Administrative Approval Action

Case File / Name: ASR-0048-2023
Block 4 Midrise

City of Raleigh
Development Services Department
One Exchange Plaza
Raleigh, NC 27602
(919) 996-2492
currentplanning@raleighnc.gov
www.raleighnc.gov

LOCATION: This 4.97 acre site zoned PD (Planned Development) is located on the East side of Hardimont Road Extension at 500 Hardimont Road. The site for this development is proposed Lot 9 of subdivision case SUB-S-46-17 (Revision approved 9/25/24).

REQUEST: This is a proposed six-story mixed use building consisting of 468,216 square feet total space with 330 residential units and 5,988 square feet of retail space and associated parking and infrastructure.

DESIGN ADJUSTMENT(S)/ ALTERNATES, ETC: N/A

FINDINGS: **City Administration finds that this request, with the below conditions of approval being met, conforms to the Unified Development Ordinance. This approval is based on a preliminary plan dated August 14, 2024 by Mcadams.**

CONDITIONS OF APPROVAL and NEXT STEPS:

This document must be applied to the second sheet of all future submittals except for final plats. This is a preliminary plan and as such no permits have been issued with this approval. To obtain permits and/or completion of the project, the following steps are required:

☑ **SITE PERMITTING REVIEW** - For land disturbance of 12,000 square feet or greater, public or private infrastructure, shared stormwater devices, etc. Site Permitting Review may be submitted upon receipt of this signed approval document.

The following items are required prior to approval of Site Permitting Review plans:

General

1. Staff continues to have concerns with the private drive operational impacts with respect to driver recognition of a vertical drop off. A stop control has been provided but no signage or delineation has been provided. This will be addressed prior to site permitting review.

2. Address the development name issue as the submittal and project name on the initial submittal is St. Albans Residential whereas the application (see cover sheet) and the site plan title sheet read "Block 4 Midrise". Contact CSC regarding possible name change request needed.

Engineering

3. A public infrastructure surety shall be provided to City of Raleigh Transportation – Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.

4. A Traffic Control and Pedestrian (TCPED) Plan must be approved and a right-of-way occupancy permit must be obtained from Right-of-way Services for any construction activities within the right-of-way.

Public Utilities

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5. SUB-S-46-2017 REV phase 3 RCMP [lots 7 & 9] must be recorded (NOTE: this plat cannot be recorded until SUB SPR for lot 7 infrastructure is approved)

Stormwater

6. The State of North Carolina shall approve any proposed disturbance within the riparian buffer prior to the issuance of any grading or site permit (UDO 9.2.3.E).

7. A stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved (UDO 9.2).

8. A nitrogen offset payment must be made to a qualifying mitigation bank (UDO 9.2.2.B).

9. A surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City (UDO 9.4.4).

10. Plans shall be revised to correctly reflect the case under which each SCM will be permitted.

Urban Forestry

11. Tree protection fence must be inspected by Urban Forestry staff prior to the issuance of a grading permit.

☑ **LEGAL DOCUMENTS** - Email to legaldocumentreview@raleighnc.gov. Legal documents must be approved, executed, and recorded prior to or in conjunction with the recorded plat on which the associated easements are shown. Copies of recorded documents must be returned to the City within one business day of recording to avoid withholding of further permit issuance.

☑	Slope Easement Deed of Easement Required
☑	Stormwater Maintenance Covenant Required

☑	Cross Access Agreements Required

☑ **RECORDED MAP(S)** - Submit plat to record new property lines, easements, tree conservation areas, etc.). Plats may be submitted for review when the Site Permitting Review plans, if required, have been deemed ready for mylar signature.

The following items must be approved prior to recording the plat:

General

1. The greenway easement as shown on the preliminary plan shall be dedicated prior to, or in conjunction with the recording of a map in any phase affected by the greenway.

Engineering

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2. A sidewalk deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)

3. A cross access agreement among the lots shall be approved by the Development Services Department for recording in the Wake County Registry, and a copy of the recorded offer of cross access easement shall be returned to the Development Services Department within one day of plat recordation. If a recorded copy of the document is not provided within this time, further recordings and building permit issuance will be withheld.

Public Utilities

4. Site Permit Review plans (SPR) must be approved by the City of Raleigh Public Utilities Department for all public water, public sewer and/or private sewer extensions.

Stormwater

5. The riparian buffers, in accordance with the preliminary plan and the State of North Carolina regulations, shall be shown on plats for recording along with required buffer statement (Recorded Map Checklist).

6. A surety equal to 125% of the cost of the construction of a stormwater device shall be paid to the Engineering Services Department (UDO 9.2.2.D.1.d).

7. The City form document entitled Declaration of Maintenance Covenant and Grant of Protection Easement for Stormwater Control Facilities shall be approved by the City and recorded with the county register of deeds office (UDO 9.2.2.G).

8. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).

9. The maximum allocated impervious area for all applicable lots in the subdivision should be identified on all maps for recording.

10. The flood prone areas, as approved by the City Stormwater Engineer and shown on the preliminary plan, shall be shown on the recorded map (UDO 9.3.3.G).

☑ **BUILDING PERMITS** - For buildings and structures shown on the approved plans. Commercial building permit plans must include the signed, approved Site Permitting Review plans attached, if applicable. Permit sets may be reviewed prior to the recordation of required plats, but cannot be approved.

The following items must be approved prior to the issuance of building permits:

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General

1. The subdivision creating the proposed lot for this development, SUB-S-46-2017 (Revision approved 9/25/24) and the associated Site Permit Review plans (SPR plans) must be approved and recorded prior to issuance of building permits.

Engineering

2. A public infrastructure surety shall be provided to City of Raleigh Transportation – Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.

3. A fee-in-lieu for public improvements not extended to property line shall be paid to the City of Raleigh (UDO 8.1.10).

Public Utilities

4. A plat must be recorded at the Wake County Register of Deeds office for all utility easement dedications.

Stormwater

5. The City form document entitled Declaration of Maintenance Covenant and Grant of Protection Easement for Stormwater Control Facilities shall be approved by the City and recorded with the county register of deeds office (UDO 9.2.2.G).

6. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).

Urban Forestry

7. A tree impact permit must be obtained for the approved streetscape tree installation in the right of way. This development proposes 6 street trees along Hardimont Road.

8. A public infrastructure surety for 6 street trees along Hardimont Road shall be provided to City of Raleigh Transportation – Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.

The following are required prior to issuance of building occupancy permit:

General

1. Final inspection of all tree conservation areas and right of way street trees by Urban Forestry Staff

2. All street lights and street signs required as part of the development approval are installed.

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3. Required public right-of-way infrastructure improvements shall be, at a minimum, sufficiently completed to provide the necessary, safe emergency and vehicular access.

Stormwater

4. As-built impervious survey is accepted by the Engineering Services Department (UDO 9.2).

5. As-built drawings and associated forms for all Stormwater devices are accepted by the Engineering Services Department (UDO 9.2.2.D.3).

EXPIRATION DATES: **The expiration provisions of UDO Section 10.2.8 E, including the ability to request extensions in the expiration date, apply to this site plan.** If significant construction has not taken place on a project after administrative site review approval, that approval may expire and be declared void, requiring re-approval before permits may be issued. To avoid allowing this plan approval to expire the following must take place by the following dates:

3-Year Expiration Date: October 9, 2027
Obtain a valid building permit for the total area of the project, or a phase of the project.

4-Year Completion Date:
Within four years after issuance of the first building permit for the site plan, the construction of the entire site plan must be completed unless an applicant has been granted vested rights. Failure to complete construction within this specified time frame shall automatically void the approved site plan for which no building permits have been issued.

I hereby certify this administrative decision.

Signed: Keegan McDonald Date: 10/09/2024
Development Services Dir/Designee

Staff Coordinator: Michael Walters

Administrative Site Review Application

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2500

Raleigh

This form is required when submitting site plans as referenced in Unified Development Ordinance (UDO) Section 10.2.8. Please check the appropriate building types and include the plan checklist document when submitting.

Office Use Only: Case #: _____ Planner (print): _____

Please review UDO Section 10.2.8. to determine the site plan tier. If assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the Permit and Development Portal. (Note: There is a fee for this verification service.)

Site Plan Tier: Tier Two Site Plan ☐ Tier Three Site Plan ☑

Building and Development Type (Check all that apply)		Site Transaction History
☐ Detached	☐ General	Subdivision case #: SUB-S-46-17
☐ Attached	☑ Mixed use	Scoping/sketch plan case #: _____
☐ Townhouse	☐ Civic	Certificate of Appropriateness #: _____
☐ Apartment	☐ Cottage Court	Board of Adjustment #: _____
☐ Tiny house	☐ Frequent Transit Development Option	Zoning Case #: _____
☐ Open lot		Design Alternate #: _____

GENERAL INFORMATION

Development name: Block 4 Midrise

Inside City limits? Yes ☑ No ☐

Property address(es): 500 Hardimont Road

Site P.I.N.(s): 1715082275

Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4).

Approximately 324 residential apartments and 6,310 sf retail with structured parking. This development is also only for Lot 9.

Current Property Owner(s): John Kane

Company: Kane Andrews Acquisition, LLC | Title: Manager

Address: c/o Kane Realty, 4321 Lassiter at North Hills Ave, Raleigh, NC 27609

Phone #: 919-719-5449 | Email: dpitts@kanerealtycorp.com

Applicant Name (If different from owner. See "who can apply" in instructions): Jonathan Balderson, Assistant PM

Relationship to owner: ☐ Lessee or contract purchaser ☑ Owner's authorized agent ☐ Easement holder

Company: McAdams | Address: 561 Hillsborough St, Suite 500, Raleigh, NC 27603

Phone #: 919-287-0815	Email: balderson@mcadamsco.com
NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.	
Developer Contact: John Kane	
Company: Kane Andrews Acquisition, LLC	Title: Manager
Address: c/o Kane Realty, 4321 Lassiter at North Hills Ave, Raleigh, NC 27609	
Phone #: 919-719-5449	Email: dpitts@kanerealtycorp.com
Applicant Name: Jonathan Balderson, Assistant Project Manager	
Company: McAdams	Address: 561 Hillsborough St, Suite 500, Raleigh, NC 27603
Phone #: 919-287-0815	Email: balderson@mcadamsco.com

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)

SITE DATA	BUILDING DATA
Zoning district(s) (please provide the acreage of each): PD	Existing gross floor area (not to be demolished): 0 sf
Gross site acreage: 4.97 ac	Existing gross floor area to be demolished: 0 sf
# of parking spaces proposed: See Site Data Table	New gross floor area: 468,216.6 sf
Max # parking permitted (7.1.2.C): No maximum	Total sf gross (to remain and new): 468,216.6 sf
Overlay District (if applicable): n/a	Proposed # of buildings: 1
Existing use (UDO 6.1.4): Vacant	Proposed # of stories for each: 8 per building code
Proposed use (UDO 6.1.4): Mixed Use (multi-family & Retail)	Proposed # of basement levels (UDO 1.5.7.A.6) 0

STORMWATER INFORMATION

Imperious Area on Parcel(s): Existing (sf) 0.00 Proposed total (sf) 208,652	Impervious Area for Compliance (includes ROW): Existing (sf) 0 Proposed total (sf) 222,472

RESIDENTIAL & OVERNIGHT LODGING DEVELOPMENTS

Total # of dwelling units: 330	Total # of hotel bedrooms: 0
# of bedroom units: 1br 280 2br 45 3br 5	4br or more 0
# of lots: 1	Is your project a cottage court? ◯ Yes ◉ No
	A frequent transit development? ◯ Yes ◉ No

M:\Projects\KAN\KAN22008\04-Production\Engineering\Civil Drawings\Current Drawings\KAN22008-ASR-CS1.dwg, 8/12/2024 3:26:21 PM, Jackson Shearer

BLOCK 4 MIDRISE

500 HARDIMONT ROAD
RALEIGH, NORTH CAROLINA 27609

ADMINISTRATIVE SITE REVIEW

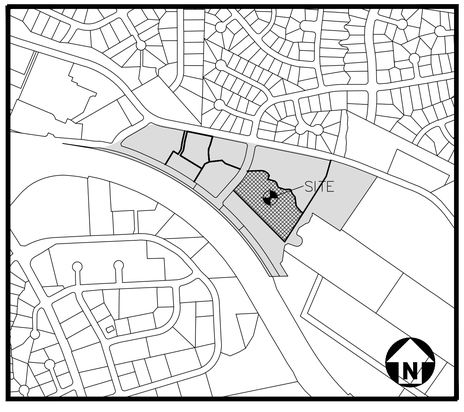
CITY OF RALEIGH CASE# ASR-0048-2023
PROJECT NUMBER: KAN-22008
DATE: AUGUST 18, 2023

SHEET INDEX

C0.00	PROJECT NOTES
C0.01	WILL SERVE LETTER
C1.00	EXISTING CONDITIONS
C1.01	DEMOLITION PLAN
C2.00	SITE PLAN
C2.01	SIGHT DISTANCE TRIANGLE PLAN
C2.02	EASEMENT PLAN
C2.03	OVERALL DEVELOPMENT TRACKING PLAN
C3.00	GRADING AND STORM DRAINAGE PLAN
C4.00	UTILITY PLAN
C4.01	UTILITY INSET PLAN
C8.00	SITE DETAILS
C8.01	SITE DETAILS
C8.02	WATER DETAILS
C8.03	WATER DETAILS
C8.04	WATER AND STORM DRAINAGE DETAILS
C8.05	STORM DRAINAGE DETAILS
C8.06	SANITARY SEWER DETAILS
L5.00	LANDSCAPE PLAN
EX-1	NORTH HILLS INNOVATION DISTRICT GREENWAY
A098	OVERALL FLOOR PLAN - LEVEL P2
A099	OVERALL FLOOR PLAN - LEVEL P1
A101	OVERALL FLOOR PLAN - LEVEL 1
A102	OVERALL FLOOR PLAN - LEVEL 2
A201	SOUTH ELEVATION
A202	EAST ELEVATION
A203	NORTH ELEVATION
A204	WEST ELEVATION
A211	ZONING - TRANSPARENCY CALCULATIONS
A212	ZONING - BLANK WALL CALCULATIONS

SITE DATA

PHYSICAL ADDRESS:		500 HARDIMONT ROAD, RALEIGH, NC 27609
PARCEL PIN:		1715082275
ZONING:		PD
OVERLAY DISTRICT:		NONE
TRACT NUMBER:		TRACT V
WATERSHED:		BIG BRANCH, NEUSE
SITE AREA		LOT 7 0.88 AC LOT 9 4.97 AC LOT 10 2.19 AC
FLOODWAY/FLOODPLAIN:		3720171500K, 3720170500K
PROPOSED USES:		MIXED USE BUILDING WITH MULTI-LEVEL PARKING FACILITY, RETAIL, AND RESIDENTIAL.
BUILDING DATA:		RESIDENTIAL: 330 TOTAL UNITS 280 1-BEDROOM, 45 2-BEDROOM, 5 3-BEDROOM RETAIL: 5,988.2 SF PARKING DECK: 153,078.6 SF RESIDENTIAL: 309,149.8 SF TOTAL: 468,216.6 SF
PARKING DATA:	VEHICLE PARKING	REQUIRED: RESIDENTIAL UNITS: 0 SPACES (PER UDO SEC. 7.1.3.A.1.A) (537 MAX.) 1-BEDROOM: 1.5 SPACES/UNIT (420 MAX.) 2-BEDROOM: 2.25 SPACES/UNIT (102 MAX.) 3-BEDROOM: 3 SPACES/UNIT (15 MAX.) RETAIL: 0 SPACES (PER UDO SEC. 7.1.3.A.1.A) (30 MAX.) 1 SPACE/200 GSF OVERALL REQUIRED PARKING: 0 SPACES (PER UDO SEC. 7.1.3.A.1.A) (567 MAX.) PROPOSED: 410 TOTAL SPACES (315 STANDARD + 33 SURFACE) (28 COMPACT) (7 ADA & 2 VAN) (25 TANDEM) (12 EV TOTAL SPOTS, 10 STANDARD EV, 1 STANDARD ADA EV SPOT & 1 VAN ADA EV SPOT)
	ACCESSIBLE PARKING	REQUIRED: 9 SPACES 1 VAN PROPOSED: 9 SPACES (7 ADA SPACES & 2 VAN)
	BIKE PARKING	REQUIRED: 55 LONG TERM SPACES; 21 SHORT TERM SPACES RETAIL: LONG TERM: 0 SPACES (NONE) SHORT TERM: 4 SPACES (1/5,000 SF, 4 MIN.) RESIDENTIAL LONG TERM: 55 SPACES (1/7 BEDROOMS) SHORT TERM: 17 SPACES (1/20 UNIT, 4 MIN.) PROPOSED: 110 LONG TERM SPACES; 22 SHORT TERM SPACES
BUILDING + PARKING SETBACKS		NONE
EXISTING IMPERVIOUS:		0 AC. (0 SF)
MAXIMUM ALLOWABLE IMPERVIOUS ALLOCATION:		LOT 9: BASED ON LAYOUT = 2.64 AC LOT 7: ASSUMPTION = 0.88 AC LOT 10: ASSUMPTION = 1.27 AC LOT 11: ASSUMPTION = 0.00 AC
PROPOSED IMPERVIOUS ALLOCATION:		4.78 AC.
BUILDING HEIGHT		MAXIMUM ALLOWED: 265' PROPOSED: 80'- 7 3/8"
BUILDING/STRUCTURE SETBACKS:		NONE
OUTDOOR AMENITY AREA (LOT 9)		REQUIRED: 0.25 ACRES (10,835 SF, 5.0% OF 4.98 ACRES) PROVIDED: 0.34 ACRES (14,827 SF, 6.8% OF 4.98 ACRES)
PERCENTAGE OF STRUCTURED PARKING:		92.0% (377 STRUCTURED PARKING SPACES OF 410 TOTAL PARKING SPACES)
OPEN SPACE:		REQUIRED: 15% OF 1,282,401 SF/29.44 AC = 192,360 SF/4.42 AC EXISTING: 488,190 SF/11.21 AC (38.08%) PROPOSED: NO CHANGE



VICINITY MAP
N.T.S.

NOTES:

1. TREE CONSERVATION HAS BEEN RECORDED UNDER BM. 2018, PG. 846
2. NO TEMPORARY OR PERMANENT ENCROACHMENTS (INCLUDING BUT NOT LIMITED TO: CLEARING, GRADING, FENCING AND THE INTSALLATION OF RETAINING WALLS OR OTHER STRUCTURES) ARE TO BE PERMITTED WITHIN THE GREENWAY EASEMENT AREA, WITHOUT PRIOR APPROVAL BY THE CITY OF RALEIGH.
3. TOTAL AMOUNT OF GREENWAY EASEMENT TO BE DEDICATED: 9.42 AC/410499 SF
4. THE SHOD YARD FOR LOT 13 WILL BE PROVIDED DURING PHASE III
5. THE GREENWAY TRAIL IS TO BE CONSTRUCTED IN 3 SEGMENTS. SEGMENT 1 CONSTRUCTION IS TO BE TIED TO THE CO OF LOT 8 IN PHASE 4. SEGMENT 2 CONSTRUCTION IS TO BE TIED TO THE CO OF LOT 7 IN PHASE 3. SEGMENT 3 CONSTRUCTION IS TO BE TIED TO THE CO OF LOT 10 IN PHASE 5.

SOLID WASTE COMPLIANCE STATEMENT:

1. THE DEVELOPER ACKNOWLEDGES THAT THEY HAVE REVIEWED AND ARE IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE SOLID WASTE DESIGN MANUAL.
2. THE SOLID WASTE REMOVAL FOR THIS PROJECT WILL BE HANDLED BY A PRIVATE SERVICE.
3. REFUSE WILL BE COLLECTED IN ROLL-OUT TRASH AND RECYCLING CARTS THAT WILL BE BROUGHT OUT CURB SIDE FOR PICKUP. PICKUP WILL BE PROVIDED TWICE A WEEK.

ATTENTION CONTRACTORS

The **Construction Contractor** responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the **Public Works Department** at **(919) 996-2409**, and the **Public Utilities Department** at **(919) 996-4540** at least **twenty four hours** prior to beginning any of their construction.

Failure to notify both **City Departments** in advance of beginning construction, will result in the issuance of **monetary fines**, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for **Inspection, Install a Downstream Plug,** have **Permitted Plans** on the **Jobsite,** or any other **Violation** of **City of Raleigh Standards** will result in a **Fine and Possible Exclusion** from future work in the **City of Raleigh.**

811 Know what's below. Call before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

MCADAMS
The John R. McAdams Company, Inc.
621 Hillsborough Street
Suite 621
Raleigh, NC 27603
phone 919. 823. 4300
fax 919. 361. 2269
license number: C-0293, C-187
www.mcadamsco.com

CONTACT
JONATHAN BALDERSON
balderson@mcadamsco.com
PHONE: 919. 287. 0815

CLIENT
KANE REALTY CORPORATION
4321 LASSITER AT NORTH HILLS AVE, SUITE 250
RALEIGH, NORTH CAROLINA 27609
PHONE: 919.833.7755

PROJECT DIRECTORY
HICKOKCOLE
ARCHITECT
301 N STREET NE, SUITE 300
WASHINGTON, DC 20002

[redacted]

REVISIONS

NO.	DATE	
1.	11.10.2023	1ST RESPONSE TO ASR COMMENTS
2.	01.05.2024	2ND RESPONSE TO ASR COMMENTS
3.	06.07.2024	3RD RESPONSE TO ASR COMMENTS
4.	08.12.2024	4TH RESPONSE TO ASR COMMENTS

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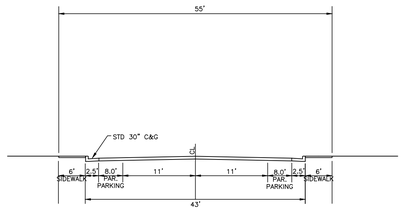
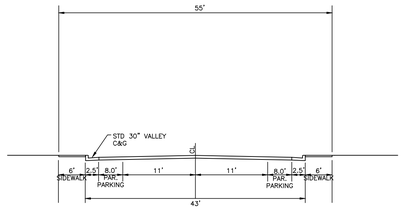
PROJECT NUMBER: KAN-22008



PRIVATE STREET A
TYPICAL SECTION: 43' B–B STREET



PRIVATE STREET B
TYPICAL SECTION: 43' B–B STREET

SANITARY SEWER NOTES:

1. ALL SEWER SERVICES IN PUBLIC R.O.W. SHALL BE INSTALLED BY A LICENSED UTILITY CONTRACTOR.
2. BEFORE COMMENCING ANY EXCAVATION IN ANY HIGHWAY, STREET, PUBLIC SPACE, OR IN AN EASEMENT, THE NORTH CAROLINA UNDERGROUND DAMAGE PREVENTION ACT REQUIRES NOTIFICATION OF EACH UTILITY OWNER HAVING U.G. UTILITIES LOCATED IN THE PROPOSED AREA TO BE EXCAVATED, EITHER ORALLY OR IN WRITING, NOT LESS THAN 2 DAYS NOR MORE THAN 10 WORKING DAYS PRIOR TO STARTING OF THE INTENT TO EXCAVATE.
3. ANY EXISTING UTILITY APPURTENANCES SHALL NOT BE REUSED ON PROPOSED IMPROVEMENTS.
4. ALL PROPOSED SEWER ON THIS SITE IS TO BE PRIVATE.
5. ALL 8" SEWER SHALL BE PVC SDR-35 AND ALL 6" SEWER SHALL BE PVC SCH.40 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
6. MINIMUM COVER TO FINISHED GRADE OF 5 FEET IN TRAFFIC AREAS TO BE PROVIDED FOR ALL COLLECTOR LINES 4 INCHES AND LARGER. IF LESS THAN 5 FEET OR DEEPER THAN 12', DUCTILE IRON PIPE SHALL BE REQUIRED WITH TYPE 1 BEDDING TO A COVER AT A MIN OF 3 FEET.
7. MINIMUM SLOPE FOR THE 8 INCH SANITARY SEWER COLLECTION LINE IS 0.50% AND THE MINIMUM SLOPE FOR THE 6 INCH SANITARY SEWER SHALL BE NO LESS THAN 1.0% (WITH CLEANOUTS EVERY 75 LINEAL FEET).
8. SEWER CLEANOUTS ARE NOT ALLOWED IN DRIVEWAYS, SIDEWALKS AND PARKING LOTS UNLESS SHOWN OTHERWISE. CLEANOUTS WITHIN ASPHALT PAVED TRAFFIC AREAS SHALL BE INSTALLED IN TRAFFIC RATED MINI-MANHOLES, DOMESTICALLY CAST.
9. ALL EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY ACTUAL LOCATION AND DEPTHS IN FIELD PRIOR TO BEGINNING CONSTRUCTION.
10. UTILITY SLEEVES SHALL BE PVC (SCH. 40). INSTALL WITH 2' MINIMUM COVER. CAP AND MARK BOTH ENDS.

RETAINING WALL NOTES

1. THE RETAINING WALL ALIGNMENT SHOWN ON THESE PLANS DEPICTS THE LOCATION OF THE FRONT FACE OF THE RETAINING WALL AT THE BOTTOM OF THE WALL. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING RETAINING WALLS ARE NOT LOCATED IN ANY STREAM BUFFERS, AND THEIR CONSTRUCTION DOES NOT ENCROACH INTO ANY ADJACENT PROPERTIES DUE TO ANY BATTER INCORPORATED IN THE DESIGN OF THE WALLS.
2. RETAINING WALLS ARE TO BE DESIGN-BUILD PROJECTS BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FINAL CONSTRUCTION DRAWINGS FROM A REGISTERED ENGINEER AND GAIN ALL REQUIRED PERMITS NECESSARY FOR THE CONSTRUCTION OF THE RETAINING WALLS.
3. RETAINING WALLS SHALL BE ASSUMED TO BE BACKFILLED WITH OFF-SITE BORROW MATERIAL OR PROCESSED FILL, UNLESS THE CONTRACTOR CAN PROVIDE TO THE OWNER WITH CONFIRMATION FROM THE GEOTECHNICAL ENGINEER AND THE RETAINING WALL DESIGNER, THAT READILY AVAILABLE ON-SITE SOILS CAN BE USED.
4. THE TOP AND BOTTOM OF WALL ELEVATIONS SHOWN ON THESE PLANS IDENTIFY FINISHED GRADE ELEVATIONS ONLY. THE EXTENT THAT THE RETAINING WALL WILL BE EXTENDED BELOW GRADE TO THE FOOTING OR ABOVE GRADE TO THE TOP OF THE CAP BLOCK COURSE SHALL BE IDENTIFIED ON THE RETAINING WALL CONSTRUCTION DRAWINGS.
5. ALL RETAINING WALLS OVER 30" HIGH SHALL HAVE A SAFETY FENCE (DESIGN BY OTHERS).
6. ANY PART OF ANY RETAINING WALL THAT EXTENDS INTO THE RIGHT-OF-WAY WILL REQUIRE AN ENCROACHMENT AGREEMENT. ENCROACHMENT AGREEMENTS FOR RETAINING WALLS SHALL BE APPROVED PRIOR TO CONSTRUCTION DRAWING APPROVAL.
7. ANY TIEBACK SYSTEMS FOR THE RETAINING WALLS SHALL NOT BE ALLOWED WITHIN PUBLIC RIGHT-OF-WAY.
8. STORMWATER RUN-OFF SHALL BE DIRECTED AWAY FROM RETAINING WALLS. ANY RUN-OFF FLOWING TO AND OVER A RETAINING WALL SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND BROUGHT TO THE ATTENTION OF THE WALL DESIGNER PRIOR TO THEIR DESIGN.
9. RETAINING WALL THAT ARE LOCATED WITHIN 30 FEET OF A PUBLIC SIDEWALK SHALL BE REQUIRED TO ADHERE TO THE FOLLOWING. A FREESTANDING WALL MAY NOT EXCEED A CONTINUOUS, UNINTERRUPTED HEIGHT OF 10 FEET. ADDITIONAL HEIGHT ABOVE 10 FEET MAY BE PERMITTED, PROVIDED THE WALL CONTAINS A MINIMUM 2-FOOT STEP BACK FOR EACH ADDITIONAL 10 FEET OF WALL HEIGHT. A TYPE C2 STREET PROTECTIVE YARD SHALL BE REQUIRED FOR ANY FREESTANDING RETAINING WALL OF AT LEAST 10 FEET IN HEIGHT. WHERE THE RETAINING WALL GAINS ADDITIONAL HEIGHT WILL A STEP BACK, THE STEP BACK AREA SHALL PROVIDE THE QUANTITY OF SHRUBS EQUAL TO A TYPE C3 STREET PROTECTIVE YARD.

SITE PLAN NOTES

1. NON-ALLEY LOADED DRIVEWAYS MAY INTERSECT A STREET NO CLOSER THAN 20 FEET FROM THE INTERSECTION OF TWO STREET RIGHT-OF-WAYS. THE MINIMUM CORNER CLEARANCE FROM CURB LINE OR EDGE OF PAVEMENT OF INTERSECTING STREETS SHALL BE AT LEAST 20 FEET FROM THE POINT OF TANGENCY OF THE RADIUS OF CURVATURE, OR 20 FEET FROM THE INTERSECTION OF RIGHT-OF-WAY LINES, WHICH EVER IS GREATER. THE RADIUS OF THE DRIVEWAY SHALL NOT ENCROACH ON THE MINIMUM CORNER CLEARANCE. REFER TO SECTION 6.5 OF THE LATEST VERSION OF THE RALEIGH STREET DESIGN MANUAL FOR ADDITIONAL DETAILS.
2. RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED WITHIN 50' OF ALL MINOR RESIDENTIAL, RESIDENTIAL, AND RESIDENTIAL COLLECTOR INTERSECTIONS. THE FULL LENGTH OF THE RIGHT-OF-WAY SHALL BE CLEARED AND GRADED ALONG ALL MAJOR, MINOR, & SENSITIVE AREA THOROUGHFARES.
3. WITHIN THE AREA DEFINED SIGHT TRIANGLES SHOWN ON THESE PLANS, THERE SHALL BE NO SIGHT OBSTRUCTING OR PARTLY OBSTRUCTING WALL, FENCE, SIGN, FOLIAGE BERMS, OR PARKED VEHICLES BETWEEN THE HEIGHTS OF 24 INCHES AND 8 FEET ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVEL WAY IF NO CURB LINE EXISTS. REFER TO SECTION 12.6 OF THE LATEST VERSION OF THE RALEIGH STREET DESIGN MANUAL FOR ADDITIONAL DETAILS.
4. MULTIWAY STOP CONTROL WILL NOT BE USED AT ANY PUBLIC STREET INTERSECTION WITHOUT AN ENGINEERING STUDY TO PROVIDE DATA TO CITY OF RALEIGH TRANSPORTATION DIVISION THAT THE MULTIWAY STOP INSTALLATION WARRANTS CAN BE MET AND ORDINANCED BY CITY COUNCIL APPROVAL.
5. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
6. ALL DIMENSIONS SHOWN ON SITE PLAN ARE MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED.
7. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
8. EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER, BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
9. THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS MAY NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED. THE CONTRACTOR SHALL INSTALL SUCH STANDARD APPURTENANCES AS REQUIRED TO CLOSELY FOLLOW THE GRADES AND ALIGNMENTS DEPICTED ON THE PLANS.
10. CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
11. CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATIONS (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
12. PRIOR TO BEGINNING CONSTRUCTION BEYOND EROSION CONTROL MEASURES, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF RALEIGH PUBLIC WORKS DEPARTMENT (919) 996-2409, AND A REPRESENTATIVE OF THE ENGINEER AND OWNER. THE PURPOSE OF THIS MEETING IS TO REVIEW THE SPECIFIC COMPONENTS OF THE PLAN AND OPERATION OF THE FACILITIES DURING CONSTRUCTION.
13. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
14. ACCESSIBLE RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF RALEIGH UNIFIED DEVELOPMENT ORDINANCE (UDO) DETAILS.
15. ALL SIDEWALKS THAT CONNECT TO THE PUBLIC RIGHT-OF-WAY MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. PEDESTRIAN EXISTING ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
16. TYPICAL PAVEMENT SECTION DETAILS ARE SHOWN WITHIN THIS SET AND INTENDED TO BE A MINIMUM PAVEMENT SECTION REQUIREMENT. THE CURRENT GEOTECHNICAL REPORT SHALL OVER-RIDE ALL TYPICAL PAVEMENT SECTIONS SHOWN, IF THE GEOTECHNICAL ENGINEER DEEMS A HEAVIER SECTION IS REQUIRED.
17. EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO SUBSTITUTION OF ALTERNATE EQUIPMENT.
18. IF UNFORESEEN CONDITIONS DEVELOP DURING CONSTRUCTION, REFER TO THE LATEST VERSION OF THE RALEIGH STREET DESIGN MANUAL AND CONTACT PUBLIC WORKS STAFF FOR FURTHER GUIDANCE.
19. ALL SIGNAGE ASSOCIATED WITH THE PUBLIC STREET SYSTEM SHALL ADHERE TO MUTCD STANDARDS AND SPECIFICATIONS.
20. ANY TRANSIT STOP LOCATIONS SHOWN ARE PRELIMINARY ONLY. FINAL LOCATION SHALL BE DETERMINED ONCE THE CITY OF RALEIGH TRANSIT ROUTE HAS BEEN FINALIZED. ALL TRANSIT STOPS SHALL HAVE A 10'x20'x6" (3000 PSI) CONCRETE PAD.

CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH AND/OR NC DOT STANDARDS.
2. THE CONTRACTOR SHALL CONDUCT THE WORK IN A SAFE MANNER WITH A MINIMUM AMOUNT OF INCONVENIENCE TO TRAFFIC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SHALL ADHERE TO THE PROVISIONS OF THE MUTCD (MOST CURRENT EDITION).
4. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING MUST BE SET UP WITH THE CONTRACTOR AND CITY OF RALEIGH TRANSPORTATION FIELD SERVICES STAFF. CONTACT ENGINEERING INSPECTIONS AT 919-996-2409 TO SET UP THE MEETING.
5. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY OBSTRUCTION PERMIT FOR ANY WORK WHICH REQUIRES THE TEMPORARY CLOSURE OF A STREET, TRAVEL LANE, PARKING SPACE OR SIDEWALK FROM THE RIGHT-OF-WAY SERVICES AT LEAST 48 HOURS IN ADVANCE. ANY TEMPORARY STREET CLOSURE MUST BE SUBMITTED 2 WEEKS PRIOR. SEE "RIGHT-OF-WAY CLOSURES" ON WWW.RALEIGHNC.GOV AND SEND THE RIGHT-OF-WAY OBSTRUCTION PERMIT TO RIGHTOFWAYSERVICES@RALEIGHNC.GOV.
6. PRIOR TO CONSTRUCTION BEGINNING, ALL SIGNAGE AND TRAFFIC CONTROL SHALL BE IN PLACE.
7. THE CONTRACTOR SHALL REPAIR ALL DAMAGED INFRASTRUCTURE IN THE RIGHT-OF-WAY AND RESTORE IT TO PREVIOUS OR BETTER CONDITION.
8. THE CONTRACTOR SHALL REPAIR ANY DAMAGES TO ADJACENT PROPERTIES AND RESTORE IT TO PREVIOUS OR BETTER CONDITION.
9. ALL SIDEWALKS MUST BE ACCESSIBLE TO PERSONS WHO ARE VISUALLY IMPAIRED AND PEOPLE WITH MOBILITY DISABILITIES. EXISTING PEDESTRIAN ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

GENERAL NOTES:

1. OWNER RESERVES RIGHT TO ADJUST SITE IMPROVEMENTS AND MODIFY BUILDING FOOTPRINTS FROM THOSE SHOWN ON THIS PLAN.
2. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF RALEIGH PUBLIC WORKS, ENGINEERING INSPECTIONS DEPARTMENT (919) 996-6824, AND A REPRESENTATIVE OF THE ENGINEER AND OWNER.
3. CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR, AFTER PERMISSION BY EROSION CONTROL INSPECTOR.
4. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND THE PLANS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE AND ENGINEER IMMEDIATELY.

ATTENTION CONTRACTORS

The **Construction Contractor** responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the **Public Works Department** at **(919) 996–2409**, and the **Public Utilities Department** at **(919) 996–4540** at least **twenty four hours** prior to beginning any of their construction.

Failure to notify both **City Departments** in advance of beginning construction, will result in the issuance of **monetary fines**, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for **Inspection**, **Install a Downstream Plug**, have **Permitted Plans** on the **Jobsite**, or any other **Violation** of **City of Raleigh Standards** will result in a **Fine and Possible Exclusion** from future work in the **City of Raleigh.**

CITY OF RALEIGH PUBLIC UTILITIES STANDARD UTILITY NOTES (AS APPLICABLE)

1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
2. UTILITY SEPARATION REQUIREMENTS:
   a) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL
   b) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER
   c) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS
   d) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER
   e) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49)
   f) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED
3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION
4. DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY
5. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT
6. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS
7. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE
8. INSTALL 4" DIP WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 20'X10' WATERLINE EASEMENT IMMEDIATELY ADJACENT. *NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE*
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION
11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION
12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE RW FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A UC / BLDG PERMIT. CONTACT (919) 996-4516 OR FOG@RALEIGHNC.GOV FOR MORE INFORMATION
13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. A CERTIFICATE OF COMPLIANCE SHALL ALSO BE OBTAINED FROM THE RW CROSS-CONNECTION COORDINATOR FOR EACH DEVICE PRIOR TO ISSUANCE OF A UC / BLDG PERMIT. CONTACT (919) 996-5923 OR CROSS.CONNECTION@RALEIGHNC.GOV FOR MORE INFORMATION
14. **NOTICE** FOR PROJECTS WITH REPLACED OR OVERSIZED MAINS: IF THE CITY'S REIMBURSEMENT FOR AN OVERSIZED MAIN OR URBAN MAIN REPLACEMENT PROJECT IS $250,000 OR GREATER - *THE PROJECT MUST BE PUBLICLY BID*

TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL CONDUCT ALL WORK IN A SAFE MANNER AND WITH A MINIMUM AMOUNT OF INCONVENIENCE TO TRAFFIC.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SHALL ADHERE TO THE PROVISIONS OF THE MUTCD (MOST CURRENT EDITION).
3. NO WORK ON, OR BLOCKAGE OF, EXISTING THROUGH TRAFFIC LANES SHALL OCCUR DURING THE PEAK TRAFFIC HOURS OF 7AM-9AM AND 4PM-6PM, MONDAY THROUGH FRIDAY. THE CONTRACTOR MUST OBTAIN A LANE CLOSURE PERMIT FOR ANY WORK WHICH REQUIRES THE CLOSURE OF A TRAVEL LANE. PLEASE CONTACT THE CITY PUBLIC WORKS DEPARTMENT - TRANSPORTATION OPERATIONS DIVISION AT (919)-996-3030 FOR LANE CLOSURES AT LEAST 48 HOURS IN ADVANCE AND FOR STREET CLOSURES, AT LEAST 2 WEEKS IN ADVANCE. PROVIDE EXACT LOCATION, CROSS STREET, DATES FOR LANE CLOSURE, CONTACT PERSON AND FAX NUMBER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE INSPECTIONS DEPARTMENT TO OBTAIN A STREET CUT PERMIT. THE PERMIT FORM IS ON-LINE (RALEIGH.GOV) AND SHALL BE COMPLETED AND FAXED TO (919)-516-2685. THE PERMIT LASTS FOR 30 DAYS AND CAN BE EXTENDED AT NO COST IF REQUEST IS MADE PRIOR TO PERMITS EXPIRATION DATE. INQUIRIES SHALL BE MADE AT (919)-996-2430.
5. PRIOR TO CONSTRUCTION BEGINNING, ALL SIGNAGE AND TRAFFIC CONTROL SHALL BE IN PLACE.
6. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AS WELL AS ALL PERMITS, APPROVALS AND EASEMENTS ON THE JOB SITE AT ALL TIMES.
7. THE CONTRACTOR SHALL REPAIR ALL DAMAGED DRIVEWAYS, DRIVEWAY PIPES, CURB AND GUTTER, SIDEWALKS AND STREETS TO EXISTING CONDITION OR BETTER.
8. ALL SIDEWALKS MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. EXISTING PEDESTRIAN ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

DEMOLITION NOTES:

1. IN ACCORDANCE WITH 40 CFR, PART 61, SUBPART M, A THOROUGH INSPECTION SHALL BE CONDUCTED FOR ASBESTOS-CONTAINING MATERIALS, PRIOR TO CONDUCTING A RENOVATION OR DEMOLITION ACTIVITY OF AN EXISTING STRUCTURE. THE ASBESTOS INSPECTION MUST BE CONDUCTED BY A NORTH CAROLINA ACCREDITED ASBESTOS INSPECTOR. ALL REGULATED AND/OR FRIABLE ASBESTOS-CONTAINING MATERIALS IDENTIFIED DURING THE SURVEY, WHICH WILL BE DISTURBED, MUST BE PROPERLY REMOVED BY ACCREDITED INDIVIDUALS BEFORE BEGINNING THE RENOVATION OR DEMOLITION ACTIVITY. IF REGULATED AND/OR FRIABLE ASBESTOS CONTAINING MATERIALS TO BE REMOVED EXCEED 160 SQUARE FEET, 260 LINEAR FEET OR 35 CUBIC FEET, A PERMIT SHALL BE APPLIED FOR THROUGH THE NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES.
2. ALL MATERIAL TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT A PERMITTED SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL LAWS.

WATER NOTES:

1. WATER TO BE USED DURING CONSTRUCTION SHALL EITHER HAVE A PERMANENT TAP INSTALLED THROUGH A NEW SERVICE TAP PERMIT, OR A RENTAL OF A HYDRANT METER SHALL BE SECURED TEMPORARILY, THROUGH THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
2. WATER DESIGN
   2.1. PUBLIC WATER SYSTEMS SHALL CONFORM TO PUBLIC DISTRIBUTION SYSTEM STANDARDS.
   2.2. PRIVATE DISTRIBUTION SYSTEMS SHALL HAVE A MASTER METER AND MASTER BACK FLOW DEVICE.
3. ALL 6" & 8" WATERLINES, SHALL BE DUCTILE IRON PRESSURE CLASS 350 PER CITY OF RALEIGH STANDARDS. ALL 2" WATERLINE SHALL BE TYPE K-COPPER.
4. ALL MAINS SHALL HAVE A MINIMUM 36" COVER.
5. ALL MAINS SHALL HAVE A TYPE 1 LAYING CONDITIONS (GEOTECHNICAL EVALUATION AND COMPACTION REPORTS SHALL BE PROVIDED TO ENGINEER WITH AS-BUILT SUBMITTAL)
6. ALL MAINS SHALL HAVE A WORKING PRESSURE OF 150 PSI AND A SURGE PRESSURE OF 300 PSI.
7. SERVICE CONNECTIONS CAN ONLY BE MADE TO A PRESSURIZED PIPE UP TO 12" PER CORPUD HANDBOOK.
8. REFER TO CORPUD HANDBOOK FOR TESTING AND APPROVAL PROCEDURE PRIOR TO ACCEPTANCE.
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI.
10. ALL EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY ACTUAL LOCATION AND DEPTHS IN FIELD PRIOR TO BEGINNING CONSTRUCTION.

GRADING NOTES

1. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
2. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
4. CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
5. PRIOR TO BEGINNING CONSTRUCTION, THE G

GFL GREEN FOR LIFE environmental

August 16, 2023

Kane Realty Corporation
4321 Lassiter at North Hills Ave, #250
Raleigh, NC 27609

RE: "Will Serve" Letter for Solid Waste and Recycling Services at Block 4 Midrise

In response to your request, this letter serves as confirmation that GFL Environmental can provide waste and recycling services for the proposed Block 4 Midrise project, located at 520 St Albans Drive, Raleigh, North Carolina.

We have reviewed the current proposed site plan and have no safety or collection concerns. If the project design changes, this letter is void and a new letter must be issued. Additionally, this letter is non-transferable.

Sincerely,

Melissa Dixon

Melissa Dixon
National Accounts Sales Executive
GFL Environmental
melissa.dixon@gflenv.com

3301 Benson Drive, Suite 601, Raleigh, NC 27609
Tel: 919-325-3000 | gflenv.com

811 Know what's **below.** **Call** before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

ATTENTION CONTRACTORS

The **Construction Contractor** responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the **Public Works Department** at **(919) 996-2409**, and the **Public Utilities Department** at **(919) 996-4540** at least **twenty four hours** prior to beginning any of their construction.

Failure to notify both **City Departments** in advance of beginning construction, will result in the issuance of **monetary fines**, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for **Inspection, Install a Downstream Plug**, have **Permitted Plans** on the **Jobsite**, or any other **Violation** of **City of Raleigh Standards** will result in a **Fine and Possible Exclusion** from future work in the **City of Raleigh**.

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

MCADAMS
The John R. McAdams Company, Inc.
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Durham, NC 27713

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RALEIGH, NORTH CAROLINA 27609

KANE REALTY CORPORATION

BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-N1
CHECKED BY	JLV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

WILL SERVE LETTER

C0.01

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NOTES:

1. EXISTING CONDITIONS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING SURVEY AND DESIGN OF PREVIOUS MASS GRADING AS PREVIOUSLY APPROVED.

LEGEND

- EXISTING IRON PIPE
- IRON PIPE SET
- CALCULATED POINT
- BORE HOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- TELEPHONE PEDESTAL
- TELEPHONE MANHOLE
- ELECTRIC BOX
- LIGHT POLE
- POWER POLE
- GUY WIRE
- CURB INLET
- STORM DRAINAGE MANHOLE
- YARD INLET
- FIBER OPTIC MARKER
- FIBER OPTIC VAULT
- SIGN
- BOLLARD
- SD — STORM DRAIN PIPE
- OU — OVERHEAD UTILITY LINES
- W — WATER LINE
- SS — SANITARY SEWER LINE
- T — TELEPHONE LINE
- G — GAS LINE
- UE — UNDERGROUND ELECTRIC
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- 250 — EXISTING MAJOR CONTOUR
- 252 — EXISTING MINOR CONTOUR

GENERAL NOTE:

1. *PHASE 2 INFRASTRUCTURE CURRENTLY UNDER CONSTRUCTION PER CITY OF RALEIGH CASE #SPR-0051-2020.

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

McADAMS
The John R. McAdams Company, Inc.
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Durham, NC 27713

phone 919. 361. 5000
fax 919. 361. 2269
license number: C-0293, C-187

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CLIENT

KANE REALTY CORPORATION
4321 LASSITER AT NORTH HILLS AVENUE
SUITE 250
RALEIGH, NORTH CAROLINA 27609

KANE REALTY CORPORATION

BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	08.14.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN-22008-ASR-XC1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

EXISTING CONDITIONS

C1.00

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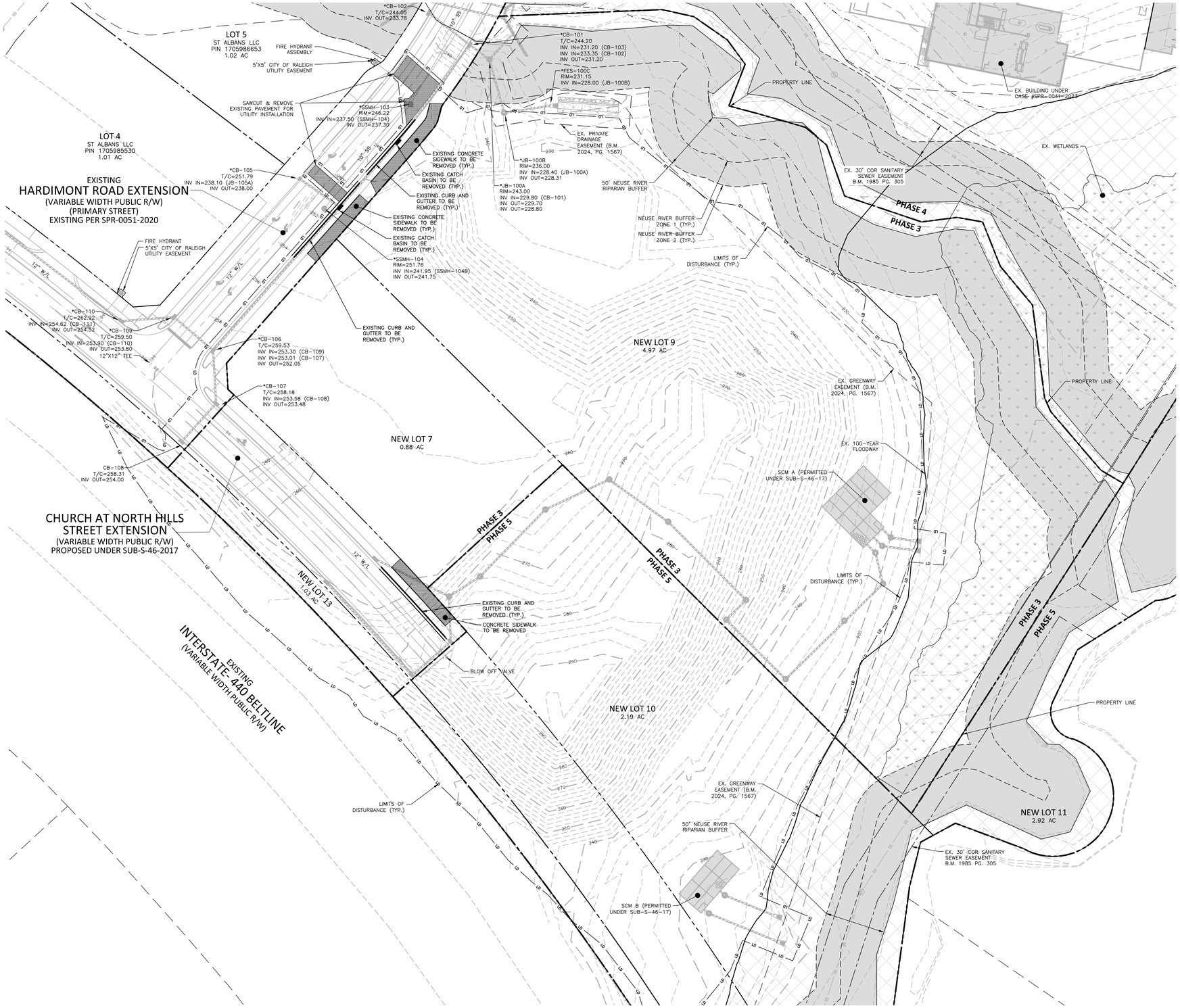

DEMOLITION LEGEND

- TREE — TREE OR OTHER VEGETATION TO BE REMOVED
- UTILITY — UNDERGROUND UTILITY TO BE REMOVED
- AREA TO BE REMOVED (SIDEWALK, CURB AND GUTTER, STRUCTURES, ASPHALT, CONCRETE PAVING, ETC.)
- NEUSE RIPARIAN BUFFER
- 250 — EXISTING MAJOR CONTOUR
- 252 — EXISTING MINOR CONTOUR

NOTE: SEE PLAN FOR DETAILED DEMOLITION PROCEDURES, SEQUENCING AND SPECIFICATIONS.

GENERAL NOTE:

1. PHASE 2 INFRASTRUCTURE CURRENTLY UNDER CONSTRUCTION PER CITY OF RALEIGH CASE #SPR-0051-2020.

Know what's below. Call before you dig.

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

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KANE REALTY CORPORATION

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ADMINISTRATIVE SITE PLAN
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REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	08.14.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-DM1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

DEMOLITION PLAN

C1.01

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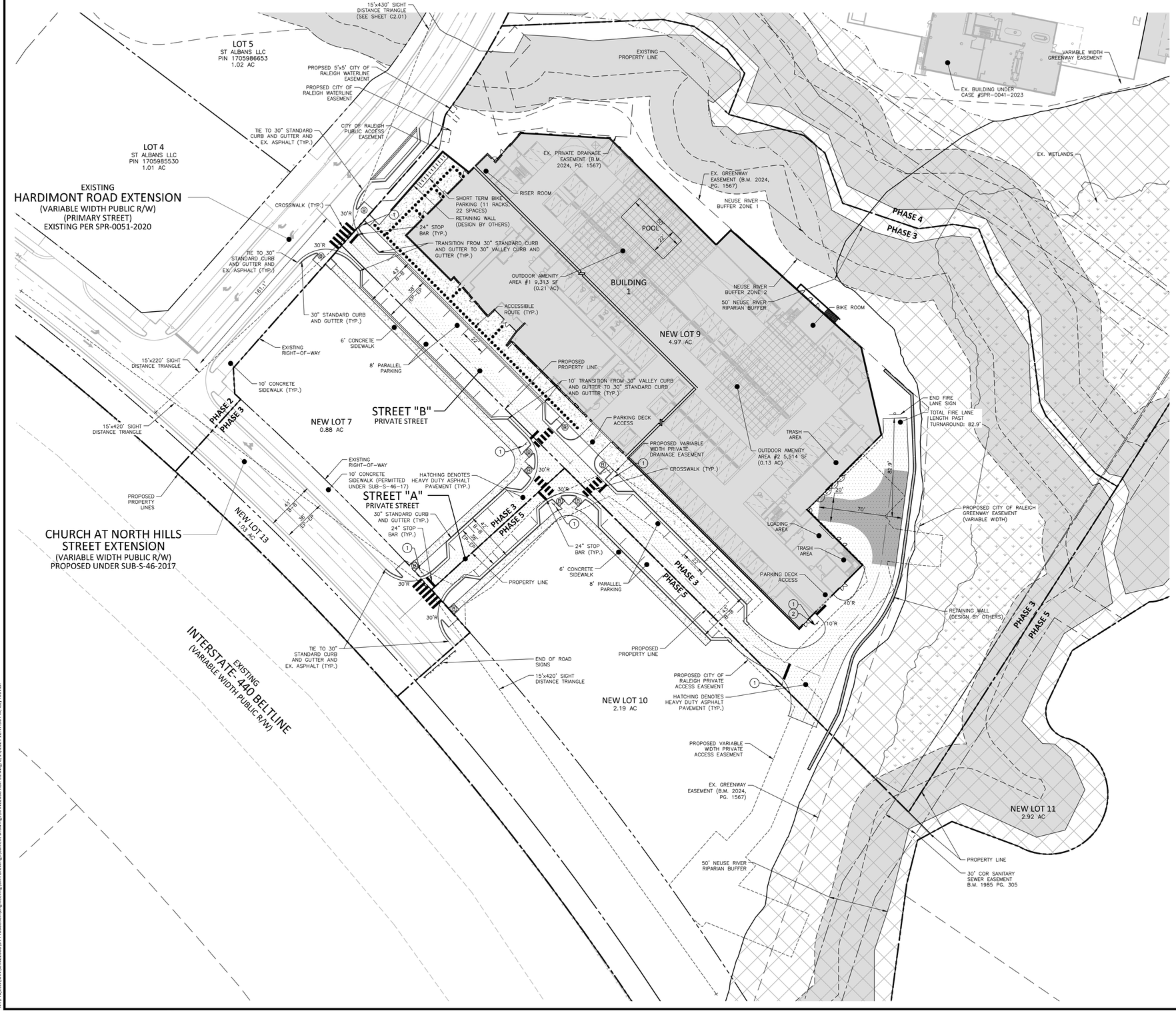

SITE LEGEND

- SIGNAGE
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- TRAFFIC DIRECTIONAL ARROW
- ACC — ACCESSIBLE PARKING STALL
- VAN — VAN ACCESSIBLE PARKING STALL
- ACCESSIBLE RAMPS (TYPE A, TYPE B, TYPE C)
- ACCESSIBLE ROUTE
- PHASE LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- CENTERLINE
- HEAVY DUTY ASPHALT PAVEMENT
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- EX. WETLANDS

SIGNAGE LEGEND

① MUTCD R1-1 30"x30"

② MUTCD R3-2 24"x24"

OUTDOOR AMENITY AREA

REQUIRED: 10,835 SF (0.25 AC)
0.25 ACRES (10,835 SF, 5.0% OF 4.98 ACRES)

PROVIDED: 14,827 SF (0.34 AC)
0.34 ACRES (14,827 SF, 6.8% OF 4.98 ACRES)

NHE Parking Summary

Tract	Structured Parking	Surface Parking	Total
A	740	0	740
B	0	0	0
C	747	14	761
D	803	38	841
E	1079	27	1106
F	921	220	1141
G	1050	0	1050
H	190	0	190
I	*	*	0
J	*	*	0
K	311	34	345
L	299	20	319
M	0	0	0
N	0	82	82
O	0	42	42
P	0	0	0
Q	0	0	0
R	936	0	936
S	0	3	3
T	282	0	282
U	468	0	468
V	377	33	410
W	0	0	0
Total	**8203**	**513**	**8716**
Ratio	**94.11% Structured Parking**		

GRAPHIC SCALE
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[redacted]

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PLAN INFORMATION

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FILENAME	KAN22008-ASR-S1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

SITE PLAN

C2.00

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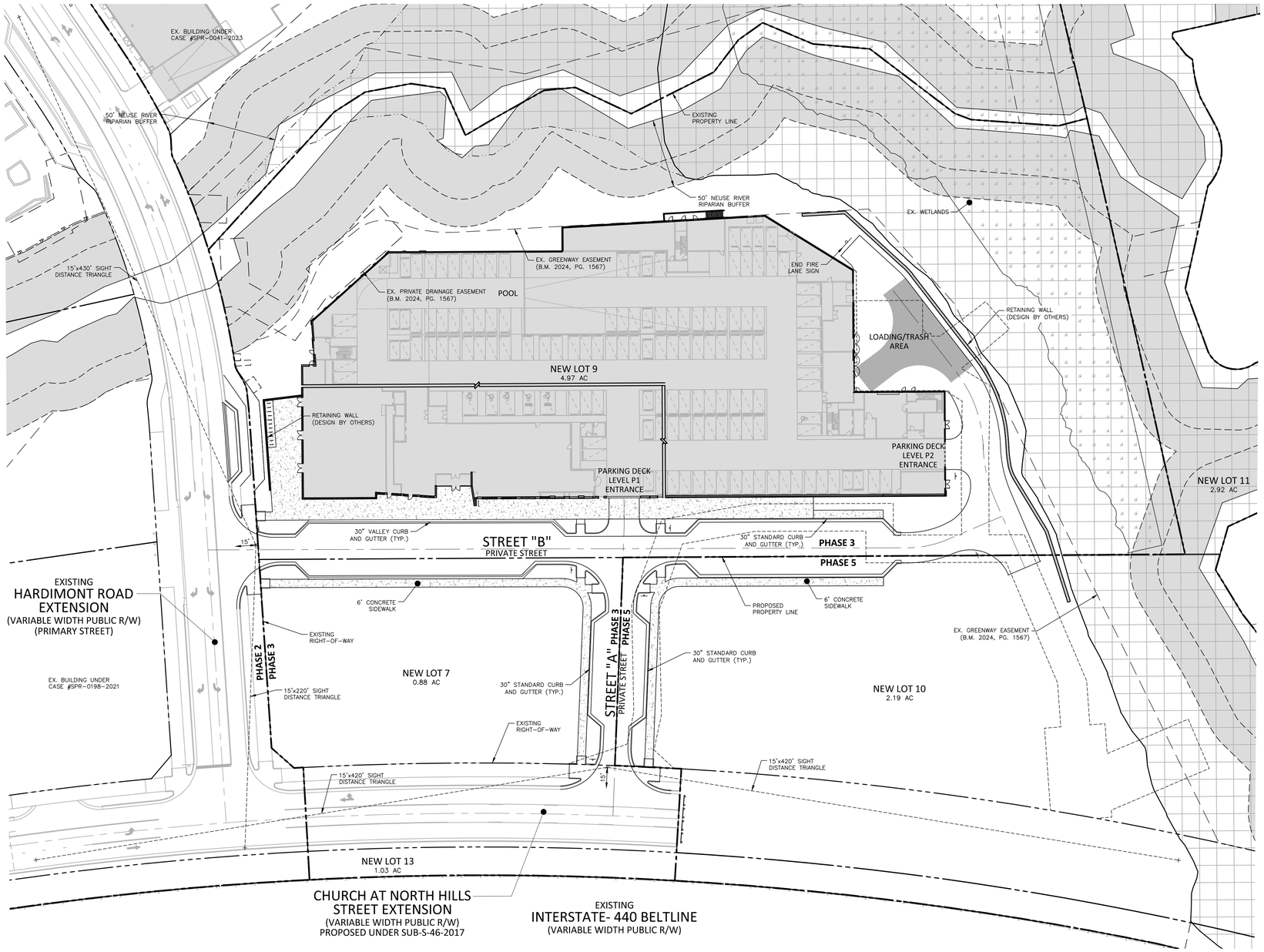

SITE LEGEND

- SIGNAGE
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- TRAFFIC DIRECTIONAL ARROW
- ACCESSIBLE PARKING STALL (ACC)
- VAN ACCESSIBLE PARKING STALL (VAN)
- ACCESSIBLE RAMPS (TYPE A, TYPE B, TYPE C)
- ACCESSIBLE ROUTE
- PHASE LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- CENTERLINE
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- EX. WETLANDS

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SCALE	1"=40'
DATE	08. 17. 2023

SHEET

SIGHT DISTANCE TRIANGLE PLAN
C2.01

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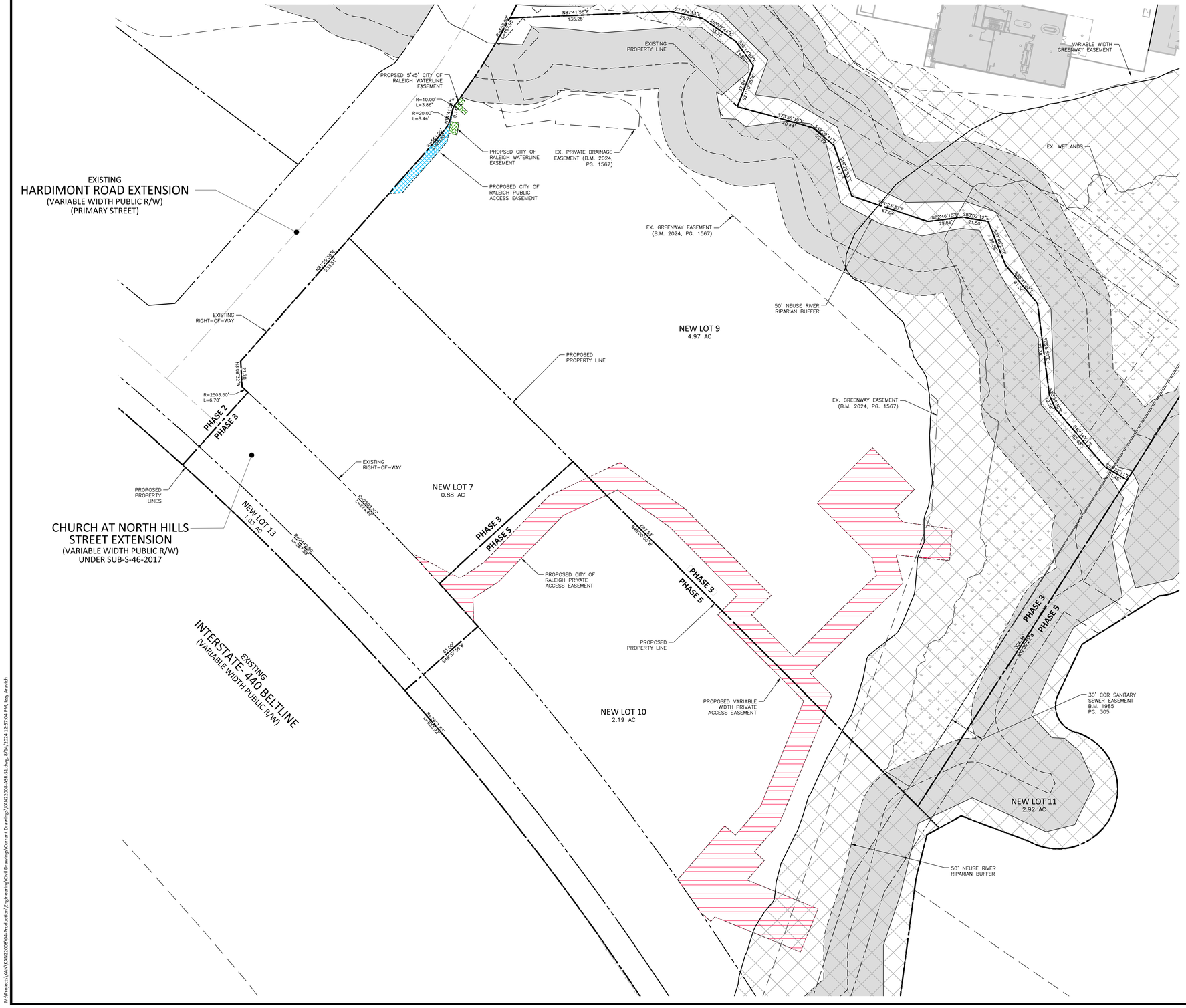

SITE LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- PRIVATE DRAINAGE ACCESS EASEMENT
- PUBLIC ACCESS EASEMENT
- WATERLINE EASEMENT
- EX. WETLANDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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[redacted]

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PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-S1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

EASEMENT PLAN

C2.02

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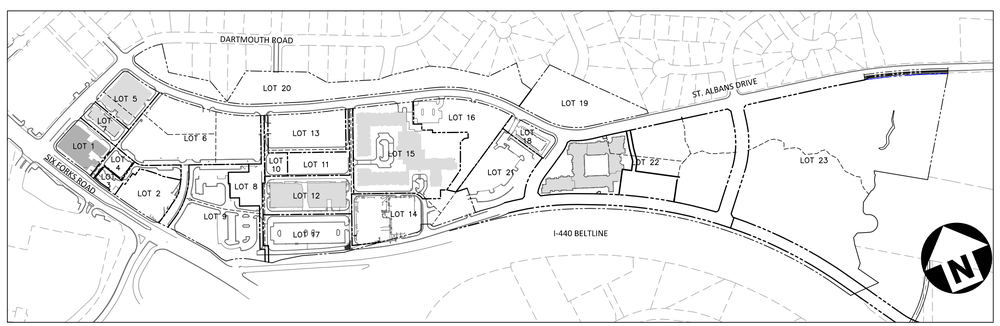
MAXIMUM INTENSITY PER USE CHART		
USE	INTENSITY	TOTAL USED
OFFICE (INCLUDING INSTITUTION/CIVIC/SERVICE)	2,014,479 SF	1,630,933 SF
COMMERCIAL/RETAIL	450,000 SF	229,617 SF
HOTEL	1,100 ROOMS	272 ROOMS
RESIDENTIAL	3,800 UNITS	2,741 UNITS

TRACT	ACREAGE		ALLOWED RETAIL SF	PROPOSED RETAIL SF	REMAINING RETAIL SF	ALLOWED RESIDENTIAL DWELLING UNITS	PROPOSED RESIDENTIAL DWELLING UNITS	REMAINING RESIDENTIAL DWELLING UNITS	ALLOWED OFFICE SF	PROPOSED OFFICE SF	REMAINING OFFICE SF	ALLOWED LODGING UNITS	PROPOSED LODGING UNITS	REMAINING LODGING UNITS	ALLOWED CONGREGATE CARE UNITS	PROPOSED CONGREGATE CARE UNITS	REMAINING CONGREGATE CARE UNITS	EXECUTED OPTION
A	1.19	I							350,000	311,887	38,113	250	-	250	0	-	-	X
		II	70,000	16,406	53,594	500	-	500	-	-	-	250	-	250	0	-	-	
		III				250	-	250	200,000	-	200,000	250	-	250	0	-	-	
B	1.09		50,000	4,165	45,835	200	-	200	-	-	-	200	135	65	0	-	-	
C	2.75		40,000	23,658	16,342	100	-	100	300,000	283,507	16,493	-	-	-	0	-	-	
D	2.35		50,000	81,502	(31,502)	400	409	(9)	-	-	-	-	-	-	0	-	-	
E	5.32	I				350	376	(26)	500,000	337,854	162,146	325	137	188	0	-	-	X
		II	100,000	18,370	81,630	1,800	-	1,800	-	-	-	325	-	325	0	-	-	
		III				800	-	800	-	-	-	325	-	325	0	-	-	
F	7.00	I				900	676	224	-	-	-	325	-	325	0	-	-	X
		II	70,000	41,309	28,691	-	-	-	350,000	-	350,000	325	-	325	0	-	-	
		III				600	-	600	250,000	-	250,000	325	-	325	0	-	-	
G	2.40	I				750	-	750	-	329,746	(329,746)	325	-	325	0	-	-	X
		II	20,000	-	20,000	-	-	-	-	-	-	325	-	325	0	-	-	
		III				300	-	300	-	-	-	325	-	325	0	-	-	
H	0.98		10,000	-	10,000	100	171	(71)	-	-	-	-	-	-	0	-	-	
I	1.50		10,000	-	10,000	100	-	100	-	-	-	-	-	-	0	-	-	
J	1.95		80,000	-	80,000	150	-	150	-	-	-	-	-	-	0	-	-	
K	2.07		50,000	14,249	35,751	325	214	111	-	-	-	325	-	325	0	-	-	
L	9.09	I	20,000	-	20,000	-	-	-	-	-	-	-	-	-	350	-	350	
		II	50,000	-	50,000	1,500	-	1,500	-	-	-	-	-	-	0	-	-	
		III	50,000	-	50,000	-	-	-	-	-	-	-	-	-	1500	412	1,088	X
M	5.95		-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	
N	3.10	I	-	-	-	-	-	-	75,000	-	75,000	-	-	-	0	-	-	
		II	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	
		III	10,000	-	10,000	100	-	100	-	-	-	-	-	-	0	-	-	
O	0.72	I				-	-	-	100,000	-	100,000	-	-	-	0	-	-	
		II	25,000	-	25,000	-	-	-	-	-	-	-	-	-	0	-	-	
		III				100	-	100	-	-	-	-	-	-	0	-	-	
		IV				-	-	-	-	-	-	225	-	225	0	-	-	
P	3.07		-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	
Q	1.69		15,000	14,726	274	200	200	-	-	-	-	225	-	225	0	-	-	
R	4.16	I	50,000	-	-	500	326	78	-	-	-	300	-	300	0	-	-	X
		II	25,000	-	-	500	-	404	200,000	-	200,000	300	-	300	0	-	-	
		III	-	-	-	500	-	404	500,000	-	500,000	300	-	300	0	-	-	
S	1.40		20,000	5,614	-	200	-	200	-	-	-	-	-	-	200	-	200	
T	1.89	I	-	-	-	525	-	525	-	-	-	225	-	225	0	-	-	
		II	20,000	-	-	350	-	350	-	-	-	225	-	225	0	-	-	
		III	45,000	6,876	-	275	-	275	400,000	367,939	32,061	225	-	225	0	-	-	X
U	3.55		25,000	6,973	-	300	396	0 (96 UNITS FROM TRACT R)	-	-	-	-	-	-	250	-	250	
V	5.99	I	15,000	5,988	9,012	600	330	270	425,000	-	425,000	200	-	200	0	-	-	
		II	35,000	-	-	400	-	400	425,000	-	425,000	200	-	200	0	-	-	
		III	50,000	-	-	275	-	275	425,000	-	425,000	200	-	200	0	-	-	
W	9.51		-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	
	TOTAL			239,836				3,098		1,630,933			272			412		

GENERAL NOTES

1. ALL RESIDENTIAL, PUBLIC AND INSTITUTIONAL, OFFICE, AND COMMERCIAL LAND USES (AS THOSE TERMS ARE UTILIZED IN THE UDO) WILL BE PERMITTED WITHIN THE DEVELOPMENT.
2. THE FOLLOWING BUILDING TYPES SHALL BE ALLOWED WITHIN THE DEVELOPMENT; TOWNHOUSE, APARTMENT, GENERAL BUILDING, MIXED-USE BUILDING, CIVIC BUILDING, AND OPEN LOT.
3. OVERALL DEVELOPMENT INTENSITIES ARE BASED ON THE MAXIMUM INTENSITY PER USE CHART.
4. TRACTS A, E, F, G, L, N, O, R, T, AND V CAN INDEPENDENTLY CHANGE FROM ONE OPTION TO ANOTHER (I. E. - TRACT E CAN BE CHANGED TO SCENARIO II WHILE TRACT F STAYS IN SCENARIO I).
5. 5. BUILDING HEIGHTS CANNOT SHIFT BETWEEN TRACTS WITHIN THE DEVELOPMENT.
6. 6. SUBJECT TO THE OTHER PROVISIONS OF THIS MASTER PLAN, THE DEVELOPER RESERVES THE RIGHT TO CONSTRUCT EXCLUSIVELY RETAIL BUILDINGS WITHIN THE DEVELOPMENT.
7. 7. TRACT AND LOT SIZES AND THEIR CONFIGURATIONS ARE SUBJECT TO CHANGE IN ACCORDANCE WITH THE MASTER PLAN WITHIN THE DEVELOPMENT.
8. 8. THERE SHALL BE NO MINIMUM OR MAXIMUM LOT AREA OR LOT WIDTHS REQUIRED WITHIN THE DEVELOPMENT.
9. 9. THERE SHALL BE A BUILD-TO OF 0-100 FEET ALONG CHURCH AT NORTH HILLS STREET EXTENSION. WITHIN THIS BUILD-TO, THE BUILDING WIDTH SHALL BE 50% MINIMUM.
10. 10. ALL MINIMUM BUILDING AND PARKING SETBACKS SHALL BE 0 FEET FOR ALL TRACTS OR LOTS WITHIN THE DEVELOPMENT. HOWEVER, TRACTS S AND U SHALL PROVIDE A MINIMUM SETBACK OF 32 FEET FROM BACK OF CURB OF ST. ALBANS DRIVE BASED UPON THE DATE OF THIS MASTER PLAN APPROVAL.
11. 11. UDO BUILDING-STEP-BACK REQUIREMENTS SHALL APPLY TO BUILDINGS WITHIN TRACTS Q, S, U, AND W. STEP-BACK REQUIREMENTS SHALL NOT APPLY TO ALL OTHER TRACTS WITHIN THE DEVELOPMENT.
12. 12. FOR BUILDINGS EXCEEDING 12 STORIES IN HEIGHT WITHIN TRACTS A, B, C, D, E, F, G, L, R, T, AND V, THERE SHALL BE A MAXIMUM FLOOR PLATE SIZE OF 35,000 SF ABOVE THE 12TH STORY.
13. 13. MINIMUM GROUND STORY AND UPPER STORY TRANSPARENCY REQUIREMENTS SHALL NOT APPLY TO TOWNHOMES OR APARTMENT BUILDINGS WITHIN ALL TRACTS OF THE DEVELOPMENT.
14. 14. MINIMUM GROUND STORY AND UPPER STORY TRANSPARENCY REQUIREMENTS SHALL APPLY TO GENERAL BUILDINGS AND MIXED-USE BUILDINGS WITHIN TRACTS Q-W OF THE DEVELOPMENT. MINIMUM GROUND STORY AND UPPER STORY TRANSPARENCY REQUIREMENTS SHALL NOT APPLY TO TRACTS A-P WITHIN THE DEVELOPMENT.
15. 15. THE MAXIMUM BLANK WALL AREA STANDARDS SHALL APPLY BY BUILDING TYPE TO TRACTS Q-W WITHIN THE DEVELOPMENT. MAXIMUM BLANK WALL AREA STANDARDS SHALL NOT APPLY TO TRACTS A-P WITHIN THE DEVELOPMENT.
16. 16. MINIMUM GROUND STORY HEIGHT SHALL BE 9 FEET FOR GENERAL BUILDINGS AND MIXED-USE BUILDINGS WITHIN TRACTS Q-W OF THE DEVELOPMENT. MINIMUM GROUND STORY HEIGHT SHALL NOT APPLY TO TRACTS A-P WITHIN THE DEVELOPMENT.
17. 17. THERE SHALL BE NO MINIMUM GROUND FLOOR ELEVATION REQUIRED BY BUILDING TYPE WITHIN ALL TRACTS OF THE DEVELOPMENT.
18. 18. A MINIMUM OF FIFTEEN PERCENT (15%) OF THE DEVELOPMENT WILL BE RESERVED AS OPEN SPACE, WHICH MAY INCLUDE GREENWAY, GREEN SPACES, PLAZAS/HARDSCAPE AREAS, TREE CONSERVATION AREAS, AND ENVIRONMENTAL FEATURES. OPEN SPACE TOTALS MAY, WITH THE CONSENT OF THE CITY ADMINISTRATION, BE SHIFTED OR REALLOCATED BETWEEN TRACTS OR LOTS WITHIN THE DEVELOPMENT.
19. 19. A 5% MINIMUM OUTDOOR AMENITY AREA REQUIREMENT SHALL APPLY TO TRACTS Q-W WITHIN THE DEVELOPMENT WHEN REQUIRED BY BUILDING TYPE. GREENWAY AREAS MAY COUNT TOWARDS THIS REQUIREMENT. NO OUTDOOR AMENITY AREA REQUIREMENT SHALL APPLY TO TRACTS A-P WITHIN THE DEVELOPMENT.
20. A TRANSIT EASEMENT MEETING CITY OF RALEIGH STANDARDS SHALL BE PROVIDED ALONG EASTBOUND ST. ALBANS DRIVE EAST OF THE INTERSECTION AT CHURCH AT NORTH HILLS STREET. THE FINAL LOCATION OF THE EASEMENT SHALL BE DETERMINED AT THE TIME OF SITE REVIEW. IF REQUESTED, THE TRANSIT EASEMENT SHALL BE IMPROVED PER CITY OF RALEIGH STANDARDS.
21. ANY DUMPSTERS LOCATED ADJACENT TO ST. ALBANS DRIVE SHALL BE APPROPRIATELY SCREENED OR LOCATED INSIDE A BUILDING.



EXISTING LOT EXHIBIT
SCALE: 1"=400'

LEGEND

- DEVELOPABLE AREA
- NEUSE RIVER RIPARIAN BUFFER
- EXISTING WETLAND
- OPEN SPACE
- PROPOSED PUBLIC STREET

GRAPHIC SCALE
0 100 200 400
1 inch = 200 ft.

SEE SHEET C0.00 FOR ALL PROJECT NOTES.

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

OPEN SPACE CALCULATIONS

REQUIRED OPEN SPACE*:	15% OF 1,282,401 SF/29.44 AC = 192,360 SF/4.42 AC
EXISTING OPEN SPACE:	488,190 SF/11.21 AC (38.08%)
PROVIDED OPEN SPACE:	488,190 SF/11.21 AC (38.08%)
REQUIRED OPEN SPACE ACCOUNTS FOR FUTURE RIGHT-OF-WAY DEDICATION	

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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CLIENT

KANE REALTY CORPORATION
4321 LASSITER AT NORTH HILLS AVENUE
SUITE 250
RALEIGH, NORTH CAROLINA 27609

KANE REALTY CORPORATION

BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	08.09.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN-22008-ASR-OAS2
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=200'
DATE	08. 17. 2023

SHEET

OVERALL DEVELOPMENT TRACKING PLAN

C2.03

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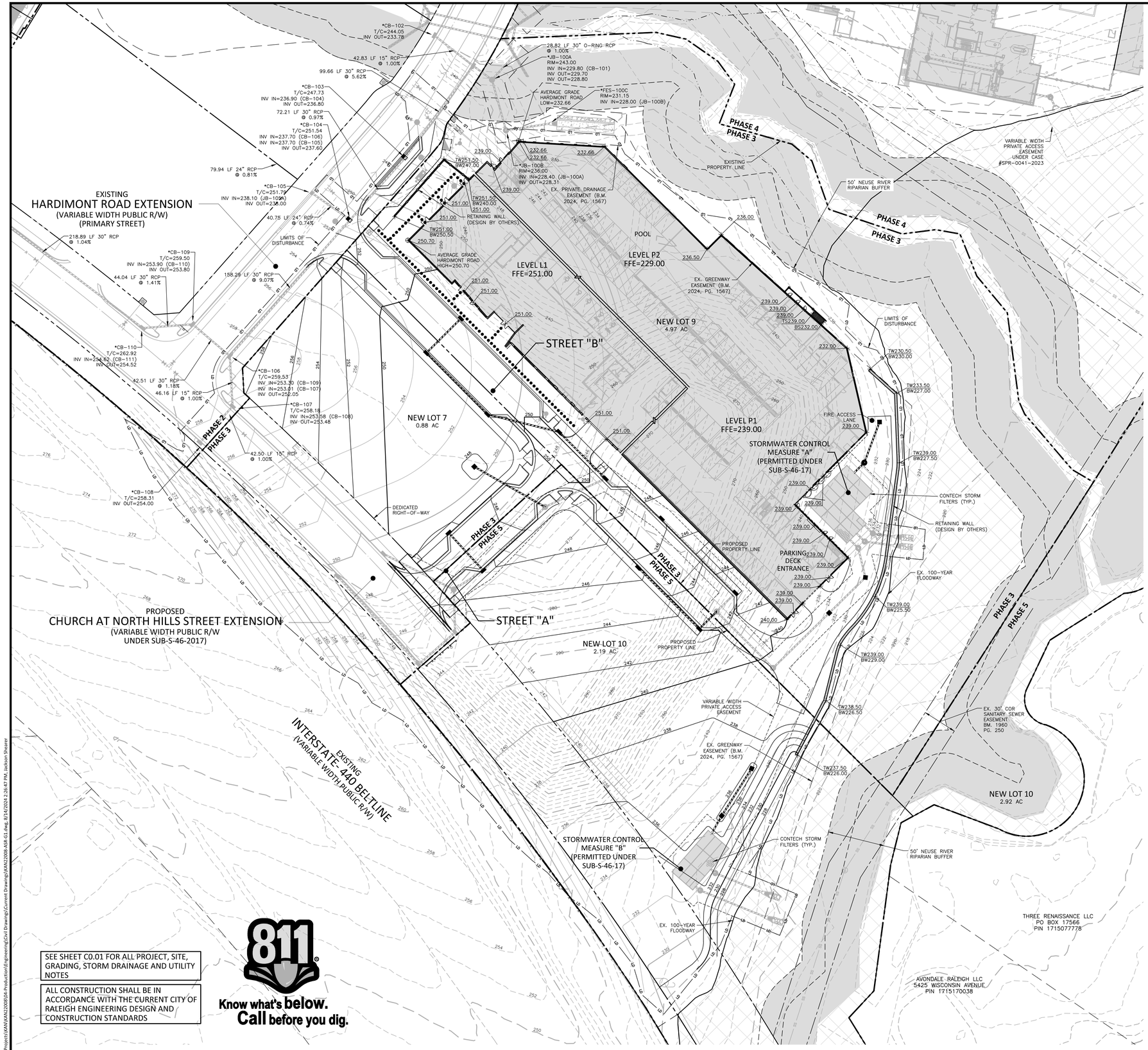

GRADING LEGEND

- FLARED END SECTION
- ENDWALL SECTION
- CATCH BASIN
- DROP INLET
- STORM SERVICE INLET
- STORM SERVICE ROOF–DRAIN
- JUNCTION BOX
- DRAINAGE FLOW ARROW
- LINE BREAK SYMBOL
- 250.50 / 250.00 — TOP & BOTTOM CURB ELEVATIONS
- TW=223.00 / BW=213.00 — TOP OF WALL ELEVATION / BOTTOM OF WALL ELEVATION (NOTE: BOTTOM OF WALL IS GROUND ELEVATION NOT WALL FOUNDATION)
- + 250.60 — SPOT ELEVATION
- STORM DRAINAGE
- STORM SERVICE LINE
- RD RD RD — ROOF DRAIN, 8" ADS NON-PERFORATED TUBING OR EQUAL 1.0% MIN. SLOPE 3' MIN. COVER PVC SCHEDULE 40 IN TRAFFIC AREAS
- TP TP TP — TREE PROTECTION FENCE
- LD LD — LIMITS OF DISTURBANCE
- WOODED AREA
- 250 — MAJOR CONTOUR
- 252 — MINOR CONTOUR
- 250 — EXISTING MAJOR CONTOUR
- 252 — EXISTING MINOR CONTOUR
- 250 — PHASE 3 MAJOR CONTOUR
- 252 — PHASE 3 MINOR CONTOUR
- EASEMENT LINE
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- EX. WETLANDS
- ACCESSIBLE ROUTE

HARDIMONT ROAD AVERAGE GRADE		
HIGH	LOW	AVERAGE
250.70	232.66	241.68

GENERAL NOTE:

1. PHASE 2 INFRASTRUCTURE CURRENTLY UNDER CONSTRUCTION PER CITY OF RALEIGH CASE #SPR-0051-2020.

SEE SHEET C0.01 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

811 Know what's below. Call before you dig.

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

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3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	08.14.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN-22008-SPR-G1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

GRADING AND STORM DRAINAGE PLAN
C3.00

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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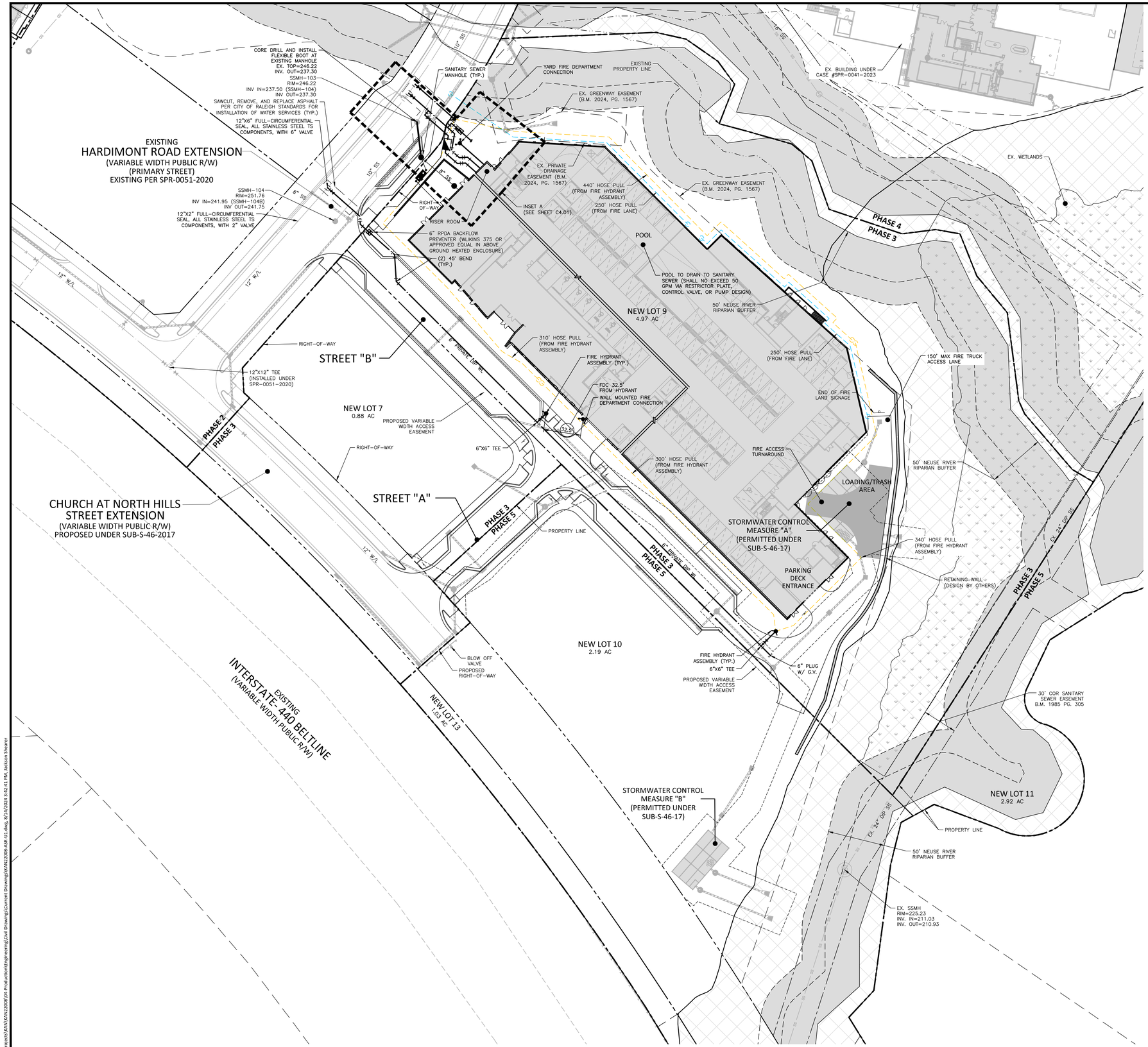

UTILITY LEGEND

- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION (FDC)
- WATER METER
- WATER VALVE
- POST INDICATOR VALVE (PIV)
- VALVE IN MANHOLE
- METER & VAULT
- BACKFLOW PREVENTER (BFP)
- REDUCER
- PLUG
- BLOW-OFF ASSEMBLY
- SANITARY SEWER MANHOLE
- SEWER CLEAN-OUT
- GREASE TRAP
- SEWER FLOW DIRECTION ARROW
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- LINE BREAK SYMBOL
- WATERLINE
- WATER SERVICE LINE
- UTILITY SLEEVE
- SANITARY SEWER
- SEWER SERVICE LINE
- SEWER FORCE MAIN (FM)
- GAS LINE (G)
- OVERHEAD UTILITY (OU)
- UNDERGROUND ELECTRIC (UE)
- TELEPHONE (T)
- EASEMENT LINE
- HOSE PULL FROM FIRE LANE
- HOSE PULL FROM FIRE HYDRANT ASSEMBLY
- PHASE LINE
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- EX. WETLANDS

GENERAL NOTES:

1. THE DOMESTIC BACKFLOW PREVENTOR IS TO BE WITHIN 50' OF THE WATER METER.
2. PER CORPUD STANDARDS THE POOL SHALL HAVE A 50GPM FLOW RESTRICTOR.
3. ELEMENTS SHOWN GRAYED BACK ARE PERMITTED UNDER CITY OF RALEIGH CASE NO. SPR-0051-2020.

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN-22008-ASR-U1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

UTILITY PLAN

C4.00

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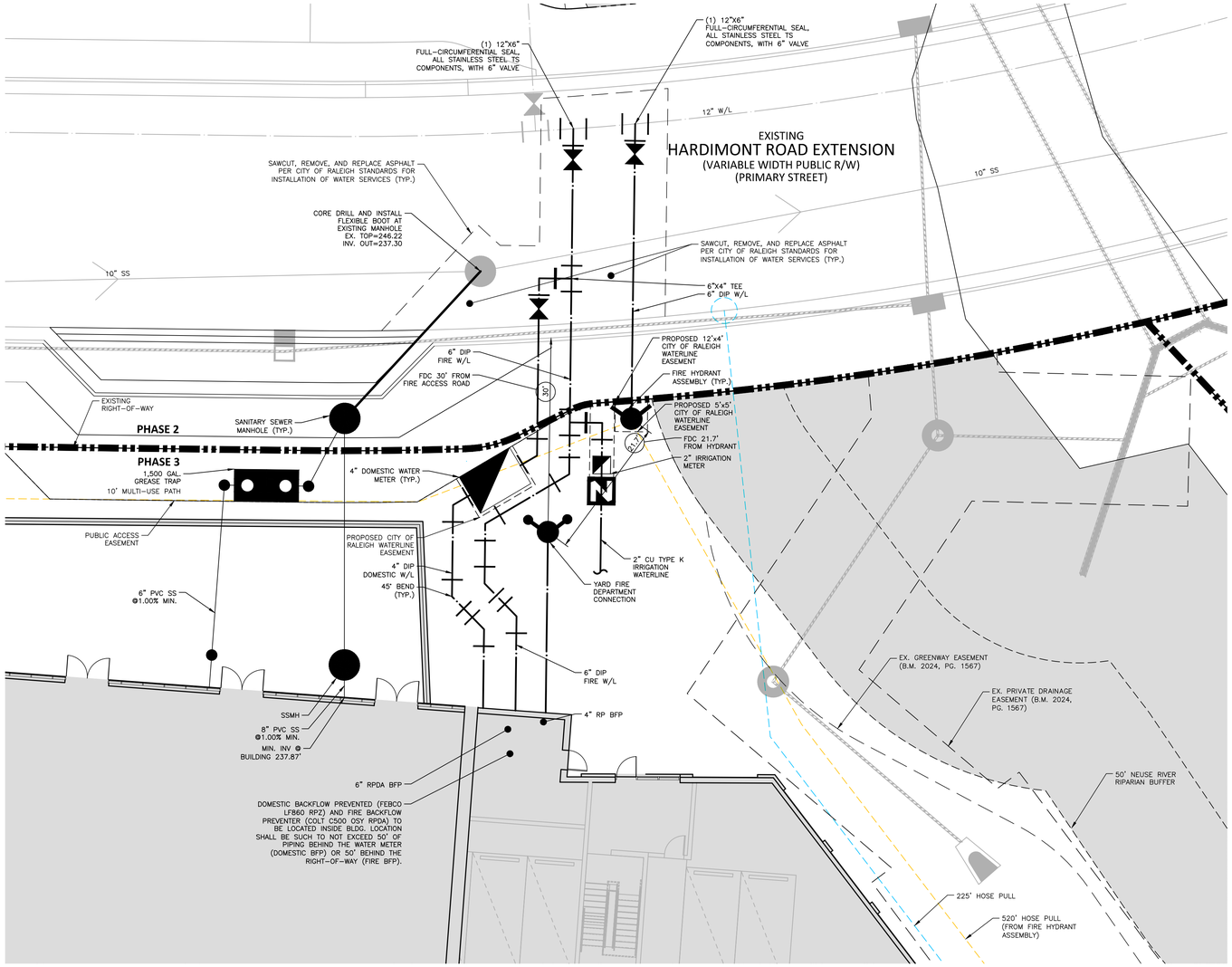

INSET A

GRAPHIC SCALE
0 5 10 20
1 inch = 10 ft.

GENERAL NOTES:

1. ELEMENTS SHOWN GRAYED BACK ARE PERMITTED UNDER CITY OF RALEIGH CASE NO. SPR-0051-2020 AND SUB-S-46-17.
2. NO TEMPORARY OR PERMANENT ENCROACHMENTS (INCLUDING, BUT NOT LIMITED TO: CLEARING, GRADING, FENCING, AND THE INSTALLATION OF RETAINING WALLS OR OTHER STRUCTURES) ARE PERMITTED WITHIN THE GREENWAY EASEMENT AREA, WITHOUT PRIOR APPROVAL BY THE CITY OF RALEIGH.

UTILITY LEGEND

- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION (FDC)
- WATER METER
- WATER VALVE
- POST INDICATOR VALVE (PIV)
- VALVE IN MANHOLE
- METER & VAULT
- BACKFLOW PREVENTER
- REDUCER
- PLUG
- BLOW-OFF ASSEMBLY
- SANITARY SEWER MANHOLE
- SEWER CLEAN-OUT
- GREASE TRAP
- SEWER FLOW DIRECTION ARROW
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- LINE BREAK SYMBOL
- WATERLINE
- WATER SERVICE LINE
- UTILITY SLEEVE
- SANITARY SEWER
- SEWER SERVICE LINE
- FM — FM — SEWER FORCE MAIN
- G — G — G — G — GAS LINE
- OU — OU — OVERHEAD UTILITY
- UE — UE — UNDERGROUND ELECTRIC
- T — T — T — T — TELEPHONE
- EASEMENT LINE
- HOSE PULL FROM FIRE LANE
- HOSE PULL FROM FIRE HYDRANT ASSEMBLY
- NEUSE RIVER RIPARIAN BUFFER
- FLOODPLAIN / FLOODWAY
- EX. WETLANDS

GENERAL NOTES:

1. THE DOMESTIC BACKFLOW PREVENTOR IS TO BE WITHIN 50' OF THE WATER METER.
2. PER CORPUD STANDARDS THE POOL SHALL HAVE A 50GPM FLOW RESTRICTOR.
3. ELEMENTS SHOWN GRAYED BACK ARE PERMITTED UNDER CITY OF RALEIGH CASE NO. SPR-0051-2020.

SEE SHEET C0.00 FOR ALL PROJECT NOTES.

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

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PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN-22008-ASR-U1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=10'
DATE	08. 17. 2023

SHEET

UTILITY INSET PLAN

C4.01

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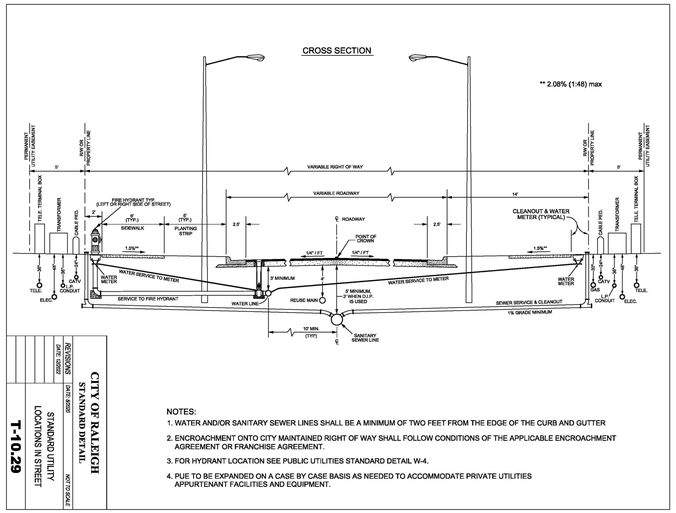
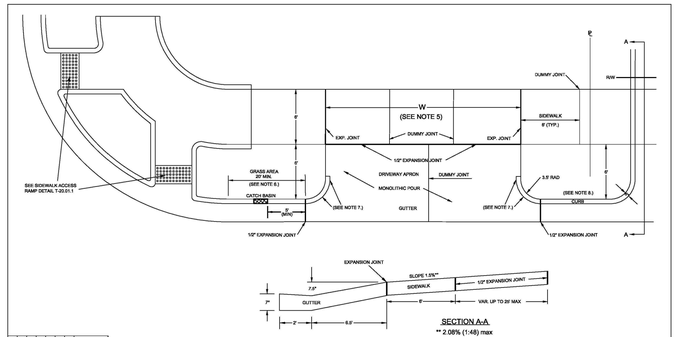


NOTES:
1. WATER AND/OR SANITARY SEWER LINES SHALL BE A MINIMUM OF TWO FEET FROM THE EDGE OF THE CURB AND GUTTER
2. ENCROACHMENT ONTO CITY MAINTAINED RIGHT OF WAY SHALL FOLLOW CONDITIONS OF THE APPLICABLE ENCROACHMENT AGREEMENT OR FRANCHISE AGREEMENT.
3. FOR HYDRANT LOCATION SEE PUBLIC UTILITIES STANDARD DETAIL W-4.
4. PUE TO BE EXPANDED ON A CASE BY CASE BASIS AS NEEDED TO ACCOMMODATE PRIVATE UTILITIES APPURTENANT FACILITIES AND EQUIPMENT.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD UTILITY LOCATIONS IN STREET	
	T-10.29	



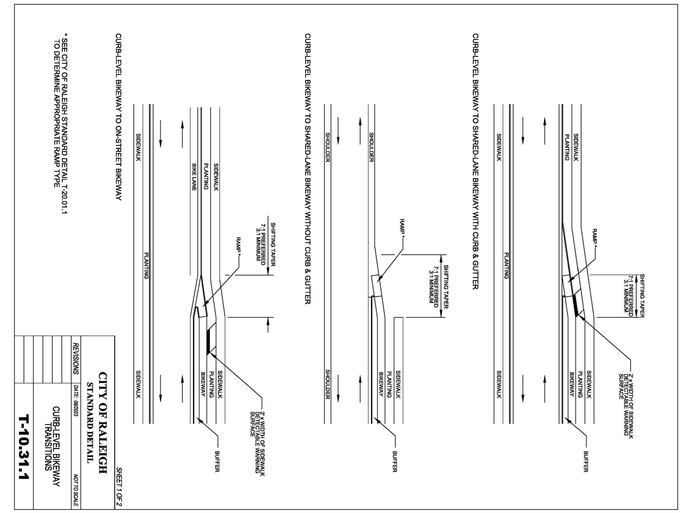
SECTION A-A
** 2.08% (1:48) max

NOTES:
1. WHEN A DRIVEWAY IS TO BE CONSTRUCTED WHERE FINAL LAYER OF ASPHALT HAS BEEN PLACED, THE CURB CAN BE SAW CUT IN A STRAIGHT LINE AND REMOVED. IF THE FINAL LAYER HAS NOT BEEN PLACED, THE ENTIRE CURB AND GUTTER SHALL BE REMOVED AND THE DRIVEWAY SHALL BE A MONOLITHIC POUR USING 3000 PSI ,MAX. 4" SLUMP CONCRETE.
2. EXPANSION MATERIAL SHALL EXTEND THE FULL DEPTH OF THE CONCRETE. 1/2" EXPANSION JOINTS ALONG SIDEWALK SHALL BE LOCATED AT NOT MORE THAN 40' INTERVALS & DUMMY CONSTRUCTION JOINTS AT 6' INTERVALS. DUMMY JOINTS SHALL BE AT LEAST 1/3 THE SLAB THICKNESS IN DEPTH.
3. SLOPE ON UNPAVED AREAS BETWEEN BACK OF CURB & SIDEWALK SHALL BE 1/4" PER FT.
4. NO EXPOSED AGGREGATE OR OTHER SPECIAL SURFACE TREATMENTS IN ROW.
5. W-DIMENSION AS SHOWN ON PLAN VIEW SHALL BE AS FOLLOWS:
   10' MINIMUM, 18' MAXIMUM FOR RESIDENTIAL DRIVEWAYS
   36' MAXIMUM FOR COMMERCIAL DRIVEWAYS
6. THE DISTANCE FROM THE END OF A STREET CURB RADIUS TO THE BEGINNING OF THE DRIVEWAY RADIUS SHOULD BE MINIMUM OF 20 FT.
7. CURB RADIUS TO BE DISSIPATED BETWEEN LIMITS NOTED ABOVE.
8. 7' MIN. BETWEEN DRIVEWAYS ON ADJACENT LOTS. 45' MIN. BETWEEN DRIVEWAYS ON SAME LOT.
9. NO RADIUS ENCROACHMENT SHALL BE ALLOWED ACROSS AN ADJOINING PROP. FRONTAGE. THIS IS DETERMINED BY EXTENDING A LINE FROM THE PROPERTY CORNER PERPENDICULAR TO THE RW TO THE CURB AND GUTTER LOCATION.
10. ALL CONCRETE MUST BE POURED ON SAME DAY AS INSPECTION OR RE-INSPECTION IS REQUIRED.
11. FINISH THE SURFACE TO GRADE AND CROSS SECTION WITH A FLOAT, TROWEL SMOOTH AND FINISH WITH A BROOM
12. DRIVEWAY RADIUS SHALL BE A MINIMUM OF 5' FROM ANY CATCH BASIN.
13. WHERE UTILITY BOXES/VAULTS MUST BE LOCATED IN THE SIDEWALK, THEY SHALL HAVE A MINIMUM 3' WIDE FRAME OF CONCRETE AROUND THEM.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	DRIVEWAY AND SIDEWALK DETAIL	
	T-10.01.2	

SHEET 2 OF 4

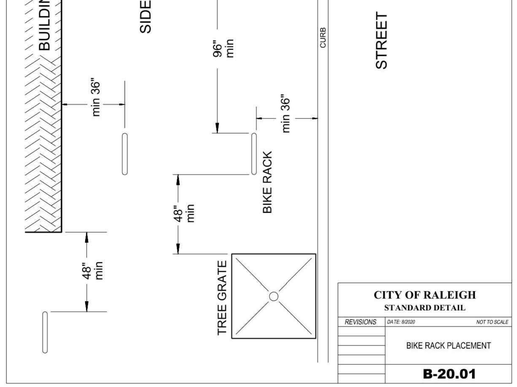


* SEE CITY OF RALEIGH STANDARD DETAIL T-20.01.1 TO DETERMINE APPROPRIATE RAMP TYPE

CITY OF RALEIGH
STANDARD DETAIL

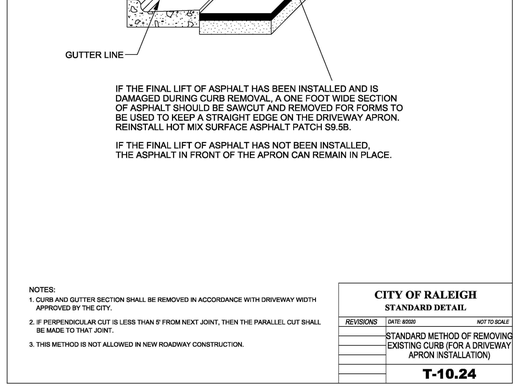
REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB-LEVEL BIKEWAY TRANSITIONS	
	T-10.31.1	

SHEET 1 OF 2



CITY OF RALEIGH
STANDARD DETAIL

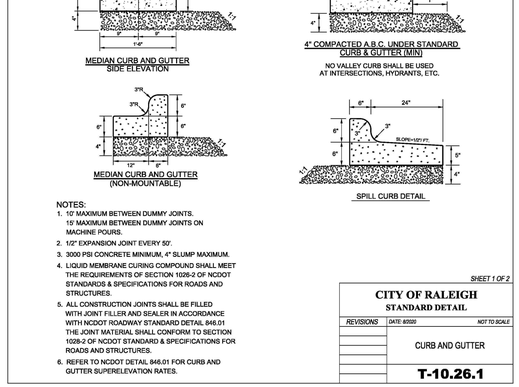
REVISIONS	DATE: 8/2020	NOT TO SCALE
	BIKE RACK PLACEMENT	
	B-20.01	



NOTES:
1. CURB AND GUTTER SECTION SHALL BE REMOVED IN ACCORDANCE WITH DRIVEWAY WIDTH APPROVED BY THE CITY.
2. IF PERPENDICULAR CUT IS LESS THAN 5' FROM NEXT JOINT, THEN THE PARALLEL CUT SHALL BE MADE TO THAT JOINT.
3. THIS METHOD IS NOT ALLOWED IN NEW ROADWAY CONSTRUCTION.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD METHOD OF REMOVING EXISTING CURB (FOR A DRIVEWAY APRON INSTALLATION)	
	T-10.24	

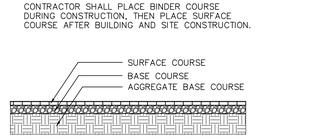


NOTES:
1. 10' MAXIMUM BETWEEN DUMMY JOINTS. 15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS.
2. 1/2" EXPANSION JOINT EVERY 50'.
3. 3000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
4. LIQUID MEMBRANE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS AND STRUCTURES.
5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01 THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT STANDARD & SPECIFICATIONS FOR ROADS AND STRUCTURES.
6. REFER TO NCDOT DETAIL 846.01 FOR CURB AND GUTTER SUPERELEVATION RATES.

SHEET 1 OF 2

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB AND GUTTER	
	T-10.26.1	



*SUBGRADE SHALL BE VOID OF HIGHLY PLASTIC CLAYS WITHIN THE TOP 12" AND SHALL BE COMPACTED TO 98% OF THE MDD (STD PROCTOR)

STANDARD DUTY
PAVEMENT DETAIL

CONTRACTOR SHALL PLACE BINDER COURSE DURING CONSTRUCTION, THEN PLACE SURFACE COURSE AFTER BUILDING AND SITE CONSTRUCTION.

*SUBGRADE SHALL BE VOID OF HIGHLY PLASTIC CLAYS WITHIN THE TOP 12" AND SHALL BE COMPACTED TO 98% OF THE MDD (STD PROCTOR)

HEAVY DUTY
PAVEMENT DETAIL

ASPHALT PAVEMENT DETAIL

N.T.S.

NOTE: A FINAL GEOTECHNICAL RECOMMENDATION FOR ASPHALT/RIGID PAVEMENT SECTIONS SHALL BE OBTAINED PRIOR TO CONSTRUCTION DRAWING APPROVAL. THESE SECTIONS ARE PRELIMINARY AND SHALL BE CONFIRMED BY A LICENSED GEOTECHNICAL ENGINEER.

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

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4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

SITE DETAILS

C8.00

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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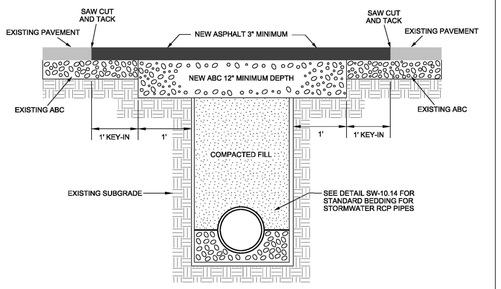


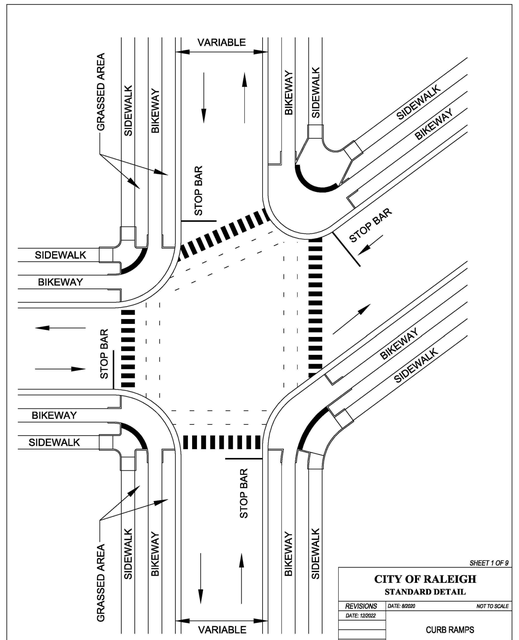
NOTES:

1. THE PAVEMENT EDGE SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.
3. THE FINAL 1' OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT. BITUMINOUS BASE OR BINDER MAY BE SUBSTITUTED IF APPROVED BY TRANSPORTATION DIRECTOR OR DESIGNEE.
4. THE ENTIRE THICKNESS/VERTICAL EDGE OF THE CUT SHALL BE TACKED.
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK.
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY AND ROLLED WITH A SMOOTH DRUM ROLLER TO ACHIEVE A SMOOTH, LEVEL PATCH.

SHEET 1 OF 2

CITY OF RALEIGH
STANDARD DETAIL

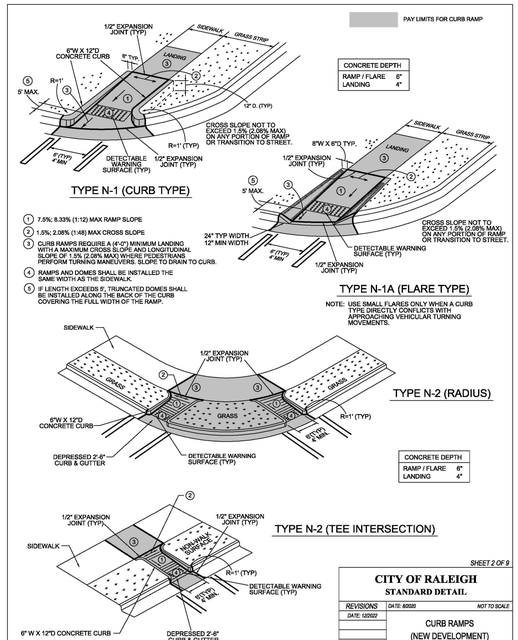
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 08/2023	ASPHALT PAVEMENT PATCH AND RCP PIPE BACKFILL	
	T-10.05.1	



SHEET 1 OF 9

CITY OF RALEIGH
STANDARD DETAIL

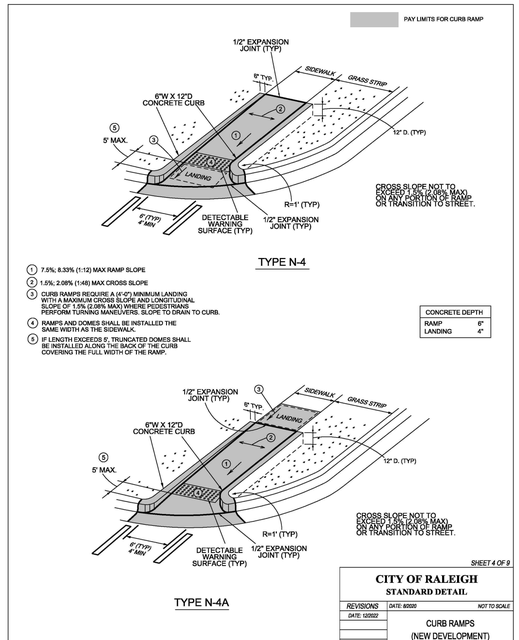
REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS	
	T-20.01.1	



SHEET 2 OF 9

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS (NEW DEVELOPMENT)	
	T-20.01.2	



SHEET 4 OF 9

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	CURB RAMPS (NEW DEVELOPMENT)	
	T-20.01.4	

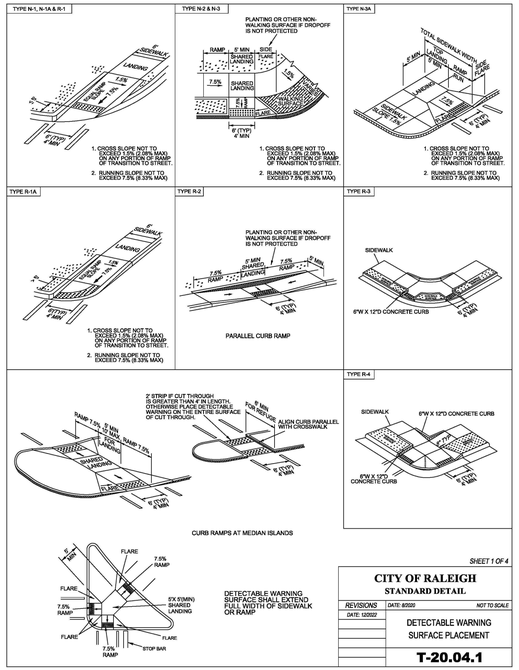
CITY OF RALEIGH
CURB RAMPS
GENERAL NOTES

1. CITY OF RALEIGH STANDARD CURB RAMPS HAVE BEEN DEVELOPED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND PUBLIC RIGHT OF WAY ACCESS GUIDELINES (PROWAG).
2. CURB RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. SIDEWALK ACCESS RAMPS SHALL BE LOCATED AS INDICATED IN THE DETAIL, HOWEVER, THE LOCATION MAY BE ADJUSTED IN COORDINATION WITH THE CITY OF RALEIGH WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT.
3. DOUBLE WHEELCHAIR RAMPS ARE TO BE INSTALLED AT ALL PUBLIC STREET INTERSECTIONS WHERE SIDEWALK IS REQUIRED.
4. THE WALKING SURFACE SHALL BE SLIP RESISTANT. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.
5. NO SLOPE ON THE SIDEWALK ACCESS RAMP SHALL EXCEED 1"/FT (12:1) IN RELATIONSHIP TO THE GRADE OF THE STREET.
6. IN NO CASE SHALL THE WIDTH OF THE SIDEWALK ACCESS RAMP BE LESS THAN 48" ALL RAMPS SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
7. USE CLASS A (3000 PSI) CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NONSKID SURFACE.
8. A 1/2" EXPANSION JOINT INSTALLED FULL DEPTH WILL BE REQUIRED WHERE THE CONCRETE SIDEWALK ACCESS RAMP JOINS THE CURB AND ALSO WHERE NEW CONCRETE ABUTS EXISTING CONCRETE.
9. CURB RAMPS SHOULD BE PLACED PARALLEL TO THE DIRECTION OF TRAVEL.

SHEET 8 OF 9

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CURB RAMP NOTES	
	T-20.01.8	

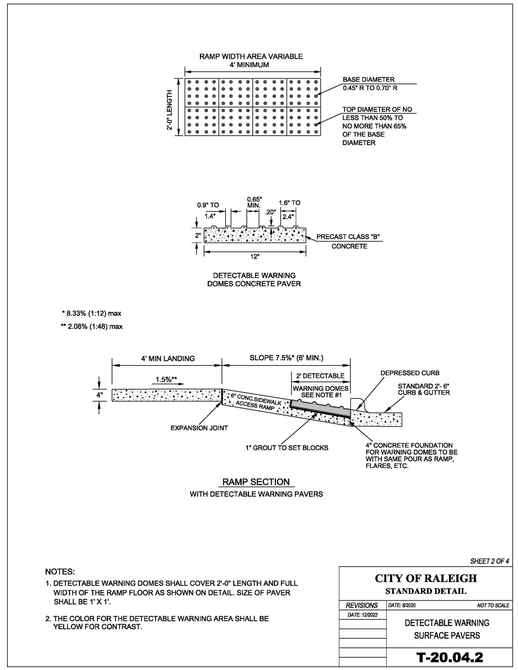


DETECTABLE WARNING SURFACE SHALL EXTEND FULL WIDTH OF SIDEWALK OR RAMP

SHEET 1 OF 4

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DETECTABLE WARNING SURFACE PLACEMENT	
	T-20.04.1	



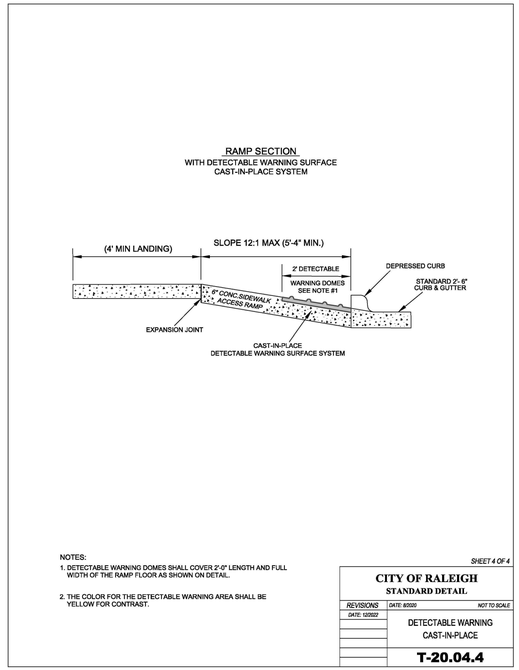
NOTES:

1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON DETAIL. SIZE OF PAVER SHALL BE 1'X 1'.
2. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.

SHEET 2 OF 4

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DETECTABLE WARNING SURFACE PAVERS	
	T-20.04.2	



NOTES:

1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON DETAIL.
2. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.

SHEET 4 OF 4

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
DATE: 12/2022	DETECTABLE WARNING CAST-IN-PLACE	
	T-20.04.4	

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

SITE DETAILS

C8.01

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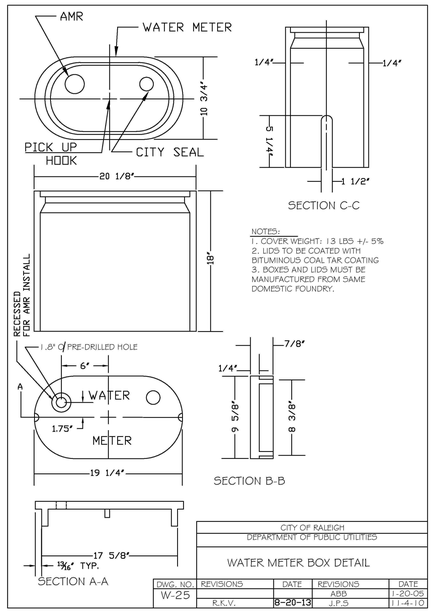
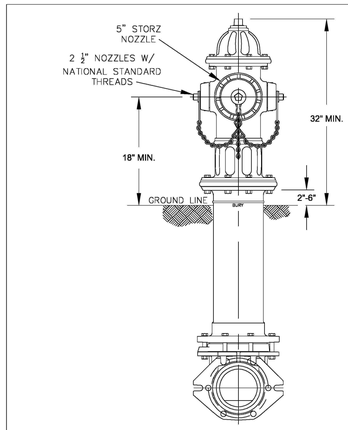


CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
WATER METER BOX DETAIL

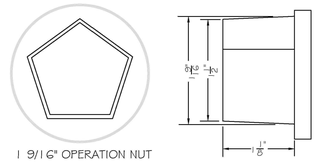
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-25			ABD	1-20-05
	R.K.V.	8-20-13	J.P.S.	11-4-10



NOTES:
1. ALL PUBLIC FIRE HYDRANTS IN THE CITY OF RALEIGH AND THE MERGER TOWNS OF GARNER, ROLESVILLE, WAKE FOREST, KNIGHTDALE, WENDELL AND ZEBULON SHALL BE PAINTED CHROME YELLOW WITH HIGH REFLECTIVE ALUMINUM SILVER CAPS, BONNETS AND OPERATING NUTS.
2. ALL PRIVATE FIRE HYDRANTS SHALL BE RED.

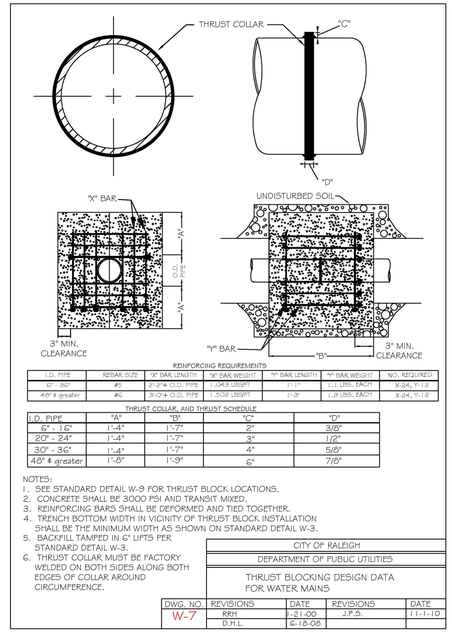
CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
RALEIGH, GARNER, KNIGHTDALE, ROLESVILLE, WAKE FOREST, WENDELL & ZEBULON
STANDARD FIRE HYDRANT WITH 5" STORZ PUMPER NOZZLE

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-5	MAB	6-30-16		
	KAT	9-15-17		



CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
HYDRANT OPERATING NUT AND 2 1/2" OUTLET THREADS

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-6	RRH	3-31-00	DHL	2-15-05
	A.B.B	4-13-04	J.P.S	11-1-10



REINFORCING REQUIREMENTS

I.D. PIPE	REBAR SIZE	"X" BAR LENGTH	"X" BAR WEIGHT	"Y" BAR LENGTH	"Y" BAR WEIGHT	NO. REQUIRED
6" - 36"	#5	2'-2"± O.D. PIPE	1.043 LBS/FT	1'-3"	1.19 LBS. EACH	X-24, Y-12
48" & greater	#6	3'-0"± O.D. PIPE	1.502 LBS/FT	1'-3"	1.19 LBS. EACH	X-24, Y-12

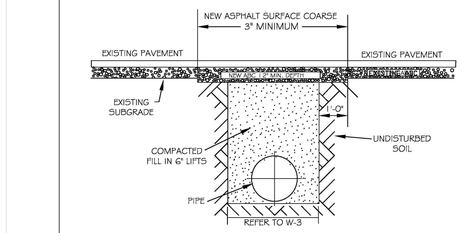
THRUST COLLAR, AND THRUST SCHEDULE

I.D. PIPE	"A"	"B"	"C"	"D"
6" - 16"	1'-4"	1'-7"	2"	3/8"
20" - 24"	1'-4"	1'-7"	3"	1/2"
30" - 36"	1'-4"	1'-7"	4"	5/8"
48" & greater	1'-5"	1'-9"	6"	7/8"

NOTES:
1. SEE STANDARD DETAIL W-9 FOR THRUST BLOCK LOCATIONS.
2. CONCRETE SHALL BE 3000 PSI AND TRANSIT MIXED.
3. REINFORCING BARS SHALL BE DEFORMED AND TIED TOGETHER.
4. TRENCH BOTTOM WIDTH IN VICINITY OF THRUST BLOCK INSTALLATION SHALL BE THE MINIMUM WIDTH AS SHOWN ON STANDARD DETAIL W-3.
5. BACKFILL TAMPED IN 6" LIFTS PER STANDARD DETAIL W-3.
6. THRUST COLLAR MUST BE FACTORY WELDED ON BOTH SIDES ALONG BOTH EDGES OF COLLAR AROUND CIRCUMFERENCE.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
THRUST BLOCKING DESIGN DATA FOR WATER MAINS

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-7	RRH	1-21-00	J.P.S.	11-1-10
	D.H.L.	6-16-06		

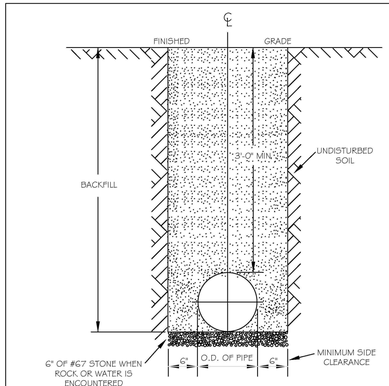


NOTES:

1. THE PAVEMENT CUT SHALL BE DEFINED BY A STRAIGHT EDGE AND CUT WITH AN APPROPRIATE SAW CUT MACHINE.
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.
3. THE FINAL 1' OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT.
4. THE ENTIRE THICKNESS/ VERTICAL EDGE OF CUT SHALL BE TACKED.
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK.
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY WITH A SMOOTH DRUM ROLLER TO ACHIEVE A SMOOTH LEVEL PATCH.
7. REFER TO CITY OF RALEIGH STANDARDS FOR TRENCHES AND PIPE BEDDING, W-3. FOR ADDITIONAL DETAILS.
8. NO HAND PATCHING ALLOWED.
9. PAVEMENT CUTS WITHIN NCDOT ROW SHALL CONFORM TO THE APPROVED ON SITE ENCROACHMENT PERMIT.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD ASPHALT PAVEMENT PATCH DETAIL

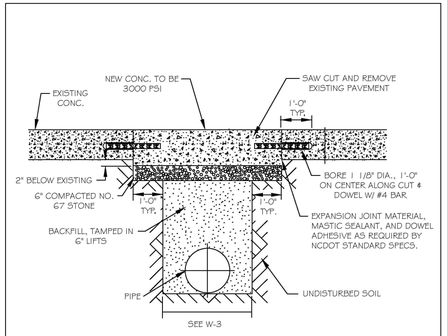
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-2	RRH	3-31-00	A.B.B.	4-16-04
	D.W.C.	11-1-99	J.P.S.	10-29-10



NOTES:
1. TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS.
5. ACHIEVE 95% COMPACTION IN BACKFILL.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON

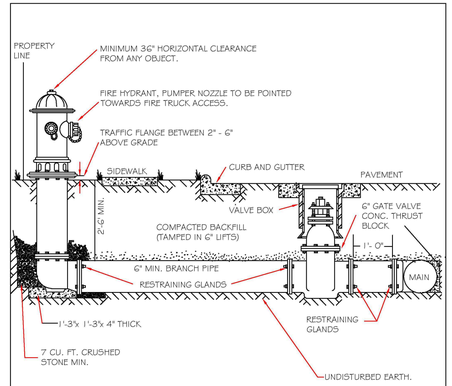
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-3	D.W.C.	9-3-99	ABD	2-15-05
	RRH	3-31-00	J.P.S.	10-29-10



NOTES:
1. SEE CITY OF RALEIGH STANDARDS FOR TRENCHES AND PIPE BEDDING W-3 FOR ADDITIONAL DETAILS
2. PAVEMENT CUTS WITHIN NCDOT ROW SHALL CONFORM TO THE APPROVED ON SITE ENCROACHMENT PERMIT.
3. THE PAVEMENT CUT SHALL BE DEFINED BY A STRAIGHT EDGE AND CUT WITH AN APPROVED SAW CUT MACHINE.
4. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT. 5. THE FINAL 6" OF FILL SHALL CONSIST OF ABC MATERAIL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT .

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD CONCRETE PAVEMENT PATCH DETAIL

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-1	RRH	3-31-00	A.B.B.	10-29-10
	A.B.B.	2-8-05	MAB	10-31-13



NOTES:
1. FIRE HYDRANT SHALL BE AS MANUFACTURED: MUELLER, AMERICAN DARLING, KENNEDY, M&H, WATEROUS, CLOW, EAST JORDAN IRON WORKS, OR US PIPE.
2. BRANCH PIPE SHALL BE DUCTILE IRON AWWA C150-96
3. 6" GATE VALVE SHALL BE AWWA C500-86 OPEN LEFT
4. STEEL RODS AND BOLTS SHALL BE ☭ HOT DIPPED GALVANIZED
5. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION RODS SHALL NOT BE COUPLED MORE THAN ONCE. IF THE LENGTH FROM THE VALVE TO THE HYDRANT EXCEEDS 20' THEN A MECHANICAL RESTRAINING GLAND WITH A REBAR CAGE SHALL BE INSTALLED NO MORE THAN 10' FROM HYDRANT AND POURED IN CONCRETE. FIRE HYDRANTS TO BE LOCATED IN ROW OR 2 FOOT EASEMENT ADJACENT TO ROW

ANYTIME SITE WORK, CONSTRUCTION, ROAD WORK, OR ANY OTHER WORK, CHANGES THE GRADE OF THE FIRE HYDRANT, THE PERSON RESPONSIBLE FOR THE WORK IS RESPONSIBLE FOR ADJUSTING THE FIRE HYDRANT TO STAY WITHIN COMPLIANCE.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD FIRE HYDRANT INSTALLATION DETAIL

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-4	ABB	4-6-04	PAP	2/17/09
	DHL	2/14/08		

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

M:\Projects\KAN\KAN22008\04-Production\Engineering\Civil Drawing\Current Drawing\KAN22008-ASR-D1.dwg, 7/19/2024 11:49:20 AM, Jackson Shearer

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KANE REALTY CORPORATION

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520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
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3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

WATER DETAILS

C8.02

REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS

BASED ON TEST PRESSURE OF 200 P.S.I.

ALL AREAS GIVEN IN SQUARE FEET.

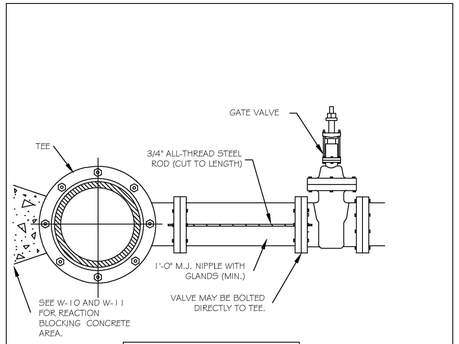
SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	UNDISTURBED EARTH OR CLAY 4000 LBS/FT²	SOFT CLAY, GOOD TRENCH WALL	LOOSE DRY SAND OR GRAVEL	ROCK; LIGHT, DRY CLAY; COARSE SAND	SAND, COMPACT, FIRM GOOD, 3000 LBS/FT²	SAND, CLEAN, DRY 2000 LBS/FT²	SOFT, LOOSE MUCK, SATURATED CLAY 1000 LBS/FT²	ROCK - POOR TO GOOD 10,000 LBS/FT²
6"									
11 1/4°	1,108	1	1	1	1	1	1	2	1
22 1/2°	2,207	1	2	2	1	1	1	3	1
45°	4,328	2	3	3	1	1	2	5	1
90°	7,996	2	4	5	1	1	2	8	1
PLUG	5,655	2	3	4	1	1	2	6	1
8"									
11 1/4°	1,970	1	1	2	1	1	1	2	1
22 1/2°	3,922	1	2	3	1	1	1	4	1
45°	7,694	2	4	5	1	1	2	8	1
90°	14,215	4	8	9	2	2	4	15	2
PLUG	10,053	3	5	6	2	2	3	10	1
12"									
11 1/4°	4,433	2	3	3	1	1	2	5	1
22 1/2°	8,826	3	5	6	2	2	3	9	1
45°	17,312	5	9	11	3	3	5	18	2
90°	31,963	8	16	19	4	4	8	32	4
PLUG	22,619	6	12	14	3	3	6	23	3
16"									
11 1/4°	7,881	2	4	5	1	1	2	8	1
22 1/2°	15,691	4	8	10	2	2	4	16	2
45°	30,779	8	16	19	4	4	8	31	4
90°	56,861	15	29	35	8	8	15	57	6
PLUG	40,213	10	21	25	5	5	10	41	5

REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.

USE 6" - 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
THRUST BLOCKING DESIGN QUANTITY TABLE

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-10	D.W.C.	6-23-99		

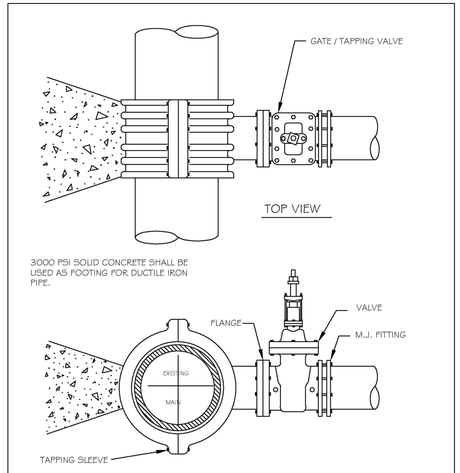


ROD REQUIREMENTS	
NO. OF RODS	BRANCH SIZE
4"	2
6"	2
8"	4
12"	4
16"	6
24"	6
30"	8
36"	8

NOTES:
1. STEEL RODS AND BOLTS SHALL BE 3/4" HOT DIPPED GALVANIZED.
2. SEE STANDARD THRUST BLOCK, TABLES W-10 AND W-11 FOR CONCRETE.
3. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL FITTINGS.
4. THIS RODDING REQUIREMENT DOES NOT APPLY TO FIRE HYDRANTS.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
VALVE RESTRAINT AT TEES AND CROSSES FOR LINES (4"-24")

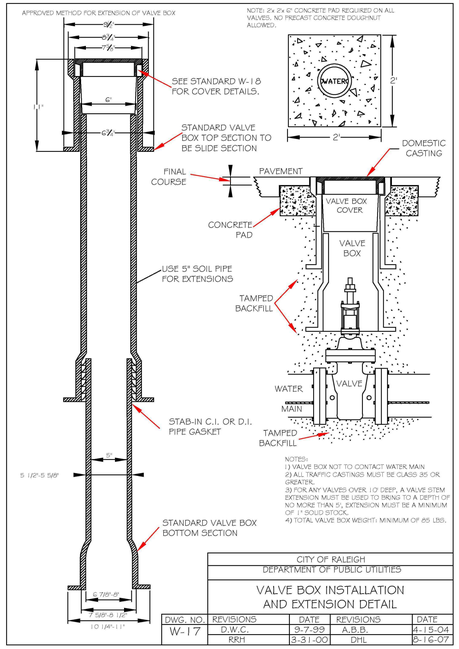
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-15	RRH	3-31-00	D.H.L.	6-16-08
	A.B.B.	4-19-04	J.P.S.	11-1-10



NOTES:
1. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT FITTINGS.
2. SEE STANDARD REACTION BLOCK TABLES, W-10 AND W-11 FOR AREA OF CONCRETE REQUIRED.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
4" - 24" STANDARD TAPPING SLEEVE AND VALVE ASSEMBLY

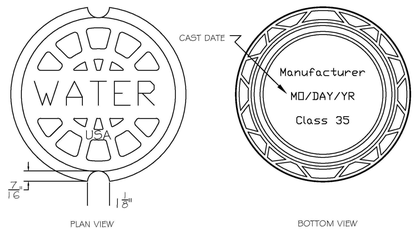
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-14	Y.C.A.	12-31-91	RRH	3-31-00
	D.W.C.	9-7-99	J.P.S.	11-1-10



NOTES:
1) VALVE BOX NOT TO CONTACT WATER MAIN
2) ALL TRAFFIC CASTINGS MUST BE CLASS 35 OR GREATER.
3) FOR ANY VALVES OVER 10' DEEP, A VALVE STEM EXTENSION MUST BE USED TO BRING TO A DEPTH OF NO MORE THAN 5'. EXTENSION MUST BE A MINIMUM OF 1" SOLID STOCK.
4) TOTAL VALVE BOX WEIGHT= MINIMUM OF 85 LBS.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
VALVE BOX INSTALLATION AND EXTENSION DETAIL

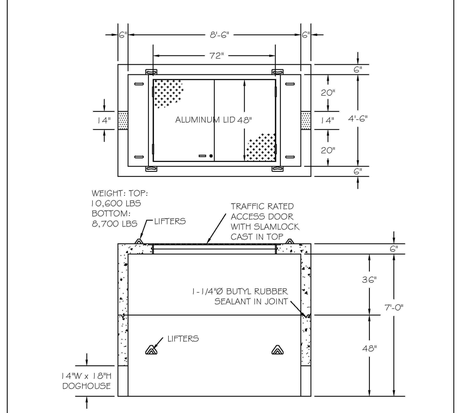
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-17	D.W.C.	9-7-99	A.B.B.	4-15-04
	RRH	3-31-00	DHL	9-16-07



NOTE 1 - "WATER" LETTERING MUST BE 1" RAISED (RECESSED FLUSH)
NOTE 2 - VALVE COVER SHALL BE DOMESTICALLY CAST.
NOTE 3 - COVER MUST HAVE A MINIMUM WEIGHT OF 25 POUNDS.
NOTE 4 - COVER MUST BE CLASS 35 OR GREATER.
NOTE 5 - COVER MUST MEET OR EXCEED AASHTO H-20 LOAD REQUIREMENTS.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
5 1/4" VALVE BOX DROP LID WITH 4" SKIRT

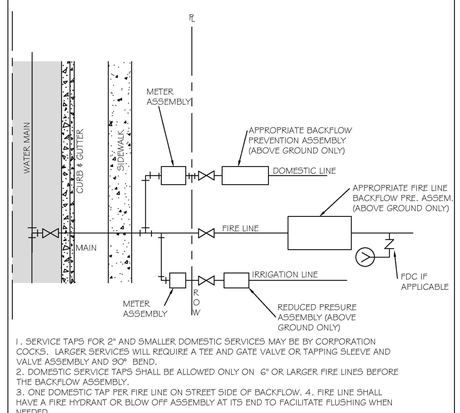
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-18				



NOTES:
1) REINFORCEMENT: #4 @ 6" OCEW
2) CONCRETE: 4,000 PSI @ 28 DAYS
3) 6" OF #67 STONE SHALL BE PLACED IN BOTTOM OF VAULT
4) METER FLANGE SHALL BE PLACED 49 " BELOW FINISHED GRADE

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
TYPICAL 6" THRU 10" WATER METER VAULT

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-33	A.B.B.	8-26-04		
	D.H.L.	6-10-08		



1. SERVICE TAPS FOR 2" AND SMALLER DOMESTIC SERVICES MAY BE BY CORPORATION COCKS. LARGER SERVICES WILL REQUIRE A TEE AND GATE VALVE OR TAPPING SLEEVE AND VALVE ASSEMBLY AND 90° BEND.
2. DOMESTIC SERVICE TAPS SHALL BE ALLOWED ONLY ON 6" OR LARGER FIRE LINES BEFORE THE BACKFLOW ASSEMBLY.
3. ONE DOMESTIC TAP PER FIRE LINE ON STREET SIDE OF BACKFLOW. 4. FIRE LINE SHALL HAVE A FIRE HYDRANT OR BLOW OFF ASSEMBLY AT ITS END TO FACILITATE FLUSHING WHEN NEEDED.
5. IRRIGATION METER SHALL BE LOCATED ON THE SIDE OF DOMESTIC METER WITH INCREASING ADDRESSES.
6. THE BACKFLOW SHALL BE INSTALLED NO MORE THAN 10' FROM THE METER IN A VISIBLE LOCATION.
7. DOMESTIC/IRRIGATION BACKFLOW RISER/STANDPIPE SHALL BE OF COPPER OR BRASS.
8. THE RP RELIEF VALVE SHALL BE A MINIMUM OF 12" ABOVE ANY MATERIAL (MULCH INCLUDED) OR GRADE.
9. A SERVICE VALVE IS REQUIRED AFTER THE METER BUT BEFORE THE BACKFLOW ASSEMBLY FOR MAINTENANCE AND REPLACEMENT PURPOSES.
10. THE INSTALLATION MUST ALSO MEET ALL CODE REQUIREMENTS PER THE NC PLUMBING CODE.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
FIRE, DOMESTIC & IRRIGATION OPTIONS SCHEMATIC

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-34	D.W.C.	11-18-99	A.B.B.	7-10-04
	RRH	3-31-00	D.H.L.	6/10/08

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

McADAMS
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RALEIGH, NORTH CAROLINA 27609

KANE REALTY CORPORATION

BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

WATER DETAILS

C8.03

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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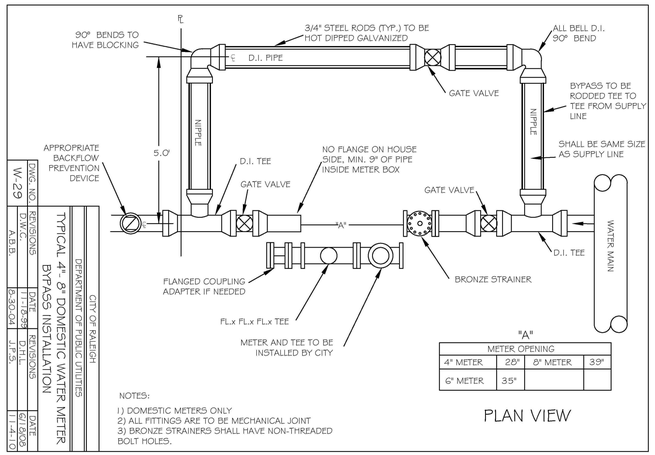

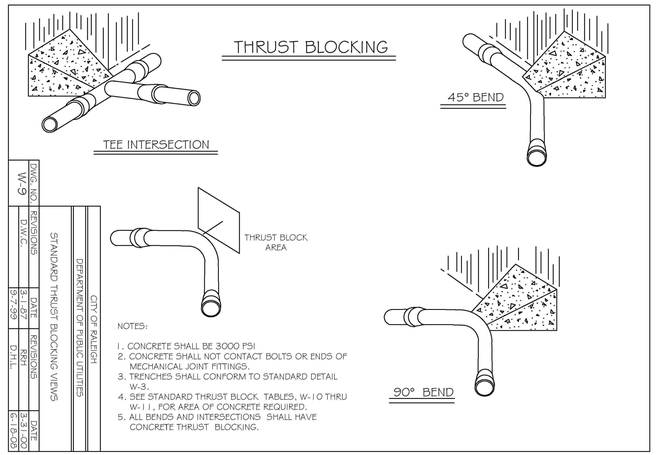

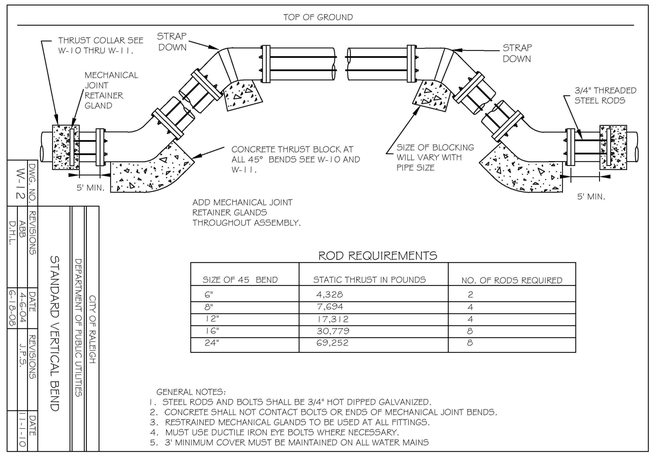

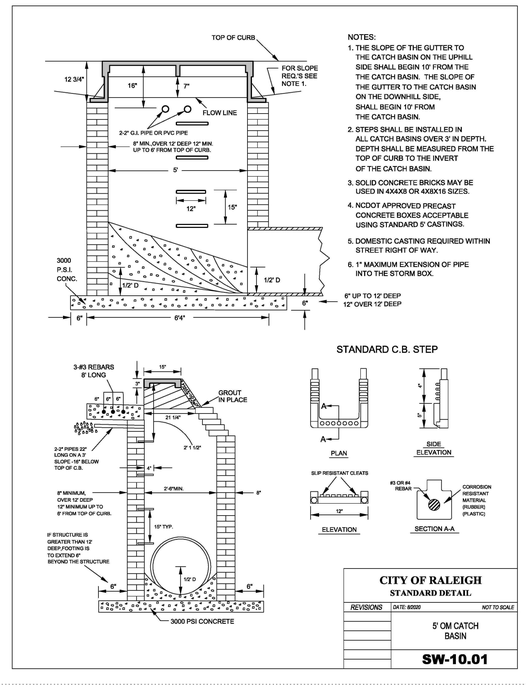

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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

WATER AND STORM DRAINAGE DETAILS

C8.04

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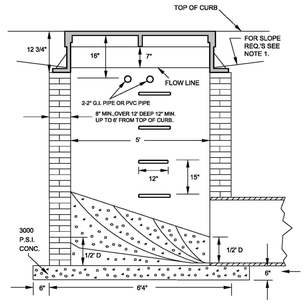
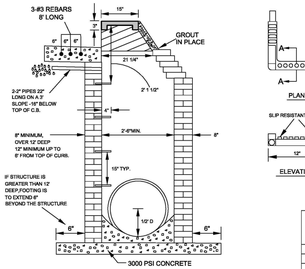
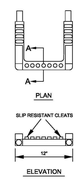


NOTES:

1. THE SLOPE OF THE GUTTER TO THE CATCH BASIN ON THE UPHILL SIDE SHALL BEGIN 10' FROM THE THE CATCH BASIN. THE SLOPE OF THE GUTTER TO THE CATCH BASIN ON THE DOWNHILL SIDE, SHALL BEGIN 10' FROM THE CATCH BASIN.
2. STEPS SHALL BE INSTALLED IN ALL CATCH BASINS OVER 3' IN DEPTH. DEPTH SHALL BE MEASURED FROM THE TOP OF CURB TO THE INVERT OF THE CATCH BASIN.
3. SOLID CONCRETE BRICKS MAY BE USED IN 4X4X8 OR 4X8X16 SIZES.
4. NCDOT APPROVED PRECAST CONCRETE BOXES ACCEPTABLE USING STANDARD 5' CASTINGS.
5. DOMESTIC CASTING REQUIRED WITHIN STREET RIGHT OF WAY.
6. 1" MAXIMUM EXTENSION OF PIPE INTO THE STORM BOX.

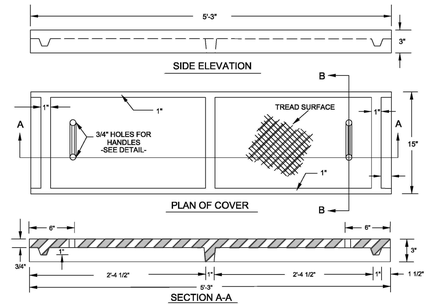
STANDARD C.B. STEP

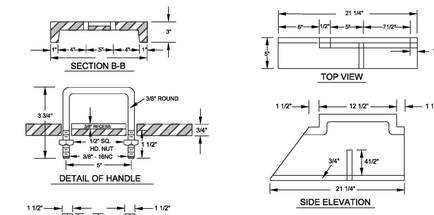




CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	5' OM CATCH BASIN	
	SW-10.01	

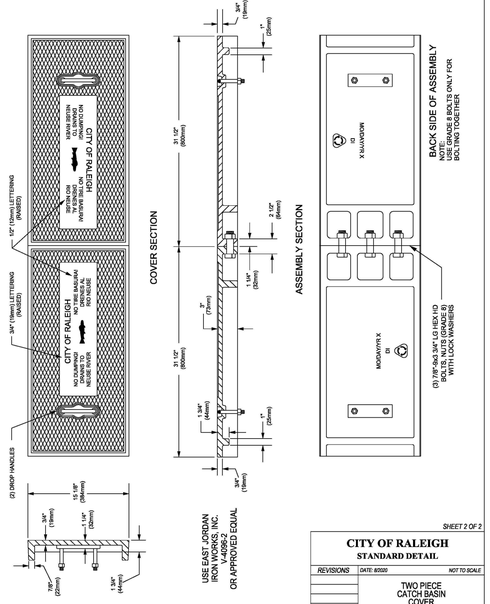




SHEET 1 OF 2

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CATCH BASIN CASTINGS	
	SW-10.06.1	



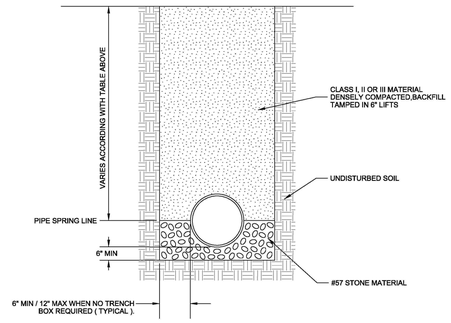
USE EAST JORDAN IRON WORKS, INC. V-4098-2 OR APPROVED EQUAL

SHEET 2 OF 3

CITY OF RALEIGH
STANDARD DETAIL

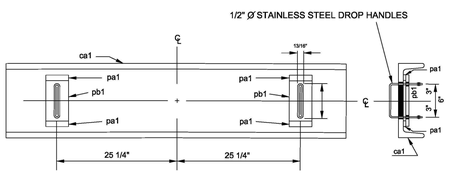
REVISIONS	DATE: 8/2020	NOT TO SCALE
	TWO PIECE CATCH BASIN COVER	
	SW-10.06.2	

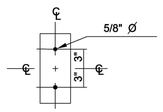
COVER FOR PIPES WITHIN THE R.O.W. MINIMUM PIPE CLEARANCE FROM INVERT TO SUBGRADE	
PIPE SIZE (in)	CLEARANCE DISTANCE (ft)
15	2.4
18	2.7
24	3.3
30	3.6
36	4.4
42	4.9
48	5.4
54	6.0
60	6.5
66	7.0
72	7.6



CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	BEDDING FOR STORMWATER RCP PIPES	
	SW-10.14	





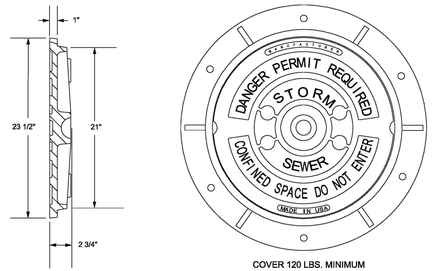
DETAIL OF pb1 PLATES

NOTES:
PAINT WITH RUST INHIBITING BLACK PAINT.

BILL OF MATERIAL MATERIAL LIST FOR ONE UNIT - MAKE ( ) UNITS			
1	C15 X 33.9# CHANNEL 62 1/2"	MK-ca1
4	1/8" X 1" H.R. FLAT BAR 3"	MK-pa1
2	3/8" x 3" H.R. FLAT BAR 10"	MK-pb1
2	1/2" STAINLESS STEEL ROUND ROD 18"	
8	1/2" STAINLESS STEEL HEX NUTS	
4	1/2" STAINLESS STEEL FLAT WASHERS	

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	CATCH BASIN STEEL TOP	
	SW-10.07	



NOTES:

1. ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
2. FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
3. COVER SHALL WEIGH A MINIMUM OF 120 LBS.
4. ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACE SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE: 8/2020	NOT TO SCALE
	STANDARD STORM MANHOLE COVER	
	SW-10.10	

LOCALLY AVAILABLE SIZES	
INTERCEPTORS CAPACITY (GAL.)	SEPARATORS CAPACITY (GAL.)
300	1000
550	1200
750	1600
1000	
1200	
1500	
2000	
2500	
3000	
4000	
5000	
6000	
8000	

NOTES:

1. BAFFLE WALL LOCATED AT A DISTANCE FROM INLET WALL 2/3 TO 3/4 OF THE TOTAL LENGTH OF THE INTERCEPTOR OR SEPARATOR AS SHOWN ON DETAIL S-40.
   BAFFLE WALLS LOCATED AT A DISTANCE APPROXIMATELY OF 1/2 OF THE TOTAL LENGTH OF THE SEPARATOR AS SHOWN ON DETAIL S-40.01 .
2. EACH INTERCEPTOR OR SEPARATOR SHALL HAVE INLET AND OUTLET TEES. THE OUTLET TEE SHALL EXTEND 50% INTO THE LIQUID DEPTH. THE INLET TEE SHALL EXTEND 25% INTO THE LIQUID DEPTH. INLET AND OUTLET TEES MUST BE OPEN TO ALLOW THE COLLECTION OF F.O.G. SAMPLE.
3. ACCESS OPENINGS OVER EACH COMPARTMENT WITHIN THE INTERCEPTOR OR SEPARATOR SHALL BE 24 INCHES IN DIAMETER AND CONTAIN PICK HOLES. ALL COVERS SHALL BE CONSTRUCTED OF CAST IRON OR EQUIVALENT TRAFFIC BEARING MATERIAL. MANHOLE COVERS MUST EXTEND TO FINISH GRADE AND BE INSTALLED TO EXCLUDE THE ENTRANCE OF STORMWATER INTO THE INTERCEPTOR OR SEPARATOR.
4. FULL SIZE DUAL SWEEP CLEANOUTS SHALL BE INSTALLED ON THE INLET AND OUTLET SIDES OF THE INTERCEPTOR OR SEPARATOR.
5. INTERCEPTORS AND SEPARATORS MUST BE VENTED IN ACCORDANCE WITH THE NC STATE PLUMBING CODE.
6. CONCRETE: 4000 PSI @ 28 DAYS.
7. DESIGN: ACI 318 BUILDING CODE
   ASTM C1613-06 FOR GREASE INTERCEPTORS
   ASTM C913-02 FOR WATER AND WASTEWATER STRUCTURES
   ASTM C890-06 FOR MINIMAL STRUCTURAL DESIGN LOADING
8. INTERCEPTORS AND SEPARATORS SHALL BE DESIGNED TO WITHSTAND AN H-20 WHEEL LOAD.
9. INTERCEPTORS OR SEPARATORS MADE OF POLYETHYLENE OR FIBERGLASS SHALL INCLUDE A MINIMUM 12,000 PSI TENSILE STRENGTH, 19,000 PSI FLEXURAL STRENGTH, AND 800,000 PSI FLEXURAL MODULUS.
10. ALL INTERCEPTORS AND SEPARATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
DIMENSIONS: GREASE INTERCEPTORS
OIL-WATER-SAND SEPARATORS

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-41	RRH	3/9/09	D.H.L.	6/15/05
	ABB	3/19/04		

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PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

STORM DRAINAGE DETAILS

C8.05

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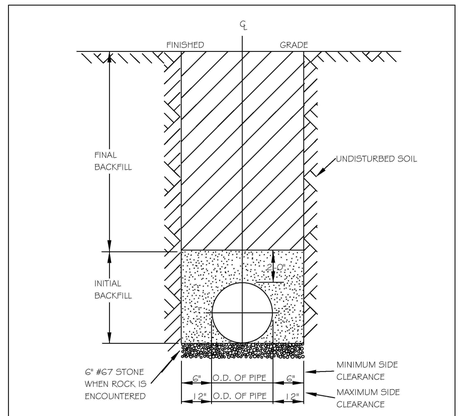
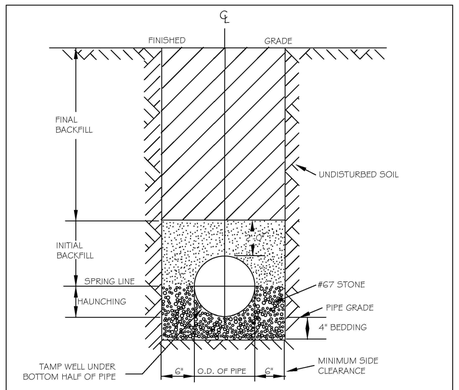


NOTES:
1. TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
5. ACHIEVE 80% COMPACTION IN NON-TRAFFIC AREAS, AND 95% COMPACTION IN TRAFFIC AREAS.
6. IF IN EASEMENT 4" TOPSOIL, AND 12" CLEAN SELECT FILL MAY BE REQUIRED.
7. NO BOULDERS 8" IN DIAMETER OR GREATER ALLOWED IN FINAL BACKFILL.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-4	D.W.C.	9-3-99		
	RRH	3-30-00		

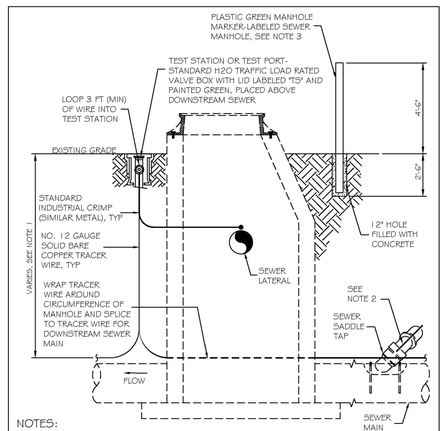


TYPICAL TRENCH BOTTOM DIMENSIONS FOR SDR 35 PVC GRAVITY PIPE

NOTES:
1. FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
TRENCH BOTTOM DIMENSIONS AND BACKFILLING REQUIREMENTS FOR PVC GRAVITY SEWER MAIN

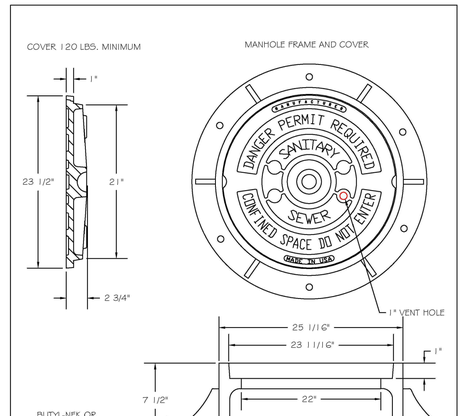
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-5	TO NOTES	3-1-87	D.W.C.	9-3-99
		7-2-92	RRH	3-30-00



NOTES:
1. THE TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. FOR GRAVITY MAIN AND OR LATERAL INSTALLATIONS LESS THAN 8 FT, THE TRACING WIRE SHALL BE ATTACHED TO THE PIPE. TRACER WIRE SHALL BE LAID FLAT AND SECURELY AFFIXED TO THE PIPE AT 10 FOOT INTERVALS. FOR GRAVITY MAIN AND OR LATERAL INSTALLATION DEEPER THAN 8 FT, THE TRACING WIRE SHALL BE INSTALLED AT A DEPTH OF 7-8 FT. THE WIRE SHALL BE PROTECTED FROM DAMAGE DURING THE EXECUTION OF THE WORK. NO BREAKS OF CUTS IN THE TRACER WIRE SHALL BE PERMITTED.
2. WHERE LATERAL TAPS ARE MADE BY SERVICE SADDLES, THE TRACER WIRE SHALL NOT BE ALLOWED TO TO BE PLACED BETWEEN THE SADDLE AND MAIN.
3. MANHOLE MARKERS SHALL BE PLACED ADJACENT TO MANHOLES AT THE DISCRETION OF OWNER OR OWNERS REPRESENTATIVE.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
GRAVITY SEWER MAIN TRACER WIRE AND MANHOLE MARKER

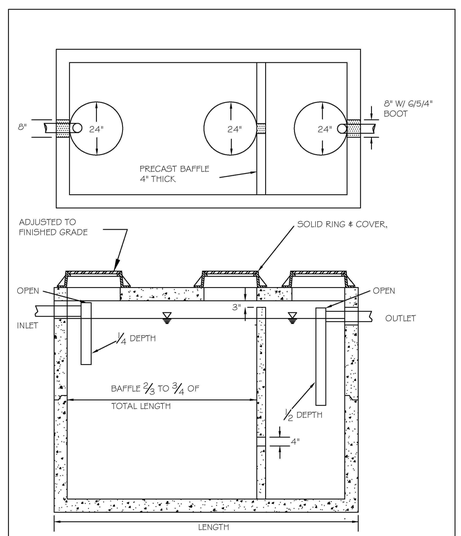
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-20A	WKD	08-14		



NOTES:
1) ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
2) FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
3) COVER SHALL WEIGH A MIN. OF 120 LBS.
4) ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACES SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD MANHOLE COVER

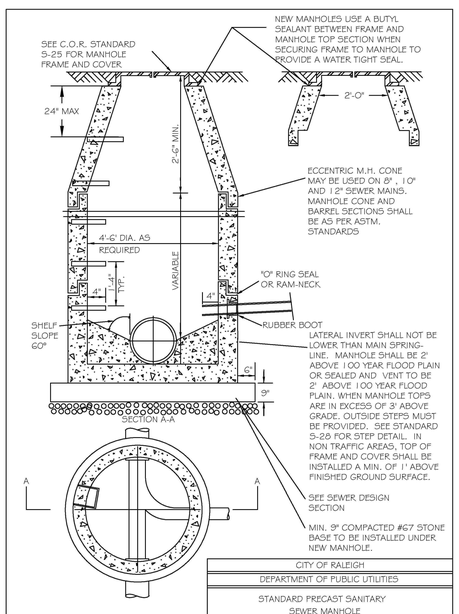
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-25		3-1-87	A.B.B.	2-9-05
	RRH	3-30-00	D.H.L.	6-18-08



NOTES:
1. REINFORCEMENT: H-20 BRIDGE LOADING (TRAFFIC RATED)
2. CONCRETE: 4000 PSI @28 DAYS
3. EARTHCOVER: 0' TO 5' MAX.

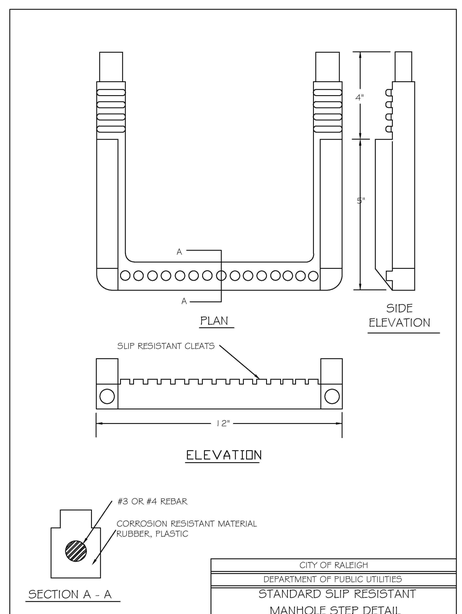
CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
1000 GALLON GREASE INTERCEPTOR

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-40	RRH	3/9/00	D.H.L.	6/18/08
	ABB	3/19/04		



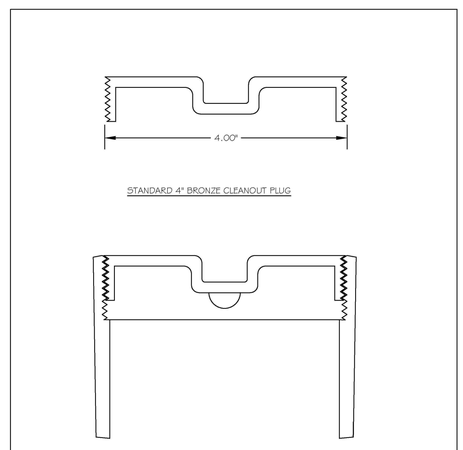
CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD PRECAST SANITARY SEWER MANHOLE

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-20	Y.C.A.	12-31-92	ABB	2-21-05
	RRH	3-30-00	D.H.L.	6-16-08



CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD SLIP RESISTANT MANHOLE STEP DETAIL

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-28	RRH	3-30-00		



CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
4" CLEANOUT PLUG

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
		3-1-87	RRH	3-30-00
S-34	D.W.C.	3-27-96		

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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SUITE 250
RALEIGH, NORTH CAROLINA 27609

KANE REALTY CORPORATION

BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMIIINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	07.30.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-D1
CHECKED BY	LJV
DRAWN BY	JS
SCALE	N.T.S.
DATE	08. 17. 2023

SHEET

SANITARY SEWER DETAILS

C8.06

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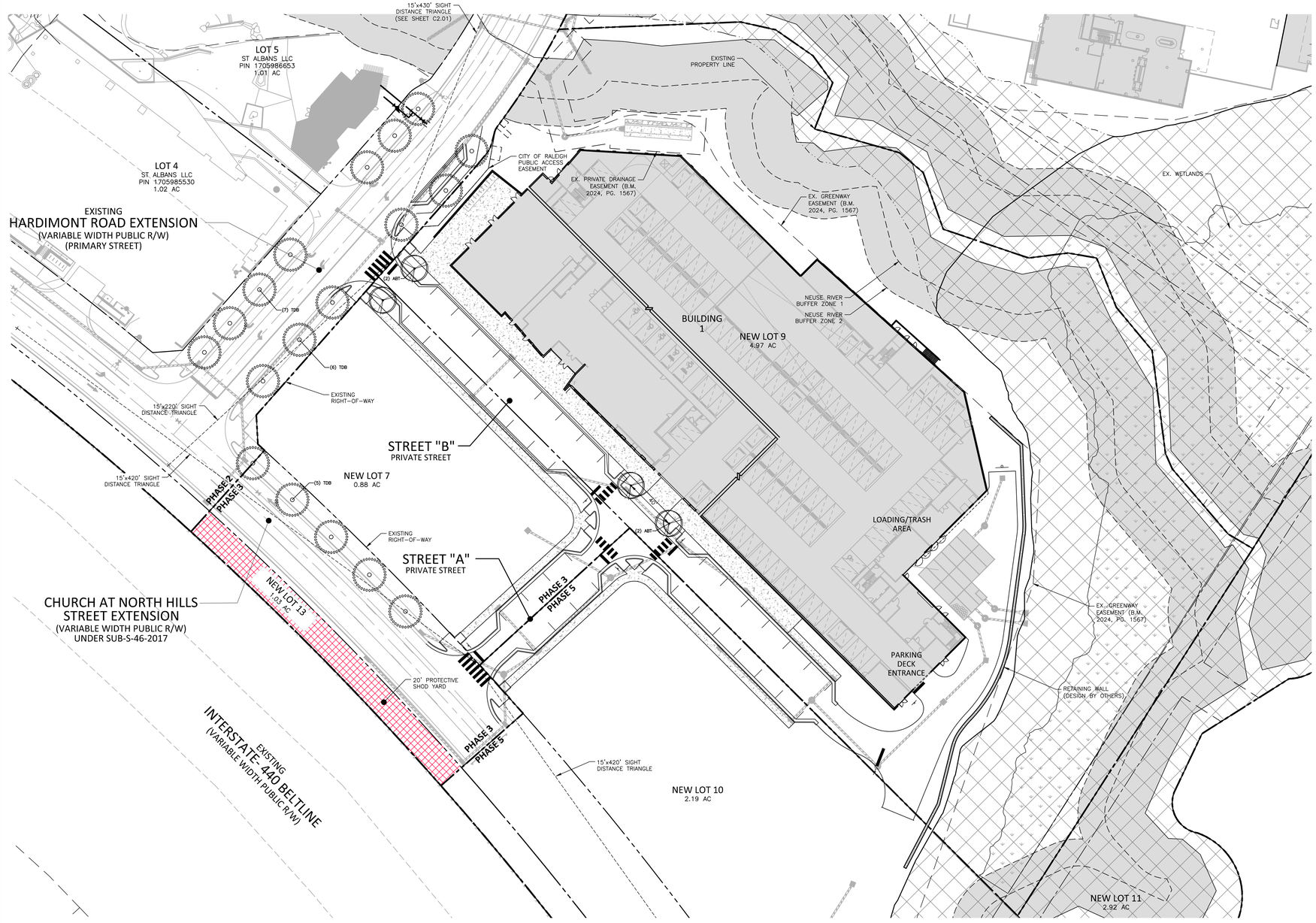

NOTES:

1. STREET TREES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 2 OF THE CITY TREE MANUAL.
2. STREET TREES SHALL BE LOCATED NO CLOSER THAN 30' FROM STOP SIGNS, 10' ON EITHER SIDE OF UTILITY PIPES, 10' FROM DRIVEWAY, 10' FROM A FIRE HYDRANT AND 20' FROM ANY LIGHT POLES. SEE RALEIGH CITY TREE MANUAL FOR ADDITIONAL MINIMUM SEPARATIONS FROM SITE ELEMENTS TO STREET TREES.
3. CONTRACTOR SHALL REPLACE ANY EXISTING STREET TREE WHICH IS DAMAGED OR DESTROYED DURING CONSTRUCTION WITH AN EQUAL SPECIES AND SIZE TO BE APPROVED BY LANDSCAPE ARCHITECT AND/OR GOVERNING AGENCY.
4. ALL EXISTING STREET TREES AND THEIR CRITICAL ROOT ZONES SHALL BE PROTECTED TO THE MAXIMUM EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
5. ALL TREES LOCATED WITHIN SIGHT DISTANCE TRIANGLES SHALL BE LIMBED UP TO A MINIMUM 8' ABOVE FINISHED GRADE.
6. STREET TREES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 2 OF THE RALEIGH CITY TREE MANUAL.
7. A TREE IMPACT PERMIT IS REQUIRED PRIOR TO SUBDIVISION OR ISSUANCE OF BUILDING PERMITS, WHICHEVER OCCURS FIRST, FOR TREES INSTALLED WITHIN THE PUBLIC RIGHT-OF-WAY.

SITE LEGEND

- SIGNAGE
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- TRAFFIC DIRECTIONAL ARROW
- ACC — ACCESSIBLE PARKING STALL
- VAN — VAN ACCESSIBLE PARKING STALL
- XX — PARKING SPACE COUNT
- TYPE A, TYPE B, TYPE C — ACCESSIBLE RAMPS
- ACCESSIBLE ROUTE
- PHASE LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- LOT LINE
- EASEMENT LINE
- CENTERLINE
- HEAVY DUTY ASPHALT PAVEMENT
- 20' SHOD YARD

PLANT_SCHEDULE

TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CAL	HEIGHT
	TDB	18	Bald Cypress	Taxodium distichum	3"	10' min
MEDIUM MATURING TREES	**CODE**	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CAL**	**HEIGHT**
	ABT	4	Trident Maple	Acer buergerianum	3" min	

GRAPHIC SCALE
0 20 40 80
1 inch = 40 ft.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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KANE REALTY CORPORATION

BLOCK 4 MIDRISE
520 ST ALBANS DRIVE
ADMINISTRATIVE SITE PLAN
RALEIGH, NORTH CAROLINA, 27609

[redacted]

REVISIONS

NO.	DATE	
1	11.10.2023	RESPONSE TO 1ST ASR COMMENTS
2	01.05.2024	RESPONSE TO 2ND ASR COMMENTS
3	06.07.2024	RESPONSE TO 3RD ASR COMMENTS
4	08.14.2024	RESPONSE TO 4TH ASR COMMENTS

PLAN INFORMATION

PROJECT NO.	KAN-22008
FILENAME	KAN22008-ASR-S1
CHECKED BY	LJV
DRAWN BY	JCS
SCALE	1"=40'
DATE	08. 17. 2023

SHEET

LANDSCAPE PLAN

L5.00

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LEGEND

- BZ1 - PRIMARY TREE CONSERVATION AREA
- BZ2 - TREE CONSERVATION AREA (GREENWAY)
- CREEK TOP OF BANK
- EXISTING CONTOUR LINE (MINOR)
- EXISTING CONTOUR LINE (MAJOR)
- RETAINING WALL
- BOARDWALK
- PAVEMENT

NOTES:

ALL GREENWAY 12' WIDTH, 2' SHOULDER, 2:1 DAYLIGHT SLOPES UNLESS OTHERWISE NOTED.

PROFILE GRADE MAXIMUM 5%.

ALL INTERSECTIONS WITH PUBLIC ROADWAY WOULD TIE TO EXISTING OR PROPOSED MULTI-USE PATHS.

NC-GRID-(NAD83)

GRAPHIC SCALE
0 30 60 120
1 inch = 60 ft.

GREENWAY SEGMENT 1

PROPOSED: CERTIFICATE OF OCCUPANCY FOR **ST. ALBANS RESIDENTIAL** TO BE CONDITIONED ON COMPLETE CONSTRUCTION OF **TRAIL SEGMENT 1**.

GREENWAY SEGMENT 2

PROPOSED: CERTIFICATE OF OCCUPANCY FOR **HARDIMONT MID-RISE** TO BE CONDITIONED ON COMPLETE CONSTRUCTION OF **TRAIL SEGMENT 2**.

GREENWAY SEGMENT 3

PROPOSED: CERTIFICATE OF OCCUPANCY FOR **CHURCH ST. HIGH-RISE** TO BE CONDITIONED ON COMPLETE CONSTRUCTION OF **TRAIL SEGMENT 3**.

BEGIN GREENWAY
L1B–ALT1 STA. 10+00
TIE TO PROPOSED SIDEWALK

ST. ALBANS DR

END SEGMENT L3B
TIE TO PROPOSED SIDEWALK

BIG BRANCH CREEK

SEGMENT L3B

EXISTING SS AND ASSOCIATED EASEMENT

ST. ALBANS RESIDENTIAL (LOT 8)

DESIGN STATUS: CONSTRUCTION DOCUMENTS
ENTITLEMENT STATUS: SPR REVIEW

ASR-0051-2022
SPR-0147-2022 (INFRASTRUCTURE)
SPR-0041-2023

PROJECTED CONSTRUCTION START: 7/1/23
PROJECTED OPEN: 7/1/25

FOOD & BEVERAGE (LOT 6)

DESIGN STATUS: SCHEMATIC DESIGN
ENTITLEMENT STATUS: ASR REVIEW

ASR-0100-2022
SPR-0120-2023

PROJECTED CONSTRUCTION START: 7/1/24
PROJECTED OPEN: 7/1/25

C.O. TIED TO TRAIL CONSTRUCTION

NEUSE RIVER BUFFER ZONE 1 (TYP.)

NEUSE RIVER BUFFER ZONE 2 (TYP.)

EXISTING WETLAND BOUNDARY (TYP.)

HARDIMONT MID-RISE (LOT 9)

DESIGN STATUS: COCNEPT DESIGN
ENTITLEMENT STATUS: ASR REVIEW

ASR-0048-2023

PROJECTED CONSTRUCTION START: 1/1/25
PROJECTED OPEN: 7/1/26

BLOCK 4 RETAINING WALL
TRAIL AT BOTTOM OF WALL

CHANNEL HOUSE (LOT 3)

STATUS: UNDER CONSTRUCTION

PROJECTED OPEN: 2023

ASR-0027-2020
SPR-0004-2021

HARDIMONT DR.

PHASE 3
PHASE 5

TOWER 5 (LOT 4 & 5)

STATUS: UNDER CONSTRUCTION

PROJECTED OPEN: 6/1/24

ASR-0010-2021
SPR-0051-2020 (INFRASTRUCTURE)
SPR-0198-2021

PROPOSED PROPERTY LINE

PROPOSED RIGHT–OF–WAY

CHURCH ST. HIGH-RISE (LOT 10)

DESIGN STATUS: NOT STARTED

FUTURE PHASE TBD

C.O. TIED TO TRAIL CONSTRUCTION

PHASE 1
PHASE 2
PHASE 3
PHASE 5

END SEGMENT L2A
TIE TO FUTURE SIDEWALK

90% PLANS - NOT FOR CONSTRUCTION

M:\Projects\KAN\KAN22002\04-Production\Engineering\Greenway\Exhibits\KAN22002-AL EX.dwg, 2/8/2024 3:43:10 PM, Jackson Shearer

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4321 LASSITER AT NORTH HILLS AVENUE
SUITE 250
RALEIGH, NORTH CAROLINA 27609

KANE REALTY CORPORATION

REVISIONS

NO.	DATE	
1	12-xx-2023	1st SPR SUBMITTAL

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY NOT FOR CONSTRUCTION

NORTH HILLS INNOVATION DISTRICT GREENWAY

GREENWAY PHASING EXHIBIT

PLAN INFORMATION

PROJECT NO.	KAN-22002
FILENAME	KAN22002-AL EX.dwg
CHECKED BY	GDB
DRAWN BY	BTB/ZEH
SCALE	1" = 60'
DATE	11-03-2023

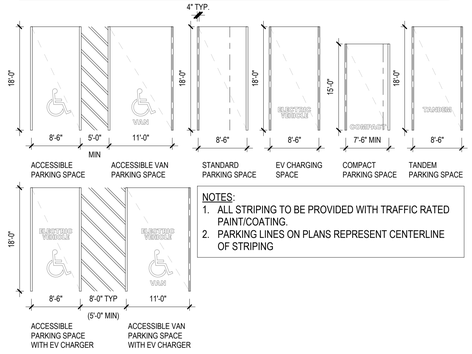
EX-1

PARKING SCHEDULE

COMPACT	28
EV (STANDARD)	10
EV HANDICAP (STANDARD)	1
EV HANDICAP (VAN)	1
HANDICAP	7
HANDICAP (VAN)	2
STANDARD	315
TANDEM	25
TOTAL	389

NOTE: REF CIVIL DRAWINGS FOR LEVEL 01 STREET PARKING INFORMATION

PARKING SPACE LEGEND



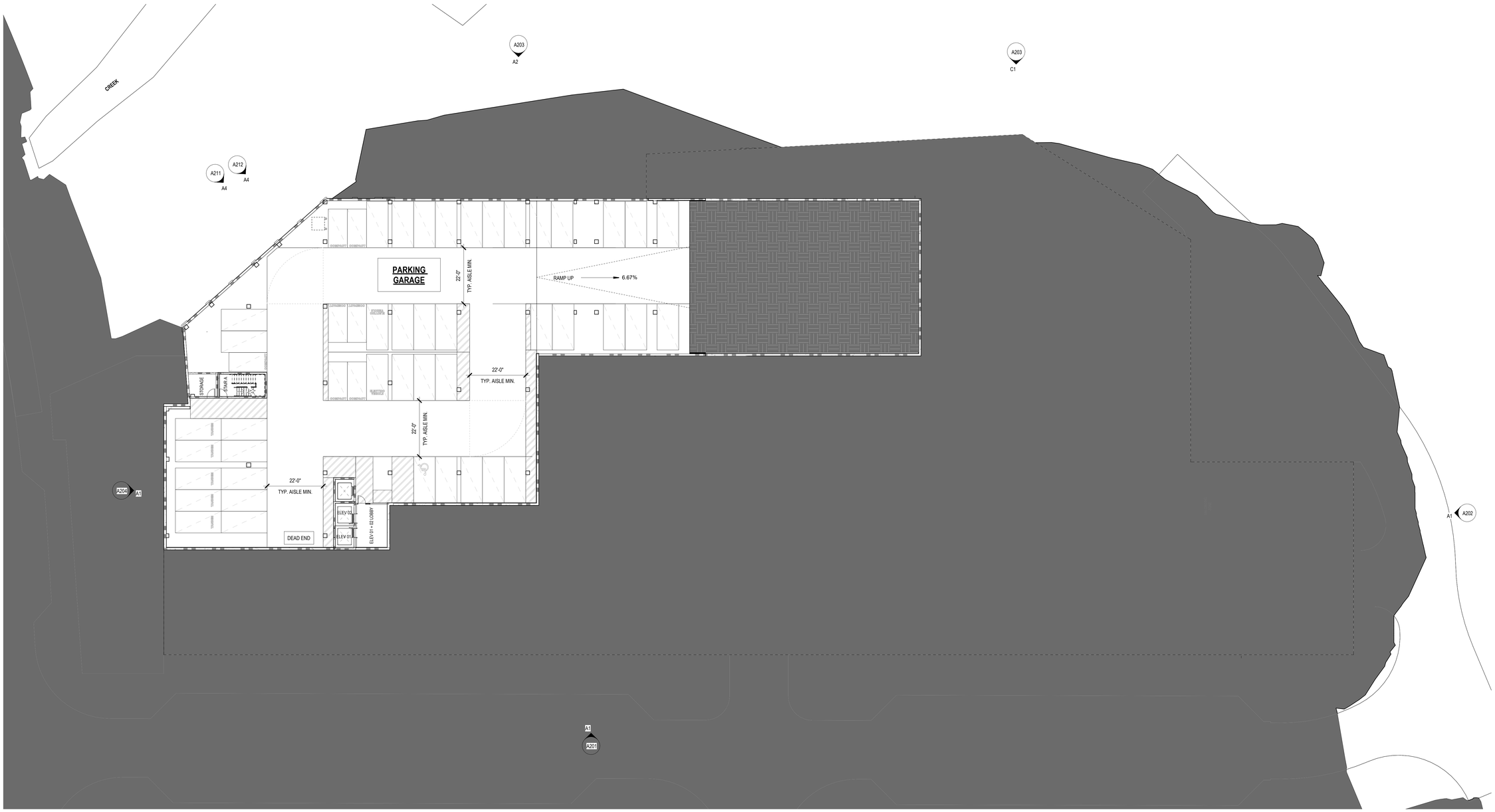
NOTES:
1. ALL STRIPING TO BE PROVIDED WITH TRAFFIC RATED PAINT/COATING.
2. PARKING LINES ON PLANS REPRESENT CENTERLINE OF STRIPING

UDO BASEMENT CALCULATION

P1:
BUILDING PERIMETER = 1,279.20 FT
PERIMETER BELOW GRADE = 565.4 FT = 44%

P2:
BUILDING PERIMETER = 841.59 FT
PERIMETER BELOW GRADE = 841.59 FT = 100%

BASEMENT CONDITION = > 50% BLDG PERIMETER WALL AREA



A1 OVERALL FLOOR PLAN - LEVEL P2

0' 2' 4' 8' 1/16" = 1'-0"

hickok cole

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301 N Street NE, Suite 300
Washington, DC 20002
202.667.9776
hickokcole.com

CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

#	DATE	DESCRIPTION
	2023-08-16	ASR SUBMISSION
	2023-11-01	ASR COMMENTS
	2024-01-05	ASR #03 SUBMISSION
	2024-06-07	ASR #04 SUBMISSION

STAMP

PROJECT NO.
23005

DRAWN BY
Author

SCALE
As indicated

DRAWING TITLE
OVERALL FLOOR PLAN - LEVEL P2

DRAWING NO.
A098

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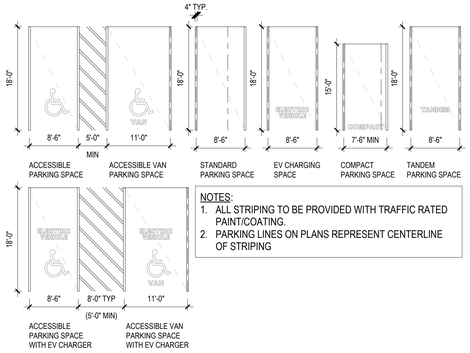
PARKING SCHEDULE

COMPACT	28
EV (STANDARD)	10
EV HANDICAP (STANDARD)	1
EV HANDICAP (VAN)	1
HANDICAP	7
HANDICAP (VAN)	2
STANDARD	315
TANDEM	25
TOTAL	389

NOTE: REF CIVIL DRAWINGS FOR LEVEL 01 STREET PARKING INFORMATION

PARKING SPACE LEGEND



NOTES:
1. ALL STRIPING TO BE PROVIDED WITH TRAFFIC RATED PAINT/COATING.
2. PARKING LINES ON PLANS REPRESENT CENTERLINE OF STRIPING

UDO BASEMENT CALCULATION

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PERIMETER BELOW GRADE = 565.4 FT = 44%

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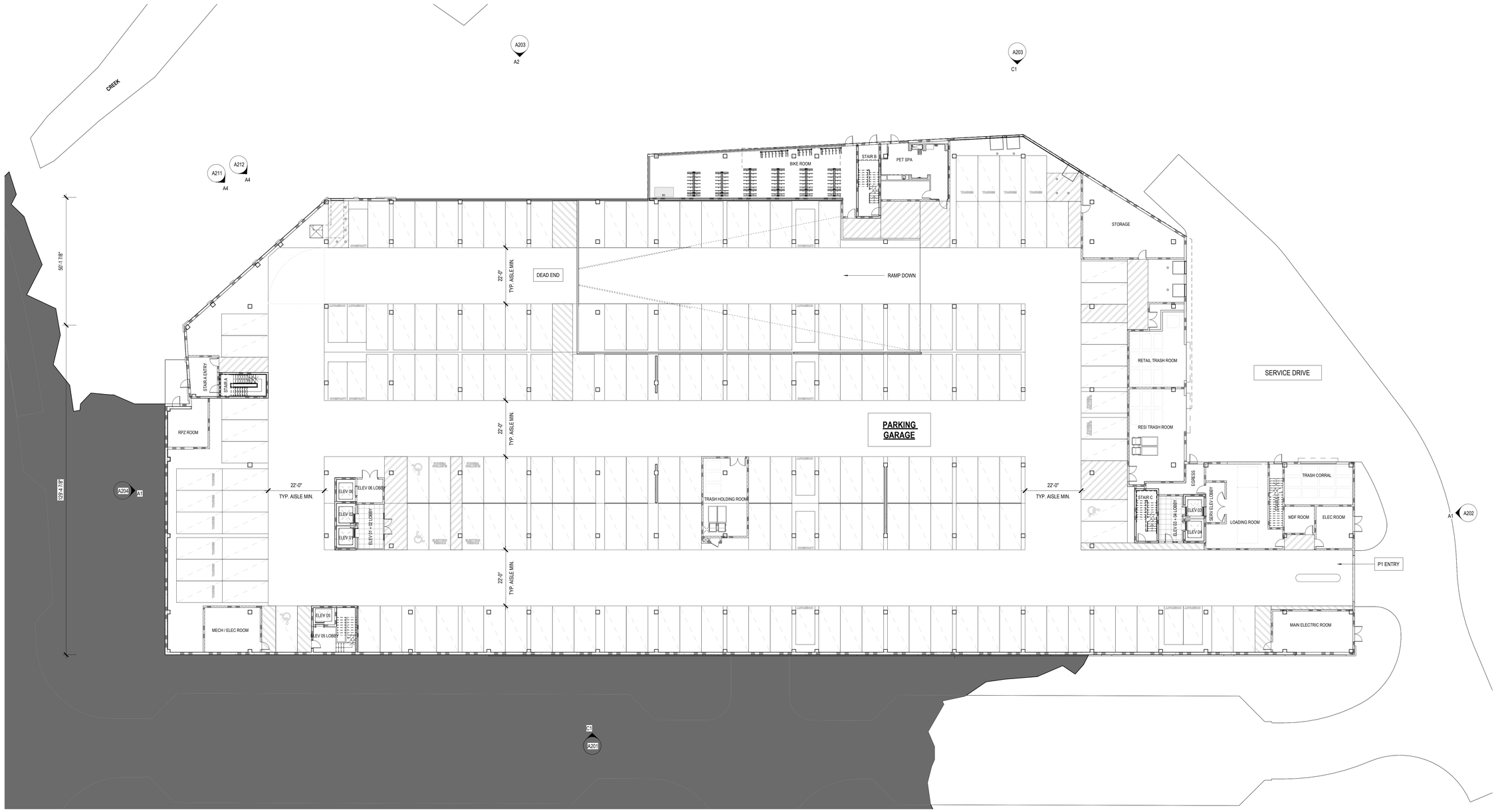
BUILDING PERIMETER = 841.59 FT
PERIMETER BELOW GRADE = 841.59 FT = 100%

BASEMENT CONDITION = > 50% BLDG PERIMETER WALL AREA



A1 OVERALL FLOOR PLAN - LEVEL P1
0' 2' 4' 8' 1/16" = 1'-0"

hickok cole

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Washington, DC 20002
202.667.9776
hickokcole.com

CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

#	DATE	DESCRIPTION
	2023-08-16	ASR SUBMISSION
	2023-11-01	ASR COMMENTS
	2024-01-05	ASR #03 SUBMISSION
	2024-06-07	ASR #04 SUBMISSION

STAMP

PROJECT NO.
23005

DRAWN BY
Author

SCALE
As indicated

DRAWING TITLE
OVERALL FLOOR PLAN - LEVEL P1

DRAWING NO.
A099

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PARKING SCHEDULE

COMPACT	28
EV (STANDARD)	10
EV HANDICAP (STANDARD)	1
EV HANDICAP (VAN)	1
HANDICAP	7
HANDICAP (VAN)	2
STANDARD	315
TANDEM	25
TOTAL	389

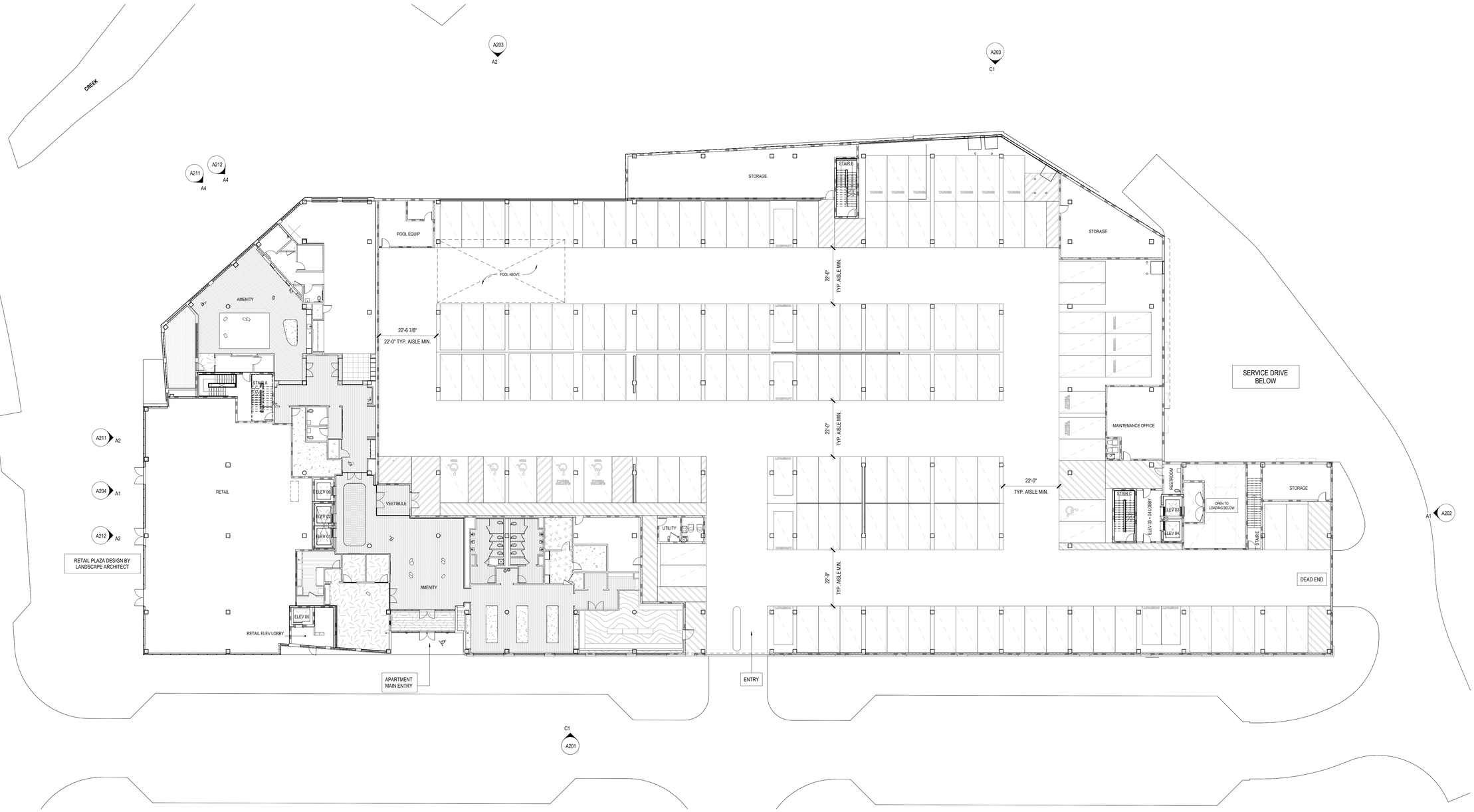
NOTE: REF CIVIL DRAWINGS FOR LEVEL 01 STREET PARKING INFORMATION

RATED PARTITION LEGEND

- 1 HR FIRE RATED PARTITION
- 2 HR FIRE RATED PARTITION
- 2 HR FIRE RATED BARRIER
- 3 HR FIRE RATED BARRIER
- 2 HR FIRE RATED EXTERIOR WALL

FLOOR PLAN - GENERAL NOTES

1. OVERALL BUILDING DIMENSIONS TO FACE OF EXTERIOR MATERIAL.
2. INTERIOR BUILDING DIMENSIONS TO FACE OF STUD OR MASONRY.
3. DEMISING WALL DIMENSIONS TO CENTER OF WALL.
4. ALL ELEVATION MARKERS ARE TO TOP OF SLAB OR PLYWOOD SHEATHING, U.O.N.
5. ALL COMMON DOORS TO BE 6" FROM ADJACENT PARTITION ON HINGE SIDE, U.O.N.
6. ALL WALLS IN AMENITY AREAS TO BE METAL STUD.
7. ALL CORRIDOR WALLS AT LEVEL 01 TO BE R22.6, U.O.N. ALL CORRIDOR WALLS AT LEVELS 02-06 TO BE W10.6, U.O.N.
8. ALL DEMISING WALLS AT LEVEL 01 TO BE R26.6, U.O.N. ALL DEMISING WALLS AT LEVELS 02-06 TO BE W01.4, U.O.N.
9. ALL VERTICAL MECHANICAL SHAFT WALLS AT LEVEL 01 TO BE R12.6 AND MECHANICAL SHAFT WALLS AT LEVELS 02-06 TO BE W22.6.
10. ALL VERTICAL SHAFT WALLS AT STAIRS, ELEVATORS, AND TRASH CHUTES TO BE M12.8 WITH S50.3 FURRING AT LEVEL 01 AND W50.4 FURRING AT LEVELS 02-06, U.O.N.
11. PROVIDE 3/4" 5 PLY FIRE RATED PLYWOOD PANELS FLOOR TO CEILING AT ALL TELECOM ROOMS AND CLOSETS.
12. ALL FLOORS OF B.O.H. SPACES TO BE SEALED CONCRETE, U.O.N.
13. SEE A-600 SHEETS FOR ENLARGED UNIT PLANS.



A1 OVERALL FLOOR PLAN - LEVEL 01

0' 2' 4' 8' 1/16" = 1'-0"

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CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

#	DATE	DESCRIPTION
	2023-08-16	ASR SUBMISSION
	2023-11-01	ASR COMMENTS
	2024-01-05	ASR #03 SUBMISSION
	2024-06-07	ASR #04 SUBMISSION

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PROJECT NO.
23005

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SCALE
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DRAWING TITLE
OVERALL FLOOR PLAN - LEVEL 1

DRAWING NO.
A101

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RATED PARTITION LEGEND

- 1 HR FIRE RATED PARTITION
- 2 HR FIRE RATED PARTITION
- 2 HR FIRE RATED BARRIER
- 3 HR FIRE RATED BARRIER
- 2 HR FIRE RATED EXTERIOR WALL

FLOOR PLAN - GENERAL NOTES

1. OVERALL BUILDING DIMENSIONS TO FACE OF EXTERIOR MATERIAL.
2. INTERIOR BUILDING DIMENSIONS TO FACE OF STUD OR MASONRY.
3. DEMISING WALL DIMENSIONS TO CENTER OF WALL.
4. ALL ELEVATION MARKERS ARE TO TOP OF SLAB OR PLYWOOD SHEATHING, U.O.N.
5. ALL COMMON DOORS TO BE 6" FROM ADJACENT PARTITION ON HINGE SIDE, U.O.N.
6. ALL WALLS IN AMENITY AREAS TO BE METAL STUD.
7. ALL CORRIDOR WALLS AT LEVEL 01 TO BE R22.6, U.O.N. ALL CORRIDOR WALLS AT LEVELS 02-06 TO BE W10.6, U.O.N.
8. ALL DEMISING WALLS AT LEVEL 01 TO BE R26.6, U.O.N. ALL DEMISING WALLS AT LEVELS 02-06 TO BE W01.4, U.O.N.
9. ALL VERTICAL MECHANICAL SHAFT WALLS AT LEVEL 01 TO BE R12.6 AND MECHANICAL SHAFT WALLS AT LEVELS 02-06 TO BE W22.6.
10. ALL VERTICAL SHAFT WALLS AT STAIRS, ELEVATORS, AND TRASH CHUTES TO BE M12.8 WITH S50.3 FURRING AT LEVEL 01 AND W50.4 FURRING AT LEVELS 02-06, U.O.N.
11. PROVIDE 3/4" 5 PLY FIRE RATED PLYWOOD PANELS FLOOR TO CEILING AT ALL TELECOM ROOMS AND CLOSETS.
12. ALL FLOORS OF B.O.H. SPACES TO BE SEALED CONCRETE, U.O.N.
13. SEE A-600 SHEETS FOR ENLARGED UNIT PLANS.

A1 ASR - OVERALL FLOOR PLAN - LEVEL 02

0' 2' 4' 8' 1/16" = 1'-0"

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CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
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DRAWING TITLE
OVERALL FLOOR PLAN - LEVEL 2

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A102

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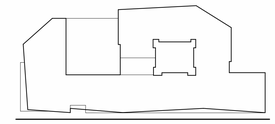
C1 SOUTH ELEVATION-B (PRIVATE ST)

0' 2' 4' 8' 1/8" = 1'-0"

A1 SOUTH ELEVATION-A (PRIVATE ST)

0' 2' 4' 8' 1/8" = 1'-0"

KEY PLAN



MATERIALS LEGEND

AFB-1	BRICK 1
AFB-2	BRICK 2
FCP-1	FIBER CEMENT PANEL 1
FCP-3	FIBER CEMENT PANEL 3
FCP-4	FIBER CEMENT PANEL 4
FCP-5	FIBER CEMENT PANEL 5
FCS-1	FIBER CEMENT SIDING 1
FCS-2	FIBER CEMENT SIDING 2
FCS-3	FIBER CEMENT SIDING 3
FCS-4	FIBER CEMENT SIDING 4
MP-1	METAL PANEL 1
MP-2	METAL PANEL 2

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PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
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REVISIONS / NOTES

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1	2023-08-16	ASR SUBMISSION
2	2023-11-01	ASR COMMENTS
3	2024-01-05	ASR #03 SUBMISSION
4	2024-06-07	ASR #04 SUBMISSION

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DRAWING TITLE
SOUTH ELEVATION

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A201

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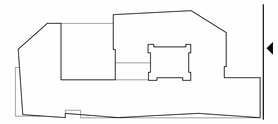
KEY PLAN



MATERIALS LEGEND

AFB-1	BRICK 1
AFB-2	BRICK 2
FCP-1	FIBER CEMENT PANEL 1
FCP-3	FIBER CEMENT PANEL 3
FCP-4	FIBER CEMENT PANEL 4
FCP-5	FIBER CEMENT PANEL 5
FCS-1	FIBER CEMENT SIDING 1
FCS-2	FIBER CEMENT SIDING 2
FCS-3	FIBER CEMENT SIDING 3
FCS-4	FIBER CEMENT SIDING 4
MP-1	METAL PANEL 1
MP-2	METAL PANEL 2

A1 EAST ELEVATION
0' 2' 4' 8' 1/8" = 1'-0"

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CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

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	2023-08-16	ASR SUBMISSION
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	2024-01-05	ASR #03 SUBMISSION
	2024-06-07	ASR #04 SUBMISSION

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23005

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EAST ELEVATION

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A202

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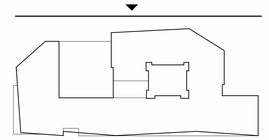
C1 NORTH ELEVATION-B

0' 2' 4' 8' 1/8" = 1'-0"

A2 NORTH ELEVATION-A

0' 2' 4' 8' 1/8" = 1'-0"

KEY PLAN



MATERIALS LEGEND

AFB-1	BRICK 1
AFB-2	BRICK 2
FCP-1	FIBER CEMENT PANEL 1
FCP-3	FIBER CEMENT PANEL 3
FCP-4	FIBER CEMENT PANEL 4
FCP-5	FIBER CEMENT PANEL 5
FCS-1	FIBER CEMENT SIDING 1
FCS-2	FIBER CEMENT SIDING 2
FCS-3	FIBER CEMENT SIDING 3
FCS-4	FIBER CEMENT SIDING 4
MP-1	METAL PANEL 1
MP-2	METAL PANEL 2

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CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

#	DATE	DESCRIPTION
	2023-08-16	ASR SUBMISSION
	2023-11-01	ASR COMMENTS
	2024-01-05	ASR #03 SUBMISSION
	2024-06-07	ASR #04 SUBMISSION

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PROJECT NO.
23005

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DRAWING TITLE
NORTH ELEVATION

DRAWING NO.
A203

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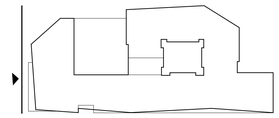
KEY PLAN



MATERIALS LEGEND

AFB-1	BRICK 1
AFB-2	BRICK 2
FCP-1	FIBER CEMENT PANEL 1
FCP-3	FIBER CEMENT PANEL 3
FCP-4	FIBER CEMENT PANEL 4
FCP-5	FIBER CEMENT PANEL 5
FCS-1	FIBER CEMENT SIDING 1
FCS-2	FIBER CEMENT SIDING 2
FCS-3	FIBER CEMENT SIDING 3
FCS-4	FIBER CEMENT SIDING 4
MP-1	METAL PANEL 1
MP-2	METAL PANEL 2

A1 WEST ELEVATION (HARDIMONT)

0' 2' 4' 8' 1/8" = 1'-0"

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CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

#	DATE	DESCRIPTION
1	2023-08-16	ASR SUBMISSION
2	2023-11-01	ASR COMMENTS
3	2024-01-05	ASR #03 SUBMISSION
4	2024-06-07	ASR #04 SUBMISSION

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23005

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DRAWING TITLE
WEST ELEVATION

DRAWING NO.
A204

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TRANSPARENCY CALCULATION
HARDIMONT GROUND FLOOR ELEVATION

UDO SECTION 1.5.9:
THE MINIMUM PERCENTAGE OF WINDOWS AND DOORS THAT MUST COVER A GROUND STORY FACADE IS MEASURED BETWEEN 0'-12' ABOVE THE SURFACE OF THE FINISHED GROUND FLOOR FOR ALL ABOVE-GRADE PORTIONS OF THE FACADE.

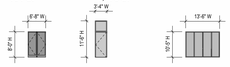
FINISH GROUND FLOOR SURFACE AREA: 2,450 SF

50% REQUIRED 1,216 SF REQUIRED
83% PROVIDED 2,027 SF PROVIDED

A MINIMUM OF THE REQUIRED TRANSPARENCY PERCENTAGE MUST BE LOCATED BETWEEN 3'-8' FROM THE SURFACE OF THE FINISHED GROUND FLOOR.

25% REQUIRED 613 SF REQUIRED
33% PROVIDED 820 SF PROVIDED

WINDOW D: 104 SF
WINDOW E: 1,170 SF



DOOR A: 53 SF
DOOR C: 38 SF
WINDOW F: 140 SF

TRANSPARENCY CALCULATION
HARDIMONT LEVELS 02-06 ELEVATION

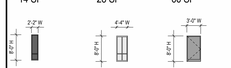
UDO SECTION 1.5.9:
THE MINIMUM PERCENTAGE OF WINDOWS AND DOORS THAT MUST COVER AN UPPER LEVEL FACADE IS MEASURED FROM TOP OF FINISHED FLOOR TO TOP OF FINISHED FLOOR ABOVE (MIXED-USE IN -PD ZONE)

LEVEL 02-06 SURFACE AREA PER LEVEL: 2,103 SF

LEVEL 02:
20% REQUIRED 421 SF REQUIRED
40% PROVIDED 856 SF PROVIDED

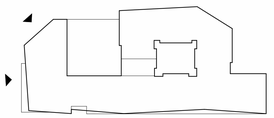
LEVEL 03 - LEVEL 06:
20% REQUIRED 421 SF REQUIRED
31% PROVIDED 664 SF PROVIDED

WINDOW A: 14 SF
WINDOW B: 28 SF
WINDOW C: 66 SF



WINDOW G: 17 SF
WINDOW H: 34 SF
DOOR B: 24 SF

KEY PLAN



ZONING - TRANSPARENCY CALCULATION - HARDIMONT ELEVATION
A2
0' 2' 4' 8' 1/8" = 1'-0"

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CONSULTANTS

PROJECT DETAILS

PROJECT NAME
TRIBUTARY

CLIENT NAME
KANE REALTY INC.

ADDRESS
500 HARDIMONT ROAD

REVISIONS / NOTES

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	2023-08-16	ASR SUBMISSION
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	2024-06-07	ASR #04 SUBMISSION

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PROJECT NO.
23005

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DRAWING TITLE
ZONING - TRANSPARENCY CALCULATIONS

DRAWING NO.
A211

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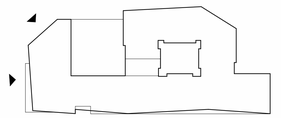
KEY PLAN



BLANK WALL CALCULATION

SECTION 1.5.10
BLANK WALL AREA MEANS ANY PORTION OF THE STREET-FACING FACADE(S) OF THE BUILDING THAT DOES NOT INCLUDE A SUBSTANTIAL MATERIAL CHANGE. WINDOWS OR DOORS; OR COLUMNS, PILASTERS OR OTHER ARTICULATION GREATER THAN 12 INCHES IN DEPTH.

BLANK WALL APPLIES IN BOTH A VERTICAL OR HORIZONTAL DIRECTION

SECTION 3.2.6
BLANK WALL MAX. 20' X 20'

A2 ZONING - BLANK WALL CALCS - HARDIMONT ELEVATION

0' 2' 4' 8' 1/8" = 1'-0"

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DRAWING TITLE
ZONING - BLANK WALL CALCULATIONS

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A212

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