

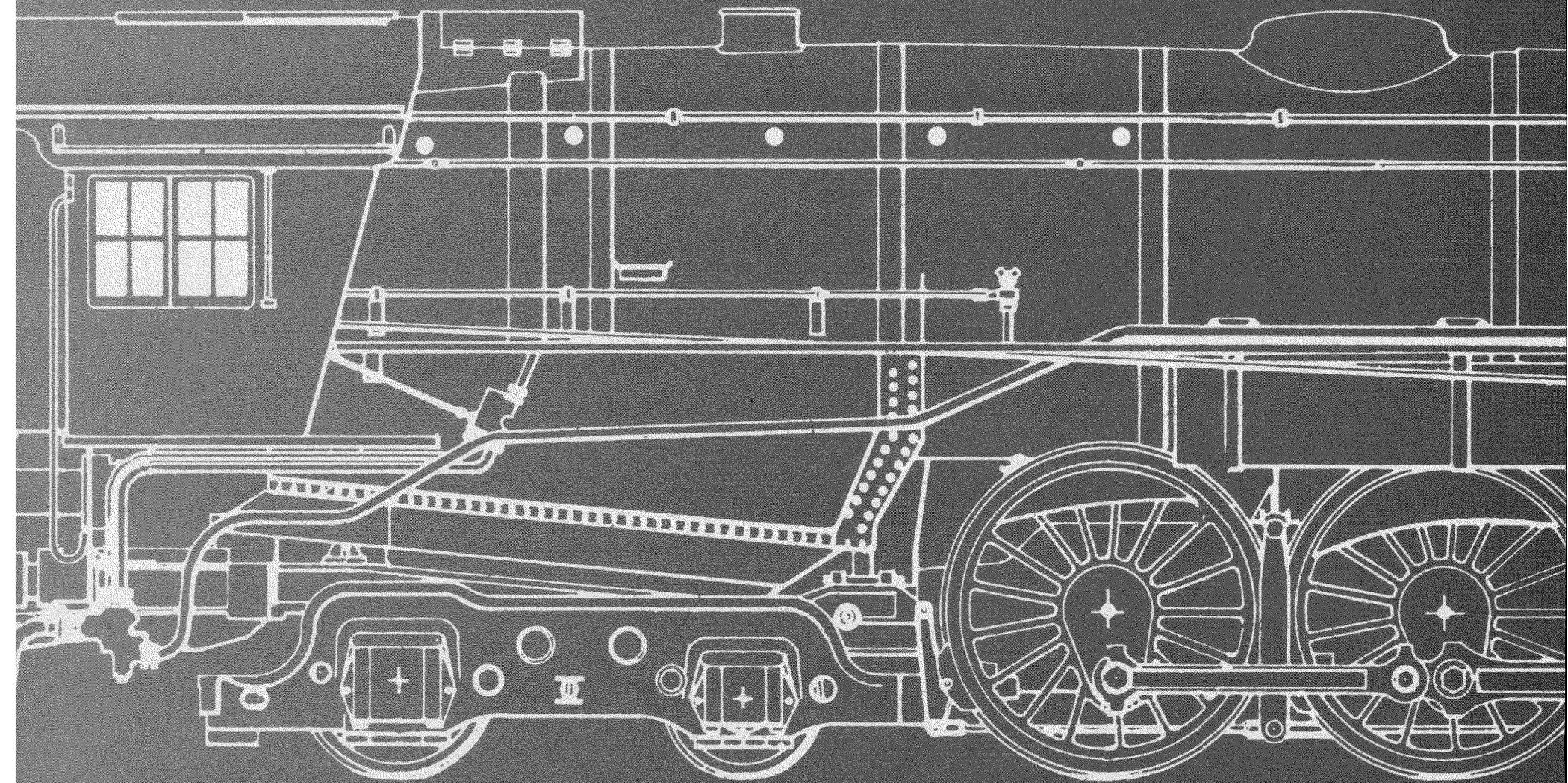
STEAMTOWN

NATIONAL HISTORIC SITE • PENNSYLVANIA

RAILROAD YARD DESIGN PROGRAM/INTERPRETIVE CONCEPT

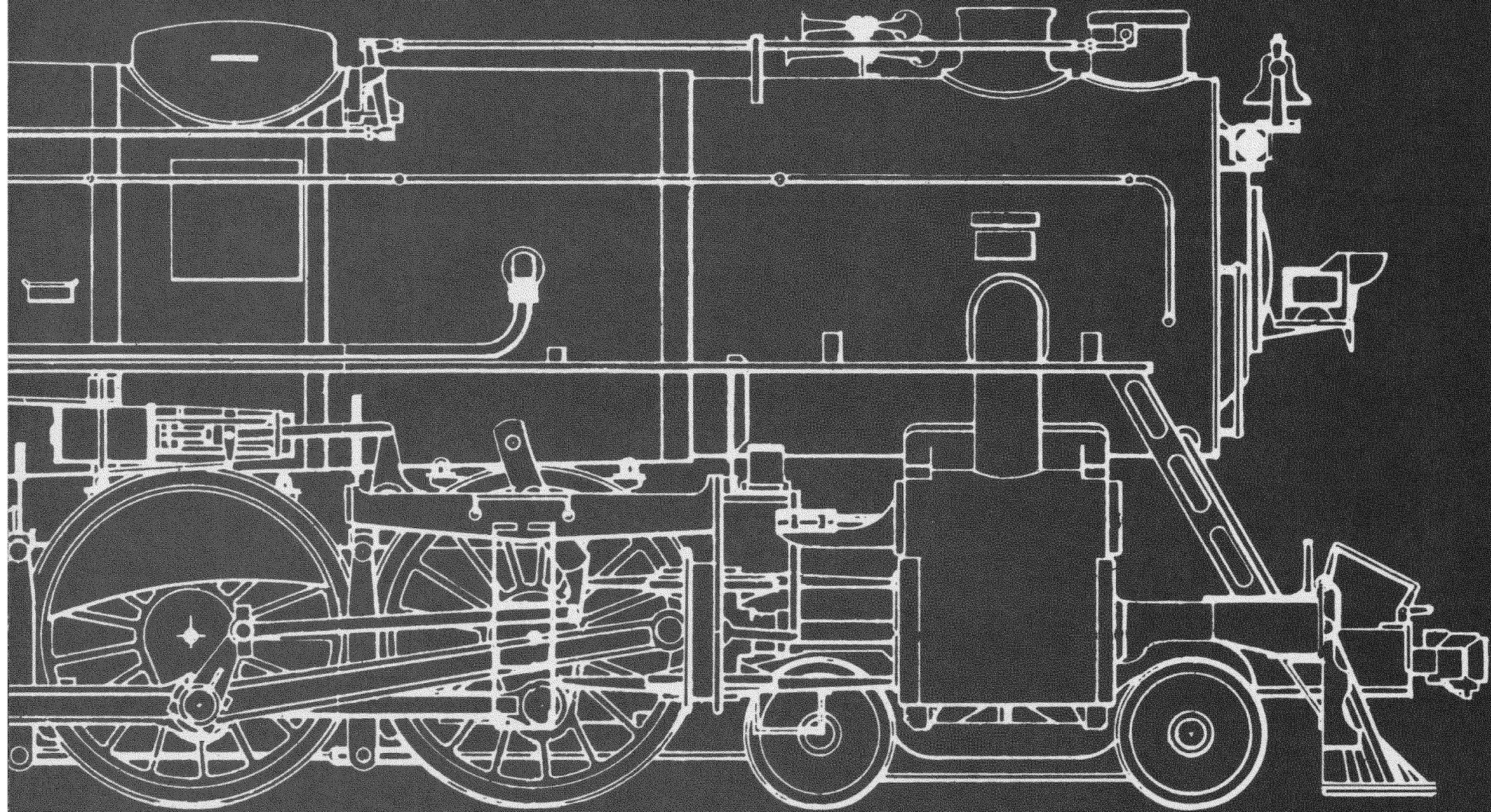
ON MICROFILM

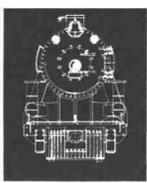
PLEASE RETURN TO:
TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE



The purpose of Steamtown National Historic Site is to preserve and use the site and collection of rail-related artifacts to further public understanding and appreciation of the role of steam railroading and related developments in the history of the region.

august 1989





CONTENTS

INTRODUCTION 2

CONCEPT FOR INTERPRETATION AND DESIGN 4

Overview 4

Entry, Arrival, and Parking 4

Roundhouse and Turntable 6

Railroad Yard 10

Maintenance/Restoration Shops 12

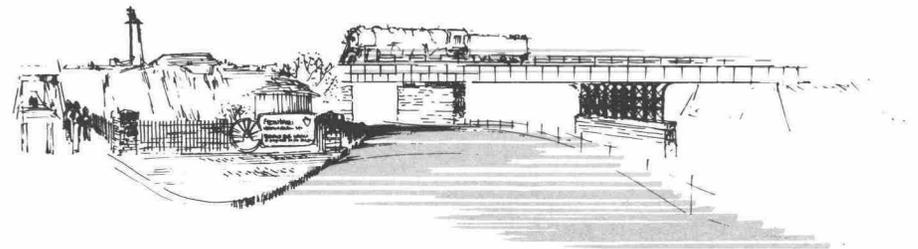
Railroad Demonstration Park 13

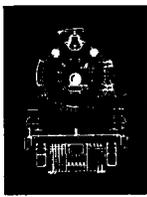
Support Facilities and Administrative Needs 14

IMPLEMENTATION STRATEGY, PROJECT PHASES,
AND COST ESTIMATE 15

SUMMARY 17

PROJECT PARTICIPANTS 18





INTRODUCTION

This *Design Program/Interpretive Concept* was undertaken to further define the goals and objectives that were established for Steamtown National Historic Site in the *Comprehensive Management Plan*. The March 1988 plan identified management objectives and prescriptive land use zones for the site; however, little design guidance was established. This project phase refines those land use zones in terms of specific design responses and programs so that progress at Steamtown can continue and the site ultimately developed for visitor use.

The management objectives defined in the initial plan have been further refined to provide better guidance to management. The following objectives supersede those contained in the plan; otherwise, most of what was initially published in the *Comprehensive Management Plan* remains valid for Steamtown National Historic Site.

To provide a setting evocative of steam railroading that retains the historic industrial working character of the yard, incorporating the preservation of historic structures to the greatest extent practicable.

To provide sufficient year-round facilities and programs so that visitors can understand the role of steam railroads in the growth of our country, while allowing opportunities for hands-on, active experiences, including riding on a steam era train and showing how a steam era railroad operated.

To preserve and/or restore locomotives and cars in the park collection for purposes of excursion, interpretation, and exhibition. In order to improve interpretive and/or educational opportunities, selective acquisition may be made in the future.

To use the site and the collection of rail-related artifacts as tools to mine the rich vein of cultural/industrial heritage that underlies the history of northeastern Pennsylvania.

To emphasize the cultural/industrial heritage of the region and to link Steamtown with other features and attractions.

Certain additional refinements for Steamtown have also been accomplished since the plan's publication. Further evaluation of the collection of locomotives and rolling stock directs that of the 40 locomotives and over 100 cars in the original collection, some 32 locomotives and 56 cars are worthy of retention because of their historical significance. The collection, including museum objects and archives, remains the principal resource of the national historic site. However, other resources are also viewed as important, including the site itself, defined as both the aboveground industrial landscape and the below-ground archeological resources. The context of the site including the surrounding city and the related industrial heritage attractions are valued. Finally, the social history, including ethnography, immigration, labor, unions, and life-styles, related to the Delaware, Lackawanna, and Western Railroad in particular and the steam era railroading in general are critical values that remain very much alive in the region. All of the above are viewed as significant features, and the discussion that follows attempts to honor those resources by designing complementary facilities to further public understanding and appreciation.

The resources at Steamtown lend themselves to four major interpretive stories that will be the major focus

for visitors to the national historic site. They are as follows:

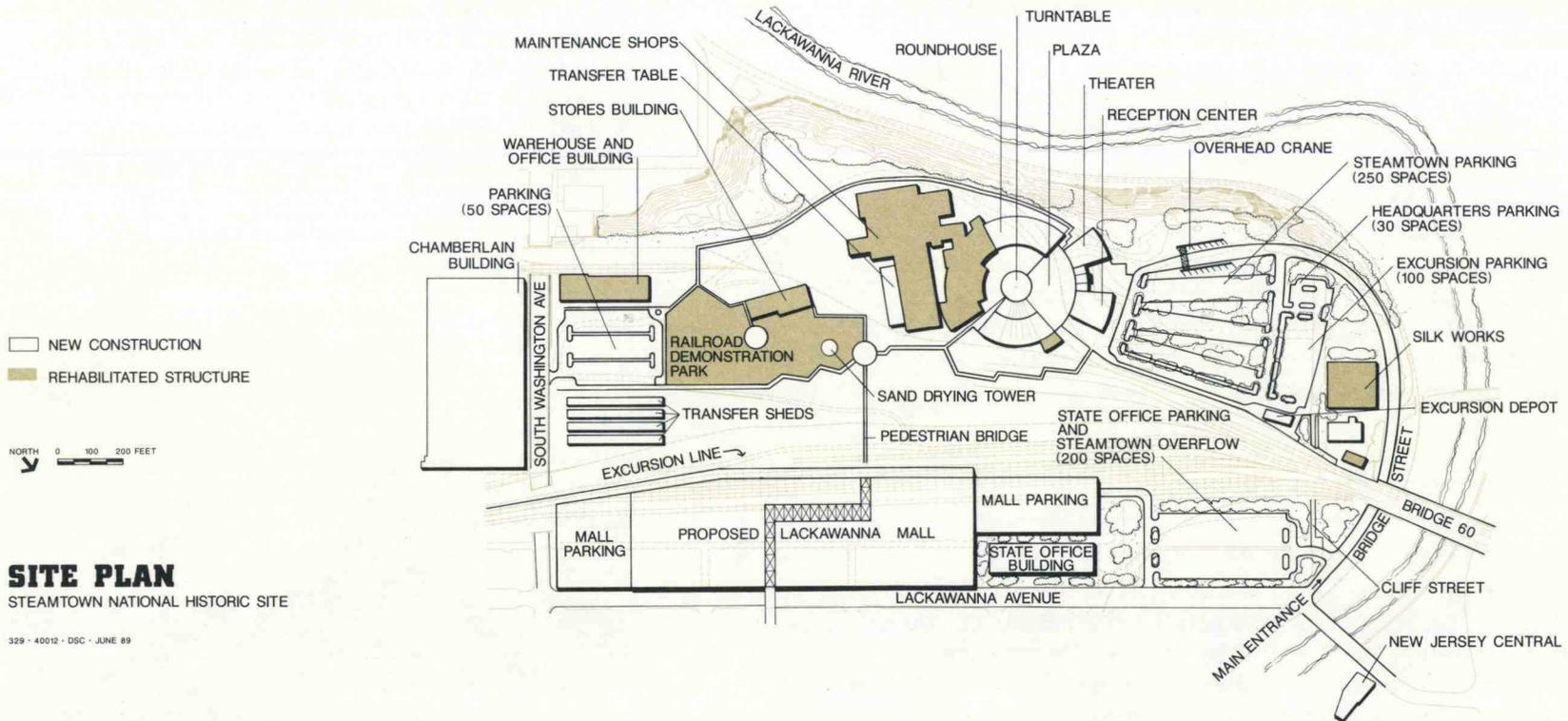
the history of railroads in the steam era (1850-1950) with emphasis on the northeastern United States

interpretation of the Delaware, Lackawanna, and Western Railroad yard and its evolution

economic, political, and social influence of the railroading industry during the steam era

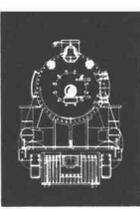
people who worked for or whose lives were influenced by the railroads and the values they represented

The state historic preservation officer and the Advisory Council on Historic Preservation have participated in the development of this plan, and, as further progress is achieved, the National Park Service will continue to seek the advice of both agencies. A memorandum of agreement between the three agencies is being drafted to address any concerns and establish procedures for continued consultation.



SITE PLAN
STEAMTOWN NATIONAL HISTORIC SITE

329 - 40012 - DSC - JUNE 89



CONCEPT FOR INTERPRETATION AND DESIGN

OVERVIEW

This document provides the concepts, framework, and program for the design and construction of Steamtown facilities. The design, to begin this year, will determine the final details, specifications, and scheduling of facilities.

The Steamtown National Historic Site recommended development plan uses the site and collection of rail-related artifacts as tools to interpret the steam era of railroading as well as the rich cultural/industrial heritage that underlies the history of northeast Pennsylvania. While the development of railroading for both passengers and freight is fundamental to the program, the project also aspires to portray the strong tradition of ethnicity, labor, faith, and love of America with which the whole of the region is identified.

The image of the great locomotives, the architecture of the roundhouse and back shop, and the working rails and auxiliary structures dominate the scene; yet, these features are complemented by landscaped pedestrian walks, parklike environments in human, even intimate scale, and a sensitive integration of site activities with the surrounding community.

ENTRY, ARRIVAL, AND PARKING

The proposed entry is designed to be as simple as possible, giving visitors a hint about Steamtown without distractions. It is recommended that vehicles enter the site from Lackawanna Avenue by way of the existing underpass at Bridge 60. At the turn-off a custom-designed entry sign in association with iron

fencing and a masonry foundation will be constructed, and a locomotive will be displayed on the bridge to heighten the sense of arrival. The existing road will be upgraded and surfaced to handle two-way traffic. Arriving visitors will then proceed under the bridge to a parking area. A crane will be located over the entry road to further enhance the sense of arrival at an industrial landscape. Views into the remnant roundhouse and the locomotives will be accommodated by aligning the entry road on an axis with an opening in the roundhouse. The parking area will have a capacity of 250 cars for use of the railroad yard. An additional 100-car and 10-bus capacity area will be available for longer term parking used in association with the excursion train. Finally, a 30-space parking area for administrative and staff use will be constructed. The plan will be to develop the parking area on axes that roughly approximate the tracks emanating from the turntable. Pedestrian circulation from the parking area to the reception center



will be facilitated by a series of tracks laid in a masonry base to further enhance an industrial character. It is recommended that the buildings east of Cliff Street be demolished for the parking area. This action will require further consultation with the state historic preservation officer prior to implementation.

It is anticipated that on certain occasions (e.g., weekends) overflow parking will be necessary. When that occurs, an arrangement will be sought to use the state office building parking area or other nearby parking areas. Pedestrian access from the state parking area will be safely facilitated by way of the Cliff Street underpass.

Design Program

Facility	Treatment	Use	Interpretive Theme
Bridge St. entrance/ parking	New construction	Visitor access/auto/train	Steam railroading
Bridge 60/wye	Rehabilitation/new construction	Operations/visitor access/ train	Riding steam train, railroad technology

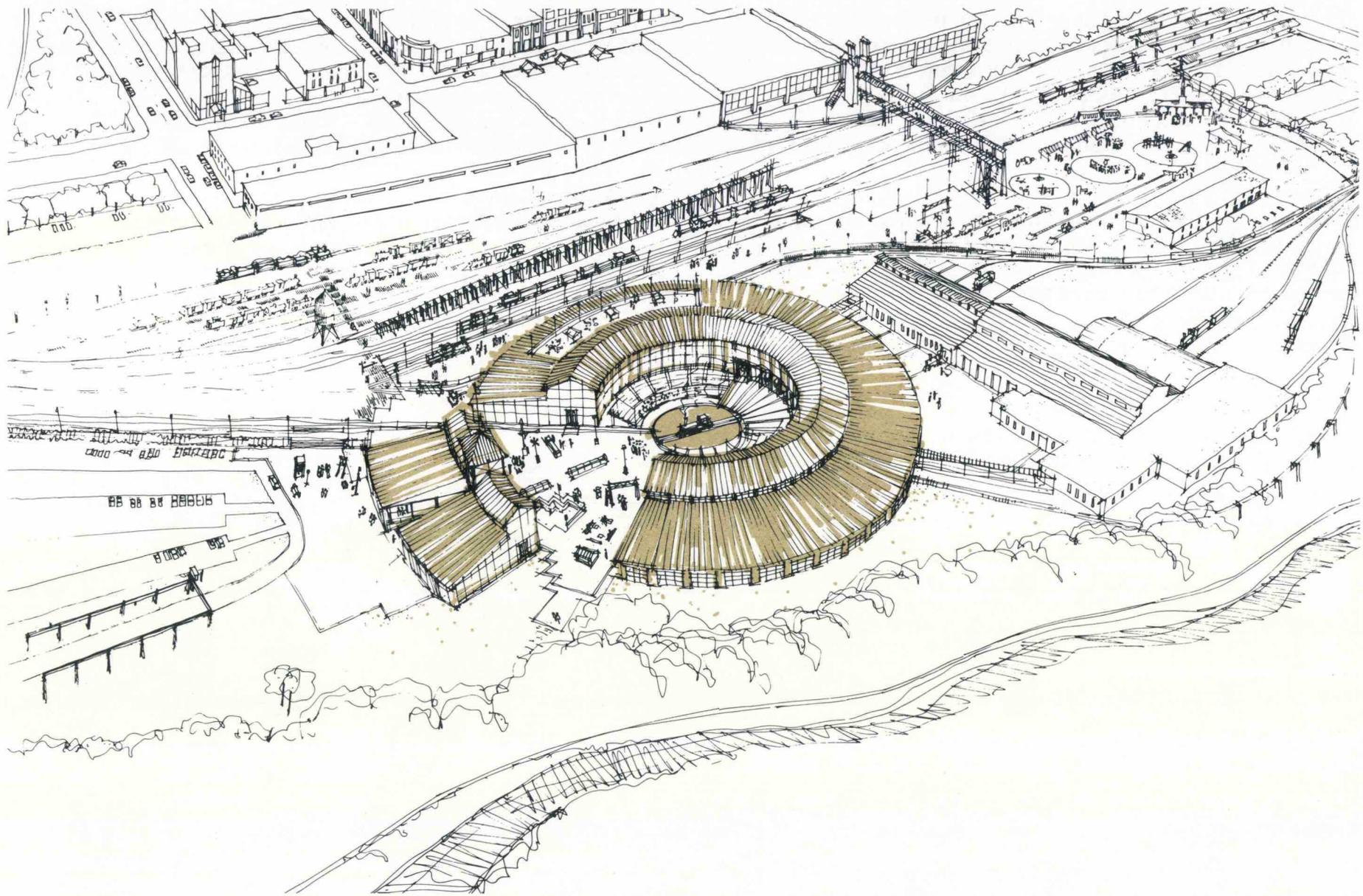
ROUNDHOUSE AND TURNTABLE

Within the vocabulary of industrial architecture a railroad yard roundhouse is distinctive and unique to the steam era. Consequently, the plan has chosen to honor this form and capitalize on its potential to serve operational needs as well as enhance the visitor's appreciation and understanding of steam railroading. Much as the turntable and roundhouse were the logistical and operational center of a railroad yard, the plan directs development of these facilities to serve as the emotional and aesthetic heart of the visitor's experience at Steamtown National Historic Site. To that end, the proposed architectural treatment is a skillful blend of the old and the new. The existing remnant roundhouse will be stabilized to house and display restored locomotives in an authentic environment. The stabilized remnant will display 13 locomotives. Either enveloping or abutting the remnant will be a new roundhouse that will house other interpretive displays and artifacts, plus additional pieces of rolling stock such as a railway post office car and a dining car. The new construction will honor the character of the site; however, the treatment will be deliberately new to make readily apparent the distinctions between the historic structure and the new elements. The roundhouse will be two-story, thus allowing visitors the opportunity to explore the displayed equipment at floor level and attain a superior vantage point at a mezzanine level. The second level will also facilitate views of the adjacent railroad yard, where periodically, locomotives will be coaled and watered, ash boxes dumped, trains made up, and other operations conducted. An operating model of the yard will be provided on the mezzanine level so that visitors can better understand the massive

undertaking and appreciate the scale of equipment necessary.

A connecting bridge to the maintenance shops will be constructed so that visitors can view restoration efforts as well as other locomotives on display. This activity will also be conducted at the mezzanine level so that visitors will be removed from any potential safety hazards. Two smaller segments of the roundhouse will be developed in the west quadrant to provide the orientation and information functions necessary for the arriving visitors. The two buildings will be designed to capture the public's interest while allowing views to the turntable and locomotives in the background remnant. The primary media will be a film to introduce the complex story of railroading. The film will relate as many facets of the steam era as possible so that the public may gain a certain level of insight prior to proceeding to the displays of locomotives, cars, artifacts, and other exhibits. A concession operation offering book sales and other railroad-related memorabilia as well as refreshments will also be housed in a portion of one of the smaller roundhouse segments. The National Park Service will work with local entrepreneurs to determine the extent of food services offered on-site. Existing underground service bays and driver drop pits could be used for pedestrian access between the various roundhouse buildings, thus allowing year-round use of the facility in a climate-controlled environment. The existing oil house will be demolished.

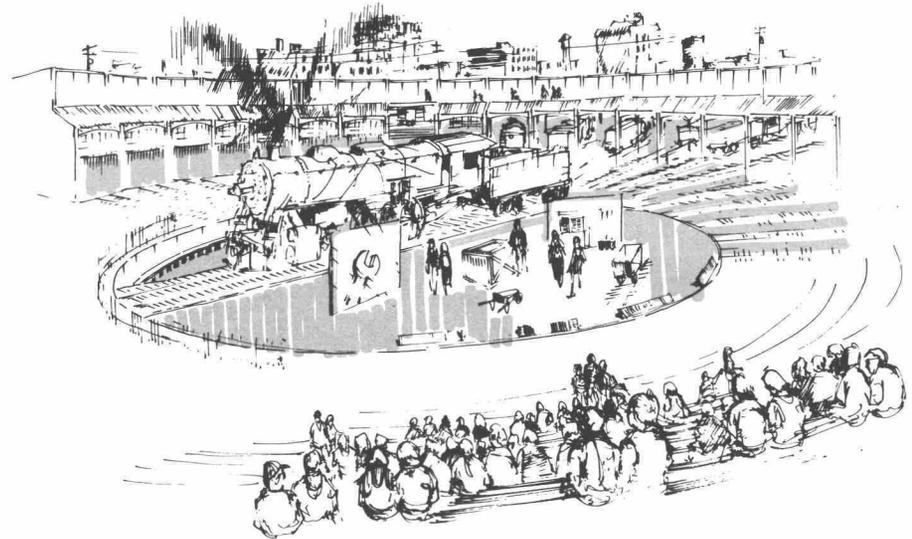
The roundhouse will, of course, surround and embrace the turntable. A new 90-foot turntable will be installed. In addition to providing the operational requirements of turning locomotives, the turntable will be designed to function as an interpretive arena. At designated times of



the day, a steamed-up locomotive will be run onto and turned on the turntable as a demonstration activity. It is envisioned that this dramatic experience will be enhanced by explanations given by on-site interpretive personnel. On other occasions a specially created "Pageant of Steam" will be presented that chronicles the industrial history of the region.

While the railroad theme will always be apparent, this program will celebrate both man and machine where costumed players, gleaming locomotives, and associated machinery will all be staged for the audience. This theater-like setting will also be available for special

events, concerts, and plays. The turntable arena will rarely be inactive. In support of this proposal the south section between the turntable and roundhouse will be developed for amphitheater seating with an audience capacity of approximately 1,000. Every attempt to design the amphitheater seating to complement the industrial surroundings will be explored. If an appropriate solution cannot be achieved, the seating will be designed to be temporary and easily removed. Also, a pedestrian plaza will be developed in the remaining outdoor space surrounding the turntable to allow for small-scale gatherings, interpretive talks, and equipment display.



Design Program

Facility	Treatment	Use	Interpretive Theme
Plaza	New construction	Gathering/meeting space, exhibits	Steam railroad yard "furniture," technology
Reception center and theater	New construction	Reception, film, exhibits, concessioner services, sales, snacks	Steam railroading, railroad history, industrial regional history, people/ethnic groups
Roundhouse	Stabilized/preserved and new construction	Exhibit, engine storage	Steam engines, steam architecture
Turntable	New construction	Locomotive turning, locomotive operating display, narrative lectures, music, plays	Steam engines, technology and lore
Amphitheater	New construction	Engine watching, special events plays and pageants, concerts ballets	Culture of industry themes, labor, folklore, spirit, unions
Underground passages	Rehabilitation, new tunnel	Access to roundhouse, shops, exhibits	Archeology, steam engines, service bays

RAILROAD YARD

Generally, the railroad yard is viewed as a significant resource because it conveys the industrial character of the national historic site. Existing elements of the railroad yard that demonstrate that character such as the sand-drying tower and the switch tower near Bridge 60 will be retained. This intrinsic character will be enhanced through the construction of all the necessary operational components of a steam era railroad yard. These facilities will be constructed directly north of the roundhouse and will include a water tower, a sanding

tower, ash pits, an engine scrubber, and coaling facilities. This location was chosen because of its proximity to the roundhouse. As discussed previously, an operating model of the yard will be available on the mezzanine level of the roundhouse. Therefore, all the operational facilities will be visible from that location. Certain areas of the yard will be used for seasonal display of the collection. Pedestrian walkways will be constructed to encourage safe circulation by visitors throughout the attractions in the yard. The intent is to maintain the yard as an operating yard both for the excursion train and other required access; therefore, certain safety restrictions on visitor use will be built into the design program.



At the site of the existing parking area adjacent to Washington Avenue, a series of transfer platforms will be constructed. Historically, transfer sheds existed on this portion of the Delaware, Lackawanna, and Western Railroad yard, and would therefore contribute to the industrial character of the yard as well as provide a visual backdrop for visitors to the remainder of the yard. This development action is also proposed to provide additional covered storage for pieces of the collection. Since this area would be removed from the mainstream of visitor activities, the transfer sheds will provide protection from the weather for those collection pieces that are not required for permanent display at the roundhouse. While the primary intent is to provide protection from the elements, the transfer sheds will be open for public use.

At the extreme west end of the national historic site near the Cliff Street underpass, a simple shelter will be constructed to serve as the departure point for the excursion train. No attempt will be made to replicate the character of a steam era passenger depot because the Hilton at Lackawanna Station is nearby; however, it should complement the industrial character of the remainder of the site. The location selected is near the main parking area serving the roundhouse and is also close to the state office building parking area, which could be used on weekends. Again, the Cliff Street underpass will be rehabilitated to ensure safe pedestrian access.

Design Program

Facility	Treatment	Use	Interpretive Theme
Yard trackage	Rehabilitation/new construction	Operations/display	Locomotives, cars, and other rolling stock; technology
Coal tipple, water cranes, sanding facility, scales, lights, cinder pit	New construction	Operations	Steam railroad operations
Transfer sheds	New construction	Display/storage	Locomotives, cars, and other rolling stock
Passenger depot	New construction	Staging area	Excursion trips

MAINTENANCE/RESTORATION SHOPS

The *Comprehensive Management Plan* directed that the restoration shops be available for visitor use so that the public could experience ongoing restoration efforts. This project phase endorses that concept and directs the rehabilitation of the maintenance shops to facilitate both operational and visitor use needs. The shops will be brought up to code to ensure a safe working environment for the maintenance staff. Additionally, a second floor overlook will be constructed for public use. The overlook will be designed in conjunction with the roundhouse so that access from that facility will be a fundamental element of pedestrian circulation. The

restoration shop will also function as winter storage and display space for additional pieces of the collection.

The establishment of a railroad restoration school is being pursued by the National Park Service in conjunction with local educational institutions and other community organizations. The school was cited in the *Comprehensive Management Plan* as a desired action that would keep alive the crafts and skills necessary to maintain steam locomotives. Classroom and administrative needs could be provided in either the old stores building or the warehouse building with "lab" and working space in the restoration shop.

Design Program

Facility	Treatment	Use	Interpretive Theme
Maintenance shop	Preservation	Rolling stock restoration/ maintenance demonstration, observation area, related operations, task-trying area	Steam technology, crafts, people, preservation techniques and skills

RAILROAD DEMONSTRATION PARK

Throughout the course of the *Comprehensive Management Plan*, a recurring desire expressed by the public was to develop a hands-on, participatory experience for visitors rather than relying exclusively on a static display of locomotives and equipment. This design program endorses that direction and dedicates the area between the old stores building and the sand-drying tower for these uses. The intent is to capitalize on a rail theme exploratorium park that would be designed to complement the remainder of the site. Possible uses include animated activities such as operating handcars, shoveling coal into a firebox, making up scaled-down trains, etc. While many of these activities will be seasonal in nature, rehabilitation of the

old stores building will be undertaken to provide space for similar activities on a year-round basis. This building could house model train displays, programs of story-telling, artist spaces, etc. In any event, this 5-acre portion of the site will be evaluated to refine these possibilities. The program further suggests that the site have a flexibility of design so that it can also accommodate a variety of special functions such as ethnic festivals and celebrations. The specific program directs the retention of the sand-drying tower. The old stores building will be evaluated to determine its suitability for future uses. A parking area off Washington Avenue will be explored. This area will serve overflow uses for special events and is also intended to provide any parking needs associated with the eventual use of the warehouse building.

Design Program

Facility	Treatment	Use	Interpretive Theme
Demonstration park	New construction	Hands-on visitor use	Railroad art and culture
Sand-drying tower	Preservation	Operations	Steam railroad operations
Old stores building	Preservation/rehabilitation	Rail-related activities, classrooms	Railroad art and culture

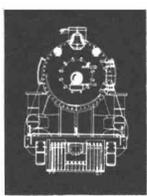
SUPPORT FACILITIES AND ADMINISTRATIVE NEEDS

To facilitate administration of the site, enhance day use possibilities, and ensure linkage with a larger heritage park proposal, a variety of other development proposals are recommended. The *Comprehensive Management Plan* recognized the need for a significant amount of space for the storage of small-scale equipment, a library, an archives, and a staff office. The intent of this plan is to rehabilitate the office and warehouse building on the southeast corner of the site. For the immediate future this building will house the administrative, storage, library, and archival needs of Steamtown National Historic Site. In the long term the National Park Service will explore the possibility of shifting the management functions to the former silk mill west of Cliff Street. Because most of the visitor activities will be at the roundhouse and turntable, the silk mill may offer a more efficient operation because of its proximity. Establishing a headquarters at the former silk mill would also depend on other needs arising in the future. If, for example, a railroad restoration school required office or classroom space, the office and warehouse building would prove ideal. In any event, once the spatial requirements necessary to support the national historic site's overall operation are more clearly understood, the National Park Service will make a final decision.

A second major consideration that influenced the site plan is the urban context of the national historic site. By virtue of its setting within downtown Scranton and adjacent to the proposed downtown mall, additional entrances and connections are appropriate. An overhead pedestrian bridge connecting the mall with the national historic site will be constructed. In addition to

providing convenient access, the bridge will also provide an intriguing platform from which visitors can view the operating railroad yard. Since the pedestrian bridge will provide access from the national historic site to the proposed mall, arrangements will be sought to share development costs with the developer. Access from downtown will be upgraded for local users by developing better pedestrian access by way of South Washington Avenue. The existing fencing along South Washington Avenue will be retained and rehabilitated.

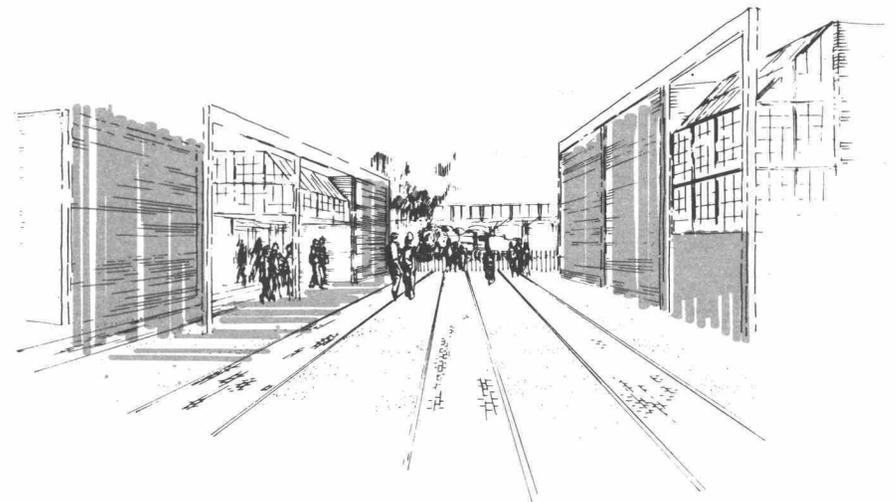
A heritage park study for Lackawanna Valley – supported by the commonwealth and local government and citizens groups – has received funding. This design program attempts to link the national historic site with adjacent resources such as the historic iron furnaces (a state historic site), the proposed Lackawanna Greenway, Nay Aug Park, and with downtown Scranton. One development action involves the construction of a promenade along the north boundary over the South Washington Avenue Bridge to the Iron Furnace State Park and the Hilton at Lackawanna Station. A second action will be to landscape the south edge of the site and provide overlooks to the Lackawanna River and views to the residential sections of Scranton. This space will also offer picnicking in the landscaped setting. A pedestrian walkway will be constructed to facilitate these uses and views along the south edge of the site.



IMPLEMENTATION STRATEGY, PROJECT PHASES, AND COST ESTIMATE

Implementation of the planned development for Steamtown National Historic Site will result in an elegant blending of a railroad museum and a celebration of the region's industrial heritage. The program elements have been planned in phases in order to make the park operational as quickly as possible. The rationale behind the phases is simple--the primary resource is the collection and the fundamental experience is the interpretation of that resource. Therefore, the parking/arrival elements, the reception center/theater, the turntable, and the roundhouse will receive the initial emphasis. Once these facilities were completed, visitors could be welcomed into a year-round, climate-controlled environment while the remainder of the site was under construction. The second phase will involve the rehabilitation of the maintenance/restoration shop and construction of the transfer table. The elements directed for construction in the railroad yard, including the transfer sheds and the passenger depot, will constitute the third phase. The railroad demonstration park and the facilities necessary to support administration of the site could be undertaken at anytime. However, the storage spaces and archival requirements could prove critical for resource protection reasons. Those developments suggested to link the site to a larger heritage park or the proposed Lackawanna Avenue mall will ideally be undertaken in concert with the others involved.

The cost estimate reflects the implementation strategy and estimates the costs for those items that are projected for immediate construction. For those actions that can be deferred, must await other developments, or for which definitive recommendations are not available, a cost estimate has not been developed.



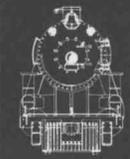
Cost Estimate

Program Element	Cost
I. Entry, Arrival, and Parking	
Entrance signs with fencing	\$ 57,000
Parking, 380 cars/10 buses	FHWA
Access Road"Bridge Street, 1/2 mile	FHWA
Overhead crane	19,000
Dickson buildings demolition	380,000
Subtotal	\$ 456,000
II. Roundhouse and Turntable	
Roundhouse	
New construction, 39,000 sq ft	5,767,000
Stabilization remnant, 25,000 sq ft	2,350,000
Exhibits/signs	7,410,000
Turntable, 90 ft diameter	
New construction/stabilization	470,000
Exhibits/signs/waysides	285,000
Theater, 7,500 sq ft	
New construction	1,021,000
Audiovisual/exhibits	2,375,000
Reception center, 7,500 sq ft	
New construction	926,000
Exhibits/signs	427,000
Plaza with amphitheater seating, 30,000 sq ft	
	855,000
Subtotal	\$21,886,000
III. Maintenance and Restoration Shop	
Maintenance building, 74,000 sq ft	7,514,000
Exhibits/waysides/signs	950,000
Subtotal	\$8,464,000

Program Element	Cost
IV. Railroad Yard	
Yard rehabilitation, 15 acres	4,940,000
Passenger depot, 1,000 sq ft	76,000
Coal tipple	152,000
Sanding facility	152,000
Water tower	92,000
Related facilities	475,000
Cinder pit	366,000
Transfer sheds, 1,200 ln ft	910,000
Switch tower	238,000
Cliff Street underpass	FHWA
Subtotal	\$7,401,000
V. Railroad Demonstration Park	
Parking (Washington St.), 50 cars	FHWA
Demonstration park, 3 acres	1,520,000
Exhibits/waysides/signs	95,000
Stores building, 30,000 sq ft	4,560,000
Maintenance-of-way building, 18,000 sq ft	190,000
Subtotal	\$6,365,000
VI. Support Facilities/Administrative Needs	
Warehouse building, 45,000 sq ft	4,589,000
Landscaping/site development, 30 acres	760,000
Pedestrian ways	505,000
Mall connection, 300 ln ft	1,843,000
Bridge 60/wye	FHWA
Subtotal	\$7,697,000

TOTAL NPS DEVELOPMENT

\$52,269,000



SUMMARY

In planning for the national historic site and the preparation of this *Design Program/Interpretive Concept*, the intent has been to achieve the following:

To honor, both architecturally and experientially, the steam era of railroading.

To remain true to the legislative intent for Steamtown.

To explore and facilitate a visitor experience that differs from all other "rail museums."

To provide for an adaptive site that allows for a changing program of interpretation and use.

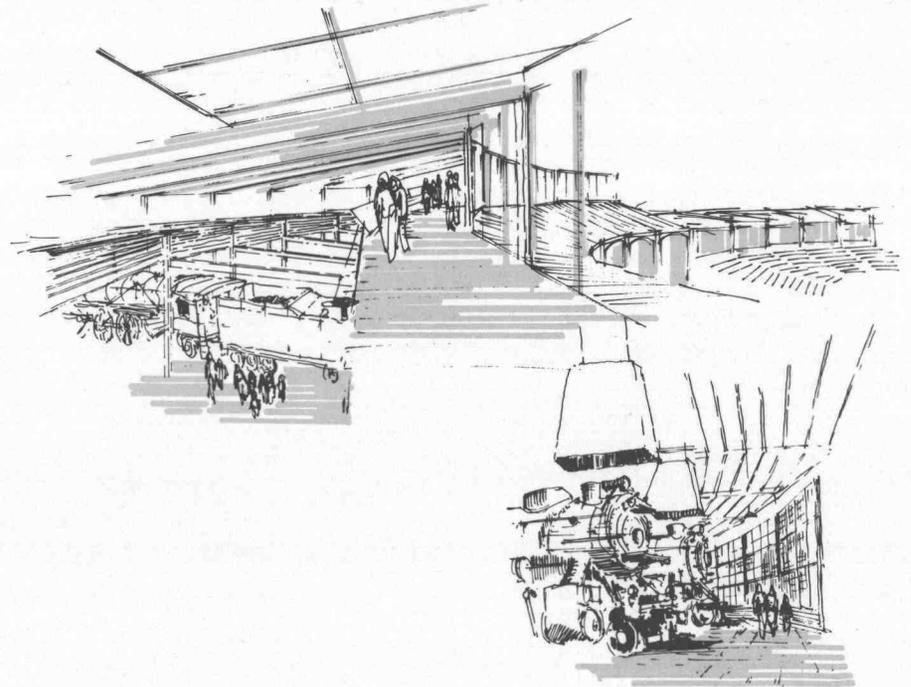
To recognize the site's urban context and encourage local use as well as regional and national use.

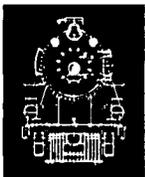
To integrate well with the proposed Lackawanna Avenue mall in both design aspects and use patterns.

To allow for the flexibility to link the site to almost any heritage park and Lackawanna River proposals that may be forthcoming.

To account for seasonal uses by facilitating both summer and winter patterns of use.

To plan construction of overall development package in phases.





PROJECT PARTICIPANTS

Denver Service Center

Bill Koning – Team Captain
Bob Pilk – Landscape Architect
John Ochsner – Landscape Architect
Dennis Piper – Landscape Architect
Mike Bureman – Cultural Resources Specialist
Berle Clemensen – Historian
Ray Borrás – Estimator

Leung, Hemmler, Camayd

Alex Camayd – Architect
Jim Rogers – Architect
Richard Leonori – Architect
Larry Malski – Railroad Expert
Jim Kane – Architect

Steamtown National Historic Site

John Latschar – Superintendent
Calvin Hite – Chief of Interpretation

Barry Howard Associates

Barry Howard – Interpretive Planner

Mid-Atlantic Regional Office

Deirdre Gibson – Landscape Architect

Harpers Ferry Center

Cliff Soubler – Interpretive Planner

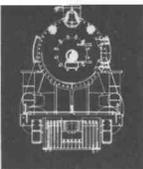
Applied Archeology Center

Paula Zitzler – Archeologist



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics and editorial staffs of the Denver Service Center.
NPS D- 17 August 1989



STEAMTOWN

NATIONAL HISTORIC SITE • PENNSYLVANIA

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

