

STAFF REPORT

DATE: May 10, 2022

RE: 255 Trumbo Road (Landscape Sec 108 Review)

FROM: Karen DeMaria, City of Key West Urban Forestry Manager

An application was submitted to the Tree Commission for Conceptual Landscape Plan approval with tree removal for a major development plan to develop the property with residential housing units for the Sheriff's Department employees and a one story non residential building. This review is to verify compliance to Sec 108 of the City Code regarding landscaping and buffer requirements to help the Planning Board with their review. This review is based on the site and landscape plan submitted to the Tree Commission dated January 26, 2021 and update submitted to the urban forestry manager dated April 29, 2022 and stamped as received on May 5, 2022.

Review of Section 108:

1. Sec 108-243: A completed landscape plan, signed and sealed, with a tree protection, erosion containment plan, and irrigation plan has been submitted along with a construction management plan.
2. Sec 108-289: The Tree Commission reviewed the conceptual landscape plan with tree removal at their April 11, 2022 meeting. The project will require the removal of 18-Green Buttonwoods (tree #4, #6, #7, #9, #10, #12, #13, #15, #16, #18, #19, #21, #22, #23, #24, #26, #27, & #29), 1-young Fiddlewood (tree #56), and 1-young Gumbo Limbo (tree # #57), the transplantation of 9-Royal Palms (Palm #5, #11, #17, #28, #45, #46, #47, #48, & #49) on site, and the heavy maintenance trim of 2-Green Buttonwoods (Trees #53 & #54). Approximately 151.6 caliper inches of approved trees is required to be planted on the property to compensate for those trees removed. The landscape plan proposes to plant approximately 312 caliper inches of approved trees.
3. Sec 108-346: The project is required to have 35% open space. It is proposing to have 40% open space. All Brazilian pepper trees, an invasive exotic plant species, currently on the site will be removed. Due to the seed source being in the soil, the property maintenance plan must include a statement regarding maintenance of the property to remove any invasive exotic plant species including Brazilian Pepper (*Schinus terebinthifolia*), Lead tree (*Leucaena leucocephala*), and Australian Pine (*Casuarina equisetifolia*).
4. Sec 108-347 (bufferyards): The proposed use of the property is primarily multi-family residential. According to the property appraiser site, the adjoining properties on the north and east side (A&D on map) are listed as public schools land use and the property to the south (C on the map) is listed as condominiums.

According to the code, the buffer area labeled as "D" requires a total of 62.4 plant units. The proposed landscape plan includes the planting and transplanting of 9-Royal Palms and the planting of 4-Gumbo Limbo trees and numerous shrub species for a total of 136 plant units.

Buffer area "A" requires the planting of 100 plant units. The proposed landscape plan includes the protection and incorporation of 11 existing green buttonwood trees and 1-young sabal palm, the transplanting of 1-Royal Palm, and the planting of 4-Gumbo Limbo trees and some shrubs for a total of 204 plant units.

Buffer area "B" requires the planting of 41 plant units. The proposed landscape plan includes the protection of 4-Royal Palms and 1-young Fiddlewood tree and the planting of 1-Gumbo Limbo tree and some shrubs for a total of 57 plant units. This area abuts an existing landscaped area on the neighboring property.

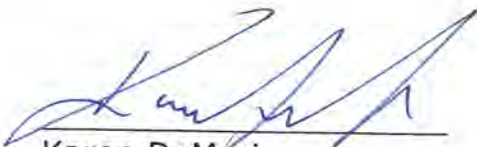
Therefore, based on the information above, the landscape plan is in compliance with this section of code.

5. Sec 108-348 allows for credit of existing plant material. The Tree Commission reviews and approves the removal and transplanting of any regulated trees and palms from properties. At the April 11, 2022, Tree Commission meeting the applicant requested and received approval for the removal of protected trees and palms and received approval for the Conceptual Landscape Plan. The Conceptual Landscape Plan included the planting of all the required replacements on the property and the protection of (15) Green Buttonwood, (1) Fiddlewood, (6) Royal Palms, and (1) Sabal Palm to remain on the site and incorporated into the landscape plan. Credit has been given for these trees and palms during the review.
6. Sec 108- 412: The plan does incorporate over 70% native vegetation and 40% of the property is to be landscaped. The rest of the property not covered in hardscape or groundcover will have sod or mulch placed.
7. 108-413, landscape requirement along street frontages. The property is 1.14 acres therefore, this section of the code requires 120 plant units per 100 linear ft in a 30 ft wide landscape area for a total of 300 plant units needed. The landscape plan proposes to plant a total of 249 primary plant units to include (2) existing Buttonwood trees, 5-Gumbo Limbos, 9-Pigeon Plum trees, 2-existing Royal Palms, 83-tall shrubs (Silver Buttonwood, Wild Coffee, and coontie), and 305 assorted shrub beds to include cocoplum and cordgrass. The proposed landscape plan is in compliance with this section of code.
8. Sec 108-414 Interior parking areas: The interior parking area complies with this section of the code. Parking islands have at least one tree and sod for every 100 square feet and there is a landscape strip separating the head in parking areas. Plans do not show clearly curbing or parking stops in the parking area. This will need to be clarified or added as a condition.

9. Sec 108-416, interior area landscaping. This section of code specifically looks at the planting of trees and requires that all areas not covered by buildings or hardscape will have grass, groundcover, shrubs or other landscaping materials. It appears the landscape plan proposes to place sod in areas not covered by shrubs and landscape bed areas. Code requires the planting of 6 canopy trees in the interior section. Two existing Buttonwood trees will remain on the property and 4-new Gumbo Limbo trees will be planted plus 3-Royal Palms will be transplanted into the interior area. Therefore, the landscape plan complies with this section of code.
10. Sec 108-447: The landscape plan does include a tree protection plan but it does not clearly show parking stops or curbing in the entire parking area.
11. Sec108-448: It does appear that all landscape strips are covered with living material and/or mulch.
12. Sec 108-450: Landscape screening has been provided where necessary.
13. Sec 108-451: Credit has been given for existing trees.
14. Sec 108-481: The proposed landscaping contains 19% palms and three main tree species, Green Buttonwood, Gumbo Limbo, and Pigeon Plums trees all of which are appropriate for this high salt area. Plant species are of appropriate size.
15. Sec 108-515: An irrigation plan has been submitted.

Conditions to be included with Planning Board Approval:

1. All Brazilian pepper trees, an invasive exotic plant species, currently on the site will be removed. Due to the seed source being in the soil, the property maintenance plan must include a statement regarding continual maintenance of the property to remove any invasive exotic plant species including Brazilian Pepper (*Schinus terebinthifolia*), Lead tree (*Leucaena leucocephala*), and Australian Pine (*Casuarina equisetifolia*).
2. Plans need to show clearly curbing or parking stops being placed in the parking area to protect landscaped areas.



Karen DeMaria
Urban Forestry Manager
City of Key West

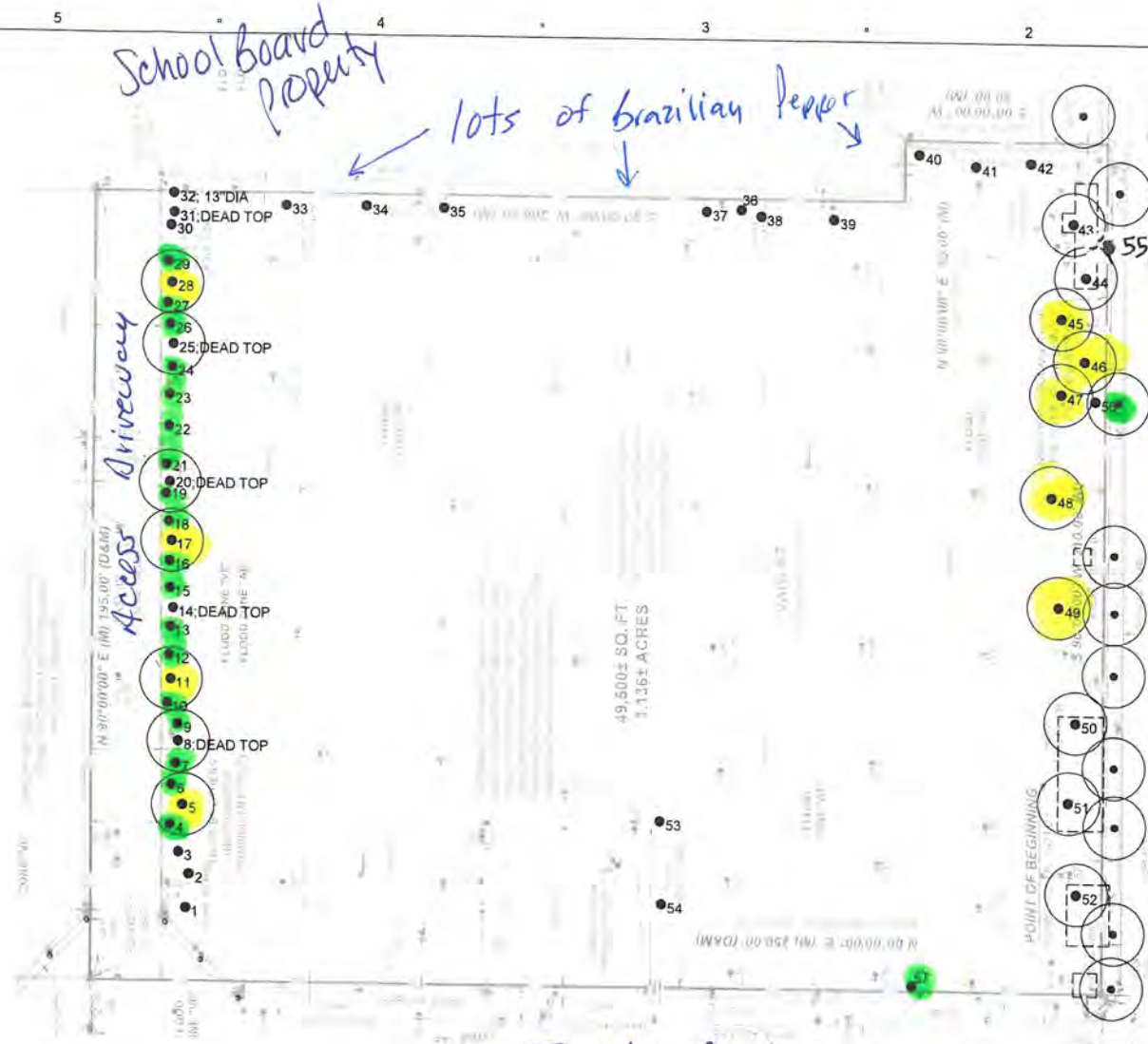
TREE PROTECTION AND PRESERVATION NOTES

- Protect designated existing trees scheduled to remain against:
 - Unnecessary cutting, breaking, or skinning of roots
 - Skinning and bruising of bark
 - Smothering of trees by stockpiling construction or excavation materials within protection barrier
- Protection barriers (tree barricades) shall be plainly visible and shall create a continuous boundary around trees or vegetation clusters in order to prevent encroachment within the barricade.
- For all trees to be preserved, see Tree Protection and Barricade Elevation detail.
- No grade changes shall be made within the protective barrier zones without prior approval.
- The method of protection is to make certain that 50% of the area under the canopy dripline remains undisturbed (no grade change or root cut) and there shall be no disturbance to the root plate.
- General contractor shall be responsible for the replacement and mitigation costs of trees damaged beyond repair that have been identified as protected and preserved. If trees are harmed through lack of protection or through negligence on the part of the contractor, the contractor shall bear the burden of the cost of repair or replacement.
- Root pruning shall be done by or under supervision of an ISA certified arborist, and meet or exceed ANSI A300 or approved tree care industry standards. A certified arborist must be onsite during the entirety of root pruning.
- No root pruning shall be done within a distance of 3x the diameter the tree unless authorized by the arborist.
- No more than 30% of the trees roots may be pruned.
- A pruning trench shall be cleared in a way that exposes the roots while leaving them intact. Use hand tools or an air knife. Limits of trench to be determined by the arborist.
- All roots outside of the protective barricade to be removed during the development shall be severed clean using a sharp tool to provide a clean cut. Roots shall be left with clean smooth ends and no ragged edges and a two-inch layer of mulch shall be applied over the surface of exposed roots during development within one hour of damage or exposure.
- After pruning, tree roots shall be covered and kept moist. Fill pruning trench with topsoil and water daily for a period determined by the arborist.

TRANSPLANTING CRITERIA

- All trees and palms to be transplanted are listed on the tree inventory sheet and shown on the proposed landscape plans.
- If transplanted materials are not immediately installed in their final location, they will be held on site. The contractor will set up a holding area and ensure trees and palms are stored in an upright manner and braced appropriately. All root balls will be covered with an organic layer of mulch and soil. Root balls will be kept moist and checked regular for moisture content. A temporary overhead misting system will be installed to keep canopy and plan buds moist to reduce plants from shocking.
- Pruning of trees and palms to be transplanted will be in accordance with the Florida Grades and Standards Manual's most recent addition.
- Trees and palms will be root pruned a minimum of 6 weeks prior to moving or as industry standard and Florida Grades and Standards dictate.

RECEIVED
MAY 05 2022
BY: [Signature]



LEGEND

□ TREE PROTECTION BARRIER

R = REMOVE
T = TRANSPLANT
S = SAVE

ALL INVASIVE SPECIES SHALL BE REMOVED FROM SITE

EXISTING TREE SURVEY

Tree No.	Type	DBH (in.)		Tree No.	Type	DBH (in.)	
1	Green Buttonwood	10	S	29	Green Buttonwood	9	R
2	Royal Palm	> 20 ft	S	30	Green Buttonwood	13	S
3	Green Buttonwood	10	S	31	DEAD Royal Palm	DEAD	R
4	Green Buttonwood	11	R	32	Green Buttonwood	13	S
5	Royal Palm	> 20 ft	T	33	Green Buttonwood	12	S
6	Green Buttonwood	12	R	34	Green Buttonwood	16	S
7	Green Buttonwood	11	R	35	Green Buttonwood	11	S
8	DEAD Royal Palm	DEAD	R	36	Young Sabal Palm	5 ft	S
9	Green Buttonwood	9	R	37	Green Buttonwood	9	S
10	Green Buttonwood	9	R	38	Green Buttonwood	9	S
11	Royal Palm	> 20 ft	T	39	Green Buttonwood	9	S
12	Green Buttonwood	15	R	40	Green Buttonwood	9	S
13	Green Buttonwood	11	R	41	Green Buttonwood	6	S
14	DEAD Royal Palm	DEAD	R	42	Green Buttonwood	8	S
15	Green Buttonwood	10	R	43	Royal Palm	> 20 ft	S
16	Green Buttonwood	8	R	44	Royal Palm	> 20 ft	S
17	Royal Palm	> 20 ft	T	45	Royal Palm	> 20 ft	T
18	Green Buttonwood	15	R	46	Royal Palm	> 20 ft	T
19	Green Buttonwood	11	R	47	Royal Palm	> 20 ft	T
20	DEAD Royal Palm	DEAD	R	48	Royal Palm	> 20 ft	T
21	Green Buttonwood	12	R	49	Royal Palm	> 20 ft	T
22	Green Buttonwood	8	R	50	Royal Palm	> 20 ft	S
23	Green Buttonwood	9	R	51	Royal Palm	> 20 ft	S
24	Green Buttonwood	10	R	52	Royal Palm	> 20 ft	S
25	DEAD Royal Palm	DEAD	R	53	Green Buttonwood	18	S
26	Green Buttonwood	10	R	54	Green Buttonwood	15	S
27	Green Buttonwood	12	R	55	Fiddlewood	2	S
28	Royal Palm	> 20 ft	T	56	Fiddlewood	2	R
				57	Gumbo Limbo	2.5	R

REMOVE / REPLACEMENT SUMMARY CHART

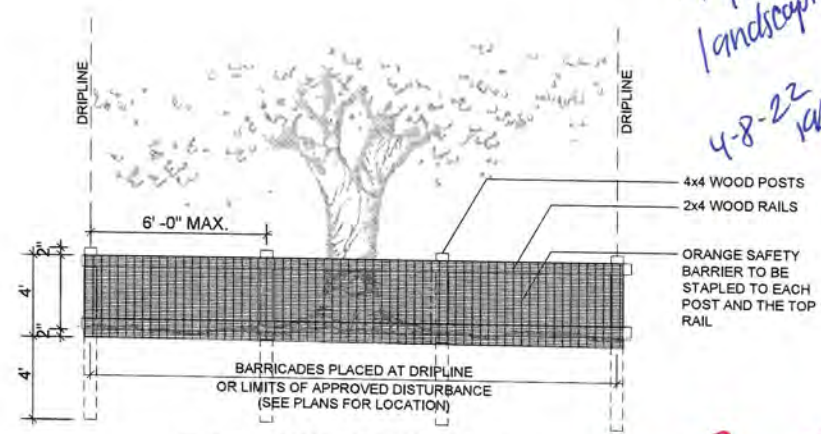
200 Cal. Inches Removed
304 Cal Provided (19 - 4" cal. Gumbo Limbo x4)
24 Cal. Provided (12 - 2" cal. Pigeon Plum x1)

$18 \times 4 = 72 + 4 = 288$

$12 \times 2 = 24$

312" replacements in landscaping

4-8-22 [Signature]



TREE PROTECTION DETAIL
N.T.S.

NOT FOR CONSTRUCTION



618 E. SOUTH STREET
SUITE 700
ORLANDO, FL 32801
407.423.8398

PROJECT
TRUMBO VILLAGE
255 TRUMBO ROAD
KEY WEST, FL

CLIENT
POPE-SCARBROUGH ARCHITECTS
810 WHITE STREET
KEY WEST, FL
305.298.3611

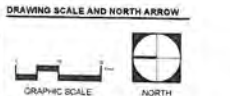
OWNER

CONSULTANTS



ISSUANCE	DD MM YY
PER DRC COMMENTS	29 FEB 22
TREE COMMISSION	17 FEB 22

PROJECT NUMBER R210943.00
DATE: 12.10.21
SCALE: SCALE 1"=30'-0"



SHEET TITLE
DEMOLITION PLAN
SHEET NUMBER
L0.00

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Public Schools (Offices)

Public Schools (Offices)

existing concrete wall

emergency gate/access

Condominium

LANDSCAPE CALCULATIONS

BUFFER YARD "A"

Required:
9' Wide
40 Plant Units/100 LF
250 LF/100 LF = 2.5 x 40 = 100 Plant Units
Provided:
(4) Canopy Trees = 40 Plant Units
(212) Shrubs = 212 Plant Units
252 Plant Units Provided
Plus 112 Cal. Inches of Existing Trees

BUFFER YARD "B"

Required:
7.5' Wide
40 Plant Units/100 LF
210 LF/100 LF = 2.1 x 40 = 84 Plant Units
Provided:
(5) Canopy Trees = 50 Plant Units
(11) Existing Evergreen Tree = 55 Plant Units
(112) Shrubs = 112 Plant Units
217 Plant Units Provided

BUFFER YARD "C"

Required:
10' Wide
36 Plant Units/100 LF
250 LF/100 LF = 2.5 x 36 = 90 Plant Units
Provided:
(4) Canopy Trees = 40 Plant Units
(5) Existing Evergreen Tree = 25 Plant Units
(141) Shrubs = 141 Plant Units
206 Plant Units Provided

BUFFER YARD "D"

Required:
7.5' Wide
40 Plant Units/100 LF
195 LF/100 LF = 1.95 x 40 = 78 Plant Units
Provided:
(4) Canopy Trees = 40 Plant Units
(40) Shrubs = 40 Plant Units
80 Plant Units Provided

LANDSCAPE ZONE

Required:
30' Wide
120 Plant Units/100 LF
250 LF/100 LF = 2.5 x 120 = 300 Plant Units
Provided:
(5) Canopy Trees = 50 Plant Units
(12) Evergreen Trees = 52 Plant Units
(315) Shrubs = 315 Plant Units
417 Plant Units Provided
Plus - 2 Existing Buttonwood of 33 Inches

- Royal Palm Transplants
- Bumbo Limbo trees
- Pigeon Plum trees
- Existing Trees

5-10-22
[Signature]

NOT FOR CONSTRUCTION

COMMUNITY SOLUTIONS GROUP

A/G/I Consultants, Inc. Service Group
618 E. SOUTH STREET
SUITE 700
ORLANDO, FL 32801
407.423.8398
CERTIFICATE OF AUTHORIZATION: EB9551

PROJECT
TRUMBO VILLAGE
255 TRUMBO ROAD
KEY WEST, FL

CLIENT
POPE-SCARBROUGH ARCHITECTS
410 WHITE STREET
KEY WEST, FL
305.296.3611 (H)

OWNER

CONSULTANTS



ISSUED FOR:

ISSUANCE	DD MM YY
PER DRC COMMENTS	28 FEB 22
TREE COMMISSION	17 FEB 22
PER COMMENTS	29 APR 22

PROJECT NUMBER R210943.00

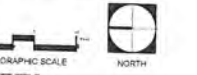
DATE 12.10.21

SCALE SCALE: 1"=10'-0"

DRAWN BY: IM

CHECKED BY: KC

DRAWING SCALE AND NORTH ARROW



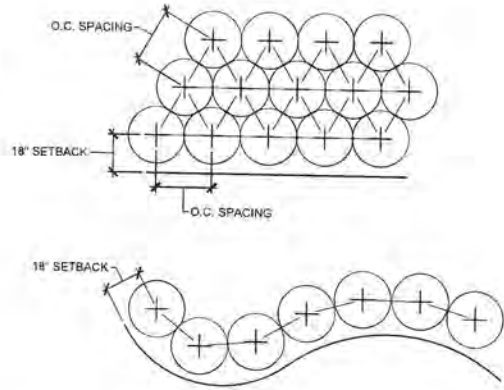
SHEET TITLE
LANDSCAPE PLAN

SHEET NUMBER
L3.00

Florida: T-2021 (12/31/2021) - Florida: T-2021 (12/31/2021) - Florida: T-2021 (12/31/2021) - Florida: T-2021 (12/31/2021) - Florida: T-2021 (12/31/2021)

NOTES

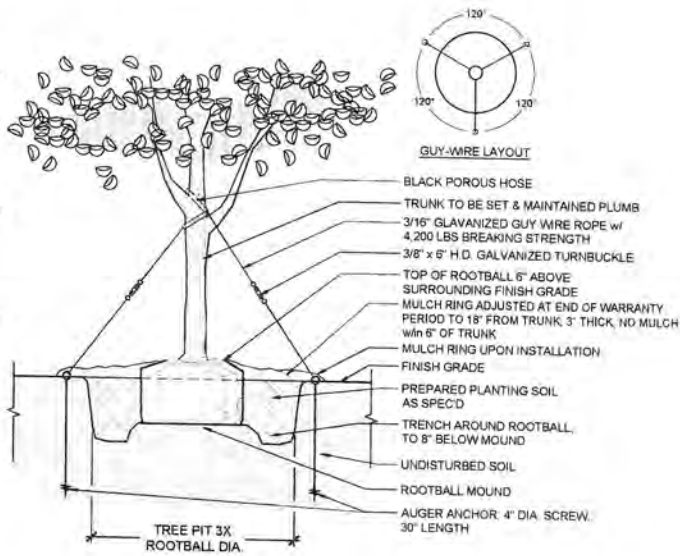
1. THE PERIMETER OF ALL CURVED PLANTING BEDS SHALL BE PLANTED AT WITH A ROW OF PLANTS AS SHOWN IN THIS DETAIL AT THE O.C. SPACING SHOWN IN THE PLANT LIST.
2. INTERIOR PORTIONS OF EACH BED SHALL BE PLANTED IN A TRIANGULAR PATTERN AS SHOWN IN THIS DETAIL, AT THE O.C. SPACING SHOWN IN THE PLANT LIST.
3. SETBACKS ARE APPLICABLE AGAINST ALL HARDSCAPE SURFACES AND SOD EDGES.



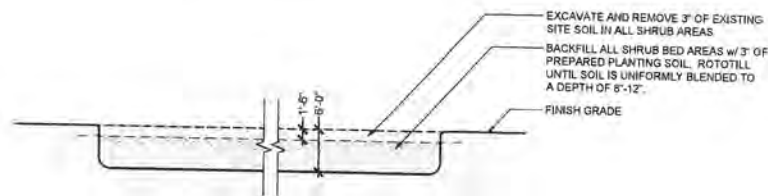
1 SHRUB AND GROUND COVER LAYOUT
N.T.S.

NOTES

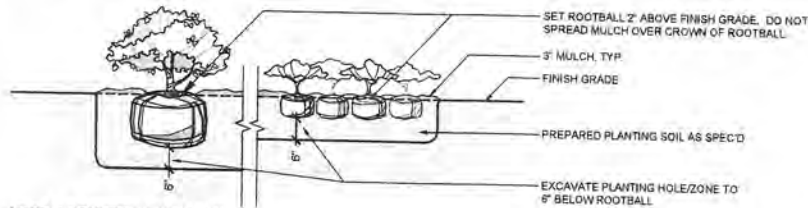
1. EXCAVATE OVERALL PLANTING HOLE TO DEPTH NECESSARY TO SET TOP OF ROOTBALL 6" ABOVE SURROUNDING FINISH GRADE. THIS IS THE ROOTBALL MOUND ELEVATION.
2. EXCAVATE A TRENCH TO AN ADDITIONAL 8" DEPTH AROUND THE ROOTBALL MOUND.
3. ASSURE PERCOLATION OF PLANTING HOLE PRIOR TO SETTING THE TREE NOTIFY THE OWNER IN WRITING IF SATISFACTORY PERCOLATION IS NOT ACHIEVED.
3. SET AUGER ANCHOR OUTSIDE THE EXCAVATED TREE PIT, EXTEND MULCH RINGS BEYOND THE ANCHORS UPON INSTALLATION TO ENSURE EASE OF MAINTENANCE (MOVING AND TRIMMING PRACTICES) DURING THE WARRANTY PERIOD.
4. UPON REMOVAL OF GUY WIRE AND AUGER ANCHOR AT END OF THE WARRANTY PERIOD, PULL THE MULCH RINGS BACK TO 18" DIAMETER. INSTALL SOD OR RELATIVE ADJACENT PLANT MATERIAL IN VACATED MULCH ZONE.
5. THIS INSTALLATION METHOD IS TO BE UTILIZED ONLY FOR TREES IN ROAD R.O.W.'s.



4 TREE PLANTING DETAIL (65-300 GAL)
N.T.S.



STEP 1: PLANTING BED PREPARATION

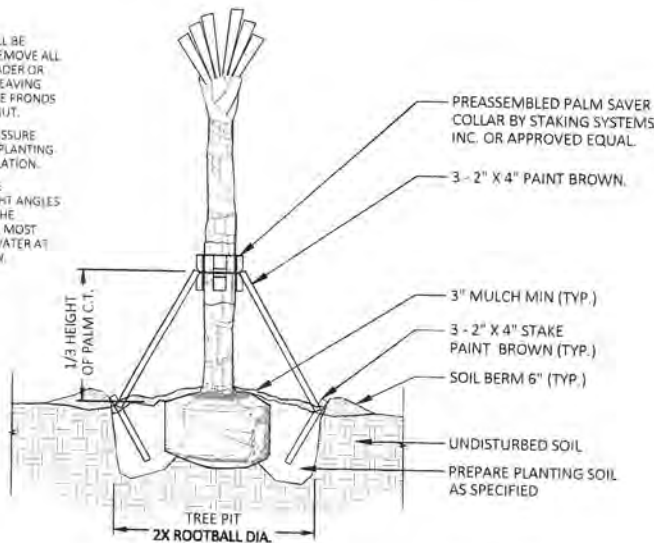


STEP 2: PLANT MATERIAL INSTALLATION

2 SHRUB AND GROUND COVER DETAIL
N.T.S.

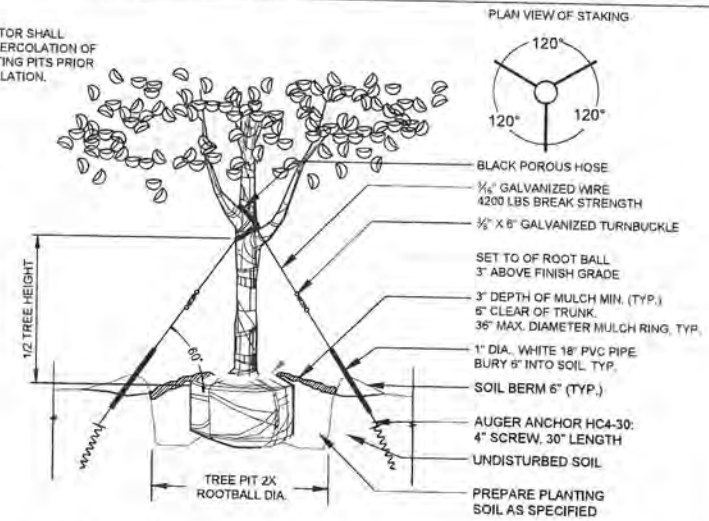
NOTES

1. CABBAGE PALMS SHALL BE HURRICANE CUT TO REMOVE ALL FRONDS. CUT THE LEADER OR CENTRAL BUD BACK, LEAVING ONLY SECTIONS OF THE FRONDS CLOSE TO THE PALM NUT.
2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
3. SOIL BERMS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE PLANT OR IN THE POSITION WHICH WILL MOST EFFECTIVELY RETAIN WATER AT THE BASE OF THE PLANT.



5 PALM PLANTING DETAIL
N.T.S.

NOTE
CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.



3 TREE PLANTING DETAIL (15-45 GAL)
N.T.S.

NOTES:

1. THE SITE WILL BE IRRIGATED WITH A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH A SEPARATE METER TO MONITOR IRRIGATION WATER USAGE. AN IRRIGATION PLAN WILL BE SUBMITTED FOR PERMITTING PRIOR TO CONSTRUCTION. BOTH SPRAY AND DRIP MAY BE UTILIZED.
2. ALL LANDSCAPE SHALL COMPLY WITH CITY OF KEY WEST LANDSCAPE CODES.
3. ALL PLANT MATERIAL SIZES SPECIFIED ARE MINIMUM SIZES. CONTAINER SIZE SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.
4. FINAL ARRANGEMENT OF PLANT MATERIAL SHALL BE STAKED BY THE CONTRACTOR FOR THE APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
5. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES BASED ON SPECIFIED SPACING AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.
6. WHERE DISCREPANCIES APPEAR BETWEEN THE NUMBER OF SHRUB SYMBOLS AND PLANT TAGS ON THE PLAN SHEETS, THE PLANT TAGS RULE.
7. REMOVE SURVEY STAKES, SILT FENCE, TREE TAGGING, AND OTHER RELATED ITEMS AFTER OWNER'S FINAL ACCEPTANCE OF THE WORK.
8. ALL PLANT MATERIAL SHALL BE PROVIDED AND MAINTAINED THROUGH FINAL COMPLETION AT FL #1 OR BETTER, ACCORDING TO THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, FL DEPT. OF AGRICULTURE AND CONSUMER SERVICES.

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	CONT	GAL	SIZE
●	18	Bursera simaruba / Gumbo Limbo	65 GAL	14'-16" HT.	4" CAL.
△	12	Coccoloba diversifolia / Pigeon Plum	45 GAL	SINGLE, STD. 12' HT.	2" CAL.
∇	2	Psychosperma elegans / Alexander Palm	25 GAL	Triple	8'-10' HT.
⊕	9	Roystonea borinquena / Transplant Royal Palm.	Transplanted		
SHRUBS	QTY	BOTANICAL / COMMON NAME	CONTAINER	SIZE	
⊗	14	Conocarpus erectus var. sericeus / Silver Buttonwood	7 GAL	3' HT. FULL	
○	168	Psychotria nervosa / Wild Coffee	3 GAL	16"-24" OA	
●	133	Zamia pumila / Coonbe	7 gal	3' HT FULL	
SHRUB AREAS	QTY	BOTANICAL / COMMON NAME	CONT	SIZE	
▨	390	Crissobalanus icaco / Coco Plum	3 GAL	18" HT.	24" o.c.
▩	62	Spartina bakeri / Sand Cord Grass	3 GAL	24"-30" o.c. FULL	30" o.c.
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT	SIZE	
▨	9,967 sf	Stenotaphrum secundatum / St. Augustine Grass	sod		

NOT FOR CONSTRUCTION

COMMUNITY SOLUTIONS GROUP

618 E. SOUTH STREET
SUITE 700
ORLANDO, FL 32801
407.423.8398

PROJECT
TRUMBO VILLAGE
313 TRUMBO ROAD
KEY WEST, FL

CLIENT
POPE-SCARBROUGH ARCHITECTS
510 WHITE STREET
KEY WEST, FL
305.296.9111

OWNER

CONSULTANTS



ISSUED FOR:

ISSUANCE	03/04/22
PER DMC COMMENTS	09/FEB/22
TREE COMMISSION	17/FEB/22
PER COMMENTS	28/APR/22

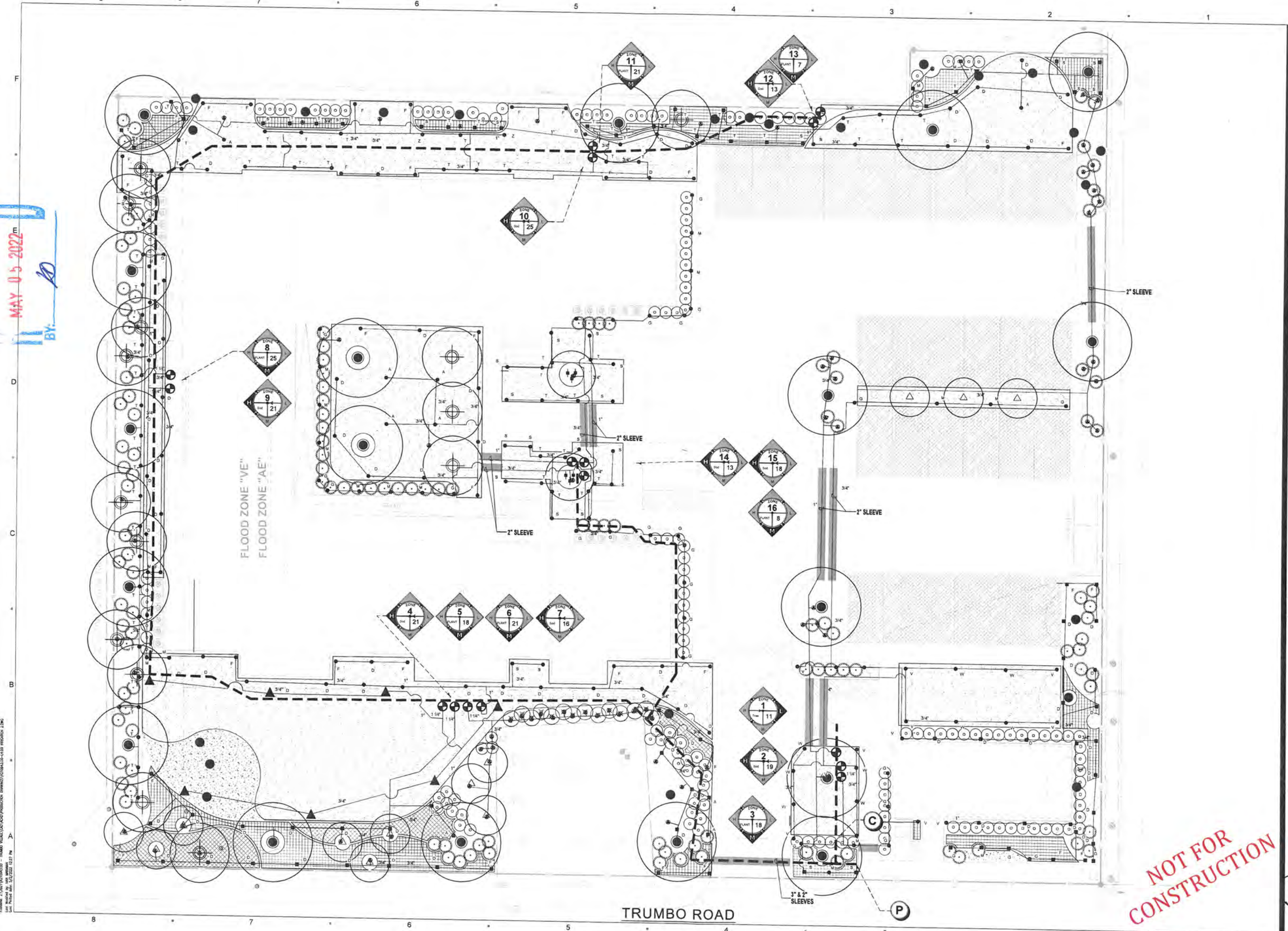
PROJECT NUMBER: R210943.00
DATE: 12/16/21
SCALE: SCALE AS NOTED
DRAWN BY: IM
CHECKED BY: CJ

SHEET TITLE
PLANT SCHEDULE & DETAILS

SHEET NUMBER
L3.01

RECEIVED
MAY 05 2022
BY: [Signature]

RECEIVED
MAY 05 2022
BY: [Signature]



Drawing: 21021010410 - IRRI...
 Date: 12/10/21
 Scale: 1"=10'-0"
 Drawn by: JM
 Checked by: KD

COMMUNITY SOLUTIONS GROUP

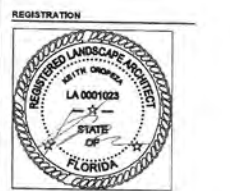
A GAI Consultants, Inc. Service Group
 618 E. SOUTH STREET
 SUITE 700
 ORLANDO, FL 32801
 407.423.8398

CERTIFICATE OF AUTHORIZATION: ER9951
PROJECT
 TRUMBO VILLAGE
 255 TRUMBO ROAD
 KEY WEST, FL

CLIENT
 POPE-SCARBROUGH ARCHITECTS
 810 WHITE STREET
 KEY WEST, FL
 305.296.3611 14

OWNER

CONSULTANTS



ISSUED FOR:

ISSUANCE	00 MM YY
PER DRC COMMENTS	08 FEB 22
TRF COMMISSION	17 FEB 22
PER COMMENTS	26 APR 22

PROJECT NUMBER: R210943.00
DATE: 12.10.21
SCALE: SCALE 1"=10'-0"
DRAWN BY: JM
CHECKED BY: KD

DRAWING SCALE AND NORTH ARROW

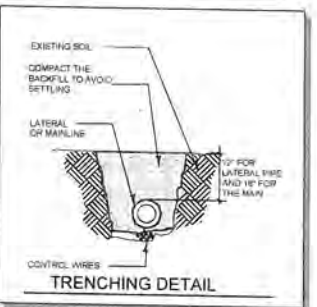
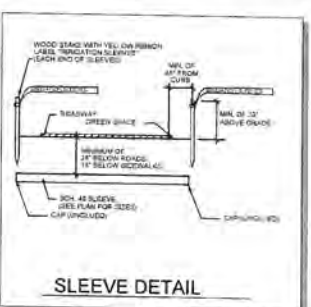
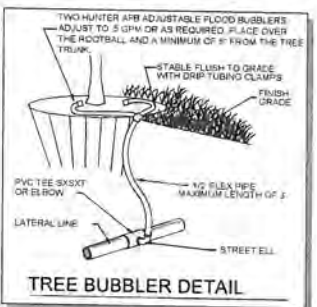
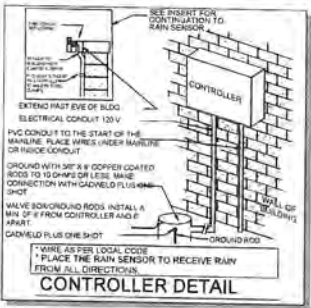
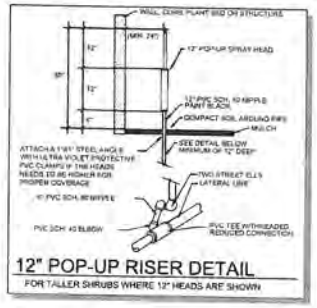
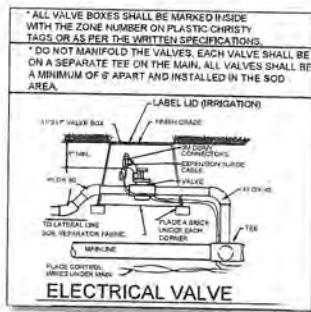
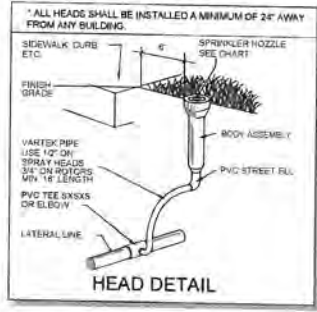


SHEET TITLE
 IRRIGATION PLAN

SHEET NUMBER
 L4.00

NOT FOR CONSTRUCTION

RECEIVED
MAY 05 2022
BY: [Signature]



GENERAL NOTES

- REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREES AND SHRUBS. HAND DIG AROUND ANY EXISTING TREES. DO NOT CUT ANY ROOTS OVER 2" IN DIAMETER.
- ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
- ALL POP-UP ROTORS AND SPRAYS SHALL BE INSTALLED USING AN 1/2" PVC FLEX PIPE CONNECTION. DO NOT USE POLYETHYLENE PIPE. USE WELDON 737 WITH A PURPLE PRIMER OR RED HOT CHRISTY'S BLUE GUE ON ALL CONNECTIONS.
- ADJUST ALL NOZZLES TO REDUCE WATER WASTE ON HARD SURFACES, WINDOWS AND BLDG. WALLS. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FLOODING. USE ADJUSTABLE NOZZLES WHERE REQUIRED TO AVOID ANY WATER ON BUILDING WINDOWS.
- ALL RISERS SHALL BE PAINTED BLACK OR A COLOR CHOSEN BY THE OWNER'S REPRESENTATIVE AND SHALL BE STAKED WITH A STEEL ANGLE AND SECURED WITH STAINLESS STEEL CLAMPS. LEAVE THE BOTTOM 12" OF THE PIPE PURPLE ON RECLAIMED SYSTEMS.
- ALL CONTROL WIRE CONNECTIONS SHALL BE MADE IN VALVE BOXES USING 3M DBR-Y WIRE CONNECTORS AND SEALANT WITH WIRE NUTS.
- THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION. THE CONTRACTOR SHALL HEAVILY MARK IN RED INK ON A WHITE BOND PAPER COPY OF THE IRRIGATION PLAN ANY INSTALLATION THAT DEVIATES FROM THE PLAN. THE AS-BUILT DRAWING SHALL ALSO LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES. MEASUREMENTS SHALL BE MARKED ON THE PLAN EVEN WHEN THE EQUIPMENT IS INSTALLED IN THE EXACT LOCATION AS THE PLAN. PROVIDE THE OWNER A PDF OF THE AS-BUILT PLAN.
- ALL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES. THE VALVE BOXES SHALL BE PURPLE WHEN USING RECLAIMED WATER.
- ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS OR INSIDE A SCH. 40 SLEEVE.
- ALL HEADS SHALL BE INSTALLED A MINIMUM OF 24" FROM ANY WALL AND A MINIMUM OF 5" FROM ANY SIDEWALK, PATIO OR ROAD. (MINIMUM OF 2'-0" WHERE THERE ARE NO BUMPER STOPS) THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS HIGHER WHERE BLOCKED BY TALL SHRUBS.
- THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DAMAGE ANY EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIRS AND COST OF ANY DAMAGE CAUSED BY THEIR WORK.
- ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP OR AS OUTLINED IN THE WRITTEN SPECIFICATIONS.
- ELECTRICAL SERVICE TO LOCATION OF THE CONTROLLER, WELL OR PUMP SHALL BE PROVIDED TO A JUNCTION BOX OR DISCONNECT AT THE EQUIPMENT LOCATION BY THE ELECTRICAL CONTRACTOR OR BY OWNER WHEN IT IS NOT PART OF THE BID PACKAGE. CONFIRM THE LOCATION OF THE CONTROLLER WITH THE OWNER OR GENERAL CONTRACTOR BEFORE ANY INSTALLATION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCALE THE PLAN AND CHECK NOZZLE TYPES TO DETERMINE THE CORRECT SPACING OF THE HEADS. THE CONTRACTOR SHALL NOT SPACE THE HEADS FURTHER APART OR USE LESS HEADS THAN SHOWN ON THE PLAN. ANY CHANGES TO THE HEAD SPACING OR LAYOUT, WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT OR OWNER, SHALL HOLD THE IRRIGATION CONTRACTOR RESPONSIBLE FOR WARRANTY OF THE PLANTS AND/OR SOD IN THESE AREAS.
- 48 HOURS BEFORE DIGGING, CALL 1-800-432-4770 (SUNSHINE STATE ONE CALL CENTER)
- INSTALL THREE EXTRA CONTROL WIRES TO EACH TERMINATION OF THE MAIN. ALL CONTROL WIRES SHALL BE INSTALLED INSIDE OF SCH. 40 GRAY PVC CONDUIT WHERE THEY CANNOT BE UNDER THE MAIN.

NOZZLE CHART

LETTER	SPEC.	COLOR	GPM @ 40 PSI	DISTANCE	RADIUS	ZONE LABELS
A	MP2000	RED	1.47	19'	FULL 360'	
B	MP CORNER	TURQUOISE	.45	14'	CORNER 105'	
C	MP CORNER	TURQUOISE	.19	14'	CORNER 45'	
D	MP2000	BLACK	.74	19'	HALF 180'	
F	MP2000	BLACK	.40	19'	QUARTER 90'	
G	MP END STRIP	COPPER	.22	8' x 15'	END STRIP	
H	RAIN XPCN	BLACK	.23	4.5'	HALF PATTERN	
K	MP815	OLIVE	1.87	8'-16'	FULL 360'	
M	MP SIDE S	BROWN	.44	8'-16'	SIDE STRIP	
S	MP815	MAROON	.49	8'-16'	90° - 180°	
T	MP815	MAROON	.93	8'-16'	90° - 180°	
V	MP3000	BLUE	.86	30'	QUARTER 90'	
W	MP3000	BLUE	1.32	30'	HALF 180'	
X	MP3000	YELLOW	2.73	30'	THREE QTR. 270'	
Y	MP3000	GRAY	3.04	30'	FULL 360'	
Z	MP2000	GREEN	1.10	19'	THREE QTR. 270'	

THE NOZZLES LISTED SHOW THE TYPE OF MP ROTATOR NOZZLE THAT SHOULD BE USED. THE CONTRACTOR SHOULD INSTALL CORRECT NOZZLE IN EACH HEAD AS SHOWN BY THE LETTER BESIDE THE HEAD ON THE PLAN. DO NOT USE MP1000 SERIES NOZZLES. THE GPM, DISTANCE AND ANGLE ON THE NOZZLE CHART ARE APPROXIMATE. THE CONTRACTOR SHALL ADJUST ALL NOZZLES TO PROVIDE THE 100% COVERAGE, BUT LIMIT OVERTHROW ON TO BUILDINGS, WALLS, PAVEMENT, ETC. THE HEADS SHALL BE SPACED AS PER THE PLAN. SCALE THE PLAN FOR DISTANCE. DO NOT ASSUME THAT ALL HEADS ARE SPACED AS PER CONVENTIONAL SPRAY HEADS. THE PRECIPITATION RATE FOR THESE NOZZLES IS LESS THAN A CONVENTIONAL SPRAY NOZZLE. FOLLOW THE ZONE CHART FOR AN APPROXIMATE RUN TIME FOR EACH ZONE. BUT SET THE RUN TIME ON THE CONTROLLER BASED ON THE SPECIFIC SITE CONDITIONS. DO NOT SUBSTITUTE WITH STANDARD NOZZLES.

LEGEND

- USE HUNTER MP ROTATOR NOZZLES
- HUNTER PRS40 SPRAY SERIES 6" POP-UP
 - HUNTER PRS40 SPRAY SERIES 12" POP-UP
 - TWO HUNTER AFB ADJUSTABLE FLOOD BUBBLERS PER TREE.
 - HUNTER PGP ULTRA ROTOR HEAD - 3 GPM
 - CLASS 200 PVC MAINLINE-1 1/2"
 - CLASS 200 PVC LATERAL LINE- SIZE AS SHOWN UNTIL A SMALLER SIZE IS SHOWN MINIMUM SIZE OF 3/4" (EXCEPT RISERS AND FLEX PIPE)
 - SCH. 40 SLEEVE (MINIMUM OF 24" DEPTH AND 2 SIZES LARGER THAN THE PIPE SIZE OR AS LABELED ON THE PLAN)
 - HUNTER ICV ELECTRIC VALVE. SIZE AS SHOWN BELOW. INSTALL VALVE IN A 11"x17" VALVE BOX AND COVER 0-25 GPM=1"
 - CONTROLLER- HUNTER IC02 SERIES. WHERE SHOWN ON THE PLAN, INSTALL WITH A HUNTER MINI-CLIK RAIN SENSOR. GROUND WITH A MINIMUM 8' COPPER CLAD ROD. SLEEVE TO AS REQUIRED.
 - POINT OF CONNECTION TO A 1" POTABLE WATER METER AND BACKFLOW PREVENTER. REFER TO THE UTILITY PLAN FOR THE EXACT LOCATION AND DETAILS.

ZONE CHART

ZONE	PLANT (TYPE)	IRRIGATION (TYPE)	WATER (DEMAND)	PRECIP. (RATE)	APPLIC. (IN. PER WEEK REQ.)	GPM (PER CYCLE)	MINUTES (PER CYCLE)	TOTAL (GALLONS)
1	TREE	BUBBLER	LOW	1.5	0.5	11	10	110
2	SOD	SPRAY	HIGH	0.75	1.5	19	50	1,140
3	PLANT	SPRAY	MEDIUM	0.75	1.0	18	40	720
4	SOD	ROTOR	HIGH	0.5	1.5	21	60	1,890
5	PLANT	SPRAY	MEDIUM	0.75	1.0	18	40	720
6	PLANT	SPRAY	MEDIUM	0.75	1.0	21	40	840
7	SOD	SPRAY	HIGH	0.75	1.5	18	60	990
8	PLANT	SPRAY	MEDIUM	0.75	1.0	25	40	1,000
9	SOD	SPRAY	HIGH	0.75	1.5	21	60	1,260
10	SOD	SPRAY	HIGH	0.75	1.5	25	50	1,500
11	PLANT	SPRAY	MEDIUM	0.75	1.0	21	40	840
12	SOD	SPRAY	HIGH	0.75	1.5	13	60	780
13	PLANT	SPRAY	MEDIUM	0.75	1.0	7	40	280
14	SOD	SPRAY	HIGH	0.75	1.5	13	60	780
15	SOD	SPRAY	HIGH	0.75	1.5	18	60	1,080
16	PLANT	SPRAY	MEDIUM	0.75	1.0	8	40	320
TOTAL GPM PER RUN CYCLE						275	800	14,220
TOTAL GPM PER WEEK (PEAK WEEKLY DEMAND)							28,440	

THE RUN TIMES SHOWN FOR THE ZONE IS FOR ONE RUN CYCLE AND WILL PROVIDE HALF THE REQUIRED AMOUNT OF WATER NEEDED PER WEEK. TWO RUN CYCLES PER WEEK ARE REQUIRED TO PROVIDE THE FULL WEEKLY REQUIREMENT. ALL RUN TIMES SHALL BE SET TO FOLLOW THE CURRENT WATER MANAGEMENT DISTRICT REGULATIONS AND REDUCED TO ONLY ONE RUN TIME PER WEEK WHEN RESTRICTED BY DAYLIGHT SAVINGS TIME OR WATER RESTRICTIONS. THE ZONE CHART IS PROVIDED AS A GENERAL OUTLINE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO SET THE RUN TIMES BASED ON THE SPECIFIC SITE CONDITIONS AND PLANT REQUIREMENTS. THIS SHALL INCLUDE, BUT NOT LIMITED TO, SOIL TYPE, DRAINAGE, SLOPES, SUN EXPOSURE AND THE ESTABLISHMENT PERIOD. THE TOTAL GPM REQUIRED PER YEAR WILL BE LESS THAN THE PEAK DEMAND PER WEEK TIMES 52 WEEKS, BASED ON THE RUN TIMES BEING REDUCED BY SENSORS AND A REDUCED WATER DEMAND IN THE WINTER MONTHS.

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CLIENT
POPE-SCARBROUGH ARCHITECTS
870 WHITE STREET
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305.296.3611 04

OWNER

CONSULTANTS



ISSUED FOR:
ISSUANCE: CD MMW VY
PERMITS COMMENTS: 09 FEB 22
FINAL COMMENTS: 17 FEB 22
PER COMMENTS: 29 APR 22

PROJECT NUMBER R210943.00
DATE: 12.10.21
SCALE:
DRAWN BY: JM
CHECKED BY: KD
DRAWING SCALE AND NORTH ARROW

SHEET TITLE
IRRIGATION DETAILS
SHEET NUMBER
L4.01

NOT FOR CONSTRUCTION