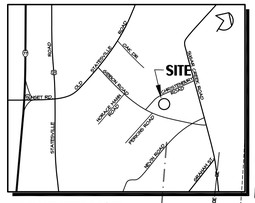
## SHEET INDEX


| Sheet No. | Sheet Title |
|---|---|
| 1 | Preliminary Subdivision Site |
| 2 | Landscape Plan |
| 3 | Storm Drainage and Grading Plan |
| 4 | Erosion Control Plan (Pre) |
| 5 | Erosion Control Plan (Post) |
| 6 | Roadway & Storm Drainage Profiles |
| 7A&B | Site Construction Details |
| 8 | Drainage Area Map |
| 9 | Roadway Improvement Plan |
| 10 A&B | Roadway X-Sections |
| 11 | BMP Plan & Details |

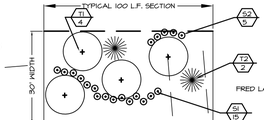




VICINITY MAP

### BUFFER ALONG COLLECTOR ROAD

6 TREES PER EVERY 100 L.F.
20 SHRUBS PER EVERY 100 L.F.
25% OF TREES TO BE EVERGREEN
75% OF SHRUBS TO BE EVERGREEN

(EXISTING TREES AND VEGETATION MAY BE USED TO MEET THE REQUIREMENTS IF THEY ARE OF SUFFICIENT MAGNITUDE TO MEET OR EXCEED THESE REQUIREMENTS.)




### BUFFER NOTES

1. EXISTING VEGETATION WITHIN THE DESIGNATED BUFFER AREA MAY BE CREDITED TOWARD BUFFER REQUIREMENTS UPON FIELD VERIFICATION/APPROVAL BY THE ZONING INSPECTOR.
2. THE PLANT LIST (RIGHT) MAY BE MODIFIED PROVIDED THE SIZE AND PLANTS ARE ALLOWED PER THE LIST OF ACCEPTABLE PLANT SPECIES IN THE ZONING ORDINANCE
3. FIELD ADJUST EXACT PLACEMENT OF PROPOSED PLANTING TO AVOID CONFLICT WITH EXISTING SITE CONDITIONS, I.E. SLOPES, SWALES, UTILITIES, OVERHEAD POWER LINES.

### PLANT LIST

| KEY | BOTANICAL NAME | COMMON NAME | SIZE |
|---|---|---|---|
| TREES | | | |
| T1 | CORNUS FLORIDA | FLOWERING DOGWOOD | 2" CAL./8' MIN. HT. |
| T2 | ILEX X ATTENUATA 'FOSTERI' | FOSTER HOLLY | 2" CAL./8' MIN. HT. |
| T3 | | | |
| SHRUBS | | | |
| S1 | LOROPETALUM CHINENSE | LOROPETALUM | 30" MIN. HT., -5' O.C. |
| S2 | ILEX CORNUTA BURFORDI | BURFORD HOLLY | 30" MIN. HT., -5' O.C. |

### CURVE TABLE

| CURVE | LENGTH | RADIUS | CHORD | BEARING |
|---|---|---|---|---|
| C-1 | 81.49' | 150.00 | 80.49' | S1°36'56"E |
| C-2 | 81.49' | 150.00 | 80.49' | S1°36'56"E |
| C-3 | 165.78' | 150.00 | 92.50' | N04°28'55"E |
| C-4 | 102.39' | 150.00 | 53.28' | N38°38'03"W |
| C-5 | 121.04' | 225.00 | 62.02' | S34°29'25"E |
| C-6 | 134.91' | 1000.00 | 67.56' | S53°46'00"E |
| C-7 | 69.84' | 150.00 | 35.56' | S49°28'55"W |
| C-8 | 96.62' | 150.00 | 50.05' | N54°35'44"E |
| C-9 | 66.86' | 150.00 | 33.99' | N23°22'28"E |

| SINGLE FAMILY LOT SIZE (SF) | MAX. BLDG COVERAGE |
|---|---|
| UP TO 4,000 | 50% |
| 4,001 - 6,500 | 45% |
| 6,501 - 8,500 | 40% |
| 8,501 - 15,000 | 35% |
| 15,001 OR GREATER | 30% |

## DEVELOPMENT DATA

TAX PARCEL NO.: 043-026-17
ZONING CLASSIFICATION: R-4 (DEVELOPED AS R-4 CLUSTER)
ZONING JURISDICTION: CITY OF CHARLOTTE
SITE ACREAGE: 24.98 AC.
NO. OF UNITS ALLOWED BY ZONING: 24.98 x 4 =99.9
AREA IN EASEMENTS/RW: 3.11 AC
NET TOTAL SITE AREA: 21.87 AC
TREE SAVE REQ'D/PRV'D: 10% x 21.87 AC= 2.18 AC/2.19 AC
ADDL LOTS FOR TREESAVE IN COS: 0.87 AC X 4= 3.4 LOTS
NO. OF UNITS ALLOWED/PROPOSED: 99.9 + 3.4= 103/100
COMMON OPEN SPACE REQUIRED: 10% x 24.98 AC= 2.50 AC.
COMMON OPEN SPACE PROVIDED: 3.13 AC = 12.5%

R-4 CLUSTER LOT DATA:
MIN. LOT SIZE = 6,000 SF
MIN. LOT WIDTH = 50'
MIN. SETBACK = 20'*
MIN. SIDE YARD = 5'
MIN. REAR YARD = 40' EXTERNAL, 30' INTERNAL

* 20' GARAGE SETBACK FROM BACK OF S/W OR 17' FROM R/W, WHICHEVER IS GREATER

THE MAXIMUM BUA IS 2,600 SF PER LOT

BUILT-UPON AREA (BUA) MEANS THAT PORTION OF A PROPERTY THAT IS COVERED BY IMPERVIOUS OR PARTIALLY IMPERVIOUS SURFACE INCLUDING, BUT NOT LIMITED TO, BUILDINGS, PAVEMENT AND GRAVEL AREAS SUCH AS ROADS, PARKING LOTS, AND PATHS, AND RECREATION FACILITIES SUCH AS TENNIS COURTS (ACTIVITY FIELDS THAT HAVE BEEN DESIGNED TO ENHANCE DISPLACEMENT OF RUNOFF SUCH AS COMPACTION AND GRADING OR INSTALLATION OF SODDED TURF, AND UNDERGROUND CONSIDERED "BUILT-UPON AREA.) "BUILT-UPON AREA" DOES NOT INCLUDE A WOODEN SLATTED DECK OR THE WATER AREA OF A SWIMMING POOL.

## GENERAL NOTES

THIS PRELIMINARY SUBDIVISION PLAN IS SUBMITTED, AND SHALL BE CONSTRUCTED, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF CHARLOTTE, ZONING AND SUBDIVISION ORDINANCES, AND THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.
BOUNDARY SURVEY INFORMATION PER SURVEY PREPARED BY METROLINA ENGINEERING & SURVEYING.
TOPOGRAPHIC INFORMATION TAKEN FROM FIELD SURVEY BY METROLINA ENGINEERING & SURVEYING.
CHIEF SUBDIVISION/INSPECTOR SHALL BE GIVEN 48 HOURS ADVANCE NOTICE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
LOT DIMENSIONS ARE APPROXIMATE; REFERENCE RECORD PLAT FOR EXACT LOT DIMENSIONS.
ALL STORM DRAINAGE PIPE SHALL BE CLASS 3 REINFORCED CONCRETE PIPE (RCP) UNLESS OTHERWISE NOTED. PIPE LENGTHS INDICATED ON THE PLANS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE DUE TO FIELD CONDITIONS.
REFERENCE SHEETS 4 & 5 FOR EROSION CONTROL PLAN AND NOTES.
REFERENCE SHEET 1 FOR EROSION CONTROL DETAILS.
CONSTRUCTION OF ALL DEVELOPMENT IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL. REFERENCE SHEET 1 FOR SITE DETAILS. THE FOLLOWING ADDITIONAL DETAILS ARE INCLUDED BY REFERENCE:

| ITEM | CLD/NCDOT STD. NO. |
|---|---|
| CURB AND GUTTER | 10.17 |
| CURB TRANSITION | 10.18 |
| CATCH BASIN LOCATION | 10.29 & 10.30 |
| (CI) BRICK CATCH BASIN | 840.01 & 840.02 |
| (DCI) DOUBLE CATCH BASIN | 20.03 & 20.04 |
| STREET NAME SIGN | 50.05 |
| CONCRETE MONUMENT | 50.03 |
| SIDEWALK | 10.22 |

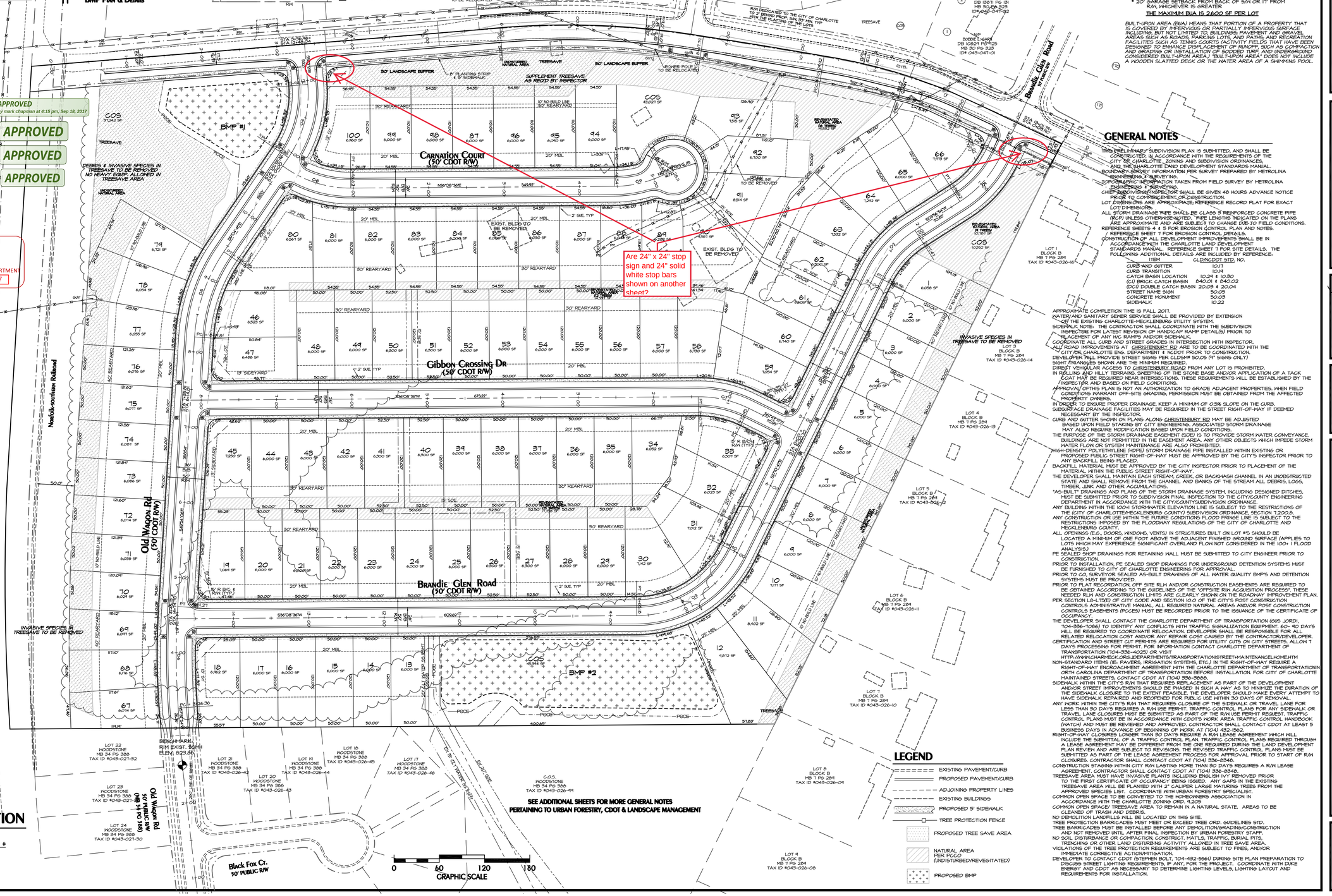
APPROXIMATE COMPLETION TIME IS FALL 2017.
WATER AND SANITARY SEWER SERVICE SHALL BE PROVIDED BY EXTENSION OF THE EXISTING CHARLOTTE-MECKLENBURG UTILITY SYSTEM.
SIDEWALK NOTE: THE CONTRACTOR SHALL COORDINATE WITH THE SUBDIVISION INSPECTOR FOR LATEST REVISION OF HANDICAP RAMP DETAIL(S) PRIOR TO PLACEMENT OF ANY W/C RAMPS AND/OR SIDEWALK.
COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
ALL ROAD IMPROVEMENTS AT CHRISTENBERY RD ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENG. DEPARTMENT & NCDOT PRIOR TO CONSTRUCTION.
DEVELOPER WILL PROVIDE STREET SIGNS PER CLDS## 50.05 (9" SIGNS ONLY)
SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
DIRECT VEHICULAR ACCESS TO CHRISTENBURY ROAD FROM ANY LOT IS PROHIBITED.
IN ROLLING AND HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR AND BASED ON FIELD CONDITIONS.
APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
CURB AND GUTTER SHOWN ON PLANS ALONG CHRISTENBURY RD MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.
THE PURPOSE OF THE STORM DRAINAGE EASEMENT (SDE) IS TO PROVIDE STORM WATER CONVEYANCE. BUILDINGS ARE NOT PERMITTED IN THE EASEMENT AREA. ANY OTHER OBJECTS WHICH IMPEDE STORM WATER FLOW OR SYSTEM MAINTENANCE ARE ALSO PROHIBITED.
HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINAGE PIPE INSTALLED WITHIN EXISTING OR PROPOSED PUBLIC STREET RIGHT-OF-WAY MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED.
BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.
"AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DITCHES, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE CITY/COUNTY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY/COUNTY SUBDIVISION ORDINANCE.
ANY BUILDING WITHIN THE 100-YI STORMWATER ELEVATION LINE IS SUBJECT TO THE RESTRICTIONS OF THE (CITY OF CHARLOTTE/MECKLENBURG COUNTY) SUBDIVISION ORDINANCE, SECTION 1.2202B.
ANY CONSTRUCTION OR USE WITHIN THE FUTURE CONDITIONS FLOOD FRINGE LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOODWAY REGULATIONS OF THE CITY OF CHARLOTTE AND MECKLENBURG COUNTY.
ALL OPENINGS (E.G., DOORS, WINDOWS, VENTS) IN STRUCTURES BUILT ON LOT #'S SHOULD BE LOCATED A MINIMUM OF ONE FOOT ABOVE THE ADJACENT FINISHED GROUND SURFACE (APPLIES TO LOTS WHICH MAY EXPERIENCE SIGNIFICANT OVERLAND FLOW NOT CONSIDERED IN THE 100-YI FLOOD ANALYSIS.)
PE SEALED SHOP DRAWINGS FOR RETAINING WALL MUST BE SUBMITTED TO CITY ENGINEER PRIOR TO CONSTRUCTION.
PRIOR TO INSTALLATION, PE SEALED SHOP DRAWINGS FOR UNDERGROUND DETENTION SYSTEMS MUST BE FURNISHED TO CITY OF CHARLOTTE ENGINEERING FOR APPROVAL.
PRIOR TO C.O. SURVEYOR SEALED AS-BUILT DRAWINGS OF ALL WATER QUALITY BMP'S AND DETENTION SYSTEMS MUST BE PROVIDED.
PRIOR TO PLAT RECORDATION, OFF SITE R/W AND/OR CONSTRUCTION EASEMENTS ARE REQUIRED TO BE OBTAINED ACCORDING TO THE GUIDELINES OF THE "OFFSITE R/W ACQUISITION PROCESS". THESE NEEDED R/W AND CONSTRUCTION LIMITS ARE CLEARLY SHOWN ON THE ROADWAY IMPROVEMENT PLAN.
PER SECTION 12-8-1.75(E) OF CITY CODE AND SECTION 10.0.2 OF THE CITY'S POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROLS EASEMENTS (PCCES) MUST BE RECORDED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (645 JORDI, 704-336-7206) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION EQUIPMENT. 60- 90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED RELOCATION COST AND/OR ANY REPAIR COST CAUSED BY THE CONTRACTOR/DEVELOPER.
CERTIFICATION AND STREET CUT PERMITS ARE REQUIRED FOR UTILITY CUTS ON CITY STREETS. ALLOW 7 DAYS PROCESSING FOR PERMIT. FOR INFORMATION CONTACT CHARLOTTE DEPARTMENT OF TRANSPORTATION (704-336-4025) OR VISIT HTTP://WWW.CHARMECK.ORG.DEPARTMENTS/TRANSPORTATION/STREET+MAINTENANCE/HOME.HTM
NON-STANDARD ITEMS (IE. PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE CHARLOTTE DEPARTMENT OF TRANSPORTATIONIN ORTH CAROLINA DEPARTMENT OF TRANSPORTATION BEFORE INSTALLATION. FOR CITY OF CHARLOTTE MAINTAINED STREETS, CONTACT CDOT AT (704) 336-3868.
SIDEWALK WITHIN THE CITY'S R/W THAT REQUIRES REPLACEMENT AS PART OF THE DEVELOPMENT AND/OR STREET IMPROVEMENTS SHOULD BE PHASED IN SUCH A WAY AS TO MINIMIZE THE DURATION OF THE SIDEWALK CLOSURE TO THE EXTENT FEASIBLE. THE DEVELOPER SHOULD MAKE EVERY ATTEMPT TO HAVE SIDEWALK REPAIRED AND REOPENED FOR PUBLIC USE WITHIN 30 DAYS OF REMOVAL.
ANY WORK WITHIN THE CITY'S R/W THAT REQUIRES CLOSURE OF THE SIDEWALK OR TRAVEL LANE FOR LESS THAN 30 DAYS REQUIRES A R/W USE PERMIT. TRAFFIC CONTROL PLANS FOR ANY SIDEWALK OR TRAVEL LANE CLOSURES MUST BE SUBMITTED AS PART OF THE R/W USE PERMIT REQUEST. TRAFFIC CONTROL PLANS MUST BE IN ACCORDANCE WITH CDOT'S WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH) AND MUST BE REVIEWED AND APPROVED. CONTRACTOR SHALL CONTACT CDOT AT LEAST 5 BUSINESS DAYS IN ADVANCE OF BEGINNING OF WORK AT (704) 432-1562.
RIGHT-OF-WAY CLOSURES LONGER THAN 30 DAYS REQUIRE A R/W LEASE AGREEMENT WHICH WILL INCLUDE THE SUBMITTAL OF A TRAFFIC CONTROL PLAN. TRAFFIC CONTROL PLANS REQUIRED THROUGH A LEASE AGREEMENT MAY BE DIFFERENT FROM THE ONE REQUIRED DURING THE LAND DEVELOPMENT PLAN REVIEW AND ARE SUBJECT TO REVISIONS. THE REVISED TRAFFIC CONTROL PLAN MUST BE SUBMITTED AS PART OF THE LEASE AGREEMENT PROCESS FOR APPROVAL PRIOR TO START OF R/W CLOSURES. CONTRACTOR SHALL CONTACT CDOT AT (704) 336-8348.
CONSTRUCTION STAGING WITHIN CITY R/W LASTING MORE THAN 30 DAYS REQUIRES A R/W LEASE AGREEMENT. CONTRACTOR SHALL CONTACT CDOT AT (704) 336-8348.
TREESAVE AREA MUST HAVE INVASIVE PLANTS INCLUDING ENGLISH IVY REMOVED PRIOR TO THE FIRST CERTIFICATE OF OCCUPANCY BEING ISSUED. ANY GAPS IN THE EXISTING TREESAVE AREA WILL BE PLANTED WITH 2" CALIPER LARGE MATURING TREES FROM THE APPROVED SPECIES LIST. COORDINATE WITH URBAN FORESTRY SPECIALIST.
COMMON OPEN SPACE TO BE CONVEYED TO THE HOMEOWNERS ASSOCIATION IN ACCORDANCE WITH THE CHARLOTTE ZONING ORD. 9.205
COMMON OPEN SPACE/ TREESAVE AREA TO REMAIN IN A NATURAL STATE. AREAS TO BE CLEANED OF TRASH AND DEBRIS.
NO DEMOLITION LANDFILLS WILL BE LOCATED ON THIS SITE.
TREE PROTECTION BARRICADES MUST MEET OR EXCEED TREE ORD. GUIDELINES STD.
TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION/GRADING/CONSTRUCTION AND NOT REMOVED UNTIL AFTER FINAL INSPECTION BY URBAN FORESTRY STAFF.
NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCT. MATLS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN TREE SAVE AREA.
VIOLATIONS OF THE TREE PROTECTION REQUIREMENTS ARE SUBJECT TO FINES, AND/OR IMMEDIATE CORRECTIVE ACTION/MITIGATION.
DEVELOPER TO CONTACT CDOT (STEPHEN BOLT, 704-432-5561) DURING SITE PLAN PREPARATION TO DISCUSS STREET LIGHTING REQUIREMENTS, IF ANY, FOR THE PROJECT. COORDINATE WITH DUKE ENERGY AND CDOT AS NECESSARY TO DETERMINE LIGHTING LEVELS, LIGHTING LAYOUT AND REQUIREMENTS FOR INSTALLATION.

CHARLOTTE. FINAL APPROVAL

| | |
|---|---|
| ENGINEERING (PCO / DETENTION / DRAINAGE PLAN) | APPROVED By mark chapman at 4:15 pm, Sep 18, 2017 |
| EROSION CONTROL | APPROVED |
| URBAN FORESTRY (TREE ORDINANCE) | APPROVED |
| CDOT | APPROVED |

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM AT http://development.charmeck.org

APPROVED FOR CONSTRUCTION
CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
By: Joshua Weaver 9-18-2017




## STREET CLASSIFICATION

SEE SHTS 7 & 9 FOR DETAILS

| STREET NAME | CLD STD # |
|---|---|
| CARNATION COURT | U-02 |
| BRANDIE GLEN ROAD | U-02 |
| GIBBON CROSSING DR | U-02 |
| OLD WAGON RD | U-02 |
| CHRISTENBURY ROAD | U-07 |

## LEGEND

- EXISTING PAVEMENT/CURB
- PROPOSED PAVEMENT/CURB
- ADJOINING PROPERTY LINES
- EXISTING BUILDINGS
- PROPOSED 5' SIDEWALK
- TREE PROTECTION FENCE
- PROPOSED TREE SAVE AREA
- NATURAL AREA PER PCCO (UNDISTURBED/REVEGITATED)
- PROPOSED BMP


KENNEY DESIGN GROUP, PA
C-1986
1216 PARSONS TRAIL
DENVER, NORTH CAROLINA 28037
PH: 704/377-6099
EMAIL: KENNEY@KENNEYDESIGN.COM
Engineering
Land Planning
Land Surveying


Revisions:
1. 11/1/1 REVISED PER CPPC, CED, & CDOT REVIEW COMMENTS
2. 5/1/17 REVISED PER CPPC, CED, & CDOT REVIEW COMMENTS
3. 8/28/17 REVISED PER KBM, CDOT, & CED SITE PLAN COMMENTS
4. 9/18/17 REVISED PER URBAN FORESTRY/CDOT COMMENTS

9/16/17

| | |
|---|---|
| Scale: | 1"=60' |
| Date: | 5/15/17 |
| Drawn By: | MJK |
| Designed By: | MJK |
| Job No.: | 0217 |

# Preliminary Subdivision Site Plan
# Gibbon Crossing
City of Charlotte, Mecklenburg County, North Carolina
Orisa Holdings, LLC, 608 Briar Patch Ter., Waxhaw, NC 28173

Sheet No. 1 Of 11