

PB 44.01-03.20
June 24, 2021

LDR-Drainage & Grades - D.S.D.
1222 First Avenue, MS 501
San Diego, CA 92101-4155

Drainage Letter
3903 Haines Street, San Diego, CA, 92109
PTS-0669397

This project proposes the demolition of a single family home on multiple parcels, and the construction of three new separate single dwelling units along with an ADU and JADU on individual lots, in the previously developed area. The site will drain in the same manner as it does today with approximately 50% of the site draining to the rear alley and the remaining area draining towards Haines Street and discharging to the public street fronting the property.

The City of San Diego Drainage design manual (2017) was used for the preparation of the letter, specifically the rational method for watersheds less than 0.5 square mile. Based upon the proposed development footprint the total site area drained is approximately 8,197 Ft², or 0.19 ac.

Existing Condition

An existing site runoff coefficient of .55 was used, which corresponds to a single family land use matching the sites existing use. Due to the small size of the site a time of concentration (T_C) of 5 minutes was used, which will result in the most conservation design. Based on a T_C of 5 minutes the resulting intensity for a 100 year storm event is 4.4 in/hr. The proposed Q from the developed site is calculated below:

$$Q_{100} = C * I * A = 0.55 * 4.4 \text{ in/hr} * .19 \text{ ac} = 0.46 \text{ CFS}$$

This flow would be split between the portion running off into Haines Street and the portion running off into the alley for 0.23 CFS at ~0.62 ft/s each. A runoff coefficient of .55 was used, which corresponds to a single family land use matching the sites proposed use.

Proposed Condition

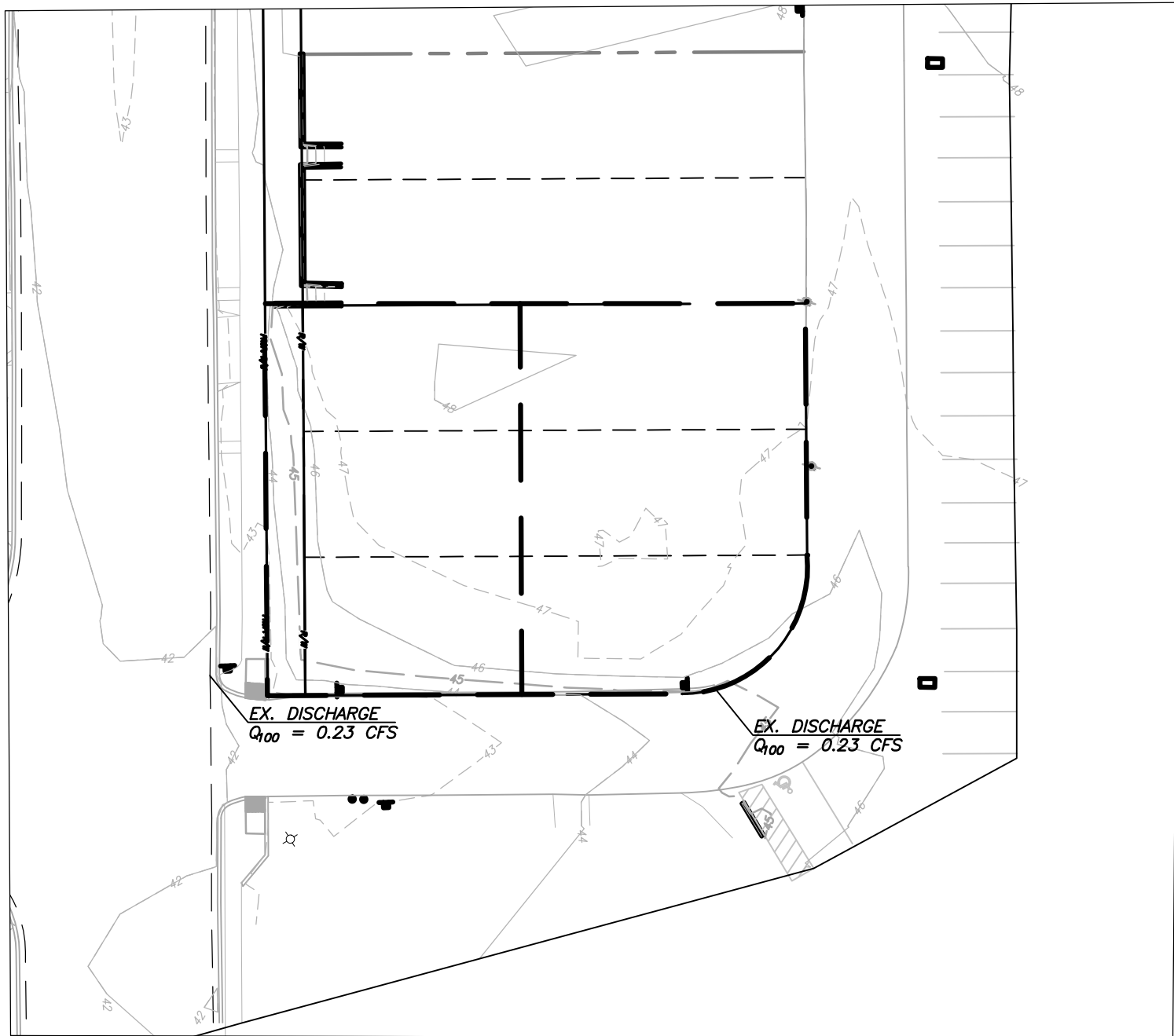
The proposed site runoff coefficient of .55 was used, since the site will be subdivided into single family homes. A time of concentration (T_C) of 5 minutes was again used due to the small size of the site, which will result in the most conservation design. The proposed Q from the developed site is calculated below:

$$Q_{100} = C * I * A = 0.55 * 4.4 \text{ in/hr} * .19 \text{ ac} = 0.46 \text{ CFS}$$

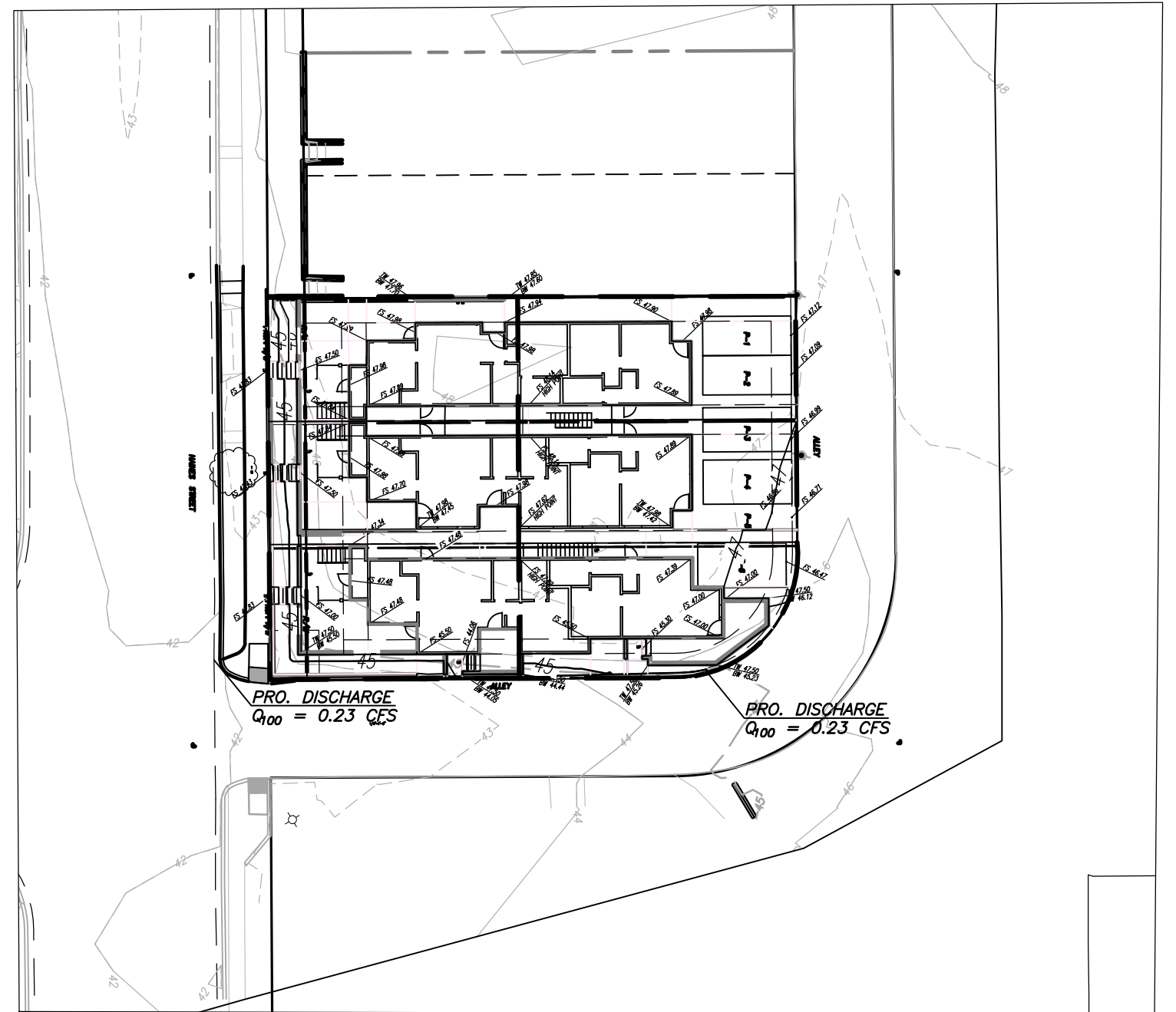
The proposed site grades were set to ensure that the drainage areas would again be split between

the portion running off into Haines Street and the portion running off into the alley being ~50% each for a drainage total of 0.23 CFS at ~0.62 ft/s each. There is no change from the existing to the proposed condition based upon the project as designed. This amount of flow is not anticipated to create any downstream negative impacts due to the relatively minor nature of the runoff, and the similarity to the existing condition.

There are no Federal or State water bodies that this project is directly tributary to, and as such there are no CWA 401/404 permits required for this project.



EX. DRAINAGE CONDITION



PRO. DRAINAGE CONDITION