



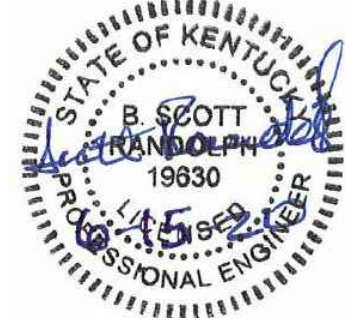
CONSTRUCTION PLANS FOR:
FiveStar #1910
NEW BUILDING CONSTRUCTION
CAVE MILL ROAD AT CAVE MILL STATION BLVD.
BOWLING GREEN, KY

CERTIFICATE OF OWNERSHIP
I (WE) DO HEREBY CERTIFY THAT I AM (WE ARE) THE ONLY OWNER(S) OF THE
PROPERTY SHOWN HEREON, AND DO ADOPT THIS AS MY (OUR) FINAL
DEVELOPMENT PLAN FOR THE PROPERTY.

DATE _____

OWNER _____

OWNER _____



CIVIL ENGINEER:
KENNER RANDOLPH
ENGINEERING & SURVEYING
199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167



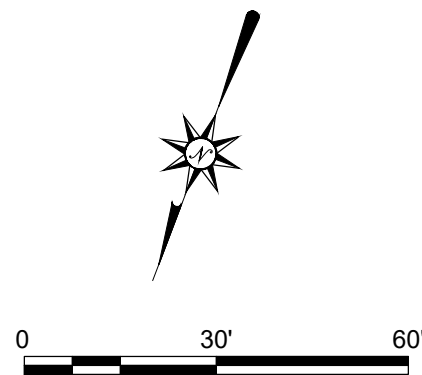
INDEX:

C1.0	EXISTING SITE & DEMOLITION PLAN
C2.0	PROPOSED SITE PLAN
C2.1	EROSION CONTROL PLAN
C2.2	PROPOSED GRADING PLAN
C2.3	ENLARGED GRADING PLAN
C2.4	PROPOSED LANDSCAPING PLAN
C3.0	DETAILS
C3.1	DETAILS



VICINITY MAP BOWLING GREEN, KY

TOPOGRAPHIC SURVEY
FIVESTAR



KEYNOTES

1. TO BE REMOVED. SAW CUT PAVEMENT AND CONCRETE TO NEAT LINES.
2. RELOCATE EXISTING GAS LINE.

CONTACTS

WATER, SEWER, & ELECTRIC
BOWLING GREEN MUNICIPAL UTILITIES
801 CENTER STREET
BOWLING GREEN, KY 42102

HEALTH DEPARTMENT
BARREN RIVER DISTRICT HEALTH DEPT.
1109 STATE STREET
BOWLING GREEN, KY 42101

BUILDING DEPARTMENT
707 E. MAIN AVENUE
P.O. BOX 430
BOWLING GREEN, KY 42101

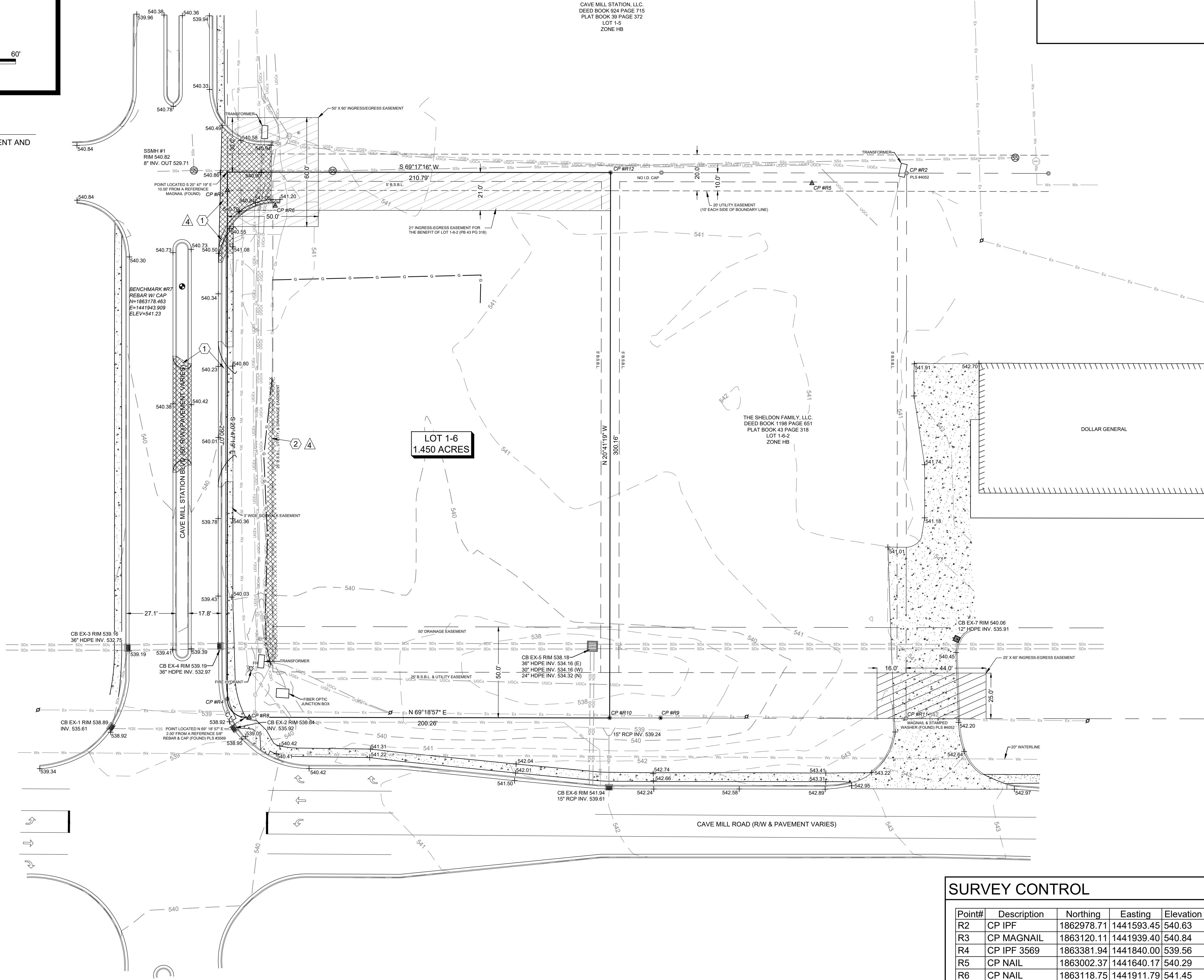
FIRE DEPARTMENT
625 EAST 6TH AVENUE
BOWLING GREEN, KY 42101

COMMUNICATIONS
AT&T
1061 LOVERS LANE
BOWLING GREEN, KY 42101

GAS
ATMOS ENERGY
2850 RUSSELLVILLE RD
BOWLING GREEN, KY 42101

FLOOD PLAIN INFO

THE PROPERTY SHOWN HEREON IS LOCATED WITHIN A FEMA SPECIAL FLOOD HAZARD AREA ACCORDING TO FIRM #21227C0308E WITH AN EFFECTIVE DATE OF 5/2/2007 BUT HAS BEEN REMOVED BASED UPON LOMR-F CASE NO. 07-04-3536A DATED JULY 26, 2007.



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	110.00'	115.73'	14.16'	S 65°46'28" E	90°06'30"

SITE DATA

1.450 ACRES OR 63,161 SQ. FT.

ZONE HB

SETBACKS
FRONT = 25'
SIDE = 5'
REAR = 5'

SURVEYOR'S NOTES

1. IN PERFORMING THIS SURVEY, NO GUARANTEE IS MADE AS TO THE EXISTENCE, SIZE, DEPTH, CONDITION, CAPACITY OR LOCATION OF ANY UTILITY EXISTING ON THE SITE, WHETHER PRIVATE, MUNICIPAL OR PUBLICLY OWNED.
2. NO EXTENSIVE INVESTIGATION HAS BEEN PERFORMED TO SEARCH FOR RECORDS OR DOCUMENTATION OF EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT A PROFESSIONAL TITLE SEARCH MAY DISCLOSE.
3. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED OR TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT PRIOR WRITTEN PERMISSION OF THE SURVEYOR. COPIES OF THIS PLAN WITHOUT AN ORIGINAL SIGNATURE AND SEAL ARE NOT VALID. THIS PLAT REPRESENTS A BOUNDARY SURVEY AND IS IN COMPLIANCE WITH 201 KAR 18:150.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON WAS PERFORMED UNDER MY DIRECTION BY MEANS OF RTK GPS MEASUREMENTS USING TRIMBLE R10 AND TRIMBLE R8S DUAL FREQUENCY GPS RECEIVERS WHEN ACCEPTABLE AND CONVENTIONAL MEANS (RANDOM TRAVERSE), FROM GPS CONTROL POINTS, WHEN NECESSARY. GPS MEASUREMENTS HAD A STATICAL ERROR THAT DID NOT EXCEED 0.05' +100 PPM PER DISTANCE ACCURACY AND RELATIVE POSITIONAL ACCURACY. WHERE CONVENTIONAL METHODS WERE USED, THE UNADJUSTED PRECISION RATIO OF THE TRAVERSE WAS A MINIMUM OF 1:56,729 AND WAS NOT ADJUSTED. THE SURVEY SHOWN HEREON IS AN "URBAN" SURVEY AND THE ACCURACY AND PRECISION OF SAID SURVEY MEETS OR EXCEEDS ALL THE SPECIFICATIONS OF THE CLASSIFICATION FOR THE COMMONWEALTH OF KENTUCKY.

CHRIS R. KENNER, PLS #4120

DATE

REFERENCE MERIDIAN

THE BEARINGS SHOWN HEREON ARE REFERENCED TO GRID NORTH OF THE NAD83 KENTUCKY SOUTH STATE PLANE COORDINATE SYSTEM. DISTANCES SHOWN ARE GRID DISTANCES. ELEVATIONS ARE BASED UPON NAVD83 GEOID 12BUS. ALL MEASUREMENTS DERIVED FROM AN INITIAL GPS OBSERVATION USING A VRS NETWORK OF KY CORS STATIONS.

LEGEND

- 5/8" REBAR & CAP (FOUND) PLS #3569 U.N.O.
- 5/8" REBAR & CAP (FOUND) PLS #3922
- MEANDER POINT
- BOUNDARY LINE THIS SURVEY
- APPROXIMATE ADJOINER OR R/W LINES
- BUILDING SETBACK LINES & EASEMENTS
- EXISTING ROADWAY AS LABELED
- EXISTING FENCE (NOT THE BOUNDARY LINE)
- EXISTING WATERLINE
- EXISTING GAS LINE
- EXISTING STORM PIPE
- EXISTING SANITARY SEWER
- EXISTING PRIMARY OVERHEAD ELECTRIC
- EXISTING SECONDARY OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND COMMUNICATIONS
- CENTERLINE DITCH
- EXISTING WATERLINE VALVE
- EXISTING WATER METER
- EXISTING GAS VALVE
- EXISTING LIGHT POLE
- POWER POLE
- CONCRETE PAVEMENT
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR

VICINITY MAP BOWLING GREEN, KY



SURVEY CONTROL

Point#	Description	Northing	Easting	Elevation
R2	CP IPF	1862978.71	1441593.45	540.63
R3	CP MAGNAIL	1863120.11	1441939.40	540.84
R4	CP IPF 3569	1863381.94	1441840.00	539.56
R5	CP NAIL	1863002.37	1441640.17	540.29
R6	CP NAIL	1863118.75	1441911.79	541.45
R7	CP IPF	1863178.46	1441943.91	541.23
R8	CP IPF 3569	1863387.04	1441825.22	539.16
R9	CP IPF 3922	1863307.10	1441613.53	538.22
R10	CP IPF 3922	1863317.01	1441639.74	538.47
R11	MAGNAIL 3922	1863259.38	1441487.24	541.96
R12	IPF 3922	1863036.21	1441745.78	540.77



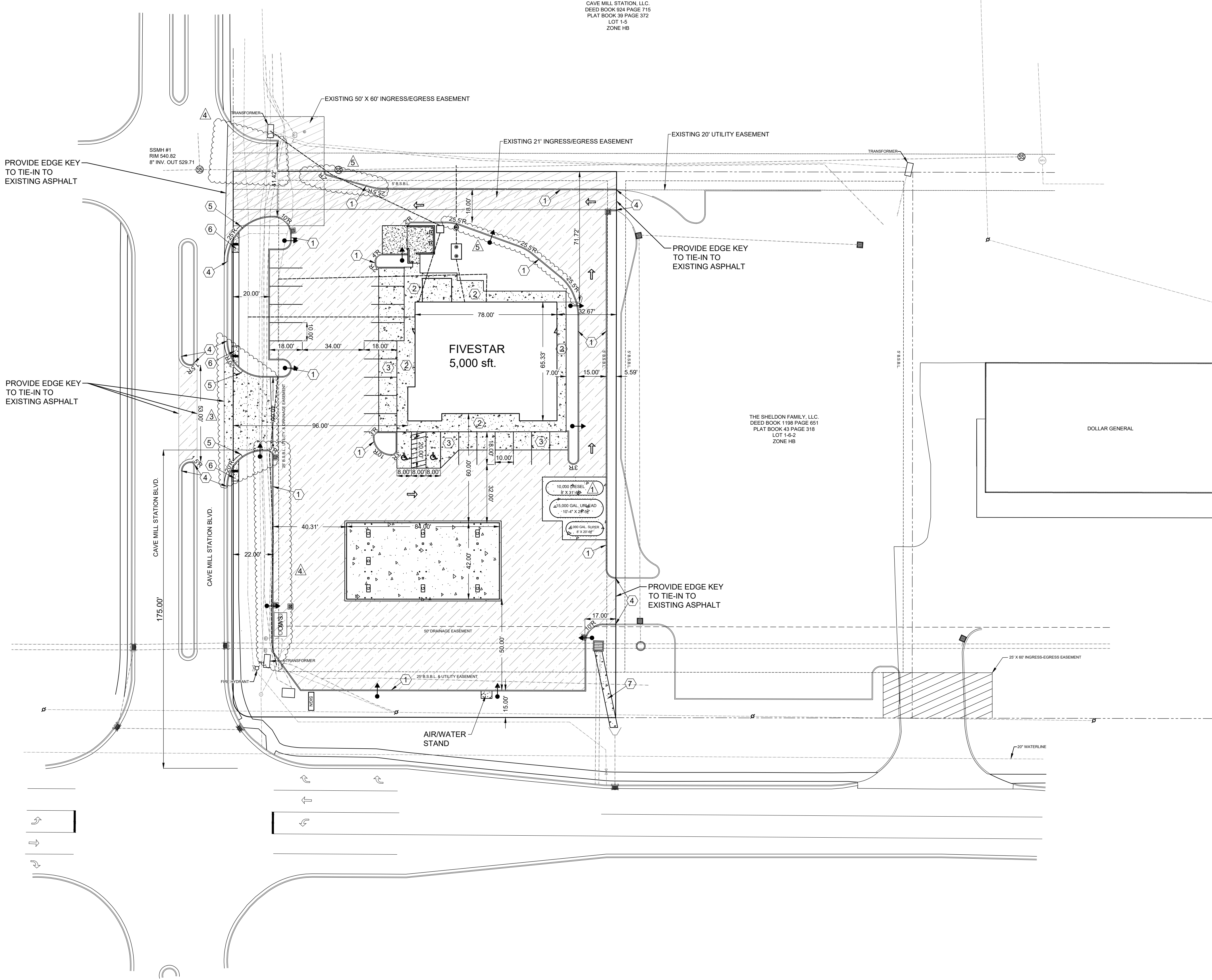
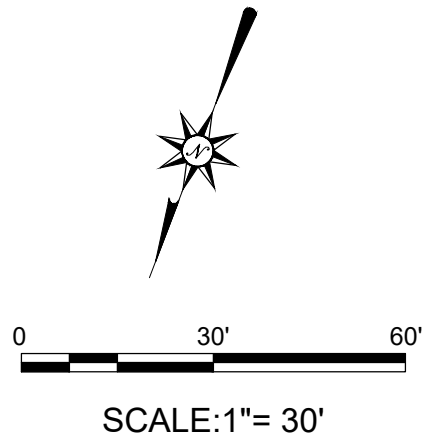
REVISION	DATE	DESCRIPTION
1	8-14-2020	REVISED DEMO PLAN FOR UTILITY RELOCATION & ENTRANCE

KENNER RANDOLPH
ENGINEERING & SURVEYING
199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167

SURVEYOR:	CLIENT ADDRESS:	DWN BY:	CRD BY:	FINAL SURVEY DATE:	CRD FILE:	FILE NAME:
CRK	NEWCOMB OIL 961 WITHROW COURT BARDSTOWN, KY 40004	BSR	BSR	10/20	1912021E	1912021E

EXISTING CONDITIONS
& DEMOLITION PLAN
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY

SHEET
IDENTIFICATION
C1.0



GENERAL NOTES:

1. THE EXISTING UTILITIES SHOWN WERE FIELD SURVEYED FROM MARKINGS PROVIDED BY UTILITY COMPANIES AND ARE APPROXIMATE LOCATIONS. OTHER UTILITIES MAY EXIST ON THIS SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING 811 AND LOCATING ALL UTILITIES BEFORE ANY EXCAVATION BEGINS.
2. MORE THAN 1 ACRE OF LAND SHOULD BE DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL SUBMIT AN NOI WITH THE STATE OF KENTUCKY PRIOR TO BEGINNING ANY GRADING WORK.
3. NO GRADING, STRIPPING, EXCAVATION, FILLING, OR OTHER DISTURBANCE OF THE NATURAL GROUND COVER SHALL TAKE PLACE UNLESS AND UNTIL WARREN COUNTY HAS APPROVED THE DEVELOPER'S SOIL EROSION CONTROL PROCEDURES AND EROSION CONTROL PLAN.
4. NO BUILDING PERMITS SHALL BE ISSUED UNTIL A FINAL DEVELOPMENT PLAN IS APPROVED BY THE PLANNING COMMISSION AND ALL CONDITIONS HAVE BEEN MET.
5. ALL CURB RADII ARE 5' TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

SITE DATA

1. CURRENT ZONING FOR THE LOT: HB.
2. TOTAL LOT AREA IS 1.45 ACRES OR 63,161 SFT.
3. PROPOSED LOT COVERAGE INCLUDING THE BUILDING IS 49,829 SFT. = 78.9%
4. TOTAL DISTURBED AREA INCLUDING UTILITIES IS 67,930 SFT.
5. FRONT YARD BUILDING SETBACK IS 25'.
6. SIDE YARD BUILDING SETBACK IS 5'.
7. REAR YARD BUILDING SETBACK IS 5'.

PARKING SPACE TABLE

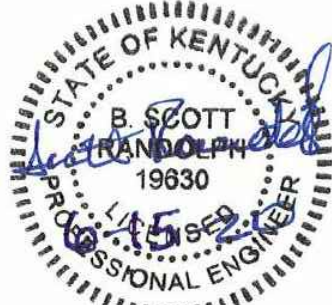
BUILDING SIZE	SPACES REQUIRED	SPACES PROVIDED
5,000 SFT.	25	38 INCLUDING 2 ADA SPACES.

KEYNOTES

1. 12" CURB AND GUTTER (SEE DETAIL 10 SHEET C3.0).
2. ALL CURB RADII SHALL BE 5' TO THE FACE OF CURB UNLESS NOTED OTHERWISE.
3. TURNDOWN SIDEWALK (SEE DETAIL 9 SHEET C3.0).
4. BLACK CONCRETE SLAB.
5. TIE-IN TO EXISTING CURB AND GUTTER.
6. TRANSITION FROM 24" CURB AND GUTTER TO STANDARD 12" CURB AND GUTTER.
7. SIDEWALK RAMP (SEE DETAIL 6 SHEET C3.1).
8. 4' WIDE CONCRETE SWALE (SEE DETAIL 4 SHEET C3.1).

LEGEND

---	BOUNDARY LINE THIS SURVEY
---	APPROXIMATE ADJOINER OR R-O-W LINES
---	EXISTING SETBACK LINES OR EASEMENTS
---	EXISTING ROADWAY AS LABELED
---	EXISTING FENCE
---	EXISTING WATERLINE
---	EXISTING SANITARY SEWER LINE
---	EXISTING SANITARY SEWER MANHOLE
---	EXISTING PRIMARY OVERHEAD ELECTRIC
---	EXISTING POWER POLE
---	EXISTING TRAFFIC SIGNAL CABLES
---	EXISTING GAS LINE
---	EXISTING STORM SEWER
---	EXISTING DITCH CENTERLINE
---	EXISTING STORM INLET
---	PROPOSED SANITARY SEWER LINE
---	PROPOSED GAS LINE
---	PROPOSED UNDERGROUND ELECTRIC
---	PROPOSED WATERLINE
---	PROPOSED SANITARY SEWER CLEANOUT
---	PROPOSED STORM INLET
---	PROPOSED LIGHT POLE
---	PROPOSED CONCRETE PAVEMENT
---	PROPOSED STANDARD ASPHALT PAVEMENT



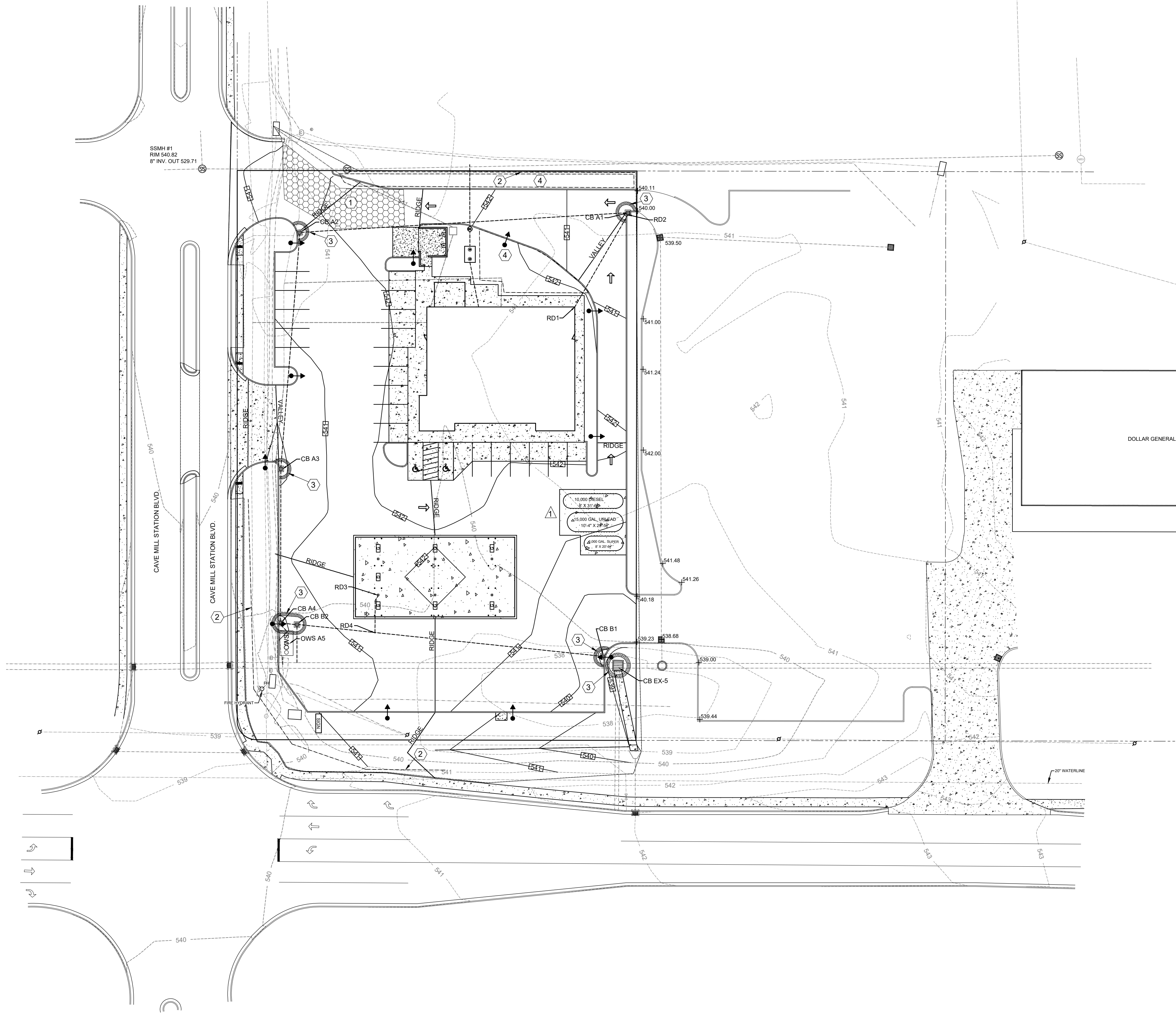
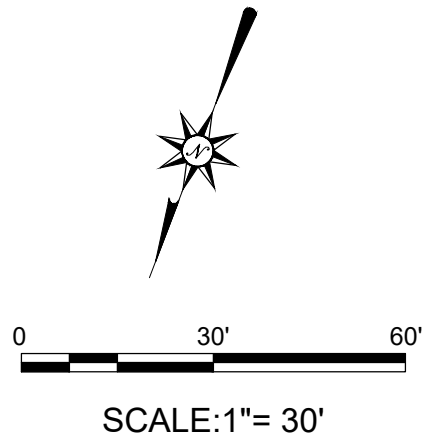
REVISION	DATE	DESCRIPTION
1	9-8-2020	REVISED CURB LOCATION AND GRADES
2	8-14-2020	REVISED GRADES, UTILITIES, CURB LOCATION AND ENTRANCE
3	8-5-2020	REVISED GRADES AND ADDED CONCRETE ENTRANCE
4	7-8-2020	REVISIONS PER BG CCPC COMMENTS
5		

KENNER RANDOLPH
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199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167

ENGINEER: BSR	CKD BY: CRK
DWN BY: BSR	CRD FILE: 1912021E
FILE NAME: 1912021E	
CLIENT ADDRESS: NEWCOMB OIL 951 WITHROW COURT BARDSTOWN, KY 40004	PROPERTY ADDRESS: 1847 CAVE MILL ROAD BOWLING GREEN, KY

SITE PLAN
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY

SHEET
IDENTIFICATION
C2.0



EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF THE APPROPRIATE PERSONEL NEEDED TO CREATE AND MAINTAIN A BEST MANAGEMENT PRACTICES PLAN IN ACCORDANCE WITH KPDES STORMWATER GENERAL PERMIT KYR10 AND "KENTUCKY EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE."
2. EROSION CONTROL MEASURES NOTED AND SHOWN ARE THE MINIMUMS DEEMED NECESSARY TO PROTECT THE PUBLIC AND OFF-SITE PROPERTIES, AND DO NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR COMPLIANCE WITH ANY AND ALL U.S. EPA AND KENTUCKY DIVISION OF WATER REQUIREMENTS. ANY ADDITIONAL ITEMS REQUIRED BY THESE AND/OR LOCAL GOVERNING AUTHORITIES SHALL BE PROVIDED AT NO COST TO THE OWNER.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL PRACTICES, PERMIT DOCUMENTS, AND INSPECTION RECORDS REQUIRED TO COMPLY WITH THE NOI AND THE CONDITIONS OF THE GENERAL KPDES PERMIT, AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
4. ANY REQUIRED ALTERATIONS OR REVISIONS TO THE EROSION CONTROL PLANS BASED UPON RESULTS OF PERIODIC INSPECTIONS, CONTRACTOR ACTIONS, AND/OR OWNER/AGENCY DIRECTIONS SHALL BE IMPLEMENTED WITHIN 7 DAYS OF DISCOVERY, AND WRITTEN DOCUMENTATION OF SUCH ALTERATIONS/REVISIONS SHALL BE KEPT ON FILE BY THE CONTRACTOR.
5. ALL AREAS DISTURBED BY GRADING THAT ARE NOT STABILIZED WITH OTHER METHODS FOR A PERIOD OF 14 DAYS SHALL HAVE TEMPORARY VEGETATIVE COVER PROVIDED.
6. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.
7. REMOVE ALL EROSION CONTROL DEVICES UPON THE ESTABLISHMENT OF PERMANENT GROUND COVER.
8. PROVIDE TEMPORARY SEEDING AS NEEDED IN ACCORDANCE WITH "KENTUCKY EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE."
9. ALL PAINT, SOLVENT, PETROLEUM PRODUCTS (FUEL, LUBE OILS, GREASE AND CUTTING OILS) AND PETROLEUM WASTE PRODUCTS SHALL BE STORED IN CONTAINERS (SUCH AS DRUMS, CANS, OR CARTONS) SO THAT THESE MATERIALS ARE NOT EXPOSED TO STORM WATER. SUFFICIENT PRACTICES OF SPILL PREVENTION CONTROL, AND/OR MANAGEMENT SHALL BE PROVIDED TO PREVENT ANY SPILLS OF THESE POLLUTANTS FROM ENTERING A WATER OF THE STATE. ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THIS REQUIREMENTS SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCES CONTAINED AND ALSO PREVENT CONTAMINATION OF GROUNDWATER.
10. DO NOT STORE CHEMICALS, DRUMS, AND BAGGED MATERIAL DIRECTLY ON THE GROUND. USE SECONDARY CONTAINMENT OR USE WOODEN PALLETS. PROVIDE SPILL CONTAINMENT DIKES AROUND CHEMICAL AND FUEL STORAGE TANKS. LINE WITH PLASTIC FILM TO PREVENT SOIL CONTAMINATION. STORE HAZARDOUS WASTES IN AN APPROPRIATE TYPE OF CONTAINER AND PROPERLY LABELED PER EPA, OSHA AND DOT REQUIREMENTS.
11. ONSITE TRASH SHOULD BE COLLECTED AND DISPOSED OF ON A REGULAR BASIS. SANITARY SYSTEMS SHOULD BE REGULARLY SERVICED. REPAIR TRASH CONTAINERS AND DUMPSTERS ON AN AS NEEDED BASIS. WHERE POSSIBLE PROVIDE COVER FOR WASTE CONTAINERS TO PREVENT THE ENTRY OF RAINWATER AND LOSS OF CONTENTS BY WIND. MAINTAIN A CONTINGENCY PLAN IN THE CASE THAT HAZARDOUS OR TOXIC MATERIALS ARE DISCOVERED.
12. MAINTAIN WASTE FLUID CONTAINERS IN LEAK PROOF CONDITION. VEHICLES AND EQUIPMENT SHOULD BE INSPECTED ON EACH DAY OF USE. LEAKS SHOULD BE REPAIRED IMMEDIATELY OR THE PROBLEM VEHICLE(S) OR EQUIPMENT SHOULD BE REMOVED FROM THE PROJECT SITE.

SEQUENCE OF SWPPP CONSTRUCTION:

1. BEFORE ANY LAND DISTURBANCE OCCURS, A NOTICE-OF-INTENT (NOI) SHALL BE FILED WITH THE STATE OF KENTUCKY DIVISION OF WATER.
2. BEFORE ANY LAND DISTURBANCE OCCURS, SILT FENCING SHALL BE INSTALLED AS SHOWN, THE CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED, AND INLET PROTECTION SHALL BE INSTALLED AROUND CB EX-5.
3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED AS SHOWN ON THIS DRAWING AND PROTECTED WITH TEMPORARY SEEDING AND MULCHING.
4. AS SOON AS THE STORM INLETS ARE CONSTRUCTED, INSTALL STONE INLET PROTECTION AS SHOWN.
5. ONCE ALL TEMPORARY EROSION CONTROL ITEMS ARE REMOVED AND PERMANENT GROUND COVER IS ESTABLISHED, A NOTICE-OF-TERMINATION SHALL BE SUBMITTED TO THE KENTUCKY DIVISION OF WATER.

DISTURBED AREA = 67,930 SFT

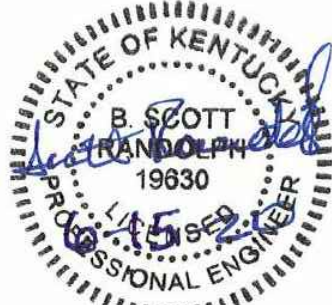
KEY NOTES:

1. CONSTRUCTION ENTRANCE. SEE DETAIL 1 SHEET C3.1.
2. PROPOSED SILT FENCE. SEE DETAIL 2 SHEET C3.1.
3. INLET PROTECTION. SEE DETAIL 3 SHEET C3.1.
4. TOPSOIL STOCKPILE AREA.

SEE EROSION CONTROL NOTES THIS SHEET.

LEGEND

---	EXISTING BOUNDARY LINE
---	EXISTING ADJOINER LINES
---	EXISTING DITCH
---	EXISTING CONTOUR LINE
---	PROPOSED CONTOUR LINE
---	PROPOSED SILT FENCE
---	PROPOSED TOPSOIL STOCKPILE AREA
---	PROPOSED LIMITS OF DISTURBANCE



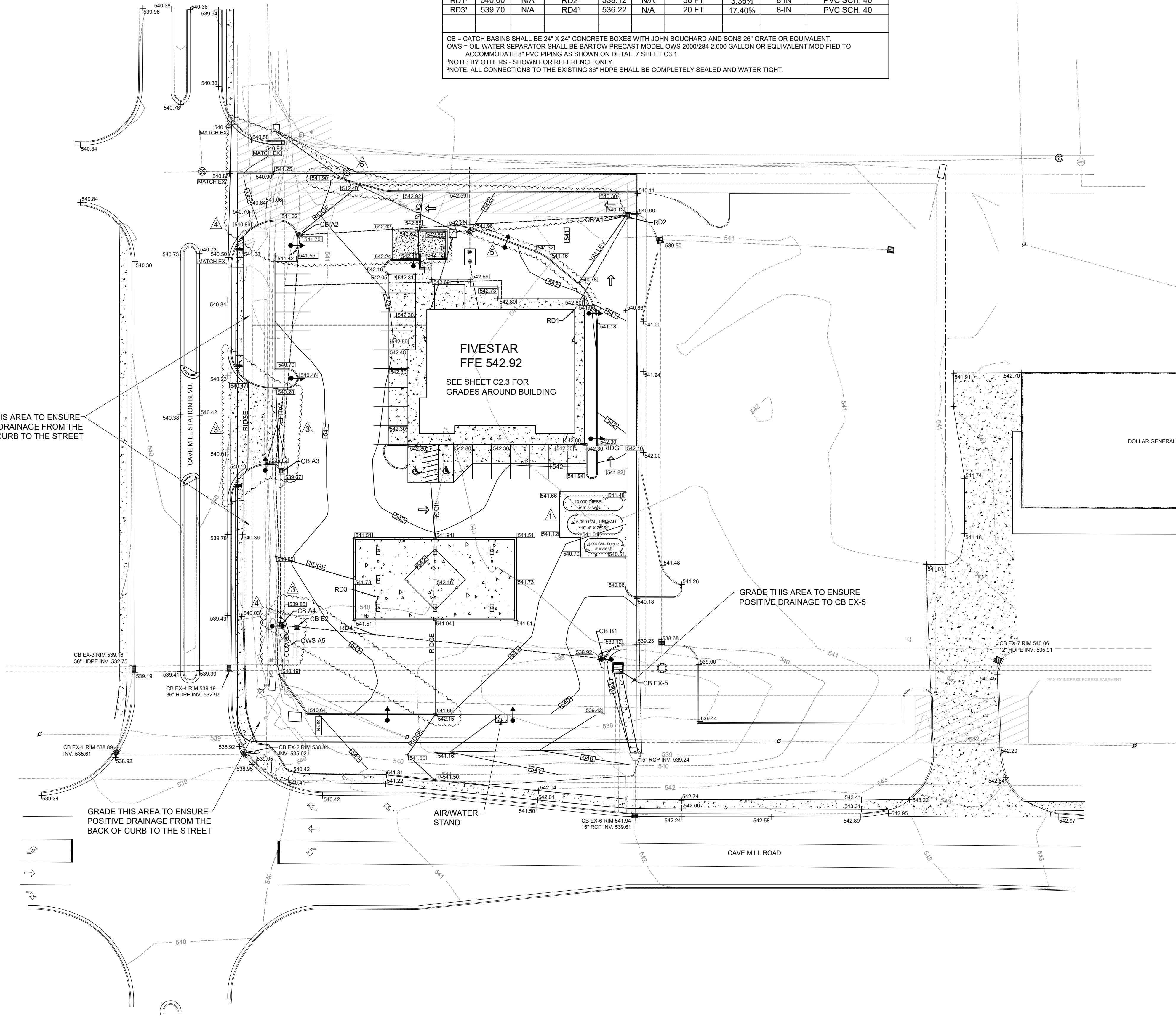
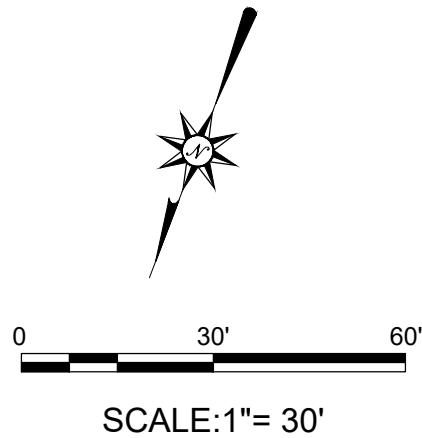
Δ	REVISED GRADES, UTILITIES, CURB LOCATION AND ENTRANCE	8-14-2020
Δ	REVISIONS PER BG CIPC COMMENTS	7-8-2020
Δ	MOVED TANK PIT LOCATION	6-22-2020
MARK	DESCRIPTION	DATE

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ENGINEER: BSR	CHK BY: CRK	CRD FILE: 1912021E
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CLIENT ADDRESS: NEWCOMB OIL 951 WITHROW COURT BARDSTOWN, KY 40004	PROPERTY ADDRESS: 1847 CAVE MILL ROAD BOWLING GREEN, KY	

EPSC
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY

SHEET
IDENTIFICATION
C2.1



STORM STRUCTURE TABLE									
FROM			TO			PIPE LENGTH	SLOPE	DIAMETER	TYPE
CODE	INV. EL.	RIM EL.	CODE	INV. EL.	RIM EL.				
CB A1	538.12	540.12	CB A2	536.40	541.70	172 FT	1.00%	15-IN	HDPE N-12
CB A2	536.40	541.70	CB A3	534.98	539.67	123 FT	1.15%	15-IN	HDPE N-12
CB A3	534.98	539.67	CB A4	534.18	539.85	80 FT	1.00%	15-IN	HDPE N-12
CB A4	534.18	539.85	OWS A5	533.93	535.52	5 FT	5.00%	8-IN	PVC SCH. 40
OWS A5	533.68	535.52	EX 36" HDPE	533.48	N/A	4 FT	5.00%	8-IN	PVC SCH. 40
CB B1	536.92	538.92	CB B2	535.30	540.11	162 FT	1.00%	15-IN	HDPE N-12
CB B2	534.25	540.11	CB A4	534.18	539.85	7 FT	1.00%	15-IN	HDPE N-12
CB B2	534.60	540.11	EX 36" HDPE	534.40	N/A	20 FT	1.00%	15-IN	HDPE N-12
RD1	540.00	N/A	RD2	538.12	N/A	56 FT	3.36%	8-IN	PVC SCH. 40
RD3	539.70	N/A	RD4	536.22	N/A	20 FT	17.40%	8-IN	PVC SCH. 40

CB = CATCH BASINS SHALL BE 24" X 24" CONCRETE BOXES WITH JOHN BOUCHARD AND SONS 26" GRATE OR EQUIVALENT.
OWS = OIL-WATER SEPARATOR SHALL BE BARTOW PRECAST MODEL OWS 2000/284 2,000 GALLON OR EQUIVALENT MODIFIED TO ACCOMMODATE 8" PVC PIPING AS SHOWN ON DETAIL 7 SHEET C3.1.
NOTE: BY OTHERS - SHOWN FOR REFERENCE ONLY.
NOTE: ALL CONNECTIONS TO THE EXISTING 36" HDPE SHALL BE COMPLETELY SEALED AND WATER TIGHT.

GENERAL NOTES:

- THE EXISTING UTILITIES SHOWN WERE FIELD SURVEYED FROM MARKINGS PROVIDED BY UTILITY COMPANIES AND ARE APPROXIMATE LOCATIONS. OTHER UTILITIES MAY EXIST ON THIS SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING 811 AND LOCATING ALL UTILITIES BEFORE ANY EXCAVATION BEGINS.
- MORE THAN 1 ACRE OF LAND SHOULD BE DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL SUBMIT AN NOI WITH THE STATE OF KENTUCKY PRIOR TO BEGINNING ANY GRADING WORK. DISTURBED AREA INCLUDING UTILITIES IS 67,930 SFT.
- SPOT ELEVATIONS SHOWN ON THE SHELTON FAMILY LOT 1-6-2 ARE BASED ON THE PROPOSED DESIGN FOR DONATOS PIZZA AND HAVE NOT BEEN VERIFIED. THE CONTRACTOR SHALL VERIFY ALL PROPOSED TIE-IN LOCATIONS AND NOTIFY THE OWNER OF ANY DISCREPANCIES.
- NO GRADING, STRIPPING, EXCAVATION, FILLING, OR OTHER DISTURBANCE OF THE NATURAL GROUND COVER SHALL TAKE PLACE UNLESS AND UNTIL WARREN COUNTY HAS APPROVED THE DEVELOPER'S SOIL EROSION CONTROL PROCEDURES AND EROSION CONTROL PLAN.
- NO BUILDING PERMITS SHALL BE ISSUED UNTIL A FINAL DEVELOPMENT PLAN IS APPROVED BY THE PLANNING COMMISSION AND ALL CONDITIONS HAVE BEEN MET.
- ALL DISTURBED AREAS THAT ARE NOT PAVED, LANDSCAPED, OR OTHERWISE PROVIDED WITH PERMANENT GROUND COVER SHALL BE SEEDED OR SODDED AS SOON AS PRACTICAL TO PREVENT SOIL EROSION.

STORM WATER RUNOFF
CALCULATION SUMMARY

METHOD OF STORM WATER CALCULATIONS:

SCS Method, 24 Hr Design Storms: 1, 2, 5, 10, 25, 50 and 100 Year

PRE-DEVELOPMENT

Total Drainage Area = 1.45 Acres
Cn = 62, Tc = 14.2 min.

POST-DEVELOPMENT

Total Drainage Area = 1.45 Acres
Cn = 88 Tc = 14.3 min.

PEAK DISCHARGE

Year	Q(cfs)
1	0.49
2	0.98
5	1.79
10	2.57
25	3.77
50	4.83
100	6.03

PEAK DISCHARGE

Year	Q(cfs)
1	3.42
2	4.37
5	5.69
10	6.79
25	8.35
50	9.62
100	11.00

LOT 1-6 AND LOT 1-6-2 ARE PART OF THE OVERALL CAVE MILL STATION DEVELOPMENT SUBDIVISION. ITS RUNOFF HAS BEEN INCLUDED IN THE DRAINAGE REPORT BY BARGE WAGGONER, SUMNER & CANNON, INC DATED JULY 2006. THE DRAINAGE REPORT ASSUMES A LOT COVERAGE OF 80% FOR THE ENTIRE 22 ACRES OF THE CAVE MILL STATION DEVELOPMENT. THE FIVESTAR DEVELOPMENT PROPOSES 1.14 ACRES OF IMPERVIOUS AREA, WHICH IS 78.9% LOT COVERAGE WHICH IS BELOW THE ASSUMED 80%. RETENTION REQUIREMENTS ARE MET BY THE EXISTING REGIONAL BASIN.

STORM WATER QUALITY

60% IS PROVIDED BY THE EXISTING DETENTION BASIN LOCATED BEHIND THORNTON'S FURNITURE (EAST SIDE OF THE CAVE MILL STATION DEVELOPMENT). THE REMAINDER IS PROVIDED BY USING A 2,000 GALLON OIL-WATER SEPARATOR. OIL-WATER SEPARATORS SHALL BE BARTOW PRECAST MODEL OWS 2000/284 2,000 GALLON OR EQUIVALENT MODIFIED TO ACCOMMODATE 8" PVC INLET & OUTLET PIPES AS SHOWN IN DETAIL 7 ON SHEET C3.1.

$Q_{wq} = C \times I \times A = 0.79 \times 2.45 \times 1.45 = 2.81 \text{ cfs}$

8" PVC PIPES AT 5% SLOPE WILL CARRY UP TO 2.95 cfs.

THE VELOCITY THROUGH THE OIL-WATER SEPARATOR USING 2.81 cfs:
 $2.81 \text{ cfs} \times 60 = 168 \text{ cfm} / 72 \text{ sft} = 2.33 \text{ ft/min.} < 3.0 \text{ ft/min. MAX. VELOCITY.}$

THE OIL-WATER SEPARATOR PROVIDES 40% TSS REMOVAL

TREATMENT TRAIN

40% + 60% - (40x60)/100 = 76% TSS REMOVAL

LEGEND

	BOUNDARY LINE THIS SURVEY
	APPROXIMATE ADJOINER OR R-O-W LINES
	EXISTING SETBACK LINES OR EASEMENTS
	EXISTING ROADWAY AS LABELED
	EXISTING FENCE
	EXISTING WATERLINE
	EXISTING SANITARY SEWER LINE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING PRIMARY OVERHEAD ELECTRIC
	EXISTING POWER POLE
	EXISTING TRAFFIC SIGNAL CABLES
	EXISTING GAS LINE
	EXISTING STORM SEWER
	EXISTING DITCH CENTERLINE
	EXISTING STORM INLET
	EXISTING SPOT ELEVATION
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	PROPOSED SPOT ELEVATION
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED SWALE CENTERLINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED GAS LINE
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED WATERLINE
	PROPOSED STORM PIPE
	PROPOSED SANITARY SEWER CLEANOUT
	PROPOSED STORM INLET
	PROPOSED LIGHT POLE
	PROPOSED OIL-WATER SEPARATOR



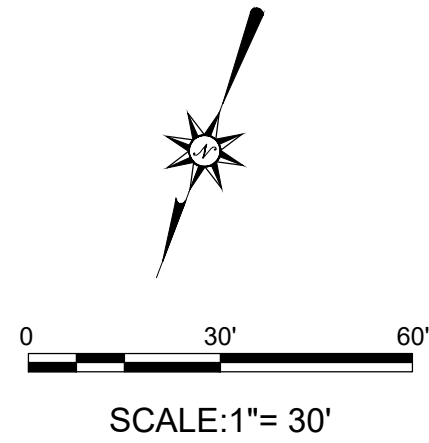
REVISION	DATE	DESCRIPTION
1	9-8-2020	REVISED CURB LOCATION AND GRADES
2	8-14-2020	REVISED GRADES, UTILITIES, CURB LOCATION AND ENTRANCE
3	8-5-2020	REVISED GRADES AND ADDED CONCRETE ENTRANCE
4	7-8-2020	REVISIONS PER BG CCPC COMMENTS
5		

KENNER RANDOLPH
ENGINEERING & SURVEYING
199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167

ENGINEER:	CHKD BY:
BSR	CRK
DWN BY:	
BSR	
CLIENT ADDRESS:	PROPERTY ADDRESS:
NEWCOMB OIL 951 WITHROW COURT BARDSTOWN, KY 40004	1847 CAVE MILL ROAD BOWLING GREEN, KY

GRADING PLAN
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY

SHEET
IDENTIFICATION
C2.2



85 LFT ALONG THE ROW * 70% = 60 LFT OF SHRUBS REQUIRED. ASSUMING SHRUBS PROVIDED ARE 3'-8" IN WIDTH, THEN 17 SHRUBS AND 2 DECIDUOUS TREES ARE REQUIRED. ONE HALF OF THE SHRUBS SHALL BE OF AN EVERGREEN SPECIES.

130 LFT ALONG THE ROW * 70% = 91 LFT OF SHRUBS REQUIRED. ASSUMING SHRUBS PROVIDED ARE 3'-8" IN WIDTH, THEN 25 SHRUBS AND 3 DECIDUOUS TREES ARE REQUIRED. ONE HALF OF THE SHRUBS SHALL BE OF AN EVERGREEN SPECIES.

190 LFT ALONG THE ROW * 70% = 133 LFT OF SHRUBS REQUIRED. ASSUMING SHRUBS PROVIDED ARE 3'-8" IN WIDTH, THEN 37 SHRUBS AND 4 DECIDUOUS TREES ARE REQUIRED. ONE HALF OF THE SHRUBS SHALL BE OF AN EVERGREEN SPECIES.

160 LFT OF INCOMPATIBLE USE AREA. 5 DECIDUOUS TREES AND 10 EVERGREEN TREES SHALL BE PROVIDED IN THIS AREA.

THE VUA BUFFER ALONG THIS PROPERTY LINE IS 5' INSTEAD OF 10' IN WIDTH OVER A LENGTH OF 200'. THE TOTAL REDUCTION IS 203' * 5' = 1,015 SFT. ADDITIONAL BUFFER WIDTH IS PROVIDED ALONG CAVE MILL ROAD AND CAVE MILL STATION BLVD. THE BUFFER WIDTH ALONG CAVE MILL STATION BLVD. IS 20' OVER A LENGTH OF 275'. THE ADDITIONAL AREA IS 275' * 10' = 2,750 SFT WHICH IS GREATER THAN THE REDUCED BUFFER AREA ALONG THIS PROPERTY LINE.







202 LFT OF COMMON PROPERTY LINE. 6 DECIDUOUS TREES AND 4 EVERGREEN TREES SHALL BE PROVIDED IN THIS AREA.

37 LFT OF COMMON PROPERTY LINE. 1 DECIDUOUS TREE AND 1 EVERGREEN TREE SHALL BE PROVIDED IN THIS AREA.

SITE DATA

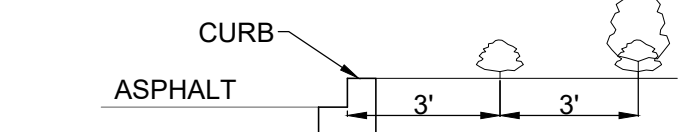
1. CURRENT ZONING FOR THE LOT: HB
2. TOTAL LOT AREA IS 1.45 ACRES OR 63,161 SFT.
3. VEHICLE USE AREA = 41,294 SFT.
4. INTERIOR LANDSCAPE REQ. (5%) = 2,065 SFT.
5. INTERIOR LANDSCAPE PROVIDED = 2,070 SFT
6. INTERIOR TREES REQ. = 6
7. INTERIOR TREES PROVIDED = 8

PLANT SCHEDULE

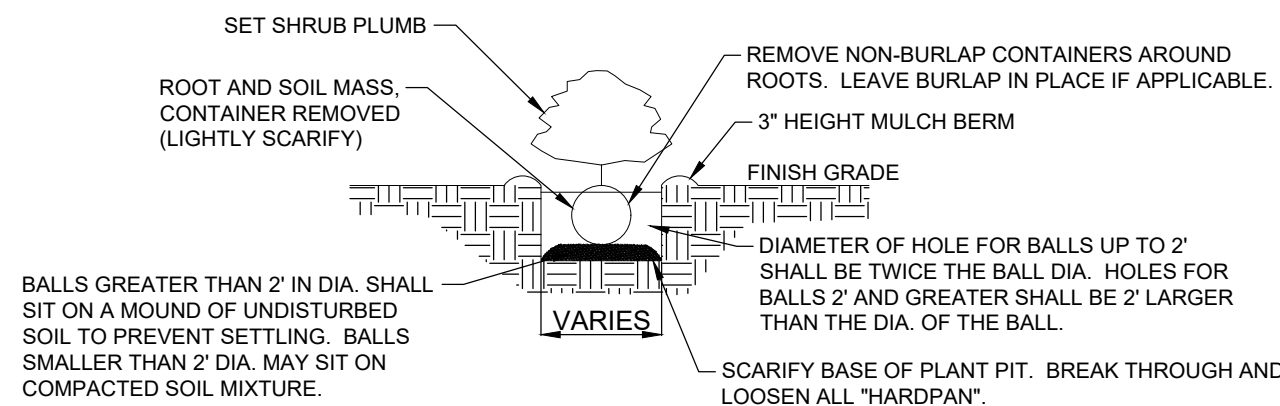
-  DWARF RED OAK (QUERCUS RUBRA)
-  AMERICAN HOLLY (ILEX OPACA)
-  REDBUD (CERCIS CANADENSIS)
-  BUMALDA SPIREA (SPIRAEA X BUMALDA) OR CHINA HOLLY (ILEX X MESERVEAE)
-  LANDSCAPE ROCK OR SOLITE
-  GRASS OF THE FESCUE OR BLUEGRASS FAMILY

LANDSCAPING NOTES:

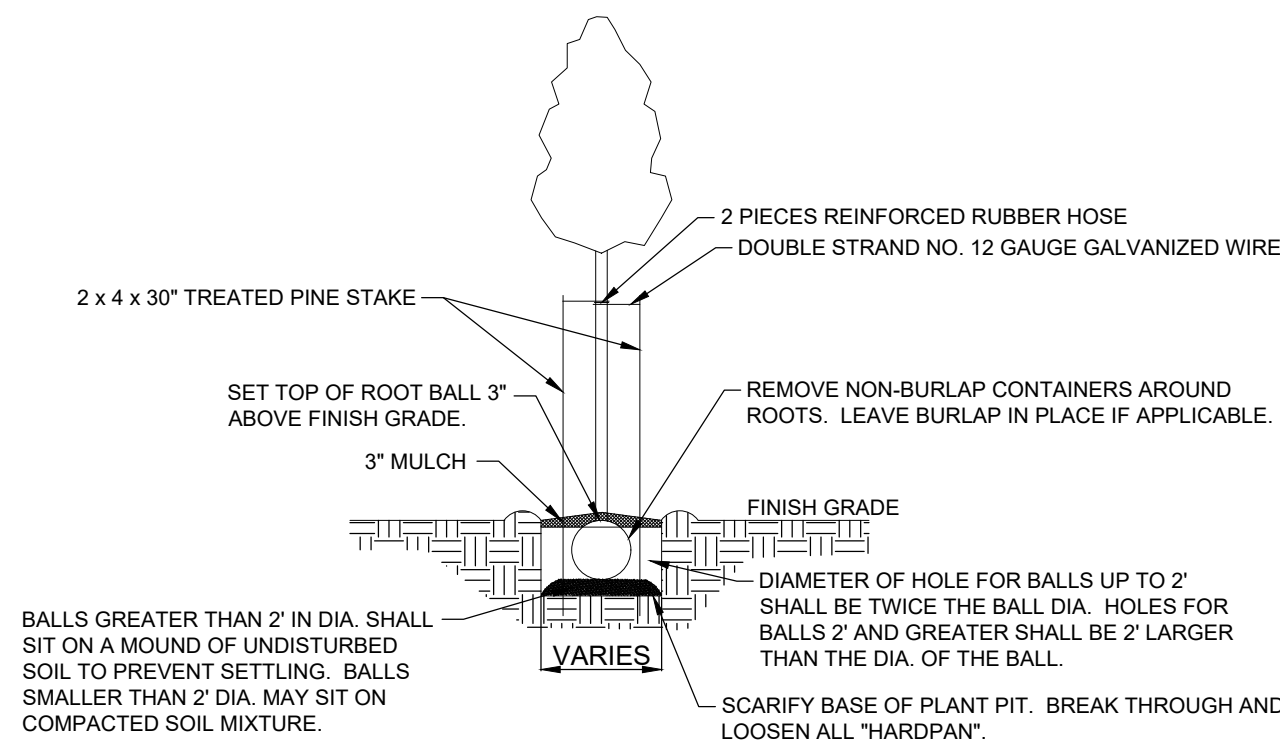
1. ALL SHRUBS SHALL BE A MINIMUM OF 24" PLANTING HEIGHT. ALL SHRUBS SHALL BE MAINTAINED AT A MINIMUM HEIGHT OF 24" AND A MAXIMUM HEIGHT OF 42". ONE HALF OF THE SHRUBS SHALL BE AN EVERGREEN SPECIES.
2. ALL DECIDUOUS TREES SHALL BE A MINIMUM OF 1.75" IN CALIPER AT PLANTING.
3. ALL EVERGREEN TREES SHALL BE A MINIMUM OF 5' PLANTED HEIGHT.
4. ALL PLANT MATERIALS AND PLANTING METHODS SHALL MEET THE AMERICAN NURSERY STANDARDS.



SHRUB/TREE PLANTING ALONG ROADWAYS
N.T.S.



SHRUB PLANTING DETAIL
N.T.S.



TREE PLANTING DETAIL
N.T.S.



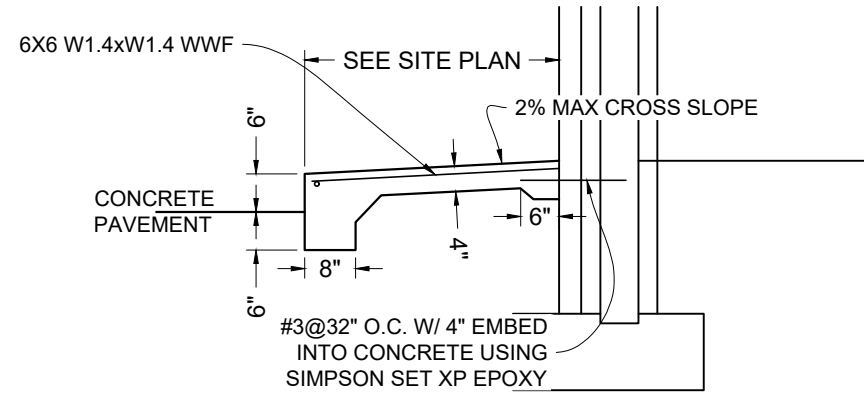
REVISION	DATE	DESCRIPTION
1	9-8-2020	REVISED CURB LOCATION AND GRADES
2	7-8-2020	REVISIONS PER BG CCPC COMMENTS
3	6-22-2020	MOVED TANK PIT LOCATION
MARK		

KENNER RANDOLPH
ENGINEERING & SURVEYING
199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167

ENGINEER: BSR	CKD BY: CRK
DWN BY: BSR	CRD FILE: 1912021E
CLIENT ADDRESS: NEWCOMB OIL 951 WITHROW COURT BARDSTOWN, KY 40004	PROPERTY ADDRESS: 1847 CAVE MILL ROAD BOWLING GREEN, KY
PLOT DATE: 9-8-2020	FILE NAME: 1912021E
SIZE: 24x36	

LANDSCAPE PLAN
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY

SHEET
IDENTIFICATION
C2.4



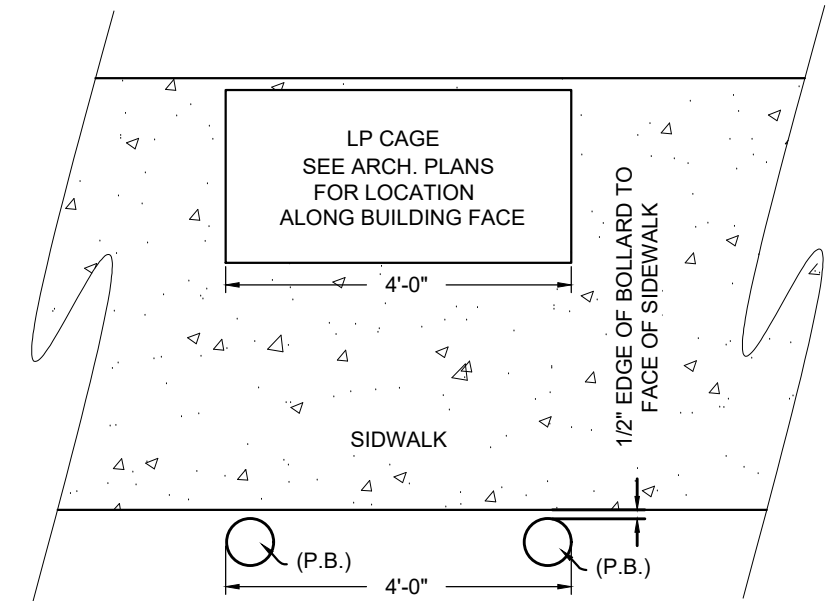
9 TURNDOWN SIDEWALK DETAIL
3.0 N.T.S.



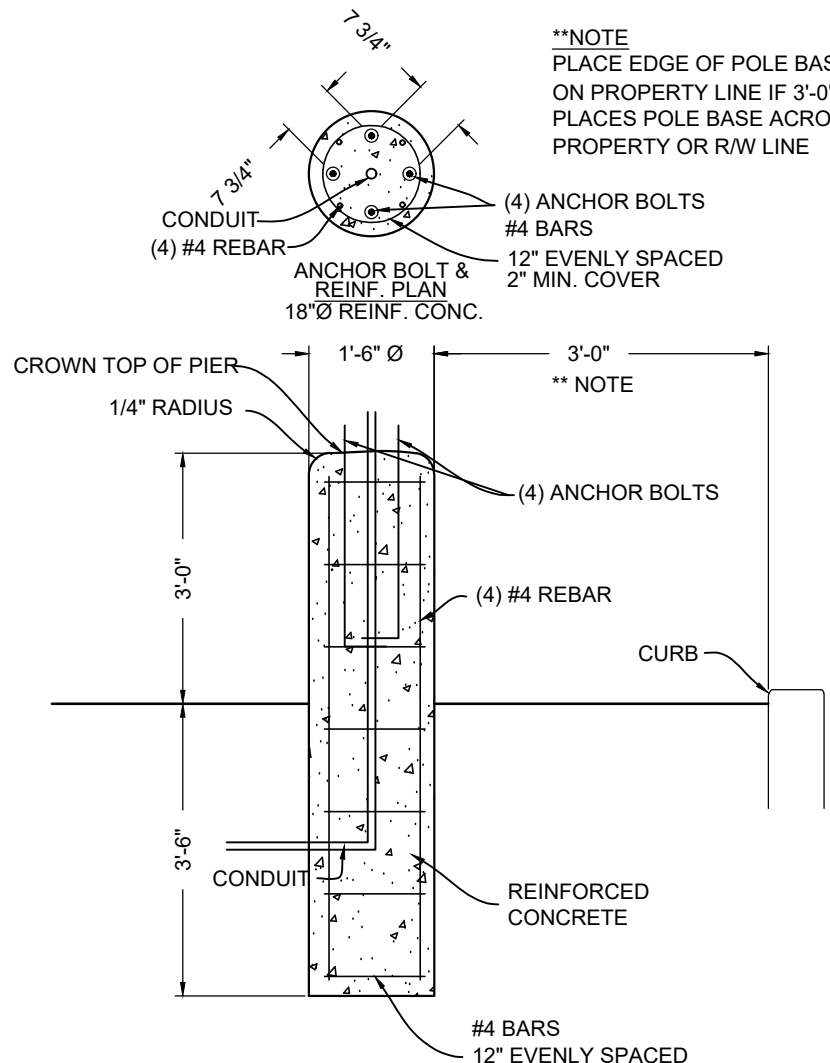
10 CURB DETAIL
3.0 N.T.S.



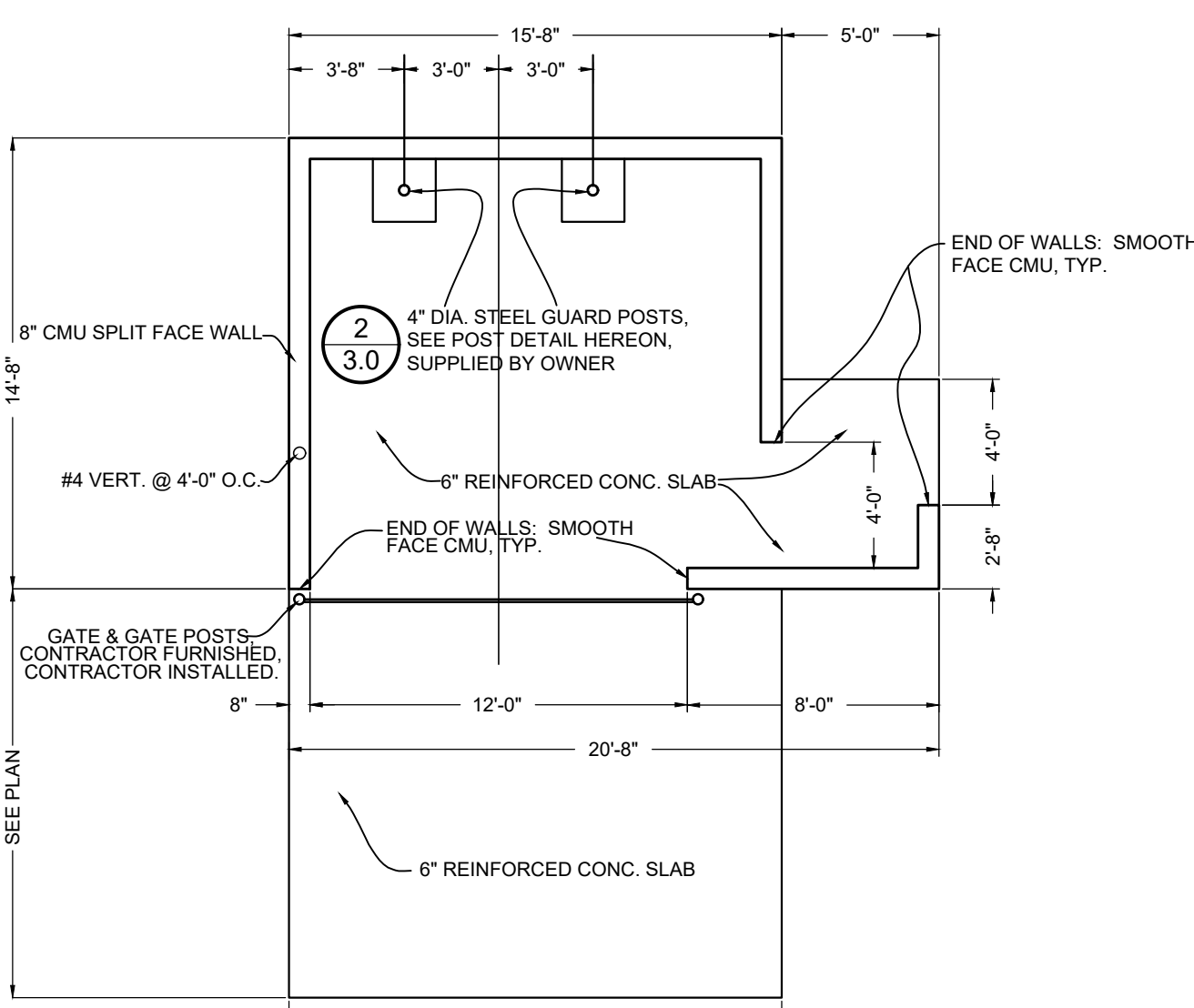
11 PAVEMENT DETAIL
3.0 N.T.S.



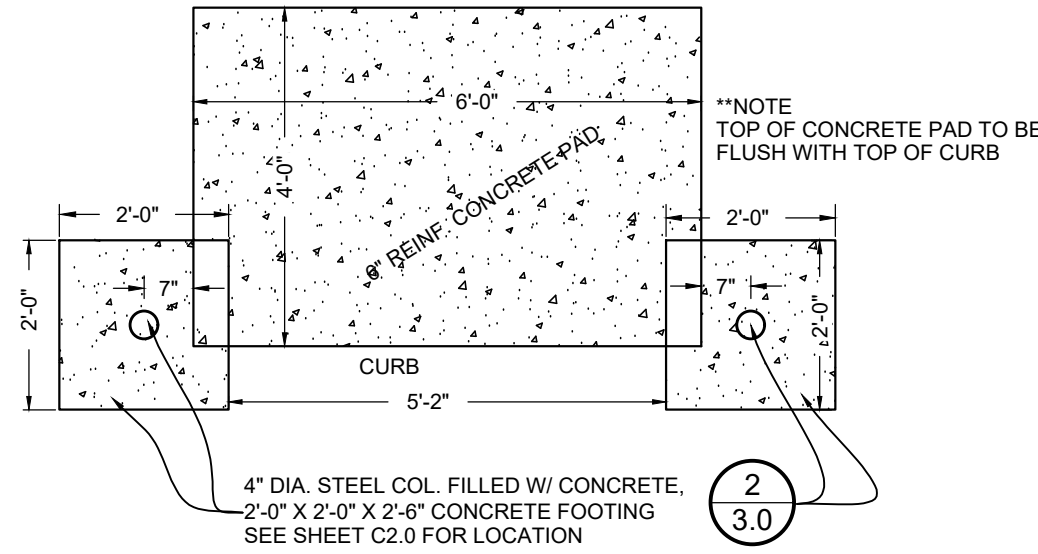
6 LP CAGE DETAIL
3.0 N.T.S.



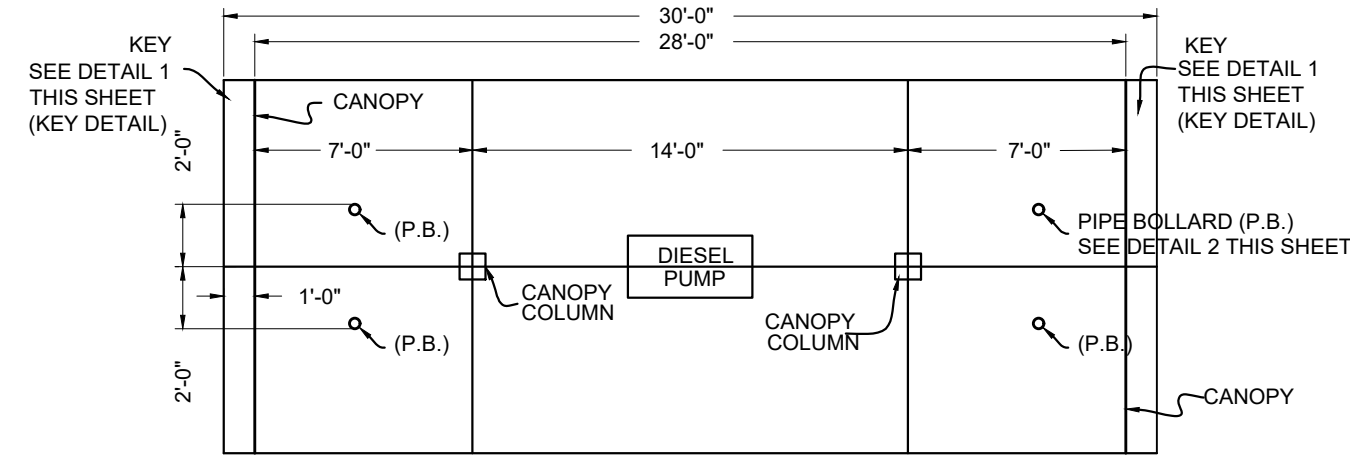
7 LIGHT POLE BASE DETAIL
3.0 N.T.S.



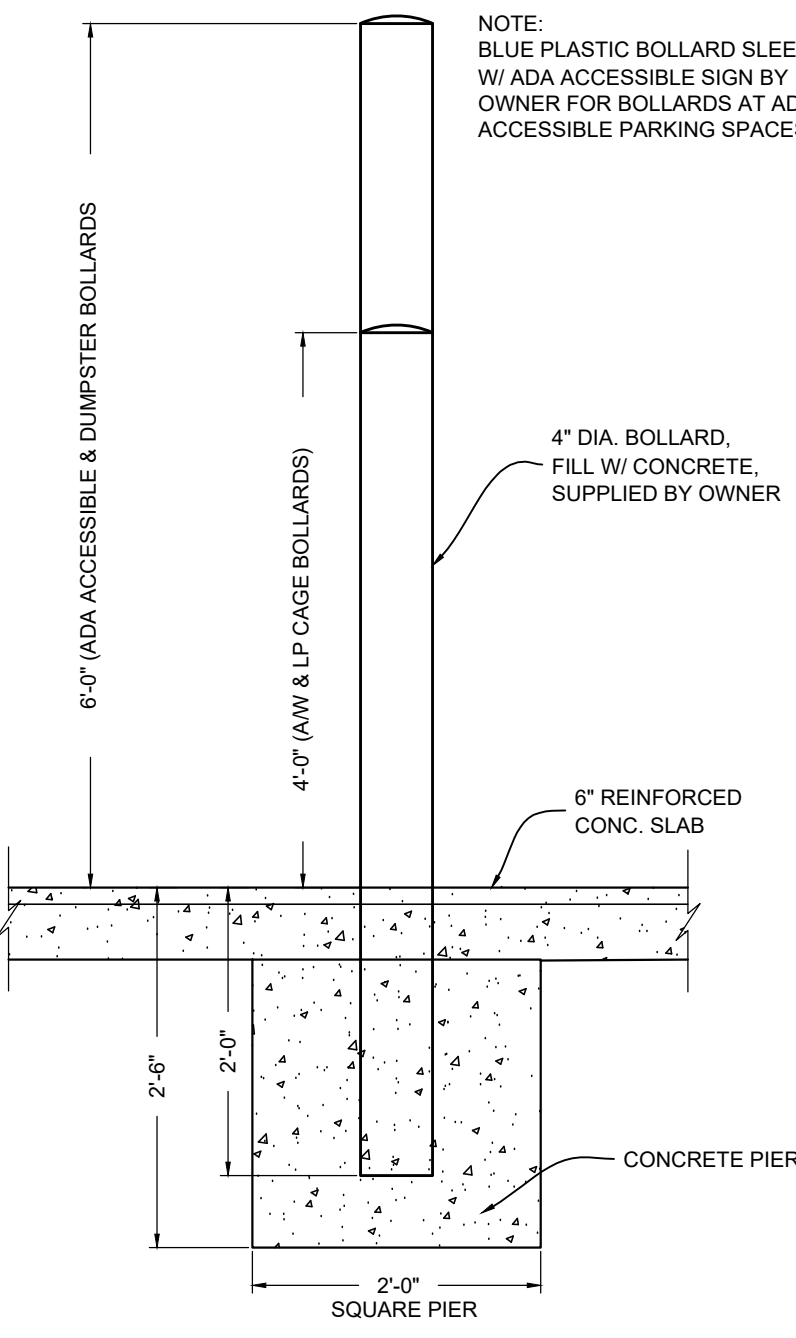
8 DUMPSTER DETAIL
3.0 N.T.S.



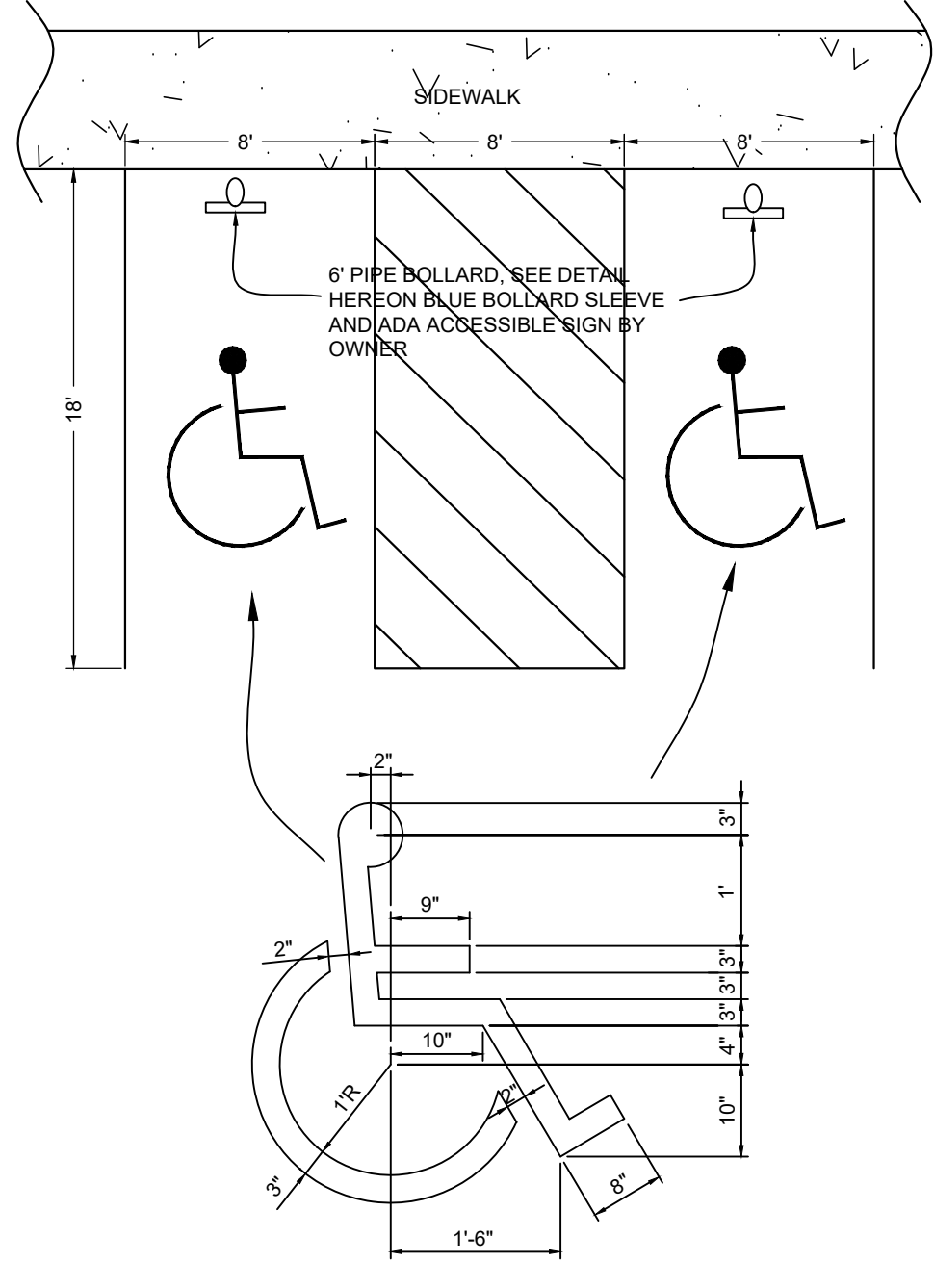
4 AIR & WATER CONC. PAD
3.0 N.T.S.



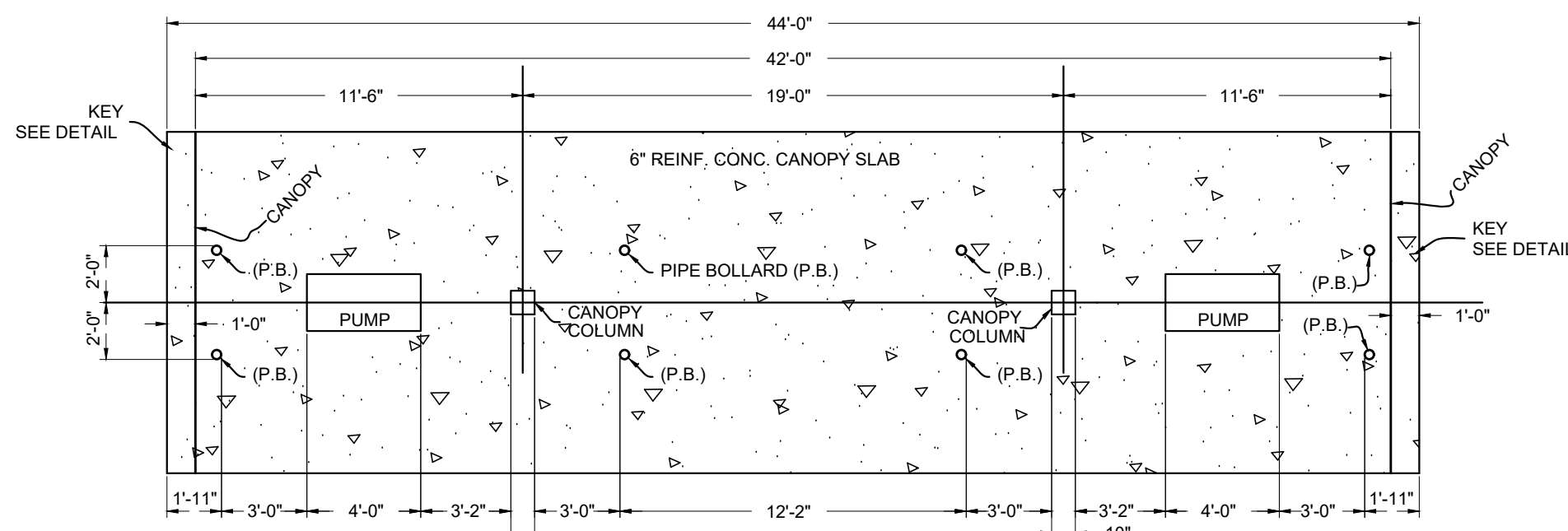
5 DIESEL PUMP ISLAND PLAN SECTION
3.0 N.T.S.



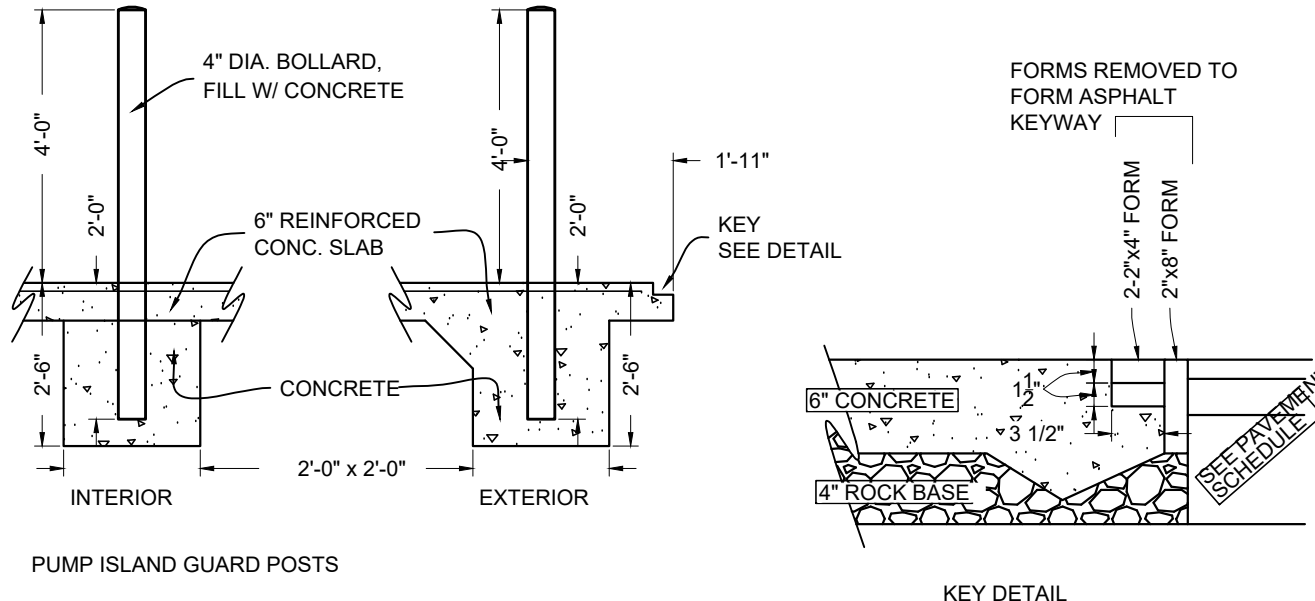
2 PIPE BOLLARD DETAIL
3.0 N.T.S.



3 ADA ACCESSIBLE SPACE DETAIL
3.0 N.T.S.



1 PUMP ISLAND PLAN SECTION
3.0 N.T.S.



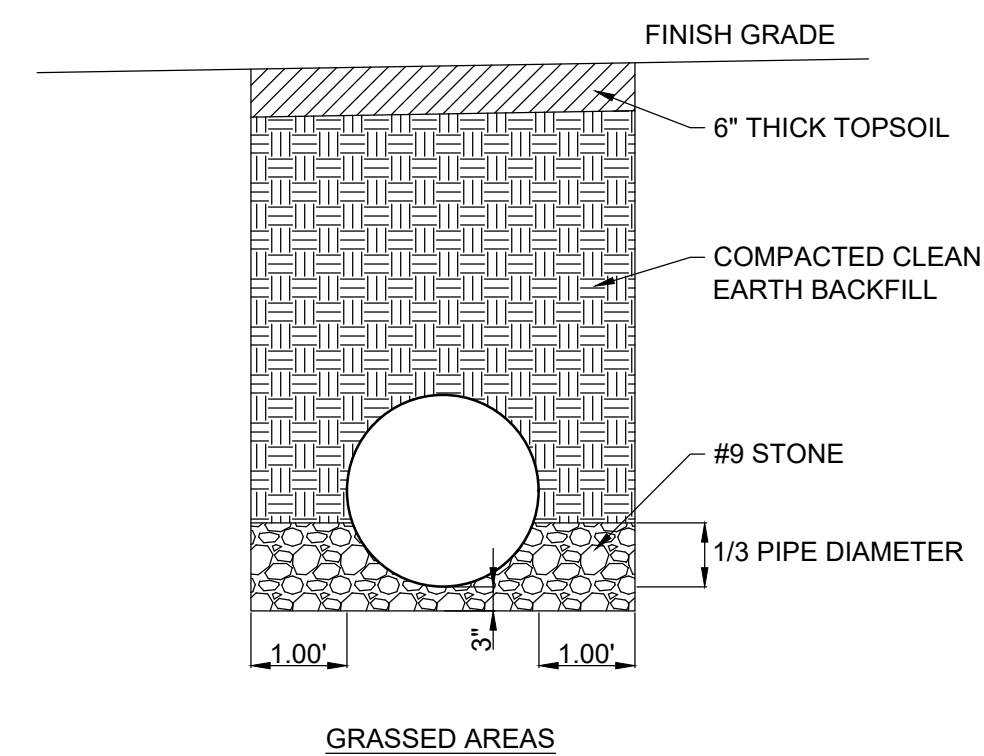
DATE	DESCRIPTION	MARK

KENNER RANDOLPH
ENGINEERING & SURVEYING
199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167

ENGINEER: BSR	CKD BY: CRK	CRD FILE: 1912021E
CLIENT ADDRESS: NEWCOMB OIL 951 WITHROW COURT BARDSTOWN, KY 40004	PROPERTY ADDRESS: 1847 CAVE MILL ROAD BOWLING GREEN, KY	FILE NAME: 1912021E
PLOT DATE: 6-16-2020	SIZE: A3A36	

DETAILS
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY

SHEET
IDENTIFICATION
C3.0



3 FT. CURB TAPER

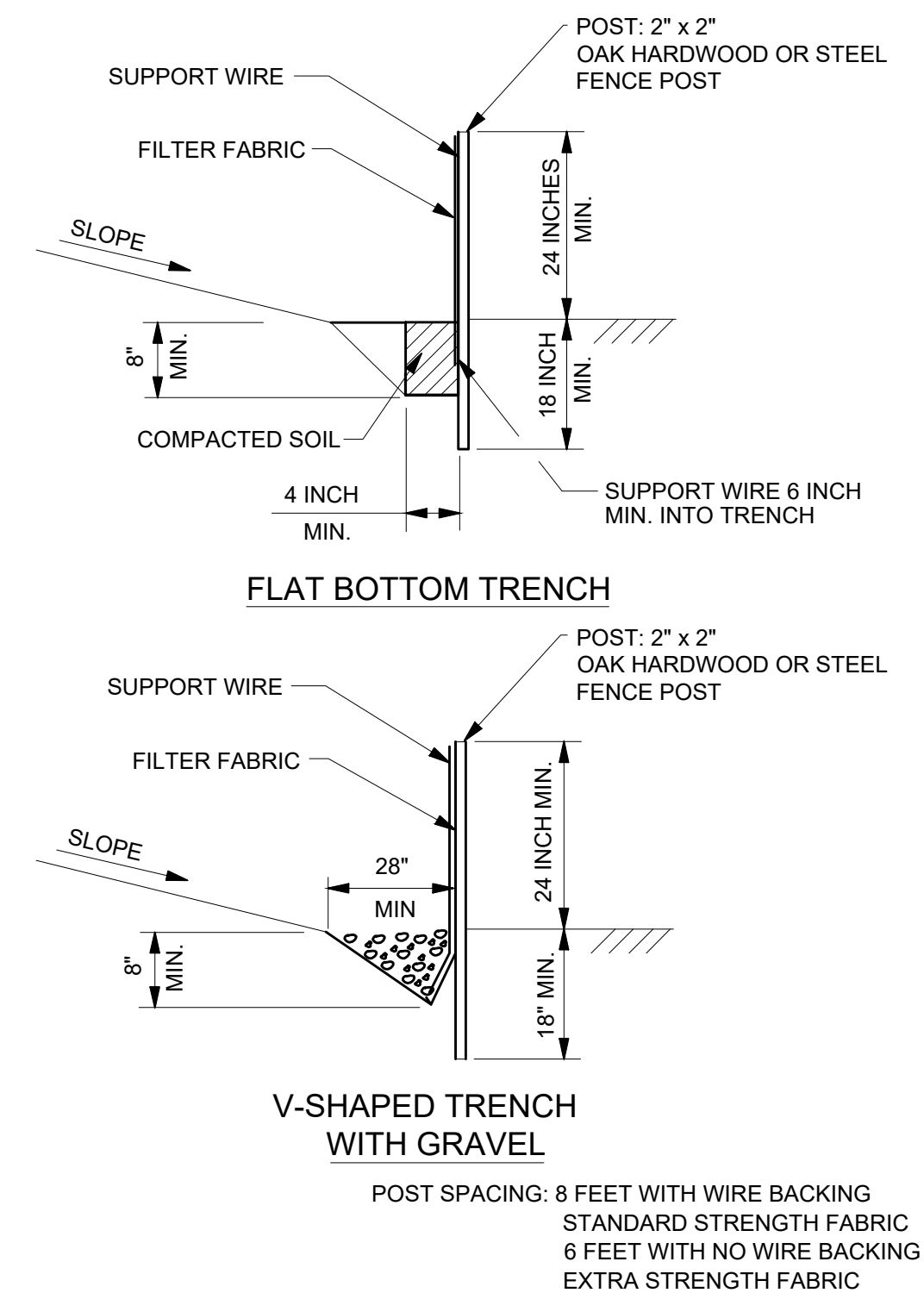
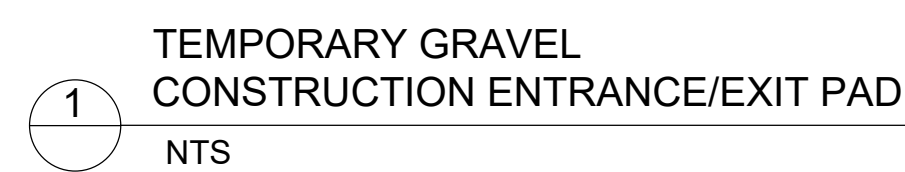
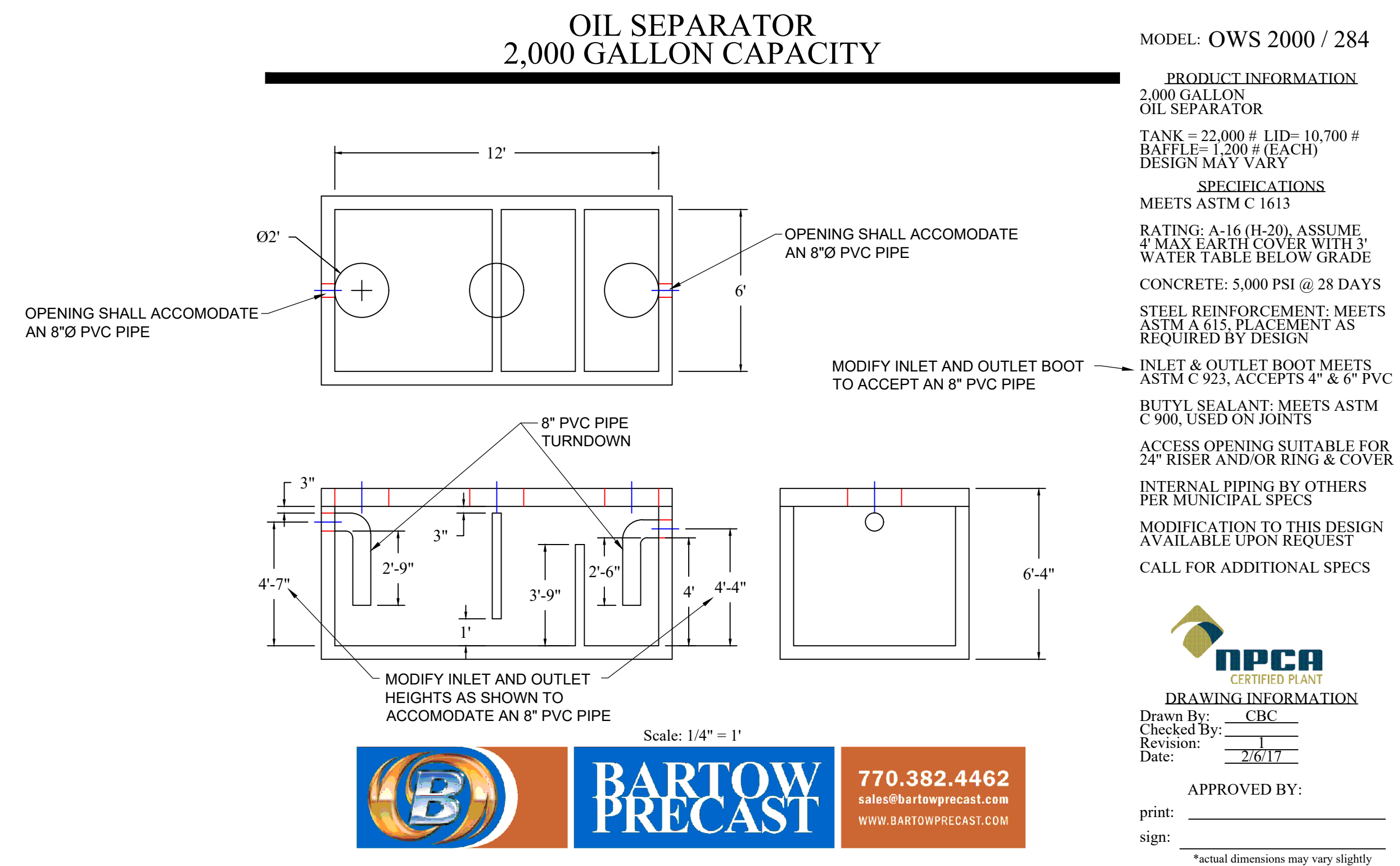
DETECTABLE WARNING PLATES

12" MAX. SLOPE

EXISTING SIDEWALK

This diagram illustrates the transition from a sidewalk to a street. It shows a '3 FT. CURB TAPER' where the curb is gradually lowered. A section of the taper is marked with a grid pattern and labeled 'DETECTABLE WARNING PLATES'. The slope of this section is indicated as '12" MAX. SLOPE'. The area below the taper is labeled 'EXISTING SIDEWALK'.

7 OIL-WATER SEPARATOR DETAIL
1/4" = 1'-0"



SEDIMENT TUBE OR FILTER SOCK. MINIMUM HEIGHT (ACTUAL) 12". FILTER SOCKS MAY BE STACKED TO ACHIEVE THE MINIMUM HEIGHT.

MIN. 2' OVERLAP

CATCH BASIN

TRENCH IN 2" IF REQUIRED

24" MIN. (TYP.)

WOOD STAKE (MIN. 1.5" x 1.5") OR STEEL POST (1.25 LBS.FOOT) (TYP.)

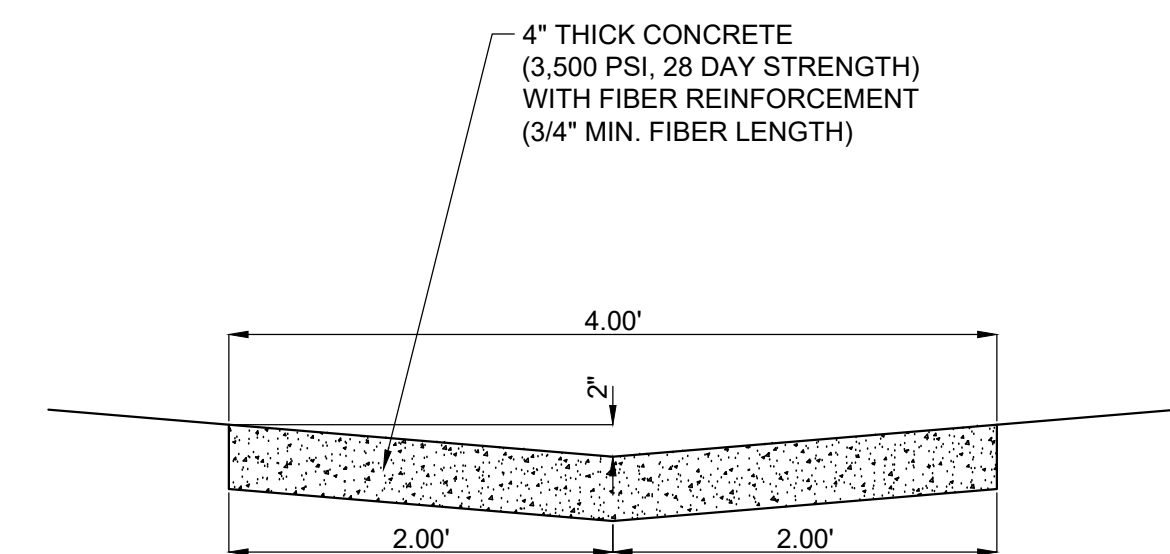
FLOW

FLOW

FLOW

FLOW

3 INLET PROTECTION
NTS



4' WIDE CONCRETE SWALE
NTS



		REVISIONS PER BG CCPC COMMENTS	7-8-2020
A			
A			
MARK	DESCRIPTION		DATE

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199 NORTH OWEN STREET
RUSSELLVILLE, KY 42276
270-717-1167

CLIENT ADDRESS: NEWCOMB OIL 951 WITHROW COURT BARDSTOWN, KY 40004	BSK DWN BY: BSR	CRD BY: CRK
PROPERTY ADDRESS: 1847 CAVE MILL ROAD BOWLING GREEN, KY	PLOT DATE: 6-16-2020	CRD FILE: 1/21/2012
	SIZE: 24X36	FILE NAME: 1/1/2012

DETAILS
FIVESTAR
1847 CAVE MILL ROAD
BOWLING GREEN, KY
1010

SHEET
IDENTIFICATION
C3.1