Infill Development - City of Clinton

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Location, Purpose, & Reasoning

This infill development project in Clinton, Iowa, aims to design housing options on vacant lots that blend both physically and financially into the existing neighborhoods. The city's need for more adequate and affordable housing for both the ageing and younger population makes infill a viable solution.

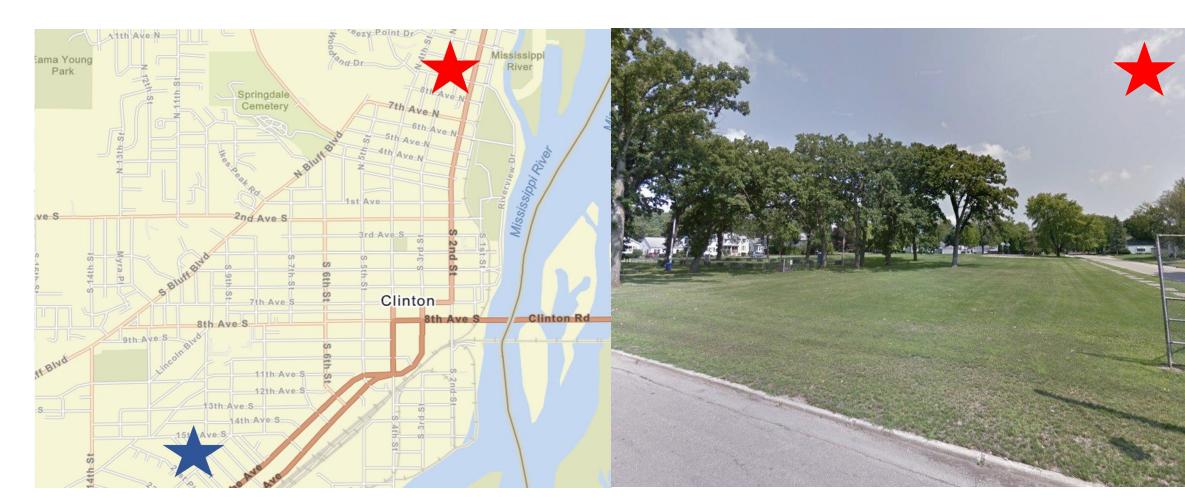


Figure 1: Hawthorne Park (red star) & Longfellow Heights (blue star)

Pocket Neighborhood

An outside the box idea, this arrangement of houses around a shared common space will foster neighborhood interactions while maintaining a level of privacy for the homeowners.



Figure 2: Overhead layout of pocket neighborhood (with garage)

1 & 2 Story Single-Family Housing

Two wood framed residential housing options were designed: a 1-story, 840 SF layout and a 2-story, 1300 SF single-family house with a front porch along with an optional garage and basement.





Figure 3: Rendering of 1-story house (without garage)



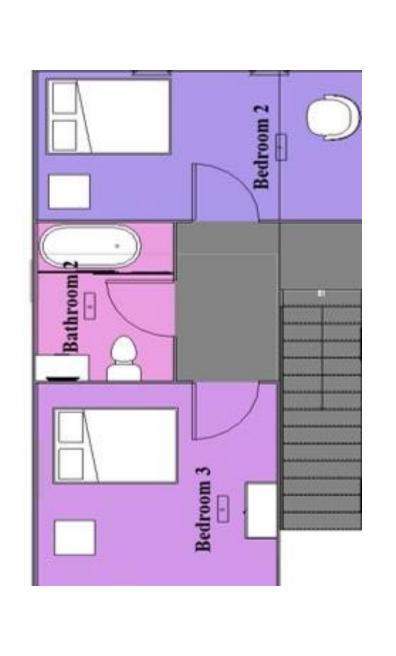


Figure 4: Layout of 1st floor (left) and 2nd floor (right) with garage





Figure 5: Rendering of 2-story house (with garage)

Cost Estimate

A single home is estimated to cost between 169.5k and 263k. Eight different options can be designed based on varying living area, optional 14k garage, and 13k basement. The pocket neighborhood is estimated to cost between 1.7 and 2.7 million dollars. This includes site work, contingencies and admin costs.

Conclusion / Recommendation

Inspired by the needs and values of future homeowners, SJJR decided to bring something new to the city of Clinton: a pocket neighborhood with affordable single-family housing, encouraging a small-scale community. Although financing will be a tough challenge given high construction costs and a low housing market, the housing option designs are also recommended to be placed on individual infill lots.







Figure 6: Renderings of pocket neighborhood

References: ASCE 7-22, Design Specification for Wood Construction (NDS 2018), Clinton Code Ordinances, International Building Code (IBC)