

GLENBRIDGE ENHANCEMENT PROJECT

*LOCATED IN BOARDMAN TOWNSHIP,
MAHONING COUNTY, OHIO*

SUBMITTED BY:
THE MAHONING COUNTY ENGINEER

FOR:
THE BOARD OF MAHONING COUNTY COMMISSIONERS

IN A JOINT EFFORT WITH:
BOARDMAN TOWNSHIP

WITH THE SUPPORT OF:
MILL CREEK METROPOLITAN PARK DISTRICT

MARCH 3, 2006

PROJECT SUMMARY

(WITH RESPECT TO THE EXISTING TRANSPORTATION CONDITIONS)

The existing bridge was constructed in 1952 as part of a Glenwood Ave. roadway extension project. The bridge is a 32' long single span steel beam structure that carries four (4) lanes of traffic over Krieder's entrance to Mill Creek Park. The abutments and wingwalls are faced with an ornamental sandstone brick which compliments other similar structures in the nearby park.

Though built with sidewalks for future considerations, no walkway was ever extended down Glenwood Ave. Brookwood Ave. has a partial sidewalk, and Mill Creek Rd. has none. The sidewalks that come off of Overhill Dr. and Newport Dr. end some 20' from the curblin. All abutting streets have sidewalks that lead thru the neighborhoods and eventually to the commercial areas of Market Street.

Along Mill Creek Rd. is St. Mark's Church, and the Krieder's entrance to Mill Creek Park is off of Brookwood Ave. Neither one of these features is safely accessible by pedestrians.

"The Glen" area of Boardman Township is a designated Historic District and abuts this project to the east. This area is filled with lamp post lighting that gives The Glen its distinctive characteristic.

Traffic counts in the project area consist of Glenwood Ave. at nearly 11,000 vehicles per day. Brookwood and Mill Creek are estimated at 2,000 and 800 respectively.

SCOPE OF PROJECT

RAILING UPGRADE

Replace existing steel panel sections on bridge with a black wrought iron rail.
Replace (and add) existing approach rail to bridge.

DRAINAGE IMPROVEMENTS

Repair (and replace) existing catch basins on bridge approaches.
Replace (and add) storm sewers along bridge approaches.

BRIDGE REPAIR

Paint steel beams.
Repair cracks on bridge wingwalls.
Clean and seal sandstone fascia brick on abutments, wingwalls, and railing posts.

LIGHTING

Add four (4) lamp post fixtures, one on each corner of the bridge.
Add highway lighting to bridge approaches.

SIDEWALK

Add (and replace) sidewalks along the east side of Glenwood Ave, southwest side of Brookwood Ave., and the north side of Mill Creek Drive.
Curbing may also need to be replaced when sidewalk is installed along roadway.

MISCELLANEOUS

Replace culvert railing (match bridge rail) on Brookwood Ave.
Repair / replace catch basins and /or inlets along Brookwood Ave.
Upgrade signage within project area.

RAILING
UPGRADE

EXISTING RAIL IS SEVERELY
RUSTED AND CORRODED

PHOTO IS OF THE WEST RAIL,
LOOKING SOUTH.



- * Existing rail is an ornamental cross design mounted on vertical posts and tied to both the sidewalk decking and the sandstone faced parapet posts .
- * In keeping with the adjacent historic areas of “The Glen” and “Mill Creek Park”, we plan to replace this railing with a similar design as well as providing additional reinforcement to comply with today’s crash requirements.
- * We will extend the bridge designed rail into the approaches to eliminate the non-aesthetic sight of standard ribbon guardrail .

GLENBRIDGE ENHANCEMENT

DRAINAGE IMPROVEMENTS

EXISTING ROADWAY DRAINAGE
SYSTEM IS FAILING.

PHOTO IS GLENWOOD AVE.,
LOOKING SOUTH.



- * Existing catch basins on the four (4) corners of the bridge need rebuilt .
- * Storm sewer line needs to added along the NE corner of the approach roadway to allow for sidewalk construction .
- * Other existing open ditches may need to be reshaped and /or redirected to catch basins with a new storm sewer .
- * Curb inlets may need to be added to improve overall roadway drainage .

BRIDGE
REPAIR

SANDSTONE FASCIA BRICK IS SEVERELY DISCOLORED.

VERTICAL CRACK IN WINGWALL IS EVIDENT ON ALL FOUR (4) CORNERS.

PHOTO IS FROM PARK DRIVE BELOW, LOOKING EAST AT SW CORNER OF BRIDGE



- * Sandstone fascia brick is deteriorating from water damage , all walls will be cleaned and sealed .
- * Cracks on walls have formed from a combination of expansion and water damage , cracks will be repaired and sealed . Sandstone fascia bricks will be replaced if needed .
- * Steel beams have significant paint loss , minor section loss near beam ends from water damage coming thru expansion and backwall . Beams will be cleaned and painted as per ODOT OZEU specifications .

LIGHTING

EXISTING HIGHWAY LIGHTING.

PHOTO IS LOOKING NORTH.



- * We intend to upgrade the existing highway lighting with high pressure sodium vapor lamps .
- * Four (4) lamp posts will be installed , one on each corner of the bridge . The posts will match the existing fixtures located in “The Glen” .

SIDEWALKS

NO EXISTING SIDEWALKS ARE
LOCATED ALONG GLENWOOD AVE,
ON EITHER APPROACH TO THE BRIDGE

PHOTO IS LOOKING NORTH.



- * Proposed work includes constructing an entire sidewalk loop around Glenwood Ave ., Brookwood Ave ., and Mill Creek Drive
- * No sidewalk exists along Glenwood Ave . or Mill Creek Dr . Existing sidewalk along Brookwood Dr . will be replaced .
- * Also, the sidewalk termini on Overhill Dr . and Newport Dr . ends twenty (20') from the curblines . We intend to finish these walks to the curblines , thus tying into our proposed sidewalk extensions .
- * All walks will have handicap accessible ramps at the curb cuts .

PROJECT AREA SITE PLAN

- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- EXISTING CULVERT RAILING

