



# LEE'S SUMMIT MISSOURI

## DESIGN & CONSTRUCTION MANUAL DESIGN CRITERIA MODIFICATION REQUEST

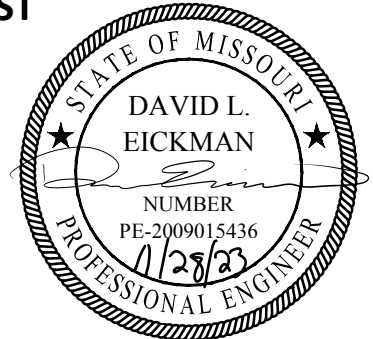
PROJECT NAME: The Village at Discovery Park Zone 1 – Public Sanitary Sewer Plans

ADDRESS: NW Colbern Rd & NE Douglas St, Lee's Summit, MO

PERMIT NUMBER: PL2023145 (Project #)

OWNER'S NAME: Jon Odle, Intrinsic 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.)

**A modification to Section 6501.E.3.a is requested to allow an increase of maximum depth of sanitary sewers and manholes from 20 ft to 23.04 ft. Modification will apply to EX. SANITARY LINE Z (existing 12" sewer main that's partially relocated) shown on sheets C653-C655 of referenced plans.**

**The sewer main in question will be running along the top of embankment of proposed wet permanent detention basin. The basin geometry and grading are dictated by storm water detention and water quality requirements. Also, since the sewer main is existing, it's flow invert elevations are fixed at upstream and downstream points. Following measures were taken to minimize the depth of the sewer:**

**a) proposed pipe slope from structure NEW MH 16-008 to SAN Z2 was analyzed to minimize excessive depth and an option of flattening the pipe from 0.67% to 0.40% was considered. However, that would result in inadequate pipe capacity and thus, the option was declined;**

**b) proposed pipe run from structure SAN Z2 to SAN Z1 was flattened from 6.84% to 2.51% and straddle blocks added to pipe run from SAN Z1 to EX MH 16-006, which brought portions of EX. SANITARY LINE Z under 20 ft deep;**

**c) proposed pipe run from structure SAN A1 to NEW MH 16-010 was flattened from 5.48% to 1.10% and outside drop was added at NEW MH 16-010, which brought LINE A under 20 ft deep;**

**Although all the efforts were made to keep the relocated and existing sewer main as shallow as possible, the basin grading and fixed flow invert elevations of the sewer lead to a need in design modification request for portions of EX. SANITARY LINE Z and SANITARY LINE C. Refer to exhibit attached for extents of waiver request and max. depth at each pipe runs and manholes.**

SUBMITTED BY:

NAME: David Eickman

ADDRESS: 1301 Burlington Street

CITY, STATE, ZIP: North Kansas City, MO 64116

Email: [deickman@olsson.com](mailto:deickman@olsson.com)

( ) OWNER (X) OWNER'S AGENT

PHONE #: 816.361.1177

SIGNATURE: \_\_\_\_\_

SUE PYLES, P.E.

DEVELOPMENT ENGINEERING MANAGER

( ) APPROVAL

( ) DENIAL

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

JEFF THORN, P.E.

DEPUTY DIRECTOR OF WATER UTILITIES

( ) APPROVED

( ) DENIAL

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

GEORGE M. BINGER III, P.E.

DEPUTY DIRECTOR OF PUBLIC WORKS / CITY ENGINEER

( ) APPROVED

( ) DENIAL

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

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A north arrow pointing upwards with the letter 'N' in the center. Below it is a scale bar marked from 0' to 200' in increments of 50'.

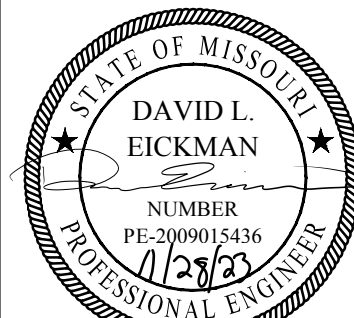
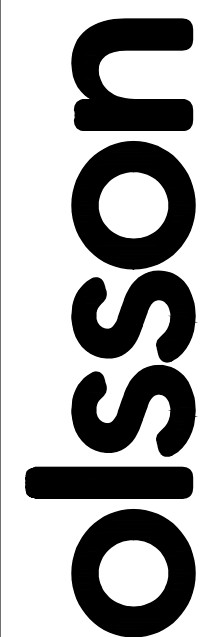
### PLAN LEGEND

\*THIS LEGEND APPLIES TO ALL SHEETS UNLESS  
EXPLICITLY SHOWN OTHERWISE ON EACH SHEET.

- |   |                                  |
|---|----------------------------------|
|  | EXISTING SANITARY SEWER          |
|  | PROPOSED SANITARY SEWER          |
|  | WAIVER EXTENTS                   |
|  | PROPERTY LINE / R/W LINE         |
|  | PROPERTY LOT LINE                |
|  | PROPOSED SANITARY SEWER EASEMENT |
|  | OTHER UTILITIES' EASEMENT        |
|  | PROPOSED STORM SEWER             |
|  | PROPOSED WATER PIPE              |
|  | EXISTING POWER SERVICE           |
|  | EXISTING NATURAL GAS PIPE        |

- ✗ REMOVE EXISTING TREE
- ⊙ EXISTING LIGHT POLE
- ⊙ EXISTING SIGN
- ⊠ EXISTING SPRINKLER BOX
- ⚡ EXISTING SPRINKLER CONTROL VALVE
- ⊕ EXISTING WATER VALVE
- ⚡ EXISTING FIRE HYDRANT
- Ⓜ EXISTING WATER METER
- Ⓛ EXISTING ELECTRIC BOX
- Ⓥ EXISTING ELECTRIC VAULT
- Ⓜ EXISTING ELECTRIC METER
- Ⓛ EXISTING ELECTRIC RISER
- EXISTING ELECTRIC MANHOLE

\*SCALE MAY AFFECT THE SIZE OF SURVEY  
SYMBOLS IN PLAN, BUT SHAPE WILL BE RETAINED.



DAVID EICKMAN, P.E.  
MO# 2009015436

[illegible]

## DESIGN CRITERIA MODIFICATION REQUEST EXHIBIT

THE VILLAGE AT DISCOVERY PARK ZONE 1  
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

drawn by: GS/OS/JN  
checked by: AR/JN  
approved by: DE  
QA/QC by: JS/NH  
project no.: D21-04643  
drawing no.: C SAN00 D2104643  
date: 11/28/2023

SHEET  
EXH-01