM LBT VALUE OF 40. THE STABILIZED SUBGRADE MATERIAL MUST BE DESIGNED TO AT LEAST 98% OF MODIFIED PROCTOR TEST MAXIMUM DRY DENSITY (ASTM D 1557, AASHTO T 99).

## PAVING DETAILS

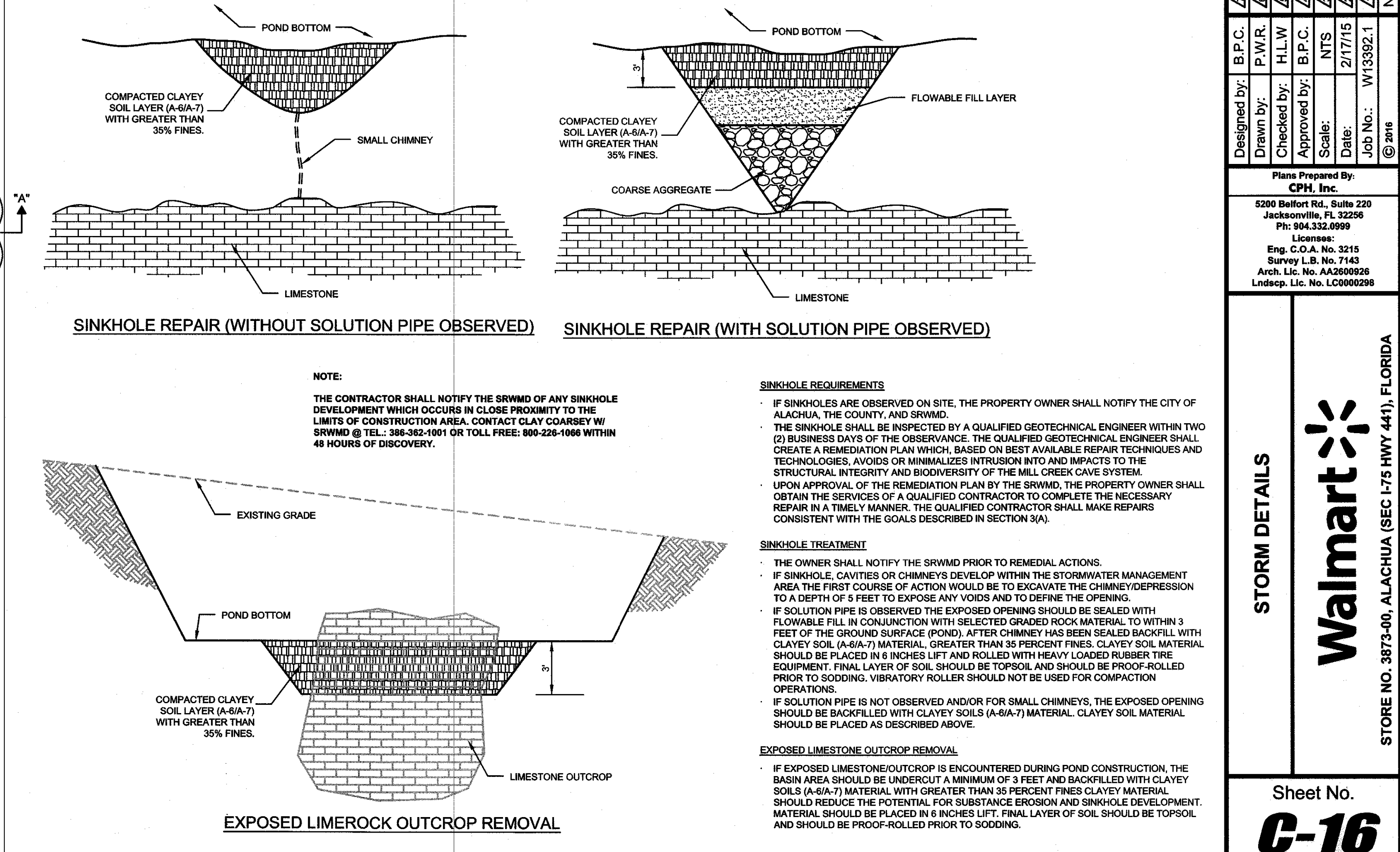
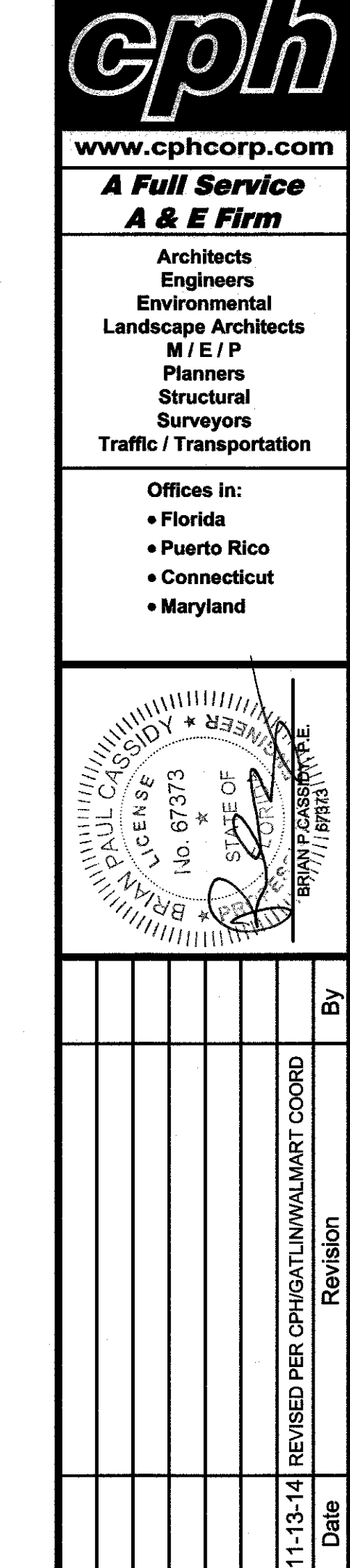
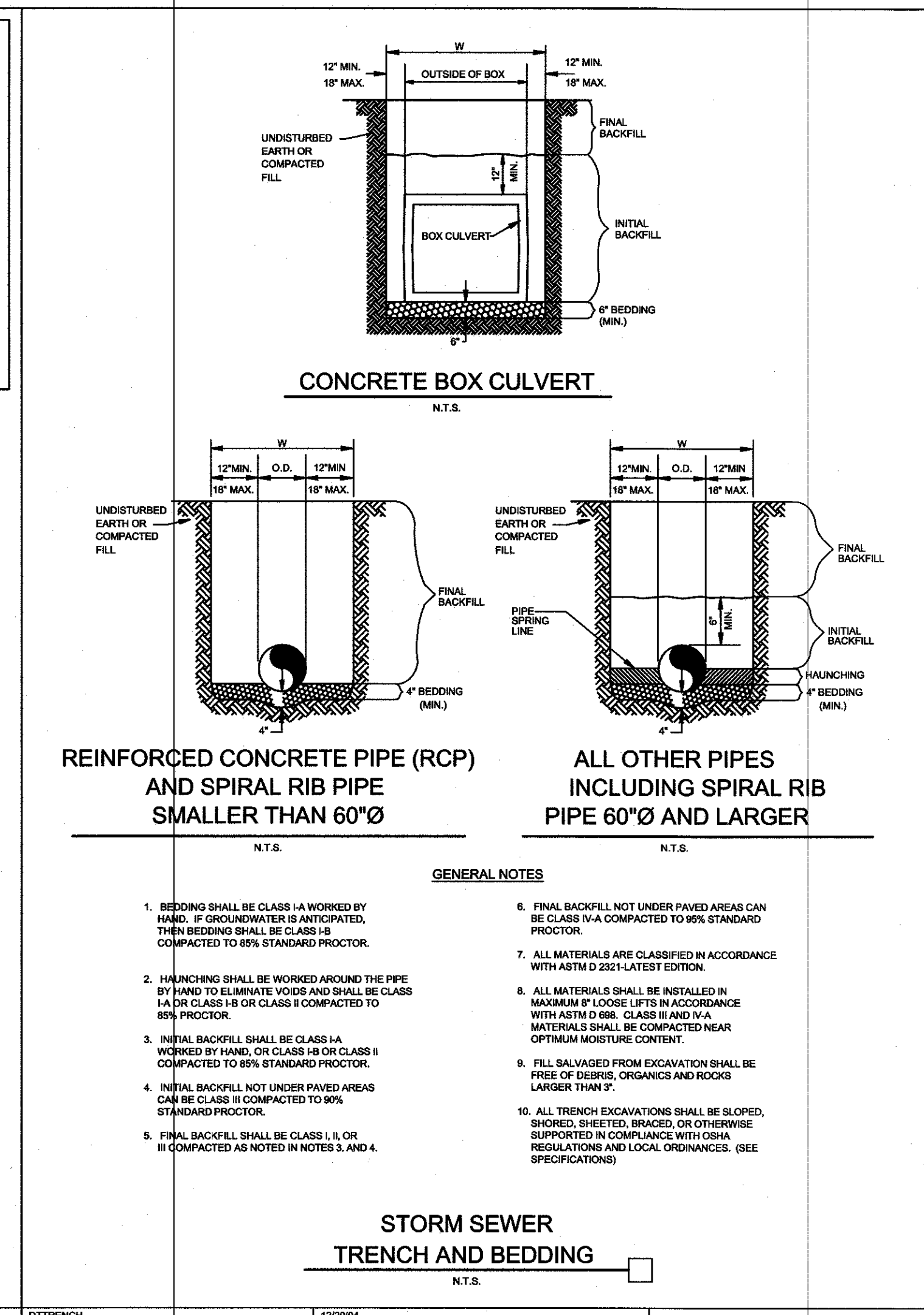


<b>www.cphcorp.com</b>									
<b>A Full Service A &amp; E Firm</b>									
Architects Engineers Environmental Landscape Architects M / E / P Planners Structural Surveyors Traffic / Transportation									
Offices In: • Florida • Puerto Rico • Connecticut • Maryland									



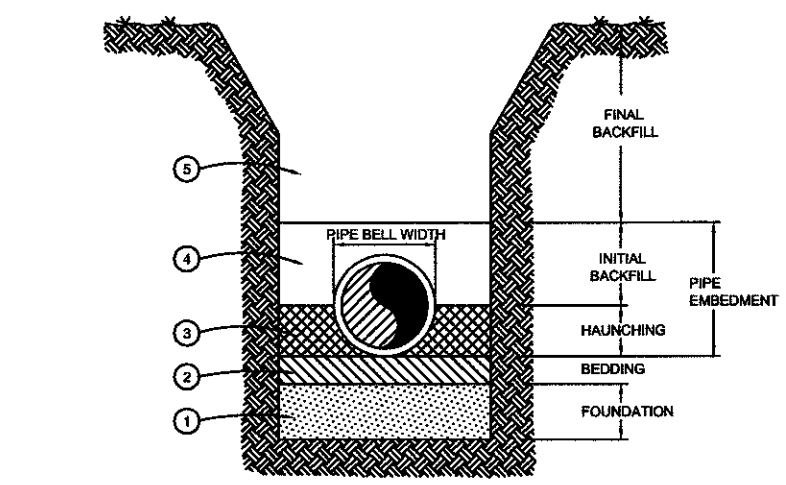






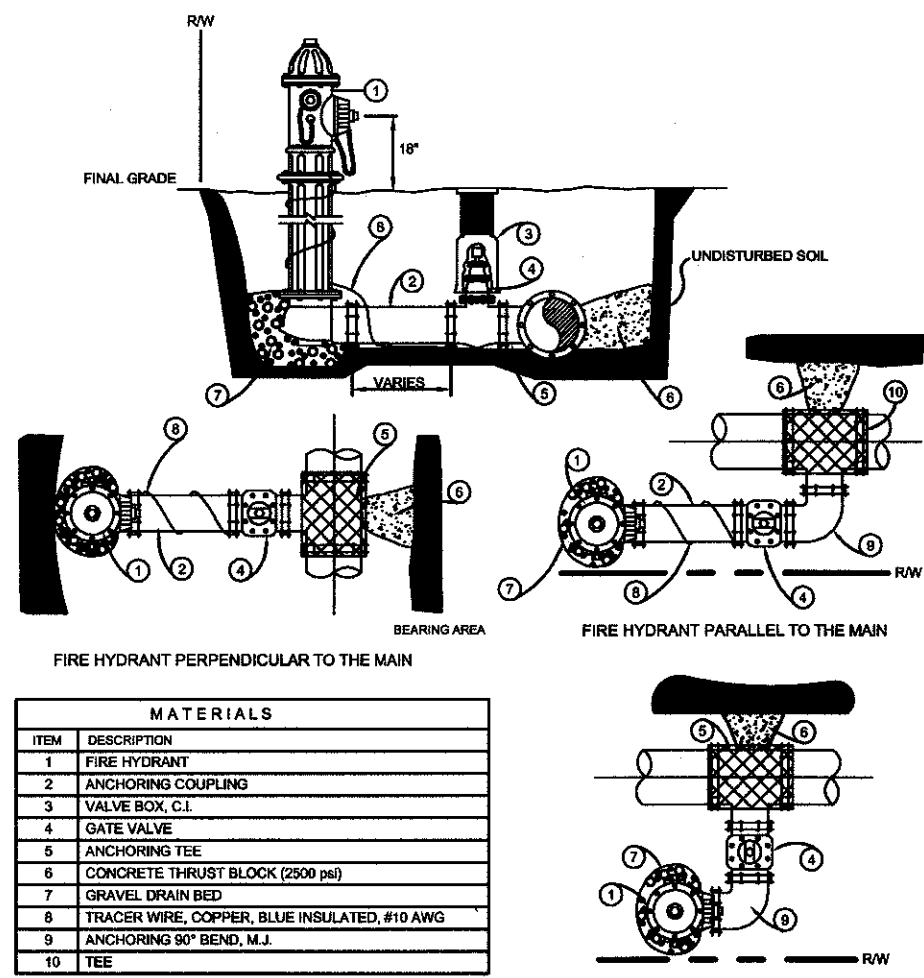






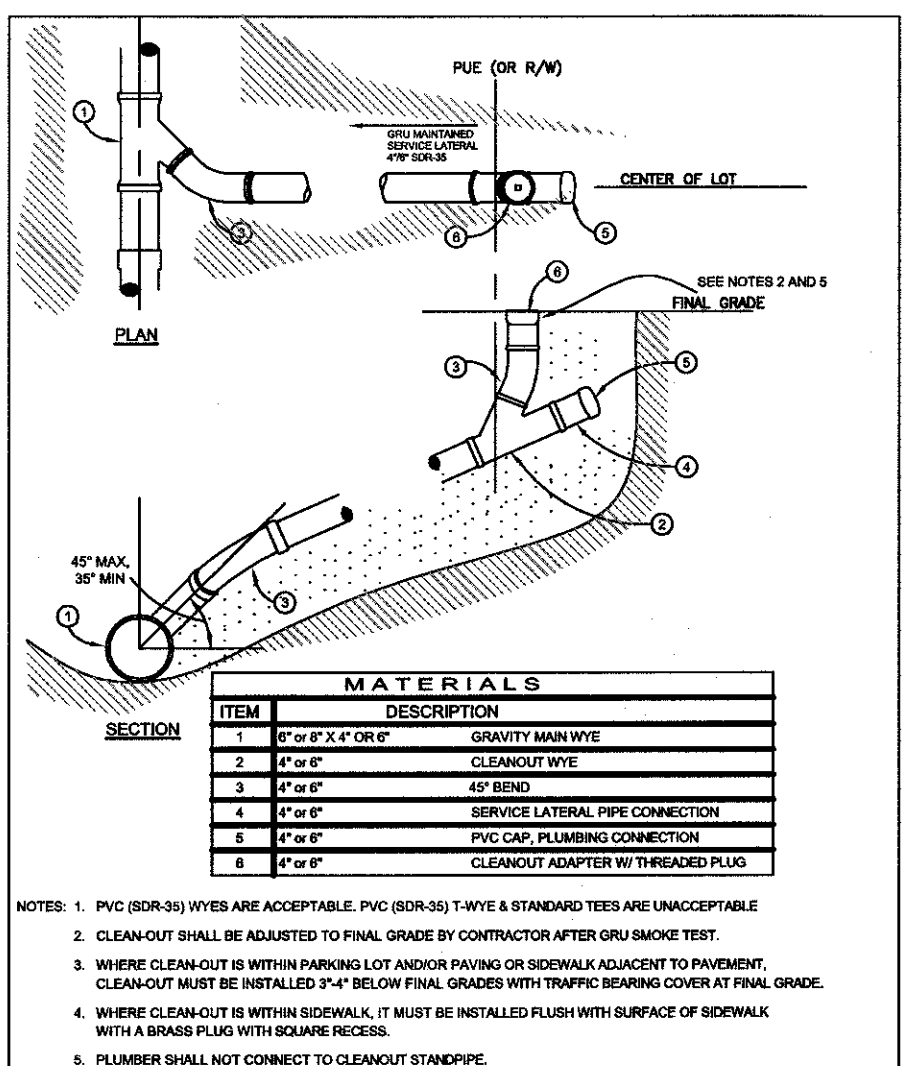
- NOTES:
1. A FOUNDATION MAY BE REQUIRED IN VERY POOR SOIL CLASS IV & V MATERIALS CONDITIONS. FIELD OBSERVATION WILL BE PROVIDED BY GRI INSPECTOR. TYPICAL FOUNDATION THICKNESS SHALL BE 12" BUT MAY VARY ACCORDING TO NATURAL MATERIAL.
  2. BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE. IN DRY SOIL CONDITIONS CLASS I OR CLASS II MATERIAL SHALL BE HAND PLACED 4" TO 6" LIGHTLY COMPACTED. UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. IN WET SOIL CONDITIONS CLASS I OR CLASS II SHALL BE HAND PLACED 4" TO 6" UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. WHEN UTILIZING CLASS II MATERIAL, SUFFICIENT AMOUNTS OF CLASS I OR CLASS II MATERIAL SHALL BE ADDED TO FILL ALL VOIDS CREATED BY THE CLASS II MATERIAL.
  3. HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. CLASS II OR CLASS III MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPERED TO PROVIDE ADEQUATE SIDE SUPPORT.
  4. INITIAL BACKFILL MATERIAL SHALL BE CLASS II OR CLASS III. IT SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF THE PIPE. THE SOIL SHALL BE CONSOLIDATED BY HAND TAMPERING OR WALKING THE SOIL IN PLACE.
  5. FINAL BACKFILL MATERIAL MAY BE MACHINE PLACED. THE MATERIAL SHALL BE CLASS II OR CLASS III MATERIAL. CLASS II MATERIAL MAY BE INSTALLED OUTSIDE OF THE ROADWAY. FINAL BACKFILL UNDER ROADWAYS MAY REQUIRE SPECIAL COMPACTION AND DENSITY TESTS. REFER TO CITY, COUNTY, OR FOOT STANDARDS, AS APPLICABLE.

Potable Water Construction Details  
BACKFILLING REQUIREMENTS

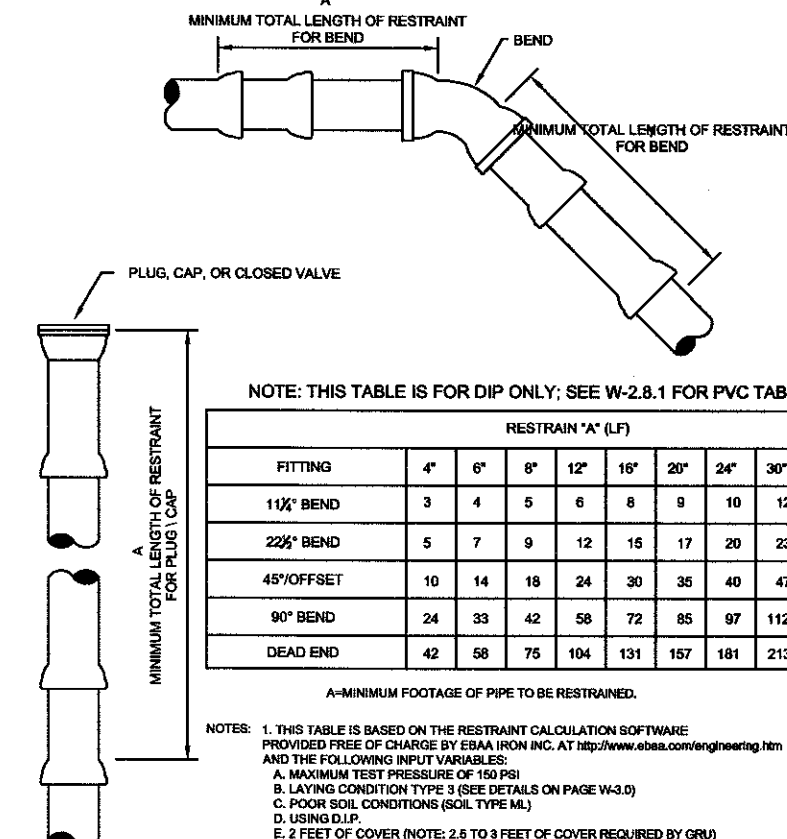


- NOTES:
1. SEE W-2.2 FOR BEARING AREA REQUIRED.
  2. A NONFRICTION MATERIAL SHALL BE USED UNDER OR 15 IN MINIMUM FILL SHOULD BE PLACED BETWEEN THE CONCRETE AND THE ENTIRE FITTING.

Potable Water Construction Details  
FIRE HYDRANT PERPENDICULAR & PARALLEL TO THE MAIN



Wastewater Construction Details  
WASTEWATER SERVICE LATERAL

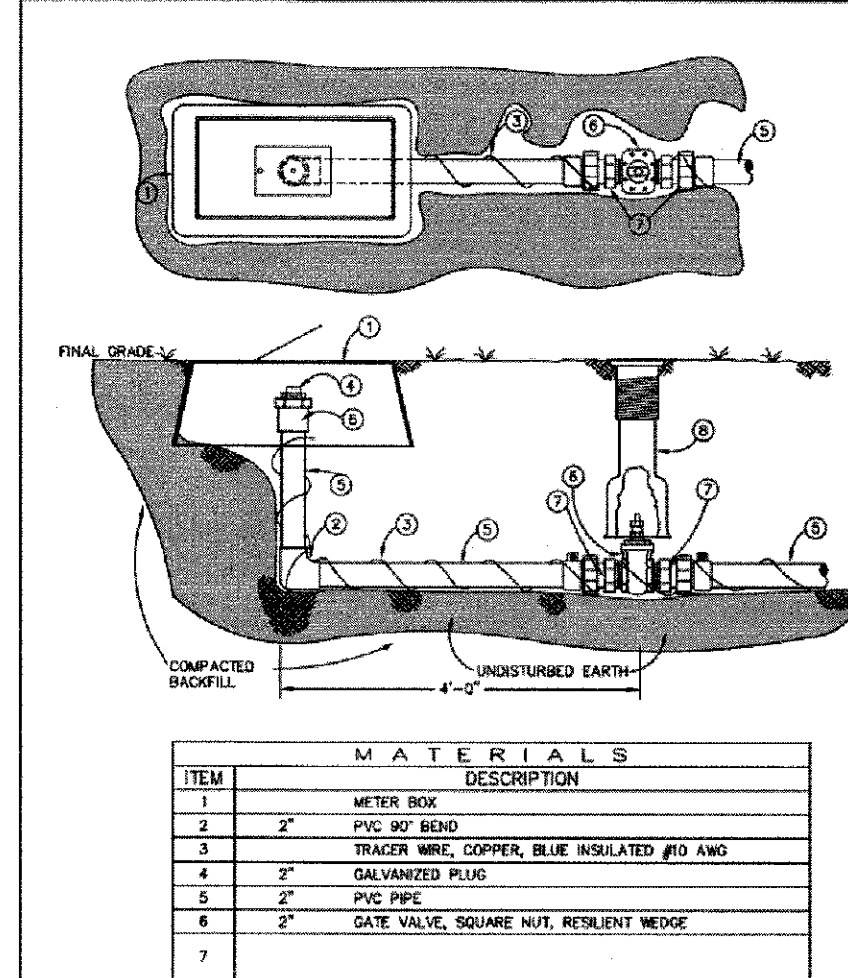


NOTE: THIS TABLE IS FOR DIP ONLY. SEE W-2.8.1 FOR PVC TABLES

FITTING	4"	6"	8"	12"	16"	20"	24"	30"	36"
110° BEND	4	6	7	8	11	12	14	15	18
225° BEND	7	10	12	16	20	23	27	31	35
45° OFFSET	14	19	24	31	41	47	54	63	71
90° BEND	28	40	50	70	97	114	130	150	168
DEAD END	57	78	101	140	176	211	243	280	325

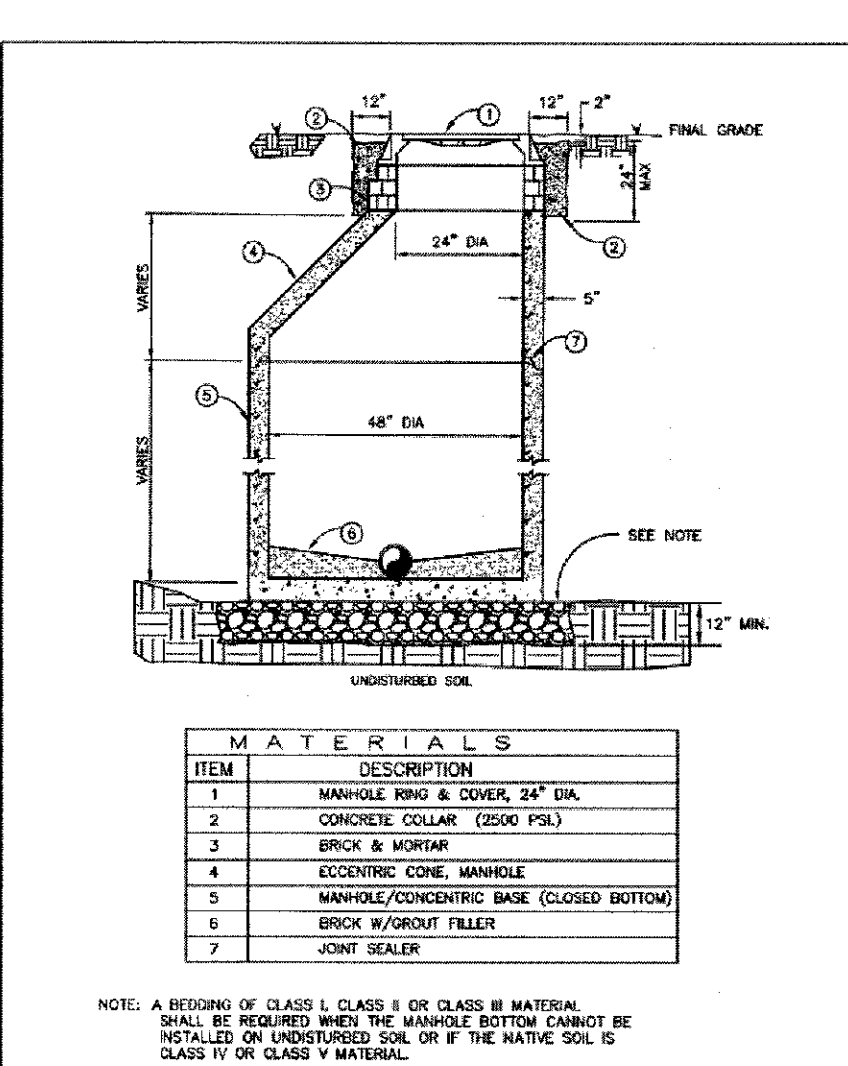
- NOTES:
1. THIS TABLE IS BASED ON THE RESTRAINT CALCULATION SOFTWARE PROVIDED FREE OF CHARGE BY EBMA FROM INC. AT <http://www.ebmamain.com/engraining.htm> AND THE FOLLOWING INPUT PARAMETERS:
    - A. MAXIMUM TRENCH DEPTH: 10 FT.
    - B. LAYERING CONDITION TYPE: 3 (SEE DETAILS ON PAGE W-3.3)
    - C. POOR SOIL CONDITION (SOIL TYPE NA)
    - D. UPRIGHT DIP
    - E. 2 FEET OF COVER (NOTE: 2.5 TO 3 FEET OF COVER REQUIRED BY GRU)
    - F. HORIZONTAL RESTRAINTS (CHANGING TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS)
    - G. SAFETY FACTOR: 1.5 TO 1
  2. FOR POLYWRAPPED DIP, MULTIPLY THE FOOTAGE BY 1.50
  3. FOR PVC PIPE DIMENSIONS SEE PAGE W-2.1
  4. RESTRAINED PIPE SHALL BE MANUFACTURED RESTRAINED PIPE. PUSH-ON RESTRAINTS OR MECHANICAL JOINT PIPE RESTRAINED BY EBMA MEDIAUS.
  5. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

Potable Water Construction Details  
DIP RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, AND CAPS



- NOTE: CONTRACTOR SHALL USE SCH 80 PVC & MALE ADAPTERS

Potable Water Construction Details  
2\"/>



Wastewater Construction Details  
MANHOLE DROP CONSTRUCTION (CLOSED BOTTOM)

NOTE: THESE TABLES ARE FOR PVC PIPE ONLY; SEE W-2.8 OR W-2.9 FOR DIP

RESTRAIN (L.F.)

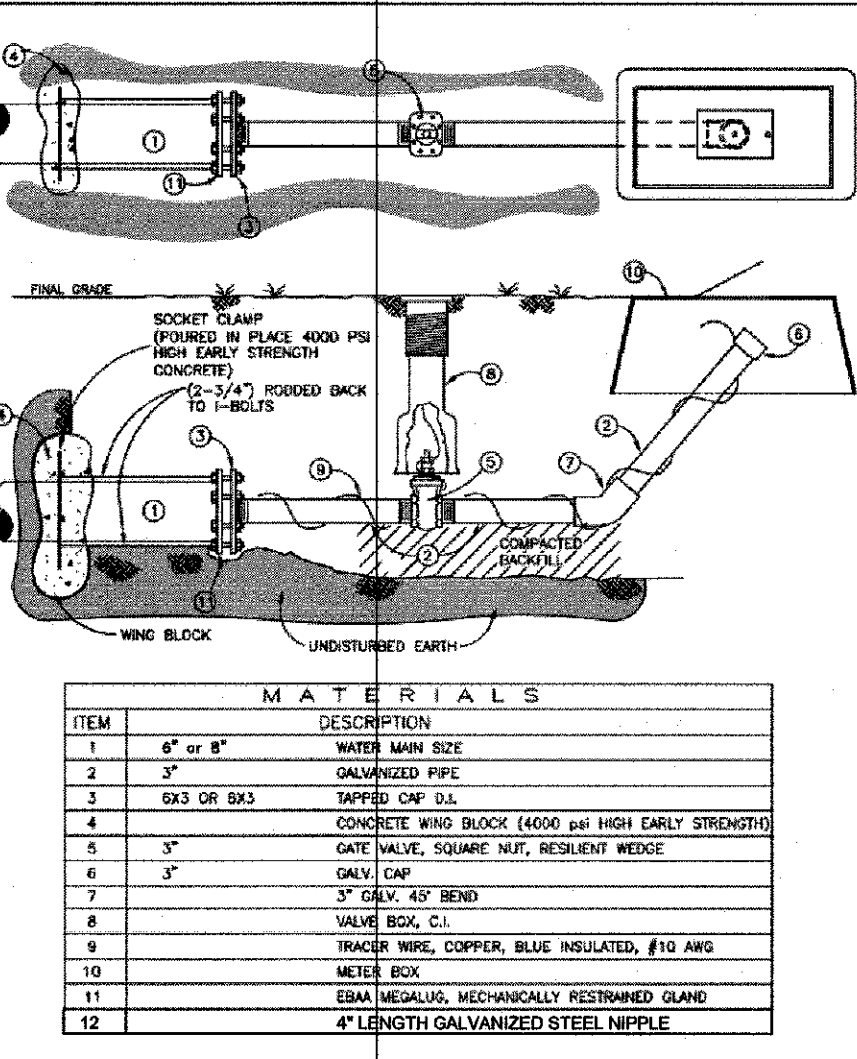
FITTING	4"	6"	7"	8"	10"	12"	14"	16"	18"
110° BEND	4	6	7	8	11	12	14	15	18
225° BEND	7	10	12	16	20	23	27	31	35
45° OFFSET	14	19	24	31	41	47	54	63	71
90° BEND	28	40	50	70	97	114	130	150	168
DEAD END	57	78	101	140	176	211	243	280	325

RESTRAIN (L.F.)

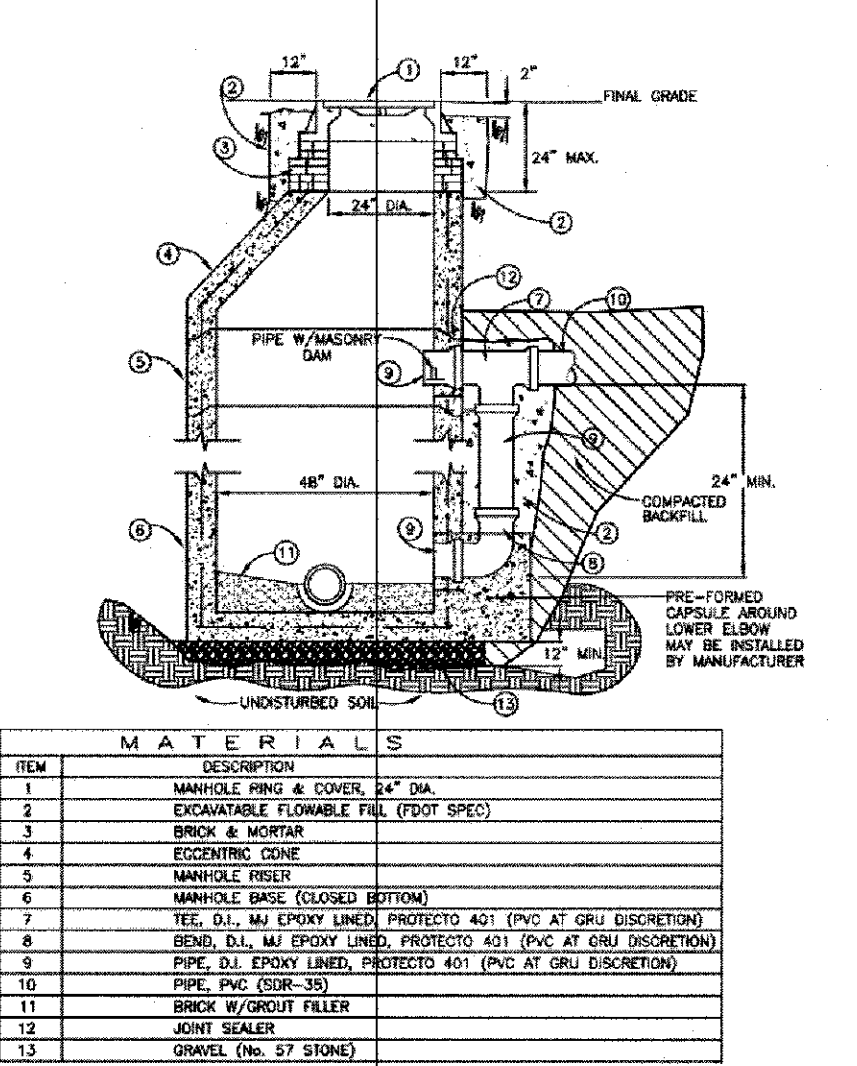
FITTING	4"	6"	7"	8"	10"	12"	14"	16"	18"
110° BEND	4	6	7	8	11	12	14	15	18
225° BEND	7	10	12	16	20	23	27	31	35
45° OFFSET	14	19	24	31	41	47	54	63	71
90° BEND	28	40	50	70	97	114	130	150	168
DEAD END	57	78	101	140	176	211	243	280	325

- NOTES:
1. THIS TABLE IS BASED ON THE RESTRAINT CALCULATION SOFTWARE PROVIDED FREE OF CHARGE BY EBMA FROM INC. AT <http://www.ebmamain.com/engraining.htm> AND THE FOLLOWING INPUT PARAMETERS:
    - A. MAXIMUM TRENCH DEPTH: 10 FT.
    - B. LAYERING CONDITION TYPE: 3 (SEE DETAILS ON PAGE W-3.3)
    - C. POOR SOIL CONDITION (SOIL TYPE NA)
    - D. UPRIGHT DIP
    - E. 2 FEET OF COVER (NOTE: 2.5 TO 3 FEET OF COVER REQUIRED BY GRU)
    - F. HORIZONTAL RESTRAINTS (CHANGING TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS)
    - G. SAFETY FACTOR: 1.5 TO 1
  2. FOR POLYWRAPPED DIP, MULTIPLY THE FOOTAGE BY 1.50
  3. FOR PVC PIPE DIMENSIONS SEE PAGE W-2.1
  4. RESTRAINED PIPE SHALL BE MANUFACTURED RESTRAINED PIPE. PUSH-ON RESTRAINTS OR MECHANICAL JOINT PIPE RESTRAINED BY EBMA MEDIAUS.
  5. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

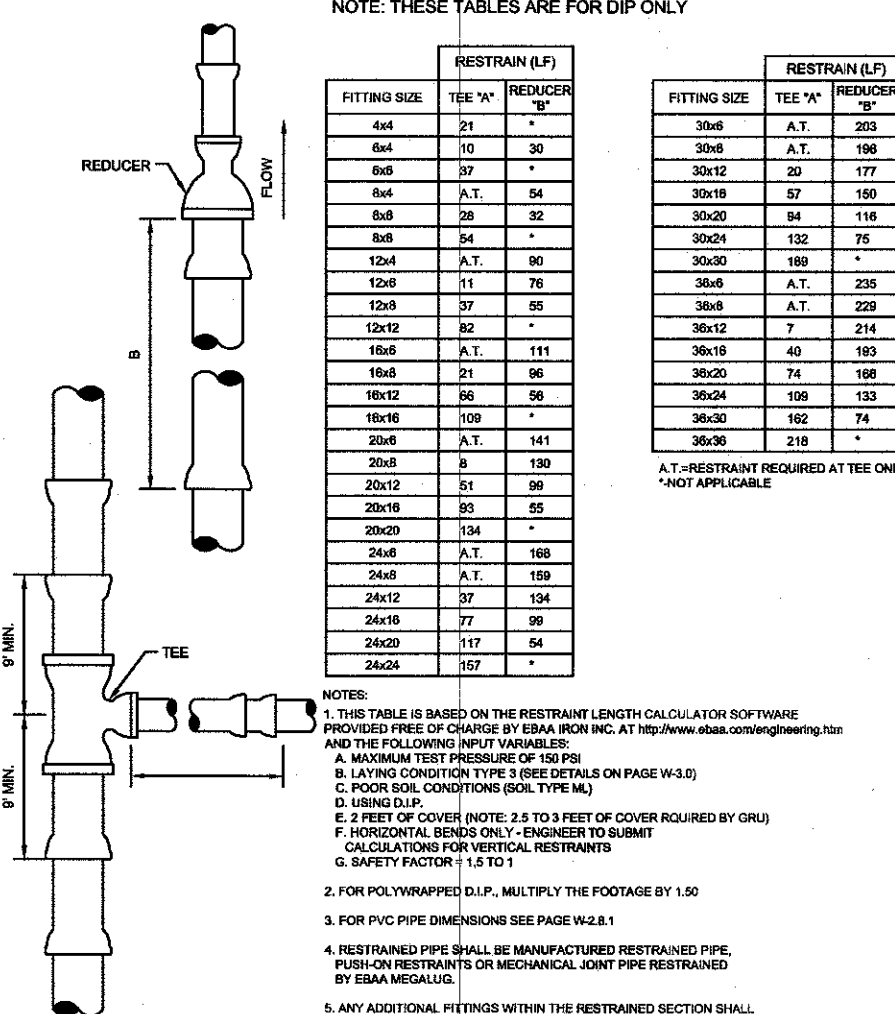
Potable Water Construction Details  
PVC RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, CAPS, TEES AND REDUCERS



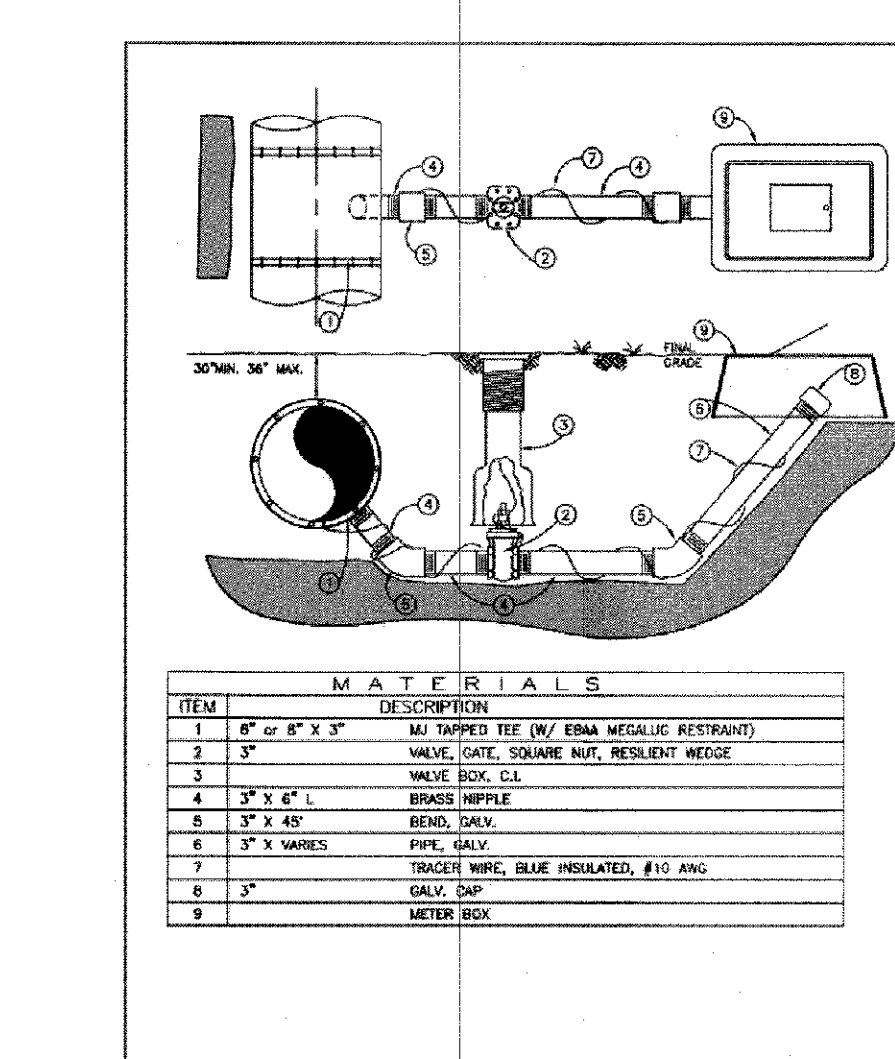
Potable Water Construction Details  
3\"/>



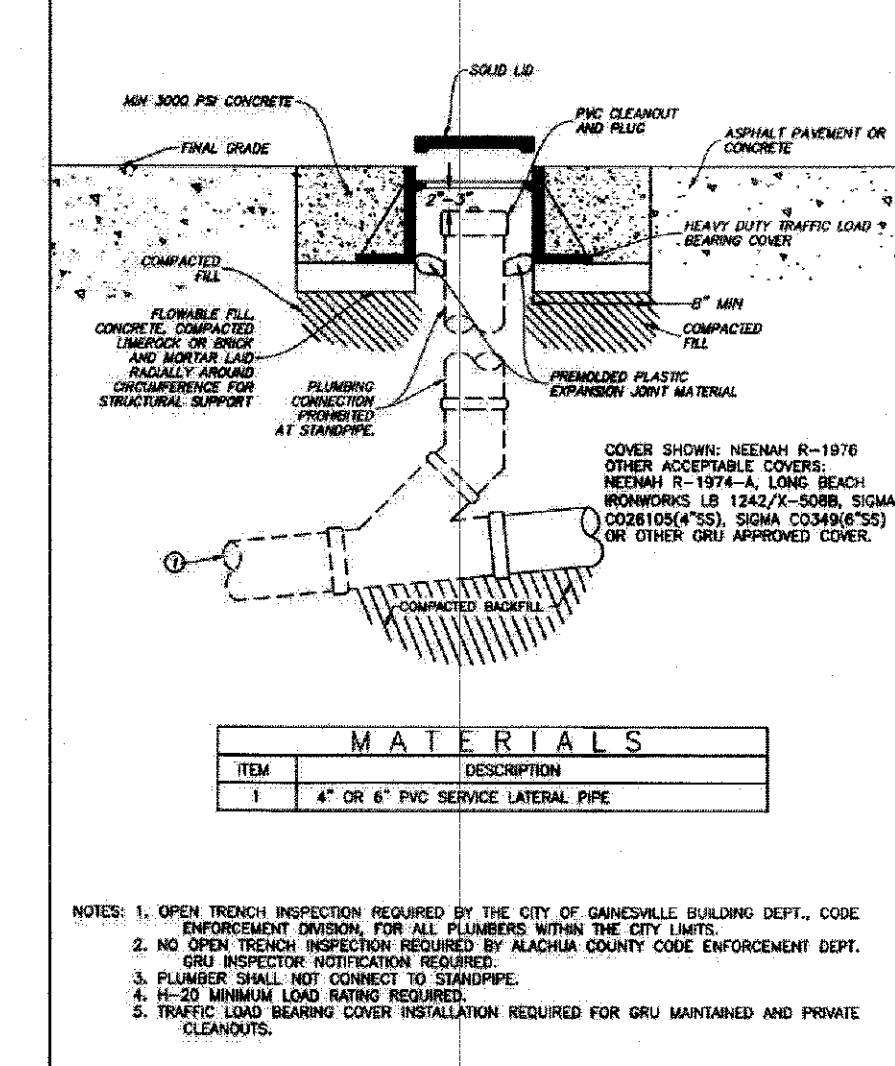
Wastewater Construction Details  
MANHOLE DROP CONSTRUCTION - SEWER MAIN



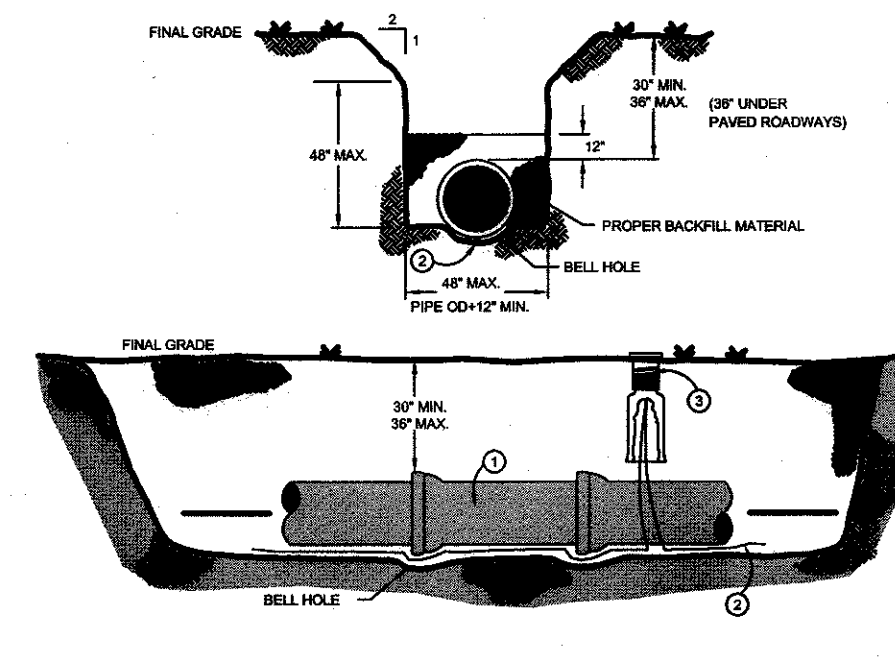
Potable Water Construction Details  
DIP RESTRAINED JOINT STANDARD FOR TEES AND REDUCERS



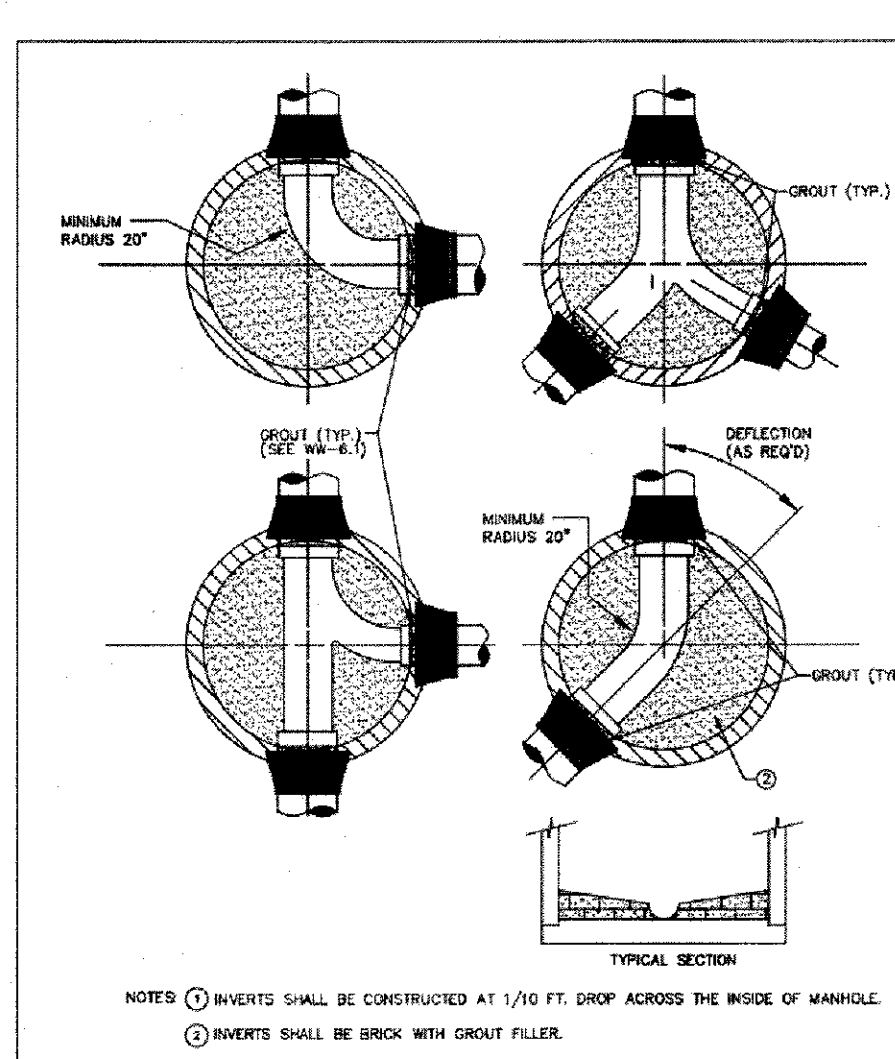
Potable Water Construction Details  
3\"/>



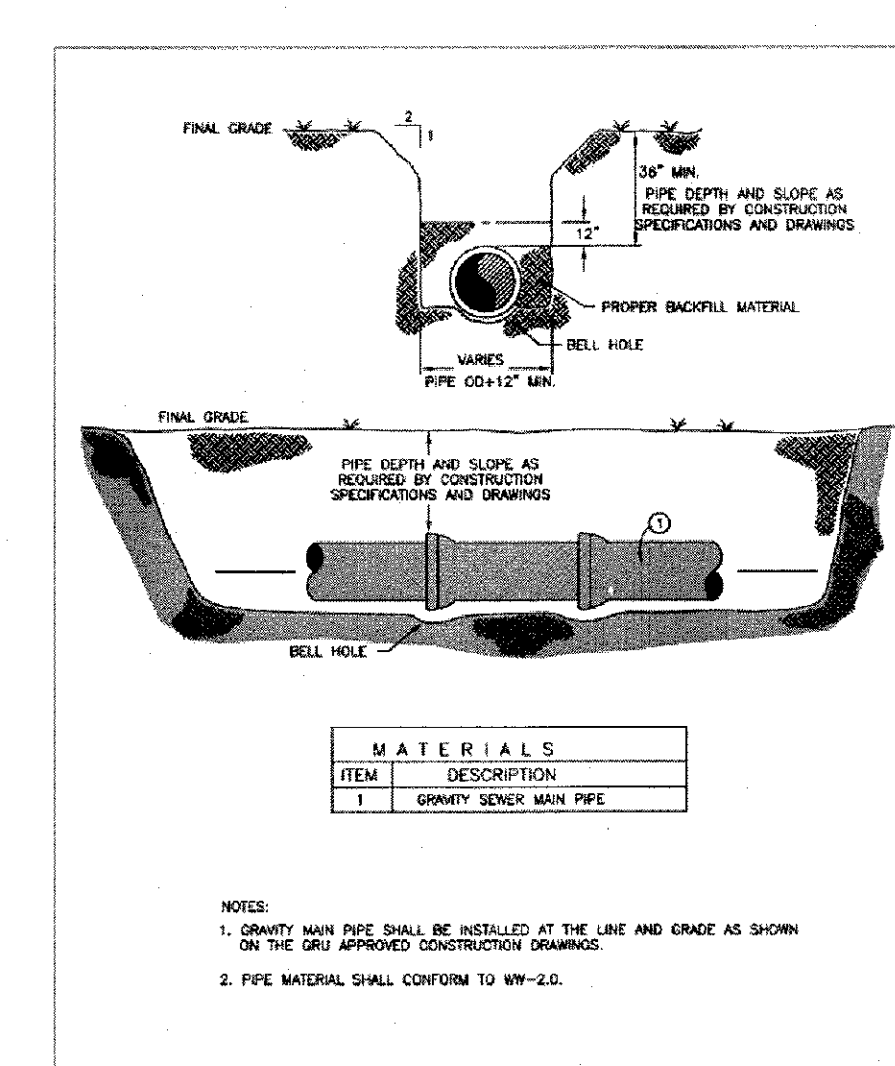
Wastewater Construction Details  
WASTEWATER CLEANOUT WITH TRAFFIC LOAD BEARING COVER



Potable Water Construction Details  
WATER MAIN CONSTRUCTION



Potable Water Construction Details  
MANHOLE INVERT CONSTRUCTION



Wastewater Construction Details  
WASTEWATER GRAVITY MAIN CONSTRUCTION

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:

- Florida
- Puerto Rico
- Connecticut
- Maryland

APR 08 2017

Designed by:	B.P.C.	By	
Drawn by:	P.W.R.	Revision	
Checked by:	H.L.W.	No.	
Approved by:	B.P.C.	Date	
Scale:	NTS	Job No.:	W13392.1
Date:	2/17/15	© 2016	

Plans Prepared By:  
**CPH, Inc.**  
5200 Buford Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999

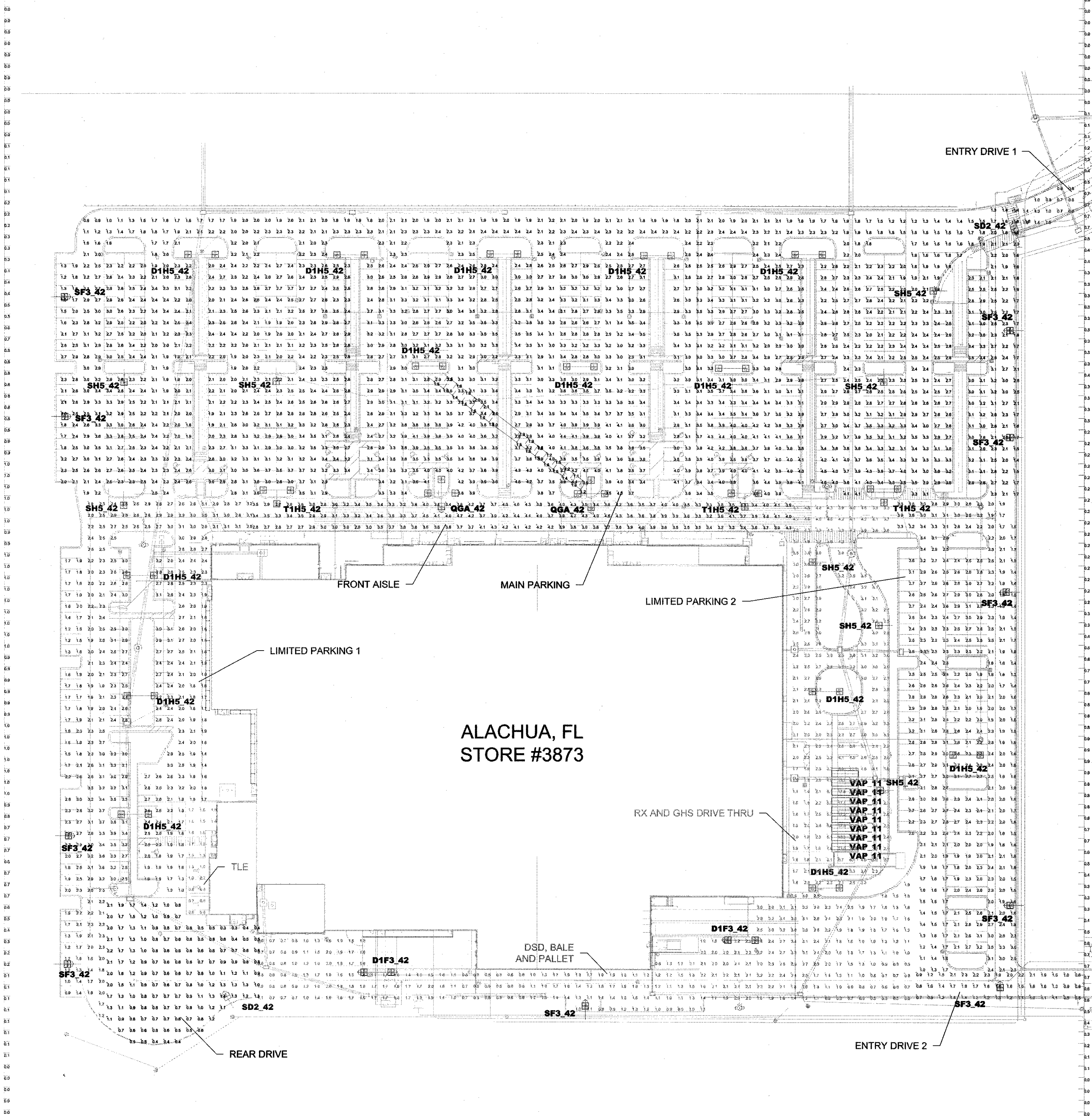
Licenses:  
Eng. C.O.A. No. 32115  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600926  
Landscape Lic. No. LC0000298

UTILITY DETAILS

STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

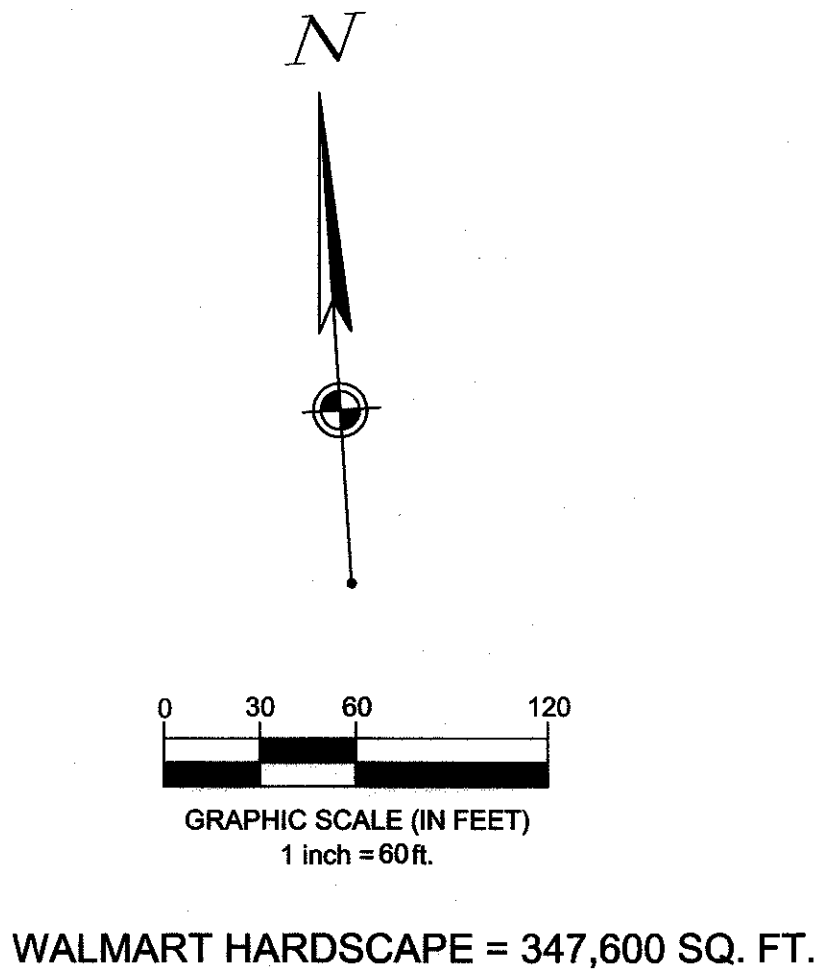
Sheet No.  
**C-17.1**





Luminaire Schedule										
Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	Lum. Lumens	Arr. Watts	Arr. Lum. Lumens	BUG Rating
	2	D1F3_42	BACK-BACK	1.000	2-EASC5F3F550DBBLCKDF 39ft pole on 3ft base	144	16800	288	33600	B2-U0-G2
	14	D1H5_42	BACK-BACK	1.000	2-EASC5H5N550DBBLCKDF 39ft pole on 3ft base	199	21200	398	42400	B4-U0-G2
	2	QGA_42	GROUP	1.000	3-EASC5H5N550DBBLCKDF and 1-EASC5E4F550DBBLCKDF 39ft pole on 3ft base	N.A.	N.A.	716	76500	N.A.
	2	SD2_42	SINGLE	1.000	1-EASC5D2F550DBBLCKDF 39ft pole on 3ft base	82	9100	82	9100	B2-U0-G2
	10	SF3_42	SINGLE	1.000	1-EASC5F3F550DBBLCKDF 39ft pole on 3ft base	144	16800	144	16800	B2-U0-G2
	8	SH5_42	SINGLE	1.000	1-EASC5H5N550DBBLCKDF 39ft pole on 3ft base	199	21200	199	21200	B4-U0-G2
	3	T1H5_42	3 @ 90 DEGREES	1.000	3-EASC5H5N550DBBLCKDF 39ft pole on 3ft base	199	21200	597	63600	B4-U0-G2
	9	VAP_11	SINGLE	1.000	VAP 232L WD HS UPS	52.6	4286	52.6	4286	B2-U3-G1

Store #: 3873		City: Alachua		State: FL				
Total Area in Square Feet		minus bldg., sidewalk, canopies, Garden Ctr., etc.		347,600 Square Feet				
Number of Parking Area Entrances		1		Entrances				
MLO ALLOWANCES								
based on MLO release June 15, 2011								
Allowable Lumens per Sq/Ft Hardscape (Initial)		5		Lumens				
Addit. Allowable Lumens per Entrance (Initial)		600		Lumens				
Addit. Lumen Allowance For Entrances (Initial)		600		Lumens				
Site Total Allowable Lumens (Initial)		1,738,600		Lumens				
Actual Initial Lumens Installed								
Fixture Type	Model	#Luminaires per pole or # wall packs	# Poles For wall packs use "0"	Watts per Arrangement	Initial Lumens per Arrangement	Total Watts	Total # of Luminaires	Total Lumens
D1F3_42	B2-U0-G2	2	2	288	33600	576	4	67,200
D1H5_42	B4-U0-G2	2	14	398	42400	5,572	28	593,600
QGA_42	N.A.	4	2	716	76500	1,432	8	153,000
SD2_42	B2-U0-G2	1	2	82	9100	164	2	18,200
SF3_42	B2-U0-G2	1	10	144	16800	1,440	10	168,000
SH5_42	B4-U0-G2	1	8	199	21200	1,592	8	169,600
T1H5_42	B4-U0-G2	3	3	597	63600	1,791	9	190,800
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
BUG ratings on this calculator may differ from BUG on the design due to TM-15 update mid 2011								
PROJECT IS COMPLIANT?			Total Poles	Light Power Density (LPD)	Lumens per Watt (LPW)	Total Watts	Total Luminaires	Total Lumens
YES			41	0.0362	108	12,567	69	1,360,400



WALMART HARDSCAPE = 347,600 SQ. FT.

Notes:  
LED statistics shown are at initial hours.

Calculation Summary Illuminance Foot-candles					
Label	Avg	Max	Min	Avg/Min	Max/Min
DSD, Bale & Pallet	1.60	3.6	0.5	3.20	7.20
Entry Drive 1	1.05	1.6	0.6	1.75	2.67
Entry Drive 2	1.39	2.3	0.5	2.78	4.60
Front Aisle	3.65	4.7	2.7	1.35	1.74
Limited Parking 1	2.34	3.9	0.9	2.60	4.33
Limited Parking 2	2.31	3.9	1.0	2.31	3.90
Main Parking	2.77	4.6	0.9	3.08	5.11
Rear Drive	0.95	2.2	0.3	3.17	7.33
RX and GHS Drive Thru	3.97	22.3	1.4	2.84	15.93
TLE	1.18	1.7	0.6	1.97	2.83
Vert Main Parking In @ 5' AFG	1.64	2.1	0.9	1.82	2.33
Vert Main Parking Out @ 5' AFG	1.47	1.6	1.2	1.23	1.33
Vert Spill Prop Line @ 5' AFG	0.19	1.0	0.0	N.A.	N.A.

REVISIONS	DATE	DESCRIPTION	
		NO.	BY
1	08/17/2016	2	
ADDRESSED CITY COMMENTS RX AND GHS REDESIGNED			

LIGHTING PLAN	
WALMART STORE #3873	

FLORIDA	
ALACHUA	

cesaconstruction.com

CREATION TO COMPLETION

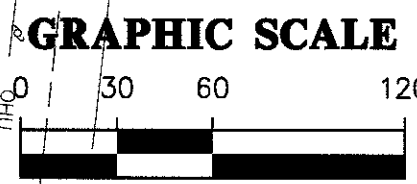
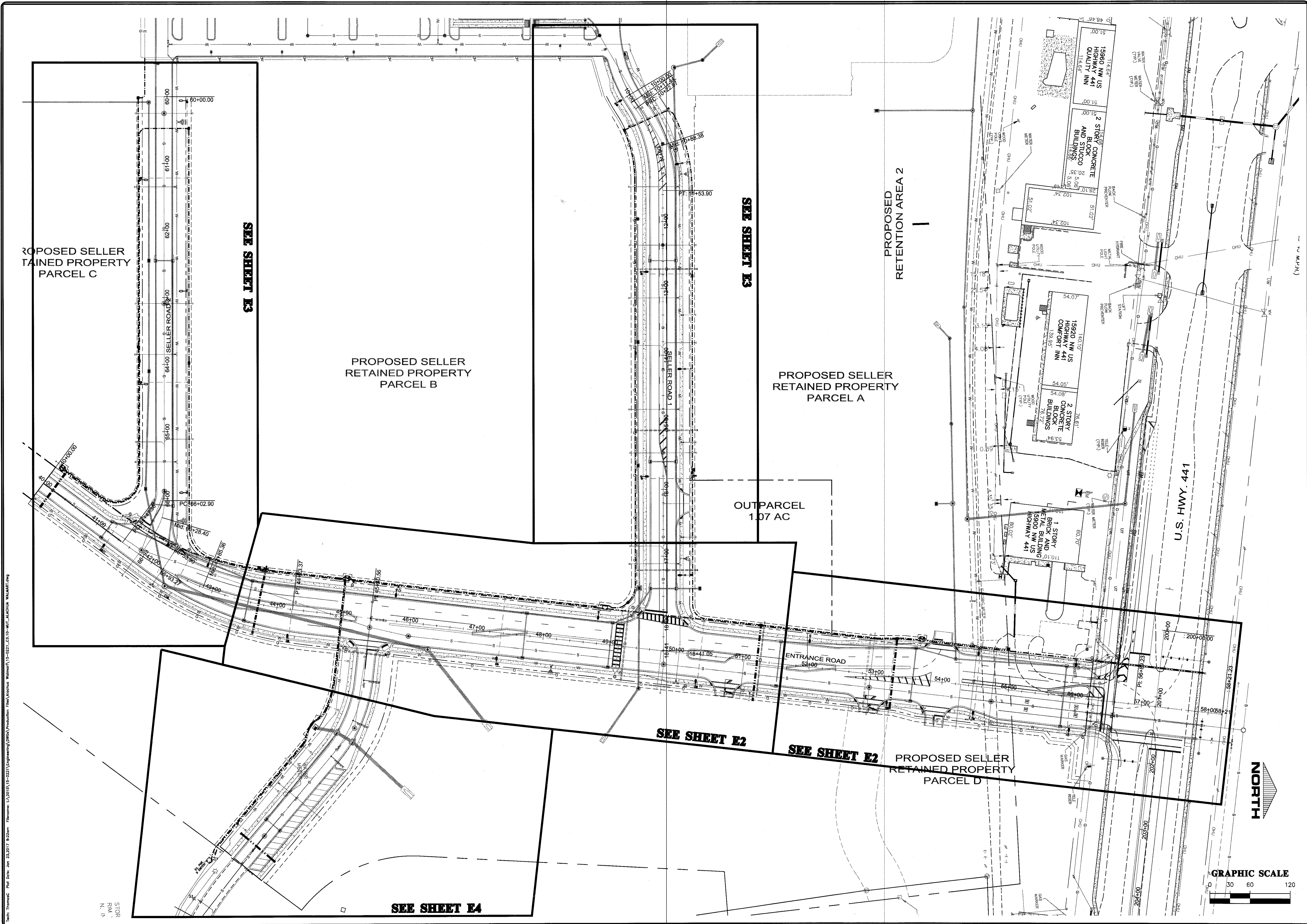
www.cesoinc.com

Engineering • Architecture • Survey • Construction Mgt • Environmental

SCALE: AS NOTED	
DATE: 01/16/2017	
JOB NO.:	751329-01
DESIGN:	LEA
DRAWN:	LEA
CHECKED:	JEE
SHEET NO. 1 OF 1	



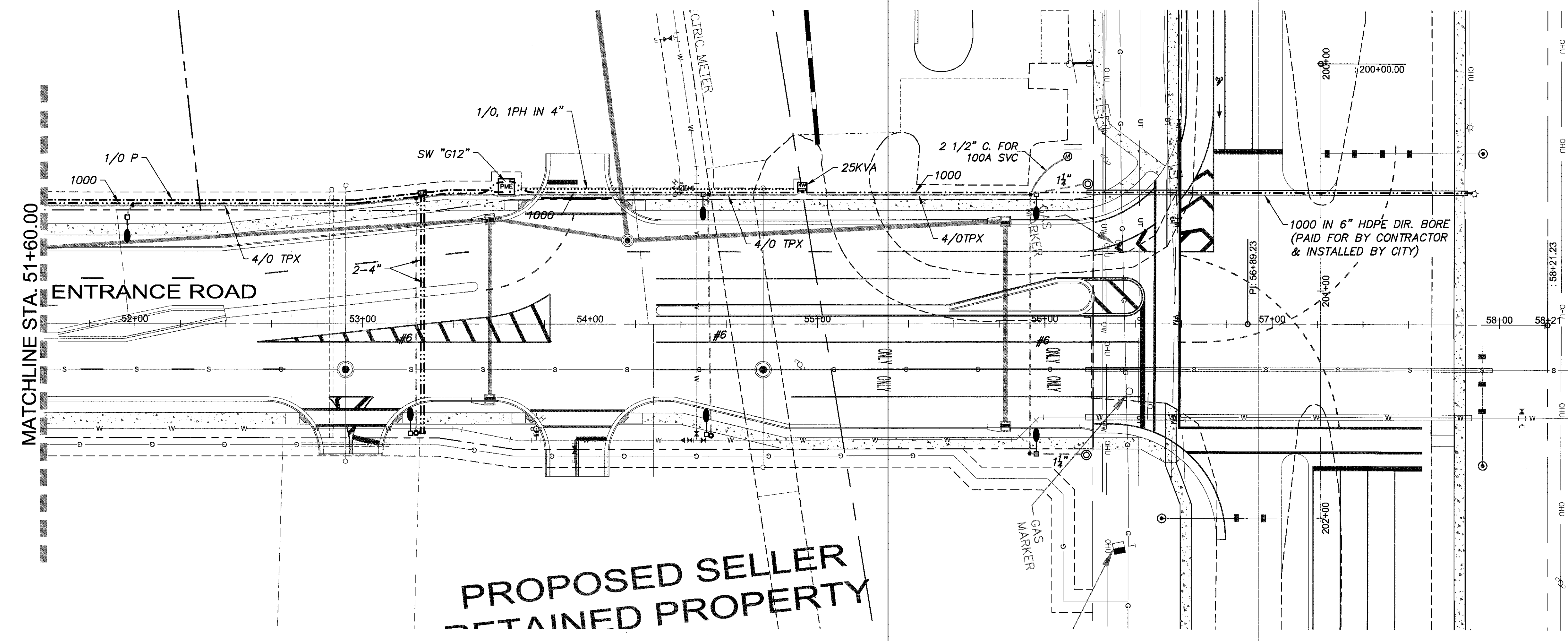
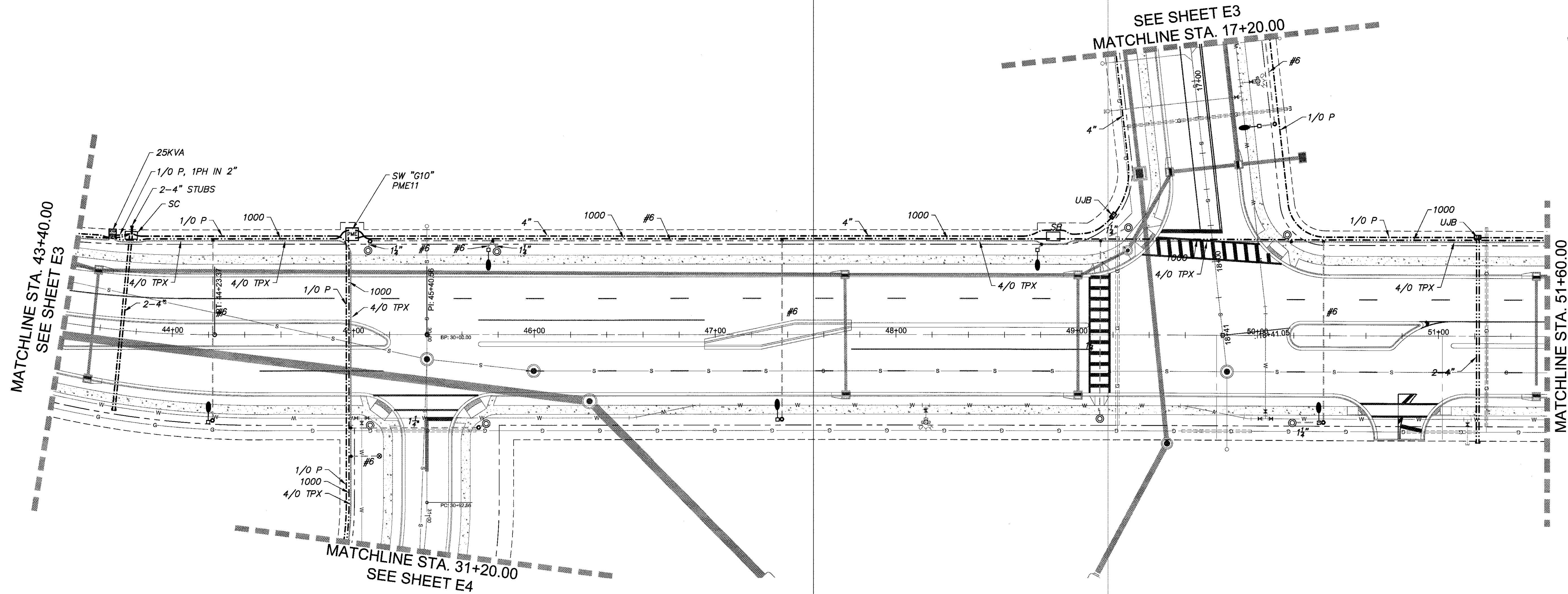
TECH: THOMAS T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 STREET, ALACHUA, FL 32815  
(352) 472-3642  
LIC. # 44156



WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER STORMANTWT@COX.NET 5304 NW 173 STREET, ALACHUA, FL 32815 (352) 472-3642 LIC. # 44156	FILE NO. DATE 01/23/17 SHEET E1 OF 12	REVISIONS	WALMART AT ALACHUA COMMERCE PARK ELECTRIC UTILITY SYSTEM	APPROVED WTS	DRAWN
---	--	-----------	---	-----------------	-------



Tracy: ThomasC Proj Date: Jan 23, 2017 9:23am Filename: L:\2017\15-0221\Engineering\DWG\Production Files\Alachua Walmart\15-0221\_CS-10-MKT-ALACHUA\_WALMART.dwg



LEGEND	
PROPOSED ELECTRICAL UTILITIES	
	TRANSFORMER
	SWITCHGEAR
	1/0 P PRIMARY CABLE
	1/0 b PRIMARY CABLE
	1000 PRIMARY CABLE
	4/0TPX SECONDARY
	#6 SECONDARY
	SMALL WIRE ENCLOSURE
	LARGE WIRE ENCLOSURE
	UD JUNCTION BOX
	SECTIONALIZING CABINET (SC)
	METER SOCKET
	SPLICE BOX
REFER TO E8 FOR SPECIFICATIONS AND DETAILS	
PROPOSED LIGHT POLES	
	A
	AL
	FUTURE PEDESTRIAN LIGHT
	139W
	101W
REFER TO E8 FOR SPECIFICATIONS AND DETAILS	
NOT TO SCALE	

DRAWN

APPROVED  
WTS

REVISIONS

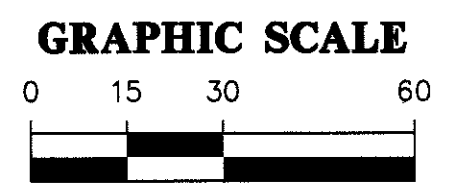
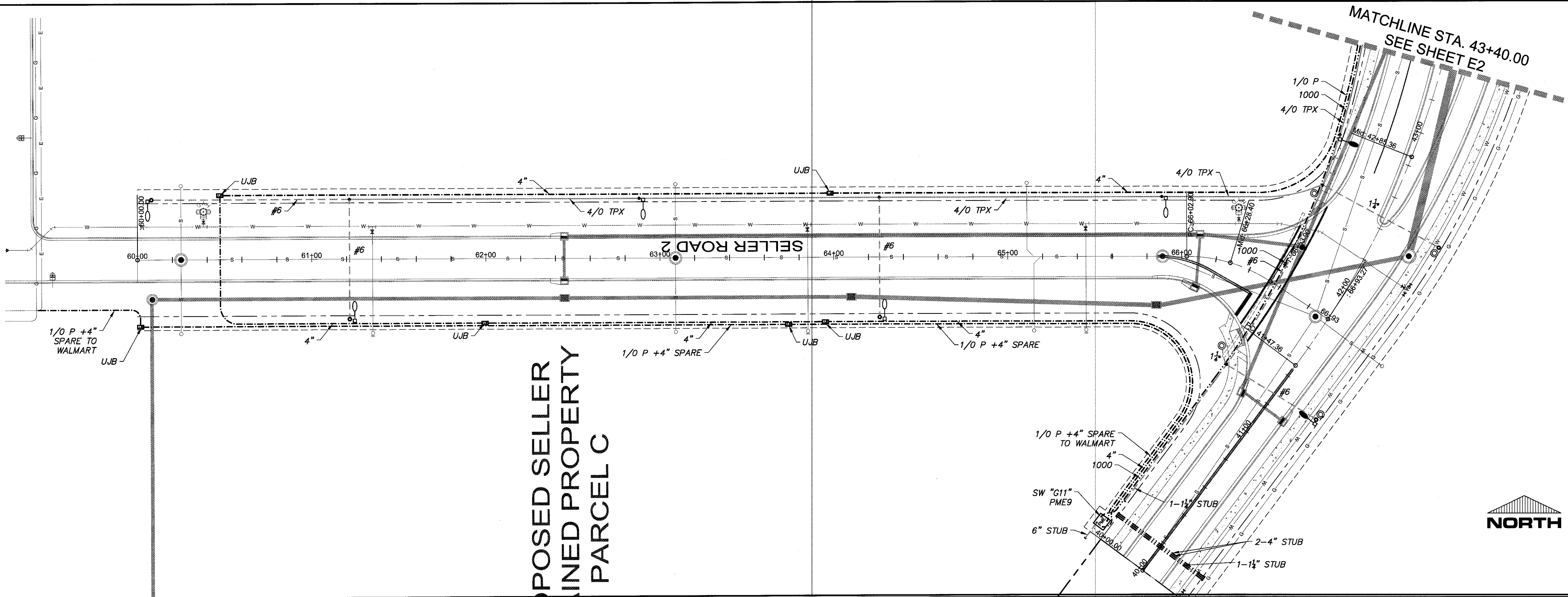
SHEET TITLE

WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

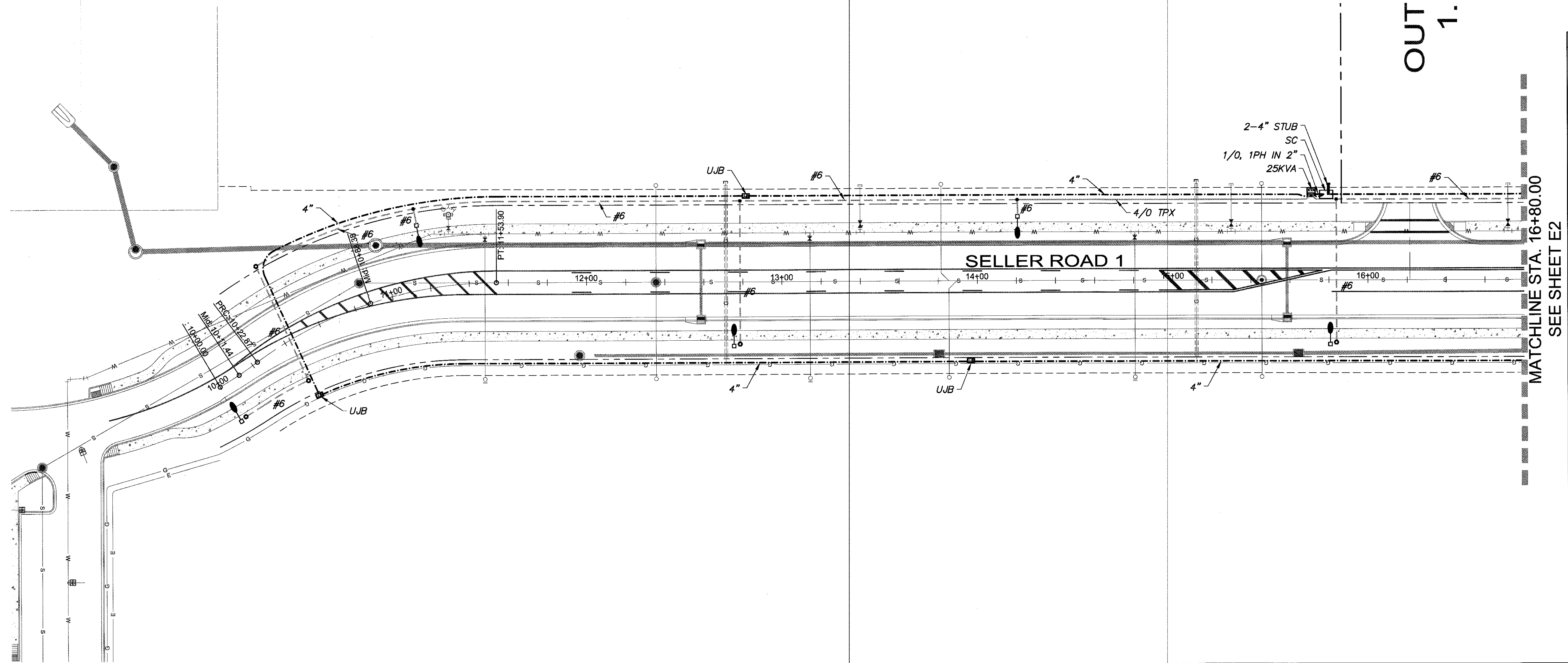
WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642  
Lic. # 44156

FILE NO.  
DATE  
01/23/17  
SHEET  
E2  
OF 12

Teich: ThomasC: Plot Date: Jan 24, 2017 10:24am Filename: L:\2015\15-0221\Engineering\WMA\Production\Plan\Alachua Walmart\15-0221\_CS-15-4017\_ALACHUA\_WALMART.dwg



LEGEND	
PROPOSED ELECTRICAL UTILITIES	
	TRANSFORMER
	SWITCHGEAR
	1/0 P PRIMARY CABLE
	1/0 b PRIMARY CABLE
	1000 PRIMARY CABLE
	4/0 TPX SECONDARY
	#6 SECONDARY
	SMALL WIRE ENCLOSURE
	LARGE WIRE ENCLOSURE
	UD JUNCTION BOX
	SECTIONALIZING CABINET (SC)
	METER SOCKET
	SPLICE BOX
REFER TO E6 FOR SPECIFICATIONS AND DETAILS	
PROPOSED LIGHT POLES	
	A
	AL
	FUTURE PEDESTRIAN LIGHT
	139W
	101W
REFER TO E6 FOR SPECIFICATIONS AND DETAILS	
NOT TO SCALE	



DRAWN

APPROVED  
WTS

REVISIONS

SHEET TITLE

WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

SEAL

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642  
Lic. # 44156

FILE NO.

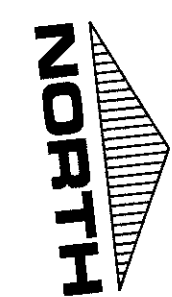
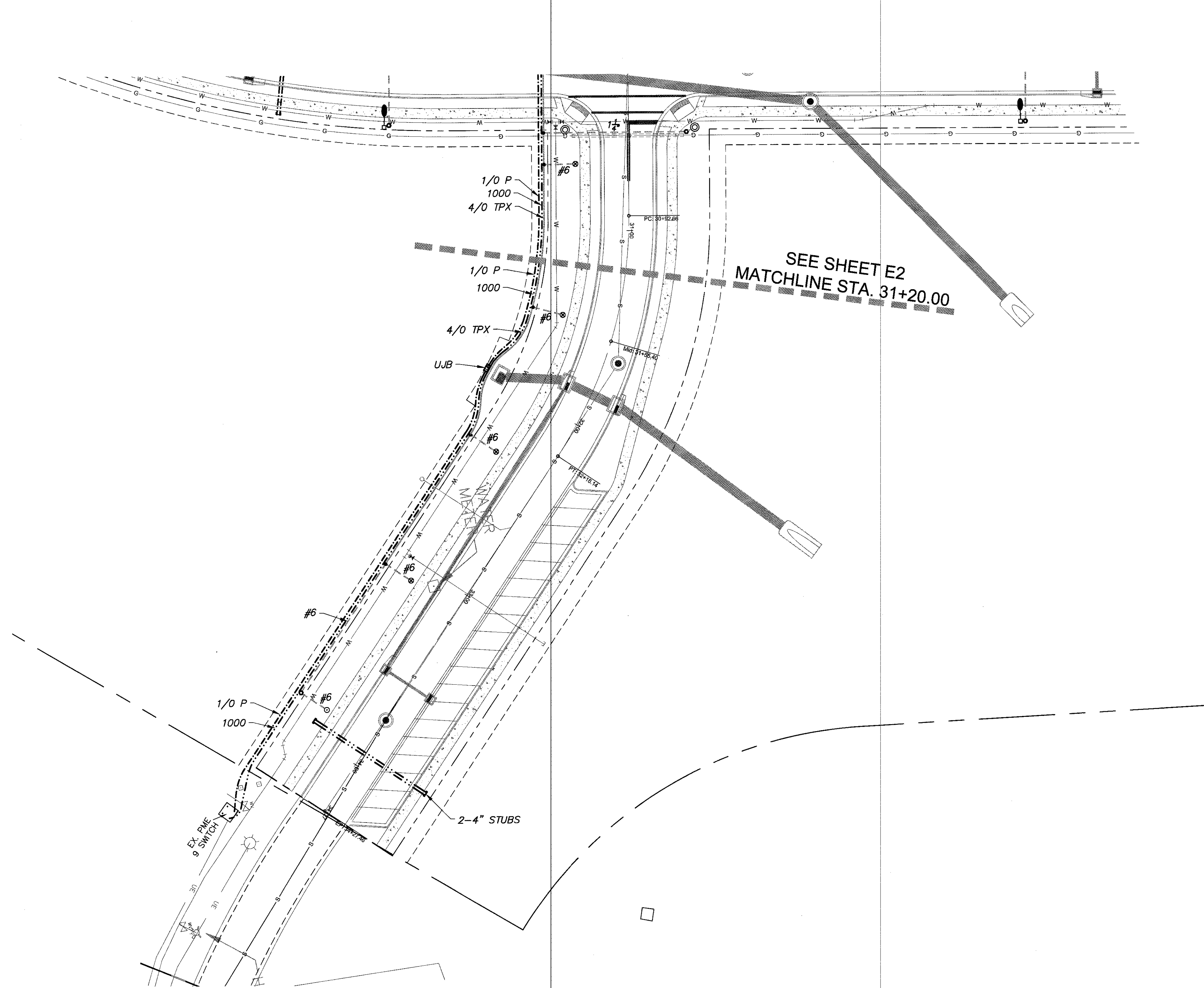
DATE  
01/23/17

SHEET  
E3

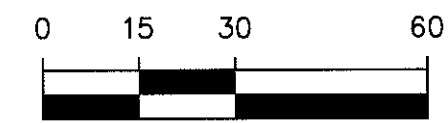
OF 12



Path: Thomas: Plot Date: Jan 23, 2017 9:23am Filename: U:\2015\15-0221\Engineering\WMA\Production\Plan\Alachua Walmart\15-0221.dwg (S-MT) ALACHUA WALMART.dwg



GRAPHIC SCALE



LEGEND	
PROPOSED ELECTRICAL UTILITIES	
	TRANSFORMER
	SWITCHGEAR
	1/0 P PRIMARY CABLE
	1/0 b PRIMARY CABLE
	1000 PRIMARY CABLE
	4/0TPX SECONDARY
	#6 SECONDARY
	SMALL WIRE ENCLOSURE
	LARGE WIRE ENCLOSURE
	UD JUNCTION BOX
	SECTIONALIZING CABINET (SC)
	METER SOCKET
	SPLICE BOX
REFER TO E6 FOR SPECIFICATIONS AND DETAILS	
PROPOSED LIGHT POLES	
	A
	AL
	FUTURE PEDESTRIAN LIGHT
	139W
	101W
REFER TO E8 FOR SPECIFICATIONS AND DETAILS	
NOT TO SCALE	

DRAWN  
APPROVED  
WTS

REVISIONS

SHEET TITLE

WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

SEAL  
3-21-17

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615 (352) 472-3642 Lic. # 44156

FILE NO.  
DATE  
01/23/17  
SHEET  
E4  
OF 12

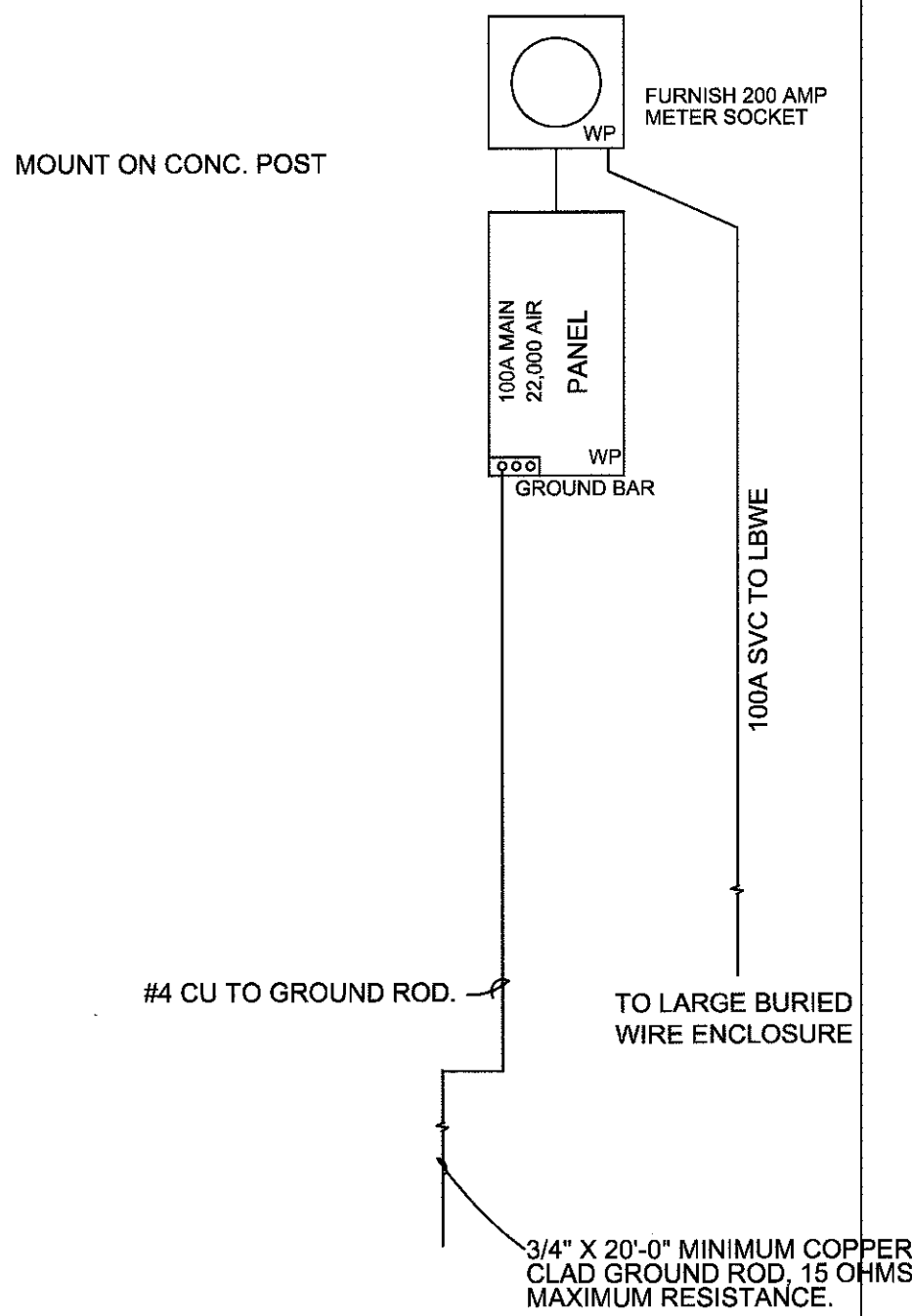


NOT TO SCALE





\\eth1\thomazc\Proj\Date Jan 23,2017 9:24am Filesize: 11,301.5K (11,302.1K) Engineering\WWS\Production Files\Alachua Walmart\15-0221\_01-0-MPT\_ALACHUA WALMART.dwg



NOTE  
ALL CONDUCTORS SHALL BE  
COPPER TYPE THWN-2.

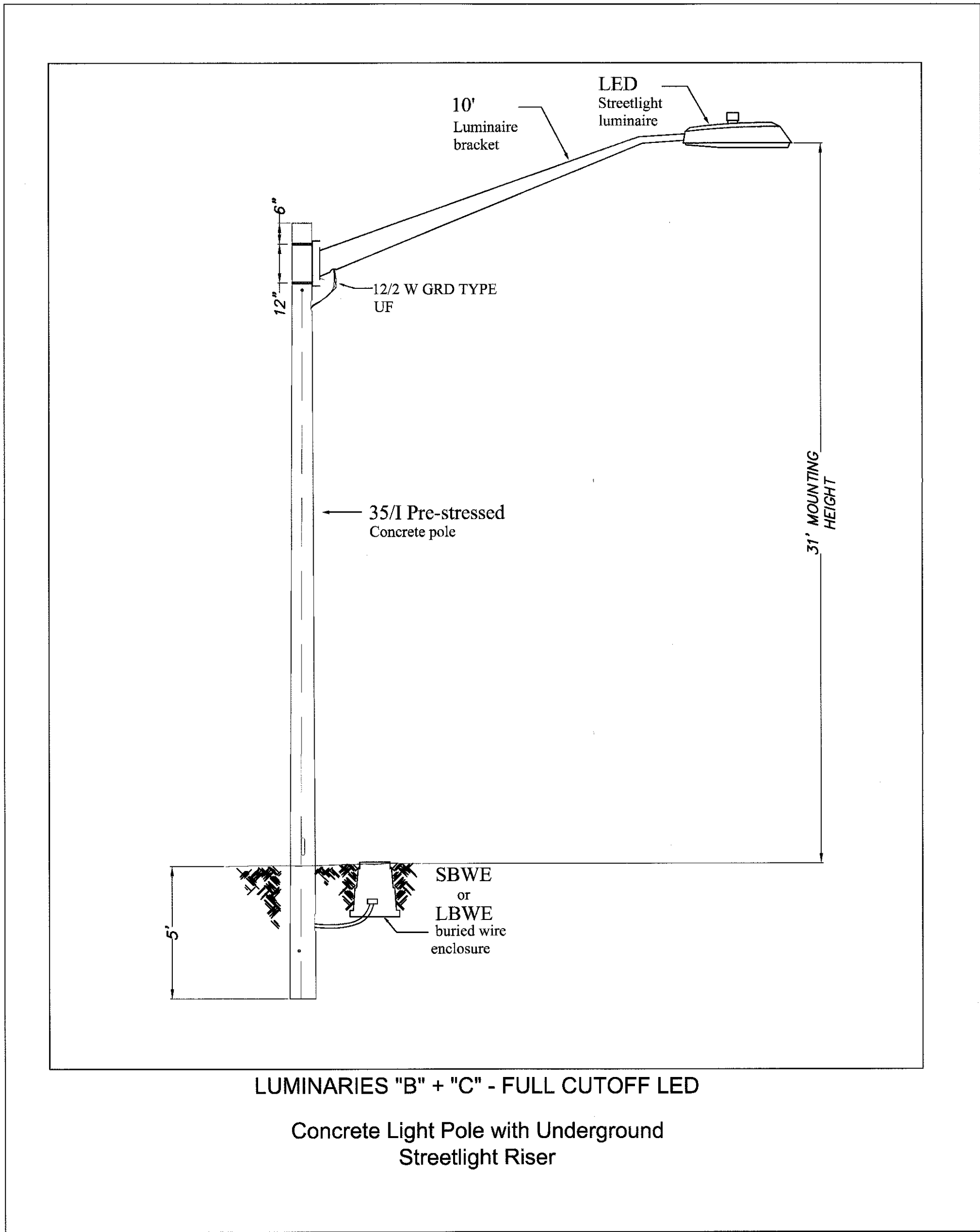
ELECTRICAL DISTRIBUTION ONE LINE DIAGRAM

NOT TO SCALE

DRAWN	WALMART AT ALACHUA COMMERCE PARK ELECTRIC UTILITY SYSTEM	 SEA 5-31-17	WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER STORMANTWT@COX.NET 5304 NW 173 Street, Alachua, FL 32615 (352) 472-3642 Lic. # 44156	FILE NO.
APPROVED WTS				DATE 01/23/17
REVISIONS				SHEET E7
SHEET TITLE				OF 12

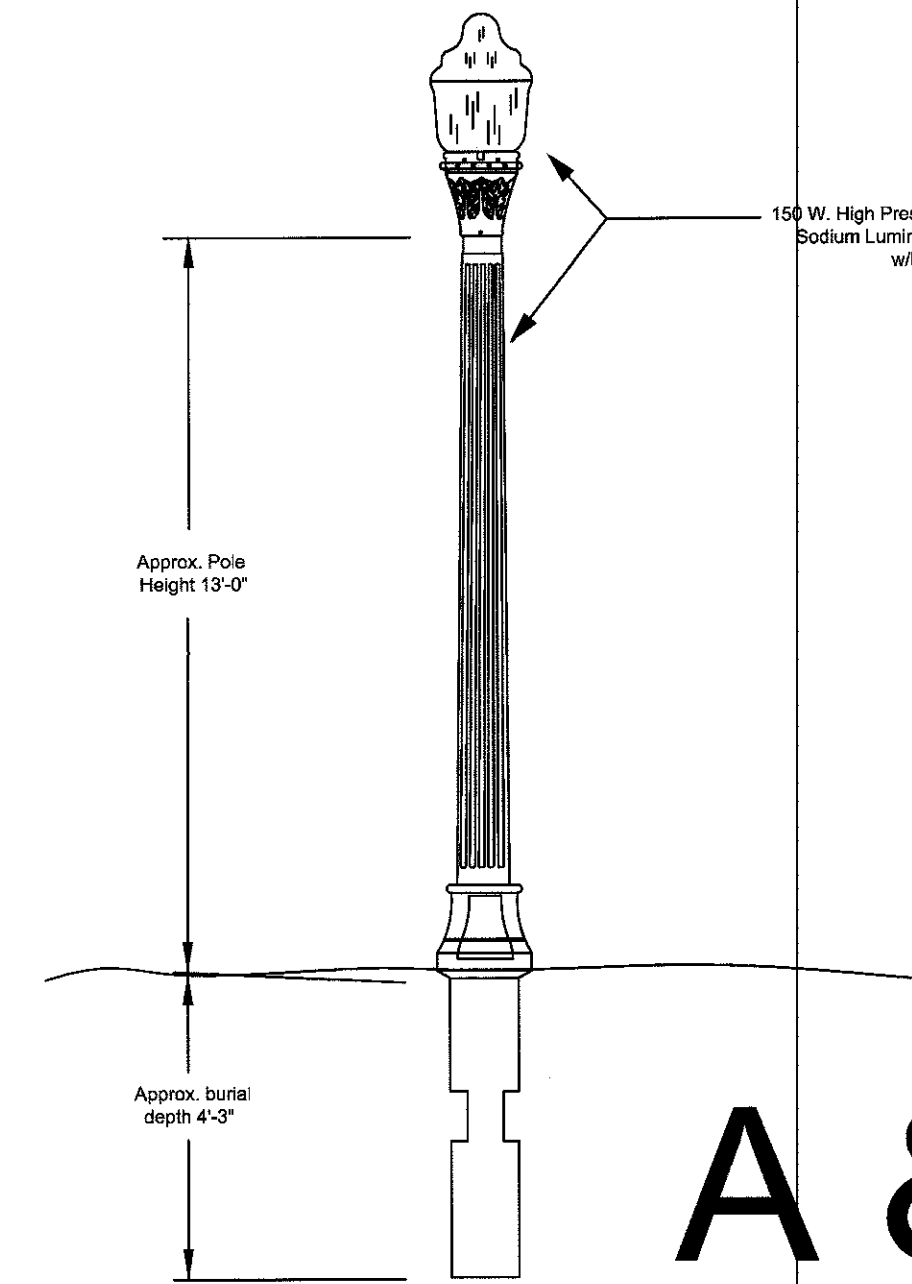


Tech: ThomasC Prod Date: Jan 24, 2017 10:28am Filename: L:\2015\15-0221\Engineering\DWG\Production Files\Alachua\Walmart\15-0221\_C312-MIT-ALACHUA\_WALMART.dwg



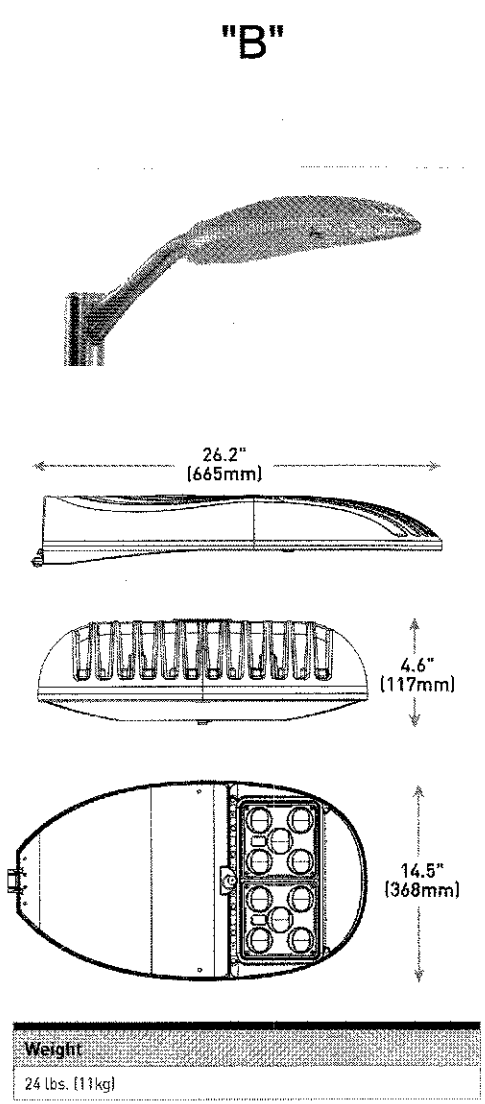
### LIGHTING LEGEND AND SPECIFICATIONS

- ⊙ FUTURE PEDESTRIAN LIGHT (BY CITY OF ALACHUA), PROVIDE SBWE WHERE NOT ADJACENT TO A LBWE. INSTALL SMALL BURIED WIRE ENCLOSURE.
- ⊗ 150 WATT HPS TYPE III DISTRIBUTION, UTILITY GRADE, OAK LEAF PATTERN, ACORN STYLE LUMINAIRE WITH GLASS REFRACTOR, ON 13' (ABOVE GROUND) CONCRETE POLE WITH 10\"/>



150 W. HIGH PRESSURE SODIUM- UTILITY LIGHT  
DECORATIVE LUMINAIRE WITH POLE

A & AL



### 250W HPS CLASS XSP Series XSP2™ LED Street/Area Luminaire - Double Module - Version C

**Product Description**  
Designed from the ground up as a totally optimized LED street and area lighting system, the XSP Series delivers incredible efficiency without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieves greater optical control with our NanoOptic® Precision Delivery Grid™ optic when compared to traditional cobra head luminaires. The XSP Series is the better alternative for traditional street and area lighting with quick payback and improved performance.  
**Applications:** Roadway, parking lots, walkways and general area spaces

Performance Summary	
NanoOptic® Precision Delivery Grid™ Optic	
Made in the U.S.A. of U.S. and imported parts	
CRI: Minimum 78 CRI	
CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)	
Limited Warranty: 10 years on luminaire/5 years on Colorfast Diffusion™ Array	

Accessories	
Field-Installed Backlight Control Shield (XA-CPBLS)	Bire Spikes (XA-CPBSPK)
Provides 1/2 mounting height cutoff	

Ordering Information									
Example: BXSP-C-HT-2ME-F-30K-UL-SV									
BXSP	C	HT	Meas.	Optic	Input Power Designator	CCT	Voltage	Color Options	Options
BXSP	C	HT	Horizontal Taper	2ME* Type I Medium 3LG* Type II Long 3ME* Type II Medium 4ME* Type II Medium	F 139W	30K 3000K 40K 4000K 57K 5700K	UL Universal 120-277V LM Universal 247-480V	BK Black BZ Bronze SV Silver	N-Q9 Utility Label and NEMA® Photocell Receptacle - External wiring label per ANSI C136.41 - 7 pin receptacle per ANSI C136.41 - Factory connected 6-10' dim leads - Photocell and shunting cap by others - Includes Q9 option - Refer to Field Adjustable Output spec sheet for details Q9 Field Adjustable Output - Refer to Field Adjustable Output spec sheet for details R NEMA® Photocell Receptacle - 7 pin receptacle per ANSI C136.41 - Factory connected 6-10' dim leads - Photocell and shunting cap by others

\* Available with Backlight Shield when ordered with field-installed accessory (see table above)  
NOTE: Price varies may apply depending on configuration

UL US DLC ENEC IFC  
US: lighting.cree.com/lighting T (800) 235-6800 F (262) 504-5415

Rev. Date: V6 08/24/2016

CREE  
T (800) 473-1234 F (800) 899-7507

### 150 HPS CLASS XSP Series XSP1™ LED Street/Area Luminaire - Single Module - Version C

**Product Description**  
Designed from the ground up as a totally optimized LED street and area lighting system, the XSP Series delivers incredible efficiency without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieves greater optical control with our NanoOptic® Precision Delivery Grid™ optic when compared to traditional cobra head luminaires. The XSP Series is the better alternative for traditional street and area lighting with quick payback and improved performance.  
**Applications:** Roadway, parking lots, walkways and general area spaces

Performance Summary	
NanoOptic® Precision Delivery Grid™ Optic	
Made in the U.S.A. of U.S. and imported parts	
CRI: Minimum 78 CRI	
CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)	
Limited Warranty: 10 years on luminaire/5 years on Colorfast Diffusion™ Array	

Accessories	
Field-Installed Backlight Control Shield (XA-CPBLS)	Bire Spikes (XA-CPBSPK)
Provides 1/2 mounting height cutoff	

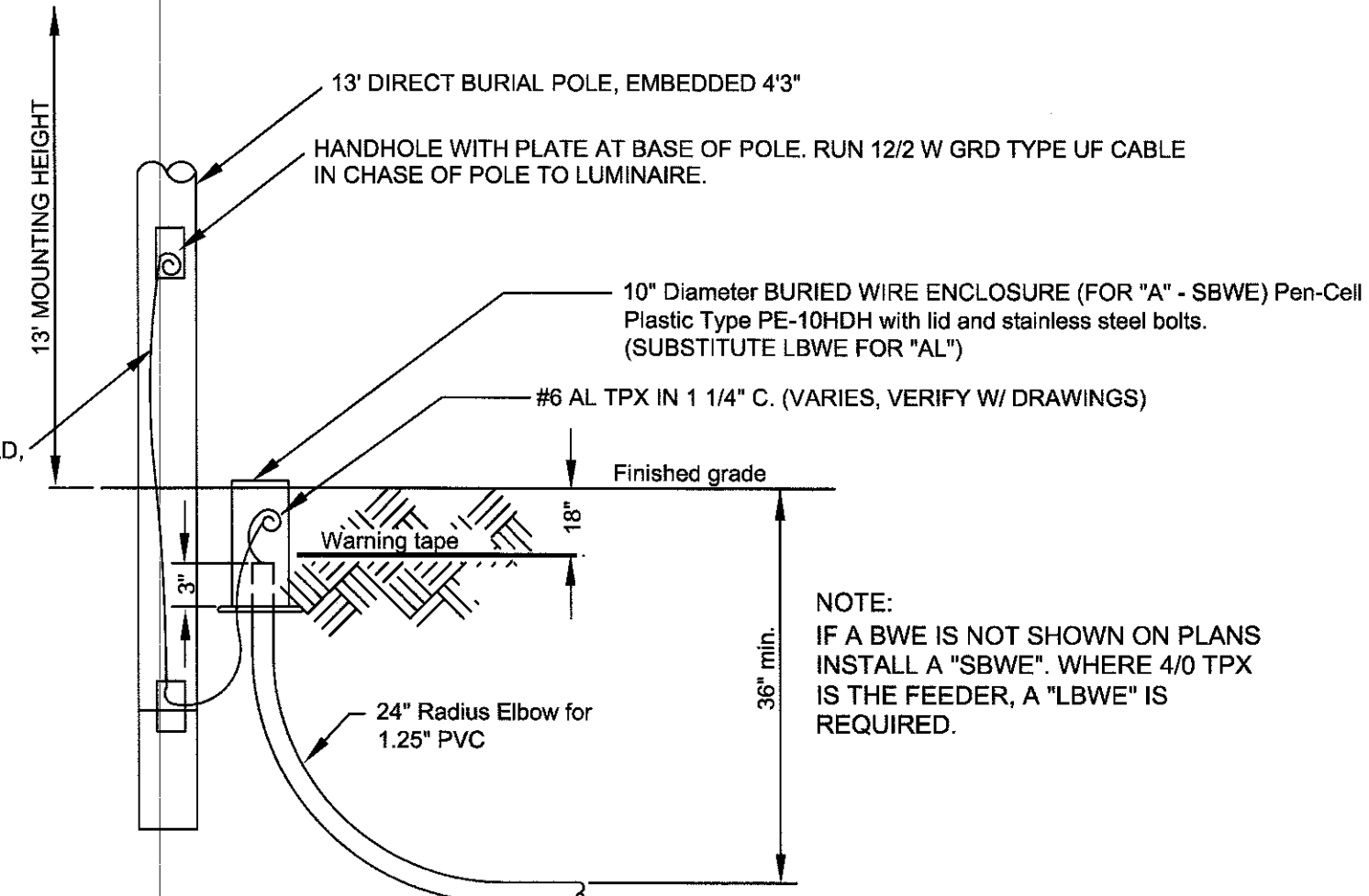
Ordering Information									
Example: BXSP-C-HT-2ME-F-30K-UL-SV									
BXSP	C	HT	Meas.	Optic	Input Power Designator	CCT	Voltage	Color Options	Options
BXSP	C	HT	Horizontal Taper	2ME* Type I Medium 3LG* Type II Long 3ME* Type II Medium 4ME* Type II Medium	E 151W	30K 3000K 40K 4000K 57K 5700K	UL Universal 120-277V	BK Black BZ Bronze SV Silver	N-Q9 Utility Label and NEMA® Photocell Receptacle - External wiring label per ANSI C136.41 - 7 pin receptacle per ANSI C136.41 - Factory connected 6-10' dim leads - Photocell and shunting cap by others - Includes Q9 option - Refer to Field Adjustable Output spec sheet for details Q9 Field Adjustable Output - Refer to Field Adjustable Output spec sheet for details R NEMA® Photocell Receptacle - 7 pin receptacle per ANSI C136.41 - Factory connected 6-10' dim leads - Photocell and shunting cap by others

\* Available with Backlight Shield when ordered with field-installed accessory (see table above)  
NOTE: Price varies may apply depending on configuration

UL US DLC ENEC IFC  
US: lighting.cree.com/lighting T (800) 235-6800 F (262) 504-5415

Rev. Date: V6 08/23/2016

CREE  
T (800) 473-1234 F (800) 899-7507



NOTE:  
CONTRACTOR SHALL FURNISH AND INSTALL ALL POLE MOUNTED LIGHT FIXTURES, POLES, AND BURIED WIRE ENCLOSURES (BWE) AT ALL POLE LOCATIONS.

TYPE "A" & "AL" UTILITY STREETLIGHT DETAIL (TYP.)  
NOT TO SCALE

DRAWN  
APPROVED  
WTS

REVISIONS

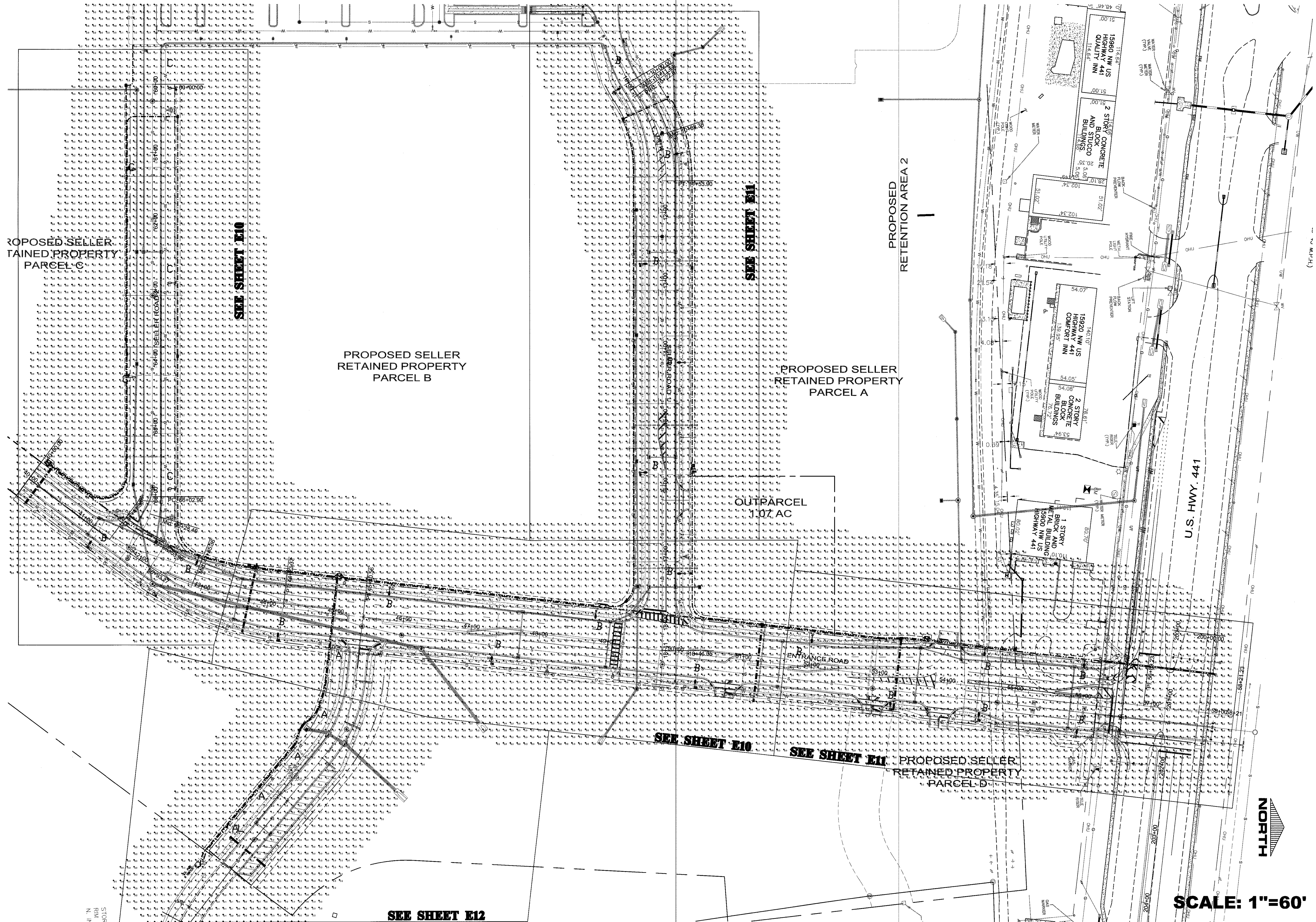
SHEET TITLE  
WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

SEAL  
3/27/17

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642 Lic. # 44156

FILE NO.  
DATE  
01/23/17  
SHEET  
E8  
OF 12





DRAWN  
APPROVED  
WTS

REVISIONS

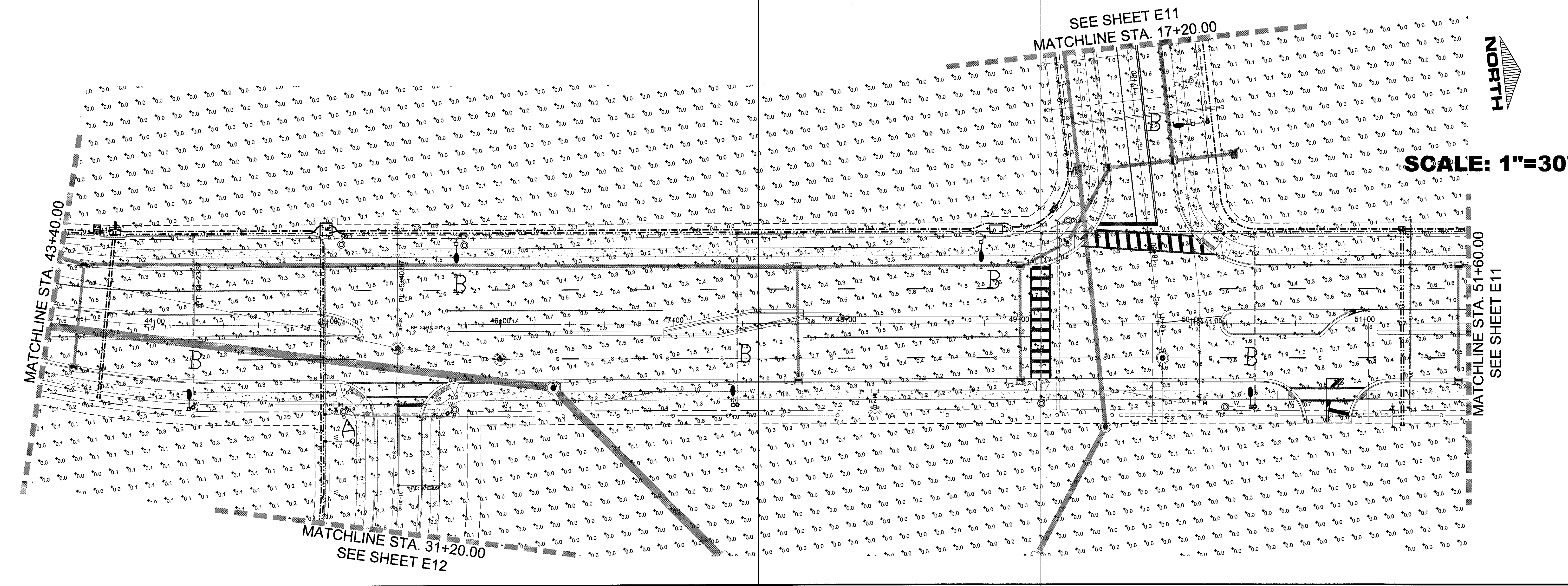
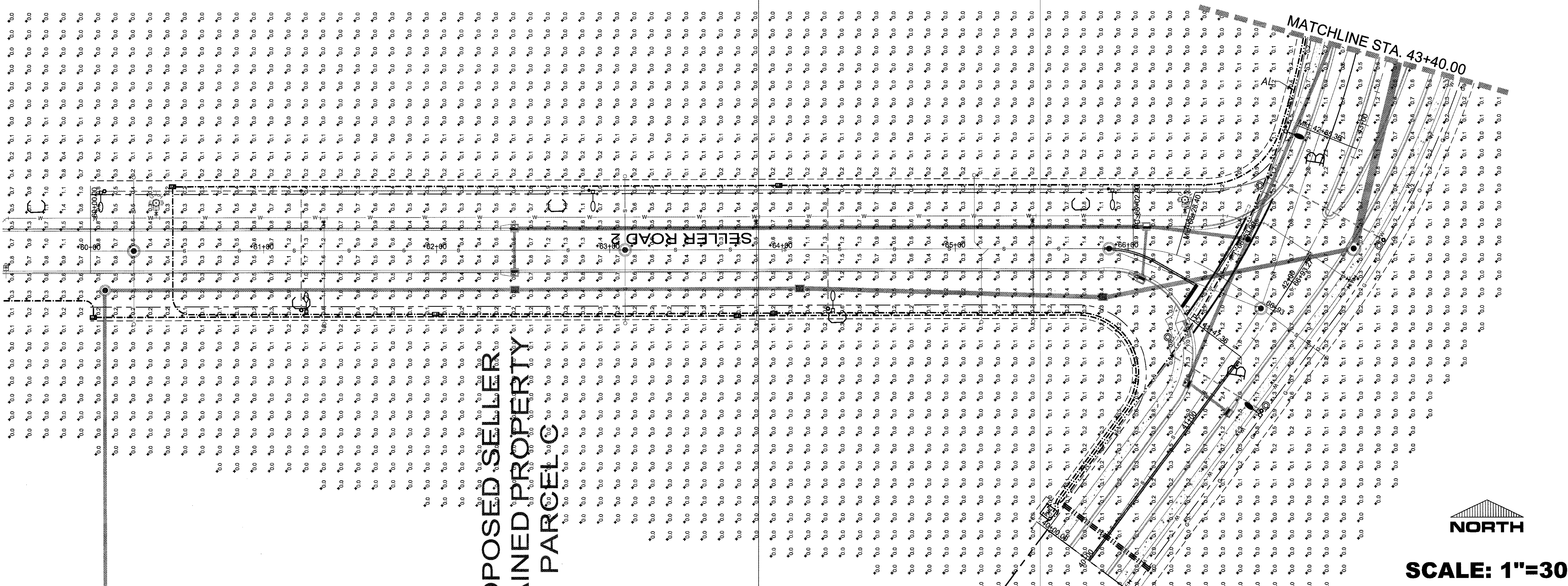
SHEET TITLE  
**WALMART AT ALACHUA COMMERCE PARK**  
ELECTRIC UTILITY SYSTEM

SEAL  
3-3-17

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642 Lic. # 44156

FILE NO.  
DATE  
01/23/17  
SHEET  
**E9**  
OF 12





DRAWN

APPROVED  
WTS

REVISIONS

SHEET TITLE

WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

SEAL

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642  
Lic. #44156

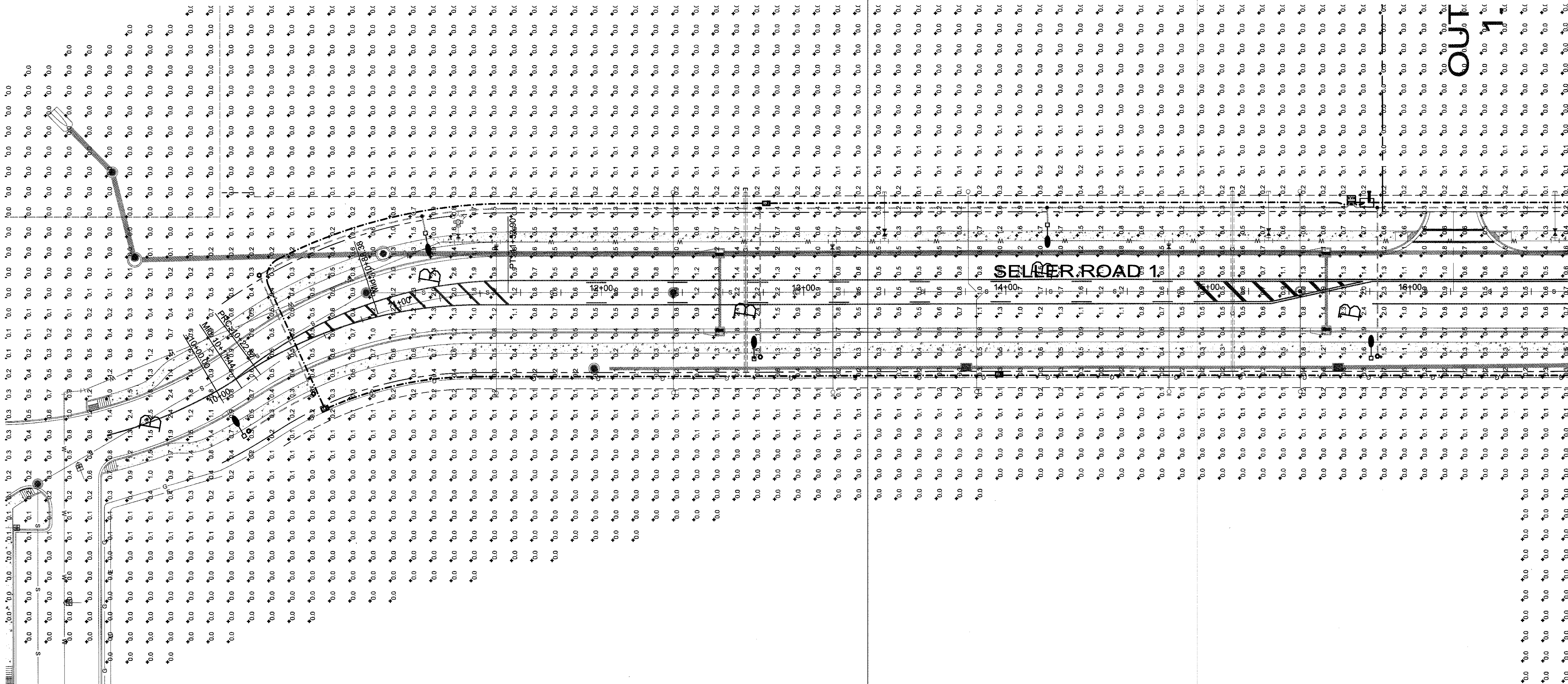
FILE NO.

DATE  
01/23/17

SHEET  
E10

OF 12

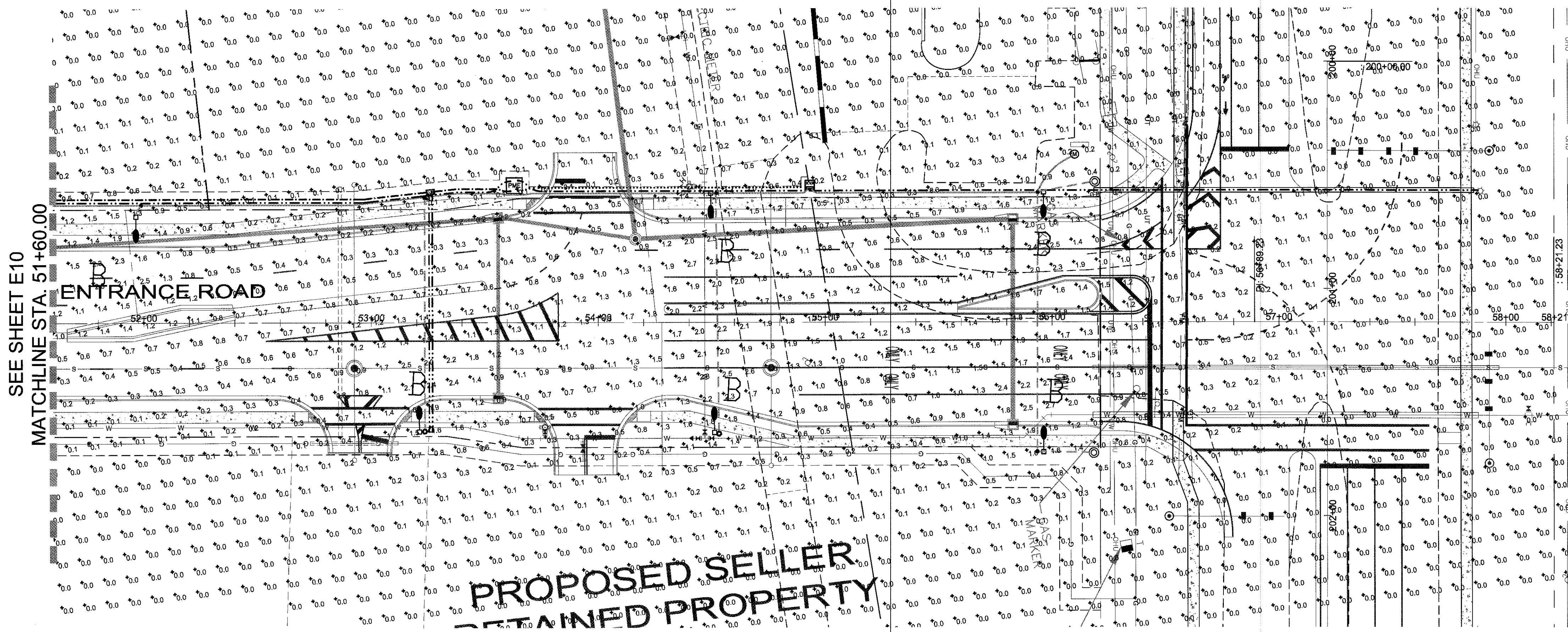




SEE SHEET E10



SCALE: 1"=30'



SEE SHEET E10



SCALE: 1"=30'

DRAWN  
APPROVED  
WTS

REVISIONS

SHEET TITLE  
WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

SEALED  
3-2-17

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642 Lic. # 44156

FILE NO.  
DATE  
01/23/17  
SHEET  
E11  
OF 12

APPROVED  
WTS

## REVISIONS

SHEET TITLE

WALMART AT ALACHUA COMMERCE PARK  
ELECTRIC UTILITY SYSTEM

SEAL

WILLIAM T. STORMANT PE - ELECTRICAL ENGINEER  
STORMANTWT@COX.NET  
5304 NW 173 Street, Alachua, FL 32615  
(352) 472-3642 Lic. # 44156

FILE NO.

DATE  
01/23/17

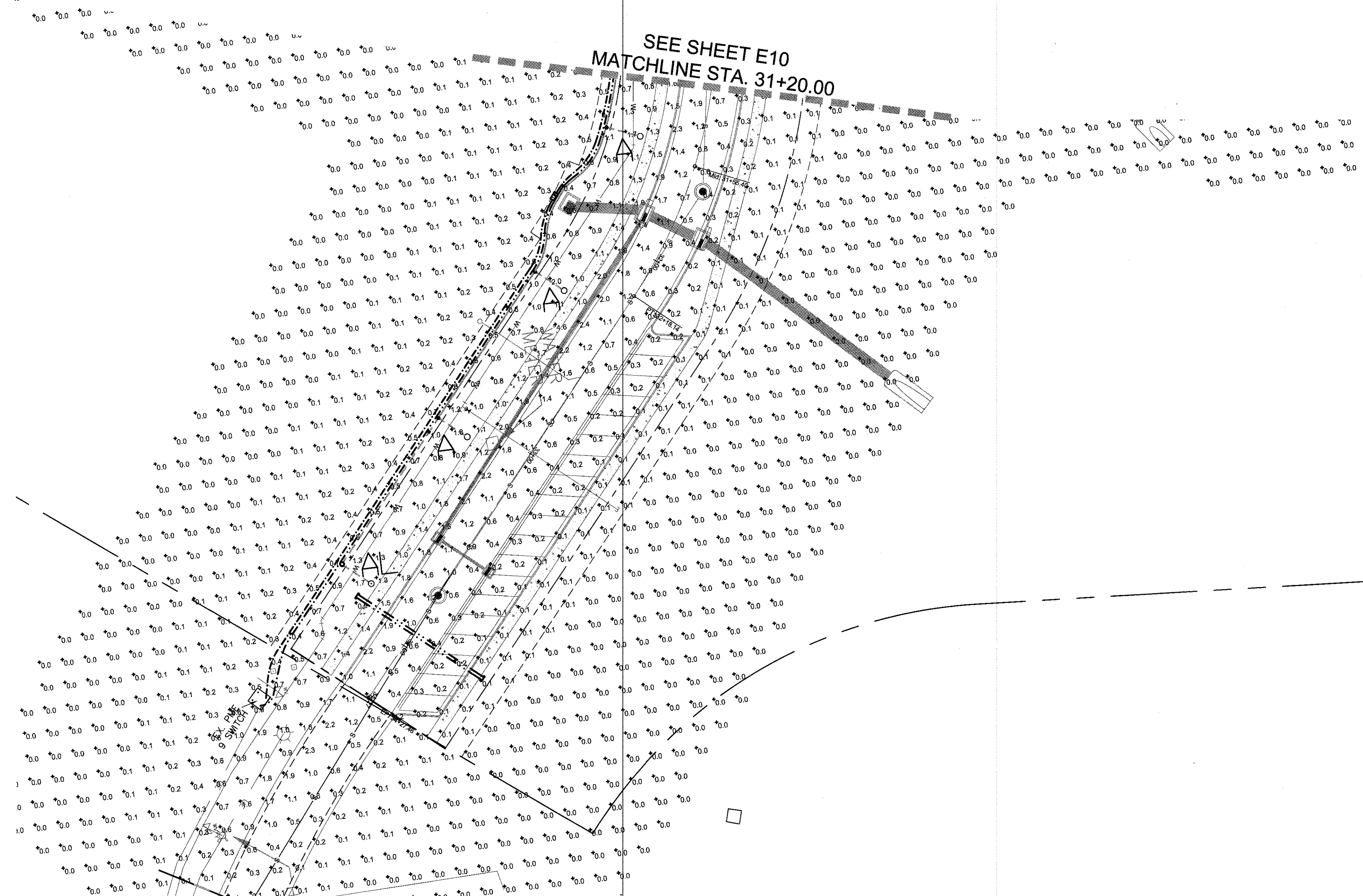
SHEET

E12

OF 12



**SCALE: 1"=30'**















PLANT LEGEND

SYM. COMMON NAME

TREES

- |    |                       |
|----|-----------------------|
| AA | DOWNY SERVICEBERRY    |
| AR | FLORIDA FLAME MAPLE   |
| BN | DURA-HEAT RIVER BIRCH |
| CC | FOREST PANSY REDBUD   |
| LS | AMERICAN SWEETGUM     |
| LI | CAPE MYRTLE           |
| LT | TULIP POPLAR          |
| MG | SOUTHERN MAGNOLIA     |
| UA | WINGED ELM            |
| PE | SLASH PINE            |
| PP | LONGLEAF PINE         |
| QS | SHUMARD OAK           |
| QV | LIVE OAK              |
| TD | BALD CYPRESS          |

HEDGES AND ACCENT PLANTS

- |    |                |
|----|----------------|
| VO | SWEET VIBURNUM |
|----|----------------|

SHRUBS

- |    |                       |
|----|-----------------------|
| AG | EDWARD GOUCHER ABELIA |
| RI | INDIAN HAWTHORN       |
| LP | PLUM LOROPETALUM      |

GROUNDCOVER

- |    |                      |
|----|----------------------|
| DV | AFRICAN IRIS         |
| ES | PURPLE LOVE GRASS    |
| MC | MUHLY GRASS          |
| DT | VARIEGATED FLAX LILY |
| TA | ASIATIC JASMINE      |
| ZP | COONTIE              |

- |     |                     |
|-----|---------------------|
| SOD | ARGENTINE BAHIA SOD |
|-----|---------------------|

cph

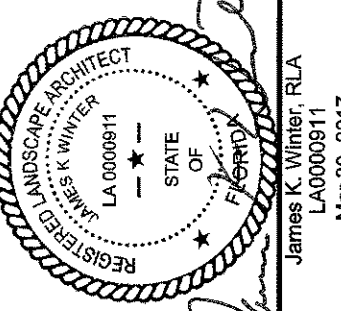
www.cphcorp.com

A Full Service  
A & E Firm

Architects  
Engineers  
Environmental  
Landscape Architects  
M/E/P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:

- Florida
- Puerto Rico
- Connecticut
- Maryland



Designed by:	JKW	Drawn by:	ARS	Checked by:	MDS	Approved by:	JKW	Scale:	1"=30'	Date:	5/16	Job No.:	W13392.1	Revised Per City Comments	JKW	By:	JKW
No.	1	No.	1	No.	1	No.	1	No.	1	No.	1	No.	1	No.	1	No.	1
Date	02-10-17	Date	02-10-17	Date	02-10-17	Date	02-10-17	Date	02-10-17	Date	02-10-17	Date	02-10-17	Date	02-10-17	Date	02-10-17

Plans Prepared By

CPI, Inc.

5200 Belfort Rd., Suite 220

Jacksonville, FL 32256

Ph: 904.332.0999

Licenses:

Eng. C.O.A. No. 3215

Survey L.B. No. 7143

Arch. Lic. No. AA2600926

Landscape Lic. No. LC0000238

LANDSCAPE PLAN

Walmart

STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

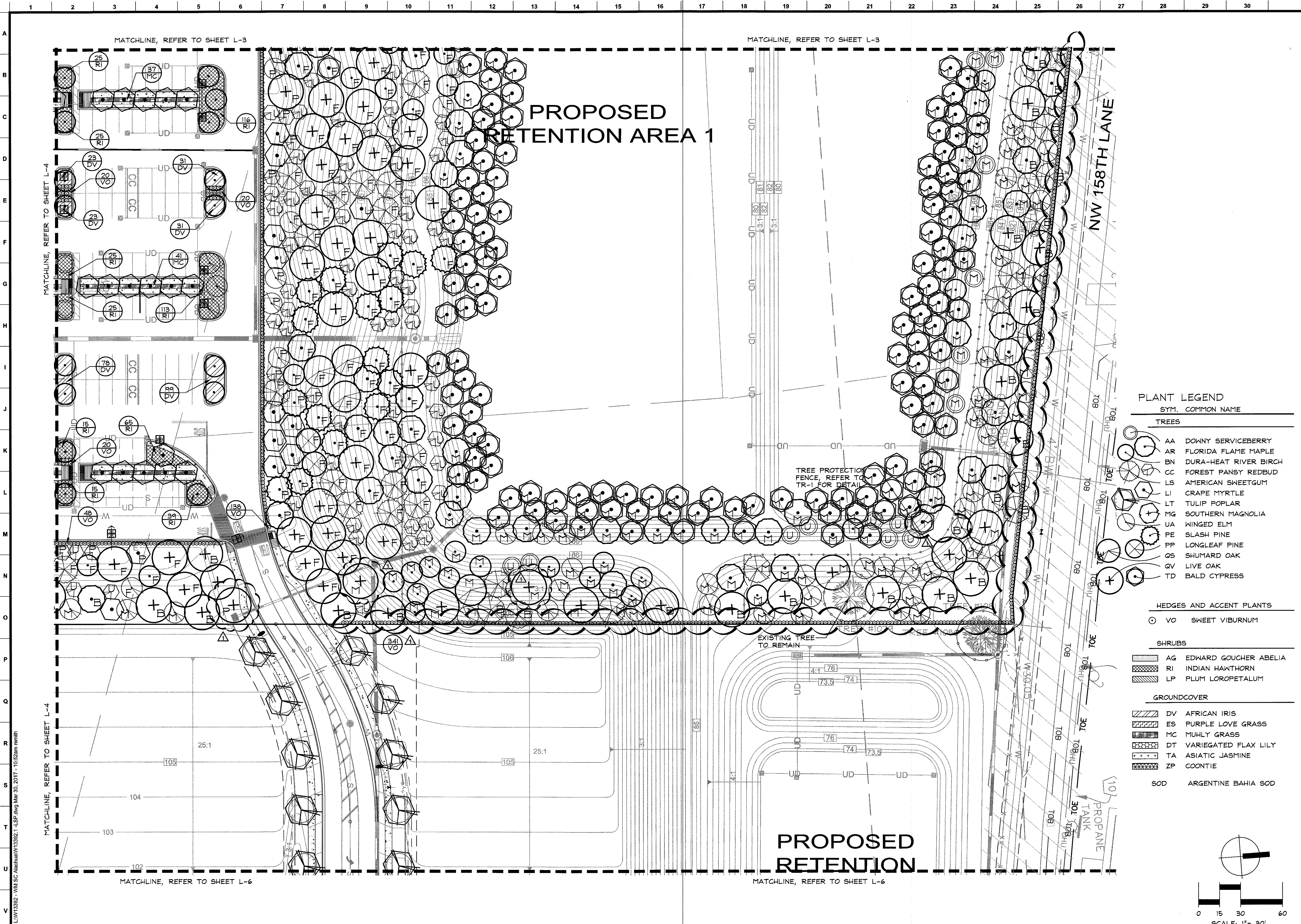
Sheet No.

L-3









- PLANT LEGEND**
- SYMBOL COMMON NAME
- TREES**
- AA DOWNY SERVICEBERRY
  - AR FLORIDA FLAME MAPLE
  - BN DURA-HEAT RIVER BIRCH
  - CC FOREST PANSY REDBUD
  - LS AMERICAN SWEETGUM
  - LI CRAPE MYRTLE
  - LT TULIP POPLAR
  - MG SOUTHERN MAGNOLIA
  - UA WINGED ELM
  - PE SLASH PINE
  - PP LONGLEAF PINE
  - QS SHUMARD OAK
  - QV LIVE OAK
  - TD BALD CYPRESS
- HEDGES AND ACCENT PLANTS**
- VO SHEET VIBURNUM
- SHRUBS**
- AG EDWARD GOUCHER ABELIA
  - RI INDIAN HAWTHORN
  - LP PLUM LOROPETALUM
- GROUNDCOVER**
- DV AFRICAN IRIS
  - ES PURPLE LOVE GRASS
  - MC MUHLY GRASS
  - DT VARIEGATED FLAX LILY
  - TA ASIATIC JASMINE
  - ZP COONTIE
- SOD**
- ARGENTINE BAHIA SOD

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland

Designed by:	Drawn by:	Checked by:	Approved by:	Scale:	Date:	Job No.:	Revised Per City Comments	Revision	Date
JKW	ARS	MDS	JKW	1"=30'	5/16	W13392.1			

© 2017

Plans Prepared By:  
**CPI, Inc.**

5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999

License:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600028  
Landscape Lic. No. LC0000298

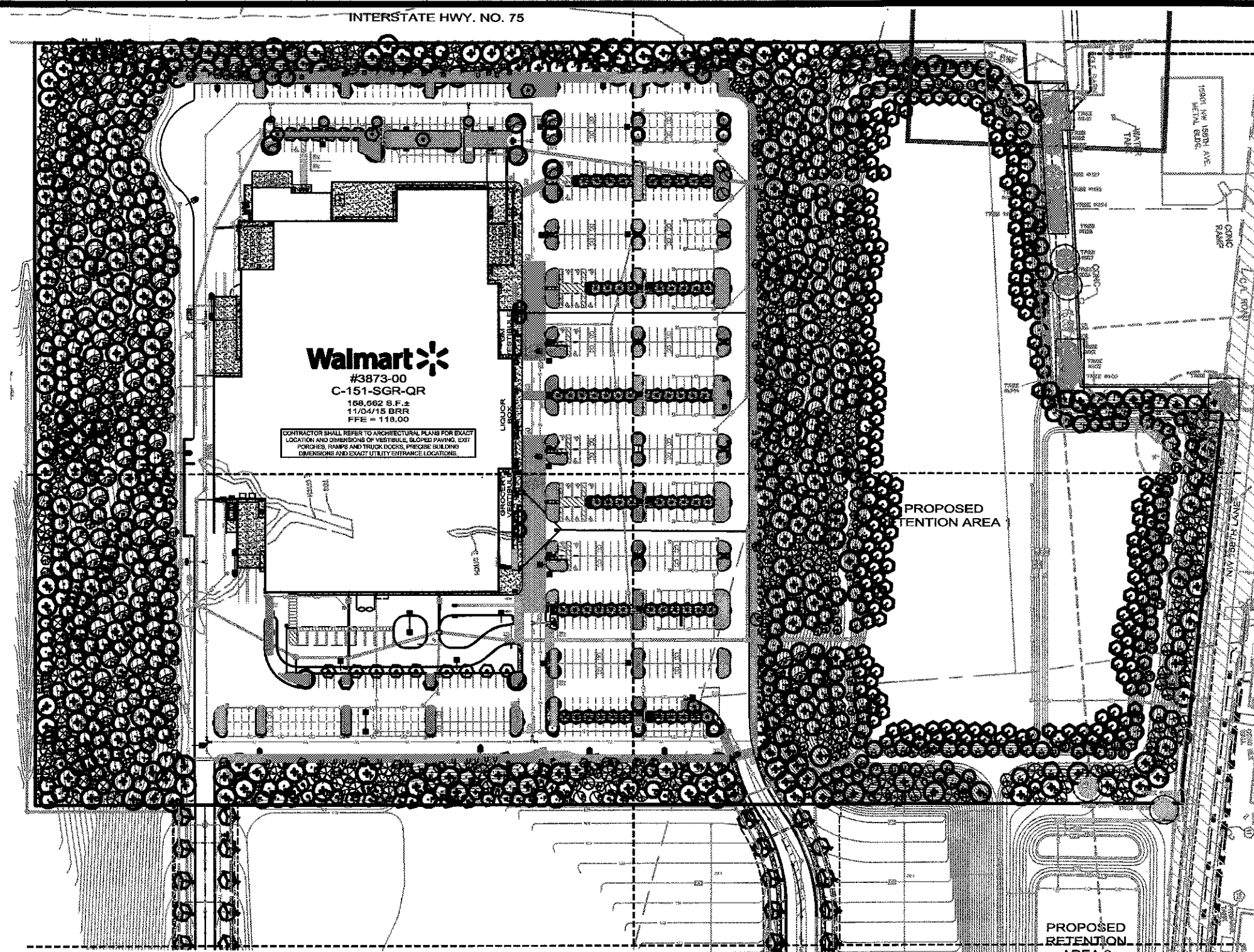
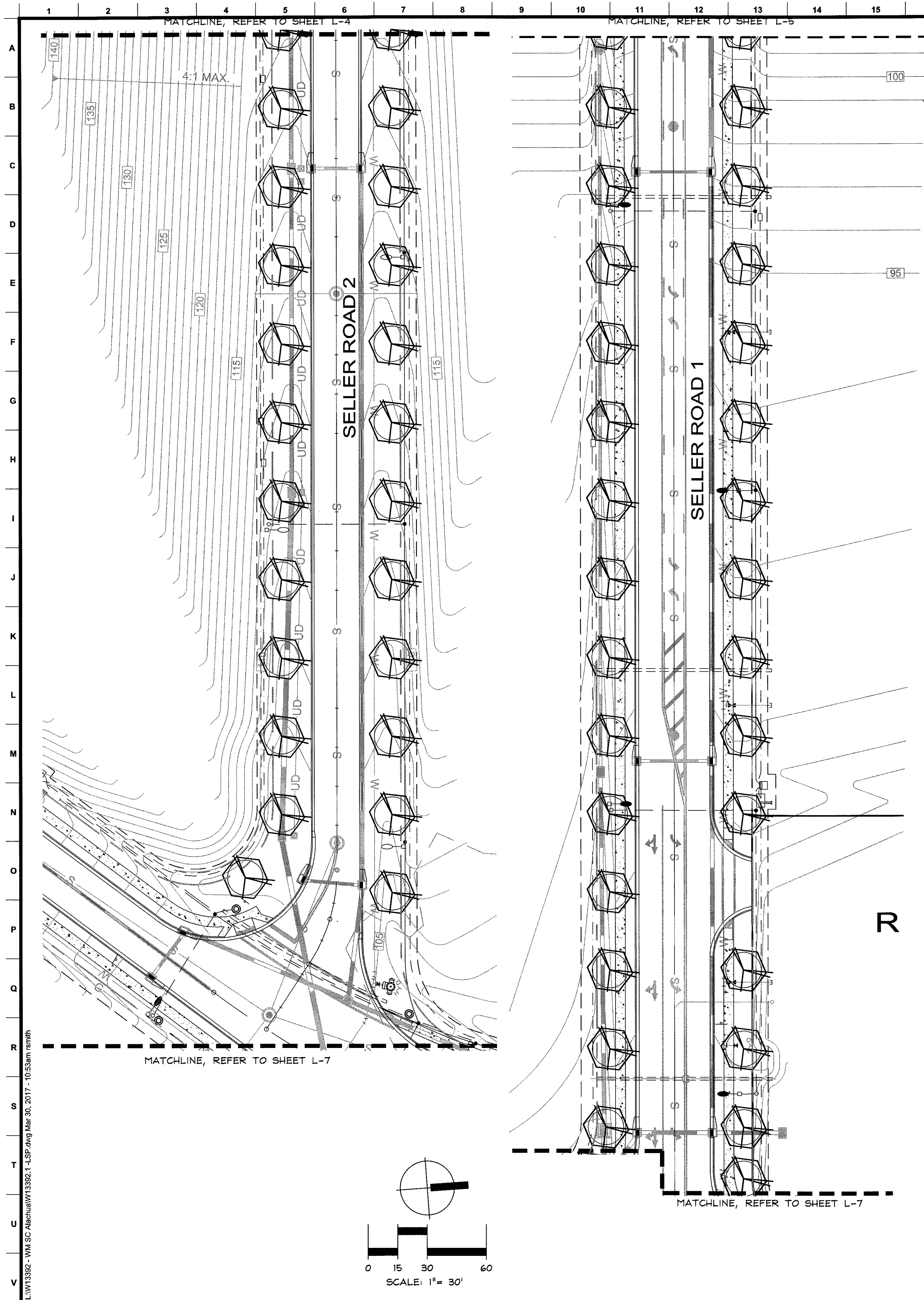
LANDSCAPE PLAN

STORE NO. 3873-00, ALACHUA (SEC 17.5 HWY 441), FLORIDA

Sheet No.  
**L-5**

L:\W13392 - VM SC Alachua\W13392 - LSP.dwg Mar 30, 2017 - 10:52am emth





LANDSCAPE DATA		
OPEN SPACE/LANDSCAPE AREA (WALMART)	768,973.19	S.F. 58.45%
PARKING LOT AREA	546,121.35	S.F. 41.54%
PROPOSED INTERIOR LANDSCAPE AREA	69,984.46	S.F. (12.8%)

PLANT LIST				
SYML	COMMON NAME	BOTANICAL NAME	DESCRIPTION	QTY
<b>TREES</b>				
AA	DOWNY SERVICEBERRY	AMELANCHIER ARBOREA	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	61 8
AR	FLORIDA FLAME MAPLE	ACER RUBRUM 'FLORIDA FLAME'	15 GAL., 2" CAL., 8' MIN. HT. (M) 30 GAL., 3" CAL., 10' MIN. HT.	188 69
BN	DURA-HEAT RIVER BIRCH	BETULA NIGRA 'BNMTF'	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 25 GAL., 3" CAL., 10' MIN. HT.	91 26
CC	FOREST PANSY REDBUD	CERCIS CANADENSIS 'FOREST PANSY'	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	238 68
LS	AMERICAN SWEETGUM	LIQUIDAMBER STYRACIFLUA	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 25 GAL., 3" CAL., 10' MIN. HT.	88 14
LI	GRAPE MYRTLE	LAGERSTROEMIA INDICA 'NATCHEZ'	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	168 30
LT	TULIP POPLAR	LIRIODENDRON TULIPIFERA	15 GAL., 1.5" CAL., 8' MIN. HT.	75
MG	SOUTHERN MAGNOLIA	MAGNOLIA GRANDIFLORA	15 GAL., 1.5" CAL., 8' MIN. HT.	5
UA	WINGED ELM	ULMUS ALATA	15 GAL., 2" CAL., 8' MIN. HT. (M) 30 GAL., 3" CAL., 10' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	46 46 8
149	SLASH PINE	PINUS ELLIOTTII	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	148 5
PP	LONGLEAF PINE	PINUS PALUSTRIS	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	52 3
QS	SHUMARD OAK	QUERCUS SHUMARDII	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	65 10
QV	LIVE OAK	QUERCUS VIRGINIANA	15 GAL., 1.5" CAL., 8' MIN. HT. (M) 15 GAL., 1.5" CAL., 8' MIN. HT.	177 8
TD	BALD CYPRESS	TAXODIUM DISTICHUM	(M) 25 GAL., 3" CAL., 10' MIN. HT.	227
(M)= MITIGATION TREE SIZE				
<b>HEDGES AND ACCENT PLANTS</b>				
VO	SWEET VIBURNUM	VIBURNUM ODORATISSIMUM	3 GAL., 24" MIN. HT., 36" O.C.	2483
<b>SHRUBS</b>				
AG	EDWARD GOUCHER ABELIA	ABELIA GRANDIFLORA 'EDWARD GOUCHER'	3 GAL, 18" HT X 9" SPR, 30" OC	55
RI	INDIAN HANORTHORN	RHAPHIOLEPIS INDICA	3 GAL, 18" H X 15" SPR, 30" OC	1710
LP	PLUM LOROPETALUM	LOROPETALUM CHINENSE 'PLUM DELIGHT'	3 GAL, 18" H X 15" SPR, 30" OC	42
<b>GROUNDCOVER</b>				
DV	AFRICAN IRIS	DIETES VEGETA	1 GAL., FULL, 24" O.C.	1172
ES	PURPLE LOVE GRASS	ERGROSTIS SPECTABILIS	1 GAL., FULL, 18" O.C.	1226
MC	MUHY GRASS	MULENBERGIA CAPILLARIS	3 GAL., FULL, 30" O.C.	978
DT	VARIEGATED FLAX LILY	DIANELLA TASMANICA	1 GAL., FULL, 18" O.C.	151
TA	ASIATIC JASMINE	TRACHELOSPERMUM ASIATICUM	1 GAL., FULL, 18" O.C.	145
ZP	COONTIE	ZAMIA PUMILA	3 GAL., 24" O.C.	79
SOD	ARGENTINE BAHIA SOD	PASPALUM NOTATUM 'ARGENTINE'	SOLID SOD, CONTRACTOR TO VERIFY QTY.	

NOTE:

PLANT DESCRIPTIONS ARE FOR MINIMUM ACCEPTABLE SPECIFICATIONS. ALL CRITERIA LISTED FOR CONTAINER SIZE, CALIPER, HEIGHT, SPREAD, ETC. MUST BE MET FOR PLANT MATERIAL ACCEPTANCE. FOR EXAMPLE, IF A THREE GALLON SHRUB DOES NOT MEET THE HEIGHT OR SPREAD SPECIFICATION, IT WILL NOT BE ACCEPTED.

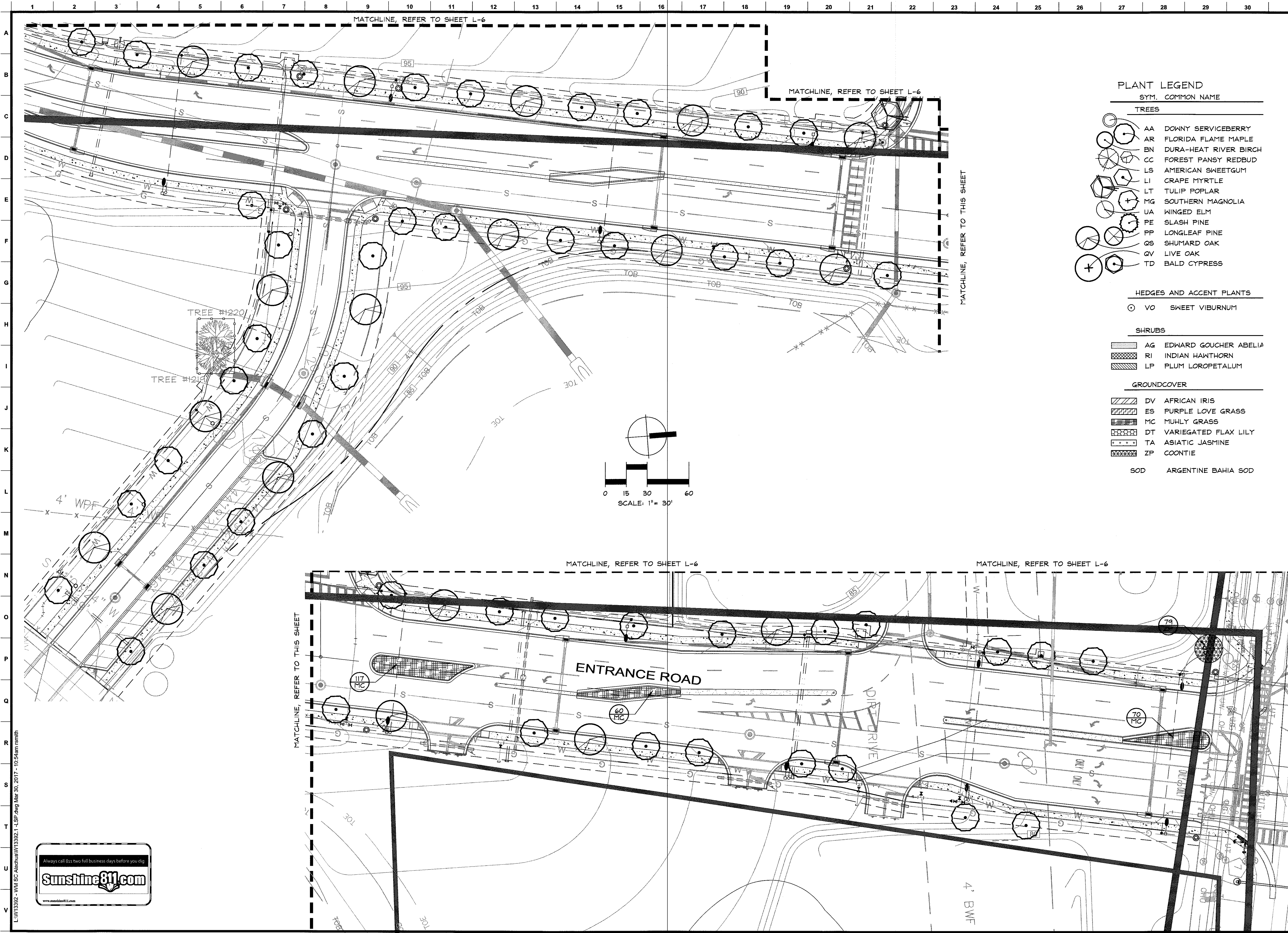
IF SPECIFIED PLANTS ARE UNAVAILABLE AT TIME OF CONSTRUCTION, CONTRACTOR MAY REPLACE SPECIFIED PLANTS WITH PLANTS APPROVED BY LANDSCAPE ARCHITECT AND CITY STAFF.

ALL OPEN SPACE AREAS WITHIN THE PROPERTY SHALL BE SODDED UNLESS PAVED, SEEDED AND MULCHED OR PLANTED WITH SHRUBS AND GROUND COVER.

ALL LANDSCAPED AREAS WILL BE 100% IRRIGATED WITH A CENTRAL AUTOMATIC IRRIGATION SYSTEM INCLUDING A RAIN SENSOR.

[illegible]





PLANT LEGEND

SYM. COMMON NAME

TREES

- AA DOWNY SERVICEBERRY
- AR FLORIDA FLAME MAPLE
- BN DURA-HEAT RIVER BIRCH
- CC FOREST PANSY REDBUD
- LS AMERICAN SWEETGUM
- LI GRAPE MYRTLE
- LT TULIP POPLAR
- MG SOUTHERN MAGNOLIA
- UA WINGED ELM
- PE SLASH PINE
- PP LONGLEAF PINE
- QS SHUMARD OAK
- QV LIVE OAK
- TD BALD CYPRESS

HEDGES AND ACCENT PLANTS

- VO SWEET VIBURNUM

SHRUBS

- AG EDWARD GOUCHER ABELIA
- RI INDIAN HAWTHORN
- LP PLUM LOROPETALUM

GROUND COVER

- DV AFRICAN IRIS
- ES PURPLE LOVE GRASS
- MC MUHLY GRASS
- DT VARIEGATED FLAX LILY
- TA ASIATIC JASMINE
- ZP COONTIE

- SOD ARGENTINE BAHIA SOD

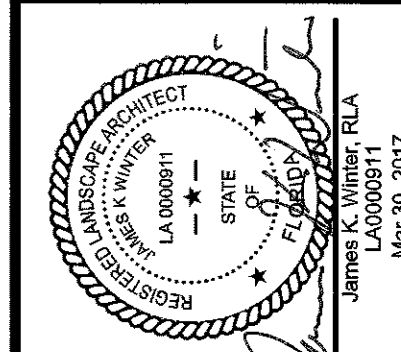
cph

www.cphcorp.com

A Full Service  
A & E Firm

Architects  
Engineers  
Environmental  
Landscape Architects  
M/E/P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland



Designed by:	Drawn by:	Checked by:	Approved by:	Scale:	Date:	Job No.:	© 2017
JKW	ARS	MDS	JKW	1"=30'	5/16	W13392.1	
No.	No.	No.	No.	No.	No.	No.	No.
1	1	1	1	1	1	1	1

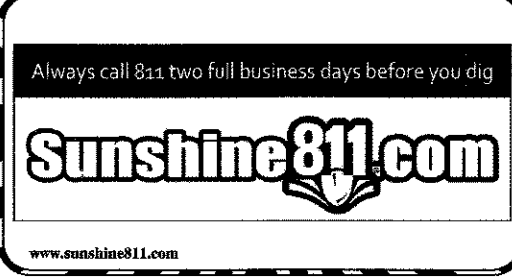
Plans Prepared By:  
CPI, Inc.  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999  
Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600926  
Landscape Lic. No. LC0000298

LANDSCAPE PLAN

**Walmart**

STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

Sheet No.  
**L-7**





LANDSCAPE NOTES:

1. The Landscape Contractor shall be responsible for all materials and all work as called for on the Landscape Plans and in the Landscape Specifications. In the event of variation between quantities shown on plan, list and the plans, the plans shall control. The Landscape Contractor shall verify all quantities and report any discrepancies at the time of bidding.
2. The Landscape Contractor shall review architectural/engineering plans and become thoroughly familiar with surface and subsurface utilities.
3. Every possible safeguard shall be taken to protect building surfaces, equipment and furnishings. The Landscape Contractor shall be responsible for any damage or injury to person or property which may occur as a result of negligence in the execution of the work.
4. The work shall be coordinated with other trades to prevent conflicts. Coordinate the planting with the irrigation work to assure availability and proper location of irrigation lines and plants.
5. Contractor shall ensure that there are no visual obstructions to vehicle lines of sight and traffic controls. Contractor shall field adjust tree and/or large shrub locations to avoid any such obstructions.
6. Trees shall be maintained by the owner to avoid future such obstructions by pruning trees and/or shrubs as necessary, utilizing horticulturally sound techniques.
7. All planting shall be performed by personnel familiar with planting procedure and under the supervision of a qualified planting foreman.
8. All plant material shall be graded Florida No. 1, or better as outlined under Grades and Standards for Nursery Stock, Part 1 and II, published by the Florida Department of Agriculture and Consumer Services.
9. The Landscape Architect or Owner shall have the right, at any stage of the operations, to reject any and all work and materials which, in his opinion, do not meet with the requirements of these specifications.
10. Except as otherwise specified, the Landscape Contractor's work shall conform to accepted horticultural practices as used in the trade.
11. The minimum acceptable size of all plants, measured after pruning, with branches in normal positions, shall conform to the measurements specified on the plant list or as indicated on the landscape drawing. Height and spread dimensions refer to main body of the plant and not extreme branch tip to tip. The caliper of tree trunks to be taken one foot above the ground level.
12. Plants shall be protected upon arrival at the site, by being thoroughly watered and properly maintained until planted.
13. All tree pits shall be excavated to size and depth in accordance with the Florida Grades & Standards for Nursery Stock, unless shown otherwise on the drawings, and backfilled with the specified planting soil. The Landscape Contractor shall fill all tree pits with water before planting to assure proper drainage percolation is available.
14. The Landscape Contractor shall be responsible for proper watering of all plants. All plants shall be thoroughly watered at time of planting and kept adequately watered until time of acceptance. It shall be the Landscape Contractor's responsibility to ensure that plants are not over watered.
15. It shall be the Landscape Contractor's responsibility to prevent plants from falling or being blown over, to re-erect and replace all plants which lean or fall and to replace all plants which are damaged due to lack of proper watering or staking. The Landscape Contractor shall be legally liable for any damage caused by instability of any plant.
16. All trees and all palms shall be guyed or staked or braced. The Landscape Contractor shall determine which small or multi-trunk trees need to be guyed and staked to maintain plants. Staking of trees and palms, if required, shall be done per staking and guying detail prepared by the Landscape Architect. It shall be the responsibility of the Landscape Contractor to remove guys and stakes from the trees and job site after a period of 1 year.
17. Plants shown over the guarantee period, shall not be cause for additional expense to the Owner, but shall be the responsibility of the Landscape Contractor. Damaged plants shall be replaced by the Landscape Contractor at no additional cost to the Owner.
18. Sod shall be certified to be free of the imported fire ant. Sod shall have a clean growth of acceptable grass, reasonably free of weeds with not less than 1 1/2" of soil firmly adhering to roots. It shall be the responsibility of the Landscape Contractor to measure and determine the exact amount required. This amount shall be verified with the Owner or Landscape Architect before installation.
19. The Landscape Contractor shall insure adequate vertical drainage in all plant beds, planters, and sod areas. Vertical drilling through any compacted fill to native soil shall be accomplished to insure drainage. If well drained fill is necessary to assure positive drainage, this issue shall be brought up by the Landscape Contractor at time of bidding.
20. The Landscape Contractor shall insure that his work does not interrupt established or projected drainage patterns.
21. The Landscape Contractor shall prune, shape and remove dead foliage/limbs from existing plant material to remain. Confirm with the Landscape Architect or Owner the extent of work required at time of bidding.
22. Mulch - All plant beds shall be top dressed with 4" hardwood mulch (or approved equal).
23. Transplanted Material - The Landscape Contractor shall be responsible for determining and evaluating which plant materials are suitable for transplanting and shall verify this with the Landscape Architect or Owner. The Landscape Contractor shall take all reasonable, horticulturally acceptable measures to ensure the successful transplanting of determined plant materials. The Landscape Contractor shall be responsible for replacing any relocated plant materials which die if such measures are not taken, as determined by the Landscape Architect or Owner. Replacement plants shall be of identical species and size if required.
24. MAINTENANCE PRIOR TO FINAL INSPECTION AND ACCEPTANCE:
- Maintenance shall commence after each plant is planted and the maintenance period shall continue until the job is accepted by the Landscape Architect or Owner. Extreme care shall be taken to instruct the Owner or his representatives in general maintenance procedures.
- Plant maintenance shall include watering, pruning, weeding, cultivating, mulching, lightening, and repairing of guys, replacement of sick or dead plants, resetting plants to proper grades or upright positions and restoration of the planting saucer and all other care needed for proper growth of the plants.
- During the maintenance period and up to the date of final acceptance, the Landscape Contractor shall do all seasonal spraying and/or dusting of trees and shrubs. Upon completion of all planting, an inspection for acceptance of work will be held. The Landscape Contractor shall notify the Landscape Architect or Owner for scheduling of the inspection 10 days prior to the anticipated date.
- At the time of the inspection, if all of the materials are acceptable, a written notice will be given by the Landscape Architect or Owner to the Landscape Contractor stating the date when the Maintenance Period ends.
- GUARANTEE AND REPLACEMENT:
- All plant materials shall be guaranteed for one (1) year from the time of final inspection and interim acceptance shall be alive and in satisfactory growth for each specific kind of plant at the end of the guarantee period.
- At the end of the guarantee period, any plant required under this contract that is dead or not in satisfactory growth, as determined by the Owner or the Landscape Architect, shall be removed and replaced. Replacement plants shall have an extended guarantee, as noted above, from time of replacement.
- All replacements shall be planted of the same kind and size as specified on the plant list. Top shall be the responsibility of the Landscape Contractor.

25. TOPSOIL

Topsoil shall be ASTM D 5566, natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity that produces heavy growth. Topsoil shall have a pH range of 5.5 to 7.4, free from subsoil, objectionable weeds, litter, sods, stiff clay, stones larger than 1-inch in diameter, stumps, roots, trash, toxic substances, or any other material which may be harmful to plant growth or hinder planting operations. Top soil shall contain a minimum of three percent organic material.

26. UNSUITABLE SUBSOILS

Locations containing unsuitable subsoil shall be treated by one or more of the following:

A. Where unsuitability is deemed by Owner or Owner's Representative to be due to excessive compaction caused by heavy equipment and where natural subsoil is other than AASHTO classification of A6 or A7, loosen such areas with spikes, disks, or other means to loosen soil to condition acceptable to Owner. Loosen soil to minimum depth of 12 inches with additional loosening as required to obtain adequate drainage. Contractor may introduce peat moss, sand, or organic matter into the subsoil to obtain adequate moisture shall be considered an incidental, without additional cost to Owner.

B. Where unsuitability is deemed by Owner or Owner's Representative to be due to presence of boards, mortar, concrete, graded aggregate or other construction materials in sub grade and where natural subsoil is other than AASHTO classification of A6 or A7, remove debris and other construction material. Such remedial measures shall be considered as incidental, without additional cost to Owner.

C. Where unsuitability is deemed by Owner to be because natural subsoil falls into AASHTO classification of A6 or A7 and contains moisture in excess of 50 percent, then installation of sub drainage system or other means described elsewhere in Specifications shall be used. Where such conditions have not been known or revealed prior to planting time and they have not been recognized in preparation of The Drawings and Specifications, then Owner shall issue pricing order to install proper remedial measures.

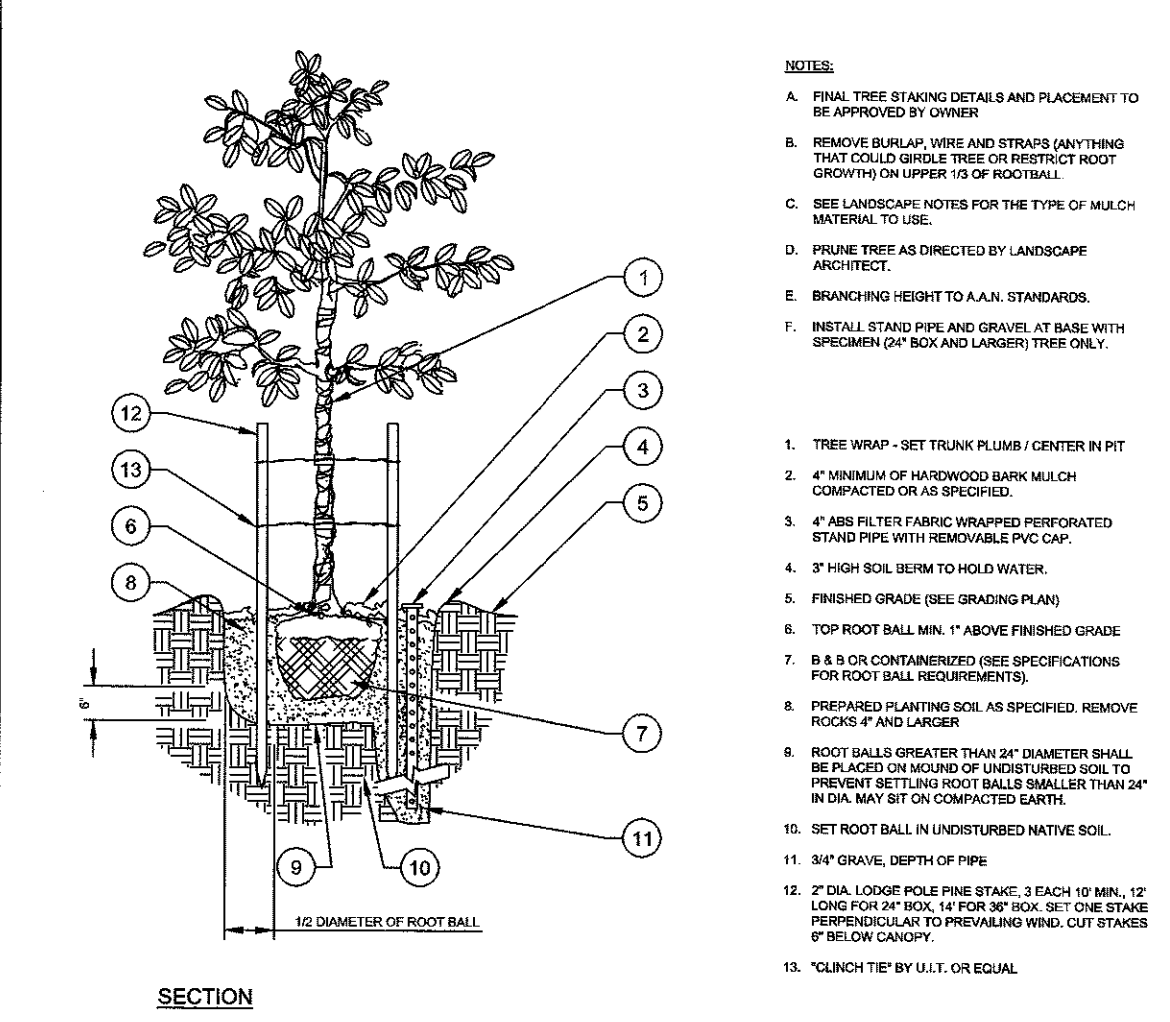
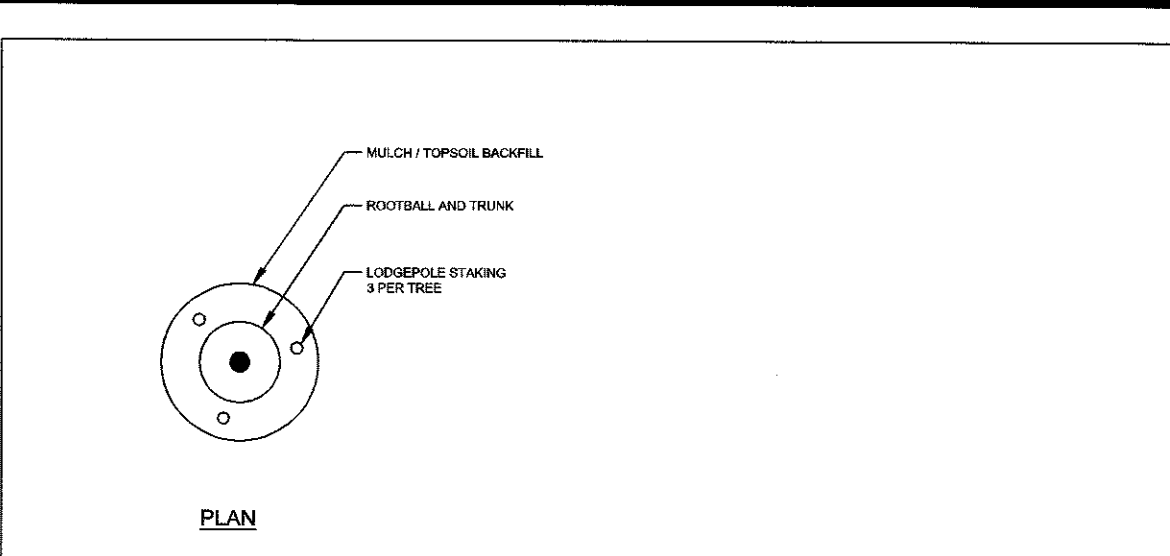
D. Planting beds where existing subsoil is determined by Owner to be unsuitable for plant growth in accordance paragraph Unsuitable Subsoil herein shall be excavated to a depth of 12 inches or as needed to provide adequate drainage. Replace excavated soil with planting soil.

ALERT TO CONTRACTOR:

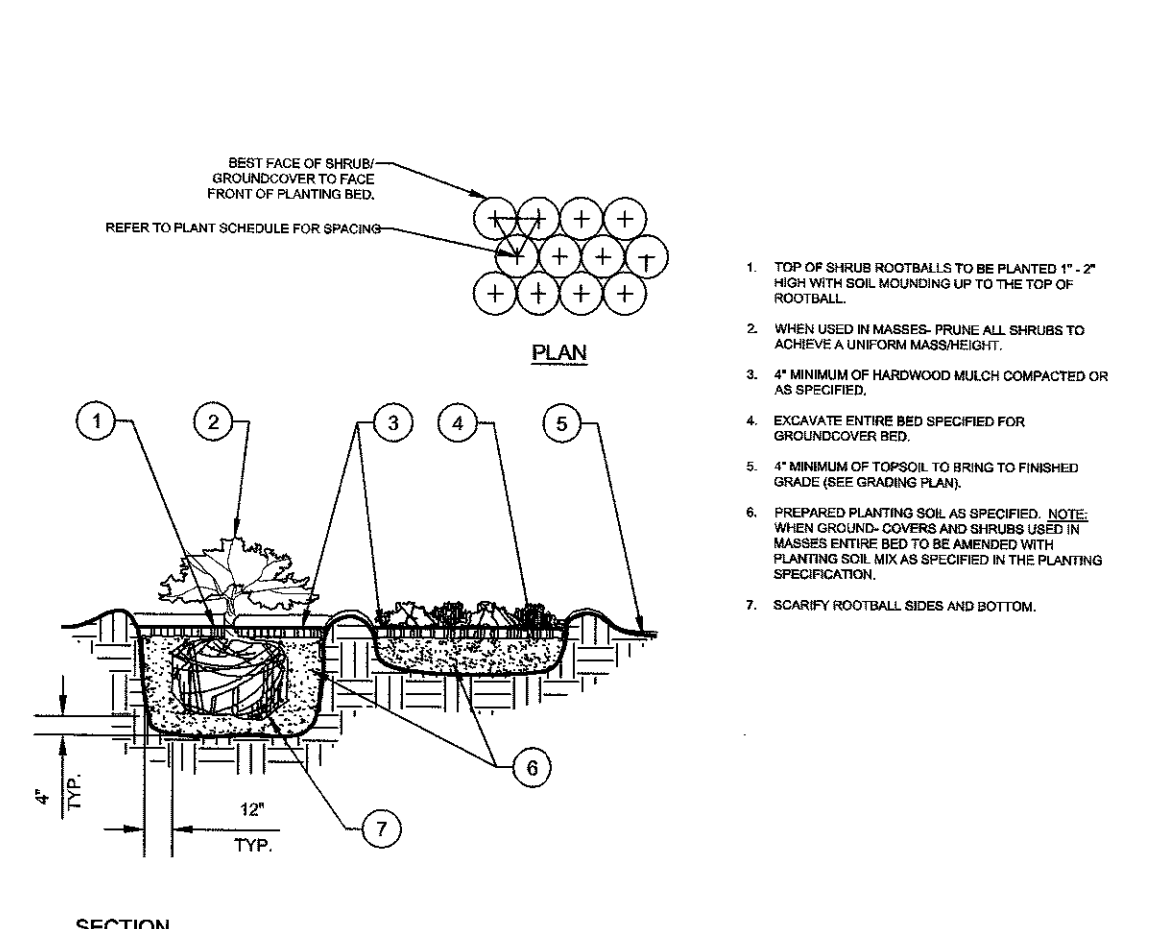
ALL WM GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. WM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.

NOTE TO CONTRACTOR:

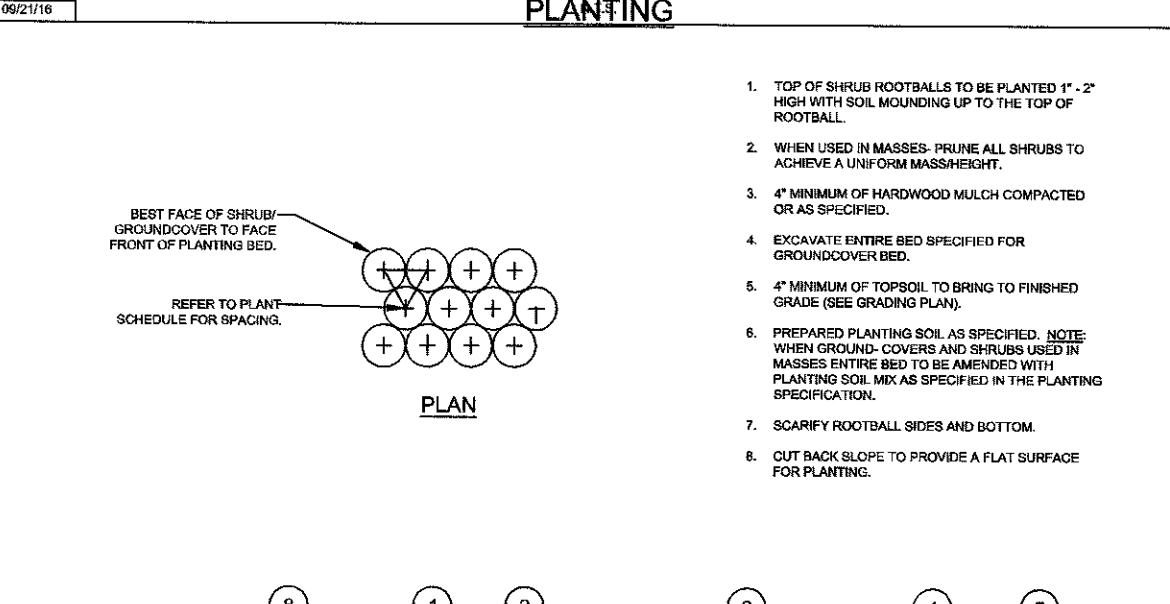
16" WIDE MULCH STRIP IS REQUIRED BEHIND ALL CONCRETE CURBS/BUFFERS. WHERE TURF GRASS WILL BE ESTABLISHED ADJACENT TO CONCRETE CURBS/BUFFERS, EITHER A 16" OR 24" (DEPENDENT ON AVAILABILITY) WIDE SOD STRIP IS REQUIRED.



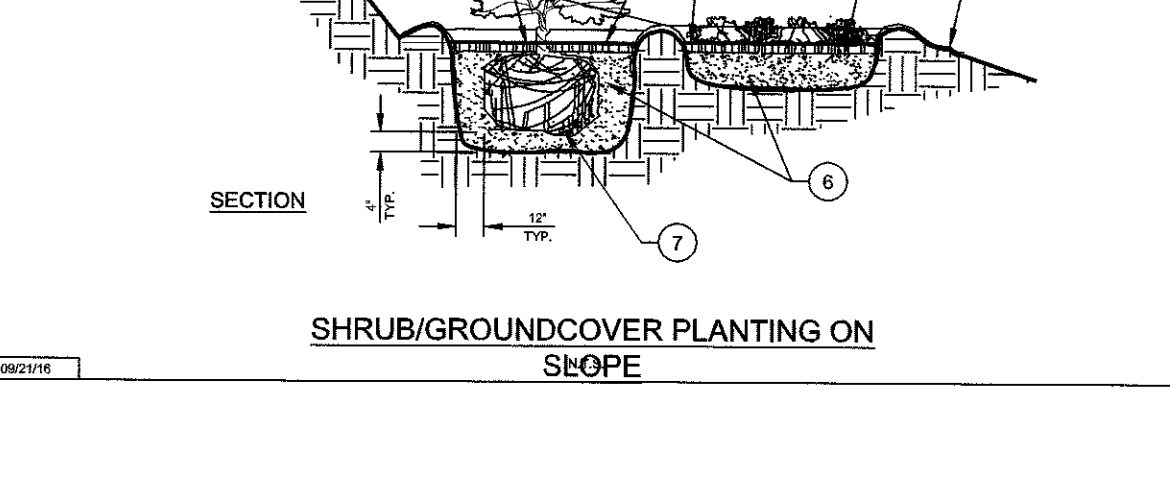
CANOPY TREE PLANTING N.T.S.



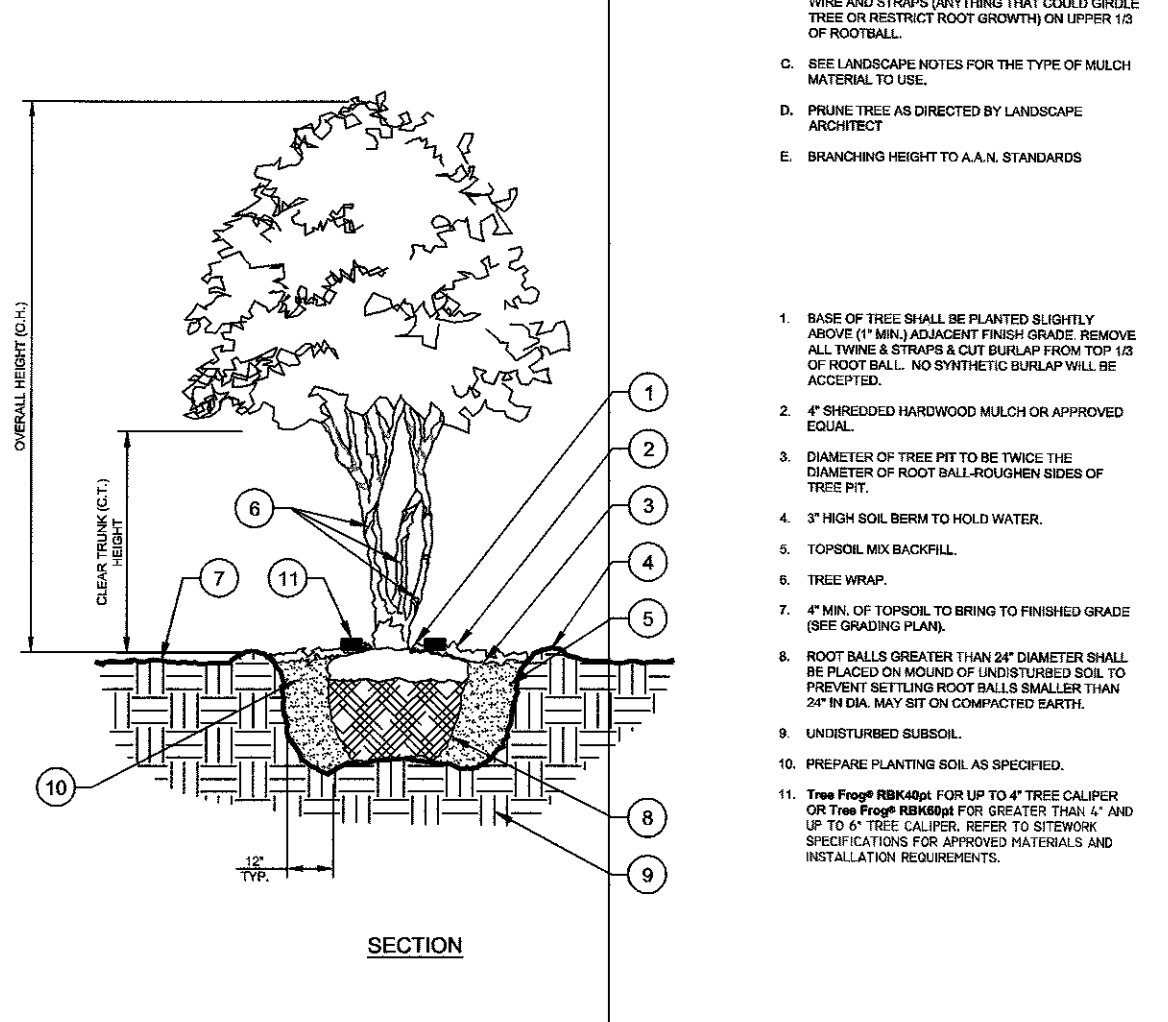
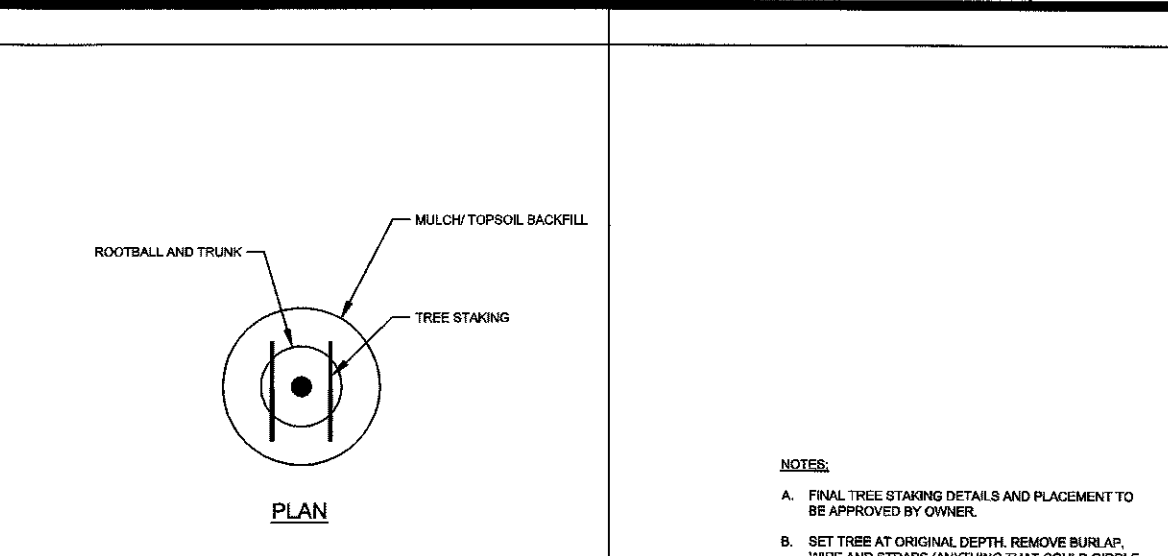
SHRUB/GROUNDCOVER PLANTING N.T.S.



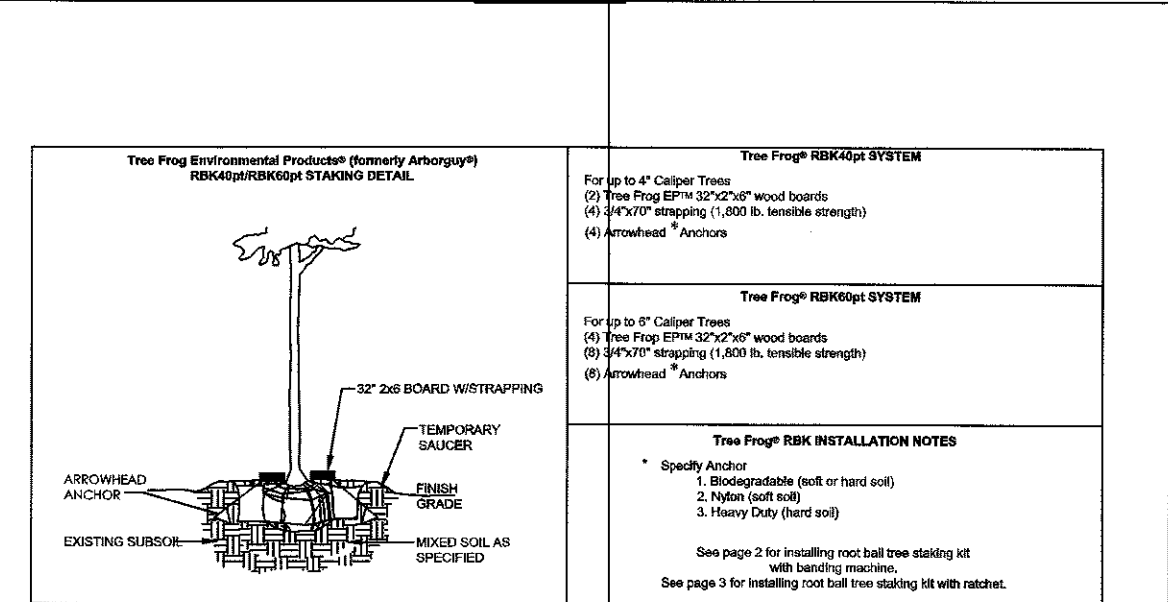
SHRUB/GROUNDCOVER PLANTING ON SLOPE N.T.S.



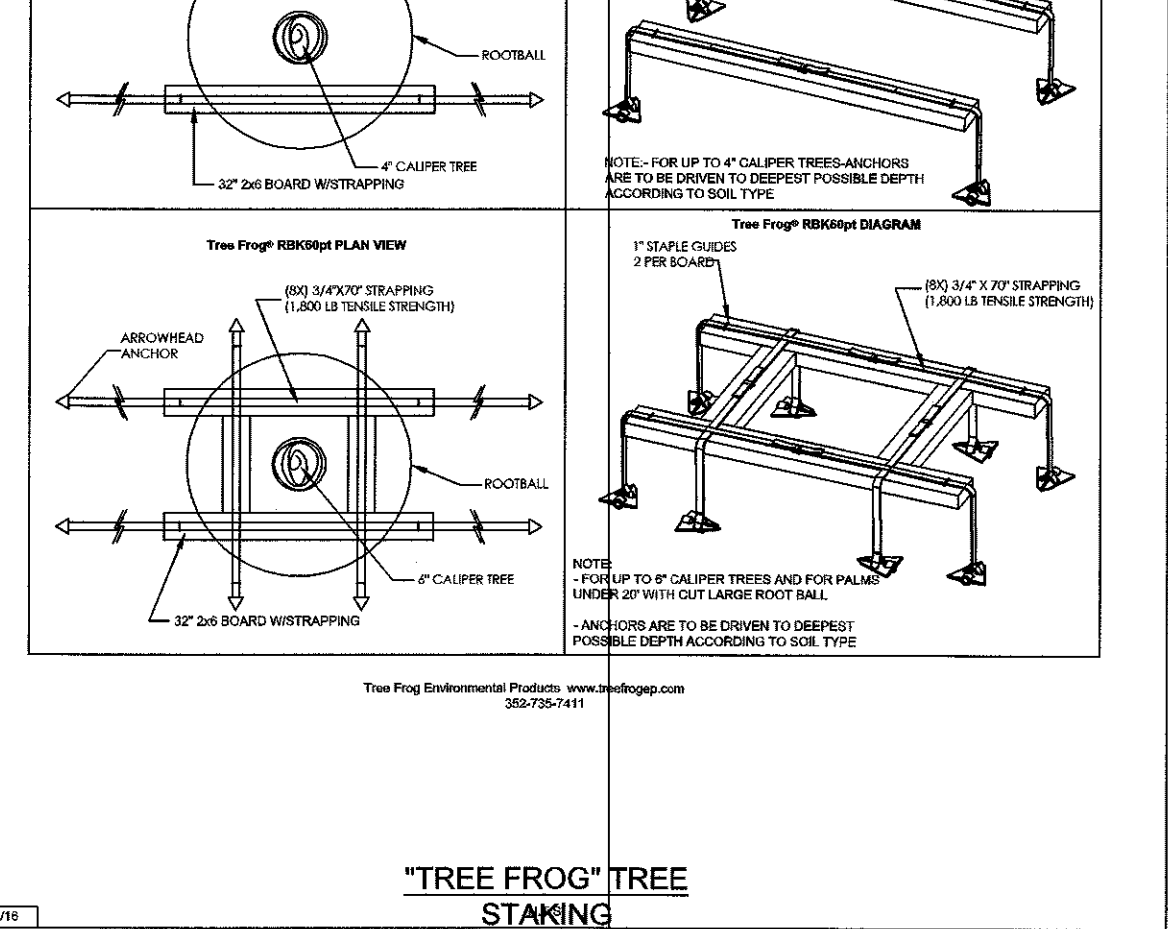
SHRUB/GROUNDCOVER PLANTING ON SLOPE N.T.S.



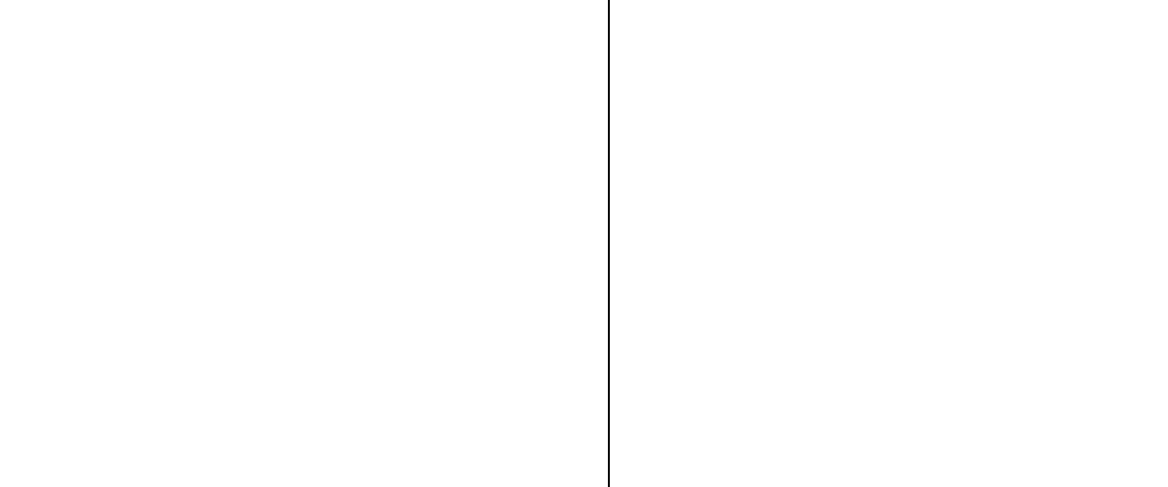
MULTI-TRUNK TREE PLANTING N.T.S.



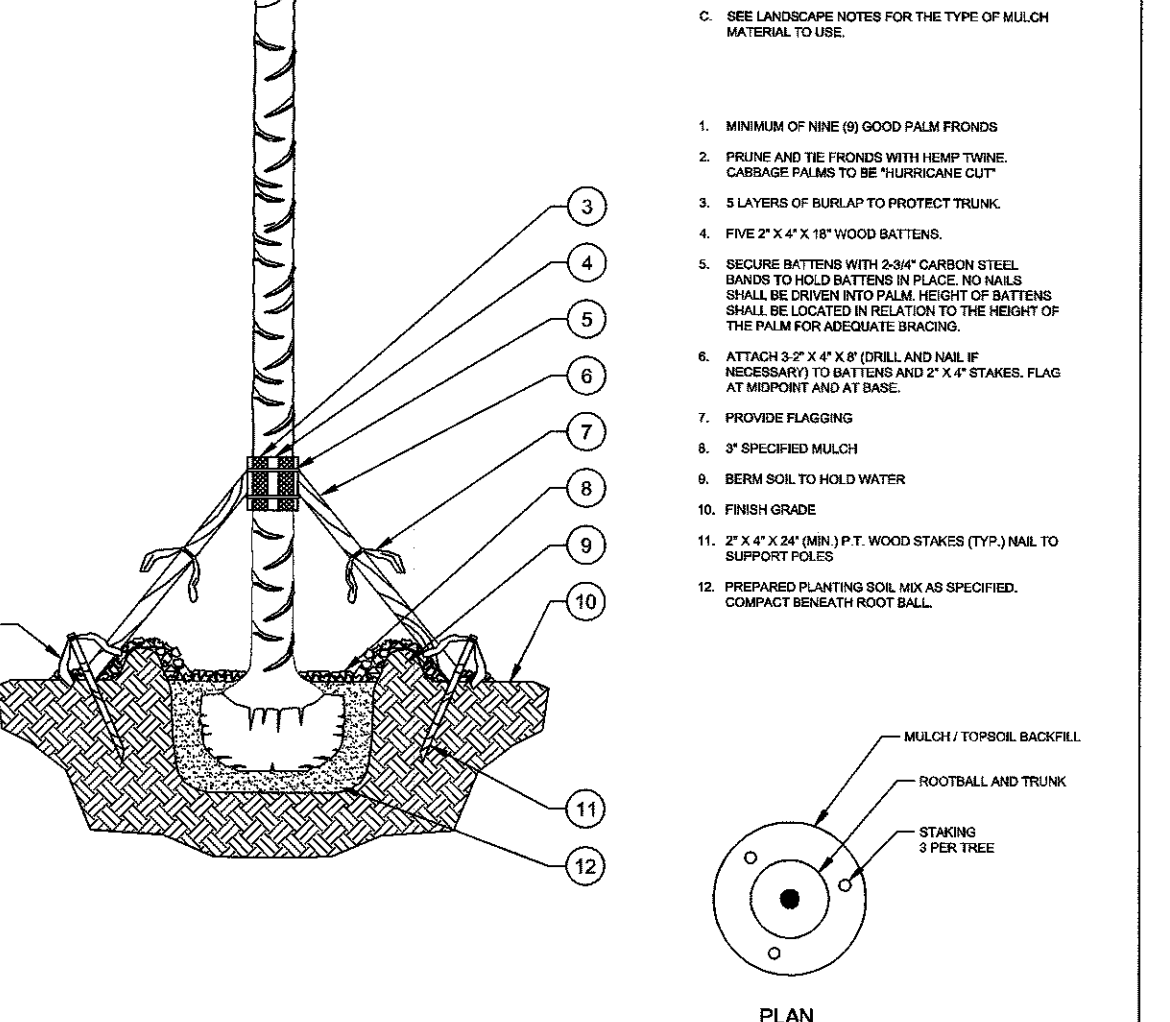
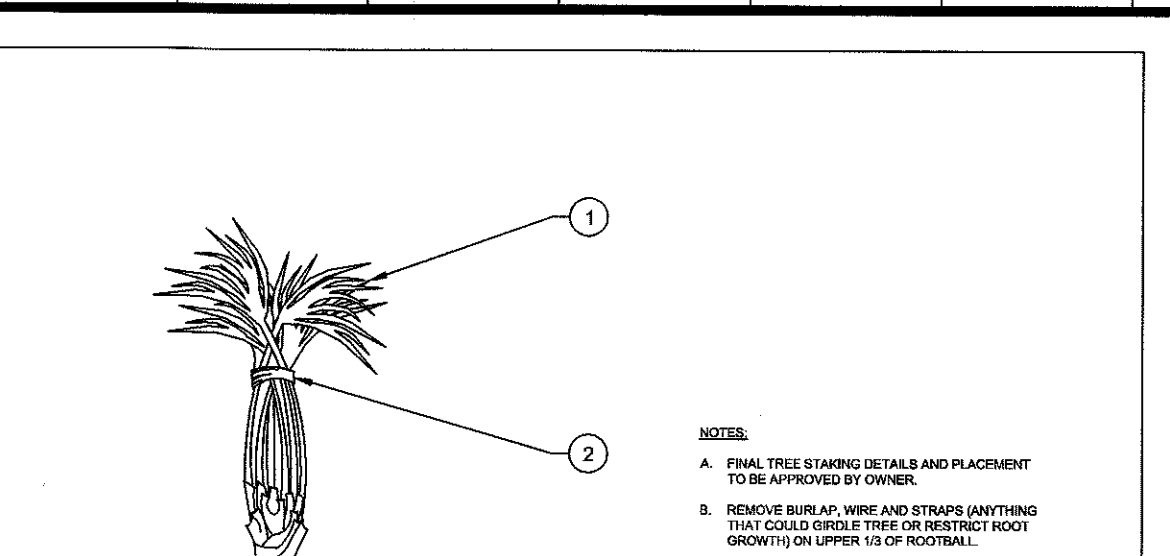
"TREE FROG" TREE STAKING N.T.S.



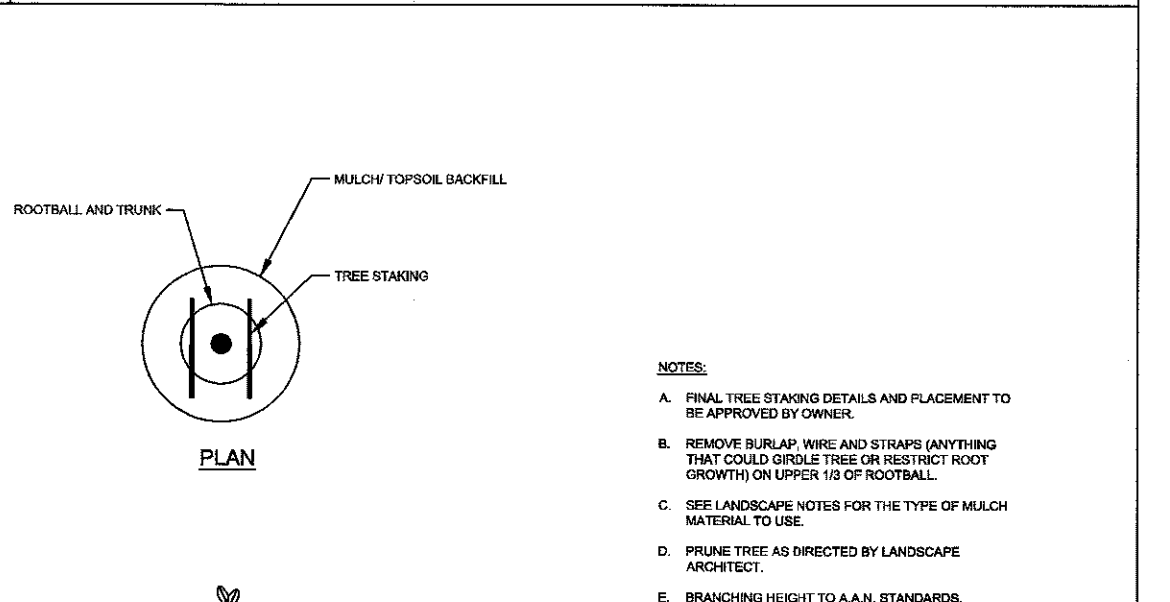
"TREE FROG" TREE STAKING N.T.S.



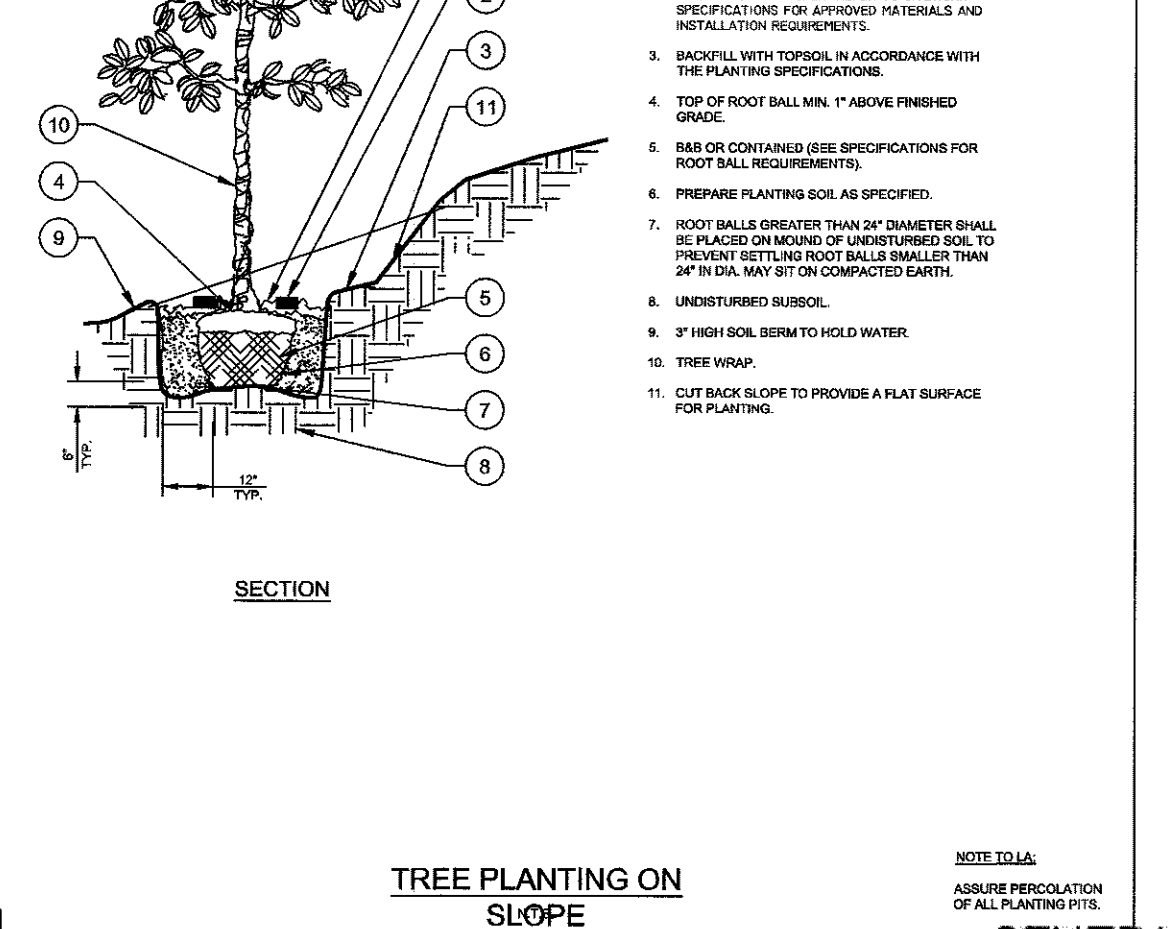
"TREE FROG" TREE STAKING N.T.S.



PALM TREE PLANTING N.T.S.



"TREE FROG" TREE STAKING N.T.S.



"TREE FROG" TREE STAKING N.T.S.



"TREE FROG" TREE STAKING N.T.S.

LANDSCAPE NOTES:

1. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL. SEE 2900 SPECIFICATION.
2. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
3. ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BUR LAPPED AS INDICATED IN THE PLANT LIST.
4. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED.
5. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
6. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
7. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREAS TO ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD (3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPEARANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE PERIOD OF TIME SHOWN IN THE 02900 SPEC.
12. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE MEETING ALL PLANT LIST SPECIFICATIONS.
13. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD DEFINED IN THE 02900 SPEC. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
14. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
15. STANDARDS SET FORTH IN 'AMERICAN STANDARD FOR NURSERY STOCK' REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
16. WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A HARDWOOD MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER TO A MINIMUM DEPTH OF FOUR INCHES.
17. REFER TO WALMART SPECIFICATIONS FOR INFORMATION NEEDED FOR IMPLEMENTATION OF PLANTING PLANS.
18. WEED MAT IS REQUIRED IN LANDSCAPED ISLANDS AS SPECIFIED.
19. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.
20. THIS PLAN IS TO BE IMPLEMENTED COOPERATIVELY WITH SWPPP PLAN, AS NEEDED, TO MAXIMIZE THE EFFECTIVENESS OF THE SWPPP PLAN FOR THIS SITE.
21. THE CONTRACTOR IS ENCOURAGED TO COMPLETE TEMPORARY OR PERMANENT SEEDING OR SODDING IN STAGES FOR SOIL STABILIZATION AS AREAS ARE COMPLETED AFTER GRADING.
22. THIS PLAN DOES NOT PRESENT ANY TEMPORARY STABILIZATION REQUIRED AS PART OF SWPPP PLAN.

GENERAL PLANTING NOTES

1. ALL ASPHALT, LIMEROCK, AND CONSTRUCTION DEBRIS TO BE REMOVED FROM PLANTING BEDS AND AREAS TO BE SODDED PRIOR TO LANDSCAPE INSTALLATION. PLANTING DEPTH OF SOIL IN SUCH AREAS SHOULD BE AT LEAST 3". IF FILL MUST BE ADDED, IT MUST BE FLORIDA CLAY DEEP FILL (FREE OF WEED SEEDS) WITH pH 5.5-6.5.
2. CANOPY TREES SHALL BE A MINIMUM OF EIGHT (8) FEET IN HEIGHT AND ORNAMENTAL OR UNDERSTORY TREES SHALL HAVE A MINIMUM CALIPER OF ONE AND A HALF (1.5) INCHES, UNLESS OTHERWISE SPECIFIED BY THE LANDSCAPE ARCHITECT.
3. ALL TREES TO BE PLANTED 1"-2" ABOVE FINISHED GRADE.
4. ALL LANDSCAPED AREAS TO BE MULCHED WITH 3" THICKNESS OF MULCH. PINE BARK "MIN NUGGET" MULCH SHALL BE USED IN ALL AREAS, EXCEPT RETENTION AREAS. PINE STRAW MULCH SHALL BE USED IN RETENTION AREAS.
5. LEADER SHOOTS AND MAIN STRUCTURAL LIMBS OF TREES WILL NOT BE TOPPED OR PRUNED. TREES TO BE STAKED AS NEEDED, GUYLINES TO BE NON-SYNTHETIC BIODEGRADABLE MATERIAL.
6. ALL PLANT MATERIAL TO BE FLORIDA NO.1 OR BETTER, GRADED IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS PUBLISHED BY THE STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.
7. ALL DISTURBED AND UNPAVED AREAS TO BE GRASSSED WITH NOXIOUS WEED AND TROPICAL SODA APPLE FREE SOD PLANTS SEEDED AND MULCHED. SEE CIVIL SITE PLANS FOR ADDITIONAL RELATED INFORMATION.
8. SHRUBS AROUND ABOVE GROUND GAS TANK TO BE PLANTED IN FUTURE PHASE.
9. SELECTIVELY CLEAR AREAS AROUND EXISTING TREES TO REMAIN IN AREAS GENERALLY INDICATED ON PLANS. REFER TO SPECIFICATION SECTION 311300 SELECTIVE TREE AND VEGETATION REMOVAL AND TRIMMING.

**cph**

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M/E/P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices In:

- Florida
- Puerto Rico
- Connecticut
- Maryland

DESIGNED BY: [Signature]  
DRAWN BY: [Signature]  
CHECKED BY: [Signature]  
APPROVED BY: [Signature]  
SCALE: [Signature]  
DATE: [Signature]  
JOB NO.: [Signature]  
© 2017

Planned By:  
**CPH, Inc.**  
5200 Belfort Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999

Licenses:  
Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. A2400098  
Landscape Lic. No. LC0000298

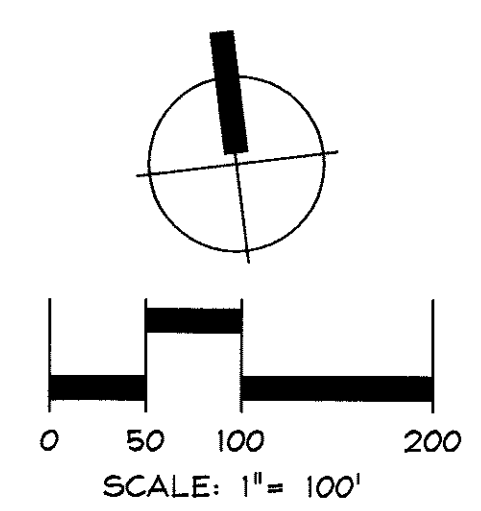
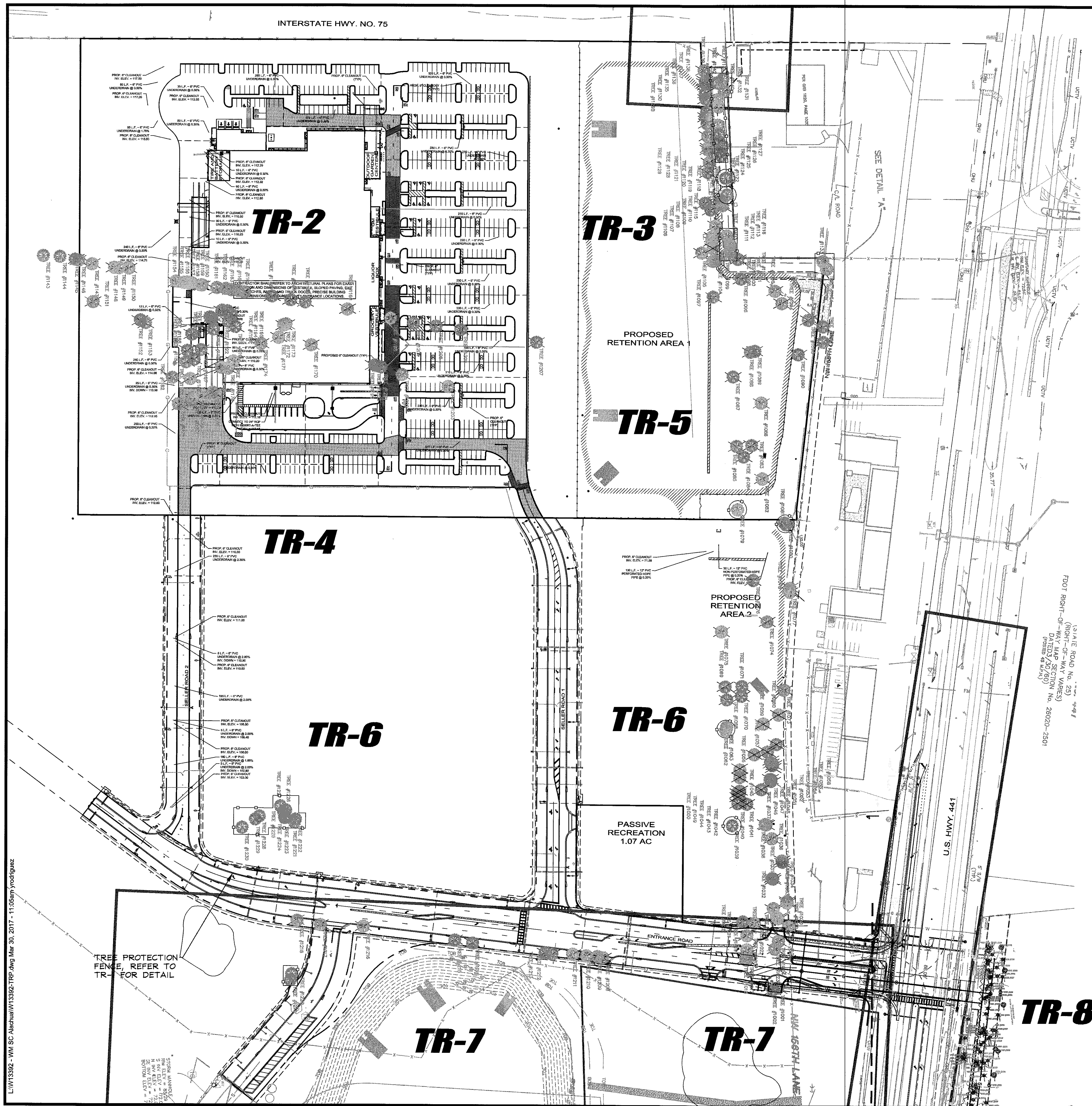
LANDSCAPE NOTES AND DETAILS

**Walmart**

Sheet No. **L-8**

STORE NO. 3873-00, ALACHUA (SEC 17.5 HWY 441), FLORIDA





- TREE LEGEND**
- EXISTING TREE TO BE REMOVED
  - EXISTING TREE TO REMAIN (REFER TO TREE PROTECTION DETAIL, SHEET TR-2)

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:

- Florida
- Puerto Rico
- Connecticut
- Maryland

Designed by:	Drawn by:	Checked by:	Approved by:	Scale:	Date:	Job No.:	No.	Date	Revision	By
JKW	ARS	MDS	JKW	1"=100'	5/16	W13392.1				

Plans Prepared By:

**CPI, Inc.**

5209 Balford Rd., Suite 220  
Jacksonville, FL 32256  
Ph: 904.332.0999

Licenses:

Eng. C.O.A. No. 3215  
Survey L.B. No. 7143  
Arch. Lic. No. AA2600026  
Landscape Lic. No. LC0000298

**OVERALL TREE RETENTION PLAN**

**Walmart**

STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

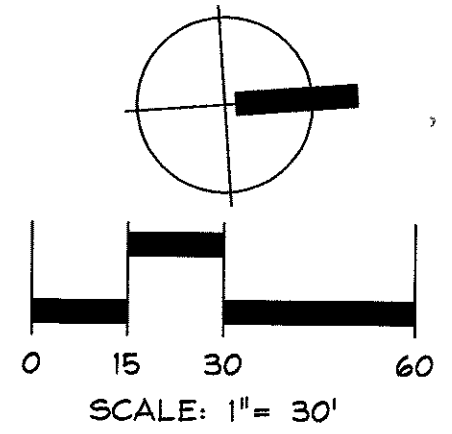
Sheet No.

**TR-1**





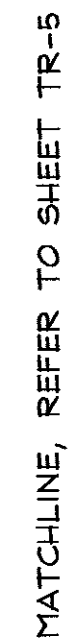




L:\W13392 - WM SC Alachua\W13392-TRP.dwg Mar 30, 2017 - 11:07am yrodriguez

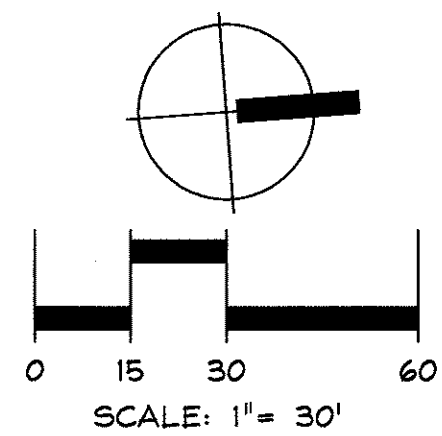
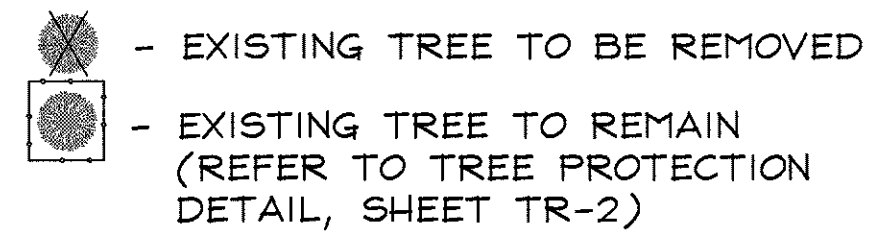


MATCHLINE, REFER TO SHEET TR-2



MATCHLINE, REFER TO SHEET TR-5

MATCHLINE, REFER TO SHEET TR-6



Sheet No.  
**TR-4**

L:\W13392 - WM SC Alachua\W13392-TRP.dwg Mar 30, 2017 - 11:08am yrodriguez



L:\W13392 - WM SC Alachua\W13392-TRP.dwg Mar 30, 2017 - 11:09am yrodriguez  
MATCHLINE, REFER TO SHEET TR-4











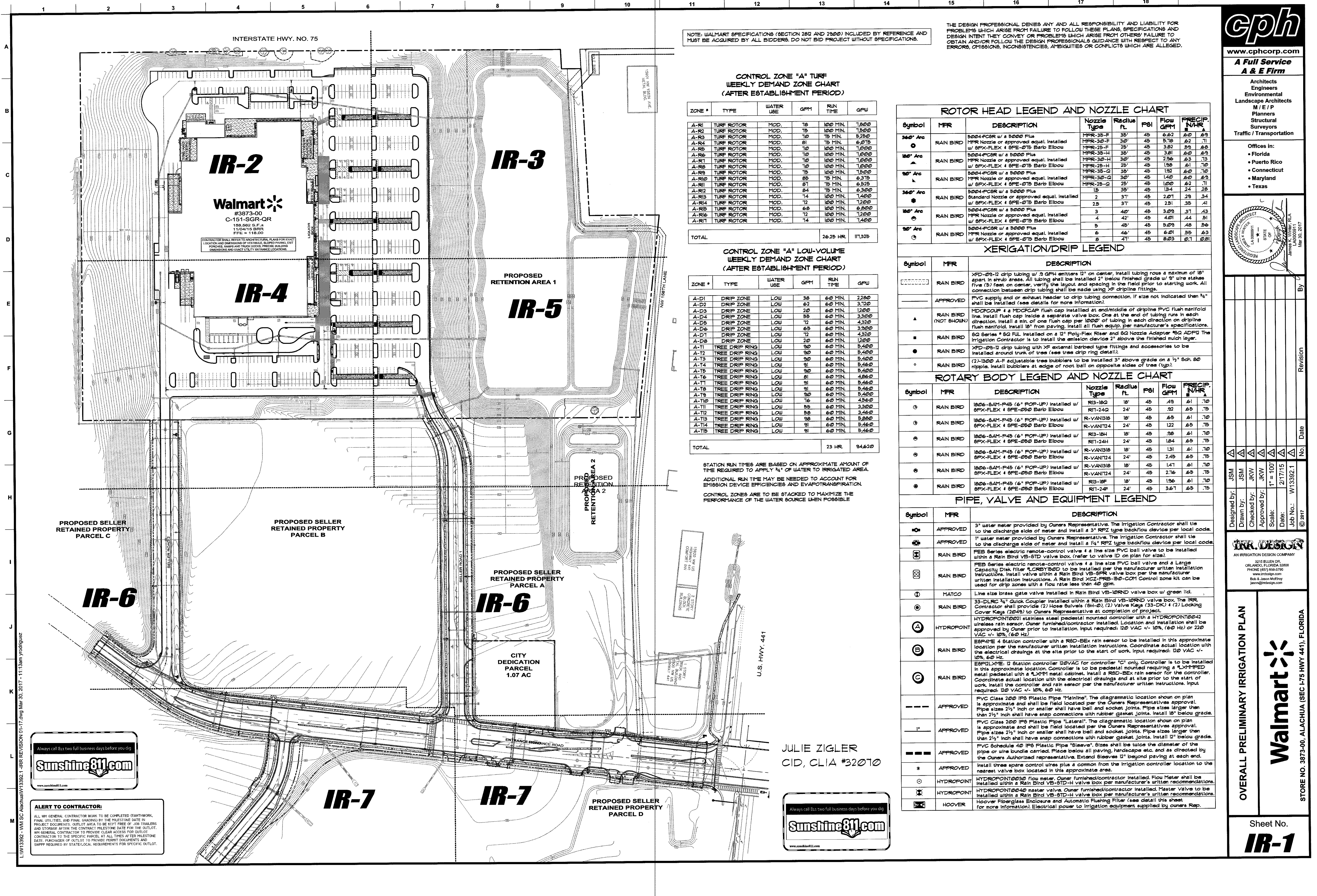




-  - EXISTING TREE TO BE REMOVED  
 - EXISTING TREE TO REMAIN  
 (REFER TO TREE PROTECTION  
 DETAIL, SHEET TR-2)

<b>www.cphcorp.com</b>									
<b>A Full Service A &amp; E Firm</b>									
Architects Engineers Environmental Landscape Architects M/E/P Planners Structural Surveyors Traffic / Transportation									
Offices in: • Florida • Puerto Rico • Connecticut • Maryland									
Revised Per City Comments Revision									
JKW BY									
02-10-17 Date									
W13392.1 Job No.									
5/16 Date									
1"=30' Scale									
JKW Approved by									
MDS Checked by									
ARS Drawn by									
JKW Designed by									
Plans Prepared By: <b>CPH, Inc.</b>									
5200 Belford Rd., Suite 220 Jacksonville, FL 32256 Ph: 904.332.0959									
Licenses: Eng. C.O.A. No. 3215 Survey L.B. No. 7143 Arch. Lic. No. AL260026 Landsep. Lic. No. LC0000298									





NOTE: WALMART SPECIFICATIONS (SECTION 2812 AND 2820) INCLUDED BY REFERENCE AND MUST BE ACQUIRED BY ALL BIDDERS. DO NOT BID PROJECT WITHOUT SPECIFICATIONS.

THE DESIGN PROFESSIONAL DENIES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND DESIGN INTENT THEY CONVEY OR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTROL ZONE "A" TURF WEEKLY DEMAND ZONE CHART (AFTER ESTABLISHMENT PERIOD)

ZONE #	TYPE	WATER USE	GPM	RUN TIME	GPU
A-R1	TURF ROTOR	MOD.	18	120 MIN.	7,200
A-R2	TURF ROTOR	MOD.	15	120 MIN.	3,600
A-R3	TURF ROTOR	MOD.	10	120 MIN.	2,400
A-R4	TURF ROTOR	MOD.	8	120 MIN.	1,600
A-R5	TURF ROTOR	MOD.	10	120 MIN.	2,400
A-R6	TURF ROTOR	MOD.	10	120 MIN.	2,400
A-R7	TURF ROTOR	MOD.	10	120 MIN.	2,400
A-R8	TURF ROTOR	MOD.	10	120 MIN.	2,400
A-R9	TURF ROTOR	MOD.	10	120 MIN.	2,400
A-R10	TURF ROTOR	MOD.	8	120 MIN.	1,600
A-R11	TURF ROTOR	MOD.	8	120 MIN.	1,600
A-R12	TURF ROTOR	MOD.	8	120 MIN.	1,600
A-R13	TURF ROTOR	MOD.	14	120 MIN.	4,200
A-R14	TURF ROTOR	MOD.	12	120 MIN.	3,600
A-R15	TURF ROTOR	MOD.	6	120 MIN.	600
A-R16	TURF ROTOR	MOD.	12	120 MIN.	3,600
A-R17	TURF ROTOR	MOD.	14	120 MIN.	4,200
TOTAL				26.25 HR	117,325

CONTROL ZONE "A" LOW-VOLUME WEEKLY DEMAND ZONE CHART (AFTER ESTABLISHMENT PERIOD)

ZONE #	TYPE	WATER USE	GPM	RUN TIME	GPU
A-D1	DRIP ZONE	LOW	38	60 MIN.	2,280
A-D2	DRIP ZONE	LOW	62	60 MIN.	3,720
A-D3	DRIP ZONE	LOW	20	60 MIN.	1,200
A-D4	DRIP ZONE	LOW	55	60 MIN.	3,300
A-D5	DRIP ZONE	LOW	12	60 MIN.	720
A-D6	DRIP ZONE	LOW	65	60 MIN.	3,900
A-D7	DRIP ZONE	LOW	12	60 MIN.	720
A-D8	DRIP ZONE	LOW	20	60 MIN.	1,200
A-T1	TREE DRIP RING	LOW	90	60 MIN.	5,400
A-T2	TREE DRIP RING	LOW	90	60 MIN.	5,400
A-T3	TREE DRIP RING	LOW	90	60 MIN.	5,400
A-T4	TREE DRIP RING	LOW	91	60 MIN.	5,460
A-T5	TREE DRIP RING	LOW	90	60 MIN.	5,400
A-T6	TREE DRIP RING	LOW	81	60 MIN.	4,860
A-T7	TREE DRIP RING	LOW	91	60 MIN.	5,460
A-T8	TREE DRIP RING	LOW	91	60 MIN.	5,460
A-T9	TREE DRIP RING	LOW	90	60 MIN.	5,400
A-T10	TREE DRIP RING	LOW	76	60 MIN.	4,560
A-T11	TREE DRIP RING	LOW	55	60 MIN.	3,300
A-T12	TREE DRIP RING	LOW	55	60 MIN.	3,300
A-T13	TREE DRIP RING	LOW	90	60 MIN.	5,400
A-T14	TREE DRIP RING	LOW	91	60 MIN.	5,460
A-T15	TREE DRIP RING	LOW	91	60 MIN.	5,460
TOTAL				23 HR	94,620

STATION RUN TIMES ARE BASED ON APPROXIMATE AMOUNT OF TIME REQUIRED TO APPLY 1/4" OF WATER TO IRRIGATED AREA. ADDITIONAL RUN TIME MAY BE NEEDED TO ACCOUNT FOR EMISSION DEVICE EFFICIENCIES AND EVAPOTRANSPIRATION. CONTROL ZONES ARE TO BE SCHEDULED TO MAXIMIZE THE PERFORMANCE OF THE WATER SOURCE WHEN POSSIBLE.

ROTOR HEAD LEGEND AND NOZZLE CHART

Symbol	MFR	DESCRIPTION	Nozzle Type	Radius ft.	PSI	Flow GPM	PRECIP. IN/HR
360° Arc	RAIN BIRD	5004-FCOR w/ a 5000 Plus MFR Nozzle or approved equal, installed w/ 8PX-FLEX 4 8PE-075 Barb Elbow	MFR-35-F 35'	45	6.62	6.0	.69
180° Arc	RAIN BIRD	5004-FCOR w/ a 5000 Plus MFR Nozzle or approved equal, installed w/ 8PX-FLEX 4 8PE-075 Barb Elbow	MFR-35-F 35'	45	3.82	3.0	.35
90° Arc	RAIN BIRD	5004-FCOR w/ a 5000 Plus MFR Nozzle or approved equal, installed w/ 8PX-FLEX 4 8PE-075 Barb Elbow	MFR-35-F 35'	45	3.82	3.0	.35
360° Arc	RAIN BIRD	5004-FCOR w/ a 5000 Plus Standard Nozzle or approved equal, installed w/ 8PX-FLEX 4 8PE-075 Barb Elbow	MFR-35-F 35'	45	1.60	1.2	.14
180° Arc	RAIN BIRD	5004-FCOR w/ a 5000 Plus Standard Nozzle or approved equal, installed w/ 8PX-FLEX 4 8PE-075 Barb Elbow	MFR-35-F 35'	45	1.60	1.2	.14
90° Arc	RAIN BIRD	5004-FCOR w/ a 5000 Plus Standard Nozzle or approved equal, installed w/ 8PX-FLEX 4 8PE-075 Barb Elbow	MFR-35-F 35'	45	1.60	1.2	.14

XERIGATION/DRIP LEGEND

Symbol	MFR	DESCRIPTION
XXXXXX	RAIN BIRD	XPD-09-12 drip tubing w/ 3 GPH emitters 12" on center, install tubing rows a maximum of 18" apart in shrub areas. All tubing shall be installed 2" below finished grade w/ 3" wire stakes five (5) feet on center, verify the layout and spacing in the field prior to starting work. All connection between drip tubing shall be made using XF drip line fittings.
—	APPROVED	PVC supply and or exhaust header to drip tubing connection, if size not indicated then 3/4" shall be used for all connections.
▲	RAIN BIRD (NOT SHOWN)	MDRGROUP 4" MDRGROUP flush cap installed at end/middle of drip line PVC flush manifold line, install flush cap inside a separate valve box. One at the end of each direction on each direction, install a min. of one flush cap per 1000' of tubing in each direction on drip line manifold, install 18" from paving, install all flush equip. per manufacturer's specifications.
■	RAIN BIRD	8Q Series 8Q FULL installed on a 12" Poly-Flux Riser and 8Q Nozzle Adapter 8Q ADP12 The Irrigation Contractor is to install the emission device 2" above the finished mulch layer.
●	RAIN BIRD	XPD-09-12 drip tubing w/ XF external barbed type fittings and accessories to be installed around trunk of tree (see tree drip ring detail).
○	RAIN BIRD	(2)-B000 A-F adjustable tree bubblers to be installed 3" above grade on a 1/2" sch. 80 nipple, install bubblers at edge of root ball on opposite sides of tree (typ).

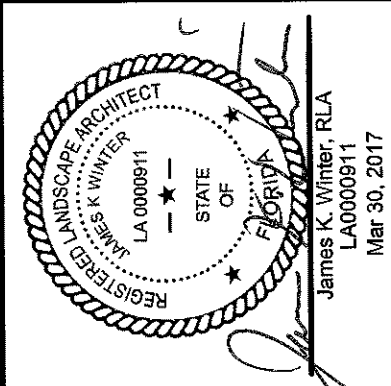
ROTARY BODY LEGEND AND NOZZLE CHART

Symbol	MFR	DESCRIPTION	Nozzle Type	Radius ft.	PSI	Flow GPM	PRECIP. IN/HR
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70
⊙	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX 4 8PE-050 Barb Elbow	R13-18Q 18'	45	4.9	6.1	.70

PIPE, VALVE AND EQUIPMENT LEGEND

Symbol	MFR	DESCRIPTION
⊙	APPROVED	3" water meter provided by Owners Representative. The Irrigation Contractor shall tie to the discharge side of meter and install a 3" RPZ type backflow device per local code.
⊙	APPROVED	1" water meter provided by Owners Representative. The Irrigation Contractor shall tie to the discharge side of meter and install a 1 1/4" RPZ type backflow device per local code.
⊙	RAIN BIRD	FEES Series electric remote-control valve 4" line size PVC ball valve to be installed within a Rain Bird VB-STD valve box (refer to valve ID on plan for size).
⊙	RAIN BIRD	FEES Series electric remote-control valve 4" line size PVC ball valve and a Large Capacity Disk Filter LCR1200 to be installed per the manufacturer written installation instructions. Install valve within a Rain Bird VB-STD valve box per the manufacturer written installation instructions. A Rain Bird VB-STD valve box per the manufacturer written installation instructions. A Rain Bird VB-STD valve box per the manufacturer written installation instructions.
⊙	MATCO	Line size brass gate valve installed in Rain Bird VB-10RND valve box w/ green lid.
⊙	RAIN BIRD	33-DLRC 3/4" Quick Coupler installed within a Rain Bird VB-10RND valve box. The RRR Contractor shall provide (2) Hose Swivels (34-02), (2) Valve Keys (33-DK) (2) Locking Cover Keys (2049) to Owners Representative at completion of project.
⊙	HYDROPOINT	HYDROPOINT0021 stainless steel pedestal mounted controller with a HYDROPOINT0042 wireless rain sensor. Owner furnished/contractor installed. Location and installation shall be approved by Owner prior to installation. Input required: 120 VAC +/- 10%, (60 Hz) or 220 VAC +/- 10%, (60 Hz).
⊙	RAIN BIRD	ESP4ME 4 station controller with a RSD-BEX rain sensor to be installed in this approximate location per the manufacturer written installation instructions. Coordinate actual location with the electrical drawings at the site prior to the start of work. Input required: 120 VAC +/- 10%, (60 Hz).
⊙	RAIN BIRD	ESP12LXME 12 station controller 120VAC for controller "C" only. Controller is to be installed in this approximate location. Controller is to be pedestal mounted requiring a "LX41FEP" metal pedestal with a "LX41FEP" metal cabinet. Install a RSD-BEX rain sensor for the controller. Coordinate actual location with the electrical drawings and at site prior to the start of work. Install the controller and rain sensor per the manufacturer written instructions. Input required: 120 VAC +/- 10%, (60 Hz).
---	APPROVED	PVC Class 200 IPS Plastic Pipe "Mainline". The diagrammatic location shown on plan is approximate and shall be field located per the Owners Representative's approval. Pipe sizes 2 1/2" inch or smaller shall have bell and socket joints. Pipe sizes larger than 2 1/2" inch shall have snap connections with rubber gasket joints. Install 18" below grade.
---	APPROVED	PVC Class 200 IPS Plastic Pipe "Lateral". The diagrammatic location shown on plan is approximate and shall be field located per the Owners Representative's approval. Pipe sizes 2 1/2" inch or smaller shall have bell and socket joints. Pipe sizes larger than 2 1/2" inch shall have snap connections with rubber gasket joints. Install 12" below grade.
---	APPROVED	PVC Schedule 40 IPS Plastic Pipe "Elevators". Sizes shall be twice the diameter of the pipe or wire bundle carried. Place below all paving, hardscape etc. and as directed by the Owners Authorized representative. Extend sleeves 12" beyond paving at each end.
*	APPROVED	Install three spare control wires plus a common from the Irrigation controller location to the nearest valve box located in this approximate area.
⊙	HYDROPOINT	HYDROPOINT0030 flow meter. Owner furnished/contractor installed. Flow Meter shall be installed within a Rain Bird VB-STD-H valve box per manufacturer's written recommendations.
⊙	HYDROPOINT	HYDROPOINT0040 master valve. Owner furnished/contractor installed. Master Valve to be installed within a Rain Bird VB-STD-H valve box per manufacturer's written recommendations.
⊙	HOOVER	Hoover Fiberglass Enclosure and Automatic Flushing Filter (see detail this sheet for more information). Electrical power to Irrigation equipment supplied by Owners Rep.

**cph**  
www.cphcorp.com  
**A Full Service A & E Firm**  
Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation  
Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland  
• Texas



Designed by:	JSM	Drawn by:	JSM	Checked by:	JKW	Approved by:	JKW	Scale:	1" = 100'	Date:	2/17/15	Job No.:	W13392.1	© 2017
By:		Revision:		Date:										

**IRR. DESIGN**  
AN IRRIGATION DESIGN COMPANY  
3216 ELLEN DR.  
ORLANDO, FLORIDA 32808  
PHONE (407) 668-5796  
www.irdesign.com  
Bub & Jason Hedrick  
jason@irdesign.com

**OVERALL PRELIMINARY IRRIGATION PLAN**  
**Walmart**  
STORE NO. 3873-00, ALACHUA (SEC 1-75 HWY 441), FLORIDA

Always call 888 two full business days before you dig  
**Sunshine811.com**  
www.sunshine811.com

**ALERT TO CONTRACTOR:**  
ALL WHEN GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTLOT AREA TO BE KEPT FREE OF JOB TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTLOT. WHEN GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTLOT CONTRACTOR TO THE SPECIFIC PARCEL, AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OR OUTLOT TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTLOT.

Always call 888 two full business days before you dig  
**Sunshine811.com**  
www.sunshine811.com

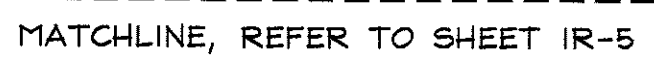
LWI13392 - WM SC AlachuaW13392-1 IRR REVISION 01-17.dwg Mar 30, 2017 - 11:13am yndiguz



**IR-2**



..:IW13392 - WM SC Alachua\W13392.1 - IRR REVISION 01-17.dwg Mar 30, 2017 - 11:15am yrodriguez



15901 NW 158TH AVE.  
METAL BLDG.

1) IRRIGATION SYSTEM (A) AS SHOWN IS DESIGNED TO OPERATE FROM A POTABLE WATER METER PROVIDING A MINIMUM FLOW OF 135 GPM AND A MINIMUM PRESSURE OF 60 PSI.

2) IRRIGATION SYSTEM (B) AS SHOWN IS DESIGNED TO OPERATE FROM A 5 HP PUMP STATION PULLING FROM A CISTERN PROVIDING A MINIMUM FLOW OF 50 GPM AND A MINIMUM PRESSURE OF 60 PSI.

3) IRRIGATION SYSTEM (C) AS SHOWN IS DESIGNED TO OPERATE FROM A POTABLE WATER METER PROVIDING A MINIMUM FLOW OF 27 GPM AND A MINIMUM PRESSURE OF 60 PSI.

CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION IF AVAILABLE FLOW AND PRESSURE DEVIATES 60 PSI MORE THEN 5% AND WILL AFFECT THE PERFORMANCE OF THE SYSTEM.

MINIMUM PRESSURE REQUIREMENTS - 60 PSI AT THE POINT OF CONNECTION  
45 PSI AT THE BASE OF THE POP-UP ROTOR HEADS  
30 PSI AT THE BASE OF THE DRIP EMITTER

4) HEAD LAYOUT BASED ON BASE INFORMATION PROVIDED. HEADS SHALL BE ADJUSTED TO ACCOMMODATE FIELD VARIATIONS WHILE MAINTAINING 100% COVERAGE AND MINIMIZING OVERSPRAY ONTO PAVED AREAS AND BUILDINGS.

5) LATERAL PIPE SHALL BE SIZED SO THE WATER VELOCITY DOES NOT EXCEED 5 FEET PER SECOND. MAXIMUM GPM PER PIPE SIZE AS FOLLOWS:

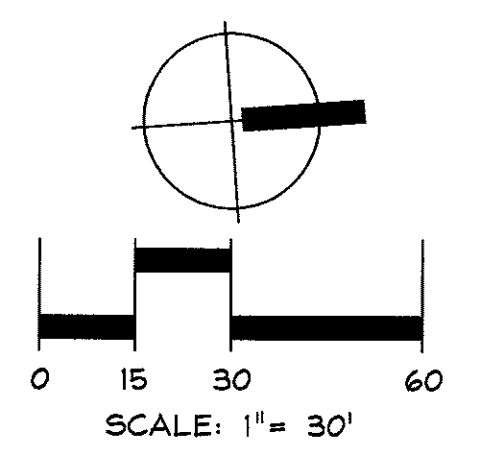
CLASS 200	
¾" PIPE	10 GPM
1" PIPE	15 GPM
1¼" PIPE	26 GPM
1½" PIPE	36 GPM
2" PIPE	55 GPM
2½" PIPE	80 GPM
3" PIPE	120 GPM

6) WATER SERVICE LINE, WATER METER, CHECK VALVES, SURGE PROTECTION, ETC. AND PERFORMANCE OF THE WATER SOURCE ARE NOT A PART OF THESE DRAWINGS.

CLASS 200	
¾" PIPE	10 GPM
1" PIPE	15 GPM
1¼" PIPE	26 GPM
1½" PIPE	36 GPM
2" PIPE	55 GPM
2½" PIPE	80 GPM
3" PIPE	120 GPM

**ALERT TO CONTRACTOR:**

ALL WM GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS. OUTFLOW AREA TO BE KEPT FREE OF JOG TRAILERS AND STORAGE AFTER THE CONTRACT MILESTONE DATE FOR THE OUTFLOW. WM GENERAL CONTRACTOR TO PROVIDE CLEAR ACCESS FOR OUTFLOW CONTRACTOR TO THE SPECIFIC PARCEL, AT ALL TIMES AFTER MILESTONE DATE. PURCHASER OF OUTFLOW TO PROVIDE PERMIT DOCUMENTS AND SWPPP REQUIRED BY STATE/LOCAL REQUIREMENTS FOR SPECIFIC OUTFLOW.



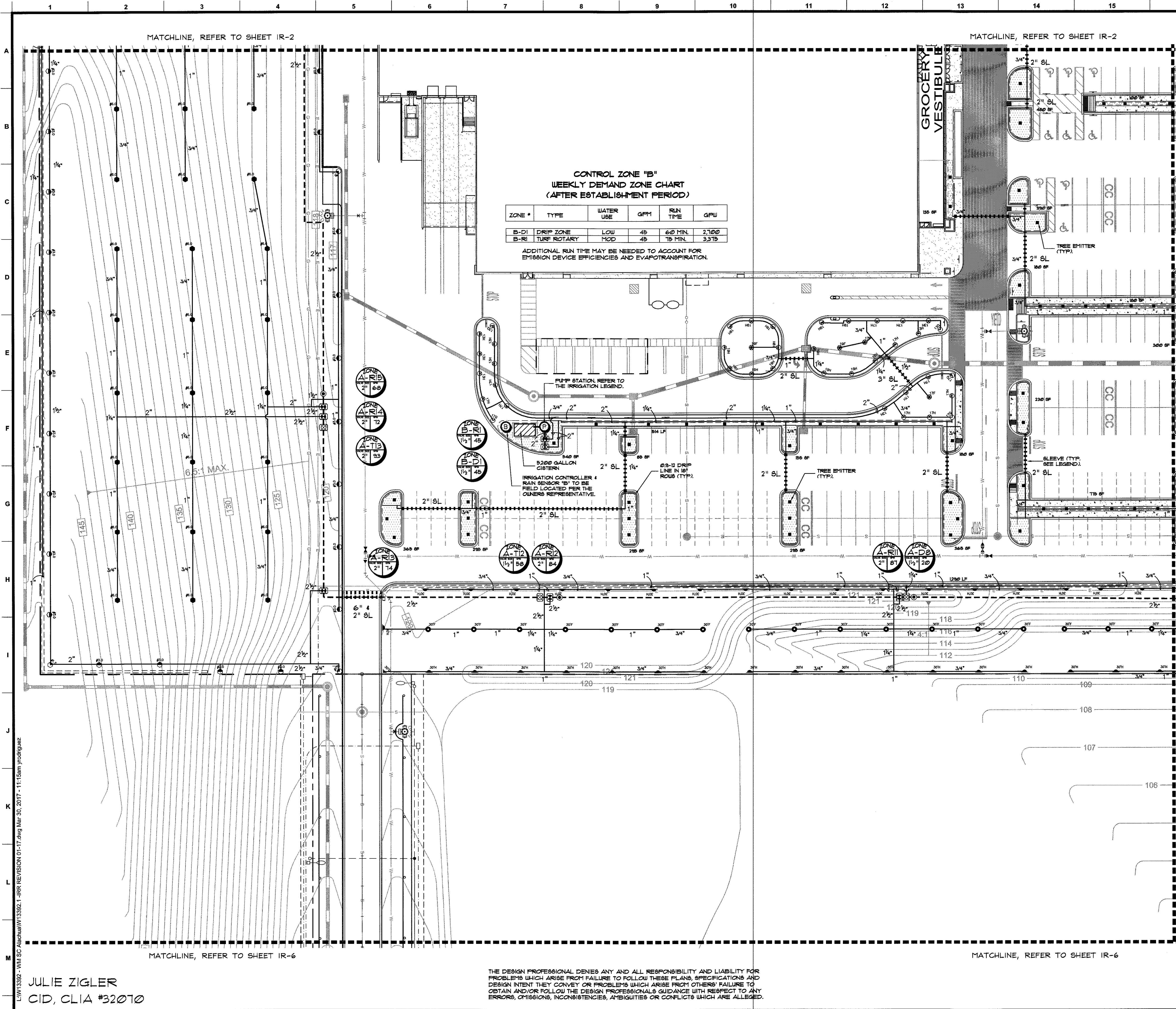
**IRR. DESIGN**  
AN IRRIGATION DESIGN COMPANY

3215 ELLEN DR.  
ORLANDO, FLORIDA 32806  
PHONE (407) 869-5790  
[www.irrdesign.com](http://www.irrdesign.com)  
Bob & Jason McElroy  
[jason@irrdesign.com](mailto:jason@irrdesign.com)

STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

***IR-3***

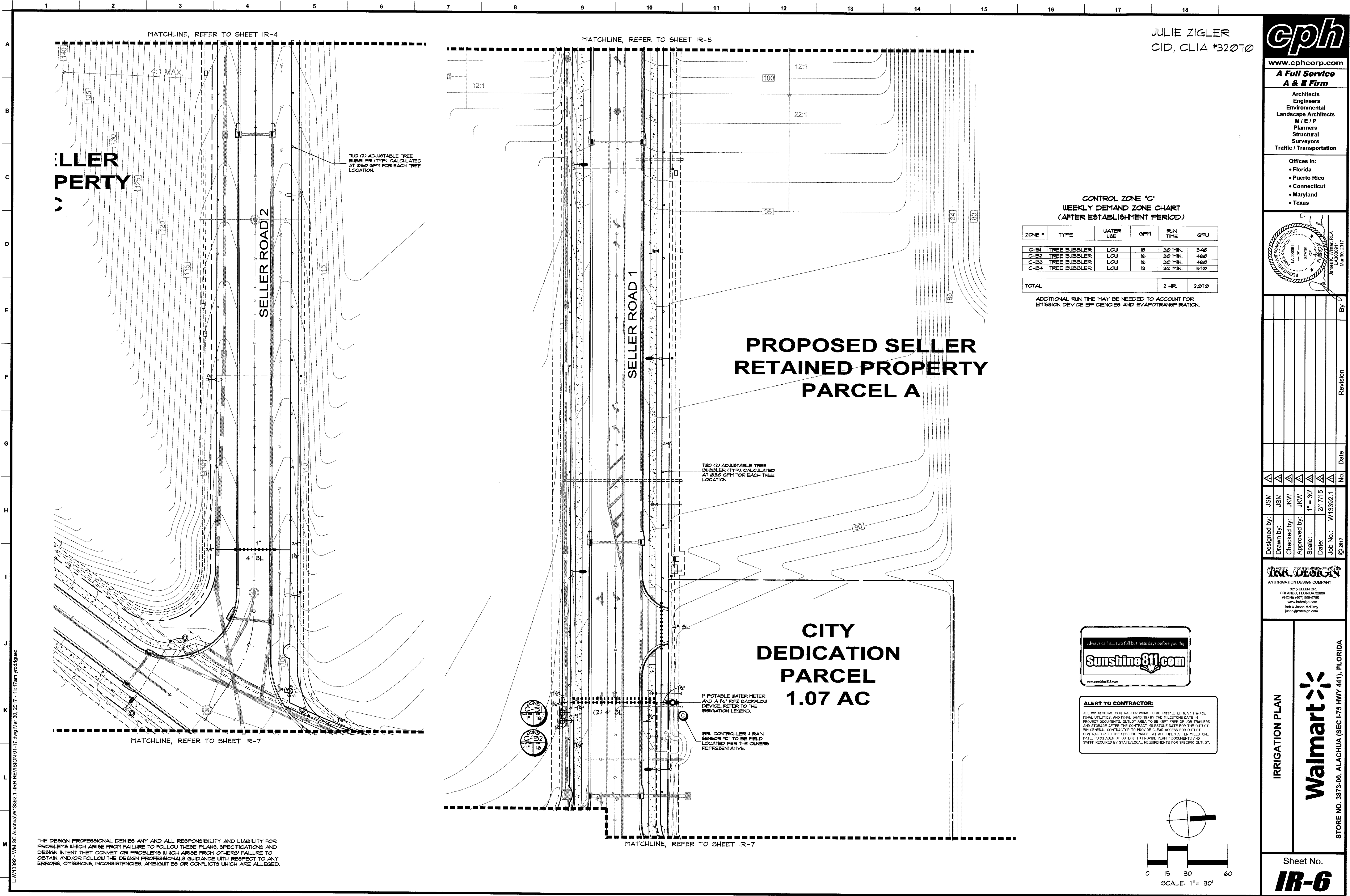




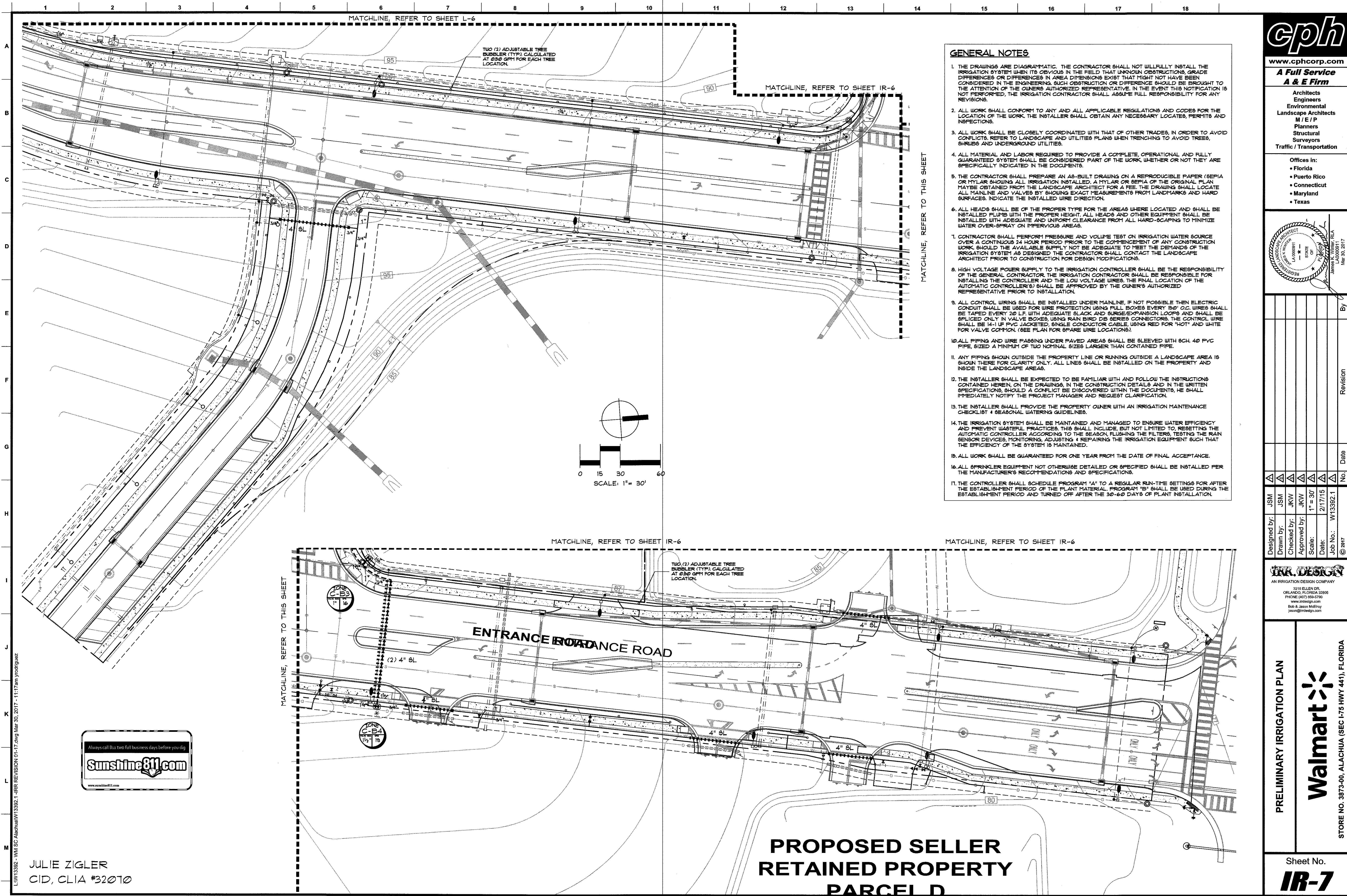












GENERAL NOTES

1. THE DRAWINGS ARE DIAGNOSTIC. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTION OR DIFFERENCE SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS.
2. ALL WORK SHALL CONFORM TO ANY AND ALL APPLICABLE REGULATIONS AND CODES FOR THE LOCATION OF THE WORK. THE INSTALLER SHALL OBTAIN ANY NECESSARY LOCATES, PERMITS AND INSPECTIONS.
3. ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. REFER TO LANDSCAPE AND UTILITIES PLANS WHEN TRENCHING TO AVOID TREES, SHRUBS AND UNDERGROUND UTILITIES.
4. ALL MATERIAL AND LABOR REQUIRED TO PROVIDE A COMPLETE, OPERATIONAL AND FULLY GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS.
5. THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING ON A REPRODUCIBLE PAPER (SEPIA OR MYLAR SHOWING ALL IRRIGATION INSTALLED. A MYLAR OR SEPIA OF THE ORIGINAL PLAN MAY BE OBTAINED FROM THE LANDSCAPE ARCHITECT FOR A FEE. THE DRAWING SHALL LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM LANDMARKS AND HARD SURFACES. INDICATE THE INSTALLED WIRE DIRECTION.
6. ALL HEADS SHALL BE OF THE PROPER TYPE FOR THE AREAS WHERE LOCATED AND SHALL BE INSTALLED PLUMB WITH THE PROPER HEIGHT. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCE FROM ALL HARD-SCAPING TO MINIMIZE WATER OVER-SPRAY ON IMPERVIOUS AREAS.
7. CONTRACTOR SHALL PERFORM PRESSURE AND VOLUME TEST ON IRRIGATION WATER SOURCE OVER A CONTINUOUS 24 HOUR PERIOD PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK. SHOULD THE AVAILABLE SUPPLY NOT BE ADEQUATE TO MEET THE DEMANDS OF THE IRRIGATION SYSTEM AS DESIGNED, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR DESIGN MODIFICATIONS.
8. HIGH VOLTAGE POWER SUPPLY TO THE IRRIGATION CONTROLLER SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE CONTROLLER AND THE LOW VOLTAGE WIRES. THE FINAL LOCATION OF THE AUTOMATIC CONTROLLER(S) SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
9. ALL CONTROL WIRING SHALL BE INSTALLED UNDER MAINLINE, IF NOT POSSIBLE THEN ELECTRIC CONDUIT SHALL BE USED FOR WIRE PROTECTION USING FULL BOXES EVERY 150' O.C. WIRES SHALL BE TAPED EVERY 20 LF. WITH ADEQUATE SLACK AND SURGE/EXPANSION LOOPS AND SHALL BE SPLICED ONLY IN VALVE BOXES, USING RAIN BIRD DB SERIES CONNECTORS. THE CONTROL WIRE SHALL BE 14-1 UP PVC JACKETED, SINGLE CONDUCTOR CABLE, USING RED FOR "HOT" AND WHITE FOR VALVE COMMON. (SEE PLAN FOR SPARE WIRE LOCATIONS).
10. ALL PIPING AND WIRE PASSING UNDER PAVED AREAS SHALL BE SLEEVED WITH SCH. 40 PVC PIPE, SIZED A MINIMUM OF TWO NOMINAL SIZES LARGER THAN CONTAINED PIPE.
11. ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS.
12. THE INSTALLER SHALL BE EXPECTED TO BE FAMILIAR WITH AND FOLLOW THE INSTRUCTIONS CONTAINED HEREIN ON THE DRAWINGS, IN THE CONSTRUCTION DETAILS AND IN THE WRITTEN SPECIFICATIONS. SHOULD A CONFLICT BE DISCOVERED WITHIN THE DOCUMENTS, HE SHALL IMMEDIATELY NOTIFY THE PROJECT MANAGER AND REQUEST CLARIFICATION.
13. THE INSTALLER SHALL PROVIDE THE PROPERTY OWNER WITH AN IRRIGATION MAINTENANCE CHECKLIST & SEASONAL WATERING GUIDELINES.
14. THE IRRIGATION SYSTEM SHALL BE MAINTAINED AND MANAGED TO ENSURE WATER EFFICIENCY AND PREVENT WASTEFUL PRACTICES. THIS SHALL INCLUDE, BUT NOT LIMITED TO: RESETTING THE AUTOMATIC CONTROLLER ACCORDING TO THE SEASON, FLUSHING THE FILTERS, TESTING THE RAIN SENSOR DEVICES, MONITORING, ADJUSTING & REPAIRING THE IRRIGATION EQUIPMENT SUCH THAT THE EFFICIENCY OF THE SYSTEM IS MAINTAINED.
15. ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.
16. ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
17. THE CONTROLLER SHALL SCHEDULE PROGRAM "A" TO A REGULAR RUN-TIME SETTINGS FOR AFTER THE ESTABLISHMENT PERIOD OF THE PLANT MATERIAL. PROGRAM "B" SHALL BE USED DURING THE ESTABLISHMENT PERIOD AND TURNED OFF AFTER THE 30-60 DAYS OF PLANT INSTALLATION.

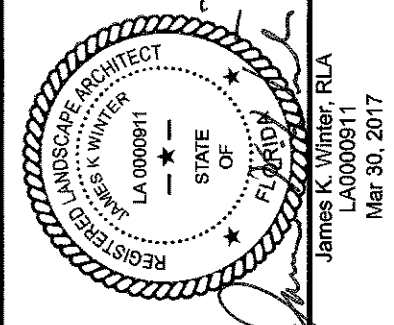


www.cphcorp.com

A Full Service  
A & E Firm

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland  
• Texas



Designed by:	JSM	Drawn by:	JSM	Checked by:	JKW	Approved by:	JKW	Scale:	1" = 30'	Date:	2/17/15	Job No.:	W13392.1	No.		Date		Revision		By	

IRR. DESIGN  
AN IRRIGATION DESIGN COMPANY  
3215 ELLEN DR.  
ORLANDO, FLORIDA 32806  
PHONE: (407) 858-5780  
www.irrdesign.com  
Bob & Jason McElroy  
jason@irrdesign.com

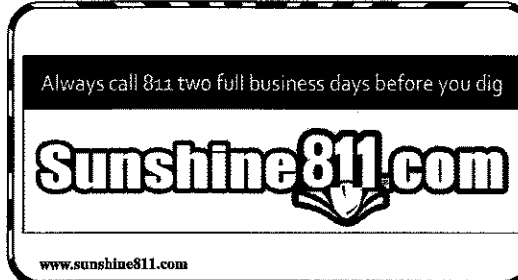
PRELIMINARY IRRIGATION PLAN



STORE NO. 3873-00, ALACHUA (SEC 1-75 HWY 441), FLORIDA

Sheet No.  
**IR-7**

JULIE ZIGLER  
CID, CLIA #32070

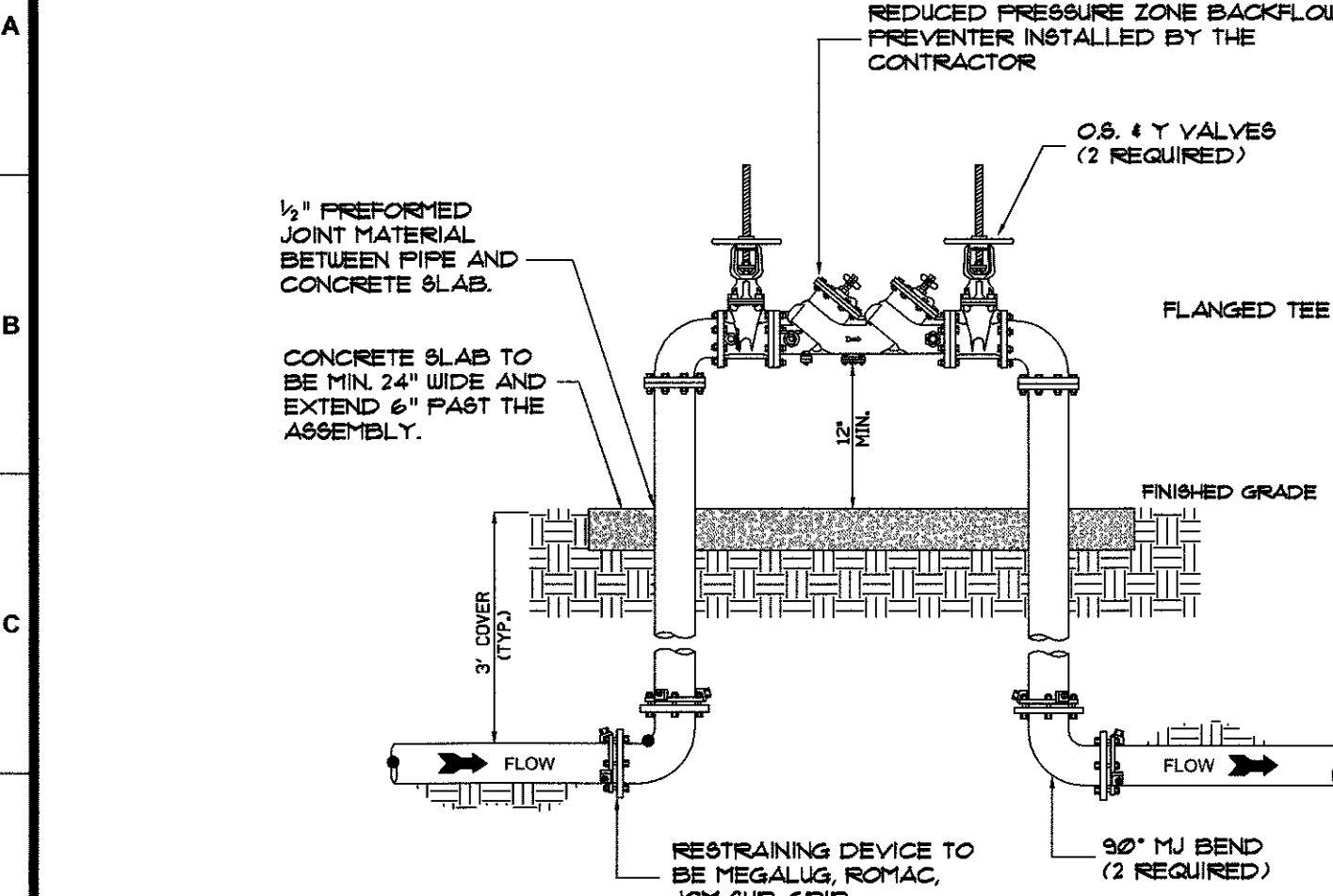


L:\W13392 - WM SC Alachua\W13392.1 - IRR REVISION 01-17.dwg, Mar 30, 2017 - 11:17am yodriguez







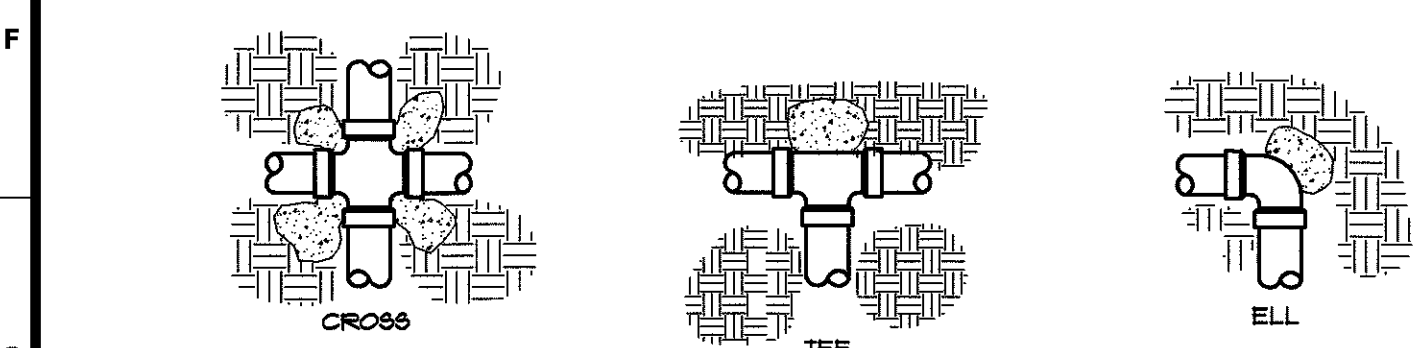


TYPE OF BACKFLOW PREVENTER MUST BE APPROVED BY ENVIRONMENTAL UTILITIES

**REDUCED BACKFLOW PREVENTER NOTES:**

1. BACKFLOW PREVENTER TO BE LOCATED NO MORE THAN 12" DOWNSTREAM FROM THE WATER METER, UNLESS OTHERWISE PERMITTED.
2. ALL PIPE AND FITTINGS 2 1/2" OR LARGER SHALL BE FLANGED DUCTILE IRON.
3. ALL FLANGED FITTINGS SHALL HAVE STAINLESS STEEL BOLTS AND NUTS.

**REDUCED PRESSURE BACKFLOW PREVENTER**

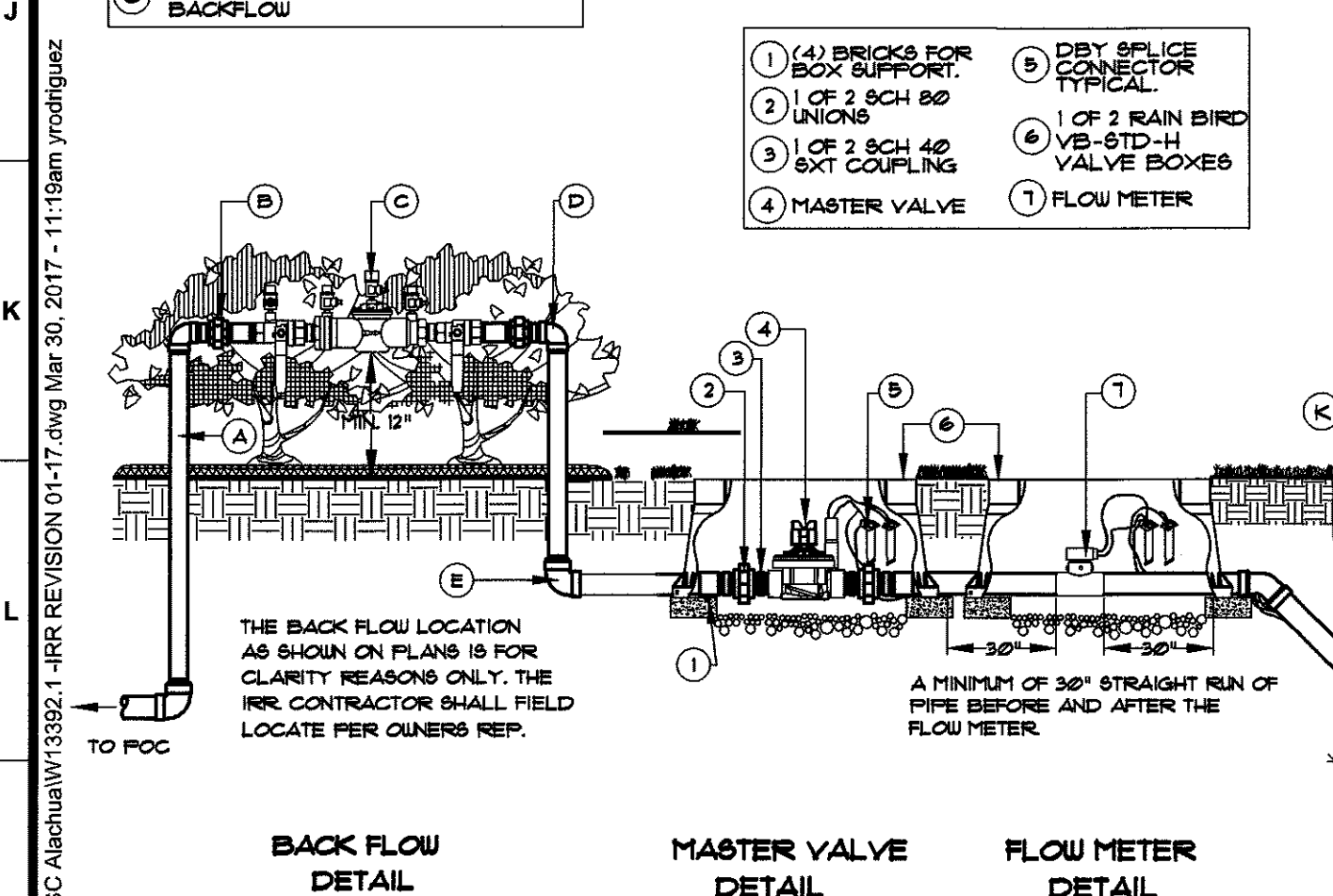


**THRUST BLOCK DETAIL**

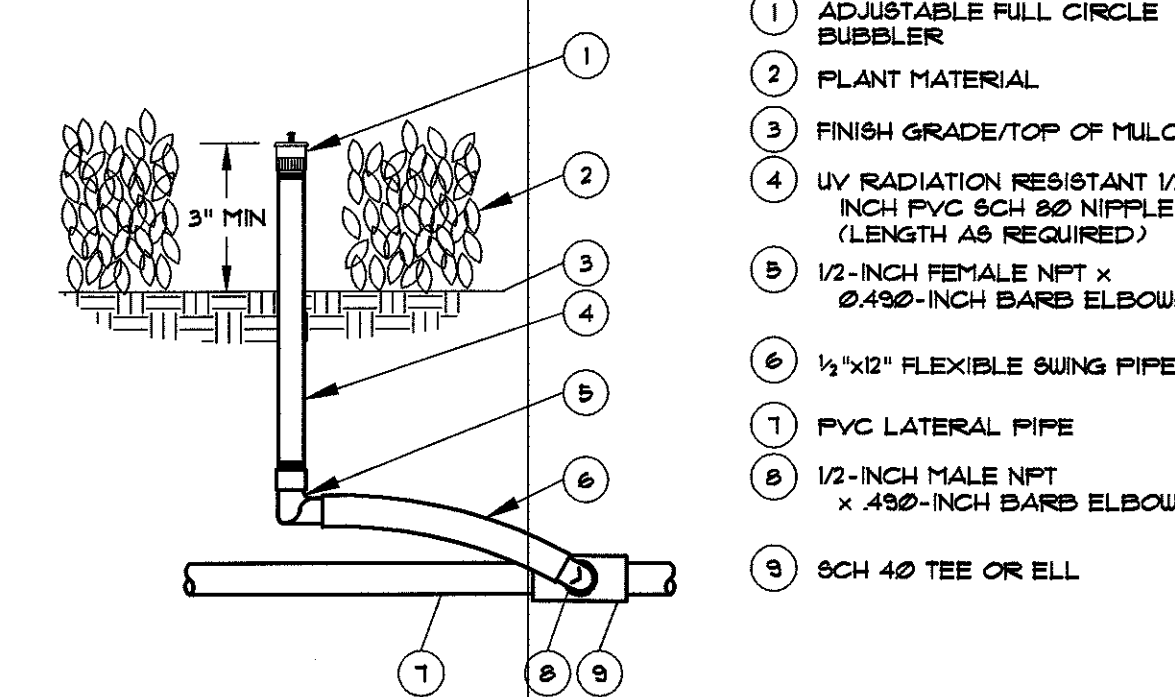
THRUST BLOCKS ARE TO BE CONSTRUCTED WITH 3,000 PSI CONCRETE AT 48 HOURS. STEEL REINFORCING RODS WILL BE REQUIRED IF SURROUNDING SOIL HAS A BEARING VALUE OF LESS THAN 2,000 PSF. THRUST BLOCKS REQUIRED AT ALL FITTINGS AND DIRECTION CHANGES ON ALL MAIN LINES 3" OR GREATER. NOTE THRUST BLOCK LOCATIONS ON AS-BUILT DRAWINGS.

- (A) STAINLESS STEEL AUTOMATIC CONTROLLER ENCLOSURE ASSEMBLY.
- (B) LOW PROFILE ANTENNA.
- (C) WeatherTRAK ET PRO SERIES CONTROLLER. SEE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- (D) CONTROLLER TRANSFORMER.
- (E) GFI ON/OFF POWER SWITCH RECEPTACLE (OPTIONAL).
- (F) FLOW SENSOR CABLE AND MASTER VALVE WIRE PER SPECIFICATION.
- (G) 2" PVC SUEEP ELL AND CONDUIT FOR FLOW SENSOR CABLE AND MASTER VALVE WIRE.
- (H) 1" PVC SUEEP ELL AND CONDUIT FOR 120 VAC FROM METERED POWER SUPPLY.
- (I) 3" PVC SUEEP ELL AND CONDUIT FOR CONTROL WIRE.
- (J) 1" PVC SUEEP ELL AND CONDUIT FOR GROUNDING WIRE. WIRE SHALL BE AS STRAIGHT AS POSSIBLE. INSTALL GROUNDING WIRE PER LOCAL AND NATIONAL ELECTRIC CODES.
- (K) FOUNDED CONCRETE BASE, SLOPE TO DRAIN.
- (L) FINISH GRADE 2" BELOW TOP OF CONCRETE BASE.
- (M) FILL VOID WITH CONCRETE SLURRY MIX, SIZE AS REQUIRED, (OPTIONAL).
- (N) UNIVERSAL RADIO REMOTE INTERFACE.
- (O) NEATLY BUNDLE WIRES AND SECURE WITH WIRE TIES.
- (P) CONTROLLER STATION OUTPUT BOARD.
- (Q) WIRELESS RAIN SENSOR.

THE IRRIGATION CONTRACTOR SHALL FIELD DETERMINE THE WIRELESS RAIN SENSOR LOCATION & INSTALL PER THE MANUFACTURER WRITTEN INSTALLATION INSTRUCTIONS.

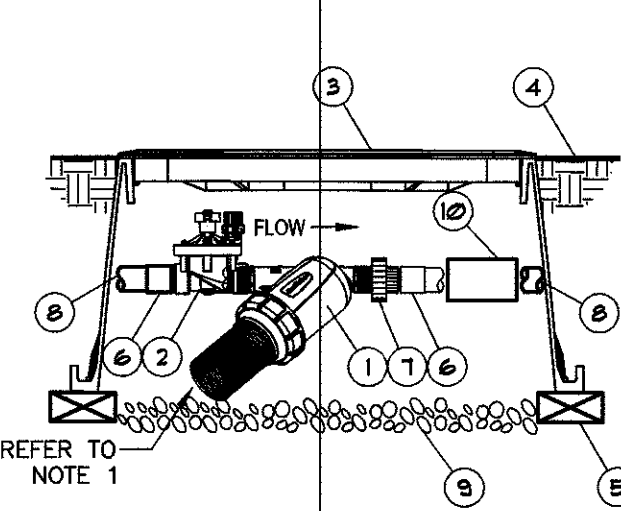


**MASTER INSTALLATION DETAIL**



**ADJUSTABLE FULL CIRCLE BUBBLER ON RISER**

ROTARY BODY LEGEND AND NOZZLE CHART									
Symbol	MFR	DESCRIPTION	Nozzle Type	Radius ft.	P&I	Flow GPM	PRECIP. IN/HR		
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R3-18Q	18"	45	.49	.61	.10	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R11-24Q	24"	45	.92	.65	.15	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R-VAN13B	18"	45	.65	.61	.10	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R-VAN124	24"	45	1.22	.65	.15	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R3-18H	18"	45	.98	.61	.10	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R11-24H	24"	45	1.84	.65	.15	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R-VAN13B	18"	45	1.31	.61	.10	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R-VAN124	24"	45	2.45	.65	.15	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R-VAN13B	18"	45	1.47	.61	.10	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R-VAN124	24"	45	2.16	.65	.15	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R3-18F	18"	45	1.96	.61	.10	
⊖	RAIN BIRD	1806-SAM-P45 (6" POP-UP) installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	R11-24F	24"	45	3.67	.65	.15	



NOTE: 1. FILTER ASSEMBLY TO BE INSTALLED WITH SCREEN DIRECTION FACING A 45° DOWNWARD ANGLE WITH ENOUGH SPACE TO REMOVE SCREEN FOR MAINTENANCE. 60°PE APPLICATIONS MAY REQUIRE RAIN BIRD VALVE BOX EXTENSIONS TO ACHIEVE ACCEPTABLE SCREEN CLEARANCE.

**LARGE CAPACITY DISK FILTER TYPICAL DETAIL**

- (1) 1/4" IRR WIRE UNDER MAIN.
- (2) 8" GRAVEL TYP.
- (3) ASSORTED INTAKE 8x8 PVC FITTINGS.
- (4) BRICKS FOR BOX SUPPORT.
- (5) MANIFOLD TEE.
- (6) DBY SPLICER CONNECTOR TYPICAL.
- (7) LINE SIZE PVC BALL VALVE.
- (8) 1 OF 2 CONTROL VALVE (SEE LEGEND).
- (9) SCH 80 PVC UNION (TYP).
- (10) 1 OF 2 SCH 40 6XT COUPLING.
- (11) 1 OF 2 RAINBIRD VB-STD-H VALVE BOX (TYP).
- (12) PVC 45 ELLS FITTING (TYP).
- (13) EXPANSION COIL (TYP).

- (A) 1 OF 4 6XT COUPLING.
- (B) LINE SIZE PVC BALL VALVE.
- (C) 1 OF 8 SCH 80 NIPPLES.
- (D) DRIP VALVE KIT REFER TO THE RAIN BIRD LARGE CAPACITY FILTER DETAIL.
- (E) RAINBIRD JB-6PR-H VALVE BOX (TYP).
- (F) PVC SCH 80 1" UNION (2) FOR SERVICING ASSEMBLY.

- (1) RAINBIRD VB-6RND VALVE BOX.
- (2) SHUT OFF/FLUSHING VALVE.
- (3) BLANK TUBING AS NEEDED.
- (4) 88 STAPLES INSTALLED EVERY 3 FEET.
- (5) DRIP ZONE LATERAL PIPE.
- (6) PVC SUPPLY HEADER.
- (7) DRIP TUBING INSTALLED IN 18" ROWS, 2" BELOW GRADE.
- (8) ASSORTED DRIP LINE INSERT FITTINGS.
- (9) FINISH GRADE.
- (10) RAIN BIRD SG NOZZLE & POLYFLEX RISER.
- (11) (1 OF 2) PVC EXHAUST HEADER.

NOTE: 1. SCH 40 PVC SLEEVE, TWICE THE DIA. OF INNER PIPE. 1/2"-3/4" SHALL RECEIVE A 2" SLEEVE. 2. INSTALL SLEEVE AND INNER PIPING AT SAME TIME. (SEE ROUGH IN DETAIL.)

**SLEEVE DETAIL**

**DRIP TUBING DETAIL**

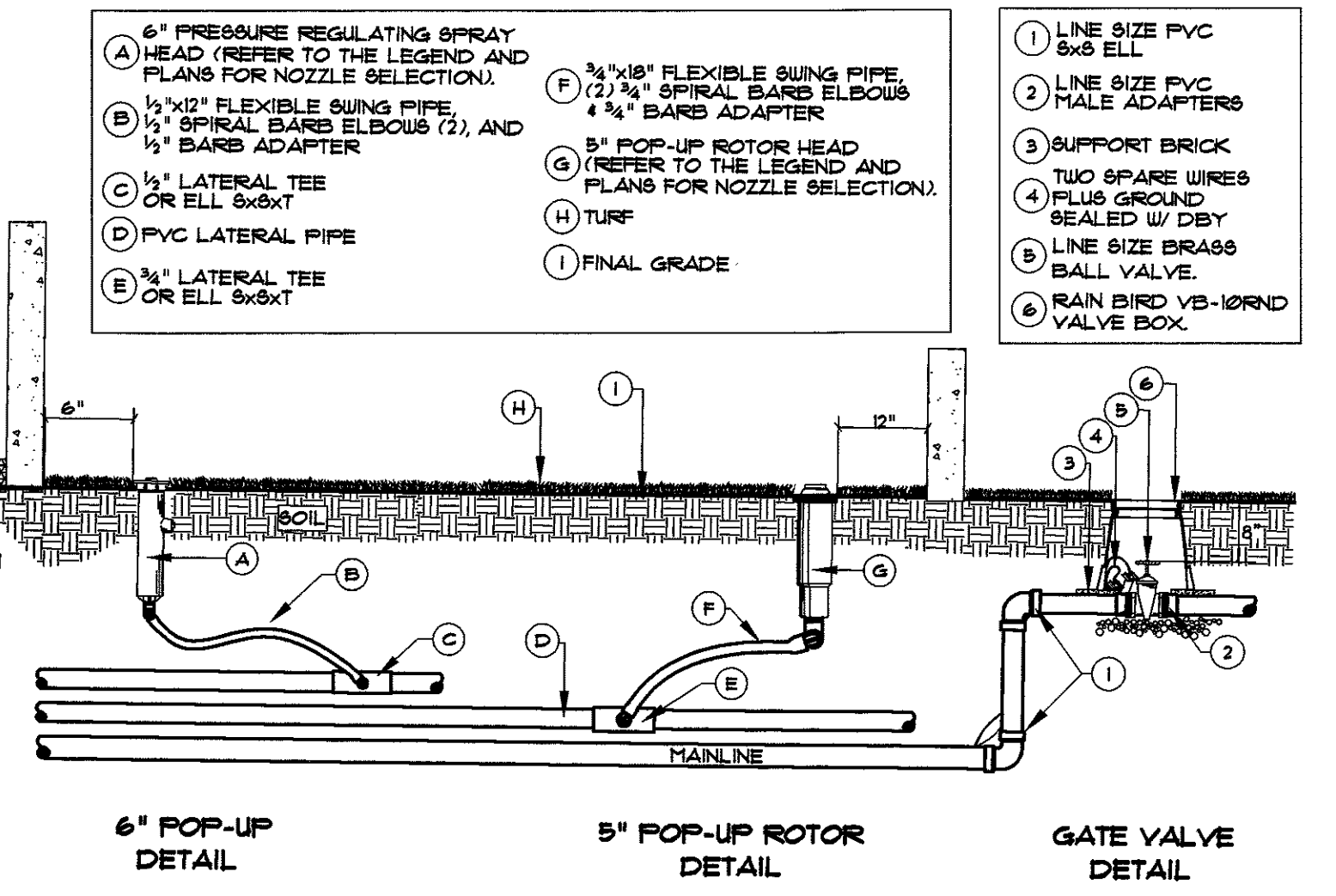
ROTOR HEAD LEGEND AND NOZZLE CHART									
Symbol	MFR	DESCRIPTION	Nozzle Type	Radius ft.	P&I	Flow GPM	PRECIP. IN/HR		
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-35-F	35"	45	6.62	.60	.63	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-32-F	32"	45	3.78	.62	.71	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-25-F	25"	45	3.92	.68	.68	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-35-H	35"	45	3.81	.60	.63	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-30-H	30"	45	2.96	.63	.73	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-25-H	25"	45	1.98	.61	.70	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-35-G	35"	45	1.92	.60	.70	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-30-G	30"	45	1.40	.60	.63	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	MPR-25-G	25"	45	1.02	.62	.71	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	15	35"	45	15.4	.24	.28	
⊖	RAIN BIRD	Standard Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	2	31"	45	2.07	.29	.34	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	2.5	31"	45	2.51	.35	.41	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	3	40"	45	3.09	.37	.43	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	4	42"	45	4.01	.44	.51	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	5	45"	45	5.09	.48	.56	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	6	46"	45	6.01	.55	.63	
⊖	RAIN BIRD	5004-PCSR w/ a 5000 Plus MPR Nozzle or approved equal, installed w/ 8PX-FLEX & 8FE-050 Barb Elbow	8	47"	45	8.03	.67	.81	

**XERIGATION/DRIP LEGEND**

Symbol	MFR	DESCRIPTION
⊖	RAIN BIRD	XFD-09-12 drip tubing w/ 3 GPM emitters 12" on center, install tubing rows a maximum of 18" apart in shrub areas. All tubing shall be installed 2" below finished grade w/ 3" wire stakes five (5) feet on center, verify the layout and spacing in the field prior to starting work. All connection between drip tubing shall be made using XF dripline fittings.
⊖	APPROVED	PVC supply and/or exhaust header to drip tubing connection. If size not indicated then 3/4" shall be installed (see details for more information).
⊖	RAIN BIRD (NOT SHOWN)	MDRGROUP 4" x MDRGROUP flush cap installed at end/middle of dripline PVC flush manifold line. Install flush cap inside a separate valve box. One at the end of tubing run in each direction. Install a min. of one flush cap per 1000' of tubing in each direction on dripline flush manifold. Install 18" from paving. Install all flush equip. per manufacturer's specifications.
⊖	RAIN BIRD	SG Series 3" SG FL. installed on a 12" Poly-Flex Riser and SG Nozzle Adapter SG ADP12. The irrigation Contractor is to install the emitter device 2" above the finished mulch layer.
⊖	RAIN BIRD	XFD-09-12 drip tubing with XF external barbed type fittings and accessories to be installed around trunk of tree (see tree drip ring detail).
⊖	RAIN BIRD	(2)-1300 A-F adjustable tree bubblers to be installed 3" above grade on a 1/2" sch. 80 nipple. Install bubblers at edge of root ball on opposite sides of tree (typ).

**PIPE, VALVE AND EQUIPMENT LEGEND**

Symbol	MFR	DESCRIPTION
⊖	APPROVED	3" water meter provided by Owners Representative. The Irrigation Contractor shall tie to the discharge side of meter and install a 3" RPZ type backflow device per local code.
⊖	APPROVED	1" water meter provided by Owners Representative. The Irrigation Contractor shall tie to the discharge side of meter and install a 1 1/2" RPZ type backflow device per local code.
⊖	RAIN BIRD	PEB Series electric remote-control valve & a line size PVC ball valve to be installed within a Rain Bird VB-STD valve box. (refer to valve ID on plan for size).
⊖	RAIN BIRD	PEB Series electric remote-control valve & a line size PVC ball valve and a Large Capacity Disk Filter LCRBY200D to be installed per the manufacturer written installation instructions. Install valve within a Rain Bird VB-6PR valve box per the manufacturer written installation instructions. A Rain Bird XGZ-100-350-COM Control zone kit can be used for drip zones with a flow rate less than 40 gpm.
⊖	MATCO	Line size brass gate valve installed in Rain Bird VB-10RND valve box w/ green lid.
⊖	RAIN BIRD	33-DLRC 3/4" Quick Coupler installed within a Rain Bird VB-10RND valve box. The IRR Contractor shall provide (2) Hose Goulets (SH-0), (2) Valve Keys (33-DK) & (2) Locking Cover Keys (2049) to Owners Representative at completion of project.
⊖	HYDROPOINT	HYDROPOINT2021 stainless steel pedestal mounted controller with a HYDROPOINT2042 wireless rain sensor. Owner furnished/contractor installed. Location and installation shall be approved by Owner prior to installation. Input required: 120 VAC +/- 10%, (60 Hz) or 220 VAC +/- 10%, (60 Hz).
⊖	RAIN BIRD	ESP4PHE 4 Station controller with a RSD-BEX rain sensor to be installed in this approximate location per the manufacturer written instructions. Coordinate actual location with the electrical drawings at the site prior to the start of work. Input required: 120 VAC +/- 10%, 60 Hz.
⊖	RAIN BIRD	ESP2LXME 12 Station controller 120VAC for controller "C" only. Controller is to be installed in this approximate location. Controller is to be pedestal mounted requiring a LXXMFPED metal pedestal with a LXXM metal cabinet. Install a RSD-BEX rain sensor for the controller. Coordinate actual location with the electrical drawings and at site prior to the start of work. Install the controller and rain sensor per the manufacturer written instructions. Input required: 120 VAC +/- 10%, 60 Hz.
---	APPROVED	PVC Class 200 IPS Plastic Pipe "Mainline". The diagrammatic location shown on plan is approximate and shall be field located per the Owners Representatives approval. Pipe sizes 2 1/2" inch or smaller shall have bell and socket joints. Pipe sizes larger than 2 1/2" inch shall have snap connections with rubber gasket joints. Install 12" below grade.
---	APPROVED	PVC Class 200 IPS Plastic Pipe "Lateral". The diagrammatic location shown on plan is approximate and shall be field located per the Owners Representatives approval. Pipe sizes 2 1/2" inch or smaller shall have bell and socket joints. Pipe sizes larger than 2 1/2" inch shall have snap connections with rubber gasket joints. Install 12" below grade.
---	APPROVED	PVC Schedule 40 IPS Plastic Pipe "Sleeve". Sizes shall be twice the diameter of the pipe or wire bundle carried. Place below all paving, hardscape etc. and as directed by the Owners Authorized representative. Extend sleeves 12" beyond paving at each end.
*	APPROVED	Install three spare control wires plus a common from the irrigation controller location to the nearest valve box located in this approximate area.
⊖	HYDROPOINT	HYDROPOINT2030 flow meter. Owner furnished/contractor installed. Flow Meter shall be installed within a Rain Bird VB-STD-H valve box per manufacturer's written recommendations.
⊖	HYDROPOINT	HYDROPOINT2040 master valve. Owner furnished/contractor installed. Master Valve to be installed within a Rain Bird VB-STD-H valve box per manufacturer's written recommendations. Hoover Fiberglass Enclosure and Automatic Flushing Filter (see detail this sheet for more information). Electrical power to irrigation equipment supplied by Owners Rep.



JULIE ZIGLER  
CID, CLIA #32070

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M / E / P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland  
• Texas

DESIGNED BY: JSM  
DRAWN BY: JSM  
CHECKED BY: JKW  
APPROVED BY: JKW  
DATE: 2/17/15  
JOB NO.: W13392.1  
© 2017

PRELIMINARY IRRIGATION NOTES AND DETAILS

**Walmart**

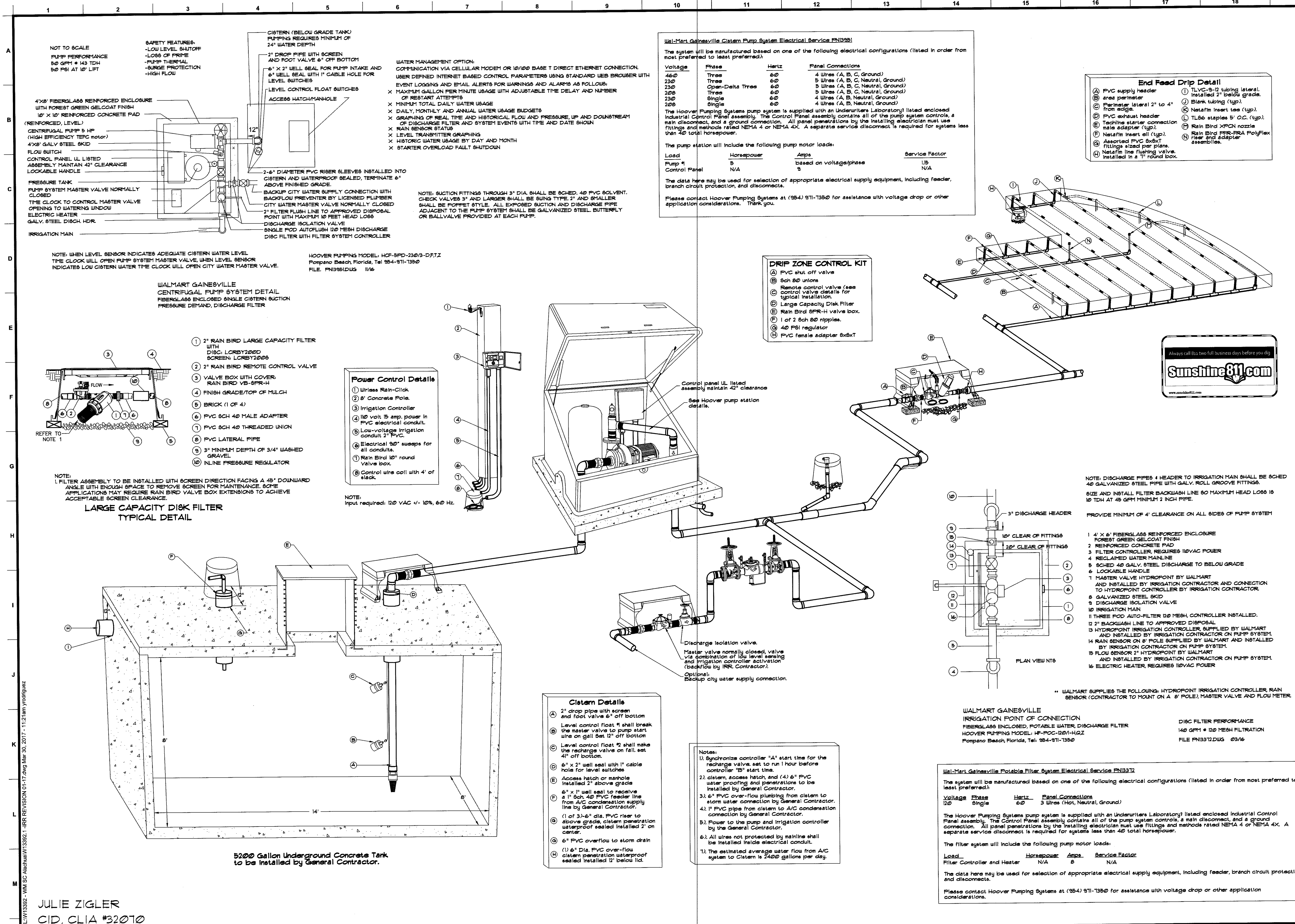
STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

Sheet No.  
**IR-9**









**Walmart Gainesville Cistern Pump System Electrical Service FN13321**

The system will be manufactured based on one of the following electrical configurations (listed in order from most preferred to least preferred):

Voltage	Phase	Hertz	Panel Connections
460	Three	60	4 Wires (A, B, C, Ground)
230	Three	60	5 Wires (A, B, C, Neutral, Ground)
230	Open-Delta Three	60	5 Wires (A, B, C, Neutral, Ground)
230	Three	60	5 Wires (A, B, C, Neutral, Ground)
230	Single	60	4 Wires (A, B, Neutral, Ground)
208	Single	60	4 Wires (A, B, Neutral, Ground)

The Hoover Pumping Systems pump system is supplied with an Underwriters Laboratory listed enclosed Industrial Control Panel assembly. The Control Panel assembly contains all of the pump system controls, a main disconnect, and a ground connection. All panel penetrations by the installing electrician must use fittings and methods rated NEMA 4 or NEMA 4X. A separate service disconnect is required for systems less than 40 total horsepower.

The pump station will include the following pump motor loads:

Load	Horsepower	Amps based on voltage/phase	Service Factor
Pump #1	5	9	1.0
Control Panel	N/A	N/A	N/A

The data here may be used for selection of appropriate electrical supply equipment, including feeder, branch circuit protection, and disconnects.

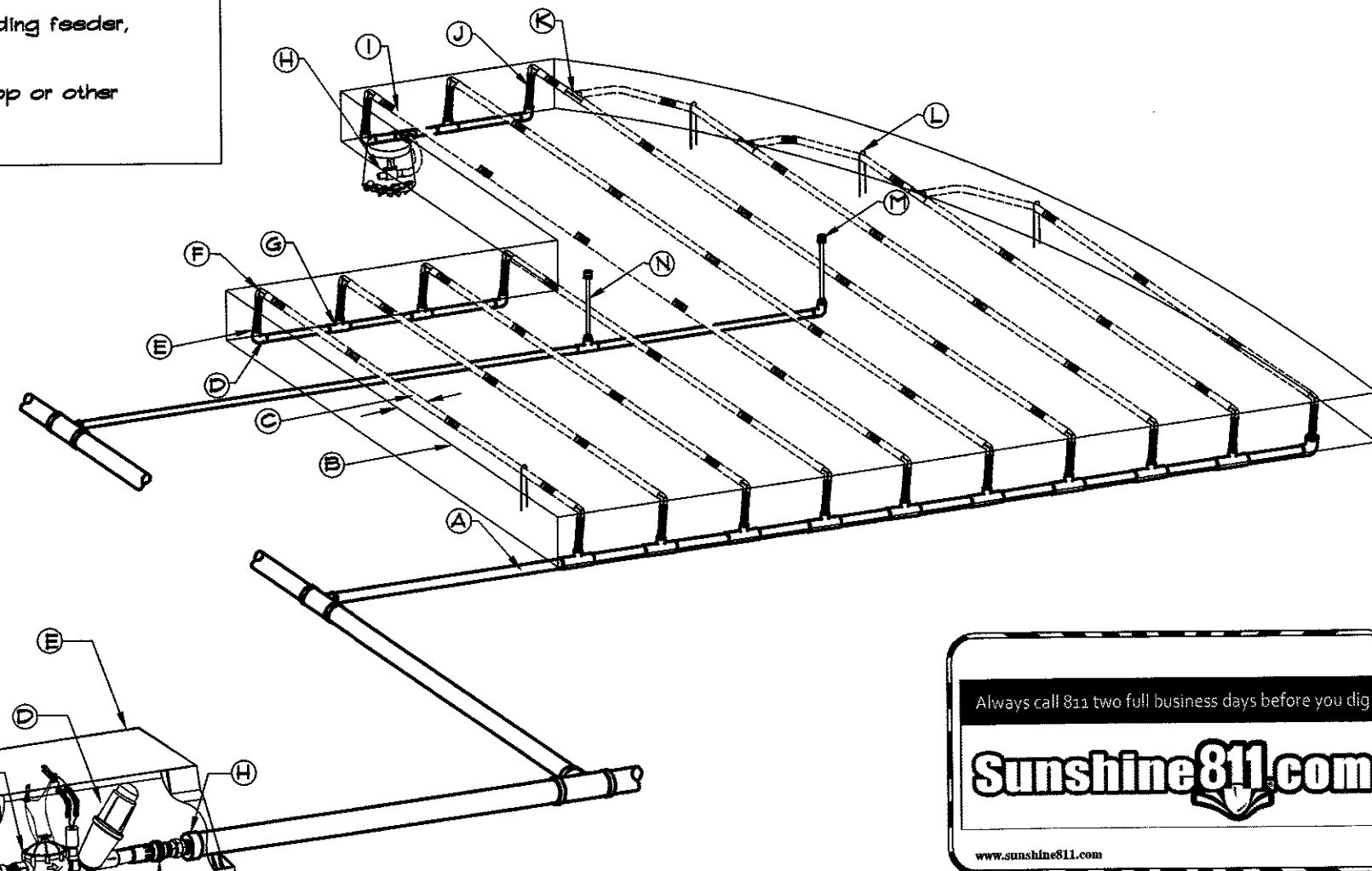
Please contact Hoover Pumping Systems at (954) 971-1350 for assistance with voltage drop or other application considerations. Thank you.

**End Feed Drip Detail**

- (A) PVC supply header
- (B) area perimeter
- (C) Rain Bird lateral 2" to 4" from edge
- (D) PVC exhaust header
- (E) Tee/tee starter connection male adapter (typ.)
- (F) Rain Bird 5PR-H valve box
- (G) Assorted PVC 8x8x1 fittings sized per plans
- (H) Rain Bird line flushing valve installed in a 1" round box
- (I) TLVC-9-12 tubing lateral installed 2" below grade
- (J) Blank tubing (typ.)
- (K) Netafim insert tee (typ.)
- (L) TL66 staples 5' O.C. (typ.)
- (M) Rain Bird XPCN nozzle
- (N) Rain Bird PPR-PRA PolyFlex Tee and adapter assemblies

**DRIP ZONE CONTROL KIT**

- (A) PVC shut off valve
- (B) 8" Sch 80 unions
- (C) Remote control valve (see control valve details for typical installation)
- (D) Large Capacity Disk Filter
- (E) Rain Bird 5PR-H valve box
- (F) 1 of 2 8" Sch 80 nipples
- (G) 40 PSI regulator
- (H) PVC female adapter 8x8x1



**Power Control Details**

- (1) Wireless Rain-Click
- (2) 8" Concrete Pole
- (3) Irrigation Controller
- (4) 110 volt 15 amp power in PVC electrical conduit
- (5) Low-voltage irrigation conduit 2" PVC
- (6) Electrical 90° sweeps for all conduits
- (7) Rain Bird 10" round valve box
- (8) Control wire coil with 4' of slack

NOTE: Input required: 120 VAC +/- 10%, 60 Hz

**LARGE CAPACITY DISK FILTER TYPICAL DETAIL**

- (1) 2" RAIN BIRD LARGE CAPACITY FILTER WITH DISC LCRB22000
- (2) 2" RAIN BIRD REMOTE CONTROL VALVE
- (3) VALVE BOX WITH COVER RAIN BIRD VB-5PR-H
- (4) FINISH GRADE/TOP OF MULCH
- (5) BRICK (1 OF 4)
- (6) PVC SCH 40 MALE ADAPTER
- (7) PVC SCH 40 THREADED UNION
- (8) PVC LATERAL PIPE
- (9) 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- (10) IN LINE PRESSURE REGULATOR

NOTE: 1. FILTER ASSEMBLY TO BE INSTALLED WITH SCREEN DIRECTION FACING A 45° DOWNWARD ANGLE WITH ENOUGH SPACE TO REMOVE SCREEN FOR MAINTENANCE. SOME APPLICATIONS MAY REQUIRE RAIN BIRD VALVE BOX EXTENSIONS TO ACHIEVE ACCEPTABLE SCREEN CLEARANCE.

**PLAN VIEW NTS**

NOTE: DISCHARGE PIPES & HEADER TO IRRIGATION MAIN SHALL BE SCHED 40 GALVANIZED STEEL PIPE WITH GALV. ROLL GROOVE FITTINGS. SIZE AND INSTALL FILTER BACKWASH LINE 60 MAXIMUM HEAD LOSS 10 10 TDH AT 45 GPM MINIMUM 2 INCH PIPE.

PROVIDE MINIMUM OF 4' CLEARANCE ON ALL SIDES OF PUMP SYSTEM

- 1 4' X 6' FIBERGLASS REINFORCED ENCLOSURE FOREST GREEN GELCOAT FINISH
- 2 REINFORCED CONCRETE PAD
- 3 FILTER CONTROLLER, REQUIRES 120VAC POWER
- 4 RECLAIMED WATER MAINLINE
- 5 SCHED 40 GALV. STEEL DISCHARGE TO BELOW GRADE
- 6 LOCKABLE HANDLE
- 7 MASTER VALVE HYDROPOINT BY WALMART AND INSTALLED BY IRRIGATION CONTRACTOR AND CONNECTION TO HYDROPOINT CONTROLLER BY IRRIGATION CONTRACTOR
- 8 GALVANIZED STEEL SKID
- 9 DISCHARGE ISOLATION VALVE
- 10 IRRIGATION MAIN
- 11 THREE POD AUTO-FILTER 120 MESH, CONTROLLER INSTALLED
- 12 2" BACKWASH LINE TO APPROVED DISPOSAL
- 13 HYDROPOINT IRRIGATION CONTROLLER, SUPPLIED BY WALMART AND INSTALLED BY IRRIGATION CONTRACTOR ON PUMP SYSTEM
- 14 RAIN SENSOR ON 8" POLE SUPPLIED BY WALMART AND INSTALLED BY IRRIGATION CONTRACTOR ON PUMP SYSTEM
- 15 FLOW SENSOR 2" HYDROPOINT BY WALMART AND INSTALLED BY IRRIGATION CONTRACTOR ON PUMP SYSTEM
- 16 ELECTRIC HEATER, REQUIRES 120VAC POWER

\*\* WALMART SUPPLIES THE FOLLOWING: HYDROPOINT IRRIGATION CONTROLLER, RAIN SENSOR (CONTRACTOR TO MOUNT ON A 8" POLE), MASTER VALVE AND FLOW METER

**Cistern Details**

- (A) 2" drop pipe with screen and foot valve 6" off bottom
- (B) Level control float #1 shall break the master valve to pump start wire on gall set 12" off bottom
- (C) Level control float #2 shall make the recharge valve on fall set 4" off bottom
- (D) 6" x 2" well seal with 1" cable hole for level switches
- (E) Access hatch or manhole installed 2" above grade
- (F) 6" x 1" well seal to receive a 1" Sch. 40 PVC feeder line from A/C condensation supply line by General Contractor
- (G) (1) of 3-6" dia. PVC riser to above grade, cistern penetration waterproof sealed installed 2" on center
- (H) 6" PVC overflow to storm drain
- (I) 6" Dia. PVC over-flow cistern penetration waterproof sealed installed 12" below lid

**Notes:**

- 1. Synchronize controller "A" start time for the recharge valve set to run 1 hour before controller "B" start time.
- 2. Cistern, access hatch, and (4) 6" PVC water proofing and penetrations to be installed by General Contractor.
- 3. 6" PVC over-flow plumbing from cistern to storm water connection by General Contractor.
- 4. 1" PVC pipe from cistern to A/C condensation connection by General Contractor.
- 5. Power to the pump and irrigation controller by the General Contractor.
- 6. All wires not protected by mainline shall be installed inside electrical conduit.
- 7. The estimated average water flow from A/C system to Cistern is 2400 gallons per day.

**WALMART GAINESVILLE IRRIGATION POINT OF CONNECTION**

FIBERGLASS ENCLOSED, PORTABLE WATER DISCHARGE FILTER

HOOPER PUMPING MODEL: HP-POC-120/1-HQZ

Pompano Beach, Florida, Tel: 954-971-1350

DISC FILTER PERFORMANCE

140 GPM @ 120 MESH FILTRATION

FILE FN13321.DWG 03/16

**Walmart Gainesville Portable Filter System Electrical Service FN13322**

The system will be manufactured based on one of the following electrical configurations (listed in order from most preferred to least preferred):

Voltage	Phase	Hertz	Panel Connections
120	Single	60	3 Wires (Hot, Neutral, Ground)

The Hoover Pumping Systems pump system is supplied with an Underwriters Laboratory listed enclosed Industrial Control Panel assembly. The Control Panel assembly contains all of the pump system controls, a main disconnect, and a ground connection. All panel penetrations by the installing electrician must use fittings and methods rated NEMA 4 or NEMA 4X. A separate service disconnect is required for systems less than 40 total horsepower.

The filter system will include the following pump motor loads:

Load	Horsepower	Amps	Service Factor
Filter Controller and Heater	N/A	8	N/A

The data here may be used for selection of appropriate electrical supply equipment, including feeder, branch circuit protection, and disconnects.

Please contact Hoover Pumping Systems at (954) 971-1350 for assistance with voltage drop or other application considerations.

**cph**

www.cphcorp.com

**A Full Service A & E Firm**

Architects  
Engineers  
Environmental  
Landscape Architects  
M/E/P  
Planners  
Structural  
Surveyors  
Traffic / Transportation

Offices in:  
• Florida  
• Puerto Rico  
• Connecticut  
• Maryland  
• Texas

DESIGNED BY: JSM  
DRAWN BY: JSM  
CHECKED BY: JKW  
APPROVED BY: JKW  
SCALE: N/A  
DATE: 2/17/15  
JOB NO.: W13392.1  
© 2017

**IR-11**

PRELIMINARY IRRIGATION NOTES AND DETAILS

Sheet No.

STORE NO. 3873-00, ALACHUA (SEC 1-75 HWY 441), FLORIDA