

ADDITION to MOORES GLASS

CODE REVIEW

THE ENGINEERS HAVE PLACED THE CODE DATA RELEVANT TO THEIR DISCIPLINE ON THEIR RESPECTIVE SHEETS.

2012 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES) (REPRODUCE THE FOLLOWING DATA ON THE BUILDING PLANS SHEET 1 OR 2)

NAME OF PROJECT: MOORES GLASS
 ADDRESS: 1115 SOUTH SOUTH 3rd STREET, WILMINGTON, NC ZIP CODE: 28405
 PROPOSED USE: GLASS COMPANY
 OWNER: JOHN MOORE CONTACT: MARK GRENNELL, ARCHITECT PHONE # (910) 233-1061 E-MAIL: mg.architect@outlook.com

OWNED BY: CITY/COUNTY PRIVATE STATE

CODE ENFORCEMENT JURISDICTION:	CITY:	COUNTY:	NEW HANOVER	STATE:	N.C.
DESIGNER FIRM	MARK GRENNELL ARCHITECT	NAME	MARK GRENNELL	LICENSE #	7438
TELEPHONE #	910-233-1061	E-MAIL	mg.architect@gmail.com		
ARCHITECTURAL					
CIVIL					
ELECTRICAL					
FIRE ALARM					
FLUORINE					
MECHANICAL					
SPRINKLER-STANDPIPE					
STRUCTURAL	Walton Engineering	Mark Walton	16379	910-259-4800	
RETAINING WALLS > 5' HIGH					
OTHER					

2012 EDITION OF NC CODE FOR: NEW CONSTRUCTION ADDITION UPFIT RENOVATION
 EXISTING RECONSTRUCTION ALTERATION REPAIR

CONSTRUCTED: 1997 RENOVATED: N/A
 ORIGINAL USE(S) (CH. 3): N/A
 CURRENT USE(S) (CH. 3): N/A
 PROPOSED USE(S) (CH. 3): BUSINESS, WAREHOUSE

BASIC BUILDING DATA

CONSTRUCTION TYPE: (CHECK ALL THAT APPLY) I-A I-B II-A II-B III-A III-B IV V-A V-B
 SPRINKLERS: NO PARTIAL YES NFPA 13R NFPA 13 NFPA 13D
 STANDPIPES: NO YES CLASS: I II III WET DRY
 FIRE DISTRICT: NO YES (PRIMARY)
 FLOOD HAZARD AREA: NO YES
 BUILDING HEIGHT: (FEET) 20

GROSS BUILDING AREA:	FLOOR:	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL	RENOVATED (SQ FT)	UPFIT (SQ FT)
2nd FLOOR						
MEZZANINE		5,000 SF	1,000 SF			
GROUND FLOOR						
TOTAL			6,000 SF			

ALLOWABLE AREA OCCUPANCY:
 ASSEMBLY A-1 A-2 A-3 A-4 A-5
 BUSINESS B-1 B-2 B-3 B-4
 EDUCATIONAL F-1 MODERATE F-2 LOW
 FACTORY H-1 DETONATE H-2 DEFLAGRATE H-3 COMBUST H-4 HEALTH H-5 HPM
 HAZARDOUS I-1 I-2 I-3 I-4
 INSTITUTIONAL I-1 I-2 I-3 I-4 I-5
 I-3 CONDITION 1 2 3 4 5
 MERCANTILE
 RESIDENTIAL R-1 R-2 R-3 R-4
 STORAGE S-1 MODERATE S-2 LOW HIGH-PILED
 UTILITY AND MISCELLANEOUS PARKING GARAGE OPEN ENCLOSED REPAIR GARAGE

ACCESSORY OCCUPANCIES:
 ASSEMBLY A-1 A-2 A-3 A-4 A-5
 BUSINESS
 EDUCATIONAL
 FACTORY F-1 MODERATE F-2 LOW
 HAZARDOUS H-1 DETONATE H-2 DEFLAGRATE H-3 COMBUST H-4 HEALTH H-5 HPM
 INSTITUTIONAL I-1 I-2 I-3 I-4 I-5
 I-3 CONDITION 1 2 3 4 5
 MERCANTILE
 RESIDENTIAL R-1 R-2 R-3 R-4
 STORAGE S-1 MODERATE S-2 LOW HIGH-PILED
 UTILITY AND MISCELLANEOUS PARKING GARAGE OPEN ENCLOSED REPAIR GARAGE

INCIDENTAL USES (TABLE 508.2.5):
 FURNACE ROOM WHERE ANY PIECE OF EQUIPMENT IS OVER 400,000 BTU PER HOUR INPUT
 ROOMS WITH BOILERS WHERE THE LARGEST PIECE OF EQUIPMENT IS OVER 15 PSI AND 10 HORSEPOWER
 REFRIGERANT MACHINE ROOM
 HYDROGEN CUTOFF ROOMS, NOT CLASSIFIED AS GROUP H
 INCINERATOR ROOMS
 PAINT SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN OCCUPANCIES OTHER THAN GROUP F
 LABORATORIES AND VOCATIONAL SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN A GROUP E OR I-2 OCCUPANCY
 LAUNDRY ROOMS OVER 100 SQUARE FEET
 GROUP I-3 CELLS EQUIPPED WITH PADDED SURFACES
 GROUP I-2 WASTE AND LINEN COLLECTION ROOMS
 WASTE AND LINEN COLLECTION ROOMS OVER 100 SQUARE FEET
 STATIONARY STORAGE BATTERY SYSTEMS HAVING A LIQUID ELECTROLYTE CAPACITY OF MORE THAN 50 GALLONS, OR A LITHIUM ION CAPACITY OF 1,000 POUNDS USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTED POWER SUPPLIES
 ROOMS CONTAINING FIRE PUMPS
 GROUP I-2 STORAGE ROOMS OVER 100 SQUARE FEET
 GROUP I-2 COMMERCIAL KITCHENS
 GROUP I-2 LAUNDRIES EQUAL TO OR LESS THAN 100 SQUARE FEET
 GROUP I-2 ROOMS OR SPACES THAT CONTAIN FUEL-FIRED HEATING EQUIPMENT

SPECIAL USES: 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416
 417 418 419 420 421 422 423 424 425 426 427

SPECIAL PROVISIONS: 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9

MIXED OCCUPANCY: NO YES SEPARATION: HR. EXCEPTION:
 INCIDENTAL USE SEPARATION (508.2.5)
 THIS SEPARATION IS NOT EXEMPT AS A NON-SEPARATED USE (SEE EXCEPTIONS).

NON-SEPARATED USE (508.3)
 THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.

SEPARATED USE (508.4) - SEE BELOW FOR AREA CALCULATIONS
 FOR EACH STORY, THE AREA OF THE OCCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

ACTUAL AREA OF OCCUPANCY A + ACTUAL AREA OF OCCUPANCY B = 1 OR LESS
 ALLOWABLE AREA OF OCCUPANCY A + ALLOWABLE AREA OF OCCUPANCY B = (1 OR LESS)

STORY NO.	DESCRIPTION AND USE	BLDG AREA PER STORY (ACTUAL)	TABLE 503 (5) AREA	AREA FOR FRONTAGE INCREASE (1)	AREA FOR SPRINKLER INCREASE (2)	ALLOWABLE AREA OR UNLIMITED (3)	MAXIMUM BUILDING AREA (4)
1	LJM FASHION & FURNISHING (M)	2,000 SF	9,000.0 SF	NOT USED	NOT USED	9,000.0 SF	
1	AGAPE - HOUSE OF LOVE (A-3)	1,000 SF	6,000.0 SF	NOT USED	NOT USED	6,000.0 SF	
1	MOORES GLASS (B)	530.0 SF	9,000.0 SF	NOT USED	NOT USED	9,000.0 SF	
1	MOORES GLASS (F2 WAREHOUSE)	1,470 SF	13,000.0 SF	NOT USED	NOT USED	13,000.0 SF	

SUMMARY: THE BUILDING IS SINGLE STORY. CONSTRUCTION TYPE IS V-B. THE ENTIRE BUILDING AREA, INCLUDING THE ADDITION, IS 6,000 SF. THIS EQUALS WHAT'S PERMITTED FOR THE MOST RESTRICTIVE USE (6,000 SF).

- (1) FRONTAGE AREA INCREASES FROM SECTION 506.2 ARE COMPUTED USING:
 A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = (P)
 B. TOTAL BUILDING PERIMETER = (P)
 C. RATIO (FP) = (P)
 D. W = MINIMUM WIDTH OF PUBLIC WAY = (W)
 E. PERCENT OF FRONTAGE INCREASE IF = 100 | FP - 0.25 | X W/30 = (X)
 (2) THE SPRINKLER INCREASE PER SECTION 506.3 IS AS FOLLOWS:
 A. MULTI-STORY BUILDING IS = 200 PERCENT
 B. SINGLE STORY BUILDING IS = 300 PERCENT
 (3) UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.
 (4) MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING X E (506.4).
 (5) THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.3.5. THE MAXIMUM AREA OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH TABLE 412.1.2.

ALLOWABLE HEIGHT	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
TYPE OF CONSTRUCTION	TYPE: V-B	NOT USED	TYPE: V-B	
BUILDING HEIGHT IN FEET	40 FT	FEET = H + 20' =	20 FT	
BUILDING HEIGHT IN STORIES	1	STORIES + 1 =	1	

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	PROVIDED (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES		0					
BEARING WALLS EXTERIOR INTERIOR	>10'	0					
NONBEARING WALLS AND PARTITIONS EXTERIOR WALLS INTERIOR WALLS	>10'	0					
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS		0					
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS		0					
SHAFT ENCLOSURES - EXIT		N/A					
SHAFT ENCLOSURES - OTHER		N/A					
CORRIDOR SEPARATION		N/A					
OCCUPANCY SEPARATION		N/A					
PARTY/FIRE WALL SEPARATION		N/A					
SMOKE BARRIER SEPARATION		N/A					
TENANT SEPARATION		N/A					
INCIDENTAL USE SEPARATION		N/A					

* INDICATE SECTION NUMBER PERMITTING REDUCTION
 LIFE SAFETY SYSTEM REQUIREMENTS
 EMERGENCY LIGHTING: NO YES
 EXIT SIGNS: NO YES
 FIRE ALARM: NO YES
 SMOKE DETECTION SYSTEMS: NO YES
 PANIC HARDWARE: NO YES

ACCESSIBLE PARKING (SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	PROVIDED	# OF ACCESSIBLE SPACES PROVIDED WITH 5' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
(M)	1/400 SF = 5	5	1	1
(A-3)	50 SEATS/4 = 13	13		
(F-2)	1/1500 = 2	2		
TOTAL (INCLUDES ACCESSIBLE SPACES) = 21				

SPECIAL INSPECTIONS REQUIRED: YES NO
 SPECIAL APPROVAL: 1.

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)	WATERCLOSETS			URINALS			LAVATORIES			SHOWERS & TUBS			MOP SINK	DRINKING FOUNTAINS REGULAR [ACCESSIBLE]
	SPACE	MALE/FEMALE	UNISEX	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX		
F-2	5 M: 5 F	-	1	-	-	1	-	-	1	-	-	1	-	-

NOTE: PER 2902.2 EXCEPTION (2) SEPARATE FACILITIES ARE NOT REQUIRED FOR MALE AND FEMALE WITH A TOTAL OCCUPANT LOAD OF 25 OR LESS

WALL ASSEMBLY

MATERIAL	R-VALUE
EXTERIOR OR AIR FILM	0.17
METAL SIDING	0.0
R-13 BATT INSULATION	13.0
INSIDE AIR FILM	0.68
TOTAL R VALUE:	13.85
U VALUE OF WALL ASSEMBLY:	0.072
REQUIRED U-FACTOR:	0.094

THIS IS ACCEPTABLE BECAUSE IT IS LESS THAN THE REQUIRED U VALUE OF 0.094 PER TABLE 502.1.2 FOR ZONE 3

NOTE: OTHER ASSEMBLIES MAY BE CONSIDERED IF THE PROVIDER CAN PROVE THAT THEY COMPLY WITH THE 2012 NC ENERGY CONSERVATION CODE AS AMENDED 2012-2016.

3 PRESCRIPTIVE WALL U-FACTOR
 NO SCALE

ROOF ASSEMBLY

MATERIAL	R-VALUE
EXTERIOR OR AIR FILM	0.17
METAL ROOFING	0.00
METAL FRAMING	0.00
R-25 INSULATION	25.0
INSIDE AIR FILM	0.68
TOTAL R VALUE:	25.85
U VALUE OF ROOF ASSEMBLY:	0.039
REQUIRED U-FACTOR:	0.041

THIS IS ACCEPTABLE BECAUSE IT IS LESS THAN THE REQUIRED U VALUE OF 0.041 PER TABLE 502.1.2 FOR ZONE 3

NOTE: OTHER ASSEMBLIES MAY BE CONSIDERED IF THE PROVIDER CAN PROVE THAT THEY COMPLY WITH THE 2012 NC ENERGY CONSERVATION CODE AS AMENDED 2012-2016.

4 PRESCRIPTIVE ROOF U-FACTOR
 NO SCALE

EGRESS CAPACITY

F-2 Warehouse
 2470 SF gross / 300 = 8.2 Occupants

A-3 Concentrated (chairs only-not fixed)
 1,000 SF net / 7 = 143 Occupants

MERCANTILE
 Grade Floor Area
 2,000 SF gross / 30 = 67 Occupants

B
 530 SF gross / 100 = 26.0 Occupants

2 OCCUPANT LOAD
 1"=30'

Plan Review Type:
 MAJOR SITE PLAN (TRC MEETING & REVIEW)
 (Greater than 2 acres or over 10,000 gross square feet)
 MINOR SITE PLAN REVIEW (TRC REVIEW)
 (Less than 2 acres or less than 10,000 gross square feet)

Key Information:
 A vicinity sketch or key map. [SEE SHEET A0.1]
 True north arrow, with north being at the top of the map. [SEE SHEET A0.1]
 Scale of the map using engineer's scale both graphic and numeric; [SEE SHEETS A0 AND A0.1]

Title Block/Site Data Tabulation:
 Name of the development; [SEE CODE REVIEW SHEET A0 ALSO SHOWN ON A0.1]
 Name of the property owner; [SEE CODE REVIEW ON SHEET A0 ALSO SHOWN ON A0.1]
 Name, address and telephone number of the [SEE CODE REVIEW ON SHEET A0] designer who prepared the plan.
 Project address; [SEE CODE REVIEW SHEET A0 ALSO SHOWN ON A0.1]
 PIN number or Tax Parcel Number; [R05413-019-005-000]
 Zoning district: [UMX]
 Building setbacks, required; [NONE, EXCEPT WHERE ABUTS RESIDENTIAL, THEN 5']
 Building setbacks, proposed; [GREATER THAN 5' ALL SIDES]
 Total amount of acreage within the project [.54 ACRES]
 boundaries:
 Building size (square footage), both existing and [EXISTING: 5,000 SF; ADDITION: 1,000 SF]
 Calculations for building lot coverage; [6,000 SF BLDG / 23,562 SF LOT: 25.4%]
 Number of units; (and number of bedrooms per [3 TENANTS] unit if multi-unit residential)

1 SITE PLAN
 1"=30'

TRASH SERVICE TO UTILIZE ROLLING CARTS

SCOPE OF SITWORK:
 -REMOVE PAVEMENT FOR NEW ADDITION
 -CONSTRUCT NEW ADDITION
 -ADD NEW ACCESSIBLE PARKING SPACE WITH ACCESS AISLE
 -ADD NEW WHEELSTOP
 -ADD NEW ACCESSIBLE PARKING SIGN.
 -ADD NEW ACCESSIBLE CURB RAMP.

FOUNDATION PLANTING:
 FRONT WALL: AREA: 20x13.33' = 273.34 SF 12%=32.8 SF REQ'D, 40 SF PROVIDED.
 ENDWALL: AREA: 762.5 SF 12%=91.5 SF REQ'D, 100 SF PROVIDED.
 BACKWALL: AREA: 20x13.33' = 273.34 SF 12%=32.8 SF REQ'D, 60 SF PROVIDED.
 PLANTS: BOXWOODS (EVERGREEN) AT 30"o/c IN A ZIG-ZAG PATTERN.

5 TREE PROT'N
 NO SCALE

EXISTING TREE
 36" HIGH STAKES
 PROTECTIVE BARRIER, PROVIDE 1' OF RADIUS FOR EACH INCH OF TRUNK DIAMETER

General Information:
 Names of property owners of adjacent properties; [SEE SHEET A0.1]
 Zoning and land use of adjacent properties; [SEE I/A0]
 Proposed streets with cross sections, existing [SEE SHEET A0.1]
 and platted streets on adjoining properties and in the proposed development with right-of-way widths;
 Location and size of proposed recreational areas [N/A]
 Location and size of proposed recreational areas [N/A]
 or open spaces;
 Existing easements: [NONE PER SURVEY. SEE SHEET A/0.1]
 Widths:
 Purposes noted:
 Public or private;
 Book and page numbers;
 Current accurate topographical information based [SEE SURVEY. SEE SHEET A/0.1]
 on mean sea level datum;
 Identify if in a special highway overlay district or [N/A]
 any other zoning overlay district;

Other required information:
 General location, ownership and size of existing:
 Water: [N/A]
 Sanitary Sewer: [N/A]
 Storm drainage lines or systems: [N/A]
 Fire Hydrants: [N/A]
 FEMA 100-year floodplain line [N/A]
 Existing parcel lines for the entire tract [SEE I/A0]
 General locations only, with sizes of proposed:
 Water lines: [SEE SHEET A0.1]
 Fire hydrants: [SEE SHEET A0.1]
 Sewer lines: [SEE SHEET A0.1]
 Storm drainage lines: [SEE SHEET A0.1]
 Please provide the Water and Sewer Capacity needs (current and proposed zoning) with calculations in gallons per day based on state guide lines.
 Water: _____ GPD (current use) [EXIST. NO CHANGE]
 Water: _____ GPD (proposed use)
 Sewer: _____ GPD (current use)
 Sewer: _____ GPD (proposed use)
 Site Inventory map as required; [SEE I/A0]
 Tree Inventory, if required by the LDC, shall [N/A] indicate trees to be preserved and those proposed for removal. This information shall be combined with an overlay of the proposed site layout. The tree inventory must be certified by a registered land surveyor. See References 18-133 & 18-455.

Moores Glass Service Inc
 1115 South 3rd Street
 Wilmington, NC

MARK GRENNELL, ARCHITECT
 P O Box 393 Castle Hayne, NC 28429 Voice 910-233-1061 Fax 910-675-9761

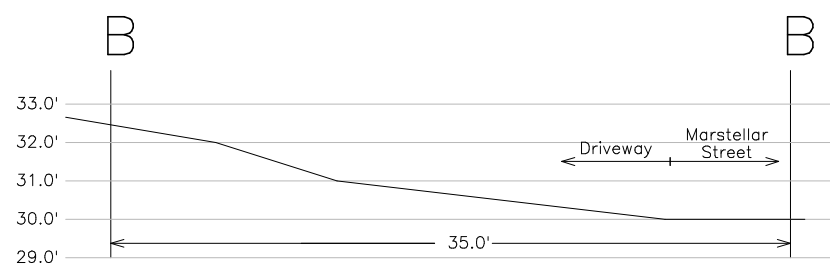
31 May 2017

REVISIONS
 no. date
 1 2 AUG 2017 TRC COMMENTS
 2 26 SEPT 2017 TRC COMMENTS
 3 28 SEPT 2017 TRC COMMENTS
 4 6 NOV 2017 TRC COMMENTS

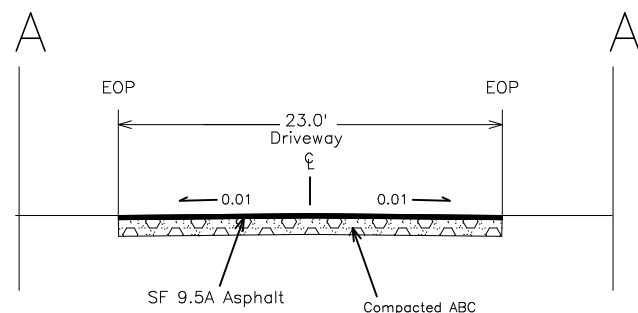
APPENDIX B
 SITE PLAN

SCALE AS NOTED

ARCH
 A0

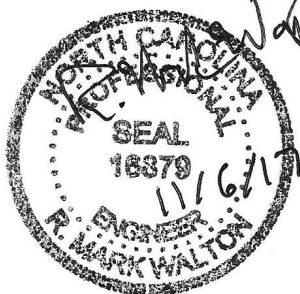


SECTION B-B
NOT TO SCALE



SECTION A-A
NOT TO SCALE

NOTE: This plan is based on a site plan by Mark Grenell Architect. By my seal below, I am certifying only the driveway plan and details.

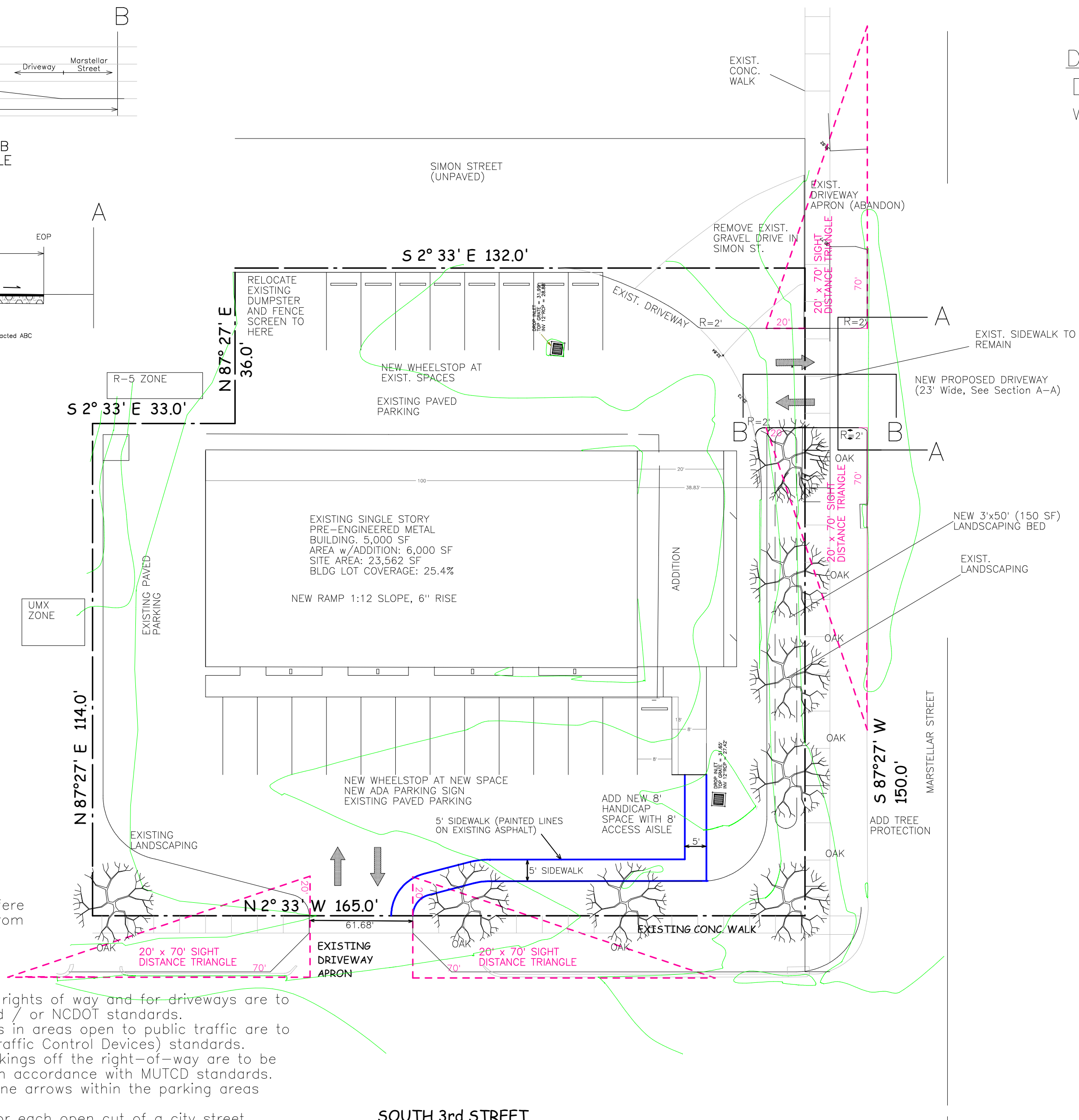


NOTE:

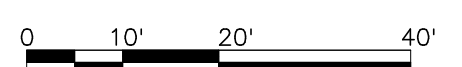
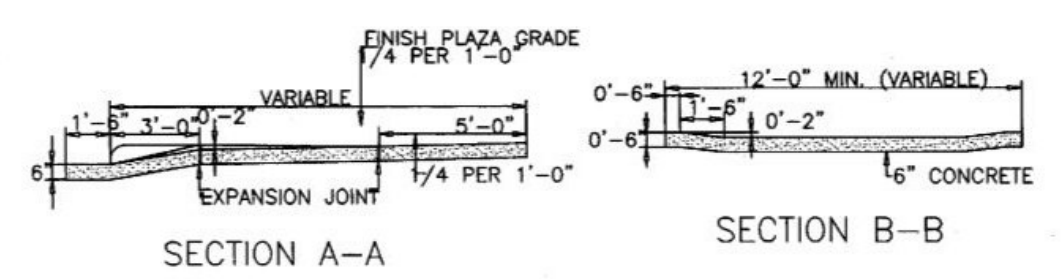
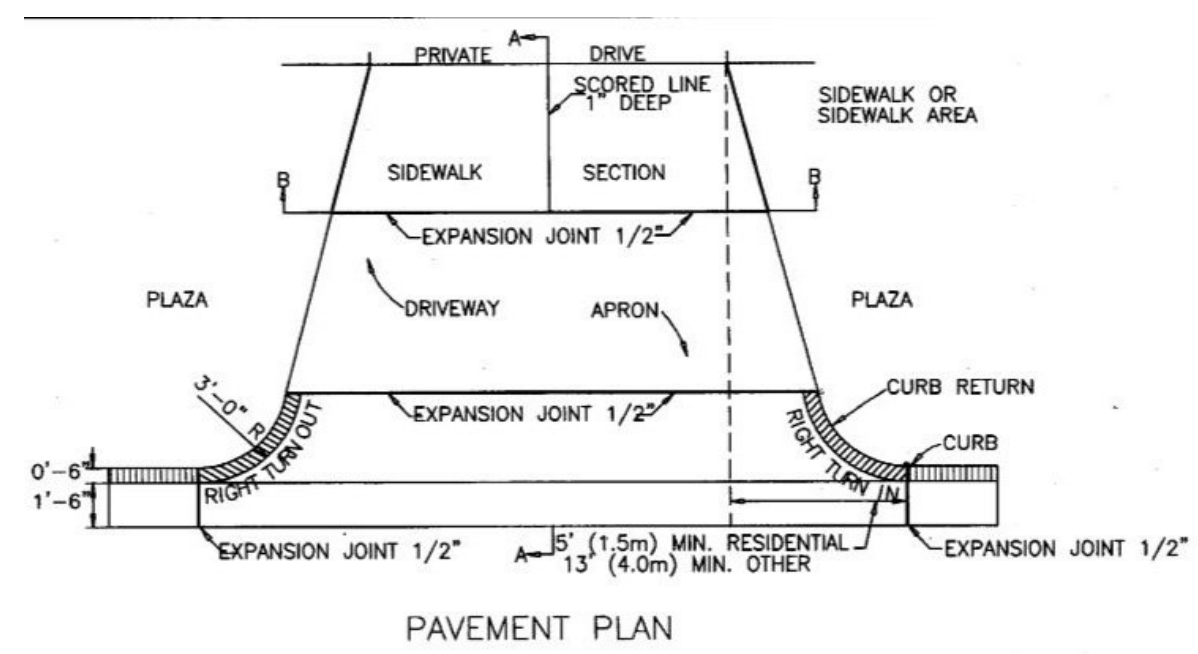
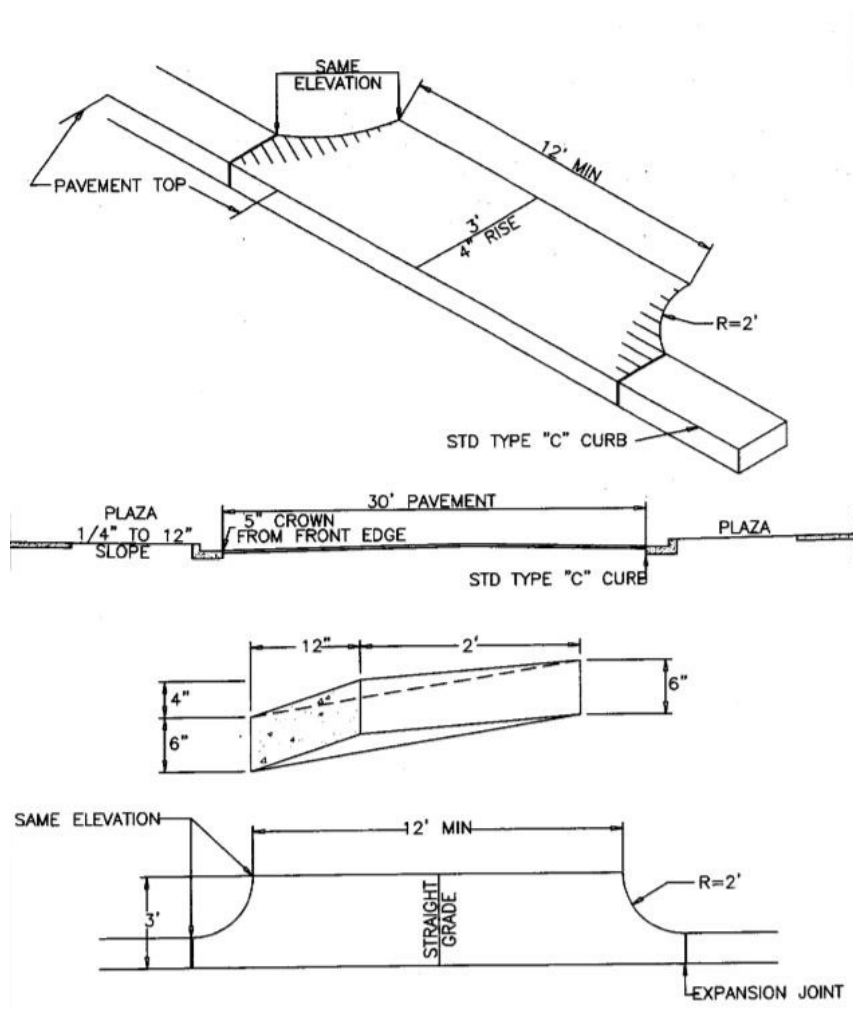
All proposed vegetation within sight triangles shall not interfere with clear visual sight lines from 10" - 30'.

NOTES:

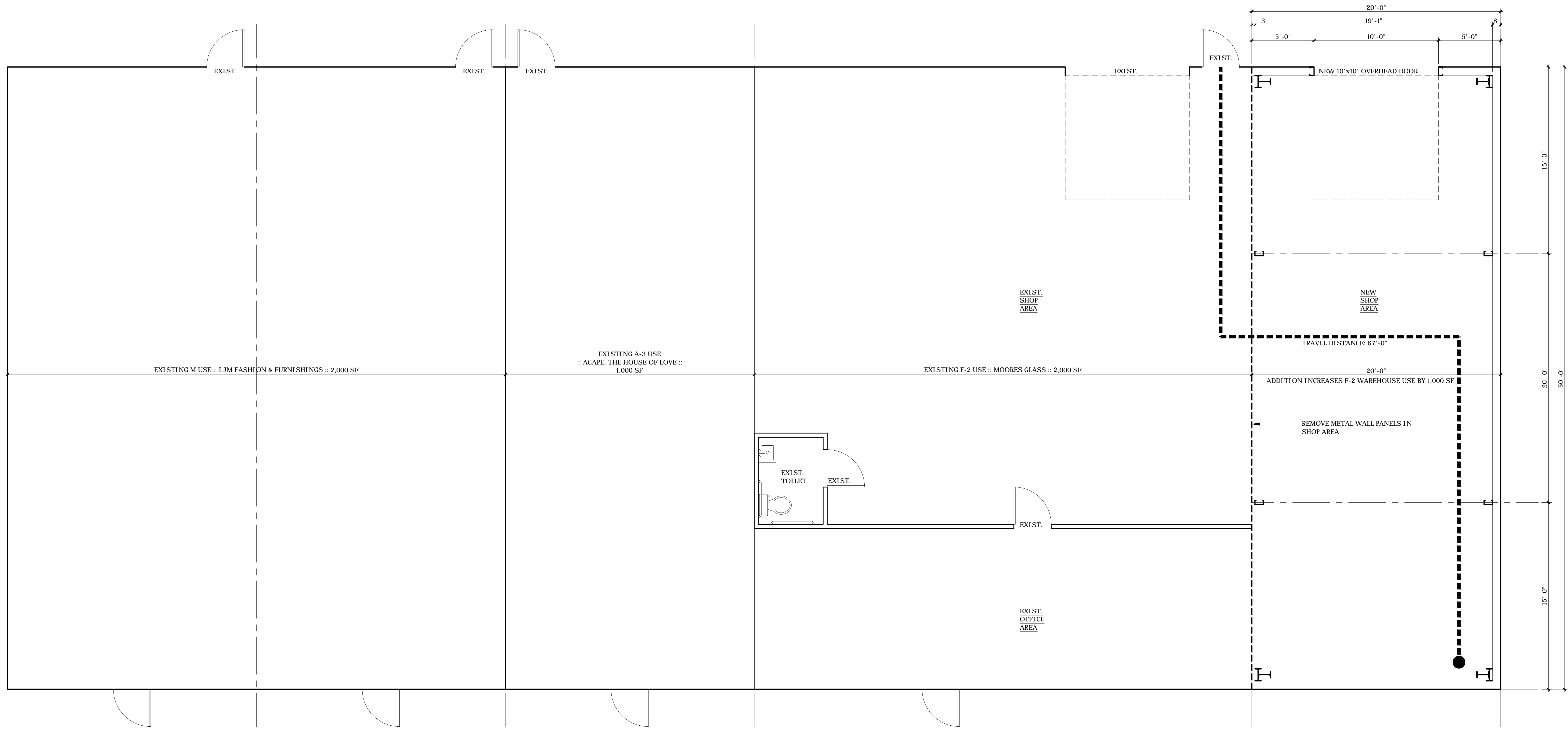
- A) All pavement markings in public rights of way and for driveways are to be thermoplastic and meet City and / or NCDOT standards.
- B) All signs and pavement markings in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards.
- C) All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.
- D) All parking stall markings and lane arrows within the parking areas shall be white.
- E) A utility cut permit is required for each open cut of a city street. Note: Call 341-5888 for details.
- F) Any broken or missing sidewalk panels, driveway panels and curbing will be replaced.
- G) A landscaping plan indicating the location of required street trees shall be submitted to the City of Wilmington Traffic Engineering Division and Parks and Recreation Dept. for review and approval prior to the recording of the final plat.
- H) Contact Traffic Engineering at 341-7888 48hrs prior to any excavation in the right of way.



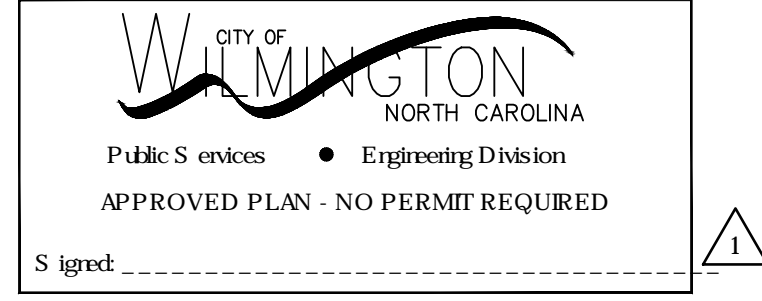
DRIVEWAY NOTES:
Driveway Pavement: 6" ABC
with 2" SF 9.5A



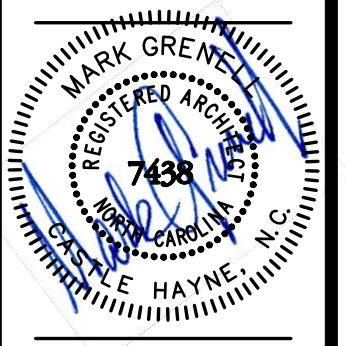
Sheet 1 of 1	Project: Moores Glass	Title: Driveway Plan	<p>PO Box 895, Burgaw, NC 28425 (910) 259-4800 Firm License# F-0968</p>
Date: 11/3/17	Scale: 1" = 20'	Drawn by: RMW/DAT	



1 FLOOR PLAN
1/4"=1'-0"

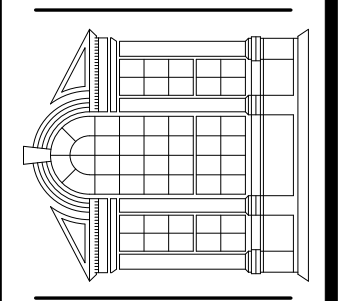


A Building Addition to
Moore's Glass Service Inc
1115 South 3rd Street
Wilmington, NC



31 May 2017

MARK GRENNELL, ARCHITECT
P O Box 393 Castle Hayne, NC 28429 Voice 910-233-1061 Fax 910-675-9761
All information and dimensions shown are subject to verification.
These drawings and ideas here depicted are for information only and do not constitute a contract.



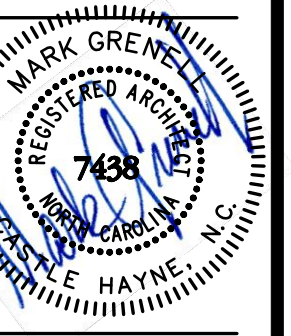
31 May 2017

REVISIONS
no. date

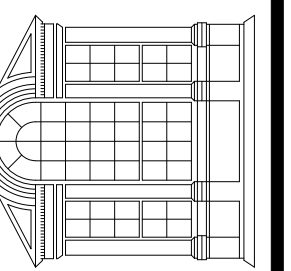
- 1 2 AUG 2017 TRC COMMENTS
- △
- △
- △
- △
- △

Floor Plan
SCALE AS NOTED

ARCH
A1



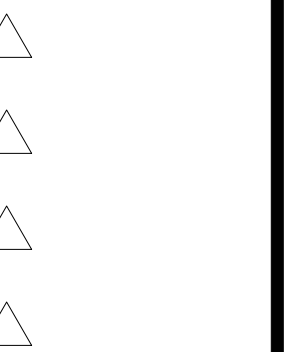
31 May 2017



31 May 2017

REVISIONS
 no. date

▲ 2 AUG 2017
 TRC COMMENTS



Elevations
 Building Section

SCALE AS NOTED

ARCH
A2

