



Founded 1998

ALPHA & OMEGA GROUP

CIVIL | STRUCTURAL | WATER RESOURCES

FIELD OBSERVATION REPORT

Inspection Date:	12/11/2025	Time Arrived:	1:05 pm
Project No. & Description:	2025.091 1852 Liberty St Failed Cistern / Sinkhole	Time Departed:	1:45 pm
Inspected By:	T. Glenn Zeblo, PE A&O Group	Weather:	Sunny, Calm, 48°F
Contractor on Site:			none
Telephone No.:	919-981-0310 x204	Present at Site:	Ms. Sherry Owens

The purpose of this site visit was to observe a sinkhole developed on the property.

Observations:

- The Church building is constructed in a low lying area of the property such that stormwater is not able to flow around and away from the building. An underground Cistern, with sump pump, was installed to capture the stormwater runoff and discharge away from the building to a lower part of the property. It appears that the Cistern has been installed for 20 plus years or more based on the visual condition of the precast wall that has failed.
- The existing precast concrete Cistern, located about 3-feet below grade, is directly beneath the grated yard inlet adjacent to the sinkhole shown with dimensional lumber laid over the failed Cistern and adjacent sinkhole. The cistern has a sump pump that discharges the collected stormwater to the rear of the property.
- Recommend remove and replace the existing Cistern and Pumps with a new precast concrete Cistern of equal or larger size.



View of secured area of failed Cistern and resulting sinkhole



Area that drains into the existing Cistern, note landscape inlet to Cistern



View of secured area of failed Cistern and resulting sinkhole



Area that drains into the existing Cistern



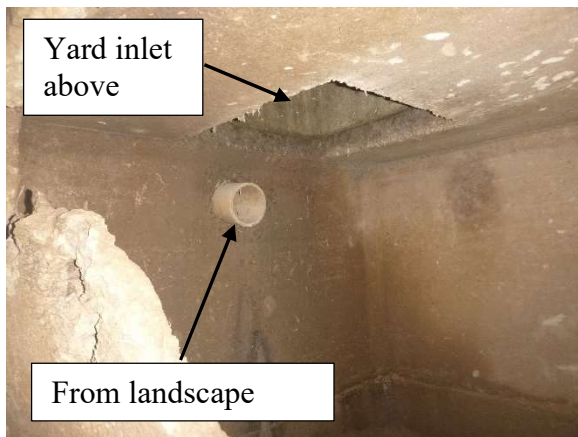
Failed wall of existing Cistern adjacent to sinkhole



4" dia. Discharge pipe from existing Cistern



View of area receiving pumped discharge from Cistern



View of inlet above Cistern through failed wall