CONCEPTUAL GRADING, DRAINAGE & UTILITIES PLAN



VICINITY MAP ZONE ATLAS PAGE K-14-Z

LEGAL DESCRIPTION

Lot 7 & Por. of Lot 8, Block 14 Huning's Highland Addition

DRAINAGE MANAGEMENT PLAN

I. INTRODUCTION

The purpose of this submittal is to present a conceptual grading and drainage plan for the "Arno Lofts" project. This submittal is made in order to support EPC & DRB approvals for the site plan and plat.

II. SITE LOCATION AND EXISTING CONDITIONS

The project site is located on the southeast corner of Central and Arno. In its current condition, the majority of the site contains the Zia Motor Lodge and associated facilities including parking. The site currently drains to the west and to the north into Arno and Central. The total peak discharge from the site in the 100 year storm is approximately 1.35cfs. Site slopes are 2% to 3%. The site is located within zone atlas map # K-14, and hydrologic zone 2.

III. PROPOSED HYDROLOGIC CONDITIONS The proposed project is to consist of 18 Loft Apartments and a small courtyard area. The site has been divided into two basins for proposed conditions. Basin A consists solely of the main portion of the building. Basin A is 100% impervious area and generates a peak discharge of 0.77cfs in the 100 year storm. This flow will be discharged to Central Ave via roof drain lines to be daylighted through the face of the curb.

Proposed Basin B consists of the balconies, stair towers, sidewalks and courtyard area behind the building. Basin B will discharge 0.52cfs to Arno via surface flow during the 100 year storm event. Basin B is 50% impervious, and 25% each of land treatments B & C.

The total discharge to adjacent public streets under proposed conditions is slightly less than existing peak flows.

IV. OFFSITE CONSIDERATIONS

There are no upstream offsite flows which will impact this site. In addition, the site will not have any detrimental impact on downstream drainage infrastructure since proposed conditions discharge is slightly less than existing.

This conceptual grading and drainage plan proposes concepts which are capable of safely passing the 100 year storm and which meet city requirements. With this submittal, we are seeking city hydrology approval for site plan and plat.

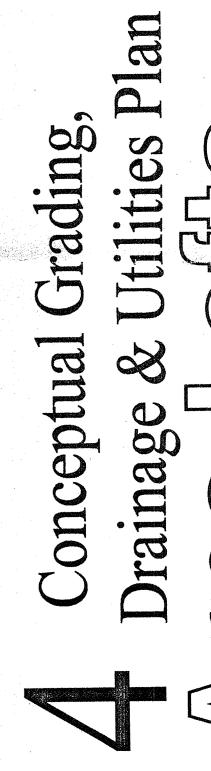
DRAINAGE CALCULATIONS

EXISTING CONDITIONS:
ASSUME 90% D, 5% C, 5% B 0.3 AC * 4.5 CFS/AC = 1.35 CFS

PROPOSED CONDITIONS: BASIN "A" (100% D) 0.163 AC * 4.7 CFS/AC = 0.77 CFS

BASIN "B" (50%D, 25% C, 25% B) 0.141 AC * 3.71cfs/AC = 0.52cfs

TOTAL PROPOSED = 1.29cfs



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