



**Humber
Design
Group, Inc.**

November 14, 2023

Subject: Salem Apartments Land Use Stormwater Management Memo

This memo serves as the documentation for the stormwater report required as part of land use submittal requirements for the Salem Apartments new development located at 891 23rd St NE Salem, OR.

Per the City of Salem Department of Public Works Administrative Rules Chapter 109 Division 004 Section 4.2(a)(3) this project qualifies as a "large project" (greater than 10,000 sf of new or replaced impervious surface).

Per the City of Salem Stormwater Design Handbook for Developers and Large Projects Section 5, to meet the Green Stormwater Infrastructure (GSI) to the Maximum Extent Feasible (MFE), the site has been delineated into (5) stormwater drainage basins. These basins can be found in the attached catchment map. Each GSI facility (in this case, stormwater planters) has been preliminarily sized to be at least 10% of the contributing area of the combined new plus impervious surface area for the associated drainage basin. The stormwater planters will send overflow from large storm events to the existing stormwater-only sewer mains located in 23rd St NE and Center Street NE.

Sincerely,

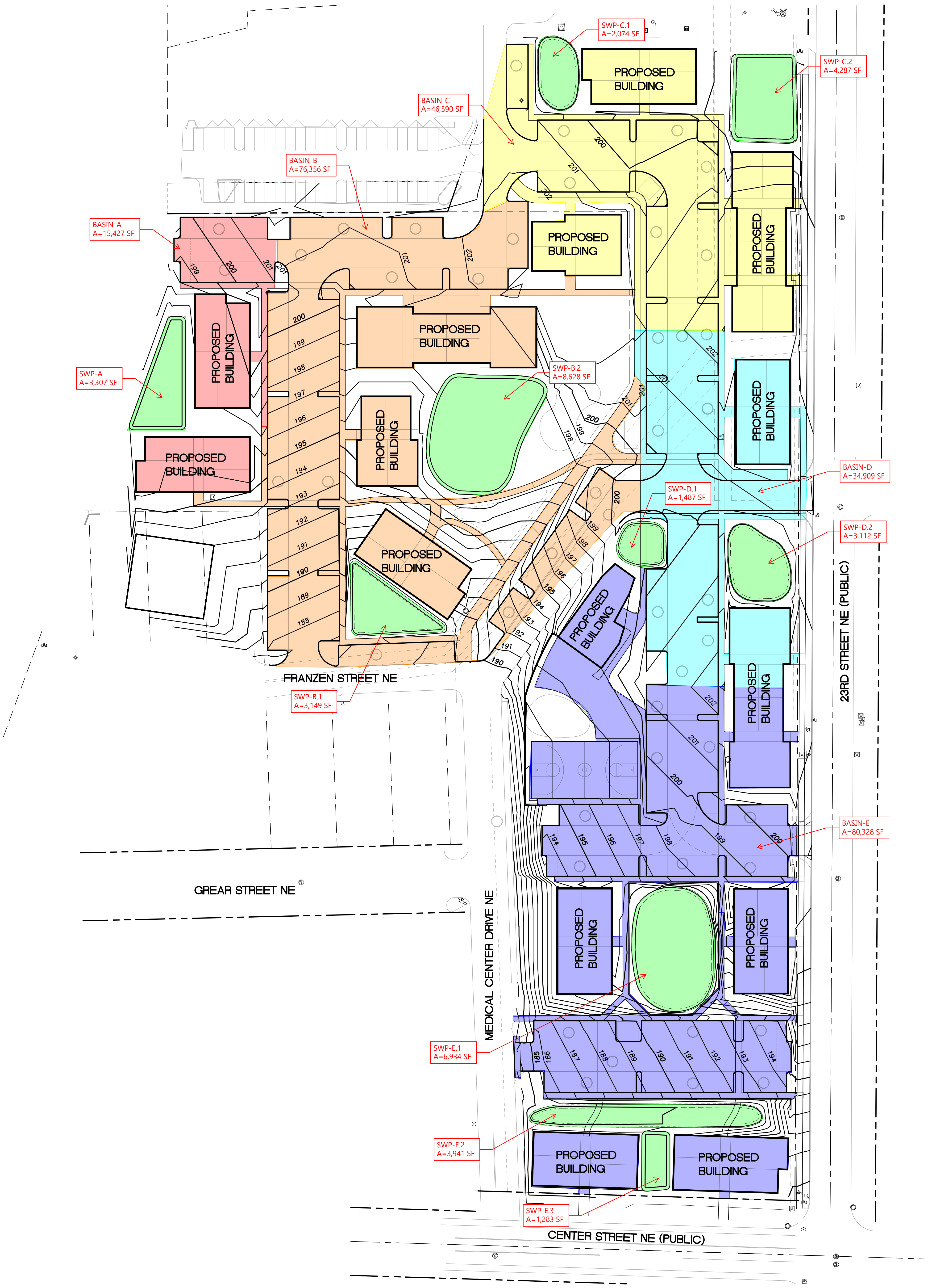
Humber Design Group, Inc.

Kristian McCombs, PE

Attachments:

Catchment Map

SALEM APARTMENTS LAND USE CATCHMENT MAP



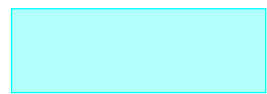
BASIN-A AREA = 15,427 SF
BASIN-A STORMWATER PLANTERS
SWP-A AREA = 3,307 SF
TOTAL AREA = 3,307 SF
IMPERVIOUS AREA TO PLANTER AREA RATIO = 3,307 / 15,427 = **21%**



BASIN-B AREA = 76,356 SF
BASIN-B STORMWATER PLANTERS
SWP-B.1 AREA = 3,149 SF
SWP-B.2 AREA = 8,628 SF
TOTAL AREA = 11,777 SF
IMPERVIOUS AREA TO PLANTER AREA RATIO = 11,777 / 76,356 = **15%**



BASIN-C AREA = 46,590 SF
BASIN-C STORMWATER PLANTERS
SWP-C.1 AREA = 2,074 SF
SWP-C.2 AREA = 4,287 SF
TOTAL AREA = 6,361 SF
IMPERVIOUS AREA TO PLANTER AREA RATIO = 6,361 / 46,590 = **14%**



BASIN-D AREA = 34,909 SF
BASIN-D STORMWATER PLANTERS
SWP-D.1 AREA = 1,487 SF
SWP-D.2 AREA = 3,112 SF
TOTAL AREA = 4,599 SF
IMPERVIOUS AREA TO PLANTER AREA RATIO = 4,599 / 34,909 = **13%**



BASIN-E AREA = 80,328 SF
BASIN-E STORMWATER PLANTERS
SWP-E.1 AREA = 6,934 SF
SWP-E.2 AREA = 3,941 SF
SWP-E.3 AREA = 1,283 SF
TOTAL AREA = 12,158 SF
IMPERVIOUS AREA TO PLANTER AREA RATIO = 12,158 / 80,328 = **15%**

