



**LEE'S SUMMIT
MISSOURI**

**DESIGN & CONSTRUCTION MANUAL
DESIGN CRITERIA MODIFICATION REQUEST**

PROJECT NAME: Bailey Farms

ADDRESS: SW Corner of SE Bailey Road and SE Ranson Road

PERMIT NUMBER: _____

OWNER'S NAME: Clayton Properties Group Inc., Contact: Bradley Kempf, VP of Land and Development

TO: Deputy Director of Public Works / City Engineer

In accordance with the City of Lee's Summit's Design and Construction Manual (DCM), I wish to apply for a modification to one or more provisions of the code as I feel that the spirit and intent of the DCM is observed and the public health, welfare and safety are assured. The following articulates my request for your review and action. (NOTE: Cite specific code sections, justification and all appropriate supporting documents.)

APWA 5600 section 5608.4.C.1 Comprehensive Detention. We are requesting that a waiver be approved based on site limitations and previous conversations with City staff regarding design requirements in the southern portion of the site. Given that we are decreasing the tributary area from 6.42 ac. to 2.38 ac., approximately 60% reduction in area and the site limitations to add an additional detention facility, we are requesting this area be considered a peripheral drainage area.

SUBMITTED BY:

NAME: Schlagel and Associates, Contact: Jim Long, P.E.
ADDRESS: 14920 W. 107th Street
CITY, STATE, ZIP: Lenexa, KS 66215
Email: JL@SchlagelAssociates.Com

() OWNER (X) OWNER'S AGENT
PHONE #: 913-492-5158

SIGNATURE: 

KENT MONTER, P.E.
DEVELOPMENT ENGINEERING MANAGER

SIGNATURE: _____

(X) APPROVAL () DENIAL
DATE: June 3, 2022

JEFF THORN, P.E.
WATER UTILITIES ASSISTANT DIRECTOR OF ENGINEERING SERVICES

SIGNATURE: _____

() APPROVED () DENIAL
DATE: _____

GEORGE M. BINGER III, P.E.
DEPUTY DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

SIGNATURE: _____

(X) APPROVED () DENIAL
DATE: June 7, 2022

COMMENTS: _____

A COPY MUST BE ATTACHED TO THE APPROVED PLANS ON THE JOB SITE



Waiver Request Report

prepared for

**Bailey Farms
1300 SE Ranson Road
Lee's Summit, MO 64081**

Revised 6/3/2022



6/3/2022

prepared by

SCHLAGEL & ASSOCIATES, P.A.

14920 W 107th ST

Lenexa, Kansas

(913) 492-5158

Schlagel & Associates Project 21-130

BAILEY FARMS WAIVER REQUEST – EXECUTIVE SUMMARY

Peripheral Drainage Area Designation Request

In accordance with the Lee’s Summit Design and Construction Manual (DCM) Section 1002.A, I wish to apply for a modification to APWA 5600 Section 5608.4.C.1a Comprehensive Control requirements. We are requesting that the waiver be approved based on site limitations and previous conversations with City Staff regarding design requirements in the southern portion of the site. Given that we are decreasing the tributary area from 6.28 ac. to 2.38 ac., a greater than 60% reduction, and the site limitations to add an additional detention facility, we are requesting that this southern portion of the development be considered a peripheral drainage area. Also note, that run-off from the streets will be captured in the storm system and routed to the proposed detention basin located in the southwest corner of the site. Only the houses and backyards will drain to the south.

In reference to Table 1.1 – Comprehensive Control for the 2, 10 and 100 year peak discharge rates the 2-yr flow is not met. However, the 10 and 100 year rates are satisfied.

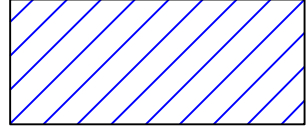
Table 1.1 – Comprehensive Control

Comprehensive Control		Peak Discharge Rates, cfs		
	Drainage Area, ac.	2-yr	10-yr	100-yr
Pre-Developed, Comprehensive	6.42	3.21	12.84	19.26
Developed, HydroCAD	2.38	7.15	12.33	19.23
Difference		-3.94	0.51	0.03

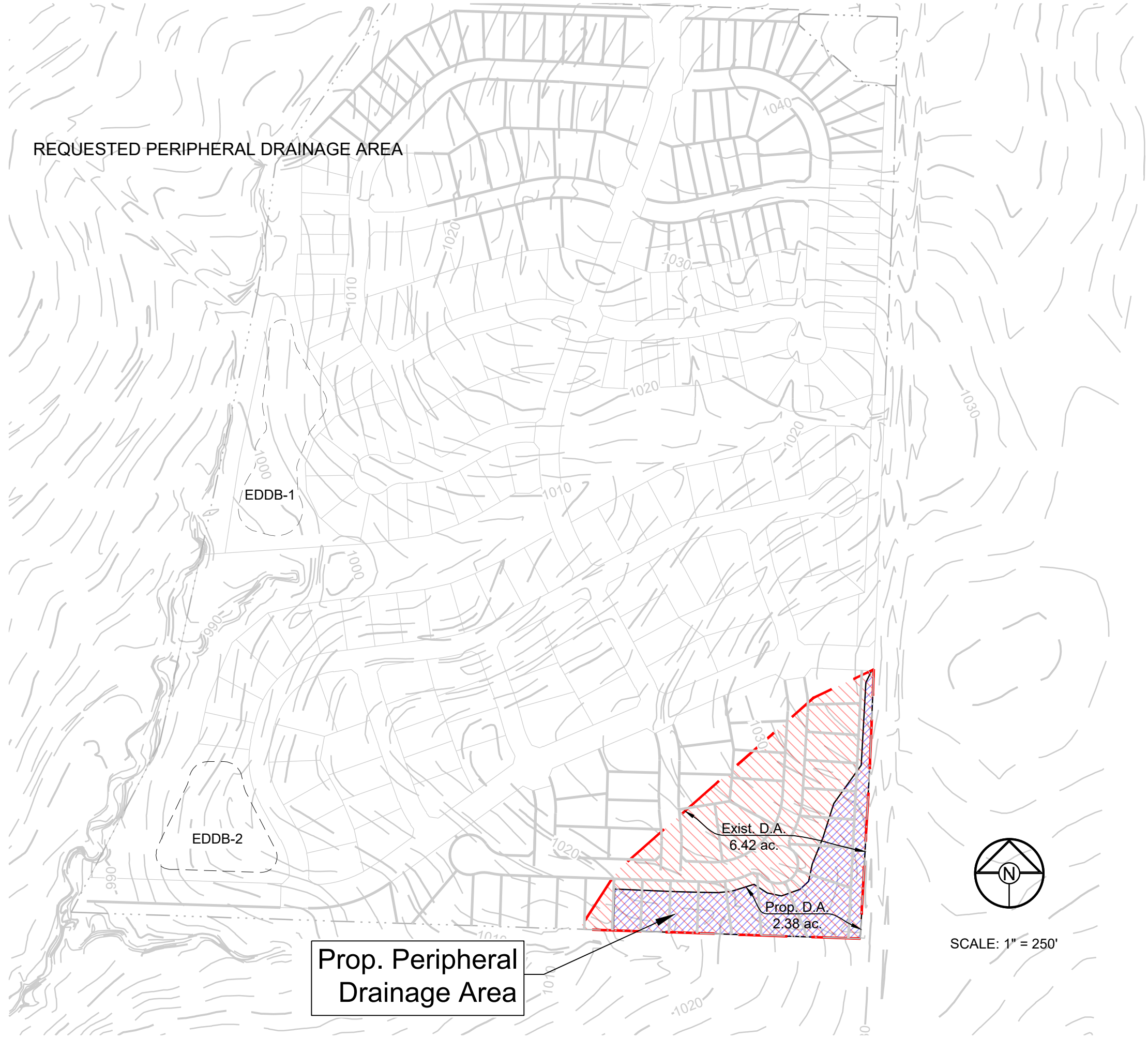
Referring to Table 1.2 – Rational Method, shown here just for comparison, is another method of calculating storm water run-off. It can be seen that there is a significant reduction in the peak run-off for the 2, 10 and 100 year storms.

Table 1.2 – Rational Method

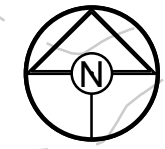
Rational Method		Peak Discharge Rates, cfs		
	Drainage Area, ac.	2-yr	10-yr	100-yr
Pre-Developed	6.42	8.14	11.39	20.48
Developed	2.38	4.87	6.75	11.96
Difference		3.27	4.65	8.53



REQUESTED PERIPHERAL DRAINAGE AREA



Prop. Peripheral
Drainage Area



SCALE: 1" = 250'

SCHLAGEL
 ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
 14920 West 107th Street Lenexa, Kansas 66215
 (913) 492-5158 Fax: (913) 492-8400
 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificates of Authority
 #E2002003800-F #LAC2001005237 #LS2002008859-F

**BAILEY FARMS
 WAIVER EXHIBIT**

1300 SE RANSON ROAD LEE'S SUMMIT, MISSOURI

DRAWN BY:	JLL
DATE PREPARED:	06/03/2022
PROJ. NUMBER:	21-130

WAIVER EXHIBIT

SHEET

1