

Drainage Area "A" (PARTIALLY CONSTRUCTED)

Tributary Area	22.35 Acres
Percent Impervious Area (Historic)	23.8 %
Percent Impervious Area (proposed)	43.0 %
Change in Percent Impervious Area	19.2 %
Peak Flow (10-Year)	82.50 cfs
Peak Flow (25-Year)	105.28 cfs
Peak Flow (100-Year)	145.38 cfs
Stormwater Detention Storage Volume	39,898 cf
Allowable Peak Discharge	37.62 cfs
Stormwater Conveyance Design	10-yr Event
Stormwater Detention Design	25-yr Event (Rational) vs. 1.8 cfs/ac.

Drainage Area "B1" (CONSTRUCTED)

Tributary Area	10.52 Acres
Percent Impervious Area (Historic)	49.2 %
Percent Impervious Area (proposed)	57.9 %
Change in Percent Impervious Area	8.7 %
Peak Flow (10-Year)	44.11 cfs
Peak Flow (25-Year)	56.26 cfs
Peak Flow (100-Year)	77.79 cfs
Stormwater Detention Storage Volume	22,569 cf
Stormwater Detention Peak Discharge	18.93 cfs
Stormwater Conveyance Design	10-yr Event
Stormwater Detention Design	25-yr Prop (Rational) vs. 1.8 cfs/ac.

Drainage Area "B2" (PROPOSED)

Tributary Area	1.32 Acres
Percent Impervious Area (Historic)	77.5 %
Percent Impervious Area (proposed)	80.1 %
Change in Percent Impervious Area	2.6 %
Peak Flow (10-Year)	n/a
Peak Flow (25-Year)	n/a
Peak Flow (100-Year)	n/a
Stormwater Detention Storage Volume	4,768 cf
Stormwater Detention Peak Discharge	3.67 cfs
Stormwater Conveyance Design	10-yr Event
Stormwater Detention Design	25-yr Prop (Rational) vs. 1.8 cfs/ac.

Drainage Area "C" (PROPOSED)

Tributary Area	5.44 Acres
Percent Impervious Area (Historic)	18.6 %
Percent Impervious Area (proposed)	48.0 %
Change in Percent Impervious Area	29.4 %
Peak Flow (10-Year)	21.76 cfs
Peak Flow (25-Year)	27.79 cfs
Peak Flow (100-Year)	38.31 cfs
Stormwater Detention Storage Volume	10,098 cf
Stormwater Detention Peak Discharge	9.79 cfs
Stormwater Conveyance Design	10-yr Event
Stormwater Detention Design	25-yr Prop (Rational) vs. 1.8 cfs/ac.

Drainage Area "D" (CONSTRUCTED)

Tributary Area	4.14 Acres
Percent Impervious Area (Historic)	23.4 %
Percent Impervious Area (proposed)	47.0 %
Change in Percent Impervious Area	23.6 %
Peak Flow (2-Year)	15.59 cfs
Peak Flow (10-Year)	25.66 cfs
Peak Flow (100-Year)	38.90 cfs
Stormwater Detention Storage Volume	15,524 cf
Stormwater Detention Peak Discharge	35.87 cfs
Stormwater Conveyance Design	10-yr Event
Stormwater Detention Design	100-yr Post-Dvlp vs. 100-yr Pre-Dvlp

NOTE: BASEMAP IS NOT TO SCALE

Stormwater Legend

- Stormwater Detention
- Stormwater BMP
- Drainage Boundary
- Existing Storm Sewer
- Proposed Storm Sewer
- Existing Combined Sewer

- Notes:
- All storm sewers are public storm sewers. Minor private connections to public systems have not been shown for clarity.
 - All existing combined sewers have been rehabilitated with CIPP and are labeled "S".

BEACON HILL REDEVELOPMENT
Kansas City, Missouri

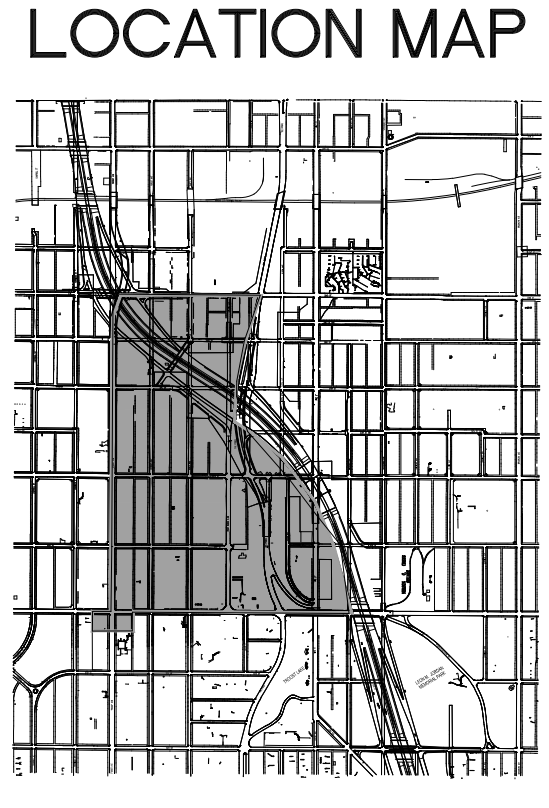
SEIDEL/HOLZMAN HNTB
Master Planner Design Architect Urban Designer Landscape Architect

0 100 200 400
1" = 100'-0"

7-STORMWATER PLAN.DWG

BEACON HILL NEIGHBORHOOD UR REDEVELOPMENT SUBMITTAL

TB Taliaferro & Browne, Inc.
Engineering - Landscape Architecture - Surveying



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UR SET
TB PROJECT 90-3590
REVISED
MARCH 2, 2018

STORMWATER CONCEPT PLAN
UR 7

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