

IMPERIAL SUGAR CHAR HOUSE

HISTORICAL SIGNIFICANCE & MOTHBALLING GOALS

ABOUT THE BUILDING:

- SERVES AS THE PRIMARY IDENTITY OF SUGAR LAND
- TOWERS OVER THE ENTIRE SITE & A CITY BEACON
- WITHIN "THE IMPERIAL SUGAR COMPANY REFINERY HISTORIC DISTRICT" ON THE NATIONAL REGISTER OF HISTORIC PLACES
- SERVED AS "THE HUB FOR THE REFINERY DURING ITS LIFESPAN AS THE KEY BUILDING FOR THE SUGAR REFINING PROCESS."(NPS)
- AREA OF SIGNIFICANCE IS "INDUSTRY"
- PERIOD OF SIGNIFICANCE IS 1923 - 1967

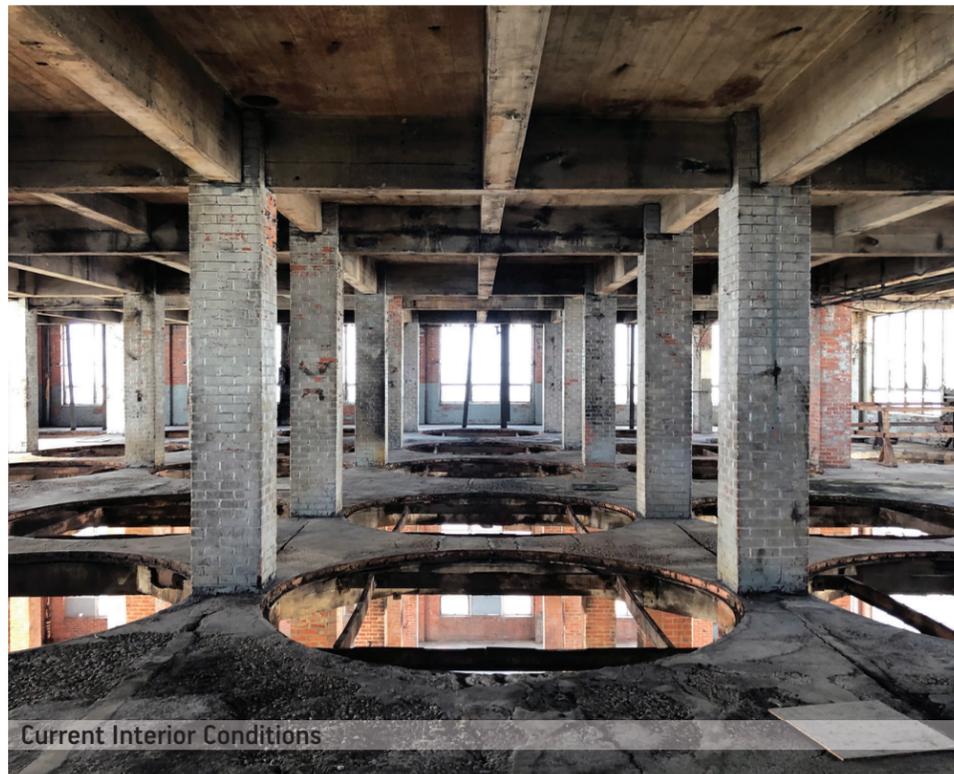
GUIDELINES TO MOTHBALL A HISTORIC BUILDING PER THE NATIONAL PARK SERVICE & GENERAL SERVICES ADMINISTRATION STANDARDS:

- 1. DOCUMENTATION OF ARCHITECTURAL AND HISTORICAL SIGNIFICANCE
- 2. PREPARE A CONDITION ASSESSMENT
- 3. STRUCTURALLY STABILIZE THE BUILDING
- 4. EXTERMINATE OR CONTROL PESTS
- 5. PROTECT THE EXTERIOR FROM MOISTURE PENETRATION
- 6. SECURE THE BUILDING TO REDUCE VANDALISM OR BREAK-INS
- 7. PROVIDE ADEQUATE VENTILATION TO THE INTERIOR
- 8. SECURE OR MODIFY UTILITIES AND MECHANICAL SYSTEMS
- 9. CLEANING, MAINTENANCE, AND MONITORING PLAN

Completed



Current Exterior Conditions



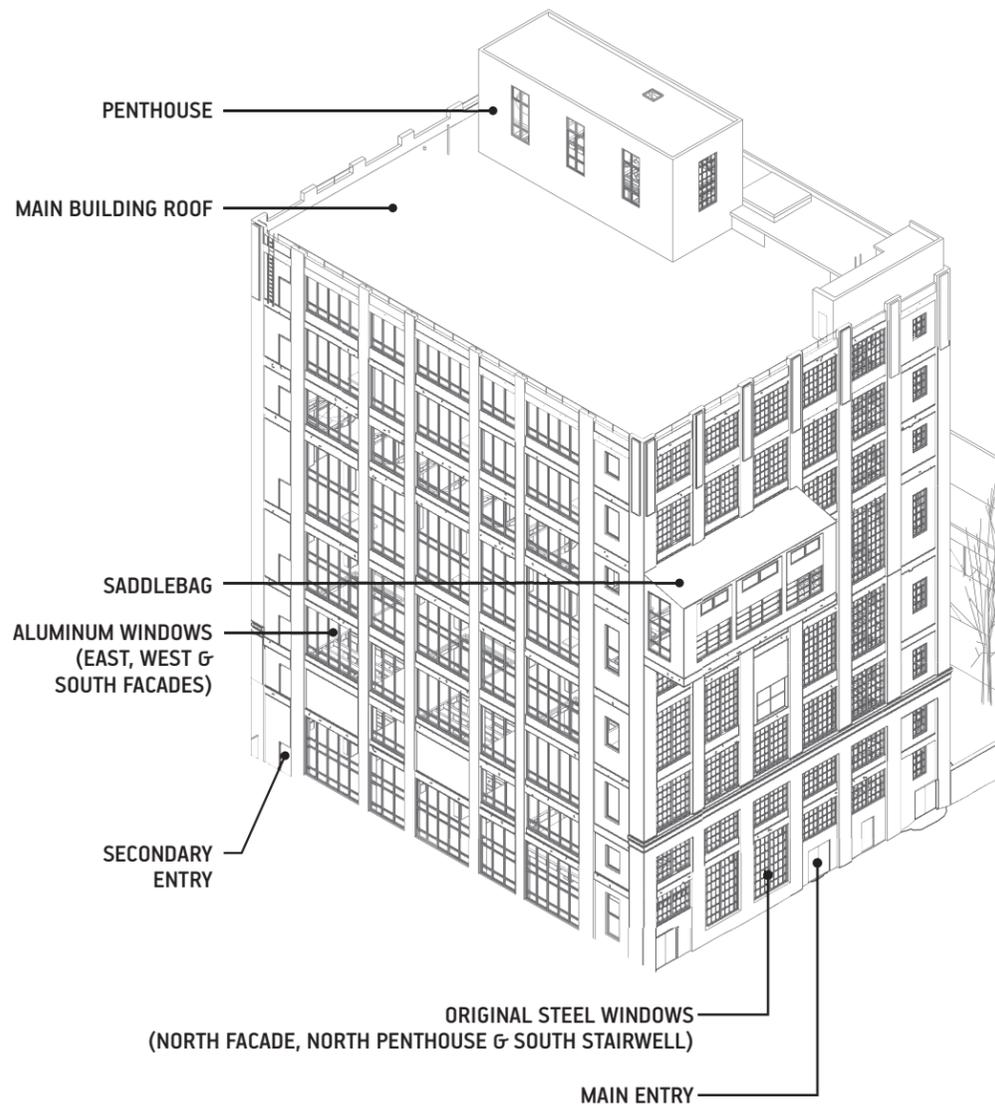
Current Interior Conditions



Example of Proposed Polycarbonate Protective Glazing

IMPERIAL SUGAR CHAR HOUSE

SUMMARY OF PROPOSED MOTHBALLING WORK AND RECOMMENDED TIME FRAME FOR IMPLEMENTATION



IMMEDIATE

- 3. STRUCTURALLY STABILIZE THE BUILDING**
 - Selective Repairs at Structural Steel Beams at Penthouse & Saddlebag
 - Selective Masonry Crack Injection
 - Selective Lintel & Brick Replacement
 - Repair Steel at (2) Exterior Signage
- 4. EXTERMINATE OR CONTROL PESTS**
 - Termite Investigation & Extermination
- 5. PROTECT THE EXTERIOR FROM MOISTURE PENETRATION**
 - Temporary Main Roof, Penthouse & Saddlebag
 - Temporary Parapets & Sheet Metal Flashing
 - New Roof Drains, Secondary Drains & Piping
 - New Protective Polycarbonate Glazing at First Floor (All Sides) & All Steel Windows
 - Replace Broken Glazing At Upper Levels & Minor Aluminum Repairs
 - Joint Protection (All windows, doors & equipment)
 - Infill Exterior Openings at Existing Plywood Locations (First Floor & Bridge)
 - Replace Metal Louver With Metal Panel at Saddlebag
 - High Performance Coatings at Selective Steel Lintels
- 6. SECURE THE BUILDING TO REDUCE VANDALISM OR BREAK-INS**
 - (2) New Exterior Doors & (1) Interior Door
 - Solar-powered Security System
- 7. PROVIDE ADEQUATE VENTILATION TO THE INTERIOR**
 - Limited Fans, Louvers, Dampers & Controls
 - New Electrical Service to Support Ventilation Requirements
- 8. SECURE OR MODIFY UTILITIES AND MECHANICAL SYSTEMS**
 - None
- 9. CLEANING, MAINTENANCE, AND MONITORING PLAN**
 - General Cleaning Throughout
 - Maintenance Plan
 - Fire Protection: Exit Signs & Fire Extinguishers
 - Protective Barricades at All Floors, Safety Signage & Lightning Protection
- PROJECT REQUIREMENTS:**
 - Hazardous Material Remediation (Limited to Areas of Scope of Work)
 - Temporary Fire Alarm & Detection System
 - General Requirements & General Conditions
 - Contractor, Architectural & Engineering Fees
 - Insurances

TOTAL IMMEDIATE COST: \$2,587,677.82

5-10 YEARS

- 2. PREPARE A CONDITION ASSESSMENT**
 - If Building to Remain Unoccupied
- 3. STRUCTURALLY STABILIZE THE BUILDING**
 - Reconstruct Concrete Roof Deck at Main Building
 - Reconstruct Concrete Roof Deck at Penthouse & Saddlebag
 - Selective Repair to Deteriorated Slabs
 - Selective Repair at Concrete Stair Treads
 - Select Masonry Pointing Throughout (Exterior & Interior)
- 4. EXTERMINATE OR CONTROL PESTS**
 - None
- 5. PROTECT THE EXTERIOR FROM MOISTURE PENETRATION**
 - Storm Drainage
 - New Permanent Main Roof, Penthouse & Saddlebag
 - New Parapets & Sheet Metal Flashing
 - Restore All Steel Windows at North Facade
 - Replace Broken Glazing As Required
 - Selective Repairs at Aluminum Windows As Required
 - High Performance Coatings at Exposed Steel, Parapet Railing, Selective Steel Lintels
- 6. SECURE THE BUILDING TO REDUCE VANDALISM OR BREAK-INS**
 - Access Control & Security System
- 7. PROVIDE ADEQUATE VENTILATION TO THE INTERIOR**
 - Reassess During Condition Assessment If Building to Remain Unoccupied
- 8. SECURE OR MODIFY UTILITIES AND MECHANICAL SYSTEMS**
 - Re-Assess During Condition Assessment If Building to Remain Unoccupied
- 9. CLEANING, MAINTENANCE, AND MONITORING PLAN**
 - Cleaning Throughout (Includes Masonry & Concrete)
 - Maintenance Plan
- PROJECT REQUIREMENTS:**
 - Hazardous Material Remediation (Limited to Areas of Scope of Work)
 - General Requirements & General Conditions
 - Contractor, Architectural & Engineering Fees
 - Insurances

TOTAL 5-10 YEAR COST: \$5,099,077.97

TOTAL COMBINED: \$7,686,755.79

IMMEDIATE	5-10 YEARS	LEACH	DPR
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TOTALS

Estimated Construction Total	\$1,790,780.50	\$3,528,773.68	\$1,272,263.91	\$1,236,489.00
Estimated Contingency	\$358,156.10	\$705,754.74	\$63,613.00	\$37,095.00
Estimated Contractor Fees	\$223,847.56	\$441,096.71	\$63,613.00	\$69,096.00
Estimated Architecture & Engineering Fees	\$214,893.66	\$423,452.84	\$120,000.00	\$120,000.00
Estimated Total Project	\$2,587,677.82	\$5,099,077.97	\$1,519,489.91	\$1,501,930.00

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
GENERAL REQUIREMENTS	General Conditions	\$142,962.00	\$228,600.00
	Project Manager	\$12,060.00	\$18,000.00
	Superintendent	\$18,090.00	\$27,000.00
	Superintendent Truck	\$2,010.00	\$3,000.00
	Superintendent Expenses	\$3,015.00	\$4,500.00
	Daily Laborers (2)	\$16,080.00	\$24,000.00
	Testing Laboratory		
	Hazardous Materials: Asbestos, Lead-based Paint	\$1,675.00	\$2,500.00
	Construction Temporary Facilities		
	Jobsite Expenses (Trailer, Utilities, Small Tools, etc.)	\$10,050.00	\$15,000.00
	Security Fencing	\$2,010.00	\$3,000.00
	Special Equipment Rental	\$6,030.00	\$9,000.00
	Dumpster Rental	\$2,010.00	\$3,000.00
	Dumpster Dump Fees	\$7,236.00	\$10,800.00
	Initial and Weekly Cleaning	\$19,296.00	\$28,800.00
	Final Cleaning	\$13,400.00	\$20,000.00
4-Month project duration			

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
EXISTING CONDITIONS	Building Demolition (Excludes Abatement)	\$378,749.00	\$495,373.40
	Remove Roof Concrete Deck Penthouse & Saddlebag	\$6,280.00	\$0.00
	Shoring and Bracing	\$55,590.00	\$55,590.00
	Remove Bridge Plywood at Previous Opening	\$650.00	\$0.00
	Remove all Plywood at Windows, First Floor	\$6,764.00	\$0.00
	Demo Existing Roof Penthouse & Saddlebag	\$3,140.00	\$0.00
	Remove Roof Concrete Deck at Main Roof	\$0.00	\$30,488.00
	Remove Concrete Fireproofing at Steel Beams at Main Roof	\$0.00	\$14,742.40
	Demo Existing Roof at Main Roof	\$0.00	\$15,244.00
	Site Clearing		
	Site and Tree Protection	\$5,000.00	\$5,000.00
	Pump Water at First Floor Sump Pits	\$1,000.00	\$1,000.00
	Termite Control		
	Termite Investigation & Extermination	\$5,000.00	\$5,000.00
	Storm Drainage		
	Erosion Control	\$0.00	\$5,000.00
	Catch Basin	\$0.00	\$5,400.00
	Backflow Preventer	\$0.00	\$30,000.00
	Storm Sewer Piping	\$0.00	\$40,000.00
	Area Drains	\$0.00	\$4,000.00
	Site Restoration and Rehabilitation		
	Prune Trees	\$900.00	\$900.00
	Exterior Scaffolding (One Side at a Time)	\$262,225.00	\$262,225.00
Interior Scaffolding	\$5,000.00	\$10,000.00	
Security Fencing, Two Rows	\$27,200.00	\$0.00	
Site Restoration and Rehabilitation - Alternative			
Interior - Graffiti Removal and Cleaning at Masonry and Concrete	\$0.00	\$10,784.00	

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
CONCRETE	Concrete Work	\$0.00	\$1,059,438.00
	Cleaning, Minor Repair & Sealing	\$0.00	\$286,380.00
	Reconstruct Concrete Roof Deck - Penthouse & Saddlebag	\$0.00	\$102,050.00
	Selective Repairs at Concrete Stair Treads	\$0.00	\$3,750.00
	Selective Repair to Deteriorated Slabs	\$0.00	\$171,828.00
	Reconstruct Concrete Roof Deck - Main Roof	\$0.00	\$495,430.00
MASONRY	Masonry Restoration	\$206,575.00	\$561,480.00
	Exterior - Inject Cracks	\$15,000.00	\$0.00
	Exterior - Selective Replacement of Lintels	\$68,600.00	\$0.00
	Exterior - Selective Replacement of Brick Units	\$110,400.00	\$0.00
	Interior - Inject Cracks	\$12,000.00	\$0.00
	Exterior - Brick & Concrete Cleaning	\$0.00	\$153,615.00
	Exterior - Select Pointing	\$0.00	\$20,000.00
	Interior - Brick Cleaning	\$0.00	\$314,265.00
	Interior - Selective Replacement of Brick Units	\$0.00	\$73,600.00
	New Masonry		
	Infill Exterior Openings - Colored Concrete Block	\$575.00	\$0.00
METALS	Metals	\$50,640.00	\$25,000.00
	Repair Structural Steel Beams at Penthouse	\$0.00	\$5,000.00
	Repair Structural Steel Beams at Saddlebag	\$0.00	\$5,000.00
	Repair Steel at Exterior Signage (2 Sides)	\$30,000.00	\$0.00
	Replace Metal Louver With Metal Panel at Saddlebag	\$640.00	\$0.00
	Metal Decking for Penthouse & Saddlebag Roof	\$10,000.00	\$0.00
	Metals		
	Repair Structural Steel Beams At Main Roof Deck	\$0.00	\$15,000.00
	Selective Repairs at Steel Stairs at Penthouse	\$5,000.00	\$0.00
Selective Repairs at Steel Stairs at Saddlebag	\$5,000.00	\$0.00	

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
WOOD & PLASTICS	Wood & Plastics	\$45,960.00	\$325,760.00
	Temporary plywood roof deck: Main Roof	\$45,960.00	\$0.00
THERMAL & MOISTURE PROTECTION	New Roof	\$176,370.00	\$325,760.00
	Temporary Main Roof - 45 mil PVC Single Ply Roof With Plywood Roof Deck	\$45,960.00	\$0.00
	Temporary Penthouse & Saddlebag - 45 mil PVC Single Ply Roof	\$7,850.00	\$0.00
	Roof Hatch and Access Ladder at Penthouse	\$0.00	\$2,500.00
	Main Roof (new) - Sarnafil 60 mil w/ R-25 Rigid Insulation	\$0.00	\$228,660.00
	Penthouse & Saddlebag - Sarnafil 60 mil w/ R-25 Rigid Insulation	\$0.00	\$47,100.00
	Temporary Parapets	\$25,000.00	\$0.00
	Parapets: Sarnafil 60 mil	\$0.00	\$37,500.00
	Sheet Metal Flashing and Trim		
	Sheet Metal Flashing	\$10,000.00	\$10,000.00
	Joint Protection		
Joint Sealers (Exterior Windows, Doors & MEP)	\$87,560.00	\$0.00	

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
OPENINGS	Doors	\$424,685.50	\$492,445.50
	New Exterior Hollow Metal Double Doors, Frames & Hardware	\$2,000.00	\$0.00
	New Exterior Single Door, Frame & Hardware	\$3,000.00	\$0.00
	New Interior Hollow Metal Single Door, Frame & Hardware	\$500.00	\$0.00
	Window Restoration and Replacement		
	Restore All Steel Windows	\$0.00	\$395,400.00
	Repair Aluminum Window Frames to Weather-tight	\$47,045.50	\$47,045.50
	Repair Aluminum Window Frames to Weather-tight at Saddlebag	\$1,850.00	\$0.00
	New Aluminum Window at Bridge Opening	\$3,575.00	\$0.00
	Metal Louvers (5,000 SF)	\$50,000.00	\$0.00
	Glazing		
	Replace Broken Glazing (1/4" thick)	\$147,615.00	\$50,000.00
Plastic Glazing - Alternate			
Protective Glazing at First Floor & All Steel Windows	\$169,100.00	\$0.00	
FINISHES	Coatings & Painting	\$2,744.00	\$42,752.78
	High Performance Coatings for Exposed Steel	\$0.00	\$39,258.78
	High Performance Coatings for Parapet Railing	\$0.00	\$750.00
	Painting of Selective Steel Lintels	\$2,744.00	\$2,744.00
SPECIALTIES	Signage	\$17,400.00	\$0.00
	Exit Signs	\$11,000.00	\$0.00
	Fire Protection Specialties		
Fire Extinguishers, Cabinets and Accessories	\$6,400.00	\$0.00	
EQUIPMENT	(No work)		
FURNISHINGS	(No work)		

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
SPECIAL CONSTRUCTION	Lightning Protection	\$164,674.00	\$0.00
	Lightning Protection	\$50,000.00	\$0.00
	Hazardous Material Remediation		
	Project Coordination and Oversight (90 Days Assumed)	\$45,000.00	\$0.00
	Remediation (Roof Only)	\$49,045.00	\$0.00
	Protective Barricades		
	Protective Barricades	\$7,429.00	\$0.00
	Safety Signage (4'x8', 2 per Floor)	\$3,200.00	\$0.00
	Solar-Operated Security Cameras	\$10,000.00	\$0.00
CONVEYING SYSTEMS	(No Work)		
PLUMBING	Plumbing	\$109,596.00	\$500.00
	Roof & Secondary Drains	\$14,600.00	\$0.00
	Piping	\$94,996.00	\$0.00
	Disconnect Fire Water Service	\$0.00	\$500.00
HEATING, VENTILATING AND AIR CONDITIONING	Mechanical Ventilation - Base	\$0.00	\$183,280.00
	Fans (2 large, 5 medium, 1 ventset)	\$0.00	\$40,000.00
	Louvers (32"x59")	\$0.00	\$5,200.00
	Louvers (45"x82")	\$0.00	\$12,600.00
	Louvers (32"x20")	\$0.00	\$24,480.00
	Motorized Dampers (Single & Multi-Section)	\$0.00	\$40,000.00
	Damper Actuators (Electronic)	\$0.00	\$18,000.00
	Misc. Ductwork, Plenums & Related	\$0.00	\$26,000.00
	Controls (Controller, 2xT-stats & Programing)	\$0.00	\$2,000.00
	Controls (2xH-stat and Additional Programing)	\$0.00	\$6,000.00
	Controls (Relays and Misc.)	\$0.00	\$9,000.00
	Fans (2 large) w/ dampers and controls	\$40,000.00	\$0.00

CSI DIVISION NAME	SCOPE OF WORK	IMMEDIATE	5-10 YEARS
ELECTRICAL	Electrical System	\$70,425.00	\$114,144.00
	New Electrical Service to Support Immediate Work	\$50,000.00	\$0.00
	Service Conduit & Feeders	\$0.00	\$4,800.00
	Electrical Panels	\$0.00	\$20,250.00
	Distribution Conduit & Feeders	\$0.00	\$3,870.00
	Transformer	\$0.00	\$9,450.00
	Distribution Conduit & Feeders	\$0.00	\$387.00
	Power for Ventilation Fans	\$0.00	\$3,431.00
	Power for Controls	\$0.00	\$318.00
	Power for Controls (Humidistat/Enthalpy)	\$0.00	\$2,222.00
	Branch Conduit & feeders	\$0.00	\$4,196.00
	General/Convenience Power (Including Conduit/Feeders)	\$0.00	\$5,000.00
	General Lighting (as Required)	\$0.00	\$10,000.00
	Emergency Lighting (as Required)	\$0.00	\$5,000.00
	Exit Signs	\$0.00	\$1,120.00
	Interior Lighting Controls	\$0.00	\$5,000.00

IMMEDIATE	5-10 YEARS
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TOTALS

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