

LEVEL ONE BANK ROCHESTER HILLS



1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MICHIGAN 48307

GENERAL NOTES:

DEMOLITION NOTES:
SEE DEMOLITION PLANS AND ELEVATIONS FOR NOTES

STRUCTURAL NOTES:
SEE STRUCTURAL DRAWINGS FOR NOTES

ARCHITECTURAL NOTES:
DO NOT SCALE DRAWINGS.
CONTRACTOR SHALL PROVIDE ALL ITEMS, ARTICLES, MATERIALS, AND OPERATIONS SCHEDULED INCLUDING ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED FOR COMPLETION.

ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL STATE, AND FEDERAL CODES AND LAWS.
CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE BUILDING AND OTHER PERMITS REQUIRED FOR THE COMPLETION OF THE WORK.

FOR TYPES I AND II CONSTRUCTION, ALL DIMENSION LUMBER IN NONBEARING EXTERIOR WALLS AND ROOF CONSTRUCTION INCLUDING GIRDERS, TRUSSES, FRAMING AND DECKING SHALL BE PRESSURE TREATED / UL CERTIFIED NON-COMBUSTIBLE PER 2015 MBC SECTION 603.1 ITEM 1.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS AT THE JOB SITE. NOTIFY THE ARCHITECT OR OWNER PRIOR TO COMMENCING WORK OF ANY DISCREPANCIES, CONFLICTS OR OMISSIONS IN THE CONSTRUCTION DOCUMENTS AND BETWEEN CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS. AN ADDENDUM WILL BE ISSUED AS NECESSARY AND WILL BECOME A PART OF THE CONTRACT DOCUMENTS. FOR THOSE DISCREPANCIES NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT OR OWNER, IT WILL BE ASSUMED THAT THE CONTRACTOR HAS BID THE MORE EXPENSIVE METHOD OF CONSTRUCTION.

CONTRACTOR SHALL KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS AND DEBRIS AND PROVIDE FINAL CLEAN-UP OF JOB SITE PRIOR TO MOVE-IN.

CONTRACTOR TO PROVIDE ALL NECESSARY TEMPORARY PROTECTION TO ENSURE THE SAFETY OF THE EXISTING TENANT AND GENERAL PUBLIC DURING CONSTRUCTION.

COORDINATE ALL WORK BEFORE AND DURING CONSTRUCTION WITH ALL OTHER AFFECTED TRADES.

WHERE INTERFERENCES DEVELOP, NOTIFY ARCHITECT FOR RESOLUTION OF CONFLICT.

RELOCATION OF CONFLICTING INSTALLED WORK, DUE TO LACK OF COORDINATION, OR POOR COORDINATION WILL NOT BE CONSIDERED EXTRA WORK

ALL M.E.P. DRAWINGS ARE REVIEWED BY ARCHITECT FOR GENERAL CODE COMPLIANCE WITH THE CURRENT MICHIGAN BUILDING CODE ONLY. ANY & ALL ENGINEERING OF M.E.P. IS THE RESPONSIBILITY OF M.E.P. ENGINEERS AND THE M.E.P. SUB CONTRACTORS, AND DOES NOT FALL ONTO THE ARCHITECT.

MILLWORK NOTES:

ALL WOODWORK/MILLWORK SHALL CONFORM TO THE QUALITY STANDARDS OF ARCHITECTURAL WOODWORK INSTITUTE (AWI) PREMIUM GRADE FOR ALL APPLICABLE SECTIONS. FABRICATOR SHALL BE FAMILIAR WITH AWI STANDARDS.

FABRICATE WOODWORK/MILLWORK ITEMS TO ACTUAL FIELD DIMENSIONS. CONTRACTOR TO FIELD VERIFY EXISTING DIMENSIONS. CONTRACTOR(S) SHALL SUBMIT SHOP DRAWINGS, SAMPLES OR MANUFACTURERS LITERATURE OF ALL ITEMS. SHOP DRAWINGS SHALL SHOW SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH QUALITY STANDARDS AND DESIGN INTENT.

COORDINATE LOCATION OF BLOCKING WITHIN PARTITIONS FOR ITEMS TO BE SECURED TO SURFACE.

CABINET INTERIORS TO BE CONSTRUCTED OF MELAMINE-FUSED FINISH HIGH DENSITY PARTICLE BOARD. CABINET DOORS TO BE FULLY FINISHED IN SPECIFIED PLASTIC LAMINATE.

ALL FASTENERS SHALL BE CONCEALED. ALL HINGES SHALL BE CONCEALED, 3-WAY ADJUSTABLE, SELF CLOSING TYPE BY "STANLEY", "BLUM", "GRASS" OR "HAFELE". ALL DRAWER SLIDES SHALL BE BALL-BEARING, FULL EXTENSION TYPE BY "ACCURITE", OR "GRANT". USE LOAD RATING FOR APPLICATIONS AS RECOMMENDED BY MANUFACTURER.

GENERAL NOTES:

CONSTRUCTION EQUIPMENT & MATERIALS SHALL BE STORED AND PLACED SO AS NOT TO ENDANGER THE PUBLIC, THE WORKERS OR ADJOINING PROPERTY FOR THE DURATION OF THE CONSTRUCTION PROJECT. REQUIRED EXITS, EXISTING STRUCTURAL ELEMENTS, FIRE PROTECTION DEVICES, AND SANITARY SAFE GUARDS SHALL BE MAINTAINED AT ALL TIMES DURING ALTERATIONS, REPAIRS, OR ADDITIONS TO ANY BUILDING OR STRUCTURE. AN ADEQUATE SUBSTITUTION SHALL BE AVAILABLE IF ANY OF THESE FEATURES BECOMES UNAVAILABLE. WASTE MATERIALS SHALL BE REMOVED IN A MANNER WHICH PREVENTS INJURY OR DAMAGE TO PERSONS, ADJOINING PROPERTIES, AND PUBLIC RIGHTS-OF-WAY. A CONSTRUCTION BARRIER PROTECTING THE PEDESTRIANS, GENERAL PUBLIC, CUSTOMERS & EMPLOYEES SHALL BE IN PLACE AND MAINTAINED AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION.

ELECTRICAL NOTES:

CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS, AND OPERATIONS SCHEDULED INCLUDING ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED FOR COMPLETION (ie: DESIGN/BUILD).

ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL STATE, AND FEDERAL CODES AND LAWS.

CONTRACTOR SHALL INSTALL NEW EMERGENCY LIGHTS W/ BATTERY BACK-UP, AND EXIT SIGNS W/ BATTERY BACK-UP THROUGHOUT AS REQUIRED BY ALL CODES AND THE LOCAL FIRE MARSHAL. CONTRACTOR SHALL FIELD INSPECT EXISTING FIXTURES AND REPLACE IF FIXTURES ARE NON-FUNCTIONING OR NEED NEW BATTERY BACK-UP.

ANY ENGINEERED DRAWINGS REQUIRED BY CITY SHALL BE PREPARED AND SUBMITTED BY SUBCONTRACTOR. ARCHITECT SHALL RECEIVE RECORD COPY.

LOCATE POWER AND COMMUNICATION RECEPTACLES TO NEAREST STUD IN APPROXIMATE POSITION INDICATED ON PLANS. PROVIDE BRIDGING BETWEEN STUDS AS REQUIRED FOR ALL DIMENSIONED RECEPTACLE LOCATIONS. DO NOT LOCATE BOXES BACK-TO-BACK WITHIN PARTITIONS- STAGGER AS REQUIRED TO MINIMIZE SOUND TRANSMISSION.

ELECTRICAL CONTRACTOR TO VERIFY WORKING CONDITION OF ALL SWITCHES, LIGHT FIXTURES, BALLASTS, EXIT AND EMERGENCY LIGHT AND OUTLETS. REPLACE IF NECESSARY (TYPICAL THROUGHOUT, AND IN ACCORDANCE WITH SPECIFICATIONS).

MECHANICAL (HVAC) NOTES:

CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS AND OPERATIONS SCHEDULED INCLUDING ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED FOR COMPLETION (ie: DESIGN/BUILD).

CONTRACTOR SHALL PROVIDE OR REWORK HVAC SYSTEM PER INFORMATION ON DRAWINGS.

ALL ROOMS TO HAVE A MINIMUM OF ONE (1) SUPPLY DIFFUSER AND ONE (1) RETURN AIR GRILLE.

ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL STATE, AND FEDERAL CODES AND LAWS.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION, TESTING AND BALANCING OF THE HVAC SYSTEM. MODIFY AND SUPPLEMENT EXISTING SYSTEM AS NECESSARY. AIR DUCTS AND RETURN AIR GRILLES SHALL BE DAMPERED AS REQUIRED.

ANY ENGINEERED DRAWINGS REQUIRED BY CITY SHALL BE PREPARED AND SUBMITTED BY SUBCONTRACTOR. ARCHITECT SHALL RECEIVE RECORD COPY.

HVAC THERMOSTAT CONTROL FOR ALL ROOMS SHALL BE LOCATED WITHIN THE DEMISED SUITE. VERIFY AND REWORK EXISTING DUCTWOK AND THERMOSTATS AS REQUIRED. VERIFY LOCATIONS OF ALL THERMOSTATS WITH TENANT REPRESENTATIVE PRIOR TO INSTALLATION.

HVAC CONTRACTOR SHALL VERIFY WORKING CONDITION OF ALL VAV BOXES, EXHAUST FANS AND ANY OTHER DEVICES DIRECTY RELATED TO THE HVAC SYSTEM. CONTRACTOR SHALL NOTIFY TENANT REP. IMMEDIATELY UPON DISCOVERY OF ANY DEFECTIVE DEVICES.

HVAC CONTRACTOR TO VERIFY WORKING CONDITON OF EVERY THERMOSTAT AND REPLACE IF NECESSARY (TYPICAL THROUGHOUT).

UPON COMPLETION OF THE WORK, HVAC CONTRACTOR SHALL PROVIDE TO THE TENANT REP. A DRAWING (AT 1/8" = 1'-0") INDICATING THE LOCATION OF EACH THERMOSTAT AND THE SUPPLY DIFFUSERS WHICH ARE CONTROLLED BY THAT THERMOSTAT.

PLUMBING NOTES:

CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS, AND OPERATIONS SCHEDULED INCLUDING ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED FOR COMPLETION (ie: DESIGN/BUILD).

CONTRACTOR SHALL PROVIDE OR REWORK PLUMBING SYSTEM PER INFORMATION ON DRAWINGS.

ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL STATE, AND FEDERAL CODES AND LAWS.

ANY ENGINEERED DRAWINGS REQUIRED BY CITY SHALL BE PREPARED AND SUBMITTED BY SUBCONTRACTOR. ARCHITECT SHALL RECEIVE RECORD COPY.

PHONE/DATA/COMMUNICATIONS NOTES:

CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A JUNCTION BOX WITH PULL STRING TO EACH WALL MOUNTED COMMUNICATIONS LOCATION.

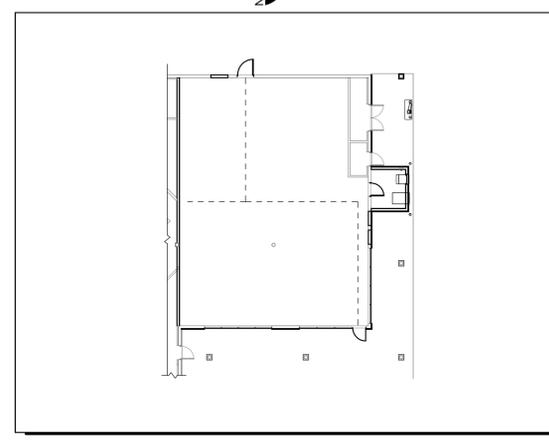
ALL NEW TELEPHONE AND DATA WIRING IN CEILING PLENUM SHALL BE PLENUM-RATED WIRE.

FIRE ALARM NOTES:

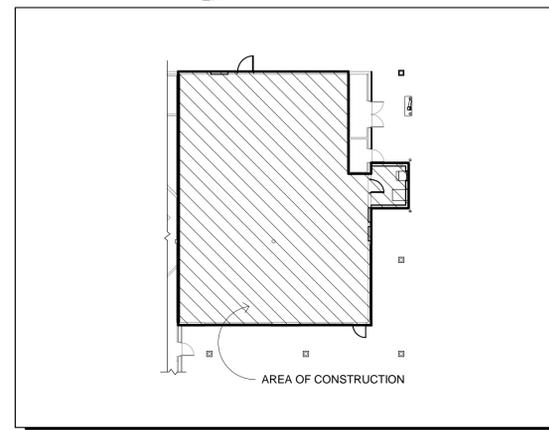
FIRE ALARM CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS.

FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR REVISED AND UPDATED DRAWINGS TO BE SUBMITTED TO CITY PRIOR TO BEGINNING WORK. FIRE ALARM CONTRACTOR TO PROVIDE ALL ITEMS, ARTICLES, MATERIALS, & LABOR TO REVISE EXISTING SYSTEM AS REQUIRED (ie: DESIGN/BUILD).

EGRESS PLAN



KEY PLAN



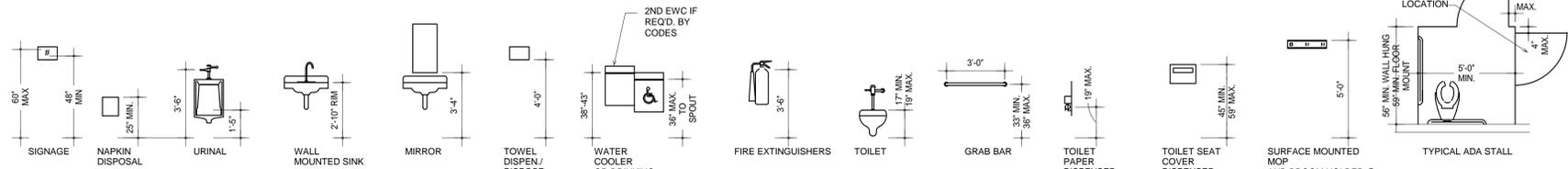
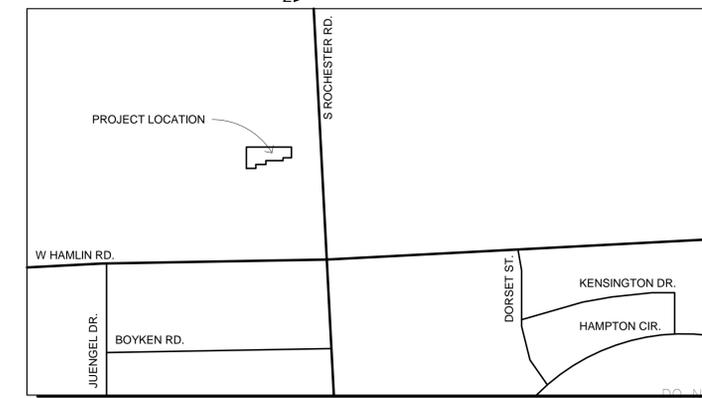
CODE ANALYSIS:

REVIEW CODE	2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS 2015 MICHIGAN BUILDING CODE 2015 MICHIGAN MECHANICAL CODE 2015 MICHIGAN PLUMBING CODE 2014 NATIONAL ELECTRIC CODE W/ PART 8 MICHIGAN AMENDMENT 2009 ICC/ANCI A117.1
TOTAL FLOORS IN BLDG.	1
USE GROUP	"B" BUSINESS
TYPE OF CONSTRUCTION	TYPE - 2B
OCCUPANCY LOAD	BUSINESS AREAS 2,587 SF GROSS/ OCCUPANT 2,587 SF/ 100 SF PER OCCUP. = 26 OCCUPANTS
EXIT ACCESS	2 EXITS REQUIRED 2 EXITS PROVIDED
EGRESS WIDTH PER OCCUPANT	25 OCCUP. x 0.2" = 5" REQUIRED 72" PROVIDED
SPRINKLER SYSTEM	SPRINKLER SYSTEM IS PROVIDED

SHEET INDEX

A0.1 COVER SHEET	MP-D DEMOLITION PLANS
1 ALTA SURVEY	MP-1 MECHANICAL / PLUMBING NEW WORK PLAN
L-1 LANDSCAPE PLAN	MP-2 ROOF NEW WORK PLAN
A1.1 ARCHITECTURAL SITE PLAN	MP-3 MECHANICAL HVAC SPECIFICATIONS
A1.2 DEMO PLANS	MP-4 PIPING SPECIFICATIONS
A1.3 DEMO ELEVATIONS	E-0 ELECTRICAL SYMBOLS LIST & GENERAL NOTES
A2.1 MAIN LEVEL FLOOR PLAN	E-1 ELECTRICAL POWER PLAN, RISER DIAGRAM & PANEL SCHEDULES
A2.2 ROOF AND FOUNDATION PLAN	E-2 ELECTRICAL SPECIFICATIONS
A3.1 ELEVATIONS	E-3 ELECTRICAL SPECIFICATIONS
A5.1 SECTIONS AND DETAILS	E-4 PHOTOMETRIC PLAN
A5.2 SECTIONS AND DETAILS	
A9.1 REFLECTED CEILING PLANS	
A10.1 WINDOW DETAILS	

LOCATION MAP



ICC A117.1 - 2009 TOILET ACCESSORIES & EQUIPMENT MOUNTING HEIGHTS

SCALE: 1/4" = 1'-0"



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

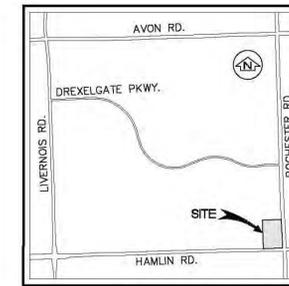
DRAWN: NLG

DATE: APRIL 15TH, 2019

SHEET TITLE: COVER SHEET

JOB NUMBER: ABD1902

SHEET NUMBER: A0.1



NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 4677 WOODWARD AVENUE
 PONTIAC, MI 48342
 TEL. (248) 332-7931
 FAX. (248) 332-8257
 EMAIL: rfraus@nowakfraus.com

LEGAL DESCRIPTION
 Land Situated in the City of Rochester Hills, County of Oakland, State of Michigan, described as:

The West 150 feet of Outlot B, ALSO the East 130 feet of the West 280 feet of Outlot B, ALSO Outlot B, EXCEPT the West 280 feet thereof, and the South 400 feet of Outlot C, Hamlin Place Farms, according to the plat thereof as recorded in Liber 15, Page 34 of Plats, Oakland County Records. Said property also being described as: Part of Outlot B and part of Outlot C of Hamlin Place Farms Subdivision, as recorded in Liber 15, Page 34 of Plats, Oakland County Records, being more particularly described as follows: Beginning at a point which is North 01 degrees 01 minutes 53 seconds East 30.00 feet along the East line of Section 22 and North 88 degrees 54 minutes 00 seconds West 80.00 feet from the Southeast corner Section 22; thence North 88 degrees 54 minutes 00 seconds West 453.80 feet along the South line of Outlot B; thence North 01 degrees 09 minutes 17 seconds East 267.00 feet along the West line of Outlot B; thence continuing North 01 degrees 09 minutes 17 seconds East 400.00 feet along the West line of Outlot C; thence South 89 degrees 08 minutes 21 seconds East 444.40 feet; thence South 00 degrees 21 minutes 00 seconds East 668.91 feet along the Westerly Right of Way line of Rochester Road (as now established) to the point of beginning.

50 W. Hamlin Road
 Tax ID: 15-22-451-030

Based on a field survey being described as:

Part of the Southeast 1/4 of Section 22, Town 3 North, Range 11 East, City of Rochester Hills, County of Oakland, State of Michigan, being part of Outlot B and part of the South 400 feet of Outlot C of Hamlin Place Farms Subdivision, as recorded in Liber 15, Page 34 of Plats, Oakland County Records, being more particularly described as follows: Commencing at the Southeast corner of said Section 22, thence North 01 degrees 09 minutes 29 seconds East 30.00 feet along the East line of said Section 22; thence North 88 degrees 54 minutes 00 seconds West 33.00 feet to the Southeast corner of said Outlot B; thence continuing, North 88 degrees 54 minutes 00 seconds West 27.00 feet to a point which is the intersection of the Westerly Right-of-Way line of Rochester Road (width varies) with the South line of Outlot B, also being the Northerly Right-of-Way line of Hamlin Road (90' wide) and the point of beginning; thence continuing, North 88 degrees 54 minutes 00 seconds West 453.80 feet to the Southwest corner of said Outlot B; thence North 01 degrees 11 minutes 30 seconds East 865.66 feet along the West line of Outlot B and C; thence South 89 degrees 18 minutes 43 seconds East 443.72 feet to a point on said Westerly Right-of-Way line of Rochester Road; thence South 00 degrees 19 minutes 36 seconds West 668.91 feet along said Westerly Right-of-Way line to the point of beginning.

SITE DATA
 Gross Land Area: 299,439 Square Feet or 6.874 Acres.
 Zoned: B-3 (Shopping Center Business) with FB-3 (Flexible Business) overlay
 Building Setbacks:
 B-3
 Front= 75'(N)
 Sides= 25'(F,N) each; 50'(N) total
 Rear= 75'(H,I)
 F. Side Yard Setbacks. Side yards shall comply with the following:
 1. If walls of structures facing interior side lot lines contain windows or other openings, the minimum yard requirements in the schedule of regulations shall be met.
 2. Where a B-3 district abuts R, RCD, RM-1, MH, SP and CI districts, the minimum side yard shall be 75 feet.
 3. In the B-3 district a front yard setback shall be required on any street frontage and from any adjacent parcel not zoned B-3.
 H. Rear Yard Setback Adjacent to a Residential District. Where a B-3 district abuts an R, RCD, RM-1 or MH district, the minimum rear yard shall be 100 feet. The rear yard may be reduced to 50 feet with the approval of the Planning Commission after a public hearing in accordance with Section 138-1.203 and submittal of a plan which ensures there will be no significant negative impacts on the adjacent property as a result of the rear yard reduction.
 I. Rear Yard Setback Adjacent to a Nonresidential District. Where a B district abuts a B, O-1, I (Industrial) SP or CI districts, the rear yard may be reduced to 10 feet with the approval of the Planning Commission, upon its determination that the requested reduction will allow for better development and will be compatible with adjoining properties.
 N. Building Spacing. When there is more than one principal commercial or industrial building on a lot or parcel, or a combination of parcels included in a unified development, the minimum spacing between buildings shall be 25 feet unless otherwise provided in the ordinance in the corner lots in I (Industrial) districts, the setbacks from the proposed or existing right-of-way lines, whichever is closer, shall be 50 feet, except as allowed in footnote L with both frontages to be considered as the front yard setback. On corner lots in the B4 and B-5 districts, the setback from the proposed right-of-way line shall be 25 feet, with both frontages to be considered as the front yard setback.

PROJECT
ROCHESTER-HAMLIN RETAIL CENTER

PROJECT LOCATION
 No. 50 W. Hamlin Road
 Part of the SE. 1/4 of Section 22, T.3N., R.11E., City of Rochester Hills, Oakland County, MI

SHEET
ALTA/ACSM
Land Title Survey

REVISIONS

NO.	DATE	DESCRIPTION

Max. Building Height permitted: 2 stories/30'
 Total Parking: 346 spaces including 14 barrier free spaces.

The above setback & height requirements were obtained from the City of Rochester Hills Zoning Ordinance. Note: The building setback lines are not plotted hereon. The surveyor cannot make a certification based on an interpretation of the Rochester Hills Zoning Ordinance. A zoning endorsement letter should be obtained from the City of Rochester Hills to insure conformity.

SURVEYOR'S CERTIFICATION
 To:
 Wells Fargo Bank, National Association and its successors and/or assigns
 Rochester-Hamlin Retail Center, L.L.C., a Michigan limited liability company
 Sewer Title Agency, LLC
 Stewart Title Guaranty Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 6(a), 6(b), 7(a), 7(b), 7(c), 8, 9, 11(a), 13, 16, 17, & 18 of Table A thereof.

The field work was completed on 02-27-2014.

KEVIN NAVAROLI
 PROFESSIONAL SURVEYOR
 No. 53503
 State of Michigan

Kevin Navaroli, P.S.
 No. 53503
 Dated: 03-10-2014

DRAWN BY:
 A.G.

APPROVED BY:
 K.N./R.FRAUS

EMAIL: rfraus@nowakfraus.com
 DATE ISSUED: 03-10-2014
 SCALE: 1"=40'
 NFE JOB NO. SHEET NO.
 H940 1

BASIS OF BEARING NOTE
 The basis of bearing for this survey was established by the North line of Hamlin Road as described in the recorded legal description. Record bearing: N.88°54'00"W.

TITLE NOTES
 Subject to:

1. Rights or claims of parties in possession not shown by the Public Records.
 2. Easements or claims of easements, not shown by the Public Records.
 3. Covenants, conditions and restrictions and other provisions not shown by the Public Records, if any, based on race, color, religion, sex, handicap, familial status or national origin as contained in instruments recorded in Liber 243, Page 13, Liber 503, Page 476, Liber 582, Page 304 and in Liber 634, Page 524, Oakland County Records. [Liber 243, Page 13, Liber 503, Page 476 and Liber 634, Page 524 - Said documents do not contain any platable easements or restrictions; Liber 582, Page 304 - Easement for Consumers Power Co. is located within the public R.O.W. and is not plotted hereon.]
 4. Easement granted to the County of Oakland for construction, operation and maintenance of water main recorded in Liber 5528, Page 251, Oakland County Records.
 5. Easement granted to the County of Oakland for construction, operation and maintenance of sanitary sewer system recorded in Liber 7468, Page 799, Oakland County Records. [Said easement is plotted hereon.]
 6. Right of Way Agreement granting easement to The Detroit Edison Company for construction, operation and maintenance of utility line facilities recorded in Liber 9360, Page 221, as re-recorded in Liber 9994, Page 210, Oakland County Records. [Approximate location of said easement is plotted hereon.]
 7. Storm Sewer Easement and Conveyance to the City of Rochester for construction, operation and replacement of storm sewer recorded in Liber 9635, Page 165, Oakland County Records. [Said easement is plotted hereon.]
 8. Sanitary Sewer Easement and Conveyance to the City of Rochester for construction, operation and replacement of sanitary sewer recorded in Liber 9635, Page 167, Oakland County Records. [Said easement is plotted hereon.]
 9. Watermain Easement and Conveyance to the City of Rochester for construction, operation and replacement of watermain recorded in Liber 9635, Page 169, Oakland County Records. [Said easement is plotted hereon.]
 10. Area Maintenance Meter Agreement by and between Hamlin Square Associates Limited Partnership and the City of Rochester Hills recorded in Liber 9726, Page 829, Oakland County Records. [Said document does not describe any platable easements or restrictions.]
 11. Area Maintenance Meter Agreement by and between Hamlin Square Associates Limited Partnership and the City of Rochester Hills recorded in Liber 9806, Page 607, Oakland County Records. [Said document does not describe any platable easements or restrictions.]
 12. Concrete Walkway Easement and Conveyance to the City of Rochester Hills for construction, operation and replacement of concrete walkway recorded in Liber 10018, Page 325, Oakland County Records. [Said easement is plotted hereon.]
 13. Easement granted to Michigan Bell Telephone Company for construction, operation and replacement of underground communications facilities recorded in Liber 13528, Page 480, Oakland County Records. [Said easement is plotted hereon.]
 14. Temporary Construction Easement granted to the County of Oakland for construction of water supply system recorded in Liber 15830, Page 526, Oakland County Records. [Said temporary easement is not plotted hereon.]
 15. Rights of tenants in possession, as tenants only, with no rights of first refusal or options to purchase.
- All exceptions shown or noted on this survey were obtained from Title Commitment No. 63-14355425-SCM, with an effective date of 02-19-2014, issued by Sewer Title Agency, LLC

FLOOD HAZARD NOTE
 The Property described on this survey is not located in a Special Flood Hazard Area as defined by the Federal Emergency Management Agency. The property lies within Map No. 26125C0394F. According to the Map Index for Macomb County, Michigan, dated 1-16-2009, Map No. 26125C0394F is not printed and is indicated as being a No Special Flood Hazard Area.

CEMETERY NOTE
 There was no observable evidence of cemeteries or burial grounds within the subject property.

UTILITY NOTE
 All utilities are underground unless otherwise noted.
 The utilities shown on this survey were determined by field observation. All locations are approximate. The location of any other underground services which may exist can only be depicted if a Utility Plan is furnished to the surveyor.

SURVEY NOTES
 There was no observable evidence of current earth moving work, building construction or building additions.
 There are no known proposed changes in street right-of-way lines available from the controlling jurisdiction.
 There was no observable evidence of recent street or sidewalk construction or repairs.

SURVEYOR'S CERTIFICATION
 To:
 Wells Fargo Bank, National Association and its successors and/or assigns
 Rochester-Hamlin Retail Center, L.L.C., a Michigan limited liability company
 Sewer Title Agency, LLC
 Stewart Title Guaranty Company

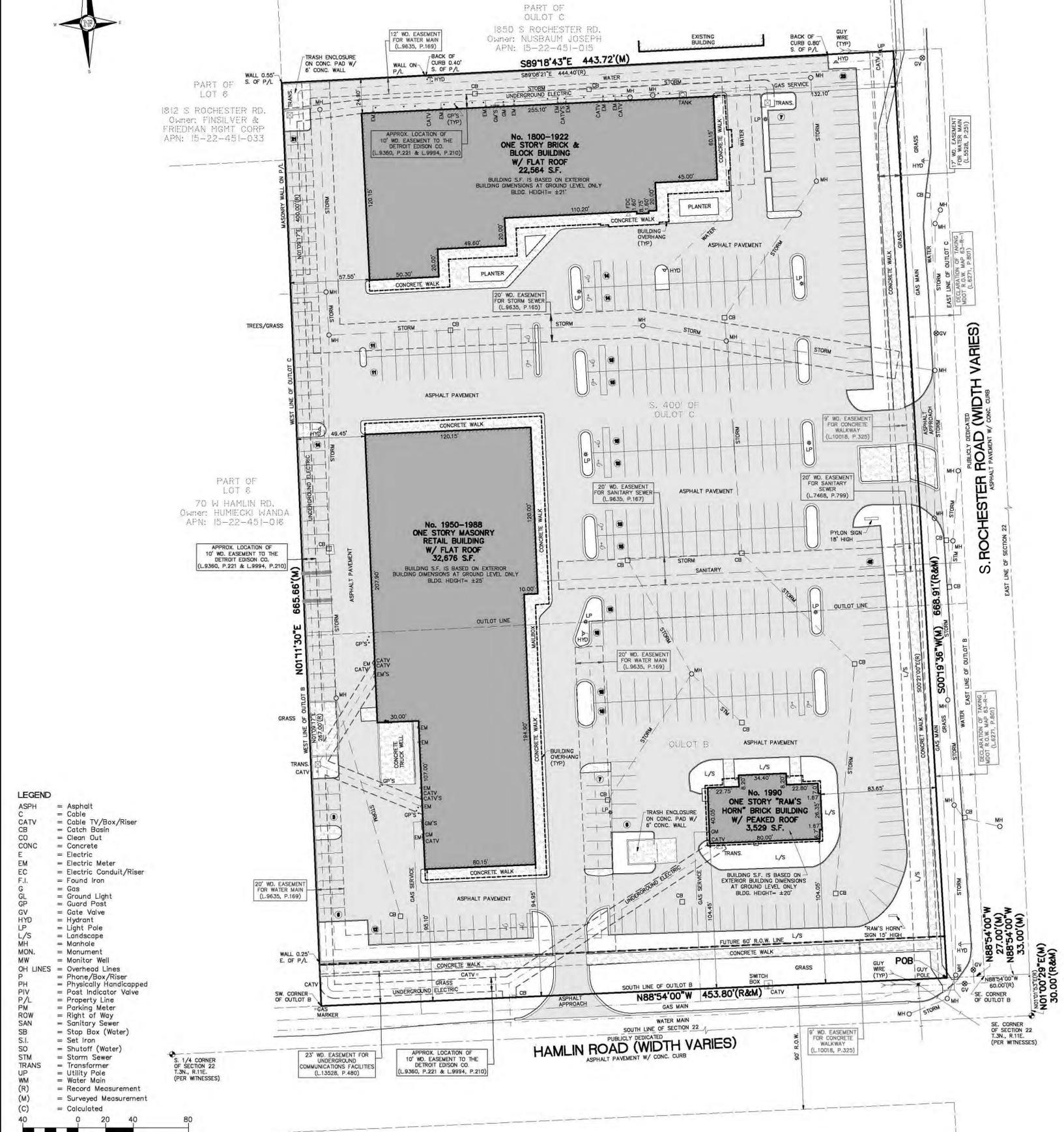
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 6(a), 6(b), 7(a), 7(b), 7(c), 8, 9, 11(a), 13, 16, 17, & 18 of Table A thereof.

The field work was completed on 02-27-2014.

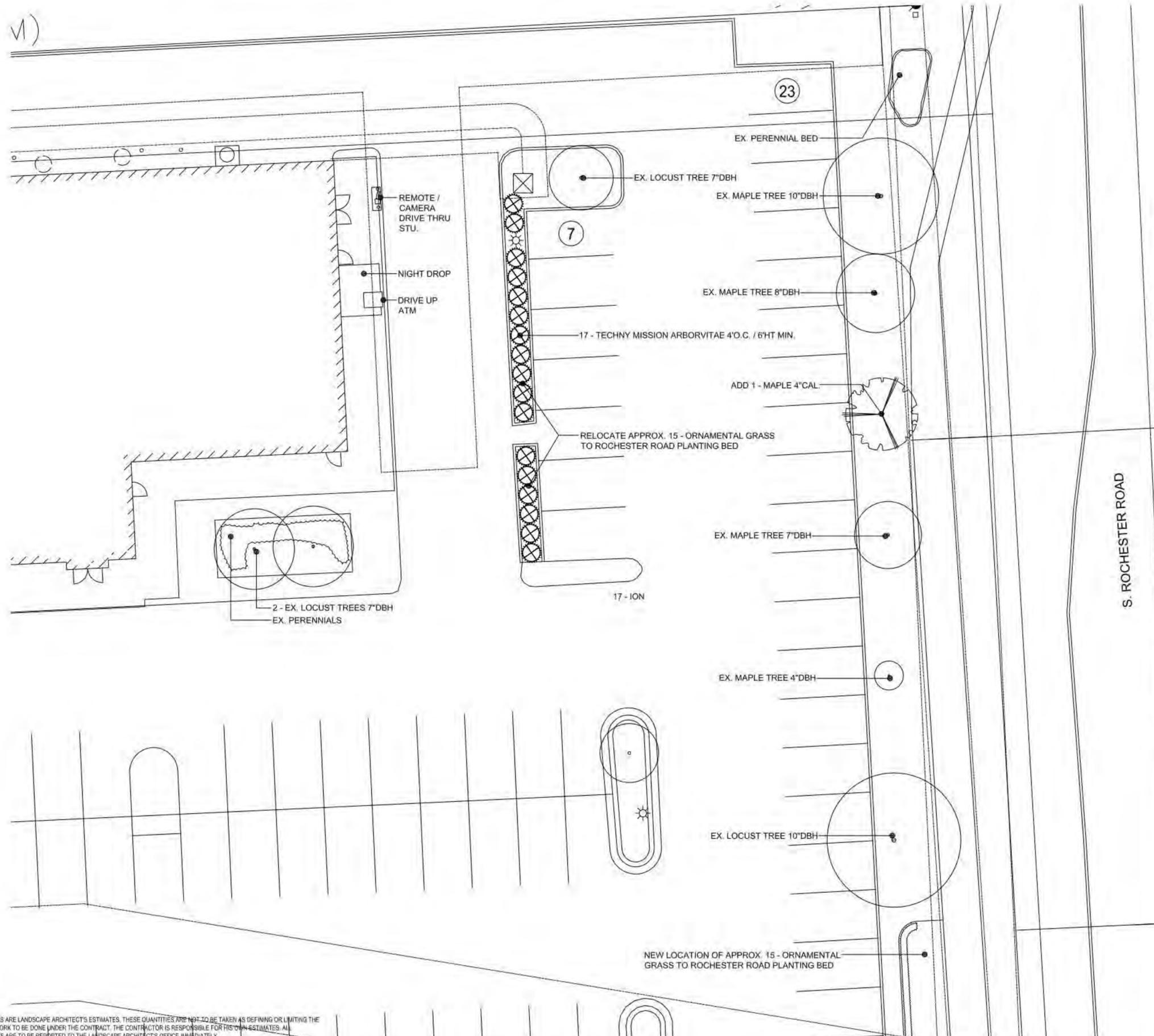
KEVIN NAVAROLI
 PROFESSIONAL SURVEYOR
 No. 53503
 State of Michigan

Kevin Navaroli, P.S.
 No. 53503
 Dated: 03-10-2014

SNOW NOTE
 This survey was performed under extreme snow conditions, due to the depth of snow & snow piles caused by snow removal the location of all surface structures such as curbs, manholes, edges of pavement & parking stripes may not be shown.



M)



COST ESTIMATE #1

ITEM	UNIT COST	TOTALS
15 - ORNAMENTAL GRASS / MOVE TO ROCHESTER ROAD	@ \$ 15.00	\$ 75.00
17 - TECHNY MISSION ARBORVITAE 4'O.C. / 6'HT MIN.	@ \$250.00	\$4,250.00
1 - MAPLE 4"CAL.	@ \$350.00	\$ 350.00
5 - YARDS HARDWOOD MULCH	@ \$ 60.00	\$ 900.00
REPAIR EXISTING IRRIGATION SYSTEM TO COVER ALL PLANTS	\$300.00	\$ 300.00
		\$5,875.00

Maintenance
 The owner of the property shall be responsible for all maintenance of site landscaping, as follows:

A. Landscaping shall be kept in a neat, orderly and healthy growing condition, free from debris and refuse.

B. Pruning shall be minimal at the time of installation, only to remove dead or diseased branches. Subsequent pruning shall assure proper maturation of plants to achieve their approved purpose.

C. All dead, damaged, or diseased plant material shall be removed immediately and replaced within six months after it dies or in the next planting season, whichever occurs first. For purposes of this Section, the planting season for deciduous plants shall be between March 1 and June 1 and from October 1 until the prepared soil becomes frozen. The planting season for evergreen plants shall be between March 1 and June 1. Plant material installed to replace dead or diseased material shall be as close as practical to the size of the material it is intended to replace. The City may notify property owners of the need to replace dead, damaged, or diseased material.

D. The approved landscape plan shall be considered a permanent record and integral part of the Site Plan Approval. Unless otherwise approved in accordance with the aforementioned procedures, any revisions to or removal of plant materials, or non-compliance with the maintenance requirements of this Section 138-12.109 will place the parcel in non-conformity with the approved landscape plan and be a violation of this ordinance.

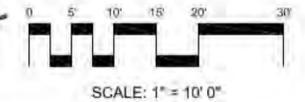
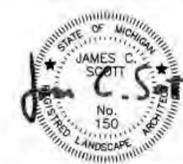
E. If protected trees are damaged, a fine shall be issued on an inch-by-inch basis at a monetary rate as defined by the Forestry Department.

17' WD. EASEMENT FOR WATER MAIN (L.5528, P.251)

DECLARATION OF TAKING MDOT R.O.W. MAP 63-R-1 (L.6271, P.801)

NOTE: ALL LANDSCAPE AREAS MUST BE IRRIGATED, AND THAT WATERING WILL ONLY OCCUR BETWEEN THE HOURS OF 12am AND 5am

PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE PLANTINGS



NOTE: ALL QUANTITIES ARE LANDSCAPE ARCHITECT'S ESTIMATES. THESE QUANTITIES ARE NOT TO BE TAKEN AS DEFINING OR LIMITING THE AMOUNT OF WORK TO BE DONE UNDER THE CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR HIS OWN ESTIMATES. ALL DISCREPANCIES ARE TO BE REPORTED TO THE LANDSCAPE ARCHITECT'S OFFICE IMMEDIATELY. ALL DESIGNS, CONCEPTS, DETAILS, ETC. ARE THE PROPERTY OF JAMES C. SCOTT & ASSOCIATES, INC. AND MAY NOT BE DUPLICATED, PHOTOGRAPHED, OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JAMES C. SCOTT, OWNER. COPYRIGHT 2019



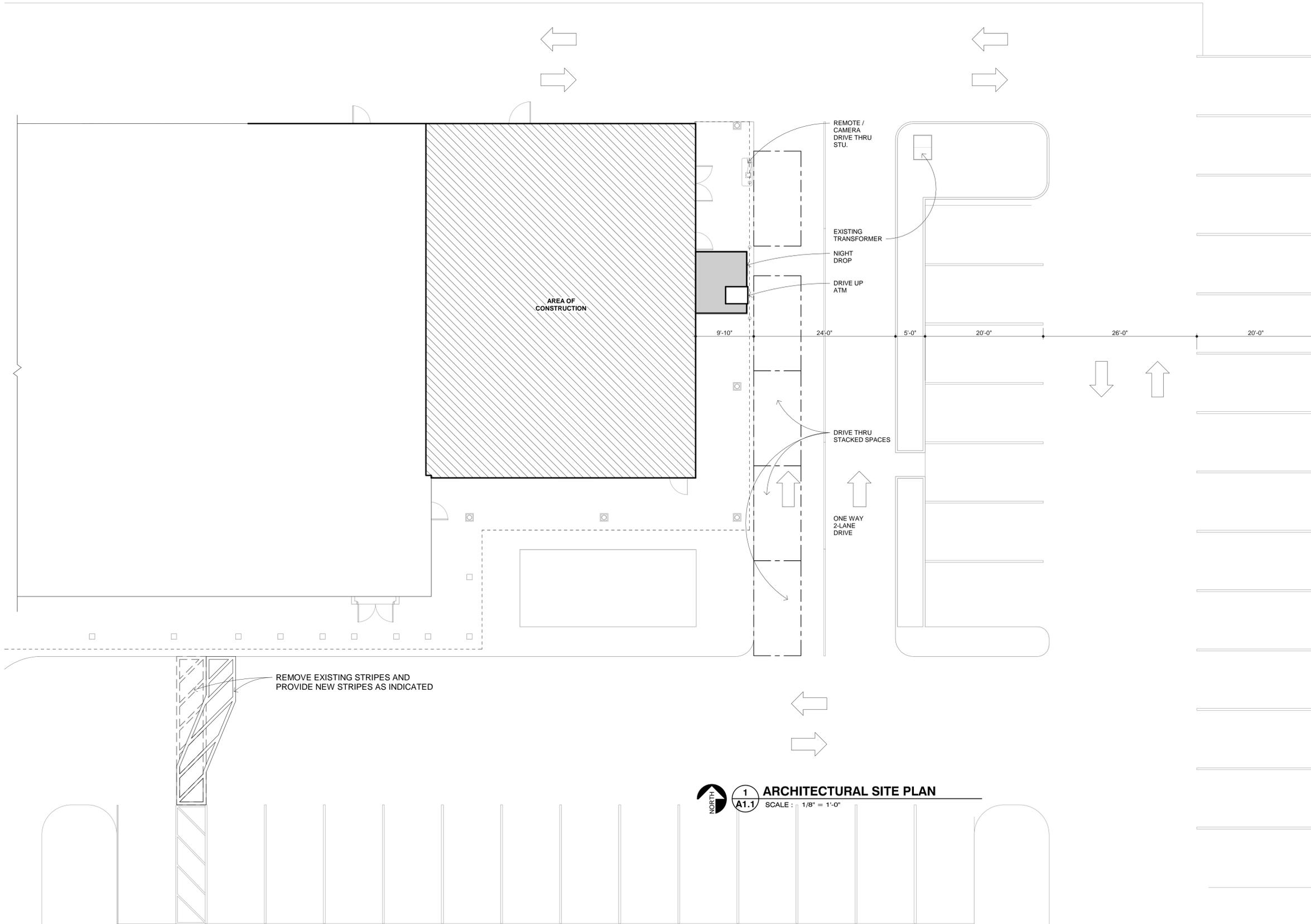
LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: NLG / MRA
DATE: APRIL 15TH, 2019
SHEET TITLE: ARCHITECTURAL SITE PLAN

JOB NUMBER: ABD1902
SHEET NUMBER: A1.1



S. ROCHESTER ROAD

1 ARCHITECTURAL SITE PLAN
A1.1 SCALE: 1/8" = 1'-0"



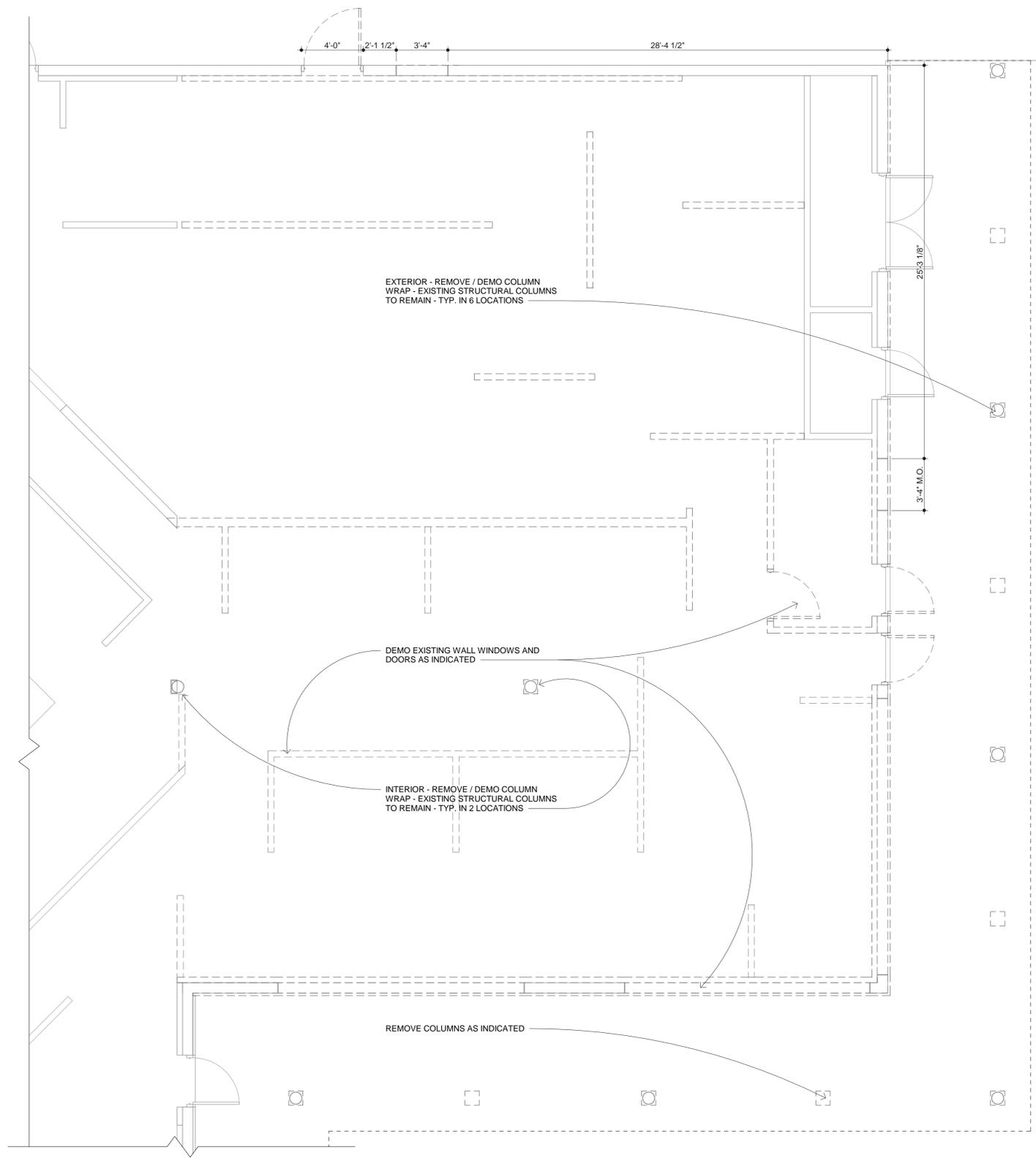
LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

REVISIONS:
REVISION 1 05-14-19
REVISION 2 05-20-19
PERMIT SET 05-22-19

DRAWN: NLG
DATE: APRIL 15TH, 2019
SHEET TITLE: DEMO PLANS

JOB NUMBER: ABD1902
SHEET NUMBER:

A1.2



1 1ST FLOOR DEMO PLAN
SCALE: 1/4" = 1'-0"

PARTITION SCHEDULE						
SYMBOL	SECTION	LOCATION	BRG. CND.	DESCRIPTION	U.L. #	RATING
1	[Solid Grey]	INTERIOR	NON-LDBRG.	NEW PARTITION TO UNDERSIDE OF CEILING GRID. CONSTRUCT WITH 5/8" GYP. BD. ON EACH SIDE OF 25 GA. 3 5/8" METAL STUDS AT 16" O.C. (MATCH WALL THICKNESS WHERE ALIGNING W/ EXISTING WALL)		
2	[Double Line]	INTERIOR	NON-LDBRG. & LDBRG.	EXISTING PARTITION OR PERIMETER WALL TO REMAIN		
3	[Dashed Line]	INTERIOR & EXTERIOR	NON-LDBRG. & LDBRG.	EXISTING PARTITION TO BE REMOVED. PATCH & REPAIR ALL FLOORS, WALLS, COLUMNS ENCLOSURES & CEILING		
4	[Solid Grey]	INTERIOR	NON-LDBRG.	NEW TENANT SEPERATION WALL - 1 LAYER OF 5/8" G.W.B. ON BOTH SIDES OF 6" MTL. STUDS @ 16" O.C. W/ 6" FIBERGLASS SOUND ATTENUATION INSULATION - UP TO ROOF DECK W/ FIRE STOPPING BETWEEN TOP PLATE AND ROOF DECKING	U404	1 HOUR
5	[Solid Grey]	EXTERIOR	NON-LDBRG.	NEW EXTERIOR WALL - 1-1/4"(t) LIMESTONE PANEL ON ± 3/4" (t) MORTAR SETTING ON GALV. SELF FURRING EXPANDED METAL LATH ON #30 FELT ON 1/2"(t) PLYWOOD SUBSTRATE ON 6" METAL STUDS @ 16" O.C. MAX W/ 6" R-19 KRAFT FACED BATTING INSULATION W/ 5/8" PAINTED G.W.B. ON INTERIOR SIDE		
5a	[Solid Grey]	EXTERIOR	NON-LDBRG.	NEW EXTERIOR WALL - 1-1/4"(t) LIMESTONE PANEL ON ± 3/4" (t) MORTAR SETTING ON GALV. SELF FURRING EXPANDED METAL LATH ON #30 FELT ON 1/2"(t) PLYWOOD SUBSTRATE ON 5-1/2" METAL STUDS @ 16" O.C. MAX W/ 6" R-19 KRAFT FACED BATTING INSULATION W/ 5/8" PAINTED G.W.B. ON INTERIOR SIDE		
6	[Cross-hatch]	EXTERIOR	NON-LDBRG.	INFILL C.M.U. W/ PAINTED EXTERIOR FINISH TO MATCH EXISTING		
7	[Solid Grey]	EXTERIOR	NON-LDBRG.	NEW EXTERIOR WALL - 1-1/4"(t) LIMESTONE PANEL ON ± 3/4" (t) MORTAR SETTING ON GALV. SELF FURRING EXPANDED METAL LATH ON #30 FELT ON EXISTING WALL AND SUBSTRATE		

DEMOLITION NOTES

- EXTENT OF BUILDING AND SITE DEMOLITION AS INDICATED ON DRAWINGS.
- THE GENERAL CONTRACTOR SHALL PROCURE ALL PERMITS AND RELEASES NECESSARY TO EXECUTE THE CONTRACT WORK.
- UPON COMPLETION OF DEMOLITION OPERATIONS THE CONTRACTOR SHALL SECURE CERTIFICATES OF COMPLETION FROM ALL GOVERNING AUTHORITIES AND FORWARD ONE COPY OF EACH TO THE OWNER / OWNER REPRESENTATIVE.
- ALL ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE CAUSED BY CONSTRUCTION.
- CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH ADJACENT STRUCTURES. MAINTAIN PROTECTED EGRESS AND ACCESS AT ALL TIMES.
- PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
- CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO ADJACENT BUSINESSES AND PRIVATE RESIDENCES.
- DO NOT CLOSE OR OBSTRUCT SIDEWALKS WITHOUT PERMITS.
- NOTIFY ADJACENT LAND OWNERS OF WORK WHICH MAY AFFECT THEIR PROPERTY OR OF POTENTIAL NOISE OR DISRUPTION.
- DISCONNECT, REMOVE AND/OR CAP EXISTING UTILITY LINES BY MEANS APPROVED BY THE RESPECTIVE UTILITY COMPANY AND GOVERNING AUTHORITIES. RECORD UTILITY AND CAP LOCATIONS ON CONTRACTOR'S "AS BUILT" DOCUMENTS.
- DEMOLISH INDICATED STRUCTURES IN AN ORDERLY AND CAREFUL MANNER.
- CEASE OPERATIONS AND NOTIFY ARCHITECT / OWNER IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. DO NOT RESUME OPERATIONS UNTIL CORRECTIVE MEASURES HAVE BEEN TAKEN.
- ALL DEMOLISHED MATERIAL SHALL BE REMOVED BY THE CONTRACTOR FROM THE SITE AND DISPOSED OF IN A PROPER AND LEGAL MANNER. THE SELECTION OF THE DUMP SITE AND DISPOSITION OF MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR.
- REMOVE ALL ABANDONED ELECTRICAL CONDUIT AND WIRING, DUCT WORK, PLUMBING PIPE SUPPLIES, DRAINS AND VENT STACKS INCLUDING AREAS ABOVE CEILINGS AND CONCEALED IN WALLS TO SOURCE. REMOVE ABANDONED FLOOR MOUNTED ELECTRICAL AND TELEPHONE DEVICES, JUNCTION BOXES, OUTLETS, PLUMBING FIXTURES, HVAC EQUIPMENT, ETC., TO BELOW FLOOR SLAB. PATCH FLOOR AS NECESSARY.
- WORK IN THE AREA SHALL INCLUDE THE DISCONNECTION, REMOVAL, RELOCATION, AND RECONNECTION COMPLETE IN ALL RESPECTS OF ALL ITEMS SHOWN ON PLANS AND/OR OTHERWISE REQUIRED TO SUIT THE DESIGN INTENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE PROJECT SITE TO CORRECTLY ASCERTAIN THE SCOPE OF SERVICES AND TO INCLUDE ALL PERTINENT COSTS IN THEIR BID.
- THE CONTRACTOR IS TO PROVIDE ALL TEMPORARY SHORING, BRACING, AND SUPPORT NECESSARY TO MAINTAIN EXISTING ROOF ELEVATIONS, AND FLOOR ELEVATIONS DURING DEMOLITION.
- FILL ALL AREAS WHERE EXISTING FOUNDATIONS HAVE BEEN REMOVED WITH COMPACTED ENGINEERED FILL AS REQUIRED. FILL & COMPACT UP TO BOTTOM OF NEW FOUNDATIONS AND/OR GRADE ELEVATION.
- ALL EXISTING ROOF STRUCTURE IS TO REMAIN EXCEPT WHERE NOTED. SEE NOTE 16 FOR BRACING REQUIREMENTS.

DO NOT SCALE DRAWINGS



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

REVISIONS:

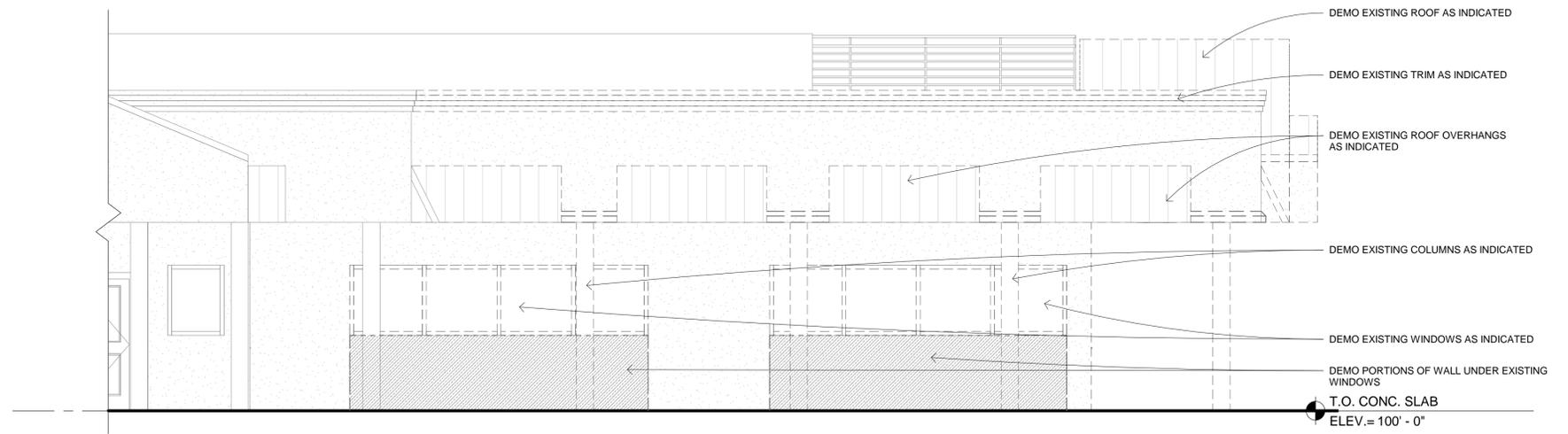
REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: NLG
DATE: APRIL 15TH, 2019
SHEET TITLE: DEMO ELEVATIONS

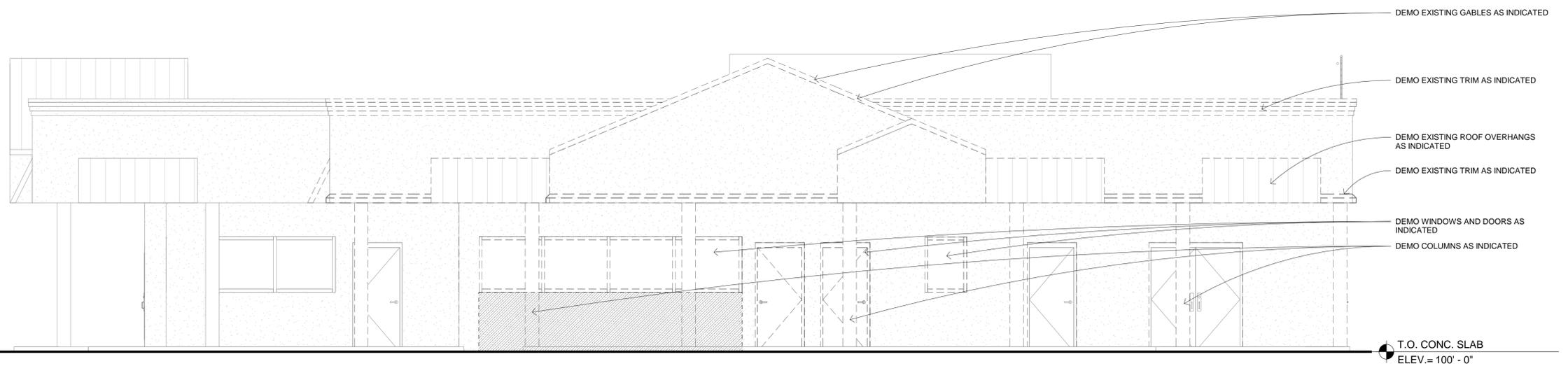
JOB NUMBER: ABD1902

SHEET NUMBER:

A1.3



2 DEMO SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



1 DEMO EAST ELEVATION
SCALE: 1/4" = 1'-0"

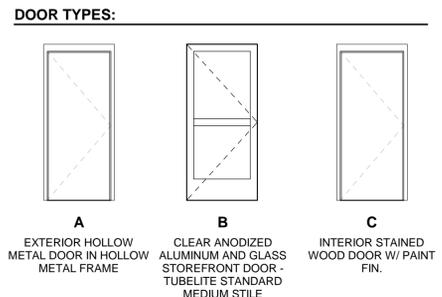
DEMOLITION NOTES

- EXTENT OF BUILDING AND SITE DEMOLITION AS INDICATED ON DRAWINGS.
- THE GENERAL CONTRACTOR SHALL PROCURE ALL PERMITS AND RELEASES NECESSARY TO EXECUTE THE CONTRACT WORK.
- UPON COMPLETION OF DEMOLITION OPERATIONS THE CONTRACTOR SHALL SECURE CERTIFICATES OF COMPLETION FROM ALL GOVERNING AUTHORITIES AND FORWARD ONE COPY OF EACH TO THE OWNER / OWNER REPRESENTATIVE.
- ALL ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE CAUSED BY CONSTRUCTION.
- CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH ADJACENT STRUCTURES. MAINTAIN PROTECTED EGRESS AND ACCESS AT ALL TIMES.
- PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
- CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO ADJACENT BUSINESSES AND PRIVATE RESIDENCES.
- DO NOT CLOSE OR OBSTRUCT SIDEWALKS WITHOUT PERMITS.
- NOTIFY ADJACENT LAND OWNERS OF WORK WHICH MAY AFFECT THEIR PROPERTY OR OF POTENTIAL NOISE OR DISRUPTION.
- DISCONNECT, REMOVE AND/OR CAP EXISTING UTILITY LINES BY MEANS APPROVED BY THE RESPECTIVE UTILITY COMPANY AND GOVERNING AUTHORITIES. RECORD UTILITY AND CAP LOCATIONS ON CONTRACTOR'S "AS BUILT" DOCUMENTS.
- DEMOLISH INDICATED STRUCTURES IN AN ORDERLY AND CAREFUL MANNER.
- CEASE OPERATIONS AND NOTIFY ARCHITECT / OWNER IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. DO NOT RESUME OPERATIONS UNTIL CORRECTIVE MEASURES HAVE BEEN TAKEN.
- ALL DEMOLISHED MATERIAL SHALL BE REMOVED BY THE CONTRACTOR FROM THE SITE AND DISPOSED OF IN A PROPER AND LEGAL MANNER. THE SELECTION OF THE DUMP SITE AND DISPOSITION OF MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR.
- REMOVE ALL ABANDONED ELECTRICAL CONDUIT AND WIRING, DUCT WORK, PLUMBING PIPE SUPPLIES, DRAINS AND VENT STACKS INCLUDING AREAS ABOVE CEILINGS AND CONCEALED IN WALLS TO SOURCE. REMOVE ABANDONED FLOOR MOUNTED ELECTRICAL AND TELEPHONE DEVICES, JUNCTION BOXES, OUTLETS, PLUMBING FIXTURES, HVAC EQUIPMENT, ETC., TO BELOW FLOOR SLAB. PATCH FLOOR AS NECESSARY.
- WORK IN THE AREA SHALL INCLUDE THE DISCONNECTION, REMOVAL, RELOCATION, AND RECONNECTION COMPLETE IN ALL RESPECTS OF ALL ITEMS SHOWN ON PLANS AND/OR OTHERWISE REQUIRED TO SUIT THE DESIGN INTENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE PROJECT SITE TO CORRECTLY ASCERTAIN THE SCOPE OF SERVICES AND TO INCLUDE ALL PERTINENT COSTS IN THEIR BID.
- THE CONTRACTOR IS TO PROVIDE ALL TEMPORARY SHORING, BRACING, AND SUPPORT NECESSARY TO MAINTAIN EXISTING ROOF ELEVATIONS, AND FLOOR ELEVATIONS DURING DEMOLITION.
- FILL ALL AREAS WHERE EXISTING FOUNDATIONS HAVE BEEN REMOVED WITH COMPACTED ENGINEERED FILL AS REQUIRED. FILL & COMPACT UP TO BOTTOM OF NEW FOUNDATIONS AND/OR GRADE ELEVATION.
- ALL EXISTING ROOF STRUCTURE IS TO REMAIN EXCEPT WHERE NOTED. SEE NOTE 16 FOR BRACING REQUIREMENTS.



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

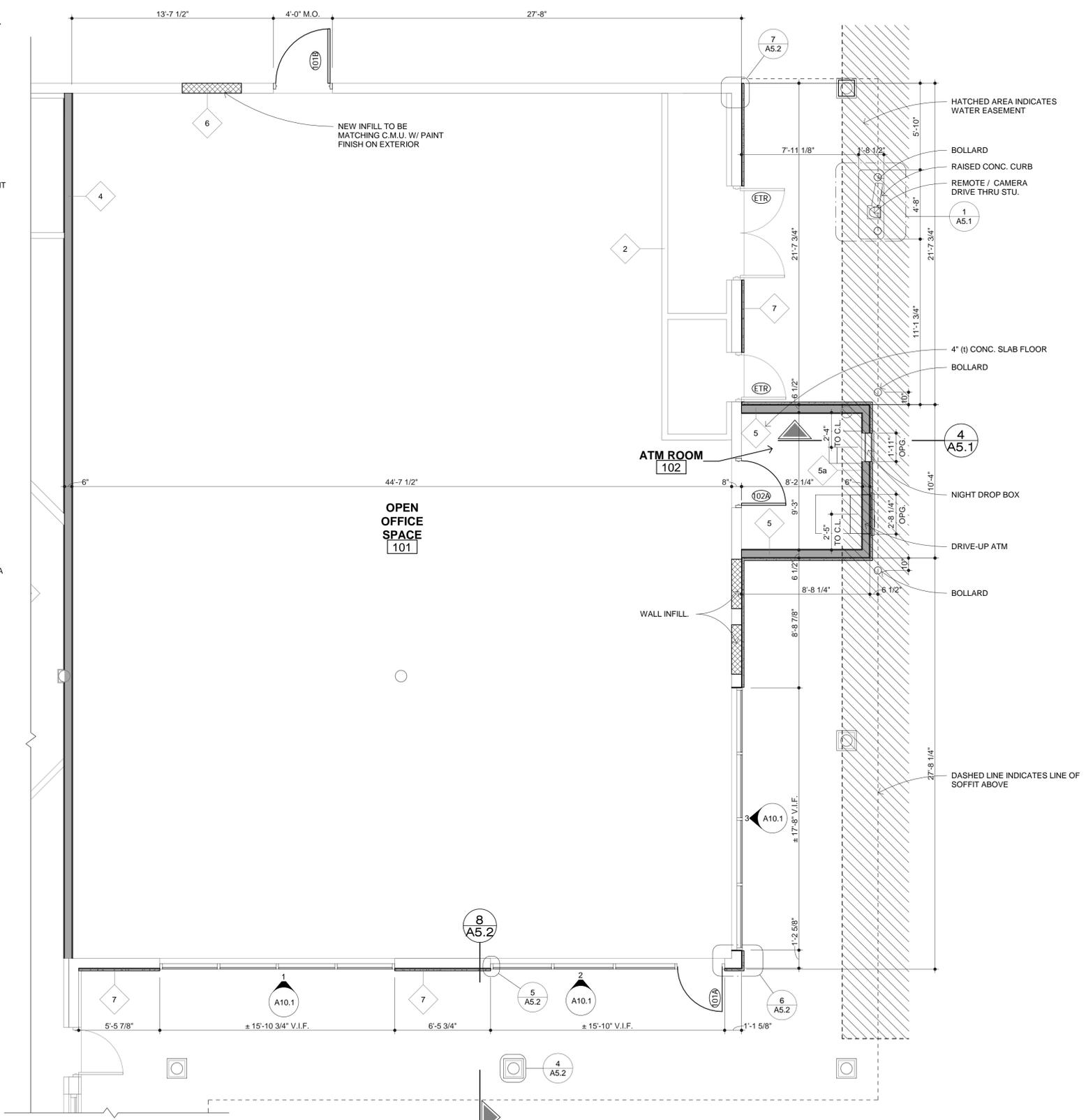
DOOR SCHEDULE						
MARK	WIDTH	HEIGHT	MODEL	TYPE	HARDWARE	COMMENTS
101A	3'-0 1/2"	7'-6 1/2"	----	B	5, 6, 7, 8	
101B	3'-8"	7'-0"	----	A	1, 4	RELOCATED EXISTING
102A	3'-0"	7'-0"	----	C	1	
ETR	3'-8"	7'-0"	----	A		
ETR	6'-0"	7'-0"	----	A		
ETR	3'-0"	7'-0"	----	A		
ETR	3'-0"	7'-0"	----	A		
ETR	3'-0"	7'-0"	----	A		



- DOOR NOTES:**
- GENERAL:**
- A. ALL NEW HARDWARE TO MATCH EXISTING FINISH. REUSE EXISTING HARDWARE WHEREVER POSSIBLE.
 - B. ROUGH ALL NEW DOOR OPENINGS WITH HEAVY GAUGE METAL OR NON-COMB WOOD STUDS.
 - C. ALL LEVERS & LOCK MECHANISMS SHALL MEET BARRIER FREE REQUIREMENTS.
 - D. ALL NEW DOORS TO RECEIVE 1-1/2" PAIR BUILDING STANDARD HINGES 4"x4" UNLESS NOTED OTHERWISE (OR MATCH EXISTING STANDARD)
 - E. ALL NEW SWING DOORS TO RECEIVE NEW WALL BUMPERS OR DOME STOPS. (OR MATCH EXISTING STANDARD)
 - F. ALL KEYING TO MATCH LANDLORD MASTER. COORDINATE KEY SCHEDULE W/ TENANT.
 - G. NEW KICK PLATES SHALL MATCH EXISTING.
 - H. ALL DOORS NOTED "ETR" ARE EXISTING TO REMAIN.
 - I. GLAZING IN DOORS, ADJACENT TO DOORS WITHIN 24", INDIVIDUAL PANE IS GREATER THAN 9 SQ. FT., BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" A.F.F. OR TOP EDGE OF THE GLAZING IS GREATER THAN 36" A.F.F. MUST BE SAFETY GLASS PER MBC 2015 SEC. 2406.4
- HARDWARE NOTES:**
- 1. LOCKSET
MFR: SCHLAGE
STYLE: LEVER 'AL' SERIES JUP
FINISH: #626 SATIN CHROME OR APPROVED EQUAL
 - 2. PASSAGE SET
MFR: SCHLAGE
STYLE: LEVER 'AL' SERIES JUP
FINISH: #626 SATIN, CHROME, OR APPROVED EQUAL
 - 3. PRIVACY SET
MFR: SCHLAGE
STYLE: LEVER 'AL' SERIES JUP
FINISH: #626 SATIN, CHROME, OR APPROVED EQUAL
 - 4. NEW CLOSER
MFR: LCN
MODEL #4010
FINISH: CLEAR ANNO OR APPROVED EQUAL
 - 5. NEW HINGES
MFR: TUBELITE
MODEL P09Z
FINISH: US26D
 - 6. NEW CLOSER
MFR: TUBELITE
MODEL P1783 HAGER SERIES 5300
FINISH: CLEAR ANNO
 - 7. NEW LOCK
MFR: TUBELITE
MODEL P1420 ADAMS RITE MS 1850A
FINISH: CLEAR ANNO OR APPROVED EQUAL
 - 8. NEW HANDLE
MFR: TUBELITE
MODEL P3489 ADAMS RITE 4560
FINISH: CLEAR ANNO OR APPROVED EQUAL

PARTITION SCHEDULE						
SYMBOL	SECTION	LOCATION	BRG. CND.	DESCRIPTION	U.L. #	RATING
1	---	INTERIOR	NON-LDBRG.	NEW PARTITION TO UNDERSIDE OF CEILING GRID. CONSTRUCT WITH 5/8" GYP. BD. ON EACH SIDE OF 25 GA. 3 5/8" METAL STUDS AT 16" O.C. (MATCH WALL THICKNESS WHERE ALIGNING W/ EXISTING WALL)		
2	---	INTERIOR	NON-LDBRG. & LDBRG.	EXISTING PARTITION OR PERIMETER WALL TO REMAIN		
3	---	INTERIOR & EXTERIOR	NON-LDBRG. & LDBRG.	EXISTING PARTITION TO BE REMOVED. PATCH & REPAIR ALL FLOORS, WALLS, COLUMNS ENCLOSURES & CEILING		
4	---	INTERIOR	NON-LDBRG.	NEW TENANT SEPERATION WALL - 1 LAYER OF 5/8" G.W.B. ON BOTH SIDES OF 6" MTL. STUDS @ 16" O.C. W/ 6" FIBERGLASS SOUND ATTENUATION INSULATION - UP TO ROOF DECK W/ FIRE STOPPING BETWEEN TOP PLATE AND ROOF DECKING	U404	1 HOUR
5	---	EXTERIOR	NON-LDBRG.	NEW EXTERIOR WALL - 1-1/4"(t) LIMESTONE PANEL ON ± 3/4" (t) MORTAR SETTING ON GALV. SELF FURRING EXPANDED METAL LATH ON #30 FELT ON 1/2" (t) PLYWOOD SUBSTRATE ON 6" METAL STUDS @ 16" O.C. MAX W/ 6" R-19 KRAFT FACED BATTING INSULATION W/ 5/8" PAINTED G.W.B. ON INTERIOR SIDE		
5a	---	EXTERIOR	NON-LDBRG.	NEW EXTERIOR WALL - 1-1/4"(t) LIMESTONE PANEL ON ± 3/4" (t) MORTAR SETTING ON GALV. SELF FURRING EXPANDED METAL LATH ON #30 FELT ON 1/2" (t) PLYWOOD SUBSTRATE ON 5-1/2" METAL STUDS @ 16" O.C. MAX W/ 6" R-19 KRAFT FACED BATTING INSULATION W/ 5/8" PAINTED G.W.B. ON INTERIOR SIDE		
6	---	EXTERIOR	NON-LDBRG.	INFILL C.M.U. W/ PAINTED EXTERIOR FINISH TO MATCH EXISTING		
7	---	EXTERIOR	NON-LDBRG.	NEW EXTERIOR WALL - 1-1/4"(t) LIMESTONE PANEL ON ± 3/4" (t) MORTAR SETTING ON GALV. SELF FURRING EXPANDED METAL LATH ON #30 FELT ON EXISTING WALL AND SUBSTRATE		

- FLOOR PLAN GENERAL NOTES**
1. ALL EXTERIOR DIMENSIONS ARE FIGURED TO EXTERIOR FACE OF MASONRY OR TO EXTERIOR SHEATHING, UNLESS NOTED OTHERWISE.
 2. ALL INTERIOR DIMENSIONS ARE FIGURED TO FACE OF ROUGH STUD UNLESS NOTED OTHERWISE.
 3. THE GENERAL CONTRACTOR SHALL COORDINATE ALL APPLICABLE TRADES TO ENSURE PROPER ROUTING, DROPS, ETC. FOR THE H.V.A.C., ELECTRICAL, PLUMBING, ETC. DURING THE ROUGH FRAMING.
 4. ALL GLASS ADJACENT TO DOORS, TUB AND SHOWER AREAS SHALL BE SAFETY GLASS.
 5. IF ANY QUESTIONS ARISE AS TO THE ARCHITECTURAL INTENT OF THESE DOCUMENTS, IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASK SUCH QUESTIONS OF THE ARCHITECT, AS THE ARCHITECT IS THE SOLE INTERPRETER OF THESE DOCUMENTS. IF NO SUCH QUESTIONS ARE ASKED, IT IS ASSUMED THAT THE ARCHITECTURAL INTENT OF THE DOCUMENTS IS UNDERSTOOD.
 6. PROVIDE PIPE INSULATION FOR ALL PLUMBING LINES PASSING THROUGH OR CONTAINED IN UN-TEMPERED CAVITIES.
 7. CONTRACTOR IS TO VERIFY THAT THE WINDOW MANUFACTURER HAS PROVIDED EGRESS WINDOWS IN ACCORDANCE WITH THE LOCAL BUILDING CODE.
 8. SEE WINDOW AND DOOR SCHEDULES FOR ROUGH OPENING REQUIREMENTS FOR WINDOWS AND DOORS.
 9. THE INTERIOR WALLS, FLOOR, AND CEILING SPACE OF THE FOLLOWING ROOM TYPES SHALL CONTAIN SOUND ATTENUATION BATT INSULATION: LAUNDRY ROOMS, BATHROOMS, POWDER ROOMS, BEDROOMS, AND MECHANICAL ROOMS.
 10. THE GENERAL CONTRACTOR IS TO COORDINATE THE LOCATION OF ALL FLOOR DRAINS REQUIRED FOR MECHANICAL EQUIPMENT IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
 11. SMOKE DETECTORS IN THE ENTIRE HOUSE SHALL MEET THE REQUIREMENTS OF SECTION R313 OF THE MICHIGAN RESIDENTIAL CODE.
 12. ALL WORK SHALL COMPLY WITH THE 2009 MICHIGAN RESIDENTIAL CODE.



1 1ST LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"

DO NOT SCALE DRAWINGS

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: NLG / MRA
DATE: APRIL 15TH, 2019
SHEET TITLE: MAIN LEVEL FLOOR PLAN

JOB NUMBER: ABD1902
SHEET NUMBER: A2.1



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

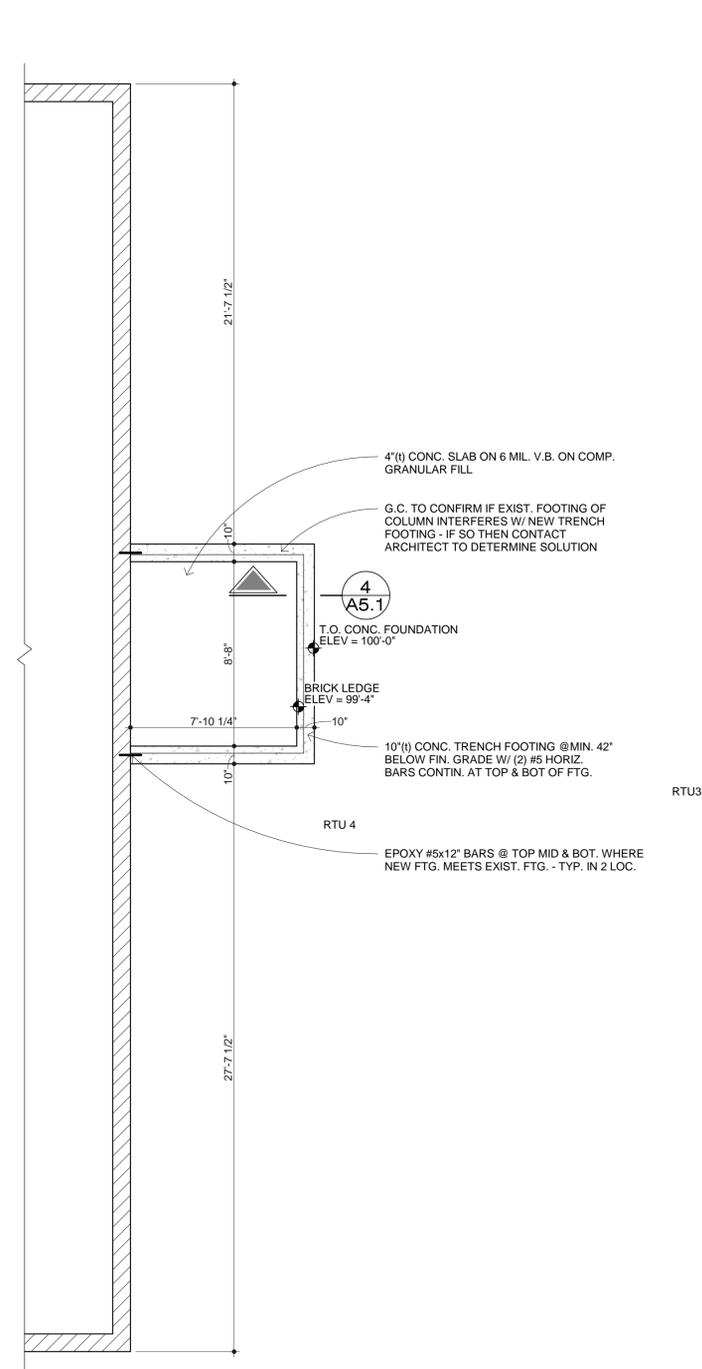
REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

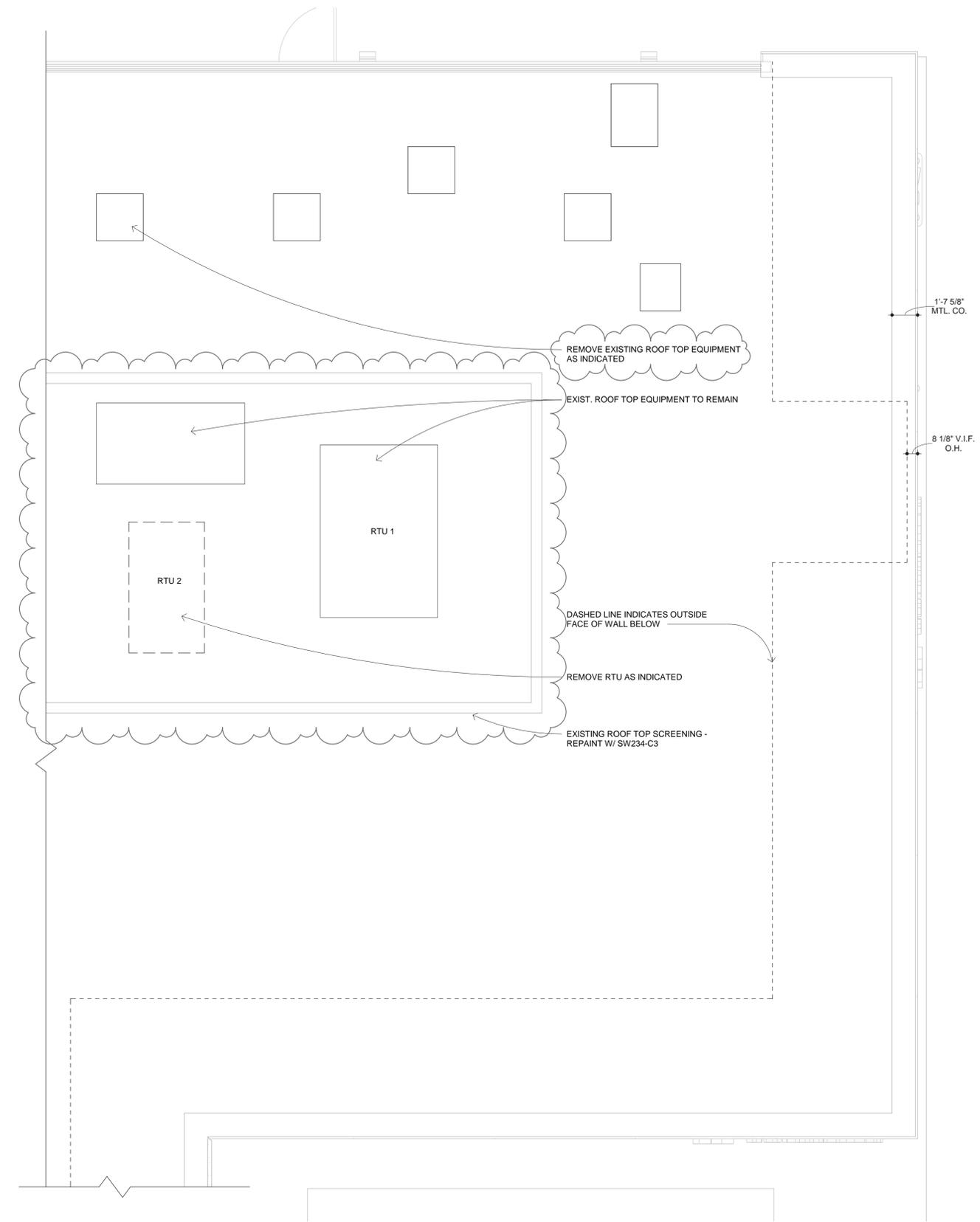
DRAWN: NLG
DATE: APRIL 15TH, 2019
SHEET TITLE: ROOF AND FOUNDATION PLAN

JOB NUMBER: ABD1902

SHEET NUMBER: A2.2



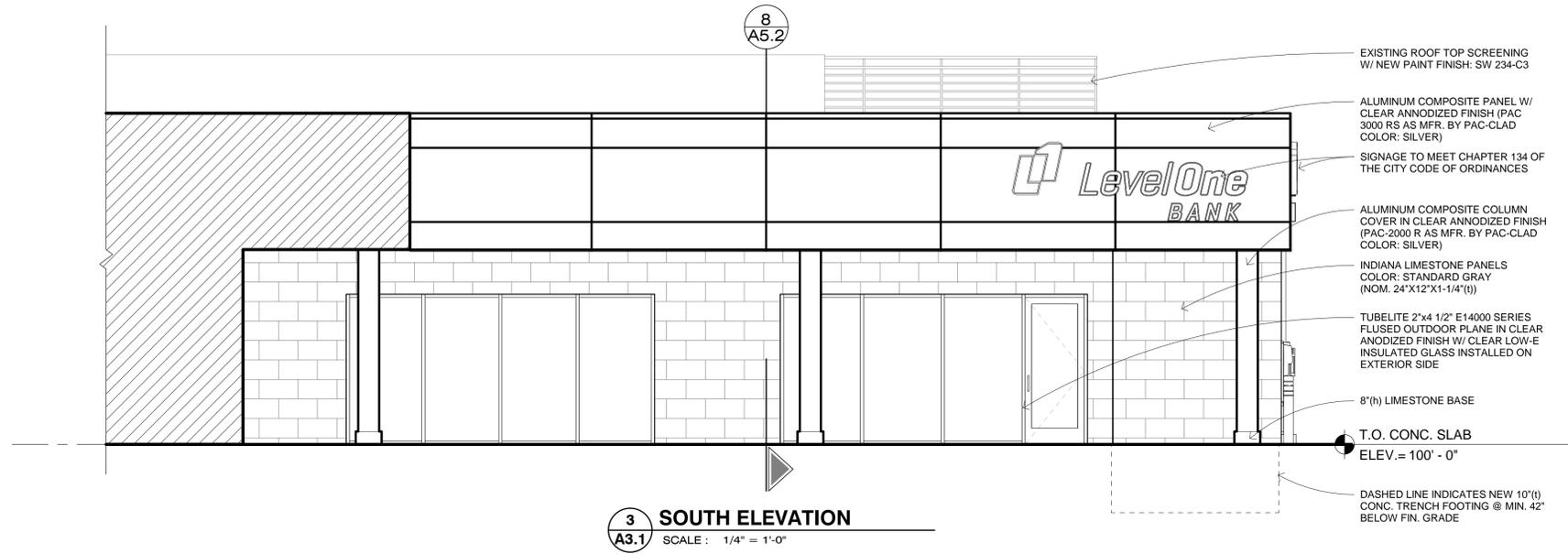
2 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



1 ROOF PLAN
SCALE: 1/4" = 1'-0"



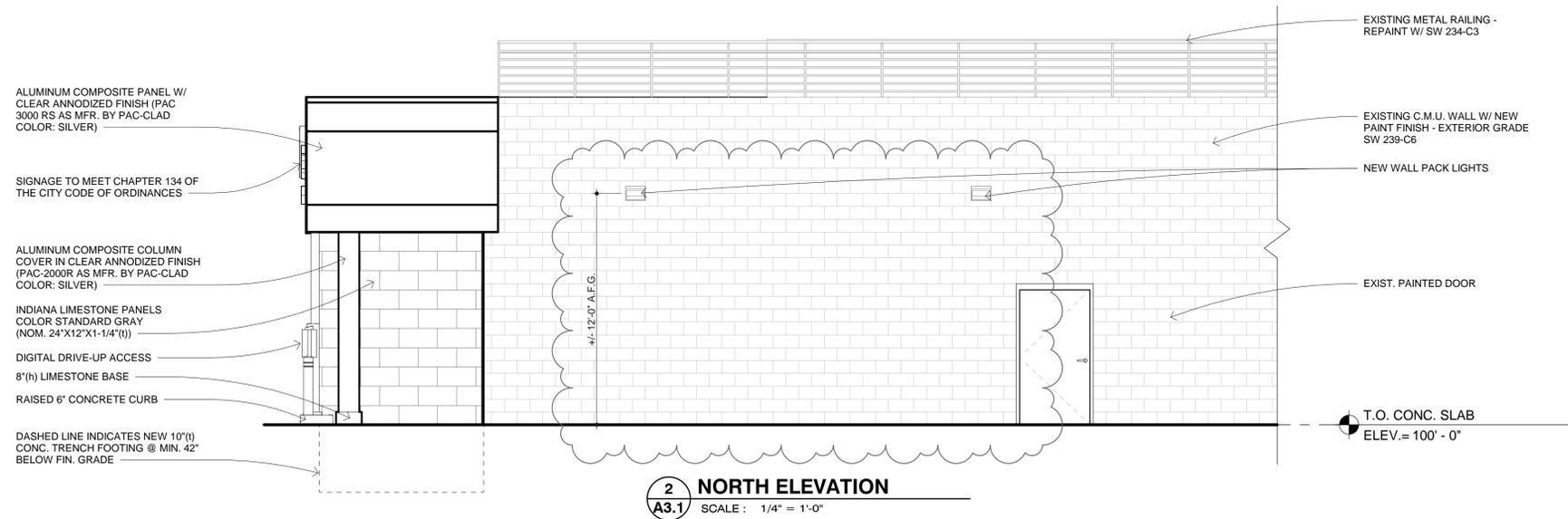
LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307



- EXISTING ROOF TOP SCREENING W/ NEW PAINT FINISH: SW 234-C3
- ALUMINUM COMPOSITE PANEL W/ CLEAR ANNOIDIZED FINISH (PAC 3000 RS AS MFR. BY PAC-CLAD COLOR: SILVER)
- SIGNAGE TO MEET CHAPTER 134 OF THE CITY CODE OF ORDINANCES
- ALUMINUM COMPOSITE COLUMN COVER IN CLEAR ANNOIDIZED FINISH (PAC-2000R AS MFR. BY PAC-CLAD COLOR: SILVER)
- INDIANA LIMESTONE PANELS COLOR: STANDARD GRAY (NOM. 24"X12"X1-1/4"(t))
- TUBELITE 2"x4 1/2" E14000 SERIES FLUSED OUTDOOR PLANE IN CLEAR ANODIZED FINISH W/ CLEAR LOW-E INSULATED GLASS INSTALLED ON EXTERIOR SIDE
- 8"(h) LIMESTONE BASE
- T.O. CONC. SLAB ELEV.= 100' - 0"
- DASHED LINE INDICATES NEW 10"(t) CONC. TRENCH FOOTING @ MIN. 42" BELOW FIN. GRADE



- EXISTING ROOF TOP SCREENING W/ NEW PAINT FIN. SW 234-C3
- ALUMINUM COMPOSITE PANEL W/ CLEAR ANNOIDIZED FINISH (PAC-3000 RS AS MFR. BY PAC-CLAD COLOR: SILVER)
- SIGNAGE TO MEET CHAPTER 134 OF THE CITY CODE OF ORDINANCES
- ALUMINUM COMPOSITE COLUMN COVER IN CLEAR ANNOIDIZED FINISH (PAC-2000R AS MFR. BY PAC-CLAD COLOR: SILVER)
- INDIANA LIMESTONE PANELS COLOR: STANDARD GRAY (NOM. 24"X12"X1-1/4"(t))
- BOLLARD AT 42" A.F.G. W/ PAINT FINISH
- DIGITAL DRIVE-UP ACCESS
- RAISED 6" CONCRETE CURB
- 8"(h) LIMESTONE BASE
- T.O. CONC. SLAB ELEV.= 100' - 0"
- DASHED LINE INDICATES NEW 10"(t) CONC. TRENCH FOOTING @ MIN. 42" BELOW FIN. GRADE



- ALUMINUM COMPOSITE PANEL W/ CLEAR ANNOIDIZED FINISH (PAC 3000 RS AS MFR. BY PAC-CLAD COLOR: SILVER)
- SIGNAGE TO MEET CHAPTER 134 OF THE CITY CODE OF ORDINANCES
- ALUMINUM COMPOSITE COLUMN COVER IN CLEAR ANNOIDIZED FINISH (PAC-2000R AS MFR. BY PAC-CLAD COLOR: SILVER)
- INDIANA LIMESTONE PANELS COLOR STANDARD GRAY (NOM. 24"X12"X1-1/4"(t))
- DIGITAL DRIVE-UP ACCESS
- 8"(h) LIMESTONE BASE
- RAISED 6" CONCRETE CURB
- DASHED LINE INDICATES NEW 10"(t) CONC. TRENCH FOOTING @ MIN. 42" BELOW FIN. GRADE

- EXISTING METAL RAILING - REPAINT W/ SW 234-C3
- EXISTING C.M.U. WALL W/ NEW PAINT FINISH - EXTERIOR GRADE SW 239-C6
- NEW WALL PACK LIGHTS
- EXIST. PAINTED DOOR
- T.O. CONC. SLAB ELEV.= 100' - 0"

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

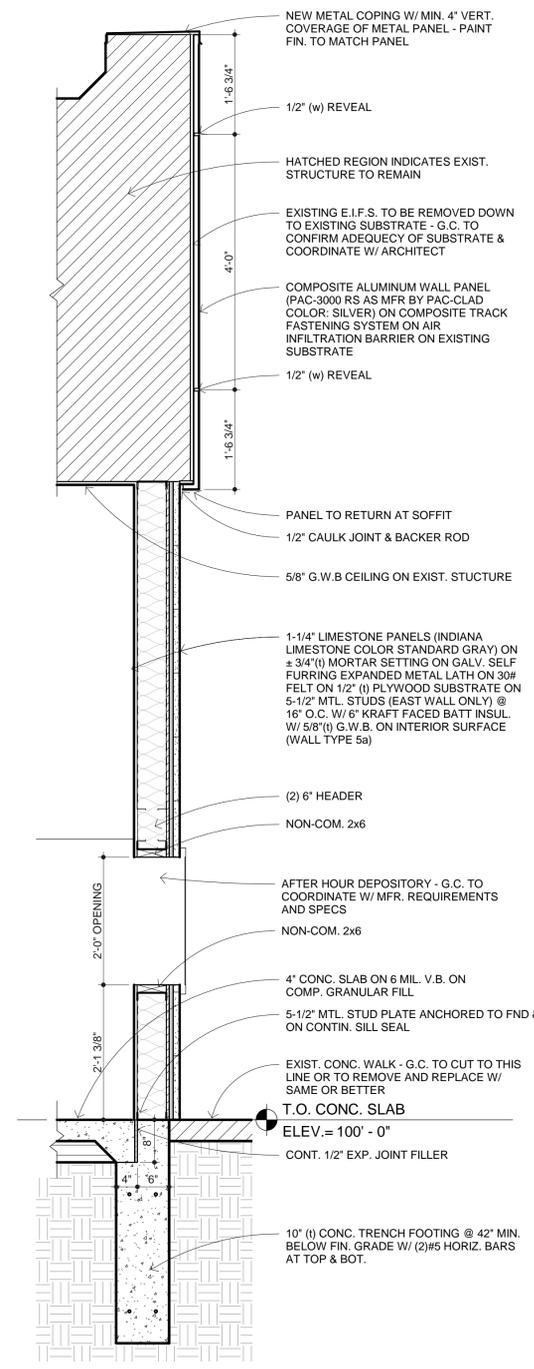
DRAWN: NLG / MRA
DATE: APRIL 15TH, 2019
SHEET TITLE: ELEVATIONS

JOB NUMBER: ABD1902
SHEET NUMBER:

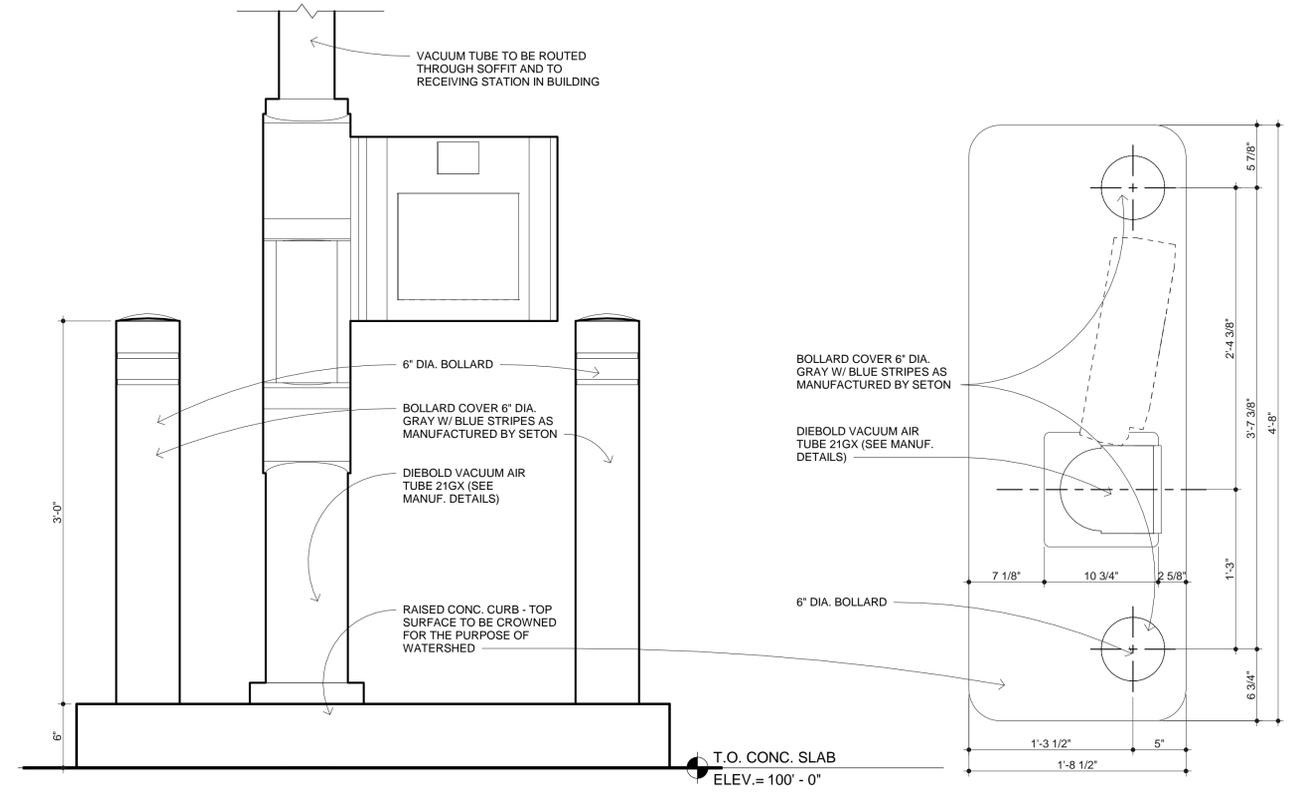
A3.1



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

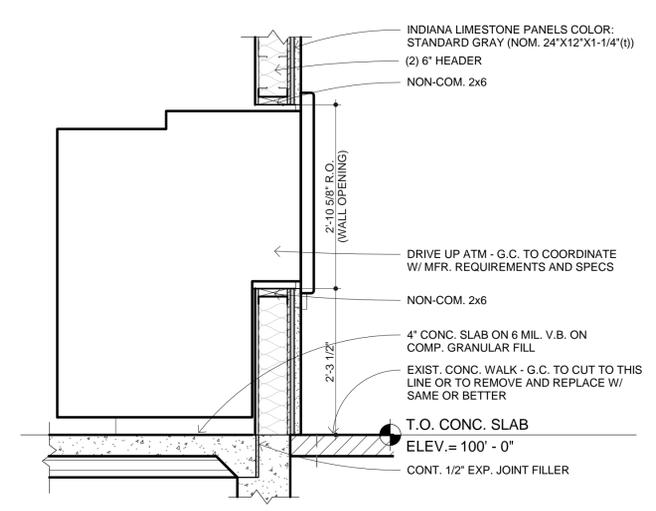


4 WALL SECTION
A5.1 SCALE : 3/4" = 1'-0"

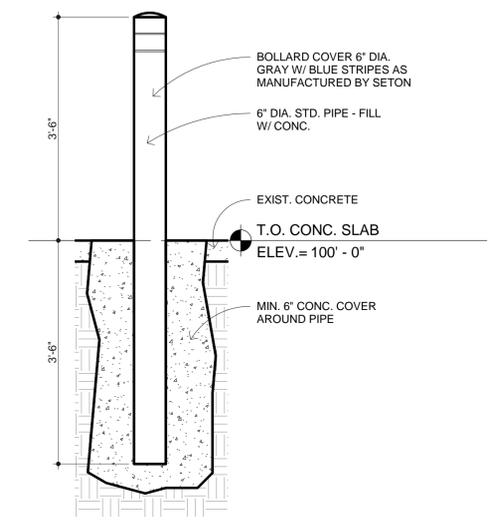


3 VACUUM AIR TUBE ELEVATION
A5.1 SCALE : 1 1/2" = 1'-0"

1 VACUUM AIR TUBE PLAN
A5.1 SCALE : 1 1/2" = 1'-0"



6 ATM SECTION
A5.1 SCALE : 3/4" = 1'-0"



5 BOLLARD DETAIL
A5.1 SCALE : 3/4" = 1'-0"

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: NLG_MRA
DATE: APRIL 15TH, 2019
SHEET TITLE: SECTIONS AND DETAILS

JOB NUMBER: ABD1902
SHEET NUMBER:

A5.1



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: MRA, NLG
DATE: APRIL 15TH, 2019
SHEET TITLE: SECTIONS AND DETAILS

JOB NUMBER: ABD1902
SHEET NUMBER:

A5.2

EXISTING C.M.U. WALL W/ NEW PAINT FINISH - EXTERIOR GRADE SW 239-C6

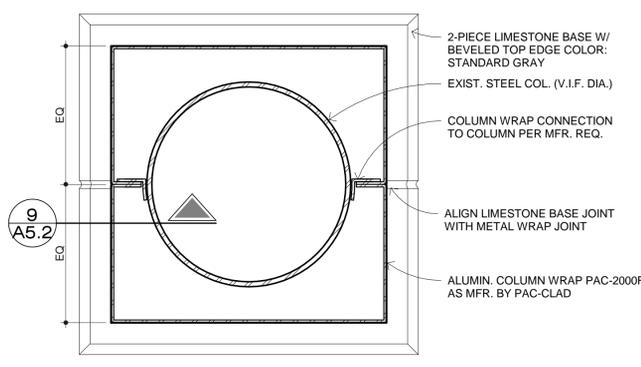
3/4"(w) GROOVED / CONCAVED MORTAR JOINT BETWEEN BACK OF NEW LIMESTONE AND EXIST. PAINTED C.M.U.

HATCHED AREA INDICATES EXISTING STRUCTURE TO REMAIN

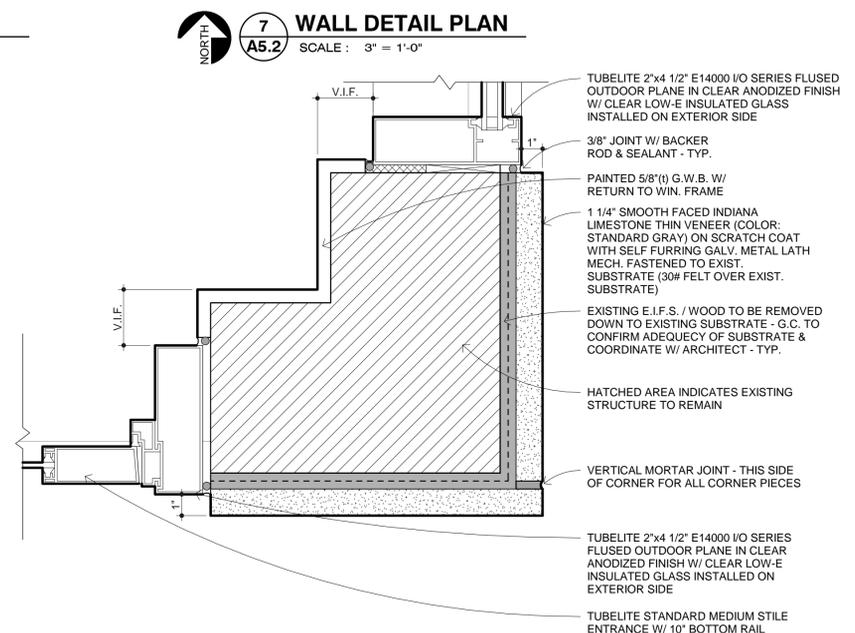
1 1/4" SMOOTH FACED INDIANA LIMESTONE THIN VENEER (COLOR: STANDARD GRAY) ON SCRATCH COAT WITH SELF FURRING GALV. METAL LATH MECH. FASTENED TO EXIST. SUBSTRATE (30# FELT OVER EXIST. SUBSTRATE)

3/8"(w) GROOVED / CONCAVED MORTAR JOINT - TYP.

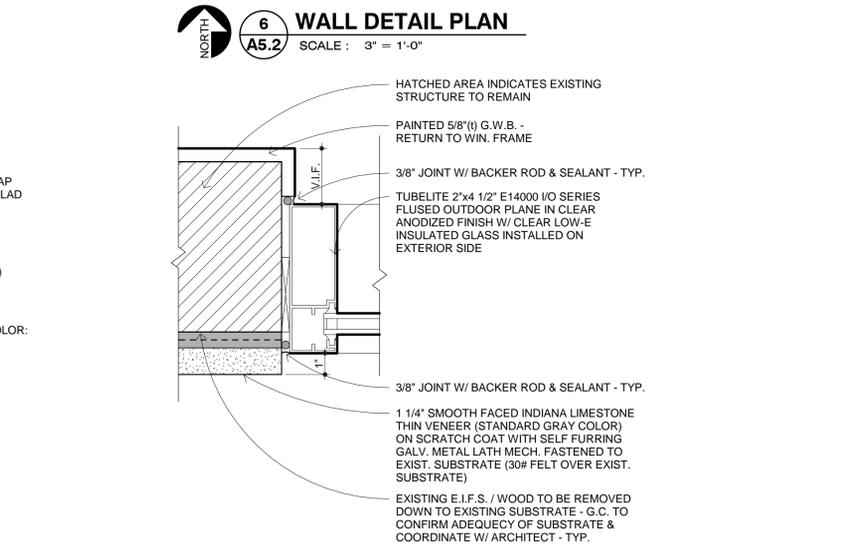
EXISTING E.I.F.S. / WOOD TO BE REMOVED DOWN TO EXISTING SUBSTRATE - G.C. TO CONFIRM ADEQUACY OF SUBSTRATE & COORDINATE W/ ARCHITECT - TYP.



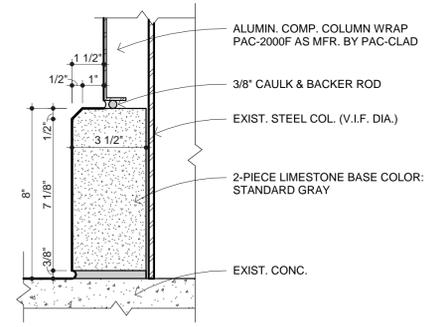
4 COLUMN WRAP DETAIL
SCALE: 3" = 1'-0"



7 WALL DETAIL PLAN
SCALE: 3" = 1'-0"

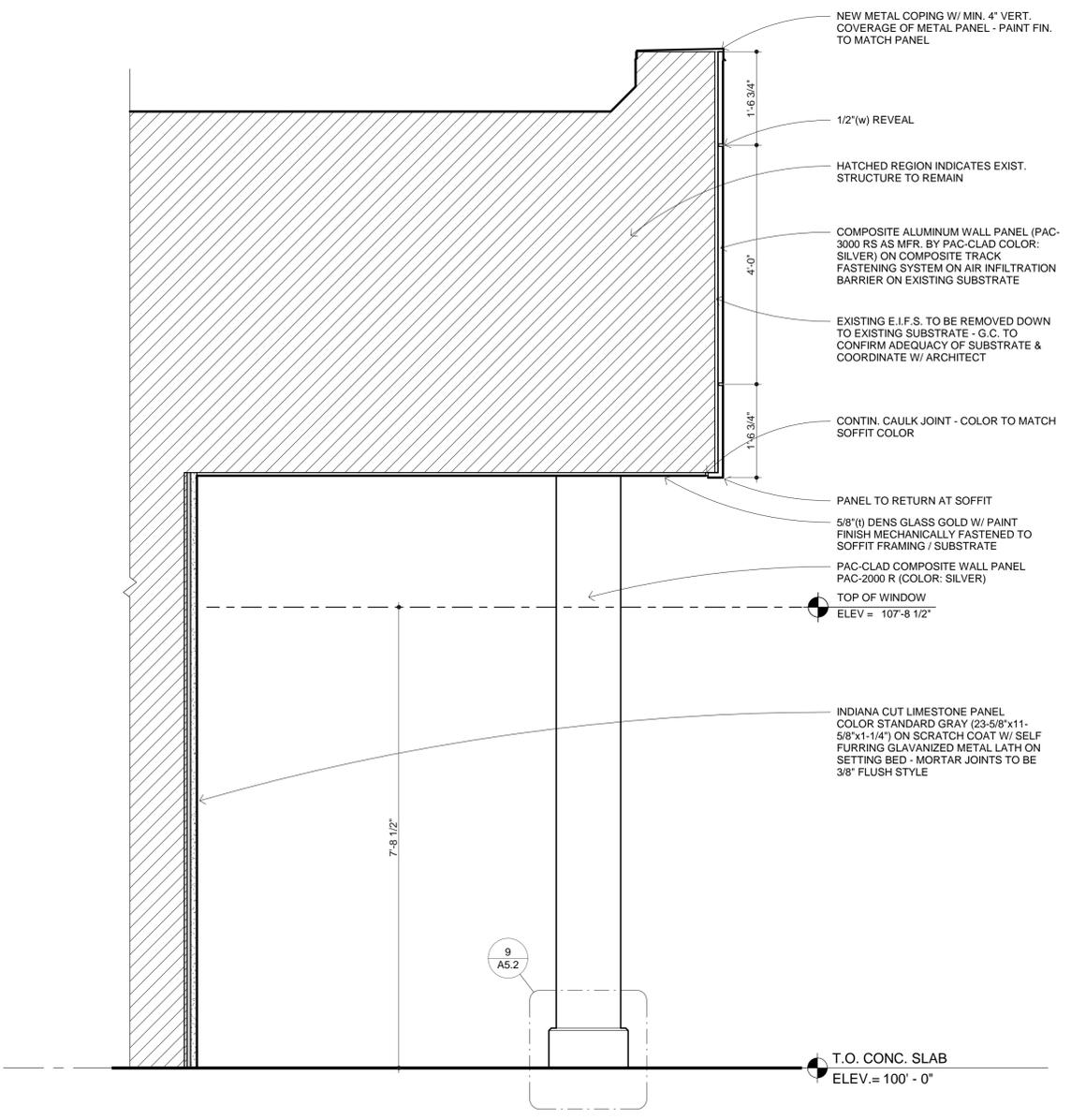


6 WALL DETAIL PLAN
SCALE: 3" = 1'-0"



9 COLUMN BASE DETAIL
SCALE: 3" = 1'-0"

5 STOREFRONT DETAIL PLAN
SCALE: 3" = 1'-0"



8 WALL SECTION
SCALE: 3/4" = 1'-0"



LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: MRA, NLG
DATE: APRIL 15TH, 2019
SHEET TITLE: REFLECTED CEILING PLANS

JOB NUMBER: ABD1902

SHEET NUMBER:

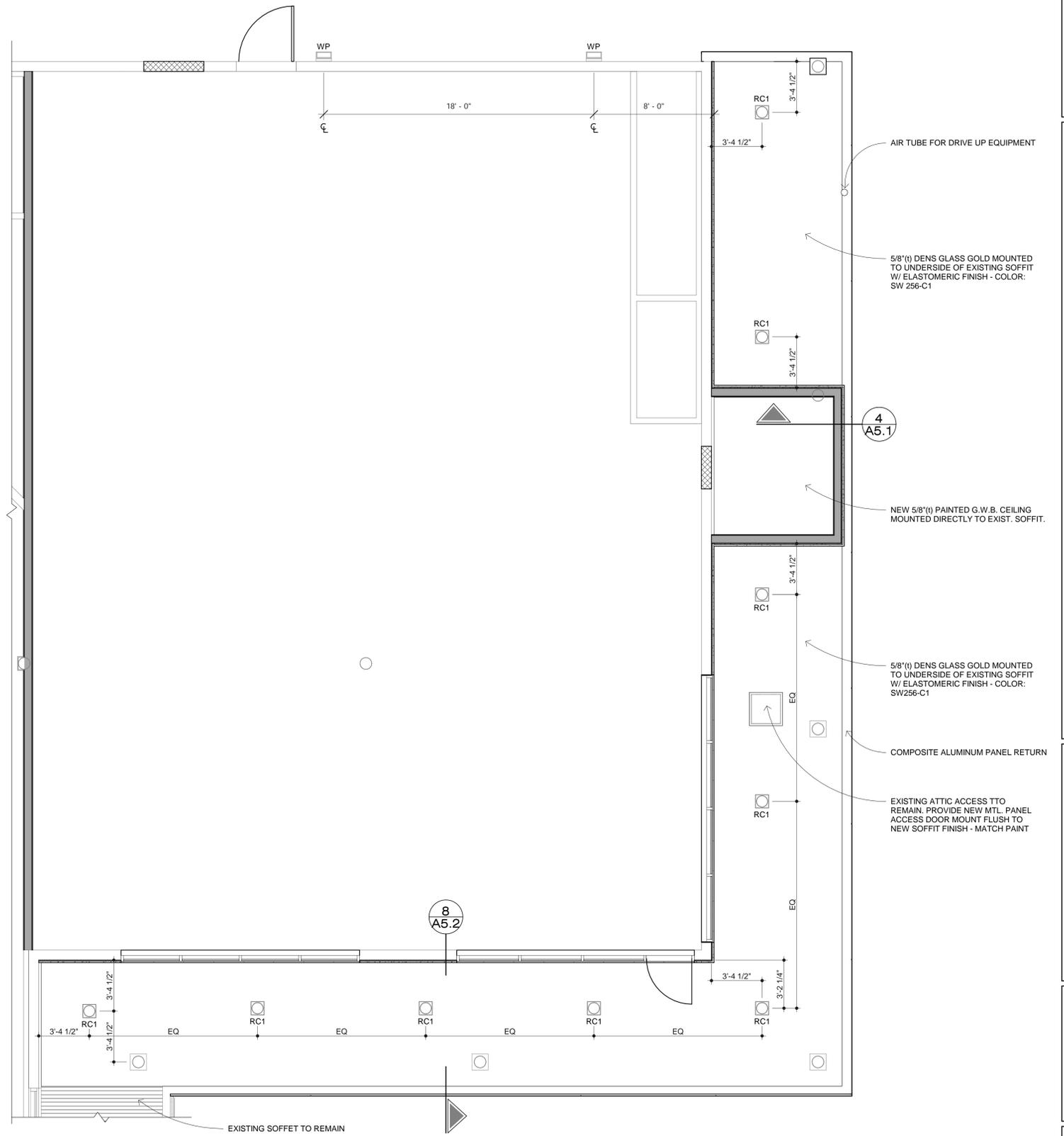
A9.1

REFLECTED CEILING LEGEND

	EXTERIOR RECESSED LIGHT FIXTURE - PRESCOLITE LMF4ML-4LFML30L30K8 W/ 54 - PHILLIPS 3000K LEDS LAMP - PHOTOMETRIC - CONTROL AT ELECTRICAL PANEL
	EXTERIOR WALL PACK - HUBBELL LNC2-12L-4K-070-2 W/ C-70-CRI LAMP

ELECTRICAL NOTES:

- FURNISH LABOR AND MATERIALS TO PROVIDE A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE PLANS.
- PROVIDE NEW LIGHTING FIXTURES AS SHOWN. ELECTRICAL CONTRACTOR TO REVIEW FIXTURE SELECTION WITH OWNER.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF MICHIGAN CODES, CODES AND ORDINANCES OF THE LOCAL MUNICIPALITY, AND THE REQUIREMENTS AND CRITERIA OF THE NATIONAL ELECTRIC CODE.
- ALL MATERIAL AND EQUIPMENT SHALL BEAR THE LABEL OF APPROVAL OF THE NATIONAL BOARD OF FIRE UNDERWRITER'S LABORATORIES.
- ALL WIRING SHALL BE NEW COPPER CONDUCTORS WITH TYPE THW/N OR XHHW INSULATION AND SHALL BE INSTALLED IN GALV. ELECTRICAL METALLIC TUBING OR RIGID STEEL CONDUIT AS REQUIRED BY CODE.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL PERMITS, PAY ALL ASSOCIATED FEES, AND ARRANGE FOR ALL INSPECTIONS FOR THEIR WORK. AT THE COMPLETION OF ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR SHALL FURNISH THE OWNER WITH ALL CERTIFICATES OF FINAL INSPECTIONS AND APPROVALS.
- ALL RECEPTACLES AND SWITCHES SHALL CONFORM TO NEC REQUIREMENTS. COLOR TO BE SELECTED.
- ALL CIRCUITS AND EQUIPMENT SHALL BE TESTED UPON COMPLETION OF WORK WHEN REQUESTED.
- THE ELECTRICAL CONTRACTOR IS TO COORDINATE EXACT LOCATION OF ALL FIXTURES AND RECEPTACLES (LIGHTING, TV, PHONE, ETC.) WITH THE OWNER IN THE FIELD.

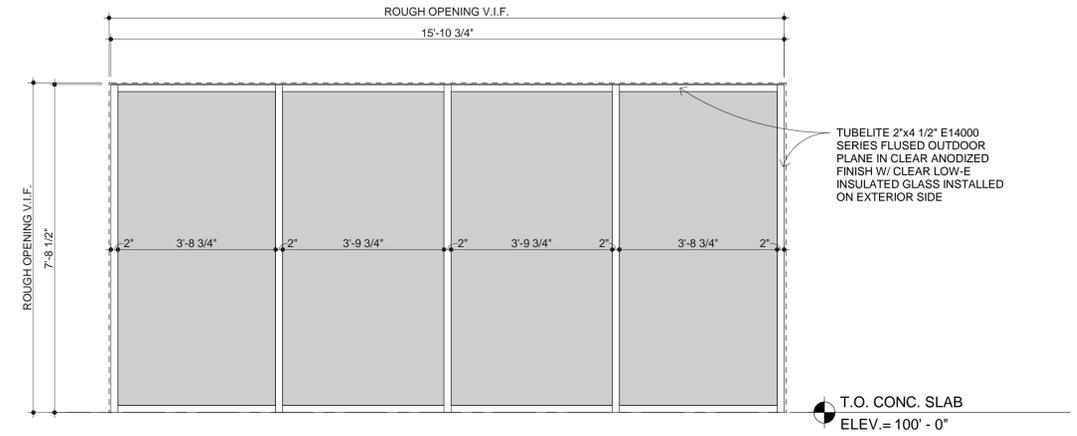


1 1ST LEVEL PROPOSED CEILING PLAN
SCALE: 1/4" = 1'-0"

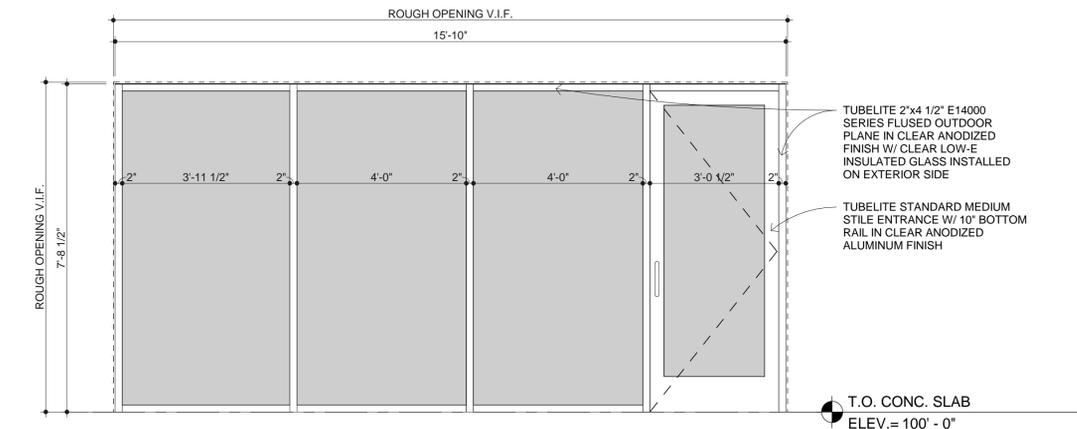
DO NOT SCALE DRAWINGS



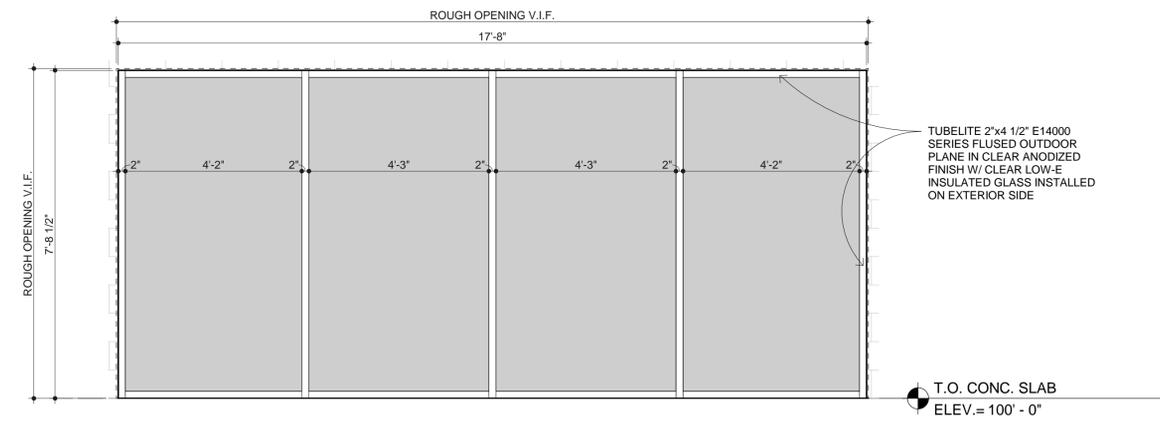
LEVEL ONE BANK
ROCHESTER HILLS
1880 S. ROCHESTER ROAD
ROCHESTER HILLS, MI 48307



1 STOREFRONT A
SCALE: 1/2" = 1'-0"



2 STOREFRONT B
SCALE: 1/2" = 1'-0"



3 STOREFRONT C
SCALE: 1/2" = 1'-0"

- WINDOW NOTES:**
1. WINDOW SELECTION BASED ON TUBELITE WINDOW SYSTEMS.
 2. COLOR OF ALL ALUMINUM EXTRUSIONS TO BE CLEAR ANODIZED ALUMINUM.
 3. HEAD HEIGHT AS INDICATED IN THE SCHEDULE IS FROM THE FINISH FLOOR THAT THE WINDOW IS ON.
 4. DIMENSIONS SHOWN ARE R.O. SIZES.
 5. WINDOW FRAME IS 1/2" SMALLER THAN R.O. SIZE. VERIFY WITH WINDOW MANUFACTURE.
 6. ALL CUSTOM WINDOW SIZES TO BE VERIFIED IN FIELD PRIOR TO FABRICATION

REVISIONS:

REVISION 1	05-14-19
REVISION 2	05-20-19
PERMIT SET	05-22-19

DRAWN: NLG

DATE: 04-16-19

SHEET TITLE: WINDOW DETAILS

JOB NUMBER: ABD1902

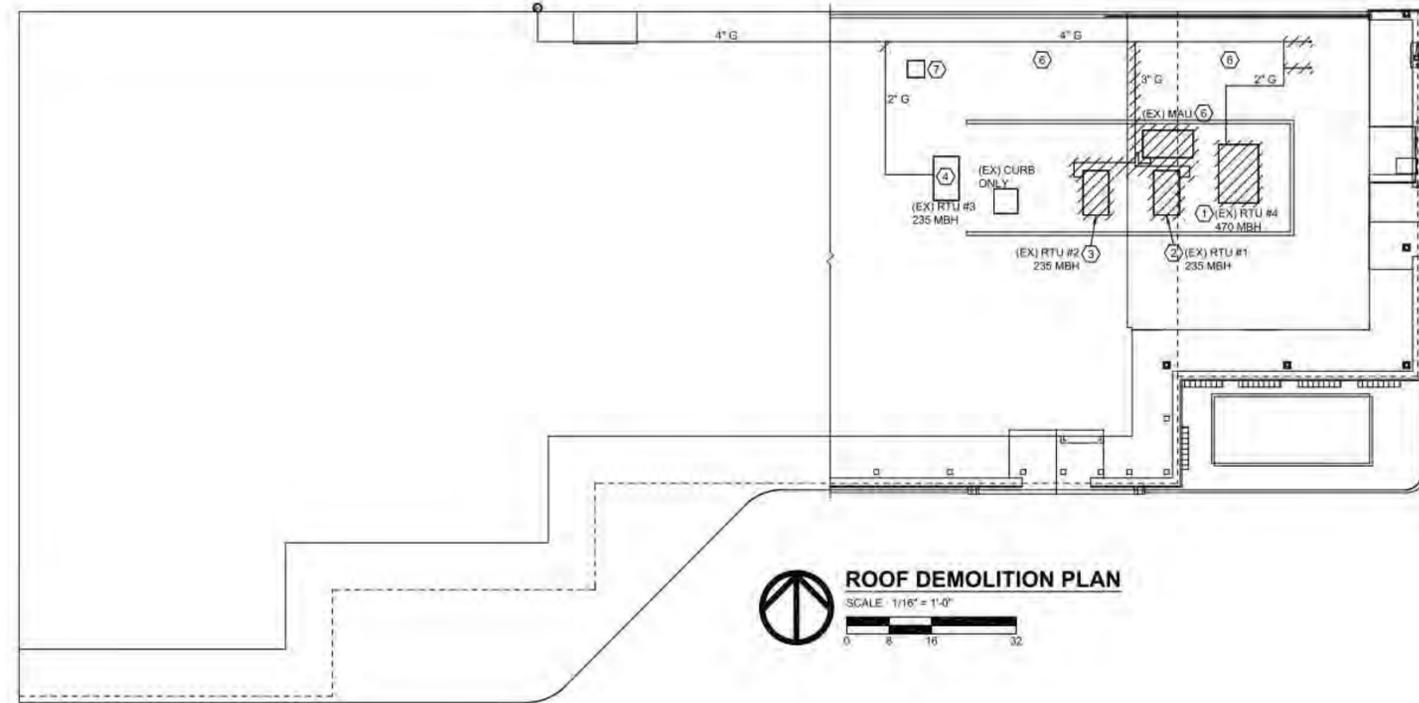
SHEET NUMBER: A10.1

DEMOLITION NOTES

1. ALL ABANDONED BRANCH PLUMBING LINES TO BE CUT BACK TO MAIN (NO DEAD LEGS ALLOWED). COORDINATE IN FIELD LIMITS OF DEMOLITION.
2. DEMO ALL EXISTING CW, HW & HW/R PIPING IN EXISTING TENANT SPACE. PROVIDE AND INSTALL NEW PIPING AS SHOWN.
3. DEMO EXISTING WATER HEATER AND FLUE COMPLETE.

GENERAL DEMOLITION NOTES:

1. THE BUILDER & HIS SUBCONTRACTORS SHALL VISIT THE EXISTING SITE AND SHALL EXAMINE TO THEIR SATISFACTION ALL OF THE PHYSICAL CONDITIONS THAT AFFECT THEIR CONTRACT PRICE, NOTING THE EXISTING SERVICE, LOCATION OF EXISTING STRUCTURES AND EQUIPMENT (IF ANY), AS WELL AS AREAS AVAILABLE FOR THE STORAGE OF MATERIAL. NO ADDITIONS TO THE CONTRACT PRICE SHALL BE REQUESTED OR PERMITTED BY THE IGNORANCE OF ANY EXISTING CONDITIONS OF THE SITE AND SURROUNDING AREA.
2. BUILDER SHALL LOCATE ALL EXISTING UTILITY LINES ON THE SITE AND RELOCATE ALL ELECTRICAL EQUIPMENT DEVICES, CONDUIT, WIRING WORK, UNDERGROUND / OVERHEAD UTILITIES, AND PLUMBING AS NECESSARY IN ORDER TO ACCOMPLISH THE WORK OR DEMOLITION WITHIN THE CONSTRUCTION AREA OR ON THE SITE. VERIFY EXACT REQUIREMENTS WITH EACH LOCAL UTILITY COMPANY BEFORE STARTING WORK. CALL "MISS DIG" BEFORE STARTING CONSTRUCTION.
3. BUILDER SHALL COORDINATE WITH THE OWNER AND ALL SUB CONTRACTORS ON ANY AND ALL NECESSARY TEMPORARY INTERRUPTIONS IN THE UTILITY DISTRIBUTION SYSTEMS ON THE SITE OR WITHIN THE FACILITY UNDER CONSTRUCTION. EVERY EFFORT SHALL BE MADE TO GIVE THE MAXIMUM ADVANCE NOTICE IN ORDER TO PROVIDE A SATISFACTORY MEANS OF PROPER SCHEDULING OF THE ACTIVITIES OF ALL CONCERNED.
4. IN PARTS WHERE ELECTRICAL OR MECHANICAL SYSTEMS CONFLICT OR ALTERATIONS TO AN EXISTING SYSTEM IS REQUIRED BY THE GENERAL CONTRACT WORK, NOTIFY AND COORDINATE ALL TRADES SO THAT THE PROPER ARRANGEMENTS AND SCHEDULING CAN BE MADE FOR INSTALLATION, CUTTING, REMOVING, TERMINATING, AND PATCHING OF SURROUNDING SYSTEMS AND MATERIALS CAN BE PROPERLY COMPLETED.
5. BUILDER SHALL CHECK & VERIFY ALL CONDITIONS AT THE JOB SITE, REPORTING ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH THE WORK.
6. BUILDER SHALL PROVIDE ALL NECESSARY BARRICADES, TEMPORARY SUPPORT OR PARTITIONS, DUST SHIELDS AND SCAFFOLDING AS NECESSARY, TO PROTECT ALL EXISTING, COMPLETED, OR NEW CONSTRUCTION FROM DAMAGE OR VANDALISM.
7. BUILDER SHALL TAKE NECESSARY MEASURES TO REMOVE ALL DEBRIS LEGALLY FROM THE SITE AND TO DIRECT ALL SUB TRADES TO KEEP THE SITE CLEAN AT ALL TIMES.
8. BUILDER SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL HIS WORK FROM DAMAGE AND VANDALISM AND SHALL PROTECT THE OWNER OR OTHER BUILDERS PROPERTY FROM INJURY, OR LOSS.
9. DO NOT SCALE DRAWINGS. USE ONLY THE DIMENSIONS PROVIDED ON THE PLANS. IF OMISSIONS OR DISCREPANCIES EXIST, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY. FAILURE TO DO SO BY ANY TRADE WILL RESULT IN THE COMPLETE WAIVER OF ANY LIABILITY OF THE ENGINEER OR OWNER.
10. IF ANY INTERFERENCES OR VIOLATIONS APPEAR AND DEPARTURE FROM THE DESIGN INTENT OF THE CONTRACT DOCUMENTS IS REQUIRED, THE BUILDER SHALL NOTIFY THE ENGINEER BEFORE ENTERING INTO CONTRACT WITH THE OWNER. FAILURE TO PROVIDE THE ENGINEER WITH AFOREMENTIONED NOTIFICATION WILL RESULT IN THE BUILDER BEING HELD RESPONSIBLE TO COMPLETE ALL WORK TO MEET THE INTENT OF THE CONTRACT DRAWINGS WITH NO ADDITIONAL EXPENSE ("EXTRAS") BEING INCURRED. ANY CHANGES BY THE BUILDER TO THE CONSTRUCTION DOCUMENTS WILL RESULT IN THE BUILDER ACCEPTING ALL RESPONSIBILITY FOR THE WORK INSTALLED.
11. ALL MATERIAL SELECTION, CONSTRUCTION TECHNIQUES, ALL FINISHED CONSTRUCTION SHALL BE PER CODE IF NOT ALREADY NOTED ON PLANS. BUILDER IS TO CONTACT THE ENGINEER WITH ALL INTERPRETATIONS OR QUESTIONS. FAILURE TO DO SO WILL RESULT IN THE COMPLETE ACCEPTANCE OF ALL LIABILITY BY THE CONTRACTOR FOR ANY RELATED CORRECTIONS.
12. BUILDER SHALL ACTIVELY COOPERATE WITH ALL OTHERS ENGAGED ON THE PROJECT, AND ARRANGE HIS WORK TO AVOID INTERRUPTIONS TO THE WORK OF OTHERS.
13. PROJECT SAFETY, CARE OF EXISTING AND ADJACENT STRUCTURES AND PROPERTIES DURING CONSTRUCTION, AND COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS SHALL BE THE EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR.
14. COORDINATE INTERRUPTIONS WITH EXISTING UTILITIES AND SERVICES WITH OWNERS REPRESENTATIVE (ENGINEER) TO ACCOMPLISH SAID WORK.

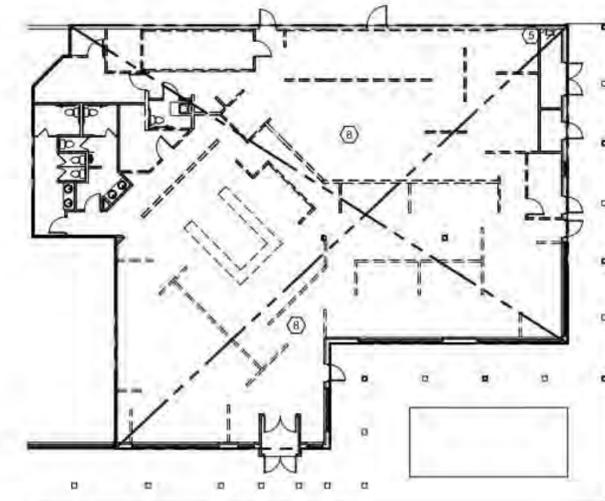


ROOF DEMOLITION PLAN
SCALE: 1/16" = 1'-0"

DEMOLITION PLAN KEYED NOTES:

(DEMOLITION KEYED NOTES APPLY TO THIS PLAN ONLY)

1. RTU #4 TO BE REPLACED WITH NEW 7.5 TON UNIT.
2. RTU #1 TO BE DEMOLISHED.
3. RTU #2 TO BE DEMOLISHED.
4. RTU #3 TO BE TEMPORARILY REUSED FOR EMPTY TENANT.
5. EXISTING ELECTRIC UNIT HEATER TO BE REPLACED WITH NEW.
6. DEMOLISH ALL ABANDONED RTU'S, MAU, EXHAUST FANS (TYP).
7. EXISTING EXHAUST FAN FOR EXISTING RESTROOMS TO REMAIN.
8. DEMOLISH ALL ABANDONED DUCTWORK, EQUIPMENT, PLUMBING, CONTROLS, GAS PIPING, AND DOMESTIC WATER PIPING. COORDINATE LIMITS OF DEMOLITION WITH LANDLORD AND OWNER'S REPRESENTATIVE AS REQUIRED FOR NEW TENANTS).



DEMOLITION FLOOR PLAN
SCALE: 1/16" = 1'-0"



ENGINEERING, INC.

Consulting Engineers
14137 Farmington Rd.
Livonia, MI 48154
Tel: (734) 855-4904
email: esteban@jredengineering.com

ELECTRICAL CONSULTANT:



ETS ENGINEERING, INC.
ENERGY / TECHNOLOGY SOLUTIONS
41E-1/2 S. WASHINGTON
P.O. BOX 11116
ROYAL OAK, MI 48068-1116
OFF: 248/744-0360
FAX: 248/744-0367
WWW.ETSENGINEERING.NET

ARCHITECT:



ABD Architects
2601 Wendover Rd.
Bloomfield Hills, MI 48302
Tel: (248) 213-6010
www.ABDarch.com

PROJECT:

Level One Bank
1880 S. Rochester Rd.
Rochester Hills, MI 48307

ISSUES/REVISIONS	DATE
PERMIT	05/16/19

SHEET TITLE:
DEMOLITION PLANS

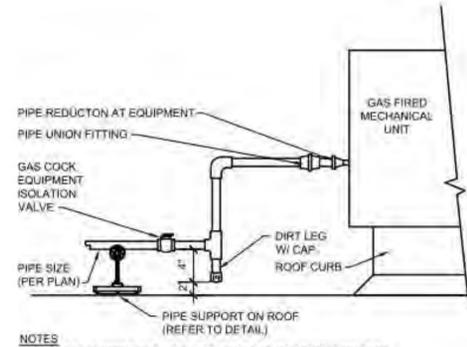
(DO NOT SCALE DRAWINGS)

DATE:	04/28/19
APPROVED BY:	E. CABELLO
CHECKED BY:	E. CABELLO
DESIGNED BY:	JRED
DRAWN BY:	JRED



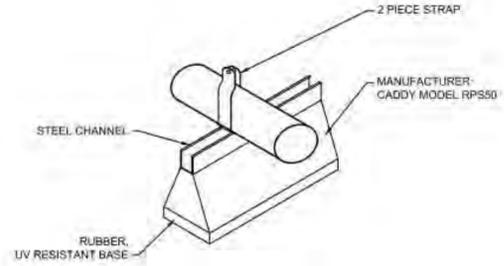
JRED PROJECT NUMBER:
19049

SHEET NUMBER:
MP-D



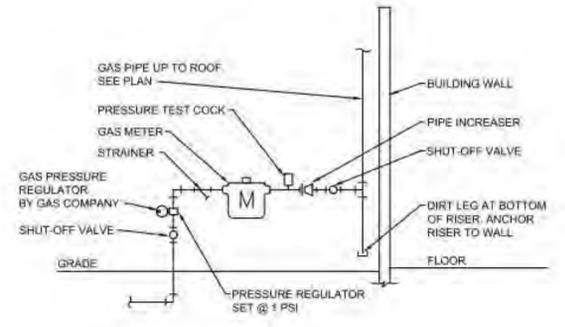
NOTES
 1. PIPE SIZES INDICATED ON PLANS SHALL BE CONSIDERED UP TO EQUIPMENT GAS INLET CONNECTION.
 2. PROVIDE PIPE REDUCER FOR EQUIPMENT GAS INLET CONNECTION.

GAS EQUIPMENT CONNECTION DETAIL
 NO SCALE

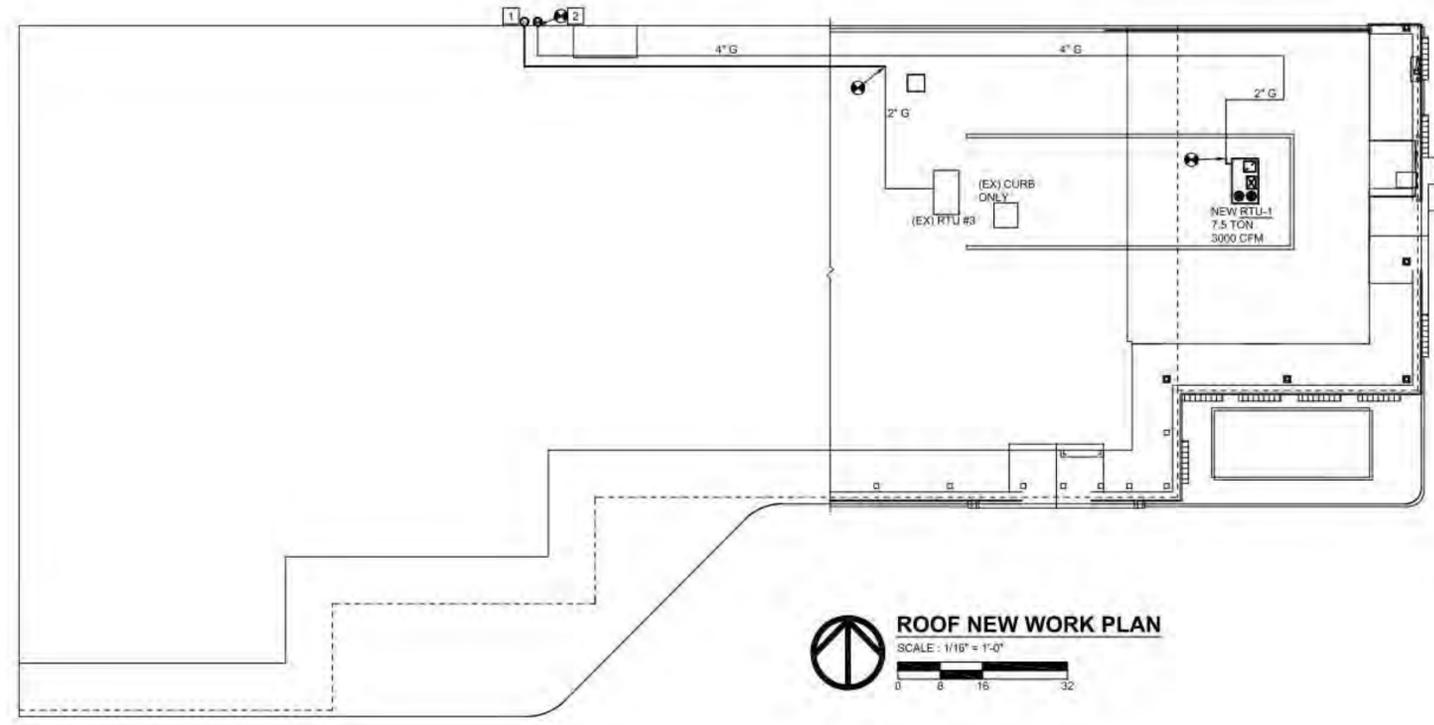


PIPE SUPPORT DETAIL
 NO SCALE

NOTES
 1. SUPPORT SPACING FOR PIPE SIZE: 2"=10'; 1/2"=8'; 1/2"=8'; 1"=7'; 3/4"=6"
 2. INSTALL PIPE STANDS IN ACCORDANCE WITH PIPE STAND MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. PLACE SUPPORT PADS ON ROOFING, AND SET PIPE STANDS FREE AND CENTERED ON SUPPORT PAD. INSTALL PIPE TO ALLOW FOR EXPANSION AND CONTRACTION. PRIME AND PAINT GAS PIPING. COLOR SHALL BE PER AUTHORITY HAVING JURISDICTION.



GAS METER DETAIL
 NO SCALE



ROOF NEW WORK PLAN
 SCALE: 1/16" = 1'-0"
 0 8 16 32

NEW WORK KEYED NOTES:
 (KEYED NOTES APPLY TO THIS SHEET ONLY)

- CONTRACTOR SHALL COORDINATE WITH LOCAL GAS UTILITY FOR INSTALLATION OF NEW GAS METER SIZED AT MINIMUM 250 CFH @ 7" W.C. ROUTE NEW 2" GAS TO EXISTING RTU-3
- CONTRACTOR SHALL COORDINATE WITH LOCAL GAS UTILITY FOR INSTALLATION OF NEW GAS METER (REPLACE EXISTING), SIZED AT MINIMUM 250 CFH @ 7" W.C. RECONNECT TO EXISTING 4" GAS MAIN.

GAS-FIRED ROOFTOP UNIT SCHEDULE

MARK	SERVES	SUPPLY FAN				NOMINAL TONNAGE	SUPPLY AIR DISCHARGE	HEATING SECTION			ELECTRICAL DATA		BASED ON MANUFACTURER AND MODEL NUMBER	UNIT WEIGHT (lbs.)	REMARKS	
		AIRFLOW (CFM)	OUTSIDE AIR (CFM)	EXTERNAL STATIC PRESSURE (Inch w.g.)	HP			INPUT (MBH)	OUTPUT (MBH)	NO OF STAGES	VOLTS/PHASE	UNIT MCA				UNIT MCCP
RTU-1	SPACE	3,000	750	0.5"	2	7.5	VERTICAL	240.0	192.0	2	208/1Ø	39.0	45	LENNOX LGH092HAM	1,329	1-B

REMARKS:
 1. UNIT SHALL MEET ASHRAE 90.1 REQUIREMENTS.
 2. PROVIDE WEATHERPROOF DISCONNECT SWITCH.
 3. PROVIDE 14" HIGH ROOF CURB.
 4. PROVIDE 100% ECONOMIZER, SINGLE ENTHALPY CONTROL.
 5. PROVIDE MOTORIZED OUTDOOR AIR DAMPERS.
 6. PROVIDE FILTER RACK WITH 2" FILTERS, MERV 8.
 7. PROVIDE RETURN AIR SMOKE DETECTOR.
 8. PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT WITH LOCKABLE COVER.
 9. PROVIDE START-UP BY MANUFACTURER'S REPRESENTATIVE.

ELECTRIC HEATING EQUIPMENT SCHEDULE

MARK	SERVES	LOCATION	HEATING SECTION		ELECTRICAL DATA			ARRANGEMENT	BASED ON MANUFACTURER AND MODEL NUMBER	REMARKS
			KW	NO OF STAGES	DRIVE	VOLTS/PHASE	MAXIMUM AMPS			
EH-1	CORRIDOR	HANGING	3.3	1	DIRECT	208/1Ø	15.9	SUSPENDED	MARKEL 5100 SERIES	1-B

REMARKS:
 1. UNIT SHALL HAVE THERMAL OVERLOAD PROTECTION.
 2. PROVIDE WITH DISCONNECT AND INTEGRAL THERMOSTAT.
 3. UNIT SHALL BE VANDAL PROOF.
 4. PROVIDE MOUNTING BRACKETS AND 24V THERMOSTAT.



Consulting Engineers
 14137 Farmington Rd.
 Livonia, MI 48154
 Tel: (734) 855-4904
 email: esteban@jredengineering.com

ELECTRICAL CONSULTANT:

ETS ENGINEERING, INC.
 ENERGY / TECHNOLOGY SOLUTIONS
 415-1/2 S. WASHINGTON
 P.O. BOX 11116
 ROYAL OAK, MI 48068-1116
 OFF: 248/744-0360
 FAX: 248/744-0367
 WWW.ETSENGINEERING.NET

ARCHITECT:

ABD ARCHITECTS
 2601 Wendover Rd.
 Bloomfield Hills, MI 48302
 Tel: (248) 213-6010
 www.ABDarch.com

PROJECT:
Level One Bank
 1880 S. Rochester Rd.
 Rochester Hills, MI 48307

ISSUES/REVISIONS	DATE
PERMIT	05/16/19

SHEET TITLE:
ROOF NEW WORK PLAN

(DO NOT SCALE DRAWINGS)
 DATE: 04/29/19
 APPROVED BY: E.CABELLO
 CHECKED BY: E.CABELLO
 DESIGNED BY: JRED
 DRAWN BY: JRED



JRED PROJECT NUMBER:
19049

SHEET NUMBER:
MP-2

MECHANICAL GENERAL

- A. PROVIDE MATERIALS AND EQUIPMENT AND EXECUTE THE WORK, INCLUDING ALL TESTING AND INSPECTIONS, IN COMPLIANCE WITH THE APPLICABLE PROVISIONS OF FEDERAL, STATE AND LOCAL GOVERNMENT LAWS, ORDINANCES, REFERENCED CODES, AND STANDARDS CURRENT AS OF THE ISSUE DATE OF THESE DRAWINGS, INCLUDING THE GOVERNING LAWS, ORDINANCES, CODES AND STANDARDS CONSTITUTE MINIMUM REQUIREMENTS. ALL MORE STRINGENT REQUIREMENTS SHALL MODIFY, SUPPLEMENT, AND SUPERCEDE APPLICABLE PORTIONS OF GOVERNING LAWS, ORDINANCES, CODES, AND STANDARDS.
- B. CONTRACTOR SHALL PRESENT CERTIFICATE TO THE OWNER'S REPRESENTATIVE THAT ALL APPLICABLE BUILDING PERMITS HAVE BEEN SECURED PRIOR TO STARTING ANY WORK AND PROVIDE THE OWNER WITH ALL REQUIRED CERTIFICATES OF FINAL APPROVAL FROM GOVERNING JURISDICTIONS AT COMPLETION OF THE WORK. PROVIDE ALL SHOP DRAWINGS AS REQUIRED IN FOLLOWING SECTIONS.
- C. MAKE ALL CONNECTIONS TO EXISTING SYSTEMS DURING DESIGNATED PERIODS UPON APPROVAL OF THE OWNER AND AT NO INCREASE IN CONTRACT SUM.
- D. REFER TO ALL GENERAL NOTES ON DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- E. MECHANICAL EQUIPMENT SHALL HAVE DECALS AND TAGS TO INDICATE LIFTING AND RIGGING, SERVICE AREAS, AND CAUTION IDENTIFICATION FOR SAFETY TO ASSIST SERVICE PERSONNEL.
- F. UNIT NAMEPLATE SHALL BE PROVIDED IN TWO LOCATIONS ON THE EQUIPMENT. AFFIX TO THE EXTERIOR OF THE EQUIPMENT AND TO THE INTERIOR OF THE CONTROL COMPARTMENT ACCESS DOOR.

SHOP DRAWINGS

- A. NO APPARATUS OR EQUIPMENT SHALL BE SHIPPED FROM STOCK OR FABRICATED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND STAMPED "REVIEWED," OR "REVIEWED AS NOTED."
- B. PROVIDE DETAILED SHOP DRAWINGS OF ALL SHEETMETAL DUCTWORK WITH NECESSARY SECTIONS, DETAILS, DIMENSIONS, ETC. SUBMIT AMCA CERTIFIED PERFORMANCE CURVES FOR EACH FAN INDICATING ITS OPERATING POINT, EFFICIENCY, STARTING TIME, AND DATA RELATIVE TO SOUND LEVELS. ALL SHEETMETAL SHOP DRAWINGS SHALL BEAR INDEPENDENT BALANCE AGENCY (AABC) APPROVAL STAMP BEFORE SHOP DRAWINGS ARE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- C. SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR ALL EQUIPMENT, INCLUDING MATERIALS, VALVES, HEATING SPECIALTIES, WIRING DIAGRAMS, AND CONTROL DIAGRAMS, INCLUDING, BUT NOT LIMITED TO THE ITEMS LISTED BELOW. WHERE ITEMS ARE REFERRED TO BY SYMBOL NUMBERS ON THE DRAWINGS AND SPECIFICATIONS, ALL SUBMITTALS SHALL BEAR THE SAME SYMBOL NUMBERS. ALL DRAWINGS SHALL CONTAIN THE PROJECT NAME AND PROJECT NUMBER. NO LOOSE SHEETS SHALL BE SUBMITTED UNLESS A COVER SHEET IS ATTACHED.
- D. PROVIDE THE FOLLOWING EQUIPMENT SHOP DRAWINGS: PACKAGED HVAC EQUIPMENT; AIR DEVICES, EXHAUST FANS; HEATING UNITS; FILTERS; PIPING; TEMPERATURE CONTROLS, AND THERMOSTATS.
- E. APPROVAL OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO CONFORM TO THE DESIGN INTENT OF THE CONTRACT DOCUMENTS APPROVAL OF SHOP DRAWINGS IS INTENDED TO BE FOR GENERAL CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS ONLY. ANY INSTALLED EQUIPMENT WHICH REQUIRES WORK BY OTHER TRADES SHALL BE COORDINATED WITH THOSE TRADES. REFER TO OTHER TRADES BID DOCUMENTS.

CODES, PERMITS, AND FEES

- A. UNLESS OTHERWISE INDICATED, ALL REQUIRED PERMITS, LICENSES, INSPECTIONS, APPROVALS, AND FEES FOR MECHANICAL WORK SHALL BE SECURED AND PAID FOR BY THIS CONTRACTOR. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, RULES AND REGULATIONS.
- B. RULES OF LOCAL UTILITY COMPANIES SHALL BE COMPLIED WITH.
- C. ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE RULES AND REGULATIONS SET FORTH IN LOCAL AND STATE CODES. WHERE THE DRAWINGS AND/OR SPECIFICATIONS INDICATE MATERIALS OR CONSTRUCTION IN EXCESS OF CODE REQUIREMENTS, THE DRAWINGS AND/OR SPECIFICATIONS SHALL GOVERN.

BASIC MATERIALS AND METHODS

- A. PROVIDE ALL ITEMS, ARTICLES, MATERIALS, OPERATIONS AND METHODS LISTED, MENTIONED OR SCHEDULED ON DRAWINGS AND/OR HEREIN, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY AND REQUIRED FOR THEIR COMPLETION. THE WORK SHALL INCLUDE INSTALLATION, CLEANING, AND TESTING OF COMPLETE AND OPERATING HVAC, TEMPERATURE CONTROL, AND OTHER SPECIAL SYSTEMS.

MECHANICAL SPECIFICATIONS

HEATING AND VENTILATING

A. GENERAL

- REFER TO SCHEDULES FOR CAPACITIES, ACCESSORIES, AND LEVEL OF QUALITY.

B. CONTROLS

- UNITS SHALL BE ORDERED AND INSTALLED WITH MANUFACTURED STANDARD CONTROLS. SCOPE OF CONTROLS WORK SHALL BE COORDINATED WITH MECHANICAL CONTRACTOR, CONTROLS CONTRACTOR, AND GENERAL CONTRACTOR.

- REFER TO SCHEDULES FOR EQUIPMENT REQUIREMENTS.

SYSTEM TESTING AND BALANCING

- A. ALL HVAC SYSTEMS SHALL BE TESTED AND BALANCED TO DEMONSTRATE THAT SPECIFIED CAPACITIES AND PROPER CONTROL FUNCTIONING HAS BEEN ATTAINED. FAN SYSTEMS ARE NOT TO BE COMPLETED PRIOR TO RUNNING PERFORMANCE TESTS, AND PRIOR TO TRAINING AND INSTRUCTION OF THE OWNER'S PERSONNEL IN THE SYSTEMS OPERATION.
- B. ENGAGE THE SERVICES OF AN INDEPENDENT CERTIFIED TEST AND BALANCE AGENCY THAT SPECIALIZES IN AND WHOSE BUSINESS IS LIMITED TO THE TESTING AND BALANCING OF AIR CONDITIONING SYSTEMS AND IS NOT AFFILIATED IN ANY WAY WITH MANUFACTURER, SUPPLIER, OR INSTALLATION CONTRACTOR. THE AGENCY SELECTED SHALL BE CERTIFIED BY ASSOCIATED AIR BALANCE COUNCIL (AABC) OR NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB).
- C. TAKE CHARGE OF AND DIRECT THE PERFORMANCE TESTS AND SUBMIT A COMPLETE REPORT ON SAME TO THE ARCHITECT. REFER TO "PERFORMANCE TESTS" IN THIS SECTION OF THE SPECIFICATIONS.
- D. EXAMINE THE AIR HANDLING SYSTEMS TO SEE THAT THEY ARE FREE FROM OBSTRUCTIONS DETERMINE THAT ALL DAMPERS AND REGISTERS ARE OPEN, THAT MOVING EQUIPMENT IS LUBRICATED, THAT FILTERS ARE FUNCTIONING, AND PERFORM OTHER INSPECTION AND MAINTENANCE ACTIVITIES NECESSARY FOR PROPER OPERATION OF THE SYSTEMS.

- E. DEMONSTRATE THAT THE AIR HANDLING EQUIPMENT PERFORMS AS SPECIFIED, ADJUST VARIABLE TYPE PULLEYS AND VOLUME DAMPERS, WHERE NECESSARY TO ACHIEVE DESIGN AIR VALUES.

- F. PERFORM THIS WORK IN ACCORDANCE WITH THE PROCEDURES AND STANDARDS DESCRIBED IN THE SMACNA "BALANCING AND ADJUSTMENT MANUAL." REPORTS ARE TO BE MADE ON SMACNA FORMS OR FACSIMILES THEREOF.

- G. TESTING AND BALANCING OF ALL AIR (AND HYDRONIC) SYSTEMS SHALL BE PERFORMED BY A SINGLE AGENCY IN COMPLETE ACCORDANCE WITH THE AABC "STANDARDS AND INSTRUMENTATION'S FORM NUMBER R1266 VOLUME NUMBER 1" AS PUBLISHED BY AABC, INCLUDING ALL CURRENT REVISIONS THERETO OR BY NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB).

PERFORMANCE TESTS

- A. A PERFORMANCE TEST SHALL BE RUN ON ALL MECHANICAL SYSTEMS IN THE PRESENCE OF THE ARCHITECT OR THE OWNER'S REPRESENTATIVE. THE OWNER'S OPERATION PERSONNEL, AND UNDER THE DIRECTION OF THE TESTING AND BALANCING TRADE. THE DURATION OF THE TEST SHALL BE A MINIMUM OF 8 HOURS OF CONTINUOUS SUCCESSFUL OPERATION (WITH NO DOWN TIME) IN WEATHER SUCH THAT A REASONABLE LOAD IS PLACED ON THE EQUIPMENT. AIR TEMPERATURES, VOLTAGES, AMPERAGES, RPM'S, ETC., SHALL ALL BE TAKEN AND RECORDED HOURLY. AT THIS TIME, ANY ADJUSTMENTS TO AIRFLOW, ETC. SHALL BE MADE.
- B. WHERE THE TIME OF YEAR PRECLUDES WEATHER TESTING OF EITHER SYSTEM, THEN SYSTEM OPERATION SHALL BE SIMULATED TO FACILITATE TESTING AT REQUIRED AIR TEMPERATURES, RESULTS RECORDED AND ANY ADJUSTMENTS SHALL BE PERFORMED AT THIS TIME.

SHEET METAL

- A. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL AS INDICATED ON THE DRAWINGS OR AS DIRECTED HEREIN. ALL SHEET METAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE" MANUALS, NFPA 90A AND 96, AND THE LATEST EDITION OF THE ASHRAE GUIDE AND DATA BOOKS. ALL DUCTWORK SIZES INDICATED ON THE PLANS ARE THE INTERNAL DIMENSIONS.
- B. ALL DUCTWORK SHALL BE SEALED AIR TIGHT AND SHALL NOT ALLOW MORE THAN 10% AIR LEAKAGE THROUGHOUT THE ENTIRE SYSTEM.
- C. SHEET METAL DUCTWORK SHALL BE SMOOTH INSIDE AND TRUE TO SIZE.
- D. DUCTWORK FITTINGS SHALL BE PER SMACNA STANDARDS. RADIUS TURNS ON SUPPLY AIR DUCTS SHALL BE 1-1/2 TIMES THE DUCT WIDTH. MINIMUM, WHERE SPACE OR CLEARANCES REQUIRES THE USE OF MITERED TURNS, PROVIDE HIGH PERFORMANCE DOUBLE THICKNESS TURNING VANES EQUAL TO AEROIDYNE "HEP."
- E. PROVIDE FACTORY MANUFACTURED TEST HOLES IN DUCTWORK WHERE REQUIRED TO FACILITATE AIR BALANCE.
- F. DUCT CONSTRUCTION AND SUPPORT DESIGN SHALL BE PER SMACNA. MINIMUM DUCT DESIGN IS PRESSURE CLASS 2" W.G. ALL DUCTWORK FROM THE AIR HANDLING UNIT FAN AND/OR STAND ALONE FAN (SUPPLY, RETURN, AND/OR EXHAUST) TO A MAIN DUCT DAMPER (CONTROL) SHALL BE DESIGNED FOR THE MAXIMUM TOTAL FAN OUTPUT PRESSURE (THIS IS TO PREVENT DUCT FAILURE IN CASE WHERE A MAIN DUCT DAMPER CLOSURES BY DESIGN OR MALFUNCTION). ALL OTHER DUCTWORK SHALL BE DESIGNED FOR THE MAXIMUM SYSTEM EXTERNAL FAN OUTPUT PRESSURE.
- G. ALL RECTANGULAR DUCTWORK SHALL BE IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS WITH REGARD TO DUCT GADE THICKNESS, REINFORCEMENT SPACING, BRACING, HANGERS, AND SUPPORTS. ALL LONGITUDINAL SEAMS SHALL BE MADE WITH A PITTSBURGH LOCK TYPE (L-1). TRANSVERSE JOINTS SHALL BE MADE WITH A POCKET LOCK (TYPE T-17) FOR DUCTWORK UP TO 3" W.G.
- H. CONTRACTOR SHALL USE DEGREASER, CLEAN AND PREP ALL EXPOSED DUCTWORK TO HAVE PAINT APPLIED. COORDINATE WITH ARCHITECTURAL TRADES.
- I. AT EACH POINT OF CONNECTION OF DUCTWORK TO FANS, PROVIDE A FLEXIBLE CONNECTION EQUAL TO VENTIFABRICS, INC. "VENTIGLAS L.A.", NOT LESS THAN 6" IN LENGTH AND MADE OF HEAVY GRADE FABRIC DOUBLE COATED WITH NEOPRENE AND PROVIDED WITH A SUITABLE FRAME AT EACH END, ARRANGED FOR BOLTING TO THE INLET OR OUTLET OF FAN AND DUCTWORK, RESPECTIVELY.
- J. FLEXIBLE CONNECTORS ON DUCTWORK TO AIR HANDLING EQUIPMENT SHALL HAVE A MAXIMUM FLAME/SMOKE DEVELOPED RATING NOT TO EXCEED 25/50.
- K. PROVIDE VOLUME DAMPERS IN THE DUCT SYSTEMS WHERE SHOWN ON PLANS AND WHERE REQUIRED TO INSURE PROPER SYSTEM BALANCING.
- L. PROVIDE FACTORY FABRICATED VOLUME DAMPERS IN ALL SUPPLY AND EXHAUST BRANCH DUCTS AND OTHERS WHERE INDICATED ON DRAWINGS. VOLUME DAMPERS SHALL BE CONSTRUCTED WITH APPLICABLE SMACNA STANDARDS.
- M. MANUAL VOLUME DAMPERS SHALL BE MADE OF GALVANIZED STEEL 18 GAUGE OR HEAVIER DAMPERS FOR DUCTWORK UP TO 12 INCHES DEEP SHALL BE ONE BLADE CARRIED ON A 3/8-INCH SQUARE STEEL ROD MOUNTED IN THE SIDE OF DUCT WITHOUT FRAME AND FITTED WITH A LOCKING TYPE QUADRANT. SINGLE BLADE HAND DAMPERS UP TO 12-INCHES WIDTH MAY BE USED. DAMPERS FOR DUCTS OF GREATER DEPTH SHALL BE MULTI-BLADE TYPE, MAXIMUM BLADE WIDTH 12-INCHES UP TO 30-INCHES BLADE LENGTH, 8-INCHES MAXIMUM WIDTH OVER 30-INCHES LENGTH. BLADES SHALL BE MOUNTED IN FRAME AND INTERCONNECTED FOR OPERATION FROM ONE LOCKING TYPE HAND QUADRANT.
- N. ALL AUTOMATIC DAMPERS CONTROLLING OUTSIDE AIR, RELIEF AIR, AND/OR RETURN AIR SHALL HAVE FRAMES OF 13 GAUGE GALVANIZED STEEL. BLADES SHALL BE 22 GAUGE GALVANIZED STEEL. BEARINGS SHALL BE OIL IMPREGNATED SINTERED BRONZE. EDGE SEALS SHALL BE SILICONE PROVIDING LOW LEAKAGE CHARACTERISTICS. SEALS SHALL BE REPLACEABLE.
- O. WALL LOUVERS SHALL BE ALL WEATHER DESIGN TO PROTECT AIR INTAKE AND/OR EXHAUST OPENINGS IN BUILDING EXTERIOR WALLS. LOUVER SHALL INCORPORATE DRAIN GUTTERS TO CHANNEL WATER TO THE LOUVER SIDE FRAMES AND JAMBS TO THE LOUVER SILL. LOUVER SHALL BE EXTREMELY EFFICIENT AND CONFORM TO AMCA LICENSED PERFORMANCE DATE. FRAME: HEAVY GAUGE EXTRUDED ALUMINUM. BLADES: EXTRUDED ALUMINUM ON 4" CENTERS. PROVIDE BIRDSCREEN ON EXTERIOR FACE OF LOUVER. ACCEPTABLE MANUFACTURERS: RUSKIN, AMERICAN WARMING, GREENHECK.

FLEXIBLE AIR DUCTWORK

- C. INSULATED FLEXIBLE AIR DUCTS SHALL BE U. L. 181 LISTED WITH TRILAMINATE OF ALUMINUM FOIL, FIBERGLASS AND POLYESTER INNER LINER ON GALVANIZED STEEL HELIX WITH R-5.0 RATING. FIBERGLASS INSULATION SHALL HAVE 25/50 FLAME/SMOKE FIRE RETARDANT VAPOR BARRIER JACKET.
- D. ALL CONNECTIONS TO DIFFUSERS ARE TO BE MADE WITH ADJUSTABLE CLAMPS AND TIGHTENED AIRTIGHT.
- E. MANUFACTURERS: CLEVERFLEX OR FLEXMASTER TYPE 5.

DUCTWORK CONSTRUCTION

A. LOW PRESSURE DUCTWORK:

- LONGITUDINAL JOINTS SHALL BE PITTSBURGH TYPE AND SHALL BE SEALED WITH MINNESOTA MINING AND MANUFACTURING COMPANY'S (3M) EC-800 OR AS APPROVED SEALING COMPOUND AS SHOWN ON DRAWING.

- TRANSVERSE JOINTS SHALL BE STANDING "S" SLIP TYPE FOR HORIZONTAL JOINTS UP TO AND INCLUDING 40" WIDTH, AND REINFORCED BAR SLIP (CLEAT) JOINT FOR 41" TO 84" WIDTH, AND 1-1/2" ANGLE REINFORCED SLIP TYPE JOINT FOR DUCTS OVER 84".

- DRIVE SLIP TYPE FOR VERTICAL JOINTS.

- ALL DUCTS WIDER THAN 48" SHALL BE PROVIDED WITH 1-1/2"x1-1/2"x1/8" ANGLE IRON STIFFENERS ON ALL SIDES ON MAXIMUM OF 48" CENTER.

B. MEDIUM PRESSURE DUCTWORK:

- TRANSVERSE DUCT JOINTS MAY BE MADE WITH THE "DUCTMATE" SYSTEM OR A STRUCTURALLY TESTED EQUIV. THE "DUCTMATE" SYSTEM COMPONENTS SHALL BE OF STANDARD IDENTIFIABLE CATALOG SYSTEMS SUPPLIED BY "DUCTMATE INDUSTRIES", PITTSBURGH, PA.

- THE STANDARD "DUCTMATE" 35 SYSTEM JOINT IS THE EQUIVALENT OF A SMACNA "J" CONNECTION. THE "DUCTMATE" 26 SYSTEM JOINT IS THE EQUIVALENT OF A SMACNA "F" JOINT CONNECTION. CONSTRUCTION OF THE DUCT SUCH AS GAUGE, REINFORCING, ETC. SHALL BE AS PREVIOUSLY INDICATED AND MEETING OR EXCEEDING SMACNA MANUALS AND ASSOCIATED ADDENDUM MANUALS PER THE MOST RECENT SMACNA STANDARDS.

- THE INSTALLATION OF THE "DUCTMATE" SYSTEM SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S MOST RECENT PRINTED ASSEMBLY AND INSTALLATION INSTRUCTIONS.

E. HANGERS FOR DUCTWORK:

- ALL SHEET METAL DUCTWORK SHALL BE SECURELY SUPPORTED ON APPROVED HANGERS OR SADDLES AS REQUIRED.

- RECTANGULAR HORIZONTAL DUCTWORK SHALL BE SUPPORTED BY ROUND STEEL RODS THREADED AT BOTH ENDS AND BOLTED THROUGH THE SUPPORTING STEEL ACROSS THE DUCT.

- SUPPORTING STEEL SHALL BE AS FOLLOWS:

- DUCT SIZE (MAXIMUM DIMENSION) SUPPORT STEEL SPACING

- UP TO 26" : 2"x3" - 1" STRAP R-0"
27" TO 48" (INCLUSIVE) : L 1-1/2"x1-1/2"x1/8" - R-0"
49" TO 59" (INCLUSIVE) : L 2"x2"x1/8"
Over 60" : L 2-1/2"x2-1/2"x3/16" - 5" O"

- ALL DUCTWORK AND PIPING INSIDE THE BUILDING SHALL BE SUSPENDED FROM THE TOP CHORD OF BAR JOIST POINTS ONLY. DO NOT CONNECT TO THE ROOF DECK. DUCTWORK AND PIPES LOCATED ON THE ROOF ARE TO BE MOUNTED ON "PATE" EQUIPMENT OR PIPE SUPPORTS. EQUIPMENT CURBS SHALL BE TYPE ES-1 OR ES-5 FOR INSULATED ROOFS. CONTRACTOR HAS THE OPTION TO USE "MIRO INDUSTRIES" EQUIPMENT OR PIPE SUPPORTS.

- ALL SHARP ENDS AND EDGES SHALL BE GROUND DOWN SMOOTH OR COVERED TO PREVENT INJURY TO PERSONNEL.

- HANGER RODS, ANGLES, AND STRAPS SHALL BE ATTACHED TO BEAM CLAMPS, CONCRETE INSERTS, AND APPROVED ANCHORS. ALL SUCH DEVICES SHALL BE UNDERWRITER'S LABORATORIES APPROVED. INSERTS AND ANCHORS SHALL BE SET IN COOPERATION WITH ALL TRADES INVOLVED.

- C-CLAMPS SHALL NOT BE USED FOR ATTACHING HANGERS.

INSULATION - GENERAL

- A. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS NECESSARY FOR THE INSTALLATION OF THERMAL INSULATION ON ALL HOT AND COLD SURFACES WHICH REQUIRE INSULATION FOR HEAT OR COLD CONSERVATION, COMFORT OF OCCUPANTS, EFFICIENCY OR EASE OF OPERATION OR TO PREVENT CONDENSATION OR DRIPPING. THE INSULATION SHALL BE COMPLETE AND EFFECTIVE THROUGHOUT THE BUILDING.

INSULATION - MATERIALS

- A. ALL INSULATION MATERIALS SHALL BE CLASS A BY UNDERWRITER'S LABORATORIES STANDARD FIBERGLASS INSULATION SHALL BE MINIMUM 5 LBS. DENSITY AND SHALL HAVE UL RATING NOT EXCEEDING 25 FLAME SPREAD, 35 FUEL CONTRIBUTED, AND 50 SMOKE DEVELOPED. ACCESSORIES SUCH AS ADHESIVE, MASTICS, CEMENTS, AND CLOTH FOR FITTINGS SHALL BE PERMANENTLY FIRE AND SMOKE RESISTANT. CHEMICALS USED FOR TREATING PAPER IN JACKET LAMINATES SHALL BE UNAFFECTED BY WATER OR HUMIDITY.
- B. MANUFACTURES: CERTAIN TEEB/SAINTE GOBAIN, OWENS CORNING, JOHN-MANSVILLE, ARMSTRONG CORK COMPANY.

DUCT INSULATION

- A. ALL CONCEALED SUPPLY AND RETURN AIR DUCTS SHALL BE INSULATED PER ASHRAE STANDARD 90.1, GENERAL REQUIREMENTS.
- B. CONCEALED DUCTWORK SHALL BE INSULATED WITH FACE DUCTWRAP 1" THICK, ONE (1) LB/CU FT. DENSITY WITH FACTORY APPLIED FRK VAPOR BARRIER JACKET OR LAMINATED ALUMINUM FOIL, OPEN MESH GLASS FIBER REINFORCING MESH SCRIM AND FLAMEPROOF KRAFT PAPER. INSULATION SHALL BE EQUAL TO OWENS-CORNING FIBERGLASS COMMERCIAL GRADE TYPE 100.
- ENSURE INSULATION IS CONTINUOUS THROUGH INSIDE WALLS. PACK AROUND DUCTS WITH FIRE PROOF SELF-SUPPORTING INSULATION MATERIAL, PROPERLY SEALED.
- FINISH INSULATION NEATLY AT HANGERS, SUPPORTS AND OTHER PROTRUSIONS.
- LOCATE COVER SEAMS IN LEAST VISIBLE LOCATIONS.

- C. ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED ACCORDING TO THE ASHRAE 90.1 ENERGY STANDARDS. GENERAL REQUIREMENTS FOR INSULATION SHALL BE R-6 FOR SUPPLY AND RETURN DUCTS IN AN UNCONDITIONED SPACE, R-8 OUTSIDE THE BUILDING. R-8 INSULATION INSTALLED BETWEEN SUPPLY AND RETURN DUCTS AND BUILDING EXTERIOR WHEN DUCTS ARE PART OF THE BUILDING ASSEMBLY, AND R-3 FOR ALL DUCTS IN UNDERGROUND INSTALLATIONS.

GRILLES, REGISTERS, AND CEILING DIFFUSERS

- A. REFER TO SCHEDULE ON DRAWINGS FOR CAPACITIES, SIZES, AND TYPES.

- B. GRILLES AND REGISTERS PERFORMANCE SHALL BE BASED ON TESTS CONDUCTED IN ACCORDANCE WITH AEC STANDARDS 1062 A2, "AIR DIFFUSING EQUIPMENT TEST CODE" AND ASHRAE STANDARD 538B "METHOD OF TESTING FOR RATING THE ACOUSTIC PERFORMANCE OF AIR CONTROL AND TERMINAL DEVICES AND SIMILAR EQUIPMENT."

- C. GRILLES, REGISTERS, AND DIFFUSERS SHALL BE MANUFACTURED BY PRICE, TITUS, CARNES, OR KRUGER. PROVIDE DAMPERS AT EACH DIFFUSER AND REGISTER. PROVIDE OPTIONS PER SCHEDULE ON DRAWINGS.

FANS (SUPPLY/RETURN)

- A. FANS SHALL BE AS SCHEDULED WITH ACCESSORIES ON DRAWINGS. FANS SHALL BEAR AMCA SEAL FOR RATED SOUND AND AIR PERFORMANCE. ALL UNITS TO BE VANDAL PROOF AND COVERS TO BE BOLTED SECURE.

- AFTER THE VISUAL INSPECTION, ALL FANS SHALL BE TESTED AT FULL SYSTEM STATIC PRESSURES BY OPERATING THE SYSTEM FANS.

- ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE TESTING AND BALANCING TRADES.

- ALL REPAIRS MUST BE DONE IN A MANNER SATISFACTORY TO THE ENGINEER'S FIELD REPRESENTATIVE.

- B. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE INSTALLATION OF THE DUCT SYSTEMS TO FUNCTION SATISFACTORILY AGAINST THE SPECIFIED SYSTEM TOTAL STATIC PRESSURE. DEFECTS DUE TO IMPROPER MATERIALS, WORKMANSHIP, AND LEAKS SHALL BE CORRECTED WITHOUT ADDITIONAL COST TO THE OWNER. OTHER WORK AFFECTED AS A RESULT OF THE ABOVE MENTIONED DEFECTS SHALL ALSO BE MADE GOOD WITHOUT COST TO THE OWNER. THE ENTIRE SYSTEM SHALL BE LEFT IN PROPER OPERATING CONDITION, ACCEPTABLE TO THE ENGINEER'S FIELD REPRESENTATIVE. OIL CANNING OF DUCTS WILL NOT BE ACCEPTABLE.

SMOKE DETECTORS AND/OR HEAT DETECTORS (SYSTEMS OVER 2000 CFM)

- A. WHERE REQUIRED BY LOCAL CODE, FURNISH AND INSTALL IN THE MAIN SUPPLY AND RETURN AIR DUCT OF EACH AIR HANDLING UNIT, A SELF-CONTAINED, IONIZATION-TYPE DUCT SMOKE DETECTOR DESIGNED TO MOUNT TO A DUCT USING SAMPLING TUBES ACROSS THE DUCT TO SENSE THE AIR. UNIT SHALL BE MANUALLY RESET AND SHALL HAVE A SET OF CONTACTS FOR FAN SHUT DOWN AS WELL AS FOR REMOTE ALARMING. SMOKE DETECTORS SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF NFPA 90A AND THE INTERNATIONAL MECHANICAL CODE OF THE LOCAL AUTHORITY HAVING JURISDICTION.

- B. SMOKE DETECTORS SHALL HAVE SAMPLING TUBES AND AUXILIARY CONTACTS FOR FAN SHUTDOWN. SMOKE DETECTORS SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM.

- C. SMOKE DETECTORS THAT ARE NOT VISIBLE SHALL HAVE REMOTE INDICATION DEVICE (LIGHT OPTION) FOR UNIT STATUS CONDITION.

WIRING

- A. FACTORY MOUNT AND WIRE UNIT CONTROLS. MOUNT ELECTRICAL COMPONENTS IN TERMINAL UNIT CONTROL BOX WITH REMOVABLE COVER. PROVIDE FIELD WIRING FROM TERMINAL STRIP IN TERMINAL UNIT CONTROL PANEL TO THERMOSTAT, COMMUNICATIONS AND POWER SOURCE.

- B. ALL WIRING SHALL COMPLY WITH LOCAL AND NATIONAL ELECTRIC CODES AND THE MANUFACTURER'S PUBLISHED INSTALLATION MANUAL.

- C. PROVIDE LAMINATED COLOR CODED WIRING DIAGRAM TO MATCH FACTORY INSTALLED WIRING AND BE PROVIDED IN BOTH POINT TO POINT AND LADDER DIAGRAM FORMAT AND AFFIXED TO THE INTERIOR OF THE CONTROL COMPARTMENT ACCESS DOOR.

THERMOSTATS

- A. IN GENERAL, ALL THERMOSTATS, INCLUDING SENSORS, ETC. SHALL BE PROVIDED BY THE HVAC EQUIPMENT MANUFACTURER.

- B. MECHANICAL TRADES SHALL FURNISH AND INSTALL ALL REQUIRED AUTOMATIC TEMPERATURE CONTROLS, INCLUDING WIRING, TRANSFORMERS, 7-DAY PROGRAMMABLE THERMOSTATS FOR PROPER OPERATION OF THE HVAC SYSTEM. WIRING SHALL BE IN ACCORDANCE WITH N.E.C. STANDARDS. COORDINATE WITH CONTROLS AND ELECTRICAL CONTRACTORS.

MISCELLANEOUS CONTROLS (MAU, KITCHEN EXHAUST FANS)

- A. PROVIDE ALL NECESSARY INTERLOCKING CONTROL DEVICES SUCH AS, STARTER RELAYS, ELECTRIC SOLENOID VALVES AND CONTROL TRANSFORMERS FOR A COMPLETE OPERATING SYSTEM.

CONTROLS INSTALLATION

- A. ALL WIRING IN CONNECTION WITH THE TEMPERATURE CONTROLS, AS WELL AS, THE WIRING IN CONNECTION WITH ALL ELECTRIC SWITCHES FOR CONTROLLING OF SYSTEMS, DAMPERS AND EQUIPMENT, SHALL BE PROVIDED BY THE CONTROL CONTRACTOR. ALL INSTALLATION AND MATERIALS SHALL CONFORM TO THE ELECTRICAL SPECIFICATIONS FOR THIS PROJECT. WIRING SHALL BE IN CONDUITS AND IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

JRED

ENGINEERING, INC.

Consulting Engineers

14137 Farmington Rd.
Livonia, MI 48154
Tel: (734) 855-4904
email: esteban@jredengineering.com

ELECTRICAL CONSULTANT:



ETS ENGINEERING, INC.

ENERGY / TECHNOLOGY SOLUTIONS

415-1/2 S. WASHINGTON

P.O. BOX 1116

ROYAL OAK, MI 48068-1116

OFF: 248/744-0360

FAX: 248/744-0367

WWW.ETSENGINEERING.NET

ARCHITECT:



ABD Architects

2601 Wendover Rd.

Bloomfield Hills, MI 48302

Tel: (248) 213-6010

www.ABDarch.com

PROJECT:

Level One

Bank

1880 S. Rochester Rd.

Rochester Hills, MI 48307

ISSUES/REVISIONS	DATE
PERMIT	05/16/19

SHEET TITLE:

MECHANICAL HVAC
SPECIFICATIONS

(DO NOT SCALE DRAWINGS)

DATE:	04/29/19
APPROVED BY:	E. CABELLO
CHECKED BY:	E. CABELLO
DESIGNED BY:	JRED
DRAWN BY:	JRED

ARCH/ENG. SEAL:

ESTEBAN CABELLO

ENGINEER

No. 46030

Professional Seal

JRED PROJECT NUMBER:

19049

SHEET NUMBER:

MP-3

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SINGLE POLE TOGGLE SWITCH		QUAD ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		NORMALLY OPEN CONTACTS
	TWO POLE TOGGLE SWITCH		QUAD FLOOR MOUNTED RECEPTACLE		NORMALLY CLOSED CONTACTS
	3 WAY TOGGLE SWITCH		DUPLEX FLOOR MOUNTED RECEPTACLE		N.C. PUSH BUTTON SINGLE CIRCUIT
	4 WAY TOGGLE SWITCH		SPECIAL RECEPTACLE-NEMA CONFIGURATION AS NOTED		N.C. PUSH BUTTON SINGLE CIRCUIT
	KEY OPERATED SWITCH		QUAD RECEPTACLE/LOW VOLTAGE SYSTEM FLOOR BOX		SPEAKER
	3 WAY KEY OPERATED SWITCH		DUPLEX RECEPTACLE/LOW VOLTAGE SYSTEM FLOOR BOX		DOUBLE FACE SPEAKER - WALL MOUNTED
	4 WAY KEY OPERATED SWITCH		VERTICAL RISER FOR SURFACE RACEWAY		SPEAKER - WALL MOUNTED
	DIMMER SWITCH MATCH LIGHTING FOR LINE OR 0-10V		SURFACE RACEWAY		MICROPHONE
	3 WAY DIMMER SWITCH		BUS DUCT		VOLUME CONTROL
	PILOT SWITCH		PANEL 480/277 VOLT		SINGLE FACE CLOCK - CEILING MOUNTED
	MANUAL ON/AUTO OFF OCCUPANCY SENSOR WALL SWITCH		PANEL 208Y/120 VOLT		SINGLE FACE CLOCK - WALL MOUNTED (MOUNT 7'-6" AFF TO CENTER)
	LOCKABLE SINGLE POLE SWITCH		DISTRIBUTION PANEL		DOUBLE FACE CLOCK - WALL MOUNTED
	HORSE POWER RATED SWITCH		MAIN DISTRIBUTION PANEL/MAIN SWITCHBOARD/MOTOR CONTROL CENTER		MOTION DETECTOR
	MANUAL ON/AUTO OFF OCCUPANCY SENSOR WITH DIMMING - MATCH LIGHTING FOR LINE OR 0-10V		TRANSFORMER		DOOR CONTACT
	CEILING MOUNTED OCCUPANCY SENSOR		ELECTRIC MOTOR		KEY PAD
	CEILING MOUNTED DAYLIGHT SENSOR		MANUAL MOTOR STARTER		SECURITY CAMERA
	OCCUPANCY SENSOR POWER PACK		MANUAL MOTOR STARTER WITH PILOT LIGHT		CARD READER
	PROGRAMMABLE LIGHT CONTROL SWITCH		MOTOR STARTER		NURSE CALL DEVICE
	BALLAST LOAD TRANSFER CONTROL		COMBINATION MOTOR STARTER		MANUAL FIRE ALARM STATION
	TIMER CONTROLLER		NON-FUSED DISCONNECT SWITCH		SMOKE DETECTOR
	CONTACTOR		FUSED DISCONNECT SWITCH		DUCT SMOKE DETECTOR
	PHOTOELECTRIC CONTROLLER		PUSH BUTTON		DUCT SMOKE DAMPER, CONNECT 120V TO SMOKE DAMPER AND FIRE ALARM CONNECTION TO SMOKE DAMPER AS WELL AS DUCT SMOKE DETECTORS AS REQUIRED PER NFPA - COORDINATE WITH MECH TRADES. PROVIDE RESET SWITCH IN ACCESSIBLE LOCATION IN AREA SERVED BY DUCT.
	SINGLE RECEPTACLE		JUNCTION BOX		DUCT SMOKE AUDIBLE/VISUAL ALARM DEVICE WITH KEYED TEST AND RESET SWITCH
	DUPLEX RECEPTACLE		HARD WIRE POWER CONNECTION		THERMAL DETECTOR
	DUPLEX RECEPTACLE MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP, (UNLESS NOTED OTHERWISE) (SIMILAR FOR EMERGENCY RECEPTACLES)		HARD WIRE CONNECTION AT FLOOR BOX		KITCHEN FIRE CONTROLS
	DUPLEX RECEPTACLE-GROUND FAULT INTERRUPTER		CIRCUIT BREAKER		FIRE ALARM HORN
	DUPLEX RECEPTACLE MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP (UNLESS NOTED OTHERWISE) WITH GROUND FAULT INTERRUPTER		SWITCH		FIRE ALARM STROBE
	DUPLEX ISOLATED GROUND RECEPTACLE MOUNTED 42" AFF OR 6" ABOVE COUNTER TOP (UNLESS NOTED OTHERWISE) WITH DEDICATED NEUTRAL CONDUCTOR		AUTOMATIC OR MANUAL TRANSFER SWITCH		FIRE ALARM HORN/STROBE
	COMBINATION 2A USB / 20A RECEPTACLE PASSAGE/OUR TRIP/USE OR EQUAL		ENGINE GENERATOR		MAGNETIC DOOR RELEASE
	DUPLEX ISOLATED GROUND FLOOR MOUNTED RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		FUSE		TAMPER SWITCH
	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR		TRANSFORMER		FLOW SWITCH
			CURRENT TRANSFORMER		FIRE ALARM CONTROL PANEL
			POTENTIAL TRANSFORMER		FIRE ALARM ANNUNCIATOR PANEL
			PANEL (LIGHTING OR RECEPTACLE)		
			NODE		
			GROUND		
			TRANSFORMER GROUND		
			TRANSIENT VOLTAGE SURGE SUPPRESSION		

ELECTRICAL ABBREVIATION LIST

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMPHERE	GF	GROUND FAULT INTERRUPTER	NC	NORMALLY CLOSED
AF	ABOVE FINISH FLOOR	GRD	GROUND	NF	NON-FUSIBLE
AFG	ABOVE FINISH GRADE	GRD	DALYANIZED RIGID CONDUIT	NC	NOT IN CONTRACT
AHU	AIR HANDLING UNIT	HQA	HAND-OFF-AUTO	NL	NIGHT LIGHT
AC	AMPS INTERRUPTING CAPACITY	HP	HORSEPOWER	NO	NORMALLY OPEN
BKR	BREAKER	HZ	HERTZ	NTS	NOT TO SCALE
BPS	BOLTED PRESSURE SWITCH	IG	ISOLATED GROUND	RECEPT.	RECEPTACLE
CB	CIRCUIT BREAKER	JB	JUNCTION BOX	RECEPT. PANEL	RECEPTACLE PANEL
CR/OUT	CIRCUIT	KW	KILOWATT	RTU	ROOF TOP UNIT
CLS	CEILING	KWH	KILOWATT - HOURS	SD	SMOKE DETECTOR SPECIFICATION
CP	CIRCULATION PUMP	KVA	KILO VOLT-AMPERES	TELCOM	TELECOMMUNICATIONS
CJH	CABINET UNIT HEATER	LP	LIGHTING PANEL	TYM	TYPICAL
DED	DEDICATED	LO	LOOK-ON	UH	UNIT HEATER
DISC	DISCONNECT	MCA	MINIMUM CIRCUIT AMPACITY	U.O.N.	UNLESS OTHERWISE NOTED
DP	DISTRIBUTION PANEL	MCB	MINI CIRCUIT BREAKER	WP	WEATHERPROOF
DWG	DRAWING	MCC	MOTOR CONTROL CENTER	WG	WIRE GUARD
EBU	EMERGENCY BATTERY UNIT	MCP	MAIN DISTRIBUTION PANEL		
ET	EXHAUST FAN	MLO	MAIN LUGS ONLY		
EM	EMERGENCY	MSB	MAIN SWITCHBOARD		
EM/HL	EMERGENCY/HIGH LIGHT	MTD	MOUNTED		
ELH	ELECTRIC UNIT HEATER	MUA	MAKE-UP AIR UNIT		
ENC	ELECTRIC WATER COOLER				
EMH	ELECTRIC WATER HEATER				
FLA	FULL LOAD AMPS				
F	FUSE				

SPECIAL SYSTEMS

- SINGLE GANG OUTLET BOX FOR LOW VOLTAGE SYSTEMS. STUB RACEWAY UP INTO ACCESSIBLE CEILING SPACE. PROVIDE BUSHING. PROVIDE BLANK COVERPLATE. WIRING BY OTHERS.
- SINGLE GANG OUTLET BOX FOR TV. STUB UP RACEWAY INTO ACCESSIBLE CEILING SPACE. PROVIDE BUSHING. PROVIDE BLANK COVERPLATE. WIRING BY OTHERS.
- TELECOMMUNICATIONS BACKBOARD

ALL "SPECIAL SYSTEMS" (TYPICALLY TELEPHONE, TV, AND DATA) WIRING AND DEVICES BY OTHERS, UNLESS NOTED ON PLANS OR SPECIFICATIONS. E.G. TO PROVIDE BOXES, RACEWAYS, BACKBOARDS, AND COVERPLATES (PER SPECIFICATIONS IF APPLICABLE). COORDINATE EXACT REQUIREMENTS OF RACEWAY AND BOX SIZES WITH LOW VOLTAGE CONTRACTOR PRIOR TO INSTALLATION.

STANDARD MOUNTING HEIGHTS

CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE OUTLETS AND LOW VOLTAGE SYSTEMS OUTLETS NOT OTHERWISE SPECIFIED	18" AFF TO CENTER OF BOX
CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE OUTLETS AND LOW VOLTAGE SYSTEMS OUTLETS NOT OTHERWISE SPECIFIED IN GYM WALLS	24" AFF TO TOP OF BOX
LIGHT SWITCHES, MOTOR CONTROL DEVICES AND FIRE ALARM PULL STATIONS NOT OTHERWISE SPECIFIED	48" AFF TO CENTER OF BOX
FIRE ALARM HORNS, SPEAKERS, STROBES	80" AFF OR 4" BELOW CEILING, WHICHEVER IS LESS
CLOCKS AND COMBINATION DEVICES NOT OTHERWISE SPECIFIED	96" AFF OR 4" BELOW CEILING, WHICHEVER IS LESS
GRF RECEPTACLES IN TOILET ROOMS AND JANITOR CLOSETS NOT OTHERWISE SPECIFIED	42" AFF TO CENTER OF BOX
LIGHTING AND RECEPTACLE BRANCH CIRCUIT PANELBOARDS AND LIGHTING CONTROLLERS NOT OTHERWISE SPECIFIED	6'-6" AFF TO TOP OF ENCLOSURE

** COORDINATE EXACT MOUNTING HEIGHTS WITH ARCHITECT/MILLWORK PRIOR TO ROUGH-IN **

GENERAL DEMOLITION NOTES:

1. ELECTRICAL FIXTURES, DEVICES, PANELBOARDS, AND OTHER ITEMS OF ELECTRICAL EQUIPMENT ON THIS DRAWING SHOWN HATCHED SHALL BE DISCONNECTED AND REMOVED BY THE CONTRACTOR. REMOVE ASSOCIATED WIRING, TERMINATIONS AND CONDUIT BACK TO THE SOURCE.
2. ALL UNUSED LOW VOLTAGE WIRING SHALL BE REMOVED IN ITS ENTIRETY.
3. REMAINING LUMINAIRES, SWITCHES, RECEPTACLES, MOTORS, ETC., NOT PART OF THE REMODELING SHALL BE CHECKED FOR PROPER OPERATION, AND CIRCUITS OPENED BY THE REMODELING WORK SHALL BE PROPERLY RECONNECTED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING WALLS, FLOORS, AND CEILINGS REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK IN THE REMODELED PORTIONS OF THE EXISTING BUILDING. OPENINGS SHALL BE NEATLY DRILLED OR CUT.
5. PATCHING SHALL BE PERFORMED BY A WORKMAN SKILLED IN THE TRADE INVOLVED, AND PATCH WORK SHALL MATCH THE EXISTING SURFACE AND FINISH IN A MANNER ACCEPTABLE TO THE ARCHITECT.
6. ALL DISCREPANCIES WITH THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO BIDS. IN OTHERWISE DOING SO, THE ELECTRICAL CONTRACTOR SHALL BE LIABLE FOR ANY REQUIRED REVISIONS.

GENERAL POWER NOTES:

1. ALL ELECTRICAL DEVICES AND ASSOCIATED OUTLET BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. ALL CONDUIT AND WIRING SHALL BE CONCEALED WHERE PHYSICALLY POSSIBLE. SURFACE RACEWAY SHALL ONLY BE PERMITTED WHERE NOTED.
2. PROVIDE (1) NO. 10 AWG NEUTRAL CONDUCTOR FOR ANY 20 AMP SINGLE PHASE CIRCUITS SHARING A NEUTRAL IN A SINGLE CONDUIT. WHERE MULTIPLE BRANCH CIRCUITS ARE USED, PROVIDE SIMULTANEOUS DISCONNECTING MEANS IN PLACE OF SINGLE POLE BREAKERS.
3. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAYS ALONG WITH PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS. CONDUIT IS NOT PERMITTED TO ACT AS AN EQUIPMENT GROUNDING CONDUCTOR UNLESS NOTED. AN ISOLATED GROUND CONDUCTOR (GREEN/WHITE) IS REQUIRED FOR ALL ISOLATED GROUND CIRCUITS.
4. WHEREVER 4 OR MORE CURRENT CARRYING CONDUCTORS ARE INSTALLED IN A SINGLE RACEWAY, E.G. SHALL INCREASE CONDUCTOR SIZE AS REQUIRED FOR DERATING PER NEC 310.15(B)(2).
5. GROUND FAULT INTERRUPTING DEVICES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS AND NOT ALLOWED BEHIND FIXED IN PLACE OR UNMOVABLE EQUIPMENT. REMOTE DEVICES MAY BE REQUIRED.
6. ALL CIRCUITS SHALL USE A MINIMUM OF 12 AWG FOR 20 AMP CIRCUITS UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR SHALL CONFIRM CONDUCTOR AND CONDUIT SIZES FOR VOLTAGE DROP, A MAXIMUM OF 3% FOR BRANCH AND FEEDER AND 5% OVERALL.
7. COORDINATE WITH OTHER TRADES FOR ANY ELECTRICAL DEVICE LOCATIONS PRIOR TO ROUGH-IN. COMPLY WITH ALL APPLICABLE CODES FOR PROPER MOUNTING HEIGHTS, NEPA, NEC, ADA, ETC.
8. WHERE LOW VOLTAGE DEVICES AND RECEPTACLES ARE SHOWN NEXT TO EACH OTHER, INSTALL AS CLOSE AS POSSIBLE. DO NOT SCALE DRAWINGS.
9. ALL "SPECIAL SYSTEMS" WIRING AND DEVICES (E. TELEPHONE, DATA, TV) SHALL BE PROVIDED AND INSTALLED BY OTHERS UNLESS NOTED ON PLANS OR SPECIFICATIONS. E.G. TO PROVIDE BOXES AND RACEWAYS PER LEGEND AND SPECIFICATIONS. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER/SUPPLIER.
10. ALL DISCREPANCIES WITH THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO BIDS. IN OTHERWISE DOING SO, THE ELECTRICAL CONTRACTOR SHALL BE LIABLE FOR ANY REQUIRED REVISIONS.
11. E.G. TO COORDINATE EXACT EQUIPMENTS OF ALL OTHER SYSTEMS WITH MANUFACTURER AND OTHER TRADES PRIOR TO ROUGH-IN AND PURCHASE OF ANY ELECTRICAL EQUIPMENT ASSOCIATED WITH SYSTEM. ANY DISCREPANCIES WITH THIS PLAN AND MANUFACTURER REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PURCHASE OR ELECTRICAL ROUGH-IN OF THIS EQUIPMENT.
12. ALL ITEMS SHOWN ON PLAN ARE NEW UNLESS MARKED AS (E) FOR EXISTING OR (R) FOR RELOCATED.
13. FOR MEDICAL BUILDINGS, ALL PATIENT CARE AREAS, EXAM AND PROCEDURE ROOMS AND THE LINE SHALL MEET NEC 2014 - 517.13 FOR REDUNDANT GROUNDING.

JRED

ENGINEERING, INC.

Consulting Engineers
14137 Farmington Rd.
Livonia, MI 48154
Tel: (734) 855-4904
email: es6060m@jedengineering.com

ELECTRICAL CONSULTANT:



ETS ENGINEERING, INC.
ENERGY / TECHNOLOGY SOLUTIONS
418-1/2 S. WASHINGTON
P.O. BOX 11116
ROYAL OAK, MI 48068-1116
OFF: 248/744-0360
FAX: 248/744-0367
WWW.ETSENGINEERING.NET

ARCHITECT



ABD Architects
2601 Wendover Rd.
Bloomfield Hills, MI 48302
Tel: (248) 213-6010
www.ABDarch.com

PROJECT:

Level One Bank
1880 S. Rochester Rd.
Rochester Hills, MI 48307

ISSUES/REVISIONS:	DATE:
PERMITS	05/16/19

SHEET TITLE:
ELECTRICAL SYMBOLS LIST & GENERAL NOTES

(DO NOT SCALE DRAWINGS)

DATE:	04/29/19
APPROVED BY:	RSL
CHECKED BY:	RSL
DESIGNED BY:	---
DRAWN BY:	ETS

ARCH/ENG SEAL:

JRED PROJECT NUMBER:
19049

SHEET NUMBER:

E-0

