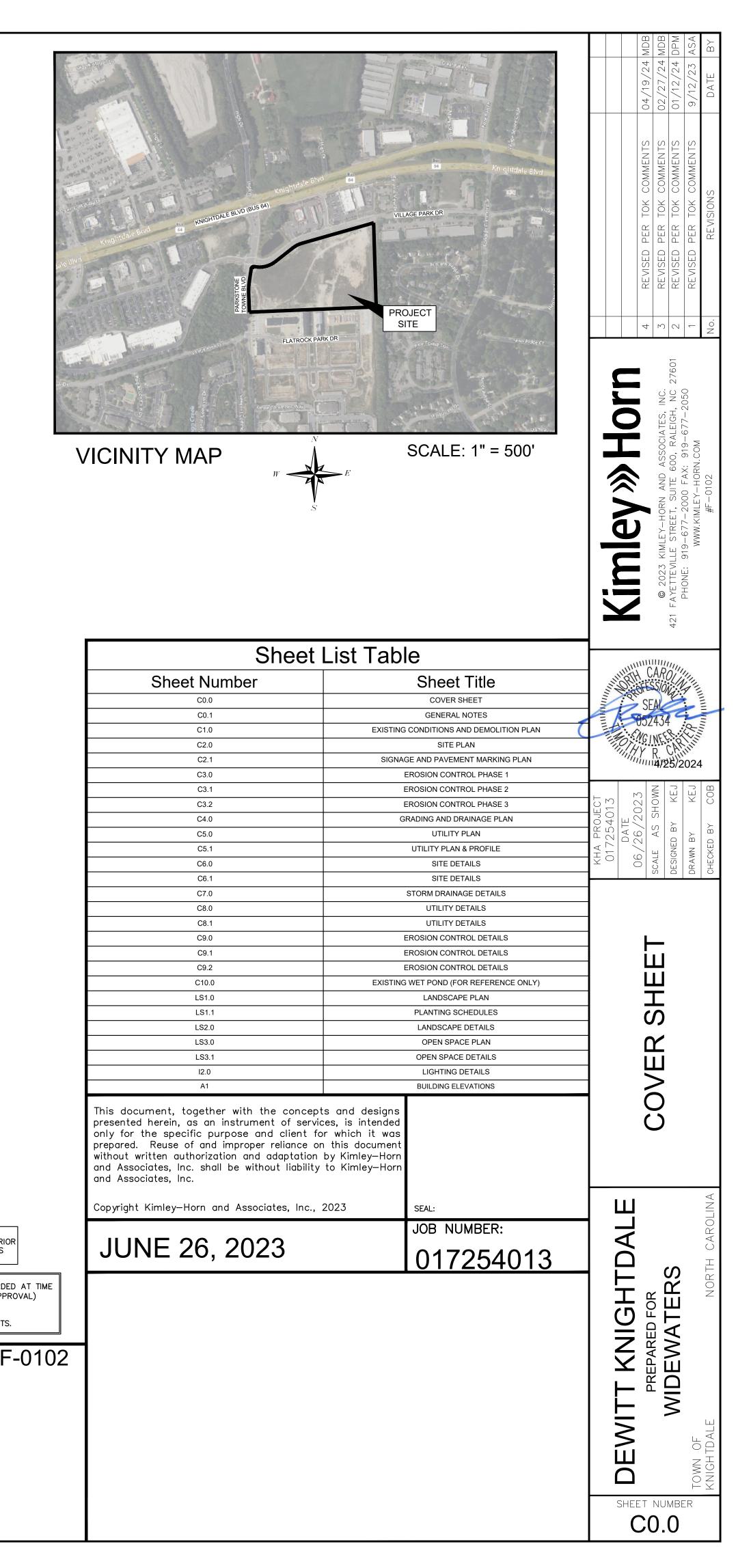


# CONSTRUCTION PLAN SUBMITTAL FOR: DEWITT KNIGHTDALE MIXED-USE 901 PARKSTONE TOWNE BOULEVARD KNIGHTDALE, NC 27545

TOWN OF KNIGHTDALE PROJECT #ZMA-15-21 ORDINANCE #23-02-15-004 PERMIT NUMBER: SEC-000015-2023

	SITE	DATA
n shall exceed the maximum front setback for	EXISTING USE:	UNDEVELOPED
way. tel shall be minimized, as indicated on the Master	ZONING:	NMX-PUD
hall be a minimum of five feet as indicated on the	PROPOSED USE:	MIXED USE (MULTI-FAMILY RESIDENTIAL, COMMERCIAL)
	TOTAL SITE AREA:	11.02 ACRES
inimum width of 22-feet and parking spaces a	PROPERTY SETBACKS:	PRIMARY STREET = 10'
nal open space shall be provided as indicated on the		ADJACENT TO UR-12 OR $RMX = 10'$ ADJACENT TO $GR8 = 30'$
es consisting of 290 multi-family units and 29,200		ADJACENT TO NMX OR HB = 0'
extended along the public right-of-way frontage of	DISTURBED AREA:	12.00 ACRES
be included following review by Development	PROJECT DATA	
g Stations shall be installed in the parking lot adjacent		
of Parkstone Towne Blvd.	PIN#	1744–85–4115
<b>Il Control.</b> In the event of a conflict or	MIXED-USE PROPOSED # OF BUILDINGS BUILDING LOT COVERAGE VEHICULAR SURFACE AREA	5 (105,250 GSF TOTAL) 21.92% (105,250 SF/480,153 SF) 36.51% (175,322 SF/480,153 SF)
truction drawings and the Town of for this project, the Approved Standards e Approved Standards shall mean all y for approval for the Property including, permit, subdivision plan, site plan,	PARKING	COMMERCIAL: TOTAL RETAIL = 29,200 SF MAXIMUM: 6 PER KSF OF GFA =29.2 KSF RETAIL * 6 = 175 SPACES MINIMUM: 1/2 OF MAXIMUM=88 SPACES
ule, Development Agreement, Utility n Agreement, the Town of Knightdale s Manual and applicable provisions of the de. <b>Certification.</b> These improvements shall be		RESIDENTIAL MAXIMUM: 1.5 SPACES PER BED UP TO 3 PER UNIT 1 BED: 114 UNITS = 171 SPACES 2-3 BED: 177 UNITS = 531 SPACES TOTAL RESIDENTIAL MAXIMUM = 702 SPACES MINIMUM: 1/2 OF MAXIMUM=351 SPACES MINIMUM ELECTRIC VEHICLE CHARGING STATIONS REQUIRED: 10 STATIONS
e following drawings and with the Standard ightdale. ify that the Standard Specifications of the oroughly checked and found to be eptions to the applicable Town standards		MAXIMUM ALLOWED: 877 SPACES MINIMUM REQUIRED: 439 SPACES TOTAL PARKING PROVIDED: 535 SPACES (INCLUDES 10 ADA AND 10 EV) TOTAL GARAGES PROVIDED: 48
the Town of Knightdale and said	ON-STREET PARKING PROVIDED:	40 SPACES
of these drawings.	TOTAL PARKING PROVIDED:	575 SPACES
, PE	ACCESIBLE PARKING:	REQUIRED SPACES = 14 (INCLUDING 2 VAN SPACES)
		PROVIDED ADA: 15 SPACES PROVIDED VAN: 2 SPACES
h has been reviewed by the Engineer for the est of my knowledge and belief, it conforms the Standard Specifications of the Town of	BIKE PARKING	COMMERCIAL: 1 PER EVERY 10 CAR SPACES 88 CAR SPACES = 9 BIKE SPACES
Date:		RESIDENTIAL 1 PER EVERY 20 CAR SPACES 447 CAR SPACES = 23 BIKE SPACES
Town of Knightdale and serve as		TOTAL REQUIRED: 32 SPACES TOTAL PROVIDED: 32 SPACES
	ALLOWABLE IMPERVIOUS AREA TO POND 2	22.28 AC
Date:		9.57 AC
]	PROP. MIXED-USE IMP. AREA REMAINING ADDITIONAL IMPERVIOUS AREA ALLOWED FOR POND 2	7.98 AC 5.23 AC
	OPEN SPACE ACREAGE:	
		REQUIRED RECREATIONAL OPEN SPACE: 97,418 SF
	3	REQUIRED ACTIVE OPEN SPACE (50% MIN): 97,418 SF TOTAL PROVIDED ACTIVE OPEN SPACE: 42,640 SF (51% OF REQUIRED)
SEDIMENT CONTROL		REQUIRED PASSIVE OPEN SPACE (UPTO 50%): 97,418 SF TOTAL PROVIDED PASSIVE OPEN SPACE: 58,140 SF (69% OF REQUIRED)
OVED PLAN	3	TOTAL PROVIDED OPEN SPACE: 100,780 SF (103% OF REQUIRED)
	TOTAL NUMBER OF PARCELS:	ONE (1)
	TOTAL NUMBER OF HOUSING UNITS:	291
). SEC	GROSS PROJECT DENSITY PER ACRE:	26.32
ntdale Public Works	CONTROL POINT:	NCGS "GORE"
n & Erosion Control	<u>{</u>	ELEV: 324.31 NORTHING: 745865.08
) 217-2250	<u> ۲</u>	EASTING: 2151017.85
) 217-2250		NOTE: A DRAFT OF THE PROJECT'S PLAT IS TO BE SUBMITTED TO CORPUD FOR REVIEW AND APPROVAL PR TO RECORDING OF THE PLAT. UTILITY BUILDING PERMITS WILL BE ISSUED BY THE TOWN UPON PLAT APPROVAL.
Construction Inspector Signature		PROPOSED WATER ALLOCATION POLICY POINTS (AWARI OF OVERALL PARKSTONE MASTER PLAN/REZONING AP
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		<ul> <li>MIXTURE OF USE DEVELOPMENT – 41 PTS.</li> <li>CLUBHOUSE &lt;4000 S.F. W/ FULL KITCHEN – 9 P<sup>-</sup></li> </ul>

NC CERTIFICATE OF AUTHORIZATION: F-0102



<u>Geotechnical notes</u>
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- THE CONTRACTOR IS RESPONSIBLE TO DO HIS OWN TAKEOFFS TO DETERMINE AMOUNTS OF CUT AND FILL, AND THE COST FOR BRINGING THE SITE TO THE LINES SHOWN ON THE PLANS IS TO BE INCLUDED IN THE BASE BID. AN ALLOWANCE IS INCLUDED IN THE CONTRACT AMOUNT FOR THE BLASTING OR RIPPING OF ROCK FOR BULK EXCAVATION AND TRENCH ROCK. THE CONTRACT AMOUNT WILL BE ADJUSTED UP OR DOWN FROM THE ROCK ALLOWANCE(S) AND APPROVED UNDERCUT AT THE UNIT RATES ESTABLISHED IN THE CONTRACT. ALL ROCK QUANTITY ADJUSTMENTS WILL BE MADE ON THE BASIS OF BANK YARDS AS OPPOSED TO TRUCK COUNTS UNLESS OTHERWISE ALLOWED BY THE OWNER. IF TRUCK COUNTS ARE ALLOWED, THE CONTRACTOR, OWNER, AND ENGINEER WILL AGREE ON THE NUMBER OF BANK YARDS PER TYPE OF TRUCK PRIOR TO THE START OF THE WORK AND THE ENGINEER WILL PERIODICALLY CHECK RANDOM TRUCKS TO VERIFY THEY ARE BEING LOADED IN A MANNER REPRESENTATIVE OF WHAT WAS ASSUMED WHEN DEVELOPING THE ESTIMATED LOAD VOLUMES. THE PHYSICAL DIMENSIONS OF THE TRUCK BED WILL NOT BE USED TO COMPUTE YARDS PER TRUCK LOAD.
- DIFFICULT EXCAVATION WILL BE DETERMINED AS DEFINED IN THE PROJECT SPECIFICATIONS AND THE CONTRACTOR WILL BE REQUIRED TO DEMONSTRATE DIFFICULT EXCAVATION WITH THE APPROPRIATE TYPE AND SIZE EQUIPMENT OR AS OTHERWISE DIRECTED BY THE ENGINEER BEFORE MATERIAL IS CLASSIFIED AS DIFFICULT EXCAVATION. IN THE CASE OF DIFFICULT TRENCH EXCAVATION, THE PAY LINES WILL BE THE NOMINAL DIAMETER OF THE PIPE PLUS 24 INCHES BUT NOT LESS THAN 4 FEET AND THE PAY DEPTH WILL EXTEND TO 6 INCHES BELOW DESIGN INVERT REGARDLESS HOW DEEP OR WIDE THE AREA IS SHOT. THE CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY GROUND DAMAGED BY BLASTING TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. IF DIFFICULT EXCAVATION MATERIAL IS UNDERLAIN BY SOIL WHICH CAN BE REMOVED WITH CONVENTIONAL EQUIPMENT WITHOUT RESORTING TO DIFFICULT EXCAVATION METHODS, ONLY THE LAYER OF MATERIAL CLASSIFIED AS DIFFICULT EXCAVATION WILL BE CLASSIFIED AS DIFFICULT EXCAVATION.
- MASS ROCK IS DEFINED AS MATERIAL WHICH CANNOT BE REMOVED WITH REASONABLE EFFORT, AS DEFINED BY THE ENGINEER, USING A D-8 DOZER WITH A SINGLE TOOTH RIPPER. TRENCH ROCK IS DEFINED AS MATERIAL WHICH CANNOT BE REMOVED WITH REASONABLE EFFORT, AS DEFINED BY THE ENGINEER, USING A CAT 330 OR EQUIVALENT TRACKHOE WITH A 3-FOOT WIDE BUCKET AND CARBIDE BULLET TEETH.
- SOIL WHICH IS SUITABLE EXCEPT THAT IT IS TOO WET WILL NOT BE DEEMED UNSUITABLE AND THE CONTRACTOR WILL BE EXPECTED TO PROVIDE EQUIPMENT TO MOISTURE CONDITION THE SOIL AND TO EXPEND THE TIME AND EFFORT NECESSARY TO ACHIEVE THE REQUIREMENTS IN THE SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER. THERE WILL BE NO ADDITIONAL PAYMENT FOR MANIPULATING THE SOIL TO MODIFY THE MOISTURE CONTENT.
- THE CONTRACTOR IS TO PROVIDE A FARM TRACTOR AND DISK CAPABLE OF TURNING THE SOIL TO A DEPTH OF 12 INCHES ON EACH PASS. DURING DRYING OPERATIONS, THE CONTRACTOR WILL TURN THE SOIL EVERY 30 TO 45 MINUTES DURING TIMES OF FAVORABLE WEATHER. AT THE END OF THE DAY AND PRIOR TO PREDICTED RAIN EVENTS. THE CONTRACTOR WILL SEAL THE SURFACE OF THE FILL AND AREAS BEING DRIED WITH A DISK WITH A SMOOTH DRUM ROLLER. THE COST TO BLADE BACK 12 TO 18 INCHES OF SOIL, MOISTURE CONDITION THE REMAINING SOIL AND TO COMPACT THAT MATERIAL AND THEN PROPERLY COMPACT THE REMOVED SOIL IN ISOLATED AREAS WHERE DEEMED NECESSARY ON THE BASIS OF PROOF ROLLING BY THE ENGINEER IS TO BE INCLUDED IN THE BASE BID AND THERE WILL BE NO ADDITIONAL PAYMENT FOR THAT WORK.
- ALL CLASSIFIED ITEMS ENCOUNTERED ARE TO BE DOCUMENTED EACH DAY BY THE OWNER'S REPRESENTATIVE AND THERE WILL BE NO PAYMENT FOR ANY CHANGE ORDERS FOR UNDERCUT OR DIFFICULT EXCAVATION NOT SUPPORTED BY A FIELD REPORT FROM THE OWNER'S REPRESENTATIVE. ANY DEWATERING REQUIRED TO COMPLETE THE WORK SHOWN ON THE DRAWINGS IS TO BE INCLUDED IN THE BASE BID COST AND THERE WILL BE NO ADDITIONAL PAYMENT FOR DEWATERING. IF THE ENGINEER DIRECTS THE CONTRACTOR TO INSTALL PERMANENT FRENCH DRAINS NOT SHOWN ON THE PLANS, THE ADDITIONAL DRAINS WILL BE PAID FOR AS A CHANGE ORDER. THE CHANGE ORDER IS TO BE EXECUTED BEFORE THE ADDITIONAL DRAINS, IF ANY ARE INSTALLED OR THERE WILL BE NO PAYMENT FOR THOSE DRAINS

### GENERAL NOTES

- A PRE-CONSTRUCTION MEETING WITH TOWN OF KNIGHTDALE, SITE CONTRACTOR, AND SUB-CONTRACTORS IS REQUIRED TO OCCUR PRIOR TO BEGINNING SITE GRADING.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS. BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND DIMENSIONS OF EXIT PORCHES, RAMPS, DOWNSPOUTS, GRAVEL AREAS ADJACENT TO BUILDING WALLS, UTILITY ENTRANCE LOCATIONS AND BOLLARDS IN BUILDING SIDEWALKS.
- ACCESSIBLE SIGNS WITH A "VAN" MARKING SHALL HAVE ADDITIONAL SIGN MOUNTED ABOVE THE SYMBOL OF ACCESSIBILITY SIGN DENOTING VAN ACCESSIBILITY.
- REFER TO DETAIL SHEET C8.0 & C8.1 FOR DETAILS OF ON-SITE SIGNAGE, STRIPING, AND PAVEMENT MARKING. REFER TO SITE PLAN FOR ADDITIONAL DIMENSIONAL INFORMATION.
- 5. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED. THOSE ISLANDS ARE TO HAVE CURB & GUTTER AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- EXISTING INFORMATION SHOWN FROM AN ALTA/ACSM LAND TITLE SURVEY PROVIDED BY CHANDLER LAND SURVEYING. INC., 83 ADAMS POINT DRIVE, GARNER, NC 27529, PHONE: 919-291-9163 AND DATED NOVEMBER 21, 2017 AND TAKEN FROM TOWN OF KNIGHTDALE APPROVED CONSTRUCTION PLAN FOR PARKSTONE AT KNIGHTDALE (KHA #017254001) DATED NOVEMBER 15, 2016, FROM TOWN OF KNIGHTDALE APPROVED CONSTRUCTION PLANS FOR PARKSTONE VILLAGE (KHA #017254009) DATED NOVEMBER 8. 2019 AND PROVIDED BY KIMLEY-HORN AND ASSOCIATES, 421 FAYETTEVILLE STREET, SUITE 600, RALFIGH, NC 27601, PHONE: 919-667-2000, AND FROM A SANITARY SEWER ELEVATION SURVEY PROVIDED BY RWK, PA, 101 W. MAIN ST SUITE 202M GARNER, NC 27529, PHONE: 919-779-4854 AND DATED NOVEMBER 10, 2021.
- THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, FLASHING LIGHTS, TRAFFIC MEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY THE NORTH CAROLINA DEPT. OF TRANSPORTATION (NCDOT) AND CITY OF RALEIGH PUBLIC WORKS DEPARTMENT.
- 9. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
- 10. THE CONTRACTOR SHALL REPLACE EXISTING CONCRETE CURBS, SIDEWALK, PAVING, AND GUTTER AS NECESSARY. 11. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
- 12. CONTRACTOR AGREES TO REPAIR ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE STANDARDS OF THE NCDOT AND CITY OF RALEIGH.
- 13. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH INSPECTOR PRIOR TO CONSTRUCTION.
- 14. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
- 15. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
- 16. THE CONTRACTOR SHALL CONSTRUCT ACCESSIBLE RAMPS AT ALL INTERSECTIONS IN ACCORDANCE WITH THE CITY OF 9. BEGIN INSTALLATION OF STORM PIPES FROM INLET CB-12 TO INLET DI-17. RALEIGH STANDARD DETAIL AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS MANUAL (LATEST REVISIONS FOR ACCESSIBLE RAMP DETAILS).
- 17. SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED. WITHIN THE AREA OF A DEFINED SIGHT TRIANGLE, THERE SHALL BE NO SIGHT OBSTRUCTING OR PARTLY OBSTRUCTING WALL, FENCE, SIGN, FOLIAGE, BERMING, OR PARKED VEHICLES BETWEEN THE HEIGHTS OF TWENTY-FOUR (24) INCHES AND EIGHT (8) FEET ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVEL WAY IF NO CURBING EXISTS.
- 18. NO TREE SHALL BE LOCATED WITHIN 15' OF A LIGHTING LOCATION.
- 19. ALL CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH CURRENT NCDOT AND TOWN OF KNIGHTDALE STANDARD SPECIFICATIONS AND DETAILS.
- 20. ALL WORK MUST COMPLY WITH NORTH CAROLINA STATE BUILDING AND HANDICAPPED ACCESSIBILITY CODE VOL. 1C.

### TREE PROTECTION NOTES

- EXISTING TREES AND SHRUBS WHERE POSSIBLE.
- 2.

- IS NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION.

### TRAFFIC CONTROL

CONTROL SIGNS AND STANDARDS.

### DEMOLITION NOTES

- PRIOR TO THE START OF ANY DEMOLITION WORK.
- ALLOWED.

# GENERAL EROSION AND SEDIMENT CONTROL NOTES<sup>19.</sup> All fill materials, existing building foundations, pavement and utility structures, topsoil and any other deleterious materials shall be completely removed from within the bearing

- REFER TO EXISTING CONDITIONS PLAN.
- GEOTECHNICAL ENGINEER.
- ENSURE THAT THE BUILDING PAD IS CONSTRUCTED WITH SUITABLE MATERIAL AS PER THE GEOTECHNICAL ENGINEERS
- DIRECTION.
- AND VERIFIED PRIOR TO COMMENCING ACTIVITY ON SITE. CRITICAL AREAS).

- SEDIMENT COLLECTS ON THE ROADWAYS.
- RAINFALL EVENT.

### STORM DRAIN INSTALLATION SEQUENCE

- REQUIRED FALL IS ACHIEVABLE
- 3. BEGIN INSTALLATION OF STORM PIPES FROM INLET CB-6 TO INLET CB-5.
- 4. BEGIN INSTALLATION OF STORM PIPES FROM INLET CB-3 TO INLET CB-2.
- 5. BEGIN INSTALLATION OF STORM PIPES FROM INLET DI-13 TO INLET DI-10.
- 6. BEGIN INSTALLATION OF STORM PIPES FROM INLET DI-20 TO INLET DI-12.
- 7. BEGIN INSTALLATION OF STORM PIPES FROM INLET DI-21 TO INLET DI-10.
- 8. BEGIN INSTALLATION OF STORM PIPES FROM INLET CB-13 TO INLET DI-14.

- TEMPORARY PIPES TO ACHIEVE THIS.
- HARDSCAPE IS BEING INSTALLED OVER INSTALLED STORM PIPES.
- 14. UPON APPROVAL, BEGIN REMOVAL OF SEDIMENT BASINS.

21. VERTICAL DATUM FOR SURVEY IS NAVD 88.

THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES, IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUESTED TO SAVE ALL OTHER

WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER AND IMMEDIATELY COVER ALL ROOT CUT SURFACES LARGER THAN TWO INCHES IN DIAMETER WITH TREE WOUND DRESSING. USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK

3. NO SOIL DISTURBANCE OR COMPACTION. CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.

4. NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING, GRADING OR CONSTRUCTION BEGINS AND

REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) FOR DETAILS OF STANDARD TRAFFIC

A. CONTRACTOR SHALL COORDINATE WITH THE TOWN OF KNIGHTDALE TO OBTAIN ALL NECESSARY DEMOLITION PERMITS

B. REMOVE ENTIRE CONCRETE CURB TO LIMITS REQUIRED FOR NEW WORK, SAW CUTTING AND REMOVING NO LONGER

C. REMOVE VEGETATION AND GRASS IN AREAS TO RECEIVE NEW ASPHALT AND CONCRETE PAVEMENTS.

D. SAW CUT AND REMOVE ASPHALT PAVEMENT TO LIMITS INDICATED ON PLAN.

E. THE CONTRACTOR SHALL DEMOLISH AND REMOVE OFF-SITE FACILITIES WITHIN THE PROJECT SITE TO INCLUDE BUILDINGS, CONCRETE STRUCTURES (ABOVE GROUND AND FOUNDATION), SITE LIGHTING STRUCTURES, PAVEMENTS AND SECONDARY UTILITIES. ALL MATERIALS SHALL BE PROPERLY DISPOSED OF PER STATE REGULATIONS.

F. ALL PRIMARY UTILITIES DISCOVERED DURING DEMOLITION OPERATIONS THAT SERVE ACTIVITIES OTHER THAN THE CANCER CENTER SITE SHALL BE PROPERLY PRESERVED AND PROTECTED.

G. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER AND ENGINEER ANY UNFORESEEN OR ADVERSE CONDITIONS, INCLUDING UNCHARTED UTILITIES, DISCOVERED DURING DEMOLITION OPERATIONS.

EXCAVATION AND EARTH MOVING OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE OWNER'S

ALL CONSTRUCTION SHALL COMPLY WITH NCDENR AND WAKE COUNTY STANDARDS AND SPECIFICATIONS.

VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF ABOVE GROUND FEATURES. NO WARRANTY IS GIVEN OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION. ALL EXISTING UTILITIES SHOULD BE CONSIDERED APPROXIMATE IN LOCATION

STABILIZE DISTURBED AREAS WITH TEMPORARY VEGETATION. DENUDED AREAS MUST BE SEEDED WITHIN FOURTEEN (14) DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION. (REFER TO NPDES SEEDING SCHEDULE FOR SEEDING IN

ENSURE THAT ALL TEMPORARY DIVERSIONS ARE INSTALLED WITH POSITIVE DRAINAGE AND SHALL OPPOSE EXISTING GRADE WHEN NECESSARY TO PROVIDE A MINIMUM OF 0.5% LONGITUDINAL SLOPE.

ALL ADJACENT ROADS TO THE SITE ARE TO BE SWEPT AND WASHED AT THE END OF EACH WORK DAY TO ENSURE NO

INSPECT AND PROPERLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER EVERY

10. INSTALL ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SEDIMENT RUNOFF.

### 1. STORM SEWER TO BE INSTALLED UPSTREAM FOR EACH RUN TO AVOID CONSTRUCTION IN THE BASINS. CONTRACTOR TO CONFIRM DOWNSTREAM STORM CONNECTION INVERT PRIOR TO INSTALLATION OF UPSTREAM STORM PIPES TO CONFIRM

2. BEGIN INSTALLATION OF STORM PIPES FROM INLET DI-18 TO INLET DI-1.

10. BEGIN INSTALLATION OF STORM PIPES FROM INLET CB-11 TO INLET DI-14.

11. STORM DRAINS DISCHARGING INTO SEDIMENT BASINS SHALL DISCHARGE BEHIND THE BAFFELS AND MAY REQUIRE

12. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAMES. SEDIMENT BASINS TO REMAIN IN PLACE WHILE

13. ONCE ALL UPSTREAM HARDSCAPE HAS BEEN INSTALLED CONTACT DOMINGO ORPILLA AT 919-217-2254 FOR INSPECTION.

15. INSTALL REMAINING STORM PIPE SECTIONS CONNECTING TO EXISTING TIE-IN POINTS.

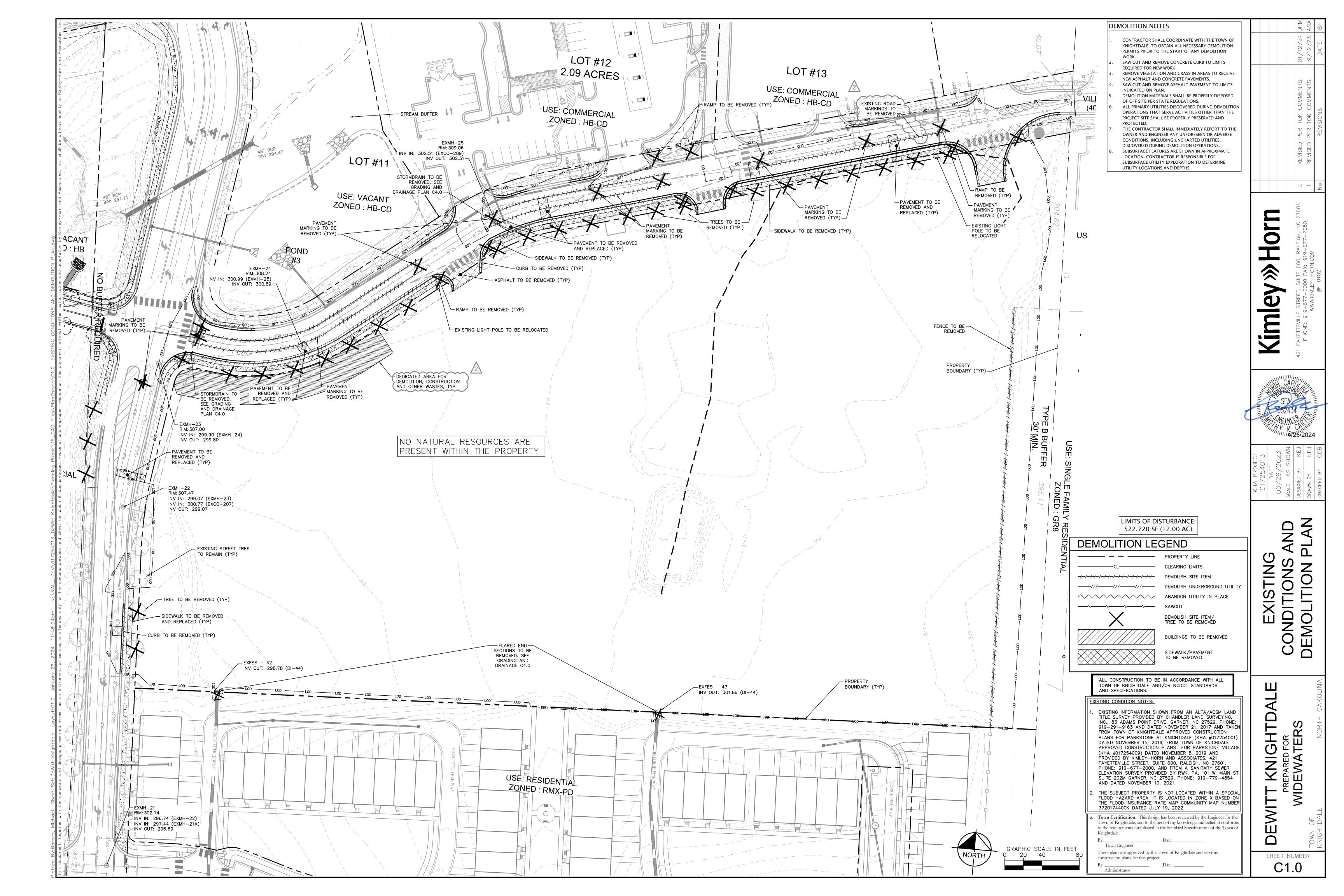
# GRADING

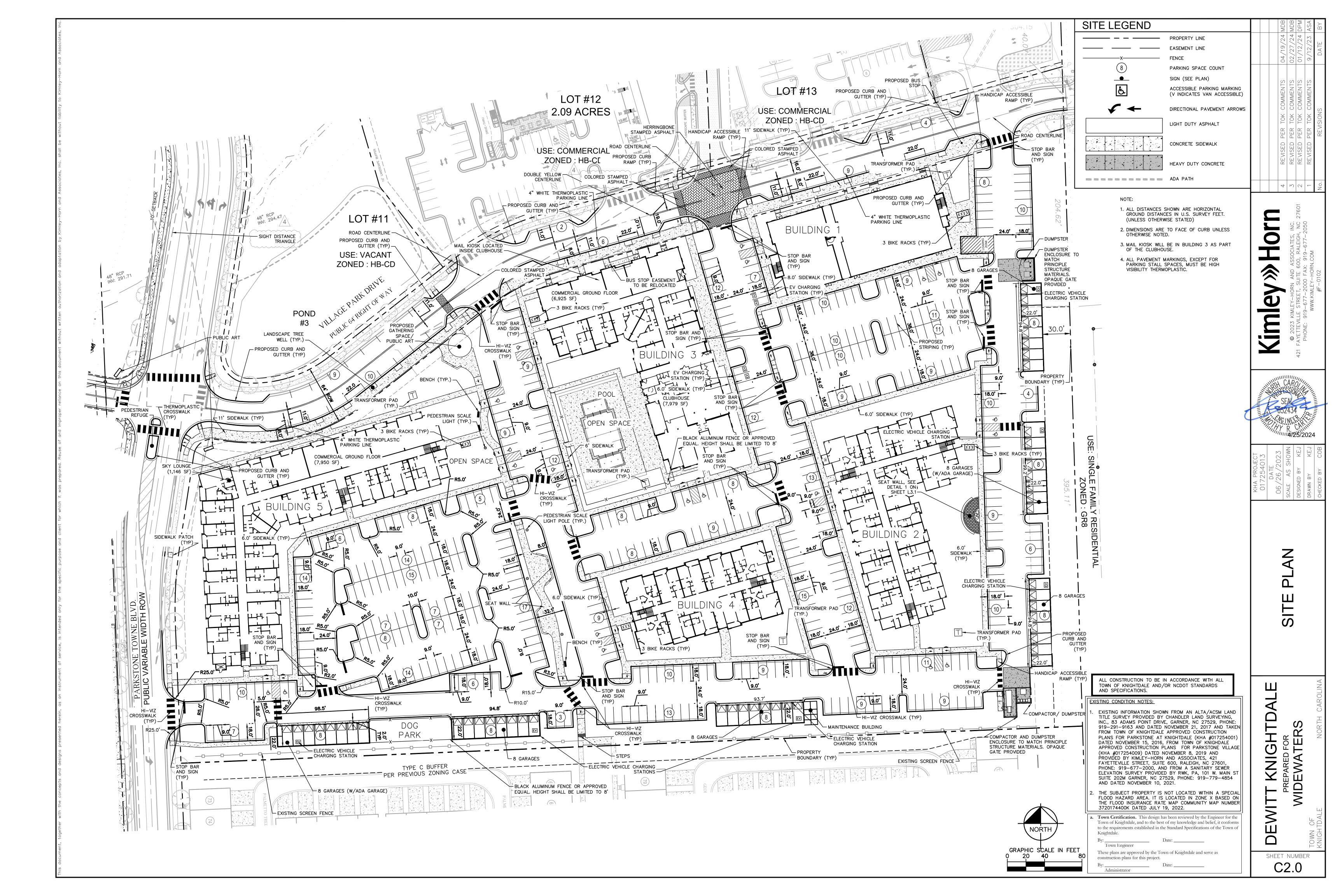
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL TOWN OF KNIGHTDALE AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- 2. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.
- 3. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
- 4. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION.
- 6. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- ALL FILL TO BE COMPACTED PER THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER.
- LIMITS OF CLEARING SHOWN ON GRADING PLAN ARE BASED UPON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.
- THE PROPOSED CONTOURS SHOWN IN DRIVES AND PARKING LOTS AND SIDEWALKS ARE FINISHED ELEVATIONS INCLUDING ASPHALT. REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
- 10. CONTRACTOR SHALL INSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN BY GRAVITY FLOW ACROSS NEW PAVEMENT AREAS TO NEW OR EXISTING DRAINAGE INLETS OR SHEET OVERLAND. 11. ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN IS SUBJECT TO
- A FINE. 12. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S.
- PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 13. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. 14. CONTRACTOR SHALL GRASS DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- 15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME
- 16. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS. THE DESIGN ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE DESIGN(S) TO INSTALL SAID ITEMS.
- 17. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY DEWATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS AS AN ALTERNATE ALLOWANCE.
- 18. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND ELEVATIONS.
- AND ANY OTHER DELETERIOUS MATERIALS SHALL BE COMPLETELY REMOVED FROM WITHIN THE BEARING ZONE BELOW THE STRUCTURE.
- 20. ALL FOUNDATION AND UTILITY EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNIAL REPRESENTATIVE TO DETERMINE WHETHER UNSUITABLE MATERIAL MUST BE REMOVED. ALL UNDESIRABLE MATTER SHALL BE REMOVED, BACKFILLED AND COMPACTED WITH SUITABLE MATERIAL AS REQUIRED BY THE GEOTECHNICAL REPRESENTATIVE AT CONTRACTOR'S EXPENSE.
- 21. GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE. AS DIRECTED BY THE ENGINEER, THEY MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN CONDITIONS. STATIONS, OFFSETS AND ELEVATIONS REFER TO THE CENTER OF DROP INLETS, MANHOLES AND JUNCTION BOXES, AND THE MIDPOINT OF THE LIP FOR CATCH BASINS.
- 22. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- 23. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- 24. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.

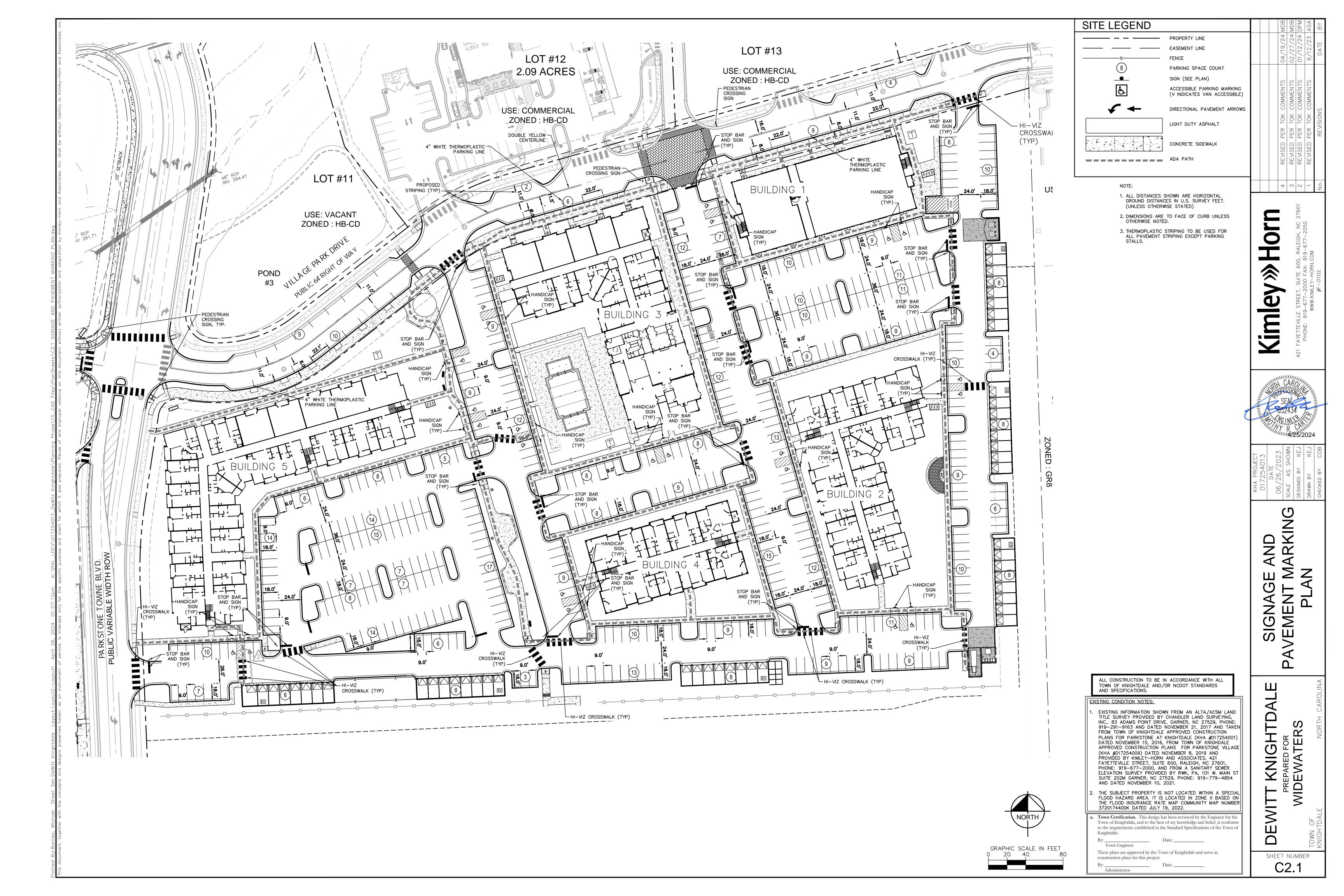
### DRAINAGE

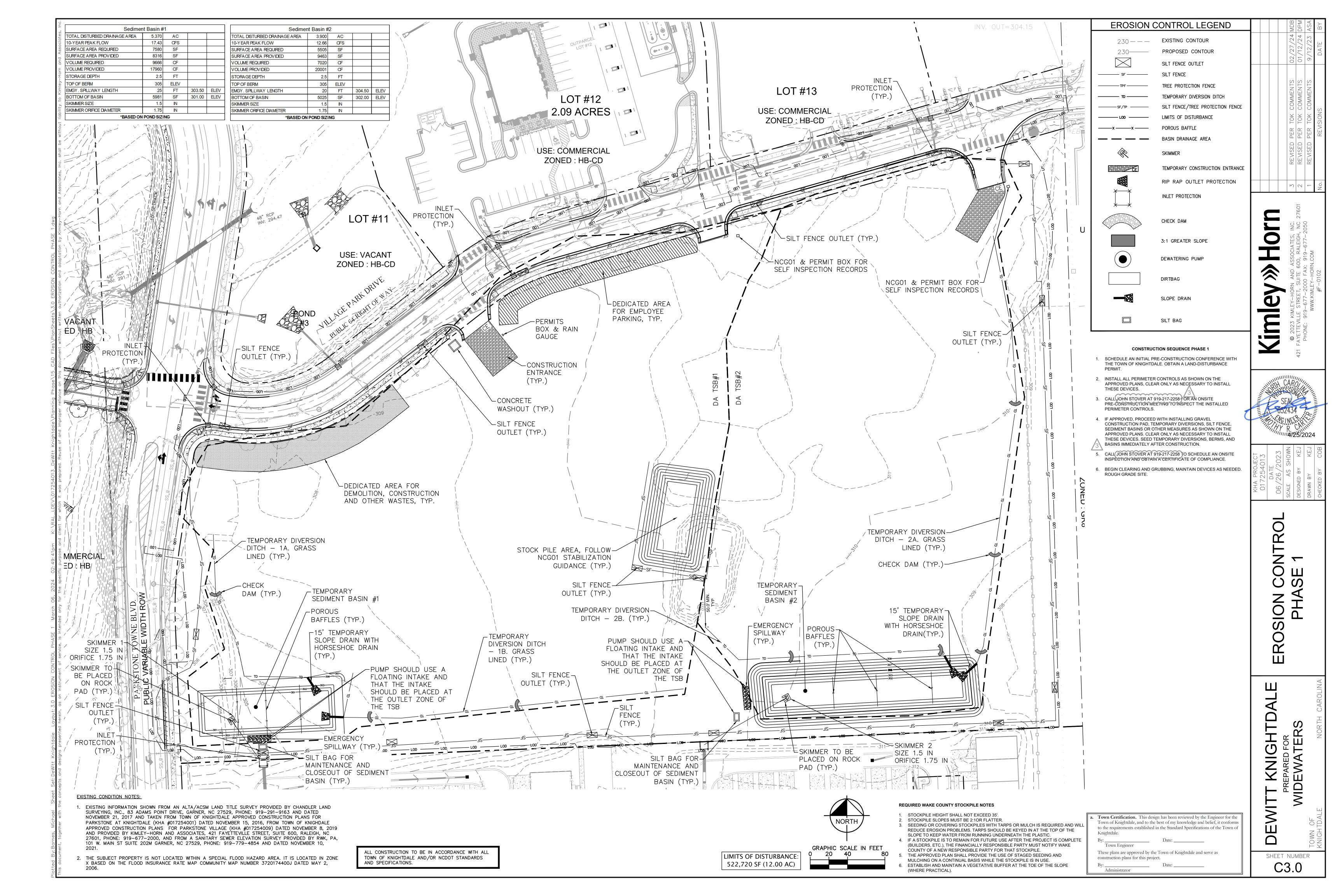
- STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED: 15" DIAMETER AND LARGER: RCP. CLASS III PER ASTM C-76.WITH FLEXIBLE PLASTIC BITUMEN GASKETS AT JOINTS. \_ESS THAN 15" DIAMETER: PVC
- 2. ALL STORM DRAINAGE WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE CLASS III REINFORCED CONCRETE
- 3. ALL PIPE LENGTHS AND SLOPES ARE APPROXIMATE.
- 4. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTH ACCURATE METHOD.
- 5. SUBSURFACE DRAINAGE FACILITIES MAY RE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- 6. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS ADDITION TO OTHER APPLICABLE CRITERIA: A. NO MORE THAN 500 LF OF TRENCH MAY BE OPENED AT ONE TIME.
- B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVE SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSE AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- D. MATERIAL USED FOR BACK-FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MIN EROSION AND PROMOTE STABILIZATION.
- E. DESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE EROSION AND SEDIMENT COM REGULATIONS.
- F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH. 7. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY RETURN IT TO EXISTING CONDITIONS OR BETTER.
- 8. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE WATERTIGHT.
- 9. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN T INVERT OUT.
- 10. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION. CATCH BASINS, MANHOLES, FRAMES, GRATES. ETC. SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD DETAILS AND SPECIFICATIONS.
- 11. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. LIDS SHALL BE LABELED "STORM SEWER".
- 12. STRUCTURE TOP ELEVATIONS SHOWN HERE ARE APPROXIMATE. CONTRACTOR SHALL ADJUST AS NECESS

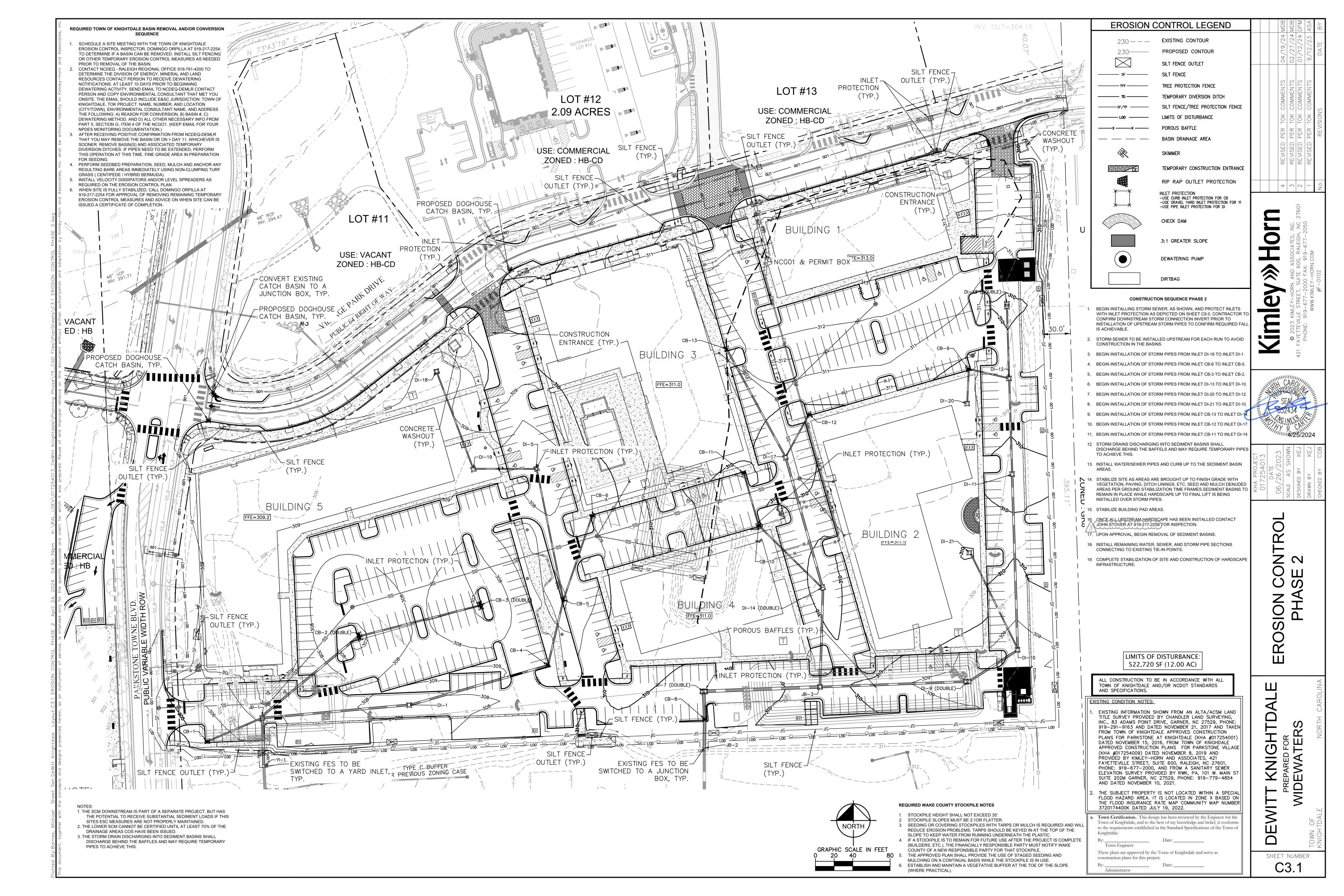
	<u>S</u> 1.	TANDARD UTILITY NOTES: All materials & construction methods shall be in accordance with city of raleigh design standards details & specifications (reference: corpud handbook current edition)	12/24 DPM 2/23 ASA ATE BY
L	2.	<ul> <li>STANDARDS, DETAILS &amp; SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)</li> <li>UTILITY SEPARATION REQUIREMENTS:</li> <li>a) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER &amp; 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</li> </ul>	01/12 9/12, DAT
-		<ul> <li>SPECIFIED &amp; INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL</li> <li>b) WHEN INSTALLING WATER &amp;/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 &amp; MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER</li> <li>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 &amp; INSTALLED TO WATERLINE SPECIFICATIONS</li> <li>d) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER &amp; STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER</li> <li>e) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN &amp; RCP STORM DRAIN CROSSINGS; MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER &amp; A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 &amp; S-49)</li> <li>f) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER &amp; SEWER FACILITIES WITH 18" MIN. VERTICAL</li> </ul>	REVISED PER TOK COMMENTS REVISED PER TOK COMMENTS REVISED PER TOK COMMENTS REVISED PER TOK COMMENTS REVISIONS
S	3.	SEPARATION REQUIRED ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR	
D	4.	PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION 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.	5.	CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY	57601
	6.	A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS	NC. NC
E.	7.	REQUIRED ON ALL REUSE MAINS 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	SSOCIATES, 1 5, RALEIGH, 919-677-20 COM
Т	8.	INSTALL 2" PE WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. <u>NOTE:</u> IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE	RN AND AS SUITE 600 000 FAX: EY-HORN.
	9.	INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM	# WI = 7 - 7
	10.	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	KIMLEY-H KIMLEY-H B19-677 WWW.K
	11.	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	© 2023 KIM FAYETTEVILLE PHONE: 919
	12.	NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION	421 F <i>J</i>
IT	13.	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 <u>FOG@RALEIGHNC.GOV</u> FOR MORE INFORMATION	
	14.	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 <u>CROSS.CONNECTION@RALEIGHNC.GOV</u> FOR MORE INFORMATION	SEAL 052434 WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/NESSON WG/N
	W	ATER	COB COB COB COB
Ξ	1. 2.	WATERLINES, LARGER THAN 2" SHALL BE DUCTILE IRON PIPE MEETING THE REQUIREMENTS OF ANSI-AWWA C151 PRESSURE CLASS 350. WATERLINES 3/4" TO 2" SHALL BE TYPE "K" SOFT COPPER. ALL UNDERGROUND UTILITIES AND FIRE HYDRANTS MUST BE FUNCTIONALLY APPROVED PRIOR TO STRUCTURAL CONSTRUCTION.	PROJEC 725401. DATE AS SH0 AS SH0 BY BY D BY
THER	3. 4. 5.	NATIONAL STANDARD THREADS SHALL BE INSTALLED ON FIRE HYDRANTS. ALL FIRE HYDRANTS AND FDC CONNECTIONS TO HAVE STORZ TYPE CONNECTION PER CITY OF RALEIGH FIRE DEPARTMENT STANDARDS. BACKFLOW PREVENTION ASSEMBLY FOR FIRE AND DOMESTIC SERVICE TO BE LOCATED WITHIN THE BUILDING.	KHA 017 09/ scale Designe Drawn checke
		REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS.	S
IN		<u>ANITARY SEWER</u>	Ц Ш
ED ELY	1. 2.	GRAVITY SANITARY SEWER MAINS SHALL BE SDR-35 PVC PIPE AS SPECIFIED IN THESE PLANS AND CITY OF RALEIGH STANDARDS AND SPECIFICATIONS. SANITARY SEWER SERVICES SHALL BE SCHEDULE 40 PVC. CLEANOUT SYMBOLS SHOWN ON THESE PLANS REPRESENT LOCATION OF SURFACE ACCESS POINT. CONTRACTOR SHALL LOCATE WYE APPROPRIATELY BASED ON PIPE DEPTH.	
NIMIZE	3.	ALL MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS. MANHOLE DIAMETER SHALL VARY DEPENDING ON PIPE DIAMETER AND DEPTH, PER CITY OF RALEIGH STANDARDS.	1
ONTROL	4. 5.	SANITARY SEWER CLEAN-OUTS LOCATED IN PAVEMENT AREAS SHALL BE HEAVY-DUTY TRAFFIC BEARING CASTINGS. ALL SEWER MAINS IN TRAFFIC AREAS SHALL HAVE MINIMUM COVER OF 5' MEASURED FROM FINISHED GRADE TO	NERAI
/ ==		PIPE CROWN UNLESS DUCTILE IRON PIPE IS PROVIDED IN CLASS 1 BEDDING WHERE A MINIMUM COVER SHALL BE 3'.	
r to IS	6. A E	SEWER MANHOLES LOCATED IN NON-PAVED AREAS SHALL HAVE RIM ELEVATION A MINIMUM OF 1' ABOVE FINISHED GRADE. つロロロンバイ ハコー	
IS TO		<u>BREVIATIONS MAY BE LISED FOR THIS BROJECT</u>	U 10
	CB - YI -	ALL ABBREVIATIONS MAY BE USED FOR THIS PROJECT. - CATCH BASIN FES – FLARED–END–SECTION YARD INLETJB – JUNCTION BOX	
	DI —	- CLEAN OUT LOD – LIMITS OF DISTURBANCE DROP INLET PVC – POLYVINYL CHLORIDE - EXISTING RCP – REINFORCED CONCRETE PIPE	
SARY.		TYP. – TYPICAL	ALE AROLINA
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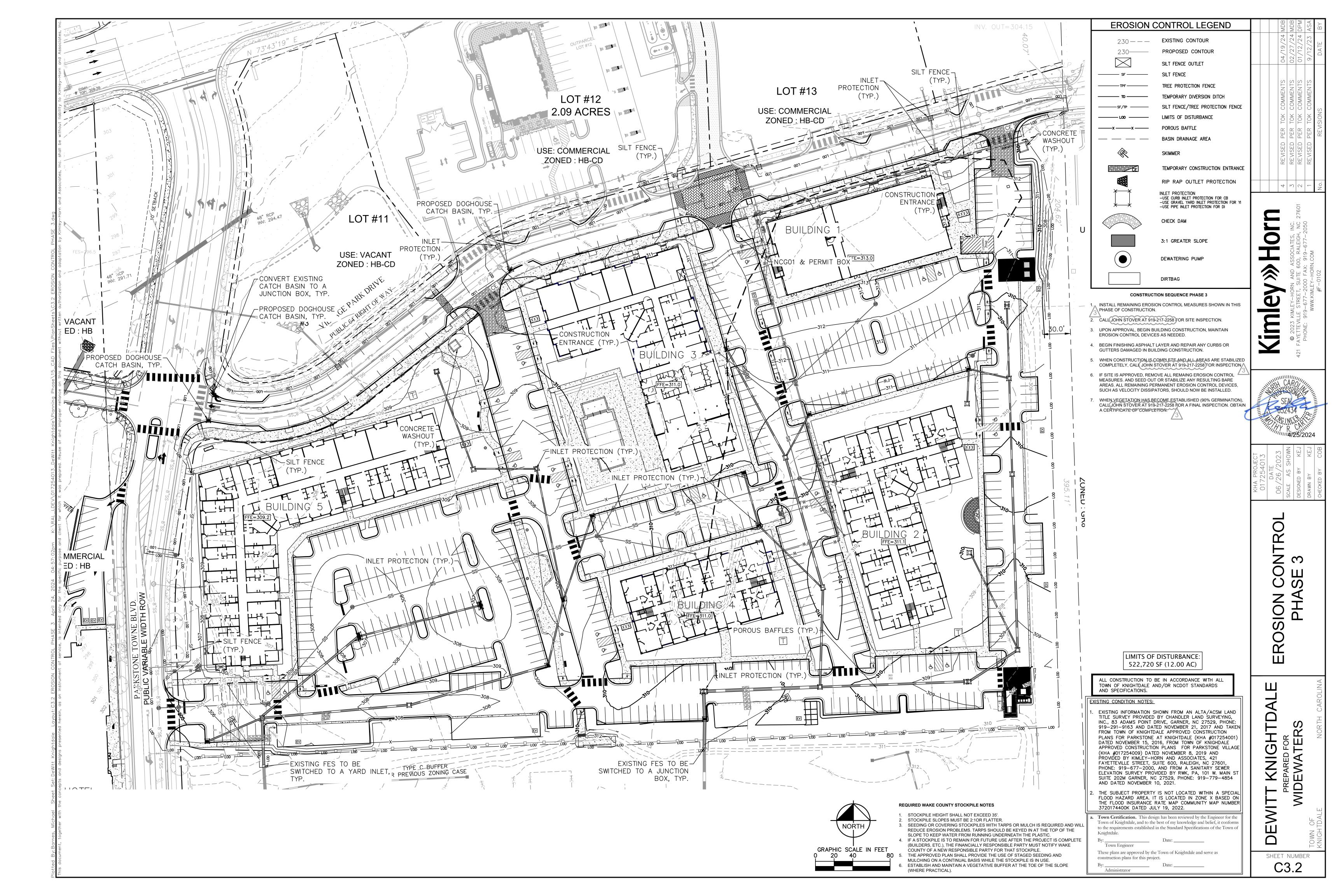


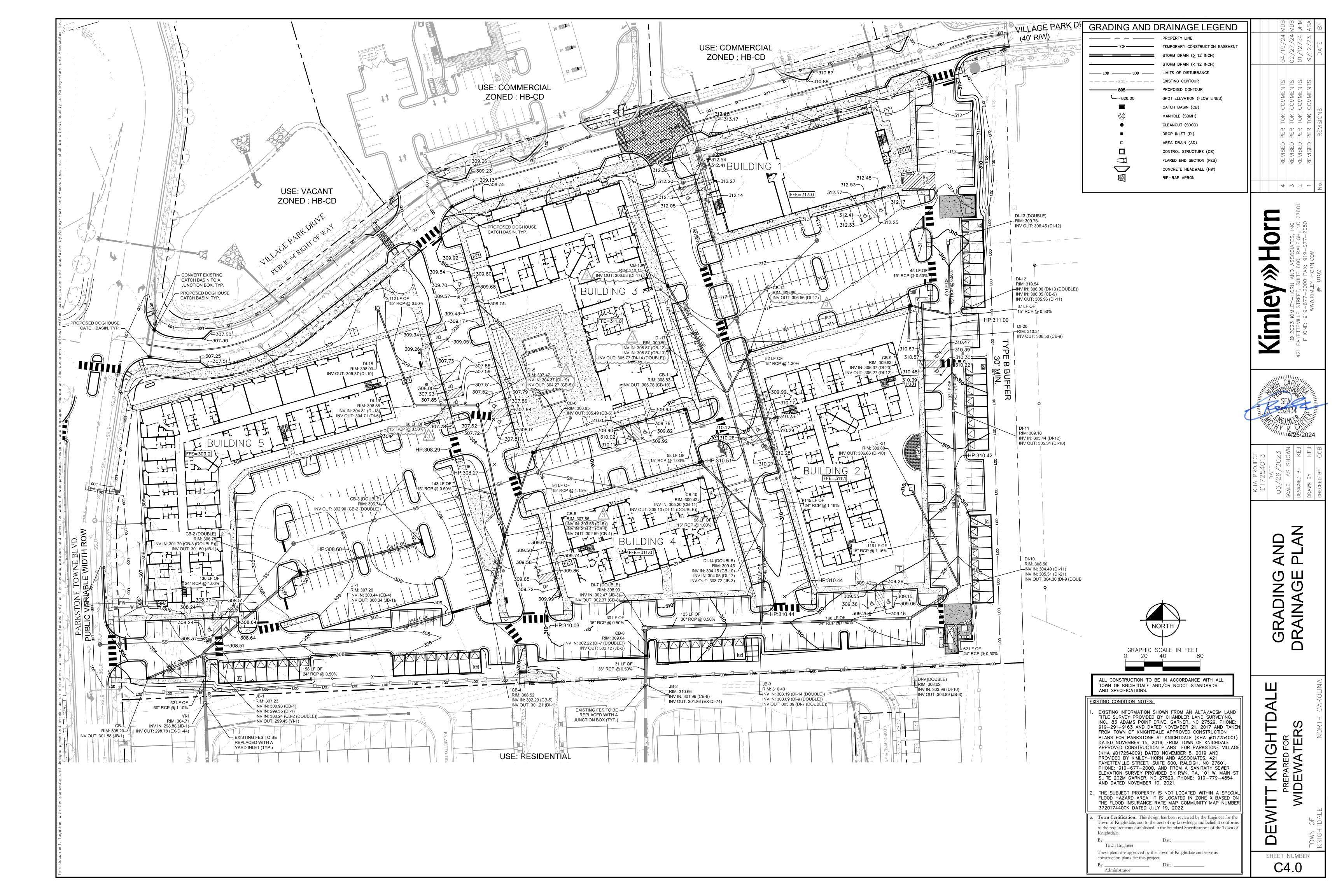


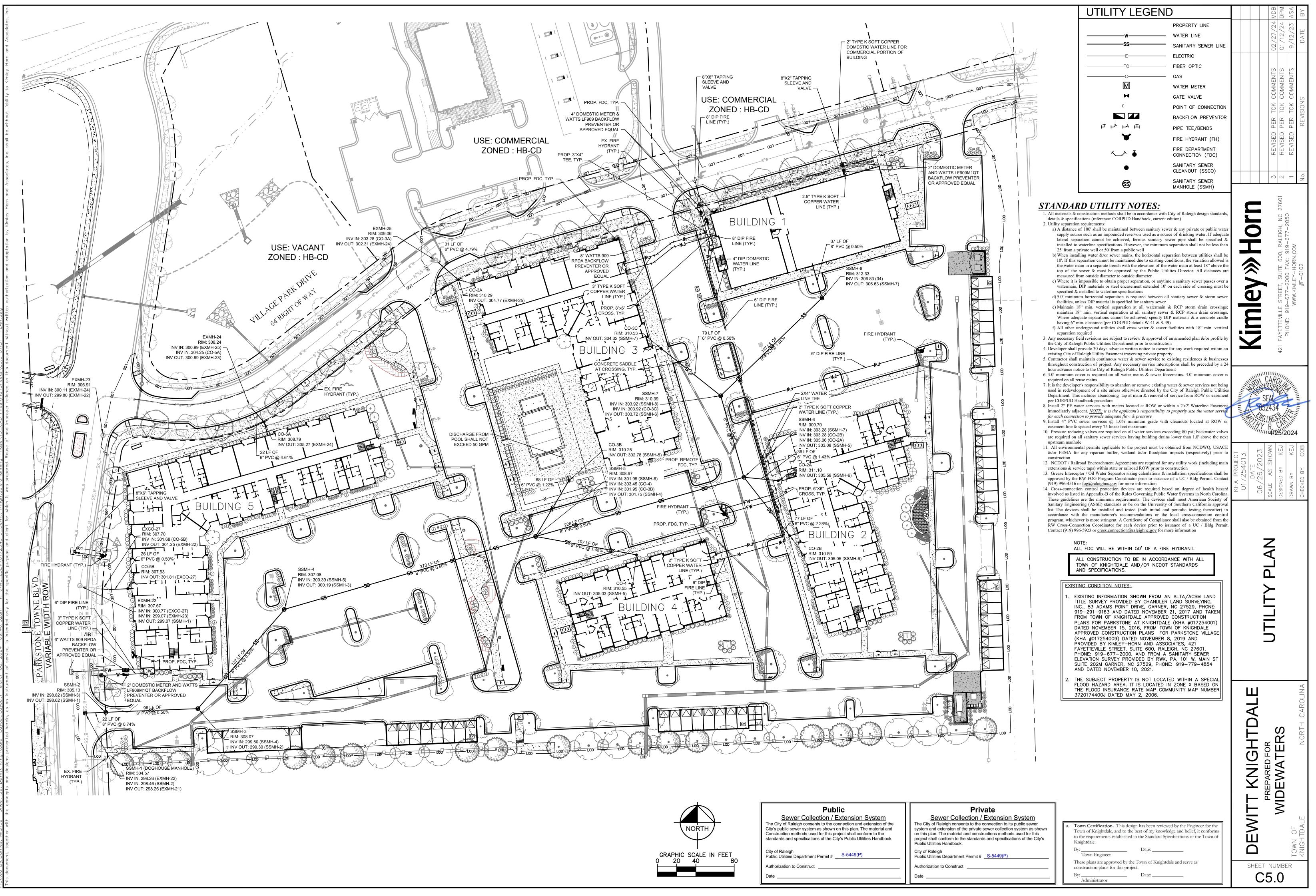


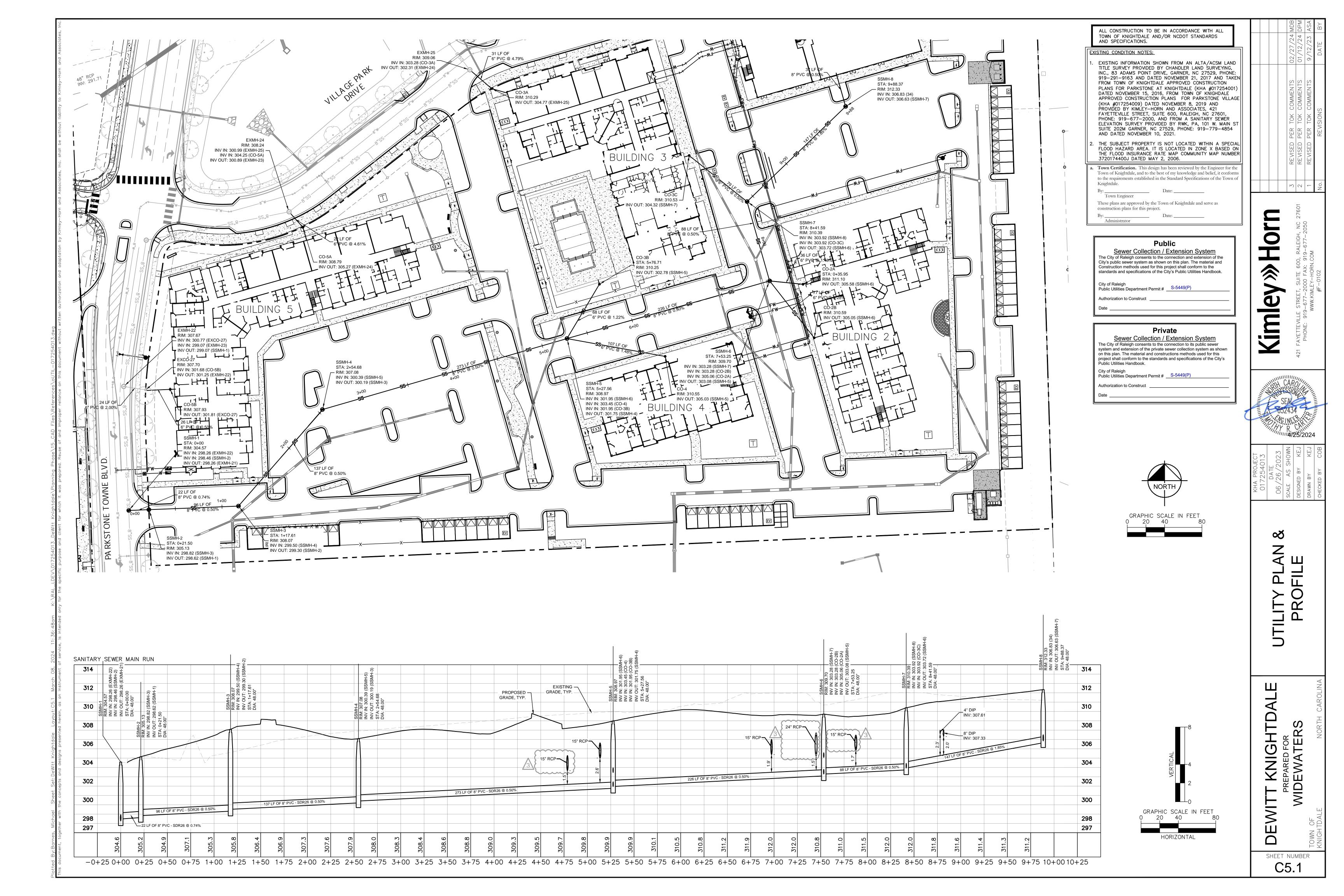


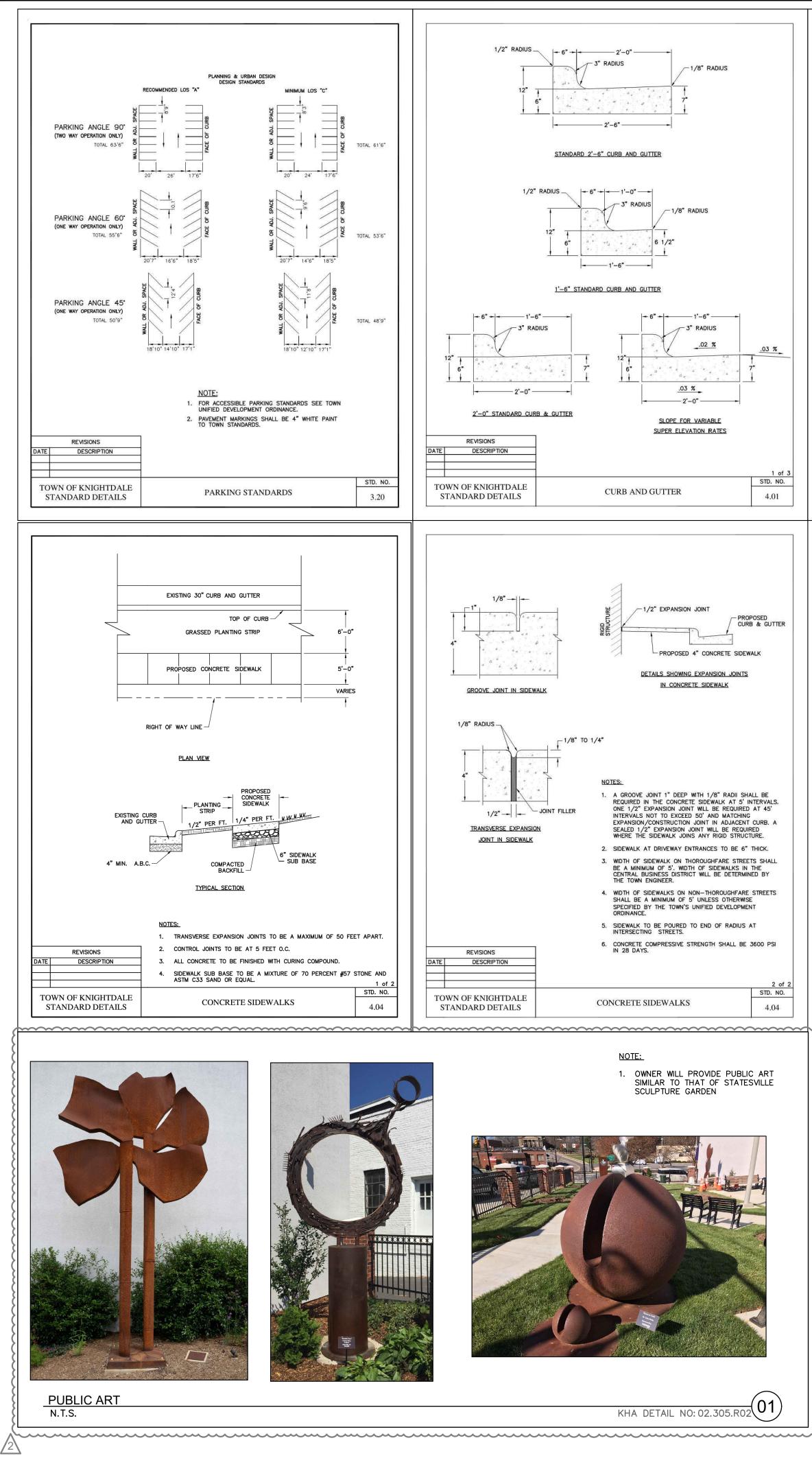










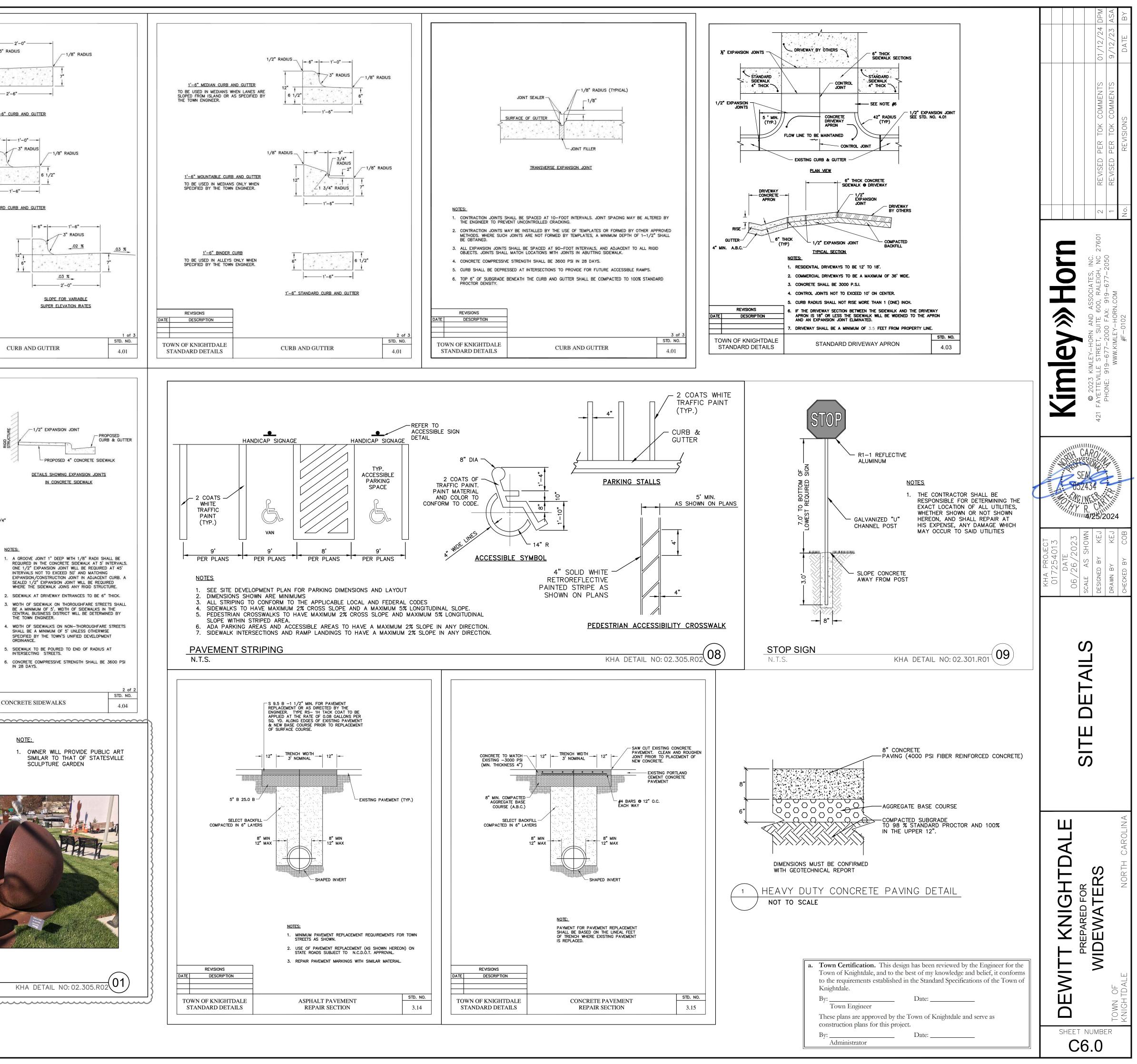


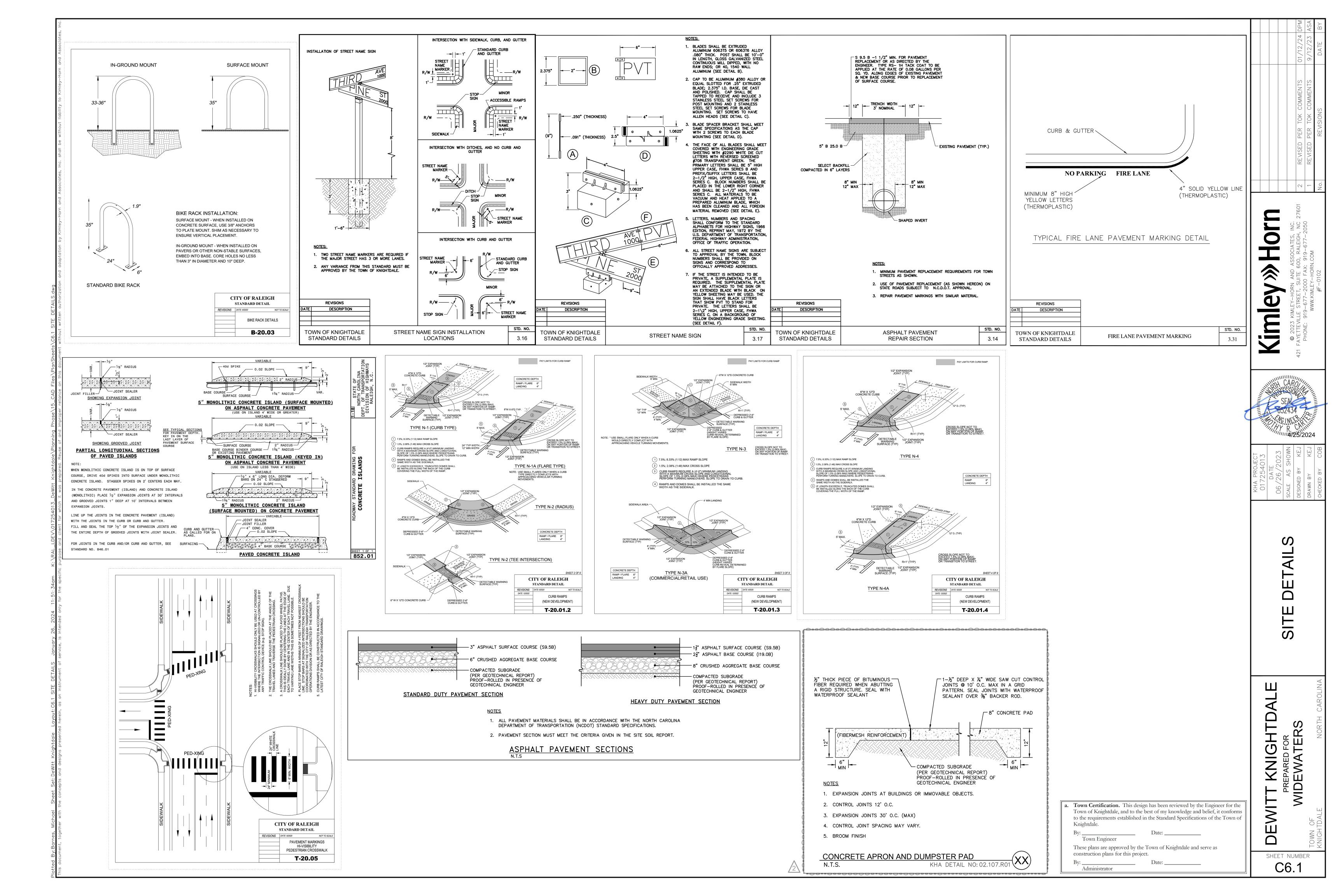
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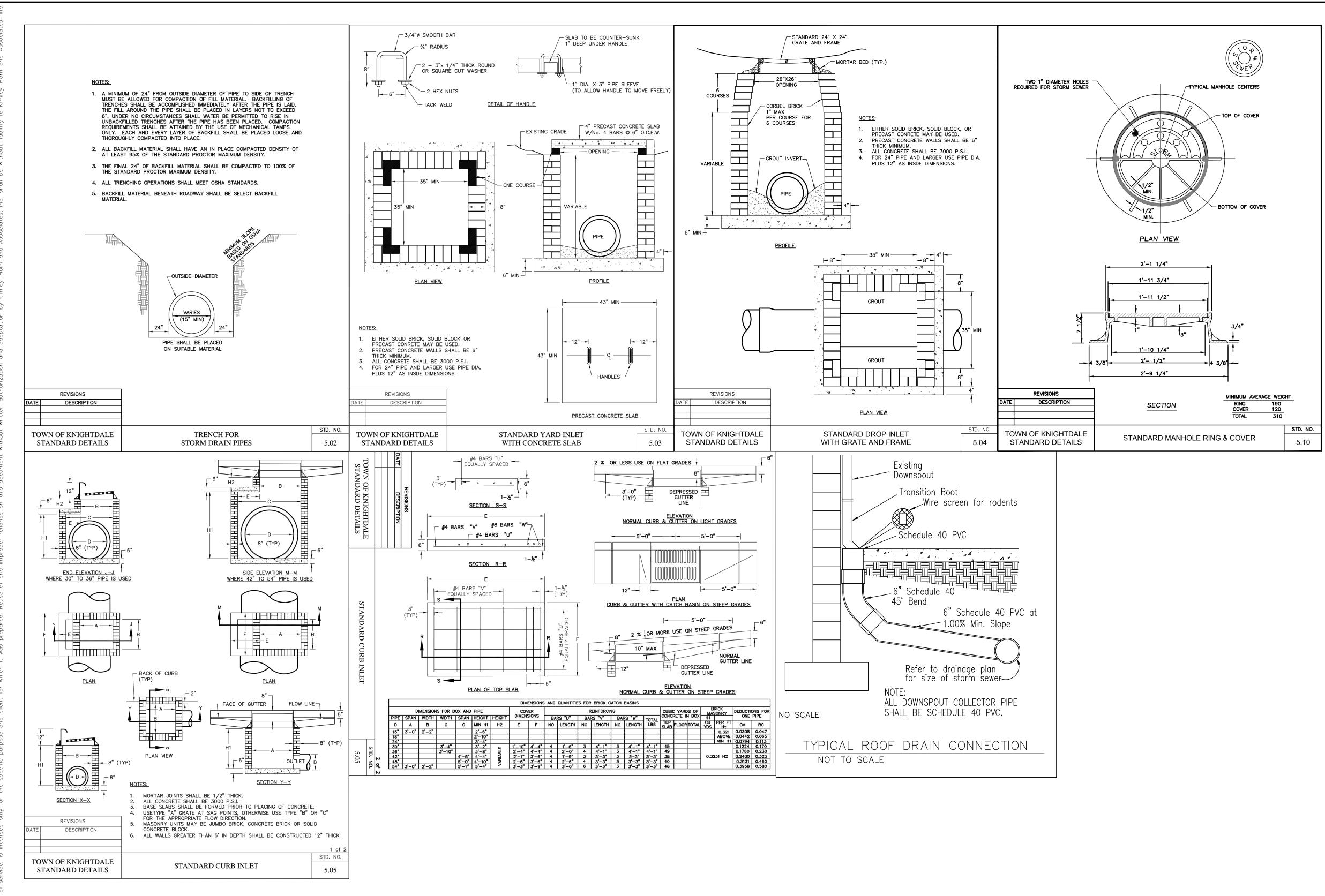
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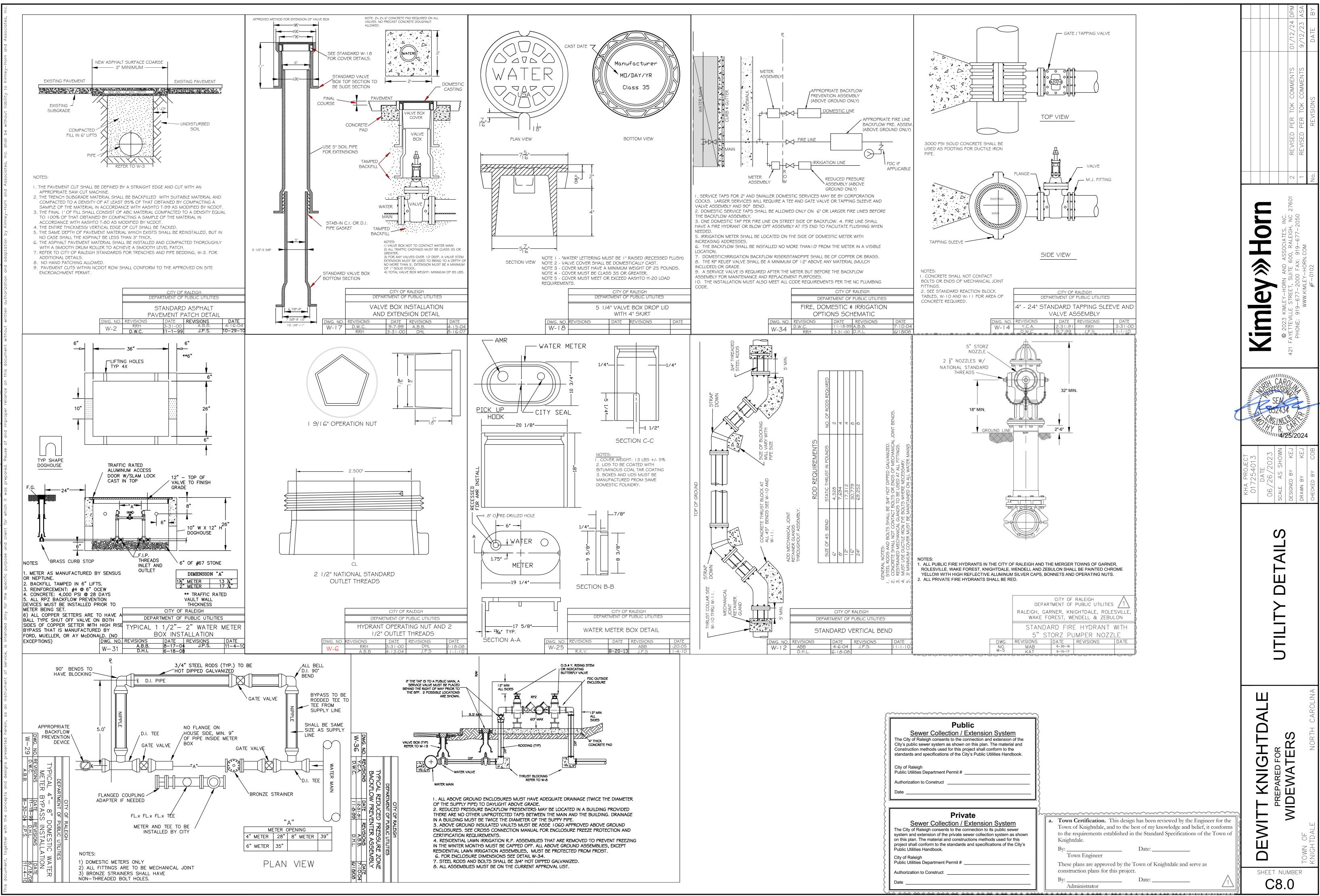


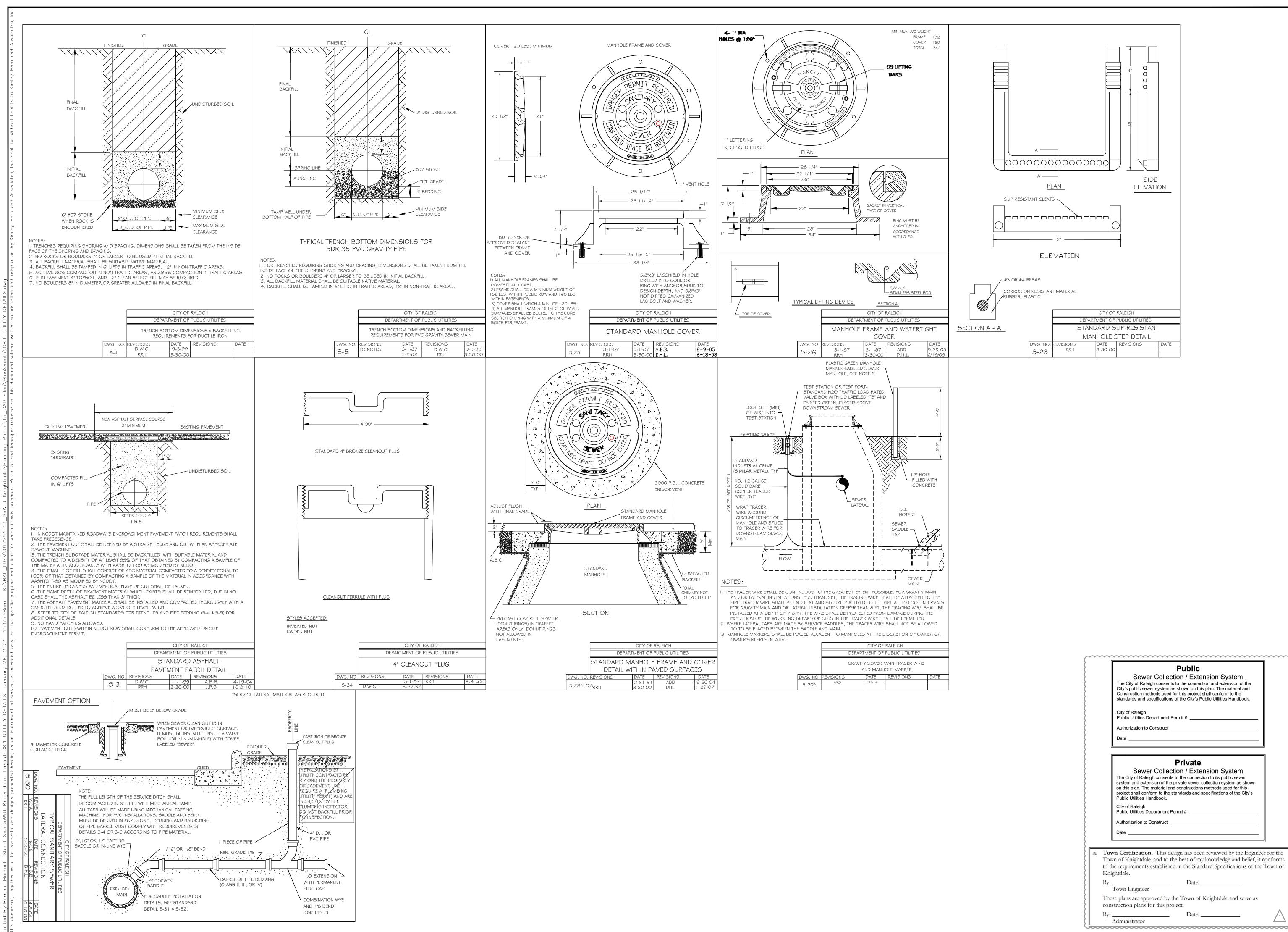


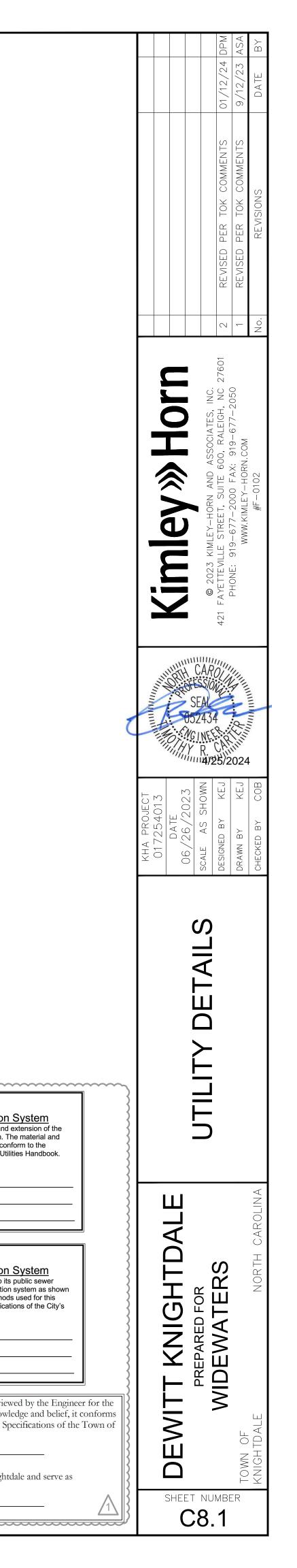


			S 01/12/24	S 9/12/23	DATE
			REVISED PER TOK COMMENTS	REVISED PER TOK COMMENTS	REVISIONS
			27601 2	1	No.
	Kimley » Horr	© 2023 kimley-horn and associates, inc.	421 FAYETTEVILLE STREET, SUITE 600, RALEICH, NC 27601	PHONE: 919-677-2000 FAX: 919-677-2030 WWW.KIMLEY-HORN.COM	#F-0102
	HILL CONTRACTOR	CAR SEAL			
C		C/NE R. 11114/2	R AP 5/2	024	
	KHA PROJECT 017254013 DATE 06/26/2023	SCALE AS SHOWN	DESIGNED BY KEJ	DRAWN BY KEJ	СНЕСКЕД ВУ СОВ
	STORM DRAINAGE		DEIAILO		
For the aforms own of	EWITT KNIGHTDALE		WIDEWAIEKS	DF	KNIGHTDALE NORTH CAROLINA
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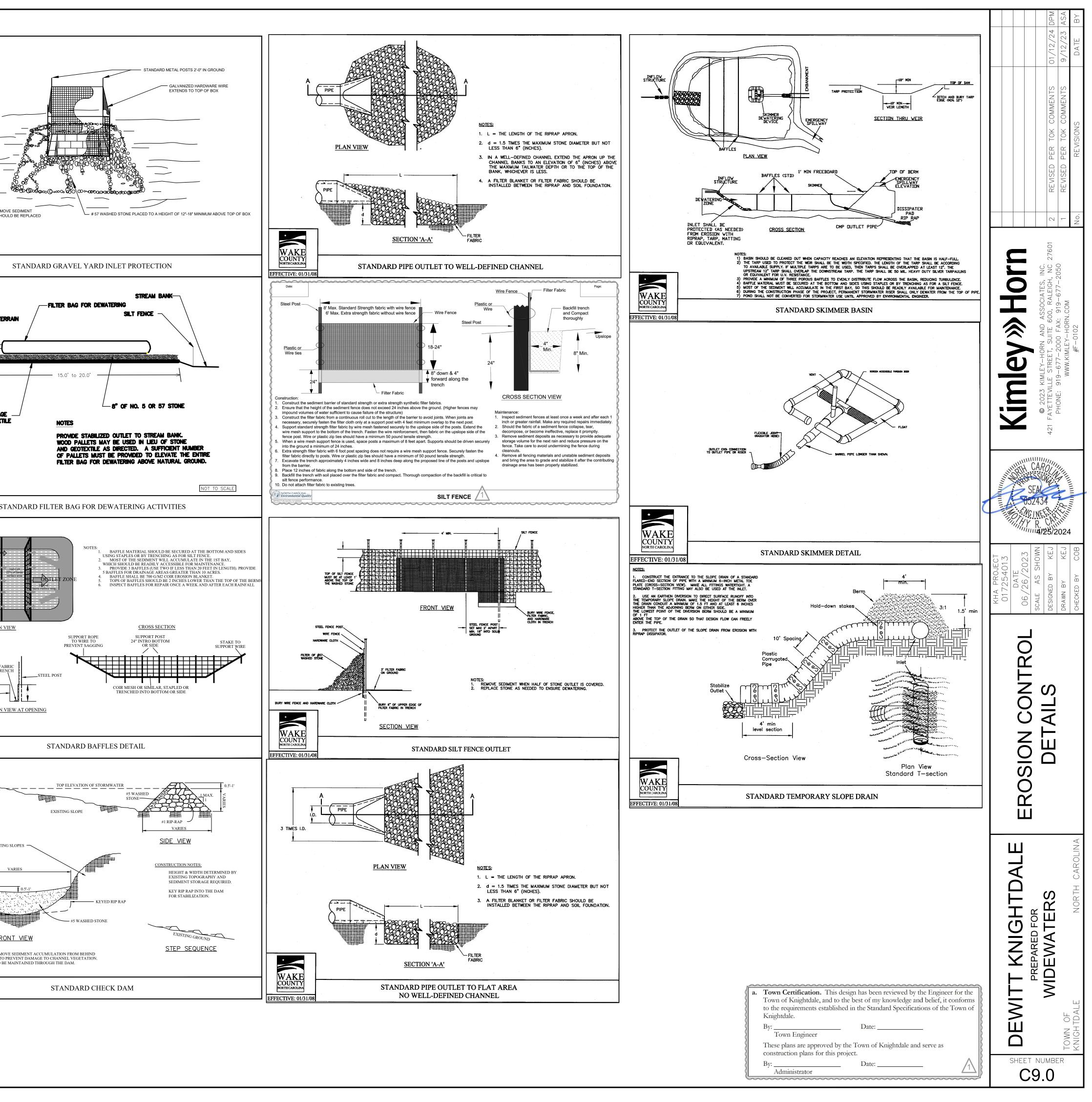
(a.	Town of Knightdale, and to the	gn has been reviewed by the Engineer for t best of my knowledge and belief, it confor in the Standard Specifications of the Town	m
<u>ě</u>	By: Town Engineer	Date:	
8	These plans are approved by the construction plans for this proje	e Town of Knightdale and serve as ect.	
	By: Administrator	Date:	1

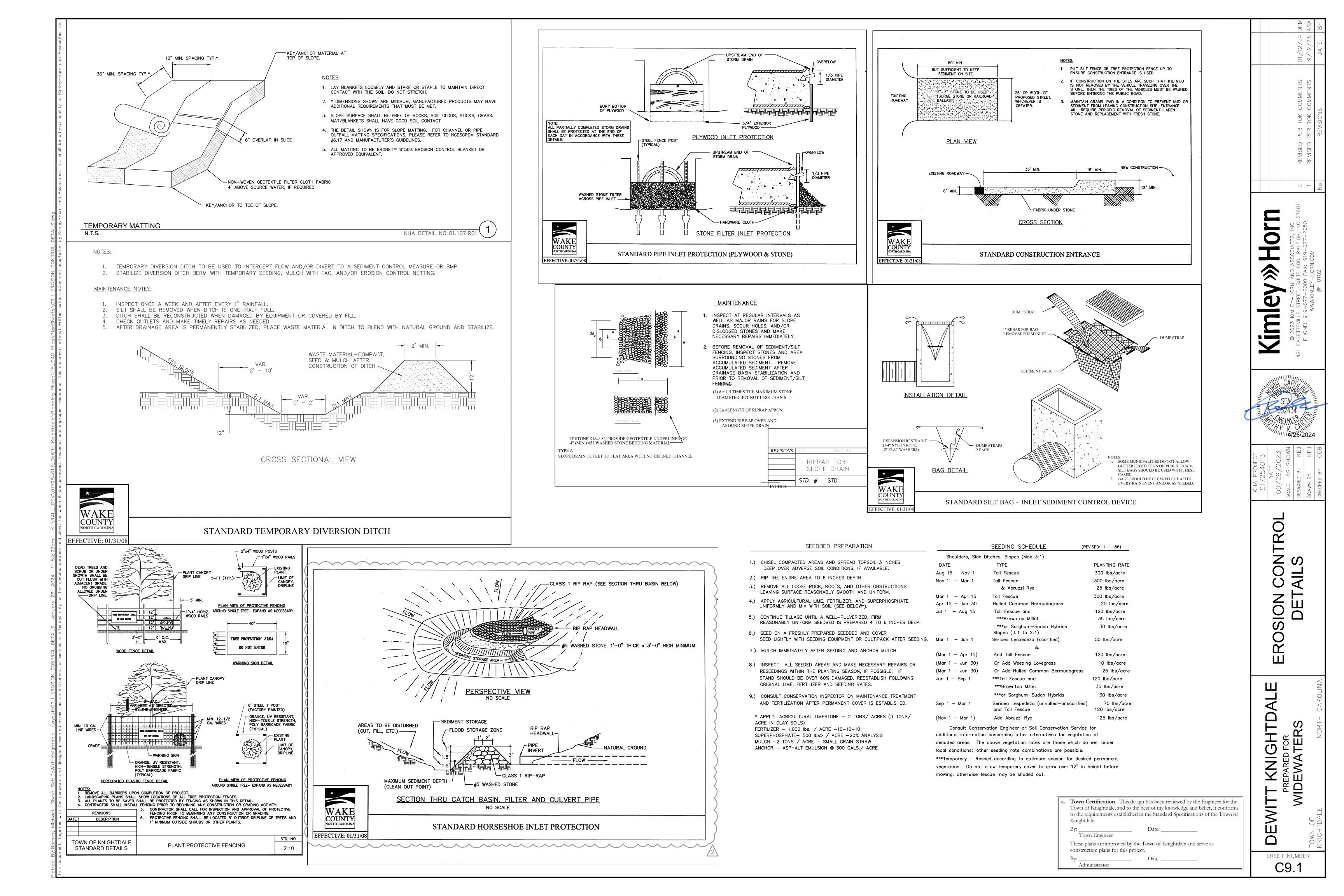




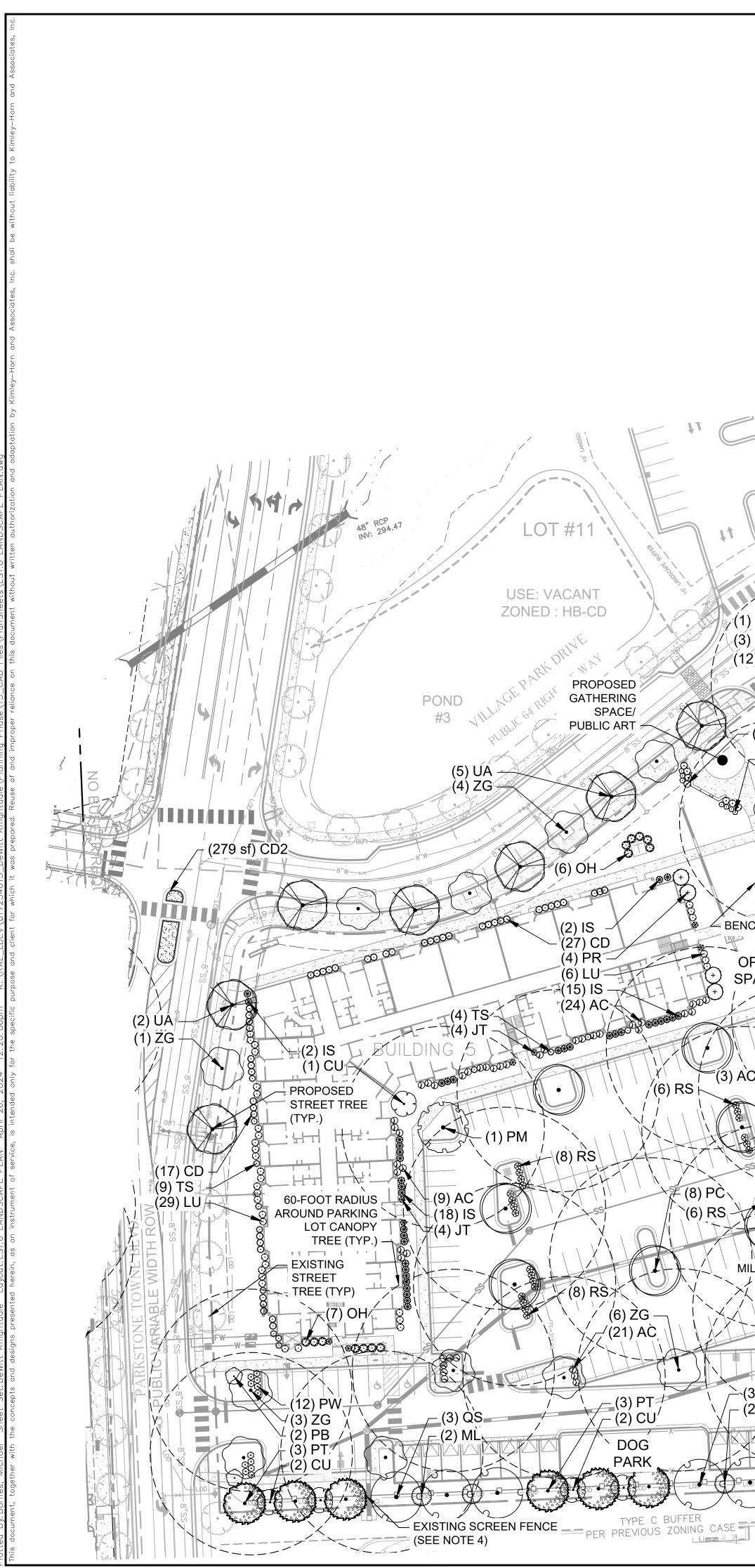


Inc.		
Associates	Town of Knightdale Required ESC Plan Maintenance Notes	
2 pup	Insert the following text block on to the first erosion and sediment control device detail sheets. <ol> <li>Provide a plan detail, construction specifications, and specific maintenance</li> <li>requirements for all proposed sediment and erosion control structures included on the plan.</li> </ol>	
Ногл	Recommend placing maintenance requirements with the associated construction detail. 2. Maintenance and/or clean out, is necessary anytime the device is at 50% capacity. All	
mley-	sediment storage measures will remain on site and functional until all grading and final landscaping of the project is complete. 3. As designated by NCDEQ NCG01 permitting, self-inspections for erosion and	
to X	sedimentation control measures are to be performed at least once every seven calendar days and within 24 hours of every rain event of 1 inch or greater. Any needed repairs shall be mode immediately to maintain measures as designed	
liability	be made immediately to maintain measures as designed. 4. Provide the minimum maintenance standards as specified below:	
	SURVEYOR FLAGS/TAPE/STAKES: <ul> <li>Replace identifiers if damaged or knocked down during development.</li> <li>Ensure key environmental and/or cultural resources maintain</li> </ul>	
without	identifiers. <ul> <li>Colors should adhere to the APWA Uniform Color Code. Use accepted</li> </ul>	~
shall be	survey symbols and ensure operators understand designations. Utility line owners/operators shall identify the designating firm. PERMITS/NCGO1 INSPECTIONS BOX:	-
. sh	Confirm box is securely fashions to a post or wall in a visible location in proximity to the construction entrance.	
tes, Ir	<ul> <li>Maintain relevant identification on the exterior of the box.</li> <li>Ensure paper documents remain dry / legible (lamination, ticket holders, binders, etc.)</li> </ul>	NOTE:
ssociates	<ul> <li>Replace any missing documents immediately. Consider placing ties or fasteners if necessary.</li> </ul>	1. INSPECT INLET PROTECTION AND REMOV AFTER EACH RAIN EVENT. GRAVEL SHOU AND REPAIRS MADE AS NEEDED.
As Ano	<ul> <li>RAIN GUAGE:</li> <li>Check and remove any items from the rain funnel and the debris filter (e.g., dust, bugs and other debris).</li> </ul>	*
kg Horn g	<ul> <li>Open the rain gauge and remove any foreign objects.</li> <li>Perform routine maintenance as specified by the manufacturer.</li> <li>Check that the gauge is not being obstructed from rain capture and is</li> </ul>	WAKE
ILS. dv	level before and after reassembly. TREE PROTECTION FENCE:	
DETAILS by Kimle	<ul> <li>Prune any damaged trees. (If) damage to protected trees occurs, repair any damage to the crown, trunk, or root system immediately.</li> <li>Repair roots by cutting off the damaged areas and painting them with</li> </ul>	EFFECTIVE: 01/31/08
tion b	<ul> <li>Repair loos by detain on the damaged areas the pairting them with the tree paint. Spread peat moss or moist topsoil over exposed roots.</li> <li>Repair damage to bark by trimming around the damaged area, taper the</li> </ul>	
adapta adapta	<ul> <li>cut to provide drainage and paint with tree paint.</li> <li>Cut off all damaged tree limbs above the tree collar at the trunk or main branch. Use three separate cuts to avoid peeling bark from healthy areas of</li> </ul>	
	the tree. SILT FENCE:	
0)	<ul> <li>Should the fabric of a sediment fence collapse, tear, decompose, or become ineffective, replace it promptly.</li> <li>Remove sediment deposits as necessary to provide adequate storage</li> </ul>	
authorization	volume for the next rain and reduce pressure on the fence. Take care to avoid undermining the fence during cleanouts.	
ets/(	<ul> <li>Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.</li> </ul>	<
PlanSheets out written o	SILT FENCE OUTLET: • Freshen stone when sediment accumulation exceeds 6 inches.	
	Keep mesh free of debris to provide adequate flow and replace stone as needed to facilitate de-watering. CONSTRUCTION ENTRANCE:	
in t in t	<ul> <li>Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2- inch stone.</li> </ul>	DRAINAGE GEOTEXTIL
CAL	<ul> <li>Immediately remove all objectionable materials spilled, washed, or tracked onto public roadways.</li> </ul>	
this d	SKIMMER:  Confirm skimmer is functional, installed in the correct orientation and has mobility to float on top of the water column.	
Phas	<ul> <li>Ensure rock pad stabilization is present under the skimmer.</li> <li>Repair any structural deficiencies (e.g., orifice disk, flex hose</li> </ul>	
Planning ber reliance	connection, vent functioning, cracked PVC) SEDIMENT BASIN • Basin requires maintenance when the inlet zone (1* quadrant) has been	
per r	filled with sediment. <ul> <li>Baffle material shall be maintained in good condition for the life of the</li> </ul>	VVAKE COUNTY NORTH CAROLINA STA
improper	pond until removal or conversion. SEDIMENT BASIN / ROLLED EROSION CONTROL PRODUCT: Inspect initial channel anchoring has been installed correctly,	EFFECTIVE: 01/31/08
Knightdale of and impro	<ul> <li>confirm segments are rolled in correct orientation.</li> <li>Any areas that are damaged or not in close contact with the ground shall be repaired and stapled.</li> </ul>	
0	Monitor and repair the RECP as necessary until ground cover is established.	
	BASIN CONVEYANCES / SLOPE DRAIN / RIP-RAP LINED CHANEL  Any erosion of the slope, berm or outlet should be repaired immediately to prevent head cutting back into the slope.	I ST CEIL
254013_ prepared.	<ul> <li>Conveyance should be refreshed if pore space has been compromised.</li> <li>Clogged drains should be flushed out or replaced.</li> <li>Additional performance measures may be required at conveyance</li> </ul>	INLET ZONE
01725 was pr	entrance to slow water entering the basin. FILTER BAG / DEWATERING ACTIVITIES	besin sufficie area
DEV it w	<ul> <li>Ensure the dewatering pad is in a good stabilized condition.</li> <li>Prior to use inspect bags for any defects. Ensure pump hoe is secure and a floating intake is being used (when possible).</li> </ul>	
AL_LC	Follow all manufacturer recommendations for inspection and     maintenance guidelines. Replace when trapped sediment has accumulated	<u>PLAN VI</u>
nt for	to 50% of the bag capacity or in accordance with the manufacturer's recommendations. TEMPORARY DIVERSION DITCHES / ROLLED EROSION CONTROL PRODUCT:	
	Any areas that are damaged or not in close contact with the ground shall be repaired and stapled.	
06am se an	Monitor and repair the RECP as necessary until ground cover is     established.     WITH WATTLES / SILT SOCKS	FENCE AND FABI BURIED IN TREN
1:52: purpo	<ul> <li>Remove sediment accumulation behind measure as necessary to prevent damage to channel vegetation.</li> <li>Replace wattle/sock if clogged or torn. Reinstall per detail if</li> </ul>	6"X6" TRENCH, BACKFILLED AND
cific 1	<ul> <li>damaged or dislodged.</li> <li>If ponding becomes excessive, replace with a larger diameter</li> </ul>	COMPACTED SECTION VI
202 le spe	wattle/sock or a different measure. WITH CHECK DAMS • Remove sediment accumulation behind measure as necessary	*
<u>y</u> 26, for th	to prevent damage to channel vegetation. • Check for erosion, piping, rock displacement, and correct stone	WAKE COUNTY
Januar d only	sizes. Repair immediately. o Confirm weir present and located at the center of the device. INLET PROTECTIONS (PIPE / YARD / DROP / CURB)	EFFECTIVE: 01/31/08
	<ul> <li>Inspect inlet protection and remove sediment after each rain event.</li> <li>Keep free of debris to provide adequate flow and if present replace</li> </ul>	
ITAILS is inte	stone as needed to facilitate de-watering.	THE
DL DB vice,		
of serv	PLYWOOD 48"x24" BLACK LETTERS	
o C	10' MIN. → B LAG	
instrume		EXISTING
0. 6	Image: Side of the second s	
ut: C9 ein, as		
Layo d here		
t e	WOOD POSTS	
pr	PLAN VIEW (SEE NOTE 2) SIGN DETAIL	
S S S S S S S S S S S S S S S S S S S	SANDBAGS (TYP.) OR STAPLES	FROM
DeWitt and de		NOTE: REMOV CHECK DAMS TO PI
. Set: cepts	PLASTIC LINING SECTION B-B	FLOW SHOULD BE I
Sheet cond	NOTES.	COUNTY NORTH CAROLINA
Ϋ́Υ	<ol> <li>ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.</li> <li>A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.</li> </ol>	EFFECTIVE: 01/31/08
Michael her with	<ol> <li>MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE AND DISPOSED OF OR RECYCLED.</li> <li>HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE</li> </ol>	
es, oget	TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION. 5. PIT CAPACITY IS MINIMUM OF 6 CUBIC FEET PER 10 CUBIC YARDS OF CONCRETE.	
<u>y</u> : Barne nent, tt	CONCRETE WASHOUT STATION	
ed By: docum	N.T.S. KHA DETAIL NO: 01.102.R01	
Inte		

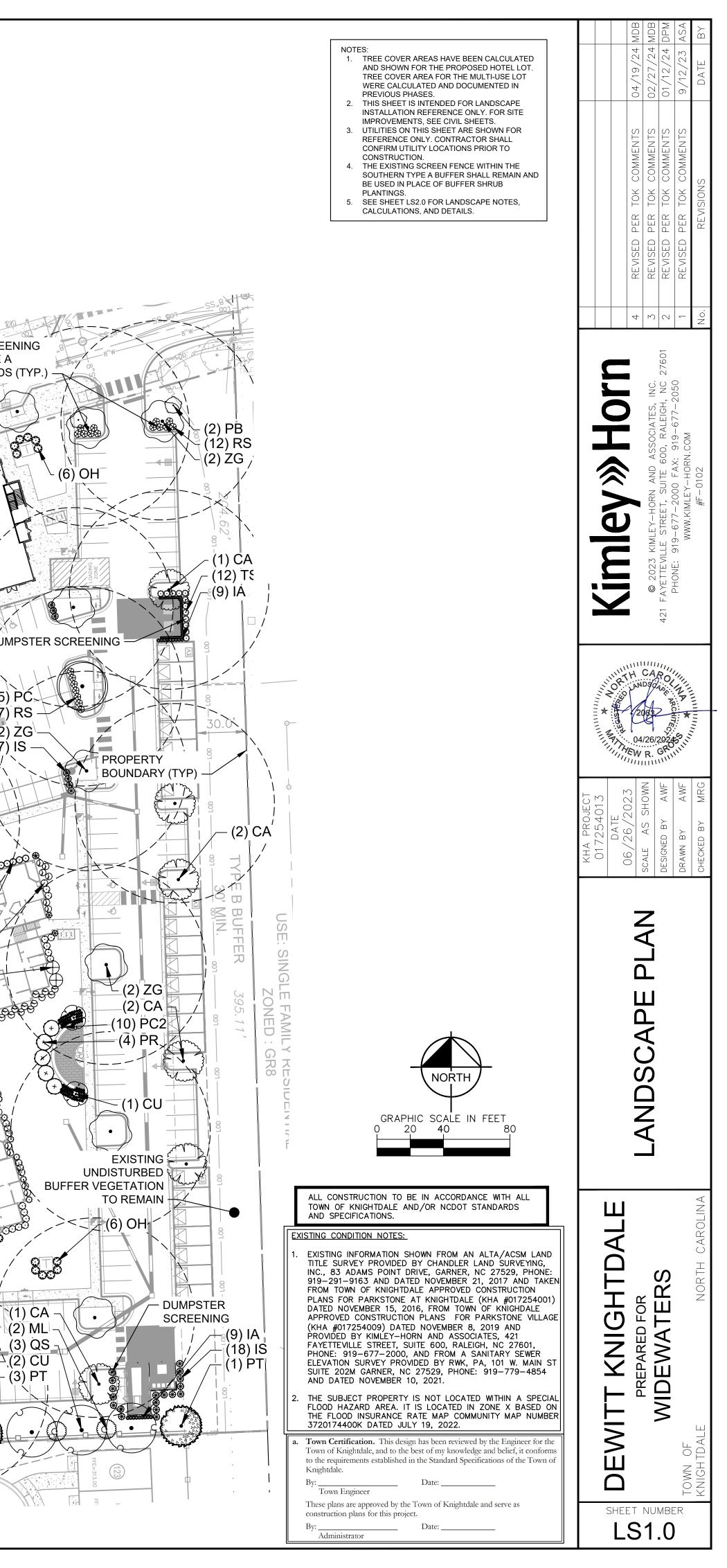




Ind Associates, Inc. shall be without liability to Kimley-Horn and Associates, In						1     REVISED PER TOK COMMENTS     01/12/24 DPN       1     REVISED PER TOK COMMENTS     01/12/23 ASN
<ul> <li>Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use for maintenance or close out unless this is infeasible. The circumstances in which it is not feasil Non-surface withdrawals from sediment basins shall be allowed only when all of the following of (a) The E&amp;SC plan authority has been provided with documentation of the non-surface with shall not commence until the E&amp;SC plan authority has approved these items,</li> <li>(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance w (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systed (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extee (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided (f) Sediment removed from the dewatering treatment devices described in Item (c) above is</li> </ul>	hdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal with Part III, Section C, Item (2)(c) and (d) of this permit, m stormwater that is removed from the sediment basin. Examples of appropriate controls include ems, nt feasible at the outlet of the dewatering treatment devices described in Item (c) above,	<section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header>	<section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	<complex-block><section-header><complex-block><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></section-header></complex-block></section-header></complex-block>	KHA PROJECT       KHA PROJECT         017254013       017254013         DETAILS       06/26/2023         Details       06/26/2020
is document, together with the concepts and designs presented herein, as an instrument of instrument of instrument of a second concepts and designs presented herein, as an instrument of the concepts of the					a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.         By:	BREPARED FOR WDEWATERS C9.2



	LANDSCAPE REQU	IREMENTS & CALCULATIONS				
	AREA TO BE LANDSCAPED	CODE REQUIREMENT	SITE LOCATION	MEASUREMENT	TOTAL QUANTITY REQUIRED	TOTAL QUANTITY PROVIDED
	10' TYPE A BUFFER	<u>PER 100 LF:</u> 3 CANOPY TREES 2 UNDERSTORY TREES SCREENING FENCE	SOUTH PROPERTY LINE	936 LF	(936 / 100) x 3 = 29 CANOPY TREES (936 / 100) x 2 = 19 UNDERSTORY TREES	30 CANOPY TREES (50% EVERGREEN) 20 UNDERSTORY TREES (50% EVERGREEN)
	30' TYPE C BUFFER	PER 100 LF: 5 CANOPY TREES 5 UNDERSTORY TREES 25 SHRUBS 40%-60% OF TREES MUST BE EVERGREEN 80% OF SHRUBS MUST BE EVERGREEN	EAST PROPERTY LINE	449 LF	(449 / 100) x 3 = 23 CANOPY TREES (449 / 100) x 5 = 23 UNDERSTORY TREES (449 / 100) x 25 = 113 SHRUBS	EXISTING UNDISTURBED BUFFER VEGETATION TO REMAIN
	PARKING LOT SCREENING	SIDES OF PARKING LOTS ADJACENT TO STREET RIGHTS- OF-WAY SCREENED TO TYPE A BUFFER STANDARDS	ALL PARKING LOT SIDES ADJACENT TO RIGHTS- OF-WAY	240	(353 / 100) x 3 = 8 CANOPY TREES (353 / 100) x 2 = 5 UNDERSTORY TREES (353 / 100) x 20 = 48 SHRUBS	8 CANOPY TREES (50% EVERGREEN) 8 UNDERSTORY TREES (50% EVERGREEN) 48 SHRUBS (100% EVERGREEN)
	TREE COVER AREA	AREA EQUAL TO THE PERIMETER OF THE DEVELOPMENT MULTIPLIED BY 20 (UP TO 10% OF SITE)	SEE LANDSCAPE PLAN FOR LOCATION	1,832 LF*	1,832 x 20 = 36,640 SF	42,005 SF (STREAM BUFFER)
STREET TF	USE: ĆŎMME ZONED : HE	RCIAL B-CD			(3) U (3) Z (0) 8″₩	PARKING LOT SCREE PLANTED TO TYPE A BUFFER STANDARDS
1) CU- 3) PM - 12) RS		(2) ZG (2) UA (2) UA (2) UA (17) JT (17) JT (17) JT (18) CD (17) JT		(12) PW- (2) PM	(13) CD (7) IS (19) OH (12) JT	
(7) GK (7) HW (1) CU (48)	(1) TS (1) TS PC2	(9) AC (8) IS (1) CU (14) DP (14) DP (14) DP (14) DP (6) J (30)	LU / - 0		(14) IS (3) PM (7) RS	
NCH (TYP.)	(9) OH (3) PM	(1) TS <sup>×</sup> (14) DP (10) P	C2	Bern	(6) OH (3) PM	BUILDING 2
(12) GK	BE (8	(26) PWL (6) JT BL	JILDING 4	W 000000000000000000000000000000000000	FOUNDATION PLANTINGS (TYP.) =	
(3) QS (2) ML +	0000 (2) PT (2) CU (2) CU	(2) CA (4) PT (1) ZG (2) ML (2) QS		(2) CA (2) CU (2) ML (3) QS	(6) OH (17) (3) Z	
	Filler		BOUNDARY			D' TYPE A BUFFER



CANOPY TREES	<u>C(</u>	ODE	<u>QTY</u>	BOTANICAL NAME		COMMON NAME			CONT.	SIZE
$\mathbb{C}$	C/	A	10	CARPINUS CAROLINIANA		AMERICAN HORNBEAM			B&B	2" CAL.
	P	C	15	PISTACIA CHINENSIS		CHINESE PISTACHE			B&B	2" CAL.
	PI	И	16	PLATANUS X ACERIFOLIA 'MORTON CIRC	LE' TM	EXCLAMATION! LONDON PL	ANE TREE	E	B&B	2" CAL.
	PI	Г	16	PINUS TAEDA		LOBLOLLY PINE			B&B	2" CAL.
•	Q	S	14	QUERCUS SHUMARDII		SHUMARD OAK			B&B	2" CAL.
$\mathbf{i}$	U	Ą	12	ULMUS PARVIFOLIA 'ALLEE'		ALLEE® LACEBARK ELM			B&B	2" CAL.
$\overline{\cdot}$	Z	G	31	ZELKOVA SERRATA 'GREEN VASE'		GREEN VASE JAPANESE ZE	Elkova		B&B	2" CAL.
NDERSTORY TRE	<u>ES Co</u>	<u>ODE</u>	<u>QTY</u>	BOTANICAL NAME		COMMON NAME			CONT.	<u>SIZE</u>
$\left( \cdot \right)$	CI	U	17	CORNUS KOUSA 'RUTPINK' TM		SCARLET FIRE KOUSA DOO	GWOOD		B&B	1.5" CAL
	M	L	10	MAGNOLIA GRANDIFLORA 'LITTLE GEM'		LITTLE GEM DWARF SOUTH	HERN MAG	NOLIA	B&B	1.5" CAL
$\langle \cdot \rangle$	PE	3	6	PRUNUS CAROLINIANA 'MONUS'		BRIGHT 'N TIGHT CAROLIN	A LAUREL	CHERRY	B&B	1.5" CAL
HRUBS	<u>C(</u>	<u>ODE</u>	<u>QTY</u>	BOTANICAL NAME		COMMON NAME			CONT.	<u>SIZE</u>
$\bigcirc$	A	С	114	ABELIA X GRANDIFLORA 'CANYON CREEP	<b>(</b> '	CANYON CREEK GLOSSY A	BELIA		3 GAL	18" MIN.
$\odot$	CI	D	115	CEPHALOTAXUS HARRINGTONIA 'DUKE G	ARDENS'	DUKE GARDENS PLUM YEV	V		3 GAL	24" MIN.
$\bigcirc$	DF	P	28	DISTYLIUM `VINTAGE JADE` PP23, 128		VINTAGE JADE DISTYLIUM			3 GAL	18" MIN.
	IA		18	ILEX CRENATA 'SKY PENCIL'		SKY PENCIL HOLLY			3 GAL	18" MIN.
$\circledast$	IS		114	ILEX GLABRA 'SHAMROCK'		SHAMROCK INKBERRY HO	LY		3 GAL	18" MIN.
$\bigotimes$	JT	Г	55	JUNIPERUS VIRGINIANA 'TAYLOR'		TAYLOR EASTERN REDCED	DAR		5 GAL	36" MIN
$\odot$	LS	6	27	LOROPETALUM CHINENSE RUBRUM 'PEA	CK'	PURPLE PIXIE® DWARF FR	INGE FLOV	WER	5 GAL	
$\bigcirc$	LU	J	136	LOROPETALUM CHINENSE RUBRUM 'DAR	K FIRE'	DARK FIRE FRINGE FLOWE	R		3 GAL	24" MIN
and the second sec	O	Н	88	OSMANTHUS HETEROPHYLLUS 'GOSHIKI'		GOSHIKI HOLLY OLIVE			3 GAL	18" MIN.
攀	P	C2	177	PENNISETUM ALOPECUROIDES 'CASSIAN	'S CHOICE'	CASSIAN FOUNTAIN GRASS	6		5 GAL	
(+)	PF	3	9	PHOTINIA X FRASERI 'RED ROBIN'		RED ROBIN PHOTINIA			5 GAL	24" MIN
(+)	P١	N	93	PITTOSPORUM TOBIRA 'WHEELER'S DWA	RF'	WHEELER'S DWARF PITTO	SPORUM		3 GAL	18" MIN
$\oplus$	R	С	2	RHODODENDRON CATAWBIENSE		CATAWBA RHODODENDRO	N		5 GAL	24" MIN
$\otimes$	R	S	95	RHAPHIOLEPIS INDICA 'SNOW WHITE'		SNOW WHITE INDIAN HAW	THORN		3 GAL	24" MIN
€÷}	т	5	54	THUJA OCCIDENTALIS 'SMARAGD'		EMERALD GREEN ARBORV	ITAE		5 GAL	36" MIN
ROUND COVERS	<u>C(</u>	ODE	<u>QTY</u>	BOTANICAL NAME		COMMON NAME			CONT.	
	CI	D2	279 SF	CYNODON DACTYLON		BERMUDAGRASS			SOD	
LANT SCHE	DULE	PAR	KING	LOT AREAS						
ANOPY TREES	<u>CODE</u>	<u>QTY</u>	BOTA	ANICAL NAME	COMMON N	IAME	CONT.	<u>SIZE</u>	<u>HEIGH</u>	<u>IT</u>
	CA	10	CARF	PINUS CAROLINIANA	AMERICAN	HORNBEAM	B&B	2" CAL.	10`-12`	HT.
	PC	15	PIST	ACIA CHINENSIS	CHINESE P	ISTACHE	B&B	2" CAL.	10`-12`	HT.
• ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	РМ	12	PLAT	ANUS X ACERIFOLIA 'MORTON CIRCLE' TM	EXCLAMAT	ION! LONDON PLANE TREE	B&B	2" CAL.	10`-12`	HT.
}	ZG	17	ZELK	OVA SERRATA `GREEN VASE`	GREEN VAS	SE JAPANESE ZELKOVA	B&B	2" CAL.	10`-12`	HT.
	CODE	<u>QTY</u>		ANICAL NAME			CONT.	SIZE		
	AC	28	ABEL	IA X GRANDIFLORA 'CANYON CREEK'		REEK GLOSSY ABELIA	3 GAL	18" MIN.		
	IA	9	ILEX	CRENATA 'SKY PENCIL'	SKY PENCI		3 GAL	18" MIN.		
*	IS	38	ILEX	GLABRA 'SHAMROCK'		KINKBERRY HOLLY	3 GAL	18" MIN.		
	OH	15	OSM	ANTHUS HETEROPHYLLUS 'GOSHIKI'	GOSHIKI H	OLLY OLIVE	3 GAL	18" MIN.		
$(\cdot)$	PW	8	PITTO	DSPORUM TOBIRA 'WHEELER'S DWARF'	WHEELER'S	S DWARF PITTOSPORUM	3 GAL	18" MIN.		
$\otimes$	RS	42	RHAF	PHIOLEPIS INDICA 'SNOW WHITE'	SNOW WHI	TE INDIAN HAWTHORN	3 GAL	24" MIN		

### PLANT SCHEDULE PARKING LOT SCREENING

CANOPY TREES	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	<u>SIZE</u>	<u>HEIGHT</u>
	РМ	4	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' TM	EXCLAMATION! LONDON PLANE TREE	B&B	2" CAL.	10`-12` HT.
$(\cdot)$	ZG	4	ZELKOVA SERRATA `GREEN VASE`	GREEN VASE JAPANESE ZELKOVA	B&B	2" CAL.	10`-12` HT.
UNDERSTORY TREES	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	HEIGHT
$\left( \cdot \right)$	CU	2	CORNUS KOUSA 'RUTPINK' TM	SCARLET FIRE KOUSA DOGWOOD	B&B	1.5" CAL	8`-10` HT.
$\bigcirc$	РВ	6	PRUNUS CAROLINIANA 'MONUS'	BRIGHT 'N TIGHT CAROLINA LAUREL CHERRY	B&B	1.5" CAL	6`-8` HT.
SHRUBS	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	
+	PW	24	PITTOSPORUM TOBIRA 'WHEELER'S DWARF'	WHEELER'S DWARF PITTOSPORUM	3 GAL	18" MIN.	
$\bigotimes$	RS	24	RHAPHIOLEPIS INDICA 'SNOW WHITE'	SNOW WHITE INDIAN HAWTHORN	3 GAL	24" MIN.	
GROUND COVERS	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.		
	CD2	279 SF	CYNODON DACTYLON	BERMUDAGRASS	SOD		

### PLANT SCHEDULE 10' TYPE A BUFFER

CANOPY TREES	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	<u>SIZE</u>	<u>HEIGHT</u>
	PT	16	PINUS TAEDA	LOBLOLLY PINE	B&B	2" CAL.	10`-12` HT.
	QS	14	QUERCUS SHUMARDII	SHUMARD OAK	B&B	2" CAL.	10`-12` HT.
UNDERSTORY TREES	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	HEIGHT
$\left( \cdot \right)$	CU	10	CORNUS KOUSA 'RUTPINK' TM	SCARLET FIRE KOUSA DOGWOOD	B&B	1.5" CAL	8`-10` HT.
	ML	10	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM DWARF SOUTHERN MAGNOLIA	B&B	1.5" CAL	6`-8` HT.

### PLANT SCHEDULE STREET TREES

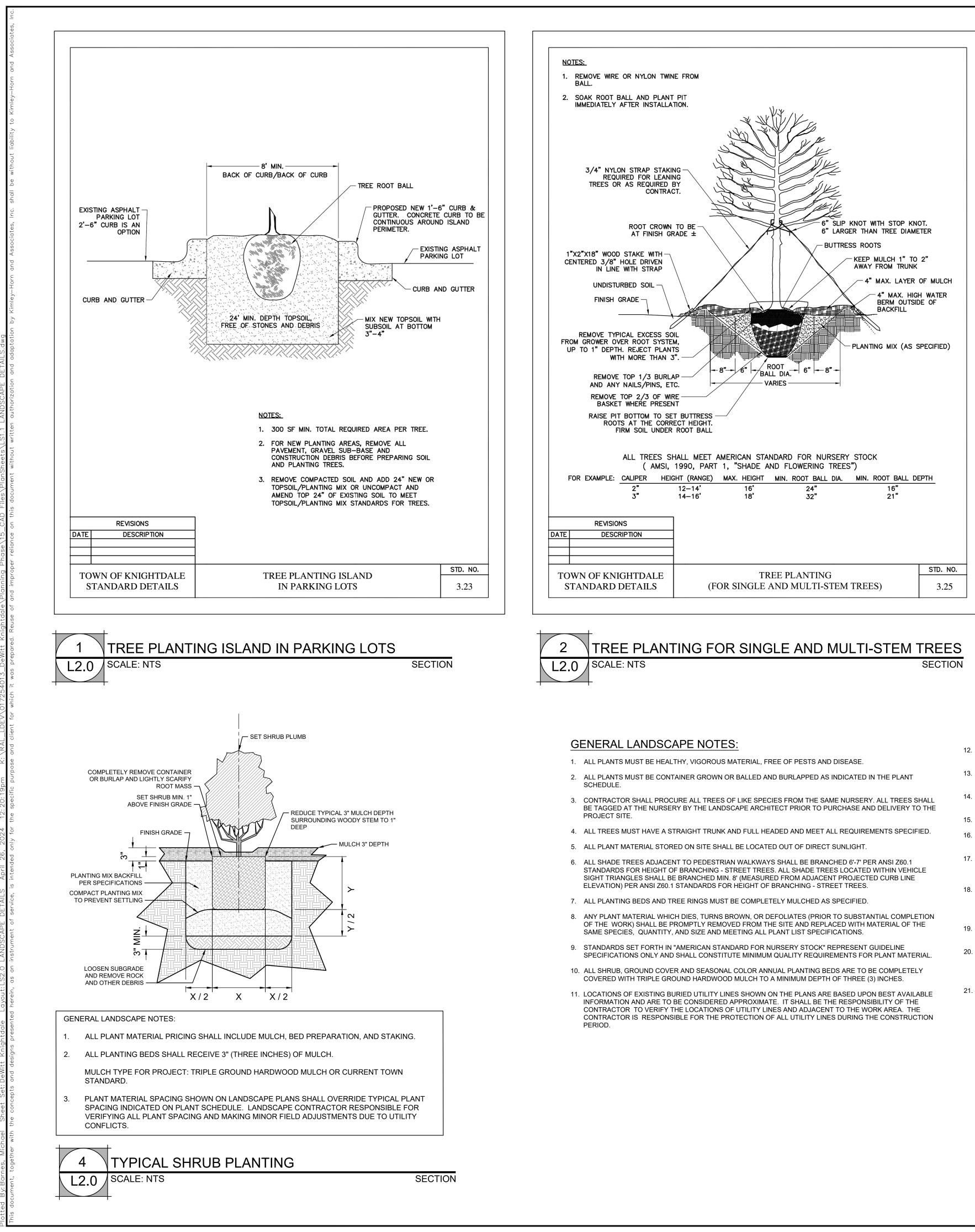
	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	HEIGHT
	UA	12	ULMUS PARVIFOLIA 'ALLEE'	ALLEE® LACEBARK ELM	B&B	2" CAL.	10`-12` HT.
$\langle \cdot \rangle^{\sim}$	ZG	10	ZELKOVA SERRATA `GREEN VASE`	GREEN VASE JAPANESE ZELKOVA	B&B	2" CAL.	10`-12` HT.

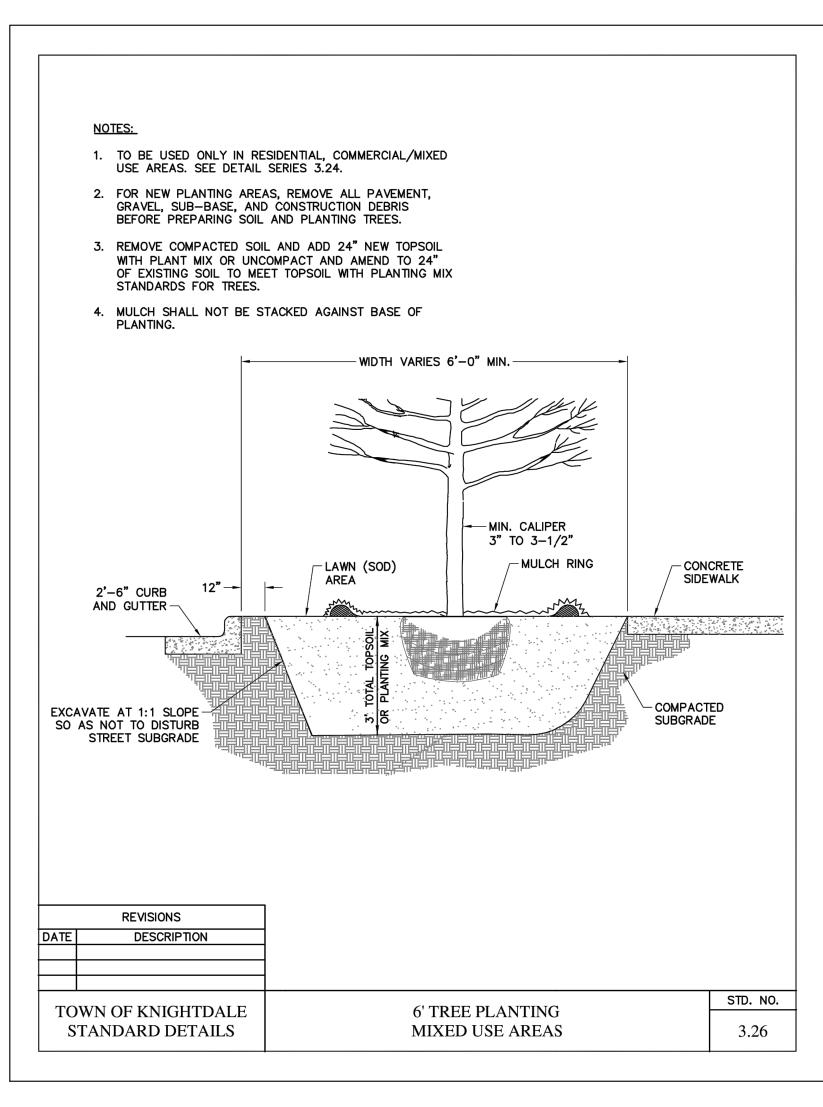
### PLANT SCHEDULE FOUNDATION PLANTING

UNDERSTORY TREES	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	HEIGHT
$\left( \cdot \right)$	CU	3	CORNUS KOUSA 'RUTPINK' TM	SCARLET FIRE KOUSA DOGWOOD	B&B	1.5" CAL	8`-10` HT.
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	
$\langle D \rangle$	AC	86	ABELIA X GRANDIFLORA 'CANYON CREEK'	CANYON CREEK GLOSSY ABELIA	3 GAL	18" MIN.	
$\odot$	CD	115	CEPHALOTAXUS HARRINGTONIA 'DUKE GARDENS'	DUKE GARDENS PLUM YEW	3 GAL	24" MIN.	
$\langle \cdot \rangle$	DP	28	DISTYLIUM `VINTAGE JADE` PP23, 128	VINTAGE JADE DISTYLIUM	3 GAL	18" MIN.	
MUNICIPALITY OF THE OWNER OWNER OF THE OWNER OWN	IA	9	ILEX CRENATA 'SKY PENCIL'	SKY PENCIL HOLLY	3 GAL	18" MIN.	
$\circledast$	IS	76	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	3 GAL	18" MIN.	
$\bigotimes$	JT	55	JUNIPERUS VIRGINIANA 'TAYLOR'	TAYLOR EASTERN REDCEDAR	5 GAL	36" MIN.	
$\odot$	LS	9	LOROPETALUM CHINENSE RUBRUM 'PEACK'	PURPLE PIXIE® DWARF FRINGE FLOWER	5 GAL		
$\bigcirc$	LU	136	LOROPETALUM CHINENSE RUBRUM 'DARK FIRE'	DARK FIRE FRINGE FLOWER	3 GAL	24" MIN.	
a service and a service and a service a s	ОН	55	OSMANTHUS HETEROPHYLLUS 'GOSHIKI'	GOSHIKI HOLLY OLIVE	3 GAL	18" MIN.	
*	PC2	90	PENNISETUM ALOPECUROIDES 'CASSIAN'S CHOICE'	CASSIAN FOUNTAIN GRASS	5 GAL		
(+)	PR	4	PHOTINIA X FRASERI 'RED ROBIN'	RED ROBIN PHOTINIA	5 GAL	24" MIN.	
(+)	PW	61	PITTOSPORUM TOBIRA 'WHEELER'S DWARF'	WHEELER'S DWARF PITTOSPORUM	3 GAL	18" MIN.	
$\oplus$	RC	2	RHODODENDRON CATAWBIENSE	CATAWBA RHODODENDRON	5 GAL	24" MIN.	
$\otimes$	RS	29	RHAPHIOLEPIS INDICA 'SNOW WHITE'	SNOW WHITE INDIAN HAWTHORN	3 GAL	24" MIN.	
<u>{``</u> }	TS	41	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	5 GAL	36" MIN.	
PLANT SCHE	DULE E	BENCH	H PLANTINGS				

<u>SYMBOL</u>	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT.	<u>HEIGHT</u>
SHRUBS						
(•)	GK	19	GARDENIA JASMINOIDES 'KLEIM'S HARDY'	KLEIM'S HARDY GARDENIA	3 GAL	20" HT MIN
	HW	19	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	3 GAL	20" HT MIN

	4REVISEDPERTOKCOMMENTS04/19/24MDB3REVISEDPERTOKCOMMENTS02/27/24MDB2REVISEDPERTOKCOMMENTS02/27/24MDB1REVISEDPERTOKCOMMENTS01/12/24DPMNo.REVISEDPERTOKCOMMENTS9/12/23ASA
	Kimley >>> Horn © 2023 kimley ->>> Horn PHONE: 919-677-2000 FAX: 919-677-2050 www.kimley-horn.com #F-0102
	KHA PROJECT         017254013         DATE         DATE         06/26/2023         Scale AS SHOWN         Designed BY AWF         Drawn BY AWF         DRAWN BY COB         CHECKED BY COB         CHECKED BY COB
	PLANTING SCHEDULES
ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE AND/OR NCDOT STANDARDS AND SPECIFICATIONS. EXISTING INFORMATION SHOWN FROM AN ALTA/ACSM LAND TITLE SURVEY PROVIDED BY CHANDLER LAND SURVEYING, INC., 83 ADAMS POINT DRIVE, GARNER, NC 27529, PHONE: 919–291–9163 AND DATED NOVEMBER 21, 2017 AND TAKEN FROM TOWN OF KNIGHTDALE APPROVED CONSTRUCTION PLANS FOR PARKSTONE AT KNIGHTDALE (KHA #017254001) DATED NOVEMBER 15, 2016, FROM TOWN OF KNIGHDALE APPROVED CONSTRUCTION PLANS FOR PARKSTONE VILLAGE (KHA #017254009) DATED NOVEMBER 8, 2019 AND PROVIDED BY KIMLEY-HORN AND ASSOCIATES, 421 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601, PHONE: 919–677–2000, AND FROM A SANITARY SEWER ELEVATION SURVEY PROVIDED BY RWK, PA, 101 W. MAIN ST SUITE 202M GARNER, NC 27529, PHONE: 919–779–4854 AND DATED NOVEMBER 10, 2021. THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA. IT IS LOCATED IN ZONE X BASED ON THE FLOOD INSURANCE RATE MAP COMMUNITY MAP NUMBER 3720174400K DATED JULY 19, 2022. <b>1. Town Certification.</b> This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale. By: Date:	DEWITT KNIGHTDALE DEWITT KNIGHTDALE RREPARED FOR WIDEWATERS TOWN OF KNIGHTDALE NORTH CAROLINA

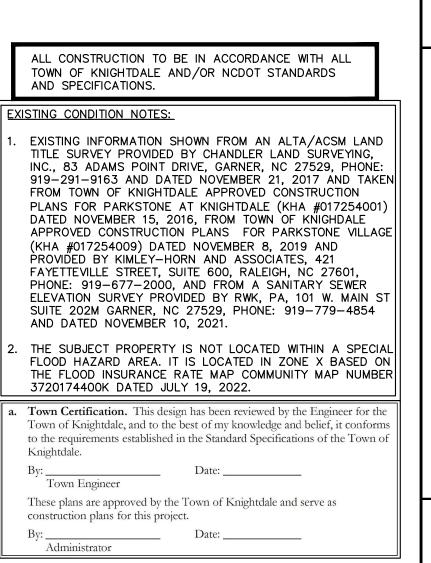




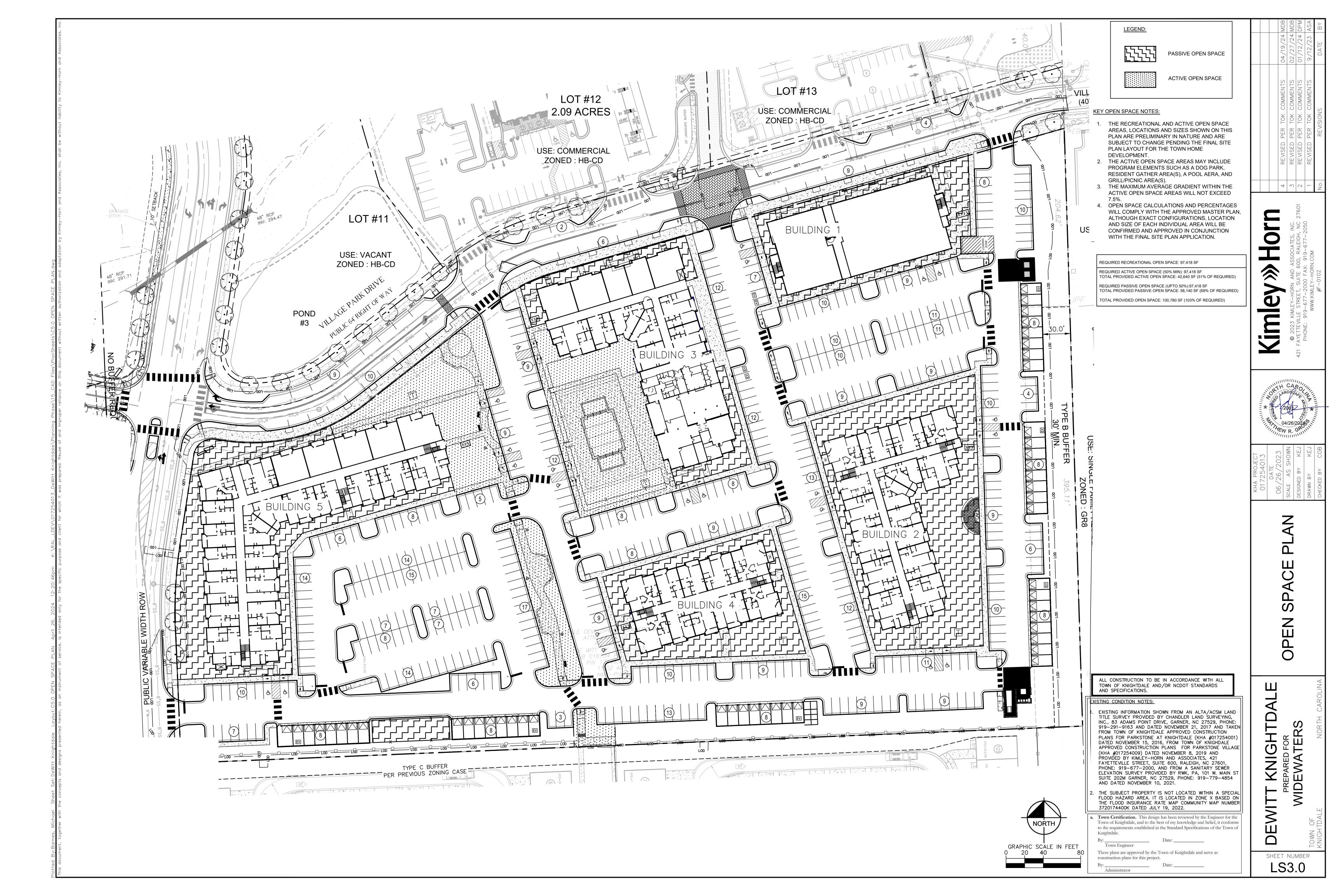


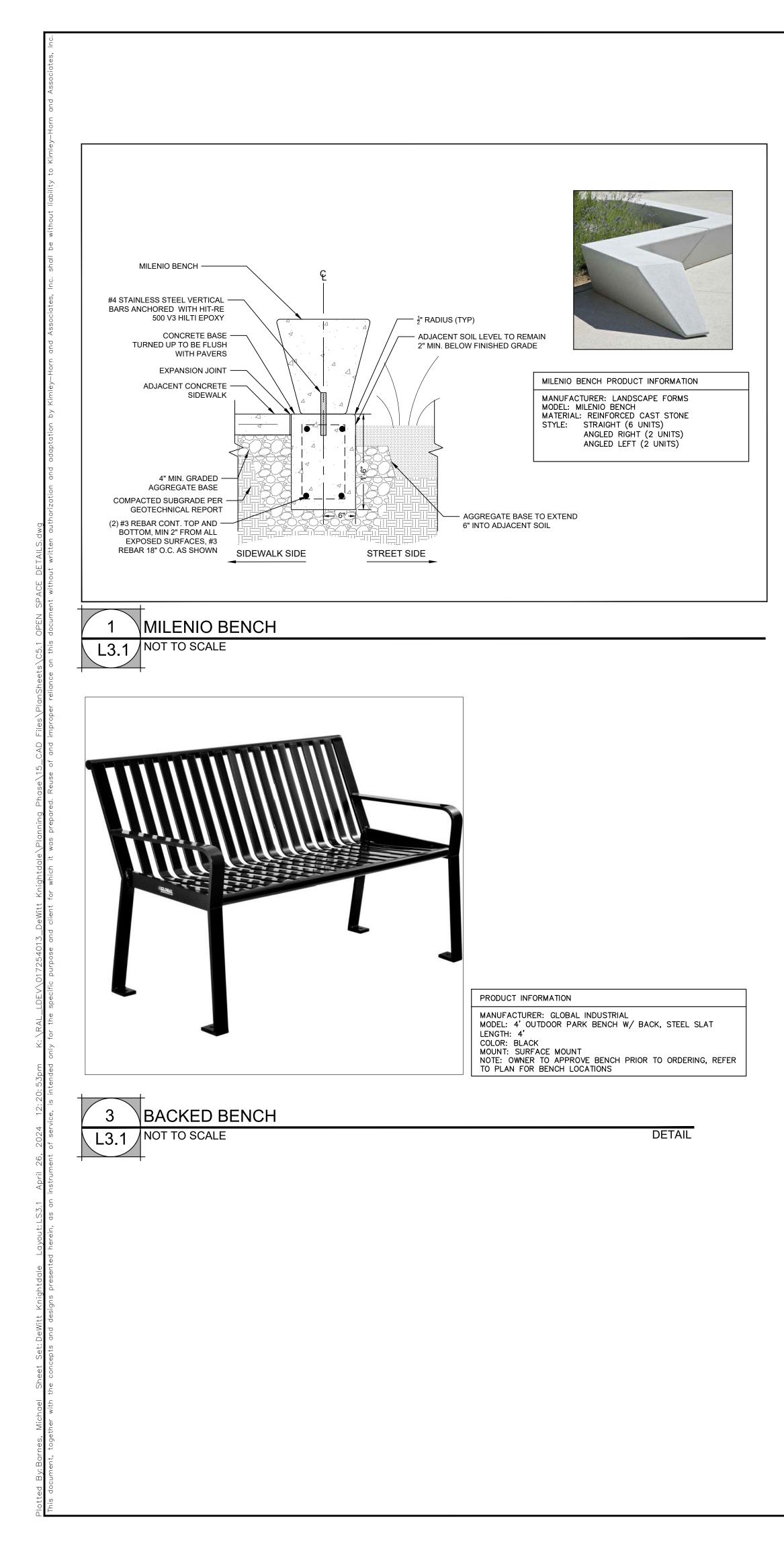
- 12. SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
- 13. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.
- 14. THE TOP OF ALL ROOT BALLS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE, AS BORN TO PREVIOUS GRADE AND GROWING CONDITIONS.
- 15. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING. 16. ALL STRAPPING AND TOP 2/3 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR
- TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF THE BURLAP FROM ROOT BALL.
- 17. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 24" NEW TOPSOIL OR UNCOMPACT AND AMEND THE TOP 24" OF EXISTING SOIL TO MEET TOPSOIL PLANTING MIX STANDARDS FOR TREES.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING TREES AND SHRUBS THAT WILL MEET BOTH MINIMUM SIZE AND SPACING FOR TREE AND UNIFIED DEVELOPMENT ORDINANCE COMPLIANCE. FAILURE TO INSTALL PLANT MATERIAL PER THIS PLAN WILL JEOPARDIZE ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING INSPECTIONS OF PLANT MATERIAL
- 19. THE CONTRACTOR SHALL INSTALL BLACK FABRIC MESH UNDER PLANTING BED MULCH TO PREVENT WEED GROWTH.
- 20. CONTRACTOR SHALL MAINTAIN LANDSCAPING FOR AT LEAST 30 DAYS AFTER SODDING AND PLANTING SHRUBS, AND 60 DAYS AFTER SEEDING, OR AS LONG AS IS NECESSARY TO ESTABLISH UNIFORM STAND OF THE SPECIFIED GRASSES, OR UNTIL SUBSTANTIAL COMPLETION OF THE PROJECT, OR UNTIL ACCEPTANCE OF THE LAWNS AND SHRUBS, WHICHEVER IS LATER.
- 21. ALL LANDSCAPE SHALL BE MAINTAINED IN PERPETUITY.

SECTION



	4 REVISED PER TOK COMMENTS 04/19/24 MDB	3 REVISED PER TOK COMMENTS	0, RALEIGH, NC 27601 2 REVISED PER TOK COMMENTS 01/12/24 DPM	COM 1 COMMENTS 9/12/23 ASA	No. REVISIONS DATE BY
V	06/26/2023	SCALE AS SHOWN = 2 5 6 2 5 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6		DRAWN BY AWF WW.KIMLEY-HORN.COM WWW.KIMLEY-HORN.COM	
			DES	DRA	
		NUI		ĒR	KNIGHTDALE NORTH CAROLINA







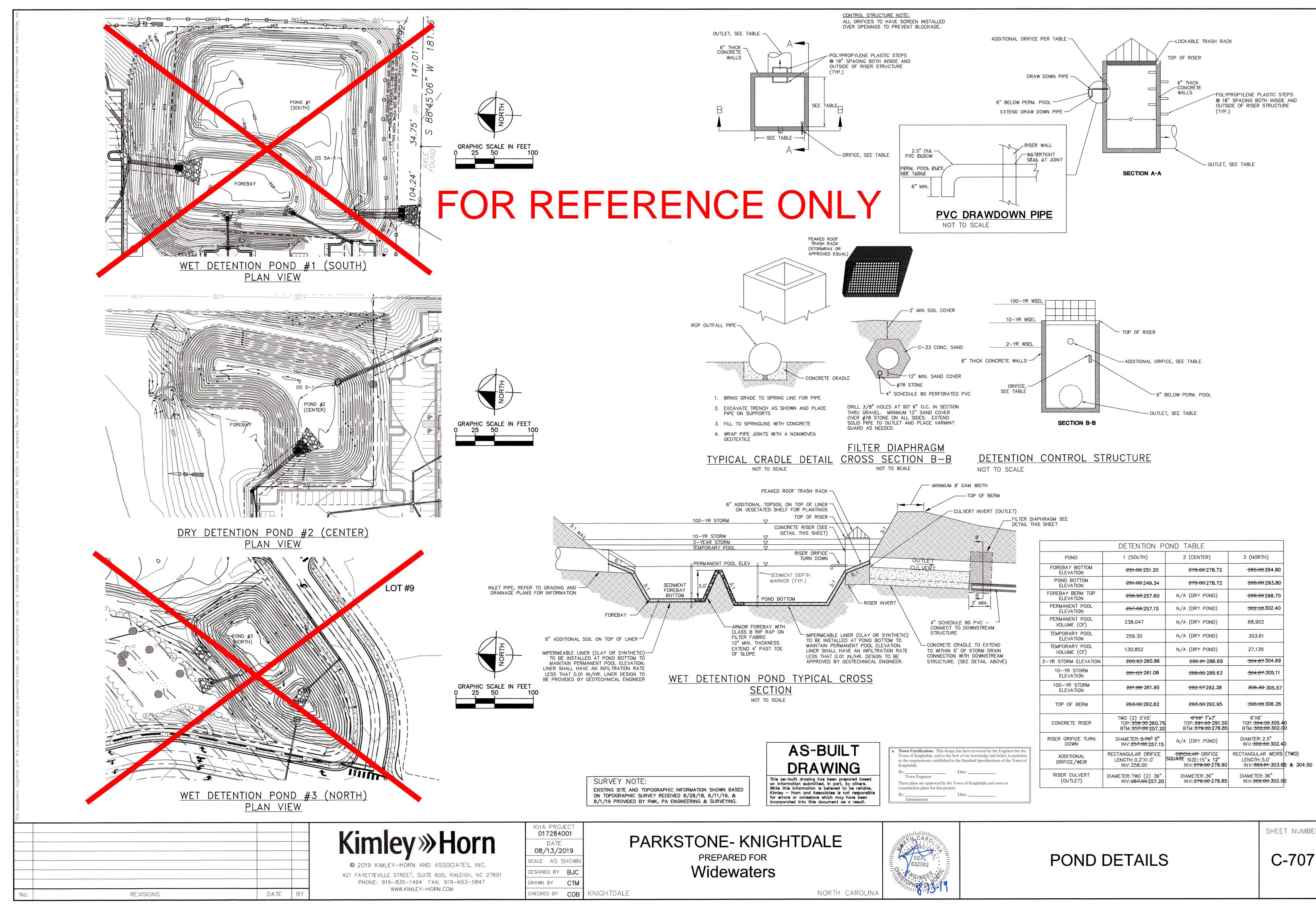
ALUMINUM FENCE REQUIREMENTS STYLE: 2 RAIL MATERIAL: ALUMINUM MATERIAL: ALUMINUM HEIGHT: 4' COLOR: BLACK NOTE: OWNER TO APPROVE FENCE PRIOR TO ORDERING. FENCE FOOTING TO BE DESIGNED PER MANUFACTURER'S SPECIFICATIONS.

REVISED PER TOK COMMENTS 04/19/24 MDB		REVISED PER TOK COMMENTS 01/12/24 DPM REVISED PER TOK COMMENTS 9/12/23 ASA	REVISIONS DATE BY
4 REVIS	3 REVIS	2 REVIS	No.
Kimley»>Horn	© 2023 KIMLEY-HORN AND ASSOCIATES, INC.	421 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601 PHONE: 919-677-2000 FAX: 919-677-2050 WWW.KIMI FY-HORN.COM	#F-0102
KHA PROJECT 017254013 DATE 06/26/2023	SH(	DESIGNED BY KEJ 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	CHECKED BY COB
OPEN SPACE		UE I AILO	
DEWITT KNIGHTDALE	-		KNIGHTDALE NORTH CAROLINA
SHEET			



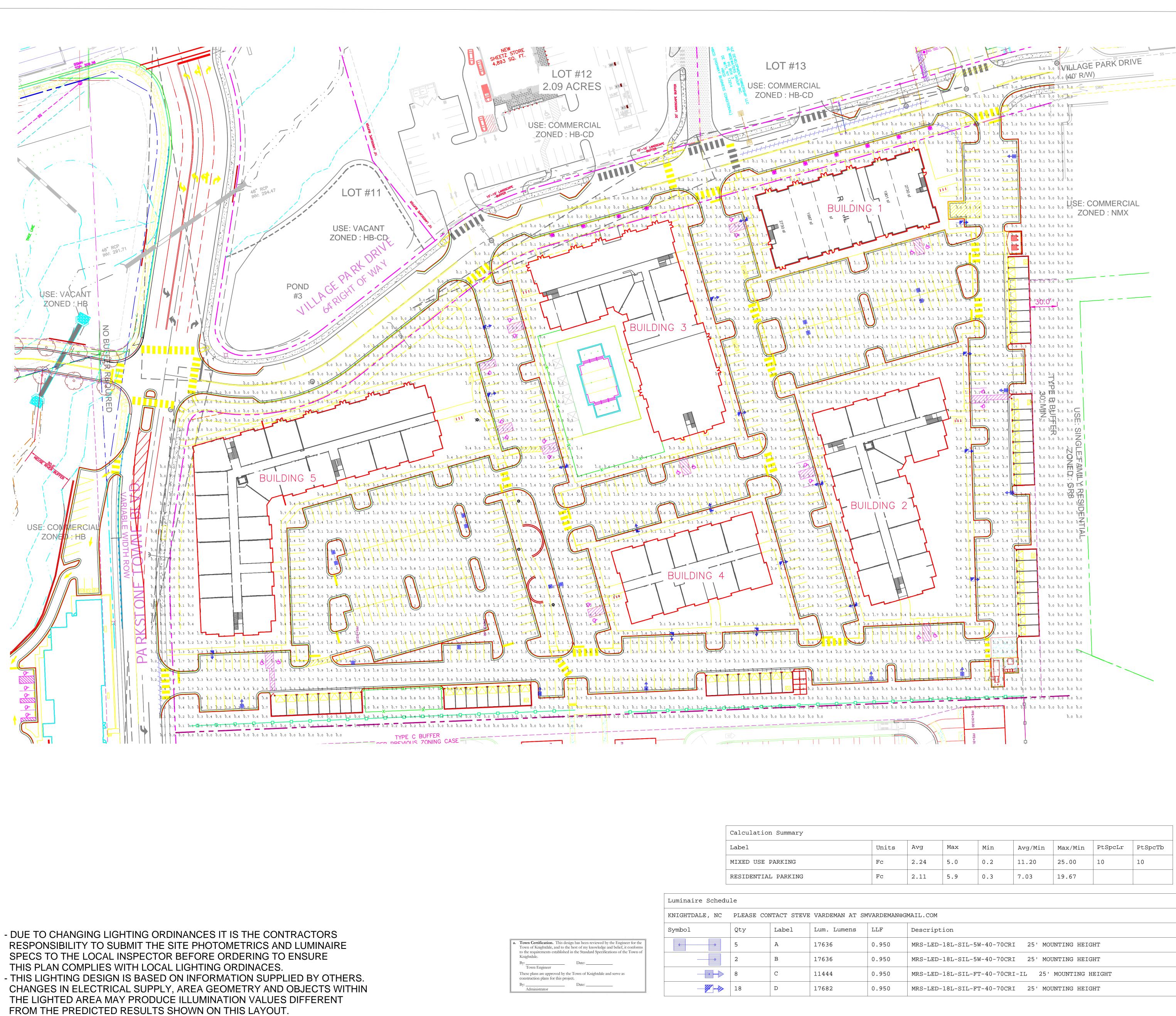
DETAIL

a.	<b>Town Certification.</b> This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
	By: Date: Town Engineer
	These plans are approved by the Town of Knightdale and serve as construction plans for this project.
	By: Date:



SHEET NUMBER

		DETENTION P	OND TABLE	
	POND	1 (SOUTH)	2 (CENTER)	3 (NORTH)
21	FOREBAY BOTTOM ELEVATION	<del>-251.00</del> -251.20	<del>279.00</del> 278.72	<del>-295.00</del> 294.80
	POND BOTTOM ELEVATION	<del>-251.00</del> -249.34	<del>279.00</del> 278.72	<del>295.00</del> 293.80
	FOREBAY BERM TOP ELEVATION	<del>256.50</del> 257.60	N/A (DRY POND)	<del>-299.50</del> 298.70
3' MIN.	PERMANENT POOL ELEVATION	<del>257.00</del> 257.15	N/A (DRY POND)	<del>-302.50</del> 302.40
4" SCHEDULE 80 PVC -	PERMANENT POOL VOLUME (CF)	238,047	N/A (DRY POND)	68,902
STRUCTURE	TEMPORARY POOL ELEVATION	259.30	N/A (DRY POND)	303.61
ONCRETE CRADLE TO EXTEND O WITHIN 5' OF STORM DRAIN	TEMPORARY POOL VOLUME (CF)	130,852	N/A (DRY POND)	27,135
ONNECTION WITH DOWNSTREAM TRUCTURE. (SEE DETAIL ABOVE)	2-YR STORM ELEVATION	<del>260.83</del> 260.86	<del>286.91</del> 286.69	<del>304.67</del> 304.69
	10-YR STORM ELEVATION	<del>261.03</del> 261.08	<del>289.86</del> 289.63	<del>304.67</del> 305.11
	100-YR STORM ELEVATION	<del>261.89</del> -261.95	<del>292.57</del> 292.38	<del>305.30</del> -305.57
	TOP OF BERM	<del>263.00</del> 262.62	<del>293.50</del> 292.95	<del>306.00</del> 306.26
	CONCRETE RISER	TWO (2) 5'X5' TOP: <del>259.30</del> 260.75 BTM: <del>257.00</del> 257.20		6'X6' TOP: <del>304.50</del> 305.40 BTM: <del>302.00</del> 302.00
	RISER ORIFICE TURN DOWN	DIAMETER: <del>3.75</del> " 5" INV: <del>257.00</del> 257.15	N/A (DRY POND)	DIAMTER: 2.5" INV: <del>302.50</del> <b>302.4</b> 0
<b>n.</b> This design has been reviewed by the Engineer for the e, and to the best of my knowledge and belief, it conforms established in the Standard Specifications of the Town of	ADDITIONAL ORIFICE/WEIR	RECTANGULAR ORIFICE LENGTH: 0.2'X1.0' INV: 258.00	CIRCULAR ORIFICE SQUARE SIZE:15"x 12" INV: <del>279.00</del> 278.90	RECTANGULAR WEIR <b>S (TW</b> LENGTH: 5.0' INV: <del>303.61</del> 303.65 &
Date: roved by the Town of Knightdale and serve as for this project.	RISER CULVERT (OUTLET)	DIAMETER: TWO(2)36" INV: <del>257.00</del> 257.20	DIAMETER: 36 <b>"</b> INV: <del>279.00</del> <b>278.85</b>	DIAMETER: 36 <b>"</b> INV: <del>302.00</del> <b>302.00</b>

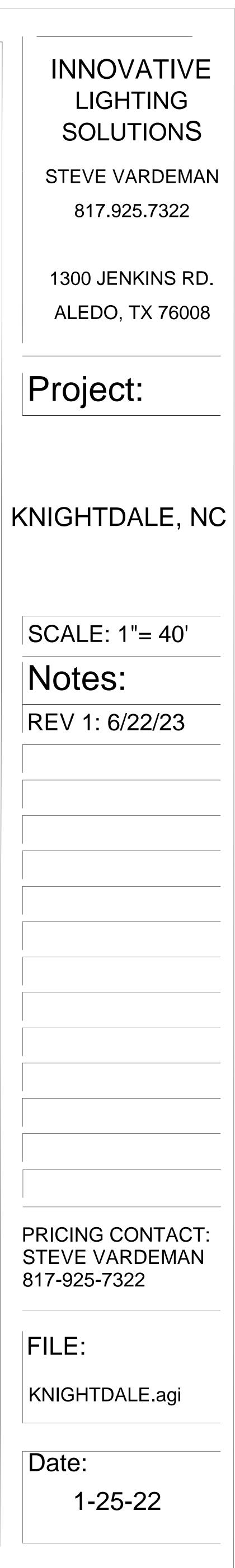


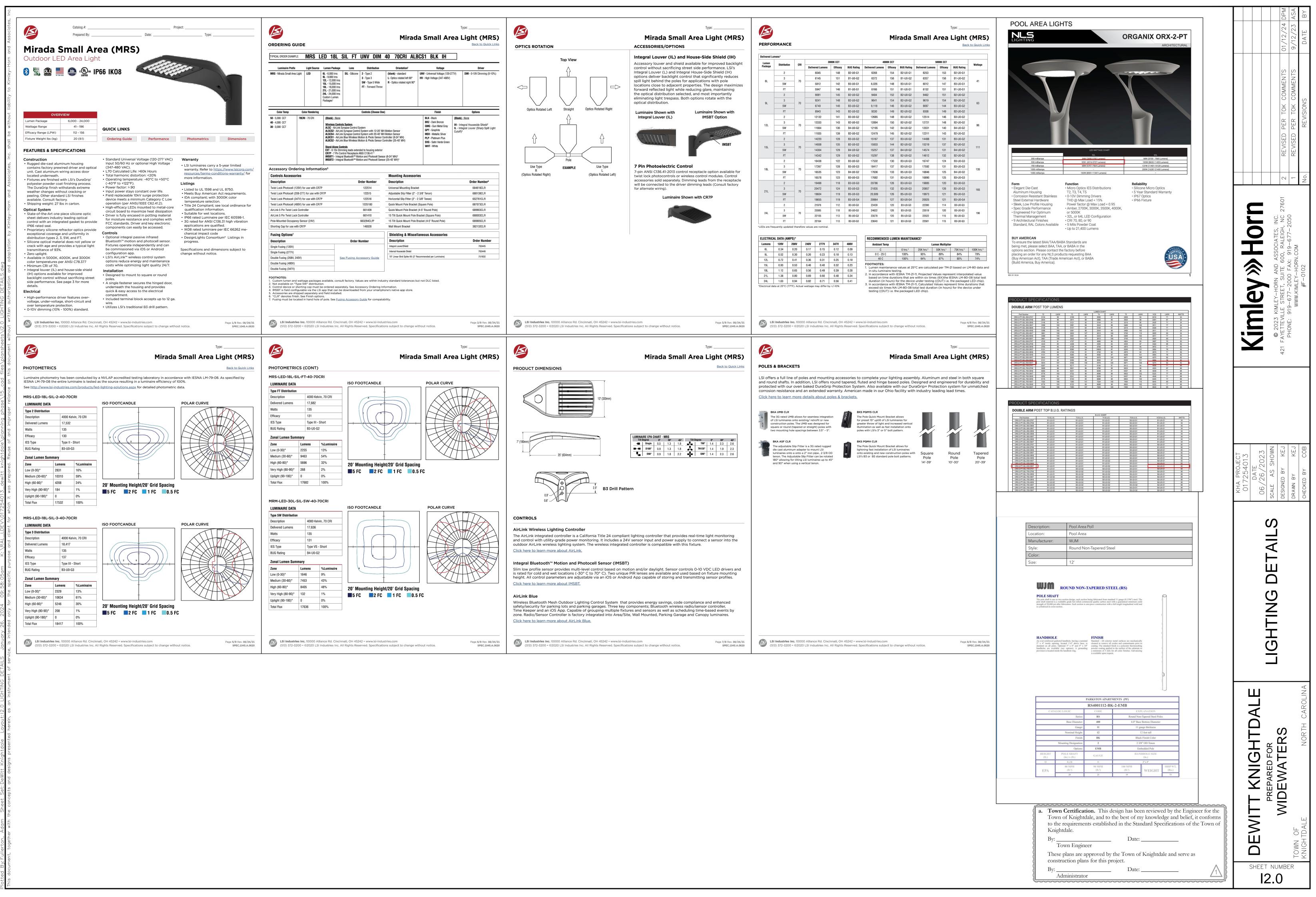
<sup>-</sup> THIS LAYOUT IS BASED ON .IES FILES THAT WERE LAB TESTED OR COMPUTER GENERATED. ACTUAL RESULTS MAY VARY.

Calculation	Summary
Label	

carcaracton bananary								
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
MIXED USE PARKING	Fc	2.24	5.0	0.2	11.20	25.00	10	10
RESIDENTIAL PARKING	Fc	2.11	5.9	0.3	7.03	19.67		

KNIGHTDALE, NC PLEASE CONTACT STEVE VARDEMAN AT SMVARDEMAN@GMAIL.COM							
Symbol	Qty	Label	Lum. Lumens	LLF	Description	Lum. Watts	
	5	A	17636	0.950	MRS-LED-18L-SIL-5W-40-70CRI 25' MOUNTING HEIGHT	135	
	2	В	17636	0.950	MRS-LED-18L-SIL-5W-40-70CRI 25' MOUNTING HEIGHT	135	
	8	С	11444	0.950	MRS-LED-18L-SIL-FT-40-70CRI-IL 25' MOUNTING HEIGHT	135	
	18	D	17682	0.950	MRS-LED-18L-SIL-FT-40-70CRI 25' MOUNTING HEIGHT	135	







# **BUILDING 1 - NORTH ELEVATION**

Scale: 3/32" = 1'-0"



# 2

### **BUILDING 1 - SOUTH ELEVATION**

Scale: 3/32" = 1'-0"



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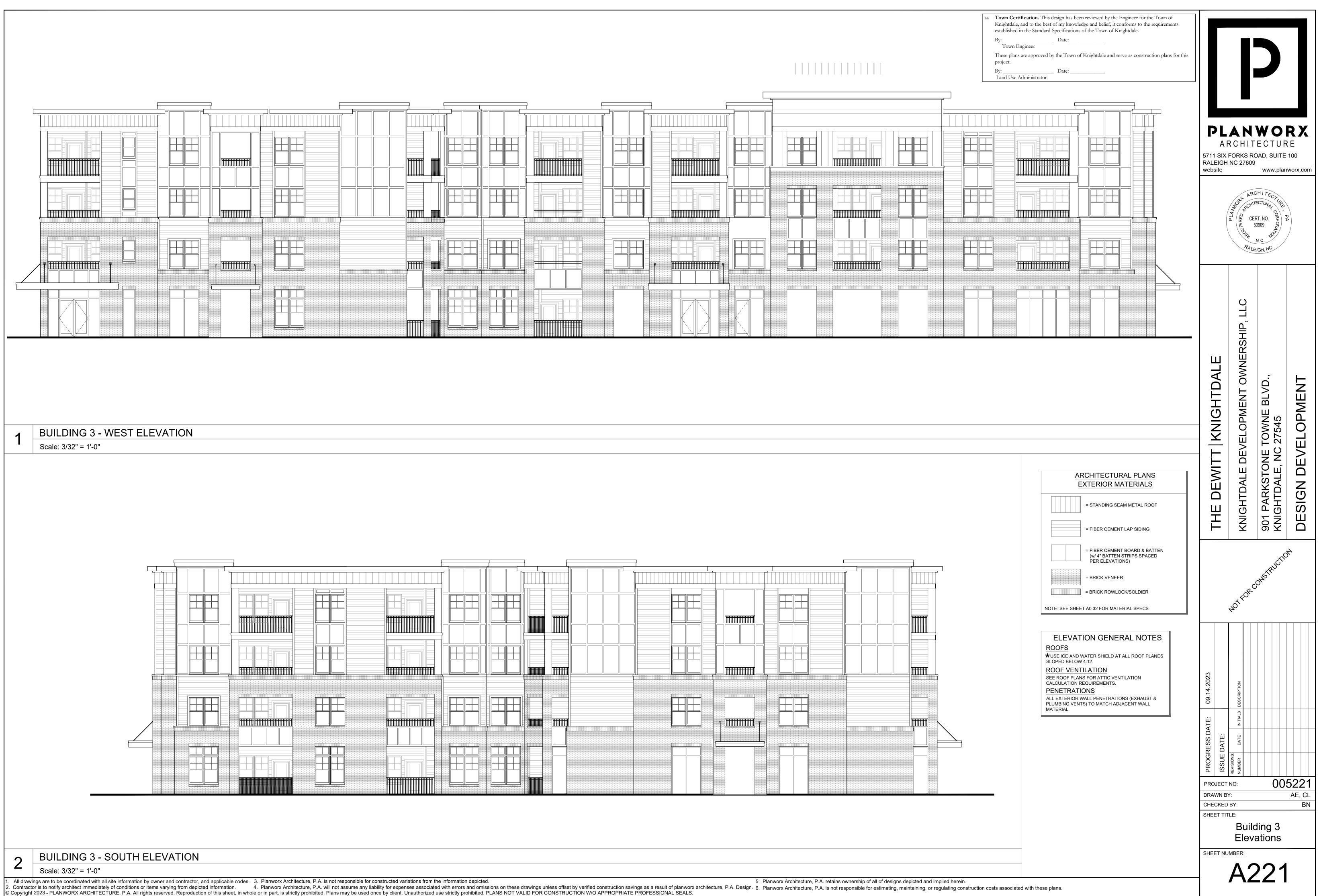


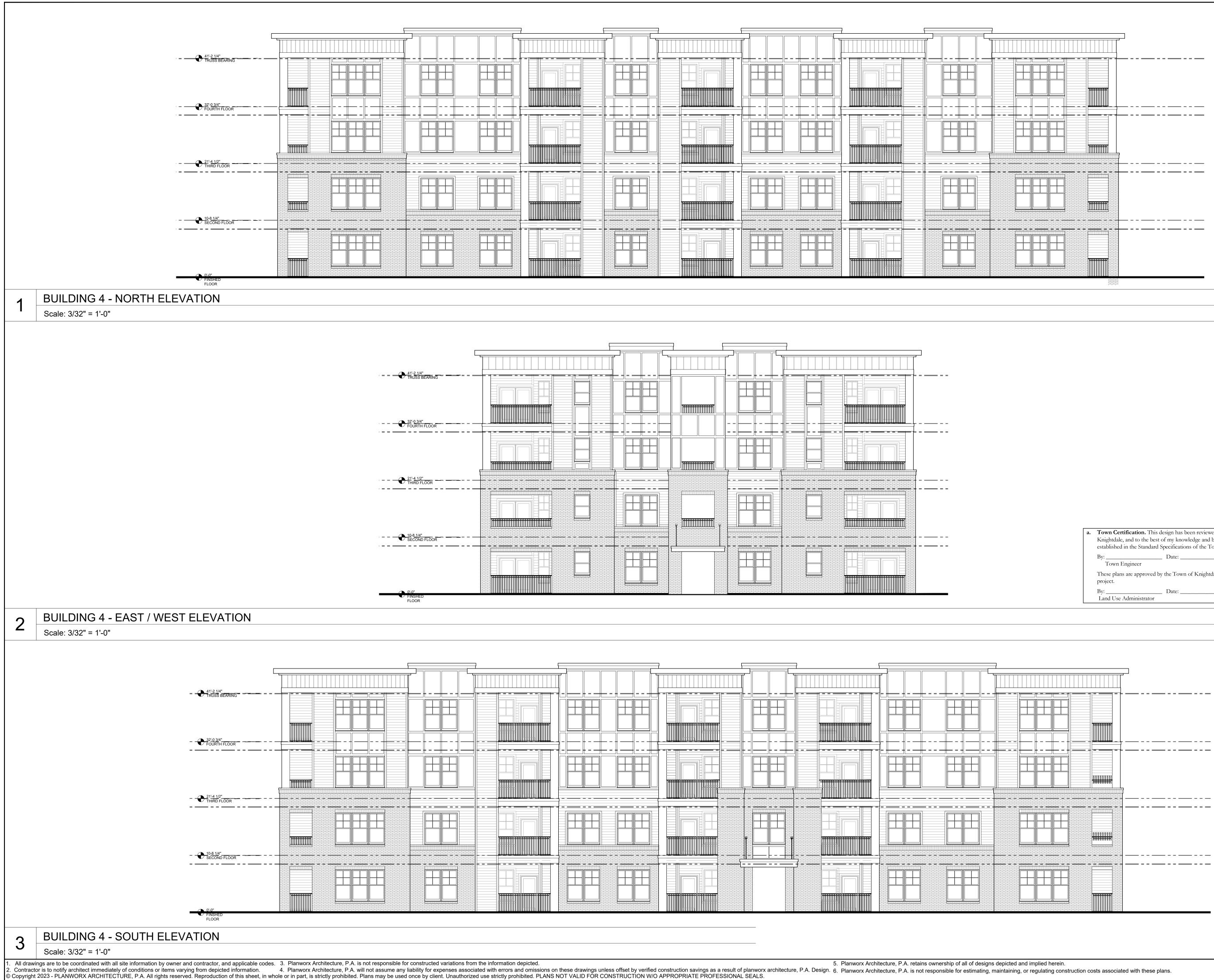
**BUILDING 1 - WEST ELEVATION** 4 Scale: 3/32" = 1'-0"

A200

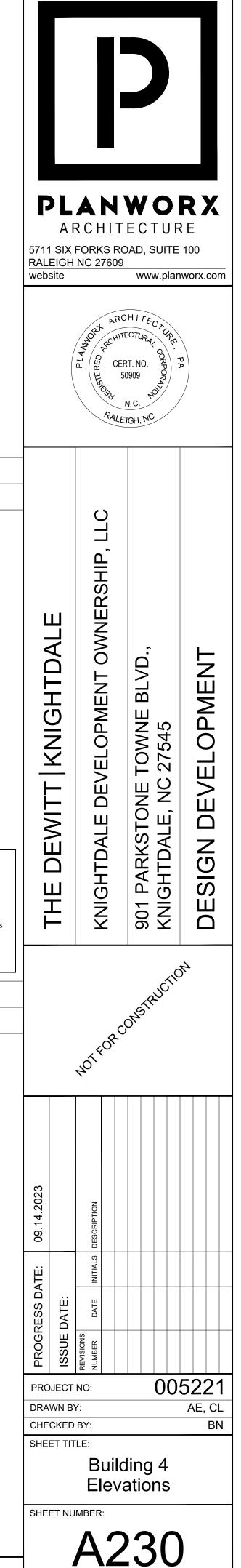








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a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

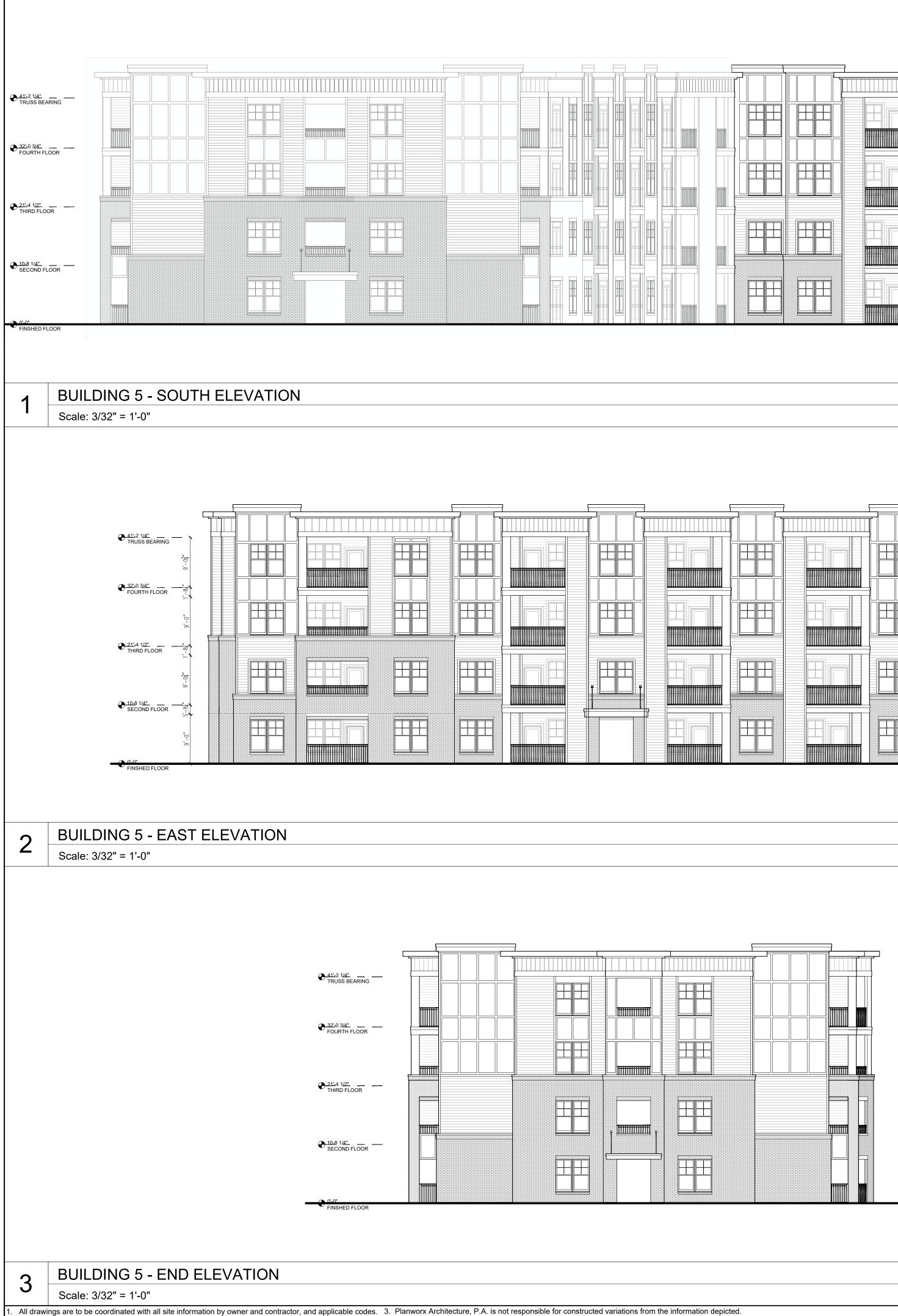
These plans are approved by the Town of Knightdale and serve as construction plans for this



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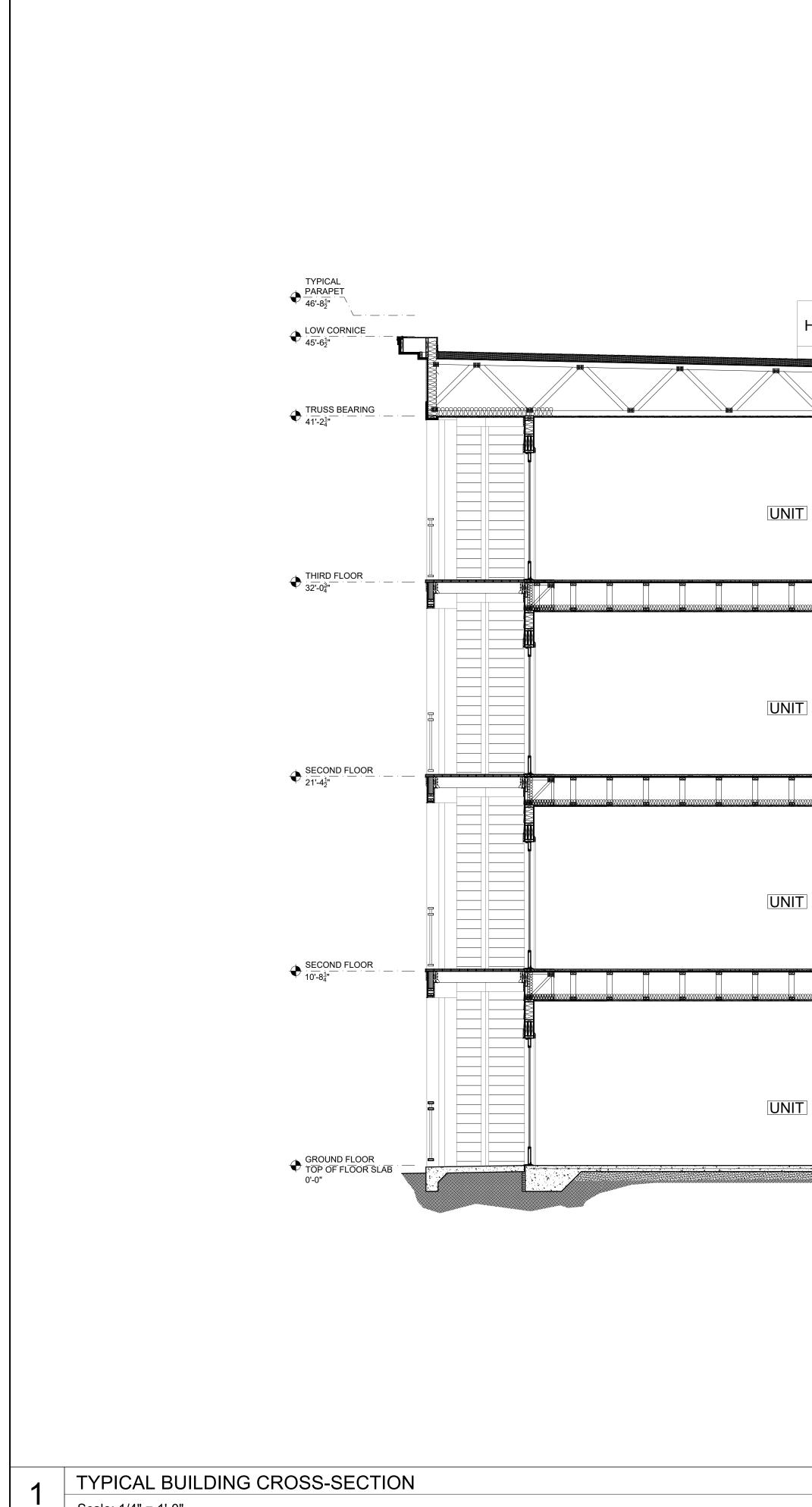


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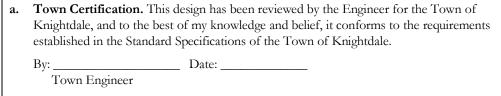




Scale: 1/4" = 1'-0"

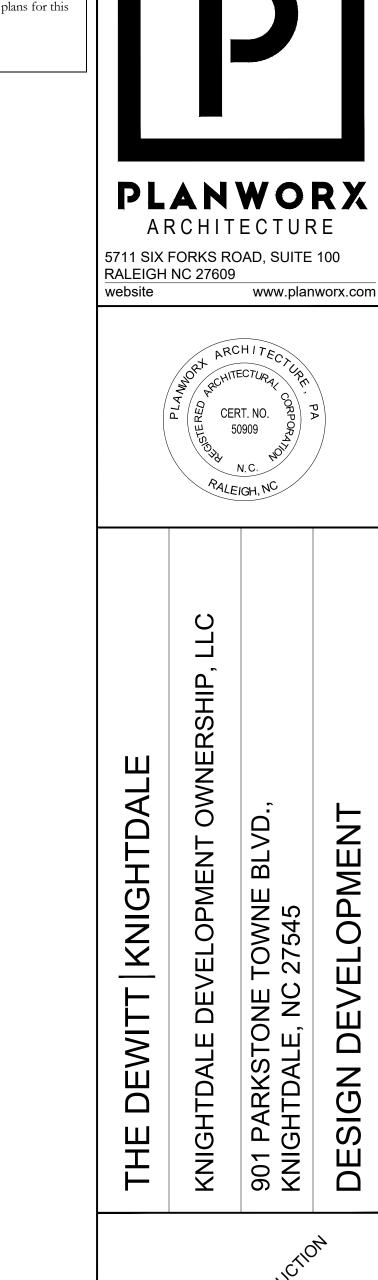
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HVAC		HVAC
	BREEZEWAY	
	BREEZEWAY	UNIT
	BREEZEWAY	UNIT
		UNIT



These plans are approved by the Town of Knightdale and serve as construction plans for this project. By: \_\_\_\_\_ \_\_\_\_ Date: \_\_\_\_\_

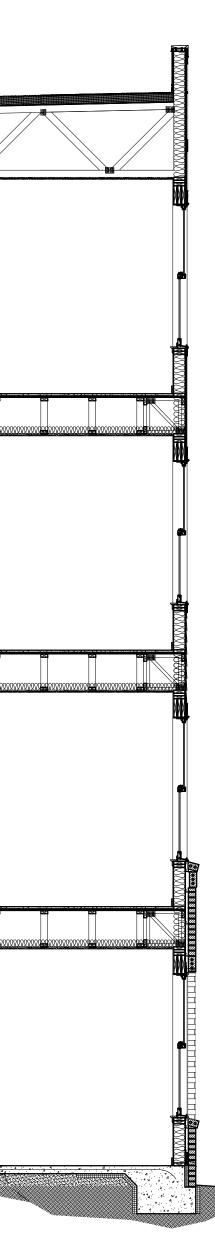
Land Use Administrator

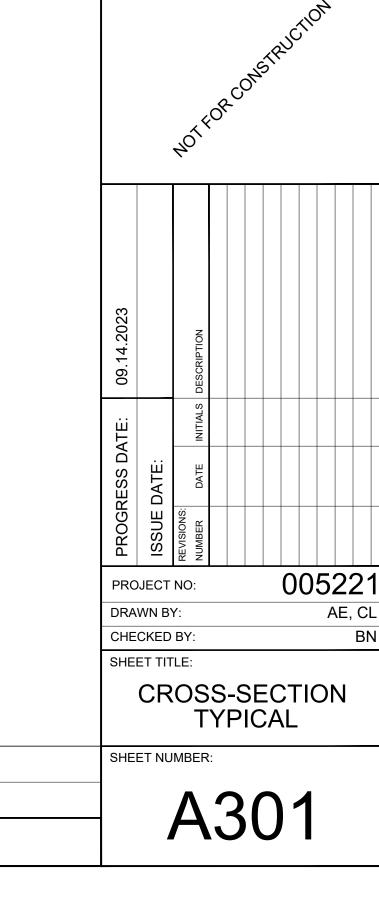


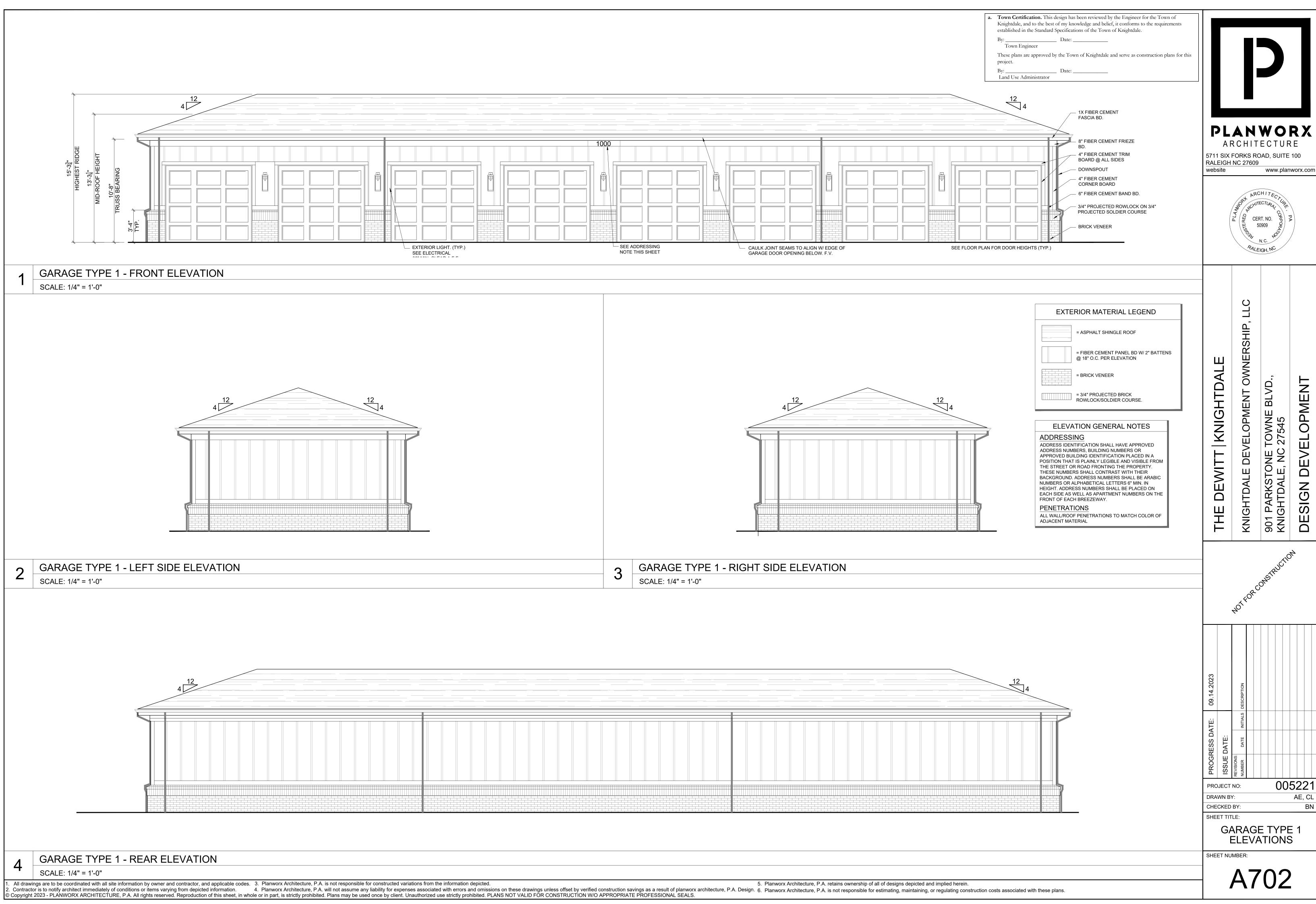
DEVELOPMENT

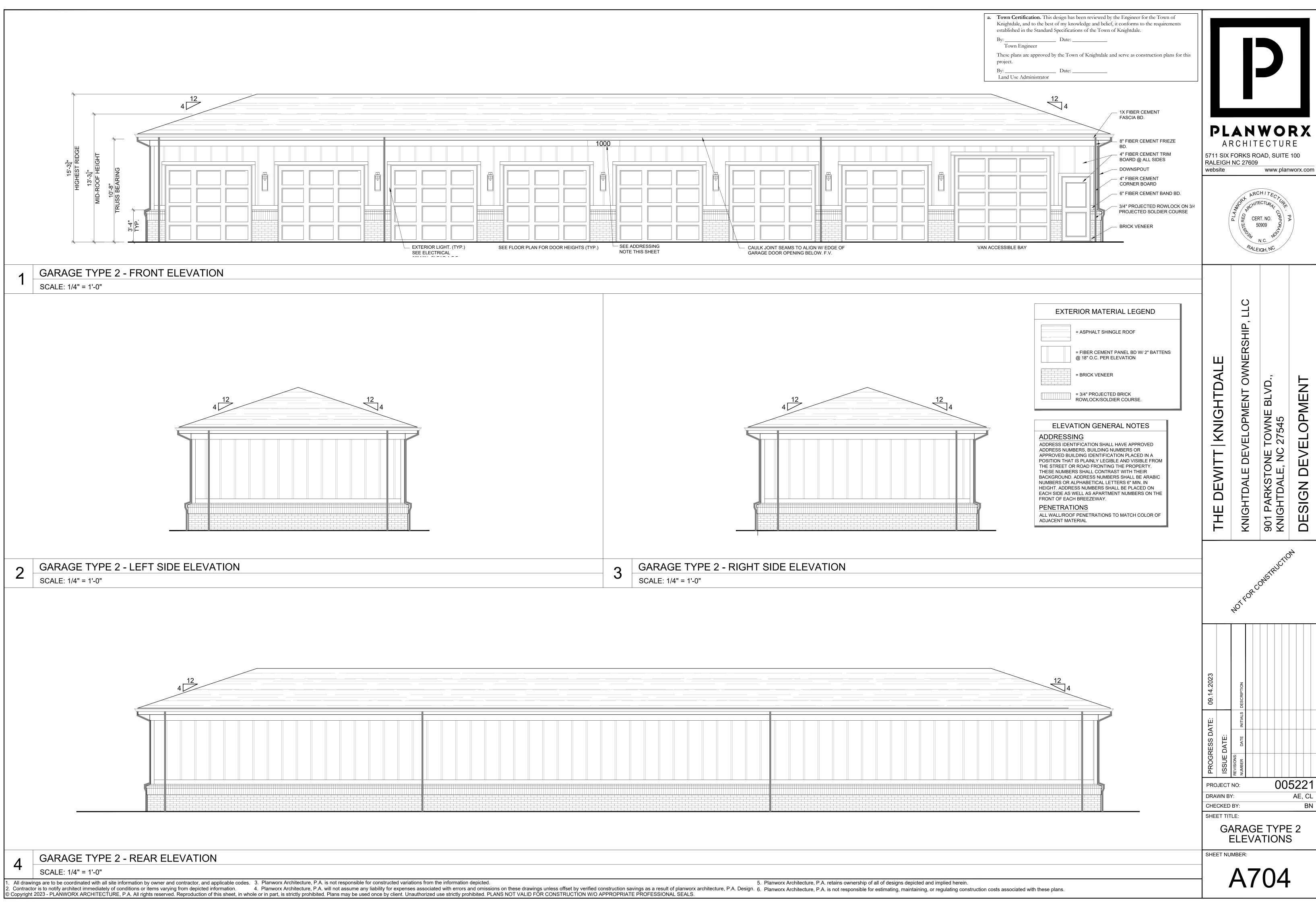
DESIGN

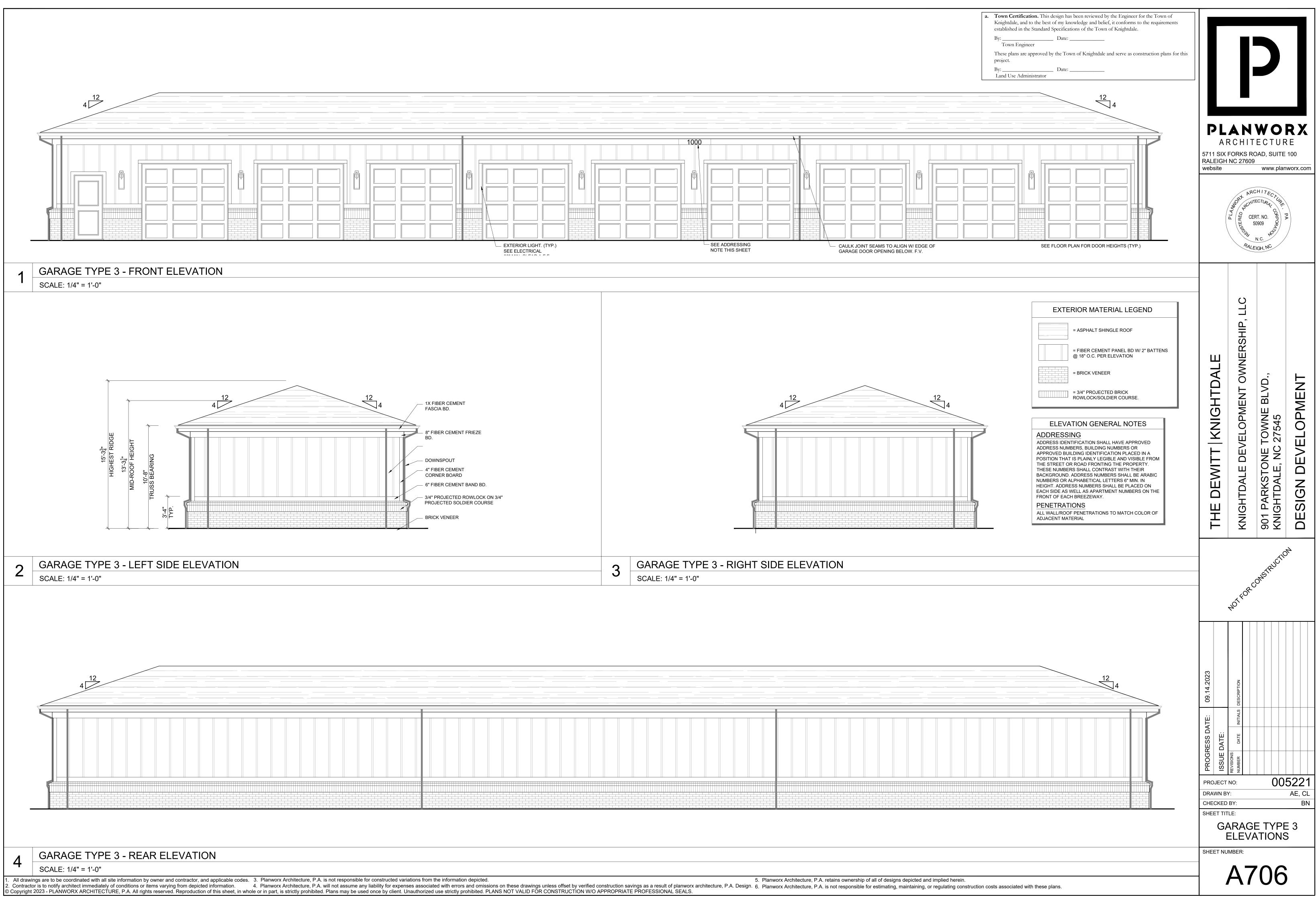
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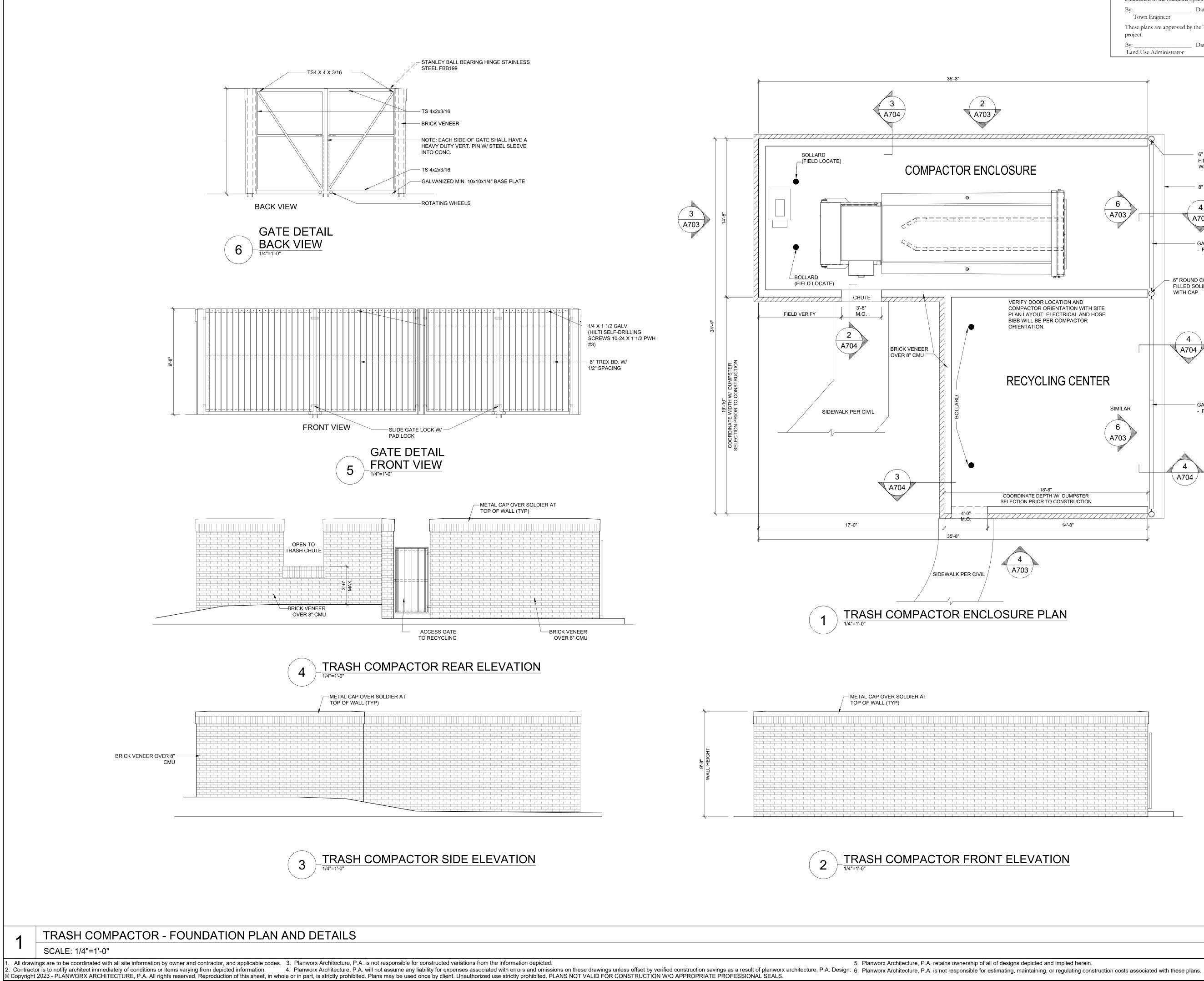




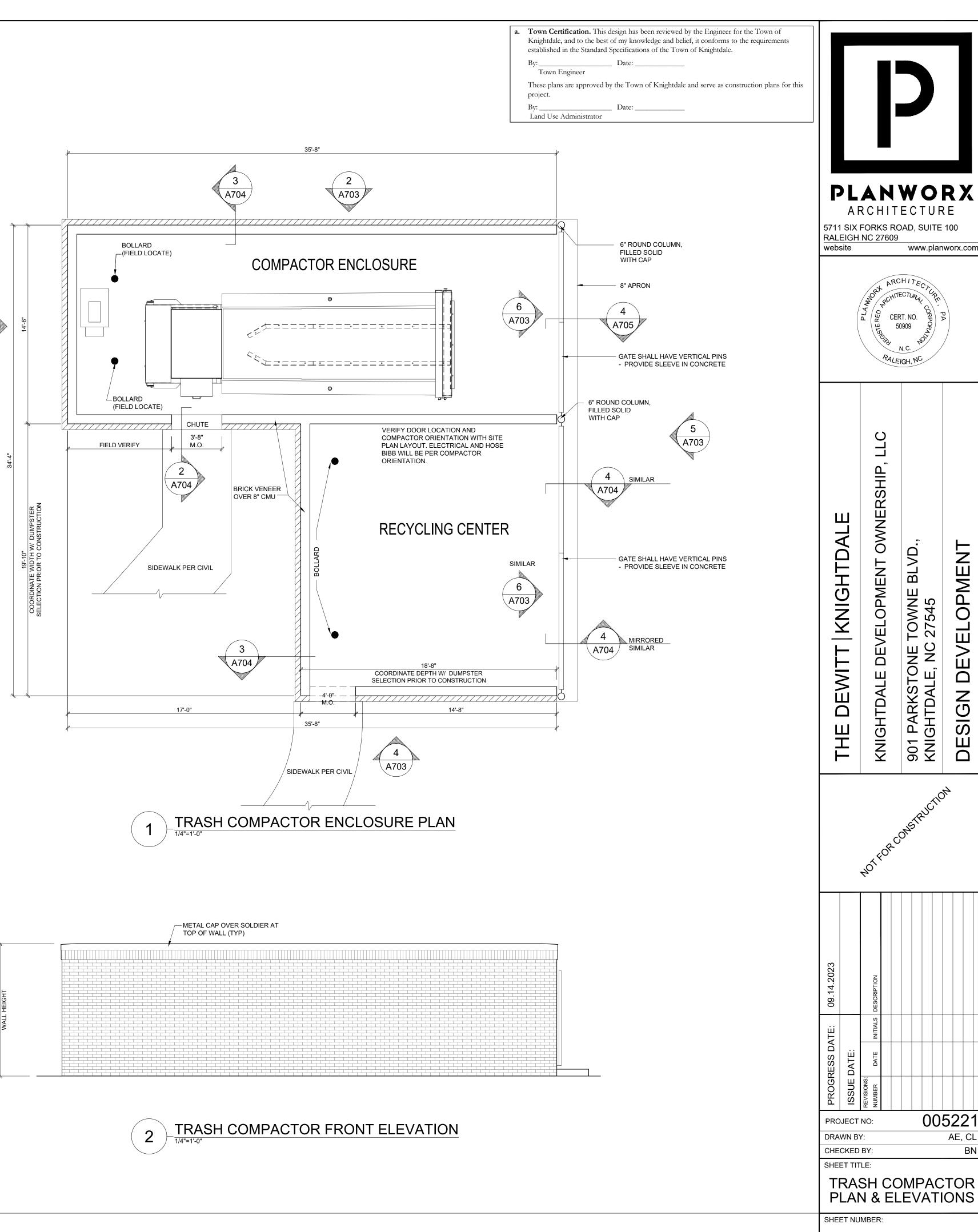


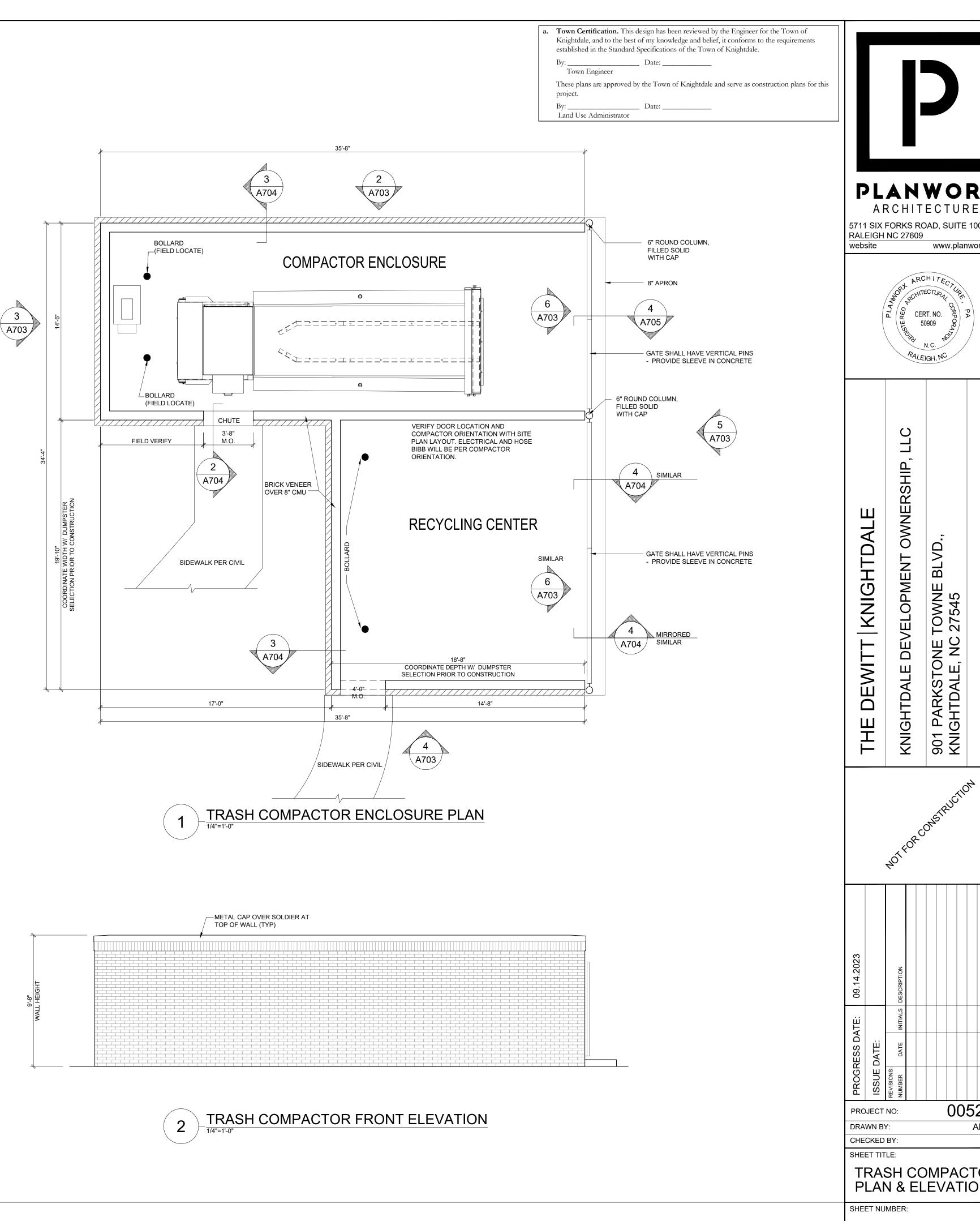






← 1/4 X 1 1/2 GALV (HILTI SELF-DRILLING SCREWS 10-24 X 1 1/2 PWH — 6" TREX BD. W/ 1/2" SPACING

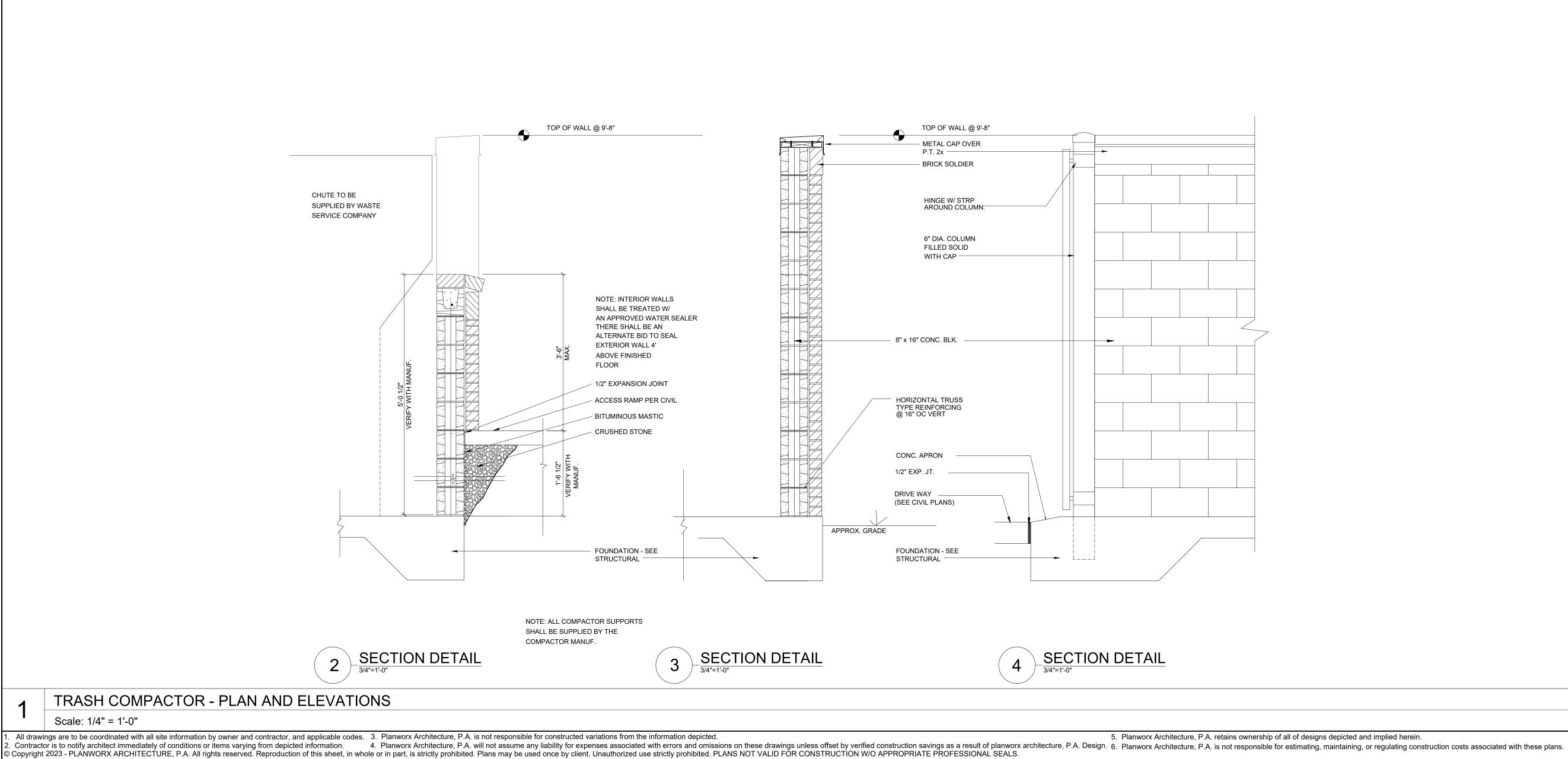




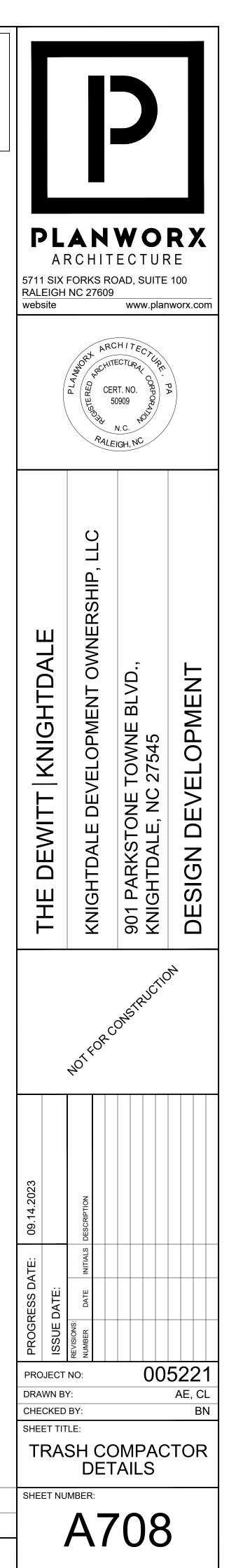
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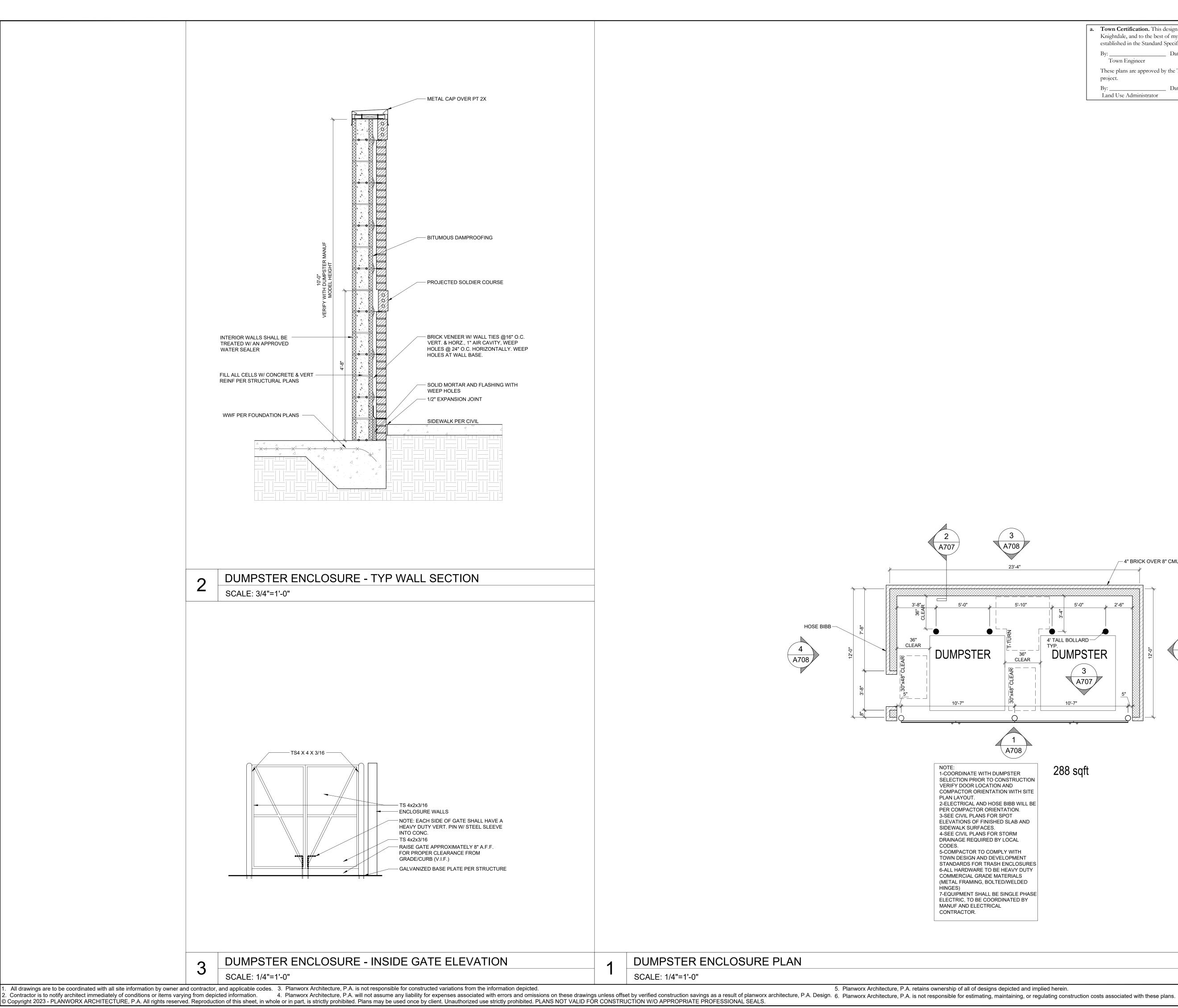
A707

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a.	Knightdale, and to the best	lesign has been reviewed by the Engineer for the Town of of my knowledge and belief, it conforms to the requirements Specifications of the Town of Knightdale.
	By: Town Engineer	_ Date:
	These plans are approved b project.	y the Town of Knightdale and serve as construction plans for this
	By: Land Use Administrator	_ Date:





### DUMPSTER ENCLOSURE PLAN

SCALE: 1/4"=1'-0" 5. Planworx Architecture, P.A. retains ownership of all of designs depicted and implied herein.

VERT. & HORZ., 1" AIR CAVITY, WEEP HOLES @ 24" O.C. HORIZONTALLY. WEEP

A707

3'-8"℃

36"

CLEAR

HOSE BIBB

′4 `

A708

5'-0"

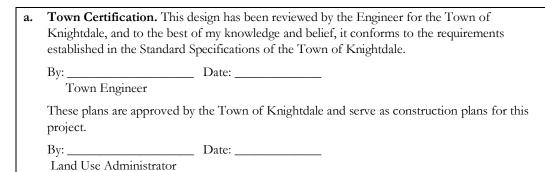
DUMPSTER

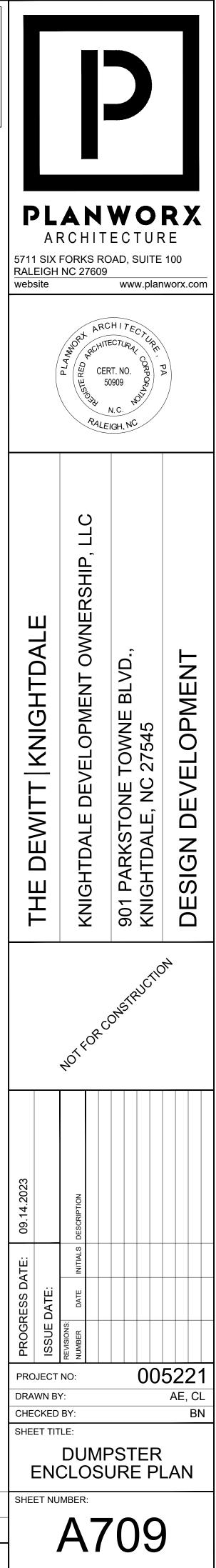
PLAN LAYOUT.

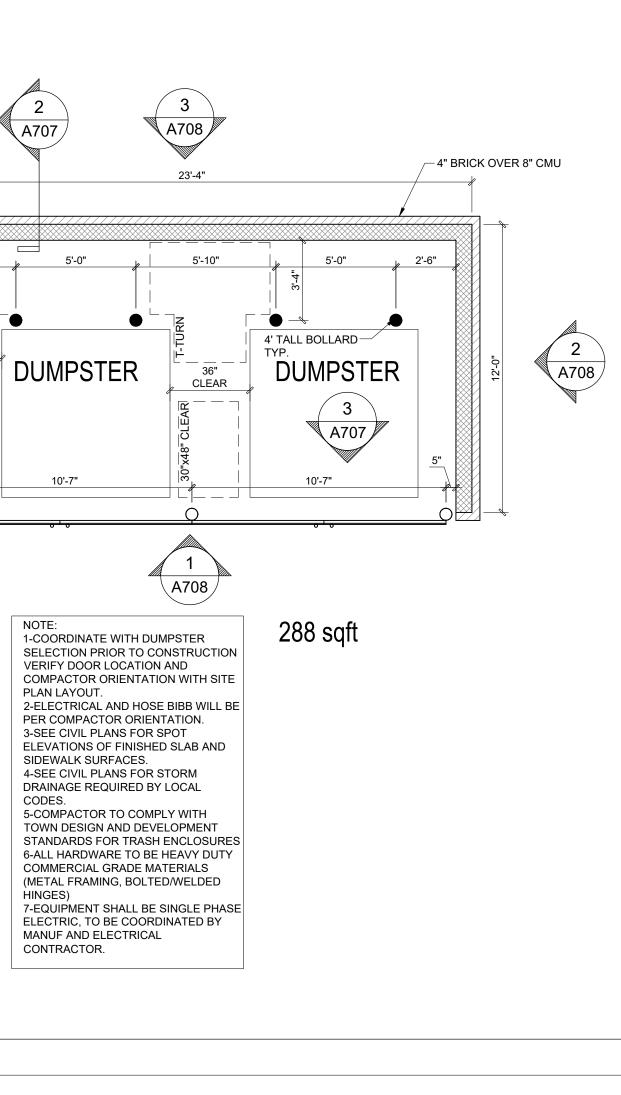
CODES.

HINGES)

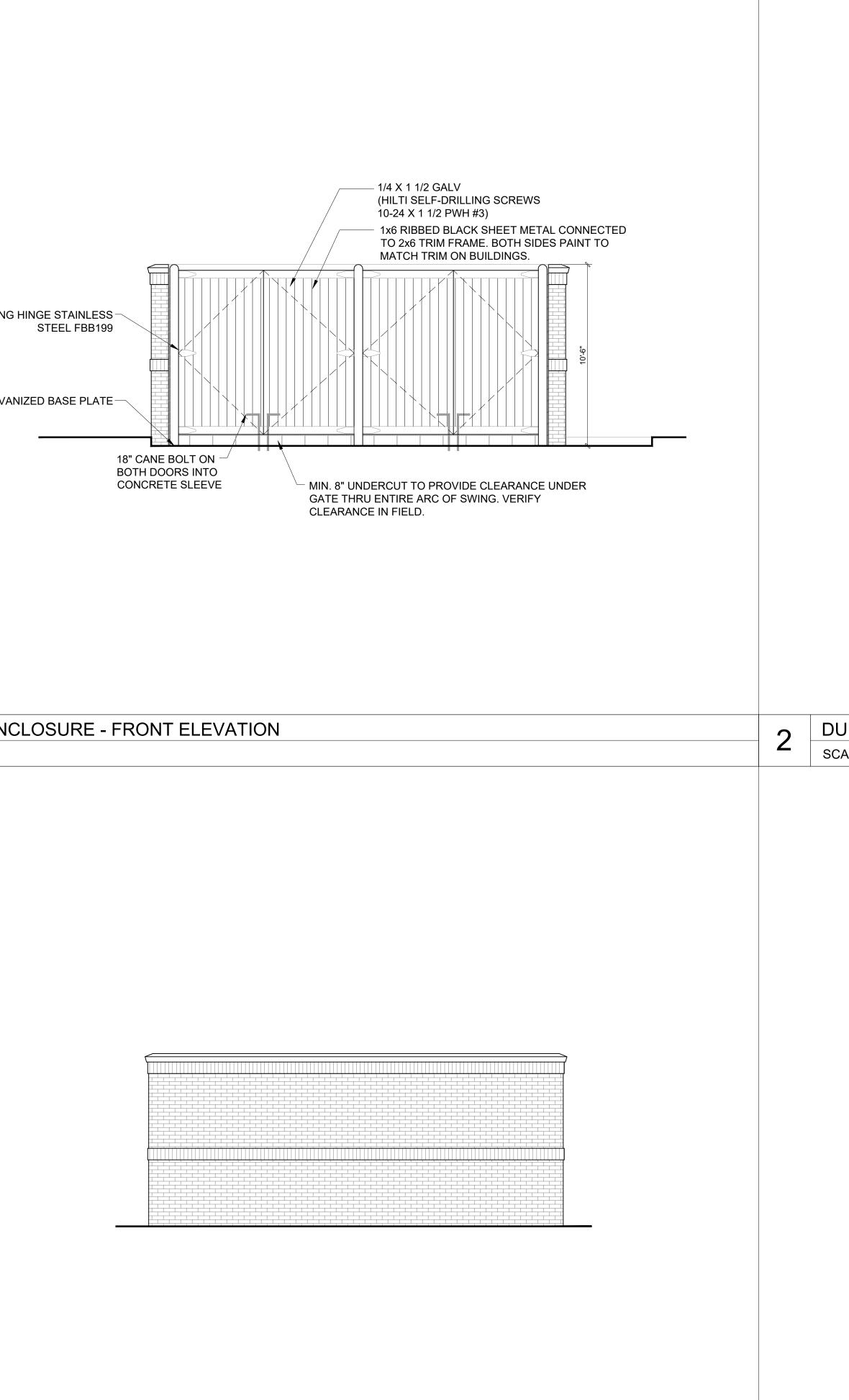
CONTRACTOR.







		Т
STANLEY BALL BEARING I		
GALVAN		
DUMPSTER ENC SCALE: 1/4"=1'-0"	1	
		r
DUMPSTER ENC SCALE: 1/4"=1'-0"	A. is not resp A. will not ass	oordinated with all site information by owner and contractor, and applicable codes. 3. Planworx Architecture, P.A. chitect immediately of conditions or items varying from depicted information. 4. Planworx Architecture, P.A. /ORX ARCHITECTURE, P.A. All rights reserved. Reproduction of this sheet, in whole or in part, is strictly prohibited
ay be used once by client. Unauthorized u	ed. Plans ma	ORX ARCHITECTURE, P.A. All rights reserved. Reproduction of this sheet, in whole or in part, is strictly prohibited



CLOSURE - REAR ELEVATION

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the information depicted.

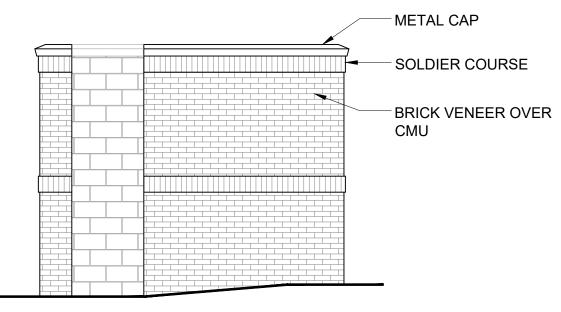
a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale. By: \_\_\_\_\_ \_\_\_\_\_ Date: \_\_\_\_

Town Engineer

Land Use Administrator

These plans are approved by the Town of Knightdale and serve as construction plans for this project. \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_

DUMPSTER ENCLOSURE - LEFT ELEVATION SCALE: 1/4"=1'-0"



DUMPSTER ENCLOSURE - RIGHT ELEVATION SCALE: 1/4"=1'-0" ted with errors and omissions on these drawings unless offset by verified construction savings as a result of planworx architecture, P.A. Design. 6. Planworx Architecture, P.A. is not responsible for estimating, maintaining, or regulating construction costs associated with these plans. I use strictly prohibited. PLANS NOT VALID FOR CONSTRUCTION W/O APPROPRIATE PROFESSIONAL SEALS.

