



CURVE DATA

CURVE NATHN-1
 P.I. 10+98.74
 PC 10+60.87
 PT 11+35.47
 Δ 24° 25' 29" (RT)
 D 32° 44' 26"
 R 175.000
 L 74.601
 T 37.876

CURVE NATHN-2
 P.I. 12+48.11
 PC 12+10.23
 PT 12+84.84
 Δ 24° 25' 29" (LT)
 D 32° 44' 26"
 R 175.000
 L 74.601
 T 37.876

Certification of Concept Plan.
 I hereby certify that I am a registered engineer, licensed to practice engineering under the laws of the State of Tennessee. I further certify that the plan and accompanying drawings, documents and statements conform to all applicable provisions of the Knoxville-Knox County Subdivision Regulations except as has been itemized and described in a report filed with the Metropolitan Planning Commission.

Registered Engineer: Robert G. Campbell
 Tennessee Certificate No. 104281

I HEREBY CERTIFY THAT THE RECOMMENDED SIGHT DISTANCE OF 250 FEET CAN BE ACHIEVED IN BOTH DIRECTIONS ALONG LONAS DRIVE FROM THE PROPOSED ENTRANCE

AASHTO STANDARDS:

LONAS DRIVE (35 MPH SPEED LIMIT)
 STOPPING SIGHT DISTANCE = 250 FEET
 INTERSECTION SIGHT DISTANCE = 330 FEET

MEASURED SIGHT DISTANCE
 RIGHT = 640 FEET
 LEFT = 723 FEET

PROPOSED PRIVATE ROADS (20 MPH SPEED LIMIT)
 STOPPING SIGHT DISTANCE = 115 FEET
 INTERSECTION SIGHT DISTANCE = 225 FEET

ALTERNATIVE DESIGN STANDARDS:
 1) PRIVATE ROAD WITH 40' R.O.W. AND 20' PAVEMENT
 2) INTERSECTION GRADE FROM 1% TO 3% AT LONAS DRIVE AND NATHAN SPRINGS WAY.
 3) INTERSECTION GRADE FROM 1% TO 3% AT NATHANS COVE WAY AND NATHANS SPRINGS WAY.

VARIANCES:
 1) REDUCTION OF INTERSECTION SPACING FROM 300 FEET TO 125 FEET BETWEEN SHIRLEY WAY AND NATHAN SPRINGS WAY.

WAIVERS:
 1) CLOSURE OF DRAINAGE AND UTILITY EASEMENTS FOR DETENTION EASEMENTS AND ALONG SOUTH LINE OF LOT 14.

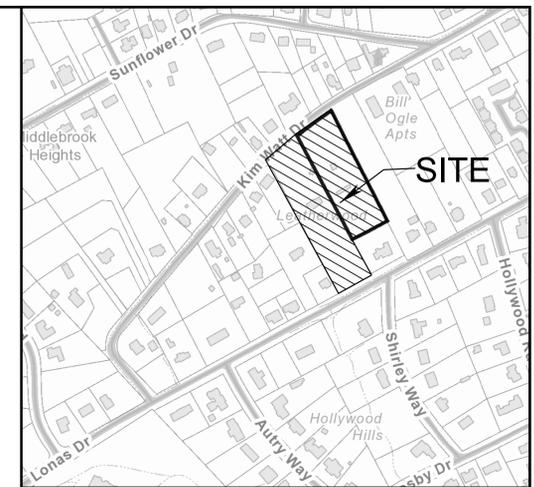
PRELIMINARY LOT AREAS SUMMARY		(30% max)		(40% max)	
LOT NO	TOTAL AREA (SQ FT)	HOUSE AREA (SQ FT)	BUILDING COVERAGE	IMPERVIOUS AREA (SQ FT)	IMPERVIOUS COVERAGE
1	5,397	1200	22%	2148	39.8%
2	5,493	1200	22%	2148	39.1%
3	5,500	1200	22%	2148	39.1%
4	5,500	1200	22%	2148	39.1%
5	5,500	1200	22%	2148	39.1%
6	5,500	1200	22%	2148	39.1%
7	5,570	1200	22%	2148	38.6%
8	6,140	1200	20%	2148	35.0%
9	10,271	1200	12%	2924	28.5%
10	8,518	1200	14%	2970	34.9%
11	6,810	1200	18%	2148	31.5%
12	6,746	1200	18%	2148	31.8%
13	6,759	1200	18%	2148	31.8%
14	8,508	1200	14%	2148	25.2%



OWNER/DEVELOPER:
 RAINIER SERVICES, LLC
 7017 HARTWINN LANE
 KNOXVILLE, TN 37918
 DAVID DROZHZHIN
 (865) 200-9521

OWNER:
 BILL A. KING
 5132 BUCKHEAD TRAIL
 KNOXVILLE, TN 37919

ENGINEER:
 ROBERT G. CAMPBELL
 AND ASSOCIATES
 7523 TAGGART LANE
 KNOXVILLE, TN 37938
 PHONE: (865) 947-5996
 FAX: (865) 947-7556



LOCATION MAP - N.T.S.

- NOTES:
- EXISTING CONTOURS FROM K.G.I.S.
 - THE HOMEOWNERS ASSOCIATION OR OTHER LEGAL ENTITY SHALL BE ESTABLISHED TO ADDRESS MAINTENANCE OF THE PRIVATE RIGHT OF WAY.
 - ACCESS TO ALL UNITS FROM INTERNAL ROAD SYSTEM ONLY. ROADWAYS TO BE PRIVATE RIGHT-OF-WAYS. DESIGN SPEED LIMIT FOR SUBDIVISION IS 20 MPH. DETENTION ACCESS TO BE FROM NATHAN SPRINGS WAY.
 - A UTILITY AND DRAINAGE EASEMENT TO BE PLATTED TEN (10) FEET IN WIDTH INSIDE ALL EXTERIOR LOT LINES ADJOINING STREETS AND PRIVATE RIGHTS-OF-WAY. A UTILITY AND DRAINAGE EASEMENT TO BE PLATTED FIVE (5) FEET IN WIDTH ALONG ALL OTHER EXTERIOR LOT LINES AND ALONG BOTH SIDES OF ALL INTERIOR LOT LINES, EXCEPT FOR ZERO LOT LINES FOR ATTACHED UNITS.
 - LOCATION OF MAILBOXES TO BE COORDINATED WITH THE U.S. POSTAL SERVICE.
 - BASED ON GEOTECHNICAL INVESTIGATION, THE DEPRESSION AREA LOCATED ON LOTS 8 & 9 IS NOT A KARST FEATURE.
 - STANDARD DRAINAGE AND UTILITY EASEMENT TO BE CLOSED IN THE AREA OF DETENTION POND.
 - EXCAVATE PERMANENT STORMWATER DETENTION PONDS IN ADVANCE OF CONSTRUCTION, AND USE AS SEDIMENT BASINS DURING CONSTRUCTION. REMOVE ACCUMULATED SEDIMENT AND INSTALL PERMANENT OUTLET STRUCTURES WHEN THE UPSTREAM DRAINAGE AREAS ARE STABILIZED.
 - LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES NOT SHOWN. PRIOR TO ANY EXCAVATION, THE OWNER AND/OR CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE LOCAL UTILITY AUTHORITIES FOR EXACT LOCATIONS AND DEPTHS.
 - A 15' SANITARY SEWER EASEMENT EXISTS ALONG SANITARY SEWER LINE, 7.5' EACH SIDE AS INSTALLED.
 - THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF CONSTRUCTION SITE POLLUTION PREVENTION CONTROLS THROUGHOUT THE LIFE OF THE PROJECT.
 - LANDSCAPING SHALL COMPLY WITH ALL ASPECTS OF THE CITY OF KNOXVILLE TREE PROTECTION ORDINANCE.
 - SIGHT DISTANCE HAS BEEN EVALUATED AND DESIGNED PER AASHTO STANDARDS.
 - PAVEMENT STRIPING TO COMPLY WITH CITY OF KNOXVILLE STANDARD SPECIFICATIONS TS40 & TS41.
 - SIGNAGE TO COMPLY WITH MUTCD AND CITY OF KNOXVILLE STANDARDS.

CLT MAP: 107C GROUP B
 PARCELS: 34.01 & 35

PLAT REFERENCE: 202210310026251
 17-9

DEED REFERENCE: 202309080033963
 2172/865

TOTAL AREA: 3.30 ACRES

PRIVATE STREET: 27,120 SQ FT (0.58 AC)

NUMBER OF LOTS: 14
 PROPERTY ZONED: RN-2 (PENDING)

PLANNING SERVICES FILE NUMBER: 12-SB-23-C

NO.	DATE	DESCRIPTION	BY	CHKD.
REVISIONS				

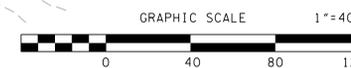


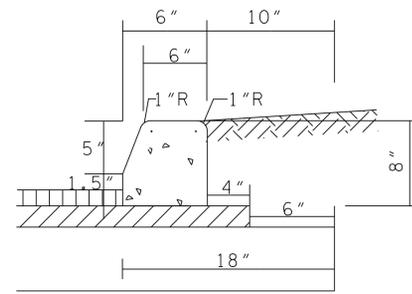
ROBERT G. CAMPBELL & ASSOC., L.P.
 CONSULTING ENGINEERS
 KNOXVILLE, TENNESSEE

NATHAN'S COVE
 CONCEPT PLAN

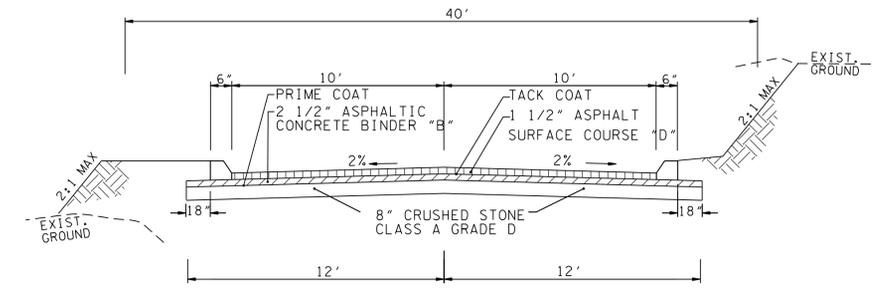
GENERAL LAYOUT
 PLAN VIEW

DESIGNED BY	CHECKED BY	SCALE	SHEET ONE
GMT	RGC	1" = 40'	NO. 1
DRAWN BY	DATE	FILE NO.	OF 2 SHEETS
GMT	11-18-23	23137	





STANDARD DETAIL 6" EXTRUDED CURB

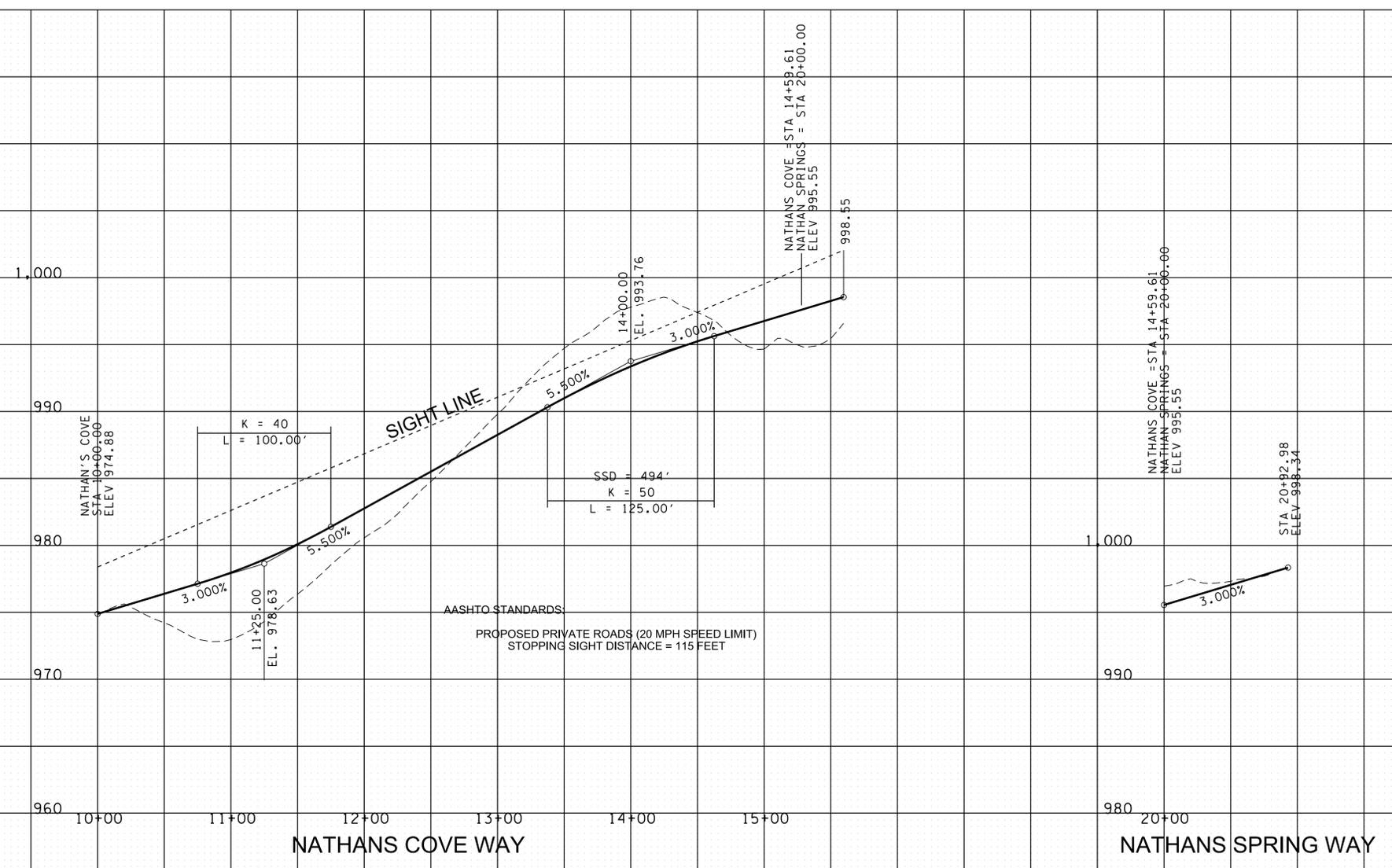


TYPICAL 2 LANE STREET PRIVATE ROADS

NOTE: INSTALL CONTRACTION JOINTS AT MAXIMUM SPACING OF 10 FEET.
INSTALL EXPANSION JOINTS AT MAXIMUM SPACING OF 25 FEET.

BORROW MATERIALS TO BE USED FOR FILL SHALL BE TESTED FOR MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT (STANDARD PROCTOR ASTM D698) PRIOR TO PLACEMENT OF FILL.

FILL SOILS SHALL BE COMPACTED IN LAYERS 8 INCHES OR LESS IN THICKNESS TO A MINIMUM OF 98 PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN PLUS OR MINUS 3 PERCENT OPTIMUM MOISTURE CONTENT. NO LESS THAN SIX (6) DENSITY TESTS SHALL BE PERFORMED IN EVERY 10,000 SQUARE FEET OF AREA PER 8 INCH LIFT. (APPROX. 1 TEST PER EVERY 50 SQ. FT.)



NO.	DATE	DESCRIPTION	BY	CHKD.

RG&A **ROBERT G. CAMPBELL & ASSOC., L.P.**
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

NATHAN'S COVE
CONCEPT PLAN

PROFILES

DESIGNED BY GMT	CHECKED BY RG&A	SCALE AS SHOWN	SHEET TWO NO. 2
DRAWN BY GMT	DATE 11-18-23	FILE NO. 23137	OF 2 SHEETS