WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



DESIGN OF NEW STAIR FOR BETHESDA STATION 7450 WISCONSIN AVENUE BETHESDA, MD 20814

CONTRACT NO. 13-FQ10060-MCAP-19

FINAL SUBMISSION NOVEMBER 28, 2012



GENERAL NOTES

- 1. NOT ALL SYMBOL DEPICTED ON THIS DRAWING ARE USED IN THE ARCHITECTURAL DRAWINGS.
- 2. VERIFY ALL DIMENSIONS IN THE FIELD.
- 3. VERIFY ALL FIELD CONDITIONS.
- ALL DIMENSIONS ARE NOMINAL UNLESS NOTED OTHERWISE.
- 5. ALL WORK WILL BE COMPLETED IN ACCORDANCE WITH THE LATEST VERSIONS OF I.B.C. AND LIFE SAFETY CODES. SEE THIS SHEET FOR LIST OF CODES. ALL WORK IS DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH WMATA DESIGN CRITERIA, VERSION 9.
- 6. DO NOT SCALE DRAWINGS FOR PURPOSES OF CONSTRUCTION.
- ANY DEVIATION FROM, OR IN FIELD ALTERATION TO THESE DRAWINGS, AND SPECIFICATIONS IS STRICTLY PROHIBITED WITHOUT PRIOR APPROVAL OF A.R. ANY SUCH ALTERATIONS SHALL BE CORRECTED AT ONCE, WITH NO EXPENSE TO THE OWNER.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES REGARDLESS OF DISCREPANCIES IN THE CONTRACT DOCUMENTS. NO ADDITIONAL COSTS WILL BE PAID BY THE OWNER TO RECTIFY WORK TO BE RELOCATED DUE TO LACK OF JOBSITE COORDINATION.
- 9. DEMOLITION, CUTTING, AND PATCHING OF ANY MATERIALS OR FIXTURES REQUIRED TO CONSTRUCT THE PROJECT IS HEREIN MADE A PART OF THESE DOCUMENTS.
- 10. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS.
- 11. THE IMAGES ON THE CONSTRUCTION DOCUMENT FLOOR PLANS REFLECT THE INFORMATION FROM THE ORIGINAL CONSTRUCTION DOCUMENTS FOR THE PROJECT, IT IS NOT AN INDICATION OF NEW WORK, IT IS SHOWN IN GRAY LINE COLOR. THE NEW WORK AND REQUIRED DEMOLITION OR REMOVALS ARE SHOWN IN BLACK LINE COLOR. IF THE DIFFERENCE IS NOT OBVIOUS, REPORT TO THE A.R. IMMEDIATELY.
- 12. ALL WORK INDICATED OR SHOWN GRAPHICALLY AS "EXISTING TO REMAIN" WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND WORK AROUND WITHOUT DISTURBING. IF DAMAGED, THE CONTRACTOR WILL REPLACE AT NO ADDITIONAL COST TO THE OWNER.
- 13. FIREPROOF ALL NEW STRUCTURAL STEEL. INCLUDING. BUT NOT LIMITED TO COLUMNS, BEAMS, METAL DECK, AND MISCELLANEOUS METALS - SEE SPECIFICATION SECTION 07.81.00.
- 14. CUTTING AND PATCHING OF QUARRY TILE PAVERS WILL BE UNDERTAKEN CAREFULLY, NEW TILE WILL BE "TOOTHED" INTO EXISTING IN AREAS OF STRUCTURAL DEMOLITION.
- 15. THE DOOR AND FRAME BELOW THE STAIR ARE HOLLOW METAL. THE DOOR SIZE IS 9'-0" HIGH BY 4'-4" WIDE. THE ACTIVE LEAF IS 3'-0" WIDE. THE DOORS AND FRAME ARE PAINTED. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

INDEX OF DRAWINGS

G-002 INDEX OF DRAWINGS, VICINITY, LOCATION MAPS, AND CODE INFORMATION

ARCHITECTURAL DRAWINGS

ABREVIATIONS AND LEGENDS

A - 002WORK ZONE PLAN

A - 100DEMOLITION AND NEW WORK PLAN

A - 200STAIR SECTIONS, ELEVATIONS & REFLECTED CEILING PLAN

A - 300STAIR SECTIONS AND ENLARGED DETAILS STAIR SECTIONS AND ENLARGED DETAILS

STRUCTURAL DRAWINGS

S-001 GENERAL NOTES

DEMOLITION - EXISTING MEZZANINE STEEL DEMOLITION - EXISTING MEZZANINE CONCRETE

DEMOLITION - EXISTING PLATFORM CONCRETE

S - 200DEMOLITION - CONCRETE REMOVAL DETAILS S - 201NEW WORK - PLATFORM STAIR ELEVATION AND SECTIONS

NEW WORK - STAIR FRAMING ELEVATION AND SECTIONS

NEW WORK - CONCRETE REPAIR DETAILS S - 300NEW WORK — STEEL DETAILS

S - 301NEW WORK - PRECAST STRINGER DETAILS

ELECTRICAL DRAWINGS

SYMBOLS, ABREVIATIONS, AND GENERAL NOTES STAIR LIGHTING-MEZZANINE DEMOLITION PLAN

E - 101STAIR LIGHTING - PLATFORM

STAIR LIGHTING — MEZZANINE

PANEL AND LIGHTING FIXTURE SCHEDULE E - 600LIGHTING CALCULATIONS

CODE INFORMATION:

APPLICABLE CODES:

BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE **ELECTRICAL CODE:** 2008 NFPA 70 NATIONAL ELECTRICAL CODE LIFE SAFETY CODE: 2009 NFPA 101 LIFE SAFETY CODE ACCESSIBILTY CODES: MARYLAND ACCESSIBILITY CODE GUIDELINES

> FOR BUILDINGS AND FACILITIES -CONMAR 05.02.02, ADAAG, & FFHAG

NOTE: ALL APPLICABLE CODES TO INCLUDE MONTGOMERY COUNTY AMENDMENTS

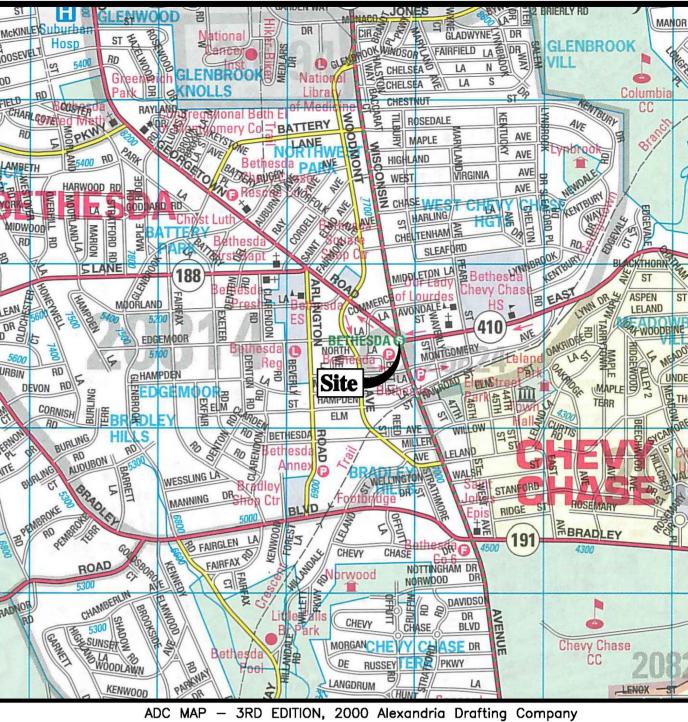
BUILDING INFORMATION:

USE GROUP: A-3 ASSEMBLY

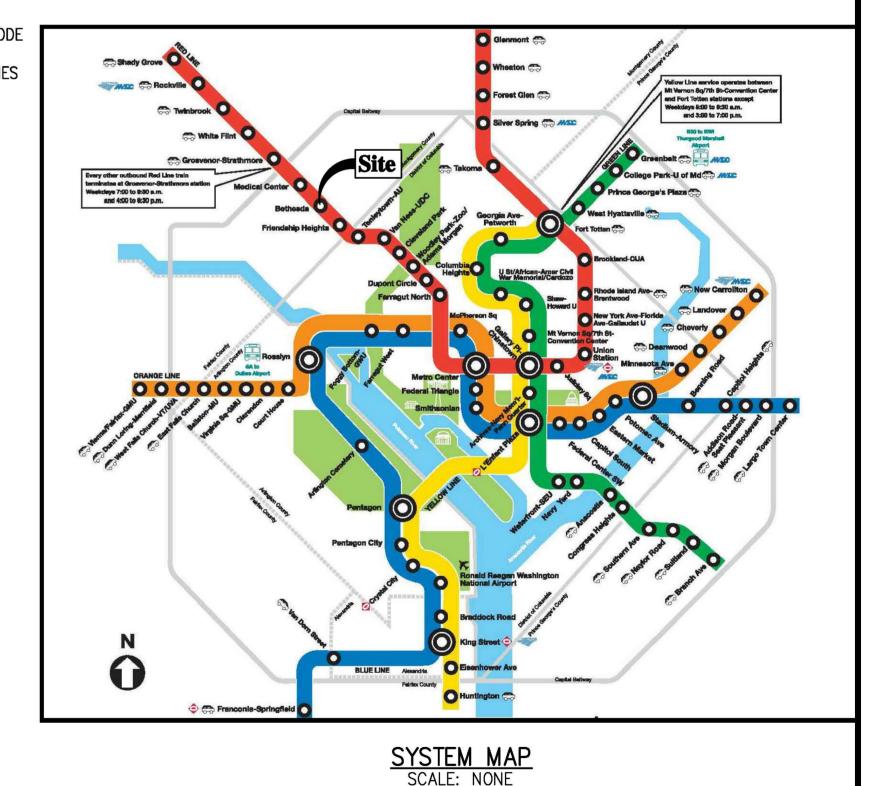
CONSTRUCTION TYPE: 1B NON-COMBUSTIBULE

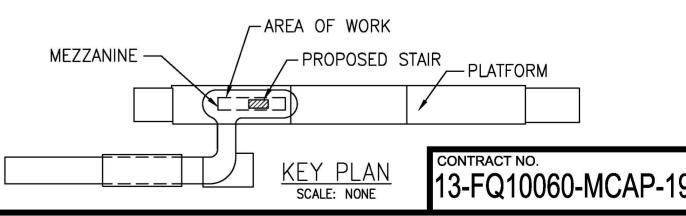
SPRINKLER SYSTEM:

EXISTING BUILDING: NONE-NOT REQUIRED PROPOSED CONSTRUCTION: NOT REQUIRED



VICINITY MAP





REFERENCE DRAWINGS **REVISIONS** DESIGNED J. SCHNEIDER DESCRIPTION NUMBER DESCRIPTION DATE BY C. RICHARDSON CHECKED J. SCHNEIDER APPROVED R. ST. JOHN DATE

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED -

JOINT VENTURE A Gannett Fleming/Parsons **SCALE**

PROJECT MANAGER

DESIGN OF NEW STAIR FOR BETHESDA STATION

GENERAL

INDEX OF DRAWINGS, VICINITY MAP, & LOCATION MAP

DRAWING NO. -002NONE G - 002

LEGEND ARCHITECTURAL ABBREVIATIONS **ABOVE** DIM DIMENSION PAINT TEL HEATER TELEPHONE **SYMBOLS** AIR CONDITIONER DIV **HVAC PORCELAIN TEMP** DIVISION HEATING, VENTILATING, & AIR CONDITIONING PORC **TEMPERED TER ACST** INSIDE DIAMETER PR ACOUSTIC DEAD LOAD ID **TERRAZZO** (100A) **DMPF** PREFAB **ADDL ADDITIONAL** DAMPPROOFING THAT IS **PREFABRICATED** THRU THROUGH DOOR NUMBER REFERENCE ADJ ΙH **PROJ** TLT **ADJACENT** INTAKE HOOD **PROJECT** TOILET AFF DPN **PSF** DEMOUNTABLE PARTITION MANUFACTURER INSUL INSULATION POUNDS PER SQUARE FOOT TRTD **TREATED** ABOVE FINISH FLOOR 100 ROOM NUMBER REFERENCE **AGGR AGGREGATE** DR INTR INTERIOR PSI POUNDS PER SQUARE INCH TYP **TYPICAL** $\frac{W}{1}$ DS JST PT UNO DOWNSPOUT JOIST **ALUMINUM** POINT UNLESS NOTED OTHERWISE WINDOW TYPE REFERENCE JOINT ALT DW PTD PAINTED VAT DISHWASHER ALTERNATE VINYL ASBESTOS TILE DWG A.R. **DRAWING** LAB LABORATORY PTN **PARTITION** VCT VINYL COMPOSITION TILE **AUTHORITY REPRESENTATIVE** L-2 LINTEL TYPE REFERENCE **ARCH PVC VERT ARCHITECTURAL EAST** LAM LAMINATE POLYVINYL CHLORIDE VERTICAL ASB **EACH** LAVATORY QTF QUARRY-TILE FLOOR VIF VERIFY IN FIELD **ASBESTOS** (V10) LOUVER TYPE REFERENCE **VTR ASPHRS EGEN** ASPHALT ROOF SHINGLES EMERGENCY GENERATOR LENGTH **RADIUS** VENT THRU ROOF **ASSOCIATION** LEFT HAND RISER EXHAUST FAN (5) RD **ASST EIFS ASSISTANT** EXTERIOR INSULATION & FINISH SYSTEM LIBRARY ROOF DRAIN WIDE TOILET ACCESSORY REFERENCE **REF** W/ **ASSY ASSEMBLY** LINEAR WITH **ELEVATION** REFRIGERANT/REFRIGERATION B REFR COLUMN REFERENCE **AVE ELEC** W/0 **AVENUE ELECTRICAL** LL LIVE LOAD **WITHOUT** REFRIGERATOR REINF **AVG AVERAGE ELEV** LLH **WBD ELEVATOR** LONG LEG HORIZONTAL REINFORCE WALLBOARD **BALC** BALCONY **ENTR ENTRANCE** LLV REQD REQUIRED WC WATER CLOSET LONG LEG VERTICAL MULTIPLE INTERIOR ELEVATION REFERENCE BD **BOARD EQUAL** LPT LOW POINT RET RETURN WD DRAWING ON WHICH FLEVATION APPEARS **BETW WDR BETWEEN** REV **EQUIP EQUIPMENT** LIGHT REVISION WOOD DOOR SINGLE INTERIOR ELEVATION REFERENCE **BLDG** BUILDING ETR REG WH EXISTING TO REMAIN REGISTER WATER HEATER LIGHTWEIGHT CONCRETE - DRAWING ON WHICH ELEVATION APPEARS BLKG BLOCKING ELECTRIC WATER COOLER **RFG EWC** MAINT MAINTENANCE **ROOFING** WTRPRF WATERPROOFING **♦**— **BLR BOILER** EXH RH PARTITON TYPE REFERENCE **EXHAUST** MAS MASONRY RIGHT HAND WWF WELDED WIRE FABRIC BM BEAM RM EX **EXISTING** MATL MATERIAL ROOM **XFMR** TRANSFORMER ~---> BM BENCHMARK **RWC** EXP MAX WB MAXIMUM **EXPANSION** RAIN WATER CONDUCTOR WHITE BOARD BOT BOTTOM EXP J1 EXPANSION JOINT **MECH MECHANICAL** LARGE SCALE PLAN REFERENCE BP SAPC BASE PLATE EXT **EXTERIOR MEMB MEMBRANE** SUSPENDED ACOUSTICAL BRDG BRIDGING **FAB MEZZ FABRICATE MEZZANINE** PANEL CEILING <u>'----</u> **BUILDING MATERIALS BEARING** SCHED **FBD FIBERBOARD** MFR **MANUFACTURER** SCHEDULE BS BOTH SIDES FD **MGR** SDG FLOOR DRAIN MANAGER SIDING **BSMT** BASEMENT SEC FDN **FOUNDATION** MANHOLE SECTION CAB **CABINET** SF **FDR** FIRE DOOR MILITARY SQUARE FOOT CAP CAPACITY SGFT FE MINIMUM FIRE EXTINGUISHER STRUCTURAL GLAZED CMU CARP CARPET FEC MISC MISCELLANEOUS FIRE EXTINGUISHER & CABINET FACING TILE CDR SH COILING DOOR FHY FIRE HYDRANT METAL SHOWER ACOUSTICAL CMU **CER** CERAMIC FIN METAL LATH SHM FINISH SECURITY HOLLOW METAL CER TILE FIX CERAMIC TILE **FIXTURE** MLDG MOLDING SHEET CMIU CAST IRON MLP SI FLASHING METAL LATH AND PLASTER INTERNATIONAL SYSTEM OF CIP CAST-IRON PIPE **FLEX FLEXIBLE** MO MASONRY OPENING UNITS SGFT / GLAZED CMU CJ CONTROL JOINT FLG **FLANGE** MOD MOTOR OPERATED DAMPER SIM SIMILAR CL MTG CENTERLINE **FLR** SKY **FLOOR** MOUNTING SKYLIGHT , , , , , , CONCRETE CLG **SLDR** CEILING **FLRG** METAL **FLOORING** SLIDING DOOR CLO CLOSET NORTH **SMLS** GYP BD / GROUT **FIREPROOF** SEAMLESS CLR **CLEAR** NOT APPLICABLE **SPEC** FIBERGLASS-REINFORCED PLASTICS **SPECIFICATION** BATT INSULATION CMIU CONCRETE MASONRY INSULATED UNIT NOT IN CONTRACT **SPKLR SPRINKLER** CONCRETE MASONRY UNIT **FOOTING** SPEAKER NUMBER RIGID INSULATION CNCL **FURNITURE SQUARE** CONCEALED **FURN NRC** SQ NOISE-REDUCTION COEFFICIENT CO **CLEANOUT** SS **GAUGE** NOT TO SCALE STAINLESS STEEL COARSE AGGREGATE CO COMPANY ST **GALV OVERALL** GALVANIZED STAINED /BALLAST COL STD COLUMN **GAR GARAGE** ON CENTER STANDARD STEEL COMP OD STL COMPOSITION **GEN GENERATOR** OUTSIDE DIAMETER STEEL CONC CONCRETE **OFFICE** STOR **GLASS** STORAGE **ALUMINUM** STRUCT CONSTR OPPOSITE HAND CONSTRUCTION GLU-LAM GLUE-LAMINATED STRUCTURE/STRUCTURAL FINISH LUMBER GOVERNMENT OHDR OVERHEAD DOOR STWY STAIRWAY CONTINUOUS GOVT CONT SUPT CONTRACTOR **GRADE OPNG OPENING** CONTR SUPERINTENDENT DIMENSIONAL LUMBER **GROUND SUPVR GRD OPP OPPOSITE** SUPERVISOR CRV CURVED **CSK** COUNTERSINK **GVL GRAVEL** ORIENTED STRAND BOARD SURF SURFACE GYPSUM WALLBOARD **SUSP** COATED **GWB** PROPERTY LINE SUSPENDED/SUSPENSION **GYP** SYS CTR **PASS** CENTER **GYPSUM** PASSENGER SYSTEM PLYWOOD PRE-ENGINEERED BUILDING CUH HIGH PEB TB TACK BOARD CABINET UNIT HEATER **PERF** PERFORATED **HDWE** HARDWARE DEPTH TOP OF ACOUSTICAL PANEL DOUBLE PLATE DBL HOLLOW METAL TOP AND BOTTOM DEG DEGREE HOLLOW METAL DOOR PLAS **PLASTER** TONGUE AND GROOVE HORIZ **PLBG PLUMBING** TAN DEPT HORIZONTAL TANGENT DEPARTMENT DET TDD EARTH DETAIL HIGH POINT **PLYWD** PLYW00D TELECOMMUNICATION DISPLAY **HEIGHT** DGL DIAGONAL PNL PANEL DEVICE DIAMETER DIA "Professional Certification. I hereby certify that these documents were prepared or CONTRACT NO. approved by me, and that I am a duly licensed professional architect under the laws of 13-FQ10060-MCAP-19 the State of Maryland, License No. 5231-A, Expiration Date: 05-18-2013." DESIGN OF NEW STAIR FOR REFERENCE DRAWINGS **REVISIONS** WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY DESIGNED J. SCHNEIDER DATE BY DESCRIPTION NUMBER DESCRIPTION **BETHESDA STATION** A Gannett Fleming/Parsons JOINT VENTURE C. RICHARDSON DEPARTMENT OF TRANSIT INFRASTRUCTURE ARCHITECTURAL DATE AND ENGINEERING SERVICES ABBREVIATIONS AND LEGENDS CHECKED J. SCHNEIDER 11/12

OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED —

SUBMITTED

PROJECT MANAGER

SCALE

NONE

DRAWING NO.

A - 001

SHEET NO.

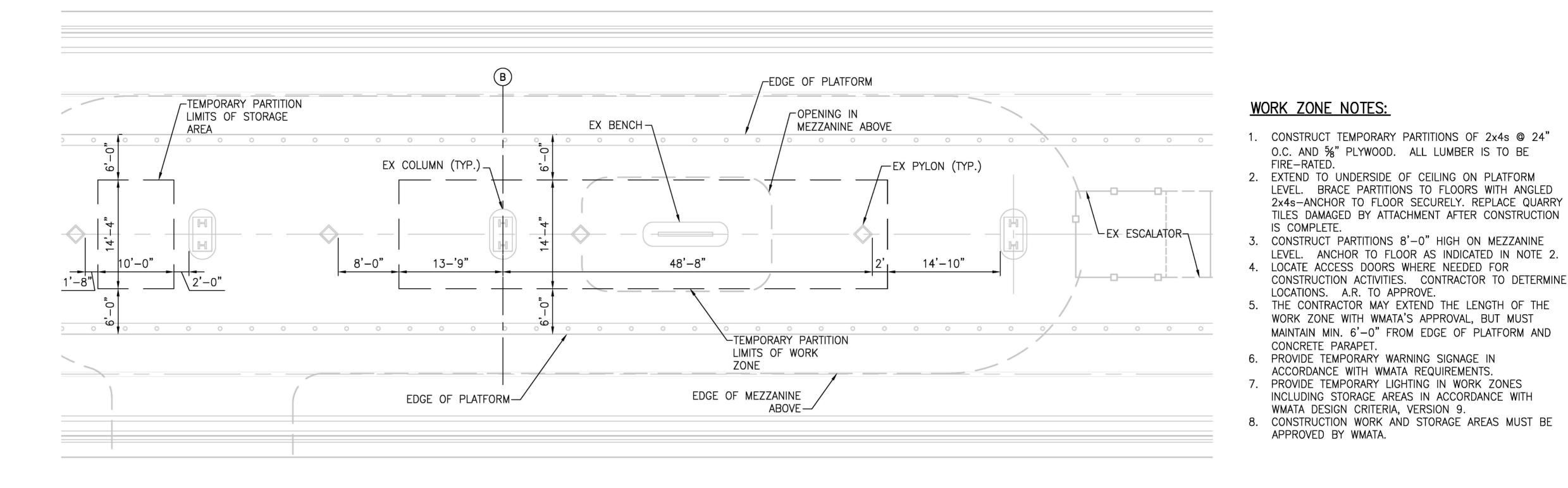
-003

DATE

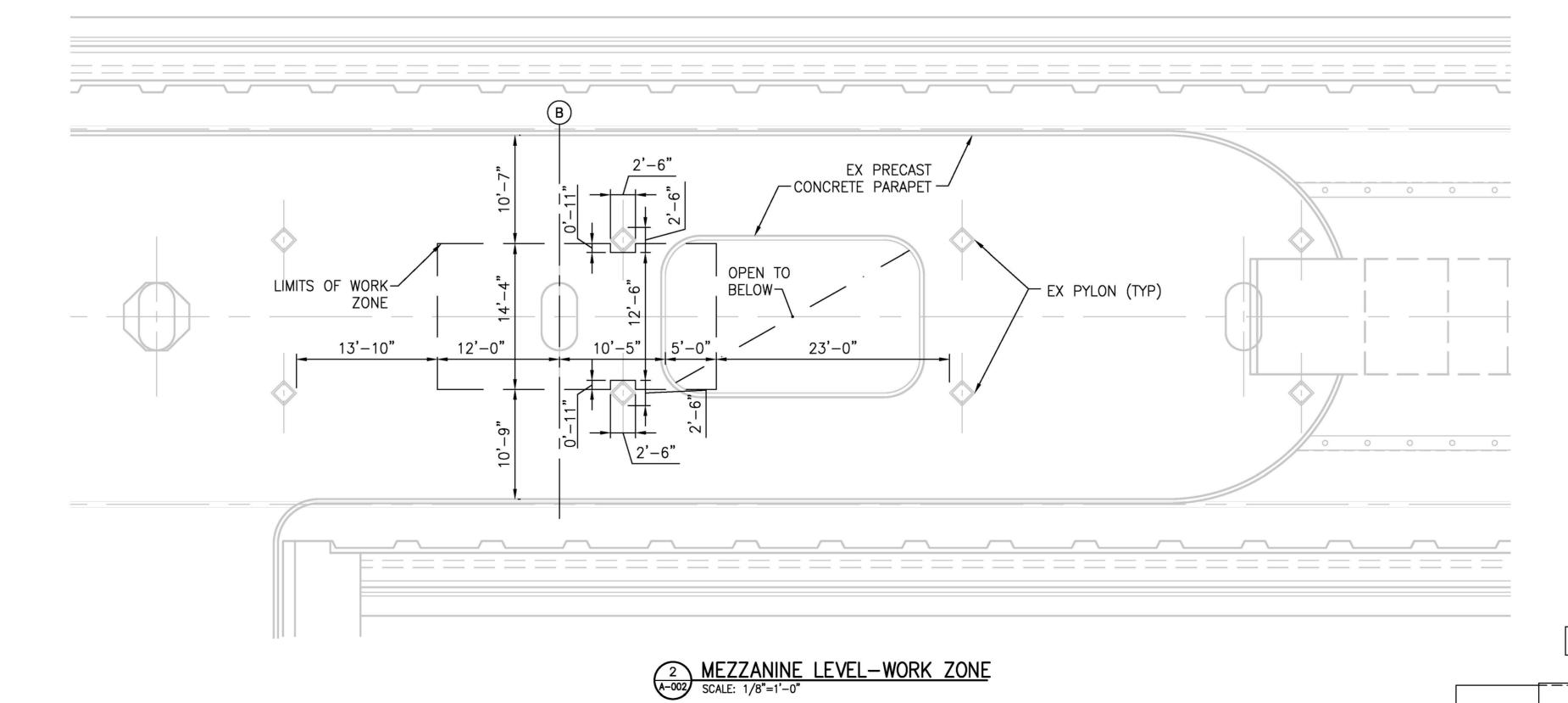
11/12

DATE

APPROVED R. ST. JOHN



1 PLATFORM LEVEL—WORK ZONE A-002 SCALE: 1/8"=1'-0"



		REFERENCE DRAWINGS		REVISIONS		
DESIGNED J. SCHNEIDER	08/12 DATE	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
DRAWN C. RICHARDSON	11/12 DATE					
CHECKED J. SCHNEIDER	11/12					
APPROVED R. ST. JOHN	DATE 11/12					
ALLINOVED	DATE					

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED -



DESIGN OF NEW STAIR FOR BETHESDA STATION

_AREA OF WORK

-PROPOSED STAIR

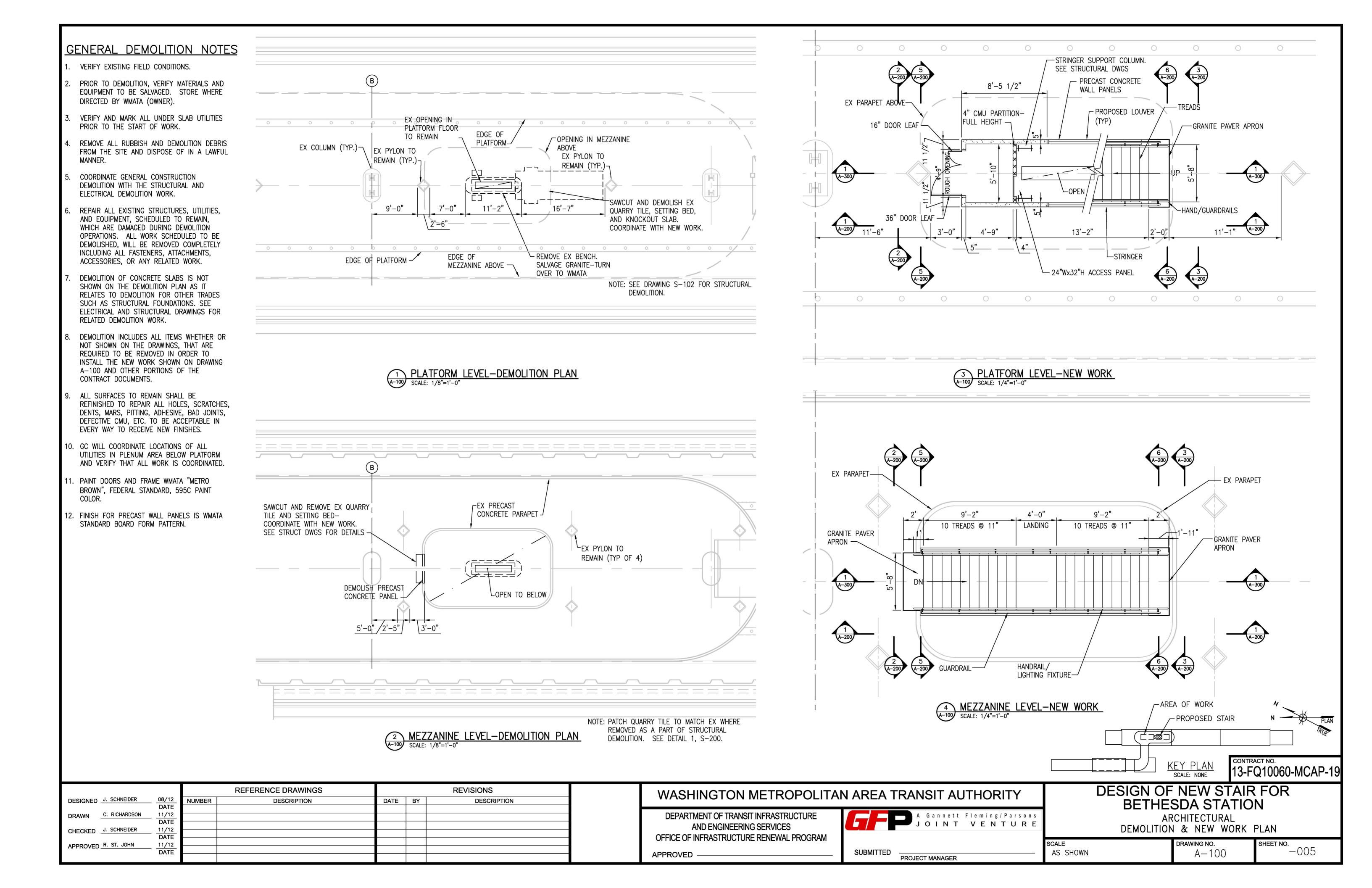
ARCHITECTURAL WORK ZONE PLAN

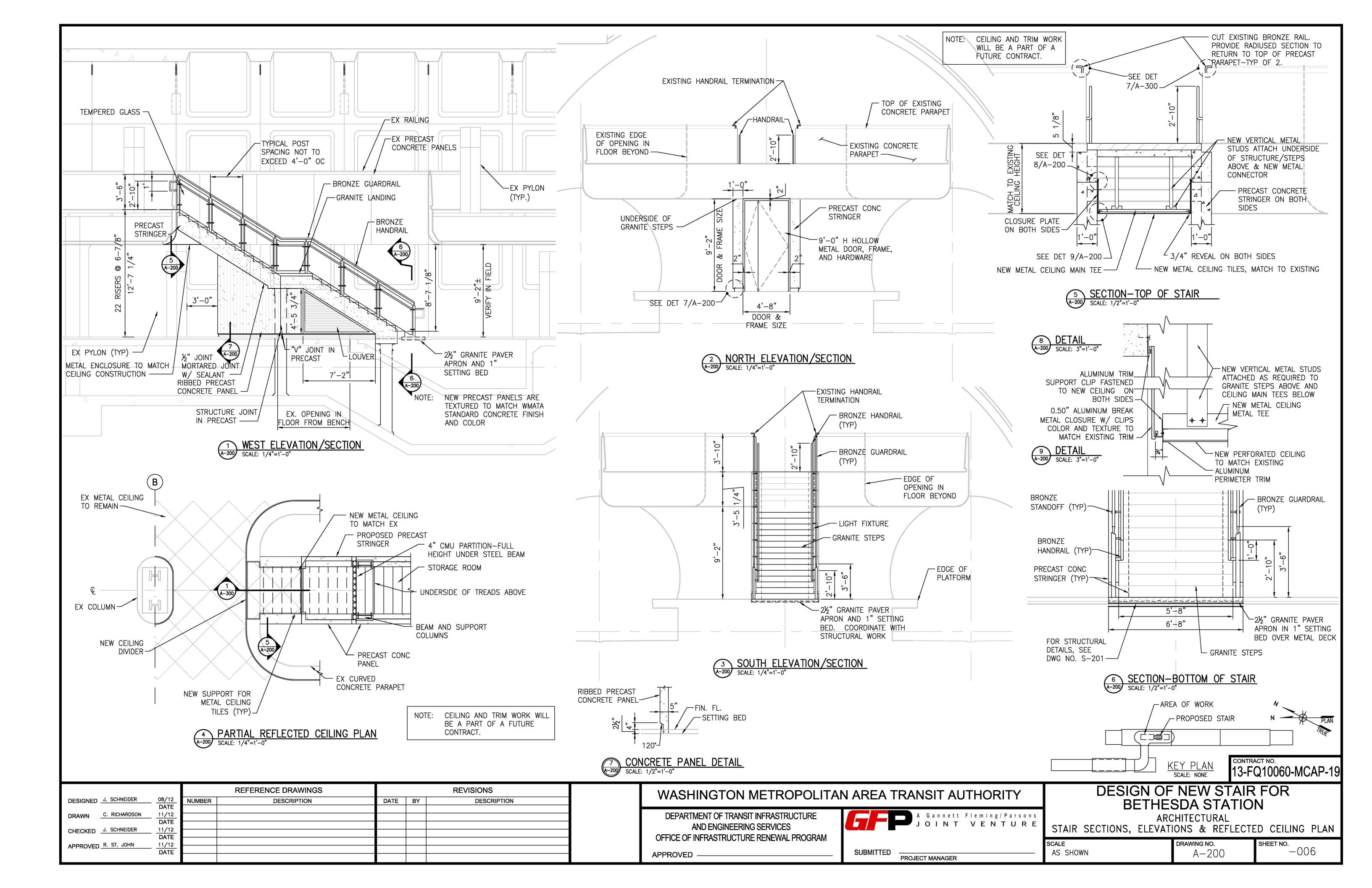
A-002

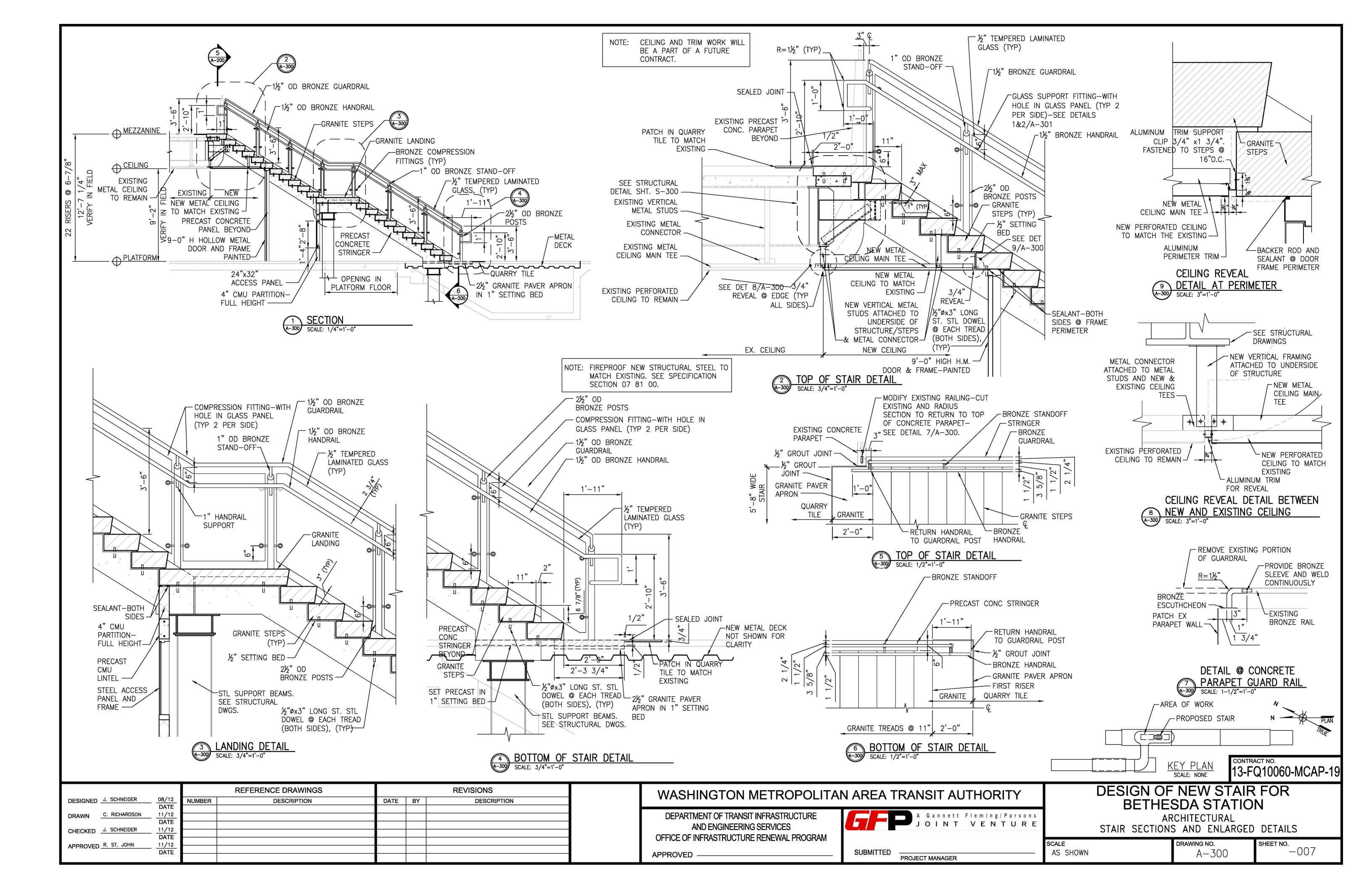
SHEET NO. -004

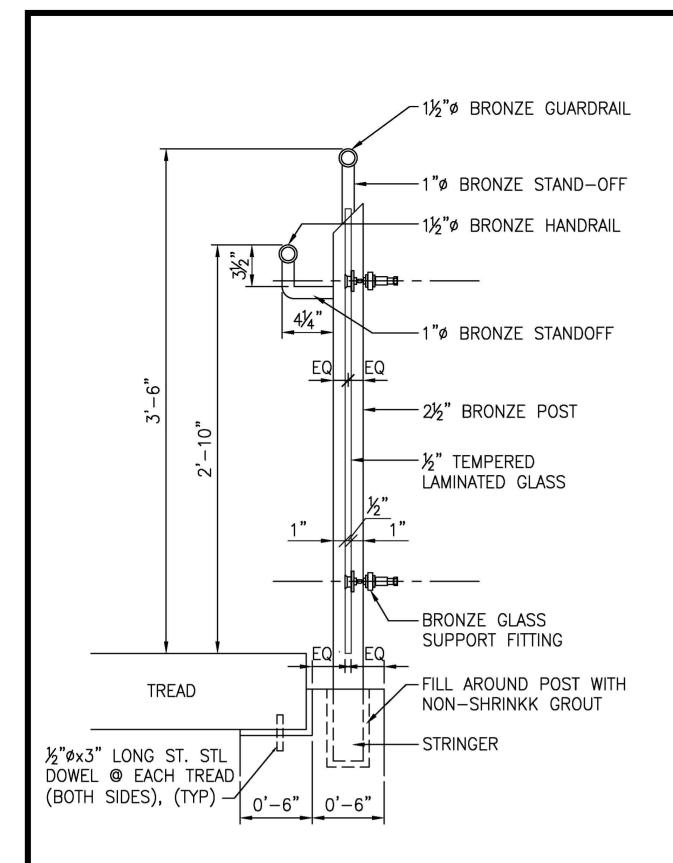
CONTRACT NO. 13-FQ10060-MCAP-19

DRAWING NO.



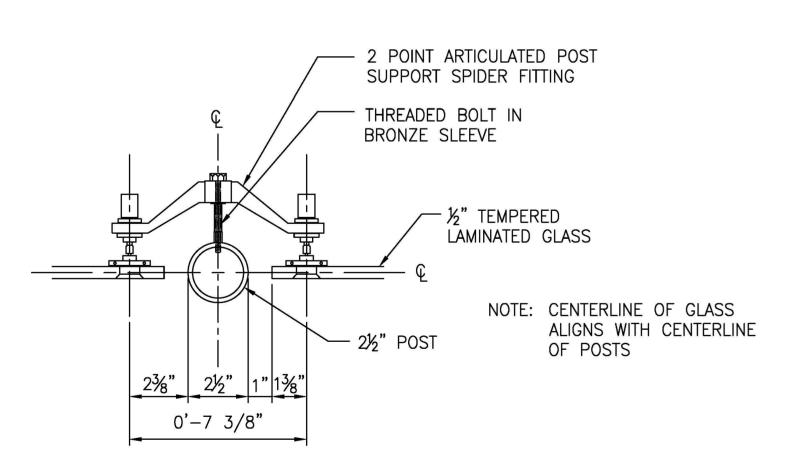






TYPICAL SECTION @ HANDRAIL

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



PLAN DETAIL @ GLASS SUPPORT FITTING

SCALE: 3"=1'-0"

CONTRACT NO. 13-FQ10060-MCAP-19

		REFERENCE DRAWINGS		REVISIONS		
DESIGNED J. SCHNEIDER	08/12 DATE	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
DRAWN C. RICHARDSON	11/12					
CHECKED J. SCHNEIDER	DATE 11/12					
STECKED	DATE					
APPROVED R. ST. JOHN	11/12 DATE					
	-, . , L					

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE
AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED —

GF	Fleming/Parsons VENTURE	
		S

PROJECT MANAGER

DESIGN OF NEW STAIR FOR BETHESDA STATION

ARCHITECTURAL
STAIR SECTIONS AND ENLARGED DETAILS

SCALE	DRAWING NO.	SHEET NO.
AS SHOWN	A-301	-008

I. GENERAL:

- 1. WORK SHALL BE COORDINATED WITH ALL TRADES TO AVOID CONFLICT OR INTERFERENCE WITH PLACEMENT OF STRUCTURAL MEMBERS, IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER PRIOR TO PERFORMING THE WORK.
- 2. PIPES, CONDUITS, AND DUCT WORK PRESENT IN PLENUM (UNDER PLATFORM) ARE NOT SHOWN IN THE STRUCTURAL DRAWINGS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WHAT UTILITIES ARE PRESENT AND RELOCATE AS REQUIRED FOR STRUCTURAL MEMBER PLACEMENT, AS PART OF THE WORK. RELOCATIONS SHALL BE PERFORMED PRIOR TO CONSTRUCTION SHOWN ON THESE DOCUMENTS.
- 3. DO NOT CUT OR ALTER ANY EXISTING STRUCTURAL MEMBERS, BEYOND THOSE SHOWN FOR REMOVAL IN
- 4. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING WORK, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 5. PRIOR TO PREPARATION OF SHOP DRAWINGS THE CONTRACTOR SHALL VERIFY AND/OR DETERMINE THE SIZE, LOCATION, CONFIGURATION, ETC. OF EXISTING STRUCTURE AT EVERY LOCATION WHERE NEW WORK IS TO ABUT, ATTACH, OR CLEAR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONDITIONS WHICH DIFFER FROM THOSE SHOWN ON PLANS.

II. DESIGN:

1. DESIGN IN ACCORDANCE WITH THE FOLLOWING CODES:

A. INTERNATIONAL BUILDING CODE (IBC) 2012 B. ACI 318 & ACI 301, CURRENT VERSIONS C. WMATA MANUAL OF DESIGN CRITERIA, RELEASE 9

2. DESIGN LOADS:

A. STAIRS: 150 PSF & 300 LB CONCENTRATED LOAD (OUTSIDE D.C. ONLY)

B. MEZZANINE: 150 PSF C. PLATFORM: 150 PSF

D. PRECAST WALL UNITS: 40 PSF WIND LOAD

III. MATERIALS:

1. STRUCTURAL STEEL:

ALL ROLLED SHAPES: ALL PLATES AND CONNECTION MATERIAL:

ANCHOR RODS:

ASTM F1554, GRADE 55, GALV. AS PER ASTM A123 ASTM A325, U.N.O **BOLTING MATERIALS:**

2. SHEAR CONNECTORS:

为" DIAMETER HEADED STUDS, U.N.O. (LENGTHS SHOWN ON PLANS)

3. CAST-IN-PLACE CONCRETE:

FLOOR SLABS

4. PRECAST CONCRETE: ARCHITECTURAL PANELS:

5,000 PSI, NORMAL WEIGHT CONCRETE STAIR STRINGERS: 5,000 PSI, NORMAL WEIGHT

5. REINFORCEMENT:

DEFORMED BARS:

ASTM A615, GRADE 60, BLACK

4,000 PSI, NORMAL WEIGHT

ASTM A992, GRADE 50

ASTM A36

IV. STRUCTURAL STEEL:

- 1. ALL WELDING SHALL COMPLY WITH A.W.S., D1.1, LATEST VERSION.
- 2. USE NON-SHRINK, NON-METALLIC GROUT UNDER BASE PLATES WITH A MINIMUM STRENGTH OF 7,000 PSI AT 28 DAYS.
- 3. ADEQUATE TEMPORARY BRACING SHALL BE PROVIDED DURING CONSTRUCTION. AS REQUIRED. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL STEEL, TEMPORARY CONNECTIONS, EQUIPMENT, GUYING, ETC., REQUIRED FOR STEEL ERECTION.
- 4. MINIMUM THICKNESS OF STRUCTURAL STEEL PLATES AND MISCELLANEOUS MATERIAL SHALL BE $\frac{1}{4}$ ".
- 5. ALL COLUMN BASE PLATES SHALL BE AS PER SECTION III, MATERIALS. MILL ENDS OF COLUMNS AT BASE
- 6. ALL PROPOSED STEEL, AND EXISTING STEEL WHICH HAD FIREPROOFING REMOVED FOR PROPOSED STEEL INSTALLATION, SHALL BE PROTECTED WITH SPRAYED FIREPROOFING. FIREPROOFING SHALL HAVE A MINIMUM TWO HOUR FIRE RESISTANCE RATING.
- 7. ALL STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.

V. PRECAST CONCRETE:

- 1. PRECAST CONCRETE UNITS SHALL BE DESIGNED, PRODUCED, AND ERECTED IN ACCORDANCE WITH METHODS AND SPECIFICATIONS CONTAINED IN THE LATEST VERSIONS OF THE PCI DESIGN HANDBOOK AND ACI 318.
- 2. CONTRACTOR/PRECAST MANUFACTURER SHALL VERIFY ALL DIMENSIONS FOR STAIR STRINGERS AND WALL PANELS. PRIOR TO SHOP DRAWINGS AND FABRICATION.
- 3. PRECAST MANUFACTURER SHALL SUBMIT SHOP DRAWINGS, SIGNED AND SEALED DESIGN BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND FOR APPROVAL. SHOP DRAWINGS MUST INCLUDE ALL REINFORCEMENT DETAILS, EMBEDMENTS AND ANCHORAGES.
- 4. ALL CONCRETE EMBEDMENTS SHALL BE HOT DIPPED GALVANIZED.

VI. MASONRY:

- 1. INTERIOR CMU WALL SHALL BE 4", AND REINFORCED VERTICALLY WITH #5 BARS @ 24". DOWEL BARS SHALL BE DRILLED INTO STRUCTURAL FLOOR SLAB AND GROUTED WITH EPOXY GROUT TO AN EMBEDMENT DEPTH NOT LESS THAN 4"
- CMU WALL SHALL HAVE HORIZONTAL TRUSS REINFORCING EVERY 16".

VII. METAL DECK

- 1. COMPOSITE METAL DECK SHAL BE USED TO REPAIR THE KNOCKOUT SLAB AT THE PLATFORM LEVEL OF BETHESDA STATION. THE DECK SHALL BE FABRICATED FROM ASTM A611 OR ASTM A653 STEEL WITH ASTM A653 GALVANIZING, PROPOSED DECK SHALL BE 2 INCH. 18 GA. WITH 21/3" CONCRETE TOPPING.
- 2. ALL METAL DECKING HAS BEEN DESIGNED FOR UNSHORED CONSTRUCTION.
- 3. DECK SUPPLIER SHALL FURNISH ANY AND ALL SCREEDS, CLOSURES, POUR STOPS, COLUMN CLOSURES AND CANTILEVER STRIPS AS REQUIRED FOR COMPLETE INSTALLATION OF DECK.
- 4. THE CONTRACTOR SHALL FASTEN STEEL DECK TO STEEL FRAMING WITH THE FOLLOWING:
 - AT ENDS AND SUPPORT: 5/8" DIAMETER PUDDLE WELDS WITH A 36/4 PATTERN.
- SIDE LAPS: #10 TEK SCREWS AT 12" SPACING, OR EQUIVALENT.
- DECK EDGES: 5/8" DIAMETER PUDDLE WELDS AT 18" SPACING

VIII. DEMOLITION:

- 1. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, SHIELDING, TEMPORARY WALLS, ETC., AS REQUIRED TO PREVENT THE PROPAGATION OF CONSTRUCTION DEBRIS BEYOND THE WORK AREA.
- 2. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF ALL WORKMEN, AUTHORITY EMPLOYEES AND THE PUBLIC EXPECTED TO BE IN THE PROXIMITY DURING THIS WORK.
- 3. NOTIFY OWNER AND ENGINEER IMMEDIATELY IF ANY PORTION OF THE EXISTING STRUCTURE WHICH IS NOT TO BE DEMOLISHED, IS DAMAGED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIR COSTS, INCLUDING DESIGN AND INSPECTION EXPENSES.
- 4. CONTRACTOR SHALL SAW CUT IN LOCATIONS SPECIFIED AS PER PLANS. CUTTING SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. CONTRACTOR TO DRILL CORNERS AND SAW CUT STRAIGHT LINES. CUT AND/OR DAMAGED PAVER TILES SHALL BE REMOVED IN THE PROXIMITY OF THE SAW CUTS TO THE NEXT UNDAMAGED TILE AND REPLACED.
- 5. CONTRACTOR'S WORK ZONE IS SHOWN ON DRAWING NO. A-004. ALL CLEARANCES SHOWN MUST BE MAINTAINED AT ALL TIMES.
- 6. THE CONTRACTOR WILL BE REQUIRED INSTALL BRACING OR SHORING TO MINIMIZE CORNER CRACKS AND TRANSFERRING LOAD TO ADJACENT SLAB FOR THE DEMOLITION OPENINGS IN THE PLATFORM SLAB (1'-10" X 1'-1"). TEMPORARY STEEL ANGLES BOLTED THROUGH THE SLAB ALIGNED DIAGONALLY WITH EACH OF THE PROPOSED SLAB CUT CORNERS IS RECOMMENDED. THE CONTRACTOR MAY ALSO SHORE THE SLAB FROM THE UNDERSIDE AS AN OPTION. THE BRACING/SHORING METHOD SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER AND THE AUTHORITY BEFORE PLATFORM SLAB DEMOLITION BEGINS.

IX. CONSTRUCTION/ERECTION:

1. THE CONTRACTOR SHALL BE AWARE THAT THE PLATFORM OF THE BETHESDA METRO RAIL STATION IS NOT ON GRADE, AND THAT VOIDS EXIST UNDER THE 8" THICK CONCRETE PLATFORM SLAB, THE CONTRACTOR IS PROHIBITED FROM USING ANY CONSTRUCTION EQUIPMENT, SUCH AS A FORK LIFT OR OTHER MECHANIZED RUBBER TIRED VEHICLE, TO RAISE AND POSITION THE PRECAST CONCRETE STRINGERS, OR FOR ANY OTHER CONSTRUCTION RELATED ACTIVITIES. SUCH EQUIPMENT WILL ONLY BE PERMITTED IF THE CONTRACTOR CAN PROVIDE CALCULATIONS TO THE AUTHORITY THAT THE EXISTING FLOOR SLAB IS CAPABLE OF SUPPORTING SUCH LOADS SAFELY, WITH OR WITHOUT TEMPORARY UNDER-PLATFORM SHORING. REQUIRED CALCULATIONS MUST BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND AND SUBMITTED TO THE AUTHORITY FOR REVIEW AND APPROVAL.

APPROVED -

- 2. SUGGESTED SEQUENCE OF CONSTRUCTION FOR STRUCTURAL ELEMENTS: (CONTRACTOR SHALL SUBMIT SEQUENCE OF CONSTRUCTION FOR APPROVAL)
 - A. REMOVE MEZZANINE AND PLATFORM CONCRETE, AND PRECAST PARAPET AS SHOWN.
 - B. INSTALL ANCHOR RODS FOR EACH STEEL FRAME. INSTALL STEEL FRAMES FOR CENTER AND BOTTOM LANDINGS. BOTH FRAMES SHALL BE TEMPORARILY BRACED IN TRANSVERSE AND LONGITUDINAL
- C. INSTALL PROPOSED MEZZANINE FRAMING, WITH THE EXCEPTION OF THE W6X12 BEAM BETWEEN
- D. INSTALL BOTTOM PRECAST STRINGERS TO BOTTOM LANDING FRAME AND CENTER LANDING FRAME. SHIM AS REQUIRED. TEMPORARY WELDS MAY BE USED. DO NOT INSTALL ANY GRANITE RISERS.
- E. WELD THE W6X12 BEAM BETWEEN THE TWO TOP STRINGERS TO TOP EMBEDDED PLATES. RAISE AND SET THE TWO PRECAST STRINGERS AND STEEL BEAM INTO POSITION ON THE CENTER LANDING FRAME.
- WELD THE W6X12 BEAM BETWEEN THE TWO TOP STRINGERS TO TOP EMBEDDED PLATES. RAISE AND SET THE TWO PRECAST STRINGERS AND STEEL BEAM INTO POSITION ON THE CENTER LANDING FRAME SHORE THE W6X12 BEAM SUCH THAT IT LINES UP WITH PROPOSED MEZZANINE FRAMING. ADJUST POSITION OF THE C7X9.8 ON THE W6X12 CONNECTION PLATES UNTIL STRINGERS ARE EVEN WITH ONE ANOTHER AND AT THE CORRECT ELEVATION. INSTALL FINAL WELDS BETWEEN THE ENDS OF THE C7X9.8 AND THE W6X12.
- G. INSTALL PERMANENT WELDS AT ALL STRINGER BASE PLATES.
- H. REPAIR PLATFORM CONCRETE AROUND CENTER LANDING SLAB COLUMNS.
- REPLACE THE KNOCKOUT SLAB WITH A NEW CONCRETE SLAB AND METAL DECKING.
- J. INSTALL GRANITE RISERS, BEGINNING AT THE BASE OF THE STAIRS AND ENDING AT THE TOP GRANITE LANDING.
- K. ADJUST POSITION OF BOLTS IN SLOTTED HOLES AS REQUIRED BETWEEN C7X9.8 AND THE CONNECTION PLATES OF THE W24X68 TO ACCOUNT FOR DL DEFLECTION OF THE NEW STEEL SUPPORTS. INSTALL FINAL FIELD WELD BETWEEN C7X9.8 AND THE W6X12 CONNECTION PLATES. AFTER STAIRS FULLY LOADED.
- L. INSTALL NEW PAVER TILES AT PLATFORM AND GRANITE BOTTOM LANDING SLAB.
- M. INSTALL 4" CMU WALL, ARCHITECTURAL PRECAST PANELS, AND DOOR UNDER STAIRS.

ABBREVIATIONS

CONTRACT NO. 13-FQ10060-MCAP-19

		REFERENCE DRAWINGS		REVISIONS		
DESIGNED W. ROBIN	08/12	NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION
DRAWN C. RICHARDSON	DATE 08/12					
46 44 44 44 44	DATE					
CHECKED D. MOSTOLLER	11/12 DATE					
APPROVED M. AKLAN	11/12					
	DATE					

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM



DESIGN OF NEW STAIR FOR BETHESDA STATION

STRUCTURAL GENERAL NOTES

DRAWING NO. SHEET NO. -009S - 001

PROJECT MANAGER

AS SHOWN

