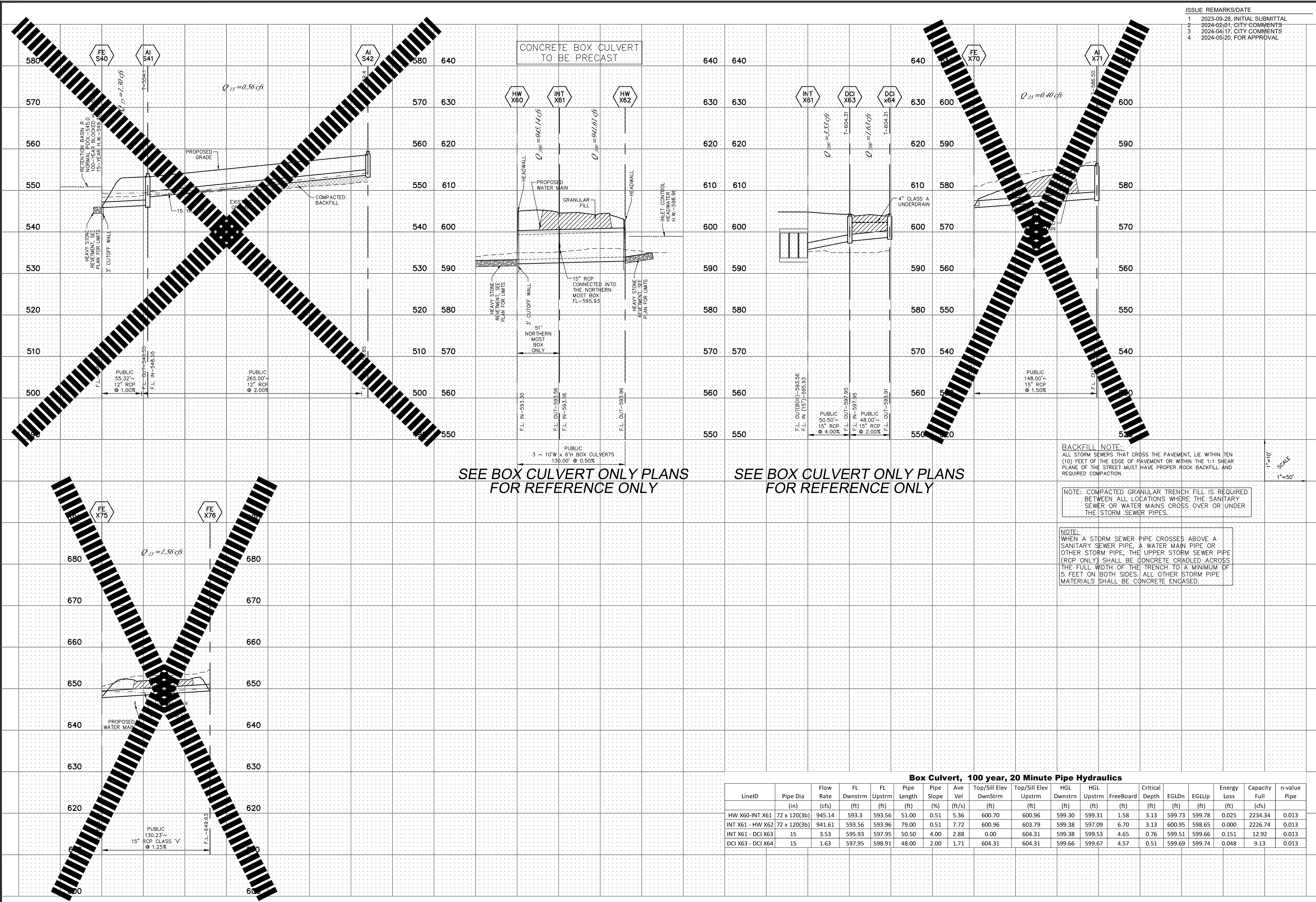


ISSUE	REMARKS/DATE
1	2023-09-28, INITIAL SUBMITTAL
2	2024-02-04, CITY COMMENTS
3	2024-04-17, CITY COMMENTS
4	2024-05-20, FOR APPROVAL



SEE BOX CULVERT ONLY PLANS FOR REFERENCE ONLY

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BACKFILL NOTE:
ALL STORM SEWERS THAT CROSS THE PAVEMENT, LIE WITHIN TEN (10) FEET OF THE EDGE OF PAVEMENT OR WITHIN THE 1:1 SHEAR PLANE OF THE STREET MUST HAVE PROPER ROCK BACKFILL AND REQUIRED COMPACTION.

NOTE: COMPACTED GRANULAR TRENCH FILL IS REQUIRED BETWEEN ALL LOCATIONS WHERE THE SANITARY SEWER OR WATER MAINS CROSS OVER OR UNDER THE STORM SEWER PIPES.

NOTE: WHEN A STORM SEWER PIPE CROSSES ABOVE A SANITARY SEWER PIPE, A WATER MAIN PIPE OR OTHER STORM PIPE, THE UPPER STORM SEWER PIPE (RCP ONLY) SHALL BE CONCRETE CRADLED ACROSS THE FULL WIDTH OF THE TRENCH TO A MINIMUM OF 5 FEET ON BOTH SIDES. ALL OTHER STORM PIPE MATERIALS SHALL BE CONCRETE ENCASED.

1"=0'
1"=50'

Box Culvert, 100 year, 20 Minute Pipe Hydraulics

LineID	Pipe Dia (in)	Flow Rate (cfs)	FL Dwnstrm (ft)	FL Upstrm (ft)	Pipe Length (ft)	Pipe Slope (%)	Ave Vel (ft/s)	Top/Sill Elev DwnStrm (ft)	Top/Sill Elev Upstrm (ft)	HGL Dwnstrm (ft)	HGL Upstrm (ft)	FreeBoard (ft)	Critical Depth (ft)	EGLDn (ft)	EGLUp (ft)	Energy Loss (ft)	Capacity Full (cfs)	n-value Pipe
HW X60-INT X61	72 x 120(3b)	945.14	593.3	593.56	51.00	0.51	5.36	600.70	600.96	599.30	599.31	1.58	3.13	599.73	599.78	0.025	2234.34	0.013
INT X61 - HW X62	72 x 120(3b)	941.61	593.56	593.96	79.00	0.51	7.72	600.96	603.79	599.38	597.09	6.70	3.13	600.95	598.65	0.000	2226.74	0.013
INT X61 - DCI X63	15	3.53	595.93	597.95	50.50	4.00	2.88	0.00	604.31	599.38	599.53	4.65	0.76	599.51	599.66	0.151	12.92	0.013
DCI X63 - DCI X64	15	1.63	597.95	598.91	48.00	2.00	1.71	604.31	604.31	599.66	599.67	4.57	0.51	599.69	599.74	0.048	9.13	0.013

PROJECT TITLE
HARVEST AT HOPEWELL
O'FALLON, MISSOURI
O'FALLON PHASE 1B

THE STERLING CO.
ENGINEERS & SURVEYORS
5055 New Baumgartner Road
St. Louis, Missouri 63129
Ph 314-487-0440 Fax 314-487-8944
www.sterling-eng-survey.com
Corporate Certificate of Authority #001348

Professional Engineer Seal
Date: 05-20-2024
Michael G. Boering, PE
License No. MO E-28643
Professional Engineer

HARVEST HOPEWELL, LLC
5097 New Baumgartner Road
St. Louis, Missouri 63129

STORM SEWER PROFILES

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