NATIONAL MALL CAROUSEL SITE IMPROVEMENTS

NATIONAL MALL CAROUSEL
1000 JEFFERSON DRIVE SW
WASHINGTON DC 20560

SF PROJECT # 2399615

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
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202.333.6446

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ARCHITECT

CIVIL ENGINEER

STRUCTURAL ENGINEER

MEP ENGINEER

SMITHSONIAN FACILITIES
APPROVAL BLOCK

DM: _____

DESIGN CHIEF: _____

R.E.: _____

OPPM: _____

OFM&R: _____

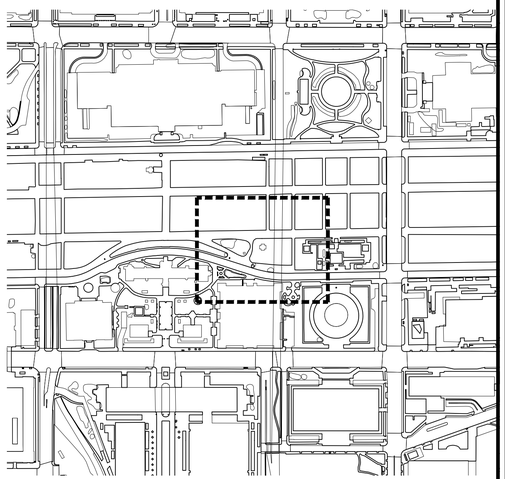
OSHEM: _____

OPS: _____

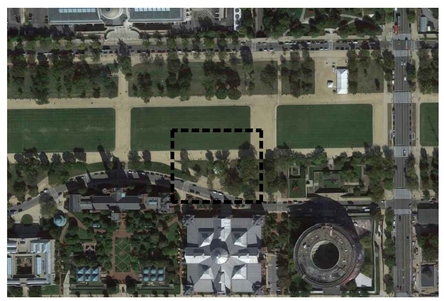
THIS PROJECT IS APPROVED AS BEING IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF SMITHSONIAN INSTITUTION DIRECTIVE 410.

MICHAEL J. CARRANCHO, P.E., DEPUTY DIRECTOR FOR ENGINEERING AND DESIGN, OPDC

VICINITY MAP



LOCATION MAP



INDEX OF DRAWINGS

GRAPHIC SCALE(S)

DATE: 12/18/24

SUBMISSION: FINAL

REVISION 1 | REVISION 2 | REVISION 3 | REVISION 4 | REVISION 5 | REVISION 6

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS: SI MALL CAROUSEL
NATIONAL MALL
WASHINGTON DC 20001

PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER:

DRAWING TITLE: COVER
DRAWING TYPE: GENERAL
WORKING STAFF: ST (DESIGNED BY) | MS (DRAWN BY) | AY (CHECKED BY)

SHEET NO.: 1_OF_53

G (DISCIPLINE) | 0 (TYPE) | 01 (SEQUENCE)

SCALE: 1:1

KEY

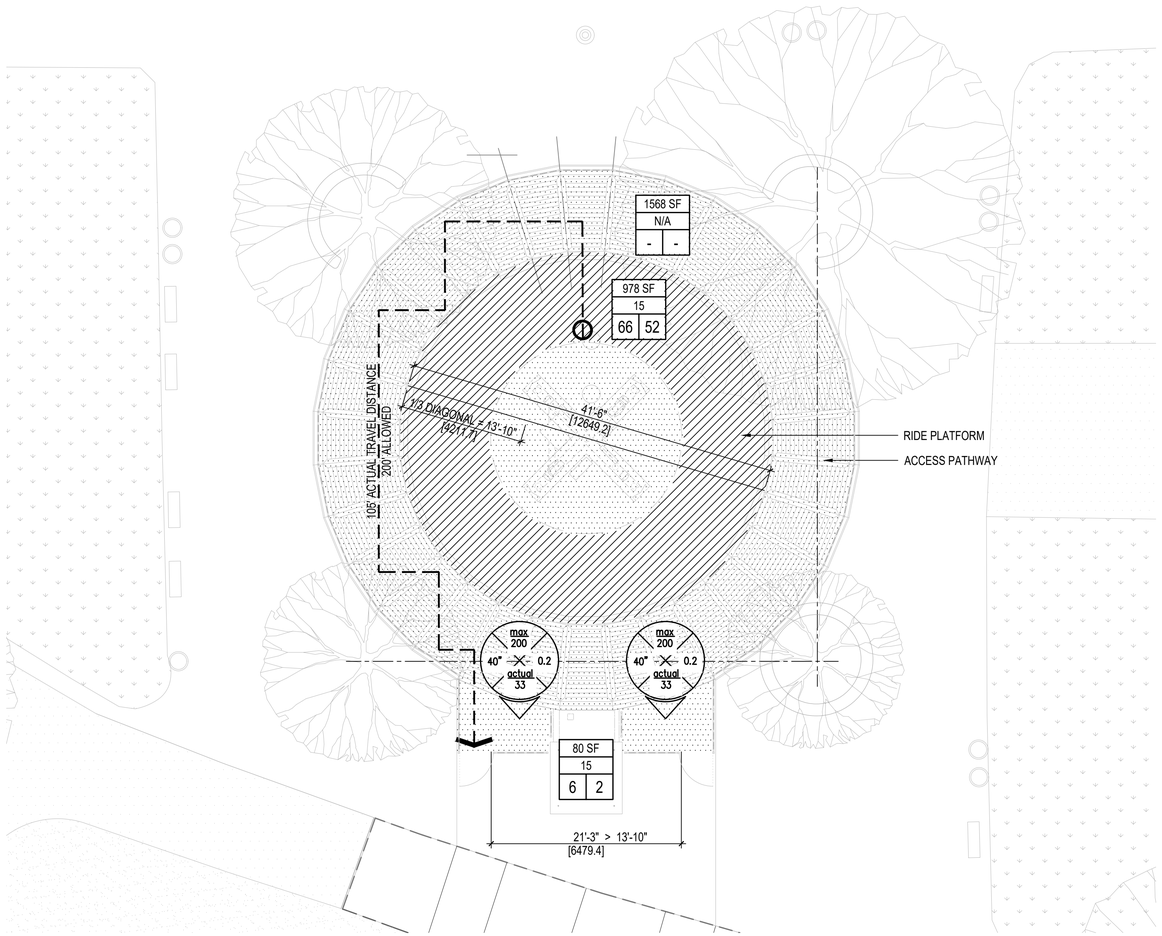
MAX OCCUPANCY

WIDTH (") — INCHES PER PERSON

ALLOWABLE EGRESS OCCUPANCY

80 SF	AREA SQUARE FOOTAGE
15	LOAD FACTOR
6 | 2	AREA OCCUPANCY

CALCULATED OCCUPANCY — ACTUAL* OCCUPANCY



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G-002

LIFE SAFETY PLAN

SCALE: 1/8" = 1'-0"

INTRODUCTION

The proposed project area is the site around the National Mall carousel which is located on the north side of 1000 Jefferson Ave, SW across from the Smithsonian Institution Building and Smithsonian Arts and Industries Building and is located on National Park Service (NPS) land. A carousel has served the National Mall at this location since 1967. The current carousel originally resided at Gwynn Oaks Amusement Park in Baltimore, MD and was relocated to its current location in 1981 to replace an earlier carousel structure. The current carousel structure was owned by a private family until December 2022, when its ownership was legally secured by the Smithsonian Institution (SI). The SI has a Commercial Use Authorization to operate the carousel on NPS land going forward.

The carousel is widely used by visitors to the Smithsonian Institution and the National Mall and must remain clean, safe, and in proper working order so that it may continue to serve the community. To that end the Smithsonian Institution has engaged Carousels and Carvings to rehabilitate the carousel off site. The SI's contract with Carousels and Carvings (C&C) is not part of the Carousel Site Improvements project defined by these documents, however the work herein includes elements that shall be completed both before and after C&C reinstalls the carousel. Coordination between the two projects is critical to the success of each.

These documents include work required to prepare the site for the carousels return and include new foundations to support the refurbished carousel structure, a boardwalk structure to provide access to the carousel, a fenced enclosure with gates, a new ticket booth structure, and hardscape improvements to ensure accessible paths to the carousel.

CODES AND REGULATIONS

The design of this project conforms to the following applicable codes and standards.

- Smithsonian Special Conditions for Architect/Engineer Services, July 2020
- Smithsonian Institution Code, Standards and Guidelines, February 2012
- Smithsonian Institution OSHEM Fire Protection & Life Safety Design Manual, September 2004
- Smithsonian Design Standards, October 2021
- Smithsonian Directive 419 - SI Safety and Health Program, April 2018
- 2024 International Building Code (IBC)
- 2024 NFPA 101, Life Safety Code

OCCUPANCY CLASSIFICATION
Group A-5 (applies to the special amusement area aggregate carousel and associated ticket booth) (IBC 303.6)

SPECIAL DETAILED REQUIREMENTS – IBC 411 for Special Amusement Areas
Carousel exempt from IBC 411 as it will be without walls and constructed to prevent the accumulation of smoke. (IBC 411.1, Ex. 2)

TYPE OF CONSTRUCTION (minimum permitted)
Ticket Booth - Type VB (but constructed of non-combustible materials, consistent with Type IIB)
Allowable height – 40 feet (IBC 504.3)
Allowable number of stories – Unlimited (IBC 504.4.)
Allowable area – Unlimited (IBC 506.2)
Carousel – Not applicable / no requirements

INTERIOR FINISH
Ticket Booth – Class A (as required by SI FPLSDM, 2.6B for spaces where automatic sprinkler protection is not provided).
Carousel – Not applicable / no requirements

FIRE ALARM

- Ticket Boot - Required by IBC 411.3.
- Carousel – Not applicable / no requirements

FIRE SPRINKLER PROTECTION

- Ticket Booth - No sprinkler protection required based on ticket booth size less than 1,000 sf. (IBC 411.2)
- Carousel – Not applicable / no requirements

MEANS OF EGRESS – applies to overall special amusement area including the carousel and ticket booth.
As required by NFPA 101
Exit signs at exits from special amusement area. (IBC 411.4)
Directional markings not required as path of egress will be apparent. (IBC 411.4)

SPECIAL REQUIREMENTS FOR AMUSEMENT RIDES
ASTM F2291-24 Standard Practice for Design of Amusement Rides and Devices

SPECIAL ACCESSIBILITY REQUIREMENTS
In addition to the accessibility requirements listed above the project must meet the National Park Service's Denver Service Center (NPS DSC) Guidelines for Slope and Cross Slope.

- Ramps: Maximum 7.5%
- Walking Surfaces: Maximum 4.0%
- Level Areas (landings, turning spaces, etc): Maximum1.5%
- Cross-Slope: 1.5% Maximum

MEANS OF EGRESS - OCCUPANT LOAD CALCULATIONS

NAME OF SPACE	AREA (SF)	OCCUPANT LOAD FACTOR (SF PER PERSON)	OCCUPANT LOAD (CALCULATED)	OCCUPANT LOAD (ACTUAL*)
RIDE PLATFORM	978	15	66	64
OPERATORS AREA	80	15	6	2
RIDE ACCESS AREA	1568	N/A	N/A	N/A
		TOTAL	72	66

* ACTUAL OCCUPANT LOAD IS GOVERNED BY THE OPERATING CAPACITY OF THE AMUSEMENT RIDE.

MEANS OF EGRESS - EXIT COMPONENTS

NAME OF EGRESS ELEMENT	FROM	TO	INCHES PER PERSON	EFFECTIVE WIDTH	CAPACITY	ACTUAL LOAD
WEST GATE	RIDE ACCESS AREA	PUBLIC WAY	0.2	40	200	33
EAST GATE	RIDE ACCESS AREA	PUBLIC WAY	0.2	40	200	33

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ARCHITECTURE
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BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA — REGISTERED — ARC4000262 — 1/9/2024 — LICENSED — ARCHITECT

KEY PLAN

8' 4' 0 8'

SCALE: 1/8"=1'-0"

GRAPHIC SCALE(S)

DATE 12/18/24 | SUBMISSION FINAL

REVISION
REVISION 1
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REVISION 3
REVISION 4
REVISION 5
REVISION 6

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS: SI MALL CAROUSEL
NATIONAL MALL
WASHINGTON DC 20001

PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER:

DRAWING TITLE: CODE
DRAWING TYPE: ARCHITECTURE
WORKING STAFF: ST (DESIGNED BY) | JC (DRAWN BY) | AY (CHECKED BY)

SHEET NO. 00_OF_11

G (DISCIPLINE) | 0 (TYPE) | 02 (SEQUENCE)

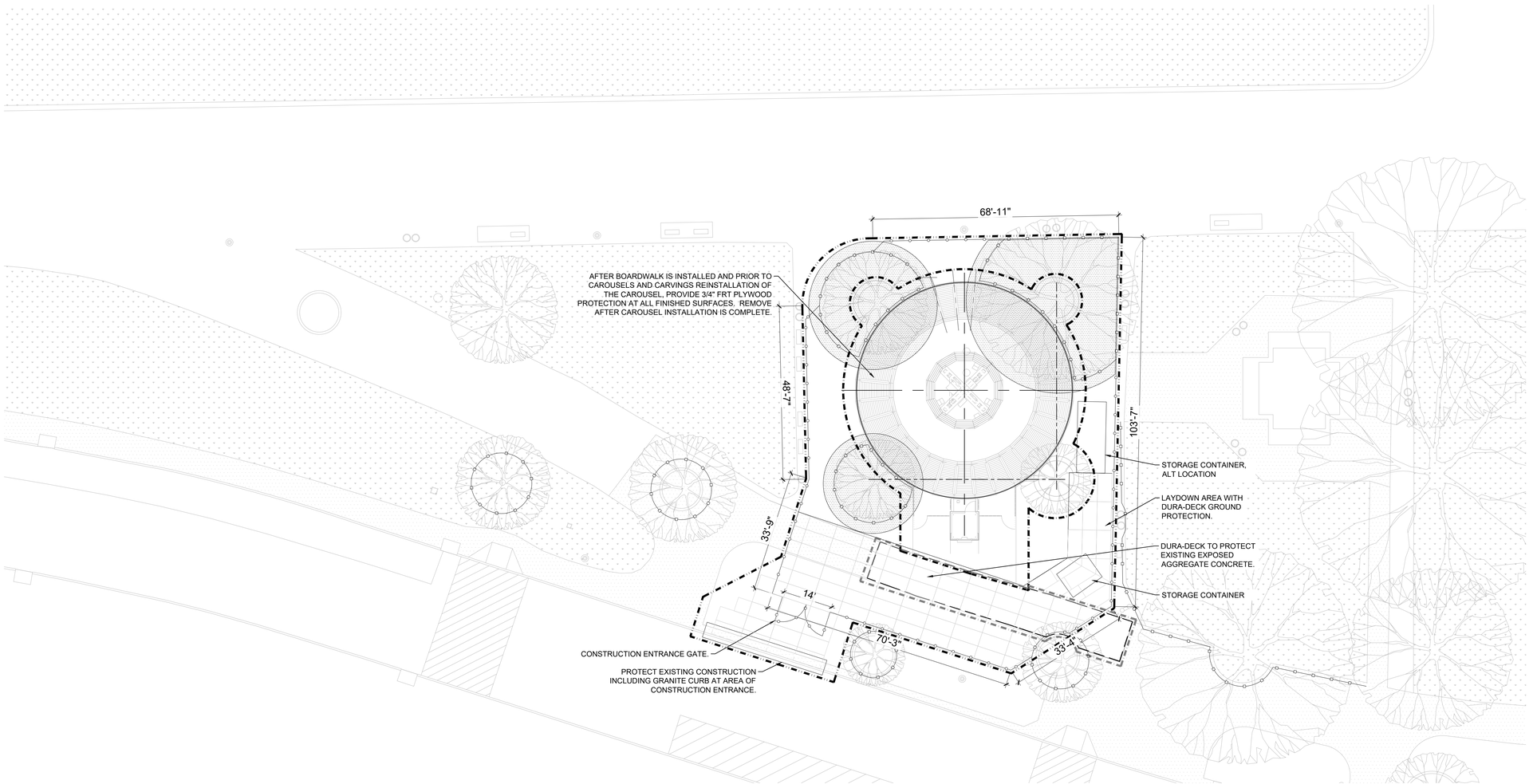
SCALE: 1:1

LEGEND

- TEMPORARY ROOT MATTING REFER TO TREE PROTECTION DRAWINGS
- CONSTRUCTION FENCE
- TREE PROTECTION FENCE REFER TO TREE PROTECTION DRAWINGS
- EXTENTS OF WORK
- ADDITIONAL EXTENTS OF WORK FOR OPTION 01 WORK

SITE LOGISTICS GENERAL NOTES

1. COORDINATE ALL SITE LOGISTICS WITH TREE PROTECTION REQUIREMENTS.
2. PROTECT ALL SITE AREAS USED FOR CONSTRUCTION STAGING WITH DURADECK.
3. ALL CONTRACTOR STAGING AREAS SHALL BE WITHIN THE LIMITS OF THE CONSTRUCTION AREA FENCING.
4. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE FENCE LOCATIONS WITH EXISTING EQUIPMENT AND SITE APPURTENANCES.
5. TURF AREAS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IN ACCORDANCE WITH SPECIFICATION SECTION 32 9200.
6. PROVIDE TEMPORARY SIGNAGE FOR CONSTRUCTION ACTIVITY THAT BLOCKS PEDESTRIAN PATHWAYS.
7. NPS PERMITS ARE REQUIRED FOR JEFFERSON DRIVE LANE CLOSURES. GC SHALL OBTAIN ANY LANE CLOSURE PERMITS REQUIRED.
8. RESTORE THE TOP 4" LAYER OF FINISH GRAVEL OF ALL GRAVEL WALKWAYS WITHIN CONSTRUCTION FENCE. RESTORE GRAVEL WALKWAYS OUTSIDE CONSTRUCTION FENCE THAT ARE DAMAGED BY PROJECT ACTIVITY. GRAVEL RESTORATION SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 32
9. AFTER BOARDWALK IS INSTALLED AND PRIOR TO CAROUSELS AND CARVINGS REINSTALLATION OF THE CAROUSEL, PROVIDE 3/4" FRT PLYWOOD PROTECTION AT ALL FINISHED SURFACES. REMOVE AFTER CAROUSEL INSTALLATION IS COMPLETE.
10. AT INTERSECTION OF TREE PROTECTION FENCE AND CONSTRUCTION FENCE, PROVIDE A COMMON FENCE POST LOCATION TO SECURE BOTH FENCE TYPES.



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SITE LOGISTICS PLAN

SCALE: 1/16" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
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1074 THOMAS JEFFERSON STREET NW
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DISTRICT OF COLUMBIA · REGISTERED · ARC4000262 · 1/9/2024 · LICENSED · ARCHITECT

KEY PLAN

16' 8' 0 16'

SCALE: 1/16" = 1'-0"

GRAPHIC SCALE(S)

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12/18/24	FINAL

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REVISION 6	

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
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ADDRESS	NATIONAL MALL WASHINGTON DC 20001
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DRAWING TITLE	SITE LOGISTICS PLAN
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) · JC (DRAWN BY) · AY (CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	G	0	03

SCALE: 1:1

FOR DOEE STAMP APPROVAL ONLY

GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR SHUTOFF, CAPPING AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
2. CONTRACTOR SHALL REMOVE AND TRANSPORT ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM ALL DEMOLITION OPERATIONS TO A LEGAL AND REGISTERED FACILITY.
3. REMOVAL OF ASPHALT AND CONCRETE PAVEMENT SHALL INCLUDE THE REMOVAL OF ALL SURFACE, BASE AND SUB-BASE MATERIALS.
4. EXISTING CONDITIONS SHOWN HEREON WERE TAKEN FROM A SURVEY PROVIDED BY THE OWNER TO THE DESIGN TEAM. SURVEY WAS COMPLETED BY AMT IN 2019.
5. ALL UNDERGROUND UTILITY LOCATIONS, INCLUDING WATER, STORM DRAINAGE, SANITARY SEWER, ELECTRICAL, TELEPHONE AND GAS WERE TAKEN FROM AVAILABLE RECORDS AND FIELD VERIFIED WHERE POSSIBLE. THE LOCATION OF ALL UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING WORK. REPORT ANY DISCREPANCY TO THE ENGINEER. MARKING LOCATIONS OF EXISTING UTILITIES, CONTACT "MISS UTILITY" AT 202-265-7177, 48-HOURS PRIOR TO ANY EXCAVATION.
6. THE CONTRACTOR MUST HAND-DIG TEST PITS AT ALL UTILITY CROSSINGS TO DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES AS WELL IN DEMOLITION WORK AND PRIOR TO ORDERING PIPE MATERIALS AND STRUCTURES. UTILITIES FOUND DURING DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF ANY CONTRACTOR ENGAGED IN EXCAVATION AT THIS SITE. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY UTILITY FINDINGS WHICH DEVIATE FROM THE CONDITIONS SHOWN.
7. ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE INSTALLED BEFORE THE START OF ANY EXCAVATION AND/OR DEMOLITION AS PER DISTRICT OF COLUMBIA EROSION AND CONTROL HANDBOOK. IF ANY ONSITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED.
8. SEE SEDIMENTATION AND EROSION CONTROL PLAN FOR ALL EXISTING TREES TO REMAIN AND BE PROTECTED.
9. NOTE PROXIMITY OF ADJACENT STRUCTURES AND UTILITY LINES AND MAINTAIN CONTINUED SERVICE DURING CONSTRUCTION. COORDINATE WITH RESPECTIVE UTILITY COMPANIES AND ENGINEER SHOULD RELOCATION OF SERVICE BE REQUIRED.
10. EXISTING UTILITIES (STRUCTURES AND LINES) NOT REQUIRED FOR FUTURE SERVICE TO BE REMOVED TO FACILITATE CONSTRUCTION. UTILITIES TO BE CAPPED AS PER UTILITY PURVEYOR'S STANDARDS AND SPECIFICATIONS. COORDINATE REQUIREMENTS WITH UTILITY PURVEYOR.
11. REMOVAL OF ALL WALLS/RETAINING WALLS AND FENCES SHALL INCLUDE THE REMOVAL OF THEIR FOUNDATION UNLESS OTHERWISE INDICATED ON THESE DRAWINGS.
12. ALL EXISTING DC STREETLIGHT POLES THAT ARE BEING PERMANENTLY REMOVED MUST BE RETURNED IN GOOD CONDITION TO THE DISTRICT OF COLUMBIA WAREHOUSE AT 1735 15TH STREET NE OFF WEST VIRGINIA AVENUE CONTACT NUMBER 202-576-5258.
13. EXISTING WATER AND SEWER SERVICES NOT REQUIRED FOR FUTURE USE TO BE REMOVED TO EXTENT NECESSARY TO FACILITATE NEW CONSTRUCTION. REMAINDER OF SERVICE TO BE CAPPED AT MAIN AND EXISTING VALVES AND TEES TO BE REMOVED PER DC WATER STANDARDS SPECIFICATIONS. COORDINATE REQUIREMENTS WITH DC WATER INSPECTOR AT 202-787-4024. PAVEMENT TO BE REMOVED PER DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
14. CONTRACTOR TO BE RESPONSIBLE FOR LAYOUT, EXTENT AND DESIGN OF SHEETING, SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES, SHORING, BRACING AND UNDERPINNING SHALL BE DESIGNED BY A STRUCTURAL ENGINEER, LICENSED IN THE DISTRICT OF COLUMBIA, HIRED BY THE CONTRACTOR AS NECESSARY TO ENSURE SUPPORT OF SURROUNDING STRUCTURES AND UTILITIES.
15. CONTRACTOR TO RELOCATE PARKING METERS IF REQUIRED AND AS DIRECTED BY D.C. BUREAU OF PARKING. COORDINATE REQUIREMENT WITH LARRY BROWN OF PARKING SERVICES AT 202-671-2291.
16. NOTIFY DC WATER UTILITY INSPECTOR, CHIEF UTILITY INSPECTION 202-787-4024 OF DISTRICT OF COLUMBIA WATER & SEWER AUTHORITY 48 HOURS PRIOR TO START OF CONSTRUCTION.
17. UNLESS OTHERWISE SHOWN ON THESE DRAWINGS, EXISTING PAVEMENT IS TO REMAIN. PROVIDE PRE-CONSTRUCTION VIDEO OF EXISTING PAVEMENT. EXISTING PAVEMENT, DISTURBED OR DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED PER DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST.
18. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES VERIFY INVERT ELEVATION OF EXISTING UTILITIES. NOTIFY ENGINEER OF ANY DISCREPANCIES WITH INFORMATION SHOWN PRIOR TO ORDERING ANY STRUCTURES.
19. CONTACT "MISS UTILITY" AT 202-265-7177 48 HOURS PRIOR TO CONSTRUCTION.
20. CONTACT DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION-PUBLIC SPACE MAINTENANCE ADMINISTRATION 48 HOURS PRIOR TO START OF CONSTRUCTION AT 202- 645-6030 OR 202-645-6031
21. ALL PROPOSED UTILITY WORK TO BE PERFORMED UNDER THE INSPECTION OF THE DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY.
22. USE MANHOLE ENTRY SEALS WHERE REQUIRED.
23. CONTRACTOR TO PROVIDE A PRE- AND POST-CONSTRUCTION TV VIDEO ON THE EXISTING SEWER SYSTEMS PER DC WATER STANDARDS AND SPECIFICATIONS.
24. THE TERM "PROPOSED" IS USED TO IDENTIFY NEW WORK TO BE PROVIDED AND CONSTRUCTED WITH THIS PLAN.

TEST PIT NOTE:

TEST PITS ARE REQUIRED AT ALL PROPOSED UTILITY CROSSINGS WITH ALL EXISTING UTILITY LINES TO DETERMINE THE EXACT HORIZONTAL LOCATION, ELEVATION AND ADD SIZE OF THE EXISTING UTILITIES. A MINIMUM OF ONE FOOT VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN EXISTING AND PROPOSED UTILITIES. TEST PITS SHOULD BE COMPLETED PRIOR TO ORDERING ANY STRUCTURES OR PIPE MATERIALS. NOTIFY ENGINEER OF ANY CONFLICT WITH PROPOSED PLANS.

SURVEY NOTES (SURVEY BY AMT)

HORIZONTAL DATUM: (MARYLAND STATE PLANE GRID NAD (83/2011). THE DATUM WAS ESTABLISHED BY A GPS STATIC SURVEY IN OCTOBER 2018 USING CONTINUOUSLY OPERATING REFERENCE STATION (CORS) "LOYF", "LOYK", "NEDR", "UMBC" AND "ZDC1". (METERS)

VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). THE DATUM WAS ESTABLISHED BY DIFFERENTIAL LEVELING METHOD USING NGS BENCHMARK HV1837. (METERS)

SITE NOTES:

1. WHERE NEW WORK MEETS EXISTING, NOTE FIELD LOCATION AND ELEVATIONS OF EXISTING FEATURES BEFORE BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCY TO THE ARCHITECT OR ENGINEER.
2. VERIFY LOCATION OF EXISTING UTILITIES BEFORE PROCEEDING WITH WORK. NOTIFY OWNER'S REPRESENTATIVE, DC WATER UTILITY INSPECTOR, DC WATER (202-787-4024) AND "MISS UTILITY" 202-265-7177 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATIONS. HAND DIG TEST PITS AT ALL UTILITY CROSSINGS AND DETERMINE EXACT CLEARANCE OF ALL PROPOSED INSTALLATIONS WELL IN ADVANCE OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONFLICTS WITH PLAN ELEVATIONS.
3. WORK AND MATERIALS IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE APPLICABLE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. ON-SITE WORK AND MATERIALS SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE DISTRICT OF COLUMBIA PLUMBING CODE.
4. DIMENSIONS ARE TO FACE OF WALL AND CURB, EDGE OF WALK AND PAVEMENT, CENTERLINE OF COLUMN, PIPE AND UTILITY STRUCTURE. UNLESS OTHERWISE NOTED.
5. FRAMES AND COVERS OF EXISTING STRUCTURES TO BE ADJUSTED TO MATCH NEW FINISHED GRADES.
6. OMISSIONS AND/OR ADDITIONS OF UTILITIES FOUND DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY OF ANY INFORMATION CONCERNING FOUND UTILITY, NOT SHOWN ON PLANS.
7. EXISTING SURFACE CONDITIONS DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING CONDITIONS. CONTRACTOR TO COORDINATE EXTENT WITH ARCHITECT OR ENGINEER.
8. TEST PITS ARE REQUIRED AT ALL LOCATION(S) WHERE PROPOSED UTILITIES CROSS EXISTING UTILITIES. INVESTIGATION(S) TO IDENTIFY HORIZONTAL LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES. THE ENGINEER IS TO BE NOTIFIED OF THIS INFORMATION.
9. IF A 1' MINIMUM VERTICAL CLEARANCE CAN NOT BE MAINTAINED AT UTILITY CROSSING, THE CONTRACTOR IS TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH WORK.
10. TRANSITION CURB, GUTTER, PAVING AND SIDEWALK TO MEET EXISTING IN LINE AND ON GRADE OR AS DIRECTED BY ENGINEER.
11. ALL DEBRIS AND EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED OFF-SITE LOCATION.
12. ALL ON-SITE WATER LINES TO HAVE A MINIMUM COVER OF 4'-0". WATER FITTINGS SHALL BE PROPERLY TIED AND ANCHORED, PER DC WATER STANDARDS AND SPECIFICATIONS.
13. WHERE PORTIONS OF EXISTING BITUMINOUS OR CONCRETE PAVING ARE TO BE REMOVED, THE EXISTING PAVEMENT SHALL BE SAW-CUT.
14. REMOVE FRAMES AND COVERS OF SEWER MANHOLE/INLETS AND/OR WATER MAIN VALVE CASTINGS TO BE ABANDONED AND FILL TO GRADE.
15. ALL CURB SPOT SHOTS ARE TOP OF CURB, UNLESS OTHERWISE NOTED.
16. NOTIFY WASHINGTON GAS AT 202-750-4205, 48 HOURS PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY TRANSMISSION MAIN. FOR FURTHER INFORMATION OR PROBLEMS, CONTACT MR. CHUCK WHITLEY AT WASHINGTON GAS AT 703-750-4205.
17. PROVIDE A MINIMUM OF 5 FEET HORIZONTAL AND 1 FOOT VERTICAL CLEARANCE BETWEEN 12" DIAMETER AND SMALLER DISTRIBUTION EXISTING GAS FACILITIES AND PROPOSED FACILITIES.
18. PROVIDE A MINIMUM OF 5 FEET HORIZONTAL AND 2 FEET VERTICAL CLEARANCE BETWEEN 16" DIAMETER OR GREATER TRANSMISSION GAS FACILITIES AND PROPOSED FACILITIES.
19. ALL PROPOSED WORK TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST STANDARDS AND SPECIFICATIONS OF THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION AND WATER AND SEWER AUTHORITY.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING SIDEWALK, CURB AND GUTTER TO REMAIN OR TO REPLACE SIDEWALK, CURB AND GUTTER DAMAGED DURING CONSTRUCTION.
21. EXISTING FULL DEPTH PAVEMENT SECTION, CURB AND GUTTER TO BE REMOVED AND REPLACED TO EXTENT NECESSARY TO FACILITATE CONSTRUCTION OF NEW UTILITIES. MATERIALS TO COMPLY WITH DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
22. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION AND GUIDELINES.

DDOT EXCAVATION NOTES:

1. NO WORK SHALL BE UNDERTAKEN IF THE APPLICANT, OR THE PERSON ON WHOSE BEHALF THE APPLICANT IS MADE, HAS A TEMPORARY REPAIR IN PUBLIC SPACE OLDER THAN 45 DAYS, OR TEMPORARY REPAIRS THAT HAVE FAILED AND THOSE REPAIRS HAVE NOT BEEN UNDERTAKEN WITHIN 24 HOURS.
2. PERSONS REGULARLY PERFORMING PUBLIC SPACE EXCAVATION AND MANHOLE WORK REQUESTED TO PROVIDE, ON A BIWEEKLY BASIS, PLANS SHOWING THEIR ANTICIPATED ACTIVITIES IN THE PUBLIC SPACE WITHIN THE TWO WEEK PERIOD. SINCE THESE PLANS ASSIST THE DEPARTMENT IN COORDINATING ACTIVITIES IN THE PUBLIC SPACE, THE FAILURE TO PROVIDE SUCH PLANS MAY RESULT IN DELAYS IN THE PERMIT REVIEW PROCESS.
3. NOTIFY THE DEPARTMENT OF TRANSPORTATION, OFFICE OF INFRASTRUCTURE OVERSIGHT AT 202-645-7050, 48 HOURS IN ADVANCE OF STARTING WORK.
4. ALL FAILED CUTS MUST BE REPAIRED WITHIN 24 HOURS OF NOTIFICATIONS.
5. D.C. LAW 3129, UNDERGROUND FACILITIES PROTECTION ACT OF 1980, REQUIRES THAT "MISS UTILITY" 202-265-7177 BE CONTACTED AT LEAST 48 HOURS AND NOT MORE THAN 10 DAYS (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS) PRIOR TO START OF EXCAVATION, SO NOTIFICATION CAN BE MADE TO PARTICIPATING PRIVATE UTILITY COMPANIES OF THE PROPOSED WORK.
6. 48 HOURS PRIOR TO EXCAVATING, PLEASE CALL THE WATER OPERATIONS BRANCH AT 202-673-6600 FOR LOCATIONS OF SEWER AND WATER MAIN LINES.
7. IMPROPER HOUSEKEEPING VIOLATIONS ON JOB SITE RELATING TO DIRT AND DEBRIS IN THE PUBLIC SPACE, CATCH BASINS, SEWERS, ETC. SHALL BE GROUNDS FOR A FINE AND/OR REVOCATION OF THE PERMIT.
8. WORK AUTHORIZED BY A PERMIT SHALL BE IN ACCORDANCE WITH THE SAFETY REQUIREMENTS FOR EXCAVATIONS AS OUTLINED IN THE D.C. INDUSTRIAL SAFETY BOARD MANUAL "SAFETY STANDARDS, RULES AND REGULATIONS CONSTRUCTION".
9. WORK AUTHORIZED BY A PERMIT SHALL BE IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
10. MAINTAIN ACCESS TO ALL ALLEY AND DRIVEWAYS AT ALL TIMES.
11. PLATE ALL INTERSECTION , WHERE APPLICABLE.
12. MAINTAIN A 6 TO 10 FOOT SIDEWALK AT ALL TIMES FOR PEDESTRIANS.
13. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND SALVAGING ALL COBBLESTONE PAVERS AND OTHER SPECIAL PAVERS REMOVED IN CONNECTION WITH EXCAVATION. THE PAVERS ARE TO BE DELIVERED TO THE DEPARTMENT OF PUBLIC WORKS MAINTENANCE YARD AT 201 FLORIDA AVENUE, N.E. TELEPHONE NUMBER IS 202-727-5809.
14. CAUTION STREET LIGHT CABLE BEHIND CURB.
15. CONTRACTOR TO LOCATE ALL WATER AND SEWER LINES PRIOR TO START OF WORK.

TRAFFIC CONTROL NOTE:

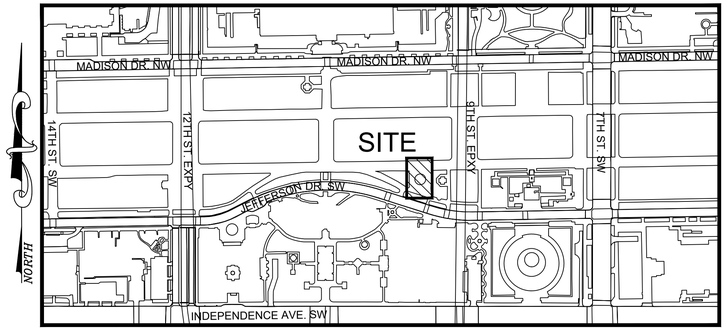
THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING TRAFFIC CONTROL PLANS TO MAINTAIN A MINIMUM OF ONE OPEN TRAVEL LANE ON JEFFERSON DRIVE AT ALL TIMES, AS WELL AS PEDESTRIAN ACCESS TO ALL MALL AND SMITHSONIAN FACILITIES DURING CONSTRUCTION. PLANS SHALL INCLUDE PHASING, CONSTRUCTION VEHICLE MOVEMENTS, STAGING AREAS, PUBLIC PARKING TO BE OCCUPIED, NUMBER OF CONSTRUCTION VEHICLES ENTERING AND LEAVING THE SITE PER DAY, AND HOURS OF WORK PER DAY. A WORK SAFETY PLAN SHALL ALSO BE PREPARED BY THE GENERAL CONTRACTOR. ALL PLANS SHALL BE SUBMITTED FOR REVIEW TO THE SMITHSONIAN AND THE NATIONAL PARK SERVICE FOR APPROVAL PRIOR TO MOBILIZATION.

ADDITIONAL PLANS REQUIRED BY CONTRACTOR:

PRIOR TO MOBILIZATION, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING TO THE SMITHSONIAN FOR REVIEW AND APPROVAL:

1. SITE SPECIFIC SAFETY PLAN
2. TRENCHING AND EXCAVATION PLAN
3. SILICA CONTROL PLAN

THESE SHALL BE COMPLETED IN ACCORDANCE WITH THE SMITHSONIAN'S STANDARDS AND SPECIFICATIONS.



VICINITY MAP

SCALE 1:300
NATIONAL MALL
WASHINGTON, DC 20001

PROJECT NARRATIVE:

PROPOSED WORK AT THIS SITE WILL INCLUDE THE REMOVAL, REFURBISHMENT, AND REINSTALLATION OF THE CAROUSEL AND SURROUNDING APPURTENANCES LOCATED ON THE NATIONAL MALL. SCOPE OF WORK INCLUDES PRIVATE, ON SITE UTILITY WORK TO ADD AN ELECTRIC LINE. LANDSCAPE, HARDSCAPE, AND TREE REMOVAL WILL BE INVOLVED.

CIVIL DRAWING INDEX

DOEE ESC NO: s23386
DOB NO: BCIV2500013

WORK IN CONFINED SPACE NOTICE:
IF APPLICABLE, ANY WORK IN CONFINED SPACE SHALL COMPLY WITH 29 CFR 1926.1203, CONFINED SPACES IN CONSTRUCTION.

MISS UTILITY
1-800-257-7777
missutility.net
NOTIFY "MISS UTILITY" AT 202-265-7177
48 HOURS IN ADVANCE BEFORE
COMMENCING THE WORK

UTILITY CONTACTS:

SEWER/WATER:	D.C. WATER 5000 OVERLOOK AVE. SW 5TH FLOOR WASHINGTON, DC 20032	-DEXTER HOLMES	(202) 787-4024
ELECTRICITY:	PEPCO 701 9TH STREET NW, ROOM 6005 WASHINGTON, DC 20068	-SARA BISHOP	(202) 872-2977
GAS:	WASHINGTON GAS CO. 6801 INDUSTRIAL ROAD SPRINGFIELD, VA 22151	-VANN JONES	(703) 750-5983
COMMUNICATIONS:	VERIZON COMMUNICATIONS FDC-1 3101 COLUMBIA PIKE CONDUIT GROUP - LOWER LEVEL SILVER SPRING, MD 20904	-MARY POLK	(301) 282-2463

HARTMAN-COX ARCHITECTS

ARCHITECTURE
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BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA
JONATHAN JOLLY
No. PE920423
1/10/2025
LICENSED
PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	COVER SHEET
DRAWING TYPE	CIVIL
WORKING STAFF	JJ / MH/SA / MM/JJ (DESIGNED BY / DRAWN BY / CHECKED BY)

SHEET NO.		
1_OF_11	C (DISCIPLINE)	0 (TYPE) / 00 (SEQUENCE)

SCALE: 1:1

LEGEND

EXISTING		PROPOSED
	CONCRETE THRUST BLOCK	
	WATER VALVE WITH CASING	
	BENCH	
	BUSH	
	TREE	
	GRATE INLET	
	STORM TRENCH DRAIN	
	DRAIN	
	ROOF DRAIN	
	SINGLE POST SIGN	
PM P	PARKING METER/KIOSK	
	TRASH CAN	
	MISCELLANEOUS POINT	
	AIR CONDITIONER	
	ELECTRIC MANHOLE	
	LAMP/ LIGHT POLE	
	ELECTRIC BOX	
	GROUND LIGHT	
9,671	SPOT SHOT	
	COMMUNICATION MANHOLE	
	UNKNOWN UTILITY MANHOLE	
	UNKNOWN VALVE	
VENT	VENT	
	SANITARY SEWER MANHOLE	
	CLEAN OUT	
	IRRIGATION VALVE	
WM	WATER METER	
	WATER MANHOLE	
D	STORM/DRAINAGE MANHOLE	
	SIGN (SI)	
SIAM	FDC - SIAMESE CONNECTION	
HB	HOSE BIBB	
SH	SPRINKLER HEAD	
SCB	SPRINKLER CONTROL BOX	
	TRAVERSE POINT	
	MONUMENT POINT	
	FIRE HYDRANT	
	BOLLARD	
	RETRACTABLE BOLLARD	
	CARD READER	
	TRAFFIC LIGHT POLE	
	MONITORING WELL	
GVP	GAS VALVE	
	DOOR	

LEGEND

EXISTING		PROPOSED
SD	STORM DRAIN LINE	
SS	SANITARY SEWER LINE	
CW	CHILLED WATER LINE SUPPLY	
CW	CHILLED WATER LINE RETURN	
W	WATER LINE	
G	GAS LINE	
COMM	TELECOMMUNICATIONS LINE	
IL	IRRIGATION LINE	
STM	UNDERGROUND STEAM LINE	
UGE	UNDERGROUND ELECTRIC LINE	
E	ELECTRIC LINE BY RECORD	
	PROPOSED ELECTRIC LINE	E
UGU	UNDERGROUND UNKNOWN UTILITY LINE	
	LIMITS OF DISTURBANCE	LOD
	FENCE LINE	
	PROPERTY LINE	
	CURB AND GUTTER	
WIF	WROUGHT IRON FENCE	
	WIDTH DOOR	
	BUILDING	
	BUILDING UNDERGROUND	
	WALL	
	AREAS MAINTAINED BY THE SMITHSONIAN INSTITUTION	

ABBREVIATIONS:

AIB	ARTS AND INDUSTRIES BUILDING
APPROX.	APPROXIMATE
ASPH.	ASPHALT
BC	BITUMINOUS CONCRETE
BC	BOLLARD & CHAIN
BC	BLUESTONE CURB
BLDG.	BUILDING
BFP	BACK-FLOW PREVENTION
BOC	BOTTOM OF CURB
BRK	BRICK
CC	CONCRETE CURB
CG	CURB & GUTTER
CI	CURB INLET
CJ	CONTRACTION JOINT CENTER
CL	LINE
CLF	CHAIN LINK FENCE
CO	CLEAN OUT
CONC.	CONCRETE
COMB	COMBINE(D)
COMP	COMPUTED
COMM	TELECOM
CRZ	CRITICAL ROOT ZONE
CW	CHILL WATER
CY	CUBIC YARD
DB	DUCTBANK
DI	DRAIN INLET
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
DWG(S)	DRAWING(S)
ELEC	ELECTRICAL
EC	END OF CURB ELECTRIC(AL)
ELEV	ELEVATION
EJ	EXPANSION JOINT
ENT	ENTRANCE
EOI	END OF INFORMATION
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FFO+X	FINISHED FLOOR OUTSITE + DISTANCE
FFTH	FINISHED FLOOR THRESHOLD
FFI	FINISHED FLOOR INSIDE
FH	FIRE HYDRANT
FL	FLOW LINE
FOD	FULL OF DEBRIS
FOW	FULL OF WATER
FR	FROM
FT	FEET/FOOT
G	GAS
GRD	GUARD
GRNT	GRANITE
IP	IRON PIPE
INV	INVERT
LP	LIGHT POLE / LOW POINT
MAT	MATCH
MH	MANHOLE (STRUCTURE)
MJ	MECHANICAL JOINT
MST	MEASURED
O/H	OVERHEAD
OHE	OVERHEAD LINE ELECTRIC
PCC	PORTLAND CEMENT CONCRETE
PM	PARKING METER
POB	POINT OF BEGINNING
PROP.	PROPOSED
(QLB)	QUALITY LEVEL B (DESIGNATION)
(QLC)	QUALITY LEVEL C (SURVEYED FEATURES)
(QLD)	QUALITY LEVEL D (RECORDS)
RAD	RADIUS
REC	RECORD
SAN	SANITARY
SEW	SEWER
SF	STORM FILTER
SG	SMITHSONIAN GARDENS
SI	SMITHSONIAN INSTITUTION
SIB	SMITHSONIAN INSTITUTION BUILDING
STD	STANDARD
STM	STEAM
STY	STORY (FLOOR)
S/W	SIDEWALK
T	TELEPHONE
TEMP	TEMPORARY
TOC	TOP OF CURB
TYP.	TYPICAL
UGE	UNDERGROUND ELECTRIC
UNK	UNKNOWN
UOS	UNLESS OTHERWISE STATED
W	WATER
WIF	WROUGHT IRON FENCE
WL	WATER LINE
WM	WATER MAIN
WV	WATER VALVE

HARTMAN-COX ARCHITECTS

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DISTRICT OF COLUMBIA
JONATHAN JOLLY
No. PES20423
1/10/2025
LICENSED
PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

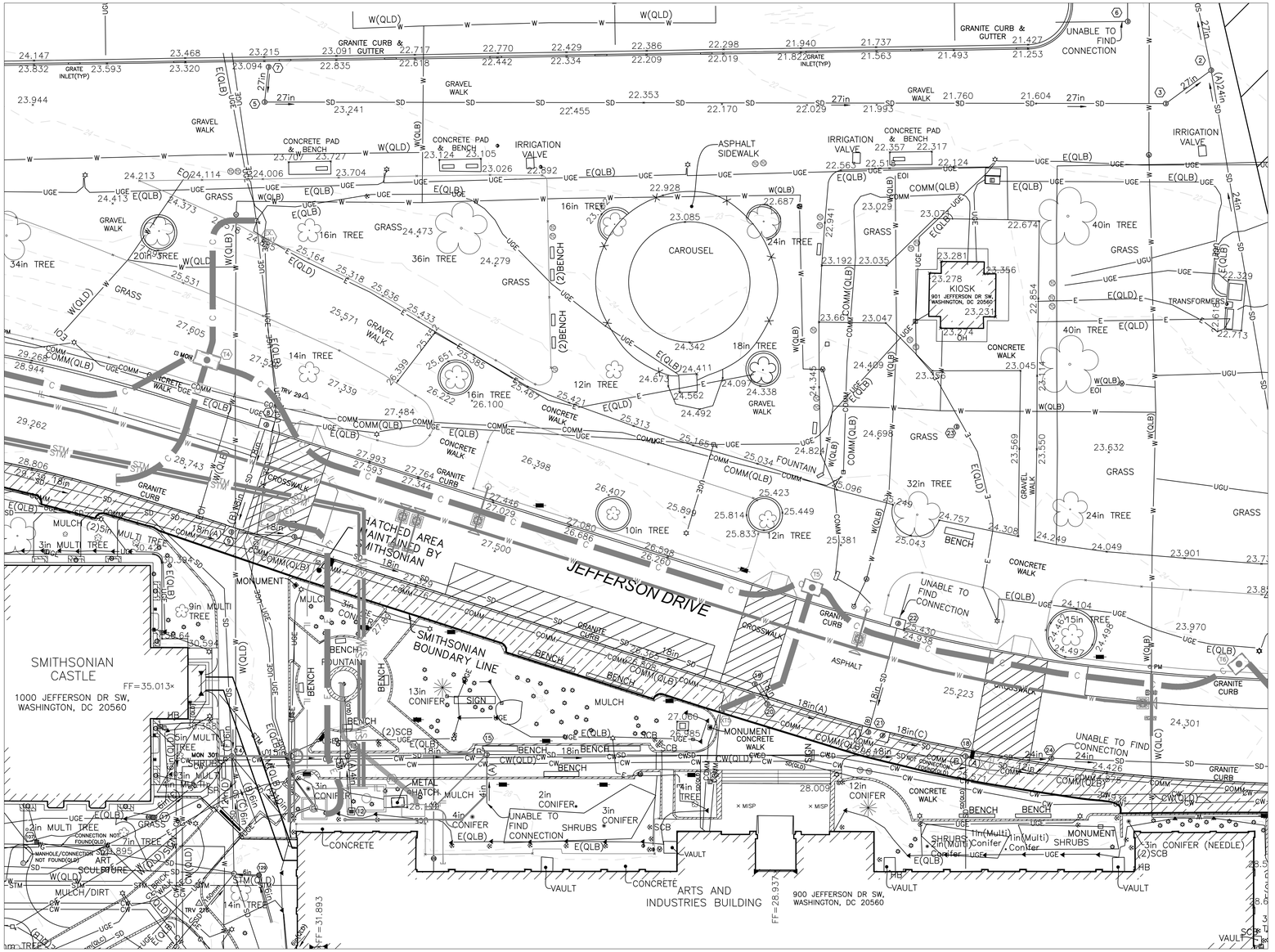
REVISION	REVISION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE / SF PROJECT NUMBER / A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE / DRAWING TYPE / WORKING STAFF	GENERAL NOTES CIVIL JJ (DESIGNED BY) / MH/SA (DRAWN BY) / MM/JJ (CHECKED BY)
SHEET NO.	2_OF_11
	C (DISCIPLINE) / 0 (TYPE) / 01 (SEQUENCE)

SCALE: 1:1



1 C-100 EXISTING CONDITIONS
SCALE = 1" = 20'

GENERAL NOTES

1. HORIZONTAL DATUM: (MARYLAND STATE PLANE GRID NAD (83/2011). THE DATUM WAS ESTABLISHED BY A GPS STATIC SURVEY IN OCTOBER 2018 USING CONTINUOUSLY OPERATING REFERENCE STATION (CORS) "LOYF", "NEDR", "UMBC" AND ZDC1". (METERS)
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). THE DATUM WAS ESTABLISHED BY DIFFERENTIAL LEVELING METHOD USING GNS BENCHMARK HV1837. (METERS)

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KEY PLAN

20' 0' 20' 40'
SCALE 1" = 20'
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION

Smithsonian Institution

Smithsonian Facilities
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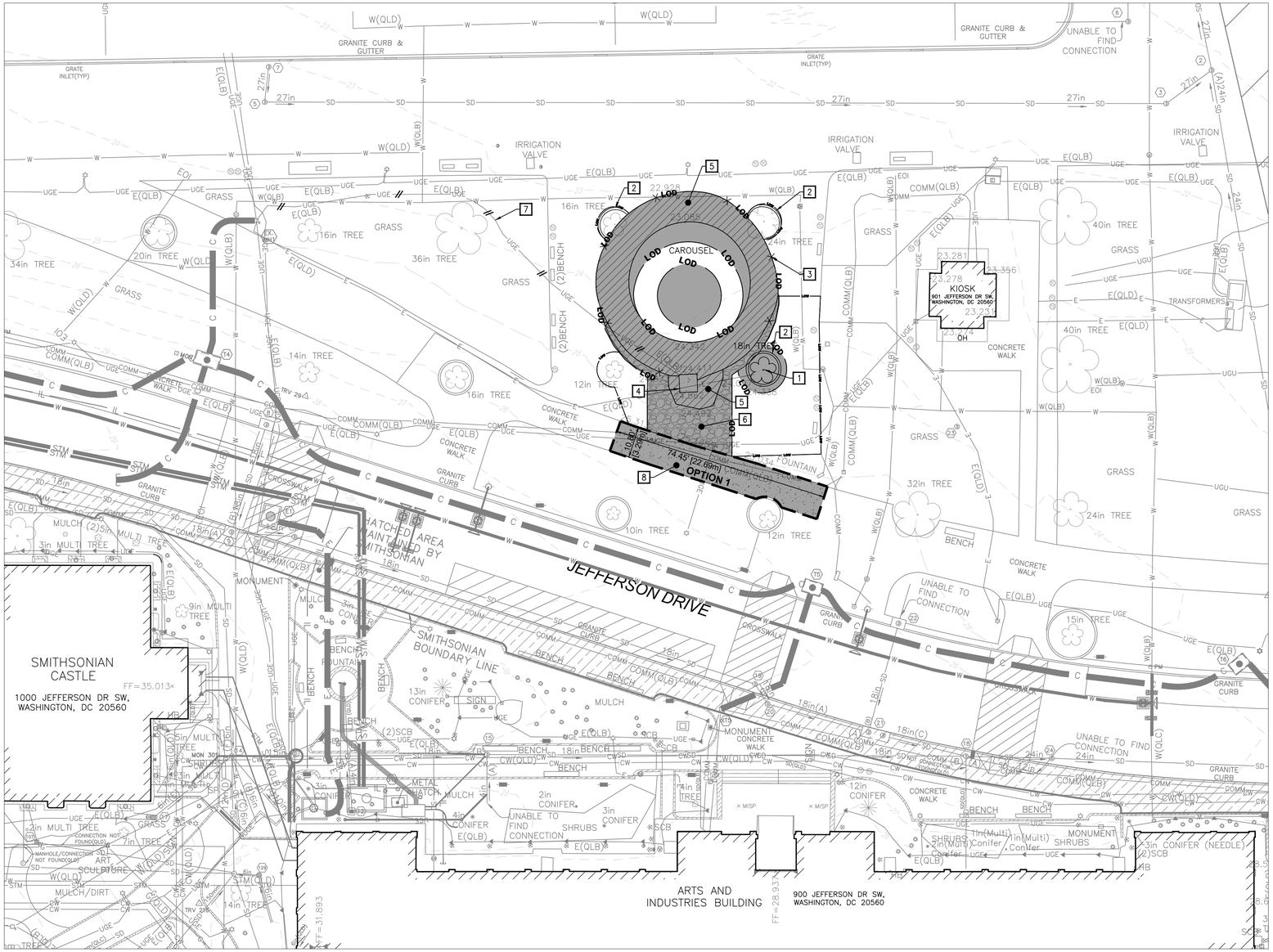
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	EXISTING CONDITIONS
DRAWING TYPE	CIVIL
WORKING STAFF	JJ (DESIGNED BY) · MH/SA (DRAWN BY) · MM/JJ (CHECKED BY)

SHEET NO. 3_OF_11

C (DISCIPLINE) · 1 (TYPE) · 00 (SEQUENCE)

SCALE: 1:1



1 CD100 DEMOLITION PLAN
SCALE = 1" = 20'

KEYNOTES

1. EXISTING TREE TO BE REMOVED.
2. EXISTING BRICK TREE BORDER TO BE REMOVED.
3. EXISTING METAL FENCE TO BE REMOVED.
4. EXISTING TICKET BOOTH TO BE REMOVED.
5. EXISTING ASPHALT SIDEWALK TO BE REMOVED.
6. EXISTING GRAVEL SIDEWALK TO BE REMOVED.
7. EXISTING ELECTRICAL DUCTBANK TO BE ABANDONED IN PLACE.
8. EXISTING CONCRETE SIDEWALK TO BE REMOVED.

LEGEND

- LIMITS OF WORK — LOW
- LIMITS OF DISTURBANCE — LOD
- LIMITS OF DISTURBANCE HATCH
- EXISTING GRAVEL PAVEMENT
- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- EXISTING TREE
- ABANDON IN PLACE

HARTMAN-COX ARCHITECTS

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DISTRICT OF COLUMBIA · JONATHAN JOLLY · No. PE920423 · 1/10/2025 · LICENSED PROFESSIONAL ENGINEER

KEY PLAN

20' 0' 20' 40'
SCALE 1" = 20'
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

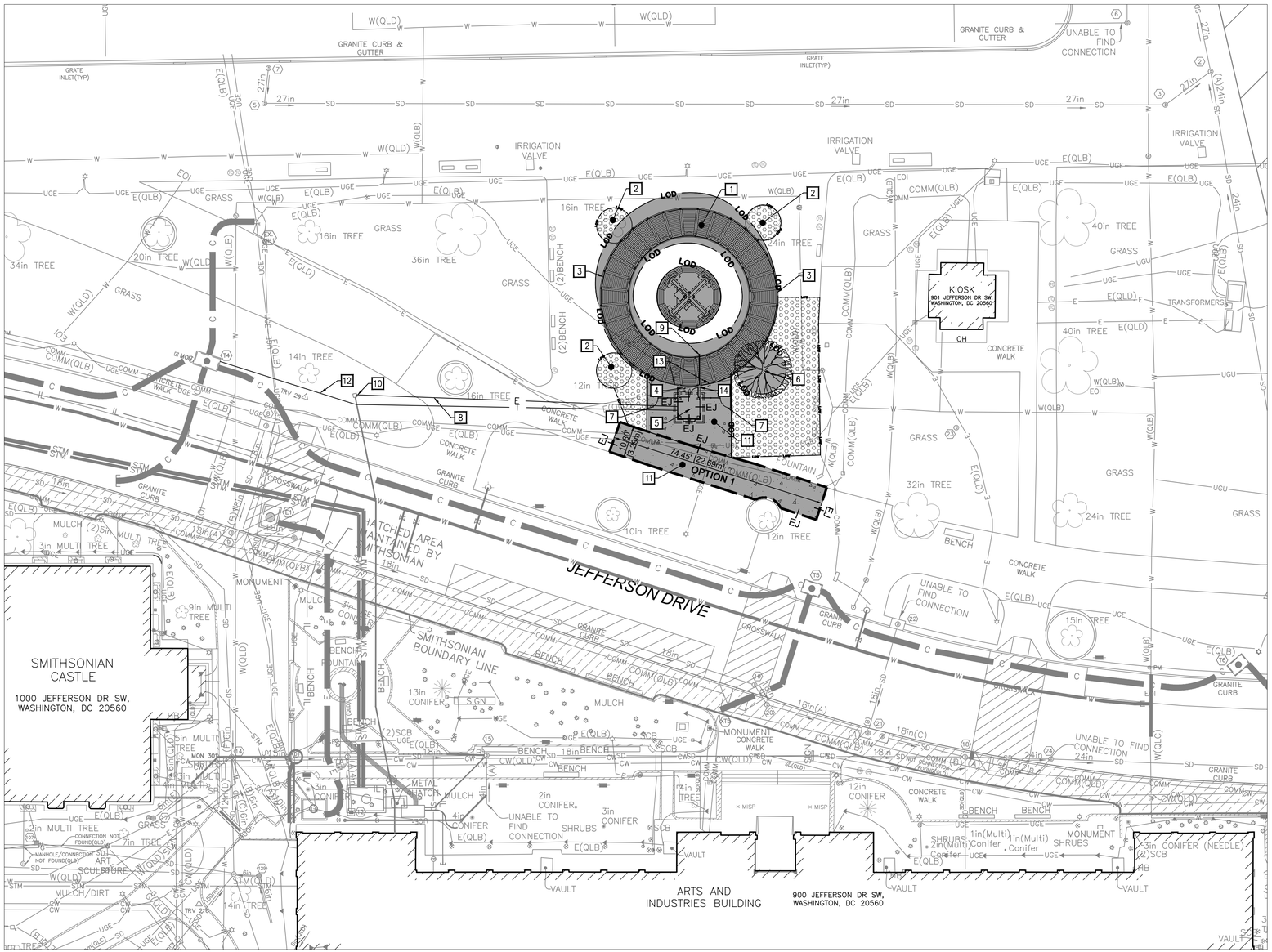
REVISION	REVISION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	DEMOLITION PLAN
DRAWING TYPE	CIVIL
WORKING STAFF	JJ (DESIGNED BY) · MH/SA (DRAWN BY) · MM/JJ (CHECKED BY)
SHEET NO.	4_OF_11
DISCIPLINE	CD
TYPE	1
SEQUENCE	00

SCALE: 1:1



NORTH

1 CS100 SITE PLAN
SCALE = 1" = 20'

SITE NOTES

1. REFER TO LANDSCAPE DRAWINGS FOR SPECIES AND DETAILS OF PROPOSED TREE.

KEYNOTES

1. PROPOSED BOARDWALK CAROUSEL APRON. SEE ARCHITECTURAL DRAWINGS FOR DETAIL.
2. EXISTING GRAVEL SIDEWALK RESTORATION AT SURFACE LEVEL ONLY. NO SUBGRADE ALTERATION/ LAND DISTURBANCE.
3. PROPOSED METAL FENCE TO REPLACE EXISTING IN-KIND.
4. PROPOSED OPERATORS POST BY OTHERS.
5. PROPOSED TICKET BOOTH. SEE ARCHITECTURAL DRAWINGS FOR DETAIL.
6. PROPOSED TREE TO BE REPLACED.
7. PROPOSED GATE. SEE ARCHITECTURAL DRAWINGS FOR DETAIL.
8. PROPOSED 2.5" ELECTRIC CONDUIT TO BE INSTALLED WITH HORIZONTAL BORING.
9. PROPOSED 4" SCH-40 PVC STORM DRAIN TO CONNECT TO TICKET BOOTH DOWN SPOUTS.
10. NEW CONNECTION TO EXISTING HANDHOLES (TO BE INSTALLED BY OTHERS)
11. PROPOSED EXPOSED AGGREGATE CONCRETE SIDEWALK. SEE SHEET CS510 FOR DETAILS.
12. PROPOSED 1.5" COMMUNICATION CONDUIT TO BE INSTALLED WITH HORIZONTAL BORING.
13. CONCRETE LEDGE OF SIDEWALK TO SUPPORT BOARDWALK SYSTEM. SEE SHEET CS510 FOR SIDEWALK DETAIL. REFER TO BOARDWALK MANUFACTURER FOR CONNECTION DETAILS.
14. PROPOSED TRENCH DRAIN.

LEGEND

- LIMITS OF DISTURBANCE — LOD
- EXPANSION JOINT — EJ
- PROPOSED FENCE
- LIMITS OF DISTURBANCE HATCH
- PROPOSED CONCRETE SIDEWALK
- PROPOSED GRAVEL SIDEWALK
- PROPOSED TREE
- LIMITS OF WORK — LOW
- GRAVEL SIDEWALK RESTORATION

HARTMAN-COX ARCHITECTS

ARCHITECTURE
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DISTRICT OF COLUMBIA · JONATHAN JOLLY · No. PES20423 · 1/10/2025 · LICENSED PROFESSIONAL ENGINEER

KEY PLAN

20' 0' 20' 40'
SCALE 1" = 20'
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION

Smithsonian Institution
Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
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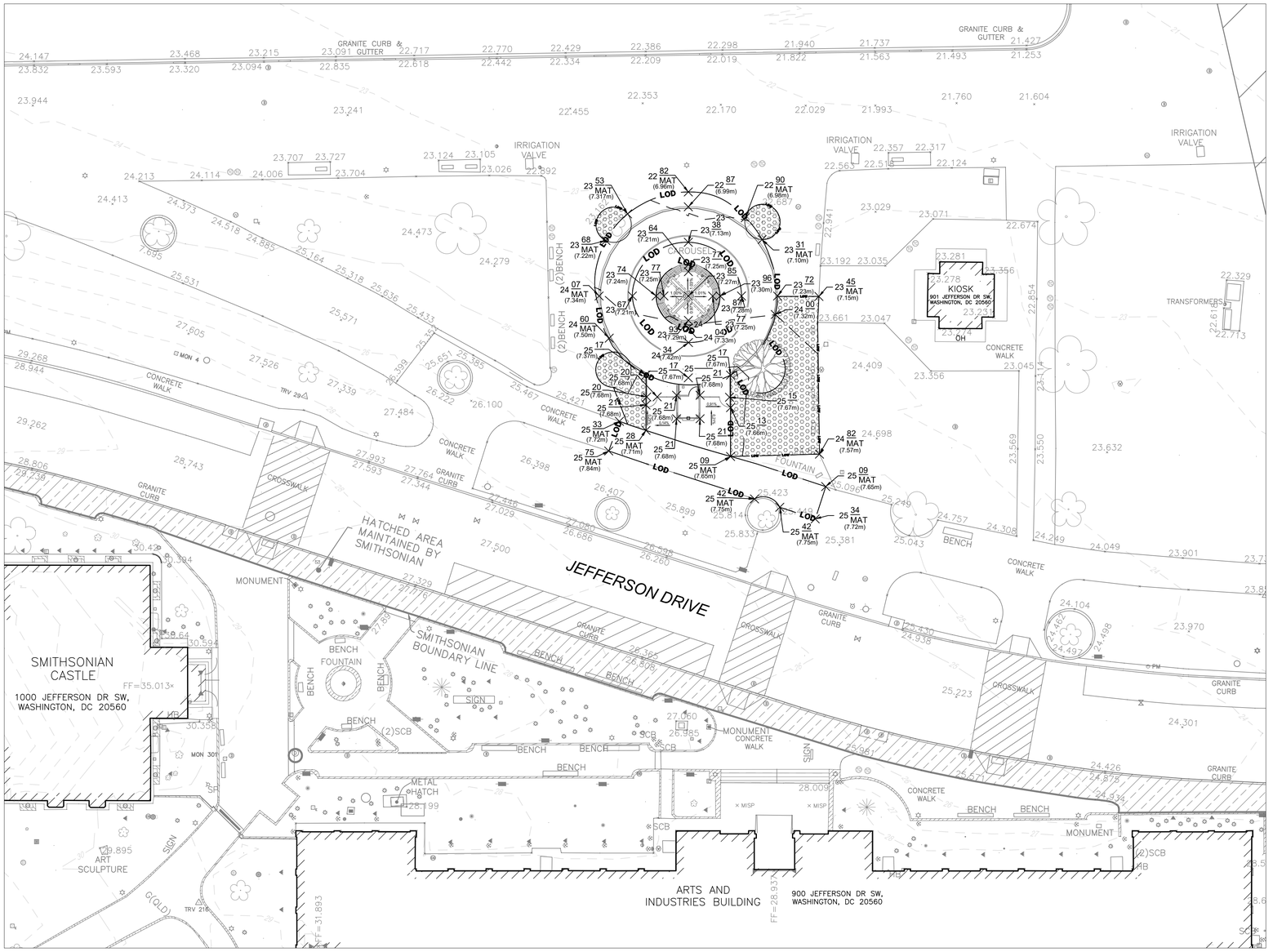
SI PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	SITE PLAN
DRAWING TYPE	CIVIL
WORKING STAFF	JJ (DESIGNED BY) · MH/SA (DRAWN BY) · MM/JJ (CHECKED BY)

SHEET NO. 6_OF_11

CS (DISCIPLINE) · 1 (TYPE) · 00 (SEQUENCE)

SCALE: 1:1



1 CG100 GRADING PLAN

SCALE = 1" = 20'

GRADING NOTES

1. EXISTING MANHOLES AND VAULT TOPS (SEWER, WATER, GAS, TELECOM, AND ELECTRICAL TO BE ADJUSTED (IF REQUIRED) TO MATCH PROPOSED GRADE.

LEGEND

LIMITS OF WORK	LOW
LIMITS OF DISTURBANCE	LOD
PROPOSED SPOTSHOT	24 69 MAT
EXISTING SPOTSHOT	22.455
GRAVEL SIDEWALK RESTORATION	

HARTMAN-COX ARCHITECTS

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HARTMAN-COX ARCHITECTS
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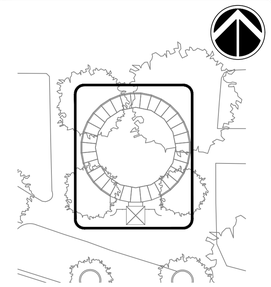
STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
1330 CONNECTICUT AVE NW, SUITE 300
WASHINGTON, DC 20036
202.580.6300

CIVIL ENGINEERING
SORBA ENGINEERING
22365 BRODERICK DR. SUITE 265
DULLES, VA 20166
571.771.0273

CODE, SECURITY, AND IT
GHD, INC.
14501 GEORGE CARTER WAY, SUITE 102
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA · JONATHAN JOLLY · No. PE920423 · 1/10/2025 · LICENSED PROFESSIONAL ENGINEER



KEY PLAN

20' 0' 20' 40'

SCALE 1" = 20'

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION

Smithsonian Institution

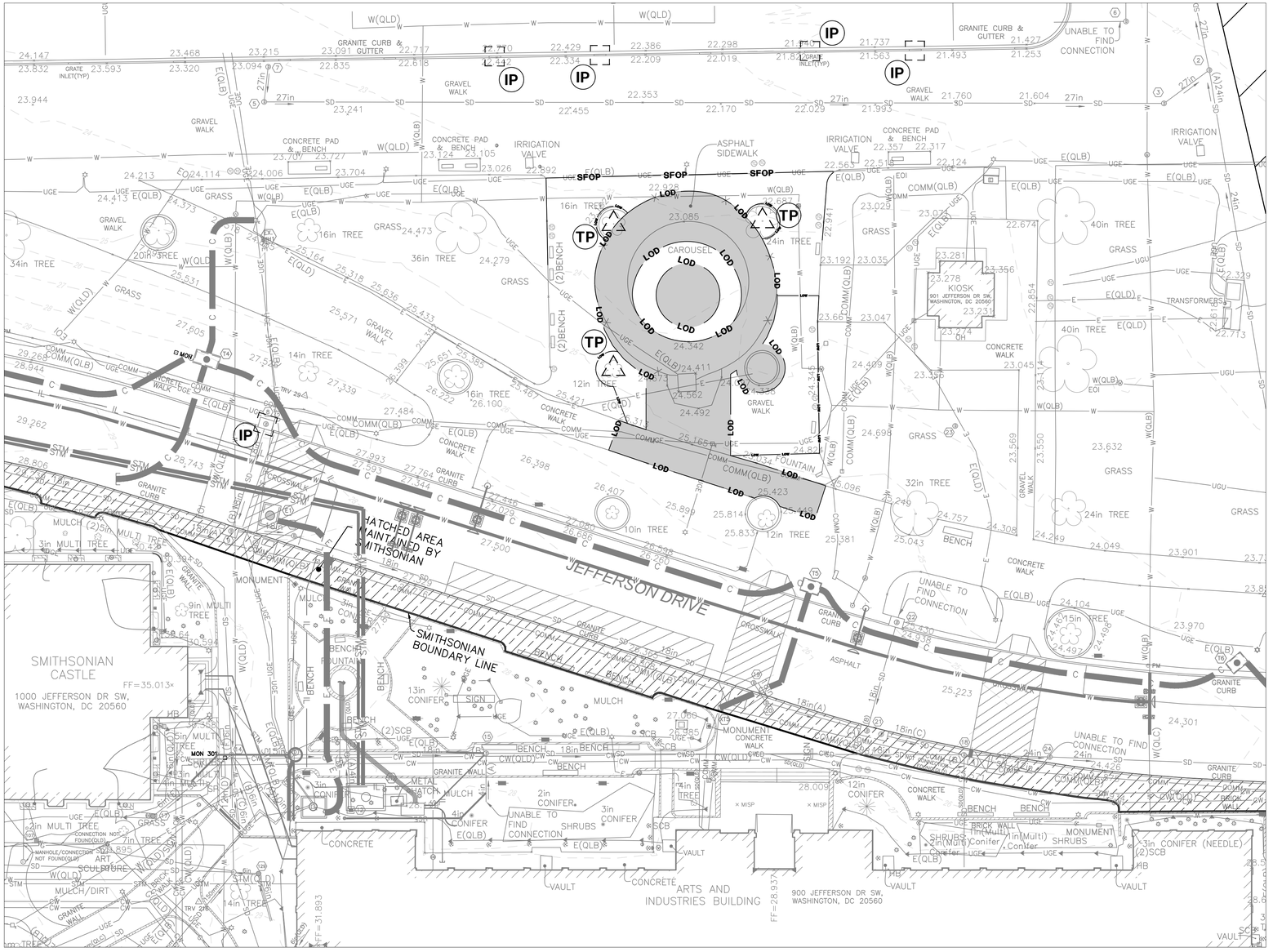
Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE / SF PROJECT NUMBER / A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE / DRAWING TYPE / WORKING STAFF	GRADING PLAN CIVIL

DESIGNED BY	DRAWN BY	CHECKED BY
JJ	MH/SA	MM/JJ

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
5_OF_11	CG	1	00

SCALE: 1:1



1 CS110 EROSION & SEDIMENT CONTROL PLAN
SCALE = 1" = 20'

ENFORCEMENT OF SIGNAGE REQUIREMENT FOR PROJECTS REQUIRING EROSION AND SEDIMENT CONTROL PLANS:

ALL CONSTRUCTION PROJECTS REQUIRING SOIL EROSION AND SEDIMENT CONTROL (ESC) PLANS MUST POST A DISTRICT–APPROVED SIGN THAT NOTIFIES THE PUBLIC TO CONTACT DOEE IN THE EVENT OR EROSION OR OTHER POLLUTION FROM THE SITE. DOEE HAS INCREASED ITS ENFORCEMENT EFFORTS FOR THIS REQUIREMENT. A LIMITED NUMBER OF PRE–PRINTED SIGNS IS AVAILABLE AT THE DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS AND WILL BE ISSUED AT NO CHARGE WITH APPROVED SOIL EROSION AND SEDIMENT CONTROL PLANS ON A FIRST COME, FIRST SERVED BASIS. AN ELECTRONIC COPY OF THE DISTRICT APPROVED SIGN IS AVAILABLE AT HTTP: //DOEE.DC.GOV/ESC.

LAND DISTURBANCE ACTIVITY NOTE:

A PERSON RESPONSIBLE FOR LAND DISTURBANCE IS TO BE PRESENT OR AVAILABLE AT ALL TIMES WHILE SITE IS IN A PHASE INVOLVING LAND DISTURBING ACTIVITY. THE RESPONSIBLE PERSON IS RESPONSIBLE FOR INSPECTION OF THE SITE EROSION & SEDIMENT CONTROL MEASURES BIWEEKLY AND AFTER RAINFALL EVENTS. AVAILABILITY TO RESPOND TO POTENTIAL EROSION PROBLEMS AS THEY OCCUR AND AVAILABILITY TO SPEAK ONSITE WITH DOEE TO REMEDY POTENTIAL PROBLEMS. THE RESPONSIBLE PERSON IS TO HAVE AVAILABLE ONSITE PROOF OF PROFESSIONAL LICENSING OR OF SUCCESSFUL COMPLETION OF A DEPARTMENT APPROVED TRAINING PROGRAM IN COMPLIANCE OF RESPONSIBLE PERSON DESIGNATION.

LAND GRADING NOTES:

1. INSTALL PERIMETER CONTROLS, DIVERSION DITCHES, AND OTHER EROSION CONTROL MEASURES BEFORE EXPOSING CUT AND FILL SLOPES.
2. COMPLETE SITE CLEARING AND GRADING IN COMPLIANCE WITH THE CONSTRUCTION SEQUENCE IDENTIFIED ON THE ESC PLAN.
3. PROVIDE EROSION AND SEDIMENT CONTROLS ON ALL TEMPORARY FILL PILES GENERATED DURING CONSTRUCTION.
4. ENSURE THAT ALL SUPPLEMENTAL FILL CREATED DURING THE GRADING PROCESS IS DISPOSED OF PROPERLY.
5. IN CASE WHERE FILL SLOPES OR SOIL PILES CANNOT BE STABILIZED BEFORE THE CLOSE OF THE WORK DAY, UTILIZE TEMPORARY EROSION CONTROL MEASURES SUCH AS PLASTIC SHEETING TO ENSURE THAT SOIL IS NOT EXPOSED.
6. CONFIRM THAT ALL FILLS ARE COMPACTED IN COMPLIANCE WITH THE STANDARD PRESCRIBED IN THE SITE PLAN.
7. REMOVE TEMPORARY DIVERSIONS AND EROSION CONTROLS ONCE SLOPES HAVE BEEN STABILIZED PERMANENTLY.
8. IMMEDIATELY REPLACE ANY FAILED DIVERSION MEASURES, AND IMMEDIATELY REGRADE AND STABILIZE ANY PORTIONS OF THE SLOPES THAT HAVE BEGUN TO FORM RILLS OR GULL. ENSURE THAT STOCKPILES ARE STABILIZED WITH VEGETATION OR WITH ANOTHER TEMPORARY COVER THROUGHOUT THE CONSTRUCTION PROCESS. MAINTAIN ALL DIVERSION MEASURES PER THE DETAILS OUTLINES IN CHAPTER 4 CONVEYANCE.

EROSION AND SEDIMENT CONTROL NARRATIVE:

EROSION AND SEDIMENT CONTROL WILL BE ACHIEVED THOUGH THE USE OF SILT FENCE ON PAVEMENT, TREE PROTECTION, AND INLET PROTECTION. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE IMPLEMENTED PRIOR TO DEMOLITION TO ENSURE ADEQUATE PROTECTION DURING DEMOLITION AND REMOVAL OF WASTE MATERIALS. ALL DEMO MATERIALS WILL BE TAKEN TO AN OFF–SITE DESIGNATION DUMPING AREA VIA DUMP TRUCKS OR DUMPSTERS.

DESCRIPTION OF PREDOMINANT SOIL TYPE:

Ub–URBAN LAND

CONSTRUCTION AND STABILIZATION SCHEDULE:

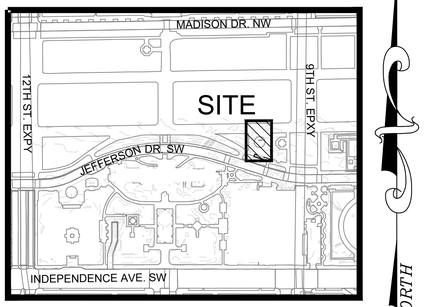
1. MOBILIZATION AND ESC INSTALLATION TO BEGIN SUMMER 2025. DEMOLITION AND HEAVY CONSTRUCTION TO OCCUR SUMMER 2025 THROUGH APRIL 2026. FINISHING WORK AND DEMOLITION TO BE COMPLETED BY SUMMER 2026. EXACT DATES ARE TO BE SET BY OWNER AND ARE SUBJECT TO CHANGE.
2. FOR FURTHER INFORMATION, PLEASE CALL: GOVERNMENT OF DISTRICT OF COLUMBIA DEPARTMENT OF ENVIRONMENT WATERSHED PROTECTION DIVISION
   1200 FIRST STREET, NE
   WASHINGTON, DC 20002
   TEL NO. (202) 535–2977

CONSTRUCTION AND STABILIZATION SEQUENCE:

BEFORE STARTING ANY LAND DISTURBANCE, YOU MUST COMPLETE A DOEE PRE–CONSTRUCTION INSPECTION. TO SCHEDULE, GO TO HTTP: //DOEE.DC.GOC/SGS AND CLICK THE REQUEST A PRE–CONSTRUCTION INSPECTION BUTTON. ATTACH A COPY OF THE ISSUED DOB PERMIT.

1. INSTALL SEDIMENT AND EROSION CONTROL MEASURES AS INDICATED ON EROSION AND SEDIMENT CONTROL PLANS.
2. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.
3. REMOVE ITEMS AS INDICATED ON DEMOLITION PLAN.
4. INSTALL PROPOSED UTILITIES.
5. INSTALL SITE IMPROVEMENTS AS INDICATED ON CONSTRUCTION DOCUMENTS FOR THE PROPOSED BUILDING.
6. AT THE COMPLETION OF CONSTRUCTION AND AFTER THE INSPECTOR'S APPROVAL, ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED.

THIS SHEET IS TO BE USED FOR SEDIMENTATION AND EROSION CONTROL PURPOSES ONLY !!!



VICINITY MAP

SCALE 1"=300'
NATIONAL MALL
WASHINGTON, DC 20001

LEGEND

LIMITS OF WORK	LOW
LIMITS OF DISTURBANCE	LOD
SILT FENCE ON PAVEMENT	SFOP
TREE PROTECTION	TP
INLET PROTECTION	IP

TOTAL AREA OF DISTURBANCE:

TOTAL AREA OF DISTURBANCE: 4,868 SQUARE FEET
OR 0.112 AC

TOTAL VOLUME OF CUT
BELOW GRADE EXCAVATION FOR FOUNDATIONS:

VOLUME OF CUT: 9.81 cy +/-

CONTRACTOR TO CONTACT WARD ARBORIST AS SOON AS POSSILBE BEFORE CONSTRUCTION BEGINS TO DISCUSS TREE PROTECTION MEASURES. THE WARD ARBORIST FOR THIS PROPERTY IS SIMOUN BANUA, AND THEIR CONTACT INFORMATION IS SIMOUN.BANUA@DC.GOV OR (202) 557–4590.

MATERIALS TO ENTER THE SITE FROM JEFFERSON DR, SW.

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
WASHINGTON, DC 20009
202.333.6446

MEP ENGINEERING
MUELLER ASSOCIATES, INC.
1306 CONCOURSE DRIVE, SUITE 100
LINTHICUM, MD 21090
410.646.4500

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THORNTON TOMASETTI, INC.
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JONATHAN JOLLY
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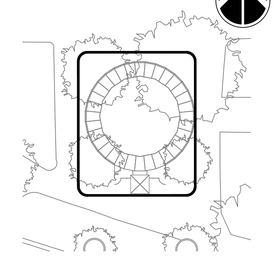

KEY PLAN

20' 0' 20' 40'
SCALE 1" = 20'
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION

REVISION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	EROSION & SEDIMENT CONTROL PLAN
DRAWING TYPE	CIVIL
WORKING STAFF	JJ / MH/SA / MM/JJ
	DESIGNED BY / DRAWN BY / CHECKED BY

SHEET NO. 7_OF_11

DISCIPLINE	TYPE	SEQUENCE
CS	1	10

SCALE: 11

SITE PROTECTION STANDARDS:

REFER TO SMITHSONIAN'S SPECIFICATION SECTION 01 53 39 SITE PROTECTION FOR DETAILS AND DIRECTION REGARDING TREE PROTECTION, FLORA PROTECTION, TURF AND PLANTING BED PROTECTION, IRRIGATION PROTECTION, REPLACEMENT PLANTS, REPLACEMENT TURF, ARTIFACTS AND FURNITURE COLLECTION PIECES, TRASH AND DEBRIS REMOVAL, SCAFFOLDING, HAUPT GARDEN, AND FAUNA PROTECTION. ALL WORK PERFORMED RELATING TO MITIGATING TREE PROTECTION AND PRESERVATION TO BE PERFORMED BY A CERTIFIED ARBORIST AS APPROVED BY SMITHSONIAN INSTITUTION GARDENS. ALL TREE PRESERVATION/PROTECTION MEASURES SHALL BE IN PLACE PRIOR TO ANY SITE DISTURBANCE OR DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR INCURRING THE COST FOR THE CERTIFIED ARBORIST AND ALL PRESERVATION/PROTECTION PRACTICES.

EROSION AND SEDIMENT CONTROL NOTE:

1. THE APPLICANT MUST NOTIFY THE DEPARTMENT OF ENERGY AND ENVIRONMENT BY PHONE (202-535-2977) AT LEAST 72 HOURS PRIOR TO THE START OF LAND DISTURBING ACTIVITY AND WITHIN (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, DEPARTMENT OF ENERGY AND ENVIRONMENT MUST BE NOTIFIED IMMEDIATELY.

2. REMOVAL OF ANY EROSION AND SEDIMENT CONTROL MEASURES REQUIRES APPROVAL FROM DOEE INSPECTOR.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT.

4. PROVIDE SILT FENCE AT PERIMETER OF EXCAVATION AREA TO REMAIN IN PLACE UNTIL BELOW GRADE EXCAVATION HAS BEGUN UNLESS OTHERWISE APPROVED BY THE INSPECTOR.

5. CONTRACTOR TO PROVIDE ON SITE APPROVED STAMPED AND SIGNED SEDIMENTATION AND EROSION CONTROL DRAWINGS BY DEPARTMENT OF ENERGY AND ENVIRONMENT, WATERSHED PROTECTION DIVISION.

6. PROVIDE A CHAIN LINK FENCE AT PERIMETER OF SITE.

7. NO LATER THAN THE FIRST DAY OF CONSTRUCTION, INSTALL SITE ACCESS MEASURES TO MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS. EACH CONSTRUCTION ENTRANCE MUST BE STABILIZED AND INCLUDE EACH ADDITIONAL MEASURES REQUIRED TO KEEP SEDIMENT FROM BEING CARRIED ONTO PUBLIC STREETS BY CONSTRUCTION VEHICLES AND WASHED INTO A STORM DRAIN OR WATERWAY.

8. REMOVE OFF-SITE ACCUMULATION OF SEDIMENT DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF DOEE INSPECTOR.

9. PERFORM ROUTINE MAINTENANCE TO PREVENT ANY NEW DE-STABILIZATION AREAS.

10. STRAW BALE DIKES WILL BE REPLACED EVERY THREE (3) MONTHS UNTIL COMMENCEMENT OF CONSTRUCTION.

NPS/NAMA ROOT PRUNING, PROTECTED ROOT ZONES (PRZ) & CRITICAL ROOT ZONES (CRZ), TURF PROTECTION, SOIL SPECIFICATIONS

EXPENSES ACCRUED REMEDIATING DAMAGES THAT OCCUR AS RESULT OF FAILING TO FOLLOW ALL OF THE PROTECTIVE MEASURES CONTAINED IN THIS DOCUMENT, TO INCLUDE INFRA-STRUCTURE REPAIR, TREE MAINTENANCE, TREE REMOVAL AND TREE REPLACEMENT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. TREES AND TURF SCHEDULED FOR REPAIR OR REPLACEMENT REQUIRE INPUT AND APPROVAL FROM THE TURF MANAGER AND/OR PARK ARBORIST/URBAN FORESTER.

1. MAPPING AND NOTIFICATION REQUIREMENT:
   - 1.A. THE LIMIT OF DISTURBANCE (LOD) SHALL BE ESTABLISHED ON ALL PROJECTS THAT REQUIRE SOIL EXCAVATION. PERMITTEE MUST PROVIDE A MAP SHOWING THE LOD, INCLUDING THE FOLLOWING CALCULATIONS:
     - 1.A.1. THE AREA OF THE LOD
     - 1.A.2. THE DEPTH OF DISTURBANCE
   - 1.B. THE CONTRACTOR SHALL NOTIFY NAMA IN 72 HOURS IN ADVANCE SO NAMA'S IS A CERTIFIED ARBORIST(S) AND OR COR MAY OVERSEE ROOT PRUNING OPERATIONS.
   - 1.C. CONTRACTOR SHALL SUBMIT DRAWINGS SHOWING THE LOCATION AND INSTALLATION OF ANY SOIL RETENTION DEVICES SUCH AS SILT FENCE, SUPER SILT FENCE, SUPPORTING POSTS AND FABRIC.
   - 1.D. EXCEPTIONS MAY REQUIRE RETENTION DEVICES INSTALLED WITHIN 1' OF TRENCH ON DISTURBED SIDE.

2. CERTIFICATION REQUIREMENTS:
   - 2.A. AN INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST SHALL PERFORM OR OVERSEE THE ROOT PRUNING BEFORE ANY DIGGING BEGINS.

3. IN FIELD - PRE-CONSTRUCTION MARKING REQUIREMENTS:
   - 3.A. EXACT LOCATION OF ROOT PRUNING TRENCH SHALL BE ESTABLISHED AND MARKED PRIOR TO COMMENCEMENT.
   - 3.B. UNDERGROUND UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO ROOT PRUNING. ANY SUCH UTILITY CONFLICTS SHALL BE ADDRESSED SAFELY BY CONTRACTOR. HAND TOOLS MAY BE REQUIRED TO TRENCH AND PRUNE ROOTS.

4. STAGING REQUIREMENTS:
   - 4.A. APPROPRIATE TURF PROTECTION MATS SHALL BE USED TO PROTECT EXISTING SOILS AND THE PRZ/CRZ OF TREES WITHIN THE LIMITS OF DISTURBANCE.
   - 4.B. THESE MATS SHALL BE MADE FOR THE PURPOSE (E.G., TRAK-MATS, ALTURNAMATS, ETC.) AND SHALL BE APPROPRIATELY SIZED FOR THE EXPECTED WEIGHT.
   - 4.C. ALL EQUIPMENT (TRUCKS, TRAILERS, MACHINERY, ETC.) SHALL BE CONVEYED AND STAGED ON SUCH TURF PROTECTION MATS. AT NO TIME SHALL VEHICLES WITH "OVER THE ROAD" DOT TIRES BE IN DIRECT CONTACT WITH SOIL, TURF OR CRZ/PRZ'S.
   - 4.D. REPORTING AND RESTORATION REQUIREMENTS:
     - 4.D.1. TURF PROTECTION AND FLOATATION TIRES AND RUBBER TRACKS MADE FOR TURF PROTECTION PURPOSES ARE ACCEPTABLE, HOWEVER, SUPERFICIAL DAMAGE TO THE TURF AND SOILS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPORTED TO THE NAMA POC WITHIN 24 HOURS OF OCCURRENCE.
     - 4.D.2. EXPENSES ACCRUED TO REMEDIATE DAMAGES THAT OCCUR AS A RESULT OF FAILING TO FOLLOW THESE PROTECTIVE MEASURES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

5. ROOT PRUNING REQUIREMENTS:
   - 5.A. ROOT PRUNING SHALL BE PERFORMED PRIOR TO ANY EXCAVATION WITHIN THE PROTECTED ROOT ZONE (PRZ) OF ANY TREE.
   - 5.B. THE PRZ IS DETERMINED BY MEASURING THE TRUNK DIAMETER AT BREAST HEIGHT (DBH; 4.5 FEET ABOVE GRADE) IN INCHES AND MULTIPLYING THAT NUMBER BY 1.5 TO GET THE DISTANCE IN FEET FROM THE TRUNK WHERE THE PRZ SHOULD BE ESTABLISHED.
     - 5.B.1. NOTE: THE CRITICAL ROOT ZONE (CRZ) IS DIRECTLY BENEATH THE OUTERMOST BRANCHES OTHERWISE KNOWN AS THE DRIPLINE OF THE TREE. THE ROOTS WITHIN THE CRZ ARE CRUCIAL TO THE TREE'S SURVIVAL. THE AREA IS OFF LIMITS TO ANY PROJECT ACTIVITY UNLESS APPROVED BY PARK ARBORIST.
   - 5.C. NEVER SHALL MORE THAN 25% OF THE ROOTS IN THE PRZ BE PRUNED UNLESS APPROVED BY PARK ARBORIST/URBAN FORESTER.
   - 5.D. ROOT PRUNING WILL OCCUR ON THE LOD WHERE PRZ'S ARE FOUND, HOWEVER, EXCEPTIONS MAY BE MADE.
   - 5.E. ROOT PRUNING SHALL BE PERFORMED BY SPECIALIZED ARBORICULTURAL MACHINERY AND/OR EQUIPMENT MADE FOR THE PURPOSE (E.G., A VERMEER ROOT PRUNER, AN AIRSPADE PNEUMATIC GUN AND HANDHELD ROOT CUTTING TOOLS, ETC.). ALL PRUNING CUTS SHALL BE MADE CLEANLY AND PERPENDICULAR TO ROOT FORM.
   - 5.F. EQUIPMENT NOT PERMITTED: A TRENCHER MACHINE (E.G. DITCH WITCH, BACKHOE, AND OTHER GENERAL DIGGING/TRENCHING EQUIPMENT, ETC.) IS NOT AN ACCEPTABLE ROOT PRUNING DEVICE WITHIN THE TOP 24" OF SOIL BELOW GRADE. DRAWINGS MUST BE APPROVED FOR ROOT PRUNING DEEPER THAN 24" BELOW GRADE IF PERFORMED WITH MACHINE OTHER THAN SPECIFIC ROOT PRUNING EQUIPMENT.
   - 5.G. ROOT PRUNING SHALL BE PERFORMED TO A DEPTH OF 24" BELOW GRADE UNLESS SPECIFIC TECHNICAL REQUIREMENT DETAILS ARE MADE IN A PARTICULAR STATEMENT OF WORK (SOW).
   - 5.H. APPROPRIATE PPE AND PUBLIC SAFETY DEVICES SHALL BE UTILIZED IN PROPER FASHION AS PER THE MOST CURRENT ANSI AND OSHA STANDARDS.
   - 5.I. FENCING MATERIALS PERMITTED WITHIN PRZ:
     - 5.I.1. INSTALLATION OF FENCE POST OR POSTS OF THE LIKE WITHIN THE PRZ SHALL BE METAL, HOLLOW AND HAVE A CLEAN AND UNBLEMISHED RIM IN ORDER TO CLEANLY CUT ROOTS WHEN DRIVEN.
     - 5.I.2. EXTRACTION OF TEMPORARY FENCE POSTS SHALL BE REMOVED BY LIFTING STRAIGHT UPWARDLY WHILE BEING MINDFUL TO NOT DAMAGE TREE ROOTS.

6. TOPSOIL REQUIREMENTS:
   - 6.A. THE COLLECTED EXCAVATED TOPSOIL, A TOPSOIL/COMPOST MIX, OR ANY OTHER NAMA APPROVED TOPSOIL SHALL BE PLACED BACK INTO THE EXCAVATED TRENCH WITHIN 1 HOUR OF DISTURBANCE AND WATERED IMMEDIATELY.
   - 6.B. UPON BACKFILLING TRENCH WITH APPROVED TOPSOIL, 3" DEEP MULCH (STRAW OR WOOD CHIPS ARE ACCEPTABLE) SHOULD COVER THE PARAMETERS OF THE TRENCH AND SHOULD BE WATERED ONCE A WEEK FOR 4 WEEKS. AFTER WEEK 5 THE MULCH CAN BE REMOVED, AND NAMA APPROVED GRASS SEED CAN BE PLANTED.
   - 6.C. IMPORTED TOPSOIL:
     - 6.C.1. SHALL BE A SCREENED, NATURAL, SURFACE SOIL, IN A FRIABLE CONDITION AND CONTAIN LESS THAN 3 PERCENT SUBSOIL.
   - 6.D. THE TOPSOIL SHALL BE FREE OF HARDPAN MATERIAL, STONES, AND CLODS LARGER THAN ½ INCH IN DIAMETER, STICKS, TREE OR SHRUB ROOTS, DEBRIS, TOXIC SUBSTANCES (I.E., RESIDUAL HERBICIDES) AND OTHER MATERIAL DETRIMENTAL TO PLANT GROWTH.
   - 6.E. THE AREA AND THE TOPSOIL SHALL BE FREE OF UNDESIRABLE PLANTS OR PLANT PARTS SUCH AS, BUT NOT LIMITED TO, BERMUDA GRASS, NUT SEDGE, MUGWORT, JOHNSONGRASS, QUICK GRASS, CANADA THISTLE, OR NOXIOUS WEEDS AS SET FORTH IN THE FEDERAL SEED ACT.
   - 6.F. AGRICULTURAL LIMESTONE AT NOT MORE THAN 5 POUNDS PER CUBIC YARD OF TOPSOIL MAY BE USED TO ADJUST AN ACIDIC CONDITION AND SHALL BE THOROUGHLY MIXED BY VOLUME.
   - 6.G. TOPSOIL SHALL NOT BE DELIVERED OR HANDLED IN A FROZEN OR MUDDY CONDITION.
   - 6.H. TOPSOIL NOTIFICATION REQUIREMENT: CONTRACTOR SHALL NOTIFY NPS OF LOCATION OF ALL SOURCES OF THE TOPSOIL AND FURNISH THE NPS A CERTIFIED REPORT FROM THE AGRICULTURAL EXPERIMENT STATION OR APPROVED AGRICULTURAL LABORATORY OF AN ANALYSIS PERFORMED NOT MORE THAN 60 DAYS PRIOR TO THE DATE OF SUBMISSION.
   - 6.I. GENERAL CHARACTERISTICS:
     - 6.I.1. CERTIFIED WEED FREE
     - 6.I.2. SCREENED, NATURAL, SURFACE SOIL, IN A FRIABLE CONDITION AND CONTAIN LESS THAN 3 PERCENT SUBSOIL. THE TOPSOIL SHALL BE FREE OF HARDPAN MATERIAL, STONES AND CLODS LARGER THAN ½ INCH IN DIAMETER, STICKS, TREE OR SHRUB ROOTS, DEBRIS. TOXIC SUBSTANCES (I.E., RESIDUAL HERBICIDES) AND OTHER MATERIAL DETRIMENTAL TO PLANT GROWTH. THE AREA AND THE TOPSOIL SHALL BE FREE OF UNDESIRABLE PLANTS OR PLANT PARTS SUCH AS, BUT NOT LIMITED TO, BERMUDA GRASS, NUT SEDGE, MUGWORT, JOHNSONGRASS, QUICK GRASS, CANADA THISTLE, OR NOXIOUS WEEDS AS SET FORTH IN THE FEDERAL SEED ACT.
     - 6.I.3. CONTRACTOR SHALL NOTIFY COR OF LOCATION OF ALL SOURCES OF TOPSOIL AND FURNISH THE COR A CERTIFIED REPORT FROM THE AGRICULTURAL EXPERIMENT STATION OR APPROVED AGRICULTURAL LABORATORY OF AN ANALYSIS PERFORMED NOT MORE THAN 60 DAYS PRIOR TO THE DATE OF SUBMISSION.
   - 6.J. THE TOPSOIL SHALL BE CERTIFIED TO MEET THE FOLLOWING REQUIREMENTS:
     - 6.J.1. SHALL BE A NATURAL, ORIGINAL SURFACE SOIL OF A SANDY LOAM TEXTURE WITH A MECHANICAL ANALYSIS OF 60-65% SAND, 15-25% SILT, AND 10-15% CLAY.
     - 6.J.2. SHALL HAVE AT LEAST 2%, BUT NOT MORE THAN 5% ORGANIC MATTER.
     - 6.J.3. SOIL pH SHALL BE pH 5.5 TO pH 6.5 INCLUSIVE UNLESS OTHERWISE SPECIFIED.
     - 6.J.4. SOIL SALINITY BY ELECTRICAL CONDUCTIVITY MEASUREMENT SHALL NOT EXCEED 600 PARTS PER MILLION (PPM) AS DETERMINED BY BLACK, EDITOR "METHOD OF SOIL ANALYSIS", PART 2, PUBLISHED BY THE AMERICAN SOCIETY OF AGRONOMY, 1965.
     - 6.J.5. THE SOIL NUTRIENT LEVEL SHALL BE BETWEEN 70-265 LBS./ACRE OF MAGNESIUM, 65-205 LBS./ACRE OF PHOSPHOROUS (P2O5), AND 85-320 LBS./ACRE OF POTASSIUM (K2O).
     - 6.J.6. AGRICULTURAL LIMESTONE AT NOT MORE THAN 5 POUNDS PER CUBIC YARD OF TOPSOIL MAY BE USED TO ADJUST AN ACIDIC CONDITION AND SHALL BE THOROUGHLY MIXED BY VOLUME.

7. EROSION CONTROL NETTING FOR TURF/SOIL:
   - 7.A. ONCE A PROJECT IS COMPLETE, STRAW/HAY BALES FOR EROSION CONTROL PURPOSES MUST BE REMOVED IMMEDIATELY TO DETER RAT/MOUSE HARBORAGE.
   - 7.B. EROSION CONTROL NETTING AND STRAW/HAY BALES MUST BE BIODEGRADABLE (NATURAL FIBERS).
   - 7.C. NETTING SHOULD PREFERABLE BE RECTANGULAR NOT SQUARE, AND FLEXIBLE LOOSE WEAVE (NOT WELDED).
   - 7.D. TO MINIMIZE WILDLIFE ENTANGLEMENT AND PLASTIC DEBRIS POLLUTION, CHOOSE TEMPORARY EROSION AND SEDIMENT CONTROL PRODUCTS THAT EITHER DO NOT CONTAIN NETTING, OR THAT CONTAIN NETTING MANUFACTURED FROM 100% BIODEGRADABLE NON-PLASTIC MATERIALS SUCH AS JUTE, SISAL, OR COIR FIBER.
   - 7.E. PROHIBITED NETTING FOR EROSION CONTROL:
     - 7.E.1. DEGRADABLE, PHOTODEGRADABLE, UV-DEGRADABLE, OXO-DEGRADABLE, OR OXO-BIODEGRADABLE PLASTIC NETTING (INCLUDING POLYPROPYLENE, NYLON, POLYETHYLENE, AND POLYESTER) ARE NOT ACCEPTABLE ALTERNATIVES.
     - 7.E.2. AVOID THE USE OF SILT FENCES REINFORCED WITH METAL OR PLASTIC MESH. WHEN NO LONGER REQUIRED, TEMPORARY EROSION AND SEDIMENT CONTROL PRODUCTS SHOULD BE PROMPTLY REMOVED.
   - 7.F. ALL NETTING MATERIALS USED SHOULD HAVE A WILDLIFE-SAFE, LOOSE-WEAVE DESIGN WITH MOVABLE JOINTS BETWEEN THE HORIZONTAL AND VERTICAL TWINES, ALLOWING THE TWINES TO MOVE INDEPENDENTLY AND THUS REDUCING THE POTENTIAL FOR WILDLIFE ENTANGLEMENT.
   - 7.G. MONITORING REQUIREMENT:
     - 7.G.1. WHEN NETTING IS INSTALLED FOR EROSION CONTROL, PERMITTEE IS REQUIRED TO MONITOR THE SITE FOR TRAPPED TRASH AND OTHER MATERIALS THAT COULD INCREASE PEST PROBLEMS.

DOEE SOIL EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES:

1. FOLLOWING INITIAL LAND DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR INTERIM STABILIZATION MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOR THE SURFACES OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND SLOPES GREATER THAN THREE (3) HORIZONTAL TO ONE (1) VERTICAL (3:1); AND FOURTEEN (14) DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THESE REQUIREMENTS DO NOT APPLY TO AREAS SHOWN ON THE PLAN THAT ARE USED FOR MATERIAL STORAGE OTHER THAN STOCKPILING, OR FOR THOSE AREAS ON THE PLAN WHERE ACTUAL CONSTRUCTION ACTIVITIES ARE BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY SO THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE DISTRICT OF COLUMBIA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (ESC).
   [21 DCMR § 542.9 (O)]

2. ESC MEASURES SHALL BE IN PLACE BEFORE AND DURING LAND DISTURBANCE.
   [21 DCMR § 543.6]

3. BEFORE STARTING ANY LAND DISTURBANCE, YOU MUST COMPLETE A DOEE PRE-CONSTRUCTION INSPECTION. TO SCHEDULE, GO TO http://doee.dc.gov/SGS AND CLICK THE "REQUEST A PRE-CONSTRUCTION INSPECTION" BUTTON. ATTACH A COPY OF THE ISSUED DOB PERMIT.

4. A COPY OF THE APPROVED PLAN SET WILL BE MAINTAINED AT THE CONSTRUCTION SITE FROM THE DATE THAT CONSTRUCTION ACTIVITIES BEGIN TO THE DATE OF FINAL STABILIZATION AND WILL BE AVAILABLE FOR DOEE INSPECTORS.
   [21 DCMR § 542.15]

5. ESC MEASURES SHALL BE IN PLACE TO STABILIZE AN EXPOSED AREA AS SOON AS PRACTICABLE AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED BUT NO LATER THAN FOURTEEN (14) DAYS FOLLOWING CESSATION, EXCEPT THAT TEMPORARY OR PERMANENT STABILIZATION SHALL BE IN PLACE AT THE END OF EACH DAY OF UNDERGROUND UTILITY WORK THAT IS NOT CONTAINED WITHIN A LARGER DEVELOPMENT SITE. [21 DCMR § 543.7]

6. STOCKPILED MATERIAL BEING ACTIVELY USED DURING A PHASE OF CONSTRUCTION SHALL BE PROTECTED AGAINST EROSION BY ESTABLISHING AND MAINTAINING PERIMETER CONTROLS AROUND THE STOCKPILE.
   [21 DCMR § 543.16 (A)]

7. STOCKPILED MATERIAL NOT BEING ACTIVELY USED OR ADDED TO SHALL BE STABILIZED WITH MULCH, TEMPORARY VEGETATION, HYDRO-SEED OR PLASTIC WITHIN FIFTEEN (15) CALENDAR DAYS AFTER ITS LAST USE OR ADDITION.
   [21 DCMR § 543.16 (B)]

8. FILL MATERIAL MUST BE FREE OF CONTAMINATION LEVELS OF ANY POLLUTANT THAT IS, OR MAY BE CONSIDERED TO REPRESENT, A POSSIBLE HEALTH HAZARD TO THE PUBLIC OR MAY BE DETRIMENTAL TO SURFACE OR GROUND WATER QUALITY, OR WHICH MAY CAUSE DAMAGE TO PROPERTY OR THE DRAINAGE SYSTEM. ALL FILL MATERIAL MUST BE FREE OF HAZARDOUS MATERIALS AND COMPLY WITH ALL APPLICABLE DISTRICT AND FEDERAL REGULATIONS.

9. PROTECT BEST MANAGEMENT PRACTICES FROM SEDIMENTATION AND OTHER DAMAGE DURING CONSTRUCTION FOR PROPER POST CONSTRUCTION OPERATION.
   [21 DCMR § 543.5]

10. REQUEST A DOEE INSPECTOR'S APPROVAL AFTER THE INSTALLATION OF PERIMETER AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
    [21 DCMR § 542.12 (A)]

11. REQUEST A DOEE INSPECTOR'S APPROVAL AFTER FINAL STABILIZATION OF THE SITE AND BEFORE THE REMOVAL OF EROSION AND SEDIMENT CONTROLS.
    [21 DCMR § 542.12 (B)]

12. FINAL STABILIZATION MEANS THAT ALL LAND-DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND EITHER OF THE FOLLOWING TWO CRITERIA HAVE BEEN MET: (1) A UNIFORM (FOR EXAMPLE, EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) PERENNIAL VEGETATIVE COVER WITH A DENSITY OF SEVENTY PERCENT (70%) OF THE NATIVE BACKGROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, OR (2) EQUIVALENT PERMANENT STABILIZATION MEASURES HAVE BEEN EMPLOYED (SUCH AS THE USE OF RIPRAP, GABIONS, OR GEO-TEXTILES).
    [21 DCMR § 542.12 (B.1, B.2)]

13. FOLLOW THE REQUIREMENTS OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND MAINTAIN A LEGIBLE COPY OF THIS SWPPP ON SITE.
    [21 DCMR § 543.10 (B)]

14. POST A SIGN THAT NOTIFIES THE PUBLIC TO CONTACT DOEE IN THE EVENT OF EROSION OR OTHER POLLUTION. THE SIGN WILL BE PLACED AT EACH ENTRANCE TO THE SITE OR AS DIRECTED BY THE DOEE INSPECTOR. EACH SIGN WILL BE NO LESS THAN 18 X 24 INCHES IN SIZE AND MADE OF MATERIALS THAT WILL WITHSTAND WEATHER FOR THE DURATION OF THE PROJECT. LETTERING WILL BE AT LEAST 1 INCH IN HEIGHT AND EASILY READABLE BY THE PUBLIC FROM A DISTANCE OF TWELVE FEET (12 FT). THE SIGN MUST DIRECT THE PUBLIC, IN SUBSTANTIALLY THE FOLLOWING FORM: "TO REPORT EROSION, RUNOFF, OR STORMWATER POLLUTION" AND WILL PROVIDE THE CONSTRUCTION SITE ADDRESS, DOEE'S TELEPHONE NUMBER (202-535-2977), DOEE'S E-MAIL ADDRESS (IEB.SCHEDULING@DC.GOV), AND THE 311 MOBILE APP HEADING ("CONSTRUCTION-EROSION RUNOFF").
    [21 DCMR § 543.22]

15. IF A SITE DISTURBS 5,000 SQUARE FEET OF LAND OR GREATER, THE ESC PLAN MUST CONTAIN THE FOLLOWING STATEMENT:
    "A RESPONSIBLE PERSON MUST BE PRESENT OR AVAILABLE WHILE THE SITE IS IN A LAND-DISTURBING PHASE. THE RESPONSIBLE PERSON IS CHARGED WITH BEING AVAILABLE TO (A) INSPECT THE SITE AND ITS ESC MEASURES AT LEAST ONCE BIWEEKLY AND AFTER A RAINFALL EVENT TO IDENTIFY AND REMEDY EACH POTENTIAL OR ACTUAL EROSION PROBLEM, (B) RESPOND TO EACH POTENTIAL OR ACTUAL EROSION PROBLEM IDENTIFIED BY CONSTRUCTION PERSONNEL, AND (C) SPEAK ON SITE WITH DOEE TO REMEDY EACH POTENTIAL OR ACTUAL EROSION PROBLEM. A RESPONSIBLE PERSON SHALL BE (A) LICENSED IN THE DISTRICT OF COLUMBIA AS A CIVIL OR GEO-TECHNICAL ENGINEER, A LAND SURVEYOR, OR ARCHITECT; OR (B) CERTIFIED THROUGH A TRAINING PROGRAM THAT DOEE APPROVES, INCLUDING A COURSE ON EROSION CONTROL PROVIDED BY ANOTHER JURISDICTION OR PROFESSIONAL ASSOCIATION. DURING CONSTRUCTION, THE RESPONSIBLE PERSON SHALL KEEP ON SITE PROOF OF PROFESSIONAL LICENSING OR OF SUCCESSFUL COMPLETION OF A DOEE-APPROVED TRAINING PROGRAM."
    [21 DCMR § 547]

THIS SHEET IS TO BE USED FOR SEDIMENTATION AND EROSION CONTROL PURPOSES ONLY!!!

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1/10/2025
LICENSED
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KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION

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BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE SF PROJECT NUMBER A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE DRAWING TYPE WORKING STAFF	EROSION & SEDIMENT CONTROL NOTES CIVIL

DESIGNED BY	DRAWN BY	CHECKED BY
JJ	MH/SA	MM/JJ

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
8_OF_11	CS	1	20

SCALE: 1:1

VEGETATIVE STABILIZATION - TEMPORARY SEEDING, SODDING AND MULCHING:

1. SITE PREPARATION:
   PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, GRASSED WATERWAYS, SEDIMENT BASINS, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND (B) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

2. SEEDBED PREPARATION AND SEEDING APPLICATION:
   THE TOP LAYER OF SOIL SHALL BE LOOSENED, LIMED AND FERTILIZED BY RAKING, DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING.
   APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL CULTIPACKER, SEEDER OR HYDROSEEDER ON A FIRM MOIST SEEDBED.

3. SOIL AMENDMENTS:
   LIME AND FERTILIZE ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TEST APPLY THE FOLLOWING:
   DOLOMITIC: 2 TONS PER ACRE OR 92 LBS./1,000 SQ.FT. (PERMANENT AND SODDING)
   LIMESTONE: 1 TON PER ACRE OR 46 LBS./1,000 SQ.FT. (TEMPORARY)
   FERTILIZER: 10-10-10 OR EQUIVALENT AT 1,000 LBS. PER ACRE OR 23 LBS./1,000 SQ.FT. (PERMANENT AND SODDING)

4. SEDIMENT CONTROL PRACTICES, SEEDING:
   SEED: "KENTUCKY 31" TALL FESCUE 60 LBS./ACRE OR 1.38 LBS./1,000 SQ.FT. AND ITALIAN (ANNUAL) RYEGRASS 40 LBS./ACRE OR .91 LBS./1,000 SQ.FT.
   DATES: 1/2 - 10/31, 5/1 - 8/14 WITH IRRIGATION.

5. TEMPORARY SEEDING: PER GROWING SEASON:
   SEED: ITALIAN OR PERENNIAL RYEGRASS 40 LBS./ACRE OR .91 LBS./1,000 SQ.FT.
   DATES: 2/1 - 4/30, AND 8/15 - 11/30
   SEED: MILLET 40 LBS/ACRE OR 0.92 LBS./1,000 SQ.FT.
   DATES: 5/1 - 8/14

6. PERMANENT SEEDING
   FINAL AND PERMANENT REPLACEMENT OF TURF SHALL BE SOD, NOT SEED. REFER TO SODDING SECTION BELOW.

7. MULCHING
   ALL SEEDINGS REQUIRE MULCHING. USE MULCH ONLY DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE. MULCH SHALL BE UNROTTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A RATE OF 1 TO 2 TONS/ACRE OR 70-90 LBS./1,000 SQ.FT. (2 BALES). MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEED BEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY MECHANICALLY OR BY HAND. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, PEG AND TWIN OR LIQUID MULCH BINDERS. LIQUID MULCH BINDER SHALL BE RAPID CURING CUTBACK ASPHALT APPLIED AT A RATE OF 200 GAL./ACRE OR 5 GAL. PER 1,000 SQ.FT. SLOPES 8 FEET OR MORE HIGH USE 348 GAL./ACRE OR 8 GAL./1,000 SQ.FT.

8. SODDING:
   CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR WITH STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTING AND NOT OVERLAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED WITHIN EIGHT HOURS OF INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

9. MAINTENANCE
   9.A. IRRIGATION: WHEN SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.
   9.B. REPAIRS: IF STAND IS INADEQUATE FOR EROSION CONTROL, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND IS OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL RATES AND PROCEDURES.

NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1987 DISTRICT OF COLUMBIA DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

SOIL PROTECTION:

ALL REMOVED SOIL SHALL BE STORED ON SITE, PROTECTED PROPERLY, AND USED FOR REPLACEMENT. ANY REPLACEMENT SOIL BROUGHT FROM OFF-SITE SHALL MATCH THE EXISTING SOIL TEXTURE. SMITHSONIAN GARDENS, THROUGH THE COTR, MUST APPROVE THE SOURCE OF ANY REPLACEMENT SOIL BEFORE PROCURING AND TRANSPORTING THE SOIL TO THE SITE. THIS INCLUDES SOIL FROM PLANTING BEDS THAT ARE EXCAVATED FOR TRENCHING.

UNDERGROUND UTILITY WORK:

1. WHEN CONDUCTING UNDERGROUND UTILITY WORK DO NOT OPEN MORE THAN FIVE HUNDRED LINEAR FEET (500 FT.) OF TRENCH AT ANY ONE TIME.

2. FILTER WATER PUMPED OUT OF TRENCH EXCAVATIONS PRIOR TO DISCHARGING TO THE STORM SEWER SYSTEM.

3. PLACE EXCAVATED MATERIAL FOR UTILITY WORK ON THE UPHILL SIDE OF A TRENCH.

4. INSTALL INTERIM OR PERMANENT STABILIZATION IMMEDIATELY AFTER A UTILITY TRENCH IS REFILLED.

5. USE MULCH AND MATTING ON EXCAVATED MATERIAL TO MINIMIZE THEIR EROSION WHEN NATURAL OR ARTIFICIAL GRASS FILTER STRIPS ARE INSTALLED TO RECEIVE STORMWATER RUNOFF FROM THE EXCAVATED MATERIALS.

STANDARD EROSION AND SEDIMENT CONTROL MEASURES AND SEQUENCE:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING.

2. PROVIDE TEMPORARY STONE CONSTRUCTION ENTRANCE WHERE SHOWN. PROVIDE WATER SOURCE AND HOSE TO CLEAN ALL EQUIPMENT LEAVING SITE.

3. INSTALL SILT FENCE AS SHOWN.

4. NO DISTURBED AREA WILL BE DENUDED FOR MORE THAN 7 CALENDAR DAYS. INSTALL THE NECESSARY TEMPORARY OR PERMANENT VEGETATIVE STABILIZATION MEASURES TO ACHIEVE ADEQUATE EROSION AND SEDIMENT CONTROL.

5. ALL CONSTRUCTION TO BE INSPECTED DAILY BY THE CONTRACTOR, AND ANY DAMAGED SILTATION OR EROSION CONTROL DEVICES OR MEASURES WILL BE REPAIRED AT THE CLOSE OF THE DAY.

6. ALL SILT FENCE TO BE MAINTAINED IN WORKING CONDITION. TO BE MAINTAINED IN WORKING CONDITION.

7. STABILIZED CONSTRUCTION ENTRANCES TO BE PERIODICALLY SUPPLEMENTED WITH ADDITIONAL STONE AS NEEDED.

8. CONTROLS CAN BE REMOVED AFTER THEIR CONTRIBUTING BASINS HAVE BEEN PERMANENTLY STABILIZED, AND APPROVAL OF INSPECTOR IS OBTAINED.

POLLUTION PREVENTION THROUGH GOOD HOUSEKEEPING:

POLLUTION PREVENTION:
THIS APPENDIX IS MEANT TO COMPLEMENT APPENDIX P STORMWATER HOTSPOTS AND EROSION AND SEDIMENT CONTROL PLAN (ESCP), BUT NOT REITERATE EPA'S CONSTRUCTION GENERAL PERMIT REQUIREMENTS. THESE NOTES SHALL APPEAR AS STAMPED NOTES ON STORMWATER MANAGEMENT PLANS (SWMPS) WHERE LAND DISTURBANCE IS GREATER THAN 5,000 SQUARE FEET AND LESS THAN ONE ACRE. THESE NOTES SHALL CONSTITUTE A MINIMUM STORMWATER POLLUTION PREVENTION PLAN (SWPPPmin) AND PROVIDE GUIDANCE ON GOOD HOUSEKEEPING PRACTICES TO PREVENT POTENTIAL CONSTRUCTION-SITE POLLUTANT FROM INTERACTING WITH STORMWATER.

STORMWATER MANAGEMENT PLAN (SWMP) GOOD HOUSEKEEPING STAMP NOTES:

FUELS AND OILS:
ON-SITE REFUELING WILL BE CONDUCTED IN A DEDICATED LOCATION AWAY FROM ACCESS TO SURFACE WATERS. INSTALL CONTAINMENT BERMS AND, OR SECONDARY CONTAINMENTS AROUND REFUELING AREAS AND STORAGE TANKS. SPILLS WILL BE CLEANED UP IMMEDIATELY AND CONTAMINATED SOILS DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL AND DISTRICT OF COLUMBIA REGULATIONS. PETROLEUM PRODUCTS WILL BE STORED IN CLEARLY LABELED TIGHTLY SEALED CONTAINERS. ALL VEHICLES ON SITE WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE ACTIVITIES. ANY ASPHALT SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SPILL KITS BE INCLUDED WITH ALL FUELING SOURCES AND MAINTENANCE ACTIVITIES.

SOLID WASTE:
NO SOLID MATERIALS SHALL BE DISCHARGED TO SURFACE WATER. SOLID MATERIALS INCLUDING BUILDING MATERIALS, GARBAGE AND PAINT DEBRIS SHALL BE CLEANED UP DAILY AND DEPOSITED INTO DUMPSTERS, WHICH WILL BE PERIODICALLY REMOVED AND DEPOSITED INTO A LANDFILL.

ABRASIVE BLASTING:
WATER BLASTING, SANDBLASTING, AND OTHER FORMS OF ABRASIVE BLASTING ON PAINTED SURFACES BUILT PRIOR TO 1978 MAY ONLY BE PERFORMED IF AN EFFECTIVE CONTAINMENT SYSTEM PREVENTS DISPERSAL OF PAINT DEBRIS.

FERTILIZER:
FERTILIZERS WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER, WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER, AND STORED IN A COVERED SHED. PARTIALLY USED BAGS WILL BE TRANSFERRED TO A SEALABLE BIN TO AVOID SPILLS.

PAINT AND OTHER CHEMICALS:
ALL PAINT CONTAINERS AND CURING COMPOUNDS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGES TO THE STORM SEWERS, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SPRAY GUNS WILL BE CLEANED ON A REMOVAL TARP. CHEMICALS USED ON SITE ARE KEPT IN SMALL QUANTITIES AND IN CLOSED CONTAINERS UNDERCOVER AND KEPT OUT OF DIRECT CONTACT WITH STORMWATER. AS WITH FUELS AND OILS, ANY INADVERTENT SPILLS WILL BE CLEANED UP IMMEDIATELY AND DISPOSED OF ACCORDING FEDERAL AND DISTRICT OF COLUMBIA REGULATIONS.

CONCRETE:
CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE DISPOSAL AREA. FORM RELEASE OIL FOR DECORATIVE STONE WORK WILL BE APPLIED OVER PALLET COVERED WITH AN ABSORBENT MATERIAL TO COLLECT EXCESS FLUID. THE ABSORBENT MATERIAL WILL BE REPLACED AND DISPOSED OF PROPERLY WHEN SATURATED.

WATER TESTING:
WHEN TESTING AND, OR CLEANING WATER SUPPLY LINES, THE DISCHARGE FROM THE TESTED PIPE WILL BE COLLECTED AND CONVEYED TO A COMPLETED STORMWATER CONVEYANCE SYSTEM FOR ULTIMATE DISCHARGE INTO A STORMWATER BEST MANAGEMENT PRACTICE (BMP).

SANITARY WASTE:
PORTABLE LAVATORIES LOCATED ON SITE WILL BE SERVICES ON A REGULAR BASIS BY A CONTRACTOR. PORTABLE LAVATORIES WILL BE LOCATED IN AN UPLAND AREA AWAY FROM DIRECT CONTACT WITH SURFACE WATERS. ANY SPILLS OCCURRING DURING SERVICING WILL BE CLEANED IMMEDIATELY AND CONTAMINATED SOILS DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL AND DISTRICT OF COLUMBIA REGULATIONS.

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.

2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL, AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.

3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.

4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.

5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
   5.A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;
   5.B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;
   5.C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 KPA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.

6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
   6.A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES;
   6.B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
   6.C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

7. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.

8. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.

9. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

THIS SHEET IS TO BE USED FOR SEDIMENTATION AND EROSION CONTROL PURPOSES ONLY!!!

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KEY PLAN

GRAPHIC SCALE(S)

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REVISION	REVISION

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BUILDING NAME	SI MALL CAROUSEL
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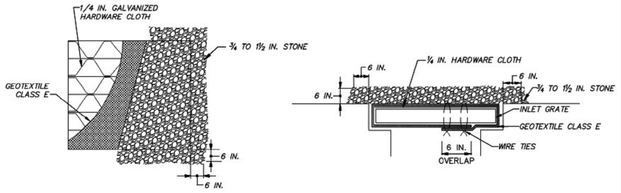
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	EROSION & SEDIMENT CONTROL NOTES
DRAWING TYPE	CIVIL
WORKING STAFF	JJ (DESIGNED BY) / MH/SA (DRAWN BY) / MM/JJ (CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
9_OF_11	CS	1	21

SCALE: 1:1

MAXIMUM DRAINAGE AREA = ¼ ACRE

STANDARD SYMBOL: AGIP



PLAN/CUT AWAY VIEW

CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. LIFT GRATE AND WRAP WITH GEOTEXTILE CLASS E TO COMPLETELY COVER ALL OPENINGS, SECURE WITH WIRE TIES, THEN SET GRATE BACK IN PLACE.
2. PLACE CLEAN ¾ TO 1-½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 4 TO 6 INCHES THICK ON THE GRATE TO SECURE THE FABRIC.
3. IF THERE ARE ANY SIGNS OF STREET FLOODING OR WATER PONDING, THIS STRUCTURE MUST BE CLEANED OR REPLACED, OR REDESIGNED WITH A VIABLE ALTERNATIVE.

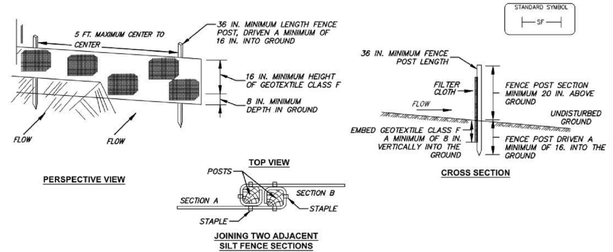
DATE	APPR
REVISED	
ISSUED:	
REFERENCE	

AT GRADE INLET PROTECTION
STORM DRAIN INLET PROTECTION

DISTRICT OF COLUMBIA
DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 307.2

STANDARD SYMBOL: SF



PERSPECTIVE VIEW

CROSS SECTION

JOINING TWO ADJACENT SILT FENCE SECTIONS

CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS MUST BE A MINIMUM OF 36 IN. LONG DRIVEN 16 IN. MINIMUM INTO THE GROUND. WOOD POSTS MUST BE OF SOUND QUALITY HARDWOOD WITH 1-1/2 IN. MINIMUM WIDTH WHEN SQUARE CUT, OR 1-3/4 IN. MINIMUM DIAMETER WHEN ROUND. STEEL POSTS MUST BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
2. FASTEN GEOTEXTILE SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION. GEOTEXTILE MUST MEET THE FOLLOWING REQUIREMENTS (GEOTEXTILE CLASS F):

PROPERTY	VALUE	TEST METHOD
TENSILE STRENGTH	50 LBS/IN (MIN.)	ASTM D-4595
TENSILE MODULUS	20 LBS/IN (MIN.)	ASTM D-4595
FLOW RATE	0.3 GAL/FT² /MINUTE (MAX.)	ASTM D-5141
FILTERING EFFICIENCY	75% (MIN.)	ASTM D-5141

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, OVERLAP, FOLD, AND STAPLE THEM TO PREVENT SEDIMENT BYPASS.
4. INSPECT SILT FENCE AFTER EACH RAINFALL EVENT, AT LEAST DAILY DURING SUSTAINED RAINFALL EVENTS, AND MAINTAIN WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 30% OF THE FABRIC HEIGHT.

DATE	APPR
REVISED	
ISSUED:	
REFERENCE	

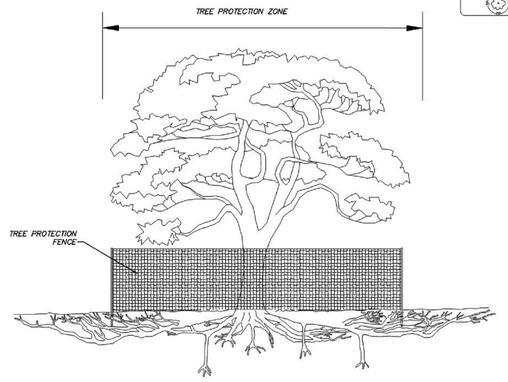
SILT FENCE-1

DISTRICT OF COLUMBIA
DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 301.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

STANDARD SYMBOL: TP



SECTION VIEW

DATE	APPR
REVISED	
ISSUED:	
REFERENCE	

TREE PROTECTION

DISTRICT OF COLUMBIA
DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 903.1

SILT FENCE DESIGN CRITERIA:

TABLE 3.1: SILT FENCE SLOPE LENGTH AND FENCE LENGTH CONSTRAINTS

SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM) (FEET)	SILT FENCE LENGTH (MAXIMUM) (FEET)
FLATTER THAN 50:1 (2%)	UNLIMITED	UNLIMITED
> 50:1 TO 10:1 (2% to 10%)	125	1,000
> 10:1 TO 5:1 (10% to 20%)	100	750
> 5:1 TO 3:1 (20% to 33%)	60	500
> 3:1 TO 2:1 (33% to 50%)	40	250
> 2:1 (> 50%)	20	125

NOTE:

- IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.
- TO AVOID CIRCUMVENTION, EXTEND THE ENDS OF THE SILT FENCE UPSLOPE TO PREVENT WATER AND SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.

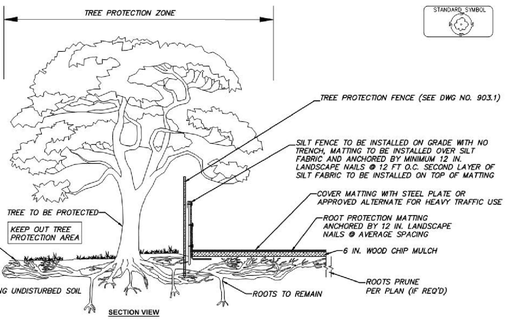
DATE	APPR
REVISED	
ISSUED:	
REFERENCE	

SILT FENCE-2

DISTRICT OF COLUMBIA
DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 301.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS



SECTION VIEW

CONSTRUCTION SPECIFICATIONS

1. MATTING MATERIAL MUST BE DOUBLE SIDED GEOCOMPOSITE, GEONET CORE WITH NON-WOVEN COVERING (SUCH AS TENSAR ROADRAIN RD7) OR APPROVED EQUIVALENT.
2. INSTALL ROOT PROTECTION MATTING BY A CERTIFIED ARBORIST.
3. TO BE USED FOR DESIGNATED TEMPORARY CONSTRUCTION ACCESS AND STOCKPILE AREAS.
4. PLACE MATTING ON 6 IN. WOOD CHIP MULCH UNLESS OTHERWISE DIRECTED.
5. FOR HEAVY TRAFFIC AREAS, COVER MATTING WITH STEEL PLATES.

DATE	APPR
REVISED	
ISSUED:	
REFERENCE	

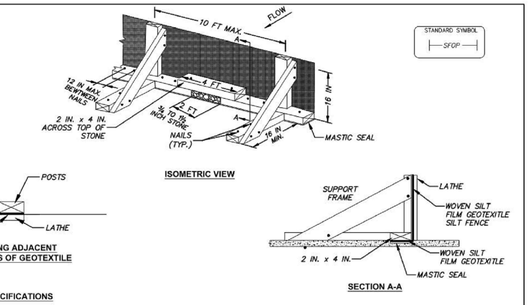
TREE ROOT PROTECTION WITH SILT FENCE

DISTRICT OF COLUMBIA
DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 903.2

SOURCE: URBAN TREE FOUNDATION 2014

STANDARD SYMBOL: SFOP



ISOMETRIC VIEW

JOINING ADJACENT SECTIONS OF GEOTEXTILE

SECTION A-A

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH BY 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN APPENDIX A.
3. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
4. PROVIDE A 2-FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
5. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN – OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
7. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
8. SECURE BOARDS TO PAVEMENT WITH 40D 5-INCH MINIMUM LENGTH NAILS.
9. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

DATE	APPR
REVISED	
ISSUED:	
REFERENCE	

SILT FENCE ON PAVEMENT

DISTRICT OF COLUMBIA
DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 310.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
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410.646.4500

STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
1330 CONNECTICUT AVE NW, SUITE 300
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CIVIL ENGINEERING
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AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA
JONATHAN JOLLY
No. PES20423
1/10/2025
LICENSED PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

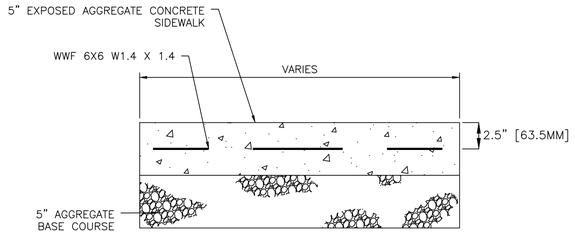
REVISION	REVISION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE SF PROJECT NUMBER A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE DRAWING TYPE WORKING STAFF	EROSION & SEDIMENT CONTROL DETAILS CIVIL JJ (DESIGNED BY) / MH/SA (DRAWN BY) / MM/JJ (CHECKED BY)
SHEET NO. 10_OF_11	CS (DISCIPLINE) / 5 (TYPE) / 00 (SEQUENCE)

SCALE: 1:1



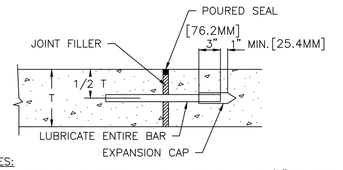
SIDEWALK SPECIFICATIONS – FOR EXPOSED AGGREGATE CONCRETE

THIS WORK CONSISTS OF CONSTRUCTING SIDEWALKS.

MATERIAL: MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS

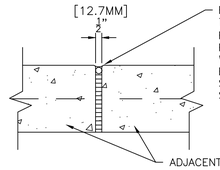
1. BED COURSE MATERIAL SHALL CONSIST OF CINDERS, SAND, SLAG, GRAVEL, OR CRUSHED STONE PASSING A 1/2–INCH–SQUARE MESH SIEVE.
2. CONCRETE SHALL CONTAIN 4.5–7.5 PERCENT OF ENTRAINED AIR, AS DETERMINED BY AASHTO T 152. CONCRETE SHALL HAVE A SLUMP OF NO MORE THAN 4 INCHES AS DETERMINED BY AASHTO T 119. THE MAXIMUM WATER–CEMENT RATIO SHALL BE 0.49. THE MINIMUM CEMENT FACTOR SHALL BE 6 1/2 BAGS PER CUBIC YARD. THE CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS.
3. AIR–ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260 (SIKA AEA 14 OR APPROVED EQUIVALENT).
4. WATER SHALL CONFORM TO AASHTO M 157. WATER SHALL CONTAIN NO SUBSTANCES DETRIMENTAL TO THE FINISHED PRODUCT. POTABLE WATER OF KNOWN QUALITY MAY BE USED WITHOUT TESTING.
5. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 TYPE I/II.
6. FINE AGGREGATE SHALL CONFORM TO ASTM C33 CONCRETE SAND WITH 2% PASSING #100 SIEVE. FINE AGGREGATES SHALL HAVE A MINIMUM SAND EQUIVALENT VALUE OF 80 WHEN TESTED IN ACCORDANCE WITH ASTM D2419.
7. COARSE AGGREGATE SHALL BE $\frac{3}{8}$" PEA GRAVEL. PEA GRAVEL SHALL BE ROUNDED NATURAL OCCURRING AGGREGATE WITH THE FOLLOWING GRADATION: 100% PASSING $\frac{1}{2}$" SIEVE; 94% PASSING 3/8"' SIEVE; 23% PASSING #4 SIEVE; 3% PASSING #8 SIEVE.
8. SIDEWALK SHALL MATCH THE COLOR AND TEXTURE OF THE SIDEWALK AT EISENHOWER MEMORIAL AND/OR AT AFRICAN AMERICAN HISTORY AND CULTURAL MUSEUM.
9. THE SURFACE RETARDER SHALL BE SPRAYABLE FOR TOPICAL APPLICATION,"CRETE–NOX TA," MANUFACTURED BY NOX–CRETE CHEMICALS, INC., OMAHA, NEBRASKA, OR APPROVED EQUAL.
10. EXPANSION JOINT FILLER SHALL BE REGRANULATED CORK PARTICLES IMPREGNATED AND BOUND WITH RESINS, ASTM D 1752–TYPE II.RESILIENCY RECOVERY SHALL BE 95 PERCENT, IF NOT COMPRESSED MORE THAN 50 PERCENT OF THE ORIGINAL THICKNESS.
11. EXPANSION JOINT SEALANT SHALL BE POLYURETHANE, TYPE I, TRAFFIC GRADE, AND BROWN (BEIGE) TO MATCH THE EXPOSED AGGREGATE; A NONSTAINING PRIMER, SUCH AS CHEM–CALK 550, MANUFACTURED BY WOODMONT PRODUCTS, INC., OR AN APPROVED EQUAL, SHALL BE USED.
12. WELDED WIRE MESH REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 55.

1 CS510 **EXPOSED AGGREGATE SIDEWALK AND JOINTS**
SCALE: NTS



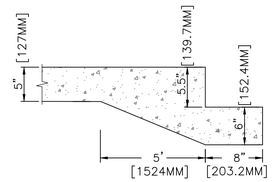
NOTES:
1. ALL FORMED JOINTS SHALL BE FINISHED WITH 1/8" RADIUS.
2. SIZE AND SPACING OF DOWELS IN TRANSITION SECTION SHALL BE GOVERNED BY THE THICKEST EDGE.
3. DOWEL BARS SHALL BE IN ACCORDANCE WITH DDOT SPECIFICATION 807.

DOWELED EXPANSION JOINT
N.T.S.

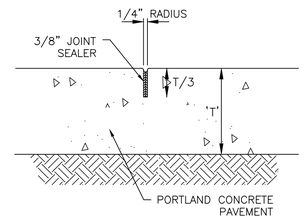


PROVIDE EXPANSION JOINT IN SIDEWALK AT FACE OF BUILDING BELOW GRADE, AT OTHER FIXED OBJECTS WHERE NEW CONCRETE PAVEMENT MEETS EXISTING AND AT 24' CENTERS.

SIDEWALK EXPANSION JOINT
N.T.S.



THICKENED EDGE AT BOARDWALK
N.T.S.



NOTE:
1. ALL FORMED JOINTS SHALL BE FINISHED WITH 1/4" RADIUS.

TOOLED CONTROL JOINT
N.T.S.

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
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202.333.6446

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MUELLER ASSOCIATES, INC.
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STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
1330 CONNECTICUT AVE NW, SUITE 300
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CIVIL ENGINEERING
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CODE, SECURITY, AND IT
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DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA · JONATHAN JOLLY · No. PE820423 · 1/10/2025 · LICENSED PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE: 12/18/24
SUBMISSION: FINAL
DIVISION
DIVISION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME: SI MALL CAROUSEL
ADDRESS: NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER:
DRAWING TITLE: SITE DETAILS
DRAWING TYPE: CIVIL
WORKING STAFF: JJ (DESIGNED BY) | MH/SA (DRAWN BY) | MM/JJ (CHECKED BY)

SHEET NO. 11_OF_11
CS | 5 | 10
DISCIPLINE | TYPE | SEQUENCE

SCALE: 1:1

X — REMOVE TREE IN POOR CONDITION

TEMPORARY ROOT MATTING (SPEC'D GEOTEXTILE, 6" WOODCHIPS, & TRACK MATS

VERTICAL MULCHING

REMOVE EXISTING FENCE EMBEDDED IN TREE ROOTS UNDER CERTIFIED ARBORIST SUPERVISION

6' CHAIN LINK TREE PROTECTION FENCE

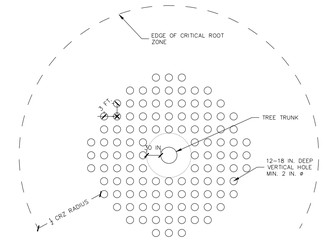
REMOVE BRICK UNDER CERTIFIED ARBORIST SUPERVISION

GROWTH REGULATOR TREATMENT

REPLACE SIDEWALK IN KIND UNDER CERTIFIED ARBORIST SUPERVISION

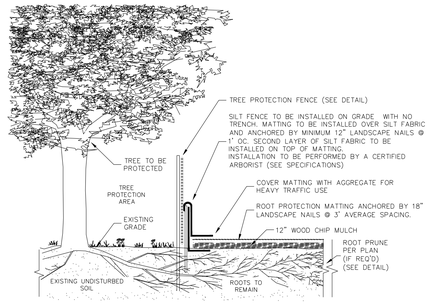
DIRECTIONAL BORING FOR UTILITIES

CRITICAL ROOT ZONE



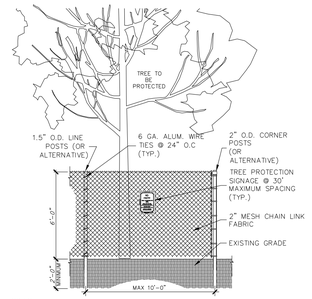
NOTES:
1. WORK TO BE PERFORMED BY OR UNDER THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.
2. USE SUPERSONIC AIRTOOL TO BORE 12–18 IN. VERTICAL HOLES, MINIMUM 2 IN. ø, ON 3x3 FT. SPACING.
3. AREA OF TREATMENT TO BE 50 IN. FROM TRUNK TO ½ CRZ RADIUS AND ANY AREA PREVIOUSLY UNDER ROOT PROTECTION MATTING. EXACT CONFIGURATION TO VARY DEPENDING ON SITE CONDITIONS AND SPECIFIC AREAS OF COMPACTION.
4. BACKFILL WITH CHIP–SIZED, PRE–MOISTENED BIOCHAR TO 1 IN. FROM TOP OF HOLE AND COVER WITH TOPSOIL OR SOD.
5. IF FOLLOWED BY LIQUID FERTILIZER AND/OR BIOCHAR INJECTION, INJECTION LOCATIONS TO BE OFFSET FROM VERTICAL MULCHING HOLES.
6. OFFSET HOLES IF TREATMENTS ARE REPEATED IN SUBSEQUENT YEARS.

6/6 VERTICAL MULCHING – PLAN VIEW
SCALE: NTS



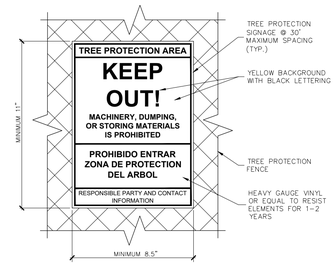
NOTES:
1. MATTING MATERIAL SHALL BE DOUBLE SIDED GEOCOMPOSITE, GEONET CORE WITH NON–WOVEN COVERING (SUCH AS TENSAR ROADRAIN RD7) OR APPROVED EQUIVALENT.
2. RPM SHALL BE INSTALLED BY A CERTIFIED ARBORIST.
3. TO BE USED FOR DESIGNATED TEMPORARY CONSTRUCTION ACCESS AND STOCKPILE AREAS.
4. MATTING SHALL BE PLACED ON 12" WOOD CHIP MULCH UNLESS OTHERWISE DIRECTED.
5. FOR HEAVY TRAFFIC AREAS, MATTING SHALL BE COVERED WITH 6–8" WELL GRADED CRUSHED AGGREGATE. ADDITIONAL LAYERS OF GEOTEXTILE, OR HARDENED SURFACE LAYER MAY BE NEEDED.

5/2 TEMPORARY ROOT PROTECTION MATTING (TYPICAL)
SCALE: NTS



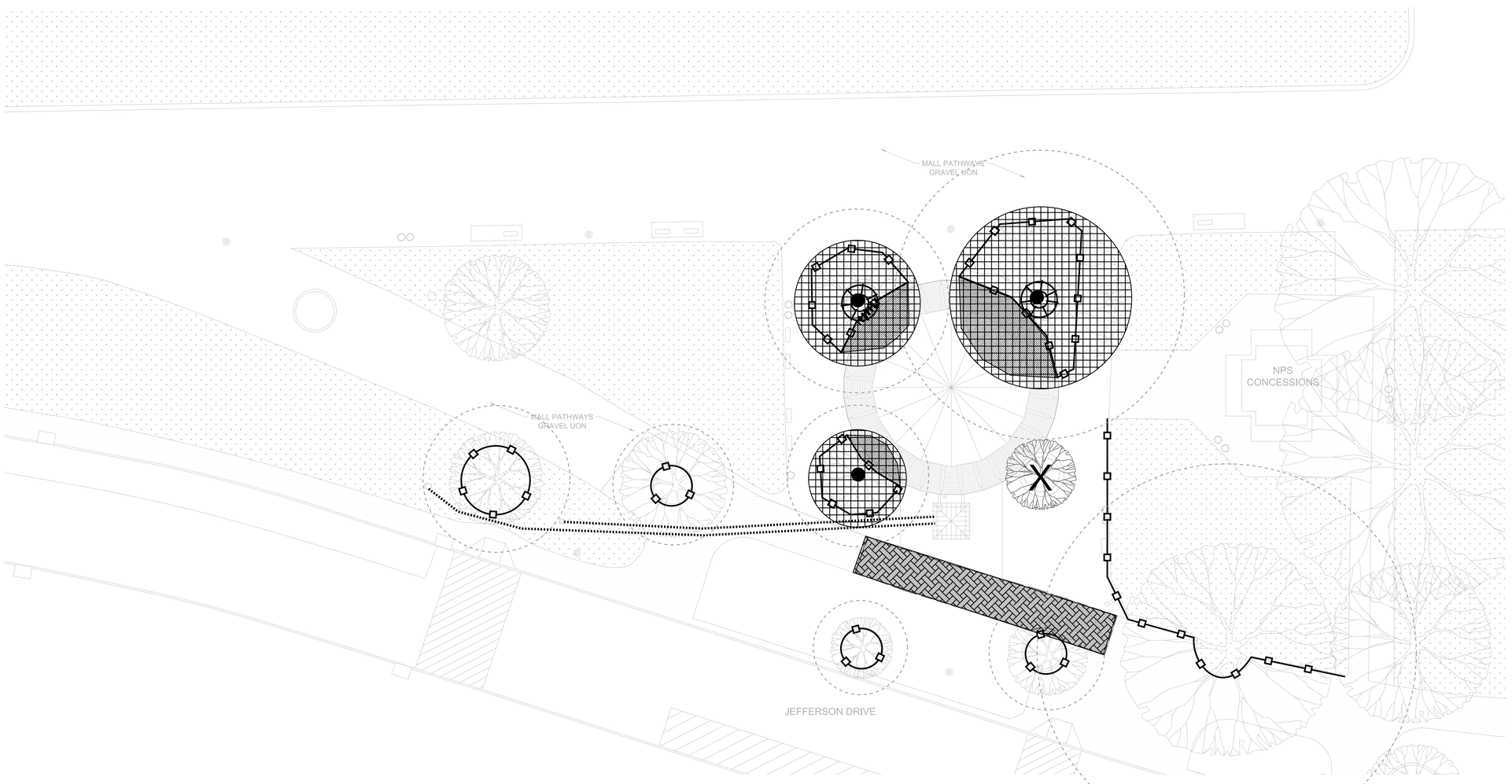
NOTES:
1. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION.
2. SUPER SILT FENCE MAY BE USED IN LIEU OF WELDED WIRE FOR TREE PROTECTION PROVIDED IT IS INSTALLED AND MAINTAINED AS A TREE PROTECTION MEASURE AND IS POSTED WITH TREE PROTECTION SIGNS.
3. TREE PROTECTION FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. REMOVE FENCE ONLY WITH APPROVAL AND AFTER ALL SITE WORK HAS BEEN COMPLETED.

1/2 CHAIN LINK TREE PROTECTION FENCE (TYPICAL)
SCALE: NTS



NOTES:
1. SIGNS TO BE ATTACHED TO TREE PROTECTION FENCE OR POSTS AT READABLE LEVEL.
2. 30' MINIMUM SPACING AVERAGE ADJUSTED FOR MAXIMUM READABILITY.
3. MINIMUM ONE SIGN FOR SMALL TREE PROTECTION AREAS.
4. SIGNS MAY BE REMOVED FROM RESIDENTIAL LOTS UPON ISSUANCE OF USE AND OCCUPANCY.
5. SIGNS TO REMAIN ON NON RESIDENTIAL SITES FOR MAINTENANCE PERIOD.

2/2 TREE PROTECTION AREA SIGN (TYPICAL)
SCALE: NTS



1/LP-020 SITE PLAN
SCALE: 1/16" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
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NOT FOR CONSTRUCTION

KEY PLAN

16' 8' 0 16'
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

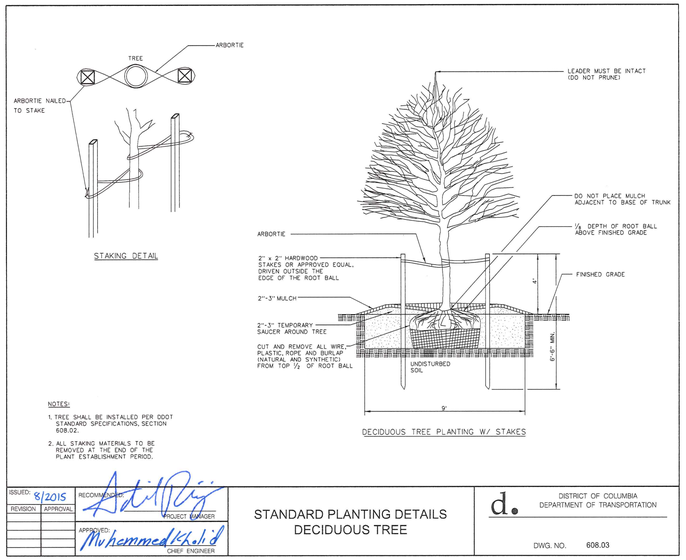
REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

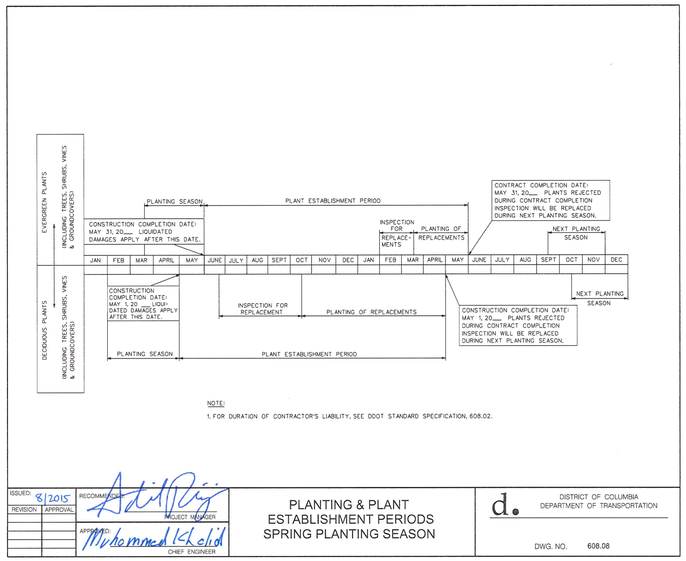
Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE / SF PROJECT NUMBER / A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE / DRAWING TYPE / WORKING STAFF	TREE PROTECTION SITE PLAN & TYPICAL DETAILS TREE PROTECTION MM (DESIGNED BY) / MM (DRAWN BY) / MM (CHECKED BY)
SHEET NO.	LP (DISCIPLINE) / 0 (TYPE) / 20 (SEQUENCE)
00_OF_11	

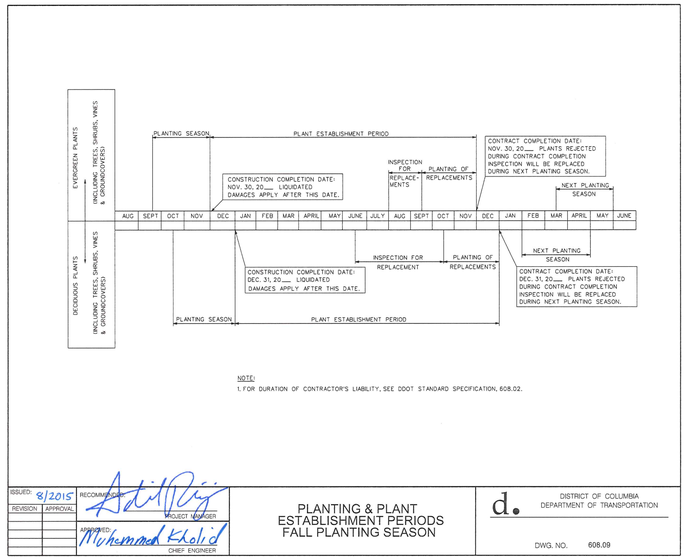
SCALE: 1:1





NOTE:
1. FOR DURATION OF CONTRACTOR'S LIABILITY, SEE DDOT STANDARD SPECIFICATION, 608.02.

ISSUED: 8/2015
REVISION | APPROVAL
RECOMMENDED: PROJECT MANAGER
APPROVED: Muhammed Khalid CHIEF ENGINEER
PLANTING & PLANT ESTABLISHMENT PERIODS SPRING PLANTING SEASON
d. DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION
DWG. NO. 608.08



NOTE:
1. FOR DURATION OF CONTRACTOR'S LIABILITY, SEE DDOT STANDARD SPECIFICATION, 608.02.

ISSUED: 8/2015
REVISION | APPROVAL
RECOMMENDED: PROJECT MANAGER
APPROVED: Muhammed Khalid CHIEF ENGINEER
PLANTING & PLANT ESTABLISHMENT PERIODS FALL PLANTING SEASON
d. DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION
DWG. NO. 608.09

HARTMAN-COX ARCHITECTS

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NOT FOR CONSTRUCTION

KEY PLAN

NOT TO SCALE

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

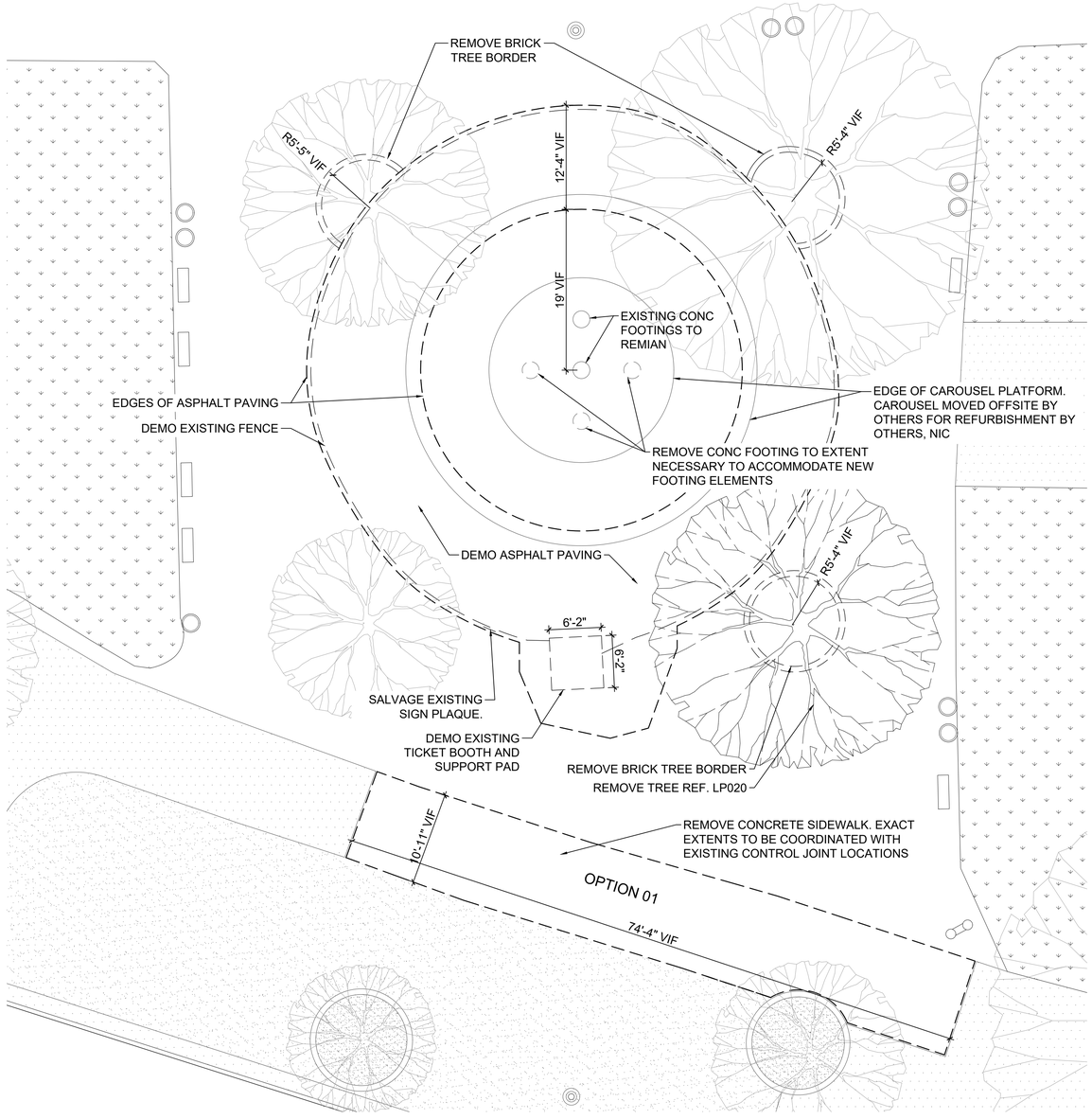
Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SI PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	TREE PLANTING DETAILS
DRAWING TYPE	TREE PROTECTION
WORKING STAFF	MM / MM / MM (DESIGNED BY / DRAWN BY / CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	LP	0	21

SCALE: 1:1



1
AD-101

DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. PROTECT ALL EXISTING TO REMAIN ELEMENTS AS NECESSARY WHETHER INDICATED ON DRAWIINGS OR NOT. REPAIR ALL DAMAGE TO EXISTING TO REMAIN FINISHES CAUSED BY FAILURE TO PROTECT.

2. REFER TO LP 020 FOR TREE PROTECTION MEASURES THAT SHALL BE INSTALLED PRIOR TO START OF DEMOLITION.

3. FOR EXISTING ITEMS TO REMAIN: PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY COTR, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION AND CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATION AFTER SELECTIVE DEMOLITION OPERATIONS ARE COMPLETE.

4. REMOVAL OF ASPHALT SHALL BE DONE WITH DIRECT SUPERVISION OF THE GENERAL CONTRACTOR'S CONTRACT ARBORIST.

5. REFER TO ALL DEMOLITION AND PROPOSED WORK DRAWINGS AND SPECIFICATIONS AS APPLICABLE FOR SPECIFIC INFORMATION, DIMENSIONS, LOCATIONS, ETC. REGARDING THE EXACT EXTENT OF DEMOLITION REQUIRED. IF PROPOSED WORK REQUIRES THE DEMOLITION OF EXISTING CONSTRUCTION, EXISTING CONSTRUCTION SHALL BE PROPERLY DEMOLISHED TO ACCOMMODATE THE NEW WORK REGARDLESS IF SHOWN ON DEMOLITION DRAWINGS.

6. PRIOR TO THE START OF WORK, CONTRACTOR SHALL DOCUMENT CONDITION OF SITE ELEMENTS BY WHATEVER MEANS THE CONTRACTOR DETERMINES WILL BEST DESCRIBE THE PRE-CONSTRUCTION CONDITION PAYING SPECIAL ATTENTION TO AREAS THAT ABUT NEW WORK. THE CONTRACTOR SHALL SUBMIT A COPY OF THIS DOCUMENTATION TO THE COTR PRIOR TO STARTING WORK. THIS DOCUMENTATION WILL BE USED IN ASSESSING THE POST CONSTRUCTION CONDITION OF THE SITE DURING THE PUNCH LIST PHASE. FAILURE TO SUBMIT THIS DOCUMENTATION IN NO WAY RELIEVES THE CONTRACTOR OF RESPONSIBILITY FOR REPAIR/REPLACEMENT OF ANY ITEM(S) THAT ARE DETERMINED TO BE DAMAGED DURING CONSTRUCTION AS DETERMINED BY THE COTR AT A LATER TIME.

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DISTRICT OF COLUMBIA
REGISTERED
ARC4000262
1/9/2024
LICENSED
ARCHITECT

KEY PLAN

8' 4' 0 8'

SCALE: 1/8"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	DEMOLITION PLAN
DRAWING TYPE	ARCHITECTURAL DEMOLITION
WORKING STAFF	ST / JC / AY (DESIGNED BY / DRAWN BY / CHECKED BY)
SHEET NO.	00_OF_11
	AD (DISCIPLINE) / 1 (TYPE) / 01 (SEQUENCE)

SCALE: 1:1

OPTION DESCRIPTIONS

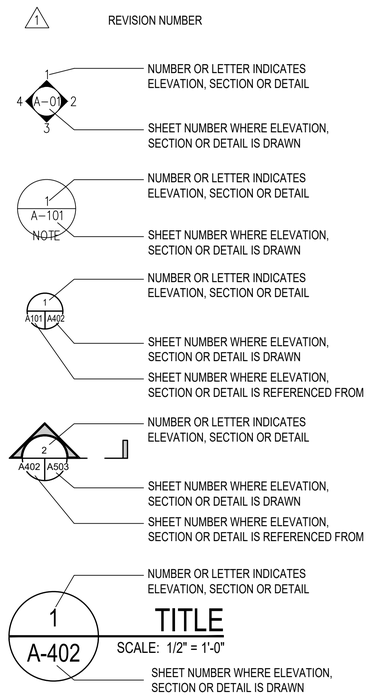
OPTION 01
THE EXISTING SIDEWALK EXCEEDS THE MAXIMUM ALLOWABLE CROSS SLOPE. REMOVE THE EXISTING CONCRETE SIDEWALK AND REPLACE IN LIKE KIND WITH EXPOSED AGGREGATE CONCRETE SIDEWALK WITH COMPLIANT CROSS SLOPE. REFERENCE SPECIAL ACCESSIBILITY REQUIREMENTS ON SHEET G002.

OPTION 02
DECKING MATERIAL OPTIONS AS SPECIFIED IN SECTIONS 010000 & 323416
BASE PROPOSAL: MODIFIED WOOD - KEBONY
OPTION 2A: MODIFIED WOOD - THERMORY
OPTION 2B: MODIFIED WOOD - ACCOYA
OPTION 2C: COMPOSITE DECK - TREX SIGNATURE

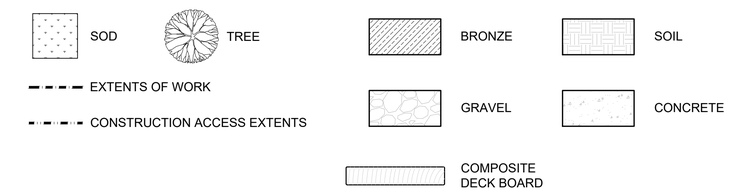
GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE WITH ALL DISCIPLINES FOR SYSTEMS EXTENTS AND INSTALLATION.
2. THE DRAWINGS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING DISCIPLINES ARE TO BE COMPLEMENTARY. ITEMS SHOWN IN ONE LOCATION IN THE DRAWINGS SHALL BE CONSIDERED TO BE REQUIREMENTS OF THE CONTRACT FOR CONSTRUCTION. IN THE EVENT OF AN INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT, THE CONTRACTOR SHALL SEEK CLARIFICATION OR INTERPRETATION FROM THE COTR PRIOR TO BIDDING. WHERE INCONSISTENCIES ARE NOT CLARIFIED PRIOR TO BIDDING, CONTRACT CLAUSES OF THE REFERENCED FEDERAL ACQUISITION REGULATION (FAR) GOVERN.
3. FIELD VERIFY ALL DIMENSIONS, NO EXCEPTIONS.
4. ANY CONFLICTS BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE COTR'S ATTENTION. THE CONTRACTOR(S) SHALL NOT PROCEED WITH ANY WORK, EXCEPT AT THEIR OWN RISK, UNTIL CLARIFICATIONS OF THE CONFLICTS ARE ISSUED TO THE CONTRACTOR BY THE COTR.
5. ITEMS DESIGNATED EXISTING ARE EXISTING TO REMAIN UNLESS OTHERWISE DESIGNATED.
6. DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS AND CONDITIONS SHOWN AND ASSUMED ON THE DRAWINGS MUST BE VERIFIED AT THE SITE BY THE CONTRACTOR BEFORE ORDERING ANY MATERIAL OR DOING ANY WORK. ANY DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS SHALL BE REPORTED TO THE COTR. NO CHANGE IN DRAWINGS OR SPECIFICATIONS IS PERMISSIBLE WITHOUT THE WRITTEN CONSENT OF THE COTR.
7. DETAILS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER AND ACCEPTABLE CONSTRUCTION, INSTALLATION OR OPERATION OF ANY PART OF THE WORK AS DETERMINED BY THE COTR, SHALL BE INCLUDED IN THE WORK THE SAME AS IF HERIN SPECIFIED OR INDICATED, AT NO ADDITIONAL COST TO THE OWNER.
8. VERIFY ALL FIELD MEASUREMENTS AT THE JOB SITE BEFORE SUBMITTING SHOP DRAWINGS.
9. VERIFY ALL ROUGH IN DIMENSIONS AND UTILITY REQUIREMENTS FOR EQUIPMENT WITH MANUFACTURERS.
10. DIMENSIONS ARE TO FACE OF FINISH PARTITION, FACE OF CONCRETE, FACE OF EXISTING OR TO CENTERLINE OF GRID OR COLUMNS OF STRUCTURAL STEEL COMPONENTS.

SYMBOLS



LEGEND



HARTMAN-COX ARCHITECTS

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DISTRICT OF COLUMBIA
REGISTERED
ARC4000262
1/9/2024
LICENSED
ARCHITECT

KEY PLAN

GRAPHIC SCALE(S)

DATE: 12/18/24
SUBMISSION: FINAL

REVISION
REVISION 1
REVISION 2
REVISION 3
REVISION 4
REVISION 5
REVISION 6

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS: SI MALL CAROUSEL
NATIONAL MALL
WASHINGTON DC 20001

PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER:

DRAWING TITLE: GENERAL NOTES
DRAWING TYPE: ARCHITECTURE
WORKING STAFF: ST (DESIGNED BY) | JC (DRAWN BY) | AY (CHECKED BY)

SHEET NO.: 00_OF_11

A (DISCIPLINE) | 0 (TYPE) | 01 (SEQUENCE)

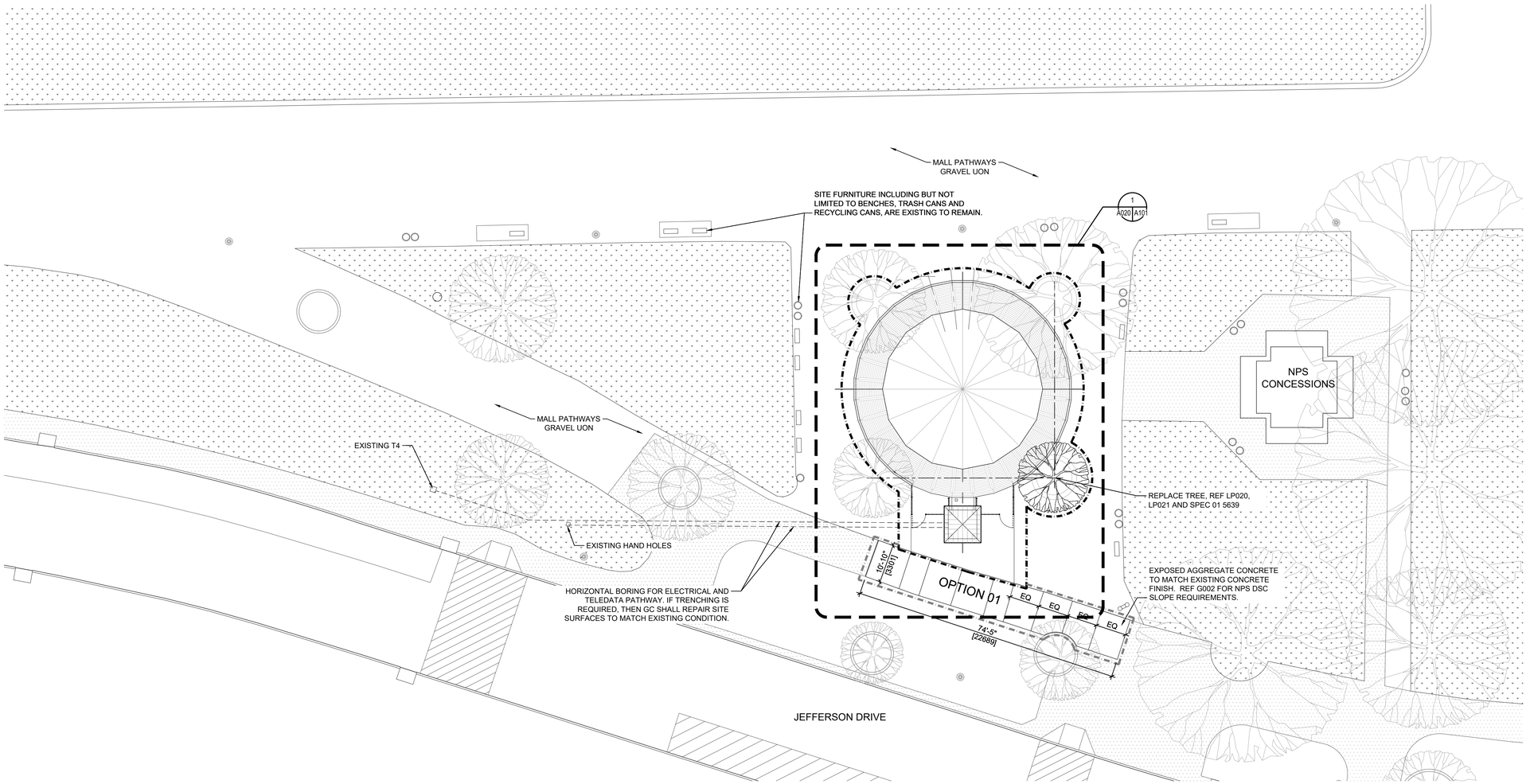
SCALE: 1:1

GENERAL SITE PLAN NOTES

1. REFER TO G003 FOR CONSTRUCTION ACCESS AND LOGISTICS PLANS.
2. REFER TO G003 SITE LOGISTICS GENERAL NOTE 8 FOR RESTORATION OF GRAVEL WALKWAYS.
3. REFER TO A401 FOR TREATMENT OF GROUND SURFACE BELOW BOARDWALK, BELOW CAROUSEL RIDE DECK, AND AT CENTER OF CAROUSEL.

LEGEND

- EXISTING SOD TO REMAIN
- EXISTING EXPOSED AGGREGATE CONCRETE SIDEWALK TO REMAIN
- EXISTING TREE TO REMAIN, REF. LP 020 FOR TREE PROTECTION MEASURES
- PROPOSED TREE, REF. LP020 & LP021
- EXTENTS OF WORK
- ADDITIONAL EXTENTS OF WORK FOR OPTION 01 WORK



1 / A-020 — SITE PLAN
SCALE: 1/16" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
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KEY PLAN

16' 8' 0 16'
SCALE: 1/16" = 1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
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Smithsonian Institution

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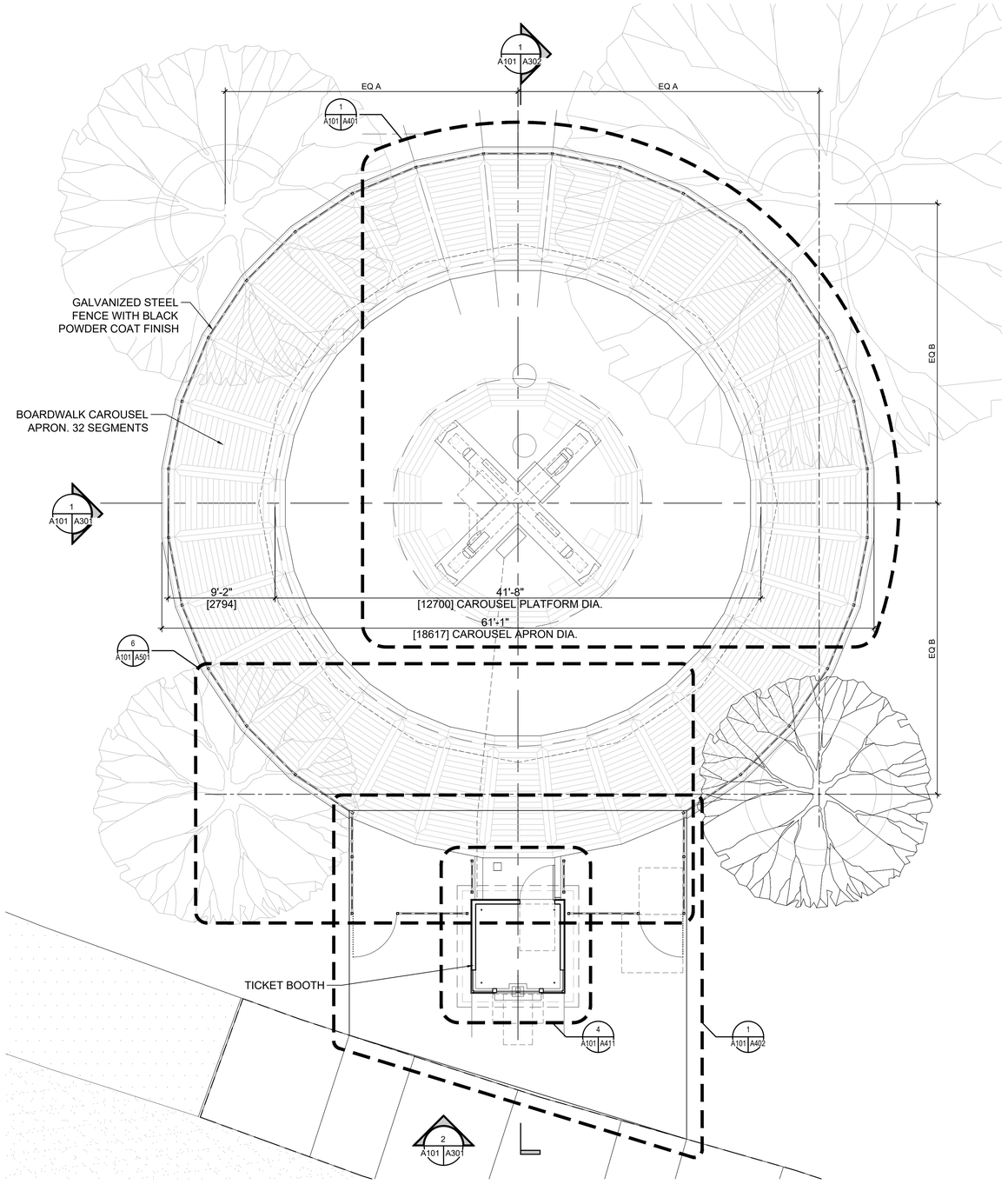
BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	ARCHITECTURAL SITE PLAN
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) · JC (DRAWN BY) · AY (CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	A	0	20

SCALE: 1:1



1 / A-101 — PLAN

SCALE: 3/16" = 1'-0"

HARTMAN-COX ARCHITECTS

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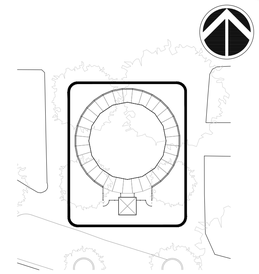
DISTRICT OF COLUMBIA · REGISTERED · ARC4000262 · 1/9/2025 · LICENSED · ARCHITECT



KEY PLAN

8' 4' 0 8'

SCALE: 3/16"=1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
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Smithsonian Institution

Smithsonian Facilities
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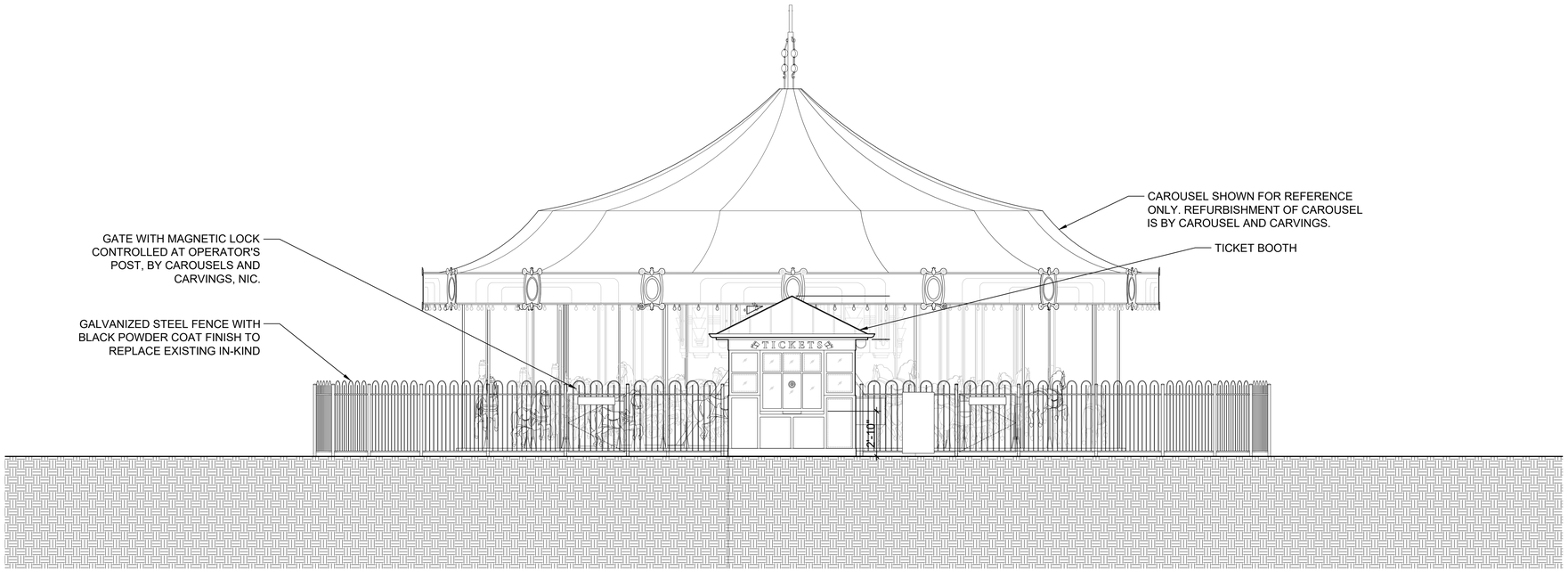
BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE / SF PROJECT NUMBER / A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE / DRAWING TYPE / WORKING STAFF	PLAN ARCHITECTURE ST (DESIGNED BY) · JC (DRAWN BY) · AY (CHECKED BY)
SHEET NO.	00_OF_11
	A (DISCIPLINE) · 1 (TYPE) · 01 (SEQUENCE)

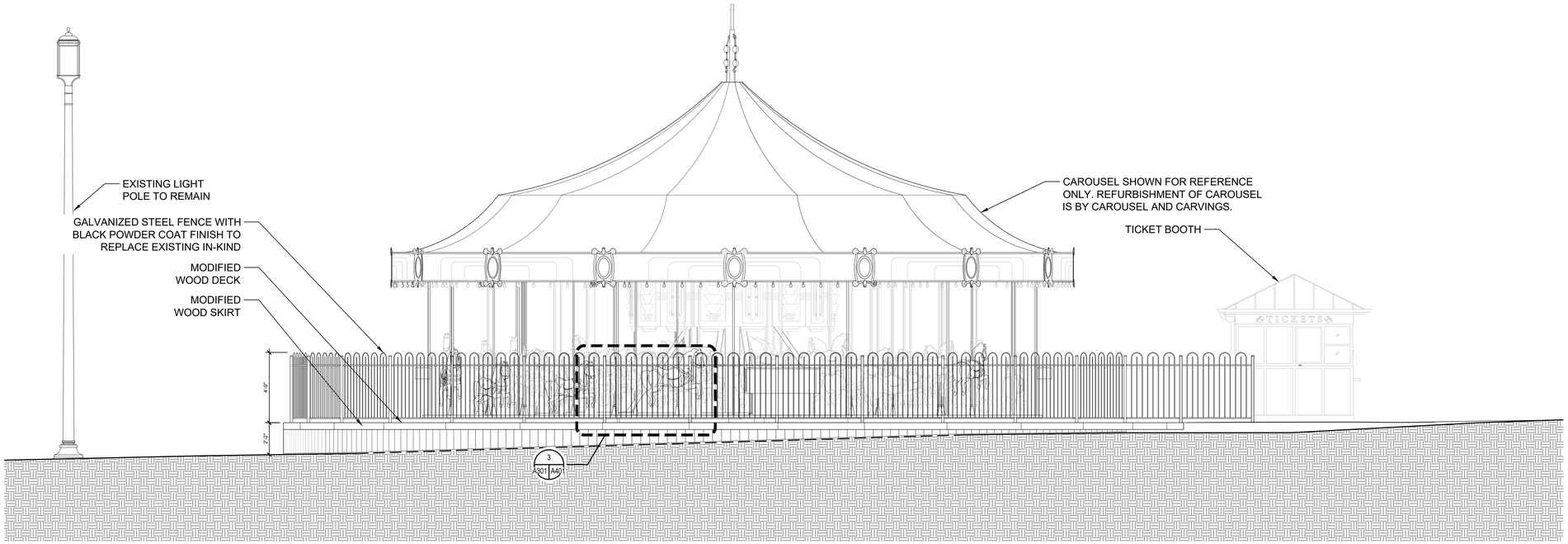
SCALE: 1:1



2
A-301

SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



1
A-301

WEST ELEVATION

SCALE: 1/4" = 1'-0"

HARTMAN-COX ARCHITECTS

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DISTRICT OF COLUMBIA
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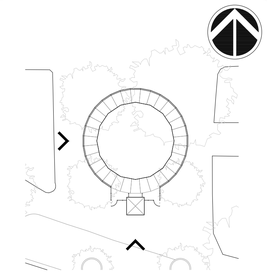
ARCHITECT



KEY PLAN

4' 2' 0 4'

SCALE: 1/4" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
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Smithsonian Institution

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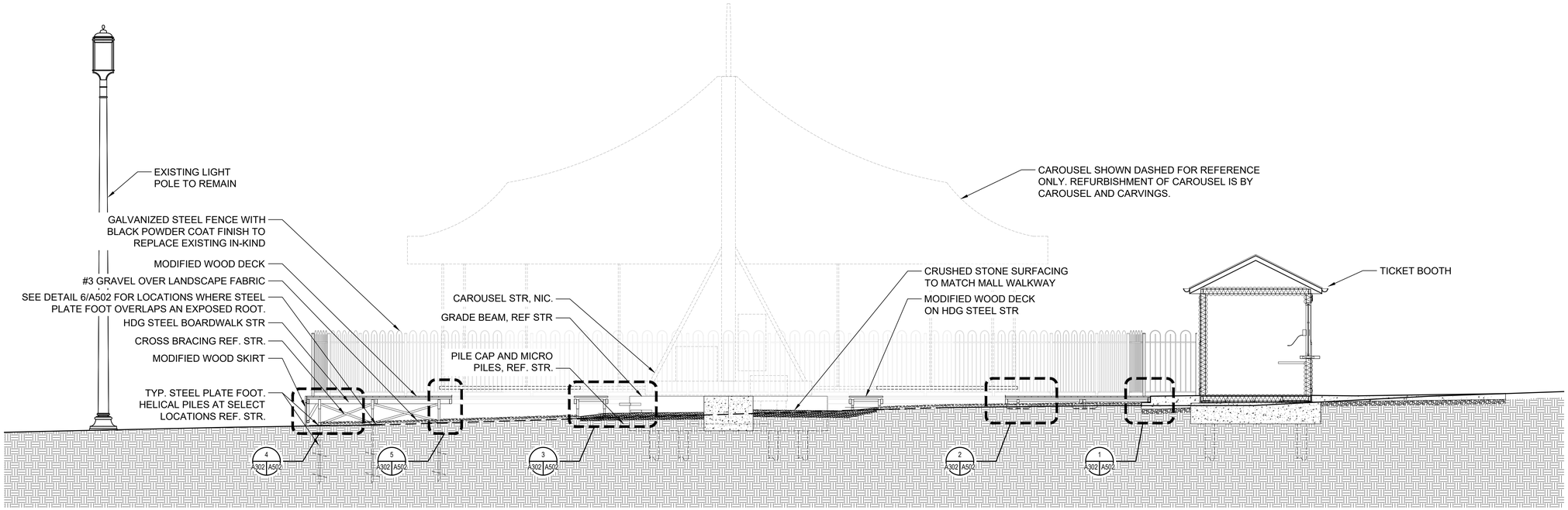
BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	ELEVATIONS
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) / JC (DRAWN BY) / AY (CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	A	3	01

SCALE: 1:1



1
A-302

SECTION

SCALE: 1/4" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
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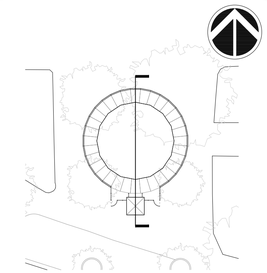
DISTRICT OF COLUMBIA
REGISTERED
ARC4000262
1/9/2024
LICENSED
ARCHITECT



KEY PLAN

4' 2' 0 4'

SCALE: 1/4" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
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REVISION	REVISION
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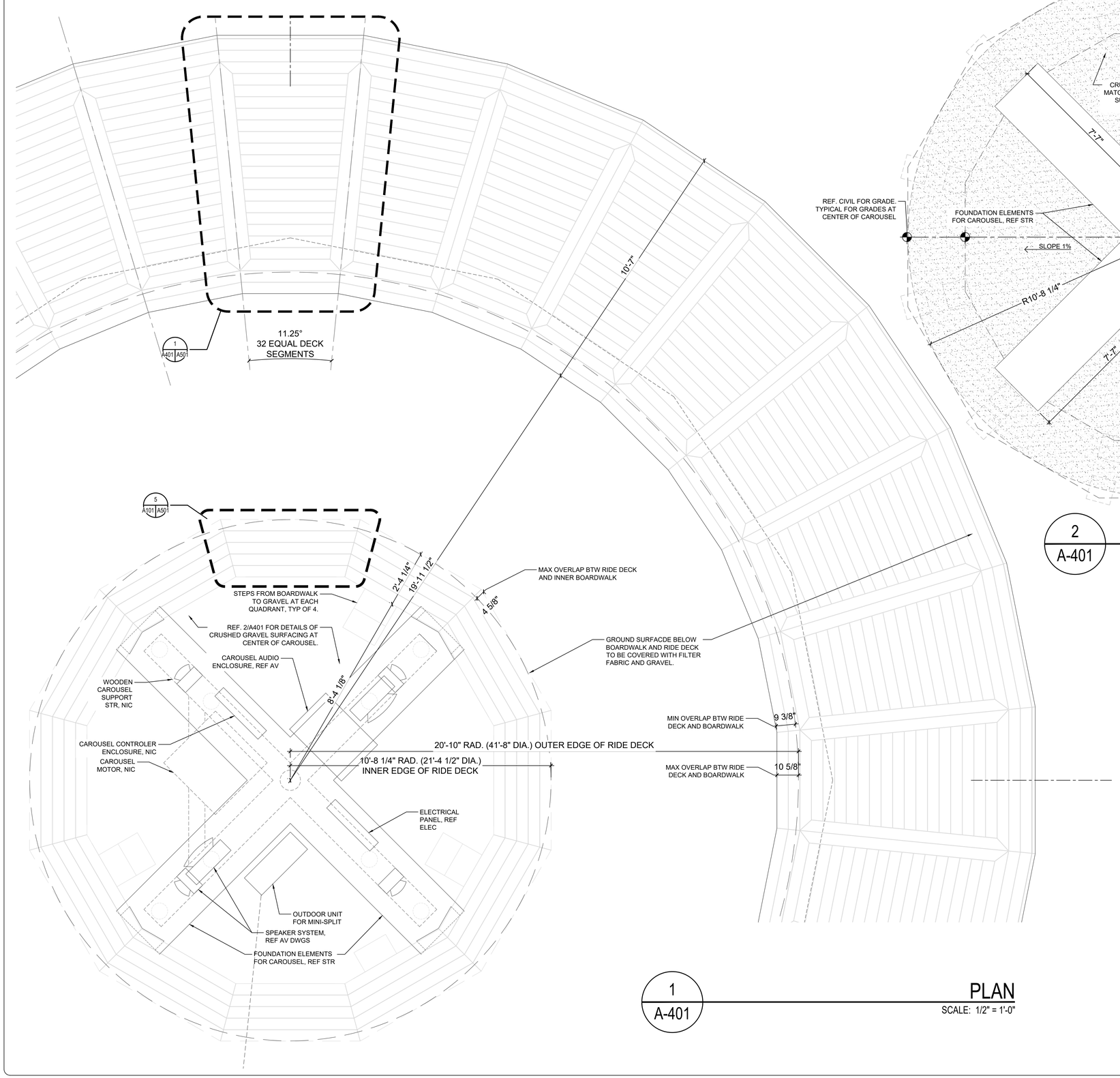
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	SECTION
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST / JC / AY (DESIGNED BY / DRAWN BY / CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_00	A	3	02

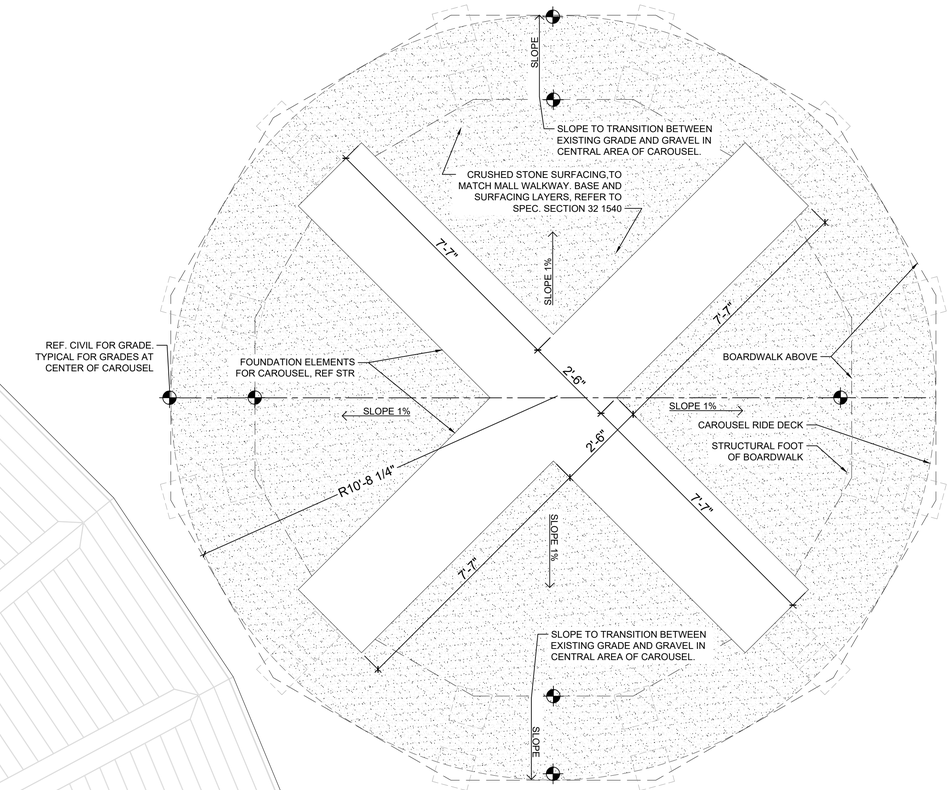
SCALE: 1:1



1
A-401

PLAN

SCALE: 1/2" = 1'-0"



2
A-401

PARTIAL PAVING PLAN

SCALE: 1/2" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
WASHINGTON, DC 20009
202.333.6446

MEP ENGINEERING
MUELLER ASSOCIATES, INC.
1306 CONCOURSE DRIVE, SUITE 100
LINTHICUM, MD 21090
410.646.4500

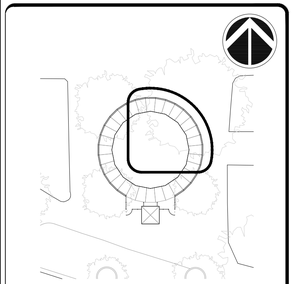
STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
1330 CONNECTICUT AVE NW, SUITE 300
WASHINGTON, DC 20036
202.580.6300

CIVIL ENGINEERING
SORBA ENGINEERING
22365 BRODERICK DR. SUITE 265
DULLES, VA 20166
571.771.0273

CODE, SECURITY, AND IT
GHD, INC.
14501 GEORGE CARTER WAY, SUITE 102
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA
REGISTERED
ARC4000262
1/9/2024
LICENSED
ARCHITECT



KEY PLAN

2' 1' 0 2'

SCALE: 1/2" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

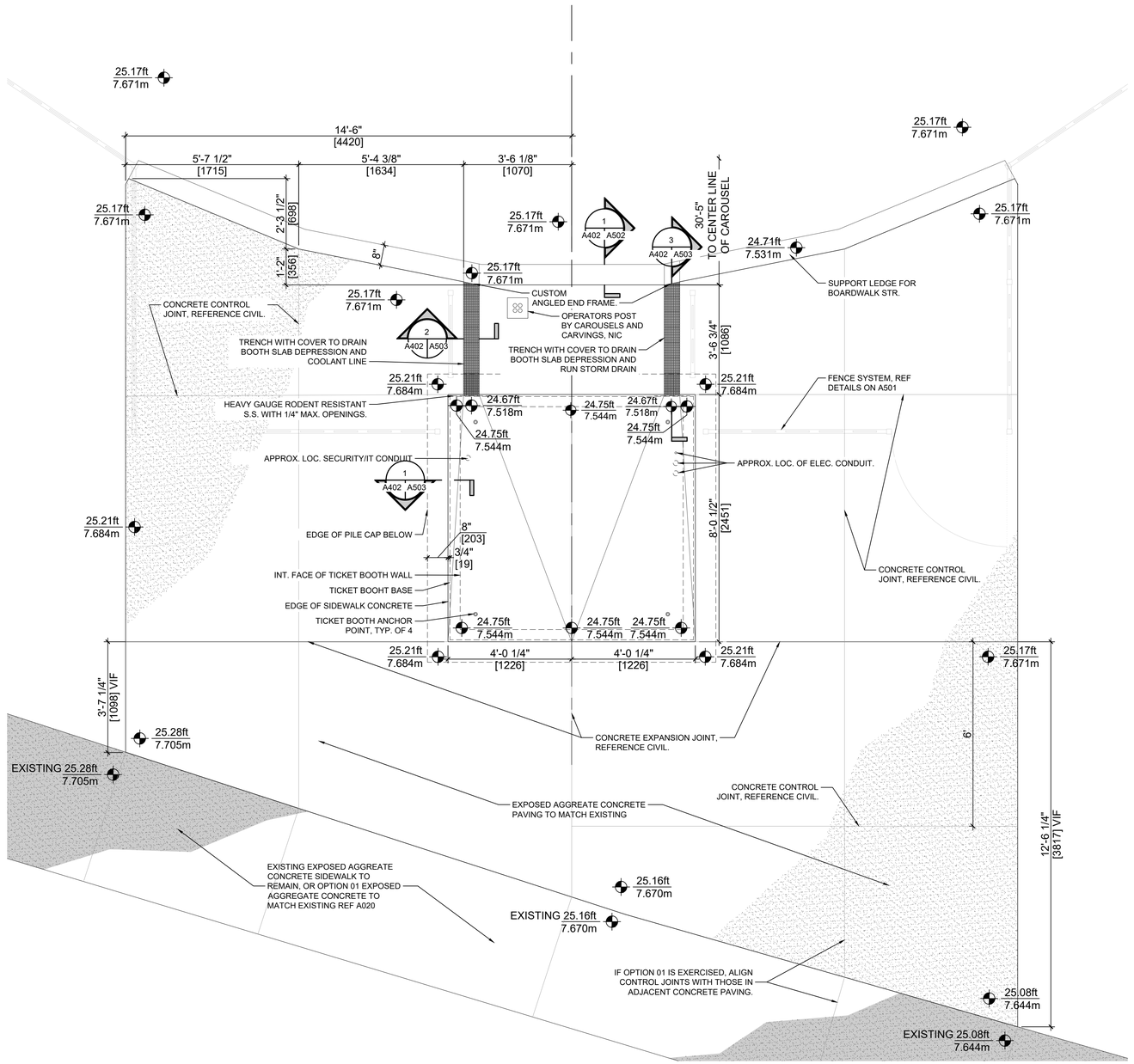
Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	ENLARGED PLAN
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) / JC (DRAWN BY) / AY (CHECKED BY)
SHEET NO.	00_OF_11
A (DISCIPLINE) / 4 (TYPE) / 01 (SEQUENCE)	

SCALE: 1:11

CONCRETE PLAN GENERAL NOTES

1. SLOPE/CROSS SLOPE OF CONCRETE IN ANY DIRECTION AT AREA BETWEEN BOARDWALK AND EXISTING SIDEWALK SHALL NOT EXCEED 1.5%. SPOT ELEVATIONS INDICATED ON THIS PLAN WERE DEVELOPED BASED ON THIS CONSTRAINT.



1 / A-402 — ENLARGED PLAN AT CONCRETE PAVING

SCALE: 1/2" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
WASHINGTON, DC 20009
202.333.6446

MEP ENGINEERING
MUELLER ASSOCIATES, INC.
1306 CONCOURSE DRIVE, SUITE 100
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410.646.4500

STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
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WASHINGTON, DC 20036
202.580.6300

CIVIL ENGINEERING
SORBA ENGINEERING
22365 BRODERICK DR. SUITE 265
DULLES, VA 20166
571.771.0273

CODE, SECURITY, AND IT
GHD, INC.
14501 GEORGE CARTER WAY, SUITE 102
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA — REGISTERED — ARC4000262 — 1/9/2024 — LICENSED — ARCHITECT

KEY PLAN

2' 1' 0 2'

SCALE: 1/2" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

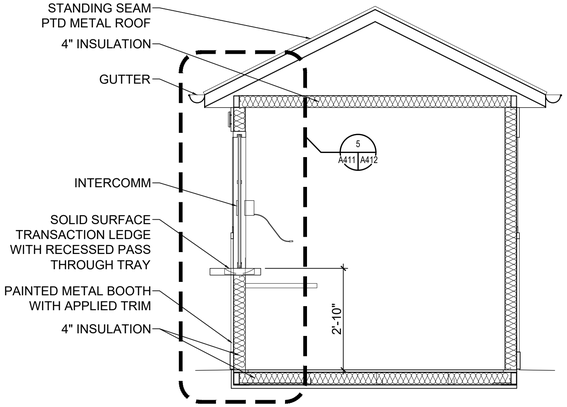
REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	ENLARGED PLAN AT CONCRETE PAVING
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) / JC (DRAWN BY) / AY (CHECKED BY)

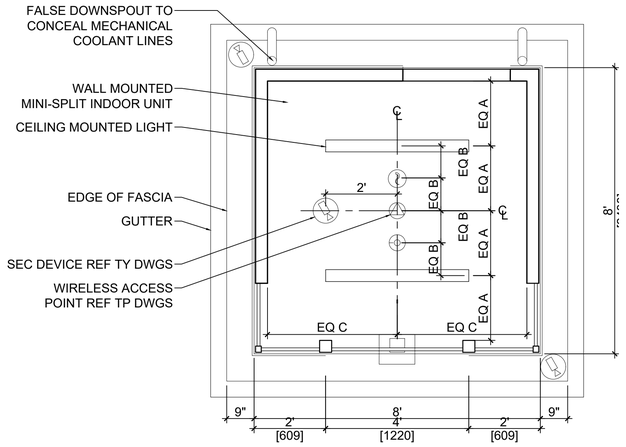
SHEET NO.	A	4	02
00_OF_11		DISCIPLINE / TYPE / SEQUENCE	



6 A-411

SECTION

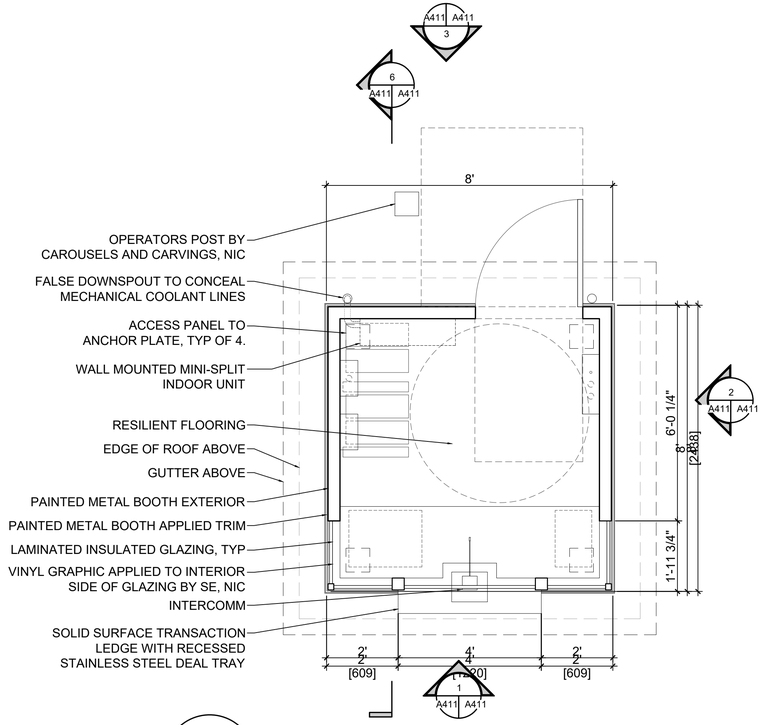
SCALE: 1/2" = 1'-0"



5 A-411

CEILING PLAN

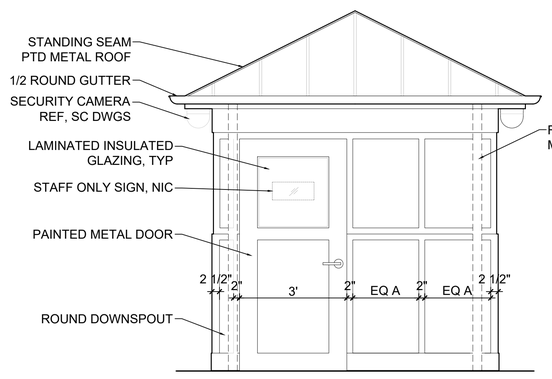
SCALE: 1/2" = 1'-0"



4 A-411

PLAN

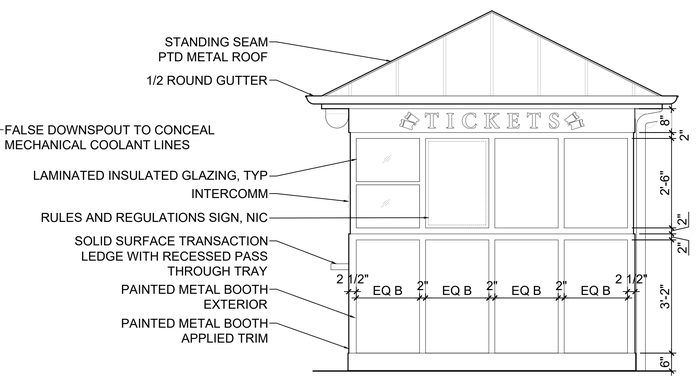
SCALE: 1/2" = 1'-0"



3 A-411

NORTH ELEVATION

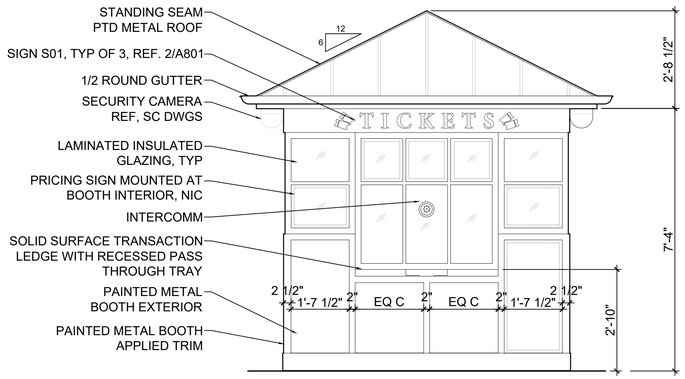
SCALE: 1/2" = 1'-0"



2 A-411

EAST ELEVATION

SCALE: 1/2" = 1'-0"



1 A-411

SOUTH ELEVATION

SCALE: 1/2" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
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1074 THOMAS JEFFERSON STREET NW
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SORBA ENGINEERING
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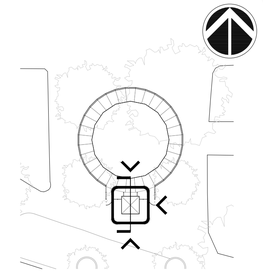
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA
REGISTERED
ARC4000262
1/9/2024
LICENSED
ARCHITECT



KEY PLAN

2' 1' 0 2'

SCALE: 1/2" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

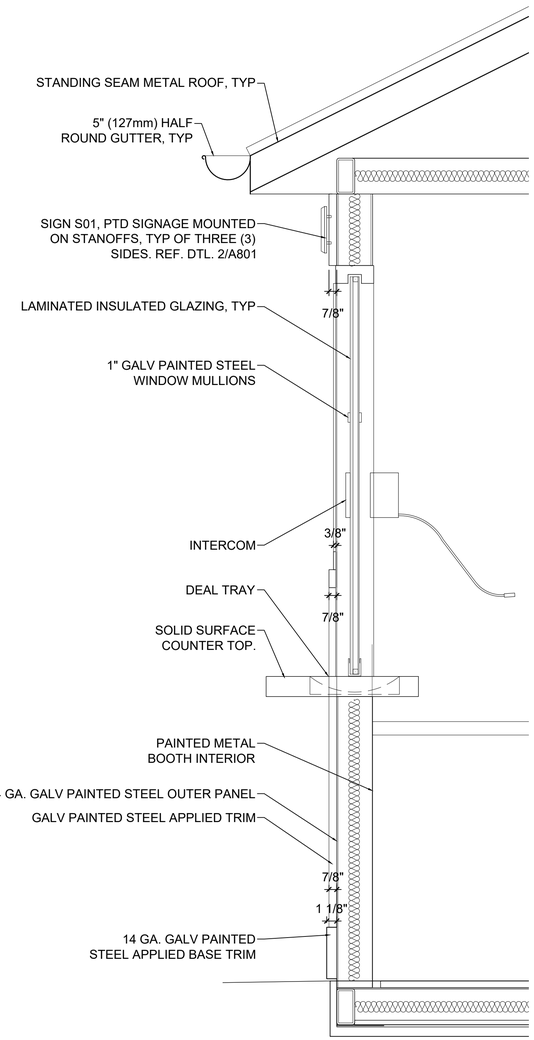
Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

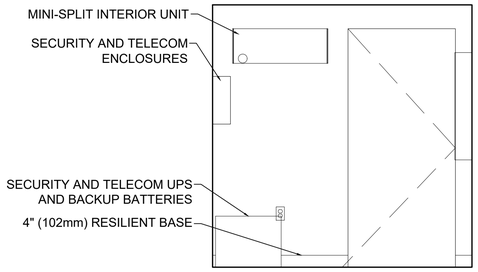
BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SI PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	TICKET BOOTH DETAILS
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST / JC / AY (DESIGNED BY / DRAWN BY / CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	A	4	11

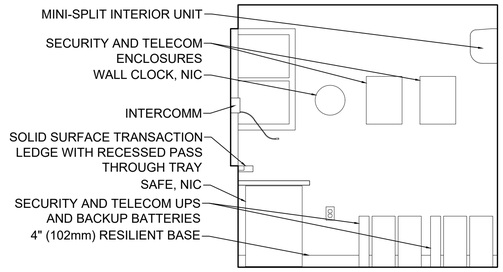
SCALE: 1:1



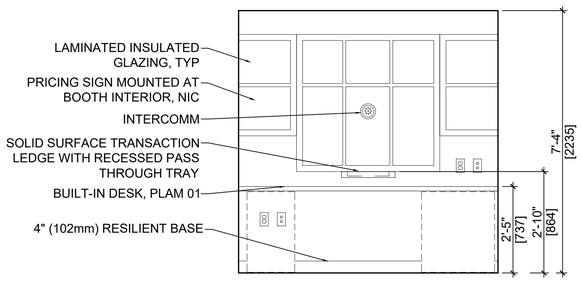
5 / A-412 SECTION
SCALE: 1 1/2" = 1'-0"



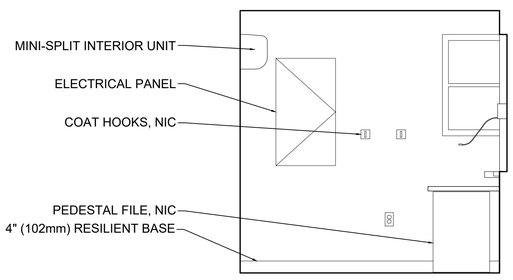
4 / A-412 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



3 / A-412 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



2 / A-412 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



1 / A-412 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
WASHINGTON, DC 20009
202.333.6446

MEP ENGINEERING
MUELLER ASSOCIATES, INC.
1306 CONCOURSE DRIVE, SUITE 100
LINTHICUM, MD 21090
410.646.4500

STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
1330 CONNECTICUT AVE NW, SUITE 300
WASHINGTON, DC 20036
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CIVIL ENGINEERING
SORBA ENGINEERING
22365 BRODERICK DR. SUITE 265
DULLES, VA 20166
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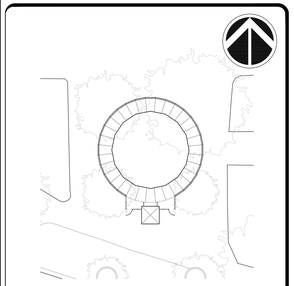
GHD, INC.
14501 GEORGE CARTER WAY, SUITE 102
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA · REGISTERED · ARC4000262 · 1/9/2024 · LICENSED · ARCHITECT



KEY PLAN

2' 1' 0 2'
SCALE: 1/2" = 1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

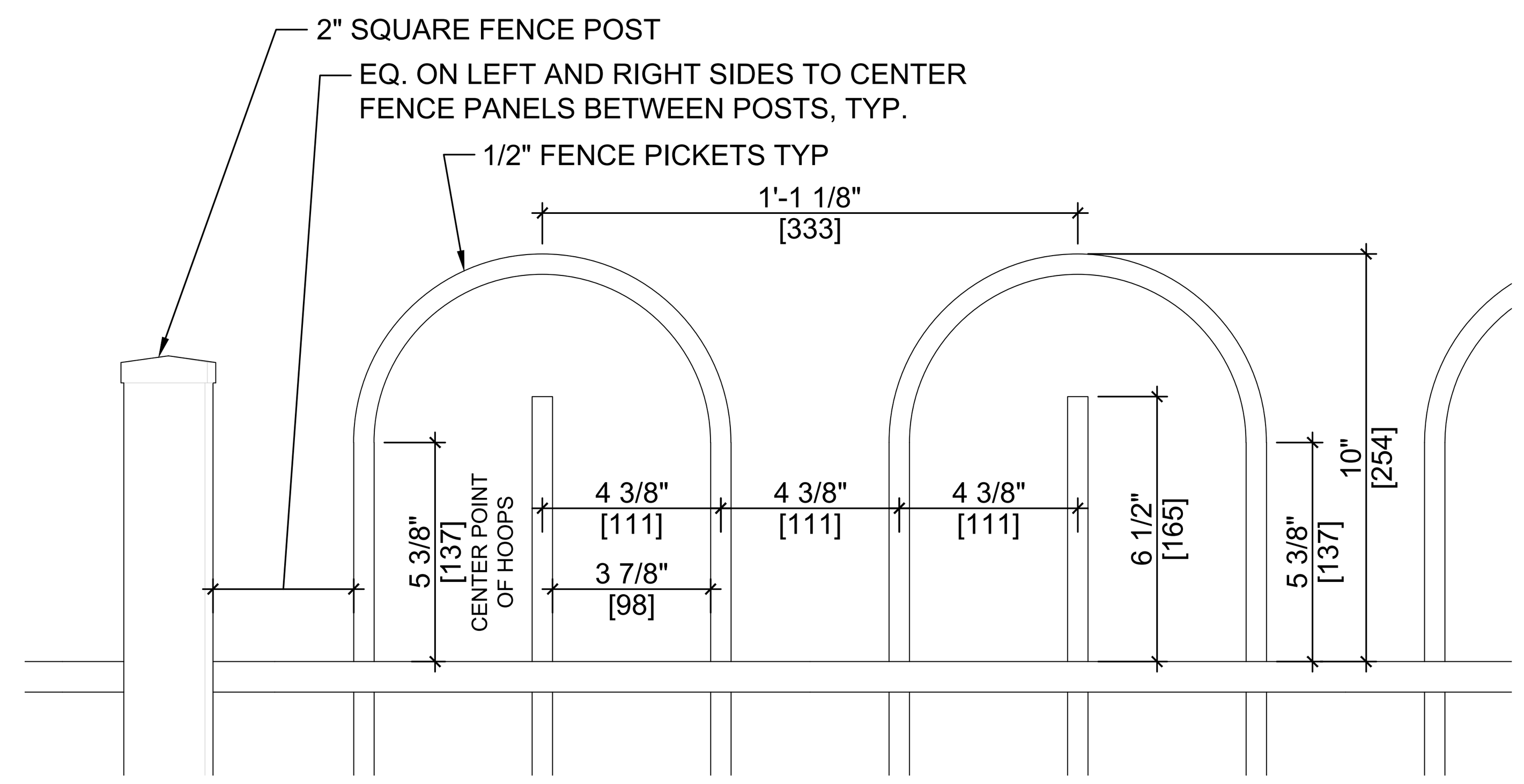
Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

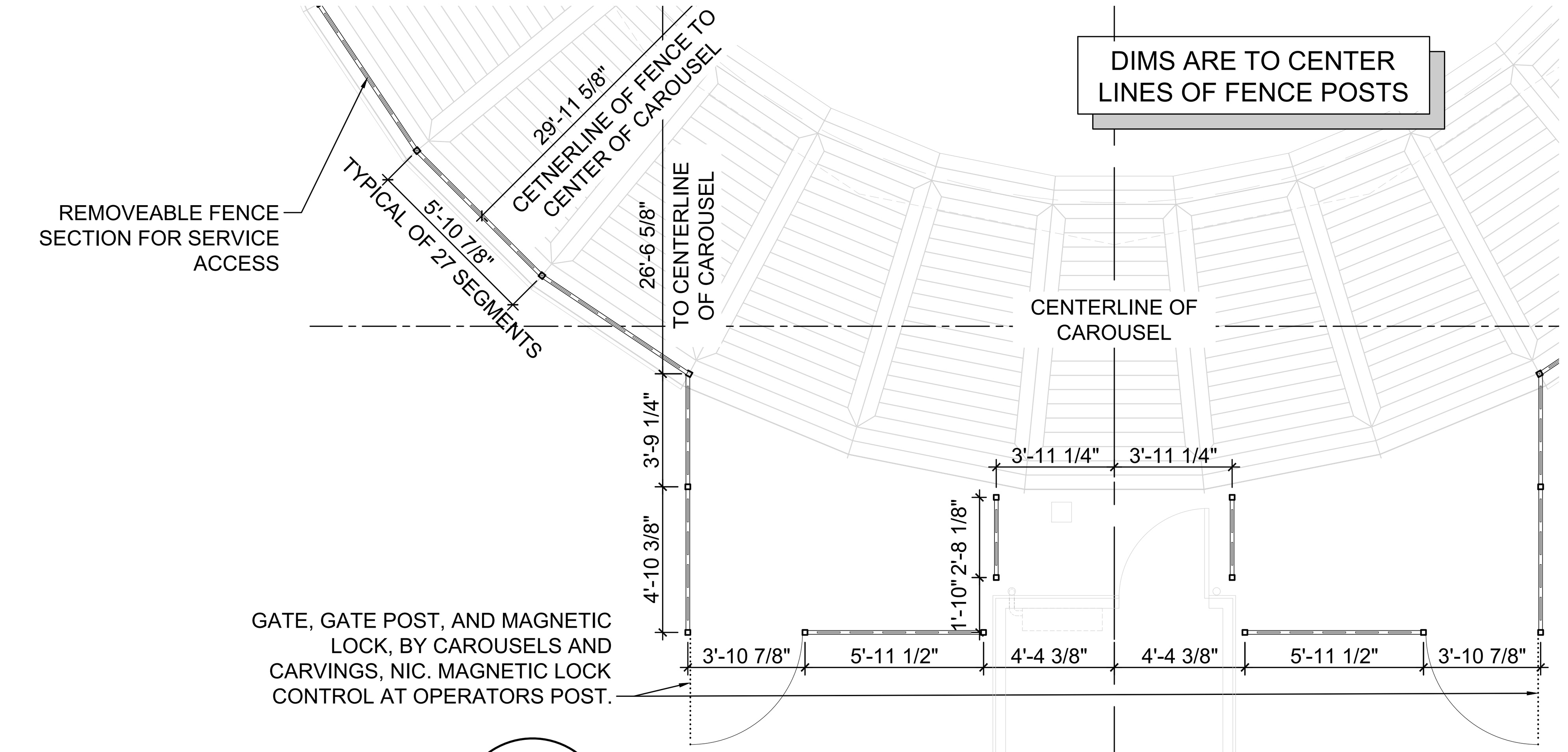
BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SI PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	TICKET BOOTH SECTION AND INTERIOR ELEVATIONS
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST / JC / AY (DESIGNED BY / DRAWN BY / CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	A	4	12

SCALE: 1:1

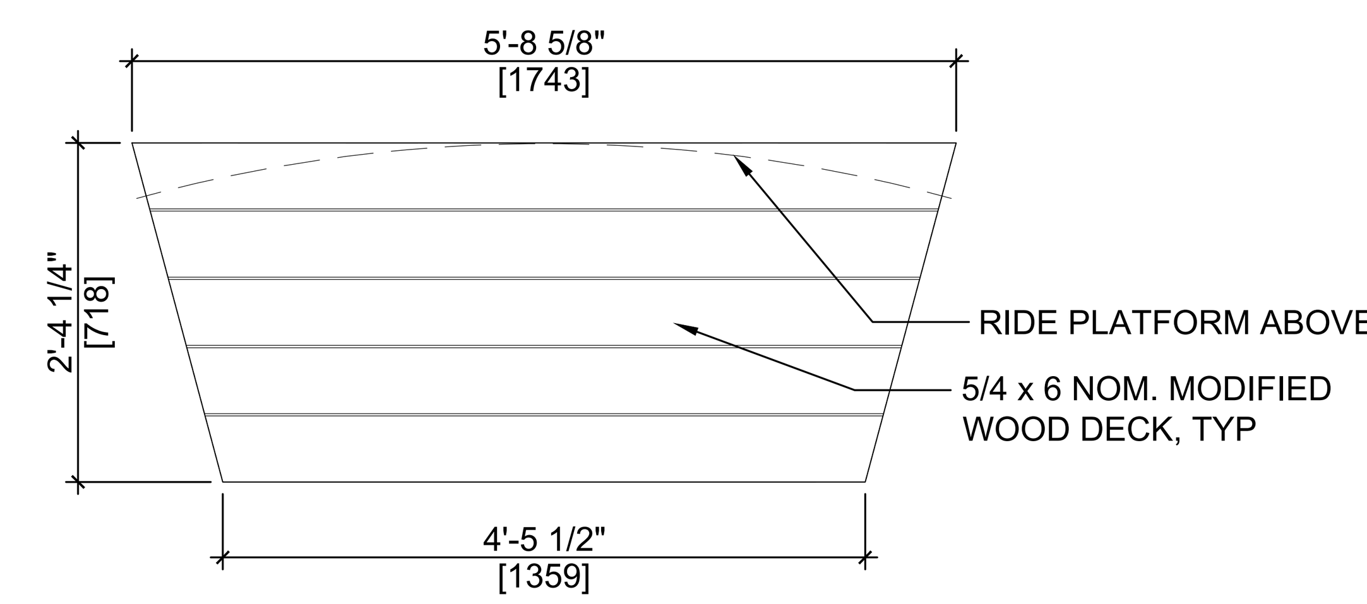


4 A-501 FENCE DETAIL
SCALE: 3" = 1'-0"

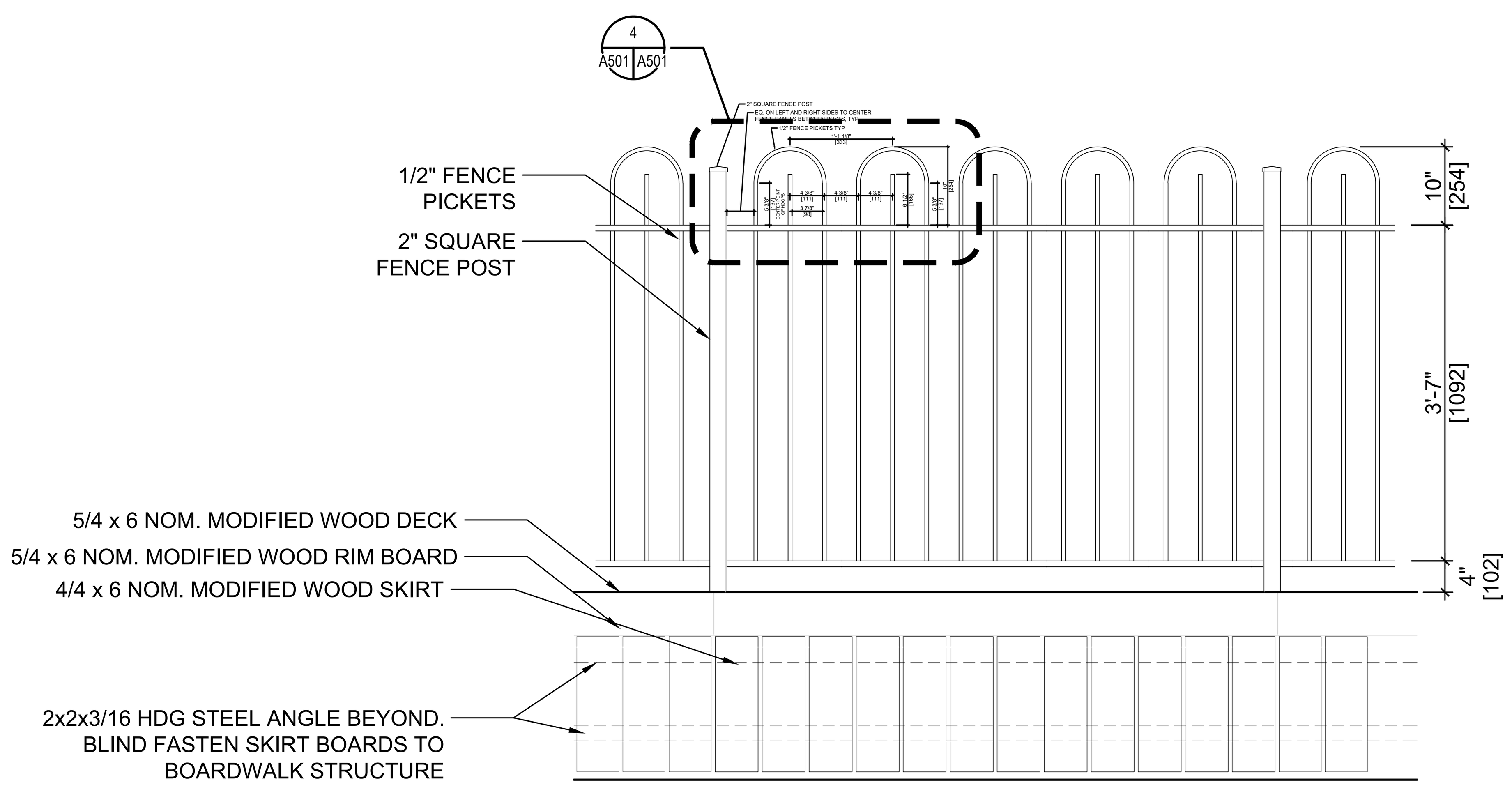


6 A-501 PARTIAL FENCE PLAN
SCALE: 1/4" = 1'-0"

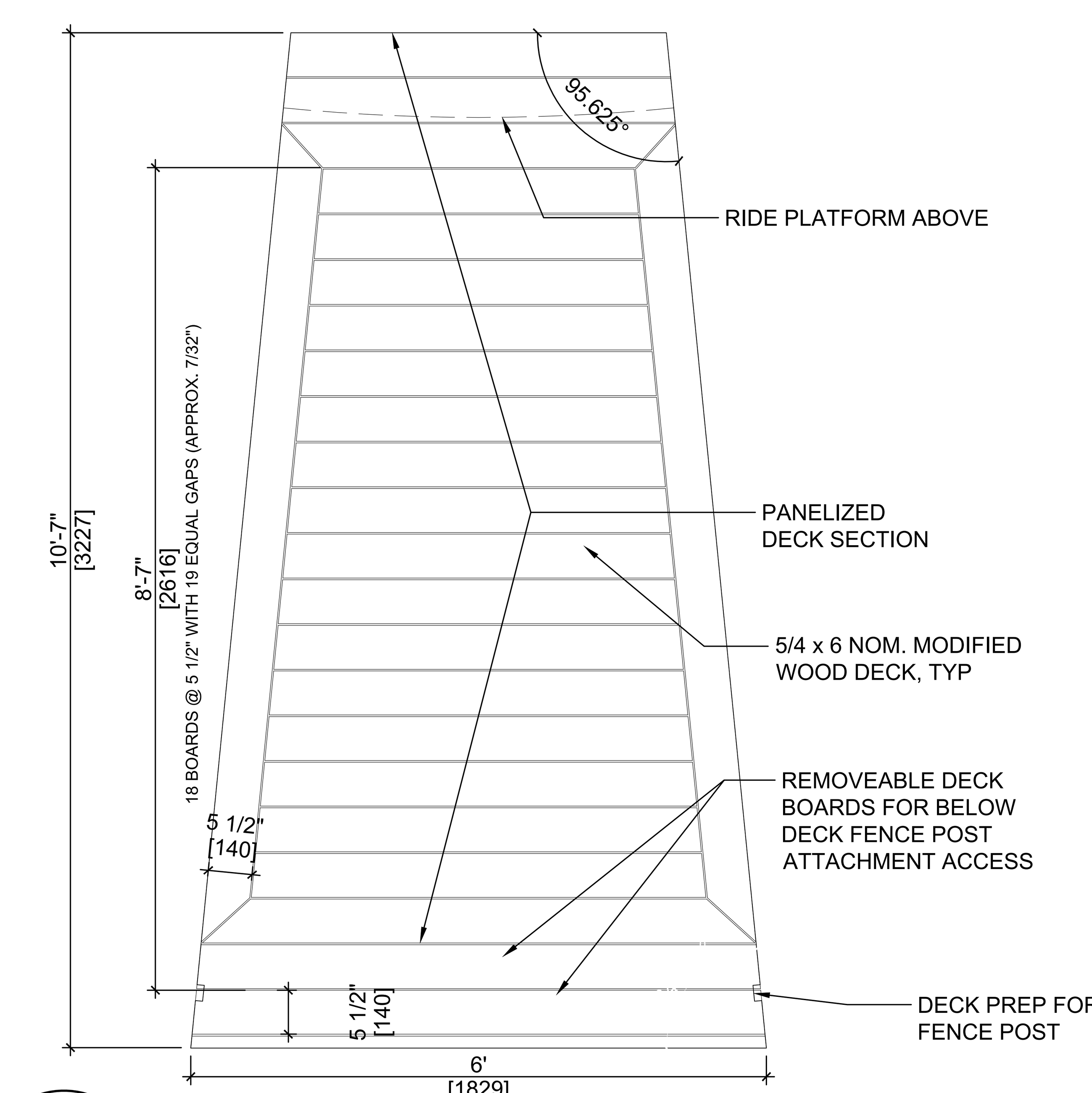
OPTION 02 - DECKING MATERIAL REFER TO A001 AND SPECIFICATION SECTIONS 01 0000 AND 32 3416



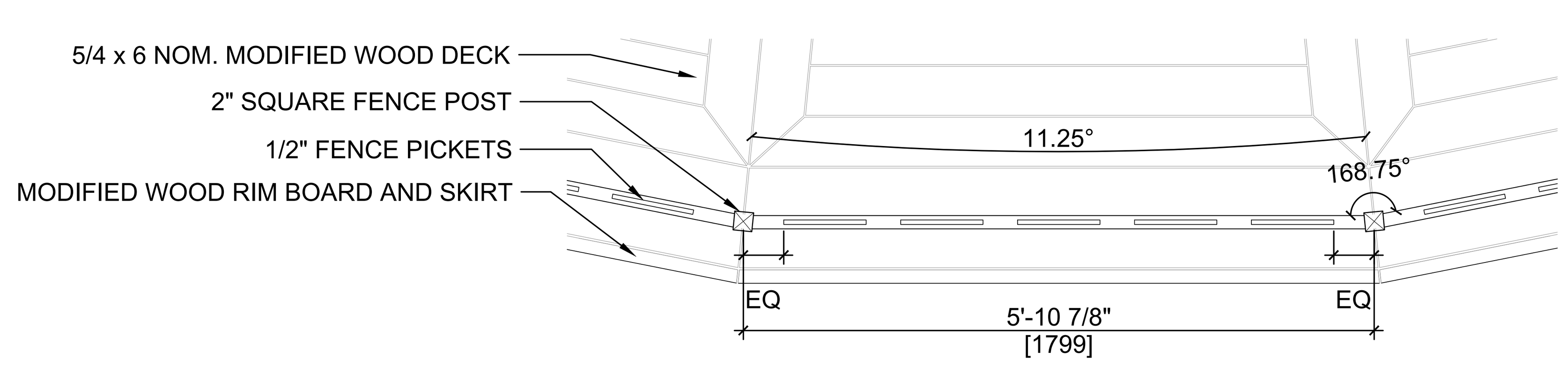
5 A-501 INNER BOARDWALK PANEL DETAIL
SCALE: 3/4" = 1'-0"



3 A-501 FENCE PANEL ELEVATION
SCALE: 3/4" = 1'-0"



1 A-501 BOARDWALK PANEL DETAIL
SCALE: 3/4" = 1'-0"



2 A-501 FENCE PANEL PLAN
SCALE: 3/4" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
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SORBA ENGINEERING
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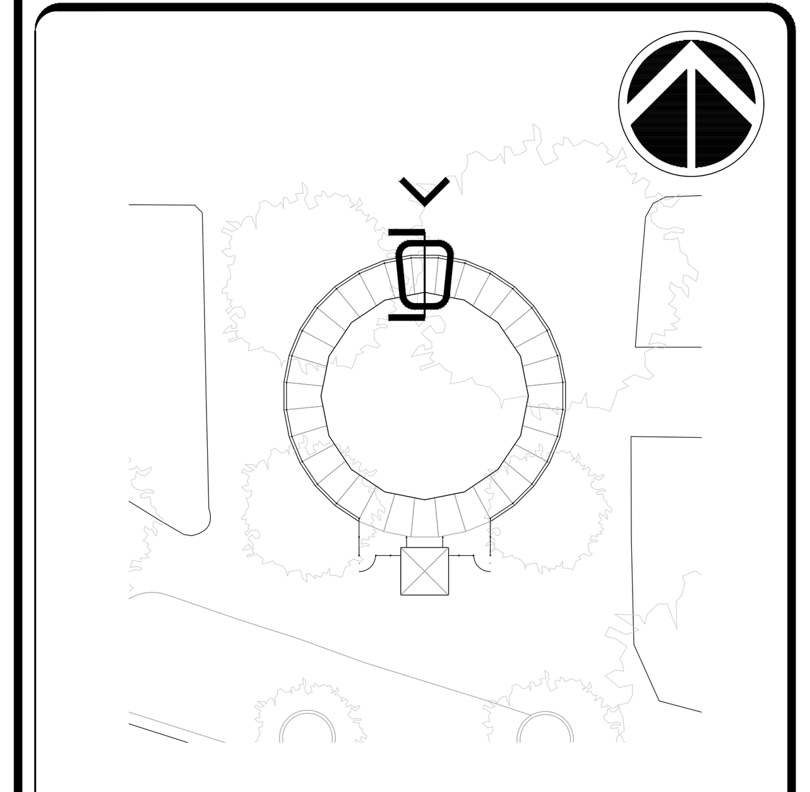
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA LICENSED ARCHITECT ARC400200262 1/9/2024



KEY PLAN

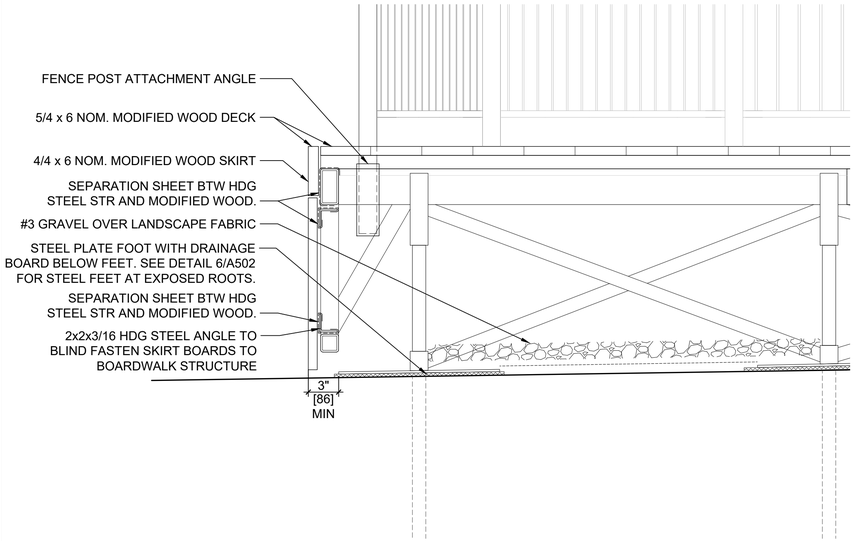
VARIES
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

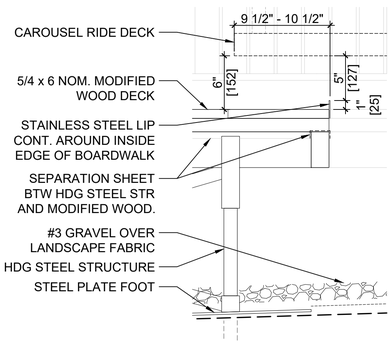
REVISION 1
REVISION 2
REVISION 3
REVISION 4
REVISION 5
REVISION 6

Smithsonian Institution
Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

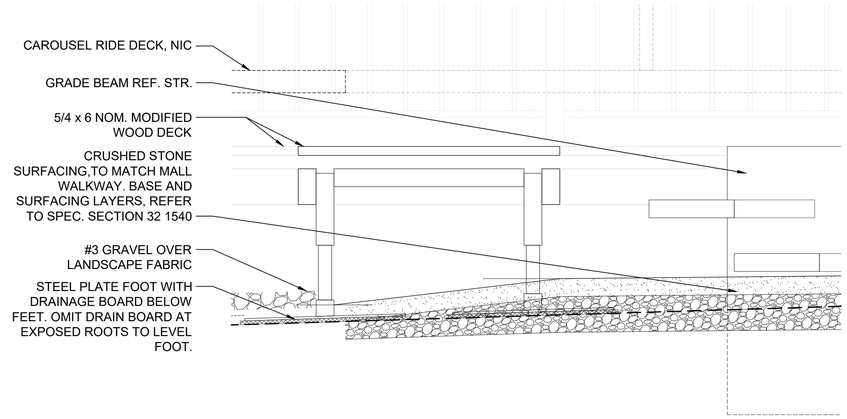
BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	FENCE AND BOARDWALK DETAILS
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) / JC (DRAWN BY) / AY (CHECKED BY)
SHEET NO. 00_OF_11	A (DISCIPLINE) / 5 (TYPE) / 01 (SEQUENCE)



4 / A-502 SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

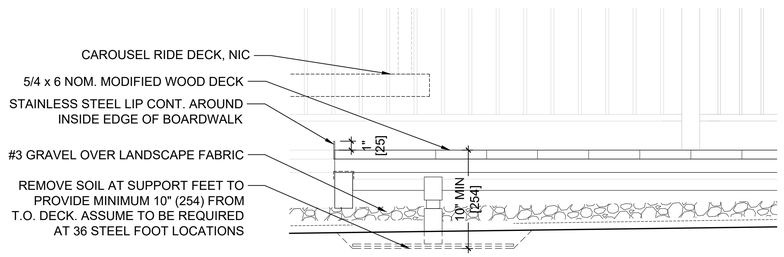


5 / A-502 SECTION DETAIL
SCALE: 1 1/2" = 1'-0"



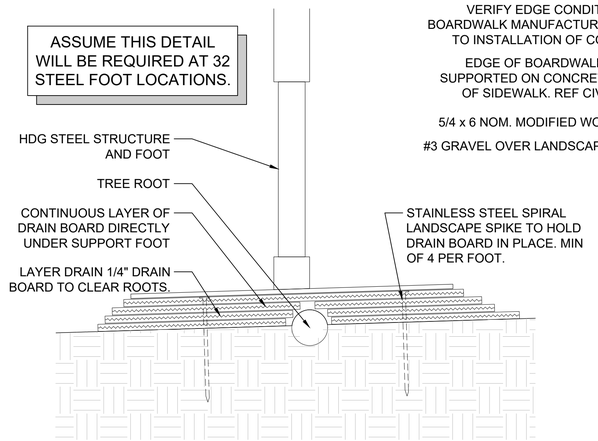
3 / A-502 SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

OPTION 02 - DECKING MATERIAL
REFER TO A001 AND SPECIFICATION SECTIONS 01 0000 AND 32 3416



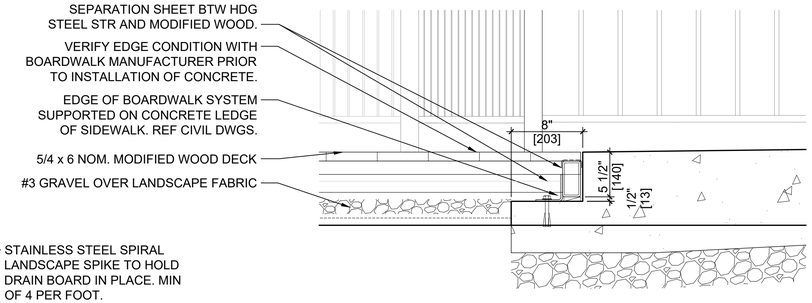
2 / A-502 SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

ASSUME THIS DETAIL WILL BE REQUIRED AT 32 STEEL FOOT LOCATIONS.



6 / A-502 SECTION DETAIL
SCALE: 3" = 1'-0"

VERIFY EDGE CONDITION WITH BOARDWALK MANUFACTURER PRIOR TO INSTALLATION OF CONCRETE.



1 / A-502 SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
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SORBA ENGINEERING
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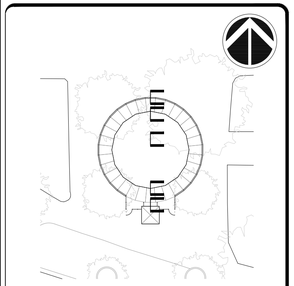
301.832.2527

DISTRICT OF COLUMBIA · REGISTERED · ARC4000262 · 1/9/2025 · LICENSED · ARCHITECT



KEY PLAN

VARIES

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

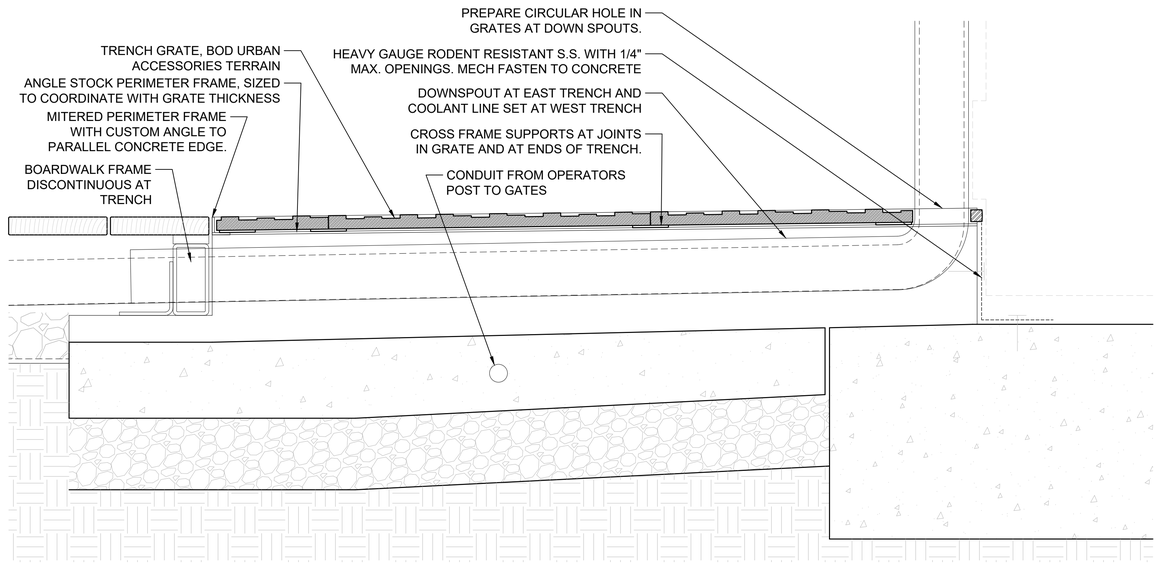
REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE SF PROJECT NUMBER A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE DRAWING TYPE WORKING STAFF	BOARDWALK DETAILS ARCHITECTURE ST (DESIGNED BY) · JC (DRAWN BY) · AY (CHECKED BY)
SHEET NO. 00_OF_11	A (DISCIPLINE) · 5 (TYPE) · 02 (SEQUENCE)

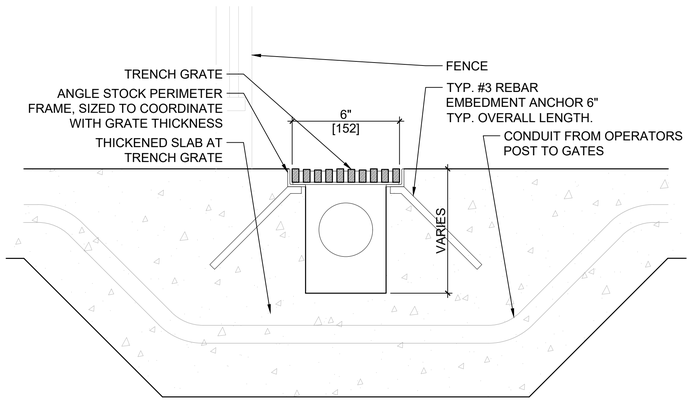
SCALE: 1:1



3
A-503

SECTION DETAIL

SCALE: 3" = 1'-0"



2
A-503

SECTION DETAIL

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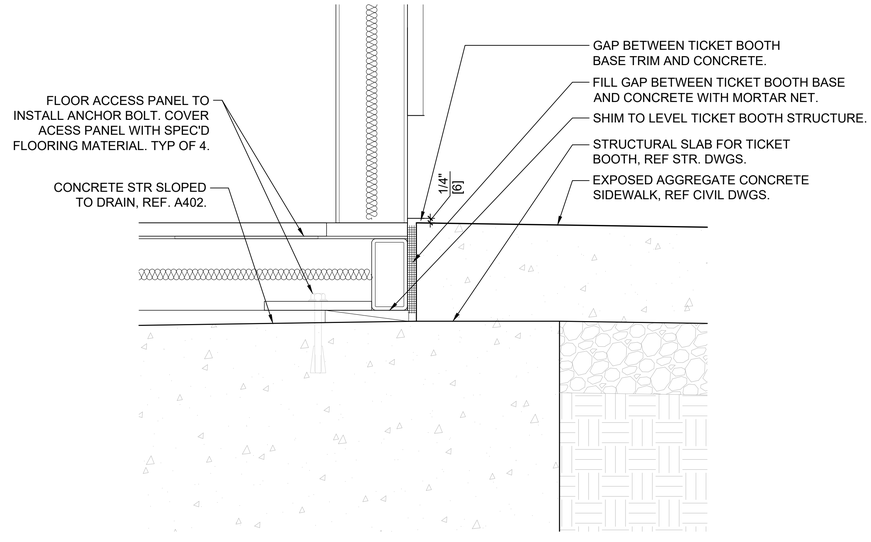

1
A-503

SECTION DETAIL

SCALE: 3" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
WASHINGTON, DC 20009
202.333.6446

MEP ENGINEERING
MUELLER ASSOCIATES, INC.
1306 CONCOURSE DRIVE, SUITE 100
LINTHICUM, MD 21090
410.646.4500

STRUCTURAL ENGINEERING
THORNTON TOMASETTI, INC.
1330 CONNECTICUT AVE NW, SUITE 300
WASHINGTON, DC 20036
202.580.6300

CIVIL ENGINEERING
SORBA ENGINEERING
22365 BRODERICK DR. SUITE 265
DULLES, VA 20166
571.771.0273

CODE, SECURITY, AND IT
GHD, INC.
14501 GEORGE CARTER WAY, SUITE 102
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION
3618 MAROON LN
BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA
ARC4000262
1/9/2024
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ARCHITECT

KEY PLAN

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Smithsonian Institution

Smithsonian Facilities
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Washington DC 20560

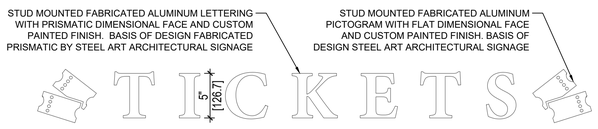
BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SI PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	CONCRETE DETAILS
DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST (DESIGNED BY) / JC (DRAWN BY) / AY (CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	A	5	03

SCALE: 1:1

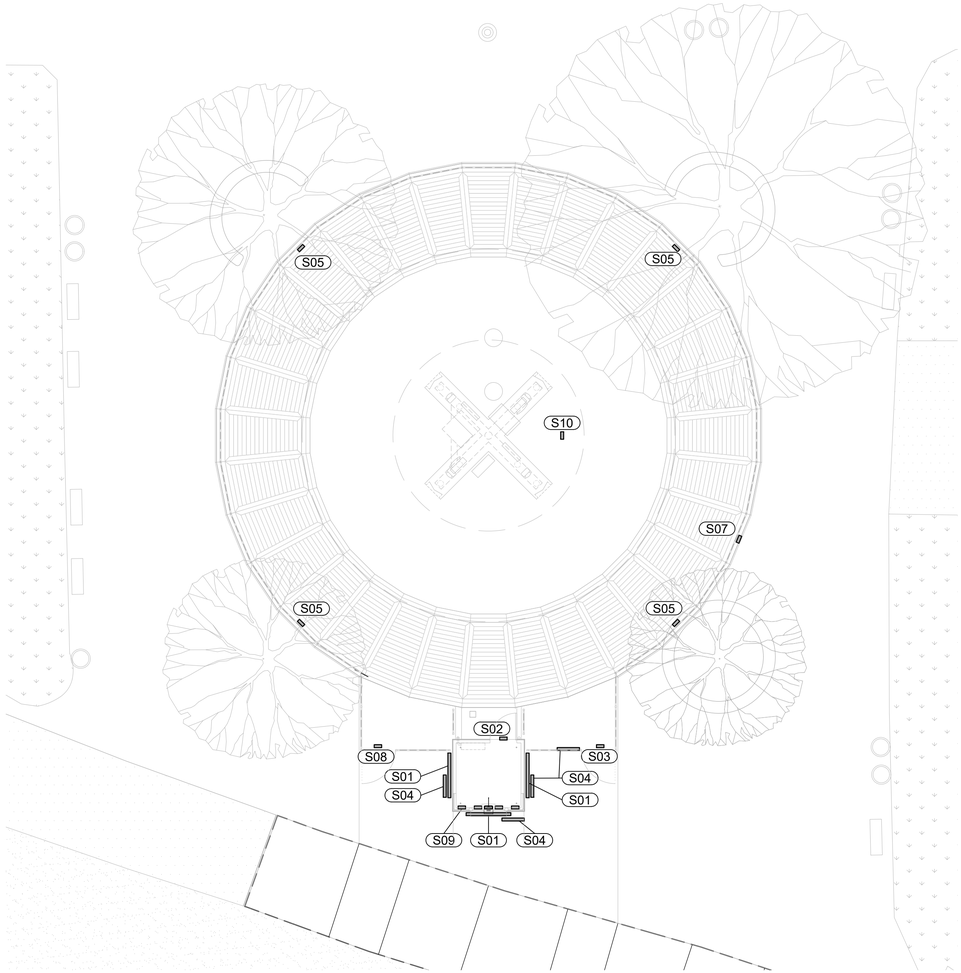
SIGNAGE SCHEDULE

SIGN NUMBER	LOCATION	DESCRIPTION	SIGN TYPE	QTY	MATERIAL	NOTES
S01	TICKET BOOTH	TICKET BOOTH SIGN IDENTIFIER	SIGN ID	3	PTD HDPE	DIMENSIONAL LETTERING SIGN IDENTIFYING TICKET BOOTH ALONG TOP EDGE OF ROOF ON (3) SIDES - SOUTH, EAST, AND WEST. SEE DETAIL 2/A801.
S02	TICKET BOOTH	STAFF ONLY	INFORMATIONAL	1	TBD	FOR REFERENCE ONLY, NIC. ENTRANCE DIRECTIONAL SIGN ATTACHED TO GATE
S03	ENTRY GATE	ENTRANCE SIGN AT GATE	DIRECTIONAL	1	ALUM PANEL	FOR REFERENCE ONLY, NIC. ENTRANCE DIRECTIONAL SIGN ATTACHED TO GATE
S04	TICKET BOOTH	RULES AND REGULATIONS SIGN	INFORMATIONAL	4	ALUM.	FOR REFERENCE ONLY, NIC. ON EAST SIDE OF TICKET BOOTH WITH RULER MARKING 42 INCHES
S05	FENCE INTERIOR	EXIT THIS WAY	DIRECTIONAL	4	ALUM. PANEL	FOR REFERENCE ONLY, NIC. SIGN ATTACHED TO FENCE FACING RIDERS
S06		NOT USED				
S07	FENCE EXTERIOR	HISTORICAL MARKER PLAQUE	INFORMATIONAL	1	ETR	FOR REFERENCE ONLY, NIC. EXISTING SIGN REINSTALLED
S08	EXIT GATE	EXIT	DIRECTIONAL	2	ALUM. PANEL	FOR REFERENCE ONLY, NIC. DIRECTIONAL SIGN ATTACHED TO GATE
S09	TICKET BOOTH	TICKET PRICING INFORMATION	INFORMATIONAL	2	VINYL OR POLYSTYRENE	FOR REFERENCE ONLY, NIC. AT FRONT BOOTH WINDOW (CHANGEABLE)
S10	CENTER OF CAROUSEL	CAROUSEL INFORMATION SIGN	INFORMATIONAL	1		FOR REFERENCE ONLY, NIC. SIGN MESSAGE: "...built 1947; erected 1981; refurbished 2024..."



2 / A-801 — S01 SIGN DETAIL

SCALE: 1 1/2" = 1'-0"



1 / A-801 — SIGNAGE PLAN

SCALE: 1/8" = 1'-0"

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
WASHINGTON, DC 20009
202.333.6446

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DC TREE PRESERVATION
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BOWIE, MD 20715
301.832.2527

DISTRICT OF COLUMBIA — REGISTERED — ARC4000262 — 1/9/2024 — LICENSED ARCHITECT

KEY PLAN

8' 4' 0 8'

SCALE: 1/8"=1'-0"

GRAPHIC SCALE(S)

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Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
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DRAWING TYPE	ARCHITECTURE
WORKING STAFF	ST / JC / AY (DESIGNED BY / DRAWN BY / CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	A	8	01

SCALE: 1:1

GR GENERAL REQUIREMENTS

GR-1 AS USED IN THESE GENERAL NOTES:
"DRAWINGS" MEANS THE LATEST STRUCTURAL DESIGN DRAWINGS, UON.
"SPECIFICATIONS" MEANS THE LATEST PROJECT SPECIFICATIONS, UON.
"CONTRACT DOCUMENTS" IS DEFINED AS THE DESIGN DRAWINGS AND THE SPECIFICATIONS
"SER" IS DEFINED AS THE STRUCTURAL ENGINEER OF RECORD FOR THE STRUCTURE IN ITS FINAL CONDITION.
"DESIGN PROFESSIONALS" IS DEFINED AS THE OWNER'S ARCHITECT AND SER.
"MEP" INCLUDES, BUT IS NOT LIMITED TO MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION.
"CONTRACTOR" IS DEFINED TO INCLUDE ANY OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS, STRUCTURAL STEEL FABRICATOR OR STRUCTURAL STEEL ERECTOR.
"BASE BUILDING STRUCTURE" IS DEFINED AS THE STRUCTURAL FRAME DESIGNED BY THORNTON TOMASETTI.
"STRUCTURE IN ITS FINAL CONDITION" MEANS ALL STRUCTURAL ELEMENTS SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS ARE INSTALLED AND COMPLETELY CONNECTED AND INSPECTED WITH NO OUTSTANDING NON-COMPLIANCE ISSUES.
"DELEGATED DESIGN" MEANS A SCOPE OF WORK THAT MEETS PERFORMANCE CRITERIA ESTABLISHED IN THE CONTRACT DOCUMENTS AND IS TO BE COMPLETED BY THE CONTRACTOR'S LICENSED ENGINEER.
"SERVICE LEVEL" LOADS ARE DEFINED AS NOMINAL OR UNFACTORED LOADS TO BE COMBINED USING ALLOWABLE STRESS LOAD COMBINATIONS
"STRENGTH LEVEL" LOADS ARE DEFINED AS FACTORED LOADS TO BE COMBINED USING STRENGTH DESIGN LOAD COMBINATIONS

GR-2 THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE STRUCTURAL WORK WITH THE ARCHITECTURAL, CIVIL, MEP CONTRACT DOCUMENTS, AS WELL AS ANY OTHER APPLICABLE TRADES.

GR-3 THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE UNTIL THE CONSTRUCTION OF THE STRUCTURE REACHES ITS FINAL CONDITION.

GR-4 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS, FOR NEW AND EXISTING STRUCTURES, AS NECESSARY TO COMPLETE THE PROJECT. NO PORTION OF THE PROJECT WHILE UNDER CONSTRUCTION IS INTENDED TO BE STABLE IN THE ABSENCE OF THE CONTRACTOR'S TEMPORARY SUPPORTS AND BRACES. CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED TO DESIGN TEMPORARY BRACING AND CONSTRUCTION SUPPORTS.

GR-5 LATERAL LOAD RESISTANCE AND STABILITY OF THE STRUCTURE IN ITS FINAL CONDITION IS PROVIDED BY [SHEAR WALLS, MOMENT FRAMES, BRACED FRAMES. OTHER] AND LATERAL STABILITY OF OTHER ELEMENTS IS PROVIDED THROUGH [FLOOR SLABS; ROOF DECK; AND IN FLOOR BRACING].

GR-6 THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS.

GR-7 THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE STRUCTURAL DRAWINGS, ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER CONSULTANTS, PROJECT SHOP DRAWINGS AND FIELD CONDITIONS.

GR-8 IN CASES OF CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS AND OTHER DISCIPLINES OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.

GR-9 APPLY DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.

GR-10 ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS.

GR-11 ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS.

GR-12 CENTERLINES OF COLUMNS AND FOUNDATIONS COINCIDE WITH GRID LINE INTERSECTIONS, UON.

GR-13 CENTERLINES OF GRADE BEAMS AND WALLS COINCIDE WITH CENTERLINES OF FOUNDATIONS, UON.

GR-14 CENTERLINES OF FRAMING MEMBERS COINCIDE WITH COLUMN CENTERLINES, UON.

GR-15 THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES FROM DAMAGE.

GR-16 THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED.

GR-17 THE CONTRACTOR SHALL COORDINATE THE BOTTOM OF BASE PLATE ELEVATIONS WITH THE AS-BUILT TOP OF SUPPORT ELEVATIONS.

GR-18 THE CONTRACTOR SHALL VERIFY ALL OPENING SIZES AND LOCATIONS WITH OTHER DISCIPLINES. THE DRAWINGS DO NOT SHOW ALL OPENINGS REQUIRED. ADDITIONAL OPENINGS, BLOCKOUTS AND SLEEVES MAY BE REQUIRED BY OTHER DISCIPLINES AND SHALL BE CONSTRUCTED USING THE TYPICAL DETAILS AND/OR THE CRITERIA INDICATED ON THE DRAWINGS. OPENINGS REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE SER.

GR-19 ELEVATIONS INDICATED ON STRUCTURAL DRAWINGS ARE BASED ON A PROJECT DATUM INDICATED ON THE [ARCHITECTURAL/CIVIL] DRAWINGS.

[GR-20] SEE ARCHITECTURAL, CIVIL, MEP, AND VERTICAL TRANSPORTATION CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION RELATING TO THE COORDINATION OF STRUCTURAL COMPONENTS INCLUDING, BUT NOT LIMITED TO:

CIVIL:
PROJECT DATUM
SITING OF BUILDING GRID LINES WITH RESPECT TO CITY BENCHMARKS
SITE PREPARATION
BACKFILLING MATERIALS AND REQUIREMENTS
PAVING AND SITE ELEMENTS OUTSIDE OF BUILDING ENVELOPE
NEW AND EXISTING SITE UTILITIES

ARCHITECTURAL:
PLAN DIMENSIONS AND PROJECT DATUM
SLAB EDGE DIMENSIONS
FINISH ELEVATIONS
WATERPROOFING AND DAMP-PROOFING DETAILS
RAMP GEOMETRY, PITS, SLAB SLOPES AND DEPRESSIONS
EMBEDMENTS, INSERTS, BLOCKOUTS, ETC.
EXACT OPENING SIZES FOR PIPES, DUCTS, ETC.
CONCRETE FINISHES AND TOPPING SLABS
CONCRETE CURBS AND HOUSEKEEPING PADS
METAL PAN STAIRS AND SUPPORTS

MEP:
PIPE AND DUCT SIZES FOR OPENING AND SLEEVE COORDINATION
FLOOR DRAINS
UNDERFLOOR AND PERIMETER DRAINAGE SYSTEMS
EQUIPMENT CURBS
CONDUITS AND EMBEDMENTS IN WALLS AND SLABS

CD CODES AND DESIGN CRITERIA

CD-1 PERFORM ALL CONSTRUCTION IN CONFORMANCE WITH THE BUILDING AND DESIGN CODES REFERENCED WITHIN THESE DOCUMENTS. THE PROJECT DOCUMENTS REFER TO THE FOLLOWING CODES AND STANDARDS, UON:

INTERNATIONAL BUILDING CODE, 2021 EDITION

STRUCTURAL CONCRETE:
"BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
THE AMERICAN CONCRETE INSTITUTE (ACI 318-19)

STRUCTURAL STEEL:
"SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", (AISC 360-16) CONFORMING TO THE PROVISIONS OF LOAD RESISTANCE FACTOR DESIGN, BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC-LRFD)

WOOD:
"NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION"
AMERICAN NATIONAL STANDARDS INSTITUTE / AMERICAN FOREST & PAPER ASSOCIATION (ANSI/AWC NDS-2018)

CD-2 **LIVE LOADS (SERVICE LEVEL):**
BOARDWALK 100 PSF

CD-3 SUPERIMPOSED DEAD LOADS (SERVICE LEVEL):

N/A

CD-4 RISK CATEGORY: II

DE DEMOLITION

DE-1 THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE MEANS AND METHODS OF DEMOLITION AND THE INTEGRITY AND STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION UNTIL THE WORK IS COMPLETED. THE CONTRACTOR SHALL PROVIDE SHORING IN REQUIRED LOCATIONS WHERE EXISTING CONSTRUCTION TO REMAIN WILL BE AFFECTED BY DEMOLITION. CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED TO DESIGN SHORING.

DE-2 THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ANY STRUCTURAL ELEMENTS WHICH ARE TO REMAIN AND THAT HAVE BEEN DAMAGED DURING THE DEMOLITION PROCESS TO THE COMPLETE SATISFACTION OF THE OWNER. THE REPAIRS SHALL BE AT NO EXPENSE TO THE OWNER. ALL REPAIR WORK SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND SUBMITTED TO THE SER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING REPAIR WORK.

DE-3 ALL EXISTING FRAMING IS INDICATED FOR REFERENCE ONLY AND IS TO BE FIELD VERIFIED BY THE CONTRACTOR. VERIFY THE EXACT EXTENT OF DEMOLITION AT THE SITE. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION. IMMEDIATELY NOTIFY THE DESIGN PROFESSIONALS OF ANY INCONSISTENCIES.

DE-4 THE CONTRACTOR SHALL USE THE STRUCTURAL CONTRACT DOCUMENTS IN CONJUNCTION WITH THE ARCHITECTURAL AND MEP DEMOLITION CONTRACT DOCUMENTS. IN THE EVENT OF CONFLICTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONALS.

DE-5 THE CONTRACTOR SHALL USE QUALIFIED, EXPERIENCED PERSONNEL FOR DEMOLITION AND REMOVAL OPERATIONS. PERFORM DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.

DE-6 DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL INSURE INTEGRITY OF THE STRUCTURE.

DE-7 PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.

DE-8 DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.

DE-9 THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF REMOVING DEMOLISHED MATERIALS FROM THE SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS.

DE-10 WHERE NEW OPENINGS IN EXISTING CONCRETE SLABS OR WALLS ARE TO BE CREATED, THE DEMOLITION CONTRACTOR SHALL CORE HOLES AT THE OUTSIDE CORNERS OF THE NEW OPENING PRIOR TO DEMOLITION. SAW-CUT AND DEMOLISH SLAB OR WALL ONLY AFTER THE INSTALLATION OF ALL REQUIRED NEW STRUCTURAL FRAMING AND/OR REINFORCEMENT IN PLAN OR SECTION, UON. SAW CUTTING SHALL BE STRAIGHT AND SHALL NOT EXTEND INTO EXISTING SLAB OR WALL TO REMAIN NOR BEYOND THE HOLES CORED AT THE CORNERS OF THE NEW OPENING.

DI DELEGATED DESIGN ITEMS

DI-1 THE CONTRACTOR SHALL EMPLOY OR RETAIN A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THIS PROJECT IS LOCATED TO DESIGN AND DETAIL DELEGATED DESIGN ITEMS TO MEET THE PERFORMANCE AND DESIGN CRITERIA ESTABLISHED AS PART OF THE BASE BUILDING STRUCTURE INDICATED IN THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO:

PILES AND CORRESPONDING GEOTECHNICAL RECOMMENDATIONS (SEE NOTE FN-2)
PRE-ENGINEERED METAL BUILDING STRUCTURE (PEMB)
BOARDWALK SYSTEM

SU SUBMITTALS

SU-1 THE CONTRACTOR SHALL PROVIDE THE REQUIRED SUBMITTALS FOR STRUCTURAL REVIEW AS OUTLINED IN THE SPECIFICATIONS. THIS INCLUDES BOTH ITEMS FULLY DESIGNED ON THE CONTRACT DOCUMENTS AND ITEMS LISTED AS DELEGATED DESIGN. ITEMS INCLUDE BUT ARE NOT LIMITED TO:

031000 CONCRETE FORMWORK
032000 CONCRETE REINFORCEMENT AND EMBEDDED ASSEMBLIES
033000 CAST-IN-PLACE CONCRETE
PILES OF TYPE TO BE DETERMINED BY CONTRACTOR'S ENGINEER

SU-2 SUBMIT LOADS IMPOSED ONTO BASE BUILDING STRUCTURE BY THE FOLLOWING CONTRACTOR DESIGNED SYSTEMS:

PRE-ENGINEERED METAL BUILDING (PEMB)
ARCHITECTURAL ORNAMENTATION (FLAGPOLES, BANNERS, MASTS, ETC.)
GUARDRAILS

WHERE CONTRACTOR LOADS IMPOSED DO NOT EXCEED AND/OR CONNECTION CONDITIONS DO NOT DIFFER FROM WHAT IS INDICATED IN THE STRUCTURAL DRAWINGS, SUBMIT FOR RECORD A LETTER SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED STATING THE FOLLOWING:

"THE CONTRACTOR DESIGNED SYSTEM HAS BEEN DESIGNED TO IMPOSE LOADS ON THE BASE BUILDING STRUCTURE THAT ARE WITHIN THE LOAD LIMITS AND AT THE LOCATIONS INDICATED ON THE STRUCTURAL DRAWINGS."

WHERE CONTRACTOR LOADS IMPOSED FOR THE ITEMS LISTED ABOVE EXCEED AND/OR CONNECTION CONDITIONS DIFFER FROM WHAT IS SHOWN IN THE STRUCTURAL DRAWINGS, SUBMIT FOR APPROVAL TO SER LOADS IMPOSED ON THE PRIMARY STRUCTURAL FRAME DUE TO THE DEAD, LIVE, AND WIND/SEISMIC LOADS INDICATED ON THE CONTRACT DOCUMENTS.
SUBMITTAL SHALL LIST THE DESIGN LOADS USED AND BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. SUBMITTAL SHALL INCLUDE LOCATION, MAGNITUDE AND DIRECTION OF UNFACTORED IMPOSED LOADS, GRAPHICALLY REPRESENTED IN THEIR APPROPRIATE LOCATIONS ON A COPY OF THE CONTRACT DOCUMENT STRUCTURAL FRAMING PLANS OR ELEVATIONS AS APPROPRIATE. DETAIL REFERENCES IN THE CONNECTIONS APPLICABLE AT EACH LOCATION SHALL BE NOTED ON THE SUBMITTAL DRAWINGS.

FOR EXTERIOR WALL ASSEMBLIES, THE LOADS IMPOSED SUBMITTAL SHALL BE COMPREHENSIVE INDICATING THE LOADS IMPOSED ON THE BASE BUILDING STRUCTURE AND SHALL INCLUDE THE REACTIONS BASED ON THE ACTUAL LOADS OF THE ENTIRE ASSEMBLY, INCLUDING BUT NOT LIMITED TO GLAZING, CLADDING, METAL STUD BACKUP, AND MULLIONS.

FOR MEP SYSTEMS, THE LOADS IMPOSED SUBMITTAL SHALL BE COMPREHENSIVE INDICATING THE LOADS IMPOSED ON THE BASE BUILDING STRUCTURE AND SHALL INCLUDE THE REACTIONS BASED ON THE ACTUAL LOADS OF THE ENTIRE MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEM, INCLUDING BUT NOT LIMITED TO PIPING, DUCTS, ELECTRICAL RACEWAYS, AND EQUIPMENT WEIGHTS.

A SUBSTITUTION REQUEST MAY BE REQUIRED WHERE CONTRACTOR LOADS IMPOSED EXCEED AND/OR CONNECTION CONDITIONS DIFFER FROM THE BASIS OF DESIGN.

SU-3 THE SER'S REVIEW OF SUBMITTALS SHALL BE FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT. NO WORK SHALL BE STARTED WITHOUT SUCH REVIEW.

FN FOUNDATIONS

FN-1 FOUNDATIONS ARE TO BE DESIGNED BY CONTRACTOR. ASSUMED MINIMUM PILE CAPACITIES ARE STATED ON STRUCTURAL DRAWINGS. CONTRACTOR TO CONFIRM PILE CAPACITIES BY GEOTECHNICAL INVESTIGATION.

FN-2 FOUNDATIONS HAVE BEEN DESIGNED BASED ON THE FOLLOWING DESIGN VALUES (SERVICE LEVEL):

PILE CAPACITY 10 TONS
PILE LATERAL CAPACITY 5 KIPS

GENERAL CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE PILE DESIGN RECOMMENDATIONS AND CONFIRM THE BASIS OF DESIGN LISTED ABOVE.

FN-3 CONTRACTOR SHALL BE RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION. WHERE NECESSARY, SHEET AND SHORE THE EXCAVATION WITH ALL REQUIRED TIEBACKS AND BRACING AS DETERMINED BY CONTRACTOR'S ENGINEER.

CM CONCRETE MATERIALS

CM-1 CONCRETE SHALL BE NORMALWEIGHT, UON. CONCRETE COMPRESSIVE STRENGTH (f' c) SHALL BE AT 28-DAY AGE, UON:

CONCRETE ELEMENT	f'c / AGE	EXPOSURE CATEGORY
FOOTINGS, PILE CAPS AND PIERS	4,000 PSI /28-DAY	F0-S0-W0-C1
GRADE BEAMS	4,000 PSI / 28-DAY	F0-S0-W0-C1
NON-SHRINK GROUT	8,000 PSI / 28-DAY	N/A

CONCRETE EARLY COMPRESSIVE STRENGTH REQUIREMENTS FOR CONSTRUCTION SHALL BE ESTABLISHED AND COORDINATED BY THE CONTRACTOR AND SUBMITTED TO THE SER FOR REVIEW.

CM-2 PROVIDE NORMALWEIGHT CONCRETE WITH CURED DENSITY OF 145 +/- 5 PCF, AND AGGREGATE CONFORMING TO ASTM C33, UON. WHERE INDICATED, PROVIDE LIGHTWEIGHT CONCRETE WITH CURED DENSITY OF 112+/-3 PCF AND AGGREGATE CONFORMING TO ASTM C330.

CM-3 THE USE OF CALCIUM CHLORIDE AND OTHER CHLORIDE CONTAINING AGENTS IS PROHIBITED. THE USE OF RECYCLED CONCRETE IS PROHIBITED. PLACEMENT WITHIN AND CONTACT BETWEEN ALUMINUM ITEMS, INCLUDING ALUMINUM CONDUIT, AND CONCRETE IS PROHIBITED.

CM-4 ALL CAST-IN-PLACE CONCRETE WILL EXPERIENCE DIFFERING VARIATIONS OF CRACKING. ANY ELEMENT EXPOSED TO DIRECT WEATHER AND/OR TEMPERATURE VARIATIONS DURING CONSTRUCTION OR IN THE FINAL CONDITION IS TO BE TREATED AND REGULARLY MAINTAINED TO PREVENT PROPAGATION OF CRACKS AND WATER PENETRATION. THE CONTRACTOR SHALL DEVELOP A REGULAR MAINTENANCE PROGRAM AND SUBMIT
IT TO THE OWNER

RE CONCRETE REINFORCEMENT

RE-1 ALL CONCRETE SHALL INCLUDE REINFORCEMENT. IF REINFORCEMENT IS NOT SPECIFICALLY INDICATED ON THE DRAWINGS VERIFY WITH THE SER.

RE-2 REINFORCEMENT SHALL CONFORM TO THE FOLLOWING STANDARDS AND MATERIAL PROPERTIES UON:

DEFORMED BARS:	ASTM A615 GRADE 60
WELDABLE DEFORMED BARS:	ASTM A706
EPOXY COATED DEFORMED BARS:	ASTM A615 / A775
WELDED WIRE REINFORCEMENT	ASTM A1064
EPOXY COATED WELDED WIRE REINFORCEMENT	ASTM A1064 / A884

RE-3 DETAIL REINFORCEMENT BASED ON THE PROJECT REQUIREMENTS, ACI-318 AND ACI-315, UON.

RE-4 WHERE A 90-DEG, 135 –DEG OR 180-DEG HOOK IS GRAPHICALLY INDICATED, PROVIDE CORRESPONDING ACI STANDARD HOOKS UON.

RE-5 DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT UON.

RE-6 REINFORCEMENT SHALL HAVE CONCRETE PROTECTION (CLEAR COVER) PER ACI 318 UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

RE-7 LAP REINFORCEMENT ONLY AT LOCATIONS AS SPECIFICALLY DETAILED ON THE DRAWINGS EXCEPT REINFORCEMENT MARKED AS CONTINUOUS CAN BE SPLICED AT LOCATIONS DETERMINED BY CONTRACTOR USING TENSION LAP SPLICES (LTS). SEE LAP SPLICE AND EMBEDMENT SCHEDULE.

RE-8 UNLESS OTHERWISE NOTED ALL LAP SPLICES ARE TO BE TENSION LAP SPLICES PER LAP SPLICE AND EMBEDMENT SCHEDULE.

RE-9 PROVIDE MECHANICAL SPLICES FOR BARS LARGER THAN #11 OR WHERE INDICATED. PROVIDE TENSILE, PRE-QUALIFIED, WELDED OR THREADED MECHANICAL SPLICES UON.

RE-10 LAP WELDED WIRE REINFORCEMENT TWO PANEL SPACINGS, UON.

RE-11 PROVIDE LAP SPLICE LOCATIONS AS FOLLOWS, UON:
A. GRADE BEAM / WALL (TOP HORIZONTAL REINFORCEMENT): AT CENTER OF SPAN
B. GRADE BEAM / WALL (BOTTOM HORIZONTAL REINFORCEMENT): AT SUPPORTS
C. WALL INSIDE FACE (VERTICAL REINFORCEMENT): AT SUPPORT
D. WALL OUTSIDE FACE (VERTICAL REINFORCEMENT): AT STORY MIDHEIGHT OF WALL FOR BELOW GRADE FOUNDATION WALLS, AT SUPPORT FOR OTHER WALLS
E. UNLESS OTHERWISE NOTED TERMINATE BARS AT DISCONTINUOUS ENDS WITH STANDARD HOOKS.

RE-12 PROVIDE EPOXY COATED REINFORCEMENT AND ACCESSORIES IN AREAS OF DIRECT EXPOSURE TO THE ENVIRONMENT, CHEMICALS, OR DE-ICING FOR THE AREAS INDICATED ON THE DRAWINGS.

SI SPECIAL INSPECTIONS

SI-1 THE FOLLOWING STRUCTURAL ITEMS REQUIRE SPECIAL TESTING AND/OR INSPECTIONS:

SEE DRAWING S0-002

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DISTRICT OF COLUMBIA
MICHAEL E. CROPPER
1/9/2025
No. PES40000143
PROFESSIONAL ENGINEER
RETURN

KEY PLAN

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	A/E_PROJECT_#
DRAWING TITLE	GENERAL NOTES
DRAWING TYPE	
WORKING STAFF	
DESIGNED BY	
DRAWN BY	
CHECKED BY	

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
S0-001	S	0	001

SCALE: 12" = 1'-0"

SCHEDULE OF SPECIAL INSPECTIONS

Address:

MATERIAL/ACTIVITY	TYPE OF INSPECTION	APPLICABLE TO THIS PROJECT				
		Y/N	C/P	EXTENT/REFERENCE	AGENT	COMPLETED
GENERAL						
Pre-construction conference	Meeting with parties listed in Section 6 of DOB SIPM to discuss Special Inspection procedures	Y	P	Scheduled by DOB with the Contractor prior to commencement of work		
EARTHWORK						
Site preparation (building)	Field testing and inspection	Y	P	Field Review; IBC 1705.6		
Fill material (building)	Review submittals, field testing and inspection	Y	P	Field Review; IBC 1705.6		
Fill compaction (building)	In-place density tests, lift thickness	Y	C	Field Review; IBC 1705.6		
Excavation	Field inspection and verification of proper depth	Y	P	Field Review; IBC 1705.6		
Foundation sub-grade	Field inspection of foundation subgrade prior to placement of concrete	Y	P	Field Review; IBC 1705.6		
Sheeting and shoring	H piles and lagging, tie backs,	N	C	IBC 1705.2,1705.7, 1705.8 T1705.7		
DEEP FOUNDATION ELEMENTS						
Materials	Review product, sizes, and lengths	Y	C	Submittal and Field Review; IBC 1705.7, 1705.8, 1705.9		
Test piles	Monitor driving of test piles	Y	C	Field Review; IBC 1705.8, .9 or .10		
Installation	Monitor drilling, placement, plumb, driving of piles, including recording blows per foot, cut off, and tip elevation	Y	C	Field Review; IBC 1705.2, 1705.3, 1705.7		
Load test	Monitor pile load test	Y	C	Field Review; IBC 1705.8, .9 or .10		
Helical Piles	Continuous special inspections shall be performed during installation of helical pile foundations	Y	C	IBC 1705.9, 1810.3.1, 1810.4.11		
CONCRETE						
Materials	Review product supplied versus certificates of compliance and mix design	Y	P	Submittal & Field Review; IBC 1705.3; ACI 318:Ch. 4 and 5; IBC 1904.2, 1910.2, 1903.3		
Installation of reinforcing steel, including Pre-stressed tendons and anchor bolts as well as welding	Field inspection of placement	Y	P	Submittal and Field Review; ACI 318:3.5, 3.5.2, 3.8.6 & Ch. 7 8.1.3 and 21.2.8; AWS D1.4; IBC 1705.3, 1908.5, 1909.1, 1910.4		
Formwork installation	Field inspection	Y	P	Field Review; ACI 318: 6.1.1; IBC 1705.3		
Concreting operations and placement	Field inspection of placement/sampling	Y	C	Field Review; ACI 318: 5.6, 5.8, 5.9-10; ASTM C 172, C 31; IBC 1705.3, 1910.6, 1910.7, 1910.8, 1910.10		

Concrete curing	Field inspection of curing process	Y	P	Field Review; ACI 318: 5.11-13; IBC 1705.3, 1910.9		
Concrete strength	Evaluation of concrete strength	Y	P	Laboratory Testing; ACI 318: 6.2; IBC 1705.3		
Inspect anchors post-installed in hardened concrete members	IBC TABLE 1705.3	N	C	ACI 318: 17.8.2.4		
PRECAST CONCRETE						
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures**	N	P	Submittal or Field Review; IBC 1705.3		
Erection and installation	Review submittals and as-built assemblies; Field inspection of in-place precast	N	P	Submittal and Field Review; ACI 318: Ch. 16; IBC Table 1705.3		
MASONRY (Level___: Building Risk Category__) TYPICAL FOR LEVEL B AND RISK CATEGORY I,II,III						
Materials	Review of products supplied versus certificate of compliance and material submitted	N	P	Submittal & Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; IBC 1705.4, 1708		
Strength	Testing/review of strength	N	C	Submittal & Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE 6; IBC 1705.4, 2105.2.2, 2105.3		
Mortar and Grout	Inspection of proportioning and mixing. Placement of mortar only.	N	P	Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Grout placement, including pre-stressing grout	Verification to ensure compliance	N	C	Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Grout space	Verification to ensure compliance	N	P	Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI 530.1/ASCE 6; TMS 602		
Mortar, grout, and prism specimens	Observe Preparation	N	C	Field Review; IBC 1704.5, ACI 530.1; ASCE 6		
Reinforcement, pre-stressing tendons, and connections	Inspect condition, size, location, and spacing	N	P	Field Review; IBC 1704.5; ACI 530/ASCE 5; ACI 530.1/ASCE 6		
Welding of reinforcing bars	Inspection and testing of welds	N	C	Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI530.1/ ASCE 6		
Pre-stressing force	Verify application and measurement	N	C	Field Review; IBC 1705.4; ACI 530/ASCE 5; ACI530.1/ASCE 6		
Protection	Inspect procedures for protection during cold and hot weather	N	P	Field Review; IBC 1705.4; ACI 530/ASCE 5;ACI 530.1/ASCE 6		
Anchorage	Inspection of anchorages	N	P	Field Review; ACI 530.1/ASCE 6, ASCE 6; IBC1705.4; ACI 530/ASCE 5		
Masonry installation	Inspection of placement of masonry and joints (Periodic after the first 5000 SF.)	N	C	Field Review; ACI 530/ASCE 5; ACI 530.1/ASCE6; IBC 1705.4		
Grouting of pre-stressed tendons	Field inspection	N	C	Field Review; ACI 318: 18.18.4; IBC 1705.3		
Application of forces for pre-stressed concrete	Field inspection	N	C	Field Review; ACI 318: 18.20; IBC 1705.3		
STRUCTURAL STEEL		**Y/N**	**C/P**			
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures or submit Certificate of Compliance	Y	P	IBC 1704.2.5, IBC 1704.2.5.1, 1704.2.5.2, 1705.2		
Bolts, nuts, and washers – materials	Material identification markings, Review of Certificate of Compliance	Y	P	Submittal & Field Review; IBC 1705.2.1; IBC 1705.2.2; IBC 1706; ASTM; AISC 360, Section A3.3		

Bolts, nuts, washers – installation	Inspection of in-place high-strength bolts, snug- tight joints, pre-tensioned and bearing type, and slip critical connections	Y	C	Submittal & Field Review; IBC 1705.2.1, 1705.2.2, AISC 360 Section M2.5		
Structural steel – materials	Material identification markings and review of Certificate of Compliance	Y	P	Submittal & Field Review; IBC 705.2.1,1705.2.2, 1706; ASTM A6, A568		
Structural steel details – installation	Inspection of member locations, structural details for bracing, connections, stiffening	Y	P	Submittal & Field Review; IBC 1705.2.1,1705.2.2, AISC 360		
Weld filler materials and welder certification	Review of identification markings, Certificate of Compliance, and welder certifications	Y	P	Submittal & Field Review; ASTM AISC 360 A3.5		
Welds	Inspection and testing of welds	Y	C	Field Review; IBC 1705.2.2.1; AWS D1.1, D1.3		
Cold-formed metal deck – materials	Review of identification marking manufacturer's certified test results	Y	P	Submittal and Field Review; IBC 1705.2.2; ASTM		
Cold-formed metal deck – installation	Review laps and welds	Y	P	Submittal and Field Review; IBC 1705.2.2, AWS D1.3		
Cold-formed light frame construction – welds	Review welding operation	Y	P	IBC 1705.11.2		
Cold form light frame construction wind resistance – screws	Review screw attachment bolting, anchoring hold downs, bracing, diaphragms, struts	Y	P	Field Review; IBC 1705.11.2		
Cold-formed steel trusses spanning 60' or greater	Inspection of temporary and permanent restraints/bracing	N	C	Field review IBC 1705.2.4		
WOOD						
Verify fabrication/quality control procedures	In-plant inspection of fabrication/quality control procedures** or submit Certificate of Compliance	Y	P	Submittal or Field Review; IBC 1704.2.5, 1705.5, 1705.5.2		
Metal plate connected wood/metal trusses spanning 60' or more	Review approved submittal and installation of restraint/bracing	N	P	Field Review; IBC 1704.2.5, 1705.5, 1705.2		
Joist Hangers – Materials/Installation	Review manufacturer's material and test standards	N	P	Field Review; IBC 1711, ASTM D 1761		
High-Load Diaphragms – Installation	Review submittal and as-built assemblies; inspection of sheathing, framing size, nail and staple diameter and length, number of fastener lines, and fastener spacing.	N	C	IBC 1705.5, 1705.5.1		
Wood Shear Walls–installation	Review nailing, bolting, anchoring, fastening, Diaphragms, struts, braces, and hold downs when fasteners are ≤ 4" on center.	N	P	Field Review; IBC 1705.11.1		
MAIN WIND FORCE RESISTING SYSTEM		**Y/N**	**C/P**			
Wind requirements	Review of the system components and installation for wood construction, cold-formed steel light frame construction, components, and cladding	N	P	Submittal and Field Review; IBC 1609.1.2, 1704.5.2, 1705.11705, 1705.4, 1705.4.1, 1705.4.2, 1710		
SEISMIC FORCE RESISTING SYSTEMS						
Seismic requirements	Review of the designated seismic systems and seismic force resistance systems	N	C	Submittal and Field Review; IBC 1613, 1704.5.1, 1705.11, 1705.12; ASCE 7		

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DISTRICT OF COLUMBIA · MICHAEL E. CROPPER · 1/9/2025 · No. PES40000143 · REGISTERED PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE 12/18/24 | SUBMISSION FINAL

REVISION 1 | REVISION 2 | REVISION 3 | REVISION 4 | REVISION 5 | REVISION 6

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME / ADDRESS: SI MALL CAROUSEL; NATIONAL MALL WASHINGTON DC 20001

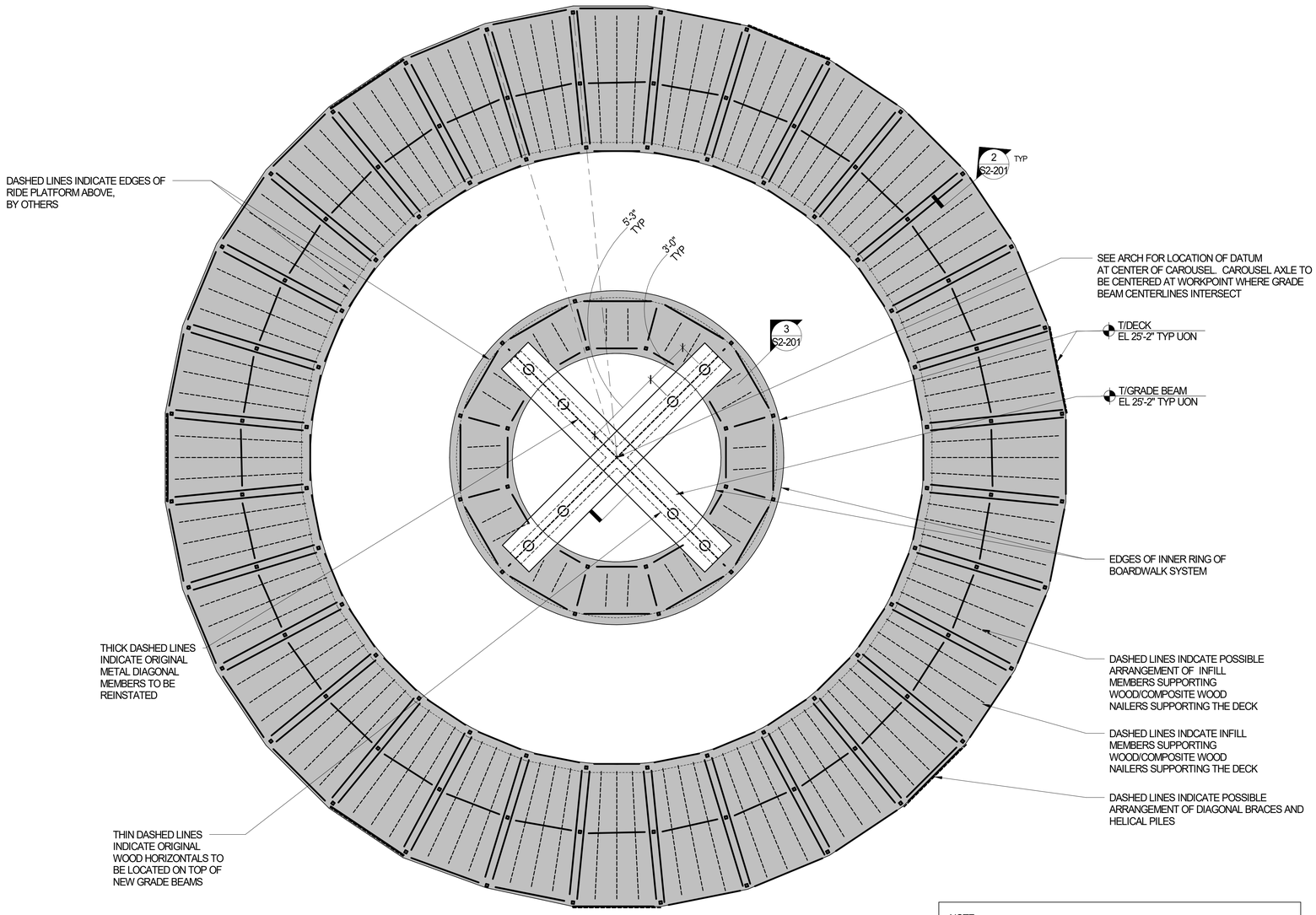
PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER: A/E_PROJECT_#

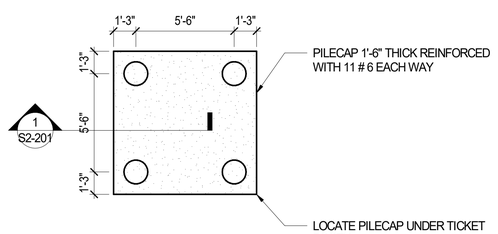
DRAWING TITLE: SPECIAL INSPECTIONS
DRAWING TYPE
WORKING STAFF
DESIGNED BY | DRAWN BY | CHECKED BY

SHEET NO. S0-002

S	0	002
DISCIPLINE	TYPE	SEQUENCE

SCALE:





SHEET NOTES:

1. SEE GENERAL NOTES FOR CONCRETE COMPRESSIVE STRENGTH
2. FOR ADDITIONAL INFORMATION REFER TO THE FOLLOWING DRAWINGS:

   GENERAL NOTES S0 SERIES DRAWINGS

   FOUNDATION DETAILS S2 SERIES DRAWINGS

3. ALL EXPOSED STEEL TO BE HOT DIPPED GALVANIZED UON.
4. ASSUMED SELF-WEIGHT OF CAROUSEL NOT INCLUDING RIDERS: 30,000 LBS - TREATED AS A LIVE LOAD

   ASSUMED LIVE LOAD FROM 60 RIDERS AND OTHERS WHO MAY STAND ON THE CAROUSEL (ASSUME 200 LBS PER HORSE AND 60 HORSES) = 12,000 LBS

NOTE:

BOARDWALK SYSTEM TO BE DESIGNED BY CONTRACTOR.

LIVE LOAD = 100 PSF

1. PROVIDE PAN FOOT SYSTEM AT TYPICAL POST
2. DESIGN BOARDWALK AS A MODULAR SYSTEM WITH REGULAR REPEATING COMPONENTS
3. INCORPORATE MEANS FOR LATERAL STABILITY, FOR EXAMPLE, PAIRS OF HELICAL PILES WITH DIAGONAL BRACES AT SELECT LOCATIONS IN LIEU OF TYPICAL PAN FOOT SUPPORT
4. SEE ARCH FOR DECKING CRITERIA. PROVIDE NAILERS FASTENED TO STRUCTURAL MEMBERS TO ENABLE DECKING TO BE FASTENED TO SUPPORTING STRUCTURE.
5. ALL STEEL TO BE HOT-DIPPED GALVANIZED

1 LEVEL 01

SCALE: 1/4" = 1'-0"

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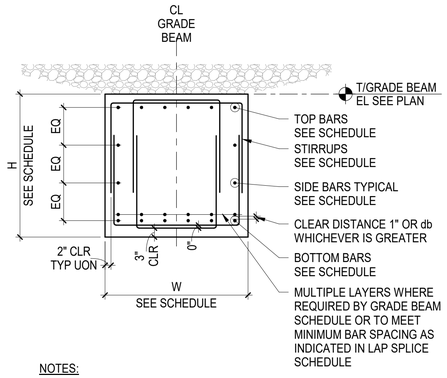
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	A/E_PROJECT_#
DRAWING TITLE	FRAMING PLAN
DRAWING TYPE	
WORKING STAFF	
DESIGNED BY	
DRAWN BY	
CHECKED BY	

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
S1-001	S	1	001

SCALE: As indicated

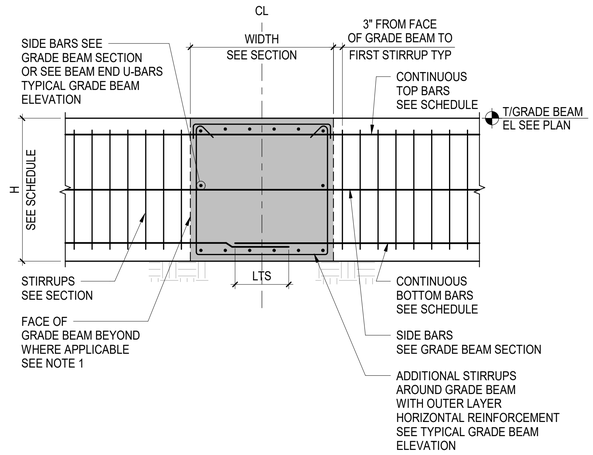


NOTES:

1. IF H IS GREATER THAN 24" PROVIDE SIDE BARS #5@10" MINIMUM UON IN SCHEDULE

1 GRADE BEAM SECTION - TYPICAL

SCALE: NOT TO SCALE



NOTES:

1. CONSTRUCTION JOINTS SHALL NOT BE PLACED AT FACE OF GRADE BEAMS WITHOUT PRIOR WRITTEN APPROVAL FROM SER
2. SLAB ON GRADE NOT SHOWN FOR CLARITY

2 TYPICAL GRADE BEAM INTERIOR INTERSECTION DETAIL

NOT TO SCALE

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SF PROJECT NUMBER	2399615
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DRAWING TITLE	TYPICAL DETAILS
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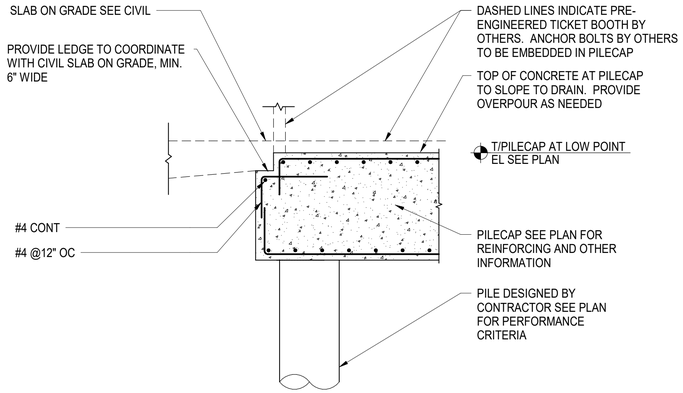
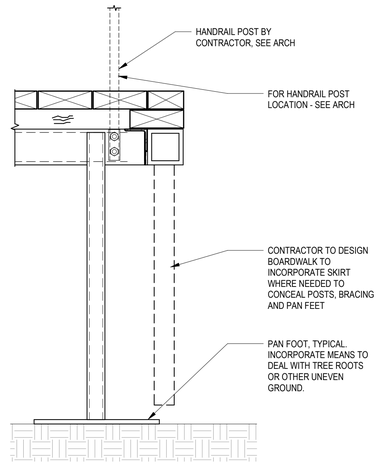
SHEET NO.	S2-100
DISCIPLINE / TYPE / SEQUENCE	S / 2 / 100

SCALE: NOT TO SCALE



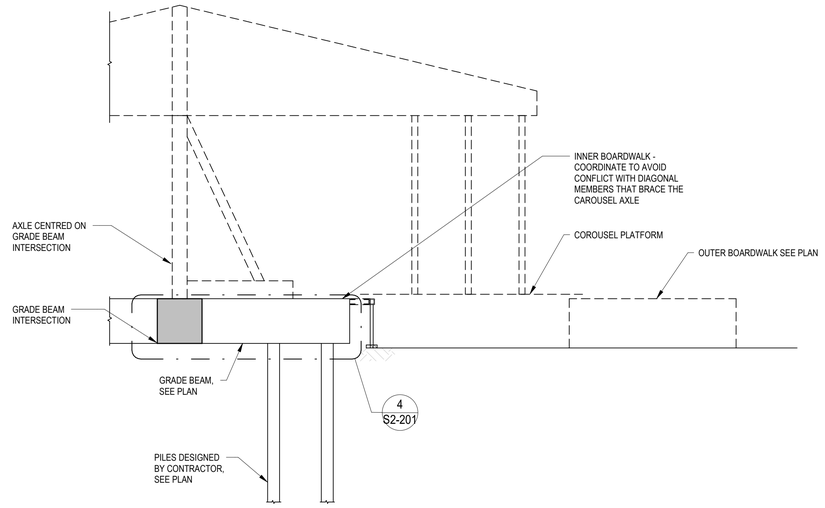
1 SECTION

SCALE: 1/2" = 1'-0"



2 SECTION

SCALE: 1 1/2" = 1'-0"



3 SECTION

SCALE: 1/4" = 1'-0"

4 GRADE BEAM REBAR DETAIL

1/2" = 1'-0"

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DRAWING TYPE	
WORKING STAFF	DESIGNED BY / DRAWN BY / CHECKED BY

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
S2-201	S	2	201

SCALE: AS INDICATED

ABBREVIATIONS

A	AMPERE(S)
AC	ALTERNATING CURRENT
ACU	AIR CONDITIONING UNIT
ADA	AMERICANS WITH DISABILITIES ACT
AF	AMPERES FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERES INTERRUPTING CAPACITY
ARCH	ARCHITECTURAL
AT	AMPERES TRIP
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIOVISUAL
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION SYSTEM
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CCT	CORRELATED COLOR TEMPERATURE
CKT	CIRCUIT
CLG	CEILING
CPT	CONTROL POWER TRANSFORMER
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CX	CONNECT TO EXISTING
DC	DIRECT CURRENT
DESIG	DESIGNATION
DIST	DISTRIBUTION
DN	DOWN
DWG	DRAWING
DX	DISCONNECT EXISTING
EA	EACH
EC	EMPTY CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
EH	ELECTRIC HEATER
ELEC	ELECTRIC
ELV	ELECTRONIC LOW VOLTAGE
EMH	ELECTRIC MANHOLE
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	EXISTING
F	FUSE
FDAS	FIRE DETECTION AND ALARM SYSTEM
FDR	FEEDER
FLA	FULL LOAD AMPERE(S)
FMC	FLEXIBLE METAL CONDUIT
FS	FUSIBLE SWITCH
FT	FOOT OR FEET
FVNR	FULL VOLTAGE NONREVERSING
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
HZ	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT(S)
KVA	KILOVOLT-AMPERES
KW	KILOWATT(S)
LED	LIGHT EMITTING DIODE
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LTG	LIGHTING
MAFC	MAKE ALL FINAL CONNECTIONS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MH	MOUNTING HEIGHT (TO CENTERLINE OF DEVICE, UNLESS OTHERWISE NOTED)
MLO	MAIN LUGS ONLY
MOA	MULTIOUTLET ASSEMBLY
MS	MANUAL SWITCH
MTD	MOUNTED
MV	MEDIUM VOLTAGE
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFS	NONFUSIBLE SWITCH
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
OL	OVERLOAD
P	POLE(S)
PH	PHASE
PIR	PASSIVE INFARED
PNL	PANEL
PVC	POLYVINYL CHLORIDE
RECEPT	RECEPTACLE(S)
REQD	REQUIRED
REL	RELOCATE OR RELOCATED
RF	RETURN FAN
RMC	RIGID METAL CONDUIT
RM(S)	ROOM(S)
RVAT	REDUCED VOLTAGE AUTOTRANSFORMER
RX	REMOVE EXISTING
SF	SUPPLY FAN
SMR	SURFACE METAL RACEWAY
SPD	SURGE PROTECTIVE DEVICE
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TA	TRIP AMPERES
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
VA	VOLT-AMPERE(S)
VFC	VARIABLE FREQUENCY CONTROLLER
VT	VOLTAGE TRANSFORMER
W	WIRE
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER

SYMBOLS

LIGHTING

- SINGLE POLE SWITCH MOUNTED 48" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED
  SUBSCRIPTS AS FOLLOWS:
  3 - THREE WAY SWITCH
  4 - FOUR WAY SWITCH
  D - DIMMER SWITCH
  P - SWITCH WITH PILOT LIGHT
  K - KEY-OPERATED SWITCH
  T - TIME SWITCH
  WP - SWITCH WITH WEATHERPROOF COVER
  OS - OCCUPANCY SENSOR
  a - LOWER CASE LETTER INDICATES SWITCH LEG
- LIGHTING FIXTURE
- LIGHTING FIXTURE, PENDANT MOUNTED
- LIGHTING FIXTURE, WALL-MOUNTED
- INDUSTRIAL LIGHTING FIXTURE
- LIGHTING TRACK
- LIGHTING FIXTURE, TRACK-MOUNTED
- LIGHTING FIXTURE, CEILING-MOUNTED
- LIGHTING FIXTURE, WALL-MOUNTED
- WALL WASHER LIGHTING FIXTURE
- DECORATIVE LIGHTING FIXTURE, PENDANT-MOUNTED
- DECORATIVE LIGHTING FIXTURE, SURFACE-MOUNTED
- EXIT SIGN - BACK-MOUNTED WITH DIRECTIONAL INDICATORS AS INDICATED
- EXIT SIGN - TOP- OR PENDANT-MOUNTED, SINGLE FACE WITH DIRECTIONAL INDICATORS AS INDICATED
- EXIT SIGN - TOP- OR PENDANT-MOUNTED, DOUBLE FACE WITH DIRECTIONAL INDICATORS AS INDICATED
- EMERGENCY LIGHTING UNIT
- OCCUPANCY SENSOR, CEILING MOUNTED - ARROWS INDICATE DIRECTION OF SENSOR BEAM AIMING
- OCCUPANCY SENSOR, WALL MOUNTED - ARROW INDICATES DIRECTION OF SENSOR BEAM AIMING
- POWER PACK
- PHOTOELECTRIC CONTROL SWITCH
- TIME CLOCK
- CONTACTOR
- DAYLIGHT SENSOR

POWER (FLOOR PLANS)

- SINGLE RECEPTACLE MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED
- DUPLEX RECEPTACLE MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED
  SUBSCRIPTS AS FOLLOWS: (APPLIES TO ALL RECEPTACLES)
  E - CONNECTED TO EMERGENCY CIRCUIT
  G - GROUND FAULT CIRCUIT INTERRUPTER TYPE
  IG - ISOLATED GROUND
  WC - WATER COOLER
  WP - WEATHERPROOF, GROUND FAULT INTERRUPTER TYPE
  84" - MOUNTING HEIGHT AS INDICATED
- RECEPTACLE MOUNTED IN PEDESTAL
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER 6" ABOVE BACKSPLASH
- DOUBLE DUPLEX RECEPTACLE MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED
- L6-30R — SPECIAL RECEPTACLE MOUNTED 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED (NEMA CONFIGURATION AS INDICATED)
- SINGLE RECEPTACLE MOUNTED IN FLOOR
- DUPLEX RECEPTACLE MOUNTED IN FLOOR
- DOUBLE DUPLEX RECEPTACLE MOUNTED IN FLOOR
- DUPLEX RECEPTACLE MOUNTED FLUSH IN CEILING
- 5 7 — MULTIOUTLET ASSEMBLY, DARK SQUARES INDICATE NEMA 5-20R DUPLEX RECEPTACLE, SPACING AS INDICATED ON DRAWINGS. NUMBER INDICATES CIRCUIT.
- 208Y/120V PANELBOARD (SURFACE MOUNTED)
- 208Y/120V PANELBOARD (FLUSH MOUNTED)
- 480Y/277V PANELBOARD (SURFACE MOUNTED)
- 480Y/277V PANELBOARD (FLUSH MOUNTED)
- JUNCTION BOX
- JUNCTION BOX (WALL MOUNTED)
- MOTOR CONNECTION
- PUSHBUTTON
- NONFUSIBLE SWITCH
- FUSIBLE SWITCH
- MAGNETIC MOTOR CONTROLLER
- COMBINATION MAGNETIC MOTOR CONTROLLER
- ENCLOSED CIRCUIT BREAKER
- TRANSFORMER
- VFC — VARIABLE FREQUENCY CONTROLLER
- GROUND ROD
- M — FRACTIONAL MANUAL MOTOR CONTROLLER MOUNTED 5'-0" AFF
- UNDERGROUND DUCT BANK

TELECOMMUNICATIONS

- DATA OUTLET BOX MOUNTED 18" ABOVE FINISHED FLOOR, WITH 1"C TO ABOVE CEILING
- VOICE OUTLET BOX MOUNTED 18" ABOVE FINISHED FLOOR, WITH 1"C TO ABOVE CEILING
- DATA OUTLET BOX MOUNTED IN FLOOR, WITH 1"C TO ABOVE CEILING
- VOICE OUTLET BOX MOUNTED IN FLOOR, WITH 1"C TO ABOVE CEILING
- VOICE/DATA OUTLET BOX MOUNTED 18" ABOVE FINISHED FLOOR, WITH 1"C TO ABOVE CEILING
- VOICE/DATA OUTLET BOX MOUNTED IN FLOOR, WITH 1"C TO ABOVE CEILING
- DATA JACK MOUNTED IN PEDESTAL
- DATA OUTLET MOUNTED FLUSH IN CEILING
- S — SPEAKER MOUNTED FLUSH IN CEILING
- M — MICROPHONE JACK MOUNTED IN FLOOR
- M — MICROPHONE JACK WALL MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED
- TELEPHONE BACKBOARD
- CABLE TRAY - LADDER TYPE

POWER (ONE LINE)

- GROUND
- TRANSFORMER
- CURRENT TRANSFORMER
- VOLTAGE TRANSFORMER
- STATIONARY CIRCUIT BREAKER
- 52 — DRAW-OUT CIRCUIT BREAKER
- SHUNT-TRIP CIRCUIT BREAKER
- NETWORK PROTECTOR
- FUSE
- DISCONNECT SWITCH
- THERMAL OVERLOADS
- CONTACTS
- M — METER
- TRANSFER SWITCH
- LIGHTNING ARRESTOR
- K — KEY OPERATED MECHANICAL INTERLOCK
- FUSED CUTOUT
- FUSED DISCONNECT SWITCH
- G — ENGINE GENERATOR SET

DRAWING CONVENTIONS

SYMBOL	DESCRIPTION
	POINT OF CONNECTION, NEW TO EXISTING
	DEMOLITION WORK TERMINATION POINT
X	INDICATES FEEDER INDICATES FEEDER DESIGNATION. REFER TO FEEDER SCHEDULE FOR CONDUCTOR AND CONDUIT SIZE
X	INDICATES SPECIAL NOTE INDICATES SPECIAL NOTE DESIGNATION. REFER TO SPECIAL NOTE LIST ON DRAWING FOR DESCRIPTION OF ITEM
XX / X	LIGHTING FIXTURE SWITCH DESIGNATION LIGHTING FIXTURE TYPE; REFER TO LIGHTING FIXTURE SCHEDULE
	DIAGONAL LINE INDICATES EMERGENCY LIGHTING FIXTURE
X / EXX	INDICATES DETAIL DESIGNATION DRAWING WHERE DETAIL IS DRAWN
X / Ex	INDICATES DIRECTION OF CUTTING PLANE INDICATES SECTION OR ELEVATION DRAWING WHERE ELEVATION OR SECTION IS TAKEN OR DRAWN
XXX/X.X / #6 / E	INDICATES PANELBOARD OR MOTOR CONTROL CENTER DESIGNATION AND CIRCUIT NUMBER BRANCH CIRCUIT HOME RUN; ARROWHEADS INDICATE NUMBER OF CIRCUITS. INCLUDE ONE EQUIPMENT GROUND CONDUCTOR. INDICATES WIRE SIZE (AWG OR CIRCULAR MILS) IF OTHER THAN BRANCH CIRCUIT WIRE SIZING STANDARD EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR "E" INDICATES EMERGENCY CIRCUIT WITH 3#10 IN ¾"C

BRANCH CIRCUIT WIRE SIZING STANDARD

WIRE	DISTANCE
#12	UP TO 75 FEET FOR 120V
#10	UP TO 120 FEET FOR 120V
#8	UP TO 190 FEET FOR 120V
#12	UP TO 150 FEET FOR 277V
#10	UP TO 260 FEET FOR 277V
#8	UP TO 400 FEET FOR 277V

	CONDUIT RUN CONCEALED IN WALL OR CEILING IN FINISHED AREAS, EXPOSED IN UNFINISHED AREAS
	CONDUIT UNDERGROUND OR UNDER SLAB
	CONDUIT UP
	CONDUIT DOWN
	HEAVY LINE WEIGHT DESIGNATES NEW WORK ON NEW WORK PLANS, REMOVAL WORK ON DEMOLITION PLANS.
	LIGHT LINE WEIGHT DESIGNATES EXISTING WORK TO REMAIN.

GENERAL NOTES

1. CONTRACTOR SHALL THOROUGHLY EXAMINE PREMISES AND OBSERVE CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED, AND SHALL COMPLETELY FAMILIARIZE THEMSELF WITH RELATED REQUIREMENTS OF THE JOB THAT WILL AFFECT WORK UNDER THIS CONTRACT. NO ALLOWANCES WILL BE MADE FOR ERRORS OR NEGLIGENCE IN THIS RESPECT.
2. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. NOT ALL CONDUIT RACEWAY OFFSETS, RISES AND DROPS HAVE BEEN INDICATED. THEREFORE, THE CONTRACTOR MUST CAREFULLY INVESTIGATE THE CONDITIONS AFFECTING THE WORK, AND ARRANGE SUCH ACCORDINGLY, PROVIDING NECESSARY FITTINGS AND ACCESSORIES THAT MAY BE NEEDED TO MEET SUCH CONDITIONS.
3. WHERE ELECTRICAL WORK PENETRATES WALLS, PARTITIONS, FLOORS OR CEILINGS, PROVIDE SLEEVES AS SPECIFIED. PATCH, SEAL AND FINISH TO MATCH SURFACE PENETRATED. DO NOT CUT/PENETRATE STRUCTURAL MEMBERS. REFER TO STRUCTURAL DRAWINGS FOR NEW OPENINGS.
4. EXISTING ABANDONED CONDUIT THAT REMAINS CONCEALED, BURIED, OR OTHERWISE CONTAINED IN OR BELOW THE REMAINING SLABS AND WALLS SHALL BE CAPPED, PLUGGED, OR OTHERWISE SEALED. ABANDONED CONDUITS SHALL BE CUT SO THAT CAPPED OR PLUGGED ENDS WILL BE FAR ENOUGH BEHIND FINISHED SURFACES TO ALLOW FOR THE INSTALLATION OF THE NORMAL THICKNESS OF FINISHED MATERIAL.
5. EXISTING ELECTRICAL CIRCUITS AFFECTED BY REMOVAL WORK AND REQUIRED TO REMAIN IN SERVICE ON A TEMPORARY OR PERMANENT BASIS SHALL BE RECONNECTED AS REQUIRED IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE.
6. FOR ALL ELECTRICAL EQUIPMENT, PULL BOXES, AND JUNCTION BOXES, ACCESS COVERS THAT ARE NOT COMPLETELY REMOVABLE SHALL BE SELF-SUPPORTING IN THE OPEN POSITION.
7. FOR ALL ELECTRICAL EQUIPMENT, PULL BOXES, AND JUNCTION BOXES, PROTECTIVE EDGES OR FILLETS SHALL BE PROVIDED ON ACCESS THAT MAY INJURE MAINTENANCE STAFF OR DAMAGE TOOLS.
8. FOR ALL ELECTRICAL EQUIPMENT THAT REQUIRES REAR ACCESS, ACCESS COVERS SHALL BE FREE TO OPEN, TRANSLATE, OR ROTATE ITS FULL DISTANCE.
9. CHECK POINTS, ADJUSTMENT POINTS, TEST POINTS, CABLES, CONNECTORS, AND LABELS SHALL BE ACCESSIBLE AND VISIBLE DURING MAINTENANCE. SUFFICIENT SPACE SHALL BE PROVIDED FOR THE USE OF TEST EQUIPMENT AND OTHER REQUIRED TOOLS WITHOUT DIFFICULTY OR HAZARD.
10. EQUIPMENT INSTALLATIONS SHALL REDUCE TO A MINIMUM THE INCIDENCE OF PREVENTIVE AND CORRECTIVE MAINTENANCE, MINIMIZE MAINTENANCE COMPLEXITY, AND MINIMIZE THE TIME REQUIREMENTS FOR MAINTENANCE. CABLES SHALL BE ROUTED SO AS TO BE READILY ACCESSIBLE FOR INSPECTION AND REPAIR.
11. ALL FUSES AND CIRCUIT BREAKERS SHALL BE READILY ACCESSIBLE FOR REMOVAL, REPLACEMENT, AND RESETTING. THE CONDITION OF FUSES (GOOD OR BLOWN) SHALL BE READILY DISCERNIBLE WITHOUT HAVING TO REMOVE THE FUSE.

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301.832.2527

KEY PLAN

GRAPHIC SCALE(S)

DATE: 12/18/24
SUBMISSION: FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

DISTRICT OF COLUMBIA · ADAM FRY · PE922685 · ELECTRICAL · 01/09/25 · PROFESSIONAL ENGINEER

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME: SI MALL CAROUSEL
ADDRESS: NATIONAL MALL WASHINGTON DC 20001

PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER:

DRAWING TITLE: ELECTRICAL LEGEND
DRAWING TYPE:
WORKING STAFF:

DESIGNED BY	DRAWN BY	CHECKED BY
ARF	MAM	ARF

SHEET NO.: 00_OF_11

DISCIPLINE	TYPE	SEQUENCE
E-	0	01KP

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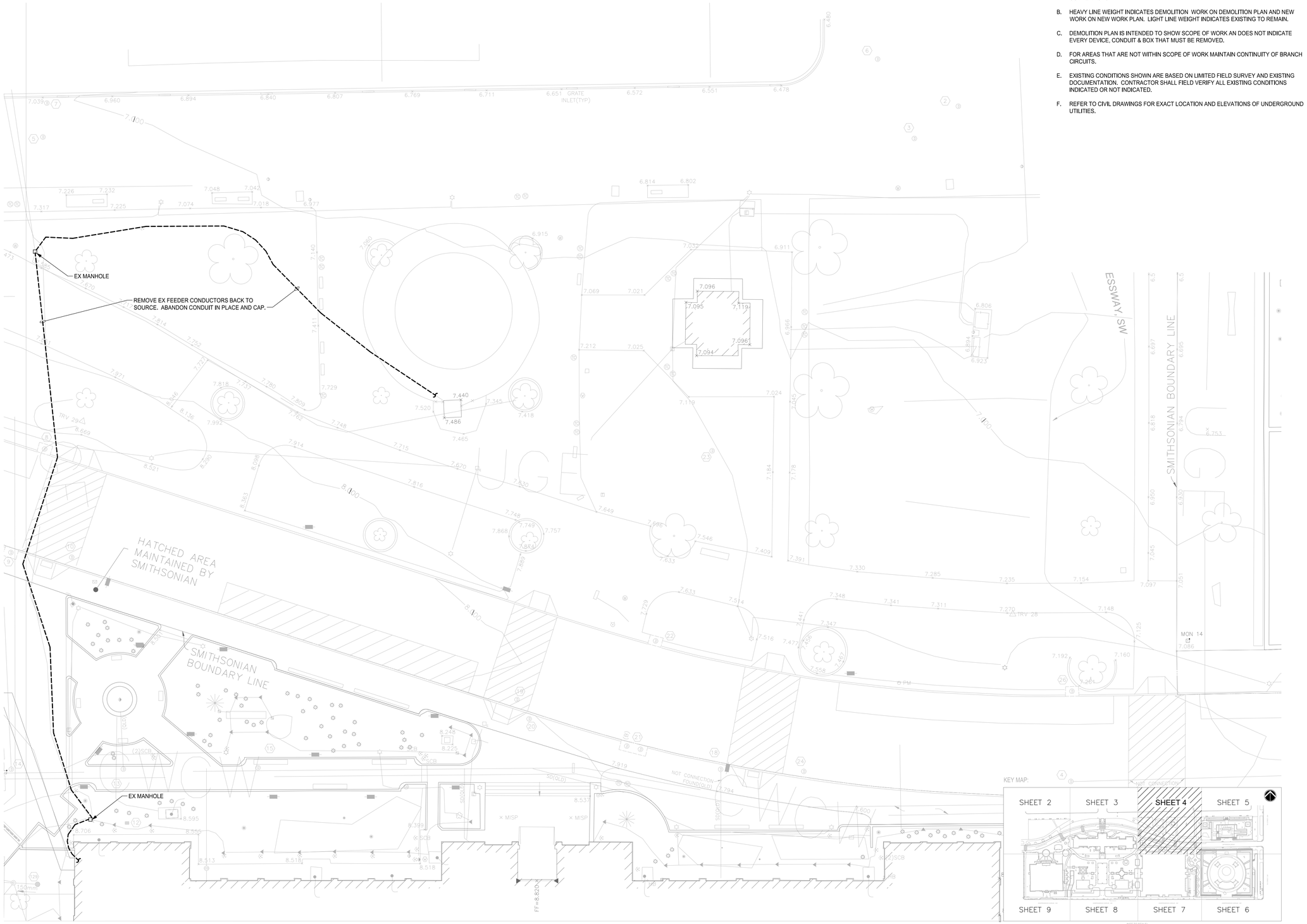

DRAWING NOTES:

A. REFER TO DRAWING E-001KP FOR SYMBOLS, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES DEMOLITION WORK ON DEMOLITION PLAN AND NEW WORK ON NEW WORK PLAN. LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN.

C. DEMOLITION PLAN IS INTENDED TO SHOW SCOPE OF WORK AN DOES NOT INDICATE EVERY DEVICE, CONDUIT & BOX THAT MUST BE REMOVED.

D. FOR AREAS THAT ARE NOT WITHIN SCOPE OF WORK MAINTAIN CONTINUITY OF BRANCH CIRCUITS.

E. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INDICATED OR NOT INDICATED.

F. REFER TO CIVIL DRAWINGS FOR EXACT LOCATION AND ELEVATIONS OF UNDERGROUND UTILITIES.

1 ED100SP — SITE PLAN - ELECTRICAL - DEMOLITION

SCALE: 1/16" = 1'-0"

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DISTRICT OF COLUMBIA — ADAM FRY — PE922685 — ELECTRICAL — PROFESSIONAL ENGINEER — 01/09/25

KEY PLAN

IF DRAWING IS REDUCED, USE GRAPHIC SCALE

12' 0' 6' 12'

1/16" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

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Washington DC 20560

BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE / SF PROJECT NUMBER / A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE / DRAWING TYPE / WORKING STAFF	SITE PLAN - ELECTRICAL - DEMOLITION ELECTRICAL ARF (DESIGNED BY) / MAM (DRAWN BY) / ARF (CHECKED BY)
SHEET NO.	00_OF_11
DISCIPLINE / TYPE / SEQUENCE	ED / 1 / 00SP

P:\22\3001\DWG\ED\00SP SITE PLAN - ELECTRICAL - DEMOLITION.DWG – 01/09/25 2:02 PM

DRAWING NOTES:

A. REFER TO DRAWING E-001KP FOR SYMBOLS, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES DEMOLITION WORK ON DEMOLITION PLAN AND NEW WORK ON NEW WORK PLAN. LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN.

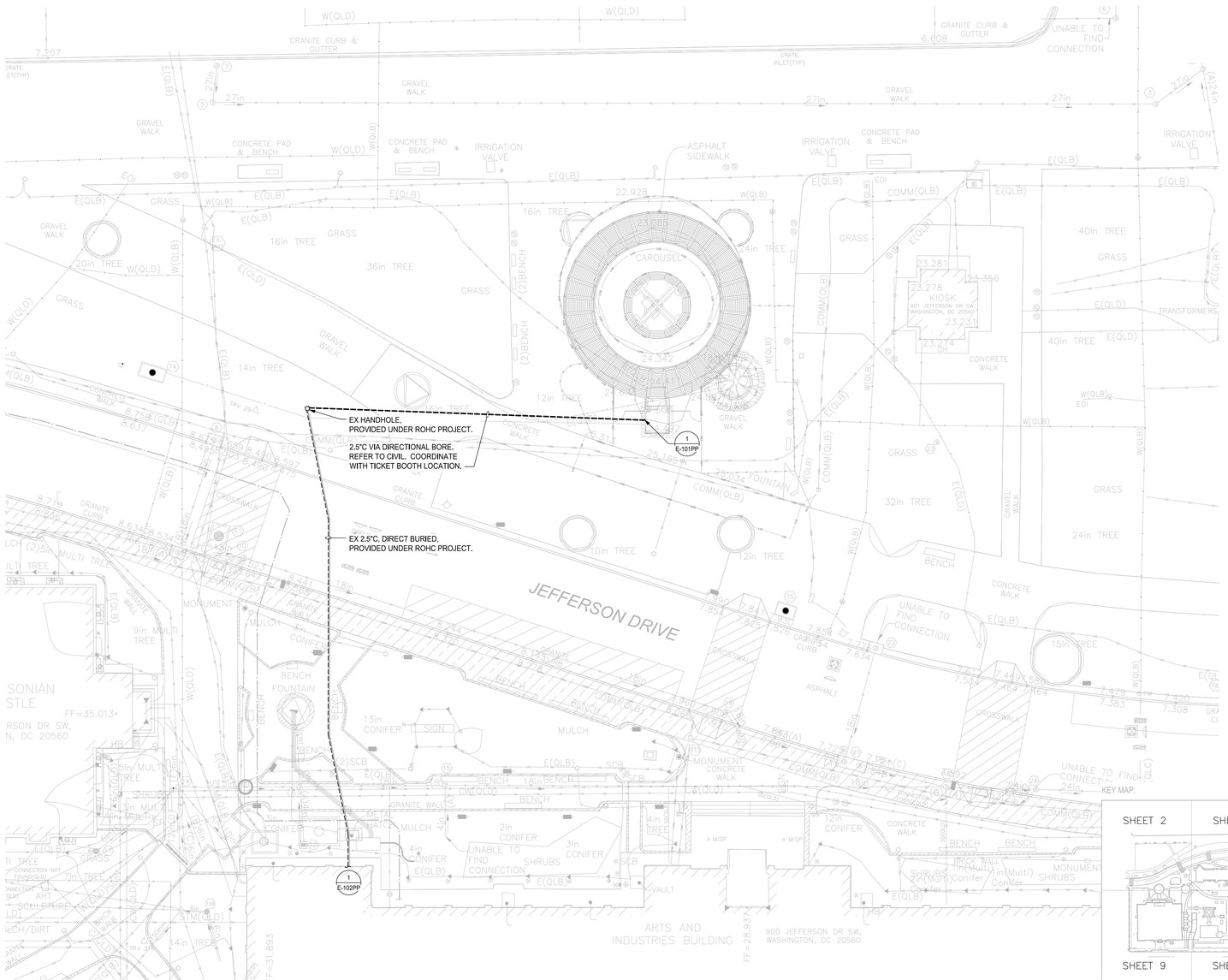
C. DEMOLITION PLAN IS INTENDED TO SHOW SCOPE OF WORK AN DOES NOT INDICATE EVERY DEVICE, CONDUIT & BOX THAT MUST BE REMOVED.

D. FOR AREAS THAT ARE NOT WITHIN SCOPE OF WORK MAINTAIN CONTINUITY OF BRANCH CIRCUITS.

E. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INDICATED OR NOT INDICATED.

F. REFER TO CIVIL DRAWINGS FOR EXACT LOCATION AND ELEVATIONS OF UNDERGROUND UTILITIES.

G. COORDINATE ALL WORK WITH NMNH/NHB HIGH-VOLTAGE SHOP.



1
E-100SP

SITE PLAN - ELECTRICAL - NEW WORK

SCALE: 1" = 20'-0"

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DISTRICT OF COLUMBIA
ADAM FRY
PE922685
ELECTRICAL
PROFESSIONAL ENGINEER
01/09/25

KEY PLAN

IF DRAWING IS REDUCED, USE GRAPHIC SCALE

20' 10' 0' 10' 20'

1" = 20'

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

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BUILDING NAME / ADDRESS	SI MALL CAROUSEL NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE / SF PROJECT NUMBER / A/E PROJECT NUMBER	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS 2399615
DRAWING TITLE / DRAWING TYPE / WORKING STAFF	SITE PLAN - ELECTRICAL - NEW WORK ELECTRICAL ARF (DESIGNED BY) / MAM (DRAWN BY) / ARF (CHECKED BY)
SHEET NO.	00_OF_11
E- (DISCIPLINE) / 1 (TYPE) / 00SP (SEQUENCE)	

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DRAWING NOTES:

A. REFER TO DRAWING E-001KP FOR SYMBOLS, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES DEMOLITION WORK ON DEMOLITION PLAN AND NEW WORK ON NEW WORK PLAN. LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN.

C. DEMOLITION PLAN IS INTENDED TO SHOW SCOPE OF WORK AN DOES NOT INDICATE EVERY DEVICE, CONDUIT & BOX THAT MUST BE REMOVED.

D. FOR AREAS THAT ARE NOT WITHIN SCOPE OF WORK MAINTAIN CONTINUITY OF BRANCH CIRCUITS.

E. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INDICATED OR NOT INDICATED.

F. REFER TO CIVIL DRAWINGS FOR EXACT LOCATION AND ELEVATIONS OF UNDERGROUND UTILITIES.

◇ SPECIAL NOTES:

1 EPO BUTTON TO SHUNT TRIP POWER TO CAROUSEL. LOCATE WITHIN 6' OF OPERATOR.

2 4#3 + #8 GND IN 2" DIRECT BURIED CONDUIT.

3 3P100A NFS, NEMA 4. MAFC TO CAROUSEL.

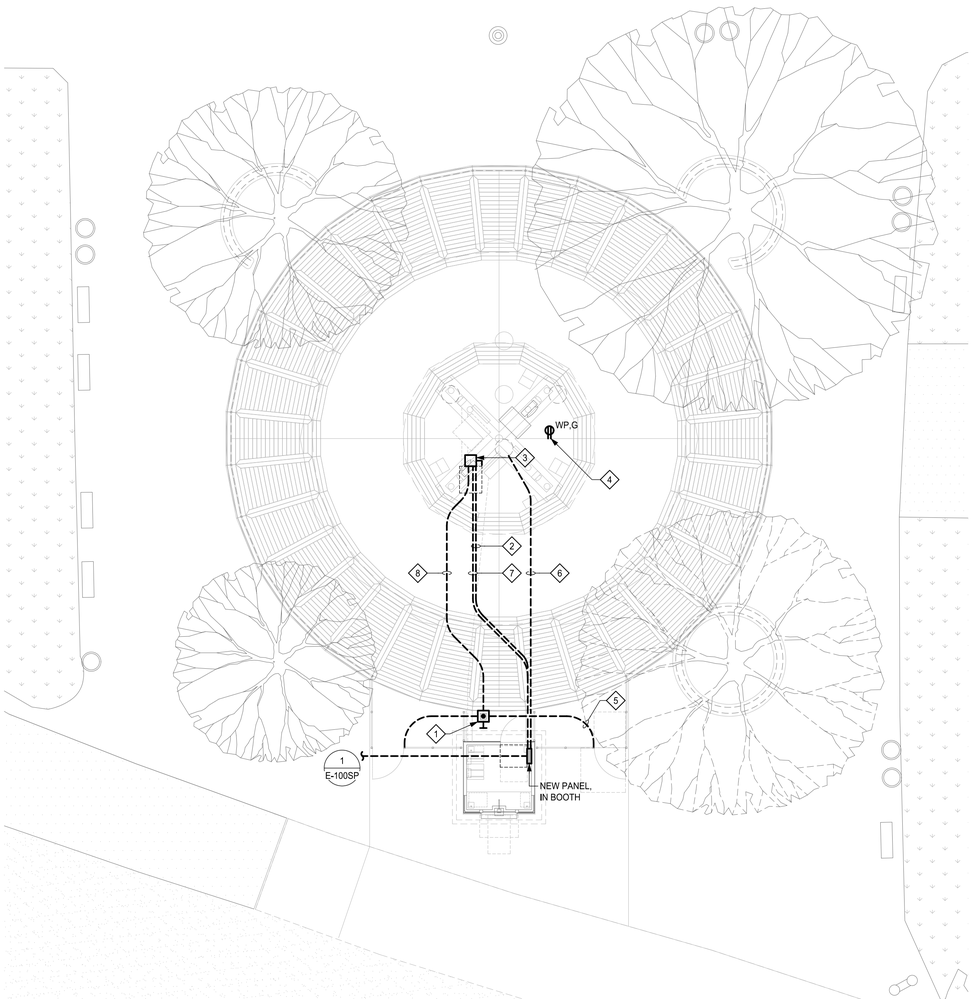
4 COORDINATE FINAL LOCATION WITH CAROUSEL INSTALLER. SERVE FROM PANEL IN BOOTH, PROVIDE DEDICATED 120V, 20A BRANCH CIRCUIT.

5 PROVIDE ¾"C FROM OPERATOR'S POST TO GATE POSTS.

6 PROVIDE SPARE 2"C FROM TICKET BOOTH TO CENTER OF CAROUSEL. CAP AT BOTH ENDS.

7 PROVIDE ¾"C FOR EMERGENCY STOP BACK TO TICKET BOOTH.

8 PROVIDE (2) ¾"C FROM OPERATOR'S POST TO PANEL AT CENTER OF CAROUSEL. PROVIDE (1) ½"C FROM OPERATOR'S POST TO PANEL AT CENTER OF CAROUSEL.



1 / E-101PP CAROUSEL PART PLAN - ELECTRICAL

SCALE: 1/8" = 1'-0"

HARTMAN-COX ARCHITECTS

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DISTRICT OF COLUMBIA
ADAM FRY
PE922685
ELECTRICAL
PROFESSIONAL ENGINEER
01/09/25

KEY PLAN

IF DRAWING IS REDUCED, USE GRAPHIC SCALE

8' 0' 4' 8'

1/8" = 1'-0"

GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

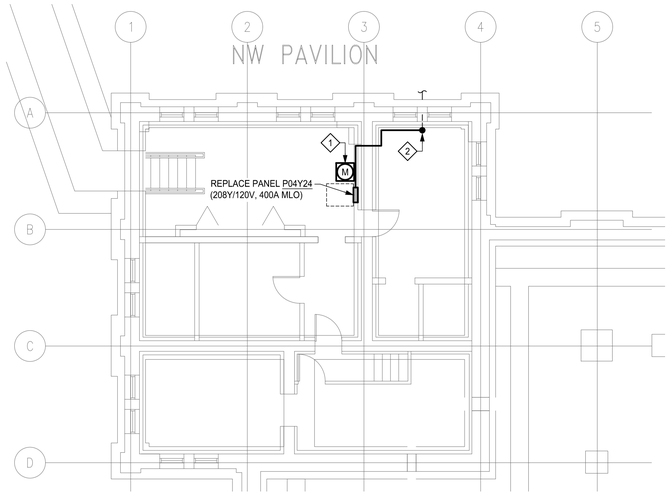
REVISION	REVISION
REVISION 1	
REVISION 2	
REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington DC 20560

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	CAROUSEL PART PLAN - ELECTRICAL
DRAWING TYPE	ELECTRICAL
WORKING STAFF	ARF (DESIGNED BY) / MAM (DRAWN BY) / ARF (CHECKED BY)
SHEET NO.	00_OF_11
	E- (DISCIPLINE) / 1 (TYPE) / 01PP (SEQUENCE)

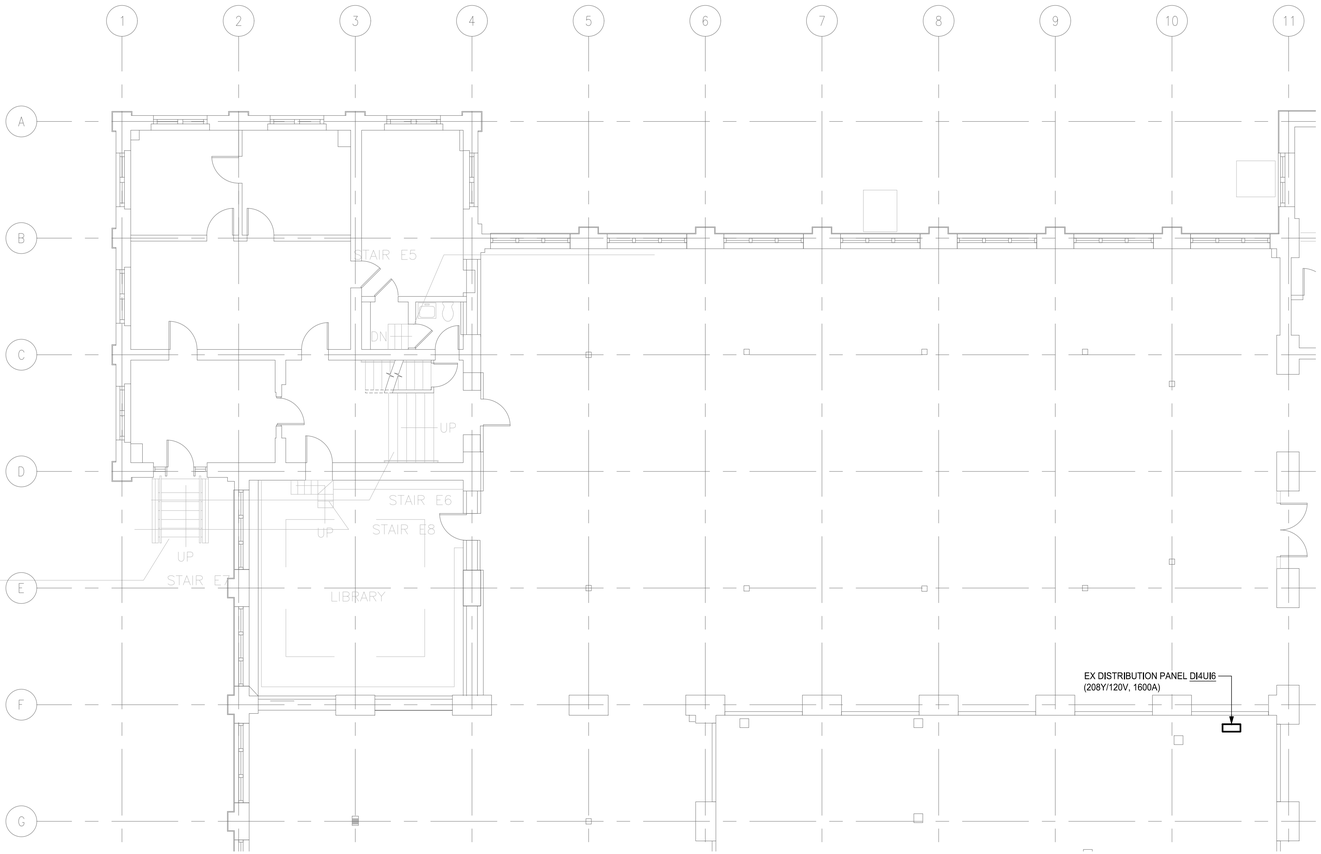
P:\22130010\DWG\E-101PP CAROUSEL PART PLAN - ELECTRICAL.DWG — 01/09/25 2:02 PM



1 E-102PP

AIB BUILDING - PART BASEMENT FLOOR PLAN - ELECTRICAL

SCALE: 1/8" = 1'-0"



2 E-102PP

AIB BUILDING - PART FIRST FLOOR PLAN - ELECTRICAL

SCALE: 1/8" = 1'-0"

DRAWING NOTES:

A. REFER TO DRAWING E-001KP FOR SYMBOLS, ABBREVIATIONS, AND DRAWING CONVENTIONS.

B. HEAVY LINE WEIGHT INDICATES DEMOLITION WORK ON DEMOLITION PLAN AND NEW WORK ON NEW WORK PLAN. LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN.

C. DEMOLITION PLAN IS INTENDED TO SHOW SCOPE OF WORK AN DOES NOT INDICATE EVERY DEVICE, CONDUIT & BOX THAT MUST BE REMOVED.

D. FOR AREAS THAT ARE NOT WITHIN SCOPE OF WORK MAINTAIN CONTINUITY OF BRANCH CIRCUITS.

E. EXISTING CONDITIONS SHOWN ARE BASED ON LIMITED FIELD SURVEY AND EXISTING DOCUMENTATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INDICATED OR NOT INDICATED.

◇ SPECIAL NOTES:

1 PROVIDE NEW METER FOR CAROUSEL FEEDER.

2 CONNECT TO CONDUIT PROVIDED UNDER ROHC PROJECT.

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KEY PLAN

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8' 0' 4' 8'

1/8" = 1'-0"

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REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

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Washington DC 20560

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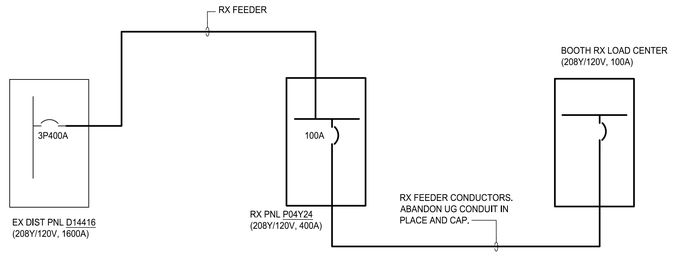
ADDRESS	NATIONAL MALL WASHINGTON DC 20001
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	
DRAWING TITLE	AIB BUILDING - PART BASEMENT & FIRST FLOOR PLANS - ELECTRICAL
DRAWING TYPE	ELECTRICAL
WORKING STAFF	ARF (DESIGNED BY) / MAM (DRAWN BY) / ARF (CHECKED BY)

SHEET NO.	DISCIPLINE	TYPE	SEQUENCE
00_OF_11	E-	1	02PP

P:\22\1300\10\WGIE-102PP AIB BLDG PART BASEMENT & FIRST FLOOR PLANS - ELECTRICAL.DWG -- 01/09/25 2:02 PM

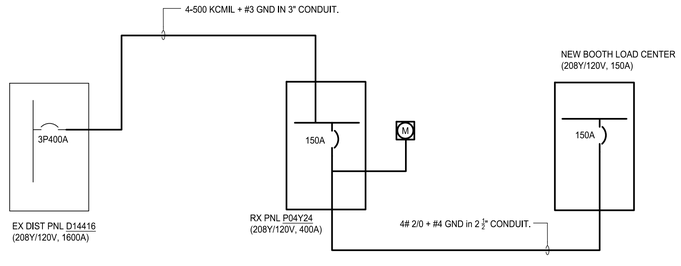
PANELBOARD: P04Y24	BUS RATING: 400A	MAIN: MLO
MIN AIC: 22,000	VOLTS: 208Y/120V	PHASES: 3 WIRES: 4
NEMA 1 ENCLOSURE	MOUNTING: SURFACE	BRANCH CIRCUIT DEVICE: CB
LOCATION: AIB BASEMENT	NOTES:	

CKT #	ITEM SERVED	CB P	CB TA	AØ (KVA)	BØ (KVA)	CØ (KVA)	CB P	CB TA	ITEM SERVED	CKT #
1				0.0 0.0						2
3	EXISTING LOAD	3	100		0.0 0.0		3	150	CAROUSEL	4
5						0.0 0.0				6
7				0.0 0.0						8
9	EXISTING LOAD	3	100		0.0 0.0		3	100	EXISTING LOAD	10
11						0.0 0.0				12
13				0.0 0.0						14
15	SPACE	3	--		0.0 0.0		3	--	SPACE	16
17						0.0 0.0				18
19				0.0 0.0						20
21	SPACE	3	--		0.0 0.0		3	--	SPACE	22
23						0.0 0.0				24



1 E-601SH PART ONE - LINE DIAGRAM - DEMOLITION

NOT TO SCALE



2 E-601SH PART ONE - LINE DIAGRAM - NEW WORK

NOT TO SCALE

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01/09/25
PROFESSIONAL ENGINEER

KEY PLAN

GRAPHIC SCALE(S)

DATE: 12/18/24

SUBMISSION: FINAL

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REVISION 3	
REVISION 4	
REVISION 5	
REVISION 6	

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BUILDING NAME / ADDRESS: SI MALL CAROUSEL
NATIONAL MALL
WASHINGTON DC 20001

PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER:

DRAWING TITLE: DETAILS & SCHEDULES -- ELECTRICAL
DRAWING TYPE:
WORKING STAFF: ARF (DESIGNED BY) | MAM (DRAWN BY) | ARF (CHECKED BY)

SHEET NO. 00_OF_11

E- (DISCIPLINE) | 6 (TYPE) | 01SH (SEQUENCE)

P:\2213007\DWG\E-601SH DETAILS & SCHEDULES - ELECTRICAL.DWG -- 01/09/25 2:02 PM

GENERAL NOTES

1. THE TERM "CONTRACT DOCUMENTS" MEANS THE SPECIFICATIONS, DRAWINGS, ADDENDUMS, SKETCHES AND OTHER DOCUMENTATION THAT DEFINE THE WORK..
2. USE CONTRACT DOCUMENTS IN COMBINATION TO DEFINE THE WORK REQUIREMENTS. VERIFY ANY CONFLICT WITH THE OWNER PRIOR TO INITIATING WORK. PROCEEDING WITH WORK IS AT THE CONTRACTORS' OWN RISK, UNTIL CLARIFICATIONS OF CONFLICTS ARE ISSUED TO THE CONTRACTORS BY THE OWNER OR OWNERS AUTHORIZED REPRESENTATIVE
3. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND INDICATE THE GENERAL PROPOSED LOCATION OF EQUIPMENT, CABLE PATHWAYS AND OUTLETS. COORDINATE LOCATION OF EQUIPMENT AND OUTLETS AND OTHER SUPPORTING ITEMS WITH ALL OTHER EXISTING UTILITIES AND TRADES.
4. COORDINATE ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. BRING ANY CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS TO THE COR'S ATTENTION IMMEDIATELY. PROCEEDING WITH ANY WORK PRIOR TO THE COR ISSUING CLARIFICATION OF CONFLICTS IS AT THE CONTRACTOR(S) OWN RISK.
5. FIELD VERIFY AND COORDINATE DEVICE LOCATIONS AND POWER REQUIREMENTS. WHERE CONFLICTS OCCUR, COORDINATE AND VERIFY FINAL LOCATIONS WITH THE CONTRACTING OFFICER'S REPRESENTATIVE PRIOR TO INSTALLATION.
6. THE TERM "CONTRACTOR" OR "GENERAL CONTRACTOR" MEANS THE PRIME CONTRACTOR RESPONSIBLE FOR ALL WORK DEFINED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS..
7. THE TERM "ELECTRICAL CONTRACTOR" MEANS A LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
8. THE TERM "AUDIO VISUAL CONTRACTOR" MEANS A LICENSED AND QUALIFIED LOW VOLTAGE COMMUNICATIONS SUBCONTRACTOR PERFORMING WORK FOR THE GENERAL CONTRACTOR.
9. THE TERM "CONTRACTING OFFICER'S REPRESENTATIVE" MEANS THE OWNER'S AUTHORIZED REPRESENTATIVE.
10. THE TERM "PROVIDE" MEANS FURNISH AND INSTALL, COMPLETE AND READY FOR USE.
11. DETAIL REFERENCES ARE NOT NECESSARILY NUMBERED INCREMENTALLY. A GAP IN NUMBERING DOES NOT INDICATE MISSING INFORMATION. DETAIL NAMES AND NUMBERS ARE SPECIFIC TO THIS DESIGN PACKAGE AND DO NOT CORRESPOND TO OTHER PUBLISHED DOCUMENTS.
12. PROVIDE LABOR, TOOLS, CONTAINERS, AND SERVICES AS REQUIRED TO MAINTAIN A CLEAN AND SAFE WORK SITE. REMOVE ALL EXCESS MATERIAL AND DEBRIS FROM THE WORK SITE. CLEAN THE WORK SITE DAILY
13. PROVIDE ALL DOCUMENTATION INCLUDING SHOP-DRAWINGS DESIGN DOCUMENTATION, AS-BUILT DOCUMENTATION, PRODUCT CUTSHEETS, PROGRAMMING WORKSHEETS, AND PROJECT COMMUNICATIONS TO THE OWNER FOR APPROVAL BEFORE STARTING WORK.
14. PAY ALL FEES AND OBTAIN ALL PERMITS AND LICENSES REQUIRED TO PERFORM THE WORK DEFINED IN THE CONTRACT DOCUMENTS.
15. PROVIDE NEW MATERIAL AND EQUIPMENT THAT CONFORM TO THE APPLICABLE STANDARDS OF UL, NEC, NEMA, ASTM AND ANSI
16. PROVIDE LABOR, TOOLS, CONTAINERS, AND SERVICES AS REQUIRED TO MAINTAIN A CLEAN AND SAFE WORK SITE. REMOVE ALL EXCESS MATERIAL AND DEBRIS FROM THE WORK SITE. CLEAN THE WORK SITE DAILY.

17 ALL EQUIPMENT TO WHICH REAR ACCESS IS REQUIRED SHALL BE FREE TO OPEN, TRANSLATE, OR ROTATE ITS FULL DISTANCE.

18 PROTECTIVE EDGES OR FILLETS SHALL BE PROVIDED ON ACCESSES THAT MIGHT INJURE MAINTAINERS OR THEIR TOOLS.

19 CHECK POINTS, ADJUSTMENT POINTS, TEST POINTS, CABLES, CONNECTORS, AND LABELS SHALL BE ACCESSIBLE AND VISIBLE DURING MAINTENANCE.

20 SUFFICIENT SPACE SHALL BE PROVIDED FOR THE USE OF TEST EQUIPMENT AND OTHER REQUIRED TOOLS WITHOUT DIFFICULTY OR HAZARD.

21 EQUIPMENT DESIGN SHALL REDUCE TO A MINIMUM THE INCIDENCE OF PREVENTIVE AND CORRECTIVE MAINTENANCE, MINIMIZE MAINTENANCE COMPLEXITY, AND MINIMIZE THE TIME REQUIREMENTS FOR MAINTENANCE.

RACEWAY NOTES

1. PROVIDE CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION. WHERE AVAILABLE, AV CABLES WILL BE IN SHARED IT CABLE TRAY. PROVIDE CONDUIT CONCEALED AREAS. IN AREAS WITH ACCESSIBLE CEILING CONDUIT IS NOT REQUIRED.
2. PROVIDE PLASTIC BUSHING AND PULL STRING WITH ALL CONDUITS.
3. PROVIDE CONDUIT AND RACEWAYS THAT COMPLY WITH NEC REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS GOVERN.
4. REGARDLESS OF NEC OR LOCAL CODES AND ORDINANCES, PROVIDE CONDUIT AND RACEWAYS SIZED FOR A MAXIMUM FILL OF 40%.
5. PROVIDE COMPRESSION TYPE CONDUIT FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE.
6. REGARDLESS OF NEC OR LOCAL CODES AND CONDUIT FILL REQUIREMENTS, CONDUIT SHALL BE 1 1/4" MINIMUM DIAMETER UNLESS OTHERWISE NOTED.
7. PROVIDE COLOR CODING OF ALL AV CONDUITS AND RACEWAYS. ALL CONDUITS AND RACEWAYS SHALL BE PERMANENTLY MARKED BY A 1 INCH BAND AND I INCH BAND EVERY 10 FEET.
8. PROVIDE SEPARATE RACEWAY. CONDUITS, JUNCTION BOXES AND ENCLOSURES FOR ALL AV WIRE AND CABLE. DO NOT COMBINE 120VAC OR ANY POWER DISTRIBUTION CIRCUIT WITH AV WIRE AND CABLE.
9. ELECTRICAL FEEDS OR LIGHTING ARE NOT TO BE RUN PARALLEL WITH AV LINES OR RACEWAYS. IF ELECTRICAL FEEDS OR LIGHTING MUST RUN PARALLEL TO AV LINES, A MINIMUM OF 4 FT OF SEPARATION MUST BE MAINTAINED.
10. INSTALL CONDUIT AND CABLE TRAY/LADDER RACK TO MAINTAIN A MINIMUM OF 5" SEPARATION FROM FLUORESCENT LIGHTING.
11. ALL CONDUIT SHALL BE DEBURRED, CLEANED, CAPPED, TAGGED, BUSHED, AND FURNISHED WITH MEASURED PULL STRINGS
12. PENETRATION IN FIRE RESISTIVE WALLS, FLOORS, CEILINGS, OR ROOF ASSEMBLES SHALL BE PROPERLY CLEANED AND SEALED PER FIRESTOPPING SPECIFICATION.

13 CABLES SHALL BE ROUTED SO AS TO BE READILY ACCESSIBLE FOR INSPECTION AND REPAIR.

WIRE AND CABLE NOTES

1. PROVIDE UTP CAT6A CABLE FOR ALL ETHERNET CONNECTIONS TERMINATED T568B.
2. WIRE AND CABLE SPLICES ARE NOT PERMITTED.

3 PANEL, CONSOLE, AND RACK MOUNTED COMPONENTS SHALL HAVE SLACK CABLE LENGTHS OR MAINTENANCE LOOPS SUFFICIENT FOR REMOVAL OF THE CONNECTORS AFTER THE COMPONENT HAS BEEN EXTRACTED FROM ITS INSTALLED LOCATION, UNLESS ADEQUATE INTERNAL ACCESS (PHYSICAL AND VISUAL) IS PROVIDED.

4 CABLES SHALL NOT BE ROUTED EXTERNAL TO THE FACE OF THE EQUIPMENT CABINET.

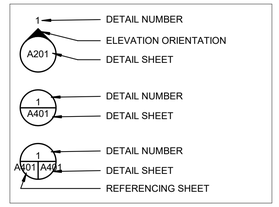
ABBREVIATIONS

ACG	ABOVE CEILING GRID
AFF	ABOVE FINISHED FLOOR
AMP	AMPLIFIER
AOIP	AUDIO OVER INTERNET PROTOCOL
AUD	AUDIO
AV	AUDIO VISUAL
AVOIP	AUDIO VISUAL OVER INTERNET PROTOCOL
BAL	BALANCED AUDIO
CAM	CAMERA
CAT	CATEGORY
CM	CEILING MOUNTED
DA	DISTRIBUTION AMPLIFIER
DAN	DANTE
DSP	DIGITAL SIGNAL PROCESSOR
EMT	ELECTRICAL METALLIC TUBING
ENET	ETHERNET
ER	EQUIPMENT ROOM
FB	FLOOR BOX
FUT	FUTURE
GPI	GENERAL PURPOSE INPUT
GPO	GENERAL PURPOSE OUTPUT
GYP	GYPSUM WALL BOARD
HD	HIGH DEFINITION
HDMI	HIGH DEFINITION MULTI MEDIA INTERFACE
IAW	IN ACCORDANCE WITH
IN	INPUT
IP	INTERNET PROTOCOL
LAN	LOCAL AREA NETWORK
LIA	LOW IMPEDENCE AUDIO
MAX	MAXIMUM
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
NACC	NEAREST ACCESSBILE CEILING CAVITY
NET	ETHERNET
NETSW	NETWORK SWITCH
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OUT	OUTPUT
PC	PERSONAL COMPUTER
POE	POWER OVER ETHERNET
PP	PATCH PANEL
PR	PAIR
PT	POKE THRU
PTZ	PAN-TILT-ZOOM CAMERA
RM	ROOM
RS232	SERIAL INTERFACE
RU	RACK MOUNTING UNIT (1.75")
RX	RECEIVER
SD	STANDARD DEFINITION
SMF	SINGLE MODE FIBER
SPK	SPEAKER
STP	SHIELDED TWISTED PAIR
SW	SWITCH OR SWITCHER
TBD	TO BE DETERMINED
TR	TELECOMMUNICATIONS ROOM
TV	TELEVISION
TX	TRANSMITTER
TYP	TYPICAL
USB	UNIVERSAL SERIAL BUS
UTP	UNSHIELDED TWISTED PAIR
VTC	VIDEO TELECONFERENCING
WM	WALL MOUNTED
WP	WALL PLATE

SYMBOL LIST

SYMBOL	USE / DESCRIPTION	INFRASTRUCTURE REQUIREMENTS	AV EQUIPMENT
	AV CABINET		
(S) Y	TWO-WAY SPEAKER Y= MOUNT TYPE P= POST		
SW Y	SUBWOOFER Y= MOUNT TYPE P= POST		

ELEVATION AND DETAIL CALLOUT



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GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

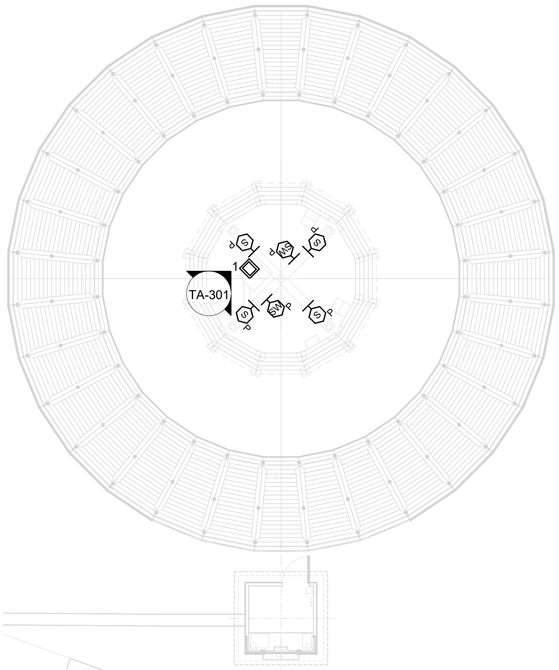
REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	12622936
DRAWING TITLE	AUDIOVISUAL SYMBOLS, NOTES & ABBREVIATIONS
WORKING STAFF	MSS (DESIGNED BY) / MSS (DRAWN BY) / DWE (CHECKED BY)
SHEET NO.	TA–001 (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)
OF	

12/18/2024 2:07:30 PM
TA-001 BY DWE 06.05.2024 DESIGN DEVELOPMENT



1
TA-101

AUDIOVISUAL FLOOR PLAN

SCALE = 1/8" = 1'-0"

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KEY PLAN

0 8' 16' 32'
1/16"=1'-0"
0 4' 8' 16'
1/8"=1'-0"
0 1' 2' 4'
1/2"=1'-0"

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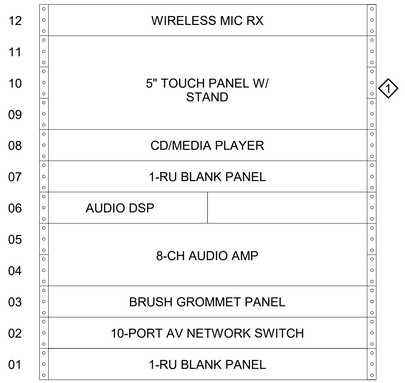
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	12622936
DRAWING TITLE	AUDIOVISUAL PLANS
WORKING STAFF	DESIGNED BY: MSS; DRAWN BY: MSS; CHECKED BY: DWE
SHEET NO. OF	TA-101 (DISCIPLINE TYPE SEQUENCE DRAWING TYPE)

12/18/2024 2:07:31 PM
TA-101 BY SC 06.05.2024 DESIGN DEVELOPMENT

KEYNOTE:

1. THREE RU RACK SHELF



AUDIOVISUAL - CABINET ELEVATION - CAROUSEL

1 / TA-301

SCALE =NTS

12/18/2024 2:07:31 PM
TA-301 BY Approver 06.05.2024 DESIGN DEVELOPMENT

HARTMAN-COX ARCHITECTS

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301.832.2527

GRAPHIC SCALE(S)

DATE: 12/18/24
SUBMISSION: FINAL

REVISION # DATE
REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

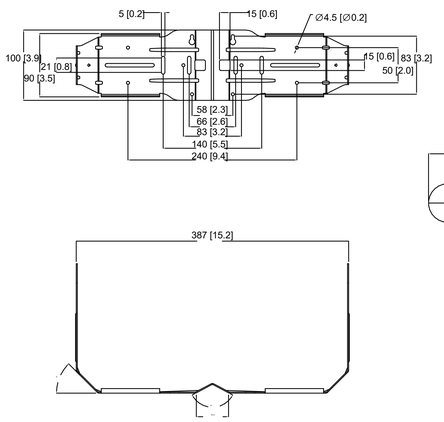
BUILDING NAME: SI MALL CAROUSEL
ADDRESS: 600 MARYLAND AVE, SW

PROJECT TITLE: NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER: 2399615
A/E PROJECT NUMBER: 12622936

DRAWING TITLE: AUDIOVISUAL RACK - ELEVATIONS
WORKING STAFF: MSS (DESIGNED BY) | MSS (DRAWN BY) | DWE (CHECKED BY)

SHEET NO. OF

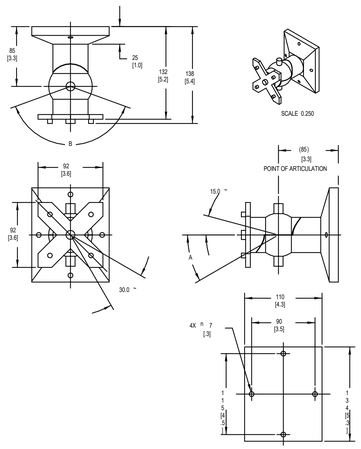
TA–301
DISCIPLINE | TYPE | SEQUENCE | DRAWING TYPE



E1 TA-501

SUBWOOFER MOUNTING BRACKET

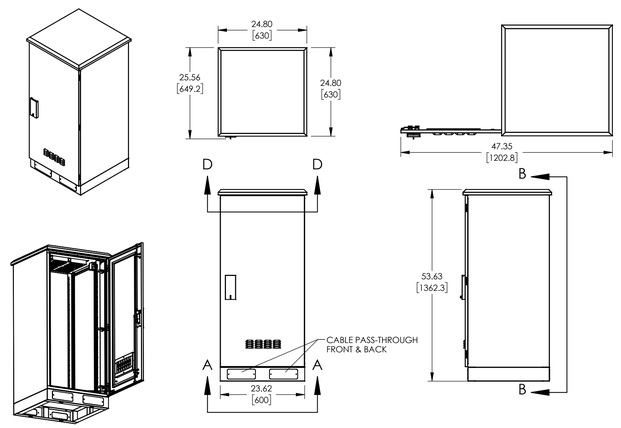
SCALE =NTS



A1 TA-501

POST SPEAKER MOUNT

SCALE =NTS



A6 TA-501

AUDIOVISUAL - CABINET DETAIL

SCALE =NTS

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GRAPHIC SCALE(S)

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12/18/24	FINAL

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A/E PROJECT NUMBER	12622936
DRAWING TITLE	AUDIOVISUAL - DETAILS

WORKING STAFF	DESIGNED BY	DRAWN BY	CHECKED BY
	MSS	MSS	DWE

SHEET NO. OF

TA–501

DISCIPLINE | TYPE | SEQUENCE | DRAWING TYPE

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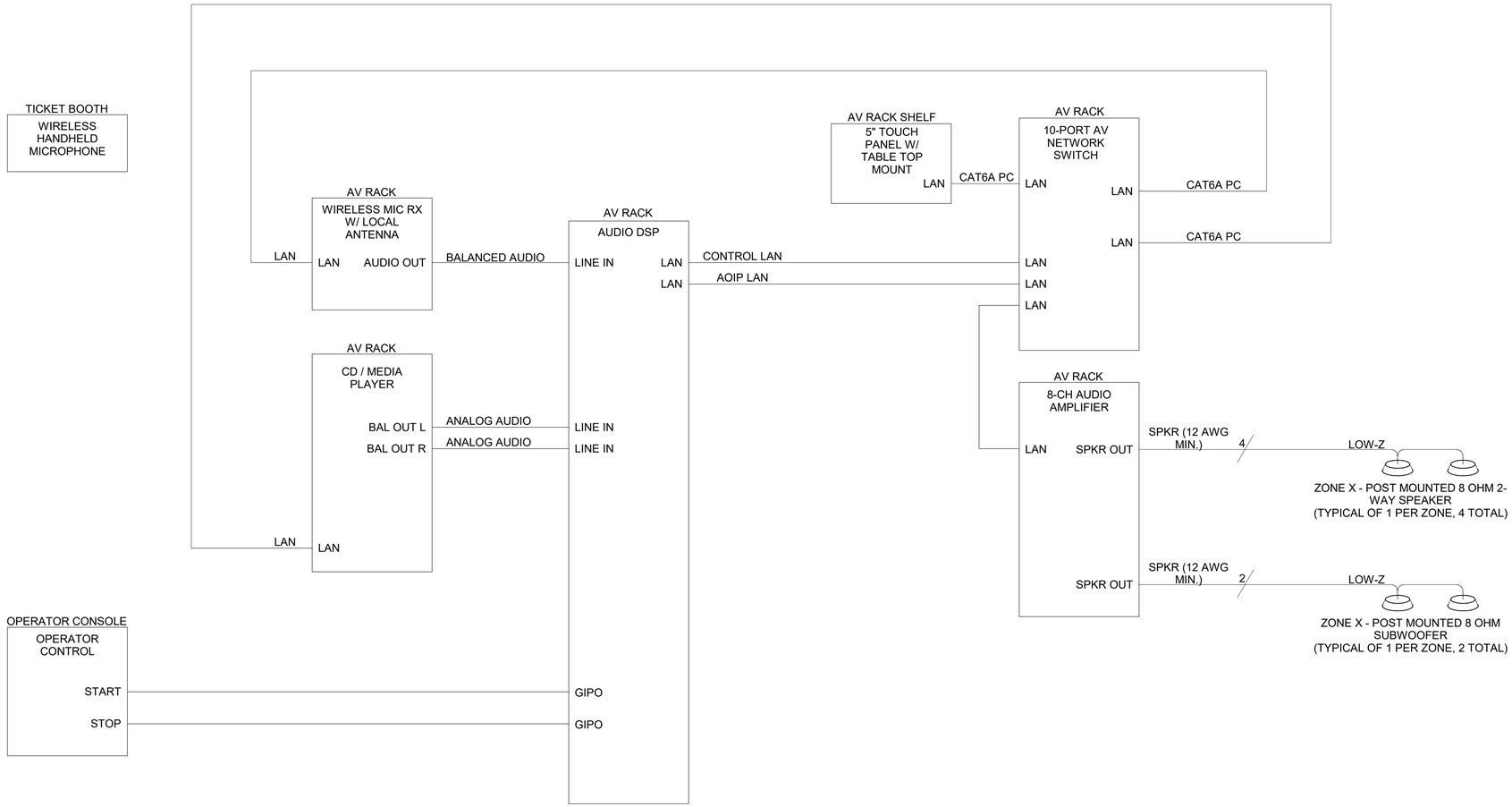

1 TA-601

AUDIOVISUAL - DIAGRAM - CAROUSEL AUDIO

SCALE =NOT TO SCALE

12/18/2024 2:07:32 PM
TA-601 BY SC 06.05.2024 DESIGN DEVELOPMENT

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A/E PROJECT NUMBER	12622936
DRAWING TITLE	AUDIOVISUAL DIAGRAMS

WORKING STAFF	DESIGNED BY	DRAWN BY	CHECKED BY
	MSS	MSS	DWE

SHEET NO. OF

TA — 601

DISCIPLINE | TYPE | SEQUENCE | DRAWING TYPE

GENERAL NOTES

1. THE SCOPE OF THIS PROJECT INCLUDES ONLY PASSIVE COMMUNICATIONS CABLING AND SUPPORTING INFRASTRUCTURE WORK AS SHOWN ON THE DRAWINGS AND DESCRIBED WITH THE ACCOMPANYING SPECIFICATION FOR THE FACILITY IDENTIFIED. PERFORM ALL WORK NECESSARY TO CARRY OUT THE INTENT OF THE CONTRACT DOCUMENTS AND PROVIDE COMPLETE SYSTEMS EVEN THOUGH EACH ITEM MAY NOT BE SPECIFICALLY MENTIONED OR DESCRIBED. ANY AND ALL ACTIVE EQUIPMENT IS NIC AND CONSIDERED TO BE GFGI.
2. THE TERM CONTRACT DOCUMENTS MEANS THE SPECIFICATIONS, DRAWINGS, ADDENDUMS, SKETCHES, AND OTHER DOCUMENTATION THAT DEFINE THE WORK.
3. THE TERM PROVIDE MEANS FURNISH AND INSTALL, COMPLETE AND READY FOR USE.
4. THE TERM OWNER MEANS SMITHSONIAN OR ITS DESIGNATED REPRESENTATIVE OR AGENT.
5. THE TERM CONTRACTOR OR GENERAL CONTRACTOR MEANS THE PRIME CONTRACTOR RESPONSIBLE FOR ALL WORK DEFINED IN THE CONSTRUCTION DOCUMENTS.
6. THE TERM ELECTRICAL CONTRACTOR MEANS A LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
7. THE TERM CABLING CONTRACTOR MEANS A LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR, OR SI-OCIO'S 3RD PARTY CONTRACTOR.
8. THE TERM NEW MEANS CONTRACTOR TO PROVIDE NEW.
9. COORDINATE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. BRING CONFLICTS TO THE OWNER'S ATTENTION IMMEDIATELY. PROCEEDING WITH WORK PRIOR TO THE OWNER ISSUING CLARIFICATION IS AT THE CONTRACTOR'S OWN RISK.
10. PROVIDE ALL LABOR, MATERIAL, CABLE, CONNECTORS, TERMINATION FIELDS, CORDS, TESTING, TRAYS, CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION.
11. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND DEFINE THE GENERAL ARRANGEMENT.
12. EXERCISE EXTREME CARE WHEN ROUGHING IN DEVICES TO NOT DAMAGE NEW OR EXISTING TO REMAIN BUILDING FINISHES.
13. PANELS, CONSOLES, AND RACK MOUNTED COMPONENTS SHALL HAVE SLACK CABLE LENGTHS OR MAINTENANCE LOOPS SUFFICIENT FOR REMOVAL OF THE CONNECTORS AFTER THE COMPONENT HAS BEEN EXTRACTED FROM ITS INSTALLED LOCATION, UNLESS ADEQUATE INTERNAL ACCESS (PHYSICAL AND VISUAL) IS PROVIDED.
14. PROVIDE AND MAINTAIN ALL DOCUMENTATION INCLUDING DESIGN DOCUMENTATION, AS-BUILT DOCUMENTATION, PROGRAMMING WORKSHEETS AND PROJECT COMMUNICATIONS.
15. FIELD VERIFY AND COORDINATE ALL DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, COORDINATE AND VERIFY FINAL LOCATIONS WITH THE OWNER PRIOR TO INSTALLATION.
16. PAY ALL FEES AND OBTAIN ALL PERMITS AND LICENSES AS REQUIRED TO PERFORM THE WORK DEFINED IN THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
17. PROVIDE NEW MATERIAL AND EQUIPMENT THAT CONFORMS TO THE APPLICABLE STANDARDS OF UL, NEC, NEMA, ASTM, AND OTHERS AS IDENTIFIED IN THE TECHNICAL SPECIFICATIONS.
18. GUARANTEE ALL WORK FOR A MINIMUM OF ONE YEAR COMMENCING FROM THE DATE OF FINAL ACCEPTANCE OF THE SYSTEM BY THE OWNER. WHERE IDENTIFIED IN DIV-27 SPECIFICATIONS, CERTIFIED SCS INSTALLATIONS SHALL PROVIDE EXTENDED PRODUCT, LABOR AND APPLICATION ASSURANCE WARRANTIES TO OWNER/TENANT IAW MANUFACTURER'S PROGRAM OFFERING.
19. PROVIDE LABOR, TOOLS, CONTAINERS, AND SERVICES AS REQUIRED TO MAINTAIN A CLEAN AND SAFE WORK SITE. REMOVE EXCESS MATERIAL AND DEBRIS FROM THE WORK SITE. CLEAN THE WORK SITE DAILY.
20. PROVIDE COORDINATION OF WORK WITH OWNER'S NEW AND EXISTING EQUIPMENT PLANS, AND IN CONJUNCTION WITH WORK INSTALLED BY OTHER TRADES.
21. CABLING, CONNECTIVITY COMPONENTS, AND SUPPORTING INFRASTRUCTURE ELEMENTS TO COMPLY WITH NFPA, NEC, UL, LOCAL CODES AND ORDINANCES, BEST INDUSTRY PRACTICES, AND MANUFACTURER INSTALLATION INSTRUCTIONS.
22. PROPERLY SECURE WORK IN OCCUPIED AREAS WITH BARRIERS TO NOT CREATE A SAFETY HAZARD. KEEP MATERIALS SUCH AS TOOLS, LADDERS AND INSTALLATION MATERIAL TO A MINIMUM AND ALLOW EASY PASSAGE OF BUILDING TENANTS. PROVIDE DROP CLOTHS OR OTHERWISE PROTECT BUILDING FINISHES FROM ALL CONSTRUCTION DEBRIS AND DUST. REMOVE TRASH AND DEBRIS ON A DAILY BASIS AND RESTORE AREAS TO PRE CONSTRUCTION CONDITIONS AS WORK IS COMPLETED.
23. OWNER IS VERY SENSITIVE TO VIBRATION, DUST, AND NOISE. ANY WORK ACTIVITIES THAT GENERATE VIBRATION NEED TO BE TESTED AND SCHEDULED IN ADVANCED. SHOULD ACTIVITIES EXCEED OWNER'S SET LIMITS, THE OWNER HAS THE RIGHT TO STOP WORK, PROVIDE AN ALTERNATE DATE AND TIME TO COMPLETE VIBRATION GENERATING WORK.
24. SLEEVES IN WALLS AND FLOORS SHALL EXTEND 1" TO 3" BEYOND THE FINISHED SURFACE. PROVIDE NYLON BUSHINGS ON ENDS OF SLEEVES. PROVIDE 4" EZ-PATHS UNLESS NOTED OTHERWISE.
25. FINISH ALL CONDUITS AT LEAST 4" BEYOND FINISHED SURFACE. PROVIDE BOND BUSHINGS ON ALL ENDS.
26. PROVIDE PULL TAPES OR PULL-LINES IN ALL LOW VOLTAGE CONDUITS. INCLUDE REPLACEMENT PULL-TAPES OR -LINES WITH EACH SUBSEQUENT CABLE PULL UNTIL CONDUIT IS RENDERED FULL. TIE ALL LINES OFF AT EACH END.
27. PROVIDE A LABEL AT EACH END OF CONDUIT RUN NOTING THE LOCATION OF THE OTHER END.
28. SLEEVE AND FIRE STOP PENETRATIONS OF RATED WALLS AND FLOORS BY A UL LISTED METHOD AND MANNER TO MAINTAIN THE ORIGINAL F- AND T-RATINGS.
29. COORDINATE TELECOMMUNICATION PATHWAYS WITH OTHER TRADES. MAINTAIN A MINIMUM SEPARATION OF 48" FROM LARGE MOTORS/TRANSFORMERS; MINIMUM 12" SEPARATION BETWEEN PARALLEL RUNS OF TELECOM PATHWAYS AND ELECTRICAL CIRCUITS; MINIMUM SEPARATION OF 5" FROM LIGHT FIXTURES.
30. INSTALLATION OF ALL CABLE TRAY SYSTEMS IS PREDICATED ON NOMINAL PROVISIONS CONSISTING OF 12" MINIMUM CLEARANCES ABOVE SIDE RAILS AND TO ONE SIDE OF THE ROUTE IN ORDER TO FACILITATE TECHNICIAN ACCESS DURING CABLE INSTALLATION ACTIVITIES. OTHER FORMS OF WIRE HARNESS HW SHALL ALSO BE LOCATED FOR READY ACCESS. ALL CABLES SHALL BE ROUTED SO AS TO BE READILY ACCESSIBLE FOR INSPECTION AND REPAIR.
31. REFER TO RCP SERIES DRAWINGS FOR ABOVE CEILING WORK, PATHWAYS, AND IN-CEILING RECEPTACLES.
32. REFER TO "E" SERIES DRAWINGS FOR COORDINATION OF OUTLET LOCATIONS, AND ELEVATIONS TO MATCH POWER RECEPTACLES.
33. AVOID PLACING BACK-TO-BACK WALL BOXES AT OPPOSITE SIDES OF THE SAME WALL PARTITION.
34. PAINT EXPOSED CONDUIT AND CABLE TRAY TO MATCH ADJACENT FINISH.
35. ALL EQUIPMENT TO WHICH REAR ACCESS IS REQUIRED SHALL BE FREE TO OPEN, TRANSLATE, OR ROTATE ITS FULL DISTANCE.
36. PROTECTIVE EDGES SHALL BE PROVIDED ON ACCESSES THAT MIGHT INJURE CABLES, TECHNICIANS OR THEIR TOOLS.
37. CHECK POINTS, ADJUSTMENT POINTS, TEST POINTS, CABLES, CONNECTORS, AND LABELS SHALL BE ACCESSIBLE AND VISIBLE DURING MAINTENANCE.
38. SUFFICIENT SPACE SHALL BE PROVIDED FOR THE USE OF TEST EQUIPMENT AND OTHER REQUIRED TOOLS WITHOUT DIFFICULTY OR HAZARD.
39. EQUIPMENT DESIGN SHALL REDUCE TO A MINIMUM THE INCIDENCE OF PREVENTIVE AND CORRECTIVE MAINTENANCE, MINIMIZE MAINTENANCE COMPLEXITY, AND MINIMIZE THE TIME REQUIREMENTS FOR MAINTENANCE.

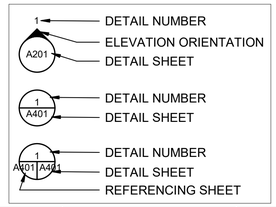
SYMBOL LEGEND

———	NEW WORK LINE TYPE
———	EXISTING WORK LINE TYPE
D#	WALL MOUNTED DATA CAT6A DROPSET D = CABLE FOR DATA CONNECTION # = NUMBER OF CABLES
D#V#	WALL MOUNTED DATA AND VOICE CAT6A DROPSET D = CABLE FOR DATA CONNECTION V = CABLE FOR VOICE CONNECTION # = NUMBER OF CABLES
V#	WALL MOUNTED VOICE CAT6A DROPSET V = CABLE FOR VOICE CONNECTION # = NUMBER OF CABLES
W#	CEILING MOUNTED DATA CAT6A DROPSET W = CABLE FOR WIRELESS ACCESS POINT CONNECTION. # = NUMBER OF CABLES
D#	CEILING MOUNTED DATA CAT6A DROPSET D = CABLE FOR DATA CONNECTION. # = NUMBER OF CABLES
F D#	FLOOR MOUNTED DATA CAT6A DROPSET D = CABLE FOR DATA CONNECTION # = NUMBER OF CABLES
T D#	TABLE MOUNTED DATA CAT6A DROPSET D = CABLE FOR DATA CONNECTION # = NUMBER OF CABLES
	TELECOMMUNICATIONS RACK, 2-POST RACK WITH VERTICAL CABLE MANAGEMENT. DASHED AREA REPRESENTS MIN 36" WORKING CLEARANCE REQUIREMENT FROM FRONT/REAR EQUIPMENT PLANE.
WPE FRONT	TELECOMMUNICATIONS RACK, 4-POST DASHED AREA REPRESENTS MIN 36" WORKING CLEARANCE REQUIREMENT FROM FRONT/REAR EQUIPMENT PLANE.
NS	NETWORK SWITCH (GFGI)
CPP	COPPER PATCH PANEL
FPP	FIBER PATCH PANEL
	EXISTING LADDER RACK
	NEW LADDER RACK
	EXISTING CABLE TRAY
	NEW CABLE TRAY
	CONDUIT SLEEVES
#	SHEET KEYNOTE TAG
#	DETAIL KEY NOTE TAG
#	REVISION TAG

ABBREVIATIONS

ACG	ABOVE CEILING GRID
AFF	ABOVE FINISHED FLOOR
ASTM	ASTM INTERNATIONAL
AV	AUDIO VISUAL
BCT	BONDING CONDUCTOR FOR TELECOMMUNICATIONS
C	CONDUIT
CAT	CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CM	CEILING MOUNTED
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CPP	COPPER PATCH PANEL
CT	CABLE TRAY
DVR	DIGITAL VIDEO RECORDER
EF	ENTRANCE FACILITY
EMI	ELECTRICAL MAGNETIC INTERFACE
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NON-METALLIC TUBING
ER	EQUIPMENT ROOM
FO	FIBER OPTIC
FOC	FIBER OPTIC CABLE
FOPP	FIBER OPTIC PATCH PANEL
FRT	FIRE-RETARDANT-TREATED
GFGI	GOVERNMENT FURNISHED, GOVERNMENT INSTALLED
IAW	IN ACCORDANCE WITH
IC	INTERMEDIATE CROSS-CONNECT
IMT	INTERMEDIATE METALLIC TUBING
ISP	INSIDE PLANT
ITS	INFORMATION TECHNOLOGY SYSTEMS
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MC	MAIN CROSS-CONNECT
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MULTIMODE
MTD	MOUNTED
NACC	NEAREST ACCESSIBLE CEILING CAVITY
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NS	NETWORK SWITCH (GFGI)
NTS	NOT TO SCALE
OC	ON CENTER
OSP	OUTSIDE PLANT
PC	PERSONAL COMPUTER
PP	PATCH PANEL
PR	PAIR
RM	ROOM
RMU	RACK MOUNTING UNIT (1.75")
RNC	RIGID NONMETALLIC CONDUIT
SCS	STRUCTURED CABLING SYSTEM
SM	SINGLEMODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TC	TELECOMMUNICATIONS CLOSET
TCO	TELECOMMUNICATIONS OUTLET
TE	TELECOMMUNICATIONS ENCLOSURE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TR	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLTS DIRECT CURRENT
VP	VANDAL PROOF
WAP	WIRELESS ACCESS POINT
WM	WALL MOUNTED
WMT	WIRE MESH TRAY
WOA	WORK AREA OUTLET
WPE	WEATHER PROOF ENCLOSURE

ELEVATION AND DETAIL CALLOUT



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A/E PROJECT NUMBER	12622936
DRAWING TITLE	TELECOM SYMBOLS, NOTES & ABBREVIATIONS
WORKING STAFF	WSP (DESIGNED BY) / MB (DRAWN BY) / SK (CHECKED BY)
SHEET NO.	TN–001GS (DISCIPLINE TN / TYPE – / SEQUENCE 001 / DRAWING TYPE GS)
OF	

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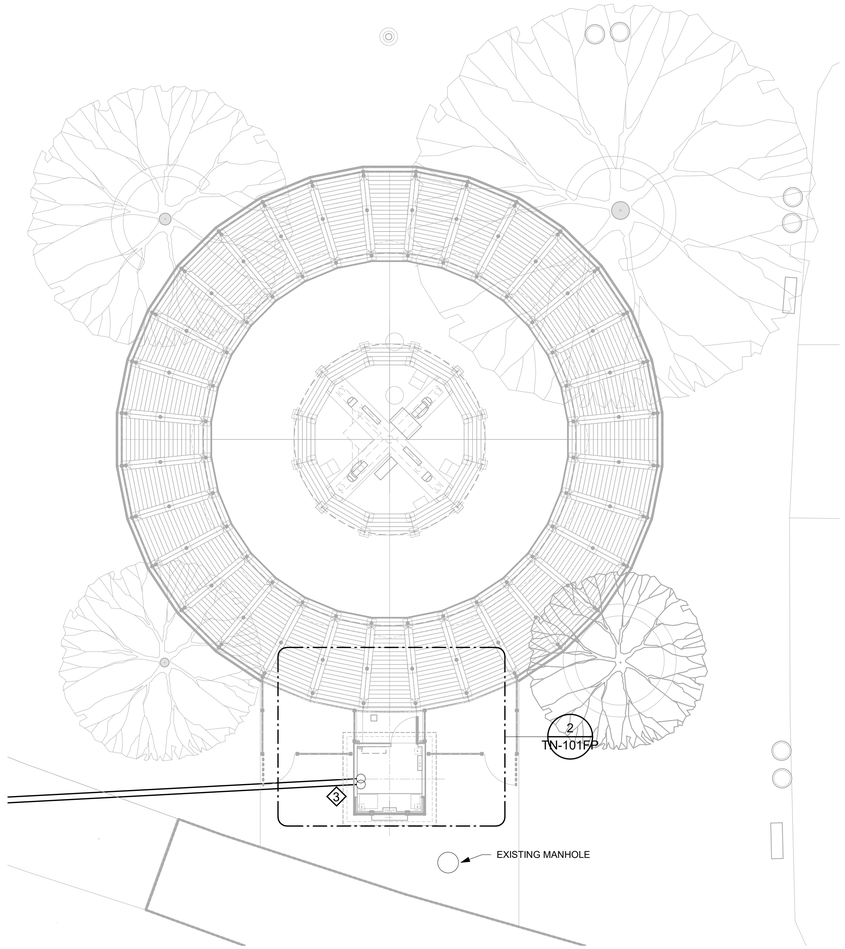
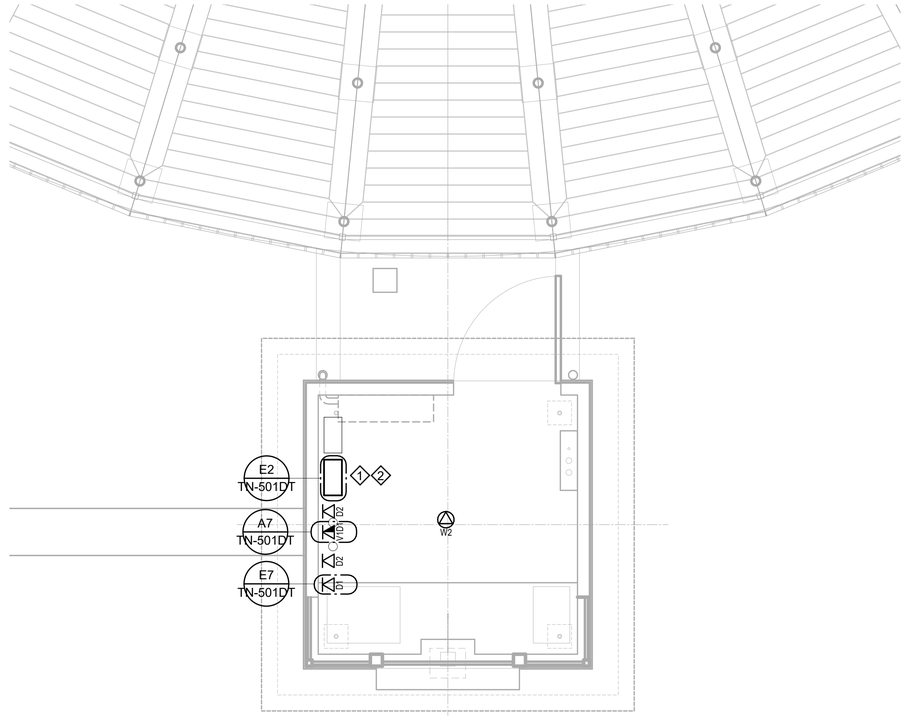
TN-001GS BY SC 06.05.2024 DESIGN DEVELOPMENT

KEY NOTES

1. NETWORK ETHERNET SWITCH INSTALLED INTO THE WALL MOUTED ENCLOSURE.
2. UNINTERRUPTABLE POWER SUPPLY (UPS) INSTALLED BELOW WALL MOUNTED ENCLOSURE.
3. INSTALL (2) NEW 2" SCHEDULE 40 PVC CONDUITS BETWEEN EXISTING TELECOM HANDHOLE T4 AND NEW CAROUSEL TICKET BOOTH. TURN CONDUITS UP AND FINISH AT LEAST 4"-6" AFF. INSTALL (1) FACTORY ASSEMBLY UNIT CONSISTING OF 3-CELL MAXCELL FABRIC INNERDUCTS IN EACH NEW 2" CONDUIT, TIED-OFF AT EACH END. INCLUDE PULL-LINE IN EACH INNERDUCT SEGEMENT. SEAL CONDUITS GAS- AND WATER-TIGHT AT CONCLUSION OF CABLE INSTALL WORK.



1 / TN-101FP — TELECOM FLOOR PLAN
SCALE = 1/8" = 1'-0"



2 / TN-101FP TN-101FP — BOOTH TELECOM ENLARGED PLAN
SCALE = 1/2" = 1'-0"

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
0 1' 2' 4'
1/2"=1'-0"
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DRAWING TITLE	TELECOMMUNICATIONS PLANS

WORKING STAFF	DESIGNED BY	DRAWN BY	CHECKED BY
	WSP	MB	SK

SHEET NO. OF

TN — 101 FP
DISCIPLINE TYPE SEQUENCE DRAWING TYPE

12/18/2024 2:07:34 PM
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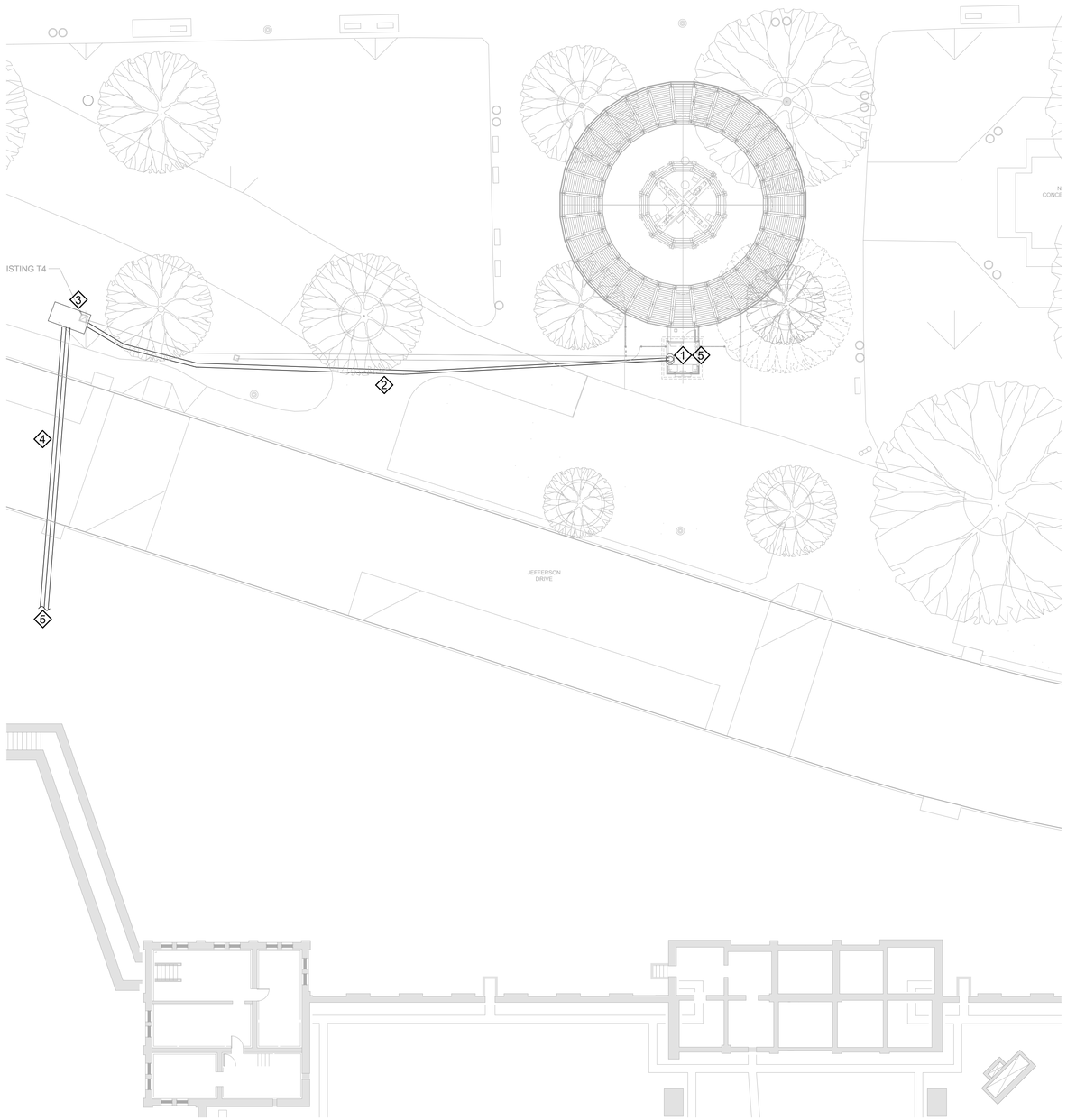

1
TN-102FP

SITE PLAN
SCALE = 1/16" = 1'-0"

KEY NOTES

1. BOTH SECURITY AND TELECOMMUNICATIONS FIBER CABLES ARE TO TERMINATE IN SPECIFIC ROOM & RACK LOCATIONS YET TO BE IDENTIFIED BY OPS/OCIO. ALL CABLE INSTALLATIONS ARE SHOWN FOR INFORMATION ONLY AND WILL BE HANDLED BY SI/OCIO's INCUMBENT 3RD PARTY CABLE CONTRACTOR. ALL CONDUIT, BOXES, AND SUPPORTING INFRASTRUCTURE BY DIV-26 AND DIV-28 CONTRACTORS..
2. INSTALL (2) NEW 2" SCHEDULE-40 PVC CONDUITS BETWEEN EXISTING TELECOM HANDHOLE T4 AND NEW CAROUSEL TICKET BOOTH. TURN CONDUITS UP AND FINISH AT LEAST 4"-6" AFF. INSTALL (1) FACTORY ASSEMBLY UNIT CONSISTING OF 3-CELL MAXCELL FABRIC INNERDUCTS IN EACH NEW 2" CONDUIT, TIED-OFF AT EACH END. INCLUDE PULL-LINE IN EACH INNERDUCT SEGMENT.
3. COORDINATE FIBER ROUTING IN T4 MANHOLE WITH NMNH/NHB HIGH VOLTAGE CONTRACTOR.
4. CABLE CONTRACTOR TO COORDINATE EXISTING UG CONDUIT ROUTE USE FROM ARTS & INDUSTRIES BUILDING (AIB) POINT-OF-ENTRY LOCATION TO THE T4 MANHOLE WITH NMAH/NHB HIGH VOLTAGE CONTRACTOR. INCLUDE (1) NEW 3-CELL MAXCELL FABRIC INNERDUCT FOR MIN 2" CONDUIT, TIED-OFF AT EACH END WHERE EXISTING INNERDUCT VACANCY DOES NOT EXIST.
5. SEAL CONDUITS GAS- AND WATER-TIGHT AT CONCLUSION OF CABLE INSTALL WORK.

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MEP ENGINEERING
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STRUCTURAL ENGINEERING
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WASHINGTON, DC 20036
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CIVIL ENGINEERING
SORBA ENGINEERING
22365 BRODERICK DRIVE, SUITE 265
DULLES, VA 20166
571.771.0273

CODE, SECURITY, AND IT
GHD, INC.
14501 GEORGE CARTER WAY, SUITE 102
CHANTILLY, VA 20151
571.325.5000

AROBORIST
DC TREE PRESERVATION.
3618 MAROON LN
BOWIE, MD 20715
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0 8' 16' 32'
1/16"=1'-0"
GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

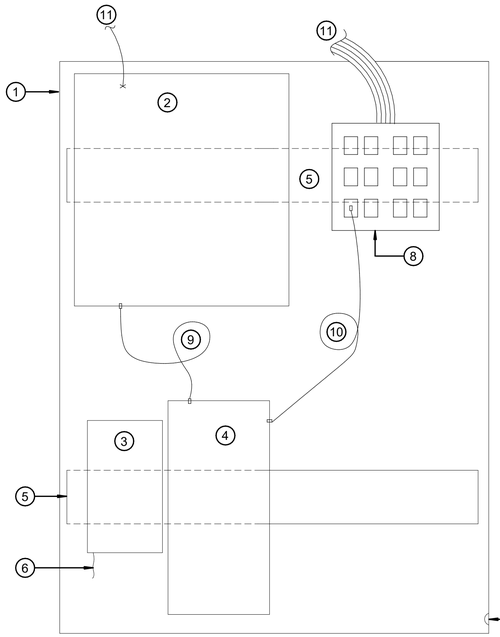
REVISION # - DATE	REVISION DESCRIPTION

Smithsonian Institution

Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	12622936
DRAWING TITLE	SITE - TELECOMMUNICATIONS PLAN
WORKING STAFF	WSP (DESIGNED BY) / MB (DRAWN BY) / SK (CHECKED BY)
SHEET NO. OF	TN-102FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

12/18/2024 2:07:34 PM
TN-102FP BY SK 06.05.2024 DESIGN DEVELOPMENT



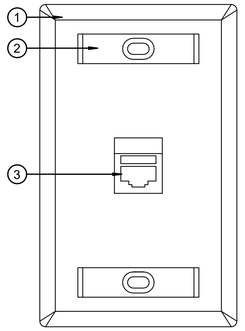
DETAIL KEY NOTES: (#)

1. ENCLOSURE (CSD 16166, 16"x16"x6") WITH DIN RRAIL KIT (CDR3P16, 3x 14") AND MOUNTING CHANNEL (CMC16).
2. FIBER TERMINATION PANEL CORNING SPH-01P WITH CONNECTOR HOUSING WITH 6 x DUPLEX LC PORTS 6.5"X6"X1".
3. POWER SUPPLY TO BE PROVIDED BY SIOPS. MODEL AND DIMENSIONS TBD.
4. ETHERNET SWITCH TO BE PROVIDED BY SIOPS. MODEL AND DIMENSIONS TBD.
5. DIN RAIL.
6. PIGTAIL CONNECT TO UPS.
7. ENCLOSURE TAMPER LOCK.
8. IN LIEU OF COPPER PATCH PANEL SYSTEM, INSTALL METALLIC DUAL-GANG (8-12 PORT) MODULAR FACEPLATE TO 4-11/16" SQUARE X 2-1/4" D BACKBOX HAVING DUAL-GANG REDUCER AND GROMMETED KNOCKOUTS FOR UTP CABLE ENTRY/EXIT.
9. DUPLEX OS2 SINGLEMODE FIBER PATCH CORD.
10. CAT6A UTP PATCH CORD (ONE PER EACH DROP CABLE).
11. FIBER/COPPER CABLE INGRESS/EGRESS GROMMETS.

E2 TN-101FP|TN-501DT

TELECOM ENCLOSURE

SCALE =NTS



DROP SET TYPES:

- T2 - (1) CAT6A

DETAIL KEY NOTES: (#)

1. SINGLE GANG PLATE
2. LABEL
3. RJ45 PORT

DETAIL NOTES:

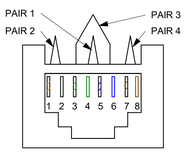
A. TYPICAL ELEVATION 18" WHEN WALL MOUNTED UON.
B. CABLING TO BE COLOR CODED AS INDICATED UNLESS OTHER COLOR SCHEME REQUIRED BY THE OWNER.
C. WHEN INSTALLED IN AREAS WITH HIGH END FINISHES COORDINATE THE COVER FINISH WITH THE INTERIOR DESINGER PRIOR TO INSTALLATION.

E7 TN-101FP|TN-501DT

SINGLE PORT ETHERNET

SCALE =NTS

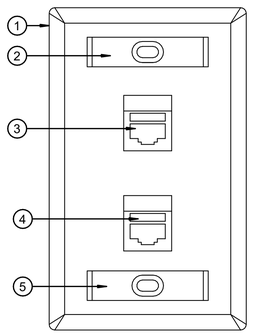
Pin	T568B Pair	10BASE-T 100BASE-TX	1000BASE-T Signal ID	Wire T568B Color
1	2	TX+	DA+ tip	white/orange stripe
2	2	TX-	DA- ring	orange solid
3	3	RX+	DB+ tip	white/green stripe
4	1	-	DC+ ring	blue solid
5	1	-	DC- tip	white/blue stripe
6	3	RX-	DB- ring	green solid
7	4	-	DD+ tip	white/brown stripe
8	4	-	DD- ring	brown solid



A1 TN-501DT

CAT-6A TERMINATION DETAIL T568B

SCALE =NTS



DETAIL NOTES:

A. COORDINATE LOCATION WITH MILLWORK WHERE INDICATED
B. TYPICAL ELEVATION 18" WHEN WALL MOUNTED UON.
C. CABLING TO BE COLOR CODED AS INDICATED UNLESS OTHER COLOR SCHEME REQUIRED BY THE OWNER.
D. WHEN INSTALLED IN AREAS WITH HIGH END FINISHES COORDINATE THE COVER FINISH WITH THE INTERIOR DESINGER PRIOR TO INSTALLATION.
E. TERMINATE DATA CABLING ON DATA PATCH PANEL.
F. TERMINATE IP PHONE CABLING ON VOICE PATCH PANEL.

DROP SET TYPES:

- (2) CAT6A

DETAIL KEY NOTES: (#)

1. SINGLE GANG PLATE
2. LABEL DATA
3. RJ45 PORT DATA (BLUE)
4. RJ45 PORT PHONE (BLUE)
5. LABLE PHONE

A7 TN-101FP|TN-501DT

DUAL PORT IP PHONE / DATA

SCALE =NTS

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
1074 THOMAS JEFFERSON STREET NW
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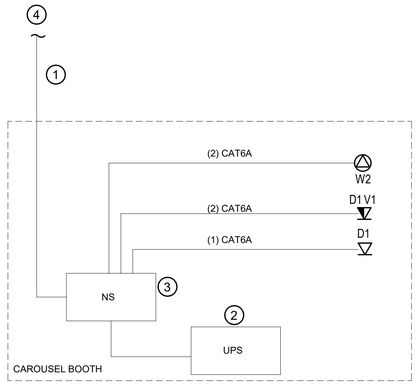
DRAWING TITLE	TELECOMMUNICATION DETAILS

WORKING STAFF	WSP	MB	SK
	DESIGNED BY	DRAWN BY	CHECKED BY

SHEET NO. OF

TN – 501 DT
DISCIPLINE TYPE SEQUENCE DRAWING TYPE

12/18/2024 2:07:35 PM
TN-501DT BY: SC 06.05.2024 DESIGN DEVELOPMENT



A1
TN-701RD

TELECOM DIAGRAM

SCALE =NTS

DETAIL KEY NOTES:

1. ETHERNET COMMUNICATIONS OVER FIBER TO BE ROUTED TO SI ARTS & INDUSTRIES BUILDING (AIB) VIA HANDHOLE T4, INTO EXISTING DUCTBANK ALONG THE NORTH SIDE OF JEFFERSON DRIVE. USE 12-STRAND FIBER, TERMINATING IN TELECOMMUNICATIONS ROOM XYZ (TBD).
2. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON UPS.
3. 8-PORT ETHERNET SWITCH FOR CONNECTIVITY TO OCIO NETWORK DEVICES TO BE PROVIDED BY SI/OCIO. OCIO CABLING CONTRACTOR SHALL INSTALL SWITCH AND ALL ASSOCIATED INFRASTRUCTURE WITHIN LOCKABLE TELECOM EQUIPMENT ENCLOSURE.
4. OCIO CABLE CONTRACTOR TO COORDINATE WITH SI-OPS AND SI-OCIO FOR FINAL HEADEND ROOM, RACK AND PATCH PANEL LOCATION AND THE EXISITING PATHWAY SYSTEMS TO USE IN ROUTE TO THE T4 MANHOLE POINT-OF-ENTRY CONDUIT LOCATION. UTILIZE NEW OR EXISTING INNERDUCT ALONG THE ENTIRE PATH. ADDITIONALLY COORDINATE FIBER INSTALLATION PASS-THRU WORK AT MANHOLE T4 WITH NMAH/NHB HIGH-VOLTAGE CONTRACTOR.

HARTMAN-COX ARCHITECTS

ARCHITECTURE
HARTMAN-COX ARCHITECTS
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SHEET NO.	TN–701RD (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)
OF	

12/18/2024 2:07:35 PM
TN-701RD BY SC 06.05.2024 DESIGN DEVELOPMENT

GENERAL NOTES

1. THE SCOPE OF THIS PROJECT INCLUDES DESIGNING AND PROVIDING A NEW COMPLETELY SUPERVISED, ELECTRONIC SECURITY SYSTEM (ESS) CONSISTING OF ACCESS CONTROL, INTRUSION DETECTION, VIDEO, AND INTERCOMMUNICATION SYSTEMS AS SHOWN ON THE DRAWINGS AND DESCRIBED WITHIN THE ACCOMPANYING SPECIFICATIONS FOR THE FACILITY IDENTIFIED. THE SYSTEM IS AN EXTENSION OF THE OWNER'S EXISTING ESS.
2. PERFORM ALL WORK NECESSARY TO CARRY OUT THE INTENT OF THE CONTRACT DOCUMENTS AND PROVIDE COMPLETE SYSTEMS EVEN THOUGH EACH ITEM IS NOT SPECIFICALLY MENTIONED OR DESCRIBED.
3. THE TERM "CONTRACT DOCUMENTS" MEANS THE SPECIFICATIONS, DRAWINGS, ADDENDUMS, SKETCHES, AND OTHER DOCUMENTATION THAT DEFINE THE WORK.
4. THE TERM "PROVIDE" MEANS FURNISH AND INSTALL, COMPLETE AND READY FOR USE.
5. THE TERM "OWNER" MEANS SMITHSONIAN INSTITUTION OR ITS DESIGNATED REPRESENTATIVE OR AGENT
6. THE TERM "CONTRACTOR" OR "GENERAL CONTRACTOR" MEANS THE PRIME CONTRACTOR RESPONSIBLE FOR ALL WORK DEFINED IN THE CONSTRUCTION DOCUMENTS.
7. THE TERM "ELECTRICAL CONTRACTOR" MEANS A LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
8. THE TERM "SECURITY CONTRACTOR" MEANS AN OWNER APPROVED LICENSED AND QUALIFIED SUBCONTRACTOR PERFORMING WORK FOR THE CONTRACTOR.
9. THE TERM "EXISTING" MEANS EXISTING TO REMAIN.
10. THE TERM "NEW" MEANS CONTRACTOR TO PROVIDE NEW.
11. PROVIDE A FULLY INTEGRATED SYSTEM AS AN EXTENSION OF THE OWNER'S EXISTING SECURITY SYSTEMS.
12. COORDINATE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK. BRING CONFLICTS TO THE OWNER'S ATTENTION IMMEDIATELY. PROCEEDING WITH WORK PRIOR TO THE OWNER ISSUING CLARIFICATION IS AT THE CONTRACTOR'S OWN RISK.
13. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, WIRE, CABLE, CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION.
14. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND DEFINE THE GENERAL ARRANGEMENT.
15. PROVIDE AND MAINTAIN ALL DOCUMENTATION INCLUDING DESIGN DOCUMENTATION, AS-BUILT DOCUMENTATION, PROGRAMMING WORKSHEETS AND PROJECT COMMUNICATIONS.
16. FIELD VERIFY AND COORDINATE ALL DEVICE LOCATIONS. WHERE CONFLICTS OCCUR, COORDINATE AND VERIFY FINAL LOCATIONS WITH THE OWNER PRIOR TO INSTALLATION.
17. PAY ALL FEES AND OBTAIN ALL PERMITS AND LICENSES AS REQUIRED TO PERFORM THE WORK DEFINED IN THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
18. PROVIDE NEW MATERIAL AND EQUIPMENT CONFORMING TO THE APPLICABLE STANDARDS OF UL, NEC, NEMA, ASTM, ANSI AND OTHERS AS IDENTIFIED IN THE TECHNICAL SPECIFICATIONS.
19. GUARANTEE ALL WORK FOR A MINIMUM OF ONE YEAR COMMENCING ON THE DATE OF FINAL ACCEPTANCE OF THE SYSTEM BY THE OWNER.
20. PROVIDE LABOR, TOOLS, CONTAINERS, AND SERVICES AS REQUIRED TO MAINTAIN A CLEAN AND SAFE WORK SITE. REMOVE EXCESS MATERIAL AND DEBRIS FROM THE WORK SITE. CLEAN THE WORK SITE DAILY.
21. PROVIDE INTEGRATION OF SECURITY DEVICES AND EQUIPMENT WITH BUILDING FIRE ALARM DEVICES AND EQUIPMENT TO COMPLY WITH NFPA, NEC, UL, AND LOCAL CODES AND ORDINANCES.
22. SECURE WORK IN OCCUPIED AREAS WITH BARRIERS TO NOT CREATE A SAFETY HAZARD. KEEP MATERIALS SUCH AS TOOLS, LADDERS AND INSTALLATION MATERIAL TO A MINIMUM AND ALLOW EASY PASSAGE OF BUILDING TENANTS. PROVIDE DROP CLOTHES OR OTHER WISE PROTECT BUILDING FINISHES FROM ALL CONSTRUCTION DEBRIS AND DUST. REMOVE TRASH AND DEBRIS ON A DAILY BASIS AND RESTORE AREAS TO PRE CONSTRUCTION CONDITIONS AS WORK IS COMPLETED.
23. OWNER IS VERY SENSITIVE TO VIBRATION, DUST AND NOISE. ANY WORK ACTIVITIES THAT GENERATE VIBRATION, NEED TO BE TESTED AND SCHEDULED IN ADVANCE. SHOULD ACTIVITIES EXCEED OWNERS SET LIMITS, THE OWNER HAS THE RIGHT TO STOP WORK, PROVIDE AN ALTERNATE DATE AND TIME TO COMPLETE VIBRATION GENERATING WORK.
24. ALL EQUIPMENT TO WHICH REAR ACCESS IS REQUIRED SHALL BE FREE TO OPEN, TRANSLATE, OR ROTATE ITS FULL DISTANCE.
25. PROTECTIVE EDGES SHALL BE PROVIDED ON ACCESSES THAT MIGHT INJURE CABLES, TECHNICIANS OR THEIR TOOLS.
26. CHECK POINTS, ADJUSTMENT POINTS, TEST POINTS, CABLES, CONNECTORS, AND LABELS SHALL BE ACCESSIBLE AND VISIBLE DURING MAINTENANCE.
27. SUFFICIENT SPACE SHALL BE PROVIDED FOR THE USE OF TEST EQUIPMENT AND OTHER REQUIRED TOOLS WITHOUT DIFFICULTY OR HAZARD.
28. EQUIPMENT DESIGN SHALL REDUCE TO A MINIMUM THE INCIDENCE OF PREVENTIVE AND CORRECTIVE MAINTENANCE, MINIMIZE MAINTENANCE COMPLEXITY, AND MINIMIZE THE TIME REQUIREMENTS FOR MAINTENANCE

CONDUIT AND RACEWAY NOTES

1. PROVIDE CONDUITS AND RACEWAYS FOR A COMPLETE INSTALLATION. ROUTE SECURITY WIRE AND CABLE IN CABLE TRAYS, METALLIC CONDUITS, COVERED RACEWAYS, OR CLOSED WIRE TROUGHS. J-HOOKS ARE NOT AUTHORIZED. ALL PATHWAYS SHALL BE LOCATED FOR READY ACCESS.
2. PROVIDE CONDUITS AND RACEWAYS THAT COMPLY WITH NEC REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS GOVERN.
3. REGARDLESS OF NEC OR LOCAL CODES AND ORDINANCES, PROVIDE CONDUIT AND RACEWAY SIZED FOR A MAXIMUM FILL OF 40%.
4. REGARDLESS OF NEC OR LOCAL CODES AND CONDUIT FILL REQUIREMENTS, THE CONDUIT MINIMUM DIAMETER IS 19mm (3/4").
5. PROVIDE COMPRESSION TYPE CONDUIT FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE.
6. PROVIDE COLOR CODING OF SECURITY CONDUITS AND RACEWAYS, PERMANENTLY MARK CONDUITS AND RACEWAYS WITH A 25mm (1") BLUE BAN D EVERY 3 METERS (10 FEET). BLUE BANDING COLOR TO BE BENJAMIN MOORE #791 OR APPROVED EQUIVALENT.
7. PERMANENTLY PAINT JUNCTION BOXES, DEVICE BOXES, TERMINAL CABINETS, AND WIRE THROUGH BLUE, COLOR TO BE BENJAMIN MOORE #791 OR APPROVED EQUIVALENT.
8. PAINT EXPOSED CONDUIT TO MATCH ADJACENT FINISH.
9. CONCEAL CONDUIT AND RACEWAYS TO THE GREATEST EXTENT POSSIBLE. IN AREAS WITHOUT CEILINGS, INSTALL CONDUIT AS UNOBTRUSIVELY AS POSSIBLE, AS CLOSE AS POSSIBLE TO FLOOR/ CEILING SLAB AND PARALLEL AND AT RIGHT ANGLES TO STRUCTURAL STEEL OR CONCRETE ELEMENTS. THESE DRAWINGS ARE DIAGRAMMATIC TO SHOW DESIGN INTENT ONLY. WHERE CONDUITS AND RACEWAYS CANNOT BE CONCEALED, COORDINATE WITH THE OWNER TO OBTAIN APPROVAL PRIOR TO INSTALLATION.
10. PROVIDE SEPARATE RACEWAY, CONDUITS, JUNCTION BOXES, AND ENCLOSURES FOR ALL SECURITY WIRE AND CABLE. USE OF SHARED LOW-VOLTAGE CABLE TRAY IS AUTHORIZED. DO NOT COMBINE 120VAC CONDUCTORS OR ANY POWER DISTRIBUTION CIRCUIT WITH SECURITY WIRE AND CABLE.
11. PROVIDE OWNER APPROVED SECURITY SCREWS AND FASTENERS FOR ALL SECURITY JUNCTION BOXES AND SCREW COVER ENCLOSURES.
12. PROVIDE ACCESS COVERS OR HATCHES FOR ALL SECURITY JUNCTION BOXES CONCEALED IN STRUCTURE. PROVIDE ACCESS TO JUNCTION BOXES AND EQUIPMENT ENCLOSURES LOCATED WITHIN 3 METERS (10 FEET) OF SECURITY DEVICES.
13. PROPERLY CLEAN AND SEAL PENETRATIONS IN FIRE RESISTIVE WALLS, FLOOR, CEILING, OR ROOF ASSEMBLIES TO THE FULL THICKNESS OF THE PENETRATION WITH AN APPROVED THROUGH PENETRATION FIRE STOP SYSTEM. PROVIDE FIRE STOP SYSTEM WITH A FIRE RESISTANCE THAT IS EQUAL TO OR GREATER THAN THAT OF THE PENETRATED ASSEMBLY. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND RATINGS OF FIRE RESISTIVE ASSEMBLIES.
14. CORE DRILL WITH MASONRY TYPE CORE BIT AND SLEEVED AS SPECIFIED ALL PENETRATIONS IN MASONRY WALLS AND FLOOR/CEILING SLABS. UTILIZE X-RAY OR ULTRASOUND TECHNOLOGY TO DETECT AND AVOID CONCEALED STRUCTURAL REINFORCEMENT.
15. CONTRACTOR IS RESPONSIBLE FOR AVOIDING ALL CONFLICTS WITH LIGHT FIXTURES, HVAC DIFFUSERS, GRILLS, DUCTS, CONDUIT AND OTHER PIPING OR OTHER OBSTRUCTIONS ENCOUNTERED. COORDINATE ALL WORK WITH EXISTING FIELD CONDITIONS. PROMPTLY NOTIFY OWNER PRIOR TO INITIATING WORK IF ANY MOUNTING LOCATIONS ARE OBSTRUCTED AND/OR IF ANY MOUNTING CONFLICTS OR PROBLEMS ARE DISCOVERED.
16. EXCAVATE WITH EXTREME CARE. TAKE ALL REASONABLE ACTIONS TO PROPERLY PROTECT; SUPPORT AND BACKFILL UNDERGROUND UTILITY LINES. IMMEDIATELY NOTIFY THE UTILITY IF AN UNDERGROUND UTILITY LINE IS DAMAGED. IF DAMAGE CREATES AN EMERGENCY, TAKE IMMEDIATE STEPS TO SAFEGUARD LIFE, HEALTH AND PROPERTY.

WIRE & CABLE NOTES

1. PROVIDE ALL WIRE AND CABLE FOR A COMPLETE AND FUNCTIONAL SECURITY SYSTEM.
2. PROVIDE WIRE AND CABLE THAT COMPLY WITH NEC AND UL REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS GOVERN.
3. PROVIDE WIRE AND CABLE CONDUCTORS FOR DATA CIRCUITS, CONTROL CIRCUITS AND COMMUNICATIONS WIRING #24 AWG MINIMUM.
4. PROVIDE WIRE AND CABLE CONDUCTORS FOR LOW VOLTAGE POWER DISTRIBUTION AND CONTROL CIRCUIT WIRING #18 AWG MINIMUM. UP SIZE CONDUCTORS AS REQUIRED TO PROVIDE A VOLTAGE DROP LESS THAN 10% UNLESS OTHERWISE NOTED.
5. PROVIDE MANUFACTURER'S INTERNAL INTERCONNECT WIRING UL APPROVED AND SIZED IN ACCORDANCE WITH THE MANUFACTURER'S MINIMUM REQUIREMENTS.
6. PROVIDE SHIELDED CABLE FOR ALL LOW SPEED SERIAL DATA CIRCUITS, CONTROL CIRCUITS, AND COMMUNICATIONS WIRING.
7. PROVIDE UTP CAT 6 CABLE FOR ALL HIGH SPEED DATA CIRCUITS (ETHERNET).
8. GROUND LOOPS ARE NOT PERMITTED. GROUND SHIELD DRAIN WIRES TO VERIFIED EARTH GROUND TERMINAL LUGS AT THE CONTROL CABINET OR ORIGINATING EQUIPMENT. INSULATE SHIELDS AND DRAIN WIRES AT THE DEVICE OR REMOTE TERMINATION POINT USING UL APPROVED INSULATORS. THE USE OF AC POWER NEUTRAL CONDUCTORS FOR GROUND CONNECTIONS IS UNACCEPTABLE.
9. PROVIDE UNSHIELDED TWISTED PAIR CABLE ASSEMBLIES FOR ALL DC LOW VOLTAGE POWER DISTRIBUTION AND CONTROL CIRCUITS.
10. PROVIDE TWISTED SHIELDED PAIR CABLE ASSEMBLIES FOR ALL AC LOW VOLTAGE POWER DISTRIBUTION.
11. ALL CABLES SHALL BE ROUTED SO AS TO BE READILY ACCESSIBLE FOR INSPECTION AND REPAIR.
12. PANELS, CONSOLES, AND RACK MOUNTED COMPONENTS SHALL HAVE SLACK CABLE LENGTHS OR MAINTENANCE LOOPS SUFFICIENT FOR REMOVAL OF THE CONNECTORS AFTER THE COMPONENT HAS BEEN EXTRACTED FROM ITS INSTALLED LOCATION, UNLESS ADEQUATE INTERNAL ACCESS (PHYSICAL AND VISUAL) IS PROVIDED.

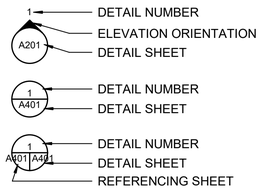
DEMO NOTES

1. PERFORM A "FUNCTIONAL CHECK" OF ALL ESS EQUIPMENT PRIOR TO INITIATING ANY DEMOLITION. COMPILE "FUNCTIONAL CHECK" RESULTS AND DELIVER TO THE OWNER.
2. THE TERM "DEMO" MEANS DISCONNECT AND REMOVED BACK TO SOURCE. STOP REMOVAL WHERE DAMAGE WOULD OCCUR IF FURTHER REMOVAL OCCURRED. CUT CONDUIT OFF AND REMOVE WIRE CONDUCTORS UNDER THESE CONDITIONS.
3. REMOVE SECURITY EQUIPMENT, COMPONENTS, AND DEVICES SCHEDULED FOR DEMOLITION IN A MANNER TO PRESERVE THE APPEARANCE AND OPERABILITY TO THE EXTENT POSSIBLE.
4. INVENTORY EQUIPMENT REMOVED DURING DEMOLITION AND TURN OVER TO OWNER.
5. MAINTAIN EXISTING SECURITY DEVICES OPERATIONALLY AS LONG AS POSSIBLE. COORDINATE SECURITY SYSTEM OUTAGE TIME WITH OWNER AND BUILDING SECURITY.
6. IF SYSTEM OUTAGE EXTENDS BEYOND NORMAL BUSINESS HOURS, THE CONTRACTOR INCURS THE COST FOR UTILIZING THE OWNERS UNIFORMED GUARD SERVICE TO PROVIDE ADDITIONAL SECURITY.

SYMBOL LEGEND

SYMBOL	DEVICE DESCRIPTION
	NEW DEVICE LINE TYPE
	EXISTING DEVICE LINE TYPE
	DEMO DEVICE LINE TYPE
NVR	NETWORK VIDEO RECORDER
NS	NETWORK SWITCH
WS	WORKSTATION, # = NUMBER
24	POWER SUPPLY, 24VDC
	MOTION SENSOR
	DURESS ALARM/PANIC BUTTON
FM-#	FIBER OPTIC CONVERTER MODULE
	FIXED DOME CAMERA
	MULTI-LENS CAMERA
	SHEET KEY NOTE, GENERAL NOTE
#	DETAIL KEY NOTE
	CONTINUATION SYMBOL
	MAGNETIC DOOR CONTACT

ELEVATION AND DETAIL CALLOUT



CAMERA TYPE LEGEND

NUMBER
TYPE
MOUNT

TYPE

3MP 3 MEGAPIXEL CAMERA
12MP 12 MEGAPIXEL CAMERA

MOUNT

CS	CEILING SURFACE
CR	CEILING RECESSED
CP	CEILING PENDANT
CT	CABLE TRAY
WS	WALL SURFACE
WA	WALL ARMATURE
PM	POLE MOUNT
PP	PARAPET
CM	CORNER MOUNT

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	ASTM INTERNATIONAL
C	CONDUIT
CAT	CATEGORY
CM	CEILING MOUNTED
COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
CT	CABLE TRAY
DC	DIRECT CURRENT
DE	DELAYED EGRESS
DPDT	DOUBLE POLE DOUBLE THROW
EMI	ELECTRICAL MAGNETIC INTERFERENCE
EMT	ELECTRICAL METALLIC TUBING
ESS	ELECTRONIC SECURITY SYSTEM
FO	FIBER OPTIC
GFGI	GOVERNMENT FURNISHED, GOVERNMENT INSTALLED
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
IDS	INTRUSION DETECTION SYSTEM
IMT	INTERMEDIATE METALLIC TUBING
LAN	LOCAL AREA NETWORK
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MULTIMODE
MSC	MUSEUM SUPPORT CENTER
MTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
NVR	NETWORK VIDEO RECORDER
OC	ON CENTER
OPDC	OFFICE OF PLANNING, DESIGN, AND CONSTRUCTION
OPS	OFFICE OF PROTECTIVE SERVICES
OSP	OUTSIDE PLANT
PACS	PHYSICAL ACCESS CONTROL SYSTEM
PC	PERSONAL COMPUTER
POE	POWER OVER ETHERNET
PP	PATCH PANEL
PR	PAIR
RM	ROOM
RMU	RACK MOUNTING UNIT (1.75")
SE	SMITHSONIAN ENTERPRISE
SI	SMITHSONIAN INSTITUTION
SM	SINGLEMODE
SMS	SECURITY MANAGEMENT SYSTEM
SOC	SECURITY OPERATIONS CENTER
SSR	SECURITY SERVER ROOM
TBD	TO BE DETERMINED
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TR	TELECOMMUNICATIONS ROOM
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
VAC	VOLTS ALTERNATING CURRENT
VASS	VIDEO ASSESSMENT AND SURVEILANCE SYSTEM
VDC	VOLTS DIRECT CURRENT
VMS	VIDEO MANAGEMENT SYSTEM
VP	VANDAL PROOF
WM	WALL MOUNTED

HARTMAN-COX ARCHITECTS

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GRAPHIC SCALE(S)

DATE	SUBMISSION
12/18/24	FINAL

REVISION # DATE	REVISION DESCRIPTION

Smithsonian Institution

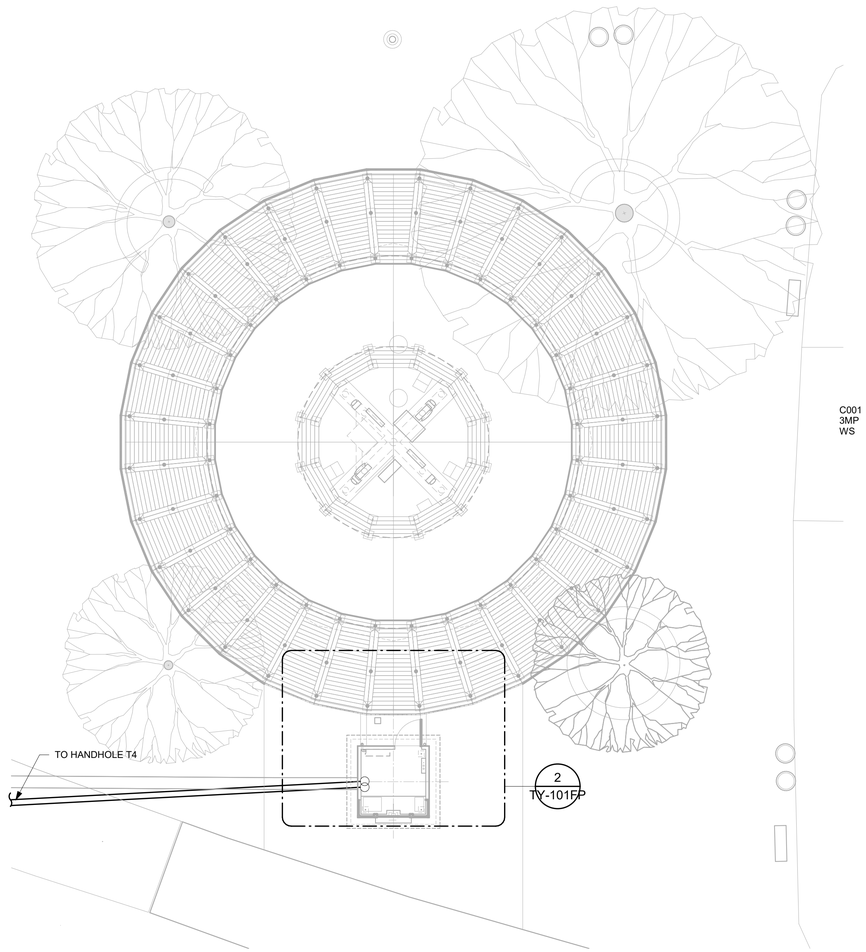
Smithsonian Facilities
600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

BUILDING NAME	SI MALL CAROUSEL
ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	12622936
DRAWING TITLE	SECURITY SYMBOLS AND ABBREVIATIONS
WORKING STAFF	WSP / MB / SK (DESIGNED BY / DRAWN BY / CHECKED BY)
SHEET NO.	TY–001GS (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)
OF	

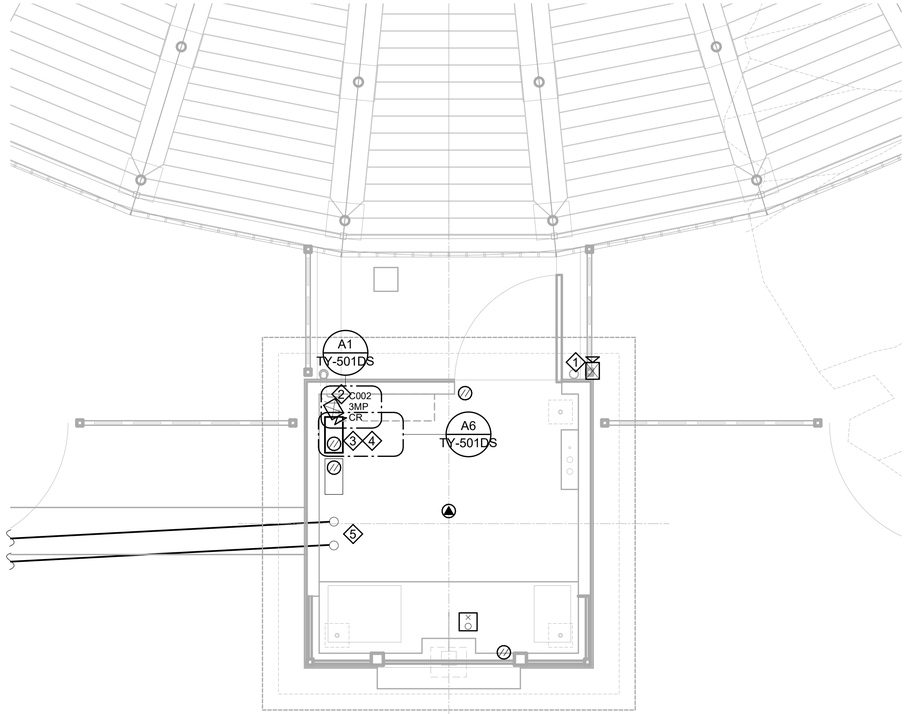
12/18/2024 2:07:36 PM
TY-001GS BY SC 06.05.2024 DESIGN DEVELOPMENT

KEY NOTES

1. EXTERNAL CAMERAS TO BE AXIS AXIS P3827-PV180 DEGREE, CONNECTED TO SI OPS NETWORK.
2. CAMERA SERVING POINT OF SALE. COORDINATE WITH COTR AND SMITHSONIAN ENTERPRISES (SE) TO CONNECT CAMERA TO SE NVR. NVR PROVIDED BY SE.
3. NEW NETWORK SWITCH SERVING CAMERAS TO BE INSTALLED IN WALL MOUNTED ENCLOSURE.
4. 120VAC, 20A DEDICATED POWER CIRCUIT PROVIDED BY DIVISION 26 CONTRACTOR. IF 120VAC EMERGENCY CIRCUIT IS NOT AVAILABLE THE UPS SHALL BE SIZED TO PROVIDE MIN 1 HOUR OF POWER BACKUP FOR CONNECTED CAMERAS.
5. INSTALL (1) NEW 6-STRAND ISP/OSP PLENUM-RATED SINGLEMODE FIBER CABLE FOR SECURITY SYSTEMS USE. TERMINATE EACH END TO DUPLEX LC CONNECTORS. REFER TO TELECOM DRAWINGS FOR CONDUIT ROUTING INFORMATION. SPECIFIC ROOM & RACK LOCATION IS YET TO BE IDENTIFIED BY OPS/OCIO. ALL CABLE INSTALLATIONS ARE SHOWN FOR INFORMATION ONLY AND WILL BE HANDLED BY SI/OCIO's INCUMBENT 3RD PARTY CABLE CONTRACTOR. ALL CONDUIT, BOXES, AND SUPPORTING INFRASTRUCTURE BY DIV-26 AND DIV-28 CONTRACTORS.



1 TY-101FP — SECURITY FLOOR PLAN
SCALE = 1/8" = 1'-0"



2 TY-101FP TY-101FP — BOOTH SECURITY ENLARGED PLAN
SCALE = 1/2" = 1'-0"

HARTMAN-COX ARCHITECTS

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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"
0 1' 2' 4'
1/2"=1'-0"

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600 Maryland Avenue S.W. Suite 5001
Washington, DC 20024-2520

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ADDRESS	600 MARYLAND AVE, SW
PROJECT TITLE	NATIONAL MALL CAROUSEL SITE IMPROVEMENTS
SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	12622936
DRAWING TITLE	SECURITY PLANS
WORKING STAFF	WSP (DESIGNED BY) / MB (DRAWN BY) / SK (CHECKED BY)
SHEET NO. OF	TY—101FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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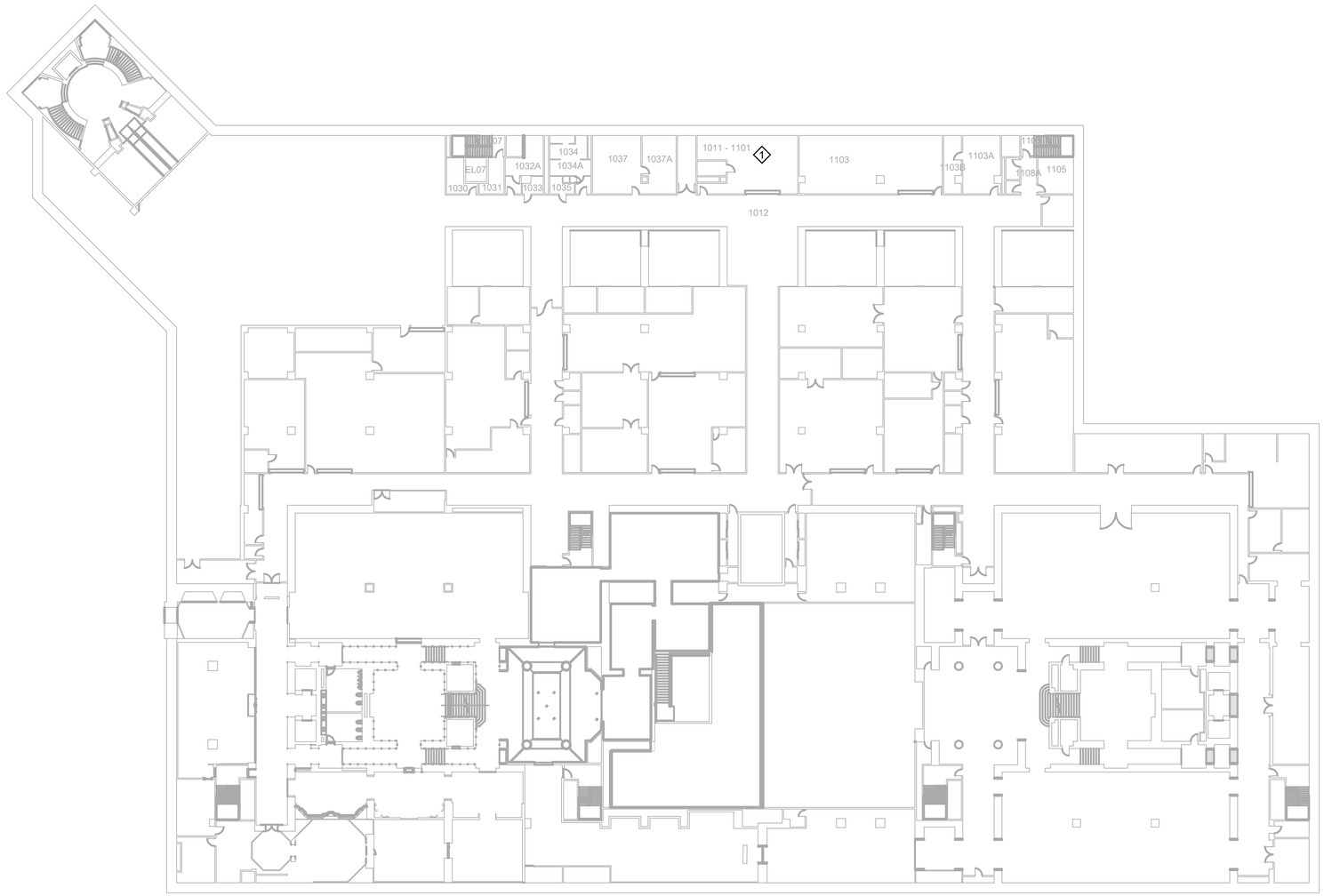

KEY NOTES

1. COMMUNICATIONS TERMINATION POINT TO DVR LOCATED IN EQUIPMENT ROOM 1101. FIBER PATHWAY FROM AIB BUILDING TO BE DETERMINED. FIBER LANDING POINT IN THIS (QUAD) BUILDING TO BE DETERMINED. EXACT FIBER PATHWAY TO ROOM 1101 IN THIS BUILDING TO BE DETERMINED.

1 / TY-102FP

QUAD BUILDING

SCALE = 3/16" = 1'-0"

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KEY PLAN

0 8' 16' 32'
1/16"=1'-0"
0 4' 8' 16'
1/8"=1'-0"
0 1' 2' 4'
1/2"=1'-0"

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SF PROJECT NUMBER	2399615
A/E PROJECT NUMBER	12622936
DRAWING TITLE	QUAD - SECURITY PLAN
WORKING STAFF	WSP (DESIGNED BY) / MB (DRAWN BY) / SK (CHECKED BY)
SHEET NO. OF	TY—102FP (DISCIPLINE / TYPE / SEQUENCE / DRAWING TYPE)

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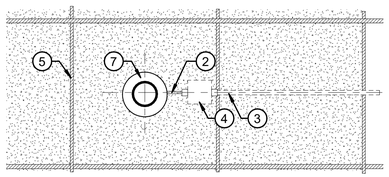
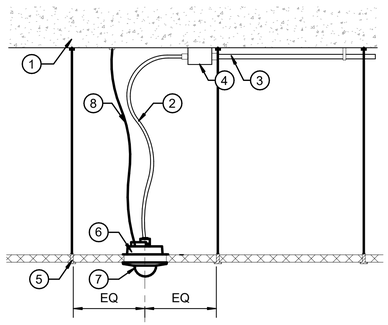


BOTTOM VIEW

DETAIL NOTES:

A. MOUNT THE CAMERA IN THE CENTER OF THE CEILING TILE.
B. COORDINATE THE CAMERA LOCATION WITH OTHER DISCIPLINES TO PROVIDE REQUIRED VIDEO COVERAGE.
C. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER.
D. EXTERNAL CAMERAS TO BE AXIS P3827-PVE 180 DEGREE.



SIDE VIEW

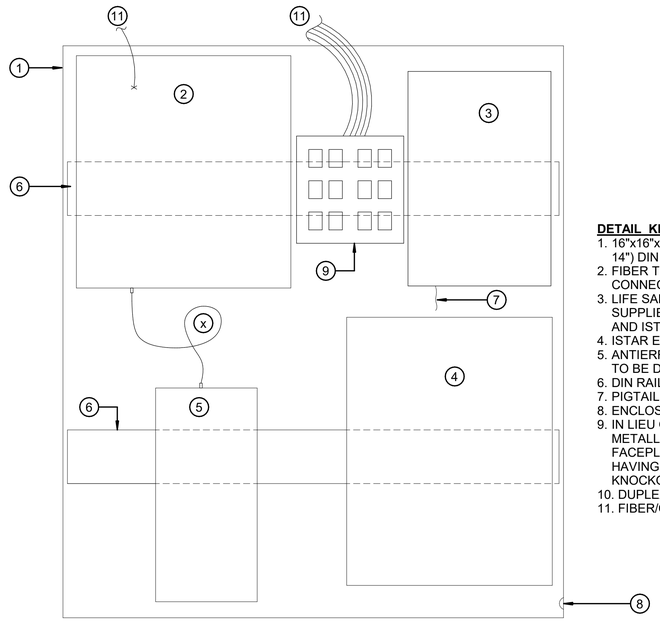
DETAIL KEY NOTES: (#)

1. CEILING SLAB
2. FLEXIBLE METALLIC CONDUIT - SIZE AS REQUIRED
3. EMT CONDUIT - SIZE AS REQUIRED
4. JUNCTION BOX - SIZE AS REQUIRED
5. SUSPENDED CEILING GRID
6. MANUFACTURERS MOUNTING ASSEMBLY
7. INTERIOR DOME CAMERA
8. MINIMUM #12 HANGER WIRE, PER PROJECT SEISMIC REQUIREMENTS

CAMERA - CEILING MOUNT TYPE 1 ACCESSIBLE CEILING

A1
TY-101FP TY-501DS

SCALE =NTS



DETAIL KEY NOTES: (#)

1. 16"x16"x6" ENCLOSURE (CSD 16166) WITH CDR3P16 (3x 14") DIN RAIL KIT AND MOUNTING CHANNEL CMC16.
2. FIBER TERMINATION PANEL CORNING SPH-01P WITH CONNECTOR HOUSING WITH 3 x DUPLEX LC PORTS.
3. LIFE SAFETY 24VDC POWER SUPPLY FP075 (1.6A INPUT) SUPPLIES POWER FOR ANTIERRA ETHERNET SWITCH AND ISTAR EDGE CONTROLLER BOARD.
4. ISTAR EDGE CONTROLLER BOARD ESTAR001-MB.
5. ANTIERRA ETHERNET SWITCH, MODEL AND DIMENSIONS TO BE DETERMINED.
6. DIN RAIL.
7. PIGTAIL TO CONNECT TO UPS.
8. ENCLOSURE TAMPER LOCK
9. IN LIEU OF COPPER PATCH PANEL SYSTEM, INSTALL METALLIC DUAL-GANG (8-12 PORT) MODULAR FACEPLATE TO 4-11/16" SQUARE X 2-1/4" D BACKBOX HAVING DUAL-GANG REDUCER AND GROMMETED KNOCKOUTS FOR UTP CABLE ENTRY/EXIT.
10. DUPLEX OS2 SINGLEMODE FIBER PATCH CORD.
11. FIBER/COPPER CABLE INGRESS/EGRESS GROMMETS.

SECURITY ENCLOSURE

A6
TY-101FP TY-501DS

SCALE =NTS

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A/E PROJECT NUMBER	12622936
DRAWING TITLE	SECURITY DETAILS
WORKING STAFF	WSP (DESIGNED BY) / MB (DRAWN BY) / SK (CHECKED BY)
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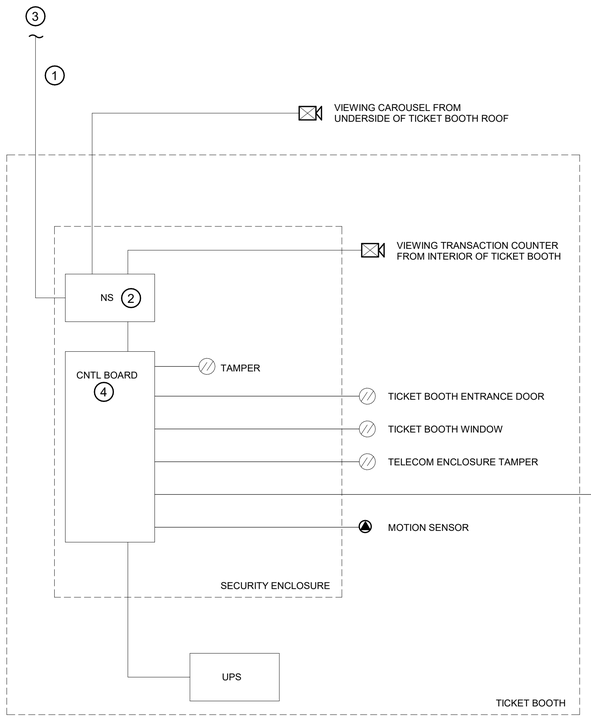

A1
TY-701RD

SECURITY DIAGRAM

SCALE = 1" = 1'-0"

DETAIL KEY NOTES:

1. ETHERNET COMMUNICATIONS OVER FIBER TO BE ROUTED TO SI ARTS & INDUSTRIES BUILDING (AIB) VIA HANDHOLE T4, INTO EXISTING DUCTBANK ALONG THE NORTH SIDE OF JEFFERSON DRIVE. USE 6-STRAND FIBER, TERMINATING IN TELECOMMUNICATIONS ROOM XYZ (TBD).
2. 8-PORT ETHERNET SWITCH FOR CONNECTIVITY TO 8 PORT ANTIERRA ETHERNET SWITCH MODEL TBD. NETWORK DEVICES TO BE PROVIDED BY SI/OCIO. OCIO CABLING CONTRACTOR SHALL INSTALL SWITCH AND ALL ASSOCIATED INFRASTRUCTURE WITHIN LOCKABLE SECURITY EQUIPMENT ENCLOSURE.
3. OCIO CABLE CONTRACTOR TO COORDINATE WITH SI-OPS AND SI-OCIO FOR FINAL HEADEND ROOM, RACK AND PATCH PANEL LOCATION AND THE EXISTING PATHWAY SYSTEMS TO USE IN ROUTE TO THE T4 MANHOLE POINT-OF-ENTRY CONDUIT LOCATION. UTILIZE NEW OR EXISTING INNERDUCT ALONG THE ENTIRE PATH. ADDITIONALLY COORDINATE FIBER INSTALLATION PASS-THRU WORK AT MANHOLE T4 WITH NMAH/MHB HIGH-VOLTAGE CONTRACTOR.
4. ISTAR EDGE CONTROLLER BOARD

HARTMAN-COX ARCHITECTS

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12/18/2024 2:07:37 PM
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