DRAINAGE SUMMARY

DIXON AVENUE PARKING LOT

MAP 35B BLOCK 1, LOT 2 MAP 45 BLOCK 6, LOT 15-17

DIXON AVENUE

CONCORD, NEW HAMPSHIRE

Prepared for Jonathan Chorlian

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INTRODUCTION

The project and associated plans are for the redevelopment of the existing Dixon Avenue parking lot located off Dixon Avenue and Storrs Street. Currently, the entire parking area is paved with two existing catchbasins collecting the runoff and directing it to the municipal drainage in Storrs Street. The proposed redesign of the site improvements not change the overall impervious area for the project. A new retaining wall is proposed on the upper portion of the site and two new catchbasins will collect the area on top of the wall. Because of storm sewer / sanitary sewer connection issue discovered in the upper alleyway, we will collect the alleyway drainage as shown on the plan and direct it through the existing system to Storrs Street. All of the drainage pipe is sized at 12" and is large enough to handle the small additional area of the alleyway and it will remedy the existing sanitary sewer connection problem.

EXISTING CONDITIONS

The current paved parking lot drains to two existing catchbasins that drain into the Storrs Street drainage system.

PROPOSED DEVELOPMENT IMPROVEMENTS

The proposed site improvements include demolishing and reclaiming the existing parking lot. Three retaining walls in all will be added. The smallest retaining wall is essentially replacing an existing stone wall between the buildings as Dixon Avenue leads up towards Loudon Road. The lower wall is set back from the existing lower wall and will essentially level the existing parking area that has a two foot tier down. The lower, flattened parking area will be restriped in a new configuration as shown of the plan. The existing CB 5206 and CB 5205 will have their rims shimmed as needed to match the new grades. The larger upper wall will create a parking area off the alleyway on top. The alleyway will be shimmed and graded to drain to the new CB 1 and CB 2. One CB that is tied to the sanitary sewer will be eliminated and the other will be reset as CB 1A and tied to CB 1. The additional area from the alleyway is small so the existing pipes do not need to be resized.

STORMWATER QUALITY

Stormwater runoff patterns are essentially unchanged for this proposed development. The existing stormwater runoff currently drains to the existing catchbasins located in the existing parking lot. Runoff from the developed area will continue to drain to basically the same points with a few new CBs added to catch the upper areas created by the new retaining wall.

EROSION CONTROL

Several "Best Management Practices" (BMP's) are proposed to minimize erosion during construction and after construction is complete. The following BMP's are proposed for this project and are designed in accordance with the Stormwater Management and Erosion Control Handbook:

• Construction entrance to Dixon Avenue after demolition has occurred until ready for new pavement. Catchbasin inlet protection for existing and new structures.



