## HIGHBRIDGE PARK ANCHOR PARKS PROGRAM:

## **PHASE 1 CAPITAL PROJECT**

Daries

Located between Laurel Hill Terrace/ Amsterdam Avenue and Harlem River Drive, in the Borough of Manhattan

Community Board 12 Parks & Cultural Affairs Commitee Presentation March 7, 2017 MKW + Associates, Parks Capital Design

## Goals

- Reinstate access to a 10-block stretch of the park
- Improve connectivity and pathways
- Make entrances, paths and trails more accessible
- Restore historic Grand Staircase at Laurel Hill Terrace
- Provide ADA accessibility at Grand Staircase terrace
- Improve safety and security with new park lighting
- Stabilize stone walls and edging
- Provide benches in scenic locations
- Create new community gathering spaces
- Reconnect community to the rich ecology / forest of the park
- Reconnect community to the historic elements of the park

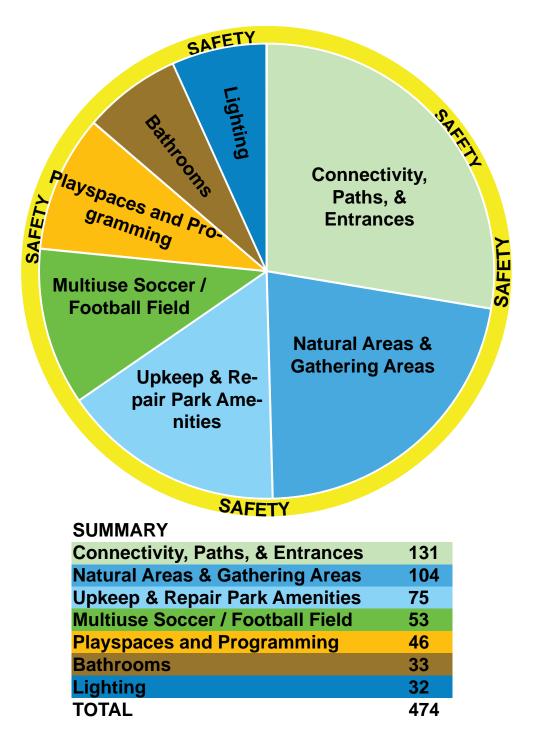
Total Budget: \$10M - Phase 1

Mayoral Funding FY17

Project Size: 6.14 acres



2









**Anchor Parks** Highbridge Park | Phase1 | Community Visioning Session





Neighborhood



**Anchor Parks** Highbridge Park | Phase1 | Site Location

500 FT





Anchor Parks Highbridge Park | Phase1 | Flood Risk

## **Flood Hazard Zones**

**ZONE A** - 1% annual-chance flood event. No Base Flood Elevation (BFE) exists.

**ZONE AE -** 1% annual-chance flood event. BFE exists.

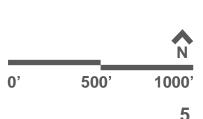
**ZONE AO -** 1% annual-chance shallow flooding.

**VE** - Areas along coasts subject to inundation by the 1% annual-chance flood event with additional hazards associated with storminduced velocity wave action. BFE exists.

**FLOODWAY -** watercourse reserved to discharge base flood.

**ZONE X** - Moderate risk areas within the 0.2% annual-chance floodplain.

### ▲ LIMIT OF MODERATE WAVE ACTION





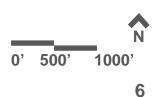


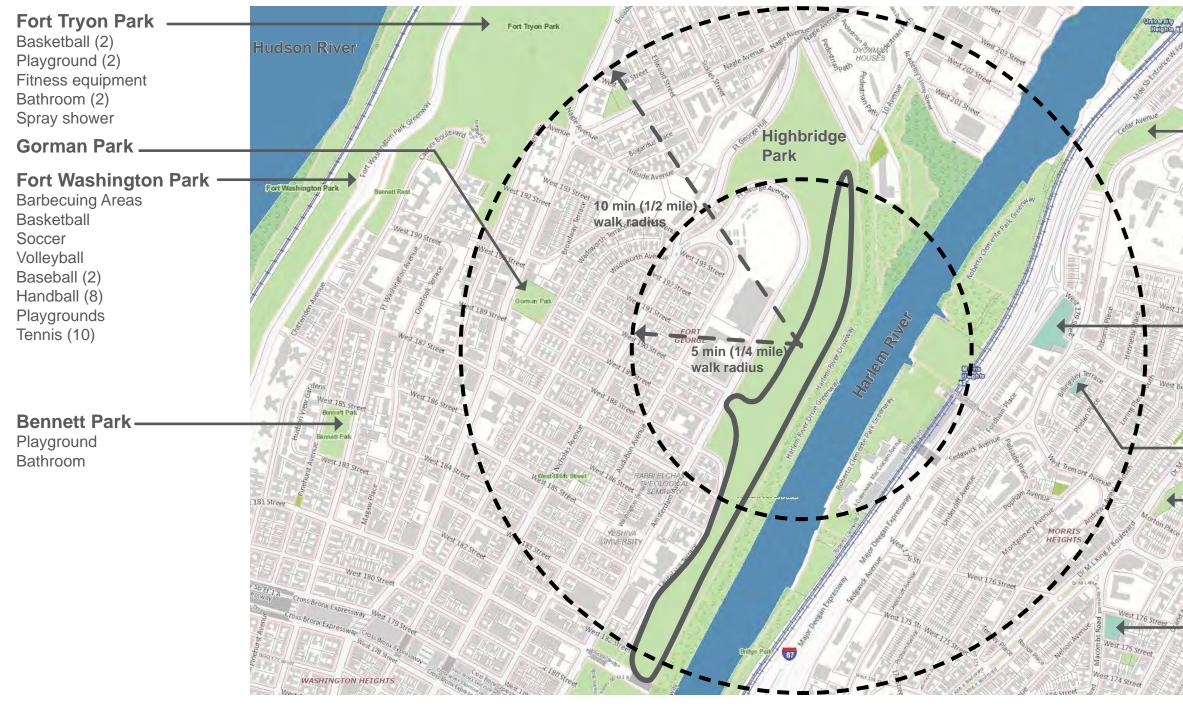
Anchor Parks Highbridge Park | Phase1 | Surrounding Land Use

## Land Use Categories

- 1 And 2 Family Residential
- Multi-Family Residential
- Mixed Use
- **Open Space And Outdoor Recreation**
- Commercial
- Institutional
- Industrial
- Parking

- **Transportation / Utilities**
- Vacant Lots







Anchor Parks Highbridge Park | Phase1 | Neighborhood Context



### **University Woods** Dog-friendly Areas

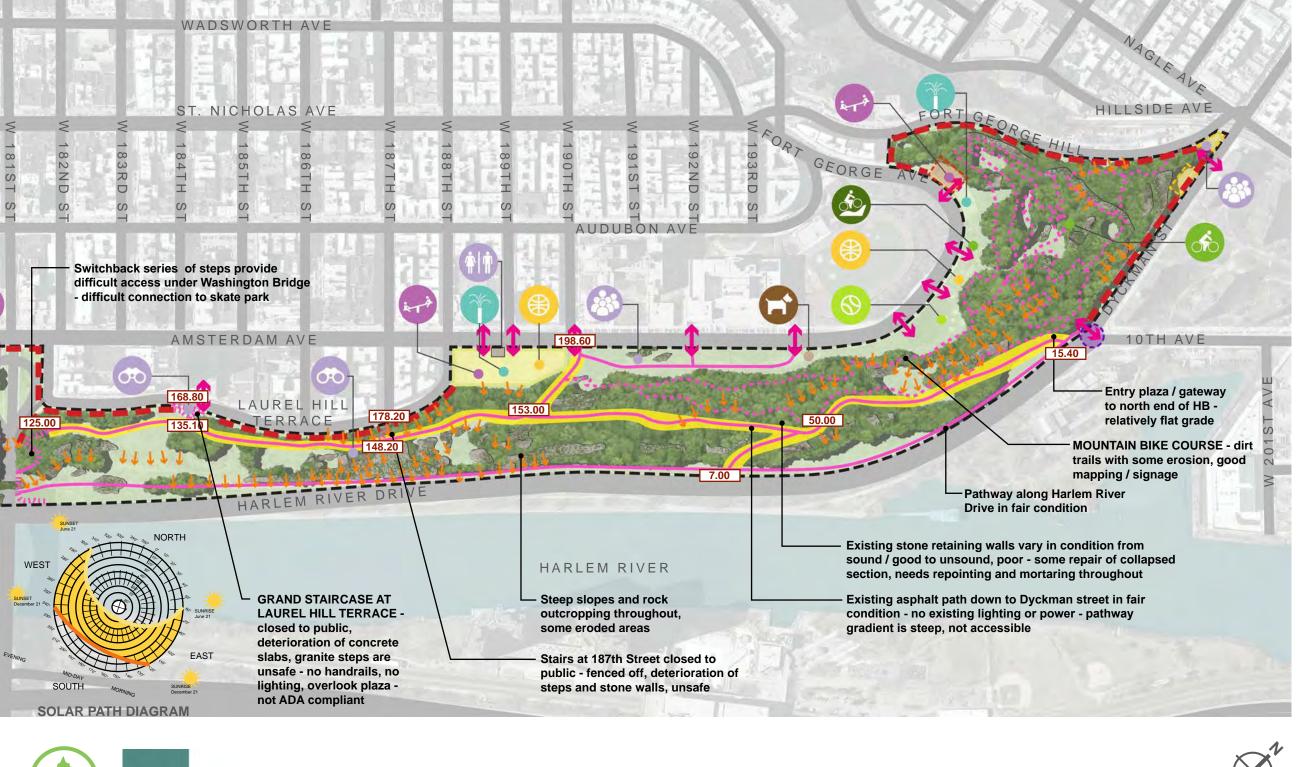
### **Cedar Playground**

Basketball Court Fitness Equipment Spray Shower Bathrooms Playground

## Beanstalk Playground Playground

Morton Playground Playground

### **Galileo Playground** Playground Spray Shower





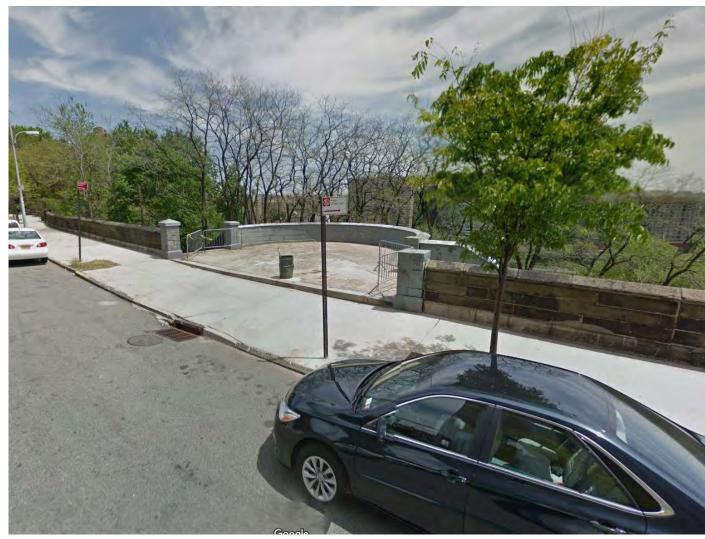
Anchor Parks Highbridge Park | Phase1 | Site Analysis

200' 400'





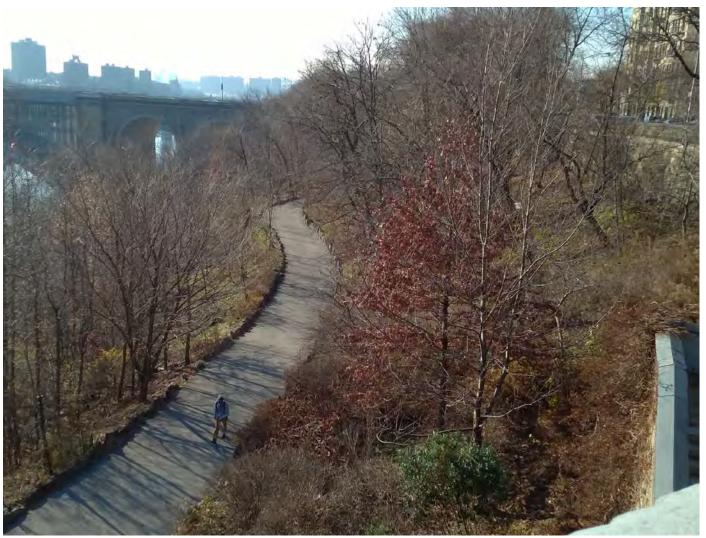
1 - Typical path configuration and materials to the South of the Grand Staircase at 184th Street.



2 - View of upper terrace of Grand Staircase at 184th Street including step up from sidewalk level.







**3 - View from upper terrace of Grand Staircase to existing lower** walk and the High Bridge beyond.



4 - View of the Grand Staircase at 184th Street.







5 - View illustrating the relationship between the mid-level walk of Highbridge Park, the Grand Staircase at 184th Street and Laurel Hill Terrace.

**NYC Parks** 



6 - Typical pathway alignment, grade and adjacencies of rubble stone walls and curbs.







7 - Stone retaining walls are a blend of dry-laid and mortared components and may include integrated rock outcrops.



8 - One of the taller heights of existing retaining walls along a steep downslope, protected by fencing.







9 - The pathway on the left slopes up to Amsterdam Avenue while the one on the right continues through the mid-level of Highbridge Park.

NYC Parks



10 - A series of stone terraces occurs along a narrower portion of the path (12' wide) in which trees have volunteered over time. Poor pavement condition is typical along this northern section.







**11 - Poor pavement condition is typical along this northern section.** 



12- The path down to Harlem River Drive becomes more open.







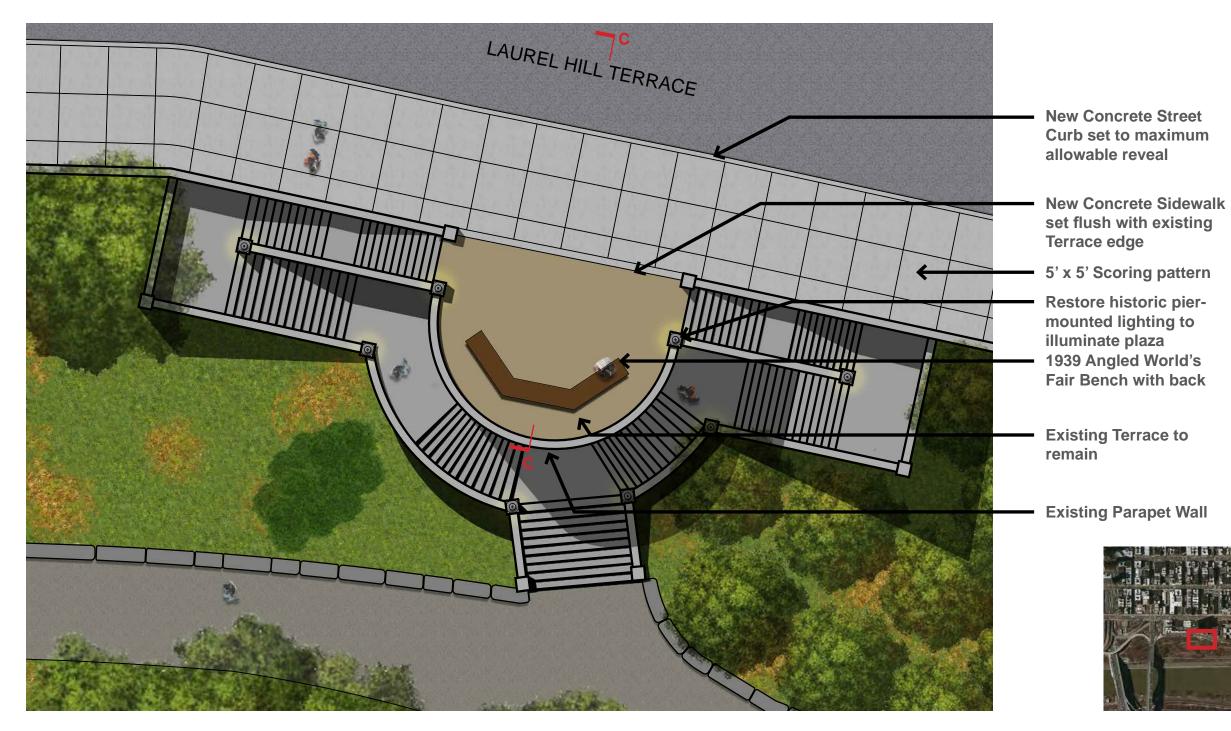
13 - As the path approaches the Harlem River Drive/Dyckman Street intersection, the wooded character along it becomes more transparent.



14 - Lower path to Harlem River Drive/Dyckman Street becomes less wooded and more park-like.







**Anchor Parks** HANNA + ASSOCIATES, LLC. Highbridge Park | Phase1 | Detail Plan - Terrace at The Grand Staircase





**Existing Conditions** 



**Anchor Parks** 

Highbridge Park | Phase1 | Detail Section C-C - Terrace at The Grand Staircase



New Concrete Sidewalk set flush with existing Terrace edge

New Concrete Street Curb set to maximum allowable reveal

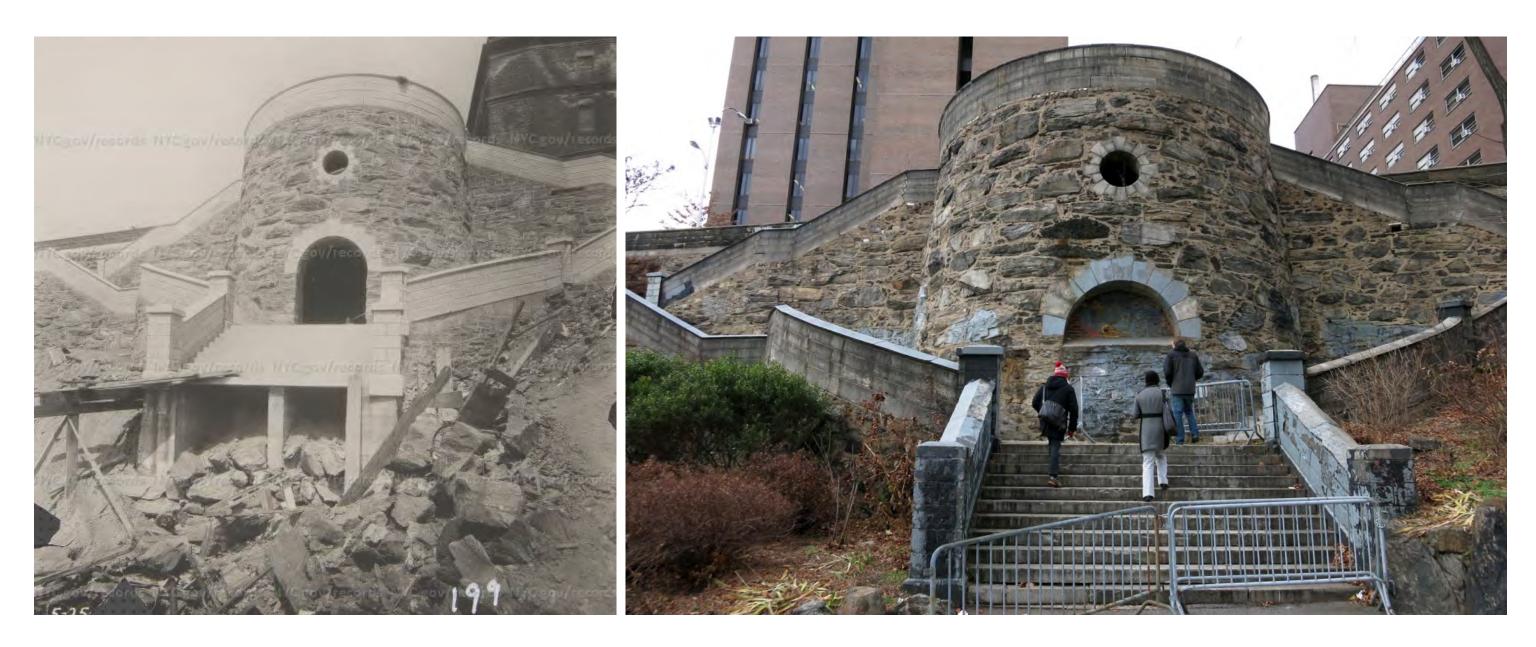


## **EXISTING HISTORIC GRAND STAIRCASE**





## **EXISTING HISTORIC GRAND STAIRCASE**



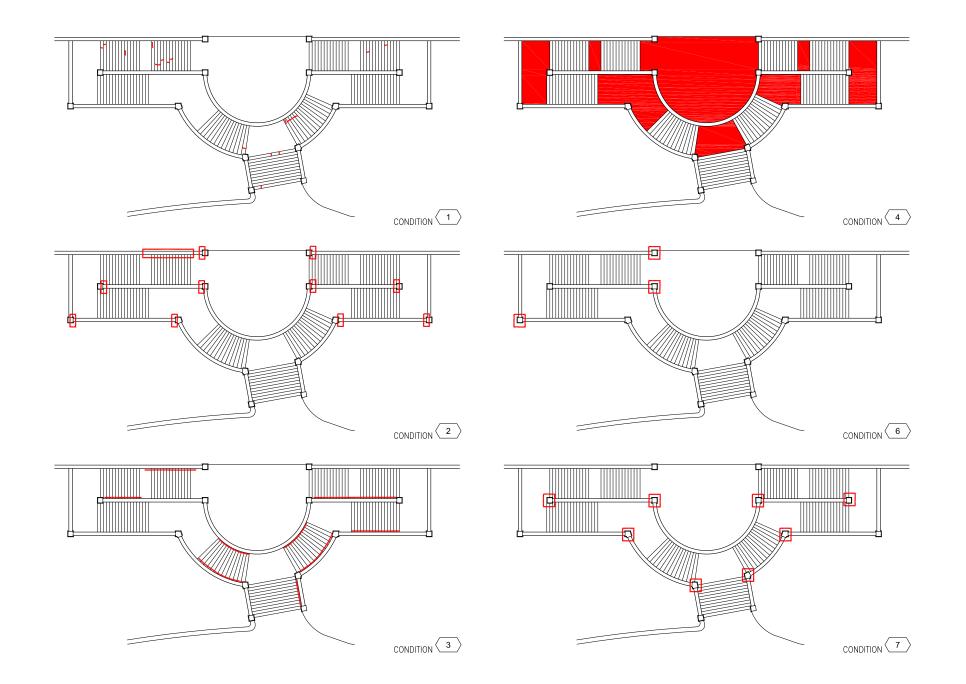


## **EXISTING HISTORIC GRAND STAIRCASE AND PLAZA**



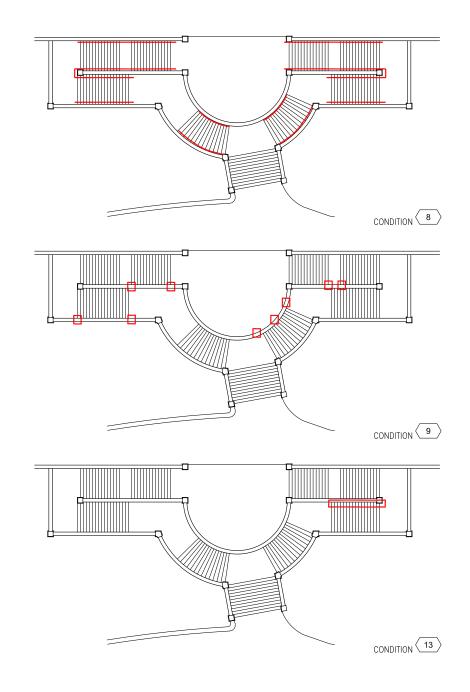


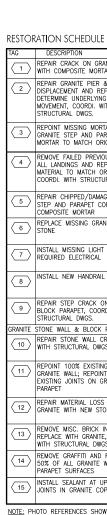




TAG	DESCRIPTION	PHOTO	QUAN
$\langle 1 \rangle$	REPAIR CRACK ON GRANITE STEP WITH COMPOSITE MORTAR	P1.1 - P1.X	21 (E
2	REPAIR GRANITE PIER & PARAPET DISPLACEMENT AND REPOINT. DETERMINE UNDERLYING CAUSE OF MOVEMENT, COORDI. WITH STRUCTURAL DWGS.	P2.1 – P2.X	11 (E
3	REPOINT MISSING MORTAR BETWEEN GRANITE STEP AND PARAPET WITH MORTAR TO MATCH ORIGINAL MORTAR.	P3.1 – P3.X	200
4	REMOVE FAILED PREVIOUS REPAIR ON ALL LANDINGS AND REPAIR WITH NEW MATERIAL TO MATCH ORIGINAL, COORDI. WITH STRUCTURAL DWGS.	P4.1 – P4.X	1,900 8 LAN
5	REPAIR CHIPPED/DAMAGED GRANITE STEP AND PARAPET COPING WITH COMPOSITE MORTAR	P5.1 - P5.X	(
6	REPLACE MISSING GRANITE COPING STONE	P6.1	3 (EA
7	INSTALL MISSING LIGHT FIXTURE AND REQUIRED ELECTRICAL	P7.1	8 (EA
8	INSTALL NEW HANDRAIL	SK-1	320 (
9	REPAIR STEP CRACK ON GRANITE BLOCK PARAPET, COORDI. WITH STRUCTURAL DWGS.	P9.1 - P9.X	9 (EA
GRANITE	STONE WALL & BLOCK PARAPET REPA	R AND CLEANING	;
(10)	REPAIR STONE WALL CRACK, COORDI. WITH STRUCTURAL DWGS.	P10.1 - P10.X	2 (EA
(11)	REPOINT 100% EXISTING JOINTS ON GRANITE WALL; REPOINT 30% EXISTING JOINTS ON GRANITE BLOCK PARAPET	P11.1 - P11.X	
(12)	REPAIR MATERIAL LOSS AND VOIDS IN GRANITE WITH NEW STONE	P12.1 - P12.X	
(13)	REMOVE MISC. BRICK INFILL AND REPLACE WITH GRANITE, COORDI. WITH STRUCTURAL DWGS.	P13.1 - P13.X	,
(14)	REMOVE GRAFFITI AND PAINT, ABOUT 50% OF ALL GRANITE WALL AND PARAPET SURFACES	P14.1 - P14.X	50% (
(15)	INSTALL SEALANT AT UPWARD-FACING JOINTS IN GRANITE COPING STONES	P15.1 - P15.X	









IPTION	PHOTO	QUANTITY
RACK ON GRANITE STEP IPOSITE MORTAR	P1.1 - P1.X	21 (EA)
RANITE PIER & PARAPET MENT AND REPOINT. E UNDERLYING CAUSE OF T, COORDI. WITH MAL DWGS.	P2.1 – P2.X	11 (EA)
MISSING MORTAR BETWEEN STEP AND PARAPET WITH TO MATCH ORIGINAL MORTAR.		200 (LF)
AILED PREVIOUS REPAIR ON INGS AND REPAIR WITH NEW TO MATCH ORIGINAL, WITH STRUCTURAL DWGS.		1,900 (SF) 8 LANDINGS
HIPPED/DAMAGED GRANITE PARAPET COPING WITH E MORTAR	P5.1 – P5.X	(LF)
MISSING GRANITE COPING	P6.1	3 (EA)
IISSING LIGHT FIXTURE AND ELECTRICAL	P7.1	8 (EA)
IEW HANDRAIL	SK-1	320 (LF)
TEP CRACK ON GRANITE RAPET, COORDI. WITH AL DWGS.	P9.1 - P9.X	9 (EA)
LL & BLOCK PARAPET REPAI	R AND CLEANING	;
FONE WALL CRACK, COORDI. UCTURAL DWGS.	P10.1 - P10.X	2 (EA)
100% EXISTING JOINTS ON WALL; REPOINT 30% JOINTS ON GRANITE BLOCK	P11.1 - P11.X	
ATERIAL LOSS AND VOIDS IN WITH NEW STONE	P12.1 - P12.X	
MISC. BRICK INFILL AND WITH GRANITE, COORDI. UCTURAL DWGS.	P13.1 - P13.X	20 (SF)
ALL GRANITE WALL AND SURFACES	P14.1 - P14.X	
EALANT AT UPWARD-FACING GRANITE COPING STONES	P15.1 - P15.X	

NOTE: PHOTO REFERENCES SHOWING EXISTING CONDITIONS



(1) CRACK ON GRANITE STEP



2 GRANITE PIER & PARAPET DISPLACEMENT



3 MISSING MORTAR



4 FAILED PREVIOUS REPAIR ON LANDING



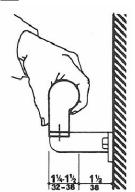
5 CHIPPED / DAMAGED GRANITE STEPS



### 6 MISSING GRANITE COPING



7 MISSING LIGHT FIXTURE





9 STEP CRACK

TAG	DESCR
$\left< 1 \right>$	REPAIR C WITH COM
2	REPAIR G DISPLACE DETERMIN MOVEMEN STRUCTUR
3	REPOINT GRANITE MORTAR
4	REMOVE ALL LANE MATERIAL COORDI.
5	REPAIR C STEP ANI COMPOSIT
6	REPLACE STONE
$\langle 7 \rangle$	INSTALL I REQUIRED
8	INSTALL 1
9	REPAIR S BLOCK P. STRUCTU
GRANITE	STONE WA
(10)	REPAIR S WITH STR
(11)	REPOINT GRANITE EXISTING PARAPET
(12)	REPAIR N GRANITE
(13)	REMOVE REPLACE WITH STR
(14)	REMOVE 50% OF PARAPET
(15)	INSTALL S JOINTS IN



## **Anchor Parks** Highbridge Park | Phase1 | Staircase Restoration

### SCHEDULE

IPTION	PHOTO	QUANTITY
RACK ON GRANITE STEP IPOSITE MORTAR	P1.1 - P1.X	21 (EA)
RANITE PIER & PARAPET MENT AND REPOINT. E UNDERLYING CAUSE OF F, COORDI. WITH MAL DWGS.	P2.1 – P2.X	11 (EA)
MISSING MORTAR BETWEEN STEP AND PARAPET WITH O MATCH ORIGINAL MORTAR.	P3.1 – P3.X	200 (LF)
AILED PREVIOUS REPAIR ON INGS AND REPAIR WITH NEW TO MATCH ORIGINAL, WITH STRUCTURAL DWGS.	P4.1 – P4.X	1,900 (SF) 8 LANDINGS
HIPPED/DAMAGED GRANITE PARAPET COPING WITH E MORTAR	P5.1 – P5.X	(LF)
MISSING GRANITE COPING	P6.1	3 (EA)
IISSING LIGHT FIXTURE AND ELECTRICAL	P7.1	8 (EA)
IEW HANDRAIL	SK-1	320 (LF)
TEP CRACK ON GRANITE RAPET, COORDI. WITH AL DWGS.	P9.1 - P9.X	9 (EA)
LL & BLOCK PARAPET REPAI	R AND CLEANING	;
TONE WALL CRACK, COORDI. UCTURAL DWGS.	P10.1 - P10.X	2 (EA)
100% EXISTING JOINTS ON WALL; REPOINT 30% JOINTS ON GRANITE BLOCK	P11.1 - P11.X	
ATERIAL LOSS AND VOIDS IN WITH NEW STONE	P12.1 - P12.X	
MISC. BRICK INFILL AND WITH GRANITE, COORDI. UCTURAL DWGS.	P13.1 - P13.X	20 (SF)
ALL GRANITE WALL AND SURFACES	P14.1 - P14.X	
EALANT AT UPWARD-FACING GRANITE COPING STONES	P15.1 - P15.X	

NOTE: PHOTO REFERENCES SHOWING EXISTING CONDITIONS







(11) REPOINT 100% MORTAR



 $\langle 12 \rangle$  VOIDS & MATERIAL LOSS



(13) MISC. BRICK INFILL



(14) GRAFFITI AND PAINT



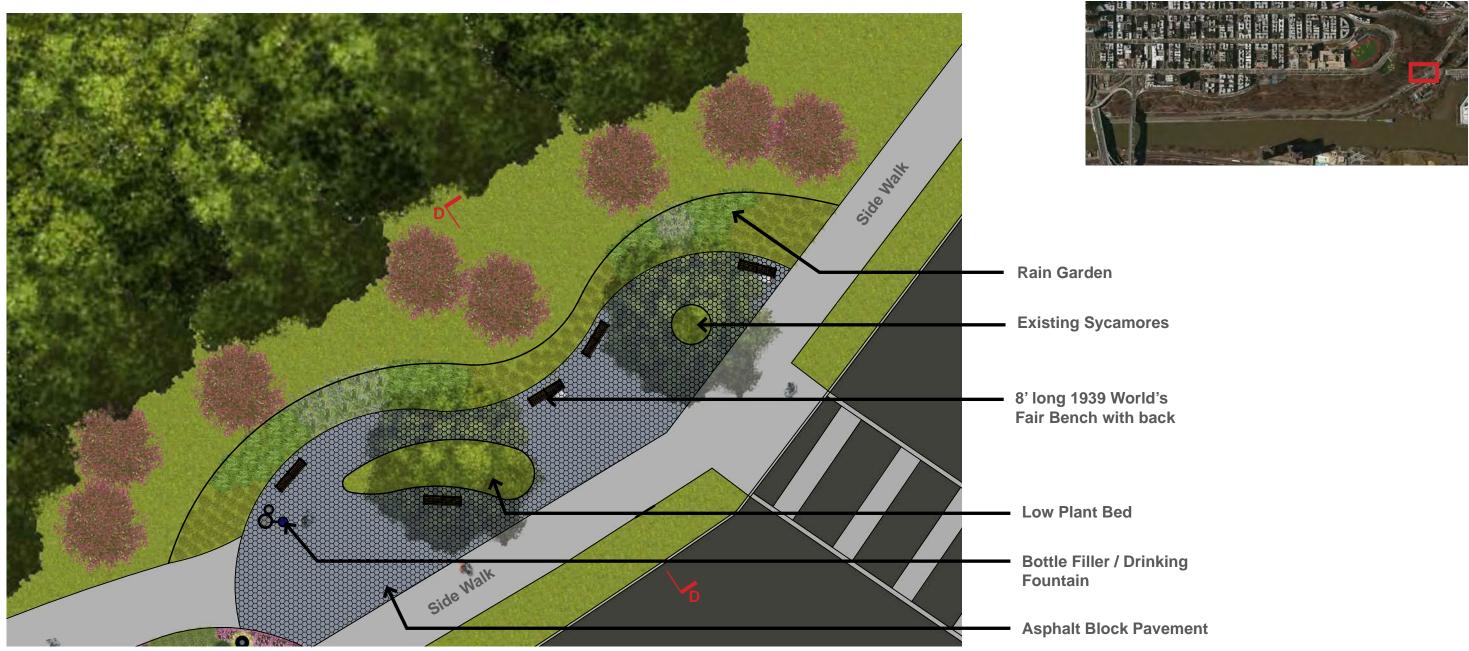
15 UPWARD-FACING JOINT IN GRANITE COPING STONE



## **Anchor Parks** Highbridge Park | Phase1 | Staircase Restoration

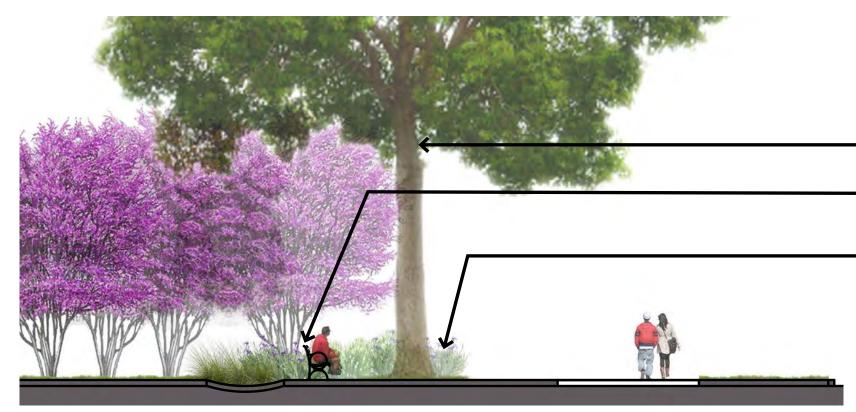
TAG	DESCRIPTION	PHOTO	QUANTITY
$\left< 1 \right>$	REPAIR CRACK ON GRANITE STEP WITH COMPOSITE MORTAR	P1.1 - P1.X	21 (EA)
2	REPAIR GRANITE PIER & PARAPET DISPLACEMENT AND REPOINT. DETERMINE UNDERLYING CAUSE OF MOVEMENT, COORDI. WITH STRUCTURAL DWGS.	P2.1 – P2.X	11 (EA)
3	REPOINT MISSING MORTAR BETWEEN GRANITE STEP AND PARAPET WITH MORTAR TO MATCH ORIGINAL MORTAR.	P3.1 – P3.X	200 (LF)
4	REMOVE FAILED PREVIOUS REPAIR ON ALL LANDINGS AND REPAIR WITH NEW MATERIAL TO MATCH ORIGINAL, COORDI. WITH STRUCTURAL DWGS.		1,900 (SF) 8 LANDING
5	REPAIR CHIPPED/DAMAGED GRANITE STEP AND PARAPET COPING WITH COMPOSITE MORTAR	P5.1 – P5.X	(LF)
6	REPLACE MISSING GRANITE COPING STONE	P6.1	3 (EA)
7	INSTALL MISSING LIGHT FIXTURE AND REQUIRED ELECTRICAL	P7.1	8 (EA)
8	INSTALL NEW HANDRAIL	SK-1	320 (LF)
9	REPAIR STEP CRACK ON GRANITE BLOCK PARAPET, COORDI. WITH STRUCTURAL DWGS.	P9.1 - P9.X	9 (EA)
GRANITE	STONE WALL & BLOCK PARAPET REPAI	R AND CLEANING	;
(10)	REPAIR STONE WALL CRACK, COORDI. WITH STRUCTURAL DWGS.	P10.1 - P10.X	2 (EA)
(11)	REPOINT 100% EXISTING JOINTS ON GRANITE WALL; REPOINT 30% EXISTING JOINTS ON GRANITE BLOCK PARAPET	P11.1 - P11.X	
(12)	REPAIR MATERIAL LOSS AND VOIDS IN GRANITE WITH NEW STONE	P12.1 - P12.X	
(13)	REMOVE MISC. BRICK INFILL AND REPLACE WITH GRANITE, COORDI. WITH STRUCTURAL DWGS.	P13.1 - P13.X	
(14)	REMOVE GRAFFITI AND PAINT, ABOUT 50% OF ALL GRANITE WALL AND PARAPET SURFACES	P14.1 - P14.X	50% (SF)
$\langle 15 \rangle$	INSTALL SEALANT AT UPWARD-FACING JOINTS IN GRANITE COPING STONES	P15.1 - P15.X	

### RESTORATION SCHEDULE



**Anchor Parks** + ASSOCIATES, LLC. Highbridge Park | Phase1 | Detail Plan - Entrance at Harlem River Drive and Dyckman Street







**Existing Conditions** 



**Anchor Parks** Highbridge Park | Phase1 | Detail Section D-D - Entrance at Harlem River Drive and Dyckman Street

 Existing Sycamores
 8' long 1939 World's Fair Bench with back
 Rain Garden

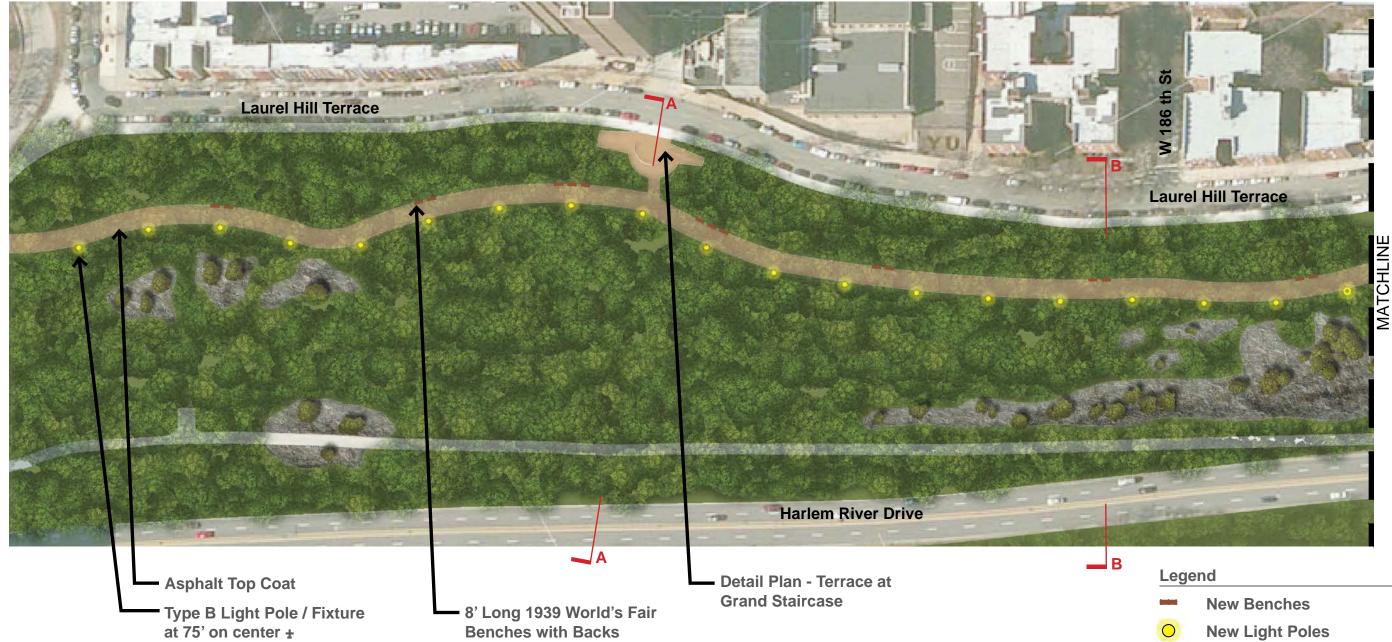


26



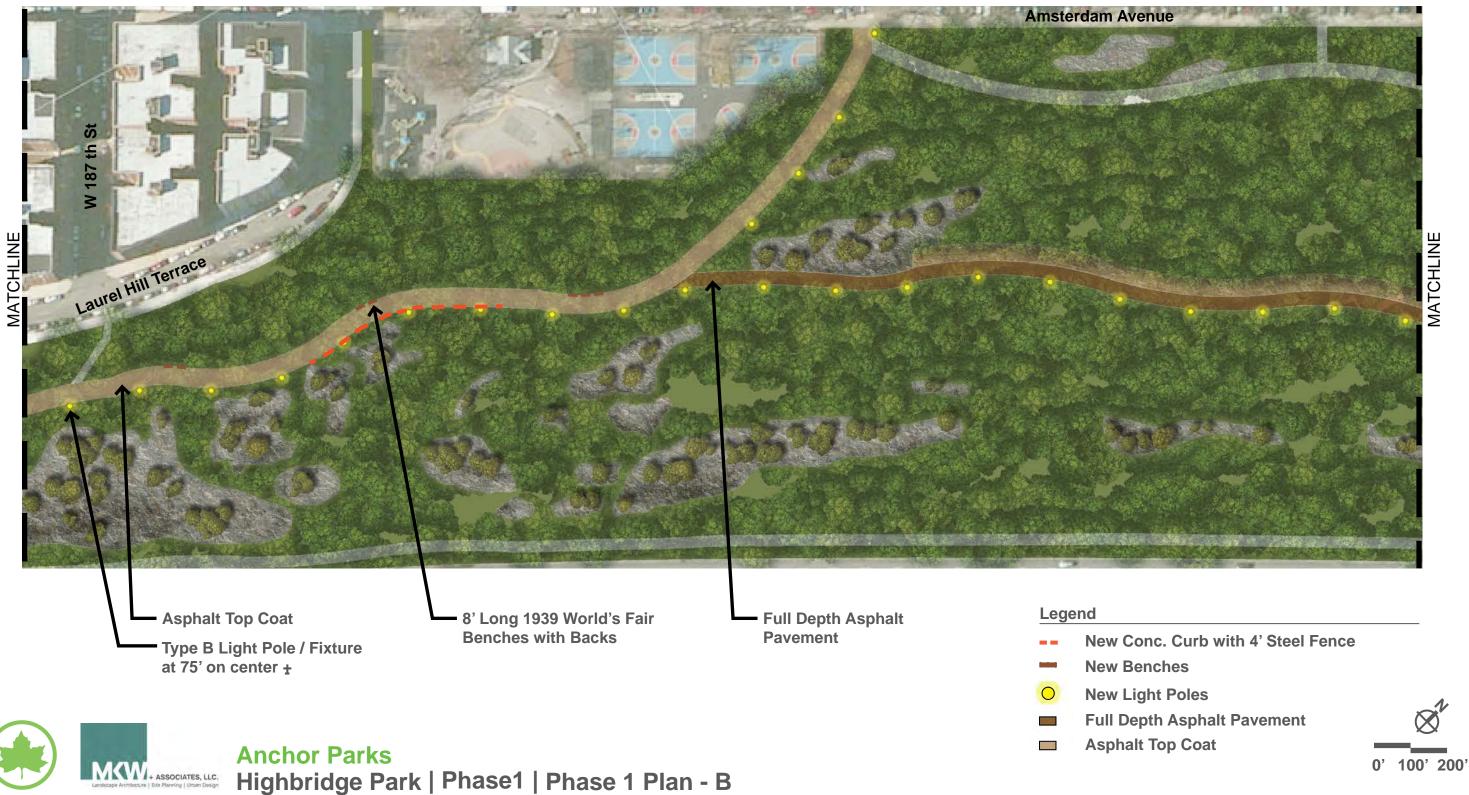


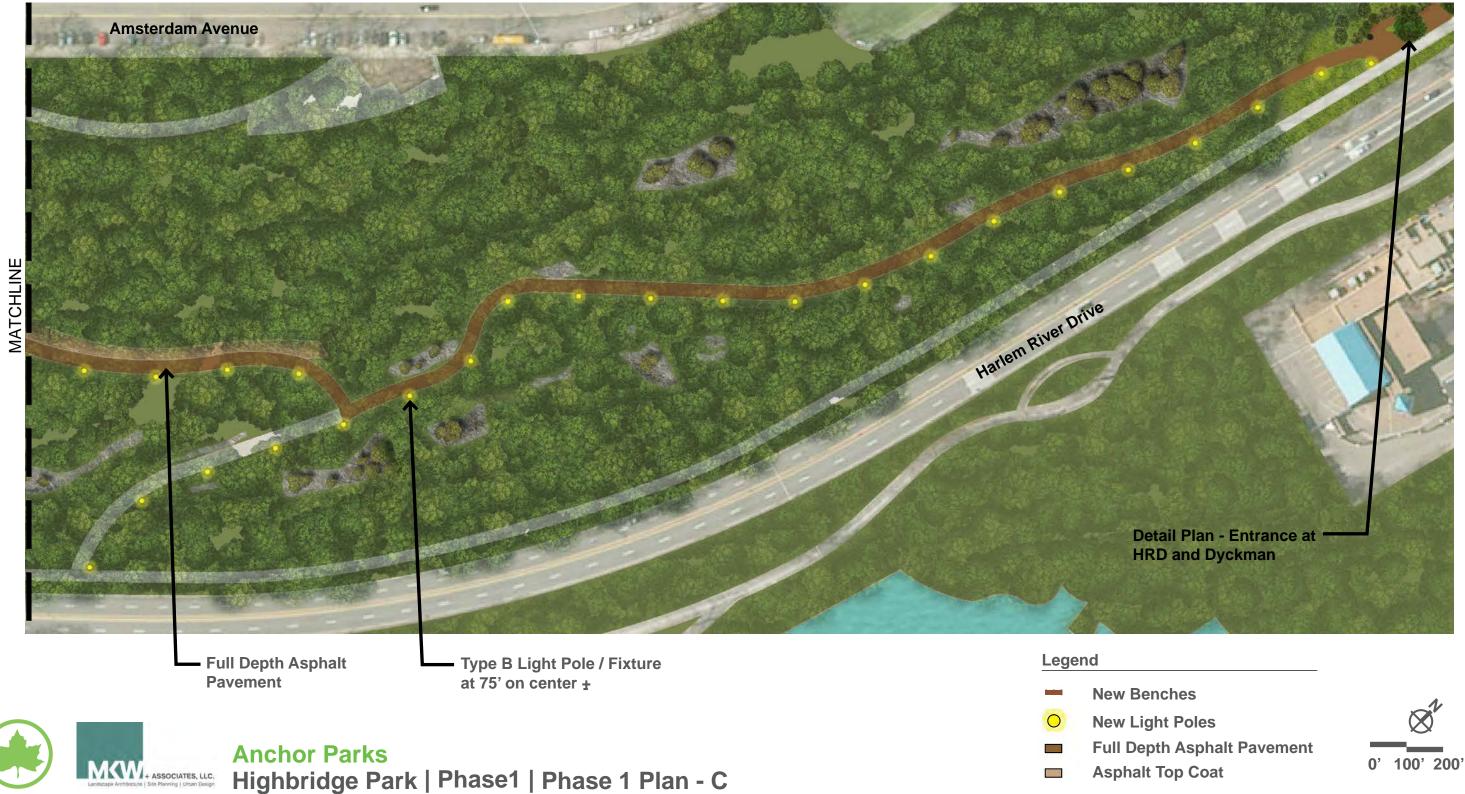






- Full Depth Asphalt Pavement
- Asphalt Top Coat



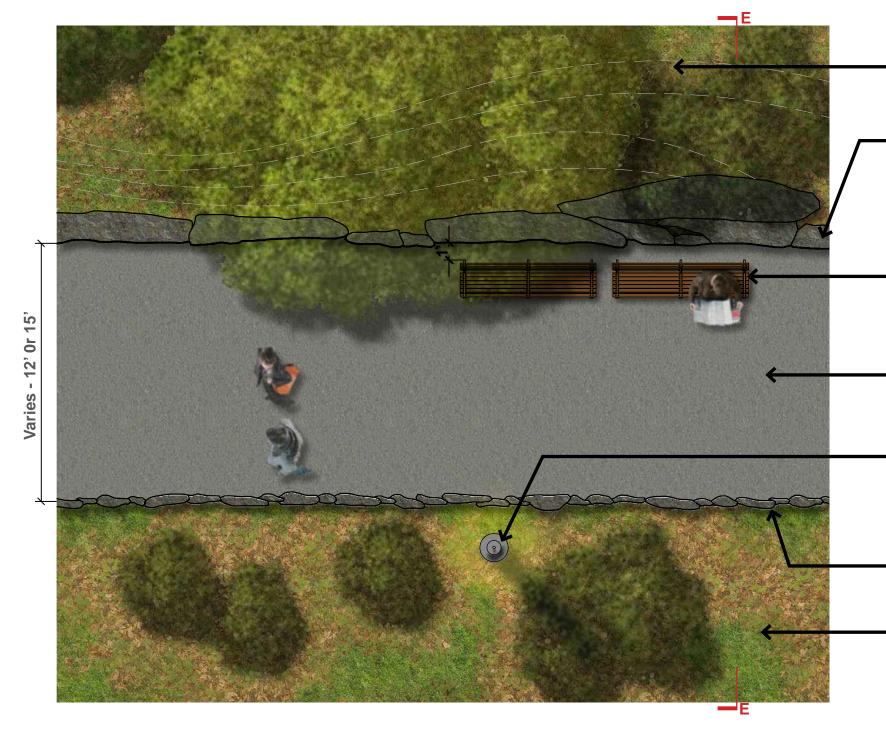














### Existing vegetated upslope

Existing Rough Stone Retaining wall or Rock Outcrop Height varies between 3' and 12'

8' long 1939 World's Fair Bench with back in double or triple configurations

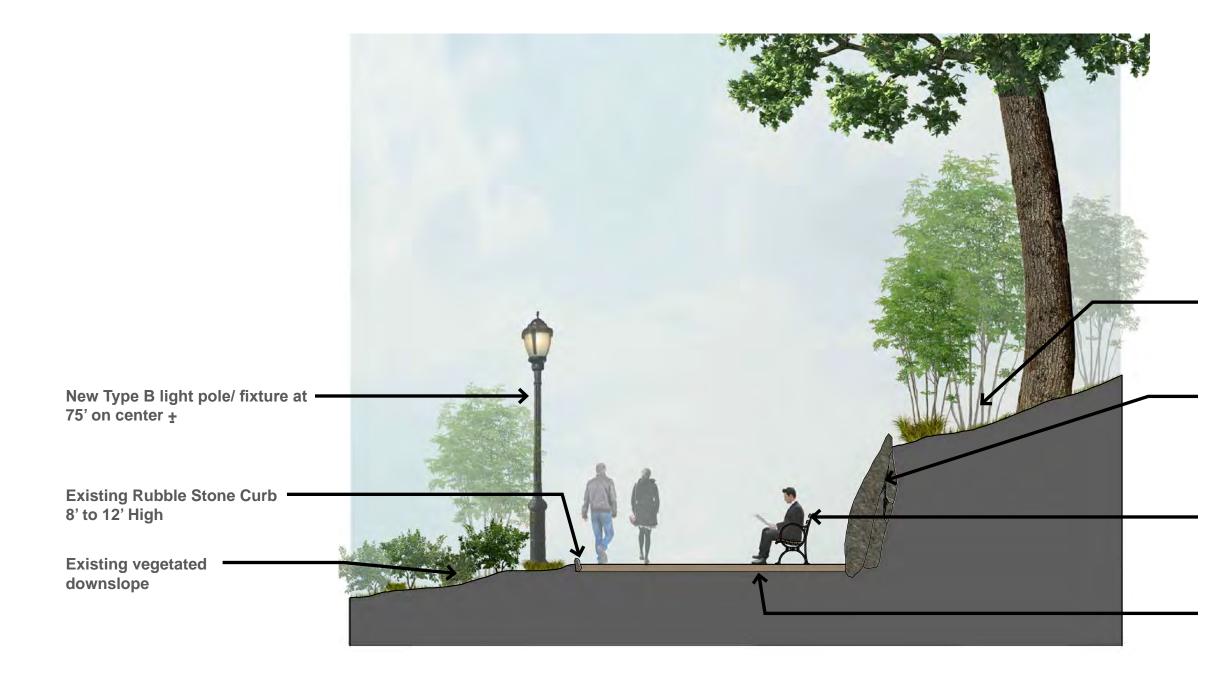
Asphalt Top Course or New Full Depth Asphalt

New Type B light pole/ fixture at 75' on center ±

Existing Rubble Stone Curb 8" to 12" High

Existing vegetated downslope

0' 8' Δ'





Existing vegetated upslope

Existing Rough Stone retaining wall or Rock Outcrop Height varies between 3' and 12'

8' long 1939 World's Fair Bench with back in double or triple configurations

Asphalt Top Course or New Full Depth Asphalt



Asphalt Pavement



Asphalt Block Pavers



**Concrete Pavement** 



4'-0" Steel Fence



1939 World's Fair Bench with Back



Bottle Filler with Hi-Lo Drinking Fountains



Anchor Parks Highbridge Park | Phase1 | Site Furnishings



Type B Light Pole and Fixture

# WHAT COMES NEXT?

- Submit Phase 1 project to the Public Design Commission
  - Continue design of Phase 1 project throughout 2017
    - Begin the Phase 2 project in May



Anchor Parks | Highbridge Park | Manhattan, NY

# ommission out 2017

