

DETAILED DEVELOPMENT PLAN STAFF REPORT



Docket Number: 2018-01-DP
Public Hearing Date: January 4, 2018
Pre-Application Conference: November 16, 2017

Description of Request: The applicants have applied for approval of a Detailed Development Plan on tracts of land totaling 1.45 acres located on Patrick Way. The Plan proposes the construction of eight (8) one bedroom units and sixteen (16) two-bedroom units along with the six (6) existing multi-family dwelling units on the property, for a total development of thirty (30) dwelling units. This property is zoned **RM-4** (Multi-Family Residential).

Owner/Applicant:

Jason Mills
 1207 US 31W Bypass
 Bowling Green, KY 42101

Developer/Applicant:

Westen Street Apartments, LLC.
 1136 South Park Drive
 Bowling Green, KY 42103

Location of Property: 1703 Patrick Way

PVA Parcel Numbers: 040B-44-106, 108 and 109
Current Zoning: **RM-4** (Multi-Family Residential)

Development Size: 1.45 acres
Existing Land Use: Multi-Family Residential, Vacant

Existing Land Use of the Surrounding Area: The surrounding area is mainly comprised of single family residential and multi-family residential uses. There are also public, public-institutional, commercial and agricultural uses in the area, as well as vacant tracts in the general vicinity.

Zoning History:

R-2 (Two-Family Residential) is the original zoning of the property. In March, 1975, the property was rezoned from **R-2** (Two Family Residential) to **R-4** (Multi-Family Residential). The property was converted from **R-4** (Multi-Family Residential) to **RM-4** (Multi-Family Residential) through an amendment to the Zoning Ordinance in December, 2001.

DETAILED DEVELOPMENT PLAN REVIEW

Section **3.11.5** of the Zoning Ordinance states the following:

Detailed Development Plan Required: Prior to the issuance of building permits, a detailed development plan shall be approved by the Planning Commission for the following:

- **Townhomes, multifamily housing, or group living with twenty four (24) or greater units.**

STAFF REVIEW

This plan was reviewed based on the **RM-4** (Multi-Family Residential) development standards as follows:

	<u>Allowed / Required</u>	<u>Provided</u>
<u>Lot Coverage:</u>	85%	59%
<u>Setbacks:</u>	Front: 25' setback	25.0'
	Rear: 25' setback	25.0'
	Side: 10' setback (proposed bldg.)	85.0' (South)
	Side: 10' setback (existing bldg.)	0' (South)(existing non-conforming)
	Side: 10' setback (proposed bldg.)	10' (North)
<u>Parking:</u>	Proposed 1 BR = 1.5 spaces x 8 units = 12	
	Proposed 2 BR = 2.5 spaces x 16 units = 40	
	Existing 1 BR = 1.5 spaces x 4 units = 6	Total spaces provided = 63
	Existing 2BR = 2.5 spaces x 2 units = 5	
	Total Spaces Required = 63	
<u>Building Height:</u>	6 stories above grade	27' (2 stories above grade)
<u>Landscaping:</u>	The landscaping plan submitted meets the requirements of the Zoning Ordinance and is approved.	
<u>Drainage:</u>	The drainage plan will be reviewed by the City of Bowling Green Public Works Department and final approval will be required, prior to the issuance of a building permit.	
<u>Signage:</u>	The development has not proposed any signage at this time. Any proposed signage would be required to meet the requirements of the Zoning Ordinance. Signage would be limited to an entrance sign, must be monument type with a maximum sign face area of sixty (60) square feet and a maximum height of five (5) feet.	

STAFF REVIEW (Continued)

- Traffic: A Traffic Impact Study (TIS) was not required for this submittal.
- Access: The development has one (1) existing access point and one (1) proposed access point to Patrick Way. Access has been reviewed and approved by the City of Bowling Green Public Works Department.

STAFF ANALYSIS

The applicants have submitted a Detailed Development Plan to develop an additional twenty-four (24) multi-family dwelling units, in addition to the six (6) existing multi-family dwelling units on the property. The proposed development will have two (2) access points onto Patrick Way, utilizing an existing access point, while constructing a second access point to Patrick Way. The proposed detailed development plan meets the requirements of the Zoning Ordinance, except for the conditions of approval listed below.

SUGGESTED CONDITIONS OF APPROVAL

- ❖ The drainage plan must be finalized and approved by the City of Bowling Green Public Works Department, prior to the issuance of a building permit;
- ❖ Plat must be recorded consolidating the lots into one new lot, revising the existing building setback line(s), add a parking and cross access easement, provide parking stops/blocks for the existing six (6) space parking area and provide additional landscaping around the existing four (4) space parking area along Patrick Way, prior to the issuance of a building permit.

MOTIONS

MOTION TO APPROVE:

I make the motion to **approve** the Detailed Development Plan, Docket number **2018-01-DP** subject to the following conditions:

- ❖ The drainage plan must be finalized and approved by the City of Bowling Green Public Works Department, prior to the issuance of a building permit;
- ❖ Plat must be recorded consolidating the lots into one new lot, revising the existing building setback line(s), add a parking and cross access easement, provide parking stops/blocks for the existing six (6) space parking area and provide additional landscaping around the existing four (4) space parking area along Patrick Way, prior to the issuance of a building permit.

My motion is based upon the Detailed Development Plan's compliance with Section 3.11.6 of the Warren County Zoning Ordinance.

OR

MOTION TO DENY:

I make the motion to **deny** the Detailed Development Plan, Docket number **2018-01-DP**. My motion is based upon the Detailed Development Plan's failure to meet the requirements of Section 3.11.6 of the Warren County Zoning Ordinance as follows:

I further request that the staff transmit a written notice to the applicant within 10 days of this action detailing the reasons for denial.

DETAILED DEVELOPMENT PLAN FOR WESTEN STREET APARTMENTS, PHASE III 1703 PATRICK WAY BOWLING GREEN, KY 42104 DECEMBER 27, 2017



SHEET

- COVER SHEET
- C1 EXISTING TOPOGRAPHY
- C2 SITE LAYOUT
- C3 SITE GRADING & DRAINAGE
- C4.0 INITIAL EROSION CONTROL
- C4.1 FINAL EROSION CONTROL
- C5 SANITARY SEWER AND WATER
- C6 ELECTRIC, TELEPHONE, & GAS
- C7 SITE DETAILS
- C8 SITE DETAILS
- L1 LANDSCAPE PLAN
- SL1 SITE LIGHTING
- A1.0 FLOOR PLAN
- A2.0 BUILDING ELEVATIONS

DEVELOPER/APPLICANT:

WESTEN STREET APARTMENTS, LLC
1136 SOUTH PARK DRIVE
BOWLING GREEN, KY 42103
CONTACT: MATT WILLIAMS
PHONE: (270) 991-2944

PARCEL OWNER:

JASON MILLS
1207 US 31W BYPASS
BOWLING GREEN, KY 42101
DEED BOOK 1108 PAGE 612
PLAT BOOK 17 PAGE 20
PLAT BOOK 20 PAGE 188

**ENGINEER, SURVEYOR, &
LANDSCAPE ARCHITECT:**

ARNOLD CONSULTING
ENGINEERING SERVICES, INC.
P.O. BOX 1338
BOWLING GREEN, KY 42101
270-780-9445

ARCHITECT:

WILLIAMS ASSOCIATE ARCHITECTS
1136 SOUTH PARK DRIVE, SUITE 102
BOWLING GREEN, KY 42103
PHONE: 270-782-2273
FAX: 270-782-2173

UTILITY COMPANIES/ GOVERNMENT OFFICIALS

PLANNING COMMISSION:
CITY-COUNTY PLANNING COMMISSION
1141 STATE STREET
BOWLING GREEN, KY 42101
CONTACT: STEVE McWHORTER
TELEPHONE: (270) 842-1953

WATER & SEWER:
BOWLING GREEN MUNICIPAL UTILITIES
801 CENTER STREET
BOWLING GREEN, KY 42101
CONTACT: RODNEY SULLIVAN
TELEPHONE: (270)782-4388

ELECTRICITY:
BOWLING GREEN MUNICIPAL UTILITIES
801 CENTER STREET
BOWLING GREEN, KY 42101
CONTACT: ERIC PHILLIPS
TELEPHONE: (270)782-4386

TELEPHONE:
AT&T
1061 LOVERS LANE
BOWLING GREEN, KY 42103
CONTACT: BUZZ COLBURN
TELEPHONE: (270)782-4811

BUILDING INSPECTIONS:
CITY OF BOWLING GREEN
BUILDING & INSPECTION DIVISION
707 E. MAIN AVE.
BOWLING GREEN, KY 42101
CONTACT: JEREMY SEGUR
TELEPHONE: (270) 393-3615

CITY ENGINEER:
BOWLING GREEN CITY PUBLIC WORKS
1011 COLLEGE STREET
BOWLING GREEN, KY 42101
CONTACT: MELISSA CANSLER, P.E.
TELEPHONE: (270) 393-3657

GAS:
ATMOS ENERGY
2850 RUSSELLVILLE ROAD
BOWLING GREEN, KY 42101
CONTACT: BYRON OOST
TELEPHONE: (270)901-1710

CABLE:
SPECTRUM COMMUNICATIONS
515 DOUBLE SPRINGS RD.
BOWLING GREEN, KY 42103
CONTACT: MICHAEL HAYES
TELEPHONE: (270)782-8355



**ARNOLD CONSULTING
ENGINEERING SERVICES**
P.O. BOX 1338 BOWLING GREEN KY, 42101
PHONE (270) 780-9445

BOWLING GREEN, WARREN CO., KY

VICINITY MAP
(N.T.S.)

GPS NOTE:
THE SURVEY SHOWN HEREON IS BASED ON GPS DATA COLLECTED BY ACES USING BOTH STATIC AND RTK METHODS WITH DUAL FREQUENCY TOPCON Hiper GA (GGD) RECEIVERS. THE ENTIRETY OF THE DATA COLLECTED FOR THIS SURVEY WAS DONE SO THROUGH GPS MEANS WHEN ACCEPTABLE, AND BY CONVENTIONAL MEANS, FROM GPS CONTROL POINTS, WHEN NECESSARY. RTK DATA WAS COLLECTED FOR ANY SITE FEATURES AND ALL CONTROL POINTS AND BOUNDARY INFORMATION WAS COLLECTED IN STATIC MODE WITH A HRMS OF 0.02" OR LESS. VECTORS AND/OR BASELINES HAVE BEEN CHECKED THROUGH STATIC OBSERVATIONS.

FLOODPLAIN INFORMATION
THE PROPERTY SHOWN HEREON DOES NOT LIE IN A FLOOD PRONE AREA ACCORDING TO (FIRM) FLOOD INSURANCE RATE MAP FOR WARREN COUNTY, KENTUCKY. SAID AREA IS SHOWN ON MAP #21227C0304E, WITH AN EFFECTIVE DATE OF MAY 2, 2007.

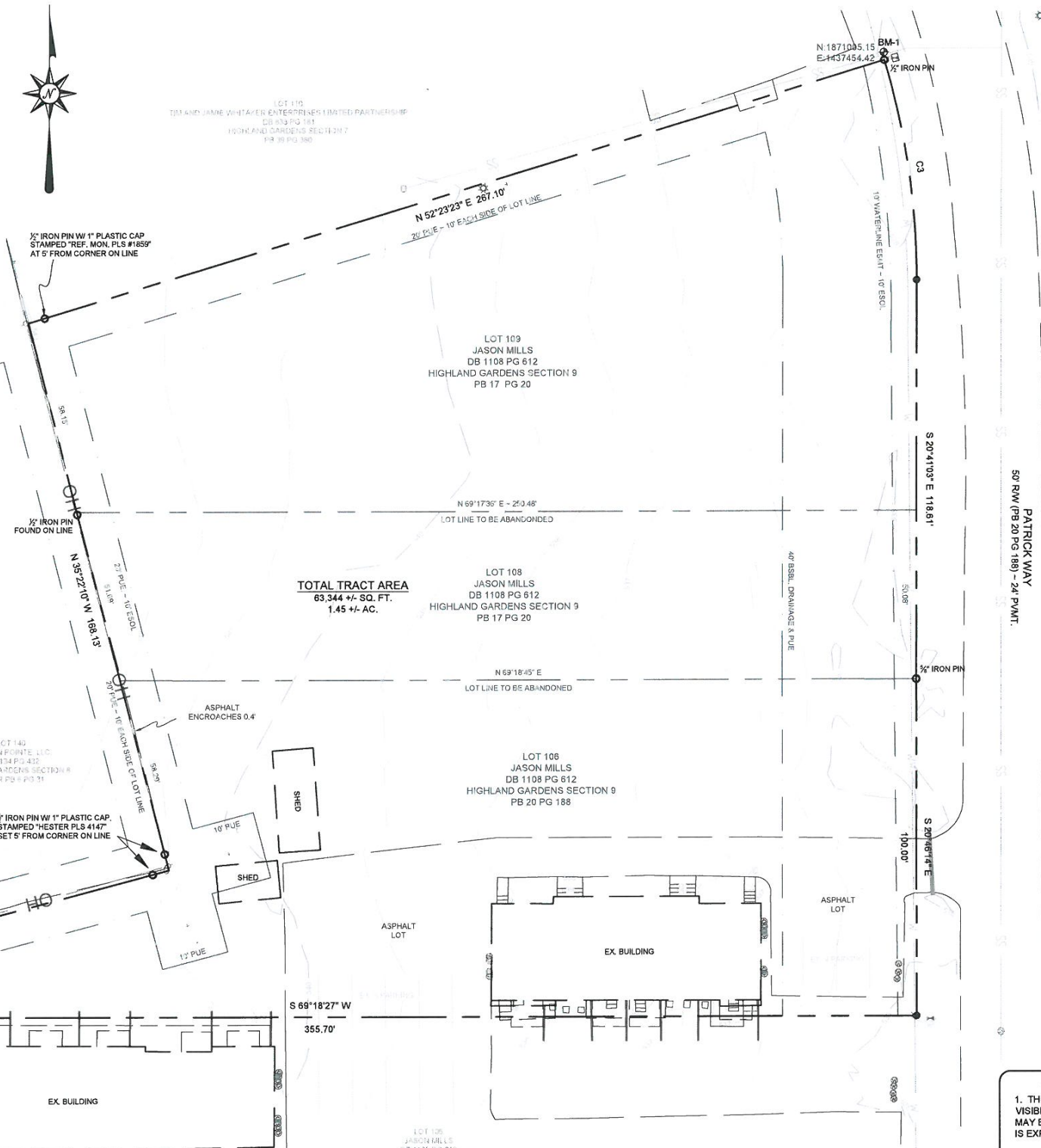
SURVEYOR'S CERTIFICATE

I DO HEREBY CERTIFY THAT THE URBAN SURVEY SHOWN HEREON WAS PERFORMED UNDER MY DIRECTION USING APPROPRIATE G.P.S. METHODS FOR MEASURING RECOVERED MONUMENTS AND ESTABLISHING SURVEY CONTROL AND/OR BY THE METHOD OF RANDOM TRAVERSE. CONVENTIONAL METHODS OF REDUNDANCY WERE EMPLOYED TO ENSURE THE QUALITY OF THE GPS DATA. THE UNADJUSTED MATHEMATICAL ERROR OF CLOSURE OF THE TRAVERSE AND THE THEORETICAL UNCERTAINTY OF THE CORNERS ESTABLISHED EXCEEDED THE SPECIFIED TOLERANCES SET FORTH BY THE COMMONWEALTH OF KENTUCKY. STANDARDS OF PRACTICE FOR PROFESSIONAL LAND SURVEYORS FOR A SURVEY OF THIS CLASS IN 201 KAR 18.150. THE BEARINGS AND DISTANCES SHOWN HEREON HAVE NOT BEEN ADJUSTED FOR CLOSURE AND ARE BASED ON GRID NORTH AS ESTABLISHED BY KY STATE PLANE COORDINATES (SOUTH ZONE 1602, GEOID 12), TAKEN FROM STATIC GPS OBSERVATION.

PRELIMINARY
CHARLES B. HESTER PLS 4147

BENCHMARK DATA:

- BENCHMARK 1**
1/2" IRON PIN LOCATED IN THE NORTH EAST MOST CORNER OF THE SUBJECT PROPERTY.
N: 1871005.15
E: 1437454.42
KY SPC (SOUTH ZONE)
ELEV: 534.87
- BENCHMARK 2**
1/2" IRON PIN LOCATED IN THE SOUTH WEST CORNER OF THE SUBJECT PROPERTY.
N: 1870623.94
E: 1437226.41
KY SPC (SOUTH ZONE)
ELEV: 540.13



TOTAL TRACT AREA
63,344 +/- SQ. FT.
1.45 +/- AC.

BOUNDARY LINE TABLE

LINE	BEARING	DISTANCE
L1	N 62°43'36\" E	8.09'
L2	N 35°23'46\" W	8.31'

BOUNDARY CURVE TABLE

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	192.97'	1949.86'	5°40'13\"	N 59°55'08\" E	192.89'
C2	260.62'	1949.86'	7°39'30\"	N 53°15'33\" E	260.43'
C3	66.35'	225.00'	16°53'43\"	S 29°06'27\" E	66.11'



LEGEND

- ⊕ BENCHMARK
- IRON PIN FOUND
- IRON PIN SET
- ⊗ CONCRETE RAW MONUMENT
- ⊗ SANITARY SEWER MANHOLE
- ⊗ SANITARY SEWER CLEAN OUT
- ⊕ ANCHOR
- ⊕ UTILITY POLE
- ⊕ SIGNAL POLE
- ⊕ ELECTRIC BOX
- ⊕ ELECTRIC METER
- ⊕ GAS VALVE
- ⊕ WATER VALVE
- ⊕ WATER METER
- ⊕ FIRE HYDRANT
- ⊕ GAS METER
- ⊕ TELEPHONE PEDESTAL
- ⊕ STORM SEWER MANHOLE
- ⊕ DROP BOX INLET
- ⊕ CURB BOX INLET
- ⊕ PIPE BOLLARD
- ⊕ GUTTER OUTLET
- ⊕ ROAD SIGN
- ⊕ TREE
- ⊕ MAILBOX
- ⊕ LAMP POLE
- BSBL BUILDING SET BACK LINE
- ESOL EACH SIDE OF LINE
- PUE PUBLIC UTILITY EASEMENT
- FFE FINISHED FLOOR ELEVATION
- PROPERTY LINE
- - - SETBACK LINE
- - - EASEMENTS
- - - LOT LINE TO BE ABANDONED
- - - CENTERLINE
- - - UNDERGROUND ELECTRIC
- - - GAS LINE
- - - OVERHEAD UTILITIES
- - - BURIED TELEPHONE
- - - SANITARY SEWER LINE
- - - WATER LINE
- - - STORM SEWER LINE
- - - FENCE LINE
- ⊕ DRAINAGE ESMT.

PARCEL OWNER, ADDRESS, AND SOURCE OF TITLE
WESTEN POINTE, LLC
1128 SOUTH PARK DRIVE
BOWLING GREEN, KY 42103
DEED BOOK 1134 PAGE 432
MINOR PLAT BOOK 6 PAGE 31

TOTAL AREA OF SURVEY
63,344 +/- SQ. FT.
1.45 +/- ACRES

CLASS "A" SURVEY
URBAN OR SUBURBAN
DATE OF FIELD SURVEY
OCTOBER 18, 2017

GENERAL NOTES

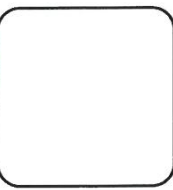
- THE LOCATION OF ALL UTILITIES SHOWN HEREON ARE BASED ON THE FIELD LOCATION OF FOUND VISIBLE STRUCTURES OR AS FLAGGED OR MARKED BY THEIR RESPECTIVE UTILITY COMPANIES. THERE MAY BE OTHER UNDERGROUND UTILITIES LOCATED ON THE PROPERTY SHOWN HEREON. NO GUARANTEE IS EXPRESSED OR IMPLIED TO THE ACTUAL LOCATION OF SAID UTILITIES.
- THE PROPERTY SHOWN HEREON IS SUBJECT TO: ANY AND ALL LEGAL EASEMENTS AND RIGHT-OF-WAYS RECORDED AND UNRECORDED, INCLUDING BUT NOT LIMITED TO THOSE SHOWN HEREON; ANY AND ALL FACTS THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH
- A BOUNDARY SURVEY DOES NOT DETERMINE LAND OWNERSHIP. A PROFESSIONAL LAND SURVEYOR ONLY PROVIDES AN OPINION OF PREVIOUSLY DESCRIBED BOUNDARY LINES WHICH MAY OR MAY NOT BE UPHOLD BY A COURT OF LAW. UNWRITTEN RIGHTS MAY OR MAY NOT EXIST ON SUBJECT PROPERTY
- THE PROPERTY SHOWN HEREON IS SUBJECT TO ANY AND ALL LEGAL EASEMENTS AND RIGHT-OF-WAYS RECORDED AND UNRECORDED, INCLUDING BUT NOT LIMITED TO THOSE SHOWN HEREON.
- ALL IRON PINS SET ARE 1/2" X 18" PINS SET WITH 1" YELLOW PLASTIC CAP STAMPED "B. HESTER PLS 4147" UNLESS OTHERWISE NOTED
- THE DATUM FOR THIS SURVEY IS GRID NORTH AS ESTABLISHED BY KENTUCKY STATE PLANE COORDINATES, SOUTH ZONE 1602. THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88 AS OBTAINED FROM STATIC OPUS OBSERVATION.

REVISIONS

WESTEN STREET APARTMENTS, PHASE III
1703 PATRICK WAY
BOWLING GREEN, KY 42104

ACES
ARNOLD CONSULTING
ENGINEERING SERVICES, INC.
P.O. BOX 1398
BOWLING GREEN, KY 42101
PHONE (270) 780-9445

JOB NUMBER: 17-3202-L
DATE: 12/27/2017
SCALE: 1" = 20'
DRAWN: J. HOGUE
CHECKED: B. HESTER
FILE PATH: Z:\SITE\DEVIC-EXISTING CONDITIONS



C1
EXISTING TOPOGRAPHY



GENERAL NOTES

1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL PERMITTING AUTHORITIES.
2. NO GRADING, STRIPPING, EXCAVATION, FILLING OR OTHER DISTURBANCE OF THE NATURAL GROUND COVER SHALL TAKE PLACE UNTIL PROPOSED SOIL EROSION CONTROL PLAN HAS BEEN APPROVED AND IN PLACE.
3. ALL DIMENSIONS INVOLVING CURB RADI ARE SHOWN TO FACE OF CURB, UNLESS NOTED OTHERWISE. ALL CURB RADI ARE 5.0' UNLESS NOTED OTHERWISE.
4. IN THE CASE OF CONFLICT BETWEEN THIS DRAWING AND ANY OTHER DRAWING AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR CLARIFICATION.
5. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND THE REQUIREMENTS OF LOCAL UTILITY COMPANIES.
6. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND THE TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND SAFETY REQUIREMENTS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF ALL VEHICLE TRAFFIC IN AND AROUND THE CONSTRUCTION AREA.
8. ALL UNPAVED AREAS TO RECEIVE A MINIMUM OF 4" TOPSOIL, SEED (AS OUTLINED IN THE LANDSCAPE PLANS), MULCHED AND WATERED AS NECESSARY TO PROVIDE SUBSTANTIAL GRASS COVER.
9. PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT BY OWNER, THE SITE SHALL BE CLEAN OF ALL DEBRIS AND TRASH.

***NOTES: THE SITE SHALL COMPLY WITH ALL ACCESSIBILITY STANDARDS.**

DEVELOPMENT SUMMARY

STATISTIC	PERMITTED / REQUIREMENT	PROVIDED
CURRENT ZONING	RM-4	RM-4
PROPOSED USE	MULTI-FAMILY	MULTI-FAMILY
TOTAL SITE AREA	MINIMUM SITE AREA PER RM-4: 5,000 SF PER 1ST UNIT + 1,500 SF/UNIT EACH ADDITIONAL UNIT = 33,500 SF	63,345 SQ. FT. 1.45 +/- ACRES
LOT COVERAGE	53,846 SQ. FT. (85%) 1.24 +/- ACRES (85%)	37,130 SQ. FT. (59%) 0.85 +/- ACRES (59%)
BUILDING SETBACKS	FRONT: 25' SIDES: 10' REAR: 25'	FRONT (PATRICK WAY): 25.0' SIDE (NORTH): 10.0' SIDE (SOUTH): 85.0' REAR (WEST): 10.0'
TOTAL PARKING	BEYS: 2 EXST. 2 EXST. 1 TOTAL SPACES REQUIRED: 63	SPACES: 1.5 (3) = 12 2.5 (18) = 45 2.5(2) = 5 1.5(4) = 6 HANDICAP SPACES: 4 STANDARD SPACES: 59 TOTAL SPACES: 63
LANDSCAPE PLAN	SEE SHEET L1	SEE SHEET L1
DRAINAGE PLAN	SEE SHEET C3	SEE SHEET C3
TRAFFIC STUDY	N/A	N/A
SITE ACCESS	PER CITY OF BOWLING GREEN	2 POINTS ONTO PATRICK WAY
DISTANCE TO NEAREST INTERSECTION	PATRICK WAY & WESTEN ST. APPROX. 300'	

BUILDING SUMMARY

STATISTIC	PERMITTED / REQUIREMENT	PROVIDED
F.A.R.	N/A	0.4665
BUILDING HEIGHT	6 STORIES	2 STORIES (27' - 0")
BUILDING BREAKDOWN	(16) TWO-BEDROOM UNITS 16 X 1,219 S.F. = 19,504 S.F. PROPOSED SQUARE FOOTAGE: 27,072 S.F. EXIST: (4) ONE-BDRM UNITS & EXST. (2) TWO-BDRM UNITS - SQ. FT.: 4,786 S.F. TOTAL SQUARE FOOTAGE: 31,858 S.F.	(8) ONE-BEDROOM UNITS 8 X 946 S.F. = 7,568 S.F.
SITE DENSITY	N/A	20.7 UNITS PER ACRE

CONSTRUCTION LEGEND

- LIGHT DUTY BITUMINOUS PAVEMENT
- HEAVY DUTY BITUMINOUS PAVEMENT
- SIDEWALK TURN-DOWN EDGE
- CONCRETE PAVEMENT
- HANDICAP SYMBOL
- STANDARD SIDEWALK
- HANDICAP VAN PARKING SIGN
- HANDICAP PARKING SIGN
- STANDARD CURB
- DUMPSTER ENCLOSURE
- WHEEL STOP



REVISIONS

WESTEN STREET APARTMENTS, PHASE III
1703 PATRICK WAY
BOWLING GREEN, KY 42104

ACES
ARNOLD CONSULTING ENGINEERING SERVICES, INC.
P.O. BOX 1338
BOWLING GREEN, KY 42101
PHONE (270) 780-9445

JOB NUMBER: 17-3202-L
DATE: 12/27/2017
SCALE: 1" = 20'
DRAWN: C. WICKER
CHECKED: B. ZACKERY
FILE PATH:
2-SITEV2-PROPOSED SITE

C2
PROPOSED SITE LAYOUT

BENCHMARK DATA:

- BENCHMARK 1**
IRON PIN LOCATED IN THE NORTHERN PORTION OF THE PROPERTY, APPROXIMATELY 20.74' FROM BACK OF SIDEWALK. ELEV: 539.02
- BENCHMARK 2**
IRON PIN LOCATED IN THE SOUTHWEST PORTION OF THE PROPERTY, APPROXIMATELY 22.69' FROM EDGE OF PAVEMENT. ELEV: 538.95



GRADING AND DRAINAGE NOTES:

1. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL NOTIFY 811 48 HOURS PRIOR TO EXCAVATION.
2. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
3. NO CUT OR FILL SLOPES SHALL BE CONSTRUCTED STEEPER THAN 2H:1V UNLESS SPECIFICALLY NOTED ON PLANS.
4. SITE GRADES AROUND THE BUILDING AND PAVEMENT AREAS SHALL BE GRADED DURING CONSTRUCTION TO PREVENT PONDING. ANY SURFACE WATER ACCUMULATION IN THE BUILDING AND PAVEMENT AREAS SHALL BE DRAINED IMMEDIATELY TO AVOID SATURATION OF THE SUBGRADE SOILS.
5. FILL, INCLUDING FINAL TOPSOIL SHALL BE PLACED A MINIMUM OF 3 INCHES BELOW FFE AT BUILDING SLABS UNLESS OTHERWISE INDICATED BY ARCHITECTURAL WALL SECTION DETAILS.
6. GRADE ALL AREAS TO MAINTAIN A POSITIVE SLOPE AWAY FROM THE BUILDING.
7. ALL EXCAVATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST OSHA GUIDELINES AS MANDATED IN CURRENT FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE IN PROVIDING SAFE WORKING CONDITIONS IN CONNECTION WITH ANY EXCAVATION WORK.
8. ENGINEERED FILL SHALL BE COMPACTED TO 98% OF STANDARD PROCTOR DENSITY IN BUILDING PAD AREAS (PROPOSED AND FUTURE EXPANSION) AND TO 95% IN PARKING AND DRIVE AREAS. VEGETATED AREAS SHOULD BE COMPACTED TO A MINIMUM OF 92% OF STANDARD PROCTOR DENSITY.
9. STONE BASES SHOULD BE COMPACTED TO A DENSITY SATISFACTORY TO ENGINEER, TYPICALLY 84% OF SOLID VOLUME OR BY TEST STRIP METHODS.
10. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, ETC. WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OFF SITE.
11. GRADE LINES SHOWN ARE FINISHED GRADE. CONTRACTOR SHOULD SEE DETAIL SHEET FOR APPROPRIATE PAVEMENT TYPE TO DETERMINE SUB-GRADE ELEVATIONS FOR PAVING AREAS.
12. CONTRACTOR IS ADVISED THAT FINAL GRADING AND CURB PLACEMENT SHALL BE COMPLETED TO ACCOMMODATE THE FOLLOWING:
 - A) NO WATER WILL POND AT POINTS WHERE LANDSCAPE ISLANDS EXTEND INTO PARKING FIELDS.
 - B) SPACES DESIGNATED FOR HANDICAP PARKING AND ACCESS AISLE SHALL HAVE A FINAL SLOPE AFTER PAVING IS COMPLETED OF NOT MORE THAN 2.0%. IF EITHER OF THESE ITEMS ARE NOT CONSTRUCTED AS OUTLINED ABOVE, REWORK WILL BE PROVIDED BY THE CONTRACTOR TO CORRECT DEFICIENCIES AT THE CONTRACTORS EXPENSE.
13. TOPSOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENT CONTROL MEASURES AROUND STOCKPILES DURING CONSTRUCTION.
14. ALL SPOT ELEVATIONS SHOWN ARE FINISHED GRADE. SPOT ELEVATIONS SHOWN ALONG GUTTERLINE ARE FLOW ELEVATIONS FOR FACE OF CURB.

STORM WATER RUNOFF CALCULATIONS

PRE-DEVELOPED
 TOTAL AREA (A_T) = 1.45 ACRES
 AREA OF IMPERVIOUS (A_I) = 0.20 ACRES
 AREA OF PERVIOUS (A_P) = 1.25 ACRES
 C_I = 0.95 C_P = 0.25
 $WT. "C" = \frac{(A_I \cdot C_I) + (A_P \cdot C_P)}{A_T} = \frac{(0.20 \cdot 0.95) + (1.25 \cdot 0.25)}{1.45} = 0.346$

POST-DEVELOPED
 TOTAL AREA (A_T) = 1.45 ACRES
 AREA OF IMPERVIOUS (A_I) = 1.04 ACRES
 AREA OF PERVIOUS (A_P) = 0.41 ACRES
 C_I = 0.95 C_P = 0.25
 $WT. "C" = \frac{(A_I \cdot C_I) + (A_P \cdot C_P)}{A_T} = \frac{(1.04 \cdot 0.95) + (0.41 \cdot 0.25)}{1.45} = 0.752$

$\Delta "C" = 0.752 - 0.346 = 0.406$
 RETENTION REQUIRED = $0.406 \cdot (2.95/12) \cdot 1.45 = 0.145$ AC-FT (6,306 CU. FT.)

TOTAL RETENTION PROVIDED
 BASIN #1 = 1,609 C.F.
 UNDERGROUND BASIN #2 = 1,260 S.F. x 3' x 40% POROSITY = 1,512 C.F.
 UNDERGROUND BASIN #3 = 1,260 S.F. x 3' x 40% POROSITY = 1,512 C.F.
 UNDERGROUND BASIN #4 = 1,134 S.F. x 3' x 40% POROSITY = 1,361 C.F.
 UNDERGROUND BASIN #5 = 648 S.F. x 3' x 40% POROSITY = 778 C.F.
 UNDERGROUND BASIN #6 = 486 S.F. x 3' x 40% POROSITY = 583 C.F.
 TOTAL STORAGE = 7,355 C.F.

WATER QUALITY (1.45 AC) IS ACHIEVED THROUGH THE USE OF PERVIOUS PAVEMENT SYSTEM AND UNDERGROUND DETENTION. TREATMENT TRAIN IS RATED AT 80% REMOVAL EFFICIENCY. THE CRITERIA AND CALCULATIONS FOR THE WATER QUALITY SYSTEM ARE BELOW.

WATER QUALITY CALCULATIONS
 TOTAL AREA (A_T) = 1.45 ACRES
 AREA OF IMPERVIOUS - TOTAL (A_I) = 1.04 ACRES
 AREA OF PERVIOUS - TOTAL (A_P) = 0.41 ACRES
 % IMPERVIOUS - TOTAL (I) = 71.7%
 P = 1.1 INCHES (RAINFALL FOR 85% STORM EVENT)
 R_v - TOTAL = $0.05 + 0.009(I) = 0.05 + 0.009(71.7) = 0.685$

$WQV = \frac{(P \cdot R_v \cdot A_I)}{12} = \frac{(1.1 \cdot 0.685 \cdot 1.45)}{12} = 1.11$ = 0.0925 AC-FT (4,020 CU FT.)

SEE ABOVE FOR VOLUME PROVIDED

TREATMENT TRAIN
 REQUIRED TREATMENT > 90% TSS REMOVAL
 PERVIOUS PAVEMENT SYSTEM = 90% TSS REMOVAL
 TOTAL SITE REMOVAL = 80%

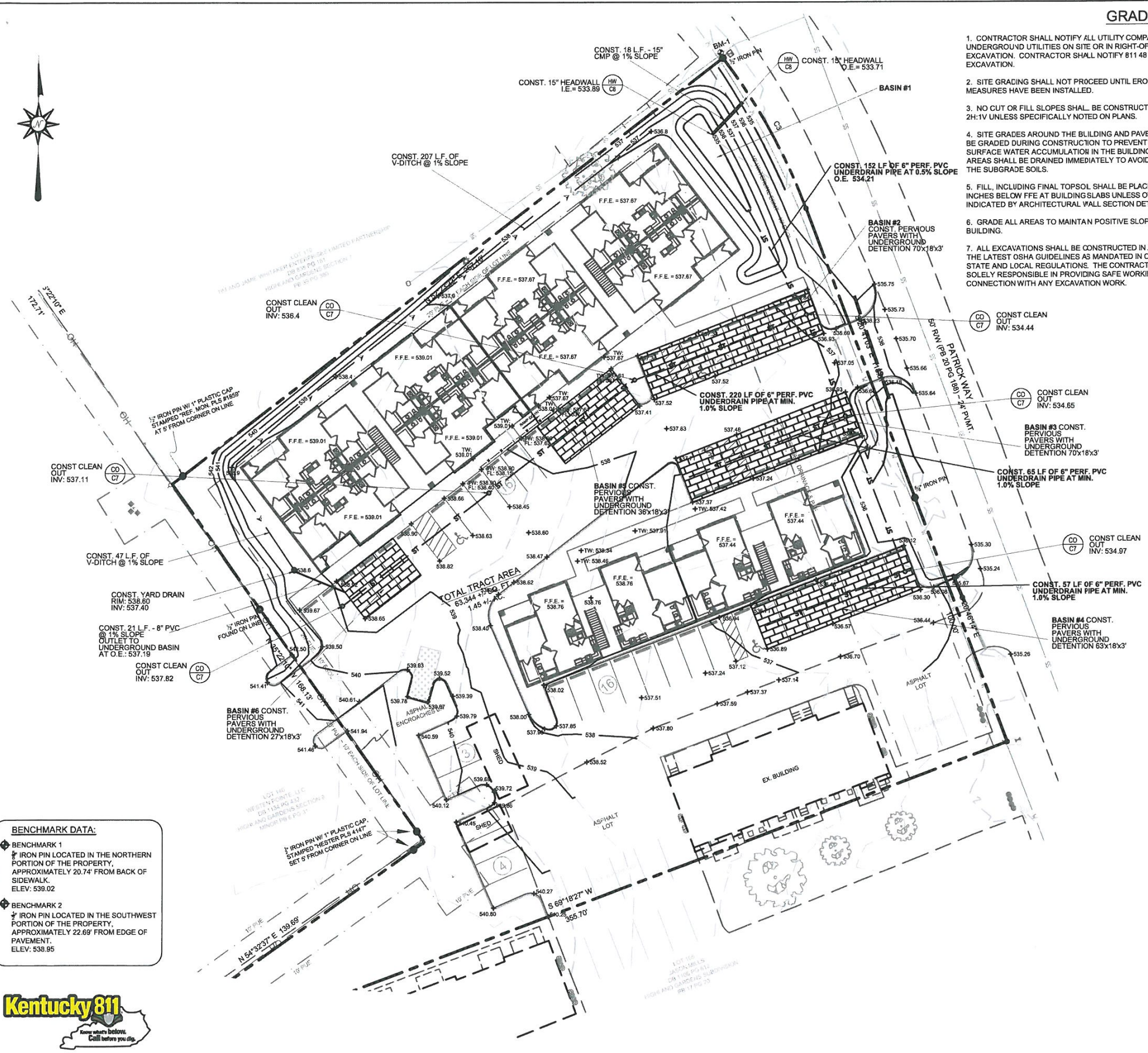
REVISIONS

WESTEN STREET APARTMENTS, LLC
 1624 WESTEN ST.
 BOWLING GREEN, KY 42104

ACES
 ARNOLD CONSULTING
 ENGINEERING SERVICES, INC.
 P.O. BOX 1338
 BOWLING GREEN, KY 42101
 PHONE (270) 780-9445

JOB NUMBER:
 DATE: 12/27/2017
 SCALE: 1" = 20'
 DRAWN: D. WHITLEY
 CHECKED: B. ZACKERY
 FILE PATH:
 Z:\SITE\DEVIC3-PROPOSED GRADING

C3
 PROPOSED
 SITE GRADING



BENCHMARK DATA:

- ◆ BENCHMARK 1
 IRON PIN LOCATED IN THE NORTHERN PORTION OF THE PROPERTY, APPROXIMATELY 20.74' FROM BACK OF SIDEWALK. ELEV: 539.02
- ◆ BENCHMARK 2
 IRON PIN LOCATED IN THE SOUTHWEST PORTION OF THE PROPERTY, APPROXIMATELY 22.69' FROM EDGE OF PAVEMENT. ELEV: 538.95



THIS SHEET IS FOR LANDSCAPE PURPOSES ONLY.

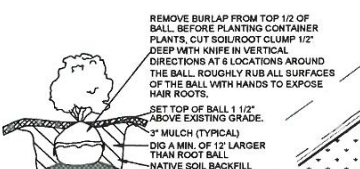
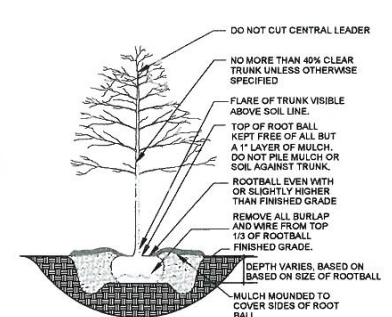
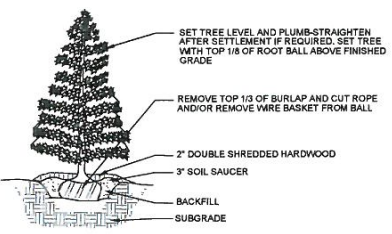


LANDSCAPE NOTES:

- PLANT MATERIALS SHALL CONFORM IN SIZE AND GRADE TO AMERICAN STANDARDS FOR NURSERY STOCK. PLANT MATERIALS SHALL BE OF STANDARD QUALITY TRUE TO NAME AND TYPE, AND FIRST CLASS REPRESENTATIVES OF THEIR SPECIES OR VARIETY. PLANTS SHALL BE CAREFULLY LABELED AND SIZES NOTED. RIGHT IS RESERVED TO REJECT PLANTS CONSIDERED AS UNSATISFACTORY. REJECTED PLANTS SHALL BE REMOVED FROM SITE. PLANTS SHOULD NOT BE PRUNED PRIOR TO DELIVERY. HEADING-BACK PLANTS TO MEET SIZES INDICATED IN DRAWINGS SCHEDULE WILL NOT BE PERMITTED.
- PLANTS & TREES
 - CONTRACTOR SHALL STAKE THE LOCATION OF EACH TREE AND SHRUB IN ACCORDANCE WITH THE LOCATIONS SHOWN ON THE DRAWINGS. STAKING AND LAYOUT WORK SHALL BE DONE SUFFICIENTLY IN ADVANCE OF PLANTING OPERATION TO PERMIT THE LANDSCAPE DESIGNER TO CHECK, REVISE IF DESIRED, AND APPROVE THE LOCATIONS BEFORE DIGGING OPERATIONS BEGIN.
 - EXCAVATE PLANTING BEDS AND POCKETS TO A DEPTH REQUIRED FOR PLANTINGS.
 - ANY ROCK OR OTHER UNDERGROUND OBSTRUCTION SHALL BE REMOVED TO DEPTH NECESSARY TO PERMIT PLANTING ACCORDING TO THESE SPECIFICATIONS.
 - IN GENERAL, CONTRACTOR SHALL THOROUGHLY WATER ALL PLANTED AREAS AFTER PLANTING AND IN DRY WEATHER USE ENOUGH WATER TO THOROUGHLY SOAK ALL TREE PITS BEFORE PLANTING. CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS IN ADVANCE OF START OF THE WORK TO INSURE THAT AN ADEQUATE SUPPLY OF WATER AND WATERING EQUIPMENT ARE AVAILABLE WHEN REQUIRED.
- MULCHING
 - MULCH TOP OF ROOT BALL AND SAUCER WITHIN 48 HOURS TO A MINIMUM DEPTH OF 2" AND TO A DEPTH NOT TO EXCEED 3".
 - ALL SHADE AND FLOWERING TREES SHALL BE MULCHED WITH THREE (3) INCHES THICK (SETTLED) AND COVERING AN AREA TWELVE (12) INCHES GREATER THAN THE DIAMETER OF PIT.
- PLANT MAINTENANCE
 - MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR 90 DAYS AFTER THE LAST PLANT HAS BEEN INSTALLED.
 - ALL PLANTS SHALL BE KEPT IN A GROWING, HEALTHY CONDITION BY WATERING, PRUNING, SHEARING, SPRAYING, TIGHTENING OF GUYS, STRAIGHTENING OF PLANTS WHICH LEAN OR SAG, LIFTING PLANTS WHICH DEVELOP MORE THAN NORMAL SETTLEMENT, WEEDING, AND BY ANY OTHER NECESSARY OPERATION OF MAINTENANCE. KEEP ALL PLANTING AREAS FREE OF WEEDS AND UNDESIRABLE GRASSES.
 - DURING THE MAINTENANCE PERIOD, PLANTS IN AN UNHEALTHY OR BADLY IMPAIRED CONDITION, SHALL BE REMOVED AND REPLACED IMMEDIATELY USING SPECIFIED MATERIAL.
- ACCEPTANCE AND GUARANTEE
 - ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR WITHOUT SATISFACTORY GROWTH, AS DETERMINED BY THE LANDSCAPE ARCHITECT, SHALL BE REMOVED AND REPLACED IN NEXT SPECIFIED PLANTING SEASON. ANY REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED AND REPLANTED IN SAME LOCATION FROM WHICH DEAD PLANT WAS REMOVED AND SHALL BE REPLACED AT NO ADDITIONAL COST.
 - ALL PLANT MATERIAL SHALL HAVE A ONE YEAR WARRANTY FOR REPLACEMENT.
- DURING THE BIDDING PROCESS, NO PLANTS MAY BE SUBSTITUTED FOR A DIFFERENT PLANT. THE PLAN MUST BE BID AS DRAWN.
- THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO COME BACK AFTER ONE YEAR OF ACCEPTANCE OF THE PLANTING TO REMOVE ANY STAKES OR GUY WIRES THAT MAY HAVE BEEN USED
- ANY DISCREPANCY BETWEEN THE PLANTING PLAN AND THE PLANT SCHEDULE SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE.
- THE OWNER RESERVES THE RIGHT TO ALTER THE PLANTING PLAN AS SHOWN IN THE AREA OF THE FOUNDATION.

MULCH: ALL SHRUBS THAT ARE SHOW IN GROUPINGS, SHALL BE MULCHED IN A PLANT BED WITH SHREDDED HARDWOOD MULCH TO A MINIMUM OF 2" AND NOT GREATER THAN 3" IN DEPTH. IN AREAS OF STEEP SLOPES A FINE GRADE (NEARLY INVISIBLE) PLASTIC NETTING MAY BE USED TO STABILIZE THE MULCH BED.

ANNUALS AND PERENNIALS: ANY DESIRED ANNUALS AND PERENNIALS MAY BE DETERMINED BETWEEN THE PROPERTY OWNER AND THE LANDSCAPE CONTRACTOR FOR DESIRED COLOR PALETTE.



PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
TREES						
AR	3	ACER RUBRUM 'AUTUMN FLAME'	RED MAPLE	1 3/4" CAL	B&B	WELL BRANCHED
CC	4	CERCIS CANADENSIS 'FOREST PANSY'	EASTERN REDBUD	5'-6" HT.	B&B	WELL BRANCHED
CK	3	CORNUS KOUSA	KOUSA DOGWOOD	5'-6" HT.	B&B	WELL BRANCHED
MS	4	MAGNOLIA STELLATA 'CENTENNIAL'	STAR MAGNOLIA	5'-6" HT.	B&B	WELL BRANCHED
PS	5	PINUS STROBUS	EASTERN WHITE PINE	5'-6" HT.	B&B	WELL BRANCHED
QP	10	QUERCUS PHELLOS	WILLOW OAK	1 3/4" CAL	B&B	WELL BRANCHED
SHRUBS						
BS	15	BUXUS SEMPERVIRENS 'VARDAR VALLEY'	COMMON BOXWOOD	2 1/2" HT.	B&B	WELL BRANCHED
CA	19	CALAMAGROSTIS ACUTIFLORA 'KARL FOENSTER'	FEATHER REED GRASS	3 GAL. CLUMP		
EA	21	EUONYMUS ALATUS 'COMPACTUS'	DWARF FOTHERGILLA	2 1/2" HT.	B&B	WELL BRANCHED
FG	14	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	2 1/2" HT.	B&B	WELL BRANCHED
HD	17	HYDRANGEA QUERCIFOLIA 'PEE WEE'	OAKLEAF HYDRANGEA	2 1/2" HT.	B&B	WELL BRANCHED
HV	16	HAMAMELIS VERNALIS 'CHRISTMAS CHEER'	VERNAL WITCH-HAZEL	2 1/2" HT.	B&B	WELL BRANCHED
IG	14	ILEX GLABRA	INKBERRY	2 1/2" HT.	B&B	WELL BRANCHED
JC	14	JUNIPERUS CHINENSIS 'SEA GREEN'	CHINESE JUNIPER	2 1/2" HT.	B&B	WELL BRANCHED
LM	13	PRUNUS LAUROCEASUS 'OTTO LUYKEN'	CHERRY LAUREL	2 1/2" HT.	B&B	WELL BRANCHED
TC	9	TAXUS CUSPIDATA 'AURESCENS'	JAPANESE YEW	2 1/2" HT.	B&B	WELL BRANCHED
VP	8	VIBURNUM X PRAGENSE	PRAGUE VIBURNUM	2 1/2" HT.	B&B	WELL BRANCHED
GROUND COVER						
LM	32	LIRIOPE MUSCARI 'BIG BLUE'	LIRIOPE	1 QUART		12" O.C.

TOTAL VEHICULAR USE AREA: 24,900 SF
 REQUIRED INTERIOR LANDSCAPING: 1,245 SF (5%)
 PROVIDED INTERIOR LANDSCAPING: 1,407 SF (5.7%)

AREA OF SOD: 1,016 SQUARE YARDS. SOD TO BE A LOCALLY GROWN TYPE TYPE FESCUE. SOD TO BE PLACED WITHIN 24 HOURS OF HARVEST.



REVISIONS

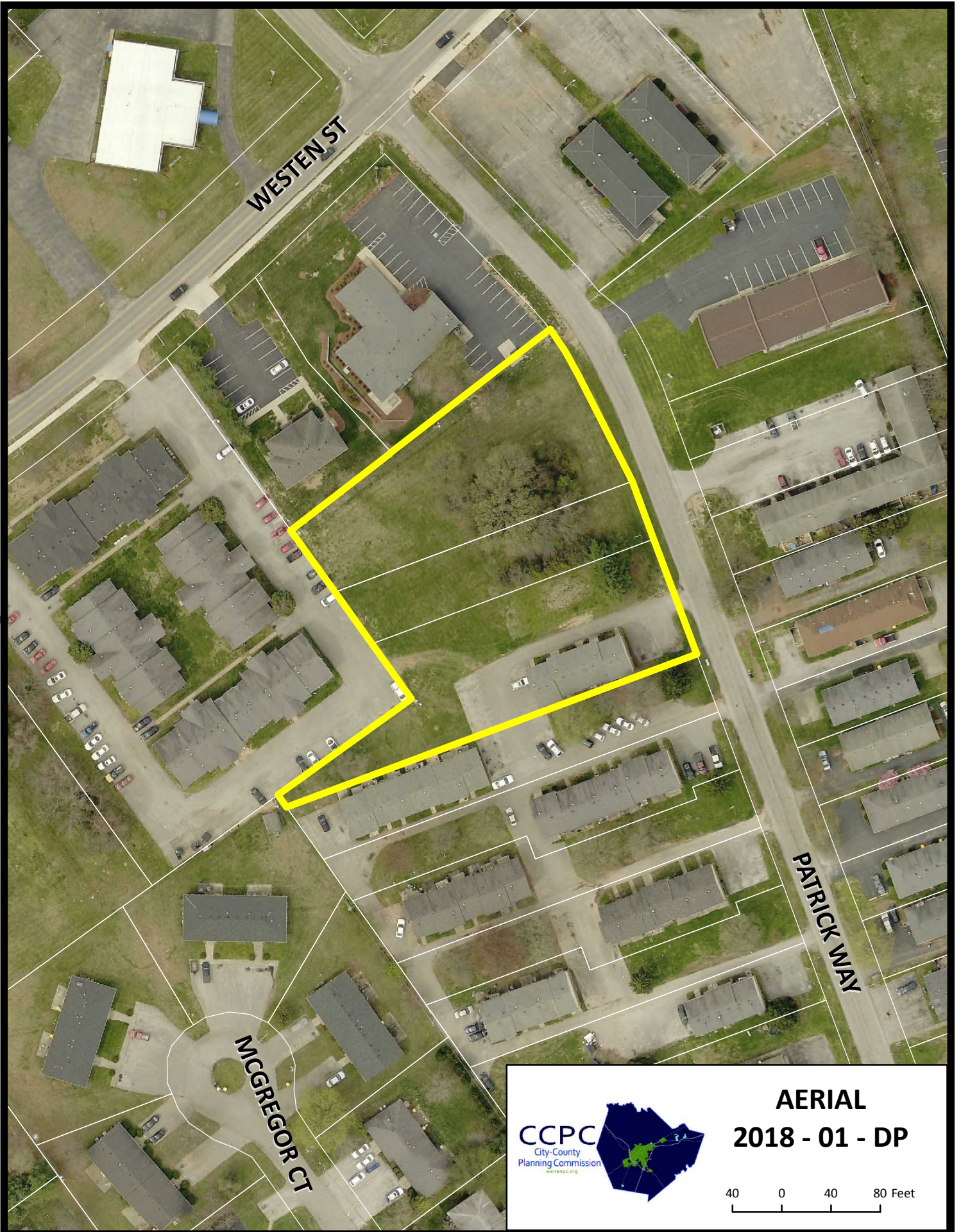
WESTEN STREET APARTMENTS, PHASE III
 1703 PATRICK WAY
 BOWLING GREEN, KY 42104

ACES
 ARNOLD CONSULTING
 ENGINEERING SERVICES, INC.
 P.O. BOX 938
 BOWLING GREEN, KY 42101
 PHONE (270) 780-9445

JOB NUMBER: 17-3202-L
 DATE: 12/27/2017
 SCALE: 1" = 20'
 DRAWN: K. CARDWELL
 CHECKED: B. SHIRLEY
 FILE PATH: Z:\SITE\2017\PROPOSED SITE

L1
 LANDSCAPE PLAN





CCPC
City-County
Planning Commission
www.ccpc.org



AERIAL
2018 - 01 - DP

40 0 40 80 Feet

