AN ORDINANCE APPROVING A REZONING FROM R-1 (SINGLE-FAMILY RESIDENTIAL) TO DISTRICT RP-1 (PLANNED SINGLE-FAMILY RESIDENTIAL) AND PRELIMINARY DEVELOPMENT PLAN FOR HIGHLAND MEADOWS 5TH AND 6TH PLAT, LOCATED AT 1201 SW LONGVIEW BLVD., IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 33, THE UNIFIED DEVELOPMENT ORDINANCE OF LEE'S SUMMIT CODE OF ORDINANCES, FOR THE CITY OF LEE'S SUMMIT, MISSOURI.

WHEREAS, Application #PL2020-335 submitted by Clayton Properties Group, Inc., requesting approval of a rezoning from R-1 (Single-family Residential) to RP-1 (Planned Single-family Residential) and preliminary development plan on land located at 1201 SW Longview Blvd, was referred to the Planning Commission to hold a public hearing; and,

WHEREAS, the Unified Development Ordinance provides for the approval of a rezoning and preliminary development plan by the City following public hearings by the Planning Commission and City Council; and,

WHEREAS, after due public notice in the manner prescribed by law, the Planning Commission held public hearings for the consideration of the rezoning and preliminary development plan on January 7, 2021, and rendered a report to the City Council recommending that the rezoning and preliminary development plan be approved; and,

WHEREAS, after due public notice in the manner prescribed by law, the City Council held a public hearing on February 2, 2021, and rendered a decision to approve the rezoning and preliminary development plan for said property.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI, as follows:

SECTION 1. That a rezoning and preliminary development plan is hereby approved on the following described property:

A TRACT OF LAND FOR REZONING PURPOSES ONLY LYING IN THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 47 NORTH, RANGE 32 WEST, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, BEARINGS ARE REFERENCED TO GRID NORTH OF THE MISSOURI STATE PLANE COORDINATE SYSTEM, 1983, WEST ZONE, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 10; THENCE NORTH 87°10'35" WEST, ALONG THE SOUTH LINE OF SAID SOUTHEAST QUARTER, A DISTANCE OF 747.13 FEET TO THE SOUTHEAST CORNER OF LOT 114, HIGHLAND MEADOWS, FOURTH PLAT, RECORDED AS DOCUMENT NO. 2017E0104888; THENCE ALONG THE EAST LINE OF SAID HIGHLAND MEADOWS, FOURTH PLAT THE FOLLOWING TWENTY-FOUR (24) COURSES:

NORTH 02°48'00" EAST, A DISTANCE OF 170.17 FEET TO THE SOUTHEAST CORNER OF LOT 116; THENCE NORTH 01°49'29" EAST, A DISTANCE OF 121.61 FEET TO THE NORTHEAST CORNER OF LOT 115; THENCE NORTH 73°08'56" WEST, A DISTANCE OF 76.31 FEET TO THE NORTHWEST CORNER OF SAID LOT 115; THENCE NORTH 87°51'19" WEST, A DISTANCE OF 74.00 FEET TO THE NORTHWEST CORNER OF LOT 116; THENCE SOUTH 88°54'43" WEST, A DISTANCE OF 149.12 FEET TO THE SOUTHEAST CORNER OF LOT 119; THENCE NORTH 02°48'00" EAST, A DISTANCE OF 120.59 FEET TO THE

NORTHEAST CORNER OF SAID LOT 119 AND BEING ON THE SOUTH RIGHT OF WAY LINE OF S.W. 12TH STREET, AS PREVIOUSLY ESTABLISHED AND BEING ON A NON-TANGENT CURVE TO THE LEFT; THENCE ALONG SAID CURVE TO THE LEFT, HAVING A CHORD BEARNG OF SOUTH 86°33'11" EAST. A RADIUS OF 425.00 FEET FOR AN ARC DISTANCE OF 9.84 FEET: THENCE NORTH 03°06'24" EAST. A DISTANCE OF 177.15 FEET TO THE NORTHEAST CORNER OF LOT 120: THENCE NORTH 00°22'00" WEST. A DISTANCE OF 120.67 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF S.W. 11TH TERRACE, AS PREVIOUSLY ESTABLISHED, SAID POINT BEING ON A NON-TANGENT CURVE THE LEFT: THENCE ALONG SAID CURVE TO THE LEFT. HAVING A CHORD BEARING OF NORTH 83°36'22" EAST, A RADIUS OF 325.00 FEET, FOR AN ARC DISTANCE OF 43.75 FEET; THENCE NORTH 10°15'00" WEST, A DISTANCE OF 50.00 FEET: THENCE NORTH 06°12'00" EAST, A DISTANCE OF 72.00 FEET; THENCE NORTH 16°33'00" EAST, A DISTANCE OF 62.50 FEET; THENCE NORTH 26°48'00" EAST. A DISTANCE OF 63.00 FEET: THENCE NORTH 81°30'52" EAST. A DISTANCE OF 98.41 FEET: THENCE NORTH 65°50'00" EAST. A DISTANCE OF 47.81 FEET; THENCE SOUTH 45°10'38" EAST, A DISTANCE OF 46.73 FEET; THENCE NORTH 37°02'04" EAST. A DISTANCE OF 125.23 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF S.W. 11TH STREET, AS PREVIOUSLY ESTABLISHED AND BEING ON A NON-TANGENT CURVE TO THE LEFT; THENCE ALONG SAID RIGHT OF WAY LINE AND ALONG SAID CURVE TO THE LEFT. HAVING A CHORD BEARING OF SOUTH 54°30'28" EAST, A RADIUS OF 325.00 FEET, FOR AN ARC DISTANCE OF 17.50 FEET; THENCE NORTH 33°57'00" EAST, A DISTANCE OF 170.06 FEET: THENCE NORTH 44°53'00" WEST, A DISTANCE OF 71.49 FEET; THENCE NORTH 26°556'00" WEST, A DISTANCE OF 28.37 FEET; THENCE NORTH 15°00'00" EAST. A DISTANCE OF 78.60 FEET TO THE SOUTHEAST CORNER OF LOT 133 OF SAID HIGHLAND MEADOWS. FOURTH PLAT. SAID POINT ALSO BEING THE SOUTHWEST CORNER OF LOT 48, HIGHLAND MEADOWS, FIRST PLAT, LOTS 1-50 & TRACTS A & B, AS RECORDED IN DOCUMENT NO. 2007E0125590; THENCE ALONG THE SOUTH LINE OF SAID HIGHLAND MEADOWS, FIRST PLAT, THE FOLLOWING FOUR (4) COURSE: NORTH 15°00'00" EAST. A DISTANCE OF 80.02 FEET: THENCE NORTH 38°24'00" EAST, A DISTANCE OF 63.50 FEET; THENCE NORTH 48°00'00" EAST. A DISTANCE OF 172.83 FEET TO THE CENTERLINE OF S.W. FORD DRIVE, AS PREVIOUSLY ESTABLISHED; THENCE NORTH 52°24'02" EAST, A DISTANCE OF 139.72 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF LONGVIEW BLVD, AS PREVIOUSLY ESTABLISHED BY HIGHLAND MEADOWS, THIRD PLAT, LOT 79-87, 90-92 & TRACT E AS RECORDED IN DOCUMENT NO. 2014E0053988, SAID POINT BEING ON A NON-TANGENT CURVE TO THE RIGHT: THENCE ALONG SAID WEST RIGHT OF WAY LINE AND ALONG SAID CURVE TO THE RIGHT, HAVING A CHORD BEARING OF SOUTH 28°26'14" EAST, A RADIUS OF 1045.00 FEET FOR AN ARC DISTANCE OF 367.47 FEET; THENCE NORTH 70°15'57" EAST. ALONG THE SOUTH LINE OF SAID HIGHLAND MEADOWS. THIRD PLAT AND ALONG THE SOUTH WAY LINE OF S.W. 11TH STREET, AS ESTABLISHED BY SAID HIGHLAND RIGHT MEADOWS, THIRD PLAT, A DISTANCE OF 138.10 FEET TO THE NORTHWEST CORNER OF LOT 92 OF SAID HIGHLAND MEADOWS, THIRD PLAT; THENCE SOUTH 14°13'00" EAST, ALONG THE WEST LINE OF SAID LOT 92. A DISTANCE OF 127.83 FEET TO THE SOUTHWEST CORNER OF SAID LOT 92; THENCE SOUTH 87°00'00" EAST. ALONG THE SOUTH LINE OF SAID LOT 92. A DISTANCE OF 65.,73 FEET TO THE SOUTHEAST CORNER OF SAID LOT 92 AND BEING ON THE WEST LINE OF LOT 130. THE GLEN AT THE MEADOWS OF WITNERSET, THIRD PLAT, LOTS 118-184, RECORDED AS DOCUMENT NO. 2003I0024858: THENCE SOUTH 03°06'46" WEST. ALONG THE WEST LINE OF SAID GLEN AT THE MEADOWS OF WINTERSET, THIRD PLAT, THE WEST LINE OF THE GLEN AT THE

BILL NO. 21-20

MEADOWS OF WINTESET, FIFTH PLAT, LOTS 212-233 & TRACT E, ALSO BEING THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 10, A DISTANCE OF 1260.55 FEET TO THE POINT OF BEGINNING. CONTAINING 1,270,417.84 SQ. FEET (29.16 ACRES).

SECTION 2. That the following conditions of approval apply:

- 1. Development shall be in accordance with the preliminary development plan dated December 14, 2020.
- 2. The architectural style and building materials for the single-family homes shall be consistent with the building elevations that were submitted December, 30 2020.
- 3. Financial security shall be provided to the City for the construction of Longview Boulevard from 10th Street to the south property line of Highland Meadows, in lieu of construction if developer elects to defer such construction, prior to the release of residential building permits associated with either 5th Plat or 6th Plat. However, no more than one plat, whether it is 5th Plat or 6th Plat, shall be recorded and associated residential building permits issued unless the aforementioned Longview Boulevard road improvements are substantially completed.

SECTION 3. Nonseverability. All provisions of this ordinance are so essentially and inseparably connected with, and so dependent upon, each other that no such provision would be enacted without all others. If a court of competent jurisdiction enters a final judgment on the merits that is not subject to appeal and that declares any provision or part of this ordinance void, unconstitutional, or unenforceable, then this ordinance, in its collective entirety, is invalid and shall have no legal effect as of the date of such judgment.

SECTION 4. That failure to comply with all of the provisions contained in this ordinance shall constitute violations of both this ordinance and Chapter 33, the City's Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit.

SECTION 5. That this ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this _____day of ______, 2021.

Mayor William A. Baird

ATTEST owler Arcun Clerk Trisha

APPROVED by the Mayor of said city this 10th day of Fclorizour, 2021.

Baird Mayor William

ATTEST: City Clerk Trisha Fowler Arcun APPROVED AS TO FORM flok \mathcal{D} 2000 City Attorney Brian W. Head



THE CHARLOTTE

Lifestyle

- Reverse
- 📇 4 Bedrooms
- 3 Bathrooms
- 😂 3 Car Garage
- 2,329 Sq. Ft (approx.)









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Plan illustrations are not to scale, and some optional features may be shown. Specifications are updated continuously to serve our customers better and are subject to change without notice. Exterior material specifications and placement may vary per community.

THE JASMINE



- Reverse
- 📇 4 Bedrooms
- 3 Bathrooms
- 🖨 🛛 3 Car Garage
- 2,615 Sq. Ft (approx.)









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THE PALMER II

- 2 Story
- 📇 4 Bedrooms

3.5 Bathrooms

- 😝 3 Car Garage
- 2,439 Sq. Ft (approx.)





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THE WATERFORD



- 1.5 Story
- 📇 4 Bedrooms
- 🙃 2.5 Bathrooms
- 🖨 🛛 3 Car Garage
- 2,137 Sq. Ft (approx.)









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THE WINFIELD

- 2 Story
- 📇 4 Bedrooms

3.5 Bathrooms

- 😝 3 Car Garage
- 2,323 Sq. Ft (approx.)





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STORMWATER DRAINAGE STUDY

FOR

Highland Meadows Phase 5&6

Lee's Summit Missouri

Prepared For: Summit Homes 120 SE 30th Street Lee's Summit MO 64082



Prepared By: Anderson Engineering, Inc. 941 W. 141st Ter., Ste. A Kansas City, MO 64145

November 10, 2020 (Revised December 10, 2020)

AndersonEngineeringInc.com

941 W. 141st Terrace, Suite A, Kansas City, Missouri 64145 • Phone: 816-777-0400

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General Information

This drainage study addresses the quantity and quality of stormwater runoff from a proposed development to be located Southeast of the intersection of Sampson Road and SW Longview Rd. in Lee's Summit Missouri. The proposed development is 29.16 acres and consists of 2 platted areas to be known generally as the 5th & 6th Plats of Highland Meadows. The development consists of 77 Single Family Residential Lots. The proposed development is zoned R-1. The property is located within the SE ¼ of Section 10, Township 47N, Range 32 West in the City of Lee's Summit, Jackson County, Missouri.

This site is previously undeveloped and consists of sparsely covered grassland and portions of thick scrub brush and grass areas. The site is currently surrounded on all sides by similar residential developments except for the south, which is vacant land. Site topography is such that the site slopes gently from North to south. A detention basin the previous development to the east drains into the project area.

The proposed development is located entirely within an area of minimal flood hazard (Zone X) as depicted on FEMA Flood Insurance Rate Map (FIRM) 29095C0418G, effective date January 20, 2017, see **Appendix C** for FEMA information.

The Natural Resources Conservation Service (NRCS) Soil Survey Map classifies the soil type on site as Sharpsburg-Urban land complex with slopes between 2 and 5 percent (Hydrologic Soil Class C) and Greenton silty clay loam, 5 to 9 percent slopes (Hydrologic Soil Class C/D). Refer to **Appendix B** for a NRCS Web Soil Survey Map and associated data.

The purpose of this report is to determine the impact of the development of this property on the existing drainage infrastructure and to show that the proposed development is in compliance with City standards. This report also addresses the water quality impact of the proposed development meeting the comprehensive control requirements of the City of Lee's Summit.

Methodology

The proposed project was analyzed utilizing the American Public Works Association section 5600, comprehensive control strategy for control of stormwater. The analysis was conducted utilizing the PondPack Ver 8.0068. An SCS Type-II 24-hr. rainfall distribution was utilized in computing unit hydrographs for varying conditions. Refer to **Appendix F** for a watershed model schematic and modeling output. The City of Lee's Summit requirement to detain and slowly release the water quality event over 40 hours was also included in the design.

Existing Conditions Analysis

The predevelopment condition is normally not directly considered in the analysis of comprehensive control. Since the proposed detention basin has offsite flows that will flow through it, it is necessary to analyze the offsite areas that contribute flow to the proposed basin. To properly compare the maximum allowable release rates it was necessary to combine offsite areas that included detention under a comparison predevelopment runoff vs. post development runoff detention scenario. This offsite drainage from adjacent developments comes primarily from the development to the East (see blue and yellow areas depicted in **Figure 2**). The concept of analysis will include passing the offsite existing flows through the proposed basin.

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Fig 1. Existing Site

Fig 2. Offsite and Onsite runoff areas – Green and Purple areas are onsite, blue and yellow are offsite.

In the stormwater model produced, the existing offsite area were assumed to have a curve number of 74 and therefore mimic the stormwater detention and proposed conditions. This analysis should produce runoff rates from the existing developed areas equal to or greater than what is actually occurring in the design storm. The Peak rates of runoff from offsite areas are listed in **Table 1.** See **Appendix A** for Points of Interest (POI).

TABLE 1: 2-yr, 10-yr, 100-yr Rainfall Event Existing Release Rates (Offsite Areas)									
CN 2-yr Q _p (cfs) 10-yr Q _p (cfs) 100-yr Q _p (cfs									
22.2 AC Ex. Detention	74	16.99	54.51	112.38					
4.72 Ac Flowing Into Prop. Basin	74	5.83	18.06	36.75					

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Proposed Conditions Analysis

The proposed 5th and 6th Plats include 77 Single Family Residential Lots and associated roads. While the proposed development is required to meet the comprehensive control strategy, the offsite runoff from the adjacent 26.92 acres to the East was assumed to control stormwater release rates though a strategy of reducing stormwater peak rates to below that of the pre-existing condition. This was assumed due to the development taking place circa 2006. There is an additional 4.45 acres being developed in phase 5 that drains to the West. This area has been included in the Phase 4 detention basin and is excluded from analysis of this study. See **Appendix A** for a proposed site plan.

Because the adjacent detention basin to the East flows through the proposed detention basin, the peak pre-existing stormwater runoff rate was determined for the offsite area. This peak rate was determined for the offsite flow based on the existing condition (CN=74). The concept is to pass the existing peak runoff from offsite through the proposed detention facility, without detaining it. Since a strategy of comprehensive control was required to combine with offsite flows a direct comparison of peak flow rates requires proper analysis of timing of those peaks for accurate determination of allowable release rates. The timing of the peak from the proposed 18.87 acre onsite drainage area determines this value. The peak was determined to occur at time of 721 minutes into the 24 hour storm event required by the APWA. Below are the calculated runoff rates from the existing offsite 22.2 Ac. Basin and the 4.72 acre basin at a time of 721 minutes.

TABLE 2: 2-yr, 10-yr, 100-yr Rainfall Event Existing Release Rates (Offsite Areas @ 721 Min)										
2-yr Q _p (cfs) 10-yr Q _p (cfs) 100-yr Q _p (cfs)										
22.2 AC Ex. Detention	10.17	37.60	81.78							
4.72 Ac Flowing Into Prop. Basin										

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For the proposed basins the development has a curve number of 82 as determined by the APWA 5600 Table 5602-3. Comprehensive control will require additional detention to account for the undetained area (5.84 Ac area). The undetained 5.84 acres is collected along the southern property edge and diverted to POI #1.

	2-yr Q _p (cfs) 10-yr Q _p (cfs) 100-yr Q _p (cfs					
	0.5 cfs/ac	2.0 cfs/ac	3.0 cfs/ac			
18.87 AC Prop. Detention	9.44	37.74	56.61			
5.84 Ac Prop. Undetained	2.92	11.68	17.52			
Total Comp Control Allowable release without offsite pass through	12.36	49.42	74.13			
Total Comprehensive Control allowable release with pass through from offsite	28.34	105.08	192.60			

The stormwater model was built utilizing Pondpack software for which the output is included in the Appendix. Peak release rates from the model had to be determined at time step 721 min, to keep the results valid. Below is a summary of the model's output.

TABLE 4: 2-yr, 10-yr, 100-yr Allowable Release vs. Design Storm Release at POI #1									
2-yr Q _p (cfs) 10-yr Q _p (cfs) 100-yr Q _p (cfs)									
Allowable Release	28.34	105.08	192.60						
Design Storm Release Rate	Design Storm Release Rate 10.34 88.88 183.98								

Comprehensive control also requires the 40-hour extended detention of runoff from the local 90% mean annual event (1.37"/24-hour rainfall). This volume was calculated to be 55,912 cubic feet of water (per Chapter 6 of the Mid-America Regional Councils Manual for Best Management Practices, 2012 edition. This volume of water is detained within the basin and released over the required 40 hours. See **Appendix E** for Calculations.

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The proposed release rates are below the allowable release rates per **Table 4** above. These release rates are accomplished via an outlet structure with varied inlet. A description of the outlet structure is included in Appendix E.

Conclusions and Recommendations

Stormwater runoff for the Highland Meadows phase 5&6, a single family housing development in Lee's Summit, MO, has been analyzed for release rate and water quality in this study. It has been shown that development of the site from its current condition to the proposed condition, if constructed as proposed with detention will not release runoff at a rate greater what is allowed by the APWA 5600, comprehensive control strategy. This will be accomplished with a single detention basin constructed on the site. This single detention basin will also release the water quality event as required by the City. It is concluded that the proposed improvements, if constructed as outlined in this study and associated plans, will meet the stormwater requirements and development criteria of the City of Lee's Summit.

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Appendix A

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 December 18, 2020
 COND

 December 14, 2020
 PL2020335

 HIGHLAND MEADOWS, 5TH AND 6TH PLAT

CONDUCTED BY:Michael K Park, PE, PTOEPHONE:816.969.1800EMAIL:Michael.Park@cityofls.netPLATPROJECT TYPE:Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT (Streets, Developments)

The proposed development is located within the Highland Meadows subdivision along the west side of Longview Boulevard, south of Longview Road. The site is bordered by single-family residential subdivisions to the north, east, and west. The land south of the site is unplatted, undeveloped, and planned R-1 zoned.

LEE'S SUMMIT

MISSOURI

DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

ALLOWABLE ACCESS

DATE:

SUBMITTAL DATE:

APPLICATION #:

PROJECT NAME:

The property will primarily be accessed by SW Longview Boulevard. The development is will extend SW Fiord Dr., SW 11th St., SW 11th Ter., SW 12th St., and SW 12th Ter. for internal subdivision circulation and access consistent with the previously approved preliminary plat for the subject property. Each existing dead-end road extension/connection has been planned in the overall subdivision design and design of adjacent subdivisions. The development will extend SW Longview Boulevard to the south property line of the subdivision, where in the future it will be further extended south in accordance with the Thoroughfare Master Plan and in coordination with adjacent property development and demand. SW Longview Boulevard intersects SW Longview Road to the north.

EXISTING STREET CHARACTERISTICS (Lanes, Speed limits, Sight Distance, Medians)

Longview Boulevard is currently a two-lane, undivided, 35 mph, major arterial with future plans for four lanes and median separation. Although Longview Boulevard is only required to have two lanes at this time, based on traffic demand, the ROW, design and grading for future build-out will be provided with similar characteristics that Longview Boulevard has been constructed south of Longview Road in the interim. SW 12th Street, SW 12th Terrace, SW 11th Street, SW 11th Terrace and SW Fiord Drive are existing two-lane residential local streets with a 25 mph speed limit. The local road intersections with Longview Boulevard will be stop controlled (no stop signs on Longview Boulevard). Longview Road is a 35 mph, undivided three-lane arterial. Longview Road east of Longview Boulevard is a minor arterial built-out with turn lanes, bicycle accommodations, etc. Longview Road west of Longview Boulevard is a major arterial that widens to a four-lane median divided roadway, turning north and continuing as Longview Boulevard/View High Drive towards Interstate 470. The segment of Longview Road between Sampson Road and Longview Boulevard will eventually be widened to four lanes whenever Longview Boulevard south of Longview Road is also widened to four lanes. The intersection of Longview Road and Longview Boulevard is currently stop controlled on Longview Road, but it too has ROW reserved for future roundabout similar to other major intersections with existing roundabouts along the major arterial. There are no sight distance issues at any of the proposed or existing intersections.

YES 🖂

ACCESS MANAGEMENT CODE COMPLIANCE?

No 🗌

All intersection spacing, turn lanes and other applicable criteria required by the Access Management Code have been satisfied and/or will be compliant as shown on the PDP.

TRIP GENERATION

Time Period	Total	In	Out
Weekday	816	408	408
A.M. Peak Hour	63	16	47
P.M. Peak Hour	82	52	30

TRANSPORTATION IMPACT STUDY REQUIRED?	YES 🗌	No 🖂		
The proposed development will no	ot likely generate i	more than 100 pea	ak hour trips; a minimum	
condition in the Access Manageme	ent Code for Traffi	ic Impact Studies.	The proposed developmer	nt
is consistent with the previously ap	oproved prelimina	ary plat for the san	ne area with regard to	
layout, land use/density, and trip g	eneration. For re	ference, a Traffic I	mpact Study was complete	d
for Highland Meadows that include	ed the single-fami	ly homes propose	d in association with this	
PDP.				
	_	_	_	
LIVABLE STREETS (Resolution 10-17)	COMPLIANT 🔀	\leq		
The proposed development include	es all Livable Stree	ets elements ident	ified in the City's adopted	
Comprehensive Plan, associated G	reenway Master F	Plan and Bicycle Tr	ansportation Plan	
attachments, and elements otherw	vise required by o	rdinances and star	ndards, including but not	
limited to sidewalk, street connect	ivity and accessib	ility. No exception	s to the Livable Streets	
Policy adopted by Resolution 10-17	7 have been prop	osed.		

RECOMMENDATION:	Approval 🔀		N/A 🗌	
Recommendations for Ap	proval refer only to the tra	ansportation impact a	nd do not constitute an	endorsement from
City Staff.				

Staff recommends approval of the proposed development.

BWR Performance... Driven by Values · Measured by Results

October 19, 2006

Mr. Richard Mather 13911 Norby Grandview, MO 64030

Re: Highlands at the Meadows of Winterset Traffic Impact Study BWR Job # 2006-0723

Dear Mr. Mather:

The traffic impact study for the Highlands at the Meadows of Winterset development in Lee's Summit, Missouri has been completed as requested. The purpose of the study was to determine the impact the proposed development will have on the surrounding transportation system.

This study discusses the impacts that the Highland at the Meadows of Winterset development will have on the existing plus site traffic conditions and 2030 plus site traffic conditions. Access management for the site has been examined and improvements have been recommended to mitigate deficiencies on the street system.

We trust that this impact analysis has adequately described the traffic conditions that may be expected in connection with the proposed development. If additional information is desired, please contact us.

Sincerely,

BUCHER, WILLIS & RATLIFF CORPORATION

Daving Drahm

Gary S. Graham, P.E., P.T.O.E. Project Manager Traffic Engineering and Transportation Planning

903 East 104^{:E} Street — Suite 900 Kansas City, MO 64131-3451

Phone 816 363 2696 Pax 816 363 0027 www.bwrcorp.com

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Lee's Summit, Missouri

Introduction

The purpose of this study is to examine the potential traffic impact of a proposed development, The Highlands at the Meadows of Winterset, on the local roadway network. The Highlands at the Meadows of Winterset will consist of single family detached houses and is proposed to be developed on a tract of land approximately 4,750 feet east of SW View High Drive along Longview Road in Lee's Summit, Missouri. The proposed location of the Highlands at the Meadows of Winterset is illustrated in Figure 1.



Figure 1 – Site Location

This study will estimate the traffic to be generated by the proposed land use and will determine the potential traffic impacts on the adjacent street network caused by the additional traffic. Recommendations will then be made to mitigate the traffic impacts accordingly.

Currently, the Highlands at the Meadows of Winterset site plan shows Longview Parkway forming a T-intersection with Longview Road. Longview Parkway will be constructed to SW 10th Street. Future development will further extend Longview Parkway to connect it with a development to the south. The site plan for the development is depicted in Figure 2.



Highlands at the Meadows of Winterset



Page 2

Lee's Summit, Missouri

Existing Traffic Conditions

The proposed site is located on the south side of Longview Road between SW Sampson Road and SW Goldenrod Drive. Longview Road is an arterial street with a posted speed limit of 35 mph. Presently, Longview road is under construction. The improvements will consist of constructing a four lane roadway to the west of the Highlands at the Meadows of Winterset main access, Longview Parkway, and a three lane roadway to the east.

In addition to an inventory of the existing roadway conditions, existing traffic volumes and 2030 traffic forecasts were obtained from the City of Lee's Summit as a basis for assessing the traffic impact of the development. The traffic counts are included in the appendix. Figure 3 depicts the existing traffic volumes.



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Projected Traffic Conditions

The Highlands at the Meadows of Winterset is an 80 acre residential development consisting of 51 villa lots and 178 single family housing lots. All lots will be considered as single family dwelling units for the purposes of this study.

The City of Lee's Summit's Comprehensive Plan designates the area of the development as low density residential.

The proposed development is bordered on the east, west and north by existing residential developments. The land to the south is currently undeveloped.

The proposed development will utilize access from Longview Parkway. Adequate street width should be provided on the streets intersecting Longview Parkway to provide for left and right turn exiting lanes. There is one proposed street connection to the east via SW 12th street and one prosed street connection to the west via SW 11th Terrace. When Longview Parkway is extended to the south SW 12th Street will connect to it.

The Highlands at the Meadows of Winterset development was compared to the Lee's Summit Access Management Plan (AMP). The AMP requires that residential corner lots shall obtain access from the street with the lowest functional classification, and access shall be placed as far from the intersection as possible to achieve the maximum available corner clearance. As the final lot plans are developed, this guideline should be followed.

The AMP also requires that access locations to subdivisions shall provide appropriate sight distance, driveway spacing and include a review of related considerations. Sight distance was unobtainable due to construction on Longview Road and is therefore subject to verification of compliance. A minimum sight distance requirement for crossing two lanes at 35 mph on Longview Road is 410 feet.

Trip Generation

Since the traffic impact of a proposed development cannot actually be measured until after the development has occurred, projected traffic demand for the proposed development must be estimated. An estimate of trip generation for the Highlands at the Meadows of Winterset development was based on the ITE *Trip Generation Manual, Seventh Edition* for the a.m. and p.m. commuter traffic peak hour. A summary of expected trip generation of the development is shown in Table 1. Trip generation codes and supporting information has been included in the appendix. The villas in the site plan were analyzed as single family detached housing.

Table 1 – Proposed Land Use Trip Generation											
Land Use	ITE	Units	We	ekday Tr	rips	A.M. 1	Peak hou	r Trips	<i>P.M. P</i>	Peak Hou	r Trips
Luna Ose	Code	Onus	In	Out	Total	In	Out	Total	In	Out	Total
Single Family Detached Housing	210	229	1114 (50%)	1114 (50%)	2228	42 (25%)	128 (75%)	170	142 (63%)	84 (37%)	226



Lee's Summit, Missouri

Trip Assignment

Once the number of trips expected to be generated has been estimated, the projected traffic must be assigned to the adjacent street network. For this analysis, estimates of the expected trip assignments to and from the proposed site were based on the gravity of existing traffic and conversations with City of Lee's Summit staff. The trip distribution is shown in Figure 4.

The traffic generated by the Highlands at the Meadows of Winterset development was superimposed onto the existing traffic for post development traffic conditions, or existing plus site traffic conditions. The a.m. and p.m. peak hour existing plus site traffic conditions for the development is shown in Figure 5.



Highlands at the Meadows of Winterset

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P:/2006-0511/01- LeesSummit Dev/tet/dgn/AM-PM Site Trips.dgn

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Traffic Analysis

The quality of traffic operation at an intersection is defined through intersection capacity analysis. Capacity analysis provides a grade for intersection operation known as level of service (LOS). Level of service consists of a grade assignment "A" through "F", with "A" the best and "F" the poorest, based on vehicle delay during the commuter peak period. The procedures and methodology for determining the level of service are outlined in the *Highway Capacity Manual* (HCM2000), produced by the Transportation Research Board. Generally LOS "A" through "D" is considered acceptable traffic operation. A description of the LOS criteria used in these analyses is shown in Table 3.

Table 2	- Level of Service Criteria			
LOS	Stop Control Intersection Delay per vehicle			
А	≤ 10			
В	> 10 and ≤ 15			
С	> 15 and ≤ 25			
D	> 25 and ≤ 35			
Е	> 35 and ≤ 50			
F	> 50			

Unsignalized capacity analysis was performed using the traffic analysis software *HCS2000* and reported using the HCM unsignalized, and queuing reports. Stop controlled intersection level of service is based on the vehicle delay of the stopped approach assuming that Longview Parkway was the controlled approach.

Because the intersection of Longview Road and Longview Parkway does not currently exist, no capacity analysis was conducted for existing conditions. Unsignalized capacity analysis was completed for existing plus site conditions at the intersection of Longview Road and Longview Parkway during the a.m. and p.m. peak hours.

The lane configurations and the results of the capacity analysis including 95th percentile vehicle queues for the existing plus site are depicted in Figure 6. Detailed capacity and queuing reports are included in the appendix. The results of the capacity analysis for the a.m. and p.m. peak hours for the existing plus site conditions are summarized in Table 3.

Tabl	e 3 – Existi	ng Plus S	ite Capacity	Analysis		
		AM Pe	1M Peak Hour PM Peak H		ık Hour	
Location		LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	
Longview Road and	WBL	А	8.1	А	8.3	
Longview Parkway	NBL	С	22.5	В	13.9	
	NBR	А	8.9	В	10.1	

The analysis of the existing plus site conditions indicates that the intersection of Longview Road and Longview Parkway will operate adequately for both the a.m. and p.m. peak hours. All movements operate at a LOS C or better.



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Lee's Summit, Missouri

2030 Conditions

The potential traffic impacts of the proposed development were also evaluated for the 2030 conditions. The city generated the 2030 traffic volumes to be used as a basis for the analysis and subtracted out the volumes from the model for this site. The proposed site volumes developed in this study were added to the traffic volumes provided by the city.

The traffic volumes for the a.m. and p.m. 2030 conditions plus site traffic are depicted in Figure 7. For the 2030 plus site traffic conditions the intersection was examined as multilane roundabout. Due to the lane configuration on Longview Road, it was assumed that the change in lane configuration would occur at the roundabout. Therefore, there would be one eastbound through lane, a dedicated eastbound right lane that would bypass the roundabout, two westbound departure lanes, two northbound approach lanes, and two southbound departure, two westbound approach lanes and one eastbound departure lane. The lane configurations and the results of the capacity analysis for the 2030 conditions plus site traffic with mitigations, including 95th percentile vehicle queues, for the study intersections are depicted in Figure 8. The results of the capacity analysis for the 2030 conditions for the a.m. and p.m. peak hour are summarized in Table 4.

Tab	le 4 – Year 2	030 Plus	Site Capacity	Analysis		
¥.		AM Peak Hour		PM Peak Hour		
Location	_	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	
Longview Road and Longview Parkway	NB Approach	А	8.3	А	7.6	
	WB Approach	В	12.8	В	12.3	
	EBT	А	5.4	А	4.6	
	EBR	А	5.3	А	5.3	

The analysis for the 2030 conditions indicates that a multilane roundabout would adequately accommodate the projected traffic volumes. The potential queues could increase to five of six vehicles per lane on some approaches during the peak hour operation.



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Conclusions

Based on the analysis of the proposed site plan, the intersection of Longview Road and Longview Parkway should adequately accommodate the proposed traffic volumes for the existing plus site conditions.

Under the 2030 projected traffic volumes a multilane roundabout should operate adequately.

The sight distance at the intersection of Longview Road and Longview Parkway should be verified following construction. Longview Road is currently under construction and therefore the sight distance can not be measured.

As the final lot plans are developed, for the corner lots within the subdivision, access should be provided to the local streets and not the collector streets.



ANDERSON ENGINEERING EMPLOYEE OWNED

December 2, 2020 6:00 p.m. Meeting Minutes for the discussion of Highland Meadows 5th & 6th Plat

Attendees: Tiffany Ford, Kyle Jones, Brad Campbell, Patrick Joyce

6:01 p.m. - Vincent Walker starts meeting with Introductions

Tiffany Ford gives introduction to online chat process

Patrick Joyce, *Anderson Engineering*, gives summary of Highland Meadows History. Patrick Joyce explained the proposal for completing Phase 5 and 6 with the rezone change to zone R-1, requesting RP-1, which changes the 30' rear yard setback to 20' rear setback. No changes proposed to actual street network or lot layouts.

Vincent Walker, *Summit Homes*, follows up opening remarks explaining that Summit Homes has already built 35% of the existing homes in Highland Meadows as "Lifestyle Homes". The rezoning allows Summit Homes standard home designs to fit on the existing lots. January 7th is the Planning Commission Meeting. City Council meeting is on February 2nd. Mr. Walker explains that the plan is for the 5th Plat to consist of 26 Lots, and 6th Plat 51 Lots, totaling 77. That will finish out Highland Community. Mr. Walker explained that Summit Homes is excited to work within Highland Meadows and the reason for not moving forward with future plats previously, was based on multiple reasons related to the challenges of the lot sizes and internal company decisions.

Tiffany Ford begins to read online questions which Vincent Walker answers. See page 2-5 for questions that were addressed via the chat log. Note that not all questions were able to be answered due to time restraints or not enough information.

7:17 p.m. - Vincent Walker closed the meeting by stating that Summit Homes goal is to be upfront through the process and open for continued questions and feedback by emailing himself and his associates. He suggested that residents with issues or concerns, outside of zoning, request a future meeting.

Questions from the chat log are asked below with responses in red:

From Chip Touzinsky to Everyone: 06:07 PM

If this subdivision was approved prior with the same house sizes and setbacks as a R-1 then I am not sure why you would need RP-1.

Summit Homes has many different styles and options for their customers. Changing some of the rear depths allows more plans to be available to buyers. No changes will be made to lot layouts. All homes will be similar to current subdivision homes.

From Keshia to Everyone: 06:07 PM duplex? town homes? No.

From jennifer.lassman to Everyone: 06:07 PM Would the change from 30 ft to 20 ft be for all of the lots, regardless of lot size? Or just for the lots that are smaller than the others. The zoning request is a blanket for, the 5th and 6th plat lots providing the ability to offer more home plan options to buyers.

From Kevin Whaley to Everyone: 06:07 PM Please elaborate on similar but not exact From Becky Warner to Everyone: 06:07 PM Similar, but not exact? "Similar" meaning that Summit Homes never tries to duplicate a home in terms of architecture and color so there will always be variance but the same style.

From Alyssa Fries to Everyone: 06:09 PM what is the projected price range for these homes? Similar to what is currently being built in existing subdivision - \$375K to \$500K+.

From Kevin Whaley to Everyone: 06:10 PM While I appreciate understand the intent, this increases the number of homes that will be built over what was originally planned, correct? No, it will not change the number. There will be 77 homes/lots.

From NNeighbor to Everyone: 06:10 PM Are any of these plats slated for anything other than SINGLE FAMILY HOMES? No.

From Neal Hardin to Everyone: 06:10 PM Perhaps use one of those lots for a bigger pool? No. Community was designed for a specific number of lots based on the existing pool. From NNeighbor to Everyone: 06:10 PM what is going in on the large lots around the semi-circle (half cul-de-sac) off Fiord?? Same style of homes.

From Kathryn Bolton to Everyone: 06:11 PM

When we built with Summit in phase 4 in 2017/2018, we were required to select a "Signature" style home, and were told that the "Lifestyle" plans were more basic and lower cost. Why aren't the homes in Phase 5 and 6 intended to be "Signature" style homes? In 2017/18 plans and styles were different than they are currently. "Signature" homes had more options for upgrades in 17/18. "Lifestyle" was more limited. As of today, Signature and

Lifestyle homes are more a similar collection of homes that can be blended.

From Brandy West to Everyone: 06:11 PM what would be the sqft on the new homes? Review Summit Homes website floor plans.

From Tracie Bruner to Everyone: 06:12 PM Are the trees that sit between Highland Meadows and Meadows of Winterset staying in place? Those are important to those of us that currently back up to them along Blazing Star Drive. **Contact Summit Homes after meeting.** This will be researched at a later time.

From Jason Brunkan to Everyone: 06:13 PM Will you extend Longview Blvd. that ends at SE 11TH ST all the way to 150 Hwy? No.

From Ryan Thompson to Everyone: 06:15 PM

pulled out due to lot constraints? but now you're back and excited to compliment what's already here? what changed?

That was just one of a few reasons why Summit Homes stopped building but can't give an exact reason at this time. However generally when Summit Homes build in an area, they are the only developers.

From Becky Warner to Everyone: 06:16 PM Exactly how many and which lots "need" this zoning change? Unable to give exact number of lots at this time but the majority of the lots did not work with the Summit Homes plans.

From Ryan Thompson to Everyone: 06:16 PM did summit purchase the remaining open phases in question from Mathers? including controlling the HOA? Yes.

From TDobb to Everyone: 06:18 PM

understanding that you do not intend to build duplexes and townhomes, does this rezoning give you the blanket permission to do that if you change your mind. No.

From Kathryn Bolton to Everyone: 06:20 PM If you're requesting to rezone, can't you also adjust the plan to include additional amenities like a pool or playground? Seems like a perfect opportunity to do that. At this time there are no plans to include amenity sites.

From Randy Warner to Everyone: 06:22 PM Typically, Summit limits the selection of floorplans within their neighborhoods. Which floorplans do you intend to offer in this neighborhood moving forward? Please refer to Summit Homes sales team to review all different options.

From Ryan Thompson to Everyone: 06:22 PM if this rezoning doesn't pass will summit continue with the purchase? Unable to answer at this time, Summit Homes would have to reassess.

From NNeighbor to Everyone: 06:23 PM where can we locate the plat plan/map that you keep posting on the screen? **Provide Summit Homes with email address and they will send exhibits.**

From Brandy West to Everyone: 06:24 PM Can the HOA buy a lot or 2 to put in a playground and or tennis courts Unable to answer at this time. Answers will be researched.

From jennifer.lassman to Everyone: 06:30 PM I noticed a split level in the Lifestyle house options. Will that be allowed? Also, it looked like some had 2 car garages and the existing houses in Highland Meadows all have 3 car garages. Intent is to build 3 car garages.

From K S to Everyone: 06:30 PM when are you breaking ground ? Estimated by late Spring.

From Chris Stinemetz to Everyone: 06:31 PM So, you are telling us to reference the website for home sizes. does that mean you will not be adding any more homes to your website collection to satisfy your needs? Website has been referenced to show current variety, but plans can always evolve. Summit Homes Sales team is best to speak with regarding changes to the collection.

From Kathryn Bolton to Everyone: 06:33 PM

Will Phase 4 be completed before work starts on Phases 5 and 6? Also, there's a detention basin in the southwest corner of Phase 4 that's a complete eyesore-- will there be any similar drainage features in Phases 5 and 6?

Summit Homes does not have control over existing detention basins that are in place. However, Summit Homes is responsive to making sure they look as good as possible and suggest to look at current Summit Homes developments as a point of reference.

Will HOA fees increase over what we already pay? Unable to address today.

From Kevin Whaley to Everyone: 06:38 PM RP-1 allows building of patio homes, cluster housing, etc. correct? Summit Homes did not buy ground to change housing style, but suggested to voice concerns to the City Council to find out if changes are allowed to be made.

From Becky Warner to Everyone: 06:39 PM Are you actually aware of our existing UNFINISHED pool size and space? Unable to answer as of right now but suggests a future meeting should be set up with development and HOA.



Exhibits Shown At Meeting



	B.M.W. COMMUNITIES, INC	REVISIONS			DRAWING INFO.		
		NO.	DESCRIPTION	э∽	DATE	DRAWN BY	GRC
NUMBER	the possible control of the intervention production and endowing the statements of					CHECK BY	ZAV
	HIGHLAND MEADOWS PH5 & PH6					JCENSE NO	
						DATE	12/2/2020
						FIELD BOOK	
01	PART OF E 1/2 - SE 1/4 SEC.10. TWP.47. RNG.32					LOB NUMBER	20KC*0057
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PL2020-335 Rezoning and Preliminary Development Plan

1201 SW Longview Blvd

