

Rec'd DSC-TEA
(Construction)

AUG 26 1994

D-190

COMPLETION REPORT

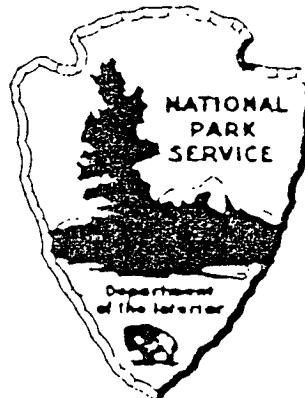
WORK ORDER NO. IFB HAFE 285 PT26

Building No. 38 Stabilization/Preservation &
Building No. 40 Restoration/Rehabilitation
(work order title)

HARPERS FERRY NATIONAL HISTORICAL PARK

PARK GENERAL, HARPERS FERRY, W. VA.

CONTRACT NO. CX300099001



PLEASE RETURN TO:

TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE

ON MICROSTRIP

NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

FACE SHEET FOR COMPLETION REPORT

Form 10-174 (June 1962)		UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE		Work Order No. IFB HAFE 285 - 26	
FACE SHEET FOR COMPLETION REPORT				Fund Symbol	
Park HARPERS FERRY NAT'L HISTORICAL PARK		Region NCR		Year Programmed 1988	
Location in Park LOWER TOWN, BLDGS. 38/40		State(s) W. VA.		PCP No.	
		County or Counties		Master Plan No. 385-25-019A	
☒ Contract and/or ☐ Day Labor				Master Plan Corrected By	
Work Order Title Building No. 38, Stabilization/Preservation Building No. 40 Restoration/Rehabilitation				As Built Drawings By Contractor & H.F. Glifort, Proj. Supr.	
				Date Started August 14, 1989	
				Date Completed March 14, 1991	
DESCRIPTION OF FIXED ASSETS (For completion by employee in charge of project)				TOTAL COSTS (For completion by FFO)	
215-1 Historic Buildings				\$660,594.35	
TOTAL				\$	

DISTRIBUTION		THE FIXED ASSET DESCRIBED ABOVE HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED DRAWINGS, SPECIFICATIONS, AND AUTHORIZED CHANGES	
No.	To		
		Submitted	Title: _____ Date: _____
		By: _____	_____
		Approved	Title: _____ Date: _____
		By: _____	_____
		COSTS VERIFIED	Title: _____ Date: _____
		BY _____	_____

10-174A
1. 1963)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Work Order Number

IFB HAFE 285 PT 26

Fund Symbol

COMPOSITION OF COST FOR COMPLETION REPORT

Park

HARPERS FERRY NAT'L HISTORICAL PARK

Region

NCR

Year Programmed

1988

Location in Park

Lower Town, Buildings Nos. 38/40

Work Order Title

Building No. 38 Stabilization/Preservation and
Building No. 40 Restoration/Rehabilitation

COMPOSITION OF COST

COSTS CHARGED TO FUNDS ALLOTTED TO FIELD FINANCE OFFICE

- (1) Personal Services.....
- (2) Travel.....
- (3) Contract Work.....
- (4) Supplies and Materials.....
- (5) Other Direct Expenses.....
- (6) Operation of Equipment.....
- (7) Depreciation of Equipment.....
- (8) Purchase of Construction Equipment.....
- (9) Purchase of Other Accountable Equipment.....
- (10) Other Costs

\$

660,594.35

(11) TOTAL COST CHARGED TO FFO FUNDS.....

xxxxxxxxxxxxxx

\$

LESS:

- (12) Residual Value of Construction Equipment on Line 8.....
- (13) Value of Other Accountable Equipment on Line 9.....
- (14) Other Credits.....

\$

(15) FFO FUNDS CHARGED TO CONSTRUCTION PROJECT.....

xxxxxxxxxxxxxx

\$

OTHER COSTS:

- (16) Non-Fund Costs (Includes "free inventory," donated materials, etc.)..
- (17) ON-SITE CONSTRUCTION COSTS.....
- (18) PS&S, AP, and/or Facilitating Services at ___% of Line 17.....
- (19) TOTAL CONSTRUCTION COSTS
- (20) Equipment Included on Lines 12 and 13.....
- (21) Line 14 Credits.....
- (22) GROSS WORK ORDER COSTS.....

\$

\$

justify other costs and other credits by line item entry, on an attached schedule, or explain in narrative.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Harpers Ferry National Historical Park
(Park)

Check One:

Monthly
Estimate

☐

Final
Estimate

☒

Accepted: March 14, 1991 UNIT PRICE CONTRACT

ESTIMATE NO. Twenty-One (21)	FOR (Period) Supplemental	DATE FEB 19 1993
CONTRACT NO. CX-3000-9-9001	COMPLETION DATE August 13, 1990	EXTENDED DATE March 23, 1991
CONTRACTOR Callas Contractors, Inc., P.O. Box 888, Hagerstown, MD 21741		ORIGINAL CONTRACT \$486,336.00
PROJECT Park General, Building 38 Stabilization/Preservation and Building 40 Restoration/Rehabilitation		CHANGE ORDERS* 12\$174,258.35
LOCATION Jefferson County, West Virginia		TOTAL CONTRACT \$660,594.35

ITEM NO.	CONTRACT QUANTITY	DESCRIPTION	QUANTITY TO DATE	UNIT PRICE	AMOUNT TO DATE
1.	450 SF	Replace Deteriorated Brick North Side of Building 38	450	11.00	4,950.00
2.	LS	All Other Work	100%	648,600.35	648,600.35
3.	LS	Extended Home Office Overhead	100%	7,044.	7,044.00

RECOMMENDED (Project Supervisor)

for Clifford W. Blackstone
Howard F. Glifort

APPROVED (Contracting Officer)

Judy A. Hansen

DATE

2/19/93

SUMMARY

TOTAL TO DATE	\$ 660,594.35
LESS RETAINED AMOUNT.....	0.00
NET.....	660,594.35
LESS PREVIOUS PAYMENTS.....	650,395.35
LESS LIQUIDATED DAMAGES.....	0.00
DUE THIS ESTIMATE.....	10,199.00
% COMPLETED TO DATE: 100%	

Stabilization and Preservation of Building No. 38 and Restoration and Rehabilitation of Building No. 40.

Work Order No. IFB, HAFE-285, Pt. 21

Description of the Work: Consists of exterior and interior restoration, rehabilitation and stabilization work, renovation of the electrical systems and installation of HVAC Systems. There is site work including a new wood porch, guard rails, bridges and a steel support frame. There is minor electrical/telephone and stucco repairs on Building No. 39, adjacent. Removing the deteriorated brick on the north wall of Building No. 38 and replacing it with new brick.

Plans and Specifications: were prepared by Geier, Brown, Renfrow Architects and the Denver Service Center, Falls Church, Virginia Design Office.

As Constructed Drawings: were completed by the Contractor and H. F. Glifort, Project Supervisor and forwarded to the Denver Service Center.

Project Activities: Preliminary surveys were made by the Denver Service Center, Falls Church Design Team and Geier, Brown, Renfrow, Architects and McMullan & Associates, Structural Engineers.

Construction Layout: was made by the Callas Contractors, Incorporated on-site Supervisor, Mr. Richard Toms.

Four (4) bids were received and opened May 17, 1989.

Award of Contract: No. CX 3000-9-9001 was made to Callas Contractors Incorporated, P. O. Box 888, Hagerstown, Maryland 21741-0888 and was issued on June 6, 1989 for the amount of \$486,336.00.

Notice to Proceed: was issued on August 4, 1989 and the date of August 14, 1989 was established as the first day of the contract.

Construction Work Consisting of: mobilization of office equipment, materials, tools and erection of safety and protection barriers started on August 14, 1989. The actual construction work included minor demolition and removal work of salvaged materials, concrete, masonry walls, stucco, structural steel, metal grating, metal duct work, wood shingle roofing, hardware, interior finishes, plastering and sheetrock (drywall), furnishings including plumbing, heating, ventilating, air conditioning, fire protection, electrical systems and lighting. The work under this contract was of the ordinary standard techniques and methods of construction with nothing unusual.

There were no stop orders issued during the construction project.

There were four (4) time extensions granted for a total of two hundred and twenty two (222) days extending the contract time to March 23, 1991 totaling the contract time to five hundred and eighty seven (587) calendar days as listed below.

Change Order

#5 August 13, 1990 - September 29, 1990 47 days.

#6 September, 1990 - November 29, 1990 61 days.

#7 November 29, 1990 - February 21, 1991 84 days.

#8 February 21, 1990 - March 23, 1991 30 days.

On June 27, 1989, Modification No. 1 was issued to incorporate the Federal Acquisition Regulation Clause 52.232-27, prompt payment for construction contract. No cost.

On October 13, 1989, Modification No. 2 was issued for \$48,532.00 to remove and dispose of asbestos roofing material and other miscellaneous asbestos contaminated debris on Building No. 38. During an inspection of the roof on Building No. 38, it was discovered that there was asbestos felt paper under the shingles and was required to be removed per the OSHA standares.

On January 4, 1990, Modification No. 3 was issued for \$3,116.00 to furnish and install a pyrotronics fire and intrusion alarm system, Model No. 3, as originally specified in lieu of the simplex system that was approved as an equal by mistake and would not function properly with the Park's existing alarm system.

In addition furnish and install three (3) fire alarm and horn strobe lights. Install the Government's furnished motion detectors needed for safety and exhibit protection that are required by code for the tenants in the building.

On March 28, 1990, Modification No. 4 was issued for \$3,300.00 to install new wall bracing on the side of door 201-C, second floor of building No. 40 to replace the existing steel rod wall bracing after removing and relocating the existing partition. Install additional steel wall supports to the new steel lintel for the front facade to stabilize the wall above.

Replace the three existing single phase meters and sockets to three phase units for the service to the building and equipment to comply with electrical code.

June 20, 1990, Modification No. 5 was issued for \$54,413.00 to change the design of the first floor of Building No. 40, due to the archaeological finds and the existence of radon in the soil during an investigation.

Revise the original designed north end gable wall bracing for building No. 38. After the repointing and rebuilding sections of the north wall, it was determined that the designed bracing was not totally needed.

Modify the electrical work on the first floor of Building No. 40, in Room 101 to accommodate the proposed exhibits.

Complete the additional plaster repair work in Building No. 40 that was not visible prior to the let of the contract.

On October 17, 1990 Modification No. 6 was issued for \$19,860.00 to complete the following items. Paint the northeast exterior wall of Building No. 38 to protect the existing exposed soft brick from erosion of a historic building.

Replace and paint the gutters on Building No. 40, also the downspouts and all connections on buildings Nos. 38 and 40, due to deterioration and omission in the contract documents.

Modify the existing transfer grills in size and equally space between the supply registers to make all the registers uniform in size, spacing and alignment within the exhibit area.

Relocate the existing exposed fire detection system conduit and boxes in Room 105 of Building No. 38, to provide a less intrusive appearance in view of the exhibits.

Sandblast the government furnished cast iron railing for the balcony of Building No. 40 to remove the rust thoroughly to preserve and prepare the railing for painting.

Remove, cut and reinstall the existing wood blocking above the structural steel beam in Building No. 38 to make the blocking flush with the steel and uniform in appearance.

Install a platform and drain pan under the existing hot water heaters in Building No. 40 to provide protection of the finished surfaces of the building from leakage.

In lieu of using the specified porch deck paint for the porch, stairs, bridges and railings, use the Benjamin Moore Deck Stain. It is not recommended to paint pressure treated lumber until it has weathered, whereby stain can be applied immediately to the pressure treated lumber.

Delete the specified steel grating walkway in Building No. 38 and install aluminum grating with safety grip surface with additional supports. The steel grating was not suitable for the proposed use whereby the aluminum grating is more compatible and a safer walkway grating.

November 9, 1990, Modification No. 7 was issued for \$16,256.00 to revise the existing foundation walls detail work and the first floor sewer lines in Rooms 101 and 104 of Building No. 40. During excavation and archaeological investigations, additional historic foundations were found thereby causing the redesign of the contract drawings.

On February 11, 1991, Modification No. 8 was issued for \$20,976.35 to replace the missing window parts to complete the window assembly in order for the windows to operate properly. This was originally omitted in the contract documents.

Apply additional coat of paint on the walls, ceilings, new exterior woodwork and floor in Building No. 40, which was inadvertently omitted from the specifications.

Remove and reinstall door and frame No. 105-D in Building No. 38 in the reverse order to comply with the uniform federal accessibility standards for the physically disabled.

Provide an enclosure to conceal the fire and security alarm panels in Building No. 40, relocated for accessibility in an emergency that were inadvertently omitted in the contract drawings.

Delete the specified heaters for Room No. 105 in Building No. 38 and provide the chromalox wall mounting units. The original specified heaters were not appropriate for the conditions in the exhibit area walkway grating and would not function properly.

Provide three knee braces to the existing steel angle on the west wall of Building No. 40, Room No. 101 to provide additional support for the chimney remains.

Plaster the north wall of Room 104 and the soffit of the stairs in Room 103, of Building No. 40, to provide a uniform finish and a fire resistant protection that had fallen off during construction.

Provide additional smoke detectors in Building No. 40, first floor Rooms Nos. 102 and 103 that were inadvertently omitted in the contract drawings.

Complete the stucco work on the front of Building No. 40 according to the revised drawings to establish the correct size and block pattern to replicate the original formation.

Install an electrical switch for the garbage disposal on the second floor of Building No. 40 that was omitted on the contract drawings.

Delete the preparation and planting of the area, North of Building 38 due to the proposed installation of utility lines and walkways.

Revise the size of the kitchen cabinets on the third floor of Building No. 40 to accommodate the specified refrigerator that would not fit into the designated space.

On April 4, 1991 Modification No. 9 was issued as a decrease of (\$483.00) to delete the painting of the north exterior wall of Building No. 38. It was determined that the specified color was not satisfactory to the surrounding buildings.

Deliver and unload the deleted designed structural steel for Building No. 38 due to changes of the original designed proposed use and the inability to obtain a substantial credit for the material.

An inspection of the work on the referenced contract was conducted on March 14, 1991 and has been completed substantially in accordance with the plans and specifications and accepted as of the above date subject to the satisfactory completion of the punch list items.

All construction and corrective work was completed on April 26, 1991 and a final inspection was made on the above date.

The weather during the year was generally fair to excellent with an average amount of rain and below normal temperatures through the winter months.

There were no liquidated damages assessed.

LIMITS OF PROJECT

Building 38 consists of a total of 4,639.25 square feet. Construction consists of rehabilitation and stabilization work consisting of structural steel, metal grating, architectural woodwork, wood shingle roof and finishes including fire protection, heating and electrical systems.

This building consists of three floors. Each floor consists of 1,546.41 square feet. The first floor is an exhibit area and the second and third floors are divided into separate rooms.

Building 40 consists of a total of 2,671 square feet. The first floor totals 869.25 square feet and is used as an exhibit area. The second floor is 899.75 square feet and is used as living quarters divided into two bedrooms, bath, kitchen and living room. The third floor is 992 square feet and is divided into two bedrooms, bath, kitchen and living room.

List of Subcontractors

Trade	Name & Address
Glazing of Windows	Antietam Glass P. O. Box 529 Hagerstown, Maryland 21741 301/739-7070
Mortar, Masonry	Bragunier Masonry Boyd Road Clear Spring, Maryland 21722 301/842-2402
Roofing	Floyd Kline Rt. #12, Box 274 Hagerstown, Maryland 21740 301/582-0600
Insulation, Framing, Plaster	Finishes, Incorporated P. O. Box 1266 Sykesville, Maryland 21784 301/781-6323
Wood Gates, Barriers	Long Fence 2520 Urbana Pike Jamsville, Maryland 21754 301/428-9040
Electrical	Tagg Electric 100 Nottingham Road Hagerstown, Maryland 21740 301/791-5510
Painting	Crown Incorporated of Hagerstown 2220 Virginia Avenue Hagerstown, Maryland 21740 301/582-1665
Ceramic Tile	Garretson Tile P. O. Box 3606 Gettysburg, Pennsylvania 17325 717/334-4617
Wood Floor	Signet Floors 18909 Premiere Court Geithersburg, Maryland 20874 301/670-4188
Structural Steel	Riley's Welding 115 N. Mildred Street CharlesTown, West Virginia 25414 304/725-9040

List of Subcontractors

Trade	Name & Address
Plumbing, HVAC	G. M. Engineering Rt. #12, Box 228 Hagerstown, Maryland 21740 301/582-4600
Heating	Morrow's Heating & Air Conditioning Service, Incorporated 210 Maple Avenue Boonsboro, Maryland 21713
Plumbing	H. R. Ebersole 125 Main Street Maugansville, Maryland 21767 301/733-7893
Plaster	Stevens Construction Company P. O. Box 631 Hagerstown, Maryland 21741 301/797-8125

- (X) FINISHES
() HARDWARE
() MECHANICAL EQUIPMENT
() ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
Ceramic Tile Wall Grout and Floor Grout	U. S. Tile Co. American Olean Co. <u>Contractor</u> Garretson Tile Co. P. O. Box 3606 Gettysburg, PA 17325 (717)-334-4617	U-779 Almond #23 Antique White A-13 White 1" Hexagon #24 Grey	Transmittal No.15
Painting	Duron Paint and Wall- coverings 10406 Tucker Street Beltsville, MD. 20705 -2297		

- () FINISHES
() HARDWARE
(X) MECHANICAL EQUIPMENT
() ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
3 - Water Closet Water Saver Toilet	American Standard	Mod. No. 2812.053 New Cadet	
3 - Aqualyn Lavatory	American Standard	Mod. No. 0476.028	
3 - Single Control Faucets	American Standard	Mod. No. 2385.063	
2 - Spectra Recess Bath Tubs	American Standard	Mod. No. 2605.103	
2 - Ultra-Mix Pressure Balan- cing bath/shower Faucets	American Standard	Mod. No. 1363.065	
2 - Residential Electric Water Heaters	A. O. Smith	Mod. ELJF-30-913	2nd & 3rd Floors 30 Gal.
1 - Electric Water Heater	A. O. Smith	Mod. ELJ-6	1st Floor 6 Gal.

- () FINISHES
 () HARDWARE
 () MECHANICAL EQUIPMENT
 (X) ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
2 - Electric Ranges	Whirlpool Benton Harbor, Michigan 49022	Model No. RF327PXVN, Ser. No. FX1201529	3rd Floor
		Ser. No. FX1201517	2nd Floor
2 - Two Speed Economy Range Hoods	Broan's	Exhaust Ducted 40000 Series	Model 403008 Almond
2 - Garbage Dispos- als	ISE In-Sinkerator	Model No. Badger 5-38 $\frac{1}{2}$ H.P.	Ser. No. 3rd Fl. GB 35848664 Ser. No. Ser. No. 2nd floor GB35848659
2 - Refrigerators	Whirlpool Benton Harbor, MI 49022	Model No. ET22DKXV Ser. No. SX1912679	3rd Floor Type C22TFA90
		Ser. No. SX2043209	2nd floor Type C22TFA90
2 - Thin Twin Laundry Systems Washer & Dryer	Whirlpool	Model No. LT5000XS Electric Ser. No. MX0613595	3rd Floor
		Ser. No. MX0613592	2nd Floor

- () FINISHES
() HARDWARE
(X) MECHANICAL EQUIPMENT
() ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
3 - Air Condition- ers. 2 Ton Split System Cooling Con- densing Units	Trane 3600 Pammel Creek Rd. LaCrosse, WI 54601- 7599	Mod. No. TTJ724A-1Ø	Bldg. No. 40 Ser. No. P-41
3 - 2½ Ton Vertical Air Handler Units	Trane	Mod. No. TWV 730B Heater Model No. BAY96X1419	3rd Floor Ser. No. D41438547 2nd Floor Ser. No. D37425194

- () FINISHES
() HARDWARE
() MECHANICAL EQUIPMENT
(X) ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
2 - Electric Unit Heaters	Q Mark Div. of Marley Electric Heating Rt. #3 Bennettsville, S.C. 29512	Model No. MUH-03-8	Bldg. No. 38 2nd & 3rd Floors
2 - Thermostats		Cat. No. MT-1	Mounted on Universal Unit Bracker
3 - Exhaust Fans (Ceiling)	Loren Cook Co.	Mod. No. GEM II	Bldg. No. 40 Bathrooms
Floor Drop-In Electric Heaters	A Mark Marley Electric Heating Co.	Mod. No. FDI-1415- 4M	Bldg. No. 38 1st Floor

TAGG ELECTRIC
146 FAIRGROUND AVE.
HAGERSTOWN, MARYLAND 21740
301-791-5510

FIXTURES

TYPE	MANUFACTURER	LAMPS	CATALOG NUMBER
A	Lightoller	40W	6348
B	Lightoller	40W PAR38	6606
C	Lightoller	60W A19	1002P1/1021
D	Progress	50W R20	P2957-30
E	Circle F	60W	212-0
F	Lightoller	75W	6620
G	Lightoller	60W A19	1100IC/1180
H	Lightoller	40W	5408
I	Lightoller	75W PAR38	1100IC/1129
J	Lightoller	75W PAR38	1102IC/1127IC
K	Lightoller	90W PAR38	1103P1/1105
L	Lightoller	60W PAR38	1102P1/1105
M	Lightoller	60W PAR38	1102IC/1105IC
N	Lightoller	90W PAR38	1102IC/1105IC

I	QTY DESIGNATION	DESCRIPTION
A0	1 P1	NQOD PANEL 120/208 V, 3 PHASE 4 WIRE S/N S. C. RATING = 10 K 70 AMP QOB MB W/ 1- 50A/2P QO C/B 2- 30A/2P QO C/B 10- 20A/1P QO C/B CU BUS GROUND BAR ENCLOSURE: HEIGHT = 26 INCHES TOP FEED, SURFACE TRIM DRAWING NUMBER: PBA 503
B0	1 P2	NQOD PANEL 120/208 V, 3 PHASE 4 WIRE S/N S. C. RATING = 10 K 100 AMP QOB MB W/ 2- 50A/2P QO C/B 4- 30A/2P QO C/B 12- 20A/1P QO C/B CU BUS GROUND BAR ENCLOSURE: HEIGHT = 26 INCHES TOP FEED, FLUSH TRIM DRAWING NUMBER: PBA 503
C0	1 P3	NQOD PANEL 120/208 V, 3 PHASE 4 WIRE S/N S. C. RATING = 10 K 100 AMP QOB MB W/ 2- 50A/2P QO C/B 4- 30A/2P QO C/B 12- 20A/1P QO C/B CU BUS GROUND BAR ENCLOSURE: HEIGHT = 26 INCHES TOP FEED, FLUSH TRIM DRAWING NUMBER: PBA 503

I	QTY DESIGNATION	DESCRIPTION
D0	1 P4	NQOD PANEL 120/208 V, 3 PHASE 4 WIRE S/N S. C. RATING = 10 K 100 AMP QOB MB W/ 12- 20A/2P QO C/B 4- 20A/1P QO C/B CU BUS GROUND BAR ENCLOSURE: HEIGHT = 29 INCHES TOP FEED, SURFACE TRIM DRAWING NUMBER: PBA 503
E0	4	FA 100 S ENCL BKR
F0	3	FAL 32100 FAL CKT BKR
G0	1	FAL 32070 FAL CKT BKR
H0	4	SN 100 FA NEUT

Control/Communicator

- () FINISHES
() HARDWARE
() MECHANICAL EQUIPMENT
(X) ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
System 3 Enclosure 24 Module	Pyrotronics	Model No. EB-33 Rail Bracket Kit EK-33	Cat. No. 3325
Manual Fire Alarm Station	Pyrotronics	Model No. MS-151	Cat. No. 6182
Ionization Smoke Detector	Pyrotronics	Model No. D1-3	Cat. No. 6119
Strobe Horn	Wheelock, Inc. 273 Branchport Ave. Long Branch, NJ 07740	Model No. 7002T-24-W-FR/	
Alarm Device Control/Communi- cator	Ademco	Model No. 4180-12	

- () FINISHES
() HARDWARE
() MECHANICAL EQUIPMENT
(X) ELECTRICAL EQUIPMENT

ITEM	MANUFACTURER	NO./NAME	NOTES
System 3 Control Panel w/2 Zones & 1 Universal Single Circuit	Pyrotronics 8 Ridgedale Ave. Cedar Knolls, NJ 07927	Model No. CP-35	Cat. No. 3060
System 3 Input Modules Dual Zone	Pyrotronics	Model No. ZU-35	Cat. No. 3107
System 3 Confirmation Control Module	Pyrotronics	Model RC-30U	Cat. No. 3167
System 3 Time Limit Module	Pyrotronics	Model No. TL-30U	Cat. No. 3116
System 3 Battery Charger/Transfer	Pyrotronics	Model No. BC-35	Cat. No. 3177
System 3 Battery Modules	Pyrotronics	Model No. BK-33-5.0AH	Cat. No. 3351
Batteries	YUASA Batteries (America) Inc. Eastern Regional Office 620 Washington Ave. Carlstadt, NJ 07072 (201) 896-8800	Model No. NP6- 12 volts	