GENERAL NOTES

SECTION 1 - GENERAL REQUIREMENTS

1.0 DEFINITIONS:

A. ENGINEER: REFERENCES ON THE STRUCTURAL DRAWINGS TO 'ENGINEER' MEAN THE STRUCTURAL ENGINEER OF RECORD. OTHER ENTITIES ARE SPECIFICALLY NOTED AS "CONTRACTOR'S ENGINEER", "MECHANICAL ENGINEER", ETC.

1.1.1 THESE NOTES SUPPLEMENT THE SPECIFICATIONS, WHICH SHALL BE REFERRED TO FOR ADDITIONAL REQUIREMENTS.

1.1.2 UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES, AND NOTIFY LANDSCAPE ARCHITECT OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.

1.1.3 EXISTING STRUCTURES:

A. CONTRACT DOCUMENTS HAVE BEEN PREPARED USING AVAILABLE DRAWINGS AND SITE OBSERVATION AS PERMITTED BY ACCESS RESTRICTIONS DURING DESIGN.
B. DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT NOW KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION (DISCOVERY). CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ALL CONDITIONS NOT PER THE CONTRACT DOCUMENTS. EXAMPLES INCLUDE:
- SIZES OR DIMENSIONS OTHER THAN THOSE SHOWN.
- DAMAGE OR DETERIORATION TO MATERIALS AND COMPONENTS.
- CONDITIONS OF INSTABILITY OR LACK OF SUPPORT.
- ITEMS NOTED AS EXISTING ON THE DRAWINGS BUT NOT FOUND IN THE FIELD.

C. PREPARE DIMENSIONAL DRAWINGS OF ALL DISCOVERED ITEMS.
D. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURAL CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS.
E. CONTRACTOR SHALL MAKE ALLOWANCE FOR THE RESOLUTION OF SUCH DISCOVERIES IN THE CONSTRUCTION SCHEDULE.
F. SUBMIT A DIMENSIONED DRAWING OF ALL NEW OPENINGS THROUGH EXISTING STRUCTURE, AND SECURE APPROVAL PRIOR TO CUTTING. DRAWING SHALL SHOW SIZE OF PROPOSED OPENING AND IT'S VERTICAL AND HORIZONTAL LOCATION.

1.1.4 USE OF DRAWINGS:

A. DO NOT SCALE DRAWINGS.

B. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.

1.1.5 TEMPORARY CONDITIONS:

THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES.

CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

USE ONLY HAND OPERATED TOOLS FOR COMPACTION ADJACENT TO FOUNDATION WALLS.

1.1.6 SUBMITTALS AND SUBSTITUTIONS:

A. SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
1. IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND DESIGNED BY MARTIN/MARTIN, INC. PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR MAKING THE CHANGE.
2. CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS.

B. SUBSTITUTIONS: LANDSCAPE ARCHITECTS APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS.
C. NONCONFORMANCE: NOTIFY LANDSCAPE ARCHITECT OF CONDITIONS NOT CONSTRUCTED PER THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH CORRECTIVE WORK. SUBMIT PROPOSED REPAIR TO THE LANDSCAPE ARCHITECT FOR ACCEPTANCE. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR DESIGNING THE REPAIR.

1.1.7 OSHA STANDARDS:

THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS.

WHERE THE STRUCTURAL DRAWINGS APPEAR TO CONFLICT WITH OSHA REQUIREMENTS, THE STRUCTURAL DRAWINGS REPRESENT FINAL CONDITIONS ONLY; THE CONTRACTOR SHALL ADD ALL ERECTION FRAMING AS MAY BE NECESSARY TO COMPLY WITH OSHA.

1.1.8 COORDINATION:

A. STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, LANDSCAPE ARCHITECTS, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.
B. COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH LANDSCAPE ARCHITECTS DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, PROJECT SHOP DRAWINGS, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.

1.1.9 SPECIAL INSPECTION:

SPECIAL INSPECTION SHALL BE PROVIDED PER IBC. THE LIST BELOW IS A SUMMARY OF REQUIRED TESTS, REFER TO THE SPECIFICATIONS FOR DETAILED TESTING REQUIREMENTS.

SOILS:
- SUBGRADE AND FILL BENEATH FOOTINGS AND SLABS-ON-GRADE AND WALL BACKFILL

CONCRETE:
- STRUCTURAL CONCRETE
- INSTALLATION OF EMBEDDED BOLTS AND PLATES SUPPORTING STRUCTURE
- REINFORCING STEEL PLACEMENT
- FIELD BENDING OF REINFORCING STEEL
- REINFORCING COUPLERS
- ANCHORED REBAR INTO HARDENED CONCRETE

STRUCTURAL STEEL:
- SHOP AND FIELD WELDING
- HIGH STRENGTH BOLTING

SECTION 2 - FOUNDATIONS
- MAXIMUM TOTAL LOAD BEARING PRESSURE 1500 PSF

SECTION 3 - STRUCTURAL CONCRETE

3.1.1 ALL WORK SHALL CONFORM WITH ACI 301-99 UNLESS NOTED OTHERWISE IN DRAWINGS OR PROJECT SPECIFICATIONS.

3.1.2 DETAIL BARS IN ACCORDANCE WITH THE LATEST EDITIONS OF "ACI DETAILING MANUAL", PUBLICATION SP-66 WITH ADDED REQUIREMENTS OF THE PROJECT SPECIFICATION, AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318.

3.2.1 REINFORCING:

A. REINFORCING: ASTM A615, GRADE 60 DEFORMED
B. WELDED AND FIELD BENT REINFORCING: ASTM A706, GRADE 60 DEFORMED
C. WELDED WIRE FABRIC: ASTM 185 PLAIN OR ASTM 497 DEFORMED, 70 KSI
D. SPLICES:
1. NO SPLICING OF REINFORCEMENT PERMITTED EXCEPT AS NOTED ON DRAWINGS. MAKE BARS CONTINUOUS AROUND CORNERS. WHERE PERMITTED, SPLICES MAY BE MADE BY CONTACT LAPS OR MECHANICAL CONNECTORS.
2. SPLICE CONTINUOUS TOP AND BOTTOM BARS IN WALLS, BEAMS, AND GRADE BEAMS AS FOLLOWS:
A. TOP BARS - AT MIDSPAN
B. BOTTOM BARS - OVER SUPPORT
3. LAP WELDED WIRE FABRIC A MINIMUM OF ONE MESH SPACING.
4. SPLICE LENGTHS
#3 = 22 in
#4 = 29 in
#5 = 36 in
#6 = 43 in
#7 = 63 in
#8 = 72 in

F. MISCELLANEOUS REINFORCING REQUIREMENTS
1. PROVIDE ADDITIONAL BARS OR STIRRUPS REQUIRED TO SECURE REINFORCING IN PLACE DURING CONCRETE PLACEMENT.
2. MAKE ALL REINFORCING BAR BENDS IN THE FABRICATOR'S SHOP UNLESS NOTED.
3. NO WELDING OF REINFORCING PERMITTED UNLESS NOTED ON DRAWINGS. WHERE PERMITTED, PERFORM WELDING IN ACCORDANCE WITH AWS D1.4, LATEST EDITION.
4. PROVIDE ADDED REINFORCING TO TRIM ALL OPENINGS, NOTCHES, AND REENTRANT CORNERS WITH (2) #5 BARS EACH SIDE OF ALL OPENINGS LARGER THAN 10" AND ALL REENTRANT CORNERS. EXTEND 2'-0 PAST EDGE OF OPENING.

3.2.2 STRUCTURAL CONCRETE MIX REQUIREMENTS:

A. RE:CONCRETE MIX TABLE IN REPAIR NOTES, S1.0

3.3.1 PLACING REINFORCEMENT:

A. REINFORCEMENT PROTECTION

1. CONCRETE PLACED AGAINST EARTH	3"
2. CONCRETE PLACED ON VOIDFORMS WITH MASONITE OR PLYWOOD COVERING	2"
3. CONCRETE PLACED IN FORMS BUT EXPOSED TO WEATHER OR EARTH:	2"
4. COLUMNS, GIRDERS, BEAMS	1 1/2"
5. WALLS NOT EXPOSED TO WEATHER OR EARTH	1"

B. REINFORCING PLACING TOLERANCES: PER ACI 117.
C. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND WELDED WIRE FABRIC AT POSITIONS SHOWN ON PLANS. ALL REINFORCING, DOWELS, BOLTS, AND EMBEDDED PLATES SHALL BE SET AND TIED IN PLACE BEFORE THE CONCRETE IS POURED. "STABBING" INTO PREVIOUSLY PLACED CONCRETE IS NOT PERMITTED.

3.3.2 MEP AND OTHER OPENINGS AND EMBEDMENTS:

A. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS BEFORE PLACING CONCRETE. DO NOT CUT REINFORCING WHICH MAY CONFLICT.

3.4.1 NON-SHRINK GROUT: CONFORM TO ASTM C1107, GRADES B, OR C. ACHIEVE 6000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.

SECTION 4 - MASONRY - NOT USED

SECTION 5 - METALS

5.1.1 CONNECTION DESIGN: PROVIDE CONNECTIONS AS SHOWN IN THE DETAILS. PROVIDE 3/4" DIAMETER A325 BOLTS AT ALL CONNECTIONS UNLESS OTHERWISE NOTED. REFER TO SPECIFICATION FOR ALTERNATIVES AND CONNECTIONS NOT SHOWN.

5.1.2 WELDING REQUIREMENTS:

A. WELDERS: HAVE IN POSSESSION CURRENT EVIDENCE OF PASSING THE APPROPRIATE A.W.S. QUALIFICATION TESTS.
B. MINIMUM WELDS: AISC SPECIFICATION, NOT LESS THAN 3/16" FILLET, CONTINUOUS UNLESS OTHERWISE NOTED.
1. WELD SIZES AND LENGTHS CALLED FOR ON THE DRAWINGS ARE THE NET EFFECTIVE REQUIRED. INCREASE WELD SIZE IF GAPS EXIST AT THE FAYING SURFACE.
2. WELD SIZES SHALL BE AS SHOWN UNLESS A GREATER SIZE IS REQUIRED BY AISC ASD-1989; J2.1.b AND J2.2.b.
C. ALL GROOVE WELDS SHALL BE COMPLETE PENETRATION UNLESS NOTED.

5.2.1 STRUCTURAL STEEL MATERIAL: PROVIDE THE FOLLOWING UNLESS NOTED:

A. WIDE FLANGE AND WT SHAPES:
ASTM A992 GRADE 50 Fy = 50 KSI
B. HOLLOW STRUCTURAL SECTION (HSS):
1. ROUND ASTM A53 TYPE E OR S GRADE 'B' Fy = 35 KSI
2. RECTANGULAR ASTM A500 GRADE 'B' Fy = 46 KSI
C. S, M, HP SHAPES, ANGLES, CHANNELS, AND OTHER STEEL NOT IDENTIFIED: ASTM A36 Fy = 36 KSI
D. PLATES AND BARS
ASTM A36 Fy = 36 KSI
E. ANCHOR BOLTS
F1554 GR 55 WELDABLE, HEAVY HEX HEADED Fy = 55 KSI Fu = 75 KSI

5.2.2 CONNECTION MATERIAL:

A. ANCHOR RODS: ASTM GRADE AS NOTED ON PLANS. PROVIDE HEAVY HEX HEADED RODS OR EQUIVALENT HEAVY HEX BEARING NUT TACK WELDED UNLESS NOTED OTHERWISE.
B. HIGH-STRENGTH BOLTS: ASTM A325 OR ASTM F1852 TENSION-CONTROL TYPE 1 HEAVY HEX, PLAIN UNLESS NOTED OTHERWISE. PROVIDE TENSION-CONTROL BOLTS WHEN EVER POSSIBLE.
C. WELDING ELECTRODES: AWS D1.1, E70 SERIES UNLESS NOTED OTHERWISE.
E. EXPANSION ANCHORS: WEDGE TYPE, REFER TO SPECIFICATIONS FOR MATERIAL, GRADE, AND FINISH. SUBMIT ICBO REPORT.
F. ADHESIVE ANCHORS: THREADED ROD ASTM A307, REFER TO SPECIFIATIONS FOR MATERIAL GRADE AND FINISH.
G. SLEEVE ANCHORS: SIMPSON SLEEVE ALL OR EQUIVALENT, SUBMIT ICBO REPORT.
H. SCREW ANCHOR: SIMPSON TITEN HD OR EQUIVALENT, SUBMIT ICBO REPORT.

5.3.1 STRUCTURAL STEEL INSTALLATION:

A. ALL HIGH STRENGTH BOLTS USED MAY BE INSTALLED SNUG TIGHT AS DEFINED BY AISC.

SECTION 6 - WOOD

6.1.1 FRAMING LUMBER:

A. DRY (19% MAXIMUM MOISTURE CONTENT AT THE TIME OF INSTALLATION), SELECT STRUCTURAL WESTERN CEDARS WITH MINIMUM DESIGN VALUES BASED ON THE 2012 NDS.
B. BEAMS AND STRINGERS USED WITH CANTILEVERS OR CONTINUOUS SPANS SHALL BE GRADED TO PROVIDE THE SPECIFIED ALLOWABLE STRESSES OVER THE ENTIRE MEMBER LENGTH.

6.2.1 NAILING:
A. UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BOX NAILS. MINIMUM NAILING SHALL BE IN ACCORDANCE WITH IBC 2015 TABLE 2304.10.1.

6.3.1 METAL CONNECTORS:

A. FRAMING CONNECTORS ARE THOSE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, SAN LEANDRO, CALIFORNIA. OTHER MANUFACTURER'S PRODUCTS MAY BE USED IF APPROVED BY THE ENGINEER. FURNISH NAILS AND/OR BOLTS OF DIAMETER, LENGTH, AND NUMBER SPECIFIED BY THE MANUFACTURER FOR EACH CONNECTOR.
B. ALL CONNECTOR HOLES SHALL BE FILLED WITH PROPER NAILS/BOLTS INCLUDING OPTIONAL NAIL LOCATIONS FOR UPLIFT. ALL BOLT HOLES SHALL BE DRILLED INTO FRAMING MEMBERS. MAXIMUM HOLE DIAMETER IS 1/16" LARGER THAN THE BOLT DIAMETER.

6.4.1 OPENINGS:

A. OPENING, POCKETS, ETC., SHALL NOT BE PLACED IN BEAMS, JOISTS, RAFTERS, STUDS, POSTS, COLUMNS, TIMBER AND OTHER STRUCTURAL MEMBERS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS.

DESIGN CRITERIA

1. CODES AND STANDARDS USED IN DESIGN:
A. INTERNATIONAL BUILDING CODE 2015.
2. WIND LOADS PER IBC 2015
OCCUPANCY CATEGORY II
WIND IMPORTANCE FACTOR, I 1.0
BASIC WIND SPEED (FASTEST-MILE WIND SPEED) 115 MPH
EXPOSURE CATEGORY B
3. GRAVITY LOADS

A. GRAVITY LOADS TABLE

LOCATION	SUPER-IMPOSED DEAD LOAD, PSF	LIVE LOAD, PSF	LIVE LOAD REDUCTION	PARTITION LOAD, PSF	REMARKS
EXISTING ROOF OF GARAGE	250	100	NO	--	15,000# LIMIT FOR LOADED CONSTRUCTION OR MAINTENANCE EQUIPMENT
POOL DECK	--	100	NO	--	

4. SEISMIC - DOES NOT CONTROL
5. DRIFTING, SLIDING, AND UNBALANCED SNOW
GROUND SNOW LOAD 116 PSF
SNOW EXPOSURE FACTOR, Ce 1.0
SNOW LOAD IMPORTANCE FACTOR, Is 0.8
THERMAL FACTOR, Ct 1.2
FLAT ROOF SNOW LOAD, Pf 78 PSF

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WATERPROOFING / RENOVATION - PHASE 2
TORIAN PLUM PARKING STRUCTURE
STEAMBOAT SPRINGS, CO

Date 03.06.2018
Drawn By AC/JW
Reviewed by DW/KD
Job No. 17.0424

REVISIONS

ISSUE	DATE
BLDG DEPT #2	4/18/2018

Issue:
100% Construction Documents

Sheet Title:
NOTES

Sheet Number
S0.1

MM JOB #: 17.0424
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PROJECT MANAGER: DAVID WITTMAN

DESIGNERS: KEVIN DUNAM
DATE PRINTED: 4/18/2018 5:03:31 PM
FILE PATH: C:\Proj\17.0424 - Torian Plum Phase 2 - R17_sbogutyn.rvt