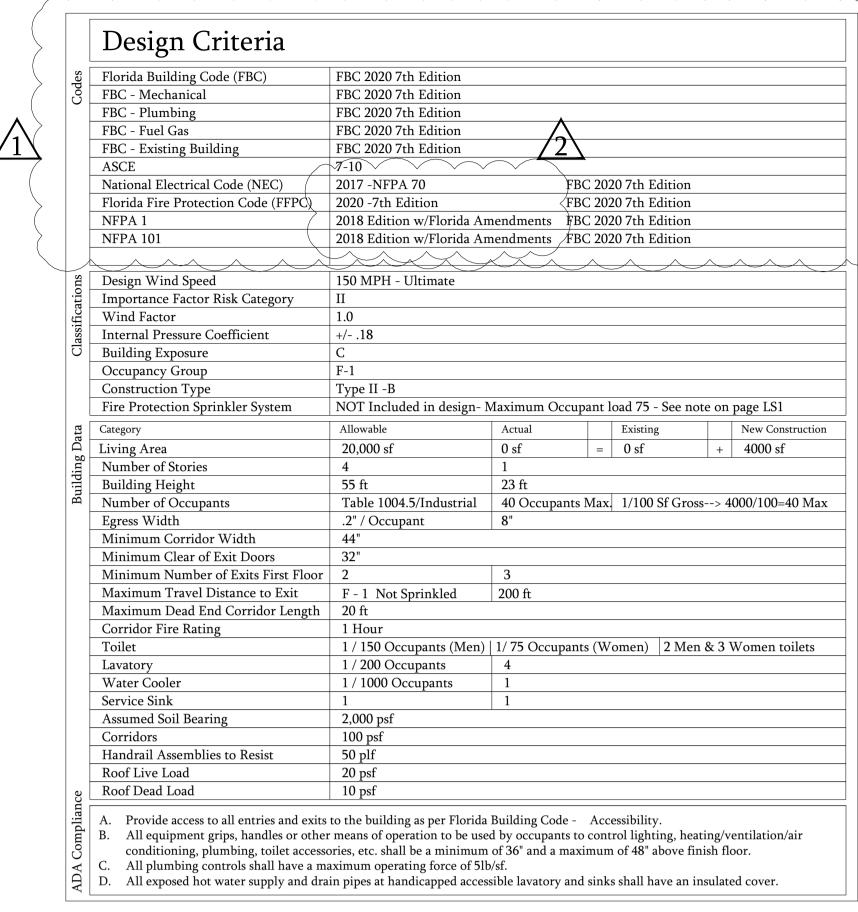
506 WEST LANCASTER ROAD ORLANDO FL



Florida Product Approval Contractor may use approved equal products with most current Florida Product Approval FL Approval # Attachement Method Uplift Tested | Uplift Design

,	efronts	D1	Storefront windows & door	Kawneer Company	Window / Door	Trifab 450	7237.1	See manufactures details for fastening Provide 16 gauge studs around frame	+/- 65 psf	-29.1 psf
	Stor									
	smopu	W#	Single Hung Window	PGT Industries	Window	Aluminum Single Hung	239-R28	# 12 Steel, 18-8 or 410 SS Screws 9 1/2" from top and bottom vertically 17 3/4" oc horizontally	+65 psf	-80 psf
;	W	W#	Fixed Glass Window	PGT Industries	Window	Aluminum Fixed Glass	243-R24	# 12 or # 14 - 410 SS Screws 6" from corners & 12" o.c.	+80 psf	-80 psf

Table 402.1.1 Component Efficiencies Required												
% Glazing	Fenestration U-Factor	Skylight U-Factor	Glazed Fenestration SHGC	Ceiling R-Value	Roof Reflectance Tested Per Section 405.6.2	Wood Frame Wall R-Value	Mass Frame R-Value	Floor R-Value/ Slab R-Value	Door U-Factor	Ducts: R-Value Location	Air Handler Location	Air Leakage Tested Per Section 403.2.2.1
20%	0.65	0.75	0.30	30	0.25	13	6/7.8	13/0	0.65	R-6/ Conditioned	Conditioned	Qn=0.03

Location Map

0° < Roof Angle < Importance Facto			H < 30'-0" Wind - 150	0 МРН		Exposure	- II	Edg	e Stri	ps & E	End	Z
Effective Wind		Roof		W	all	Ove	rhang					
Area (SF)	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 2	Zone 3	3	2		2	
A < 20	-40.5	-67.9	-102.2	-43.9	-54.2	-58.3	-96.0			- + -		Т
	16.5	16.5	16.5	40.5	40.5							
20 < A < 50	-39.4	-60.7	-84.7	-42.1	-50.5	-57.3	-75.4					
	15.4	15.4	15.4	38.7	38.7							
50 < A < 100	-38.1	-51.1	-61.5	-39.7	-45.7	-55.9	-48.1	2	1		1	- 1
	14.1	14.1	14.1	36.2	36.2							
100 < A < 500	-37.0	-43.9	-43.9	37.8	-42.1	-54.9	-27.4					
	13.0	13.0	13.0	34.4	34.4							
A < 500	-	-	_	-33.6	-33.6	-	-					
	-	-	-	30.2	30.2			3	2		2	- 1
 Doors must me Mullions must Windows must Windows and 	t meet 1.5 ti st meet all r Doors with	imes Design equired pre nin 3'-0" of	n Pressure. essures com an exterior Width of th	bined (Neg corner sha ne edge stri	gative & Po ll be in Zoi	sitive). ne 5. nown in Fi		l la	Θ		_	

General Notes -1

- All work shall comply with FBC 2017 sixth edition All contractors to inspect the job site to inspect and inform themselves of all existing conditions and limitations prior to bidding. failure to do so shall not relieve contractors from performing the work under this contract. report, in writing any varying field conditions, ommitions, or discrepancies to the consultant. include in bid any additional work required for code compliance.
- Should any error, ommition, discrepancy be encountered during construction, the consultant shall be notified promptly, so that he may have the opportunity to take whatever steps necessary to resolve
- 4) Action taken without knowledge of consultant or In contradiction to the work product or the Recommendations to the consultant shall become the Responsibility of such parties taking action.
- 5) The general contractor shall supervise and direct The work and shall be responsible for all Construction means, methods, techniques, sequences And procedures. As part of his responsibility, the Contractor shall retain the services of a licensed Structural engineer to design ,amend, supervise any Scaffolding for workman and all shoring of forms And elements of construction.
- 6) Provide all necessary shoring bracing temporary Protection, etc. As required. The general contractor At his expense shall engage properly qualified Persons to determine where and how temporary Measures shall be used and inspect the same in the Field. Any observation by the field representative (consultant or engineer) shall not include the Inspection of this items.
- Provide all material and skilled labor as Required for a complete finish installation. Verify Extent of owner
- 8) Do not scale the drawings, dimensions, or take Precedence. Verify all dimensions on site. Dimensions shall not be measured from plans due to possible changing of the size of drawings during reproduction. Field dimensions on this Drawings shall have precedence over scaled Dimensions. Dimensions are to the structural grid or to finish surfaces, unless otherwise indicated.
- 9) Clean jobsite after each day work. Maintain a clean
- Safe jobsite at all time. 10) The general contractor and subcontractor will Assume full responsibility, unrelieved by the review of Shop drawings and documents for; Dimensions, coordination of various trades, fabrication Processes, construction techniques, and safety Conditions.
- 11) The design manufacture and installation/erection Of all manufactured items including but not limited To, prefabricated metal buildings, trusses, curtain wall Systems, etc. And their connections to the primary Structural elements shall be promulgated by and in Accordance with all applicable codes, specifications And standards, local ordinances, and/ or specific Criteria noted on the drawings. The compliance of This contingencies is solely the responsibility of their
- 12) All materials shall be free of defects and Installed in a professional, workmanlike manner by Skilled Mechanics.
- 13) All contractors working on this project shall Carry liability and property damage insurance with a Hold harm less clause to indemnify, defend and hold Harmless the consultant and the owner from and Against any and all claims, costs, damages, expenses, Suits, judgements, liabilities, and attorney's fees in Connection with the claims for injury or death to Persons or damage to property caused by or alleged To be caused by or in any manner, directly or Indirectly arising from,incident to ,connected with by Or alleged to having caused by an act, error or ommition, negligence or otherwise or parties or either Or any of
- 14) Each and every contractor and sub contractor When accepting contractual obligations for this Project shall understand that a prerequisite to any Operation or project whether filed with owner or Not, that they have implied agreement to the above (note 13 "hold harmless) and its specific wordings.
- 15) All floor walls ceilings, penetrations to Comply with required fire ratings.
- 16) All local state and federal regulations and Procedures regarding safety are responsibility of The contractor.
- 17) All construction to be with the specified fire Rating applicable to areas within the building, and Shell match prevailing code for fire.
- 18) Special safety note:-All contractor and their workman working on this Project shall at all times, prior and during the Course of their activity be responsible for the Safety of their employees as well as others and in The care of the property. Each representative of Their employee shall ascertain that the condition Under which they will be required to accomplish their Work are safe within good safety practices and meet All concerned regulations of the occupational Safety hazard act, or other governing regulations. The Beginning of work by a contractor shall indicate Satisfaction concerning safety and full Responsibility for accidents or damage. If unsatisfied, The contractor shall indicate what so ever action or Devices necessary to render safety conditions for Life and property as are related to his activity. If The work of other parties outside organization is Upon inspection is found at any time to be unsafe, he Shall stop work immediately and notify the engineer And owner.

General Notes -2

- 1. The set of documents shall not be separated. Any product or work shown on any sheet shall be included by the contractor with or without details. Contractor is responsible for coordination between sheets of the set and coordination of subcontractors
- All contractors and subcontractors shall conform to all state and local codes applicable to their trades as well as provide safe site conditions at all times complying with all applicable OSHA requirements.
- The contractor shall field verify the locations, elevations, and dimensions of all existing utilities, structures and other features affecting this work prior to construction. Locations, elevations, and dimensions of existing utilities, structures, and other features are shown according to information available at the time of preparation of these plans. The contractor shall check plans and field conditions for conflicts and discrepancies prior to construction. The contractor shall notify the owner's architect/engineer of any conflict before performing any work in the affected
- All specifications and documents referred to shall be of latest revisions and/or latest edition.
- Only work shown on this drawing is certified by the
- Any condition (connections, corner flashings, etc.) not detailed shall be resolved to the architects or engineers satisfaction in a manner compatible with the project. Any special structural design required, not shown by the architect shall be done by a qualified structural
- Doors and cased openings indicated nearby wall intersections shall be located so that the edge of the finish opening is six inches from the face of the nearby wall unless otherwise indicated. All other doors and cased openings shall be centered between adjacent wall intersections.
- 10. All concrete shall be 3000 PSI in 28 days. 11. Assumed soil bearing pressure of 2000 PSF minimum.
- 12. All walls to be properly braced until concrete slab is locked in place.
- 13. Back filling behind concrete walls to be done in 6" to 12" layers and tamped.
- 14. Contractor responsible for supervision of construction. 15. It is agreed that the professional services of a Consultant do not include the review of the site Observation of the contractor's work or Performance. Consultant shall not be responsible For construction management and or supervision.
- 16. Any field changes required which are not consistent with these drawings shall be requested in writing to the architect who will determine if drawings modifications are required for county or city approval.
- 7. The contract documents are complementary, and what is required by one shall be as binding as if required by all. The contractor shall coordinate all portions of the work as described in the contract documents. Notify the architect for resolution of all discrepancies prior to construction.
- 18. Site engineering, building placement, soil analysis and topographic work shall be the responsibility of the owner / contractor. Any information not consistent with plans shall be brought to the attention of the
- architect / engineer in writing. 19. Recessed pedant type sprinkler heads (if used) shall be extended to new ceiling. Heads to center on acoustical tiles (if used).
- 20. Minimum of R-30 Insulation shall be placed above the ceiling or as shown within drawings
- 21. Walls not extending to structure above must be braced to structure at 4'-0"o.c. minimum. 22. Provide blocking in walls for all wall mounted
- building accessories.
- 23. The contractor is responsible for repairing any damage to existing facilities, above or below ground, that may occur as a result of the work performed by the
- 24. It is the contractor's responsibility to become familiar with the permit and inspection requirements of the various governmental agencies. The contractor shall obtain all necessary permits prior to construction, and schedule inspections according to agency instruction. 25. Contractor shall submit for review to the owner's
- architect/engineer shop drawings on all precast and manufactured items to be used on this site. Failure to obtain approval before installation may result in removal and replacement at contractor's expense. Architect's/engineer's approval of a shop drawing does not relieve contractor's responsibility for performance
- 26. Record Drawings- The contractor shall be responsible for recording information on a set of the approved plans concurrently with construction progress. Within two weeks following final inspection the contractor shall submit one set of record drawings to the architect/engineer of record. The final record drawings shall comply with the following
- 26.1. Drawings to be legibly marked to record actual
- 26.2. Drawings shall show actual location of all building elements both above and below ground. 26.3. Drawings shall clearly show all field changes of dimension and detail including changes made by
- field order or by change order. 26.4. Drawings shall clearly show all details not on original contract drawings but constructed in the
- 27. Any Elevations, Details, Hidden Conditions and/or Products not shown on drawings that are required as per the architects judgement shall be provided and installed to Architect's satisfaction at no cost to the owner.

	S
1 2 LS1	Life Safety Plan Wall Types &Occupant Load
1 2 LS2	UL Design & Fire Penetration Details
1 2 A1	Floor & Plan, Door & Finish Schedules
1 2 A2	Reflected Ceiling & Attic Plans, Ceiling Details
1 2 A3	Roof Plan, Roofing Details
1 2 A4	Building Elevations
1 2 A5	Building Sections, Typical Wall Section
1 2 S1	Footing Plan, Footing Details
1 2 P1	Sanitary Plan Details Notes & Fixture Schedule
1 2 P2	Water Supply Plan Details & Notes
1 2 E1	Electrical Power Plan Notes & Panel Schedules
1 2 E2	Lighting Plan Notes & Fixture Schedule
1 2 M1	HVAC Plan, Details, Schedules & Unit info.

1 2 T1 Design Criteria, Location Map, General Notes

1 2 C1 Site Plan - Revised With New Parking.

Drawing Index

Rvsn No Contains

NO	D. DATE:	BY:	REVISIONS	COPY ISSUED TO
1	07/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER
2	. 04/21/22	N GAJJAR	3RD REVIEW COUNTY COMMENTS -MECH & FIRE	GC/OWNER
3	00/00/00			
4	00/00/00			
5	00/00/00			
6	00/00/00			
7	00/00/00			

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 GENERALNOTES, DESIGN CRITERIA AND LOCATION MAP



DRAWING NO

DATE: SCALE: JOB NO.

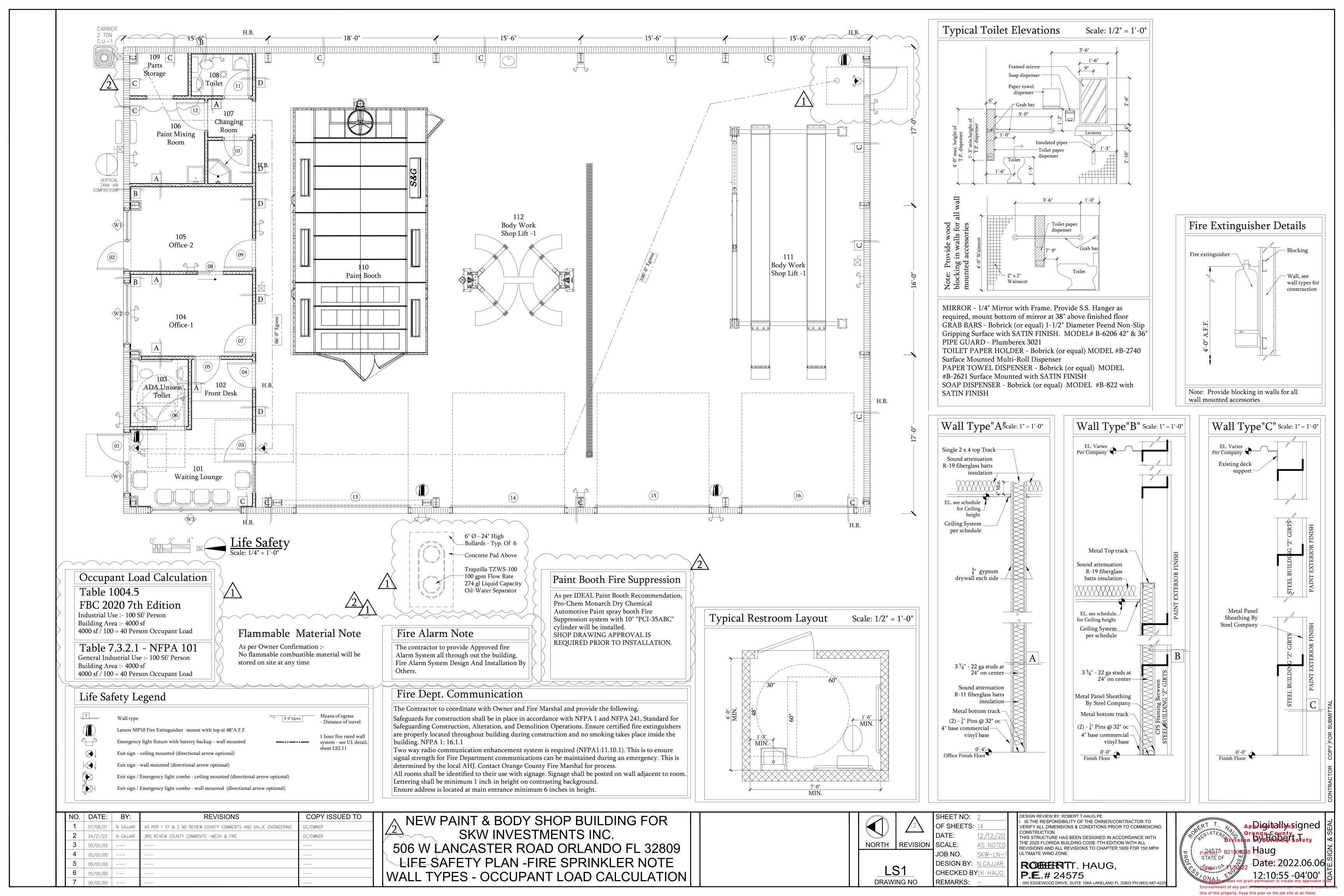
SKW-LN-**DESIGN BY:** N.GAJJAR CHECKED BY:R HAU REMARKS:

DESIGN REVIEW BY: ROBERT T HAUG PE. IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH

> ULTIMATE WIND ZONE. ROBERTT. HAUG, **P.E**.# 24575

THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL

Ap Digitally signed REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH hauq Hauq Date: 2022.06.06 12:08:55 -04'00' 000 EDGEWOOD DRIVE. SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225



(5) (4A)(4)

. Floor and Ceiling Runners -- (Not shown) -- For use with Item 2 Channel shaped, fabricated from min 25 MSG corrosion-protected steel min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max. 1A. Framing Members* - Floor and Ceiling Runners -- Not shown In lieu of Item 1 -- For use with Item 2A, proprietary channel shaped, min. 3-5/8 in. deep, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC max. Effective thickness is 0.034 in.

CLARKDIETRICH BUILDING SYSTEMS -- UltraSTEEL®. 1B. Framing Members* - Floor and Ceiling Runners -- (Not shown -In lieu of Item 1) -- For use with Item 2A, proprietary channel shaped, min. 2-1/2 in. deep, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling fasteners 24 in. OC. max. Effective thickness is 0.034 in. **CLARKDIETRICH BUILDING SYSTEMS -- UltraSTEEL®.**

1C. Framing Members* - Floor and Ceiling Runner -- Not shown - In lieu of Item 1 -- For use with Item 2C, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. CALIFORNIA EXPANDED METAL PRODUCTS CO -- Viper25TM

CRACO MFG INC -- SmartTrackTM

MARINO/WARE, DIV OF WARE INDUSTRIES INC -- Viper25TM

PHILLIPS MFG CO L L C -- Viper25TM Track TELLING INDUSTRIES L L C -- Viper25TM Track 1D. Framing Members* - Floor and Ceiling Runner -- Not shown - In lieu of Item 1 -- For use with Item 2D, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. CALIFORNIA EXPANDED METAL PRODUCTS CO -- Viper20TM

MARINO/WARE, DIV OF WARE INDUSTRIES INC -- Viper20TM

PHILLIPS MFG CO L L C -- Viper20TM Track TELLING INDUSTRIES L L C -- Viper20TM Track 1E. Framing Members*-- Floor and Ceiling Runners -- (Not shown) --In lieu of Item 1 - Channel shaped, attached to floor and ceiling with fasteners 24 in. OC. max.

ALLSTEEL & GYPSUM PRODUCTS INC -- Type SUPREME Framing System CONSOLIDATED FABRICATORS CORP, BUILDING **PRODUCTS DIV** -- Type SUPREME Framing System QUAIL RUN BUILDING MATERIALS INC -- Type SUPREME

SCAFCO STEEL STUD MANUFACTURING CO -- Type SUPREME Framing System STEEL CONSTRUCTION SYSTEMS INC -- Type SUPREME

UNITED METAL PRODUCTS INC -- Type SUPREME Framing 1F. Floor and Ceiling Runners -- (Not shown)--For use with Item 2B.

Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC. As an alternate to Item 1) -- For use with Items 2F, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC.

CLARKDIETRICH BUILDING SYSTEMS -- CD ProTRAK DMFCWBS L L C -- ProTRAK MBA BUILDING SUPPLIES -- ProTRAK SOUTHEASTERN STUD & COMPONENTS INC -- ProTRAK STEEL STRUCTURAL SYSTEMS L L C -- Tri-S ProTRAK TELLING INDUSTRIES L L C -- TRUE-TRACKTM

1H. Framing Members* - Floor and Ceiling Runner -- Not shown - In lieu of Item 1 -- For use with Item 2G, proprietary channel shaped runners, minimum width to accommodate stud size, with 1-1/8 in long legs fabricated from min 0.015 in. (min bare metal thickness) galv steel attached to floor and ceiling with fasteners spaced 24 in. OC max. **SUPER STUD BUILDING PRODUCTS** -- The Edge 11. Framing Members* - Floor and Ceiling Runner -- For use with Item 2H, proprietary channel shaped runners, minimum width to accommodate stud size attached to floor and ceiling with fasteners 24 in.

STUDCO BUILDING SYSTEMS -- CROCSTUD Track 1J. Floor and Ceiling Runners -- (Not shown) -- Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in, long legs, for use with study specified below and fabricated from min 0.02 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC. MARINO/WARE, DIV OF WARE INDUSTRIES INC -- Viper20TM Track VT100

2. **Steel Studs --** Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height 2A. Framing Members* - Steel Studs -- In lieu of Item 2 - Proprietary channel shaped studs, min. depth as indicated under Item 5, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. Allowable use of studs is shown in the table below. For direct attachment of gypsum board only. Effective thickness is 0.034 in. CLARKDIETRICH BUILDING SYSTEMS -- UltraSTEEL®. 2B. Steel Studs -- (As an alternate to Item 2, For use with Items 5B & 5E) Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs

friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height. 2C. Framing Members* - Steel Studs -- (As an alternate to Item 2, For use with Items 5C or 5I) - Proprietary channel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in less than the assembly height and installed with a ½ in. gap between the end of the stud

and track at the bottom of the wall. For direct attachment of gypsum CALIFORNIA EXPANDED METAL PRODUCTS CO -- Viper25TM CRACO MFG INC -- SmartStudTM MARINO/WARE, DIV OF WARE INDUSTRIES INC -- Viper25TM PHILLIPS MFG CO L L C -- Viper25TM

2D. Framing Members* - Metal Studs -- Not shown - In lieu of Item 2 -- For use with Item 1D, proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated from min 0.020 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than CALIFORNIA EXPANDED METAL PRODUCTS CO -- Viper20TM MARINO/WARE, DIV OF WARE INDUSTRIES INC -- Viper20TM PHILLIPS MFG CO L L C -- Viper20TM

TELLING INDUSTRIES L L C -- Viper25TM

TELLING INDUSTRIES L L C -- Viper20TM

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2E. **Framing Members*-- Steel Studs --** In lieu of Item 2 - For Use with Item 1E- Channel shaped studs, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. ALLSTEEL & GYPSUM PRODUCTS INC -- Type SUPREME Framing CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS

QUAIL RUN BUILDING MATERIALS INC -- Type SUPREME Framing SCAFCO STEEL STUD MANUFACTURING CO -- Type SUPREME

DIV -- Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC -- Type SUPREME Framing UNITED METAL PRODUCTS INC -- Type SUPREME Framing System 2F. Framing Members*-- Steel Studs -- (Not shown, As an alternate to Item 2) --For use with Items 1G, 5F or 5G or 5I only, channel shaped studs, min depth as indicated under Item 5F, 5G or 5I, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs

to be cut 3/4 in. less than assembly height. CLARKDIETRICH BUILDING SYSTEMS -- CD ProSTUD DMFCWBS L L C -- ProSTUD MBA BUILDING SUPPLIES -- ProSTUD SOUTHEASTERN STUD & COMPONENTS INC -- ProSTUD STEEL STRUCTURAL SYSTEMS L L C -- Tri-S ProSTUD

TELLING INDUSTRIES L L C -- TRUE-STUDTM

2G. Framing Members* - Metal Studs -- Not shown - In lieu of Item 2 -- For use with Item 1H, proprietary channel shaped steel studs, minimum width indicated under Item 5, 1-1/4 in. deep fabricated from min 0.015 in. (min bare metal thickness) galvanized steel. Studs 3/8 in. to 3/4 in. less in lengths than assembly heights.

SUPER STUD BUILDING PRODUCTS -- The Edge 2H. Framing Members* - Steel Studs -- Not shown - In lieu of Item 2 - For use with Item 1I. Proprietary channel shaped studs, minimum width indicated under Item 5, Studs to be cut 3/8 to 3/4 in less than the assembly height. STUDCO BUILDING SYSTEMS -- CROCSTUD

3. Wood Structural Panel Sheathing -- (Optional, For use with Item 5 Only.)-(Not Shown) - 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head self-drilling tapping screws with a min. head diam. of 0.292 in. at maximum 6 in. OC. n the perimeter and 12 in. OC. in the field. When used, fastener lengths for gypsum panels increased by min. 1/2 in . Batts and Blankets* -- (Required as indicated under Item 5) -- Mineral wool

batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 5. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies 4A. Batts and Blankets* -- (Optional) -- Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and**

. **Gypsum Board*** -- Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of stude need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr 2 hr 3 hr and 4 hr ratings are as follows:

Blankets (BKNV or BZJZ) Categories for names of Classified companies.

1 nr, 2 nr,	, 3 nr and 4 nr	ratings are as	follows:	
	Min Stud	Min	No. of	Min
	Depth, in.	Stud	Layers	Thkns of
	Items 2, 2E,	Depth, in.	& Thkns	Insulation
	and 2G	Item 2A	of Panel	(Item 4)
ating, Hr				
1	3-1/2	3-5/8	1 layer, 5/8 in. thick	Optional
1	2-1/2	3-5/8	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	3-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2-1/2	2 layers, 1/2 in. thick	Optional
2	1-5/8	2-1/2	2 layers, 5/8 in. thick	Optional
2	3-1/2	3-5/8	1 layer, 3/4 in. thick	3 in.
3	1-5/8	2-1/2	3 layers, 1/2 in. thick	Optional
3	1-5/8	2-1/2	2 layers, 3/4 in. thick	Optional
3	1-5/8	2-1/2	3 layers, 5/8 in. thick	Optional
4	1-5/8	2-1/2	4 layers, 5/8 in. thick	Optional
4	1-5/8	2-1/2	4 layers, 1/2 in. thick	Optional
4	2-1/2	2-1/2	2 layers, 3/4 in. thick	2 in.

CONTINENTAL BUILDING PRODUCTS (CBP) — 5/8 in. thick Type X CGC INC -- 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC; 3/4 in.

UNITED STATES GYPSUM CO -- 1/2 in thick Type C. IP-X2. IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types IP-X3 or ULTRACODE USG MEXICO S A DE C V -- 1/2 in thick Type C. IP-X2. IPC-AR or WRC: 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE

When Item 7B, Steel Framing Members*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 6. 5A. **Gypsum Board* --** (As an alternate to Item 5) -- 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer layer to one side of the assembly.

Secured as described in Item 6. CGC INC -- Type SHX. CONTINENTAL BUILDING PRODUCTS (CBP) -5/8 in. thick Type X UNITED STATES GYPSUM CO -- Type FRX-G. SHX.

USG MEXICO S A DE C V -- Type SHX. 5B. Gypsum Board* -- (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or 3/4 in. thick products are specified. For direct attachment only to steel study Item 2B. (not to be or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ³/₄ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and

used with Item 3) - Nom 5/8 in. or ³/₄ in. may be used as alternate to all 5/8 in. staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12). **RAY-BAR ENGINEERING CORP** -- Type RB-LBG 5C. Gypsum Board* -- (For Use With Item 2C) Rating Limited to 1 Hour. 5/8

in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in, long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in, OC starting 4 in, from the board edge, Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on opposite sides of studs. (Horizontal Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. All horizontal

joints are to be backed as outlined under section VI of Volume 1 in the Fire Resistive Directory CGC INC -- Type SCX. CONTINENTAL BUILDING PRODUCTS (CBP) -5/8 in. thick Type X UNITED STATES GYPSUM CO -- Type SCX, SGX.

USG MEXICO S A DE C V -- Type SCX. 5D. Gypsum Board* -- (As an alternate to Item 5) -- 5/8 in. thick, 48 in. wide, applied vertically or horizontally. Secured as described in Item 6. For use with

Items 1 and 2 only **UNITED STATES GYPSUM CO -- Type USGX.** 5E. **Gypsum Board* --** (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified. For direct attachment only to steel study Item 2B, no to be used with Item 3). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs.

Vallboard secured to studs with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in.

NEW ENGLAND LEAD BURNING CO INC, DBA NELCO -- Nelco F. **Gypsum Board*** -- (As an alternate to Item 5) -- For use with Items 1G and 2F and limited to 1 Hour Rating only. Gypsum panels with beyeled, square or tapered edges, applied vertically, and fastened to the steel studs with 1 in. long Type S screws spaced 8 in. OC along vertical and bottom edges and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Steel stud depth shall be a minimum 3-5/8

UNITED STATES GYPSUM CO -- 5/8 in. thick Type SCX, SGX. 5G. Gynsum Board* -- (As an alternate to Item 5) -- For use with Items 1G and 2F only, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally, as specified in the table below and fastened to the steel studs as described in Item 6. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 2 hr, 3 hr and 4 hr ratings are as follows:

Gypsum Board Protection on Each Side of Wall Rating, Hr Min Stud Depth, in. Item 2F No. of Layers & Thickness of

Min Thk	ns of Insulation (Item 4)	
1-5/8	2 layers, 1/2 in. thick	Optional
1-5/8	2 layers, 5/8 in. thick	Optional
1-5/8	3 layers, 1/2 in. thick	Optional
1-5/8	3 layers, 5/8 in. thick	Optional
1-5/8	4 layers, 5/8 in. thick	Optional
1-5/8	4 layers, 1/2 in. thick	Optional
ENTAL BUII	LDING PRODUCTS (CBP) —	5/8 in. thick Type X
C 1/2 in. thi	ick Type C, IP-X2 or IPC-AR;	5/8 in. thick Type AR

IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in. thick Types IP-X3 or UNITED STATES GYPSUM CO -- 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type SCX, SGX, SHX, IP-X1, AR, C, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types IP-X3 or ULTRACODE USG MEXICO S A DE C V -- 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in.

thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in.

CGC INC

thick Types IP-X3 or ULTRACODE 5H. Gypsum Board* -- (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 or 3/4 in thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 or 3/4 in. may be used as alternate to all 5/8 or 3/4 in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 11A) or Lead Discs (see Item 12A). MAYCO INDUSTRIES INC -- Type X-Ray Shielded Gypsum

5I. Gypsum Board* -- (As an alternate to Item 5) - Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 5. Steel stud minimum depth shall be as indicated in Item 5. CGC INC -- Type ULX CONTINENTAL BUILDING PRODUCTS (CBP) -5/8 in. thick Type X UNITED STATES GYPSUM CO -- Type ULX

USG MEXICO S A DE C V -- Type ULX 5J. **Gypsum Board* --** (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2B, not to be used with Item 3). Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in, long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick Compression fitted or adhered over the screw heads. Lead batten strips and

discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, **RADIATION PROTECTION PRODUCTS INC -- Type RPP-LBG** 6. **Fasteners --** (Not shown) -- For use with Items 2 and 2F - Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in, long for 3/4 in, thick panels, spaced 8 in, OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two layer systems: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Three-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in, thick panels, spaced 24 in, OC, Third layer- 2-1/4 in, long for 1/2 in, 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. Four-layer systems: First layer- 1 in, long for 1/2 in., 5/8 in, thick panels, spaced 24 in, OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in.

long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from 6A. **Fasteners --** (Not shown) --For use with Item 2A - Type S or S-12 steel screws used to attach panels to study (Item 2A). Single layer systems: 1 in long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels spaced 8-1/2 in. OC with additional screws 1 in. and 2-1/2 in. from edges of the board when panels are horizontally, or 8 in, OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. **Two** layer systems applied vertically: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Two layer systems applied horizontally: First layer- 1 in. long for 1/2 and 5/8 in, thick panels or 1-1/4 in, long for 3/4 in, thick panels,

spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in, thick panels or 2-1/4 in, long for 3/4 in, thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board with screws offset 8 in. from first laver. **Three-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels,

spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in, long for 5/8 in, thick panels, spaced 12 in, OC, Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board. Four-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 ir OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in, OC, Screws offset min 6 in, from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the

. Furring Channels -- (Optional, not shown, for single or double layer systems) -- Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 5A and 5E. A. Framing Members* -- (Not Shown) -- (Optional on one or both sides, not shown, for single or double layer systems) -- As an alternate to Item 7, furring channels and Steel Framing Members as described below: Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8

in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to

studs as described in Item b. Gypsum board attached to furring channels as

described in Item 6. Not for use with Item 5A and 5E

Steel Framing Members* -- Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. RSIC-1 clips secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. RSIC-V clips secured to studs with No. 8 x 9/16 in. minimum self-drilling, S-12 steel screw

through the center hole. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC -- Types RSIC-1, RSIC-V. B. Framing Members* -- (Optional, Not Shown) -- As an alternate to Item 7, for single or double layer systems, furring channels and Steel Framing Members on only one side of studs as described below: g. **Furring Channels --** Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring

channels as described in Item 5. Not for use with Item 5A and 5E. Steel Framing Members* -- Used to attach furring channels (Item 7Ba) to one side of studs (Item 2) only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.

KINETICS NOISE CONTROL INC -- Type Isomax C. Framing Members* -- Optional - Not Shown - Used as an alternate method to attach resilient channels (Item 7). Clips attached at each intersection of the resilient channel and the steel studs (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the steel stud with min. 1 in. long Type S-12 steel screws through the center hole of the clip and the resilient channel flange

KEENE BUILDING PRODUCTS CO INC -- Type RC Assurance. 7D. Framing Members* -- (Not Shown) -- (Optional on one or both sides, not shown, for single or double layer systems) -- As an alternate to Item 7, furring channels and Steel Framing Members as described below: Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs.

attached to furring channels as described in Item 6. Not for use with Item 5A and 5E. Steel Framing Members* -- Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12

steel screw through the center grommet. Furring channels are

friction fitted into clips.

Channels secured to studs as described in Item b. Gypsum board

PLITEQ INC -- Type GENIECLIP . Joint Tape and Compound -- Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in, wide, embedded in first layer of compound over all oints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge. . Siding, Brick or Stucco -- (Optional, not shown) -- Aluminum, vinyl or steel siding, brick veneer or stucco, meeting the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to

studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick. Caulking and Sealants* -- (Optional, not shown) -- A bead of acoustical sealant applied around the partition perimeter for sound

UNITED STATES GYPSUM CO -- Type AS Lead Batten Strips -- (Not Shown, For Use With Item 5B) - Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification

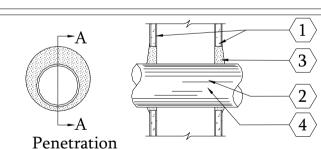
QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5B) and optional at remaining stud locations. Required behind vertical joints. 1A. Lead Batten Strips -- (Not Shown, For Use With Item 5H) Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grades "A, B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead Discs or Tabs -- (Not Shown, For Use With Item 5B) - Used in lieu of or in addition to the lead batten strips (Item 11) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 5B) underneath screw locations prior to the installation of the screws.

Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". P.A. Lead Discs -- (Not Shown, for use with Item 5H) Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.9% meeting the Federal Specification OO-L-201f, Grades "A. B. C or D". B. Lead Batten Strips -- (Not Shown, For Use With Item 5E) Lead

batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5E) and optional at remaining stud locations. 4. Lead Tabs -- (Not Shown, For Use With Item 5E) 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5E) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

Fire Wall Pipe Penetration Detail

*Bearing the UL Classification Mark



NTS

Penetration Elevation Section A-A

UL System WL-1479 (1 Hour Fire Rating)

1) U.L. One hour wall assembly 2) Metallic pipe - any of the following may be used:

A) Nominal 4" dia. or smaller schedule 10 or heavier steel pipe. the annular space shall be a minimum 1/4" to 1-1/4". B) Nominal 4" dia. or smaller steel electrical metal tubing or steel conduit. the annular space shall be a minimum 1/4"

C) Nominal 4" dia. or smaller type l or heavier copper tubing or steel conduit. the annular space shall be a minimum

3) Fill, void or cavity material - minimum 5/8" thickness of firecode compound installed such that a minimum 3/8" crown is formed around the penetrated item, overlapping minimum 1" onto the wallboard surface.

4) For plastic pipes at wall penetrations, seal with 3m cp-25 fire barrier caulk around entire perimeter. install per manufacturer's specifications. For CPVC use 3m IC 15WB+ fire barrier caulk around entire perimeter.



3M™ Fire Barrier Sealant IC 15WB+

Product Data Sheet

1. Product Description 3M™ Fire Barrier Sealant IC 15WB+ is a cost-effective, one-part, gun-grade, latex-based, intumescent firestop sealant that dries to form a monolithic firestop seal that also acts as a barrier to airborne sound transmission. 3M™ Fire Barrier Sealant IC 15WB+ firestops through penetrations passing through fire-rated floor, floor/ceiling or wall assemblies, as well as other fire-rated interior building partitions and assemblies (e.g. static construction joints or blank openings). In addition, the unique intumescent property of this material allows 3M[™] Fire Barrier Sealant IC 15WB+ to expand and help maintain a firestop penetration seal for up to 3 hours as penetrants are exposed to fire. 3M™ Fire Barrier Sealant IC 15WB+ bonds to most construction substrates, including: gypsum wallboard, concrete, metals, wood, plastic (including CPVC) and cable jacketing. No mixing is required.



Product Color: Yellow.

Product Features

Firestop tested up to 3 hours in • Sag-resistant accordance with ASTM E 814 Halogen-free (UL 1479), ASTM E 1966 Excellent adhesion (UL 2079) & CAN/ULC-S115

Re-enterable/repairable CPVC compatible Excellent caulk rate Expanded fire protection systems Paintable Helps minimize sound transfer* Water clean up

Complies with the intent of LEED® NC-EQ Credit 4.1 for Low-Emitting Materials: Adhesives and Sealants, Cost-effective firestop sealant contains <250 g/L VOC contents (less H₂O and exempt solvents per SCAQMD Rule 1168) available in tube, pail or sausage.

2. Applications 3M[™] Fire Barrier Sealant IC 15WB+ is a general-purpose intumescent firestop ideal for sealing single or multiple through penetrations in fire-rated construction. 3M[™] Fire Barrier Sealant IC 15WB+ is typically used in mechanical, electrical and plumbing applications to firestop openings created by the following penetrations in fire-rated floors, floor/ceilings or walls: metallic pipe, plastic pipe, conduit, power and communication cable, cable trays, busways, combos, insulated pipe and HVAC duct penetrations. 3M™ Fire Barrier Sealant IC 15WB+ is also used to firestop blank openings and static construction joints.

*Minimizes noise transfer—STC-Rating of 54 when tested in STC 54-rated wall assembly.

3. Specifications 3MTM Fire Barrier Sealant IC 15WB+ Typically Specified MasterFormat (2004) shall be a one component, ready-to-use, gun-grade, latex-based, intumescent firestop sealant capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and be applicable to overhead, vertical and horizontal firestops. The sealant shall be listed by independent test agencies such as UL, ULC, Intertek or FM. 3M™ Fire Barrier Sealant IC 15WB+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 1966 (UL 2079) Standard Test Method for Fire Resistive Joint Systems and CAN/ ULC-S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Sealant IC 15WB+ meets the requirements of the IBC, IRC, NBCC,

IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70) and NFPA 101.

Section 07 84 00 - Firestopping Section 07 27 00 - Air Barriers ection 07 84 16 - Annular Space Protection Section 07 84 43 - Fire-Resistant Joint Sealant Section 07 87 00 - Smoke Containment Barriers Section 07 92 19 - Acoustical Joint Sealant Section 21 00 00 - Fire Suppression Section 22 00 00 – Plumbing Section 23 00 00 – Heating, Ventilating, and Air Conditioning (HVAC)

Section 26 00 00 - Electrical

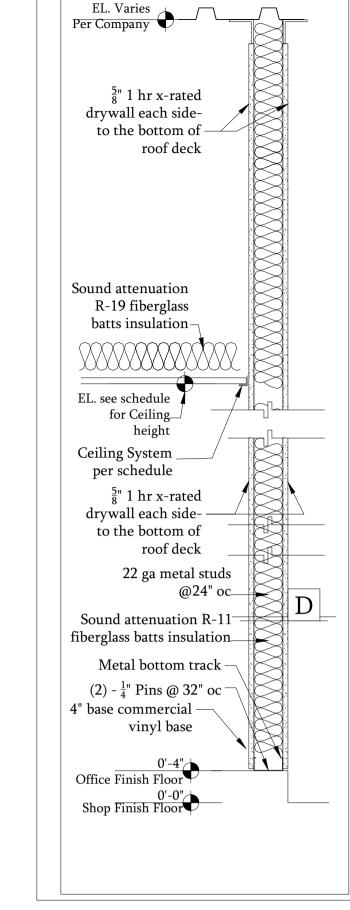
For technical support relating to 3M Fire Protection Products and Systems, call: 1-800-328-1687 For more information on 3M Fire Protection Products, visit: www.3m.com/firestop



AND PERIMETER CONTAINMENT SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY

Intertek

LISTED





TO 4 Fig.

Fire Protection

Fire Protection

TO 4 Fig.

Meets Optiona
L Requirements

APPROVED

SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APROVAL GUIDE

FILL, VOID OR CAVITY
MATERIALS
90G9
MATERIAL FIRE RESISTANC
CLASSIFICATION SEE UL FIR
RESISTANCE DIRECTORY

FILL, VOID, OR CAVITY

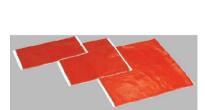
3M™ Fire Barrier Moldable Putty Pads MPP+

Product Data Sheet

1. Product Description

3M[™] Fire Barrier Moldable Puttv Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M[™] Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire. smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV), the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M[™] Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back metallic electrical boxes.

3M[™] Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M[™] Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M[™] Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating. Color: Dark Red



4 in. x 8 in. (101.6mm x 203.3mm).

pad sizes available.

7 in. x 7 in. (177.8mm x 177.8mm) an

9.5 in. x 9.5 in. (241.2mm x 241.3mm)

• Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115 Wall opening protective tested up to 2 hours in accordance with UL 263 Provides draft and cold smoke seal

 Excellent adhesion Re-enterable/repairable · Halogen-free and solvent-free Excellent aging properties Low VOC Will not dry out or crumble Red color widely recognized as Pliable and conformable—molds a fire protective product easily into required shape Helps reduce noise transfer*

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants. *Minimizes noise transfer—STC-Rating of 52 when tested in STC 53-rated wall assembly

2. Applications 4 in. x 8 in. (101.6mm x 203mm) 3M[™] Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective to meet building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in. x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3MTM Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M[™] Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M[™] Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Section 07 84 16 - Annular Space Protection Section 07 86 00 - Smoke Seals Section 07 87 00 - Smoke Containment Barriers Section 07 27 00 - Thermal and Moisture Protection Firestopping Section 21 00 00 - Fire Suppression

Section 07 84 00 – Firestopping

Typically Specified MasterFormat (2004)

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687 For more information on 3M™ Fire Protection Products, visit: www.3M.com/firestop



1 Darformance & Tunical Physical Properties

4. Periorillance & Ty	picai Physicai Properti
Color:	Dark Red
Nominal Density:	10-12 lbs./gal. (1.2-1.45kg/L)
Nominal Thickness:	1/10 in. (2.54mm)
Surface Burning (ASTM E 84):	Flame Spread 0, Smoke Development 0
Heat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413): Tested in STC 53 rated wall assembly	52 when tested on back-to-back metallic electrical boxes in certain configurations

Dimensions: 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm) **Unit Volume:** 2.52 in.3 (41.4cm³) Unit Weight: 2.7 oz (76g) **Dimensions:** 7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm) **Unit Volume:** 4.63 in.³ (76.0cm³) **Unit Weight:** 4.1 oz (116g)

Dimensions: 9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm) **Unit Volume:** 6.1 in.3 (139.8cm³)

Unit Weight: 7.6 oz (215g)

Corrugated cardboard box with liner between individual pads.

contaminants). Putty can be molded together at new/existing putty overlap.

5. Packaging, Storage, Shelf Life

VOC Less H₂O and Exempt Solvents: < 250g/L

3M[™] Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions. Shelf Life:

3M™ Fire Barrier Moldable Putty Pads MPP+ shelf life is indefinite in original unopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for 6. Installation Techniques Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not

Installation Details: Electrical boxes must be firestopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one stud cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm. per 9.29 sq. m) — refer to listed system details and applicable local building code requirements. For electrical box installations, a minimum of 1/10 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed

system. Make sure that putty is in complete contact with the substrate and penetrating item(s). Note: Partial pads can be pieced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam. Over application (i.e., using excessive amount of material) of product to vertical surfaces may cause sagging, follow system details. Product is

7. Maintenance No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3Mth Fire Barrier Moldable Putty Pad MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the

not impaired by freezing but should be warmed to 32°F (0°C) before applying.

3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M[™] Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack, 10 packs/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (20 pads/case) 7 in. x 7 in. 1/10 in. (177.8mm x 177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10 in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material.

affected area and install the proper thickness of putty, ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from

9. Safe Handling Information Consult product's Material Safety Data Sheet (MSDS) from country-of-use prior to handling and disposal.

For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

3M Center, Building 225-3S-06 St. Paul. MN 55144-1000 800-328-1687 877-369-2923 (Fax) www.3M.com/firestor

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for apricular purpose and suitable for user's method of application. Warranty and Limited Remedy: 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTIED MERCHANTABILITY OR FITNESS FOR A PARTICULAR BUILDING AND INCLUDING ANY IMPLIED WARRANTIES for the 3M product these not confirm to this warranty the selection product and fit to the selection of the selec PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the se price. Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, specia

3M is a trademark of 3M Company. Used under license in Canada. LEED is a trademark of U.S. Green Building Council Non-Profit Corporation. All other trademarks are the property of their respective owners Please Recycle. Printed in U.S.A. @ 3M 2015. All rights reserved. Reference Number 98-0213-4620-4 RevB

NO. DATE: BY: REVISIONS COPY ISSUED TO AS PER 1 ST REVIEW COUNTY COMMENTS 07/08/21 N GAJJAF 2 | 00/00/00 | ---3 | 00/00/00 | ---4 | 00/00/00 | ---**5** | 00/00/00 | ---6 | 00/00/00 |

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 ULDESIGN AND PENETRATION DETAILS

NORTH | REVISION | LS2

DRAWING NO

DATE: SCALE: JOB NO.

REMARKS:

SKW-LN-**DESIGN BY: N.GAJJAR** CHECKED BY:R HAU

DESIGN REVIEW BY: ROBERT T HAUG PE. IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH

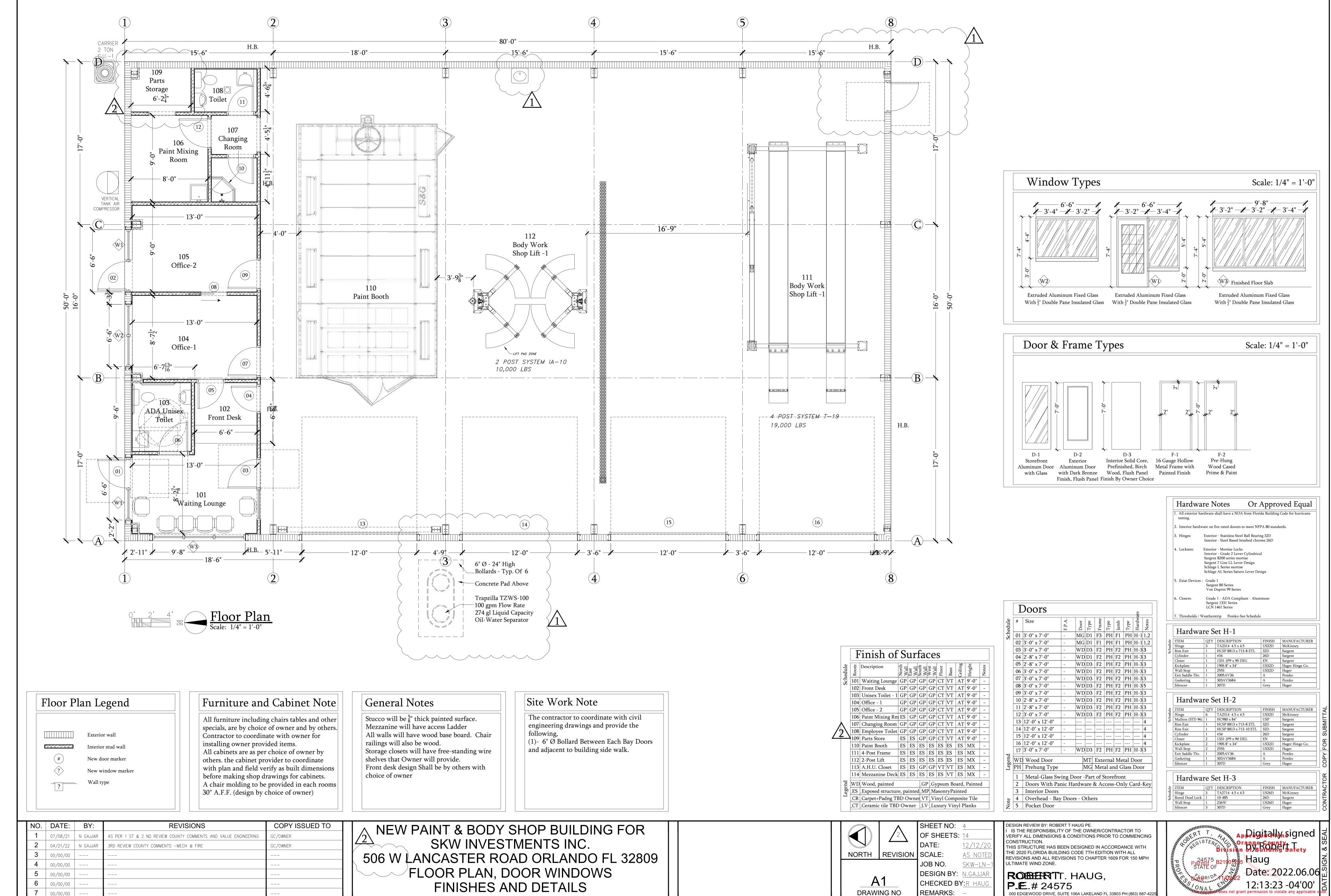
THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL

REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE. ROBERTT. HAUG, **P.E**.# 24575

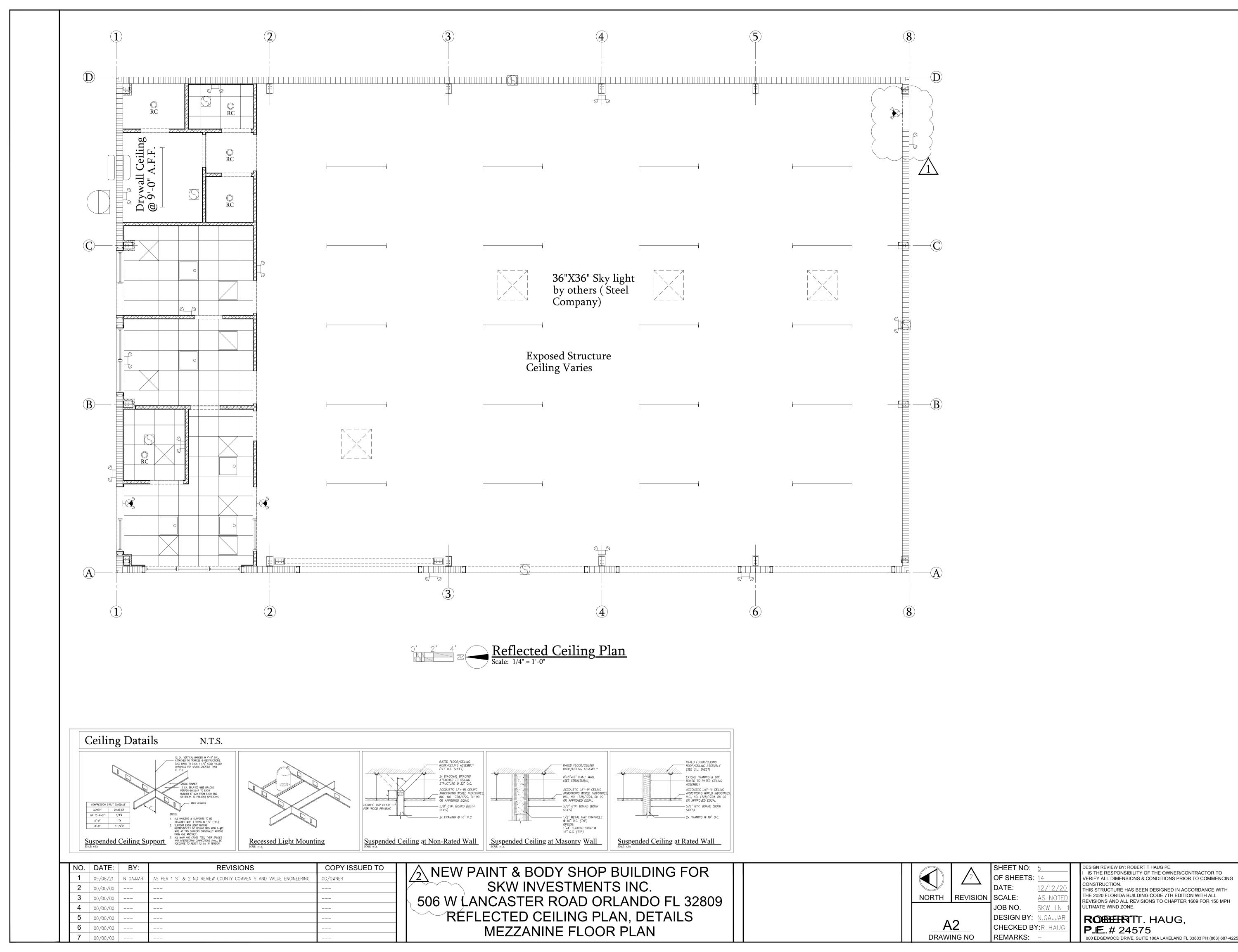
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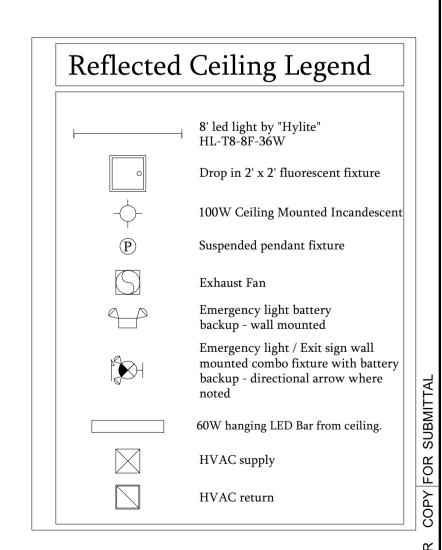
title of this property. Keep this plan on the job site at all times.

000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225



Encroachment of any part of this improvement can result in a cloud of title of this property. Keep this plan on the job site at all times.





Ap Digitally signed

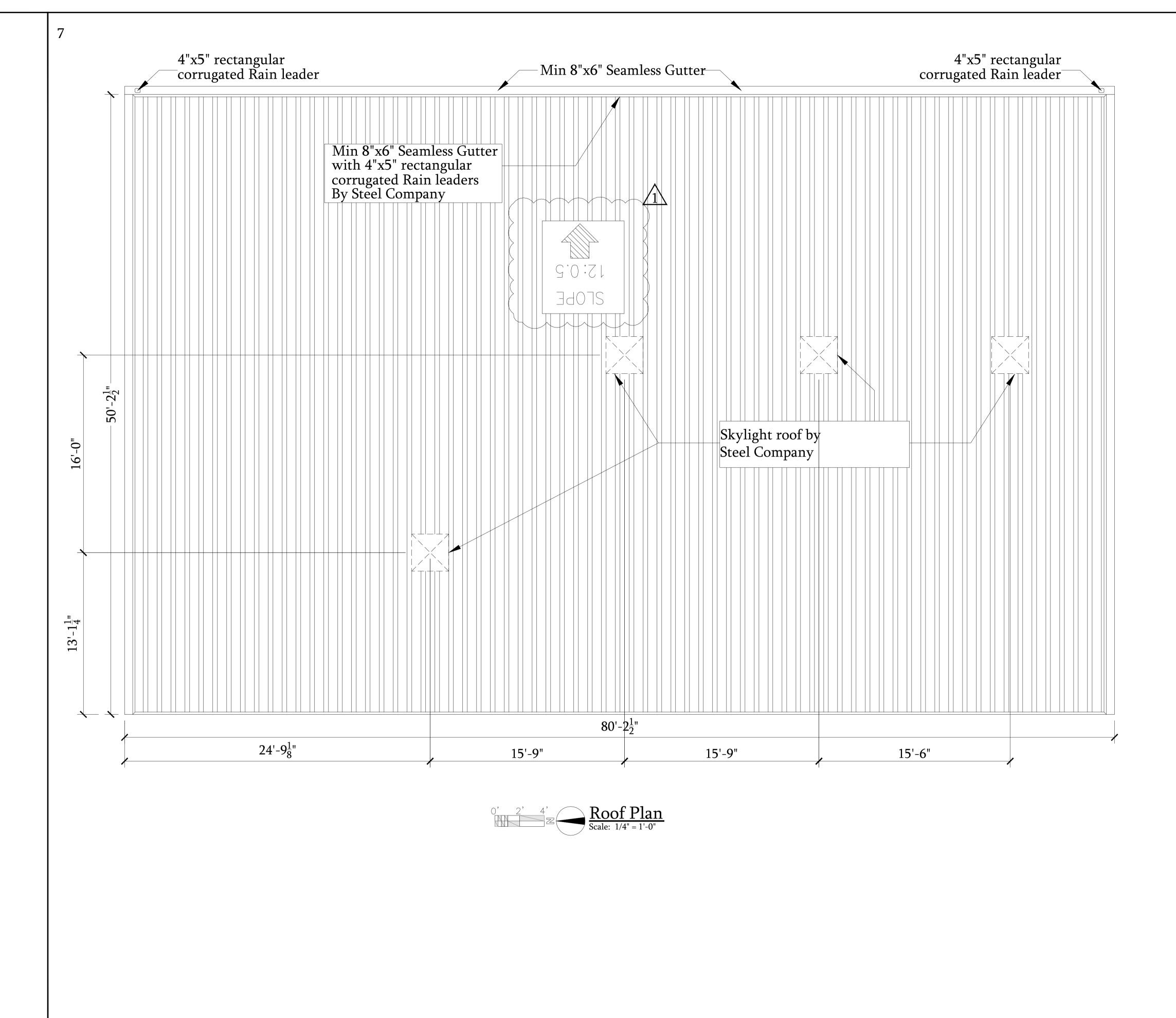
Division by Robert Jety

P24575 B21904255 Haug

STATE OF

Date: 2022.06.06

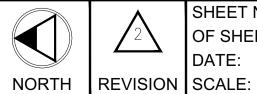
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COPY ISSUED TO NO. DATE: BY: REVISIONS AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING 2 00/00/00 ---3 00/00/00 ---4 00/00/00 ---5 00/00/00 ---6 00/00/00 ---

7 | 00/00/00 | ---

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 ROOF PLAN AND DETAILS MEZZANINE FLOOR JOIST PLAN



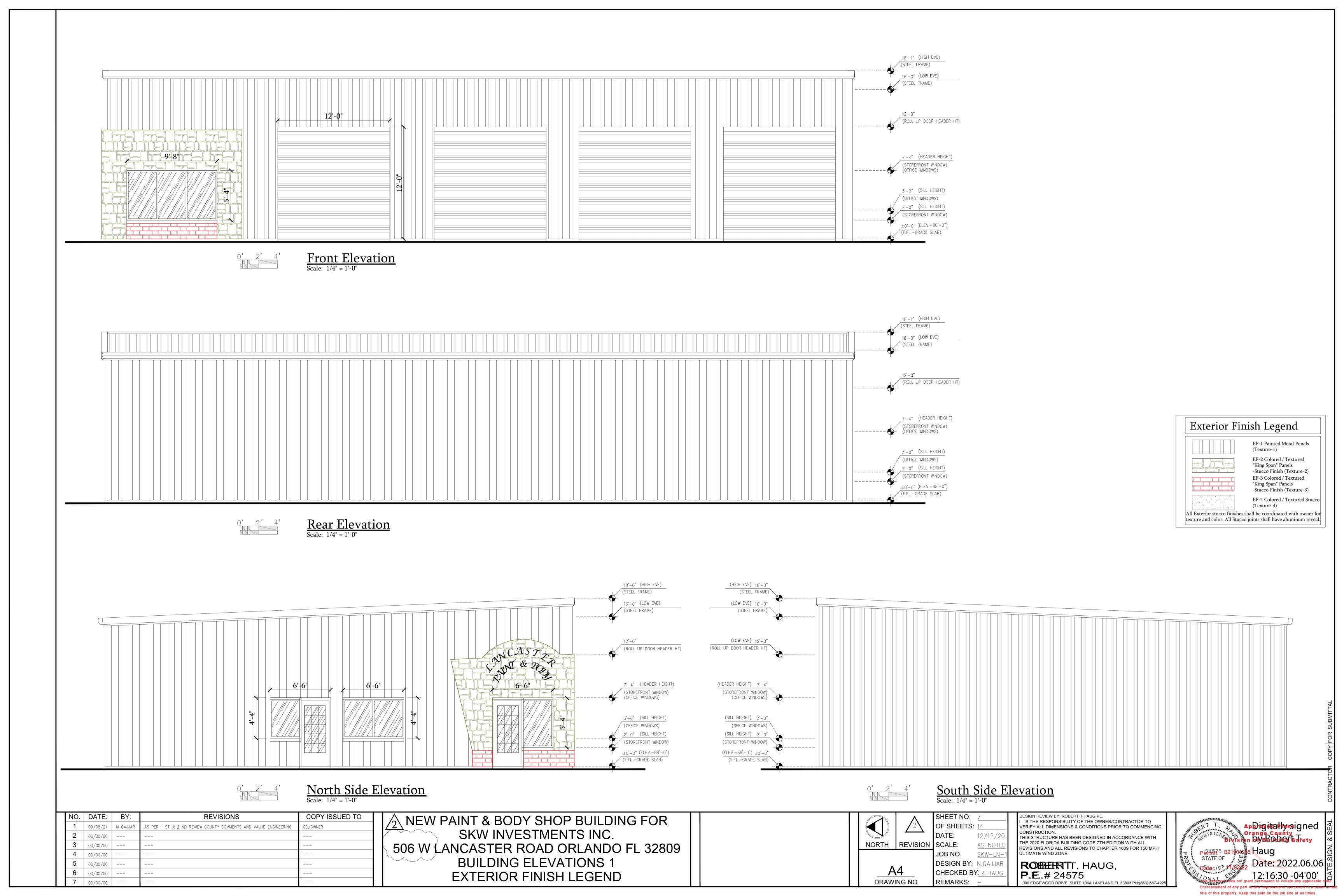
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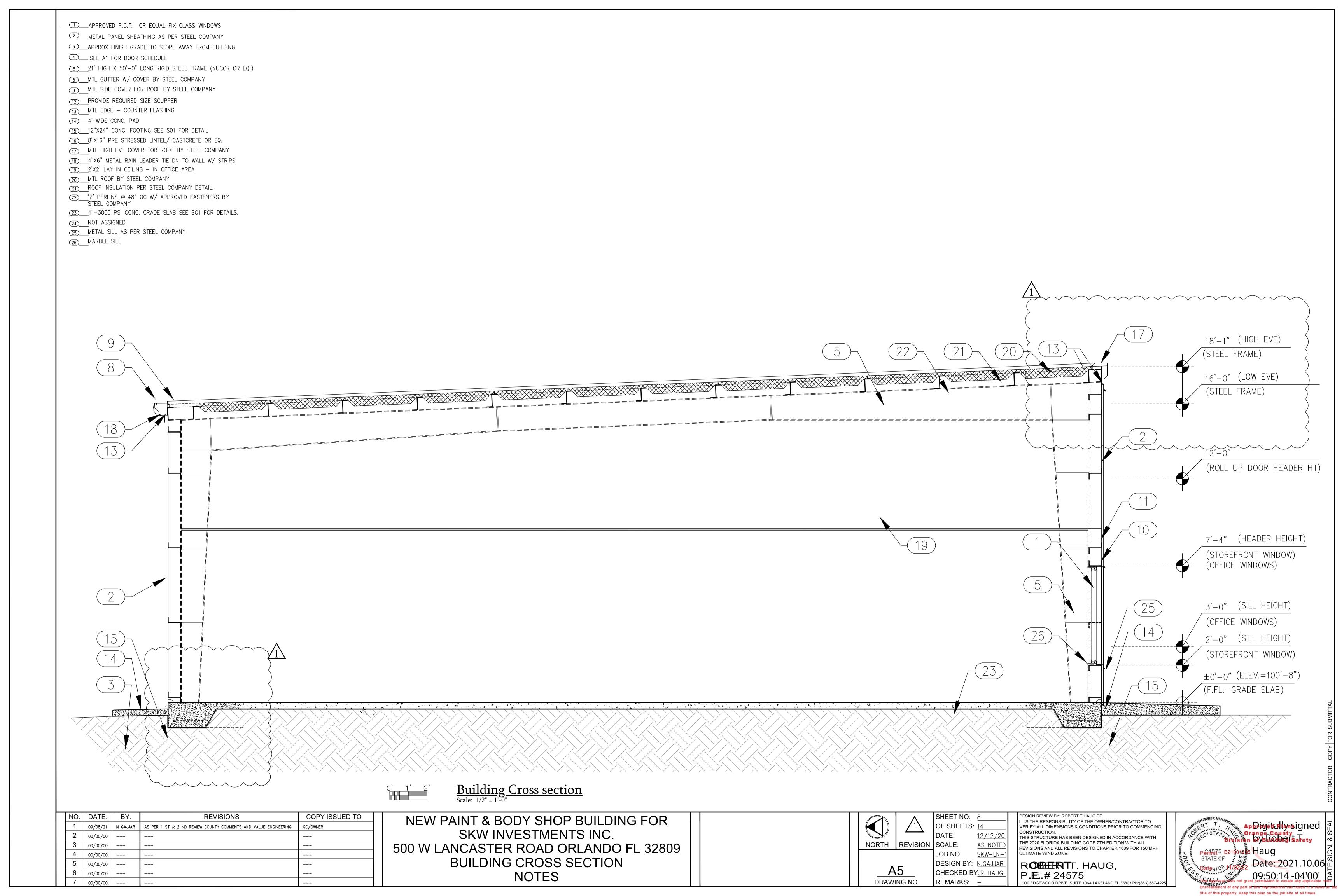
JOB NO. DESIGN BY: N.GAJJAR CHECKED BY:R HAUG

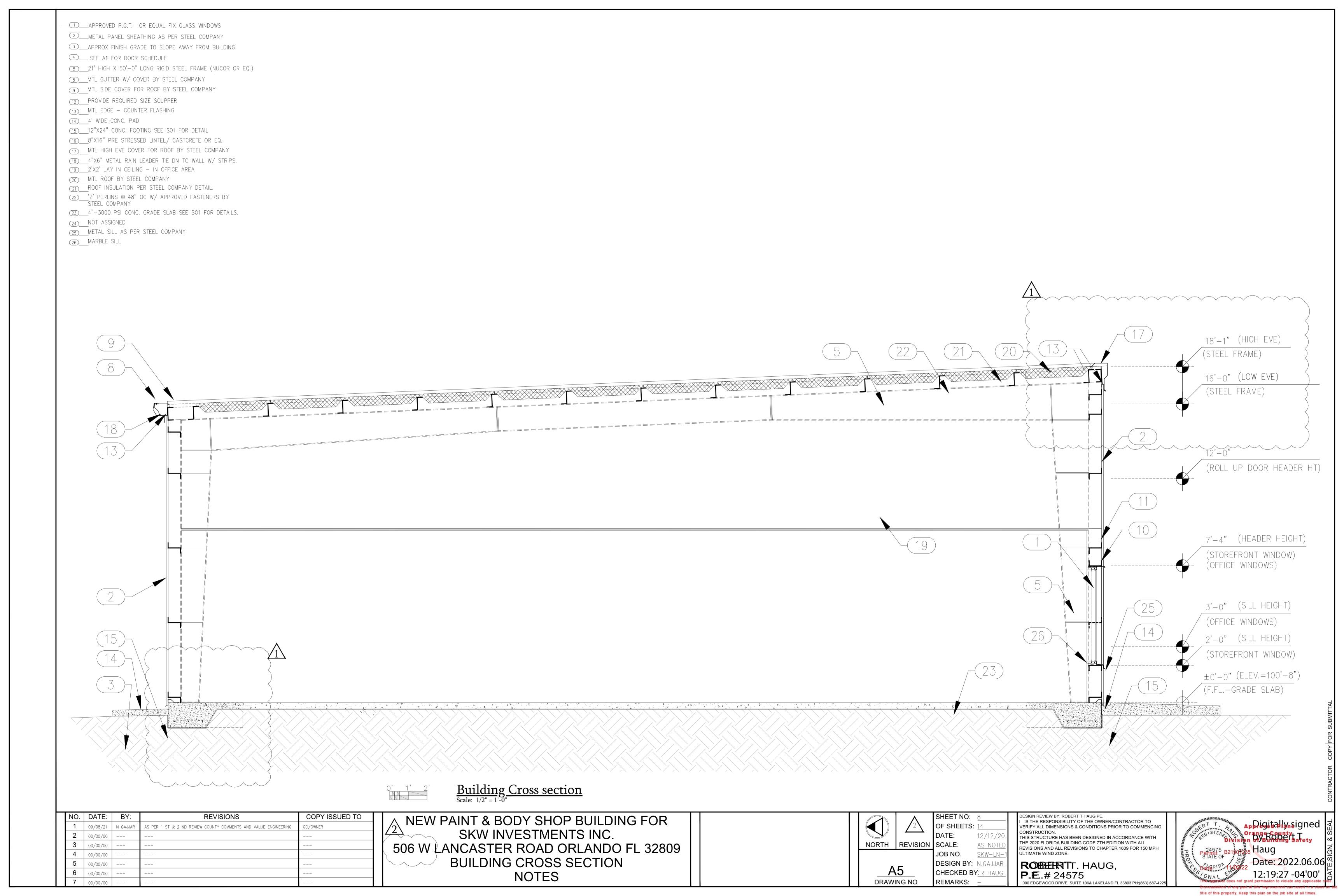
REMARKS:

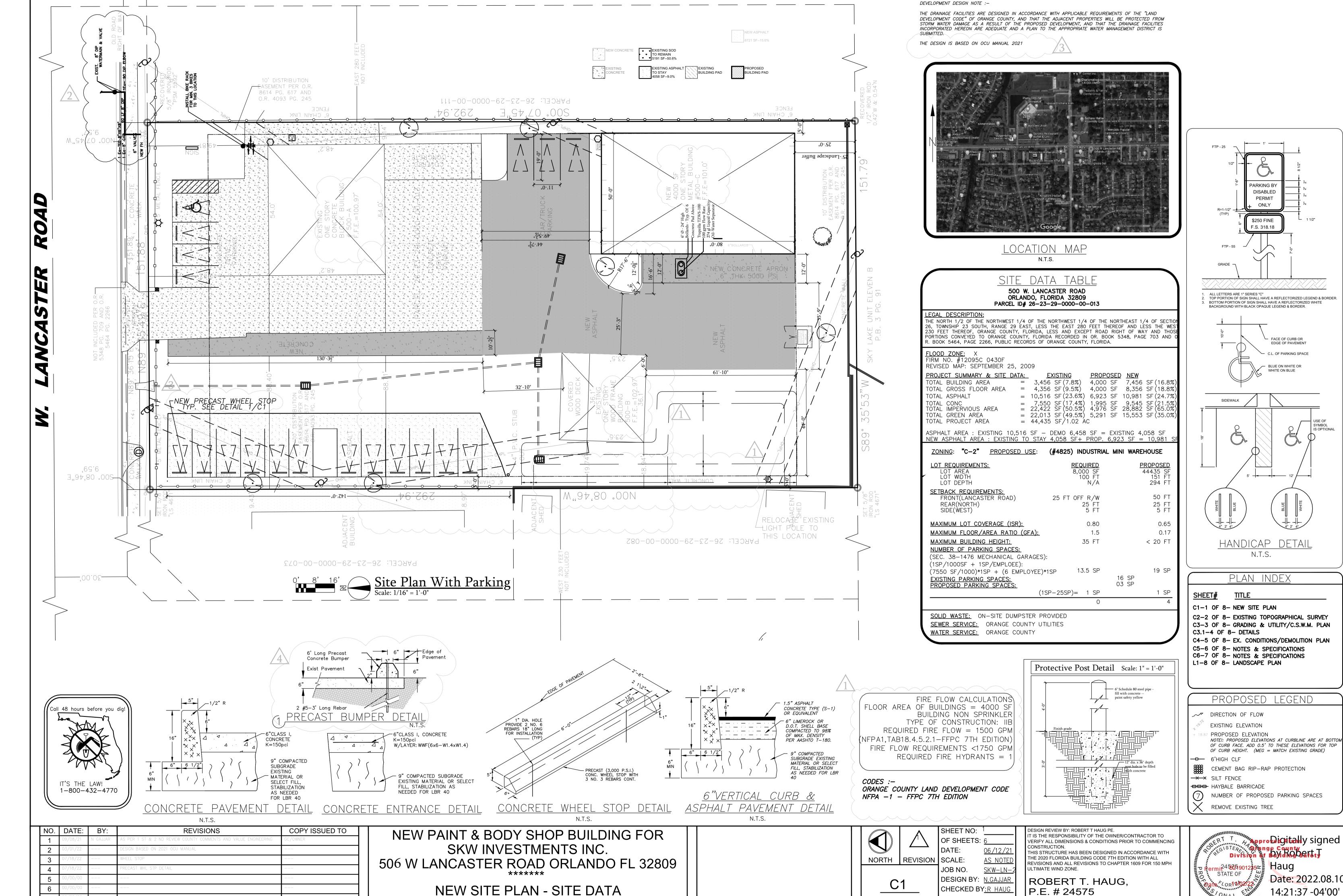
I IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

ROBERTT. HAUG, P.E.# 24575
000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-422 ApDigitally signed or by Bobert Jety Date: 2022.06.06 12:15:36 -04'00' not grant permission to violate any applicable of









14:21:37 -04'00'

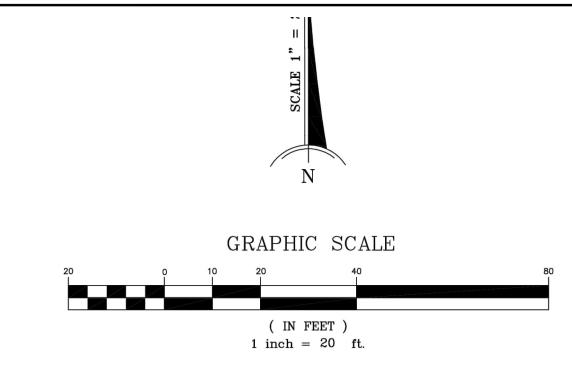
title of this property. Keep this plan on the lob site at all times

P.E. # 24575

2000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-422

REMARKS:

DRAWING NO



BOUNDARY SURVEY

DESCRIPTION:

The North 1/2 of the Northwest 1/4 of the Northwest 1/4 of the Northeast 1/4 of Section 26, Township 23 South, Range 29 East, less the East 280 feet thereof and less the West 230 feet thereof, Orange County, Florida, LESS AND EXCEPT road right of way and those portions conveyed to Orange County, Florida recorded in OR. Book 5348, Page 703 and O. R. Book 5464, Page 2266, Public Records of Orange County, Florida.

SCHEDULE B-II

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

COMMITMENT NUMBER: 660208

COMMITMENT DATE: NOVEMBER 6, 2018 AT 11:00 PM

- 1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the Public Records or attaching subsequent to the Commitment Date hereof but prior to the date the Proposed Insured acquires for value of record the estate or interest or Mortgage thereon covered by this Commitment.
- STANDARD / NON-SURVEY ITEM
- a. General or special taxes and assessments required to be paid in the year 2018 and subsequent years.
- b. Rights or claims of parties in possession not recorded in the Public Records.
- c. Any encroachment, encumbrance, violation, variation or adverse circumstance that would be disclosed by an inspection or an accurate and complete land survey of the Land and inspection of the Land.
- d. Easements or claims of easements not recorded in the Public Records.
- e. Any lien, or right to a lien, for services, labor or material furnished, imposed by law and not recorded in the Public Records. STANDARD / NON-SURVEY ITEM
- 3. Any Owner's Policy issued pursuant hereto will contain under Schedule B the following exception: Any adverse ownership claim by the State of Florida by right of sovereignty to any portion of the Land insured hereunder. including submerged. filled and artificially exposed lands. and lands accreted to such lands. STANDARD / NON-SURVEY ITEM
- 4. Any lien provided by County Ordinance or by Chapter 159, F.S., in favor of any city, town, village or port authority, for unpaid service charges for services by any water systems, sewer systems or gas systems serving the land described herein; and any lien for waste fees in favor of any county or municipality.
- STANDARD / NON-SURVEY ITEM 5. Easement in favor of Florida Power Corporation recorded in O.R., Book 4093, Page 245, Public Records of Orange County,

PLOTTED ON SURVEY

6. Distribution Easement in favor of Florida Power Corporation, dba Progress Energy, Florida, Inc. recorded in O.R. Book 8614, Page 617, Public Records of Orange County, Florida. PLOTTED ON SURVEY

7. Rights of the lessees under unrecorded leases.

STANDARD / NON-SURVEY ITEM

- BEARINGS BASED ON THE SOUTH RIGHT OF WAY LINE OF
- LANCASTER ROAD AS BEING N89°35'43"E.
- NO UNDERGROUND UTILITIES, UNDERGROUND FOUNDATIONS, OR UNDERGROUND SIGN BASES WERE LOCATED.
- ELEVATIONS BASED ON ORANGE COUNTY BENCHMARK "L-1491-022" ELEVATION = 100.099 NAVD 1988 DATUM.
- CERTIFIED TO:
- Stephen M. Stone
- Old Republic National Title Insurance Company - SKW Investments Inc., a Florida corporation
- Wefky R. Mansour
- Farouk M. Sos
- United Southern Bank

LEGEND

UTILITY POLE

LIGHT POLE

OVERHEAD POWER LINE

TELEPHONE RISER

STORM MANHOLE

REVISED: 07/01/2021 ELEVATIONS



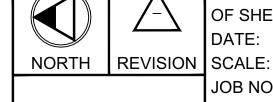
JAMES R. SHANNON JR., P.L.S. #4671 NOT VALID WITHOUT THE SIGNATURE AND THE SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

SHANNON SURVEYING, INC. 499 NORTH S.R. 434 — SUITE 2045 ALTAMONTE SPRINGS, FLORIDA, 32714 (407) 774-8372 LB # 6898

DATE OF SURVEY: 03/12/2021 FIELD BY: NB SCALE: 1" = 20' FILE NUMBER: 26-23-29 500 W LANCASTER

NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO
1				
2				
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NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 500 W LANCASTER ROAD ORLANDO FL 32809 **EXISTING SURVEY TOPOGRAPHICAL**



C2

DRAWING NO

DATE: AS NOTED JOB NO. SKW-LN-DESIGN BY: N.GAJJAR CHECKED BY:R HAUG

REMARKS:

ULTIMATE WIND ZONE. ROBERT. HAUG,

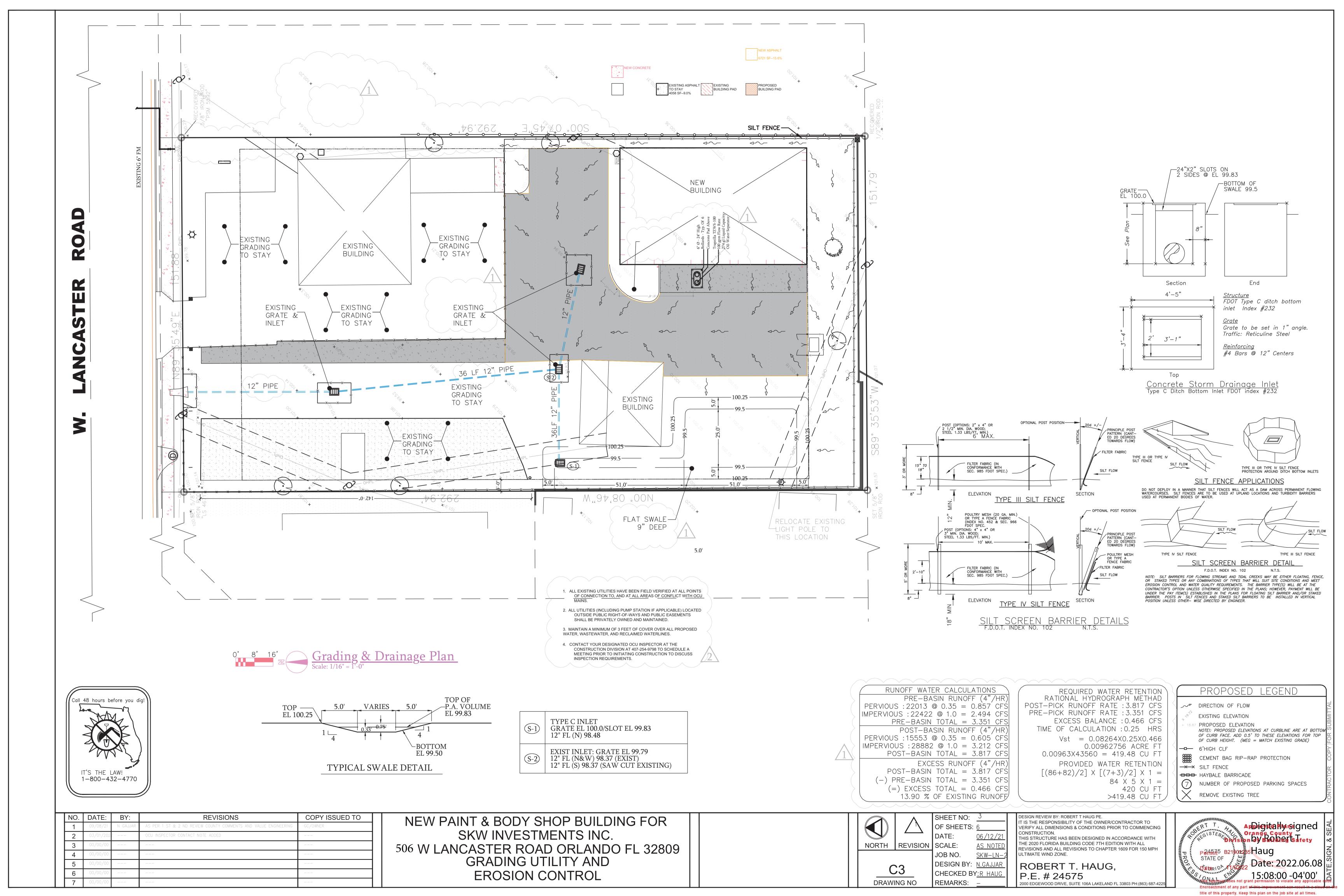
DESIGN REVIEW BY: ROBERT T HAUG PE.

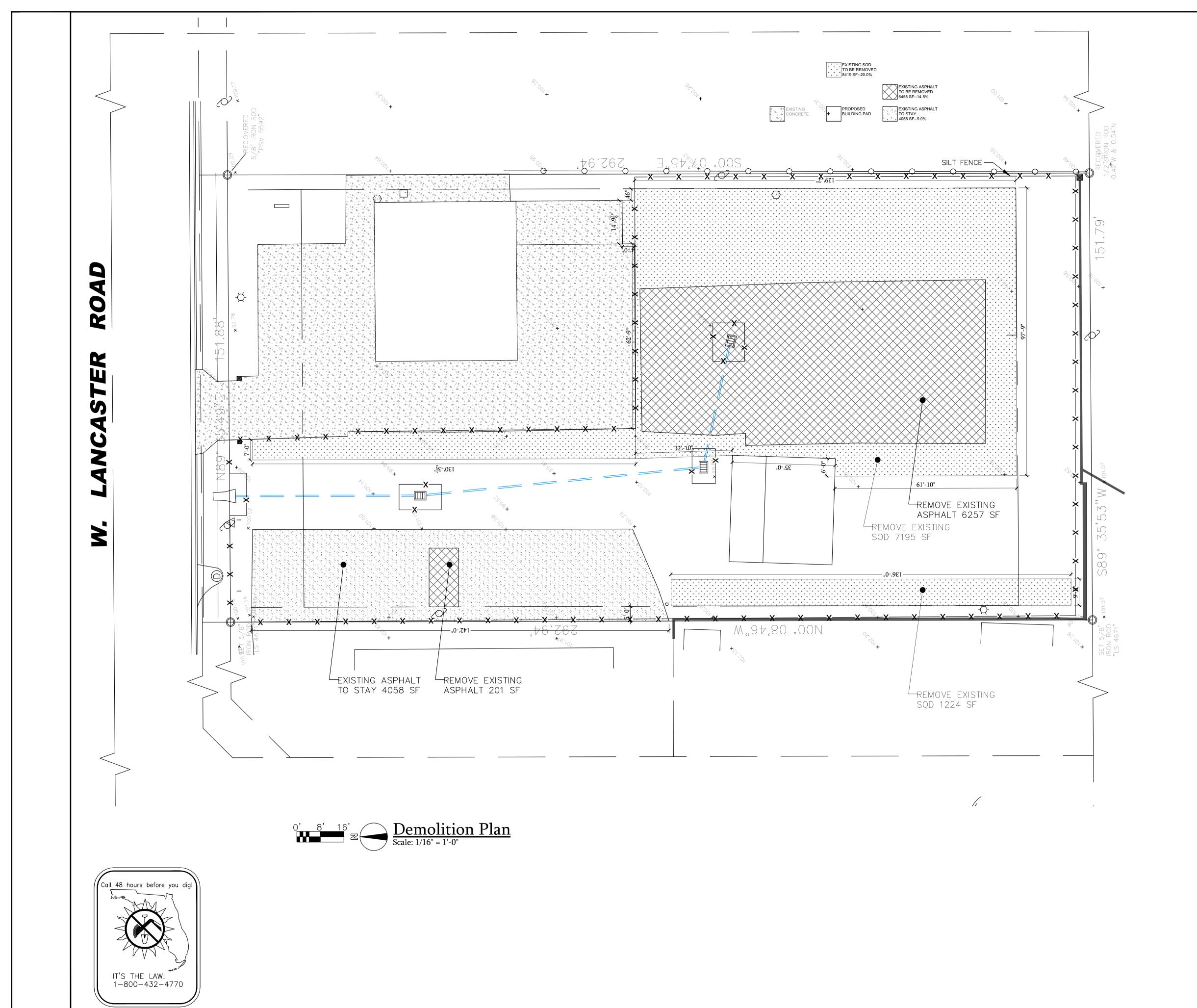
VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH

IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO

P.**E** # 24575 000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-422







PROPOSED LEGEND

→ DIRECTION OF FLOW

EXISTING ELEVATION

+ 18.87 PROPOSED ELEVATION

NOTE!: PROPOSED ELEVATIONS AT CURBLINE ARE AT BOTTOM
OF CURB FACE. ADD 0.5' TO THESE ELEVATIONS FOR TOP
OF CURB HEIGHT. (MEG = MATCH EXISTING GRADE)

CEMENT BAG RIP-RAP PROTECTION

─── HAYBALE BARRICADE

7) NUMBER OF PROPOSED PARKING SPACES

REMOVE EXISTING TREE

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 500 W LANCASTER ROAD ORLANDO FL 32809 DEMOLITION PLAN

NO. DATE: BY:

REVISIONS

COPY ISSUED TO



C4

DRAWING NO

JOB NO. SKW-LN-DESIGN BY: N.GAJJAR

CHECKED BY:R HAUG

REMARKS:

THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL

DESIGN REVIEW BY: ROBERT T HAUG PE. I IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH

REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE. ROBERTI. HAUG, P.E.# 24575 000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

Appigitally signed Date: 2021.07.27 15:42:45 -04'00'

GENERAL CONSTRUCTION NOTES

- ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK. ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL
- 3. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES. STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE
- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES. STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION. . THE CONTRACTOR SHALL CHECK THE PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR

DISCREPANCIES BEFORE PERFORMING ANY WORK IN THE

- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES, AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES, IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION, BY CALLING "SUNSHINE" AT 1-800-432-4770. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT INCLUDED IN THE "SUNSHINE"
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES. ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE
- CONTRACTOR. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR
- INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION. 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS WHICH ARE FROM THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER'S
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES, AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION AS REQUIRED. ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER. OR WITHOUT AGENCY INSPECTOR PRESENT, MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE 11 BACKEILL MATERIAL SHALL BE SOLIDLY TAMPED AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP

10. AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION,

- OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. 12. SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH
- OF AT LEAST 3,000 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED. 13. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. ADDITIONAL COSTS ARE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION IS TO BE
- 14. ALL DISTURBED AREAS WHICH ARE NOT TO BE SODDED, ARE TO BE SEEDED AND MULCHED TO DOT STANDARDS, AND MAINTAINED UNTIL A SATISFACTORY STAND OF GRASS, ACCEPTABLE TO THE REGULATORY AGENCY AND ENGINEER OF RECORD, HAVE BEEN OBTAINED. ANY WASHOUTS, RE-GRADING, RE-SEEDING, AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED FOR MAINTENANCE, BY THE REGULATORY AGENCY AND ENGINEER OF RECORD.
- 15. THE SOILS ENGINEER IS TO SUPPLY THE ENGINEER WITH A PHOTOCOPY OF ALL COMPACTION TESTS, AND ASPHALT RESULTS. THE SOILS ENGINEER IS TO CERTIFY TO THE ENGINEER OF RECORD. IN WRITING, THAT ALL TESTING REQUIREMENTS. REQUIRED BY THE LOCAL REGULATORY AGENCY, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), FOR THE IMPROVEMENTS. AS REQUIRED BY THE ENGINEERING CONSTRUCTION DRAWINGS, HAVE BEEN SATISFIED.
- 16. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE. 17. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY

RESPONSIBLE FOR MEANS AND METHODS FOR CONSTRUCTION

18. ALL SODDING, SEEDING AND MULCHING SHALL INCLUDE WATERING AND FERTILIZATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY THE OWNER.

CLEARING AND GRUBBING NOTES

- PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER
- THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE, WITH THE SOILS TESTING REPORT, COPIES OF THE SOILS REPORT ARE AVAILABLE THROUGH THE OWNER OR THE SOILS TESTING COMPANY. QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY.
- THE CONTRACTOR SHALL CLEAR AND GRUB, ONLY THOSE PORTIONS OF THE SITE, NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
- 4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES. UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 5. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS. ONLY "GRADING BY HAND" IS PERMITTED WITHIN
- THE CANOPY LINE OF TREES THAT ARE TO REMAIN. 6. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES. 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY
- COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING 8. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF
- THE PLANS PRIOR TO DEMOLITION. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY
- CONSTRUCTION PROGRESS. 10. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE 11. WHEN CONSTRUCTION IS COMPLETED. THE RETENTION/DETENTION
- AREAS WILL BE RESHAPED. CLEANED OF SILT, MUD AND DEBRIS. AND RE-SODDED IN ACCORDANCE TO THE PLANS. 12 CONTRACTOR IS TO PROVIDE FROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS.

GRADING AND DRAINAGE NOTES

- 1. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCK, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY DELETERIOUS MATERIAL IS TO BE STOCKPILED. OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. DE-WATERING SHALL BE USED AS REQUIRED.
- ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS 4. PVC STORM PIPE. 12" AND SMALLER SHALL CONFORM TO AWWA
- C-900 CLASS 150 STANDARDS UNLESS OTHERWISE NOTED ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. THE CONTRACTOR IS TO SOD THE RETENTION/DETENTION POND AS
- INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE POND. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH

PAVING NOTES

THE LOCAL REGULATORY AGENCY.

- 1. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER'S
- ENGINEER FOR APPROVAL. 2. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND
- ANY STRUCTURE. ALL PAVEMENT MARKINGS SHALL BE MADE WITH TRAFFIC PAINT IN ACCORDANCE TO FDOT STANDARD SPECIFICATIONS 971-12 OR 971-13. PARKING STALL STRIPING TO BE 4" WIDE PAINTED WHITE STRIPES. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHEN THE
- DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN TWELVE (12) INCHES. STANDARD INDEXES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".

PAVING. GRADING & DRAINAGE **TESTING AND INSPECTION** REQUIREMENTS

- 1. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S SOILS ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE FOUND IN THE ENGINEERING CONSTRUCTION DRAWINGS, UPON COMPLETION OF THE WORK. THE SOILS ENGINEER MUST SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE

S.J.R.W.M.D. /

- **EROSION CONTROL NOTES**
- 1. DURING CONSTRUCTION SEDIMENT IS TO REMAIN ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO INITIATING AND DURING ALL PHASES OF LAND CLEARING AND CONSTRUCTION TO PREVENT SOIL EROSION AND SILTATION.
- ROUGH EXCAVATE RETENTION AREAS. DIRECT ALL SURFACE DRAINAGE TOWARD RETENTION AREA DURING
- 4. AFTER PAVING, GRADE RETENTION AREAS TO CONTOURS, SHAPE AS
- SHOWN AND SOD. 5. ALL DISTURBED CONDITIONS SHALL BE RESTORED TO NATURAL
- CONDITIONS OR BETTER. 6. ALL SIDE SLOPES OF RETENTION OR SWALE AREAS SHALL BE STABILIZED BY VEGETATION OR OTHER MATERIALS TO MINIMIZE EROSION AND PROTECT THE STORMWATER BASIN. NOTE: PLAN CONFLICTS, SHOWN OR UNSHOWN, WITH OTHER EXISTING SITE

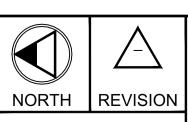
IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE

CONTRACTOR TO MAKE ADJUSTMENTS AND PROTECT OR REINSTALL ALL DISTURBED EXISTING UTILITIES, PHONE LINES, POWER LINES, POWER SUPPORT CABLES, SPRINKLER LINES AND CONTROLS, MECHANICAL PIPELINES OR UNDERGROUND POWER CABLES AND RETURN EXISTING CONCRETE WALKS, DUMPSTER PADS, FENCE, HANDRAIL, VALVES, HYDRANTS, GUY WIRES, ELECTRIC BOXES AND PIPELINES WHICH SHALL BE REPAIRED OR REINSTALLED AS INCIDENTAL TO THE COST OF WORK SHOWN HEREUNDER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE ANY CONFLICTS PRIOR TO AWARD OF THE CONTRACT. NOTE: REQUIRED

EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION WHICH MAY INCLUDE CITATIONS. AS PROVIDED BY CHAPTERS 40D-4 & 40D-40 F.A.C. INITIATION OF CIVIL PENALTY PROCEDURES PURSUANT TO SECTION 373.129. F.A.C. CAN RESULT IN A PENALTY NOT TO EXCEED \$10,000 PER OFFENSE WITH EACH DATE DURING WHICH SUCH VIOLATION OCCURS CONSTITUTING A OFFENSE.

NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO
1				
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NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 500 W LANCASTER ROAD ORLANDO FL 32809 SPECIFICATIONS & NOTES



<u>C5</u>

DRAWING NO

SCALE: JOB NO.

REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH SKW-LN-DESIGN BY: N.GAJJAR CHECKED BY: R HAUG REMARKS:

DESIGN REVIEW BY: ROBERT T HAUG PE. IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH

ULTIMATE WIND ZONE. ROBERT. HAUG,

P.**E** # 24575 2000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL



HOR	RIZON	TAL S	SEPAF	RATIC	N RE	QUIR	REMEN	ITS (NO	TES 1	& 2)
PROPOSED UTILITY		POTABLE WATER (NOTE 3)		RECLAIMED WATER MAIN (SEE NOTE 7)		WASTEWATER FORCEMAIN		SANITARY SEWER	STORM SEWER	STRUCTURAL FOUNDATION, WALLS, ETC. (SEE NOTE 8)
		4"-12"	16"-UP	4"-12"	16"-UP	4"-12"	16"-UP	ALL SIZES	ALL SIZES	ALL SIZES
POTABLE WATER	4"-12"	3'	5'	3'	5'	6'	6'	6'	3'	10'
(NOTE 3)	16"-UP	5'	5'	5'	5'	6'	6'	6'	5'	15' (NOTE 5)
RECLAIMED WATER MAIN	4"-12"	3'	5'	3'	5'	3'	5'	3'	3'	10'
(SEE NOTE 7)	16"-UP	5'	5'	5'	5'	5'	5'	5'	5'	15' (NOTE 5)
WASTEWATER	4"-12"	6'	6'	3'	5'	3'	5'	3'	3'	10'
FORCEMAIN	16"-UP	6'	6'	5'	5'	5'	5'	5'	5'	15' (NOTE 5)
SANITARY SEWER	ALL SIZES	6'	6'	3'	5'	3'	5'	3'	5'	VARIES PER DEPTH

MAINS, ETC.

DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND

- MAINTENANCE. FOR PIPES INSTALLED AT GREATER DEPTHS THAN THE MINIMUM OCU DESIGN STANDARDS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH. THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES PRIOR TO INSTALLATION.
- 4. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
- PRESSURE MAINS 16-IN TO 24-IN MAY HAVE 10-FT SEPARATION FROM STRUCTURAL FOUNDATION, WALLS, ETC IF NEW MAINS ARE RESTRAINED FOR THE ENTIRE LENGTH.
- REFERENCE FIGURE A116-2 FOR VERTICAL PIPELINE SEPARATION REQUIREMENTS.
- RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. ADDITIONAL SEPARATION SHALL BE REQUIRED BY UTILITIES FOR CONSTRUCTION OF, INCLUDING, BUT NOT LIMITED TO: LIVE LOADS, MULTI-STORY COMMERCIAL BUILDINGS, SUPERSTRUCTURES. EMBANKMENTS, RETAINING WALLS, BRIDGES, RAILROADS, HIGH VOLTAGE TRANSMISSION MAINS, GAS

ORANGE COUNTY UTILITIES FIGURE A116-1 STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL

TWO NON-PENETRATING PICK HOLES MACHINED MATING 25.75" (STANDARD) SURFACES }-!?-!?-!?}-!?-!?}-!?-!?-!?-!?-!? 24" ± 0.375" 4.75" MIN **ELEVATION** 1. ONLY APPLIES TO UTILITIES OWNED AND MAINTAINED MANHOLES. "ORANGE COUNTY" SHALL NOT APPEAR ON PRIVATE MANHOLES.

STANDARD MANHOLE FRAME & COVER

STANDARD DRAWINGS

APPENDIX A

RAISED 1.5" LETTERS FLUSH

SPECIFICATIONS MANUAL

WITH TOP OF COVER

ORANGE COUNTY UTILITIES FIGURE A305 **STANDARDS & CONSTRUCTION**

ORANGE COUNTY UTILITIES STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL STANDARD DRAWINGS **GENERAL** APPENDIX A DATE: February 11, 2011 **GREASE INTERCEPTOR** FIGURE A307-1 REINFORCED CONCRETE MINIMUM 4000 PSI AT-6" MIN THICKNESS 4" MIN Ø INSPECTION CONCRETE -CLEAR ACCESS PRECAST BAFFLE 4" MINIMUM Ø -L 4" MINIMUM Ø 4" MINIMUM Ø INSPECTION TEE CLEANOUT-PLAN VIEW -PAVING OR GRADE OTHER WATERTIGHT SEALANT CLEANOUT TEE _ 4" MIN. Ø INSPECTION TEE 4" MIN Ø INLET 4" MIN Ø OUTLET TO SANITARY **CLEANOUT TEE** PRECAST BAFFLE SEWER MAIN 4" MIN THICKNESS -6" MIN PVC -8" IF INLET + 42" MIN LIQUID PIPE IS 8" DEPTH 6" MIN THICKNESS 9" MIN . SPECIFIC DESIGN DETAILS MUST IN ALL ASPECTS MEET APPLICABLE FLORIDA PLUMBING AND ADMINISTRATIVE CODE. 2. SIZE GREASE INTERCEPTOR PER OCU MANUAL, SECTION 2310. MINIMUM SIZE 750 GAL; MAXIMUM SIZE 1250 GAL. INTERCEPTORS SHALL BE WATER AND GAS TIGHT 4. ALL FIXTURES LOCATED IN FOOD AND BEVERAGE PREPARATION AREAS SHALL BE ROUTED THOUGH GREASE INTERCEPTOR. RESTROOM WASTE SHALL NOT BE ROUTED THROUGH INTERCEPTOR. BAFFLE REQUIRED; ALTERNATIVE DESIGNS ARE ACCEPTABLE. DESIGN MUST MEET FLORIDA PLUMBING AND ADMINISTRATIVE 6. LOADS: H-20 TRUCK WHEELS WITH 30% IMPACT PER AASHTO. TRAFFIC BEARING FRAME AND COVER TO MEET FDOT STANDARD

APPENDIX A STANDARD DRAWINGS BEDDING & TRENCHING - TYPE A FINISHED GRADE TRENCH WIDTH **VARIES** W/ PIPE SIZE **COMMON FILI** (SEE NOTE 4) PIPE O.D. 12" (TYP) INITIAL **BACKFILL** HAUNCHING (SEE NOTE 8) **COMMON FILL UNDISTURBED** MIN 24" WATER LEVEL EARTH (SEE NOTE 5) (SEE NOTE 3)

1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO

- 2. TRENCH BACKFILL: COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180. 3. PIPE BEDDING UTILIZING SELECT COMMON FILL IN ACCORDANCE WITH "TYPE B" BEDDING
- AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
- 4. 15-IN MAX. (12-IN MIN.) FOR PIPE DIAMETER LESS THAN 24-IN AND 24-IN MAX (12-IN MIN) FOR PIPE DIAMETER 24-IN AND LARGER.
- 5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION DEWATERING AS REQUIRED.
- 6. ALL PIPE SHALL BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE
- 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF
- RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS. 8. FOR GRAVITY SEWER, THE FIRST LIFT SHALL BE PLACED TO THE SPRING LINE OF THE PIPE AND COMPACTED BY HAND TAMP.
- 9. CONTRACTOR SHALL USE BEDDING AND TRENCHING TYPE B DETAIL FOR OVER EXCAVATION AND WHEN UNSUITABLE MATERIALS ARE ENCOUNTERED IN THE EXCAVATION.

ORANGE COUNTY UTILITIES STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL

FIGURE A101

APPENDIX A

OCU GENERAL NOTES

- 1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF INCLUDING BUT NOT LIMITED TO: WATER MAINS WASTEWATER FORCE MAINS GRAVITY MAINS RECLAIMED WATER MAINS ELECTRIC. GAS. CABLE TV. TELECOMMUNICATIONS. STORM WATER. FIBER OPTIC AND OTHER UNDERGROUND FACILITIES. MAIN LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
- SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR.
- THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION INSPECTION SECTION, FIELD SERVICES DIVISION AT LEAST 10 CALENDAR DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT BY CALLING (407)
- 4. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION INSPECTOR IN ACCORDANCE WITH TABLE 4110-1
- "UTILITIES' SCHEDULE OF NOTIFICATIONS IN THIS MANUAL 5. THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE OCU SYSTEM SHALL BE
- IN CONFORMANCE WITH THE STANDARDS, CONSTRUCTION SPECIFICATIONS, AND APPENDIX D IN THIS MANUAL. ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO: WATER MAINS. FORCE MAINS. RECLAIMED WATER MAIN. SANITARY GRAVITY PIPES. STORM WATER PIPES, ELECTRIC, TELEPHONE, GAS, POLES AND STAYS, CABLE TV AND OTHER UTILITY FACILITIES WITHIN THE LIMITS OF THE PROJECT WILL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL ADJUST ALL EXISTING OCU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, CURBS, OR STORM WATER IMPROVEMENTS. OCU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO: PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS. ALL ADJUSTMENTS SHALL BE MADE TO CURRENT STANDARDS
- 8. ONLY OCU PERSONNEL SHALL OPERATE EXISTING OCU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR IS RESPONSIBLE FOR OPERATING ANY NEWLY INSTALLED VALVE THAT HAS NOT BEEN CLEARED FOR USAGE BY FDEP AND OCU. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE OCU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY OCU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE. 9. CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED
- WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE-APPROVED INTERRUPTIONS OF SERVICE WITH THE OCU INSPECTOR 7 WORKING DAYS IN ADVANCE AND WRITTEN NOTICE SHALL BE GIVEN TO AFFECTED CUSTOMERS AT LEAST 4 WORKING DAYS IN ADVANCE. 10. THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND / OR HAULING OF WASTEWATER DURING APPROVED
- INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS OR HAUL PLAN. REVIEWED AND APPROVED BY A PROFESSIONAL ENGINEER TO OCU DEVELOPMENT ENGINEERING AND TO THE INSPECTOR FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR. 11. ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING

CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY

- CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND OCU. 12. THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH AN APPROVED BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO
- RECLAIMED WATER OR FORCE MAIN SHALL ALSO BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTER. 13. FOR PVC PIPE, NO JOINT DEFLECTION OR PIPE BENDING IS ALLOWED. ALIGNMENT CHANGE SHALL BE MADE ONLY 14. FOR DIP PIPE, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS. FITTINGS AND LAYING RADIUS
- FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION 15. FOR APPROVED PVC OR HDPE PIPE USED IN A HORIZONTAL DIRECTIONAL DRILL INSTALLATION, THE CURVATURE AND/OR DEFLECTION SHALL NOT EXCEED THE PARAMETERS ESTABLISHED IN THIS MANUAL.
- 16. ALL DAMAGE TO ORANGE COUNTY INFRASTRUCTURE, PIPELINES, AND ASSETS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE WITH AN APPROVED METHOD BY THE COUNTY. IF THE REPAIR IS NOT PERFORMED IN A TIMELY MANNER, AS DETERMINED BY THE ORANGE COUNTY UTILITY INSPECTOR, ORANGE COUNTY MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
- 17. THE CONTRACTOR SHALL BE LIABLE FOR ANY AND ALL SANITARY SEWER OVERFLOWS (SSO) ASSOCIATED WITH THE WORK, REGARDLESS OF FAULT. THE CONTRACTOR WILL BE ASSESSED PENALTIES FOR ANY AND EACH SSO AS SPECIFIED IN SECTION 3110, GENERAL CONSTRUCTION REQUIREMENTS.

ORANGE COUNTY UTILITIES

STANDARDS & CONSTRUCTION

SPECIFICATIONS MANUAL

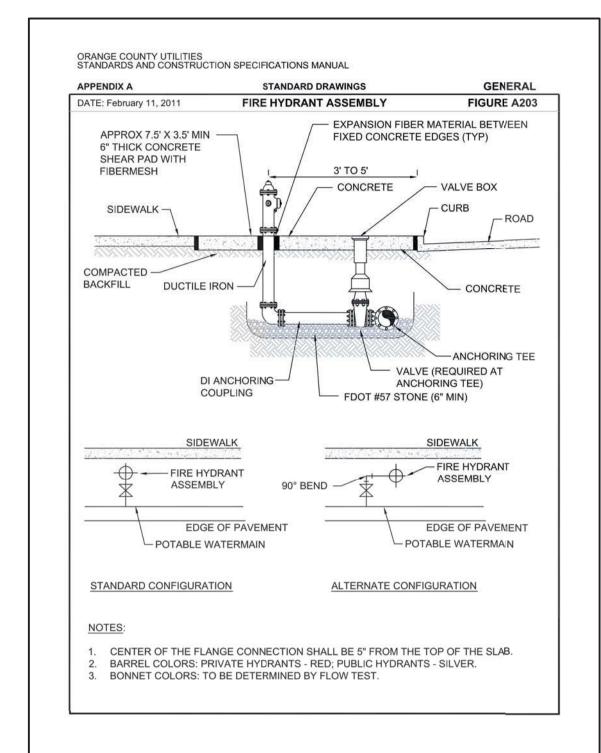
APPENDIX A

10/10/2021

STANDARD DRAWINGS

FIGURE GN

STANDARD DRAWINGS



BEDDING & TRENCHING - TYPE B FINISHED GRADE TRENCH WIDTH **VARIES** W/ PIPE SIZE **COMMON FILL** (SEE NOTE 4) PIPE O.D.

12" (TYP) **INITIAL BACKFILL** (SEE NOTE 1) **COMMON FILL** HAUNCHING **BEDDING MATERIAL** (SEE NOTE 8) (SEE NOTE 10) BEDDING (SEE NOTES 9 & 10) UNDISTURBED EARTH MIN 24" WATER LEVEL (SEE NOTE 5)

- 1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180. 2. TRENCH BACKFILL: COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR
- FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180. 3. PIPE BEDDING UTILIZING SELECT COMMON FILL IN ACCORDANCE WITH "TYPE B" BEDDING
- AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES. 4. 15-IN MAX. (12-IN MIN.) FOR PIPE DIAMETER LESS THAN 24-IN AND 24-IN MAX (12-IN MIN) FOR PIPE DIAMETER 24-IN AND LARGER.
- 5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATERING
- 6. ALL PIPE SHALL BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE
- REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
- 8. FOR GRAVITY SEWER, THE FIRST LIFT SHALL BE PLACED TO THE SPRING LINE OF THE PIPE AND COMPACTED BY HAND TAMP.
- 9. BEDDING DEPTH SHALL BE 4-IN MINIMUM FOR PIPE DIAMETER UP TO 12-IN AND 6-IN MINIMUM FOR PIPE DIAMETER 16-IN AND LARGER.

10. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF REQUIRED BEDDING MATERIAL BELOW THE PIPE. UTILITIES SHALL DETERMINE REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION IN THE FIELD.

ORANGE COUNTY UTILITIES FIGURE A102 **STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL**

NO. DATE: BY: **REVISIONS** COPY ISSUED TO

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 OCU APPLICABLE STANDARD DETAILS



C3.

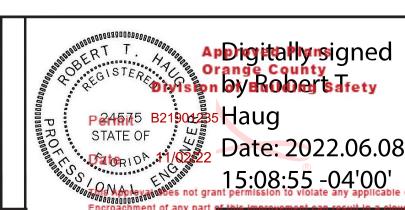
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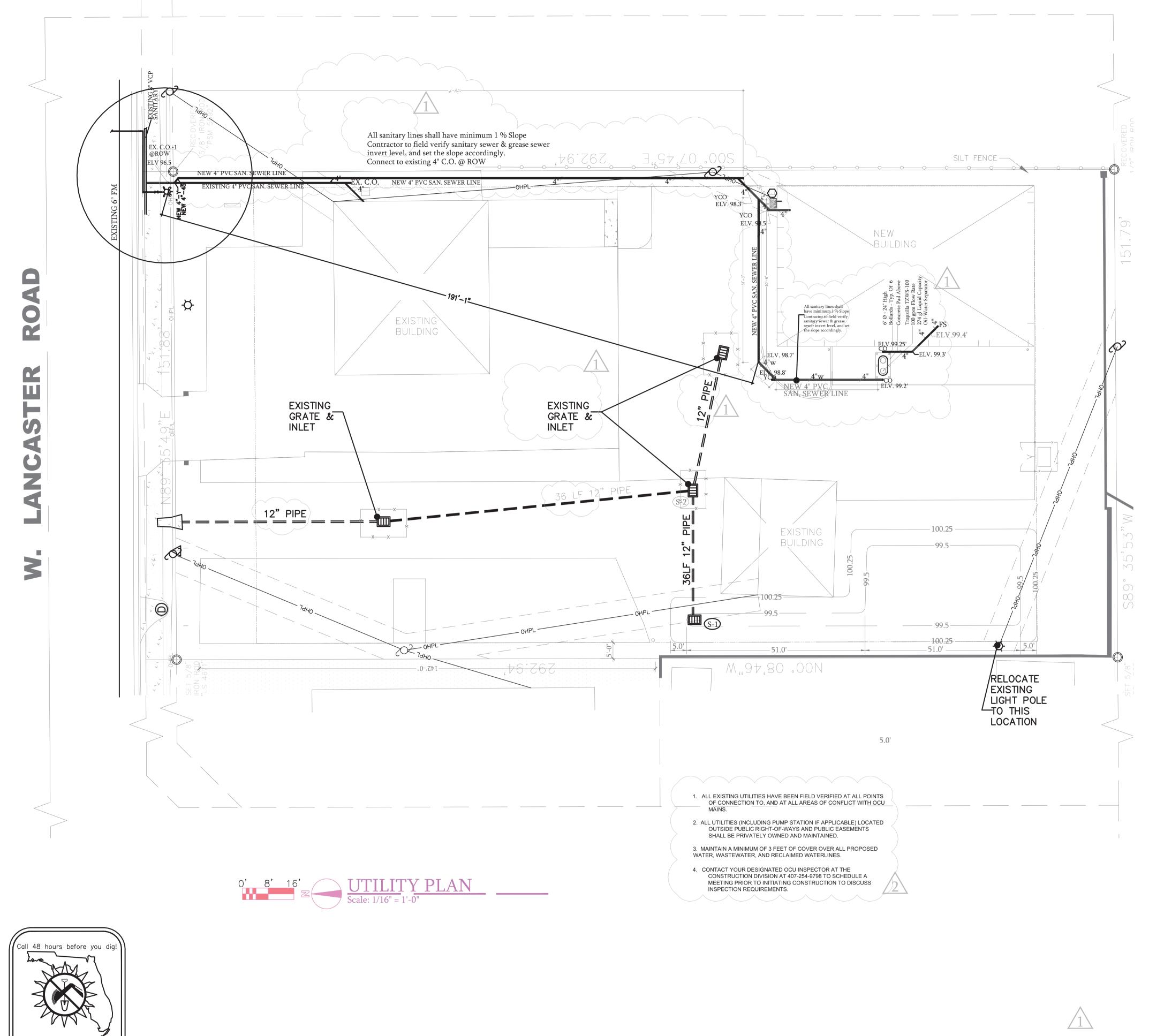
SHEET NO: SCALE: JOB NO. DESIGN BY: N.GAJJAR CHECKED BY:R HAUG

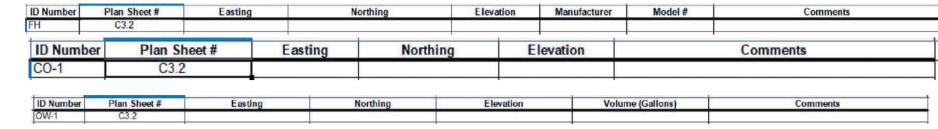
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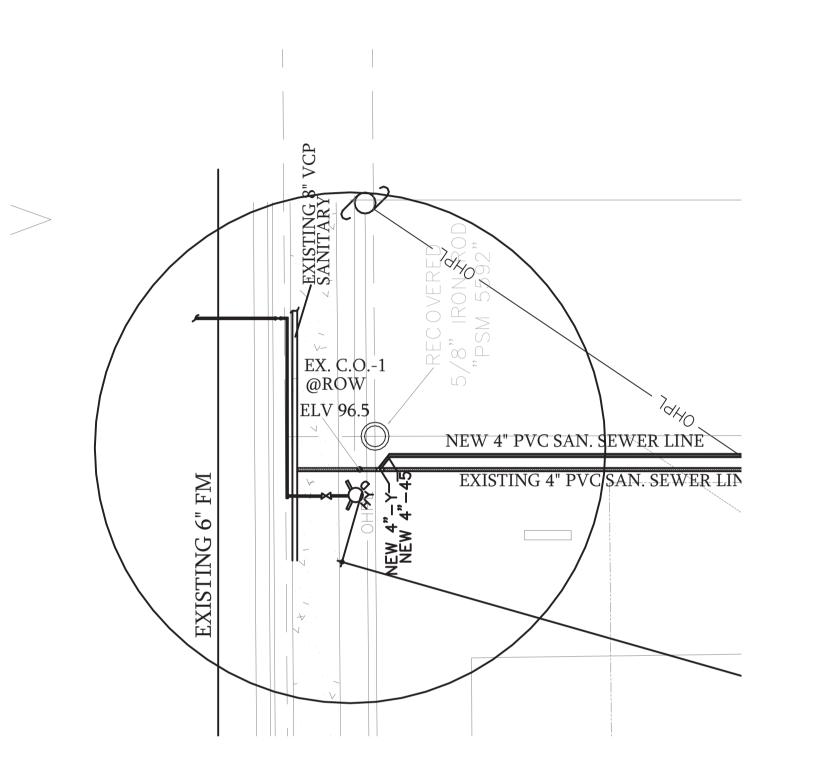
DESIGN REVIEW BY: ROBERT T HAUG PE. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

ROBERT T. HAUG, P.E. # 24575 2000 EDGEWOOD DRIVE. SUITE 106A LAKELAND FL 33803 PH:(863) 687-422









PROPOSED LEGEND

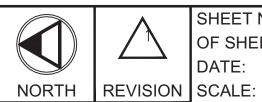
- → DIRECTION OF FLOW
- EXISTING ELEVATION
 - 7 PROPOSED ELEVATION
- NOTE!: PROPOSED ELEVATIONS AT CURBLINE ARE AT BOTTOM OF CURB FACE. ADD 0.5' TO THESE ELEVATIONS FOR TOP
 OF CURB HEIGHT. (MEG = MATCH EXISTING GRADE)
- CEMENT BAG RIP-RAP PROTECTION

- HAYBALE BARRICADE
- NUMBER OF PROPOSED PARKING SPACES
 - REMOVE EXISTING TREE

NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO
1	09/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER
2	03/01/202	2	OCU INSPECTOR CONTACT NOTE ADDED	
3	00/00/00			
4	00/00/00			
5	00/00/00			
	00/00/00			

1-800-432-4770

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 UTILITY PLAN



C3.2

DRAWING NO

JOB NO. SKW-LN-2 DESIGN BY: N.GAJJAR

CHECKED BY:R HAUG

REMARKS:

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

2000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO

VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING

ROBERT T. HAUG, P.E. # 24575

DESIGN REVIEW BY: ROBERT T HAUG PE.

ApDigitally signed Date: 2022.06.08

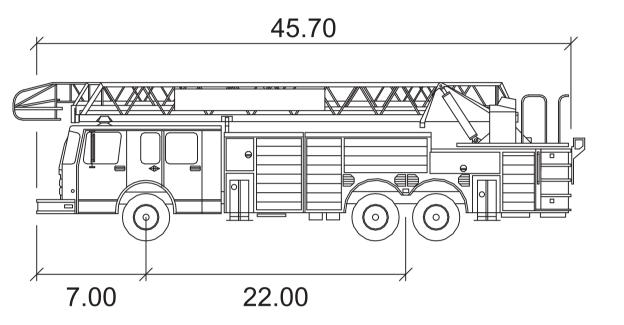
1) FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1,

2) A WATER SUPPLY FOR FIRE PROTECTION, ÉITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1).

3) WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 1, 16.4.3.1.3). 4) FIRE FLOW TESTING SHALL BE PERFORMED IN ÁCCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING.

5) A 36 IN. CLEAR SPACE SHALL BE

MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7. 6) HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10



OCFRD

	1001
Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 6.0
Steering Angle	: 44.2

DESIGN CRITERIA

Florida Fire Prevention Code 7th Edition

	NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO
	1	03/01/22	N GAJJAR	SWEPT PATH ANALYSIS AND FIRE TRUCK SPECIFICATIONS	GC/OWNER
ſ	2	00/00/00			
ſ	3	00/00/00			
	4	00/00/00			
	5	00/00/00			
Γ	6	00/00/00			

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 TURNING RADIUS ANALYSIS

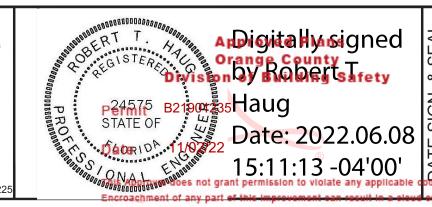


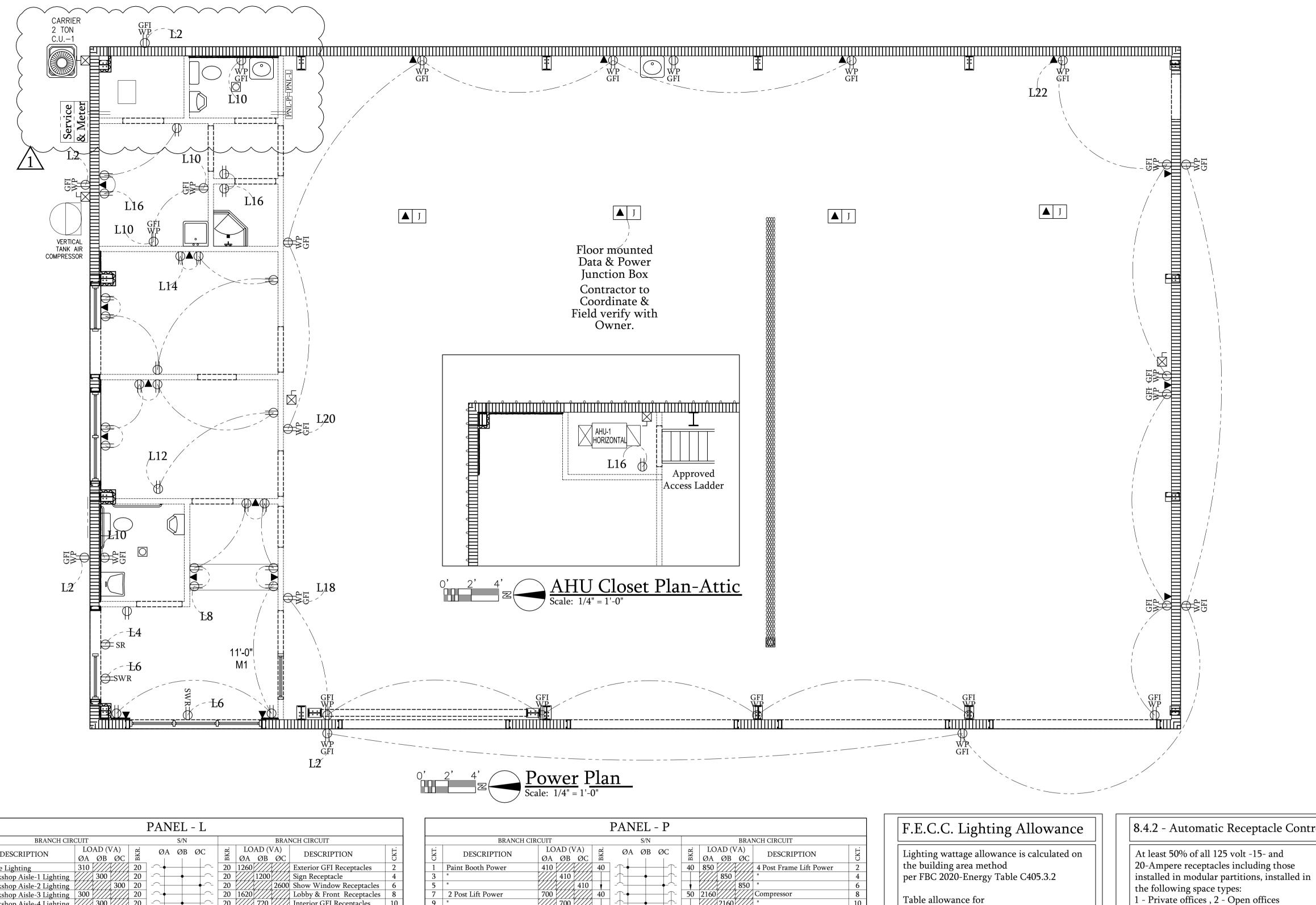
DRAWING NO

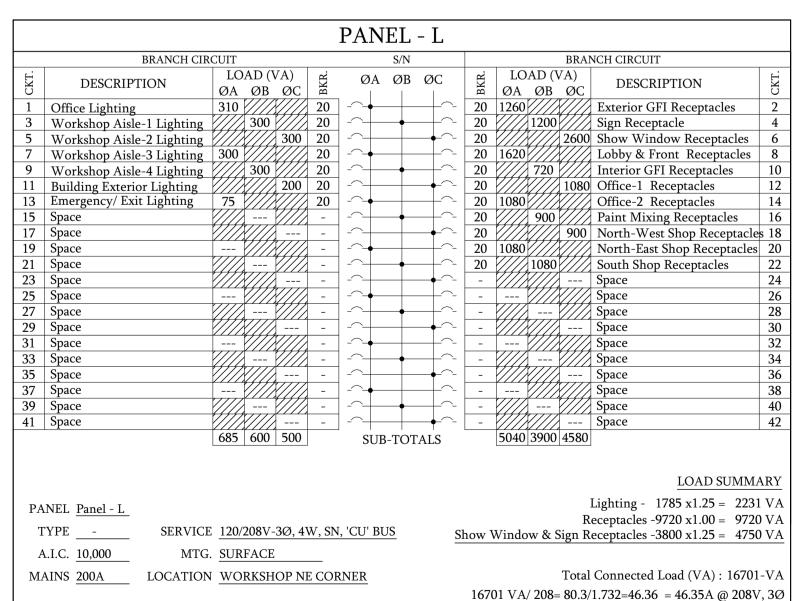
DESIGN BY: N.GAJJAR CHECKED BY:R HAUG REMARKS:

IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

ROBERT T. HAUG, P.E. # 24575







REVISIONS

AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING

COPY ISSUED TO

NO. DATE:

00/00/00

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	BRANCH (CIRCUIT			S/N			BRA	NCH CIRCUIT	
CKT.	DESCRIPTION	LOAD (VA) ØA ØB ØC	BKR.	ØA	ØB	ØC	BKR.	LOAD (VA) ØA ØB ØC	DESCRIPTION	CKT.
1	Paint Booth Power	410	40] -			40	850	4 Post Frame Lift Power	2
3	n	410] -	_	 -		850	"	4
5	II	410	<u> </u>] -^-			_ +	850		6
7	2 Post Lift Power	700	40	<u></u>		+ $-$	50	2160	Compressor	8
9	II	700] -	_	$+\uparrow$		2160	"	10
11	II .	700] -^-		<u> </u>	_ +	216		12
13	CU-1	1335	20	<u> </u>		$+$ \uparrow -	20	2500	AHU-1	14
15	II .	1335] -^-	_			2500	"	16
17	Instant Water Heater-2	1000	20] -			20	//////////	Instant Water Heater-1	18
19	п	1000		<u> </u>			_ +	1000] "	20
21	Space	///	-	l -^+	_		20	1000	Instant Water Heater-3	22
23	Space	///////	-	l -^+				100		24
25	CU-2	1920	20	」 -←		$+$ \uparrow -	20	1920	AC-1	26
27	"	1920	_ †	l -^+	_		_ †	1920	7 "	28
29	Space	///////	-	l -^+		<u> </u>	-	///////	Space	30
31	Space	////////	-	<u>^</u> +			-	////////	Space	32
33	Space	//// ////	-	l -^+	_		_	//// ////	Space	34
35	Space	////////	-	^ 		<u> </u>	_	/////////	Space	36
37	Sub Panel - "L"	5725	-	│ -			_	////////	Lightening & Surge Protector	
39	"	4500	-	! <u>^</u>	_		_	////	<u> " </u>	40
41	"	5080	-] -^-		-	-	////////	"	42
		11090 8865 7190			-TOT			8430 8430 5010	<u>)</u>	
	ower Note : The	0		_	-					
it	shall be revised	as per Owne	r's	choic	e o	f equi	pm	ents.	LOAD SUMMA	ARY
PA	NEL <u>Panel - P</u>	-			I	ighting,	sign	& show window	power factor addition -= 1396	5 VA
Т	YPE SERVI	ICE <u>120/208V-3Ø, 4V</u>	V, SN	I, 'CU' BU	J <u>S</u>]	Receptacles -0000 x1.00 = 0000) VA
A	.I.C. <u>10,000</u> M	ГG. <u>SURFACE</u>						Panel -L +All E	quipments-49015 x1.00 = 49015	5 VA
MA	AINS 400A LOCATION	ON WORKSHOP NE	COI	RNER				Tota	l Connected Load (VA) : 50411	-VA

NEW PAINT & BODY SHOP BUILDING FOR
SKW INVESTMENTS INC.
500 W LANCASTER ROAD ORLANDO FL 32809
ELECTRICAL POWER PLAN -DETAILS - NOTES
PANEL SCHEDULES & RISER

42731 VA / 360 V = 140 A = 140.0 A @ 208V, 3Ø

8.4.2 - Automatic Receptacle Control

Table allowance for Automotive Facility space is 0.71w/sqft. Total interior lighting wattage is 1785. Gross area is 4000 sqft. 1785/4000 = 0.45So building lighting allowance is compliant.

Show Window & Sign Outlets

Load Calculation

Show Window Outlets as per 220.43 200 VA / Liner Foot 9'-8" x 200 = 1933 $3'-4" \times 200 = 667$

 $\overline{2600} \text{ VA} - 2600 \text{ x} 1.25 = 3250 \text{ VA}$ Total

Sign Outlets as per 220.14(F) 1200 VA / Each $1 \times 1200 = 1200$

1200 VA - 1200 x1.25=1500 VA



DRAWING NO

building occupant (s)

3 - Computer Classrooms

device that shall function on:

but no more than one floor or

occupants leaving a space or

shall be controlled by an automatic control

A - A scheduled basis using ,a time-of-day

off at specific programmed times an independent program schedule shall be

B - An occupant sensor that shall turn

receptacles off within 30 minutes of all

C - A signal from another control or alarm

system that indicates the area is unoccupied.

Ex1ceptions: Receptacles for the following

A - Receptacles specifically designated for

equipment required 24 hour operation.

shall not require an automatic control device.

B - Spaces where an automatic shut-off would

endanger the safety or security of the room or

operated control device that turns receptacles

provided for areas of no more than 25 000 sf

DATE: JOB NO. DESIGN BY: N.GAJJAR CHECKED BY:R HAUG

REMARKS:

<u>12/12/20</u> <u>AS NOTED</u> SKW-LN-

DESIGN REVIEW BY: ROBERT T HAUG PE. IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING

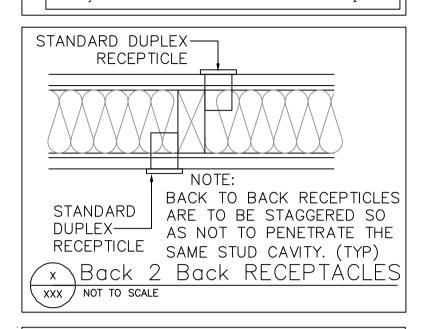
THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

ROBERTI. HAUG, P**.E**.# 24575

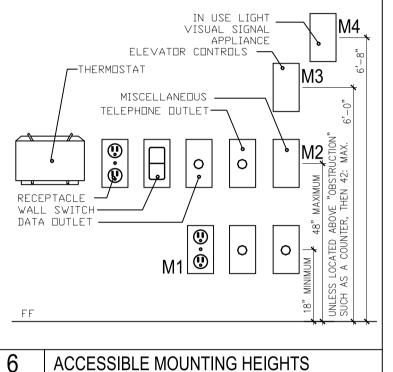


marked according to 2014 nec article 406.3 (e). E0011c Show window receptacles required and installed within 18 inches of the top of the window. (article 210.62). Receptacle within 6' of water outlets shall be GFI Receptacles shall be half controlled receptacles tied into occupancy sensors which control the space. receptacles to be p+s rf receptacles and signal pack or similar. controlled receptacles installed per FBC EC code chapter 4 section (405.6) shall be permanently marked as per NEC 406.3 (e) t visually differentiate them from uncontrolled receptacles.

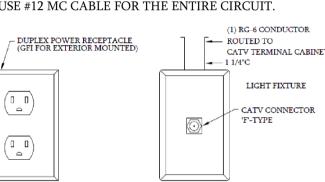


E0004d Automatic receptacle control; the provisions for electrical distribution for all sections of this code are subject to the design conditions in ashrae standard 90.1, section 8.4.2. (c405.6.1) controlled receptacles shall be

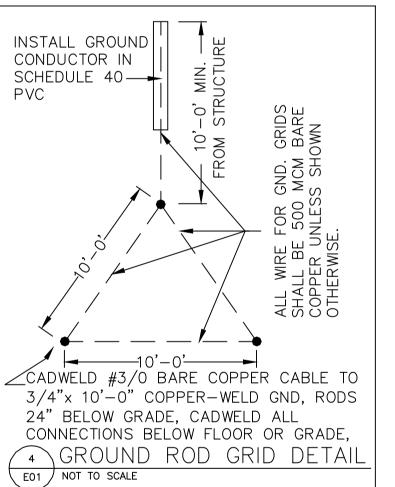
Code Note

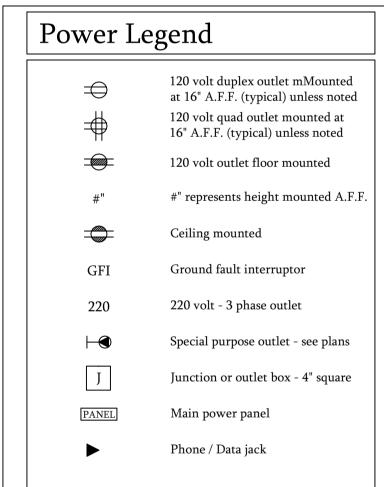


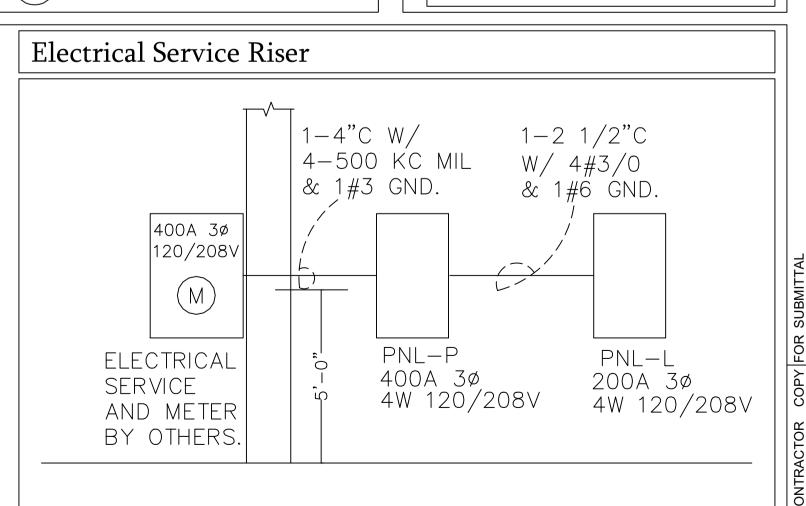
POWER GENERAL NOTES COORDINATE EXACT RECEPTACLE AND DATA LOCATIONS WITH FURNITURE AND OWNER MOUNT RECEPTACLES & DATA OUTLETS WITHIN CASE WORK. COORDINATE EXACT MOUNTING WITH MILL WORK. 3. LOCATE RECEPTACLE ON UNIT AS SERVICE RECEPTACLE. DO NOT ROUTE CONDUIT ON OR ABOVE ROOF. 4. USE #12 MC CABLE FOR THE ENTIRE CIRCUIT.

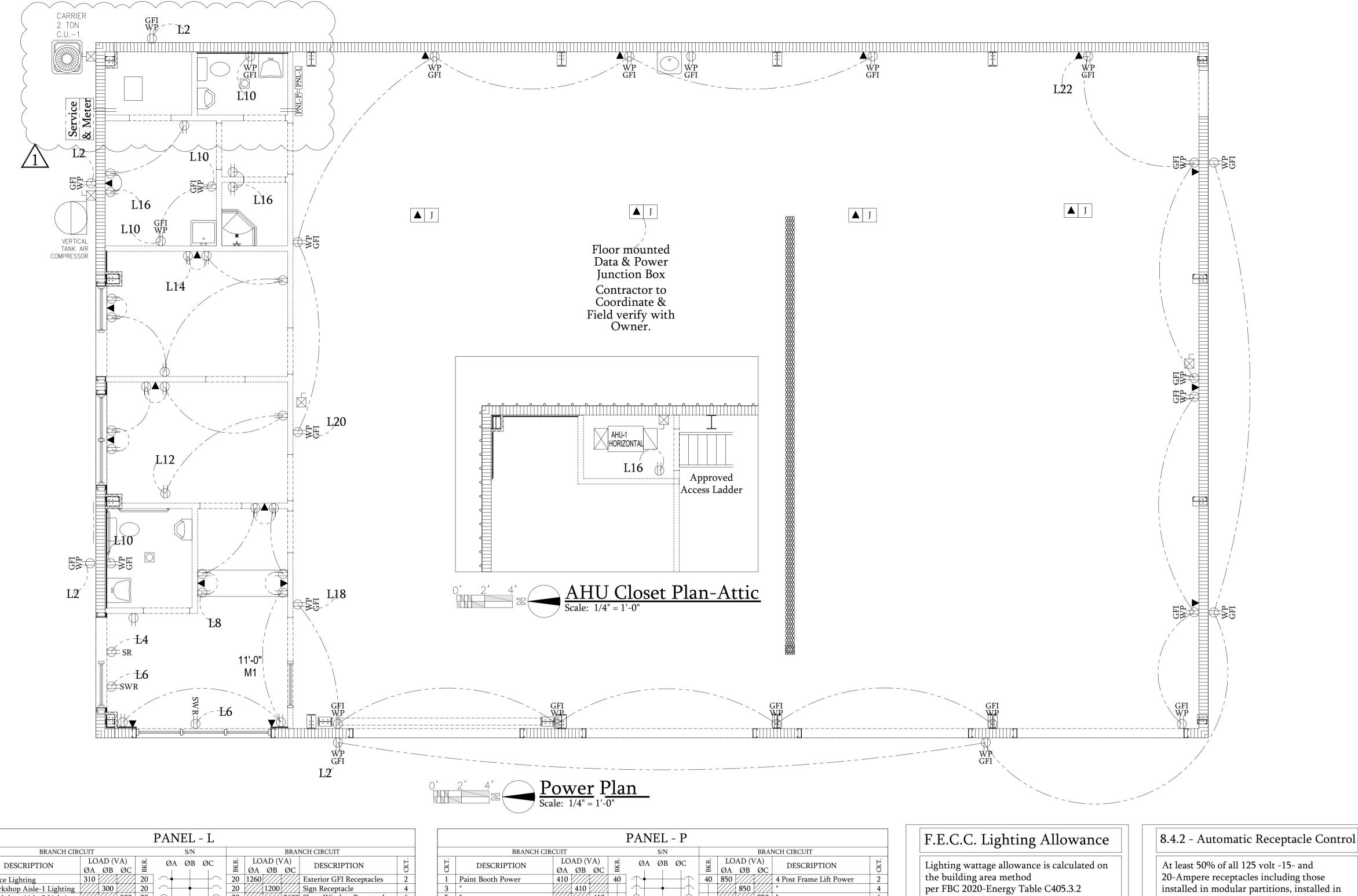


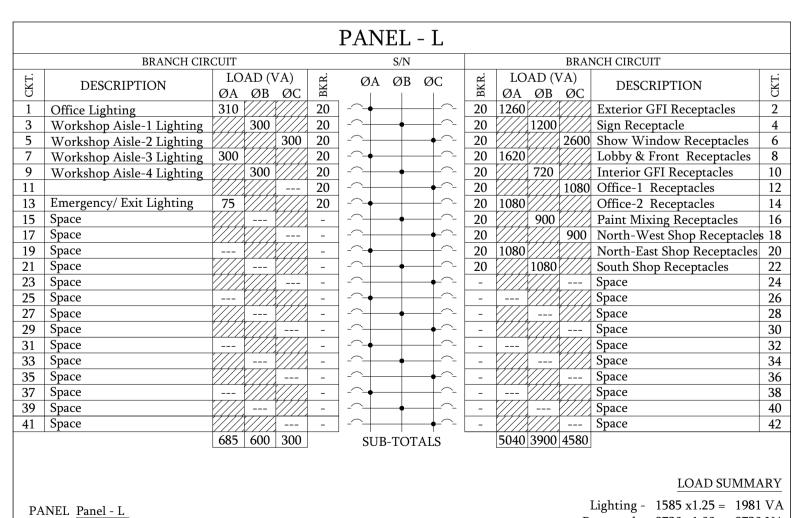
TYPICAL TV OUTLET/RECEPTACLE DETAIL NOT TO SCALE SYMBOL REPRESENTS POWER DUPLEX RECEPTACLE AND T.V. OUTLET. TYPICAL FOR ALL $_{\odot}$ SHOWN ON DRAWING.











	A.I.C. <u>10,000</u> MAINS 200A		TG. <u>SURFACE</u> ON WORKSHOP NE CORNER	Total C	onnected Load (VA) : 16451-VA
	MAINS ZOUA	LOCATION	ON WORKSHOP NE CORNER		732=45.66 = 46.66A @ 208V, 3Ø
				10431 VA/ 200= 79.0/1.	732=43.00 = 40.00A @ 206 v , 30
N	IO. DATE	: BY:	REVISIO	DNS	COPY ISSUED TO
N	1 09/08/2		REVISION AS PER 1 ST & 2 ND REVIEW COUNTY COM	-	COPY ISSUED TO GC/OWNER

2 | 00/00/00 | ---

3 | 00/00/00 | ---

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7 | 00/00/00 |

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 ELECTRICAL POWER PLAN -DETAILS - NOTES PANEL SCHEDULES & RISER

SUB-TOTALS

Power Note: The load assigned to equipments are not final.

it shall be revised as per Owner's choice of equipments.

SERVICE 120/208V-3Ø, 4W, SN, 'CU' BUS

MAINS 400A LOCATION WORKSHOP NE CORNER

2 Post Lift Power

13 CU-1

Space Space Space

35 Space 37 Sub Panel - '

PANEL Panel - P

A.I.C. 10,000

TYPE -

Receptacles -9720 x 1.00 = 9720 VA

Automotive Facility space is 0.71w/sqft. Total interior lighting wattage is 1785. Gross area is 4000 sqft. 1785/4000 = 0.45So building lighting allowance is compliant.

Show Window & Sign Outlets

Load Calculation

Table allowance for

1000 Instant Water Heater-1

8430 8430 5010

Space Surge Protector 3

Total Connected Load (VA): 50411-VA

42731 VA / 360 V = 140 A = 140.0 A @ 208V, 3Ø

LOAD SUMMARY

Show Window Outlets as per 220.43 200 VA / Liner Foot 9'-8" x 200 = 1933 $3'-4" \times 200 = 667$ $\overline{2600} \text{ VA} - 2600 \text{ x} 1.25 = 3250 \text{ VA}$

1200 VA - 1200 x1.25=1500 VA

Lighting, sign & show window power factor addition -= 1396 VA Sign Outlets as per 220.14(F) Receptacles -0000 x 1.00 = 0000 VA1200 VA / Each Panel -L +All Equipments-49015 x1.00 = 49015 VA 1 x 1200 = 1200

endanger the safety or security of the room or building occupant (s)

DRAWING NO

the following space types:

3 - Computer Classrooms

device that shall function on:

but no more than one floor or

occupants leaving a space or

1 - Private offices, 2 - Open offices

off at specific programmed times an independent program schedule shall be

B - An occupant sensor that shall turn

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shall be controlled by an automatic control

A - A scheduled basis using ,a time-of-day

operated control device that turns receptacles

provided for areas of no more than 25 000 sf

DATE: JOB NO.

CHECKED BY:R HAU(

REMARKS:

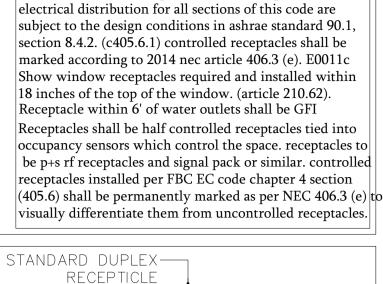
SKW-LN-**DESIGN BY: N.GAJJAR**

IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO

THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL

ROBERTT. HAUG, **P.E**.# 24575

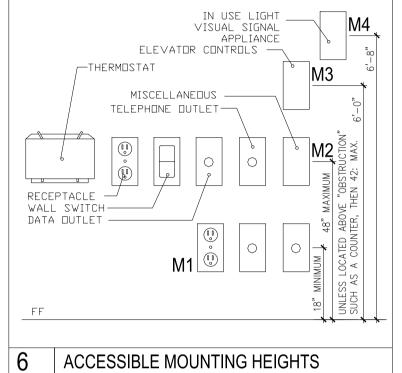




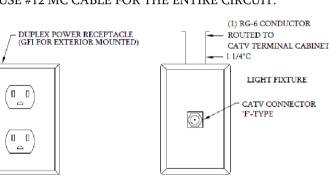
E0004d Automatic receptacle control; the provisions for

Code Note

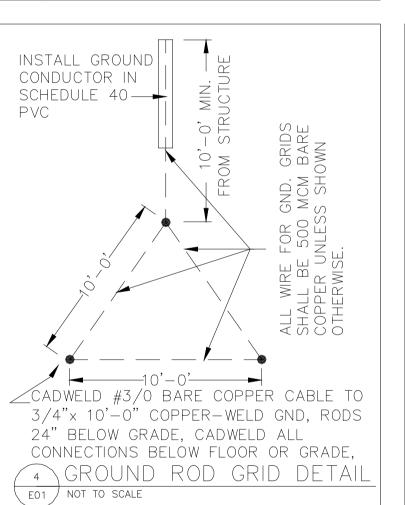
STANDARD DUPLEX-BACK TO BACK RECEPTICLES STANDARD ARE TO BE STAGGERED SO DUPLEX— AS NOT TO PENETRATE THE RECEPTICLE SAME STUD CAVITY. (TYP) × Back 2 Back RECEPTACLES XXX NOT TO SCALE

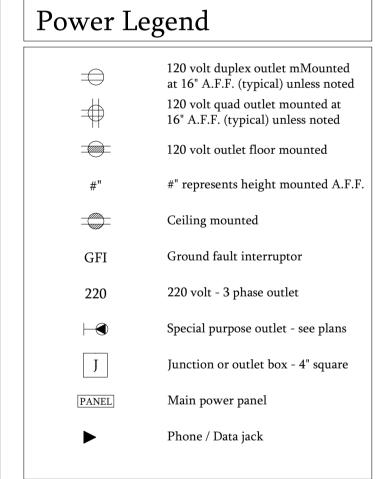


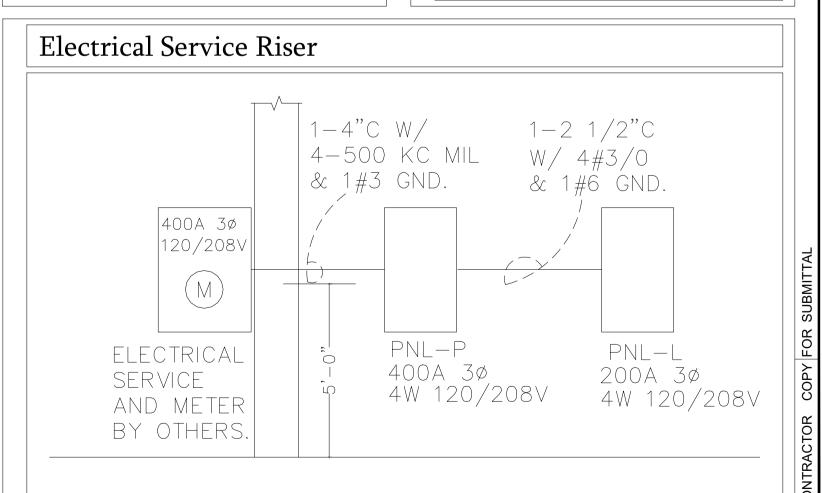
POWER GENERAL NOTES COORDINATE EXACT RECEPTACLE AND DATA LOCATIONS WITH FURNITURE AND OWNER. MOUNT RECEPTACLES & DATA OUTLETS WITHIN CASE WORK. COORDINATE EXACT MOUNTING WITH MILL WORK. 3. LOCATE RECEPTACLE ON UNIT AS SERVICE RECEPTACLE. DO NOT ROUTE CONDUIT ON OR ABOVE ROOF. USE #12 MC CABLE FOR THE ENTIRE CIRCUIT.



TYPICAL TV OUTLET/RECEPTACLE DETAIL NOT TO SCALE SYMBOL REPRESENTS POWER DUPLEX RECEPTACLE AND T.V. OUTLET. TYPICAL FOR ALL $\ \ \ \ \ \ \ \ \ \ \$ SHOWN ON DRAWING.







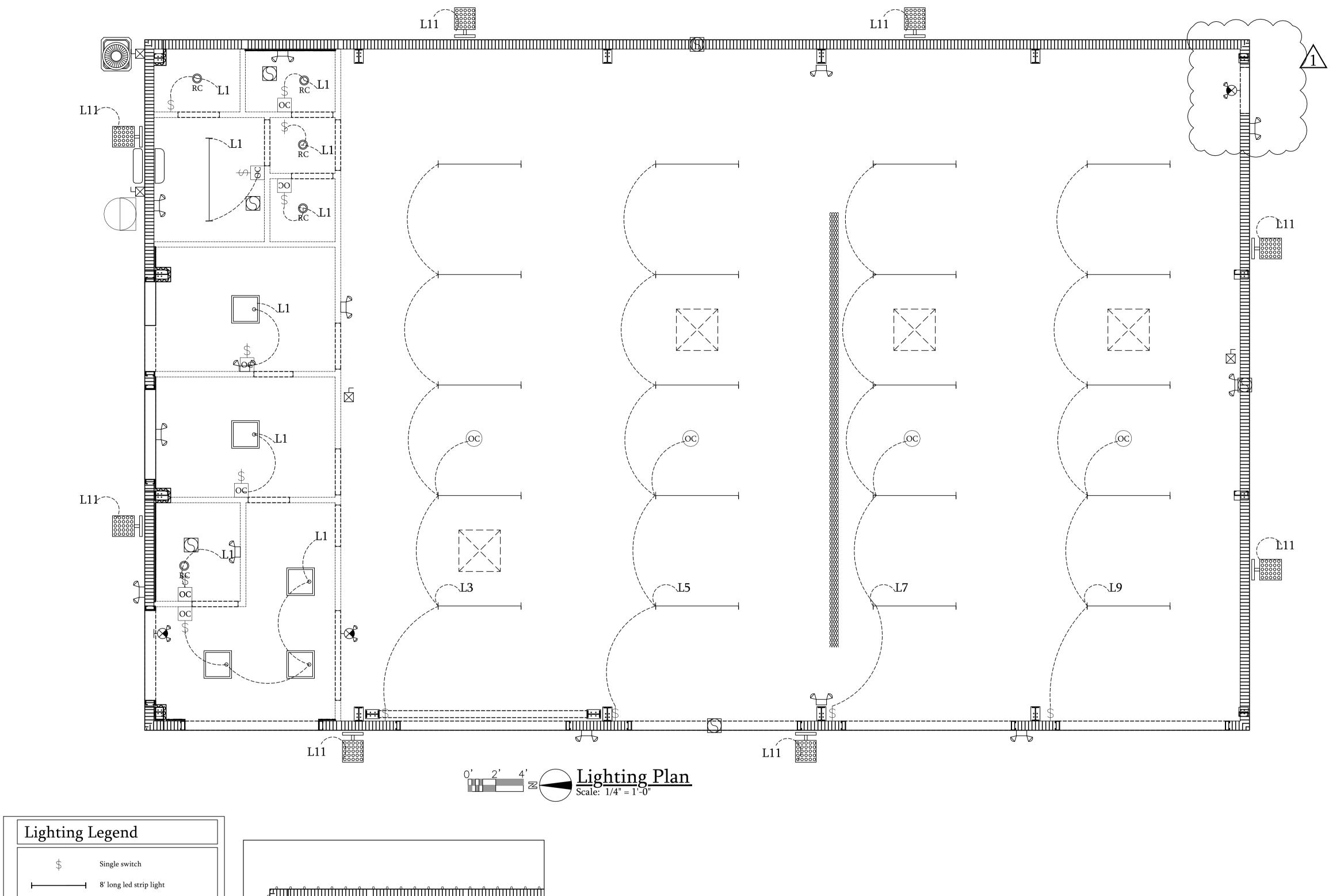
NORTH | REVISION | SCALE:

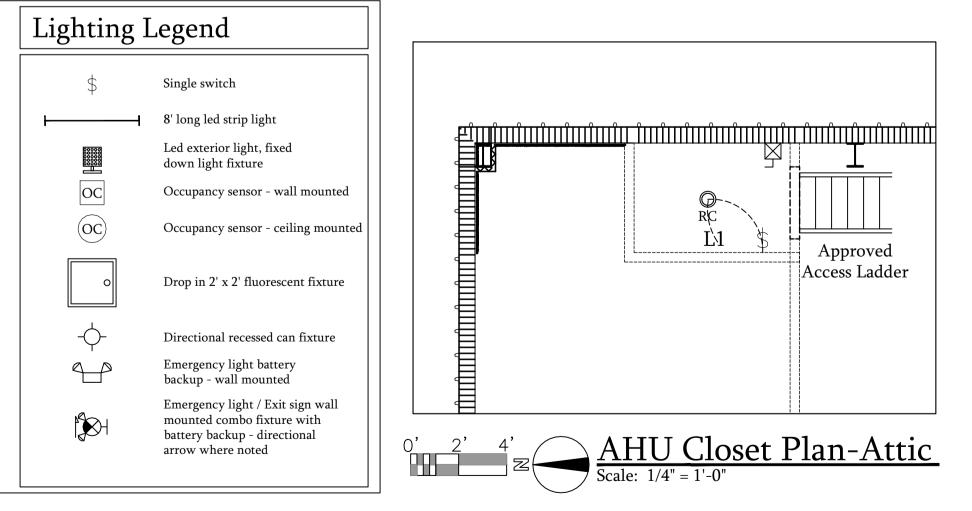
REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

title of this property. Keep this plan on the job site at all times

12:22:53 -04'00'





LIGHTING GENERAL NOTES

1. NIGHT LIGHTS (NL), EXIT LIGHTS, AND EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT.

SWITCHES AND OCCUPANCY SENSORS SHALL BE TYPE II PLENUM RATED CABLE AS RECOMMENDED BY THE MANUFACTURER.

2. ALL LOW VOLTAGE CABLE FOR LOW VOLTAGE

3. ALL OCCUPANCY SENSORS/VACCANCY SENSORS SHALL

BE SET TO TIME OUT AFTER 30 MINUTES. 4. CONTRACTOR SHALL SUBMIT MANUFACTURERS SHOP DRAWINGS SHOWING DEVICE LOCATIONS, AREA OF COVERAGE, AND DETAILED DESCRIPTIONS OF DEVICES USED. 5. MOUNT ENGRAVED NAMEPLATE ON CEILING GRID DIRECTLY BELOW POWER/SWITCH PACKS INDICATING

OCCUPANCY/VACCANCY SENSOR POWER/SWITCH PACK LOCATION. 6. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON SHEET M2 FOR CONNECTION TO HVAC AND PLUMBING

EQUIPMENT. 7. COORDINATE FINAL FIXTURE LOCATIONS AND TYPES WITH ARCHITECTURAL DRAWINGS LOCATE ABOVE ACCESIBLE
CEILING ABOVE ASSOCIATED
CONTACTOR/PANEL > 120V. UNSWITCHED "HOT" (EMERGENCY LIGHTING, NIGHT 120V. CONTACTORED CIRCUIT LIGHT FIXTURE

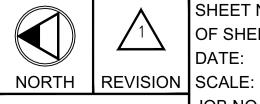
LIGHTING "HOMERUN" WIRING DETAIL

Fixture Schedule Note

All fixtures selected by owner contractor to confirm all fixture selections prior to commencing work. Design based on volt-amps shown on if different fixtures are selected with higher volt-amp requirements it is the contractor's responsibility to adjust circuitry as required to accommodate the changes and consult with engineer as necessary.

LIGH	HTIN	G FIXTURE SCH	HEDU	JLE			
SYMBOL		DESCRIPTION	VOLTS	LAMPS	VOLT- AMPS	MOUNTING	
RC •	EURI 6" DLCS-2040e ULTRATHIN 12W, 900 LUMEN, 4000 KELVIN SURFACE MOUNT ON J BOX SUPPLY WITH BATTERTY BACKUP			1-15W R30 LED	15	RECESSED IN GYPSUM CEILING WITH FLANGE.	
	——	8' LONG LED STRIP LIGHT	120	1-96" LED	60	CEILING MTD	
00000 00000 00000 00000 00000 11	LED EXTERIOR LIGHT, FIXED DOWN LIGHT FIXTURE		120	LED	40	WALL MOUNTED ON POLE	
0	2'x2' LED GRID TROFFER NICOR T6C22HU4D, 35W, 4480 LUMEN, 4000 KELVIN		120	INTEGRAL	35	T-BAR	
		GENCY BATTERY PACK FIXTURE WALL MOUNTED.	120	2-LED	5	WALL MOUNTED	
EXIT	LED EXIT LIGHT, RED. SELF POWERED WITH SEALED NI—CAD BATTERY AND SELF DIAGNOSTICS SURE—LITES CX OR EQUAL		120	LED	5	UNIVERSAL SURFACE MOUNTED	CONTRACIO

	NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO	NEW PAINT & BODY SHOP BUILDING FOR
	1	09/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER	
	2	00/00/00				SKW INVESTMENTS INC.
	3	00/00/00				500 W LANCASTER ROAD ORLANDO FL 32809
	4	00/00/00				
	5	00/00/00				ELECTRICAL LIGHTING PLAN -DETAILS - NOTES
١	6	00/00/00				LIGHTING FIXTURE SCHEDULE
	7	00/00/00				



E2

DRAWING NO

DATE: <u>AS NOTED</u> JOB NO. SKW-LN-DESIGN BY: N.GAJJAR CHECKED BY:R HAUG

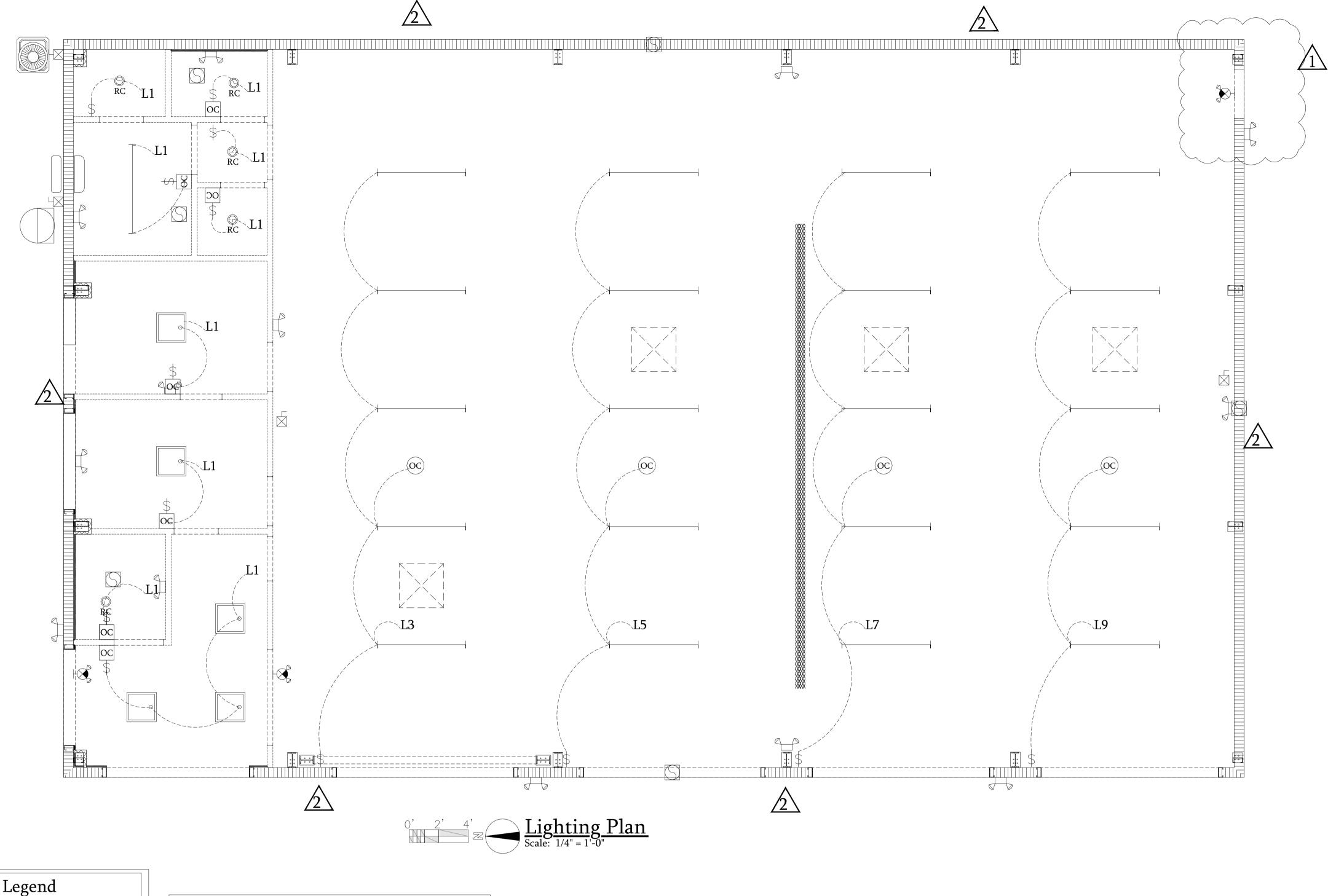
REMARKS:

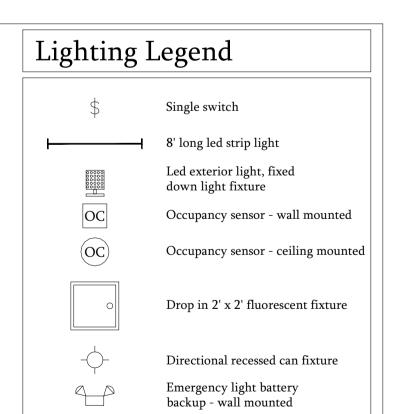
DESIGN REVIEW BY: ROBERT T HAUG PE. IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH

P.E.# 24575 000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE. ROBERTI. HAUG,

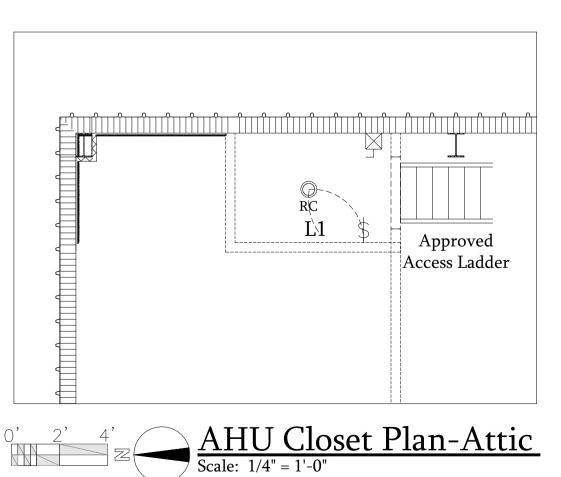
Appligitally signed
Orange County
Sign DysRobertaTety , Date: 2021.10.06 բ 09:52:37 -04'00'





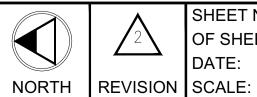
Emergency light / Exit sign wall mounted combo fixture with battery backup - directional

arrow where noted



ı	NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO	│
	1	07/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER	1 1 / 5 \
	2	04/21/22	N GAJJAR	3RD REVIEW COUNTY COMMENTS -EXTERIOR BLDG LIGHTS REMOVED	GC/OWNER	J HANNESTMENT
	3	00/00/00				506 W LANCASTER ROAD OF
	4	00/00/00				
	5	00/00/00] ELECTRICAL LIGHTING PLAN
	6	00/00/00				LIGHTING FIXTURE SO
	7	00/00/00				

P BUILDING FOR ITS INC. RLANDO FL 32809 -DETAILS - NOTES SCHEDULE



E2

DRAWING NO

DATE: JOB NO.

REMARKS:

SKW-LN-DESIGN BY: N.GAJJAR CHECKED BY:R HAUG

DESIGN REVIEW BY: ROBERT T HAUG PE. I IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING

LIGHTING GENERAL NOTES

OF LOCAL LIGHTING CIRCUIT.

MANUFACTURER.

EQUIPMENT.

NIGHT LIGHTS (NL), EXIT LIGHTS, AND EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO UNSWITCHED LEG

3. ALL OCCUPANCY SENSORS/VACCANCY SENSORS SHALL

4. CONTRACTOR SHALL SUBMIT MANUFACTURERS SHOP DRAWINGS SHOWING DEVICE LOCATIONS, AREA OF

COVERAGE, AND DETAILED DESCRIPTIONS OF DEVICES USED.

5. MOUNT ENGRAVED NAMEPLATE ON CEILING GRID DIRECTLY BELOW POWER/SWITCH PACKS INDICATING OCCUPANCY/VACCANCY SENSOR POWER/SWITCH PACK

6. REFER TO MECHANICAL EQUIPMENT SCHEDULE ON

7. COORDINATE FINAL FIXTURE LOCATIONS AND TYPES

LIGHTING FIXTURE SCHEDULE

SHEET M2 FOR CONNECTION TO HVAC AND PLUMBING

2. ALL LOW VOLTAGE CABLE FOR LOW VOLTAGE SWITCHES AND OCCUPANCY SENSORS SHALL BE TYPE II

PLENUM RATED CABLE AS RECOMMENDED BY THE

BE SET TO TIME OUT AFTER 30 MINUTES.

WITH ARCHITECTURAL DRAWINGS

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE.

ROBERTT. HAUG, P.E.# 24575
000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

Ap Digitally signed
orange County
by BRODE Tarety ₅ Haug Date: 2022.06.06 12:23:42 -04'00' So not grant permission to violate any applicable code.

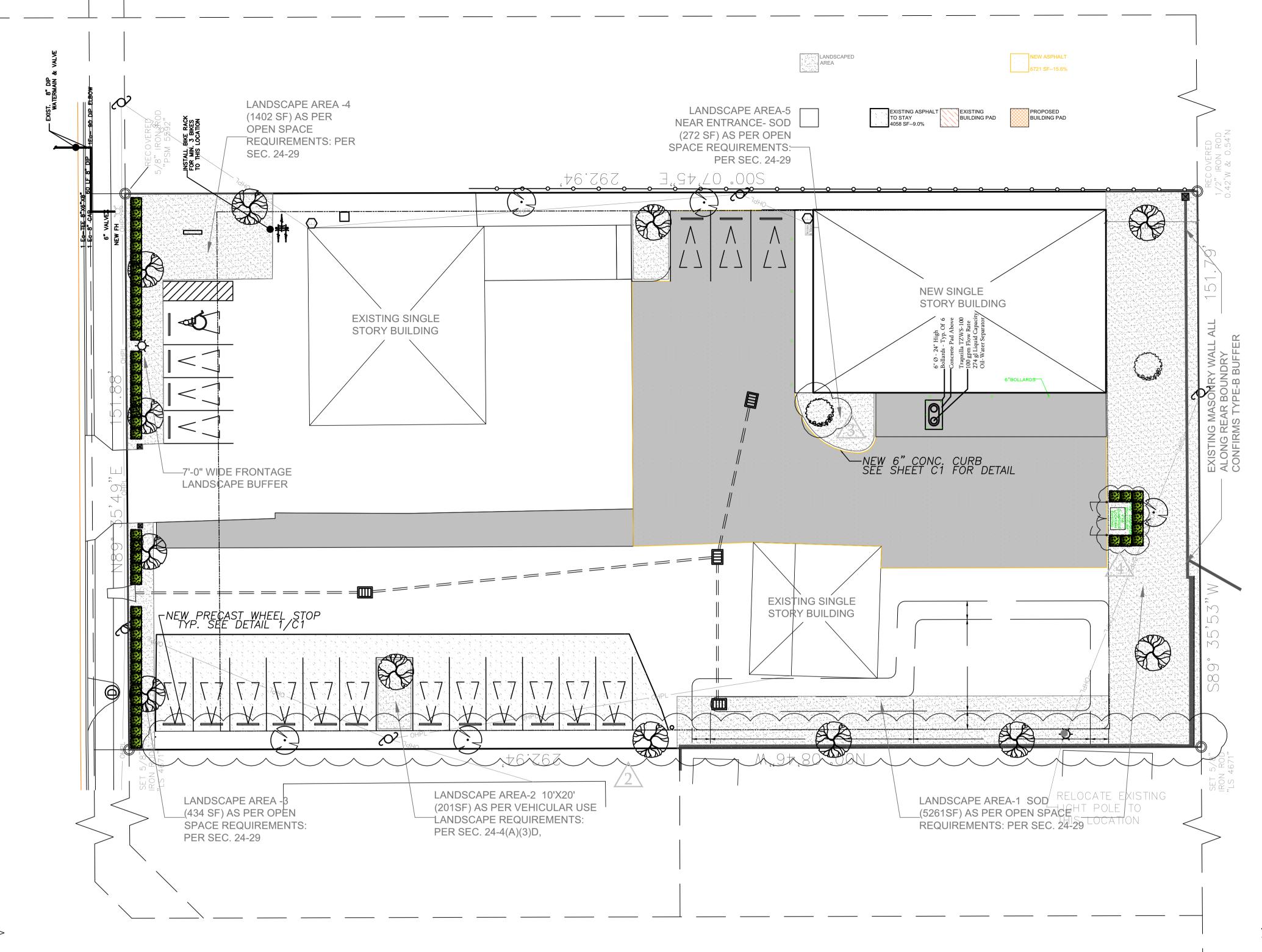
> 120V. UNSWITCHED "HOT" (EMERGENCY LIGHTING, NIGHT CEILING ABOVE ASSOCIATED
CONTACTOR/PANEL 120V. CONTACTORED CIRCUIT LIGHTING "HOMERUN" WIRING DETAIL

Fixture Schedule Note

LOCATE ABOVE ACCESIBLE

All fixtures selected by owner contractor to confirm all fixture selections prior to commencing work. Design based on volt-amps shown on if different fixtures are selected with higher volt-amp requirements it is the contractor's responsibility to adjust circuitry as required to accommodate the changes and consult with engineer as necessary.

SYMBOL		DESCRIPTION	VOLTS	LAMPS	VOLT- AMPS	MOUNTING
RC ◎	12W, SURFA	6" DLCS-2040e ULTRATHIN 900 LUMEN, 4000 KELVIN ACE MOUNT ON J BOX LY WITH BATTERTY BACKUP	120	1-15W R30 LED	15	RECESSED IN GYPSUM CEILING WITH FLANGE.
		8' LONG LED STRIP LIGHT	120	1-96" LED	60	CEILING MTD
00000		EXTERIOR LIGHT, FIXED DOWN FIXTURE	120	LED	40	WALL MOUNTED ON POLE
0	T6C22	LED GRID TROFFER NICOR PHU4D, 35W, 4480 LUMEN, KELVIN	120	INTEGRAL	35	T-BAR
		GENCY BATTERY PACK FIXTURE WALL MOUNTED.	120	2-LED	5	WALL MOUNTED
EXIT	POWER BATTE	XIT LIGHT, RED. SELF RED WITH SEALED NI—CAD RY AND SELF DIAGNOSTICS -LITES CX OR EQUAL	120	LED	5	UNIVERSAL SURFACE MOUNTED



Landscape Requirements:

15% LANDSCAPE AREA REQUIRED FOR SITES GREATER THAN 1 ACRE WHEN XERISCAPE LANDSCAPING IS

44435 SF (1.02 AC) X 15% = 6,665 SF REQUIRED LANDSC APE AREA

PROVIDED LANDSCAPE AREA:

AREA-1 = 5,461 SFAREA-2 = 201 SFAREA-3 = 434 SFAREA-4 = 1,402 SF

PROVIDED LANDSCAPE AREA: 7,770 SF (17.5%) (ADDITIONAL LANDSCAPING MAY BE PROVIDED BY

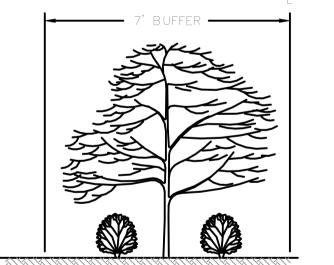
LANDSCAPE BUFFER REQUIREMENTS

EAST SIDE = NONE SOUTH SIDE = 25' (TYPE B) WEST SIDE = NONE

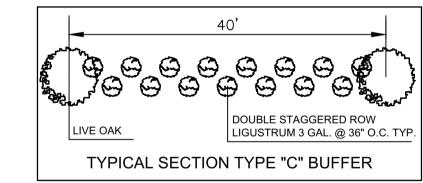
Irrigation Legend

KEY	DESCRIPTION
@	4" WELL W/ 3 H.P SUBMERSIBLE PUMP 50 GPM @ 50 PSI
×	2" BACK-FLOW PREVENTION DEVICE
T	HUNTER PRO-C OUTDOOR TIME CLOCK
R	REMOTE RAIN SENSOR MINI-CLICK
\otimes	1½" ELECTRIC SOLENOID VALVE

Irrigation Zone Schematic Not to Scale



Landscaped 7' Type "C" Frontage Buffer



Buffer Notes:

(Per SEC 24-5(A)2:)

FEET OR FRACTION THEREOF.

A 25' TYPE B LANDSCAPE BUFFER IS REQUIRED TO SEPARATE C-2 PROPERTIES FROM RESIDENTIAL USES. THIS BUFFER SHALL BE COMPLETELY OPAQUE FROM THE GROUND UP TO A HEIGHT OF AT LEAST SIX FEET AND SHALL BE A MINIMUM OF TWENTY -FIVE FEET WIDE. THE TYPE B BUFFER MAY UTILIZE A MASONRY WALL, BERM, PLANTED AND/OR EXISTING VEGETATION OR ANY COMBINATION THEREOF WHICH MAINTAINS A COMPLETELY OPAQUE BUFFER. THIS BUFFER MUST BE FOUR FEET HIGH AND SEVENTY PERCENT OPAQUE AT PLANTING AND BE CAPABLE OF ATTAINING FULL HEIGHT AND OPACITY WITHIN THREE YEARS. SEC 24-5(B): ALL BUFFERS SHALL INCLUDE ONE SHADE TREE FOR EACH FORTY LINEAL

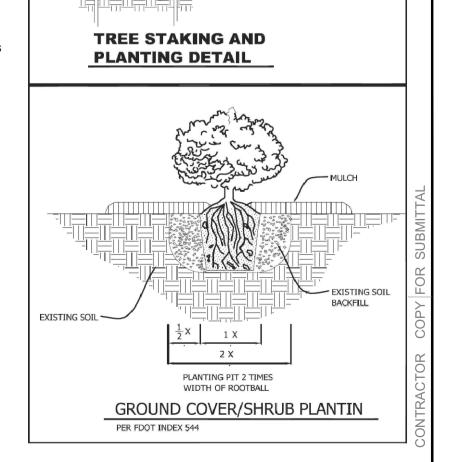
Notes:

- 1. NATIVE TREES AND PLANT MATERIALS ALONG WITH XERISCAPE MATERIALS AND PRINCIPLES TO BE USED WHEN LANDSCAPING THIS SITE.
- 2. ALL PLANTS TO BE FLA. #1 OR BETTER.
- 3. OWNER MAY SUBSTITUTE OTHER APPROVED SHADE TREES
- AND PLANTS PER CODE. 4. ALL PIPE TO BE SCH. 40 P.V.C.

SPECIFIC ATIONS.

ULTIMATE WIND ZONE.

- 5. ALL SLEEVING TO BE SCH. 40 P.V.C.
- 6. ALL TREES TO BE STAKED & GUYED W/ ARBOR-GUY.
- 7. ALL DISTURBED AREAS NOT SODDED ARE TO BE SEEDED & MULCHED W/ ARGENTINE BAHIA PER D.O.T.



TWIGS, TRIM NO LEADERS, RETAIN NATURAL SHAPE.

WHITE SURVEYOR'S TAGGING TAPE, 6" LENGTH

MOUND TO FORM SAUCER

- 3 - 2" X 3" STAKES DRIVEN INTO GROUND AT AN ANGLE, THEN TIGHTENED TO VERTICAL POSITION, 8' MINIMUM

LENGTH, STAKES AT 120 DEGREE ANGLE

__ 3/4" - 2 PLY REINFORCED RUBBER OR PLASTIC HOSE, 12 GAUGE GALVANIZED WIRE

ADDITIONAL LANDSCAPING MAY BE PROVIDED BY OTHERS -

DESCRIPTION

EAST PALATKA HOLLY 2" DBH

LIVE OAK 3" DBH

CRAPE MYRTLE

LIGUSTRUM LUCIDUM

Plant Legend

SYMBOL | KEY | QTY

CM

3 *

39 *

NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO	
1	09/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER	
2	03/01/22		TREES @ 50' 0/C		
3	07/18/22		SHADE TREE		
4	09/22/22		SHRUBS AT DUMPSTER		
5					
6	00/00/00				

<u>Landscape & Irrigation Plan</u> Scale: 1/16" = 1'-0"

SIZE & REMARKS

12'-14' x 4'-5'

#3 30"-36" HT 3' O.C.

2" CAPLIER, 7' TALL

7' x 5' FLA. #1

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 500 W LANCASTER ROAD ORLANDO FL 32809 LANDSCAPE & IRRIGATION

THE OWNER OR DEVELOPER SHALL BE RESPONSIBLE FOR ENSURING THAT ALL POSSIBLE MEASURES

ARE TAKEN DURING THE CLEARING PROCESS TO AVOID DAMAGE TO TREES DESIGNATED TO REMAIN

a. PROTECTIVE BARRICADES SHALL BE CONSTRUCTED PRIOR TO CLEARING AROUND ALL TREES

AT A DISTANCE OF 1 FOOT PER 1 INCH OF DBH AND SHALL BE APPROXIMATELY FOUR FEET IN

HEIGHT. THE BARRICADE SHOULD BE RIGID AND STURDY ENOUGH TO SURVIVE THE CONSTRUCTION PERIOD: HOWEVER, ANY SUITABLE NEW OR SCRAP MATERIAL MAY BE USED IN ITS CONSTRUCTION.

b. ABSOLUTELY NO FILL, BUILDING MATERIALS, TRASH OR OTHER OBJECTS SHALL BE PLACED INSIDE THESE BARRIERS. NO EQUIPMENT WILL BE PARKED OR STORED INSIDE THESE BARRIERS. IF FILL IS DEPOSITED ADJACENT TO THESE AREAS, A SUITABLE TEMPORARY OR PERMANENT RETAINING

ATTACHING SIGNS OR OTHER OBJECTS TO TREES. IT SHALL BE UNLAWFUL TO ATTACH A SIGN OR

OTHER OBJECT OF A PERMANENT OR TEMPORARY NATURE TO A TREE BY THE USE OF NAILS, WIRE

STRUCTURE SHALL BE CONSTRUCTED TO PREVENT SILTATION OF THE BARRICADED AREA.

DESIGNATED TO REMAIN. THESE BARRICADES SHALL BE LOCATED AT THE DRIP LINE OF THE TREES OR

WHERE NECESSARY TO PROTECT TREES TO BE PRESERVED.

OR ANY OTHER METHOD THAT MAY BE HARMFUL TO THE TREE.

AFTER CONSTRUCTION. THIS SHALL INCLUDE USE OF HAND LABOR RATHER THAN LARGE MACHINERY

DRAWING NO

THIS LANDSCAPE PLAN IS DESIGNED IN ACCORDANCE WITH ORANGE COUNTY LAND DEVELOPMENT CODE SECTIONS 24-3(B)

AND 24-4(L)(1). THE IRRIGATION SYSTEM HAS BEEN DESIGNED

AND WILL BE INSTALLED IN CONFORMANCE WITH CH -37,

SECTIONS 601-613 OF THIS CODE.

NORTH | REVISION | SCALE:

JOB NO. **DESIGN BY:** N.GAJJAR CHECKED BY:R HAUG

REMARKS:

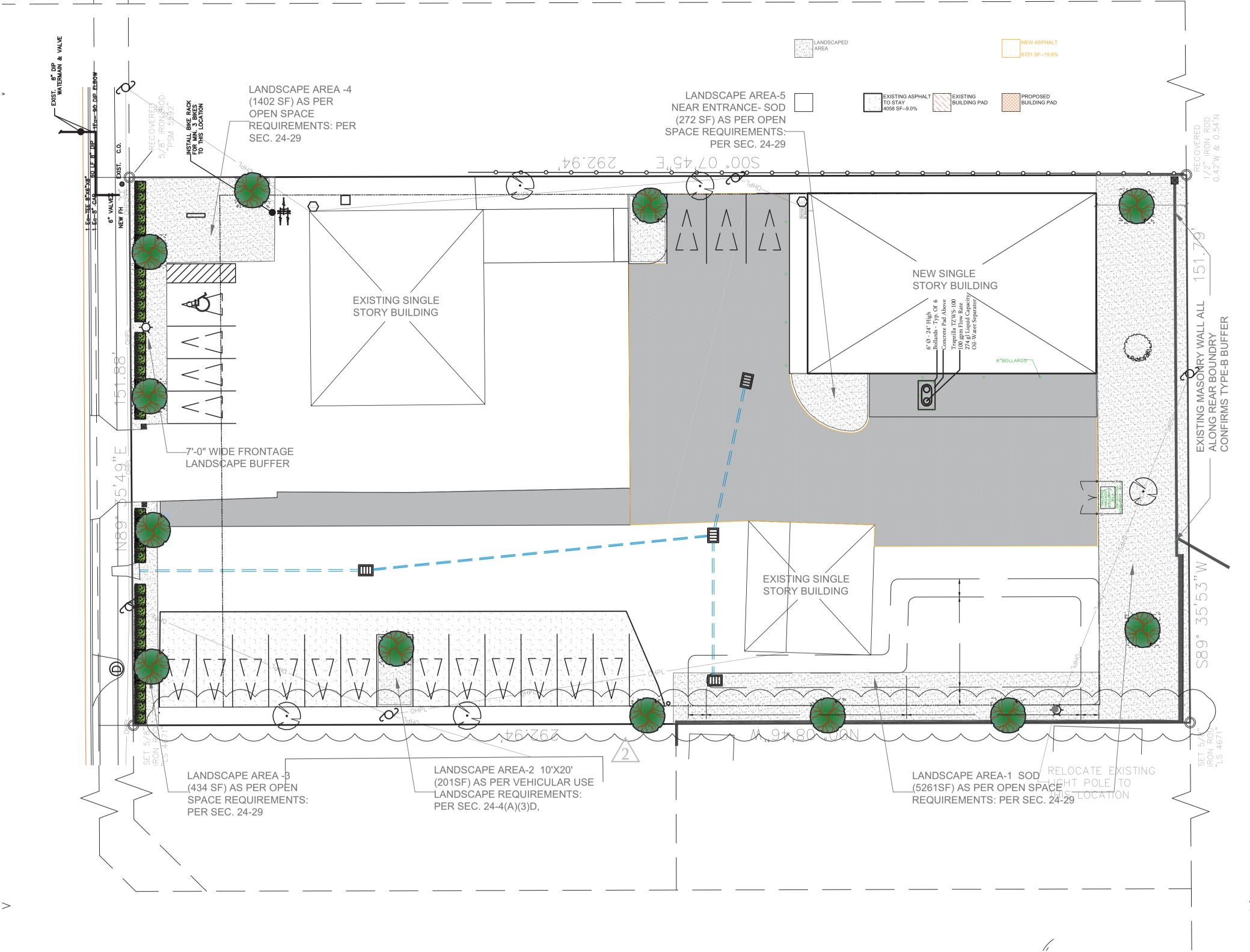
DESIGN REVIEW BY: ROBERT T HAUG PE. T IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH

ROBERT T. HAUG, P.E. # 24575 2000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

Approved Plans Orange County **Division of Building Safety**

This Approval does not grant permission to violate any applicable

Permit B21901235



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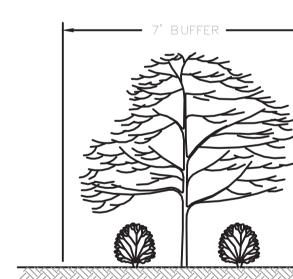
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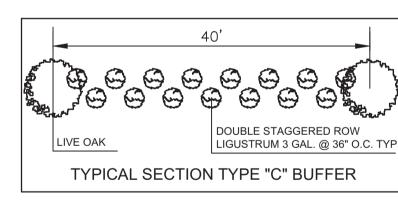
Irrigation Zone Schematic

Not to Scale

 $B = B \cup B \cup B \cup ER \longrightarrow$



Landscaped 7' Type "C" Frontage Buffer



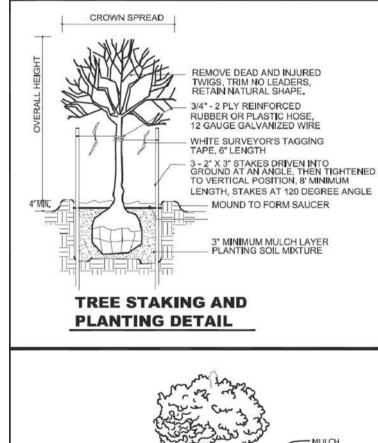
Buffer Notes:

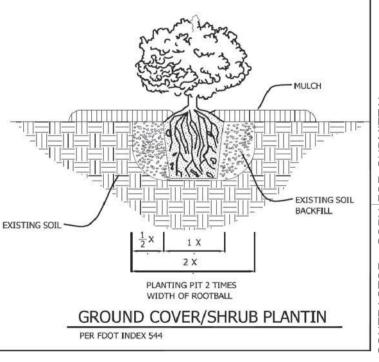
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LIVE OAK 3" DBH

CRAPE MYRTLE

LIGUSTRUM LUCIDUM

Plant Legend

SYMBOL | KEY | QTY

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CM

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NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO	
1	09/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER	
2	03/01/22		TREES @ 50' 0/C		
3	00/00/00				
4	00/00/00				
5	00/00/00				
6	00/00/00				

Landscape & Irrigation Plan

SIZE & REMARKS

7' x 5' FLA. #1

12'-14' x 4'-5'

#3 30"-36" HT 3' O.C

2" CAPLIER, 7' TALL

NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 LANDSCAPE & IRRIGATION *****

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AND 24-4(L)(1). THE IRRIGATION SYSTEM HAS BEEN DESIGNED

AND WILL BE INSTALLED IN CONFORMANCE WITH CH -37,

SECTIONS 601-613 OF THIS CODE.

ORANGE COUNTY LAND DEVELOPMENT CODE SECTIONS 24-3(B)



SHEET NO: JOB NO. DESIGN BY: N.GAJJAR

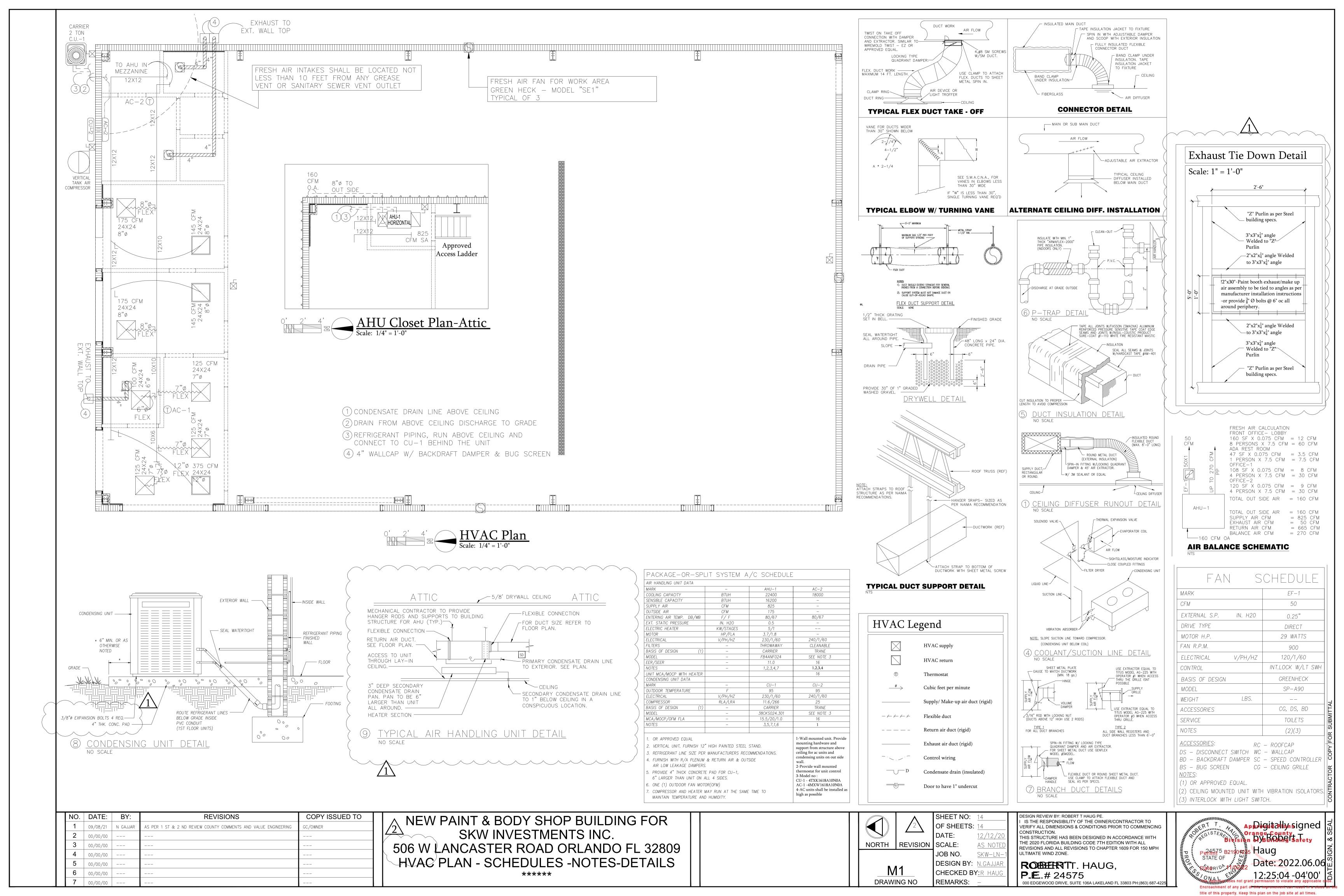
DESIGN REVIEW BY: ROBERT T HAUG PE. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH

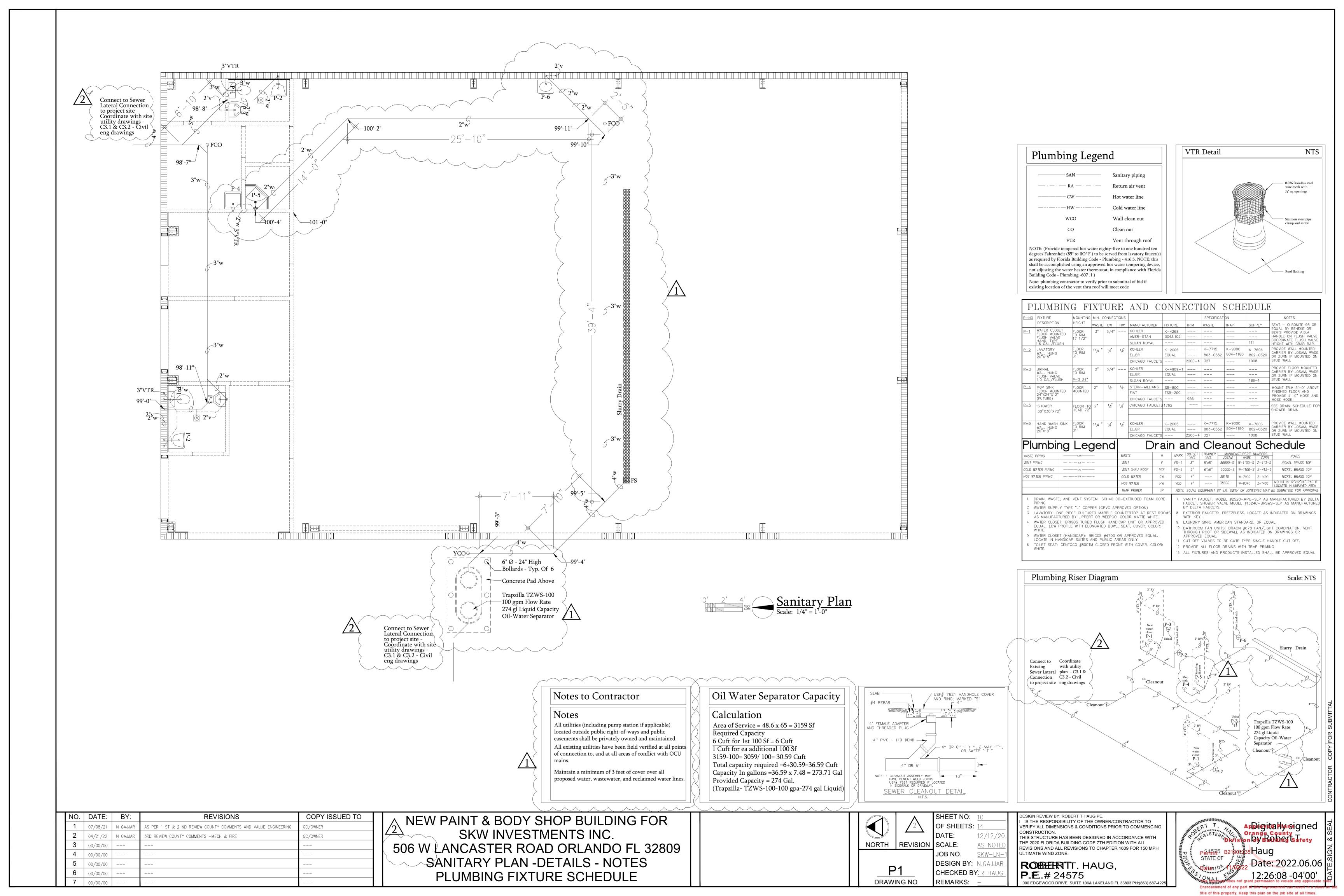
ULTIMATE WIND ZONE. ROBERT T. HAUG, P.E. # 24575

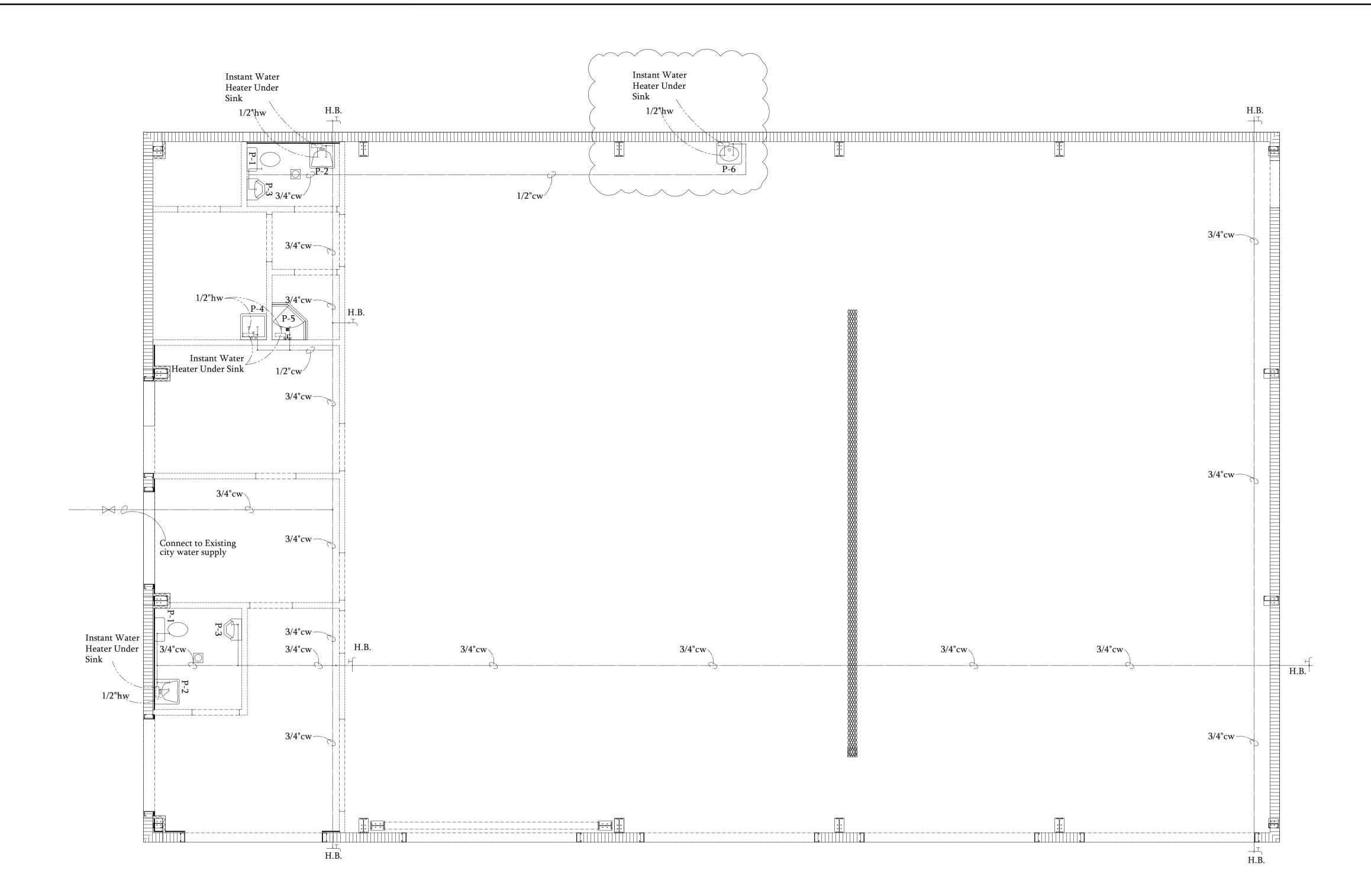


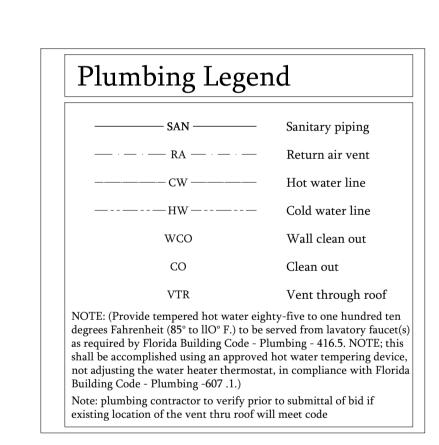
title of this property. Keep this plan on the job site at all times.

CHECKED BY: R HAUG REMARKS: DRAWING NO 2000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225









 $\frac{\text{Water Supply Plan}}{\text{Scale: } 1/4" = 1'-0"}$

NO.	DATE:	BY:	REVISIONS	COPY ISSUED TO	Γ
1	09/08/21	N GAJJAR	AS PER 1 ST & 2 ND REVIEW COUNTY COMMENTS AND VALUE ENGINEERING	GC/OWNER	
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NEW PAINT & BODY SHOP BUILDING FOR SKW INVESTMENTS INC. 506 W LANCASTER ROAD ORLANDO FL 32809 WATER SUPPLY PLANS *****

NORTH REVISION SCALE:

DRAWING NO

JOB NO. SKW-LN-**DESIGN BY:** N.GAJJAR CHECKED BY:R HAUG

REMARKS:

DESIGN REVIEW BY: ROBERT T HAUG PE. I IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY ALL DIMENSIONS & CONDITIONS PRIOR TO COMMENCING THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION WITH ALL

REVISIONS AND ALL REVISIONS TO CHAPTER 1609 FOR 150 MPH ULTIMATE WIND ZONE. ROBERTT. HAUG, P.E.# 24575 000 EDGEWOOD DRIVE, SUITE 106A LAKELAND FL 33803 PH:(863) 687-4225

ApDigitally signed
orange County
n by Robert Tety Date: 2022.06.06

