STRUCTURAL NOTES

1 The general contractor shall provide frost protection for all foundation sub-grades during construction. Footings shall be cast on frozen sub-grade material. F protection shall be maintained after the footings have been cast to insure that no bearing material become frozen prior to back-filling.

2 All fill under slabs on ground shall be coarse granular material compacted to 95% of maximum density at optimum water content. All slabs on ground shall have panels poured per ACI-302.1R (latest local approved edition). Section 6.4.1 or all slabs on ground may be poured continuously by using a pre-molded keyed meta joint to form areas not exceeding 800 sq. ft. Maximum spacing 25'-0".

3 Do not backfill against walls until supporting slabs are in place and have attained required strength. Back ill against walls shall be coarse granular fill.

4 Contractor shall adequately brace all walls during construction.

5 Welded wire fabric shall have ends lapped on full mesh and shall extend into supporting beams or walls except at slabs on ground.

6 All splices in reinforcing shall be Class "C" splices in accordance with ACI-318 (latest local approved edition) except as noted in the plans. Bend horizontal wall reinforcing 1'-0") minimum around all corners or provide 4'-0" long corner bars to match horizontal reinforcing. Splices for#14 and 18 bars shall be either butt welc or mechanical connection developing. In tension and compression, 125 percent of specified yield strength (FY) of the bar.

7 All concrete, except as noted, shall be (f'c=3,000 psi) stone aggregate concrete at 28 days.

8 Except as noted, all reinforcing shall be high strength new billet steel conforming to ASTM designation A 15-82 (FY=60,000 psi). All stirrups and ties shall be ne intermediate grade steel conforming to ASTM designation A-6 15-82 (FY=40,000 psi). All reinforcing sha l be detailed, fabricated, and placed in accordance with t ACI's "Manual of Standard Practice for Detailing Concrete Structures" ACI-3 15, latest local approved edition).

9 Unless otherwise noted in structural drawings, provide concrete protection for reinforcing as follows:

Cast against earth:	3"
Exposed to earth or weather:	
No. 6 and larger bars	2"
No. 5 and smaller bars	1-1/2"
Not exposed to earth or weather:	
Slabs, walls joists	¾"
Beams, girders, columns	1-1/2" to ties, stirrups, or spirals

10 Construction joints in walls, beams and slabs shall be located midway between supports except that whe n an intersecting member occurs at midspan, the joint s be offset twice the width of the intersecting member. Before fresh concrete is poured against concrete in place, the contact surfaces of concrete in place shall be thoroughly cleaned, all laitance shall be removed and the contact surfaces shall be thoroughly slushed with grout consisting of one part sand to one part cemen with a minimum amount of water.

11 All formwork shall be in accordance with the American Concrete Institute "Formwork for Concrete", Spec al Publication No. 4 and ACI's "Standard Recommende Practice for Concrete Formwork: (ACI-347, latest local approved edition).

12 No equipment, lights, sprinklers, pipes, ceiling, etc., shall be supported from the floor deck or roof deck.

13 See mechanical or architectural drawings for holes in slabs not shown.

14 Provide 3 continuous courses of brick or 100% solid masonry below all joist or slab bearing lines. Provide 16" minimum brick or 100% solid masonry below all lir and/or minor wall bearing beams. Brick piers shall be fully bonded into adjacent walls.

15 All concrete masonry shall conform to the latest edition of ASTM Specifications C90 and C145. All morta shall conform to ASTM C270 and shall be type "S" minimum. All brick and masonry construction shall be provided with galvanized "Dur-O-Wal" joint reinforcing at 16" on center unless heavier reinforcing is note the drawings. Calcium chloride and other chlorides may not be used as admixtures. All masonry construc on must be protected from freezing. The requirements the Brick Institute of America and the National concrete Masonry Association shall be followed.

16 Loose lintels for masonry walls shall be as follows for each 4" width:

L1	0'-0" to 3'-0"	3-1/2"x3-1/2"x5/16" angle
L2	3'-1" to 5'-0"	4"x3-1/2"x5/16" angle
L3	5'-1" to 6'6"	5"x3-1/2"x3/8" angle
L4	6'-7" to 8'-0"	6"x3-1/2"x3/8" angle

17 All angles shall have their short leg outstanding and 6" minimum bearing. Lintels over openings in interio r non-bearing masonry partitions not otherwise specifie shall be precast lightweight concrete lintels with 1 No. 5 bar top and bottom for each 4" width.

18 All steel joists shall conform to the SJI standard specification in all respects and shall have bridging in accordance with the SJI specification. Joists shall be welded to steel supports except at columns where they shall be bolted. Minimum bearing shall be 2-1/2" on steel beams and 4" on concrete and masonry. Bearing plates with anchors shall be provided at all joists bearing on concrete and masonry (weld or bolt joist to the plate). All field modifications of the steel joists shall be performed in accordance with details provided by the steel joist fabricator's engineer. Provide 5 rows of bridging with the center row to be cross bridging, for all K series joists spanning 40'-0" or more. Provide double joists under parallel partitions where their length exceeds 1/3 of the joist span. Coordinate the joist layout with mechanical, electrical, plumbing, walls and other items.

19 No mechanical equipment shall be placed on joists without approval of the engineer. No equipment, lights, sprinklers, pipes, ceiling, etc., shall be supported from the bottom chord of the joist.

20 All structural steel shall conform to ASTM Specification A-36 (latest local approved), or A-572 (latest local approved) (see plans) for which mill test reports shall be submitted to the architect. All steel shall be detailed, fabricated, and erected in accordance with the AISC Manual, AISC Specification and AISC Code of Standard Practice. All connections shall develop the full strength of the beam. In general, field connections shall be made with ¾" A-325 high tensile bolts, unless otherwise noted, and shop connections shall be welded.

21 All welding shall be in accordance with the "Structural Welding Code – Steel", AWS D1.1 (latest local approved) of the American Welding Society. These welds shall be made only by operators qualified by prescribed tests in the "Structural Welding Code in Building Construction" of the American Welding Society. Acceptance to be subject to the inspection and review of an independent inspection agency.

22 Connections detailed by the fabricator shall meet the following requirements:

23 The provisions of Section 4.2.1 of the AISC Code of Standard Practice are not applicable to this project.

24 Bolted framing angle connections are to be designed and detailed in accordance with "Predesigned Bolted Framing Angle Connections", AISC Engineering Journal, volume 19, Number1, First Quarter,1982. (Use 1.25" minimum edge distance and 3" bolt spacing).

25 Connections may be designed and detailed in accordance with Tables II through VII, Part 4 of the AISC Manual.

26 Where bearing-type connections are specified, shear values for threads included in the shear plane shall be used, except as follows: Special connections for reactions exceeding 45 kips may be designed and detailed using large diameter bolts and/or higher strength bolts and/or bolt strengths for threads excluded from the shear plane.

27 Connections other than those permitted above or detailed on the contract drawings shall be friction type connections.

28 Connections other than those specified in paragraphs above may be used provided that complete structural computations, signed and sealed by a structural engineer registered in the local jurisdiction, are submitted to the architect. Moment resisting frame connections shall be friction type connections. Beams framing into the weak axis of the column shall frame directly into the web of the column.

29 All structural steel shall be shop painted with a rust inhibitive primer (red oxide). It will not be necessary to mask out areas for welding and/or friction type bolted connections.

30 Field structural steel to be inspected by qualified inspectors approved by the structural engineer. Field inspection reports to be filed with the structural engineer within 5 days of the time of actual inspection. Inspectors must be notified of all phases of construction by the general contractor.

31 Prefabricated wood trusses shall be designed by the manufacturer's engineer. The manufacturer's engineer shall be registered in the local jurisdiction. Load tables, shop drawings and design data shall be submitted for review. Trusses shall be braced in accordance with Bracing Wood Trusses: Commentary and Recommendations by the Truss Plate Institute, Inc. Allowable stresses In the wood and deflections shall conform to the governing code. Contractor shall be responsible for all necessary erection bracing. Provide "toe" anchors at both the top and bottom chords of trusses in walls parallel to trusses (anchors shall engage at least 3 trusses). Top chord "tee" anchors shall be spaced at 4'-0" on center. Bottom chord "tee" anchors shall be spaced at 8'-0" on center. Provide diagonal bracing from bottom chord of first truss to the top chord of an interior truss. Diagonal braces shall have a maximum angle with the horizontal of 45 degrees and shall be located at the bottom chord "tee" anchor location.

32 Shop Drawings for all structural elements shown on the contract documents must be submitted by the general contractor. If a contractor or owner fails to submit the shop drawings, the firm of Patuxent Architects, Inc., will not be responsible for the structural certification and/or the design of the project. At the time of shop drawing submission, the general contractor shall state in writing any deviations or omissions from the contract documents. The general contractor shall review all shop drawings before submissions and make all corrections as he deems necessary and shall certify on each drawing as follows:

33 "I certify that the contract document requirements have been met and all dimensions, conditions, and quantities are verified as shown and/or as corrected on this drawing.

Signed

34 All concrete work shall conform to the latest approved (by local government) editions of the following A.C.I. and A.S.T.M. documents:

ACI-301	Specifications for Structural Concrete for Buildings
ACI-318	Code
ACI-214	Compression Tests
ACI-306	Cold Weather
ACI-315	Detailing
ACI-347	Formwork
ACI-305	Hot Weather
ACI-211	Proportions of Concrete
ACI-304	Placing Concrete
ACI-ASCE Committee 423	Unbonded Tendons
ASTM-C94	Ready-mix Concrete

35 All field and lab testing of concrete shall conform to the latest approved (by local government) editions o fASTM:

ASTM C-31	Field Cylinder Specimens
ASTM C-143	Slump Test
ASTM C-231	Air Content (when required)
ASTM C-39	Lab Testing Cylinders
ASTM C-172	Sampling Fresh Concrete
ASTM C-42	Hardened Cores (when required)

Upon completion of concrete testing, the agency shall certify their results as follows:

36 "I certify that the field and lab testing conforms to the ASTM documents and good practice."

Signed

P.E.

(For Agency)

37 Loads greater than the design live loads shall not be placed on the structure. A concrete structure may not support its design live load for 28 days. Contractor sl support adjacent structures, utilities, and excavations. Contractor shall have all temporary formwork sheeting, shoring, underpinning, etc., certified by a qualified engineer registered in the local jurisdiction as a part of the contractor's work.

38 Contractor must submit a concrete design mix in accordance with ACI-318 (latest local approved edition). Such design mix shall be accompanied by the appropri graphs and background data. Concrete design mix shall indicate 7 and 28 day strengths, cement content and water/cement ratio, fine and coarse aggregates, and admixtures for each design strength. The addition of water at the plant or in the field greater than 1% more than the specified water content is strictly prohibited.

39 All work specified herein shall be inspected in accordance with the building code and all local ordinances. The owner or contractor shall hire an experienced, qualified inspector to perform all the required inspection work. The engineer will not perform the required inspection as a part of his design service. The engineer may visit the site to ascertain general conformance to the contract documents and such visits are not to be construed as meeting inspection requirements unless engineer specifically so states in writing.

40 The general contractor shall submit plans showing all penetrations through the framed slabs. The openings shall be accurately located, sized, and dimensioned.

41 All stairs, railings, metal and stud walls, glass, storefront, and exterior ceilings shall be designed for loads indicated in the local building code. Shop drawings and calculations shall be signed and sealed by an engineer registered in the local jurisdiction.

42 Live Loads:

Wind:	BOCA
Roof:	30 psf minimum plus drifting as per BOCA
Library:	150 psf
Second Floor:	40 psf
Second Floor Corridors:	80 psf
Stairs:	100 psf

MATERIALS KEYNOTES

DIVISION 3	**CONCRETE**
03300.B	12" x 24" Continuous conc. ftg. w/3-#4 stl. rebar.
03300.C	12" x 12" x 24" conc. ftg.
03300.H	4" conc. Slab w/ 6x6 10/10 w.w.m on 4 mil.Vapor barrier on 4" gravel base
03300.J	Thicken Slab to 8" deep and 18" wide
03300.L	1/2" Expansion joint.
03300.M	48" x 48" x 12" Conc Ftg.
DIVISION 4	**MASONRY**
04085.A	Fabric flashing w/ weeps @ 32" o.c.
04220.C	8" CMU w/ horizontal stl. reinf. every other course.
04220.D	12" CMU w/ horizontal stl. reinf. e.o.c.
04810.A	4" Brick veneer.
04810.B	Brick rowlock cap.
04810.C	Brick soldier course.
04820.A	4" x 8" Reinf. conc. lintel.
DIVISION 5	**METALS**
05120.A	W8x28 W/ Hung Plate
05120.B	W8 X 18
05120.J	3" Steel column.
05120.K	3" x 4" x 3/8" Steel angle.
~~05120.L~~	~~12K5 -58 Joists @ 24" OC.~~
05520.A	Powder Coated Aluminum Railing @ 42" A.F.F.
DIVISION 6	**WOOD, PLASTICS AND COMPOSITES**
06070.C	2x8 Pressure Treated
06070.D	2x12 Pressure Treated
06070.E	2X12 Pressure Treated Joists @ 16" O.C.
06070.F	(3) 2x12 Pressure Treated Beam
06070.G	4X4 Pressure Treated
06070.H	6X6 Pressure Treated
06070.I	5/4 X 6 Pressure Treated
06070.J	2x8 Pressure Treated Plate anchored at 48" o.c.
06070.K	P.T. Wood Railings @ 36" A.F.F.
06070.L	P.T. Prefabricated Stairs
06070.M	P.T. 1 x
06090.A	1/2" Dia. Anchor bolts.
06090.B	Galv. Steel joists hanger.
06100.A	2 x 4 Wood studs @ 16" o.c.
06100.B	2 x 6 wood studs @ 16" o.c. w/1/2" wood sheathing & house wrap.
06100.C	2 x 4
06100.D	2 x 6
06100.E	2 x 8
06100.F	2 x 10
06100.G	2 x 12
06100.I	(3) 2 x 10 Header.
06100.K	4 x 4
06100.L	6 x 6
06100.R	2 x 6 Clad rake board.
06100.S	2 x 6 Clad fascia board.
06100.T	2 x 6 ceiling joists @ 24" o.c.
06100.U	2 x12 Rafters @ 24" o.c.
06100.X	2 x 12 Floor joists @ 16" o.c. w/ ¾" plywd
06150.A	3/4" T&G Plywood subfloor
06160.A	1/2" wood sheathing.
06160.B	5/8" wood sheathing
06173.A	24" Wood Trusses @ 24" O.C. w/ 5/8" wd sheathing
06173.B	Pre-engineered Roof trusses @ 24" o.c. w/ 5/8" wd sheathing
06173.C	Pre-engineered mono trusses @ 24" o.c. w/ 5/8" wd sheathing
06173.D	Pre-Engineered Hip Truss
06173.E	Rim Joist
06176.B	11 3/4" LPI wood joists @ 16" o.c. w/ ¾" plywd
06180.B	(3) 1 3/4" 14" LVL.
06430.A	Prefabricated pine stairs.
06430.B	Wood railings @ 42" AFF.
DIVISION 7	**THERMAL AND MOISTURE PROTECTION**
07110.A	4 Mil. vapor barrier w/ gravel ballast.
07120.A	Bituminous sealant w/ 6 mil VB below grade
07160.A	Cementitious parging
07185.A	60 mil Duradeck or Deking
07212.B	R-19 (6") fiberglass batt insulation.
07212.E	R-38 (12") fiberglass batt insulation.
07311.A	25 Year Fiberglass shingles on 15# Asphalt impregnated roofing paper
07464.A	Vinyl siding.
07464.B	Vinyl trim.
07464.D	Vented vinyl soffit.
07464.E	Beaded vinyl soffit.
07464.F	Stucco 3/8" Thick
07631.A	Pre-finished aluminum gutter.
07631.B	Pre-finished aluminum downspouts
07724.A	Continuous ridge vent.
DIVISION 9	**FINISHES**
09260.A	1/2" Gypsum Board.
09260.B	1/2" Gypsum waterproof "green board."
09511.A	Suspended ceiling system.

PLUMBING SCHEDULE

	DESCRIPTION	CATALOG #	REMARKS
P-1	H/C Toilet		
P-2	Toilet		
P-3	Urinal		
P-4	Sink		
P-5	Janitors Sink		

SEE MECHANICAL FOR FIXTURE DETAILS

D-1 PLUMBING SCHEDULE — N.T.S.

FINISH SCHEDULE

ROOM #
1 A 1

FLOOR /BASE	WALLS/WAINSCOT	CEILING
1. 12" X 12" TILE / TILE VCT	A. PTD. GYP. BD	1. 2 X 2 LAY-IN CEILING
2. 6" X 6" QUARRY TILE / TILE	B. PTD. GYP. BD. ENAMEL	2. PTD. GYP. BD
3. NO WORK @ FLOORING	C. PTD. CMU	3. REPLACE EXISTING 2 x 2 STAPLE UP CEILING TILE
4. CARPET 32 oz DIRECT GLUE DOWN, NYLON	D. PATCH/REPAIR SHEETROCK, PTD	4. NO CEILING WORK
	E. NO WORK @ WALL'S	
	F. PAINT EXISTING WALL'S	

D-5 FINISH SCHEDULE — N.T.S.

ACCESSORY SCHEDULE

	DESCRIPTION	CATALOG #	REMARKS
A-1	Surface-Mounted Toilet Tissue Dispenser	B-288	
A-2	42" x 1 1/2" dia. S.S. Grab Bar	B-6806-42	
A-3	36" x 1 1/2" dia. S.S. Grab Bar	B-6806-36	
A-4	24" x 36" Mirror	B-290 2436	
A-5	60" x 36" Mirror	B-290 6036	
A-6	Surface- Mounted Soap Dispenser	B-4112	
A-7	Semi-Recessed Paper Towel Dispenser & Waste Receptacle	B-38032	

PRODUCTS SPECIFIED ARE BOBRICK UNLESS OTHERWISE NOTED

D-10 ACCESSORY SCHEDULE — N.T.S.

DOOR SCHEDULE

DOOR	SIZE	MATERIAL	RATING	LOCATION	LOCKSET	CLOSER	PANIC HARDWARE	TYPE
1	3068	PTD. INSUL. STL.	N/R	KITCHEN	ENTRY	YES	YES	1
2	~~10'-0" X 7'-0"~~ ALUM STORE	~~SL60 3200 NANA WALL~~	N/R	LOWER DINING AREA	ENTRY	NO	YES	2 WHITE
3	~~10'-0" X 7'-0"~~ "	~~SL60 3200 NANA WALL~~	N/R	LOWER DINING AREA	ENTRY	NO	YES	2 WHITE
4	~~10'-0" X 7'-0"~~ "	~~SL60 3200 NANA WALL~~	N/R	LOWER DINING AREA	ENTRY	NO	YES	2 WHITE
5	6068	STORE FRONT W/ 1'-10" TRANSOM	N/R	DECK	ENTRY	YES	YES	3 WHITE
6	6068	STORE FRONT W/ 1'-10" TRANSOM	N/R	DECK	ENTRY	YES	YES	3 WHITE
7	3068	SOLID CORE WOOD	N/R	KITCHEN	STOREROOM	YES	NO	4
8	3068	SOLID CORE WOOD W/ VIEWING GLASS	N/R	SERVING	STOREROOM	YES	NO	4
9	3068	SOLID CORE WOOD	N/R	MENS RESTROOM	BATH	YES	NO	4
10	3068	SOLID CORE WOOD	N/R	WOMEN'S RESTROOM	BATH	YES	NO	4
11	3068	SOLID CORE WOOD	N/R	STORAGE ROOM	STOREROOM	YES	NO	4
12	6068	SOLID CORE WOOD W/ 1'-10" SIDELIGHT	N/R	UPPER DINING AREA	PASSAGE	NO	NO	5
13	6068	SOLID CORE WOOD W/ 1'-10" SIDELIGHT	N/R	UPPER DINING AREA	PASSAGE	NO	NO	5

PROVIDE BIRCH VENEER FLUSH PANELS UNFINISHED, COMMERCIAL SCHLAGE HARDWARE JAZZ SERIES,

A-1 DOOR SCHEDULE — N.T.S.

WINDOW SCHEDULE

LABEL	WINDOW NUMBER	TYPE	NOTES
A.	3521	AWNING	PROLINE SERIES
B.	3521-3	AWNING	PROLINE SERIES
C.	3521-2	AWNING	PROLINE SERIES
D.	3521	AWNING	PROLINE SERIES
	3565	CASEMENT	
E.	3521-3	AWNING	PROLINE SERIES
	3565-3	CASEMENT	
F.	3521-4	AWNING	PROLINE SERIES
	3565-4	CASEMENT	
G.	3571-4	CASEMENT	PROLINE SERIES
H.	3559	CASEMENT	PROLINE SERIES
I.	3529	CASEMENT	PROLINE SERIES
J.	3535-3	CASEMENT	PROLINE SERIES
K.	3753	DOUBLE HUNG	PROLINE SERIES

NOTE: WINDOWS SPECIFIED ARE PELLA PROLINE SERIES
WOOD WINDOWS IN WHITE UNLESS OTHERWISE NOTED.

A-8 WINDOW SCHEDULE — N.T.S.

No.	Revisions/Submissions	Date

Patuxent Architects, Inc.
Architecture and Construction Consultants
P.O. Box 421, Prince Frederick, Maryland 20678
www.patuxentarchitects.com
TEL 410-257-9298
FAX 410-535-4127

SOLOMONS ISLAND YACHT CLUB

SOLOMONS, MARYLAND

Drawing Title: STRUCTURAL NOTES SCHEDULES

ARCHITECT'S CERTIFICATION STATEMENT
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER: 9085 EXPIRATION DATE: JUNE 15, 2008.

Seal

Designed	PDK	Project No.	02-0713
Drawn	RWR	Scale	AS SHOWN
Checked	PDK	Drawing No	G002
Reviewed	PDK		02 of 17
Date	02-04-08		

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