

SDRMF-2023-00027

ENGINEERING

EROSION CONTROL

URBAN FORESTRY

CDOT

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

Sheet Number

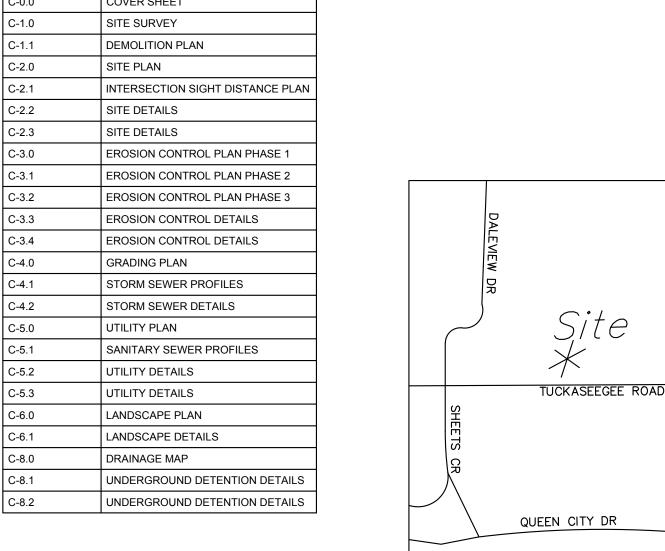
Emily Chien Matthew Yankech Vincent Condon

Jacobus Peeters

6112 TUCKASEEGEE ROAD TOWNHOMES

CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA - CITY LD PROJECT # SDRMF-2023-00027

SITE CONSTRUCTION DOCUMENTS



AIRPORT NOISE DISCLOSURE OVERLAY DISTRICT NOTICE NOISE WARNING - THIS PROPERTY, EITHER PARTIALLY OR WHOLLY IS ZONED AIRPORT NOISE DISCLOSURE OVERLAY DISTRICT AND LIES WITHIN OR NEAR THE NOISE EXPOSURE MAP AREAS OF CHARLOTTE/DOUGLAS INTERNATIONAL AIRPORT AND MAY BE SUBJECT TO NOISE THAT MAY BE OBJECTIONABLE.

Sheet List Table

Sheet Title

GENERAL NOTES

- 1. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN IN THIS PLAN IS BASED UPON A GIS DATA, GATEWAY DESIGN GROUP DOES NOT REPRESENT OR WARRANT THE WORK PREPARED BY
- 2. THE CIVIL ENGINEER AND THE OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS. 3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY
- STANDARDS, LAWS, AND REGULATIONS. 4. CONTRACTOR SHALL NOTIFY GATEWAY DESIGN GROUP 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 5. ALL LOCAL, MUNICIPAL, AND STATE LAWS, RULES, AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE PART OF THE PROJECT CONTRACT DOCUMENTS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. 6. DO NOT SCALE DRAWINGS IN THIS SET. ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER

THE SCALE SHOWN ON THE PLANS SECTIONS PROFILES AND DETAILS IN THE EVENT OF

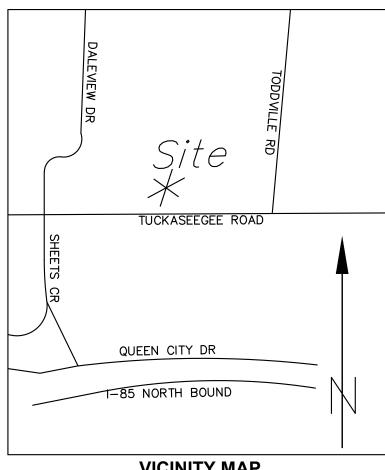
- DISCREPANCIES, THE CONTRACTOR SHALL REQUEST CLARIFICATION FROM THE CIVIL ENGINEER AND/OR OWNER'S REPRESENTATIVE. 7. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THERE OF SHALL BE SUBMITTED TO THE CIVIL ENGINEER AND/OR OWNER'S REPRESENTATIVE FOR REVIEW. NO DEPARTURES FROM THE
- CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE CIVIL ENGINEER AND/OR OWNER'S REPRESENTATIVE. 8. THE SURVEYOR SHALL REPORT ANY ENCROACHMENTS OR DISCREPANCIES GENERATED BY THE SITE
- PLAN AGAINST ANY DEVELOPMENT REQUIREMENTS SPECIFIED BY THE SITE PLAN TO THE CIVIL ENGINEER AND/OR OWNER'S REPRESENTATIVE PRIOR TO ANY ACTUAL CONSTRUCTION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS PRIOR TO

- COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER AND/OR OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS. 10. ALL SUB-SURFACE UTILITIES IDENTIFIED ON THE CONSTRUCTION DOCUMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED ON SURVEY INFORMATION GATHERED FROM FIELD INSPECTION AND/OR ANY OTHER APPLICABLE RECORD DRAWINGS WHICH MAY BE AVAILABLE. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF ANY WORK.. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER AND/OR OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL PROVIDE NOTICE OF EXCAVATION TO NOTIFICATION CENTER AND FACILITY OWNERS (PER NC STATUTE) NO LESS THAN 3 BUSINESS DAYS AND NO MORE THAN 12 WORKING DAYS PRIOR TO BEGINNING DEMOLITION, EXCAVATION OR ANY OTHER FORM OF CONSTRUCTION.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY EXISTING UTILITY LINES REQUIRED TO COMPLETE ANY PORTION OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE COORDINATION AND COSTS OF THE RELOCATION AND ASSOCIATED WORK. 13. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, LANDSCAPING, AND FEATURES TO REMAIN ON AND/OR ADJACENT TO THE PROJECT SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT THEIR OWN EXPENSE, ALL DAMAGED ELEMENTS RESULTING FROM
- CONTRACTOR OPERATIONS OR NEGLIGENCE. 14. THE CONTRACTOR SHALL BE RESPONSIBLE TO IMMEDIATELY REPAIR ANY ACTIVE UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT CONTRACTOR'S EXPENSE. 15 THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE PUBLIC R/W (RIGHT-OF-WAY) IN ACCORDANCE
- WITH THE STANDARDS OF THE NCDOT, CDOT, AND CITY OF CHARLOTTE. 16. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY TO RELOCATE/REPLACE ANY EXISTING UTILITY AND/OR LIGHT POLES. ALL EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE MUST BE RELOCATED AT THE CONTRACTOR'S EXPENSE.

17. ALL TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY, EMPLOYED AND PAID

- DIRECTLY BY THE OWNER. TESTING SHALL BE PERFORMED, AT A MINIMUM, IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. IN THE EVENT THE RESULTS OF THE INITIAL TESTING DO NOT COMPLY WITH THE PLANS AND THE SPECIFICATIONS, SUBSEQUENT TEST NECESSARY TO DETERMINE THE ACCEPTABILITY OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE. ELEMENTS FOUND TO BE DEFICIENT IN STRENGTH OR THICKNESS SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR.
- 18. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES. 19. GENERAL CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC ARE
- 20. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES, AND RIGHT-OF-WAYS, PUBLIC AND PRIVATE, PRIOR TO WORKING IN THESE AREAS. 21. ANY DISCREPANCIES FOUND IN THE FIELD SHALL BE CALLED TO THE ATTENTION OF THE OWNER OR ENGINEER PRIOR TO PROCEEDING WITH WORK.
- 22. ALL DRAINAGE FACILITIES, CURB CUTS, AND CURB RAMPS MUST BE CONSTRUCTED IN COMPLIANCE WITH THE NCDOT AND CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL AND COORDINATED WITH CITY ENGINEERING DEPARTMENT. 23. CONTRACTOR TO OBTAIN BUILDING DEMOLITION PERMIT AS REQUIRED PER ALL APPLICABLE
- ***ALL STANDARD NUMBERS REFER TO THE LATEST EDITION OF THE CITY OF CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL AND THE NCDOT STANDARD DETAILS AND SPECIFICATIONS.



DEVELOPER:

CAROLINAS PROPERTIES LLC 1401 FUNNY CIDE DR WAXHAW, NC 28173 (718) 607-4595 mukesh@carolinasproperties.com

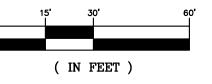
DESIGNER:

GATEWAY DESIGN GROUP, PLLC 15126 CASTLEBRIDGE LANE MATTHEWS, NC 28104 GREG EMERY, P.E. (828) 989-9207 greg@gatewaydesigngroup.com

SURVEYOR:

CHEVIS KING CAROLINA GEOMATICS, PLLC 469 HOSPITAL DR SUITE D GASTONIA, NC 28054 (980) 329-3382

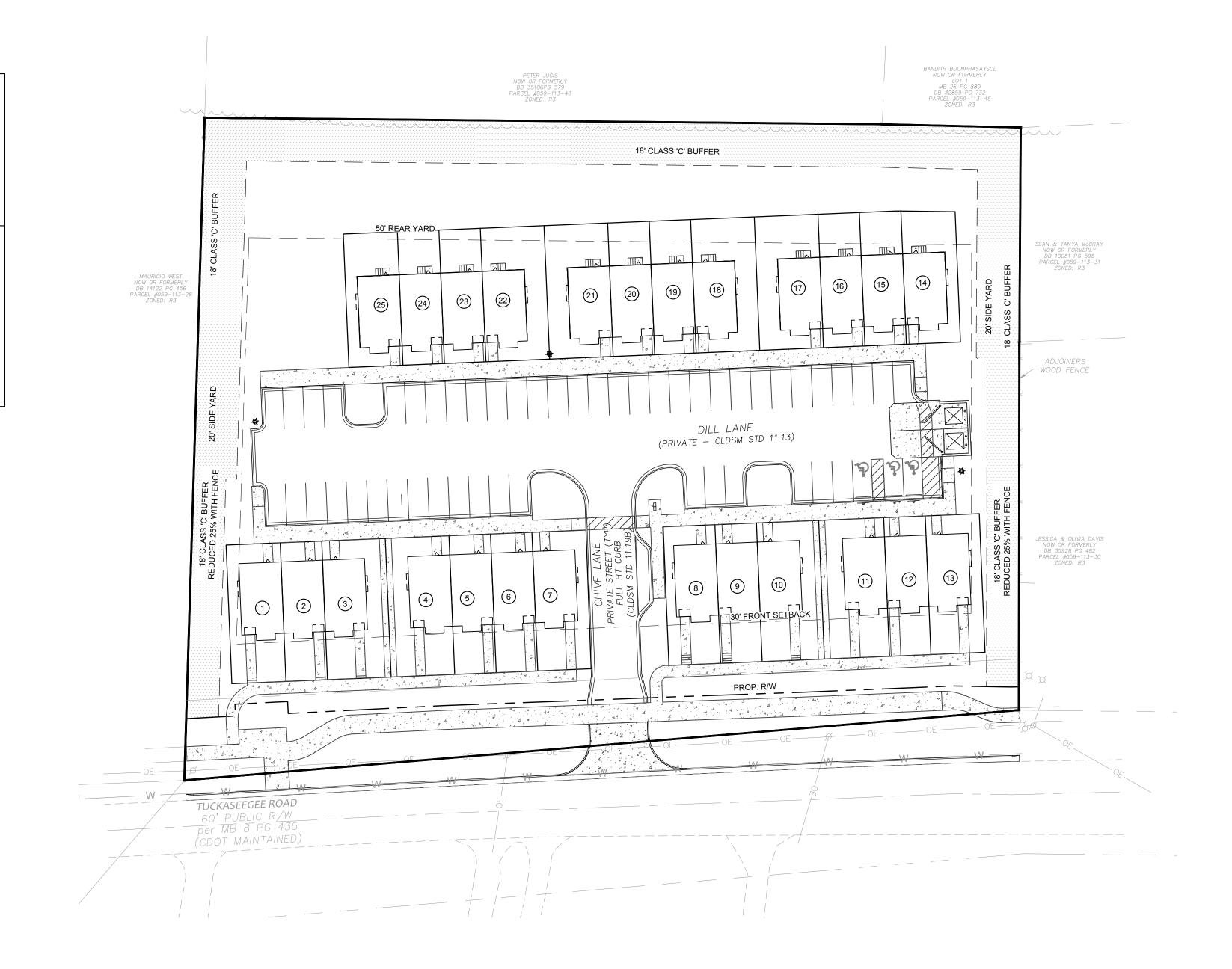
GRAPHIC SCALE

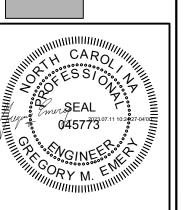


HORIZONTAL 1 inch = 30 ft.

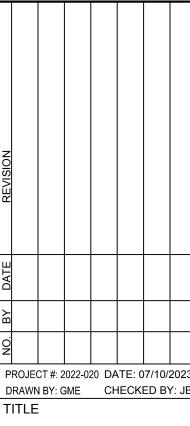


- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC., AS NECESSARY TO INSURE SAFETY.
- 3. ALL PAVEMENT CUTS, CONCRETE OR ASPHALT, ARE TO BE REPLACED ACCORDING TO STANDARDS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.
- SHORING WILL BE ACCORDING TO OSHA TRENCHING STANDARDS PART 1926 SUBPART P, OR AS AMENDED.





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COVER SHEET



PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY

CDOT

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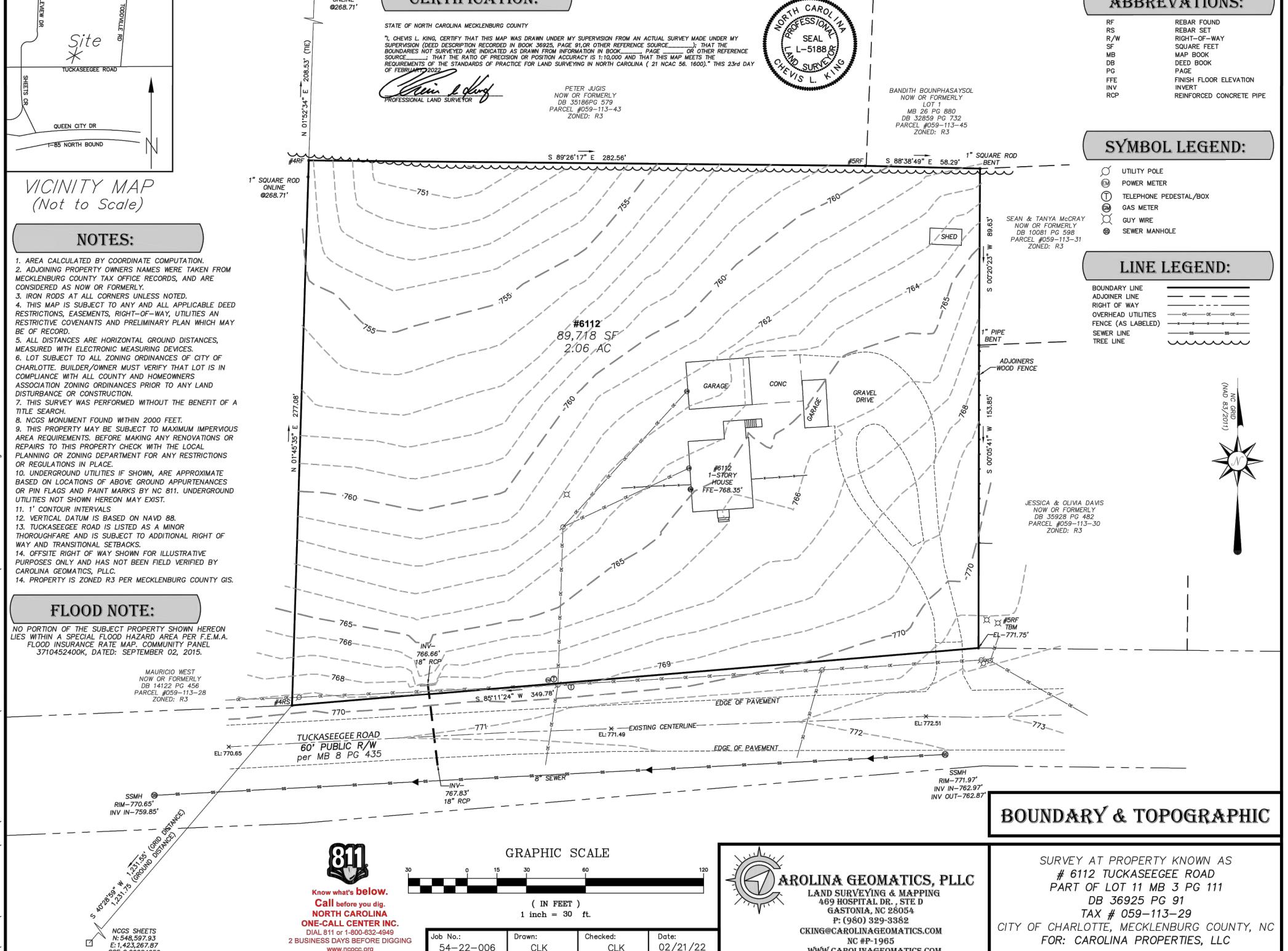
Emily Chien

Matthew Yankech

Vincent Condon

Jacobus Peeters

CERTIFICATION: ABBREVATIONS: ONLINE @268.71 REBAR FOUND STATE OF NORTH CAROLINA MECKLENBURG COUNTY REBAR SET "I, CHEVIS L. KING, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SEAL RIGHT-OF-WAY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 36925, PAGE 91,OR OTHER REFERENCE SOURCE______); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION IN BOOK______, PAGE ______ OR OTHER REFERENCE SOURCE_____; THAT THE RATIO OF PRECISION OR POSITION ACCURACY IS 1:10,000 AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56. 1600)." THIS 23rd DAY SQUARE FEET _ L-5188 & MAP BOOK DEED BOOK FINISH FLOOR ELEVATION PETER JUGIS NOW OR FORMERLY BANDITH BOUNPHASAYSOL REINFORCED CONCRETE PIPE NOW OR FORMERLY



02/21/22

WWW.CAROLINAGEOMATICS.COM

CLK

54-22-006

www.ncocc.org

CLK

EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN IN THIS PLAN IS BASED UPON A COMBINATION OF A SURVEY PROVIDED BY CAROLINA GEOMATICS, PLLC ON FEBRUARY 21, 2022 AND GIS DATA. GATEWAY DESIGN GROUP DOES NOT REPRESENT OR WARRANT THE WORK PREPARED BY THE SURVEYOR. THIS INFORMATION HAS BEEN SHOWN ON THE GATEWAY DESIGN GROUP TITLEBLOCK FOR PLAN

CONSTRUCTION
LOTTE-MECKLENBUR CONNING DE

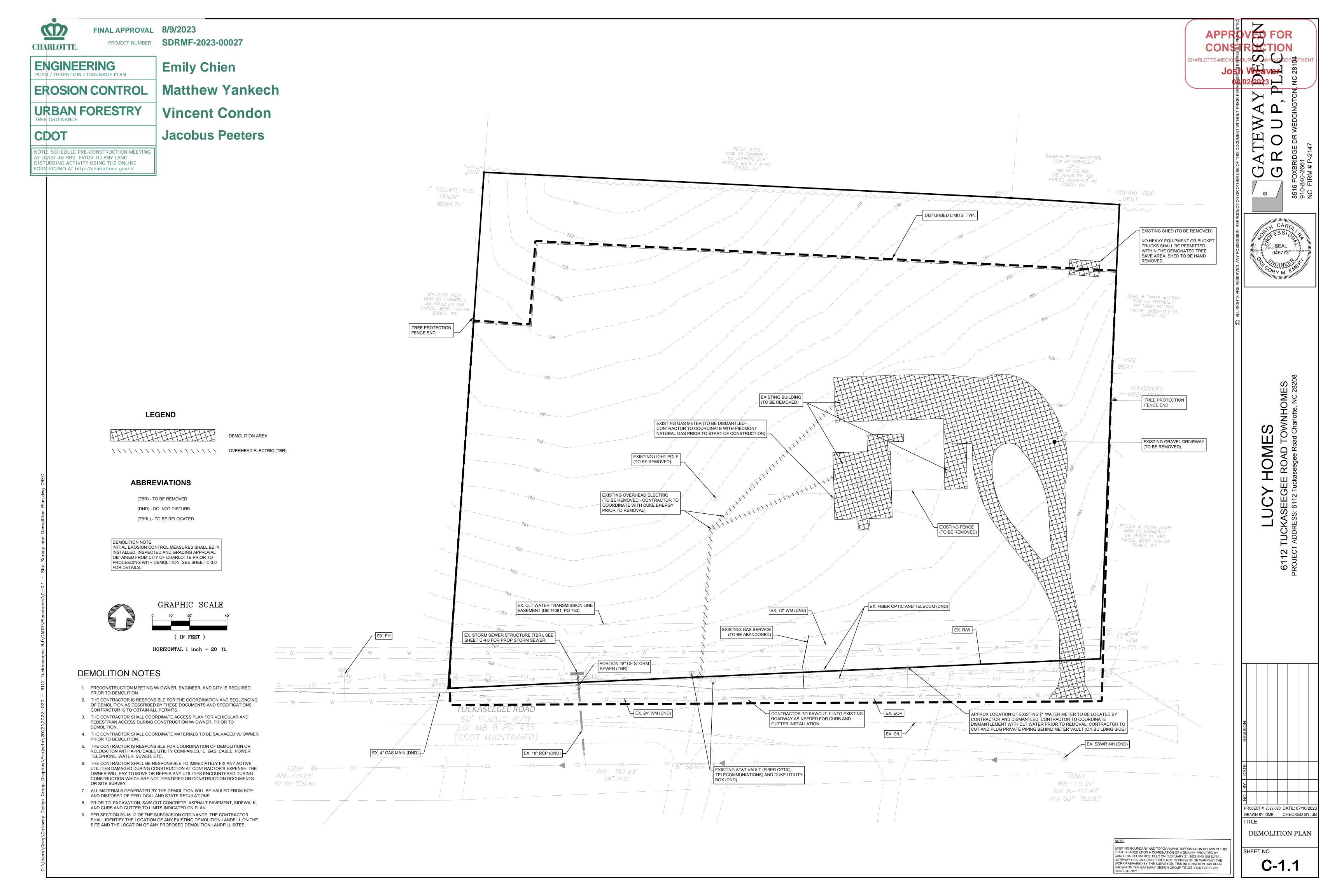


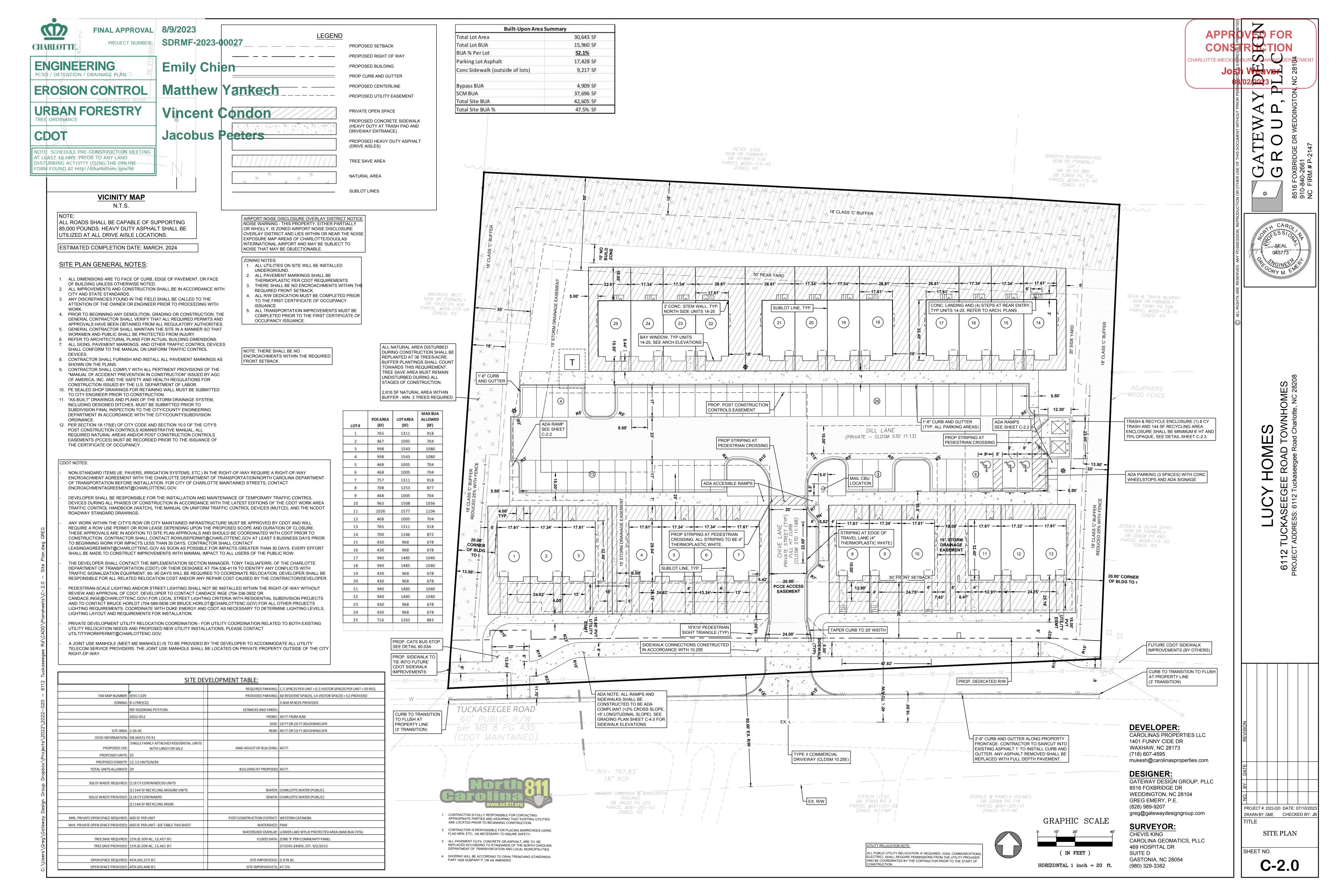
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ROAD TOWNHOMES
eegee Road Charlotte, NC 28208 LUCY
6112 TUCKASEEG
PROJECT ADDRESS: 6112 1

PROJECT #: 2022-020 DATE: 07/10/202 DRAWN BY: GME CHECKED BY: JI SITE SURVEY

HEET NO.

C-1.0





PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING
PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY
TREE ORDINANCE

CDOT

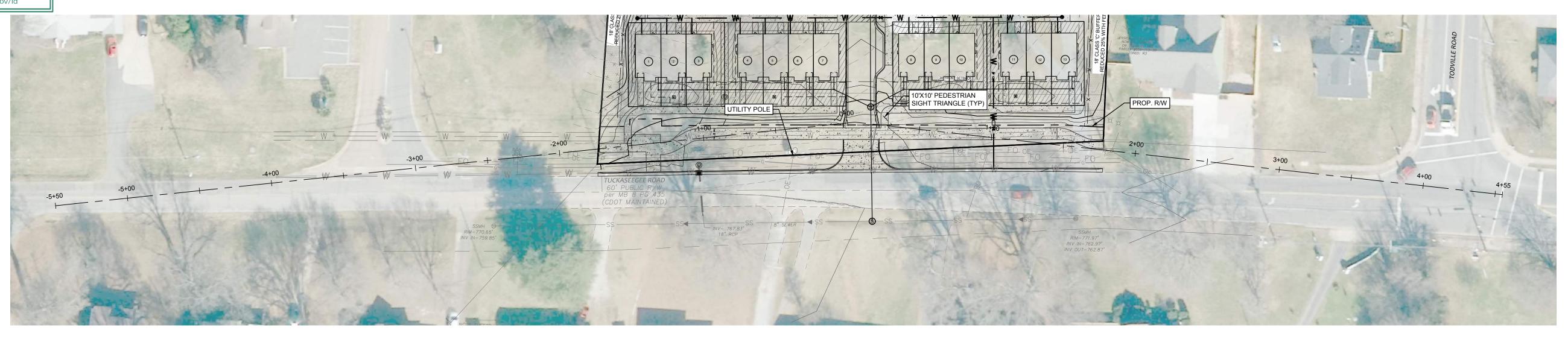
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

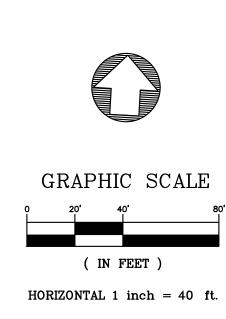
Emily Chien

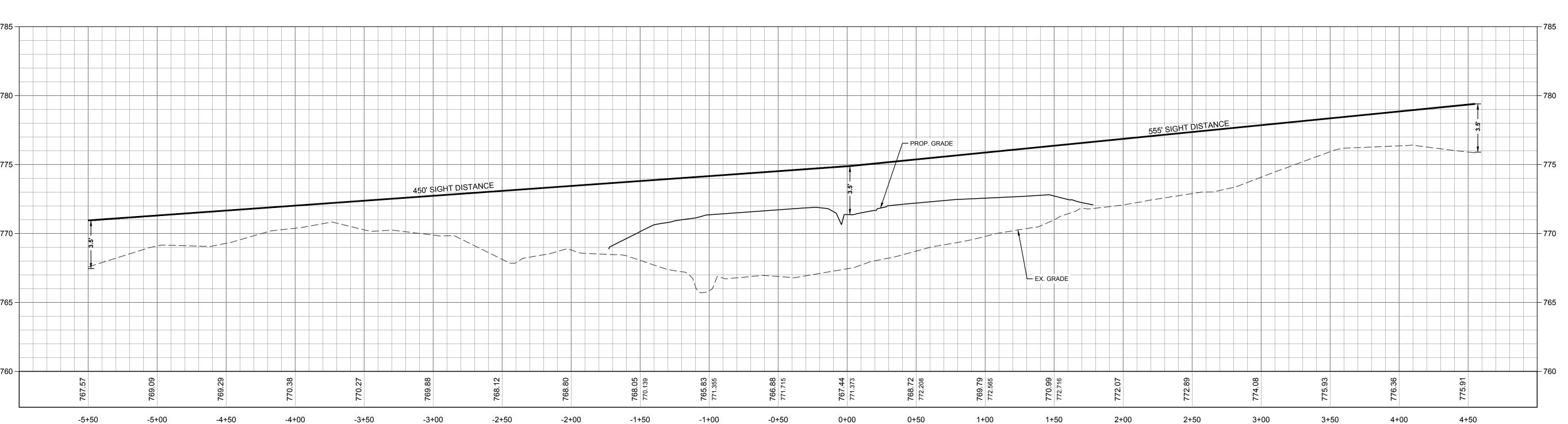
Matthew Yankech

Vincent Condon

Jacobus Peeters



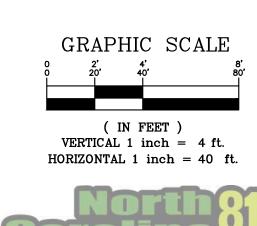




TUCKASEEGEE ROAD DESIGN SPEED NOTE:

DESIGN SPEED IS THE MAXIMUM SAFE SPEED THAT CAN BE MAINTAINED OVER A SPECIFIED SECTION OF ROADWAY WHEN CONDITIONS ARE SO FAVORABLE THAT THE DESIGN FEATURES OF THE ROADWAY GOVERN. FOR POSTED SPEEDS OF 30 MPH OR LESS, THE DESIGN SPEED SHALL BE NO LESS THAN THE POSTED SPEED PLUS 10%; FOR POSTED SPEEDS OF 35 MPH OR MORE, THE DESIGN SPEED SHALL BE NO LESS THAN THE POSTED SPEED PLUS 5 MPH.

POSTED SPEED: 45 MPH DESIGN SPEED USED: 50 MPH





APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO BEGINNING CONSTRUCTION.

1. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING

- CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC., AS NECESSARY TO INSURE SAFETY.
- 3. ALL PAVEMENT CUTS, CONCRETE OR ASPHALT, ARE TO BE REPLACED ACCORDING TO STANDARDS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.
- SHORING WILL BE ACCORDING TO OSHA TRENCHING STANDARDS PART 1926 SUBPART P, OR AS AMENDED.

SHEET NO.

PROJECT #: 2022-020 DATE: 07/10/2023

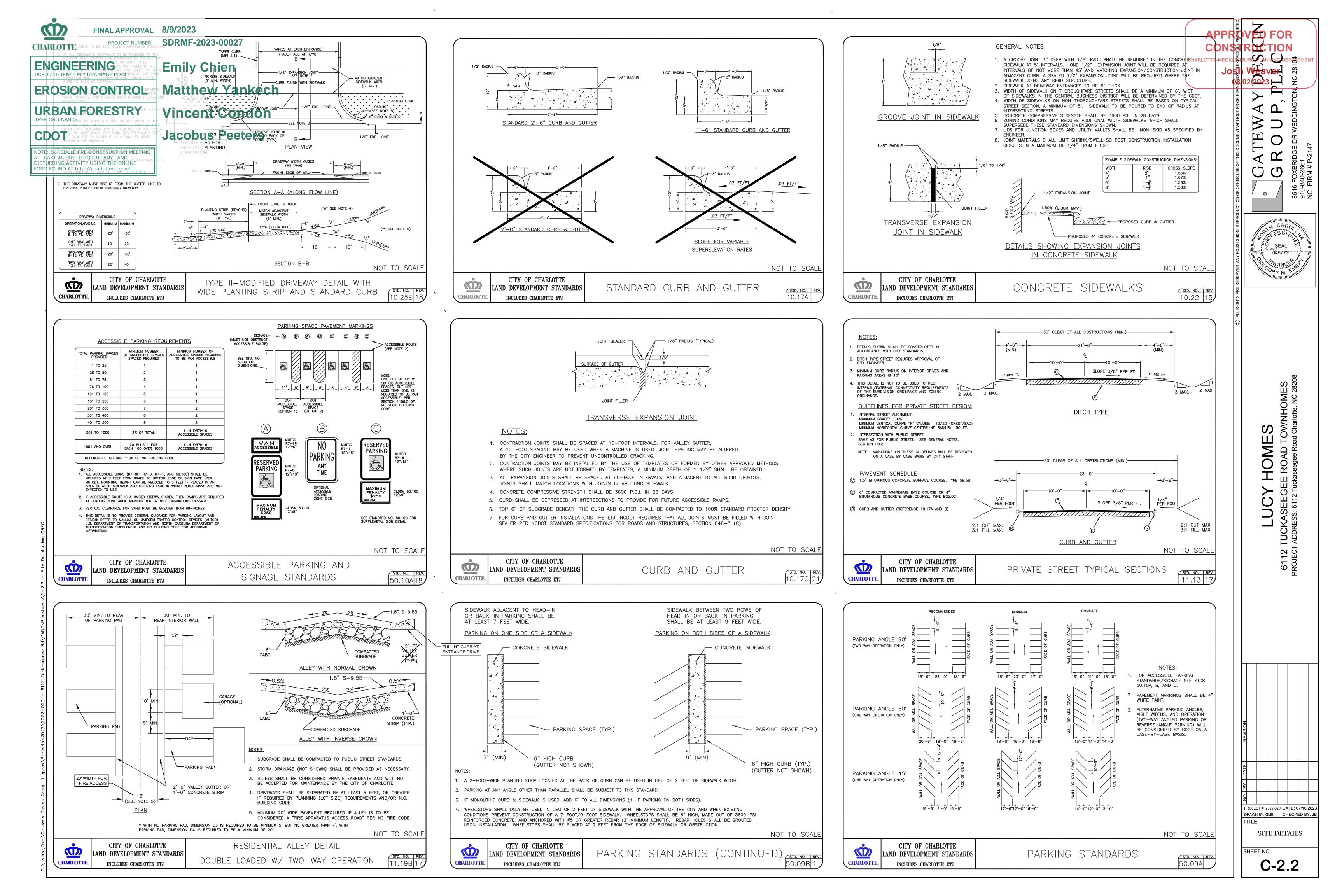
DRAWN BY: GME CHECKED BY: JB

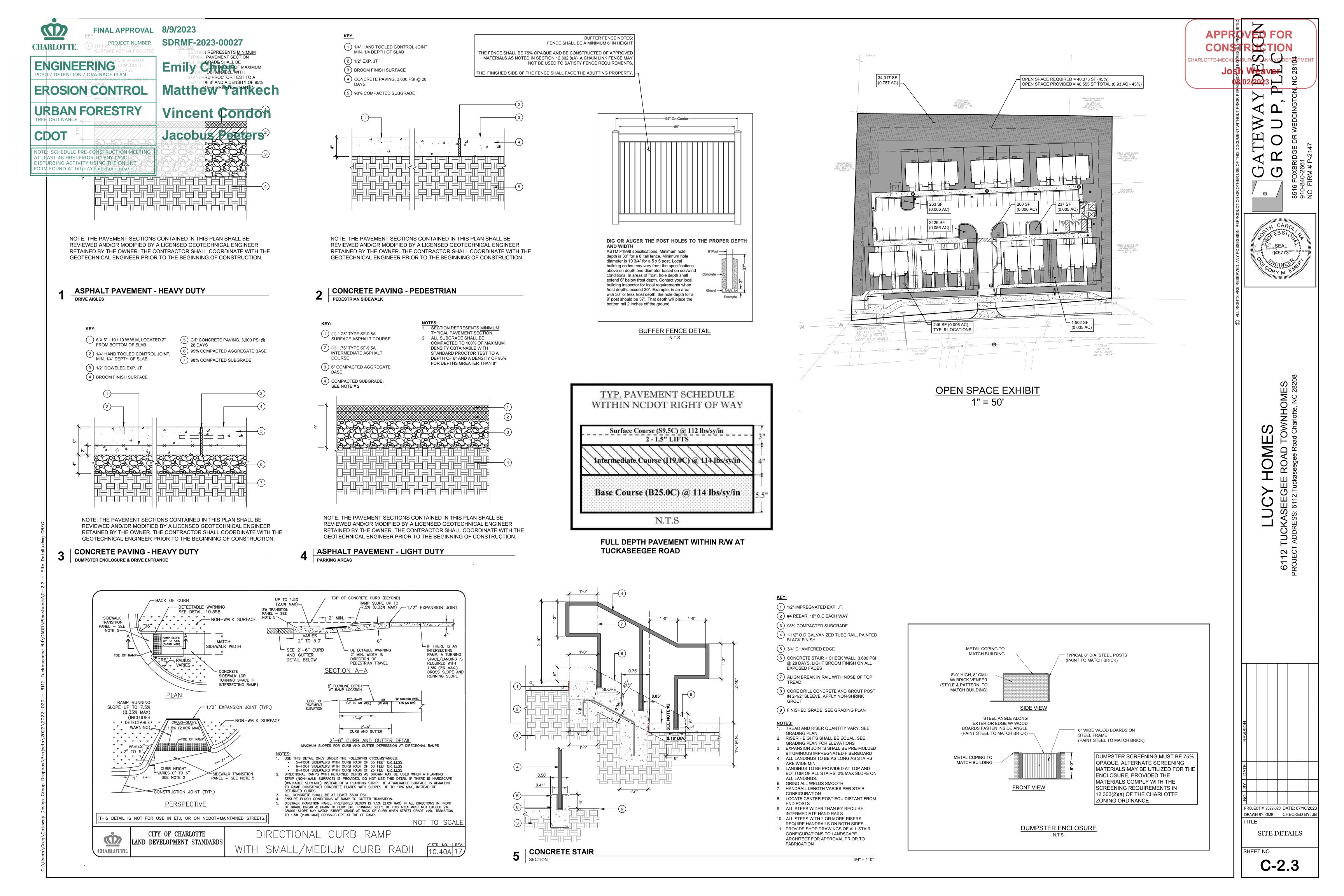
INTERSECTION SIGHT DISTANCE PLAN

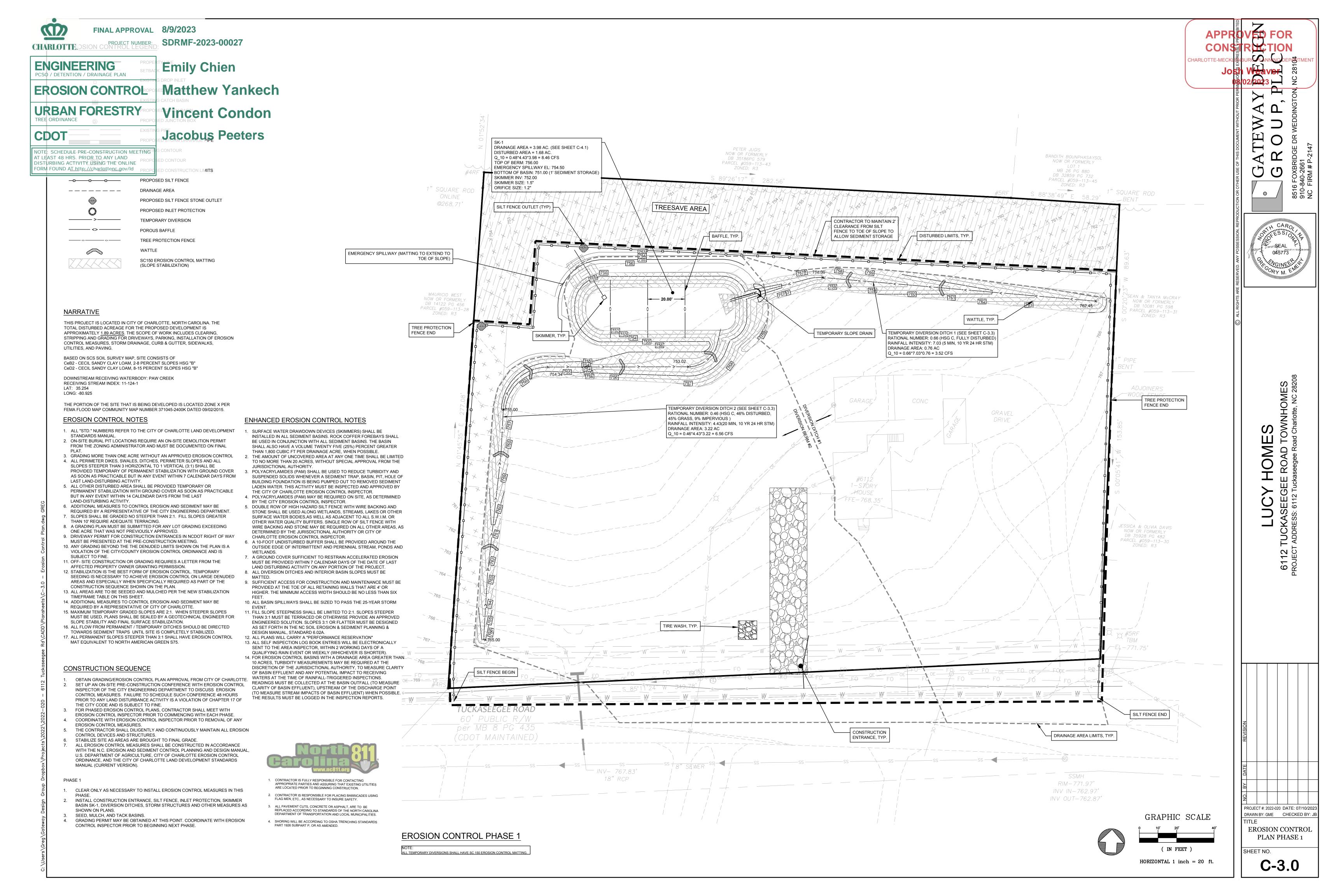
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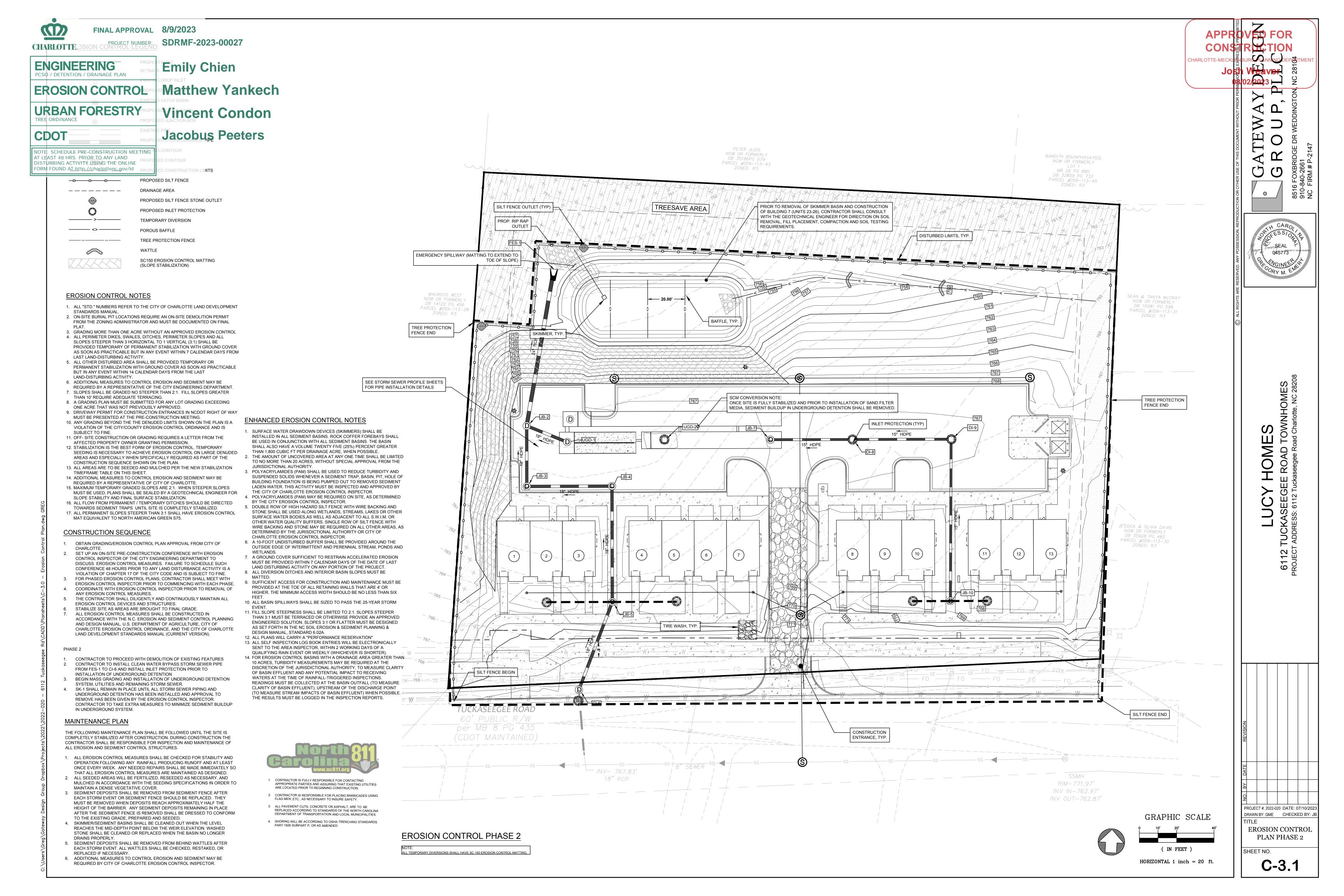
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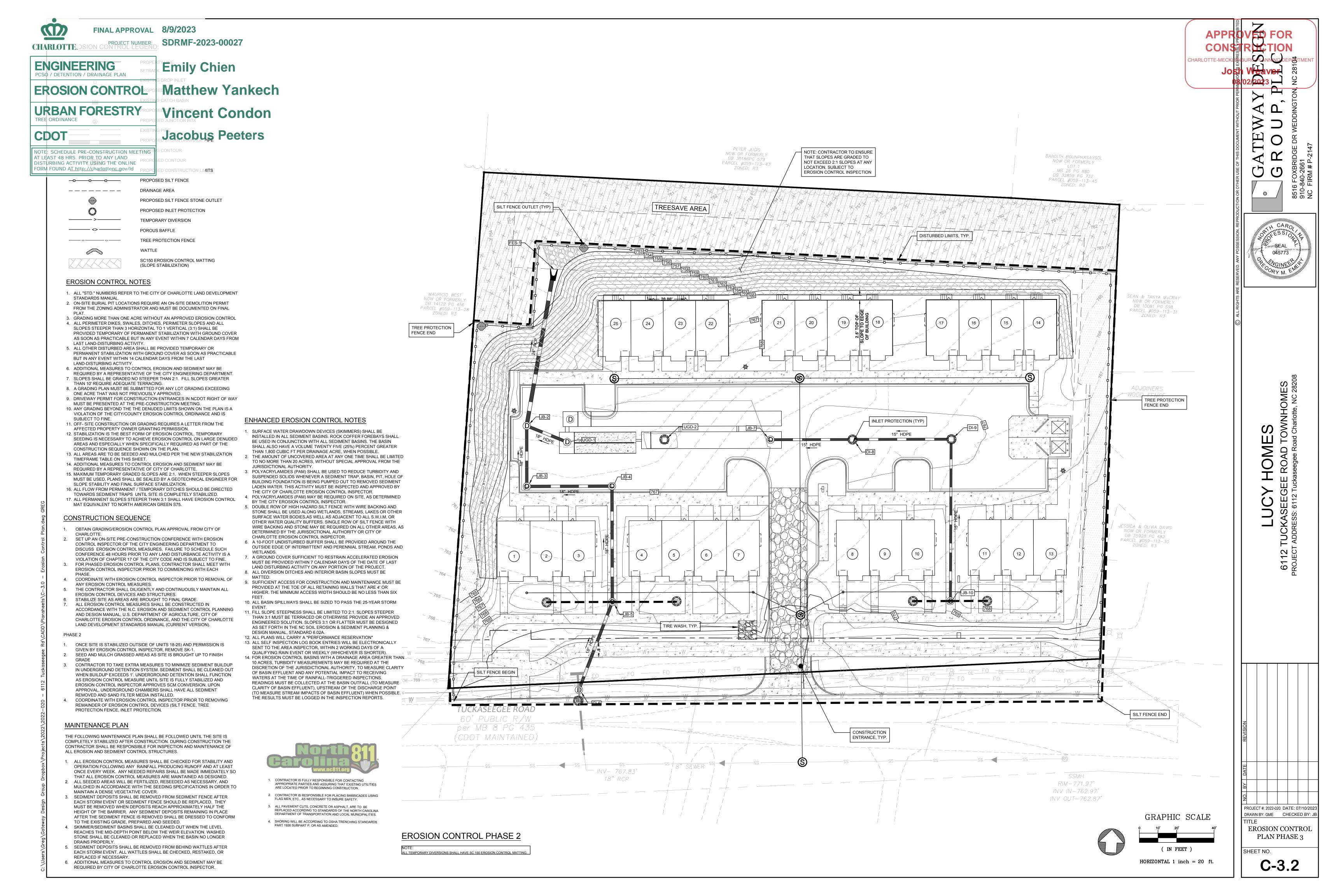
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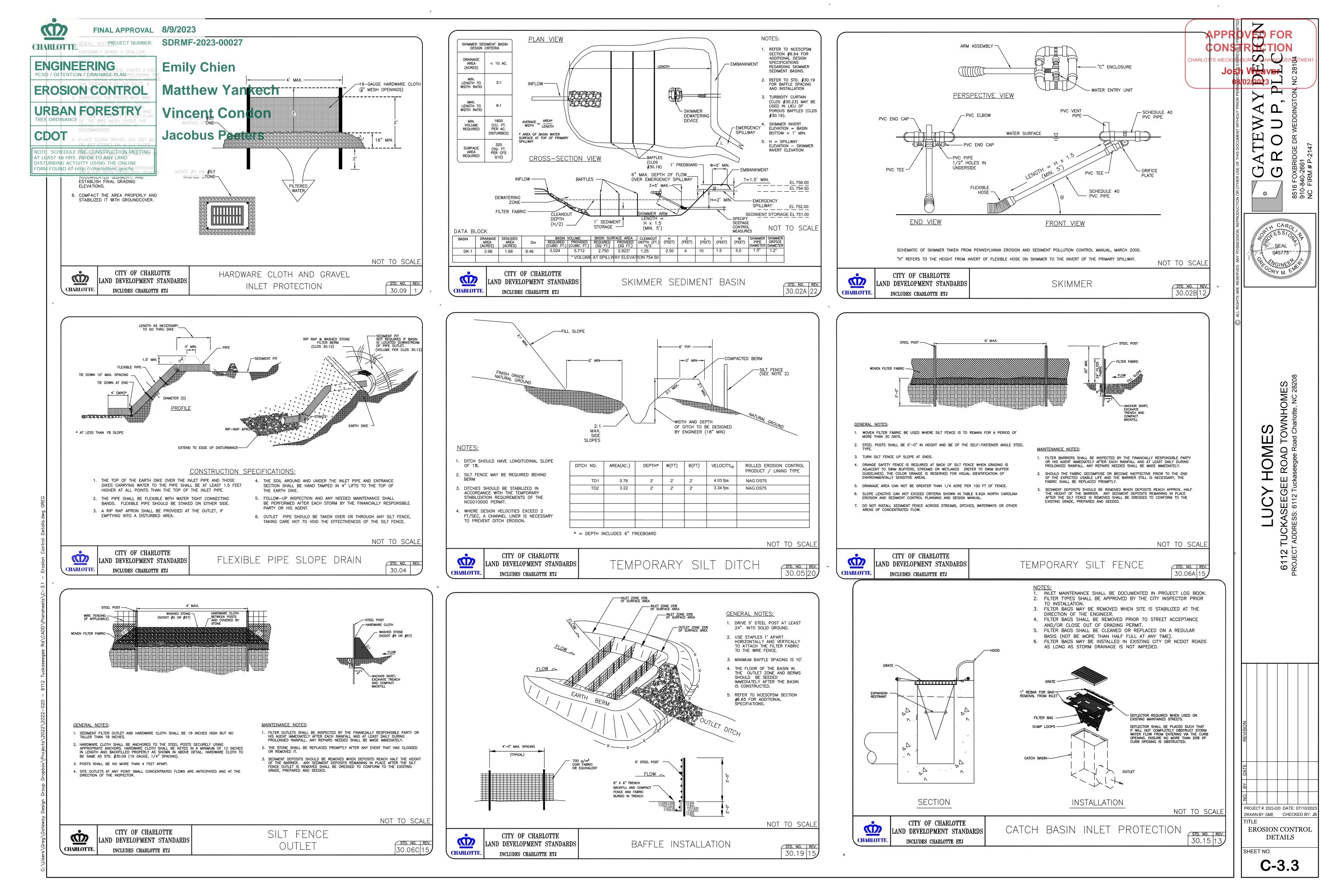












PROJECT NUMBER: SDRMF-2023-00027

ir days

1.0 inch in

24 hours

outfalls (SDOs)

or offsite

accessible)

measures

7 calendar days

event ≥ 1.0 inch in

and within 24

and within 24

hours of a rain

hours of a rain

event > 1.0 inch in

After each phase

of grading

(5) Streams or At least once per

wetlands onsite 7 calendar days

event ≥ 1.0 inch in

24 hours

ENGINEERING Carre I business hours in accordance with the table **EROSION CONTROL**

URBAN FORESTRY

CDOT

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

SELF-INSPECTION, RECORDKEEPING AND REPORTING

ather or site conditions would cause the safety of the inspection dy, the inspection may be delayed until the next business day or

pproved by the Division.

properly,

Identification of the measures inspected

Name of the person performing the inspection,

Name of the person performing the inspection,

Indication of visible sediment leaving the site.

. Indication of whether the measures were operating

Description of maintenance needs for the measure

sheen, floating or suspended solids or discoloration

Evidence of indicators of stormwater pollution such as of

Description, evidence, and date of corrective actions taken.

If visible sedimentation is found outside site limits, then a record

. Actions taken to clean up or stabilize the sediment that has lef

2. Description, evidence, and date of corrective actions taken, and

If the stream or wetland has increased visible sedimentation or a

Description, evidence and date of corrective actions taken, and

Regional Office per Part III. Section C. Item (2)(a) of this permit

Records of the required reports to the appropriate Division

. An explanation as to the actions taken to control future

stream has visible increased turbidity from the construction

The phase of grading (installation of perimeter E&SC

measures, clearing and grubbing, installation of storm

drainage facilities, completion of all land-disturbing

activity, construction or redevelopment, permanent

Documentation that the required ground stabilization

timeframe or an assurance that they will be provided as

measures have been provided within the required

ctivity, then a record of the following shall be made:

ription, evidence, and date of corrective actions taken.

2. Date and time of the inspection,

Date and time of the inspection.

of the following shall be made:

the site limits,

ground cover).

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours. Item to Document **Documentation Requirements** (a) Each E&SC measure has been installed | Initial and date each E&SC measure on a conv

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

and does not significantly deviate from the | of the approved E&SC plan or complete, date locations, dimensions and relative elevations | and sign an inspection report that lists each shown on the approved E&SC plan. holiday periods, and no individual-day rainfall information is a large that coulative rain measurement for those unattended days (see this will determine if a site inspection is and no individual-day rainfall information is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device

the E&SC measures are modified after initial (b) A phase of grading has been completed. | Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the onstruction phase. Initial and date a copy of the approved E&SC (c) Ground cover is located and installed in accordance with the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The

E&SC measure shown on the approved E&SC

initial installation of the E&SC measures or if

plan. This documentation is required upon the

(d) The maintenance and repair Complete, date and sign an inspection report. requirements for all E&SC measures have been performed. (e) Corrective actions have been taken Initial and date a copy of the approved E&SC to E&SC measures plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the

(a) This General Permit as well as the Certificate of Coverage, after it is received.

Division provides a site-specific exemption based on unique site conditions that make

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

this requirement not practical:

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items, (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,

(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include

properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems, (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,

(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and

(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

EFFECTIVE: 04/01/

ABOVE GRADE VASHOUT STRUCTURE

NORTH CAROLINA

Environmental Quality

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

mplementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes many calendar Timeframe variations Site Area Description days after ceasing and disturbance l (a) Perimeter dikes. swales, ditches, an None perimeter slopes (b) High Quality Water (HQW) Zones f slopes are 10' or less in length and are (c) Slopes steeper than not steeper than 2:1, 14 days are -7 days for slopes greater than 50' in length and with slopes steeper than 4:1 ·7 days for perimeter dikes, swales, (d) Slopes 3:1 to 4:1 ditches, perimeter slopes and HQW -10 days for Falls Lake Watershed 7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones) Areas with slopes -10 days for Falls Lake Watershed unless flatter than 4:1 there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the

- techniques in the table below: Temporary Stabilization other mulches and tackifiers Hydroseeding
- Rolled erosion control products with or without temporary grass seed
- Appropriately applied straw or other mulch Plastic sheeting
- Permanent Stabilization • Temporary grass seed covered with straw or | • Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil Hvdroseeding Shrubs or other permanent plantings covered with mulch

Uniform and evenly distributed ground cover

Structural methods such as concrete, asphalt or

Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.

retaining walls

- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures. Apply flocculants at the concentrations specified in the NC DWR List of Approved
- PAMS/Flocculants and in accordance with the manufacturer's instructions. Provide ponding area for containment of treated Stormwater before discharging
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE Maintain vehicles and equipment to prevent discharge of fluids.

Provide drip pans under any stored equipment. Identify leaks and repair as soon as feasible, or remove leaking equipment from the

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland. Cover waste containers at the end of each workday and before storm events or
- provide secondary containment. Repair or replace damaged waste containers. Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility. . On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

- 1. Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface
- Contain liquid wastes in a controlled area Containment must be labeled, sized and placed appropriately for the needs of site.

waters unless no other alternatives are reasonably available

Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

Install portable toilets on level ground, at least 50 feet away from storm drains,

- streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas. Monitor portable toilets for leaking and properly dispose of any leaked material.

Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably
- five feet from the toe of stockpile
- Provide stable stone access point when feasible.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



2. THE CONCRETE VASHOUT STRUCTURES SHALL BE HADITADIED VIEN THE LIQUID AND/DR SDLID REACHES 75% OF THE STRUCTURES ACDICRETE VASHOUT STRUCTURE NEEDS TO SE CLEARY MARKED VITH SIGNAGE NOTING DEVICE. SCONCRETE VASHOUT STRUCTURE NEEDS TO BE CLEARY HARRED VITH SOUNAGE HOTTING DEVICE.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

They are less than 25 gallons but cannot be cleaned up within 24 hours,

Releases of hazardous substances in excess of reportable quantities under Section 311

of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA

(e) Noncompliance with the conditions of this permit that may endanger health or the

After a permittee becomes aware of an occurrence that must be reported, he shall contact

the appropriate Division regional office within the timeframes and in accordance with the

other requirements listed below. Occurrences outside normal business hours may also be

Within 24 hours, an oral or electronic notification.

with the federal or state impaired-waters conditions.

Within 24 hours, an oral or electronic notification.

Within 24 hours, an oral or electronic notification.

location of the spill or release.

quality and effect of the bypass.

effect of the bypass

Reporting Timeframes (After Discovery) and Other Requirements

Within 7 calendar days, a report that contains a description of the

sediment and actions taken to address the cause of the deposition.

Division staff may waive the requirement for a written report on a

If the stream is named on the NC 303(d) list as impaired for sediment-

related causes, the permittee may be required to perform additional

determine that additional requirements are needed to assure compliance

monitoring, inspections or apply more stringent practices if staff

Within 24 hours, an oral or electronic notification. The notification

shall include information about the date, time, nature, volume and

A report at least ten days before the date of the bypass, if possible.

The report shall include an evaluation of the anticipated quality and

Within 7 calendar days, a report that includes an evaluation of the

Within 7 calendar days, a report that contains a description of the

including exact dates and times, and if the noncompliance has not

been corrected, the anticipated time noncompliance is expected to

prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).

Division staff may waive the requirement for a written report on a

continue; and steps taken or planned to reduce, eliminate, and

noncompliance, and its causes; the period of noncompliance.

reported to the Department's Environmental Emergency Center personnel at (800)

• They cause sheen on surface waters (regardless of volume), or

They are within 100 feet of surface waters (regardless of volume).

SECTION C: REPORTING

(b) Oil spills if:

environment.

(a) Visible sediment

deposition in a

(b) Oil spills and

substances per Ite

1(b)-(c) above

(c) Anticipated

bypasses [40 CFR

122.41(m)(3)]

(d) Unanticipated

122.41(m)(3)]

may endanger

health or the

environment[40

CFR 122.41(I)(7)]

bypasses [40 CFR

(e) Noncompliance

with the condition

of this permit that

release of

hazardous

stream or wetland

1. Occurrences that Must be Reported

They are 25 gallons or more,

Permittees shall report the following occurrences:

(Ref: 40 CFR 302.4) or G.S. 143-215.85.

. Reporting Timeframes and Other Requirements

(d) Anticipated bypasses and unanticipated bypasses.

(a) Visible sediment deposition in a stream or wetland.

CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If an
- review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or

alternate method or product is to be used, contact your approval authority for

- discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive
- Locate washouts in an easily accessible area, on level ground and install a stone
- entrance pad in front of the washout. Additional controls may be required by the Install at least one sign directing concrete trucks to the washout within the project
- limits. Post signage on the washout itself to identify this location. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary
- 0. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES Store and apply herbicides, pesticides and rodenticides in accordance with label

products, follow manufacturer's instructions.

- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of
- accidental poisoning Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water
- or surface water. If a spill occurs, clean area immediately. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE Create designated hazardous waste collection areas on-site.

Place hazardous waste containers under cover or in secondary containment. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

EFFECTIVE: 04/01/19

1. A STABILIZED ENTRANCE PAD OF 2-3" OF WASHED STONE AND/OR RAILROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ON TO

2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.

FOLLOW WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH) FOR SIDEWALK CLOSURE OR DETOUR/DIVERSION.

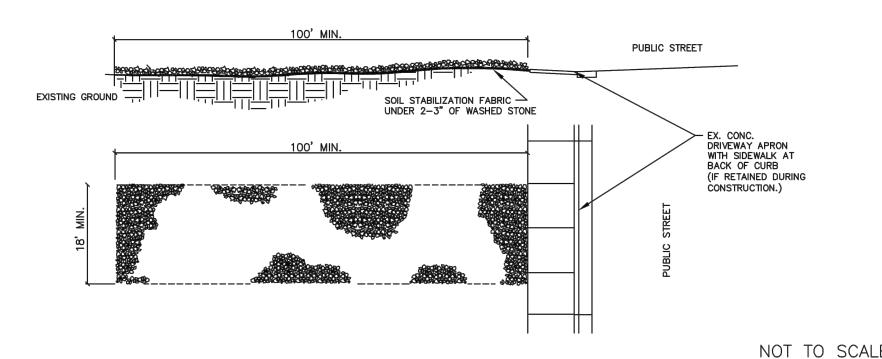
NOTES:

3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY) TTE. 4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY. ANY AGGREGATE TRACKED INTO THE ROADWAY MUST BE

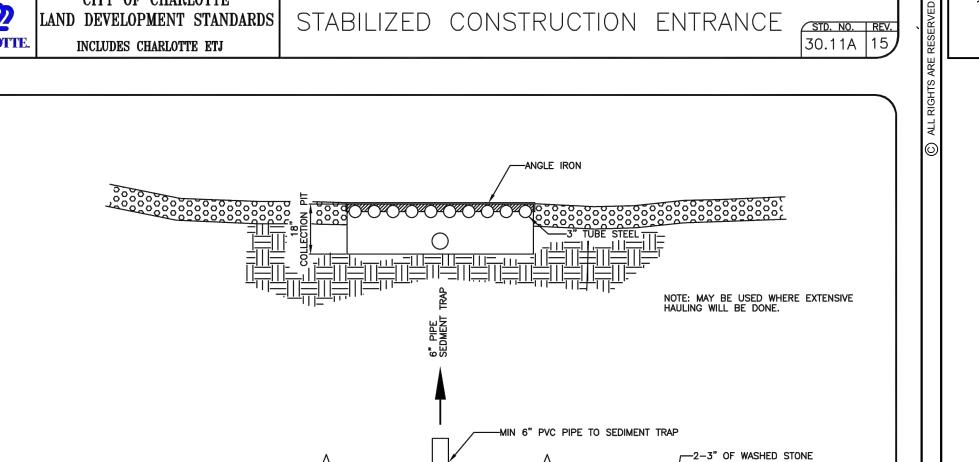
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA

6. CDOT MAY REQUIRE A STANDARD COMMERCIAL DRIVEWAY (STD. 10.24 & 10.25) TO ACCESS THE CONSTRUCTION SITE IF THE DRIVEWAY IS ON A THOROUGHFARE, OR ON ANY

STREET WITH AN EXISTING SIDEWALK TO REMAIN OPEN DURING CONSTRUCTION.



CITY OF CHARLOTTE **CHARLOTTE** INCLUDES CHARLOTTE ETJ



STD. 30.11A

CITY OF CHARLOTTE AND DEVELOPMENT STANDARDS CHARLOTTE INCLUDES CHARLOTTE ETJ

CHARLOTTE.

INCLUDES CHARLOTTE ETJ

CONSTRUCTION ENTRANCE TIRE WASH

KEY/ANCHOR MATERIAL AT TOP OF SLOPE. SPACING TYP.* **GENERAL NOTES:** 36" MIN. SPACING TYP.* STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH. 2. * DIMENSIONS SHOWN ARE MINIMUM, MANUFACTURED PRODUCTS MAY HAVE ADDITIONAL REQUIREMENTS THAT MUST BE 3. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, GRASS. MAT/BLANKETS SHALL HAVE GOOD SOIL CONTACT. 4. THE DETAIL SHOWN IS FOR SLOPE MATTING. FOR CHANNEL OR PIPE OUTFALL MATTING SPECIFICATIONS, PLEASE REFER TO NCESCPDM STANDARD #6.17 AND WATER TABLE MANUFACTURER'S GUIDELINES. NON-WOVEN GEOTEXTILE FILTER CLOTH FABRIC 4' ABOVE SOURCE WATER.

 ullet KEY/ANCHOR MATERIAL TO TOE OF SLOPE. NOT TO SCALE CITY OF CHARLOTTE LAND DEVELOPMENT STANDARDS

EMBANKMENT MATTING DETAIL

NOT TO SCALE

STD. NO. REV.

30.11B 15

C-3.4

PROJECT #: 2022-020 DATE: 07/10/20

DRAWN BY: GME CHECKED BY: JI

EROSION CONTROL

DETAILS

M

6112 TUCKA

EARTHEN STOCKPILE MANAGEMENT

Protect stockpile with silt fence installed along toe of slope with a minimum offset of

Stabilize stockpile within the timeframes provided on this sheet and in accordance

PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS, PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

FINISHED GRADE - FFE: FINISHED FLOOR ELEVATION - LPE: PAD ELEVATION

STORM SEWER GENERAL NOTES:

- 1. REFER TO NCDOT STD DETAILS 300.01 FOR METHOD OF STORM PIPE INSTALLATION.
- 2. ALL CURB INLET RIM ELEVATIONS ARE MEASURED AT CENTER LIP OF EDGE OF PAVEMENT, ALL GRATED DROP INLET RIM ELEVATIONS ARE MEASURED AT TOP OF GRATE. ALL SLAB DROP INLET RIM ELEVATIONS ARE MEASURED AT BOTTOM OF THROAT OPENING.
- 3. ALL FLARED END SECTION'S SLOPE AND ORIENTATION ARE TO BE THE SAME AS THE ATTACHED OUTLET PIPE. THE LENGTH OF ALL FLARED END SECTIONS ARE INCLUDED IN THE OUTLET PIPE'S
- 4. FOR JB, INSTALL NCDOT STRUCTURE 840.31 WITH OPTIONAL MH
- FRAME AND GRATE (NCDOT 840.54). 5. ALL CURB INLETS (CB) SHALL BE PER NCDOT DETAIL 840.01. 840.02 & 840.03 (BRICK/CONCRETE) INLET WITH CAST IRON GRATE AND HOOD), UNLESS NOTED OTHERWISE. ALL DROP INLETS (DI) SHALL BE SLAB TYPE INLETS PER NCDOT DETAIL 840.04/840.05, UNLESS NOTED OTHERWISE. ALL HEADWALLS (HW) SHALL BE PER CHARLOTTE DETAIL 20.17A, UNLESS NOTED OTHERWISE.

GRADING PLAN GENERAL NOTES:

- 1. GRADING MORE THAN ONE ACRE WITHOUT A PERMIT IS A VIOLATION AND SUBJECT TO FINES. GRADING AREAS OUTSIDE THE LIMITS SHOWN IS A VIOLATION AND IS SUBJECT TO FINES.
- 2. ALL PROPOSED CONTOURS REFLECT FINISHED GRADES.
- 3. ALL SPOT ELEVATIONS REPRESENT TOP OF PAVEMENT B UNLESS OTHERWISE NOTED SEE
- 4. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- GRADE DISCREPANCIES EXIST THAT CONFLICT WITH THE INFORMATION SHOWN ON THE EXISTING CONDITIONS AND PROPOSED PLANS. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE FOR RESOLUTION. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- 6. INTERIM GRADING SHALL BE PROVIDED THAT ENSURES THE PROTECTION OF STRUCTURES UTILITIES. SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, AND WASHOUT.
- 7. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN AWAY FROM BUILDINGS, ACROSS PAVEMENT AND/OR LANDSCAPE AREAS TO NEW OR EXISTING STORM DRAIN INLETS. DRAINAGE SWALES. OR OVERLAND SHEET FLOW.
- 8. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT
- 9. ALL FILL MATERIAL SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
- 10. ALL SLOPES SHALL BE NO STEEPER THAN 2:1, UNLESS NOTED OTHERWISE.
- 11. COORDINATE APPROPRIATE SLOPE STABILIZATION ON ALL SLOPES STEEPER THAN 2:1 WITH PROJECT GEOTECHNIAL ENGINEER. 12. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO
- EXISTING GRADE. 13. LIMITS OF CLEARING SHOWN ARE ON GRADING PLAN ARE BASED UPON THE APPROXIMATE
- CUT AND FILL SLOPE LIMITS OR OTHER GRADING REQUIREMENTS.
- 14. IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON ALL GUTTERS/FLOW LINES.
- 15. 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.
- 16. ALL GRADING EARTHWORK IS SUBJECT TO 95% MIN. COMPACTION AND STANDARD CHARLOTTE AND NCDOT SPECIFICATIONS. FILL MATERIALS, EXACT COMPACTION RATE, MOISTURE CONTENT, AND METHODOLOGY ARE TO BE RECOMMENDED, TESTED, AND CERTIFIED BY GEOTECHNICAL ENGINEER. THIS ALSO APPLIES TO ALL PONDS. EMBANKMENTS. PRE-SUBMITTAL MEETING WITH CITY INSPECTOR AND GEOTECHNICAL ENGINEER IS REQUIRED PRIOR TO ANY EMBANKMENT WORK.
- 17. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- 18. CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER OR ENGINEER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
- 19. TOP 12" OF SUBGRADE OF BUILDING PADS TO BE COMPACTED TO MINIMUM 100% OF STD. PROCTOR MAXIMUM DRY DENSITY.
- 20. SUBGRADE OF ROADS TO BE PROOF ROLLED PRIOR TO STONE PLACEMENT. 21. ABC STONE TO BE COMPACTED TO 100% OF STD. PROCTOR.
- 22. BITUMINOUS PAVEMENT BASE COURSE TO BE COMPACTED TO A DENSITY OF 92%. BITUMINOUS PAVEMENT INTERMEDIATE COURSE SHALL BE COMPACTED TO A DENSITY OF
- 92%. BITUMINOUS SURFACE COURSE TO BE COMPACTED TO A DENSITY OF 92%. 23. ALL CONCRETE FOR SIDEWALKS AND CURBS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3600 PSI. THE CONCRETE MIX AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS.
- 24. ALL CATCH BASINS, DROP INLETS, AND JUNCTION BOXES SHALL BE CONSTRUCTED PER CITY OF CHARLOTTE STANDARDS.
- 25. RETAINING WALL DESIGN TO BE PROVIDED BY CONTRACTOR'S WALL DESIGN ENGINEER. RETAINING WALL DRAWINGS TO BE PROVIDED TO ENGINEER FOR REVIEW AND APPROVAL.



- APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO BEGINNING CONSTRUCTION.
- REPLACED ACCORDING TO STANDARDS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.
- 4. SHORING WILL BE ACCORDING TO OSHA TRENCHING STANDARDS PART 1926 SUBPART P, OR AS AMENDED.

Emily Chien

ADA ACCESSIBLE ROUTE INSTRUCTIONS TO CONTRACTOR

Matthew Yanke Cractors Shall exercise appropriate care and precision in CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS INDICATED ON THIS SHEET. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH STATE Vincent Condent Ederal accessibility rules and regulations. Finished surfaces along the accessible route of travel from parking

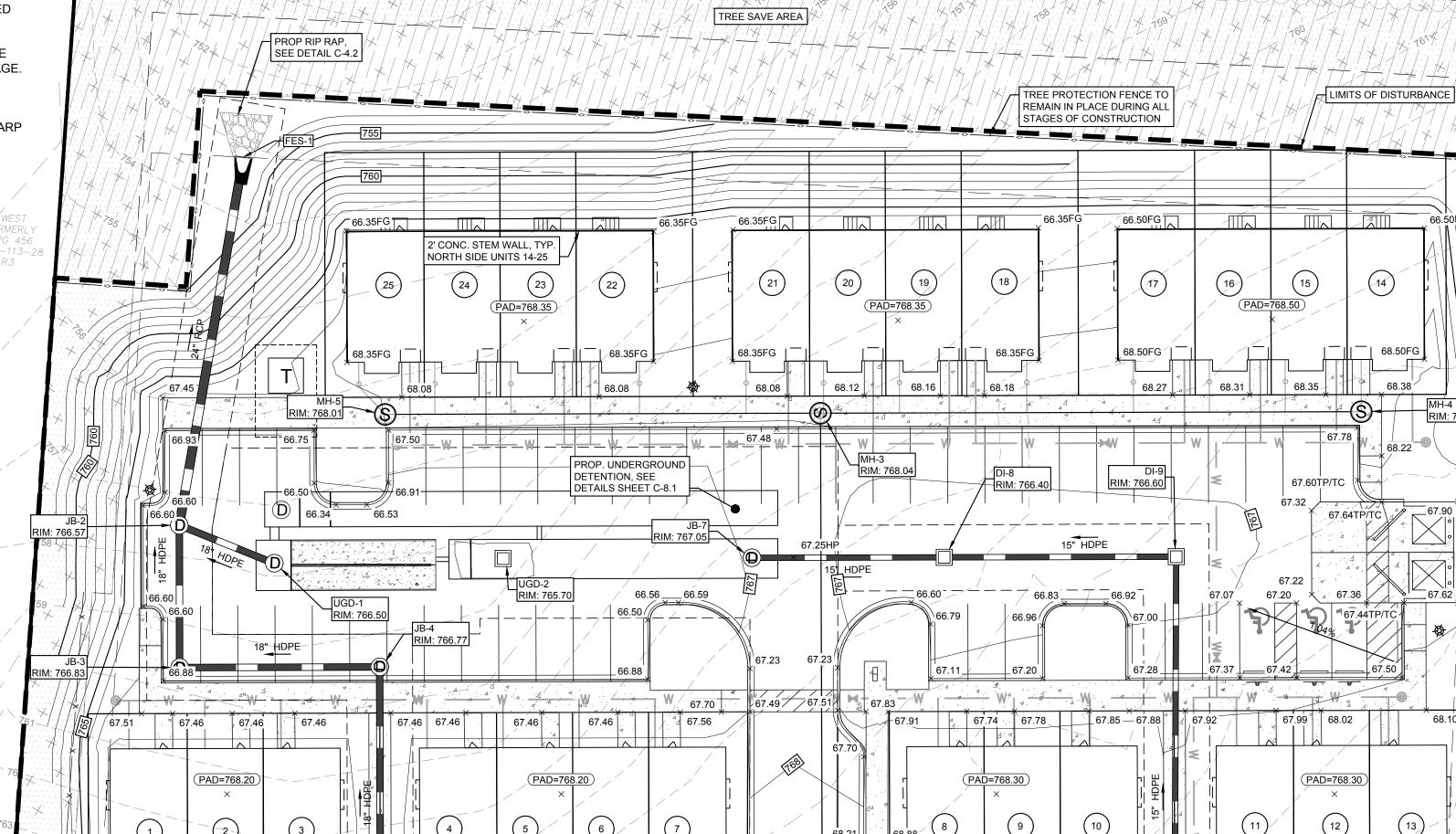
SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EGRESS, SHALL Jacobusture eeters, To Points of accessible building entrance/egress, shall also building code requirements. THESE INCLUDE, BUT ARE NOT LIMITS TO THE FOLLOWING:

<u>CURB RAMPS</u> - SLOPE SHALL NOT EXCEED 8.3% FOR A MAXIMUM OF SIX (6)

ANDINGS - SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL PROVIDE POSITIVE DRAINAGE AND SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION.

PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - SHALL PROVIDE A 36" OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL, THE SLOPE SHALL BE NO GREATER THAN 5.0% IN THE DIRECTION OF TRAVEL AND SHALL NOT EXCEED 2.0% IN CROSS SLOPE.

<u>DOORWAYS</u> - SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 2.0% FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5' FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCES INCORPORATED BY CODE). CONTRACTOR TO WARP ASPHALT AS NECESSARY TO ENSURE SLOPES ARE ADA ACCESSIBLE. CONTRACTOR SHALL ENSURE NO PONDING OCCURS DUE TO PAVEMENT MODIFICATIONS.



∠YI RIM:

AINAGE NOTE: ALL CONCRETE JTTER SHALL BE CONSTRUCTE

THE STORM SEWER STRUCTURES.

TO HAVE A MINIMUM 0.5% LONGITUDINAL SLOPE AND

68.56769 68.56

TP/TC

· TP/TC

△ 68.21_△

YARD INLET NOTES:

69.50

70.15 70.64

CDOT MAINTAINED,

CONTRACTOR TO CONSTRUCT CI-6 PER CLDSM STD 20.34 AND MAINTAIN A MINIMUM 6" OF CLEARANCE BETWEEN BOTTOM OF

70.64

1. YARD INLETS SHALL BE MINIMUM 18"X18" NYLOPLAST DRAINAGE BASIN OR APPROVED EQUIVALENT. 2. ALL YARD INLET PIPING TO BE INSTALLED AT MINIMUM

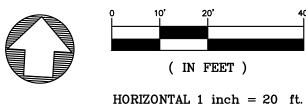
1.00% SLOPE AND MAINTAIN POSITIVE DRAINAGE TO TIE INTO STORM SEWER NETWORK. 3. YARD INLET PIPING SHALL BE INSTALLED AT A MINIMUM

CI-6 (CLDSM 20.34) JB RÌM: 771.05

GRATE RIM: 770.56

-- INV-- 767.83°

18" BELOW FINISHED GRADE. 4. DOWNSPOUTS PIPING SHALL BE MIN. 8" HDPE



JESSICA & OLIVIA DAVIS

NOW OR FORMERLY

DB 35928 PG 482

PARCEL #059-113-3C

ZONED: R3

IMPROVEMENTS (BY OTHERS

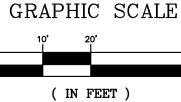
68 34 /

RIM-771.97'

INV IN-762.97

INV OUT-762.87

1.00% ±68.88 =



GRADING PLAN

PROJECT #: 2022-020 DATE: 07/10/20

DRAWN BY: GME CHECKED BY: JI

ROPLANNING

M

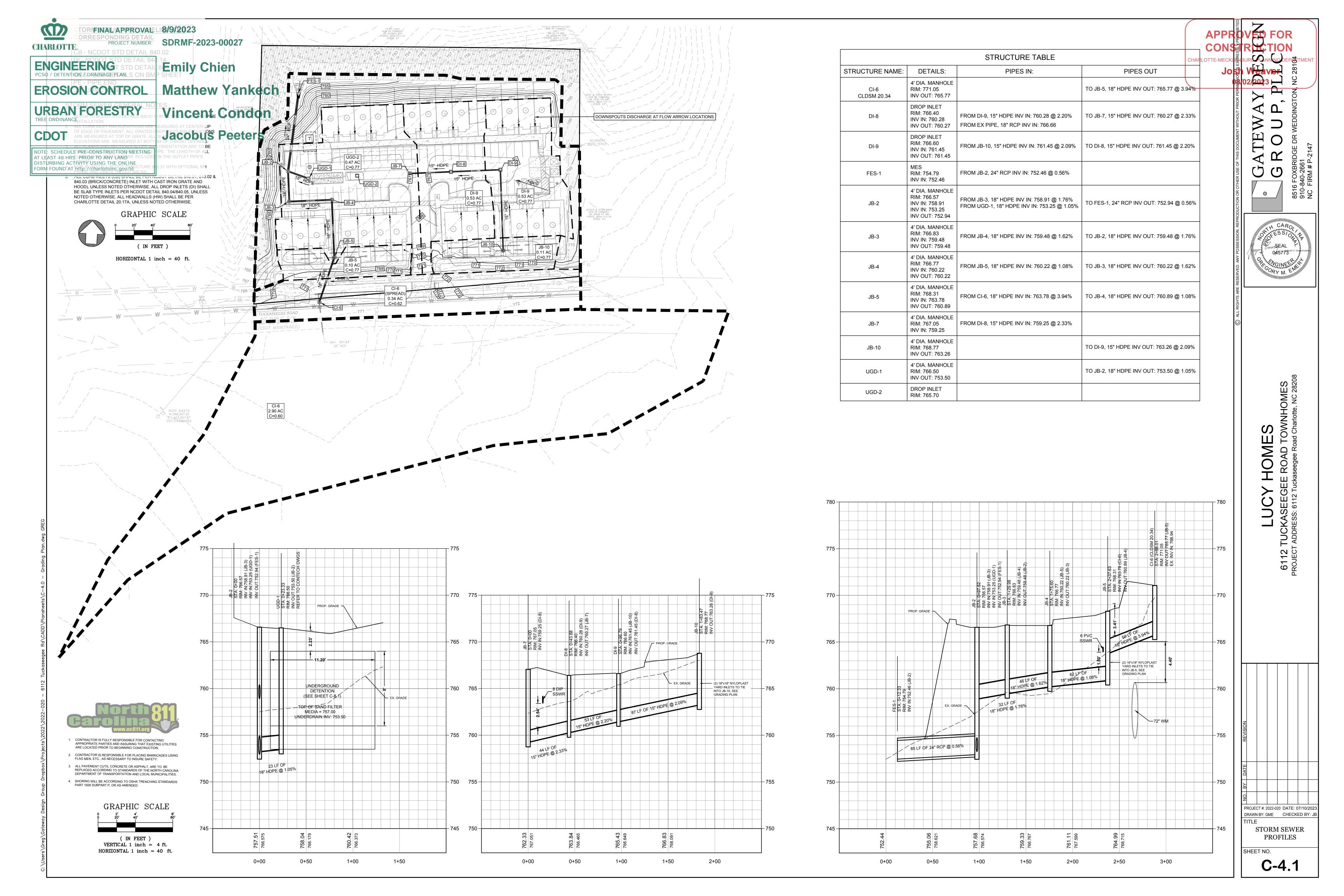
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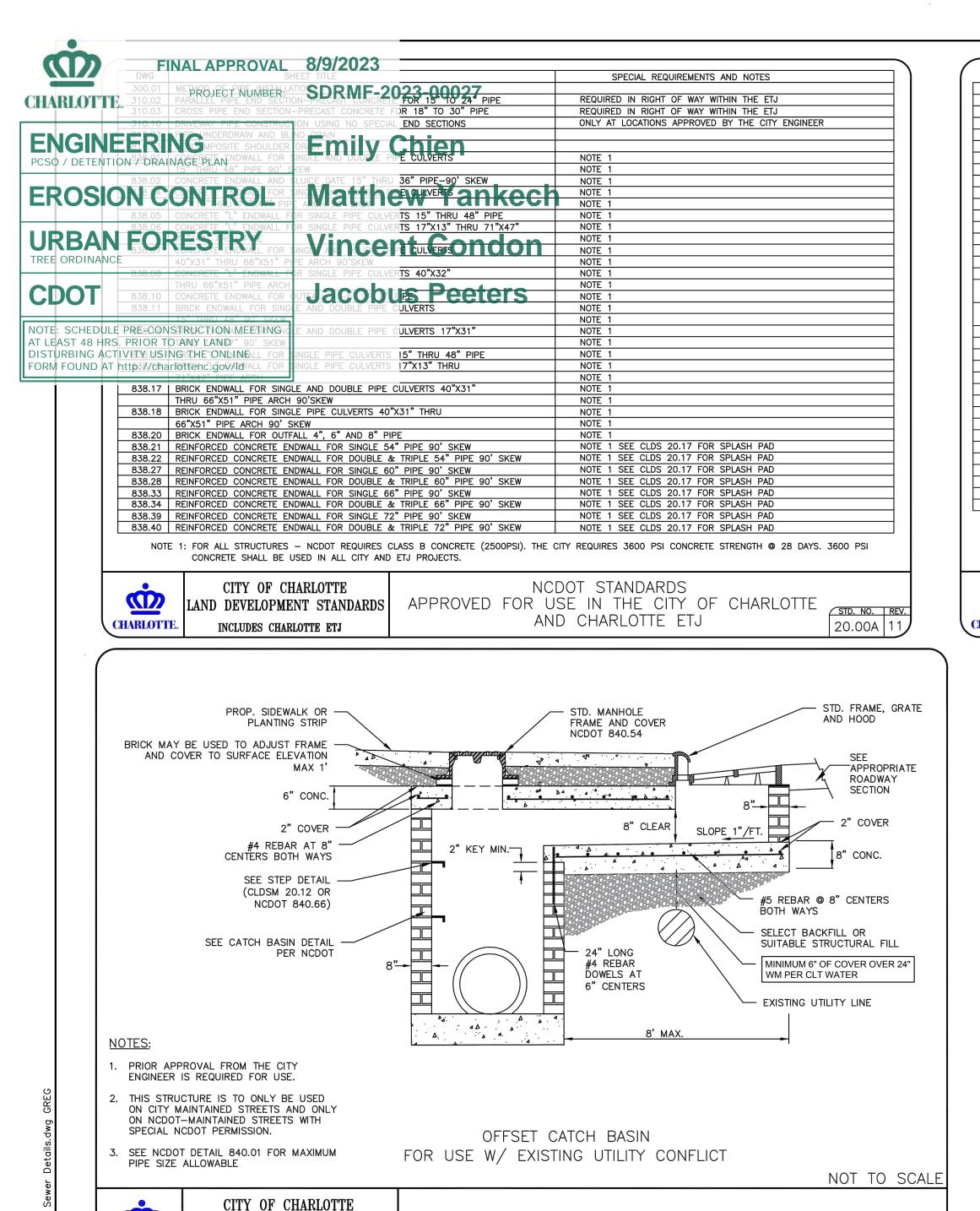
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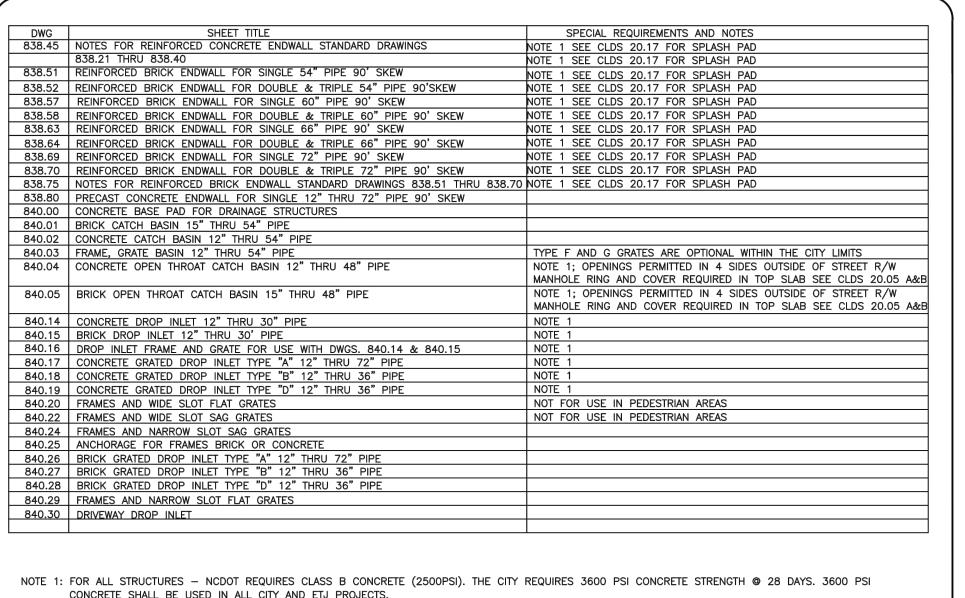
2. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC., AS NECESSARY TO INSURE SAFETY. 3. ALL PAVEMENT CUTS, CONCRETE OR ASPHALT, ARE TO BE

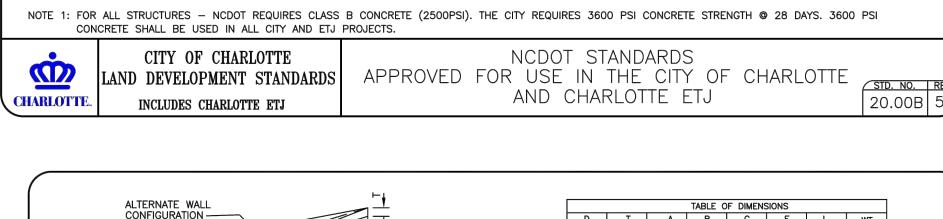
> FILITY RELOCATION NOTE: LL PUBLIC UTILITY RELOCATION, IF REQUIRED, (GAS, COMMUNICATIONS ELECTRIC) SHALL REQUIRE PERMISSIONS FROM THE UTILITY PROVIDER AND BE COORDINATED BY THE CONTRACTOR PRIOR TO THE START OF

SHEET NO.

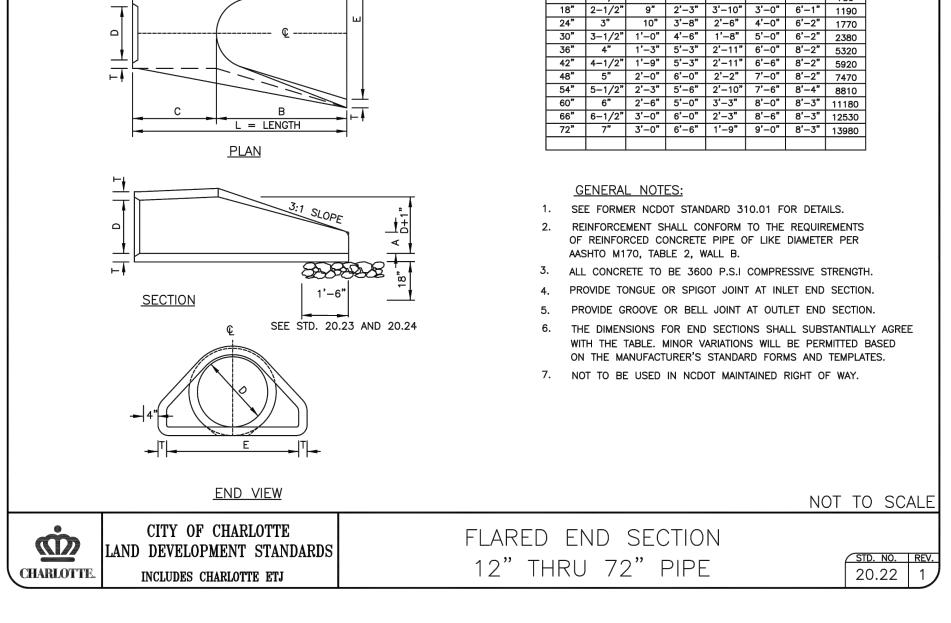


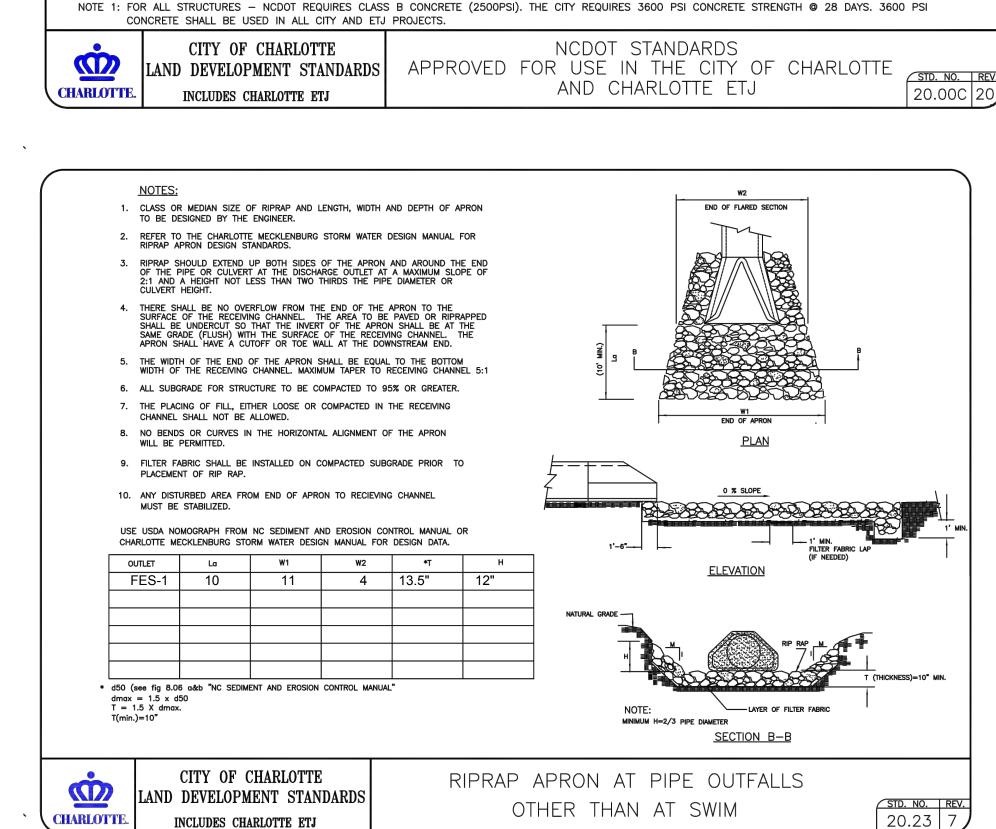






15" 2-1/4" 6" 2'-3" 3'-10" 2'-0" 6'-1"





840.31 CONCRETE JUNCTION BOX (WITH OPTIONAL MANHOLE) 12" THRU 66" PIPE

840.34 | TRAFFIC BEARING JUNCTION BOX FOR USE WITH PIPES 42" AND UNDER

840.45 PRECAST DRAINAGE STRUCTURE (SOLID AND WAFFLE WALL)

840.51 BRICK MANHOLE 12" 36" PIPE
840.52 PRECAST MANHOLE 4', 5' AND 6' DIAMETER 12" THRU 48" PIPE

840.53 PRECAST MANHOLE WITH MASONRY BASE 12" THRU 42" PIPE

840.46 TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE

840.35 TRAFFIC BEARING DROP INLET FOR CAST IRON DOUBLE FRAME AND GRATES

840.36 TRAFFIC BEARING DROP INLET FOR STEEL (840.37) DOUBLE FRAME AND GRATES

852.04 METHODS FOR PLACEMENT OF DROP INLETS IN GRASSED MEDIAN (USING 1'-6" CURB AND GUTTER

852.05 | MEDIAN CURB FOR CATCH BASIN (FOR USE WITH 1'-6" CURB AND GUTTER)

852.06 METHOD OF PLACEMENT OF DROP INLETS IN CONCRETE ISLANDS

840.32 BRICK JUNCTION BOX 12" THRU 66" PIPE

840.37 | STEEL GRATE AND FRAME

840.54 MANHOLE FRAME AND COVER

840.60 DRAINAGE STRUCTURE STEPS

840.71 | CONCRETE PAVED DITCHES

850.01 | CONCRETE PAVED DITCHES

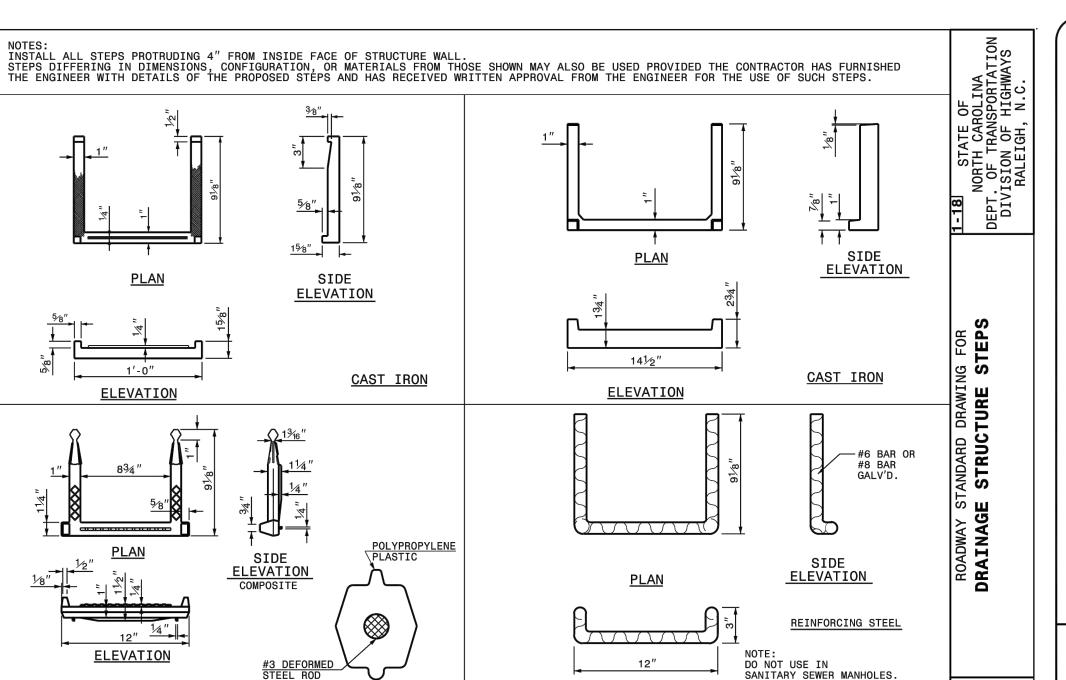
876.01 RIP RAP IN CHANNELS

876.03 DRAINAGE DITCHES WITH CLASS "A" RIP RAI

876.04 DRAINAGE DITCHES WITH CLASS "B" RIP RAP

310.01 1998 DRAWINGS CONCRETE FLARED END SECTION

840.41 SPRING BOX CONCRETE OR BRICK



SECTION A-A

OFFSET CATCH BASIN

ELEVATION

STD. NO. REV.

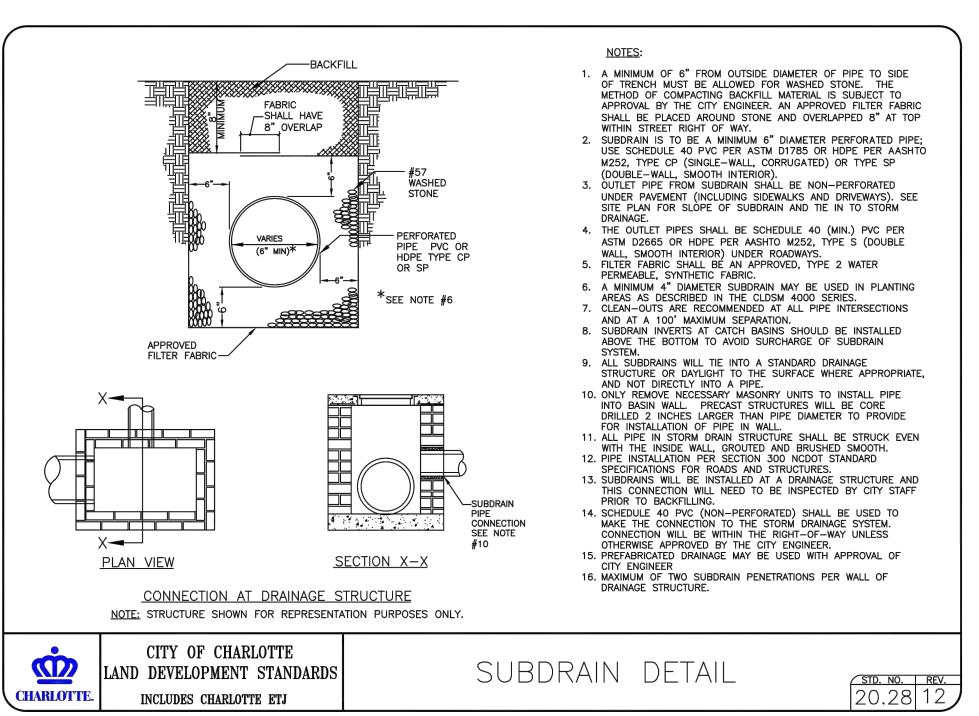
20.34 19

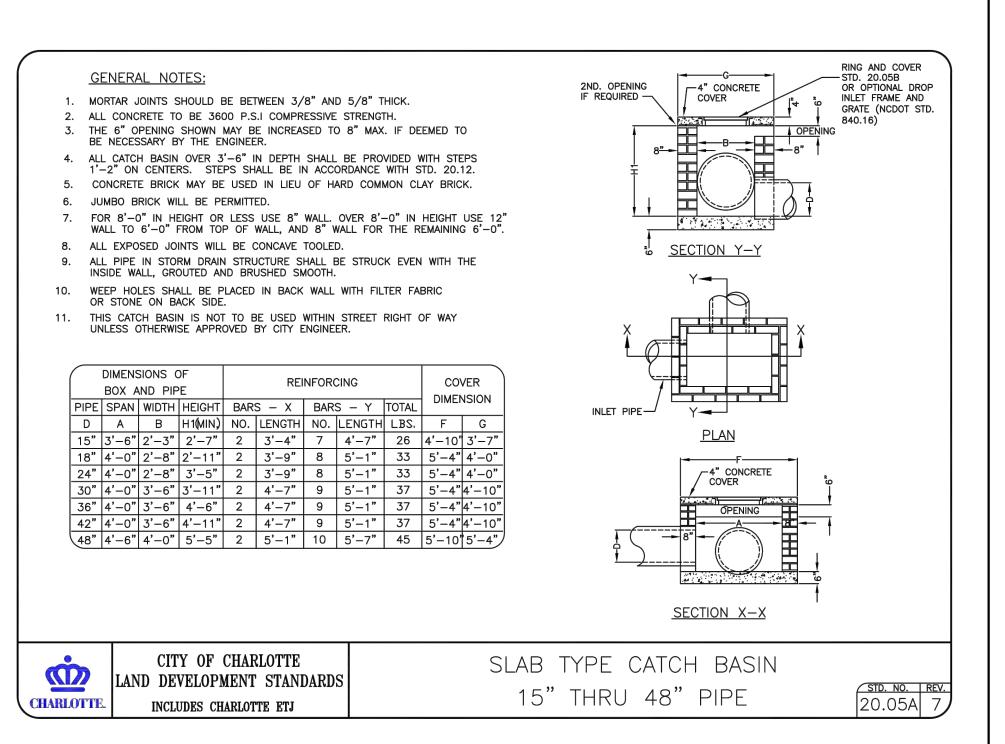
840.66

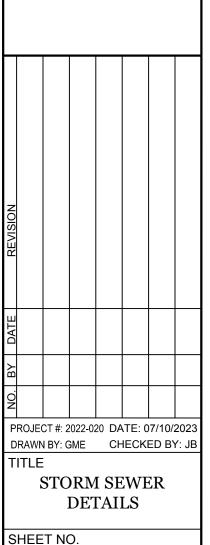
AND DEVELOPMENT STANDARDS

INCLUDES CHARLOTTE ETJ

CHARLOTTI







C-4.2

RODANNIGE

Veaver

851 910 NC

CARC

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045773°°

ORY M.

TOWNHOMES AND CHARLOW NC 2820

AD R

Ш

6112 TUCKASEEG

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SPECIAL REQUIREMENTS AND NOTE NOTE 1; OPTIONAL MANHOLE IS REQUIRED

NOTE 1; OPTIONAL MANHOLE IS REQUIRED; AS MEASURED FROM BOTTOM OF

TOP SLAB -- FOR JUNCTION BOX HEIGHT 0'-4'8" USE 8<mark>"</mark> THICK WALL,

WAFFLE WALL IS NOT PERMITTED IN ROADWAY, PLANTING STRIPS,

OR MEDIANS. ALL OPENINGS SHALL BE PRE-CAST

FROM 4'8" HEIGHT TO 10' HEIGHT, USE 12" THICK WALL. FROM FROPOSEDE-

STRUCTURE EXCEEDS 12'-0" HEIGHT A SPECIAL DESIGN WILL BE REQUIRED

USED AS A CATCH BASIN SUPPORTING NCDOT 840.03 FRAME, GRATE, AND HOOD — THE FLAT

TOP SLAB ONLY ACCEPTABLE WHEN A 12" VERTICAL RISER CAN BE ACCOMMODATED ON TOP OF

F USED AS A CATCH BASIN SUPPORTING NCDOT 840.03 FRAME, GRATE, AND HOOD — THE FLAT

TOP SLAB ONLY ACCEPTABLE WHEN A 12" VERTICAL RISER CAN BE ACCOMMODATED ON TOP OF

ALL COVERS SHALL BE SUPPLIED WITH A MINIMUM OF TWO AND A MAXIMUM OF SIX

THE STRUCTURE (BETWEEN THE TOP OF FLAT TOP SLAB AND BOTTOM OF FRAME/GRATE)

THE STRUCTURE (BETWEEN THE TOP OF FLAT TOP SLAB AND BOTTOM OF FRAME/GRATE)

NOTE 1; OPTIONAL MANHOLE IS REQUIRED

NOT FOR USE IN PEDESTRIAN AREAS

NOT FOR USE IN PEDESTRIAN AREAS

-INCH DIAMETER VENT HOLES.

PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY

CDOT

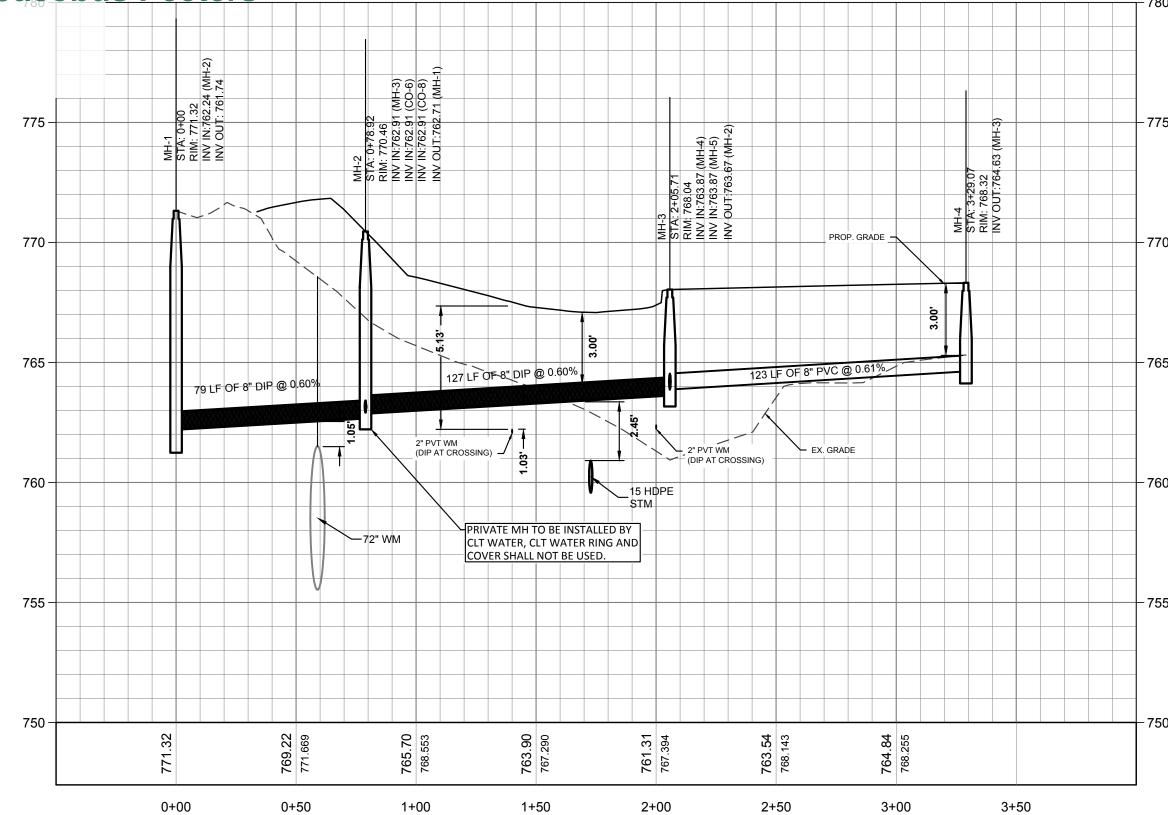
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

Emily Chien

Matthew Yankech

Vincent Condon





APPROVAL SEAL SEAL 045773 N.C.P.E. **SUMMARY OF SEWER MAINS & MANHOLES** SIZE LENGTH SIZE LENGTH 79 LF

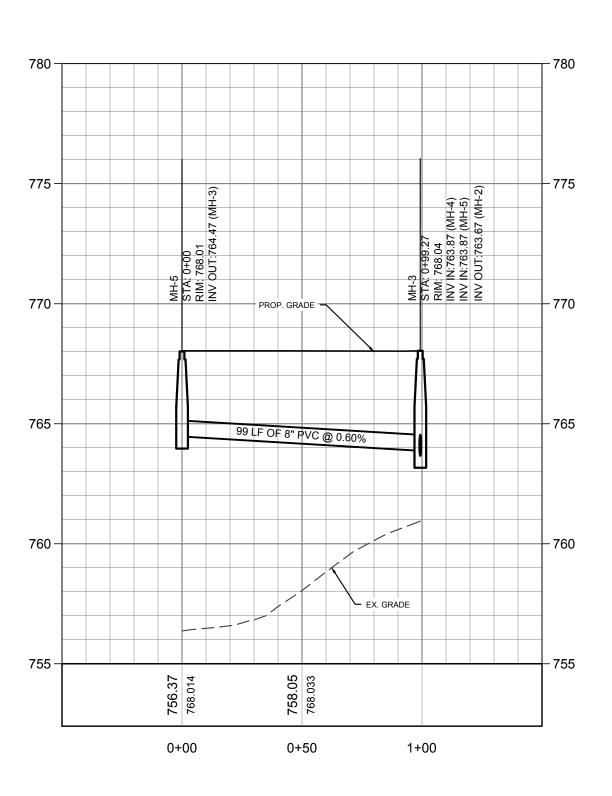
PROJECT NAME: 61	112 TUCKASEEGEE RD
	TOWNHOMES
JOB NO:	
DATE OF ACTIVATION:	

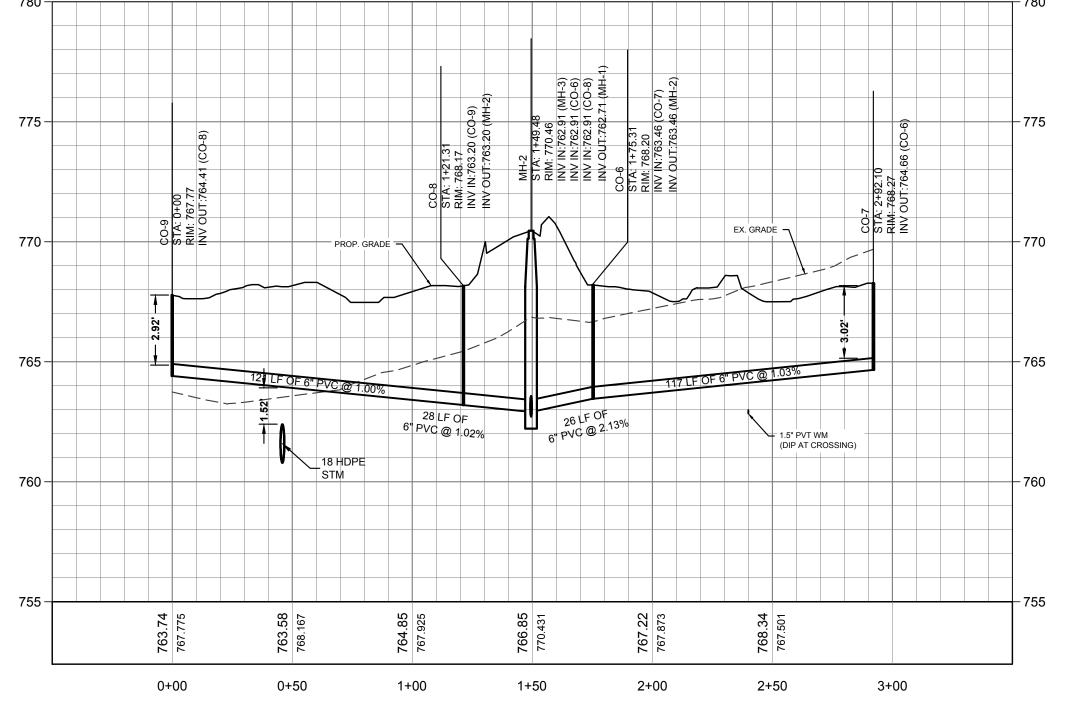
BY:

TOTAL NO. OF MANHOLES: 1 (PVT), 1 (PUBLIC)

TOTAL NO. LOTS SERVED: 25

DATE AS BUILT:





GRAVITY SEWER MAIN EXTENSION CHARLOTTE WATER 6112 TUCKASEEGEE ROAD TOWNHOMES CREEK BASIN ____ PROJECT TYPE: ☐ NEW CONSTRUCTION ☐ RELOCATION ☐ MODIFICATION OF PERMIT NO. VOLUME OF WASTEWATER GENERATED BY THIS PROJECT: 4,750 (TO BE PERMITTED PRIVATELY) GALLONS PER DAY BASED ON 190 GAL/DAY/SINGLE FAMILY HOUSEHOLD X 25 HOUSEHOLDS OR 135 GAL/DAY/MULTI-FAMILY UNIT X ______ UNITS OR IS BASED ON : WASTEWATER TREATMENT PLANT RECEIVING WASTEWATER: McALPINE CR. (NC0024970) ■ McDOWELL CR. (NC0036277) SUGAR CR. (NC0024937) ROCKY CR. (NC0036269) NATURE OF WASTEWATER _______ % DOMESTIC ______ % INDUSTRIAL ______ % COMMERCIAL ______ % OTHER _ SUBDIVISION COMMERCIAL SCHOOL INDUSTRIAL APARTMENTS/CONDO'S OTHER ORIGIN OF WASTEWATER 🔲 SUBDIVISION LIST ANY PARAMETER AND ITS CONCENTRATION THAT WILL BE GREATER THAN NORMAL DOMESTIC LEVELS: IF WASTEWATER IS NON-DOMESTIC, DESCRIBE LEVEL OF PRETREATMENT: IF A PRETREATMENT PERMIT IS REQUIRED, HAS ONE BEEN ISSUED? YES NO HAS ENGINEER DETERMINED THAT DOWNSTREAM SEWERS ARE CAPABLE TO HANDLE THIS FLOW? 🔀 YES HAS ENGINEER DETERMINED THAT NC DEM AND CLTWater MINIMUM DESIGN STANDARDS ARE MET BY THIS PROJECT? X YES NO COMPLETE NAME AND ADDRESS OF ENGINEERING DESIGN FIRM: CHARLOTTE WATER 5100 BROOKSHIRE BOULEVARD CHARLOTTE, NORTH CAROLINA 28216 TELEPHONE _______ 704 _ - ______ 399 _ - _____ 2221

		ORY M. EMILIAN
CLTWater PERMIT NO.	ISSUED	
PLANT FLOW ALLOCATION RECORDED BY:		

JOSEPH C WILSON, P.E., CHIEF ENGINEER

I, _______ GREG EMERY _____, ATTEST THAT THIS APPLICATION FOR _6112 TUCKASEEGEE RD TOWNHOMES

BEST OF MY KNOWLEDGE. I FURTHER ATTEST THAT TO THE BEST OF MY KNOWLEDGE THE PROPOSED DESIGN HAS BEEN PREPARED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS. ALTHOLIGH CERTAIN PORTIONS OF THIS SLIB PACKAGE MAY HAVE BEEN DEVELOPED BY OTHER PROFESSIONALS, INCLUSION OF THESE MATERIALS UNDER MY SIGNATURE AND SEAL SIGNIFIES THAT I HAVE REVIEWED THIS MATERIAL AND HAVE JUDGED IT TO BE CONSISTENT WITH

NORTH CAROLINA PROFESSIONAL ENGINEER'S SEAL, SIGNATURE, AND DATE:

THE PROPOSED DESIGN.

PERMIT APPROVED BY: _____

HAS BEEN REVIEWED BY ME AND IS ACCURATE AND COMPLETE TO THE

SEAL 045773

GRAPHIC SCALE

(IN FEET) VERTICAL 1 inch = 4 ft.

HORIZONTAL 1 inch = 40 ft.

1. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING

ARE LOCATED PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC., AS NECESSARY TO INSURE SAFETY.

SHORING WILL BE ACCORDING TO OSHA TRENCHING STANDARDS PART 1926 SUBPART P, OR AS AMENDED.

APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES

SANITARY SEWER 3. ALL PAVEMENT CUTS, CONCRETE OR ASPHALT, ARE TO BE REPLACED ACCORDING TO STANDARDS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.

CONSTRUCTION
LOTTE-MECKLES BUR CONNING DE

WH CARO.

Mer&EAL

045773

OMES
ROAD TOWNHOMES
eegee Road Charlotte, NC 28208

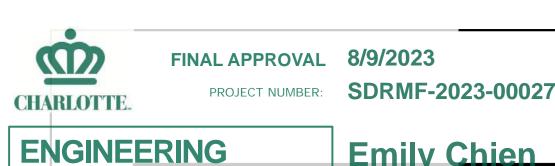
LUCY
6112 TUCKASEEGE
PROJECT ADDRESS: 6112 Tuc

SHEET NO. C-5.1

PROJECT #: 2022-020 DATE: 07/10/202

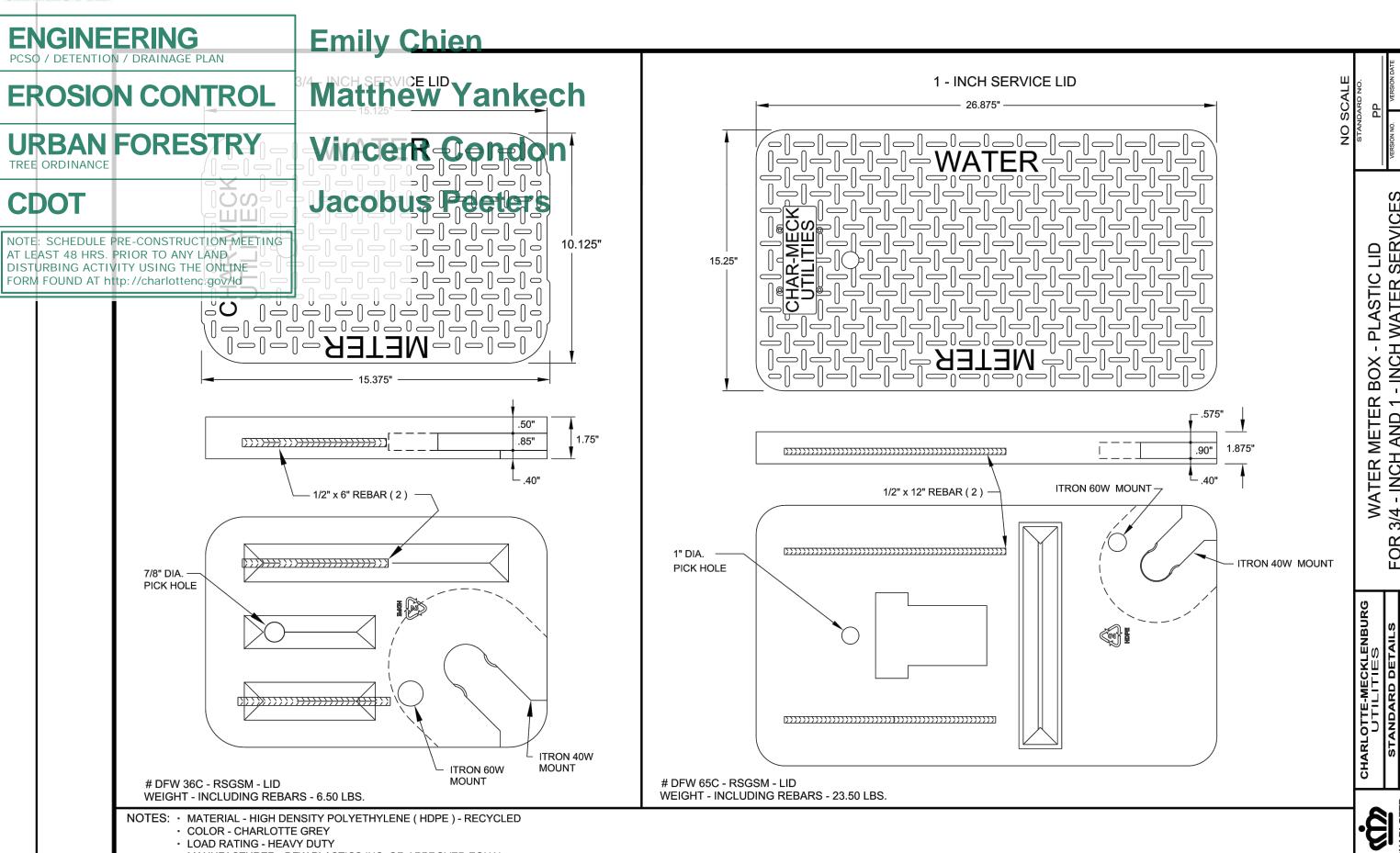
DRAWN BY: GME CHECKED BY: JE

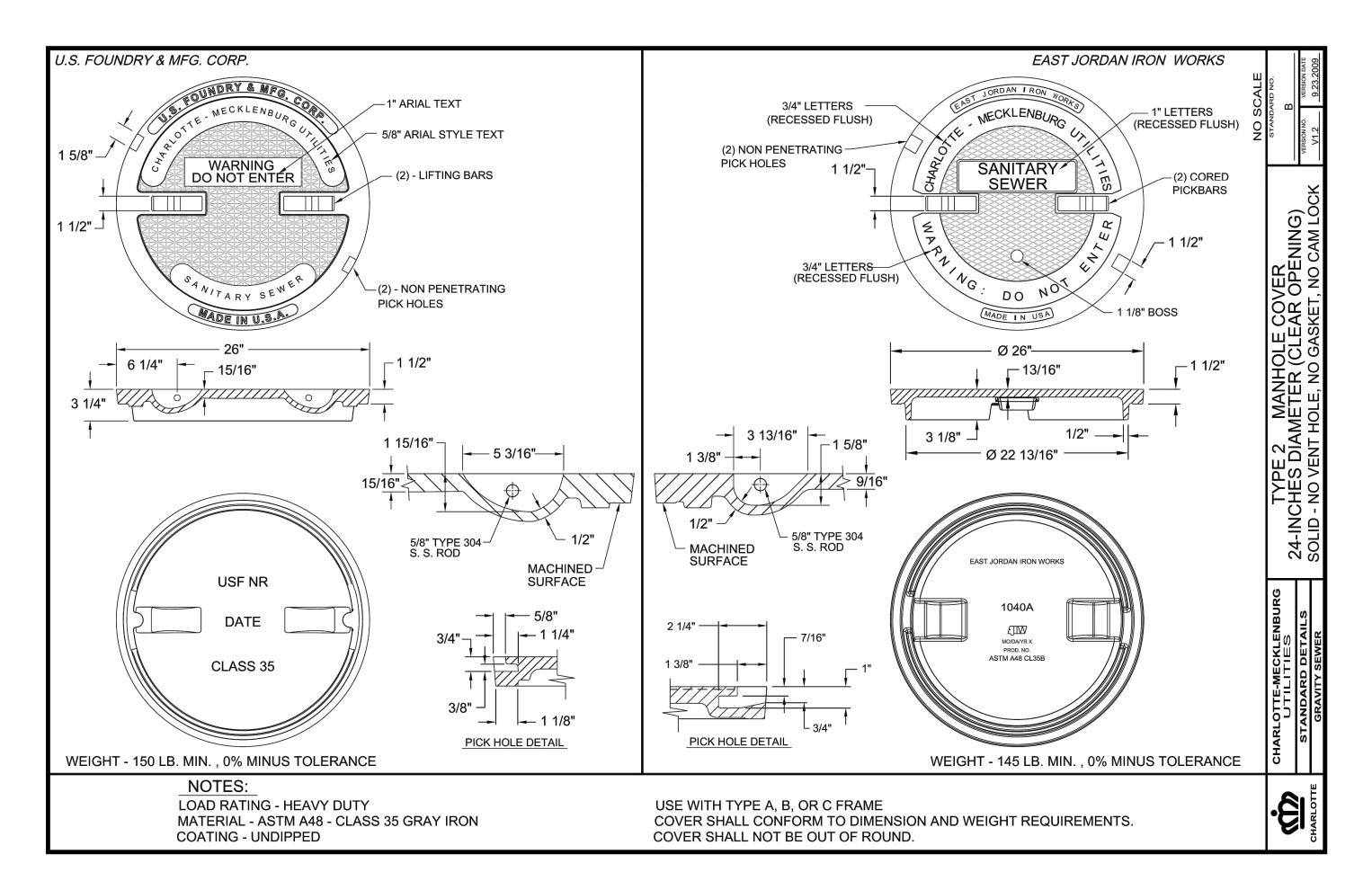
PROFILES

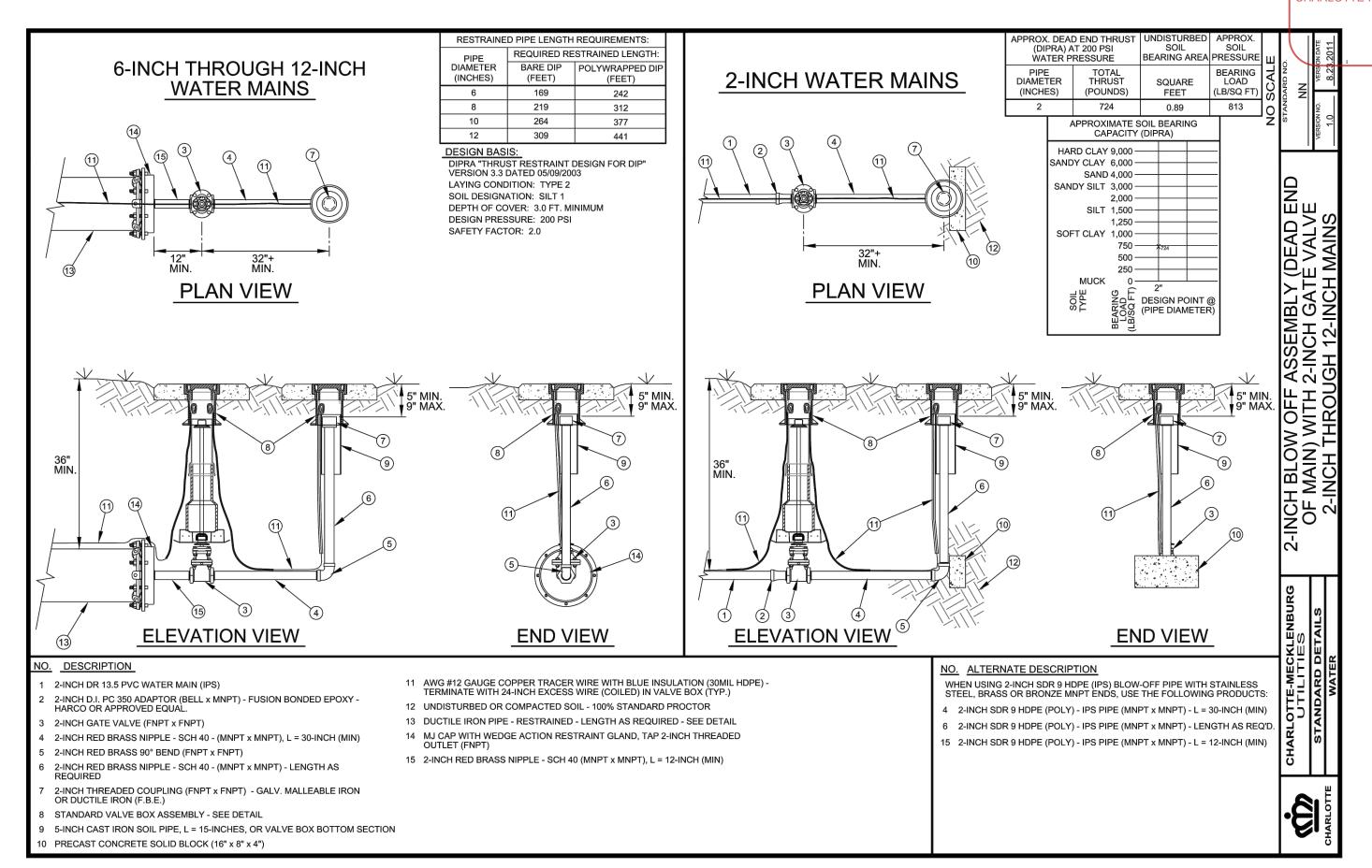


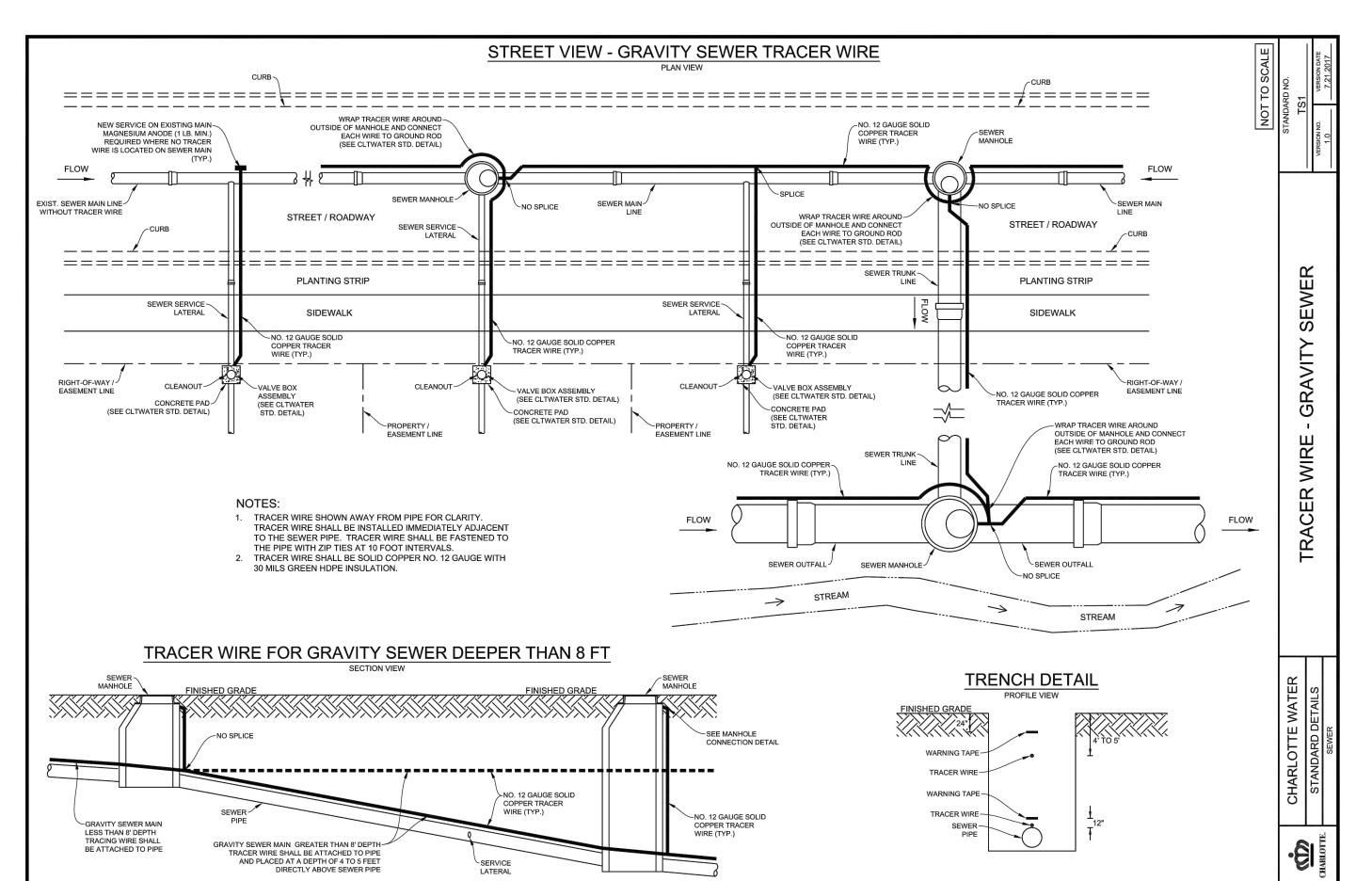
· LOAD RATING - HEAVY DUTY

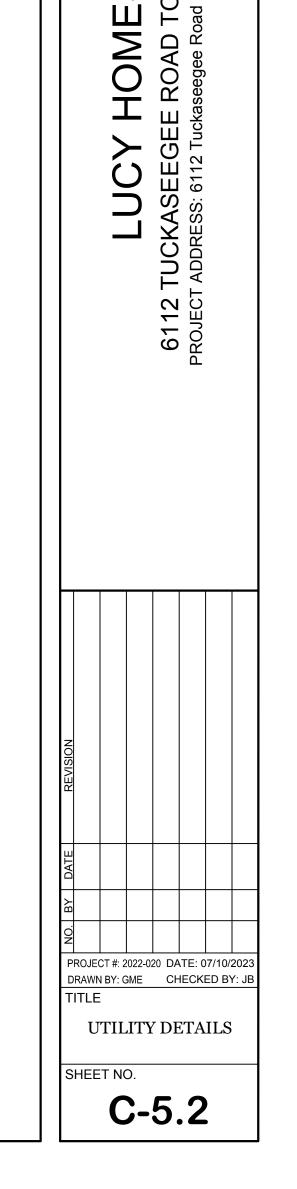
· MANUFACTURER - DFW PLASTICS INC. OR APPROVED EQUAL









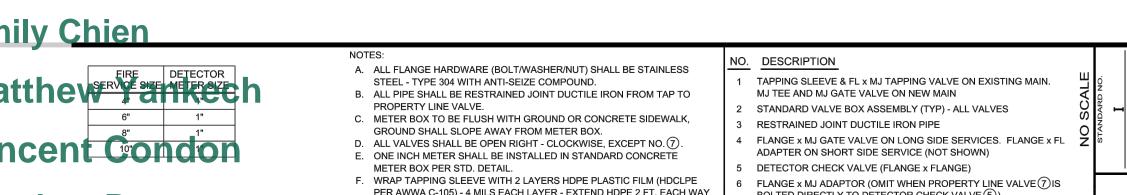


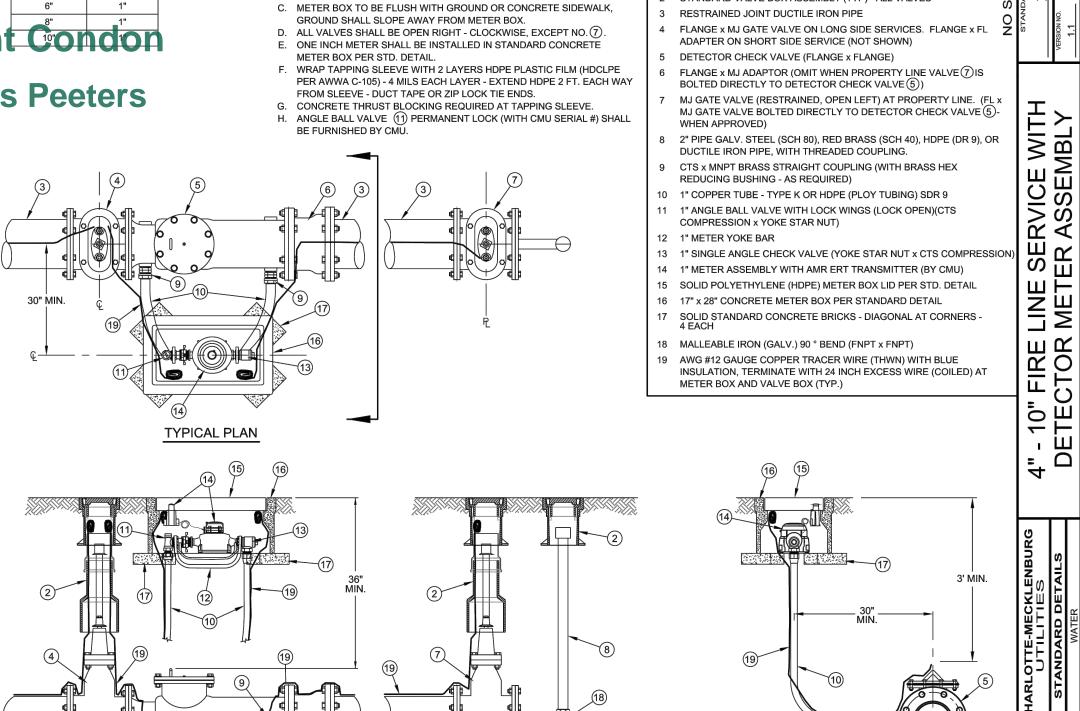
RECTIO JRE DANNING



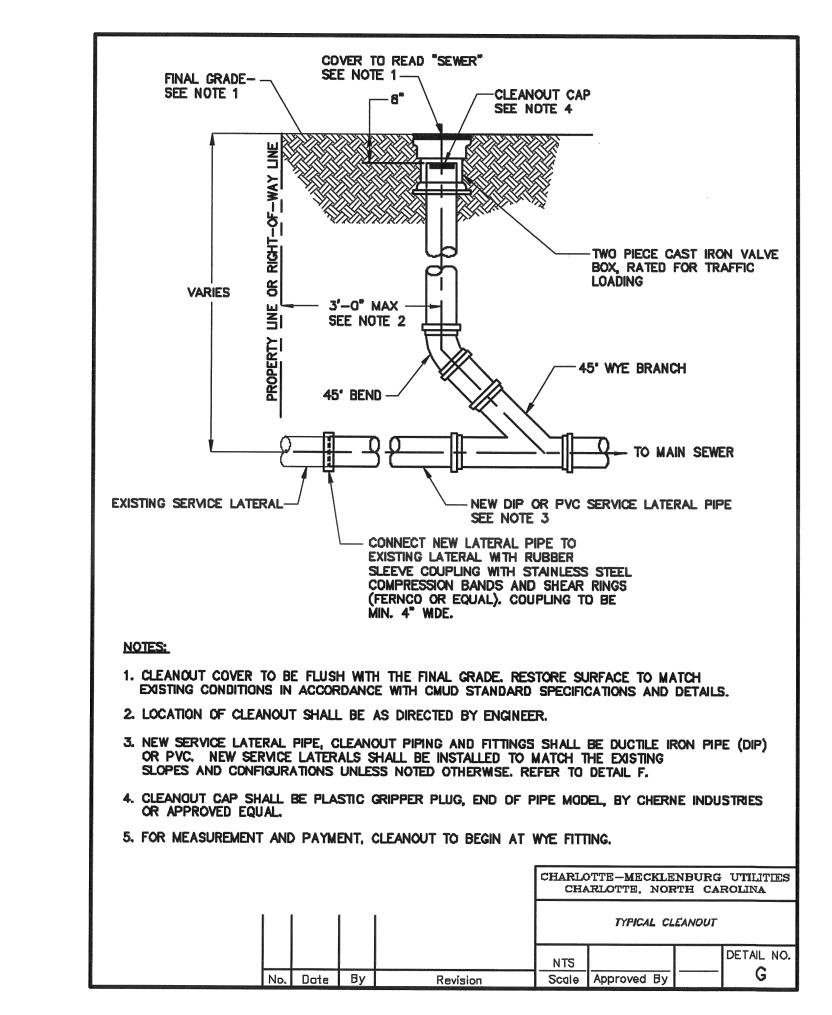
WATER MAIN -

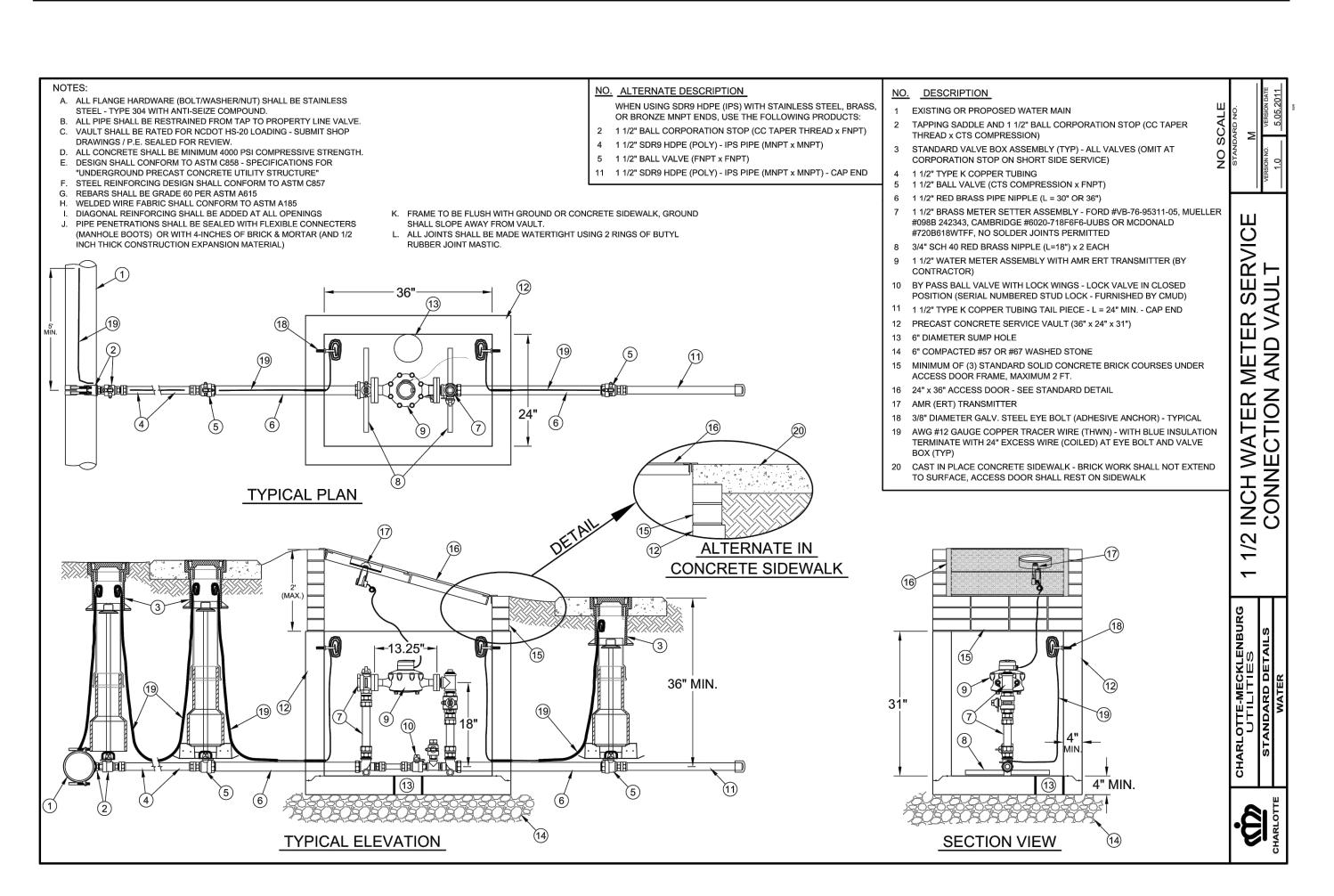
3/4" TAP/PLUGGED FOR TESTING



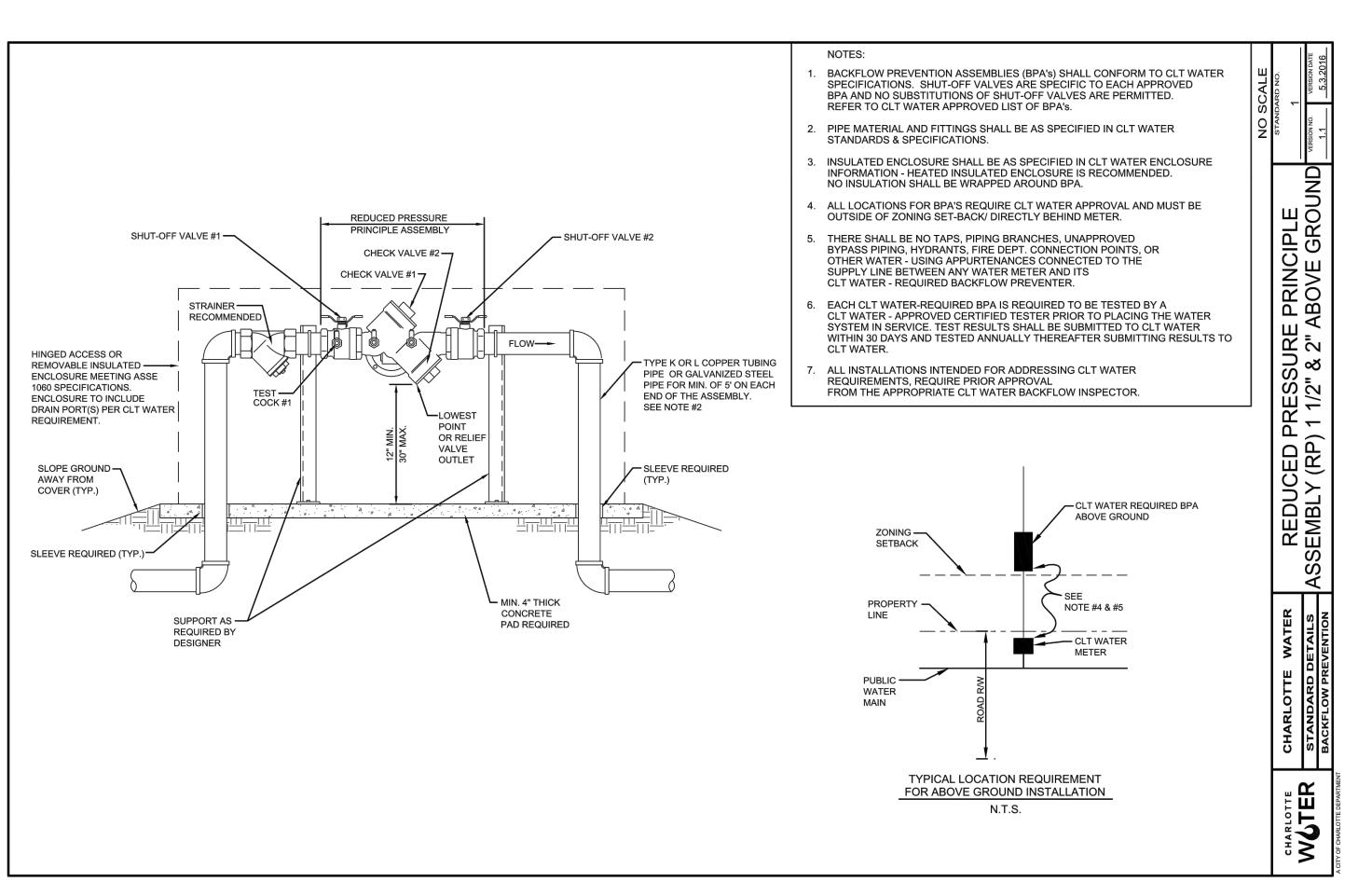


SIDE ELEVATION

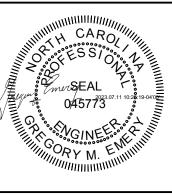




TYPICAL ELEVATION



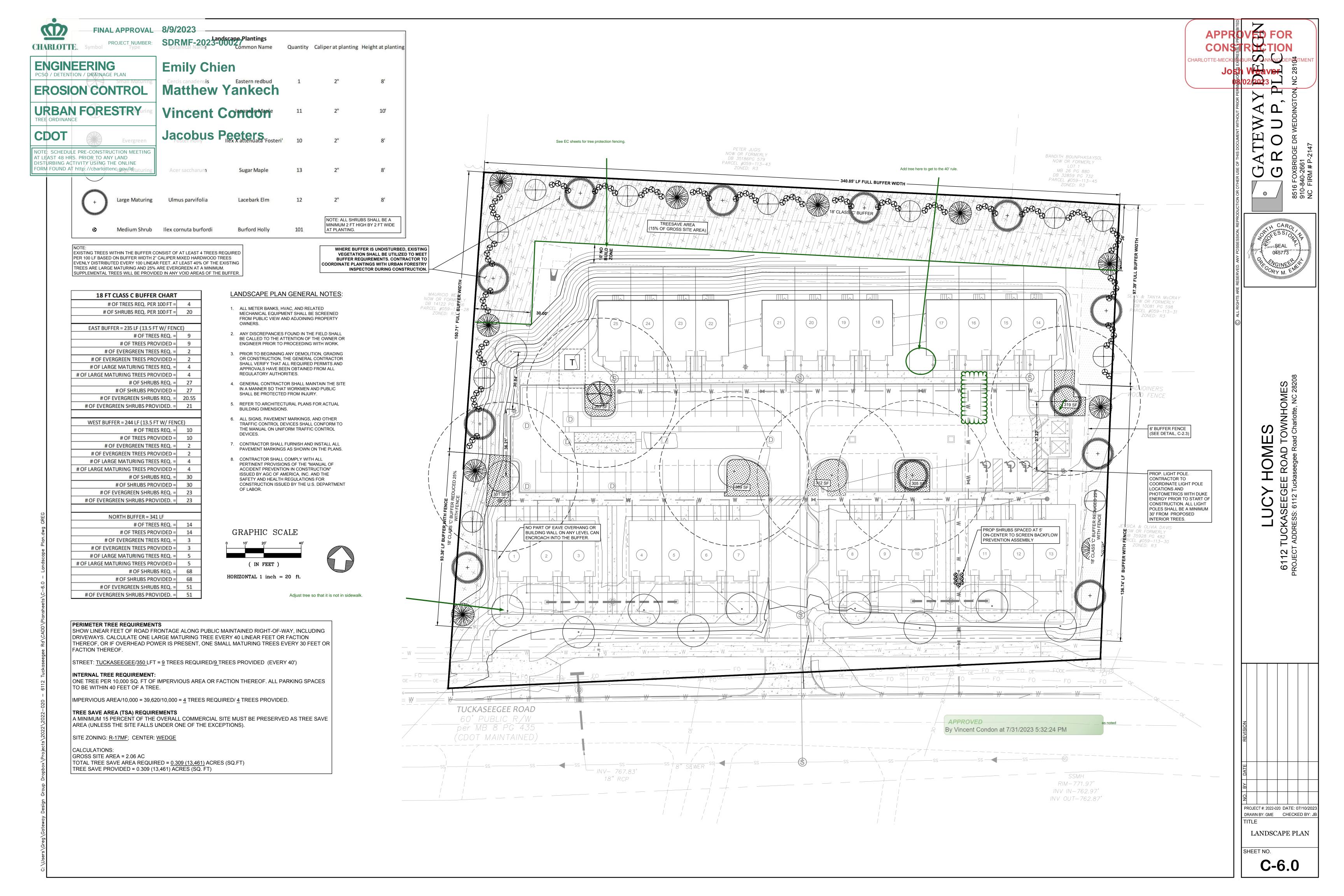




JMC 6112 TROJECT

PROJECT #: 2022-020 DATE: 07/10/202 DRAWN BY: GME CHECKED BY: JE

UTILITY DETAILS





PROJECT NUMBER: SDRMF-2023-00027

CITY OF CHARLOTTE

INCLUDES CHARLOTTE ETJ

AND DEVELOPMENT STANDARDS

Emily Chien

ENGINEERING PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY CDOT

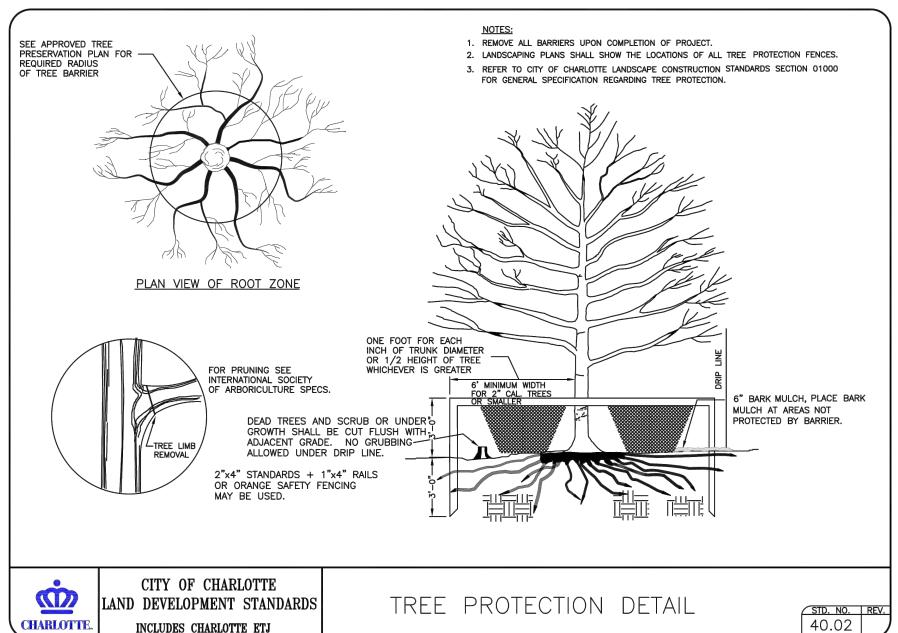
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

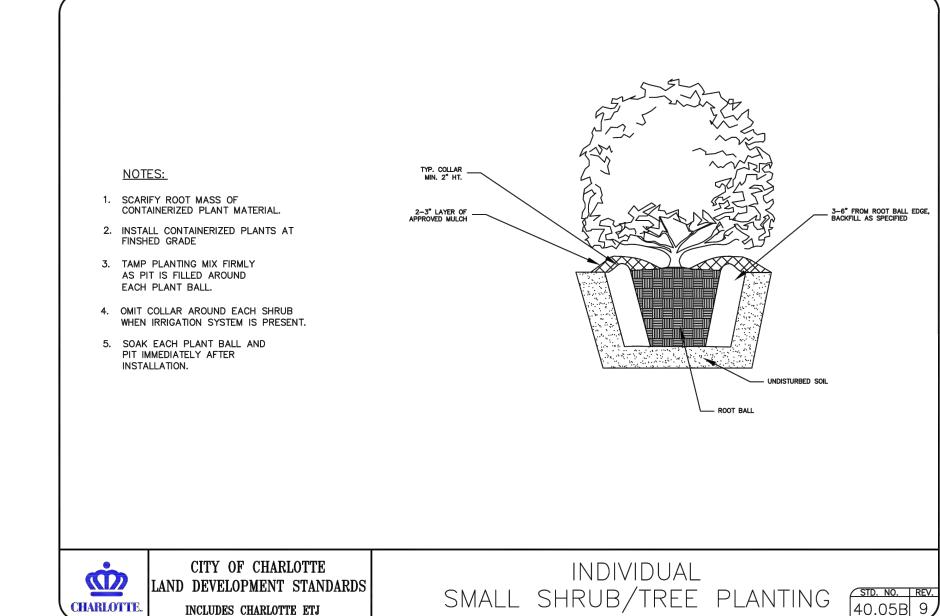
CHARLOTTE

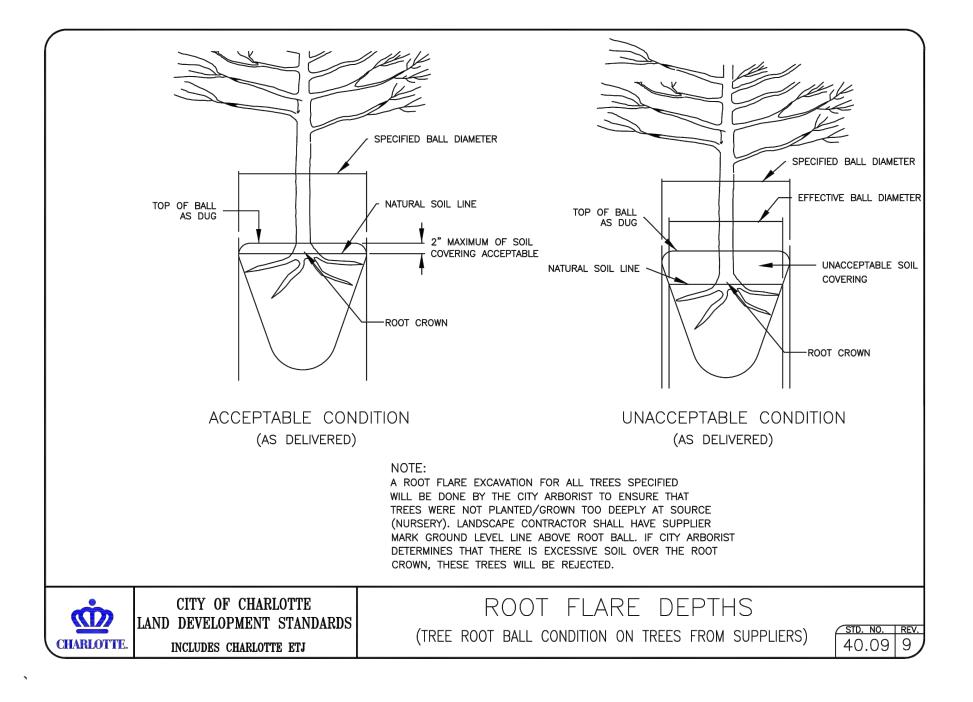
Matthew Yankech AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
EDVOIDED TO ME TO THE STALLATION OF THE STALLATION. Jacobus Peeters 3/4" NYLON STRAP -ROOT CROWN TO --BE AT FINISH GRADE 3 - 1"x2"x18" WOOD STAKES REMOVE TOP 1/3 BURLAP -REMOVE TOP 1/3 OF WIRE RAISE PIT BOTTOM TO SET ROOT CROWN ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) NOT TO SCALE

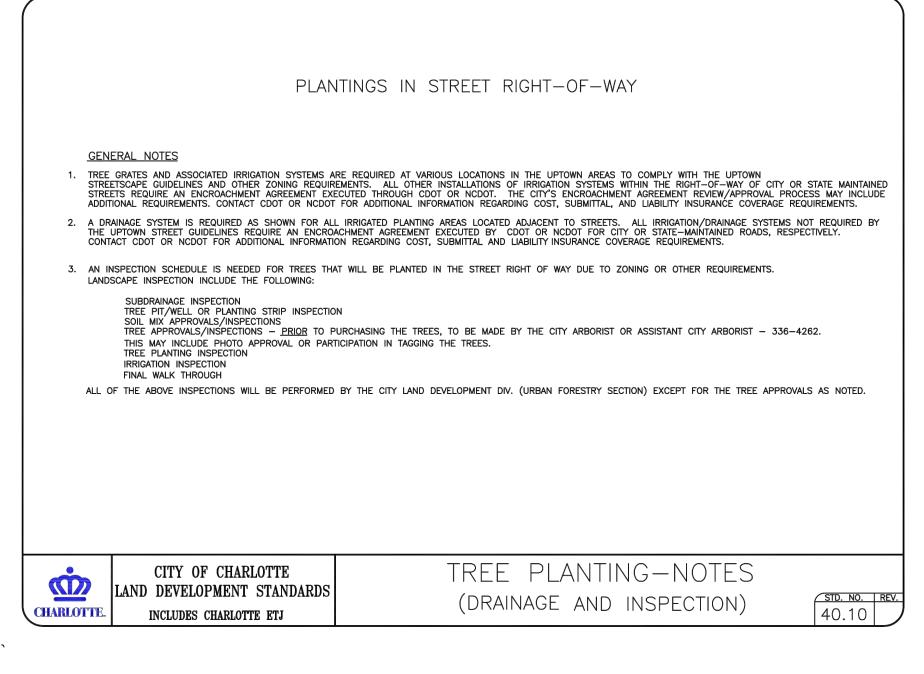
TREE PLANTING

(FOR SINGLE AND MULTI-STEM TREES)









Plant Material

1. Minimum tree size at planting is 2" caliper and 8' tall for single-stem trees. All multi-stem plants must be tree form, maximum 3 to 5 trunks, and minimum 10' tall. Where 3" single-stem caliper trees are specified/required the minimum height shall be 10' tall, if

multi-stem trees are specified then they shall be a minimum of 12' tall. 2. All new trees must have straight trunks with strong central leaders intact to the top of the crown unless multi-stem trees are specified. All required trees shall be typical of their species and variety, have normal growth habits, have well-developed branches, be vigorous and have fibrous root systems. Trees with major girdling roots will NOT be accepted. Trees with codominant branching will NOT be accepted. Trees that have been sheared, topped or cut back to multiply the branching structure will NOT be accepted. Trees shall be free of abrasions, damage, disease, pests and cracks. All pruning cuts greater than ½ inch diameter shall have callus tissue formed prior to planting. No pruning cut on the trunk shall be more than one-half the diameter of the central leader at the height where the cut was made. Root flares shall be located at grade. Trees with more than 2" of soil covering the root ball/flare from will NOT be accepted

3. Size of required plants, spread of roots and size of balls shall be in accordance with ANSI Z60.1 (latest edition) as published by the

American Nursery & Landscape Association, except where specified/authorized by Urban Forestry. 4. All required trees of a particular species and variety shall be uniform in size and configuration.

5. Perimeter trees in urban zones shall be 3" in caliper and be free of branches up to 6' from the top of root crown (ball). 6. A minimum of 50% of new trees must be native species, and sites with more than 20 trees required will have to install multiple (3 or

more) species pursuant to the Tree Ordinance Guidelines. . 75% of required trees must be large mature species except in situations with overhead power line co

Planting Requirements

8. See CLDS 40.01 & 40.09 (on plan) for detailed tree planting requirements. 9. Plastic hose parts will NOT be accepted for tree staking. See CLDS 40.01 for approved staking method/materials.

10. All strapping, and top 1/3 of wire basket and burlap must be cut away and removed from root ball when planting. 11. For new planting areas, remove all pavement, gravel sub-base and construction debris; remove compacted soil and add 18" new topsoil, or till and amend the top 18" of existing soil to meet topsoil/planting mix standards for trees (within entire minimum area of 274

12. Trees planted on public street right-of-way require approval from Urban Forestry prior to installation. 13. Review soil requirements in the Tree Ordinance Guidelines.

Utility Issues

14. If utility is to be installed in/near any required tree(s) or Tree Save Area(s), call Urban Forestry PRIOR to utility installation. 15. Large maturing trees may not be planted within 25' of overhead power distribution or transmission lines.

16. If trees conflict with any utilities or signs; call Urban Forester to resolve BEFORE planting. 17. Adjust tree planting locations to avoid existing underground utilities. Plant 15' from all underground utilities.

18. No light poles, utilities or transformers can be installed in tree islands.

19. Commercial scale lighting (> 15' in height) must be a minimum distance of 30' from a tree. Pedestrian scale lighting (≤ 15' in height) must be a minimum distance of 15' from a tree. Show site lighting on landscape plan.

<u>Tree Save and Preservation</u>
20. Tree protection must be installed and verified by Urban Forestry prior to starting ANY construction activity. 21. Show tree protection and trees save areas on demolition, erosion control, grading and landscape plan sheets.

22. Commercial tree save areas must be recorded on a final plat with the Mecklenburg County Register of Deeds before Urban Forestry holds can be released. A 10' no build zone around tree save areas must be referenced on the plat.

23. Tree Save Areas shall be free of invasive plant species. If an area proposed for tree save contains invasive plant

species at time of proposal, such invasive plant species shall be removed prior to final CO. 24. The area of any easements (water, sewer, utility, etc.) can NOT be counted toward the tree save requirement.

25. Any activity in tree save areas must be accomplished without mechanized equipment.

26. No structure will be allowed within 10' of tree save areas unless approved by Urban Forestry.

27. All trees on public street right-of-way/property are protected and removal must be permitted by Urban Forestry.

28. Contact Urban Forestry PRIOR to any crane set-up, machinery operation or temporary building erection that may impact protected trees, tree save areas, including City trees in public right-of-way. Impacts may include but are not limited to: encroaching in tree drip-lines, excavation, soil compaction, tree trimming, erecting and dismantling of construction cranes.

General
29. Submit required CO/hold release form at https://charlottenc.gov/developmentcenter for an inspection of tree protection/planting areas,

a minimum of 3 days before the CO/hold release is needed. 30. Visit City of Charlotte's CLT Development Center website for additional information and urban forestry requirements:

https://charlottenc.gov/developmentcenter then click Trees. 31. All tree save payment-in-lieu, perimeter tree payment in lieu, and City tree mitigation payments (checks) must be submitted to:

Attn: Urban Forestry Supervisor **CLT Development Center**

600 E. Fourth St. (1st Floor) Charlotte, NC 28202

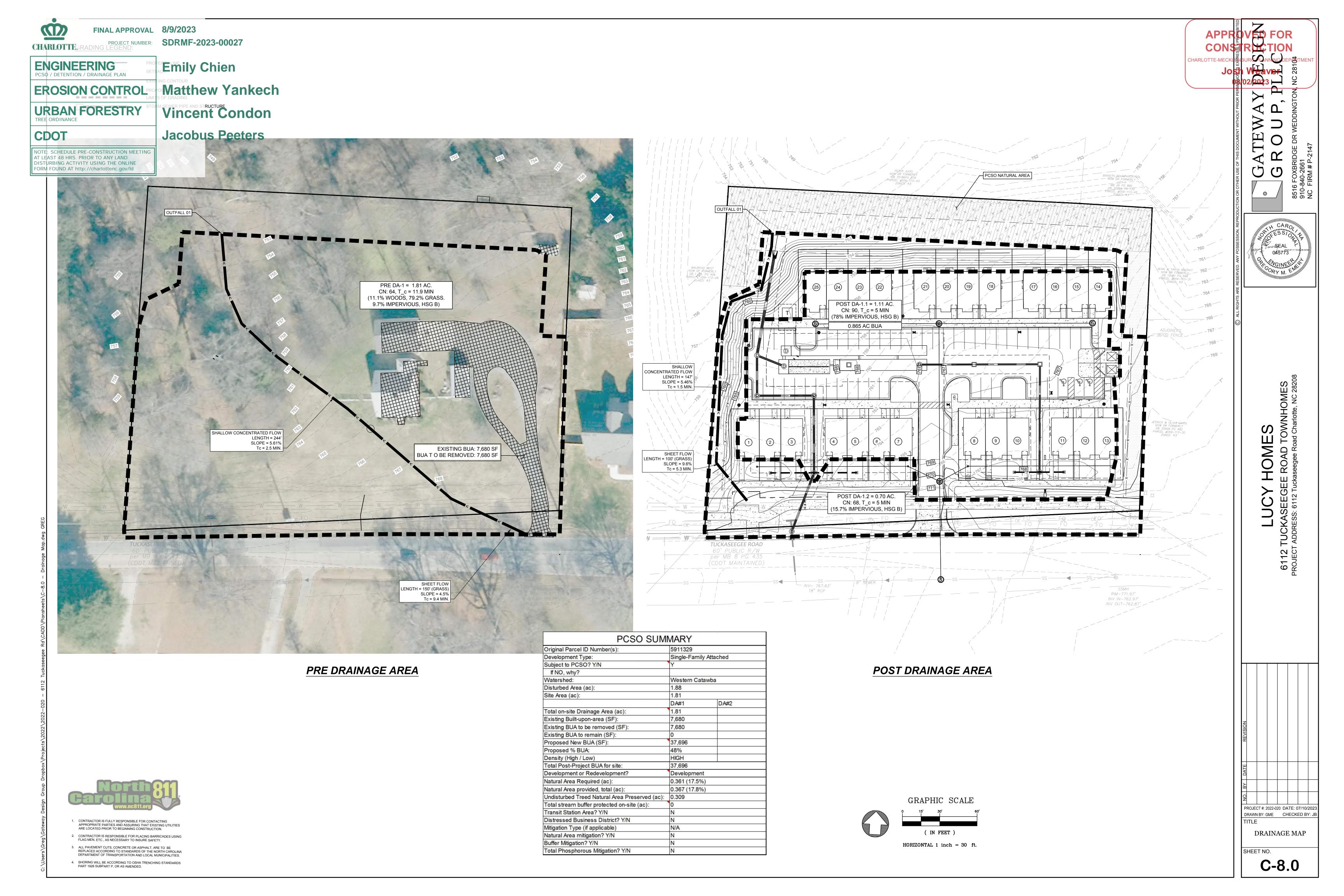
JMC H H LUCY
6112 TUCKASEEGE
PROJECT ADDRESS: 6112 Tuc

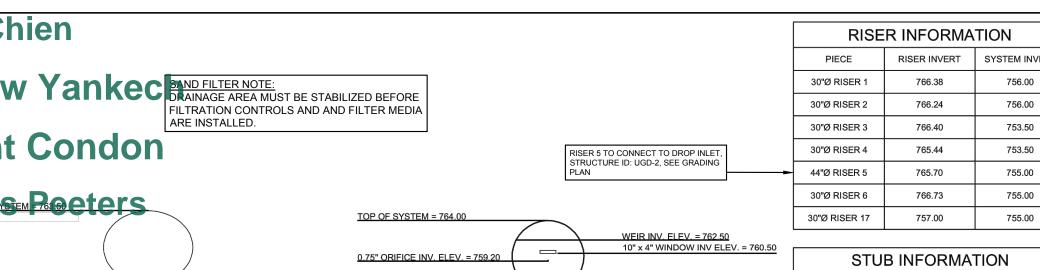
PROJECT #: 2022-020 DATE: 07/10/202 DRAWN BY: GME CHECKED BY: JE

LANDSCAPE DETAILS

SHEET NO.

C-6.1





REQUIRED BACKFILL

33" SEE TYPICAL BACKFILL DETAIL

NOT TO SCALE

CHATECH CINTECH' CMP DETENTION SYSTEMS NGINEERED SOLUTIONS LLC www.ContechES.com **PROPOSAL** 7037 Ridge Road, Hanover, MD 21076 443-457-1500 410-740-8490 410-740-8492 FAX

2'-6"

PIPE Ø

PLAN

2'-6"

FRONT

48"Ø to 90"Ø FITTING REINFORCEMENT

MAY BE REQUIRED BASED ON HEIGHT OF

COVER AND LIVE LOAD CONDITION

TYPICAL MANWAY DETAIL

NOT TO SCALE

142"X91"Ø UNDERGROUND DETENTION SYSTEM - 739761-010 TUCKASEEGEE ROAD CHARLOTTE, NC SITE DESIGNATION: SANDFILTER

TRENCH CONDITION

7

BEDDING

PIPE ≤ 12": D + 16"

PIPE < 24": 3.0D

PIPE > 12": 1.5D + 12"

PIPE > 144": D + 10'0"

4 CORRUGATED STEEL PIPE (CSP / HEL-COR).

PER THE ENGINEER OF RECORD (26.5.4.1).

FOUNDATION (2)

FINAL BACKFILL

INITIAL BACKFILL

- INITIAL FILL ENVELOPE (1)(1a)-

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):

PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).

THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).

FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).

BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER.

CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).

3 ENGINEER TO DETERMINE IF BEDDING IS REQUIRED. BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY

5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).

6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.

6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF

ENGINEER TO DETERMINE IF GEOTEXTILE SHOULD BE USED TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT

7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS

FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2

TYPICAL BACKFILL DETAIL

5a INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90%

STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS

RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3

SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM

EMBANKMENT CONDITION

IN SITU

COVER | PROFILE

12" 1 1/2" x 1/4"

12" 2 2/3" x 1/2"

12" 3" x 1". 5" x 1

102"-144" D/8 3" x 1", 5" x 1"

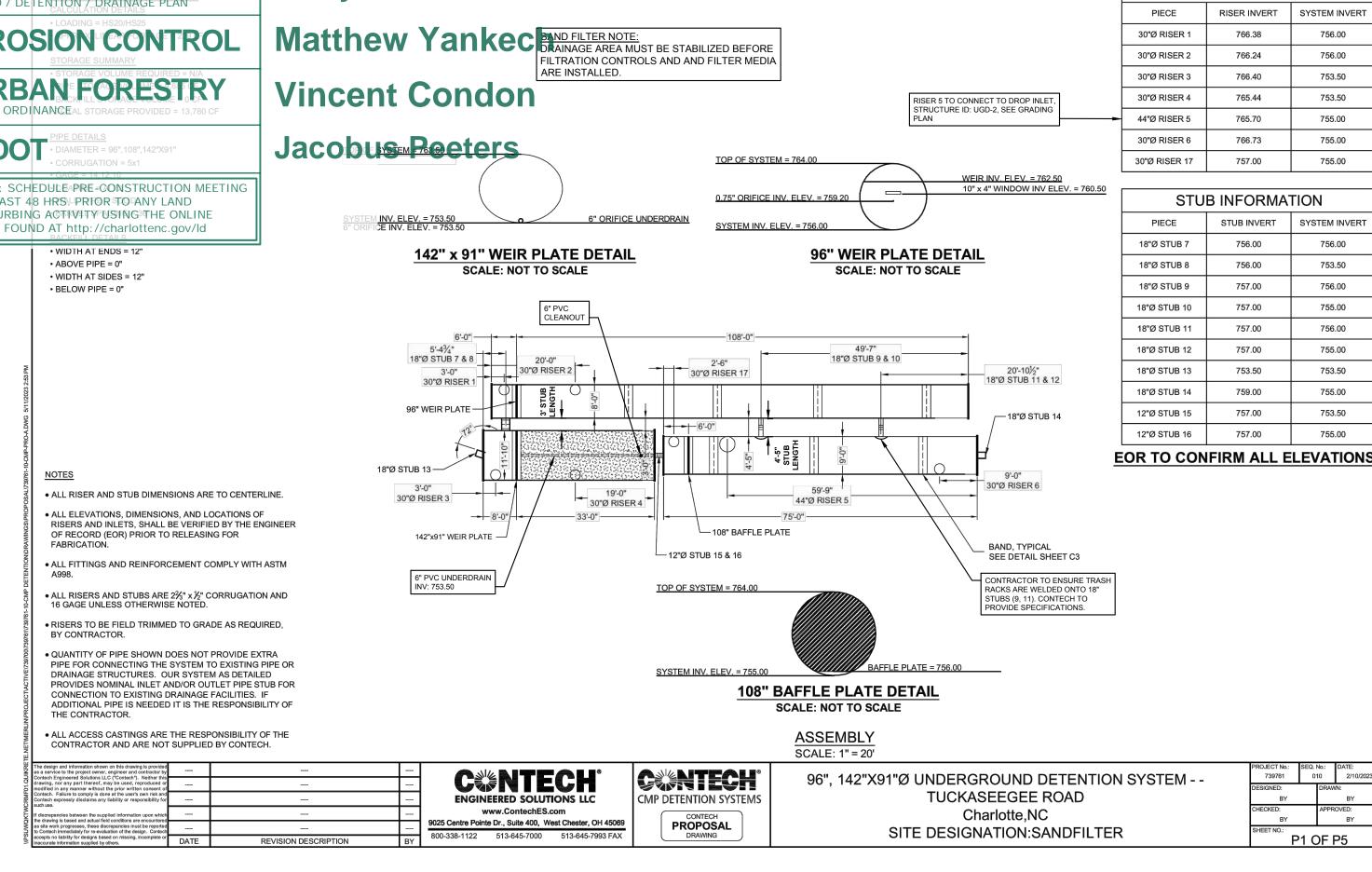
DIAMETER

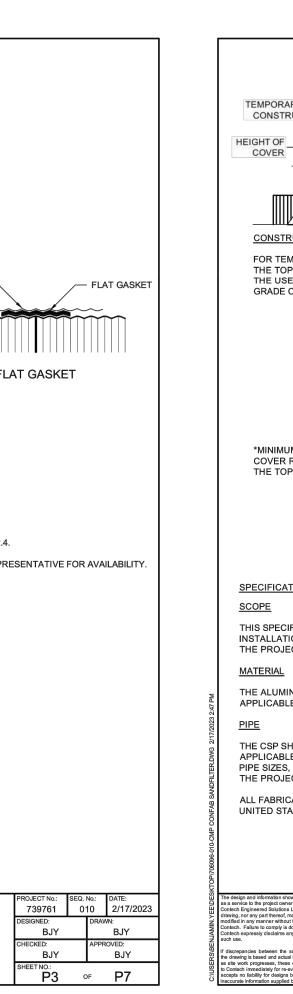
6"-10"

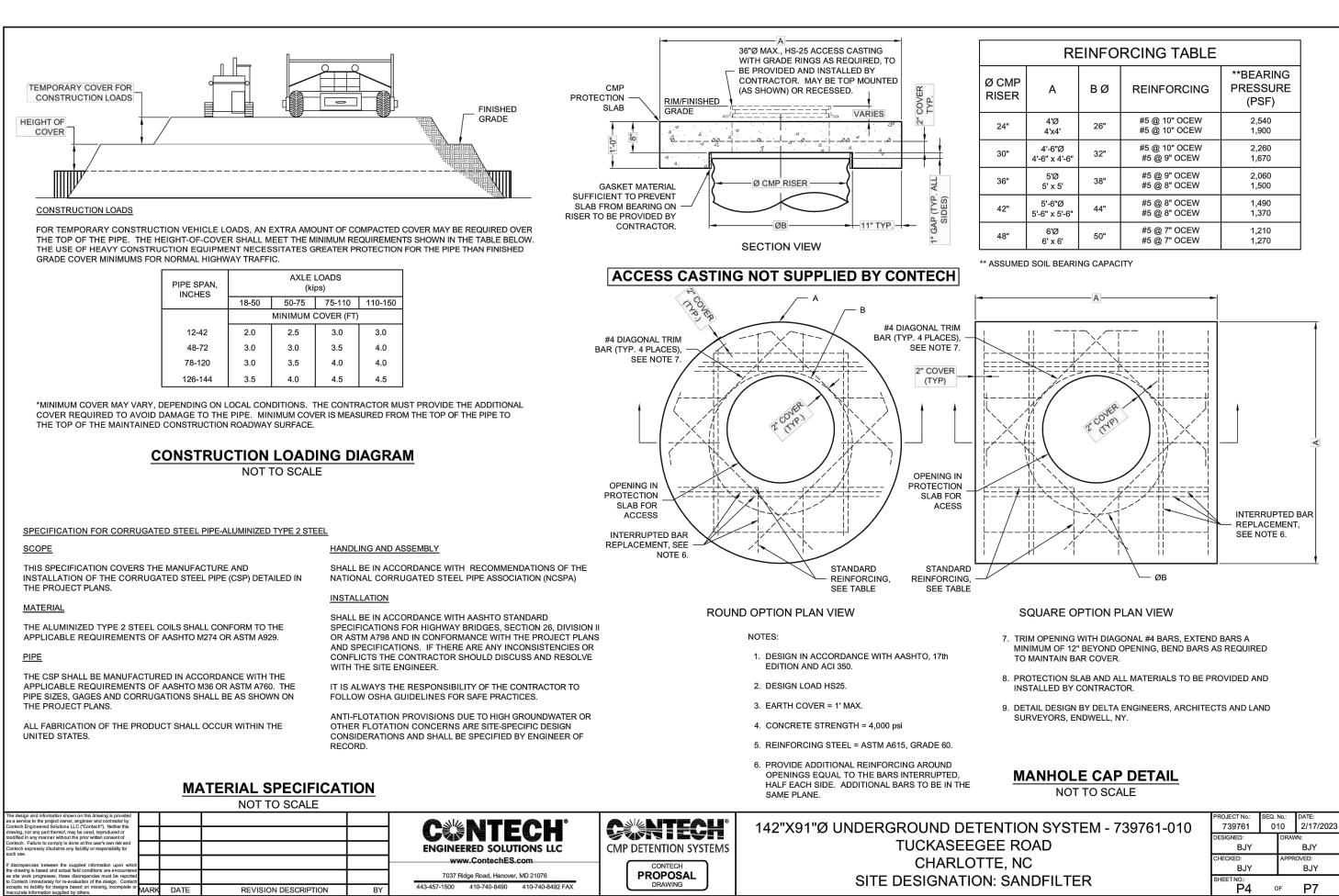
12"-48"

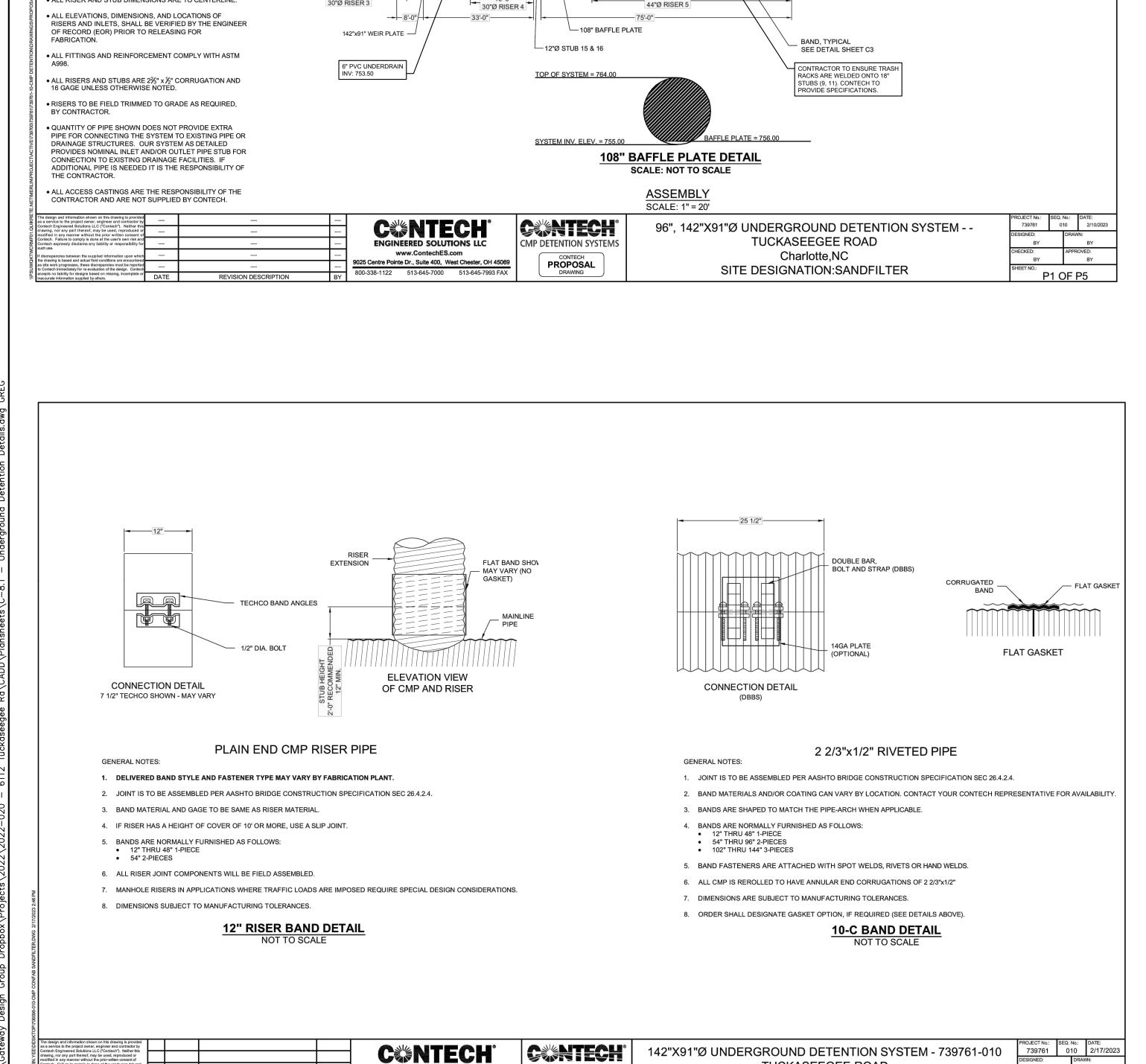
54"-96"

BJY BJY BJY BJY of **P7**







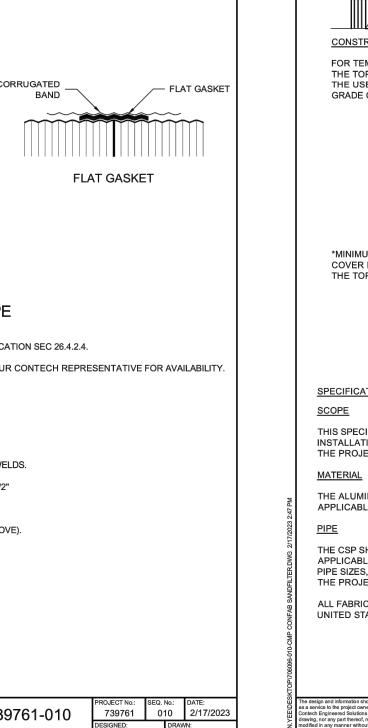


CMP DETENTION SYSTEMS

PROPOSAL

www.ContechES.com

443-457-1500 410-740-8490 410-740-8492 FAX



TUCKASEEGEE ROAD

CHARLOTTE, NC

SITE DESIGNATION: SANDFILTER

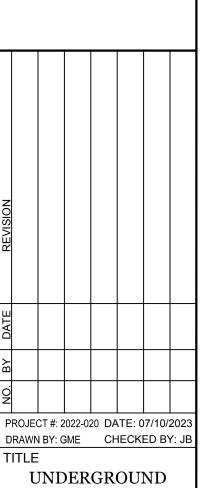


RODANNIG



OWNHOMES

Id Charlotte, NC 2820 ME 12 ⁻ JECT 61



SHEET NO. C-8.1

DETENTION DETAILS



SDRMF-2023-00027 PROJECT NUMBER:

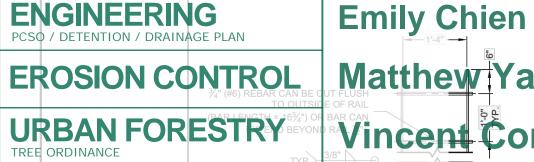
ACCESSIBILITY, THE PRACTICALITY AND SUITABILITY OF

AND/OR INCORPORATING LADDERS IN THESE SMALLER

DIAMETER RISERS SHOULD BE ADDRESSED BY THE

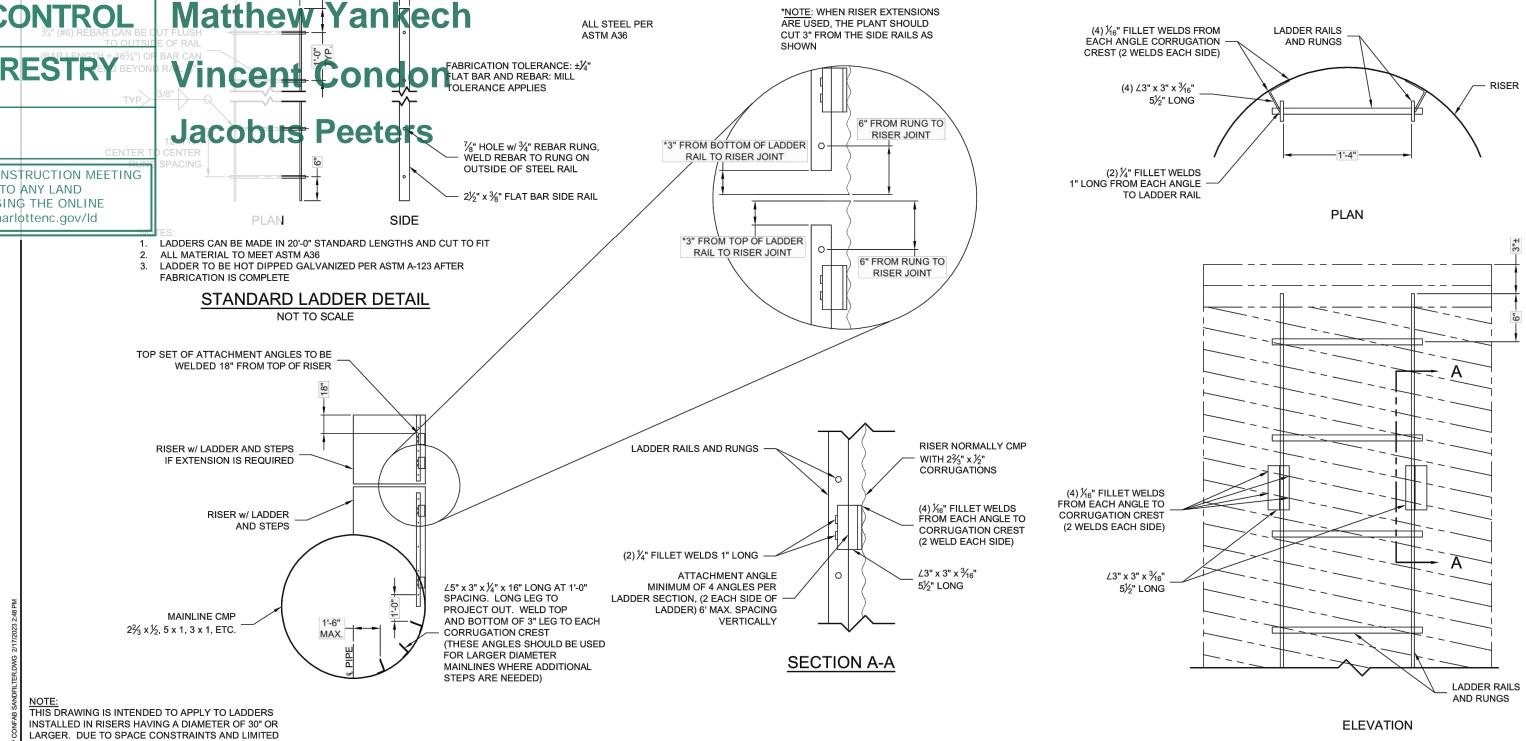
UTILIZING RISERS SMALLER THAN 30" DIAMETER

OWNER AND PROJECT ENGINEER



CDOT NOTE: SCHEDULE PRE-CONSTRUCTION MEETING

AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld



RISER LADDER DETAIL

NOT TO SCALE

IGINEERED SOLUTIONS LLC

www.ContechES.com

7037 Ridge Road, Hanover, MD 21076

CANTECH

CMP DETENTION SYSTEMS

PROPOSAL

739761 010 2/17/2023

BJY

BJY

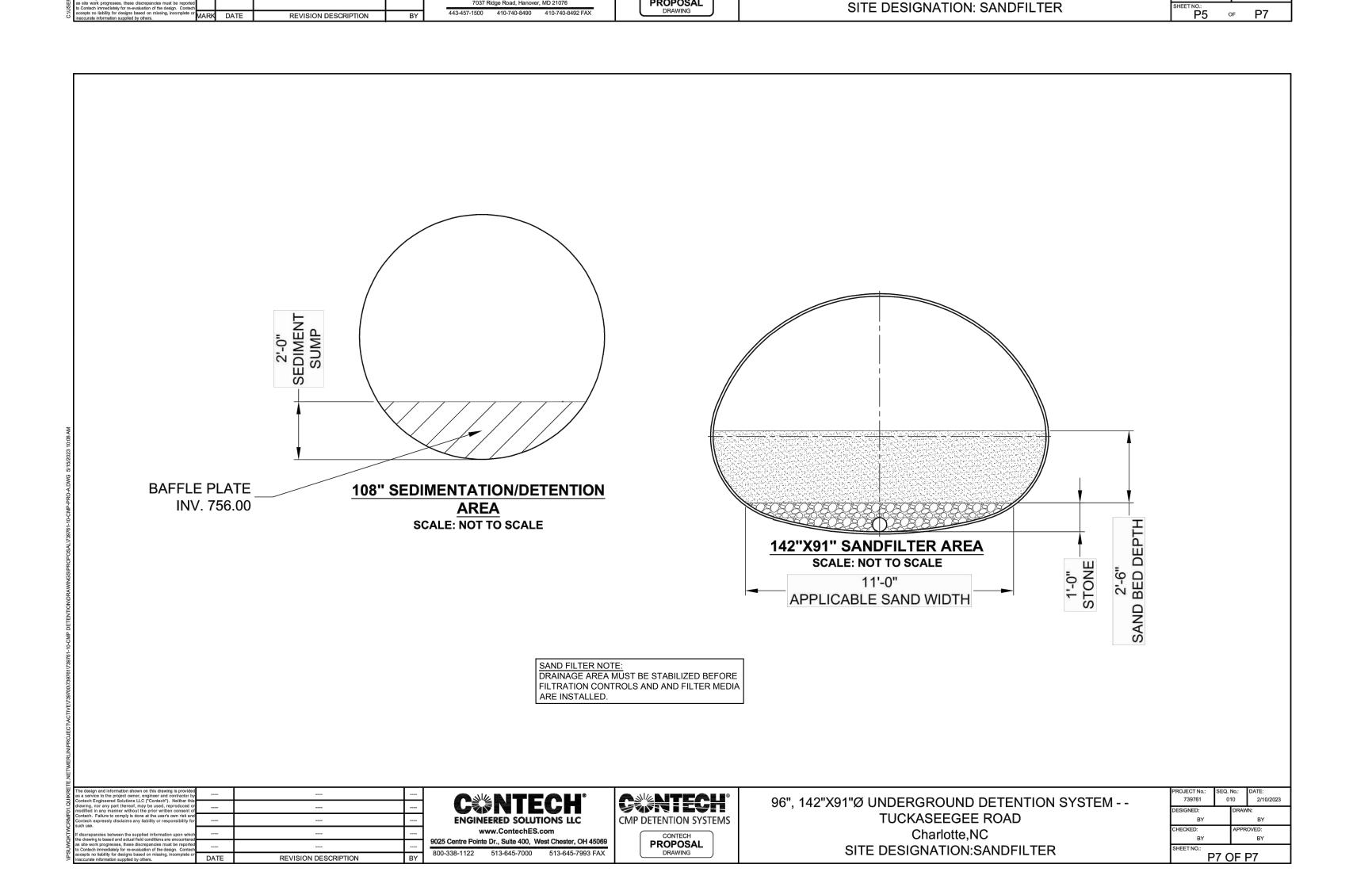
BJY

BJY

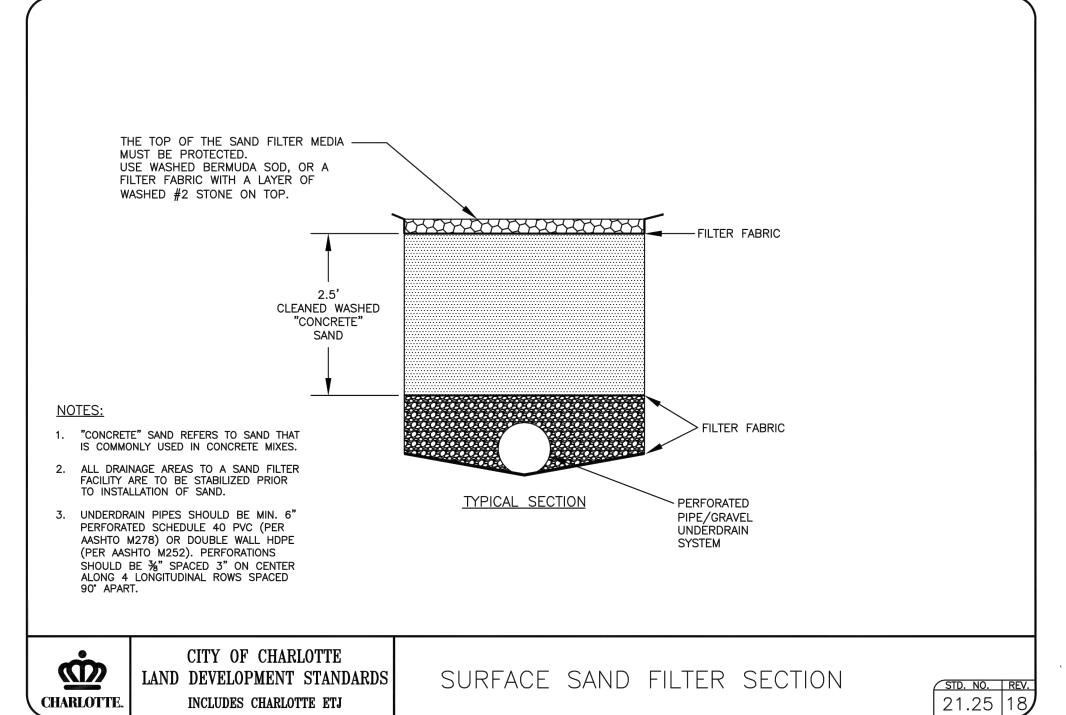
142"X91"Ø UNDERGROUND DETENTION SYSTEM - 739761-010

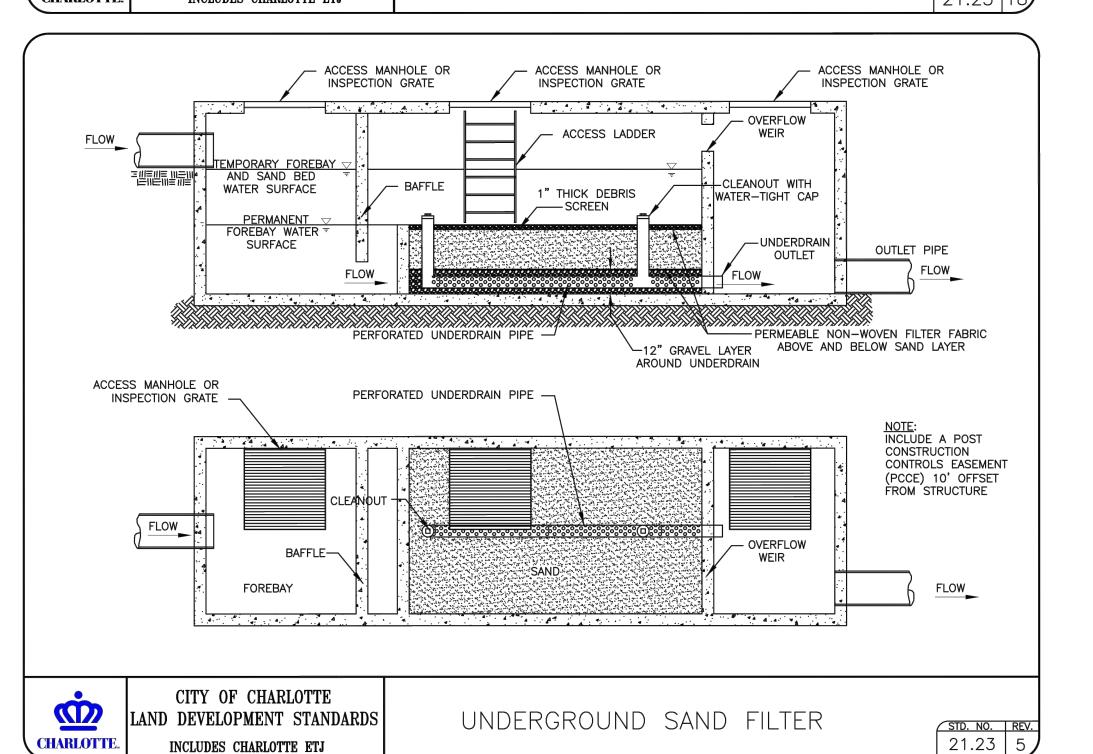
TUCKASEEGEE ROAD

CHARLOTTE, NC

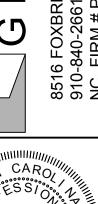


BMP Inset Table Sand Filter 112 Tuckaseegee Road Townhome Project Name Sequence ID: 1.11 Prainage Area (acres): Land Use/Development Type: 0.25 to 1.5 acres - Residential egetation Type: N/A 78% Percent Built-Upon Area: Sediment Chamber Length (ft.): Sediment Chamber Width (ft.): 10 Sediment Chamber Height (ft.): Sand Filter Type: Underground Media Depth (ft.): 2.5 Media Surface Area (ft2): 363 Flow Diverter Present (Y/N): Regulated By: Post Construction Ordinance reatment Effectiveness: Optimal NC State Plane X (easting): 1424133.576 C State Plane Y (northing) 549675.475



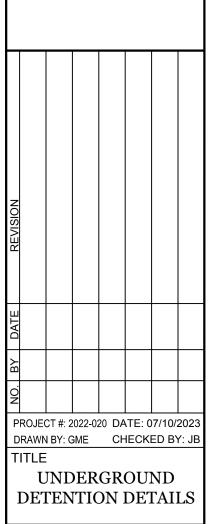


JRC PLANNING



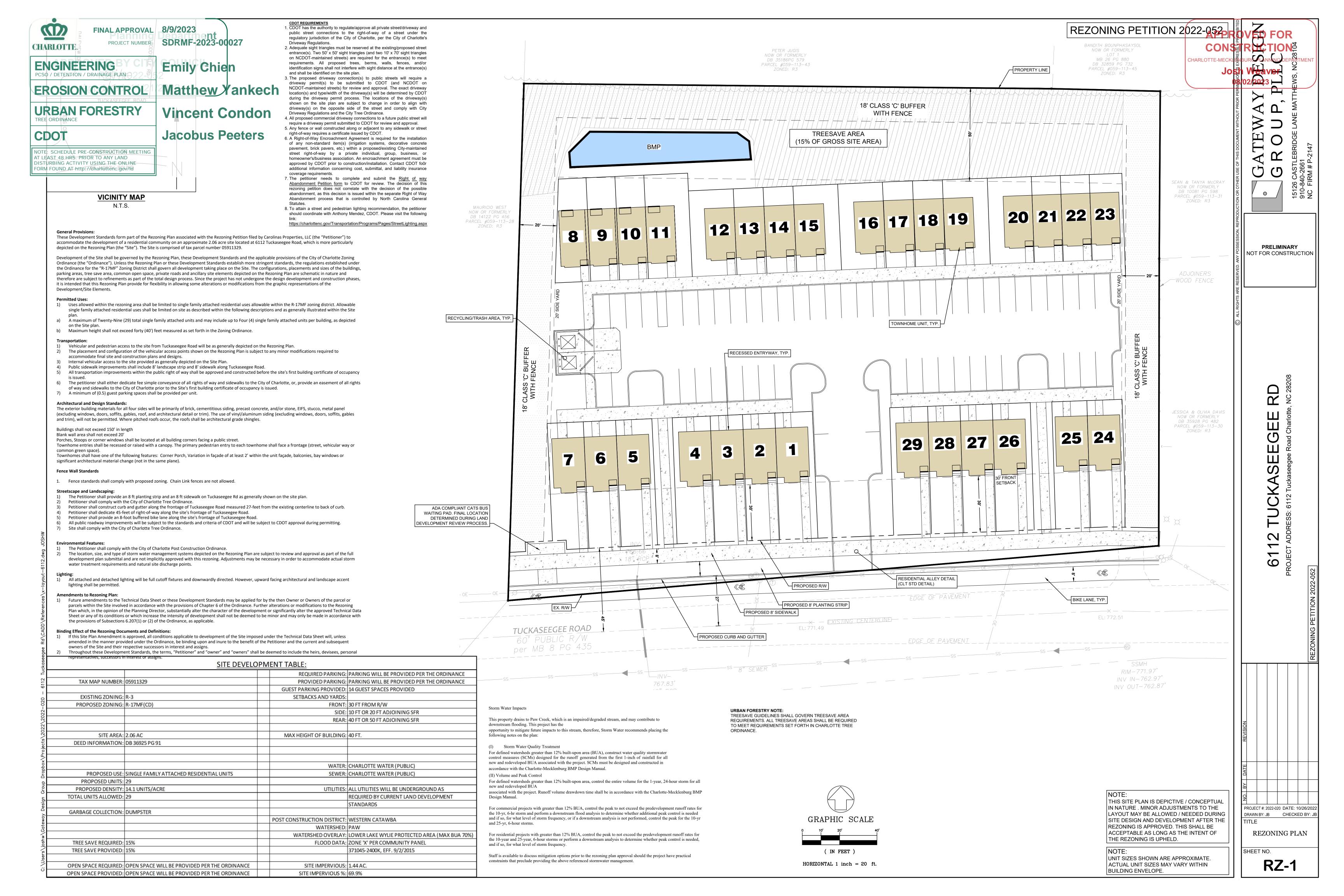


TOWNHOMES AND CHARLOW NC 28208 **JMC** LUCY HC 6112 TUCKASEEGEE RO PROJECT ADDRESS: 6112 Tuckaseeg



C-8.2

SHEET NO.





FINAL APPROVAL 8/9/2023 PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING
PCSO DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY
TREE ORDINANCE

CDOT

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS, PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

Charlotte, North Carolina 28202 Tony F. Miller, AIA LEED AP #6201 PH: 704-377-8500

Emily Chien Matthew Yankech Vincent Condon Jacobus Peeters



PERSPECTIVE VIEW

·			
	Exterior Materi	als Key	
KEY	DESCRIPTION	SIZE	LOCATION - See
AL-1	Aluminum Gutter and Downspout - Color to Match Fascia	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	As Noted on Elevations
	The state of the s		The Hotel on Elevations
BRK-1	Triangle Brick - Camden	Modular · · · · · · · · · · · · · · · · · · ·	Majority Modular Face Brick,
BRK-2	Green Leaf Brick - Black Walnut	Modular	Accent Brick Bands & Accents
MTR-1	"Dark Grey" Mortar by Hölcim	3/8" Joints	At All Face Brick & Brick Pavers
			<u> </u>
WD-1	Cedar Brackets Color to Match Trim	See Details	Typical Wood Bracket as Noted on Elevations
SID-1	James Hardie - Hardie Panel Vertical Siding - 'Iron Gray'	Smooth Texture	Typical Siding as Noted on Elevations
SID-2	James Hardie - Hardie Trim Smooth Batten Boards - 'Iron Gray'	Smooth Texture	Typical Siding Accent as Noted on Elevations
	<u></u>		
TRM-1	James Hardie Trim.	4" Smooth Texture	Typical Trim
TRM-2	James Hardie Trim.	6" Smooth Texture	Typical Trim
TRM-3	James Hardie Trim.	8" Smooth Texture	
TRM-4	James Hardie Trim.	10" Smooth Texture .	
. <u> </u>			
MTL:-1	Metal Sales Manufacturing Corporation - Image II, 12" Striated Metal Roof	77.	
SHG-1	30 Year "Pewter Gray" Shingle GAF Timberline Natural Shingles		Roofing as Noted on Elevations

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Only Architect and Engineer sealed written documents are part of the "Construction Documents and take precedence over any other information.

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The General Contractor is responsible to insure all Subcontractors comply with product warranties. The Contractor shall bring any conflicts, errors or omissions to the attention of Tony F. Miller, AIA at the time of bidding/pricing prior to proceeding with construction.

All Contractors shall conform to Good Building Practices and product recommendations in the construction where performance standards are not described in the drawings or specifications. The Owner has the Authority to approve equal

allowed by the notation "or equal" except for Caution should be exercised in making changes from these drawings. Only Tony F. Miller, AIA may approve assembly modifications, as even minor changes could lead to more significant problems or additional expenses to other trades. Proposed value engineering suggestions shall be submitted to the Owner & Architect with a Change · Order request specifying proposed cost and time

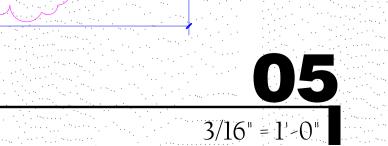
substitutions of products shown in the plans where



SIDE ELEVATION

SIDE ELEVATION





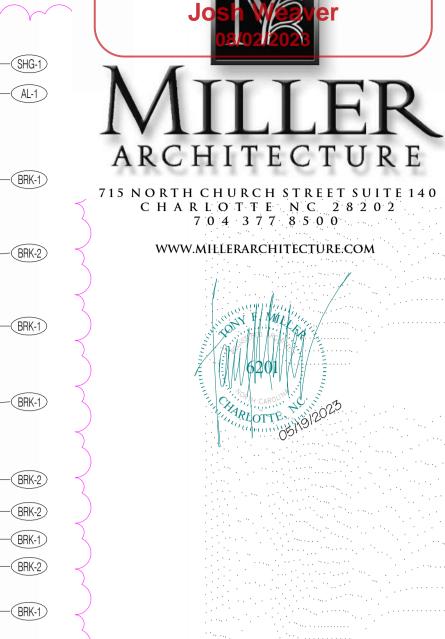
3/16" = 1'-0"



REAR ELEVATION 3/16" = 1'-0"



FRONT ELEVATION 3/16" = 1'-0"



STRUCTURAL ENGINEER

TUCKASEEGEE TOWNHOMES LAND-FOR-SALE 6112 Tuckaseegee Road

CAROLINA PROPERTIES, LLC 1401 FUNNY CIDE DR. WAXHAW, NC 28173 718.607.4595

ISSUED FOR Civil Review

07/07/2023

REVISIONS Description Civil Review Comments

ISSUE DATE: 05/19/2023

STRUCTURE ELEVATIONS - UNITS 1-3, 8-10, 11-13

> Tuckaseegee Townhomes
> FILE NAME: 6ll2_Triplex.rvt DRAWNBY. DZ CHECKED BY: TFM



PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING
PCSO DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY
TREE ORDINANCE

CDOT

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

Charlotte, North Carolina 28202 Tony F. Miller, AIA LEED AP #6201 PH: 704-377-8500

Emily Chien

Matthew Yankech Vincent Condon Jacobus Peeters

—(AL-1)

Average Grade Average Grade 69' - 11 1/4" 322-9 1/4

LOCATION - See

Elevations

PERSPECTIVE VIEW

DESCRIPTION

Practices and product recommendations in the

described in the drawings or specifications. The Owner has the Authority to approve equal

construction where performance standards are not

substitutions of products shown in the plans where allowed by the notation "or equal" except for

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changes could lead to more significant problems or

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· additional expenses to other trades.

Exterior Materials Key

SIDE ELEVATION

3/16" = 1'-0"

REAR ELEVATION

3/16" = 1'-0"

TUCKASEEGEE

TOWNHOMES

LAND-FOR-SALE

STRUCTURAL ENGINEER

715 NORTH CHURCH STREET SUITE 140 C H A R L O T T E N C 2 8 2 0 2 7 0 4 3 7 7 8 5 0 0

WWW.MILLERARCHITECTURE.COM

6112 Tuckaseegee Road

____ CAROLINA PROPERTIES, LLC

1401 FUNNY CIDE DR. WAXHAW, NC 28173 (718) 607-4595

ISSUED FOR Civil Review ISSUE DATE: 05/19/2023

REVISIONS Description Civil Review Comments

STRUCTURE ELEVATIONS - UNITS

07/07/2023

4-7

Tuckaseegee Townhomes 6112_4 FILE NAME: Unit.rvt DRAWNBY. DZ CHECKED BY: TFM

As Noted on Elevations Majority Modular Face Brick, Accent Brick Bands & Accents At All Face Brick & Brick Pavers Typical Wood Bracket as Noted on Elevations Cedar Brackets Color to Match Trin James Hardie - Hardie Panel Vertical Siding - 'Iron Gray' James Hardie - Hardie Trim Smooth Batten Boards - 'Iron Gr Typical Siding as Noted on Elevations Typical Siding Accent as Noted on Elevations Metal Sales Manufacturing Corporation - Image II, 12" Striated Metal Roof The Architectural plans are the property of Miller Architecture and may not be reproduced without the written agreement of Tony F. Miller, AIA.
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The General Contractor is responsible to insure all Subcontractors comply with product warranties. The Contractor shall bring any conflicts, errors or omissions to the attention of Tony F. Miller, AIA at Blank Wall Blank Wall the time of bidding/pricing prior to proceeding with construction.

All Contractors shall conform to Good Building

Bay Window

SIDE ELEVATION

FRONT ELEVATION

RAWING INDEX CHARLOTTE.

FINAL APPROVAL 8/9/2023

PROJECT NUMBER: SDRMF-2023-00027

ENGINEERING
PCSO / DETENTION / DRAINAGE PLAN

Emily Chien

EROSION CONTROL

Matthew Yankech

URBAN FORESTRY
TREE ORDINANCE

Vincent Condon CDOT

Jacobus Peeters

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

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· Order request specifying proposed cost and time

additional expenses to other trades.

described in the drawings or specifications.

The Owner has the Authority to approve equal



SIDE ELEVATION 3/16" = 1'-0" Average Grade 69' - 11 1/4"

REAR ELEVATION

TUCKASEEGEE 3/16" = 1'-0"

TOWNHOMES

LAND-FOR-SALE

6112 Tuckaseegee Road

CAROLINA PROPERTIES, LLC

STRUCTURAL ENGINEER

715 NORTH CHURCH STREET SUITE 140 C H A R L O T T E N C 2 8 2 0 2 7 0 4 3 7 7 8 5 0 0

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ISSUED FOR: Civil Review ISSUE DATE: 05/19/2023.

REVISIONS Description

Civil Review Comments

07/07/2023

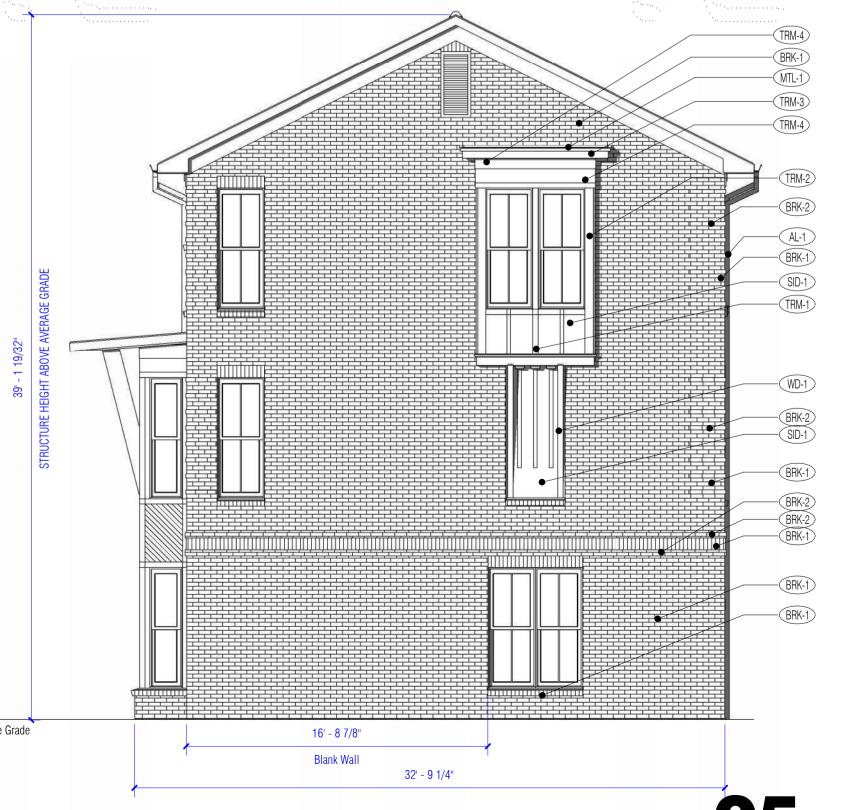
STRUCTURE ELEVATIONS - UNITS

> Tuckaseegee Townhomes 6112_4 FILE NAME: Unit_Units 14-25 rvt DRAWNBY. DZ CHECKED BY: TFM

14-25

3/16" = 1'-0"

Blank Wall 32' - 9 1/4"



Average Grade 05 3/16" = 1'-0"

Average Grade 69' - 11 1/4"

FRONT ELEVATION

PERSPECTIVE VIEW Exterior Materials Key LOCATION -DESCRIPTION See Elevations

AL-1 Aluminum Gutter and Downspout - Color to Match Fascia BRK-1 Triangle Brick - Camden
BRK-2 Green Leaf Brick - Black Walnu Majority Modular Face Brick, Accent Brick Bands & Accents MTR-1 "Dark Grey" Mortar by Holcin At All Face Brick & Brick Pavers Typical Wood Bracket as Noted on Elevations WD-1 Cedar Brackets Color to Match Trim SID-1 James Hardie - Hardie Panel Vertica) Siding - 'Iron Gray'
SID-2 James Hardie - Hardie Trim Smooth Baften Boards - 'Iron Gray' Smooth Texture
Smooth Texture Typical Siding as Noted on Elevations
Typical Siding Accent as Noted on TRM-1 James Hardie Trim.
TRM-2 James Hardie Trim.
TRM-3 James Hardie Trim.
TRM-4 James Hardie Trim. MTL-1 Metal Sales Manufacturing Corporation - Image II, 12" Striated Metal Roo SHG-1 30 Year "Pewter Gray" Shingle GAF Timberline Natural Shingles

SIDE ELEVATION