

REPORT TO THE LAKES VEGETATION AND LANDSCAPING COMMITTEE

To:	The LVL Committee	For:	March 10, 2022 LVLC meeting.
Via:	Carlos Dougnac, Assistant Vice President, PDC	From:	Cydney McGlothlin, University Architect
Requestor:	FLMNH	Presenters:	Cydney McGlothlin

PHASE:	Committee Responsibilities:	STATUS AND PRIOR COMMENTS:	DATE:
X PROGRAMMING	<i>The committee will review and recommend approval/denial of general site suitability - having evaluated impacts to trees, landscape, natural areas, and lakes.</i>		
SCHEMATIC DESIGN	<i>The committee will review and recommend approval/denial of tree removal - plans for transplants, replacements and/or mitigation, based on the building footprint, utility corridors, and other construction activities.</i>		
DESIGN DEVELOPMENT	<i>The committee will review and recommend approval/denial of final landscaping - appropriateness and inclusion of any mitigation for tree removal.</i>		

BACKGROUND INFORMATION:

PROJECT:
UF-396, Florida Museum of Natural History (FLMNH) Thompson Earth Systems Institute Addition

SITE:
Addition to Powell Hall (FLMNH). See attached location map.

STATUS:
Programming site approval

- OBJECTIVES:**
- Design has not begun, but the site has been identified.
 - The tree impact may include:
 - 33 palm trees
 - 24" (?) Laurel Oak
 - 22" Lauren Oak
 - Bamboo

PROJECT PHASE AND PRESENTATION NARRATIVE:
Programming

- ENCLOSURES:**
1. Presentation
 2. CMP Checklist

UF-396 Florida Museum of Natural
History Thompson Earth Systems
Institute Addition

Programming

March 2022

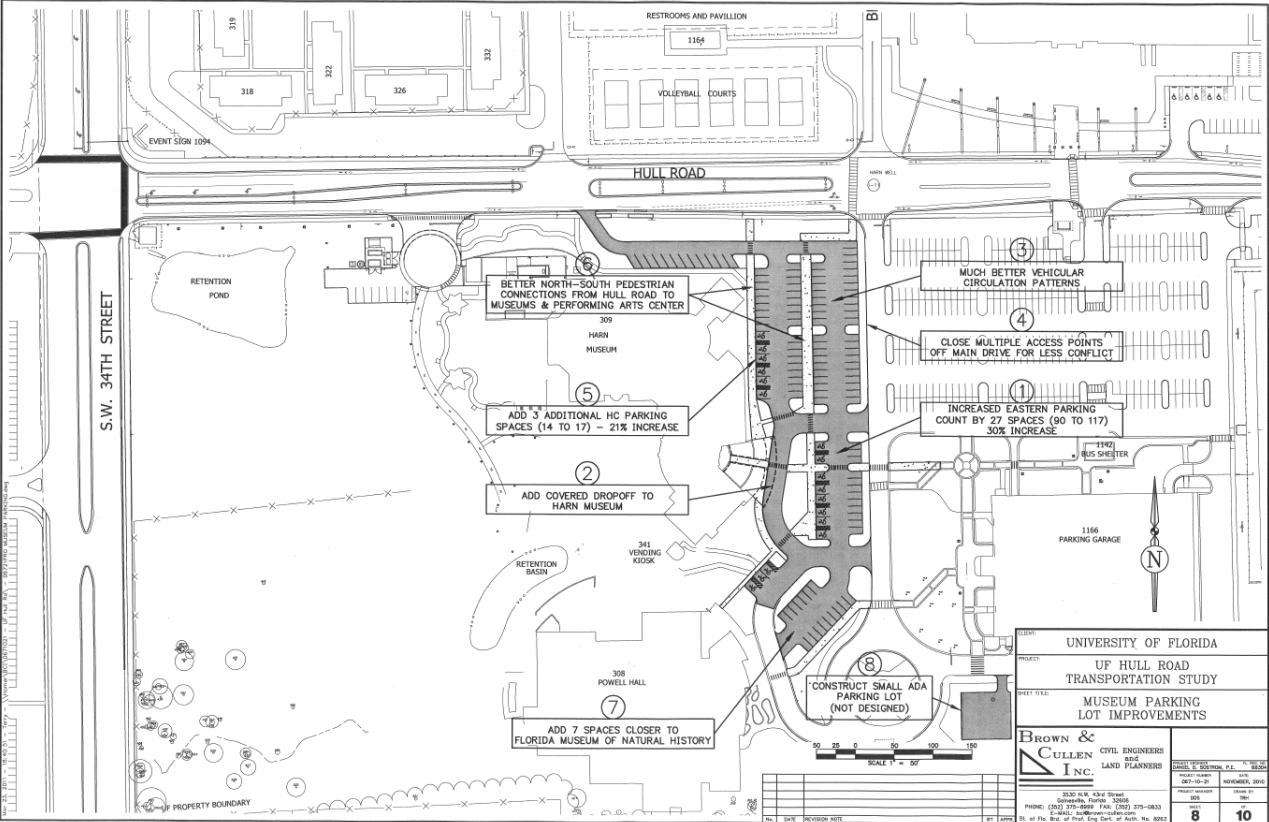
Existing Cultural Plaza



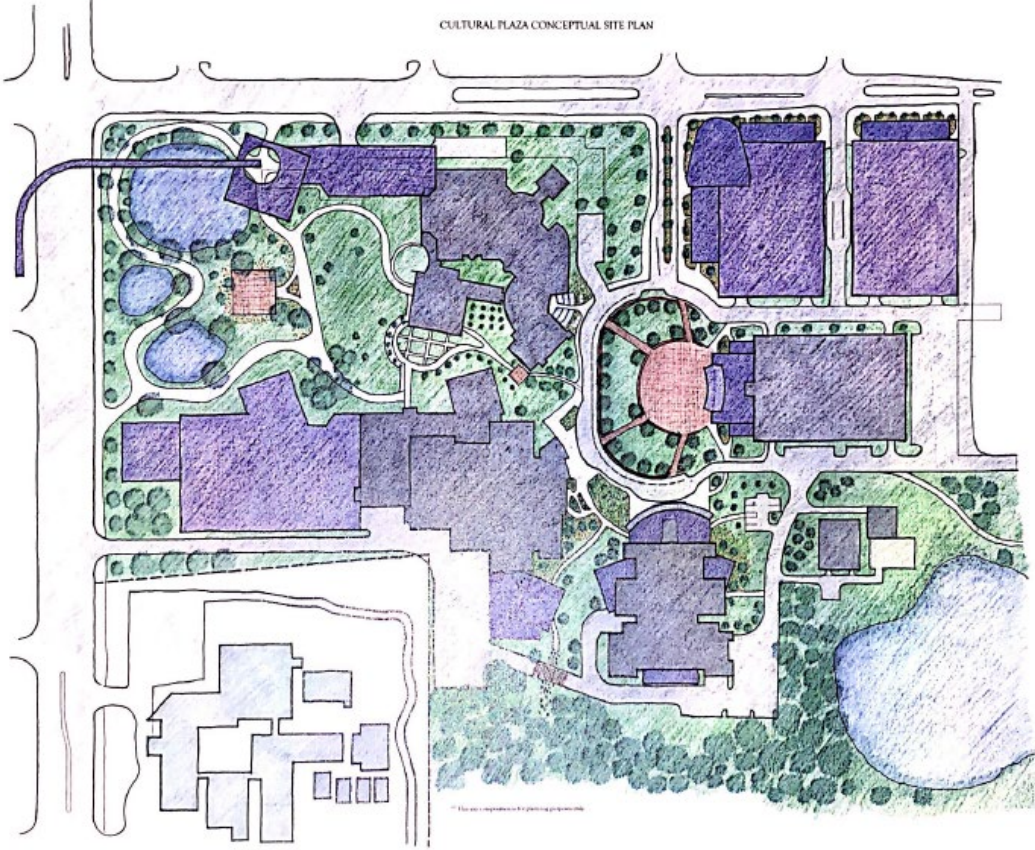
Original Cultural Plaza ~ 1998?



Cultural Plaza planning

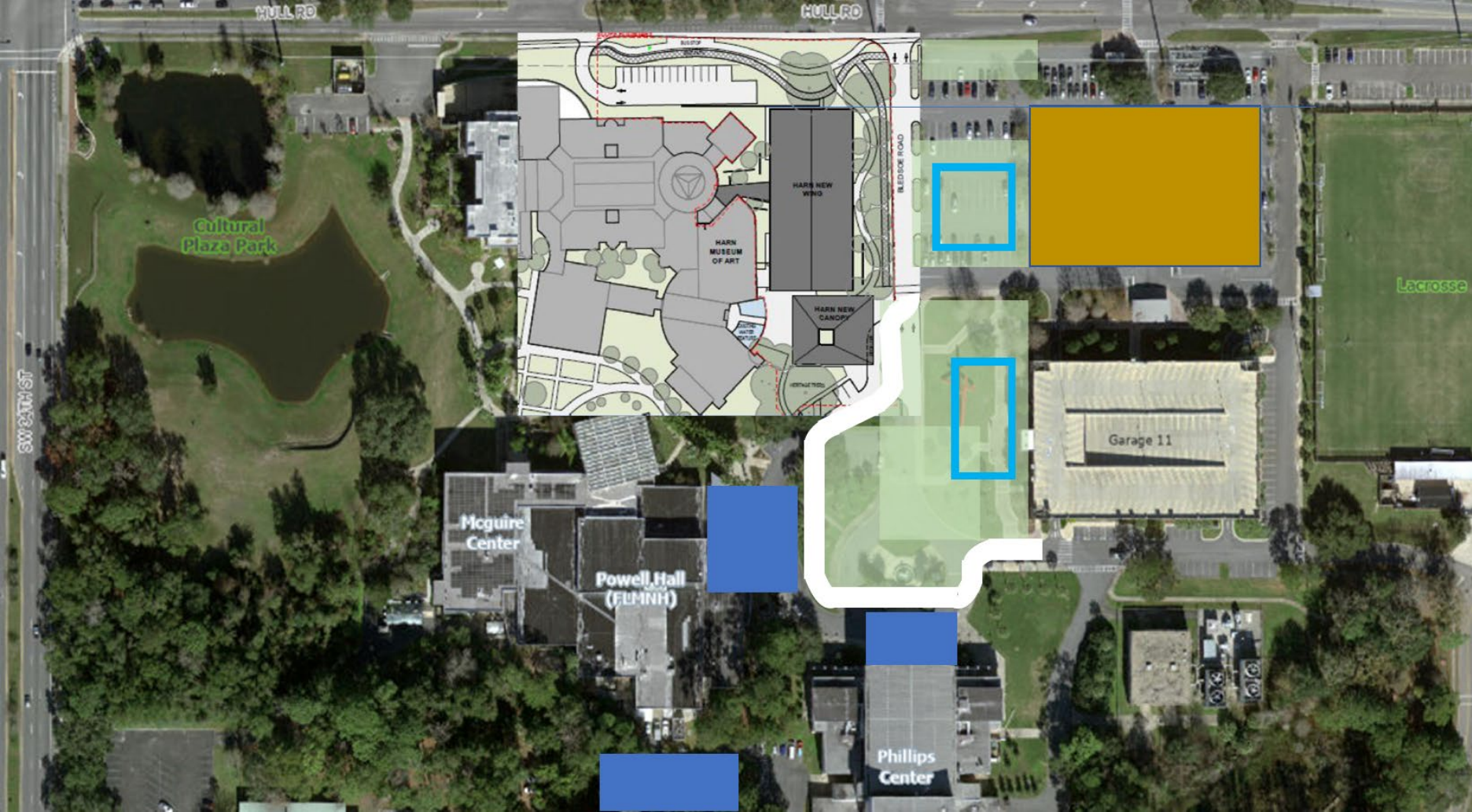


2010 parking study

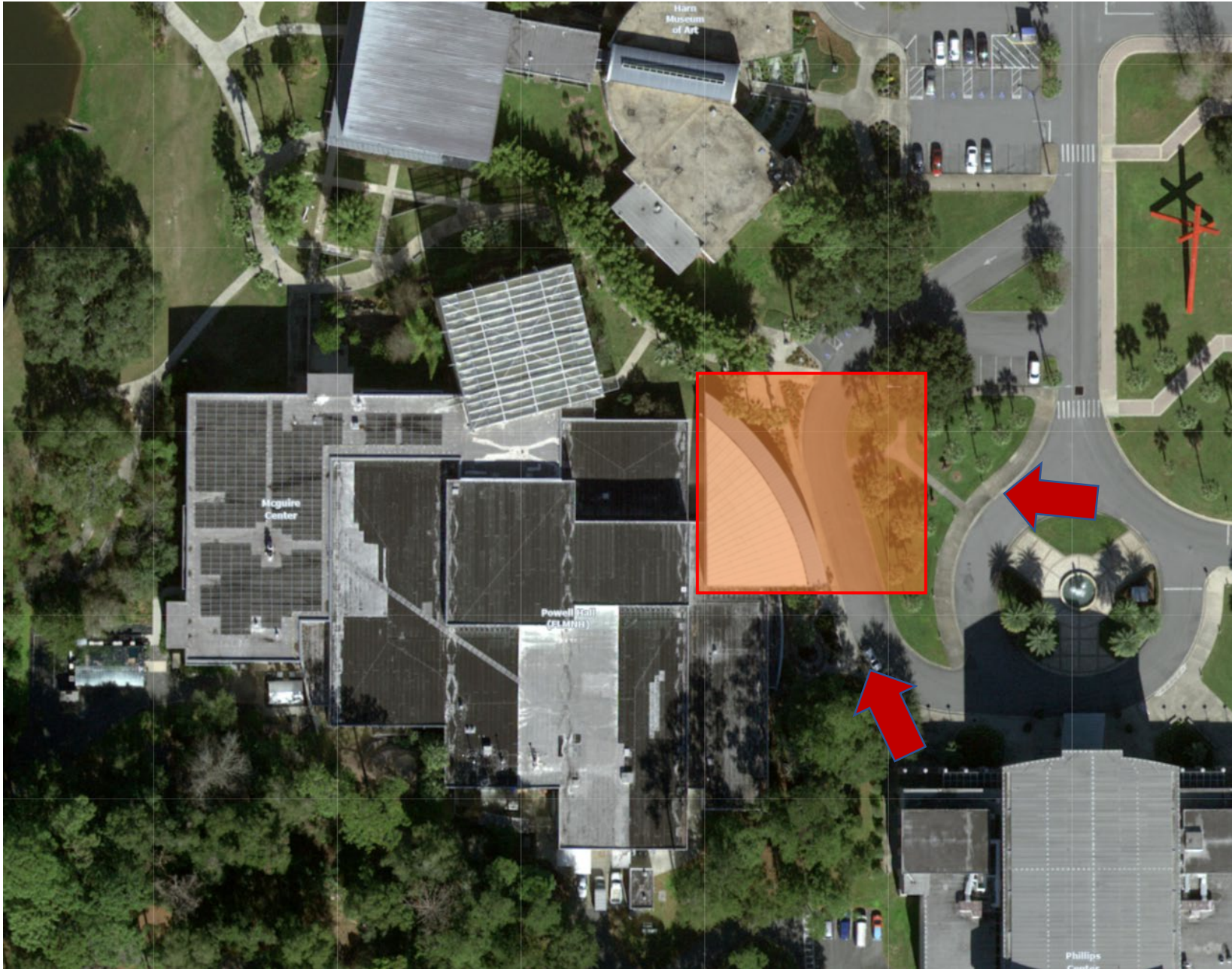


2005 massing study

Cultural Plaza planning



2022 study



UF-396 Florida
Museum of Natural
History Thompson
Earth Systems
Institute Addition
location



Project Site



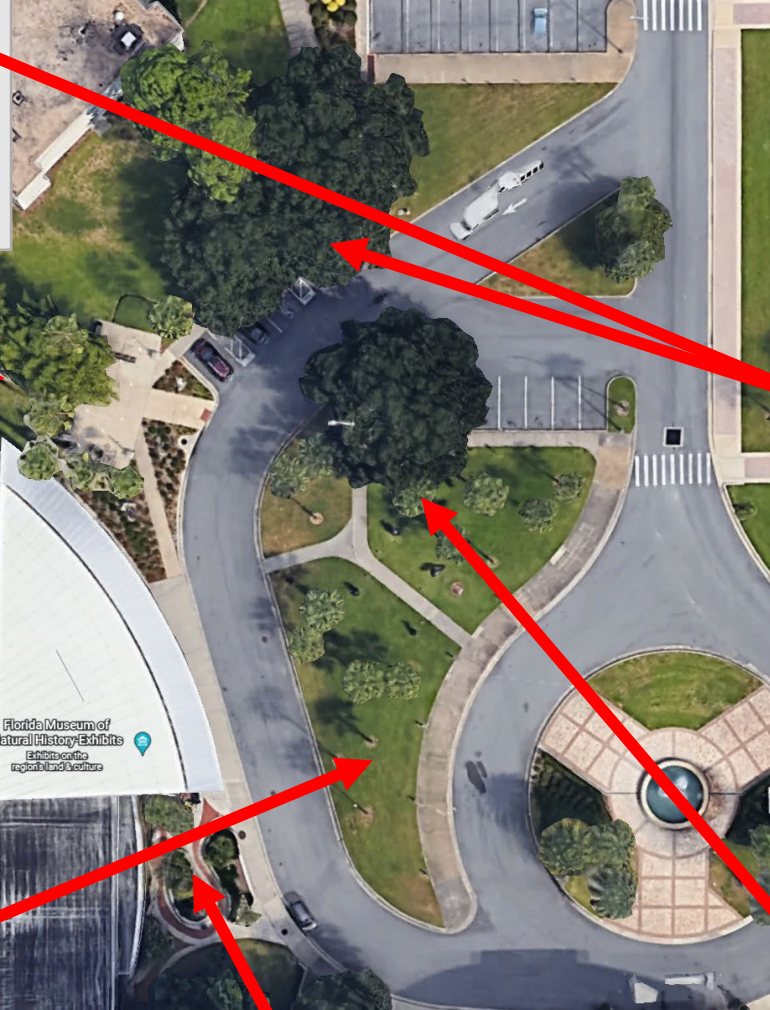
Existing site



14 palms and some bamboo next to site



16 palms in island green space



22" LAO



22" - 24" LAO?

3 palms next to building

Florida Museum of Natural History Thompson Earth Systems Institute Addition

Program:

- ~19,000 – 45,000 GSF
- 2 stories

Other objectives:

- Create presence at the Cultural Plaza
- The building should physically represent the Museum's mission

Schedule:

- AE selection – complete April 2022
- Schematic Design approvals – Fall 202
- Potential Pause for funding
- Design Development approvals – TBD
- Construction - TBD

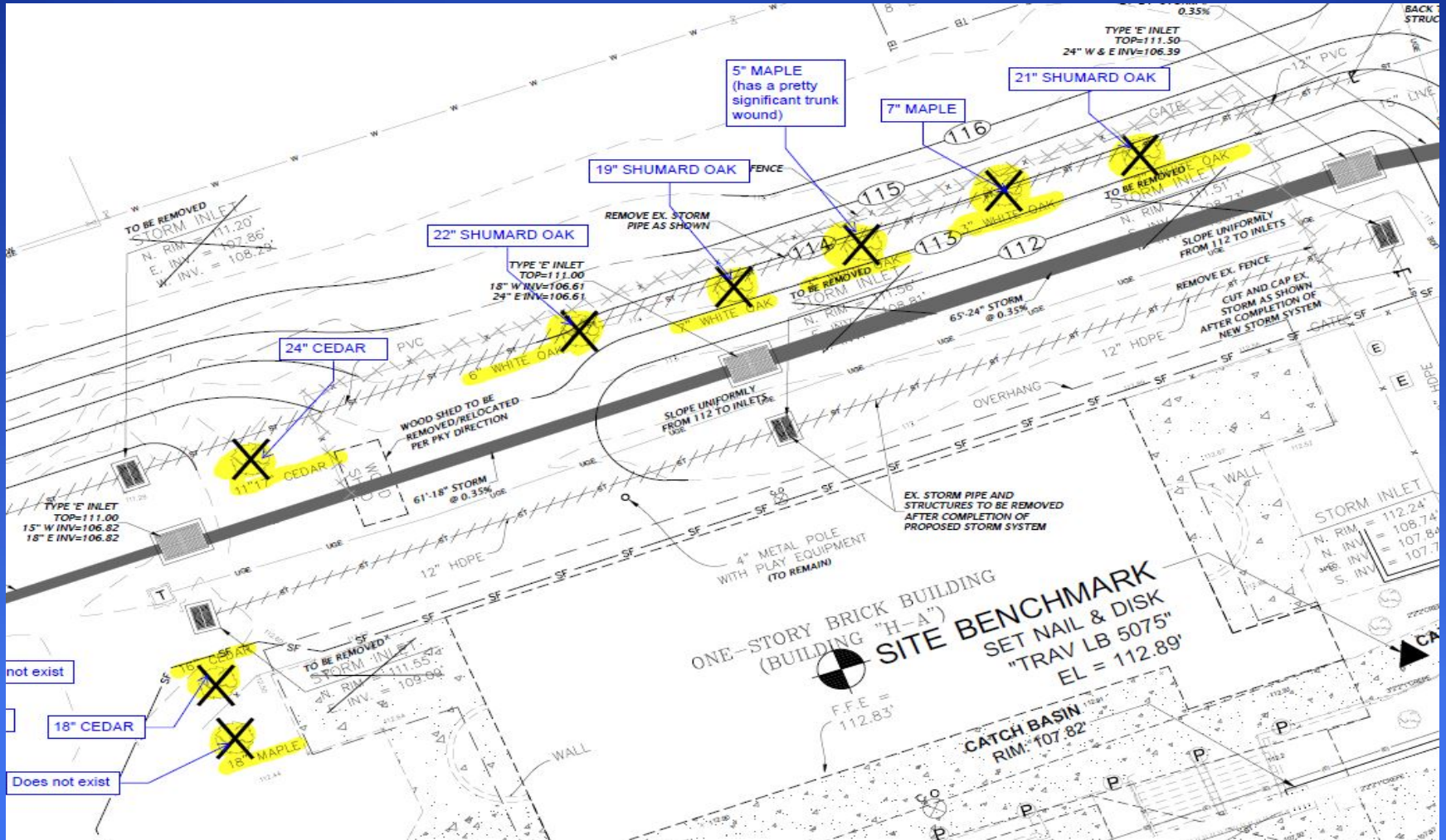
UF-394
PK Yonge
(Storm Drainage Supplement)

Construction Phase
Lake Vegetation & Landscaping
Committee

Update March 10, 2022

Keith Humphreys, Project Manager
Planning, Design & Construction

Previous: Cad plan for drain system



- Tree Impacts due to storm line path
Trees on north of building “H” and the elementary building.



Tree Impacts

3 Shumard Oak: 1 – 22”

1 – 19”

1 – 21”

2 Cedar: 1 – 24”

1 – 18”

2 Maple 1 – 7”

1 – 5”

PK will be planting required trees to mitigate the loss of these trees. Location TBD.

7/8/21 LVL Motion

Motion:

Adam Dale made a motion to approve the proposed tree removal with the requirement that PK Yonge replant 22 trees as mitigation and bring back the replanting plan to the committee with labeled species.

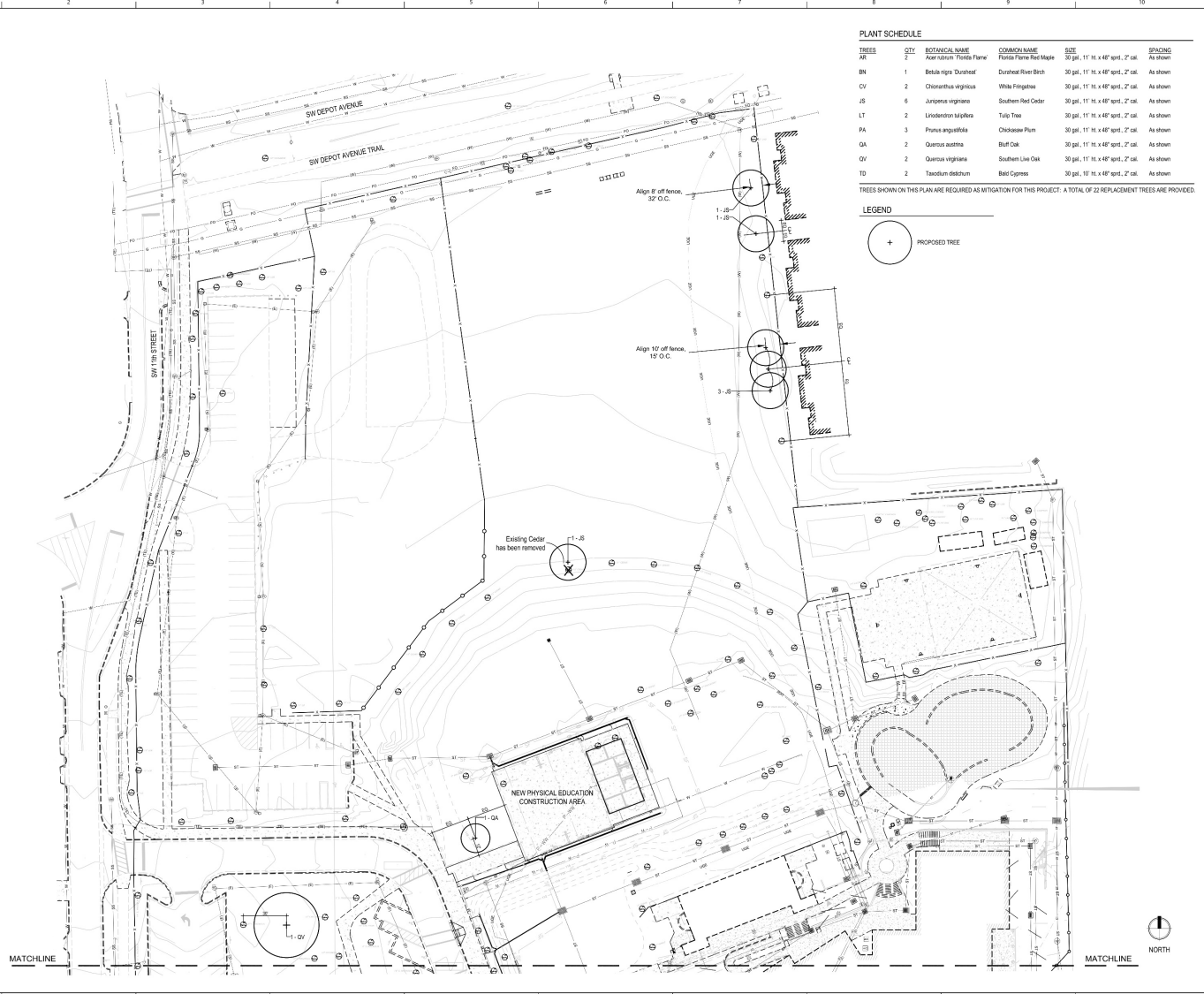


Proposed Trees

PLANT SCHEDULE

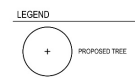
<u>TREES</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>
AR	2	Acer rubrum `Florida Flame`	Florida Flame Red Maple	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
BN	1	Betula nigra `Duraheat`	Duraheat River Birch	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
CV	2	Chionanthus virginicus	White Fringetree	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
JS	6	Juniperus virginiana	Southern Red Cedar	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
LT	2	Liriodendron tulipifera	Tulip Tree	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
PA	3	Prunus angustifolia	Chickasaw Plum	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
QA	2	Quercus austrina	Bluff Oak	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
QV	2	Quercus virginiana	Southern Live Oak	30 gal., 11` ht. x 48" sprd., 2" cal.	As shown
TD	2	Taxodium distichum	Bald Cypress	30 gal., 10` ht. x 48" sprd., 2" cal.	As shown

PROJECT: 22-018, 224 N.W. 2nd Avenue, Suite E, Gainesville, Florida 32601
CLIENT: PKY DEVELOPMENTAL SCHOOL
ISSUED FOR: 100% REVIEW
ISSUED DATE: 25 FEB 2022
REVISIONS:
SCALE: 1" = 30'
SHEET TITLE: TREE MITIGATION PLAN AND SCHEDULE
SHEET NUMBER: L-101



TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
AK	2	<i>Acacia saligna</i> Florida Flame	Florida Flame Red Maple	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
BN	1	<i>Betula nigra</i> Duraleaf	Duraleaf River Birch	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
OY	2	<i>Chorizanthe virginiana</i>	White Filigree	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
JS	6	<i>Jurupia virginiana</i>	Southern Red Cedar	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
LT	2	<i>Liriodendron tulipifera</i>	Tulip Tree	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
PA	3	<i>Pinus angustifolia</i>	Chickadee Pine	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
QA	2	<i>Quercus asotina</i>	Bluff Oak	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
OY	2	<i>Quercus virginiana</i>	Southern Live Oak	30 gal, 11' 10" x 48" spd., 2" cal.	As shown
TD	2	<i>Taxodium distichum</i>	Bald Cypress	30 gal, 10' 10" x 48" spd., 2" cal.	As shown

TREES SHOWN ON THIS PLAN ARE REQUIRED AS MITIGATION FOR THIS PROJECT. A TOTAL OF 22 REPLACEMENT TREES ARE PROVIDED.



MANLEY DESIGN
Landscape Architecture • Site Planning

Manley Design, LLC
224 N.W. 2nd Avenue, Suite E
Gainesville, Florida 32601
(352) 363-7412
Certificate of Authorization No. LC26000575

UF-349 PK YONGE MIDDLE HIGH SCHOOL EXPANSION

for
**PKY DEVELOPMENTAL
SCHOOL**

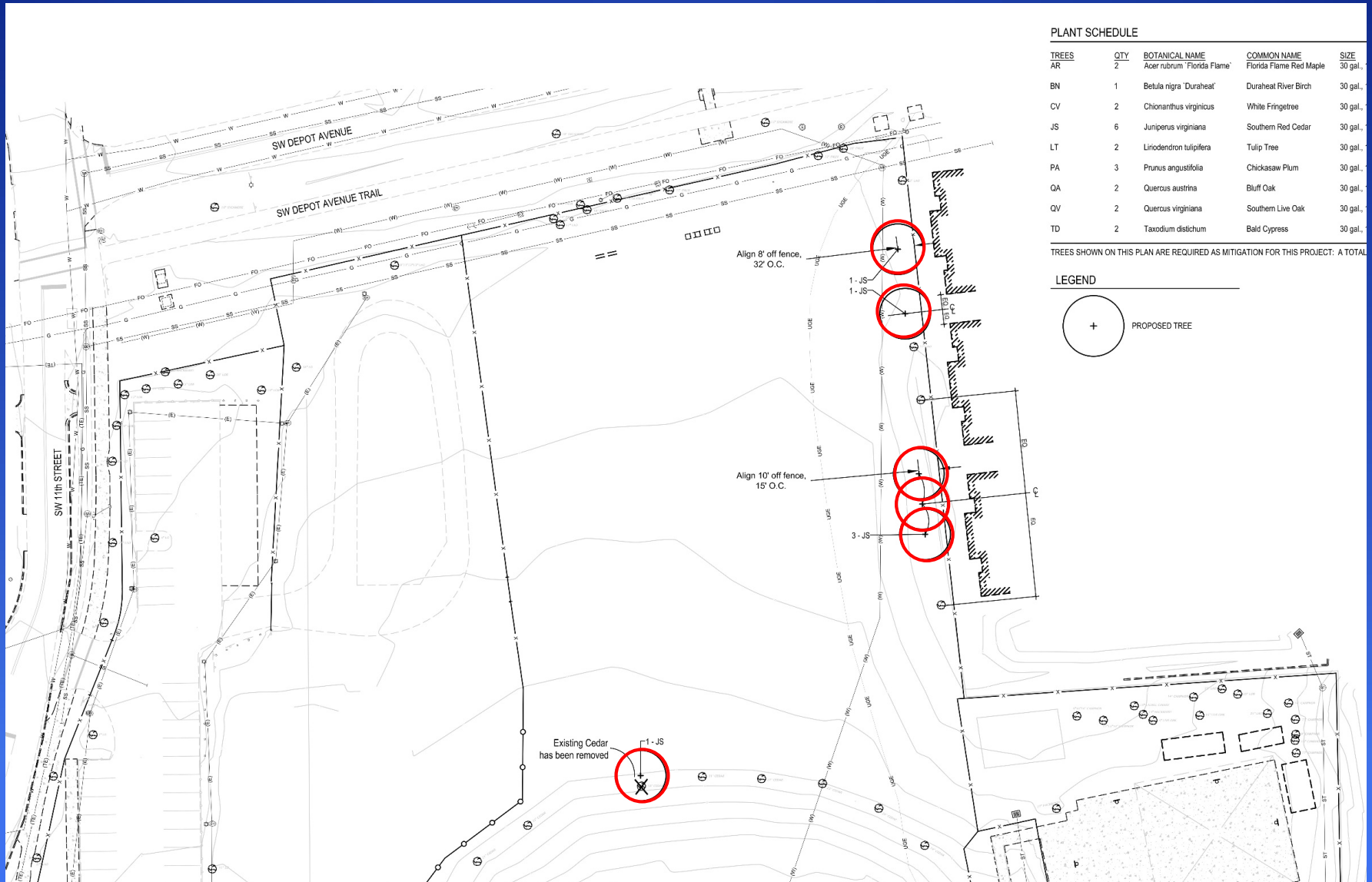
SCALE

PROJECT NO: 22-018
CLIENT NO:
ISSUED FOR: 100% REVIEW
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REVISIONS:



TREE MITIGATION PLAN AND SCHEDULE

SHEET NUMBER
L-101

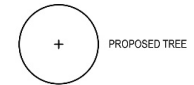


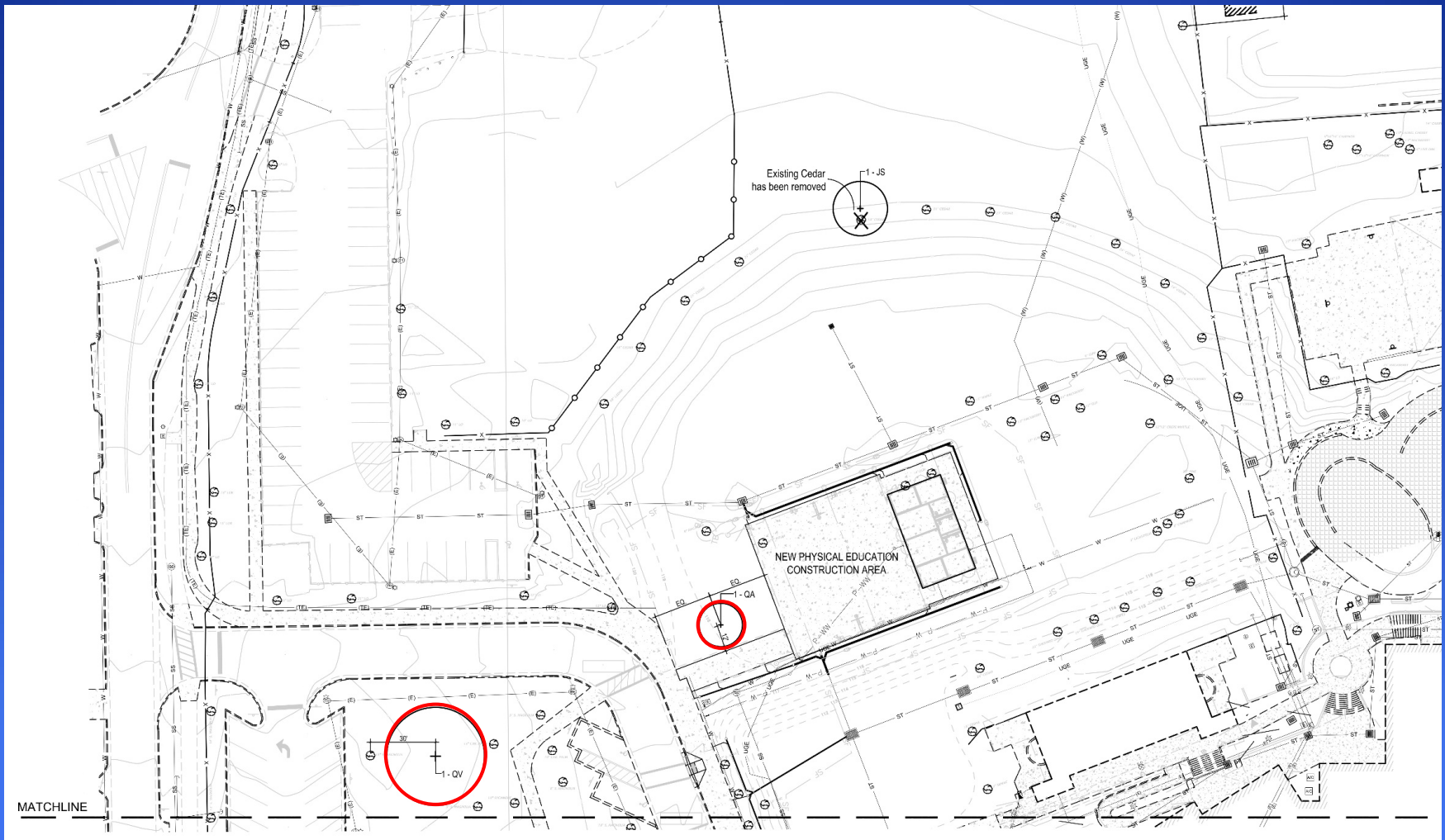
PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AR	2	Acer rubrum 'Florida Flame'	Florida Flame Red Maple	30 gal.
BN	1	Betula nigra 'Duraheat'	Duraheat River Birch	30 gal.
CV	2	Chionanthus virginicus	White Fringetree	30 gal.
JS	6	Juniperus virginiana	Southern Red Cedar	30 gal.
LT	2	Liriodendron tulipifera	Tulip Tree	30 gal.
PA	3	Prunus angustifolia	Chickasaw Plum	30 gal.
QA	2	Quercus austrina	Bluff Oak	30 gal.
QV	2	Quercus virginiana	Southern Live Oak	30 gal.
TD	2	Taxodium distichum	Bald Cypress	30 gal.

TREES SHOWN ON THIS PLAN ARE REQUIRED AS MITIGATION FOR THIS PROJECT: A TOTAL

LEGEND





PROJECT NAME:

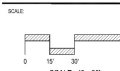
**UF-349 PK
YONGE
MIDDLE HIGH
SCHOOL
EXPANSION**

for
**PKY DEVELOPMENTAL
SCHOOL**

SEA:

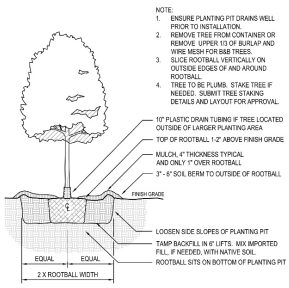
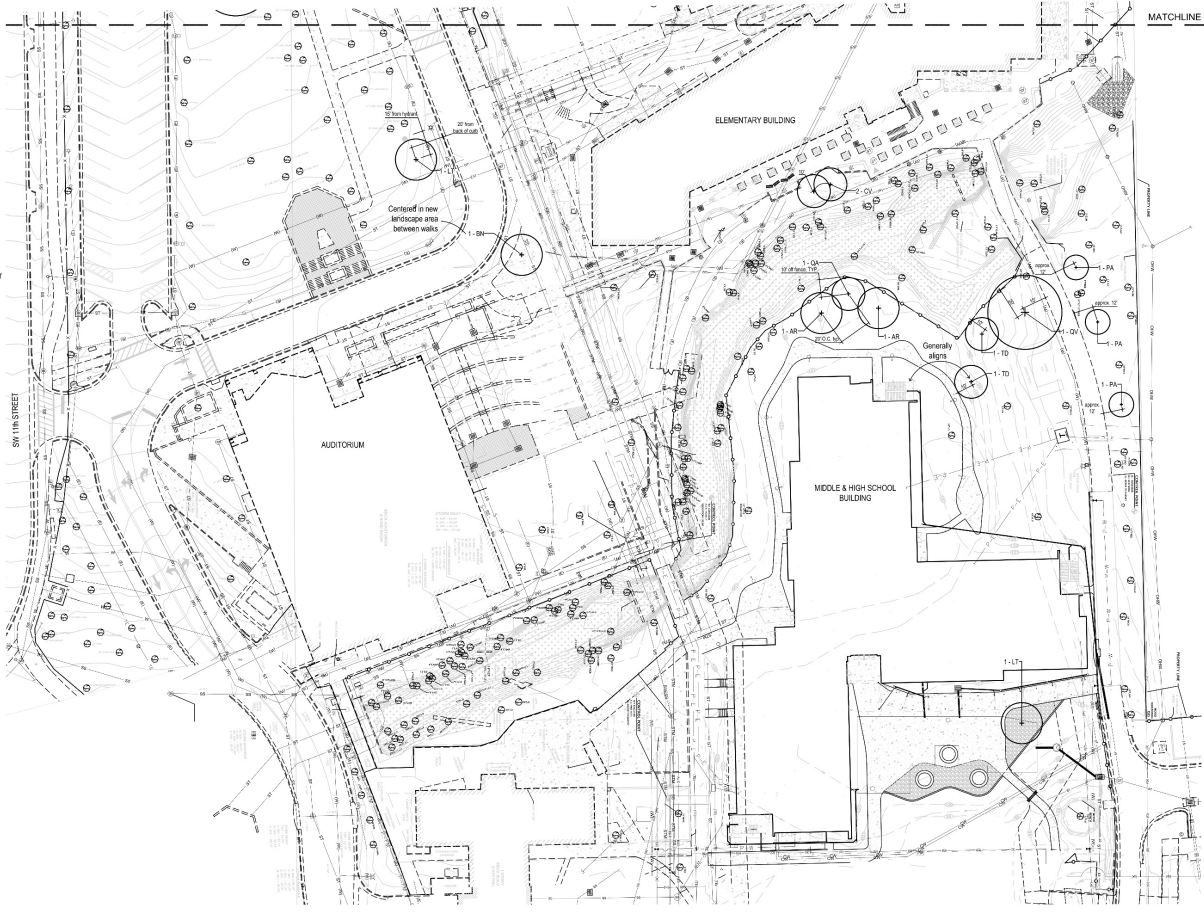
PROJECT NO: 22-018
CLIENTS NO:
ISSUED FOR: **100% REVIEW**

ISSUE DATE: 25 FEB 2022
REVISIONS:



SHEET TITLE:
**TREE MITIGATION
PLANS, NOTES, AND
DETAILS**

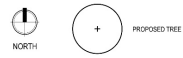
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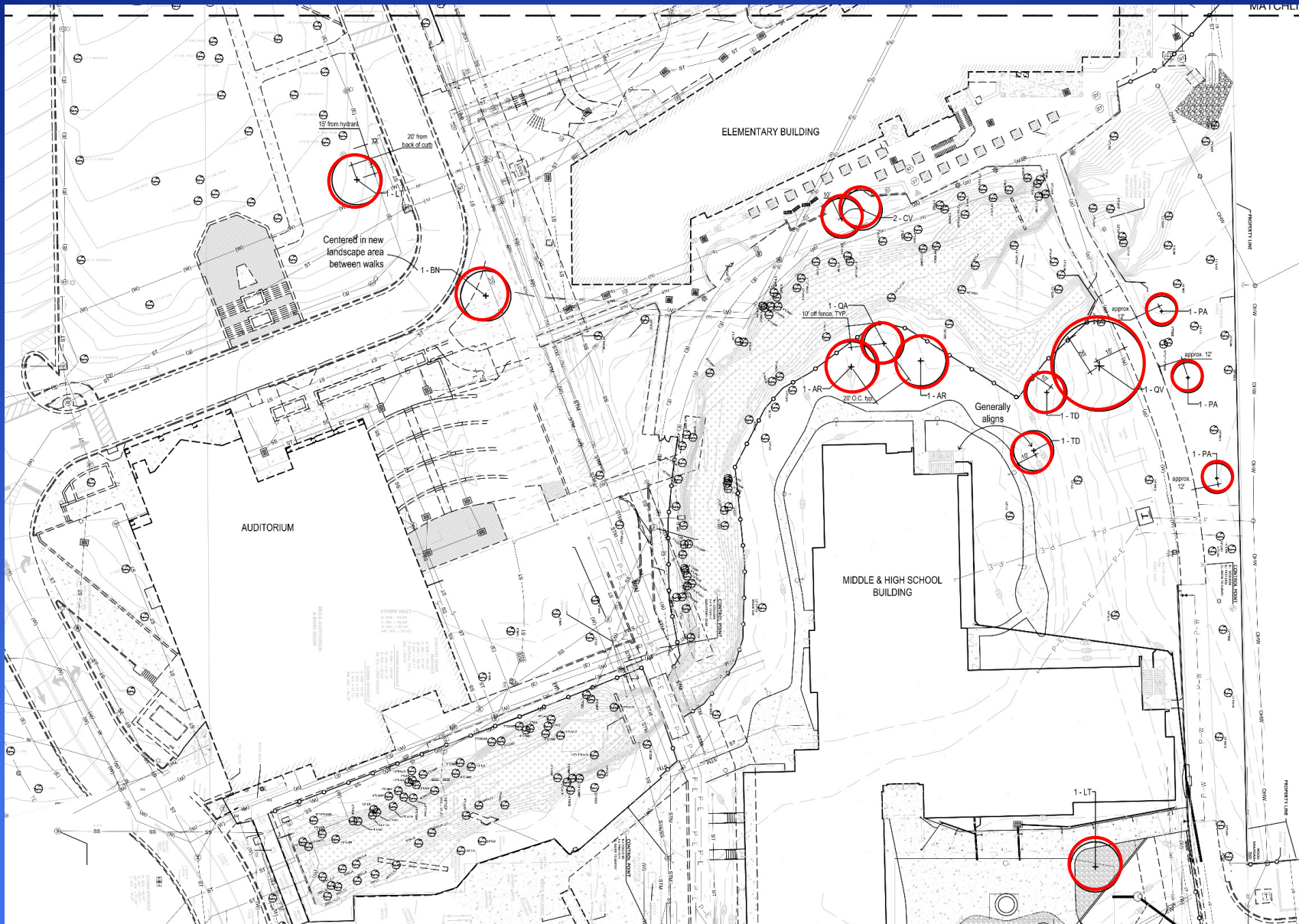


1 TREE PLANTING DETAIL
SCALE: N.T.S.

LANDSCAPE NOTES

1. SPECIFICATIONS: ADHERE TO UF STANDARD SPECIFICATION SECTION 32000 PLANTING AND ADDITIONAL PROJECT SPECIFIC SPECIFICATIONS ON SHEET L-103.
2. PROTECTION OF EXISTING TREES: LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. OBTAIN A UP DUG PERMIT - CALL 352-363-7261. ALSO CALL BOUNDARY STATE ONE CALL - SEE LOAD BEHIND.
3. PROTECTION OF PUBLIC: CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL MAINTENANCE OF FIBER OPTIC AND BICYCLE TRAFFIC AND SAFETY MEASURES DURING LANDSCAPE INSTALLATION PER applicable CODES AND UNIVERSITY REQUIREMENTS.
4. PRE CONSTRUCTION MEETING: IF DESIRED BY THE UF PROJECT MANAGER, CONTACT THE UF PROJECT MANAGER PKY AND THE PROJECT LANDSCAPE ARCHITECT TO SCHEDULE AN ON SITE MEETING PRIOR TO ANY INSTALLATION ACTIVITIES TO REVIEW PROPOSED TREE LOCATIONS.
5. SELECTION OF TREES AND VEGETATION: ANY VEGETATION, INCLUDING TREES AND SHRUBS, INDICATED TO BE PRESERVED BUT DAMAGED OR DESTROYED DURING CONSTRUCTION ACTIVITIES SHALL BE REPLACED OR MITIGATED BY THE CONTRACTOR WITH LIKE SPECIES OR ANOTHER SPECIES APPROVED BY PKY.
6. PLANT SUBSTITUTIONS: NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN APPROVAL BY THE PROJECT MANAGER AND LANDSCAPE ARCHITECT PRIOR TO ORDERING OR DELIVERY TO SITE.
7. PLANTING PREPARATION: REMOVE ALL CONSTRUCTION DEBRIS, LIMEROCK, GRAVEL, ROAD BEDDING, CURBS, AND OTHER ITEMS POTENTIALLY DAMAGING TO PLANT GROWTH WITHIN PROPOSED LANDSCAPE AND TURF AREAS PRIOR TO PLANTING. MAINTAIN EXISTING GRASSES UNLESS OTHERWISE APPROVED BY THE UF PROJECT MANAGER REPRESENTATIVE. IF ALL REQUIRED, USE A CLEAN SANDY LOAM WITH pH 5.4-5.8 AND EXCAVATED FROM LOCAL SOURCES AND KEEP IT'S SOFT THAT IT IS FREE OF WEEDS, SEEDS, LITTER, TOXINS, AND OTHER ITEMS HARMFUL TO PLANTING.
8. 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 (ANSI A300) AND OTHER WOODY PLANT MAINTENANCE (ANSI A63) AND TRUNKING, TRIMMING, REPAIRING, MAINTAINING, AND REMOVING TREES AND CUTTING BRUSH-SAFETY REQUIREMENTS (ANSI Z323). 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 BARK OF BRANCHES.
9. PLANT MATERIALS: GENERAL: ALL PLANT MATERIALS SHALL MEET FLORIDA NUMBER 1 REQUIREMENTS AS PER THE MOST CURRENT EDITION OF FLORIDA GRASSES AND STANDARDS FOR NURSERY PLANTS; FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
10. PROTECTED TREES: ALL TREES TO BE A MINIMUM OF EIGHT FEET TALL AND HAVE A MINIMUM TRUNK DIAMETER OF TWO INCHES. TREES SHALL BE IN 36 GALLON PLANT CONTAINERS OR, IF FIELD GROWN, HAVE A MINIMUM ROOTBALL DIAMETER OF 26 INCHES. INSTALL 19\"/>
- 11. NEW TREE STAKING: IF NECESSARY TO MAINTAIN TREES PLUMB, TREES SHALL BE STAKED WITH BIODEGRADABLE STAKING MATERIALS. PROPOSED STAKING METHOD APPROVED BY URBAN FORESTRY INSPECTOR PRIOR TO INSTALLATION.
- 12. MULCHING: FOUR INCHES OF MULCH SHALL COVER TREE RING PLANTING AREAS AND ALL SHRUBS AND GROUND COVER PLANTING AREAS. MULCH SHOULD BE NO DEEPER THAN ONE INCH OVER THE TOP OF TREE ROOTBALLS. USE CLEAN HARDWOOD MULCH, FREE OF DEBRIS, STICKS, AND ZONES.
- 13. IRRIGATION: WATER TREE PLANTINGS THROUGH THE ESTABLISHMENT PERIOD TO MAINTAIN TREES IN A THIRING CONDITION AS DEFINED BY FLORIDA GRASSES AND STANDARDS.
- 14. RESPONSIBILITY WARRANTY POLICY: ALL PROTECTED EXISTING LANDSCAPING WITHIN THE WORK AREA AND ANY NEW LANDSCAPING SHALL BE WARRANTED TO BE ALIVE AND IN HEALTHY CONDITION ONE (1) YEAR FROM DATE OF SUBSTANTIAL COMPLETION. IF ANY LANDSCAPING MATERIAL IS REPLACED WITHIN THE WARRANTY PERIOD THEN THE REPLACEMENT MATERIAL SHALL ALSO BE WARRANTED ONE (1) YEAR FROM DATE OF REPLACEMENT AND IN PLUMB. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTICING AND WRITING OF THE UF PROJECT MANAGER KEVANS PRIOR TO THE END OF THE WARRANTY PERIOD. THE UF PROJECT MANAGER HAS THE OPTION TO DO AN END OF WARRANTY INSPECTION AT THAT TIME. FAILURE OF THE CONTRACTOR TO NOTIFY PROJECT MANAGER OR END OF WARRANTY SHALL CAUSE THE WARRANTY PERIOD TO EXTEND UNTIL SUCH TIME AS THE CONTRACTOR OWES THE UF PROJECT MANAGER 30 DAYS END OF WARRANTY NOTICE.





Next Steps

- Installation
- Watering through establishment
- Questions?

UF Landscape Master Plan & Sustainable SITES Initiative

3-10-22

UF | UNIVERSITY of
FLORIDA

#1

MOST SUSTAINABLE BUILDING
CERTIFICATIONS THAN ANY OTHER
PUBLIC HIGHER EDUCATION
INSTITUTION

7

OF GREEN BUILDING RATING
PROGRAMS USED

92

TOTAL NUMBER OF GREEN BUILDING
CERTIFICATIONS

Today's Discussion

- What is SITES
- Goals for SITES
- SITES Guiding Principles
- SITES Subcategories
- Current Projects
- Lessons Learned
- Insights for LVL to consider

What is SITES



SITES offers a comprehensive rating system designed to distinguish sustainable landscapes, measure their performance and elevate their value.




SITES is used by professionals of all fields to align land development and management with innovative sustainable design.




SITES certification is for development projects located on sites with or without buildings




Open spaces
Local, state and national parks;
botanic gardens; arboretums


Streetscapes and plazas


Commercial
Retail and office areas;
corporate campuses


Residential
Neighborhoods or individual
yards


Educational/Institutional
Public and private campuses;
museums; hospitals

GOALS for SITES

Transform the
Market through
Design, Development
& Maintenance
Practices

Create
Regenerative
Systems &
Foster
Resiliency

Enhance Human
Well-Being &
Strengthen
Community

Ensure Future
Resource Supply &
Mitigate Climate
Change

SITES

Guiding Principles

- Do no harm
- Apply the precautionary principle
- Design with nature and culture
- Use a decision-making hierarchy of preservation conservation, and regeneration
- Support a living process
- Use a systems thinking approach
- Use a collaborative and ethical approach
- Maintain integrity in leadership and research
- Foster environmental stewardship

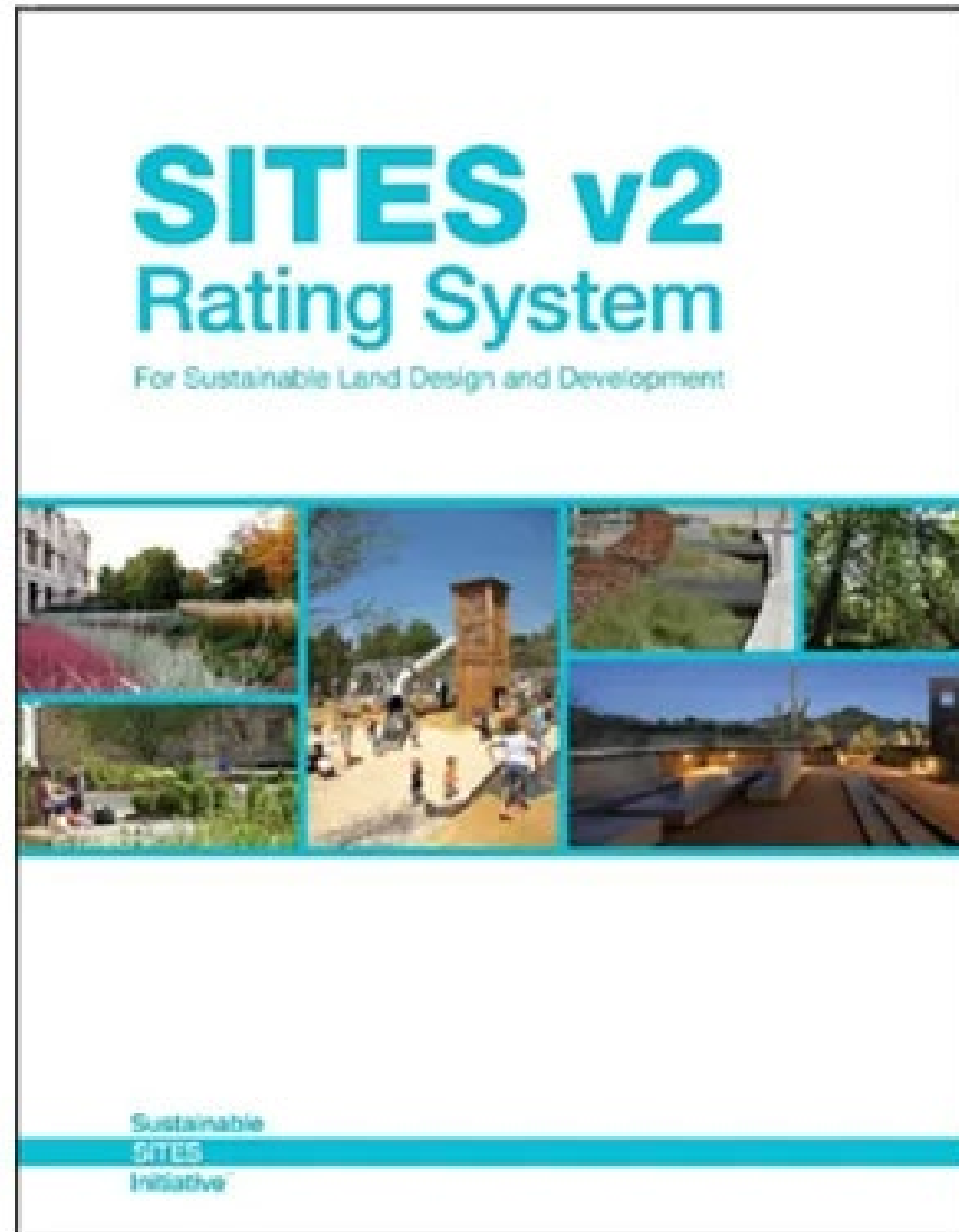
SITES

Subcategories

13	SECTION 1: Site Context
3	SECTION 2: Pre-Design Assessment & Planning
23	SECTION 3: Site Design – Water
40	SECTION 4: Site Design – Soil & Vegetation
41	SECTION 5: Site Design – Materials Selection
30	SECTION 6: Site Design – Human Health & Well-Being
17	SECTION 7: Construction
22	SECTION 8: Operations & Maintenance
11	SECTION 9: Education & Performance Monitoring
9	SECTION 10: Innovation or Exemplary Performance

200 TOTAL possible points

CERTIFICATION	Points
CERTIFIED	70
SILVER	85
GOLD (GOAL)	100
PLATINUM	135





NORTHEAST GATEWAY

The creation of the Northeast Gateway serves to announce the campus, welcome the casual visitor, orientate guests to the parking facilities beyond. The result is a positive first impression of the campus generated by quality materials, organized facilities for parking and drop-off, a well-maintained and clarified landscape, and the introduction to the pedestrian-centric campus beyond the pedestrian gate at the end of Union Walk.



NEWELL GATEWAY

The proposed primary pedestrian gateway is incorporated at the intersection of Newell Drive and West University Avenue to convey Newell Drive's conversion to a pedestrian way and to welcome pedestrians into campus. The gateway also frames one of the most appealing long views of the eastern most historic portion of campus.

Project Goals

LANDSCAPE DESIGN GUIDELINE PRINCIPLES

1. Greet Gainesville with a More Welcoming and Integrated Urban Experience
2. Redesign Campus Roadways to Support and Encourage All Modes of Travel
3. Integrate All New Campus Projects into the Campus Fabric, Advancing Pedestrian and Bike Connections and Campus Spaces
4. Celebrate the Ecological Setting of the Campus, Embracing Sustainable Goals and LID Practices
5. Reflect UF's Ecological Setting in its Plant Materials, Promoting Simplicity and Maintainability in Planting Design
6. Unify the Campus with Comprehensive Standards for Hardscape and Furnishings

Northeast Gateway

SITES PROJECT ID: 13742

TOTAL	75	65	60	ESTIMATED POINTS (Total possible 200)
KEY				
YES	Project confident points are achievable			
?	Project striving to achieve points, not 100% confident			
NO	Project is unable to achieve these credit points			



Newell Gateway

SITES Project ID: 13740

TOTAL	83	39	74	ESTIMATED POINTS (Total possible 200)
KEY				
YES	Project confident points are achievable			
?	Project striving to achieve points, not 100% confident			
NO	Project is unable to achieve these credit points			



SITES Lessons Learned



Soil restoration and healthy soils

- Vegetation and Soil Protection Zones (VSPZ)
- UF On-Site Composting
- Biomass Density Index



Sustainable Materials

- Salvaged materials and plants (approx. \$100k savings)
- Advocacy Letters (local, transparent, sustainable practices)
- Non-hazardous pesticides and fertilizers



Human Health

- Wayfinding
- Defining Site Users
- Livable Wages
- Mental Restoration
- Physical activity



Sustainable Construction Practices

- Preconstruction Meeting
- Defined Punchlist Items
- Protecting Air Quality (Heavy Equipment Policy)



Maintenance Techniques

- Carbon Impact of Maintenance Equipment
- On-Site Recycling
- 10yr Goals (stormwater, water treatment, water quality, irrigation, erosion soil amendments, plant health, site safety, pest management, invasive plant management, conserve habitat, equipment and maintenance, conserve habitat, enhance site experience, etc.)

Insights to Consider Programming Phase

- Site Assessment to Influence Design
 - What's existing? Identify significant habitat
 - What is adjacent? Conservation or Historic preservation opportunities
 - Consider Construction Impacts (noise, dust, light, etc.)
- Identify opportunities /constraints/impacts to consider
- Encourage 3rd Party Sustainability Certification





Insights to Consider Schematic Design

- Ask for project specific sustainability goals (beyond certification level)
- Emphasis on vegetation & soils protection zones
- Understand rainwater impacts & encourage LID (assess average monthly pre & post precipitation, direction of rainwater flow, how to reuse rainwater intelligently)
- Foot-traffic flow (walking on the grass vs keeping travelers on strategic pavement)

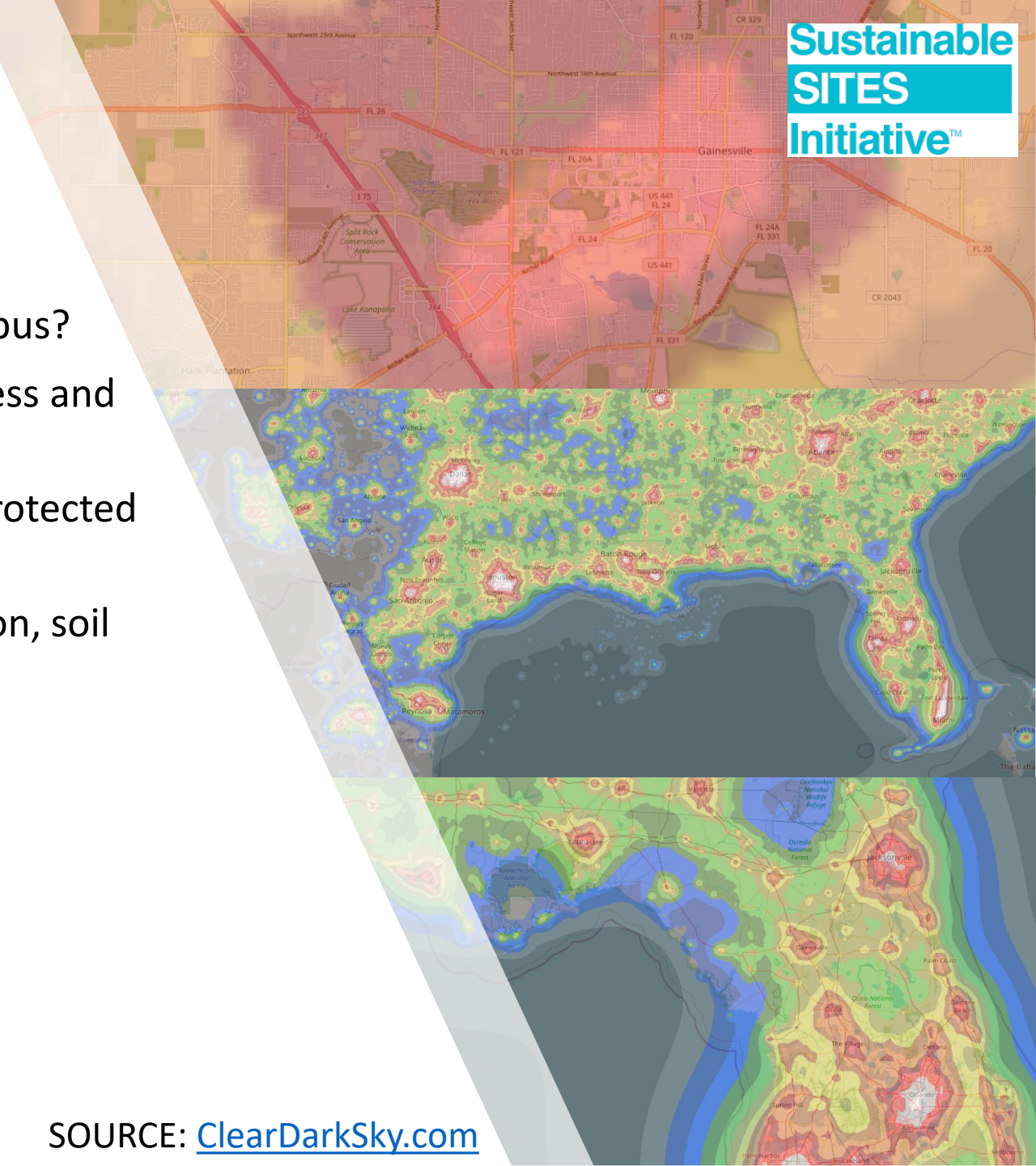
Insights to Consider Design Development

- Native plants/ground cover vs plantings under tree canopy cover
- Sustainable plant production & local workforce
- Maximize shading, minimize asphalt
- Request carbon impacts of removed trees (age or DBH and species)



Potential Projects

- No UPLIGHT please!
- How can we best relocate valuable plants on campus?
- How do we better promote sustainability awareness and education?
- Arborist to certify that indicated trees are to be protected
- Pre/Post healthy soils testing?
(bulk densities, texture, organic matter, compaction, soil chemical characteristics)
- Consider pledges
- Conduct more site visits!



Questions?

