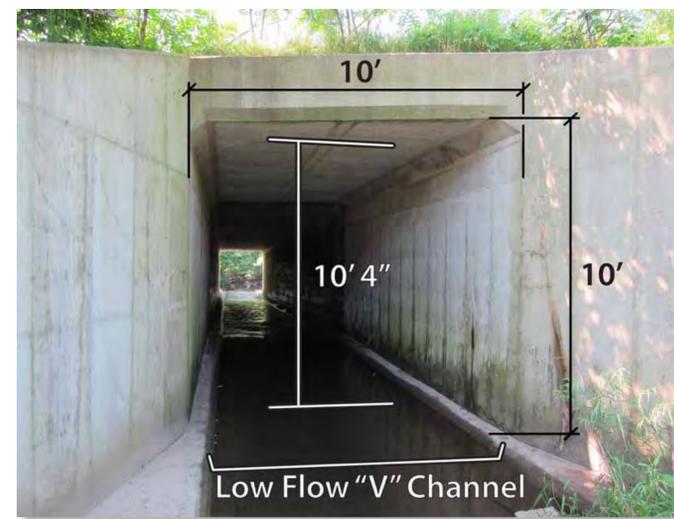




Cutaway of proposed modifications that would allow pedestrians to pass safely beneath Highway 30 through the culvert.



Existing conditions within the large box-culvert.



Aerial photo showing the location of the existing culvert location and the adjacent non-buildable lot, which happens to be in a forest preserve.

### Highway 30 Underpass near Nature Park

Near the southeast corner of Nature Park, there is a 10' x 10' box culvert which passes drainage under Highway 30. Most days drainage occupies only the bottom 3-4" of the culvert. Initial discussions with the Iowa Department of Transportation (IDOT) indicate there is an opportunity here to utilize this culvert as a grade separated crossing of Highway 30. Currently the IDOT has a similar application in Coralville where a trail traverses under Interstate 80.

The first task would be to complete engineering design calculations to determine if drainage from large storm events could still pass within the culvert without creating increased backwater depths that would damage upstream properties. Secondly, a durable elevated walking platform with the ability to pass low flow drainage underneath would be necessary. The 10' culvert has a built in 4" deep 'V' channel which adds to the much needed vertical clearance that is necessary to make this a viable pedestrian crossing.

The initial concept shows using the 4" 'V' channel including the bottom 12" of the culvert to provide for a 16" high walking surface with drainage accommodations underneath. This would allow for clearance of roughly 9' clearance to the culvert ceiling, which is the preferred minimum clearance needed to pass bike traffic.

At the exit of the culvert, on the south side of Highway 30 there is a 4 acre tract of land that is considered a non-buildable lot, due to access restrictions and within the floodplain. The owner of the parcel has indicated in the past an interest to donate this property to the City. Previously, with the position of this parcel adjacent to Highway 30 with no access, the property had no value to the City. Now with this trail extension, this property would extend the City's greenbelt south of Nature Park and would provide the much needed room to transition the trail through the culvert. A grade separated crossing would provide much needed pedestrian access to the south side of Highway 30.

# Mount Vernon

## Highway 30 Underpass near Nature Park

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