



SEAVIEW PIER ADDITION 124 FISHING PIER LN. NORTH TOPSAIL BEACH, NC

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WESTON LYALL, PE, PLS, PLLC

6/28/2023

DRAWN BY:

SHEET: 8 OF 10

MECHANICAL PLAN

STRUCTURAL & CIVIL ENGINEERING &

THESE PLANS CANNOT BE REDRAWN OR REPRODUCED IN ANY WAY WITHOUT THE EXPRESS CONSENT OF WESTON LYALL, PE. PLS, PLLC, AND PARTY THAT TAKES PART IN DOING SO IS IN VIOLATION OF COPYRIGHT LAWS.

D. ELBOWS: ALL SQUARE BENDS OR ELBOW FITTINGS SHALL SE FITTED WITH APPROVED TYPE DOUBLE THICKNESS TURNING VANES, E. FLEXIBLE DUCT: FACTORY INSULATED, R-B, MINIMUM, UL 181 CLASS 1. MAXIMUM FLEX DUCT RUNGUT LENGTH NOT TO EXCEED 8' UNLESS OTHERWISE NOTED. INSTALL AND SUPPORT FLEXIBLE DUCTS IN STRICT ACCORDANCE WITH

B. DUCT SIZES INDICATED ARE INSIDE FREE AREA DIMENSIONS, DUCT DIMENSIONS SHALL BE ADJUSTED TO SUIT FEELD CONDITIONS USING EQUIVALENT SIZE PER ASHRAE STRAINARD, RECTANGULAR OR OUND EQUIVALENT SIZE PER ASHRAE STRAINARD, RECTANGULAR OR FORWARD EQUIVALENT SIZE OF THE ASHRAE STRAINARD IS USED.

C. BRANCH DUCTS: PROVIDE MANUFACTURED TAKE-OFF FITTINGS (SPIN-IN FITTINGS) WITH EXTRACTOR AND VOLLING DAMPER WITH LOCKING QUADRANT OFERATOR AND INSULATION GUADRAL ENVIRONMENT CORPORATION OR EQUIVAL FOR ALL BRANCH RUMOUTS TO SUIPPLY REGISTERS AND DIFFUSERS. UNLESS OTHERWISE NOTED, MATCH SUPPLY BRANCH DUCT SIZE TO DIFFUSER STREET.

A DUCT CONSTRUCTION (SINGLE WALL): GALVANIZED STEEL CONSTRUCTED, BRACED, SUPPORTED AND INSTRULED ACCORDING TO SMACHA HYAC DUCT CONSTRUCTION STANDARDS, IT PRESSURE CLASS, SEAL CLASS, A SEAL USING APPROVED TYPE DUCT SEALING MASTIC OR TAPE DIPPED IN OR BRUSHED WITH ADHESINE ("HABDCAST" DI-TAPE W/FTA-20 ADHESINE OR "UNITED MICHL" MID TAPE W/MTD-20 ADHESINE). "DUCT TAPE" IS UNACCEPTABLE FOR DUCT SEALING.

MANUFACTURERS'S INSTRUCTIONS.
F. PLEXIBLE CONNECTIONS: PROVIDE FLEXIBLE CONNECTORS, VENTFABRICS OR EQUIAL, AT ALL MECHANICAL EQUIPMENT CONNECTIONS TO DUCT SYSTEM.

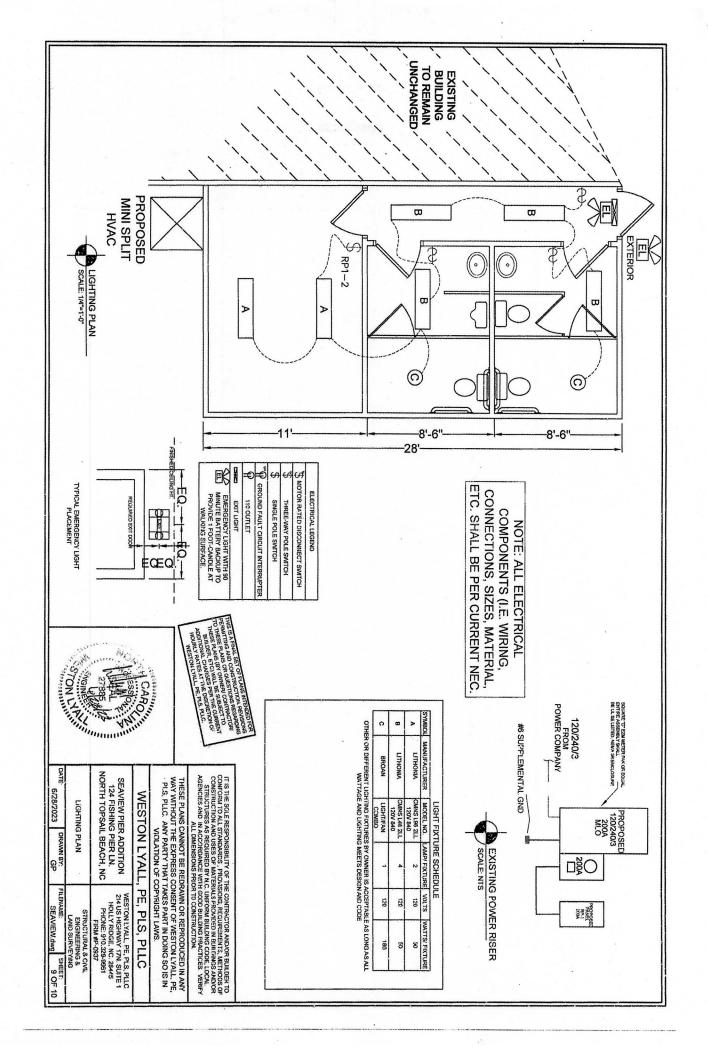
THIS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR BUILDER TO CONFORM TO ALL STANDARDS. PROVISIONS, REQUIREDMENTS, METHODS OF CONSTRUCTION AND USES OF MATERIALS PROVIDED IN BUILDINGS AND/OR STRUCTIONS AND USES OF MATERIALS PROVIDED IN BUILDING CODE, LOCAL AGENCIES AND IN ACCOPROMOSE WITH GOOD BUILDING PRACTICES. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

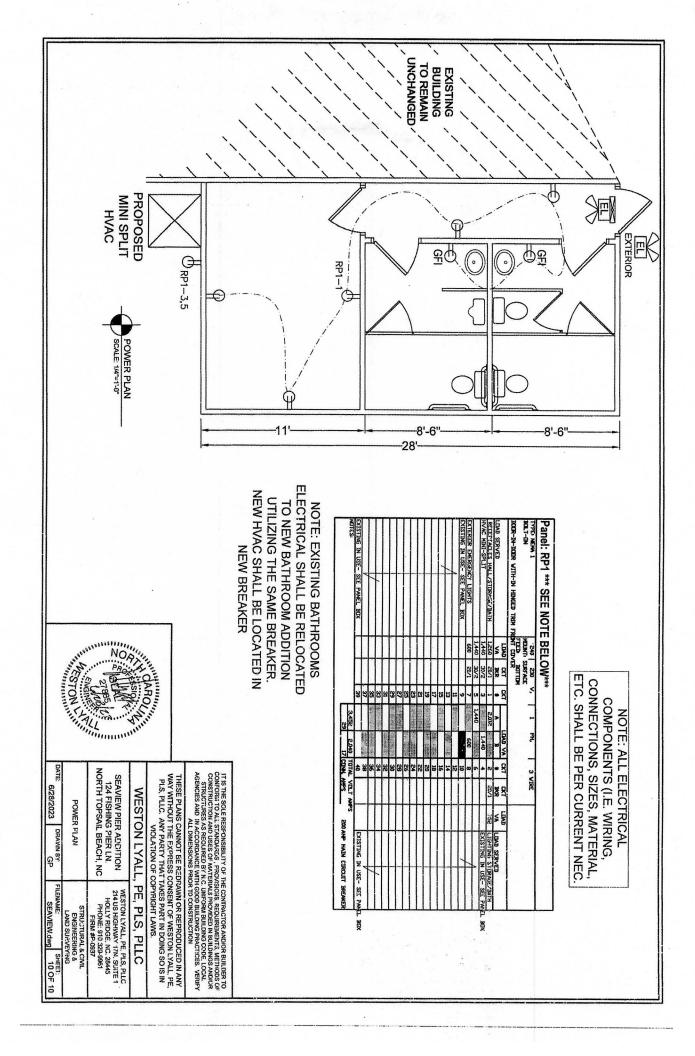
PLENUMS.

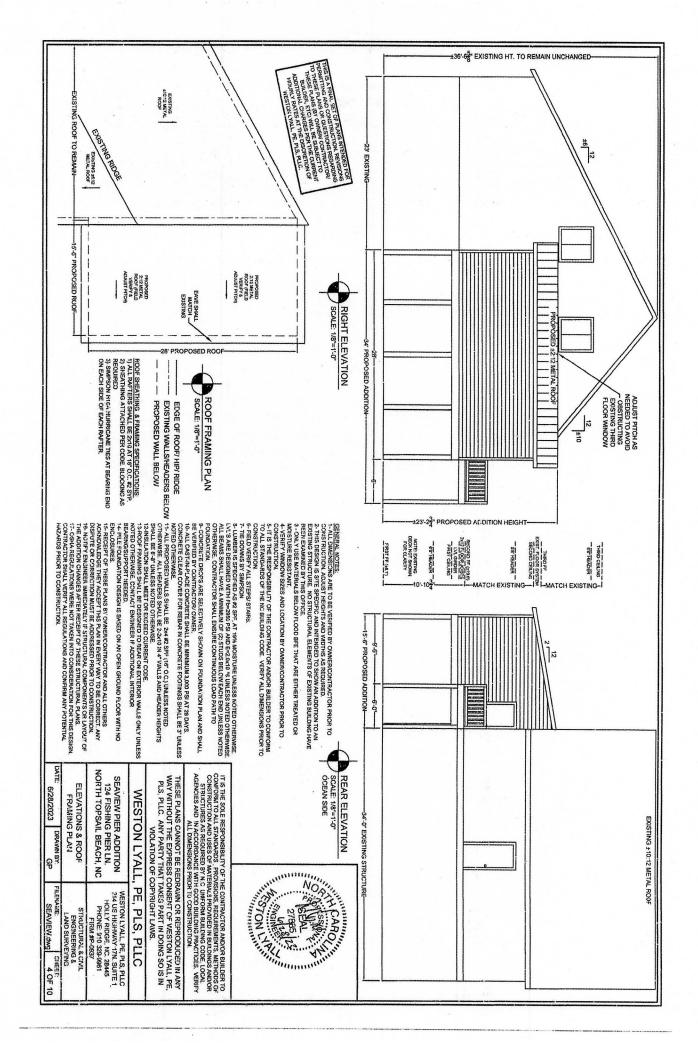
REPRIGEANT PIPING INSULATION: ELASTOMERIC CLOSED CELL PIPE INSULATION, ARMAFLEX AP OR EQUAL, 1½" THICK, PROTECT ALL EXTERIOR, EXPOSED PIPE INSULATION WITH ARMAFLEX WB FINISH.

C. CONDENSATE DRAIN PIPING INSULATION: ELASTOMERIC CLOSED CELL PIPE INSULATION, ARMAFLEX AP OR EQUAL, 1/2" THICK, PROTECT ALL EXTERIOR, EXPOSED PIPE INSULATION WITH ARMAFLEX WB FINISH.

A DUCT INSULATION; R-8 MINIMUM, 2* FIBERGLASS BLANKET
NISULATION, ASTR CESS, TYPE II, 0.75 PCF CLASS F-1, ASTR MER FLAME
SPREAD/SMOKE DEPELOPED RATING LESS THAN 25/50, PROVIDE WITH
FACTORY APPLIED ALL—PURPOSE, LAMINATED GLASS—TRIER—REINFORCED,
FLAME—REIADDANT KRAFT PAPER AND ALLUMINUM FOUL ACKET, INSTALL ON
ALL CONCEALED HVAC SUPPLY, RETURN, MAKE—UP AIR DUCTS AND
TAMBLES.







BASIC BHIL DING DATA Construction "Spec 11-A 11-A (obset all that apply) 11-B Sprinklers 21-N 12-Brail 11-Yes Standbloss 21-N 12-Yes Class 11-I FireDistrict 21-N 12-Yes(Primary) Actification NA Actification October 18th Arthream NA Actification October 18th Actification October 18th Arthream NA Actification October 18th Ac EXISTING: Reconstruction CONSTRUCTED: (date) FLOOR 6th Floor 5th Floor 3th Floor 2th Floor 2th Floor Mezzanine 1th Floor EAD DESIGN PROFESSIONAL; 2018 APPENDIX B BUILDING CODE SLMM ARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DIRELLINGS AND TOWNHOUSES) (Reproduce the following data on the building plans sheet 1 or 2) EXISTING (SQFT) 765 SF 1,530 SF N/A 1,530 SF ±23-3" (ADDITION ONLY) WESTON LYALL, P.E. New Construction St Addition Upfit: Alteration Temperature Temperature ORIGINAL USE(5)(Ch. 3): A-2 GESTAURANT A-3CPIERO, BUSHEP) CURRENT USE(5)(Ch. 3): A-2 GESTAURANT A-3CPIERO, BUSHEP) PROPOSED USE(5)(Ch. 3): A-2 GESTAURANT A-3CPIERO, BUSHEP) NAME WESTON LYALL, P.E. □NFPA13 □NFPA13R □NFPA13D □II □III □Wet □Dry Flood Hozord Area □No 图 Yes (910 329-9961 AI C (910 329 9961 (910)329-9961 TELEPHONE # 765 SF 1,964 SF N/A 1,530 SF N/A 4,259 SF SUB-TOTAL E-MAIL | Rooms containing fire pumps | Group 1/2 storage norms over 1/0 square feet | Group 1/2 storage norms over 1/0 square feet | Group 1/2 storage norms over 1/0 square feet | Group 1/2 norms of spaces that contain the 1-fined heating equipment | Group 1/2 norms of spaces that contain the 1-fined heating equipment | Group 1/2 norms of spaces that contain the 1-fined heating equipment | Group 1/2 norms of spaces that contain the 1-fined heating equipment | Group 1/2 norms of spaces that contain the 1-fined heating equipment | Group 1/2 norms of spaces that contain the 1-fined heating | Group 1/2 norms of spaces | G | Furner consistency | piece of equipment is over 400,000 Btu per how input | | Rooms with biles where the largest piece of equipment is over 15 psi and 10 horsepower Refrigment metalize soon | | Hydrogen cutoff rooms, not classified as Group H | | Intrinerator rooms | | Phint shops, not classified as Group H, located in a Group E | | Laboratories and vocational shops, not classified as Group H, located in a Group E or 1-2 occupancy | | Laboratories and vocational shops, not classified as Group H, located in a Group E or 1-2 occupancy | | Laboratories and vocational shops, not classified as Group H, located in a Group E or 1-2 occupancy | | Laboratories and vocational shops, not classified as Group H, located in a Group E or 1-2 occupancy | | Laboratories and vocational shops, not Consider a Group H, located in a Group E or 1-2 occupancy | | Laboratories and vocational shops, not Consideration | | Laboratories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-3 categories and liberto collection rooms | | Group 1-4 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 categories and liberto collection rooms | | Group 1-5 Assembly Chair State Control of the Control of Chair State Characters Charact ncidental Uses(Table 508.2.5); Concentration | Control | DAI DA2 BA3 DA4 DAS ALLOWABLE AREA This separation is not exempt as a Non-Separated Use (see exceptions). Non-Separated Use (508.3) Non-Separated Use (508.3) The required type of construction for the building shall be determined by applying the height and area infraintens for each of the applicable occupancies to the entire building. The most usatistive type of construction, so determined, shall apply to the ordine building. Separated Use (508.4) - See below for area calculations. For each story, the area of the occupancy shall be such that the store of the native of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1. Actud Aread OcapancyA + Actud Aread OcapancyB <1 NilowddeAread OcapancyA AllowddeAread OcapancyB





		□ 509.9	23 0 424 24	Type Buildi For a lithium- Duildi	ancy	For a first section of the control o		
17.50	2012 NC Administrat			Type of Construction Building Height in Feet #22 Building Height in Stories		³ Frontage area inciteates from Section 506.2 are compared that a. Perimeter which froms a politic way corpers space itering 20 feet retriainsum width = <u>MA</u>	ASSEMBLY	ANDUSE
אדוה אדור המוד המחור	2012 NC Administrative Code and Policies			(TABLE 503) Type ±23'-3" (ADDITION)	ALLO	n Section 506.2 are compared to the say or operate as a public way or operate for the citer (Fip) MAC compared to the citer (Fip) MAC compared to the citer of public way = 1001 (Fip) contracts: 1 = 1001 (Fip) contracts: 1 = 200 percent 1 = 300 percent 1 = 300 percent 2 der conditions of Section to the citer operating ganges must contain under of stories in priving ganges must contain the figure of the citer operating ganges must contain the figure of the citer operating ganges must contain the figure of the citer operating ganges must contain the citer of the citer operating ganges must contain the citer of t	4259 SF 6000 SF	BLDG AREA TABLE 503' PER STORY AREA (ACTUAL)
100000000000000000000000000000000000000				V-B Feet = H + 20' =! Stories = 1 =N	ALLOWABLE HEIGHT INCREASE FOR SPUNCLESS	ge area increases from Section S06.2 are computed thas Fertimeter which frome a public way origins guore having 20 feer minimum width = N/A. (Fold Badding Permeter Station (FIP) = N/A. W = Minimum width of public way = (FIP) W = Minimum width of public way = (FIP) W = Minimum width of public way = (FIP) W = Minimum width of public way = (FIP) Malfastory building 1, = 200 percent Single story building 1, = 200 percent Single story building 1, = 200 percent Single story building 1, = 200 percent Malfastory building 1, = 200 percent Single story buil		503 AREA FOR EA FRONTAGE
200				N/A Type		ee reininum wi	2	AREA FOR SPRINKLER INCREASE
20000				Y-8	SHOWN ON PLANS	idth = <u>N/A</u>	*	ALLOWABLE AREAOR
On Pill Orn				REFERENCE	CODE	(F)	\$	MANDAUM BUILDING AREA

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR ANDOR BUILDER TO CONFORM TO ALL STANDARDS , PROVISIONS, REQUIREMENTS, MÉTHODS OF CONSTRUCTION AND USES OF MATTEMALS PROVIDED IN BUILDINGS ANDOR STRUCTION AND USES OF MATTEMALS PROVIDED IN BUILDING SANDOR STRUCTURES AS REQUIRED BY N.C. UNIF-ORM BUILDING CODE, LOCAL AGENCIES AND IN ACCORDANGE WITH GOOD BUILDING PRACTICES. VERHEY ALL DAMENSIONS PRIOR TO CONSTRUCTION

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DATE: 5/28/2023 DRAVIN BY: GP	APPENDIX B "CODE SUMMARY"	SEAVIEW PIER ADDITION 124 FISHING PIER LN. NORTH TOPSAIL BEACH, NC	WESTON LYALL, PE, PLS, PLLC
FILENAME: SHEET: 1 OF 10	STRUCTURAL & CIVIL ENGINEERING & LAND SURVEYING	WESTON LYALL, PE, PLS, PLLC 214 US HIGHWAY 17N. SUITE 1 HOLLY RIDGE, NC. 28445 PHONE: 910.329-9961 FIRM #P-0937	PE, PLS, PLLC

		27805 27805 5/10/NE	NO. 18 18 18 18 18 18 18 18 18 18 18 18 18	TAROUT		23 2 No Administrative Code and Policipe	Assumed and real property line locations	Fire and/or smoke rated wall locations (Chapter 7)	LIFE SAFETY PLAN REQUIRE MENTS	Energency Lighting	LIFE SAFETY SYSTEM REQUIREMENTS	Indicate excises number permitting reduction.	Occinent Squature N/A Parties Wall Squature N/A Smole Barrie Squature N/A Topias Squatien N/A Topias Squatien N/A N/A N/A	+	Road Communicies Introducting Expressing Season International Internatio	discluding supporting beams was war 0 0		West WA WA WA WA South WA WA WA WA WA WA WA W	Walk and Bright MAA NAA NAA NAA NAA NAA NAA NAA NAA NAA) >30 N/A	0 0 0 TALE GR2	0	SEDUCTION) ATTECT Y ASSEMBLY FEMELIFICATION	BUADHI GLIDIOT FIRE BATHE DETUL # DESIGN # DESIGN # DESIGN # DESIGN # PROMEDS AND FOR RATED FOR	TIXE TXC IECTION REQUIREMENTS
	2012NC Administrative Code and Policies	100.04.	AGLE ARLES	ACCESSIBLE PARKING (SECTION 1100) TOTAL 9 OF PARKINGS/MCSS REGIONAL PORT ACCESSIBLE PARKINGS (SECTION 1100) TOTAL 9 OF PARKINGS/MCSS REGIONAL PORT ACCESSIBLE PARKINGS (SECTION 1100) TOTAL 9 OF PARKINGS/MCSS REGION 1000 REGION 100	Unital Accessing Present Present Control Units Control Uni	(SECTION 1107)	ACCESSIBLE DWELLING UNITS	☐ The square footage of each smoke compartment (407.4) ☐ Note any code exceptions or table noves that may have been utilized regarding the items above		Location of doors with delayed egress locks and the amount of delay (1008.1.9.7) Location of doors with electromagnetic egress locks (1008.1.9.8) Location of doors outpiped with hold-open devices.	☐ Location of doors with panic tardware (10081:10)	A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation	ADDITION (1 EXIT): 2 OCCUP. PER DOOR	(1 REQUIRED EXITS)	Maximum calculated occupant load capacity each estit door can accommodate based on egress width (1005.1) ADDITION: 2 OCCUP.*0.2= 0.4" REQUIRED: (1) 36" DOOR PROVIDED ADDITION: 10 OCCUPANT ACCUPANT ACCUPANT ACC	36" DOOR MINIMUM	Dead and lengths (10.8.4)	IXI Common path of travel distances (1014.3 & 1028.8) STORAGE AREA = ±40'	TOTAL OF 2 OCCUPANTS FOR ADDITION ONLY Extraccess invertibisatics (1017) 200' (ASSEMBLY PER TABLE 1017.2 NCSBC)		EX Occupant loads for each area STORAGE, BATHROOMS=434 SF/300= 2 OCCUPANTS		Company: type: for each awa as it relates to occupant food calculation (Table I 004.1.2) STORAGE=300 SQ.FT/OCCUPANT	☐ Existing structures within 30° of the proposed building N /A	Extenior wall opening area with respect to distance to assumed property lines (705.8)
		CONTEST NOTES AND THE PLANT OF	THE IS A FRAME SET OF PRANCE SATERANDONE THE IS A FRAME SET OF PRANCE STREAM OF THE STREAM OF THE SET OF TRACTION THE IS A FRAME SET OF TRACTION THE IS A F	ş		2012 NC Administrative Code and Policies		Special approval: (Local J		SPACE EXISTING MANUSED 1		SPECIAL INSPECTIONS REQUIRED:	SOL BEARING CAPACITIES: Field Test (provide copy o Presumptive Bearing capa Pile size, type, and capacit	LATERAL DESIGN CONTROL:	X Buildin Nomen Seisrric bæs et err: And ysis Procedure Architecturd, Mechanit	Bosic structural sys	Spectral Response/ Site Classification (SEISMIC DESIGN CATEGORY: Provide the following Seismic Design	Wind Lood:		Ground Snow Load:	LiveLoods	inportance actrs:	DESIGN LOADS:	
6/28/2023	APPENDIX B "CODE STRUCTURAL & CIVIL ENGINEERING S SUMMARY LAND SURVEYING DATE: I DRAWN BY: FLENAME SHEET	SEAVIEW PIER ADDITION 124 FISHING PIER LN. 124 FISHING PIER LN. NORTH TOPSAIL BEACH, NC PHONE: 910.329-3661 FIRM \$19-0837	WESTON LYALL, PE, PLS, PLLC	THESE PLANS CANNOT BE REDRAWN OR REPRODUCED IN ANY WAY WITHOUT THE EXPRESS CONSENT OF WESTON LYALL, PE, PLS, PLLC. ANY PARTY THAT TAKES PART IN DOING SO IS IN VIOLATION OF COPYRIGHT LAWS.	IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NADIOR BUILDER TO CONFORM TO ALL STANDARDS, PROVISONS, REQUIREMENTS, METHODS OF CONSTRUCTION AND USES OF MATERIALS PROVIDED IN BUILDINGS ANDOR STRUCTIDES, AS REQUIRED BY N.C. UNIFORM BILLDING FORE, LOCAL AGENCIES AND IN ACCORDANCE WITH GOOD BUILDING PRACTICES. VEHIEV ALL DIMENSIONS PRIOR TO CONSTRUCTION	and Policies		Specid approved: (Local Junisdiction, Department of Insurance, OSC, DPF, Diffis, ICC, etc., describe below)	SPECIAL APPROVALS		PLUMBING FIXTURE REQUIREMENTS	REQUIRED: 口Yes 図 No	ARING CAPACITIES. Field Test (movile copy of test report)	IROL: Earthquake ☐ Wind 図	Daulding Franz Dual Withiermediane RCorrSpealul Sted Seisyric Doeseheer: V _x = 112 K. Analysis Procedure Simpfilled I Equivalent Lanca Force Dynamic Architectural, Mechanical, Companents anchored? □ Y _c s ☑ No	Wall Dual w/Special Moment Frame	Special Response Acceleration S. 201. 1881 LIM. LIV. Special Response Acceleration S. 201. 188 LIM. LIV. Special Response Acceleration S. 201. 188 LIV. LIM. LIV. Site Classification (Table 1613.5.2) A. A. B. C. 201. B. C. E. C.	ic Design Parameters	Basic Wind Speed 150 mph (ASCE-7-10) Expusure Category 100 Importance Factor 100 Wind Base Sheets (for MWFRS) Vx = 16.8 K Vy = 9.3 K		15 psf	Roof 20 psf Mezzanine NAA psf	Wind (lw)	פואטרושאר הבפיפא (אמחוואא הארו)	אייייייייייייייייייייייייייייייייייייי

	2012NC Administrative Code and Policies	Clirroce: 3 4 5 Method of Complience: (Energy Code) Percompute (Energy	ENERGY REQUIREMENTS: ENERGY REQUIREMENTS: ENERGY REQUIREMENTS: The following data shall be considered minimum and any special antibute required to meet the energy code shall also be provided. Each Designer shall famish the required portions of the project information for the plan data sheet. If performance method, state the annual orargy cost for the standard reference design vs. amount are prepared for the
CAROLINA CONTRACTOR CO	2012 NC Administrative Cocis and Politics	Interior design conditions winter design conditions summer dry bulk	MECHANICAL SUMMARY (ADDITION ONLY) MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
THESE PLANS CANNOT BE REDRAWN OR REPRODUCED IN ANY WAY WITHOUT THE EXPRESS CONSENT OF WESTON LYALL, PE, PLS, PLC, ANY PARTY THAT TAKES PART IN DOING SO IS IN VIOLATION OF COPYRIGHT LAWS. WESTON LYALL, PE, PLS, PLLC SEAVIEW PIER ADDITION 124 FISHING PIER LN. NORTH TOPSAIL BEACH, NC 124 FISHING PIER LN. NORTH TOPSAIL BEACH, NC APPENDIX B "CODE SUMMARY" APPENDIX B "CODE SUMMARY" APPENDIX B "CODE LAND STRUCTUPAL & CIVIL ENCANCE PIOLS PROCEDURE OF THE WAIN SET OF 10 BATE 6/28/2023 DRAWN BY GP FILEWAME DATE 5/28/2023 DRAWN B	IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR ANDOR BUILDER TO CONFORM TO ALL STANDARDS. PROVISIONS, REQUIREMENTS, METHODS OF CONSTRUCTION AND USES OF MATERIALS PROVIDED IN BUILDINGS ANDIOR STRUCTURES AS REQUIRED BY N.C. JANFORM BUILDING CODE. LCCAL AGENCIES AND IN ACCORDANGE WITH 6000 BUILDING PRACTICES. VERHEY ALL DIMENSIONS PRIDE TO CONSTRUCTION.		