Notes:
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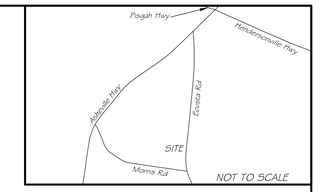
2. The locations of underground utilities are based on above-ground structures and record drawings provided to the surveyor. Locations of underground utilities/structures may vary from locations shown hereon. Additional buried utilities/structures may be encountered.
3. Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence, or any other facts that an accurate title search may disclose.
4.The certification of survey and plat was prepared for the entity named in the title block hereon and does not extend to any other entity, unless recertified by the professional land surveyor.
5. All miscellaneous survey related materials, including but not limited to, project plans, deed and ROW research, maps, field notes and data, survey reports, record title report, calculations, working drawings, estimates, and other materials acquired and/or prepared by the surveyor as instruments of service shall remain the property of the surveyor and assigns.
6. This drawing is not valid unless the original signature and stamp are attached. Any reproduction or variance to this survey by electronic or any other means are not to be considered issued by the professional surveyor.
7. Property is currently zoned General Industrial, Special Distrct Overlay as per The City of Brevard.
8. Property is located in Zone X, Minimal Flood Risk as per FRIS Map Panel 8597, Map # 3700859700J effective date 10-02-2009.
9. Contour Lines are at 1' intervals.

Grid North
NAD83 (2011)

Building Setbacks as per
The City of Brevard GI Zoning:
Front: 15'
Side: 10'/25' from Residental Distrct
Rear: 10'/25' from Residental Distrct

Building Setbacks provided to Surveyor
as per Site Plan by High Country Engineering, P.C.:
Front: 40'
Side: 40'
Rear: 40'

6.94 Acres
Area By Coordinate Computation



Vicinity Map

PRELIMINARY
FOR REVIEW PURPOSES ONLY

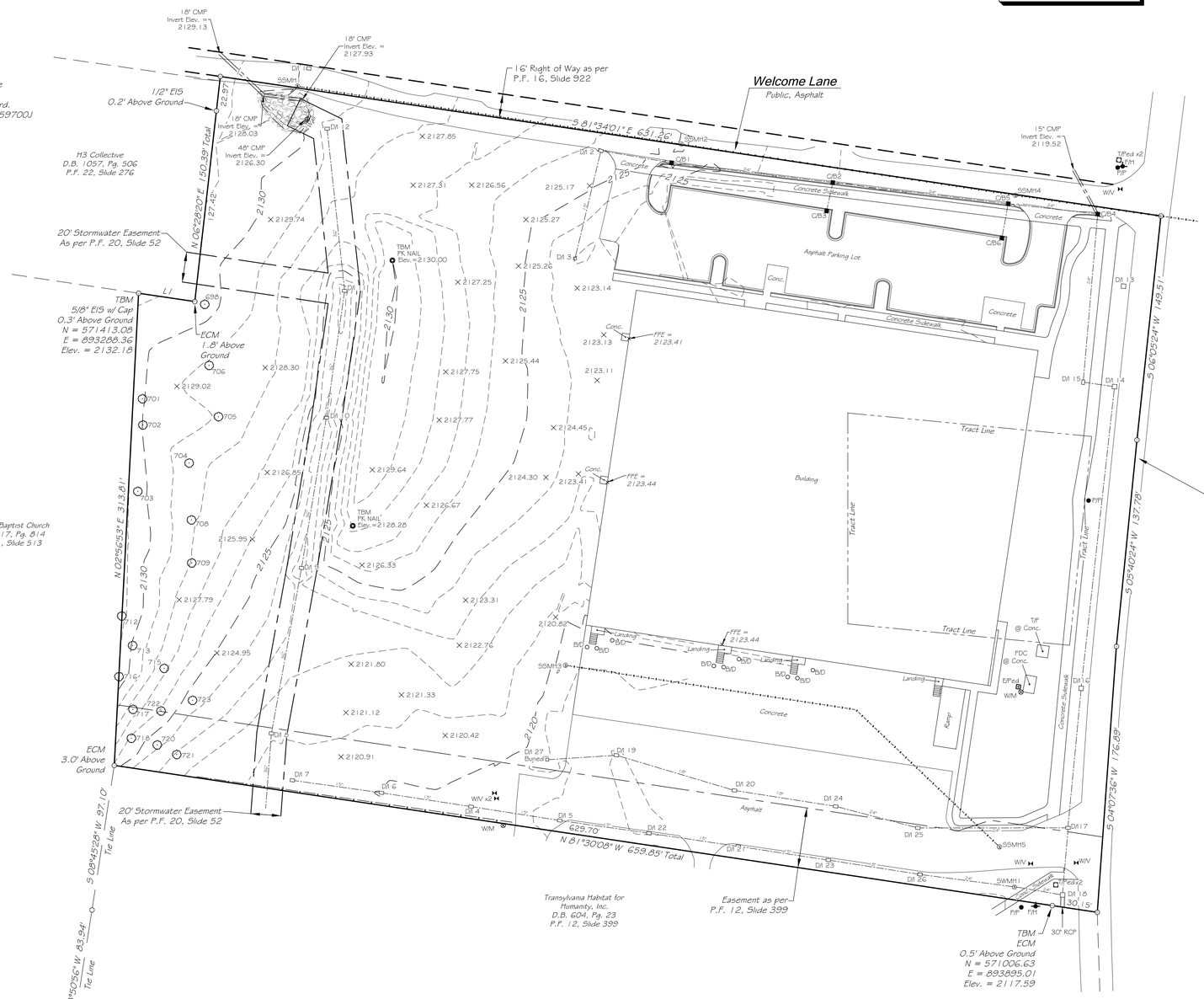
Global Positioning System Certification (RTK)
The Positional Accuracy Of The RTK Derived Positional Information Is 0.03' Horizontal & 0.03' Vertical

Horizontal Positions Are Referenced to NAD 83 (NSRS 2011)

Vertical Positions Are Referenced To NAVD 88 (Geoid 12)

Combined Factor 0.99977536 (Ground To Grid)

Equipment Used: Carlson GPS-BRx6



L2 is a Tie Line		
Course	Bearing	Distance
L1	S 81°31'31" E	37.70'
L2	N 04°53'23" E	15.19'

GRAPHIC SCALE – FEET
40 0 40 80 120

Being all of Tracts 1 & 2 as described in
D.B. 824, Pg. 498
As shown on the Recombination Survey for The City of Brevard
Recorded at P.F. 16, Slide 922

Map of Partial Topographic Survey for

Transylvania Partnership, Inc.

-Owners-
D.B. 824, Pg. 498

-Sheet One of Two-

Pin: 8597-31-5264-000

Legend:
ECM = Existing Concrete Monument
EIP = Existing Iron Pipe
EIS = Existing Iron Stake
IPS = Iron Pipe Set
O = Unmarked Point, Unless Otherwise Noted
ROW/MON = Right of Way Monument
ROW = Right of Way
RRS = Railroad Spike
TBM = Temporary Benchmark
BSL = Building Setback Lines
P/P = Power Pole
D/I = Drop Inlet
C/B = Catch Basin
F/H = Fire Hydrant
T/Ped = Telephone Pedestal
E/Ped = Electrical Pedestal
T/F = Transformer
W/M = Water Meter
W/V = Water Valve
SSMH = Sanitary Sewer Manhole
B/D = Bollard
FFE = First Floor Elevation
CMP = Corrugated Metal Pipe
RCP = Reinforced Concrete Pipe
— • — • — • — • — • — • — = Fence

City of Brevard Township	Transylvania County, NC

ASSOCIATED LAND SURVEYORS
& PLANNERS PC.
P.O. BOX 578 * HORSE SHOE, NC 28742
(828) 890-3507 NC BUSINESS LICENSE NO. C-2774

SCALE: 1 Inch = 40 Feet	DATE: December 29, 2023
JOB NO.: S-23-676	DRAWN BY: KMK/JTB IntelliCAD 8.0

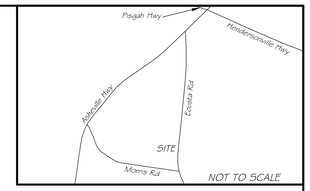
Grid North
NAD83 (2011)

Point	Northing	Easting	Elev.	Invert In	Invert In	Invert In	Invert Out
D/I 1	571562.276	893401.349	2129.71				2128.86
D/I 2	571507.664	893595.269	2125.51	2119.21			2119.11
D/I 3	571436.117	893578.080	2122.97				2119.87
D/I 4	571072.293	893509.094	2119.16	2116.36			2116.31
D/I 5	571063.113	893567.943	2118.49	2115.89			2115.79
D/I 6	571081.470	893449.600	2119.95	DI 2X3	DI 2X3	DI 2X3	DI 2X3
D/I 7	571089.768	893390.464	2120.31				2117.41
D/I 8	571120.857	893376.518	2121.05	2114.70			2114.60
D/I 9	571230.715	893396.515	2121.31	2115.26			2115.16
D/I 10	571330.458	893412.960	2122.79	2115.89			2115.84
D/I 11	571414.652	893425.172	2122.22	2116.72	2117.62		2116.42
D/I 12	571522.247	893413.504	2128.59	DI 2X3	DI 2X3	DI 2X3	DI 2X3
D/I 13	571417.775	893942.282	2120.46	2117.56			2115.46
D/I 14	571351.109	893936.289	2120.02	2115.12	2115.17		2115.07
D/I 15	571354.032	893915.495	2120.52	2115.22			2115.17
D/I 16	571150.845	893914.127	2119.08	2113.58	2113.73		2113.48
D/I 17	571058.204	893905.393	2119.16	2112.71	2112.71		2112.66
D/I 18	571013.630	893901.838	2117.63	2112.63			2112.33
D/I 19	571106.407	893605.535	2117.92	DI 3X2	DI 3X2	DI 3X2	DI 3X2
D/I 20	571083.035	893683.923	2117.92	2114.42	2114.42		2114.22
D/I 21	571045.910	893686.448	2117.22	2114.62			2114.57
D/I 22	571054.693	893627.167	2117.84	2115.04			2114.99
D/I 23	571036.814	893746.289	2117.14	2114.14			2114.14
D/I 24	571072.493	893751.117	2117.80	2113.60			2113.45
D/I 25	571058.147	893805.763	2117.43	2113.13	2113.13		2113.08
D/I 26	571027.317	893807.067	2116.73	2113.68			2113.63
D/I 27	571103.484	893559.638	2118.26	2115.16(Invert)	DI BURIED	DI BURIED	DI BURIED
SWMH1	571018.886	893869.825	2117.83				2114.43

Point	Northing	Easting	Elev.	Invert In	Invert In	Invert In	Invert Out
CB1	571498.720	893642.108	2124.80	2118.80			2118.75
CB2	571485.608	893749.106	2123.04	2117.94	2117.99		2117.84
CB3	571468.724	893745.321	2121.26				2117.96
CB4	571464.700	893924.924	2121.03	2115.58			2115.53
CB5	571471.610	893865.578	2121.68	2116.83	2116.88		2116.08
CB6	571450.637	893861.665	2120.98				2117.53

Point	Northing	Easting	Elev.	Invert In	Invert In	Invert In	Invert Out
SSMH1	571550.515	893393.861	2130.00	2125.05			2124.95
SSMH2	571512.023	893648.778	2125.11	2125.05			2124.95
SSMH3	571166.100	893571.791	2119.43				2116.73
SSMH4	571478.105	893870.598	2121.67	2118.87			2118.77
SSMH5	571045.583	893859.904	2118.52	2114.77			2113.92

Point	Description
698	34" POPLAR & 32" OAK
701	8" HICKORY
702	14" OAK
703	12" OAK & 8" HICKORY
704	14" HICKORY
705	14" & 18" HICKORY
706	16" HICKORY
708	16" HICKORY
709	14" & 10" HICKORY
712	16" OAK
713	16" DOUBLE MAPLE
715	14" & 18" MAPLE
716	14" MAPLE X2 & 10" DOUBLE MAPLE
717	12" MAPLE x2 & 20" PINE
718	12" MPL x2 & 18" POPLAR
720	16" DOUBLE MAPLE & 18" MAPLE
721	12" MAPLE CLUSTER & 12" BIRCH
722	12" MAPLE CLUSTER
723	12" BIRCH



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As shown on the Recombination Survey for The City of Brevard Recorded at P.F. 16, Slide 922

Map of Partial Topographic Survey for

Transylvania Partnership, Inc.

-Owners-
D.B. 824, Pg. 498

-Sheet Two of Two-

Pin: 8597-31-5264-000

40 0 40 80 120
GRAPHIC SCALE - FEET

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Rear: 10\|25' from Residental District

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SCALE: 1 Inch = 40 Feet | DATE: December 29, 2023
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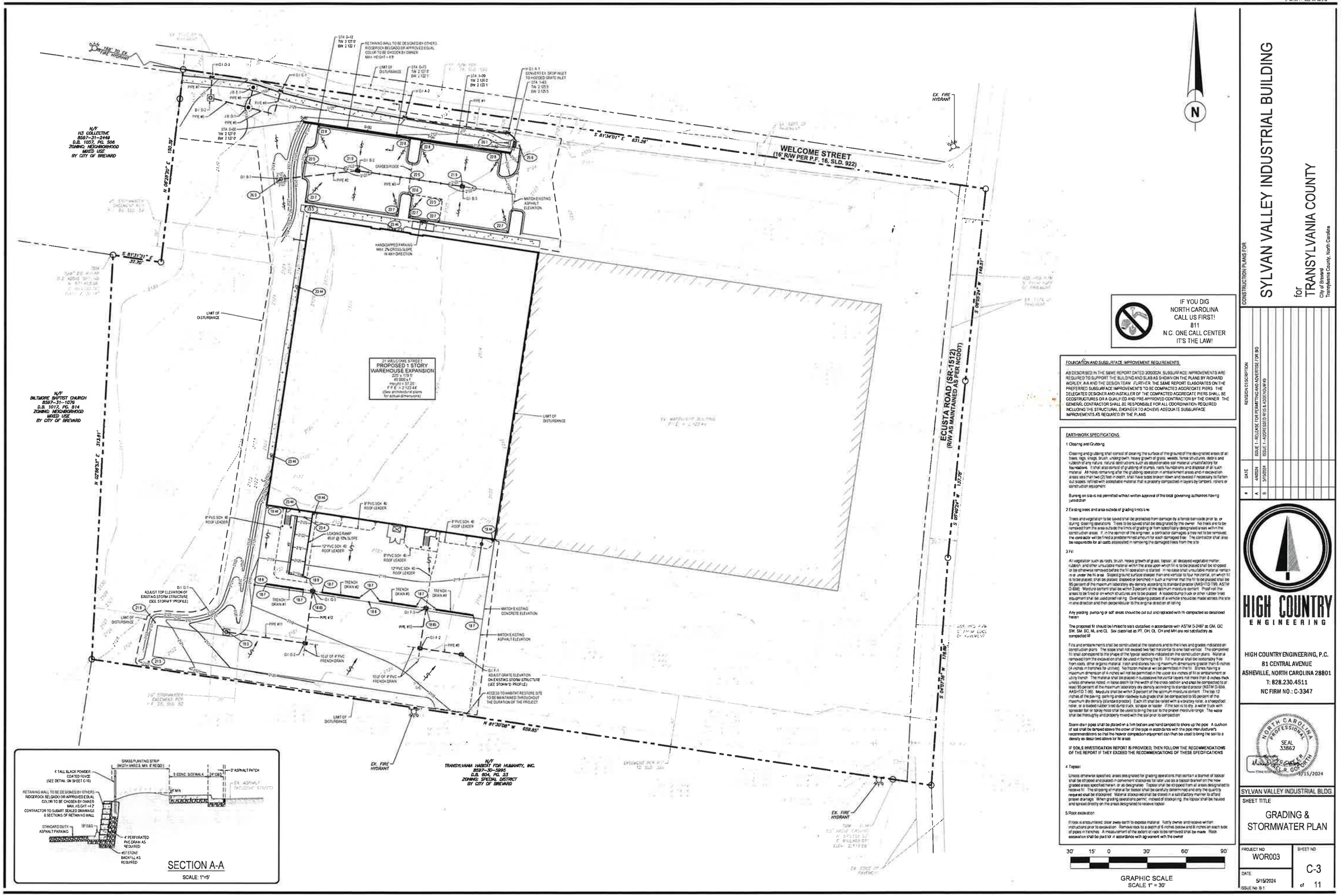

SECTION A-A

SCALE: 1"=5'

IF YOU DIG
NORTH CAROLINA
CALL US FIRST!
811
N.C. ONE CALL CENTER
IT'S THE LAW!

FOUNDATION AND SUBSURFACE IMPROVEMENT REQUIREMENTS

AS DESCRIBED IN THE SAME REPORT DATED 2/20/2024, SUBSURFACE IMPROVEMENTS ARE REQUIRED TO SUPPORT THE BUILDING AND SLAB AS SHOWN ON THE PLANS BY RICHARD WORLEY, AIA AND THE DESIGN TEAM. FURTHER, THE SAME REPORT ELABORATES ON THE PREFERRED SUBSURFACE IMPROVEMENTS TO BE COMPACTED AGGREGATE PIERS. THE DELEGATED DESIGNER AND INSTALLER OF THE COMPACTED AGGREGATE PIERS SHALL BE GEOSTRUCTURES OR A QUALIFIED AND PRE-APPROVED CONTRACTOR BY THE OWNER. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION REQUIRED INCLUDING THE STRUCTURAL ENGINEER TO ACHIEVE ADEQUATE SUBSURFACE IMPROVEMENTS AS REQUIRED BY THE PLANS.

EARTHWORK SPECIFICATIONS

1 Clearing and Grubbing

Clearing and grubbing shall consist of clearing the surface of the ground of the designated areas of all trees, logs, snags, brush, undergrowth, heavy growth of grass, weeds, fence structures, debris and rubbish of any nature, natural obstructions such as objectionable soil material unsatisfactory for foundations. It shall also consist of grubbing of stumps, roots foundations and disposal of all such material. All holes remaining after the grubbing operation in embankment areas and in excavation areas less than two (2) feet in depth, shall have sides broken down and leveled if necessary to flatten out slopes, refilled with acceptable material that is properly compacted in layers by tampers, rollers or construction equipment.

Burning on site is not permitted without written approval of the local governing authorities having jurisdiction

2 Existing trees and areas outside of grading limits line

Trees and vegetation to be saved shall be protected from damage by a fence barricade prior to, or during, clearing operations. Trees to be saved shall be designated by the owner. No trees are to be removed from the area outside the limits of grading or from specifically designated areas within the construction areas. If, in the opinion of the engineer, a contractor damages a tree not to be removed, the contractor will be fined a predetermined amount for each damaged tree. The contractor shall also be responsible for all costs associated in removing the damaged trees from the site.

3 Fill

All vegetation such as roots, brush, heavy growth of grass, topsoil, all decayed vegetative matter, rubbish, and other unsuitable material within the area upon which fill is to be placed shall be stripped or be otherwise removed before the fill operation is started. In no case shall unsuitable material remain in or under the fill area. Sloped ground surface steeper than one vertical to four horizontal, on which fill is to be placed, shall be plowed, stepped or benched in such a manner that the fill to be placed shall be 95 percent of the maximum laboratory dry density according to standard proctor (AASHTO T99, ASTM D-698). Moisture content shall be within 3 percent of the optimum moisture content. Proof-roll the areas to be filled or on which structures are to be placed. A loaded dump truck or other rubber tired equipment shall be used proof-rolling. Overlapping passes of a vehicle should be made across the site in one direction and then perpendicular to the original direction of rolling.

Any yielding, pumping or soft areas should be cut out and replaced with fill compacted as described herein.

The proposed fill should be limited to soils classified in accordance with ASTM D-2487 as GM, GC SW, SM, SC, ML and CL. Soil classified as PT, OH, OL, CH and MH are not satisfactory as compacted fill.

Fills and embankments shall be constructed at the locations and to the lines and grades indicated on construction plans. The slope shall not exceed two feet horizontal to one foot vertical. The completed fill shall correspond to the shape of the typical sections indicated on the construction plans. Material removed from the excavation shall be used in forming the fill. Fill material shall be reasonably free from roots, other organic material, trash and stones having a maximum dimensions greater than 6 inches (4 inches in trenches for utilities). No frozen material will be permitted in the fill. Stones having a maximum dimension of 4 inches will not be permitted in the upper six inches of fill or embankment or utility trench. The material shall be placed in successive horizontal layers not more than 8 inches thick, unless otherwise noted, in loose depth for the width of the cross section and shall be compacted to at least 95 percent of the maximum laboratory dry density according to standard proctor (ASTM D-698 AASHTO T-99). Moisture shall be within 3 percent of the optimum moisture content. The top 12 inches of the pad, parking and/or roadway sub-grade shall be compacted to 95 percent of the maximum dry density (standard proctor). Each lift shall be rolled with a vibratory roller, a sheepsfoot roller, or a loaded rubber tired dump truck, scraper or loader. If the soil is too dry, a water truck with spreader bar or spray hose shall be used to bring the soil to the proper moisture range. The water shall be thoroughly and properly mixed with the soil prior to compaction.

Storm drain pipes shall be placed on a firm bottom and hand tamped to shore up the pipe. A cushion of soil shall be tamped above the crown of the pipe in accordance with the pipe manufacturer's recommendations so that the heavier compaction equipment can then be used to bring the soil to a density as described above for fill areas.

IF SOILS INVESTIGATION REPORT IS PROVIDED, THEN FOLLOW THE RECOMMENDATIONS OF THE REPORT IF THEY EXCEED THE RECOMMENDATIONS OF THESE SPECIFICATIONS.

4 Topsoil

Unless otherwise specified, areas designated for grading operations that contain a blanket of topsoil shall be stripped and placed in convenient stockpiles for later use as a topsoil blanket on the new graded areas specified herein, or as designated. Topsoil shall be stripped from all areas designated to receive fill. The stripping of material for topsoil shall be carefully determined and only the quantity required shall be stockpiled. Material stockpiled shall be placed in a satisfactory manner to afford proper drainage. When grading operations permit, instead of stockpiling, the topsoil shall be hauled and spread directly on the areas designated to receive topsoil.

5 Rock excavation

If rock is encountered, clear away earth to expose material. Notify owner and receive written instructions prior to excavation. Remove rock to a depth of 6 inches below and 6 inches on each side of pipes in trenches. A measurement of the extent of rock to be removed shall be made. Rock excavation shall be paid for in accordance with agreement with the owner.

30' 15' 0 30' 60' 90'

GRAPHIC SCALE
SCALE 1" = 30'

CONSTRUCTION PLANS FOR

SYLVAN VALLEY INDUSTRIAL BUILDING

for

TRANSYLVANIA COUNTY

City of Brevard
Transylvania County, North Carolina

#	DATE	REVISION DESCRIPTION
A	4/4/2024	ISSUE 1 - RELEASE FOR PERMITTING AND ADVERTISE FOR BID
B	5/15/2024	ISSUE 1 - ADDENDUM #3

HIGH COUNTRY ENGINEERING

HIGH COUNTRY ENGINEERING, P.C.
81 CENTRAL AVENUE
ASHEVILLE, NORTH CAROLINA 28801
T: 828.230.4511
NC FIRM NO.: C-3347

NORTH CAROLINA PROFESSIONAL SEAL 33862 ENGINEER MICHAEL R. GORCHEFF
5/15/2024

SYLVAN VALLEY INDUSTRIAL BLDG.

SHEET TITLE

GRADING & STORMWATER PLAN

PROJECT NO: WOR003

DATE: 5/15/2024

ISSUE No: B-1

SHEET NO: C-3 of 11