

Location Bondurant, Iowa.

Cleaveland Park Stormwater

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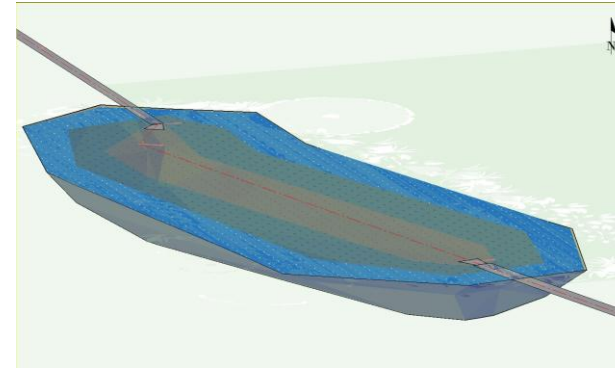
Client: John Horton
Publics works director,
City of Bondurant.



Figure 1. Satellite view of site



Final Design Proposed Layout



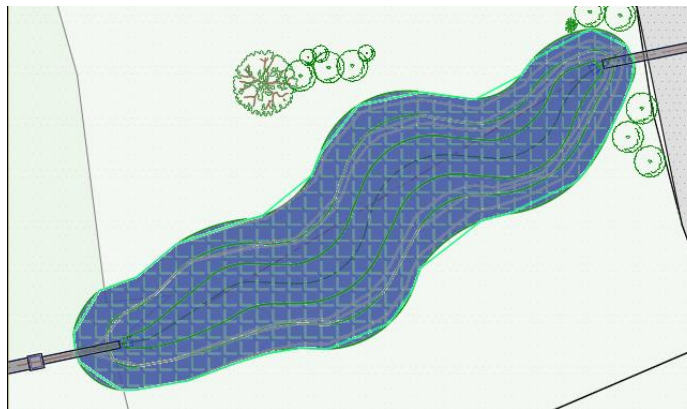
Final Design Conveyance Channel

Recommendations

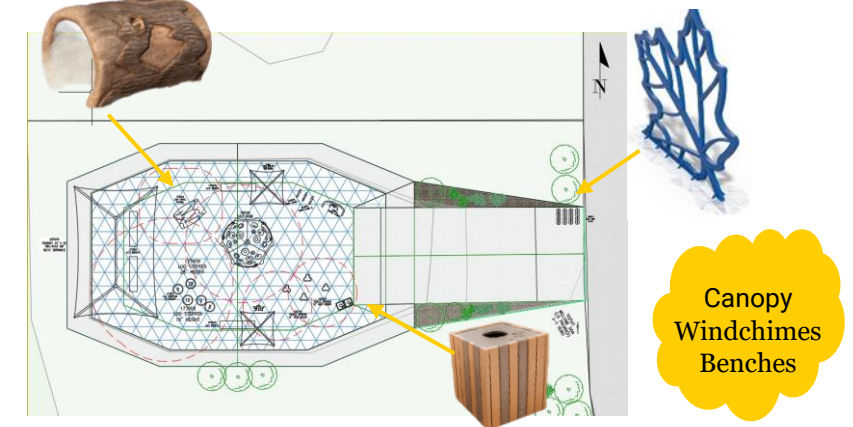
- Change site 1 into stream
- Increase pipe from 8in CPP to minimum 20in RCP
- Entire Pipe network upgraded between Site 1 and Site 2
- Change Site 2 into conveyance channel
- Add Playground

Design Objective

Evaluates storm sewer overland flow and surface water that has inhibited park development. Design a stormwater system to resolve drainage constraints.



Final Design Stream



Final Design Playground

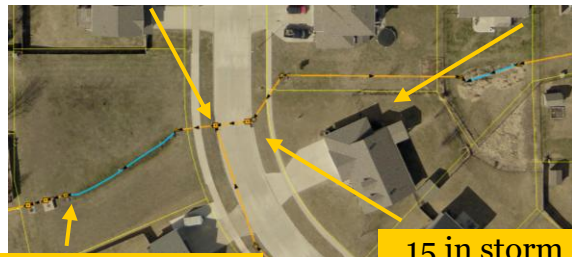
Canopy
Windchimes
Benches

References - Design Standards:
Iowa DNR, Iowa SUDAS, and
USDA.

Playground Equipment -
Landscape Structures

18 in storm drain

8 in PVC pipe



24 in culvert inlet

15 in storm drain

Figure 2. Existing Site

IOWA