GENERAL NOTES

I. Codes and Standards

A. The following codes and standards shall apply to the design and construction of this structure:

1. "International Building Code 2012" - International Code Council
2. "Building Code Requirements for Structural Concrete (ACI 318-11)" - American Concrete Institute.
3. "Manual of Steel Construction" - American Institute of Steel Construction, Inc., Fourteenth Edition
4. "ACI Manual of Concrete Practice 2008 (Part 1 through Part 5)" - American Concrete Institute.
5. "CRSI Handbook" 2008 - Concrete Reinforcing Steel Institute.
6. "PCI Design Handbook, 7th Edition" - Precast/Prestressed Concrete Institute
7. ASCE 7-10, Minimum Design Loads for Buildings & Other Structures - American Society of Civil Engineers.

B. The construction of this structure including the quality control and safety of all work shall be governed by all applicable Federal and District of Columbia codes and ordinances including Fire Codes. This structure shall be classified as Type IIB.

C. Use the latest editions unless noted otherwise.

D. The structure is designed for (2 1/2) levels of future vertical expansion.

II. Existing Condition or Construction

Prior to fabrication and erection or installation of any material or placement of concrete for new construction, FIELD VERIFY ALL EXISTING elevations, dimensions, and conditions of adjacent existing construction including foundation and compare them with the Contract Documents. Report any contradiction or discrepancy to the Architect/Engineer immediately for interpretations and/or adjustments prior to commencing work. Cost of correcting discrepancies after work has been started shall be borne by the Contractor.

III. Design Loads

A. Live Loads:

	Roof (Top Tier)		Typical	
	Uniform	Concetrated	Uniform	Concentrated
1. Supported parking levels	40 psf	*	40 psf	*
2. Stairs, landings, and lobbies			100 psf	**
3. Stair elevator tower roof	20 psf			

Note: Live load reductions permitted per IBC 2012 section 1607.9

4. * Concentrated wheel load (on 4.5 in. x 4.5 in.; applied to produce maximum stress) 3000 lbs.
5. ** Concentrated load on stair treads (on area of 4 sq. in., applied to produce maximum stress) 300 lbs.
6. Bumper impact load at 18" & 27" A.F.F. (on 1 sq. ft. surface; all susceptible members) 6000 lbs.

B. Wind Loads:

1.	Basic wind speed	115 mph
2.	Ice Importance Factor	1.0
3.	Wind exposure category	B
4.	Wind importance factor, Iiw	1.0
5.	Internal pressure coefficient, GCPi	0.55
6.	Wind design pression, Pis:	

Components & Cladding	Wind Pressure (psf)				
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
All Tiers	37.63	57.06	57.06	37.39	43.95

Note: See ASCE 7-10, FIGURE 30.4-1 &30.4-2A for add'l info

C. Seismic Loads:

1.	Seismic Importance Factor	1.0
2.	Risk Category	II
3.	Ss: 0.2 second spectral response acceleration S1: 1.0 second spectral response acceleration	0.195 0.059
4.	Site Class	D
5.	Sds: 0.2 second spectral response coefficient Sd1: 1.0 second spectral response coefficient	0.208 0.094
6.	Seismic Design Category	B
7.	Seismic Force Resisting System	

a. The Seismic Force Resisting System shall be classified as Intermediate Precast Structural Walls and shall comply with the requirements of ASCE 7-05 Section 14.2.2.14.

b. Bearing wall system with intermediate precast shear walls (N/S) & Intermediate reinforced concrete moment frame (E/W)

8. Design Base Shear

a. N-S shearwall seismic loads (per wall, kips)

West Structure

Level \ Wall	SW#1	SW#2	SW#3
6th Tier	194 kips	23 kips	31 kips
5th Tier	170 kips	20 kips	27 kips
4th Tier	140 kips	17 kips	23 kips
3th Tier	110 kips	14 kips	18 kips
2nd Tier	80 kips	11 kips	14 kips
G Tier	54 kips	9 kips	12 kips
B1 Tier	27 kips	7 kips	10 kips
Base Shear	775 kips	101 kips	135 kips

East Structure

Level \ Wall	SW#4	SW#5	SW#6	SW#7
6th Tier	48 kips	37 kips	25 kips	255 kips
5th Tier	42 kips	32 kips	22 kips	223 kips
4th Tier	35 kips	27 kips	19 kips	183 kips
3th Tier	28 kips	22 kips	16 kips	143 kips
2nd Tier	21 kips	16 kips	12 kips	104 kips
G Tier	14 kips	11 kips	9 kips	63 kips
B1 Tier	8 kips	7 kips	6 kips	27 kips
Base Shear	196 kips	152 kips	109 kips	998 kips

b. E-W shearwall seismic loads (per wall, kips)

West Structure

Level \ Wall	LW#1	LW#2
6th	68 kips	68 kips
5th Tier	60 kips	60 kips
4th Tier	50 kips	50 kips
3rd Tier	40 kips	40 kips
2nd Tier	31 kips	31 kips
G	21 kips	21 kips
B1	11 kips	11 kips
Base Shear	281 kips	281 kips

East Structure

Level \ Wall	LW#3	LW#4	LW#5
6th	58 kips	58 kips	58 kips
5th Tier	51 kips	51 kips	51 kips
4th Tier	43 kips	43 kips	43 kips
3rd Tier	34 kips	34 kips	34 kips
2nd Tier	26 kips	26 kips	26 kips
G	18 kips	18 kips	18 kips
B1	9 kips	9 kips	9 kips
Base Shear	239 kips	239 kips	239 kips

9. Cs: Seismic Response Coefficient

a. N-S Shearwall Cs = .052
b. E-W Shearwall Cs = .035

10. R: Response Modification Factor

a. N-S Shearwall R = 4
Cd = 4

b. E-W Shearwall R = 5
Cd = 4.5

11. Analysis Procedure Used: Equivalent lateral force procedure

D. Roof Snow Loads:

1.	Ground snow load, pg	25 psf
2.	Flat roof snow load, pf	21 psf
3.	Snow exposure factor, Ce	1.0
4.	Thermal factor, Ct	1.2
5.	Snow importance factor, Is	1.0
6.	Snow drift	220 pdf

E. Volume Change Parameters:

1.	Design temperature differential	50° F
2.	Annual average ambient relative humidity	70%

IV. Foundation Work (Reference only):

A. The foundation including spread footings, wall footings, retaining walls, and slab-on-grade have been designed in accordance with the geotechnical report prepared by Schnabel Engineering dated 8/11/2010. For additional information, see Division 02 of the Specifications.

B. Foundation Design Parameters: See foundation drawings for existing structure.

C. General Contractor is responsible for the design and construction of all temporary excavations, bracing, sheeting, and shoring.

V. Concrete:

A. Material Properties - Concrete:

Application	f'c (min.) @ 28 days (psi)	W/C ratio (Max.)	Slump (inches)	Total Air Content (±1 1/2%)
1. Cast-in-Place Concrete:				
Walls, Piers	5000	0.40	4	5 1/2
Slab-On-Grade	5000	0.40	3	6 1/2
Tee Topping, Pourstrip	5000	0.40	3	7 1/2
Other	4000	0.45	4	no test
2. Precast Concrete:				
Columns, Girders	6000	0.38	no test	5 1/2
Tees, Slabs, Stairs	5500	0.38	no test	6 1/2
Beams, Wall Panels	5000	0.40	no test	5 1/2
3. Other Concrete:				
Columns base drypack	6000	----	0	no test
Masonry grout fill	3000	----	8-10	no test
N.S.N.S. grout	6000	----	0	no test

4. The allowable maximum slump shown above shall be prior to adding superplasticizer as applicable.
5. All concrete aggregates shall be normal-weight, U.N.O.

B. Material Properties - Reinforcing & Connection Steel:

Type	Grade, ksi	ASTM No.
Deformed rebars, U.N.O.	60 (80)	A615
Weldable deformed rebars	60 (80)	A706
Welded wire reinforcement (W.W.R.)	65	A185
Prestressing strands	270	A416
Deformed bar anchors (D.B.A.)	70	A496
Headed anchor studs (H.A.S.)	60	A108

C. Cast-in-Place and Precast Concrete Notes:

1. All reinforcement shall be continuous and no splices shall be permitted except as detailed or authorized by the Engineer. When permitted, column reinforcing to be spliced according to ACI 318-08, Chapter 12, U.N.O.
2. Provide additional reinforcing around all openings, i.e., doors, windows, blockouts, etc., as follows; two #5 bars, E.F., on all sides of each opening extended 2'-0" beyond the corners of each opening plus two #5 by 4'-0" long diagonals, E.F., at each corner except as noted herein.
3. When permitted, splices shall be made by Class B tension lap splices, typical, U.N.O.
4. Provide 3/4" chamfers on exposed corners of concrete, U.N.O.
5. Provide construction and control joints in slabs and walls as shown on the Drawings. For further information, refer to section 033000 of the Specifications.
6. All inserts, coil rods, and plate connections shall be galvanized unless otherwise noted. Whenever feasible, all inserts and sleeves shall be cast in the concrete. Use of power-propelled fasteners or drilled-in anchors shall not be allowed in prestressed concrete unless authorized in writing by the Engineer.
7. Tee to tee connector plates and rebar shall be stainless steel per ASTM A 666, Type 304L. Welding on stainless steel plates shall be in accordance with latest edition of AWS Code.
8. All C.I.P. toppings, pourstrips, and washes to contain calcium nitrite corrosion inhibitor (3 gal. per cu. yd. of concrete) and 11/2 lbs. fibrous reinforcement per cubic yard of concrete in accordance with spec. section 033000. Maximum size of coarse aggregate shall be 3/8".

D. Additional Precast Concrete Notes:

1. The structural drawings have been detailed based on performance-type design of the precast members unless noted otherwise. Precast contractor shall submit the design calculations and shop drawings, with Professional Engineer's seal in the District of Columbia. Refer to spec. section 034000 for further requirements.
2. The structure has been designed for its intended final service condition. The precast contractor shall be responsible for supplemental member design to withstand forces due to handling and erection including transporting, sequencing, guying, bracing, staying and shoring required for structural stability during construction until final stability is achieved through completion of design connections.
3. Provide all openings, blockouts, reveals, rustications, recesses, drips, inserts, etc., cast into precast concrete according to the requirements of the Architectural, Electrical and Mechanical Drawings. Coordinate actual sizes and locations with respective trades. These include, but is not limited to, the following:

a. Blockouts for exterior lighting conduits as required.
b. Blockouts for electrified signs at entry/exit location.
c. Anchor bolts and conduits for light poles at top tier.
d. Embed plates and/or blockouts for separator and hoist beam connections per elevator load requirements.
e. Blockouts/openings for elevator buttons, fixtures, etc.
f. Vertical chases along lightwalls for plumbing/drainage risers.
g. Embed plates and inserts for exterior facade framing as required.

4. Provide two #4 L bars with 3'-0" legs (minimum) at each corner of precast panels.
5. P/C double tees to contain 2 gal. calcium nitrite corrison inhibitor per cubic yard of concrete.

E. Concrete Protection for Reinforcement:

1. The minimum concrete cover provided for reinforcement shall be per ACI 318-08, Section 7.7, U.N.O.
2. For prestressed/precast construction, the minimum concrete cover for reinforcement at top of all prestressed/precast members shall be 1.5 inches, U.N.O.

VI. Concrete Masonry

A. Material Properties - Masonry:

1. Prism strength of masonry, f'm = 1500 psi.
2. Mortar type "M" (below grade) or "S" (above grade)

B. General Notes for Masonry

1. Minimum vertical reinforcement for masonry walls shall be #4 @ 48" o.c., typical U.N.O. Provide one #4 vertical at all corners, at each side of openings and at ends of walls. Masonry walls subject to bumper loads shall be reinforced with #4 @ 16" o.c., extended to at least 2'-8" above floor and all cores shall be grouted solid up to 2'-8" above floor.
2. Provide dowels between foundation and masonry walls to match vertical wall reinforcement in size and spacing, U.N.O.
3. Horizontal joint reinforcement for masonry walls shall be standard weight, galvanized spaced @ 16" o.c., typical, U.N.O. Provide one-piece prefabricated units spaced @ 8" o.c. at wall corners and intersections.
4. Provide bond beam lintels with two #5 continuous above openings, U.N.O. Bearing support for bond beams shall be solid blocks or hollow blocks grouted solid over an area of 8" wide minimum, over three courses below and extending out at an angle of 45 degrees, U.N.O.
5. The Contractor shall verify that all openings below lintels are adequate to accept door or window frames, louvers, etc., as shown on the Drawings. Notify Architect and/or Engineer of any conflict prior to lintel installation.
6. Provide control joints in masonry or brick walls at 20'-0" o.c., maximum, U.N.O.

VII. Structural Steel

A. Material Properties - Structural Steel:

Type	Fy, psi	ASTM No.
W-Shape	50,000	A992
Anchor Bolts	36,000	F1554, Grade 36
Connection Steel	36,000	A36
Steel Pipes	35,000	A53, Grade B
Structural Tubes	46,000	A500, Grade B
Cold Formed Steel	33,000	A924
Welding Electrodes	E70XX	AWS D1.1, D1.6 OR D19.0
Type	Fu, psi	ASTM No.
High Strength Bolts	120,000	A325

B. Structural steel fabrication, erection and connection design shall conform to AISC "Manual of Steel Construction".

C. Submit shop drawings for approval prior to any fabrication.

D. Member connections shall be detailed for a minimum factored force of no less than 10 kips as per AISC "Manual of Steel Construction".

E. All connections shall be designed for the member sizes indicated on the plans or as detailed using A325 high strength bolts, 3/4" Ø U.N.O.

F. All connections shall be standard AISC framed or seated beam connections, U.N.O.

G. All exterior steel members and connections shall be painted with rust inhibiting primer or hot dipped galvanized and painted per specifications. Do not galvanize or paint surfaces to be field welded. Touch-up all field welds with rust inhibiting primer or galvanizing repair paint and paint per specifications. Refer to AWS D19.0 for additional info.

H. Bolted connections:

1. All bolted connections shall be made with 3/4"\ ASTM A325 bolts with ASTM F436 washers and ASTM A563 nuts, U.N.O.
2. All high-strength bolt connections shall conform to "Specifications for Structural Joint Using ASTM A325 Bolts" as endorsed by AISC.
3. High-strength bolted connection shall be bearing type with threads allowed in the shear plane, U.N.O.
4. High-strength bolt shall be snug-tightened, unless required by AISC "Manual of Steel Construction" to be fully pretensioned or noted as pretensioned on the Drawings. Pretension bolts with a calibrated torque wrench or by the "turn of the nut" method.

I. All welding shall conform to AWS D1.1, AWS D1.6 (Stainless Steel) or AWS D19.0 (Galvanized Steel) - latest edition.

J. Welded connections:

1. Minimum size of weld shall be 3/16", U.N.O.
2. Surface to be field welded shall be clean and free of paint, dirt, grease or other foreign material.

VIII. Miscellaneous Items

A. These notes supplement the Specifications which shall be referred to for further information.

B. In case of conflict between notes, details and specifications, the most stringent requirements shall govern.

C. For exact sizes and locations of all mechanical, plumbing and electrical items and penetrations, consult respective trades for coordination.

D. Do not scale the drawings.

IX. Abbreviations

A.B.	ANCHOR BOLTS	EXT.	EXTERIOR	PSF	POUNDS PER SQUARE FOOT
A.F.F.	ABOVE FINISHED FLOOR	F.D.	FLOOR DRAIN	P/T	POST-TENSIONED
ALT.	ALTERNATE	F.E.	FIRE EXTINGUISHER	R.D.	ROOF DRAIN
ARCH.	ARCHITECT	F.F.	FAR FACE	RM.	ROOM
BET.	BETWEEN	FDN.	FOUNDATION	R.O.	ROUGH OPENING
BIT.	BITUMINOUS	FIN.	FINISH	R.O.F.	RANDOM ORIENTED FIBER
BOTT.	BOTTOM	FL./FLR.	FLOOR	SCHED.	SCHEDULE
BRG.	BEARING	FTG.	FOOTING	SECT.	SECTION
C.I.P.	CAST-IN-PLACE	GA.	GAUGE	SHT.	SHEET
C.J.	CONTROL JOINT/ CONSTRUCTION JOINT	GALV.	GALVANIZED	SIM.	SIMILAR
		G.B.	GRADE BEAM	S.L.V.	SHORT LEG VERTICAL
CL./CLR.	CLEAR	G.C.	GENERAL CONTRACTOR	S.O.G.	SLAB-ON-GRADE
C.M.	CONSTRUCTION MANAGER	GR.	GRADE	SPECS.	SPECIFICATIONS
C.M.U.	CONCRETE MASONRY UNIT	G.W.B.	GYPSUM WALL BOARD	SQ.	SQUARE
COL.	COLUMN	H.A.S.	HEADED ANCHOR STUDS	STD.	STANDARD
CONC.	CONCRETE	H.M.	HOLLOW METAL	STL.	STEEL
CONN.	CONNECTION	HOR.	HORIZONTAL	T & B	TOP AND BOTTOM
CONT.	CONTINUOUS	HT.	HEIGHT	T.B.D.	TO BE DETERMINED
CONTR.	CONTRACTOR	H.V.A.C.	HEATING, VENTILATION & AIR CONDITIONING	TYP.	TYPICAL
D.B.A.	DEFORMED BAR ANCHOR	I.D.	INSIDE DIAMETER	U.N.	UNLESS NOTED
DET.	DETAIL	INFO.	INFORMATION	VERT.	VERTICAL
DIA.	DIAMETER	INSUL.	INSULATION	V.I.F.	VERIFY IN FIELD
DIM.	DIMENSION	INT.	INTERIOR	W/	WITH
DN.	DOWN	INV.	INVERT	W/O	WITHOUT
DWG(S).	DRAWING(S)	JT.	JOINT	W.P.	WORKING POINT
EA.	EACH	LBS.	POUNDS	WT.	WEIGHT
E.B.F.	ELEVATION BOTTOM OF FOOTING	LIN.	LINEAL	WWF	WELDED WIRE FABRIC
E.B.P.	ELEVATION BOTTOM OF PIER	L.L.V.	LONG LEG VERTICAL	WWR	WELDED WIRE REINFORCEMENT
E.F.	EACH FACE	MAX.	MAXIMUM		
E.F.G.	ELEVATION FINISHED GRADE	MECH.	MECHANICAL		
E.J.	EXPANSION JOINT	MFR.	MANUFACTURER		
EL./ELEV.	ELEVATION	MIN.	MINIMUM		
ELEC.	ELECTRICAL	MISC.	MISCELLANEOUS		
E.T.B.	ELEVATION TOP OF BEAM	MSB	MEDIUM SAND BLAST		
E.T.C.	ELEVATION TOP OF PILE OR DRILLED PIER CAP	MTL.	METAL		
		N.F.	NEAR FACE		
E.T.F.	ELEVATION TOP OF FOOTING	N.I.C.	NOT IN CONTRACT		
E.T.L.	ELEVATION TOP OF LEDGE	N.S.N.S.	NON-SHRINK, NON-STAI		
E.T.P.	ELEVATION TOP OF PIER	N.T.S.	NOT TO SCALE		
E.T.P/C.	ELEVATION TOP OF PRECAST	O.C., O/C	ON CENTERS		
E.T.S.	ELEVATION TOP OF SLAB	O.D.	OUTSIDE DIAMETER		
E.T.W.	ELEVATION TOP OF WALL	O.H.	OPPOSITE HAND		
E.W.	EACH WAY	P/C	PRECAST CONCRETE		
E.W.E.F.	EACH WAY, EACH FACE	PSI	POUNDS PER SQUARE INCH		
E.W.P.	ELEVATION WORKING POINT				

Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14
1 35% Submission	4/15/14

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TimHaahs

Drawing Title: STRUCTURAL GENERAL NOTES

Approved: Project Director
-
-
-

Project Title: VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

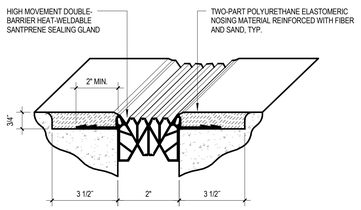
Drawing Number: S0.1

Dwg. 39 of 89

Office of Construction and Facilities Management

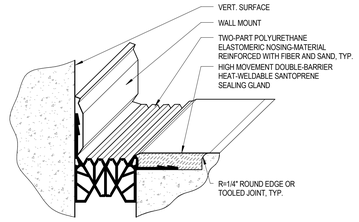
Department of Veterans Affairs

VA FORM 08-6231



NOTE:
1. THE GAP SHOWN IS AT A TYPICAL TEMPERATURE (70°F). IT WILL VARY DEPENDING ON THE PREVAILING TEMPERATURE DURING INSTALLATION AS WELL AS MOVEMENT DUE TO SHRINKAGE, CREEP AND ELASTIC SHORTENING OF CONCRETE WHICH MAY OCCUR PRIOR TO ACTUAL INSTALLATION.
2. THE GAP MAY BE PROGRESSIVELY WIDER AT THE UPPER TIERS.
3. CONTRACTOR MUST COORDINATE ACTUAL SIZE OF BLOCKOUTS REQUIRED BY EXPANSION JOINTS WITH THE EXPANSION JOINT INSTALLER.
4. THE EXPANSION JOINT SYSTEM MUST BE ADA ACCESSIBLE.

01 TYPICAL EXPANSION JOINT
6" = 1'-0"



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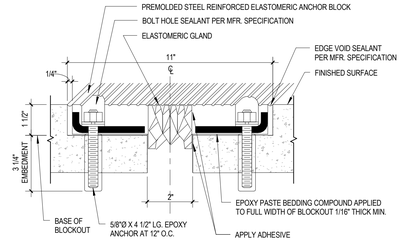
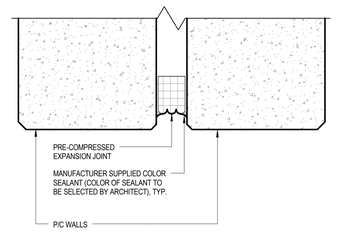
4. THE EXPANSION JOINT SYSTEM MUST BE ADA ACCESSIBLE.

02 TYPICAL EXPANSION JOINT (AT VERTICAL SURFACE)
6" = 1'-0"



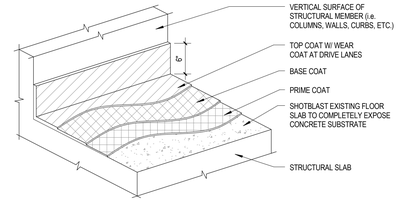
NOTES:
1. THE GAP SHOWN IS AT A TYPICAL TEMPERATURE (70°). IT WILL VARY DEPENDING ON THE PREVAILING TEMPERATURE DURING INSTALLATION AS WELL AS MOVEMENT DUE TO SHRINKAGE, CREEP, AND ELASTIC SHORTENING OF CONCETE WHICH MAY OCCUR DUE TO SHRINKAGE, CREEP, AND ELASTIC SHORTENING OF CONCRETE WHICH MAY OCCUR PRIOR TO ACTUAL INSTALLATION.
2. THE C.I.P. & P/C CONCRETE CONTRACTOR MUST COORDINATE ACTUAL SIZE OF BLOCKOUTS REQUIRED BY EXPANSION JOINT MATERIAL WITH THE JOINT INSTALLER.
3. EXTRUDED (BOLTED) EXPANSION JOINT MUST BE INSTALLED AT THE TOP LEVEL.
4. PROVIDE 6" VERTICAL RETURN (UP) AT WALL OR COLUMN TERMINATION AS APPLICABLE.

03 EXPANSION JOINT AT TOP TIER
3" = 1'-0"



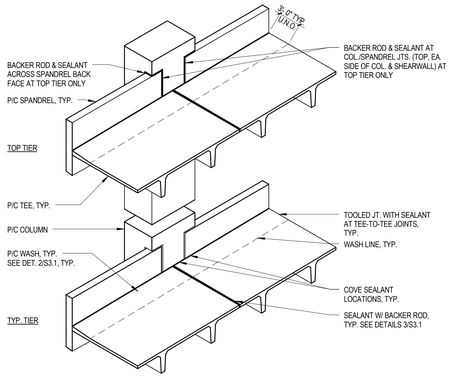
NOTE:
1. PROVIDE CONT. COMPRESSIBLE EXP. JT. AT ALL HORIZ. & VERT. JOINTS EXPOSED TO VIEW BETWEEN DECK & STAIRS/ELEVATORS. PROVIDE STRUCTURAL FLOOR EXPANSION JOINTS AT LOCATIONS SUBJECT TO VEHICULAR & PEDESTRIAN TRAFFIC PER OTHER APPROPRIATE DETAILS.
2. WATERPROOFING CONTR. TO FIELD VERIFY WIDTH OF JOINTS PRIOR TO INSTALLATION OF PRE-COMPRESSED EXP. JT.

04 COMPRESSIBLE EXPANSION JOINT
3" = 1'-0"

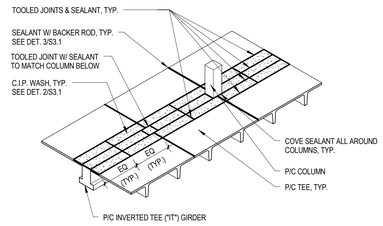


INSTALLATION PROCEDURE:
1. DEGREASE AND SHOT BLAST EXISTING FLOOR SURFACES.
2. PREPARE SURFACE & CRACKS IN ACCORDANCE WITH MANUFACTURING REQUIREMENTS AND PROCEDURES. SEE SPECIFICATION SECTION 07902 FOR ADDITIONAL REQUIREMENTS.
3. APPLY COATING AS SHOWN PER SPECIFICATION SECTION 07902 AND PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
4. REFER TO STRUCTURAL PLAN SHEETS FOR LOCATIONS OF TRAFFIC DECK COATING APPLICATION.

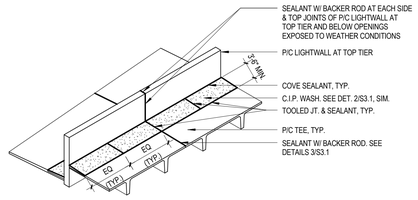
05 TRAFFIC DECK COATING APPLICATION
1" = 1'-0"



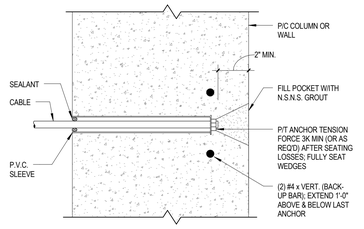
06 EXTERIOR OUTBOARD COLUMN JOINT SEALANT ISOMETRIC
1/4" = 1'-0"



07 INTERIOR COLUMN JOINT SEALANT ISOMETRIC
1/4" = 1'-0"



08 INTERIOR WALL JOINT SEALANT ISOMETRIC
1/4" = 1'-0"



09 BARRIER CABLE ANCHOR DETAIL
3" = 1'-0"

Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14

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TimHaahs

Drawing Title: STRUCTURAL GENERAL DETAILS

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S0.2

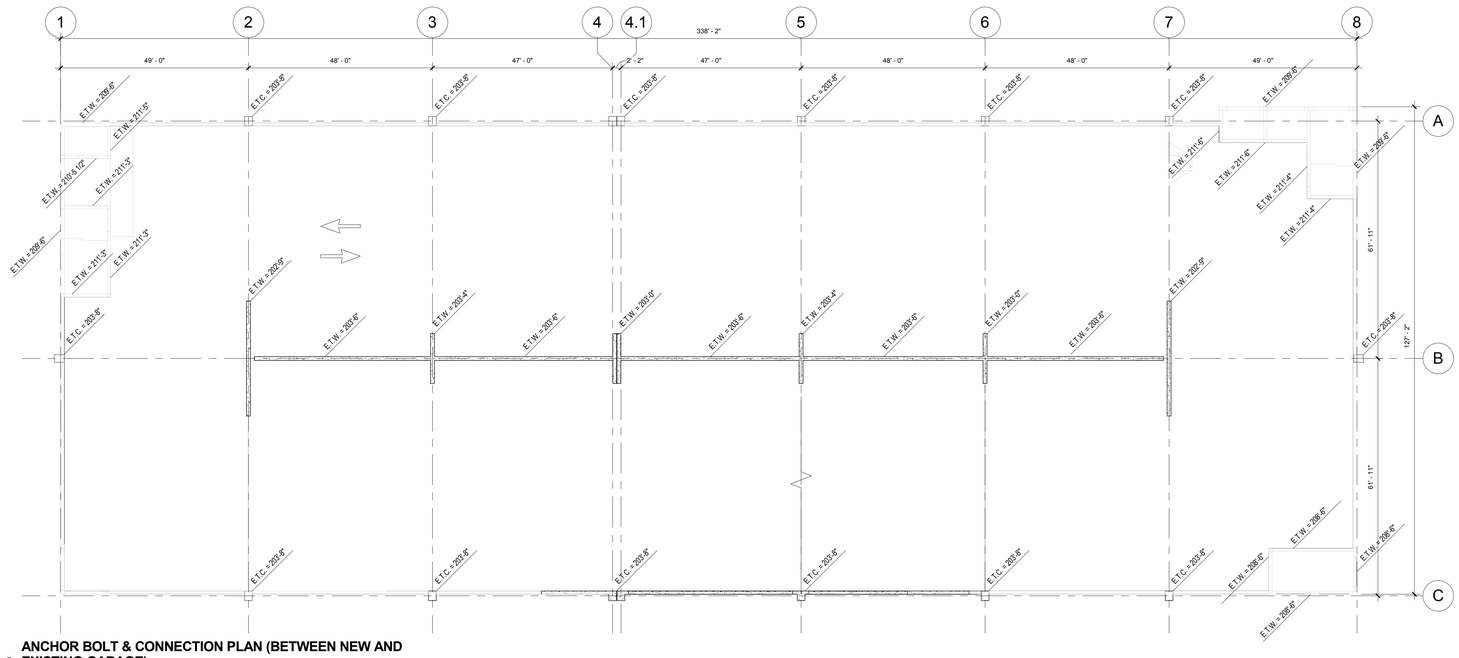
Dwg. 40 of 89

As indicated

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



01 ANCHOR BOLT & CONNECTION PLAN (BETWEEN NEW AND EXISTING GARAGE)

1/16" = 1'-0"

BASE ELEVATION = 200'-0"

SHEET NOTES:
1. ELEVATIONS AND LOCATIONS OF PRECAST MEMBERS ARE BASED ON PRECAST SHOP DRAWINGS FROM PHASE 1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE AN ACCURATE SURVEY OF EXISTING CONDITIONS.
2. REFER TO SHEET S0.1 FOR GENERAL NOTES.
3. REFER TO SHEET S0.2 FOR GENERAL DETAILS.
4. BASE EL. REPRESENTS THE BENCH MARK BY WHICH ACTUAL ELEVATIONS ARE CALCULATED BY ADDING OR SUBTRACTING ELEVATIONS SHOWN ON THE SPECIFIC LOCATION OF FOUNDATIONS.

DEDUCT ALTERNATES (ALT.)

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS
BASE: Perforated metal screen with accent lighting as shown on the drawings.
DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete accent lighting as shown on Drawings(s) 01/A2.4, 02/A2.4, 11/A5.2 and 02/E1.4

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES
BASE: Elevator finishes as shown on the drawings.
DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1 and A4.2.

DEDUCT ALT. #3 - SITE IMPROVEMENTS
BASE: All site work shown on the drawings.
DEDUCT: Provide only the site work shown on Drawing(s) 01/CS3.1 and CS3.2.

DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS
BASE: All landscape work and site furnishings shown on the drawings.
DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES
BASE: All automatic door opening devices shown on the drawings and hardware schedule.
DEDUCT: Provide manual door closer as specified in Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS
BASE: All card readers shown on the drawings and hardware schedule.
DEDUCT: Provide manual door locks/latches as specified in Spec Sections(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2.

DEDUCT ALT. #7 - BARRIER CABLE SYSTEM
BASE: Barrier cable system as shown on the drawings.
DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 – CRASH BARRIER, BOLLARDS AND SECURITY GATES
BASE: All crash barriers, bollards, and security gates shown on the drawings.
DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING
BASE: All site fencing shown on the drawings.
DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1.

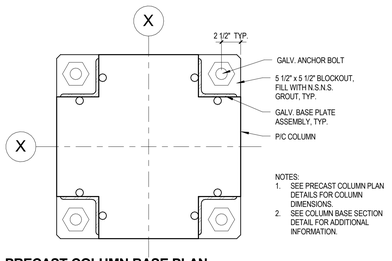
DEDUCT ALT. #10 -INTERIOR GARAGE BARRIER FENCING
BASE: All cable type barrier fencing shown on the drawings.
DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS
BASE: Security cameras as shown on the drawings.
DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and 02/E3.5.

DEDUCT ALT. #12 - LED LIGHTING
BASE: LED lighting as shown on the drawings.
DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

DEDUCT ALT. #13 - SECURITY BOOTH
BASE: Security booth as shown on the drawings.
DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

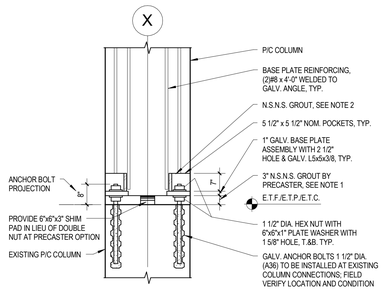
DEDUCT ALT. #14 - PARKING TIERS
BASE: 2-1/2 new tiers parking tiers as shown on the drawings.
DEDUCT: Delete 1/2 tier and connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.



NOTES:
1. SEE PRECAST COLUMN PLAN DETAILS FOR COLUMN DIMENSIONS.
2. SEE COLUMN BASE SECTION DETAIL FOR ADDITIONAL INFORMATION.

02 PRECAST COLUMN BASE PLAN

N.T.S.



NOTES:
1. GROUT COLUMN BASE AND POCKETS AFTER COLUMN IS ERECTED & PRIOR TO ERECTION OF P/C BEAM. GROUT TO MATCH COLUMN FINISH AND COLOR.
2. FIELD VERIFY LOCATION OF EXISTING COLUMN FUTURE EXPANSION ANCHORS.

03 PRECAST COLUMN BASE SECTION

N.T.S.

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
1	35% Submission	4/15/14
Revisions:		Date

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TimHaahs

Drawing Title: ANCHOR BOLT PLAN & DETAILS - EXISTING & NEW WORK

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S1.0

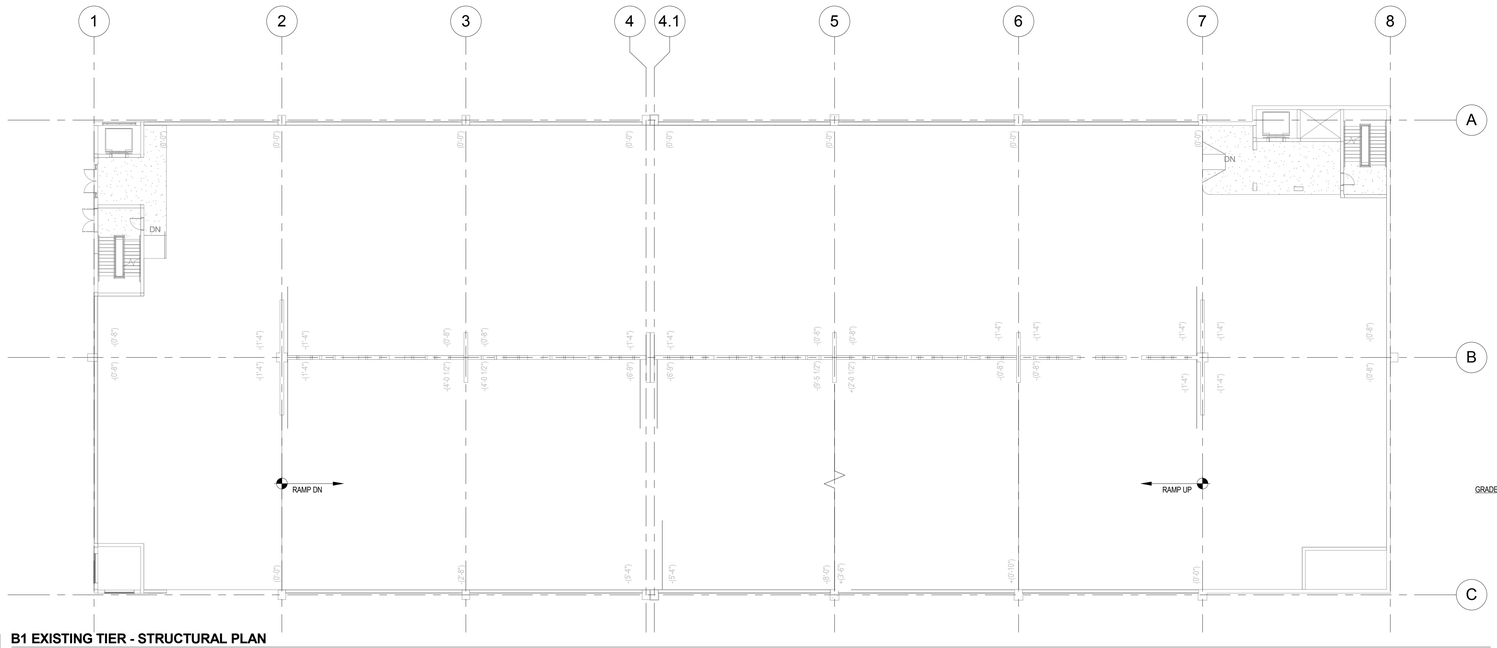
Dwg. 41 of 89

As indicated

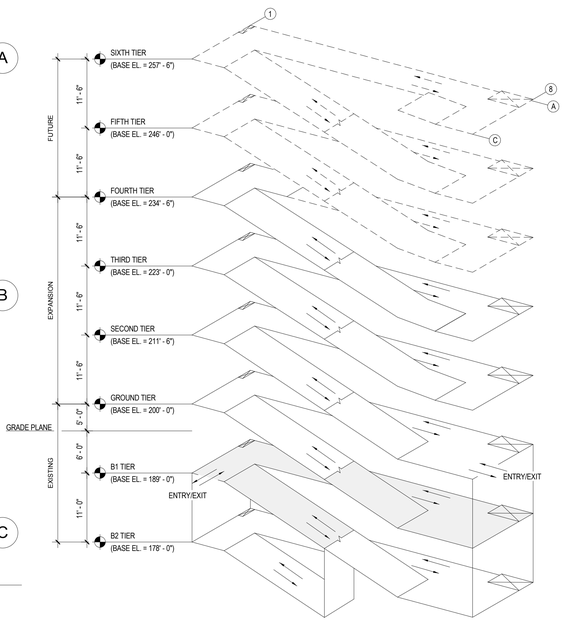
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



01 **B1 EXISTING TIER - STRUCTURAL PLAN**
1/16" = 1'-0"



KEY PLAN
ISOMETRIC

DEDUCT ALTERNATES (ALT.)

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS
BASE: Perforated metal screen with accent lighting as shown on the drawings.
DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete accent lighting as shown on Drawing(s) 01/A2.4, 02/A2.4, 11/A5.2 and 02/E1.4

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES
BASE: Elevator finishes as shown on the drawings.
DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1 and A4.2.

DEDUCT ALT. #3 - SITE IMPROVEMENTS
BASE: All site work shown on the drawings.
DEDUCT: Provide only the site work shown on Drawing(s) 01/CS3.1 and CS3.2.

DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS
BASE: All landscape work and site furnishings shown on the drawings.
DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES
BASE: All automatic door opening devices shown on the drawings and hardware schedule.
DEDUCT: Provide manual door closer as specified in Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS
BASE: All card readers shown on the drawings and hardware schedule.
DEDUCT: Provide manual door locks/latches as specified in Spec Sections(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2.

DEDUCT ALT. #7 - BARRIER CABLE SYSTEM
BASE: Barrier cable system as shown on the drawings.
DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 – CRASH BARRIER, BOLLARDS AND SECURITY GATES
BASE: All crash barriers, bollards, and security gates shown on the drawings.
DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING
BASE: All site fencing shown on the drawings.
DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1.

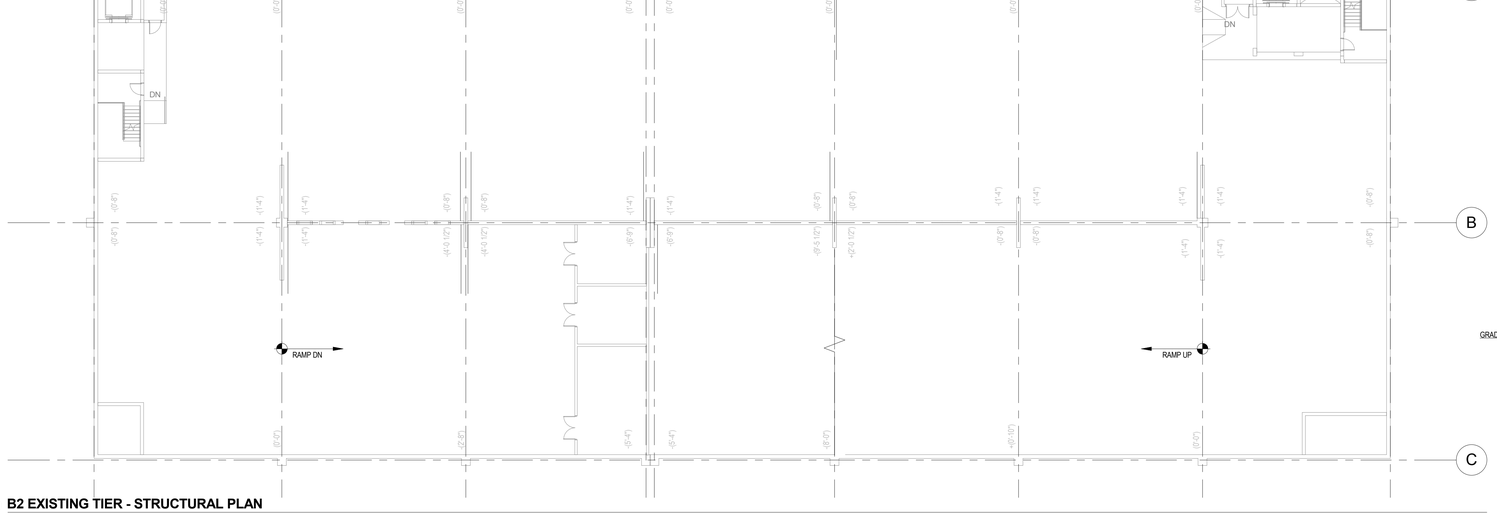
DEDUCT ALT. #10 -INTERIOR GARAGE BARRIER FENCING
BASE: All cable type barrier fencing shown on the drawings.
DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS
BASE: Security cameras as shown on the drawings.
DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and 02/E3.5.

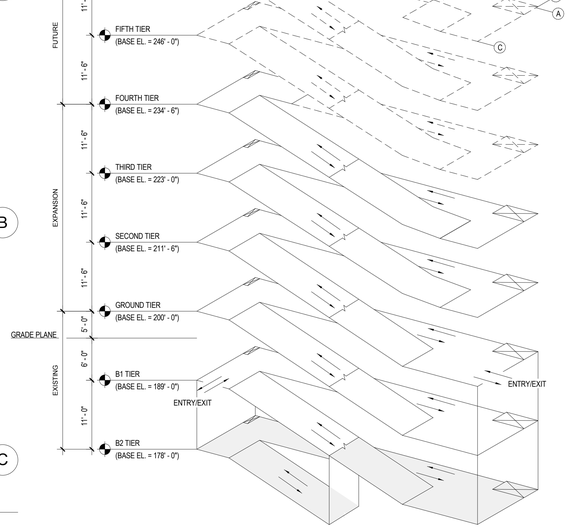
DEDUCT ALT. #12 - LED LIGHTING
BASE: LED lighting as shown on the drawings.
DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

DEDUCT ALT. #13 - SECURITY BOOTH
BASE: Security booth as shown on the drawings.
DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

DEDUCT ALT. #14 - PARKING TIERS
BASE: 2-1/2 new tiers parking tiers as shown on the drawings.
DEDUCT: Delete 1/2 tier and connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.



02 **B2 EXISTING TIER - STRUCTURAL PLAN**
1/16" = 1'-0"



KEY PLAN
ISOMETRIC

As indicated

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
Revisions:		Date

VA FORM 08-6231

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Drawing Title
B2 & B1 TIER STRUCTURAL PLANS - EXISTING

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

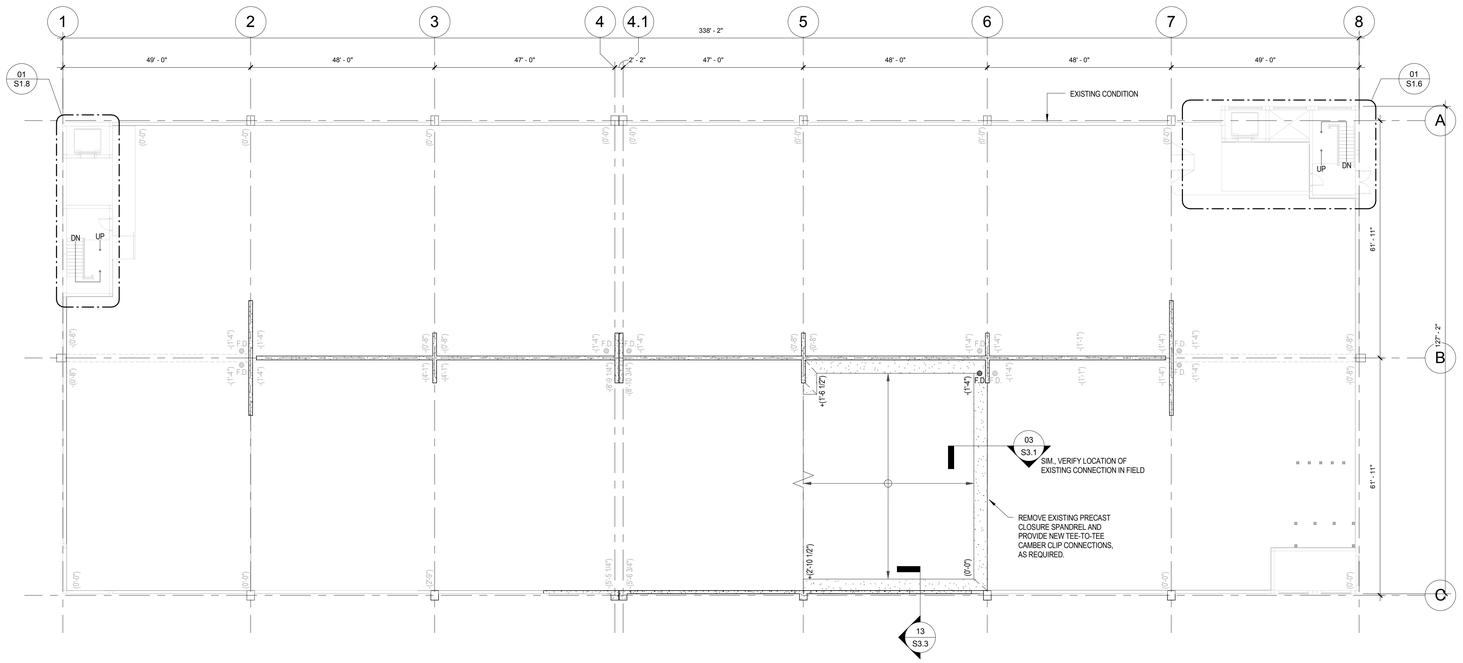
Building Number: -

Drawing Number: S1.1

Dwg. 42 of 89

Office of Construction and Facilities Management

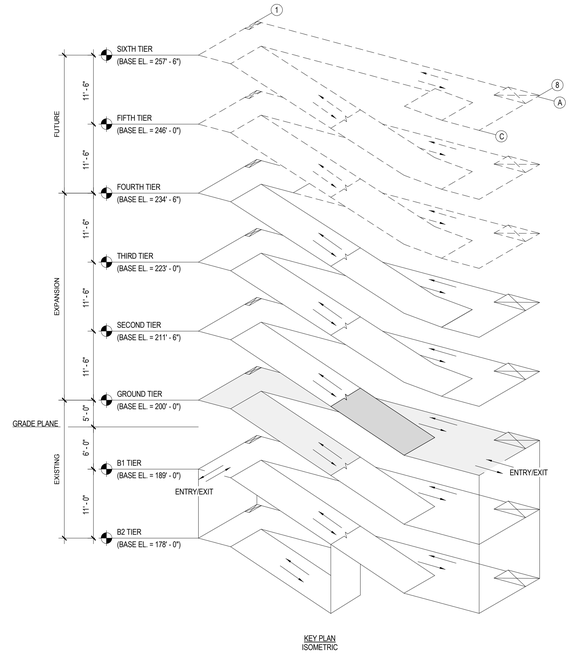
Department of Veterans Affairs



01 GROUND TIER STRUCTURAL PLAN

1/16" = 1'-0"

BASE ELEVATION = 200'-0"



KEY PLAN
ISOMETRIC

DEDUCT ALTERNATES (ALT.)

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS
BASE: Perforated metal screen with accent lighting as shown on the drawings.
DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete accent lighting as shown on Drawings(s) 01/A2.4, 02/A2.4, 11/A5.2 and 02/E1.4

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES
BASE: Elevator finishes as shown on the drawings.
DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1 and A4.2.

DEDUCT ALT. #3 - SITE IMPROVEMENTS
BASE: All site work shown on the drawings.
DEDUCT: Provide only the site work shown on Drawing(s) 01/CS3.1 and CS3.2.

DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS
BASE: All landscape work and site furnishings shown on the drawings.
DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES
BASE: All automatic door opening devices shown on the drawings and hardware schedule.
DEDUCT: Provide manual door closer as specified in Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS
BASE: All card readers shown on the drawings and hardware schedule.
DEDUCT: Provide manual door locks/latches as specified in Spec Sections(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2.

DEDUCT ALT. #7 - BARRIER CABLE SYSTEM
BASE: Barrier cable system as shown on the drawings.
DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 – CRASH BARRIER, BOLLARDS AND SECURITY GATES
BASE: All crash barriers, bollards, and security gates shown on the drawings.
DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING
BASE: All site fencing shown on the drawings.
DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1.

DEDUCT ALT. #10 -INTERIOR GARAGE BARRIER FENCING
BASE: All cable type barrier fencing shown on the drawings.
DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS
BASE: Security cameras as shown on the drawings.
DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and 02/E3.5.

DEDUCT ALT. #12 - LED LIGHTING
BASE: LED lighting as shown on the drawings.
DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

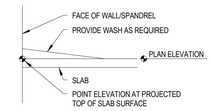
DEDUCT ALT. #13 - SECURITY BOOTH
BASE: Security booth as shown on the drawings.
DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

DEDUCT ALT. #14 - PARKING TIERS
BASE: 2-1/2 new tiers parking tiers as shown on the drawings.
DEDUCT: Delete 1/2 tier and connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.

TYPICAL TIER SHEET NOTES:

1. REFER TO SHEET S0.1 FOR GENERAL NOTES.
2. REFER TO SHEET S3.1 FOR PRECAST TEE DETAILS.
3. REFER TO SHEET S3.2 FOR COLUMN DETAILS.
4. REFER TO SHEETS S1.1 THROUGH S1.4 FOR FLOOR DRAIN LOCATIONS. COORDINATE WITH PLUMBING DRAWINGS.
5. REFER TO SHEETS S1.5-S1.8 FOR STAIRTOWER PLANS, SECTIONS, AND DETAILS.
6. FLOOR SLAB SYSTEM IS PRECAST DOUBLE TEES. U.N.O. DOUBLE TEE LAYOUT BY PRECASTER. WARP DOUBLE TEES AS REQUIRED TO PROVIDE A SMOOTH TRANSITION FOR ELEVATION DIFFERENCES.
7. PLAN 1/S1.3 REPRESENTS THE TYPICAL TIER PLAN. ALL SECTION CUTS, PLAN DETAILS, AND NOTES SHOWN ON IT ARE TYPICAL OF EVERY TIER U.N.O.
8. USE STRAIGHT LINE INTERPOLATION FOR FLOOR ELEVATIONS BETWEEN THOSE INDICATED.
9. SLOPE BEARING PLATES IN BEAM OR SUPPORT PLATES IN COLUMNS/WALLS TO PROVIDE UNIFORM BEARING SURFACES FOR P/C MEMBERS AS REQUIRED, TYP.
10. ▨ SHADED AREAS DEPICT EXTENT OF C.I.P. TOPPING.
11. ▨ SHADED AREAS DEPICT EXTENT OF TRAFFIC DECK COATING. PRECASTER TO COORDINATE TEE FINISH AT SURFACES WHICH WILL RECEIVE TRAFFIC DECK COATING WITH WATERPROOFING CONTRACTOR.
12. ——— INDICATES TOOLED JOINT WITH SEALANT. PROVIDE TOOLED JOINT WITH SEALANT ABOVE ALL TEE-TO-TEE JOINTS PER DETAILS 3/S3.1. PROVIDE TRANSVERSE TOOLED JOINT WITH SEALANT OVER EACH CONNECTION ALONG FULL LENGTH OF C.I.P. WASH OR AT 6'-0" O.C.
13. – – – INDICATES WASH LINE.
14. ALL TOPPING ON TEES AND POURSTRIPS TO HAVE CORROSION INHIBITOR AT THE RATE OF 3 GALS./CU. YARD OF CONCRETE AND PROVIDE 1 1/2 POUNDS OF FIBROUS REINFORCING PER CU. YARD OF CONCRETE.
15. ELEVATIONS SHOWN ON STRUCTURAL PLANS ARE TOP OF THE SLAB (P/C DOUBLE TEE) ELEVATIONS AT THE COLUMN CENTERLINE, U.N.O. WITH AN ELEVATION TARGET SYMBOL. (THIS DOES NOT INCLUDE THE HEIGHT OF WASHCURB.) REFER TO PLAN ELEVATION KEY FOR ADDTL. INFO.
16. ⋮⋮ DEPICTS LOCATIONS WHERE COLUMNS/WALLS STOP AT FLOOR ELEVATION.
17. BASE ELEVATIONS REPRESENT THE BENCHMARK BY WHICH ACTUAL SPOT ELEVATIONS ARE CALCULATED BY ADDING/SUBTRACTING THE ELEVATIONS SHOWN AT SPECIFIC LOCATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE A MINIMUM OF 8'-4" HEADROOM CLEARANCE BETWEEN ALL DRIVING SURFACES AND OVERHEAD STRUCTURE AT THIS TIER PRIOR TO PLACING CONCRETE POURSTRIP AND TOPPING.



As indicated

Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14
1 35% Submission	4/15/14

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TimHaahs

Drawing Title
GROUND TIER STRUCTURAL PLAN - EXISTING & NEW WORK

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

Date 02/16/15 | Checked NCA | Drawn BSS

Project Number 688-345

Building Number -

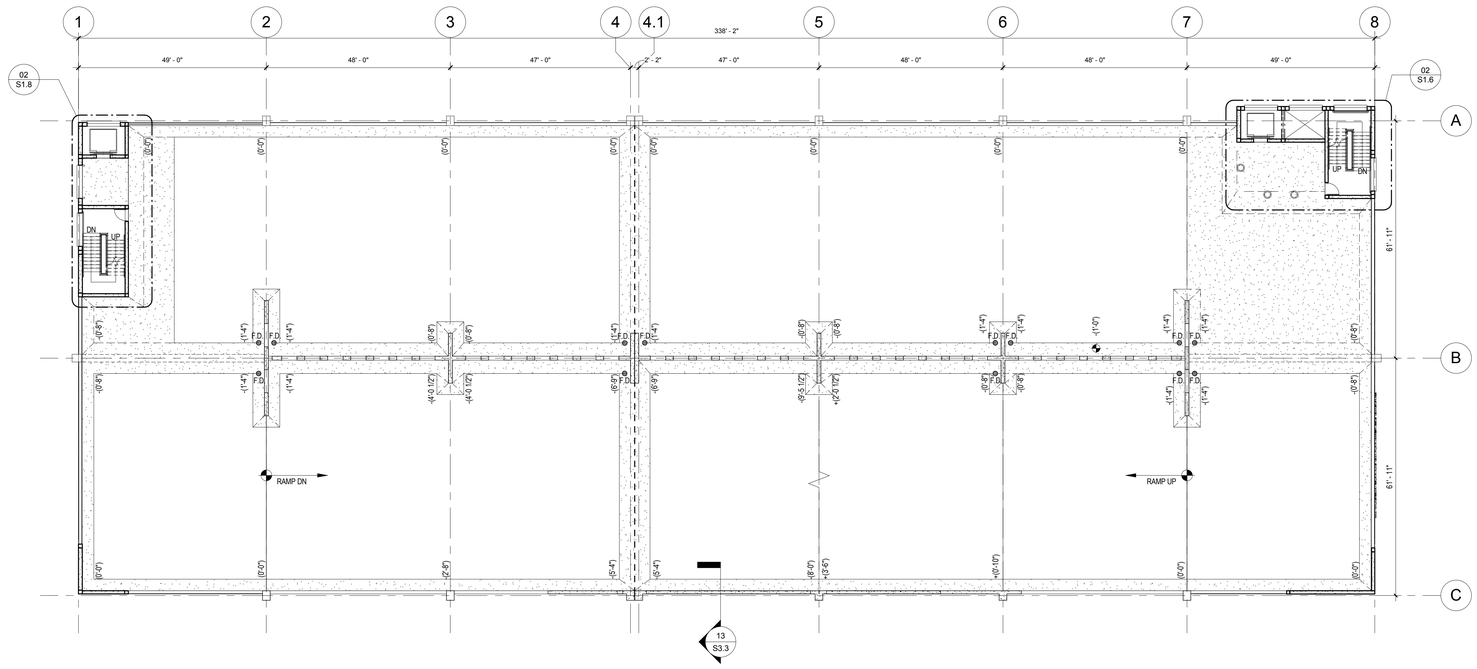
Drawing Number S1.2

Dwg. 43 of 89

Office of Construction and Facilities Management

Department of Veterans Affairs

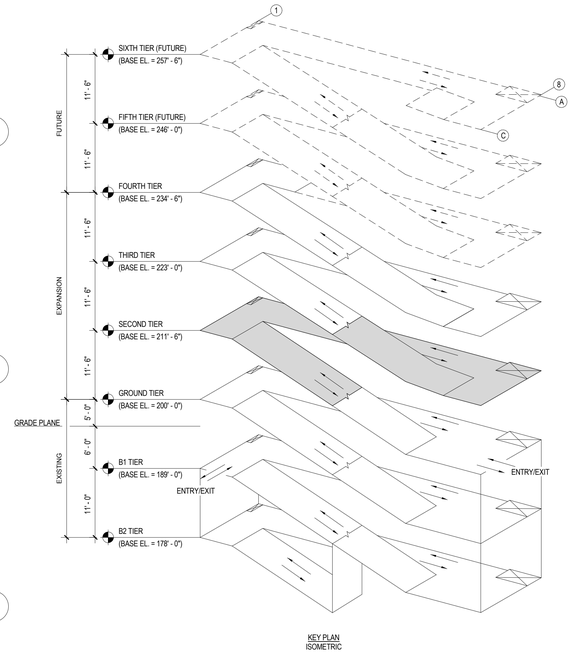
VA FORM 08-6231



01 SECOND TIER STRUCTURAL PLAN

1/16" = 1'-0"

BASE ELEVATION = 211'-6"



KEY PLAN
ISOMETRIC

DEDUCT ALTERNATES (ALT.)

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS
BASE: Perforated metal screen with accent lighting as shown on the drawings.
DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete accent lighting as shown on Drawings(s) 01/A2.4, 02/A2.4, 11/A5.2 and 02/E1.4

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES
BASE: Elevator finishes as shown on the drawings.
DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1 and A4.2.

DEDUCT ALT. #3 - SITE IMPROVEMENTS
BASE: All site work shown on the drawings.
DEDUCT: Provide only the site work shown on Drawing(s) 01/CS3.1 and CS3.2.

DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS
BASE: All landscape work and site furnishings shown on the drawings.
DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES
BASE: All automatic door opening devices shown on the drawings and hardware schedule.
DEDUCT: Provide manual door closer as specified in Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS
BASE: All card readers shown on the drawings and hardware schedule.
DEDUCT: Provide manual door locks/latches as specified in Spec Sections(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2.

DEDUCT ALT. #7 - BARRIER CABLE SYSTEM
BASE: Barrier cable system as shown on the drawings.
DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 – CRASH BARRIER, BOLLARDS AND SECURITY GATES
BASE: All crash barriers, bollards, and security gates shown on the drawings.
DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING
BASE: All site fencing shown on the drawings.
DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1.

DEDUCT ALT. #10 -INTERIOR GARAGE BARRIER FENCING
BASE: All cable type barrier fencing shown on the drawings.
DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS
BASE: Security cameras as shown on the drawings.
DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and 02/E3.5.

DEDUCT ALT. #12 - LED LIGHTING
BASE: LED lighting as shown on the drawings.
DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

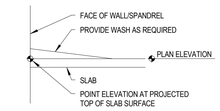
DEDUCT ALT. #13 - SECURITY BOOTH
BASE: Security booth as shown on the drawings.
DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

DEDUCT ALT. #14 - PARKING TIERS
BASE: 2-1/2 new tiers parking tiers as shown on the drawings.
DEDUCT: Delete 1/2 tier and connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.

TYPICAL TIER SHEET NOTES:

1. REFER TO SHEET S0.1 FOR GENERAL NOTES.
2. REFER TO SHEET S3.1 FOR PRECAST TEE DETAILS.
3. REFER TO SHEET S3.2 FOR COLUMN DETAILS.
4. REFER TO SHEETS S1.1 THROUGH S1.4 FOR FLOOR DRAIN LOCATIONS. COORDINATE WITH PLUMBING DRAWINGS.
5. REFER TO SHEETS S1.5-S1.8 FOR STAIRTOWER PLANS, SECTIONS, AND DETAILS.
6. FLOOR SLAB SYSTEM IS PRECAST DOUBLE TEES, U.N.O. DOUBLE TEE LAYOUT BY PRECASTER. WARP DOUBLE TEES AS REQUIRED TO PROVIDE A SMOOTH TRANSITION FOR ELEVATION DIFFERENCES.
7. PLAN 1/S1.3 REPRESENTS THE TYPICAL TIER PLAN. ALL SECTION CUTS, PLAN DETAILS, AND NOTES SHOWN ON IT ARE TYPICAL OF EVERY TIER U.N.O.
8. USE STRAIGHT LINE INTERPOLATION FOR FLOOR ELEVATIONS BETWEEN THOSE INDICATED.
9. SLOPE BEARING PLATES IN BEAM OR SUPPORT PLATES IN COLUMNS/WALLS TO PROVIDE UNIFORM BEARING SURFACES FOR P/C MEMBERS AS REQUIRED, TYP.
10. [▪▪▪▪▪] SHADED AREAS DEPICT EXTENT OF C.I.P. TOPPING.
11. [▪▪▪▪▪] SHADED AREAS DEPICT EXTENT OF TRAFFIC DECK COATING. PRECASTER TO COORDINATE TEE FINISH AT SURFACES WHICH WILL RECEIVE TRAFFIC DECK COATING WITH WATERPROOFING CONTRACTOR.
12. ———— INDICATES TOOLED JOINT WITH SEALANT. PROVIDE TOOLED JOINT WITH SEALANT ABOVE ALL TEE-TO-TEE JOINTS PER DETAILS 3/S3.1. PROVIDE TRANSVERSE TOOLED JOINT WITH SEALANT OVER EACH CONNECTION ALONG FULL LENGTH OF C.I.P. WASH OR AT 6'-0" O.C.
13. - - - - - INDICATES WASH LINE.
14. ALL TOPPING ON TEES AND POURSTRIPS TO HAVE CORROSION INHIBITOR AT THE RATE OF 3 GALS./CU. YARD OF CONCRETE AND PROVIDE 1 1/2 POUNDS OF FIBROUS REINFORCING PER CU. YARD OF CONCRETE.
15. ELEVATIONS SHOWN ON STRUCTURAL PLANS ARE TOP OF THE SLAB (P/C DOUBLE TEE) ELEVATIONS AT THE COLUMN CENTERLINE, U.N.O. WITH AN ELEVATION TARGET SYMBOL. (THIS DOES NOT INCLUDE THE HEIGHT OF WASH/CURB.) REFER TO PLAN ELEVATION KEY FOR ADDT. INFO.
16. ⋮ ⋮ DEPICTS LOCATIONS WHERE COLUMNS/WALLS STOP AT FLOOR ELEVATION.
17. BASE ELEVATIONS REPRESENT THE BENCHMARK BY WHICH ACTUAL SPOT ELEVATIONS ARE CALCULATED BY ADDING/SUBTRACTING THE ELEVATIONS SHOWN AT SPECIFIC LOCATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE A MINIMUM OF 8'-4" HEADROOM CLEARANCE BETWEEN ALL DRIVING SURFACES AND OVERHEAD STRUCTURE AT THIS TIER PRIOR TO PLACING CONCRETE POURSTRIP AND TOPPING.



4	100% Submission	2/16/15
3	95% Submission	8/28/14
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Revisions:		Date

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Drawing Title
SECOND TIER STRUCTURAL PLAN - NEW WORK

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S1.3

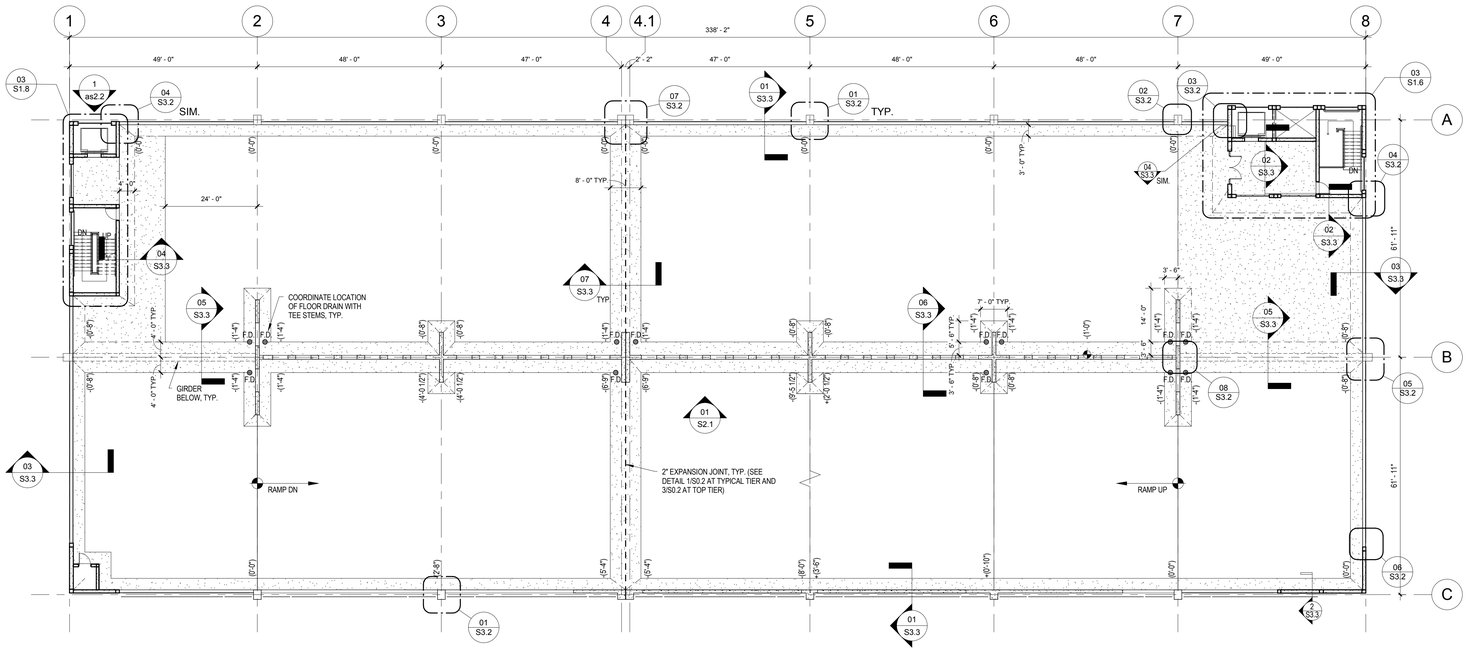
Dwg. 44 of 89

As indicated

Office of Construction and Facilities Management

Department of Veterans Affairs

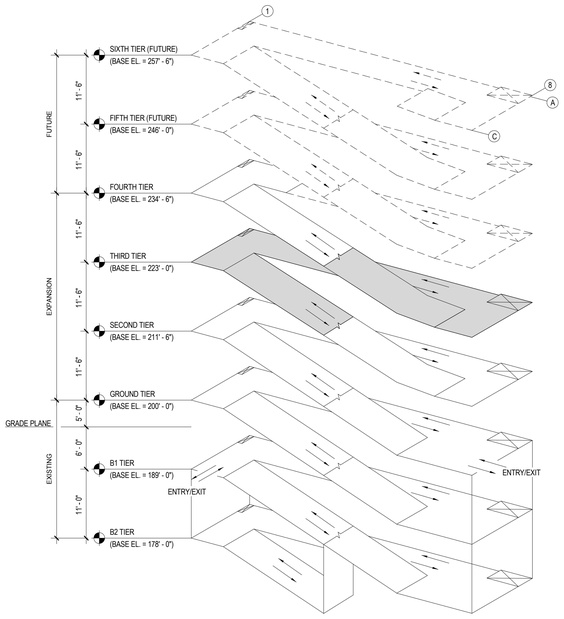
VA FORM 08-6231



01 THIRD TIER STRUCTURAL PLAN

1/16" = 1'-0"

BASE ELEVATION = 223'-0"



KEY PLAN
ISOMETRIC

DEDUCT ALTERNATES (ALT.)

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS
BASE: Perforated metal screen with accent lighting as shown on the drawings.
DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete accent lighting as shown on Drawings(s) 01/A2.4, 02/A2.4, 11/A5.2 and 02/E1.4

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES
BASE: Elevator finishes as shown on the drawings.
DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1 and A4.2.

DEDUCT ALT. #3 - SITE IMPROVEMENTS
BASE: All site work shown on the drawings.
DEDUCT: Provide only the site work shown on Drawing(s) 01/CS3.1 and CS3.2.

DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS
BASE: All landscape work and site furnishings shown on the drawings.
DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES
BASE: All automatic door opening devices shown on the drawings and hardware schedule.
DEDUCT: Provide manual door closer as specified in Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS
BASE: All card readers shown on the drawings and hardware schedule.
DEDUCT: Provide manual door locks/latches as specified in Spec Sections(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2.

DEDUCT ALT. #7 - BARRIER CABLE SYSTEM
BASE: Barrier cable system as shown on the drawings.
DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 – CRASH BARRIER, BOLLARDS AND SECURITY GATES
BASE: All crash barriers, bollards, and security gates shown on the drawings.
DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING
BASE: All site fencing shown on the drawings.
DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1.

DEDUCT ALT. #10 -INTERIOR GARAGE BARRIER FENCING
BASE: All cable type barrier fencing shown on the drawings.
DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS
BASE: Security cameras as shown on the drawings.
DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and 02/E3.5.

DEDUCT ALT. #12 - LED LIGHTING
BASE: LED lighting as shown on the drawings.
DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

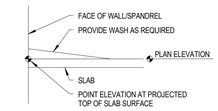
DEDUCT ALT. #13 - SECURITY BOOTH
BASE: Security booth as shown on the drawings.
DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

DEDUCT ALT. #14 - PARKING TIERS
BASE: 2-1/2 new tiers parking tiers as shown on the drawings.
DEDUCT: Delete 1/2 tier and connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.

TYPICAL TIER SHEET NOTES:

1. REFER TO SHEET S0.1 FOR GENERAL NOTES.
2. REFER TO SHEET S3.1 FOR PRECAST TEE DETAILS.
3. REFER TO SHEET S3.2 FOR COLUMN DETAILS.
4. REFER TO SHEETS S1.1 THROUGH S1.4 FOR FLOOR DRAIN LOCATIONS. COORDINATE WITH PLUMBING DRAWINGS.
5. REFER TO SHEETS S1.5-S1.8 FOR STAIRTOWER PLANS, SECTIONS, AND DETAILS.
6. FLOOR SLAB SYSTEM IS PRECAST DOUBLE TEES, U.N.O. DOUBLE TEE LAYOUT BY PRECASTER. WARP DOUBLE TEES AS REQUIRED TO PROVIDE A SMOOTH TRANSITION FOR ELEVATION DIFFERENCES.
7. PLAN 1/S1.3 REPRESENTS THE TYPICAL TIER PLAN. ALL SECTION CUTS, PLAN DETAILS, AND NOTES SHOWN ON IT ARE TYPICAL OF EVERY TIER U.N.O.
8. USE STRAIGHT LINE INTERPOLATION FOR FLOOR ELEVATIONS BETWEEN THOSE INDICATED.
9. SLOPE BEARING PLATES IN BEAM OR SUPPORT PLATES IN COLUMNS/WALLS TO PROVIDE UNIFORM BEARING SURFACES FOR P/C MEMBERS AS REQUIRED, TYP.
10. [▨] SHADED AREAS DEPICT EXTENT OF C.I.P. TOPPING.
11. [▨] SHADED AREAS DEPICT EXTENT OF TRAFFIC DECK COATING. PRECASTER TO COORDINATE TEE FINISH AT SURFACES WHICH WILL RECEIVE TRAFFIC DECK COATING WITH WATERPROOFING CONTRACTOR.
12. ——— INDICATES TOOLED JOINT WITH SEALANT. PROVIDE TOOLED JOINT WITH SEALANT ABOVE ALL TEE-TO-TEE JOINTS PER DETAILS 3/S3.1. PROVIDE TRANSVERSE TOOLED JOINT WITH SEALANT OVER EACH CONNECTION ALONG FULL LENGTH OF C.I.P. WASH OR AT 6'-0" O.C.
13. – – – INDICATES WASH LINE.
14. ALL TOPPING ON TEES AND POURSTRIPS TO HAVE CORROSION INHIBITOR AT THE RATE OF 3 GALS./CU. YARD OF CONCRETE AND PROVIDE 1 1/2 POUNDS OF FIBROUS REINFORCING PER CU. YARD OF CONCRETE.
15. ELEVATIONS SHOWN ON STRUCTURAL PLANS ARE TOP OF THE SLAB (P/C DOUBLE TEE) ELEVATIONS AT THE COLUMN CENTERLINE, U.N.O. WITH AN ELEVATION TARGET SYMBOL. (THIS DOES NOT INCLUDE THE HEIGHT OF WASHCURB.) REFER TO PLAN ELEVATION KEY FOR ADDT'L. INFO.
16. : : DEPICTS LOCATIONS WHERE COLUMNS/WALLS STOP AT FLOOR ELEVATION.
17. BASE ELEVATIONS REPRESENT THE BENCHMARK BY WHICH ACTUAL SPOT ELEVATIONS ARE CALCULATED BY ADDING/SUBTRACTING THE ELEVATIONS SHOWN AT SPECIFIC LOCATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE A MINIMUM OF 8'-4" HEADROOM CLEARANCE BETWEEN ALL DRIVING SURFACES AND OVERHEAD STRUCTURE AT THIS TIER PRIOR TO PLACING CONCRETE POURSTRIP AND TOPPING.



As indicated

Revisions:	Date
4 100% Submission	2/16/15
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TimHaahs

Drawing Title
THIRD TIER STRUCTURAL PLAN - NEW WORK

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

Date 02/16/15 | Checked NCA | Drawn BSS

Project Number 688-345

Building Number -

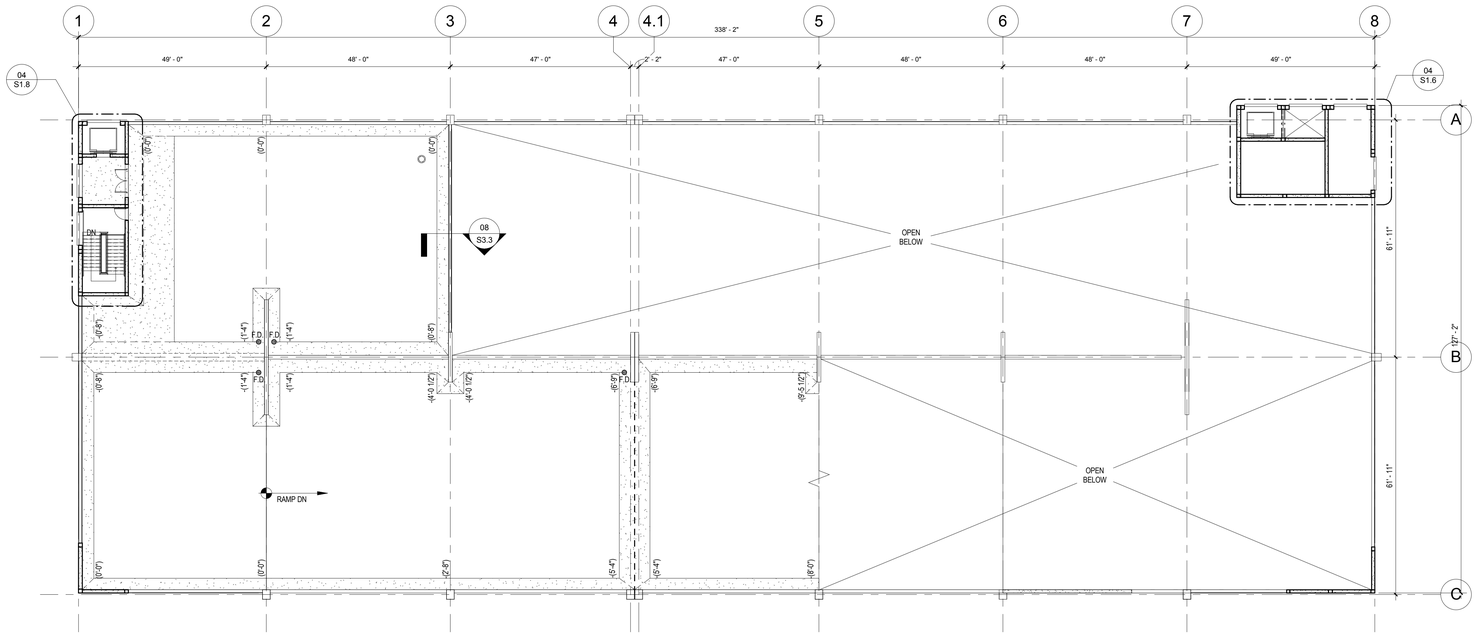
Drawing Number S1.4

Dwg. 45 of 89

Office of Construction and Facilities Management

Department of Veterans Affairs

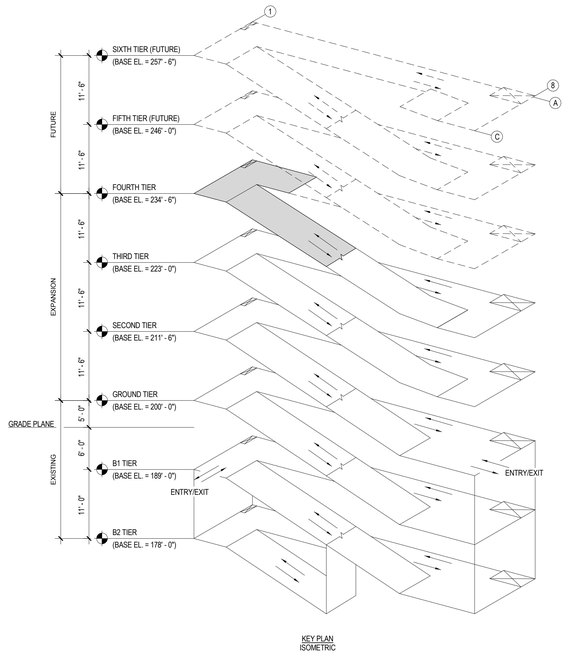
VA FORM 08-6231



01 FOURTH TIER STRUCTURAL PLAN

1/16" = 1'-0"

BASE ELEVATION = 234'-6"



KEY PLAN
ISOMETRIC

DEDUCT ALTERNATES (ALT.)

DEDUCT ALT. #1 - PERFORATED METAL SCREEN WALLS
BASE: Perforated metal screen with accent lighting as shown on the drawings.
DEDUCT: Delete perforated metal screen and supporting structure as shown on Drawing(s) 05/A2.1 and 03/A2.2, delete accent lighting as shown on Drawings(s) 01/A2.4, 02/A2.4, 11/A5.2 and 02/E1.4

DEDUCT ALT. #2 - ELEVATOR LOBBY UPGRADES
BASE: Elevator finishes as shown on the drawings.
DEDUCT: Delete exposed aggregate finish on concrete floor as shown in Drawing(s) 01/A3.1, 01/A3.2, 04/A5.2 and 05/A5.2 and substitute smooth trowel finish, delete suspended metal ceilings as shown on Drawing(s) A4.1 and A4.2, provide substitute light fixtures as shown on fixture schedule E0.0 and Drawing(s) A4.1 and A4.2.

DEDUCT ALT. #3 - SITE IMPROVEMENTS
BASE: All site work shown on the drawings.
DEDUCT: Provide only the site work shown on Drawing(s) 01/CS3.1 and CS3.2.

DEDUCT ALT. #4 - LANDSCAPE AND SITE FURNISHINGS
BASE: All landscape work and site furnishings shown on the drawings.
DEDUCT: Provide only the landscape work and site furnishings shown on Drawing(s) 01/LP7.0 and LP7.1.

DEDUCT ALT. #5 - AUTOMATIC DOOR OPENING DEVICES
BASE: All automatic door opening devices shown on the drawings and hardware schedule.
DEDUCT: Provide manual door closer as specified in Spec Section(s) 087100. Delete electrical feeds shown on Drawing(s) 01/E2.1, 01/E2.4 and 02/E2.4.

DEDUCT ALT. #6 - CARD READERS
BASE: All card readers shown on the drawings and hardware schedule.
DEDUCT: Provide manual door locks/latches as specified in Spec Sections(s) 087100. Delete electrical feeds shown on Drawing(s) 02/E2.2, 01/E2.4 and 02/E3.2.

DEDUCT ALT. #7 - BARRIER CABLE SYSTEM
BASE: Barrier cable system as shown on the drawings.
DEDUCT: Delete barrier cables at exterior openings as shown on Drawing(s) A2.1, A2.2 and 06/A2.4.

DEDUCT ALT. #8 – CRASH BARRIER, BOLLARDS AND SECURITY GATES
BASE: All crash barriers, bollards, and security gates shown on the drawings.
DEDUCT: Delete all crash barriers, bollards, and security gates shown on Drawing(s) 01/CS3.0, 04/LP7.1 and 05/LP7.1.

DEDUCT ALT. #9 - SITE FENCING
BASE: All site fencing shown on the drawings.
DEDUCT: Delete all site fencing shown on Drawing(s) 01/CS3.0 and 08/LP7.1.

DEDUCT ALT. #10 -INTERIOR GARAGE BARRIER FENCING
BASE: All cable type barrier fencing shown on the drawings.
DEDUCT: Provide chain link barrier fencing shown on Drawing(s) S2.1 and 06/S3.3.

DEDUCT ALT. #11 - SECURITY CAMERAS
BASE: Security cameras as shown on the drawings.
DEDUCT: Delete security cameras and appurtenances (conduit, junction boxes, and power) shown on Drawing(s) E3.3, E3.4 and 02/E3.5.

DEDUCT ALT. #12 - LED LIGHTING
BASE: LED lighting as shown on the drawings.
DEDUCT: Provide substitute light fixtures as shown on fixture schedule E0.0 and as shown on Drawing(s) E1.4, E1.5 and E1.6.

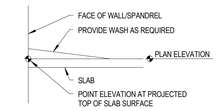
DEDUCT ALT. #13 - SECURITY BOOTH
BASE: Security booth as shown on the drawings.
DEDUCT: Delete security booth and appurtenances shown on Drawing(s) A4.3, 02/E1.4, 03/E2.2 and 01/E2.3.

DEDUCT ALT. #14 - PARKING TIERS
BASE: 2-1/2 new tiers parking tiers as shown on the drawings.
DEDUCT: Delete 1/2 tier and connecting ramp as shown on Drawing(s) 02/A1.2, 02/A1.6, A2.1, A2.2, 01/S1.5, 02/M1.3, 02/P1.3, 03/FP1.3, 02/E1.6, 02/E2.4 and 02/E3.4.

TYPICAL TIER SHEET NOTES:

1. REFER TO SHEET S0.1 FOR GENERAL NOTES.
2. REFER TO SHEET S3.1 FOR PRECAST TEE DETAILS.
3. REFER TO SHEET S3.2 FOR COLUMN DETAILS.
4. REFER TO SHEETS S1.1 THROUGH S1.4 FOR FLOOR DRAIN LOCATIONS. COORDINATE WITH PLUMBING DRAWINGS.
5. REFER TO SHEETS S1.5-S1.8 FOR STAIRTOWER PLANS, SECTIONS, AND DETAILS.
6. FLOOR SLAB SYSTEM IS PRECAST DOUBLE TEES, U.N.O. DOUBLE TEE LAYOUT BY PRECASTER. WARP DOUBLE TEES AS REQUIRED TO PROVIDE A SMOOTH TRANSITION FOR ELEVATION DIFFERENCES.
7. PLAN 1/S1.3 REPRESENTS THE TYPICAL TIER PLAN. ALL SECTION CUTS, PLAN DETAILS, AND NOTES SHOWN ON IT ARE TYPICAL OF EVERY TIER U.N.O.
8. USE STRAIGHT LINE INTERPOLATION FOR FLOOR ELEVATIONS BETWEEN THOSE INDICATED.
9. SLOPE BEARING PLATES IN BEAM OR SUPPORT PLATES IN COLUMNS/WALLS TO PROVIDE UNIFORM BEARING SURFACES FOR P/C MEMBERS AS REQUIRED, TYP.
10. [▨] SHADED AREAS DEPICT EXTENT OF C.I.P. TOPPING.
11. [▨] SHADED AREAS DEPICT EXTENT OF TRAFFIC DECK COATING. PRECASTER TO COORDINATE TEE FINISH AT SURFACES WHICH WILL RECEIVE TRAFFIC DECK COATING WITH WATERPROOFING CONTRACTOR.
12. ——— INDICATES TOOLED JOINT WITH SEALANT. PROVIDE TOOLED JOINT WITH SEALANT ABOVE ALL TEE-TO-TEE JOINTS PER DETAILS 3/S3.1. PROVIDE TRANSVERSE TOOLED JOINT WITH SEALANT OVER EACH CONNECTION ALONG FULL LENGTH OF C.I.P. WASH OR AT 6'-0" O.C.
13. – – – – INDICATES WASH LINE.
14. ALL TOPPING ON TEES AND POURSTRIPS TO HAVE CORROSION INHIBITOR AT THE RATE OF 3 GALS./CU. YARD OF CONCRETE AND PROVIDE 1 1/2 POUNDS OF FIBROUS REINFORCING PER CU. YARD OF CONCRETE.
15. ELEVATIONS SHOWN ON STRUCTURAL PLANS ARE TOP OF THE SLAB (P/C DOUBLE TEE) ELEVATIONS AT THE COLUMN CENTERLINE, U.N.O. WITH AN ELEVATION TARGET SYMBOL. (THIS DOES NOT INCLUDE THE HEIGHT OF WASHCURB.) REFER TO PLAN ELEVATION KEY FOR ADDTL. INFO.
16. ⋮ ⋮ DEPICTS LOCATIONS WHERE COLUMNS/WALLS STOP AT FLOOR ELEVATION.
17. BASE ELEVATIONS REPRESENT THE BENCHMARK BY WHICH ACTUAL SPOT ELEVATIONS ARE CALCULATED BY ADDING/SUBTRACTING THE ELEVATIONS SHOWN AT SPECIFIC LOCATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE A MINIMUM OF 8'-4" HEADROOM CLEARANCE BETWEEN ALL DRIVING SURFACES AND OVERHEAD STRUCTURE AT THIS TIER PRIOR TO PLACING CONCRETE POURSTRIP AND TOPPING.



Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14
1 35% Submission	4/15/14

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TimHaahs

Drawing Title
FOURTH TIER STRUCTURAL PLAN - NEW WORK

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

Date 02/16/15 | Checked NCA | Drawn BSS

Project Number 688-345

Building Number -

Drawing Number S1.5

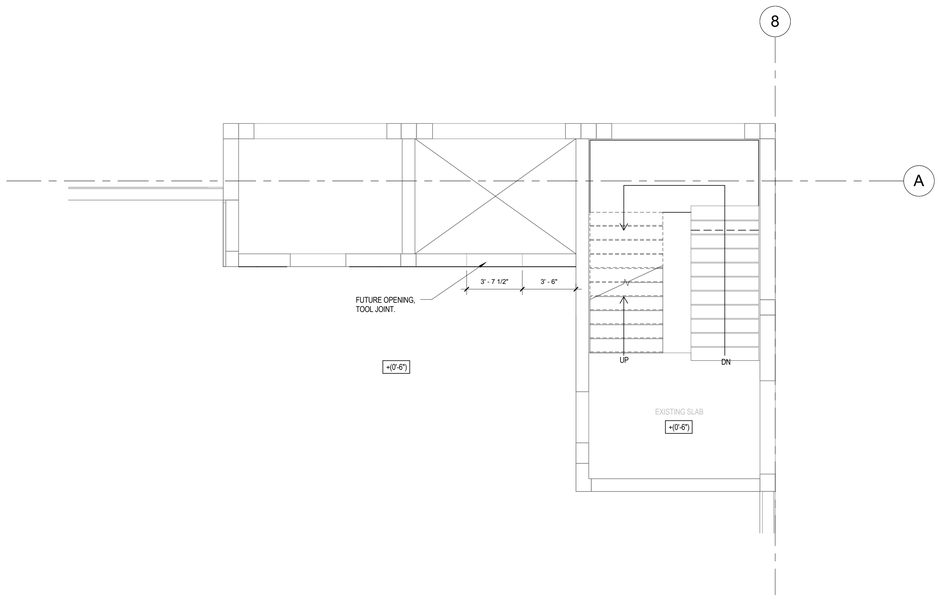
Dwg. 46 of 89

As indicated

Office of Construction and Facilities Management

Department of Veterans Affairs

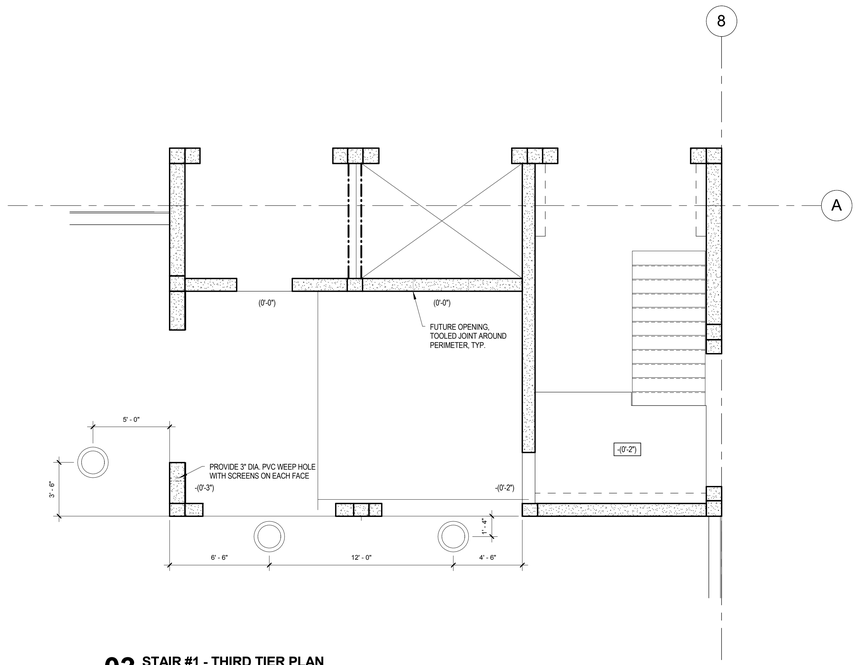
VA FORM 08-6231



01 STAIR #1 - GROUND TIER PLAN

1/4" = 1'-0"

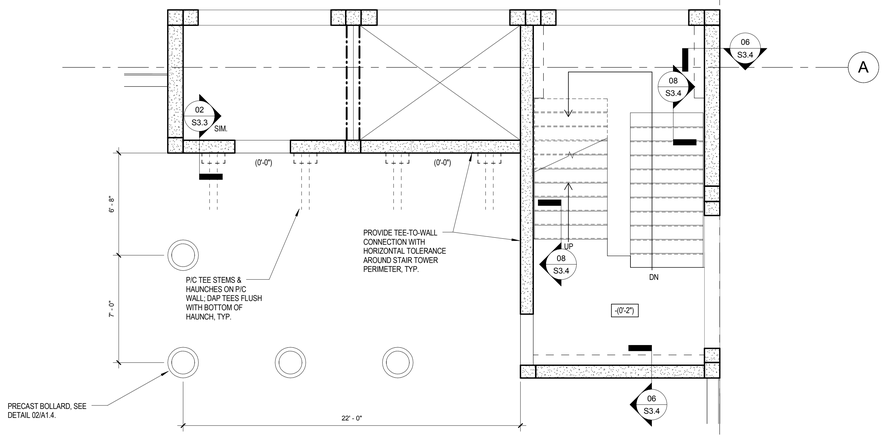
BASE ELEVATION = 200'-0"



03 STAIR #1 - THIRD TIER PLAN

1/4" = 1'-0"

BASE ELEVATION = 223'-0"

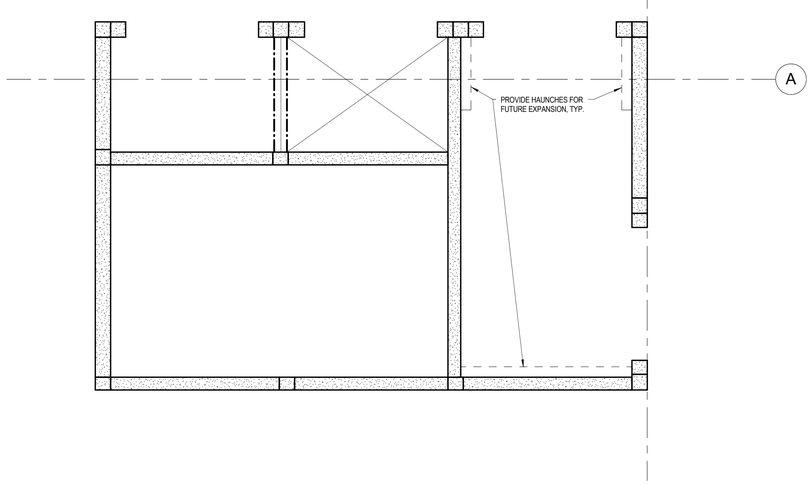


SHEET NOTE: SEE SHEET A3.2 FOR STAIR AND RAILING INFORMATION.

02 STAIR #1 - SECOND TIER PLAN

1/4" = 1'-0"

BASE ELEVATION = 211'-6"



04 STAIR #1 - FOURTH TIER PLAN

1/4" = 1'-0"

BASE ELEVATION = 234'-6"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
Revisions:		Date

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TimHaahs

Drawing Title: ELEVATOR/STAIR TOWER #1 STRUCTURAL PLANS

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S1.6

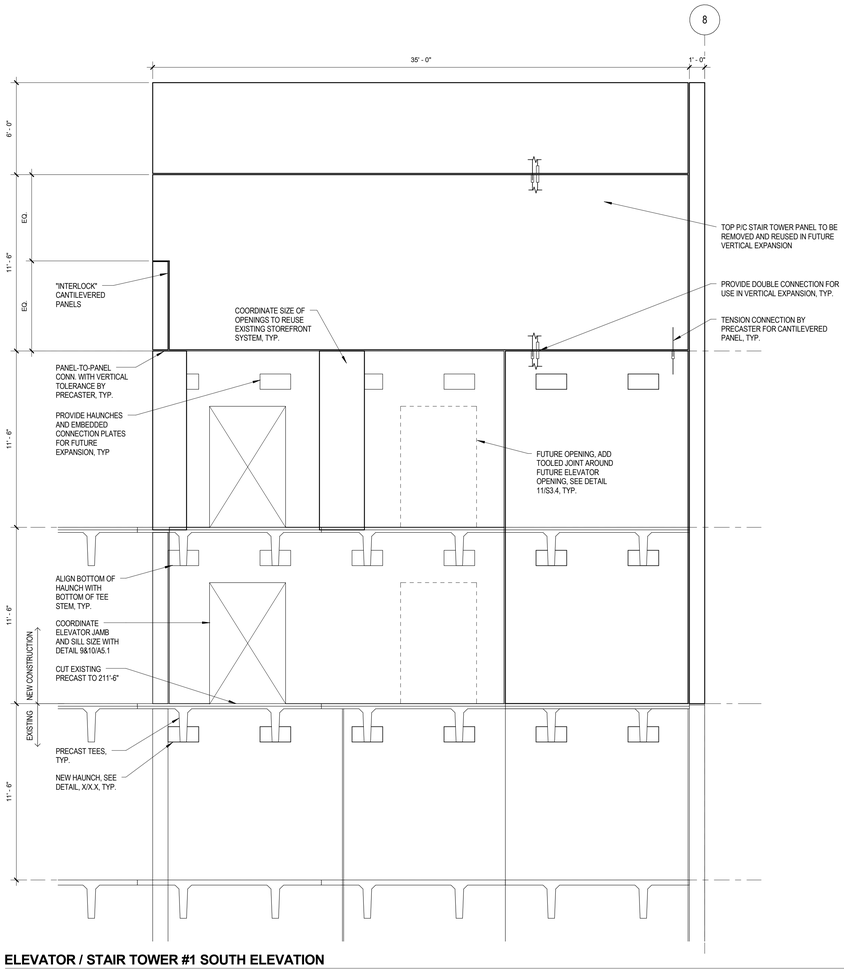
Dwg. 47 of 89

1/4" = 1'-0"

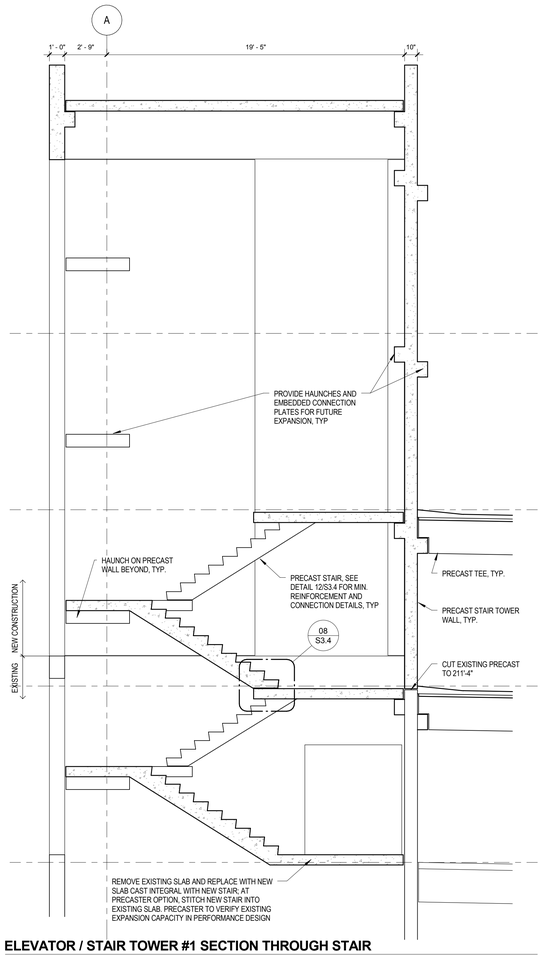
Office of Construction and Facilities Management

Department of Veterans Affairs

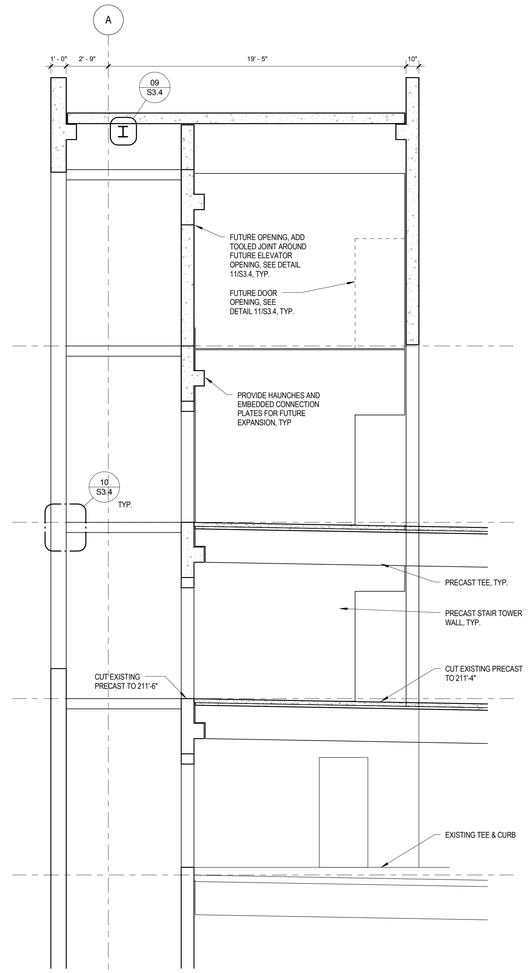
VA FORM 08-6231



01 ELEVATOR / STAIR TOWER #1 SOUTH ELEVATION
1/4" = 1'-0"



02 ELEVATOR / STAIR TOWER #1 SECTION THROUGH STAIR
1/4" = 1'-0"



03 ELEVATOR / STAIR TOWER #1 SECTION THROUGH ELEVATOR
1/4" = 1'-0"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
Revisions:		Date

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Drawing Title
ELEVATOR/STAIR TOWER#1
ELEVATION & SECTIONS

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT
PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

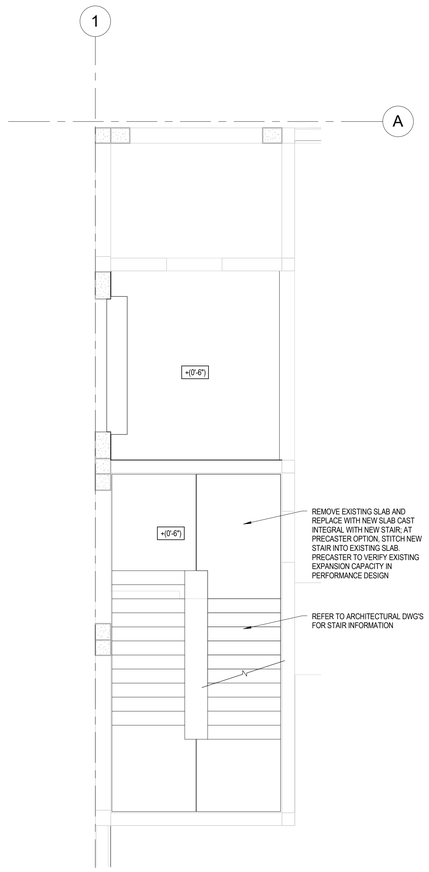
Building Number: -

Drawing Number: S1.7
Dwg. 48 of 89

1/4" = 1'-0"

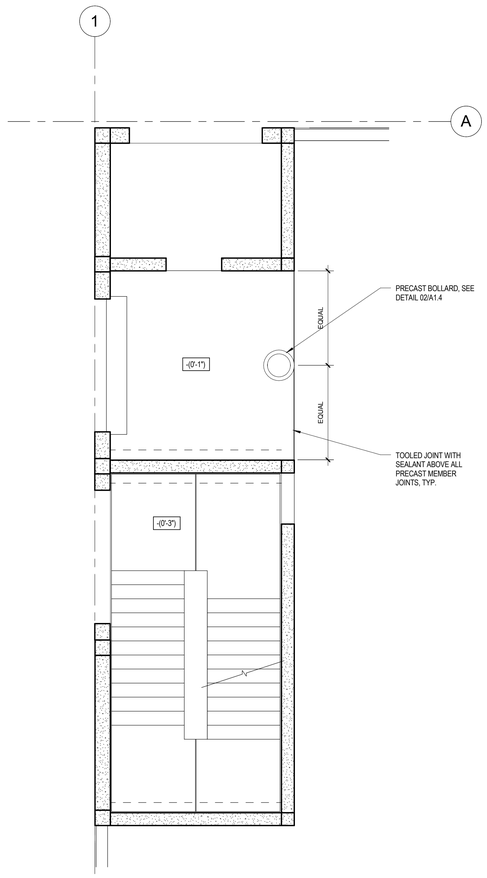
Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231



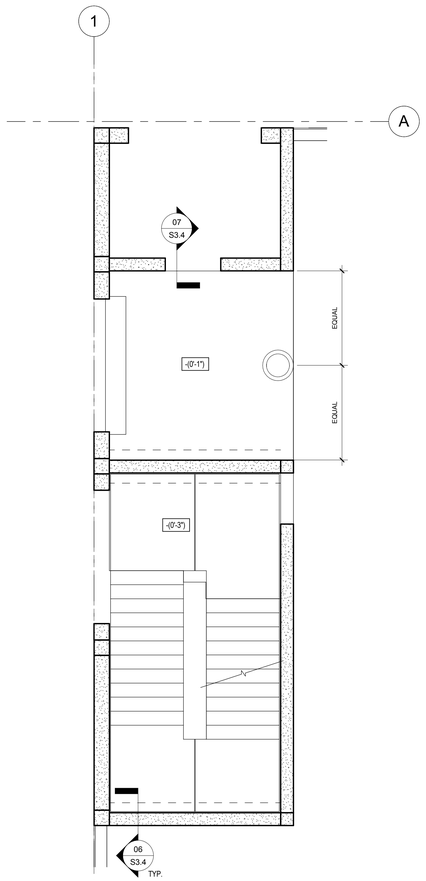
01 STAIR #2 - GROUND TIER PLAN
1/4" = 1'-0"

BASE ELEVATION = 200'-0"



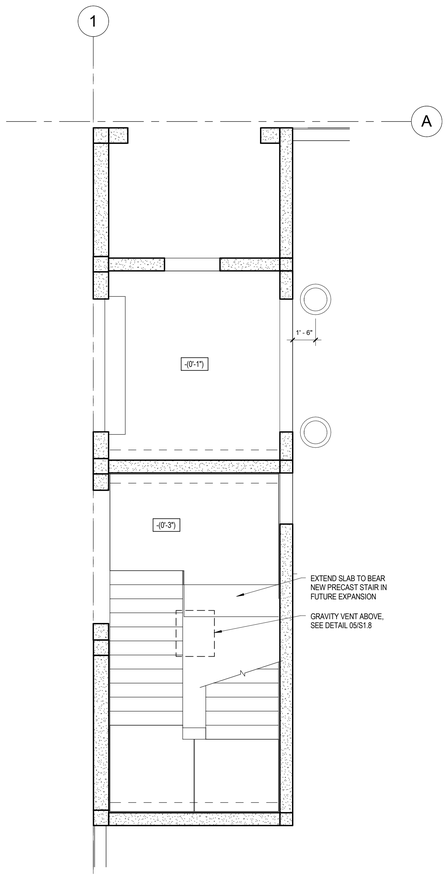
02 STAIR #2 - SECOND TIER PLAN
1/4" = 1'-0"

BASE ELEVATION = 211'-6"



03 STAIR #2 - THIRD TIER PLAN
1/4" = 1'-0"

BASE ELEVATION = 223'-0"



04 STAIR #2 - FOURTH TIER PLAN
1/4" = 1'-0"

BASE ELEVATION = 234'-6"

SHEET NOTE: SEE SHEET A3.3 FOR STAIR AND RAILING INFORMATION.

Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14

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Drawing Title
ELEVATOR/STAIR TOWER #2
STRUCTURAL PLANS

Approved: Project Director
-
-
-

Project Title
VA MEDICAL CENTER
EXPAND VISITOR/PATIENT
PARKING GARAGE - PHASE 1

Location
50 IRVING ST. N.W. WASHINGTON, D.C.

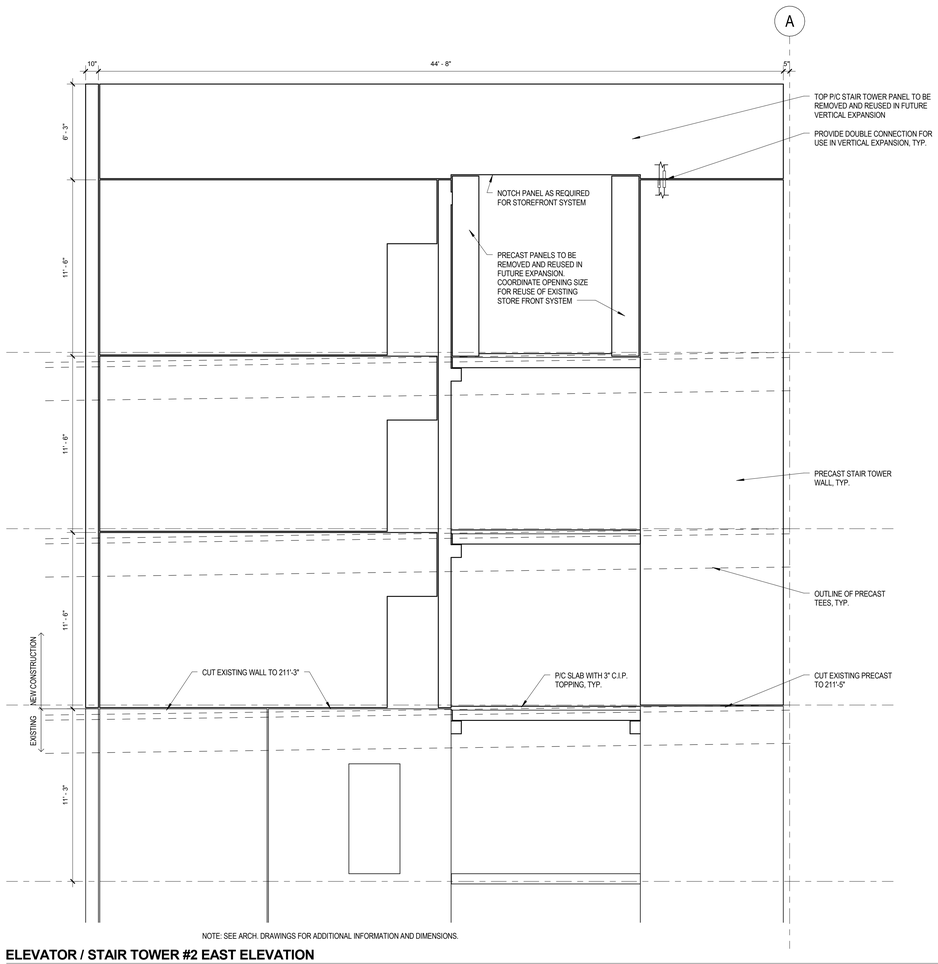
Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345
Building Number: -
Drawing Number: S1.8
Dwg. 49 of 89

1/4" = 1'-0"

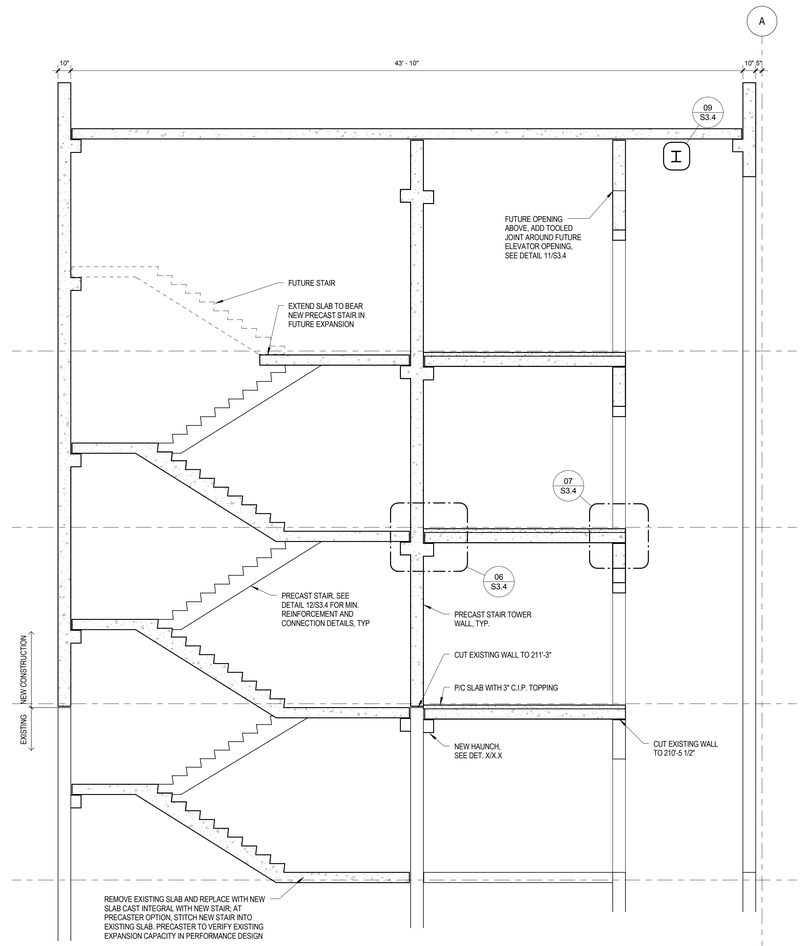
Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231



NOTE: SEE ARCH. DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.

01 **ELEVATOR / STAIR TOWER #2 EAST ELEVATION**
1/4" = 1'-0"



2 **ELEVATOR / STAIR TOWER #2 SECTION**
1/4" = 1'-0"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
Revisions:		Date

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Drawing Title: ELEVATOR/STAIR TOWER #2 ELEVATION & SECTION

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S1.9

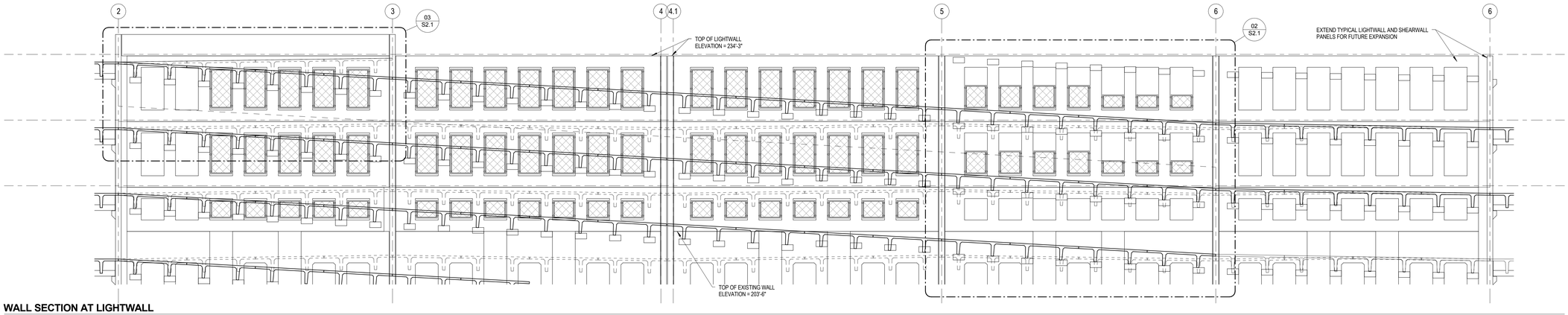
Dwg. 50 of 89

1/4" = 1'-0"

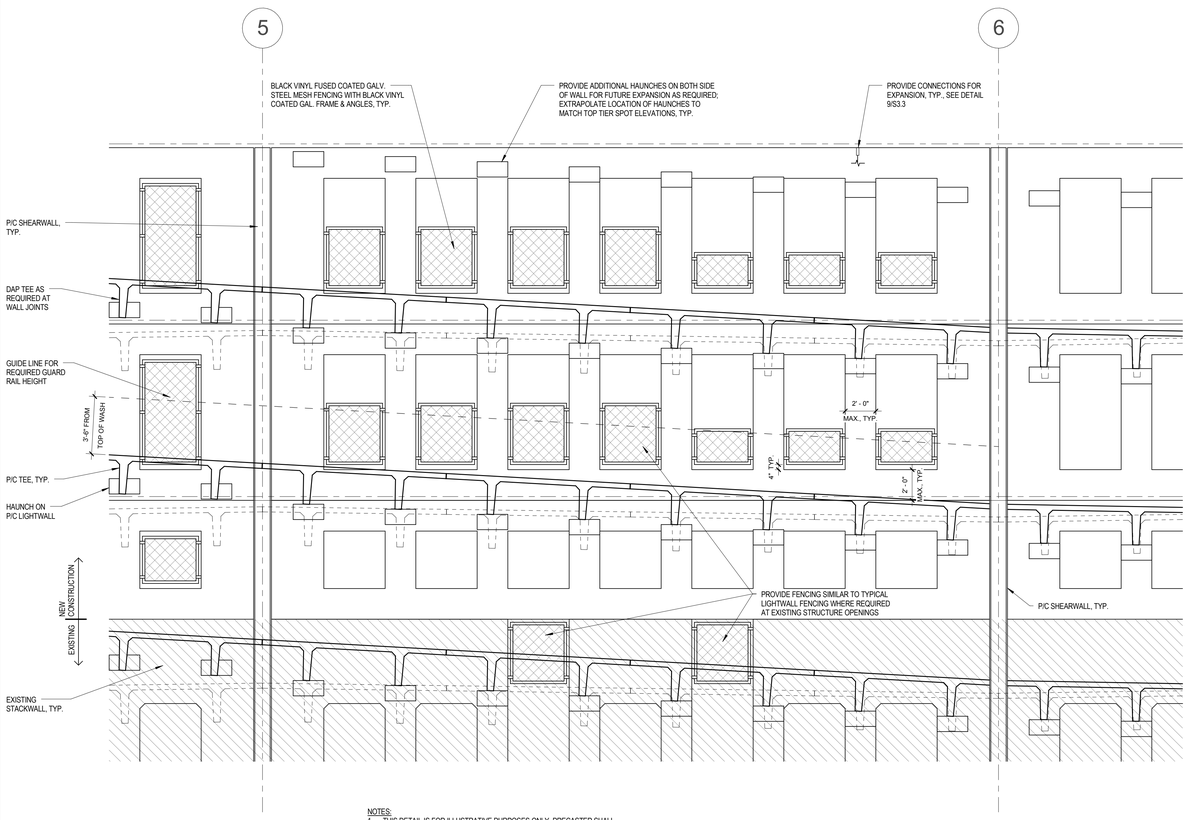
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

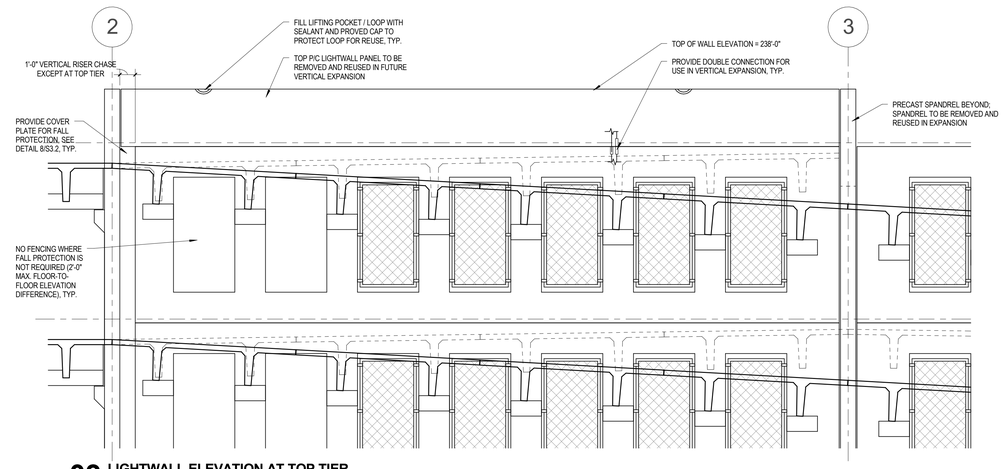


01 WALL SECTION AT LIGHTWALL
1/8" = 1'-0"

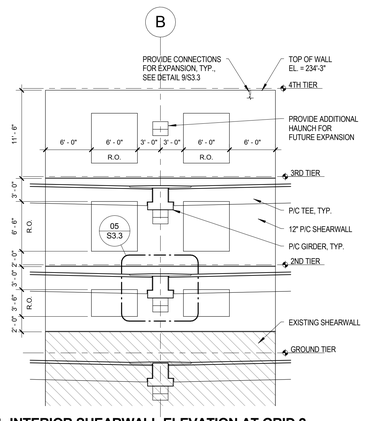


NOTES:
1. THIS DETAIL IS FOR ILLUSTRATIVE PURPOSES ONLY. PRECASTER SHALL DETERMINE HEIGHT OF FENCING WHILE MAINTAINING GUARDRAIL HEIGHT.
2. DIMENSIONS OF THE LIGHTWALL OPENINGS SHOWN ON THIS DETAIL ARE MINIMUM REQUIRED. PRECASTER SHALL MAXIMIZE HEIGHT & WIDTH OF OPENINGS. PRECASTER TO DESIGN LIGHTWALL AS MOMENT FRAME.
3. LIGHTWALL FENCING SHOWN IS DEDUCT ALTERNATE. SEE DETAIL 06/S3.3 FOR BASE BID.

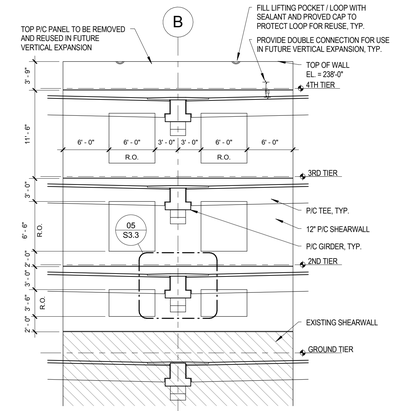
02 TYPICAL LIGHTWALL ELEVATION
1/4" = 1'-0"



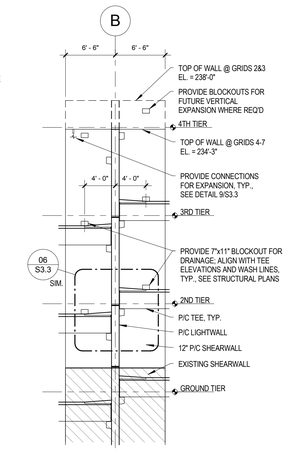
03 LIGHTWALL ELEVATION AT TOP TIER
1/4" = 1'-0"



04 INTERIOR SHEARWALL ELEVATION AT GRID 2
1/8" = 1'-0"



05 INTERIOR SHEARWALL ELEVATION AT GRID 7
1/8" = 1'-0"



06 TYPICAL INTERIOR SHEARWALL ELEVATION
1/8" = 1'-0"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
Revisions:		Date

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TimHaahs

Drawing Title: LIGHTWALL & SHEARWALL SECTIONS

Approved: Project Director
-
-
-

Project Title: VA MEDICAL CENTER
EXPAND VISITOR/PATIENT
PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S2.1

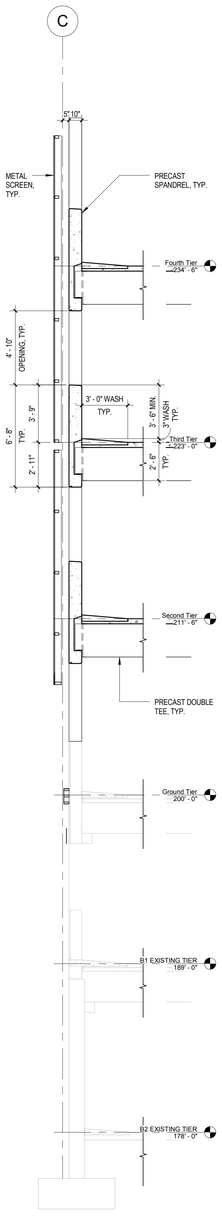
Dwg. 51 of 89

As indicated

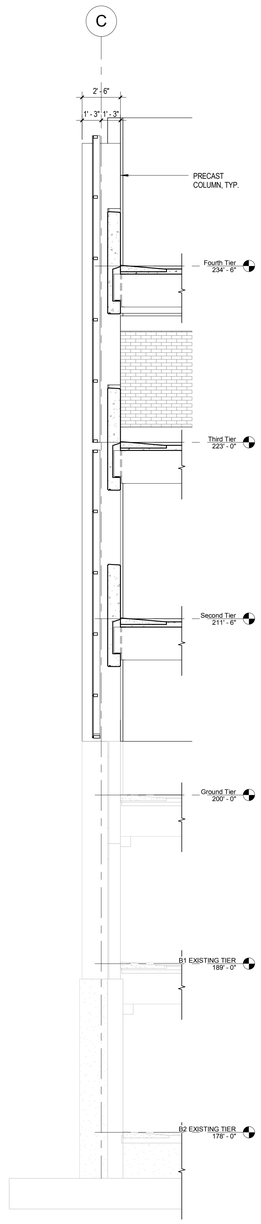
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

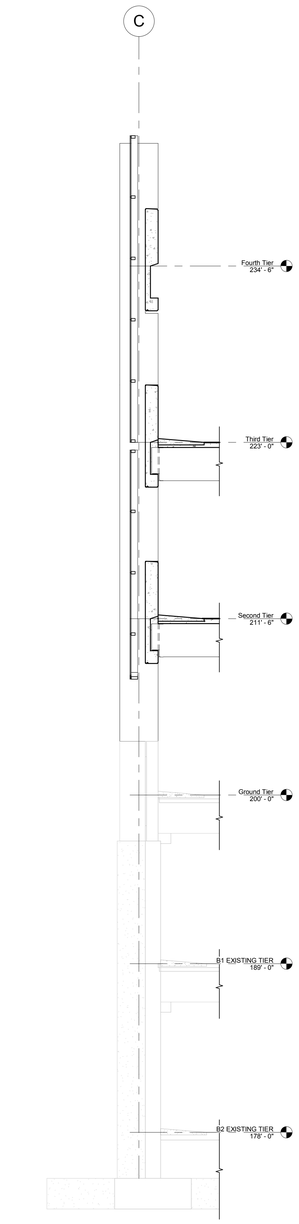


01 WALL SECTION AT ENTRY/EXIT ON B1
1/4" = 1'-0"



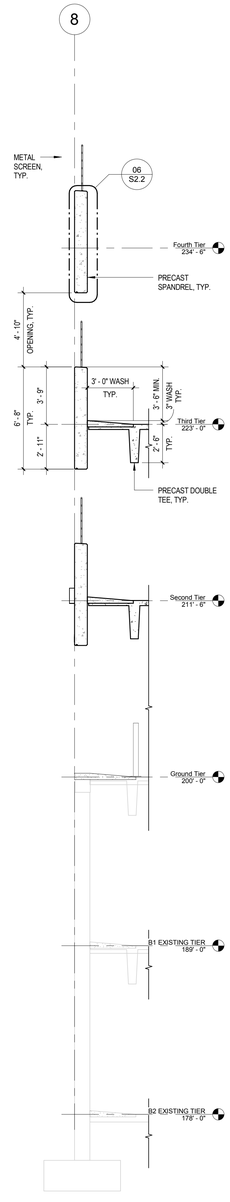
02 WALL SECTION AT SOUTH WALL BETWEEN GRID 2 & 6, TYP.
1/4" = 1'-0"

NOTE: SEE 01/A3.4 FOR ADD'L NOTES

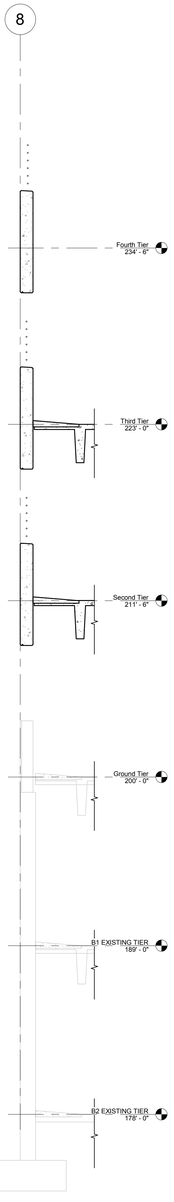


03 WALL SECTION AT SOUTH BETWEEN 6 & 8, TYP.
1/4" = 1'-0"

NOTE: SEE 01/A3.4 FOR ADD'L NOTES

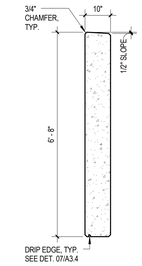


04 WALL SECTION AT ENTRY/EXIT ON GROUND
1/4" = 1'-0"

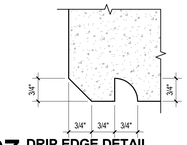


05 WALL SECTION AT EAST WALL, TYP.
1/4" = 1'-0"

NOTE: SEE 04/A3.4 FOR ADD'L NOTES



06 SPANDREL PROFILE DETAIL
1/2" = 1'-0"



07 DRIP EDGE DETAIL
6" = 1'-0"

As indicated

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
Revisions:		Date

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TimHaahs

Drawing Title: WALL SECTIONS & SPANDREL DETAILS

Approved: Project Director
-
-
-

Project Title: VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

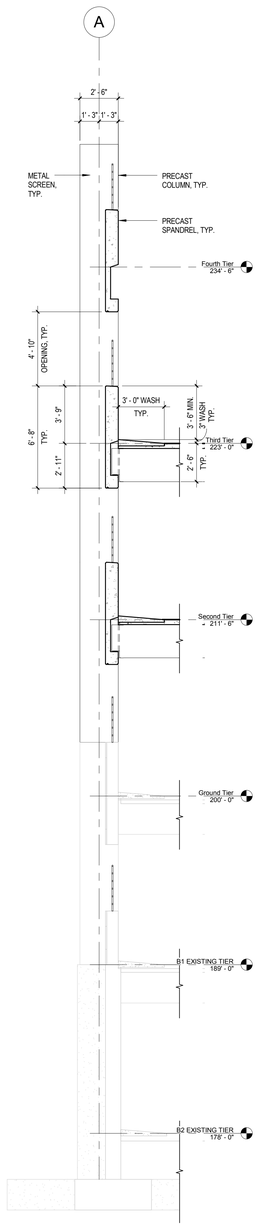
Drawing Number: S2.2

Dwg. 52 of 89

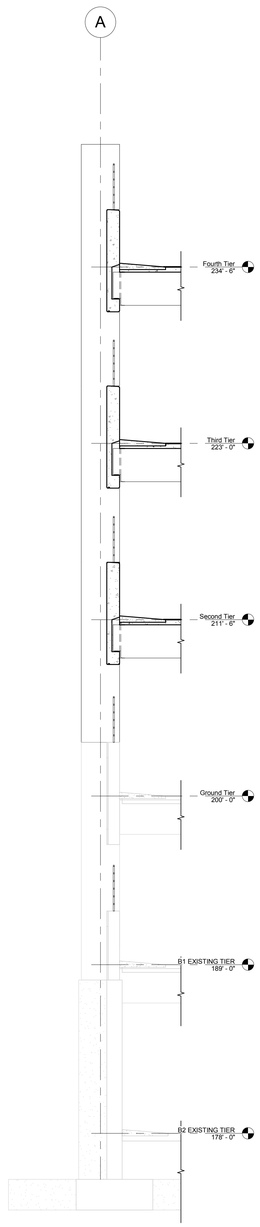
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

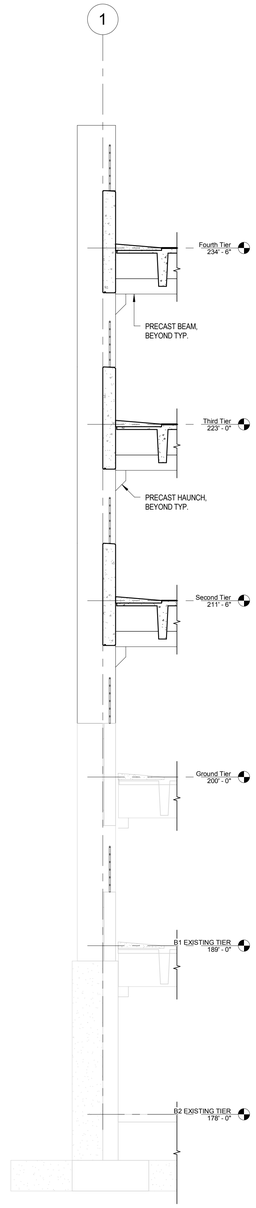


01 WALL SECTION AT NORTH WALL BETWEEN 3 & 8, TYP.
1/4" = 1'-0"



02 WALL SECTION AT NORTH WALL BETWEEN 1 & 3, TYP.
1/4" = 1'-0"

NOTE: SEE 01/A3.5 FOR ADD'L NOTES



03 WALL SECTION AT WEST WALL, TYP.
1/4" = 1'-0"

NOTE: SEE 01/A3.5 FOR ADD'L NOTES

Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14

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TimHaahs

Drawing Title: WALL SECTIONS

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S2.3

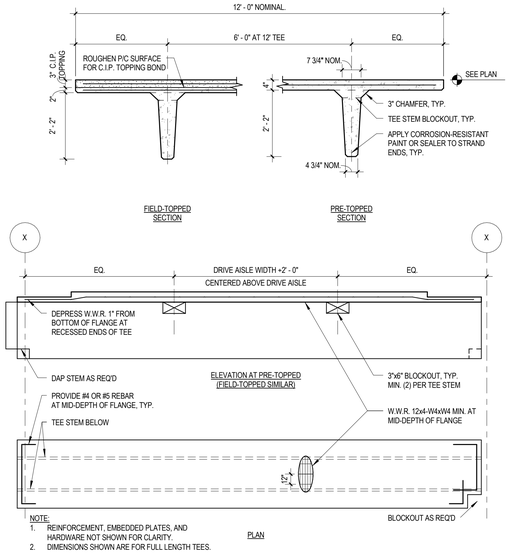
Dwg. 53 of 89

1/4" = 1'-0"

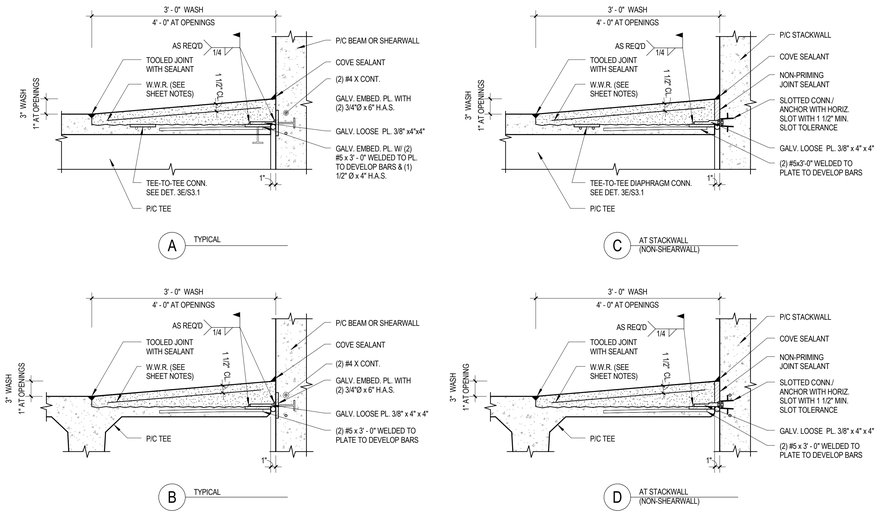
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



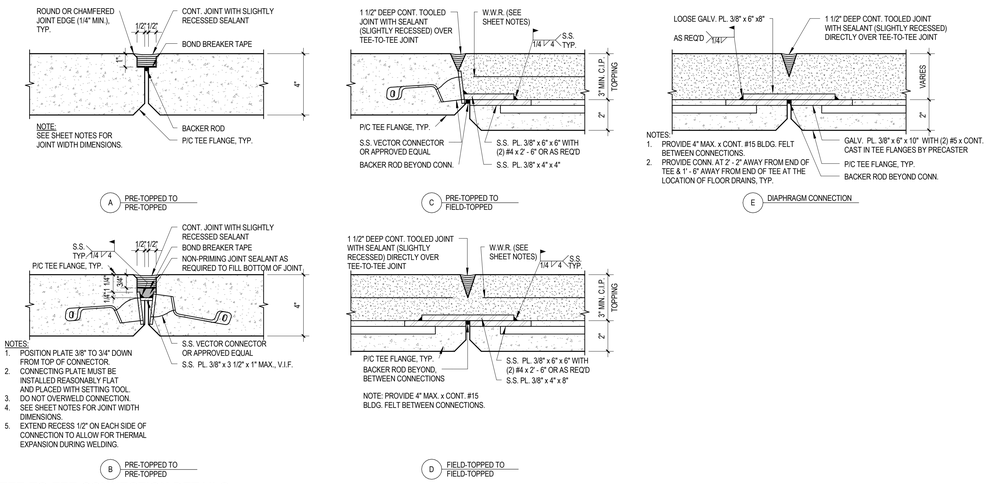
01 PRECAST TEE DETAILS
1/2" = 1'-0"



02 TEE-TO-WALL & TEE-TO-BEAM CONNECTION DETAILS
1" = 1'-0"

PRECAST TEE SHEET NOTES:
1. PRECAST MEMBERS & CONNECTIONS SHALL BE PERFORMANCE DESIGNED BY PRECASTER IN ACCORDANCE WITH THE CRITERIA DEFINED IN THE PRECAST SPECIFICATIONS AND DETAILS SHOWN ON DRAWINGS.
2. CONCRETE STRENGTH SHALL BE PROVIDED AS FOLLOWS:
   A. f'ci = 3500 PSI MIN. AT RELEASE
   B. f'c = 5500 PSI MIN. AT 28 DAYS
3. INITIAL PULLING FORCE SHALL BE 31 KIPS PER 1/2" ϕ 270 KSI STRAND.
4. PROVIDE MINIMUM SHEAR REINFORCEMENT OF 0.090 IN²/FT FOR FIRST 5'-0" FROM EACH END OF TEE IF FULL SCALE LOAD TEST RESULTS ARE ACCEPTABLE TO ENGINEER. PROVIDE ADDITIONAL SHEAR REINFORCING AT TEE-TO-TEE CONNECTION AS REQUIRED BY PERFORMANCE DESIGN.
5. PROVIDE TEE-TO-BEAM OR TEE-TO-WALL CONNECTIONS PER DETAIL 2/S3.1 AS FOLLOWS:
   A. AT EACH TEE STEM FOR CONNECTIONS TO BEAMS, GIRDERS, AND WALLS
   B. AT MIDPOINT BETWEEN STEMS FOR CONNECTIONS TO POCKETED SPANDRELS
   C. AT 8'-0" O.C. MAX. UNLESS SHORTER SPACING IS REQUIRED PER PERFORMANCE DESIGN FOR CONNECTIONS TO NON-LOAD-BEARING SPANDRELS
   D. TEE-TO-SHEARWALL CONNECTIONS AS REQUIRED PER PERFORMANCE DESIGN
6. TYPICAL TEE-TO-TEE CONNECTIONS PER DETAILS 3/S3.1 SHALL BE SPACED AS FOLLOWS:
   A. (7) AT 4'-0" O.C. CENTERED AT DRIVE AISLES
   B. REMAINING AT 8'-0" O.C. AT PARKING STALLS
7. COORDINATE REQUIRED EXTENDED DAPS IN TEES FOR HORIZONTAL PIPE RUNS WITH M.E.P. DRAWINGS. MAINTAIN REQUIRED HEADROOM CLEARANCE NOTED ON STRUCTURAL FLOOR PLANS. SEE DET. 5/S3.3 FOR ADDITIONAL INFO.
8. TEE-TO-TEE JOINT WIDTHS SHALL BE AS FOLLOWS:
   A. AT FLAT AREAS: 1/4" (WITH +1/2"-.0" TOLERANCE)
   B. AT RAMP AREAS: 3/8" (WITH +1/2"-.0" TOLERANCE)

C.I.P. WASH / TOPPING SHEET NOTES:
1. PROVIDE W.W.R. 6x6-W4xW4 IN C.I.P. WASHES & TOPPING UNLESS LARGER W.W.R. IS REQUIRED BY PRECASTER PERFORMANCE DESIGN.
2. MINIMUM DIAPHRAGM REINFORCEMENT TO BE CAST IN ENDS OF TEES SHALL BE (2)#5xCONT. LONGITUDINAL BARS. SEE DET. 3E/S3.1 FOR EMBEDDED DIAPHRAGM CONNECTION. PRECASTER SHALL BE RESPONSIBLE FOR THE FINAL DESIGN AND SHALL SUPPLY LOOSE DIAPHRAGM / COLLECTOR REINFORCEMENT FOR THE PROJECT AS REQUIRED BY THE PERFORMANCE DESIGN.
3. DIAPHRAGM / COLLECTOR REINFORCEMENT PARALLEL TO THE TEE SPAN SHALL BE PROVIDED BY REINFORCEMENT INSIDE TEE FLANGES AND PROPER TEE-TO-GIRDER CONNECTION PER PRECASTER PERFORMANCE DESIGN.
4. PROVIDE TRANSVERSE TOOLED JOINT WITH SEALANT OVER EACH CONNECTION ALONG FULL LENGTH OF C.I.P. WASH. SEE SHEET S0.3 FOR ADDITIONAL INFORMATION.
5. APPLY BONDING AGENTS OVER RECESSED TEE FLANGE SURFACES PRIOR TO POURING C.I.P. POURSTRIPS, WASHES, & TOPPING.



03 TEE-TO-TEE CONNECTION DETAILS
3" = 1'-0"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
1	35% Submission	4/15/14
Revisions:		Date

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Drawing Title: PRECAST TEE DETAILS

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S3.1

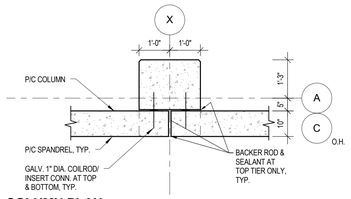
Dwg. 54 of 89

As indicated

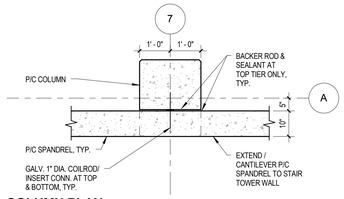
Office of Construction and Facilities Management

Department of Veterans Affairs

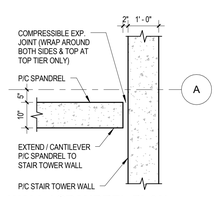
VA FORM 08-6231



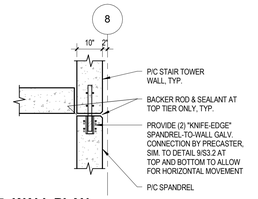
01 COLUMN PLAN
1/2" = 1'-0"



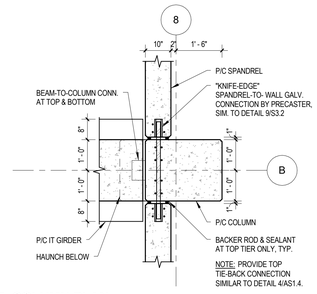
02 COLUMN PLAN
1/2" = 1'-0"



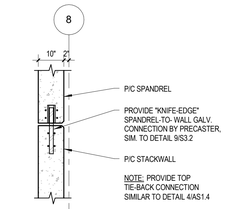
03 WALL / SPANDREL PLAN
1/2" = 1'-0"



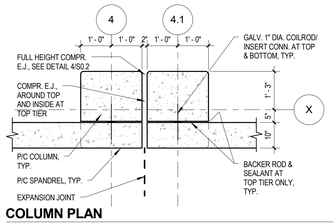
04 WALL PLAN
1/2" = 1'-0"



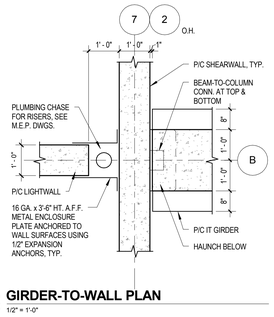
05 COLUMN PLAN
1/2" = 1'-0"



06 WALL / SPANDREL PLAN
1/2" = 1'-0"

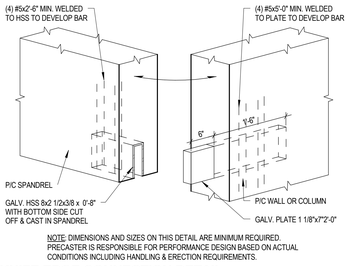


07 COLUMN PLAN
1/2" = 1'-0"



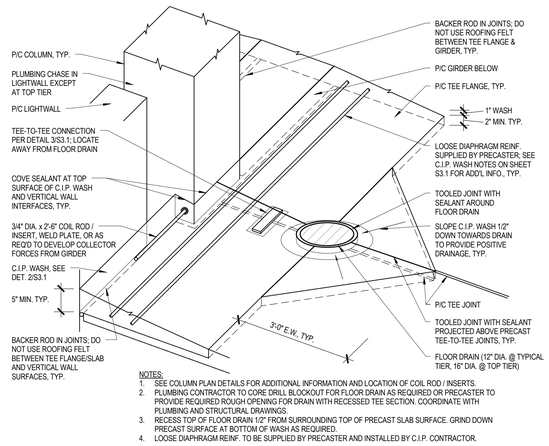
08 GIRDER-TO-WALL PLAN
1/2" = 1'-0"

PRECAST COLUMN NOTES:
1. PRECAST COLUMNS (INCLUDING CONNECTIONS, HAUNCHES, ETC.) SHALL BE PERFORMANCE DESIGNED BY PRECASTER IN ACCORDANCE WITH THE CRITERIA IN SPECIFICATION SECTION 034000 & DETAILS SHOWN ON DRAWINGS.
2. TYPICAL U.N.O.: f'c = 6000 PSI
3. ALL COLUMN TIES SHALL BE #4@16" (MAX.) O.C., U.N.O.
4. PROVIDE (3)#4 ADDITIONAL COLUMN TIES @ 4" O.C. AT TOP & BOTTOM OF COLUMNS AND BELOW BEARING POCKETS.
5. SEE DETAIL 2/S1.0 FOR PRECAST COLUMN BASE PLAN DETAIL.
6. USE 3/4"ΦX2'-6" COIL RODS AT TYPICAL COIL ROD/INSERT CONNECTIONS TO P/C COLUMNS. USE 3/4"ΦX1'-6" COIL RODS AT FLOOR DRAIN LOCATIONS.



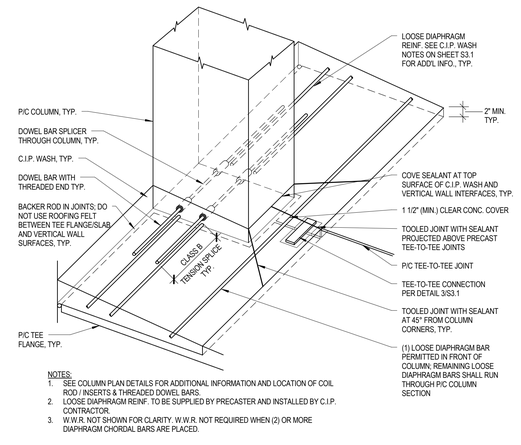
NOTE: DIMENSIONS AND SIZES ON THIS DETAIL ARE MINIMUM REQUIRED. PRECASTER IS RESPONSIBLE FOR PERFORMANCE DESIGN BASED ON ACTUAL CONDITIONS INCLUDING HANDLING & ERECTION REQUIREMENTS.

09 KNIFE EDGE CONNECTION DETAIL
N.T.S.



NOTES:
1. SEE COLUMN PLAN DETAILS FOR ADDITIONAL INFORMATION AND LOCATION OF COIL ROD / INSERTS.
2. PLUMBING CONTRACTOR TO CORE DRILL BLOCKOUT FOR FLOOR DRAIN AS REQUIRED OR PRECASTER TO PROVIDE REQUIRED ROUGH OPENING FOR DRAIN WITH RECESSED TEE SECTION. COORDINATE WITH PLUMBING AND STRUCTURAL DRAWINGS.
3. RECESS TOP OF FLOOR DRAIN 1/2" FROM SURROUNDING TOP OF PRECAST SLAB SURFACE. GRIND DOWN PRECAST SURFACE AT BOTTOM OF WASH AS REQUIRED.
4. LOOSE DIAPHRAGM REINF. TO BE SUPPLIED BY PRECASTER AND INSTALLED BY C.I.P. CONTRACTOR.

10 INTERIOR C.I.P. WASH ISOMETRIC
3/4" = 1'-0"



NOTES:
1. SEE COLUMN PLAN DETAILS FOR ADDITIONAL INFORMATION AND LOCATION OF COIL ROD / INSERTS & THREADED DOWEL BARS.
2. LOOSE DIAPHRAGM REINF. TO BE SUPPLIED BY PRECASTER AND INSTALLED BY C.I.P. CONTRACTOR.
3. W.W.R. NOT SHOWN FOR CLARITY. W.W.R. NOT REQUIRED WHEN (2) OR MORE DIAPHRAGM CHORDAL BARS ARE PLACED.

11 PERIMETER C.I.P. WASH ISOMETRIC
3/4" = 1'-0"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
1	35% Submission	4/15/14
Revisions:		Date

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TimHaahs

Drawing Title: PRECAST COLUMN PLAN DETAILS

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S3.2

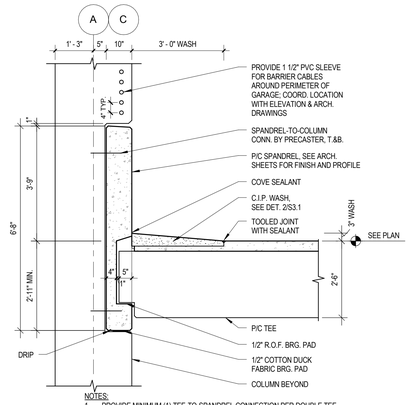
Dwg. 55 of 89

As indicated

Office of Construction and Facilities Management

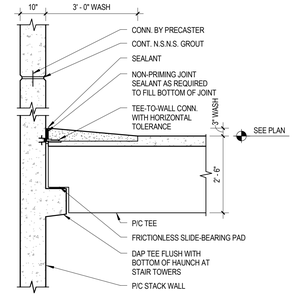
Department of Veterans Affairs

VA FORM 08-6231

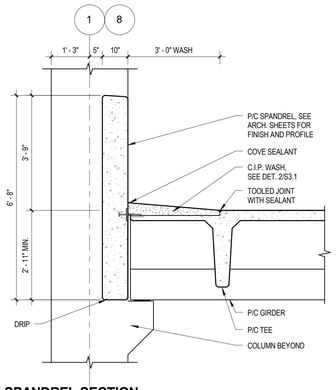


NOTES:
1. PROVIDE MINIMUM (1) TEE-TO-SPANDREL CONNECTION PER DOUBLE TEE.

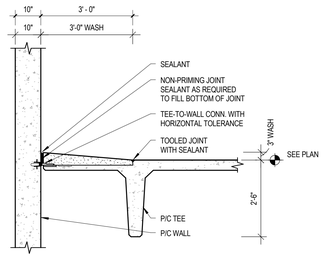
01 SPANDREL SECTION
1/2" = 1'-0"



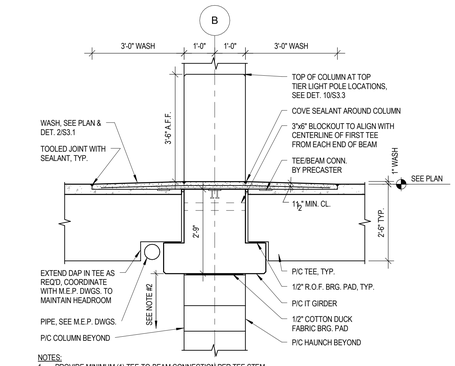
02 WALL SECTION
1/2" = 1'-0"



03 SPANDREL SECTION
1/2" = 1'-0"



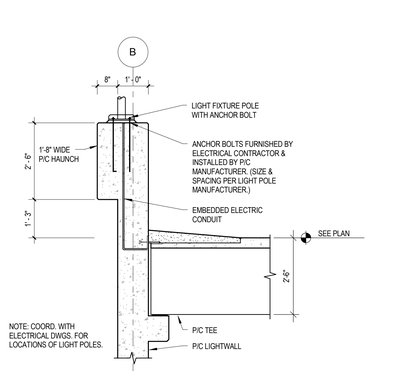
04 WALL SECTION
1/2" = 1'-0"



NOTES:
1. PROVIDE MINIMUM (1) TEE-TO-BEAM CONNECTON PER TEE STEM.
2. PROVIDE REQUIRED HEADROOM CLEARANCES PER NOTES ON STRUCTURAL FLOOR PLANS.

05 GIRDER SECTION
1/2" = 1'-0"

06 LIGHTWALL SECTION
1/2" = 1'-0"



NOTES:
1. ALL CONN. HARDWARE SHALL BE GALVANIZED.
2. ALIGN BOLT HOLES (DRILLED IN P/C TEES) & L'S WITH DIRECTION OF MOVEMENT (PERPENDICULAR TO LENGTH OF TEES) TO ALLOW FREE MOVEMENT.

07 SHEAR TRANSFER DETAIL
1/2" = 1'-0"

NOTE: VERIFY EXISTING SPANDREL SIZE AND CONNECTIONS IN FIELD.

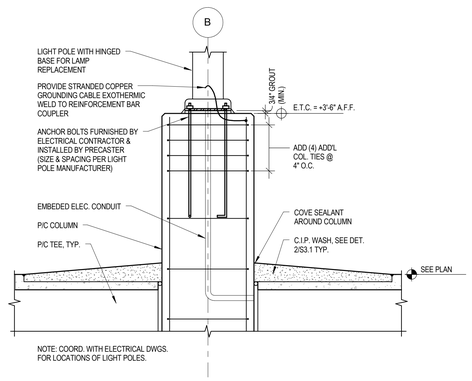
08 CLOSURE SPANDREL SECTION
1/2" = 1'-0"

NOTE: ALL COLUMNS AND WALLS ARE TO BE DESIGNED FOR VERTICAL EXPANSION.

09 TYPICAL CONNECTION DETAIL FOR FUTURE EXPANSION
3/4" = 1'-0"

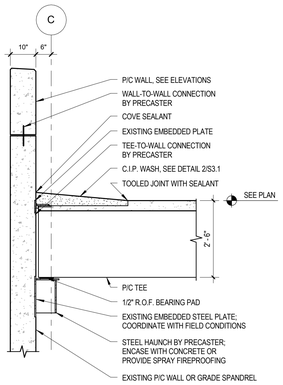
NOTE: PRECASTER TO PROVIDE BLOCKOUTS FOR ALL FLOOR DRAINS AS REQUIRED. COORDINATE WITH STRUCTURAL AND PLUMBING DRAWINGS.

10 TYPICAL FLOOR DRAIN DETAIL
3/4" = 1'-0"



11 TYPICAL LIGHTPOLE SECTION AT COLUMN
3/4" = 1'-0"

12 TYPICAL LIGHTPOLE SECTION AT LIGHTWALL
1/2" = 1'-0"



13 WALL SECTION
1/2" = 1'-0"

4	100% Submission	2/16/15
3	95% Submission	8/28/14
2	65% Submission	8/07/14
1	35% Submission	4/15/14
Revisions:		Date

VA FORM 08-6231

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TimHaahs

Drawing Title: PRECAST SECTION DETAILS

Approved: Project Director
-
-
-

Project Title: VA MEDICAL CENTER
EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S3.3

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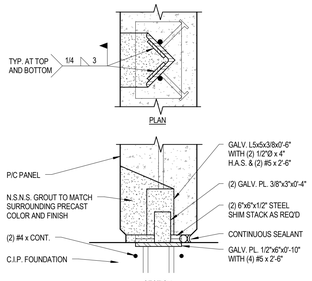
As indicated

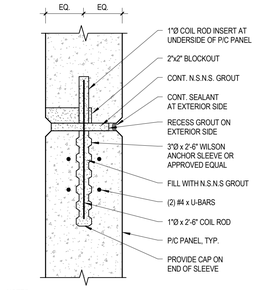
Office of Construction and Facilities Management

Department of Veterans Affairs



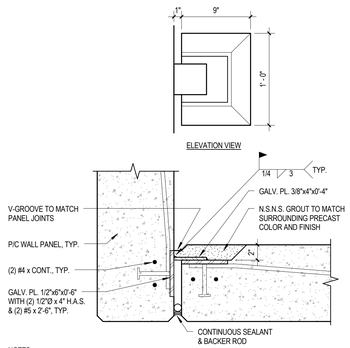
NOTES:
1. PROVIDE CONNECTIONS AT 4'-0" O.C. OR MINIMUM (2) PER PANEL.
2. PROVIDE CONTINUOUS WATERPROOFING BOARD PRIOR TO BACKFILL WHERE EXTERIOR FINISHED GRADE IS ABOVE THE JOINT.
3. THE CONNECTION SHOWN IS THE MINIMUM REQUIRED. PRECASTER TO PERFORMANCE DESIGN LARGER CONNECTION AS REQUIRED.
4. PLACE CONNECTION POCKET ON INTERIOR SIDE, U.N.O.

01 TYP. C.I.P. FOUNDATION TO P/C PANEL CONNECTION
N.T.S.



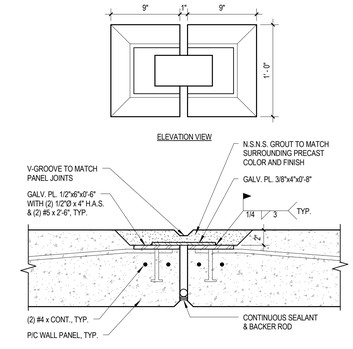
NOTES:
1. PROVIDE CONNECTIONS AT 4'-0" O.C. OR MINIMUM (2) PER PANEL.
2. THE CONNECTION SHOWN IS THE MINIMUM REQUIRED. PRECASTER TO PERFORMANCE DESIGN LARGER CONNECTION AS REQUIRED.
3. PLACE BLOCKOUT ON INTERIOR SIDE, U.N.O.
4. USE SIMILAR CONNECTION AT EXPANSION LOCATIONS. FIELD VERIFY EXISTING EXPANSION CONNECTIONS. PRECASTER TO PERFORMANCE DESIGN CONNECTION TO EXISTING CONDITIONS. EPOXY DOWEL ANCHORS TO EXISTING CONCRETE AS REQUIRED.

02 TYP. P/C PANEL TO P/C PANEL CONNECTION
N.T.S.



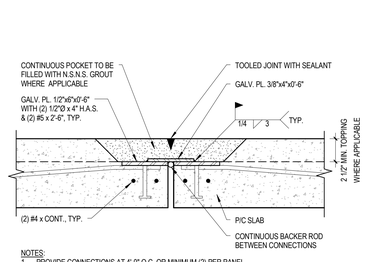
NOTES:
1. PROVIDE CONNECTIONS AT 4'-0" O.C. OR MINIMUM (2) PER PANEL.
2. PROVIDE FIRE-RATED BACKER ROD FOR ALL VERTICAL JOINTS AT ELEVATOR TOWERS AND OTHER FIRE-RATED ROOMS SHOWN ON ARCHITECTURAL PLANS.
3. THE CONNECTION SHOWN IS THE MINIMUM REQUIRED. PRECASTER TO PERFORMANCE DESIGN LARGER CONNECTION AS REQUIRED.
4. PLACE CONNECTION POCKET ON INTERIOR SIDE, U.N.O.

03 TYP. P/C PANEL CONNECTION (AT CORNER VERTICAL JOINTS)
N.T.S.



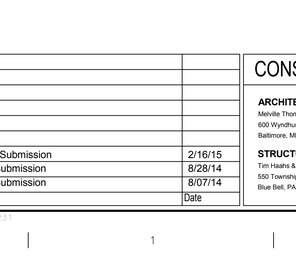
NOTES:
1. PROVIDE CONNECTIONS AT 4'-0" O.C. OR MINIMUM (2) PER PANEL.
2. PROVIDE FIRE-RATED BACKER ROD FOR ALL VERTICAL JOINTS AT ELEVATOR TOWERS AND OTHER FIRE-RATED ROOMS SHOWN ON ARCHITECTURAL PLANS.
3. THE CONNECTION SHOWN IS THE MINIMUM REQUIRED. PRECASTER TO PERFORMANCE DESIGN LARGER CONNECTION AS REQUIRED.
4. PLACE CONNECTION POCKET ON INTERIOR SIDE, U.N.O.

04 TYP. P/C PANEL CONNECTION
N.T.S.



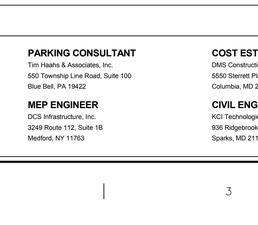
NOTES:
1. PROVIDE CONNECTIONS AT 4'-0" O.C. OR MINIMUM (2) PER PANEL.
2. THE CONNECTION SHOWN IS THE MINIMUM REQUIRED. PRECASTER TO PERFORMANCE DESIGN LARGER CONNECTION AS REQUIRED.

05 TYP. P/C SLAB TO P/C SLAB CONNECTION
N.T.S.



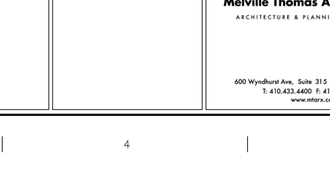
NOTE: PROVIDE CONN. @ 4'-0" O.C. MAX. OR MIN. (2) CONN. PER PANEL

06 P/C SLAB TO HAUNCH CONNECTION
N.T.S.



NOTE: PROVIDE CONN. @ 4'-0" O.C. MAX. OR MIN. (2) CONN. PER PANEL

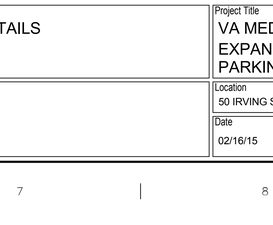
07 P/C SLAB TO ELEVATOR WALL CONNECTION
N.T.S.



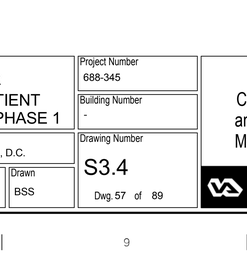
NOTE: PROVIDE CONN. AT 4'-0" O.C. MAX. OR MIN. (2) CONN. PER PANEL

08 P/C STAIR TO P/C SLAB CONNECTION
N.T.S.

09 HOIST BEAM CONNECTION
N.T.S.



10 SEPARATOR BEAM CONNECTION
N.T.S.



11 FUTURE OPENING DETAIL
1" = 1'-0"

NOTE: REINFORCEMENT AT THIS DETAIL IS THE MINIMUM REQUIREMENT. PRECASTER IS RESPONSIBLE FOR FINAL ANALYSIS BASED ON ACTUAL CONDITIONS INCLUDING HANDLING & ERECTION REQUIREMENTS.

12 TYPICAL P/C STAIR SECTION
N.T.S.

13 NEW PRECAST TEE HAUNCH DETAIL
N.T.S.

Revisions:	Date
4 100% Submission	2/16/15
3 95% Submission	8/28/14
2 65% Submission	8/07/14

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TimHaahs

Drawing Title: PRECAST DETAILS

Approved: Project Director: - - -

Project Title: VA MEDICAL CENTER EXPAND VISITOR/PATIENT PARKING GARAGE - PHASE 1

Location: 50 IRVING ST. N.W. WASHINGTON, D.C.

Date: 02/16/15 | Checked: NCA | Drawn: BSS

Project Number: 688-345

Building Number: -

Drawing Number: S3.4

As indicated

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Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231