

Elks Crossing Rear Yard Major Drainage Easement

Public Works Committee Meeting

Associated Planning Application Nos. 16VE020, 16VE021, 16VE022

November 15, 2016

Major Drainage Easement Definition & Purpose

- IDCM 4.1.6: Drainage easements shall be established for the 100 year runoff when the drainage way conveys the runoff from two or more lots.
- A minimum 20' wide major drainage easement is a City Standard minimum width to allow for maintenance.
- No obstructions are allowed within major drainage easements including buildings, walls, fences, hedges, trees and shrubs so that access to the MDE can be maintained, and runoff can flow unimpeded.

Application Request is to Vacate Portions of the 20' MDE and Allow Minor Drainage Easement to Remain

- A major drainage easement is intended for drainage from multiple lots and has restrictions and limitations to the easement area so that it can function as intended.
- 8' minor drainage easement required on the interior lot line of all plats is intended for drainage from adjacent lots only, therefore it has fewer restrictions and limitations within the easements.
- Fences, playground equipment and sheds are currently located within the MDE and could impact or impede drainage, and/or create drainage issues on adjacent lots

Major Drainage Easement Dedicated with Platting of Adjacent Residential Lots

- Drainage was designed by developer's engineer for a rear yard drainage swale, based on the developer's plan to provide walk-out basements, to meet minimum City Standards
- Lots along Duckhorn Street platted in 2013
- Lots along Vinecliff Drive platted in 2015
- Both plats included MDE, with 10' of MDE in the rear yard (20' total), with the statement that the MDE must be free of obstructions
- MDE takes drainage from adjacent 29 lots, drains to the north, and collects at an area inlet

Location Map of Rear Yard Drainage Swale



Aerial Map from April 2015, many homes have been constructed along Vinecliff Drive adjacent to MDE since aerial map was taken.



Diagram of a V-shaped drainage ditch cross-section. The ditch has a 5:1 slope on both sides. The bottom width is 2.00 feet. The ditch is 9.00 feet wide at the top on each side. The top width is 9.00 feet on the left and 9.00 feet on the right. The top edges are labeled "GRADE TO DRAIN".

[illegible]

Elks Crossing Covenants, Recorded on the Lots

ARTICLE THREE: EASEMENTS

Section 1. Public Utilities. Easements for the public utilities over and across the lots shall be those shown upon the recorded plat and any additions or revisions thereto. There shall also be sewer and power easement over and across the lots for purposes of serving each Lot with such utilities.

Section 2. Drainage Easements. As shown by the plat and miscellaneous documents for the Properties, there are drainage easements for surface water drainage along the lots and a Major Drainage Easement within the subdivision. All owners must keep the area of these easements free from improvements and obstructions including any buildings, walls, hedges, trees and shrubs which could interfere with effective drainage. It is the responsibility of each owner to prevent soil erosion and accumulation of sediment on his or her Lot and to see that his or her Lot is maintained, mowed and raked where the Major Drainage Easement is located, all as required to allow the drainage improvements to function properly regardless of whether any improvements have been made to the Lot.

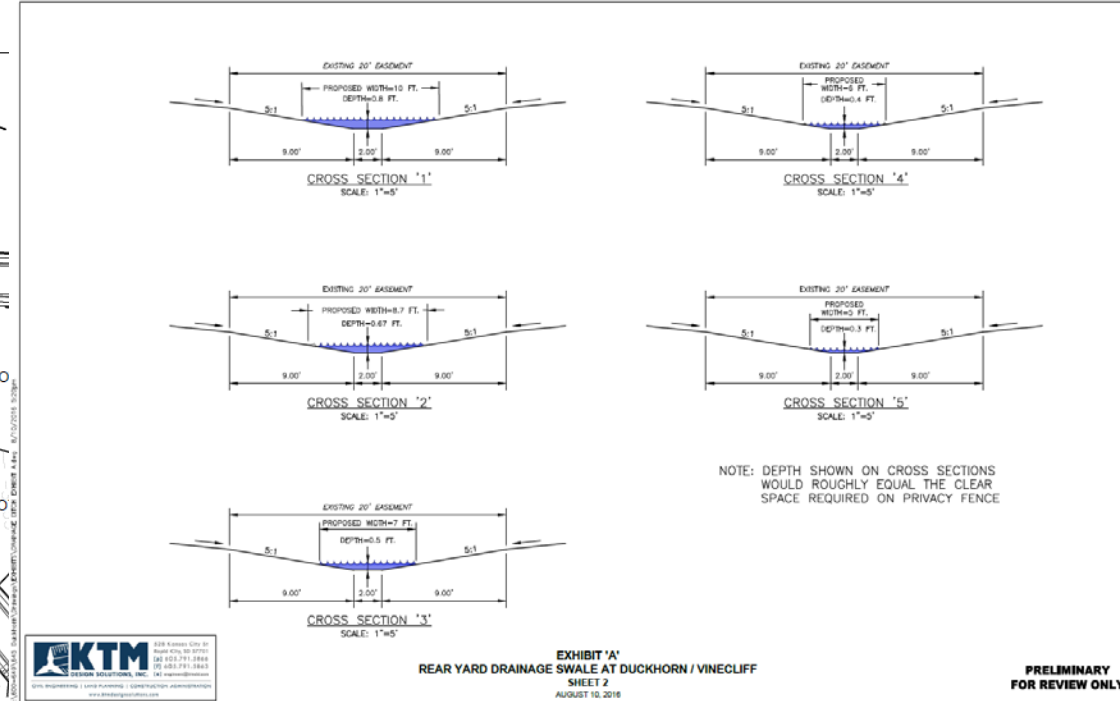
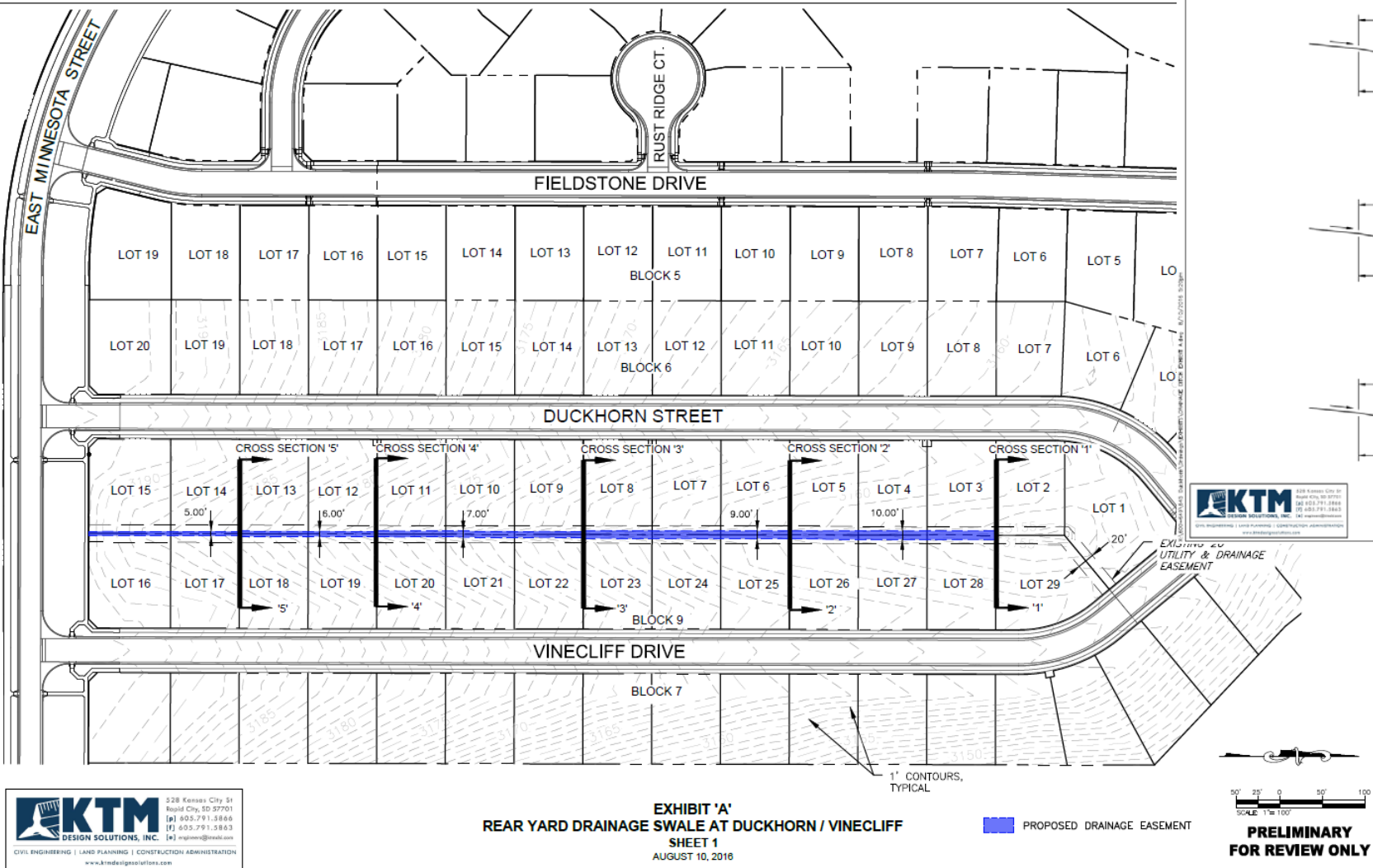
The City is not a party to the Covenants, however the Covenants do say that “All owners must keep the area of these easements free from improvements and obstructions...”

Engineer's Evaluation of Drainage Easement Vacation

- Requirement of a drainage easement vacation application is a drainage report prepared by a Professional Engineer.
- The report submitted with the application does not include an engineer's recommendation to vacate the entire MDE. KTM Design Solutions, the engineer, proposed 3 alternatives:
 1. Grant an exception to allow fences in the easement.
 2. Reduce the width of the drainage easement consistent with the design width of flow and forgo the need for freeboard.
 3. Reduce the width of the easement and grant an exception to allow fences in the easement

None of the 3 alternatives are supported by City Staff.

Engineer's Evaluation Illustrates that it is Appropriate to Maintain the MDE



Staff Recommendation: Uphold the Denial of the Request, to maintain the MDE intact per the original subdivision plan. All obstructions shall be removed from the MDE.

Questions?