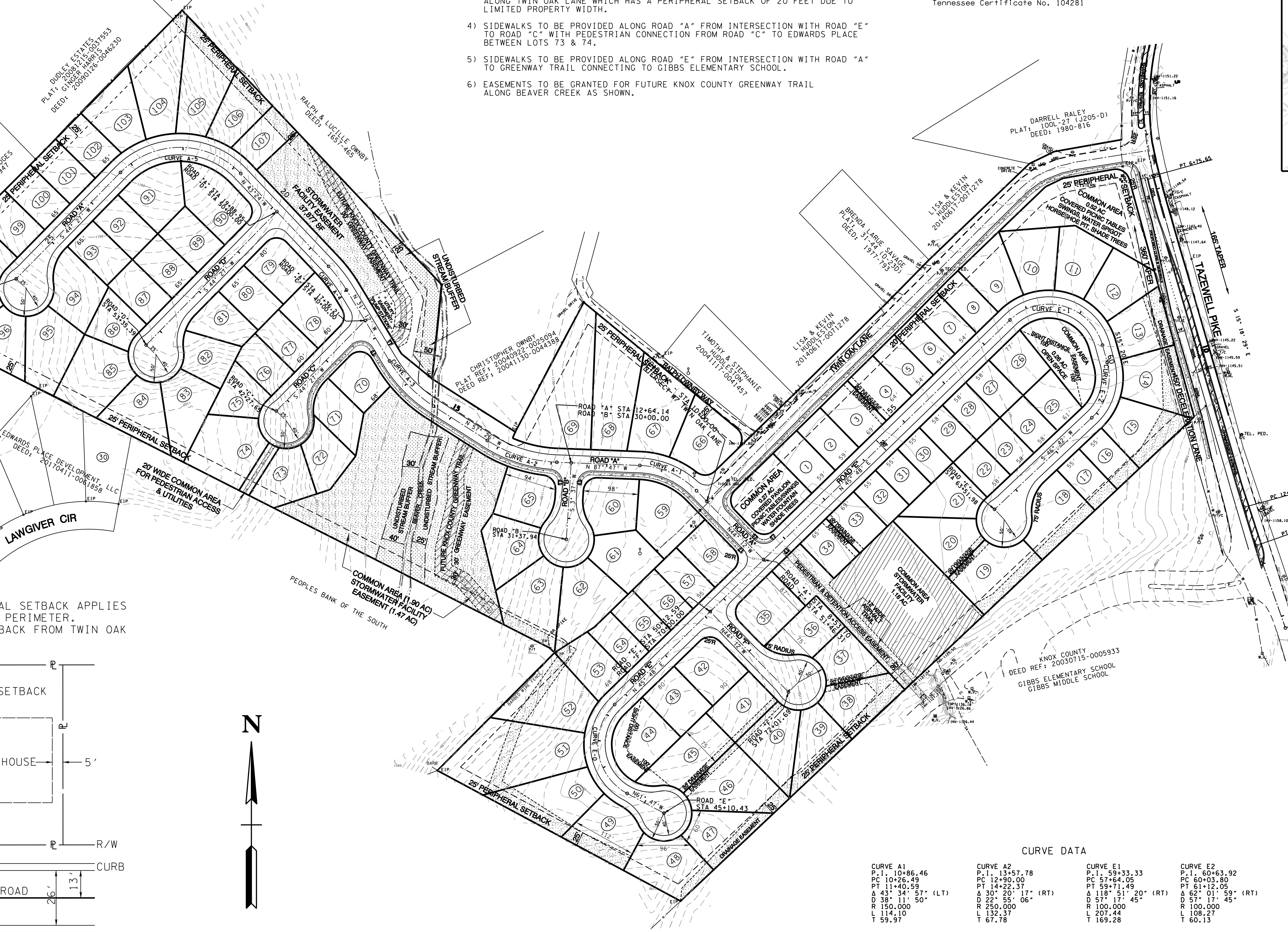
NOTES:

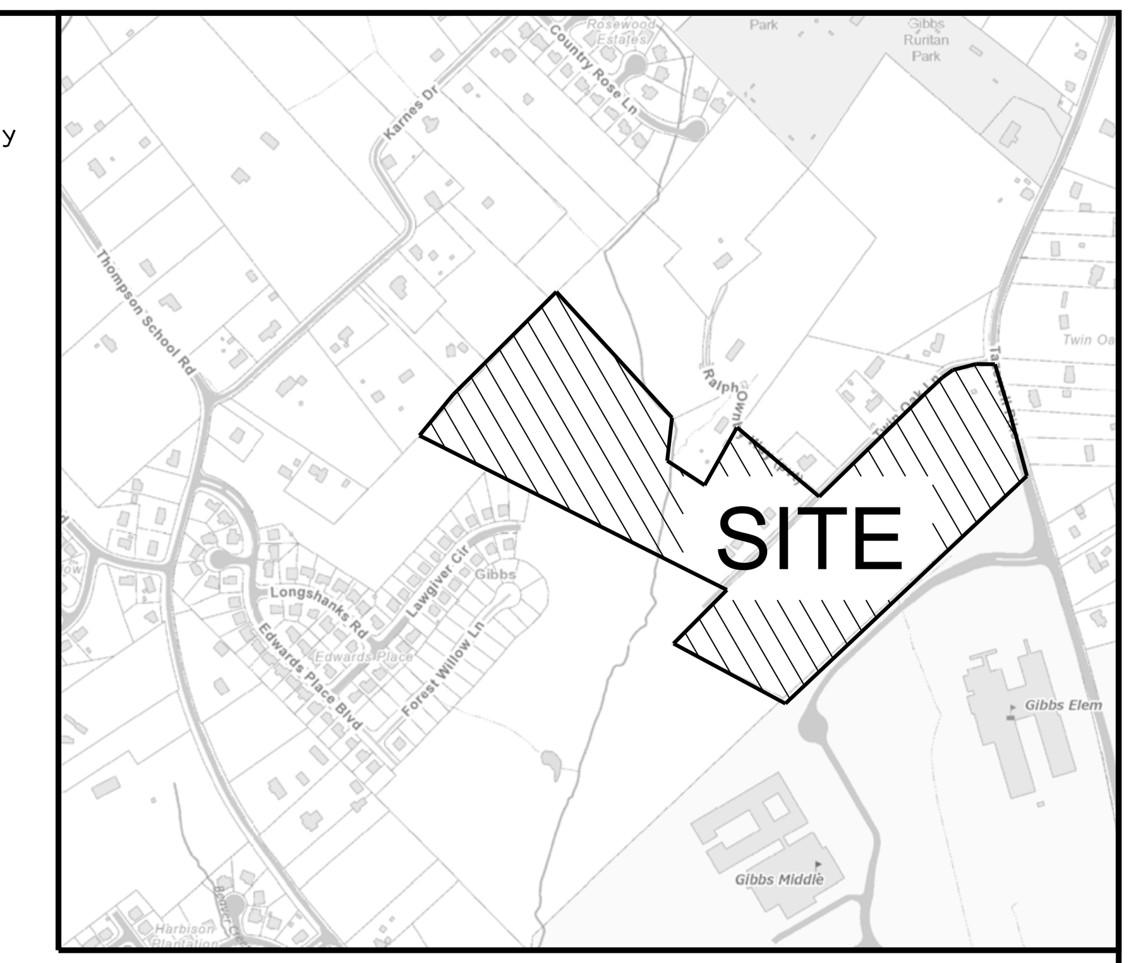
1) TWIN OAK LANE AND TAZEWELL PIKE TO BE WIDENED WITH LEFT TURN LANE ONTO TWIN OAK LANE, AND EXTENDED DECELERATION LANE FOR GIBBS SCHOOLS.
2) ACCESS TO ALL UNITS FROM INTERNAL ROAD SYSTEM ONLY. LOTS 1-9 ACCESS FROM ROAD "E" ONLY.
3) PERIPHERAL SETBACK OF 25 FEET APPLIES TO PERIMETER OF SUBDIVISION, EXCEPT ALONG TWIN OAK LANE WHICH HAS A PERIPHERAL SETBACK OF 20 FEET DUE TO LIMITED PROPERTY WIDTH.
4) SIDEWALKS TO BE PROVIDED ALONG ROAD "A" FROM INTERSECTION WITH ROAD "E" TO ROAD "C" WITH PEDESTRIAN CONNECTION FROM ROAD "C" TO EDWARDS PLACE BETWEEN LOTS 73 & 74.
5) SIDEWALKS TO BE PROVIDED ALONG ROAD "E" FROM INTERSECTION WITH ROAD "A" TO GREENWAY TRAIL CONNECTING TO GIBBS ELEMENTARY SCHOOL.
6) EASEMENTS TO BE GRANTED FOR FUTURE KNOX COUNTY GREENWAY TRAIL ALONG BEAVER CREEK AS SHOWN.

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 Garrett M. Tucker
Tennessee Certificate No. 104281

GARRETT M. TUCKER REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 104281 STATE OF TENNESSEE
8-1-20





LOCATION MAP

ALTERNATE DESIGN STANDARDS REQUIRING PLANNING COMMISSION APPROVAL:

1) REDUCTION OF OF MINIMUM CURVE RADIUS ON ROAD "A" AT STATION 10+86 FROM 250' TO 150'
2) REDUCTION OF OF MINIMUM CURVE RADIUS ON ROAD "A" AT STATION 22+39 FROM 250' TO 150'
3) REDUCTION OF OF MINIMUM CURVE RADIUS ON ROAD "E" AT STATION 59+33 FROM 250' TO 100'
4) REDUCTION OF OF MINIMUM CURVE RADIUS ON ROAD "E" AT STATION 60+63 FROM 250' TO 100'
5) REDUCTION OF OF DEPTH DOUBLE FRONTAGE LOTS 1-9 FROM 135 FEET TO MINIMUM OF 100 FEET.
6) REDUCTION OF MINIMUM CURVE RADIUS ON ROAD "E" AT STATION 47+22 FROM 250' TO 100'

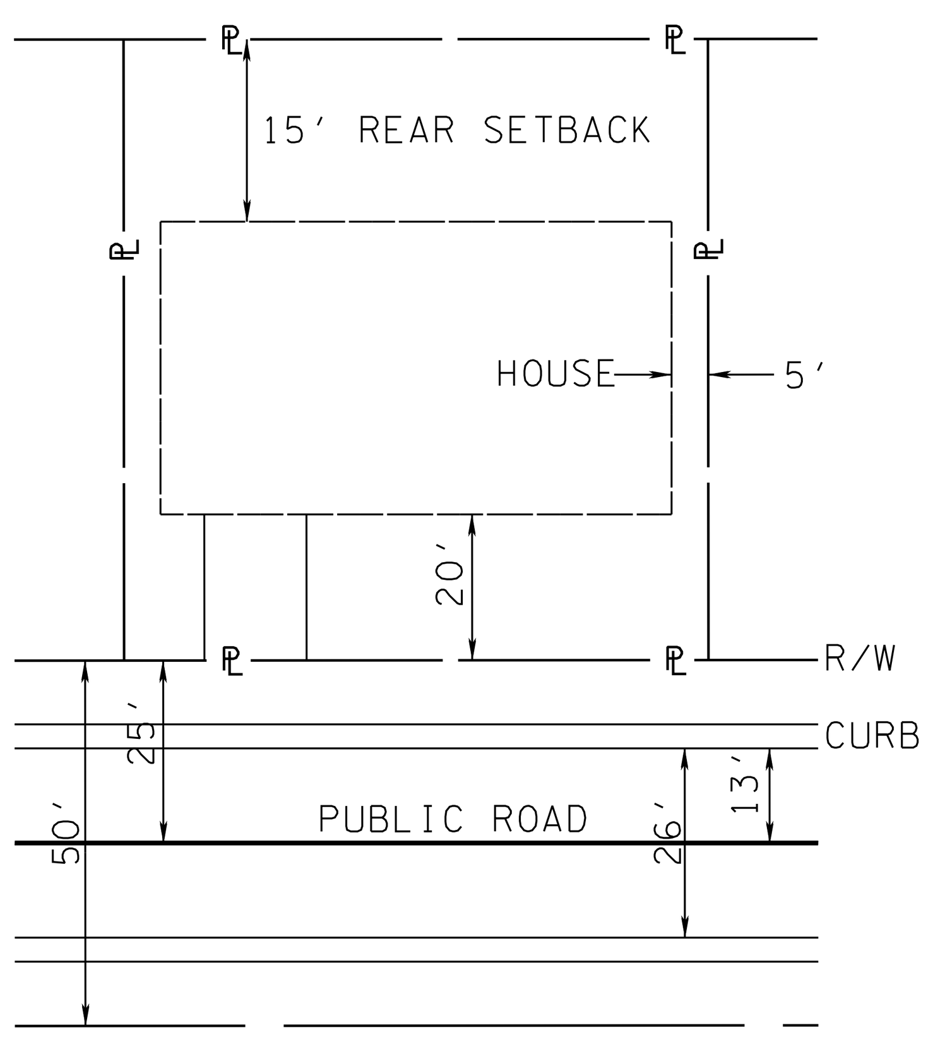
VARIANCES:

1) REDUCTION OF TANGENT LENGTH BETWEEN BROKENBACK CURVES ON ROAD "E" FROM 150' TO 32.31'
2) REDUCTION OF TANGENT LENGTH BETWEEN REVERSE CURVES ON ROAD "A" FROM 50' TO 33.06'
3) REDUCTION OF MINIMUM TANGENT LENGTH BETWEEN BROKEN BACK CURVES A-2 AND A-3 FROM 150 FEET TO 114.48 FEET.

OWNER/DEVELOPER:
HIGHWAY MARKINGS/ PAUL G. HIBBEN
8333 COPPOCK ROAD
KNOXVILLE, TN 37938
PHONE: (865) 922-1550
FAX: (865) 922-9229

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

NOTE: 25' PERIPHERAL SETBACK APPLIES AROUND SUBDIVISION PERIMETER.
20' PERIPHERAL SETBACK FROM TWIN OAK LANE FOR LOTS 1-9



TYPICAL LOT LAYOUT
(SINGLE FAMILY)

N

GRAPHIC SCALE 1"=100'
0 100 200 300

CURVE DATA

CURVE A1	CURVE A2	CURVE E1	CURVE E2
P.I. 10+86.46	P.I. 13+57.78	P.I. 59+33.33	P.I. 60+63.92
PC 10+26.49	PC 12+90.00	PC 57+64.05	PC 60+03.80
PT 11+40.59	PT 14+22.37	PT 59+71.49	PT 61+12.05
Δ 43° 34' 57" (LT)	Δ 30° 20' 17" (RT)	Δ 118° 51' 20" (RT)	Δ 62° 01' 59" (RT)
D 38° 11' 50"	D 22° 55' 06"	D 57° 17' 45"	D 57° 17' 45"
R 150.000	R 250.000	R 100.000	R 100.000
L 114.10	L 132.37	L 207.44	L 108.27
T 59.97	T 67.78	T 169.28	T 60.13

CURVE A3	CURVE A4	CURVE E0	CURVE A5
P.I. 15+95.10	P.I. 18+27.19	P.I. 47+22.04	P.I. 22+39.12
PC 15+36.85	PC 18+00.47	PC 45+85.43	PC 20+83.43
PT 16+51.31	PT 18+53.71	PT 47+73.21	PT 23+24.64
Δ 26° 13' 50" (RT)	Δ 12° 12' 04" (LT)	Δ 107° 35' 30" (LT)	Δ 92° 08' 02" (LT)
D 22° 55' 06"	D 22° 55' 06"	D 57° 17' 45"	D 38° 11' 50"
R 250.000	R 250.000	R 100.000	R 150.000
L 114.45	L 53.24	L 187.78	L 241.21
T 58.25	T 26.12	T 136.61	T 155.69

CLT MAP: 021
PARCELS: 001 & 013

DEED REFERENCE: 20051229-0056068
DEED REFERENCE: 20150917-0017914

PROPERTY ZONED: PR (<4 DU/AC)

NUMBER OF LOTS: 107

TOTAL AREA: 33.04 ACRES

Revised: 8/1/2020

PLANNING SERVICES MPC FILE NUMBER: 8-SA-20-C & 8-B-20-UR

NO.	DATE	DESCRIPTION	BY	CKD.

REVISIONS

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

TWIN OAK LANDING
CONCEPT PLAN / USE ON REVIEW

GENERAL LAYOUT

DESIGNED BY	CHECKED BY	SCALE	SHEET ONE NO. 1
GMT	RGC	1" = 100'	
DRAWN BY	DATE	FILE NO.	
JER	8-1-20	15041	OF 13 SHEETS

NOTES:

1) ALL EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES IDENTIFIED IN THIS SWPPP WILL BE INSTALLED AS RECOMMENDED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.

2) TOPSOIL WILL BE REMOVED AND EITHER TEMPORARILY STOCKPILED FOR LATER REDISTRIBUTION OR IMMEDIATELY UTILIZED FOR FINAL COVER. CLEARING AND GRUBBING WILL BE HELD TO THE MINIMUM NECESSARY FOR GRADING AND EQUIPMENT OPERATION. TOPSOIL PILES WILL BE TEMPORARILY SEEDED.

3) SEDIMENT WILL BE REMOVED FROM SILT FENCE, ROCK CHECK DAMS, HAY BALE TRAPS, AND TEMPORARY SEDIMENT TRAPS BEFORE THE DESIGN CAPACITY OF THE STRUCTURE HAS BEEN REDUCED BY 50%. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER WILL BE PICKED UP PRIOR TO ANTICIPATED STORM EVENTS, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORM WATER DISCHARGES. AFTER USE, SILT FENCES WILL BE REMOVED TO PREVENT THEM FROM BECOMING A POLLUTANT SOURCE FOR STORM WATER DISCHARGES. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT WILL BE REPLACED AT THE END OF THE WORKDAY

4) IN ACCORDANCE WITH THE TNCPG, INSPECTIONS WILL BE PERFORMED BY QUALIFIED PERSONNEL AT LEAST TWICE EVERY CALENDAR WEEK. INSPECTIONS WILL BE AT LEAST 72 HOURS APART. INSPECTIONS WILL INCLUDE DISTURBED AREAS OF THE CONSTRUCTION SITE, AREAS USED FOR STORAGE OF MATERIALS EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER AND EXIST THE SITE, AND EACH OUTFALL POINT. BASED ON INSPECTION RESULTS, MODIFICATIONS OR REPAIRS TO EXISTING CONTROL MEASURES WILL BE MADE BEFORE THE NEXT RAIN EVENT IF POSSIBLE, BUT WITHIN 7 DAYS AFTER THE NEED IS IDENTIFIED. INSPECTION DOCUMENTS WILL BE MAINTAINED ON SITE AND MADE AVAILABLE UPON REQUEST.

5) STABILIZATION WILL BE ACCOMPLISHED AS SOON AS PRACTICABLE AFTER ATTAINMENT OF FINAL GRADE AND NO LATER THAN SEVEN DAYS AFTER ATTAINING FINAL GRADE. WHERE EARTH-DISTURBING ACTIVITY HAS TEMPORARILY CEASED, TEMPORARY STABILIZATION WILL BE APPLIED WITHIN SEVEN DAYS IF THE ACTIVITY WILL NOT RESUME WITHIN 15 DAYS. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED WILL BE RECORDED AND MAINTAINED ON THE SITE. STABILIZATION METHODS MAY INCLUDE SEED AND MULCH, OR SEED AND EROSION CONTROL BLANKETS.

STORM DRAINAGE SUMMARY

FROM	ELEVATION GRATE	ELEVATION INVERT	TO	ELEVATION GRATE	ELEVATION INVERT	LENGTH	SLOPE	DIAMETER / MATERIAL
HW-1	---	1127.90	OS-1	1133.25	1128.24	34	1.00%	30" RCP
HW-2	---	1130.00	CB-1	1139.35	1130.80	114	0.70%	24" HDPE
CB-1	1139.35	1130.80	CB-2	1135.84	1132.30	200	0.75%	18" HDPE
CB-2	1135.84	1132.30	CB-3	1135.84	1132.50	26	0.77%	18" HDPE
CB-3	1135.84	1132.50	CB-29	1138.60	1134.90	127	1.89%	18" HDPE
CB-29	1138.60	1134.90	CB-30	1138.30	1135.30	71	0.56%	18" HDPE
CB-1	1139.35	1130.80	CB-4	1143.55	1135.55	172	2.76%	18" HDPE
CB-4	1143.55	1139.55	CB-5	1143.55	1140.05	26	1.92%	18" HDPE
CB-4	1143.55	1135.55	CB-6	1141.90	1136.90	88	1.53%	18" HDPE
CB-6	1141.90	1136.90	CB-7	1141.90	1138.40	26	5.77%	18" HDPE
CB-6	1141.90	1136.90	CB-8	1141.77	1137.77	80	1.09%	18" HDPE

STORM DRAINAGE SUMMARY

FROM	ELEVATION GRATE	ELEVATION INVERT	TO	ELEVATION GRATE	ELEVATION INVERT	LENGTH	SLOPE	DIAMETER / MATERIAL
HW-4	---	1129.00	AD-3	1134.76	1130.51	80	1.89%	18" HDPE
AD-3	1134.76	1130.51	CB-9	1142.90	1138.90	90	9.32%	18" HDPE
CB--9	1142.90	1138.90	CB-10	1145.30	1140.30	68	2.06%	18" HDPE
CB-10	1145.30	1140.30	CB-11	1150.20	1144.20	258	1.51%	18" HDPE
CB-11	1150.20	1144.20	CB-12	1148.25	1144.75	58	0.95%	18" HDPE
HW-3	---	1130.00	CB-13	1134.90	1131.40	126	1.11%	18" HDPE
CB-13	1134.90	1131.40	CB-14	1139.55	1135.55	136	3.05%	18" HDPE
CB-14	1139.55	1135.55	CB-15	1139.55	1136.05	26	1.92%	18" HDPE

LEGEND

- SF × SF × SF × SF — SILT FENCE
- CE — CONSTRUCTION EXIT
- IP — STORM DRAIN INLET PROTECTION
- OP — STORM DRAIN OUTLET PROTECTION
- OVERLAND DRAINAGE PATTERN
- MA — EROSION CONTOL MATTING
- CD — ROCK CHECK DAM
- 1150 — EXISTING GRADE
- 1150 — PROPOSED GRADE
- EIP — IRON PIN FOUND
- PIPE — PIPE FOUND
- G.V. — GAS VALVE
- W.M. — WATER METER
- MANHOLE
- SIGN
- W.V. — WATER VALVE
- FIRE HYDRANT
- P/T — POWER/TELEPHONE
- GUY WIRE

CONSTRUCTION SEQUENCE

PHASE 2:

1) CONSTRUCT POND #1. INSTALL POND OUTLET STRUCTURE AND LEVEL SPREADER. PLUG BOTTOM OPENING FOR USE AS TEMPORARY SEDIMENT BASIN.

2) CLEAR REMAINDER OF PHASE 2 AREA. REMOVE TOPSOIL AND STOCKPILE FOR REDISTRIBUTION. SEED TOPSOIL PILE.

3) WIDEN TWIN OAK LANE TO 26 FEET WIDE.

4) WIDEN TAZEWELL PIKE TO PROVIDE LEFT TURN LANE ONTO TWIN OAK LANE AND EXTEND DECELERATION LANE TO SCHOOL.

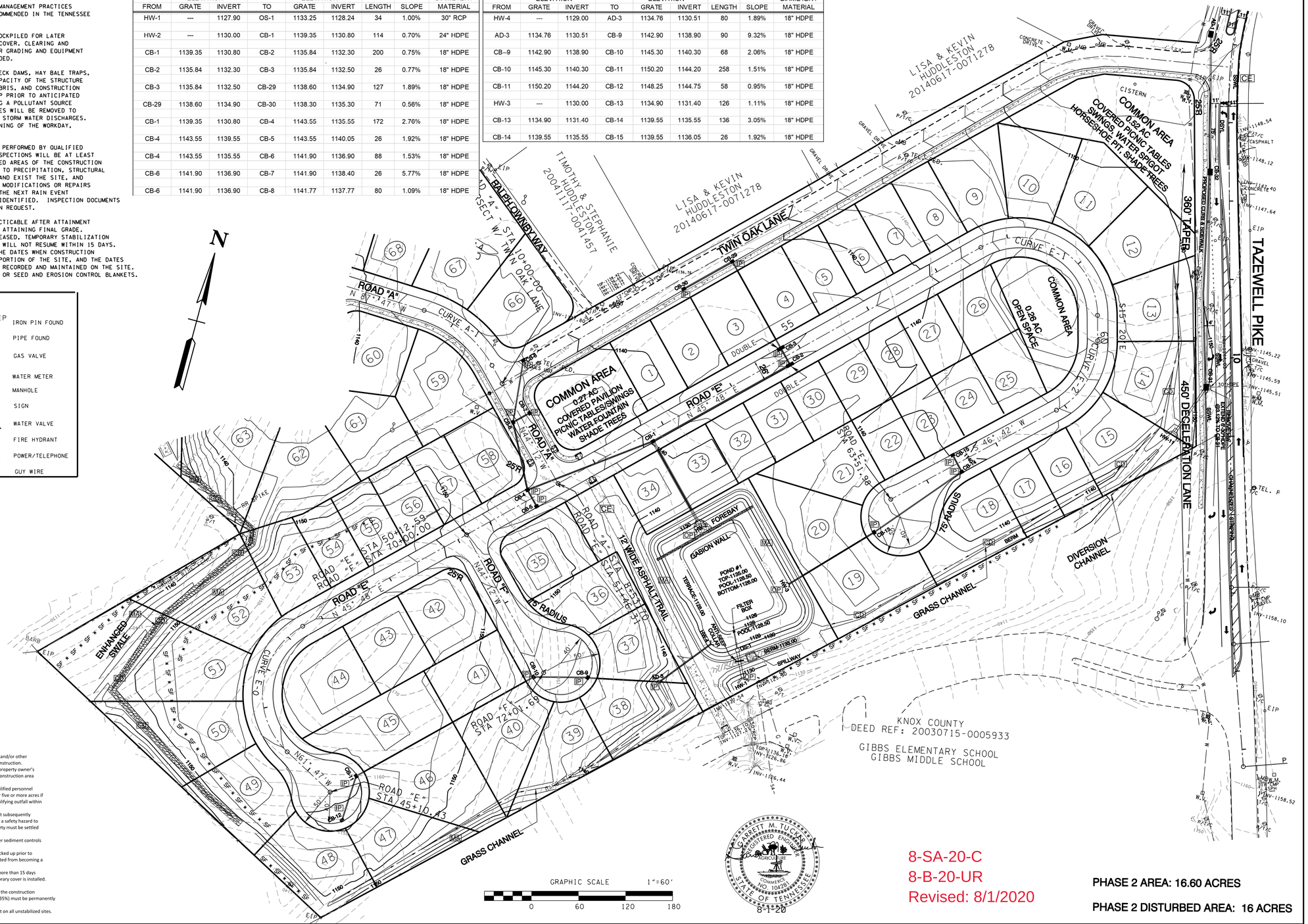
5) ROUGH GRADE SUBDIVISION ROADWAYS AND BUILDING PADS.

6) INSTALL STORM SEWER, PROVIDE INLET AND OUTLET PROTECTION.

7) INSTALL WATER AND SANITARY SEWER FACILITIES.

8) FINAL GRADE ROADWAYS AND INSTALL PAVEMENT AND CURBS.

Standard Notes:
1. This is a priority construction activity.
2. Adequate drainage, erosion and sediment control measures, best management practices and/or other stormwater management facilities shall be provided and maintained at all times during construction. Damages to adjacent property and/or the construction site caused by the contractor's or property owner's failure to provide and maintain adequate drainage and erosion/sediment control for the construction area shall be the responsibility of the property owner and/or contractor.
3. Quality assurance of erosion prevention and sediment controls shall be conducted by qualified personnel performing site assessment at each outfall involving drainage totaling 10 or more acres, or five or more acres if draining to impaired or exceptional waters. This assessment will be conducted at each qualifying outfall within a month of construction commencement. (see CGP sec 3.1.2 for assessment language)
4. Fugitive sediment that has escaped the construction site must be removed so that it is not subsequently washed into storm sewers and/or streams by the next rain and/or so that it does not pose a safety hazard to users of public streets. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining land owner.
5. Sediment should be removed from sediment traps, silt fences, sedimentation ponds, other sediment controls when design capacity has been reduced by 50%.
6. Litter, construction debris, and construction chemicals exposed to stormwater shall be picked up prior to anticipated storm events or before being carried off the site by wind, or otherwise prevented from becoming a pollution source for stormwater discharges.
7. Preconstruction vegetative ground cover shall not be destroyed, removed, or disturbed more than 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
8. Existing vegetation should be preserved to the maximum extent practicable.
9. Temporary or permanent soil stabilization must be completed no later than 15 days after the construction activity in that portion of the site has permanently or temporarily ceased. Steep slopes (>35%) must be permanently or temporarily stabilized within 7 days.
10. Site inspections shall be performed at least twice weekly at a minimum of 72 hours apart on all unstabilized sites.



GRAPHIC SCALE 1"=60'
0 60 120 180

GARRETT M. TUCKER REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 104091 STATE OF TENNESSEE
8-1-20

8-SA-20-C
8-B-20-UR
Revised: 8/1/2020

PHASE 2 AREA: 16.60 ACRES

PHASE 2 DISTURBED AREA: 16 ACRES

NO.	DATE	DESCRIPTION	BY	CKD.
		REVISIONS		

RGC&A

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

TWIN OAK LANDING
STORMWATER POLLUTION PREVENTION PLAN

GRADING & DRAINAGE PLAN SWPPP PHASE 2

DESIGNED BY	CHECKED BY	SCALE	SHEET THREE NO. 3
GMT	RGC	1" = 60'	
DRAWN BY	DATE	FILE NO.	OF 13 SHEETS
JER	8-1-20	15041	

LEGEND

SF * SF * SF *	SILT FENCE	EIP	IRON PIN FOUND
CE	CONSTRUCTION EXIT	PIPE ⊗	PIPE FOUND
IP	STORM DRAIN INLET PROTECTION	G.V.	GAS VALVE
OP	STORM DRAIN OUTLET PROTECTION	W.M.	WATER METER
——►	OVERLAND DRAINAGE PATTERN		MANHOLE
MA	EROSION CONTOL MATTING		SIGN
CD	ROCK CHECK DAM	W.V.	WATER VALVE
— — —1150— —	EXISTING GRADE		FIRE HYDRANT
——1150——	PROPOSED GRADE	P/T	POWER/TELEPHONE
			GUY WIRE

CONSTRUCTION SEQUENCE

PHASE 2:

1) CONSTRUCT PONDS #2, 3, & 4. INSTALL POND OUTLET STRUCTURES AND LEVEL SPREADER. PLUG BOTTOM OPENING FOR USE AS TEMPORARY SEDIMENT BASIN.

2) INSTALL MINOR ROAD CROSSING IN ACCORDANCE WITH GENERAL ARAP PERMIT.

3) CLEAR REMAINDER OF PHASE 3 AREA. REMOVE TOPSOIL AND STOCKPILE FOR REDISTRIBUTION. SEED TOPSOIL PILES.

4) ROUGH GRADE ROADWAYS AND BUILDING PADS.

5) INSTALL STORM SEWER, PROVIDE INLET AND OUTLET PROTECTION.

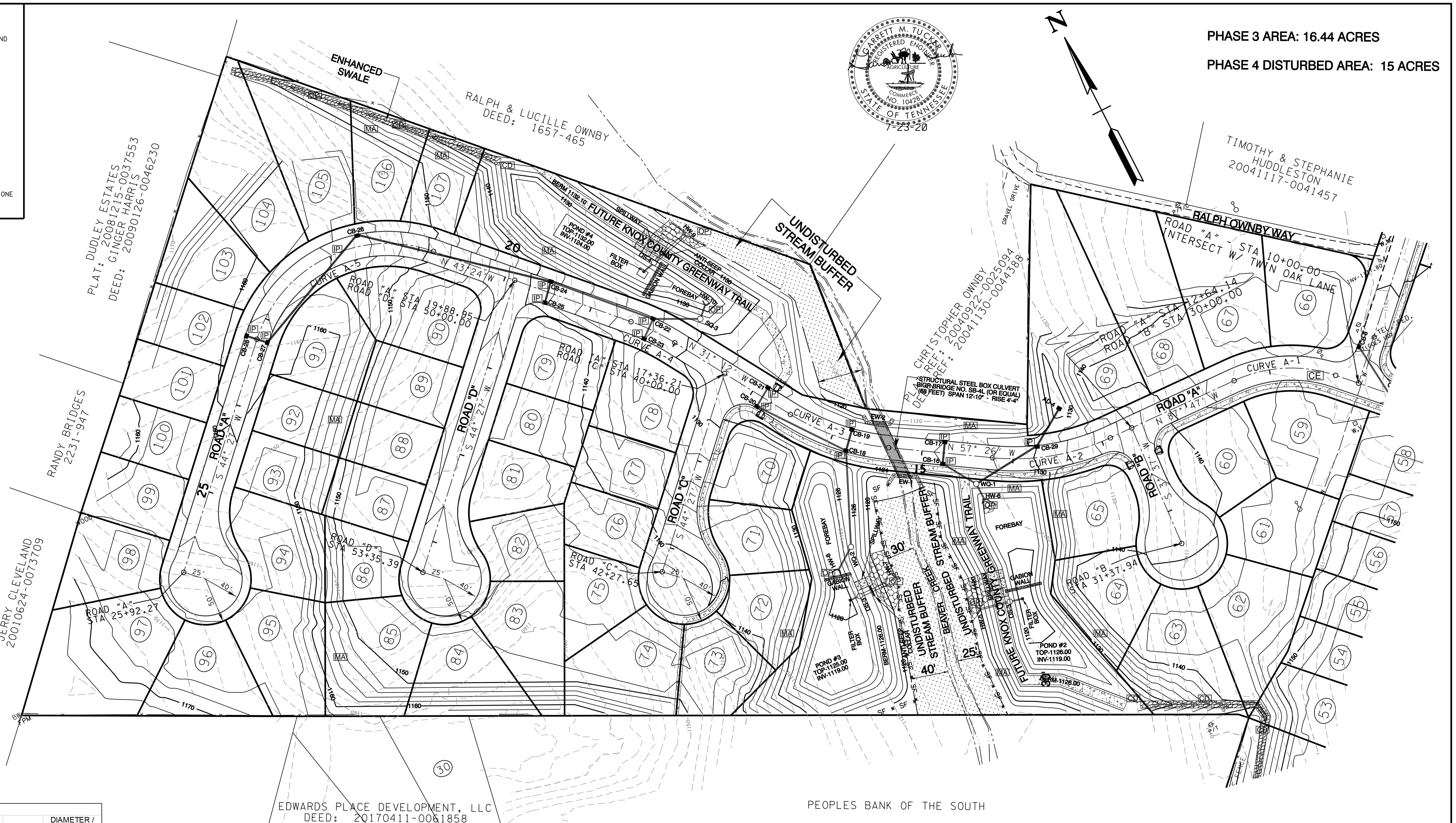
6) INSTALL WATER AND SANITARY SEWER FACILITIES.

7) FINAL GRADE ROADWAYS AND INSTALL PAVEMENT AND CURBS.

8) AFTER ALL CONSTRUCTION IS COMPLETED, AND ALL AREAS ARE STABILIZED, CONVERT TEMPORARY SEDIMENT PONDS TO PERMANENT STORMWATER DETENTION BASINS.

PHASE 3 AREA: 16.44 ACRES

PHASE 4 DISTURBED AREA: 15 ACRES



STORM DRAINAGE SUMMARY								
	ELEVATION			ELEVATION				DIAMETER /
FROM	GRATE	INVERT	TO	GRATE	INVERT	LENGTH	SLOPE	MATERIAL
HW-5	---	1118.50	OS-2	1123.00	1118.80	30	1.00%	24" RCP
HW-6	---	1122.00	WQ-1	1126.00	1122.50	16	3.13%	18" RCP
WQ-1	1126.00	1122.50	CB-16	1126.00	1123.00	40	1.25%	18" HDPE
CB-16	1126.00	1123.00	CB-17	1126.00	1123.30	26	1.15%	18" HDPE
WQ-1	1126.00	1122.50	CB-29	1130.00	1125.00	75	3.33%	18" HDPE
CB-29	1130.00	1125.00	AD-4	1130.00	1126.00	47	2.13%	18" HDPE
HW-7	---	1118.50	OS-3	1123.00	1118.80	30	1.00%	18" RCP
HW-8	---	1120.00	WQ-2	1126.00	1120.20	25	0.80%	24" HDPE
WQ-2	1126.00	1120.20	CB-18	1124.90	1120.80	102	0.59%	18" HDPE
CB-18	1124.90	1120.80	CB-19	1124.90	1121.30	26	1.92%	18" HDPE
CB-18	1124.90	1120.80	CB-20	1126.00	1122.30	109	1.38%	18" HDPE
CB-20	1126.00	1122.30	CB-21	1126.00	1122.60	26	1.15%	18" HDPE

STORM DRAINAGE SUMMARY								
	ELEVATION			ELEVATION				DIAMETER /
FROM	GRATE	INVERT	TO	GRATE	INVERT	LENGTH	SLOPE	MATERIAL
HW-9	---	1123.40	OS-4	1129.80	1123.90	40	1.25%	30" RCP
HW-10	---	1128.00	WQ-3	1132.10	1128.20	14	1.43%	24" HDPE
WQ-3	1132.10	1128.20	CB-22	1132.00	1128.50	49	0.61%	24" HDPE
CB-22	1132.00	1128.50	CB-23	1132.00	1128.80	26	1.15%	18" HDPE
CB-22	1132.00	1128.80	CB-24	1138.20	1134.20	119	4.54%	18" HDPE
CB-24	1138.30	1134.20	CB-25	1138.20	1134.70	26	1.92%	18" HDPE
CB-24	1138.30	1134.20	CB-26	1154.50	1150.50	218	7.48%	18" HDPE
CB-26	1154.50	1150.50	CB-27	1158.20	1153.70	154	2.08%	18" HDPE
CB-27	1158.20	1153.70	CB-28	1158.20	1154.20	26	1.92%	18" HDPE
EW-1	---	1116.92	EW-2	---	1117.60	68	1.00%	BOX CULVERT

Standard Notes:
1. This is a priority construction activity.
2. Adequate drainage, erosion and sediment control measures, best management practices and/or other stormwater management facilities shall be provided and maintained at all times during construction. Damages to adjacent property and/or the construction site caused by the contractor's or property owner's failure to provide and maintain adequate drainage and erosion/sediment control for the construction area shall be the responsibility of the property owner and/or contractor.
3. Quality assurance of erosion prevention and sediment controls shall be conducted by qualified personnel performing site assessment at each outfall involving drainage totaling 10 or more acres, or five or more acres if draining to impaired or exceptional waters. This assessment will be conducted at each qualifying outfall within a month of construction commencement. (see CGP sec 3.1.2 for assessment language)
4. Fugitive sediment that has escaped the construction site must be removed so that it is not subsequently washed into storm sewers and/or streams by the next rain and/or so that it does not pose a safety hazard to users of public streets. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining land owner.
5. Sediment should be removed from sediment traps, silt fences, sedimentation ponds, other sediment controls when design capacity has been reduced by 50%.
6. Litter, construction debris, and construction chemicals exposed to stormwater shall be picked up prior to anticipated storm events or before being carried off the site by wind, or otherwise prevented from becoming a pollution source for stormwater discharges.
7. Preconstruction vegetative ground cover shall not be destroyed, removed, or disturbed more than 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
8. Existing vegetation should be preserved to the maximum extent practicable.
9. Temporary or permanent soil stabilization must be completed no later than 15 days after the construction activity in that portion of the site has permanently or temporarily ceased. Steep slopes (>35%) must be permanently or temporarily stabilized within 7 days.
10. Site inspections shall be performed at least twice weekly at a minimum of 72 hours apart on all unstabilized sites.

8-SA-20-C
8-B-20-UR
Revised: 7/23/2020

GRAPHIC SCALE 1"=60'

0 60 120 180

NO.	DATE	DESCRIPTION	BY	CKD.

REVISIONS

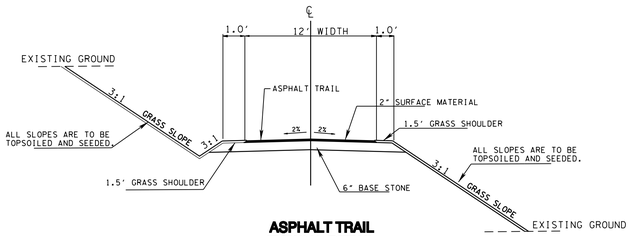
ROBERT G. CAMPBELL & ASSOC., L.P.
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

TWIN OAK LANDING
STORMWATER POLLUTION PREVENTION PLAN

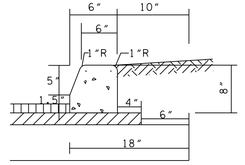
GRADING & DRAINAGE PLAN SWPPP PHASE 3

DESIGNED BY	CHECKED BY	SCALE
GMT	RGC	1" = 60'
DRAWN BY	DATE	FILE NO.
JER	7-23-20	15041

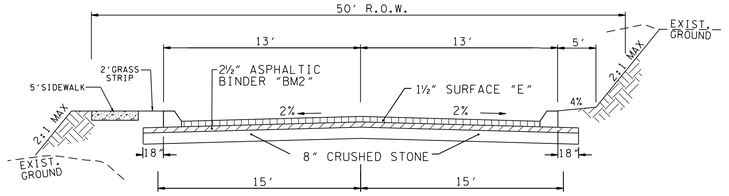
SHEET FOUR NO. 4 OF 13 SHEETS



ASPHALT TRAIL
TYPICAL DETAIL



STANDARD DETAIL 6" EXTRUDED CURB



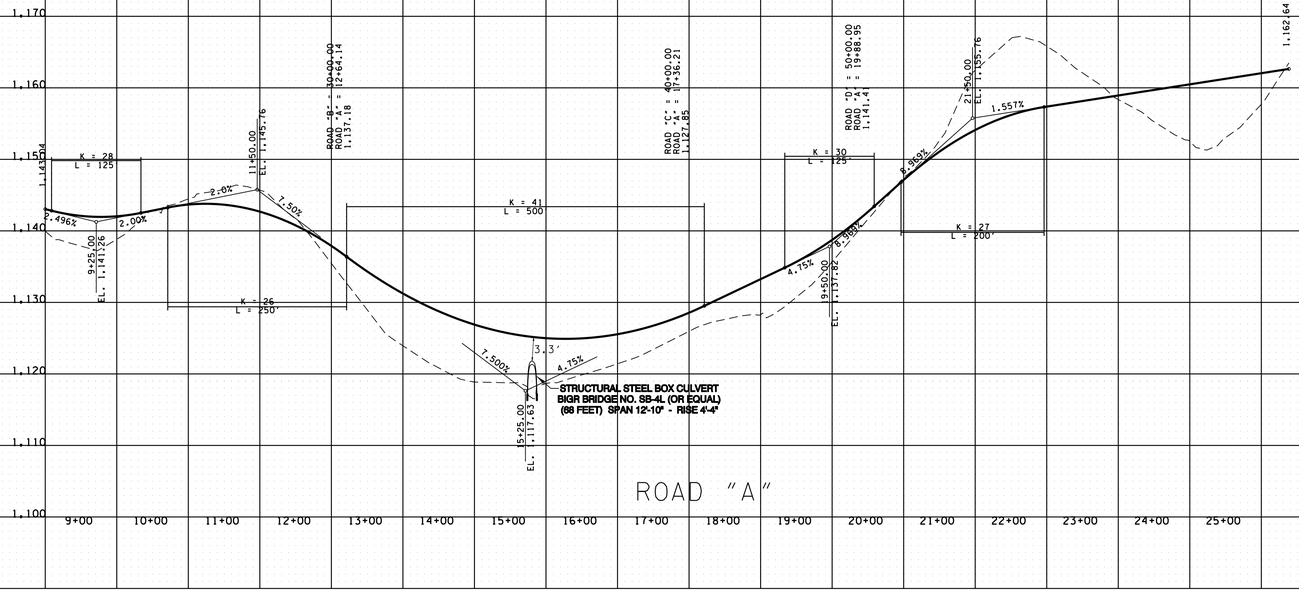
TYPICAL 2 LANE STREET
PUBLIC ROADS

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.)

* "D" MIX REQUIRED ON FINAL SURFACE WHERE GRADE IS 10% OR GREATER.

8-SA-20-C
8-B-20-UR
Revised: 7/23/2020



NO.	DATE	DESCRIPTION	BY	CKD.
		REVISIONS		

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

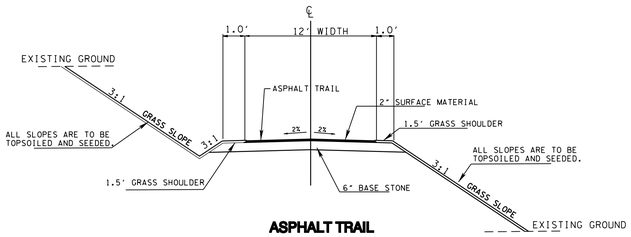
TWIN OAK LANDING

ROAD PROFILES

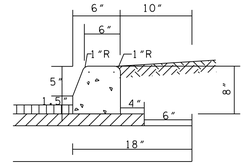
DESIGNED BY	CHECKED BY	SCALE
GMT	RGC	1"=100' HORZ. 1"=10' VERT.
DRAWN BY	DATE	FILE NO.
JER	7-23-20	15041

SHEET FIVE NO. 5
OF 13 SHEETS

GARRETT M. TUCKER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 104291
STATE OF TENNESSEE

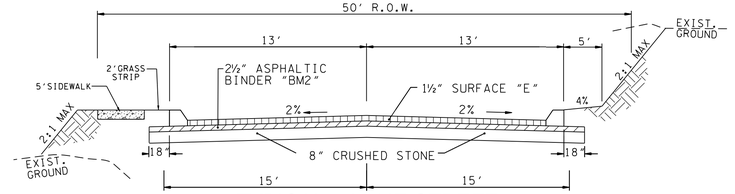


ASPHALT TRAIL
TYPICAL DETAIL



STANDARD DETAIL 6" EXTRUDED CURB

8-SA-20-C
8-B-20-UR
Revised: 8/1/2020

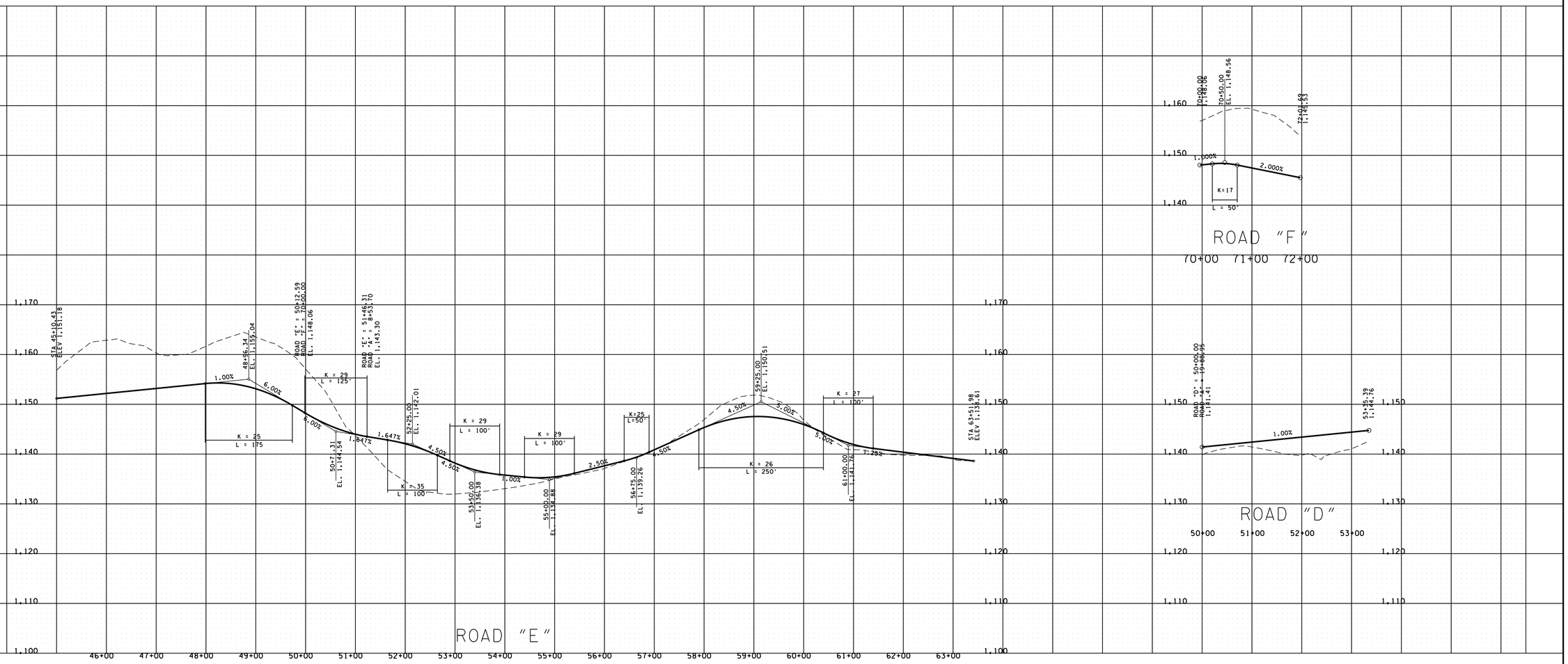


TYPICAL 2 LANE STREET
PUBLIC ROADS

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.)

• "D" MIX REQUIRED ON FINAL SURFACE WHERE GRADE IS 10% OR GREATER.



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		REVISIONS		

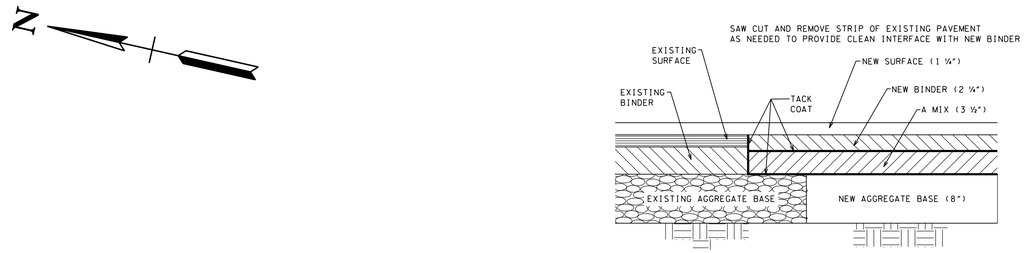
RGC&A

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

TWIN OAK LANDING

ROAD PROFILES

DESIGNED BY	CHECKED BY	SCALE	SHEET SIX
GMT	RGC	1"=100' HORZ. 1"=10' VERT.	NO. 6
DRAWN BY	DATE	FILE NO.	
JER	8-1-20	15041	OF 13 SHEETS



TAZEWELL PIKE WIDENING DETAIL
TDOT PAVEMENT SECTION
NO SCALE

TDOT STANDARD DRAWINGS TO BE REFERENCED:

SIDEWALKS: RP-S-7

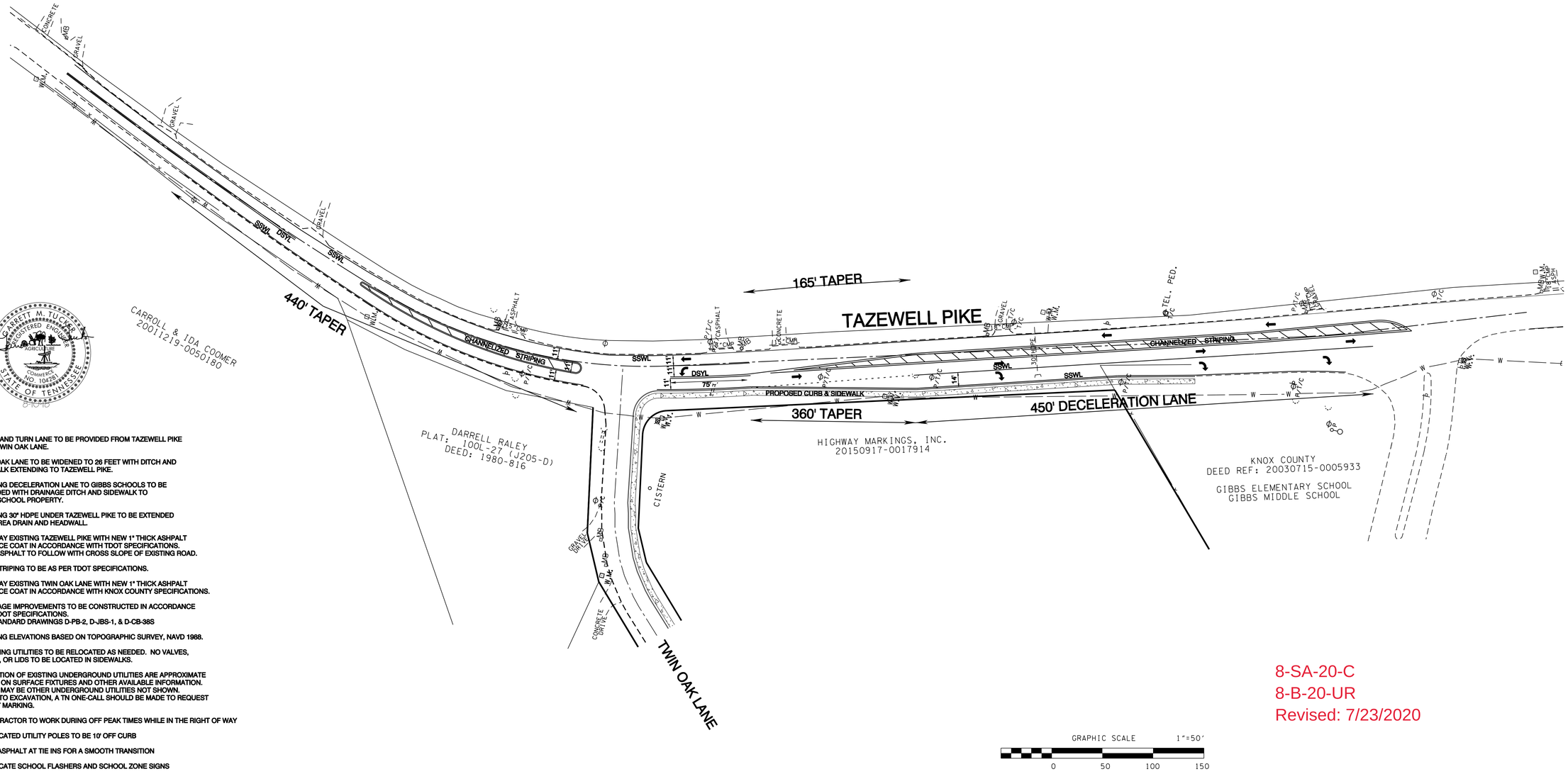
CURB: RP-NMC-10

CURB RAMPS: RP-H-3
RP-H-4
RP-H-5
RP-H-8
RP-H-9

STRIPING: T-M-1
T-M-2
T-M-3
T-M-4

LEGEND

- EIP — IRON PIN FOUND
- PIPE — PIPE FOUND
- G.V. — GAS VALVE
- W.M. — WATER METER
- MANHOLE
- SIGN
- W.V. — WATER VALVE
- FIRE HYDRANT
- P/T — POWER/TELEPHONE
- GUY WIRE
- SURVEY CONTROL POINT



GARRETT M. TUCKER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 104281
STATE OF TENNESSEE

NOTES:

1) LEFT HAND TURN LANE TO BE PROVIDED FROM TAZEWELL PIKE ONTO TWIN OAK LANE.

2) TWIN OAK LANE TO BE WIDENED TO 26 FEET WITH DITCH AND SIDEWALK EXTENDING TO TAZEWELL PIKE.

3) EXISTING DECELERATION LANE TO GIBBS SCHOOLS TO BE EXTENDED WITH DRAINAGE DITCH AND SIDEWALK TO GIBBS SCHOOL PROPERTY.

4) EXISTING 30" HDPE UNDER TAZEWELL PIKE TO BE EXTENDED WITH AREA DRAIN AND HEADWALL.

5) OVERLAY EXISTING TAZEWELL PIKE WITH NEW 1" THICK ASHPALT SURFACE COAT IN ACCORDANCE WITH TDOT SPECIFICATIONS. NEW ASPHALT TO FOLLOW WITH CROSS SLOPE OF EXISTING ROAD.

6) NEW STRIPING TO BE AS PER TDOT SPECIFICATIONS.

7) OVERLAY EXISTING TWIN OAK LANE WITH NEW 1" THICK ASHPALT SURFACE COAT IN ACCORDANCE WITH KNOX COUNTY SPECIFICATIONS.

8) DRAINAGE IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH TDOT SPECIFICATIONS.
SEE STANDARD DRAWINGS D-PB-2, D-JBS-1, & D-CB-38S

9) EXISTING ELEVATIONS BASED ON TOPOGRAPHIC SURVEY, NAVD 1988.

10) EXISTING UTILITIES TO BE RELOCATED AS NEEDED. NO VALVES, BOXES, OR LIDS TO BE LOCATED IN SIDEWALKS.

11) LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON SURFACE FIXTURES AND OTHER AVAILABLE INFORMATION. THERE MAY BE OTHER UNDERGROUND UTILITIES NOT SHOWN. PRIOR TO EXCAVATION, A TN ONE-CALL SHOULD BE MADE TO REQUEST UTILITY MARKING.

12) CONTRACTOR TO WORK DURING OFF PEAK TIMES WHILE IN THE RIGHT OF WAY

13) RELOCATED UTILITY POLES TO BE 10' OFF CURB

14) MILL ASPHALT AT TIE INS FOR A SMOOTH TRANSITION

15) RELOCATE SCHOOL FLASHERS AND SCHOOL ZONE SIGNS

8-SA-20-C
8-B-20-UR
Revised: 7/23/2020

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CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

TWIN OAK LANDING
TAZEWELL PIKE (S.R. 331) - WIDENING & STRIPING PLAN

PROPOSED LAYOUT

DESIGNED BY	CHECKED BY	SCALE	SHEET NO.
GMT	RGC	AS SHOWN	2
DRAWN BY	8-10-18	FILE NO.	OF SIX SHEETS
GMT		15041	