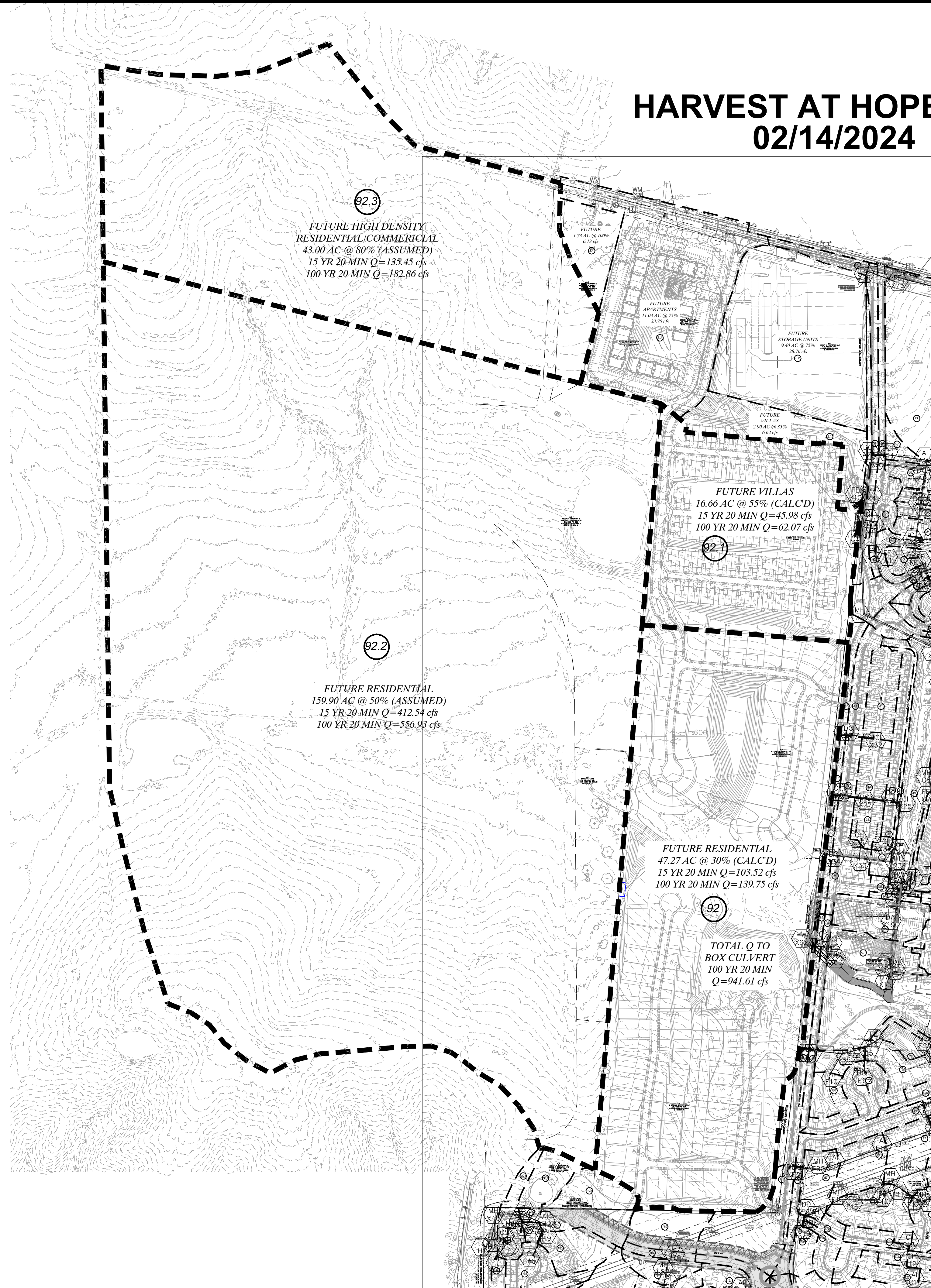


# HARVEST AT HOPE

## 02/14/2024



ISSUE	REMARKS/DATE
1	2023-09-28, INITIAL SUBMITTAL
2	2024-02-01, CITY COMMENTS
3	2024-04-17, CITY COMMENTS
4	2024-05-20, FOR APPROVAL

Drainage Area	Total Area (AC)	100% Impervio	15 Year, 20 Min. 100% P.I. Factor	Total 15 Year, 20 Min 100% Q	Grass (AC)	15 Year, 20 Min. 5% P.I. Factor	Total 15 Year, 20 Min 5% Q	Total 15 YR Q	Total 100 YR Q
89	0.41	0.28	3.54	0.99	0.13	1.70	0.22	1.21	1.63
90	0.45	0.35	3.54	1.24	0.10	1.70	0.17	1.41	1.90
92	47.27			CALC'D 30% IMPERVIOUS - P.I. FACTOR =2.19				103.52	139.75
92.1	16.66			CALC'D 55% IMPERVIOUS - P.I. FACTOR =2.76				45.98	62.07
92.2	159.90			ASSUMED 50% IMPERVIOUS - P.I. FACTOR =2.58				412.54	556.93
92.3	43.00			ASSUMED 80% IMPERVIOUS - P.I. FACTOR =3.15				135.45	182.86

### INLET CAPACITY TABLE

INLET NUMBER	INLET TYPE	STREET GRADE	INLET CAPACITY (CFS)	Q15 (CFS)	UPSTREAM INLET	Q15 BYPASS FROM UPSTREAM INLET (CFS)	TOTAL Q15 TO INLET (CFS)	Q15 BYPASS (CFS)	Q100 (CFS)	Q100 BYPASS FROM UPSTREAM INLET (CFS)	TOTAL Q100 TO INLET (CFS)	Q100 BYPASS (CFS)
X63	DCI	LOW	8.00	1.41			1.41	0.00	1.90		1.90	0.00
X64	DCI	LOW	8.00	1.21			1.21	0.00	1.63		1.63	0.00

PROJECT TITLE

**HARVEST AT HOPEWELL**

O'Fallon, Missouri

**O'FALLON PHASE IB**

**THE STERLING CO.**  
ENGINEERS & SURVEYORS

5055 New Baumgartner Road  
St. Louis, Missouri 63129  
Ph 314-487-0440 Fax 314-487-8944  
www.sterling-eng-sur.com  
Corporate Certificate of Authority #001348



Date: 05-20-2024  
Michael G. Boerding  
License No. MO E-28643  
Professional Engineer

HARVEST HOPEWELL, LLC  
5091 New Baumgartner Road  
St. Louis, Missouri 63129

OFFSITE DRAINAGE AREA MAP TO CULVERT

P+Z No. 21-004994  
City No. 21-011444  
Date: 05-20-2024  
Job No. 20-09-327

Page No.

**8.22**

IMP

**THIS DOCUMENT IS FOR DRAINAGE AREA PURPOSES ONLY!  
NOT FOR CONSTRUCTION!**