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Project Team

The Delta Institute

53 West Jackson Boulevard

Suite 230

Chicago, IL 60604

312 554 0900 (p) 312 554 0193 (f)

www.delta-institute.org

Grand Calumet Task Force

6060 Miller Avenue

Gary, IN 46403

219 938 1400 (p)

www.grandcalriver.org

Great Cities Urban Data Visualization

Laboratory

University of Illinois-Chicago 412 South Peoria Street M/C 350 Chicago, IL 60607 312 413 5779 (p)

www.uic.edu/cuppa/udv

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Prepared by

Jesse Elam (DI) • T.J. Holsen (DI) • Kevin Lawler (DI)

Brinda Kannan (UDV) • Xin Li (UDV)

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1.0 Introduction

1.1 Origins. The Gary Riverfront Revival emerged in Fall 2002 as a partnership between the Delta Institute, the City of Gary, and the Grand Cal Task Force. At that time, the U.S. Steel Corporation was removing contaminated sediments from a five-mile stretch of the Grand Calumet River through Gary as part of a consent decree and corrective action agreement with the U.S. Environmental Protection Agency (EPA). The Delta Institute—a non-profit organization whose work promotes community and economic development and environmental quality in the Great Lakes region—and the Grand Cal Task Force—a non-profit group that works to enhance environmental and economic vitality in communities along the river—approached the City of Gary to discuss future plans for the river. The opportunities arising from the clean-up of the East Branch were apparent, and a partnership was born. Through a grant from the EPA, the partners embarked on a participatory process to create a plan for redevelopment along the cleaned-up stretch of the river in Gary (Figure A).

1.2 Input and collaboration. The partners designed the Gary Riverfront Revival as a two-step process, first to highlight the benefits that could arise from rehabilitating the river and, second, to create a conceptual plan for redevelopment along the river corridor, looking carefully for opportunities to reestablish a relationship between the river and those living and working in Gary. For generations the Grand Calumet has been dangerously contaminated, a detriment to avoid rather than treasure. Newly cleaned-up, the Grand Cal needs the stewardship of the business and residen-

tial communities in Gary to ensure the degradation of the past is not repeated.

Seeking the best ways to open Gary to the river, and to maximize the economic and social benefits of the clean-up. this planning process sought to incorporate the input of residents, government officials, and the business community. The Delta Institute and the Grand Cal Task Force organized four meetings with residents in the Horace Mann neighborhood and met several times with U.S. Steel officials and the Gary Chamber of Commerce. The City of Gary Departments of Planning, Environmental Affairs, Community Development, and Economic Development were instrumental in developing this plan, as was the Planning and Development Council. State and federal agencies, including the Indiana Departments of Environmental Management and Natural Resources, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency, also provided valuable input.

1.3 Economic value of clean-up on the East Branch. Early in the planning process, the Delta Institute retained an economist from the University of Illinois-Chicago to estimate the economic benefits of cleaning up the East Branch. The analysis, available on the internet at www.delta-institute.org, showed that the polluted river lowered the value of nearby residential property by a significant margin. Cleaning-up the river, the study concluded, could increase home values by almost 30 percent (McMillen 2003). This estimate is conservative, since it considers only the removal of the river's negative economic impact. They do not take into account the possibility that the river will be transformed into a community asset over time, so that property near the river trades at a premium relative to other

locations. The study also suggests that such benefits could extend to the entire city if redevelopment efforts are undertaken that protect the river ecosystem, meet community needs, and foster a healthy economy.

1.4 Project setting. Sediments were removed from the East Branch between the Conrail trestle (not shown in Figure A) and the eastern end of open water on U.S. Steel property, from which point the river runs underground to join the Marquette Lagoons (not shown in Figure A). This stretch lies wholly within the City of Gary and determines the east-west extent of the project area. To the south, the boundary of the immediate project area was taken to be Fifth Avenue, following the Delta Institute's economic study (McMillen 2003), as a reasonable area of influence from the river.

The land on the north side of the Grand Calumet through the project area is a mix of industrial property, right of way for I-90, and holdings by the Indiana Department of Natural Resources (Figure D). To the south, the pattern is somewhat different. The primary use is residential over about half the stretch (the Horace Mann or Ambridge Mann neighborhood), although the river is buffered through much of that by a strip of undeveloped land owned by the City of Gary. Industrial uses take up essentially the rest of the property immediately adjoining the river on the south.

1.5 Project overview. This plan deals with three main sites along the river (Figure A), chosen because of specific opportunities they present. On the far west, there is a low area at the end of Bridge Street that U.S. Steel cleared and used as a staging area for its dredging operation. It includes a rough-hewn and gradu-

ally deteriorating boat launch. The planned Gary Green Link trail would run near to the launch. The plan recommends grabbing the opportunity, suggesting measures to stabilize and improve the launch, as well as a management strategy to ensure its continuing value and recreational connection its surroundings (Section 3). The boat launch is aimed at serving all residents of Gary and the region.

Enhancements to Ambridge Park (Section 4) are geared more toward the Horace Mann neighborhood. Erosion is severe along the river here, and the river bank area is scruffy. The park is underutilized, partly because its recreational facilities have not changed with the population. This plan proposes improvements aimed at preserving the park's centrality in the neighborhood and tying it with the proposed South Shore redevelopment to the east as well as, again, the Gary Green Link (Figure A).

Converting the C-lot, a former U.S. Steel parking lot, to a park and cultural site is meant to connect the river and Gary's most famous industry to downtown (Section 5). This project, too, would join with downtown reinvestment (such as the Steel Yard stadium and streetscape improvements) and the trailhead of the Gary Green Link. Establishing the park entails drawing a connection through the set of train and highway overpasses at the northern edge of downtown.

These sites are connected by the water flowing past them, but they are not conceptualized as related. Joining them in perception into sites along a trail can be readily accomplished by the use of a minimum number of intrinsically meaningful and repeated design elements. This plan proposes one simple device: the recurring use of a seawall — to stop erosion along the bank — that mimics the

existing rubble wall built several decades ago along U.S. Steel property. The concept of sites linked by a water trail is expanded in Section 6.

The eastern and western portions of the Horace Mann neighborhood are in decline. While the eastern end has a redevelopment planned, the western end does not. This plan seeks to elaborate an employer assisted housing strategy that can cover the western part of Horace Mann and be generalizable to other parts of the city (Section 7).

2.0 Principles and objectives of the Gary Riverfront Revival Plan

- 2.1 Contamination has long had a dark hold on the Grand Calumet River. U.S. Steel's clean-up of the river is an opportunity to unmask and celebrate its value.
- 2.2 The landscape along the east-west river axis should be cultivated as a mosaic of uses within a unity of design. At the same time, conceptual connections should be established north to the U.S. Steel Gary Works and Lake Michigan and south through the city.
- 2.3 In residential and recreational settings, the river can be made more valuable both in active use and as a backdrop. The river should be rendered more visible to the community, with recreational facilities enhanced or built from scratch, and specific access points to the river established.
- 2.4 Underutilized land along the river should, where sensible, be made publicly accessible and given a recreational use. This need not necessarily impair the land's ability to accommodate other uses. In the industrial section on the east end of the planning area, especially, the recreational worth of the river and the adjoining land must be integrated with its value to industry.
- 2.5 Many related planning efforts have been undertaken in Gary; others are ongoing. This plan should avoid retreading ground already

- covered. Moreover, it should seek to tie in with other plans' recommendations and offer support to them.
- 2.6 This plan should be strategic in focus, concentrate in detail on particular sites and projects, and offer specific recommendations for implementation. More general or larger issues will be dealt with where they intersect with the geographic area under consideration. The study area is, by necessity, defined by proximity to the remediated stretch of the Grand Calumet River.
- 2.7 The costs of investing in the projects recommended in this plan should not be borne by the City of Gary alone. Outside sources of funding should be identified, as well as contributions by parties with a stake in the recommendations. Overall cost is to be minimized by judicious selection of projects.
- 2.8 Residential redevelopment is a high priority in the Horace Mann community, the northern part of which adjoins the river. Comprehensive revitalization plans have been completed for Horace Mann in the recent past, and this plan strives to avoid duplication. The recommendation to rebuild is obvious, but this plan does not extend into predevelopment activities. What this plan can do, however, is offer suggestions for taking advantage of policy and community assets to increase homeownership.

2.9 This plan eagerly seeks the partnership of the business community. Its creation of value for Gary through employment opportunities and landholdings is a powerful strength to draw upon, and the benefits of the plan accrue to business as well.

3.1 Boat launch at Bridge Street

This semi-improved facility sits in the bottomland below road grade immediately off Bridge Street at the river. Used as a staging area during U.S. Steel's dredging operation, the launch area is a no-frills, gravel-surfaced space, but it has a functional boat launch. A combined sewer outfall lies immediately west of the boat ramp and Gary Sanitary District has a small, fenced-off outbuilding on the site. Next to the outbuilding there is a steel tower, with a small footprint, of unknown use and ownership. The existing launch sits on about 2.8 acres of land in public ownership (see below, Section 3.5.2).

We recommend proceeding with the improvement of the boat launch in two major phases: initial stabilization and later enhancement to support additional recreational use. Please refer to Section 6 for a discussion of the safety of river use.

3.2 Initial stabilization

The launch should be turned over to public use and advertised as such. Doing so would provide the direct, unambiguous access to the river absent in Gary. Two or possibly three improvements will still be needed to transform a temporary facility into a permanent amenity:

3.2.1 The gravel river bank will need to be protected from erosion (Figure 1). This could be accomplished either by grading down and revegetating the bank or by building a retaining wall. Because the subsurface material is layered with liners that would be exposed during grading, a retaining wall is the better approach. Building a retaining wall also provides an opportunity to clinch design continuity along the river. Constructing the

wall of the same material proposed for the Ambridge Park enhancement (Section 4 below), which itself mimics the existing revetment of hot-poured slag along the U.S. Steel property, would bring a measure of visual unity to the three sites whether seen from the river or from land.

3.2.2 The gravel boat ramp should be replaced with a concrete slab for longer wear, better traction, and protection against erosion. Thereafter the shoreline would need little maintenance. An entrance ramp of packed dirt surfaced with gravel presently leads from Bridge Street down to the launch area. The short-term stability of the entrance ramp probably needs to be examined and the ramp, if necessary, shored up.

Figure 1: River bank at Boat Launch site



Four ancillary actions should be taken to "launch the launch" effectively:

3.2.3 The remaining signs posting rules for workers onsite and warning against trespassing should be removed. A sign proclaiming the boat launch a public access point, and giving it a name (e.g., "Grand Calumet River — Bridge Street Boat Launch"), should be installed.

- **3.2.4** Directional signs will be needed to advertise the launch. Obvious locations are the intersections of Bridge Street and Fourth and Fifth Avenues, Clark Street and Fifth Avenue, and Buchanan Street and Fourth Avenue.
- **3.2.5** Information about fish consumption and the safety of water contact must be posted at the launch area.
- **3.2.6** Currently existing signs along the river should be reconsidered. They give the impression, as one observer put it, that the Grand Cal is the River Styx, treating the water as if it were a direct passage to the underworld (Figure 2). To meet the community-serving goals of the river clean-up, the message of the signs needs to balance frankness and optimism, caution and anxiety. The Grand Cal Task Force and the Indiana Department of Environmental Management collaborated in putting up one set of signs; the Gary Sanitary District put up another set. A very good suggestion from one closely involved with the Task Force was to hold a sign-removal ceremony to celebrate the clean-up.



Figure 2: Current signage on the East Branch.

3.3 Enhancement and support facilities

Improving upon the initial stabilization of the launch area, a boat dock could be built and the launch area expanded into the adjoining bottomland to include supporting uses like a picnic pavilion and walking trails. The sketch site plan in Figure B gives an indication of how the area might appear. The setting is pleasant and fairly bucolic in spite of the expressway across the river, while the eastern view off the bridge is a fine, accessible vista of the wide Grand Calumet flood plain.

The sketch site plan shows one-way internal traffic circulation and a two-way entrance—exit. Five parking spaces are provided for passenger cars, which is in line with the Department of Natural Resources' normal practice at stream access points, as well as three spaces for vehicles with trailers. The space nearest the path perpendicular to the ramp would be used for handicap parking. An information kiosk is placed directly beside the ramp to post the necessary warnings.

Besides boating, users can enjoy the river at this park through several outlets. The platform juts slightly into and over the river so that one can gaze into the water from directly above. The grass steps are an arrangement of terraces, scaled to a human stride, leading down to the river. The viewing plaza uses a small amount of special paving, interlocking with sectors of turf, to create a secondary focus away from the launch and entrance area. The plaza is set in a semi-hidden grove and rewards the short walk to reach it. We should note that the site is laid out with thinly spaced trees and low shrubs to ease fears (and reduce the chances) that the park, in its cut-off corner of the neighborhood, is unsafe. The trees themselves should be mature specimens left from land clearing for the park. Lights will need to be installed, most likely, requiring utility line extension.

The site plan is, again, an initial sketch. The final design may need to be refined to be sure no structures are built over the combined sewer line or otherwise interfere with the functionality of the site.

3.4 Rationale

3.4.1 Survey data. There are currently no official public access points to the Grand Calumet within the cleaned-up stretch of the river. The recommendation to provide the boating access seems obvious enough, but what supports it? A Grand Cal Task Force survey to determine preferences for in-water recreation for the river showed that about a quarter of respondents in the Gary region would most prefer to use the Grand Calumet for canoeing (GCTF 2000: Appendix D). Although fishing and swimming were more popular — 44 percent and 32 percent, respectively — fishing for consumption and swimming have to be discouraged for the time being because of contamination. The survey gives grist for guesswork, though, because the wider category of "boating" would have been more appropriate than "canoeing," and secondly because, for some, fishing may entail boating. Neither did the survey measure demand for a given type of recreation — i.e., whether the respondent currently engages in the activity or would do so given river cleanup, facility improvements, etc. Nonetheless, a public-use launch would support both boating, which probably would be more popular than the survey seems to suggest, as well as fishing from the bank.

3.4.2 Types of boat. The intention of this plan is to provide access not just for canoes, but for trailerable boats with small motors. We expect there are john boats in Gary that fit the description, but we were not able to get data for this plan from the Indiana Department of Motor Vehicles on the number and type of registered boats in Gary. The depth of the water, the low trestles crisscrossing the river, the attractiveness of the resource, and local demographics will place a natural limit on the size of the craft and motor found on the Grand Cal. From profiles taken following the clean-up, it appears that the dredged portion of the river, although considerably deeper in some places, averages 5 to 7 feet in depth (estimated from Earth Tech 2004: Appendix C), which is sufficient to float small motorized craft.

On the other hand, outboard engines discharge their exhaust underwater and thus leave behind some of the same residues that U.S. Steel spent \$50 million to clean out of the river. With this fact in mind, it could be appropriate to limit boaters to electric trolling motors. Residents have repeatedly expressed concern about noise from boats on the river. While it the occasional outboard motor may not be more disruptive than the constant noise of the Toll Road, restricting boaters to trolling motors could also address concern among residents.

3.5 Management, restoration, and ownership

3.5.1 Management. Who should manage the launch? The most logical candidate is the Indiana Department of Natural Resources. It already runs a Public Access program for rivers and lakes across the state, and so would have the administrative capacity to manage the

Bridge Street launch. The Department of Natural Resources (DNR) has also been intimately involved in the clean-up of this section of the river. Finally, DNR owns a large swath of property northwest of the boat launch site — the Clark and Pine Nature Preserve and the "Bongi property," or Clark and Pine East (Figure D) — and there is the possibility that the department will take ownership of the oxbow land just across the river some years after U.S. Steel restores it (see discussion in Section 3.6.1). Having the launch area under the same ownership or administration as the nature preserve tract would aid in comprehensive management of the area. And if the oxbow is converted to a recreational use, a point of access with parking facilities, information displays, etc. will be needed nearby. Otherwise the oxbow would be isolated, surrounded by water and industrial property. In short, recreational use of the oxbow makes much more sense in tandem with the Bridge Street launch area.

3.5.2 Restoration. Under the terms of its consent decree, U.S. Steel is obligated to restore the launch area to its condition prior to the dredging operation. To remove the launch facility now is akin to digging a hole and filling it in again. This plan's recommendations clearly would suffer as a result, and Gary residents would needlessly lose an opportunity. Ecological analysis suggests the launch area is not a high priority restoration site (WCA 2004); the better use for the site is to deliver recreational benefits such as those suggested here. The City of Gary should attempt to intercede immediately with the trustee agencies to retain the end of Bridge Street as a launch.

3.5.3 Current ownership. The launch area, as geographically defined in the en-

hancement phase of this plan, is a jigsaw

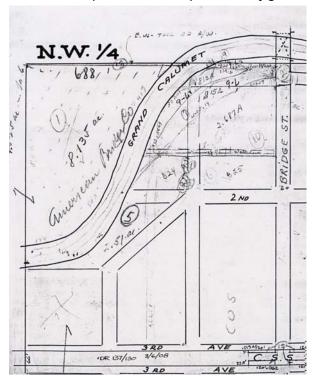


Figure 3. Plat showing property lines in boat launch area

puzzle of parcels owned by the City of Gary and the Indiana Transportation Finance Authority, the successor agency to the Indiana Toll Road Commission (Figure 3). The Department of Natural Resources need not necessarily take ownership of the launch area to manage it, but if it does we recommend that the parcels be joined. Either way, agreements will have to be reached with the Indiana Transportation Finance Authority and the City of Gary.

3.6 Linkages

3.6.1 Gary Green Link trail system.

As several route segments in the Gary Green Link trail system depend on a stem running over the span at Bridge Street, turning the launch facility over to public use and adding a picnic area would also be a point of connection with the Green Link plan (Figure C). The Green Link plan also recommended establishment of a canoe launch at the site (WCA 2004: Appendix F). All proposed route alternatives branch off of Bridge Street, coming within a few blocks of the launch site. Although it would be best to have contiguity between the boat launch and the Green Link, the connection is not highly dependent upon a specific choice of route for the trail.

The ground is contested here anyway. U.S. Steel owns the oxbow land (Figure D), intends at present to retain ownership, and will soon be carrying out site restoration according to a workplan approved by the trustee agencies. Two other actors have different visions for the land. The City of Gary Department of Environmental Affairs is advocating for routing part of the Green Link through the oxbow, whereas the Indiana Department of Natural Resources is less than keen about traffic through a site it hopes to restore to its native ecology. This plan does not see the two positions as necessarily mutually exclusive. The trail would occupy only a narrow strip; especially sensitive areas could be fenced off.

3.6.2 Historic bridge. Finally, the bridge beside the launch is apparently one of only two remaining spans of the double cantilever design in America (personal communication from John Newgent, retired engineer for American Bridge Corporation; June 10, 2004). It has a constituency that values its histori-

¹ The trustee agencies are authorized by Congress to act on behalf of the public by bringing damage claims against parties responsible for pollution. In the Grand Calumet/Indiana Harbor Canal system, they include the U.S. Environmental Protection Agency, U.S. Department of the Interior, U.S. Department of Commerce, and the State of Indiana (Departments of Natural Resources and Environmental Management).

cal significance and has acted to oppose its replacement. The bridge provides an opportunity for an interpretive site and/or landmark designation, although the replacement of the floor system in the bridge a few years back suggests it will continue in service for some time, diminishing the urgency of establishing landmark status. The bridge is owned by Indiana Industrial Investments, a firm that leases out the property formerly owned by American Bridge Corporation to industrial tenants.

As the Department of Natural Resources includes the Division of Historic Preservation and Archeology, the presence of the bridge may well be another nexus in the agency's involvement.

3.6.3 Rerouting truck traffic. Bridge Street sees heavy truck traffic from the industrial operations on the old American Bridge Company land. While some may like the vitality of recreation intermixed with the industrial to-and-fro, most will see the trucks as a problem. The 1995 Ambridge Mann Redevelopment Plan reported that the truck traffic also hampered residential circulation, especially at the intersection of Bridge Street and Second Avenue. One solution might be to close Bridge Street to truck traffic and reroute it either along the north side of the Toll Road, around the exchange cloverleaf. and back into the neighborhood at the Buchanan Street bridge; or reroute it west along the access road to Clark Road. The Bridge Street span would then most logically become a pedestrian (or multi-use) bridge leading over to the oxbow property.

3.6.4 Stakeholder recommendations. The Gary Department of Environmental Affairs has raised the idea of an interpretive trail on a raised walkway through the

wetlands to the east of the launch area (Figure C) for which the launch area can serve as a trailhead and provide parking as well. Should recreational access to the oxbow land via the existing bridge turn out to be problematic, it has been suggested that the viewing plaza in the site plan could be a likely location to build a pedestrian bridge across the river.

4.0 Ambridge Park enhancement

Ambridge Park is a main community focal point in the Horace Mann neighborhood. The park directly abuts the river, but two rows of chainlink fence and a patch of vegetation separate them. Because dredging undercut the riverbank, the edge of the park is caving into the river (Figure 3), taking the first fence with it. Except for a small playground area, the park is designed mainly with baseball and basketball in mind.

We propose taking action to control erosion of the riverbank, tie the park more closely to the river, update park facilities, and connect the park to the planned new South Shore redevelopment, as well as to support lower-intensity leisure like strolling, meeting neighbors, picnicking, and so forth. The site plan is shown in Figure E.

Figure 4: Bank erosion at Ambridge Park.



4.1 Site plan elements

4.1.1 Seawall. Constructing a seawall along the river is a logical way to stop erosion on a steeply sloping bank at a recreation site where the public will be

tramping around (Figure E). The same construction technique should be used here as for the wall at the boat launch site. A steel sheet will almost certainly be needed to retain the bank, but the wall should be faced with stone that, again, mimics the existing hot-poured slag revetment along U.S. Steel property. At the eastern and western edges of the park, the seawall would slope down gradually to the natural bank. The fences that bar access to the river should be removed, as well as the trees dangling over the water with roots half-exposed.

We prefer the seawall alternative to restoration of the natural riverbank because it not only indicates the continuity of sites along the river, but also clearly designs the park with the river in mind. The stretch of river along which the wall would run is short enough (about 300 feet) that adverse environmental effects from the armoring of the riverbank are expected to be minimal. Please see the discussion of river restoration and permitting requirements in Section 6.

The playground is directly adjacent to the river's edge. For that reason the wall should have a handrail at or higher than standard residential code height, and the balusters must be placed closely enough to prevent children from wriggling through. Alternatively the stone wall itself could extend above ground level to serve as the handrail.

4.1.2 Visibility of the Toll Road. Directly across the river from the park is a ramp for the Toll Road (Figure 4). It is not an especially pleasing sight. Planting trees to screen the ramp would be difficult, though probably not impossible, because the concrete runs close to the edge of the river and the bank is steep. The Indiana Department of Transportation may also be loath to allow trees so close to the

roadway. On a typical urban highway, the first ten feet out from the outer travel lane makes up the "clear zone," where, for safety reasons, obstructions are generally prohibited. It is not entirely clear whether the same is true for on- and off-ramps.

An expansion is planned for the Toll Road that will add another lane in each direction. It is not known whether the plans call for reengineering the ramp. Under the right conditions, the expansion could be an opportunity: if Indiana adopts a mode of design becoming more and more widespread among state Departments of Transportation, a context sensitive approach might be employed that could involve affected citizens to minimize adverse impacts and develop a design peculiarly suitable to the locale (see e.g. TRB 2002). Relative to this plan, the offramp across from Ambridge Park might be masked by a treatment for the guardrail — a low rubble wall like the proposed seawall, for example, or some other device.

Figure 5: Toll road viewed from the river.



4.1.3 Path along river. The seawall provides an obvious contour along which a path could lead. Presently a gravel path runs in a circuit around the children's play area, but the segment beside the river

does not continue east to join Second Avenue, so that the park and playground have no planned pedestrian access from the northeast corner. This plan calls for the path to extend along the north edge of the park from end to end with entrance plazas on either side, to be constructed of permeable pavers.

4.1.4 Gary Green Link The path is intended to coincide with the route of the Gary Green Link, and thus to continue to the east and west of Ambridge Park. To the west, there is the choice of routing the path on the bank or on the existing alley. Using the alley would probably be cheaper and easier, mainly because it is already graded and surfaced. How is the alley used now? Garbage is collected from the street side of the houses, so this arrangement would not be altered. On the other hand, numerous houses have garages on the alleys. Not all residents actually park their cars in the garages, but they may need to be compensated for any loss of function caused by restricting the use of the alley. Since the alley is quite narrow, turning a car around in it would be very difficult. To keep car access to the garages, then, the alley needs to remain open on either end. This would also permit a small amount of throughtraffic, of course, but it could be minimized by adding "No Thoroughfare" signs and continuing the entrance plaza paving motif into the alley entrance. Considering that several other segments of the Green Link will be on-street routes, the trade-off is small for this interesting, low-traffic route.

4.1.5 Overgrowth. Thinning the overgrowth along the river is an important part of the path's design. Neighborhood residents have remarked that the area between the alley and the river is over-

grown, that it blocks the river from sight, and that it attracts dumping. Thinning the high shrubs and weeds would probably be sufficient to take care of these problems, and it would also encourage informal access to the river. A program to trim overgrowth does, though, represent an ongoing maintenance expense.

4.1.6 Conversion of Second Avenue to one-way flow. To the east of the park, the trail would again continue either on the bank or on the street (Second Avenue). And, again, using the street would be most cost-effective and avoids disturbing the riverbank. The best option might be to convert Second Avenue to one-way (westbound) and use a portion of the street for the trail. The existing grid street pattern allows several other car access and parking options for residences along the street, so changing Second Avenue to one-way should not pose problems for them. Blocking east bound traffic also addresses the hazard of the Buchanan Street-Second Avenue intersection. Cars turning from Second onto Buchanan now go blindly into a fusillade of traffic exiting the Toll Road at high speed.

4.1.7 Intersection of Second and Buchanan. A similar difficulty will confront bicyclists and pedestrians using the Green Link as they try to cross Buchanan. The hump in the bridge conceals cars from pedestrians and bicyclists and conceals pedestrians and bicyclists from cars. Early warning lights on the Toll Road side of the bridge could be effective in slowing traffic. The lights could be manually actuated by pedestrians, just as crosswalk signs are in some locales.

For a number of reasons, a design treatment at the Second–Buchanan intersection would be appropriate. It would

presumably include a certain linearity that makes evident a path across the wide expanse of asphalt so that the Green Link physically continues across Buchanan. The design would also serve to advertise the existence and use of the Green Link. It would symbolically connect two parts of the neighborhood, which would be especially important when the new South Shore neighborhood goes up, for the redevelopment, as drawn, would be split by Buchanan. But because the right design will only emerge when the character of the new neighborhood becomes apparent, we have not contributed a sketch.

4.1.8 Recreation area east of Ambridge Park. On the east side of Ambridge Park, this plan creates a pavilion, seating area, and grass steps of the same designs as those planned for the boat launch site. The grass steps, in their openness to the river, are a way of structuring interaction between the water and the land that complements the barrier of the seawall. Sculpting the bank into steps repeats the sheer drop of the seawall by making the elevation change down to the water into a series of small sheer drops, scaled to the human step, and softened by vegetation.

Clearly the final design of the pavilion and furniture should harmonize with the rustic quality that the seawall will bring. It would be unfortunate to emplace catalog buildings here. Of course, design at a higher intensity costs somewhat more.

The pavilion and grass steps are meant to support basic leisure. Strolling, picnicking, and hanging around are best done in pleasant settings. We are proposing updates to the park that partly reflect the changing age demographic of Horace Mann (see TCB 2003 for a discussion). As the community gets older,

low-intensity outdoor recreation gets more important.

4.1.9 Stakeholder recommendations. This plan does not propose redesigning the entire existing park, only adding elements to it. Currently the Gary Department of Parks and Recreation has no other plans for the park that would conflict with our recommendations. According to its 2003-2007 Master Plan, the Park Board envisions no improvements to Ambridge Park during its current planning cycle. Horace Mann residents have suggested that another use should replace one of the baseball diamonds. As Little League games at the park have been moved elsewhere, there is little use of the fields, and because of budget cuts at the Parks Department, maintenance has lagged. Replacing one of the diamonds seems sensible, although we think the best new use would be more apparent with the construction of the South Shore neighborhood.

An earlier proposal for reconfiguring Ambridge Park recommended installing a canoe launch. This still seems a viable idea, mainly because canoeists on the river could then tie up and come ashore at Ambridge Park. The proposed launch at Bridge Street would make the better starting point for a canoe trip, since there would be parking facilities available nearby, while launching at Ambridge Park would require parking on the street or hauling a canoe from the lot near the basketball court. Stakeholders have also suggested, in the context of scarce resources, moving the viewing platform proposed for Bridge Street to Ambridge Park, where there might be a higher density of users. If circumstances allow, platforms could be installed at both sites.

4.1.10 Vandalism. Considering that the Ambridge Park enhancement calls for new investment in the physical environment, vandalism is potentially ruinous. This summer the seats of the new metal bleachers at Ambridge Park were thoroughly, almost methodically, banged up. The restroom doors beneath the announcer's booth were smashed in with the concrete anchor of a fencepost. Some ongoing vandalism can be expected, so the pavilion and seating planned for the east side of the site need to be durable. This can partly be taken care of in the design phase, when the designer will balance looks and function with indestructibility. Residents have suggested bolting everything down to concrete pads and installing security lighting.

4.2 Funding

4.2.1 Recreation. An ideal source of funding for the recreational components of the Ambridge Park enhancement — for example, the pavilion — would be Rehabilitation Grants through the federal Urban Park and Recreation Recovery (UPARR) program. Under this program, physical project costs are shared by the federal government and the locality at 70 and 30 percent, respectively; localities can put up Community Development Block Grant funds as part of their match, but no other federal funding. Gary received \$0.25 million from UPARR in 2001. No funding was authorized for the national program in FY 2004 (NPS 2004), but money may be available in upcoming vears.

Similarly, the Hometown Indiana grant program would provide \$10,000 to \$200,000 (on a 1:1 local match) for the development of recreational sites, including facility construction (IDNR 2003). The Indiana Department of Natural Re-

sources administers the program. Eligibility requires an approved five-year master plan, which the Park Board has written and submitted (CGBPR 2003) but which will require filing an amendment since it does not include the projects proposed here. Unfortunately the Legislature did not authorize funding for Hometown Indiana for 2003 and 2004, but funding may be made available in the next two-year cycle.

4.2.2 Trail. The new trail through Ambridge Park is a possible route for the Gary Green Link. Transportation Enhancement funds could be used for this purpose, and perhaps for the pedestrian plazas. The City of Gary was recently awarded part of the Transportation Enhancement funding necessary to build the Gary Green Link, but the first sum will go to construct a western portion of the trail system.

4.2.3 Seawall construction. The seawall is meant to be a good-looking, place-making erosion control device. As such, U.S. Steel and the agency trustees should be approached on the matter before they pursue any alternate restoration plans they have for the area. See Section 6.4.1 for a discussion.

Other state and federal erosion-control and watershed funding could also be available. The Indiana Coastal Grants Program, available by way of the Coastal Zone Management Act, is one possibility. Grants can be awarded for low cost construction for resource improvement and are limited to \$100,000 with a 1:1 match (IDNR Nov. 2004). "Large scale, hard structure erosion control projects" are ineligible, but "large scale" means greater than \$100,000. See cited reference for more details.

Grants are also available through Section 319 of the Clean Water Act, administrated by the Indiana Department of Environmental Management, Watershed Management Section (IDEM 2004). The funding is meant for projects that improve water quality impairment caused by nonpoint source pollution, as erosion and sedimentation are. The deadline is in October of each year. Applications are typically more competitive if discrete projects are wrapped into a broader approach to solving water quality problems—and this is needed anyway. The Watershed Management Section also has a stated preference for bioengineering methods of streambank stabilization as opposed to hard techniques such as the seawall proposed here. A full complement of application guidance is available through the cited reference.

5.0 Conversion of C-lot to park

No section of the Grand Calumet within the planning area is connected to a public center of activity in Gary. In its relationship to the river, Ambridge Park is an exception more in its potential than in actuality. In taking this plan's approach of tying the river more closely to the community, therefore, public spaces have to be created. In addition, this plan seeks to tie in with recent public investments and ongoing planning efforts. When merging these goals, a nexus appears where the river winds close to downtown. The Gary Green link, running between the Norfolk Southern and CSX rail lines, will cross Broadway at Union Station, which is slated for redevelopment. The Steel Yard baseball stadium attracts a swarm of summertime visitors, and Gary has invested in streetscape improvements for the Broadway corridor through downtown. Gateway Park has also been refurbished in the recent past.

Near downtown the river is wholly bounded by U.S. Steel property (Figure D). On the south side of the river, though, the land is less intensively used, generally speaking, and east of Broadway it is underutilized. Behind the Gary Works Visitor Center fronting on Broadway there is a defunct parking lot, formerly Parking Lot C or the "C-lot," tucked between the Grand Calumet and the collection of viaducts to the south. Transforming this land into a public space would not only establish a connection between downtown and the river, but also recover a place that has languished invisibly behind the viaducts. We propose converting the C-lot into a park whose design reflects its adjacency to what historically was the largest integrated steel mill in the world.

5.1 Existing conditions

The entire site is about 33 acres. It is flat and overgrown with pioneer vegetation, including trees with years of growth on them. The surface is gravel or crushed slag, with strips of hard surfacing that give the C-lot its striped pattern from the air (Figure G). When the parking lot was retired, it was mothballed. Concrete wheel stops and wire rope barriers along the river were left in place, as well as a battery of light poles, infrastructure from a different era that now has a strong and likeable sculptural quality. A substation owned by Northern Indiana Public Service Company (NIPSCO) formerly sat in the southwest-central part of the site; when it was demolished, debris from the building was largely left scattered there.

Numerous site features have a current function for the plant. On the far west side of the site, three lagoons treat process water from the plant, mainly removing oil and allowing some heavy metal settling. and discharge it into the Grand Calumet. Rusty chainlink fences surround the lagoons. An access road to the lagoons takes an awkward path through the middle of the site. Several pipes run catwalklike from bank to bank near the lagoons. Several transmission line towers are found on-site, primarily along the south edge. There is also an outbuilding just off the access road that was originally constructed by NIPSCO to hold gas for a defunct coke oven. From conversations with U.S. Steel officials, it appears that this outbuilding's ownership is in question (Figures D, G). Finally, the Visitor Center and a bus drop-off for the Gary Public Transportation Corporation are located on the eastern edge of the site and are in current use.

In contrast to the parking lot gone to seed, the landscaping along the river

near the Visitor Center and Administration buildings is well-kept, with a pleasant, settled-in quality. The south riverbank is vegetated and guite steep. The north riverbank is a rubble wall made of hotpoured slag that, especially against the backdrop of the Administration building and Hospital, built in period style, dates the setting in the charming past (Figure 5). Treatments for the other sites in this plan call for using the rubble wall as a design element: retaining walls used to shore up the bank against erosion elsewhere along the river would use a facing material mimicking the look of the hotpoured slag construction. U.S. Steel officials report that they have concerns about the stability of the rubble wall north of Clot. It lacks a proper footing, and bank undercutting from the dredging has imperiled it. In several places portions of the wall have dropped into the river. U.S. Steel would do well to rehabilitate the rubble wall rather than tear it out and replace it with, say, sheet piling or some other characterless form of armoring.

Figure 6: U.S. Steel administration building.



U.S. Steel has no plans to put the C-lot site to a new use. As with the rest of the Gary Works property, though, U.S. Steel must perform an assessment to determine the nature and extent of any

possible contamination on the site. Further planning, i.e., beyond this plan's recommendations, awaits the results of the assessment, due in the third quarter of 2005. There is the known possibility of contamination from a former coke oven gas holder on the NIPSCO parcel. The ownership and future use of that parcel needs to be resolved as well in order to move forward.

5.2 Site plan

5.2.1 Overall design. We propose establishing a steel sculpture park on the C-lot site (Figure F) surrounded by informally arranged paths through the existing pioneer vegetation. In form and, of course, materials the sculptures would bear a strong relationship to the site and the plant. The sculptures would be grouped into a strongly geometric form, a 3×3 square, on a base pad of permeable paving of about two acres (drawn as a placeholder). A signature sculpture on the western end of the site serves as a secondary focal point, only dimly visible from the eastern end of the site so that taking one of the meandering paths is an anticipatory trip.

A second major element in the plan is the development of a museum to be devoted to the industrial, ecological, and social history of Gary. The museum building, which is drawn as a placeholder at about 16,000 square feet (gross floor area), is set where the Visitor Center parking lot is now located, the main siting criteria being proximity to Broadway and avoidance of the transmission lines. A new parking lot would be constructed south of the museum and east of the bus drop-off. The site plan is a sketch: meant to be illustrative only, it leaves details like the floor area of the museum and the number of parking spaces to phase two

planning. As discussed shortly, a museum may not be the best option for the space. In fact, it would be much preferable — and, we expect, attract many more visitors to a park at C-lot — for U.S. Steel once again to offer tours of the Gary Works.

A path down to the river would be cut to enable park visitors to approach the water. Given the steepness of the bank, the path has to run diagonally downward or employ switchbacks. It has been suggested that a debarkation point for water taxis could, at some point in the future, be located here. Final decisions about how to run a path to the water's edge may need to wait until the water taxi concept can be firmed up.

5.2.2 Functionality. An overriding design criterion for the C-lot is the preservation of its functionality. The Visitor Center and bus drop-off for the Gary Public Transportation Company are located on the eastern edge of the site. These elements remain in the site plan. The lagoons would remain, of course, and a new access road would be built along the southern edge of the site to allow service vehicles to reach them. Existing fencing around the lagoons would probably need to be replaced with a stronger barrier, with a row of evergreens to screen the fence and the lagoons. What will become. finally, of the NIPSCO outbuilding? The site plan assumes it can be removed, but only minor adjustments to the route of the southern path would be necessary if it has to remain.

Selected elements of the site's history, as well as its current functionality, should also be retained. The light poles, again, have a strong sculptural quality. The striped pattern can be preserved by leaving the existing gravel and pioneer vegetation on one row and newly land-

scaping the next. However, all decisions about landscaping, such as leaving existing vegetation or planting anew, are contingent on the results of the environmental assessment, since a finding of widespread contamination might mean some amount of soil would have to be removed.

5.2.3 Sculptures. The site has been planned so that a range of different sculptures could be plugged into the base pad and signature site. Particular sculptures can be acquired on a flow basis, as resources become available, so that the site is completed over a span of time. What sort of sculptures should they be? Stakeholders should choose, but the past history of the site and its transformation should be a guide. Having an enormous steel mill adjacent to a park provides immediate design suggestions. The out-ofscale base pad tries to reproduce the giantism of the plant. The sculptures can carry forward the same theme in the vertical dimension. Across the river the plant looms starkly; it is an open question whether that set of forms could be considered beautiful. Over the years a large portion of Gary residents have come through the plant gate to go to work. The plant carries for them an innumerable array of associations; the sculptures should, in a general way, capture and transfigure them all.

5.2.3.1 Sculpture acquisition. The sculptures should be superb but inexpensive, yet commissioning ten sculptures, depending on the market, may not be cheap. One solution is to develop a partnership with one or more of the colleges and schools in Gary to have students, under faculty guidance, design and build the sculptures as an advanced studio class. Then the cost should only be fac-

ulty time, overhead, and materials if they cannot be donated. Independent of cost considerations, a partnership between the city and its artistic students is a stimulative investment, giving students creative, community-serving work that can pay off in long-run dedication to the city's arts community.

The City should identify the best department, or perhaps external organization, to oversee the project. U.S. Steel would need to be represented as well. A university partnership could be established formally by mailing Requests for Proposals (RFPs) to art department heads, with the work to be done on a contract basis with a given budget. As nine sculptures are planned for the C-lot site, several could be designed at once to hasten completion, i.e., the choice among proposals need not be a one-winner competition. Sending RFPs to other schools in Indiana or in Chicago could be worthwhile.

5.2.3.2 Funding for acquisition. Several sources of funding may be available for the project. The Indiana Arts Commission is a good first choice. For the last three years it has made annual grants in the neighborhood of \$300,000, split between Lake, Porter, and LaPorte Counties, to organizations seeking grants for the arts (QLC 2004: 88). The National Endowment for the Arts is another possibility. It offers grants between \$5,000 and \$500,000, though awards over \$100,000 are rare and more than half are less than \$25,000 (GSA 2004). NEA grants to units of local government require a 1:1 match (using non-federal funds), as well as a three-year record of programming. The latter consideration could factor into the choice of an agency to handle acquiring sculpture. Establishing a comprehensive

list of grantmaking agencies is a second stage of planning.

5.2.3.3 Materials and design. If the sculptures are to fit the site, they should make use of the sorts of materials produced or found in a steel mill. No doubt U.S. Steel has equipment on site past its useful life suitable to be donated for reuse as a sculptural component; reject products could also be captured. The sorts of materials needed and available could be established through U.S. Steel involvement with contracting and design review, although coordination might be difficult. For example, would U.S. Steel have to put together an inventory of available materials to provide with the RFP? Or hold a bidder's conference prior to submission to negotiate the availability of materials? Time and expense for U.S. Steel must be minimized. Details such as these can be hammered out in second phase planning.

If multiple sculptors are employed to design parts of the sculpture plaza, a set of design criteria will have to be established to ensure a certain level of unity across the works in the plaza. This is not an ideal way to achieve a unitary aesthetic effect, but a tradeoff is unavoidable in farming out the work to nine design teams. The design criteria should be written into the RFP and will require some thought. In addition, the RFP should contain a full photographic and verbal description of the site. It should describe the available budget, but the scoring system should award points for cost minimization. There are some obvious, low-level conditions on the design that are more practical than aesthetic. (1) The sculptures should be durable and weather-resistant. and (2) safe for children to play with and around. They must (3) fit into the final dimensions of the square space on the pad

and (4) should not extend out of their spaces to impede walking on the pad. Again, such details of the program are a next step.

5.2.4 Museum. A park and sculpture garden alone probably will not be sufficient to draw a steady stream of visitors to the C-lot, especially considering its location, so a destination use is in order. One recommendation for a destination use, especially considering the background values of this plan, is an industrial and environmental history museum. The history of industrialization in northwest Indiana, Gary in particular, is a fascinating story that richly illustrates the movement of national economic life over a century, its changing relationship with the natural world, and its driving influence over social change.

Several questions immediately arise. For one, a proposal for a museum with a similar theme has come out recently. It would to be located at Buffington Harbor and called the Discovery Center. (Anon. 2004). The Discovery Center would showcase the industrial history of northwest Indiana and the social history of the immigrants who settled in the region, but seems to lack a focus on the environment. While the near-simultaneous emergence of this proposal is further ratification that some sort of museum is a good idea, either one or the other could be built, but probably not both. Museum attendance in America is relatively low: about 23 percent of the adult population can be expected to visit a science or history museum at least once in a year (Di-Maggio and Ostrower 1990). The portion of the population that visits frequently is probably much lower. About 13 percent of African-Americans visit at least once per year, and African-Americans represent 85 percent of the population of Gary. Attendance also declines considerably with income. Clearly a market study would need to be performed to determine the feasibility of building the museum.

A well-attended, exciting, and well-appointed museum would probably need to be sized and marketed to a regional audience. In that case, the museum might see further competition for visitors from the Ford Calumet Environmental Center near Hegewisch in Chicago, about 15 miles away, which is slated to open in 2006. Creating a museum with a regional perspective, i.e., the industrial shoreline zone of northwest Indiana, could also be made somewhat difficult by a location on U.S. Steel property.

Numerous organizations could be potential partners in curating the museum, which would itself probably be chartered as a non-profit corporation. Indiana University Northwest hosts the Calumet Archives, which contain a large storehouse of historical documents and photographs that could be a source of exhibit materials. The Gary Historical Society would also be a partner. Museums in Chicago, furthermore, could hold offsite programs to seed the C-lot museum. The Field Museum has been quite active in the Calumet area on the Illinois side.

5.2.5 Gary Works tours. It is a safe bet that visitor interest would be piqued more by offering tours of the Gary Works than by a museum. As one stakeholder put it, signs boasting tours of the mill could "get people off the interstate" and into Gary. So there is the potential that tours could draw visitors, and retail spending as a byproduct, from outside the region.

There is interest at a high level within the City of Gary for offering tours of the Gary Works. There is also precedent: U.S. Steel formerly ran a tour program, but discontinued it in the mid-1970s.

Restarting tours is this plan's preferred alternative. Further discussion of the issues involved, however, would need to take place in conversations between the concerned parties. U.S. Steel officials have numerous concerns regarding security and current federal anti-terrorism policy.

5.3 Connection to downtown

The C-lot is concealed behind an assemblage of elevated viaducts for the South Shore line, the Toll Road, and two freight rail lines. The site catches no through-traffic. Unless one had business at the Gary Works, the ground-level traveler would never notice C-lot. Thus, a visual link needs to be established that connects C-lot to downtown. Such a connection would also integrate the Gary Green Link trailhead at Union Station into the fabric of the city.

A design for the downtown to C-lot connection is shown in Figure H. It has two major components. First, a sight line would be established by installing a curving wall or railing between the sidewalk and road that leads from Gateway Park to the C-lot. The railing would undulate horizontally and vertically, wavelike, to match the second component, a very large-scale mural of the Lake Michigan shoreline painted on the embankment of the South Shore line viaduct. At the corners of the embankment where Broadway extends through, the mural would wrap around as waves, as if the traveler were passing through the lake.

5.3.1 Railing. In Gateway Park the "wave rail" would terminate in a flourish as shown in the bottom right of Figure H. In the segment through the overpasses,

the rail is meant to function also as a pedestrian confidence measure. The rail, about three feet high at crest, would help to organize the pedestrian environment and provide a psychological buffer against car traffic. The rhythm of horizontal curves is suggested by the existing pattern of sidewalks and crosswalks under the South Shore line and Toll Road: the sidewalk hooks around the South Shore embankment, then jogs across a traffic island, then repeats the same pattern. In a similar vein, continuing the mural on the interior walls of the South Shore embankment serves a preexisting need, for the asphalt and concrete environment under the viaducts is a bit oppressive. The material of choice for the railing would probably be tube steel, which U.S. Steel might be willing to donate.2

5.3.1.1 No other changes to park. Besides installing sculptural flourishes at the ends of the wave rail, we do not propose any changes to Gateway Park. It has already been redesigned in the past few years and is a well-organized space.

5.3.2 Mural. One purpose of the mural is to extend in visual imagination the northern border of downtown, now awkwardly defined by the South Shore railroad embankment. Another is to give the bland, utilitarian wall a makeover. The formality of Gateway Park and the character of the wall as a backdrop combine to give, in sum, the criteria that the mural design should be serene and somewhat neutral, not busy, and should suggest depth and expansiveness. Lake Michigan

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² The amount needed is somewhere around 4,500 feet, given that the railing would run a straight distance of about 1,100 feet on both sides of Broadway and estimating the length needed to accommodate curvature and balusters.

fits the bill. The design is also meant to be playful: the South Shore line becomes a shoreline. There is some irony, as well, considering the long-run efforts of the communities in northwest Indiana to establish connections to the lake by converting industrial uses to recreational, residential, and commercial uses. The mural depicts a view of the lake were it possible to see through the Gary Works. It would, moreover, portray a shoreline closer to the pre-industrial original — the existing shore beyond the Gary Works is fill: mainly slag and no beach.

There is now a small mural, painted on plywood, hanging on the embankment near where Broadway passes under. It is, unfortunately, weathered and peeling badly. The Lake Michigan mural would replace this one, but it would have to be removed soon anyway.

5.4 Context and concerns

5.4.1 Security. U.S. Steel's central concern about this proposal is security. From that perspective the company views C-lot as a buffer against trespassing on the more important sections of the Gary Works. What actually prevents illegal access to the Gary Works via the C-lot is the river and the sheer rubble wall on the other side. On the other hand, access to the C-lot itself is not, at present, tightly controlled. A row of highway dividers at the western edge of the Visitor Center parking lot is the only physical barrier.

It stands to reason that U.S. Steel could achieve the same level of security by giving up the use of C-lot as a buffer while strengthening other barriers. A chain-link fence with razor wire, tastefully hidden behind vegetation, could be built along the north side of the river. This plan's aim is to persuade U.S. Steel that having a public use near plant operations.

if managed properly, does not necessarily present an unacceptable security environment. A fine example is A. Finkl & Sons' mill on Goose Island in Chicago, where doors to the plant open directly onto Cortland Avenue and passersby on the sidewalk can peer in as if it were a car wash. For that matter, Finkl and its surroundings complete with extensive land-scaping and pedestrian pockets are a model final step in the integrated steel mill: integration with public use.

5.4.2 Ownership and funding. Under the proposals outlined here, U.S. Steel could either transfer ownership of C-lot to the City of Gary or retain ownership and seal an agreement that establishes a right to public access and to make specified improvements. It is expected that U.S. Steel will prefer the latter choice, to keep control of the property and an ongoing say in security measures around the park. In any event, liability for various hazards will have to be anticipated, assigned, and agreed.

One possibility is to structure the agreement like a land trust, where U.S. Steel leases a portion of the C-lot to the City at a nominal rate and allows the City, or another party, to build a park and possibly a museum. This approach, though, does not suggest a mechanism for funding construction.

5.4.2.1 LWCF. The Land and Water Conservation Fund (LWCF), distributed through the Indiana Department of Natural Resources, would be a natural choice to pay for park development. It offers grants between \$10,000 and \$200,000, requiring a 1:1 local match with no recycling of federal funds, for land acquisition and construction of recreational facilities. Donation or bargain sale of the C-lot would count toward the 50 percent local

match. But the LWCF option is difficult—although not out of the guestion—because the presence of "environmental intrusions" like overhead wires is restricted on sites receiving LWCF assistance (IDNR Jan. 2004: A-10). The Clot is, of course, crossed by high tension wires along two axes (Figure G). The area proposed for redevelopment into a park is not, in the main, beneath the power lines, but the program restrictions are forthrightly based on power lines' presumed aesthetic detraction rather than health and safety. Nonetheless, applications for projects on sites crossed by high voltage wires are not automatically ruled out but judged on an individual basis.

5.4.2.2 Conservation easement.

Another possibility is for U.S. Steel to record a conservation easement on a portion of the C-lot and donate it to the City of Gary or an affiliated organization. For this U.S. Steel would receive a charitable deduction on its federal corporate income tax filing. If the firm would then agree to make a transfer payment to the City equal to the tax savings, the monies could be used to pay for park improvements. In this way U.S. Steel would retain ownership of the parcel and the City would gain a source of revenue for the project. The amount of this revenue depends on the appraised value of the easement.

A precedent exists in the preservation of historic building façades under the Federal Historic Preservation Tax Incentive Program (Public Law 96-541), although in that case a façade easement is donated to a non-profit organization that then maintains the façade using a tax-deductible contribution from the donor (LPCI n.d.). Fiscally this arrangement may be better for U.S. Steel, since a contribution to developing or maintaining the park would also be tax-deductible.

Creation of a park out of the C-lot is probably an acceptable conservation purpose, which determines whether, under IRS rules, the easement is a qualified easement (Hoover 2002: 4). Extensive building construction may not be strictly compatible with the spirit of the rules, so the effect of plans to site a museum at the park has to be examined further. The organization receiving what is, in effect, a donation must also be qualified. A local government may need to have adopted a conservation plan. Details of this sort will need further investigation, and an appraisal will of course be necessary.

6.1 The Grand Calumet River itself

6.1.1 Public health. The balance between promoting public health and encouraging use of the river — rehabilitating the river in the public mind — is a delicate one. Unlimited swimming and fishing for consumption are the gold standard recreational uses that define a clean river. Against this, the Indiana Department of Health has placed the Grand Calumet under a "Group 5 Advisory" for 2004, which declares that no fish of any species or size should be eaten, while the Indiana of Environmental Department Management and the Gary Sanitary District have posted signs along the river warning against contact with the water.

The river is not entirely clean. Only 5.1 miles of the Grand Calumet were dredged, with eight or so miles downstream left to go. Fish can travel freely between the dredged and undredged areas of the river. And were the entire river, sediments and water, suddenly rendered sparkling clean, toxins would persist for some years in the tissues of fish and in other aquatic animals and plants. Discharge from combined sewer outfalls also remains a hazard that restricts contact with the water following rainfall. And air deposition may remain a significant contributor to contamination well into the future.

6.1.2 Clean-up standards. The standards governing the clean-up, moreover, do not necessarily ensure that the river bottom and water in the dredged area are safe for extended human contact. U.S. Steel was required to remove contaminated sediments that had accumulated in the river over the years, and to dredge down six to twelve inches into the native river bottom (Personal

communication from Daniel Sparks, U.S. Fish and Wildlife Service; May 3, 2004). The only chemical performance criterion set in the consent decree from the Environmental Protection Agency was the river bottom contain polychlorinated biphenyls (PCBs) at no more than 50 parts per million (ppm) after dredging. While the remaining river bottom could contain less than 50 ppm, the standard itself is far too high to safely wiggle one's toes in the mud. Lastly, the success of the clean-up will not be known until post-dredging monitoring begins. Monitoring studies are scheduled at intervals of three, five, and seven years after the Environmental Protection Agency certifies that the dredging is complete, which at the time of this writing has not yet happened.

6.1.3 Rehabilitation. Despite these still dismaying conditions, it is time to take specific steps to rehabilitate the Grand Calumet in the public eye. The pall of danger that hangs over the Grand Calumet, its reputation as a stream of poison, is notorious. As an objective indicator, the Delta Institute's economic study showed the negative effects of these perceptions on the value of residential properties near the river (see Section 1.3). Although a clean-up of the river is good in itself, its meaning for the community — beyond the expected uptick in property values — is opaque and somewhat dubious if it is not made apparent that the clean-up is for the community, for its eventual use and benefit. If no such provision is made, an opportunity would be lost.

The projects proposed in this plan, in the locations shown in Figure A, are meant to rejoin the river with the community. Among other benefits, they variously provide public boating access on the Grand Calumet, recover former industrial land along the river for the residents of Gary, and restore the relationship between the river and an urban park.

6.2 Public use and navigability

The Grand Calumet is a navigable river from the Illinois state line to Marquette Park in east Gary, or 15.4 river miles (INRC 2004). This should mean that the State of Indiana owns the bed of the river up to the ordinary high water mark and that the public has unrestricted use within the channel, so that owners of property along the river would have no authority to prevent passage of boats by physically obstructing the river. On the other hand, it does not appear that there is an affirmative duty on the part of landowners to provide overland access to the river so that canoeists, for example, could launch their craft from private land. Therefore, for the public to access the river within the cleaned-up stretch, there must be defined access points, preferably on public land.

6.3 Permits

Several elements of this plan will require permitting by the Indiana Department of Environmental Management and the U.S. Army Corps of Engineers. Under Section 404 of the federal Clean Water Act, the Army Corps of Engineers is authorized to regulate projects that involve discharging dredge or fill material into United States waters. This generally includes streambank stabilization. For projects where a federal permit is required, Section 401 of the Clean Water Act also calls for Water Quality Certification from the state — that is, from the Indiana Department of Environmental Man-

agement — to ensure the project would uphold the state's water quality standards. Seawall construction specifically requires a Section 401 Certification (IDEM 2003).

Besides the seawalls at the Bridge Street boat launch and at Ambridge Park, three other elements may require permits. Removing vegetation along a river corridor, as suggested for the residential area west of Ambridge Park, requires regulatory review. This proposal would not, however, leave the riverbank naked. Trees and ground cover would remain; only thick mid-story vegetation would be removed. Under the authority of the Rivers and Harbors Act of 1899, the Corps of Engineers also regulates the "the construction of any structure in or over any navigable water...." (Goldfarb 1988: 94) Building the dock and viewing platform into the river at Bridge Street would, therefore, apparently require a permit. The object of the law is to keep waterways clear for commercial navigation, so the Corps will presumably make its decision on those grounds, although inchannel construction activities may also trigger environmental review under the Clean Water Act. It seems unlikely that the dock and viewing platform will impede commercial navigation, for there essentially is none, and the dock, at least, can only promote recreational "navigation." Finally, the construction of grass steps at Bridge Street and Ambridge Park will, of course, involve land clearing and bank modification, so permitting will be required for that aspect of the project as well.

6.4 River restoration

6.4.1 Possible inconsistency with U.S. Steel's efforts. Under one of its consent decrees, U.S. Steel's obligations

following clean-up include ecological restoration of the Grand Cal through the dredged stretch of the river and on certain pieces of adjacent land. The Ecological Restoration Work Plans for the oxbow and Bongi tracts (Figure D) were finalized by the trustees at the end of July 2004, but aquatic community restoration has been put on hold pending resolution of the question whether all non-native material has been removed and remediation is complete. For that reason a finalized aquatic restoration plan, with site locations specified, has not yet been released, and we were not able to obtain a draft version to compare for conflicts with the proposals put forward in this plan. Our main concern over consistency is whether, and where, extensive bioengineered bank stabilization would be part of the proposed restoration.

6.4.2 Broader concept of landscape restoration. Any restoration may be good restoration, but at the same time we have taken as a goal establishing the building blocks of a landscape mosaic along the Grand Cal corridor that includes urban and human ecology. To that end we proposed, at the C-lot, preserving the impress of the land's former use rather than naturalizing the site; at Ambridge Park and Bridge Street we suggested building seawalls and a terraced bank that continue a design theme and present themselves as an investment in the neighborhood in addition to nature. We hasten to add that the river frontage of these sites is a small fraction of the riparian area along the remediated stretch. In conjunction with restoration of, for instance, the Bongi and Oxbow tracts to conditions approximating native conditions, the corridor would have the beginnings of a balanced mosaic. Other areas of bank erosion could be dealt with by bioengineering solutions.

Adopting a landscape or total ecology approach, the aquatic restoration work-plan could include the two seawalls, which U.S. Steel could pay for in lieu of a naturalizing alternative. Considering that there has been no formal process for third-party stakeholder involvement in forming the work plans, it seems unlikely that suggestions like seawalls and terracing could be incorporated into the work plan even if the restoration were thoroughgoing and, for example, all sites of bank erosion were addressed.

A watershed plan that could approach these issues simultaneously would be an important part of restoration.

6.4.3 Further clean up. There are positive signs that contaminant removal will continue: while expensive, the U.S. Fish and Wildlife Service suggested this year that the best course of action among the alternatives was further dredging downstream from the stretch covered by the consent decree with U.S. Steel. The agency put the chances for resource recovery thereafter at good to very good (IEI 2004: 29).

6.5 Future use of the Grand Calumet

6.5.1 A manipulated river. Opinion survey information and public comments collected by the Grand Cal Task Force for its 2000 Corridor Vision show that residents in the region overwhelmingly want the Grand Calumet/Indiana Harbor Canal system to be a green corridor. On the East Branch it already is to some extent, for there the river was never completely transformed into an industrial channel, with construction of wharves and slips, etc. as the river on the Illinois side has been. This is not to say that the ecology

of the river is anything close to undisturbed. For example, the East Branch was been relocated twice in the last century, once by U.S. Steel and once to permit construction of the Indiana Toll Road. In fact the perennial flow of the river, as we know it today, is mainly effluent: including outfall from municipal wastewater treatment plants, around 90 percent of flow in the river is discharge (IDEM 1997). Prior to industrialization the river was closer to a marsh or wetland, periodically drying into a mudflat.

6.5.2 Water trail and a Revived River. In keeping with the Corridor Vision and comments received from stakeholders in the present planning process, this plan retains a concentration on establishing, enhancing, and connecting open space. It does so with the understanding that the functionality of the selected sites needs to be preserved—that additional, public uses have to jive with existing uses—and that the sites need to be conceptually interlinked. How could the approach extend further up and down the river? Envisioning the Grand Calumet as a recreational water trail is one way. After a century or more of industrial and public works projects, the river is connected to a web of canals and original rivers branching densely through northeast Illinois and northwest Indiana. Many of these, too, are receiving the renewed attention of planners, this time for recreation. The Indiana Department of Natural Resources has compiled an Outstanding Rivers List with federal and state river designations and the rivers in Indiana to which they apply (INRC 2003). There are Wild and Scenic Rivers, State Study Rivers, Blue Ribbon Trout Streams. There are also designated Canoe Trails, which the Grand Calumet could become, but an entirely new designation may capture the Grand Calumet better—Recovery River, or maybe Revived River.

6.5.3 Further planning for water trail. Those few who canoe the East Branch are surprised and thrilled at the prettiness of it. The water in the dredged stretch is as clear as Lake Michigan and fairly deep, and most of the riparian area is in a natural — but not undisturbed condition. Noise intrusion from the Toll Road is relatively limited, and the industrial sites on the river come off as integral to the landscape. But nowhere have plans been made for boaters to disembark and go onto land, which is a bit like having no local-access roads for cars. A further process of identifying sites along the river in public ownership, or that are otherwise available, and establishing a river-related design for them would be a requisite part of making the Grand Calumet a water trail.

Developing the river as a water trail would entail a fair amount of further planning for site acquisition, drawing up prototype designs, and examining the capacity of the channel to take various types of boats various places. Connectivity is essential. Would a long-haul canoeist be able to get from, say, Bridge Street to Wolf Lake? Is a given connecting link deep enough, public, and nonseasonal? Disused railroad trestles currently cross the river in several spots, and many are low enough that high water could make them a bottleneck for boats passing down the river.

6.5.4 Culvert to Marquette Lagoons. One of the more interesting areas would be to the east: the culvert carrying flow through U.S. Steel property from the Marquette Lagoons. If feasible, digging out the river so that boats could pass

freely to Marquette Park would be a prime goal. U.S. Steel officials were doubtful about the proposal: they felt the engineering demands were impossibilities. Several roads and a coal yard overlie the culvert. Because a major source of flow at that point is effluent from the Gary Works coke plant, and accessories to the coke plant lie atop the culvert, one official suggested that daylighting the river would kill it, for the coke plant would have to cease operation and flow would drop to a trickle. There are also problems related to flow and water level control structures for the river and lagoons. Nevertheless, a willingness to continue discussion on U.S. Steel's part would aid in visualizing the possible future of the river as a fully connected water trail.

7.1 Redeveloping the Horace Mann community

Dividing the Horace Mann neighborhood into West, Central, and East Planning Areas,³ as in Figure A, there is a clearly visible decline in quality outward from the stable Central Planning Area. There are far more vacant lots in the East and West Planning Areas, and many more buildings are abandoned or substandard. One way to combat the decline of the neighborhood is to promote homeownership, which gives the owner a longterm stake in the neighborhood and an interest in building the value of the surrounding property — through vigilance in reporting crime, joining or starting block clubs, or scores of other ways. Benefits would accrue to existing residents, owners and renters alike. Homeownership also helps build household net worth, which is significant in a neighborhood where 27 percent of households are below the federal poverty line (TCB 2003). In the U.S. in 1995, the average homeowner had a net wealth of at least \$102,000, compared to \$4,750 for an average renter (Stegman 1999: 1). An influx of additional wealth would help level off deterioration in the neighborhood.

One substantial barrier to promoting homeownership is the level of financial commitment to the home (and neighborhood) required. This plan proposes meeting the barrier with employerassisted housing (EAH). Employers in or near Horace Mann can offer housing benefits to their employees that are tar-

near Horace Mann can offer housing benefits to their employees that are tar
These divisions do not correspond to the subneighborhoods identified in earlier planning efforts. They are only a way of highlighting areas of relative distress and stability, not a reinterpretation

of sub-neighborhood boundaries.

geted to the neighborhood. From this the employer would save on turnover costs, enhance recruitment, and improve its operating environment by paying into the demand pull that gets homes built on vacant lots. In some cases described below. the benefit is paid for by the state or federal government. By tying homeownership assistance to employment, we help ensure that creditworthy, stably-employed persons move to homes in neighborhoods in need of revitalization. Employees acquire a double stake in the neighborhood — work and residence — and employers become even more substantial assets to the community.

7.1.1 Other efforts. Plans are already afoot to redevelop Horace Mann; the neighborhood has had two comprehensive revitalization plans in the past ten years. What we offer in this section, therefore, are mainly strategic recommendations that fit in the gaps and focus narrowly on EAH. In what follows, we suggest strategies for EAH in the West and East Horace Mann Planning Areas. Approaches available to the non-profit, for-profit, and public sectors are outlined. In essence, we are discussing ways to stimulate demand for — that is, lower the price of — new owner-occupied housing. On the supply side, there are a fair number of new housing developments in Horace Mann in various stages of completion. Gary Citywide Development Corporation is now building ten houses on the 600-700 block of Pierce Street. Plans are in for review on a development near Borman Square. Preparations are being made to develop the new South Shore neighborhood on the east end of Horace Mann. Nevertheless, no specific strategic plans have been made to redevelop the west end of Horace Mann specifically. We will briefly discuss the shape redevelopment might take there.

7.2 Financial benefit and eligibility in EAH – Examples in the Chicago Area

There are numerous examples of EAH programs in the region. Several efforts being coordinated by the Metropolitan Planning Council's Regional Employer Assisted Collaboration for Housing (REACH) for northeastern Illinois are available to draw from (see MPC 2004). The most common forms of financial benefit among REACH partners are down payment and closing cost assistance. This is also true nationally (Hoffman 1999). An employer contributes \$2,000 to \$7,500 (most often \$5,000) in no-interest, forgivable loans and obtains an agreement that the employee will continue to work at his or her job for a specified period of time, generally three to five years. The arrangement typically requires a matching contribution from the employee and is enforced through a lien on the employee's new property that expires at the end of the period. As an unfamiliar benefit, down payment assistance serves a clear, readily understandable need. The highest perceived barrier to homeownership, according to a Fannie Mae survey, is the cost of down payment (Fannie Mae 2003).

7.2.1 Down payment assistance.

Down payment assistance programs in the region have started fairly small. For instance, Advocate Bethany Hospital in Garfield Park, Illinois, has committed to provide EAH benefits of \$3,000 to \$5,000 (for three or five years on the job) to 25 people over five years, which amounts, at a maximum, to a direct cost of \$125,000. Setting aside funds sufficient for five or

less employees per year is typical. At Bethany, the loans are forgivable at a rate of 20 percent per year. The employee contributes a \$1,000 match, must qualify for a mortgage, and must attend homeownership counseling (operated by Neighborhood Housing Services). In other words, creditworthiness and some capacity to save are required of the employee.

7.2.2 Income and occupation eligibility. The matching funds from the Illinois Housing Development Authority that sweeten EAH in Illinois are made available only to employees in families earning less than 80 percent of the area median income. Otherwise employers are free to market their programs to a workforce segment of their choosing. Advocate Bethany and Illinois Institute of Technology make their programs available to any full-time employee. Sinai Health Systems in Lawndale, Illinois, restricts its program to registered nurses.

The object of these programs is community redevelopment. To that end, the Metropolitan Planning Council suggests that an employer restricting its assistance to a distressed neighborhood should not shy from marketing the program to relatively higher-income employees. Not only are they more likely to qualify for a mortgage, but they would be expected to inject stability into the neighborhood.

For employees with other options, though, down payment assistance of \$5,000 over five years may not figure high enough to outweigh moving into certain neighborhoods. Supportive redevelopment, such as the projects proposed in this plan, can aid in attracting moderate-to-middle income employees and their families.

7.2.3 Geographic eligibility. Advocate Bethany's program is restricted to employees who buy a home within a tenmile radius of the hospital. Sinai confines its assistance to purchasers of rehabbed homes made available through Neighborhood Housing Service's "Livin' in Lawndale" program.

7.3 Employer assisted housing with the public sector

Public sector employers have strong potential to be leaders in employerassisted housing and could develop a program that targets the west side of Horace Mann. The public sector shares with hospitals a stewardship mission, giving it a strong, clear purpose for engaging in direct revitalization through EAH. Exercising a stabilizing influence already, the Public Safety Building, fairly nearby at Fifth Avenue and Polk Street, houses a large number of law enforcement and emergency service personnel. To the west, relatively nearby, is the Gary Sanitary District treatment plant. Teachers and other staff from Horace Mann High School would be natural participants, but the school has been closed. While not well compensated, most public sector jobs are fairly stable, despite the property value reassessment that has led to staff cuts as budgets adjust.

7.3.1 My Community program. One powerful advantage of pursuing EAH in the public sector is that certain public employees — teachers, fire fighters, law enforcement, and state, county, and municipal employees — are eligible for the My Community program from the Indiana Housing Finance Authority and Fannie Mae. My Community gives a belowmarket interest rate on the first mortgage and up to \$7,000 in down payment as-

sistance as a no-interest, forgivable second mortgage. It offers more lenient credit requirements and takes a reduced down payment contribution from the employee, among other benefits. Furthermore, the program is not funded through allocations from the state, but through the sale of mortgage revenue bonds, so it is not hostage to waxing and waning commitment from the Legislature.

7.3.2 Geographic targeting. Again, the primary objects of EAH in community revitalization are targeting benefits to distressed neighborhoods and retaining stable employees there for some period of time. Conditions imposed by the U.S. Department of Housing and Urban Development mean that buyers must live in homes financed through the My Community program for at least five years or the second mortgage loan will not be completely forgiven. The federal recapture tax may also induce homebuyers to remain in the home for at least nine years, although the Indiana Housing Finance Authority suggests that, for most buyers, the tax would fall lightly if at all (IHFA n.d.).

The My Community program, however, is not targeted as narrowly to a specific neighborhood as an employerdefined program might be, and employees could not, at present, be required by local officials to choose homes on the west side of Horace Mann. Two options, therefore, are:

- for participating public sector employers to market the west side heavily, most effectively in close partnership with the developer building or rehabbing the homes; or
- for participating public sector employers to offer a place-based

benefit on top of the My Community benefit.

7.3.2.1 Under the first option, the assistance offered would be matchmaking and advertising. For instance, the employer could maintain a list of available homes in targeted neighborhoods, promote the My Community program with posters and email announcements, assist employees in filling out the requisite forms, and give employees a certain number of hours off for touring homes and closing. Except for expenses associated with marketing, under this approach EAH would be costless for local government. Indiana Housing Finance Authority and Fannie Mae would assist in setting up the program and arrange homebuyer counseling. My Community has not been well utilized in Lake County, for which one explanation may be that not enough eligible participants have been steered toward it. Indiana Housing Finance Authority and Fannie Mae would be willing partners in developing an individualized program for public sector employers in Gary.

7.3.2.2 The second option seems to have more economic bite. Adding a second benefit would work most logically as closing cost assistance to complement the down payment benefit from My Community; and there is precedent in Indiana for doing so (personal communication from Regina Potora, Indiana Housing Finance Authority: September 3, 2004). But it is not clear that local government could, given fiscal constraints, provide an additional benefit on a continuous basis, or that the added effect would be especially strong. Adverse politics may develop over the neighborhoods selected for the benefit. For these reasons, we suggest that public sector employers try the first option as a pilot, then offer closing cost assistance if the marketing-only program proves anemic.

7.3.3 Leadership. Because the City of Gary employs numerous police officers, firefighters, and court officials at the Public Safety Building, the City is the entity best suited to take a leading role in EAH in west Horace Mann. The City employs about 2,000 workers overall. Other public sector participants, perhaps targeting other neighborhoods, could eventually include Gary Public Schools, Lake County, Gary Sanitary District, and others.

7.4 The private sector and the Empowerment, Enterprise, and Airport Development Zones

Private sector employers have business-based reasons for EAH that are well elaborated in REACH and Fannie Mae literature (see Fannie Mae 2003; MPC 2004). The Metropolitan Planning Council uses the figure that the cost of replacing an employee is about equal to the worker's yearly salary; if EAH reduces turnover, then the cost of the housing benefit may be small in comparison. The administrative costs of actually running program are minimized outsourcing it; MPC 2004 describes how this works. Additionally, though, businesses may be able to avail themselves of the Empowerment, Enterprise, or Airport Development Zone tax credits not offered to public and non-profit sector employers. It is very possible that the credits could repay the cost of housing assistance over and above the savings from reduced employee turnover and enhanced recruitment.

7.4.1 Empowerment Zone. The Empowerment Zone is a community and

economic development program headed at the national level by the Department of Housing and Urban Development and managed locally by the Gary, East Chicago, Hammond Empowerment Zone office. The boundaries of the Empowerment Zone in Gary are shown in Figure I. Only the portion of the Horace Mann neighborhood east of Grant Street is within the Empowerment Zone, so the strategy outlined below is applicable only there. Use of the Employment Credits could prove quite beneficial to the South Shore redevelopment.

Among other tax benefits, a business located within the zone could claim an Employment Credit for a worker who lives within the zone and performs substantially all services for the business within the zone. The business could claim a federal tax credit good for 20 percent of the wages paid for the employee's services per year (IRS 2004). The credit is figured from the first \$15,000 of the employee's yearly wages, so the maximum credit is \$3,000 per employee per year for each year of Empowerment Zone designation. Businesses in the zone will be eligible for the Employment Credit until December 31, 2009 (HUD 2003).

7.4.2 Program benefit. Private employers could offer housing assistance to their employees to induce them to move into the Empowerment Zone. The typical down payment benefit of \$5,000 that we are recommending is a one-time expenditure. In contrast, an employee who moves into the zone to take advantage of an employer's assistance in buying a house will return tax benefits over the life of the Empowerment Zone designation, more than offsetting the cost of the housing benefit. For a business offering down payment assistance in calendar year 2005, the maximum return would be

a credit of \$15,000 per year × 20 percent × 5 years less a \$5,000 down payment benefit. Discounted at 5 percent, the net present value to employers is about \$6,900; at 7 percent, it is about \$4,900. The enterprising and socially committed business, however, would look on the credits solely as a pass-through and provide a housing benefit up to the breakeven point, or about \$11,900 and \$9,900, respectively, at the discount rates above. These are much more significant offerings, while the indirect employer benefits of EAH would still repay the employer's efforts.

7.4.3 Income eligibility. We should also note that the Employment Credit carries no restrictions on the income of the employees. Using the Empowerment Zone Employment Credit is compatible with the attempt to attract moderate-to-middle income residents to distressed neighborhoods. However, the actual down payment assistance will be more useful and attractive to potential homebuyers on the lower end of that range.

7.4.4 Enterprise and Airport Development Zones. The Enterprise Zone offers tax credits that could also dovetail with EAH, especially in areas where the Empowerment and Enterprise Zones overlap, but no portion of Horace Mann is included within the latter. However, the Airport Development Zone, which offers the same benefits, includes a small sliver of Horace Mann west of Bridge Street. The Enterprise and Airport Development Zones are programs authorized by the State of Indiana and managed locally by the Gary Urban Enterprise Association. Parts of the zones are shown in Figure I.

Employment Expense Credits are available to businesses within the zones that employ residents of the zones. The

credit is worth about half of the Empowerment Zone Employment Credit. It is computed as either 10 percent of expenditures on qualified employees, or as \$1,500 × the number of qualified employees, whichever is less (IDOR 2003).

Tax deductions are also available for zone employees/residents themselves. Qualified employees are able to deduct up to \$7,500 per year from their statetaxable income (IDOC n.d.). As the adjusted gross income tax rate on individuals in Indiana is 3.4 percent, the maximum tax benefit from moving to the Enterprise Zone would be only \$255 per vear. Taken as an annuity, however, the net present value of the benefit is about \$8,500 at 3 percent and \$5,100 at 5 percent. Since this benefit—as with the Zone **Employment** Empowerment Credit—inheres partly in the person, not solely in the property, it is unlikely to be lost through capitalization into home purchase price.

There is some uncertainty about the continued availability of the credits, for the Enterprise Zones have a programmed lifespan. The Gary Urban Enterprise Association was founded in 1985, but the zone designation lasts for 10 years with two 5-year extensions (IDOR 2003).

7.4.5 Next steps. The Gary Department of Community Development should coordinate a campaign of contacting businesses within the Zones to sell the EAH concept to them. This could be funded and carried out by the City, funded by the City and carried out by a contractor, or carried out by another party in collaboration with the Department. We have done some preliminary work by mapping Gary businesses in a Geographic Information System, using a database obtained from Dun and Bradstreet, to locate those within the Enter-

prise and Empowerment Zones. The database contains contact information, Standard Industrial Classifications, as well as other data; it can be made available from the Delta Institute on request. To maximize efficiency, as there are many businesses within Gary that potentially could be contacted, the list should be sorted by likelihood of positive response. For example, it appears from survey research that, within the private sector, utilities and finance, insurance, and real estate (FIRE) firms stand out as willing partners in EAH, and that larger employers are more likely to participate (Hoffman 2000). Business contacts should be accompanied by information on what types of homes are available and where. Second stage planning would review the literature more comprehensively to design a marketing strategy.

7.5 Employer-assisted housing with Methodist Northlake

7.5.1 Hospitals and other institutional employers. Institutional employers have been shown to be somewhat more likely to engage in EAH than other types of employers (Hoffman 2000). Among institutions, hospitals seem to be leaders across the U.S., which also appears true of REACH partners, although municipalities and universities in the Chicago area also make up a large fraction of the institutional REACH partners. There are good reasons for hospitals to be especially interested in EAH. One is based on the bottom line. There is a generalized shortage of qualified healthcare personnel, so a benefit that roots employees where they are for several years is valuable for helping retain them in the face of competing offers. Nurses are typically offered signing bonuses on hiring; housing benefits could be wrapped into the bonus. And turnover costs can be quite high, even among lower-paid staff.

Another reason is the mission of healthcare. Many hospitals, especially those that are organized as non-profits or based in faith, take a holistic approach to health. If patients from the community surrounding the hospital arrive in a state of ill health that is really a function of neighborhood disintegration, it makes sense to approach the problem on that level, and EAH can become a community stabilization and redevelopment strategy. Unsafe housing conditions, such as leadbased paint, can lead to very specific illnesses. In the Englewood community of Chicago, St. Bernard Hospital hired staff to concentrate on redevelopment and, in partnership with the City of Chicago, built new housing in the neighborhoods surrounding the hospital. Although St. Bernard offered housing benefits to its personnel, the new homes were made available to eligible non-employees too.

7.5.2 Methodist Hospital Northlake.

Methodist Northlake is another strong asset in the Horace Mann neighborhood. The recommendations set forth for the City also apply to Methodist, since its health care workers, too, can take advantage of the down payment assistance offered through the My Community program. It would perhaps have more freedom to target additional benefits to the geography it chooses. Were the City to develop the marketing infrastructure for a program targeted to its employees, it would appear easy to translocate it to Methodist.

7.6 Redevelopment on the west side of Horace Mann

7.6.1 Data needed. West Horace Mann, especially north of the South

Shore line, is clearly distressed and apparently has no reinvestment on the horizon. For a future redevelopment effort to be successful, data collection would first be necessary to support decision-making. First, assess whether the west side of Horace Mann can be rebuilt through infill development or whether larger scale reconstruction has a higher probability of success. The Community Builders, Inc. did such a survey — a windshield survey — of the east side in its 2003 Horace Mann Community Comprehensive Revitalization Plan, concluding implicitly that condemning and rebuilding several blocks was the preferred option. The same should be done for the west side. although more detailed data should be gathered about the physical condition of the buildings. Although its feasibility cannot be known without further study, infill development would be much cheaper and easier than razing and rebuilding.

7.6.2 Parcels. Much of the land is already in public ownership (which is a partial indicator of neighborhood quality), so it could be assembled readily. Further information about pending tax sale availability has been gathered and is mapped in Figure J.⁴ The City could later assist an interested developer by acquiring Treasurer's tax sale properties and properties owned by Lake County, then transferring them to the developer, along with cityowned parcels, for a nominal charge. The west side is, unfortunately, not a favorable location: isolated, invisible, and cut off by the South Shore tracks. Admittedly there are priority areas, along Fourth and Fifth Avenues and Broadway, for example, where redevelopment would have a stronger psychological advantage. And

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⁴ These data are current as of August 2004. Although there was a Commissioner's sale in November, it is unlikely that these properties sold.

there are signs that the City is looking to liquidate its vacant property holdings by selling them cheaply to adjoining owners.

8.0 Conclusion

The Grand Calumet River, one of the nation's most highly polluted waterways, has not been able to live up to its name for as long as anyone living can remember. A threat to living things that might come into contact with its waters, the river was sometimes an assault on the senses and often an economic hindrance to nearby property owners. It was not unreasonable for the cities through which the river runs to ignore and avoid it, whether consciously or through habit.

As the last century drew to a close, people began to recognize and work for the Grand Cal's potential as a natural resource. With the recent removal of contaminated sediments from the East Branch, the promise of a river in Gary which brings enjoyment to the community and contributes to the city's economic vitality is renewed, revived.

This conceptual plan titled the *Gary Riverfront Revival* tries to open the river to the city and its residents, to draw people to the Grand Cal. The plan also points to opportunities to stabilize and revitalize the nearby residential community. Each element is critical to the long-term protection and stewardship of the river, and to maximizing its potential as an asset and amenity to Gary. Equally important, the ideas presented herein have been identified as important by stakeholders in the river's future.

The concepts put forth here are not grandiose—the plan veers away from the biggest dreams for the time being, and instead points toward opportunities for smaller, manageable, realistic, and affordable first steps. This plan also complements several other plans currently being implemented in Gary.

Nearly every one of the many people involved in providing input for the Gary

Riverfront Revival planning process voiced the concern that this plan—that any plan—may present attractive ideas, but will in the end be another disappointment if the ideas are not implemented. Sound and well-supported ideas for redevelopment along the river in Gary must spark action and should not remain on shelves or in computer hard drives.

It is up to each of us then, to take the next steps toward reviving the riverfront.

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10.0 Summary of next steps

The following table shows the first few immediate steps toward accomplishing the projects described in this plan. Details can be found in the text. The actions (in gray) are in rough order of priority. Parties to be involved, as well as suggested leadership roles, are shown in the left column. Issues to be addressed are in the right-hand column; contingent relationships are indicated where appropriate.

Proposed project or site	
Action(s)	
Leadership	Central issues and requirements
Parties involved	
 Contacts (where not 	obvious)

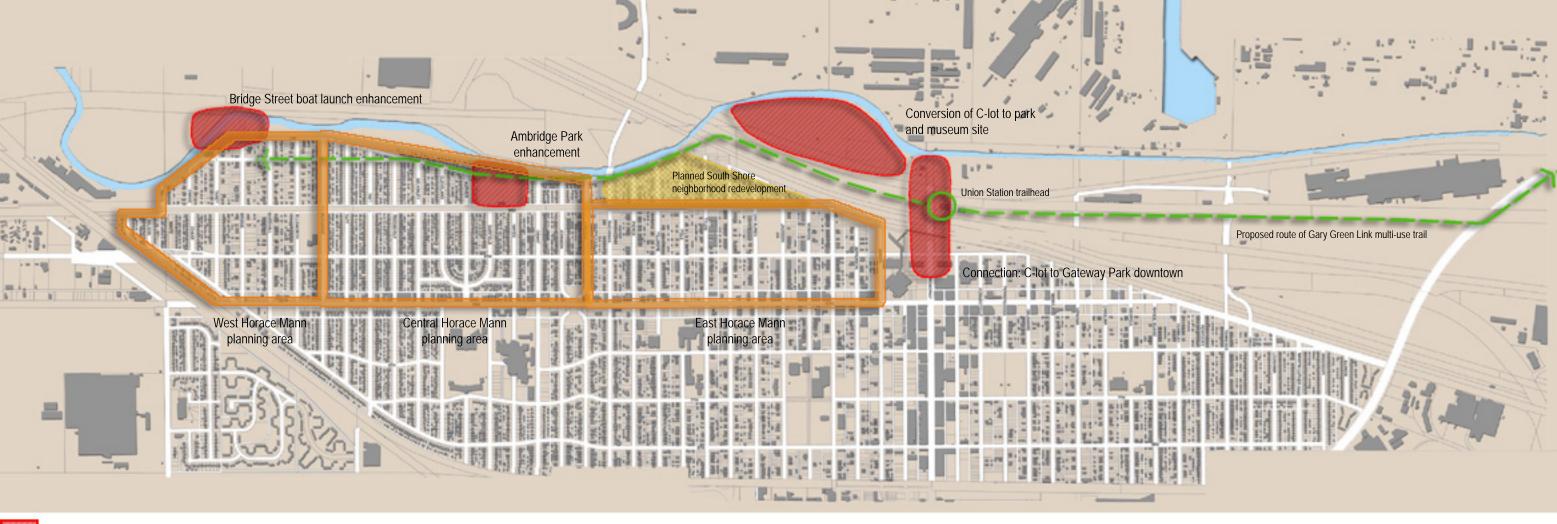
Bridge Street boat launch		
City of Gary (CoG) discussion with DNR		
CoG Dept. Environ. Affairs	Lifting USS obligation to remove launch facility	
DNR	Functional stabilization of site	
Nick Heinzelman	Second phase facilities to be provided	
Bill James, F&W Division Chief	Timeline and cost	
IDEM	Expectations for eventual disposition of oxbow land	
	Concordance with recomms. here or other humanistic design	
	Engineering and detailed design studies for launch area	
CoG discussion with Sanitary Dist		
CoG Dept. Environ. Affairs	Avoiding disturbance to, and keeping continued access to, infra-	
	structure on the site	
GSD Board Attorney	Requirements for combined sewer outfall on site	
CoG Law Department	Resolution of parcel ownership	
IN Department of Administration		
Jim Lewis, State Land Office		
	promotion strategy consistent with recreational use	
CoG Dept. Environ. Affairs		
IDEM		
Indiana Dept. of Health/Fish Advi-		
sory program		
DNR		

Ambridge Park enhancements		
Determination of alignment for 0	Gary Green Link trail	
CoG Dept. Environ. Affairs	Continuing Green Link along river on north edge of park	
Wolff-Clements Associates		
CoG Parks		
Grant application for seawall construction		
CoG Dept. Environ. Affairs	Requires:	
Consulting engineer	Feasibility and demonstration of purpose	
CoG Parks	Cost estimation	
	Evaluation of reproduction techniques for seawall	
Application for grant to fund recreation facility construction		
CoG Dept. Parks/Park Board	Contingent upon authorization of funding	
Consulting architect/engineer	Requires:	
	Detailed design drawings	

Cost estimation	
Amendment of <i>Master Plan</i>	

Conversion of C-lot to park		
Open discussions with U.S. Stee		
CoG Mayor	Restarting tours of mill	
Gary Works general manager	Contingent upon positive news from environmental assess.:	
	Transfer of tax benefits as funding mechanism for C-lot	
	Appraisal, determination of annual tax benefit	
	Management arrangements	
	Maintaining security	
	Providing materials for wave rail/sculpture park	
Take preliminary steps for C-lot/downtown connection completion		
CoG Dept. Planning	Construction drawings for wave rail/terminus sculpture	
Consulting planner/architect	Detailed work-up of mural	
	Cost estimates	
Stage 2 planning for C-lot park		
CoG Dept. Planning	Contingent upon positive news from U.S. Steel discussions	
Consulting landscape architect	Requires:	
	Detailed site development drawings	
	Museum market study if negative news on plant tours	

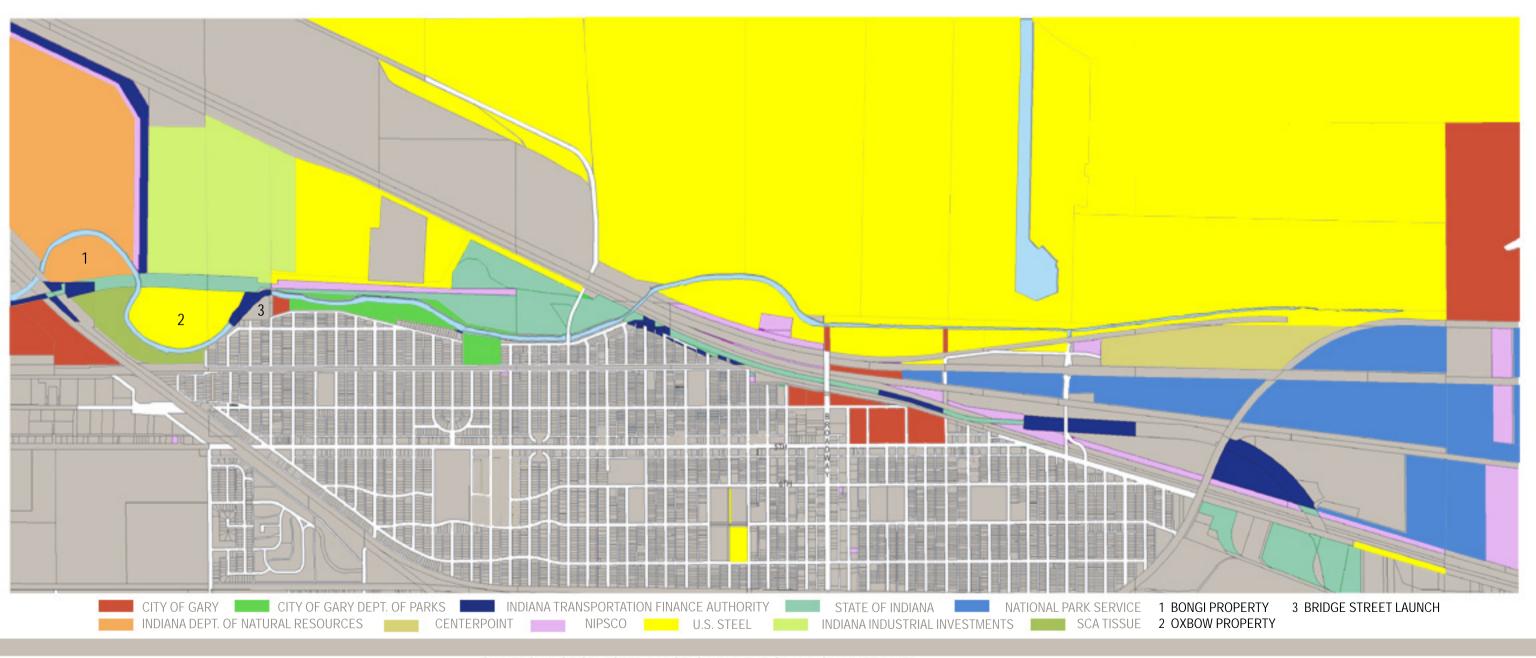
Employer assisted housing strategy				
Outreach to businesses within the	Empowerment and Enterprise Zones			
CoG Dept. Community Develop.	Preparing package of tax forms and instructions			
Contractor	Marketing strategy			
Non-/For-profit developers	Partnerships with developers			
	Identifying and contacting businesses			
Development of CoG employer as	sisted housing program			
CoG Dept. Community Develop.	Partnerships with developers			
CoG Mayor's Office	Compiling information on available homes			
Indiana Housing Finance Authority	Designing marketing tools			
Regina Potora				
Fannie Mae				
 Curt Wiley (Indiana Partner 				
ship Office				
Predevelopment work for West Horace Mann rebuild				
CoG Dept. Community Develop.	Detailed housing condition survey			
Consulting planner				



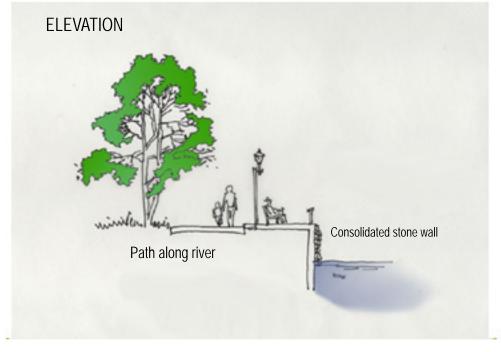
PROJECTS PROPOSED IN THIS PLAN

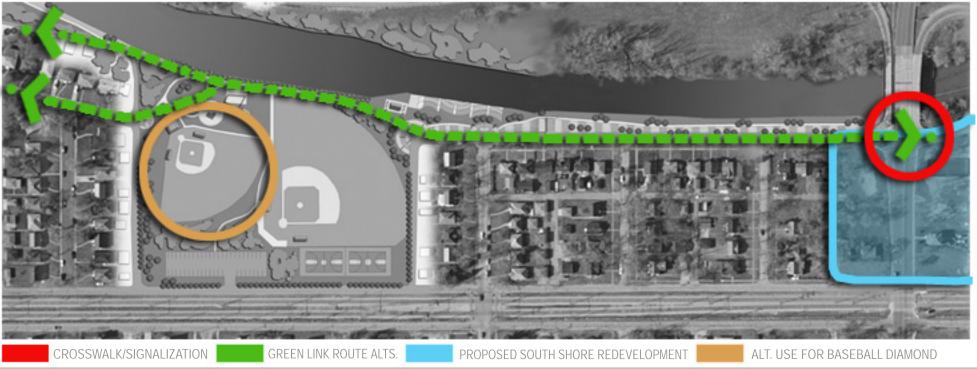


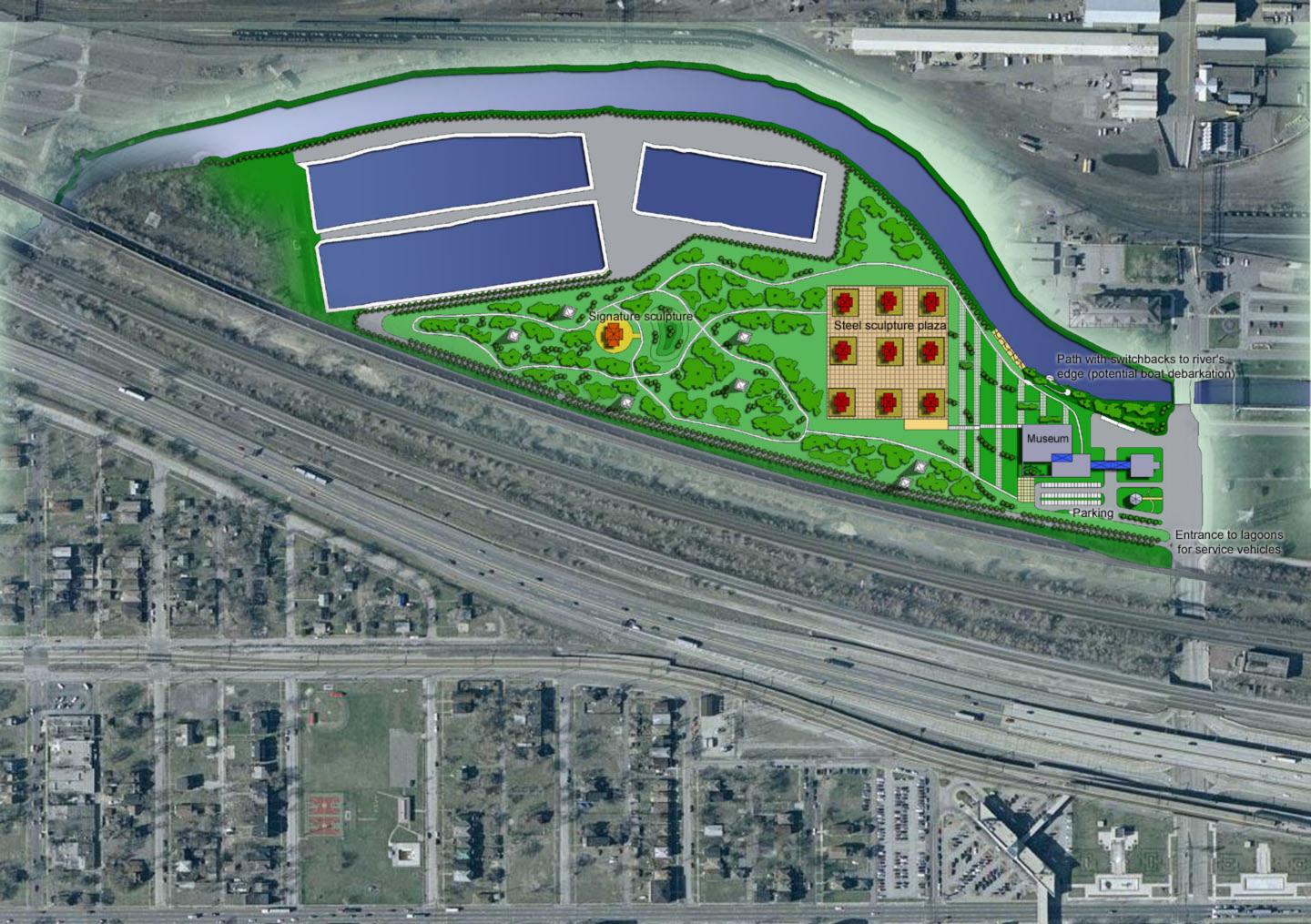




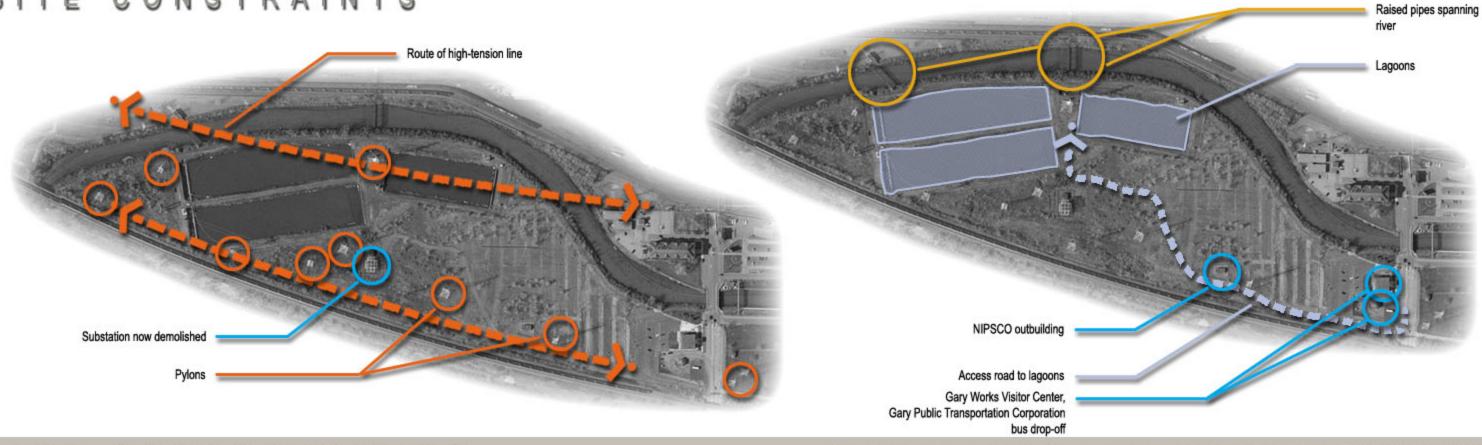




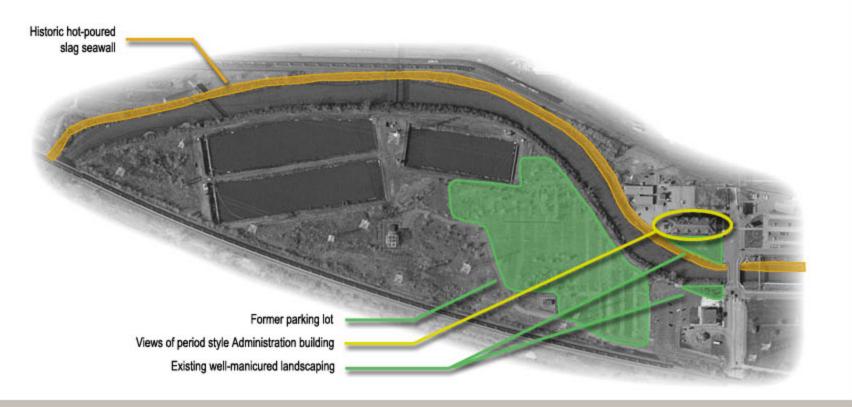




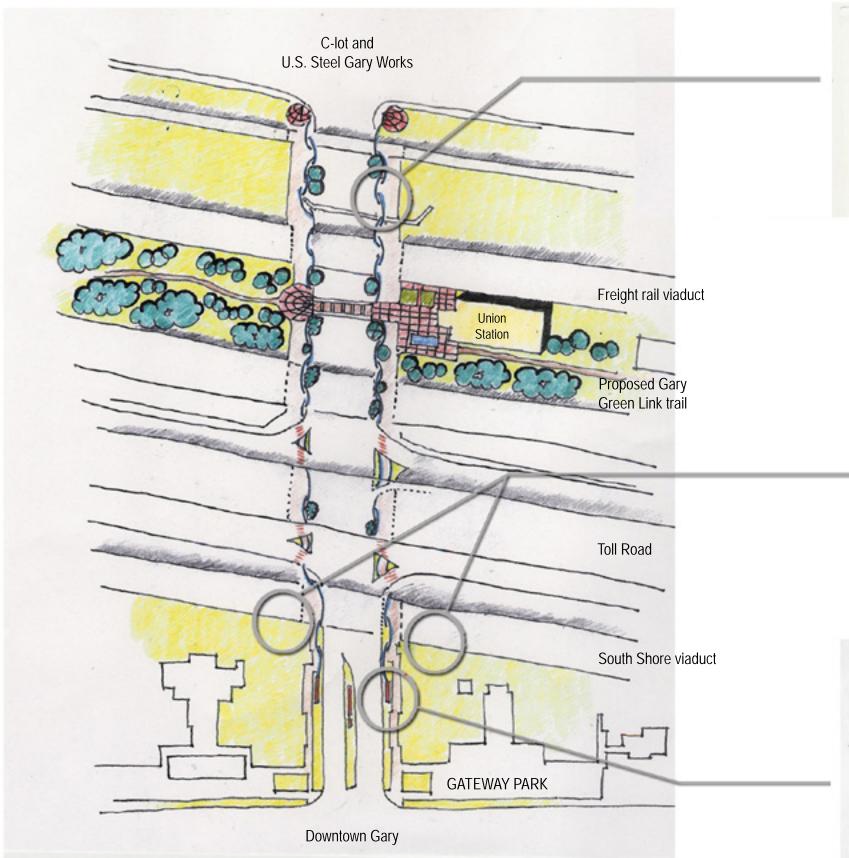
SITE CONSTRAINTS

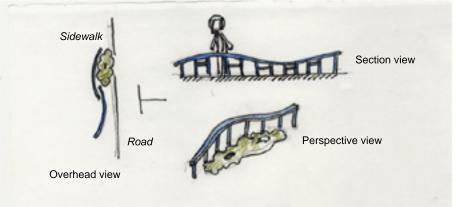


SITE OPPORTUNITIES

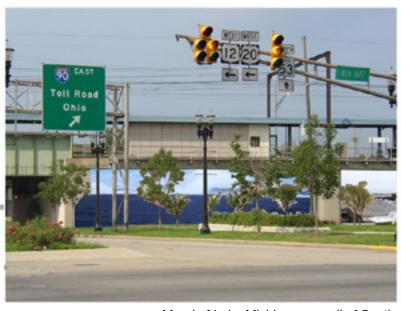








"Wave rail" of tube steel running between road and sidewalk



Mural of Lake Michigan on wall of South Shore line overpass; waves continue around corner under viaduct as if passing through the lake.

