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275 east liberty
ann arbor, michigan 48101
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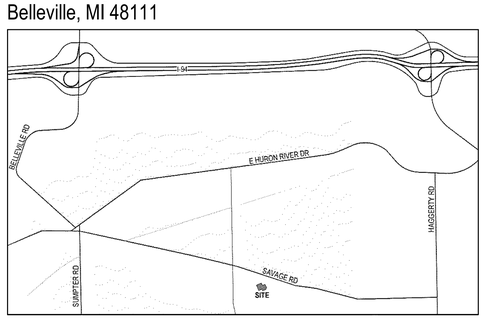
Van Buren Public Schools

Savage & Tyler Elementary Schools
Secured Entry Renovations

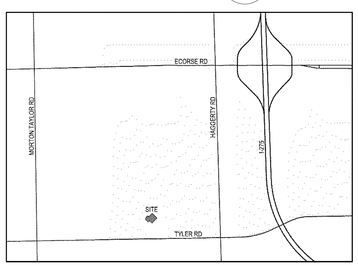
List of Drawings

Savage Elementary
42975 Savage Rd
Belleville, MI 48111



Tyler Elementary
42200 Tyler Rd
Belleville, MI 48111

Site Map



Code Information

REFER TO DRAWING 1.LS0.1 AND 1.LS0.2
FOR LIFE SAFETY AND CODE INFORMATION

Registration Seal

Signature
Date

Signature
Date

Signature
Date

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

iDS Project Number

20111-3008

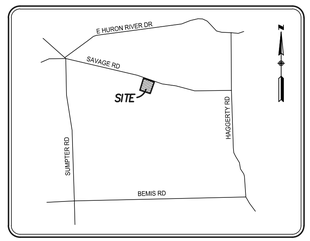
LEGEND

- MANHOLE
- CATCH BASIN
- C.O. SEWER CLEAN OUT
- GAS METER
- GAS SHUT OFF VALVE
- VALVE BOX
- GATE VALVE & WELL
- WATER SHUT OFF VALVE
- FIRE HYDRANT
- SPRINKLER VALVE BOX
- LAWN SPRINKLER HEAD
- UNVERIFIED MAPPED OBJECT
- ELECTRIC RISER OR METER
- TELEPHONE RISER
- CABLE TV RISER
- AIR CONDITION UNIT
- UTILITY POLE
- UTILITY POLE W/ LAMP EXTENSION (ARROW INDICATES DIRECTION OF ARM)
- LIGHT POLE
- LIGHT POLE WITH LAMP EXTENSION
- TRAFFIC SIGNAL
- POLE W/ TRAFFIC SIGNAL (OVER ROAD)
- GUY WIRE
- GROUND LEVEL / DECORATIVE LIGHTING
- FLAG POLE
- METAL OR CONC. POST
- MAILBOX
- SIGN
- WATER FOUNTAIN
- PARKING METER
- BILLBOARD OR LARGE SIGN
- BASKETBALL HOOP
- BOULDER
- STATUE OR SCULPTURE
- BENCH — BENCH
- BIKE RACK — BIKE RACK
- PICNIC TABLE
- SOCCER GOAL — SOCCER GOAL
- STUMP
- DS-S DOWNSPOUT INTO STORM DRAIN
- DS-G DOWNSPOUT TO GROUND
- CONIFEROUS TREE
- DECIDUOUS TREE
- DECIDUOUS SHRUB
- CONIFEROUS SHRUB
- SECTION CORNER
- SDA#10 TRAVERSE POINT
- STRUCTURE NUMBER
- SDA POINT No.
- 685.00 SPOT ELEVATION

TC	TOP OF CURB ELEVATION
GU	GUTTER ELEVATION
TP	TOP OF PAVEMENT ELEVATION
EM	EDGE OF METAL ELEVATION
TW	TOP OF WALK ELEVATION
T/WALL	TOP OF WALL ELEVATION
B/WALL	BOTTOM OF WALL ELEVATION
GR	GROUND ELEVATION
UG	UNDERGROUND
FO	FIBER OPTIC
CONC	CONCRETE
ASPH	ASPHALT
FF	FINISH FLOOR ELEVATION
DL	DOOR LEDGE ELEVATION
F.I.	FOUND IRON
F.M.	FOUND MONUMENT
F.P.K.	FOUND P.K. NAIL
S.I.	SET IRON W/SDA CAP
S.P.K.	SET P.K. NAIL
S.P.K./TAG	SET P.K. NAIL W/SDA TAG
MAG	SET MAGNETIC NAIL
MAG/TAG	SET MAGNETIC NAIL W/SDA TAG
M	MEASURED
R	RECORD
C	CALCULATED
INV.	INVERT ELEVATION
CMP	CORRUGATED METAL PIPE

- G — GAS
- SN — SANITARY SEWER (SAN)
- ST — STORM SEWER (STM)
- WM — WATERMAIN (WM)
- OH — OVERHEAD WIRE
- COMBINED SEWER
- STE — STEAM LINE
- O — OIL LINE
- F — UG FIBER (COMM.)
- E — UG ELECTRIC (ELEC.)
- T — UG PHONE (PH)
- C — UG CABLE (CBL)
- CHAIN LINK FENCE (CL)
- WOOD FENCE
- WOVEN WIRE FENCE (WW)
- GUARD RAIL
- EDGE OF BRUSH/WOODS
- CENTERLINE OF DITCH
- CULVERT
- 650 — MAJOR CONTOUR
- 651 — MINOR CONTOUR
- BOUNDARY LINES
- ROW LINES
- SECTION LINES
- PROPERTY LINES
- ASPHALT
- CONCRETE
- GRAVEL/ DIRT/ MULCH
- BRICK / PAVERS
- WATER
- WATER W/ VEGETATION

SITE BM#101



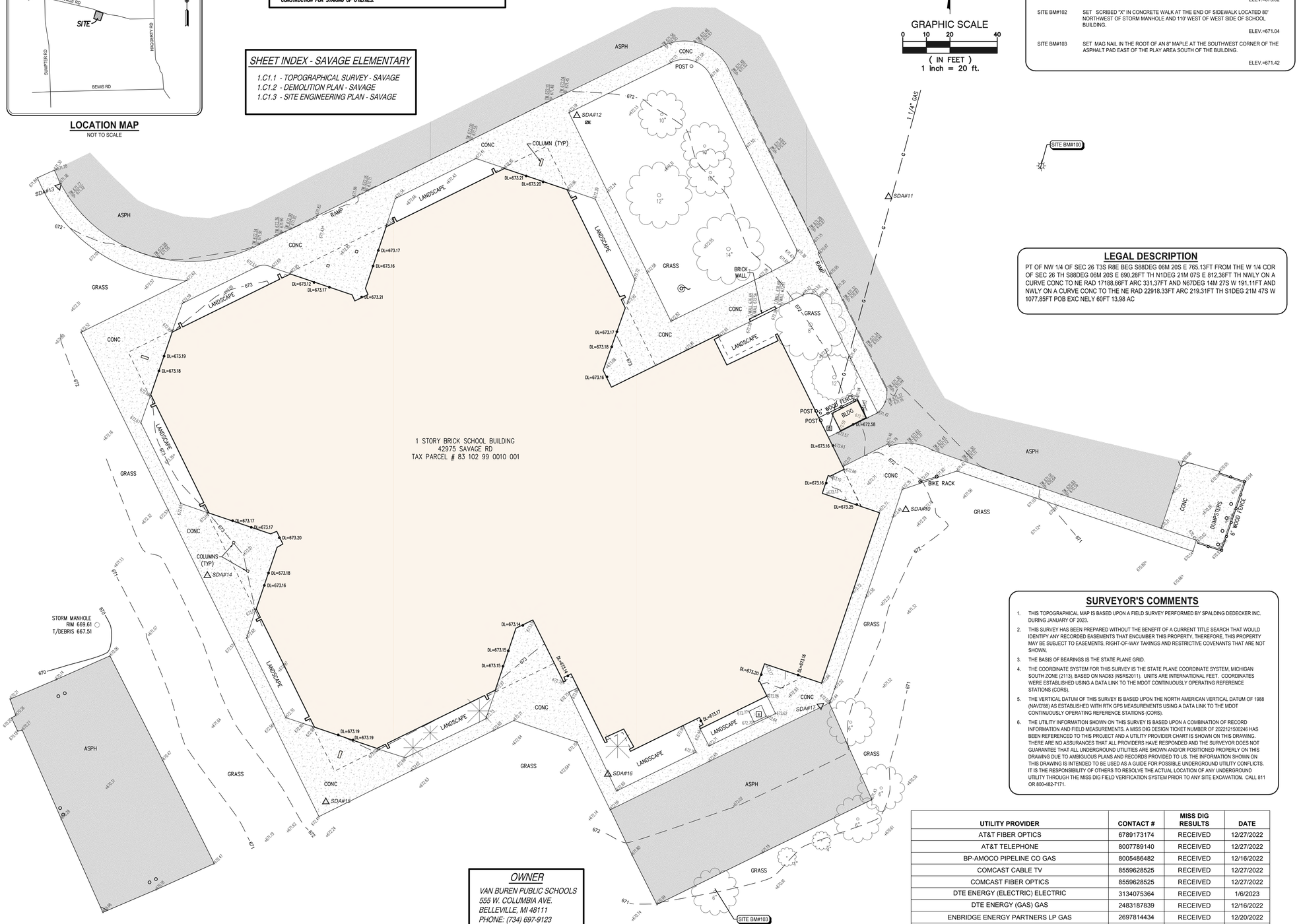
LOCATION MAP
NOT TO SCALE

SURVEY NOTES

1. TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS MAY BE BASED ON RECORD DATA NOT MEASURED IN THE FIELD.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL INFORMATION SHOWN ON THIS SURVEY AND NOTIFYING THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL UTILIZE A PRIVATE UTILITY LOCATOR TO STAKE PUBLIC AND PRIVATE UTILITY LOCATIONS PRIOR TO START OF CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY, AT NO COST TO THE PROJECT, TO REPAIR OR REPLACE ANY DAMAGE CAUSED TO EXISTING UTILITIES.
4. CONTRACTOR SHALL CONTACT MISS DIG (811) THREE WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR STAKING OF UTILITIES.

SHEET INDEX - SAVAGE ELEMENTARY

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 inch = 20 ft.



BENCHMARK DESCRIPTIONS

DATUM: GPS-DERIVED NAVD'88

SITE BM#100	SET SCRIBED "X" ON THE SOUTHWEST SIDE OF LIGHT POLE BASE LOCATED IN THE EAST PARKING LOT. ELEV.=672.71
SITE BM#101	SET SCRIBED "X" ON THE SOUTHEAST SIDE OF LIGHT POLE BASE LOCATED AT THE MOST WESTERLY LIGHT POLE IN THE WEST PARKING LOT. ELEV.=673.62
SITE BM#102	SET SCRIBED "X" IN CONCRETE WALK AT THE END OF SIDEWALK LOCATED 80' NORTHWEST OF STORM MANHOLE AND 110' WEST OF WEST SIDE OF SCHOOL BUILDING. ELEV.=671.04
SITE BM#103	SET MAG NAIL IN THE ROOT OF AN 8" MAPLE AT THE SOUTHWEST CORNER OF THE ASPHALT PAD EAST OF THE PLAY AREA SOUTH OF THE BUILDING. ELEV.=671.42

LEGAL DESCRIPTION

PT OF NW 1/4 OF SEC 26 T3S R8E BEG S88DEG 06M 20S E 765.13FT FROM THE W 1/4 COR OF SEC 26 TH S89DEG 06M 20S E 690.28FT TH N1DEG 21M 07S E 812.36FT TH NWLY ON A CURVE CONC TO NE RAD 17188.66FT ARC 331.37FT AND N67DEG 14M 27S W 191.11FT AND NWLY ON A CURVE CONC TO THE NE RAD 22918.33FT ARC 219.31FT TH S1DEG 21M 47S W 1077.85FT POB EXC NELY 60FT 13.98 AC

SURVEYOR'S COMMENTS

1. THIS TOPOGRAPHICAL MAP IS BASED UPON A FIELD SURVEY PERFORMED BY SPALDING DEDECKER INC. DURING JANUARY OF 2023.
2. THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SEARCH THAT WOULD IDENTIFY ANY RECORDED EASEMENTS THAT ENCUMBER THIS PROPERTY. THEREFORE, THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RIGHT-OF-WAY TAKINGS AND RESTRICTIVE COVENANTS THAT ARE NOT SHOWN.
3. THE BASIS OF BEARINGS IS THE STATE PLANE GRID.
4. THE COORDINATE SYSTEM FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH ZONE (2113), BASED ON NAD83 (NSRS2011). UNITS ARE INTERNATIONAL FEET. COORDINATES WERE ESTABLISHED USING A DATA LINK TO THE MDOT CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS).
5. THE VERTICAL DATUM OF THIS SURVEY IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88) AS ESTABLISHED WITH RTK GPS MEASUREMENTS USING A DATA LINK TO THE MDOT CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS).
6. THE UTILITY INFORMATION SHOWN ON THIS SURVEY IS BASED UPON A COMBINATION OF RECORD INFORMATION AND FIELD MEASUREMENTS. A MISS DIG DESIGN TICKET NUMBER OF 2022121500246 HAS BEEN REFERENCED TO THIS PROJECT AND A UTILITY PROVIDER CHART IS SHOWN ON THIS DRAWING. THERE ARE NO ASSURANCES THAT ALL PROVIDERS HAVE RESPONDED AND THE SURVEYOR DOES NOT GUARANTEE THAT ALL UNDERGROUND UTILITIES ARE SHOWN AND/OR POSITIONED PROPERLY ON THIS DRAWING DUE TO AMBIGUOUS PLANS AND RECORDS PROVIDED TO US. THE INFORMATION SHOWN ON THIS DRAWING IS INTENDED TO BE USED AS A GUIDE FOR POSSIBLE UNDERGROUND UTILITY CONFLICTS. IT IS THE RESPONSIBILITY OF OTHERS TO RESOLVE THE ACTUAL LOCATION OF ANY UNDERGROUND UTILITY THROUGH THE MISS DIG FIELD VERIFICATION SYSTEM PRIOR TO ANY SITE EXCAVATION. CALL 811 OR 800-482-7171.

OWNER

VAN BUREN PUBLIC SCHOOLS
555 W. COLUMBIA AVE.
BELLEVILLE, MI 48111
PHONE: (734) 697-9123
FAX: (734) 697-6385

UTILITY PROVIDER	CONTACT #	MISS DIG RESULTS	DATE
AT&T FIBER OPTICS	6789173174	RECEIVED	12/27/2022
AT&T TELEPHONE	8007789140	RECEIVED	12/27/2022
BP-AMOCO PIPELINE CO GAS	8005486482	RECEIVED	12/16/2022
COMCAST CABLE TV	8559628525	RECEIVED	12/27/2022
COMCAST FIBER OPTICS	8559628525	RECEIVED	12/27/2022
DTE ENERGY (ELECTRIC) ELECTRIC	3134075364	RECEIVED	1/6/2023
DTE ENERGY (GAS) GAS	2483187839	RECEIVED	12/16/2022
ENBRIDGE ENERGY PARTNERS LP GAS	2697814434	RECEIVED	12/20/2022
VAN BUREN TOWNSHIP POTABLE WATER	7346998900		
VAN BUREN TOWNSHIP SANITARY SEWER	7346998900		
WOLVERINE PIPELINE COMPANY PIPELINE	8883375004	RECEIVED	12/16/2022

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	J. Ensley
Project Architect / Engineer	J. Ensley
Drawn By	C. Yang
Q.M. Review	J. Ensley
Approved	J. Ensley
Drawing Scale	As Noted

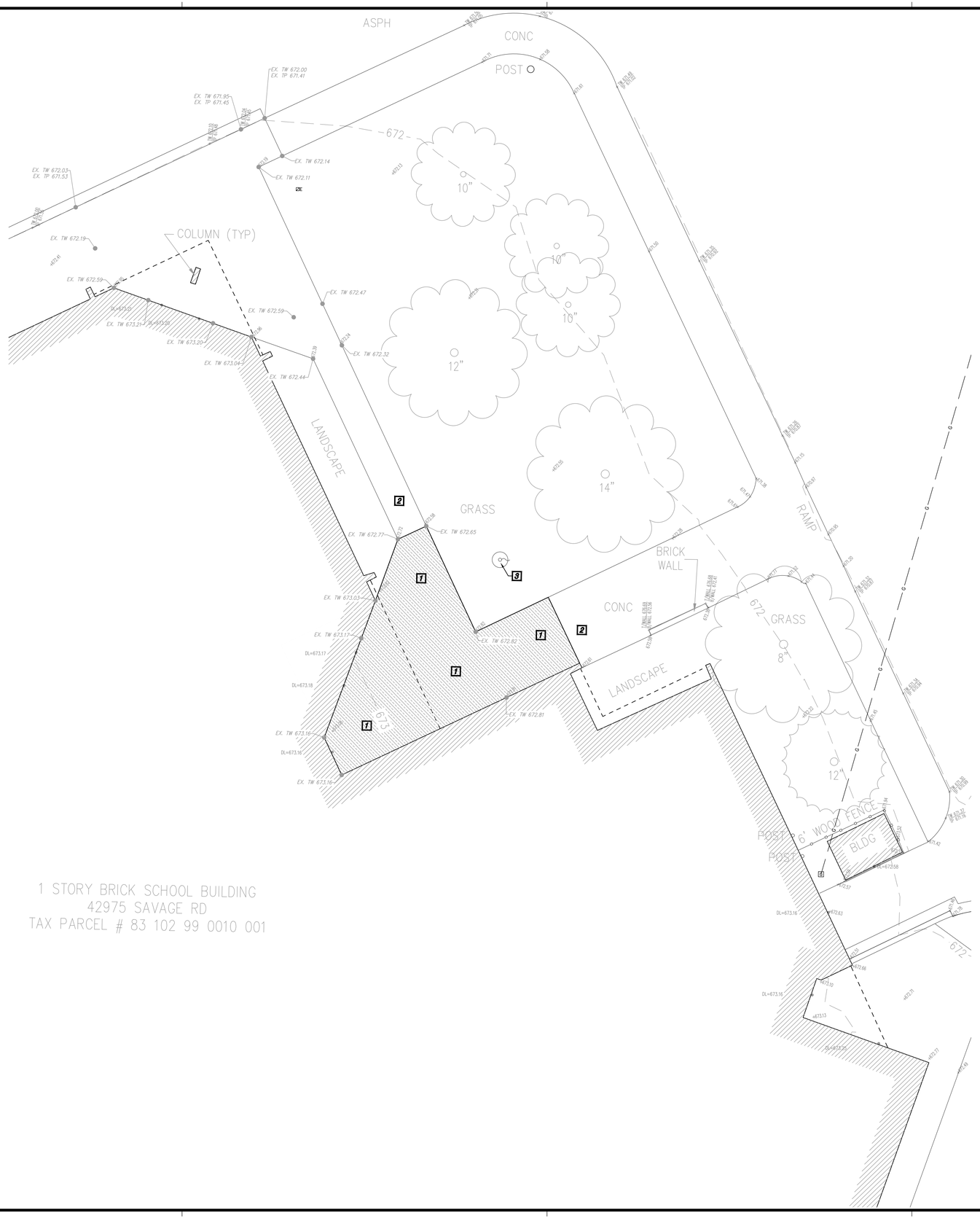
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Topographical Survey
Savage

IDS Project Number: 20111-3008
SDA Project No. NP24095

Drawing Number: 1.C1.1



1 STORY BRICK SCHOOL BUILDING
42975 SAVAGE RD
TAX PARCEL # 83 102 99 0010 001

GRAPHIC SCALE
0 5 10 20
(IN FEET)
1 inch = 10 ft.

DEMOLITION NOTES

1. REMOVE CONCRETE PAVEMENT TO FULL DEPTH. SAWCUT FULL DEPTH TO NEAREST JOINT WHERE NEW PAVEMENT WILL BE PLACED ADJACENT TO EXISTING PAVEMENT. EXCAVATE EXISTING AGGREGATE BASE AND SUBGRADE AS NECESSARY TO INSTALL NEW PAVEMENT SECTION AS SHOWN ON THE PAVING PLANS, INCLUDING NEW AGGREGATE BASE.
2. PROTECT EXISTING CONCRETE WALK TO REMAIN.
3. PROTECT EXISTING FLAG POLE INCLUDING BASE TO REMAIN.

ALL DEPRESSIONS CREATED BY DEMOLITION PROCEDURES SHALL BE BACKFILLED WITH CLASS II FILL MATERIAL, IN 8" LIFTS COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT, UP TO PROPOSED SUBGRADE.

CONTRACTOR IS RESPONSIBLE FOR DOING AN EARTHWORK CALCULATION FOR CUT AND FILL REQUIREMENTS, AND IS RESPONSIBLE FOR INCLUDING IMPORT AND EXPORT OF MATERIALS IN THEIR BID. ALL EXCESS MATERIAL (INCLUDING TOPSOIL, CLEAN FILL, AND WASTE MATERIAL) SHALL BE REMOVED FROM THE SITE.

CONTRACTOR TO PROTECT EXISTING WALKS, PAVEMENT, CURBS, GUTTERS, WALLS, FENCES, GATES, LANDSCAPING AND TREES TO REMAIN DURING CONSTRUCTION.

BASE FILE DISCLAIMER

TOPOGRAPHICAL SURVEY HAS BEEN COMBINED WITH PROPOSED DESIGN INFORMATION FROM PREVIOUS CONCRETE SIDEWALK REPLACEMENT PROJECT TO CREATE CURRENT BASE FILE, INCLUDING EXISTING GRADE INFORMATION. CONTRACTOR TO FIELD VERIFY EXISTING GRADES PRIOR TO START OF WORK AND NOTIFY ENGINEER OF ANY ISSUES.

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Project Title

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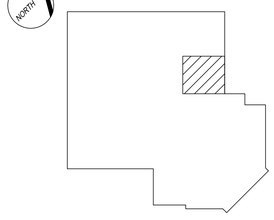
Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



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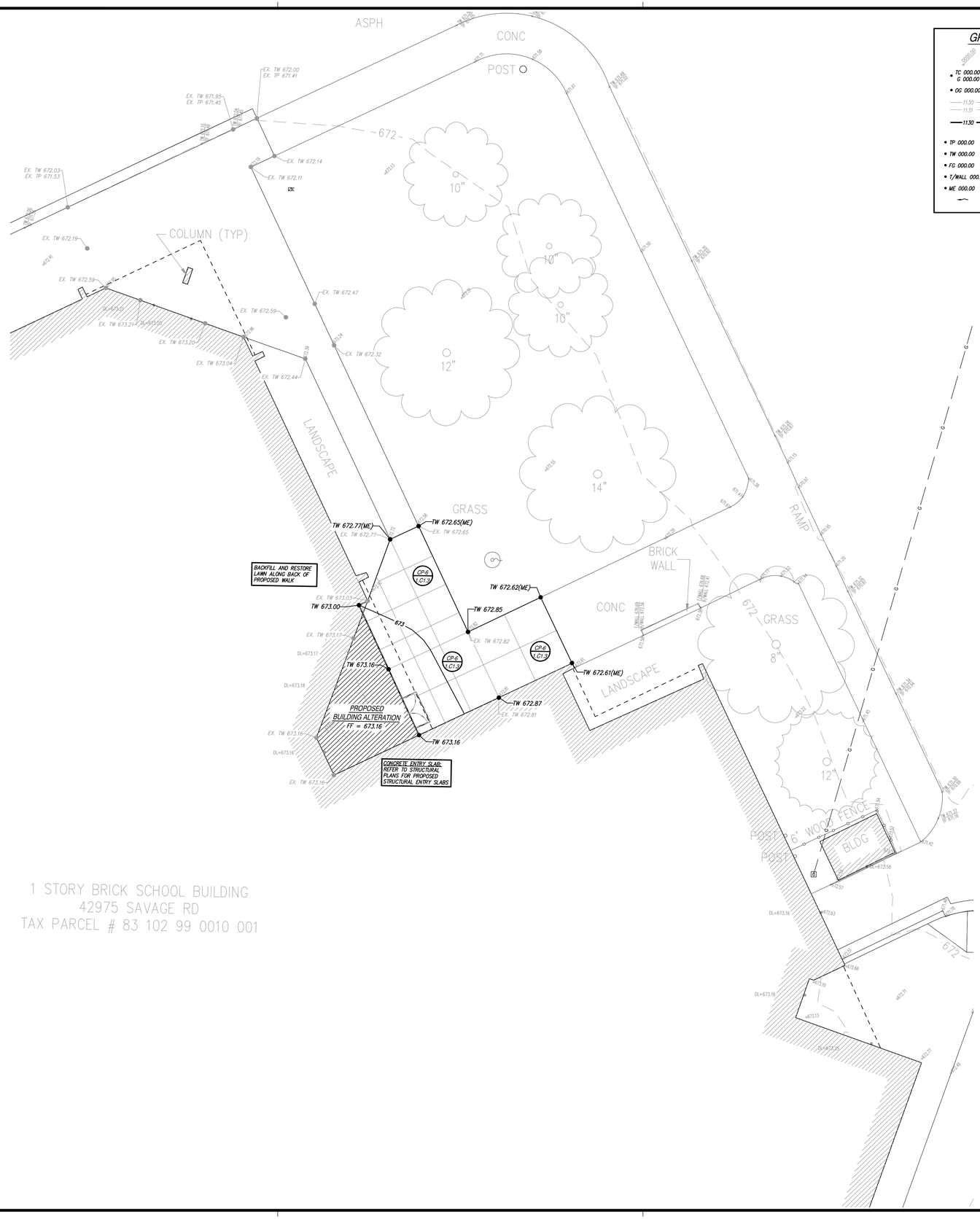
IDS Drawing Title

Demolition Plan
Savage

IDS Project Number
20111-3008
SDA Project No. NP24095

Drawing Number
1.C1.2



1 STORY BRICK SCHOOL BUILDING
42975 SAVAGE RD
TAX PARCEL # 83 102 99 0010 001

GRADING LEGEND

- EXISTING ELEVATION
- TC 000.00 / G 000.00 — PROPOSED TOP OF CURB ELEVATION / PROPOSED GUTTER ELEVATION
- OG 000.00 — OUTSIDE GRADE ELEVATION
- 11.30 / 11.31 — EXISTING CONTOURS
- 11.30 — PROPOSED CONTOURS
- TP 000.00 — TOP OF PAVEMENT ELEVATION
- TW 000.00 — TOP OF WALK ELEVATION
- FG 000.00 — FINISH GRADE ELEVATION
- T/WALL 000.00 — TOP OF WALL ELEVATION
- ME 000.00 — MATCH EXISTING ELEVATION
- FLOW ARROW

GRAPHIC SCALE
0 5 10 20
(IN FEET)
1 inch = 10 ft.

LEGEND

- PROPOSED WATERMAIN
- PROPOSED SANITARY
- PROPOSED STORM SEWER
- PROPOSED GAS MAIN
- PROPOSED ELECTRIC
- PROPOSED HYDRANT
- PROPOSED GATE VALVE & WELL (GVW)
- PROPOSED TAPPING SLEEVE, VALVE & WELL (TSVW)
- PROPOSED SAN MANHOLE (SAN)
- PROPOSED STORM MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED INLET (INL)
- PROPOSED END SECTION (ES)
- PROPOSED FIELD CATCH BASIN (FCB) W/BEEHIVE COVER OR STANDPIPE (SP) W/ BAR GRATE COVER
- STANDARD BITUMINOUS PAVEMENT
- HEAVY-DUTY BITUMINOUS PAVEMENT
- DEEP-STRENGTH BITUMINOUS PAVEMENT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- MILL PAVEMENT
- 2 — UTILITY CROSSING (SEE DATA TABLE)
- STORM SEWER STRUCTURE: CB 2 — STRUCT. TYPE / STRUCT. NO.
- SANITARY SEWER STRUCTURE: 20
- WATERMAIN STRUCTURE: 10 XXX — STRUCT. NO. / STRUCT. TYPE

PAVING CONSTRUCTION NOTES

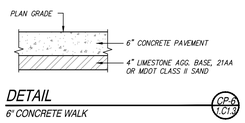
1. EARTHWORK AND PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE FOLLOWING ITEMS.
2. REMOVE ANY EXISTING TOPSOIL, VEGETATION, TREES AND OTHER DELETERIOUS MATERIALS TO EXPOSE THE SUBGRADE SOIL. TREE ROOTS SHALL BE COMPLETELY REMOVED.
3. EXCAVATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
4. THE TOP 12 INCHES OF THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557-91).
5. THE FINAL SUBGRADE SHALL BE THOROUGHLY PROOFROLLED UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS WHICH CANNOT BE MECHANICALLY STABILIZED SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
6. THE AGGREGATE BASE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557-91). THE BASE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND THE PAVED EDGE.
7. CONTRACTOR SHALL PROTECT EXISTING CURB, GUTTER, SIDEWALK, WALLS, FENCES AND ALL OTHER EXISTING SITE FEATURES NOT INDICATED FOR REMOVAL OR REHABILITATION.
8. PLACE EXPANSION JOINTS WHERE NEW CONCRETE PAVEMENT OR WALKS ABUT BUILDING WALLS (PROPOSED OR EXISTING), COLUMN WALLS OR BASES, CONCRETE FOUNDATIONS OR BASES, CURBS, OR EXISTING CONCRETE PAVEMENT. PLACE JOINT SEALANT ON ALL EXPANSION JOINTS.
9. CONTRACTOR TO CONSTRUCT CONTRACTION AND EXPANSION JOINTS IN ALL NEW CONCRETE PAVEMENT. CONTRACTION JOINTS SHALL BE TOOLED WHERE SIDEWALK WIDTH IS 8' OR LESS, AND SHALL BE SPACED EQUAL TO THE WIDTH OF THE PAVEMENT (I.E. 8' SPACING FOR 8' WIDE WALK), BUT NOT MORE THAN 10' APART. PLACE EXPANSION JOINTS WITH JOINT SEALANT AT MAXIMUM 50' SPACING. CONTRACTOR SHALL GENERALLY MATCH THE JOINT PATTERNS FOR CONCRETE PAVEMENT WHEN SHOWN ON THE PLANS.
10. CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS FOR MDOT GRADE 4000 CONCRETE PER THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

GRADING NOTES

1. CONTRACTOR TO PLACE ALL NEW PAVEMENT TO THE GRADES INDICATED, OR MATCH ORIGINAL GRADES IF NEW GRADES ARE NOT SHOWN. CONTRACTOR SHALL CONFIRM MINIMUM 1% PAVEMENT SLOPES ARE ATTAINED IN ALL AREAS.
2. PROPOSED GRADES MAY BE BASED ON AN INTERPOLATION OF DATA SHOWN ON THE TOPOGRAPHIC SURVEY. THIS INTERPOLATED DATA IS APPROXIMATE AND COULD DIFFER SLIGHTLY BASED ON THE ACCURACY OF THE SURVEY. CONTRACTOR SHALL CONFIRM THAT THE PROPOSED GRADES SHOWN ON THIS PLAN WILL NOT CREATE A STANDING WATER CONDITION (I.E. A LOW SPOT OR PAVEMENT SLOPES LESS THAN 1%) OR AN UNSAFE CONDITION WITH SLOPES IN EXCESS OF 5%. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THEY BELIEVE THAT ONE OF THESE SITUATIONS WILL OCCUR BASED ON THE PROPOSED GRADES.
3. ALL PAVEMENT PLACED WITHIN BARRIER FREE PARKING AREAS (STALLS AND ACCESS AISLES) SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION, INCLUDING MEASURED DIAGONALLY ACROSS THE AREAS. CONTRACTOR SHALL ADJUST SLOPES AS NECESSARY TO PROVIDE ADA COMPLIANT SLOPES AS WELL AS PROVIDING RE-GRADED TRANSITION SLOPES OUTSIDE OF THE BARRIER FREE PARKING AREAS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF TRANSITION ZONES WILL EXCEED MAXIMUM 5% SLOPES. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE PATTERNS WITH ALL NECESSARY PAVEMENT RE-GRADING.
4. ALL BARRIER FREE RAMPS AND ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF MDOT DETAIL R-28 "SIDEWALK RAMP AND DETECTABLE WARNING DETAILS".
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING STORM WATER RUNOFF DURING CONSTRUCTION OPERATIONS. OF PARTICULAR CONCERN WILL BE THE TIME PERIOD AFTER THE SITE HAS BEEN STRIPPED AND NOT YET RESTORED, BUILT UPON, OR PAVED. CONTRACTOR MUST INSTALL OR CONSTRUCT APPROPRIATE TEMPORARY MEASURES TO PROTECT ADJACENT PROPERTIES.

RESTORATION NOTE

RESTORE ALL DISTURBED NON-PAVED AREAS WITH 3" OF CLEAN TOPSOIL AND SEED MIX (30% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 50% CREEPING RED FESCUE). PLACE MULCH IN ALL SEEDED AREAS. ON SLOPES IN EXCESS OF 10 HORIZONTAL TO 1 VERTICAL PLACE NORTH AMERICAN GREEN DS150 MULCH BLANKET IMMEDIATELY AFTER SEEDING. USE METAL STAPLES PER MANUFACTURERS RECOMMENDATIONS TO HOLD MATTING IN PLACE.



DETAIL
6" CONCRETE WALK
CP-6 1.C1.3

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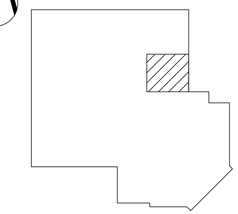

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IDS Drawing Title

Site Engineering Plan
Savage

IDS Project Number: 20111-3008
SDA Project No. NP24095

Drawing Number: 1.C1.3

LEGEND

- MANHOLE
- CATCH BASIN
- C.O. SEWER CLEAN OUT
- GAS METER
- GAS SHUT OFF VALVE
- VALVE BOX
- GATE VALVE & WELL
- WATER SHUT OFF VALVE
- FIRE HYDRANT
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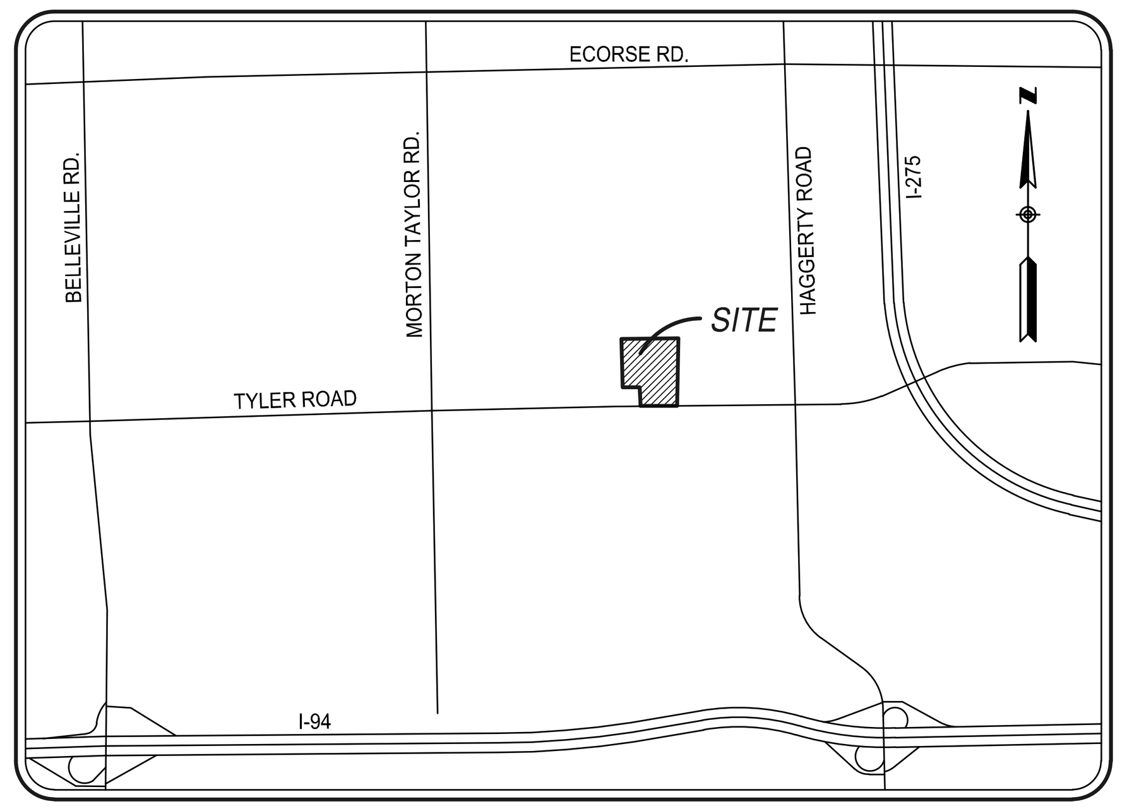


LOCATION MAP

NOT TO SCALE

BENCHMARK DESCRIPTIONS

DATUM: GPS-DERIVED NAVD'88

SITE BM#100	ARROW ON HYDRANT, LOCATED ON THE NORTH SIDE OF TYLER ROAD ±40' WEST OF THE CENTERLINE OF ENTRANCE TO TYLER ELEMENTARY SCHOOL.	ELEV.=678.76
SITE BM#101	CHISELED "+" ON NORTHEAST EDGE OF CONCRETE LIGHT POLE BASE, LOCATED ±135' SOUTH OF THE SOUTHERN MOST BUILDING FACE OF TYLER ELEMENTARY SCHOOL AND ±135' WEST OF THE EAST FENCE LINE.	ELEV.=678.40
SITE BM#102	CHISELED "+" ON NORTH EDGE OF CONCRETE LIGHT POLE BASE, LOCATED ±140' SOUTH OF THE WESTERN MOST BUILDING FACE (SOUTH CORNER) OF TYLER ELEMENTARY SCHOOL AND ±160' EAST OF THE WEST FENCE LINE.	ELEV.=679.81

SURVEYOR'S COMMENTS

1. THIS TOPOGRAPHICAL MAP IS BASED UPON A FIELD SURVEY PERFORMED BY SPALDING DEDECKER INC. DURING JANUARY OF 2023.
2. THE PROPERTY LINES/RIGHT-OF-WAY LINES SHOWN ON THIS TOPOGRAPHICAL SURVEY ARE INTENDED TO BE AN APPROXIMATE GRAPHICAL REPRESENTATION OF THE PROPERTY LINES. SPALDING DEDECKER HAS BASED THE PROPERTY LINES AND RIGHT OF WAY LINES UPON A COMBINATION OF A PROVIDED LEGAL DESCRIPTION, FOUND FIELD MONUMENTATION AND OCCUPATION. PROPERTY LINES AS SHOWN IN DRAWING ARE BASED UPON THIS WORK. VARIATIONS MAY EXIST BETWEEN THE EXISTING PROPERTY DESCRIPTION AS SHOWN AND THE GRAPHICAL LINES COMPUTED IN THE DRAWING. A COMPLETE PROPERTY LINE ANALYSIS IS NOT PART OF THE SCOPE OF SERVICES AND PROPERTY CORNERS HAVE NOT BEEN SET IN THE FIELD PER THE AGREED TO SCOPE OF SERVICES.
3. THIS SURVEY HAS BEEN PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SEARCH THAT WOULD IDENTIFY ANY RECORDED EASEMENTS THAT ENCUMBER THIS PROPERTY. THEREFORE, THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RIGHT-OF-WAY TAKINGS AND RESTRICTIVE COVENANTS THAT ARE NOT SHOWN.
4. THE BASIS OF BEARINGS IS THE STATE PLANE GRID.
5. THE COORDINATE SYSTEM FOR THIS SURVEY IS THE STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH ZONE (2113), BASED ON NAD83 (NSRS2011). UNITS ARE INTERNATIONAL FEET. COORDINATES WERE ESTABLISHED USING A DATA LINK TO THE MDOT CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS).
6. THE VERTICAL DATUM OF THIS SURVEY IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88) AS ESTABLISHED WITH RTK GPS MEASUREMENTS USING A DATA LINK TO THE MDOT CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS).
7. THE PARKING LOT STRIPING SHOWN ON THIS SURVEY IS APPROXIMATE. DIMENSIONAL AND/OR ORIENTATION VARIATIONS MAY EXIST. THIS DRAWING SHOULD NOT BE USED FOR A PARKING SPACE COUNT.
8. THE UTILITY INFORMATION SHOWN ON THIS SURVEY IS BASED UPON A COMBINATION OF RECORD INFORMATION AND FIELD MEASUREMENTS. A MISS DIG DESIGN TICKET NUMBER OF 2022121500130 HAS BEEN REFERENCED TO THIS PROJECT AND A UTILITY PROVIDER CHART IS SHOWN ON THIS DRAWING. THERE ARE NO ASSURANCES THAT ALL PROVIDERS HAVE RESPONDED AND THE SURVEYOR DOES NOT GUARANTEE THAT ALL UNDERGROUND UTILITIES ARE SHOWN AND/OR POSITIONED PROPERLY ON THIS DRAWING DUE TO AMBIGUOUS PLANS AND RECORDS PROVIDED TO US. THE INFORMATION SHOWN ON THIS DRAWING IS INTENDED TO BE USED AS A GUIDE FOR POSSIBLE UNDERGROUND UTILITY CONFLICTS. IT IS THE RESPONSIBILITY OF OTHERS TO RESOLVE THE ACTUAL LOCATION OF ANY UNDERGROUND UTILITY THROUGH THE MISS DIG FIELD VERIFICATION SYSTEM PRIOR TO ANY SITE EXCAVATION. CALL 811 OR 800-482-7171.

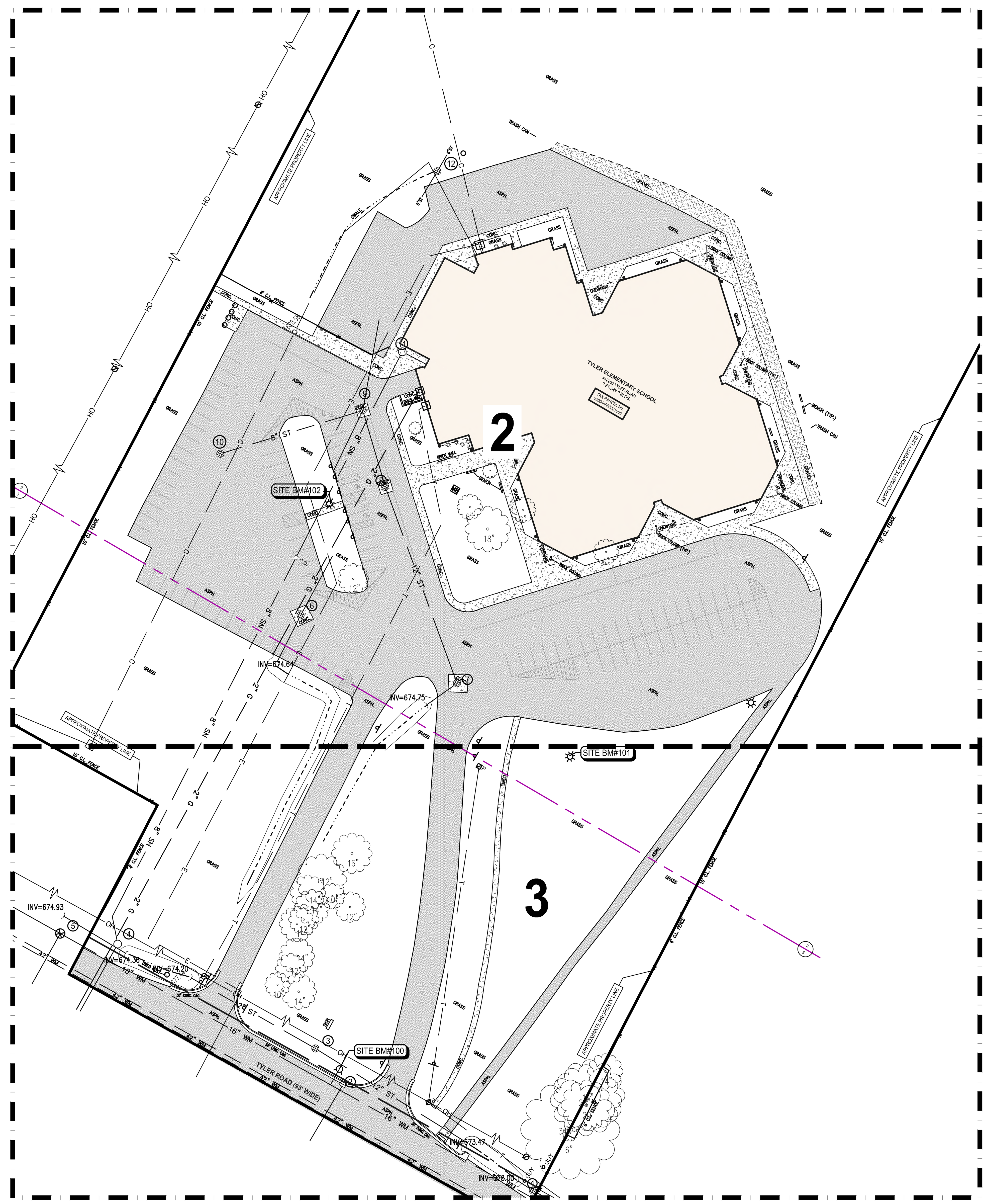
LEGAL DESCRIPTION

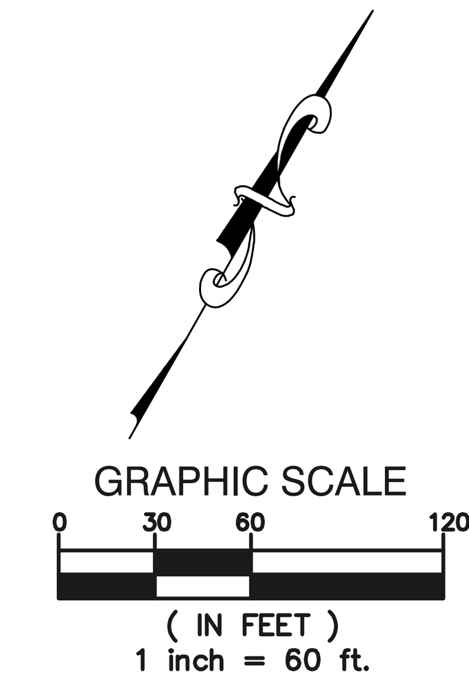
SOURCE: BS&A ONLINE
OWNER: VAN BUREN PUBLIC SCHOOLS
TAX PARCEL ID: 83-044-99-0001-005
ADDRESS: 42200 TYLER ROAD

PT OF SE 1/4 SEC 11 T3S R9E DESC AS BEG N88DEG 02M 33S W 1907.70 FT FROM SE 1/4 COR SEC 11 TH N88DEG 02M 33S W 405.97FT TH NODEG 28M 45S E 150FT TH N88DEG 02M 33S W 150FT TH NODEG 28M 45S E 1060.92FT TH S89DEG 31 M 15S E 554.71 FT TH SODEG 28M 45S W 875. 7FT TH SODEG 17M 41S W 350.15FT TO POB 14.44 AC

UTILITY CHART

UTILITY PROVIDER	CONTACT #	MISS DIG RESULTS	DATE
123.NET, INC. FIBER OPTICS	(248) 431-4584	NOT RECEIVED	
AT&T FIBER OPTICS	(678) 917-3174	RECEIVED	12/29/2022
AT&T TELEPHONE	(800) 778-9140	RECEIVED	12/29/2022
COMCAST CABLE TV	(855) 962-8525	RECEIVED	12/29/2022
COMCAST FIBER OPTICS	(855) 962-8525	RECEIVED	12/29/2022
DTE ENERGY (ELECTRIC) ELECTRIC	(313) 407-5364	RECEIVED	1/6/2023
DTE ENERGY (GAS) GAS	(248) 318-7839	RECEIVED	12/19/2023
GREAT LAKES WATER AUTHORITY POTABLE WATER	(313) 799-0289	RECEIVED	12/15/2022
VAN BUREN TOWNSHIP POTABLE WATER	(734) 699-8900	NOT RECEIVED	
VAN BUREN TOWNSHIP SANITARY SEWER	(734) 699-8900	NOT RECEIVED	





SURVEY NOTES

1. TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS MAY BE BASED ON RECORD DATA NOT MEASURED IN THE FIELD.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL INFORMATION SHOWN ON THIS SURVEY AND NOTIFYING THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL UTILIZE A PRIVATE UTILITY LOCATOR TO STAKE PUBLIC AND PRIVATE UTILITY LOCATIONS PRIOR TO START OF CONSTRUCTION. IT IS THE CONTRACTORS RESPONSIBILITY, AT NO COST TO THE PROJECT, TO REPAIR OR REPLACE ANY DAMAGE CAUSED TO EXISTING UTILITIES.
4. CONTRACTOR SHALL CONTACT MISS DIG (811) THREE WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR STAKING OF UTILITIES.

SHEET INDEX - TYLER ELEMENTARY

OWNER

VAN BUREN PUBLIC SCHOOLS
555 W. COLUMBIA AVE.
BELLEVILLE, MI 48111
PHONE: (734) 697-9123
FAX: (734) 697-6385

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STRUCTURAL ENGINEER
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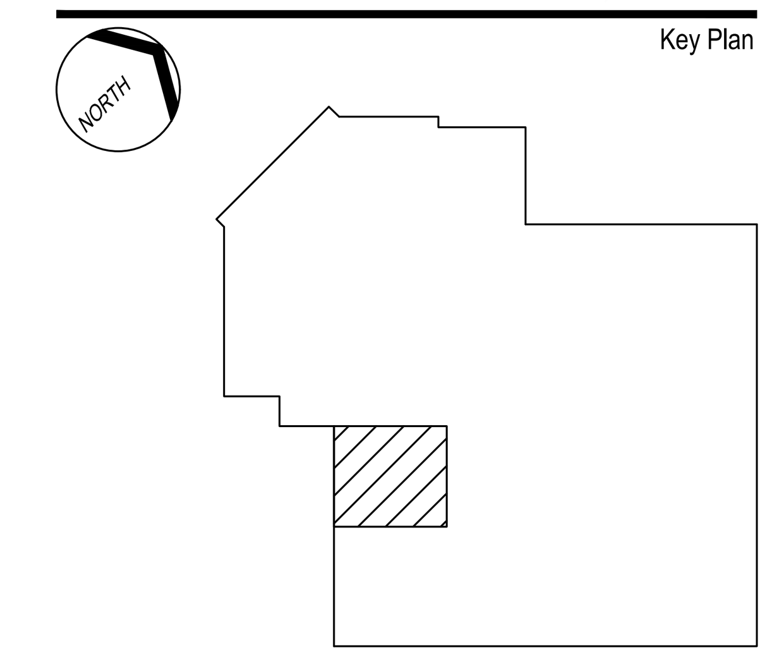
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



Project Administrator	A. Maurer
Project Designer	J. Ensley
Project Architect / Engineer	J. Ensley
Drawn By	C. Yang
Q.M. Review	J. Ensley
Approved	J. Ensley
Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
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IDS Drawing Title

Topographical Survey
1 of 3
Tyler

IDS Project Number: 20111-3008
SDA Project No. NP24096

Drawing Number: 1.C2.1

LEGEND

- MANHOLE
- CATCH BASIN
- SEWER CLEAN OUT
- GAS METER
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GRAPHIC SCALE
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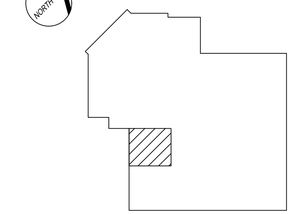

Project Administrator	A. Maurer
Project Designer	J. Ensley
Project Architect / Engineer	J. Ensley
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IDS Drawing Title

Topographical Survey
2 of 3
Tyler

IDS Project Number

20111-3008

SDA Project No. NP24096

Drawing Number

1.C2.2

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- CATCH BASIN
- SEWER CLEAN OUT
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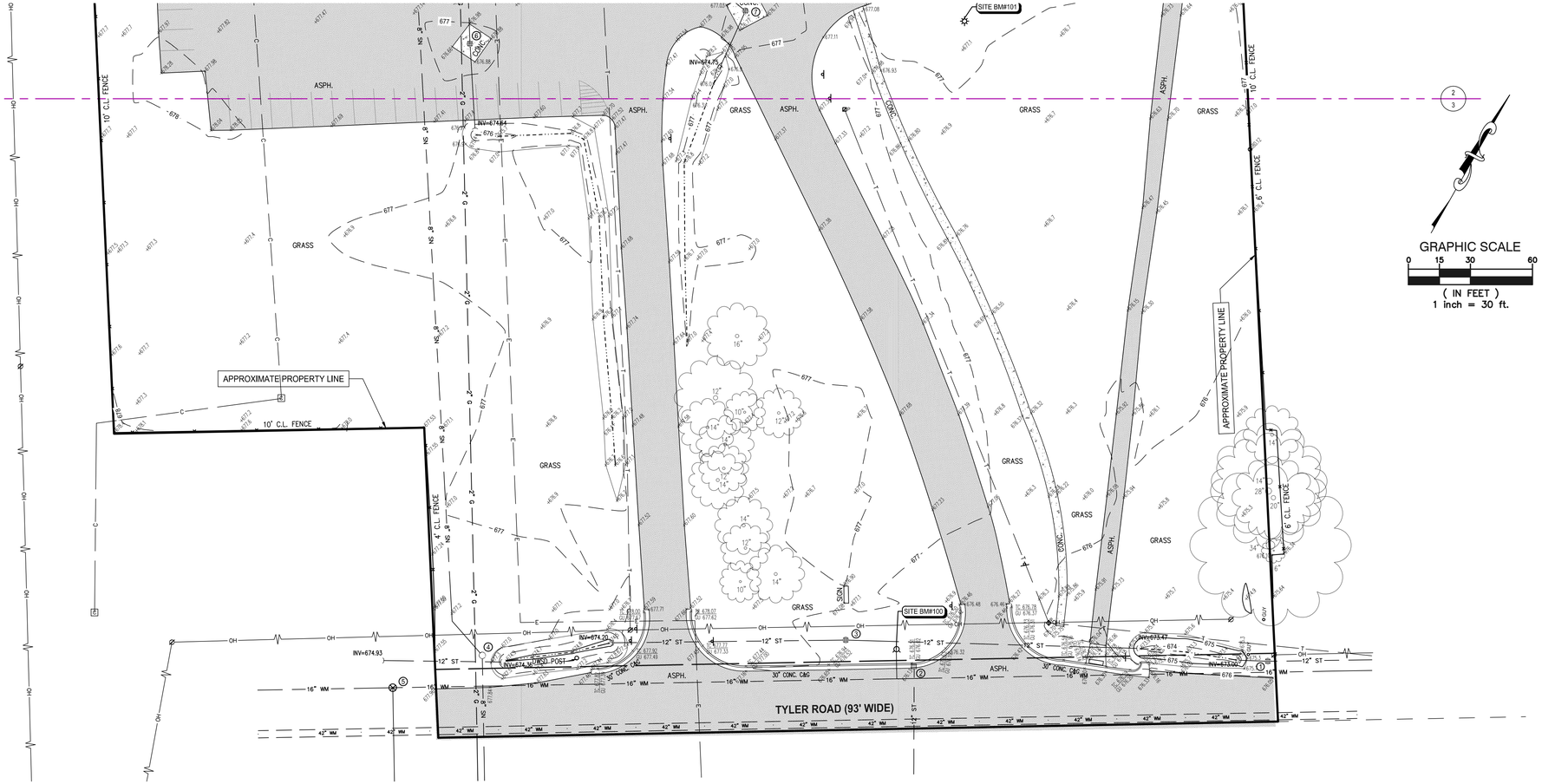

GRAPHIC SCALE

0 15 30 60

(IN FEET)

1 inch = 30 ft.

STRUCTURE TABLE

THE STRUCTURE TABLE ON THIS DRAWING IDENTIFIES THE AS-SURVEYED UNDERGROUND UTILITY MANHOLES THAT WERE FIELD MEASURED USING REASONABLE AND TRADITIONAL SURVEYING PRACTICES. PIPE SIZES, DIRECTIONS AND ELEVATIONS ARE INDICATED BY A COMBINATION OF FIELD EVIDENCE AND AVAILABLE RECORD INFORMATION. UNDERGROUND UTILITY PIPE SIZES AND CONNECTIONS ARE MANY TIMES AMBIGUOUS, SOME STRUCTURES MAY HAVE PIPES WITH UNKNOWN CONNECTIONS, SUMPS AND / OR PIPES THAT ARE FILLED WITH DEBRIS. IT WILL BE UP TO THE DESIGN ENGINEER TO LOOK AT THE PRESENTED SURVEY RESULTS AND DECIDE IF FURTHER INVESTIGATION BY OTHER METHODS SUCH AS VACUUM CLEAN OUT, UNDERGROUND RADAR, SMOKE TESTING AND PHYSICAL EXCAVATION IS REQUIRED AS AN ADDITIONAL SERVICE.

#	TYPE	RIM	SIZE	MTRL	INVERT	DIRECTION	CONNECT
1	**BEE-HIVE CATCH BASIN**	675.25	12"	RCP	672.95	EAST	ES
			12"	RCP	672.95	WEST	ES
2	**SQUARE CATCH BASIN**	676.08	12"	RCP	672.92	SOUTH	
	TOP / WATER	672.96					
3	**BEE-HIVE CATCH BASIN**	676.37	12"	RCP	673.97	WEST	ES
			12"	RCP	673.97	EAST	ES
4	**SANITARY MANHOLE**	677.52	8"	CLAY	670.22	NW	11
			8"	CLAY	670.17	SOUTH	
5	**GATE VALVE & WELL**	677.93					
	TEE 16" E-W 12" S						
	TOP / PIPE	672.38				E / W / S	
6	**ROUND CATCH BASIN**	676.52	12"	RCP	674.57	SOUTH	ES
			8"	PVC	674.57	NORTH	
7	**ROUND CATCH BASIN**	676.51	12"	RCP	674.40	SSW	ES
			12"	RCP	674.40	NW	8
8	**ROUND CATCH BASIN**	677.01	12"	RCP	674.46	NW	9
			12"	RCP	674.51	SE	7
9	**ROUND CATCH BASIN**	677.83	12"	RCP	674.03	NNW	
			12"	RCP	674.11	SE	8
			10"	CLAY	674.09	SOUTH	
			8"	CLAY	674.09	SW	10
10	**ROUND CATCH BASIN**	677.11	8"	CLAY	674.76	NNE	9
11	**SANITARY MANHOLE**	679.25	6"	CLAY	673.80	EAST	BLDG
			8"	CLAY	673.25	SOUTH	4
12	**BEE-HIVE CATCH BASIN**	677.56	6"	CPP	675.76	NORTH	
	UNABLE TO OPEN CHAINED DOWN		6"	CLAY	675.14	SOUTH	
	TOP / DEBRIS	675.26					

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3 of 3
Tyler

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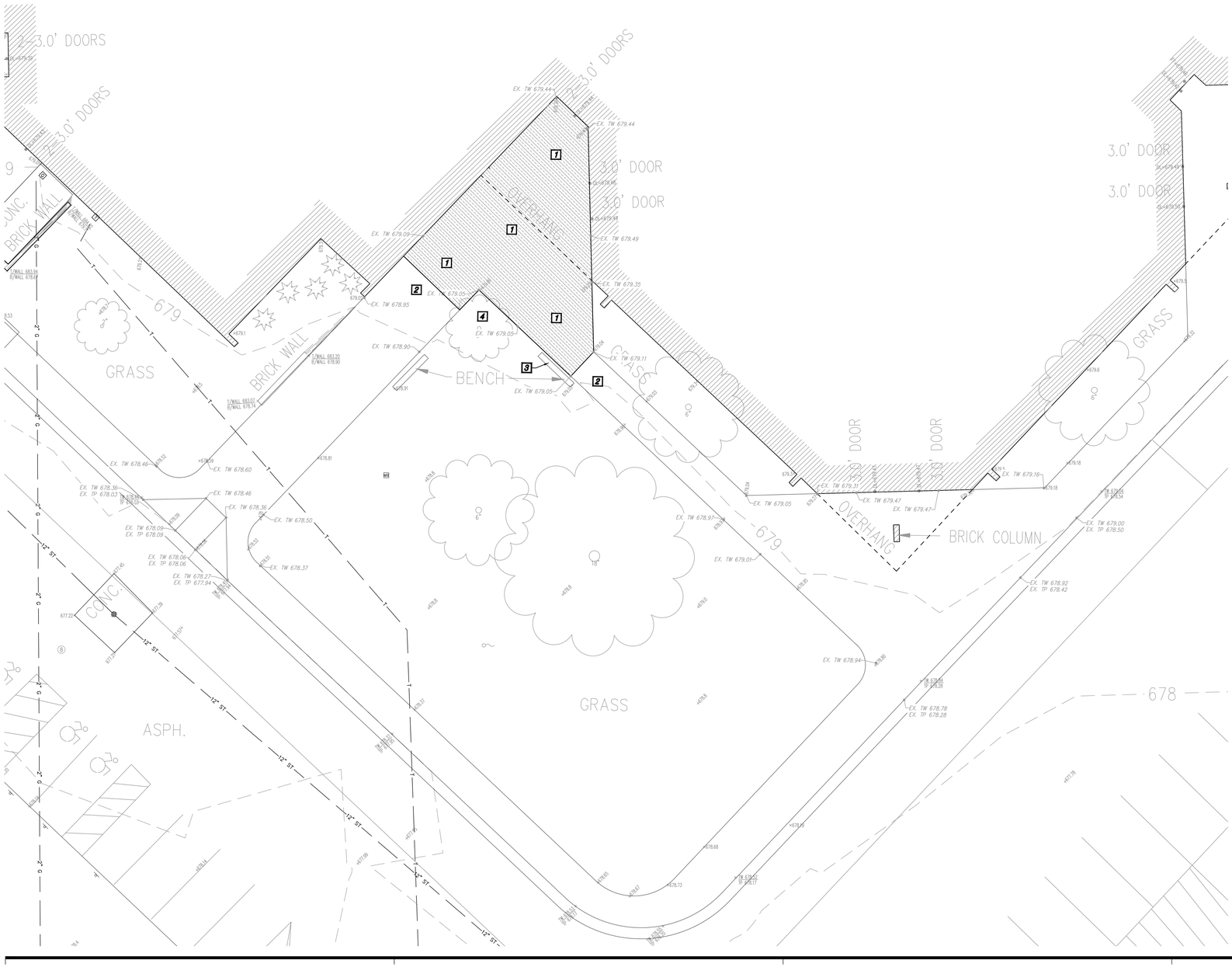
SDA Project No. NP24096

Drawing Number: 1.C2.3

TYLER ELEMENTARY SCHOOL

#42200 TYLER ROAD
? STORY ? BLDG.

TAX PARCEL No.
830044990001005



GRAPHIC SCALE

0 5 10 20

(IN FEET)
1 inch = 10 ft.

DEMOLITION NOTES

1. REMOVE CONCRETE PAVEMENT TO FULL DEPTH. SAWCUT FULL DEPTH TO NEAREST JOINT WHERE NEW PAVEMENT WILL BE PLACED ADJACENT TO EXISTING PAVEMENT. EXCAVATE EXISTING AGGREGATE BASE AND SUBGRADE AS NECESSARY TO INSTALL NEW PAVEMENT SECTION AS SHOWN ON THE PAVING PLANS, INCLUDING NEW AGGREGATE BASE.
2. PROTECT EXISTING CONCRETE WALK TO REMAIN.
3. PROTECT EXISTING BENCH TO REMAIN.
4. PROTECT EXISTING TREE TO REMAIN.

ALL DEPRESSIONS CREATED BY DEMOLITION PROCEDURES SHALL BE BACKFILLED WITH CLASS II FILL MATERIAL, IN 6" LIFTS COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT, UP TO PROPOSED SUBGRADE.

CONTRACTOR IS RESPONSIBLE FOR DOING AN EARTHWORK CALCULATION FOR CUT AND FILL REQUIREMENTS, AND IS RESPONSIBLE FOR INCLUDING IMPORT AND EXPORT OF MATERIALS IN THEIR BID. ALL EXCESS MATERIAL (INCLUDING TOPSOIL, CLEAN FILL, AND WASTE MATERIAL) SHALL BE REMOVED FROM THE SITE.

CONTRACTOR TO PROTECT EXISTING WALKS, PAVEMENT, CURBS, GUTTERS, WALLS, FENCES, GATES, LANDSCAPING AND TREES TO REMAIN DURING CONSTRUCTION.

BASE FILE DISCLAIMER

TOPOGRAPHICAL SURVEY HAS BEEN COMBINED WITH PROPOSED DESIGN INFORMATION FROM PREVIOUS CONCRETE SIDEWALK REPLACEMENT PROJECT TO CREATE CURRENT BASE FILE, INCLUDING EXISTING GRADE INFORMATION. CONTRACTOR TO FIELD VERIFY EXISTING GRADES PRIOR TO START OF WORK AND NOTIFY ENGINEER OF ANY ISSUES.

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	J. Ensley
Project Architect / Engineer	J. Ensley
Drawn By	C. Yang
Q.M. Review	J. Ensley
Approved	J. Ensley
Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Demolition Plan
Tyler

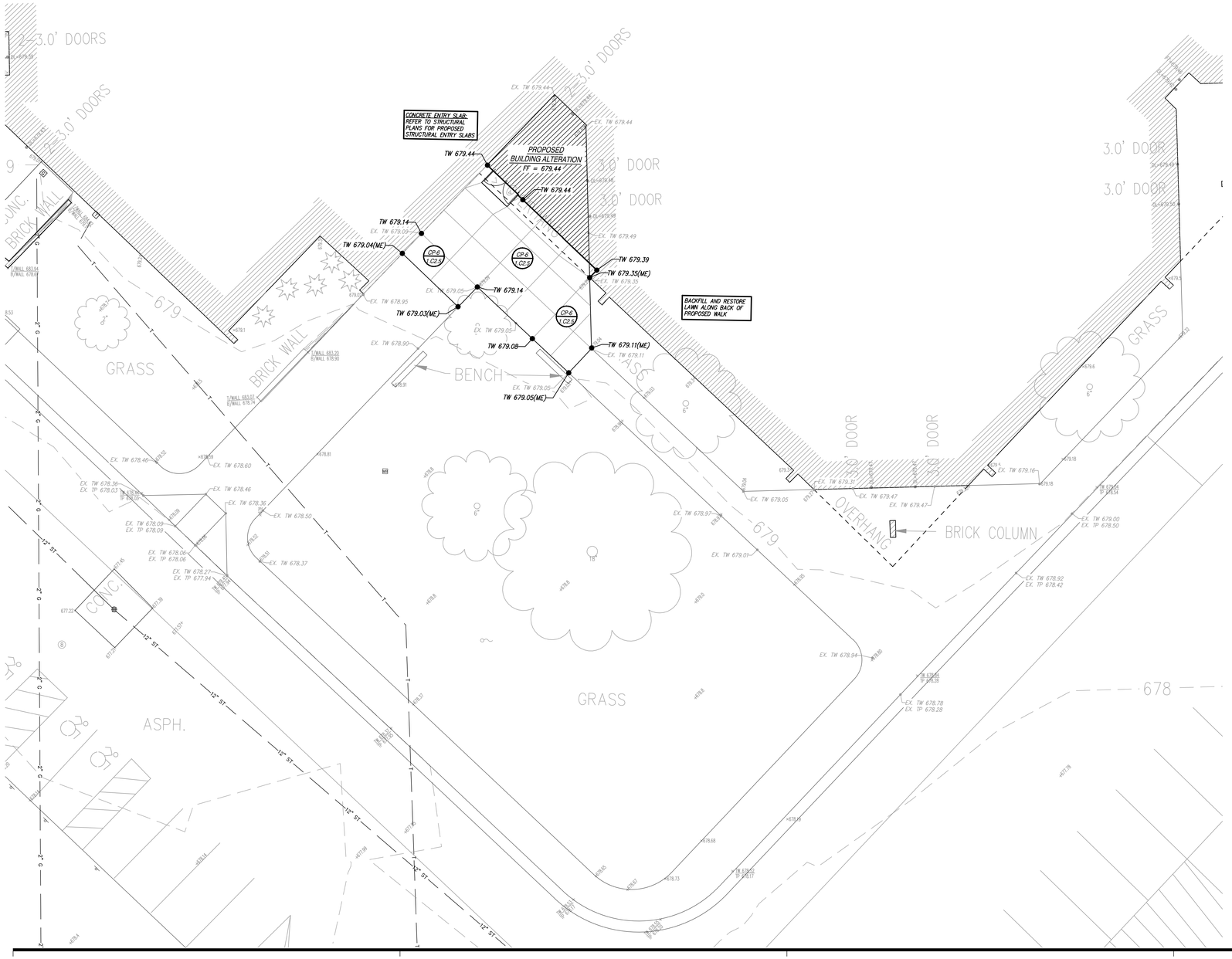
IDS Project Number: 20111-3008
SDA Project No. NP24096

Drawing Number: 1.C2.4

TYLER ELEMENTARY SCHOOL

#42200 TYLER ROAD
? STORY ? BLDG.

TAX PARCEL No.
830044990001005



GRAPHIC SCALE
0 5 10 20
(IN FEET)
1 inch = 10 ft.

GRADING LEGEND

- EXISTING ELEVATION
- TC 000.00 / G 000.00 — PROPOSED TOP OF CURB ELEVATION / PROPOSED GUTTER ELEVATION
- OG 000.00 — OUTSIDE GRADE ELEVATION
- 1130 / 1131 — EXISTING CONTOURS
- 1130 — PROPOSED CONTOURS
- TP 000.00 — TOP OF PAVEMENT ELEVATION
- TW 000.00 — TOP OF WALK ELEVATION
- FG 000.00 — FINISH GRADE ELEVATION
- T/WALL 000.00 — TOP OF WALL ELEVATION
- ME 000.00 — MATCH EXISTING ELEVATION
- FLOW ARROW

LEGEND

- PROPOSED WATERMAIN
- PROPOSED SANITARY
- PROPOSED STORM SEWER
- PROPOSED GAS MAIN
- PROPOSED ELECTRIC
- PROPOSED HYDRANT
- PROPOSED GATE VALVE & WELL (GVW)
- PROPOSED TAPPING SLEEVE, VALVE & WELL (TSVW)
- PROPOSED SAN MANHOLE (SAN)
- PROPOSED STORM MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED INLET (INL)
- PROPOSED END SECTION (ES)
- PROPOSED FIELD CATCH BASIN (FCB) W/BEEHIVE COVER OR STANDPIPE (SP) W/ BAR GRATE COVER
- STANDARD BITUMINOUS PAVEMENT
- HEAVY-DUTY BITUMINOUS PAVEMENT
- DEEP-STRENGTH BITUMINOUS PAVEMENT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- MILL PAVEMENT
- UTILITY CROSSING (SEE DATA TABLE)
- STORM SEWER STRUCTURE: CB 2 — STRUCT. TYPE / STRUCT. NO.
- SANITARY SEWER STRUCTURE: 20
- WATERMAIN STRUCTURE: 10 XXX — STRUCT. NO. / STRUCT. TYPE

PAVING CONSTRUCTION NOTES

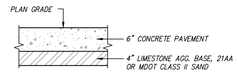
1. EARTHWORK AND PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE FOLLOWING ITEMS.
2. REMOVE ANY EXISTING TOPSOIL, VEGETATION, TREES AND OTHER DELETERIOUS MATERIALS TO EXPOSE THE SUBGRADE SOIL. TREE ROOTS SHALL BE COMPLETELY REMOVED.
3. EXCAVATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
4. THE TOP 12 INCHES OF THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557-91).
5. THE FINAL SUBGRADE SHALL BE THOROUGHLY PROOFROLLED UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS WHICH CANNOT BE MECHANICALLY STABILIZED SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
6. THE AGGREGATE BASE SHALL BE COMPACTED TO A DENSITY NO LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR (ASTM D 1557-91). THE BASE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND THE PAVED EDGE.
7. CONTRACTOR SHALL PROTECT EXISTING CURB, GUTTER, SIDEWALK, WALLS, FENCES AND ALL OTHER EXISTING SITE FEATURES NOT INDICATED FOR REMOVAL OR REHABILITATION.
8. PLACE EXPANSION JOINTS WHERE NEW CONCRETE PAVEMENT OR WALKS ABUT BUILDING WALLS (PROPOSED OR EXISTING), COLUMN WALLS OR BASES, CONCRETE FOUNDATIONS OR BASES, CURBS, OR EXISTING CONCRETE PAVEMENT. PLACE JOINT SEALANT ON ALL EXPANSION JOINTS.
9. CONTRACTOR TO CONSTRUCT CONTRACTION AND EXPANSION JOINTS IN ALL NEW CONCRETE PAVEMENT. CONTRACTION JOINTS SHALL BE TOOLED WHERE SIDEWALK WIDTH IS 8' OR LESS, AND SHALL BE SPACED EQUAL TO THE WIDTH OF THE PAVEMENT (I.E. 6' SPACING FOR 6' WIDE WALK), BUT NOT MORE THAN 10' APART. PLACE EXPANSION JOINTS WITH JOINT SEALANT AT MAXIMUM 50' SPACING. CONTRACTOR SHALL GENERALLY MATCH THE JOINT PATTERNS FOR CONCRETE PAVEMENT WHEN SHOWN ON THE PLANS.
10. CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS FOR MDOT GRADE 4000 CONCRETE PER THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

GRADING NOTES

1. CONTRACTOR TO PLACE ALL NEW PAVEMENT TO THE GRADES INDICATED, OR MATCH ORIGINAL GRADES IF NEW GRADES ARE NOT SHOWN. CONTRACTOR SHALL CONFIRM MINIMUM 1% PAVEMENT SLOPES ARE ATTAINED IN ALL AREAS.
2. PROPOSED GRADES MAY BE BASED ON AN INTERPOLATION OF DATA SHOWN ON THE TOPOGRAPHIC SURVEY. THIS INTERPOLATED DATA IS APPROXIMATE AND COULD DIFFER SLIGHTLY BASED ON THE ACCURACY OF THE SURVEY. CONTRACTOR SHALL CONFIRM THAT THE PROPOSED GRADES SHOWN ON THIS PLAN WILL NOT CREATE A STANDING WATER CONDITION (I.E. A LOW SPOT OR PAVEMENT SLOPES LESS THAN 1%) OR AN UNSAFE CONDITION WITH SLOPES IN EXCESS OF 5%. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THEY BELIEVE THAT ONE OF THESE SITUATIONS WILL OCCUR BASED ON THE PROPOSED GRADES.
3. ALL PAVEMENT PLACED WITHIN BARRIER FREE PARKING AREAS (STALLS AND ACCESS AISLES) SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION, INCLUDING MEASURED DIAGONALLY ACROSS THE AREAS. CONTRACTOR SHALL ADJUST SLOPES AS NECESSARY TO PROVIDE ADA COMPLIANT SLOPES AS WELL AS PROVIDING RE-GRADED TRANSITION SLOPES OUTSIDE OF THE BARRIER FREE PARKING AREAS. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF TRANSITION ZONES WILL EXCEED MAXIMUM 5% SLOPES. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE PATTERNS WITH ALL NECESSARY PAVEMENT RE-GRADING.
4. ALL BARRIER FREE RAMPS AND ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF MDOT DETAIL R-28 "SIDEWALK RAMP AND DETECTABLE WARNING DETAILS".
5. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING STORM WATER RUNOFF DURING CONSTRUCTION OPERATIONS. OF PARTICULAR CONCERN WILL BE THE TIME PERIOD AFTER THE SITE HAS BEEN STRIPPED AND NOT YET RESTORED, BUILT UPON, OR PAVED. CONTRACTOR MUST INSTALL OR CONSTRUCT APPROPRIATE TEMPORARY MEASURES TO PROTECT ADJACENT PROPERTIES.

RESTORATION NOTE

RESTORE ALL DISTURBED NON-PAVED AREAS WITH 3" OF CLEAN TOPSOIL AND SEED MIX (30% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 50% CREEPING RED FESCUE). PLACE MULCH IN ALL SEEDED AREAS. ON SLOPES IN EXCESS OF 10 HORIZONTAL TO 1 VERTICAL PLACE NORTH AMERICAN GREEN DS150 MULCH BLANKET IMMEDIATELY AFTER SEEDING. USE METAL STAPLES PER MANUFACTURERS RECOMMENDATIONS TO HOLD MATTING IN PLACE.



DETAIL — 6" CONCRETE WALK — CP-6 (C2.5)

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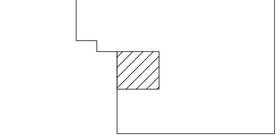

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Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Site Engineering Plan
Tyler

IDS Project Number: 20111-3008
SDA Project No. NP4096

Drawing Number: 1.C2.5

NOTES AND SCHEDULES

Foundation Notes and Schedule

Prepare soil supporting foundations in accordance with recommendations in the geotechnical report

Bottom of all exterior footings must be at least 42" minimum below grade. If interior foundations are left exposed to freezing weather during construction, lower bottom of footing to 42" below grade. Provide frost blocks at all exterior swing doors per detail FN-04 . Bottom of frost block shall match bottom of adjacent footing. Coordinate dimensions in plan with architecture/site drawings to match joints in sidewalks.

The contractor shall coordinate penetrations through footing with MEP (sleeves, locations, elevations...)

The contractor shall safeguard and protect all excavations and adjacent structures, pavements, and utilities. All excavations shall be kept free of water. The contractor is responsible for the design, installation, maintenance, and removal of all shoring, bracing, and dewatering that is required to properly construct the foundations and protect adjacent structures, pavements and utilities.

See foundation typical details for additional requirements

Footing Label Conventions: FS-24T(24")
- footing type, see schedule
- "T" indicates top bars are required
- indicates the non-standard thickness of footing required at this location

label	dimensions		reinforcement
	plan	min. thickness	
FS-24	see plan	26"	(2) #5 bars, top&bot

Slab-on-Grade Notes and Schedule

Place slabs on a 10 mil vapor barrier, on compacted granular fill. all subgrade below slab to be prepared in accordance with recommendations in the geotechnical report

Contractor shall submit control joint layout for architect's approval.

See achitectural for extents and dimensions of all slab depressions including areas depressed for special flooring or entry grating. Maintain slab thickness at depressed slab locations. Contractor to coordinate and provide all slab depressions, housekeeping pads, and pits required by the mep drawings

See slab typical details on S0.3 for more information.

label	total thickness	reinforcing	notes
SL-1	5"	6x6-W2.9xW2.9	typical, locate reinforcing in top half of slab

Bearing Plate Notes and Schedule

Provide 5,000 psi leveling grout bed under bearing plate. Set edge of bearing plate back 1/2" from face of masonry wall. All plates shall be 36 ksi.

Provide a bearing plate at all locations where a steel beam or joist bears on masonry. See framing plans for type required at each location. Provide bearing plate PL-1 unless noted otherwise on plan.

For beams with only (1) end bearing on masonry, provide a welded connection to the bearing plate, as shown in 1/S0.2.

For beams with both ends bearing on masonry, provide a welded connection to the bearing plate at one end (1/S0.2) and a slip connection to the bearing plate at the other end, as shown in 2/S0.2.

After the interior space has become temperature controlled, and the beam installation is complete, fill voids remaining in the bearing pockets with cmu and non-shrink grout.

see MS-14 for typical detail.

label	plan size	plate thickness	embed. studs	notes
PL-1	7" x 9"	1/2"	(2) 1/2" dia. x 6"	long dimension parallel to wall

SUBMITTALS

SUBMITTALS

Stamping of shop drawings by SDI does not approve any alteration or deviation from the construction documents. If alterations, substitutions, and deviations from the construction documents are indicated by the contractor in shop drawings, they are not approved by sdi's stamp or submittal comments. Alterations, substitutions, and deviations should not be included in the shop drawings - they must be submitted as a separate document to SDI for review.

The following items related to the building structural system are to be submitted to the architect in accordance with the requirements of the project specifications:

1) Concrete mix designs and control joint locations

2) Concrete test results

3) Slab joint layout

4) Reinforcing bar shop drawings - footings, walls, piers, & slabs

5) Masonry vertical and horizontal reinforcing bar shop drawings including masonry dowel layout (foundation to wall dowels) provided by the mason to the foundation contractor prior to foundation installation

6) Masonry materials (block, grout, mortar)

7) Veneer ties
- product information
- sealed engineering calculations for all brick cavity conditions

8) Welder certifications for shop and field welders

9) Structural steel shop drawings

10) All inspection reports as pertaining to the items listed above

SPECIAL INSPECTION

STATEMENT of SPECIAL INSPECTIONS

The contractor shall coordinate owner-paid, independent inspections meeting all applicable requirements of IBC Chapter 17. For steel see also AISC 360 Chapter N, and for masonry see also ACI 530 Chatper 3.

All inspections shall be documented with written reports and a final report; submitted to the owner and copied to the architect, structural engineer, and building official. Reinspection of deficient work wil be required as necessary to confirm that corrections have been satisfactorily completed.

Continuous Inspection is to be understood as an inspector present during all hours of activity for the given operation, unless stated otherwise.

Periodic Inspection is to be understood as an inspector present sufficient to ensure regular and repeated evaluation, not less than daily, for the given operation, unless stated otherwise.

Soils

Continuous inspection of procedures during placement and compaction of engineered fills.

Periodic confirmation of sub-grade bearing capacities and excavation depths.

Concrete

Continuous testing of slump, air content, and temperature of concrete as well as collection and subsequent testing of cylinders. (Continuous being understood as daily for each mix type and not less than 50% of all batches/truckloads being tested.)

Periodic inspection of the placement of formwork, placement of reinforcing, and curing practices.

Masonry

Periodic inspection, of constructed geometry, voids prior to grouting, mortar joints, reinforcement, anchors, cold and hot weather practices, as well as observation, collection, and subsequent testing of grout prisms.)

Steel

Periodic inspection of completed bolted connnections, welded conections, deck attachments, stud attachments, and related field practices. (Periodic being understood as 10% of completed connections visually evaluated.)

Final inspection of project completeness.

One-time shop inspection of shop practices and welder certificates

STRUCTURAL DEMOLITION

STRUCTURAL DEMO NOTES

1. Material having salvage value shall become the property of the owner unless otherwise directed by the owner. All other material and debris accumulated as a result of demolition shall become the property of the contractor and shall be removed from the premises by the contactor.

2. Furnish, install, and maintain in safe conditions at all times temporary protection required to ensure safety for persons and property during demolition.

3. Prior to the start of demolition work the general contractor shall determine the location of load bearing walls, beams, and columns. No load bearing structural walls, beams, or columns shall be demolished without specific approval from the engineer of record.

4. No structural member or component shall be cut, notched, or otherwise altered unless approved in writing by the engineer of record.

5. The contract structural drawings and specifications represent the finished structure, and do not indicate the method or means of construction.

6. The general contractor or construction manager shall supervise and direct the work and shall be solely responsible for all construction means and methods executed on site.

7. Temporary shoring of load bearing elements shall be designed by the contractor's registered structural engineer (other than the engineer or record).

REFERENCES

All work shall conform to the requirements of the most recent version of the following referenced standards:

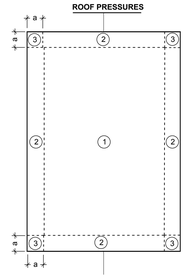
Building Code	2015 Michigan Building Code
Structural Loads	ASCE-7
Concrete	ACI 301 ACI 318: Building Code Requirements for Structural Concrete and Commentary ACI SP 66: ACI Detailing Manual Portland Cement Association "Design and Control of Concrete Mixtures"
Masonry	ACI 530/ASCE 5 ACI 530.1/ASCE 6
Brick	BIA "Technical Notes on Brick Construction"
Steel	AISC 360-10: Specification for Structural Steel Buildings
Welding	American Welding Society AWS D1.1/D1.1M
Steel Joists	Steel Joists Institute "Standard Specifications"
Metal Deck	Steel Deck Institute Specifications
Consstuction Loads	ASCE 37 (unless noted otherwise ASCE 7 (where adjacent to occupied or existing space)

STRUCTURAL LOADS

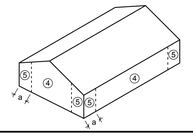
DESIGN LOADS
All loads are subject to modification per requirements of ASCE-7

Risk Category	III
Roof Loading	
Roof Live Load	20 psf
Snow Load	25 psf uniform + drifting
Snow	
Ground snow	Pg = 25 psf
Importance factor	Is = 1.1
Exposure factor	Ce = 1.0
Thermal factor	Ct = 1.0
Flat roof uniform snow load	Pf = 25 psf
Seismic	
Seismic importance factor	Ie = 1.25
Site classification of soil	D
1.0 second spectral response	S1 = 4.8%
0.2 second spectral response	Ss = 9.8%
Seismic design category	B
Seismic-resisting system	Ordinary reinforced masonry shear wall
Response modification factor	R = 2.0
Analysis procedure used	equivalent lateral force procedure
Wind	
Basic wind speed	V = 120 mph
Exposure category	C

ROOF PRESSURES



WALL PRESSURES



COMPONENTS & CLADDING ULTIMATE (LRFD) WIND PRESSURES

Zone	Effective Area Per ASCE 7-10 CH 26 (square feet)	Ultimate Pressure (lbs per square foot)		
		positive	negative	overhang
1 (ROOF)	10	+ 16	-40	n/a
	20	+ 16	- 38	n/a
	50	+ 16	- 36	n/a
	100	+ 16	- 35	n/a
2 (ROOF)	10	+ 35	- 66	- 64
	20	+ 34	- 60	- 64
	50	+ 32	- 52	- 64
	100	+ 30	- 44	- 64
3 (ROOF)	10	+ 35	- 66	- 64
	20	+ 34	- 60	- 64
	50	+ 32	- 52	- 64
	100	+ 30	- 44	- 64
4 (WALL)	10	+ 38	- 40	n/a
	20	+ 36	- 38	n/a
	50	+ 34	- 36	n/a
	100	+ 32	- 34	n/a
5 (WALL)	10	+ 38	- 48	n/a
	20	+ 36	- 44	n/a
	50	+ 34	- 42	n/a
	100	+ 32	- 38	n/a

Positive and negative signs in the table above denote pressures active toward and away from building surfaces, respectively.

Parties using the above table are responsible for calculating the appropriate effective areas for use with their scope

Pressures shown are Ultimate LRFD forces per ASCE 7-10

a = 10% of least building width or 40% of mean roof height, whichever is smaller, but not less than 4% of least building width or 5 ft

MATERIALS

MATERIALS

SOIL:

Soil supporting foundations	2,000 psf minimum allowable brg. capacity

CONCRETE:

Foundations	5,000 psi at 28 days
Interior Slab on Grade	4,000 psi at 28 days
Exterior Slab on Grade	5,000 psi at 28 days, 0.4 max w/c ratio, 6% air-entrainment
Reinforcing bar	ASTM A615 (grade 60)
Welded wire fabric	ASTM A1064 flat sheets
Synthetic fiber reinforcing	ASTM C1116 (Tuf-Strand SF by Euclid or equal)

MASONRY:

CMU	ASTM C90 normal weight (net compressive strength f'm = 2500 psi, minimum unit strength = 3250 psi)
Brick (clay masonry)	ASTM C62 & C216 (net compressive strength = 1000 psi)
Rebar positioners	Corelock rebar positioner by Wire-Bond, No. 376 rebar positioner by Heckmann Building Products or #RB rebar positioner by Hohmann&Barnard, Inc. or equal
Rebar splice connectors	Spyra-Lox rebar lap-joint tie by Hohmann&Barnard, Inc. or equal
Mortar below grade	ASTM C270, Type M (mortar cement)
Mortar typical	ASTM C270, Type S (mortar cement)
Mortar brick	ASTM C270, Type N
Grout in CMU cores	ASTM C476 (3000 psi at 28 days)
Reinforcing bar	ASTM A615 (grade 60)
Tie Wire	ASTM A-82
Horizontal Joint Reinforcement	A-82, hot-dipped galvanized per ASTM A-153

STEEL:

Structural steel:	
W-shapes	ASTM A992 - Fy=50 ksi
Channels, Angles, Plates	ASTM A36 - Fy=36 ksi
HSS Round	ASTM A500 Type B - Fy = 42 ksi
HSS Rectangular, Square	ASTM A500 Type B - Fy = 46 ksi
Structural steel pipe	ASTM A53 - Type E or S, grade B, Fy = 35 ksi
Structural steel bolts	ASTM A325-N
Washers	ASTM F436 hardened washer
Nuts	ASTM A563
Welding electrodes (E-70 series)	ASTM A233
Steel roof deck	ASTM A653-94 Structural Quality grade 33, G-60 galvanized
Grout below plates	Non-shrink, non-metallic (5000 psi)
Anchor bolts	ASTM F1554 threaded rods, 36 ksi uno
Screw Anchors	Hilti Kwik HUS-EZ
Adhesive for Anchors	
Into Concrete	Hilti HIT-HY 200 Adhesive w/ SafeSet
Into Masonry	Hilti HIT-HY 270, HIT-SC sleeve if hollow
Headed steel studs	ASTM A108-Grade 1010-1020, welded per chapter 7 of ANSI/AWS D1.1

CONSTRUCTION NOTES

It is the responsibility of the Construction Manager(CM)/General Contractor(GC) to bring these notes to the attention of relevant Subcontractors and to coordinate all efforts to ensure that these limits are followed.

The permanent structure must be completed by the construction team within the specific limitations indicated below - which relate to sequencing, temporary shoring or bracing, construction loads, etc.

Means and Methods: the means and methods of construction are the sole responsibility of the CM/GC & their Subcontractors (Construction Team).

Electronic files: Electronic structural drawing files, when requested by the contracting team, may be provided at the discretion of the engineer of record only after SDI has received the signed release form. When electronic files are provided they are provided for convenience only, their accuracy cannot be ensured, and nothing in them shall be construed to supercede requirements of construction documents or requirements dictated by field conditions.

Field measurements: Verification of field dimensions is the responsibility of the contracting team.

Partial Completion of Structure: The structural documents depict a completed structure, and as such the structure does not have full structural integrity until it is completed. All judgments pertaining to procedures whereby the project is advanced through intermediate stages of partial completion must be considered matters of Means and Methods, and shall be the responsibility of the Construction Team.

Construction shoring and bracing: Means and Methods, Partial Completion of Structure, construction sequencing, or unforseen field conditions may require temporary shoring or bracing to advance the structure towards completion. Structural members are not self-bracing and must be shored and/or braced by the Construction Team as necessary until stabilized by virtue of completed connections. Not all necessary shoring or bracing is identified in the construction documents. Common construction conditions that require engineered shoring or bracing include but are not limited to:
- structural building framing prior to connection and floor completion
- openings in walls prior to lintel installation

Reference the structural plans, elevations, and details for additional conditions that require temporary shoring or bracing.

The GC/CM are responsible for ensuring that design and construction of temporary shoring and bracing is fully captured in Subcontractor scope.

Engineering of shoring and bracing: The design of all construction shoring and bracing must be performed by a Delegated Structural Engineer, other than SDI, hired by the CM/GC or one of their Subcontractors. See "Delegated Design Notes" on this page for further information.

Protection from weather: During construction it is the Construction Team's responsibility to appropriately protect structural elements from the damage due to weather. Footings subject to cold weather should be protected from freezing by appropriate means that may include lowering the bottom of footings to an elevation below frost depth. For hot and cold weather concrete placement, follow recommendations of ACI 305 and 306.

Excavations: The contractor must safeguard and protect all excavations and adjacent structures, pavements, and utilities. All excavations must be kept free of water. The contractor is responsible for the design, installation, maintenance, and removal of all shoring, bracing, and dewatering that is required to properly construct foundations and protect adjacent structures, pavements and utilities.

Unsuitable Soil: Where areas and depths of unsuitable existing soil is identified on the site the unsuitable soil must be removed and replaced with engineered fill in accordance with the Project Geotechnical Report. Coordinate these efforts with the Project Geotechnical Engineer and the on site Soils Testing Agency.

Underpinning: Where underpinning is required the GC/CM shall devise means and methods whereby the work is to be completed including conformance to any requirements already specified in the construction documents. Engineering of underpinning is a Delegatd Design responsibility and must be performed by a licensed geotechnical engineer.

Anchor bolt placement: Accurate placement of anchor bolts is the responsibility of the Construction Team. Prior to casting foundation concrete, all cast-in place column anchor rods must be surveyed. Coordinate the results of this survey with the steel Subcontractor to ensure a common understanding of grid and anchor bolt locations and to identify misplaced anchors. Incorrectly placed bolts identified after concrete has cured must be addressed by the Construction Team in order to maintain the original base plate and anchor rod capacity. Calculations must be submitted by a licensed engineer, other than SDI, demonstrating the design forces are met.

Mobile Equipment or Construction on Foundations
Concrete foundations, after curing 7 days, can support all types of light equipment loads (up to 10,000 lb. gross vehicle weight) provided that the equipment has rubber tires.

Cranes and boom trucks in excess of 10,000 lbs require SDI approval for use over foundations

Skid-steer loaders and other equipment on steel tracks are, in all cases, prohibited from driving on exposed concrete mat foundations.

Unless approved by SDI, crane pads must be located such that crane surcharge loading overlap with building foundations.

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	H. Baghi
Project Architect / Engineer	C. King
Drawn By	H. Baghi
Q.M. Review	N. LaForest
Approved	B. Toy
Drawing Scale	

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

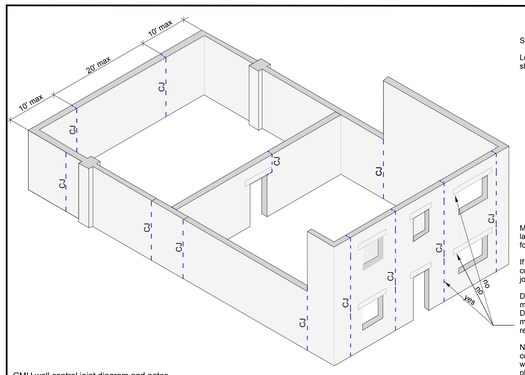
IDS Drawing Title

Typical Structural Notes and Schedules

IDS Project Number: 20111-3008

Drawing Number: 1.S0.1

MASONRY DETAILS



CONTROL JOINT NOTES

See MS-03 for typical control joint detail

Locate control joints (CJ) as shown on plan, if not shown on plan provide control joint as follows:

- at 1-1/2 times the CMU wall height 20 ft on center max, whichever is smaller
- within 10 ft of corners
- on both sides of openings greater than 6'-0" wide
- at one side of opening less than 6'-0" wide
- changes in wall height
- on one side of doorways, locate CJ on latch side

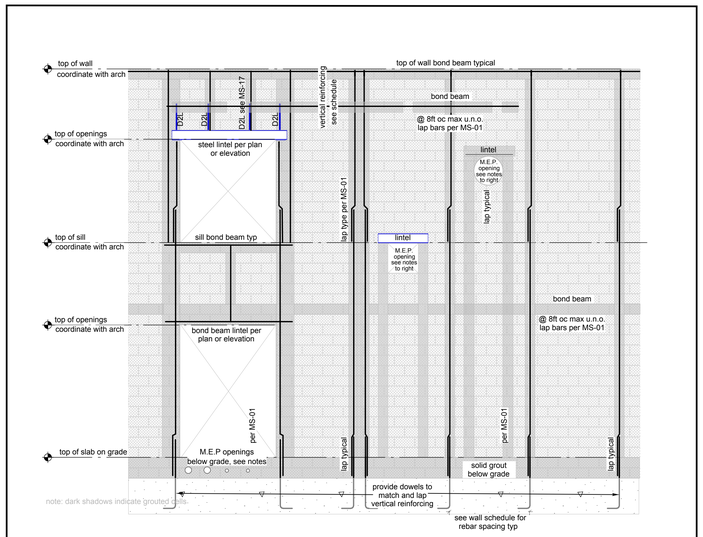
Masonry contractor must submit control joint layout
for review and approval

If walls consist of different types of masonry units, consult NCMA TEK notes for possible additional joint requirements

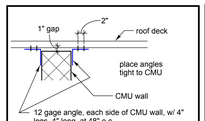
Diagram is appropriate for masonry partition walls, masonry backup walls, or masonry bearing walls. Diagram is not intended to outline control joints in masonry veneer. See architectural drawings for required locations of veneer control joints

No CMU control joints permitted at window jambs. control joints should be centered between windows or doorways unless shown otherwise on plan

CMU wall control joint diagram and notes
no scale — typical detail MS-50

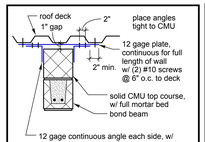


typical CMU wall elevation
no scale — typical detail MS-51

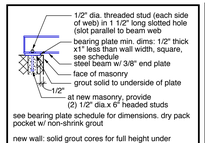


note: for CMU walls over 20 ft tall, reduce 12 ga angle spacing to 24" oc max

CMU partition walls below metal deck
no scale — typical detail MS-10



CMU partition walls below metal deck
no scale — typical detail MS-11

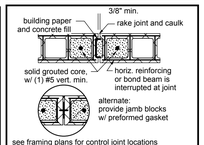


see bearing plate schedule for dimensions. dry pack pocket w/ non-shrink grout

new wall: solid grout cores for full height under bearing plate and reinforce with (1) # 5 bar.

existing wall: solid grout (3) courses below bearing

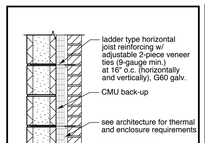
beams bearing on new or existing CMU walls
no scale — typical detail MS-14



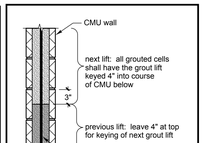
see framing plans for control joint locations

see MS-51 for required control joint locations not otherwise shown on plan

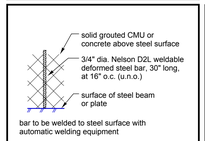
masonry control joints
no scale — typical detail MS-03



masonry veneer with CMU backup
no scale — typical detail MS-15



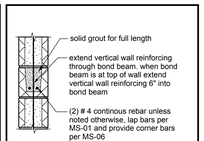
keying of grout lift in CMU cores
no scale — typical detail MS-04



bar to be welded to steel surface with automatic welding equipment

lap 28" with wall reinforcing. solid grout all reinforced cells

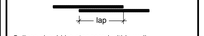
deformed anchor attached to steel
no scale — typical detail MS-17



bond beam
no scale — typical detail MS-05

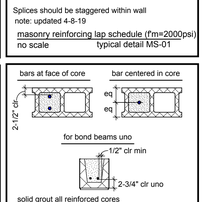
for use with f'm = 2000 psi masonry and
fy = 60 ksi (non-epoxy coated) reinforcing bars
(case A: standard reinforcing in tension)

bar size	minimum lap length
#3	18"
#4	24"
#5	38"
#6	56"
#7	80"



Splices should be staggered within wall
note: updated 4-8-19

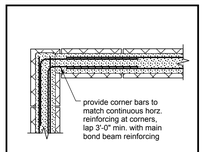
masonry reinforcing lap schedule (f'm=2000psi)
no scale — typical detail MS-01



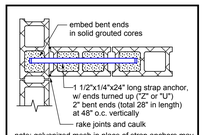
solid grout all reinforced cores

provide rebar positioners (such as CoreLock by Wire-Bond) at 48" vertically

rebar locations in reinforced CMU
no scale — typical detail MS-02

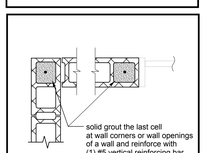


intersection of CMU walls at bond beam
no scale — typical detail MS-06



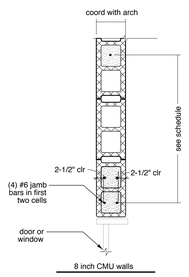
note: galvanized mesh in place of strap anchors may besubmitted to SDI as a voluntary alternate. requested mesh locations will need to be reviewed and approved by SDI

intersection of CMU walls
no scale — typical detail MS-07



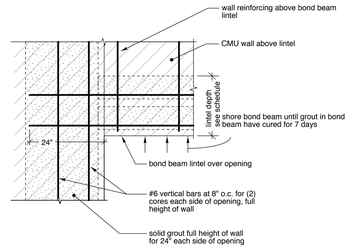
additional reinforcing at corners and openings
no scale — typical detail MS-08

for use at all cmu wall openings greater than 2 ft wide unless noted otherwise



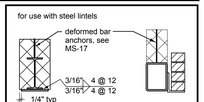
typical jamb reinforcing at wall openings greater than 2 ft wide (doors, windows, louvers, duct openings, etc)
no scale — typical detail MS-26

for use at the ends of all bond beam lintels



elevation at ends of bond beam lintels
no scale — typical detail MS-25

for use with steel lintels



provide 3/8" plates/bent plates as shown where masonry would overhang flange by more than 1/2", end bottom plate 1/4" short of opening at each end. provide end bearing according to typ. det. MS-14. lintels in exterior walls to be galvanized (both bent plate and beam). solid grout cores first (3) courses above plate

steel lintels in masonry walls
no scale — typical detail MS-24

MASONRY SCHEDULES

MASONRY WALL NOTES AND SCHEDULE

Control joints shall be provided in walls per detail MS-03 as shown on the plans or elevations. If not specified on the plans or elevations, then provide per MS-50.

See MS-02 for placement of rebar within the grouted cells.

Walls are to be assumed to be partially grouted with the spacing of the vertically grouted cores to match the spacing of the reinforcing noted in the schedule below. Fully grouted walls will be noted special where required.

label	wall width	vertical reinforcement size/spacing	vertical reinforcement position	bond beams	notes
MW-P	see arch	#4@32"	centered	none	all interior cmu walls unless noted otherwise. see 1.S0.2 for top of wall bracing details.
MW-8	8"	#5@32"	centered	8 ft oc max	

LINTEL NOTES AND SCHEDULES

All openings in masonry walls shall have a lintel placed over the opening. See architectural drawings for all locations, dimensions and elevations of doors, windows and wall openings. See MEP for all duct and utility penetrations through walls.

If an opening or lintel is not shown on the structural drawings, contractor shall provide a lintel per the following:

Lintels Unless Noted Otherwise
Loose Veneer Lintels: see schedule below

Openings in CMU block up to 4'-0": ML-1 or (2) L5x3-1/2"x3/8 (8 in CMU) or (2) L5x5x3/8" (12 in CMU)

Openings in CMU block 4' to 10': ML-3 or W8x31 + 3/8 cap plate to match wall thickness

For openings larger than noted above, or if the opening is located below a beam, contact the architect for direction. provide bearing plates and 3/8" end plates at ends of all W-shape and HSS lintels. provide 3/4" dia. nelson D2L deformed bar anchors, 30" long, @ 16" o.c. along top of lintel as shown in MS-17.

Galvanizing

All shelf angles, lintels, plates and beams supporting within exterior walls shall be G-90 hot dip galvanized. After installation, touch up all members with galvanic paint to restore complete coverage.

Veneer Loose Lintel Schedule (use with masonry or stone veneers up to 4" thick)

lintel tag	description	graphic	bearing	clr opening	notes
LL-1	L4x4x3/8		8" min	up to 4'-0"	
LL-2	L6x4x3/8		8" min	up to 6'-0"	
LL-3	L7x4x1/2		8" min	up to 7'-0"	provide (3) layers of 9 gage galv. deformed ladder-type joint reinf. in full mortar beds, extend 24" past opening ea side
LL-4	L8x4x3/4		8" min	up to 9'-4"	

Brick must be lipped where angle is thicker than 3/8"

Steel Lintel Schedule (for use where indicated on plan or elevation)

lintel tag	description	graphic	bearing plate	notes
L-1	HSS8x8x3/8" + 3/8" plate		PL7x7x1/2"	
L-2	W8x24		PL7x7x1/2"	

see MS-17 and MS-24 for required deformed bar anchors.

all steel lintels to have (3) courses of 24" long ladder type 9 ga. joint reinf. at each end of lintel adjacent to opening

Masonry Lintel Schedule

lintel tag	grouted lintel depth	reinforcement	schematic section	use
ML-1	16"	(2) #5 bar, bottom	6" CMU; 8" to 12" CMU; 2-3/4" clr to bot of bars	openings up to 4'-0" uno
ML-2	24"	(2) #5 bar, bottom	6" CMU; 8" to 12" CMU; 2-3/4" clr to bot of bars	where tagged on plan or elevation
ML-3	full height of wall above opening	(2) #5 bar, bottom	vert reinf to top of wall; 8" to 16" CMU; 2-3/4" clr to bot of bars	openings up to 10 ft uno

Provide min 8" bearing each end

Extend lintel reinforcing 16" min. beyond each end of opening

Continuously solid grout full height of lintel (no cold joints permitted)

Reference detail MS-05 for typical bond beam lintel detail.

No bond beam reinforcing laps are permitted over openings

MASONRY NOTES

CMU WALL NOTES AND SCHEDULES

General

Masonry construction and materials shall conform to the more stringent provisions of chapter 21 of the 2015 Michigan Building Code and the requirements of "Specification for Masonry Structures (TMS602-13) published by the Masonry Society.

All work shall be laid true to a line, plumb and level in keeping with the tolerances defined in "Specifications for Masonry Structures (TMS602-13).

The contractor shall employ hot or cold weather construction practices defined in "Specifications for Masonry Structures (TMS602-13). No work shal be done subject to freezing temperatures or on a frozen substrate.

Masonry construction conformance with the construction documents shall be verified in accordance with IBC level 1 quality assurance by an ICC certified structural masonry special inspector.

Coordinate dimensions of all CMU block with architectural drawings. Verify top of CMU elevations with architecture.

All masonry shall be laid in a running bond unless specifically noted otherwise.

All grout shall be placed or supervised by a masonry certified in grout placement by the International Masonry Institute or approved alternate. Grout placement and consolidation shall conform with section 3.5 of the "Specifications for Masonry Structures (TMS602-13).

Provide ladder type horizontal joint reinforcing with preformed lapped corner reinforcing at 16" c/c vertically in all masonry walls (unless noted otherwise). Joint reinforcing shall be galvanized and have side wires of 9-gauge minimum conforming to ASTM A-82. Joint reinforcement shall be lapped a minimum of 8".

Masonry joints shall be fully filled for solid units and face shell bedded with head joint depth equal to the face shell or greater for hollow units unless otherwise noted.

Position vertical bars per MS-02 solid grout all reinforced cores and all cores below grade. in lieu of lapping reinforcing bars, reinforcing bar splice couplers can be provided that have a tensile capacity of 125% the tensile capacity of the reinforcing bar being spliced.

See typical detail MS-03 for control joints in masonry walls and detail MS-05 for bond beams. Continue vertical reinforcement through bond beams. See MS-51 for typical control joint diagram unless otherwise shown on plan.

All CMU door jambs, window jambs, and all CMU cores below beam or lintel bearing locations are to be solid grouted w/ (1) additional #5 vertical reinforcing bar.

Where masonry meets structural members subject to vertical deflection, provide allowance for vertical movement of L/240 of structural member.

Masonry walls are to be adequately braced during construction until floor and wall systems are complete. Design loads for temporary wall bracing at minimum shall be based on ASCE 37. Where masonry walls are constructed adjacent occupied spaces including but not limited to: existing buildings or pedestrian walkways, design loads for temporary wall bracing shall be taken from ASCE 7. Construction bracing shall be designed by the contractor and sealed by a PE licensed in the state that has jurisdiction over the project.

See details for bond beam locations. Bond beams shall continue for full length of walls unless noted otherwise, and have #4 corner bars (30"x30") lapping 24" with bond beam bars (see MS-06). Except for MW-P, Provide additional bond beams every 8' o.c. for the full height of all walls. See MS-05

See MS-50 for typical CMU wall elevation

Masonry Reinforcement

Detailing, bending and placement of steel reinforcement shall be in accordance with "Specification for Masonry Structures (TMS602-13).

All steel reinforcement shall be placed and supported as necessary to maintain proper position as defined in "Specification for Masonry Structures (TMS602-13).

All horizontal steel reinforcement shall be continuous around corners and lapped as shown in MS-06.

Where vertical steel reinforcement terminates at a bond beam, provide a standard 90 degree hook.

Bar Splicing (laps)

At base of all walls provide dowels to match and lap vertical wall reinforcing.

See MS-01 for required bar splice lengths.

Continuous vertical bars may be spliced where desired by contractor.

Horizontal bars in lintels must remain continuous and are not permitted to be spliced.

Horizontal bond beam reinforcing may be spliced where desired by contractor.

M.E.P. Openings

Submit all M.E.P. openings not specifically shown on the structural drawings for review and approvall - a lintel is required over all openings. See lintel schedule on this sheet for typical lintels that can be used for estimating purposes, final lintels must come from SDI.

Below grade M.E.P. penetrations should be located beneath doorways unless specicially approved be SDI. All penetrations below doors must have 4" clear spacing between.

Masonry Exposed to Weather and/or Corrosive Enviroments

Where structural masonry walls and/ or interior CMU partition walls are directly exposed to weather or corrosive enviroments, the following additional requirements apply:

1. The masonry unit and mortar shall be produced using an intergral water repellant (IWR) like RainBloc GP, or an approved alternative which meets ASTM E514 testing.
2. The exposed face of the masonry wall shall have a surface applied water repellant applied after construction directly to the exposed face of the masonry.

Examples of Exposed Walls or Corrosive Environments include:

- single wythe exterior walls
- indoor pools with exposed CMU
- garages, labs, or workshops with exposed CMU
- loading docks

A maintenence plan shall be put in place for the owner for the surface applied water repellant to be re-applied every 5-7 years for the life of the building.

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator
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Project Designer
H. Baghi
Project Architect / Engineer
C. King
Drawn By
H. Baghi
Q.M. Review
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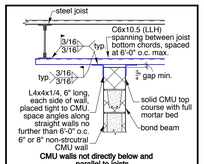
IDS Drawing Title

Typical Masonrt Notes, Details and Schedules

IDS Project Number
20111-3008

Drawing Number
1.S0.2

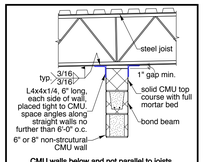
STEEL JOIST DETAILS



CMU walls not directly below and parallel to joists

typical non-structural CMU wall bracing at joists

no scale — typical detail **JS-08**



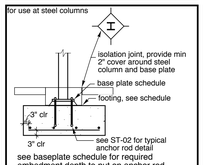
CMU walls below and not parallel to joists

typical non-structural CMU wall bracing at joists

no scale — typical detail **JS-09**

FOUNDATION DETAILS

for use at steel columns

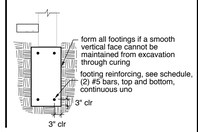


see baseplate schedule for required embedment depth to nut on anchor rod

anchor rods at steel columns

no scale — typical detail **FN-01**

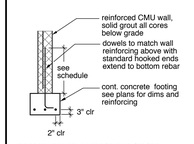
for use where approved by architect and soil conditions permit



trench footing

no scale — typical detail **FN-02**

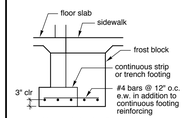
for use at continuous footing locations



masonry dowels at continuous footing

no scale — typical detail **FN-03**

for use at exterior-outswing doors



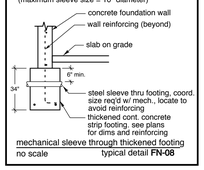
see architectural plan for dimensions

match bottom of ftg, min 42" below exterior grade

frost block

no scale — typical detail **FN-04**

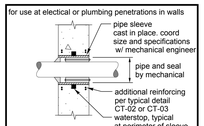
for use at mechanical penetrations through footing (maximum sleeve size = 10" diameter)



mechanical sleeve through thickened footing

no scale — typical detail **FN-08**

for use at electical or plumbing penetrations in walls



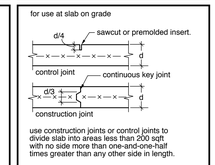
verify penetration size and location of penetrations with architect and mechanical/plumbing

sensitive mep penetrations in concrete walls

no scale — typical detail CT-04

SLAB DETAILS

for use at slab on grade

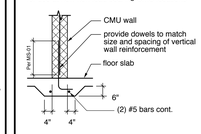


use construction joints or control joints to divide slab into areas less than 200 sqft with no side more than one-and-one-half times greater than any other side in length.

joints in slab on grade

no scale — typical detail **SL-01**

for use at new non-load bearing CMU locations

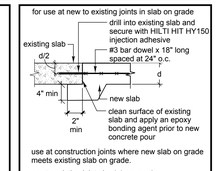


see plan for width of CMU wall

thickened slab under new CMU

no scale — typical detail **SL-03**

for use at new to existing joints in slab on grade



use at construction joints where new slab on grade meets existing slab on grade.

new to existing joints in slab on grade

no scale — typical detail SL-13

for use locating reinforcing bars in concrete structure (see ACI 7.7.1 for further info)

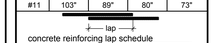
condition	concrete cover
cast against & perm. exposed to earth	3"
exposed to earth or weather:	
#6 bar thru #18 bar	2"
#5 bars or smaller	1 1/2"
not exposed to weather or earth	
slabs/wall/joists: (#11 bars and smaller)	3/4"
beams/cimns: (primary reinf/ ties/stirrups)	1 1/2"

typical clear cover for reinforcing bars (non-prestressed)

no scale — typical detail **CT-08**

for use with normal weight concrete and fy = 60 ksi (non-epoxy coated) reinforcing bars

bar size	f'c= 3000psi	f'c= 4000psi	f'c= 5000psi	f'c= 6000psi
#3	29"	25"	23"	21"
#4	38"	33"	30"	27"
#5	47"	41"	37"	34"
#6	57"	49"	44"	40"
#7	66"	57"	51"	47"
#8	75"	65"	58"	53"
#9	84"	73"	66"	60"
#10	94"	81"	73"	66"
#11	103"	89"	80"	73"

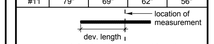


concrete reinforcing lap schedule

no scale — typical detail CT-20

for use with normal weight concrete and fy = 60 ksi (non-epoxy coated) reinforcing bars

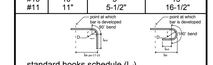
bar size	f'c= 3000psi	f'c= 4000psi	f'c= 5000psi	f'c= 6000psi
#3	22"	19"	18"	16"
#4	29"	26"	23"	21"
#5	37"	32"	29"	26"
#6	44"	38"	34"	31"
#7	51"	44"	40"	36"
#8	58"	50"	45"	41"
#9	65"	56"	51"	46"
#10	72"	63"	56"	51"
#11	79"	69"	62"	56"



concrete reinforcing development length schedule

no scale — typical detail CT-21

bar size	D	ℓ_{dt} 180˚ hooks	ℓ_{dt} 90˚ hooks
#3	2-1/4"	2-1/2"	4-1/2"
#4	3"	2-1/2"	6"
#5	3-3/4"	2-1/2"	7-1/2"
#6	4-1/2"	3"	9"
#7	5-1/4"	3-1/2"	10-1/2"
#8	6"	4"	12"
#9	9"	4-1/2"	13-1/2"
#10	10"	5"	15"
#11	11"	5-1/2"	16-1/2"



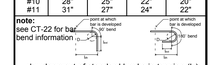
standard hooks schedule (ℓ_{dt})

no scale — typical detail CT-22

for use with normal weight concrete and fy = 60 ksi (non-epoxy coated) reinforcing bars

bar size	f'c= 3000psi	f'c= 4000psi	f'c= 5000psi	f'c= 6000psi
#3	9"	8"	7"	7"
#4	12"	10"	9"	9"
#5	15"	13"	12"	11"
#6	17"	15"	14"	13"
#7	20"	18"	16"	15"
#8	23"	20"	18"	16"
#9	26"	22"	20"	18"
#10	28"	25"	22"	20"
#11	31"	27"	24"	22"

note:
see CT-22 for bar bend information



development of standard hooks in tension (ℓ_{dt})

no scale — typical detail CT-23

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

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Project Designer
İ.H. Baghi'

Project Architect / Engineer
C. King

Drawn By
H. Baghi'

Q.M. Review
N. LaForest

Approved
B. Toy

Drawing Scale

Issued for	Issue Date
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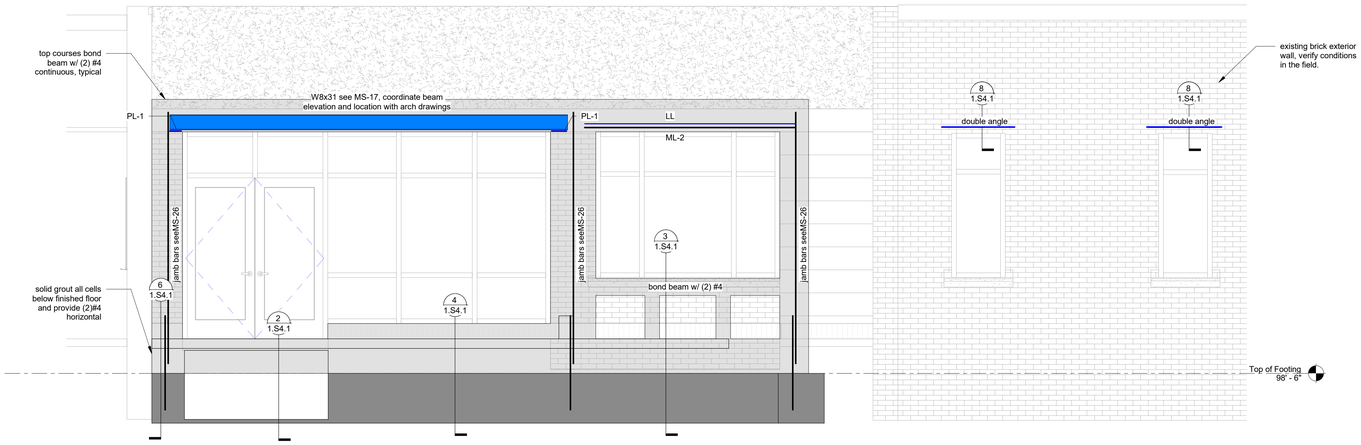
IDS Drawing Title

Typical Details

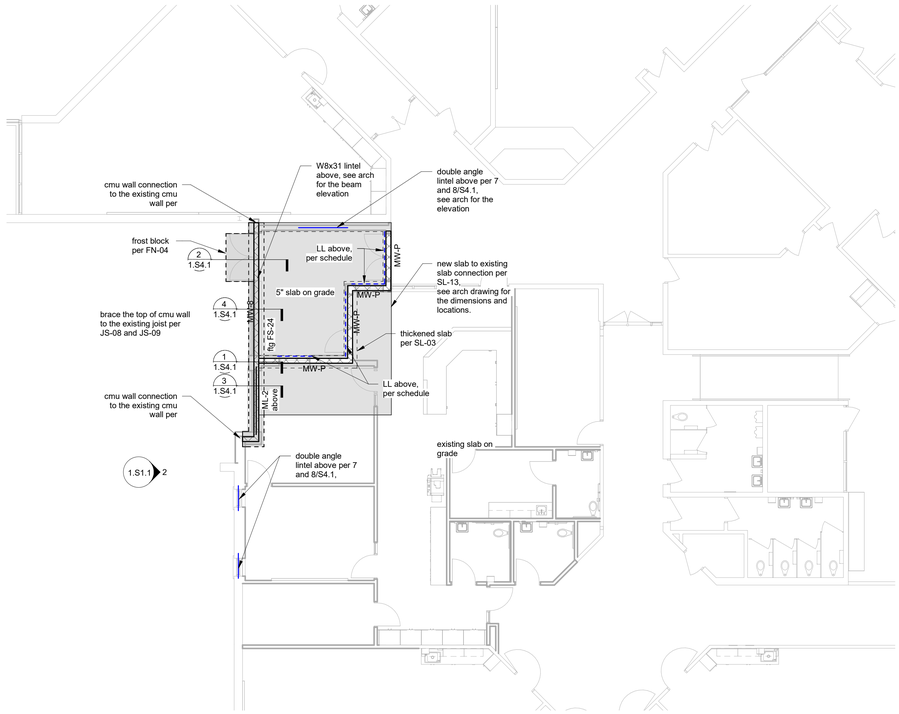
IDS Project Number
20111-3008

Drawing Number
1.S0.3



2 1.S1.1 west elevation

3/8" = 1'-0"



project north

Foundation Plan - Tyler elementary

Savage elementary
- sim opp hand

scale 1/8" = 1'-0"

Foundation Plan Notes

Footing Label Conventions: **FS-24T(24")**

- footing type, see schedule
- "T" indicates additional top bars are required at this location
- indicates a non-standard thickness of footing required at this location

Slab on Grade
Typical top of slab elevation = 100'-0", u.n.o.
See architectural plans for areas with depressed or sloping slabs.

Slab on grade to be 5" thick, u.n.o.

Foundations
Typical top of footing elevation = 98'-8", u.n.o.

Place footings on soil compacted to a minimum of 2,000 psf allowable bearing capacity, verified by an on site testing agency prior to footing placement.

The bottom of all footings which will be exposed to freezing temperatures permanently or during construction shall be lowered to at least 42" below grade.

Provide a thickened slab below all interior cmu walls per SL-03/S0.3 unless a footing is shown. See architectural for cmu wall locations.

See **Slab on Grade Notes** and **Foundation Notes and Schedule** on S0.1 and typical details on S0.3 and project specifications for more information and requirements.

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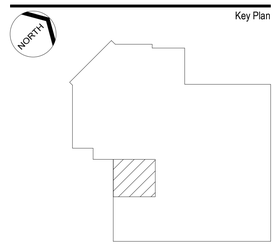

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Foundation Plan

IDS Project Number
20111-3008

Drawing Number
1.S1.1

Foundation Section Notes:
1. All footings to bear on native soil, prepared according to recommendations in soils report, testing agency to inspect and verify prior to footing placement

2. See CT-08 for required concrete cover unless otherwise indicated

3. Lap continuous bars per CT-20

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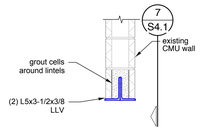
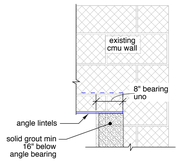


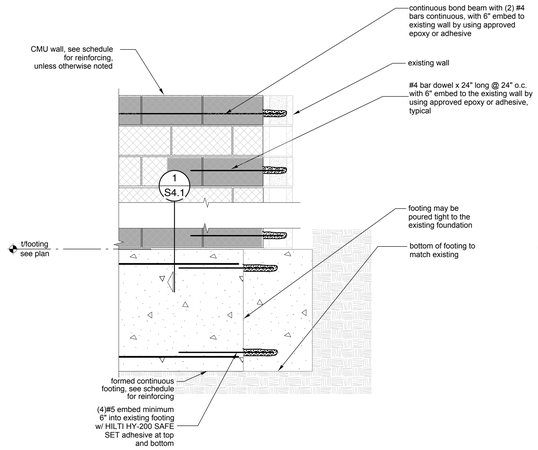
8 S4.1 double angle lintel at non-bearing wall — 3/4" = 1'-0"

note: provide temporary shoring of existing CMU wall during installation of lintel

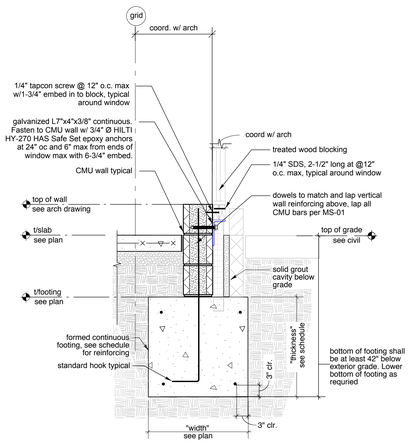


7 S4.1 double angle lintel at non-bearing wall — 3/4" = 1'-0"

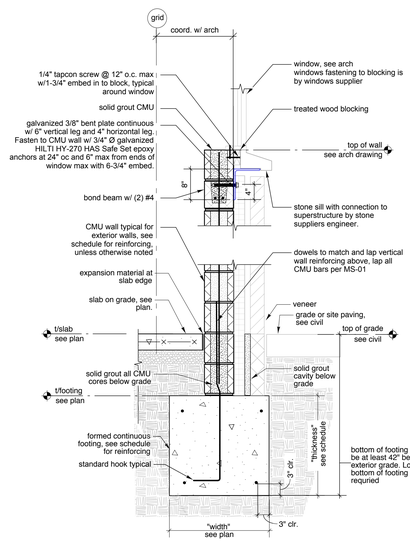
note: provide temporary shoring of existing CMU wall during installation of lintel



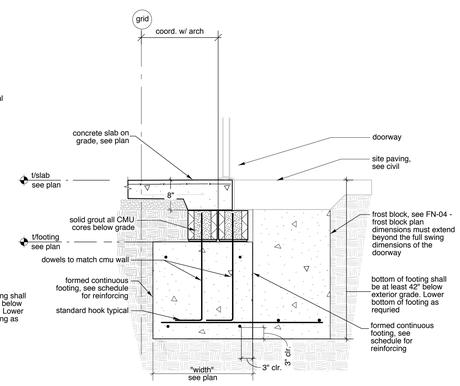
6 S4.1 new wall to existing wall connection — 3/4" = 1'-0"



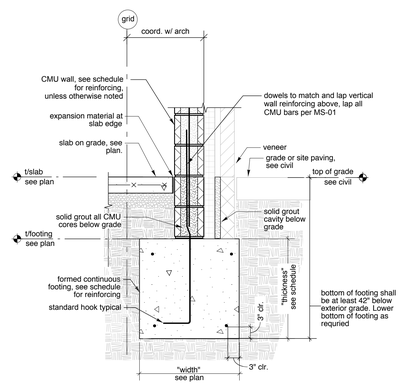
4 S4.1 — 3/4" = 1'-0"



3 S4.1 exterior wall — 3/4" = 1'-0"



2 S4.1 exterior doorway — 3/4" = 1'-0"



1 S4.1 exterior wall — 3/4" = 1'-0"

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Structural Details

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ABBREVIATIONS

A	
AB	ABUSE RESISTANT
ABRSV	ABRASIVE
ACOUS	ACOUSTIC, ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AC PNL	ACOUSTICAL PANEL
ACS PNL	ACCESS PANEL
ACU	AIR CONDITIONING UNIT
ADJ	ADJACENT, ADJUSTABLE
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APPROX	APPROXIMATELY
ARCH	ARCHITECT, ARCHITECTURAL
AUTO	AUTOMATIC
B	
BD	BOARD
BEV	BEVEL, BEVELED
BF	BARRIER FREE
BLDG	BUILDING
BLKG	BLOCKING
BN	BULLNOSE
BOTT	BOTTOM
BRG	BEARING
BRKT	BRACKET
BSMT	BASEMENT
BUR	BUILT UP ROOFING SYSTEM
B/D	BOTTOM OF DECK
C	
CAB	CABINET
CB	CATCH BASIN
CBB	CEMENT BACKER BOARD
CC	COLOR CODE
CCT	CUBICLE CURTAIN TRACK
CEM PLAS	CEMENT PLASTER
CG	CORNER GUARD
CHBD	CHALKBOARD
CHKD PL	CHECKERED PLATE
CJ	CONTROL OR CONSTRUCTION JOINT
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPACTED
COMPO	COMPOSITION
CONC	CONCRETE
CONF	CONFERENCE
CONN	CONNECT, CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUE, CONTINUOUS
CONTR	CONTRACTOR
CONV	CONVERTOR
CORR	CORRIDOR/CORRUGATED
COORD	COORDINATE
CPT	CARPET
CSWK	CASEWORK
CT	CERAMIC TILE
CSK	COUNTERSINK (SUNK)
CUH	CABINET UNIT HEATER

D	
D	DEPTH
DBL	DOUBLE
DWTR	DUMBWAITER
DT DR	DUTCH DOOR
DEMO	DEMOLISH, DEMOLITION
DEPR	DEPRESSED
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFUSER
DIM	DIMENSION
DIR	DIRECTORY
DEFS	DIRECT APPLIED EXT FINISH SYSTEM
DMPF	DAMPPROOFING SYSTEM
DMT	DEMOUNTABLE
DN	DOWN
DR OPNG	DOOR OPENING
DR	DOOR
DWG	DRAWING
DT	DRAIN TILE
DWL	DOWEL
DWR	DRAWER
E	
EA	EACH
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
ENTR	ENTRANCE, ENTRY
ENTER MAT	ENTRY MAT SYSTEM
EP	ELECTRICAL PANEL
EPT	EPOXY PAINT
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EWC	ELECTRICAL WATER COOLER
(E)	EXISTING FINISH/DOOR (PER SCHEDULE)
EXIST	EXISTING
EXP	EXPOSED
EXP BT	EXPANSION BOLT
EXP CONST	EXPOSED CONSTRUCTION
EXT	EXTERIOR
F	
FAC	FACTORY
FACP	FIRE ALARM CONTROL PANEL
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEB	FIRE EXTINGUISHER AND BRACKET
FEC	FIRE EXTINGUISHER CABINET
FIN FLR	FINISH FLOOR

F (CONT)	
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FIN	FINISH, FINISHED
FLASH	FLASHING
FLR	FLOOR
FPRFG	FIREPROOFING
FR	FRAME
FRGM	FIRE RATED GLAZING MARKINGS
FRP	FIBERGLASS REINFORCED PANEL
FT	FEET, FOOT
FTG	FOOTING
FTR	FIN TUBE RADIATION
FVC	FIRE VALVE CABINET
FWC	FABRIC WALL COVERING
G	
GA	GAGE, GAUGE
GALV	GALVANIZED
GF CMU	GROUND FACE CONCRETE MASONRY...
GRFC	GLASS FIBER REINFORCED CONCRETE
GRFG	GLASS FIBER REINFORCED GYPSUM
GI	GALVANIZED IRON
GL	GLASS/GLAZED
GL CMU	GLAZED CONCRETE MASONRY UNIT
GR	GRADE
GRG	GLASS REINFORCED GYPSUM
GRL	GRILLE
GYP BD	GYPSUM BOARD
H	
H	HIGH, HEIGHT
HB	HOSE BIBB
HC	HOLLOW CORE
HDWD	HARDWOOD
HDWE	HARDWARE
HD/SLR	HARDENER SEALER
HM	HOLLOW METAL
HORIZ	HORIZONTAL, HORIZONTALLY
HORIZB	HORIZONTAL BLINDS
HP	HIGH POINT
HPC	HIGH PERFORMANCE COATING
HR	HOUR
I	
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INCL	INCLUDE, INCLUDING
INFO	INFORMATION
IN	INCH, INCHES
INSUL	INSULATE, INSULATION
INT	INTERIOR
IR	IMPACT RESISTANT
IR GYP BD	IMPACT RESISTANT GYPSUM BOARD

J	
JC	JANITOR CLOSET
JT	JOINT
JST	JOIST
K	
KD	KNOCK DOWN
L	
L	LONG, LENGTH
LAB	LABORATORY
LAM	LAMINATE, LAMINATED
LAV	LAVATORY
LBL	LABEL
LBS	POUNDS
LF	LINEAR FOOT
LH	LEFT HAND
LHR	LEFT HAND REVERSE
LIMEST	LIMESTONE
LINO	LINOLEUM
LKR	LOCKER
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LO	LOUVER OPENING
LP	LOW POINT
LPRF	LIGHT PROOF
LT WT	LIGHT WEIGHT
LVT	LUXURY VINYL TILE
M	
MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MCC	MULTI COLOR COATING
MDS	METAL DIVING STRIP
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MKBD	MARKERBOARD
MLDG	MOULDING
MO	MASONRY OPENING
MRT	MARBLE THRESHOLD
MTD	MOUNTED
MTL	METAL OR METALLIC
MT	METAL THRESHOLD
MTL PNL	METAL PANEL
MULL	MULLION
N	
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NRC	NOICE REDUCTION COEFFICIENT
NTS	NOT TO SCALE

O	
OC	ON CENTER
OD	OUTISDE DIAMETER
O/H	OVERHEAD
OPNG	OPENING
OPP HD	OPPOSITE HAND
ORN	ORNAMENTAL
OZ	OUNCE
P	
PA	PUBLIC ADDRESS
PAVERT	PAVER TILE
PBD	PARTICLEBOARD
P/C	PRECAST
PC	PIECE
PERF	PERFORATED
PERIM	PERIMETER
PH PNL	PORCELAIN ENAMEL
PLBG	PLUMBING
PLAS	PLASTER
P LAM	PLASTIC LAMINATED
PLYWD	PLYWOOD
POL	POLISH, POLISHED
POL...	POLISHED CONCRETE
POC	POROUS
PORC	PORCELAIN
PORC EN	PORCELAIN ENAMEL
PORC T	PORCELAIN TILE
PR	PAIR
PREFAB	PREFABRICATION
PRKG	PARKING
PS	PROJECTION SCREEN
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT
PTN	PARTITION
PVC	POLYVINYLCHLORIDE
PVF	POLYVINYL FLUORIDE COATING (KYNAR)
PVW	PROTECTIVE VINYL WALL COVERING
Q	
QT	QUARRY TILE
R	
R	RISER
RAD	RADIUS
RAF	RESILIENT ATHLETIC FLOORING
RC	RAIN CONDUCTOR
REF	REFER, REFERENCE
REFL	REFLECTED, RELECTIVE
REFRIG	REFRIGERATOR
REINF	REINFORCE, REINFORCEMENT, REINFORCING
REQD	REQUIRED
RESIL	RESILIENT
REV	REVISED, REVISION
RFG	ROOFING

R (CONT)	
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RR	RAILROAD
RS	ROOF SUMP
RSD	ROLLER SHADE
RT	RUBBER TILE
S	
SC	SOLID CORE
SCHED	SCHEDULE
SCR	SHOWER CURTAIN ROD
SECT	SECTION
SF	SQUARE FEET (FOOT)
SGFT	STRUCTURAL GLAZED FACING TILE
SHIP	SHELF AND POLE
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	SERVICE SINK
STAG	STAGGERED
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
ST STL	STAINLESS STEEL
STN	STAIN
SURF	SURFACE
SUSP	SUSPEND, SUSPENSION
SYM	SYMBOL
SYMM	SYMMETRICAL
T	
T	TREAD
T & B	TOP AND BOTTOM
T & G	TONGUE AND GROOVE
TC	TOP OF COVER OR CURB
TEL	TELEPHONE
TEMP GL	TEMPERED GLASS
TERR	TERRAZZO
THK	THICK, THICKNESS
TKBD	TACKBOARD
TKSP	TACK STRIP
TOC	TOP OF COVER OR CURB
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSOM
TURF	INDOOR TURF
TV	TELEVISION
TYP	TYPICAL

U	
UC	UNDERCUT
UL	UNDERWRITERS LABORATORIES,INC.
UON	UNLESS OTHERWISE NOTED
V	
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL, VERTICALLY
VERTB	VERTICAL BLINDS
VEN...	VENEER PLASTER
VIF	VERIFY IN FIELD
VIT	VITREOUS
VR	VAPOR RETARDER
VRS	VINYL REDUCER STRIP
VTR	VENT THRU ROOF
VWC	VINYL WALL COVERING
W	
W	WIDE, WIDTH
WBR	WALL BUMPER RAIL
WC	WAINSCOTT
WI	WITH
WD	WOOD
WM	WIRE MESH
WO	WINDOW OPENING
W/O	WITHOUT
WP	WATERPROOF
WPF	WEATHERPROOF
WP	WORKING POINT
WSCT	WATERSTOP
WSTPG	WEATHERSTRIPPING
WTTPG	WATERSTOP
WWF	WELDED WIRE FABRIC
L	ANGLE
X	BY
℄	CENTERLINE
[	CHANNEL
°	DEGREE OR DEGREES
Ø	DIAMETER
'	FEET, FOOT
"	INCH, INCHES
#	NUMBER OR POUND
PL	PLATE
T	TEE

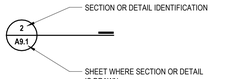
MATERIAL LEGEND

- SOIL
- GRANULAR FILL
- GRAVEL
- CONCRETE
- CONCRETE MASONRY UNIT
- BRICK
- GLAZED CMU
- STRUCTURAL GLAZED FACING TILE
- STONE
- MARBLE
- METALS
- FINISH WOOD
- PLYWOOD
- PREMOLDED EXPANSION JOINT OR COMPRESSIBLE FILLER STRIP
- GLASS OR PLASTIC GLAZING
- PLASTER OR GYPSUM BOARD
- CERAMIC OR QUARRY TILE
- TERRAZZO
- ACOUSTICAL PANEL OR ACOUSTICAL TILE
- BATT INSULATION
- RIGID INSULATION
- CAVITY WALL INSULATION
- ROOF INSULATION

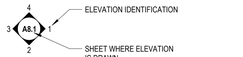
SYMBOL LEGEND

SECTION OR DETAIL TITLE

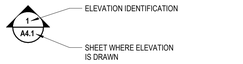
SECTION OR DETAIL LOCATOR



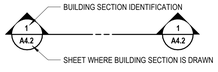
INTERIOR ELEVATION SYMBOL



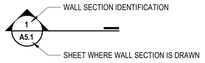
EXTERIOR ELEVATION SYMBOL



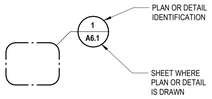
BUILDING SECTION LOCATOR



EXTERIOR WALL SECTION LOCATOR

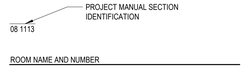


LARGE SCALE PLAN OR DETAIL

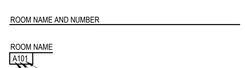


COLUMN DESIGNATION/CENTERLINE

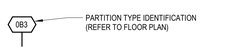
MATERIAL KEYNOTE



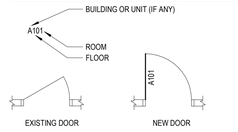
ROOM NAME AND NUMBER



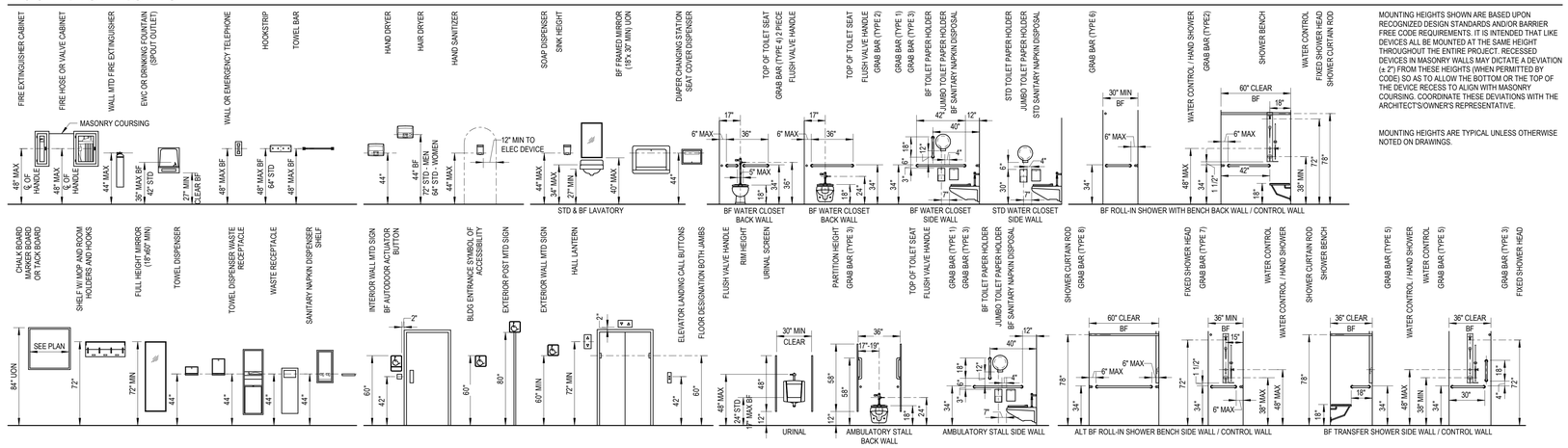
PARTITION TYPE



DOOR NUMBER



MOUNTING HEIGHTS



MOUNTING HEIGHTS SHOWN ARE BASED UPON RECOGNIZED DESIGN STANDARDS AND/OR BARRIER FREE CODE REQUIREMENTS. IT IS INTENDED THAT LIKE DEVICES ALL BE MOUNTED AT THE SAME HEIGHT THROUGHOUT THE ENTIRE PROJECT. RECESSED DEVICES IN MASONRY WALLS MAY DICTATE A DEVIATION (± 2") FROM THESE HEIGHTS (WHEN PERMITTED BY CODE) SO AS TO ALLOW THE BOTTOM OR THE TOP OF THE DEVICE RECESS TO ALIGN WITH MASONRY COURSING. COORDINATE THESE DEVIATIONS WITH THE ARCHITECT'S/OWNER'S REPRESENTATIVE.

MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE NOTED ON DRAWINGS.

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ann arbor, michigan 48101
734.213.6091
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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS SHEET

Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	A. Pelfrey
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Architectural Reference Information

IDS Project Number: 20111-3008

Drawing Number: 1. AR.0

MEANS OF EGRESS

	MBC			NFPA			MRCEB	
Assembly Occupancy								
Exit Access Travel Distance	200/250	ft	Table 1016.2	200/250	ft	Section 12.2.6.2		
Common Path of Egress Travel	75/100	ft	Table 1014.3	75/100	ft	Section 12.2.5.1.2		
Dead End Corridors	20/50	ft	Section 1018.4	20/50	ft	Section 12.2.5.1.3	35	ft Section 805.6
Egress width per occupant	MBC			NFPA				
Stairways	0.3	in	Section 1005.3.1	0.3	in	Table 7.3.3.1		
Other Egress Components	0.2	in	Section 1005.3.2	0.2	in	Table 7.3.3.1		

Maximum Floor Area Allowances Per Occupant	MBC		Section 1004.1	NFPA		Section 7.3.1.2
Business	100	sf	Gross	100	sf	Gross
Assembly: Unconcentrated	15	sf	Net	15	sf	Net
Educational (Shops and vocational)	50	sf	Net	50	sf	Net
Educational (Classroom area)	20	sf	Net	20	sf	Net
Exercise Rooms	50	sf	Gross	50	sf	Gross
Library: Reading Rooms	50	sf	Net	50	sf	Net
Library: Stack Area	100	sf	Gross	100	sf	Gross
Stage and Platforms	15	sf	Net	15	sf	Net
Accessory Storage Areas/ Mechanical Room	300	sf	Gross	500	sf	Gross
		sf	Net/Gross		sf	Net/Gross
		sf	Net/Gross		sf	Net/Gross

Tabular Occupant Loads

First Floor	2,883
Total	2,883

Exit Egress Capacity	Quantity		Width	MBC Capacity	NFPA Capacity
First Floor					
Doors	43	@	32 in	6,880	6,880
Stairs	0	@	0 in	0	0
Total				**6,880**	**6,880**

LIFE SAFETY SYSTEMS

High-Rise Buildings	
Applicability MBC Section 403.1	☐ Yes ☐ No
Fire Protection System Requirements	
Automatic Sprinkler Systems MBC Section 903 NFPA - See Occupancy Chapters & 9.7.1	☐ Full ☐ Partial ☐ None
Standpipe Systems MBC Section 905 NFPA - See Occupancy... NFPA 45	☐ Required ☐ Not Required
Fire Pumps	☐ Required ☐ Not Required
Fire Hazard Occupancy	☐ Light (Low) ☐ Ordinary (Moderate) ☐ Extra (High)
Portable Fire Extinguishers MBC Section 906 IFC Section 906 NFPA See Occupancy Chapters & 9.7.4	☐ Required ☐ Not Required ☐ Special Hazard Areas Only
Fire Alarm and Detection System Requirements	
Manual Fire Alarm System MBC Section 907 NFPA See Occupancy Chapters & 9.6	☐ Required ☐ Not Required
Emergency Voice/Alarm Communication System MBC Section 907.2.1.1 MBC Section 907.5.2.2	☐ Required ☐ Not Required Per MRCEB Section 804.4.1, Exception #1
Elevator Requirements	
Ambulance Strecther Compliance MBC Section 3002.4	☐ Yes ☐ No
Accessible Means of Egress MBC Section 1007.2.1	☐ Yes ☐ No
Emergency and Standby Power System MBC Section 2702	☐ Required Emergency Lighting and Exit Signs ☐ Not Required

FIRE RATINGS AND SEPARATIONS

		MBC		NFPA	
Primary Structural Frame		0 hr	Table 601	0 hr	NFPA 220
Bearing Walls					
Exterior		0 hr	Table 601	0 hr	NFPA 220
Interior		0 hr	Table 601	0 hr	NFPA 220
Nonbearing Walls and Partitions					
Exterior	>10 feet Fire Separation Distance	0 hr	Table 602	0 hr	NFPA 220
Interior		0 hr	Table 601	0 hr	NFPA 220
Floor Construction and Associated Secondary Members		0 hr	Table 601	0 hr	NFPA 220
Roof Construction and Associated Secondary Members		0 hr	Table 601	0 hr	NFPA 220
Separation of Occupancies		N/A hr	Table 508.3.3	N/A hr	See Occupancy Chapters
Allowable Area Separations (Fire Walls)		2 hr	Section 705	2 hr	Section 8.2.1.3
Fire Area Separations (Fire Barriers)		1 hr	Section 706	1 hr	Section 8.3
Corridors (Fire Partitions)	Smoke Tight	1 hr	Section 1018	1 hr	See Occupancy Chapters
Shaft Enclosures		1 hr	Section 707	1 hr	Section 8.3
Smoke Compartments (Smoke Barriers)		0 hr	Section 709	1 hr	Section 8.4
Incidental Use Areas		MBC Section 509		NFPA See Occupancy Chapters	
Furnace Room		1 hr		1 hr	
Boiler Room		1 hr		1 hr	
Refrigerant Machinery Room		1 hr			
Hydrogen Cutoff Room		2 hr			
Incinerator Room		2 hr			
Paint Shops		1 hr			
Laboratories and Vocational Shops		1 hr		1 hr	
Laundry Room >100sf		1 hr		1 hr	
Waste and Linen Collection Room		1 hr			
Stationary storage batter systems		2 hr			
Storage and Janitor...				1 hr	
Maintenance Shops				1 hr	

INTERIOR FINISH REQUIREMENTS

	MBC Table 803.11	NFPA See Occupancy Chapters
Interior Wall and Ceiling Finish Requirements		
Interior exit stairways, ramps and passageways	A	A
Corridors and exit access stairways and ramps	B	B
Rooms and Enclosed Spaces	C	C

	MBC Section 804.4	NFPA See Occupancy Chapters
Interior Floor Finish Requirements	Class II	N/A

CODE INFORMATION

APPLICABLE CONSTRUCTION CODES AND STANDARDS

Building:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Rehabilitation Code for Existing Buildings, Incorporating the 2015 Edition of the International Existing Building Code
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Fire Services, 2016 Fire Safety Rules for Schools, Colleges and Universities, Incorporating the 2012 Edition of the NFPA 101 Life Safety Code
Barrier Free:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2009 ICC A117.1 - Accessible and Usable Buildings and Facilities
	U.S. Department of Justice and Architecture and Transportation Barriers Compliance Board, American with Disabilities Act (ADA) 2010 - Standards for Accessible Design
Structural:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code
Mechanical:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Mechanical Division, 2021 Michigan Mechanical Code, Incorporating the 2021 Edition of the International Mechanical Code
Plumbing:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plumbing Division, 2021 Michigan Plumbing Code, Incorporating the 2021 Edition of the International Plumbing Code
Electrical:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Electrical Division, 2023 Michigan Electrical Code, Incorporating the 2023 Edition of the National Electrical Code
Fire Alarm:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Electrical Division, Incorporating the 2013 Edition of NFPA 72 - National Fire Alarm and Signaling Code

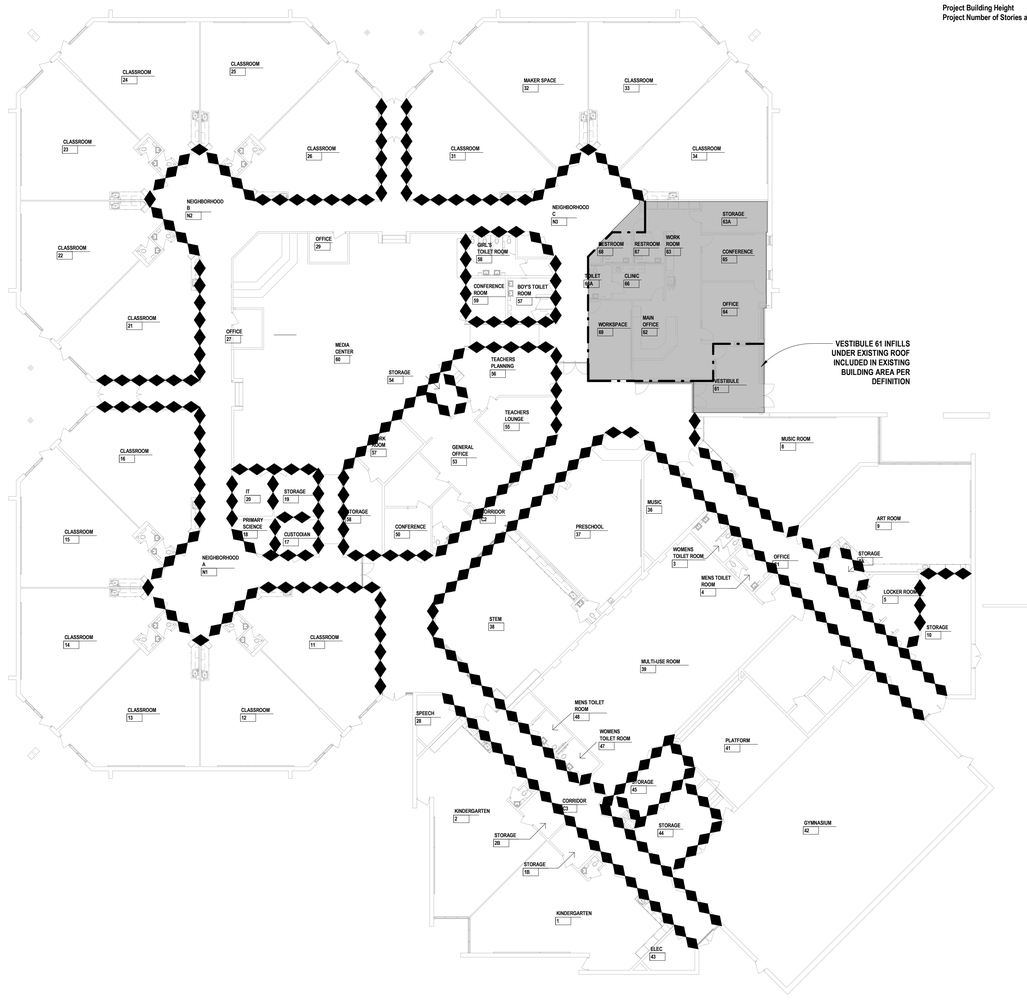
BUILDING INFORMATION

SINGLE USE AND OCCUPANCY

		MBC	NFPA
Type of Construction		IIB	II(000)
Occupancy Group		E	E
Tabular Building Area (MBC Table 506.2) (At)	NS	14,500 SF/story	
	S (1 or MI)	58,000 SF/story	
Frontage Increase (MBC Section 506.3) (If)		0.75	
Building Perimeter that fronts a public way or open space		1,043 feet	
Perimeter of entire building		1,043 feet	
Width of public way or open space		30 feet	
Allowable Area (Aa)	**Non-sprinklered**	**25,375 SF/story**	
	Fully Sprinklered	**68,875 SF/story**	

Project Floor Area	Existing	Proposed	Renovated		Total
First Floor	50,429 SF	0 SF	2,218 SF	4%	50,429 SF
Sub-total	50,429 SF	0 SF	2,218 SF	4%	50,429 SF

	MBC	
Tabular Allowable Building Height (MBC Table 504.3)	55	Feet
Tabular Story Limitations (MBC Table 504.4)	2	Stories above grade plane
Project Building Height	**24**	**Feet**
Project Number of Stories above grade plane	**1**	**Stories above grade plane**



LEGEND

LIFE SAFETY
NOTE: NOT ALL SYMBOLS MAY BE USED

- EMERGENCY RESCUE/VENTILATION WINDOW OPENING
- EXISTING FIRE-RESISTANT-RATED FIRE BARRIER. NEW PENETRATIONS OR OPENING PROTECTIVES WILL COMPLY WITH 1-HOUR FIRE-RESISTANCE-RATED FIRE BARRIER REQUIREMENTS
- 1-HR FIRE-RATED PARTITION
- 2-HR FIRE-RATED PARTITION
- 3-HR FIRE-RATED PARTITION
- SMOKE TIGHT PARTITION
- AREA OF LEVEL 2 ALTERATION
- AREA COVERED BY EXISTING AUTOMATIC SPRINKLER SYSTEM

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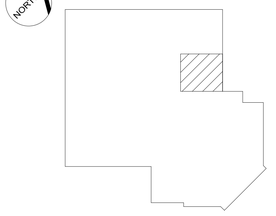
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



Project Administrator
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Q.M. Review
N. LaForest
Approved
B. Sundberg
Drawing Scale
1/16" = 1' - 0"

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Life Safety Plan - Savage Elementary

IDS Project Number
20111-3008

Drawing Number
1.LS0.1

MEANS OF EGRESS

	MBC			NFPA			MRCEB	
Assembly Occupancy								
Exit Access Travel Distance	200/250	ft	Table 1016.2	200/250	ft	Section 12.2.6.2		
Common Path of Egress Travel	75/100	ft	Table 1014.3	75/100	ft	Section 12.2.5.1.2		
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Educational (Classroom area)	20	sf	Net	20	sf	Net
Exercise Rooms	50	sf	Gross	50	sf	Gross
Library: Reading Rooms	50	sf	Net	50	sf	Net
Library: Stack Area	100	sf	Gross	100	sf	Gross
Stage and Platforms	15	sf	Net	15	sf	Net
Accessory Storage Areas/ Mechanical Room	300	sf	Gross	500	sf	Gross
		sf	Net/Gross		sf	Net/Gross
		sf	Net/Gross		sf	Net/Gross

Tabular Occupant Loads

First Floor	2,883
Total	2,883

Exit Egress Capacity	Quantity		Width		MBC Capacity	NFPA Capacity
First Floor						
Doors	43	@	32	in	6,880	6,880
Stairs	0	@	0	in	0	0
Total					**6,880**	**6,880**

LIFE SAFETY SYSTEMS

High-Rise Buildings	
Applicability	☐ Yes ☒ No
MBC Section 403.1	
Fire Protection System Requirements	
Automatic Sprinkler Systems	☐ Full ☒ Partial ☐ None
MBC Section 903	
NFPA - See Occupancy Chapters & 9.7.1	
Standpipe Systems	☐ Required ☒ Not Required
MBC Section 905	
NFPA - See Occupancy...	
NFPA 45	
Fire Pumps	☐ Required ☒ Not Required
Fire Hazard Occupancy	☐ Light (Low) ☒ Ordinary (Moderate) ☐ Extra (High)
Portable Fire Extinguishers	☒ Required ☐ Not Required ☐ Special Hazard Areas Only
MBC Section 906	
IFC Section 906	
NFPA See Occupancy Chapters & 9.7.4	
Fire Alarm and Detection System Requirements	
Manual Fire Alarm System	☒ Required ☐ Not Required
MBC Section 907	
NFPA See Occupancy Chapters & 9.6	
Emergency Voice/Alarm Communication System	☐ Required ☒ Not Required Per MRCEB Section 804.4.1, Exception #1
MBC Section 907.2.1.1	
MBC Section 907.5.2.2	
Elevator Requirements	
Ambulance Strecther Compliance	☒ Yes ☐ No
MBC Section 3002.4	
Accessible Means of Egress	☒ Yes ☐ No
MBC Section 1007.2.1	
Emergency and Standby Power System	☒ Required Emergency Lighting and Exit Signs ☐ Not Required
MBC Section 2702	

FIRE RATINGS AND SEPARATIONS

		MBC		NFPA	
Primary Structural Frame		0 hr	Table 601	0 hr	NFPA 220
Bearing Walls					
Exterior		0 hr	Table 601	0 hr	NFPA 220
Interior		0 hr	Table 601	0 hr	NFPA 220
Nonbearing Walls and Partitions					
Exterior	>10 feet Fire Separation Distance	0 hr	Table 602	0 hr	NFPA 220
Interior		0 hr	Table 601	0 hr	NFPA 220
Floor Construction and Associated Secondary Members		0 hr	Table 601	0 hr	NFPA 220
Roof Construction and Associated Secondary Members		0 hr	Table 601	0 hr	NFPA 220
Separation of Occupancies		N/A hr	Table 508.3.3	N/A hr	See Occupancy Chapters
Allowable Area Separations (Fire Walls)		2 hr	Section 705	2 hr	Section 8.2.1.3
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Smoke Compartments (Smoke Barriers)		0 hr	Section 709	1 hr	Section 8.4
Incidental Use Areas		MBC Section 509		NFPA See Occupancy Chapters	
Furnace Room		1 hr		1 hr	
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Waste and Linen Collection Room		1 hr			
Stationary storage batter systems		2 hr			
Storage and Janitor...				1 hr	
Maintenance Shops				1 hr	

INTERIOR FINISH REQUIREMENTS

	MBC Table 803.11	NFPA See Occupancy Chapters
Interior Wall and Ceiling Finish Requirements		
Interior exit stairways, ramps and passageways	A	A
Corridors and exit access stairways and ramps	B	B
Rooms and Enclosed Spaces	C	C

	MBC Section 804.4	NFPA See Occupancy Chapters
Interior Floor Finish Requirements	Class II	N/A

CODE INFORMATION

APPLICABLE CONSTRUCTION CODES AND STANDARDS

Building:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Rehabilitation Code for Existing Buildings, Incorporating the 2015 Edition of the International Existing Building Code
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Fire Services, 2016 Fire Safety Rules for Schools, Colleges and Universities, Incorporating the 2012 Edition of the NFPA 101 Life Safety Code
Barrier Free:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code
	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2009 ICC A117.1 - Accessible and Usable Buildings and Facilities
	U.S. Department of Justice and Architecture and Transportation Barriers Compliance Board, American with Disabilities Act (ADA) 2010 - Standards for Accessible Design
Structural:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2015 Michigan Building Code, Incorporating the 2015 Edition of the International Building Code
Mechanical:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Mechanical Division, 2021 Michigan Mechanical Code, Incorporating the 2021 Edition of the International Mechanical Code
Plumbing:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plumbing Division, 2021 Michigan Plumbing Code, Incorporating the 2021 Edition of the International Plumbing Code
Electrical:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Electrical Division, 2023 Michigan Electrical Code, Incorporating the 2023 Edition of the National Electrical Code
Fire Alarm:	Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Electrical Division, Incorporating the 2013 Edition of NFPA 72 - National Fire Alarm and Signaling Code

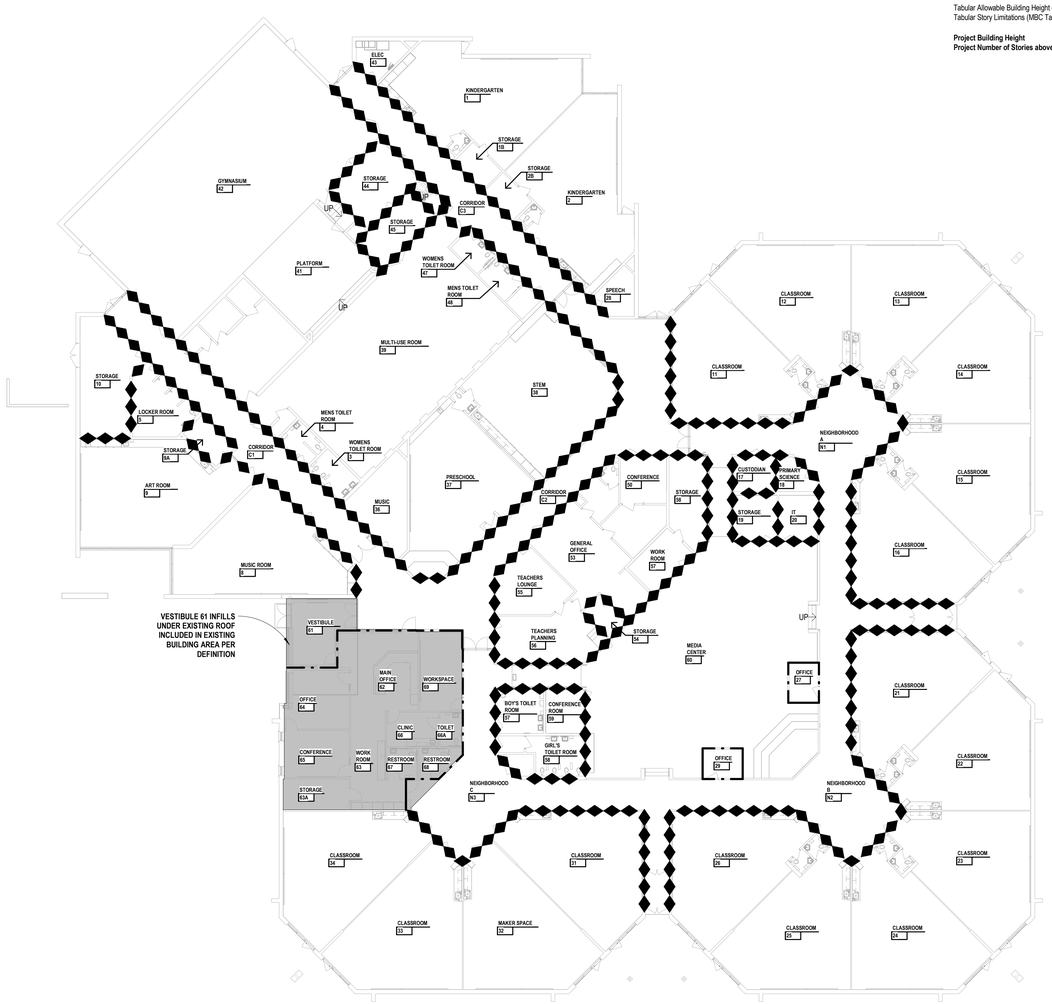
BUILDING INFORMATION

SINGLE USE AND OCCUPANCY

		MBC	NFPA
Type of Construction		IIB	II(000)
Occupancy Group		E	E
Tabular Building Area (MBC Table 506.2) (At)	NS	14,500 SF/story	
	S (1 or MI)	58,000 SF/story	
Frontage Increase (MBC Section 506.3) (If)		0.75	
Building Perimeter that fronts a public way or open space		1,043 feet	
Perimeter of entire building		1,043 feet	
Width of public way or open space		30 feet	
Allowable Area (Aa)	**Non-sprinklered**	**25,375 SF/story**	
	Fully Sprinklered	**68,875 SF/story**	

Project Floor Area	Existing	Proposed	Renovated		Total
First Floor	50,429 SF	0 SF	2,218 SF	4%	50,429 SF
Sub-total	50,429 SF	0 SF	2,218 SF	4%	50,429 SF

	MBC	
Tabular Allowable Building Height (MBC Table 504.3)	55	Feet
Tabular Story Limitations (MBC Table 504.4)	2	Stories above grade plane
Project Building Height	**24**	**Feet**
Project Number of Stories above grade plane	**1**	**Stories above grade plane**



LEGEND

LIFE SAFETY
NOTE: NOT ALL SYMBOLS MAY BE USED

- EMERGENCY RESCUE/VENTILATION WINDOW OPENING
- EXISTING FIRE-RESISTANT-RATED FIRE BARRIER. NEW PENETRATIONS OR OPENING PROTECTIVES WILL COMPLY WITH 1-HOUR FIRE-RESISTANCE-RATED FIRE BARRIER REQUIREMENTS
- 1-HR FIRE-RATED PARTITION
- 2-HR FIRE-RATED PARTITION
- 3-HR FIRE-RATED PARTITION
- SMOKE TIGHT PARTITION
- AREA OF LEVEL 2 ALTERATION
- AREA COVERED BY EXISTING AUTOMATIC SPRINKLER SYSTEM

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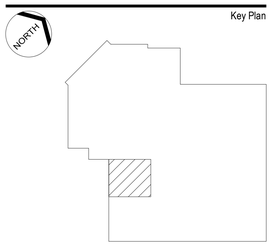
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	A. Pelfrey
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	1/16" = 1' - 0"

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Life Safety Plan - Tyler Elementary

IDS Project Number: **20111-3008**

Drawing Number: **1.LS0.2**

GENERAL NOTES

NEW WORK PLAN

A. REFER TO SHEET 1.A9.2 FOR DOOR SCHEDULE AND COLORS.

B. REFER TO SHEET 1.A9.1 FOR FINISH SCHEDULE AND COLORS.

C. REFER TO LIFE SAFETY PLANS FOR PARTITION RATINGS.

D. PARTIAL WALL POCHEING IS SHOWN THROUGHOUT THIS PLAN AND THE TERMINATION OF SAME SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE IN WALL MATERIAL. VERIFY WALL MATERIALS WITH PARTITION TYPES AND SCHEDULES.

E. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL SCOPE OF WORK.

F. INFILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILINGS THAT ARE THE RESULT OF MECHANICAL OR ELECTRICAL DEMOLITION. OPENINGS IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESS AS EXISTING. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS. FINISHES AND WALL THICKNESS. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR SCOPE OF WORK.

G. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE.

H. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.

I. ADDITIONAL TERRAZZO FLOOR PATCHING SCOPE OF WORK IS SHOWN ON SHEET 1.A0.1 FLOOR PLANS.

KEYNOTES

NEW WORK FLOOR PLAN

SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS

NOTE: NOT ALL KEYNOTES MAY BE USED

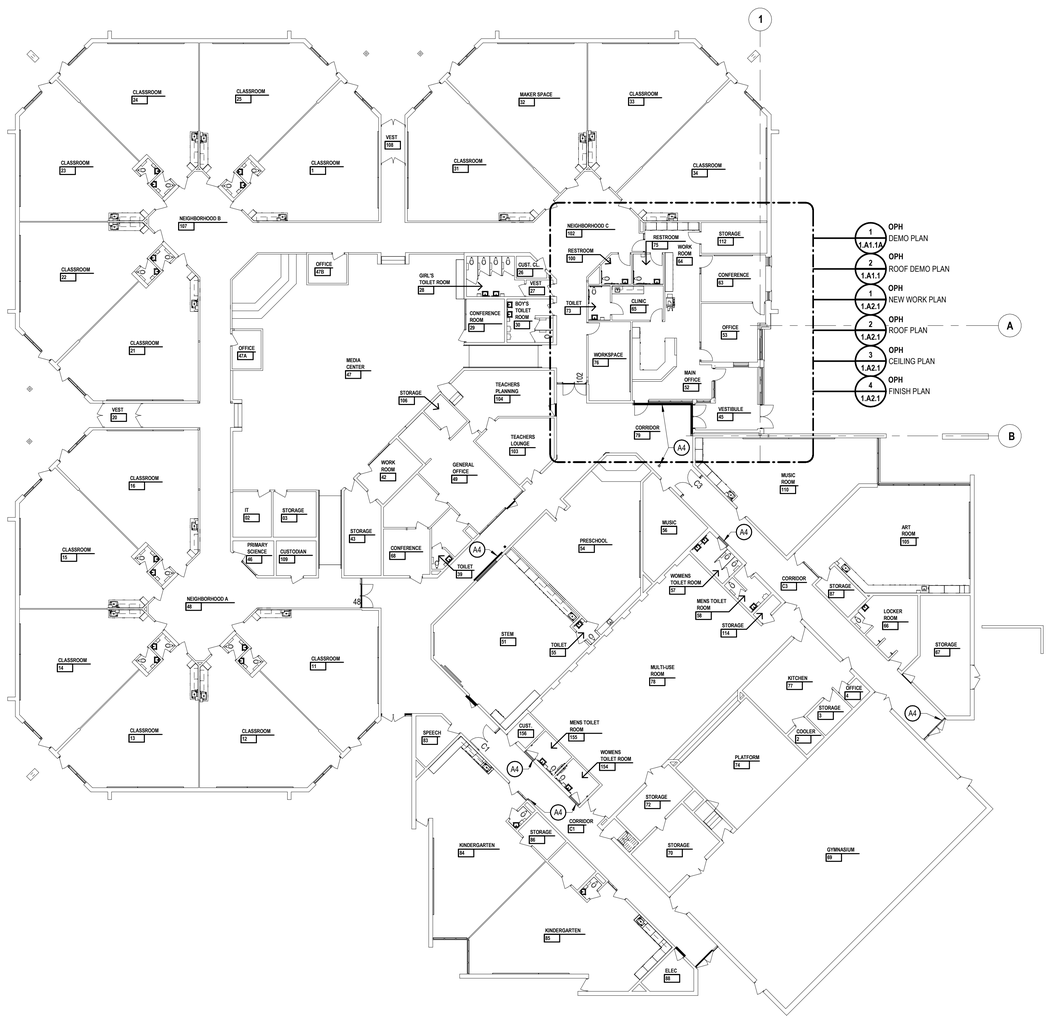
(#) LEGEND SYMBOL INDICATOR

A1 03 3000 PATCH AND REPAIR CONCRETE FLOOR AT LOCATION OF REMOVED WALL OR REMOVED SLAB PORTION. REFER TO STRUCTURAL DETAIL SL-13 PER SHEET 1.S0.3.

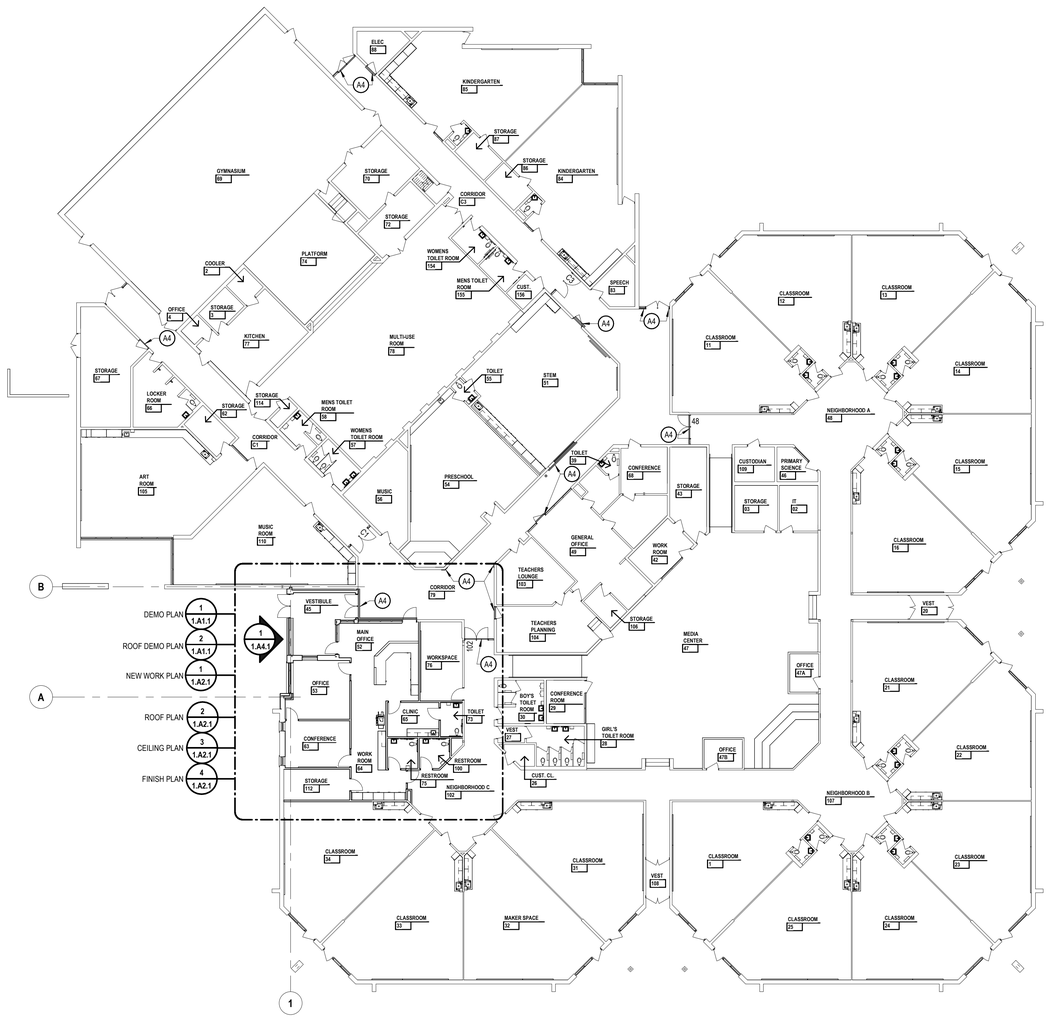
A2 03 3000 CONCRETE SLAB ON GRADE. REFER TO FOUNDATION PLAN PER SHEET 1.S1.1.

A3 POWER-OPERATED DOOR

A4 09 6623 TERRAZZO FLOORING AND WALL BASE REPAIR. REFER TO ROOM FINISH SCHEDULE.



2 1.FIRST FLOOR COMPOSITE PLAN - SAVAGE ELEMENTARY
1/16" = 1'-0"



1 1.A1.1 1.FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY
1/16" = 1'-0"

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

NORTH

Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	A. Pelfrey
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	3/32" = 1' - 0"

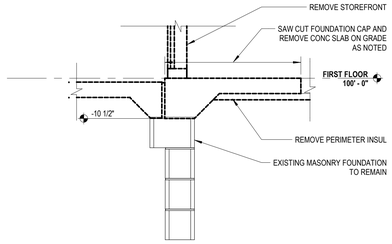
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Addendum No.2	10-25-2024
Construction Set	02-10-2025

IDS Drawing Title

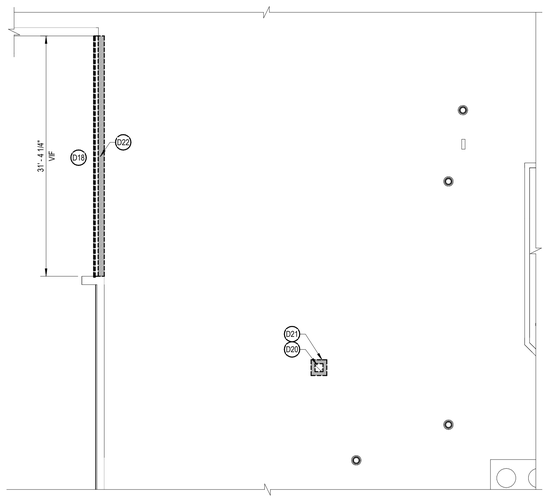
First Floor Composite Plan

IDS Project Number: 20111-3008

Drawing Number: 1. A0.1



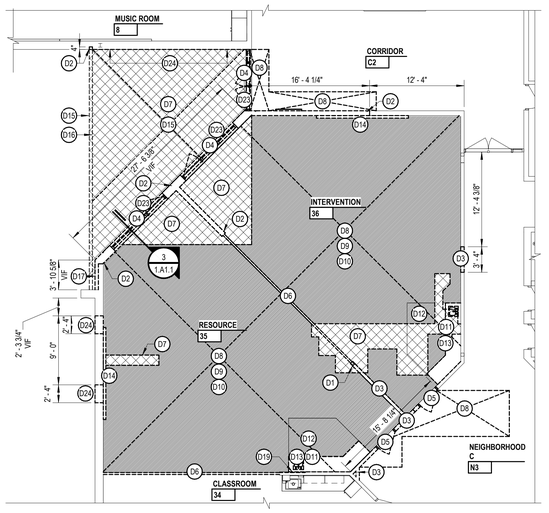
3 / 1.A1.1 DEMO WALL SECTION
3/4" = 1'-0"



LEGEND

ROOF DEMOLITION PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- X — EXISTING ROOF MATERIAL TO BE REMOVED AS NOTED BY KEYNOTE
- X — CUT AND REMOVE PORTION OF METAL DECK AS NOTED BY KEYNOTE



2 / 1. A0.1 ENLARGED ROOF DEMO PLAN - TYLER ELEMENTARY
1/8" = 1'-0"
SAVAGE ELEMENTARY - SIM OPP HAND

1 / 1. A0.1 ENLARGED DEMO PLAN - TYLER ELEMENTARY
1/8" = 1'-0"
SAVAGE ELEMENTARY - SIM OPP HAND

GENERAL NOTES

DEMOLITION PLAN

A. ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLAN. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.

B. CONTRACTOR SHALL PROVIDE TEMPORARY DUSTPROOF PARTITIONS WITH DOORS AT LOCATIONS INDICATED AND/OR AS REQUIRED TO ADEQUATELY SEPARATE OCCUPIED AREAS FROM CONSTRUCTION HAZARDS, NOISE AND/OR DUST. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE ALL LOCATIONS WITH ARCHITECT'S/OWNER'S REPRESENTATIVE.

C. CONTRACTOR SHALL PROVIDE DUST MATS AT ALL CONSTRUCTION AREA ENTRANCES AND EXIT LOCATIONS. COORDINATE ALL LOCATION'S WITH ARCHITECT'S/OWNER'S REPRESENTATIVES.

D. CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.

E. COORDINATE SCOPE AND EXTENT OF DEMOLITION WITH NEW WORK PLANS AND DETAILS.

F. REFER TO MECHANICAL AND ELECTRICAL DEMOLITION SHEETS FOR ADDITIONAL INFORMATION.

KEYNOTES

DEMOLITION PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

D1 REMOVE COLUMN IN ITS ENTIRETY

D2 REMOVE PORTION OF MASONRY WALL. COORDINATE WITH NEW WORK PLANS.

D3 REMOVE PORTION OF GYPSUM BOARD / METAL STUD PARTITION. COORDINATE WITH NEW WORK PLANS.

D4 REMOVE DOORS, STOREFRONT FRAMING, GLAZING, SILL, SEALANT, ANCHORS, WOOD BLOCKING, AND ASSOCIATED SOFFIT / CEILING ELEMENTS AS REQUIRED FOR INSTALLATION OF NEW WORK.

D5 REMOVE DOOR, FRAME, AND SILL IN ITS ENTIRETY.

D6 REMOVE OPERABLE PARTITION WALL AND FRAMING IN ITS ENTIRETY.

D7 SAW CUT AND REMOVE PORTION OF CONCRETE FLOOR SLAB. COORDINATE WITH NEW WORK AND PLUMBING PLANS.

D8 REMOVE ACOUSTICAL CEILING TILES AND GRID.

D9 REMOVE CARPET, BASE AND ADHESIVE DOWN TO TOP OF STRUCTURAL SLAB.

D10 SALVAGE CLASSROOM PROJECTOR, PROJECTOR SCREEN, AND CEILING SPEAKERS.

D11 SALVAGE WALL-MOUNTED PAPER TOWEL DISPENSER AND SOAP DISPENSER.

D12 REMOVE CERAMIC TILE, TILE BASE, MARBLE SILL, AND GROUT DOWN TO TOP OF STRUCTURAL SLAB.

D13 REMOVE BASE CABINETS, SINK, COUNTERTOP, BACKSPLASH AND/OR WALL MOUNTED CABINETS.

D14 REMOVE MARKERBOARD / TACKBOARD / WHITEBOARD IN ITS ENTIRETY.

D15 REMOVE ACRYLIC PLASTER ON METAL LATH AND SUSPENSION SYSTEM IN ITS ENTIRETY - HEAVY BUILDING STRUCTURE TO REMAIN. COORDINATE CONDITION WITH ARCHITECT ONCE EXPOSED.

D16 REMOVE VENTED DRIP SCREED

D17 REMOVE EXTERIOR GLAZED FACE BRICK

D18 SALVAGE METAL PARAPET FLASHING OR METAL COPING CAP AS NEEDED TO COMPLETE SOFFIT/FASCIA REMOVAL.

D19 REMOVE GYPSUM BOARD WALL AS REQUIRED TO PERFORM PLUMBING WORK.

D20 REMOVE PORTION OF METAL ROOF DECK OR INSULATING ROOF DECK AS REQUIRED FOR MECHANICAL PENETRATIONS. COORDINATE WITH NEW WORK AND MECHANICAL DRAWINGS.

D21 REMOVE ROOF SYSTEM (MEMBRANE AND RIGID INSULATION) AS REQUIRED FOR NEW MECHANICAL EQUIPMENT CURB. METAL DECK TO REMAIN U.O.N. COORDINATE WITH NEW WORK AND MECHANICAL DRAWINGS.

D22 REMOVE PORTION OF ROOF MEMBRANE AS SHOWN. COORDINATE WITH NEW WORK.

D23 REMOVE SPALLED / DAMAGED CONCRETE AS REQUIRED FOR NEW FINISHES.

D24 SALVAGE EXISTING BRICK. COORDINATE WITH NEW WORK PLAN DETAIL 1/1.A5.2 AND EXTERIOR ELEVATION ON 1.A4.1

LEGEND

DEMOLITION PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- X — EXISTING CEILING TO BE REMOVED AS NOTED BY KEYNOTE
- X — EXISTING FLOOR/FINISH TO BE REMOVED AS NOTED BY KEYNOTE
- X — SAWCUT AND REMOVE PORTION OF CONC SLAB AS NOTED BY KEYNOTE

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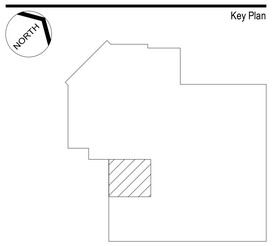
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	A. Pelfrey
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	As Noted

Issued for	Issue Date
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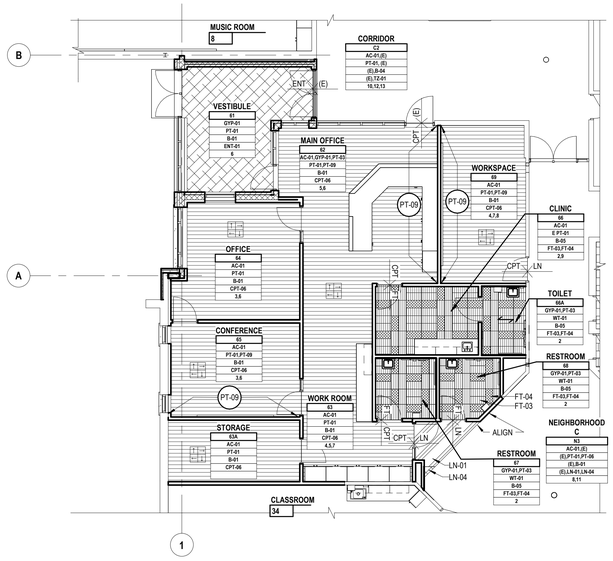
Construction Set	02-10-2025

IDS Drawing Title

Demolition Plans

IDS Project Number: 20111-3008

Drawing Number: 1.A1.1



4 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED FLOOR FINISH PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

GENERAL NOTES

FINISH PLAN

A. REFER TO ROOM FINISH SCHEDULE AND COLOR CODES FOR MORE INFORMATION.

LEGEND

FINISH PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- 09 6543 LINOLEUM TILE FLOORING LN-01
- 09 6543 LINOLEUM TILE FLOORING LN-04
- 09 3000 PORC FLOOR TILE FT-03
- 09 3000 PORC FLOOR TILE FT-04
- 09 6813 CARPET TILE ENT-01
- 09 6813 CARPET TILE CPT-06
- 09 6613 TERRAZZO FLOORING TZ-01
- X_X — FLOOR MATERIAL TRANSITION TAG REFER TO 1.A9.2 FOR TRANSITION/ SILL DETAILS
- XX-XX — FLOOR COLOR CODE TAG - REFER TO ROOM FINISH SCHEDULE SHEET 1.A9.1
- FLOORING INSTALLATION DIRECTION
- XX-XX — ACCENT MATERIAL, REFER TO COLOR CODES
- FLOORING INSTALLATION METHOD - ASHLAR
- FLOORING INSTALLATION METHOD - MONOLITHIC
- FLOORING INSTALLATION METHOD - QUARTER TURN
- FLOORING INSTALLATION METHOD - NON-DIRECTIONAL
- FLOORING INSTALLATION METHOD - HERINGBONE
- ROOM NAME / # ROOM # / Ceiling Finish / Wall Finish / Base Finish / Floor Finish / Comments — NOTE: FINISHES INDICATED IN ROOM FINISH TAGS ARE GENERAL OVERALL FINISHES FOR ROOM UNLESS OTHERWISE INDICATED BY NOTE, REMARK, DETAIL AND/OR ELEVATION
- ROOM SPECIFIC FINISH REMARKS, REFER TO REMARKS LEGEND FOR ADDITIONAL INFORMATION

GENERAL NOTES

REFLECTED CEILING PLAN

A. CEILING HEIGHT 9'-0" AFF UNLESS OTHERWISE NOTED.

B. ACOUSTICAL CEILING PANELS AND/OR TILES SHALL BE CENTERED WITHIN THE ROOM OR BORDER UNLESS OTHERWISE NOTED.

C. REFER TO FLOOR PLANS FOR PARTITION TYPE DESIGNATION.

D. COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTING DEVICES.

E. UNLESS OTHERWISE NOTED LOCATION OF ITEMS SHOWN IN AREAS WITHOUT FINISH CEILINGS IS APPROXIMATE. COORDINATE EXACT LOCATION BETWEEN TRADES.

F. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.

LEGEND

REFLECTED CEILING PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- LAY-IN CEILING
- EXISTING LAY-IN CEILING
- GYPSUM BOARD CEILING
- ACOUSTIC METAL DECK
- RECESSED DOWNLIGHT
- RECESSED LINEAR LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- PENDANT LINEAR LIGHT FIXTURE
- LIGHT FIXTURES
- INDUSTRIAL LIGHT FIXTURE
- LINEAR RETURN DIFFUSER
- LINEAR SUPPLY DIFFUSER
- EXHAUST AIR DIFFUSER
- RETURN AIR REGISTER/GRILLS
- SUPPLY AIR REGISTER/GRILLS
- ACCESS PANEL (24X24 UON)
- RADIANT CEILING PANEL
- SPRINKLER HEAD
- SENSORS
- FIRE ALARM DEVICES
- SPEAKERS
- MICROPHONE
- EXIT SIGNS
- JUNCTION BOX
- RECEPTACLES
- WIRELESS ACCESS POINT
- CAMERA
- PROJECTOR
- FLAT PANEL MONITOR

KEYNOTES

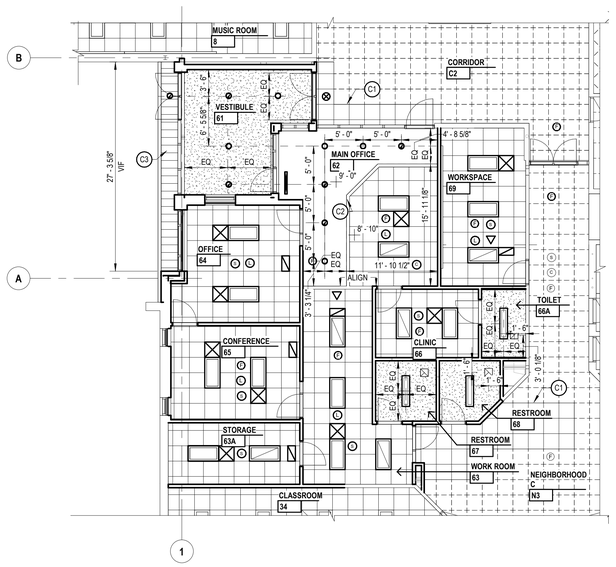
REFLECTED CEILING PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

C1 09 5113 PATCH ACOUSTIC LAY-IN CEILING PANEL

C2 09 2900 GYPSUM BOARD BULK HEAD. REFER TO DETAIL 13/1.A5.1

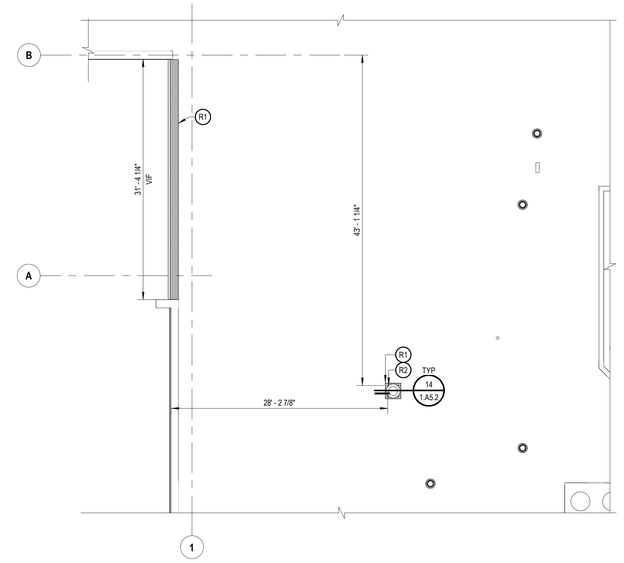
C3 07 4213 METAL PANEL SOFFIT



3 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED REFLECTED CEILING PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND



2 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED ROOF PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

GENERAL NOTES

ROOF PLAN

A. REFER TO SHEET 1.A5.1 & 1.A5.2 FOR TYPICAL ROOFING DETAILS.

B. COORDINATE SIZE AND LOCATION OF ALL EQUIPMENT SUPPORTS WITH INFORMATION PROVIDED BY THE APPROPRIATE EQUIPMENT MANUFACTURER AND TRADE CONTRACTORS.

C. REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL PIPES, CURBS, VENTS, DUCTS, CONDUITS, LIGHTNING PROTECTION, AND OTHER FEATURES EXTENDING THROUGH THE ROOF SURFACES WHICH REQUIRE FLASHING AND COORDINATE SIZE AND LOCATION OF SAME.

D. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS.

E. VERIFY EXACT LOCATIONS OF ROOFING CONTROL JOINTS (IF REQUIRED) WITH ROOFING MANUFACTURER.

LEGEND

ROOF PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- SLOPE — ROOF SLOPE INDICATION
- ROOF SUMP
- OVERFLOW ROOF SUMP
- ROOF HATCH
- ROOF WALKWAY
- EJ — BUILDING EXPANSION JOINT
- TAPERED INSULATION
- EQUIPMENT RAIL
- CURB MOUNTED EQUIPMENT
- STACK

KEYNOTES

ROOF PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

R1 07 5300 PATCH SINGLE-PLY ROOFING TO MATCH EXISTING ON RIGID INSULATION ON EXISTING METAL ROOF DECK.

R2 23 0000 MECHANICAL EQUIPMENT MOUNTED TO ROOF CURB.

GENERAL NOTES

NEW WORK PLAN

A. REFER TO SHEET 1.A9.2 FOR DOOR SCHEDULE AND COLORS.

B. REFER TO SHEET 1.A9.1 FOR FINISH SCHEDULE AND COLORS.

C. REFER TO LIFE SAFETY PLANS FOR PARTITION RATINGS.

D. PARTIAL WALL POCHEING IS SHOWN THROUGHOUT THIS PLAN AND THE TERMINATION OF SAME SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE IN WALL MATERIAL. VERIFY WALL MATERIALS WITH PARTITION TYPES AND SCHEDULES.

E. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL SCOPE OF WORK.

F. INFILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILINGS THAT ARE THE RESULT OF MECHANICAL OR ELECTRICAL DEMOLITION. OPENINGS IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESS AS EXISTING. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS, FINISHES AND WALL THICKNESS. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR SCOPE OF WORK.

G. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE.

H. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.

I. ADDITIONAL TERRAZZO FLOOR PATCHING SCOPE OF WORK IS SHOWN ON SHEET 1.A0.1 FLOOR PLANS.

LEGEND

NEW WORK PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- EXISTING CONSTRUCTION
- NEW CONSTRUCTION
- XXX — PARTITION TYPE - REFER TO PARTITION DETAILS SHEET A9.4
- SHALL COMPLY WITH BARRIER FREE REQUIREMENTS
- XXXX — CASEWORK/ MILLWORK TAG
- XXXX — SIGN NUMBER
- XXXX — 10 1100 VISUAL DISPLAY SURFACE MK= MARKERBOARD, TK=TACKBOARD XXXX INDICATES BOARD SIZE
- XXXX — 12 3553 LABORATORY EQUIPMENT & 11 5313 LABORATORY FUME HOODS
- W1.1 — 12 2413 ROLLER WINDOW SHADE
- CORNER GUARD

KEYNOTES

NEW WORK FLOOR PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

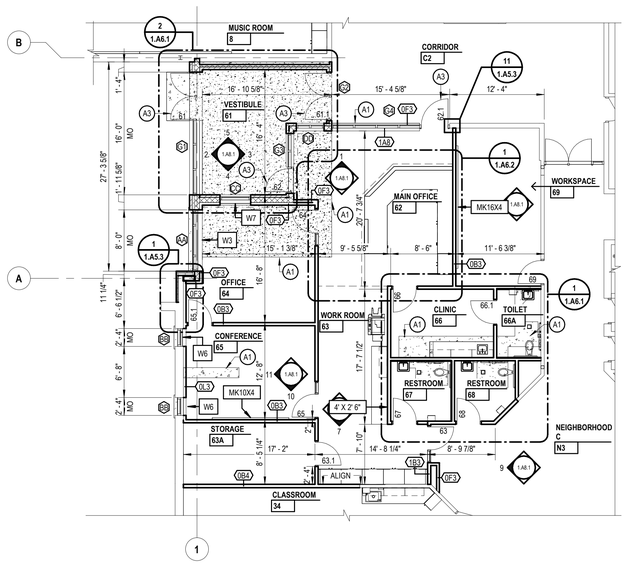
(#) LEGEND SYMBOL INDICATOR

A1 03 3000 PATCH AND REPAIR CONCRETE FLOOR AT LOCATION OF REMOVED WALL OR REMOVED SLAB PORTION. REFER TO STRUCTURAL DETAIL SL-13 PER SHEET 1.S0.3.

A2 03 3000 CONCRETE SLAB ON GRADE. REFER TO FOUNDATION PLAN PER SHEET 1.S1.1.

A3 POWER-OPERATED DOOR

A4 09 6623 TERRAZZO FLOORING AND WALL BASE REPAIR. REFER TO ROOM FINISH SCHEDULE.



1 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED NEW WORK PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

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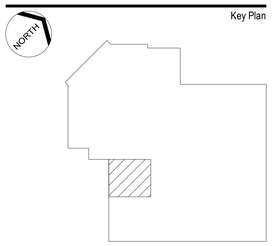
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



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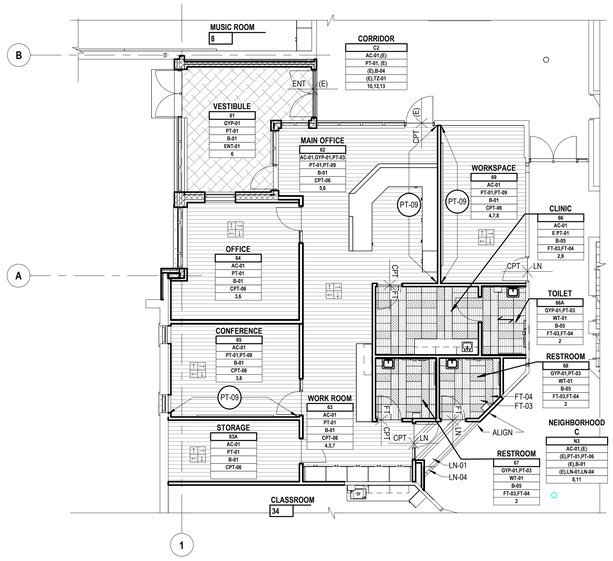
IDS Drawing Title

New Work Plans

IDS Project Number: 20111-3008

Drawing Number: 1.A2.1



4 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED FLOOR FINISH PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

GENERAL NOTES

FINISH PLAN

A. REFER TO ROOM FINISH SCHEDULE AND COLOR CODES FOR MORE INFORMATION.

LEGEND

FINISH PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- 09 6543 LINOLEUM TILE FLOORING LN-01
- 09 6543 LINOLEUM TILE FLOORING LN-04
- 09 3000 PORC FLOOR TILE FT-03
- 09 3000 PORC FLOOR TILE FT-04
- 09 6813 CARPET TILE ENT-01
- 09 6813 CARPET TILE CPT-06
- 09 6613 TERRAZZO FLOORING TZ-01
- X_X — FLOOR MATERIAL TRANSITION TAG REFER TO 1.A9.2 FOR TRANSITION/ SILL DETAILS
- XX-XX — FLOOR COLOR CODE TAG - REFER TO ROOM FINISH SCHEDULE SHEET 1.A9.1
- FLOORING INSTALLATION DIRECTION
- XX-XX — ACCENT MATERIAL, REFER TO COLOR CODES
- FLOORING INSTALLATION METHOD - ASHLAR
- FLOORING INSTALLATION METHOD - MONOLITHIC
- FLOORING INSTALLATION METHOD - QUARTER TURN
- FLOORING INSTALLATION METHOD - NON-DIRECTIONAL
- FLOORING INSTALLATION METHOD - HERINGBONE

ROOM NAME
ROOM
Ceiling Finish
Wall Finish
Base Finish
Floor Finish
Comments

NOTE: FINISHES INDICATED IN ROOM FINISH TAGS ARE GENERAL OVERALL FINISHES FOR ROOM UNLESS OTHERWISE INDICATED BY NOTE, REMARK, DETAIL AND/OR ELEVATION

ROOM SPECIFIC FINISH REMARKS, REFER TO REMARKS LEGEND FOR ADDITIONAL INFORMATION

GENERAL NOTES

REFLECTED CEILING PLAN

A. CEILING HEIGHT 9'-0" AFF UNLESS OTHERWISE NOTED.

B. ACOUSTICAL CEILING PANELS AND/OR TILES SHALL BE CENTERED WITHIN THE ROOM OR BORDER UNLESS OTHERWISE NOTED.

C. REFER TO FLOOR PLANS FOR PARTITION TYPE DESIGNATION.

D. COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTING DEVICES.

E. UNLESS OTHERWISE NOTED LOCATION OF ITEMS SHOWN IN AREAS WITHOUT FINISH CEILINGS IS APPROXIMATE. COORDINATE EXACT LOCATION BETWEEN TRADES.

F. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.

LEGEND

REFLECTED CEILING PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- LAY-IN CEILING
- EXISTING LAY-IN CEILING
- GYPSUM BOARD CEILING
- ACOUSTIC METAL DECK
- RECESSED DOWNLIGHT
- RECESSED LINEAR LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- PENDANT LINEAR LIGHT FIXTURE
- LIGHT FIXTURES
- INDUSTRIAL LIGHT FIXTURE
- LINEAR RETURN DIFFUSER
- LINEAR SUPPLY DIFFUSER
- EXHAUST AIR DIFFUSER
- RETURN AIR REGISTER/GRILLS
- SUPPLY AIR REGISTER/GRILLS
- ACCESS PANEL (24X24 UON)
- RADIANT CEILING PANEL
- SPRINKLER HEAD
- SENSORS
- FIRE ALARM DEVICES
- SPEAKERS
- MICROPHONE
- EXIT SIGNS
- JUNCTION BOX
- RECEPTACLES
- WIRELESS ACCESS POINT
- CAMERA
- PROJECTOR
- FLAT PANEL MONITOR

KEYNOTES

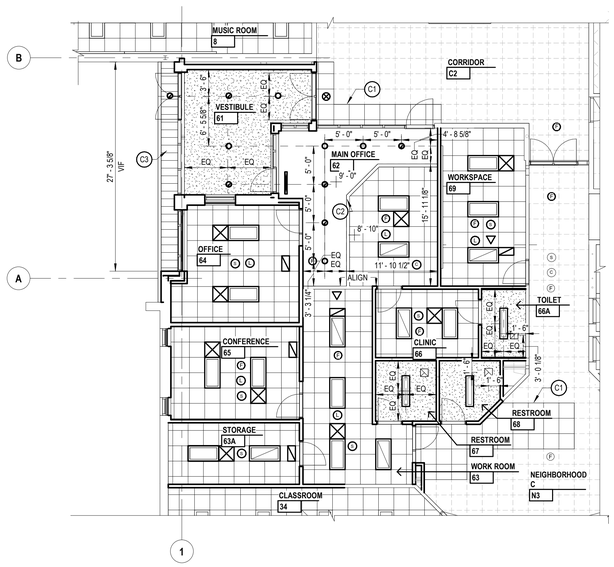
REFLECTED CEILING PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

C1 09 5113 PATCH ACOUSTIC LAY-IN CEILING PANEL

C2 09 2900 GYPSUM BOARD BULK HEAD. REFER TO DETAIL 13/1.A5.1

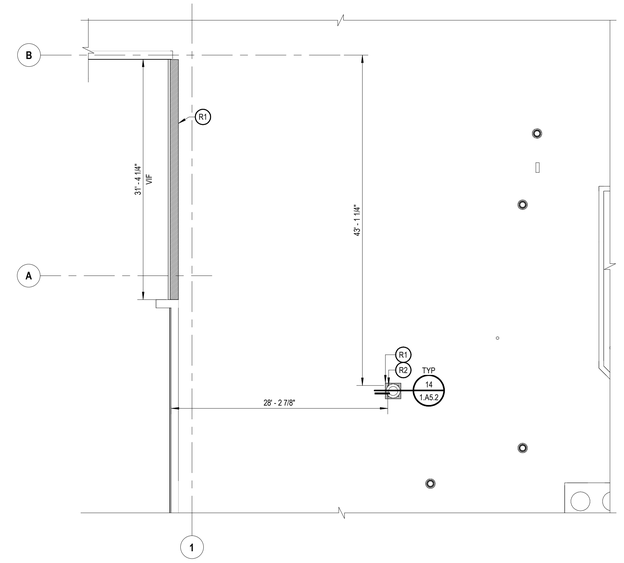
C3 07 4213 METAL PANEL SOFFIT



3 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED REFLECTED CEILING PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND



2 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED ROOF PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

GENERAL NOTES

ROOF PLAN

A. REFER TO SHEET 1.A5.1 & 1.A5.2 FOR TYPICAL ROOFING DETAILS.

B. COORDINATE SIZE AND LOCATION OF ALL EQUIPMENT SUPPORTS WITH INFORMATION PROVIDED BY THE APPROPRIATE EQUIPMENT MANUFACTURER AND TRADE CONTRACTORS.

C. REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL PIPES, CURBS, VENTS, DUCTS, CONDUITS, LIGHTNING PROTECTION, AND OTHER FEATURES EXTENDING THROUGH THE ROOF SURFACES WHICH REQUIRE FLASHING AND COORDINATE SIZE AND LOCATION OF SAME.

D. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS.

E. VERIFY EXACT LOCATIONS OF ROOFING CONTROL JOINTS (IF REQUIRED) WITH ROOFING MANUFACTURER.

LEGEND

ROOF PLAN
NOTE: NOT ALL SYMBOLS MAY BE USED

- SLOPE — ROOF SLOPE INDICATION
- ROOF SUMP
- OVERFLOW ROOF SUMP
- ROOF HATCH
- ROOF WALKWAY
- EJ — BUILDING EXPANSION JOINT
- TAPERED INSULATION
- EQUIPMENT RAIL
- CURB MOUNTED EQUIPMENT
- STACK

KEYNOTES

ROOF PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

R1 07 5300 PATCH SINGLE-PLY ROOFING TO MATCH EXISTING ON RIGID INSULATION ON EXISTING METAL ROOF DECK.

R2 23 0000 MECHANICAL EQUIPMENT MOUNTED TO ROOF CURB.

GENERAL NOTES

NEW WORK PLAN

A. REFER TO SHEET 1.A9.2 FOR DOOR SCHEDULE AND COLORS.

B. REFER TO SHEET 1.A9.1 FOR FINISH SCHEDULE AND COLORS.

C. REFER TO LIFE SAFETY PLANS FOR PARTITION RATINGS.

D. PARTIAL WALL POCHEING IS SHOWN THROUGHOUT THIS PLAN AND THE TERMINATION OF SAME SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE IN WALL MATERIAL. VERIFY WALL MATERIALS WITH PARTITION TYPES AND SCHEDULES.

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LEGEND

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NOTE: NOT ALL SYMBOLS MAY BE USED

- EXISTING CONSTRUCTION
- NEW CONSTRUCTION
- XXX — PARTITION TYPE - REFER TO PARTITION DETAILS SHEET A9.4
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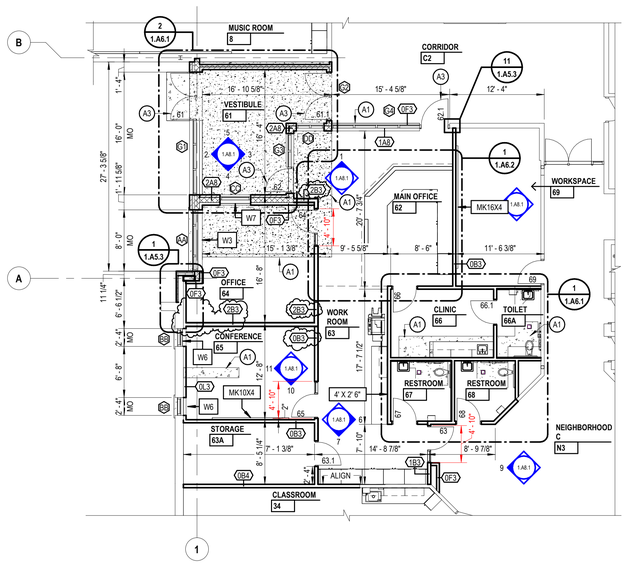

1 / 1. A0.1 — 1/8" = 1'-0"

ENLARGED NEW WORK PLAN - TYLER ELEMENTARY

SAVAGE ELEMENTARY - SIM OPP HAND

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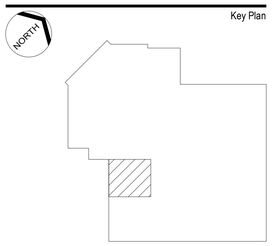
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



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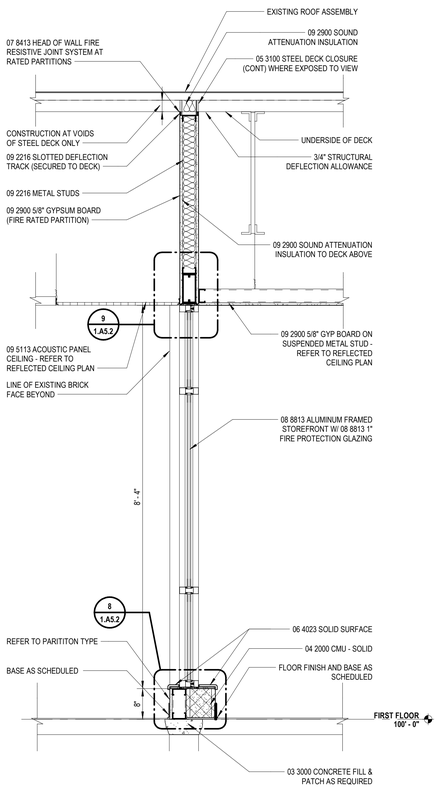
Bulletin No.2	02-12-2025

IDS Drawing Title

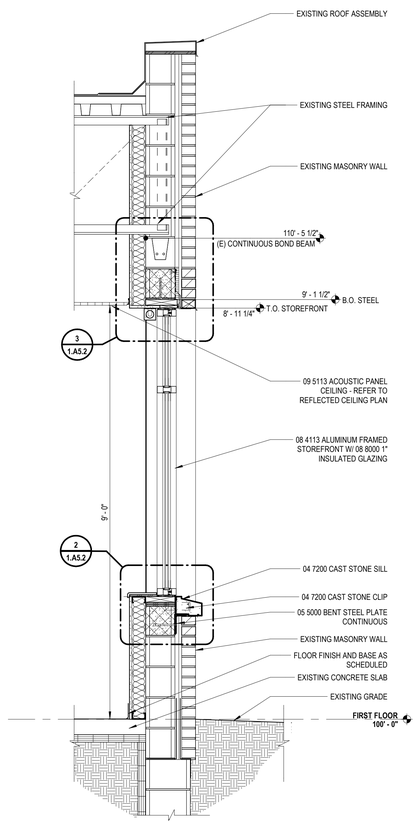
New Work Plans

IDS Project Number: 20111-3008

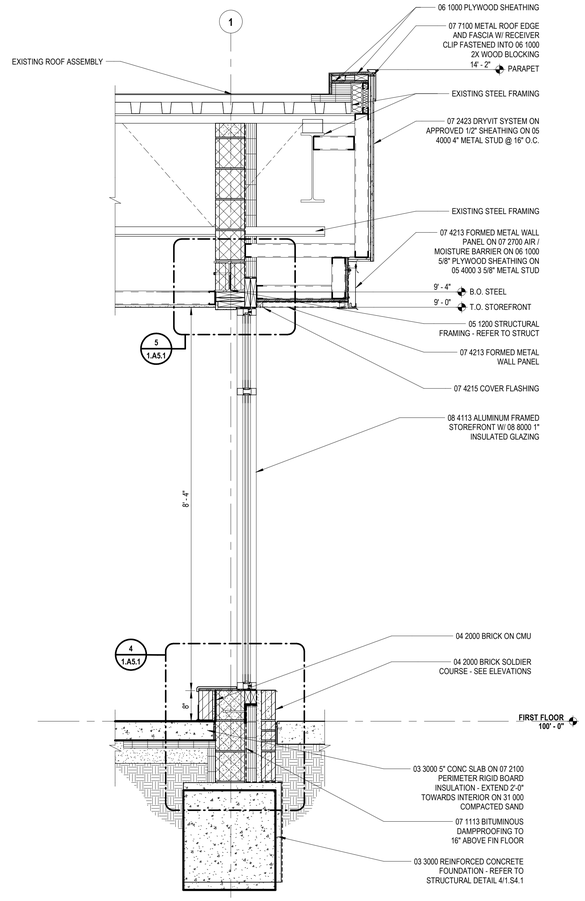
Drawing Number: 1.A2.1



9 1.A8.1 WALL SECTION
3/4" = 1'-0"



7 1.A4.1 WALL SECTION
3/4" = 1'-0"



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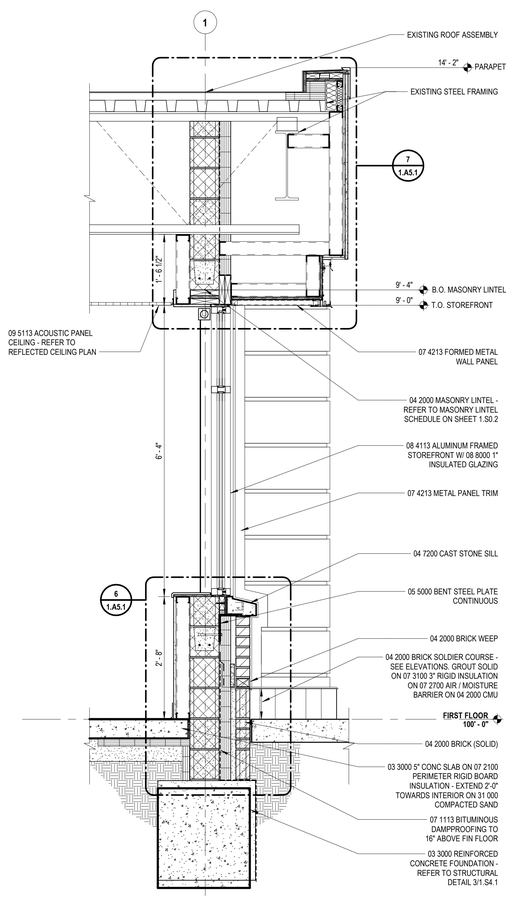

3 1.A4.1 WALL SECTION
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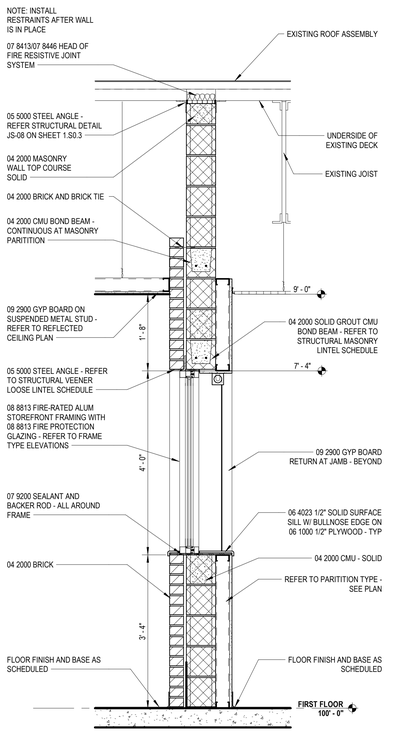
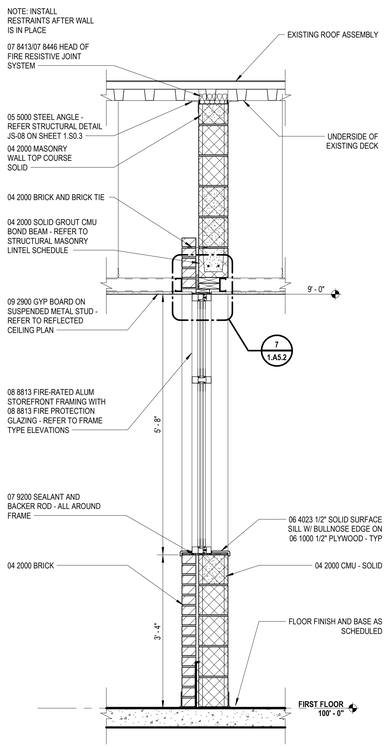


8 1.A8.1 SECTION DETAIL
3/4" = 1'-0"



6 1.A8.1 SECTION DETAIL
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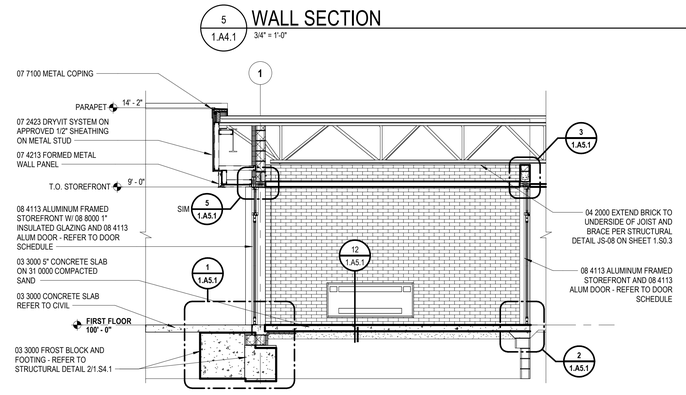

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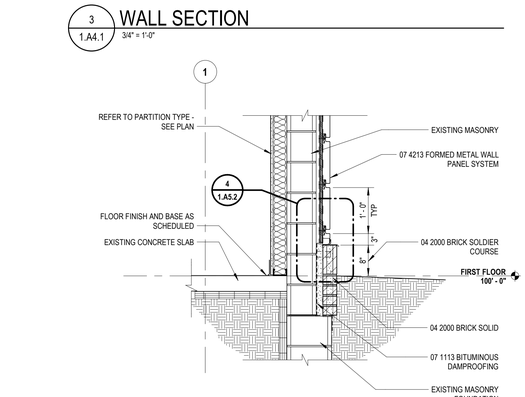

2 1.A4.1 WALL SECTION
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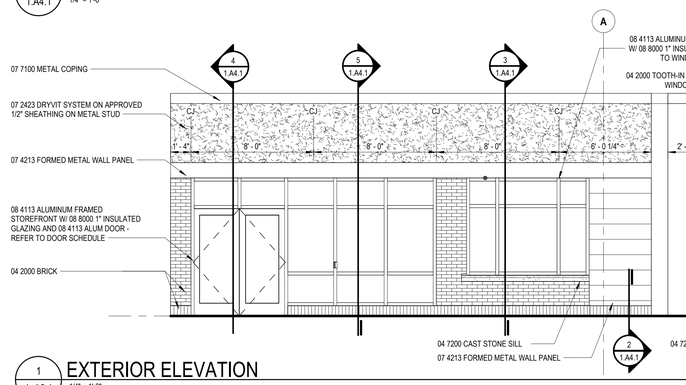

1 1. A0.1 EXTERIOR ELEVATION
1/4" = 1'-0"

LEGEND

ELEVATION MATERIALS
NOTE: NOT ALL SYMBOLS MAY BE USED

- 04 2000 CMU BLOCK
- 04 2000 BRICK MASONRY
- EXISTING BRICK MASONRY
- 09 2900 GYP BOARD
- 07 2423 DRYVIT SYSTEM

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Approved: B. Sundberg
Drawing Scale: As Noted

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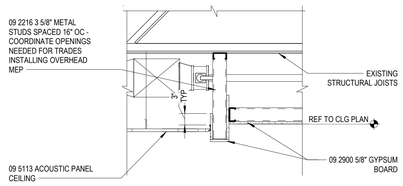
IDS Drawing Title

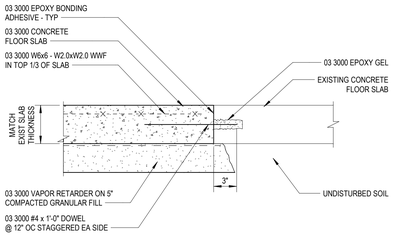
Elevations and Sections

IDS Project Number: 20111-3008

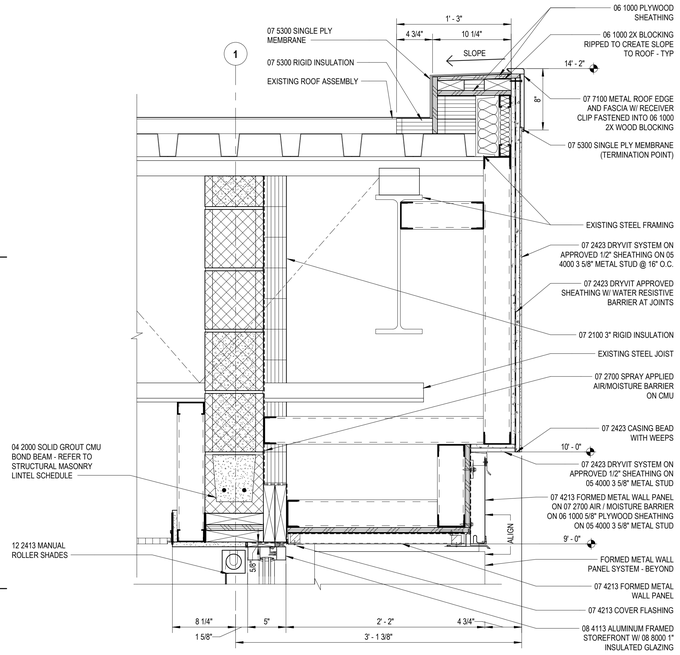
Drawing Number: 1.A4.1



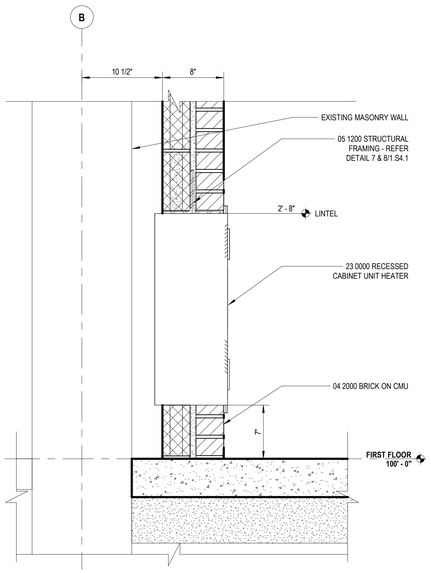
13 SECTION DETAIL
3/4" = 1'-0"



14 CONCRETE FLOOR SLAB INFILL
1 1/2" = 1'-0"



7 SECTION DETAIL
1 1/2" = 1'-0"



12 SECTION DETAIL
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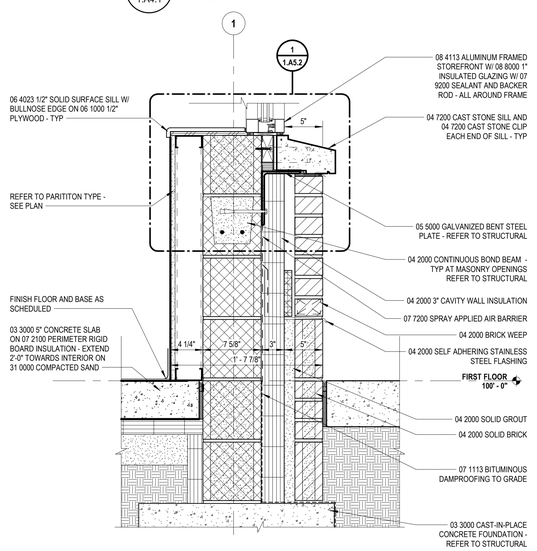

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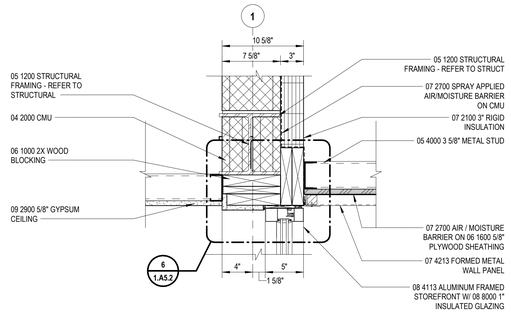

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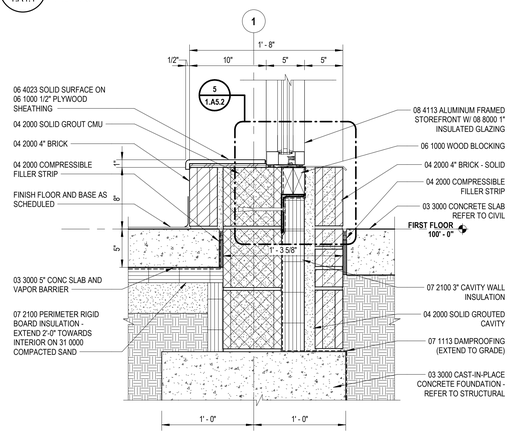
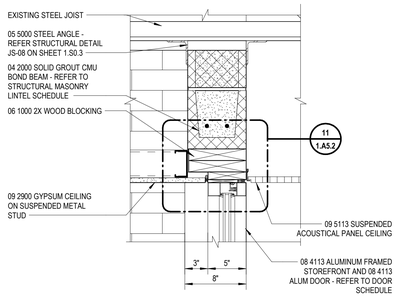
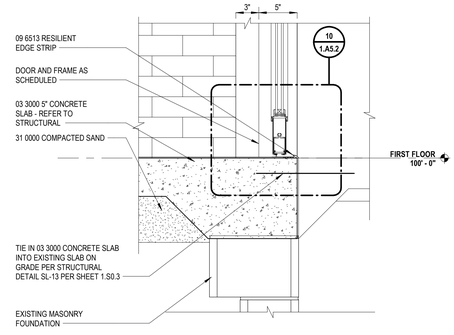


4 SECTION DETAIL
1 1/2" = 1'-0"



3 SECTION DETAIL
1 1/2" = 1'-0"



2 SECTION DETAIL
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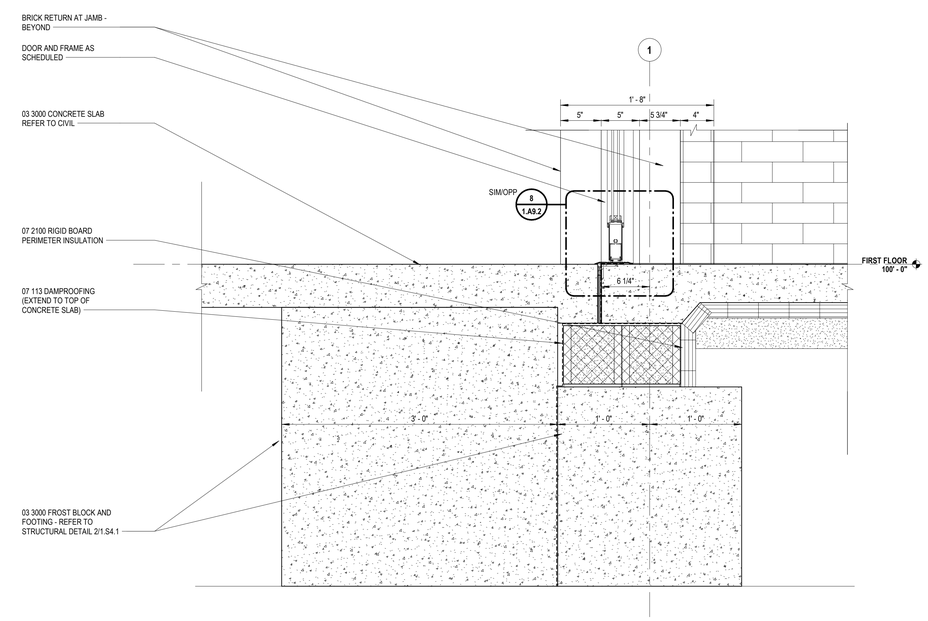

1 SECTION DETAIL
1 1/2" = 1'-0"

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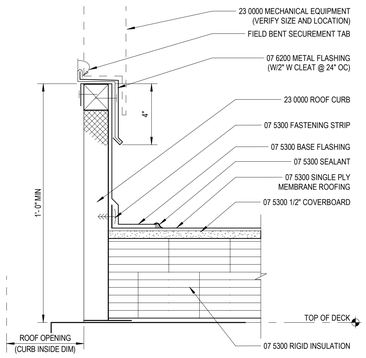
IDS Drawing Title

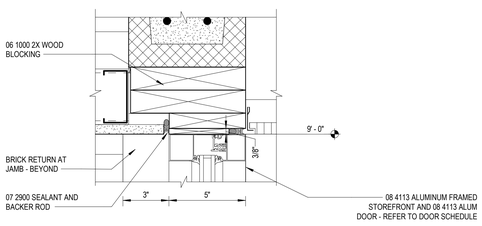
Sections Details

IDS Project Number
20111-3008

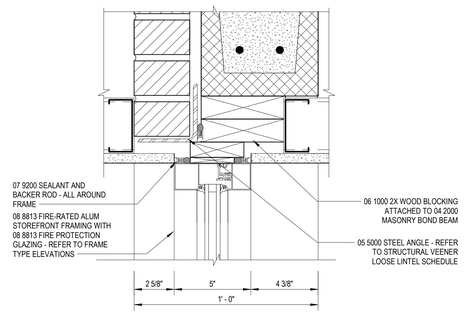
Drawing Number
1.A5.1



14 / 1.A2.1 ROOF CURB (SINGLE PLY MEMBRANE ROOFING)
3" = 1'-0"



11 / 1.A5.1 SECTION DETAIL
3" = 1'-0"



7 / 1.A4.1 SECTION DETAIL
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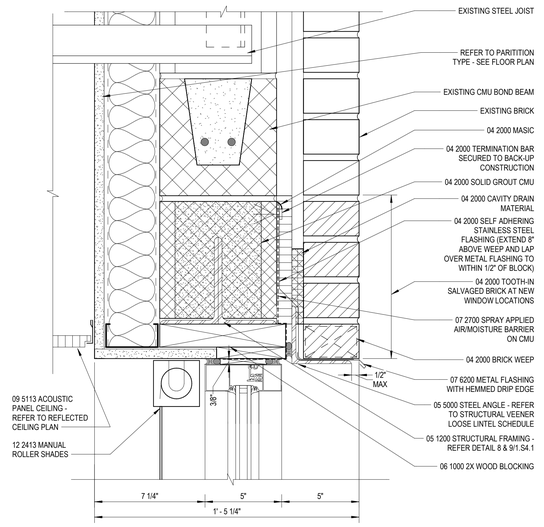

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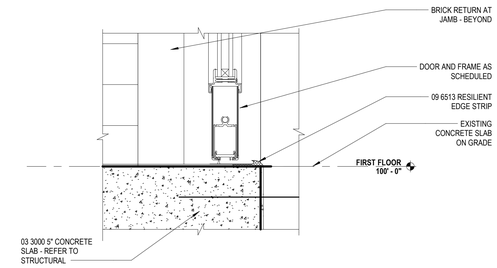

10 / 1.A5.1 SECTION DETAIL
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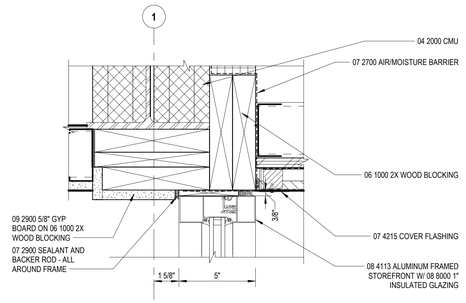

6 / 1.A5.1 SECTION DETAIL
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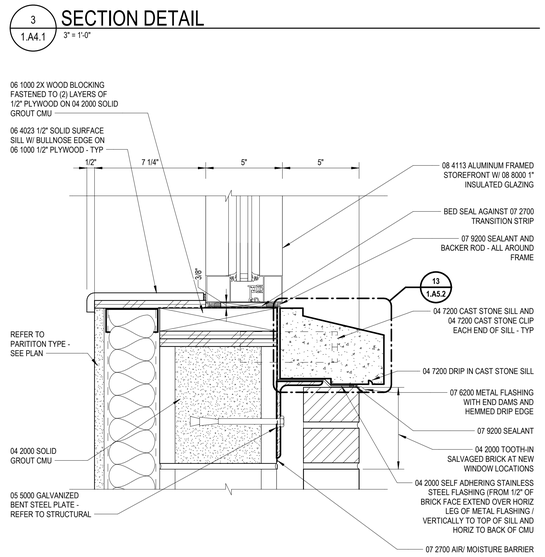
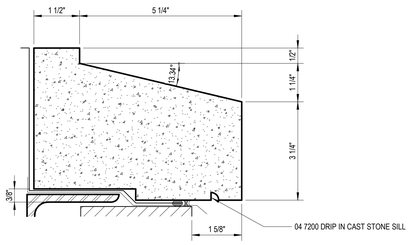
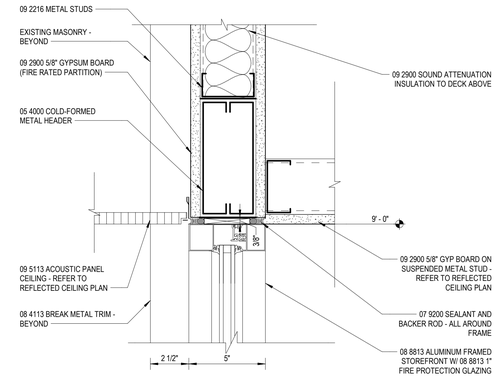


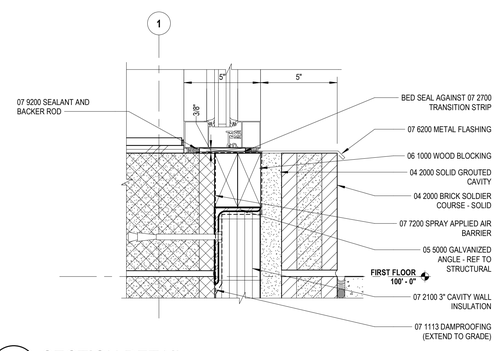
2 / 1.A4.1 SECTION DETAIL
3" = 1'-0"



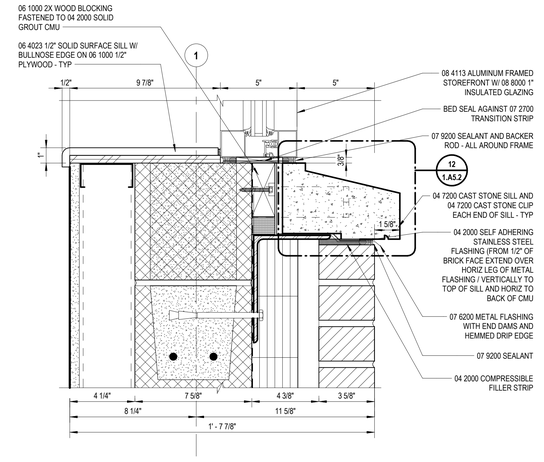
13 / 1.A5.2 CAST STONE SILL PROFILE
6" = 1'-0"



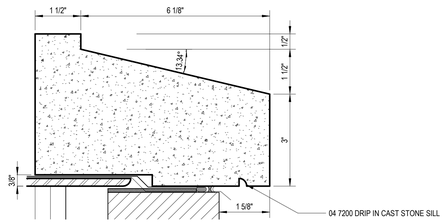
9 / 1.A4.1 SECTION DETAIL
3" = 1'-0"



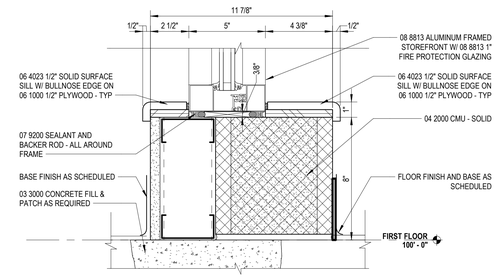
5 / 1.A5.1 SECTION DETAIL
3" = 1'-0"



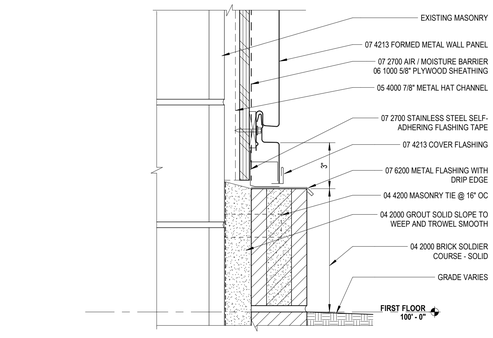
1 / 1.A5.1 SECTION DETAIL
3" = 1'-0"



12 / 1.A5.2 CAST STONE SILL PROFILE
6" = 1'-0"



8 / 1.A4.1 SECTION DETAIL
3" = 1'-0"



4 / 1.A4.1 SECTION DETAIL
3" = 1'-0"

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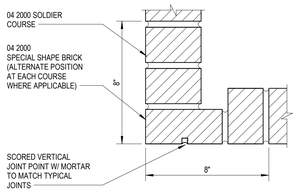
IDS Drawing Title

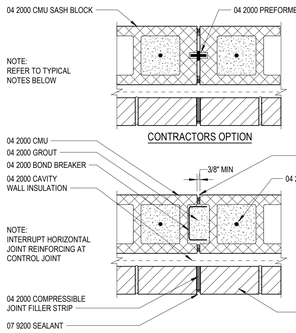
Section Details

IDS Project Number
20111-3008

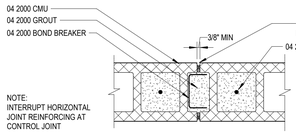
Drawing Number
1.A5.2



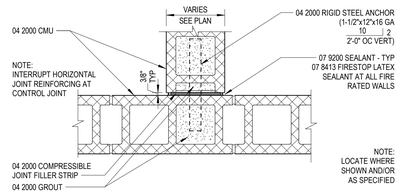
15 BRICK SOLDIER COURSING AT CORNER
3" = 1'-0"



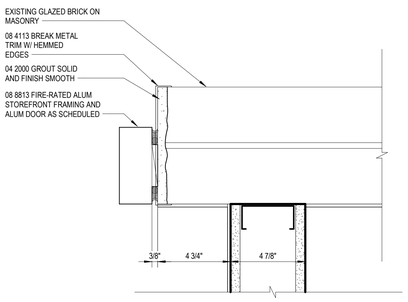
14 EXTERIOR MASONRY WALL CONTROL/EXPANSION JT
1 1/2" = 1'-0"



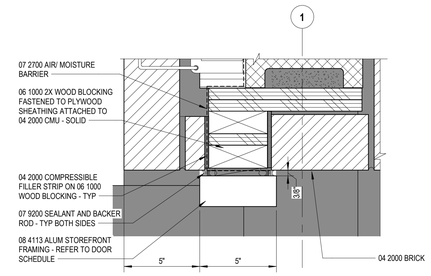
13 INTERIOR MASONRY WALL CONTROL JOINT
1 1/2" = 1'-0"



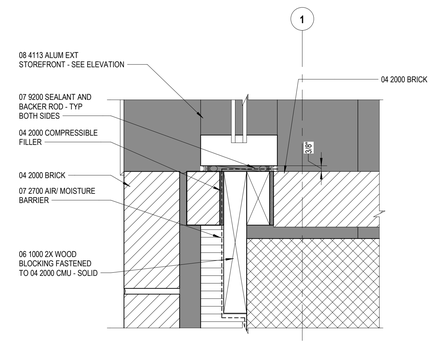
12 INTERIOR MASONRY WALL CONTROL JOINT
1 1/2" = 1'-0"



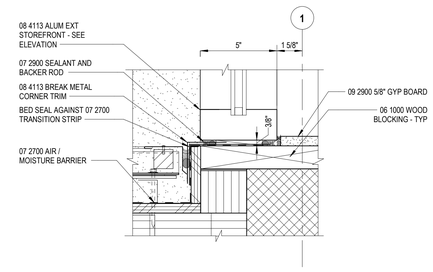
11 PLAN DETAIL
1.A2.1 3" = 1'-0"



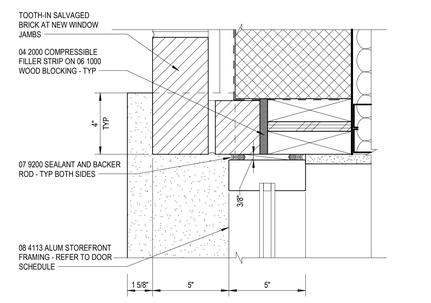
10 PLAN DETAIL
1.A5.3 3" = 1'-0"



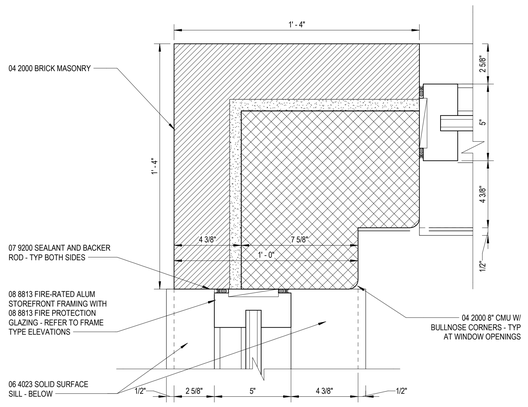
9 PLAN DETAIL
1.A5.3 3" = 1'-0"



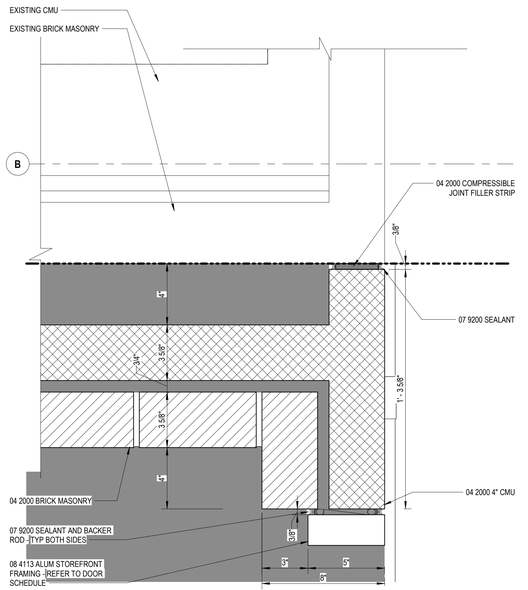
8 PLAN DETAIL
1.A5.3 3" = 1'-0"



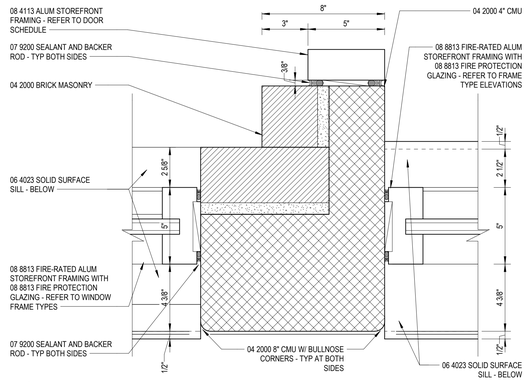
7 PLAN DETAIL
1.A5.3 3" = 1'-0"



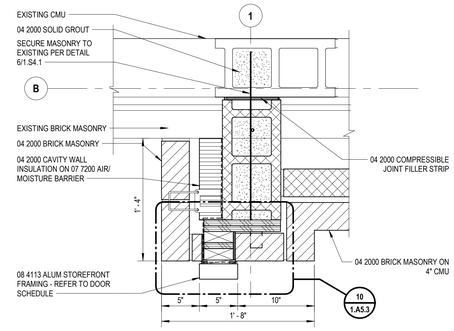
6 PLAN DETAIL
1.A6.1 3" = 1'-0"



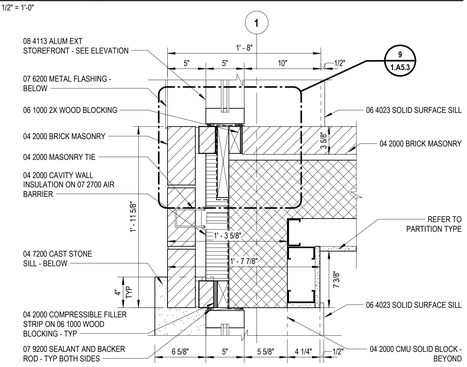
5 PLAN DETAIL
1.A6.1 3" = 1'-0"



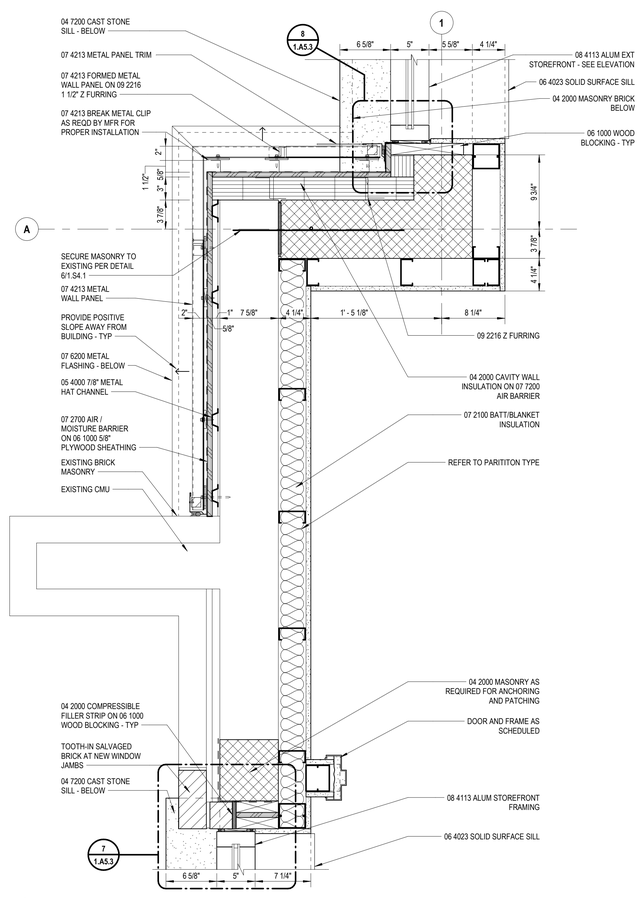
4 PLAN DETAIL
1.A6.1 3" = 1'-0"



3 PLAN DETAIL
1.A6.1 1 1/2" = 1'-0"



2 PLAN DETAIL
1.A6.1 1 1/2" = 1'-0"



1 PLAN DETAIL - ABOVE WINDOW SILL
1.A2.1 1 1/2" = 1'-0"

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B. Sundberg
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Plan Details

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Drawing Number
1.A5.3

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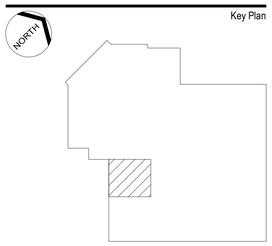

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Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	A. Pelfrey
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	1/4" = 1' - 0"

Issued for	Issue Date
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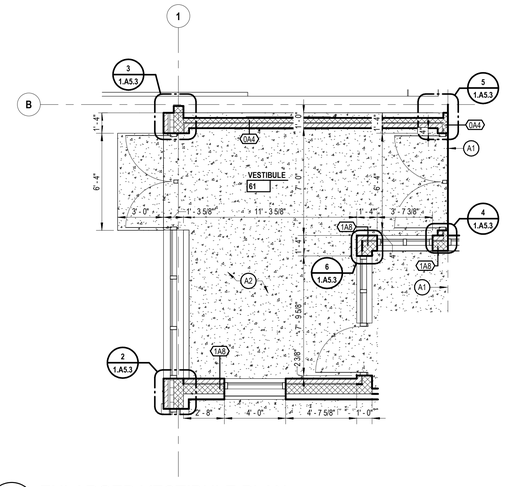
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Enlarged Plan Details

IDS Project Number: 20111-3008

Drawing Number: 1.A6.1



2 / 1.A2.1 ENLARGED VESTIBULE PLAN
1/4" = 1'-0"

KEYNOTES

NEW WORK FLOOR PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

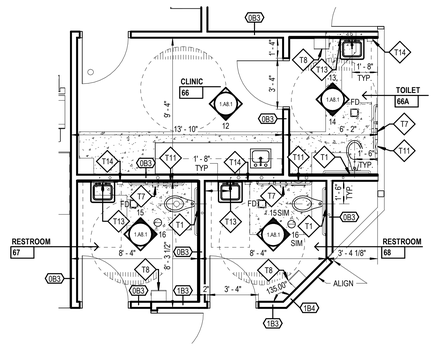
(#) LEGEND SYMBOL INDICATOR

A1 03 3000 PATCH AND REPAIR CONCRETE FLOOR AT LOCATION OF REMOVED WALL OR REMOVED SLAB PORTION. REFER TO STRUCTURAL DETAIL SL-13 PER SHEET 1.S0.3.

A2 03 3000 CONCRETE SLAB ON GRADE. REFER TO FOUNDATION PLAN PER SHEET 1.S1.1.

A3 POWER-OPERATED DOOR

A4 09 6623 TERRAZZO FLOORING AND WALL BASE REPAIR. REFER TO ROOM FINISH SCHEDULE.



1 / 1.A2.1 ENLARGED TOILET ROOM PLANS
1/4" = 1'-0"

LEGEND

TOILET ACCESSORIES
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

REFER TO SPECIFICATION SECTION 10 2800 FOR ADDITIONAL INFORMATION ALL TOILET ACCESSORIES ARE CONTRACTOR FURNISHED AND INSTALLED UON.
(OF/CI): OWNER FURNISHED/OWNER INSTALLED
(OF/CI): OWNER FURNISHED/CONTRACTOR INSTALLED
REFER TO DRAWING 1.AR.0 FOR TYPICAL MOUNTING HEIGHTS

(X) LEGEND SYMBOL INDICATOR

T1 GRAB BAR SET 1 (1) GRAB BAR TYPE 1, (1) GRAB BAR TYPE 2, (1) GRAB BAR TYPE 3 (CF/CI)
T7 TOILET PAPER DISPENSER (OF/CI)
T8 PAPER TOWEL DISPENSER (OF/CI)
T11 SANITARY NAPKIN DISPOSAL (OF/CI)
T13 MIRROR (CF/CI)
T14 SOAP DISPENSER (OF/CI)

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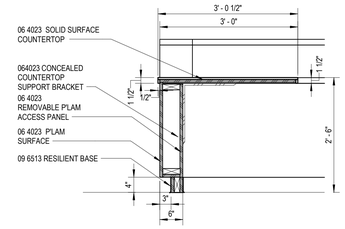
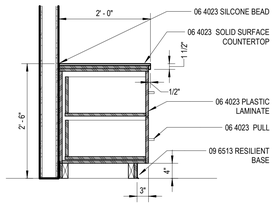
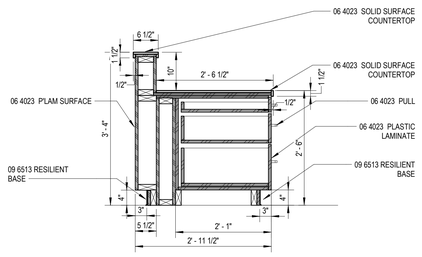


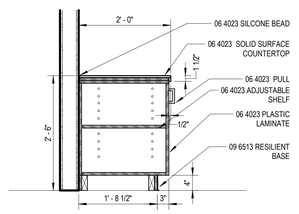
10 / 1.A6.2 RECEPTION DESK - SECTION DETAIL
3/4" = 1'-0"



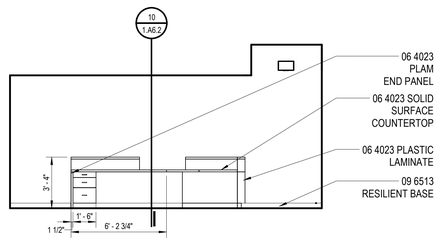
9 / 1.A6.2 RECEPTION DESK - SECTION DETAIL
3/4" = 1'-0"



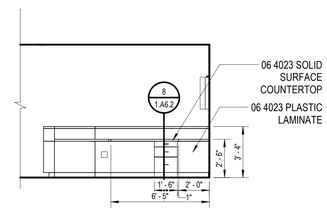
8 / 1.A6.2 RECEPTION DESK - SECTION DETAIL
3/4" = 1'-0"



7 / 1.A6.2 RECEPTION DESK - SECTION DETAIL
3/4" = 1'-0"



6 / 1.A6.2 RECEPTION DESK
1/4" = 1'-0"



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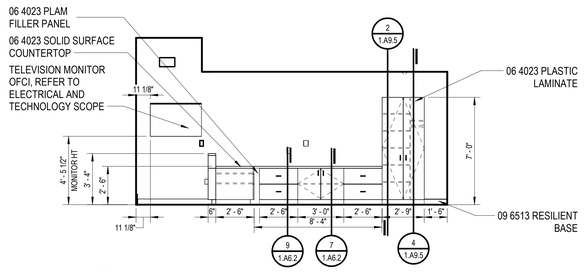
1/4" = 1'-0"



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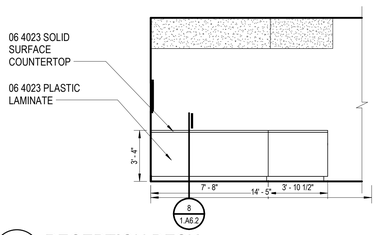
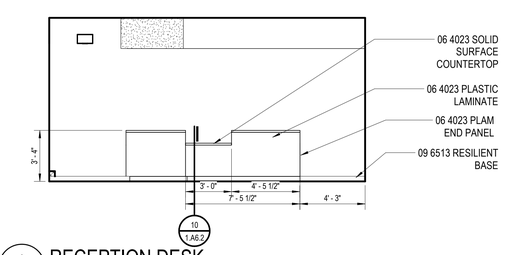
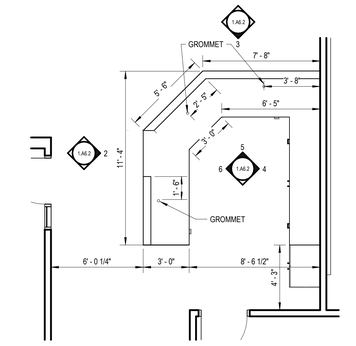
1/4" = 1'-0"



3 / 1.A6.2 RECEPTION DESK
1/4" = 1'-0"



2 / 1.A6.2 RECEPTION DESK
1/4" = 1'-0"



1 / 1.A2.1 RECEPTION DESK ENLARGED PLAN
1/4" = 1'-0"

Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	D. Sandle
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	As Noted

Issued for	Issue Date
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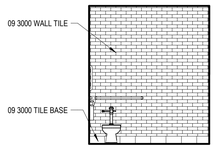
Construction Set	02-10-2025

IDS Drawing Title

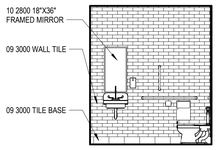
Enlarged Reception Desk Plan

IDS Project Number: 20111-3008

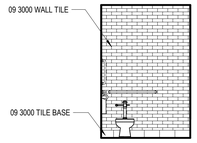
Drawing Number: 1.A6.2



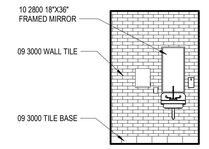
16 1.A6.1 TOILET ROOM
1/4" = 1'-0"



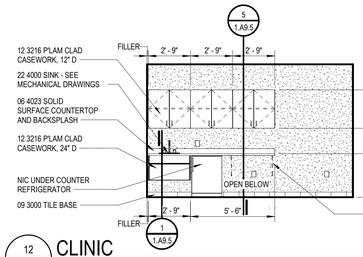
15 1.A6.1 TOILET ROOM
1/4" = 1'-0"



14 1.A6.1 CLINIC TOILET
1/4" = 1'-0"

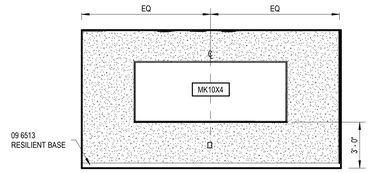


13 1.A6.1 CLINIC TOILET
1/4" = 1'-0"



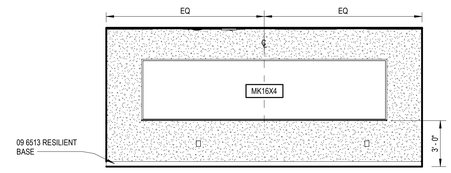
12 1.A6.1 CLINIC
1/4" = 1'-0"

11 1.A2.1 CONFERENCE ROOM
1/4" = 1'-0"

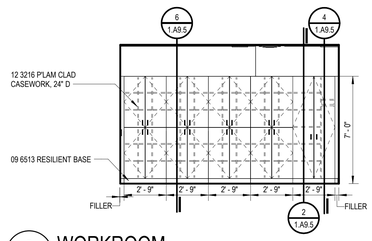


10 1.A2.1 CONFERENCE ROOM
1/4" = 1'-0"

9 1.A2.1 CORRIDOR
1/4" = 1'-0"



8 1.A2.1 WORKSPACE
1/4" = 1'-0"



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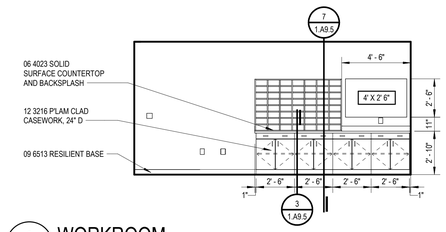
1/4" = 1'-0"



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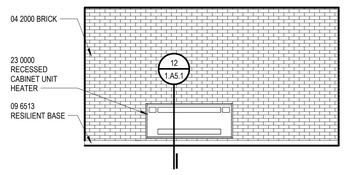
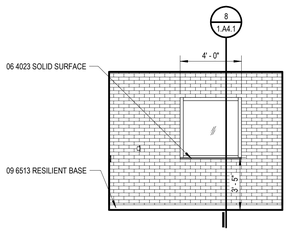
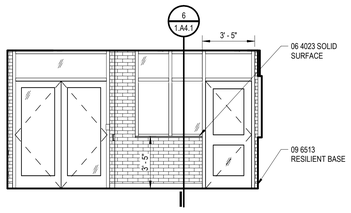
1/4" = 1'-0"



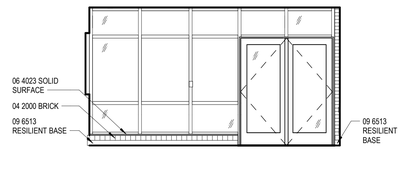
5 1.A2.1 VESTIBULE
1/4" = 1'-0"



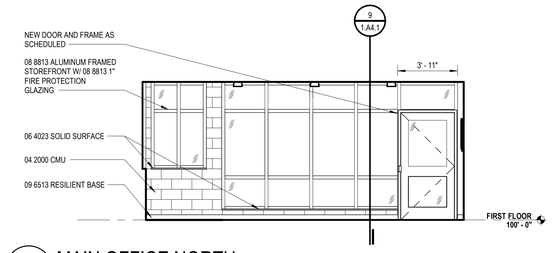
4 1.A2.1 VESTIBULE
1/4" = 1'-0"



3 1.A2.1 VESTIBULE
1/4" = 1'-0"



2 1.A2.1 VESTIBULE
1/4" = 1'-0"



1 1.A2.1 MAIN OFFICE NORTH
1/4" = 1'-0"

GENERAL NOTES

INTERIOR ELEVATIONS

A. ALL DIMENSIONS ARE TO FACE OF GYP BOARD UON.

B. COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND INSTALLATION OF ALL FIXTURES AND EQUIPMENT

C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT ARCHITECT WHEN ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN ON CONSTRUCTION DOCUMENTS.

D. COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING THE SAME. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.

E. FASTEN ALL TALL CASES TO THE ADJOINING WALL THROUGH THE BACK OR SIDE OF THE UNIT.

F. ALL COUNTERTOPS INSTALLED ALONG A WALL OR EQUIPMENT ARE TO HAVE 4" BACKSPLASH AND SIDE SPLASH UON.

G. FINISH ALL EXPOSED ENDS AND BACKS OF FREESTANDING CASEWORK/ MILLWORK.

H. PROVIDE LOCKS ON ALL CABINET DOORS AND DRAWERS UON. ALL LOCKS SHOULD BE KEYED ALIKE BY ROOM, PROVIDE MASTER KEYING.

I. REFER TO A9.1 ROOM FINISH SCHEDULE FOR COLORS AND FINISHES OF MATERIALS

J. REFER TO PLANS, SECTIONS AND DETAILS FOR CASEWORK DEPTH.

K. PROVIDE CABINET FILLERS AS NEEDED.

L. FURNITURE AND SPECIALTY EQUIPMENT BY OTHERS SHOWN FOR REFERENCE ONLY

M. FURNITURE SHOWN AT HALFTONE BY OWNER

N. PROVIDE PARTITION REINFORCEMENT AT LOCATIONS OF WALL MOUNTED EQUIPMENT. REFER TO DETAIL X/AX.X FOR TYPICAL REQUIREMENTS AT NEW CONSTRUCTION. CONDITIONS MAY VARY AT EXISTING PARTITIONS.

O. NOT ALL SIGN LOCATIONS ARE ELEVATED

P. COORDINATE LOCATIONS OF ALL REQUIRED UTILITY CONNECTIONS AND/OR REQUIREMENTS WITH THE TRADE PROVIDING THE SAME

LEGEND

INTERIOR ELEVATIONS
NOTE: NOT ALL SYMBOLS MAY BE USED

XXXX — 06 4023 CASEWORK / MILLWORK TAG

XXXX — 10 1100 VISUAL DISPLAY SURFACE MK= MARKERBOARD, TK=TACKBOARD XXXX INDICATES BOARD SIZE

XXXX — SPECIALTY EQUIPMENT BY OTHERS REFER TO FF&E OR TECHNOLOGY PACKAGES

XX-XX — ACCENT MATERIAL, REFER TO COLOR CODES

LEGEND

ELEVATION MATERIALS
NOTE: NOT ALL SYMBOLS MAY BE USED

04 2000 CMU BLOCK

04 2000 BRICK MASONRY

EXISTING BRICK MASONRY

09 2900 GYP BOARD

07 2423 DRYVIT SYSTEM

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator
A. Maurer
Project Designer
A. Pelfrey
Project Architect / Engineer
C. King
Drawn By
D. Sandle
Q.M. Review
N. LaForest
Approved
B. Sundberg
Drawing Scale
As Noted

Issued for	Issue Date
Design Development	06-24-2024
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Bids	09-13-2024
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IDS Drawing Title

Interior Elevations

IDS Project Number
20111-3008

Drawing Number
1.A8.1

SCHEDULE - COLOR CODES

COLOR CODES	PRODUCT / MATERIAL	MANUFACTURER	PRODUCT NAME / NUMBER	COLOR NAME / NUMBER	SIZE	FINISH	NOTES
AC-01	ACOUSTICAL PANEL	USG	ECLIPSE 76575	WHITE	24"X24" SQUARE EDGE		
B-01	RESILIENT BASE	ROPPE	PINNACLE RUBBER COVE BASE 4"	BLACK 100			
B-02	TILE BASE	CROSSVILLE	ARGENT	CLEAN SLATE	6"X12" COVE BASE		
B-04	TERRAZZO			MATCH EXISTING			TERRAZZO BASE REPAIR
B-05	TILE BASE	AMERICAN OLEAN	THEORETICAL	CREATIVE GRAY	6"X12" COVE BASE		
CPT-06	CARPET TILE	INTERFACE	DETOURS	STEEL	50CM X 50CM		QUARTER TURN INSTALLATION METHOD
E PT-01	EPOXY PAINT	SHERWIN WILLIAMS		FROSTY WHITE SW6196			
ENT-01	CARPET	MANNINGTON COMMERCIAL	FRIXITION ENTRYWAY SYSTEM, CHARGE	KINETIC	18"X36"		INSTALLATION METHOD ASHLAR
FT-01	FLOOR TILE	CROSSVILLE	ARGENT	CLEAN SLATE	6"X6"	UNPOLISHED	STRAIGHT LAY INSTALLATION
FT-03	FLOOR TILE	AMERICAN OLEAN	THEORETICAL	CREATIVE GRAY	12" x 24"		STRAIGHT LAY INSTALLATION
FT-04	FLOOR TILE	AMERICAN OLEAN	THEORETICAL BOLD	AUTHENTIC ORANGE	12" x 24"		STRAIGHT LAY INSTALLATION
LN-01	LINOLEUM	FORBO	MCT	EIGER MCT-629	13"X13"	TOPSHIELD PRO	CORRIDOR FIELD
LN-04	LINOLEUM	FORBO	MCT	LAGUNA MCT-3238	13"X13"	TOPSHIELD PRO	ACCENT
PL-01	PLASTIC LAMINATE	WILSONART		NEO WALNUT 7991-38			
PL-03	PLASTIC LAMINATE	WILSONART		WEATHERED CHAIR 8204K-16			
PT-01	PAINT	SHERWIN WILLIAMS		FROSTY WHITE SW6196			FIELD
PT-03	PAINT	SHERWIN WILLIAMS		HIGH REFLECTIVE WHITE SW7757		FLAT	CEILING
PT-06	PAINT	SHERWIN WILLIAMS		JAMACIA BAY SW6781			ACCENT
PT-07	PAINT	SHERWIN WILLIAMS		BLACK MAGIC SW6991			HOLLOW METAL DOORS AND FRAMES
PT-09	PAINT	SHERWIN WILLIAMS		MARIGOLD SW6664			ACCENT
SC-01	SHADE CLOTH	DRAPER MERMET	GREEN SCREEN EVOLVE 3%	NATURAL			
SS-02	SOLID SURFACE MATERIAL	CORIAN		NEUTRAL CONCRETE			
SS-03	SOLID SURFACE MATERIAL	LG HI-MACS		HAZE / M308			WINDOW SILLS
SS-04	SOLID SURFACE MATERIAL	LG HI-MACS		RIPE COTTON GS18R			RECEPTION DESK
TK-02	TACKBOARD	MAHARAM	MESSENGER	TANGELO 053			
TZ-01	TERRAZZO						TERRAZZO FLOOR REPAIR
WD-01	WOOD DOORS	VT INDUSTRIES		WHITE OAK		CLEAR	
WT-01	WALL TILE	AMERICAN OLEAN	COLORSTORY	BALANCE 14	3"X6"		1/3RD OFFSET INSTALLATION

SCHEDULE - WINDOW SHADES

TYPE	LENGTH	WIDTH	HOUSING	MANUFACTURER	MATERIAL	MECHANISM	MOUNTING
W3	6' - 2"	8' - 0"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	INSIDE MOUNT, SMALL HEADBOX
W3: 1							
W6	6' - 2"	2' - 4"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	INSIDE MOUNT, SMALL HEADBOX
W6: 2							
W7	4' - 0"	4' - 0"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	INSIDE MOUNT, SMALL HEADBOX
W7: 1							

SCHEDULE - ROOM FINISH

NUMBER	NAME	FLOOR	BASE	WALL	CEILING	REMARKS
61	VESTIBULE	ENT-01	B-01	PT-01	GYP-01	6
62	MAIN OFFICE	CPT-06	B-01	PT-01,PT-09	AC-01,GYP-01,PT-03	5,6
64	OFFICE	CPT-06	B-01	PT-01	AC-01	3,6
65	CONFERENCE	CPT-06	B-01	PT-01,PT-09	AC-01	3,6
63	WORK ROOM	CPT-06	B-01	PT-01	AC-01	4,5,7
66	CLINIC	FT-03,FT-04	B-05	E PT-01	AC-01	2,9
66A	TOILET	FT-03,FT-04	B-05	WT-01	GYP-01,PT-03	2
67	RESTROOM	FT-03,FT-04	B-05	WT-01	GYP-01,PT-03	2
69	WORKSPACE	CPT-06	B-01	PT-01,PT-09	AC-01	4,7,8
C2	CORRIDOR	(E),TZ-01	(E),B-04	PT-01, (E)	AC-01,(E)	10,12,13
68	RESTROOM	FT-03,FT-04	B-05	WT-01	GYP-01,PT-03	2
N3	NEIGHBORHOOD C	(E),LN-01,LN-04	(E),B-01	(E),PT-01,PT-06	AC-01,(E)	8,11
63A	STORAGE	CPT-06	B-01	PT-01	AC-01	
C1	CORRIDOR	(E),TZ-01	(E),B-04	(E)	(E)	8,12,13
C3	CORRIDOR	(E),TZ-01	(E),B-04	(E)	(E)	8,12,13

ABBREVIATIONS

ROOM FINISH SCHEDULE

AC PANEL	ACOUSTICAL PANEL
ACT	ACOUSTICAL CEILING TILE
CC	COLOR CODE
CG	CORNER GUARD
CMU	CONCRETE MASONRY UNIT
CT	CERAMIC TILE
CEM PLAS	CEMENT PLASTER
CONC	CONCRETE
DEFS	DIRECT APPLIED EXTERIOR FINISH SYSTEM
(E)	EXISTING FINISH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EPT	EPOXY PAINT
E TERR	EPOXY TERRAZZO
ENTR MAT	ENTRY MAT SYSTEM
EXP CONST	EXPOSED CONSTRUCTION
FWC	FABRIC WALL COVERING
GF CMU	GROUND FACE CONCRETE MASONRY UNIT
GL CMU	GLAZED CONCRETE MASONRY UNIT
GYP BD	GYPSUM BOARD
HD/SLR	HARDENER/ SEALER
IR GYP BD	IMPACT RESISTANT GYPSUM BOARD
LIMEST	LIMESTONE
LINO	LINOLEUM
MCC	MULTI-COLORED COATING
MTL	METAL
MTL PNL	METAL PANEL
P LAM	PLASTIC LAMINATE
PAVER T	PAVER TILE
PLAS	PLASTER
POL CONC	POLISHED CONCRETE
PORC T	PORCELAIN TILE
PT	PAINT
QT	QUARRY TILE
RAF	RAISED ACCESS FLOORING
RT	RUBBER TILE
RESIN FLR	RESINOUS FLOORING
RESIL	RESILIENT
SGFT	STRUCTURAL GLAZED FACING TILE
SHT V	SHEET VINYL
SSM	SOLID SURFACE MATERIAL
ST STL	STAINLESS STEEL
STN	STAIN
TC	TRAFFIC COATING
TERR	TERRAZZO
VCT	VINYL COMPOSITION TILE
VWC	VINYL WALLCOVERING
VEN PLAS	VENEER PLASTER
WD	WOOD

GENERAL NOTES

ROOM FINISH SCHEDULE

* REFER TO ABBREVIATIONS LIST FOR MATERIAL CODE DESCRIPTIONS

A. "ROOM NUMBER AND ROOM NAME" CORRESPOND TO THE NUMBER AND NAMES INDICATED ON THE SHEETS.

B. "MATERIAL/FINISH" INDICATE THE SPECIFIC MATERIALS AND FINISHES TO BE USED TO CONSTRUCT AND FINISH THE FLOORS, BASE, WALLS AND CEILINGS.

C. "CC" INDICATES THE COLOR CODE FOR EACH MATERIAL AND/OR FINISH, REFER TO "COLOR CODES".

D. "REMARKS" INDICATES ANY SPECIAL REQUIREMENTS FOR THE MATERIAL AND FINISH IN A ROOM - SEE "ROOM FINISH SCHEDULE REMARKS".

E. "CEILING" IS THE MATERIAL AND FINISH AT THE UNDERSIDE OF THE FLOOR OR ROOF ABOVE. "SOFFIT" IS THE MATERIAL AND FINISH AT THE UNDERSIDE OF THE STAIR RUN.

F. REFER TO 1.A2.1 FOR FLOOR TILE PATTERNS AND MATERIALS.

G. REFER TO A8 SERIES FOR INTERIOR ELEVATIONS.

H. "E" PREFIX TO THE "PT" CODE REFER TO EPOXY PAINT MATERIAL (E PT-XX).

REMARKS

ROOM FINISH SCHEDULE

1. NOT USED
2. GROUT AT FLOOR TILE TO BE TEC ACCUCOLOR EFX, COLOR: 939 MIST. GROUT AT WALL TILE TO BE TEC ACCUCOLOR EFX, COLOR: 949 SILVERADO. TRANSITION AT CERAMIC FLOOR TILE TO BE MARBLE THRESHOLD. STRAIGHT GRID INSTALLATION.
3. ROLLER SHADES SC-01 TO RUN FULL LENGTH OF GLAZING OPENING. VIF - FOR OPENING SIZE.
4. TACKBOARD MATERIAL TK-02
5. PLASTIC LAMINATE PL-03, SOLID SURFACE SS-04
6. SOILD SURFACE MATERIAL AT WINDOW SILLS IS SS-03
7. TRANSITION AT CARPET TO LINOLEUM OR CARPET TO EXISTING TO BE SCHLUTER RENO U AEU 100 IN SATIN ANODIZED ALUMINUM
8. TOUCH UP PAINT REQUIRED. PATCH/REPAIR/PAINT ALL LOCATIONS WHERE WALL MOUNTED ITEMS ARE REMOVED, INCLUDING BUT NOT LIMITED TO CLOCKS, ALARMS, WIREWAYS, ETC. OR WHERE SELECTIVE DEMOLITION OCCURS - COORDINATE EXTENTS WITH DEMO AND NEW WORK.
9. PLASTIC LAMINATE PL-01, SOLID SURFACE SS-02
10. PT-01 AND B-04 AT NEW WALL
11. NEW FLOORING, BASE, AND PAINT OCCURS ONLY IN AREAS WHERE NEW CONSTRUCTION OCCURS
12. TZ-01 AND B-04 AT TERRAZZO FLOORING AND WALL BASE REPAIRS; REFER TO 1/1.A0.1 FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY
13. TZ-01 AND B-04 AT TERRAZZO FLOORING AND WALL BASE REPAIRS; REFER TO 2/1.A0.1 FIRST FLOOR COMPOSITE PLAN - SAVAGE ELEMENTARY

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

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Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	D. Sandle
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	As Noted

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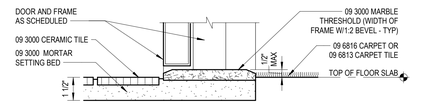
Bulletin No.1	12-20-2024
Construction Set	02-10-2025

IDS Drawing Title

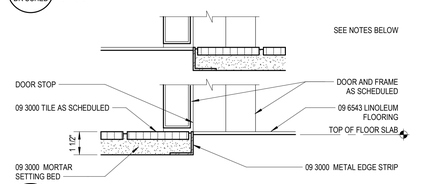
Room Finish Schedule

IDS Project Number: **20111-3008**

Drawing Number: **1.A9.1**



14 DR SCHED **SILL** 3" = 1'-0"



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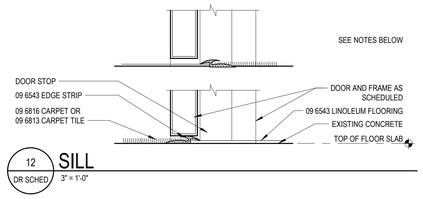

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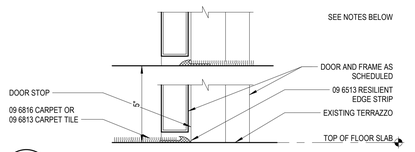

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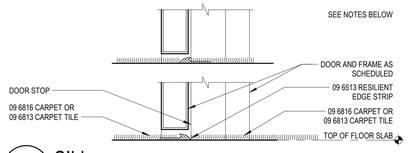
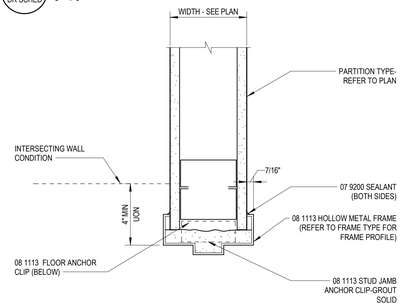
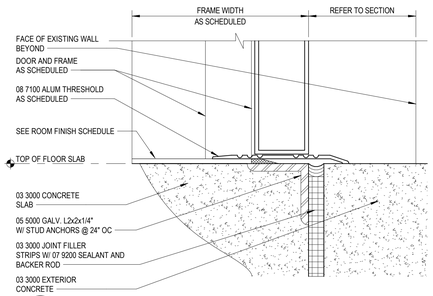


10 DR SCHED **SILL** 3" = 1'-0"



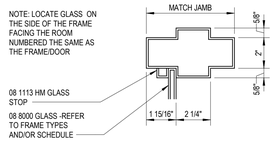
9 DR SCHED **JAMB(HEAD SIM) - HOLLOW METAL** 3" = 1'-0"



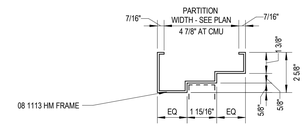
8 DR SCHED **SILL** 6" = 1'-0"

DOOR SCHEDULE

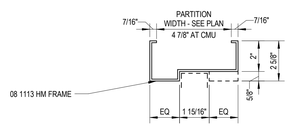
DOOR NUMBER	DOOR SIZE WIDTH	LEAF 1	LEAF 2	HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH/ CC	DOOR FRGM	FRAME TYPE	FRAME MATERIAL	FRAME FINISH / CC	FRAME FRGM	DETAILS HEAD	JAMB	SILL	HARDWARE SET	DOOR ASSEMBLY RATING	WALL RATING	REMARKS
48	6' - 0"	3' - 0"	3' - 0"	7' - 0"	(E)	(E)	(E)	-	(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14
61	6' - 0"	3' - 0"	3' - 0"	7' - 0"	FG2	AL	FAC	-	SEE ELEV.	AL	ANOD-BL	-	6/1.A5.2	3/1.A5.3	8/1.A9.2	1.5	-	-	1, 3
61.1	6' - 0"	3' - 0"	3' - 0"	7' - 0"	FG2	AL	FAC	-	SEE ELEV.	AL	ANOD-BL	-	11/1.A5.2	5/1.A5.3	10/1.A5.2	2.5	-	-	1, 3
62	3' - 0"	3' - 0"		7' - 0"	FG2	AL	FAC	W-OH-D-H-T-60, FRG-04	SEE ELEV.	AL	ANOD-BL	W-OH-D-H-T-60, FRG-04	7/1.A5.2	SIM 6/1.A5.3	-	2.0	60	60	1, 3
62.1	3' - 6"	3' - 6"		7' - 0"	FG2	AL	FAC	D-20	SEE ELEV.	AL	ANOD-BL	W-OH-D-H-T-60, FRG-04	9/1.A5.2	11/1.A5.3	11/1.A9.2	3.0	20	60	1, 3
63	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	D-20	B	HM	PT-07	H	9/1.A9.2	9/1.A9.2	12/1.A9.2	4.0	20	60	1
63.1	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	5.0			
64	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	B	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	6.0	-	-	
65	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	B	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	8.0	-	-	
65.1	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	6.0			
66	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	14/1.A9.2	6.0			
66.1	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	-	7.0	-	-	
67	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	A	HM	PT-07	-	9/1.A9.2	9/A9.2	14/1.A9.2	7.01			
68	3' - 0"	3' - 0"		7' - 0"	F	WD	WD-01	-	A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	13/1.A9.2	7.01	20	60	
69	3' - 0"	3' - 0"		7' - 0"	N	WD	WD-01	D-20	A	HM	PT-07	-	9/1.A9.2	9/1.A9.2	12/1.A9.2	6.01	20	60	
102	6' - 0"	3' - 0"	3' - 0"	7' - 0"	(E)	(E)	(E)	-	(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14
C1	6' - 0"	3' - 0"	3' - 0"	7' - 0"	(E)	(E)	(E)	-	(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14
C3	6' - 0"	3' - 0"	3' - 0"	7' - 0"	(E)	(E)	(E)	-	(E)	(E)	(E)	-	(E)	(E)	(E)	10.0	-	-	12, 13, 14



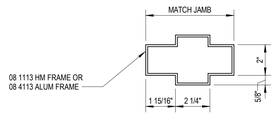
5 1.A9.2 **FRAME - HM W/ GLASS** 3" = 1'-0"



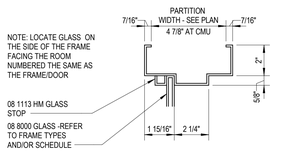
6 1.A9.2 **FRAME - DOUBLE EGRESS JAMB** 3" = 1'-0"



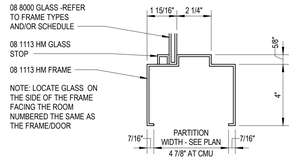
7 1.A9.2 **FRAME - DOUBLE EGRESS HEAD** 3" = 1'-0"



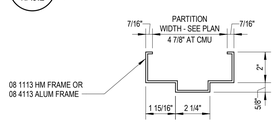
2 1.A9.2 **FRAME - HM** 3" = 1'-0"



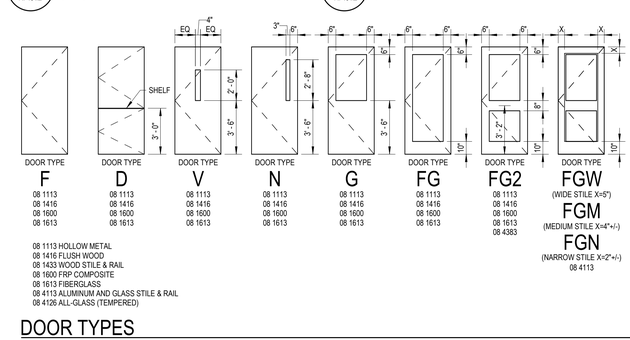
3 1.A9.2 **FRAME - HM W/ GLASS** 3" = 1'-0"



4 1.A9.2 **FRAME - HM W/ GLASS** 3" = 1'-0"



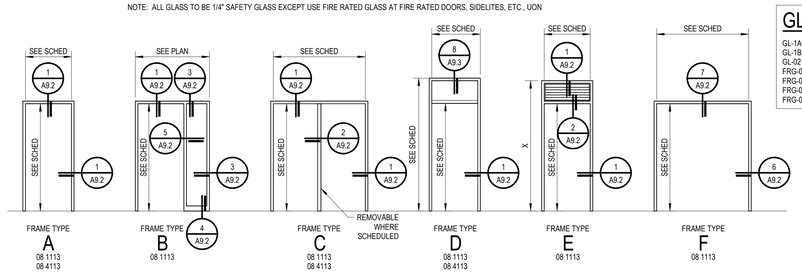
1 1.A9.2 **FRAME - HM** 3" = 1'-0"



DOOR TYPES

1/4" = 1'-0"

NOTE: ALL GLASS TO BE 1/4" SAFETY GLASS EXCEPT USE FIRE RATED GLASS AT FIRE RATED DOORS, SIDELITES, ETC., UON



NOTE: ALL GLASS TO BE 1/4" SAFETY GLASS EXCEPT USE 08 8813 FIRE RATED GLASS (FRG) AT FIRE RATED DOORS, SIDELITES, ETC., UON

GLAZING TYPE LEGEND

GL-1A - LOW-E-COATED, CLEAR, INSULATING GLASS
GL-1B - LOW-E-COATED, CLEAR, INSULATING SAFETY GLASS
GL-02 - CLEAR, NON-INSULATED, SAFETY GLASS
FRG-01 - 20 MINUTE FIRE-PROTECTION-RATED GLAZING
FRG-02 - FIRE-PROTECTION-RATED GLAZING (DOOR LITES)
FRG-03 - 60 MINUTE FIRE-PROTECTION-RATED GLAZING
FRG-04 - 60 MINUTE FIRE-RESISTANCE-RATED GLAZING

GENERAL NOTES

DOOR SCHEDULE

A. REFER TO THE DRAWINGS FOR DOOR LOCATIONS

B. "DOOR NUMBER" CORRESPONDS TO THE DOOR NUMBER INDICATED ON THE DRAWINGS. NOTE: AT EXISTING WALL OPENINGS, FIELD VERIFY SIZE OF DOORS AND FRAMES.

C. (DOOR) "SIZE" INDICATES THE NOMINAL WIDTH AND HEIGHT OF THE DOOR IN FEET AND INCHES. ALL DOORS ARE 1 3/4" THICK UNLESS OTHERWISE NOTED.

D. "DOOR AND FRAME TYPE/MATL/FINISH" INDICATES THE CODES FOR TYPE (INDICATED ON THE DRAWINGS), MATERIAL AND FINISH.

E. "CC" INDICATES THE COLOR CODE FOR FINISHES OF DOORS AND FRAMES, SEE "SCHEDULE - COLOR CODES".

F. "DETAILS HEAD- JAMB-SILL" INDICATES THE DETAIL NUMBER INDICATED ON THE DRAWINGS.

G. "HARDWARE SET" INDICATES HARDWARE SET NUMBERS SPECIFIED IN 08 7100 - DOOR HARDWARE.

H. "DOOR ASSEMBLY RATING" INDICATES THE MINIMUM FIRE RESISTANCE RATING FOR FIRE DOORS AND/OR SIDELITES.

I. "WALL RATING" INDICATES THE FIRE RESISTANCE RATING OF THE WALL CONTAINING THE DOOR.

J. "FRGM" INDICATES FIRE-RATED GLAZING MARKINGS.

K. "REMARKS" INDICATES ANY SPECIAL REQUIREMENTS FOR A DOOR AND FRAME - SEE "DOOR SCHEDULE - REMARKS".

REMARKS

DOOR SCHEDULE

1. ACCESS CONTROL SYSTEM
2. REMOVABLE MULLION
3. LOW ENERGY POWER OPERATED DOOR
4. POWER OPERATED DOOR PACKAGE DOOR ASSEMBLY (ALL HARDWARE BY DOOR MANUFACTURER)
5. HOLLOW METAL ASTRAGAL
6. DOOR FRAME TO REMAIN - ONLY REPLACE DOOR LEAF AND HARDWARE - PATCH, REPAIR, AND FILL HOLES ON DENTS ON THE EXISTING FRAME.
7. VERIFY DIMENSIONS IN FIELD
8. RE-CERTIFY FRAME FOR 20 MINUTE FIRE DOOR ASSEMBLY RATING.
9. 180 DEGREE SWING
10. DOOR TO RECEIVE NEW OR SALVAGED DOOR BARRICADE HARDWARE - BY OTHERS
11. BATTERY POWERED ELECTRONIC CLASSROOM HARDWARE
12. MAGNETIC HOLD-OPENS
13. DOOR AND FRAME - EXISTING TO REMAIN
14. DOOR LOCATIONS FOR BOTH BUILDINGS SHOWN ON SHEET 1.A0.1

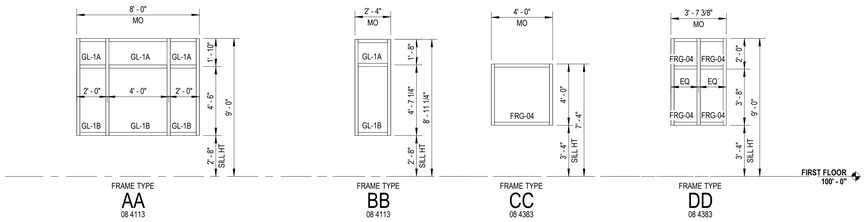
FIRE-RATED GLAZING ASSEMBLIES MARKING

W	MEETS WALL ASSEMBLY CRITERIA
OH	MEETS FIRE WINDOW ASSEMBLY CRITERIA INCLUDING THE HOSE STREAM TEST
D	MEETS FIRE DOOR ASSEMBLY CRITERIA
H	MEETS FIRE DOOR ASSEMBLY "HOSE STREAM" TEST
T	MEETS 450 DEG F TEMPERATURE RISE CRITERIA FOR 30 MINUTES
NT	DOES NOT MEET 450 DEG F TEMPERATURE RISE CRITERIA FOR 30 MINUTES
XXX	TIME IN MINUTES OF THE FIRE RESISTANCE OR FIRE PROTECTION RATING OF THE GLAZING ASSEMBLY

ABBREVIATIONS

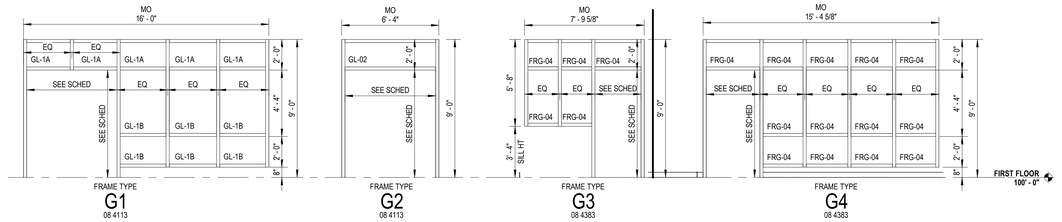
DOOR SCHEDULE

ALUM	ALUMINUM
ANOD	ANODIZED
CC	COLOR CODES
(E)	EXISTING
FBR	FIBERGLASS
FRP	FIBERGLASS REINFORCED PANEL
FAC	FACTORY
GL	GLASS
180	180 MINUTES (3 HOUR)
90	90 MINUTES (1 1/2 HOUR)
60	60 MINUTES (1HOUR)
45	45 MINUTES (3/4 HOUR)
20	20 MINUTES (1/3 HOUR)
HM	HOLLOW METAL
HDWE	HARDWARE
MATL	MATERIAL
P LAM	PLASTIC LAMINATE
PT	PAINT
PVF	POLYVINYL FLUORIDE COATING (KYNAR)
STN	STAIN
ST STL	STAINLESS STEEL
STL	STEEL
WD	WOOD
WM	WIRE MESH



WINDOW TYPES

1/4" = 1'-0"



FRAME TYPES

1/4" = 1'-0"

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STRUCTURAL ENGINEER
SDI Structures
275 east liberty
ann arbor, michigan 48101
734.213.6091
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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator: A. Maurer
Project Designer: A. Pelfrey
Project Architect / Engineer: C. King
Drawn By: A. Pelfrey
Q.M. Review: N. LaForest
Approved: B. Sundberg
Drawing Scale: As Noted

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Addendum No.2	10-25-2024
Construction Set	02-10-2025

IDS Drawing Title

Door Schedule and Details

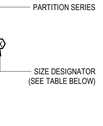
IDS Project Number: 20111-3008

Drawing Number: 1.A9.2

GENERAL NOTES

INTERIOR PARTITIONS

1. "WALL" AND "PARTITION" ARE USED TO DENOTE EITHER WALLS OR PARTITIONS INTERCHANGEABLY.
2. REFER TO SHEET AR.0 - ARCHITECTURAL REFERENCE INFORMATION FOR ABBREVIATIONS, SYMBOLS, AND GRAPHIC INDICATIONS.
3. REFER TO COMPOSITE LIFE SAFETY PLANS FOR PARTITION FIRE RATINGS.
4. REFER TO ROOM FINISH SCHEDULE FOR WALL FINISHES AND WALL BASE.



MATERIAL	DESIGNATION SIZE	ACTUAL SIZE	SPACING
MASONRY	4 6 8 12	3 5/8 " 5 5/8 " 7 5/8 " 11 5/8 "	N/A
STEEL STUDS	1 2 3 4 6	1 5/8 " 2 1/2 " 3 5/8 " 4" 6"	16" OC
FURRING	0 1 2 3	7/8 " 1 5/8 " 2 1/2 " 3 5/8 "	16" OC
SHAFTWALL C-H STUDS	2 4 6	2 1/2 " 4" 6"	24" OC

5. SUBSTITUTE 09 2900 - TILE BACKING BOARD AT LOCATIONS TO RECEIVE A TILE WALL FINISH.
6. ALL NON-LOAD BEARING METAL WALL FRAMING SHALL BE BASED ON TOTAL STUD HEIGHT. REFER TO SPECIFICATION SECTIONS 05 4000 - COLD-FORMED METAL FRAMING, 09 2116 - GYPSUM BOARD SHAFT WALL ASSEMBLIES AND 09 2216 - NON-STRUCTURAL METAL FRAMING FOR ADDITIONAL REQUIREMENTS.
7. WHERE ROOMS WITH DIFFERENT PARTITION REQUIREMENTS ARE ADJACENT, THE PARTITION WITH THE GREATER FIRE-RATING AND/OR STC SHALL BE USED BETWEEN THEM.
8. AT INTERSECTIONS OF DIS-SIMILAR PARTITON TYPES, THE HIGHEST RATED PARTITION IS TO RUN THROUGH THE INTERSECTION TO MAINTAIN ENCLOSURE. MAINTAIN RATING OF RATED PARTITION AT INTERSECTION WITH COLUMN ENCLOSURES BY EXTENDING RATED CLOSURE AS REQUIRED.
9. FIRE-RATED PARTITIONS SHALL BE CONSTRUCTED ACCORDING TO THE FIRE TEST INDICATED. NO SUBSTITUTIONS OF MATERIALS OR DEVIATIONS FROM CONSTRUCTION ARE ALLOWED. ADDITIONAL LAYERS MAY BE REQUIRED FOR ACOUSTICAL OR OTHER REASONS AND MUST BE EXECUTED AS SHOWN.
10. STC RATINGS ARE MINIMUM ACOUSTICAL PERFORMANCE REQUIREMENT. SPECIFIC ACOUSTICAL TESTS ARE GIVEN FOR REFERENCE ONLY. SOUND ATTENUATION BLANKET THICKNESS SHALL BE AS FOLLOWS:
    A. 1 1/2 " FOR PARTITIONS WITH 1 5/8 " AND 2 1/2 " STUDS (INCLUDING SHAFTWALLS).
    B. 3" FOR PARTITIONS WITH 3 5/8 ", 4" OR 6" STUDS.
    C. 3" FOR SHAFTWALLS WITH 4" OR 6" STUDS UNO.
    D. AS REQUIRED FOR FIRE RATING.
11. DETAILS ARE DIAGRAMMATIC - PRECISE REQUIREMENTS OF TESTS ASSEMBLIES SHALL GOVERN.

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Project Title

Van Buren Public Schools

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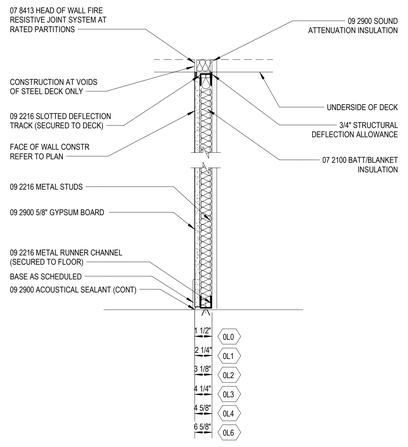
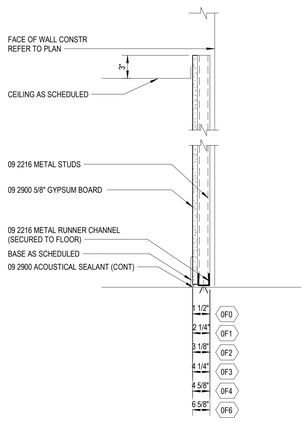
Key Plan



PARTITION SERIES 'L'



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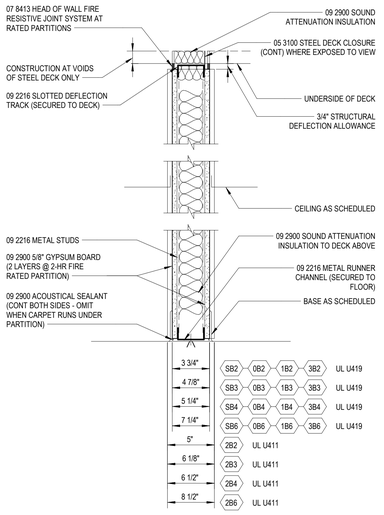
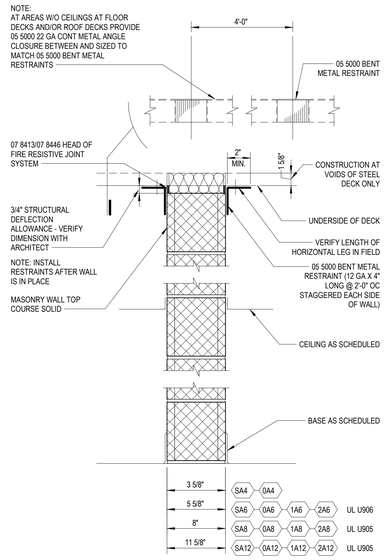


PARTITION SERIES 'B'



PARTITION SERIES 'A'

Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	A. Pelfrey
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	As Noted

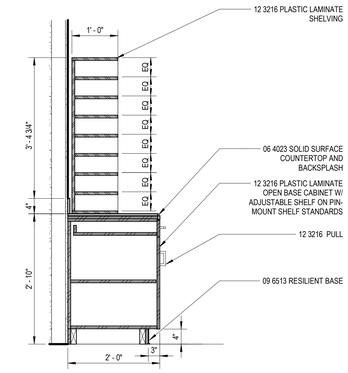
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

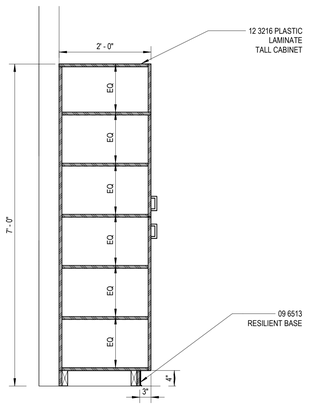
Partition Types

IDS Project Number: 20111-3008

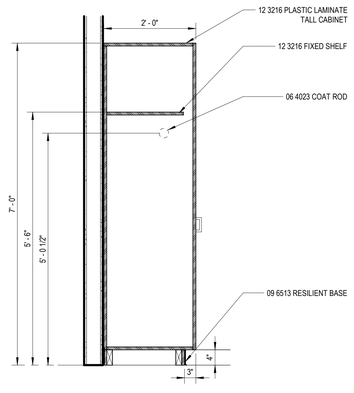
Drawing Number: 1.A9.4



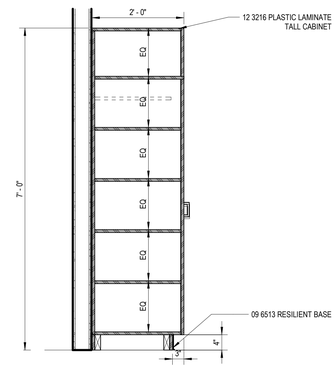
7 / 1.A8.1 MAILBOX - SECTION DETAIL
3/4" = 1'-0"



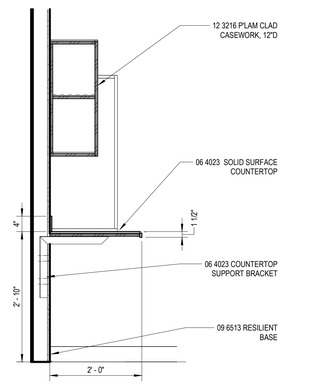
6 / 1.A8.1 TALL CABINET - SECTION DETAIL
3/4" = 1'-0"



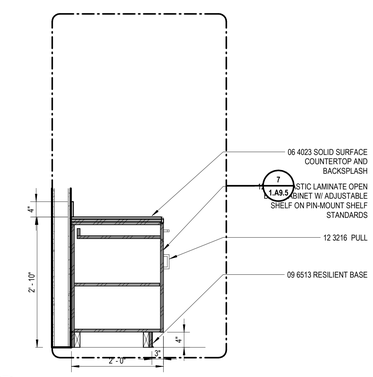
4 / 1.A6.2 TALL CABINET - SECTION DETAIL
3/4" = 1'-0"



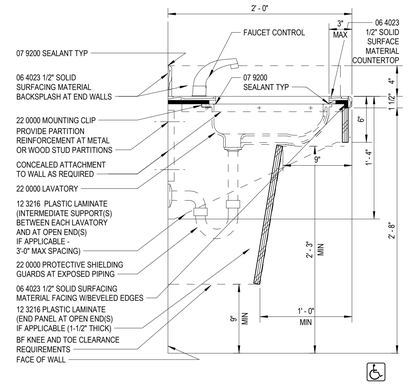
2 / 1.A6.2 TALL CABINET - SECTION DETAIL
3/4" = 1'-0"



5 / 1.A8.1 BASE CABINET - SECTION DETAIL
3/4" = 1'-0"



3 / 1.A8.1 BASE CABINET - SECTION DETAIL
3/4" = 1'-0"



1 / 1.A8.1 SECTION DETAIL @ADA SINK
1 1/2" = 1'-0"

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	D. Sandle
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Interior Sections and Details

IDS Project Number: 20111-3008

Drawing Number: 1.A9.5

GENERAL NOTES

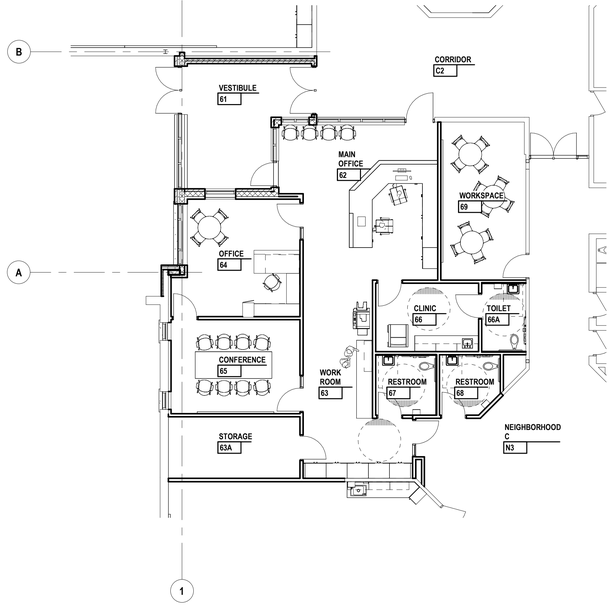
FURNITURE FIXTURE AND EQUIPMENT PLAN

A. ITEMS SHOWN IN GRAYSCALE ARE FOR REFERENCE ONLY.

B. COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND INSTALLATION OF ALL FURNITURE, FIXTURES AND EQUIPMENT

C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT ARCHITECT WHEN ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN ON CONSTRUCTION DOCUMENTS.

D. COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING THE SAME. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.



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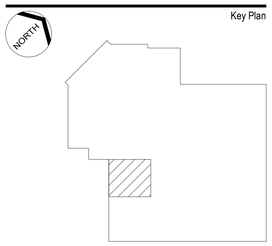
Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan



Project Administrator	A. Maurer
Project Designer	A. Pelfrey
Project Architect / Engineer	C. King
Drawn By	D. Sandle
Q.M. Review	N. LaForest
Approved	B. Sundberg
Drawing Scale	1/8" = 1' - 0"

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

First Floor Furniture Plan

For Reference Only

IDS Project Number	Drawing Number
20111-3008	1.F2.1

ABBREVIATIONS

A

AAV	AIR ADMITTANCE VALVE
AC	AIR COMPRESSOR
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AE	AIR EXTRACTOR
AFF	ABOVE FINISHED FLOOR
AFT	AIR FLOW TRANSMITTED
AHU	AIR HANDLING UNIT
APD	AIR PRESSURE DROP
AL	ACTIVE LENGTH
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
ASR	AUTOMATIC SPRINKLER RISER

B

BAS	BUILDING AUTOMATION SYSTEM
BBD	BOILER BLOWDOWN
BF	BARRIER FREE
BFP	BOILER FEEDWATER PUMP
BHP	BRAKE HORSEPOWER
BP	BACKFLOW PREVENTER
BTU	BRITISH THERMAL UNIT
BWV	BACKWATER VALVE

C

CAP	CAPACITY
CC	COILING COIL
CD	COLD DECK
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CLG	CEILING
CO	CLEANOUT
COND	CONDENSATE (COOLING)
CONN	CONNECTION
CONT	CONTINUATION
CONTR	CONTRACTOR
CONV	CONVECTOR
CPU	CENTRAL PROCESSING UNIT
CR	CONDENSATE RETURN (STEAM)
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
CV	CONTROL VALVE
CW	COLD WATER

D

DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREES
DN	DOWN
D/N	DAY/NIGHT
DPR	DAMPER
D&T	DRIP & TRAP
DTC	DRAIN TILE CONNECTION
DX	DIRECT EXPANSION

E

EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EHC	ELECTRIC HEATING COIL
EIH	ELECTRIC INFRARED HEATER
EJ	EXPANSION JOINT
ELEV	ELEVATION
ELEC	ELECTRICAL
EMCS	ENERGY MONITORING AND CONTOL SYSTEM
ENT	ENTERING
ER	EXHAUST REGISTER
ERU	ENERGY RECOVERY UNIT
ES	EMERGENCY SHOWER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWB	ENTERING WET BULB
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
(E)	EXISTING
EXP	EXPANSION

F

F	FARENHEIT
FA	FACE AREA
F & BD	FACE AND BYPASS DAMPER
FCU	FAN COIL UNIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION

F CONT

FDAMP	FIRE DAMPER
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FHV	FIRE HOSE VALVE
FL	FIRE LINE
FLA	FULL LOAD AMPS
FMS	FLOW MEASUREMENT STATION
FPM	FEET PER MINUTE
FT	FOOT/FEET
F&T	FLOAT & THERMOSTATIC STEAM TRAP
FTR	FINNED TUBE RADIATION
FVC	FIRE VALVE CABINET

G

GA	GAGE/GAUGE
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
GPH	GALLONS PER HOUR
GR	GRILLE
GV	GATE VALVE

H

HUMD	HUMIDIFIER
HB	HOSE BIBB
HD	HOT DECK
HO	HUB OUTLET
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HP STM	HIGH PRESSURE STEAM
HV	HEATING AND VENTILATION UNIT
HVAC	HEATING, VENTILATION & AIR CONDITIONING

I

ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IW	INDIRECT WASTE

L

LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
LD	LINEAR DIFFUSER
LP	LIGHTING PANEL
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE

M

MAT	MIXED AIR TEMPERATURE
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MFR	MANUFACTURER
MGV	MASTER GAS VALVE
MH	MAN HOLE
MIN	MINIMUM
MS	MOTOR STARTER
MZ	MULTI-ZONE UNIT

N

NC	NORMALLY CLOSED
NCR	NOISE CRITERION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
No.	NUMBER
NTS	NOT TO SCALE

O

OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
OS&Y	OUTSIDE SCREW AND YOKE
OV	OUTLET VELOCITY

P

P	PUMP
PA	PIPE ANCHOR
PAC	PACKAGED AIR CONDITIONING UNIT
PCR	PUMPED CONDENSATE RETURN
PD	PRESSURE DROP
PG	PIPE GUIDE
PLBG	PLUMBING
PSI	POUNDS PER SQUARE INCH - GAUGE
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE PLASTIC

R

RA	RETURN AIR
RAD	RADIATOR
RAG	RETURN AIR GRILLE
RCP	RADIANT CEILING PANEL
RH	RELATIVE HUMIDITY
RF	RETURN FAN
RM	ROOM
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RP	RADIANT PANEL
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
RS	ROOF SUMP
RTU	ROOF TOP UNIT

S

SA	SUPPLY AIR
SAG	SUPPLY AIR GRILLE
SAN	SANITARY
SAT	SUPPLY AIR TEMPERATURE
SC	STEAM COIL
SD	SUPPLY DIFFUSER
SF	SUPPLY FAN
SH	SPRING HANGER
SHT	SHEET
SP	SUMP PUMP
SPECS	SPECIFICATIONS
SP HD	SPRINKLER HEAD
SPKR	SPRINKLER
SS	SERVICE SINK
SV	SOLENOID VALVE
SWS	SAFE WASTE SINK

S CONT

ST	STORM
STM	STEAM

T

TC	TEMPERATURE CONTROL
TD	TRENCH DRAIN
TV	TURNING VANES
TW	TEMPERED WATER
TYP	TYPICAL

U

UH	UNIT HEATER
UL	UNDERWRITERS LABORATORY
UR	URINAL
UV	UNIT VENTILATOR

V

V	
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VI	VIBRATION ISOLATOR
VRF	VARIABLE REFRIGERANT FLOW
VS	VENT STACK
VTR	VENT THROUGH ROOF

W

W	WASTE
W&V	WASTE AND VENT
WB	WET BULB
WC	WATER CLOSET
WCO	WALL CLEANOUT
WG	WATER GAUGE
WH	WALL HYDRANT (FREEZE PROTECTED)
WS	WASTE STACK

NOTATION METHODS

- SD-A, 10" DIA, 350 CFM — SUPPLY DIFFUSER, TYPE 'A', 10" NECK, 350 CFM
- SD-A, 10" DIA, 350 CFM — SUPPLY DIFFUSER (3-WAY)
- RR-A, 350 CFM — RETURN REGISTER, TYPE 'A', 350 CFM
- ED-A, 350 CFM — EXHAUST REGISTER, TYPE 'A', 350 CFM
- SD-A, 1200 CFM — SIDEWALL SUPPLY REGISTER, TYPE 'A', 350 CFM
- SD-A, 350 CFM — SUPPLY AIR DIFFUSER, TYPE 'A' WITH FLEXIBLE DUCT CONNECTION (TWO WAY THROW)
- BELL MOUTH AIR INLET AREA SHALL BE EQUAL TO 2' TIMES DUCT AREA
- AHU 1 — AIR HANDLING UNIT No. 1
- EF 1 — EXHAUST FAN No. 1
- SUPPLY AIR BRANCH CONNECTION SPIN-IN FITTING WITH VOLUME DAMPER
- RETURN AIR/EXHAUST AIR BRANCH CONNECTION WITH VOLUME DAMPER
- ST 1 — SOUND TRAP (ATTENUATOR)
- FTR-A, 5'-0" AL, 5.7 MBH, 0.6 GPM — FINNED TUBE RADIATION TYPE 'A', 5'-0" ELEMENT, 5.7 TOTAL MBH (REFER TO EQUIPMENT SCHEDULES)
- CUH A — CABINET UNIT HEATER, TYPE 'A'
- CONV A — CONVECTOR, TYPE 'A'
- VAV 2,1100 A — TERMINAL VARIABLE OR CONSTANT VOLUME BOX AHU OR RTU SERVING THE VAV OR CAV. ROOM NUMBER. A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (HEATING COIL, REFER TO EQUIPMENT SCHEDULES)
- VAV 2,1100 A — TERMINAL VARIABLE OR CONSTANT VOLUME BOX AHU OR RTU SERVING THE VAV OR CAV. ROOM NUMBER. A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (NO HEATING COIL, REFER TO EQUIPMENT SCHEDULES)
- DUAL DUCT CONSTANT VOLUME MIXING BOX (REFER TO EQUIPMENT SCHEDULES)
- RHC 1000 A — REHEAT COIL, ROOM NUMBER A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (REFER TO EQUIPMENT SCHEDULES)
- POINT WHERE CHANGE IN DUCT SIZE OR PIPE PITCH TAKES PLACE
- POINT WHERE DEMOLITION ENDS/POINT OF NEW CONSTRUCTION
- NEW MECHANICAL
- EXISTING MECHANICAL

SYMBOLS

FIRE DAMPER	EXPANSION COMPENSATOR/EXPANSION JOINT
SMOKE DAMPER	SPRING HANGER (SH)
SMOKE DAMPER AND FIRE DAMPER	FLOOR CLEANOUT (FCO)
VOLUME DAMPER WITH REMOTE OPERATOR	WALL CLEANOUT (WCO)
FLEXIBLE DUCT	MANHOLE (MH)
CUH OR CONVECTOR (SURFACE)	FLOOR DRAIN
FINNED TUBE RADIATION	CATCH BASIN (CB)
TERMINAL VOLUME BOX (W/O HEATING COIL)	PENDANT SP HD (FLUSH MOUNTED TYPE)
TERMINAL VOLUME BOX (W/ HEATING COIL)	SIAMESE CONNECTION
FLEXIBLE PIPE CONNECTION	PRESSURE INDICATOR (P)
#" / #" — INDICATES FLAT OVAL DUCT SIZE	TEMPERATURE INDICATOR (T)
#" x #" — INDICATES RECTANGULAR DUCT SIZE	THERMOMETER
#Ø — INDICATES ROUND DUCT SIZE	MANUAL AIR VENT
ANGLE RELIEF VALVE	FLOW MEASURING DEVICE
ANGLED STOP CHECK VALVE	FLOW ELEMENT (ORIFICE PLATE) (FE)
BALANCE VALVE	POINT OF NEW CONNECTION
BUTTERFLY VALVE (SEE SPECIFICATION FOR TYPE)	TO BE DEMOLISHED AND REMOVED
BALL, GAS, GATE, GLOBE, PLUG VALVE (SEE SPECIFICATION FOR TYPE)	PLUMBING RISER TAG
CHECK VALVE W/ ARROW INDICATING FLOW	MASTER GAS SHUT-OFF VALVE (MGS)
CONTROL VALVE	PRESSURE REDUCING STATION (PRV)
LINEAR STOP CHECK VALVE	REDUCED PRESSURE BACKFLOW PREVENTER (RPBP)
MIXING VALVE	FIRE PROTECTION PIPING (F)
PRESSURE REDUCING VALVE	DOMESTIC COLD WATER PIPING (CW)
PRESSURE RELIEF VALVE	HIGH PRESSURE COLD WATER (HPCW)
STRAINER	DOMESTIC HOT WATER PIPING (HW)
UNION	DOMESTIC HOT WATER RETURN PIPING (HWR)
PIPE ANCHOR	NON-POTABLE WATER PIPING (NPW)
PIPE GUIDE	DISTILLED WATER (DW)

REVERSE OSMOSIS WATER (RO)	PROCESS COOLING WATER SUPPLY (PCWS)
DEIONIZED WATER SUPPLY (DI)	PROCESS COOLING WATER RETURN (PCWR)
TEMPERED WATER (TW)	CONDENSATE DRAIN PIPING (COOLING) (COND)
NATURAL GAS PIPING (G)	HIGH PRESSURE CONDENSATE RETURN PIPING (HPCR)
NATURAL GAS PIPING (EMERGENCY POWER SUPPLY) (G(EPS))	HOT WATER HEATING SUPPLY PIPING (HWHS)
NITROUS OXIDE PIPING (NIT-OX)	HOT WATER HEATING RETURN PIPING (HWHR)
OXYGEN PIPING (OXY)	HEAT PUMP WATER SUPPLY (HPWS)
COMPRESSED AIR (CA)	HEAT PUMP WATER RETURN (HPWR)
COMPRESSED AIR PIPING PRESSURE INDICATED (CA(#))	HIGH TEMPERATURE HOT WATER SUPPLY PIPING (HTHWS)
CARBON DIOXIDE GAS (CO2)	HIGH TEMPERATURE HOT WATER RETURN PIPING (HTHWR)
FUEL OIL RETURN (FOR)	HEAT RECOVERY RETURN PIPING (HRR)
FUEL OIL SUPPLY (FOS)	HEAT RECOVERY SUPPLY PIPING (HRS)
SANITARY SEWER (SAN)	LOW PRESSURE STEAM (STM)
PUMPED SANITARY SEWER (PSAN)	STEAM PIPING PRESSURE INDICATED (STM(#))
VENT PIPING (V)	VRF SYSTEM REFRIGERANT PIPING (VRF)
ACID VENT PIPING (AV)	TEMPERATURE INDICATOR GAUGE TYPE (TI)
VACUUM PIPING (VAC)	DIFFERENTIAL PRESSURE GAUGE (DPI)
ACID WASTE (AW)	HUMIDISTAT (ROOM) (H)
STORM SEWER (ST)	CARBON MONOXIDE SENSOR (XD)
OVERFLOW STORM (OST)	HUMIDISTAT (H)
PUMPED STORM WATER (PST)	THERMOSTAT (T)
DRAIN TILE (DT)	OCCUPANCY SENSOR - CEILING MOUNTED (L)
CHILLED WATER SUPPLY PIPING (CHWS)	OCCUPANCY SENSOR - WALL MOUNTED (L)
CHILLED WATER RETURN PIPING (CHWR)	PHOTOELECTRIC SWITCH - CEILING MOUNTED (PC)
CONDENSER WATER SUPPLY PIPING (CWS)	PHOTOELECTRIC SWITCH - WALL MOUNTED (PC)
CONDENSER WATER RETURN PIPING (CWR)	STATIC PRESSURE SENSOR (SP)
PUMPED CONDENSATE RETURN PIPING (PCR)	CARBON DIOXIDE SENSOR - DUCT MOUNTED (C)
CONDENSATE RETURN PIPING (GRAVITY) (CR)	HUMIDITY SENSOR - DUCT MOUNTED (H)

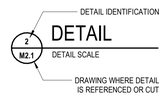
THERMOSTAT WITH GUARD (T)	END SWITCH (ES)
TEMPERATURE SENSOR - DUCT MOUNTED AVERAGING ELEMENT (T)	FLOW SWITCH - INLINE (FM)
TEMPERATURE SENSOR W/ SUNSHIELD (T)	DIFFERENTIAL PRESSURE SWITCH (DPS)
TEMPERATURE SENSOR - DUCT MOUNTED RIGID ELEMENT (T)	PRESSURE SWITCH (PS)
TEMPERATURE SENSOR - IMMERSION TYPE ELEMENT (T)	MAIN AIR SUPPLY (MECHANICAL CONTROLS) (M)
AREA SMOKE DETECTOR (FSD)	PNEUMATIC LINE
DUCT SMOKE DETECTOR (FSD)	SOLENOID VALVE
FIRE STAT - DUCT MOUNTED (F)	PRESSURE GAUGE (P)
FREEZE STAT - DUCT MOUNTED (FZ)	VALVE - TWO WAY PNEUMATIC CONTROLLED
FLOW METER (FM)	VALVE - THREE WAY PNEUMATIC CONTROLLED
AQUASTAT (STRAP ON) (AQ)	TWO WAY MOTORIZED VALVE
AIR FLOW SENSOR (AFS)	THREE WAY MOTORIZED VALVE
LOOP POWER INDICATOR (AI)	ANALOG INPUT
DAY/NIGHT MAIN AIR SWITCH (D/N)	ANALOG OUTPUT (AO)
MANOMETER (DI)	DIGITAL INPUT
CONTROL RELAY (CR)	DIGITAL OUTPUT (DO)
CURRENT SWITCH (CS)	DIFFERENTIAL PRESSURE TRANSMITTER (DPT)
MOTORIZED DAMPER MOTOR (M)	PRESSURE TRANSMITTER (PT)
DAMPER (PARALLEL BLADE)	ELECTRICAL LINE DESIGNATION ON CONTROL DIAGRAMS AND FLOOR PLANS
DAMPER (OPPOSED BLADE)	ELECTRICAL LINE DESIGNATION ON WIRING DIAGRAMS (VOLTAGE AS NOTED)
ELECTRIC - PNEUMATIC RELAY (EP)	SWITCH
START STOP (MOTOR CONTROL) (SS)	FUSE
RELAY (ELECTRICAL) (R)	TRANSFORMER
TWIST TIMER (TT)	THERMAL OVERLOAD
VELOCITY CONTROLLER (VC)	RELAY CONTACT
MOTOR DISCONNECT SWITCH	RELAY COIL
MOTOR STARTER, W/O HOA SWITCH	SYSTEM OR EQUIPMENT GROUND
MOTOR STARTER, W/ HOA SWITCH	

MECHANICAL DRAWING INDEX

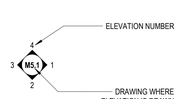
THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS SHEET.

SYMBOL LEGEND

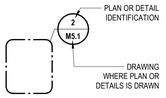
DETAIL SYMBOL



ELEVATION SYMBOL

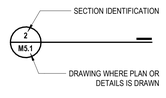


PLAN OR DETAIL ENLARGEMENT

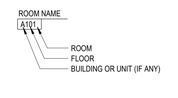


COLUMN CENTERLINE

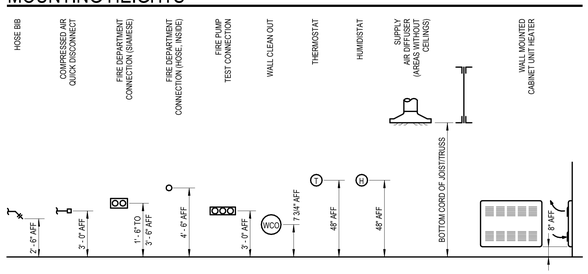
SECTION LOCATOR



ROOM NAME AND NUMBER



MOUNTING HEIGHTS



GENERAL NOTES

1. VERIFY ALL CONDITIONS IN FIELD BEFORE START OF CONSTRUCTION. NOTIFY ARCHITECT/ENGINEER OF DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS.
2. COORDINATE ALL WORK WITH APPROPRIATE TRADES.
3. COORDINATE ANY REQUIRED SHUTDOWN OF SERVICES OR EQUIPMENT WITH OWNER'S REPRESENTATIVE.
4. PROVIDE ALL MISC. STEEL AND ITEMS REQUIRED FOR THE PROPER INSTALLATION OF ALL PIPE, SHEET METAL AND EQUIPMENT.
5. COORDINATE FLOOR, WALL & ROOF PENETRATIONS ETC. WITH ARCHITECTURAL TRADES.
6. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE IN AREA WITHOUT A CEILING UNLESS INDICATED OTHERWISE.
7. DUCT CONNECTED TO EQUIPMENT SHALL EQUAL EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.
8. MAXIMUM LENGTH ON FLEXIBLE DUCT SHALL BE 5'-0".
9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT DIFFUSER LOCATIONS IN AREAS WITH A CEILING.
10. DO NOT RUN ANY PIPING OR DUCTWORK INTO AN ELECTRICAL ROOM THAT DOES NOT SERVE THAT ROOM.

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	N. Moeggenborg
Project Architect / Engineer	N. Moeggenborg
Drawn By	N. Moeggenborg
Q.M. Review	T. Vercruysse
Approved	J. Schwartz
Drawing Scale	None

Issued for	Issue Date
Design Development	06-24-2024
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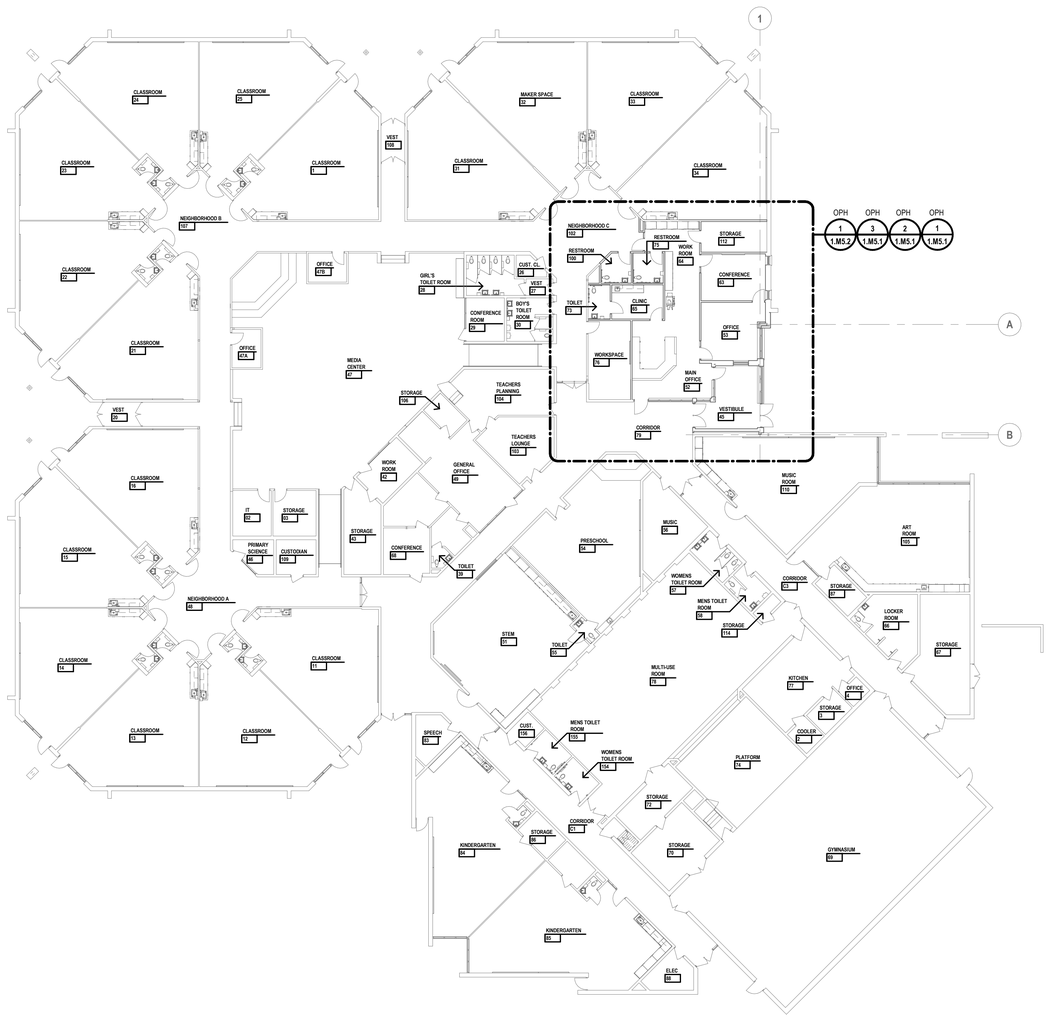
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

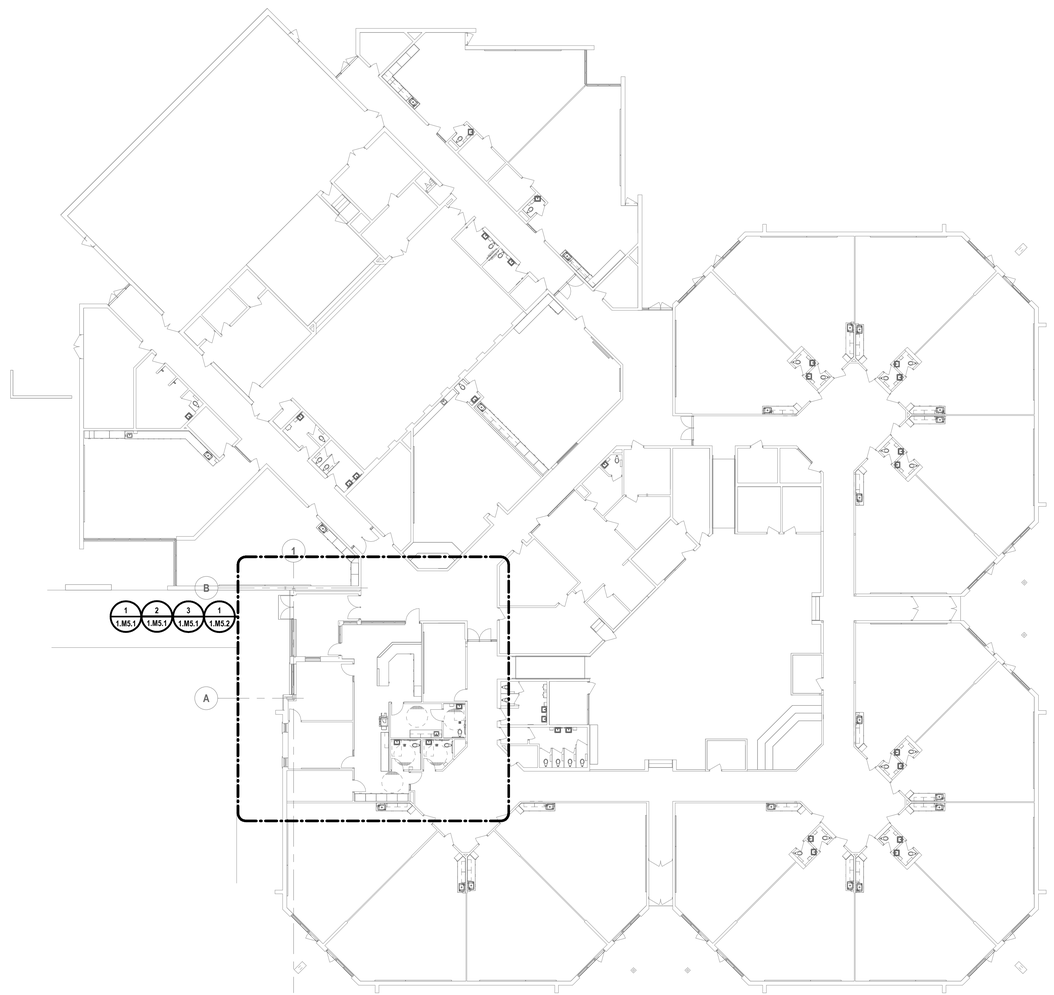
Mechanical Reference Information

IDS Project Number: 20111-3008

Drawing Number: 1.MR.0



3 1.FIRST FLOOR COMPOSITE PLAN - SAVAGE ELEMENTARY
1/16" = 1'-0"



1 1.FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY
M5.1 1/16" = 1'-0"

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

NORTH

Project Administrator	A. Maurer
Project Designer	N. Moeggenborg
Project Architect / Engineer	N. Moeggenborg
Drawn By	N. Moeggenborg
O.M. Review	T. Vercruysse
Approved	J. Schwartz
Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
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Bids	09-13-2024
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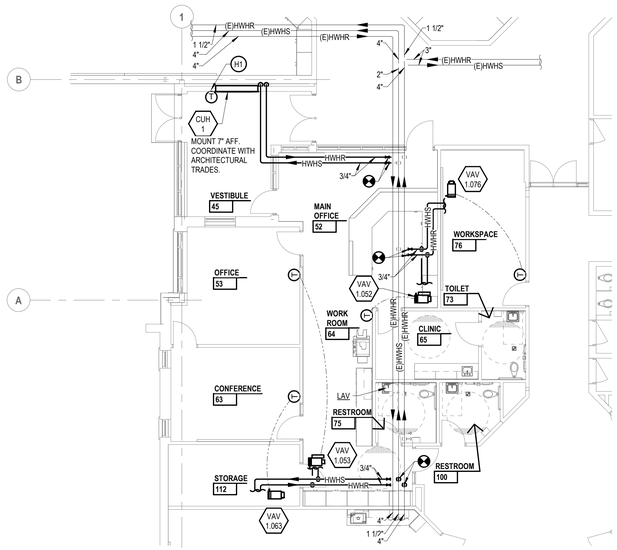
IDS Drawing Title

First Floor Composite Plan

IDS Project Number: 20111-3008

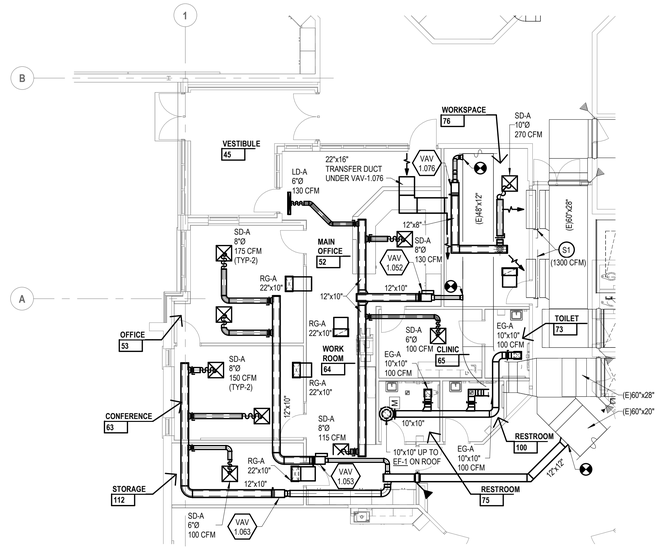
Drawing Number: 1.M0.1



3 1.M0.1 1.FIRST FLOOR HVAC PIPING - TYLER ELEMENTARY

1/8" = 1'-0"

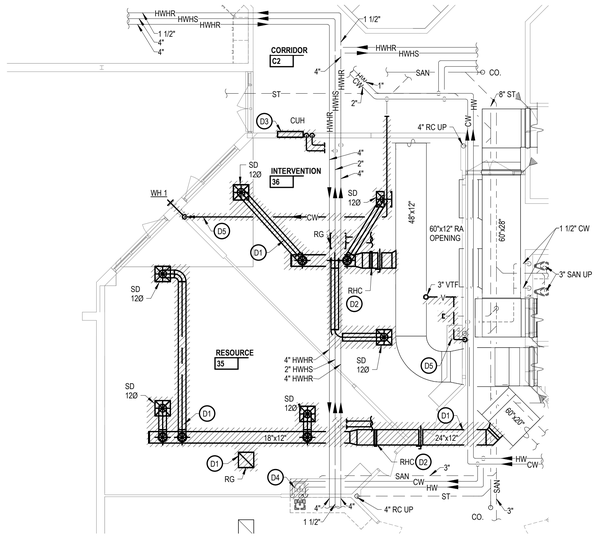
SAVAGE ELEMENTARY - SIM OPP HAND



2 1.M0.1 1.FIRST FLOOR SHEET METAL - TYLER ELEMENTARY

1/8" = 1'-0"

SAVAGE ELEMENTARY - SIM OPP HAND



1 1.M0.1 1.FIRST FLOOR MECHANICAL DEMOLITION - TYLER ELEMENTARY

1/8" = 1'-0"

SAVAGE ELEMENTARY - SIM OPP HAND

KEYNOTES

DEMOLITION

NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

D1 REMOVE SUPPLY/RETURN DUCTWORK AND ASSOCIATED GRILLES, REGISTERS, AND DIFFUSERS.

D2 REMOVE HOT WATER HEATING COIL. ASSOCIATED HEATING HOT WATER SUPPLY AND RETURN PIPING, AND CONTROLS.

D3 REMOVE CABINET UNIT HEATER AND ASSOCIATED HEATING HOT WATER SUPPLY AND RETURN PIPING.

D4 REMOVE PLUMBING FIXTURE SANITARY, HOT WATER, AND COLD WATER PIPING.

D5 REMOVE COLD WATER PIPING AND WALL HYDRANT.

KEYNOTES

SHEET METAL

NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

S1 BALANCE TO AIRFLOW INDICATED.

KEYNOTES

HVAC PIPING

NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

H1 FACTORY MOUNTED THERMOSTAT.

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Drawing Scale
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IDS Drawing Title

Partial Mechanical Plans

IDS Project Number

20111-3008

Drawing Number

1.M5.1

KEYNOTES

DEMOLITION

NOTE: NOT ALL KEYNOTES MAY BE USED

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D5 REMOVE COLD WATER PIPING AND WALL HYDRANT.

KEYNOTES

SHEET METAL

NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

S1 BALANCE TO AIRFLOW INDICATED.

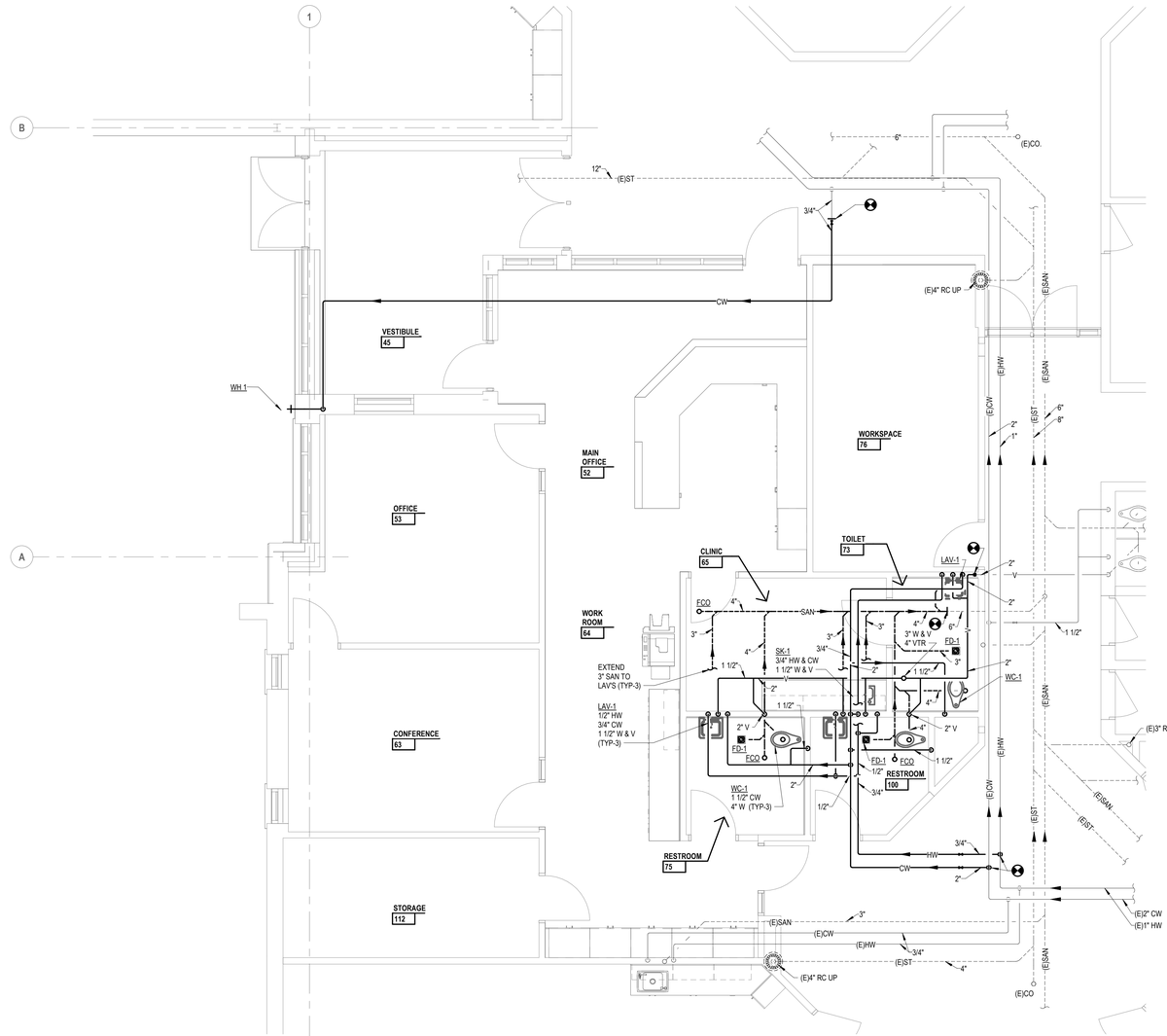
KEYNOTES

HVAC PIPING

NOTE: NOT ALL KEYNOTES MAY BE USED

(#) LEGEND SYMBOL INDICATOR

H1 FACTORY MOUNTED THERMOSTAT.



1 1.M0.1 1.FIRST FLOOR PLUMBING - TYLER ELEMENTARY

1/4" = 1'-0"

SAVAGE ELEMENTARY - SIM OPP HAND

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Project Title

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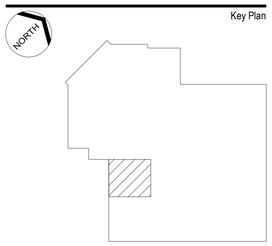
Key Plan



Project Administrator
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N. Moeggenborg
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N. Moeggenborg
Q.M. Review
T. Vercruysse
Approved
J. Schwartz
Drawing Scale
As Noted

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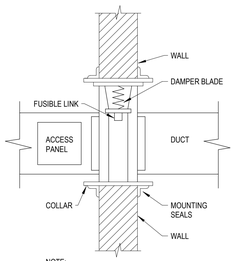
IDS Drawing Title

Partial Mechanical Plans

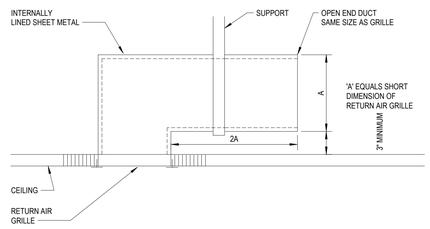
IDS Project Number
20111-3008

Drawing Number
1.M5.2

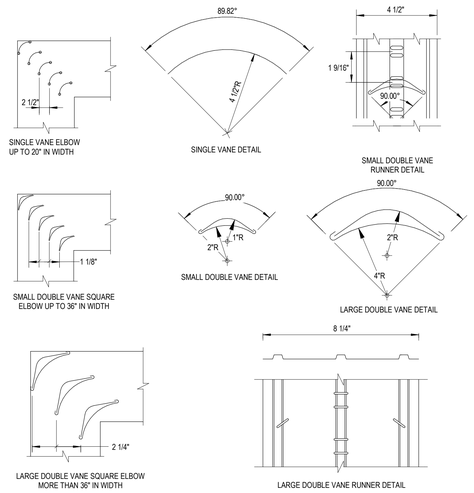


NOTE:
1. ALL DAMPERS MUST HAVE UL LABEL.
2. PROVIDE 14"X14" ACCESS PANEL IN DUCT WHEN SIZE PERMITS. FOR SMALLER DUCTS, MAKE PANEL 2" LESS THAN DUCT.

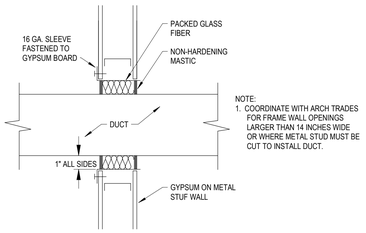
TYPICAL FIRE DAMPER CURTAIN TYPE
NO SCALE



TYPICAL CEILING RETURN AIR GRILLE SOUND TRAP
NO SCALE

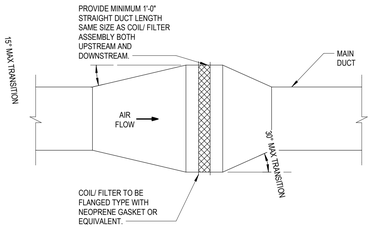


SQUARE AND RECTANGULAR ELBOWS - LOW VELOCITY
NO SCALE

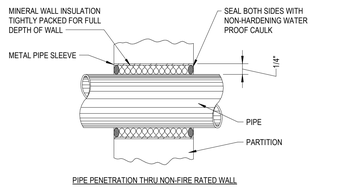


NOTE:
1. COORDINATE WITH ARCH TRADES FOR FRAME WALL OPENINGS LARGER THAN 14 INCHES WIDE OR WHERE METAL STUD MUST BE CUT TO INSTALL DUCT.

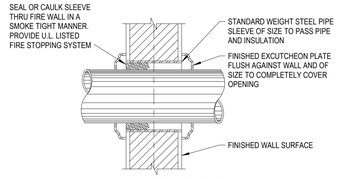
DUCT SEAL AT NON-RATED WALLS
NO SCALE



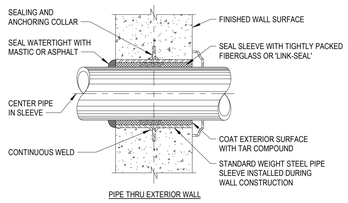
TYPICAL DUCT TRANSITION
NO SCALE



PIPE PENETRATION THRU NON-FIRE RATED WALL

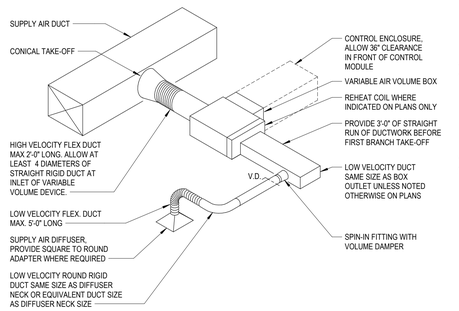


PIPE THRU FIRE RATED WALL OR FLOOR

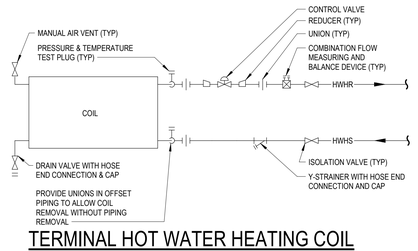


PIPE THRU EXTERIOR WALL

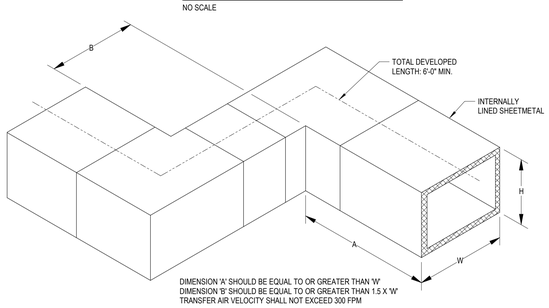
PIPE PENETRATIONS
NO SCALE



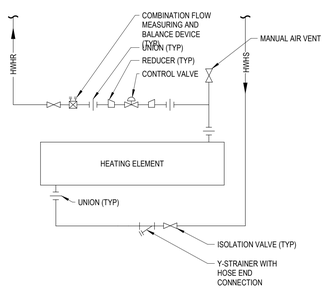
TYPICAL VAV BOX DETAIL
NO SCALE



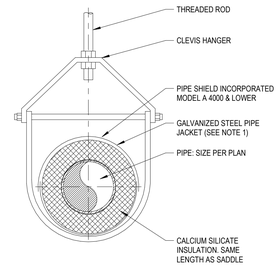
TERMINAL HOT WATER HEATING COIL WITH 2 - WAY CONTROL VALVE
NO SCALE



TYPICAL TRANSFER AIR 'Z-DUCT' DETAIL
NO SCALE



HOT WATER CONVECTOR OR CABINET UNIT HEATER PIPING DIAGRAM
NO SCALE



SINGLE PIPE SUPPORT (LESS THAN 4")
NO SCALE

NOTES:
1. PROVIDE GALVANIZED SHEET METAL INSULATION JACKET AS FOLLOWS:

PIPE SIZE:	LENGTH:	GAUGE:
2" TO 4"	12"	18

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	N. Moeggenborg
Project Architect / Engineer	N. Moeggenborg
Drawn By	N. Moeggenborg
Q.M. Review	T. Vercruysse
Approved	J. Schwartz
Drawing Scale	As Noted

Issued for	Issue Date
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IDS Drawing Title

Details

IDS Project Number: 20111-3008

Drawing Number: 1.M6.1

VARIABLE VOLUME TERMINAL WITH TEMPERING COIL SCHEDULE

MARK	HVAC SYSTEM	ROOM		MAX COOLING AIRFLOW (CFM)	MAX HEATING AIRFLOW (CFM)	MIN AIRFLOW (CFM)	INLET SIZE	OUTLET DUCT SIZE	MIN SP TO OPER. BOX	MAX NC	HOT WATER TEMPERING COIL								"PRICE" MODEL NO.	REMARKS
		No.	NAME								FLOW (GPM)	CAPACITY (MBH)	EWT (°F)	LWT (°F)	EAT (°F)	LAT (°F)	MAX PD (FT HD)	COIL RUNOUT (IN.)		
VAV - 1.052	1	52	RECEPTION	475	220	120	8"	12"x10"	0.25	27	0.5	7.1	180	150	55	85	3	1/2	SDV	
VAV - 1.053	1	53	PRINCIPAL OFFICE	350	220	70	6"	12"x8"	0.25	25	0.5	7.1	180	152	55	85	3	1/2	SDV	
VAV - 1.063	1	63	CONFERENCE ROOM	400	280	90	8"	12"x10"	0.25	27	0.6	9.1	180	150	55	85	3	1/2	SDV	BOTTOM ACCESS
VAV - 1.076	1	76	CONFERENCE ROOM	270	90	75	6"	12"x8"	0.25	25	0.5	2.9	180	161	55	85	3	1/2	SDV	BOTTOM ACCESS

NOTES:

1. MAX NC LEVEL BASED ON 1.5" INLET SP WITH NO ALLOWANCE FOR EXTERNAL ATTENUATION.
2. PROVIDE A 24"x24" CEILING MOUNTED ACCESS DOOR FOR ALL VARIABLE BOXES MOUNTED ABOVE INACCESSIBLE CEILINGS.
3. HOT WATER TEMPERING COILS SHALL BE MINIMUM 1-ROW.
4 PERFORMANCE BASED ON WATER UNLESS NOTED OTHERWISE.

FAN SCHEDULE

MARK	LOCATION	AREA SERVED	DESIGN AIRFLOW (CFM)	EXTERNAL STATIC PRESSURE (IN. WG.)	FAN DATA			MOTOR DATA			ELECTRICAL V/PH/HZ	"GREENHECK" MODEL No.	REMARKS
					TYPE	DRIVE	FAN RPM	HP	BHP	RPM			
EF-1	ROOF	TOILET ROOMS	300	0.5	CENTRIFUGAL	DIRECT	1,675	1/10	0.07	1,725	120/60/1	G-080-VG	

NOTES:

1. PROVIDE ALL FANS WITH FACTORY MOUNTED AND WIRED DISCONNECT.

HOT WATER CABINET UNIT HEATER SCHEDULE

MARK	HEATING CAPACITY (MBH)	FLUID FLOW (GPM)	EWT (°F)	LWT (°F)	EAT (°F)	LAT (°F)	FAN			FILTER		ENCLOSURE	ELECTRICAL		"STERLING" MODEL No.	REMARKS
							CFM	HP	RPM	TYPE	AREA (SF)	L x D x H (IN.)	V/PH/Hz	AMPS		
CUH-1	37.5	2.0	180	140	65	102	1060	1/10	1050	PERM	2.7	66 x 9-1/2 x 25	120/1/60	1.50	RWI-1130-10	

NOTES:

1. PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT.

GRILLE, REGISTER AND DIFFUSER SCHEDULE

MARK	CORE STYLE	BORDER FRAME TYPE	MODULE SIZE	FINISH	ACCESSORY	CONSTRUCTION	"PRICE" MODEL No.	REMARKS
SD-A	LOUVER	NOTE 1	24"x24"	WHITE	NONE	STEEL	SCD	
RG-A	EGG CREATE	NOTE 1	24"x12"	WHITE	NONE	ALUMINUM	80	
EG-A	EGG CREATE	NOTE 1	24"x24"	WHITE	NONE	ALUMINUM	80	PROVIDE REMOTE OPERATED DAMPER
LD-A	LINEAR SLOT	NOTE 1	48" LONG	WHITE	SDB PLENUM	ALUMINUM	SDS100	2 SLOTS

NOTES:

1. COORDINATE MOUNTING FRAMES WITH REFLECTED CEILING PLANS.
2. COORDINATE LENGTH OF ALL LINEAR SUPPLIES AND RETURNS WITH ARCHITECTURAL FLOOR PLANS AND REFLECTED CEILING PLANS.

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Author
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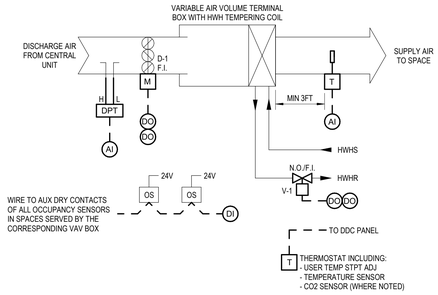
IDS Drawing Title

Schedules

IDS Project Number
20111-3008

Drawing Number
1.M7.1



VAV TERMINAL WITH HWH TEMPERING COIL CONTROL DIAGRAM

NOTES
1. WHERE APPLICABLE, OCCUPANCY SENSORS TO BE INSTALLED, POWERED, AND CONNECTED TO LIGHTING CONTROLS BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL CONNECT ALL OCCUPANCY SENSORS IN SPACES SERVED BY THE CORRESPONDING VAV BOX TO THE VAV CONTROLLER SUCH THAT ALL SPACES MUST BE SIMULTANEOUSLY UNOCCUPIED IN ORDER TO INDICATE UNOCCUPIED STATUS IN THE VAV CONTROLLER.

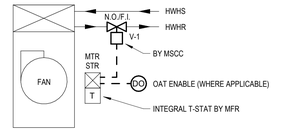
SEQUENCE OF OPERATION

GENERAL
1. THE OPERATING MODE OF THE TERMINAL UNIT SHALL BE AUTOMATICALLY CYCLED BETWEEN OCCUPIED AND UNOCCUPIED MODE TO MATCH THE OCCUPANCY MODE OF THE ASSOCIATED CENTRAL UNIT.
2. WHERE APPLICABLE, WHEN THE TIME SCHEDULE INDICATES OCCUPIED AND CONNECTED OCCUPANCY SENSORS INDICATE THE SPACE IS UNOCCUPIED, THE UNIT SHALL OPERATE IN STANDBY MODE.
3. UPON NO DEMAND FOR HEATING OR COOLING, THE DAMPER SHALL CONTROL AIRFLOW TO THE MINIMUM AIRFLOW CFM SETPOINT.
4. UPON A RISING DEMAND FOR COOLING, THE DAMPER SHALL CONTROL TOWARDS THE MAXIMUM COOLING AIRFLOW CFM SETPOINT.
5. UPON A RISING DEMAND FOR HEATING, FIRST THE HEATING CONTROL VALVE SHALL INCREASE HEATING TOWARDS MAXIMUM. UPON A FURTHER DEMAND FOR HEATING, THE DAMPER SHALL CONTROL AIRFLOW TOWARDS THE MAXIMUM HEATING AIRFLOW CFM SETPOINT.

OCCUPIED MODE OPERATION
1. THE UNIT SHALL CONTROL TO MAINTAIN THE OCCUPIED SPACE TEMPERATURE RANGE (70°F TO 75°F). LOCAL TEMPERATURE SETPOINT ADJUSTMENT SHALL BE DISABLED.
2. UNITS SERVING PRIVATE OFFICES SHALL PERMIT LOCAL OCCUPIED SPACE TEMPERATURE SETPOINT ADJUSTMENT AND SHALL CONTROL TO MAINTAIN THE SET THERMOSTAT TEMPERATURE SETPOINT.

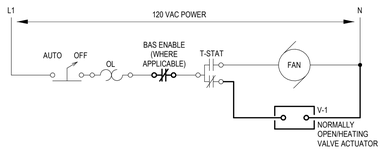
UNOCCUPIED MODE OPERATION
1. THE UNIT SHALL CONTROL TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE RANGE (60° F TO 85°F).

STANDBY MODE OPERATION
1. THE UNIT SHALL CONTROL TO MAINTAIN THE STANDBY SPACE TEMPERATURE RANGE (65°F TO 80°F).

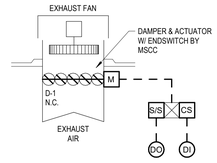


CABINET UNIT HEATER CONTROL DIAGRAM

SEQUENCE OF OPERATION
1. THE CABINET UNIT HEATER FAN AND VALVE SHALL CYCLE TO MAINTAIN THE INTEGRAL THERMOSTAT TEMPERATURE SETPOINT.
2. APPLICABLE TO UNITS LOCATED IN BUILDING VESTIBULES OR NEAR EXTERIOR DOORS, WHEN THE OUTSIDE AIR TEMPERATURE IS GREATER THAN 45°F (ADJ), THE BAS SHALL DISABLE THE UNIT.

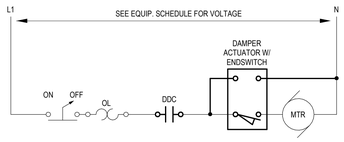


CABINET UNIT HEATER WIRING DETAIL

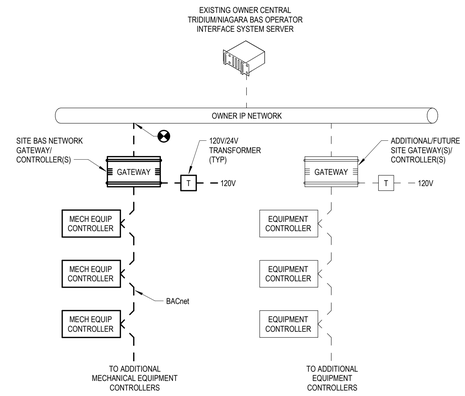


ROOF MOUNTED EXHAUST FAN CONTROL DIAGRAM

SEQUENCE OF OPERATION
1. THE EF SHALL BE SET TO ACTIVATE AND DEACTIVATE ACCORDING TO THE SET OPERATION TIME SCHEDULE FOR OCCUPIED AND UNOCCUPIED TIME PERIODS.
2. WHEN THE FAN IS ENABLED, THE ISOLATION DAMPER SHALL OPEN. ONCE THE DAMPER ENDSWITCH VERIFIES THE DAMPER HAS OPENED, THE FAN SHALL START.



TYPICAL SINGLE PHASE EXHAUST FAN WIRING DETAIL



BUILDING AUTOMATION SYSTEM NETWORK RISER DIAGRAM

NOTES
1. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL PROVIDE A NEW BUILDING AUTOMATION SYSTEM (BAS) CONTROLLER/GATEWAY DEVICE OR DEVICES, POWER SUPPLIES, AND NEMA 1 ENCLOSURES AS NECESSARY TO INTEGRATE ALL FIELD DEVICES AND DEVICE NETWORKS TO THE OWNER CENTRAL BAS OPERATOR INTERFACE SYSTEM (OIS) SERVER.
2. MSCC SHALL PROVIDE ETHERNET IP DATA CONNECTION(S) AND LOCATE DEVICE(S) AS NECESSARY IN COORDINATION WITH THE ELECTRICAL/TECHNOLOGY CONTRACTOR AND THE OWNER.

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

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Drawing Scale
None

Issued for	Issue Date
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IDS Drawing Title

Mechanical Systems Controls

IDS Project Number
20111-3008

Drawing Number
1.M8.1

ABBREVIATIONS

A	
A	AMPERES
AC	ALTERNATING CURRENT
ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
AIC	AMPERES INTERRUPTING CAPACITY
ALT	ALTERNATE
AP	AMPERE PLUG
ARCH	ARCHITECT, ARCHITECTURAL
AS	AMPERE SENSOR
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO/VISUAL
AWG	AMERICAN WIRE GAUGE
B	
BAS	BUILDING AUTOMATION SYSTEM
BLDG	BUILDING
BOT	BOTTOM
BSMT	BASEMENT
C	
C	COMMUNICATIONS
CAB	CABINET
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CD	CANDELA
CKT	CIRCUIT
CLG	CEILING
COMP	COMPUTER
CP	CONTROL PANEL
CT	CABLE TRAY
CUH	CABINET UNIT HEATER
CZ	CONTROL ZONE
D	
DA	DIGITALLY ADDRESSABLE
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL
DEMO	DEMOLISH, DEMOLITION
DEPT	DEPARTMENT
DIA	DIAMETER
DISC	DISCONNECT
DN	DOWN
DP	DISTRIBUTION PANEL
DT	DUAL TECHNOLOGY
DWG	DRAWING
E	
EA	EACH
EC	ELECTRICAL CONTRACTOR
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
EP	ELECTRIC PNEUMATIC SWITCH
EPT	ELECTRIC POWER TRANSDUCER
EQUIP	EQUIPMENT
EUH	ELECTRIC UNIT HEATER
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXIST	EXISTING
EXT	EXTERIOR
F	
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPS
FLR	FLOOR
FT	FOOT/FEET
FU	FUSE
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
FOC	FIBER OPTIC COMMUNICATIONS
G	
GA	GAGE/GAUGE
GT	GAME TIMER/CLOCK
GC	GENERAL CONTRACTOR
GFCI/GFI	GROUND FAULT CIRCUIT INTERRUPTER
GRD	GROUND
GYP BD	GYPSUM BOARD
H	
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND/AUTO/OFF
HP	HORSEPOWER
HTR	HEATER
HV	HEATING AND VENTILATION UNIT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
I	
IAC	INTERLOCKED ARMORED CABLE
IDF	INTERMEDIATE DISTRIBUTION FRAME
IN	INCHES
ITS	INTEGRATED TECHNOLOGY SYSTEMS
IR	INFRARED
J	
JB	JUNCTION BOX
JC	JANITORS CLOSET
K	
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
L	
LAN	LOCAL AREA NETWORK
LCP	LIGHTING CONTROL PANEL
LCS	LIGHTING CONTROL SYSTEM
LP	LIGHTING PANEL
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
L/S/I/G	LONG TIME/SHORT TIME INSTANTANEOUS/GROUNDING
M	
MAX	MAXIMUM
MB	MARKERBOARD
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDF	MAIN DISTRIBUTION FRAME
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MOD	MODULATOR
MTD	MOUNTED
MTG	MOUNTING
N	
NACP	NOTIFICATION APPLIANCE CONTROL PANEL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NF	NON-FUSED
NIC	NOT-IN-CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFE	OWNER FURNISHED EQUIPMENT
OS	OCCUPANCY SENSOR
OFS	OFFICE OF FIRE SAFETY
P	
PA	PUBLIC ADDRESS
PB	PULLBOX
PC	PHOTOCELL
PE	PNEUMATIC ELECTRIC SWITCH
PH	PHASE
PIR	PASSIVE INFRARED
PL	PILOT LIGHT
POS	POINT OF SALE
PP	POWER PANEL
PT	POKE THROUGH
PTD	POWER TRANSFER DEVICE
PVC	POLYVINYL CHLORIDE
R	
R	RELOCATE OR RELOCATED ITEM
RAF	RETURN AIR FAN
RCP	REFLECTED CEILING PLAN
REQD	REQUIRED
RF	RADIO FREQUENCY
RGS	RIGID GALVANIZED STEEL
RMS	ROOT MEAN SQUARE
RP	RECEPTACLE PANEL
S	
SAF	SUPPLY AIR FAN
SCCR	SHORT CIRCUIT CURRENT RATING
SD	SMOKE DETECTOR
SF	SQUARE FEET
SPD	SURGE PROTECTIVE DEVICE
SPECS	SPECIFICATIONS
SPKR	SPEAKER
SS	SURGE SUPPRESSION
ST	SHUNT TRIP
STD	STANDARD
SUB	SUBSTATION
SW	SWITCH
SWGR	SWITCHGEAR
T	
TC	TIME CLOCK
TEL	TELEPHONE
TELECOM	TELECOMMUNICATIONS
TERM	TERMINAL
TKBD	TACKBOARD
TR	TAMPER RESISTANT
TTB	TELEPHONE TERMINAL BACKBOARD
TTC	TELEPHONE TERMINAL CABINET
TU	TERMINAL UNIT
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
U	
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
USB	UNIVERSAL SERIAL BUS
UV	ULTRAVIOLET
V	
VSD	VARIABLE SPEED DRIVE
VIF	VERIFY IN FIELD
VP	VAPOR PROOF
W	
WAN	WIDE AREA NETWORK
WAP	WIRELESS ACCESS POINT
WG	WIRE GUARD
WP	WEATHER PROOF
X	
XP	EXPLOSION PROOF
MISC	
3R	NEMA 3R
4X	NEMA 4X
X	BY
'	DEGREES
Ø	DIAMETER
'	FOOT, FEET
"	INCH, INCHES

ELECTRICAL DRAWING INDEX

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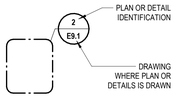
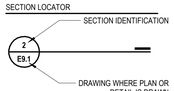
SYMBOL LEGEND

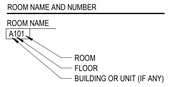
DETAIL SYMBOL


ELEVATION SYMBOL

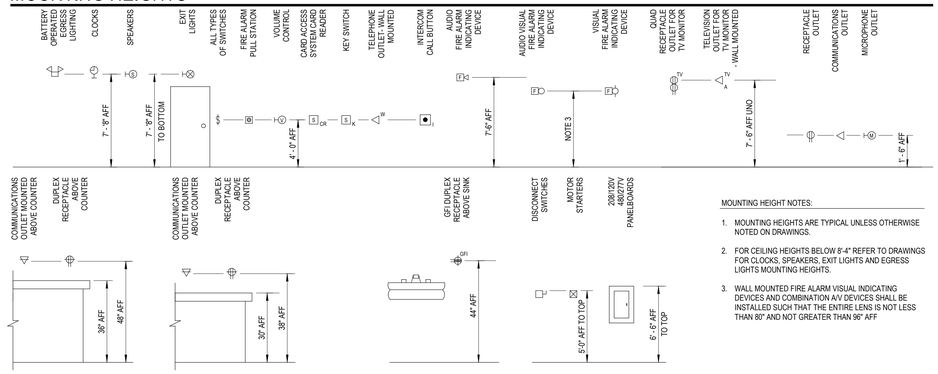

PLAN OR DETAIL ENLARGEMENT


COLUMN CENTERLINE


SECTION LOCATOR


ROOM NAME AND NUMBER


MOUNTING HEIGHTS



MOUNTING HEIGHT NOTES:

1. MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE NOTED ON DRAWINGS.
2. FOR CEILING HEIGHTS BELOW 8'-4" REFER TO DRAWINGS FOR CLOCKS, SPEAKERS, EXIT LIGHTS AND EGRESS LIGHTS MOUNTING HEIGHTS.
3. WALL MOUNTED FIRE ALARM VISUAL INDICATING DEVICES AND COMBINATION A/V DEVICES SHALL BE INSTALLED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" AFF

SYMBOLS (LETTERS (X) INDICATES TYPE , TYPICAL)

LIGHTING

- LIGHTING FIXTURE; RECESSED OR SURFACE MOUNTED
- LIGHTING FIXTURE; RECESSED OR SURFACE MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
- LIGHTING FIXTURE; PENDANT MOUNTED
- LIGHTING FIXTURE; PENDANT MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
- STRIP LIGHTING FIXTURE
- STRIP LIGHTING FIXTURE ON NIGHT LIGHT OR EMERGENCY CIRCUIT
- LIGHTING FIXTURE; RECESSED AIMABLE OR WALL WASH
- LIGHTING FIXTURE; RECESSED OR PENDANT MTD
- LIGHTING FIXTURE; RECESSED OR PENDANT MTD ON NIGHT LIGHT OR EMERGENCY CIRCUIT
- LIGHTING FIXTURE; SURFACE MOUNTED
- LIGHTING FIXTURE; SURFACE MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
- TRACK LIGHTING
- LIGHTING FIXTURE; WALL MOUNTED
- LIGHTING FIXTURE; WALL MOUNTED ON NIGHT LIGHT OR EMERGENCY CIRCUIT
- LIGHTING FIXTURE; UNDERCABINET MOUNTED
- LIGHTING FIXTURE; COVE MOUNTED
- EXIT LIGHTING FIXTURE SINGLE OR DOUBLE FACE WITH DIRECTIONAL ARROWS - CEILING OR PENDANT MOUNTED
- WALL MOUNTED EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS
- CEILING MOUNTED SELF-CONTAINED EMERGENCY LIGHTING UNIT
- WALL MOUNTED SELF-CONTAINED EMERGENCY LIGHTING UNIT
- POLE MOUNTED AREA LIGHTING FIXTURE; QUANTITY OF LUMINARIES AS INDICATED
- SITE LIGHTING; BOLLARD
- POST TOP POLE MOUNTED AREA LIGHTING FIXTURE
- SITE LIGHTING FIXTURE; ADJUSTABLE FLOOD
- LINE VOLTAGE SINGLE POLE SWITCH
- LINE VOLTAGE DOUBLE POLE SWITCH
- LINE VOLTAGE THREE WAY SWITCH
- LINE VOLTAGE FOUR WAY SWITCH
- LINE VOLTAGE KEY OPERATED SWITCH
- LINE VOLTAGE 'WALL BOX' DIMMER SWITCH
- LINE VOLTAGE LIGHTING OCCUPANCY SENSOR WITH INTEGRAL ON/OFF SWITCH - WALL MOUNTED
- LINE VOLTAGE LIGHTING OCCUPANCY SENSOR WITH INTEGRAL DIMMING - WALL MOUNTED
- LINE VOLTAGE LIGHTING OCCUPANCY SENSOR WITH INTEGRAL DUAL ZONE ON/OFF SWITCH - WALL MOUNTED
- LINE VOLTAGE SWITCH WITH PILOT LIGHT
- LINE VOLTAGE SWITCH WITH TIMER
- LINE VOLTAGE SINGLE POLE SWITCHES FOR DUAL LEVEL LIGHTING CONTROL
- LINE VOLTAGE THREE WAY SWITCHES FOR DUAL LEVEL LIGHTING CONTROL
- LOW VOLTAGE PUSH BUTTON STATION LV - SINGLE ZONE ON/OFF LVD - SINGLE ZONE DIMMING LV2 - 2 ZONE ON/OFF ONLY LV2D - 2 ZONE ON/OFF & DIMMING
- CEILING MTD OCCUPANCY SENSOR
- WALL MTD LIGHTING OCCUPANCY SENSOR
- CEILING MTD LINE VOLTAGE OCCUPANCY SENSOR
- WALL MTD LINE VOLTAGE LIGHTING OCCUPANCY SENSOR
- LIGHTING CONTACTOR
- TIME SWITCH
- LIGHTING CONTROL PANEL
- PHOTOELECTRIC SWITCH/PHOTOCELL - CEILING MOUNTED
- PHOTOELECTRIC SWITCH/PHOTOCELL - WALL MOUNTED
- EMERGENCY POWER TRANSFER DEVICE
- LIGHTING CONTROL PRESET STATION OR TOUCHSCREEN

POWER

- SINGLE RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN CEILING
- DEAD-FRONT GROUND FAULT CIRCUIT INTERRUPTER (PROTECTION OF DOWNSTREAM CONNECTED DEVICES)
- ABOVE COUNTER DEAD-FRONT GROUND FAULT CIRCUIT INTERRUPTER (PROTECTION OF DOWNSTREAM CONNECTED DEVICES)
- FLUSH MOUNTED POWER ONLY FLOOR BOX
- DUPLEX RECEPTACLE OUTLET MOUNTED ABOVE COUNTER
- DUPLEX RECEPTACLE OUTLET WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER PROTECTION
- DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM GROUND FAULT CIRCUIT INTERRUPTER PROTECTION DEVICE
- DUPLEX RECEPTACLE OUTLET WITH INTEGRAL SURGE SUPPRESSION
- DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM SURGE SUPPRESSION DEVICE
- DUPLEX RECEPTACLE OUTLET SPLIT WIRED
- DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND
- QUAD RECEPTACLE OUTLET
- QUAD RECEPTACLE OUTLET MOUNTED ABOVE COUNTER
- QUAD RECEPTACLE OUTLET WITH ONE (1) INTEGRAL SURGE SUPPRESSION TYPE RECEPTACLE AND ONE (1) SURGE SUPPRESSION PROTECTED RECEPTACLE
- SPECIAL RECEPTACLE AS INDICATED
- POWER/COMMUNICATIONS POLE
- SPECIAL POWER CONNECTION
- CORD DROP
- POKE THROUGH ASSEMBLY LETTERS INDICATE TYPE (TYP)
- JUNCTION BOX - CEILING MOUNTED
- JUNCTION BOX - WALL MOUNTED
- PUSHBUTTON STATION - EMERGENCY POWER SHUTDOWN
- HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY
- VERTICALLY MOUNTED MULTI-OUTLET RACEWAY
- BUS DUCT
- EQUIPMENT MOUNTING BACKBOARD
- 208/120V PANELBOARD
- 480/277V PANELBOARD
- DISTRIBUTION OR POWER PANELBOARD
- SINGLE PHASE MOTOR
- THREE PHASE MOTOR
- MAGNETIC MOTOR STARTER
- COMBINATION MAGNETIC MOTOR STARTER & FUSED DISCONNECT SWITCH - SWITCH SIZE / FUSE SIZE
- NON-FUSED DISCONNECT SWITCH -SWITCH SIZE
- FUSED DISCONNECT SWITCH -SWITCH SIZE/FUSE SIZE
- ENCLOSED CIRCUIT BREAKER -CB RATING
- VARIABLE SPEED DRIVE
- MAGNETIC CONTACTOR
- MANUAL MOTOR STARTER
- HORSEPOWER RATED SWITCH
- PACKAGED EQUIPMENT WITH INTEGRALLY MOUNTED PREWIRED CONTROL PANEL
- FURNISHED AS INTEGRAL PART OF EQUIPMENT, OR AS INDICATED TRANSFORMER
- GROUND ROD
- LIGHTNING PROTECTION AIR TERMINAL
- GROUND BUS BAR AS INDICATED

AUXILIARY SYSTEMS

- CEILING MOUNTED SINGLE FACED CLOCK
- CEILING MOUNTED DOUBLE FACED CLOCK
- WALL MOUNTED SINGLE FACED CLOCK
- WALL MOUNTED DOUBLE FACED CLOCK
- COMBINATION WALL MOUNTED SPEAKER/CLOCK
- CEILING MOUNTED COMBINATION SPEAKER/CLOCK
- WALL MOUNTED DIGITAL CLOCK
- CEILING MOUNTED SPEAKER
- CEILING MOUNTED SPEAKER CLUSTER
- WALL MOUNTED SPEAKER
- CEILING MOUNTED MICROPHONE OUTLET
- WALL MOUNTED MICROPHONE OUTLET
- WALL MOUNTED AUXILIARY OUTLET
- WALL MOUNTED VOLUME CONTROL
- WALL MOUNTED BELL
- WALL MOUNTED CHIME
- WALL MOUNTED HORN SPEAKER
- CEILING MOUNTED HORN SPEAKER
- SECURITY SYSTEM CARD READER
- SECURITY SYSTEM DOOR CONTACT
- SECURITY SYSTEM ELECTRIC STRIKE
- SECURITY SYSTEM ELECTRIFIED HARDWARE
- SECURITY SYSTEM LOCKDOWN READER/BUTTON
- SECURITY SYSTEM KEY SWITCH
- SECURITY SYSTEM MOTION DETECTOR
- CEILING MOUNTED SECURITY CAMERA
- WALL MOUNTED SECURITY CAMERA
- FIRE ALARM PULL STATION
- WALL MOUNTED A/V FIRE ALARM INDICATING DEVICE
- CEILING MOUNTED A/V FIRE ALARM INDICATING DEVICE
- WALL MOUNTED VISUAL FIRE ALARM INDICATING DEVICE
- CEILING MOUNTED VISUAL FIRE ALARM INDICATING DEVICE
- WALL MOUNTED AUDIO FIRE ALARM INDICATING DEVICE
- CEILING MOUNTED AUDIO FIRE ALARM INDICATING DEVICE
- WALL MOUNTED VISUAL EMERGENCY MASS NOTIFICATION INDICATING DEVICE
- CEILING MOUNTED VISUAL EMERGENCY MASS NOTIFICATION INDICATING DEVICE
- WALL MOUNTED AREA SMOKE DETECTOR
- CEILING MOUNTED AREA SMOKE DETECTOR
- CEILING MOUNTED COMBINATION AREA SMOKE/CO DETECTOR
- CEILING MOUNTED TEMPERATURE DETECTOR
- DUCT SMOKE DETECTOR
- WALL MOUNTED MAGNETIC DOOR HOLDER/RELEASE
- WATER FLOW SWITCH
- TAMPER SWITCH
- FIRE FIGHTER TELEPHONE JACK
- FIRE ALARM CONTROL PANEL
- FIRE SUPPRESSION SYSTEM CONTROL PANEL
- FIRE ALARM REMOTE ANNUNCIATOR PANEL
- SINGLE BED STATION - NURSE CALL
- DOUBLE BED STATION - NURSE CALL
- BATHROOM STATION - NURSE CALL
- BATHROOM STATION PULL CORD - NURSE CALL
- CODE BLUE PUSHBUTTON - NURSE CALL
- NURSE CALL DUTY STATION
- NURSE CALL EMERGENCY STATION
- NURSE CALL MASTER STATION
- NURSE CALL POWER SUPPLY
- NURSE CALL STAFF STATION
- NURSE CALL WALL MOUNTED DOME LIGHT
- NURSE CALL CEILING MOUNTED DOME LIGHT
- NURSE CALL WALL MOUNTED DOME LIGHT WITH CODE BLUE
- NURSE CALL CEILING MOUNTED DOME LIGHT WITH CODE BLUE
- WALL MOUNTED COMMUNICATIONS OUTLET
- ABOVE COUNTER COMMUNICATIONS OUTLET
- CEILING MOUNTED COMMUNICATIONS OUTLET
- COMMUNICATIONS FLOORBOX
- MULTI-SYSTEM FLOORBOX
- NETWORK INTERCOM STATION
- INTERCOM CALL BUTTON WITH PRIVACY

ONE-LINE

- ANALOG AMPERE\VOLT METER
- ANALOG ENERGY USAGE METER
- DIGITAL MULTI-FUNCTION METER
- KIRK KEY INTERLOCK
- CIRCUIT BREAKER
- SWITCH
- FUSE
- TRANSFORMER
- TRANSFER SWITCH
- THERMAL OVERLOAD
- CONTACTS
- INDICATES WIRE SIZE AND CONDUIT SIZE
- DRAWOUT CIRCUIT BREAKER
- AIR-MAG / VACUUM CIRCUIT BREAKER
- ENGINE GENERATOR
- SYSTEM OR EQUIPMENT GROUND

MISC

- EXOTHERMIC WELD OR BRAZED CONNECTION
- CONDUIT IN OR BELOW FLOOR SLAB OR BELOW GRADE
- RACEWAY TURNED UP
- RACEWAY TURNED DOWN
- SEAL-OFF - CONDUIT SEAL
- CABLE TRAY
- UNDERFLOOR DUCT - POWER
- UNDERFLOOR HEADER DUCT - POWER
- UNDERFLOOR DUCT - COMM
- UNDERFLOOR HEADER DUCT - COMM

SITE

- FLUSH IN-GRADE HAND HOLE
- UNDERGROUND ELECTRICAL
- UNDERGROUND COMMUNICATIONS
- UNDERGROUND FIBER OPTIC COMMUNICATIONS
- UNDERGROUND LIGHTING
- EMERGENCY "CODE BLUE" BOLLARD

PROJECT GENERAL NOTES

1. ALL ITEMS SHOWN HATCHED SHALL BE DISCONNECTED AND REMOVED. LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN. HEAVY LINE WEIGHT INDICATES NEW.
2. ITEMS DENOTED BY THE LETTER "R" INDICATE EXISTING EQUIPMENT TO BE RELOCATED. THESE ITEMS SHALL BE DISCONNECTED, REMOVED AND STORED FOR REINSTALLATION IN NEW LOCATIONS AS INDICATED ON NEW WORK PLANS.
3. WHERE APPLICABLE AND NOT SPECIFICALLY INDICATED OTHERWISE, EXISTING IN PLACE CONDUITS, JUNCTION BOXES, PULL BOXES AND HANGERS MAY BE REUSED FOR NEW WORK PROVIDING THAT THE INSTALLATION IS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE EXISTING CONDUITS DO NOT INTERFERE WITH DEMOLITION OR NEW WORK OF ANY TRADES.
4. WHERE CONDUITS ARE ROUTED CONCEALED IN WALL CAVITIES FOR ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED, ABANDON THE CONDUIT CONCEALED IN THE WALL CAVITY. REMOVE THE CONDUIT EXITING THE WALL CAVITY INTO THE CEILING SPACE BEYOND THE FIRST FITTING OR JUNCTION BOX. REMOVE ALL SURFACE MOUNTED OUTLET BOXES ASSOCIATED WITH THE CONDUIT SYSTEM. ABANDON ALL FLUSH MOUNTED OUTLET BOXES ASSOCIATED WITH THE CONDUIT SYSTEM IN PLACE AND PROVIDE NEW BLANK COVER PLATES.
5. WHERE CONDUITS ARE ROUTED UNDERGROUND FOR ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED. REMOVE INDICATED EQUIPMENT AND WIRING BACK TO SOURCE. CUT CONDUIT BELOW FINISHED FLOOR AND REMOVE. PATCH FLOOR.
6. DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT AS INDICATED INCLUDING HANGERS. PULL BOXES. JUNCTION BOXES, CONDUIT AND WIRING FROM THE POWER SOURCE TO THE UTILIZATION EQUIPMENT.
7. WHERE REMOVAL OF CONDUIT AND WIRING AFFECTS THE OPERATION OF "UPSTREAM" AND/OR "DOWNSTREAM" UTILIZATION EQUIPMENT WHICH WAS NOT INDICATED TO BE REMOVED, PROVIDE ADDITIONAL CONDUIT AND WIRING TO RESTORE THE "UPSTREAM" AND "DOWNSTREAM" UTILIZATION EQUIPMENT TO ITS NORMAL OPERATION.
8. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SUPERVISION REQUIRED TO COMPLETE ALL DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT AS SPECIFIED OR INDICATED. DISCONNECT, REMOVE AND RELOCATE ALL ITEMS AS REQUIRED TO FACILITATE THE NEW CONSTRUCTION. COORDINATE THE DEMOLITION REQUIREMENTS WITH ALL OTHER TRADES AND THE NEW WORK PLANS.
9. NEW FIRE ALARM DEVICES SHALL BE COMPATABLE WITH EXISTING FIRE ALARM SYSTEM. EXISTING FIRE ALARM SYSTEM IS MANUFACTURED BY NATIONAL TIME AND SIGNAL. COORDINATE ALL SYSTEMS REQUIREMENTS WITH MANUFACTURER.
10. PROVIDE A DEDICATED NEUTRAL CONDUCTOR WITHIN THE RACEWAY, ALONG WITH THE PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS.
11. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY, ALONG WITH THE PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS.
12. ALL 120 VOLT, 20 AMPERE BRANCH CIRCUITS EXCEEDING 100'-0" IN LENGTH SHALL BE INSTALLED USING #10 AWG CONDUCTORS UNLESS OTHERWISE NOTED.
13. PROVIDE #10 AWG WIRING (MINIMUM) FOR ALL LIGHTING BRANCH CIRCUITS SERVING EXTERIOR BUILDING MOUNTED LIGHTING FIXTURES.
14. ALL ELECTRICAL DEVICES AND ASSOCIATED OUTLET BOXES SHALL BE FLUSH MOUNTED UNLESS NOTED OTHERWISE. ALL CONDUIT AND WIRING SHALL BE CONCEALED. SURFACE METAL RACEWAY SHALL BE PERMITTED ONLY WHERE NOTED.
15. MOUNTING HEIGHT OF RECESSED JUNCTION OR OUTLET BOXES IN BLOCK OR BRICK MAY BE ADJUSTED TO THE NEAREST HORIZONTAL COURSING. COVER PLATE TO CONCEAL GROUTLINE.
16. ALL WORK AND EQUIPMENT SHALL CONFORM TO THE NEC. THE MEANS AND METHODS USED BY THIS CONTRACTOR SHALL CONFORM TO NEC SECTION 110.3.
17. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED TO THE FIRE MARSHAL FOR APPROVAL PRIOR TO SUBMITTING FOR ENGINEER APPROVAL.
18. ALL UNUSED LIGHTING FIXTURES TO BE RETURN TO OWNER

Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARDS INFORMATION SHOWN ON THIS SHEET

Project Administrator	A. Maurer
Project Designer	T. Morgan
Project Architect / Engineer	T. Morgan
Drawn By	T. Morgan
Q.M. Review	T. Carron
Approved	T. Carron
Drawing Scale	No Scale

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

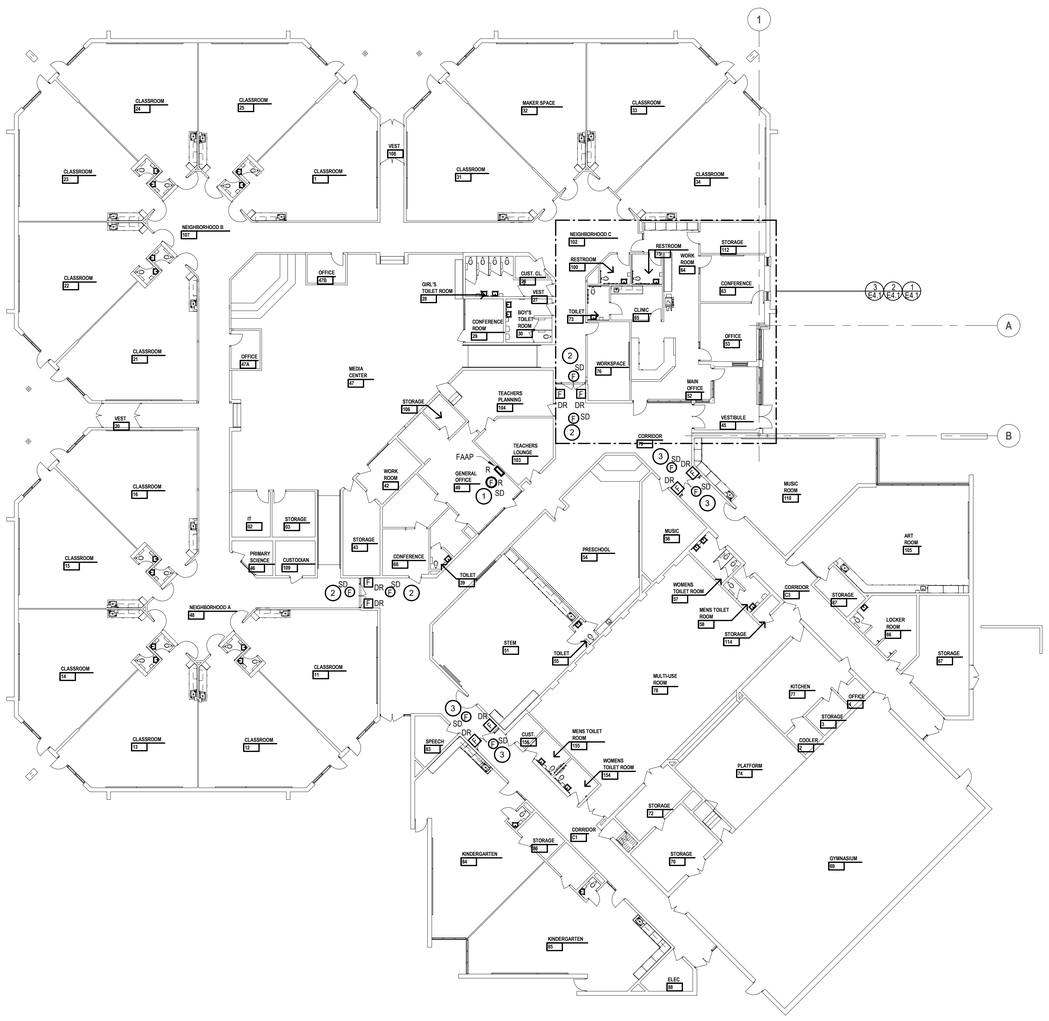
Electrical Reference Information

IDS Project Number: 20111-3008

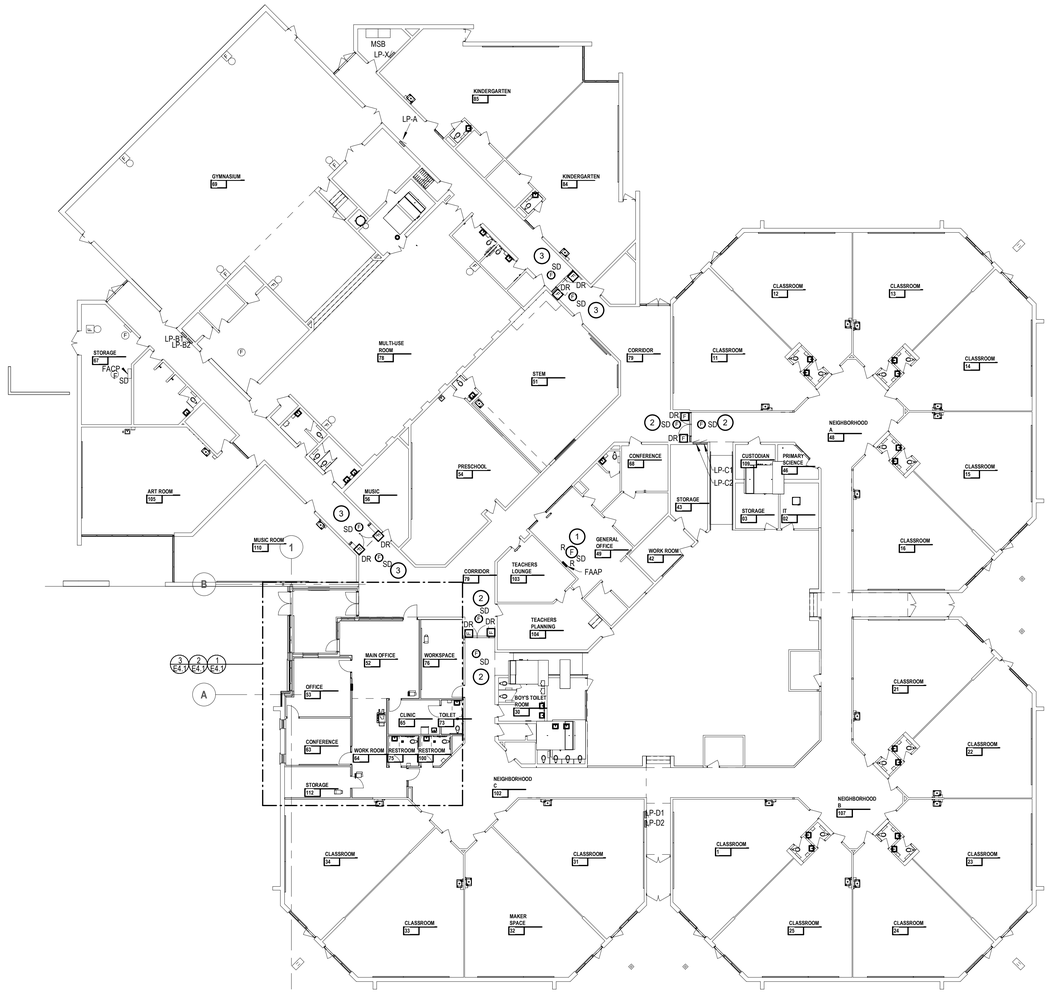
Drawing Number: 1.ER. 0

KEY NOTES

1. RELOCATE FIRE ALARM ANNUNCIATOR PANEL AND CEILING MOUNTED SMOKE DETECTOR FROM GENERAL OFFICE 49 TO NEW SECURED ENTRY MAIN OFFICE 62.
2. DOORS HELD OPEN BY ELECTRIFIED HOLD OPEN DEVICES. WIRING TO HOLD OPEN DEVICES SHALL BE #12 AWG. ALL WIRING BELOW CEILING PROVIDED IN SURFACED MOUNTED WIREMOLD. CONNECT NEW FIRE ALARM MODULE TO EXISTING FIRE ALARM SYSTEM. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE PRIOR TO ROUGH IN. REFER TO DETAIL 6 ON DRAWING 1.E7.1 FOR ADDITIONAL INFORMATION.
3. DOOR HELD OPEN BY ELECTRIFIED HOLD OPEN DEVICES. WIRING TO HOLD OPEN DEVICES SHALL BE #12 AWG. CONNECT NEW DEVICES TO EXISTING FIRE ALARM SYSTEM. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE PRIOR TO ROUGH IN. REFER TO DETAIL 6 ON DRAWING 1.E7.1 FOR ADDITIONAL INFORMATION.



2 FIRST FLOOR COMPOSITE PLAN - SAVAGE ELEMENTARY
1/16" = 1'-0"



1 1.FIRST FLOOR COMPOSITE PLAN - TYLER ELEMENTARY
1/16" = 1'-0"

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www.sdistructures.com

Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator	A. Maurer
Project Designer	T. Morgan
Project Architect / Engineer	T. Morgan
Drawn By	T. Morgan
Q.M. Review	T. Carron
Approved	T. Carron
Drawing Scale	As Noted

Issued for	Issue Date
Design Development	06-24-2024
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IDS Drawing Title

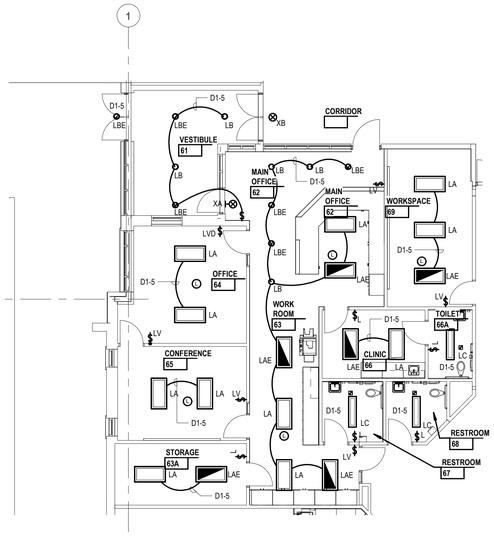
First Floor Composite Plan

IDS Project Number: 20111-3008

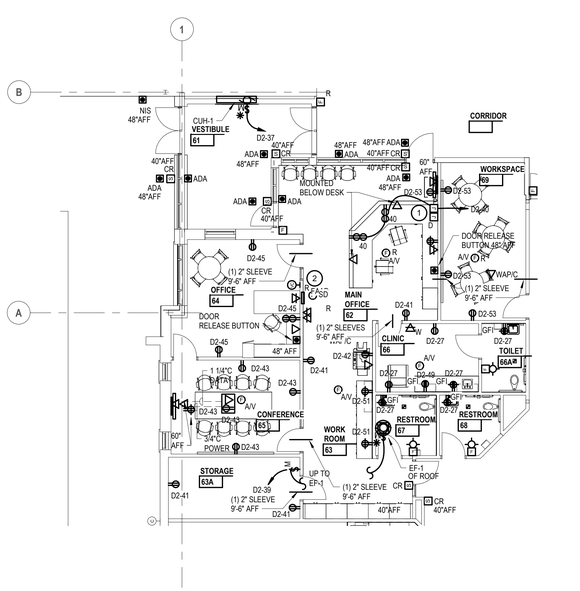
Drawing Number: 1.E0. 1

KEY NOTES

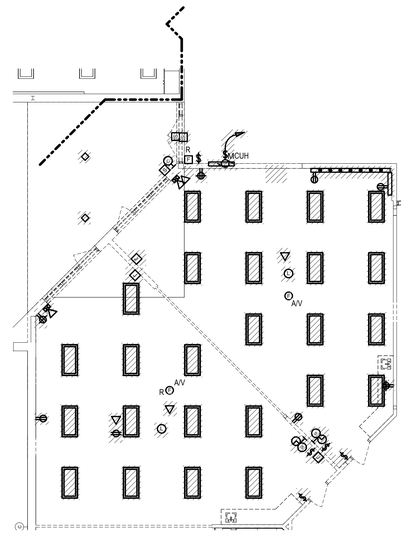
1. PROVIDE JUNCTION BOX IN WALL AT 18" AFF FOR ROUTING POWER BRANCH WIRING TO OUTLETS AND DATA CABLING WITH PULL STRINGS .
2. RELOCATE EXISTING FIRE ALARM ANNUCATOR PANEL FROM EXISTING MAIN OFFICE TO NEW SECURED ENTRY ADDITION.



2 LIGHTING PLAN
1/8" = 1'-0"
SAVAGE ELEMENTARY - SIM OPP HAND



3 NEW WORK POWER & AUXILIARY SYSTEMS PLAN
1/8" = 1'-0"
SAVAGE ELEMENTARY - SIM OPP HAND



1 DEMOLITION PLAN
1/8" = 1'-0"
SAVAGE ELEMENTARY - SIM OPP HAND

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator
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T. Morgan
Project Architect / Engineer
T. Morgan
Drawn By
T. Morgan
Q.M. Review
T. Carron
Approved
T. Carron
Drawing Scale
As Noted

Issued for	Issue Date
Design Development	06-24-2024
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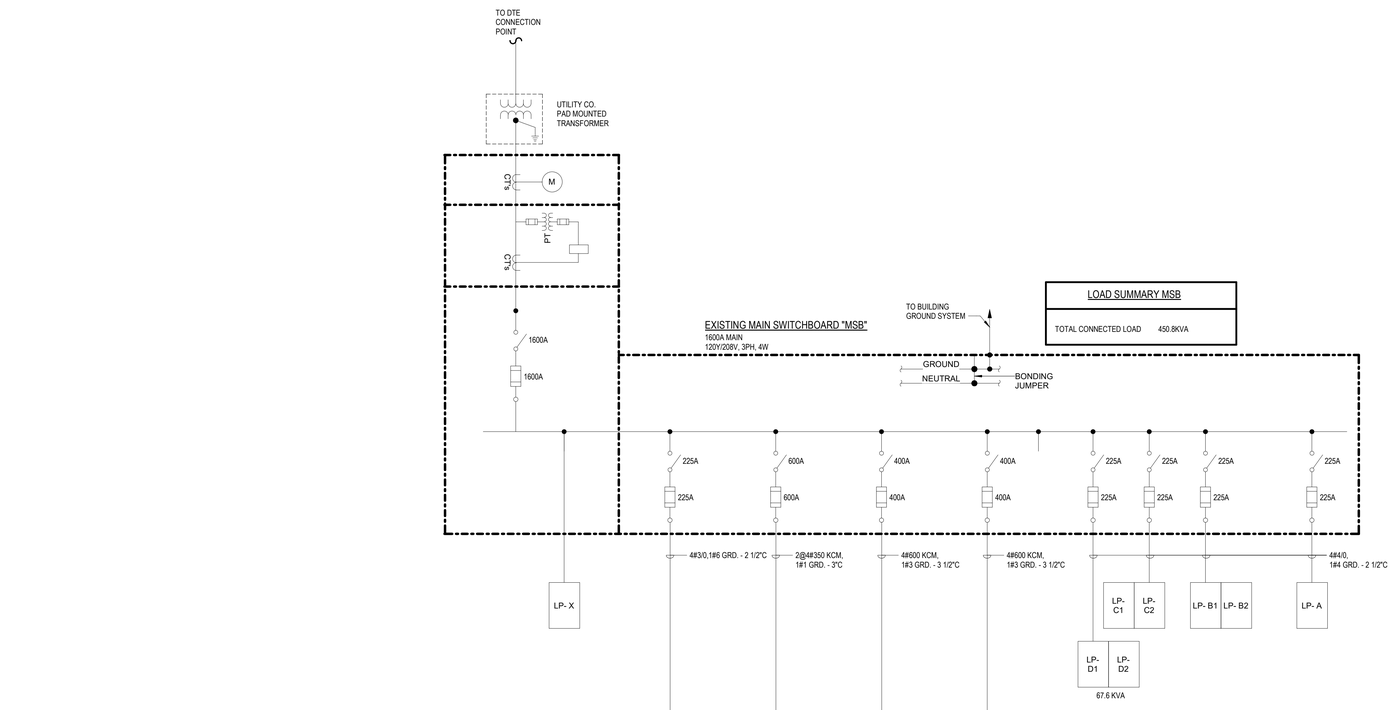
IDS Drawing Title

Enlarged Plans

IDS Project Number
20111-3008

Drawing Number
1.E4. 1



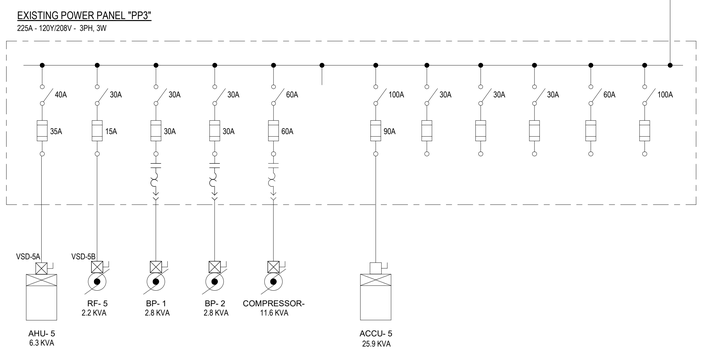
CONDUIT AND WIRE SCHEDULE

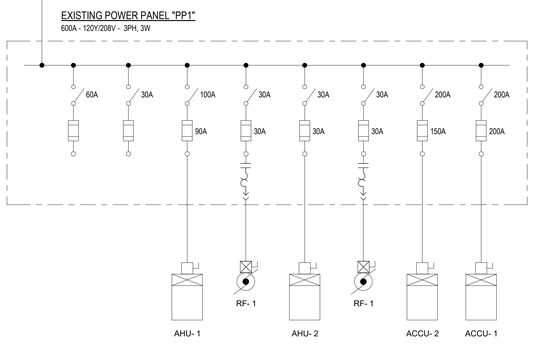
COPPER CONDUCTORS

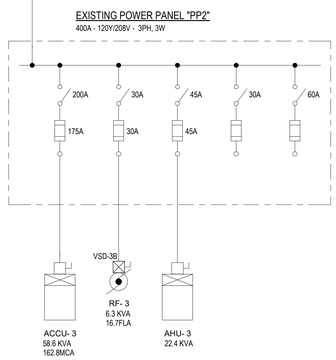
		3 PHASE, 3 WIRE WITH GROUND		3 PHASE, 4 WIRE WITH GROUND	
		TAG	FILL	TAG	FILL
THW THHW (NOTE 4)	60 DEGREE C RATING (NOTE 5)	20G	3#12,1#12 GRD. - 3/4"C	20NG	4#12,1#12 GRD. - 3/4"C
		30G	3#10,1#10 GRD. - 3/4"C	30NG	4#10,1#10 GRD. - 3/4"C
		40G	3#8,1#10 GRD - 3/4"C	40NG	4#8,1#10 GRD - 1"C
		55G	3#6,1#10 GRD. - 1"C	55NG	4#6,1#10 GRD. - 1 1/4"C
		70G	3#4,1#8 GRD. - 1 1/4"C	70NG	4#4,1#8 GRD. - 1 1/4"C
		85G	3#3, 1#8 GRD. - 1 1/4"C	85NG	4#3, 1#8 GRD. - 1 1/4"C
		95G	3#2,1#8 GRD. - 1 1/4"C	95NG	4#2,1#8 GRD. - 1 1/2"C
		110G	3#1,1#6 GRD. - 1 1/2"C	110NG	4#1,1#6 GRD. - 2"C
XHHW THHN THWN (NOTE 4)	75 DEGREE C RATING (NOTE 5)	150G	3#1/0,1#6 GRD. - 1 1/2"C	150NG	4#1/0,1#6 GRD. - 2"C
		175G	3#2/0,1#6 GRD. - 2"C	175NG	4#2/0,1#6 GRD. - 2"C
		200G	3#3/0,1#6 GRD. - 2"C	200NG	4#3/0,1#6 GRD. - 2 1/2"C
		230G	3#4/0,1#4 GRD. - 2"C	230NG	4#4/0,1#4 GRD. - 2 1/2"C
		255G	3#250 KCM,1#4 GRD. - 2"C	255NG	4#250 KCM,1#4 GRD. - 2 1/2"C
		285G	3#300 KCM,1#4 GRD - 2 1/2"C	285NG	4#300 KCM,1#4 GRD - 3"C
		310G	3#350 KCM,1#3 GRD. - 2 1/2"C	310NG	4#350 KCM,1#3 GRD. - 3"C
		380G	3#500 KCM,1#3 GRD. - 3"C	380NG	4#500 KCM,1#3 GRD. - 3 1/2"C
		420G	3#600 KCM,1#3 GRD. - 3"C	420NG	4#600 KCM,1#3 GRD. - 3 1/2"C
		510G	2(3#250 KCM, 1#2 GRD. - 2 1/2"C]	510NG	2(4#250 KCM, 1#2 GRD. - 2 1/2"C]
		620G	2(3#350 KCM, 1#1 GRD. - 2 1/2"C]	620NG	2(4#350 KCM, 1#1 GRD. - 3"C]
		760G	2(3#500 KCM,1#1/0 GRD. - 3"C]	760NG	2(4#500 KCM,1#1/0 GRD. - 3 1/2"C]
		800G	2(3#600KCM, 1#1/0 GRD-3"C]	800NG	2(4#600KCM, 1#1/0 GRD-3 1/2"C]
		1000G	3(3#500 KCM,1#2/0 GRD. - 3"C]	1000NG	3(4#500 KCM,1#2/0 GRD. - 3 1/2"C]
		1200G	3(3#600 KCM,1#3/0 GRD. - 3"C]	1200NG	3(4#600 KCM,1#3/0 GRD. - 3 1/2"C]
		1600G	4(3#600 KCM,1#4/0 GRD. - 3"C]	1600NG	4(4#600 KCM,1#4/0 GRD. - 3 1/2"C]
		2000G	5(3#600 KCM,1#250 KCM GRD. - 3 1/2"C]	2000NG	5(4#600 KCM,1#250 KCM GRD. - 3 1/2"C]

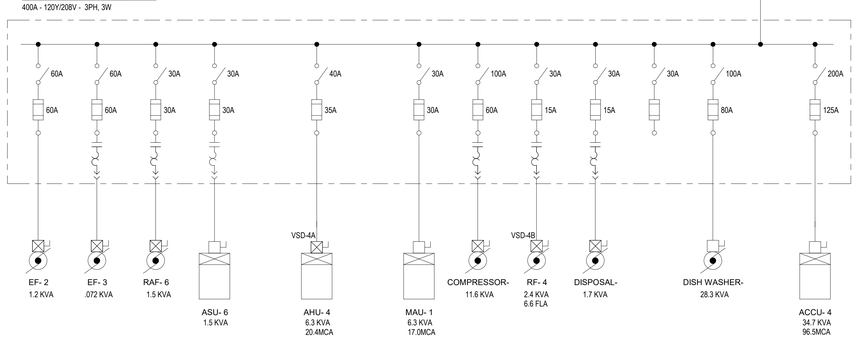
NOTES:

1. GROUND WIRES SHOWN IN CONDUIT AND WIRE SCHEDULE ARE EQUIPMENT GROUNDING CONDUCTORS SIZED PER NEC 250-122.
2. GROUNDING ELECTRODE CONDUCTORS FOR SERVICE ENTRANCE AND FOR TRANSFORMER NEUTRALS SHALL BE SIZED PER TABLE 250.66.
3. MAIN BONDING JUMPER AND SYSTEM BONDING JUMPER FOR MAIN SERVICE AND SEPARATELY DERIVED SYSTEMS SHALL BE SIZED PER NEC 250.28(D) AND TABLE 250.102(C)(1).
4. CONDUIT FILL BASED CONDUCTOR INSULATION TYPE AS INDICATED AND SHALL BE USED FOR RMC, FMC, EMT AND PVC SCHEDULE 40 ONLY. ALL OTHER CONDUITS SHALL BE SIZED PER NEC CHAPTER 9 ANNEX C.
5. CONDUCTOR AMPACITY IS BASED ON TEMPERATURE RATING INDICATED AND NEC TABLE 310.15(B)(16).









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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator
A. Maurer
Project Designer
T. Morgan
Project Architect / Engineer
T. Morgan
Drawn By
T. Morgan
Q.M. Review
T. Carron
Approved
T. Carron
Drawing Scale
No Scale

Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

One Line Diagram

For Reference Only

IDS Project Number: 20111-3008

Drawing Number: 1.E5. 1

PANELBOARD SCHEDULE LP-D1

225 AMPS MLO

CKT.	LOAD	CB	A		B		C		CB	LOAD	CKT.
1	Corridor Lights	20	1800	1800					20	Toilet & Centrum	2
3	Centrum & Room 36 Lights	20			1800	1800			20	Lights Room 32	4
5	**New Secured Entry**	20					**1644**	1800	20	Lights Room 34	6
7	**Spare**	20		1800					20	Lights Room 33	8
9	Lights Room 35	20			1800	1800			20	Lights Room 33	10
11	Lights Room 26	20					1800	1800	20	Lights Room 31	12
13	Lights Room 26	20	1800	1800						Lights Room 31	14
15	Lights Room 25, Pod Corridor	20			1800	1800				Lights Room 24	16
17	Lights Room 25 - 32	20					1800	1800		Lights Room 24	18
19	Lights Room 34	20	1800	1800						Lights Room 25	20
21	Lights Media Center	20			1800	1800				Lights Media Center	22
23	Lights Media Center	20					1800	1800		Lights Media Center	24

Panel Information

Volts:	208/120 Wye
Mounting:	Flush
A.I.C. (RMS Symmetrical):	10000
Phase:	3
Wire:	4
Hertz:	60

Symbols

Note: All Symbols May Not Be Used

* PROVIDE LOCK ON ATTACHMENT
\# PROVIDE SWD RATED BREAKER
@ PROVIDE AFCI TYPE BREAKER
\+ PROVIDE GFCI TYPE BREAKER

Load Classification Total Connected Load

Receptacle	0 VA
Equipment	0 VA
Lighting	41244 VA
Kitchen	0 VA

PHASE A CONNECTED LOAD:	12,600 VA
PHASE B CONNECTED LOAD:	14,400 VA
PHASE C CONNECTED LOAD:	14,244 VA
TOTAL CONNECTED LOAD:	**41,244 VA**
TOTAL ESTIMATED DEMAND LOAD:	**41,244 VA**
TOTAL ESTIMATED DEMAND AMPS:	**114.5 A**

PANELBOARD SCHEDULE LP-D2

225 AMPS MLO

	CKT.	LOAD	CB	A		B		C		CB	LOAD	CKT.	
	25	Lights - Kitchenette	20	960	1800					20	Media Center Lights	26	
+	27	**Recepts. -Rm 66,67,68, 66A**	20			**1080**	900			20	Recept - Media Center	28	
+	29	Recept - Room 34, 35	20					720	540	20	Floor Recept - Media Center	30	
+	31	Recept - Room 32,33	20	900	360					20	Recept - Workroom	32	
+	33	Recept - Room 26, 31	20			900	667			20	Ref Fan #1	34	
+	35	Recept - Room 34, 25	20					900	960	20	Mech Room Lights	36	
	37	**New CUH-1**	20	**180**	540					20	Recept - Toilet, M.C.	38	
	39	**New EF-1**	20			**420**	**720**			20	**Recepts. - Main Office 62**	40	
	41	**Recepts. Secured Entry**	20					**720**	**1200**	20	**Copier - Workroom 63**	42	
	43	**Recepts. - Conference 65**	20	**1080**	1587					20	Exhaust Fan # 1	44	
	45	**Recepts. - Office 64**	20			**720**	1587			30	VAV Rm 32 - 33, 36	46	*
	47	Upper Pod Computers	20					1440	1587	30	VAV Rm 23 -24, 21	48	*
	49	**Refrig. - Clinic 66**	**20**	**1200**	1587					30	VAV Rm 25, 31	50	
	51	**Recepts. - Workroom 63**	**20**			**360**	100			15	VAV Control	52	
	53	**Recepts - Workroom 69, Monitor**	**20**					**720**			Space	-	
	-	Space									Space	-	
	-	Space									Space	-	
	-	Space									Space	-	

Panel Information

Volts:	208/120 Wye
Mounting:	Flush
A.I.C. (RMS Symmetrical):	10000
Phase:	3
Wire:	4
Hertz:	60

Symbols

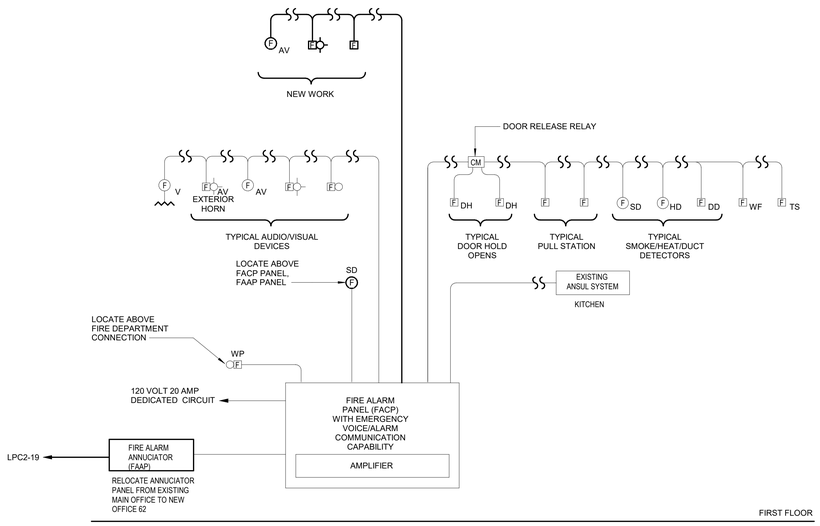
Note: All Symbols May Not Be Used

* PROVIDE LOCK ON ATTACHMENT
\# PROVIDE SWD RATED BREAKER
@ PROVIDE AFCI TYPE BREAKER
\+ PROVIDE GFCI TYPE BREAKER

Load Classification Total Connected Load

Receptacle	25835 VA
Equipment	600 VA
Lighting	0 VA
Kitchen	0 VA

PHASE A CONNECTED LOAD:	10,194 VA
PHASE B CONNECTED LOAD:	7,454 VA
PHASE C CONNECTED LOAD:	8,787 VA
TOTAL CONNECTED LOAD:	**26,435 VA**
TOTAL ESTIMATED DEMAND LOAD:	**18,518 VA**
TOTAL ESTIMATED DEMAND AMPS:	**51.4 A**



NOTES:

1. ELECTRICAL CONTRACTOR SHALL VERIFY ALL REQUIRED WIRE SIZES AND QUANTITIES WITH THE FIRE ALARM SYSTEM MANUFACTURER. ALL WIRING SHALL BE COLOR CODED AND CLEARLY TAGGED.
2. ALL WIRING INSULATION SHALL BE TYPE AS APPROVED PER THE FIRE ALARM CODE REQUIREMENTS.
3. SCHEMATIC DIAGRAM INDICATES GENERAL LAYOUT & INTENT OF SYSTEM DESIGN. REFER TO POWER & AUXILLIARY SYSTEMS PLANS FOR EXACT QUANTITIES AND LOCATIONS OF DEVICES.
4. PROVIDE AND INSTALL STAINLESS COVERPLATE OVER UNUSED BACK BOXES LEFT FROM DEMOLISH FIRE ALARM SYSTEM DEVICES.
5. PROVIDE POLYCARBONATE COVER OVER ALL PULL STATIONS.
6. PROVIDE SURFACE WIREMOLD FOR ALL WALL MOUNTED FIRE ALARM DEVICES.

FIRE ALARM DIAGRAM SECURED ENTRY

Not To Scale

LIGHTING FIXTURE SCHEDULE

LA	DESCRIPTION:	2'x 4' RECESSED LED BACK-LIT FLAT PANEL WITH: 4800 NOMINAL LUMEN PACKAGE, 3" MAXIMUM THICKNESS, POST-PAINTED GALVANIZED STEEL HOUSING, WHITE PAINTED ALUMINUM OR 20 GA. STEEL FRAME CONSTRUCTION, FACTORY INSTALLED DIE-FORMED DRIVER BOX ACCESSIBLE ABOVE, 0.125" THICK (MIN) PMMA OPAL FORSTED LENS, 100 LPW MIN EFFICACY, INTEGRAL SURGE PROTECTION, DRIVER DISCONNECT, L70 PROJECTED LIFE OF >50K HOURS AT 25 DEGREES CELCIUS AMBIENT TEMPERATURE, 120 VOLTAGE REPLACEABLE POWER SUPPLY WITH FLICKER FREE 10% MINIMUM DIMMING, T-BAR CLIPS FOR INSTALLATION IN A LAY-IN CEILING, DLC LISTED AND UL DAMP LOCATION LISTING.
	MANUFACTURER:	ACUITY: SPX SERIES
	SOURCE:	MINIMUM 80 CRI, 3500K CCT, 4800 LUMENS
	INPUT WATTS:	43
LAE	DESCRIPTION:	SAME AS TYPE "LA", EXCEPT PROVIDE INTEGRAL EMERGENCY BATTERY RATED FOR 1541 LUMENS AT 10-14 W PROVIDING CONTINUOUS RATED LIGHT OUTPUT FOR 90 MINUTES.
	MANUFACTURER:	ACUITY: SPX SERIES
	SOURCE:	MINIMUM 80 CRI, 3500K CCT
	INPUT WATTS:	43
LB	DESCRIPTION:	4" (NOMINAL) ROUND APERTURE, RECESSED COMMERCIAL GRADE OPEN LED DOWNLIGHT LUMINAIRE WITH: 7-1/2" MAXIMUM HOUSING DEPTH, SELF-FLANGED MATTE DIFFUSE REFLECTOR WITH WHITE PAINTED FLANGE, GENERAL DISTRIBUTION, REGRESSED LENS, ACCOMMODATIONS FOR CEILING THICKNESS TO 1-1/2", LEDS AND POWER SUPPLY SERVICEABLE FROM BELOW, 0-10V FLICKER FREE DIMMABLE (TO 1%), ELECTRONIC POWER SUPPLY WIRED FOR DIMMING, OVERLOAD AND SHORT CIRCUIT PROTECTION, INTEGRAL DRIVER DISCONNECT, ENERGY STAR CERTIFIED, UL LISTING FOR DAMP LOCATIONS: MVOLT VOLT OPERATION.
	MANUFACTURER:	ACUITY: LDN4 SERIES
	SOURCE:	MIN 80 CRI, 2000 DELIVERED LUMENS, 3500K CCT
	MAX INPUT WATTS:	26
LBE	DESCRIPTION:	SAME AS TYPE LB, EXCEPT, INCLUDE REMOTE EMERGENCY BATTERY PACK RATED FOR 2400 LUMENS PROVIDING CONSTANT ILLUMINATION FOR 90 MINUTES.
	MANUFACTURER:	ACUITY: LDN4 SERIES
	SOURCE:	MIN 80 CRI, 2000 DELIVERED LUMENS, 3500K CCT
	MAX INPUT WATTS:	26
LC	DESCRIPTION:	SAME AS TYPE "LA" EXCEPT 1' X 4'; MOUNTED IN GYMSUM CEILING
	MANUFACTURER:	ACUITY: SPX SERIES
	SOURCE:	MINIMUM 80 CRI, 4800 DELIVERED LUMENS, 3500K CCT
	MAX INPUT WATTS:	39 WATTS MAXIMUM
XA	DESCRIPTION:	SINGLE FACE, UNIVERSAL WALL MOUNT LED EMERGENCY EXIT LUMINAIRE WITH: DIE-CAST ALUMINUM FRAME, BACK PLATE AND MOUNTING CANOPY, WHITE DIE-CAST ALUMINUM (HOUSING), DIE-CAST ALUMINUM WHITE FACE; RED STENCIL STYLE LETTERS; DIRECTIONAL ARROWS AS INDICATED ON PLAN; LED LAMPS WITH DIFFUSE POLYCARBONATE LENS;SEALED MAINTENANCE FREE NICKEL CADMIUM BATTERY; LOW VOLTAGE DISCONNECT; SOLID STATE/FULLY AUTOMATIC AND CURRENT LIMITED CHARTER; BOTTOM MOUNTED TEST-SWITCH/PILOT LIGHT; BROWNOUT PROTECTION, FILTERED POWER SUPPLY TO PROTECT LED'S FROM SURGES, AND FULL SELF-DIAGNOSTICS, DUAL 120/277 VOLT NORMAL OPERATION AND UL LISTED. PROVIDE WIRE GUARD WHERE INDICATED ON PLANS
	MANUFACTURER:	LITHONIA: LE SERIES
	SOURCE:	FURNISHED WITH FIXTURE
	INPUT WATTS:	1.2W (SINGLE)
XB	DESCRIPTION:	SINGLE FACE, UNIVERSAL CEILING MOUNT LED EMERGENCY EXIT LUMINAIRE WITH: DIE-CAST ALUMINUM FRAME, BACK PLATE AND MOUNTING CANOPY, WHITE DIE-CAST ALUMINUM (HOUSING), DIE-CAST ALUMINUM WHITE FACE; RED STENCIL STYLE LETTERS; DIRECTIONAL ARROWS AS INDICATED ON PLAN; LED LAMPS WITH DIFFUSE POLYCARBONATE LENS;SEALED MAINTENANCE FREE NICKEL CADMIUM BATTERY; LOW VOLTAGE DISCONNECT; SOLID STATE/FULLY AUTOMATIC AND CURRENT LIMITED CHARTER; BOTTOM MOUNTED TEST-SWITCH/PILOT LIGHT; BROWNOUT PROTECTION, FILTERED POWER SUPPLY TO PROTECT LED'S FROM SURGES, AND FULL SELF-DIAGNOSTICS, DUAL 120/277 VOLT NORMAL OPERATION AND UL LISTED.
	MANUFACTURER:	LITHONIA: LE SERIES
	SOURCE:	FURNISHED WITH FIXTURE
	INPUT WATTS:	1.2W (SINGLE)

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator
A. Maurer
Project Designer
T. Morgan
Project Architect / Engineer
T. Morgan
Drawn By
T. Morgan
Q.M. Review
T. Carron
Approved
T. Carron
Drawing Scale
No Scale

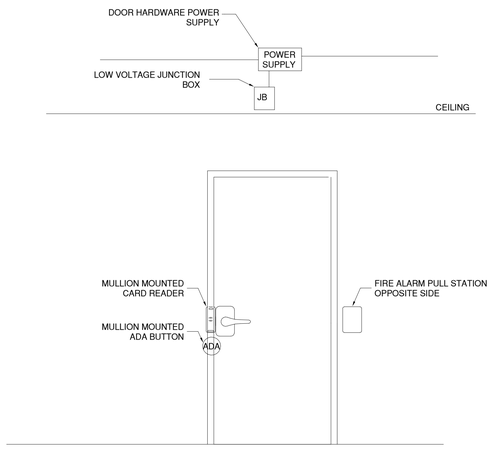
Issued for	Issue Date
Design Development	06-24-2024
Quality Management Review	08-23-2024
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

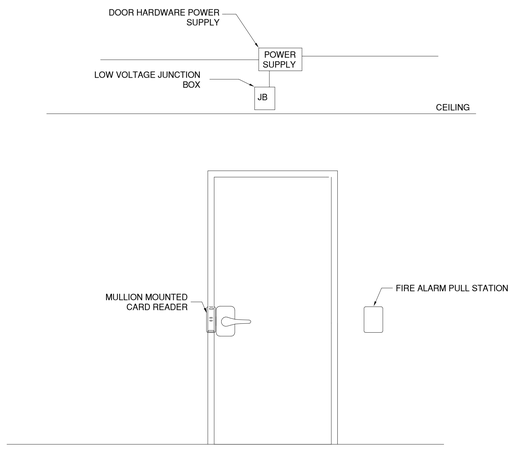
Panelboard Schedules, Lighting fixture Schedule, Details and Fire Alarm Diagram

IDS Project Number: 20111-3008

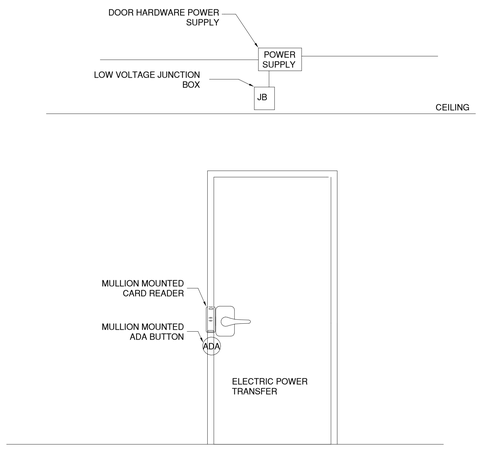
Drawing Number: 1.E6. 1



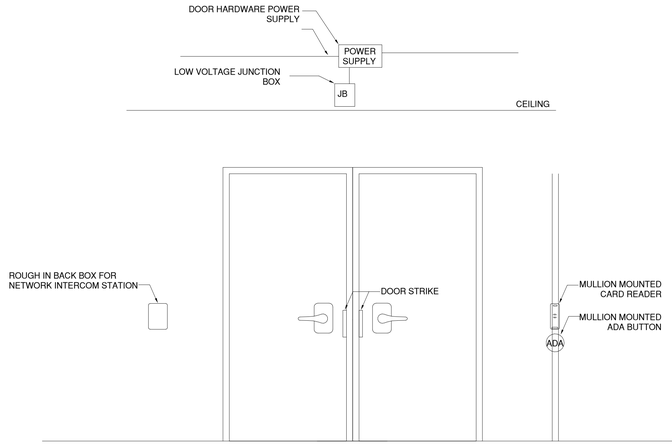
5 SINGLE DOOR ENTRANCE SIDE
NO SCALE



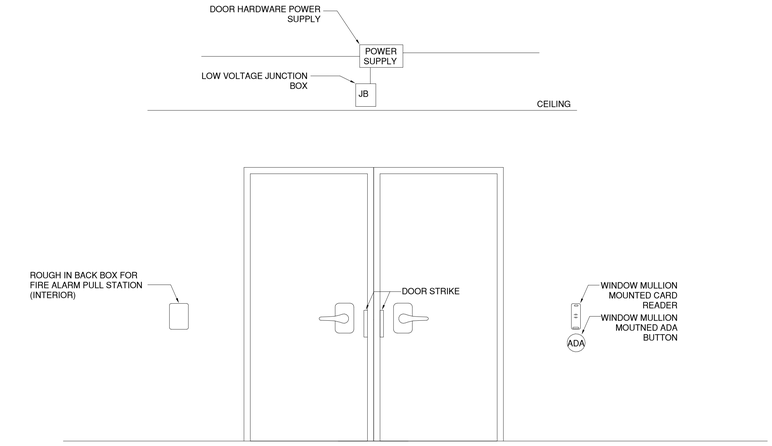
4 SINGLE DOOR INTERIOR SIDE
NO SCALE



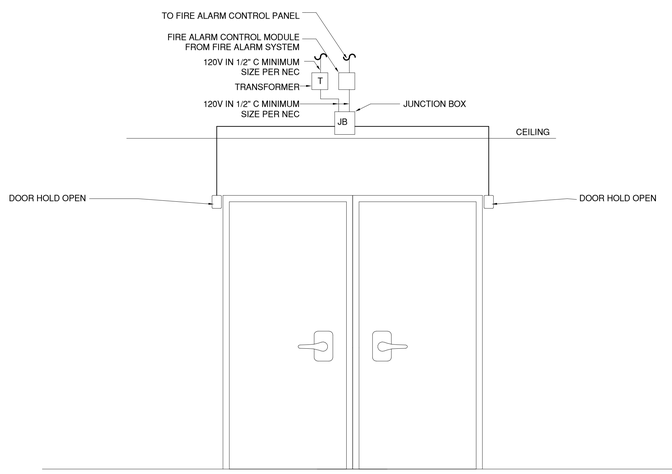
3 SINGLE DOOR INTERIOR SIDE
NO SCALE



2 DOUBLE DOOR ENTRANCE SIDE
NO SCALE



1 DOUBLE DOOR ENTRANCE SIDE
NO SCALE



6 DOUBLE DOOR - DOOR HOLD OPEN
NO SCALE

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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

Project Administrator: A. Maurer
Project Designer: T. Morgan
Project Architect / Engineer: T. Morgan
Drawn By: T. Morgan
Q.M. Review: T. Carron
Approved: T. Carron
Drawing Scale: No Scale

Issued for	Issue Date
Bids	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Details

IDS Project Number: 20111-3008

Drawing Number: 1.E7.1

ABBREVIATIONS

A	AMPERES
AC	ALTERNATING CURRENT
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALS	ASSISTED LISTENING SYSTEM
ALT	ALTERNATE
ANT	ANTENNA
ARCH	ARCHITECT, ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO/VISUAL
AWG	AMERICAN WIRE GAUGE
B	
BLDG	BUILDING
BE	BUILDING ENTRANCE
BOT	BOTTOM
BSMT	BASEMENT
BTU	BRITISH THERMAL UNITS
C	
CAB	CABINET
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCP	CLASSROOM CONTROL PANEL
CCTV	CLOSED CIRCUIT TELEVISION
CHBD	CHALKBOARD
CKT	CIRCUIT
CLG	CEILING
COMP	COMPUTER
CPU	CENTRAL PROCESSING UNIT
CP	CONTROL PANEL
CT	CABLE TRAY
D	
D	DATA
DA	DIGITALLY ADDRESSABLE
DC	DIRECT CURRENT
DEMO	DEMOLISH, DEMOLITION
DEMOD	DEMODULATOR
DEPT	DEPARTMENT
DHE	DISTRICT HEADEND
DIA	DIAMETER
DMARC	DMARCATION POINT
DN	DOWN
DP	DISTTRIBUTION PANEL
DVD	DIGITAL VERSATILE DISCT
DWG	DRAWING
E	
EA	EACH
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
EPT	ELECTRIC POWER TRANSDUCER
EQUIP	EQUIPMENT
ET	ETHERNET
EXIST	EXISTING
F	
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATING PANEL
FACP	FIRE ALARM CONTROL PANEL
FB	FLOOR BOX
FIB	FIBER OPTIC
FLR	FLOOR
FT	FOOT/FEET
G	
GA	GAGE/GAUGE
GFI	GROUND FAULT INTERRUPTER
GFCI	GROUND FAULT CIRCUITINTERRUPTER
GRD	GROUND
GYP BD	GYPSUM BOARD
H	
HD	HIGH DEFINITION TV
HH	HAND HOLE
HP	HORSEPOWER
HRN	HORN
HTR	HEATER
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HARD WIRED
I	
IDF	INTERMEDIATE DISTRIBUTION FRAME
IG	ISOLATED GRAND
I/O	INPUT / OUTPUT
IN	INCHES
IP	INTERNET PROTOCAL
IR	INFRARED
J	
JB	JUNCTION BOX
JC	JANITORS CLOSET
K	
K	KILOHERTZ
KHZ	KILOHERTZ
KVA	KILOVOLT AMPERE
KVM	KEYBOARD / VIDEO / MOUSE
KW	KILOWATT
L	
LAN	LOCAL AREA NETWORK
LAR	LINE ARRAY SPEAKER
LCD	LIQUID CRYSTAL DISPLAY
LCP	LIGHTING CONTROL PANEL
LED	LIGHT EMMITTING DIODE
LP	LIGHTING PANEL
LTG	LIGHTING
M	
MAX	MAXIMUM
MC	MASTER CLOCK
MDF	MAIN DISTRIBUTION FRAME
MECH	MECHANICAL
MH	MOUNTING HEIGHT
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULATOR
MON	MONITOR
MTD	MOUNTED
MTG	MOUNTING
N	
NC	NORMALLY CLOSED
NIC	NOT-IN-CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
O	
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR...
OFE	OWNER FURNISHED EQUIPMENT
OS	OCCUPANCY SENSOR
P	
PA	PUBLIC ADDRESS
PB	PULLBOX
PH	PHASE
PIR	PASSIVE INFRARED
PNL	PANEL
POS	POINT OF SALE
PROJ	PROJECTOR
PT	POKE THROUGH
PTZ	PAN / TILT / ZOOM
PVC	POLYVINYL CHLORIDE
R	
R	RELOCATE OR RELOCATED ITEM
REQD	REQUIRED
RF	RADIO FREQUENCY
RGS	RIGID GALVANIZED STEEL
RX	RECEIVER
S	
SCRN	PROJECTOR SCREEN
SD	SMOKE DETECTOR
SF	SQUARE FEET
SPECS	SPECIFICATIONS
SPKR	SPEAKER
SS	SURGE SUPPRESSION
STD	STANDARD
SW	SWITCH
T	
TC	TIME CLOCK
TEL	TELEPHONE
TELECOM	TELECOMMUNICATIONS
TERM	TERMINAL
TKBD	TACKBOARD
TR	TAMPER RESISTANT
TTB	TELEPHONE TERMINAL BACKBOARD
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TX	TRANSMITTER
TYP	TYPICAL
U	
UL	UNDERWRITERS LABORATORIES, INC.
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBAL POWER SUPPLY
USB	UNIVERSAL SERIAL BUS
V	
V	VOICE
VC	VOLUME CONTROL
VCR	VIDEO CASSETTE RECORDER
VIF	VERIFY IN FIELD
VOIP	VOICE OVER INTERNET PROTOCOL
W	
WAN	WIDE AREA NETWORK
WAP	WIRELESS ACCESS POINT
WB	WHITEBOARD
WG	WIRE GUARD
WLAN	WIRELESS LOCAL AREA NETWORK
WP	WEATHER PROOF
MISC	
3R	NEMA 3R
4X	NEMA 4X
X	BY
⌀ OR C	CENTERLINE
°	DEGREES
'	FOOT, FEET
"	INCH, INCHES
#	NUMBER
PH	PHASE
%	PERCENT, PERCENTAGE

TECHNOLOGY DRAWING INDEX

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SYMBOL LEGEND

DETAIL SYMBOL
DETAIL IDENTIFICATION
DETAIL
DETAIL SCALE
DRAWING WHERE DETAIL IS REFERENCED OR CUT

ELEVATION SYMBOL
ELEVATION NUMBER
DRAWING WHERE ELEVATION IS DRAWN

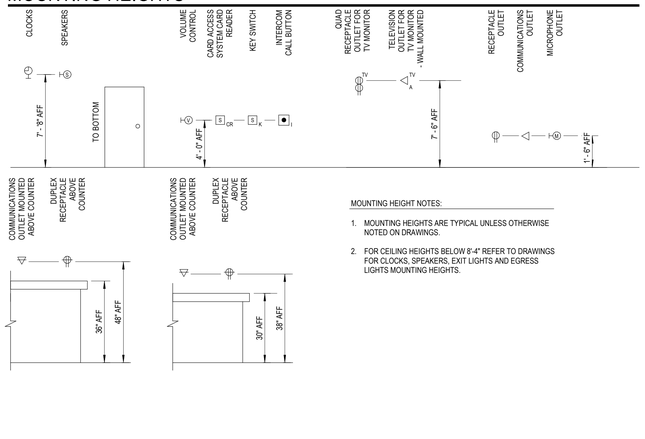
PLAN OR DETAIL ENLARGEMENT
PLAN OR DETAIL IDENTIFICATION
DRAWING WHERE PLAN OR DETAILS IS DRAWN

COLUMN CENTERLINE
EXISTING
NEW

SECTION LOCATOR
SECTION IDENTIFICATION
DRAWING WHERE PLAN OR DETAIL IS DRAWN

ROOM NAME AND NUMBER
ROOM NAME
ROOM
FLOOR
BUILDING OR UNIT (IF ANY)

MOUNTING HEIGHTS



MOUNTING HEIGHT NOTES:

1. MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE NOTED ON DRAWINGS.
2. FOR CEILING HEIGHTS BELOW 8'-4" REFER TO DRAWINGS FOR CLOCKS, SPEAKERS, EXIT LIGHTS AND EGRESS LIGHTS MOUNTING HEIGHTS.

GENERAL NOTES

1. LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN OR EQUIPMENT PROVIDED BY OTHERS. HEAVY LINE WEIGHT INDICATES NEW EQUIPMENT.
2. NETWORK DEVICE PLATES AND THE CABLING FOR THESE AREAS SHALL BE PROVIDED BY THE TECHNOLOGY CONTRACTOR.
3. TECHNOLOGY CONTRACTOR SHALL COORDINATE DEVICE OUTLET LOCATIONS WITH THE ARCHITECTURAL AND CASEWORK DRAWINGS PRIOR TO ROUGH-IN. REPORT ANY CONFLICTS TO THE CONSTRUCTION MANAGER FOR RESOLUTION.
4. TECHNOLOGY CONTRACTOR SHALL COORDINATE CLOSET ROOM EQUIPMENT/DEVICE LOCATIONS WITH THE GENERAL TRADES.
5. TECHNOLOGY CONTRACTOR SHALL NOT PLACE ANY DISTRIBUTION CABLING ALONGSIDE POWERLINES, OR SHARE THE SAME CONDUIT, CHANNEL OR SLEEVE WITH ELECTRICAL APPARATUS.
6. ALL CABLES SHALL BE INSTALLED IN "J" HOOKS, CONDUITS, CABLE TRAY OR AN APPROVED RACEWAY SYSTEM. WHERE CABLE TRAY IS NOT AVAILABLE, SUPPORT HORIZONTAL CABLE EVERY FIVE FEET WITH "J" HOOKS SUFFICIENT IN SIZE TO HANDLE ALL BUNDLED CABLES WHILE MIMMIZING CRUSHING. IF CABLE SLACK EXCEEDS TWELVE (12) INCHES BETWEEN SUPPORTS, ADDITIONAL SUPPORTS SHALL BE INSTALLED TO TAKE UP SLACK AND RELIEVE CABLE STRESS. ALL CABLES SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING STEEL. ALL COMMUNICATIONS CABLES SHALL BE LOCATED AND FASTENED TO GUARANTEE THERE SHALL BE NO INTERFERENCE FROM MAGNETIC FIELDS GENERATED FROM FIXTURE BALLASTS, MOTORS OR SIMILAR ELECTRICAL LOADS.
7. INSTALL ALL CABLES MAINTAINING CABLE MANUFACTURES RADIUS OF CURVATURE AND PROTECT AT BENDS AND CORNERS. MAINTAIN MINIMUM BEND RADUIS AND TENSION LIMITATIONS, AS SPECIFIED BY EIA/TIA FOR ALL COMMUNICATION CABLES.
8. LOOSELY BUNDLE CABLES WITH VELCRO TIES SUITABLE FOR PLENUM ENVIRONMENTS, EVERY TWENTY FEET.
9. THE LOW-VOLTAGE CONTRACTOR SHALL ASSURE THAT THE COMPLETION OF CABLE INSTALLATION. CABLES ARE FREE FROM TWISTS, KINKS, SHARP BENDS, CUTS, GOUGES OR ANY OTHER PHYSICAL DAMAGE.
10. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF WORK. THE TECHNOLOGY CONTRACTOR SHALL PROVIDE ALL INCIDENTAL MATERIALS AND LABOR OR A COMPLETE, FULLY FUNCTIONAL SYSTEM AND VERIFYING FIELD RACEWAYS.
11. NOTIFY CONSTRUCTION MANAGER OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND TECHNOLOGY DRAWINGS.
12. ALL WORK AND EQUIPMENT SHALL CONFORM TO NEC. THE MEANS AND METHODS USED BY TECHNOLOGY CONTRACTORS SHALL CONFORM TO NEC SECTION 110.3.
13. SECURITY CAMERAS AND WIRELESS ACCESS POINT LOCATIONS INDICATED ARE FOR NETWORK CABLING ONLY.
14. WIRELESS ACCESS POINTS ARE PROVIDED BY OWNER AND INSTALLED BY THE LOW-VOLTAGE CONTRACTOR. THE LOW-VOLTAGE CONTRACTOR IS TO PROVIDE A 10' PATCH CORD FOR EACH WIRELESS ACCESS POINT.
15. SECURITY CAMERAS ARE BY PROVIDED AND INSTALLED BY THE SECURITY CONTRACTOR. THE SECURITY CONTRACTOR IS TO PROVIDE A 10' PATCH CORD FOR EACH SECURITY CAMERA.

SYMBOLS (LETTERS (X) INDICATE TYPE, TYPICAL)

POWER

- SINGLE RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN CEILING
- FLUSH MOUNTED POWER ONLY FLOOR BOX
- DUPLEX RECEPTACLE OUTLET MOUNTED ABOVE COUNTER
- DUPLEX RECEPTACLE OUTLET WITH INTEGRAL GROUND FAULT PROTECTION
- DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM GROUND FAULT PROTECTION DEVICE
- DUPLEX RECEPTACLE OUTLET WITH INTEGRAL SURGE SUPPRESSION
- DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM SURGE SUPPRESSION DEVICE
- DUPLEX RECEPTACLE OUTLET SPLIT WIRED
- DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND
- QUAD RECEPTACLE OUTLET
- QUAD RECEPTACLE OUTLET MOUNTED ABOVE COUNTER
- QUAD RECEPTACLE OUTLET WITH ONE (1) INTEGRAL SURGE SUPPRESSION TYPE RECEPTACLE AND ONE (1) SURGE SUPPRESSION PROTECTED RECEPTACLE
- SPECIAL RECEPTACLE AS INDICATED
- POWER/COMMUNICATIONS POLE
- SPECIAL POWER CONNECTION
- CORD DROP
- POKE THROUGH ASSEMBLY LETTERS INDICATE TYPE (TYP)
- JUNCTION BOX - CEILING MOUNTED
- JUNCTION BOX - WALL MOUNTED
- PUSHBUTTON STATION - EMERGENCY POWER SHUTDOWN
- INTERCOM CALL BUTTON
- INTERCOM CALL BUTTON WITH PRIVACY
- HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY
- VERTICALLY MOUNTED MULTI-OUTLET RACEWAY
- BUS DUCT
- EQUIPMENT MOUNTING BACKBOARD
- 208/120V PANELBOARD
- 480/277V PANELBOARD
- DISTRIBUTION OR POWER PANELBOARD
- SINGLE PHASE MOTOR
- THREE PHASE MOTOR
- MAGNETIC MOTOR STARTER
- COMBINATION MAGNETIC MOTOR STARTER - SWITCH SIZE / FUSE SIZE
- NON-FUSED DISCONNECT SWITCH -SWITCH SIZE
- FUSED DISCONNECT SWITCH -SWITCH SIZE/FUSE SIZE
- ENCLOSED CIRCUIT BREAKER -CB RATING
- MAGNETIC CONTACTOR
- MANUAL MOTOR STARTER
- HORSEPOWER RATED SWITCH
- PACKAGED EQUIPMENT WITH INTEGRALLY MOUNTED PREWIRED CONTROL PANEL
- FURNISHED AS INTEGRAL PART OF EQUIPMENT
- TRANSFORMER
- GROUND ROD
- LIGHTNING PROTECTION AIR TERMINAL
- GROUND BUS BAR AS INDICATED

AUXILIARY

- CEILING MOUNTED SINGLE FACED CLOCK
- CEILING MOUNTED DOUBLE FACED CLOCK
- WALL MOUNTED SINGLE FACED CLOCK
- WALL MOUNTED DOUBLE FACED CLOCK
- COMBINATION WALL MOUNTED SPEAKER/CLOCK
- CEILING MOUNTED COMBINATION SPEAKER/CLOCK
- WALL MOUNTED DIGITAL CLOCK
- CEILING MOUNTED SPEAKER
- BIDIRECTIONAL WALL MOUNTED SPEAKER
- BIDIRECTIONAL CEILING MOUNTED SPEAKER
- CEILING MOUNTED SPEAKER CLUSTER
- WALL MOUNTED SPEAKER
- CEILING MOUNTED MICROPHONE OUTLET
- WALL MOUNTED MICROPHONE OUTLET
- WALL MOUNTED VOLUME CONTROL
- WALL MOUNTED BELL
- WALL MOUNTED CHIME
- WALL MOUNTED HORN SPEAKER
- CEILING MOUNTED HORN SPEAKER
- SECURITY SYSTEM ELECTRIC LATCH
- SECURITY SYSTEM CARD READER
- SECURITY SYSTEM DOOR CONTACT
- SECURITY SYSTEM KEY SWITCH
- SECURITY SYSTEM MOTION DETECTOR
- CEILING MOUNTED SECURITY CAMERA -ARROWS INDICATE FIELD OF VIEW
- WALL MOUNTED SECURITY CAMERA -ARROWS INDICATE FIELD OF VIEW
- FIRE ALARM CONTROL PANEL
- FIRE SUPRESSION SYSTEM CONTROL PANEL
- FIRE ALARM REMOTE ANNUNCIATOR PANEL
- SINGLE BED STATION - NURSE CALL
- DOUBLE BED STATION - NURSE CALL
- BATHROOM STATION - NURSE CALL
- BATHROOM STATION PULL CORD - NURSE CALL
- CODE BLUE PUSHBUTTON - NURSE CALL
- NURSE CALL DUTY STATION
- NURSE CALL EMERGENCY STATION
- NURSE CALL MASTER STATION
- NURSE CALL POWER SUPPLY
- NURSE CALL STAFF STATION
- NURSE CALL WALL MOUNTED DOME LIGHT
- NURSE CALL CEILING MOUNTED DOME LIGHT
- NURSE CALL WALL MOUNTED DOME LIGHT WITH CODE BLUE
- NURSE CALL CEILING MOUNTED DOME LIGHT WITH CODE BLUE
- WALL MOUNTED COMMUNICATIONS OUTLET -LETTER INDICATES FACEPLATE TYPE
- ABOVE COUNTER COMMUNICATIONS OUTLET -LETTER INDICATES FACEPLATE TYPE
- CEILING MOUNTED COMMUNICATIONS OUTLET -LETTER INDICATES FACEPLATE TYPE
- COMMUNICATIONS FLOORBOX -LETTER INDICATES FACEPLATE TYPE
- MULTI-SYSTEM FLOORBOX -LETTER INDICATES FACEPLATE TYPE
- WALL MOUNTED PROJECTION SYSTEM
- CEILING MOUNTED PROJECTION SYSTEM
- SHORT THROW PROJECTION SYSTEM

ONE-LINE

- SYSTEM OR EQUIPMENT GROUND
- EXOTHERMIC WELD OR BRAZED CONNECTION
- CONDUIT IN OR BELOW FLOOR SLAB OR BELOW GRADE
- RACEWAY TURNED UP
- RACEWAY TURNED DOWN
- CABLE TRAY
- UNDERFLOOR DUCT - POWER
- UNDERFLOOR HEADER DUCT - POWER
- UNDERFLOOR DUCT - COMM
- UNDERFLOOR HEADER DUCT - COMM

SITE

- FLUSH IN-GRADE HAND HOLE
- UNDERGROUND ELECTRICAL
- UNDERGOUND COMMUNICATIONS
- UNDERGROUND FIBER OPTIC COMMUNICATIONS
- UNDERGROUND LIGHTING

Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARDS INFORMATION SHOWN ON THIS SHEET

Project Administrator	A. Maurer
Project Designer	J. Brender, T. Horner
Project Architect / Engineer	T. Morgan
Drawn By	T. Horner
Q.M. Review	T. Carron
Approved	T. Carron
Drawing Scale	

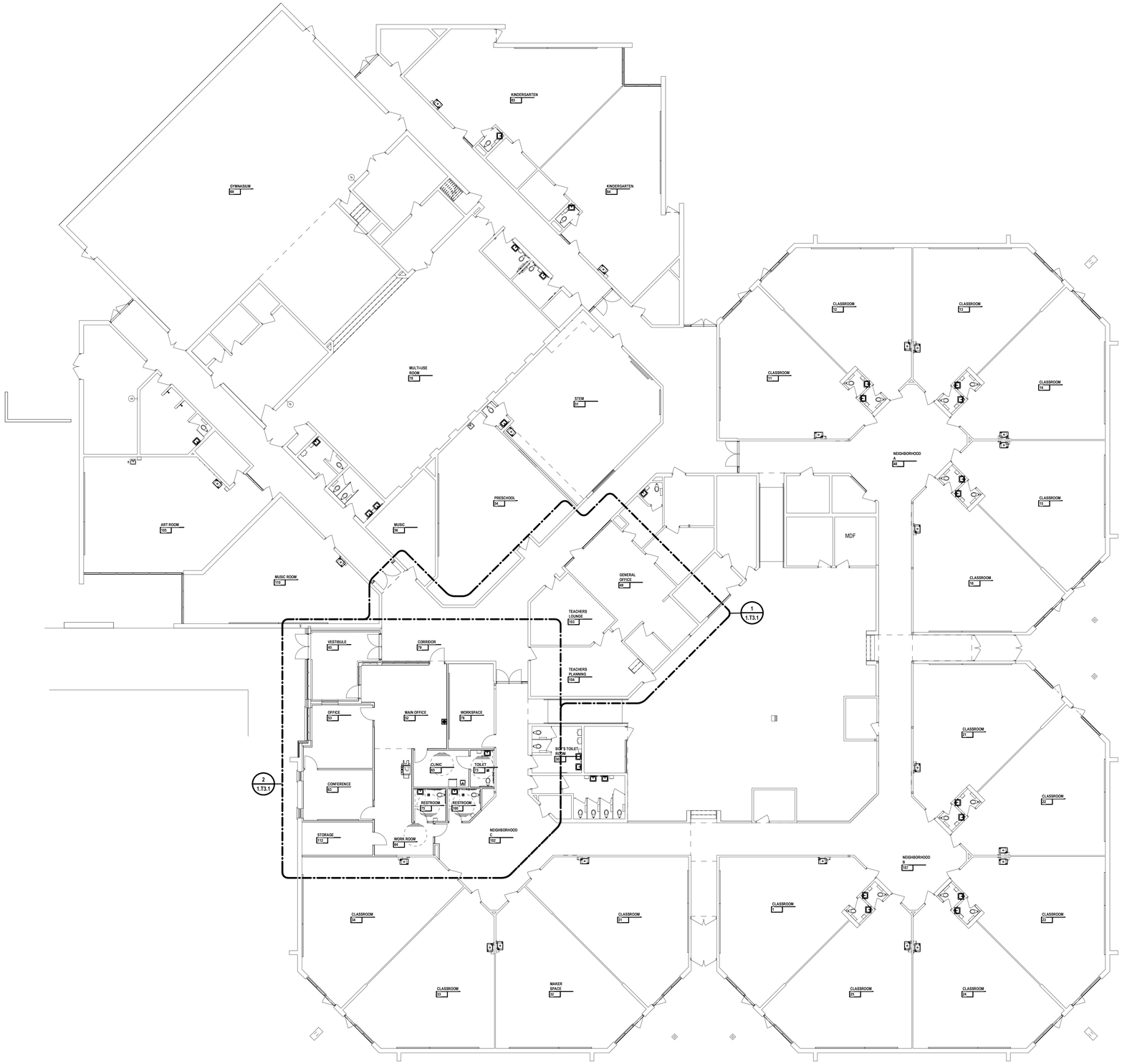
Issued for	Issue Date
BP4 Bulletin No. 17	09-13-2024
BP6 Bulletin No. 8	09-13-2024
BP7 Bulletin No. 3	09-13-2024
Construction Set	02-10-2025

IDS Drawing Title

Technology Reference Information

IDS Project Number: 20111-3008

Drawing Number: 1.TR.0



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Project Title

Van Buren Public Schools

Savage & Tyler Elementary Schools Secured Entry Renovations

Key Plan

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Project Designer
J. Brender, T. Horner
Project Architect / Engineer
T. Morgan
Drawn By
T. Horner
Q.M. Review
T. Carron
Approved
T. Carron
Drawing Scale
3/32" = 1'-0"

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IDS Drawing Title

First Floor Technology Composite Plan

IDS Project Number
20111-3008

Drawing Number
1.T0.1

1.DATA DEVICE SCHEDULE

DROP ID	SOURCE TR	DESCRIPTION	DATA RACK ID	CATEGORY 6 CABLE COUNT	FACEPLATE TYPE
62-1	MDF	WALL MOUNTED DISPLAY DROP	1	1	B
62-2	MDF	WALL DROP	1	2	C
62-3	MDF	WALL DROP	1	2	C
62-4	MDF	FURNITURE DROP	1	2	E
62-5	MDF	FURNITURE DROP	1	4	D
64-1	MDF	WALL DROP	1	4	A
65-1	MDF	WALL DROP	1	1	H
65-2	N/A	WALL MOUNTED DISPLAY GROMMET	N/A	N/A	G
65-3	MDF	FLOOR BOX	1	1	I
66-1	MDF	PHONE DROP	1	1	F

NOTES: SEE SHEET 1.T7.1 FOR FACEPLATE DETAILS.

1.WAP DEVICE SCHEDULE

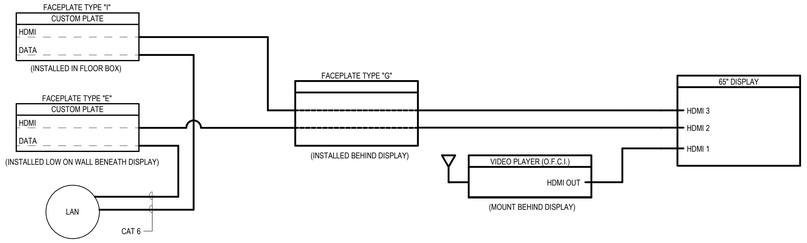
DROP ID	SOURCE TR	DESCRIPTION	DATA RACK ID	CATEGORY 6 CABLE COUNT	FACEPLATE TYPE
62-6	MDF	CEILING MOUNTED WAP	1	1	N/A
69-1	MDF	CEILING MOUNTED WAP	1	1	N/A

NOTES: SEE SHEET 1.T7.1 FOR WAP DETAILS.

1.SECURITY CAMERA SCHEDULE

DROP ID	SOURCE TR	CAMERA DESCRIPTION	CAMERA TYPE	CATEGORY 6 CABLE	CAMERA MODEL	FRAME RATE
CAM-01	MDF	EXTERIOR WALL MOUNTED NETWORK INTERCOM	1	1	AXIS I8016-LVE Network Video Intercom	15 FPS
CAM-16	MDF	INTERIOR CEILING MOUNTED CAMERA	2	1	Hanwha PNM-12082RVD	15 FPS

NOTES: SEE SHEET 1.T7.1 FOR SECURITY CAMERA DETAILS.

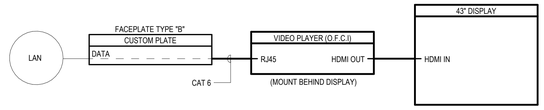


6 / 1.T3.1 — CONFERENCE ROOM 65 CONNECTION DIAGRAM
Not To Scale

NOTE: SEE DRAWING T7.1, DETAIL 4 FOR ROUGH IN DETAIL

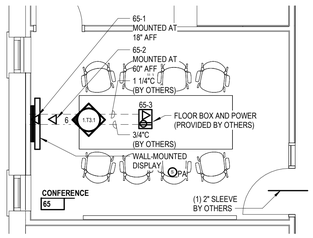
KEY NOTES

1. STRUCTURED CABLING CONTRACTOR SHALL COIL EXISTING CATEGORY 6 CABLES IN ABOVE CEILING SPACE FOR FUTURE USE. WHERE V4000 EXISTS, SHALL BE REMOVED BY STRUCTURED CABLING CONTRACTOR.
2. SECURITY CONTRACTOR SHALL REMOVE EXISTING NETWORK INTERCOM AND GENERAL OFFICE CAMERA. STORE ONSITE SECURELY FOR FUTURE USE. COIL EXISTING CATEGORY 6 CABLING IN ABOVE INTERIOR CEILING SPACE FOR FUTURE USE.
3. STRUCTURED CABLING CONTRACTOR TO ROUTE TWO (2) CATEGORY 6 CABLES TO A/C DOOR CONTROLLERS LOCATED IN MDF AND COIL 20' SERVICE LOOP FOR FUTURE USE. DOOR RELEASE BUTTONS SHALL BE PROVIDED AND INSTALLED BY ACCESS CONTROL CONTRACTOR.
4. STRUCTURED CABLING CONTRACTOR SHALL USE EXISTING CAT6 CABLE COILED ABOVE CEILING SPACE. IF CABLE LENGTH IS NOT SUFFICIENT REMOVE EXISTING CABLE BACK TO SOURCE AND PULL NEW CAT6 TO THIS LOCATION.

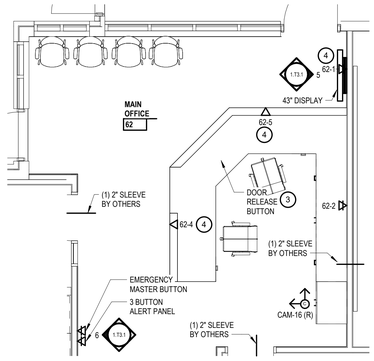


5 / 1.T3.1 — MAIN OFFICE 62 DISPLAY CONNECTION DIAGRAM
Not To Scale

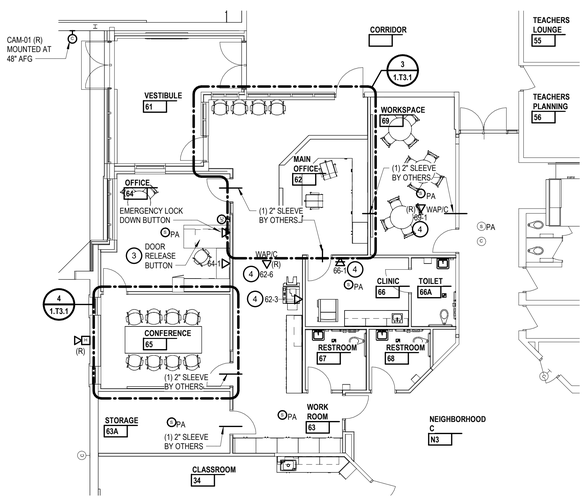
NOTE: SEE DRAWING T7.1, DETAIL 5 FOR ROUGH IN DETAIL



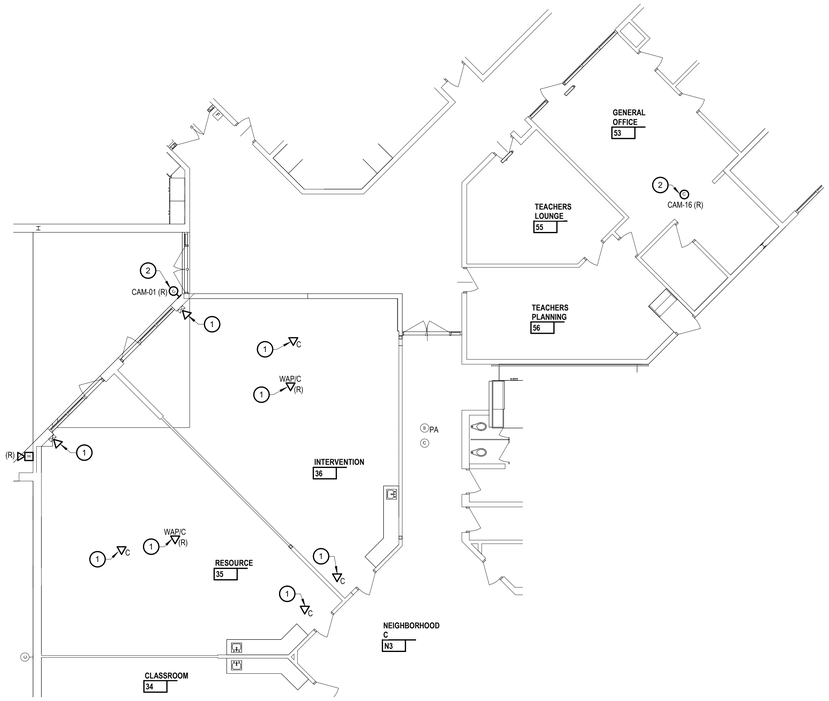
4 / 1.T3.1 — TECHNOLOGY NEW PLAN CONFERENCE ROOM
1/4" = 1'-0"



3 / 1.T3.1 — TECHNOLOGY NEW PLAN MAIN OFFICE
1/4" = 1'-0"



2 / 1.T0.1 — SECURE ENTRY NEW TECHNOLOGY PLAN
1/8" = 1'-0"



1 / 1.T0.1 — SECURE ENTRY TECHNOLOGY DEMO PLAN
1/8" = 1'-0"

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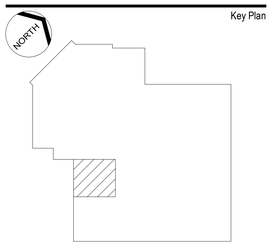
Key Plan



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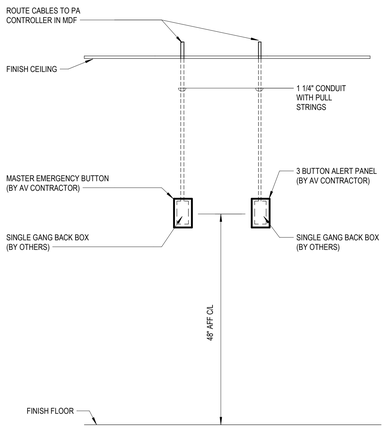
IDS Drawing Title

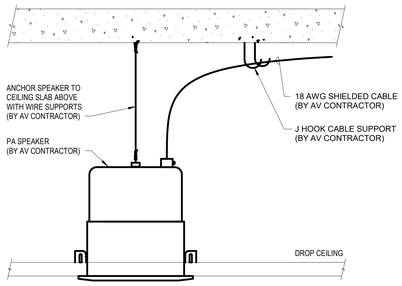
First Floor Technology Plan

IDS Project Number: 20111-3008

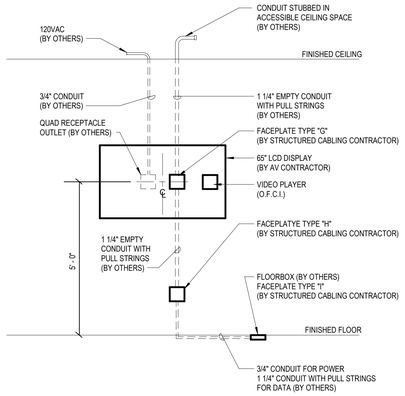
Drawing Number: 1.T3.1



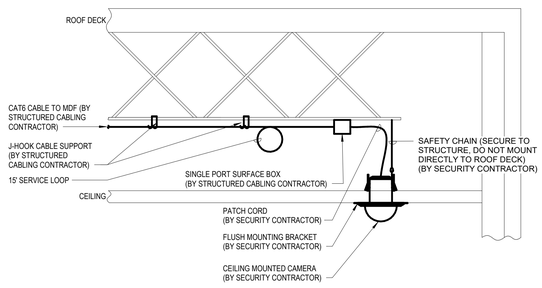
6 MAIN OFFICE PA EMERGENCY BUTTON DETAIL
1/8" = 1'-0"



9 TYPICAL FLUSH CEILING MOUNTED PA SPEAKER DETAIL
Not To Scale
S PA

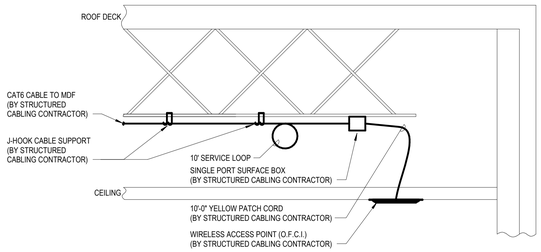


5 LCD ROUGH DETAIL LARGE CONFERENCE ROOM
Not To Scale

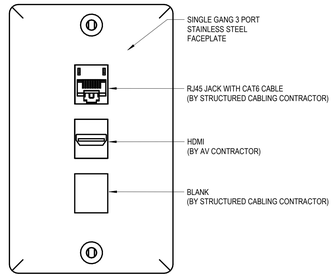


2 CEILING MOUNTED CAMERA DETAIL
Not To Scale
C CAM-16

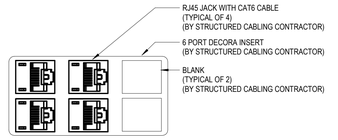
4 LCD ROUGH DETAIL OFFICE DISPLAY
1.T3.1
Not To Scale



1 CEILING MOUNTED WAP DETAIL
Not To Scale
WAP C



FACEPLATE TYPE "H"
Not To Scale



FURNITURE FACEPLATE

FACEPLATE TYPE "D"
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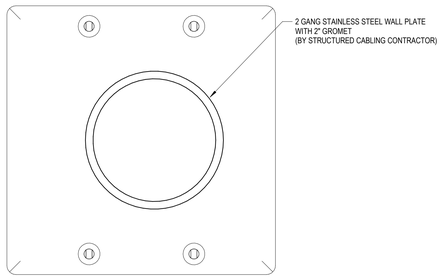

FACEPLATE TYPE "G"
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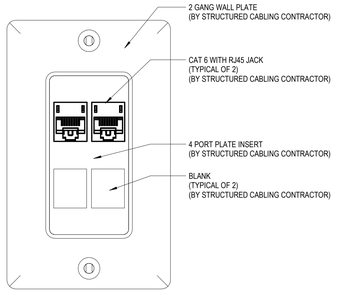

FACEPLATE TYPE "C"
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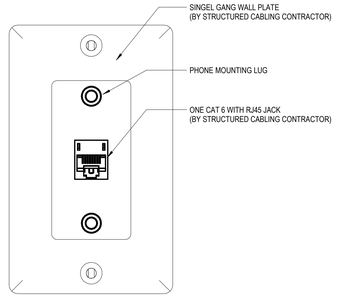

FACEPLATE TYPE "F"
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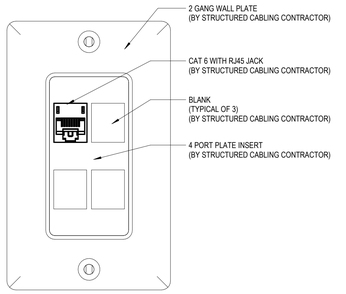

FACEPLATE TYPE "B"
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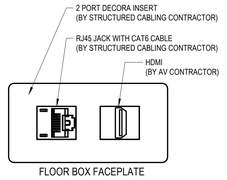
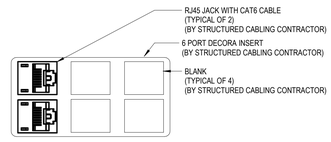


FLOOR BOX FACEPLATE

FACEPLATE TYPE "I"
Not To Scale



FURNITURE FACEPLATE

FACEPLATE TYPE "E"
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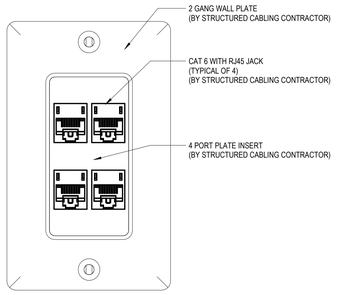

FACEPLATE TYPE "A"
Not To Scale

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