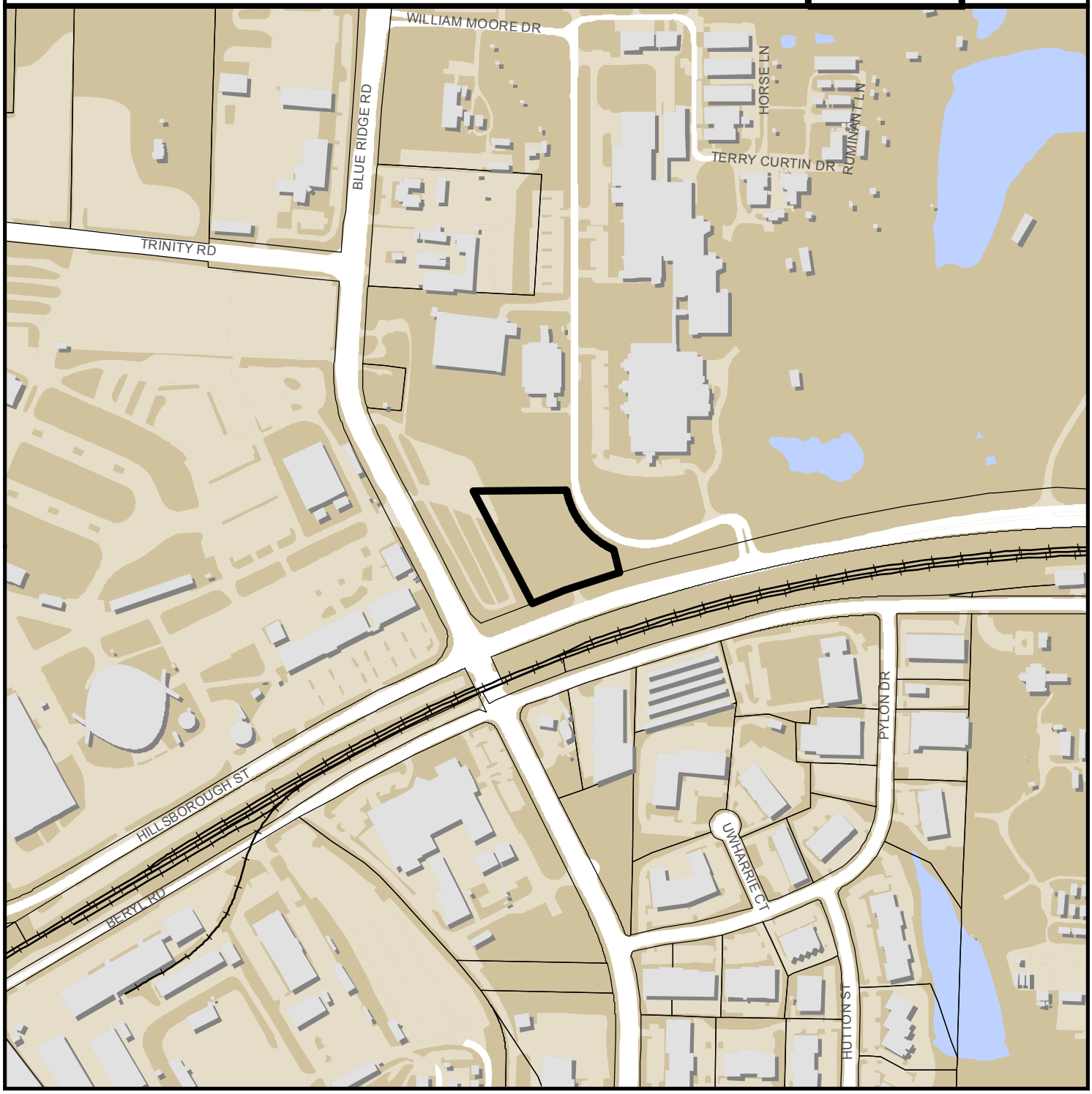
FLEX LAB BUILDING, CENTERIAL BIOMED
SR-9-2016



Zoning: **PD**
CAC: **West**
Drainage Basin: **House**
Acreage: **2.63**
Square Feet: **46,442**

Planner: **Meade Bradshaw**
Phone: **(919) 996-2664**

Applicant: **CBC Flex Lab, LLC**
Phone: **(919) 233-9901**

Planning & Development

Development Services
Customer Service Center
One Exchange Plaza, Suite 400
Raleigh, NC 27601
Phone 919-996-2495
Fax 919-516-2685

Administrative Site Review Application
For UDO Districts Only

SR-9-16

When submitting plans, please check appropriate building type and include the Plan Checklist document.

Building Type		FOR OFFICE USE ONLY
☐ Detached ☐ Attached ☐ Apartment ☐ Townhouse	☒ General ☐ Mixed Use ☐ Open Lot	Transaction Number 462283 Assigned Project Coordinator Brenda Assigned Team Leader Bradshaw

Has your project previously been through the Due Diligence process? If yes, provide the transaction # 422120 (CTR)

GENERAL INFORMATION

Development Name	Flex Lab Building, Centennial Biomedical Campus
Zoning District	PD
Proposed Use	Office and lab
Property Address(es)	1001 William Moore Drive

Wake County Property Identification Number(s) for each parcel to which these guidelines will apply: portion of 0784-74-3650

P.I.N. Recorded Deed	P.I.N. Recorded Deed	P.I.N. Recorded Deed	P.I.N. Recorded Deed
D.B. 16214, Pg. 2704			

What is your project type? ☐ Apartment ☐ Banks ☐ Elderly Facilities ☐ Hospitals ☐ Hotels/Motels ☐ Industrial Building ☐ Mixed Residential ☐ Non-Residential Condo ☐ Office ☐ Religious Institutions ☐ Residential Condo ☐ Retail ☐ School ☐ Shopping Center ☐ Single Family ☐ Telecommunication Tower ☐ Townhouse ☐ Cottage Court ☒ Other: If other, please describe: Office/Lab Space

WORK SCOPE	Per City Code Section 10.2.8.D.1, summarize the project work scope. Construct 2 story building and associated parking.
DESIGN ADJUSTMENT OR ADMIN ALTERNATE	Per City Code Chapter 8, summarize if your project requires either a design adjustment, or Section 10 - Alternate Administrative AE

CLIENT/DEVELOPER/ OWNER	CBC Flex Lab, LLC	Name (s) Tom Huff	
	Address 5400 Trinity Road, Suite 309, Raleigh, NC 27607		
	Phone (919) 233-9901	Email thuff@casso.com	Fax (919) 233-9905
CONSULANT (Contat Person for Plans)	Company Piedmont Land Design, LLP	Name (s) Ron Hendricks	
	Address 8522-204 Six Forks Road, Raleigh, NC 27615		
	Phone (919) 845-7600	Email ronh@piedmontlanddesign.com	Fax (919) 845-7703

DEVELOPMENT TYPE & SITE DATA TABLE (Applicable to all developments)	
Zoning Information	**Building Information**
Zoning District(s) PD	Proposed building use(s) Flex Lab
If more than one district, provide the acreage of each	Existing Building(s) sq. ft. gross 0
Overlay District	Proposed Building(s) sq. ft. gross 46,442
Total Site Acres 2.63 Inside City Limits ☒ Yes ☐ No	Total sq. ft. gross (existing & proposed) 46,442
Off street parking Required 117 Provided 129	Proposed height of building(s) 29.5' Stories 2
COA (Certificate of Appropriateness) case #	FAR (floor area ratio percentage) 0.41
BOA (Board of Adjustment) case # A-	Building Lot Coverage percentage 0.20 (site plans only)
CUD (Conditional Use District) case # Z-	Height of 1st Floor 14.7'
Stormwater Information	
Existing Impervious Surface 0 acres/square feet	Flood Hazard Area ☐ Yes ☒ No
Proposed Impervious Surface ~~1.77~~ 1.82 acres	**If Yes, please provide**
Neuse River Buffer ☐ Yes ☒ No Wetlands ☐ Yes ☒ No	Alluvial Soils Flood Study FEMA Map Panel #

FOR RESIDENTIAL DEVELOPMENTS	
1. Total # Of Apartment, Condominium or Residential Units	7. Open Space (only) or Amenity
2. Total # Of Congregate Care Or Life Care Dwelling Units	8. Is your project a cluster unit development? ☐ Yes ☐ No
3. Total Number of Hotel Units	
4. Overall Total # Of Dwelling Units (1-6 Above)	
5. Bedroom Units 1br 2br 3br 4br or more	
6. Infill Development 2.2.7	

SIGNATURE BLOCK (Applicable to all developments)

In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed development plan as approved by the City.

I hereby designate Piedmont Land Design, LLP to serve as my agent regarding this application, to receive and respond to administrative comments, to resubmit plans on my behalf and to represent me in any public meeting regarding this application.

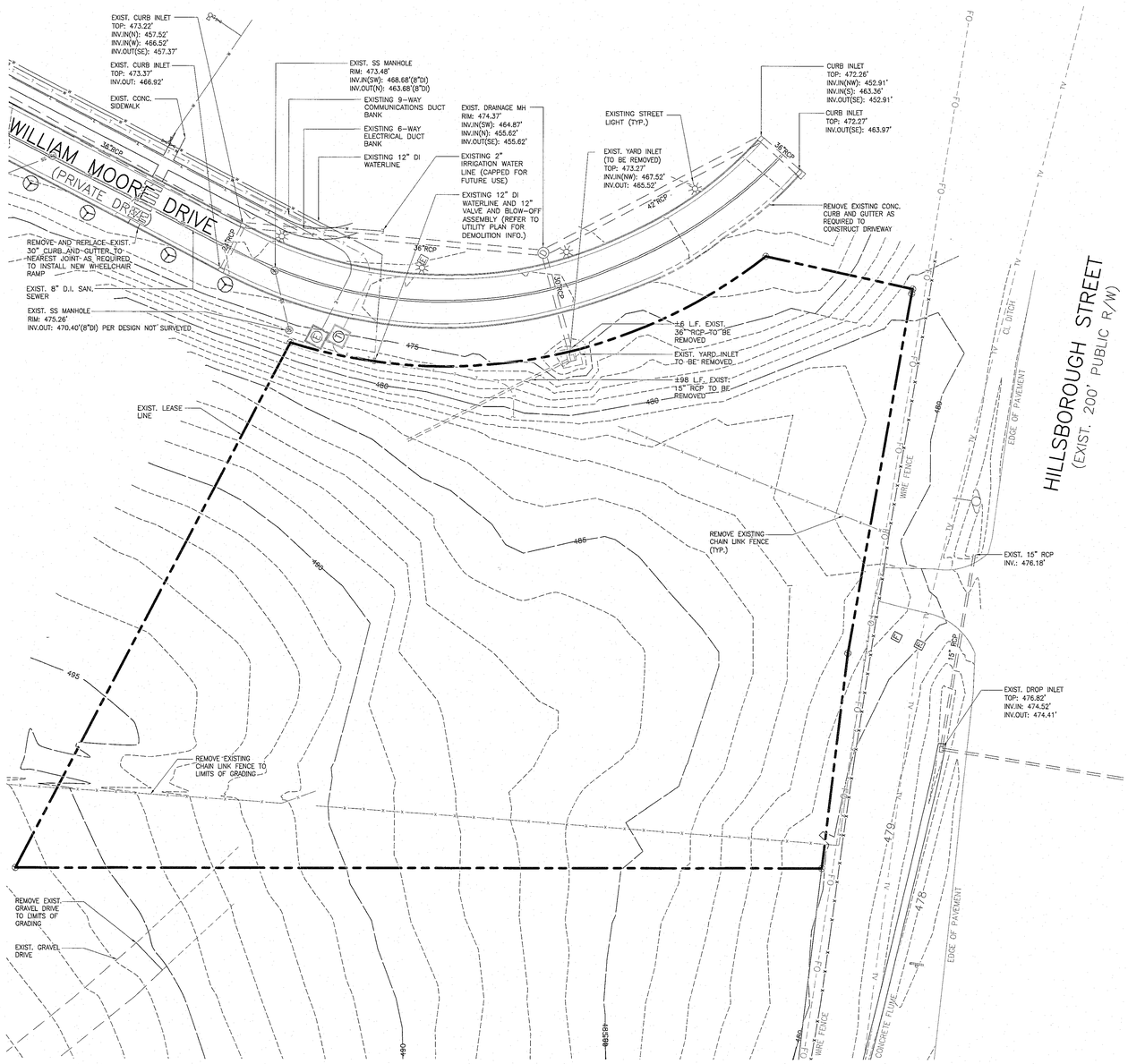
I/we have read, acknowledge and affirm that this project is conforming to all application requirements applicable with the proposed development use.

Signed TM HM FEB. 10, 2016 Date

Signed _____ Date

TO BE COMPLETED BY APPLICANT			TO BE COMPLETED BY STAFF		
General Requirements	YES	N/A	YES	NO	
1. Filing Fee for Plan Review – Payments may be made by cash, Visa, Master Card or check made payable to: City of Raleigh (No fee for Infill recombination)	☒	$937.00	✓		
2. **Site Review** completed and signed by the property owner	☒		✓		
3. Client must complete and print page 1 and 2 of the **Site Review** to the plan cover sheet (not applicable for infill recombination)	☒	☐	✓		
4. I have referenced the **Site Review** and by using this as a guide, it will ensure that I receive a complete and thorough first review by the City of Raleigh	☒		✓		
5. Provide the following plan sheets:	☐				

a) Cover sheet: includes general n owner's name, contact's name, telephone number, mailing address and email address	☒		✓		
b) Existing Conditions Sheet	☒	☐	✓		
c) Proposed Site Plan	☒		✓		
d) Proposed Grading and Stormwater Plan; Approach to Stormwater	☒				
e) Proposed Utility Plan, including Fire	☒	☐	✓		
f) Proposed Tree Conservation Plan	☐	☒			✓
g) Proposed Landscaping Plan	☒	☐	✓		
h) Building elevations that show maximum height of buildings to be removed	☒	☐	✓		
i) Transportation Plan	☐	☒			✓
6. Ten (10) sets of proposed plans to engineering scale (1" = 20', 1" =100', etc.), and date of preparation. For re-submittals – include all revision dates	☒		✓		
7. Minimum plan size 18"x24" not to exceed 36"x42"	☒		✓		
8. A vicinity map no smaller/less than 1"=500' and no larger than 1"=1000' to the inch, showing the position of the plan with its relation to surrounding streets and properties, and oriented in the same direction as the preliminary plan	☒		✓		
9. Include sheet index and legend defining all symbols with true north arrow, with north being at the top of the map	☒		✓		
10. Digital copy of only the plan and elevations. Label the CD with the plan name, case file number, and indicate how many times the plan has been resubmitted for review	☒		✓		
11. Wake County School Form, if dwelling units are proposed	☐	☒			✓
12. Preliminary stormwater quantity and quality summary and calculations package	☒	☐	✓		
13. For secondary tree conservation areas, include two (2) copies of the tree cover report completed by a certified arborist, North Carolina licensed landscape architect, or North Carolina registered forester	☐	☒			✓



DEMOLITION NOTES

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
4. CONTRACTOR IS RESPONSIBLE FOR REMOVING OR RELOCATING ALL UTILITIES IN CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES.
5. ALL TREE PROTECTION FENCE AND SILT FENCE WITH TREE PROTECTION SIGNAGE SHALL BE INSTALLED PRIOR TO BEGINING DEMOLITION.
6. CONTRACTOR SHALL COORDINATE PHASING OF REMOVALS WITH NEW CONSTRUCTION.
7. PHASING OF ALL REMOVALS SHALL BE COORDINATED WITH INSTALLATION OF NEW IMPROVEMENTS SO THAT THERE IS NO INTERRUPTION IN SERVICES OR LACK OF PROPER DRAINAGE OR EROSION CONTROL.

NORTH

0 30 60 90

SCALE: 1" = 30'

PLD
PIEDMONT LAND DESIGN, LLP
8522-204 SIX FORKS ROAD
RALEIGH, NORTH CAROLINA 27615
919.845.7600 PHONE
919.845.7703 FAX
ENGR. FIRM LICENSE NO. F-0843

[redacted]

PRELIMINARY
NOT FOR CONSTRUCTION

FLEX LAB BUILDING
NCSU CENTENNIAL BIOMEDICAL CAMPUS
1001 WILLIAM MOORE DRIVE
RALEIGH, NORTH CAROLINA

ISSUED: **12 FEB 2016**

REVISIONS:

DRAWN BY: **JJA**
CHECKED BY: **RPH**

PROJECT: **CACBCFL**

EXISTING CONDITIONS AND DEMOLITION PLAN

DWG. NO. **SR 2**

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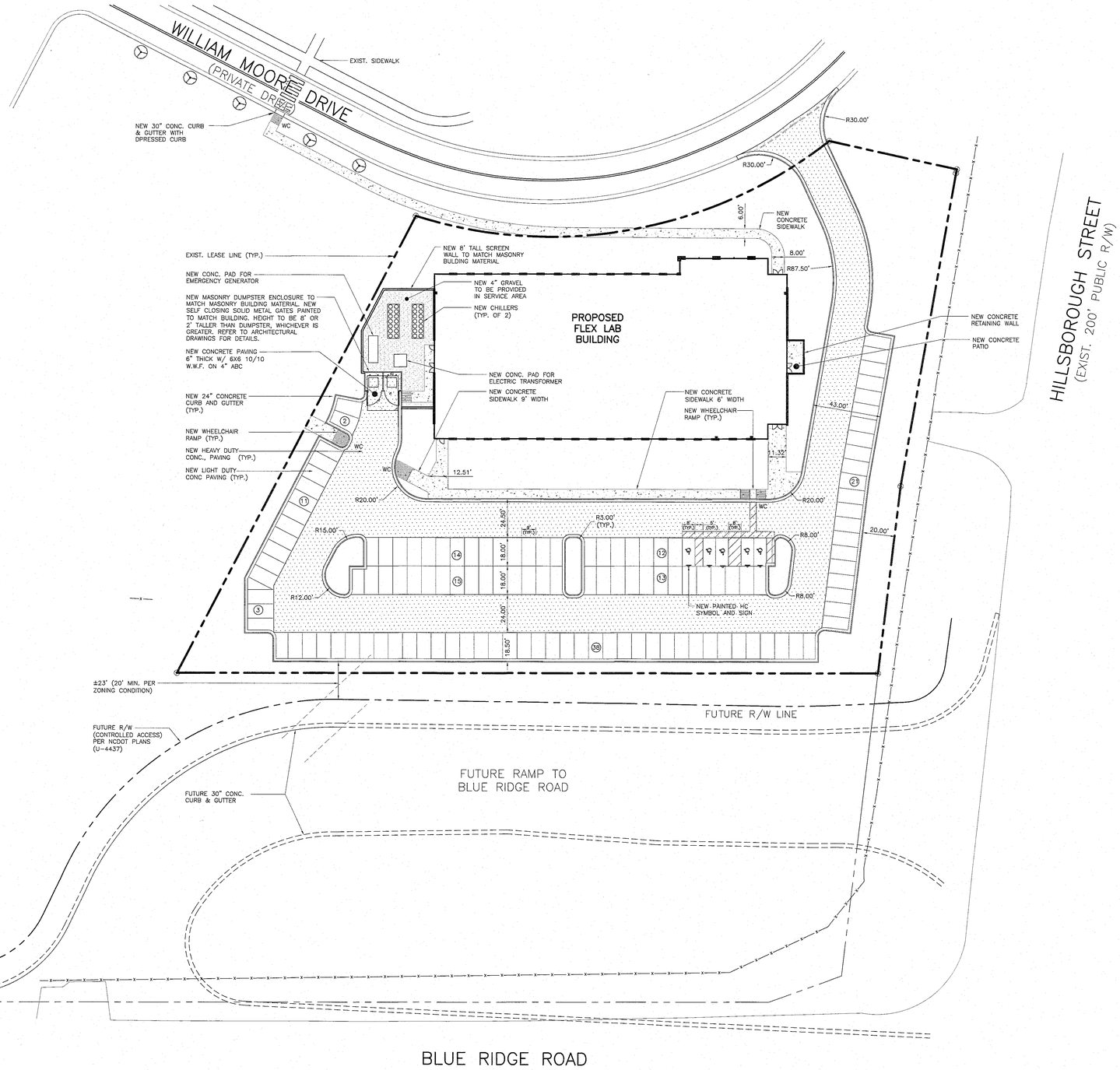

STAKING NOTES

1. ALL DIMENSIONS ARE TO BACK OF CURB, FACE OF TURNED DOWN WALK, EDGE OF PAVING, COLUMN LINE, BUILDING WALL FACE OR PROPERTY LINE.
2. PARKING SPACES ARE 9.0' WIDE MINIMUM EXCEPT HANDICAP SPACES WHICH ARE 8.0' WIDE MINIMUM WITH 5.0' AISLES.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF CANOPIES, SLOPED PAVING, EXIT PORCHES, RAMPS, PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS.
4. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DIMENSIONAL CONFLICTS PRIOR TO THE BEGINNING OF CONSTRUCTION.
5. ALL CURB AND GUTTER SHALL BE 24" WIDE.

PAVING LEGEND

- STANDARD DUTY ASPHALT PAVING: 2" SF9.5A ON 6" ABC
- HEAVY DUTY ASPHALT PAVING: 1" SF9.5A ON 2" SB.5B ON 8" ABC
- HEAVY DUTY CONCRETE: 6" THICK 4,000 PSI CONC. W/6x6 $^{10}/_{10}$ W.W.F. ON 4" ABC
- CONCRETE SIDEWALK: 4" THICK 3,000 PSI CONC.

NORTH

0 30 60 90

SCALE: 1" = 30'

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1001 WILLIAM MOORE DRIVE
RALEIGH, NORTH CAROLINA

ISSUED: **12 FEB 2016**

REVISIONS:

DRAWN BY: **JJA**
CHECKED BY: **RPH**

PROJECT: **CACBCFL**

STAKING PLAN

DWG. NO. **SR 3**

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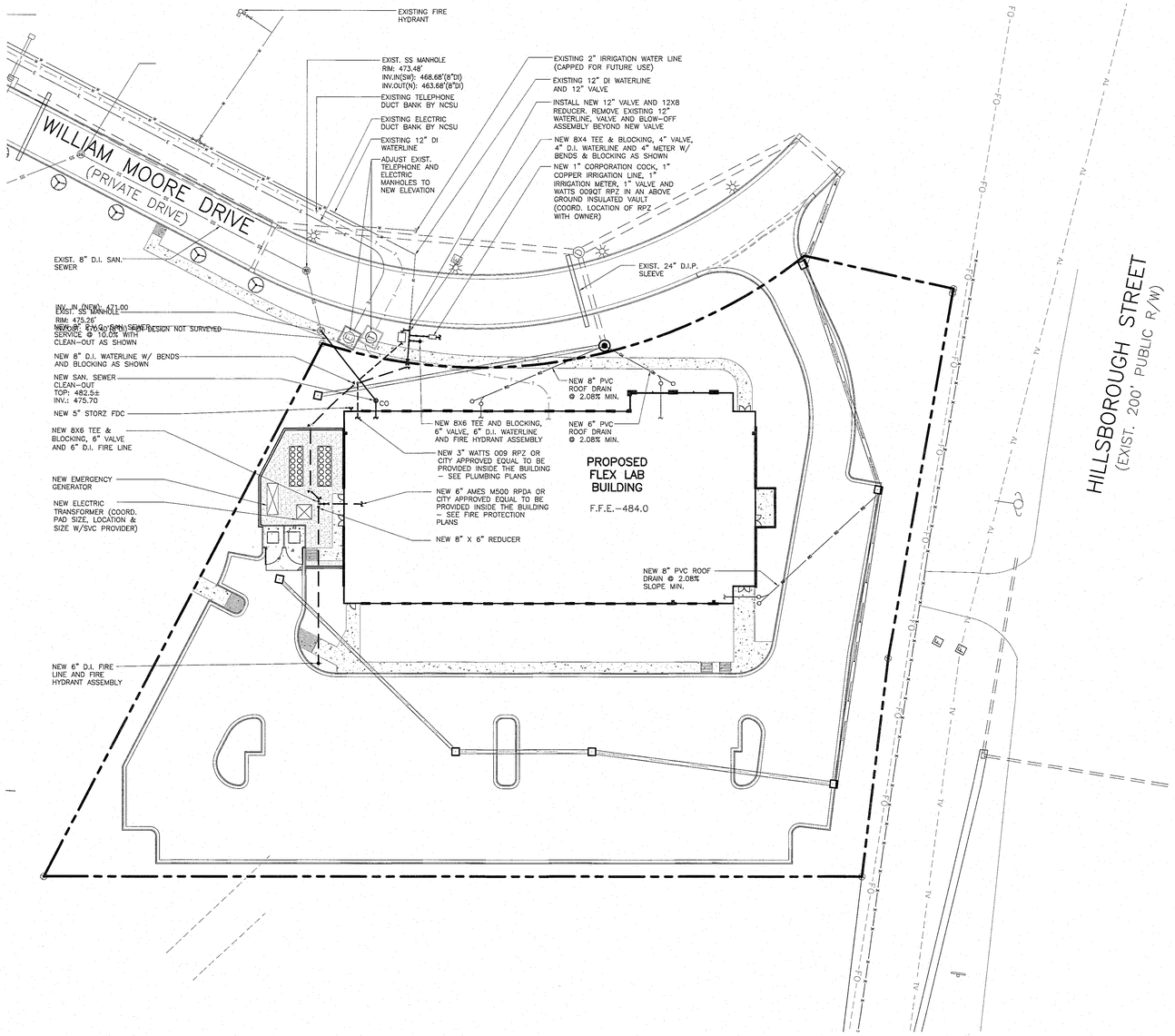

UTILITY NOTES:

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-4949) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
4. CONTRACTOR SHALL COORDINATE THE LOCATION OF THE ELECTRIC, GAS, COMMUNICATION, FIBER OPTIC AND TELEPHONE SERVICE WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL PROVIDE CONDUITS AS REQUIRED FOR THESE UTILITIES UNDER PAVED AREAS. LAYOUT SHOWN FOR THESE UTILITIES IS SCHEMATIC AND IS SUBJECT TO CHANGE UPON REVIEW BY UTILITY COMPANIES.
5. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTIONS.
6. SAW CUT AND REMOVE ASPHALT PAVEMENT TO LIMITS INDICATED ON PLAN FOR NEW WATER LINE INSTALLATION. INSTALL ASPHALT PATCH PER CITY OF RALEIGH AND NCDOT STANDARDS.
7. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED. THE CONTRACTOR SHALL COORDINATE THE ACTUAL AND PROPOSED LOCATION OF UTILITIES TO AVOID CONFLICTS.
8. ALL MANHOLE AND CLEAN-OUT FRAMES AND COVERS/GRATES SHALL BE PAINTED BLACK SEMI-GLOSS ENAMEL AFTER INSTALLATION.
9. ALL CLEAN-OUTS SHALL BE PROVIDED IN CAST IRON FRAME AND COVER SIMILAR TO WATER VALVE BOX. PROVIDE HEAVY DUTY FRAME AND COVER IN PAVED AREAS.

MASTER METER NOTE:

CENTENIAL BIOMEDICAL CAMPUS WATER SERVICE HAS A MASTER METER AT CONNECTION POINT TO CITY WATER MAIN.

CITY OF RALEIGH STANDARD UTILITY NOTES

1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
2. UTILITY SEPARATION REQUIREMENTS:
   A) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.

   B) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER

   C) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS

   D) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER

   E) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49)

   F) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED
3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION
4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT
5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS
6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE
7. INSTALL 4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE
8. INSTALL 8" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION
12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION
13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE =OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA.

THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION

NORTH

0 30 60 90

SCALE: 1" = 30'

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FLEX LAB BUILDING
NCSU CENTENNIAL BIOMEDICAL CAMPUS
1001 WILLIAM MOORE DRIVE
RALEIGH, NORTH CAROLINA

ISSUED: **12 FEB 2016**

REVISIONS:

DRAWN BY: **JJA**
CHECKED BY: **RPH**

PROJECT: **CACBCFL**

UTILITY PLAN

DWG. NO. **SR 5**

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PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	QUAN.	CAL.	HT.	ROOT	REMARKS
TREES							
AR1	Acer rubrum 'October Glory'	Red Maple	4	3 1/2"	12-14'	B&B	TYPE C2 STREETYARD TREE
AR2	Acer rubrum 'October Glory'	Red Maple	7	2"	8'	B&B	VSA TREE
CB	Carpinus betulus 'Fastigiata'	European Hornbeam	5	2"	8'	B&B	VSA TREE
LI	Lagerstroemia indica 'Whit IV'	Crape Myrtle	6	N/A	6'	B&B	ACCENT - RED FLOWER
MG	Magnolia grandiflora 'Claudia Wannamaker'	Southern Magnolia	2	2"	8'	B&B	VSA TREE
MGA	Magnolia grandiflora 'Alta'	Southern Magnolia	15	N/A	6'	B&B	ACCENT TREE
QA1	Quercus acutissima	Sawtooth Oak	3	3 1/2"	12-14'	B&B	TYPE C2 STREETYARD TREE
QA2	Quercus acutissima	Sawtooth Oak	4	2"	8'	B&B	VSA TREE
QL	Quercus lyrata	Overcup Oak	5	3 1/2"	12-14'	B&B	VSA TREE
QN	Quercus nuttallii	Nuttall Oak	3	2"	8'	B&B	VSA TREE
UP	Ulmus parvifolia 'Emer II'	Chinese Lacebark Elm	6	3 1/2"	12-14'	B&B	TYPE C2 STREETYARD TREE
SHRUBS							
BM	Buxus microphylla japonica 'Baby Gem'	Baby Gem Boxwood	141		18"	7 GAL	VSA SHRUB - 2' O.C.
IV	Ilex verticillata 'Winter Red'	Winterberry Holly	12		36"	7 GAL	TYPE C2 STREETYARD SHRUB
PL	Prunus laurocerasus 'Schipkaensis'	Laurel	42		36"	7 GAL	TYPE C2 STREETYARD SHRUB
TO	Thuja occidentalis 'Emerald'	Emerald Arborvitae	35		18"	3 GAL	BMP SCREEN/ACCENT SHRUB

SYMBOLS: B&B = BALLED & BURLAPPED; B.R. = BARE ROOT; CONT. = CONTAINER; O.C. = ON-CENTER; GAL = GALLON

LANDSCAPE NOTES

1. CONTRACTOR SHALL REMOVE ALL WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., IN LANDSCAPE AREAS DISTURBED BY CONSTRUCTION. LANDSCAPE BEDS SHALL BE SCARIFIED TO A DEPTH OF 6" AND GRADED SMOOTH TO ALLOW FOR POSITIVE DRAINAGE.
2. FINISHED GRADE IN LANDSCAPE ISLANDS SHALL BE INSTALLED SO THAT THEY ARE 1" LOWER THAN THE TOP OF THE SURROUNDING CURBS.
3. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
4. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
6. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS AND LAWN UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
10. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (OR AS INDICATED IN THE LANDSCAPE SPECIFICATIONS) BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
11. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
12. SEASONAL COLOR AREAS SHOWN ON PLANS SHALL CONSIST OF ANNUAL FLOWERING PLANTS THAT WILL PROVIDE SEASONAL VARIETY AND COLOR. PLANT SELECTIONS SHALL BE SUITED TO SITE CONDITIONS AND CAPABLE OF THRIVING IN AREAS SHOWN ON PLANS.

LAWN NOTES:

- LAWN AREAS SHALL BE TIFGRAND HYBRID BERMUDA SOD.
- CONTRACTOR SHALL OBTAIN THREE (3) SOIL SAMPLES FROM TOPSOIL STOCKPILE AREA(S) AND SUBMIT TO A LAB FOR NUTRIENT ANALYSIS. CONTRACTOR SHALL AMEND TOPSOIL TO BE USED FOR LAWN AND LANDSCAPE INSTALLATION PER RECOMMENDATIONS PROVIDED IN THE NUTRIENT ANALYSIS. A COPY OF THE REPORT INCLUDING RECOMMENDED AMENDMENT SCHEDULE SHALL BE PROVIDED TO THE OWNER PRIOR TO INSTALLATION.
- LAWN AREAS SHALL BE TILLED TO A MINIMUM DEPTH OF SIX (6) INCHES AND GRADED SMOOTH PRIOR TO SOD INSTALLATION.
- IRRIGATION PLANS SHALL BE PREPARED BY OTHERS.

LANDSCAPE REQUIREMENTS

STREET PROTECTIVE YARD:

NC HIGHWAY 54 - HILLSBOROUGH STREET
(AVENUE 4-LANE, DIVIDED)

PER UDO SECTION 8.5.1.D.4, A TYPE C2 STREET PROTECTIVE YARD IS REQUIRED FOR DEVELOPMENT THAT ABUTS A STREET CONTROLLED BY NCDOT. 4 TREES & 15 SHRUBS PER 100 L.F. REQUIRED/PROVIDED

322 L.F. OF HILLSBOROUGH STREET FRONTAGE

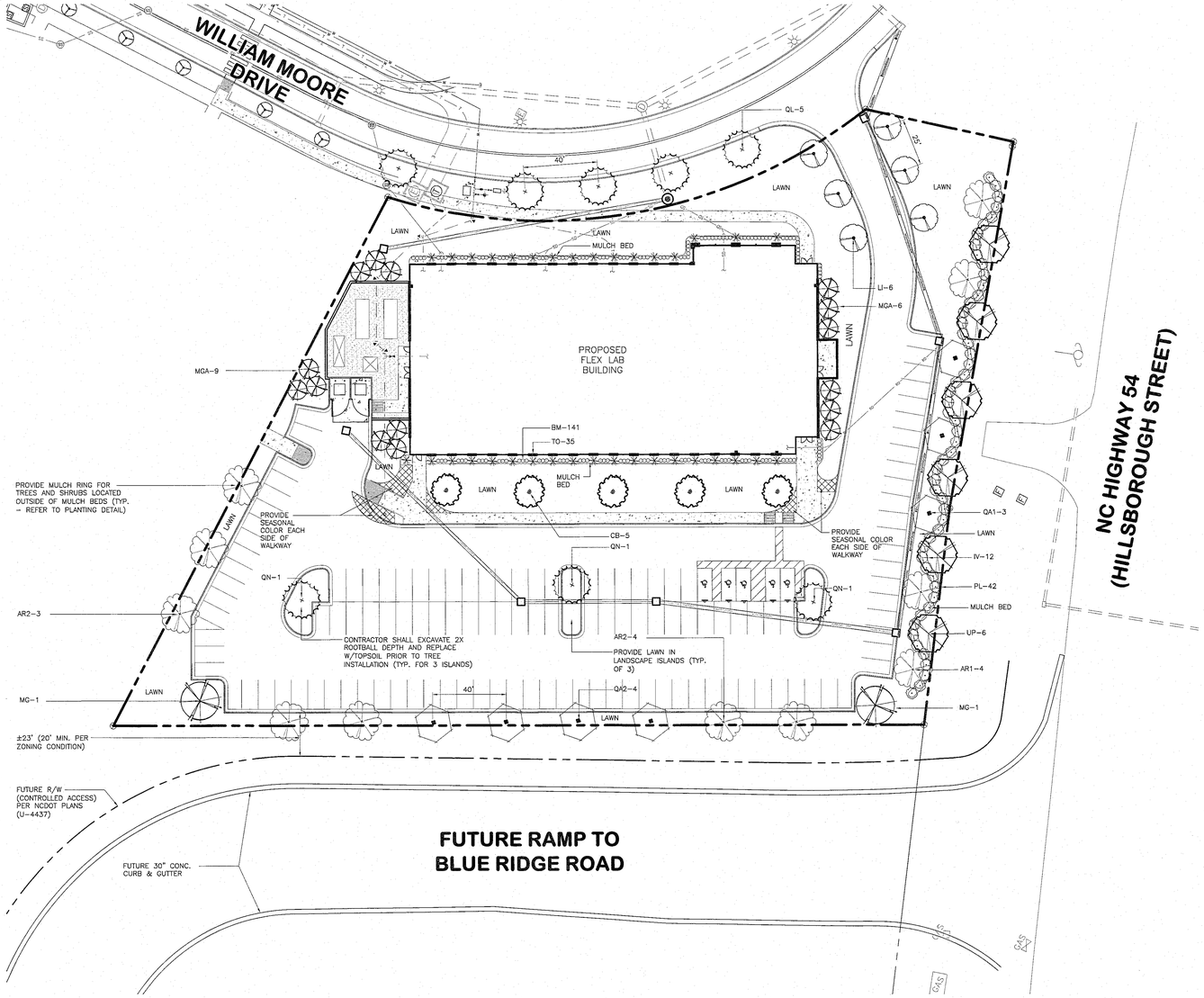
322 L.F./100 X 4 = 13 STREET TREES REQUIRED/PROVIDED

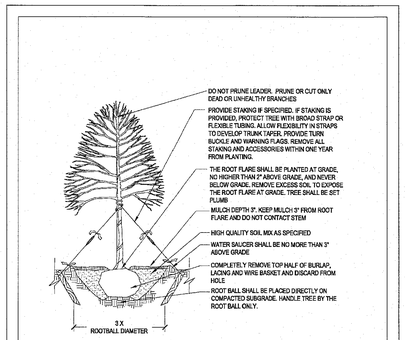
322 L.F./100 X 15 = 49 SHRUBS REQUIRED/PROVIDED

VEHICULAR SURFACE AREA (VSA): 48,133 S.F.

1 TREE/2,000 S.F. REQUIRED
48,133 S.F./2,000 = 24 TREES REQUIRED/PROVIDED

1 SHRUB/500 S.F. REQUIRED
48,133 S.F./500 = 97 SHRUBS REQUIRED/PROVIDED





NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE DRAINAGE OF ALL PLANTING PITS. (POSITIVE DRAINAGE AWAY FROM PIT)
2. ADHERE TO STANDARDS IN THE CITY TREE MANUAL.
3. STREET TREES MUST BE 3" CALIPER AT INSTALLATION WITH A 5' MINIMUM FIRST BRANCH HEIGHT.
4. PLANTING SEASON OCTOBER - APRIL.
5. A TREE IMPACT PERMIT IS REQUIRED.
6. ELECTRICAL OUTLETS AND OTHER UTILITIES ARE PROHIBITED IN THE PLANTING AREA IMMEDIATELY SURROUNDING THE TREE.

CONTACT INFORMATION:
CITY OF RALEIGH PARKS, RECREATION AND CULTURAL RESOURCES DEPARTMENT URBAN FORESTER:
TREES@RALEIGHNC.GOV
WWW.RALEIGHNC.GOV

CITY OF RALEIGH
PARKS, RECREATION AND CULTURAL RESOURCES DEPT

REVISIONS	DATE BY/ED	NOT TO SCALE
		TREE PLANTING DETAIL
		PRCR-03

NORTH

0 30 60 90
SCALE IN FEET

PLD
PIEDMONT LAND DESIGN, LLP
8522-204 SIX FORKS ROAD
RALEIGH, NORTH CAROLINA 27615
919.845.7600 PHONE
919.845.7703 FAX
ENGR. FIRM LICENSE NO. F-0843

PRELIMINARY
NOT FOR CONSTRUCTION

FLEX LAB BUILDING
NCSU CENTENNIAL BIOMEDICAL CAMPUS
1001 WILLIAM MOORE DRIVE
RALEIGH, NORTH CAROLINA

ISSUED: **12 FEB 2016**

REVISIONS:

DRAWN BY: **MGD**
CHECKED BY: **RPH**

PROJECT: **CACBCFL**

LANDSCAPE PLAN

DWG. NO. **SR 6**

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