

REVISIONS	
COPYRIGHT © 2018	
ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.	
DA	

DONAHUE ARCHITECTURE, INC.
1202 SW 17th Street, Ste 201-165
Ocala, FL 34471
T 352.867.5148
E john@donahue-arch.com
FL CofA # 32147
FL License # AA26000933

BUILDING SECTION

BUILDING SECTION

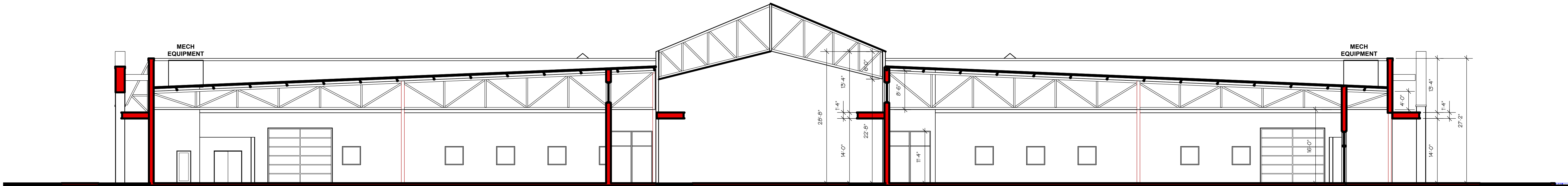
**A New Building For
San Felasco - Tech City
Alachua, Florida**

DATE	06/04/18	
JOB	D_18024	
DRAWN BY	JAD	8
A203	OF	
Review Set	10	

06/04/18



2 **RENDERING**
Scale 1/16" = 1'-0"



1 **BUILDING SECTION**
Scale 3/32" = 1'-0"

REVISIONS	
COPYRIGHT © 2018	
ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.	
DONAHUE ARCHITECTURE, INC. 1202 SW 17th Street, Ste 201-165 Ocala, FL 34471 T 352.867.5148 E john@donahue-arch.com FL CofA # 32147 FL License # AA26000933	DA
BUILDING SECTIONS	
BUILDING SECTIONS	
A New Building For San Felasco - Tech City Alachua, Florida	
DATE 06/04/18	
JOB D_18024	
DRAWN BY JAD	7
A202	OF
Review Set	8

REVISIONS

COPYRIGHT © 2018

ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.

DONAHUE ARCHITECTURE, INC.

1202 SW 17th Street, Ste 201-165
Ocala, FL 34471
T 352.867.5148
E john@donahue-arch.com
FL CofA # 32147
FL License # AA26000933

ELEVATIONS

ELEVATIONS

A New Building For
San Felasco - Tech City
Alachua, Florida

DATE 06/04/18

JOB D_18024

DRAWN BY JAD

A201

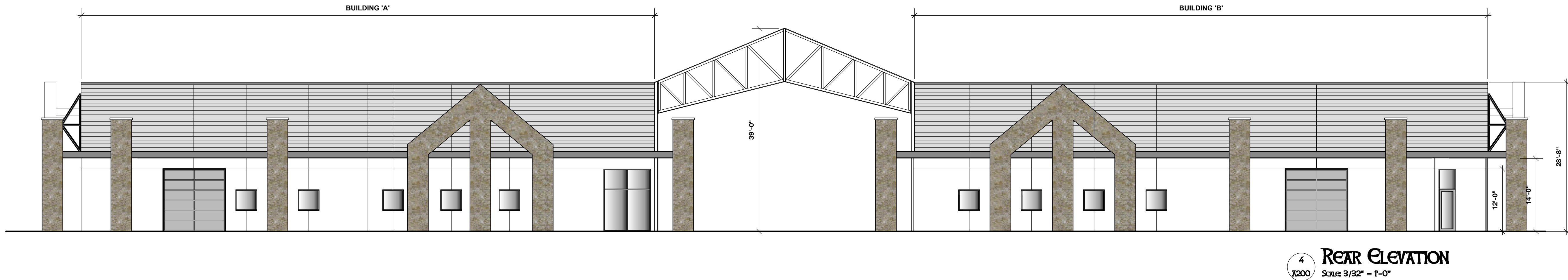
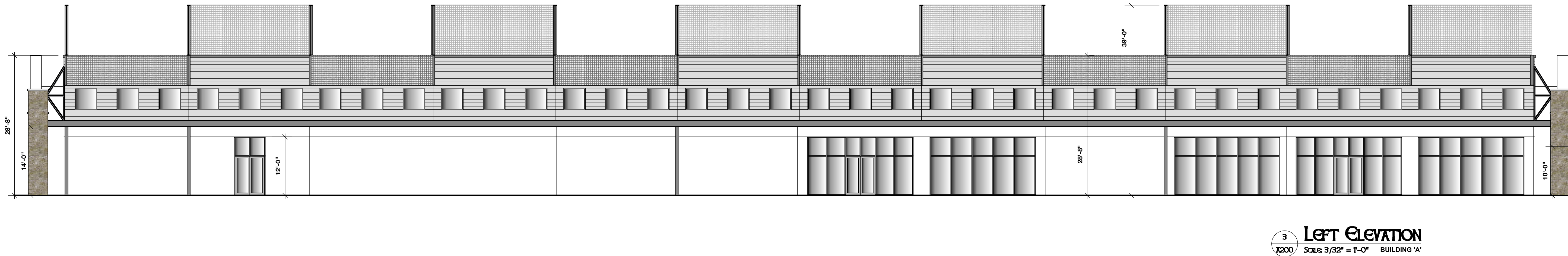
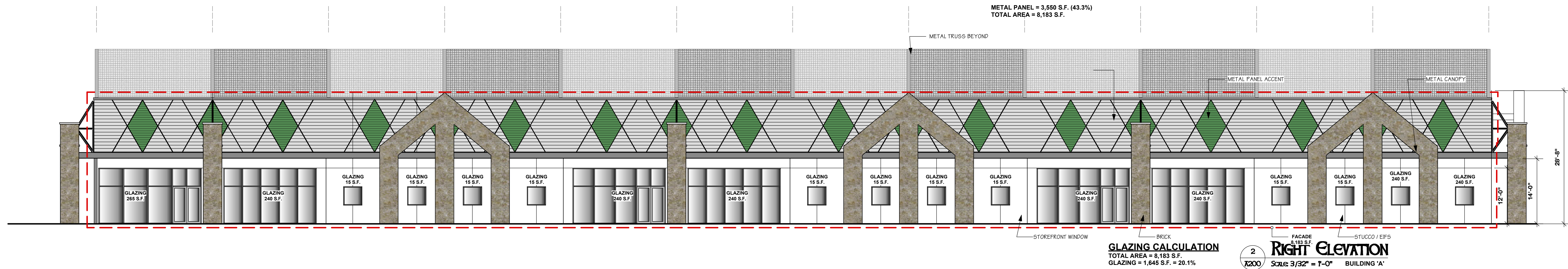
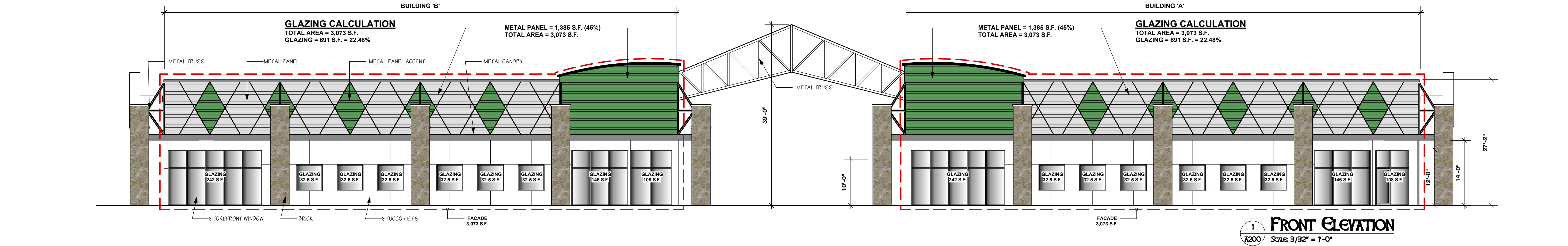
Review Set

6

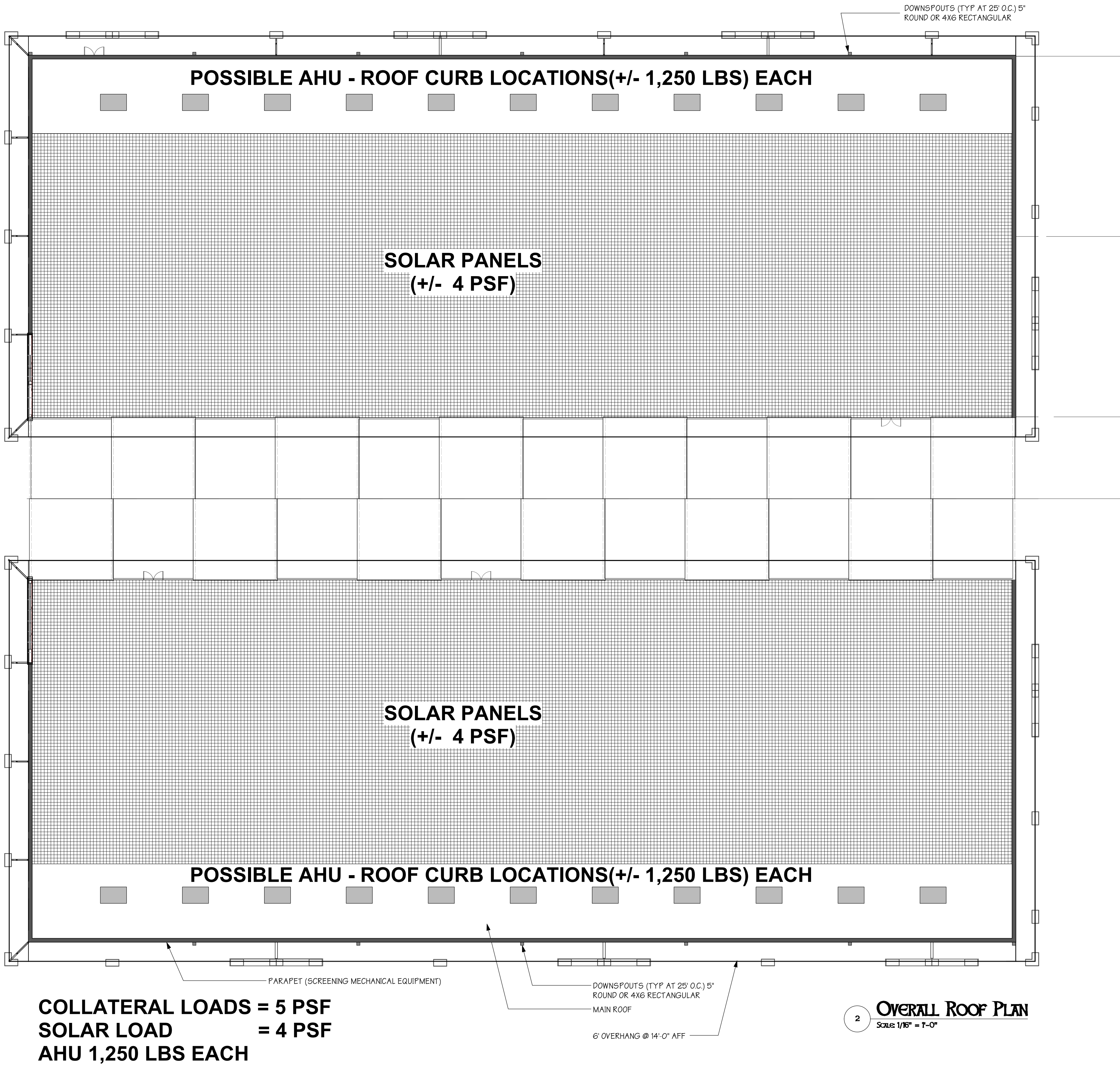
OF

10



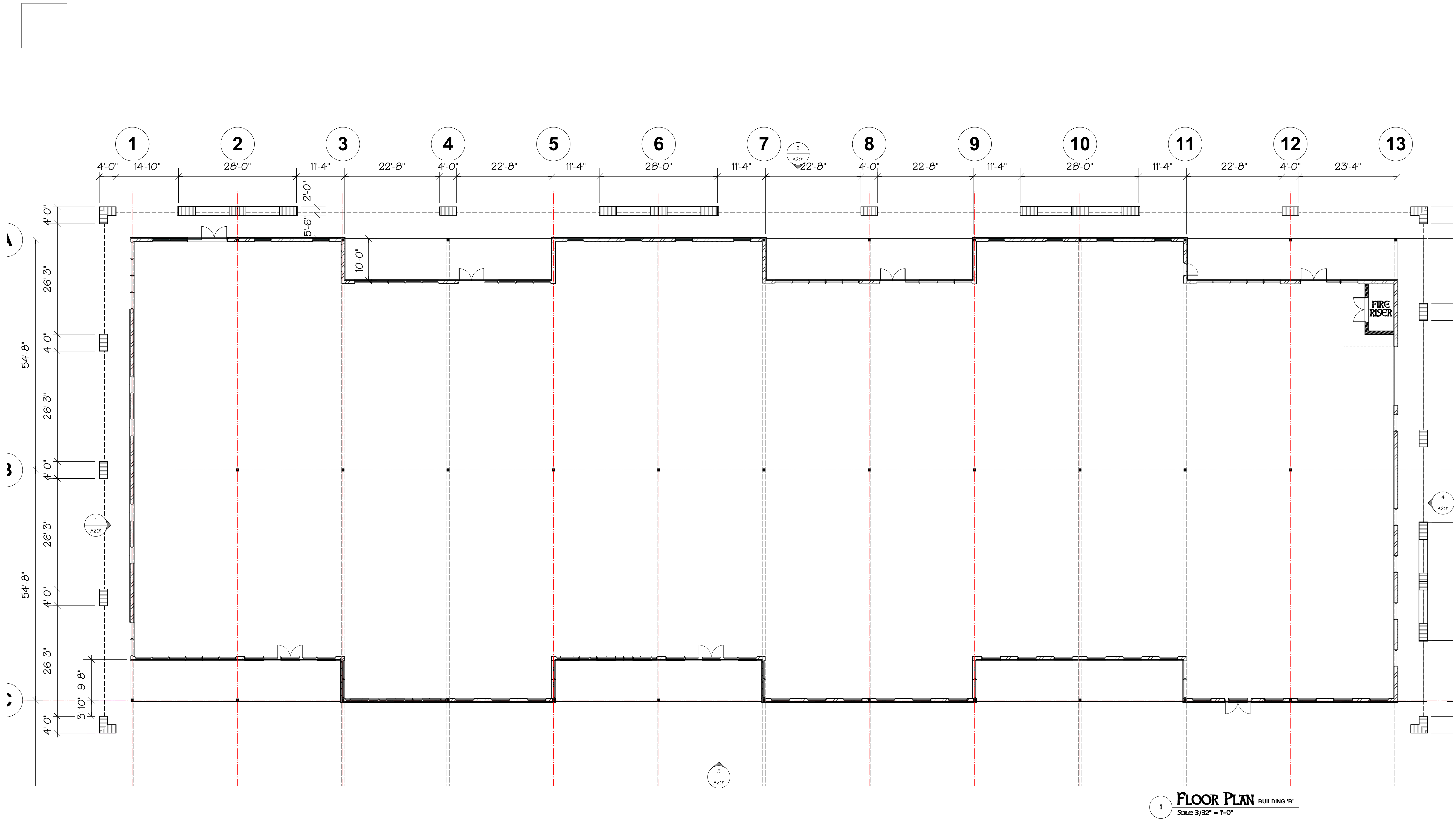


REVISIONS	
COPYRIGHT © 2018	
ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.	
DONAHUE ARCHITECTURE, INC. 1202 SW 17th Street, Ste 201-165 Ocala, FL 34471 T 352.867.5148 E john@donahue-arch.com FL CoFA # 32147 FL License # AA26000933	
DA	
ELEVATIONS	
BUILDING ELEVATIONS	
A New Building For San Felasco - Tech City Alachua, Florida	
DATE JOB DRAWN BY JAD	06/04/18 D_18024 JAD
A200	5 OF 10
Review Set	



REVISIONS	
COPYRIGHT © 2018	
ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.	
DONAHUE ARCHITECTURE, INC. 1202 SW 17th Street, Ste 201-165 Ocala, FL 34471 T 352.867.5148 E john@donahue-arch.com FL CofA # 32147 FL License # AA26000933	
DA	
FLOOR PLANS	
ROOF PLAN	
A New Building For San Felasco - Tech City Alachua, Florida	
DATE JOB	06/04/18 D_18024
DRAWN BY JAD JAD	4
A103	OF 10
Review Set	

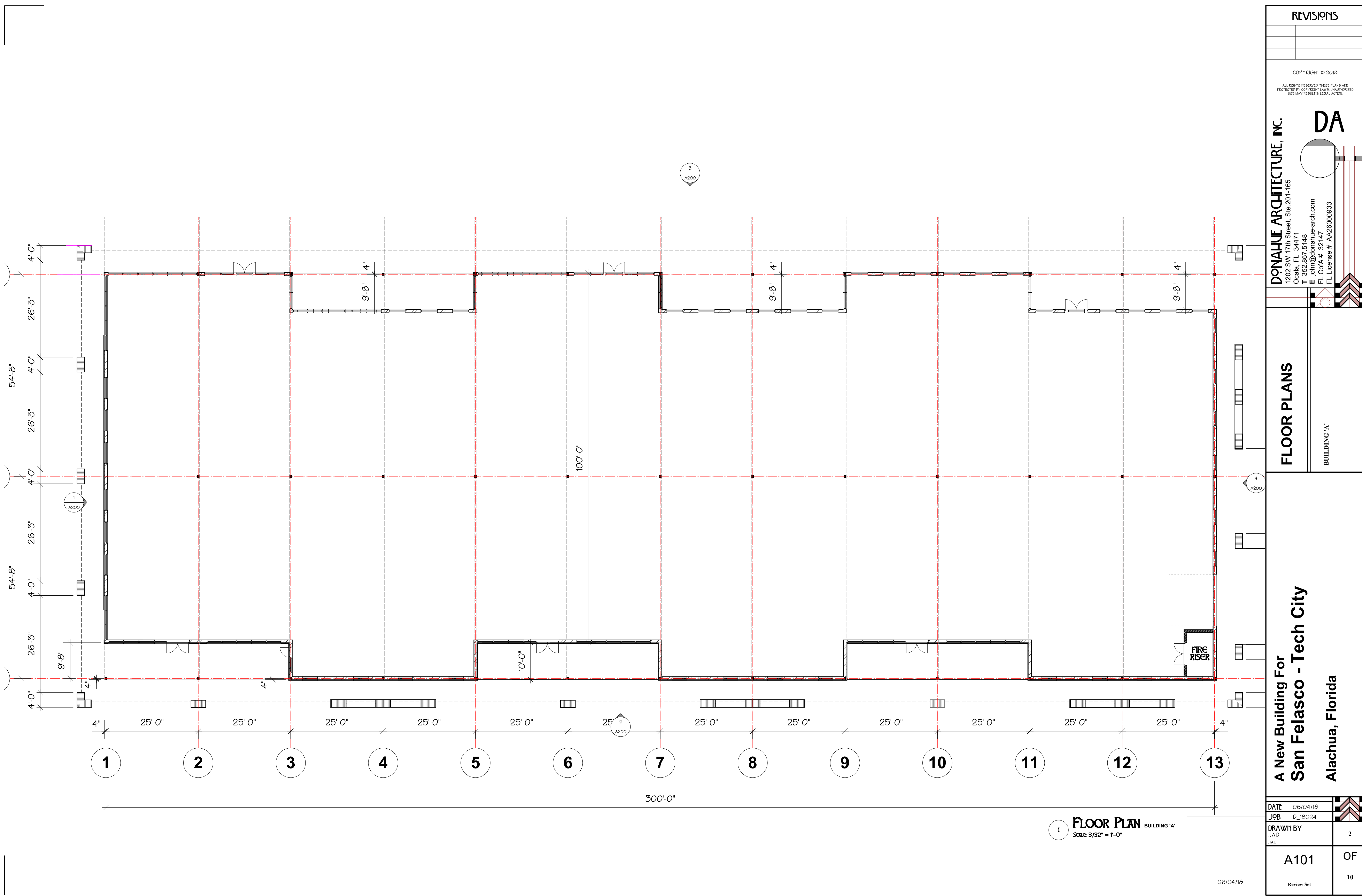
06/04/18



1 FLOOR PLAN BUILDING 'B'
Scale: 3/32" = 1'-0"

REVISIONS	
COPYRIGHT © 2018	
ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.	
DONAHUE ARCHITECTURE, INC. 1202 SW 17th Street, Ste 201-165 Ocala, FL 34471 T 352.867.5148 E john@donahue-arch.com FL CoFA # 32147 FL License # AA26000933	
DA	
FLOOR PLANS	
BUILDING 'B'	
A New Building For San Felasco - Tech City Alachua, Florida	
DATE JOB	06/04/18 D_18024
DRAWN BY JAD JAD	3
A102	OF 10
Review Set	

06/04/18



REVISIONS	
COPYRIGHT © 2018	
ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.	
DONAHUE ARCHITECTURE, INC. 1202 SW 17th Street, Ste 201-165 Ocala, FL 34471 T 352.867.5148 E john@donahue-arch.com FL CofA # 32147 FL License # AA26000933	
DA	
FLOOR PLANS	
BUILDING 'A'	
A New Building For San Felasco - Tech City Alachua, Florida	
DATE JOB	06/04/18 D_18024
DRAWN BY JAD JAD	2
A101	OF 10
Review Set	

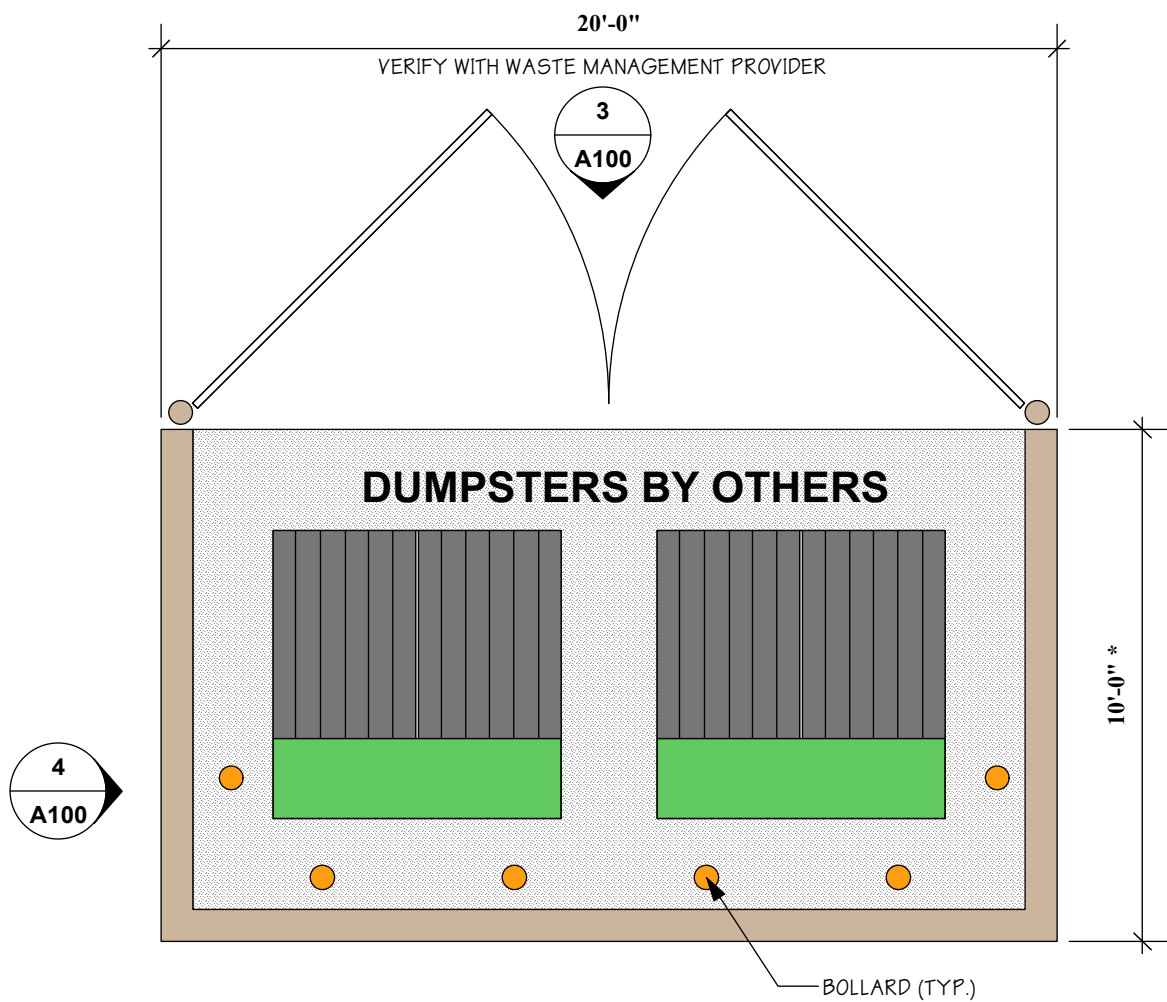
06/04/18

BUILDING DESIGN DATA

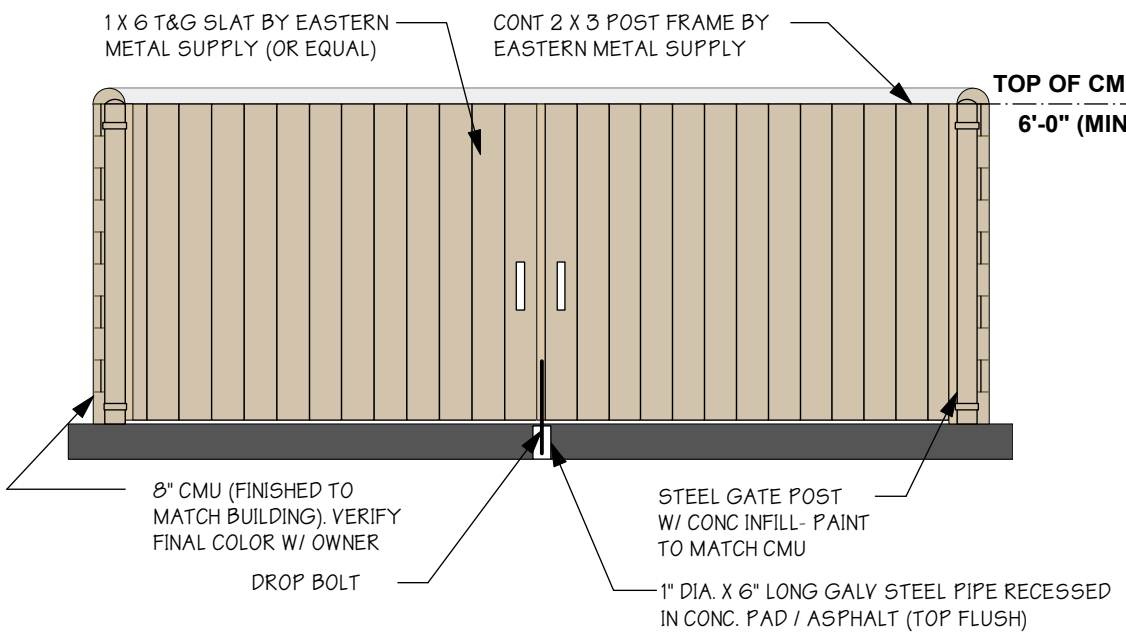
OCCUPANCY CLASSIFICATION - BUSINESS / MERCANTILE
CONSTRUCTION TYPE - TYPE III, SPRINKLED
FLOORS: ONE
ROOF TYPE: SINGLE PLY MEMBRANE
ROOF MATERIAL: PVC
PAVEMENT: CONC / ASPHALT

OVERALL AREA

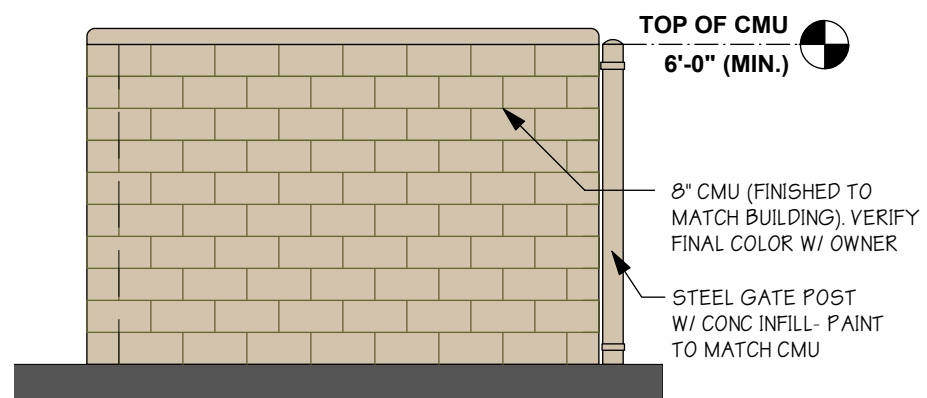
AREA	SQUARE FOOTAGE
BUILDING A	30100 SQ FT
BUILDING A-2	30100 SQ FT
TOTAL SQ. FT.	60200 SQ FT



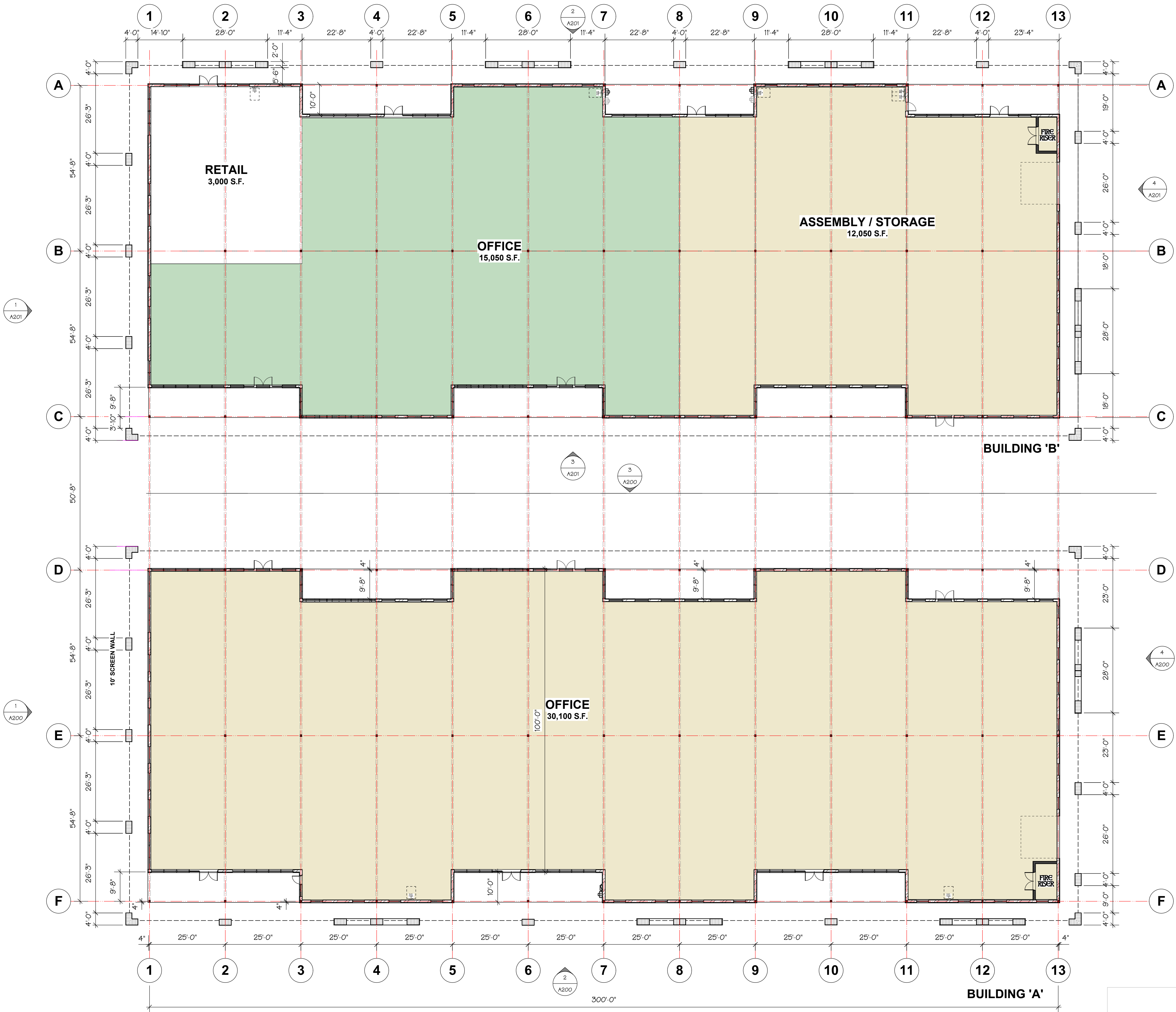
2 DUMPSTER ENCLOSURE PLAN
Scale: 1/4" = 1'-0"



3 DUMPSTER ENCLOSURE ELEVATION
Scale: 1/4" = 1'-0"



4 DUMPSTER ENCLOSURE ELEVATION
Scale: 1/4" = 1'-0"



1 OVERALL PLAN
Scale: 1/16" = 1'-0"

REVISIONS

COPYRIGHT © 2018

ALL RIGHTS RESERVED. THESE PLANS ARE PROTECTED BY COPYRIGHT LAWS. UNAUTHORIZED USE MAY RESULT IN LEGAL ACTION.

DONAHUE ARCHITECTURE, INC.

1202 SW 17th Street, Ste 201-165

Ocala, FL 34471

T 352.867.5148

E john@donahue-arch.com

FL CoFA # 32147

FL License # AA26000933

DA

FLOOR PLANS

OVERALL FLOOR PLANS

A New Building For
San Felasco - Tech City

Alachua, Florida

DATE 06/04/18

JOB D_18024

DRAWN BY JAD

JAD

A100

Review Set

OF

10

06/04/18

SAN FELASCO TECH CITY

for
Laser Investment Group

PROJECT NO: 18-035
CLIENT'S NO.:
ISSUED FOR: **SITE PLAN REVIEW**

4 JUN 2018
18 JUN 2018
25 JUN 2018

AS SHOWN

TREE REMOVAL AND TREE CREDITS NOTES AND CALCULATIONS

L-101

Per City of Alachua ULDR, Article 6., Sec. 6.2.D., Tree planting, relocation, replacement, credit, banking & Sec. 6.2.2.D.4. Landscaping standards, Credits for preservation of existing trees preserved & Table 6.2-3. Credit for existing trees preserved

- Tree Mitigation: New trees shall be installed to replace removed healthy, regulated trees that are 10" DBH and over, excluding those trees on the City's Nuisance Tree List. Removed regulated trees shall be replaced on a 1 tree:1 tree basis. Removed heritage and champion trees shall be replaced on an inch:inch basis. Heritage trees are defined as 30" DBH or larger.

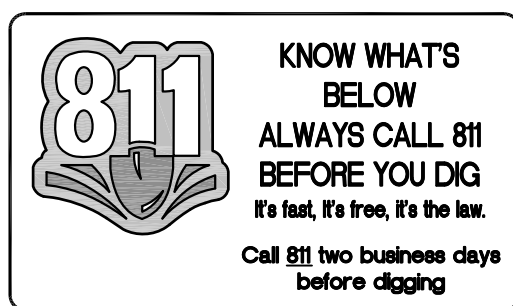
- Replacement Trees: Shall be graded Florida No. 1 or better. Replacement trees shall be of a similar type as that being removed. 50% shall be shade trees and 75% shall be site-specific trees chosen from the recommended tree list.

- **Tree Credits:** Where a minimum number of trees are required to meet the landscaping requirements of these land development regulations or an approved planned development, credit shall be given for the retention of healthy existing native trees. No credit will be given for the preservation of trees on the nuisance tree list. Double credit will be given for each preserved healthy heritage tree accommodated by a change in design within portions of the site proposed for development. Tree credits can be used with the landscaping standards for Subsections 6.2.2(D)(1), Site landscaping; 6.2.2(D)(2), Parking lot landscaping; or 6.2.2(D)(3), Perimeter buffers.

- **NOTE:** Wild Cherry trees, which exist on this site, are included in the City's Nuisance Tree List, App. 6.2.2.A. and as such do not require mitigation if removed. Wild Cherry trees to remain have not been included as tree credits.

- **NOTE:** Trees required for mitigation cannot be used for other site landscaping requirements. Mitigation trees are identified with a 'M' on landscape plans. See landscape plans.

1. **PRE-DESIGN MEETING:** IF REQUESTED BY THE CITY OF ALACHUA, CONDUCT A PRE-DESIGN, ON-SITE MEETING WITH THE LDR ADMINISTRATOR TO LOCATE ANY CHAMPION OR HERITAGE TREES AND OTHER REGULATED TREES AND TO DISCUSS PROTECTION METHODS FOR TREES TO BE RETAINED OR RELOCATED.
2. **EXISTING TREE PROTECTION:** PROTECTIVE BARRIERS SHALL BE CONSTRUCTED, AS NECESSARY, TO PREVENT THE DESTRUCTION OR DAMAGING OF REGULATED TREES LOCATED NEAR ANY CONSTRUCTION ACTIVITY OR STORAGE OF EQUIPMENT AND MATERIALS. PROTECTED TREES SHALL INCLUDE THOSE TREES THAT HAVE NOT BEEN PERMITTED NOR DESIGNATED FOR REMOVAL BY EITHER THE TERMS OF THE PERMIT OR APPROVED DEVELOPMENT ORDER. PROTECTIVE BARRIERS SHALL BE PLAINLY VISIBLE AND SHALL CREATE A CONTINUOUS BOUNDARY AROUND TREES OR VEGETATION CLUSTERS IN ORDER TO PREVENT ENCRoACHMENT BY MACHINERY, VEHICLES, OR STORED MATERIALS. PROTECTIVE BARRIERS SHALL REMAIN IN PLACE AND INTACT UNTIL CONSTRUCTION IS COMPLETED. SEE DETAIL BELOW FOR ADDITIONAL REQUIREMENTS.
3. **EXISTING UTILITIES:** LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. CALL SUNSHINE STATE ONE CALL - SEE LOGO BELOW. A MINIMUM DISTANCE OF TEN FEET SHALL BE MAINTAINED FROM ALL RETAINED REGULATED, HERITAGE, AND CHAMPION TREES WHEN INSTALLING UNDERGROUND UTILITIES. IF THIS RESULTS IN UNREASONABLE HARSHIP, A SOIL AUGER SHALL BE USED TO TUNNEL UNDER THE ROOT SYSTEMS. TREES WHOSE ROOTS ARE KNOWN TO CAUSE ROOT DAMAGE TO PUBLIC ROADWAYS OR OTHER PUBLIC WORKS SHALL NOT BE PLANTED WITHIN 15 FEET OF A PUBLIC UTILITY.
4. **TREE REMOVAL:** TREE REMOVAL SHALL BE CONDUCTED BY A LICENSED GENERAL CONTRACTOR, LICENSED RESIDENTIAL CONTRACTOR, OR TREE REMOVAL COMPANY. THE ENTITY RESPONSIBLE FOR REMOVAL OF THE TREE OR TREES SHALL HAVE A CURRENT OCCUPATIONAL LICENSE WANTED TO BE THE ENTITY IN WHICH THE REMAIN IS LOCATED. PROOF OF CURRENT OCCUPATIONAL LICENSE SHALL BE SUBMITTED AT THE TIME OF APPLICATION FOR TREE REMOVAL PERMIT OR BUILDING PERMIT. A COPY OF THE TREE REMOVAL PERMIT SHALL BE POSTED ON THE SITE DURING CONSTRUCTION, IF APPLICABLE. SEE 'EXISTING REGULATED TREES AND REQUIRED MITIGATION' CHART FOR ADDITIONAL INFORMATION.

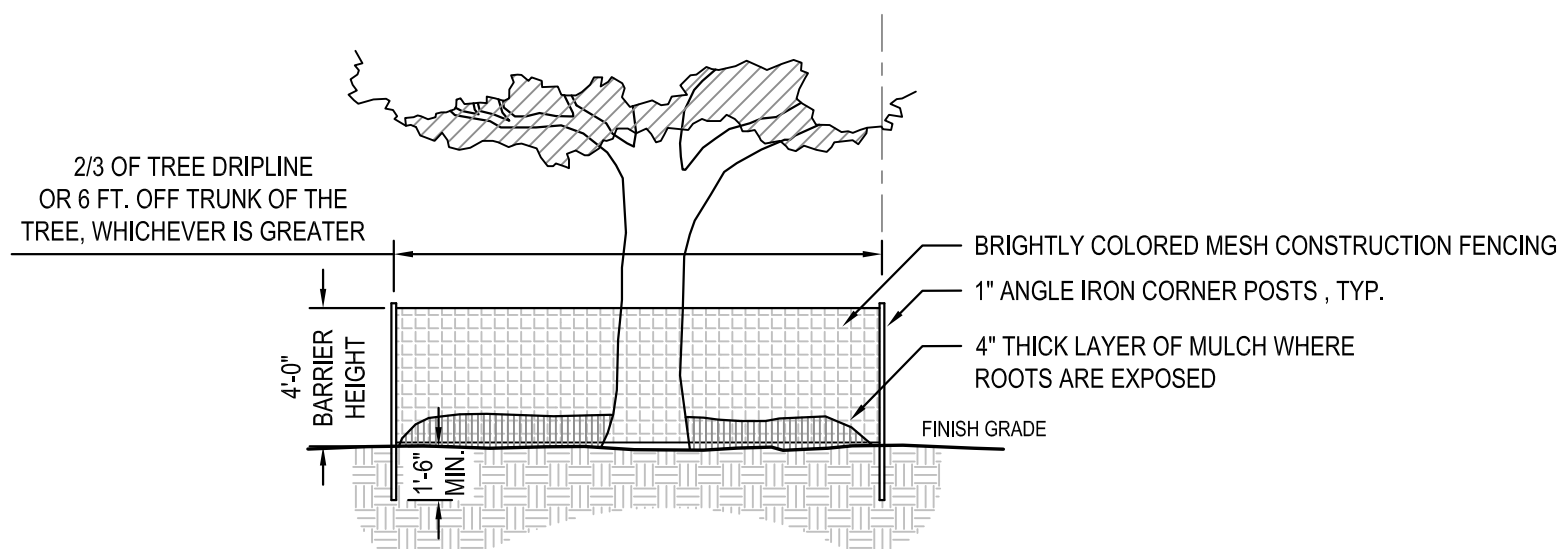


Tree No.	Existing Tree - Scientific / Common Name	Size (DBH)	Remove or Remain?	Mitigation Rate	Mitigation Required (1.5" cal.)	OR Tree Credit	Explanation
1	Quercus laurifolia Laurel Oak	18"	Remove	1:1	1		
2	Quercus laurifolia Laurel Oak	25"	Remove	1:1	1		
3	Quercus virginiana Live Oak	17"	Remove	1:1	1		
4	Quercus laurifolia Laurel Oak	21"	Remove	1:1	1		
5	Quercus laurifolia Laurel Oak	20"	Remove	1:1	1		
6	Quercus virginiana Live Oak	39"	REMAIN			7	
7	Quercus laurifolia Laurel Oak	24"	Remove	1:1	1		
8	Quercus laurifolia Laurel Oak	33"	Remove	inch:inch	22		
9	Sabal palmetto Sabal Palm	12"	Remove	1:1	1		
10	Quercus virginiana Live Oak	21"&30"	Remove	1:1 & inch:inch	21		
11	Quercus virginiana Live Oak	15"	Remove	1:1	1		
12	Quercus laurifolia Laurel Oak	14"	Remove	1:1	1		
13	Quercus virginiana Live Oak	38"	REMAIN			7	
14	Quercus laurifolia Laurel Oak	11"	Remove	1:1	1		
15	Quercus laurifolia Laurel Oak	18"	Remove	1:1	1		
16	Prunus serotina Wild Cherry	13"	Remove	0	0		Wild Cherry does not provide credit nor require mitigation
17	Juniperus silicicola Southern Red Cedar	14"	Remove	1:1	1		
18	Quercus laurifolia Laurel Oak	13"	REMAIN			3	
19	Quercus virginiana Live Oak	37"	REMAIN			7	
20	Juniperus silicicola Southern Red Cedar	15"	Remove	1:1	1		
21	Quercus laurifolia Laurel Oak	17"	Remove	1:1	1		
22	Pinus spp. Pine	16"	Remove	1:1	1		
23	Quercus laurifolia Laurel Oak	20"	Remove	1:1	1		
24	Juniperus silicicola Southern Red Cedar	15"	Remove	1:1	1		
25	Quercus laurifolia Laurel Oak	15"	REMAIN			3	
26	Pinus spp. Pine	19"	Remove	1:1	1		
27	Quercus laurifolia Laurel Oak	10"	Remove	1:1	1		
28	Quercus laurifolia Laurel Oak	13"	Remove	1:1	1		
29	Pinus spp. Pine	14"	Remove	1:1	1		
30	Quercus laurifolia Laurel Oak	20"	Remove	1:1	1		
31	Quercus laurifolia Laurel Oak	33"	Remove	inch:inch	22		
32	Quercus virginiana Live Oak	44"	Remove	inch:inch	30		
33	Prunus serotina Wild Cherry	17"	Remove	0	0		Wild Cherry does not provide credit nor require mitigation
34	Quercus laurifolia Laurel Oak	19"	Remove	1:1	1		
35	Quercus laurifolia Laurel Oak	15"	Remove	1:1	1		
36	Prunus serotina Wild Cherry	25"	Remove	0	0		Wild Cherry does not provide credit nor require mitigation
37	Juniperus silicicola Southern Red Cedar	12"	Remove	1:1	1		
38	Juniperus silicicola Southern Red Cedar	12"	Remove	1:1	1		
39	Juniperus silicicola Southern Red Cedar	23"	REMAIN			4	
40	Quercus laurifolia Laurel Oak	18"	REMAIN			4	
41	Juniperus silicicola Southern Red Cedar	11"	REMAIN			2	
42	Juniperus silicicola Southern Red Cedar	15"	REMAIN			3	
43	Quercus laurifolia Laurel Oak	17"	REMAIN			3	
44	Juniperus silicicola Southern Red Cedar	16"	REMAIN			3	
45	Quercus laurifolia Laurel Oak	14"	REMAIN			3	
46	Prunus serotina Wild Cherry	13"	REMAIN	0	0		Wild Cherry does not provide credit nor require mitigation
47	Quercus laurifolia Laurel Oak	23"	REMAIN			4	
48	Pinus spp. Pine	11"	REMAIN			2	
49	Quercus laurifolia Laurel Oak	17"	REMAIN			3	
50	Pinus spp. Pine	28"	REMAIN			5	
51	Liquidambar styraciflua Sweetgum	12"&10"&6"	Remove	1:1	2		
Total Mitigation Trees Required						123	
						Total Tree Credits Available	63

SEE LANDSCAPE PLAN FOR LOCATION OF MITIGATION
REPLACEMENT TREES AND FOR USE OF TREE CREDITS.

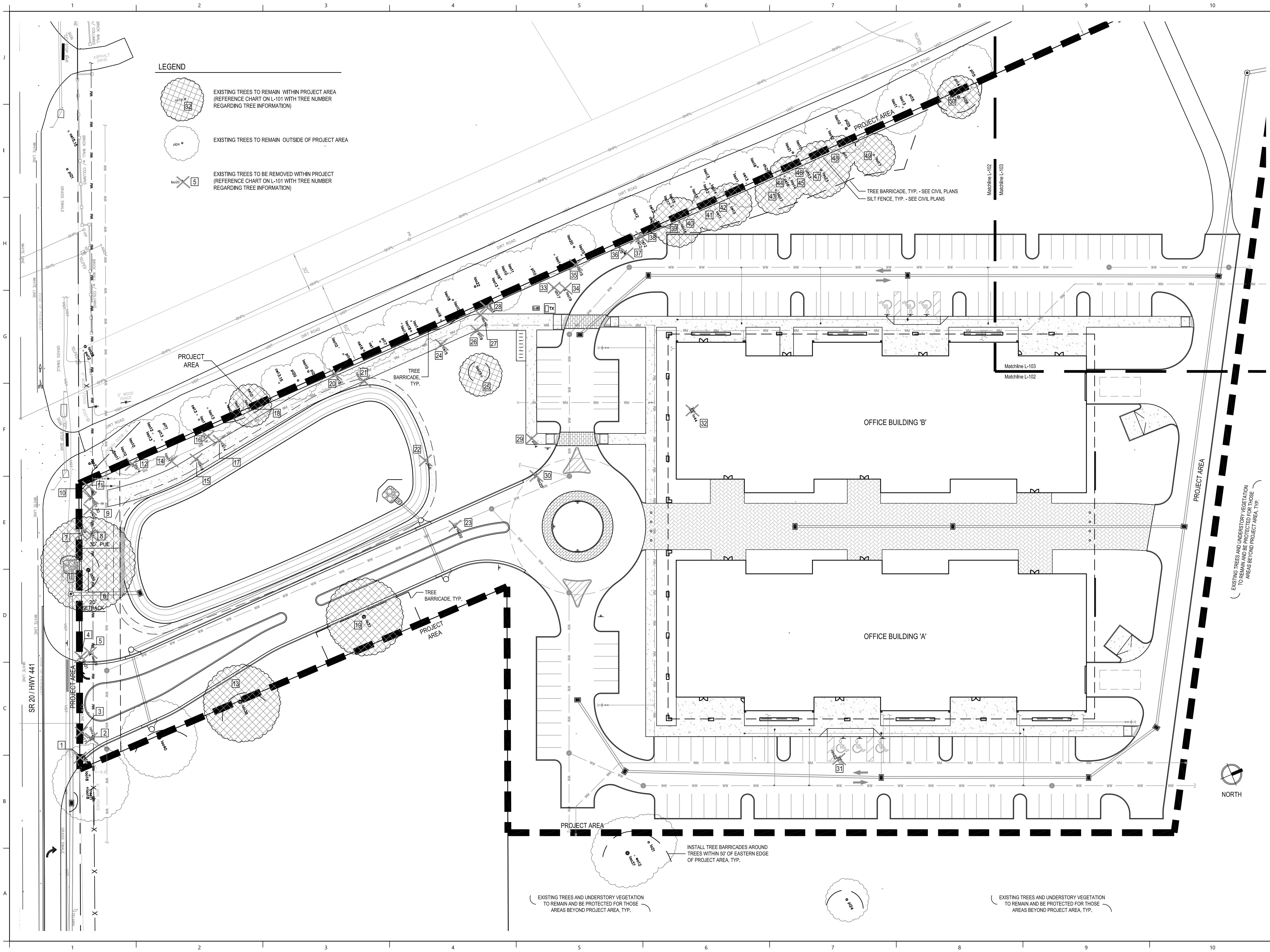
NOTE:

1. PROTECTIVE BARRICADES SHALL BE PLACED AROUND ALL TREES TO BE RETAINED ON THE SITE AND SHALL REMAIN IN PLACE UNTIL SITE CLEARING AND CONSTRUCTION ACTIVITIES ARE COMPLETE. EXCEPT WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE PROTECTED AREA. IF LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE PROTECTED AREA, THEN THE PROTECTIVE BARRICADES SHALL ONLY BE REMOVED WHEN ACTIVITIES ARE OCCURRING. PROTECTIVE BARRICADES SHALL BE REPLACED UPON COMPLETION OF THE ACTIVITIES WITHIN THE PROTECTED AREA.
2. DO NOT STORE MATERIALS OR ALLOW ENCROACHMENT OF VEHICLES OR MACHINERY WITHIN TREE BARRIER AREA. NO BUILDING MATERIALS, DEBRIS, MACHINERY OR HARMFUL CHEMICALS SHALL BE PLACED WITHIN PROTECTIVE BARRIERS. ADDITIONALLY, THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE TREE PROTECTION AREA UNLESS APPROVED BY THE CITY OF ALACHUA DURING SITE PLAN REVIEW: CLEARING OF VEGETATION OTHER THAN BY HAND, COMPACTION, FILLING, OR REMOVAL OF SOIL, AND CONCRETE, ASPHALT, OR OTHER PAVING MATERIALS.
3. NO GRADE CHANGES MAY OCCUR WITHIN TREE BARRIER AREA WITHOUT APPROVAL. IF GRADE CHANGES ARE PROPOSED WITHIN THE TREE BARRIER AREA, EITHER A PROTECTIVE DRYWELL AND ROOT AERATION SYSTEM SHALL BE PROVIDED WHERE GRADE IS RAISED OR A PROTECTIVE RETAINING WALL SHALL BE CONSTRUCTED AT THE PERIMETER OF THE PROTECTIVE RADIUS.
4. NO ATTACHMENTS SHALL BE SECURED TO TREES DESIGNATED TO REMAIN ON SITE.
5. A THREE-INCH LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF ANY EXPOSED ROOTS OF RETAINED REGULATED, HERITAGE, AND CHAMPION TREES AND KEPT WET DURING THE SITE CLEARING AND CONSTRUCTION PHASES.
6. ANY RETAINED OR RELOCATED TREE SHALL BE REPLACED IF THE TREE DIES WITHIN ONE YEAR AFTER SITE CLEARING AND CONSTRUCTION.
7. ANY ROOT PRUNING AND/OR PRUNING OF RETAINED REGULATED, HERITAGE, AND CHAMPION TREES DURING THE SITE CLEARING OR CONSTRUCTION PHASES SHALL BE DONE IN ACCORDANCE WITH ARBORICULTURAL STANDARDS.



SCALE: N.T.S.

PLOTDATE: 06/23/2018 10:52 AM USER: ELISABETH MANLEY
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\04_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035_TR.DWG



SAN FELASCO
TECH CITY

Alachua, FL

for
Laser Investment Group

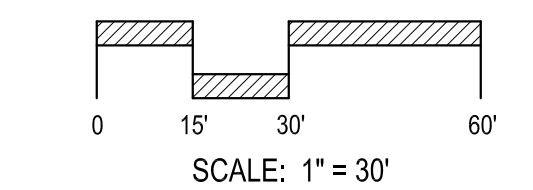
SEAL:

PROJECT NO: 18-035
CLIENT'S NO:
ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018

REVISIONS:
4 JUN 2018
18 JUN 2018
25 JUN 2018

SCALE:



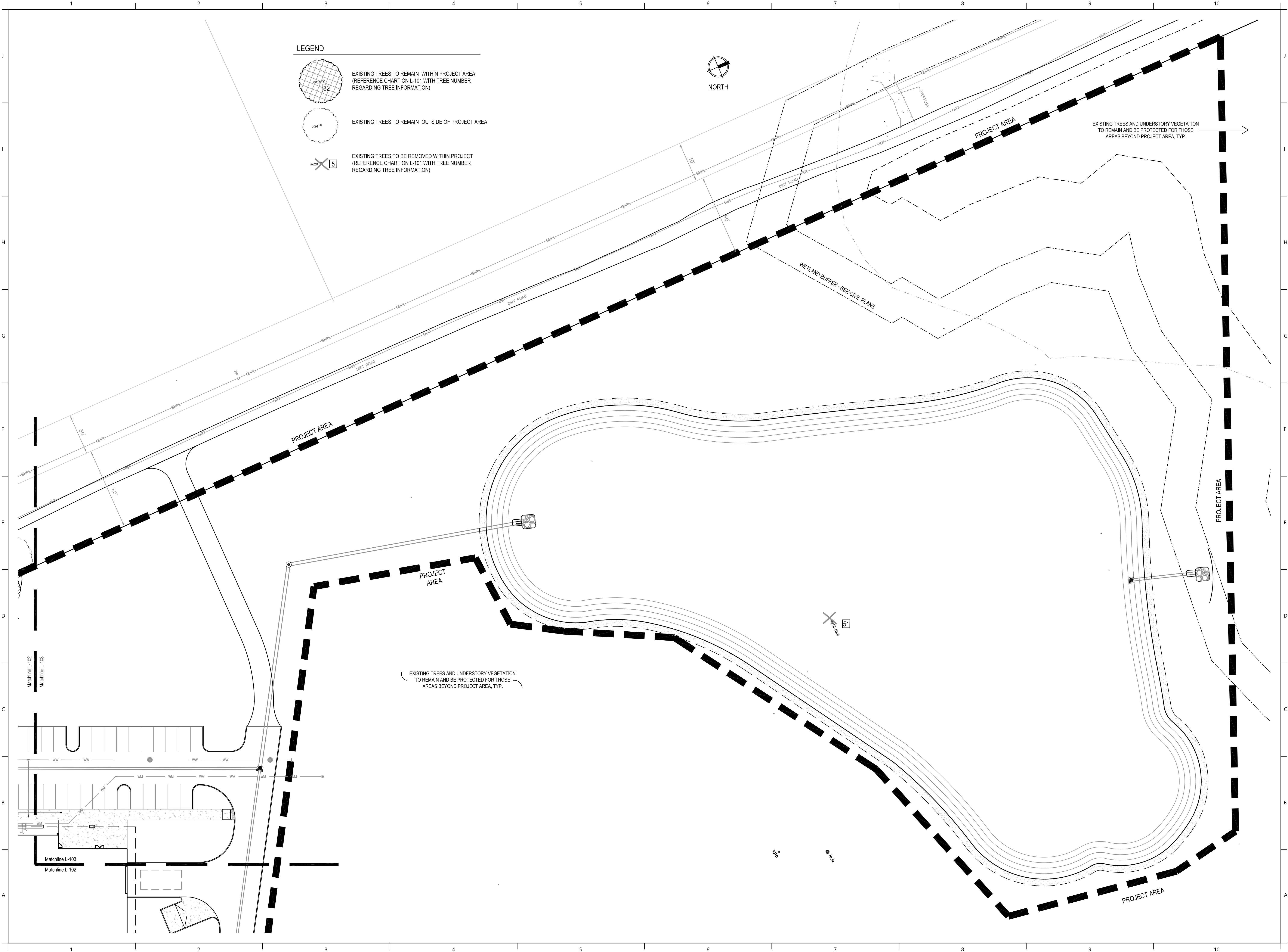
SHEET TITLE:

TREE REMOVAL AND
TREE CREDITS PLAN

SHEET NUMBER:

L-102

PLOTDATE: 06/22/2018 3:03 PM USER: ELISABETH MANLEY
 FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\GA_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035_TR.DWG



PROJECT NAME:

**SAN FELASCO
TECH CITY**

Alachua, FL

for
Laser Investment Group

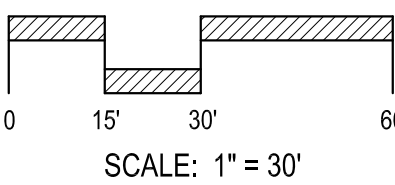
SEAL:

PROJECT NO: 18-035
 CLIENT'S NO:
 ISSUED FOR: **SITE PLAN REVIEW**

ISSUED DATE: 30 APR 2018
 REVISIONS:

4 JUN 2018
 18 JUN 2018
 25 JUN 2018

SCALE:



SHEET TITLE:

**TREE REMOVAL AND
TREE CREDITS PLAN**

SHEET NUMBER:

L-103

PLOTDATE: 06/23/2018 10:01 AM USER: ELISABETH MANLEY
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\04_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035_LANDSCAPE

LANDSCAPE NOTES

- PRE-DESIGN MEETING: IF REQUESTED BY THE CITY OF ALACHUA, CONDUCT A PRE-DESIGN, ON-SITE MEETING WITH THE LDR ADMINISTRATOR TO LOCATE ANY CHAMPION OR HERITAGE TREES AND OTHER REGULATED TREES AND TO DISCUSS PROTECTION METHODS FOR TREES TO BE RETAINED OR RELOCATED.
- EXISTING TREE PROTECTION AND TREE REMOVAL: SEE TREE REMOVAL AND TREE CREDITS PLAN.
- EXISTING UTILITIES: LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. CALL SUNSHINE STATE ONE CALL. SEE LOGO BELOW. A MINIMUM DISTANCE OF TEN FEET SHALL BE MAINTAINED FROM ALL RETAINED, REGULATED, HERITAGE, AND CHAMPION TREES WHEN INSTALLING UNDERGROUND UTILITIES. IF THIS RESULTS IN UNREASONABLE HARSHIP, A SOIL AUGER SHALL BE USED TO TUNNEL UNDER THE ROOT SYSTEMS. TREES WHOSE ROOTS ARE KNOWN TO CAUSE ROOT DAMAGE TO PUBLIC ROADWAYS OR OTHER PUBLIC WORKS SHALL NOT BE PLANTED WITHIN 15 FEET OF A PUBLIC UTILITY.
- VISIBILITY: NO TREE SHALL BE PLANTED WITHIN TEN FEET OF A FIRE HYDRANT OR UTILITY POLE, WITHIN 15 FEET OF A DRIVEWAY APRON, WITHIN 20 FEET OF A TRAFFIC SIGN, OR WITHIN 25 FEET OF AN INTERSECTION IN ORDER TO ENSURE ADEQUATE VISIBILITY.
- PLANTING PREPARATION: REMOVE ALL CONSTRUCTION DEBRIS, LIMEROCK, GRAVEL, ROAD BEDDING, LITTER, AND OTHER ITEMS POTENTIALLY DAMAGING TO PLANT GROWTH WITHIN PROPOSED LANDSCAPE AND TURF AREAS PRIOR TO PLANTING. MAINTAIN EXISTING GRADES UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE. IF FILL IS REQUIRED, USE A CLEAN, SANDY LOAM WITH pH 5.5-6.5 AND EXCAVATED FROM LOCAL SOURCES AND DEEP PITS SUCH THAT IT IS FREE OF WEEDS, SEEDS, LITTER, TOXINS, AND OTHER ITEMS HARMFUL TO PLANTINGS.
- PRUNING: IF TREE OR ROOT PRUNING IS REQUIRED, THESE ACTIVITIES SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA). TREE PRUNING SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT VERSION OF THE AMERICAN NATIONAL STANDARD FOR TREE CARE OPERATIONS "TREE, SHRUB AND OTHER WOODY PLANT MAINTENANCE" (ANSI 300) AND "PRUNING, TRIMMING, REPAIRING, MAINTAINING, AND REMOVING TREES, AND CUTTING BRUSH—SAFETY REQUIREMENTS" (ANSI Z133), NO MORE THAN 25 PERCENT OF THE CROWN SHOULD BE REMOVED AT ONE TIME. ON YOUNG TREES, LIMB REMOVAL SHALL LEAVE NO MORE THAN 33 PERCENT OF THE TRUNK BARE OF BRANCHES.
- PLANT MATERIAL, GENERAL: ALL PLANT MATERIALS SHALL MEET 'FLORIDA NUMBER 1' REQUIREMENTS AS PER THE MOST CURRENT EDITION OF 'FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS', FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
- PROPOSED TREES: PROPOSED CANOPY TREES SHALL BE A MINIMUM OF EIGHT FEET TALL WITH 1 1/2" CALIPER PER FLORIDA GRADES AND STANDARDS. PROPOSED UNDERSTORY TREES SHALL HAVE A CALIPER OF 1 1/2" INCHES.
- PROPOSED SHRUBS: PROPOSED SHRUBS SHALL BE A MINIMUM OF 24" HEIGHT IF UPRIGHT SPECIES AND 18" SPREAD IF SPREADING SPECIES.
- NEW TREE STAKING: IF NECESSARY TO MAINTAIN TREES PLUMB, TREES SHALL BE STAKED WITH BIODEGRADABLE STAKING MATERIALS.
- SOD: ALL UNPAVED AND DISTURBED AREAS OUTSIDE OF PROPOSED TREE, SHRUB, AND GROUND COVER PLANTINGS SHALL BE SODDED. SEE CIVIL PLANS FOR SODDING INFORMATION FOR STORMWATER FACILITIES. SOD SHALL BE SAND-GROWN, STRONGLY ROOTED, WITHOUT SYNTHETIC STABILIZING MATERIALS, FREE OF PESTS, AND CERTIFIED FREE OF NOXIOUS WEEDS BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRY.
- MULCH: THREE INCHES OF MULCH SHOULD COVER TREE RING PLANTING AREAS AND ALL SHRUB AND GROUND COVER PLANTING AREAS. MULCH SHOULD BE NO DEEPER THAN ONE INCH OVER THE TOP OF TREE ROOTBALLS. USE PINE STRAW MULCH FOR ALL PLANTING AREAS. MULCH TO BE FREE OF DEBRIS, STICKS, AND CONES. NO PLASTIC OR NON-BIODEGRADABLE WEED CLOTH OR SURFACE COVERS TO BE USED.
- IRRIGATION: SEE IRRIGATION PLANS FOR IRRIGATION DESIGN.
- RESPONSIBILITY: THE OWNER OF THE PARCEL SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PRESERVED, RELOCATED, OR REPLACEMENT TREES. ALL TREES WILL BE INSPECTED BY AN ARBORIST, FORESTER, OR REGISTERED LANDSCAPE ARCHITECT, HIRED BY THE OWNER, WITHIN SIX MONTHS AFTER PLANTING TO ENSURE THE TREES ARE SURVIVING IN A HEALTHY CONDITION. A CERTIFIED REPORT SHALL BE PROVIDED TO THE LAND DEVELOPMENT REGULATIONS ADMINISTRATOR DESCRIBING THE CONDITION OF TREES. TREES FOUND TO BE IN DECLINING CONDITION SHALL BE REPLACED BY THE OWNER OF THE PARCEL WITHIN 30 DAYS OF SUBMITTAL OF THE REPORT. IF REPLACEMENT IS NECESSARY, THERE SHALL BE A REINSPECTION REPORT SUBMITTED WITHIN SIX MONTHS AFTER THE REPLACEMENT REPLANTING. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPING INSTALLED IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN. ALL PLANT LIFE SHOWN ON A LANDSCAPE PLAN SHALL BE REPLACED IF IT DIES, IS SERIOUSLY DAMAGED, OR REMOVED.



XERISCAPE CRITERIA

Per City of Alachua ULDR, Article 6, Sec. 6.2.2.D.6.b. Xeriscape Standards

- | | |
|-----------|--|
| Required: | (i.) Preserve and maintain native vegetation. |
| Provided: | Site plan preserves areas of existing trees and vegetation. |
| Required: | (ii.) Group plant material into water use zones based on water needs. |
| Provided: | Proposed plant material has low to moderate watering requirements and as such can be grouped together in irrigation zones. See Irrigation Plans. |
| Required: | (iii.) Ensure plant types are appropriate for soils. |
| Provided: | Selected plant material includes native tree species and Florida-friendly shrubs and groundcovers that are appropriate for anticipated site soils. |
| Required: | (iv.) Use of mulch. |
| Provided: | Mulch is proposed for all trees, shrubs, and groundcover areas. |
| Required: | (v.) Use of low water use plants. |
| Provided: | Native tree species are proposed, and Florida-friendly, low or moderate water demanding shrub and groundcover species are proposed. |
| Required: | (vi.) Efficient irrigation. |
| Provided: | See Irrigation Plans, which does not water turf as it is a drought-tolerant species, provides a rain sensor, minimizes overspray and groups irrigation zones per plant type and similar watering demand. |
| Required: | (vii.) Maintenance. |
| Provided: | Maintenance of landscape and irrigation is required per note 14 above, Landscape Notes. |
| Required: | (viii.) Drip irrigation or emitters. |
| Provided: | Irrigation design includes drip irrigation - See Irrigation Plans. |

Proposed landscape and irrigation design meet Xeriscape requirements for this project.

TREE CREDITS & TREE MITIGATION

Use of Credits: Where a minimum number of trees are required to meet the landscaping requirements of these land development regulations or an approved planned development, credit shall be given for the retention of healthy existing native trees. No credit will be given for the preservation of trees on the nuisance tree list. Double credit for will be given for each preserved healthy heritage tree accommodated by a change in design within portions of the site proposed for development. Tree credits can be used to comply with the landscaping standards for Subsections 6.2.2(D)(1), Site landscaping; 6.2.2(D)(2), Parking lot landscaping; or 6.2.2(D)(3), Perimeter buffers.

See 'TREE REMOVAL AND TREE CREDITS PLAN' for list of tree credits. See tree numbers on plans for reference.

- Total tree credits available: 63 credits
- Total tree credits used: 63 credits

See 'TREE REMOVAL AND TREE CREDITS PLAN' for list of tree required mitigation trees. 50% mitigation trees to be canopy trees and 75% to be site specific species. Mitigation trees may not be used to satisfy other site landscape requirements. Mitigation trees are indicated with a 'M' on plans.

- Total mitigation trees required: 123 replacement trees at 15 gal., 1.5" caliper
- Total mitigation trees provided: 123 replacement trees at 15 gal., 1.5" caliper including 63 Canopy (51%) and 60 Understory (49%) and all are site specific species

SITE LANDSCAPE REQUIREMENTS

Per City of Alachua ULDR, Article 6, Sec. 6.2.2.D.1. Landscape Standards (c.) Business Uses

REQUIREMENTS =

- Canopy Trees, Primary/Street Facing Site Areas: (3) canopy trees per acre located on primary side.
- Canopy Trees, Side and Rear Site Areas: (2) canopy trees per acre located on sides and rear sides.
- Understory Trees, Entire Site: (6) ornamental/understory trees per acre, with 50% planted in front of the structure and 25% planted on each side.
- Grassing, Entire Site: A combination of solid sod, seeding and sprigs to cover 100% of the lot site disturbed by construction activities. Areas of native vegetation do not have to be sodded. An area within 20 feet of the front building facade shall be sodded with other disturbed areas to be sodded, seeded or sprigged.
- Building Facade: An additional (4) canopy trees for each 100 lineal feet of facade, planted in front of the facade. An existing canopy tree that is a native species and in very good to excellent health can be utilized to fulfill this requirement if it is located within 25 feet of the building. It is encouraged that the tree be located so that it may provide shade on the structure during the summer afternoon. A row of shrubs planted along all facades of the structure, with consideration given to access to utility meters or mechanical equipment. In lieu of a horizontal line of shrubs along the front facade, shrub masses of three or more species may be utilized. Shrubs shall not be planted directly against the structure, but a minimum of two feet from the facade to facilitate adequate air circulation.

PROVIDED = Total Project Area 13.3 AC

SIDE OF SITE	REQUIRED	PROVIDED
Front, South	Canopy: 3/AC = 40 Trees at 15-gallon, 1.5" caliper Understory: 6/AC with 50% in Front = 80 Trees total with 40 in front	Canopy: 42 Canopy trees provided Understory: 40 Understory trees provided
Side, East	Canopy: 2/AC = 27 Trees at 15-gallon, 1.5" caliper Understory: 6/AC with 25% on side = 20 Trees	Canopy: 16 Canopy trees provided + 9 tree credits Understory: 19 Understory trees provided + 1 tree credit
Side, West	Canopy: 2/AC = 27 Trees at 15-gallon, 1.5" caliper Understory: 6/AC with 25% on side = 20 Trees	Canopy: 27 Canopy trees provided Understory: 20 Understory trees provided
Rear, North	Canopy: 2/AC = 27 Trees at 15-gallon, 1.5" caliper Understory: None	Canopy: 57 Canopy trees provided Understory: 42 Understory trees provided
Bldg. Facade	1 Canopy tree / 25 LF Row of shrubs, all perimeters Total facade = 1,133 LF/25 = 46 Trees at 15-gallon, 1.5" caliper Continuous hedge	12 Canopy trees provided + 34 credits Continuous hedge where landscape areas are available

ARTERIAL FRONTAGE SCREENING REQUIREMENTS

Per City of Alachua ULDR, Article 6, Sec. 6.2.3.E. Arterial Frontage

REQUIREMENTS = Arterial frontage shall be screened with a series of canopy and understory trees, shrubs and ground cover, as follows. This requirement applies to the project's southern frontage along US Hwy 441.

- 5 canopy trees every 100 lineal feet of arterial frontage; and
- 3 understory/ornamental trees every 100 lineal feet of arterial frontage; and
- A continuous row of shrubs or groups of shrubs that forms an opaque screen for the entire length of arterial frontage
- 210 LF frontage

REQUIREMENT	PROVIDED
210 LF frontage / 20LF = 11 Canopy trees	1 Existing tree + 10 Proposed canopy trees
210 LF frontage / 33 LF = 7 Understory trees	7 Proposed understory trees
Continuous hedge	Continuous hedge

TREE DIVERSITY REQUIREMENTS

Per City of Alachua ULDR, Article 6, Sec. 6.2.2.D.8. Plantings

REQUIREMENTS =

- When fewer than (20) trees are required on a site, no more than 50% shall be of one type, OR
- When more than (20) but fewer than (40) trees are required, no more than 50% shall be of one single species, OR
- When (40) or more trees are required, no more than 50% of the required trees shall be of one single species.

TOTAL REQ. TREES	REQUIREMENT	PROVIDED
386	No more than a total of 193 for one proposed species	Most of one species is 91

PARKING LOT LANDSCAPE REQUIREMENTS

Per City of Alachua ULDR, Article 6, Sec. 6.2.2.D.2. Parking Lot Landscaping

REQUIREMENTS =

- Offset: Allow for a 2 1/2-foot bumper overhang from the face of the curb to new plantings.
- Parking Interior Areas: (1) canopy or understory tree/2,000 SF with (10) shrubs per tree, ideally within interior of parking lot islands.
- Parking Perimeter: Shall be a minimum of five feet, and an average of seven feet in width along the entire length of the perimeter of the parking lot. The width of the buffer may vary to allow for design creativity, as long as a minimum width of five feet is maintained. Include (4) canopy trees for every 100 lineal feet, (2) understory/ornamental trees per 100 lineal feet, and a continuous, opaque screen of shrub material parallel to the parking lot area. The shrubs may be arranged in a linear or curvilinear pattern, as long as the screen does not have any visual breaks. The parking lot screen shall reach 36 inches in height within three years.

PROVIDED =

REQUIREMENT	PROVIDED
Parking Area 'A': 46 LF northern perimeter & 55 LF southern perimeter 46 LF/ 25 = 2 Canopy trees + 55 LF / 25 = 3 Canopy trees 46 LF/ 50 = 1 Understory tree + 55 LF/ 50 = 2 Understory trees 5 Canopy trees & 3 Understory trees 3,085 SF / 2,000 SF parking lot area = 2 trees 10 shrubs/ parking lot island	5 Canopy trees 4 Understory trees 2 canopy trees 10 shrubs/ parking lot island
Parking Area 'B': 46 LF northern perimeter & 90 LF southern perimeter 46 LF/ 25 = 2 Canopy trees + 90 LF / 25 = 4 Canopy trees 46 LF/ 50 = 1 Understory tree + 90 LF/ 50 = 2 Understory trees 6 Canopy trees & 3 Understory trees 4,705 SF / 2,000 SF parking lot area = 3 trees 10 shrubs/ parking lot island	8 Canopy trees 4 Understory trees 3 canopy trees 10 shrubs/ parking lot island
Parking Area 'C': 308 LF western perimeter & 328 LF eastern perimeter 308 LF/ 25 = 13 Canopy trees + 328 LF / 25 = 14 Canopy trees 308 LF/ 50 = 7 Understory trees + 328 LF/ 50 = 7 Understory trees 27 Canopy trees & 14 Understory trees 18,220 SF / 2,000 SF parking lot area = 9 trees 10 shrubs/ parking lot island	13 Canopy trees + 14 credits 21 Understory trees 9 canopy trees 10 shrubs/ parking lot island
Parking Area 'D': 364 LF western perimeter & 328 LF eastern perimeter 364 LF/ 25 = 15 Canopy trees + 328 LF / 25 = 14 Canopy trees 364 LF/ 50 = 8 Understory trees + 328 LF/ 50 = 7 Understory trees 29 Canopy trees & 15 Understory trees 20,535 SF / 2,000 SF parking lot area = 10 trees 10 shrubs/ parking lot island	24 proposed Canopy trees + 5 credits 18 Understory trees 10 canopy trees 10 shrubs/ parking lot island

SITE PERIMETER LANDSCAPE BUFFER REQUIREMENTS

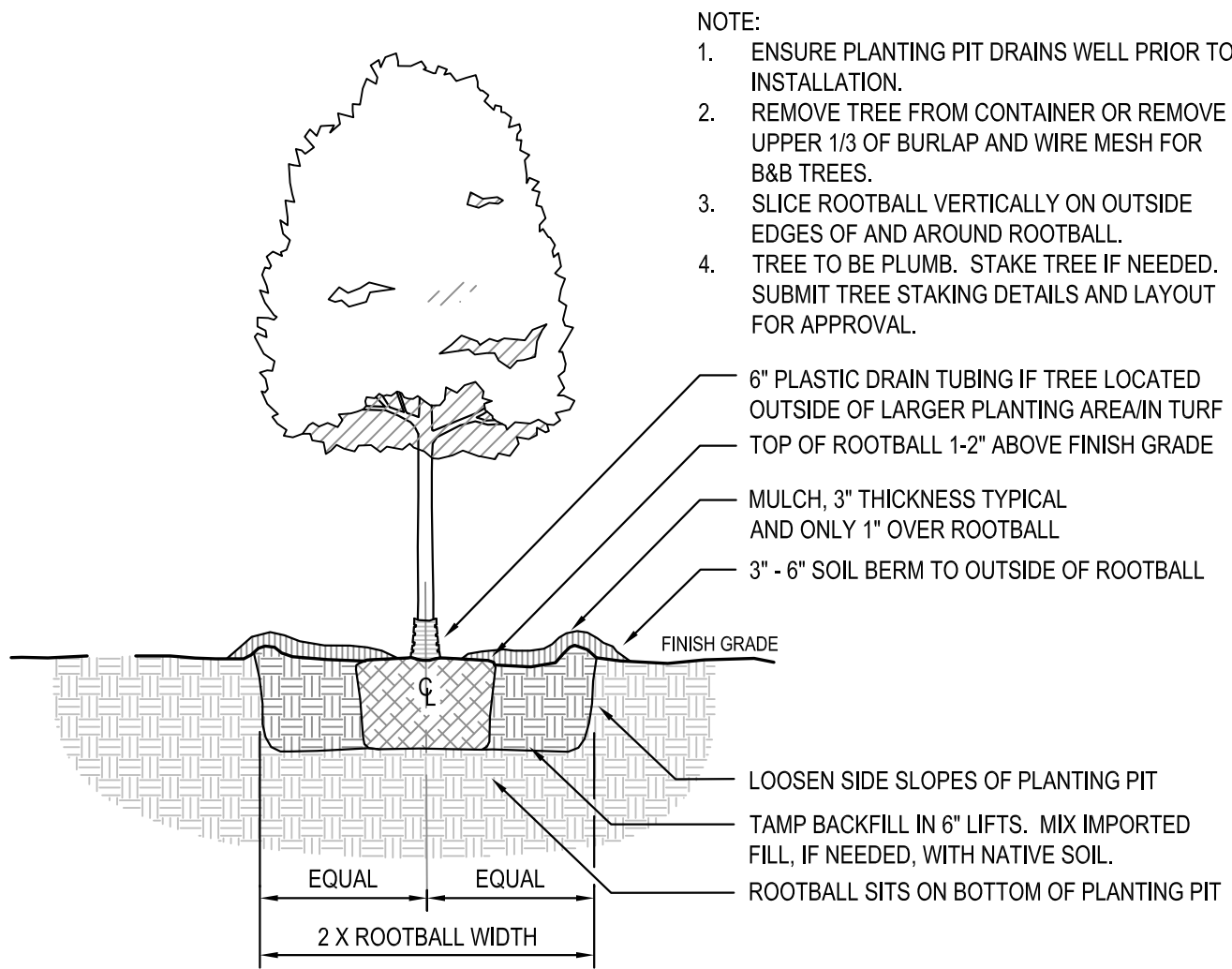
Per City of Alachua ULDR, Article 6, Sec. 6.2.2.D.3. Perimeter Buffers

REQUIREMENTS =

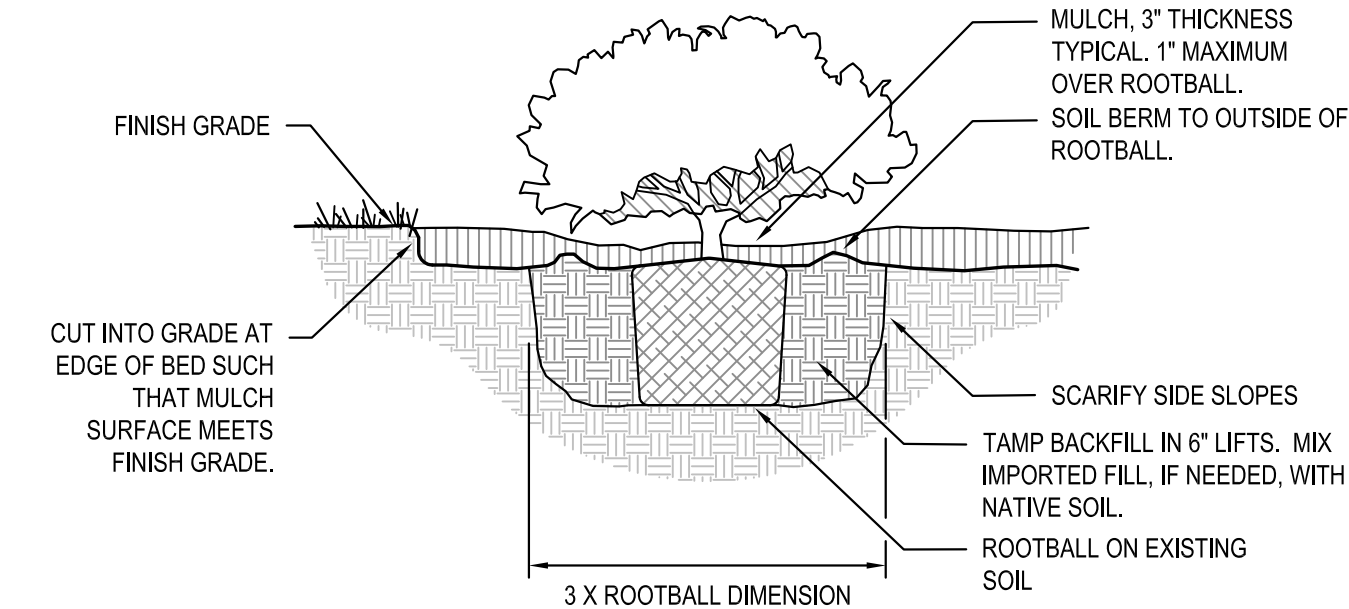
- Land uses that do not require buffers (Sec. 6.2.2.D.3.a.ii.): Development located within the CSV, AG, CBD and PD districts shall not be required to provide a perimeter buffer in accordance with the requirements of this section.
- Vacant Adjacent Parcel (Sec. 6.2.2.D.3.d.i.): Where a developing parcel is adjacent to a vacant parcel, the developing parcel may provide one-half of the perimeter buffer required adjacent to the vacant land in accordance with Table 6.2-2, Buffer Class Application.
- Existing Buffers (Sec. 6.2.2.D.3.d.ii.): Where a developing parcel is adjacent to an existing use, then the developing parcel shall provide the full buffer required adjacent to the existing use, unless a perimeter buffer meeting the standards of this section already exists on either lot.
- Existing Trees to Remain Credits (Sec. 6.2.2.D.4.): Canopy or ornamental/understory trees that are in very good to excellent health, that are protected before and during development of the site and maintained thereafter in a healthy growing condition, can be used to comply with the landscaping standards for Subsections 6.2.2(D)(1), Site landscaping; 6.2.2(D)(2), Parking lot landscaping; or 6.2.2(D)(3), Perimeter buffers, of this section. Credits for the preservation of existing canopy or ornamental/understory trees will be based on the standards in Table 6.2-3, Credit for Existing Trees Preserved.

PROVIDED =

SIDE OF SITE	REQUIRED	PROVIDED
Side/West	5' wide Type A, Light Industrial. Selected Option 1 Buffer, which requires one canopy tree per 60 LF and one understory tree per 60 LF. Total length = 1,311 LF to wetland buffer edge/60 = 22 canopy trees and 22 understory trees	24 canopy trees & 24 understory trees planted around existing trees to remain
Side/East that is adjacent to the parcel that fronts US 441 (Alachua County)	The parcel directly to the east of the project site and along/fronting US 441 is within Alachua County and zoned 'BH/Highway Oriented Business'. Type A buffer is required. 5' wide Type A, Light Industrial. Selected Option 1 Buffer, which requires one canopy tree per 60 LF and one understory tree per 60 LF. Total length = 500 LF / 60 = 9 canopy trees and 9 understory trees	9 proposed canopy trees & 10 proposed understory trees planted as possible around existing trees and proposed canopy trees
Side/East that is adjacent to the undeveloped portion of this site, near Phoenix Commercial Park (Alachua County)	7.5' wide Type B, Light Industrial. Selected Option 1 Buffer, which requires one canopy tree per 50 LF and one understory tree per 40 LF. Adjacency is vacant so only half of the requirement applies. Total length = 1,835 LF / 100 = 19 canopy trees and 1,835/80 = 23 understory trees	19 proposed canopy trees & 23 proposed understory trees
Rear/North	7.5' wide Type B, Light Industrial. Selected Option 1 Buffer, which requires one canopy tree per 50 LF and one understory tree per 40 LF. Adjacency is vacant so only half of the requirement applies. Total length = 570 LF / 100 = 6 canopy trees and 570 / 80 LF = 8 understory trees	Plantings follow northern perimeter of retention pond to minimize impacts within wetland buffer. 8 proposed canopy trees & 9 proposed understory trees

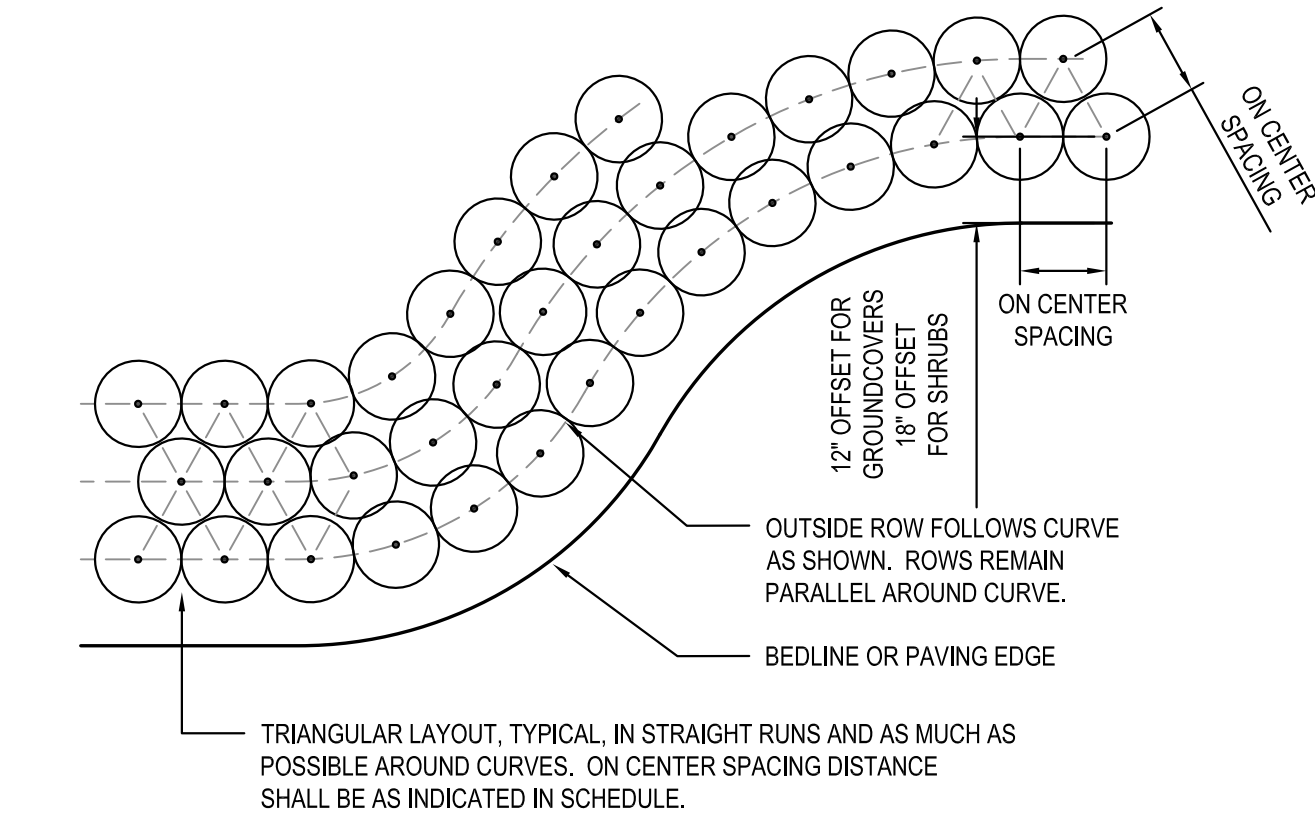


1 TREE PLANTING DETAIL
SCALE: N.T.S.



2 SHRUB AND GROUND COVER PLANTING DETAIL
SCALE: N.T.S.

PLANTING TYPICAL LAYOUT



3 SHRUB AND GROUND COVER LAYOUT DETAIL
SCALE: N.T.S.

PROJECT NAME:

SAN FELASCO
TECH CITY

Alachua, FL

for
Laser Investment Group

SEAL:

PROJECT NO: 18-035
CLIENT'S NO:
ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018
REVISIONS:

4 JUN 2018
18 JUN 2018
25 JUN 2018

SCALE:

AS SHOWN

SHEET TITLE:

LANDSCAPE NOTES,
DETAILS, AND
CALCULATIONS

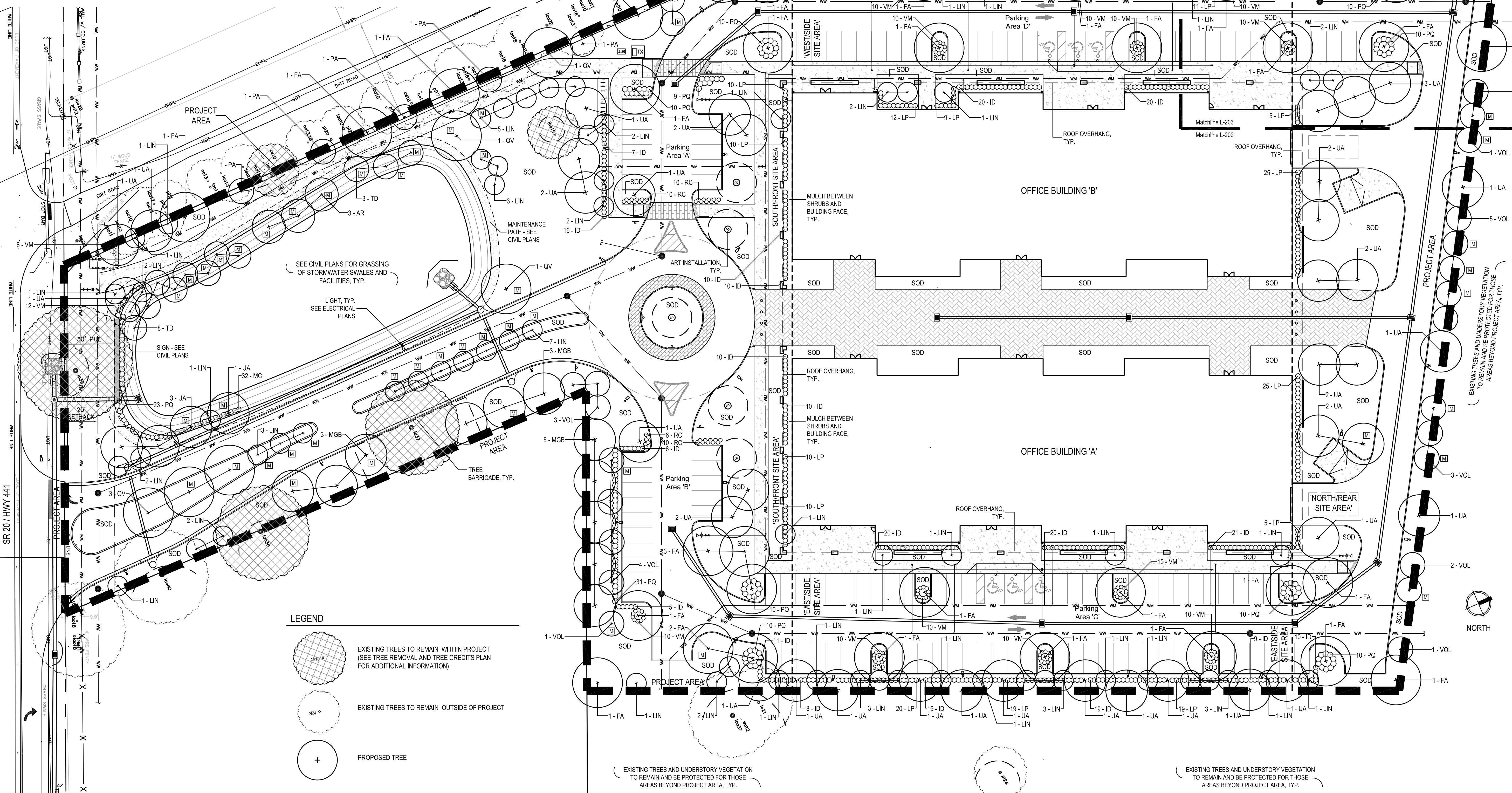
SHEET NUMBER:

L-201

PLOTDATE: 06/23/2018 10:57 AM USER: ELISABETH MANLEY
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\04_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035-LA.DWG

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	NOTES
AR	16	Acer rubrum 'Florida Flame'	Florida Flame Red Maple	15 gal., 9' ht. x 36" sprd., 1.5" cal.	As shown	'Canopy Tree'
FA	49	Fraxinus americana	White Ash	15 gal., 9' ht. x 36" sprd., 1.5" cal.	As shown	'Canopy Tree'
LIN	76	Lagerstroemia indica x faurei 'Natchez'	Natchez Crape Myrtle	15 gal., 8' ht. x 24" sprd., 1.5" cal.	As shown	Standard form, 'Understory Tree'
MGB	27	Magnolia grandiflora 'Brackens Brown Beauty'	Bracken's Southern Magnolia	15 gal., 9' ht. x 36" sprd., 1.5" cal.	As shown	'Canopy Tree'
PA	14	Prunus angustifolia	Chickasaw Plum	15 gal., 7' ht. x 24" sprd., 1.5" cal.	As shown	'Understory Tree'
QV	27	Quercus virginiana	Southern Live Oak	15 gal., 9' ht. x 36" sprd., 1.5" cal.	As shown	'Canopy Tree'
TD	26	Taxodium distichum	Bald Cypress	15 gal., 8' ht. x 36" sprd., 1.5" cal.	As shown	'Canopy Tree'
UA	60	Ulmus alata	Winged Elm	15 gal., 9' ht. x 36" sprd., 1.5" cal.	As shown	'Canopy Tree'
VOL	91	Viburnum obovatum	Walter's Viburnum	15 gal., 5' ht. x 30" sprd., 1.5" cal.	As shown	'Understory Tree'
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	NOTES
ID	316	Ilex cornuta 'Dwarf Burford'	Dwarf Burford Holly	3 gal., 24" ht. x 18" sprd.	30" o.c.	
LP	237	Loropetalum chinense rubrum 'Plum Delight'	Plum Loropetalum	3 gal., 24" ht. x 18" sprd.	30" o.c.	
MC	32	Muhlenbergia capillaris	Pink Muhly	1 gal., 18" ht., full	30" o.c.	
PQ	153	Paspalum quadrifarium	Crowgrass	1 gal., 18" ht., full	36" o.c.	
RC	36	Rosa x 'Coral Drift'	Coral Drift Rose	3 gal., 12" ht. x 18" sprd.	24" o.c.	
VM	140	Viburnum obovatum 'Mrs Shillers Delight'	Mrs Shillers Delight Viburnum	3 gal., 24" ht. x 18" sprd.	24" o.c.	
SOD/SEED		BOTANICAL NAME	COMMON NAME	SIZE		NOTES
SOD		Paspalum notatum 'Argentine'	Bahia Grass	sod		Sand grown and weed free



MANLEY DESIGN
Landscape Architecture • Site Planning

Manley Design, LLC
3462 NW 13th Avenue
Gainesville, Florida 32605
(352) 363-7412
Certificate of Authorization No. LC26000575

PROJECT NAME:

SAN FELASCO
TECH CITY

Alachua, FL

for
Laser Investment Group

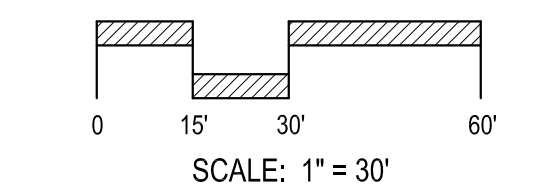
SEAL:

PROJECT NO: 18-035
CLIENT'S NO:
ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018
REVISIONS:

4 JUN 2018
18 JUN 2018
25 JUN 2018

SCALE:



SHEET TITLE:

PLANT SCHEDULE
AND LANDSCAPE
PLAN

SHEET NUMBER:

L-202

**SAN FELASCO
TECH CITY**

for
Laser Investment Group

PROJECT NO: 18-035
CLIENT'S NO.:
ISSUED FOR: **SITE PLAN REVIEW**

4 JUN 2018

18 JUN 2018

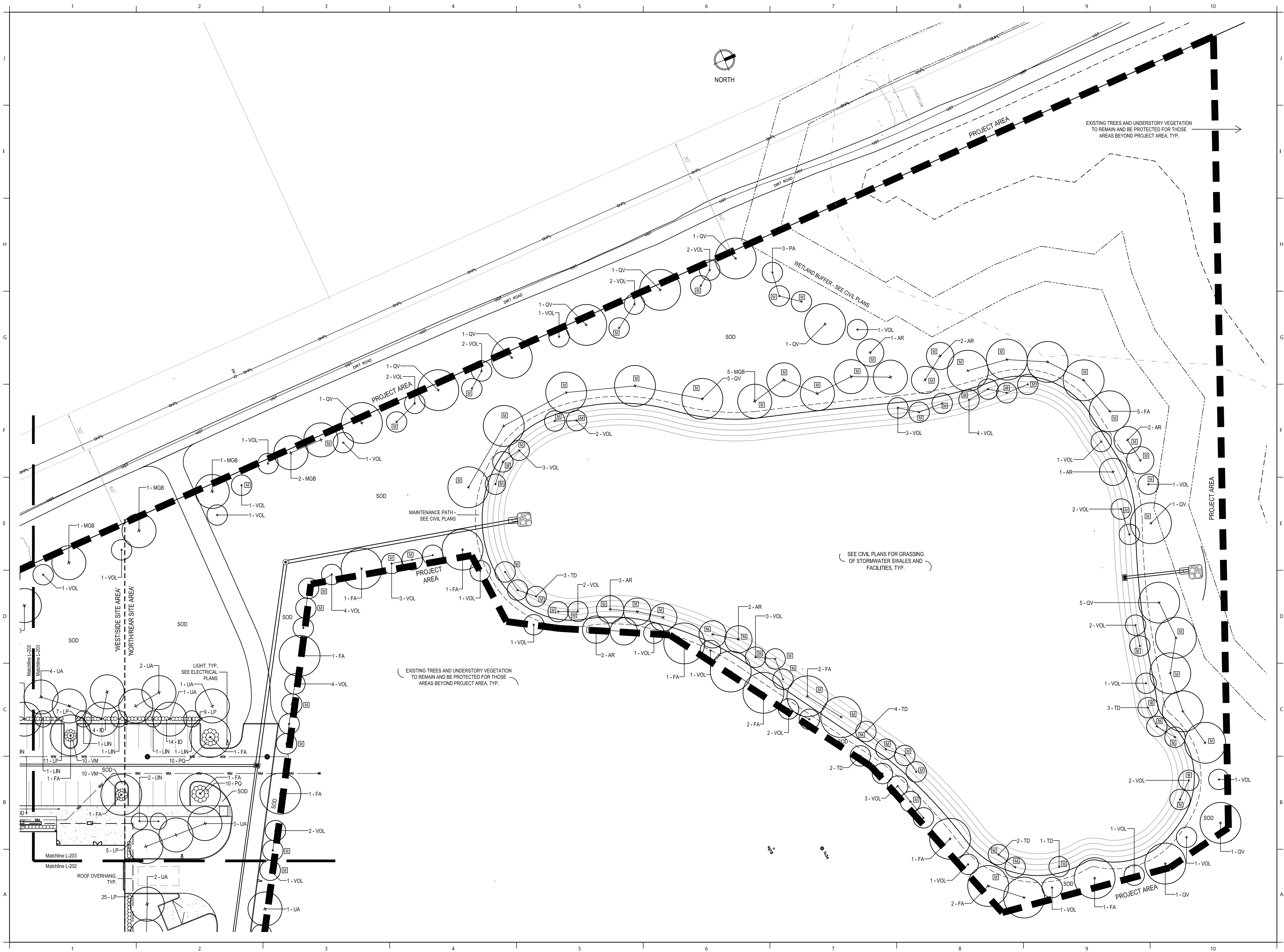
25 JUN 2018

0 15' 30' 60'

SCALE: 1" = 30'

LANDSCAPE PLAN

L-203



USER: ELISABETH MANLEY
PLOTDATE: 06/23/2018 9:10 AM
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\04_PRODUCTION\02_SPRACDGS\2018-06-25_FINAL\01_SHEETS\18035_LA.DWG

TECHNICAL SPECIFICATIONS - PLANTING, SECTION 329000

PART 1 - GENERAL

1.1 SUMMARY

- A. PROVIDE ALL LABOR, EQUIPMENT AND INCIDENTALS REQUIRED TO RENDER ALL SERVICES REQUIRED TO SUCCESSFULLY INSTALL ALL TURF AND LANDSCAPE PROPOSED WITHIN THE PROJECT AREA AS DEFINED ON PLANS.
- B. WORK WILL INCLUDE BUT IS NOT LIMITED TO PREPARATION, INSTALLATION, AND MAINTENANCE FOR PROPOSED TURF AND LANDSCAPE MATERIAL.

1.2 SUBMITTALS

- A. PROVIDE TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO ANY PLANTING ACTIVITIES. SUBMITTALS SHALL INCLUDE:
1. A COPY OF CURRENT CERTIFICATE AS A CERTIFIED LANDSCAPE CONTRACTOR BY THE FLORIDA NURSERY, GROWERS, AND LANDSCAPE ASSOCIATION (FNGLA).
 2. A COPY OF CURRENT PEST CONTROL LICENSE (ROW, ORNAMENTAL AND/OR AQUATIC, IF APPROPRIATE)
 3. MANUFACTURER'S LABELS OR INFORMATION FOR ANY COMPONENTS INCORPORATED INTO THIS PROJECT, INCLUDING BUT NOT LIMITED TO FERTILIZERS, PESTICIDES, AND STAKING SYSTEMS.
 4. IF REGENERATED PALMS ARE PROPOSED WITHIN THE PROJECT, REPRESENTATIVE COLOR PHOTOGRAPHS OF "REGENERATED PALMS" SHALL BE PROVIDED BY THE CONTRACTOR AND SUBMITTED TO THE LANDSCAPE ARCHITECT AND THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DELIVERY. PHOTOS SHALL CLEARLY DEPICT THE FOLLOWING: CLEAR TRUNK HEIGHT; THE TRUNK DIAMETER MEASURED AT THE BASE; THE ROOT BALL MEASUREMENTS; REGENERATED ROOTS ON ALL SIDES OF THE ROOT BALL; AND THREE FULLY EXPANDED NEW FRONDS.
 5. IF IMPORTED FILL IS REQUIRED TO AUGMENT EXISTING CONDITIONS FOR PLANTING, PROVIDE IMPORTED FILL AS DESCRIBED WITHIN PRODUCTS SECTION. PROVIDE A SOIL ANALYSIS THROUGH THE UNIVERSITY OF FLORIDA EXTENSION SOIL TESTING LABORATORY FOR EACH FILL SOURCE AND INCLUDING INCLUDE A WRITTEN REPORT CONTAINING SOIL-AMENDMENT AND FERTILIZER RECOMMENDATIONS FOR EACH SOURCE.
 6. SCHEDULE OF VALUES: PRIOR TO THE COMMENCEMENT OF THE WORK, SUBMIT INSTALLED UNIT PRICES FOR ALL PLANT MATERIALS (MULCH SHALL BE INCLUDED IN THE INSTALLED UNIT PRICING) AND SODDING. THE SCHEDULE OF VALUES SHOULD EQUAL THE TOTAL CONTRACT PRICE FOR LANDSCAPE INSTALLATION.
 7. TYPEWRITTEN INSTRUCTIONS PROVIDING A MAINTENANCE SCHEDULE AND ALL MAINTENANCE OPERATIONS NECESSARY TO MAINTAIN THE PLANTINGS DURING AND FOLLOWING INSTALLATION, AS SPECIFIED BELOW.
 8. WRITTEN WARRANTIES AS SPECIFIED BELOW.
 9. RECORD DRAWINGS: FURNISH ONE SET OF RECORD DRAWINGS THAT CLEARLY SHOW ALL CHANGES MADE TO THE ORIGINAL CONTRACT DRAWINGS DURING THE COURSE OF THE WORK. DRAWINGS SHALL BE PROVIDED IN PDF FILE FORMAT AND TO BE FULLY LEGIBLE AND TO SCALE.

1.3 QUALITY CONTROL

- B. ALL WORK SHALL BE PERFORMED BY A FNGLA CERTIFIED LANDSCAPE CONTRACTOR (FCLC) WHO HAS COMPLETED LANDSCAPE WORK SIMILAR IN SCOPE, MATERIAL, DESIGN, AND EXTENT TO THAT AS INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL TREE AND SHRUB ESTABLISHMENT. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN FCLC CERTIFICATION UNDER FNGLA.
- C. PRUNING, IF REQUIRED, SHALL BE PERFORMED BY A CERTIFIED ARBORIST, AS CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA).
- ALL PLANT MATERIAL TO COMPLY WITH "FLORIDA #1" GRADE QUALITY STANDARD AS DEFINED AND SPECIFIED WITHIN THE LATEST EDITION OF THE "FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRIES. PROVIDE HEALTHY, VIGOROUS STOCK GROWN IN A RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALED, INJURIES, ABRASIONS, OR DISFIGUREMENT.
- D. UNSATISFACTORY OR DEFECTIVE MATERIAL MAY BE REJECTED AT ANY TIME, AND REJECTED MATERIAL SHALL BE REMOVED IMMEDIATELY FROM THE PROJECT SITE.
- E. CONTRACTOR SHALL MAINTAIN AND EXPERIENCED, FULL-TIME SUPERVISOR ON THE PROJECT SITE DURING ALL PLANTING ACTIVITIES.
- F. SUBSTITUTIONS WILL NOT BE ACCEPTED UNLESS PROOF OF NON-AVAILABILITY OR EVIDENCE OF EQUAL STATUS IS DEMONSTRATED PRIOR TO ORDERING AND/OR INSTALLATION. CONTRACTOR TO SUBMIT A SUBSTITUTION REQUEST TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO ORDERING, DELIVERY, OR INSTALLATION OF MATERIAL. THE SUBSTITUTION REQUEST SHALL IDENTIFY THE ISSUE WITH THE SPECIFIED MATERIAL AND PROPOSE ALTERNATIVE, EQUAL MATERIAL(S). INFORMATION TO BE PROVIDED REGARDING ALTERNATIVE MATERIALS SHALL INCLUDE SCIENTIFIC NAME, COMMON NAME, SIZE, AND SOURCE.
- G. PACKAGE STANDARD PRODUCTS WITH MANUFACTURER'S CERTIFIED ANALYSIS OR ANALYSIS BY RECOGNIZED LABORATORY.

1.4 CONTRACTOR REQUIREMENTS

- A. PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY FOR COMPLETION OF WORK AND MAINTENANCE.
- B. OBTAIN ALL NECESSARY PERMITS, LICENSES, AND NOTIFICATIONS AND PAY FEES NECESSARY FOR COMPLETION OF THE WORK.
- C. COMPLY WITH ALL APPLICABLE CODES.
- D. COORDINATE WITH OTHER TRADES WORKING ON THE PROJECT DURING PLANTING ACTIVITIES.
- E. COORDINATION SHALL OCCUR WITH OTHER CONTRACTORS OR PROJECTS OCCURRING OFF SITE IF NECESSARY.
- F. IDENTIFY AND VERIFY THE LOCATION OF ALL UTILITIES WITHIN PROPOSED PLANTING AREAS. CONTRACTOR TO CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AS REQUIRED BY CHAPTER 556 OF FLORIDA STATUTES PRIOR TO ANY EXCAVATION OR PLANTING ACTIVITIES.
- G. PROVIDE SAFE STORAGE FOR ALL EQUIPMENT AND MATERIALS. STORAGE OF SUCH ITEMS IS AT THE CONTRACTOR'S RISK.
- H. REPAIR, AT NO COST TO THE OWNER, ANY DAMAGE OCCURRING DUE TO CONTRACTOR NEGLIGENCE TO EXISTING UTILITIES, STRUCTURES, FURNISHINGS, HARDSCAPE, LANDSCAPE, OR OTHER ELEMENTS TO REMAIN. ANY DAMAGED WORK SHALL BE REPAIRED AS PER PLANS, OTHER SPECIFICATIONS SECTIONS, OR AS INSTRUCTED BY THE OWNER'S REPRESENTATIVE.
- I. MAINTENANCE DURING INSTALLATION AND UNTIL FINAL ACCEPTANCE.

1.5 WARRANTY

- A. EXISTING LANDSCAPE AND VEGETATION
1. ALL EXISTING LANDSCAPE AND TURF TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION ACTIVITIES.
- B. NEW PLANTS
1. WARRANTY SHRUBS AND GROUNDCOVER FOR A PERIOD OF TWELVE (12) MONTHS AFTER DATE OF SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR THAT WHICH IS A RESULT OF NEGLIGENCE BY OWNER, ABUSE, DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND THE CONTRACTOR'S CONTROL.
 2. REMOVE AND REPLACE ANY LANDSCAPE MATERIAL FOUND TO BE DEAD OR IN UNHEALTHY CONDITION DURING WARRANTY PERIOD.
- B. NEW SOD:
1. WARRANTY ALL GRASS FOR A PERIOD OF SIX (6) MONTHS AFTER SUBSTANTIAL COMPLETION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, AS DETERMINED BY THE LANDSCAPE ARCHITECT, EXCEPT FOR DEFECTS RESULTING FROM NEGLIGENCE BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR THE UNUSUAL PHENOMENA OR INCIDENTS, WHICH ARE BEYOND THE CONTRACTOR'S CONTROL.
 2. REMOVE AND REPLACE ALL TURF FOUND TO BE DEAD OR IN AN UNHEALTHY CONDITION DURING WARRANTY PERIOD AS DETERMINED BY THE LANDSCAPE ARCHITECT.
- C. REPAIR GRADES, LAWN AREAS, PAVING, AND ANY OTHER DAMAGE RESULTING FROM REPLACEMENT PLANTING OPERATIONS, AT NO ADDITIONAL COST TO OWNER.
- D. IF ANY PLANTS ARE REPLACED DURING THE WARRANTY PERIOD, THEN THE REPLACEMENT MATERIAL SHALL ALSO BE WARRANTED FOR THE SAME PERIOD AS LISTED FOR NEW MATERIAL, ABOVE, FROM THE DATE OF REPLACEMENT. ONLY ONE REPLACEMENT WILL BE REQUIRED EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH SPECIFIED REQUIREMENTS.
- E. A FINAL INSPECTION WILL BE MADE AT THE END OF THE WARRANTY PERIOD TO DETERMINE ACCEPTANCE OR REJECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER, IN WRITING, THIRTY (30) DAYS PRIOR TO THE END OF THE WARRANTY PERIOD, AT WHICH TIME THE OWNER HAS THE OPTION TO PERFORM AN END OF WARRANTY INSPECTION. FAILURE TO NOTIFY THE OWNER OF THE END DATE OF THE WARRANTY PERIOD SHALL CAUSE THE WARRANTY PERIOD TO EXTEND UNTIL SUCH TIME AS THE CONTRACTOR GIVES THE OWNER THE REQUIRED 30 DAYS NOTICE.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED AT SITE.
- B. SOD: TIME DELIVERY SO THAT SOD WILL BE PLACED WITHIN 24 HOURS AFTER STRIPPING. PROTECT SOD AGAINST DRYING AND BREAKING OF ROLLED STRIPS.
- C. PLANTS: DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING DELIVERY. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET PLANTS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS UNTIL PLANTING TIME. HANDLE PLANT MATERIALS BY ROOTBALL.

PART 1 - GENERAL, CONT

1.7 PROJECT CONDITIONS

- A. COORDINATE AND COOPERATE WITH OTHER TRADES TO ENABLE WORK TO PROCEED AS RAPIDLY AND EFFICIENTLY AS POSSIBLE.
- B. IF WEATHER CONDITIONS DETRIMENTAL TO PLANTING ARE ENCOUNTERED OR ANTICIPATED, NOTIFY THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO PLANTING. PLANTING SHALL NOT OCCUR DURING PERIODS OF OR WITHIN 48 HOURS OF PREDICTED TEMPERATURES LESS THAN 32 F.
- C. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED OR ANTICIPATED, INCLUDING BUT NOT LIMITED TO LIMESTONE, ROAD BASE, RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OBSTRUCTIONS, OR TOXIC MATERIALS, NOTIFY THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO PLANTING.
- D. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY PARTIES CONCERNED.
- E. DETERMINE LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK. CALL SUNSHINE STATE ONE CALL, 811. PERFORM WORK IN A MANNER THAT AVOIDS POSSIBLE DAMAGE. HAND EXCAVATE AS REQUIRED.

PART 2 - PRODUCTS

2.1 FILL

- A. IF REQUIRED TO AUGMENT EXISTING SOILS FOR LANDSCAPE AND TURF INSTALLATION, PROVIDE NEW, DEEP FILL MATERIAL AS PER USDA STANDARD TEXTURES AND THAT IS TAKEN FROM WELL-DRAINING LOCAL SOURCES WITH SIMILAR SOIL TYPES AS FOUND AT THE PROJECT SITE.
- B. FILL TO BE SUITABLE FOR PLANT GROWTH, FRIABLE, AND FREE OF CLAY LUMPS, BRUSH, WEEDS, SEEDS, ROOTS, STUMPS, STONES, ORGANIC MUCK, HARD PAN CLAY, LITTER AND CONSTRUCTION DEBRIS INCLUDING LIMEROCK OR PAVING BASE MATERIAL, ASPHALT, AND CONCRETE, AND OTHER EXTRANEEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH
- C. FILL TO BE OF PH 5-6.5.

2.2 MULCH

- A. MULCH SHALL BE PINE STRAW, FREE OF BRANCHES, CONES, AND DEBRIS.

2.3 COMMERCIAL FERTILIZER

- A. SHRUBS AND GROUNDCOVERS: UTILIZE A ROOT STARTER OR EQUIVALENT SLOW RELEASE FERTILIZER TO ENCOURAGE ROOT GROWTH. APPLY AT MANUFACTURER'S RECOMMENDED RATE. ROOT STARTER SHALL BE A COMPLETE, SLOW RELEASE FERTILIZER WITH ORGANIC NITROGEN AND CONTAIN THE FOLLOWING PERCENTAGES OF AVAILABLE PLANT NUTRIENTS:
1. BETWEEN 5-6% TOTAL NITROGEN (N) CONSISTING OF 3.5-4.5% WATER INSOLUBLE/SLOW RELEASE NITROGEN AND 1.5% WATER SOLUBLE NITROGEN
 2. BETWEEN 1-2% PHOSPHATE (P205)
 3. BETWEEN 0.5-3% POTASH/POTASSIUM (K)
- A. PALMS: FERTILIZE WITH AN 8N - 2P205 - 12K20 + 4MG WITH MICRONUTRIENTS. 100% OF N, K, AND MG SHALL BE IN SLOW RELEASE FORM AND MICRONUTRIENTS SHALL BE IN SULFATE OR CHELATE (FE ONLY) FORM. 5.60 UNITS OF SLOW RELEASE NITROGEN SHALL BE POLYMER COATED. 5.60 - 8.40 UNITS OF SLOW RELEASE POTASH SHALL BE POLYMER COATED. SLOW RELEASE MG SHALL BE PRILLED (GRANULAR) KIESERITE. FERTILIZER SHALL CONTAIN APPROXIMATELY 1.5 - 2% MN AND FE (0.1 - 0.2% FOR FE CHELATED), PLUS TRACE AMOUNTS OF B (0.15%), ZN (0.15%), AND CU (0.05%).
- B. TURF: PROVIDE FERTILIZER WITH NOT LESS THAN SIXTEEN (16) PERCENT TOTAL NITROGEN, FOUR (4) PERCENT AVAILABLE PHOSPHORIC ACID AND EIGHT (8) PERCENT SOLUBLE POTASH. APPLY AT MANUFACTURER'S RECOMMENDED RATE.

2.4 PLANT MATERIALS

- A. PROVIDE SHRUBS AND GROUNDCOVERS OF SIZE, GENUS, SPECIES, AND VARIETY AS SHOWN IN THE PLANT SCHEDULE FOR LANDSCAPE WORK THAT CONFORM TO FLORIDA NO. 1 QUALITY STANDARDS.
- B. PROVIDE HEALTHY, VIGOROUS STOCK GROWN IN A RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALED, INJURIES, ABRASIONS, OR DISFIGUREMENT.
- C. LANDSCAPE MATERIAL SHALL BE CONTAINER GROWN MATERIAL UNLESS OTHERWISE SPECIFIED OR UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE.

2.5 SOD

- A. PROVIDE SAND-GROWN ONLY, STRONGLY ROOTED SOD, NOT LESS THAN TWO YEARS OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES, AND MACHINE CUT TO PAD THICKNESS OF 3/4 INCH (PLUS OR MINUS 1/4 INCH), EXCLUDING TOP GROWTH AND THATCH. PROVIDE ONLY SOD CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED. SOD SHALL BE VIABLE AND NOT DORMANT.
- B. PROVIDE SOD OF UNIFORM PAD SIZES WITH A MAXIMUM 5% DEVIATION IN EITHER LENGTH OR WIDTH. BROKEN PADS OR PADS WITH UNEVEN ENDS WILL NOT BE ACCEPTABLE. SOD PADS INCAPABLE OF SUPPORTING THEIR OWN WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON UPPER 10 PERCENT OF PAD WILL BE REJECTED.
- C. STABILIZING NETTING OR OTHER SYNTHETIC MATERIALS WITHIN SOD SHALL BE PROHIBITED.
- D. SOD TO BE AS LISTED WITHIN THE PLANT SCHEDULE.
- E. REFER TO CIVIL PLANS FOR SOD TYPE AND INSTALLATION METHODS WITHIN STORMWATER FACILITIES.

2.6 WEED PRE-EMERGENT HERBICIDE

- A. APPLY "RON STAR G" PRE-EMERGENT HERBICIDE, OR APPROVED EQUAL IN PLANTING AREAS. REVIEW AND GAIN APPROVAL FROM OWNER PRIOR TO APPLICATION.

PART 3 - EXECUTION

3.1 PREPARATION

- A. CONDUCT A PRE-CONSTRUCTION CONFERENCE ON SITE WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK. DISCUSS PROPOSED ACTIVITIES, REVIEW PROPOSED PLANTING AREAS, AND CONFIRM PROPOSED SCHEDULE OF WORK. PROVIDE ONE WEEK'S NOTICE OF PROPOSED CONFERENCE.
- B. ENSURE ALL ASPHALT, LIMEROCK, AND OTHER CONSTRUCTION DEBRIS ARE REMOVED FROM AREAS OF PROPOSED PLANTING OR SODDING TO A MINIMUM DEPTH OF THREE FEET PRIOR TO INSTALLATION.
- C. CLEAN EXISTING SOIL OF ROOTS, PLANTS, SODS, STONES, CLAY, LUMPS AND OTHER EXTRANEEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.
- D. PLANTING DEPTH OF SOIL SHALL BE A MINIMUM OF THREE (3) FEET. IF FILL MUST BE ADDED, IT SHALL CONFORM TO THE REQUIREMENTS LISTED ABOVE.
- E. GAIN APPROVAL FROM OWNER FOR REMOVAL OF EXISTING GRASS, VEGETATION, AND TURF BY METHODS OTHER THAN HAND REMOVAL. IF APPROVED, ADHERE TO THE FOLLOWING REGARDING PREPARATION OF AREAS WITH UNCHANGED GRADE OR AREAS THAT HAVE NOT BEEN ALTERED BY CONSTRUCTION ACTIVITIES: REMOVE EXISTING GRASS, VEGETATION, AND TURF BY SPRAYING WITH "ROUND-UP" OR OTHER APPROPRIATE HERBICIDE AND PERFORM ADDITIONAL SPRAY TREATMENTS AS NEEDED TO ENSURE A COMPLETE KILL. REMOVE AND DISPOSE OF RESULTING DEAD VEGETATION AND TURF. DO NOT TURN RESULTING DEAD VEGETATION OR TURF OVER INTO SOIL. REPEAT IF NECESSARY TO REMOVE EXISTING VEGETATION.
- F. FOR TURF AREAS INDICATED FOR RENOVATION, MECHANICALLY CUT OUT AREAS OF FAILING TURF AND CREATE A CLEAN EDGE FOR NEW SOD INSTALLATION.
- G. FINE GRADE PROPOSED PLANTING AND SOD AREAS TO SMOOTH, EVEN SURFACES WITH LOOSE, UNIFORMLY FINE TEXTURE AND FREE OF LUMPS, CLODS, STONES, ROOTS, AND OTHER EXTRANEEOUS MATTER. ROLL, RAKE, AND DRAG AREAS, REMOVE RIDGES, AND FILL DEPRESSIONS AS REQUIRED TO MEET FINISH GRADES.
- H. ALLOW FOR SOD THICKNESS IN AREAS TO BE SODDED SUCH THAT INSTALLED SOD MEETS FINISHED GRADES.

3.2 TREE BARRIERS AND EXISTING TREE PROTECTION

- A. REFER TO NOTES ON DEMOLITION PLANS OR LANDSCAPE PLANS REGARDING TREE PROTECTION AND TREE PROTECTION BARRIERS.
- B. MINIMIZE IMPACTS ON EXISTING TREE ROOTS AS MUCH AS POSSIBLE. AVOID TREE ROOT PLATE AREAS AS DEFINED BY PERMITTING AGENCIES.
- C. ALL ROOTS OF TREES TO REMAIN THAT ARE IMMEDIATELY ADJACENT TO EXTENSIVE EXCAVATION AND ARE 1" DIAMETER OR OVER SHALL BE HAND CUT. EXPOSE ROOTS BY HAND DIGGING, HAND CUT OR SAW CLEANLY, AND IMMEDIATELY COVER WITH SOIL. DO NOT ALLOW CUT ROOTS TO DRY OUT.
- D. SUPPLEMENTAL IRRIGATION IS REQUIRED FOR TREES THAT HAVE UNDERGONE ROOT PRUNING. PROVIDE SUPPLEMENTAL IRRIGATION IMMEDIATELY FOLLOWING PRUNING AND CONTINUE THROUGH CONSTRUCTION.

PART 3 - EXECUTION, CONT

3.3 PLANTING TREES, SHRUBS, AND GROUNDCOVERS

- A. PLANT SHRUBS AND GROUNDCOVER AFTER FINAL GRADES ARE ESTABLISHED AND PRIOR TO PLANTING OF LAWNS UNLESS OTHERWISE AUTHORIZED BY LANDSCAPE ARCHITECT. IF PLANTING OF TREES AND SHRUBS OCCURS AFTER INSTALLATION OF LAWNS, PROTECT LAWN AREAS AND PROMPTLY REPAIR DAMAGE CAUSED BY LANDSCAPE INSTALLATION.
- B. LAY OUT INDIVIDUAL SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS. TRIANGLE SPACING SHALL BE USED FOR SHRUBS AND GROUNDCOVERS UNLESS OTHERWISE SPECIFIED IN PLANS OR BY LANDSCAPE ARCHITECT. OUTLINE AREAS AND SECURE LANDSCAPE ARCHITECT'S OR OWNER REPRESENTATIVE'S ACCEPTANCE BEFORE START OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS MAY BE REQUIRED.
- C. EXCAVATE PITS, BEDS, AND TRENCHES SUCH THAT PITS ARE AS DEEP AS THE PLANT'S ROOTBALL AND 1.5 TIMES THE DIAMETER OF THE ROOTBALL. LOOSEN HARD SOIL IN BOTTOM OF EXCAVATION. SCARIFY SIDES OF PIT.
- D. FILL EXCAVATIONS FOR SHRUBS WITH WATER AND ALLOW WATER TO PERCOLATE OUT PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANTING IF PITS DO NOT DRAIN PRIOR TO PLANTING.
- E. REMOVE PLANT MATERIAL FROM CONTAINER. LIFT TREES BY THE ROOTBALL AND NOT BY THE TRUNK. SET PLANT MATERIAL STOCK IN CENTER OF PIT OR TRENCH WITH TOP OF BALL AT 1-2" ABOVE ADJACENT FINISH LANDSCAPE GRADES.
- F. REMOVE ANY SYNTHETIC OR STRAPPING MATERIAL PRIOR TO SETTING PLANT MATERIAL INTO PLANTING PIT OR TRENCH.
- G. ENSURE PLANT MATERIAL IS PLUMB.
- H. PLACE BACKFILL AROUND BASE AND SIDES OF BALL AND WORK IN EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS. ENSURE ROOTBALL REMAINS 1-2" ABOVE ADJACENT FINISH GRADE. WHEN EXCAVATION IS APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED. WATER AGAIN AFTER PLACING FINAL LAYER OF BACKFILL.
- I. DISH TOP OF BACKFILL FOR TREES AND PALMS TO ALLOW FOR MULCHING.
- J. ALL PLANT MATERIAL SHALL BE FERTILIZED AT THE TIME OF PLANTING. MIX OR APPLY FERTILIZER JUST INSIDE OF PLANT FOLIAGE/DRIPLINE. DO NOT APPLY FERTILIZER DIRECTLY ON STEMS OR EXPOSED ROOTS OF MATERIAL. MIX SPECIFIED FERTILIZERS WITH EXISTING SOIL AT RATES SPECIFIED BY THE MANUFACTURER. DELAY MIXING OF FERTILIZER IF PLANTING WILL NOT FOLLOW PLACING OF PLANTING SOIL WITHIN THREE (3) DAYS.
- K. APPLY PRE-EMERGENT HERBICIDE, IF APPROVED BY OWNER, AND AS PER MANUFACTURER'S SPECIFICATIONS.
- L. MULCH PITS, TRENCHES, AND PLANTED AREAS. PROVIDE A THREE (3) INCH THICKNESS OF MULCH AND WORK ONTO TOP OF BACKFILL. THE FINISH LEVEL OF MULCH SHOULD MEET ADJACENT FINISH GRADES. MULCH AREAS BETWEEN GROUNDCOVER PLANTS.
- M. WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER CROWNS OF PLANTS WITH WET SOILS.
- N. GUY AND STAKE TREES IMMEDIATELY AFTER PLANTING AS NEEDED.

3.4 SODDING NEW LAWNS

- A. ENSURE GRADE IS SMOOTH AND EVEN WITH A LOOSE, UNIFORM TEXTURE. ROLL, RAKE AND DRAG PROPOSED LAWN AREAS, REMOVE RIDGES, AND FILL DEPRESSIONS AS REQUIRED TO MEET FINISH GRADES AND PROVIDE AN EVEN SURFACE FOR SOD INSTALLATION.
- B. LAY SOD WITHIN 24 HOURS FROM TIME OF STRIPPING.
- C. MOISTEN PREPARED LAWN AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE MOISTURE TO DRY BEFORE PLANTING LAWNS. DO NOT CREATE A MUDDY SOIL CONDITION.
- D. APPLY SPECIFIED COMMERCIAL FERTILIZER AT RATES SPECIFIED AND THOROUGHLY MIX INTO UPPER TWO INCHES OF SOIL IN AREAS OF PROPOSED SOD. DELAY APPLICATION OF FERTILIZER IF LAWN PLANTING WILL NOT FOLLOW WITHIN A FEW DAYS.
- E. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS. DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAP SOD FIRMLY IN PLACE ONCE LAID.
- F. ANCHOR SOD ON SLOPES GREATER THAN 3:1 WITH WOOD PEGS TO PREVENT SLIPPAGE, IF NEEDED.
- G. AVOID DAMAGE TO SUBGRADE OR SOD DUE TO INSTALLATION ACTIVITIES.
- H. WATER SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.

3.5 CLEANUP

- A. MAINTAIN WORK AREAS IN AN ORDERLY CONDITION. KEEP PAVEMENTS AND ADJACENT SITE AREAS CLEAN. REMOVE ALL POTS, LITTER, TOOLS, EQUIPMENT, AND EXTRANEEOUS SOIL, SOD, OR MATERIALS AT THE END OF EACH WORK DAY. STORE MATERIALS AND EQUIPMENT WHERE DIRECTED. DISPOSE OF MATERIALS AS DIRECTED.

3.6 NEW PLANT PROTECTION

- A. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DURING CONSTRUCTION. MAINTAIN PROTECTION DURING INSTALLATION AND THROUGHOUT THE MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.
- B. TREES WHICH ARE TO REMAIN IN THE CONSTRUCTION AREA SHALL BE PROTECTED FROM DAMAGE THROUGHOUT THE CONSTRUCTION PROCESS BY THE CONTRACTOR.
- C. DO NOT PERMIT HEAVY EQUIPMENT OR STOCKPILES WITHIN THE DRIP LINE OF EXISTING OR NEWLY PLANTED TREES. REMOVE INTERFERING BRANCHES WITHOUT INJURY TO TRUNKS.

3.7 MAINTENANCE

- A. MAINTENANCE ACTIVITIES SHALL INCLUDE THE FOLLOWING ACTIVITIES DURING CONSTRUCTION AND UNTIL FINAL ACCEPTANCE:
1. WEEDING: MAINTAIN PLANTINGS AND TURF AS WEED FREE.
 2. MULCHING: MAINTAIN MULCH AT TREES, PALMS, AND WITHIN PLANTING BEDS AT A 3" DEPTH.
 3. PEST CONTROL: SPRAY AS REQUIRED TO KEEP PLANTINGS AND TURF FREE OF INSECTS AND DISEASE.
 4. MOWING: MOW TURF AREAS AS NEEDED OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
 5. REPLACEMENT: REPLACE PLANTS OR SOD AREAS THAT ARE IN POOR CONDITION.
 6. LITTER REMOVAL: REMOVE LITTER AND DEBRIS FROM LANDSCAPE AND TURF AREAS.
 7. RESTORE PLANTING SAUCERS OF TREES AND SHRUBS.
 8. TIGHTEN AND REPAIR STAKE AND GUY WIRE SUPPORTS, IF PRESENT, AND RESET TREES AND SHRUBS TO PROPER GRADES OF VERTICAL POSITION AS REQUIRED.
 9. REMOVE ALL TREE STAKING, IF PRESENT, WITHIN ONE YEAR AFTER PLANTING.

3.8 REPLACEMENT OF EXISTING LANDSCAPE DAMAGED DURING PROJECT

- A. ANY EXISTING VEGETATION, INCLUDING TREES AND SHRUBS, DAMAGED OR DESTROYED SHALL BE REPLACED OR MITIGATED BY THE CONTRACTOR WITH LIKE SPECIES OR ANOTHER SPECIES APPROVED BY THE OWNER'S REPRESENTATIVE. ANY AREA OF VEGETATION THAT IS DAMAGED DURING CONSTRUCTION WILL BE RESTORED TO ITS ORIGINAL STATE WITHIN 72 HOURS OF THE COMPLETION OF THE ASSOCIATED CONSTRUCTION WORK.
- B. IF REMOVAL OF AN EXISTING TREE REQUIRES MITIGATION, THE CONTRACTOR SHALL BE HELD LIABLE FOR THE COMPLETE COST, INCLUDING BUT NOT LIMITED TO TREE REPLACEMENT COSTS AND PAYMENTS REQUIRED TO PERMITTING AGENCIES.
- C. TREE REPLACEMENT SPECIES AND PROCEDURES SHALL BE DISCUSSED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF ACTIVITIES.

3.9 INSPECTION AND ACCEPTANCE

- A. WHEN ALL LANDSCAPE WORK IS SUBSTANTIALLY COMPLETE, THE LANDSCAPE ARCHITECT WILL, UPON REQUEST, MAKE A SUBSTANTIAL COMPLETION INSPECTION TO DETERMINE ACCEPTABILITY AND COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE LANDSCAPE ARCHITECT WILL PRODUCE A WRITTEN PUNCH LIST FOR THE CONTRACTOR AND OWNER'S REPRESENTATIVE TO IDENTIFY ITEMS THAT SHALL BE ADDRESSED PRIOR TO FINAL ACCEPTANCE.
- B. ONCE ITEMS OF THE PUNCH LIST ARE ADDRESSED, THE LANDSCAPE ARCHITECT WILL CONDUCT A FINAL COMPLETION INSPECTION. IF NECESSARY, THE LANDSCAPE ARCHITECT WILL PRODUCE A FINAL PUNCH LIST FOR THE CONTRACTOR AND OWNER'S REPRESENTATIVE TO IDENTIFY ITEMS TO BE ADDRESSED PRIOR TO FINAL ACCEPTANCE.
- C. FINAL ACCEPTANCE WILL NOT BE ISSUED UNTIL ALL PUNCH LIST ITEMS HAVE BEEN COMPLETED AND ACCEPTED BY THE OWNER AND ALL SUBMITTALS HAVE BEEN MADE.
- D. WORK MAY BE INSPECTED FOR ACCEPTANCE IN PORTIONS AS PHASES OF INSTALLATION ARE COMPLETED AND AS AGREEABLE TO THE LANDSCAPE ARCHITECT, PROVIDED EACH PORTION OF WORK OFFERED FOR INSPECTION IS SUBSTANTIALLY COMPLETE.

END OF SECTION

PROJECT NAME:

SAN FELASCO
TECH CITY

Alachua, FL

for
Laser Investment Group

SEAL:

PROJECT NO: 18-035
CLIENT'S NO:
ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018
REVISIONS:

4 JUN 2018
18 JUN 2018
25 JUN 2018

SCALE:

N/A

SHEET TITLE:

LANDSCAPE
TECHNICAL
SPECIFICATIONS

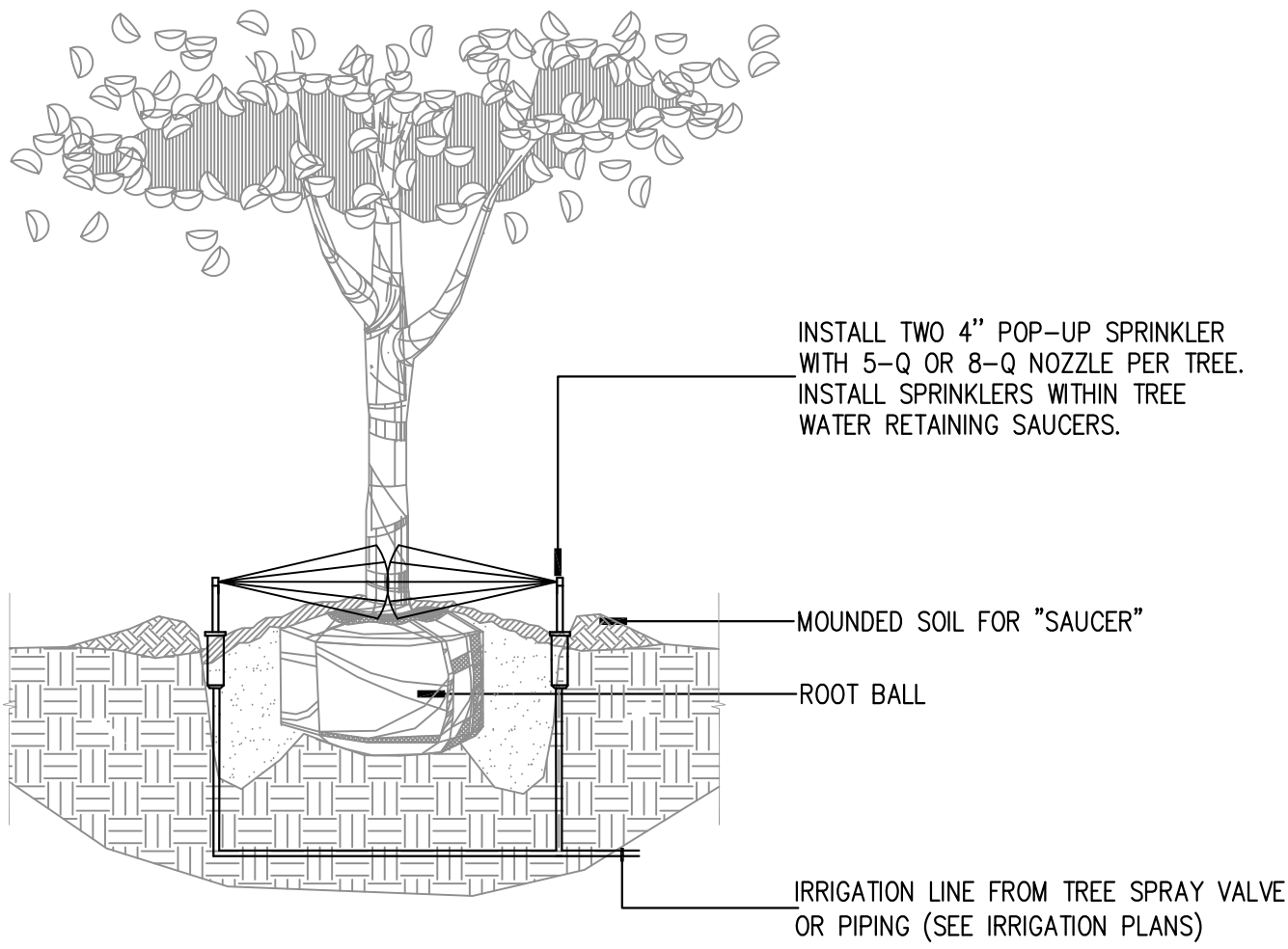
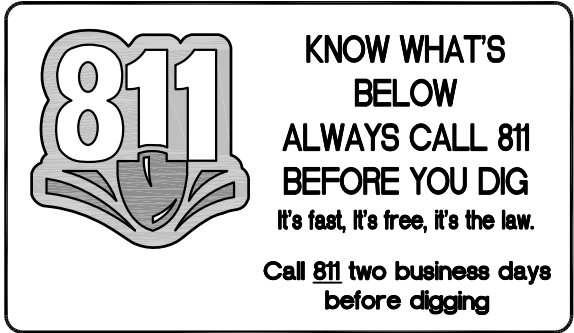
SHEET NUMBER:

L-204

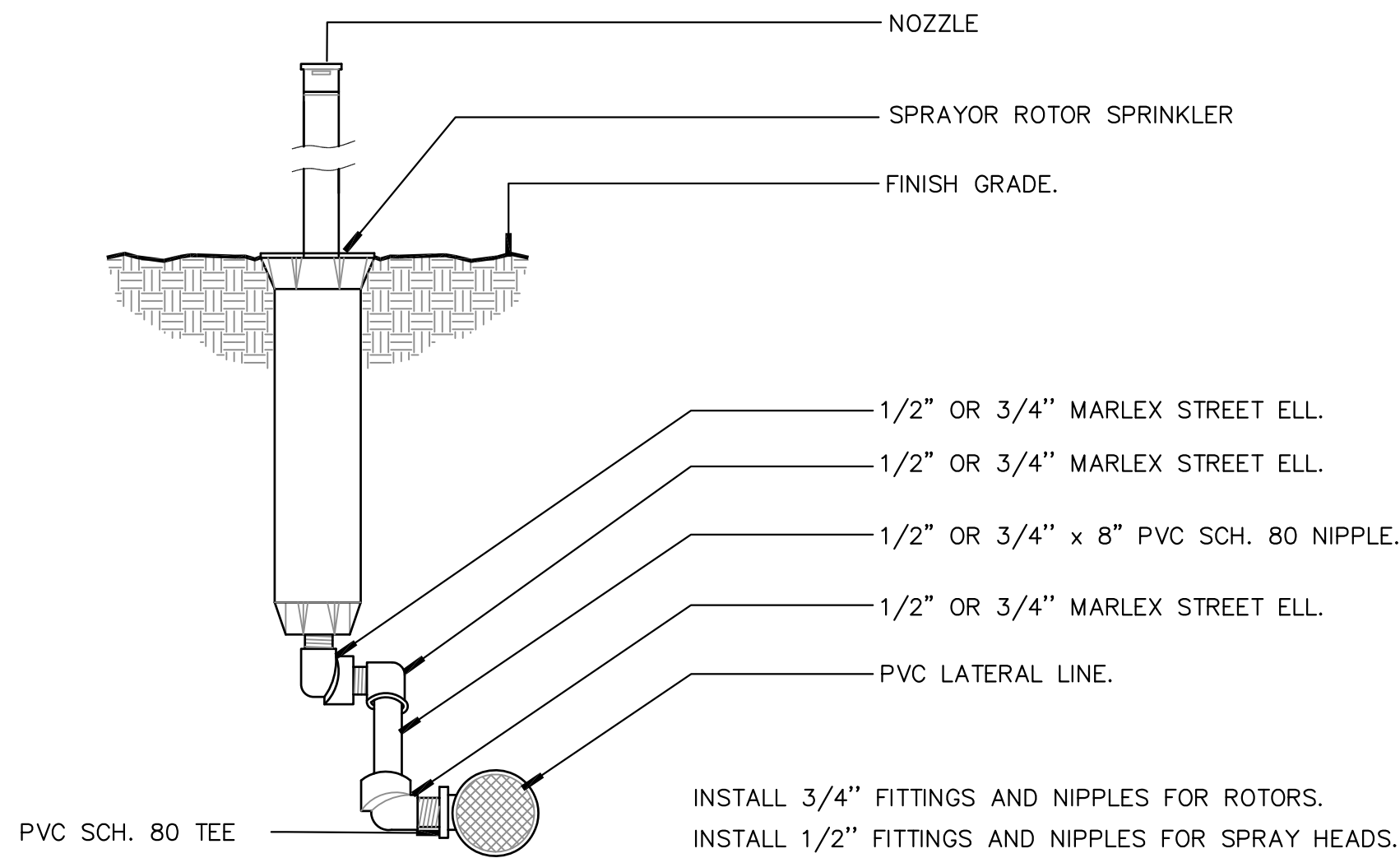
PLOTDATE: 06/23/2018 10:24 AM USER: ELISABETH MANLEY
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\GA_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035_IRR.DWG

GENERAL IRRIGATION NOTES

1. LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. CALL SUNSHINE STATE ONE CALL - SEE LOGO BELOW.
2. ANY IRRIGATION ITEMS NORMALLY INSTALLED IN LANDSCAPE AREAS THAT ARE SHOWN OUTSIDE OF LANDSCAPE AREAS OR OUTSIDE OF THE PROPERTY LINES ARE SHOWN AS SUCH FOR GRAPHIC CLARITY ONLY. INSTALL THESE ITEMS INSIDE OF PROPERTY LINES AND IN LANDSCAPE AREAS.
3. PROVIDE PROOF TO THE OWNER'S REPRESENTATIVE THAT ALL AVAILABLE MAINTENANCE MANUALS FOR EACH OF THE PRODUCTS INCLUDED IN THIS INSTALLATION HAVE BEEN PROVIDED TO THE OWNER OR OWNER'S REPRESENTATIVE.
4. ANY EXISTING TREE ROOTS, WHEN ENCOUNTERED DURING INSTALLATION OF UTILITIES, SHALL BE CUT OFF EVENLY WITH CLEAN SHARP PRUNING TOOLS AND COVERED WITH SOIL AS SOON AS POSSIBLE TO REDUCE DEHYDRATION. THE CONTRACTOR/DEVELOPER SHALL MINIMIZE THE DAMAGE TO EXISTING TREE ROOT SYSTEMS.
5. CONNECT TO THE RP BACKFLOW PREVENTER STUBOUT AS THE POINT OF CONNECTION.
6. INSTALL 2 SPARE (#14 BLACK) WIRES FROM THE CONTROLLER TO THE FARTHEST VALVE LOCATION.
7. IRRIGATION SHALL BE LOCATED MINIMUM ONE (1) FOOT FROM ANY WALL, COLUMN, OR BUILDING EDGE/FACE.
8. IRRIGATION SHALL BE DIRECTED AWAY FROM BUILDING AT ALL TIMES, SO THAT SPRAY DOES NOT HIT BUILDING FACE, COLUMN, WALL, ETC.
9. ADJUST THE IRRIGATION SYSTEM COMPONENTS AND EXISTING SYSTEM TO PROVIDE UNIFORM COVERAGE. ASSURE THAT THE SYSTEM PROVIDES 100% COVERAGE OF ALL LANDSCAPE MATERIALS INCLUDING SHRUBS, GROUND COVER, AND TREES.

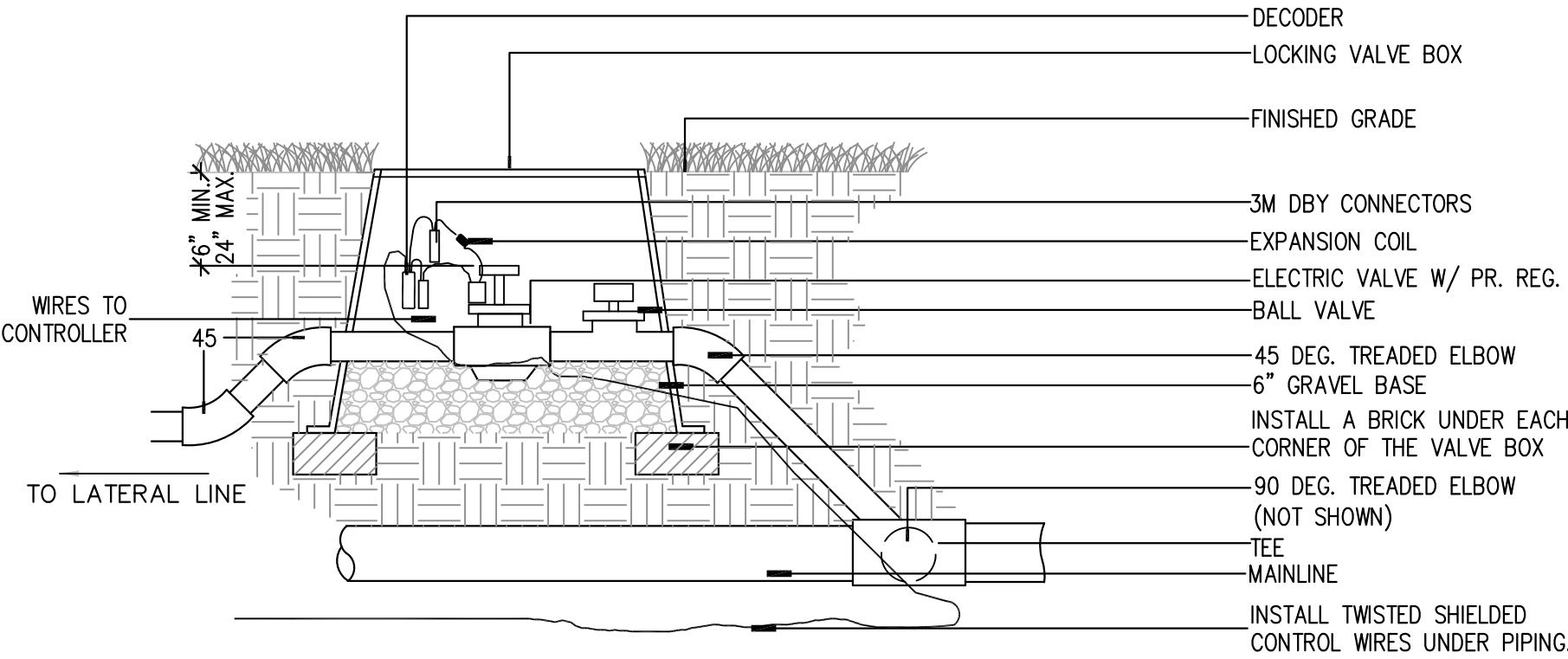


1 TREE SPRAY LOCATIONS
SCALE: N.T.S.

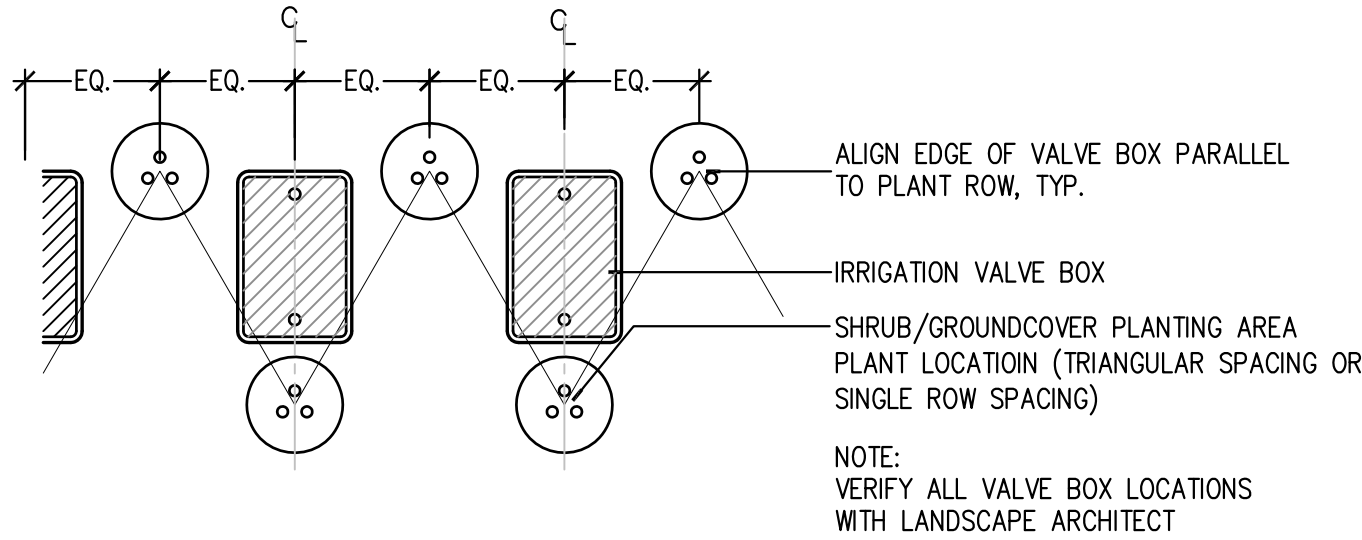


2 4" POP-UP AT GRADE
SCALE: N.T.S.

NOTE:
ALL VALVE BOXES SHALL
BE MARKED WITH THE CHRISTY I.D.
TAGS OR SUBSTITUTION ACCEPTABLE
TO OWNER



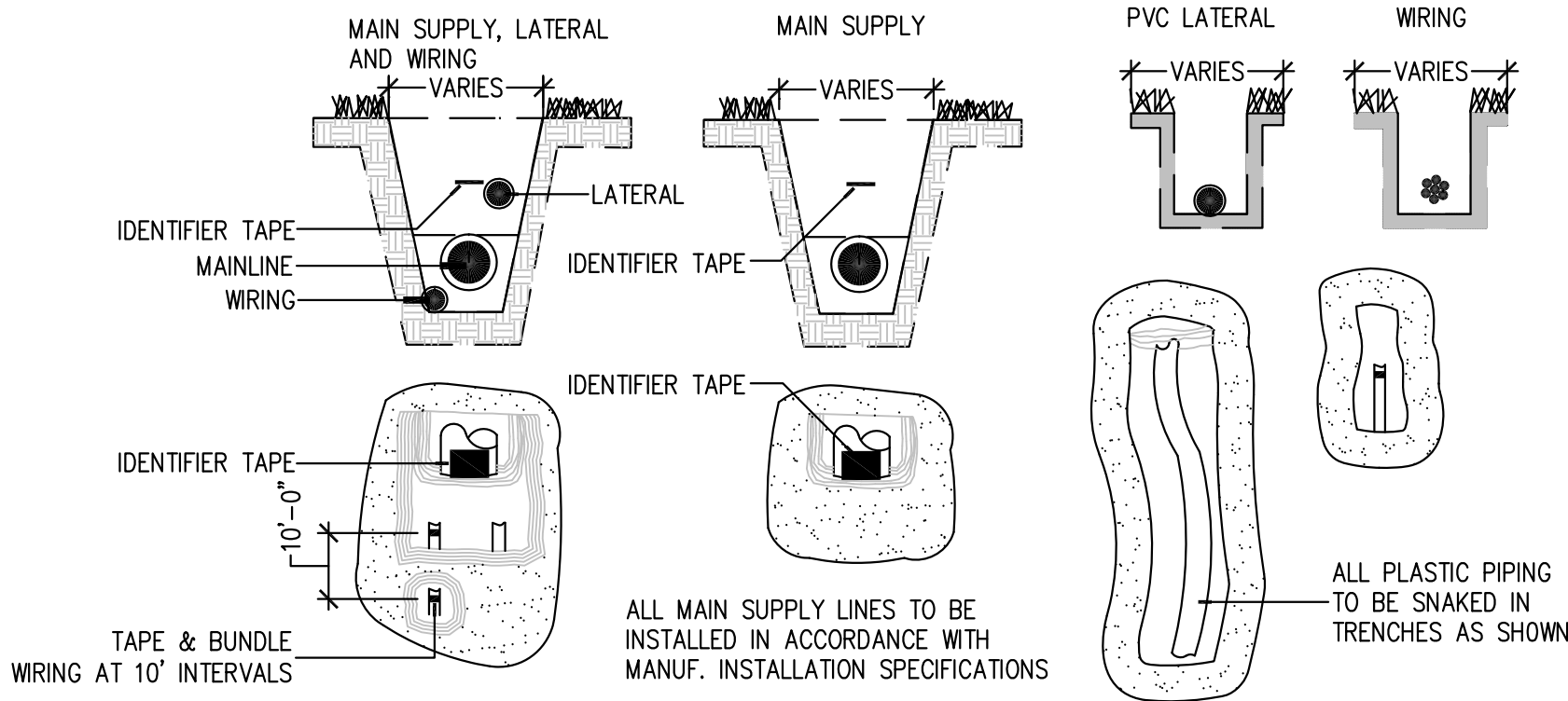
4 VALVE ASSEMBLY INSTALLATION
SCALE: N.T.S.



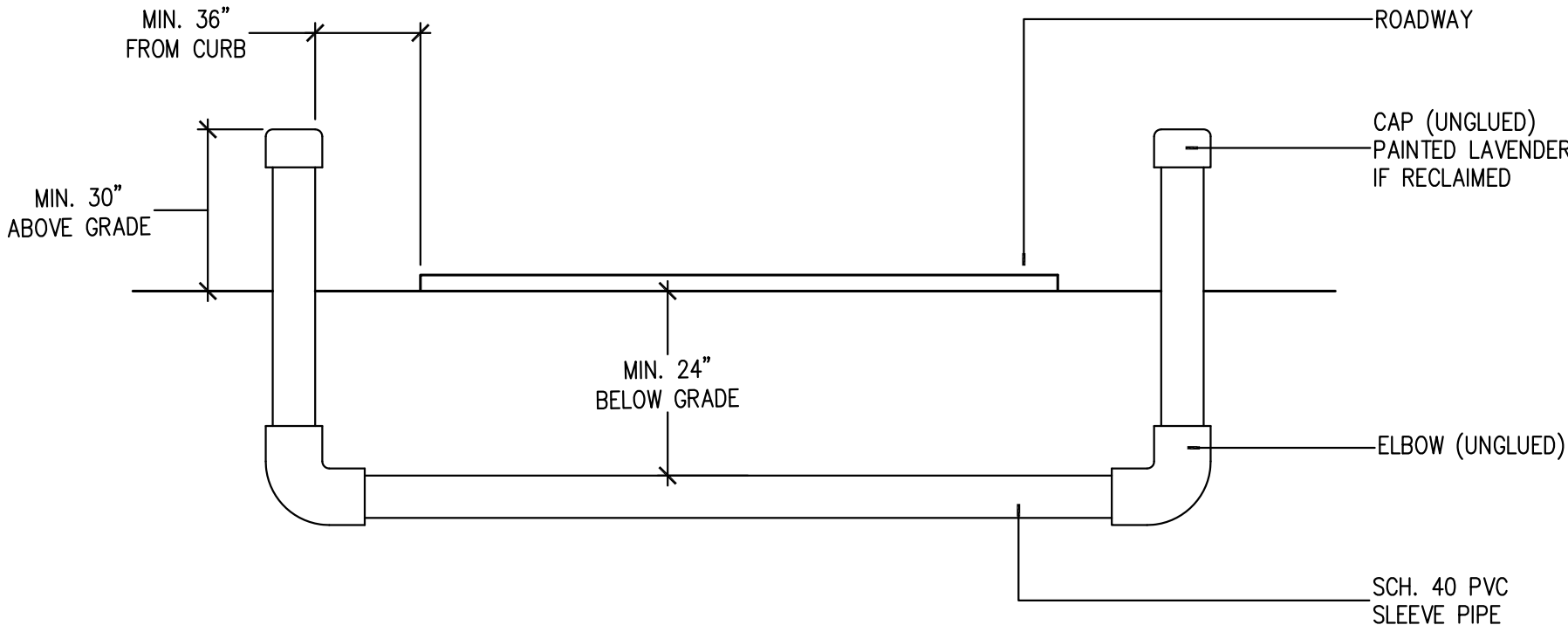
NOTE: VALVE GROUPINGS TO BE LOCATED IN TURF AREAS ONLY.

5 VALVE BOX ORIENTATION
SCALE: N.T.S.

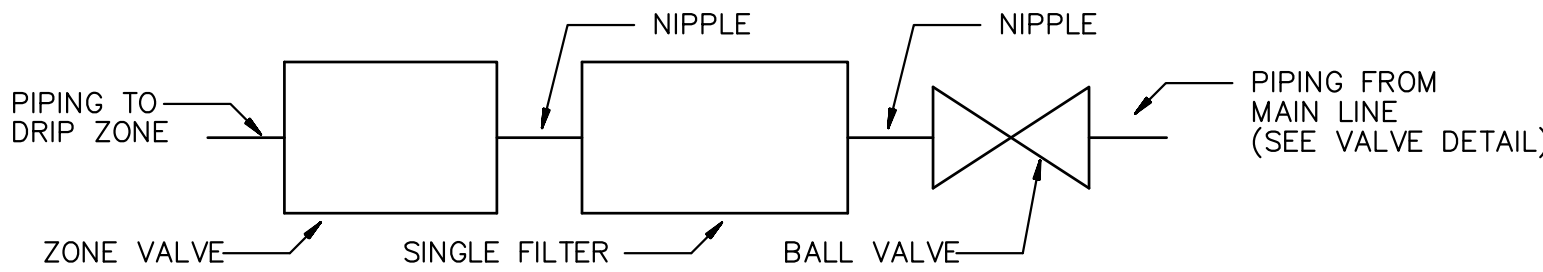
3 TRENCH CONSTRUCTION
SCALE: N.T.S.



6 SLEEVE LOCATIONS
SCALE: N.T.S.

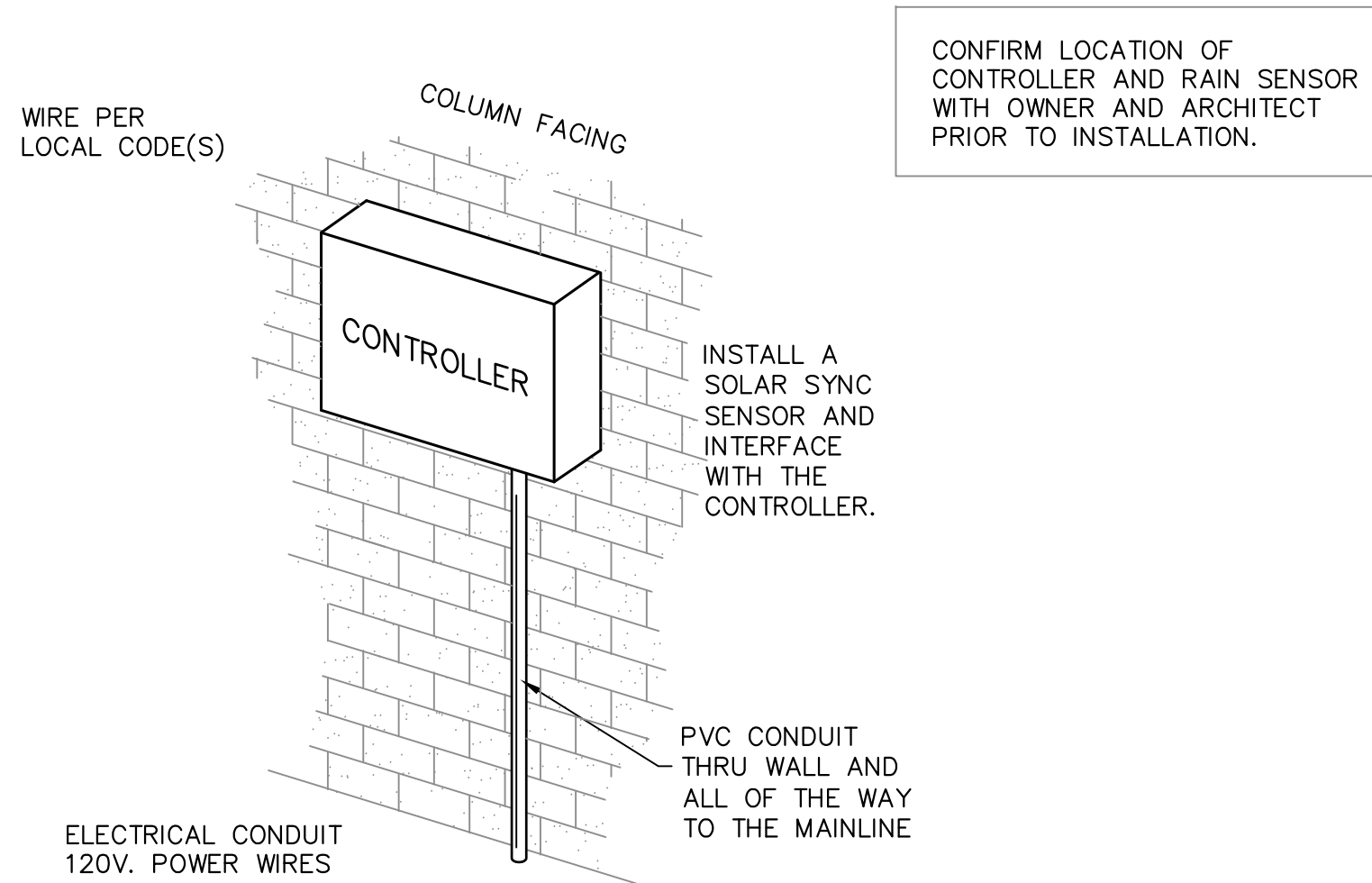


7 VALVE WITH FILTER SCHEMMATIC
SCALE: N.T.S.



- NOTES:
- INSTALL A SEPARATE VALVE BOX FOR EACH VALVE AND FILTER. (3) JUMBO VALVE BOXES
 - INSTALL FILTER IN ORIENTATION THAT ALLOWS REMOVAL OF CAP FOR FLUSHING (UPWARD)
 - INSTALL A FILTER UPSTREAM OF EACH VALVE.

8 CONTROLLER MOUNTING
SCALE: N.T.S.



PROJECT NAME:

SAN
FELASCO
TECH CITY

Alachua, FL

for
Laser Investment
Group

SEAL:

PROJECT NO: 18-035
CLIENT'S NO:
ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018
REVISIONS:

04 JUN 2018
18 JUN 2018
25 JUN 2018

SCALE:

AS SHOWN

SHEET TITLE:

IRRIGATION
NOTES
AND
CALCULATIONS

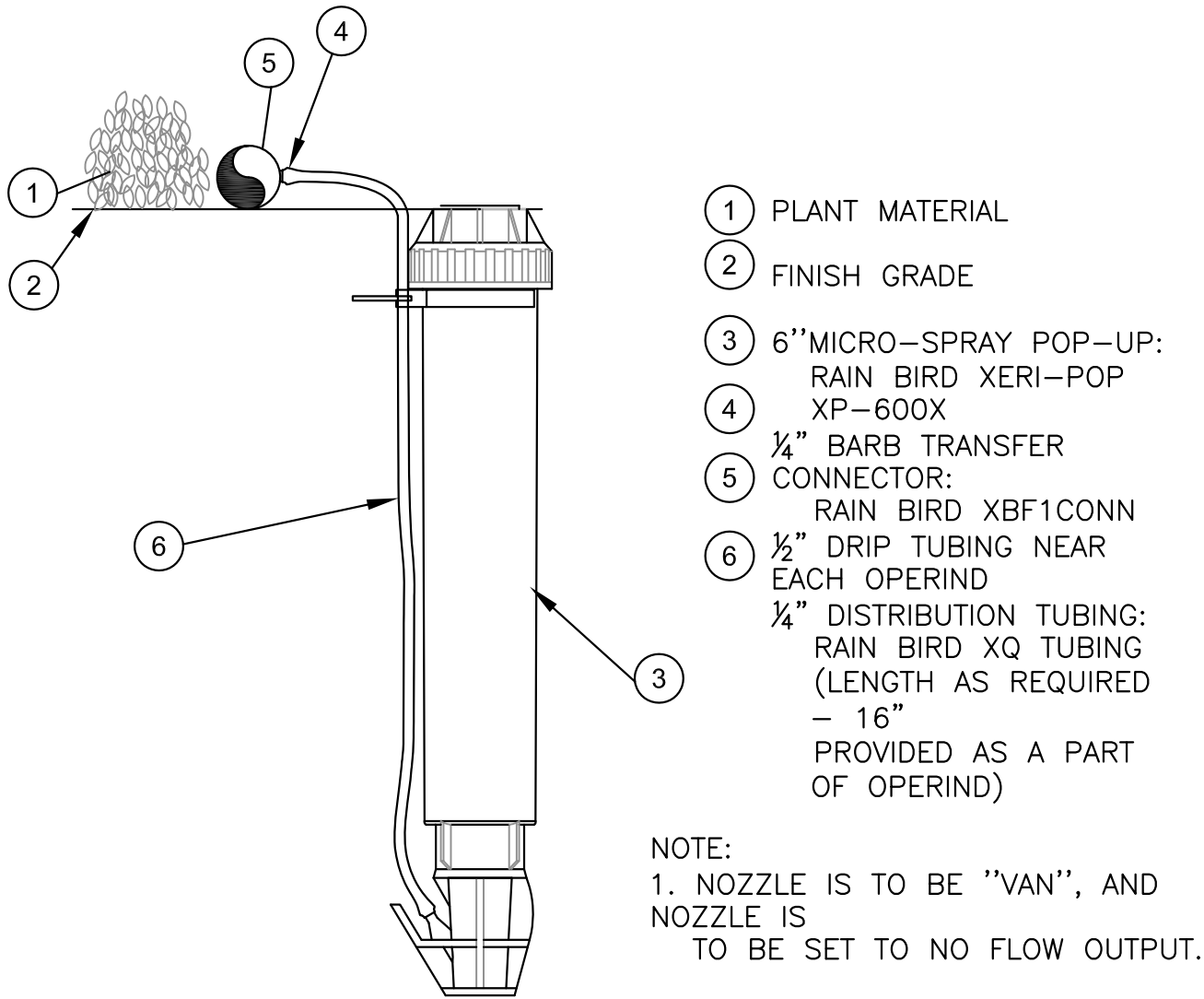
SHEET NUMBER:

L-301

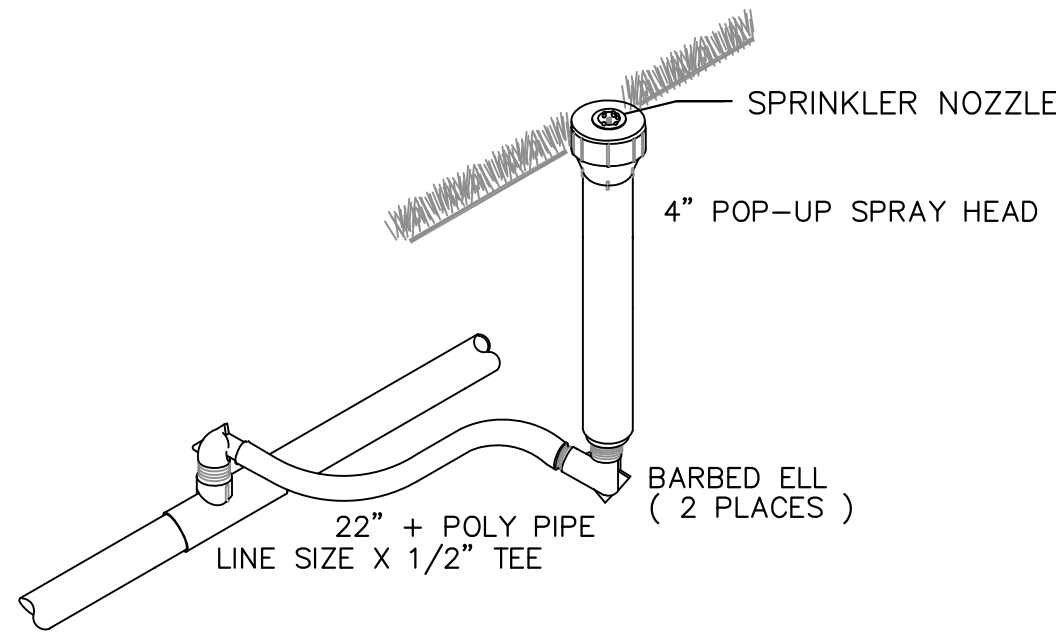
PLOTDATE: 06/23/2018 10:25 AM USER: ELISABETH MANLEY
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\GA_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035_IRR.DWG

DRIP IRRIGATION NOTES

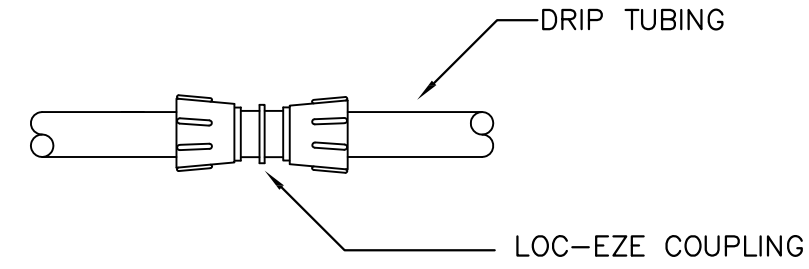
1. INSTALL TORO DL2000 TUBING WITH ALL FITTINGS AS NECESSARY FOR ALL DRIP TUBING (GROUND COVER AND SHRUB) APPLICATIONS.
2. INSTALL A LINE OF TUBING 2" TO 4" FROM HARDSCAPE AND BEDLINES.
3. INSTALL A MINIMUM OF 2 ROWS OF TUBING IN ANY AREA.
4. INSTALL TUBING AT FINISHED GRADE UNDER THE MULCH.
5. LOOP ALL RUNS OF TUBING WITH A MAXIMUM LOOP DISTANCE FROM THE SUPPLY MANIFOLD OF 300'.
6. INSTALL ONE TORO T-ALFD15150-L 1.5" FILTER WITH A STAINLESS STEEL 150 MESH (104 MICRONS) SCREEN FOR EACH VALVE.
7. INSTALL A TORO #T-FCH-H-FIPT FLUSHING VALVE AT EACH OF THE AIR/VACUUM RELIEF VALVE LOCATIONS WITH ALL FITTINGS AS NECESSARY TO FLUSH THE SYSTEM INTO THE LANDSCAPE, WHEN NECESSARY.
8. INSTALL A TORO #T-YD-500-34 VACUUM/AIR RELIEF VALVE AT THE OPPOSITE ENDS OF THE LOOPED NETWORK AND AT THE TERMINATION OF THE SUPPLY MANIFOLD FROM THE AUTOMATIC VALVE. INSTALL A MANUAL LINE FLUSHING VALVE AT EACH LOCATION.
9. INSTALL A RAIN BIRD "OPERIND" AT EACH VACUUM/AIR RELIEF VALVE LOCATION.
10. DRIP TUBING QUANTITIES ON PLANS ARE APPROXIMATE. CONTRACTOR TO VERIFY EXACT QUANTITIES. CONTRACTOR TO BE PAID FOR ACTUAL QUANTITY OF DRIP TUBING AND BLANK TUBING INSTALLED UP TO A MAXIMUM AS SHOWN ON THE PLANS.
11. QUANTITIES ON PLANS DO NOT INCLUDE BLANK TUBING, LINE FLUSHING VALVES, AIR RELIEF VALVES OR PVC HEADERS. INCLUDE THESE ITEMS AND ANY OTHER ITEMS NECESSARY FOR A FULLY FUNCTIONING AUTOMATIC SYSTEM IN BID AND INSTALLATION.
12. INSTALL LANDSCAPE STAPLES 6' O.C. AND ANYWHERE ELSE NECESSARY TO SECURE TUBING TO THE GROUND.
13. FOLLOW THE MANUFACTURER'S INSTALLATION GUIDELINES INCLUDED WITH THE PRODUCTS.
14. DO NOT CURVE TUBING TO LOOP AT THE ENDS OF RUNS. INSTEAD USE (2) 90 DEG. FITTINGS AND A SHORT PIECE OF TUBING.



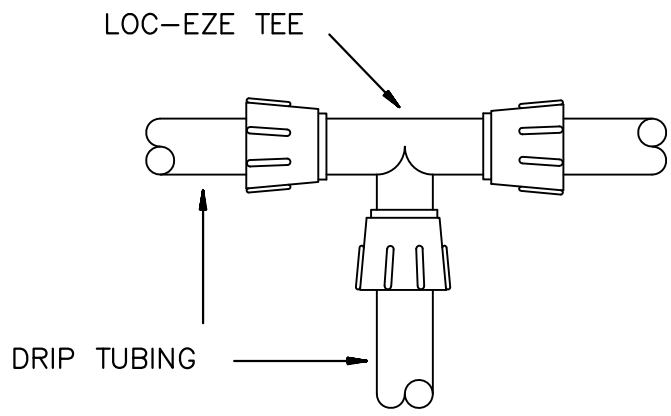
1 RAIN BIRD OPERIND CONNECTION
SCALE: N.T.S.



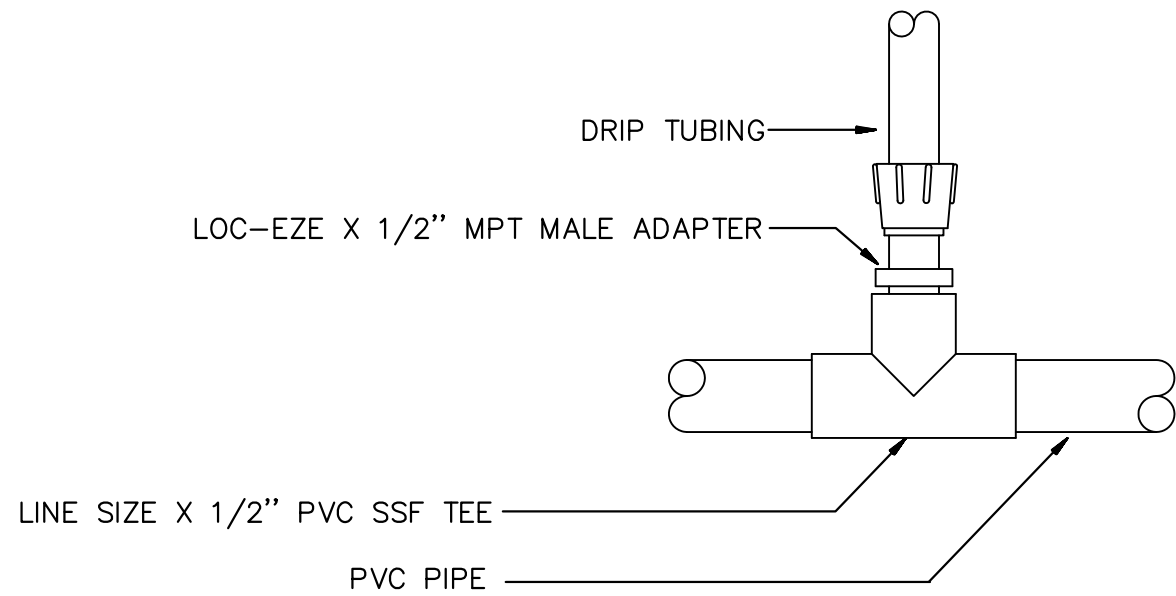
2 SPRAYHEAD AT GRADE
SCALE: N.T.S.



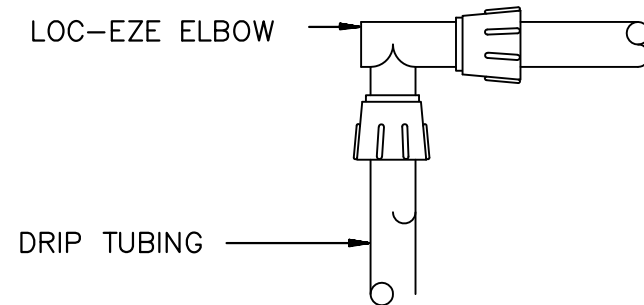
3 LOC-EZE COUPLING (T-FCC16)
SCALE: N.T.S.



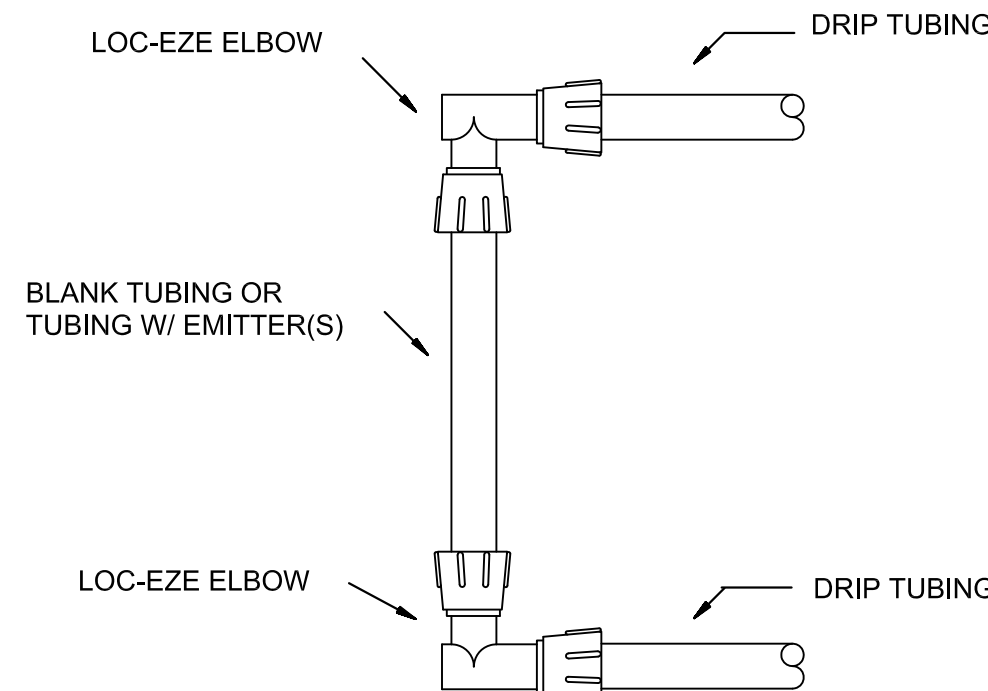
4 LOC-EZE TEE (T-FTT16)
SCALE: N.T.S.



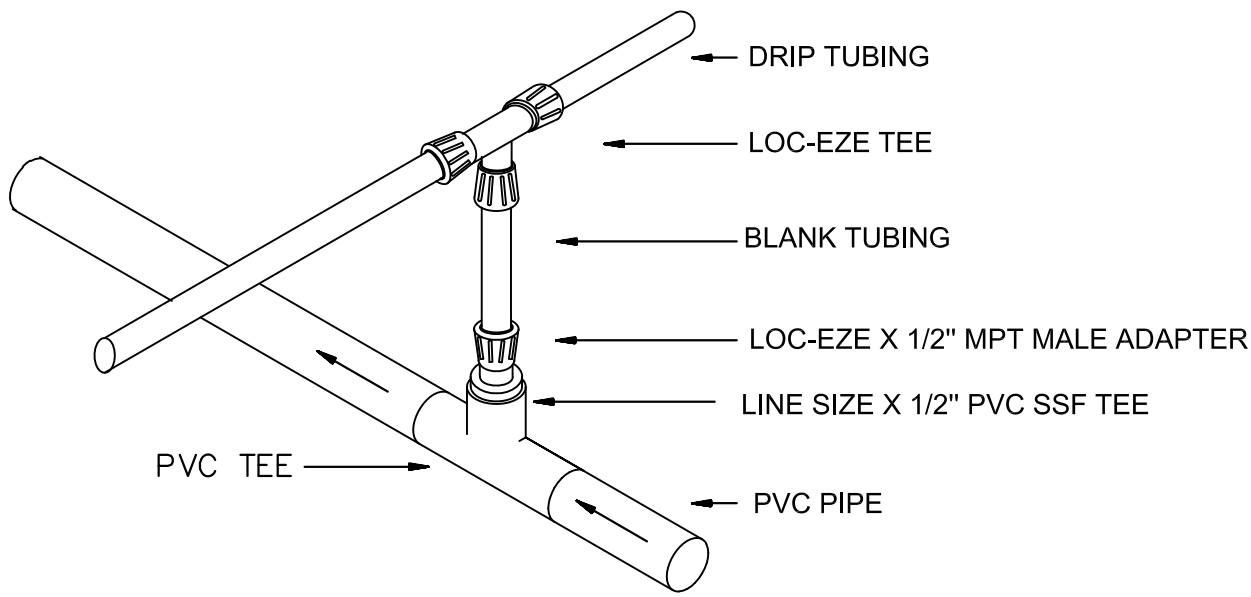
5 MANIFOLD CONNECTION (PVC TO ADAPTER)
SCALE: N.T.S.



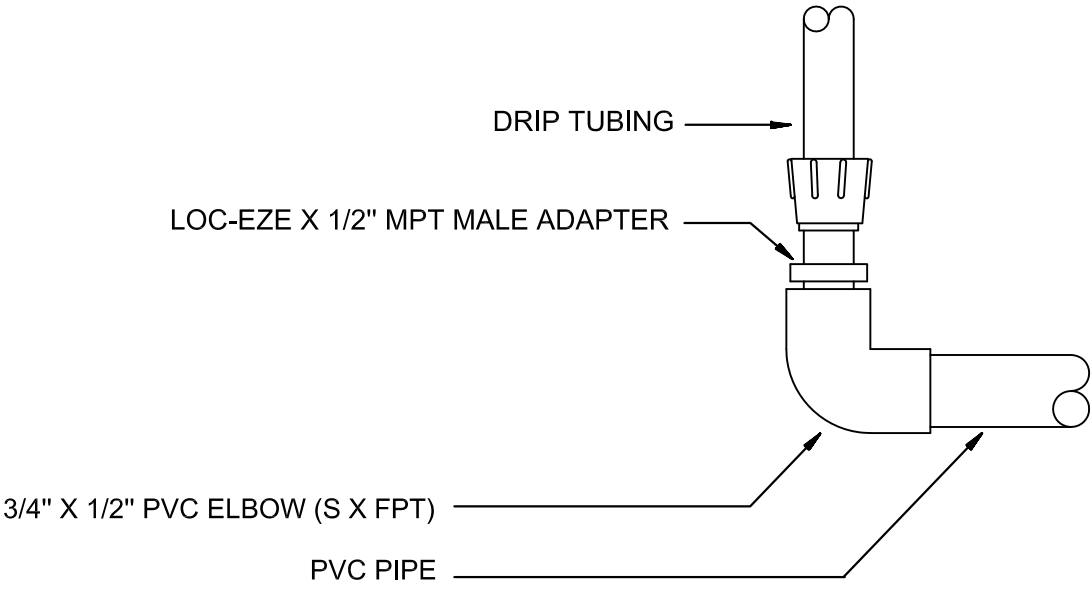
6 LOC-EZE ELBOW (T-FEEE16)
SCALE: N.T.S.



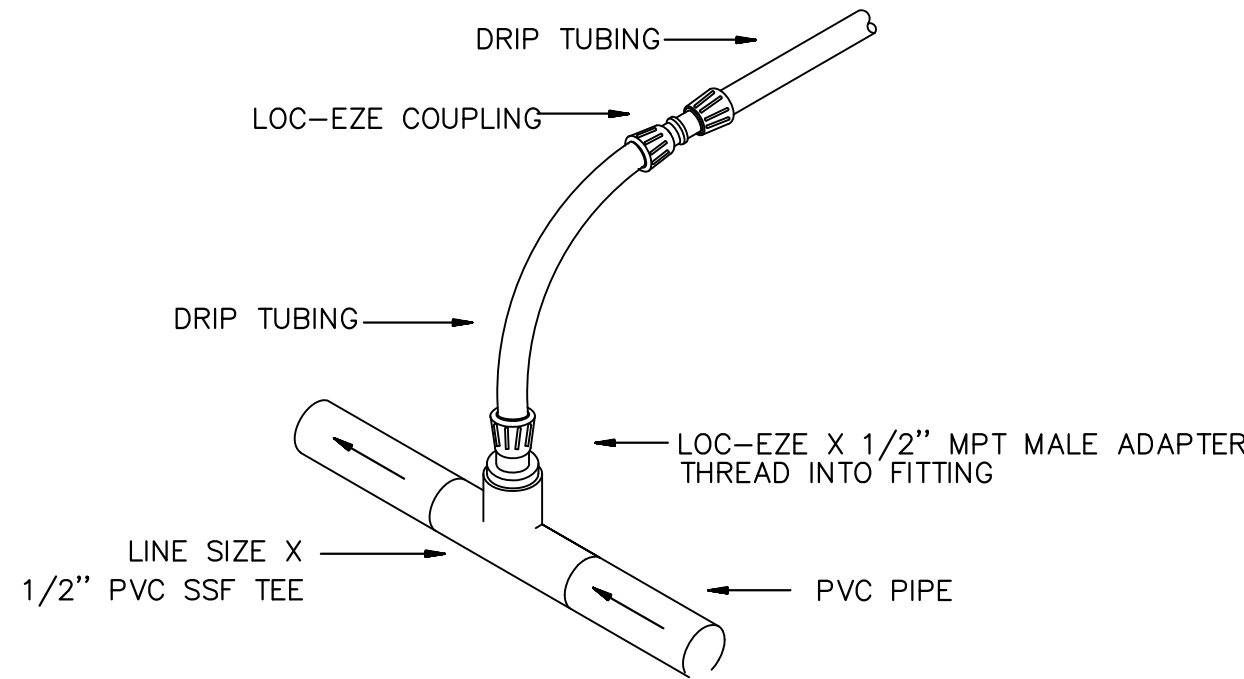
7 LOC-EZE ELBOW LOOP
SCALE: N.T.S.



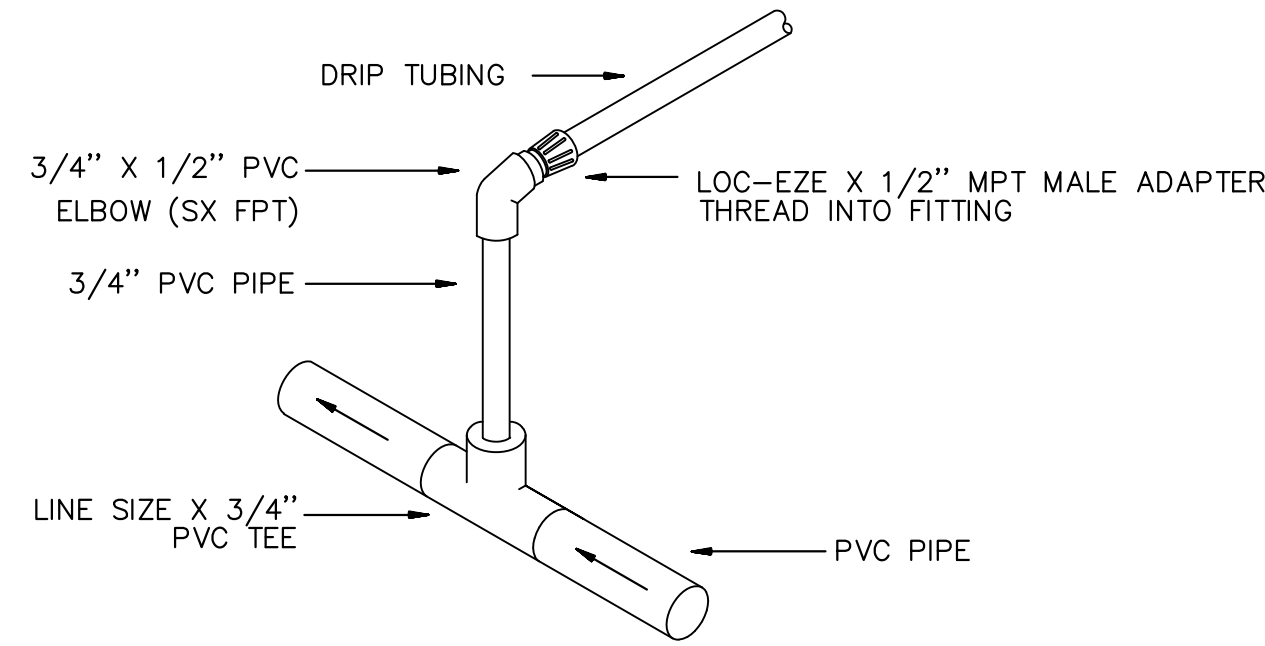
8 MANIFOLD CONNECTION (CENTER FEED)
SCALE: N.T.S.



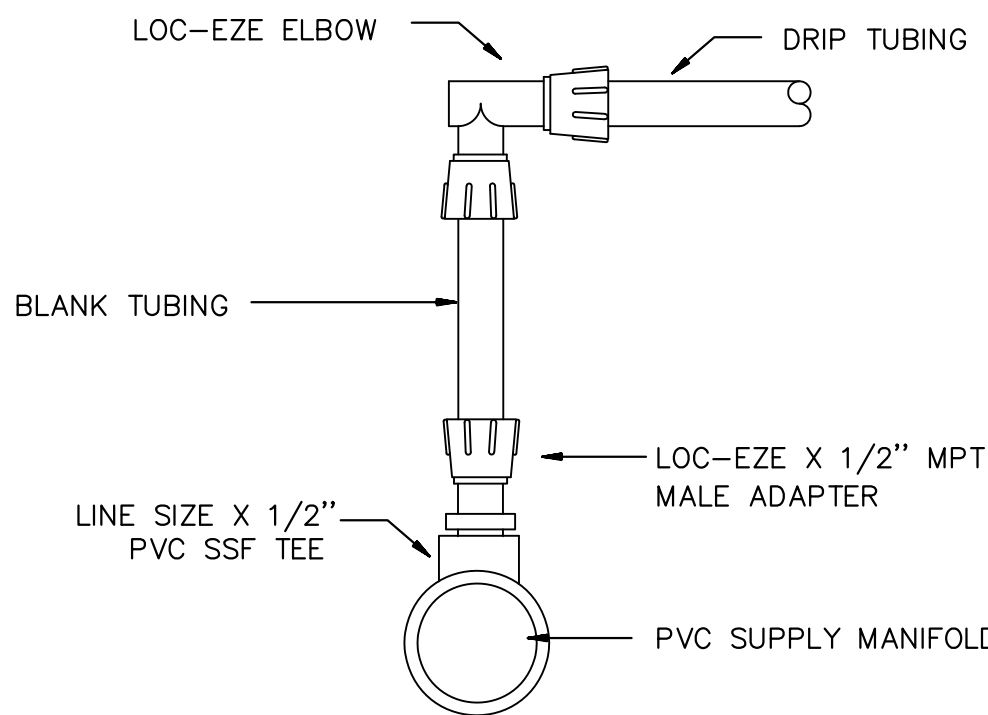
9 MANIFOLD CONNECTION (PVC TO ADAPTER)
SCALE: N.T.S.



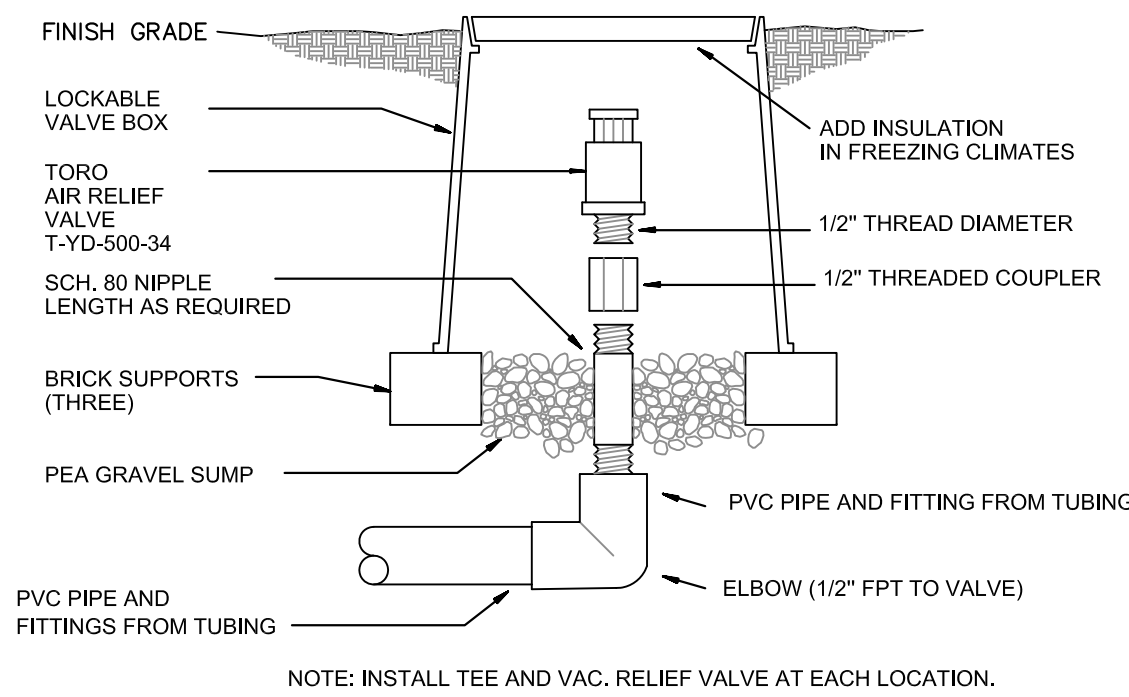
10 BLANK DL2000 DRIPLINE RISER
SCALE:



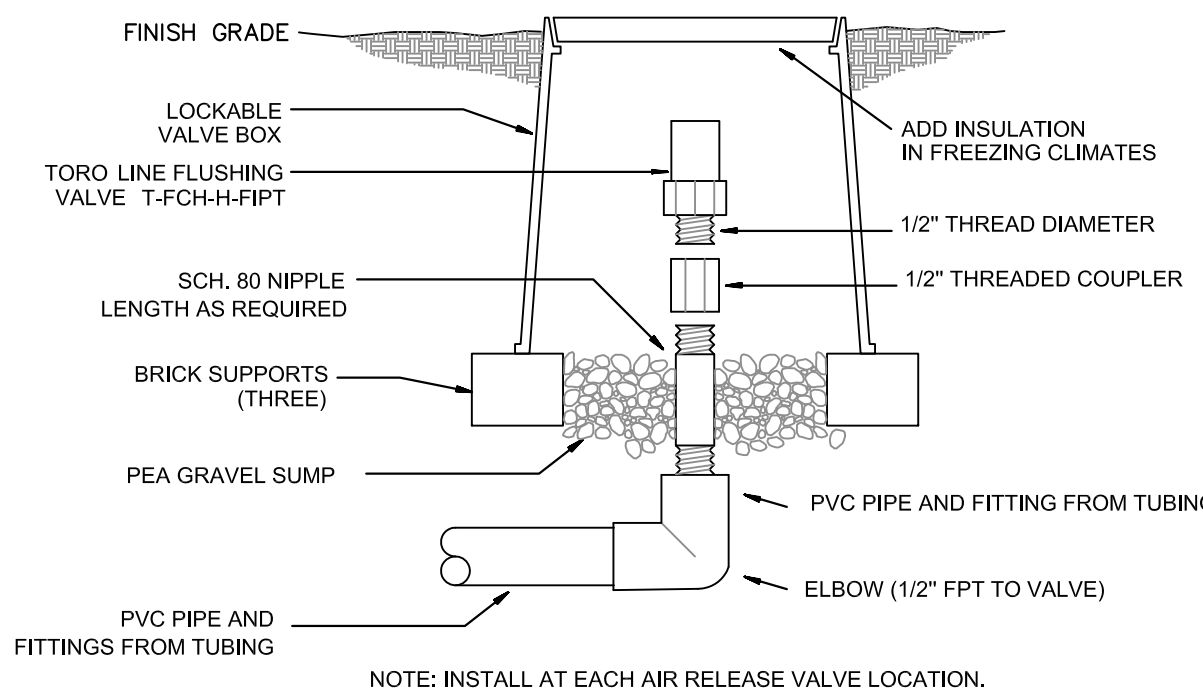
11 MANIFOLD (PVC) CONN. (END FEED)
SCALE: N.T.S.



12 LOC-EZE ELBOW TO LOC-EZE ADAPTER CONNECTION
SCALE: N.T.S.



13 AIR RELIEF VALVE
SCALE: N.T.S.



14 FLUSHING VALVE
SCALE: N.T.S.

PLOTDATE: 06/23/2018 11:01 AM USER: ELISABETH MANLEY
 FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\GA_PRODUCTION\02_SPRACDS\2018-06-25_FINAL\01_SHEETS\18035_IRR.DWG

IRRIGATION LEGEND

- RAIN BIRD 1804-SAM WITH 5Q NOZZLE, ONE PER TREE (TYPICAL)
- TORO DL 2000 1 GPH, 12" O.C. PR. REG. DRIP TUBING
- POINT OF CONNECTION TO 1.5" RPZ BFP SEE CIVIL PLANS AND FIELD LOCATE.
- SCHEDULE 40 1.5" PVC SOLVENT WELD MAIN LINE ROUTING
- CL 200 SOLVENT WELD PVC ZONE PIPE ROUTING
- SCHEDULE 40 PVC SLEEVE LOCATION: SIZE AND NUMBER TO BE DETERMINED
- HUNTER ICV-151G-FS-AS-ADJ 1.5" VALVE WITH DUAL-1 DECODER AND DUAL-S SURGE ARRESTOR
- HUNTER ICV-101G-FS-AS-ADJ 1" VALVE WITH DUAL-1 DECODER AND DUAL-S SURGE ARRESTOR
- IC-600-PL CONTROLLER WITH DUAL48M LOCATION
- HUNTER WSS-SEN SOLAR SYNC SENSOR LOCATION
- LOCATION OF DRIP AIR/VACUUM RELIEF VALVE, LINE FLUSHING VALVE AND RAIN BIRD OPERIND

STA.	SIZE
C-X	#
TYPE	GPM
APPL.	#/#

VALVE STATION, SIZE, APPLICATION AND GALLONAGE

STA.	SIZE
C-3	1"
TYPE	GPM
DRIP	10.1

STA.	SIZE
C-4	1.5"
TYPE	GPM
DRIP	25.4

STA.	SIZE
C-1	1"
TYPE	GPM
TREES	19.6

STA.	SIZE
C-5	1.5"
TYPE	GPM
DRIP	25.4

STA.	SIZE
C-2	1"
TYPE	GPM
TREES	19.0

INSTALL PVC (TREE SPRAY) PIPING FROM VALVE #C-1 SIZED AS SHOWN. INSTALL BRANCHES OF 3/4" PVC PIPING TO ALL TREES IN THE C-1 TREE SPRAY AREA BEFORE THE TERMINATION OF THAT PIPING. THEN INSTALL 1" PVC PIPING FROM THE TERMINATION OF THE PIPING SHOWN TO ALL OF THE OTHER TREE SPRAYS IN THE #C-1 TREE SPRAY AREA (196 EA.) (SEE TREE SPRAY DIVISION LINE.) DO NOT INSTALL MORE THAN 75 TREE SPRAYS ON ANY 1" PIPING RUN.

INSTALL 1" PVC (TREE SPRAY) PIPING FROM THE 1 1/4" PVC PIPING STUBOUT AT VALVE #C-2 AS SHOWN TO ALL TREE SPRAYS IN THE #C-2 TREE SPRAY AREA (190 EA.) (SEE TREE SPRAY DIVISION LINE.) DO NOT INSTALL MORE THAN 75 TREE SPRAYS ON ANY 1" PIPING RUN.

GROUND THE TWO-WIRE SYSTEM AT THE VALVES' LOCATIONS.

MOUNT CONTROLLER ON BACK OF COLUMN, NOT VISIBLE FROM PARKING LOT. SOLAR SYNC TO BE MOUNTED OUTSIDE OF CANOPY COVER. VERIFY EXACT CONTROLLER AND SOLAR SYNC LOCATION WITH OWNER PRIOR TO INSTALLATION. INSTALL CONDUIT FROM INSIDE BUILDING CONTINUOUSLY TO CONTROLLER LOCATION.

INSTALL ALL WIRES FROM CONTROLLER TO VALVES IN 2" ELECTRICAL CONDUIT.

ANY ITEMS, OTHER THAN SLEEVED ITEMS, SHOWN UNDER PAVEMENT OR ITEMS SHOWN OUTSIDE OF PROPERTY LINES ARE SHOWN AS SUCH FOR GRAPHIC CLARITY ONLY. INSTALL THESE ITEMS IN LANDSCAPE AREAS.

ANY ITEMS, OTHER THAN SLEEVED ITEMS, SHOWN UNDER PAVEMENT OR ITEMS SHOWN OUTSIDE OF PROPERTY LINES ARE SHOWN AS SUCH FOR GRAPHIC CLARITY ONLY. INSTALL THESE ITEMS IN LANDSCAPE AREAS.

PROJECT NAME:

SAN
 FELASCO
 TECH CITY

Alachua, FL

for
 Laser Investment
 Group

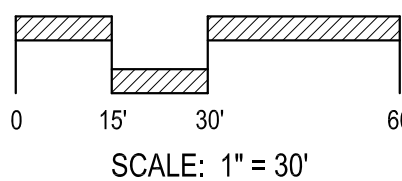
SEAL:

PROJECT NO: 18-035
 CLIENT'S NO:
 ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018
 REVISIONS:

04 JUN 2018
 18 JUN 2018
 25 JUN 2018

SCALE:



SHEET TITLE:

IRRIGATION
 SCHEDULE AND
 PLAN

SHEET NUMBER:

L-303

**SAN
FELASCO
TECH CITY**

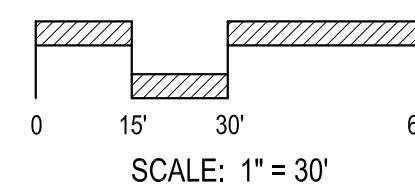
for
**Laser Investment
Group**

PROJECT NO: 18-035
CLIENT'S NO.:
ISSUED FOR: **SITE PLAN REVIEW**

ISSUED DATE: 30 APR 2018
REVISIONS:

04 JUN 2018
18 JUN 2018
25 JUN 2018

SCALE:

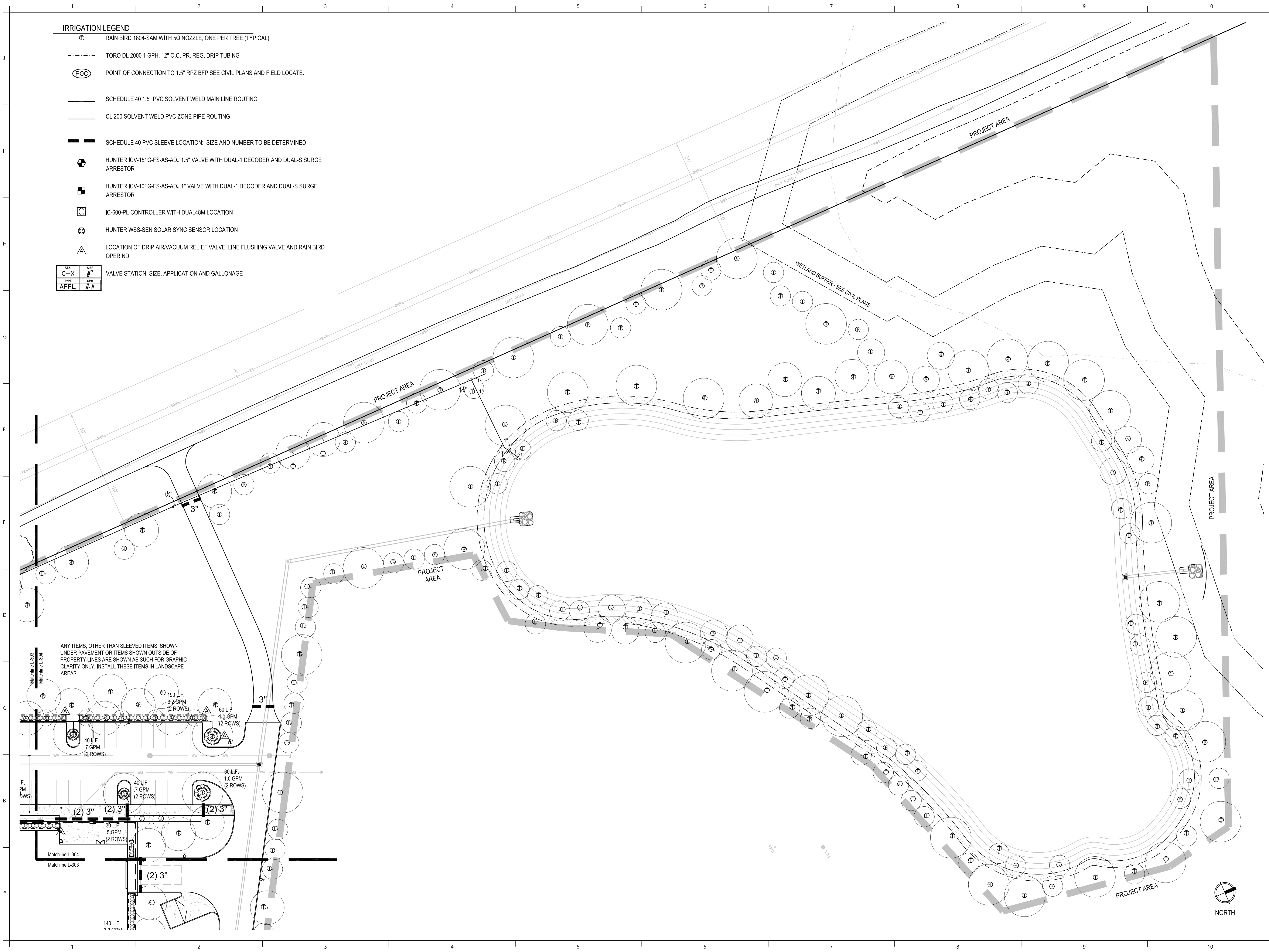


SHEET TITLE:

IRRIGATION PLAN

SHEET NUMBER:

L-304



PLOTDATE: 06/23/2018 10:32 AM USER: ELISABETH MANLEY
FILENAME: C:\USERS\ELISABETH MANLEY\DESKTOP\PROJECTS\2018\18-035 TECH CITY - EDA\04_PRODUCTION\02_SPRACDS\2018-06-05_FINAL\01_SHEETS\18035_IRR.DWG

PART 1 – GENERAL

DESCRIPTION

FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND TRANSPORTATION, UNLESS OTHERWISE SPECIFIED, NECESSARY TO PROVIDE AN AUTOMATIC IRRIGATION SYSTEM FOR LANDSCAPE PLANT MATERIALS AND TURF AND MULCH AREAS.

APPLICABLE STANDARDS

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS S376.1, "DESIGN, INSTALLATION AND PERFORMANCE OF UNDERGROUND, THERMOPLASTIC IRRIGATION PIPELINES."

ASTM D2774, "UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING."

ASTM D1785, POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE, SCHEDULES 40, 80, AND 120.

ASTM D2241 POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE (SDR–PR).

SUBSTITUTIONS

WHEREVER BRAND NAMES ARE USED IN THESE SPECIFICATIONS, USE ONLY THE BRAND SPECIFIED. MAKE NO SUBSTITUTIONS AS A PART OF THIS BID PACKAGE.

PART 2 – MATERIALS

PIPE

FURNISH ALL UNDERGROUND PIPING AS PVC EXCEPT FOR ANY FLEXIBLE POLYETHYLENE (POLY PIPE) PIPING THAT IS TO BE USED BETWEEN THE LATERALS AND SPRINKLER HEADS. ALL PVC PIPE SHALL BE CL 200 PIPE OR BETTER.

SIZE EACH SLEEVE AT LEAST TWICE (2X) THE SIZE OF THE PIPE BEING ROUTED THROUGH IT. INSTALL EACH CONTROL WIRE SLEEVE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES BEING ROUTED THROUGH IT UNDER THE AREA SPECIFIED. CONSULT WITH THE OWNER OR OWNER'S REPRESENTATIVE FOR THE LOCATION, DEPTH, NUMBER AND SIZE OF ANY AVAILABLE EXISTING SLEEVES.

INSTALL ANY ABOVE GROUND PIPE AS GALVANIZED PIPE.

PIPE FITTINGS

FOR MAIN LINE PVC PIPE FITTINGS, USE PVC SCH. 40 FITTINGS AND USE THREADED FITTINGS FOR CONNECTION TO VALVES.

FOR PVC ZONE PIPE, USE SCHEDULE 40, SOLVENT WELD FITTINGS, MANUFACTURED FROM PVC 12454–B COMPOUND AND TESTED IN ACCORDANCE WITH ASTM D2466, EXCEPT FOR THREADED FITTINGS. FOR THREADED APPLICATIONS, USE SCHEDULE 80 FITTINGS MANUFACTURED FROM PVC 12454– B COMPOUND AND TESTED IN ACCORDANCE WITH ASTM D2467.

CONNECT ALL "POLY PIPE" AND RISER ASSEMBLIES TO THE IRRIGATION PIPELINE WITH A SCHEDULE 80 TEE, AS DESCRIBED ABOVE.

DO NOT USE MALE ADAPTERS FOR ANY APPLICATIONS. INSTEAD, USE A "TOE" NIPPLE GLUED INTO A SCHEDULE 40 COUPLER.

SEE DETAILS FOR SPRINKLER TO PIPE CONNECTIONS. NO "FLEX PVC" IS ALLOWED.

SOLVENT CEMENT AND PRIMER

USE A MEDIUM OR HEAVY BODY GRAY SOLVENT CEMENT MANUFACTURED IN ACCORDANCE WITH ASTM D2564 AND PRIMER MANUFACTURED IN ACCORDANCE WITH ASTM F656.

TREE SPRAYS

INSTALL RAIN BIRD 1804–SAM SPRINKLERS WITH 5Q NOZZLES FOR ALL TREE SPRAY APPLICATIONS.

DRIP TUBING

INSTALL TORO DL2000 PRESSURE COMPENSATING .9 GPH, 12" O.C. TUBING FOR ALL DRIP LINE APPLICATIONS.

DRIP TUBING FITTINGS

INSTALL TORO TUBING FITTINGS FOR ALL DRIP LINE APPLICATIONS.

VALVE BOXES

USE 12 X 18 VALVE BOXES FOR ALL APPLICATIONS.

ELECTRIC VALVES

USE HUNTER ELECTRIC VALVES WITH PRESSURE REGULATORS AND DECODERS FOR ALL APPLICATIONS.

CONTROLLER

USE A HUNTER 6–STATION CONTROLLER PER LEGEND WITH DUAL48M AND A SOLAR SYNC SENSOR FOR THIS SYSTEM.

1 IRRIGATION SPECIFICATIONS

SCALE: N/A

WIRE

USE U.L. U.F. WIRE APPROVED FOR DIRECT BURIAL UNDERGROUND FOR ALL 24 VAC APPLICATIONS.

USE #14 TWSTED SHIELDED PAIR WIRE FOR ALL COMMUNICATION WIRES.

USE #14 AWG U.L. U.F. WIRE FOR ALL VALVE DECODER TO VALVE WIRES.

PART 3 – EXECUTION

GENERAL

INSTALL PVC PIPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. REVIEW CONSTRUCTION PLANS WITH THE OWNER OR OWNER'S REPRESENTATIVE BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT/OWNER PRIOR TO INSTALLATION IF THERE IS ANY DOUBT AS TO HEAD LINE OR ZONE PLACEMENT.

INSPECT THE CONSTRUCTION SITE BEFORE ANY WORK BEGINS AND FLAG LOCATIONS OF MAINLINE PIPE, SLEEVES, HEADS AND VALVES FOR REVIEW BY THE OWNER'S REPRESENTATIVE. FLAGS SHALL BE CLEARLY MARKED OR COLORED TO DESIGNATE THE TYPE OF EQUIPMENT TO BE INSTALLED AT THAT POINT. INSTALLATION SHALL NOT COMMENCE UNTIL THE STAKING/ FLAGGING HAS BEEN APPROVED.

COORDINATE THE INSTALLATION OF THE IRRIGATION SYSTEM WITH THE CONTRACTOR TO PROVIDE FOR CORRECT APPLICATION OF WATER TO THE PLANT MATERIAL.

PIPE TRENCH CONSTRUCTION

PROVIDE FOR A MINIMUM DEPTH OF COVER OF 18" FOR ALL MAIN LINE PIPE AND 12" OF COVER FOR ALL ZONE PIPE AS MEASURED FROM FINISHED GRADE.

PROVIDE THE MINIMUM DEPTH OF COVER, AS SPECIFIED ABOVE, OVER THE TOP OF THE PIPE BEFORE THE TRENCH IS WHEEL–LOADED.

BACK FILL

PROVIDE INITIAL BACK FILL MATERIAL THAT IS FINE–GRAINED MATERIAL FREE FROM COMPACTED EARTH GREATER THAN TWO INCHES IN DIAMETER, ROCKS, OR STONES.

TAMP THE BACK FILL IN LAYERS NOT TO EXCEED SIX INCHES. LIFT AND COMPACT FIRMLY AROUND THE PIPE AND UP TO AT LEAST SIX INCHES ABOVE THE TOP OF THE PIPE. SUFFICIENTLY MOISTEN THE BACK FILL TO PERMIT THOROUGH COMPACTION UNDER AND ON EACH SIDE OF THE PIPE TO PROVIDE SUPPORT FREE FROM VOIDS. AVOID DEFORMING, DISPLACING, OR DAMAGING PIPE DURING THIS PHASE OF THE OPERATION. ASSURE THAT WHEN FINISHED, THE SOIL COMPACTION EQUALS THE ORIGINAL CONDITION.

FITTING AND PIPE CONNECTIONS

SQUARE CUT, CLEAN AND PRIME ALL JOINTS BEFORE CEMENTING.

FULLY ENGAGE ALL JOINTS WHILE CEMENTING.

PVC FITTINGS – MAKE ALL SOLVENT WELD JOINTS IN ACCORDANCE WITH ASTM D2855. PRIME ALL FITTINGS WITH PURPLE PRIMER BEFORE MAKING SOLVENT WELD CONNECTIONS. ALLOW SOLVENT WELDED JOINTS AT LEAST ONE (1) HOUR TO SET UP BEFORE MOVING OR HANDLING. DO NOT PERMIT WATER IN THE PIPE FOR AT LEAST TWENTY–FOUR HOURS AFTER MAKING A SOLVENT WELD ON THAT PIPE UNLESS RECOMMENDED OTHERWISE BY THE SOLVENT CEMENT MANUFACTURER. SEAL ALL THREADED PVC FITTINGS WITH LIQUID TEFLON EXCEPT SPRINKLER HEADS, ELECTRIC VALVE CONNECTIONS AND SWING JOINTS. INSTALL ALL OF THESE EXCEPTIONS USING ONE INCH TEFLON TAPE.

FLUSHING PIPELINES

FLUSH ALL PIPELINES BEFORE SPRINKLERS ARE INSTALLED. MAINTAIN A MINIMUM PIPE VELOCITY OF THREE FEET PER SECOND AND FLUSH FOR A MINIMUM TIME OF:

T = 2L/3 WHERE T = TIME IN SECONDS
& L = PIPE LENGTH IN FEET FROM INLET POINT TO MOST DISTANT POINT IN PIPELINE.

INSTALLING ELECTRIC VALVE CONTROL WIRING

INSTALL WIRING IN THE SAME TRENCH AND ALONG THE SAME ROUTE AS, AND UNDERNEATH THE MAIN LINE EXCEPT IN LOCATIONS WHERE THE WIRE WILL PASS UNDER PAVING. AT THOSE LOCATIONS INSTALL THE WIRE INSIDE OF A PVC SLEEVE. INSTALL CONTROL WIRING THROUGH WALLS, FLOORS, AND SLABS IN PVC SLEEVES. INSTALL (2) EXTRA WIRES POWER FROM EACH CONTROLLER TO THE FARTHEST VALVE IN EACH DIRECTION OPERATED BY THAT CONTROLLER.

TAPE WIRING TOGETHER AT INTERVALS OF TEN FEET, USING 1/4 INCH FIBER REINFORCED TAPE.

USE A CONTINUOUS WIRE BETWEEN THE CONTROLLER AND VALVE. MAKE AN EXPANSION LOOP OF A MINIMUM 12 INCHES DIAMETER AT EACH WIRE CONNECTION. PROVIDE EXPANSION COILS OF WIRE AT NO MORE THAN 100 FOOT INTERVALS AND AT EACH DIRECTION CHANGE IN THE WIRE ROUTING.

ATTACH PERMANENT MARKINGS AT EACH END OF EACH WIRE TO IDENTIFY IT BY VALVE NUMBER. (CHRISTIE I.D. TAGS OR EQUAL)

PROVIDE A SEPARATE POWER WIRE FOR EACH CONTROL VALVE.

AUTOMATIC CONTROLLER INSTALLATION

LOCATION – VERIFY LOCATION WITH OWNER OR OWNER'S REPRESENTATIVE BEFORE INSTALLATION.

VERIFY THAT SUFFICIENT SLEEVING EXISTS TO ALLOW ROUTING OF THE VALVE WIRING FROM THE CONTROLLER TO EACH VALVE.

VALVE INSTALLATION

INSTALL ALL AUTOMATIC ZONE VALVES AND GATE VALVES IN VALVE BOXES. NUMBER EACH ZONE VALVE BOX ON THE UNDERSIDE AND TOPSIDE OF EACH VALVE BOX COVER WITH BLACK WATERPROOF MARKER FOR REFERENCE.

INSTALL ANY MAIN LINE ISOLATION VALVES AND QUICK COUPLING VALVES IN VALVE BOXES.

INSTALLATION OF SPRAY HEADS.

INSTALLATION SCHEDULE – INSTALL SPRAY HEADS AFTER THE SPRINKLER BODY ASSEMBLIES HAVE BEEN CLEANLY FLUSHED.

ORIENTATION – INSTALL POP–UP UNITS IN A PLUMB POSITION AND FIELD ADJUST SPRINKLER HEADS TO OBTAIN COMPLETE COVERAGE OF IRRIGATED AREA WITH MINIMUM OVER SPRAY ONTO PAVED SURFACES. HEADS ARE TO BE LOCATED ON A MAXIMUM SPACING OF 55% OF THE SPRINKLER COVERAGE DISTANCE AND CLOSER WHERE INDICATED. ADJUST NOZZLE DISTANCE AS NEEDED TO COVER PLANT MATERIALS AND MINIMIZE OVER SPRAY ON STRUCTURES AND PAVEMENT. ALIGN POP–UP SPRAY HEADS IN A VERTICAL ORIENTATION AS SHOWN IN THE DETAILS. –ADJUST AS NECESSARY TO PROVIDE THE BEST COVERAGE IN SLOPED AREAS.

TESTING

PRESSURE TEST THE SYSTEM MAIN LINE BEFORE APPRECIABLY BACKFILLING.

PRESSURE TEST THE SYSTEM MAIN LINE, IN THE PRESENCE OF THE OWNER OR OWNER'S REPRESENTATIVE, FOR A PERIOD OF NO LESS THAN FOUR HOURS, CONTINUOUSLY, AT A PRESSURE OF NO LESS THAN 100 PSI WITH NO LEAKS AND ASSURE THAT ANY TESTS OF THE SYSTEM MAIN LINE MEET THE APPLICABLE COUNTY PLUMBING CODES. IF LEAKAGE OCCURS, REMEDY THE LEAKAGE PROBLEM AND RETEST. REPEAT THIS PROCESS AS MANY TIMES AS NECESSARY UNTIL A SUCCESSFUL TEST IS PERFORMED.

INSPECTIONS

THE FOLLOWING INSPECTIONS ARE REQUIRED. NOTIFY OWNER OR OWNER'S REPRESENTATIVE IN ADVANCE THAT EACH ITEM IS READY FOR INSPECTION AS INDICATED BELOW:

INSPECTION OF FLAGGED UNDERGROUND MAINLINE PIPING, SLEEVES, SPRINKLER AND VALVE LOCATIONS PRIOR TO BEGINNING CONSTRUCTION – NOTIFY 48 HOURS IN ADVANCE.

SPRINKLER COVERAGE TEST – NOTIFY 48 HOURS IN ADVANCE.

FINAL INSPECTION – NOTIFY 48 HOURS IN ADVANCE.

TESTING

COVERAGE TESTS – CONDUCT SPRINKLER COVERAGE TESTS UNDER NORMAL OPERATING PRESSURE CONDITIONS BEFORE ANY GROUND COVER OR TURF IS PLANTED. CORRECT AND FIELD ADJUST SPRINKLER ORIENTATION TO PROVIDE UNIFORM PRECIPITATION OVER THE IRRIGATED AREA AND MINIMIZE OVER SPRAY ONTO PAVED SURFACES AND BUILDINGS.

WARRANTY

THE CONTRACTOR SHALL ISSUE TO THE OWNER OR OWNER'S REPRESENTATIVE A CERTIFICATE OF WARRANTY OF THE IRRIGATION SYSTEM FOR A PERIOD OF NOT LESS THAN ONE YEAR ON ALL SPRINKLERS, VALVES, THE CONTROLLER, AND HIS LABOR.

DRAWING OF RECORD

THE CONTRACTOR SHALL SUPPLY TO THE OWNER A DRAFTED, SCALED, REPRODUCIBLE PLAN SHOWING ALL CHANGES MADE TO THE EXISTING IRRIGATION SYSTEM AND ALL NEWLY INSTALLED COMPONENTS INCLUDING ALL SPRINKLERS, INCLUDING BODY TYPES AND NOZZLES, PIPE, INCLUDING SIZES AND THE ENDS OF SLEEVING LOCATIONS AS MEASURED FROM AT LEAST TWO FIXED OBJECTS, CONTROLLER, AND WIRE ROUTING. THIS PLAN MAY BE AN ADAPTATION OF THE IRRIGATION DESIGN WITH ANY CHANGES DRAFTED ON THIS PLAN. THE DRAWING SHALL ALSO PROVIDE A MINIMUM OF TWO (2) DIMENSIONS TAKEN FROM FIXED OBJECTS TO EACH AUTOMATIC VALVE AND MANUAL CONTROL VALVE.

ADDITIONAL SUBMITTALS

SUPPLY TO THE OWNER ALL INSTRUCTION SHEETS AND PARTS LISTS COVERING ALL OPERATING AND ELECTRICAL–RELATED EQUIPMENT, BOUND IN ONE FOLDER. FURNISH THE OWNER WITH ANY KEYS FOR LOCKABLE ITEMS ON THIS SYSTEM.

RAIN GAUGE

ASSURE THAT EACH CONTROLLER IS INTERFACED WITH A RAIN SWITCH WHICH WILL SHUT THE SYSTEM OFF IN CASE OF RAIN OR FREEZING WEATHER. CONFIRM LOCATION OF RAIN GAUGE WITH OWNER PRIOR TO INSTALLATION.

MISCELLANEOUS

ANY IRRIGATION ITEMS NORMALLY INSTALLED IN LANDSCAPE AREAS THAT ARE SHOWN OUTSIDE OF LANDSCAPE AREAS OR OUTSIDE OF THE PROPERTY LINES ARE SHOWN AS SUCH FOR GRAPHIC CLARITY ONLY. INSTALL THESE ITEMS INSIDE OF PROPERTY LINES AND IN LANDSCAPE AREAS. CONTACT THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION IF IN ANY DOUBT OF HEAD, LINE OR ZONE PLACEMENT.

ASSURE THAT THE SYSTEM PROVIDES 100% COVERAGE OF ALL LANDSCAPED AREAS. REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE BEFORE COMMENCING WITH THE INSTALLATION.

ALL APPLICABLE CODES SHALL TAKE PRECEDENCE OVER THESE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE CODES.

THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO MAKE MINOR FIELD CHANGES.

FIELD ADJUST NOZZLE SELECTION LOCATIONS AND PLUMB OF SPRINKLERS AND SPACING OF DRIP TUBING TO PROVIDE PROPER COVERAGE.

PROJECT NAME:

SAN FELASCO TECH CITY

Alachua, FL

for
Laser Investment Group

SEAL:

PROJECT NO: 18-035

CLIENT'S NO.:

ISSUED FOR: SITE PLAN REVIEW

ISSUED DATE: 30 APR 2018

REVISIONS:

04 JUN 2018

18 JUN 2018

25 JUN 2018

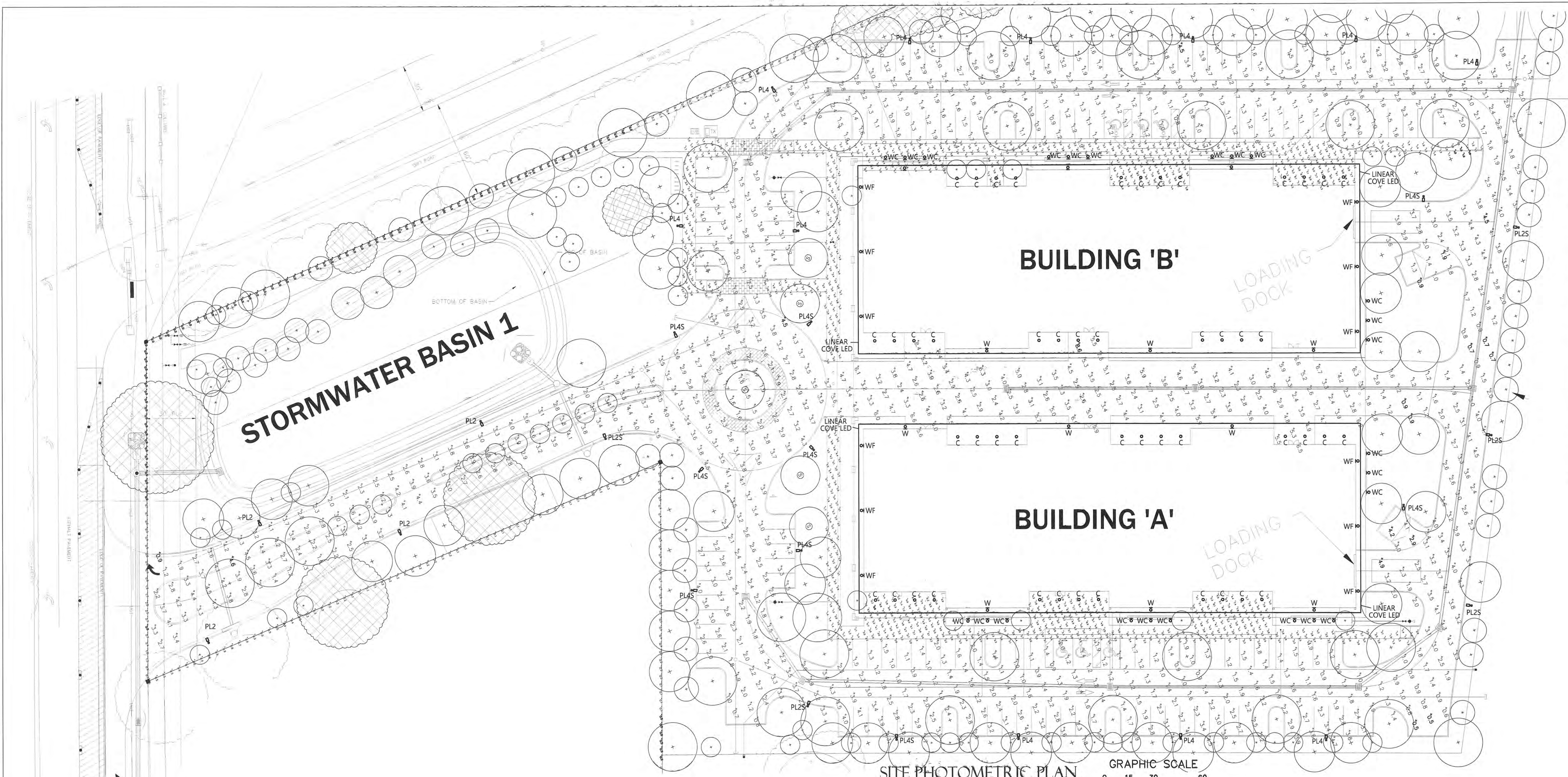
SCALE:

SHEET TITLE:

IRRIGATION TECHNICAL SPECIFICATIONS

SHEET NUMBER:

L-305



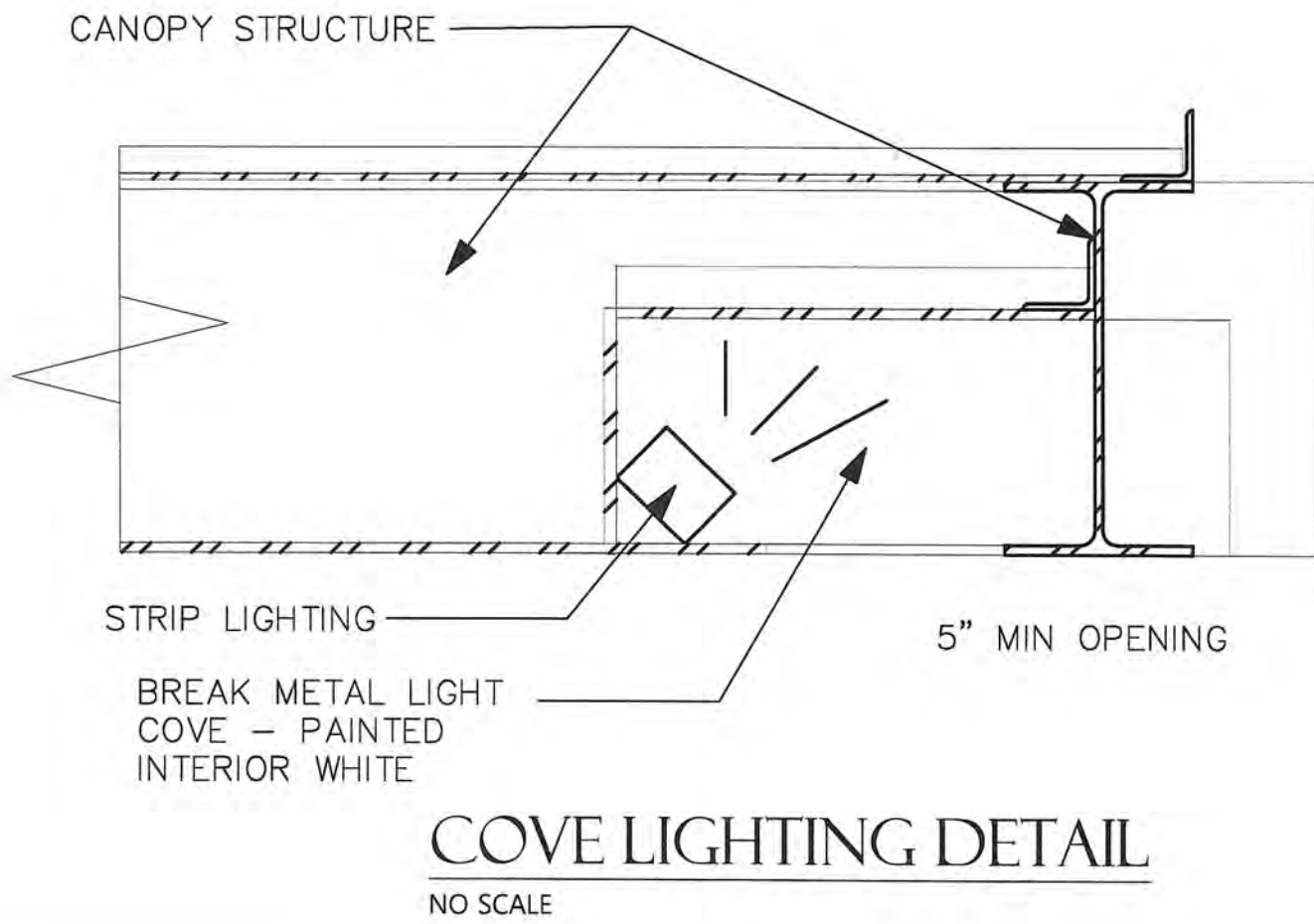
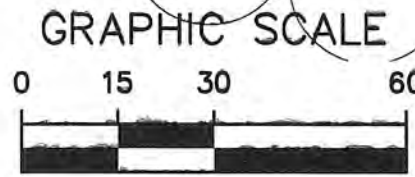
LUMINAIRE SCHEDULE FOR PHOTOMETRICS									
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
■	PL4	8	ARXX-18M2-MV-NW-4-XX-700 S	Leotek Electronics - Pole arm mount roadway luminaire.	ARXX-18M2-MV-NW-4-XX-700 S.ies		15000	0.81	160
■	PL2	8	ARXX-18M2-MV-NW-2-XX-700 S	Leotek Electronics - Pole arm mount roadway luminaire.	ARXX-18M2-MV-NW-2-XX-700 S.ies		15000	0.81	160
■	PL4S	10	ARXX-15M2-MV-NW-4-XX-700 S	Leotek Electronics - Pole arm mount roadway luminaire.	ARXX-15M2-MV-NW-4-XX-700 S.ies		17500	0.81	124
■	PL2S	3	ARXX-15M2-MV-NW-2-XX-700 S	Leotek Electronics - Pole arm mount roadway luminaire.	ARXX-15M2-MV-NW-2-XX-700 S.ies		17500	0.81	124
○	W	10	122L-3-55LA-NW	122 SlenderForm LED Sconce	(1) LIGHT ARRAY OF 32 LEDs DRIVEN AT 530mA	122-3-55LA-NW.IES	5685	0.81	50
○	WC	15	26 7123-40	ONE4TWO MEDIUM_MONO_LED_4 0"-4000K	GLD0332 9 LED_4000K	26 7123-40.ies	1122	0.81	16
○	WF	6	122L-4-55LA-NW	122 SlenderForm LED Sconce	(1) LIGHT ARRAY OF 32 LEDs DRIVEN AT 530mA	122-4-55LA-NW.IES	5365	0.81	50
○	C	48	UR4E-XXXXX090L WITH XXUR-120EB2	LED	LED	UR4E-XXXXX090L.IES	1100	0.81	15
—	LINEAR LED COVE	408	523-000004-72	MOLDED PLASTIC HOUSING, ONE WHITE CIRCUIT BOARD WITH 6 LEDs, TRANSLUCENT WHITE PLASTIC DROP LENS	SIX WHITE LIGHT EMITTING DIODES (LEDs)	eW_Cove_EC Powercore_400 0K_12in_ITL64 058_011510.ies	41 lum/ft	0.81	12.08

PHOTOMETRIC STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PEDESTRIAN BREEZEWAY	+	3.8 fc	8.6 fc	0.9 fc	9.6:1	4.2:1
NORTH DUMPSTER	+	1.4 fc	1.9 fc	0.9 fc	2.1:1	1.6:1
SOUTH DUMPSTER	+	3.5 fc	4.2 fc	2.9 fc	1.4:1	1.2:1
ENTRY ROAD	+	3.1 fc	4.6 fc	0.9 fc	5.1:1	3.4:1
NORTH PARKING/DRIVE	+	2.3 fc	4.5 fc	0.7 fc	6.4:1	3.3:1
PROPERTY LINE	+	0.3 fc	2.8 fc	0.0 fc	N / A	N / A
NORTH SIDEWALK	+	4.0 fc	9.7 fc	1.0 fc	9.7:1	4.0:1
SOUTH SIDEWALK	+	4.1 fc	9.8 fc	1.0 fc	9.8:1	4.1:1
SOUTH PARKING/DRIVE	+	2.3 fc	4.9 fc	0.5 fc	9.8:1	4.6:1

SITE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

GENERAL NOTES

- HIGHLIGHTED POINTS REPRESENT MAXIMUM/MINIMUM VALUE FOR EACH AREA.
- FIXTURES WILL BE CONTROLLED WITH PHOTOCELL AND OPERATE DUSK-TO-DAWN.
- POLES SHALL BE LOCATED MINIMUM 24" BEHIND CURB.



HUNTER DESIGN AND CONSULTING, INC.
735 ARLINGTON AVE N, STE 308
ST. PETERSBURG, FL 33701
352-238-6366
FLORIDA CA #31946, PE #76961

SAN FELASCO TECH CITY
SITE PHOTOMETRIC PLAN
ALACHUA, FLORIDA

PROJECT INFORMATION	
PROJECT NUMBER:	18054
DRAFTED:	K. HUNTER
DESIGNED:	K. HUNTER
REVIEWED:	K. HUNTER
ISSUE DATE:	6/21/18

REVISIONS

SHEET NUMBER

E-1