ALLENDALE CHARTER TOWNSHIP
PLANNING COMMISSION MEETING
April 5, 2021
7:00 p.m.
Zoom Video Call

In accordance with the Open Meetings Act and the Michigan Department of Health and Human Services, those wishing to participate in the meeting can do so via video call using the instructions below.

You can join remotely in two different ways.

A. For Video and Audio: Use a Zoom App
B. For Audio Only: Dial-In

Video and Audio Instructions
At the time of the meeting use this link and/or passcode to join.
https://zoom.us/j/99160590637?pwd=SUVqVDFxTHdFY3JDd09ISGlaaVd5QT09
Passcode: aGxD76

Audio Only Instructions
Callers are responsible for any charges that may apply through their phone plan.
You can dial in using your phone.
Dial:1-929-205-6099
Meeting ID: 991 6059 0637
Participant ID: *Not Needed for callers.*
Passcode: 880426
For Individuals with disabilities you can use a relay service by dialing 711 first.
Dial-In Instructions:

1. Dial into the number provided above.
2. You will be asked for a Meeting ID.
3. Enter 991 6069 0637.
4. Press # to confirm Meeting ID.
5. You will be asked for a Participant ID. (Callers do not need a Participant ID.)
6. Press # to confirm you don't have a Participant ID.
7. You will be asked to enter a passcode.
8. Enter 880426.
9. Press # to confirm passcode.

*Once you enter the call you will be muted.
Public Comment:

Please note that meetings are open to the public, but are not structured for public discussion to occur throughout the entire meeting. Instead, there are opportunities for members of the public to address the Board/committee members during specific points in the meeting.

Two periods of public comment will be held during the times outlined in the attached agenda.

1. The admin for the call will unmute callers one by one.
2. When it is your turn to speak you will be notified that you have been "unmuted"
3. You will have 10 seconds to respond if you would like to speak.
    - If you confirm that you would like to speak you will be given "the floor" and 90 seconds to speak.
    - If you decline to speak or do not answer, the admin will move to the next caller.
4. At the end of each public comment period, the opportunity for public comment will be closed and the Board Chair will move the meeting forward.

Closing the Meeting:

1. Closing of the meeting will proceed by motion of the board after completion of the items on the agenda. The agenda can be found in the following pages.
2. Shortly after the meeting is closed the admin will end the meeting for all participants.

1. Call the Meeting to Order

2. Roll Call

3. Received for Information:
    A. Georgetown Charter Township Master Plan Amendment Notice

4. Approval of the March 15, 2021 Planning Commission Minutes

5. Approval of the Agenda

6. Public Comments for *non-public hearing items*

7. Public Hearings:

8. Site Plan Review:

9. Old Business:
    A. Allendale Baptist Church – Planned Unit Development Site Plan

10. New Business:
    A. Allendale Christian School – Building Addition
        - Minor vs Major determination
    B. Mr. Burger – Walgreens Planned Unit Development Amendment & Site Plan

11. Public Comments

12. Township Board Reports

13. Commissioner and Staff Comments

14. Adjourn

Next meeting Monday, April 19, 2021 at 7:00 p.m.

◊

ALLENDALE CHARTER TOWNSHIP

PLANNING COMMISSION MEETING

March 15, 2021

7:00 p.m.

Via Zoom Software

1. Meeting called to order
2. Roll Call
   Present: Westerling, Adams, Zuniga, Schut, Kelley, Zeinstra, Longcore
   Staff Present: Greg Ransford
   Other Guests Present: Sara-Moring Hilt, Curtis Moran, Kelli McGovern, Kelly Kuiper, Miles Ulsberg, Lora Richmond
3. Received for information: No information received.
4. Motion by Kelley to approve the March 1, 2021 meeting minutes. Seconded by Westerling. **Approval 7-0**
5. Motion by Longcore recommending switching the order of new business and old business and to approve the March 15, 2021 Planning Commission Agenda. Seconded by Zeinstra. **Approval 7-0**
6. Public Comments for *non-public hearing items:*
   Chairperson Longcore opened the public comment section for non-public hearing items. Kelli McGovern facilitated the public comments beginning with the callers, proceeding to participants using the web or app. Callers and participants were recognized, but no public comments were made. Chairperson Longcore closed the public comment section.
7. Public Hearings: no public hearings were scheduled.
8. New Business:
   a. 5015 Warner – Mining Application – 70-09-13-200-006

   Kelly Kuiper with Nederveld, on behalf of operator, Mr. Curtis Moran, briefed the Commission regarding the project of two small ponds, each 4.9 acres with a total sand volume of over 250,000 cubic yards mined through traditional methods. The proposed time frame and request for the project is five years. Ms. Kuiper also reiterated that the haul route was as close as possible to the proposed truck haul route.

   Ms. Kuiper stated they would be addressing some clerical errors from a previous Township memo and brought two items before the Commission needing approval:

   - Proposal of 50 ft of crushed concrete vs. asphalt at the construction access road.
   - Deferment on a sidewalk until the road is paved.

   In addition, Ms. Kuiper referred to the Road Commission letter of credit or performance bond previously recommended by Mr. Jody Carter for a performance bond in the amount of $40,000 per mile. Ms. Kuiper noted there would be 1-1/4 miles until they reached the pavement. She stated that Mr. Moran and Mr. Carter were currently working on a permitting mechanism concerning mining operations on dirt roads to ensure there would be a way to satisfactorily maintain the road.

Mr. Adams inquired about the ground water being managed during excavation, and Mr. Moran explained the water shed sloping downward and water running into the bayou, as well as the clay layer with the moorings. He assured the Commission that they would have adequate means to excavate and provide ample soil for future construction. In addition, he addressed how the County was working with the applicant. He also addressed the miscommunication that led to noise concerns of starting up equipment too early along the road and explained they have requested the trucks not to line up until 7:10 a.m. on weekdays and 8:10a.m. on weekends. He also agreed to amend the posted sign indicating to call the specified number for dispatch to handle any complaints immediately.

Ms. Kuiper addressed Ms. Vandenberg's letter discussing that the rear and behind the lots was not accessible unless a private drive was provided along the easement in addition to the access at the road, which was something that could be completed.

Mr. Schut maintained his concern about the layout of the development and the splits of the lots and opposed setting a public hearing,

Chairperson Longcore recommended scheduling a public hearing barring there were no anticipated major changes to the site plans. Ms. Kuiper confirmed any possible changes would be minor.

Discussion occurred among the Commissioners regarding methods of public notice, and it was determined that there was ample notification to the public according to the Township ordinances. Commissioners agreed a public hearing could be set, and Chairperson Longcore thanked the applicants.

9. Old Business:
    A. Work Program
        1. Section 3.19 – Tree Preservation Language

Planner Ransford summarized for the public an ordinance adopted by Park Township in Ottawa County that the Commission was reviewing for third draft revisions on five points made in the last meeting to the language for Allendale Township. He mentioned that a tree canopy analysis was in the process of being completed for the purpose of determining what percentage to maintain as a minimum canopy coverage within the revision.

Mr. Schut questioned the definition of tree size being 6" or greater in diameter, and the Commissioners agreed that the language adopted by Park Township was sufficient. He also recommended to the Commissioners that the tree canopy language apply to all projects. The initial consensus was that the clear cutting and tree canopy language should be drafted to be applied to any project prior to site plan approval.

Chairperson Longcore recommended adding language to section three to potentially include "further, the cutting of any tree within a project prior to a site plan approval." The Commissioners discussed whether the language should keep the 25% canopy coverage or create a range with Mr. Schut voicing concern that 25% was not enough.

Planner Ransford explained that he had reviewed three recent site plans and hoped to have example site plans for a point of comparison in the coming weeks, and the Commissioners agreed they would review those when received.

Mr. Zeinstra suggested replacing the first part entirely with "the Planning Commission may require an inventory" which was agreed upon by the Commissioners.

Planner Ransford agreed to make the updates and added that he was also waiting to hear from Mr. Sullivan regarding the recent proposed language and would review any changes.

2. Section 24.06H – Standards for Approval of Waste Disposal Facilities

Planner Ransford recapped the previous discussion of the changes for the third draft revisions.

Mr. Schut pointed out that item 2d should indicate "no more than" rather than "at least three feet apart." Planner Ransford agreed to prepare revisions to the language for the Commission to review based on comments provided. Mr. Schut also requested dropping the "13 feet" space requirement. Mr. Zeinstra concurred, and consensus was reached with direction provided to Ransford.

3. Section 24.06 J. - Standards for Approval on Building Appearance.

Planner Ransford summarized the two items of revision from the prior review: to not apply the minimal glass requirement adjacent to residential areas and to parking areas except for customer parking.

The Commissioners agreed the revisions had progressed and although Counsel Sullivan would still be reviewing the revisions, they did not anticipate there would be significant changes, thus a Public Hearing could be set.

B. Master Plan – Map

Planner Ransford recapped the work on the existing base map and the six changes the Commission had requested. Relative to the November 2020 meeting, he had worked on clarification to the master plan classification and zoning ordinance district table. He concluded this could only be done through amending the zoning district names which would prove difficult. He explained once the Master Plan was finalized, the plan and supporting documents could be reviewed and a decision made to make those amendments if necessary.

The Commissioners agreed that the map met the overall expectations. Mr. Zuniga noted some areas with possible re-zoning changes. The Commissioners discussed these and clarified the changes needing to be updated. Direction was provided to Ransford to revise the map accordingly and proceed with the next step in the process. Ransford indicated that he would bundle all of the text together with the maps and return the entire draft document to the Planning Commission for further review.

10. Second Public Comment
    Chairperson Longcore opened the public comment section for non-public hearing items. Kelli McGovern facilitated the public comments beginning with the callers, proceeding to participants using the web or app. Callers and participants were recognized, but no public comments were made. Chairperson Longcore closed the public comment section.

11. Township Board Reports
    Mr. Zeinstra reported updates to Department Heads in Assessing, Finance, and Human Resources. The Board also approved a new Township Business Registration for maintaining all new businesses and contact information, as well as the PUD Amendment for Hidden Shores West.

12. Commissioner and Staff Comments
    Mr. Zuniga asked for clarification about the use of decorative blocks for sidewalks per the Township ordinance, and Planner Ransford confirmed it was permissible.

13. Chairperson Longcore adjourned at 8:20 p.m.

Next meeting Monday, April 5, 2021 at 7:00 p.m.

Planning Commission Minutes respectfully submitted by Lora Richmond

Fresh Coast Planning

950 Taylor Avenue, Ste 200
Grand Haven, MI 49417
www.freshcoastplanning.com

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616-638-1240
greg@freshcoastplanning.com

Lindsay R. Mohr, MPA
248-990-3525
lindsay@freshcoastplanning.com

Julie Lovelace
616-914-0922
julie@freshcoastplanning.com

Brian Werschem
231-206-4821
bwerschem@gmail.com

MEMORANDUM

To: Allendale Charter Township Planning Commission
From: Gregory L. Ransford, MPA
Date: March 31, 2021
Re: Allendale Baptist Church Planned Unit Development – Final PUD Site Plan

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As you know, at your February 17, 2020 meeting you provided direction to the Allendale Baptist Church to perform revisions to their Preliminary Planned Unit Development (PUD) Site Plan and resubmit the plan for Final PUD Site Plan review and public hearing. As you also know, given that the applicant has created the Final PUD Site Plan over a year after said meeting, you requested that the applicant come before you prior to the public hearing. As a result, attached are their updated materials in advance of the public hearing on April 19, 2021.

Pursuant to your February 17, 2020 direction, you instructed the applicant to perform the following revisions or found the following items acceptable:

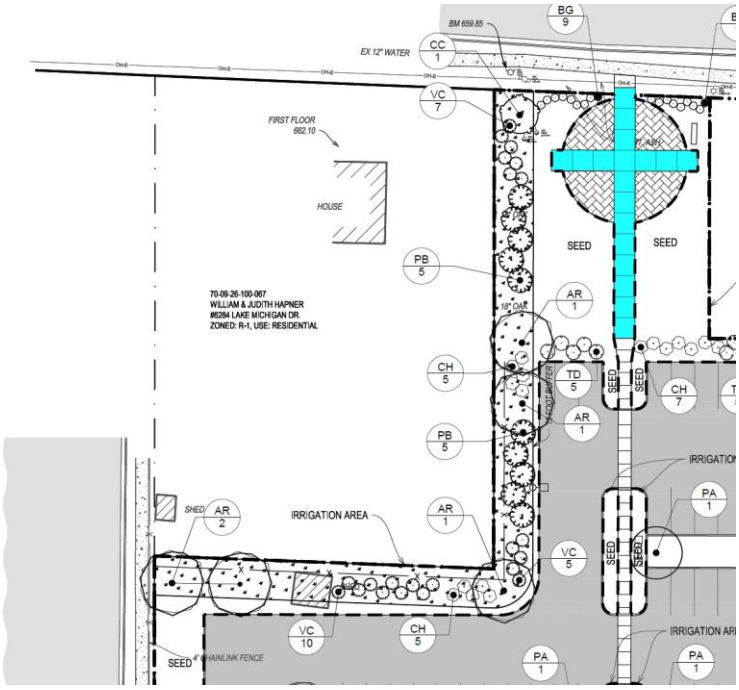
- Provide a hard copy of traffic data that was verbalized to the Planning Commission
- Remove the connection point to the Family Fare property but provide easement in the northern parking lot aisle to the residentially used lot to the west, ultimately connecting to Presley Parkway
- Screen the parking adjacent to Lake Michigan Drive
- Interior curbing as presented is acceptable
- Dumpster enclosure size is acceptable (10 foot interior width)
    - Enclosure material shall comply with the Zoning Ordinance and be of similar masonry to the principal building
    - Gate material must be vinyl or composite
- Rooftop Screening
    - Provide details or photograph
    - Can be unit screening in-lieu of a parapet wall
    - Could use a shorter parapet with a visual perspective provided
- Screening of adjacent residential lot to the northwest is acceptable
- Provide photometrics into residential property to the northwest
- Sidewalks are acceptable at five feet in width rather than eight feet
- Any signage shall meet the Zoning Ordinance
- Directional signage is acceptable

2021 Plan Submission Observations and Findings

Observations

- Dumpster Enclosure – the applicant proposes 36 inches of cultured stone at its base, along with a concrete cap, finishing the remainder of the enclosure walls with Dryvit. This is contrary to your direction.
- Cross Structure – the cross structure along Lake Michigan Drive has been abandoned and replaced with a ground mounted sign
- Elevations (Sheet A-9) – The elevation sheet indicates that, "Precast concrete on sanctuary may be changed to insulated metal panel. We are still evaluating this option."

- Parking – the second row parking area previously contained a grass wheel stop between the parking rows. This has been removed, leaving only the end islands and the center walkway island.
- Residential Screening (to northwest) – the landscaping has been slightly reduced. For your convenience, below is a snapshot of the February 2020 plan.



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
AR	Acer rubrum `Red Rocket`	Red Maple	2.5" Cal.	B&B	5
CC	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	7
PA	Pyrus calleryana `Autumn Blaze`	Autumn Blaze Pear	2.5" Cal.	B&B	9
EVERGREEN	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**
PB	Picea glauca densata	Black Hills Spruce	7 FT.	B&B	10
SHRUBS	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**
BG	Buxus x `Green Mound`	Green Mound Boxwood	3 gal.	Pot	18
CH	Cornus alba `Bailhalo` TM	Ivory Halo Dogwood	30"	Pot	31
TD	Taxus x media `Densiformis`	Dense Yew	5 gal.	Pot	35
VC	Viburnum carlesii	Korean Spice Viburnum	30"	Pot	31

Findings

- Concrete Curbing – Pursuant to Section 21.04E – Parking Lot Construction Requirement of the Allendale Charter Township Zoning Ordinance, the internal drive to the southwest is exempt from concrete curbing and is represented accordingly within the plans.

The Final PUD Site Plan has been scheduled for your review at your April 5, 2021 meeting. If you have any questions, please let us know.

GLR
Planner

Attachments

cc: Adam Elenbaas, Supervisor

FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

February 12, 2020

Mr. Gregory Ransford, MPA
Fresh Coast Planning
950 Taylor Avenue, Suite 200
Grand Haven, Michigan 49417

RE: Baptist Church Site Plan Review

Dear Mr. Ransford:

We have reviewed the proposed Baptist Church development application. The following sheets were received on January 28th and reviewed for compliance to Allendale Charter Township (ACT) standards:

- L-101 Landscape Plan, dated 1-27-20
- ES.1 Site Lighting Calculation Plan, dated 1-27-20
- C-101 Civil Existing Conditions & Demolition Plan, dated 1-27-20
- C-102 Civil Layout Plan, dated 1-27-20
- C-103 Civil Utility Plan, dated 1-27-20
- C-104 Civil Grading Plan, dated 1-27-20
- A-19 Roof Plan, dated 1-22-20
- A9.0 Building Elevations, dated 1-22-20

We received a second sheet set on February 5th and reviewed for compliance to Allendale Charter Township standards:

- L-101 Landscape Plan, dated 2-3-20
- C-102 Civil Layout Plan, dated 2-3-20
- Dumpster Details, dated 2-3-20
- Area Plan, undated
- Rendering, undated

The following comments were made for your consideration:

<u>L-101 Landscape Plan:</u>

- No Comments

<u>ES.1 Site Lighting Calculation Plan:</u>

- No Comments

2960 Lucerne Drive SE
Grand Rapids, MI 49546
P: 616.977.1000
F: 616.977.1005
www.fveng.com

C-101 Civil Existing Conditions & Demolition Plan:

- No Comments

C-102 Civil Layout Plan:

- The water main must be looped looped from west property line to WJ Presley R.O.W with 8-inch ductile iron pipe. Additional details will be necessary for construction purposes.
- Please confirm that the proposed 35' illuminated cross near Lake Michigan Drive will be acceptable. It appears dangerously close to the overhead lines on M-45 and 10' from the property line.
- Indicate driveway widths from Family Fare lot and WJ Presely Parkway.
- Miscellaneous callouts to trees, pipes, and structures that are not drawn in, but appear on most sheets. Please revise.
- Path to dumpster enclosure should have thicker than Standard Duty Bituminous due to loads from frequent heavy vehicles.
- Confirm the shed of neighboring residential property is to be removed or staying in place.
- Why is a 30' wide aisle necessary in the northern parking bay?
- Clarify which sidewalks are existing and which are proposed.
- The proposed landscape curb is shallow at 1' in depth and could be upheaved from a normal snowplow. Please consider strengthening it by making it deeper.
- Clarify where the two different curb types are located and where they end.

C-103 Civil Utility Plan:

- Comment under General Storm Sewer Notes: "Materials, installation and testing of the storm sewer system must conform to Allendale Charter Township standards."
- Utility Trench detail should be an ACT standard detail. Please revise.
- Water service and sanitary lateral specs are not identified. Please add, see attached.
- Existing sanitary manhole S-3 must be accessible via driveway (paved, concrete, or gravel) which is capable of supporting a vactor truck for maintenance purposes.

C-104 Civil Grading Plan:

- Incomplete proposed grading plan and difficult to understand. Please clarify.
- Drainage system elevations are required, please add.
- Water level in proposed drainage pond is required, please add.

A-19 Roof Plan:

- No Comments

A9.0 Building Elevations:

- No Comments

Dumpster Details:

- No Comments

Area Plan:

- No Comments

General Comments:

- WJ Presley is currently in a public right-of-way and serves as the main entrance into the site. Consideration should be given to expanding the subject site by granting the half right-of-way to the Church since future town center plans have changed. Since WJ Presley will only serve as a shared entrance to two properties, it does not need public road status.

Should you have questions regarding this site plan review, please do not hesitate to contact us at your convenience.

Sincerely,

FLEIS & VANDENBRINK

Bruce Pindzia, P.E.
Sr. Project Engineer

Kyle Sutton, E.I.T

cc: Adam Elenbaas - ACT Supervisor
Chad Doornbos – Superintendent of Public Works
Lindsay Mohr – Fresh Coast Planning

Attachments: Utility Trench Spec
Water Service Spec
Sanitary Lateral Spec

Allendale Baptist Church

a

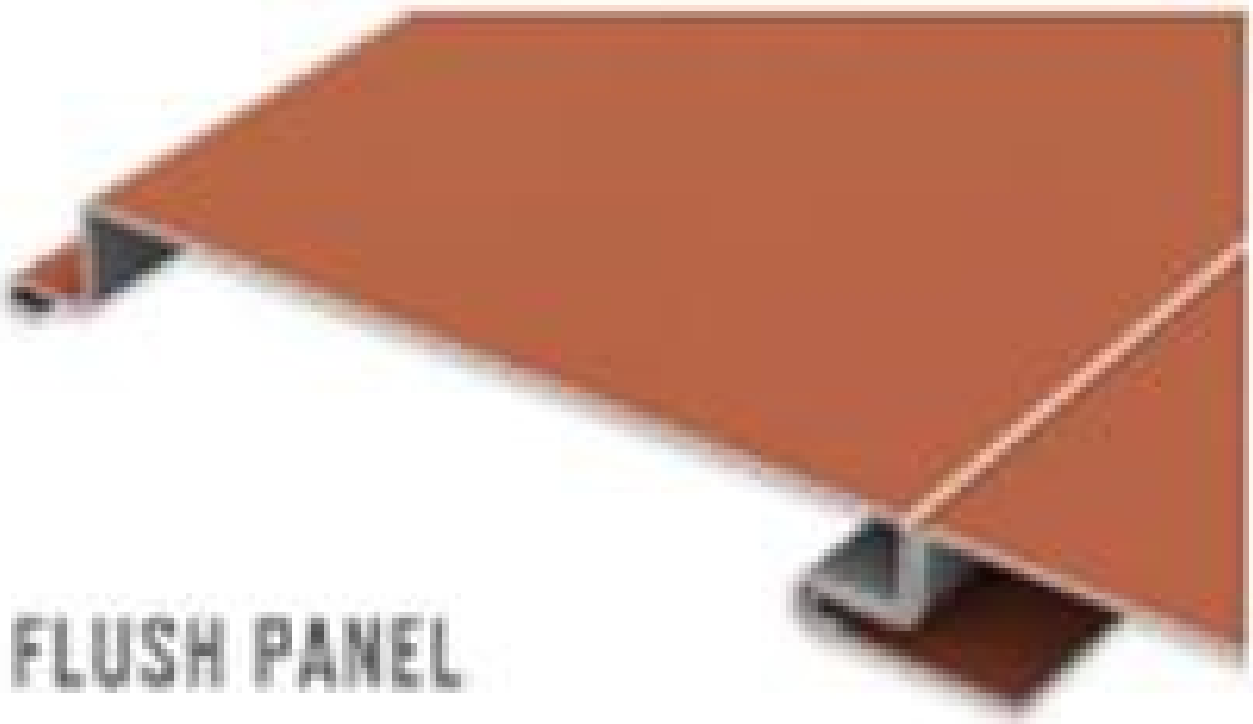
criteria: 50 SF, 10 FT height maximum, 75% EMC maximum
as drawn: 50 SF, 6′ height, 45.6% EMC
description: custom fabricated internally illuminated cabinet with routed push thru faces, 37.5″ x 87.5″ full color ThinkSign LED message center (45.6%), custom stone veneer base

SIGNATURE:	DATE:	DRAWING: allendale BC main id	MANAGER: K. Alexander	DATE:	
		PROJECT: Allendale Baptist Church	DESIGN: R. Sobota	3/5/2020	3.0

MIDWEST SIGN COMPANY
7381 Ardith Ct SW, Suite D, Byron Center, MI 49315
616.583.1743 800.245.5800 midwestsignco.com

These designs, details and plans represented herein are the property of Midwest Sign Co; specifically developed for your personal use in connection with the project being planned for you by Midwest Sign Co. It is not to be shown to anyone outside your organization, nor is it to be used, reproduced, exhibited or copied in any fashion whatsoever. All designs (excepting registered trademarks) remain the property of Midwest Sign Co.

Flush and Rev

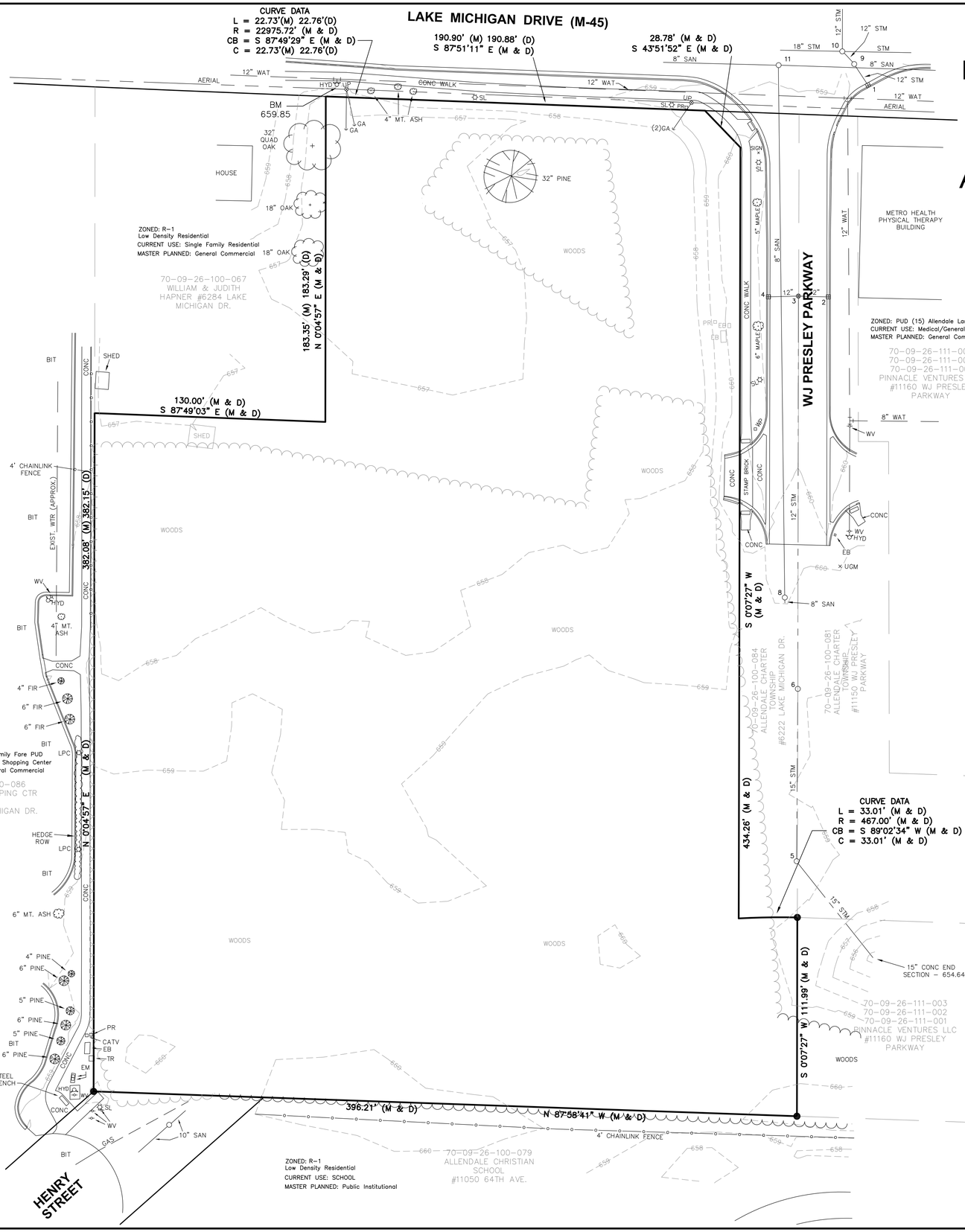


FLUSH PANEL

PROPOSED SITE DEVELOPMENT PLANS FOR:

Allendale Baptist Church

6262 LAKE MICHIGAN DRIVE
ALLENDALE TOWNSHIP, OTTAWA COUNTY, MI



LEGAL DESCRIPTION

That part of the Northwest one–quarter of Section 26, Town 7 North, Range 14 West, Allendale Township, Ottawa County, Michigan, described as: COMMENCING at the Northwest corner of said section; thence South 87°49'03" East 1005.15 feet along the North line of said section; thence South 00°07'27" West 96.59 feet to a point 13 meters (42.65 feet) South of the construction centerline of Eastbound Highway M–45 and the POINT OF BEGINNING; thence South 43°51'52" East 28.78 feet; thence South 00°07'27" West 434.26 feet to the South line of future Henry Street; thence Easterly 33.01 feet along a 467.00 foot radius curve to the right along said South line, the long chord of which bears North 89°02'34" East 33.01 feet to the East line of the West 66.00 feet of the East one–half of the Northeast one–quarter of the Northwest one–quarter of the Northwest one–quarter of Section 26; thence South 00°07'27" West 111.99 feet along said East line to the South line of the Northeast one–quarter of the Northwest one–quarter of the Northwest one–quarter of said section; thence North 87°58'41" West 396.21 feet along said South line; thence North 00°04'57" East 382.15 feet; thence South 87°49'03" East 130.00 feet; thence North 00°04'57" East 183.29 feet to a point 13 meters (42.65 feet) South of the construction centerline of Eastbound Highway M–45; thence Easterly 22.76 feet along a 22975.72 foot radius curve to the left, the long chord of which bears South 87°49'29" East 22.76 feet; thence South 87°51'11" East 190.88 feet to the point of beginning.

184,841 Square Feet
4.2434 Acres

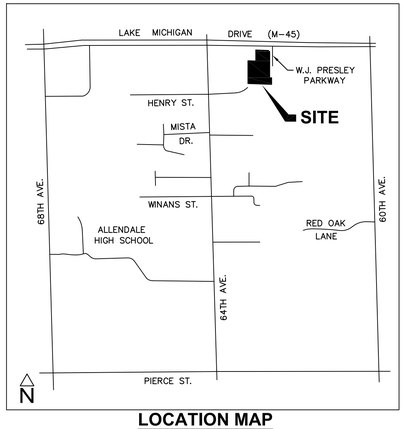
Tax Parcel No. 70-09-26-100-083

SHEET INDEX

C0: COVER SHEET / EXISTING CONDITIONS PLAN
C1: SITE LAYOUT PLAN
C2: CONCEPT SITE UTILITY PLAN
L-1: LANDSCAPE PLAN
1of1: SITE LIGHTING PLAN
A-3: BUILDING FLOOR PLAN
A-9: BUILDING ELEVATIONS
A-20 TRASH ENCLOSURE DETAILS

STATE OF MICHIGAN
JEFFREY MARK BRINKS
6/2021
PROFESSIONAL ENGINEER

811
Know what's below.
Call before you dig.



LOCATION MAP
NOT TO SCALE

Note: Existing site and utility information utilized in these drawings was obtained from a survey conducted by Moore & Bruggink and has been assumed to be accurate.

REVISIONS	
DATE	DESCRIPTION
02/12/21	ISSUED FOR REZONING
03/05/21	REVISED PER TOWNSHIP REVIEW
03/29/21	REVISED PER TOWNSHIP REVIEW

NOT FOR CONSTRUCTION

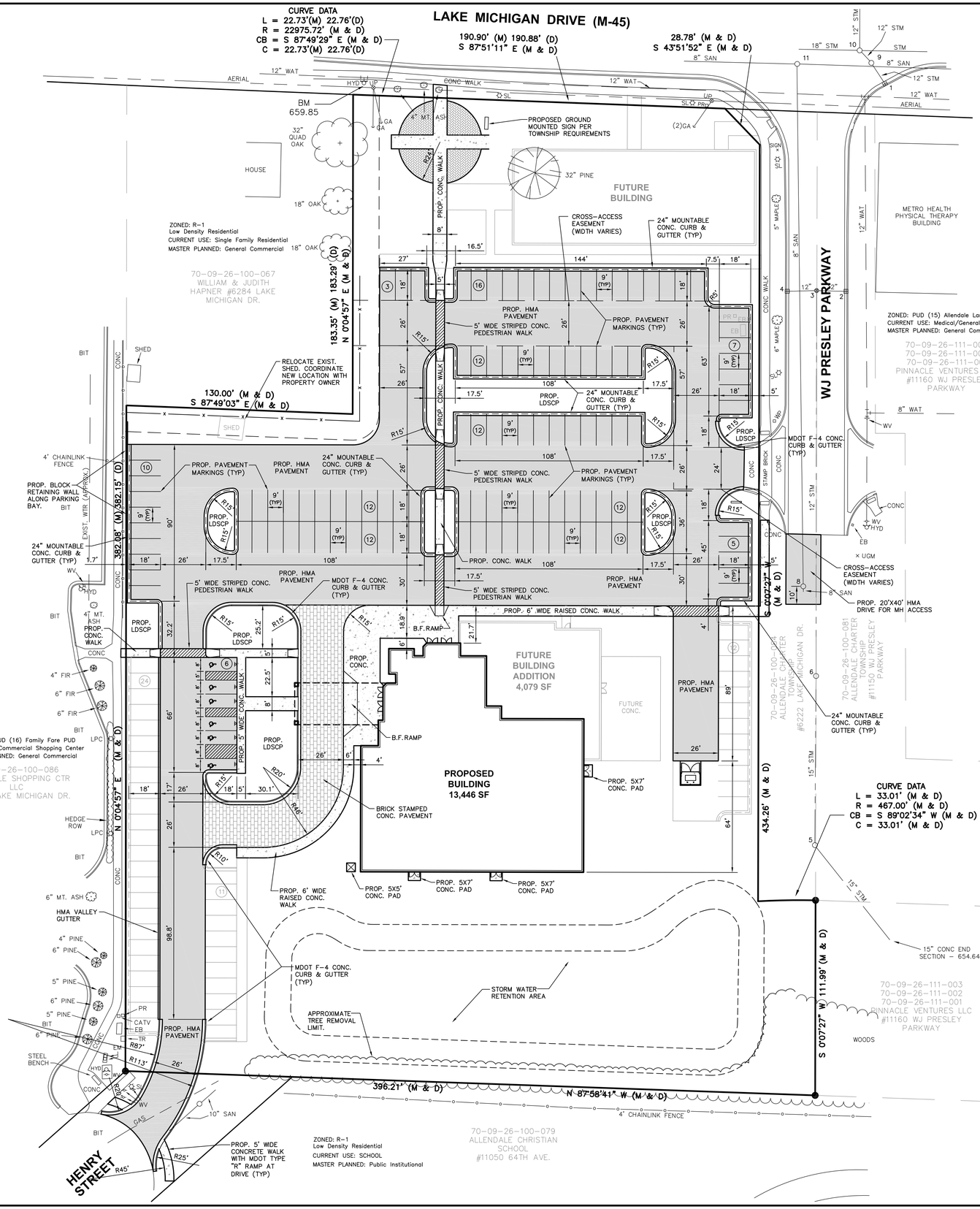
PROPOSED SITE IMPROVEMENTS FOR:
Allendale Baptist Church - 6262 Lake Michigan Dr.
COVER SHEET / EXISTING CONDITIONS
Allendale Township — Ottawa County — Michigan

For: Pinnacle Construction Group
1000 Front Street NW
Grand Rapids, MI 49504
Phone: 616.451.0500

8515 Ridgebluff Dr. SW
Byron Center, MI 49315
616-490-0329
ventureciv@.com
VENTURE ENGINEERING, PLLC

PROJECT NO.	20144
DRAWN BY:	JAC
CHECKED BY:	JMB
DATE:	01/18/21
SHEET NO.	C0

Mar 25, 2021 – 5:38pm C:\Users\jbrink\OneDrive\Documents\Venture Projects\20144 Allendale Baptist Church\C0 [EXIST COND].dwg, XREFs: [Venture TBlock 24x36] [X



SITE NOTES

1. SITE AREA: 184,841 SF (4.24 ACRES)
2. SITE ADDRESS: 6262 LAKE MICHIGAN DRIVE
3. PPN: 70-09-26-100-083
4. CURRENT ZONING: R-1 (LOW DENSITY RESIDENTIAL)
5. PROPOSED ZONING: PUD
6. PARKING REQUIREMENTS:

   CHURCHES: 1 SPACE PER 4 SEATS IN LARGEST SANCTUARY OR HALL.
   RETAIL: 1 SPACE PER 200SF GFA PLUS 1 PER 3 EMPLOYEES.
   FOOD: 1 PER 70 SF UFA PLUS 1 PER 3 EMPLOYEES.
   OFFICES: 1 SPACE PER 300SF GFA.

   CHURCH: 373 SEATS / 4 = 94 SPACES REQUIRED

   119 SPACES PROVIDED (INCLUDING 6 B.F.)

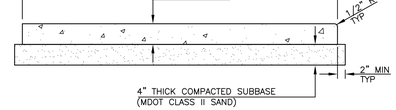
   FUTURE:
   RETAIL: 2,000 SF / 200 + EMPLOYEES = 11 SPACES
   FOOD: 1,000 SF / 70 + EMPLOYEES = 16 SPACES
   OFFICES: 4,800 SF / 300 = 16 SPACES

   FUTURE:
   INCLUDING CHURCH: 137 SPACES REQUIRED

   166 FUTURE SPACES PROPOSED

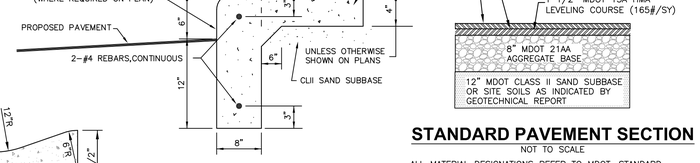
7. CONTRACTOR SHALL CONTACT "MISS DIG" 1-800-482-7171 (72) HOURS PRIOR TO CONSTRUCTION TO ALLOW FOR ACCURATE LOCATION OF ALL UNDERGROUND UTILITIES.
8. EXISTING UTILITIES SHOWN ARE FROM RECORD PLANS AND EVIDENCE IN THE FIELD. NO GUARANTEE IS MADE FOR ACCURACY OR THAT THE UTILITIES SHOWN ARE THE ONLY IN THE AREA. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OR CONTINUATION OF CONSTRUCTION ACTIVITIES.
9. ALL CONSTRUCTION METHODS & MATERIALS SHALL COMPLY WITH CURRENT ALLENDALE TOWNSHIP, OTTAWA COUNTY & MDOT STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS HAVE BEEN ISSUED.
10. THE PROPOSED DEVELOPMENT WILL UTILIZE EXISTING AVAILABLE INFRASTRUCTURE INCLUDING ROADS, SEWAGE DISPOSAL, & WATER SUPPLY. NO UNANTICIPATED DEMAND WILL BE PLACED ON TOWNSHIP SERVICES.
11. SITE LIGHTING WILL CONSIST OF HIGH DOWNWARD DIRECTED, CUTOFF STYLE FIXTURES AND SHALL COMPLY WITH REQUIRED ILLUMINATION LEVELS.
12. TRASH ENCLOSURE SHALL HAVE 6' HIGH OPAQUE WALLS AND COMPOSITE GATES. IT SHALL BE CONSTRUCTED OF MATERIALS THAT ARE SIMILAR TO THE PROPOSED BUILDING.
13. SITE SIGNAGE SHALL CONFORM TO THE APPROVED SIGN PACKAGE REQUIREMENTS.
14. BARRIER-FREE RAMPS SHALL BE 6 FT LONG WITH A MAXIMUM SLOPE OF 1:12 AND SHALL HAVE A NON-SLIP SURFACE.
15. BARRIER-FREE SIGNAGE SHALL BE 6'-8" TO BOTTOM OF SIGN. 1 SHALL BE A "VAN" SIGN.
16. COORDINATE ALL UTILITY CONNECTIONS WITH THE APPROPRIATE UTILITY PROVIDERS PRIOR TO CONSTRUCTION.
17. WORK WITHIN LAKE MICHIGAN DRIVE (M-45) R/W REQUIRES A PERMIT FROM THE MICHIGAN DEPARTMENT OF TRANSPORTATION. WORK WITHIN HENRY STREET R/W REQUIRES A PERMIT FROM THE OTTAWA COUNTY ROAD COMMISSION. WORK WITHIN PRESLEY PARKWAY R/W REQUIRES A PERMIT FROM ALLENDALE TOWNSHIP.

Know what's below. Call before you dig.



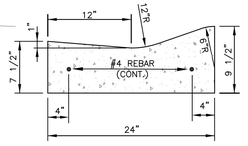
TOOL CONTRACTION JOINT AT INTERVAL EQUAL TO WIDTH. PLACE 1" EXPANSION JOINT AT 50' INTERVAL.

STANDARD SIDEWALK
NOT TO SCALE



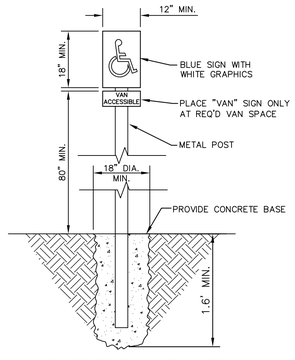
STANDARD PAVEMENT SECTION
NOT TO SCALE

ALL MATERIAL DESIGNATIONS REFER TO MDOT. STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2012 EDITION AND SUPPLEMENTAL SPECIFICATIONS

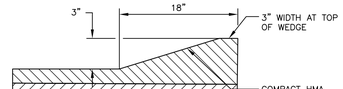


MOUNTABLE CONCRETE CURB & GUTTER
NOT TO SCALE

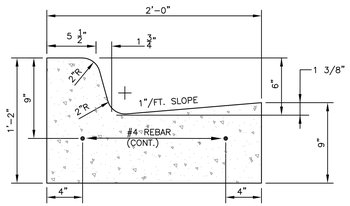
RAISED SIDEWALK DETAIL
NOT TO SCALE



BARRIER FREE SIGN DETAIL
NOT TO SCALE



ROLLED HMA CURB
NOT TO SCALE



M.D.O.T. F-4 CURB & GUTTER
NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION
02/12/21	ISSUED FOR REZONING
03/05/21	REVISED PER TOWNSHIP REVIEW
03/29/21	REVISED PER TOWNSHIP REVIEW

NOT FOR CONSTRUCTION

PROPOSED SITE IMPROVEMENTS FOR:

Allendale Baptist Church - 6262 Lake Michigan Dr.

SITE LAYOUT PLAN

Allendale Township — Ottawa County — Michigan

For: Pinnacle Construction Group

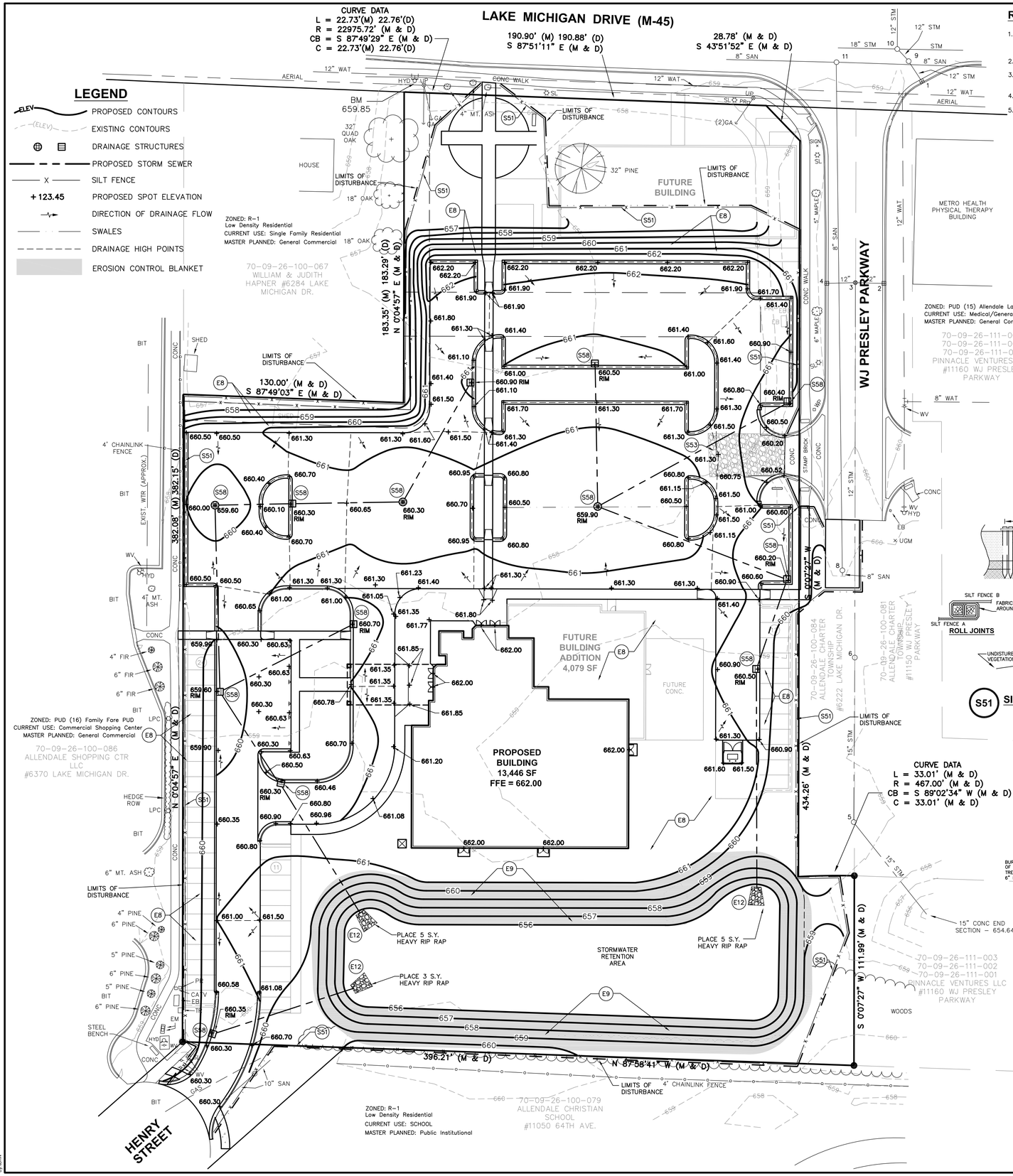
1000 Front Street NW
Grand Rapids, MI 49504
Phone: 616.451.0500

8515 Ridgebluff Dr. SW
Byron Center, MI 49315
616-490-0329
venturedwl.com

VENTURE ENGINEERING, PLLC

PROJECT NO.	20144
DRAWN BY:	JAC
CHECKED BY:	JMB
DATE:	01/18/21
SHEET NO.	C1

Mar 25, 2021 - 5:44pm C:\Users\JKirch\OneDrive\Documents\Venture Projects\20144 Allendale Baptist Church\Ct dwg, XREFs: [1] [Venture TBlock 24x36] [X By: JKirch



RETENTION BASIN NOTES:

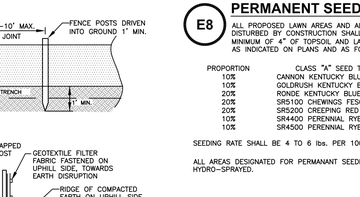
1. THE CONTRACTOR SHALL AVOID COMPACTION OF THE SOIL IN THE RETENTION BASIN AREA DURING EXCAVATION AND GRADING. THE FINAL TWO FEET OF SOIL SHALL BE REMOVED BY EXCAVATING TO FINISH GRADE.
2. PLACE A NYLOPLAST ENVIROHOOD OVER OUTLET PIPES IN CB 130, 135, & 160.
3. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE RETENTION BASIN FOLLOWING CONSTRUCTION AND THE BOTTOM 4" TO 6" SHALL BE SCARIFIED.
4. TOPSOIL SHALL NOT BE PLACED ON THE BASIN BOTTOM AND BOTTOM TWO FEET OF SIDE SLOPE.
5. BASIN BOTTOM AND BOTTOM TWO FEET OF SIDE SLOPE SHALL BE SEEDED WITH "STORMWATER SEED MIX" BY CARDNO/JF NEW. APPLY PER MFG REQUIREMENTS.

SESC SCHEDULE

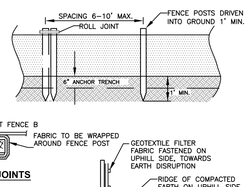
1. INSTALL SILT FENCE & INLET PROTECTION AS SHOWN. MAINTAIN SILT FENCE BY REMOVING SEDIMENT WHEN IT HAS REACHED 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE.
2. CLEAR & GRUB SITE AS NECESSARY AND REMOVE EXISTING PAVEMENT AS SHOWN ON PLANS. STOCKPILE EXCESS MATERIALS AS REQUIRED. THE CONTRACTOR IS DIRECTED TO INSTALL SILT FENCE AT THE TOE OF THE SLOPE AROUND PERIMETER OF TEMPORARY STOCKPILES.
3. CONSTRUCT STORM SYSTEM.
4. PLACE INLET PROTECTION IN ALL PROPOSED CATCH BASINS IMMEDIATELY FOLLOWING INSTALLATION.
5. PERMANENT CONTROL MEASURES MUST BE COMPLETED 5 CALENDAR DAYS AFTER THE FINAL EARTH CHANGE IS COMPLETED FOR EACH AREA DISTURBED. THIS INCLUDES BLANKETS, SEEDING, MULCHING & HYDROMULCHING, AS INDICATED IN THESE PLANS.
6. FOR ALL AREAS TO BE SEEDED, THE MULCH MUST BE APPLIED IMMEDIATELY AFTER SEED APPLICATION.
7. CLEAN STORM SEWER, INLETS, AND PIPES OF ALL CONSTRUCTION SEDIMENT IMMEDIATELY FOLLOWING PROJECT COMPLETION.
8. REMOVE TEMPORARY CONTROLS SUCH AS SILT FENCE, INLET PROTECTION AND NETTING ONCE VEGETATION IS ESTABLISHED AND THE SITE HAS BEEN STABILIZED.

EROSION CONTROL NOTES

1. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AND PERMIT AGENCY REQUIREMENTS.
2. GRADING WILL BE LIMITED TO WITHIN PROPERTY LINES AND/OR GRADING LIMITS.
3. THE PROPERTY IS NOT IMPACTED BY A FLOODPLAIN.
4. NO SOIL WILL BE ALLOWED TO ACCUMULATE OFF SITE. ANY SOIL TRACKED OFF SITE IS SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
5. ALL TRAFFIC ENTERING OR LEAVING PROPERTY SHALL USE STABILIZED CONSTRUCTION ACCESS.
6. WHERE POSSIBLE SILT FENCE IS TO PLACED 10' FROM TOE OF SLOPE TO ALLOW FOR MAINTENANCE.
7. DUST CONTROL MEASURES SHALL BE APPLIED AT ALL TIMES WITHIN THE PROJECT BY THE CONTRACTOR.
8. ALL DISTURBED AREAS SHALL BE SEEDED WITHIN 5 CALENDAR DAYS OF ACHIEVING FINAL GRADE WITH PERMANENT SEED MIXTURE.
9. ALL DISTURBED AREAS THAT WILL NOT ACHIEVE FINAL GRADE WITHIN 30 CALENDAR DAYS SHALL BE SEEDED PER TEMPORARY SEEDING SPECIFICATIONS. ALL SLOPES 1 VERTICAL: 5 HORIZONTAL OR STEEPER SHALL BE TRACK WALKED PERPENDICULAR TO SLOPE PRIOR TO TEMPORARY SEEDING.
10. ALL SLOPES GREATER THAN 1:4 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN DS-75 EROSION CONTROL BLANKET OR APPROVED EQUAL, UNLESS NOTED OTHERWISE. ALL STORMWATER CHANNELS AND DITCHES SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC-250 PERMANENT EROSION CONTROL BLANKET OR APPROVED EQUAL, UNLESS NOTED OTHERWISE. BLANKETS SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS.
11. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED DAILY AND ANY PROBLEMS REMEDIED IMMEDIATELY.
12. PERMANENT EROSION CONTROL MEASURES SHALL BE MAINTAINED BY PROPERTY OWNER. MAINTENANCE INCLUDES REGULAR INSPECTION AND CLEANING OF ALL STORM WATER FACILITIES AND ENSURING VEGETATION IS ADEQUATE ON ALL SLOPES.
13. STOCKPILE EXCESS TOPSOIL ON SITE AS INDICATED ON PLANS OR DIRECTED BY ENGINEER AND INSTALL SILT FENCE AROUND THE PERIMETER OF THE STOCKPILE. PLACE TEMPORARY SEEDING ON STOCKPILE ONCE THE SITE HAS BEEN CLEARED AND ALL TOPSOIL HAS BEEN STOCKPILED.
14. EXISTING SOILS ONSITE ARE TYPICALLY SAND.
15. TOTAL AREA OF DISTURBANCE = 4.0 ACRES±
16. ALL PROJECTS DISTURBING 1 OR MORE ACRES OR ARE WITHIN 500 FT. OF A LAKE OR STREAM REQUIRE A SOIL EROSION CONTROL PERMIT FROM THE DESIGNATED AUTHORIZED PUBLIC AGENCY.



E12 RIPRAP - OUTLET PROTECTION
NOT TO SCALE



E8 PERMANENT SEEDING NOTE

ALL PROPOSED LAWN AREAS AND ALL AREAS DISTURBED BY CONSTRUCTION SHALL RECEIVE A MINIMUM OF 4" OF TOPSOIL AND LAWN SEED MIX AS INDICATED ON PLANS AND AS FOLLOWS:

PROPORTION	CLASS "A" SEED TYPE
10%	CANNON KENTUCKY BLUEGRASS
10%	GOLDRUSH KENTUCKY BLUEGRASS
20%	RONDE KENTUCKY BLUEGRASS
20%	SR5100 CHEWINGS FESCUE
20%	SR5200 CREEPING RED FESCUE
10%	SR4400 PERENNIAL RYEGRASS
10%	SR4500 PERENNIAL RYEGRASS

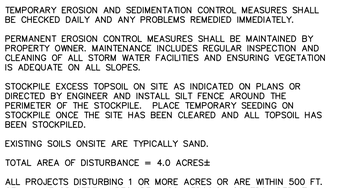
SEEDING RATE SHALL BE 4 TO 6 lbs. PER 1000 SQ. FEET.

ALL AREAS DESIGNATED FOR PERMANANT SEEDING SHALL BE HYDRO-SPRAYED.

S51 SILT FENCE DETAIL
NOT TO SCALE

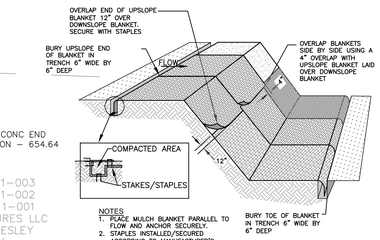
NOTE: 1. INSTALL PER MANUFACTURERS INSTRUCTIONS.

S58 INLET PROTECTION - FABRIC DROP



NOTES:
1. ESTABLISH STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INITIATION OF SITE CONSTRUCTION ACTIVITIES.
2. CARE SHOULD BE TAKEN TO PREVENT MATERIAL MOVEMENT INTO ADJACENT WETLANDS/WATERBODIES.
3. CARE SHOULD BE TAKEN TO MAINTAIN EXISTING ROADSIDE DRAINAGE VIA CULVERT INSTALLATION, WITH SEDIMENT SUMP PLACED DOWNFLOW OF CULVERT.

S53 STABILIZED CONSTRUCTION ACCESS
NOT TO SCALE



NOTES
1. PLACE MULCH BLANKET PARALLEL TO FLOW AND ANCHOR SECURELY.
2. STAPLES INSTALLED/SECURED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

E9 MULCH BLANKETS

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET S-E-S-C KEYING SYSTEM

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
EROSION / SEDIMENT CONTROLS			
E8	PERMANENT SEEDING		Stabilization method utilized on sites where earth change has been completed (final grading attained).
E9	MULCH BLANKETS		On exposed slopes, newly seeded areas, new ditch bottoms, or areas subject to erosion.
E12	RIPRAP		Use along shorelines, waterways, or where concentrated flows occur. Slows velocity, reduces sediment load, and reduces erosion.
S51	SILT FENCE		Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
S53	STABILIZED CONSTRUCTION ACCESS		Used at every point where construction traffic enters or leaves a construction site.
S58	INLET PROTECTION FABRIC DROP		Use at stormwater inlets, especially at construction sites.

811 Know what's below. Call before you dig.

SCALE: 1" = 30'

REVISIONS	
DATE	DESCRIPTION
02/12/21	ISSUED FOR REZONING
03/05/21	REVISED PER TOWNSHIP REVIEW
03/29/21	REVISED PER TOWNSHIP REVIEW

NOT FOR CONSTRUCTION

PROPOSED SITE IMPROVEMENTS FOR:
Allendale Baptist Church - 6262 Lake Michigan Dr.
SITE GRADING & SESC PLAN
Allendale Township Ottawa County Michigan
For: Pinnacle Construction Group

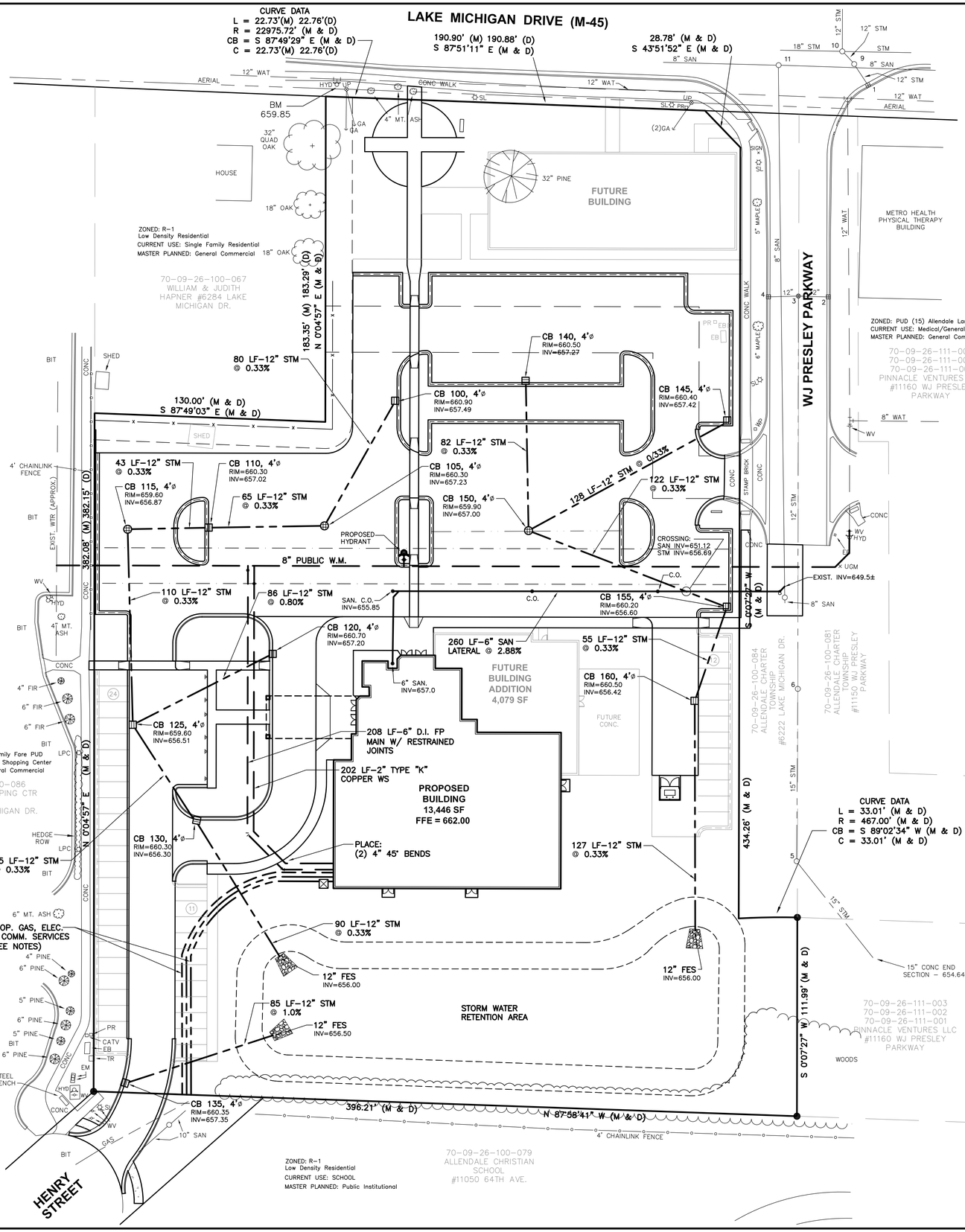
1000 Front Street NW
Grand Rapids, MI 49504
Phone: 616.451.0500

8515 Ridgebluff Dr. SW
Byron Center, MI 49315
616-490-0328
ventureMI.com

VENTURE ENGINEERING, PLLC

PROJECT NO. 20144
DRAWN BY: JAC
CHECKED BY: JMB
DATE: 01/18/21
SHEET NO. C2

Mar 25, 2021 – 5:47pm C:\Users\jjenn\OneDrive\Documents\Venture Projects\20144 Allendale Baptist Church\C2.dwg, XREFs: (1) [Venture TBlock 24x36] (1) [2] [3] By: jjenn



LEGEND

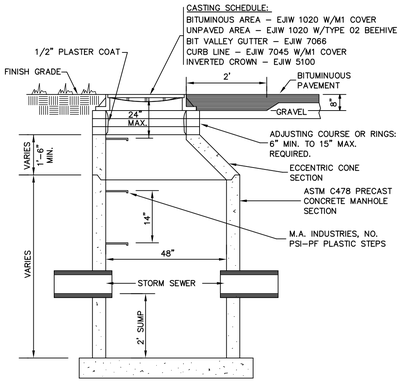
- DRAINAGE STRUCTURES
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED GAS SERVICE
- PROPOSED WATER SERVICE
- PROPOSED ELECTRIC SERVICE

0 30 60
SCALE: 1" = 30'

GENERAL NOTES:

1. EXISTING UTILITIES SHOWN ARE FROM RECORD PLANS AND EVIDENCE IN THE FIELD. NO GUARANTEE IS MADE FOR ACCURACY OR THAT THE UTILITIES SHOWN ARE THE ONLY IN THE AREA. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OR CONTINUATION OF CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITIES IN A MANNER TO MINIMIZE INCONVENIENCE TO ADJACENT PROPERTIES.
3. ALL CONSTRUCTION METHODS & MATERIALS SHALL COMPLY WITH CURRENT ALLENDALE CHARTER TOWNSHIP, OTTAWA COUNTY AND CURRENT MDOT STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS HAVE BEEN ISSUED.
4. CONTRACTOR SHALL KEEP ALL FIRE LANES OPEN & ACCESSIBLE DURING CONSTRUCTION AT ALL TIMES.
5. CONSTRUCTION TRAFFIC SHALL BE MINIMIZED ON ANY NEW PAVEMENT. THE CONTRACTOR SHALL REPAIR ANY DAMAGE OR FAILURE CAUSED BY CONSTRUCTION ACTIVITIES, AS WELL AS REPAIRING LOAD DAMAGE ON THE EXISTING PAVEMENT SYSTEM TO THE SATISFACTION OF THE ENGINEER.
6. ALL CONSTRUCTION ACTIVITIES SHALL BE STAKED AND GRADED UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.
7. ALL RUNOFF FROM THE ROOF OF THE PROPOSED BUILDING SHALL BE CONNECTED DIRECTLY TO THE PROPOSED STORM WATER RETENTION AREA.
8. STORM SEWER PIPE SHALL BE SLCPP (ADS N-12 OR EQUAL) UNLESS OTHERWISE INDICATED.
9. A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE CONTRACTED TO MONITOR EARTHWORK & PAVING ACTIVITIES.
10. STORM WATER WILL BE DISCHARGED TO AN ON SITE STORM WATER RETENTION AREA DESIGNED TO MEET OTTAWA COUNTY WATER RESOURCES COMMISSIONER REQUIREMENTS..
11. COORDINATE ALL UTILITY CONNECTIONS WITH THE APPROPRIATE UTILITY PROVIDER PRIOR TO CONSTRUCTION. AT MINIMUM, SERVICES SHALL BE PLACED IN 4" PVC CONDUIT UNDER PAVED AREAS.

811 Know what's **below.** **Call** before you dig.



4' DIA. CATCH BASIN DETAIL

NO SCALE

REVISIONS	
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03/29/21	REVISED PER TOWNSHIP REVIEW

NOT FOR CONSTRUCTION

PROPOSED SITE IMPROVEMENTS FOR:
Allendale Baptist Church - 6262 Lake Michigan Dr.
SITE UTILITY PLAN
Allendale Township — Ottawa County — Michigan
For: Pinnacle Construction Group
1000 Front Street NW, Grand Rapids, MI 49504, Phone: 616.451.0500

VENTURE ENGINEERING, PLLC
8515 Ridgebluff Dr. SW
Byron Center, MI 49315
616-490-0329
ventureswl.com

PROJECT NO.	20144
DRAWN BY:	JAC
CHECKED BY:	JMB
DATE:	01/18/21
SHEET NO.	C3

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Ordinance Requirements:

Article 21A.04 F.1: Front Yard Requirements

For each 150' of road frontage 2 deciduous or evergreen trees, 2 ornamental trees and 3 shrubs per tree is required.
Required along Lake Michigan Drive: 243.7'/150 = 3.25 dec. or ever. trees, 3.25 ornamental trees and 19.5 shrubs
Provided along Lake Michigan Drive: 2 dec. trees, 1 existing Pine, 3 ornamental trees and 20 shrubs

Article 21A.04 G: Off Street Parking Area Requirements

All parking areas consisting of 20 or more spaces shall have 20 sf of landscaping per space.
Required based on 166 parking spaces 3320 sf of landscaping.
Provided based on 166 parking spaces 5445 sf of landscaping.
Required one canopy tree per 20 parking spaces: 166 spaces/20 = 8.3 trees
Provided: 8 canopy trees

Section 21A.04 Greenbelt Requirements

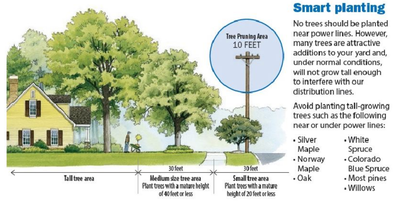
For each 20 linear feet abutting the adjacent property, one tree shall be planted within the greenbelt. Trees shall be a mixture of evergreen, canopy and ornamental trees. Two shrubs shall be planted for each tree and each shrub shall be a minimum of thirty (30) inches at planting and reach a minimum height of five feet at maturity.

Required along West & North Property Line: 313.4'/20 = 15.66 dec. or ever. trees, or ornamental trees and 31.32 shrubs

Provided along West & North Property Line: 16 trees and 32 shrubs

Article 24.05 F9:

I certify this landscape plan if installed as shown to be per ordinance

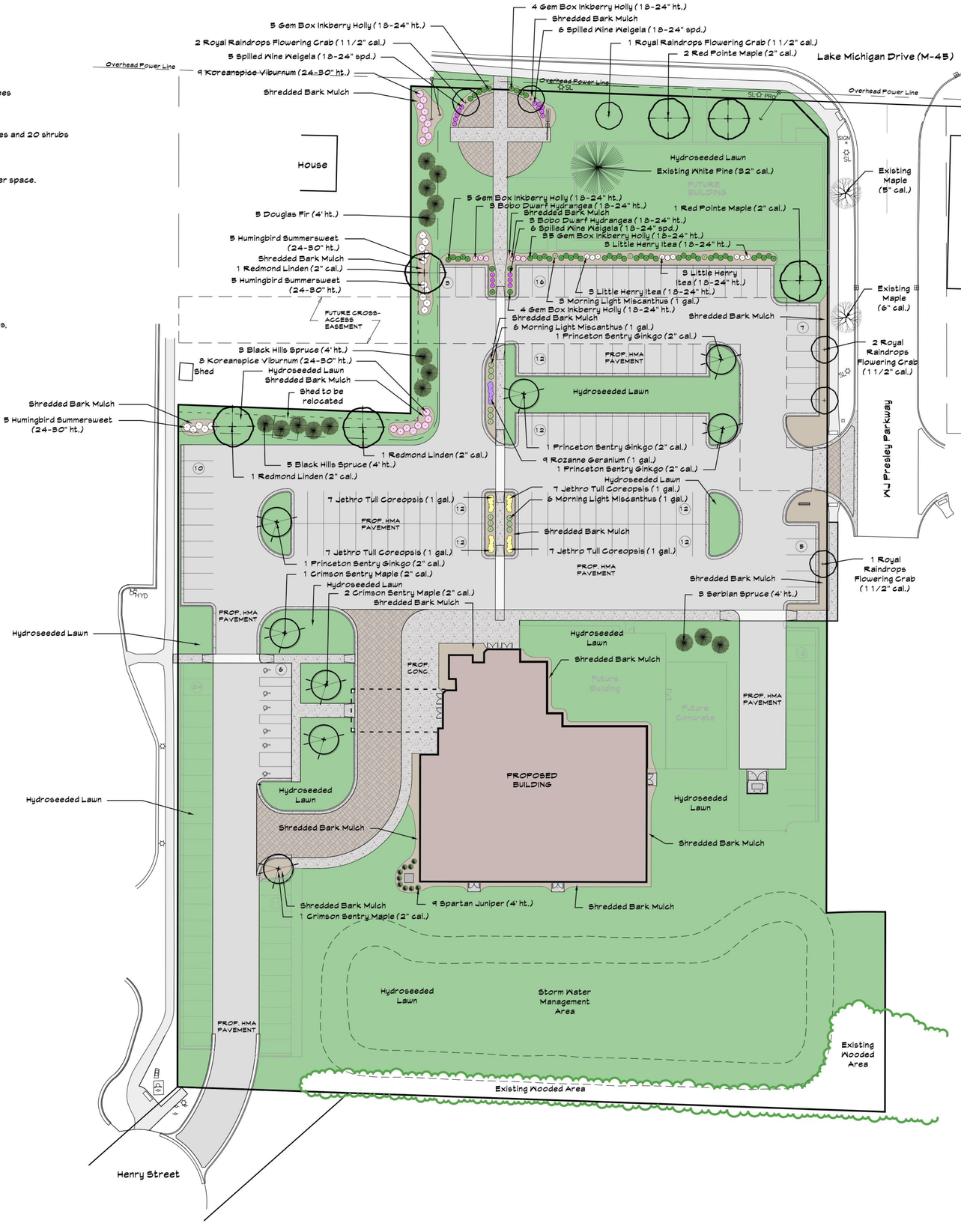


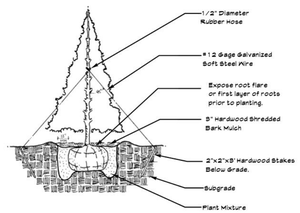
Smart planting

No trees should be planted near power lines. However, many trees are attractive additions to your yard and, under normal conditions, will not grow tall enough to interfere with our distribution lines.

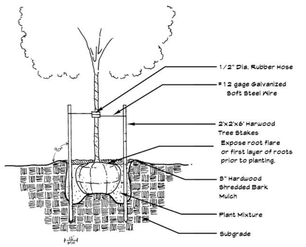
Avoid planting tall-growing trees such as the following near or under power lines:

- Silver Maple
- Norway Maple
- Oak
- White Spruce
- Colorado Blue Spruce
- Most pines
- Willows

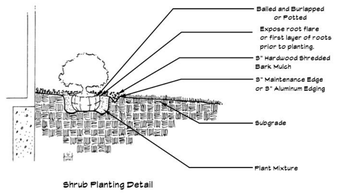




Evergreen Planting Detail- 5' and Taller



Deciduous Trees 3" Caliper and Smaller



Shrub Planting Detail

811 Know what's **below.** **Call** before you dig.

North

Landscape Plan
(scale: 1"=30')

0 15' 30' 45' 60'

Notes:

1. All landscaping to be installed by a qualified Landscape Contractor. Plant sizes specified on the landscape plan shall be the size planted. Plants smaller then specified will be rejected.
2. All plantings shall be mulched with 3" shredded premium hardwood bark mulch. Trees in lawn areas shall receive a 6' diameter bark ring 3" deep.
3. The landscape contractor shall remove any twine that is wrapped around the trunk of a tree or shrub as well as the top third of any burlap. Use a wire cutter to make 3-5 cuts in the wire basket to allow roots to grow through.
4. Trees and shrubs shall be planted with a plant mix consisting of 1 part topsoil, 1 part peat, and 1 part existing soil.
5. Planting areas shall be edged with aluminium edging unless noted otherwise.
6. Lawn areas shall receive 4" of topsoil and hydroseeded. Check with specifications for topsoil availability or contact project manager.
7. All lawn and shrub bed areas shall be watered by an automatic irrigation system. The irrigation system shall be designed and installed by the Landscape Contractor. Shrub areas shall be irrigated with drip irrigation. The irrigation system shall include a rain sensor to shut the system off if it rains.
8. Maintenance of the landscape shall be provided for by the owner and include fertilizing of lawn and plant material, yearly pruning, top dressing of mulch areas every other year and watering. Landscaping shall be kept free of debris and refuse.
9. Plant materials shall be chosen and installed in accordance with standards recommended by the County Cooperative Extension Service or American Nursery Association.

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DESIGN SCAPES
Residential and Commercial Landscape Design
7391 45th Avenue Jenison, Michigan 49428
616.669.0304

STATE OF MICHIGAN
JOYCE E. WEISE
LANDSCAPE ARCHITECT
No. 1202
LICENSED LANDSCAPE ARCHITECT

Landscape Plan Drawn By:
Joyce E. Weise PLA, ASLA

PROPOSED LANDSCAPE PLAN FOR:

Allendale Baptist Church

6262 Lake Michigan Drive Allendale Twp., Michigan

AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

DRAWING NUMBER: 20144

DRAWN BY: Joyce E. Weise PLA, ASLA

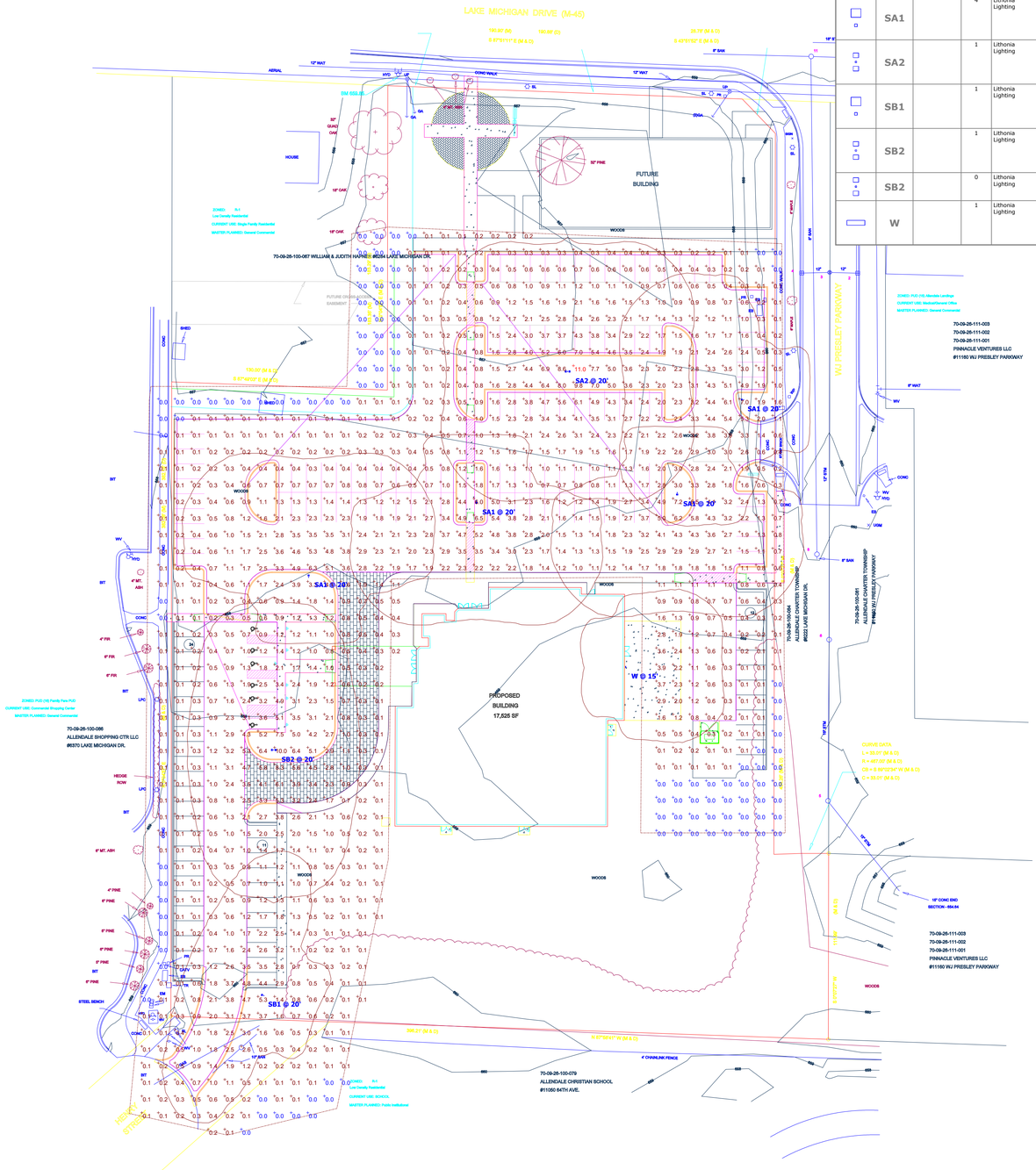
DRAWING DATE: 021521

ISSUED FOR:

02/19/21 Site Plan Approval
05/05/21 Per Township Review

SCALE 1"=30'

SHEET NUMBER L-1



Plan View
Scale - 1" = 40ft

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency	Distribution	Polar Plot	Notes
	SA1		4	Lithonia Lighting	DSX1 LED P7 40K T4M MVOLT SPA NLTAIR2 PIRHN DDBXD	DSX1 LED P7 40K T4M MVOLT	LED	1	DSX1_LED_P7_40K_T4M_MVOLT.ies	20295	1	1	183	100%	TYPE IV, SHORT, BUG RATING: B3 - U0 - G4	Max: 1194cd	
	SA2		1	Lithonia Lighting	DSX1 LED P7 40K T4M MVOLT SPA NLTAIR2 PIRHN DDBXD	DSX1 LED P7 40K T4M MVOLT	LED	1	DSX1_LED_P7_40K_T4M_MVOLT.ies	20295	1	1	366	100%	TYPE IV, SHORT, BUG RATING: B3 - U0 - G4	Max: 1194cd	
	SB1		1	Lithonia Lighting	DSX1 LED P5 40K T2M MVOLT SPA NLTAIR2 PIRHN DDBXD	DSX1 LED P5 40K T2M MVOLT	LED	1	DSX1_LED_P5_40K_T2M_MVOLT.ies	15796	1	1	138	100%	TYPE III, MEDIUM, BUG RATING: B3 - U0 - G3	Max: 1270cd	
	SB2		1	Lithonia Lighting	DSX1 LED P5 40K T2M MVOLT SPA NLTAIR2 PIRHN DDBXD	DSX1 LED P5 40K T2M MVOLT	LED	1	DSX1_LED_P5_40K_T2M_MVOLT.ies	15796	1	1	276	100%	TYPE III, MEDIUM, BUG RATING: B3 - U0 - G3	Max: 1270cd	
	SB2		0	Lithonia Lighting	DSX1 LED P7 40K T2M MVOLT SPA NLTAIR2 PIRHN DDBXD	DSX1 LED P7 40K T2M MVOLT	LED	1	DSX1_LED_P7_40K_T2M_MVOLT.ies	20689	1	1	366	100%			
	W		1	Lithonia Lighting	DSXW2 LED 30C 1000 40K TFTM MVOLT	DSXW2 LED WITH 3 LIGHT ENGINES, 30 LED's, 1000mA DRIVER, 4000K LED, TYPE FORWARD THROW MEDIUM OPTIC	LED	1	DSXW2_LED_3OC_1000_40K_TFTM_MVOLT.ies	11120	1	1	109	100%	TYPE IV, SHORT, BUG RATING: B2 - U0 - G3	Max: 726cd	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.3 fc	11.0 fc	0.0 fc	N/A	N/A

VISUAL

ALLENDALE BAPTIST

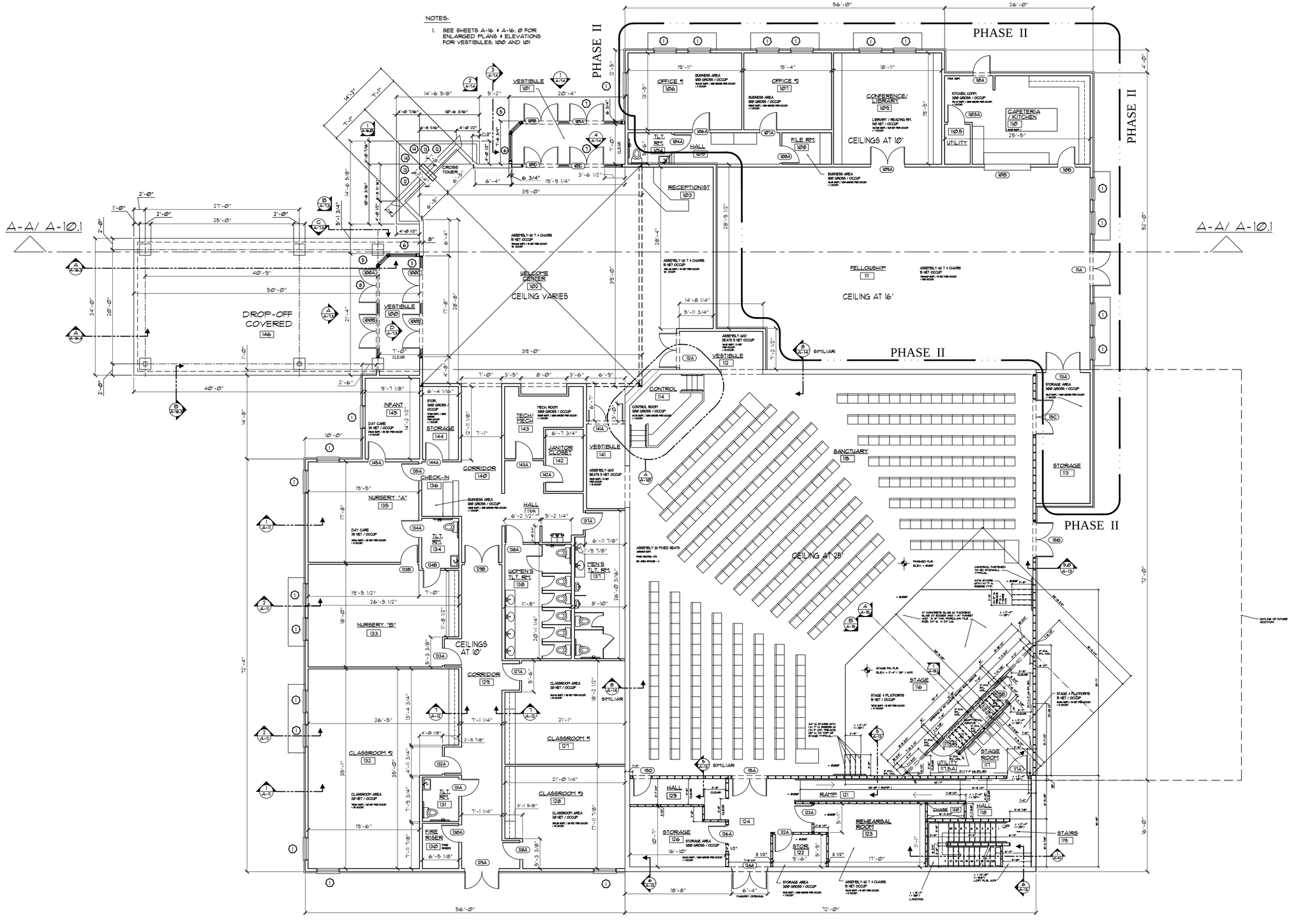
Designer

Date
2/9/2021
Scale
Not to Scale
Drawing No.

Summary

NOTES:

1. SEE SHEETS A-16.1 & A-16.2 FOR ENLARGED PLANS & ELEVATIONS FOR VESTIBULES 100 AND 101



FIRST FLOOR PLAN

SCALE: 1/8"=1'-0"

DATE	REVISION / RELEASE
01/22/2020	REVD MECH PLAN
3/01/2020	REVD PLAN
12/29/2020	BID PERMIT/RELEASE

DATE: 12-18-2020
SCALE: 1/4"=1'-0"
DRAWN: DP
JOB #: 20185

AUSTIN AND ASSOCIATES
ARCHITECTS AND PLANNERS
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3205 BAY ROAD SUITE 5
SAGINAW, MICHIGAN 48603
PHONE: 1 (989) 793-1365

NEW BUILDING FOR: FIRST FLOOR PLAN

ALLENDALE BAPTIST CHURCH

6262 LAKE MICHIGAN DRIVE
ALLENDALE, MICHIGAN 49401

DRAWING
A-3
7 OF 66

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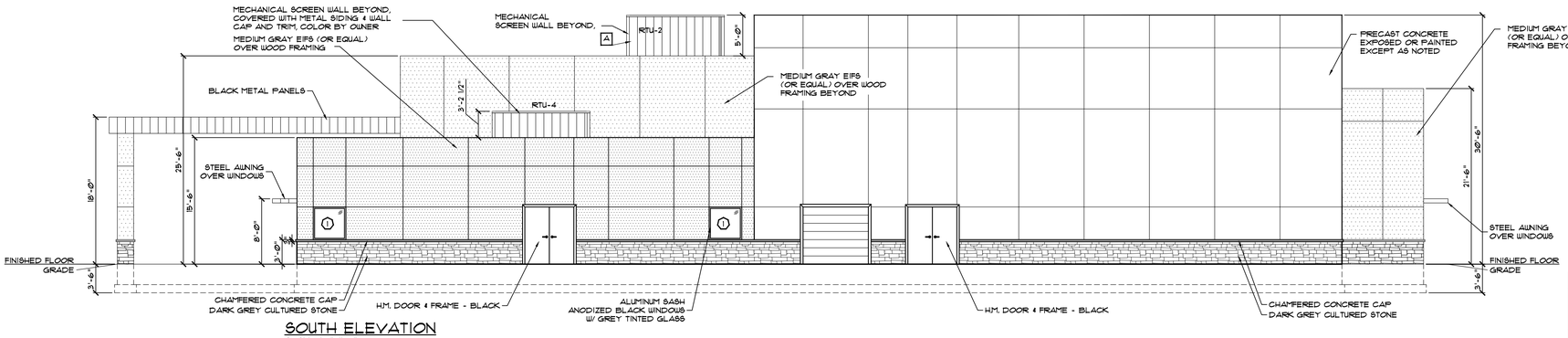
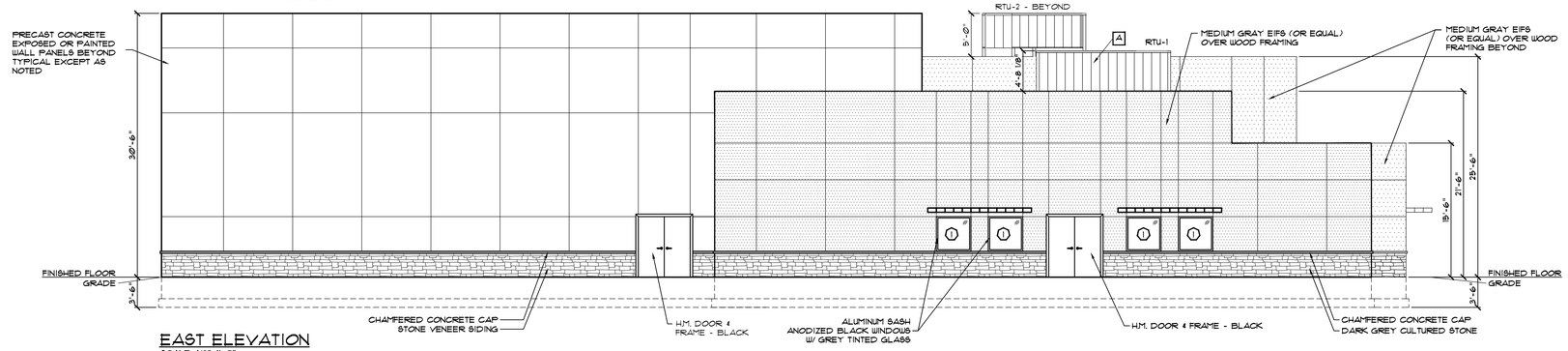


SOUTH ELEVATION
SCALE: 1/8"=1'-0"

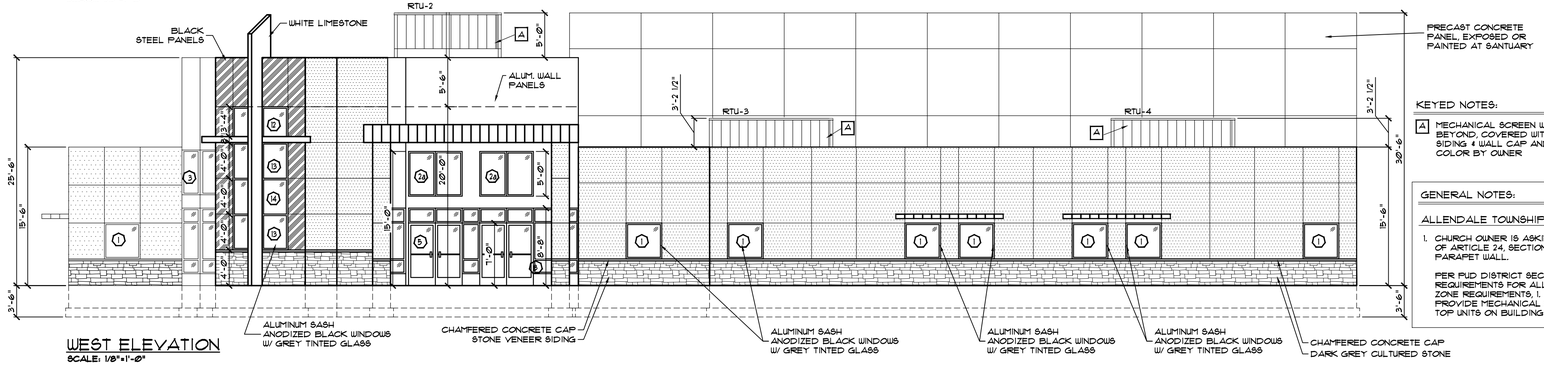
SOUTH ELEVATION		
AREA OF BUILDING MATERIALS PER SQ.FT.		PERCENTAGE
CULTURED STONE :	3545.50 SQ. FT.	9.14 %
EIFS :	1245.76 SQ. FT.	32.12 %
PRECAST CONCRETE :	1,914.18 SQ. FT.	49.35 %
METAL PANELS :	172.52 SQ. FT.	4.45 %
DRS & WINDOWS :	191.56 SQ. FT.	4.94 %
TOTAL SQ.FT.	3,878.52 SQ. FT.	100.00 %



EAST ELEVATION
SCALE: 1/8"=1'-0"

EAST ELEVATION		
AREA OF BUILDING MATERIALS PER SQ.FT.		PERCENTAGE
CULTURED STONE :	392.51 SQ. FT.	9.70 %
EIFS :	1,410.86 SQ. FT.	34.80 %
PRECAST CONCRETE :	1,947.72 SQ. FT.	48.05 %
METAL PANELS :	142.09 SQ. FT.	3.51 %
DRS & WINDOWS :	160.00 SQ. FT.	3.94 %
TOTAL SQ.FT.	4,053.18 SQ. FT.	100.00 %

WEST ELEVATION		
AREA OF BUILDING MATERIALS PER SQ.FT.		PERCENTAGE
CULTURED STONE :	383.33 SQ. FT.	9.48 %
EIFS :	1,362.11 SQ. FT.	33.69 %
PRECAST CONCRETE :	1,221.15 SQ. FT.	30.20 %
METAL PANELS :	153.82 SQ. FT.	3.80 %
DRS & WINDOWS :	460.02 SQ. FT.	11.37 %
BLACK STEEL PANEL	105.72 SQ. FT.	2.61 %
LIMESTONE :	57.46 SQ. FT.	1.42 %
ALUM. WALL PANELS	299.38 SQ. FT.	7.43 %
TOTAL SQ.FT.	4,043.05 SQ. FT.	100.00 %



WEST ELEVATION
SCALE: 1/8"=1'-0"

NORTH ELEVATION		
AREA OF BUILDING MATERIALS PER SQ.FT.		PERCENTAGE
CULTURED STONE :	339.50 SQ. FT.	9.61 %
EIFS :	1,841.61 SQ. FT.	52.11 %
PRECAST CONCRETE :	363.43 SQ. FT.	10.29 %
METAL PANELS :	254.73 SQ. FT.	7.21 %
DRS & WINDOWS :	305.40 SQ. FT.	8.65 %
BLACK STEEL PANEL	105.72 SQ. FT.	2.99 %
LIMESTONE :	57.46 SQ. FT.	1.63 %
ALUM. WALL PANELS	261.96 SQ. FT.	7.45 %
TOTAL SQ.FT.	3,529.81 SQ. FT.	100.00 %

KEYED NOTES:

A MECHANICAL SCREEN WALL BEYOND, COVERED WITH METAL SIDING & WALL CAP AND TRIM, COLOR BY OWNER

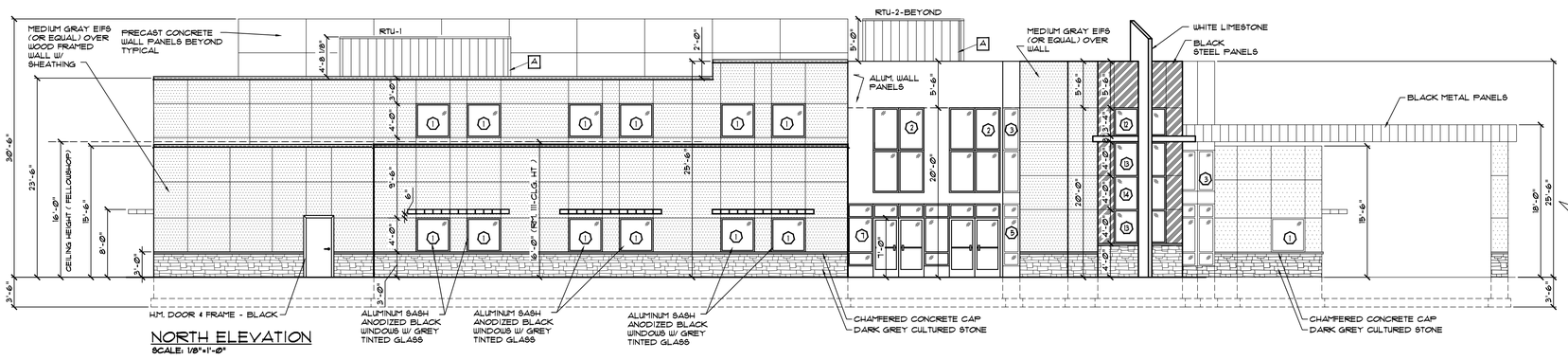
PRECAST CONCRETE ON SANCTUARY MAY BE CHANGED TO INSULATED METAL PANEL. WE ARE STILL EVALUATING THIS OPTION

GENERAL NOTES:

ALLENDALE TOWNSHIP ZONING ORDINANCE

1. CHURCH OWNER IS ASKING FOR VARIANCE IN LIEU OF ARTICLE 24, SECTION 24.06 G. - " MINIMUM 4 FT HIGH PARAPET WALL.

   PER PUD DISTRICT SECTION 12.05 DEVELOPMENT REQUIREMENTS FOR ALL PUD'S. - A. MODIFICATIONS OF ZONE REQUIREMENTS. 1. - REQUESTING MODIFICATION TO PROVIDE MECHANICAL SCREEN WALLS TO SCREEN ROOF TOP UNITS ON BUILDING AS SHOWN IN PLANS.



NORTH ELEVATION
SCALE: 1/8"=1'-0"

NOT FOR CONSTRUCTION

OWNER REVIEW DRAWINGS
NOT FOR CONSTRUCTION
RELEASE DATE: MARCH 1, 2020
ALL PREVIOUS DRAWINGS SHALL BE NULL AND VOID UPON ISSUANCE OF THIS RELEASE SET

DATE	REVISION / RELEASE
-	-

DATE: 12-12-2019
SCALE: 1/ 8"=1'-0"
DRAWN: DP
JOB #: 201885

AUSTIN AND ASSOCIATES
ARCHITECTS AND PLANNERS
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3685 BAY ROAD SUITE 5
SAGINAW, MICHIGAN 48603
PHONE: (989) 793-1365

NEW BUILDING FOR: BUILDING ELEVATIONS

ALLENDALE BAPTIST CHURCH

6262 LAKE MICHIGAN DRIVE
ALLENDALE, MICHIGAN 49401

DRAWING
A-9
- OF -

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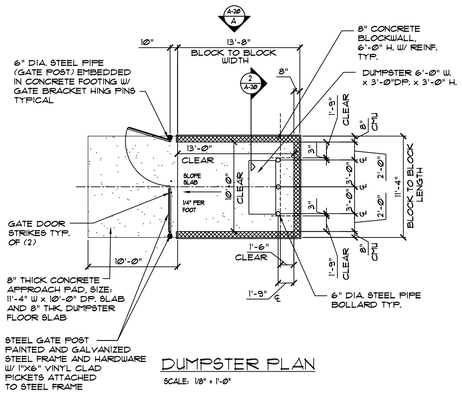
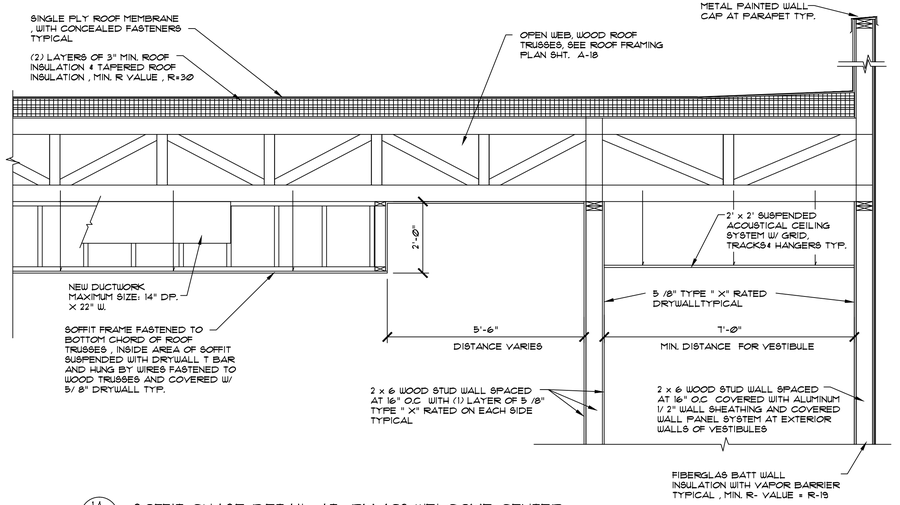


DUMPSTER PLAN

SCALE: 1/8" = 1'-0"

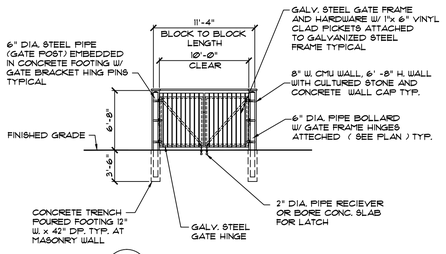
GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY THE SIZE OF THE ENCLOSURE WITH THE LOCAL TRASH REMOVAL COMPANY PRIOR TO CONSTRUCTION.
2. DUMPSTER ENCLOSURE SHALL BE PER THE ALLENDALE TWP ZONING ORDINANCE ARTICLE 24 SECTION 2406, H, WASTE DISPOSAL FACILITIES.
3. BOLLARDS SHALL BE INSTALLED MIN. 48" BELOW GRADE AND SET IN CONCRETE WITH 3" COVERAGE AND 6"CONC. AT BASE
4. DUMPSTER GATE SHALL BE COVERED WITH VINYL CLAD FRAMING MEMBERS, COLOR SELECTED BY OWNER.
5. EXTERIOR WALL OF DUMPSTER ENCLOSURE SHALL BE COVERED WITH CULTURED STONE, WAINSCOAT 36" H. WITH CONCRETE CAP, UPPER PART OF DUMPSTER WALL COVERED WITH DRYVIT WALL SYSTEM, COLOR SELECTED BY OWNER. CMU WALL SHALL HAVE STONE CAP, TYP.
6. BOLLARDS AND GATE POSTS SHALL BE PAINTED WITH EXTERIOR PAINT , COLOR SELECTED BY OWNER.



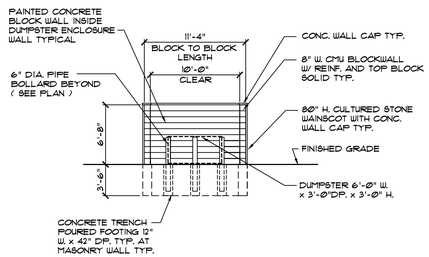
1A / A-20 SOFFIT CHASE DETAIL AT RM. 102 WELCOME CENTER AND VESTIBULES

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



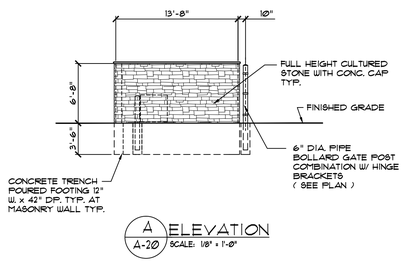
1 / A-20 FRONT ELEVATION

SCALE: 1/8" = 1'-0"



2 / A-20 REAR ELEVATION

SCALE: 1/8" = 1'-0"



A / A-20 ELEVATION

SCALE: 1/8" = 1'-0"

DATE	REVISION / RELEASE
12/18/2020	BID / PERMIT RELEASE
3/22/2021	ZONING COMPLIANCE
3/29/2021	REVD / ZONING DEPT.

DATE: 2-3-2020
SCALE: AS NOTED
DRAWN: DP
JOB #: 201835

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NEW BUILDING FOR: DUMPSTER DETAILS

ALLENDALE BAPTIST CHURCH

6262 LAKE MICHIGAN DRIVE
ALLENDALE, MICHIGAN 49401

DRAWING
A-20
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Jeff Brinks

From: Aaron Byler <ab@askourclients.com> on behalf of Aaron Byler
Sent: Monday, March 8, 2021 8:26 AM
To: Jeff Brinks (jbrinks@venturecivil.com)
Subject: FW: Traffic Numbers

For your records

Aaron Byler

Project Manager
pinnacle construction group, inc.
1000 front avenue nw
grand rapids, mi 49504
e ab@askourclients.com
o 616.451.0500 x219
f 616.451.0860
m 616.514.0013
www.askourclients.com

From: Mark Green <mark@allendalebaptist.org>
Sent: Friday, March 5, 2021 9:44 AM
To: Brian Sinnott <bsinnott@fveng.com>
Cc: Aaron Byler <ab@askourclients.com>; Greg Yaklin <gyaklin@msn.com>
Subject: Re: Traffic Numbers

Brian,

Thank you so much!!

Mark

> On Mar 5, 2021, at 9:30 AM, Brian Sinnott <bsinnott@fveng.com> wrote:
>
> Here are my notes from the PC meeting from February 2020:
>
> Church Size: 17,500 square feet
> Number of seats: 373
>
> Per ITE Trip Generation Handbook, 8th edition Section 560 - Churches
> Weekday total trips: 240 trips
> Sunday peak hour trips: 100 trips
> Weekday PM peak hour trips: 25 trips
>
> Allendale Township Ordinance 24.L: Requires trip generation analysis if 50 peak hour trips or 750 trips during a typical day.

Note the following :

- While Sunday peak hour trips exceed the 50 trip threshold of the ordinance, Sunday peak hour traffic is generally not the concern intended by such traffic studies. Traffic on M-45 as well as trip generation related to nearby businesses is likely far less on Sunday mid-day than it is on weekday afternoon peak hours.
- With a second access to Henry Street, trips to and from M-45 will be less than the total trips
- A 316-foot fully marked right turn deceleration lane already exists at the Presley intersection for eastbound traffic. Compare this to a 184-foot deceleration lane to Family Fare immediately to the west, and a 224-foot taper only lane to LifeStream Church.

Brian Sinnott, PE
Senior Project Manager

FLEIS & VANDENBRINK
2960 Lucerne Drive SE, Suite 100 | Grand Rapids | MI | 49546
O: 616.977.1000 | C: 616.502.1101 | D: 616.588.1907 | F: 616.977.1005
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Wall Panel
SYSTEMS

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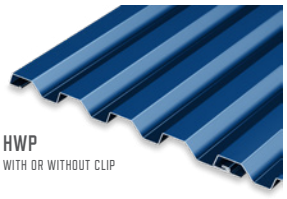
PAC-CLAD®
PETERSEN
A CARLISLE COMPANY

DEL VALLE CAREER & TECHNICAL EDUCATION, DEL VALLE, TX
Contractor: Texas Roofing Co.
Architect: Pfluger Architects
GC: American Constructors
Photo: Alan Blakely
Profile: Highline S-1
Colors: Cardinal Red, Custom Tor Red, Custom Ron Red

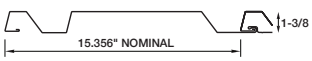
Precision Series HWP, Highline and Box Rib

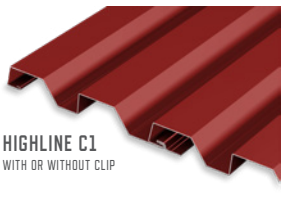


HWP
WITH OR WITHOUT CLIP

HIGHLINE B1
WITH OR WITHOUT CLIP

HIGHLINE B2
WITH OR WITHOUT CLIP





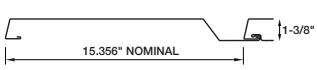
HIGHLINE C1
WITH OR WITHOUT CLIP

HIGHLINE C2
WITH OR WITHOUT CLIP

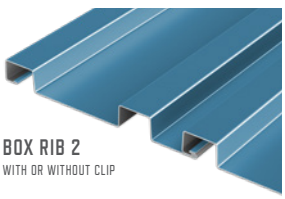
HIGHLINE M1
WITH OR WITHOUT CLIP

HIGHLINE S1
WITH OR WITHOUT CLIP
Note: Minimum panel length is 5'

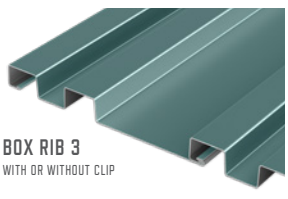
HIGHLINE S2
WITH OR WITHOUT CLIP
Note: Minimum panel length is 5'



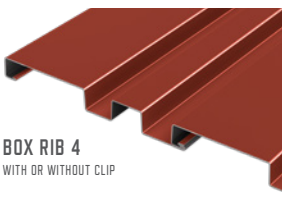
BOX RIB 1
WITH OR WITHOUT CLIP



BOX RIB 2
WITH OR WITHOUT CLIP



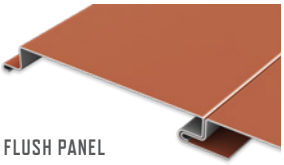
BOX RIB 3
WITH OR WITHOUT CLIP



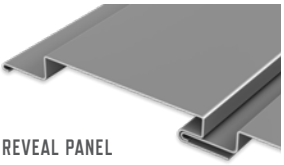
BOX RIB 4
WITH OR WITHOUT CLIP

Note: Line drawings are not to scale.

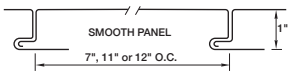
Flush and Reveal



FLUSH PANEL



REVEAL PANEL

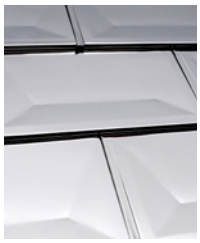


Stocked Colors	
Al	
.032	36
.040	22
STEEL	
24 GA.	43
22 GA.	16

- Available with up to two pencil ribs
- Rounded interlock leg provides improved flush kit
- Optional clips available for Miami-Dade wind resistance requirements
- 30-year non-prorated finish warranty
- Panel lengths from 4′ to 25′
- Galvalume Plus available

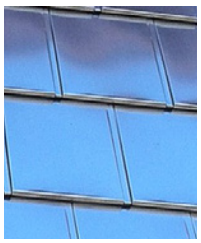
Testing Available at PAC-CLAD.COM

Precision Series Tiles



CUPPED

FLAT



DIAMOND

Stocked Colors	
Al	
.032	36
STEEL	
24 GA.	43

- .032 anodized available
- Zalmag® coated steel (26 gauge) available (Sold only in Florida and Texas)
- 30-year non-prorated finish warranty
- May be used for both wall and roof applications
- No sealant is required

Stocked Colors	
Al	
.032	36
.040	22
.050	29
STEEL	
24 GA.	43
22 GA.	16

- Highline S-2 is only available in .050 aluminum and 22 gauge steel
- No-clip panel, or clip installation for expansion/contraction
- Multiple rib patterns provide a variety of looks and design options
- Panel depths of ⅞″ or 1-⅜″
- Cost-effective installation
- Horizontal or vertical installation
- Micro-seam corners available
- Galvalume Plus available
- Aluminum panels may be perforated
- Panel lengths:
  30' maximum for steel;
  22′ maximum for aluminum on the thru-fastened leg; longer lengths available on clip panels

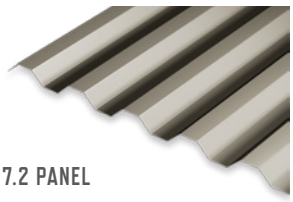
Testing Available at PAC-CLAD.COM

MINNEAPOLIS-ST. PAUL CONSOLIDATED LOADING DOCK
Contractor: Progressive Building Systems
Architect: Miller Dunwiddie Architecture
GC: Sheehy Construction
Photo: Steve Bergerson
Profile: Precision Series Tiles, cupped
Colors: Patina Green, Hemlock Green,
Arcadia Green, Custom Aged Copper

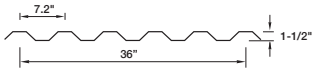
AISD PERFORMING ARTS CENTER, AUSTIN, TX
Contractor: Texas Roofing Co.
Architect: Pfluger Architects
GC: American Constructors
Owner: Austin Independent School District
Photo: Tom Coplen
Profiles: Flush Panel, M-42 Panel
Colors: Burgundy, Colonial Red
Terra Cotta, Galvalume

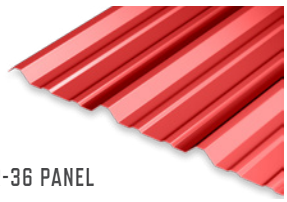
COVER PHOTO: WICHITA STATE PARTNERSHIP BUILDING #3, WICHITA, KS Contractor: Mahaney Group Architect: GLMV Architecture GC: Crossland Construction Photographer: Alan Blakely, alanblakely.com
Profiles: Highline S-1, Snap-On, flat sheet Colors: Silver, Bone White, Matte Black

Exposed Fastener

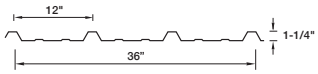


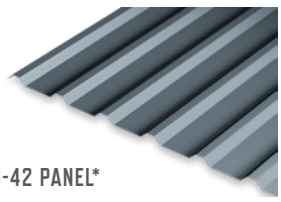
7.2 PANEL



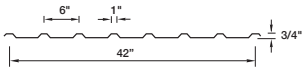


R-36 PANEL

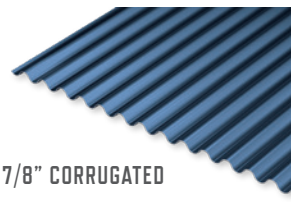




M-42 PANEL*



Note: Made only in Tyler, Texas facility

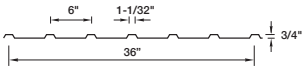


7/8" CORRUGATED

Stocked Colors	
Al	
.032	36
.040	22
.050	29
STEEL	
24 GA.	43
22 GA.	16

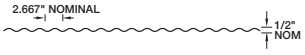
- 30-year non-prorated finish warranty
- Matching screws and rivets
- Closure strips available
- Precut short lengths (5'-0" minimum) (3'-0" on the M-42)

M-36 PANEL*

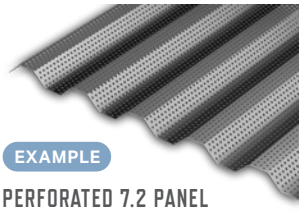


*Note: The M-36 and M-42 panels are not intended for use in the construction of metal buildings or structural roof applications. Please consult with Petersen regarding the application of this panel.

1/2" CORRUGATED



Perforation



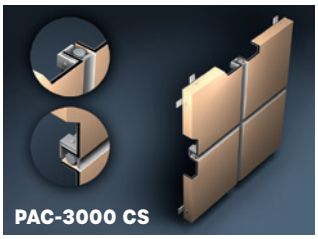
EXAMPLE

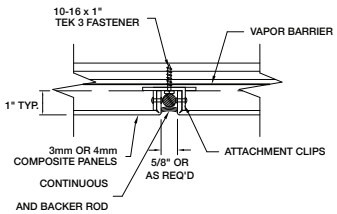
PERFORATED 7.2 PANEL

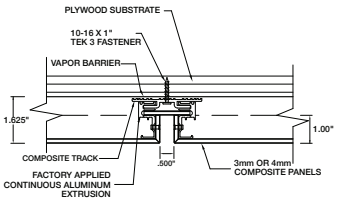
Petersen offers perforation of select PAC-CLAD metal wall panels and flat sheet. Perforated panels and metal can provide a contrasting look with any non-perforated metal or other building material to create visual interest on any project. Architects can specify perforated aluminum and copper to diffuse light, air or sound, or simply for architectural flair. Typical applications include equipment screens, partitions, sign panels, parking decks, guards, interior acoustical applications and enclosures of any kind.

Perforation is available in a nearly endless combination of hole sizes, spacing and open space percentages to complement virtually any architectural design or need. Perforation options will vary by panel profile and metal thickness. Consult factory for details.

Composite







Stocked Materials
3mm, 4mm, 6mm Composite
.063-.125 Mill Finish Aluminum
Zinc and Stainless Steel
Anodized Aluminum

- Available in a wide variety of non-PAC-CLAD colors and finishes
- Precise fabrication to meet exacting tolerances
- Rout-and-return fabrication
- Welded corners available

Testing Available at PAC-CLAD.COM

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A CARLISLE COMPANY

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Annapolis Junction, MD 20701
P: 800-344-1400
F: 301-953-7627

10551 PAC Road
Tyler, TX 75707
P: 800-441-8661
F: 903-581-8592

102 Northpoint Parkway
Acworth, GA 30102
P: 800-272-4482
F: 770-420-2533

1800 S. 7th Ave., Suite 130
Phoenix, AZ 85007
P: 833-750-1935
F: 602-254-6504

1885 Station Parkway NW, Suite B
Andover, MN 55304
P: 877-571-2025
F: 866-901-2935

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Fresh Coast Planning

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231-206-4821
bwerschem@gmail.com

MEMORANDUM

To: Allendale Charter Township Planning Commission
From: Gregory L. Ransford, MPA
Date: March 31, 2021
Re: Allendale Christian School – Minor versus Major Change Determination

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Attached is a narrative, site plan, floor plan and elevations, and related documentation from Lynnelle Berkenpas of Holland Engineering on behalf of Allendale Christian School to construct an addition of approximately 12,878 square feet for the purpose of classrooms, offices, and storage. The property is located at 11050 64th Avenue and is located within the R-1 Low Density One-Family Residential (R-1) District. The school is a special use within the R-1 District.

Minor vs. Major Change Determination

Pursuant to Section 20.10 – Amendment to an Approved Special Land Use of the Allendale Charter Township Zoning Ordinance (ACTZO), the Planning Commission shall determine if a proposed change or changes to a site plan are minor or major. In the event the Planning Commission determines the proposed is a minor amendment, the Planning Commission may approve the revisions without a public hearing. In the event the Planning Commission determines the proposed is a major amendment, a public hearing is required along with the final site plan review. For your convenience, below is a copy of Section 20.10, in part, which details examples of major changes and should be used to guide your deliberations.

> Section 20.10 – Amendment to an Approved Special Land Use
>
> B. A major change is defined as a change in the conditions of approval or a change to the Special Land Use which would substantially alter the intensity of the use of the property so as to call into question compliance with the Special Land Use approval standards of Section 20.06 herein.
>
> Examples of a major change may include but are not limited to a substantial increase in the hours of operation, a substantial expansion of the land area devoted to outdoor activity, a substantial increase in the number of items displayed or stored outdoors, an increase in the intensity of the use which would substantially increase traffic or a change in the conditions of approval which may result in a substantial adverse impact on nearby residents or property.
>
> In addition, a major change would also include expanding the land area that was approved for the existing Special Land Use and expanding the building containing the use if such expansion would increase the intensity of the use.

General Observations and Findings

Façade

It is important to note that the school façade is not subject to the requirements of Section 24.06J – Building Appearance of the Allendale Charter Township Zoning Ordinance (ACTZO), which is consistent with the recent Lighthouse Community Church building.

Relief Pursuant to Section 24.11

With all due respect to the determination of the Planning Commission, in anticipation that the Planning Commission would deem the proposed as major, we directed the applicant to provide the attached narrative in advance of the formal site plan submission and public hearing to address whether the Planning Commission would seek updates to the site in accordance with the ACTZO, including but not necessarily limited to, existing exterior lighting, the existing dumpster enclosure, existing landscaping, and irrigation.

As the applicant highlighted within the Narrative, the Planning Commission has the authority to determine what attributes of a site require updating based on certain review criteria provided by Section 24.11 – Expansion of Existing Use, Structure, or Building of the ACTZO. The applicant has responded to the criteria found therein collectively related to the site attributes from which they seek relief. For your convenience, below is a copy of Section 24.11. It is important to note that Section 24.11 limits the type of deficiencies for consideration by the review criteria.

> Sec. 24.11 EXPANSION OF EXISTING USE, STRUCTURE, OR BUILDING.
>
> It is recognized that land uses, buildings, and structures are existing which do not conform to the current regulations of this Ordinance and as such do not achieve the intended purposes of this Ordinance. When these uses, buildings, and structures are proposed to be expanded, enlarged, or increased in intensity so that a site plan review is required per Section 24.02 herein, the following regulations shall apply:
>
> A. The site development standards used in reviewing site plans shall be applied to existing uses, structures or buildings when they are affected by any expansions, enlargements or increases in intensity. These standards shall be applied if it is determined that as a result of such expansions, enlargements or increases in intensity, any of the following situations exist:
>
>   1. Existing stormwater drainage provisions on site are inadequate to protect nearby lakes, streams or creeks from runoff contaminants or to prevent drainage onto adjoining properties and do not substantially comply with the Ottawa County Stormwater Management Ordinance.
>   2. There is insufficient on-site parking to satisfy current Zoning Ordinance requirements and/or a hard surface parking area is needed to reduce dust, and to reduce gravel and soil runoff into the public stormwater drainage system.
>   3. Existing driveways may result in hazardous vehicle movements.
>   4. Additional plantings are needed in order to comply with the intent of the Allendale Township landscape regulations or to replace trees and shrubs previously removed, or screening is needed in the form of fencing or landscaping to provide a buffer between uses, particularly to screen materials stored outside.
>   5. Access to adjoining properties is inadequate and can be improved by way of parking lot connections or installation of service drives to improve traffic circulation and reduce the number of turning movements onto the public street system.
>   6. Safety for pedestrians can be improved and better emergency vehicle access can be provided.
>   7. Better lighting conditions are needed to reduce or eliminate nuisance lighting situations for drivers and nearby properties.
>   8. Screening of dumpsters is needed to improve the appearance of a site and reduce the likelihood of windblown trash.
>   9. Sidewalks are needed to improve pedestrian safety.

B. In determining how to apply the site plan review standards to address the above deficiencies found on a site, the Planning Commission shall be guided by the following criteria:

1. Whether compliance would ensue safer on site conditions, protect the natural environment, improve traffic circulation, achieve compatibility with adjacent land uses, promote the use of the land in a socially and economically desirable manner and generally accomplish the purposes of site plan review as described in this Section.
2. The practicality of requiring complete compliance with the applicable regulations of this Ordinance based on the existing design, layout, and operation of the existing use and size of the site or if only partial compliance would be more practical.
3. Whether or not requiring compliance would have a negative impact on the character, safety and welfare of the neighborhood or surrounding area.

The request for determination has been scheduled for review at your April 5, 2021 meeting. We expect the applicant to be in attendance. If you have any questions, please let us know.

GLR
Planner

Attachments

cc: Adam Elenbaas, Supervisor
Lynnelle Berkenpas, Holland Engineering

Allendale
CHARTER TOWNSHIP
"Where community is more than just a concept!"

Planning Commission
Site Plan Review Application

Submission Date:_____

Application for Site Plan Review in conjunction with which of the following:

- ☐ Site Plan Review Only
- ☐ PUD Rezoning
- ☑ Special Use Application
- ☐ Other:_____

Property Owner:	Allendale Christian School		
Mailing Address:	11050 64th Ave., Allendale, MI, 49401		
Phone Number:	616-895-5108	Cell Phone:	616-895-5108
Email Address:	bkoetje@allendalechristian.org	Fax:	bkoetje@allendalechristian.org
Owner's Signature:	bkoetje@allendalechristian.org		

Applicant Name: (if not owner)	Lakewood Construction / Marcel Vander Laan		
Mailing Address:	11050 64th Ave., Allendale, MI, 49401		
Phone Number:	616-895-5108	Cell Phone:	616-895-5108
Email Address:	bkoetje@allendalechristian.org	Fax:	bkoetje@allendalechristian.org
Applicant's Signature:	bkoetje@allendalechristian.org		

Who is the responsible party for future invoices? Check one: ☐ Property Owner | X | Applicant

Architect, Engineer, Attorney or other professionals associated with the project (attach additional sheets if necessary):

Contact:	Holland Engineering (Lynnelle Berkenpas)		
Mailing Address:	11050 64th Ave., Allendale, MI, 49401		
Phone Number:	616-392-5938	Cell Phone:	616-895-5108
Email Address:	lberkenpas@hollandengineering.com	Fax:	bkoetje@allendalechristian.org

6676 Lake Michigan Drive | P.O. Box 539 | Allendale MI 49401
Phone: 616-895-6295 Fax: 616-895-6670 or 616-895-6330
www.allendale-twp.org

Address of Property:	11050 64th Ave.				
Permanent Parcel Number:	70 - 09 - 26 - 100 - 087				
Legal Description of Property (or attach to the application):					
NW 1/4 OF NW 1/4 EXC THAT PART LYING N OF A LINE COM S 0D 38M 18S E 831.07 FT, N 89D 21M 42S E 33 FT & S 0D 38M 18S E 33 FT FROM NW SEC COR, TH N 89D 21M 42S E 400.54 FT ALG S LI OF HENERY ST, NE'LY 241.15 FT ALG A 333 FT RAD CURVE TO LEFT (CHD BEARS N 68D 36M 53S E 235.92 FT), N 47D 52M 05S E 135.64 FT, TH S 88D 36M 58S E 564.46 FT TO E LI OF NW 1/4 OF NW 1/4 AND END OF SD LINE. ALSO EXC W 50 FT FOR RD R/W, ALSO THAT PART OF NW COM S 0D 39M 58S E 1328.04 FT & S 88D 48M 06S E 871.76 FT FROM NW SEC COR, TH S 88D 48M 06S E 447 FT, S 0D 29M 43S E 329.96 FT, N 88D 48M 06S W 447 FT, TH N 0D 29M 43S W 329.96 FT TO BEG. SEC 26 T7N R14W					
Lot Area:	20.20 acres	Lot Depth:	995	Lot Width:	1260
Current Zoning of Parcel:	R-1	Current Use of Parcel:	School		
Proposed Use of Parcel:	Same use				
Name of Proposed Development (if applicable):	Allendale Christian School Expansion				
Name of Proposed Buildings to be constructed:	N/A				
Square feet of gross:		Square feet of usable floor area:	See site plan		
Number of Permanent Employees (if applicable):	47				

- Please include 6 sets of the proposed Site Plan and 1 electronic copy for staff review along with your application and escrow fee. (When ready for submission to the Planning Commission, smaller than typical plans are allowed when they can be easily interpreted and are to scale.)
- Please see Resolution 2011-2 for our full escrow fee policy. If you would like a copy of this policy it is available online or by request at the Township office.
- If your escrow is not kept up to date, according to our policy, the Township reserves the right to withhold approval of your project, issue a stop work order, or withhold final occupancy until the escrow balance is made current.

For Office Use Only

Date Received:			
Amount Paid:		Check No:	
Notes:			

ALLENDALE CHARTER TOWNSHIP
6676 Lake Michigan Drive | P.O. Box 539 | Allendale MI 49401
Phone: 616-895-6295 Fax: 616-895-6670 or 616-895-6330
www.allendale-twp.org

NARRATIVE STATEMENT

Current Site Layout

Allendale Christian School is located at the southeast corner of 64th Avenue and Henry Street in Allendale Township. The property is currently home to the school, which was originally constructed back in 2007 with 37,200 sft floorplan and expansions to the east and west wings of the school shown for future additions on the site plans. An expansion on the east wing in 2017 added approximately 5,700 square feet to the building.

The attached plan sheet C-101 shows both the existing and proposed building layout on the property around the proposed improvements.

Prior construction plans for the 2007 and 2017 are available and included for reference.

Request

The property owner is requesting the approval of an extension of their special use and site plan review for an expansion of the west wing of the building that was shown in early master planning in 2007. This expansion will add 12,787 sft to the building on the west wing and will include a minor expansion of one of the stormwater ponds. This expansion will allow an increase in the student population of up to 500 total students, with approximately 25% of those students being part time. This would be an increase of approximately 100 students from the current student population. The floorplan and exterior architectural drawings are provided for reference.

In the future, the school is also planning to expand the gymnasium, and additional parking needs will be assessed at that time.

Limited changes are needed to the site for this expansion, and the location of the expansion behind a wooded corner at Henry and 64th. We are requesting consideration from the Planning Commission under Section 24.11.B for the site plan review to be limited to the portion of the site being changed by the project. A photo is provided below of the area of the proposed expansion, looking toward the corner of 64th Avenue and Henry Street.

Additional information is provided below to outline the modest changes that are planned for the project.

Additional Information

Stormwater

The project plans have been submitted to the Ottawa County Water Resources for review and permit. It is anticipated that limited improvements and expansion of the stormwater ponds at 64th and Henry will be required to accommodate the building expansion.

Traffic Impact Study

No significant changes are planned to the traffic flow on or into the site.

On 64th Avenue, there is a left turn lane available for incoming traffic into the south lot and an existing widening for right turning movements. Henry Street is a dead-end street that serves as the entry to the north lot and there is a left turn lane available to Henry Street.

Because the students are too young to drive and bussing is available, the increased parking needs would be limited to a few additional teachers. There are currently only 47 employees, and many are part-time or not always present at the same time. Approximately 40 cars are regularly parked on the site during school hours. There are 110 available parking spaces. Parking calculations are on Sheet C-101, but no prior parking calculations could be located for this site. 500 total students are projected, and approximately 25% of the students are in part-time kindergarten. There are currently about 400 students enrolled with only 300 being full time.

Photos of parking at the site during normal school hours are included below.

It is anticipated that parking needs will be reassessed in a few years with a proposed expansion of the gymnasium, but the school's parking needs are limited at this time.

Irrigation

The property is currently served with public water and sewer, with irrigation provided with public water. The current expansion of the building will reduce yard space, and irrigation heads will be adjusted with the project as necessary.

Dumpster Enclosure

A photo of the existing dumpster enclosure is provided to the right for reference. This enclosure was constructed with the original building and is located on the southeast corner of the gymnasium near the emergency access drive. This is a block structure that is consistent with the rest of the school on a concrete slab with adequate space for the needs of the school.

Landscaping

South Landscape Buffer- At the time of construction in 2007, a 15' wide landscape buffer along the south property line was required and was shown on the site plan. Please refer to Sheet C4.01 of the 2007 plans. At this time, the landscape buffer has matured, and a photo is shown below for reference. We believe the existing vegetation meets the intent of this requirement, so no changes are proposed at this time.

Front Yard Landscaping-At the time of construction in 2007, front yard landscaping was placed along 64th and Henry. Current photos are provided below for reference. We believe the existing vegetation meets the intent of this requirement, so no changes are proposed at this time.

Off Street Parking Landscaping- No changes are currently proposed to the parking lot, but seven island trees were originally proposed for the parking lot that was constructed in 2007, which exceeds current requirements. There is also significant additional landscaping around the parking lots. We believe the existing vegetation meets the intent of this requirement, so no changes are proposed at this time.

We are requesting consideration from the Planning Commission under Section 24.11.A.4 and B.3 for limited landscaping improvements due to the location of the expansion behind a wooded area at the corner of Henry Street and 64th Avenue. Due to the limited scope of the changes and location of these changes, additional compliance is unlikely to improve the character, safety or welfare of the neighborhood.

Lighting

A lighting and photometric plan is provided for the addition of six (6) wallpack fixtures to the exterior of the building. Existing site lighting is planned to remain in place in this area.

REVIEW OF CRITERIA FOR PARTIAL COMPLIANCE

Section 24.11.B: In determining how to apply the site plan review standards to address the above deficiencies found on a site, the Planning Commission shall be guided by the following criteria:

1. Whether compliance would ensue safer on site conditions, protect the natural environment, improve traffic circulation, achieve compatibility with adjacent land uses, promote the use of the land in a socially and economically desirable manner and generally accomplish the purposes of site plan review as described in this Section.

   Response: As noted above, the anticipated impact to the site and community are limited with this project.

2. The practicality of requiring complete compliance with the applicable regulations of this Ordinance based on the existing design, layout, and operation of the existing use and size of the site or if only partial compliance would be more practical.

   Response: In this case, we believe that partial compliance with the Ordinance achieves the intent of the ordinance as the school has been consistently improving the building and site over the years. With the location of the work and limited impact to the neighboring properties, the School is requesting consideration for making improvements in the immediate vicinity of the work.

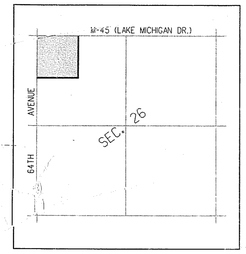
   3. Whether or not requiring compliance would have a negative impact on the character, safety and welfare of the neighborhood or surrounding area.

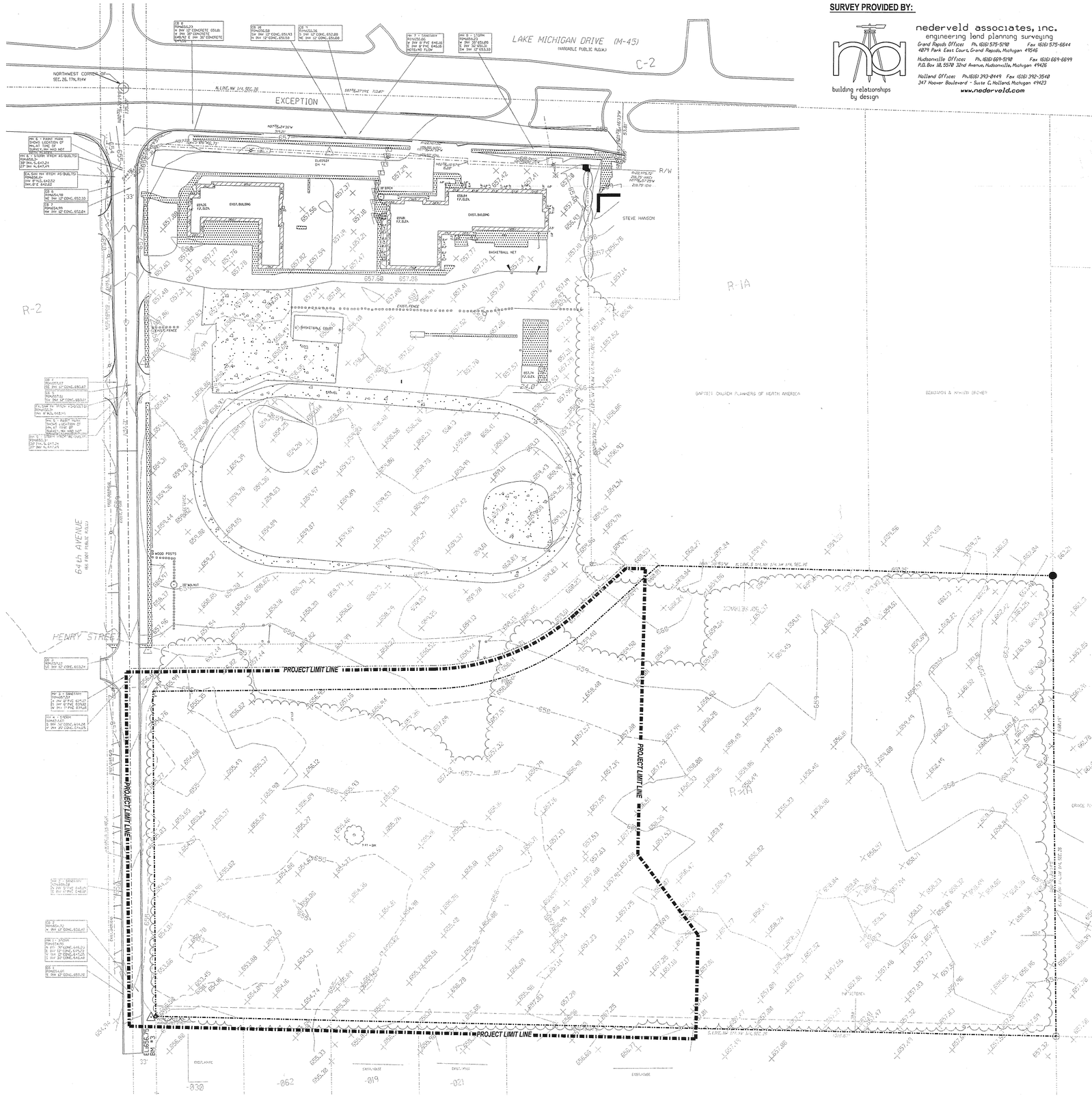
   Response: As previously outlined, the location of the site improvements and limited change in parking use limit the change that the surrounding community will see as a result of the expansion.

SURVEY PROVIDED BY:

nederveld associates, inc.
engineering land planning surveying
Grand Rapids Office: Ph. (616) 575-5190 Fax (616) 575-6644
4879 Park East Court, Grand Rapids, Michigan 49546
Hudsonville Office: Ph. (616) 669-5190 Fax (616) 669-6899
P.O. Box 18, 5570 32nd Avenue, Hudsonville, Michigan 49426
Holland Office: Ph. (616) 392-8449 Fax (616) 392-3540
347 Hoover Boulevard - Suite G, Holland, Michigan 49423
www.nederveld.com
building relationships by design

LOCATION MAP





LEGEND

- POST
- LIGHT POLE
- POLE ANCHOR
- MAILBOX
- TREE
- ELECTRIC METER
- SIGN
- CATCHBASIN
- WATERMAIN HYDRANT
- WATERMAIN VALVE
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- BENCHMARK LOCATION
- TELEPHONE MANHOLE
- POWER POLE
- GAS RISER
- TELEPHONE RISER
- TELEPHONE BOX
- WATER WELL
- 1' CONTOURS
- POWER LINES
- CHAIN LINK FENCE
- BITUMINOUS CONCRETE
- CONCRETE
- GRAVEL
- WATERMAIN
- STORM SEWER
- SANITARY SEWER

3 WORKING DAYS / BEFORE YOU DIG CALL MISS DIG @ 1-800-482-7171 (TOLL FREE)

NORTH

EXISTING SITE SURVEY

SCALE 1"=60'

GMB Architects + Engineers
66 East Eighth Street - Suite 200
Holland, Michigan 49423

DRAWN BY	ISSUANCES	REVISIONS
MTL	06.19.06 PERMIT SET	
MTL	08.21.06 PERMIT SET	
MTL	11.17.06 PERMIT SET	
MTL	12.08.06 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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EXISTING SITE SURVEY

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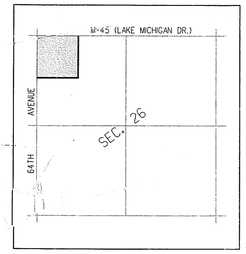
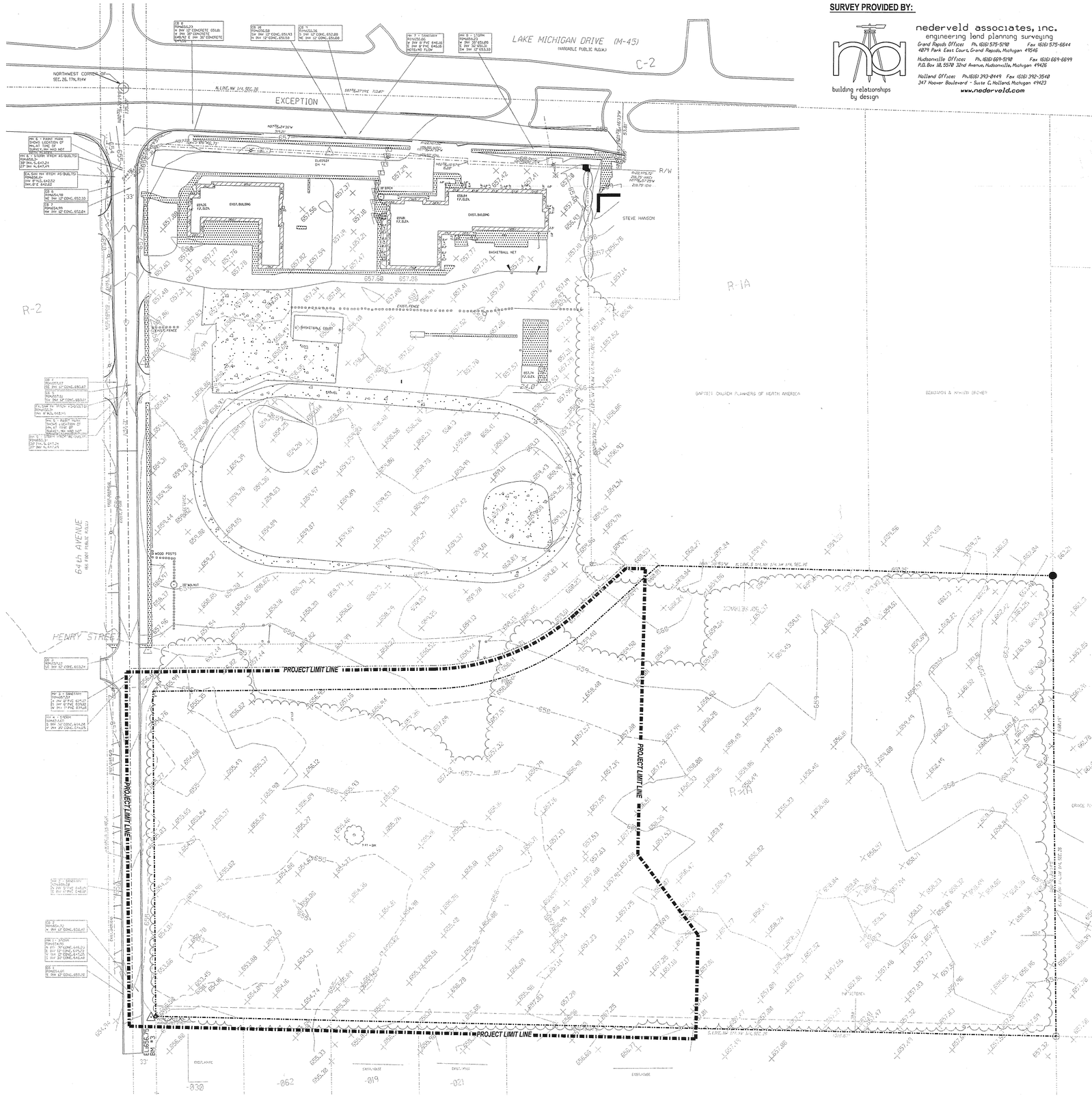
LOCATION MAP





LEGEND

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EXISTING SITE SURVEY

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NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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EXISTING SITE SURVEY

C0.01

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CL OF HENRY ST.

CL OF 64TH AVE

BUS DROP OFF (29 SPACES)

VISITOR PARKING (71 SPACES)

EMERGENCY DRIVE (11 SPACES)

NEW BUILDING
FFE 659.0

PROJECT LIMIT LINE

N88° 36'58"W N. LINE, S 1/4, NW 1/4, NW 1/4, SEC. 26

S. LINE, NW 1/4, NW 1/4, SEC. 26

EXISTING TREES TO REMAIN PROTECT FROM DAMAGE DURING CONSTRUCTION

ALL LANDSCAPING,SIDEWALK, ROADWORK,AND UTILITIES ALONG HENRY ST. TO BE PROVIDED BY ALLENDALE TOWNSHIP

ALL CONCRETE IN THIS AREA TO BE PROVIDED BY THE OWNER

ALL PLEXUS BENCHES AND LITTER RECEPTACLES MANUFACTURED BY LANDSCAPE FORMS TO BE PROVIDED BY THE OWNER

ALL BIKE LOOPS MANUFACTURED BY WAUGH VALLEY TO BE PROVIDED BY THE OWNER

REFER TO DETAIL 1/C1.02 FOR ENTRANCE DETAIL

TYPICAL FOR ALL PARKING LOT ISLANDS - TRANSITION CURB PAN AROUND ISLAND TO MATCH LOT GRADES

HEAVY DUTY BIT PAVEMENT AS SPECIFIED

BIT PAVEMENT AS SPECIFIED FOR AUTO. TRAFFIC

CONCRETE SCORING TO BE 4'-0" O/C AND LAYOUT SHALL BE AS DRAWING IN PLANS, TYPICAL AT EACH CIRCULAR ENTRY

EXPOSED AGGREGATE BAND, 16" WIDE, TYPICAL AT EACH CIRCULAR ENTRY

EXPOSED AGGREGATE BANDING

(2) 4" SLEEVES TYPICAL @ EACH LOCATION SHOWN

6" CONCRETE SLAB-REINFORCEMENT 6x6 WWM W1.4 x W1.4 @ MAINT. PAD.

8" CONCRETE SLAB-REINFORCEMENT SHALL BE WWM W1.4 x W1.4 @ DUMPSTER PAD.

TAPER BOC TO FULL HEIGHT OVER 5FT

DUB DOWN TYPICAL AT LOCATION SHOWN

NEW 8'-0" SIDEWALK AS SPECIFIED

NEW 10'-0" SIDEWALK AS SPECIFIED

8'-0" SIDEWALK AS SPECIFIED

EXPOSED AGGREGATE BAND, 16" WIDE, TYPICAL AT EACH CIRCULAR ENTRY

STRIPE LOT AS SHOWN

STRIPE 8" SOLID LINE AS SHOWN

EXTEND CURB MIN. 5FT PAST & SLOPE TO OUTER

PROVIDE DRAINAGE DITCH MIN. 18" DEEP TO PROTECT ADJACENT PROPERTY AND DIRECT FLOWS TO STORMWATER TREATMENT PONDS

WOOD GUARD POSTS (TYP.)

50' SETBACK

WOOD POSTS

18" WALNUT

MATCH ROAD ELEVATION

3 WORKING DAYS / BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE)

GENERAL NOTES:

1. ALL WORK SHALL COMPLY W. APPICABLE REQUIREMENTS OR THE LOCAL CODE, ORDINANCES AND ACCIDENT/FIRE PREVENTION REGULATIONS.
2. REMOVE ALL UNUSABLE DEMOLITION MATERIALS AND DEBRIS FOR THE SITE AND DISPOSE OF PROPERLY OFFSITE.
3. DO NOT BURY ANY DEBRIS, ROOTS, TOPSOIL OR OTHER MATERIALS.
4. INSTALL ALL UTILITIES IN ACCORDANCE WITH ALLENDALE TOWNSHIP SPECIFICATIONS AND REQUIREMENTS.
5. PROTECT ADEQUATELY THE SITE, ADJOINING PROPERTY, AND UTILITY SERVICES.
6. ALL TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. DO NOT DRIVE HEAVY EQUIPMENT WITHIN 12' OF TREE TRUNKS. BRANCHES WHICH ARE DAMAGED DURING DEMOLITION OF STRUCTURES AND OR SURFACES SHALL BE CUT OUT AS DIRECTED BY ARCHITECT. ANY ROOTS OF TREES BEING SAVED WHICH ARE EXPOSED DUE TO DEMOLITION/REMOVAL SHALL BE COVERED WITHIN 6 HOURS W. SOIL.
7. CONTRACTORS TO REVIEW ALL SHEETS FOR RELATED INFORMATION.

NORTH

SITE PLAN
SCALE 1"-30'

GMB Architects - Engineers
85 East Eighth Street, Suite 200
Holland, MI 49423

ISSUANCES	REVISIONS
GD ISSUE ALLENDALE TOWNSHIP REVIEW	
BID ISSUE OWNER REVIEW	
W/PERMIT FOR PERMIT REVIEW	
ISSUED FOR CONSTRUCTION PHASE	
12/08/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: XXX

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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SITE PLAN

C1.01

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GMB Architects + Engineers
65 East Eighth Street, Suite 200
Holland, MI 49423

WOOD POSTS

18" WALNUT

+ RIM 658.5

+ RIM 657.6

+ RIM 657.6

N88° 36'58"W N. LINE, S 1/4, NW 1/4, NW 1/4, SEC. 26

95.85'

WOOD GUARD POSTS (TYP.)

50' SETBACK

R 40'-0"

54'-2 1/2"

R 30'-0"

N=662.30
E=554.04

162'-11 3/4"

R 30'-0"

R 60'-0"

R 88'-6"

N=549.78
E=535.82

N=529.75
E=512.99

N=435.41
E=522.00

810.32'

33'-0" ROW

30'-2"

30'-6"

20'-8"

R=200.00'

N=569.66
E=477.69

N=580.97
E=467.10

N=312.00
E=464.42

N=327.07
E=438.11

N=310.14
E=445.37

N=232.25
E=452.26

N=232.66
E=447.55

164'-9 1/4"

N=509.76
E=425.78

N=583.76
E=410.77

N=568.17
E=401.78

N=326.75
E=365.92

N=342.81
E=357.73

N=509.91
E=368.19

N=494.08
E=359.62

N=596.60
E=352.98

N=614.15
E=348.14

N=424.16
E=333.28

N=384.32
E=329.66

N=464.16
E=332.93

N=308.52
E=298.37

N=318.53
E=319.69

N 00° 38'18" W

33'-0" ROW

335'-4 7/8"

N. LINE, NW 1/4, SEC. 26

N=144.74
E=308.14

N=73.20
E=269.07

N=74.61
E=267.64

N=78.24
E=251.34

N=33.48
E=227.93

N=102.03
E=225.67

N=122.90
E=267.41

N=183.76
E=256.57

N=193.79
E=250.81

N=175.96
E=252.19

N=179.79
E=247.47

N=195.56
E=246.25

N=271.06
E=269.46

N=293.19
E=261.80

N=232.02
E=230.37

N=249.29
E=220.50

N=241.47
E=216.12

N=257.79
E=213.98

N=261.07
E=210.31

N=332.07
E=235.45

N=346.03
E=197.65

N=502.23
E=197.65

NEW BUILDING
FFE 659.0

R-1A

124'-9 1/4"

N=27.25
E=200.60

N=25.75
E=188.67

N=50.63
E=181.49

N=81.36
E=181.82

N=89.81
E=186.82

N=79.64
E=179.66

N=75.03
E=170.81

N=46.50
E=154.19

N=11.24
E=158.41

N=11.27
E=158.41

N=80.57
E=139.09

N=112.83
E=158.97

N=116.34
E=155.41

N=132.35
E=153.11

N=124.58
E=148.60

N=131.66
E=141.77

N=135.54
E=137.61

N=214.17
E=155.45

N=278.12
E=180.68

N=285.83
E=172.81

N=281.29
E=165.08

N=336.62
E=158.83

N=342.67
E=148.34

N=342.82
E=158.99

N=356.61
E=159.69

N=346.67
E=146.12

N=336.23
E=115.17

N=340.03
E=114.04

N=332.58
E=105.51

N=336.62
E=104.84

N=327.09
E=107.83

N=342.17
E=92.82

N=87.56
E=316.82

N=328.07
E=71.92

N=410.23
E=126.27

N=438.32
E=50.66

N=428.44
E=40.85

N=520.32
E=48.91

50' SETBACK

568.0'

N=67.06
E=118.72

N=26.09
E=113.58

N=36.33
E=94.04

N=58.34
E=59.60

N=10.98
E=44.78

N=8.77
E=28.07

N=131.91
E=78.71

N=160.34
E=112.68

N=160.31
E=105.80

N=172.17
E=102.19

N=292.64
E=36.59

POINT OF ORIGIN • N0.00, E0.00
FOUND CAPPED IRON
MARKED "ALS 27459"

N=16.79
E=16.97

N=16.24
E=57.72

418'-8"

104'-8"

795'-8" TO PROPERTY LINE

S68° 46'37"E

S. LINE, NW 1/4, NW 1/4, SEC. 26

1318.67'

33

R/W

-030
JOEL KEEGSTRA

-062
STANLEY & MILDRED ZEINSTRA

-019
DANIEL & SANDRA REATINI

-021
RICK WHITSELL

DONALD & MARIANNE FREDRICKS TRUST

NORTH

DIMENSION PLAN
SCALE 1"=30'

DRAWN BY	ISSUANCES	REVISIONS
MCL	08/31/06 ALLENDALE TOWNSHIP REVIEW	
	12/31/06 OWNER REVIEW SET	
	12/19/06 FOR PERMIT REVIEW	
	12/20/06 FOR PRE-CONFERENCE PACKAGE	
	12/08/06 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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DIMENSION PLAN

C2.01

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64th AVENUE
(66 FOOT PUBLIC R.O.W.)

HENRY STREET

N88° 36'58"W N. LINE, S 1/4, NW 1/4, NW 1/4, SEC. 26

95.65'

50' SETBACK

WOOD GUARD POSTS (TYP.)

GREASE TRAP

MECHANICAL CENTER

TRANSFORMERS

TRASH COMPACTOR

RECEIVING

PEDESTRIAN CROSSING (TYP.)

DETENTION POND (DRY)

DETENTION POND (DRY)

PROP. 10' UTIL. ESMT.

5'-CONC. SIDEWALK (BOTH SIDES OF ROAD)

CB 3
RIM=657.12
SE INV 12" CONC. 653.24

MH 3 - SANITARY
RIM=657.57
N INV 8" PVC 639.17
S INV 8" PVC 639.12
W INV 8" PVC 639.18

MH 4 - STORM
RIM=657.60
S INV 36" CONC. 644.20
W INV 36" CONC. 644.05

MH 2 - SANITARY
RIM=655.68
N INV 8" PVC 640.19
S INV 8" PVC 640.18

CB 2
RIM=654.72
W INV 12" CONC. 650.47

MH 1 - STORM
RIM=654.95
N INV 36" CONC. 646.23
E INV 12" CONC. 649.23
W INV 12" CONC. 647.85
S INV 36" CONC. 646.40

CB 1
RIM=654.69
E INV 12" CONC. 650.28

CONNECT TO 12" WATERMAN WITH TAPPING SLEEVE COORDINATE WORK WITH ALLENDALE CHARTER TOWNSHIP. FIELD VERIFY I.E. AND LOCATION.

NOTE TO CONTRACTOR: DO NOT POSITION STORM AT LOWEST GRADE ELEV. MANHOLE 6 TO SERVE AS OVERFLOW OUTLET

PLACE: 6" VALVE & BOX

5CY OF 6"-9" RIVER STONE

12" CONC FE SECTION INV. ELEV=653.7

120LF OF 12" STORM @ 0.5%

(2) #10 AWG AND (1) #10 GND IN 3/4" CONDUIT (TYP. THIS CIRCUIT)

ST. MH. 101 (12" DIA.) EJW-1040 TYPE 02 RIM=657.5 12" W INV=654.3

4CY OF 3"-6" RIVER STONE

NOTE TO CONTRACTOR: DO NOT POSITION STORM AT LOWEST GRADE ELEV. MANHOLE 6 TO SERVE AS OVERFLOW OUTLET

7CY OF 6"-9" RIVER STONE

12" CONC FE SECTION INV. ELEV=653.5

110 LF OF 12" STORM @ 0.5%

ST. MH. 101 (12" DIA.) EJW-1040 TYPE 02 RIM=658.0 12" W INV=654.1

4CY OF 3"-6" RIVER STONE

COORDINATE DEPTH OF WATERMAN W/ PROPOSED GRADES OF POND.

(1-38,40

TO BMS

30' UTILITY EASEMENT

24" X 36" PG STYLE QUAZITE BOX WITH EXTENSION (48" DEEP) COVER LOGO: COMMUNICATIONS

PLACE: (1) 6" VALVE & BOX (1) FIRE HYDRANT

24" X 36" PG STYLE QUAZITE BOX WITH EXTENSION (48" DEEP) COVER LOGO: COMMUNICATIONS

TO SHEET E3.1A

(2) 4" PVC CONDUITS. INSTALL (3) 1 1/2" INNERDUCT SLEEVES WITH PULL CORDS IN ONE CONDUIT.

4CY OF 6"-9" RIP RAP

3 TYP.

3 TYP.

(2) #6 AWG AND (1) #6 GND IN 3/4" CONDUIT (TYP. THIS CIRCUIT UNLESS NOTED)

TO SHEET E3.1A

8" SANITARY, REFER TO SHEET P21A FOR CONTINUATION. INV. EL. 654.13'

6" F.P. TO 1'-0" A.F.F. REFER TO PLUMBING FOR CONTINUATION

4" POTABLE TO 1'-0" A.F.F. REFER TO PLUMBING FOR CONTINUATION

12" CONC FE SECTION INV. ELEV=652.2

7CY OF 6"-9" RIVER STONE

(2) #4 AWG AND (1) #4 GND IN 1" CONDUIT TO L1-40,42

(2) #4 AWG AND (1) #4 GND IN 1" CONDUIT

TO BMS

L1-38,40

24" X 36" PG STYLE QUAZITE BOX WITH EXTENSION (48" DEEP) COVER LOGO: COMMUNICATIONS

PLACE: (1) 8"x8"x6" TEE (2) 6" VALVE & BOX (1) FIRE HYDRANT

(1) 1" CONDUIT FOR SIGN DATA CONNECTION

(2) #10 GRD IN (1) 1" CONDUIT TO L1-61

24" X 36" PG STYLE QUAZITE BOX WITH EXTENSION (48" DEEP) COVER LOGO: ELECTRIC

24" X 36" PG STYLE QUAZITE BOX WITH EXTENSION (48" DEEP) COVER LOGO: COMMUNICATIONS

MH-201 COVER OVER PIPE-8 SLOPE CHANGE

SIGN BY OWNER

4" POTABLE

6" SDR-35 @ 1.0% FROM RF DRNS

APPROX. 6" STORM INVERT: 655.0+/- REFER TO PLUMBING

(2) #10 AWG AND (1) #10 GND IN 3/4" CONDUIT (TYP. THIS CIRCUIT)

PLACE: 4" VALVE & BOX

PLACE: (1) 8"x8"x6" TEE (2) 6" VALVE & BOX (1) 6"x4" REDUCER (1) 4" VALVE & BOX (1) FIRE HYDRANT

CONNECT TO 12" WATERMAN WITH TAPPING SLEEVE COORDINATE WORK WITH ALLENDALE-CHARTER TOWNSHIP. FIELD VERIFY I.E. AND LOCATION

24" X 36" PG STYLE QUAZITE BOX WITH EXTENSION (48" DEEP) COVER LOGO: COMMUNICATIONS

10 CY OR 6"-9" RIVER STONE

7 CY OF 6"-9" RIVER STONE

8" COMBINATION FIRE PROTECTION / POTABLE WATER

ROUTE IN 50'-0" WIDE EASEMENT WITH MUNICIPAL STORM AND SANITARY SEWER MAINS. MAINTAIN 10'-0" MIN. SEPARATION FROM SEWER SYSTEMS

LB-101 (6'-0" DIA.) RIM: 654.6 12" E INV=651.5 6" NW INV 652.2 BOT. 650.2

80LF OF 12" PERF. STORM @ 0.5%

LB-102 (6'-0" DIA.) RIM: 654.6 12" W INV=651.1 BOT. 650.2

FOUND CAPPED IRON MARKED PLS 27457

EXIST. HOUSE -030 JOEL KEEGSTRA

EXIST. HOUSE -062 STANLEY & MILDRED ZEINSTRA

EXIST. HOUSE -019 DANIEL & SANDRA REATINI

EXIST. HOUSE -021 RICK WHITSELL

R-1A

S88° 46'37"E

40'-0" UTILITY EASEMENT

EXIST. 10' CONCRETE

EXIST. 24' PAVE

EXIST. OVERHEAD

EXIST. 8" SAN

EXIST. 30" STM

EXIST. 12" W

N. LINE, NW 1/4, SEC. 26

GENERAL UTILITY NOTES

1. NEW WATERMAN AND SANITARY SEWER SYSTEM SHALL BE INSTALLED TO MEET THE CONSTRUCTION REQUIREMENTS OF THE ALLENDALE TOWNSHIP STANDARD CONSTRUCTION SPECIFICATION.
2. CONTRACTOR SHALL FIELD VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES.
3. REGRADE AND RESEED ALL AREAS DISTURBED DURING CONSTRUCTION.
4. ALL ORGANIC MATTER, EXCESS FILL, TOPSOIL AND DEBRIS SHALL BE REMOVED FROM SITE AND DISPOSED OF PROPERLY.
5. WATERMAN SERVING HYDRANTS, HYDRANTS, AND VALVES SHALL BE INSTALLED THE EASEMENT WHERE APPLICABLE).
6. MAINTAIN A MINIMUM OF 5'-9" OF COVERAGE FROM GRADE TO CENTERLINE OF PIPE. MAINTAIN A MINIMUM OF 10'-0" CLEARANCE OF SANITARY SEWER MAIN.
7. SANITARY SEWER AND WATERMAIN CONSTRUCTION IS TO BE INSPECTED BY ALLENDALE TOWNSHIP. PRESSURE TESTING OF THE SEWER AND WATERMAIN AND CHLORINATION OF THE WATERMAN TO BE PERFORMED BY THE CONTRACTOR, WITNESSED AND APPROVED BY ALLENDALE TOWNSHIP. WATER SAMPLES TO BE TAKEN BY ALLENDALE TOWNSHIP FOR TESTING.
8. EXISTING SEWER & WATERMAIN LINES SHALL BE PROTECTED FROM DEBRIS AND CONTAMINATION.
9. HYDRANTS AND FITTINGS SHALL BE TIED AND BLOCKED. HYDRANTS AND VALVES SHALL OPEN CLOCKWISE (RIGHT).
10. THE CONTRACTOR SHALL NOTIFY THE CITY WHEN CONSTRUCTION BEGINS 48 HOURS (TWO WORKING DAYS) PRIOR TO CONSTRUCTION.
11. SANITARY SEWER SHALL BE PVC SDR-35 AS APPROVED BY ALLENDALE TOWNSHIP.
12. ALL MANHOLE CASTINGS ARE TO HAVE BOLT-DOWN COVERS PER ALLENDALE TOWNSHIP.
13. IN FIELD AREAS THE TOP ELEVATION OF THE MANHOLE CASTINGS SHOULD BE 3" ABOVE THE FINISHED GROUND ELEVATION OR PER ALLENDALE TOWNSHIP REQS.
14. CONTRACTOR SHALL REMOVE/PATCH EXISTING ASPHALT AND CONCRETE IN AREAS OF WATERMAN OR SANITARY SEWER INSTALLATION. WORK SHALL MATCH EXISTING. IN AREAS OF GRASS/LANDSCAPE CONTRACTOR SHALL HYDROSEED OR MATCH EXISTING GRADE.

GENERAL NOTES:

1. ALL WORK SHALL COMPLY W. APPLICABLE REQUIREMENTS OR THE LOCAL CODE, ORDINANCES AND ACCIDENT/FIRE PREVENTION REGULATIONS.
2. REMOVE ALL DEMOLITION MATERIALS AND DEBRIS FOR THE SITE AND DISPOSE OF PROPERLY OFFSITE.
3. DO NOT BURY ANY DEBRIS, ROOTS, TOPSOIL OR OTHER MATERIALS.
4. INSTALL ALL UTILITIES IN ACCORDANCE WITH ALLENDALE TOWNSHIP SPECIFICATIONS AND REQUIREMENTS.
5. PROTECT ADEQUATELY THE SITE, ADJOINING PROPERTY AND UTILITY SERVICES.
6. ALL TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. DO NOT DRIVE HEAVY EQUIPMENT WITHIN 12'-0" TREE TRUNKS. BRANCHES WHICH ARE DAMAGED DURING DEMOLITION OF STRUCTURES AND OR SURFACES SHALL BE CUT OUT AS DIRECTED BY ARCHITECT. ANY ROOTS OF TREES BEING SAVED WHICH ARE EXPOSED DUE TO DEMOLITION/REMOVAL SHALL BE COVERED WITHIN 6 HOURS W. SOIL.
7. CONTRACTORS TO REVIEW ALL SHEETS FOR RELATED INFORMATION.

3 WORKING DAYS / BEFORE YOU DIG CALL MISS DIG. 1-800-482-7171 (TOLL FREE)

NORTH

UTILITY PLAN

SCALE: 1"=30'-0"

GMB Architects + Engineers
65 East Eighth Street, Suite 200
Holland, MI 49423

ISSUANCES	REVISIONS
08/31/06 ALLENDALE TOWNSHIP REVIEW	
10/20/06 OWNER REVIEW SET	
11/29/06 FOR OWNER REVIEW	
12/01/06 FOR FIRE MARSHAL REVIEW	
12/08/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: MCL

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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UTILITY PLAN

C3.01

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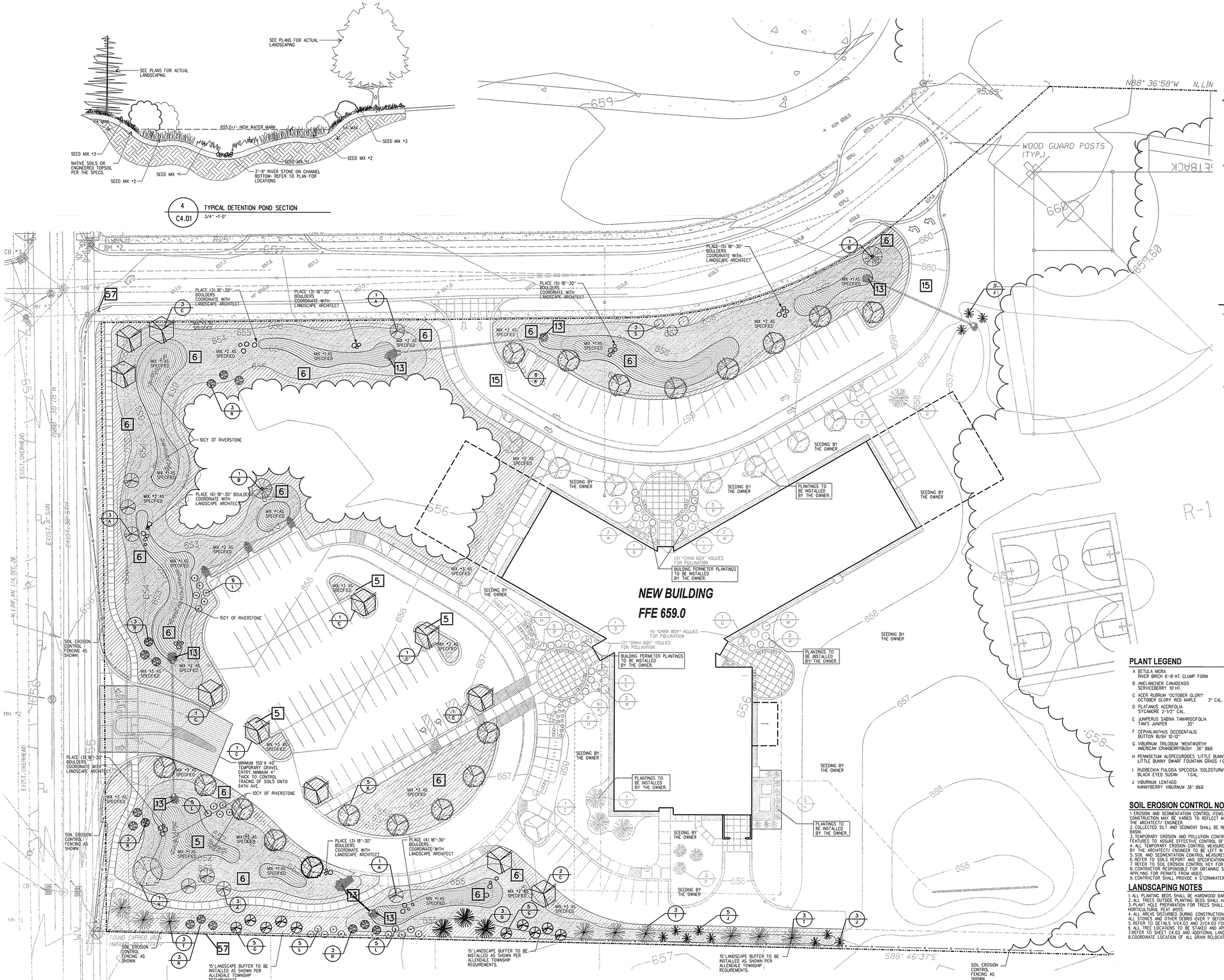
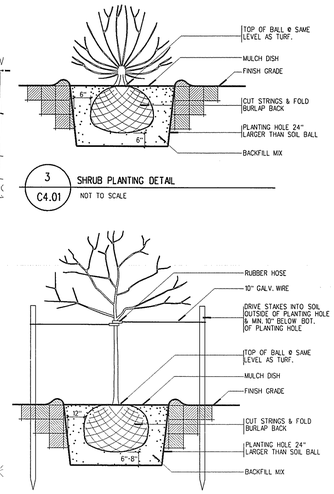
4 C4.01 TYPICAL DETENTION POND SECTION
3/4" =1'-0"





3 C4.01 SHRUB PLANTING DETAIL
NOT TO SCALE

2 C4.01 TREE PLANTING DETAIL
NOT TO SCALE

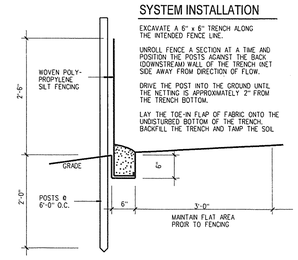
SYSTEM INSTALLATION

EXCAVATE A 6" x 6" TRENCH ALONG THE INTENDED FENCE LINE.

UNROLL FENCE A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM DIRECTION OF FLOW.

DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS APPROXIMATELY 2" FROM THE TRENCH BOTTOM.

LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACKFILL THE TRENCH AND TAMP THE SOIL



1 C4.01 SEDIMENT CONTROL DETAIL
3/4" =1'-0"

PLANT LEGEND

A BETULA NIGRA
RIVER BIRCH 6'-8' HT., CLUMP FORM

B AMELANCHER CANADENSIS
SERVICEBERRY 10' HT.

C ACER RUBRUM 'OCTOBER GLORY'
OCTOBER GLORY RED MAPLE 3" CAL.

D PLATANUS ACERIFOLIA
SYCAMORE 2-1/2" CAL.

E JUNIPERUS SABINA TAMARISCIFOLIA
TAM'S JUNIPER 30"

F CEPHALANTHUS OCCIDENTALIS
BUTTON BUSH 10'-12"

G VIBURNUM TRILOBUM 'WENTWORTH'
AMERICAN CRANBERRYBUSH 36" B&B

H PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'
LITTLE BUNNY DWARF FOUNTAIN GRASS 1 GAL.

I RUDBECKIA FULGIDA SPECIOSA 'GOLDSTURM'
BLACK EYED SUSAN 1 GAL.

J VIBURNUM LENTAGO
NANNYBERRY VIBURNUM 36" B&B

K QUERCUS RUBRA
RED OAK 3" CAL.

L PHYSOCARPUS OPULIFOLIUS
NINEBARK 10-12'

M ACER RUBRUM
RED MAPLE 10' CLUMP FORM

N JUNIPERUS SABINA 'BROADMOOR'
BROADMOOR JUNIPER 20"-24"

O CALAMAGROSTIS X ACUTIFOLIA 'KARL FOERSTER'
KARL FOERSTER'S FEATHER REED GRASS 2 GAL.

P JUNIPERUS CHINENSIS 'ARMSTRONGII'
ARMSTRONG JUNIPER 24"-30"

Q PICEA PUNGENS
COLORADO BLUE SPRUCE 6' HT.

R CORNUS STOLONIFERA
RED OSIER DOGWOOD 12"-15"

S VIBURNUM RYTIDOPHYLLUM
LEATHERLEAF VIBURNUM 6'-8' HT., CLUMP FORM

T PICEA ABIES
NORWAY SPRUCE 6' HT

U THUJA OCCIDENTALIS 'TECHNY'
MISSION ARBORVITAE 36" B&B

V SALIX ALBA 'TRISTIS'
GOLDEN WEEPING WILLOW 4" CAL

W ILEX X 'CHINA GIRL'
CHINA GIRL HOLLY 24"-30"

X NOT USED
NOT USED

Y NOT USED
NOT USED

Z NOT USED
NOT USED

S / J — NUMBER REQUIRED / PLANT TYPE

SOIL EROSION CONTROL NOTES

1. EROSION AND SEDIMENTATION CONTROL ITEMS ARE SHOWN IN LINE DRAWINGS TO SUGGEST GENERAL CONCEPTS. ACTUAL CONSTRUCTION MAY BE VARIED TO REFLECT MATERIALS USED AND SPECIFIC SITE PROBLEMS SUBJECT TO THE APPROVAL OF THE ARCHITECT/ ENGINEER.
2. COLLECTED SILT AND SEDIMENT SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE EFFECTIVENESS OF THE SEDIMENTATION BASIN.
3. TEMPORARY EROSION AND POLLUTION CONTROL PROVISIONS SHALL BE COORDINATED WITH THE PERMANENT CONTROL FEATURES TO ASSURE EFFECTIVE CONTROL OF WATER POLLUTION DURING CONSTRUCTION.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AT THE COMPLETION OF CONSTRUCTION UNLESS ORDERED BY THE ARCHITECT/ ENGINEER TO BE LEFT IN PLACE.
5. SOIL AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE BEFORE ON SITE CONSTRUCTION BEGINS.
6. REFER TO SOILS REPORT AND SPECIFICATION FOR ADDITIONAL INFORMATION.
7. REFER TO SOIL EROSION CONTROL KEY FOR ADDITIONAL INFORMATION.
8. CONTRACTOR RESPONSIBLE FOR OBTAINING SOIL EROSION CONTROL PERMITS FROM OTTAWA COUNTY S.E.C. AGENCY AND APPLYING FOR PERMITS FROM MDEQ.
9. CONTRACTOR SHALL PROVIDE A STORMWATER OPERATOR FOR THE SITE - PER NPDES PERMIT REQUIREMENTS.

LANDSCAPING NOTES

1. ALL PLANTING BEDS SHALL BE HARDWOOD BARK MULCH, 4" DEEP.
2. ALL TREES OUTSIDE PLANTING BEDS SHALL HAVE 3'-0" DIA CIRCLE OF SHREDDED HARDWOOD BARK MULCH, 4" DEEP.
3. PLANT HOLE PREPARATION FOR TREES SHALL CONSIST OF ONE HALF TOPSOIL AND ONE HALF APPROVED COMMERCIAL HORTICULTURAL PEAT MOSS.
4. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED AND SEEDED AS PER SPECIFICATIONS. REMOVE ALL STONES AND OTHER DEBRIS OVER 1" BEFORE SEEDING.
5. REFER TO DETAILS 3/C4.03 AND 2/C4.03 FOR PLANTING INFORMATION.
6. ALL TREE LOCATIONS TO BE STAKED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
7.REFER TO SHEET C4.03 AND ADDITIONAL LANDSCAPE NOTES.
8.COORDINATE LOCATION OF ALL DRAIN RELOCATION PLANTINGS AND BOULDERS WITH LANDSCAPE ARCHITECT.

3 WORKING DAYS / BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE)

GENERAL NOTES:

1. ALL WORK SHALL COMPLY W. APPLICABLE REQUIREMENTS OR THE LOCAL CODE, ORDINANCES AND ACCIDENT/FIRE PREVENTION REGULATIONS.
2. REMOVE ALL UNUSABLE DEMOLITION MATERIALS AND DEBRIS FOR THE SITE AND DISPOSE OF PROPERLY OFFSITE.
3. DO NOT BURY ANY DEBRIS, ROOTS, TOPSOIL OR OTHER MATERIALS.
4. INSTALL ALL UTILITIES IN ACCORDANCE WITH GEORGETOWN TOWNSHIP SPECIFICATIONS AND REQUIREMENTS.
5. PROTECT ADEQUATELY THE SITE, ADJOINING PROPERTY AND UTILITY SERVICES.
6. ALL TREES TO REMAIN SHALL BE CAREFULLY PROTECTED. DO NOT DRIVE HEAVY EQUIPMENT WITHIN 12' OF TREE TRUNKS. BRANCHES WHICH ARE DAMAGED DURING DEMOLITION OF STRUCTURES AND OR SURFACES SHALL BE CUT OUT AS DIRECTED BY ARCHITECT. ANY ROOTS OF TREES BEING SAVED WHICH ARE EXPOSED DUE TO DEMOLITION/REMOVAL SHALL BE COVERED WITHIN 6 HOURS W. SOIL.
7. CONTRACTORS TO REVIEW ALL SHEETS FOR RELATED INFORMATION.

SOIL EROSION & SEDIMENTATION CONTROL CONSTRUCTION SCHEDULE

ID	TASK NAME	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP
1	MASS GRADING									
2	PLACE SILT/CLEAN SACKS IN NEW C.B.'S									
3	PLACE/REPAIR SILT FENCING(#57)									
4	MAINTAIN SE/SC PRACTICES									
5	INSTALL UTILITIES/STORMWATER SYSTEM									
6	GRADING/DISTURBING SOIL									
7	SEEDING / MAINTAIN PLANTINGS (#5)									
8	PAVING/CONCRETE PLACEMENT (#15)									
10	CLOSE PROJECT/PUNCHLIST									

NOTES:
1. SE/SC PRACTICES TO BE MAINTAINED DURING WINTER MONTHS AND AT EVERY START UP SE/SC ELEMENTS SHALL BE INSPECTED AND REPAIRED AS NEEDED
2. NO EARTH CHANGES OUTSIDE PROJECT LIMITS MAY OCCUR WITHOUT AN APPROVED PLAN
3. ANY SOIL OR DEBRIS ON A PUBLIC STREET MUST BE CLEANED DAILY.
4. PROTECT ALL CATCHBASINS - SILT SACKS MUST BE CLEANED AS NEEDED TO REMAIN EFFECTIVE
5. CONTRACTORS SHALL REFER TO CONSTRUCTION SCHEDULE PROVIDED BY CM FOR BIDDING/CREW SCHEDULING PURPOSES

SOIL EROSION CONTROL LEGEND

2	SELECTIVE GRADING & SHAPING	15	PAVING
5	SEEDING	16	CURB & GUTTER
6	SEEDING WITH MATTING	38	CATCH BASIN, DRAIN INLET
13	RIPRAP, RUBBLE, GABIONS	57	GEOTEXTILE SILT FENCE

NORTH

LANDSCAPE & SOIL EROSION CONTROL PLAN
SCALE 1"=30'

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66 East Eighth Street, Suite 200
Holland, MI 49423

ISSUANCES / REVISIONS
08/11/06 PLANNING REVIEW
10/20/06 SITE PLAN REVIEW
11/13/06 FOR OWNER REVIEW
12/08/06 FOR THE DEVELOPMENT REVIEW
12/08/06 FOR BIDS AND CONSTRUCTION

DRAWN BY: MCL

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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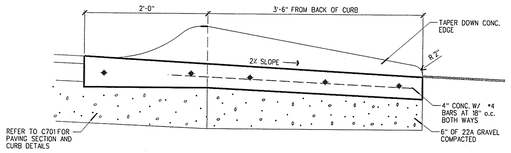
PROJECT NO. 5-0630

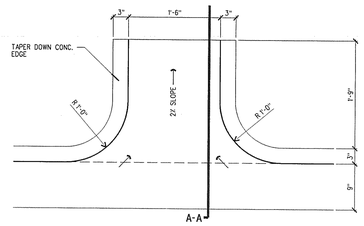
LANDSCAPE AND SOIL EROSION CONTROL PLAN

C4.01

g:\5-0630\5-0630c401.dgn scottg

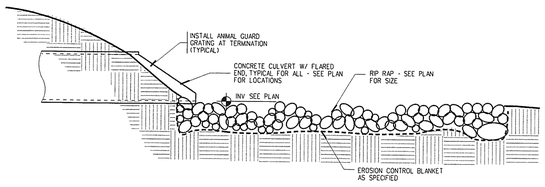


SECTION A-A



PLAN VIEW

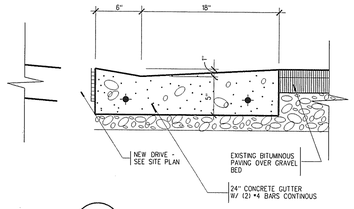
24 C7.01 CONCRETE DRAINAGE SPILLWAY



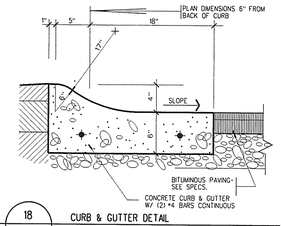
23 C7.01 CULVERT DETAIL 1/4" = 1'-0"

5 C7.01 RAMP DETAIL - TYP. FOR ALL H.C. RAMPS 1/2" = 1'-0"

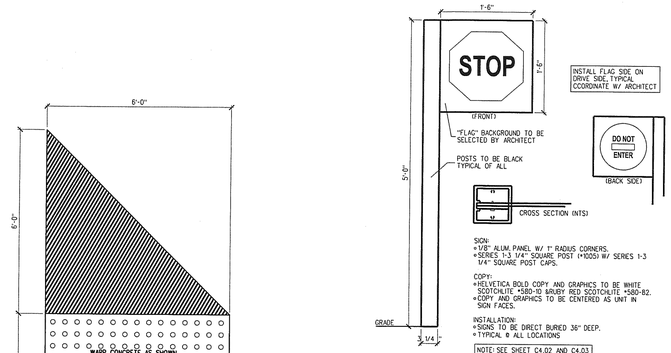
20 C7.01 CONCRETE MAINTENANCE STRIP NTS



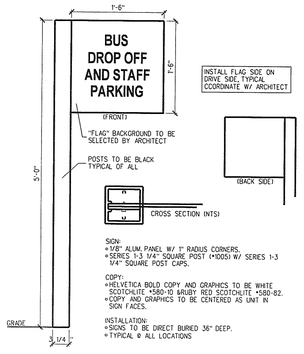
19 C7.01 GUTTER DETAIL 1.1/2" = 1'-0"



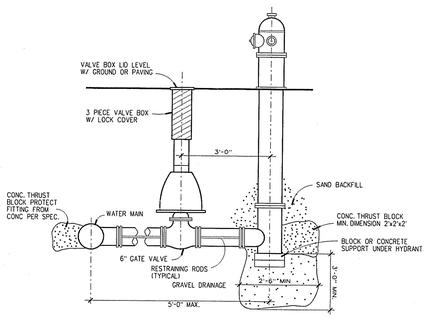
18 C7.01 CURB & GUTTER DETAIL 1.1/2" = 1'-0"



22 C7.01 TYPICAL SIGNAGE DETAIL (BY OWNER) 1" = 1'-0"



21 C7.01 TYPICAL SIGNAGE DETAIL (BY OWNER) 1" = 1'-0"

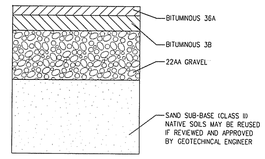


17 C7.01 TYPICAL FIRE HYDRANT NOT TO SCALE

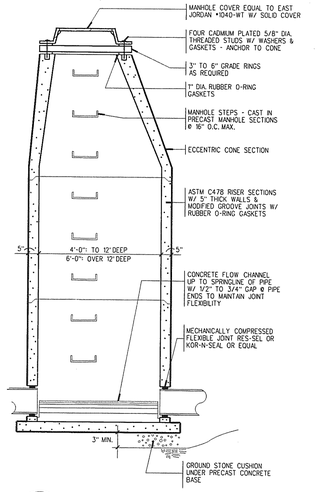
16 C7.01 NOT USED NOT TO SCALE

PAVING AREAS		
MATERIAL	HEAVY DUTY	STD. DUTY
36A WEARING COURSE	1.5"	1.5"
3B LEVELING COURSE	2.5"	1.5"
22AA AGG. BASE	10"	8"
CLASS II SAND SUB-BASE	12"	12"

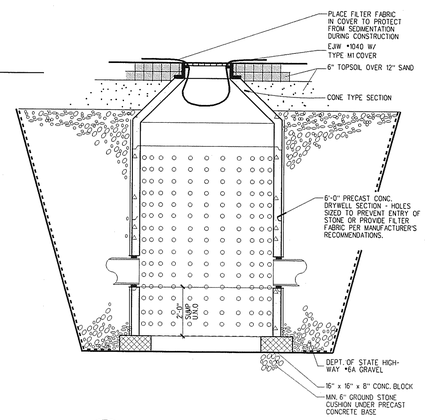
NOTES:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL PAVING INFORMATION.
2. REFER TO SHEET C1.01 FOR DESIGNATED PAVING AREAS. USE HD IN DRIVE AREAS STD. DUTY IN PARKING LOTS, MISC. PAVING AREAS.



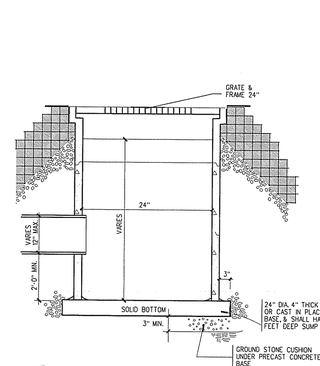
15 C7.01 TYPICAL PAVEMENT SECTIONS NOT TO SCALE



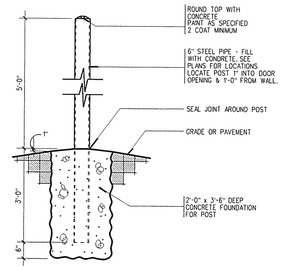
14 C7.01 TYPICAL SANITARY MANHOLE 1/2" = 1'-0"



13 C7.01 LEACHING BASIN DETAIL NOT TO SCALE

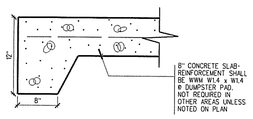


12 C7.01 2FT DIA. CATCH BASIN DETAIL NOT TO SCALE

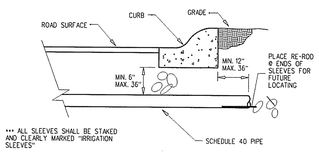


11 C7.01 BUMPER POST NO SCALE

10 C7.01 NOT USED NOT TO SCALE

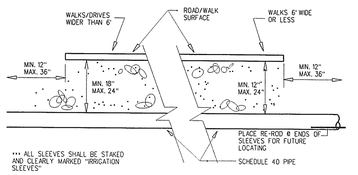


09 C7.01 CONCRETE THICKENED SLAB DETAIL NTS



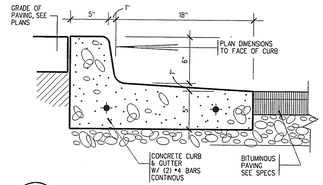
*** ALL SLEEVES SHALL BE STAKED AND CLEARLY MARKED "IRRIGATION SLEEVES"

08 C7.01 SLEEVING DETAIL (CURBED) NOT TO SCALE

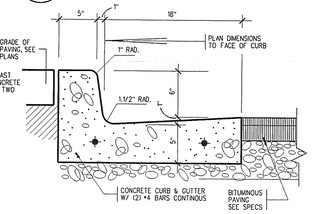


*** ALL SLEEVES SHALL BE STAKED AND CLEARLY MARKED "IRRIGATION SLEEVES"

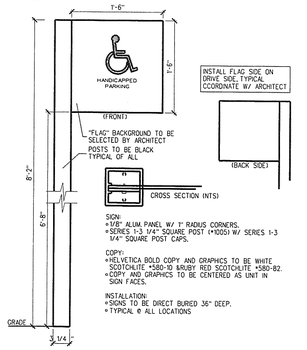
07 C7.01 SLEEVING DETAIL (NON-CURBED) NOT TO SCALE



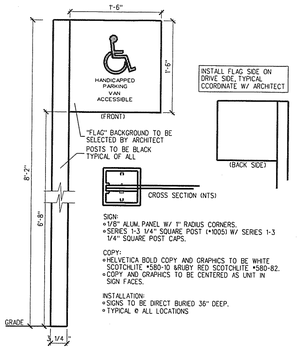
06 C7.01 CURB & GUTTER DETAIL 1.1/2" = 1'-0"



05 C7.01 CURB & GUTTER DETAIL 1.1/2" = 1'-0"

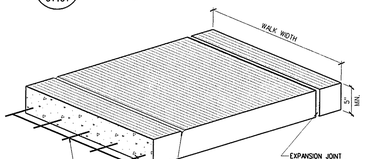


04 C7.01 BARRIER - FREE SIGN (BY OWNER) 1" = 1'-0"



03 C7.01 BARRIER - FREE SIGN (VAN ACCESSIBLE) (BY OWNER) 3/4" = 1'-0"

02 C7.01 NOT USED NOT TO SCALE



GENERAL SIDEWALK NOTES:
1. ALL SIDEWALK IS 5" THICK U.N.O.
2. MIN. 8" CLASS II SAND BASE
3. ALL EDGED MUST BE FINISHED WITH A 1/2" FILLET
4. REFER TO SPEC. 03.000 FOR CONC. SPECS.
5. BROOM FINISH ALL SIDEWALK PERPENDICULAR TO WIDTH. REFER ALSO TO SPEC. 03.000.
6. WHERE A PERM. STRUCTURE IS LOCATED IN SIDEWALK, PLACE EXP. MAT'L AROUND STRUCTURE AND ADJUST JOINT PATTERN TO INTERSECT STRUCTURE
7. COLD JOINTS - PLACE EXPANSION JOINT AT ALL COLD JOINTS

01 C7.01 TYPICAL SIDEWALK DETAIL NOT TO SCALE

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65 East Eighth Street, Suite 200
Holland, MI 49423

GMB

REVISIONS

ISSUANCES	
08/11/06	KLEIDAIE TOWNSHIP REVIEW
10/30/06	OWNER REVIEW SET
11/29/06	COMMENTS FOR OWNER REVIEW
12/08/06	COMMENTS FOR PRE-ENGINEERED PACKAGE
12/08/06	**FOR BIDS AND CONSTRUCTION**

DRAWN BY: MKS

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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SITE DETAILS

C7.01

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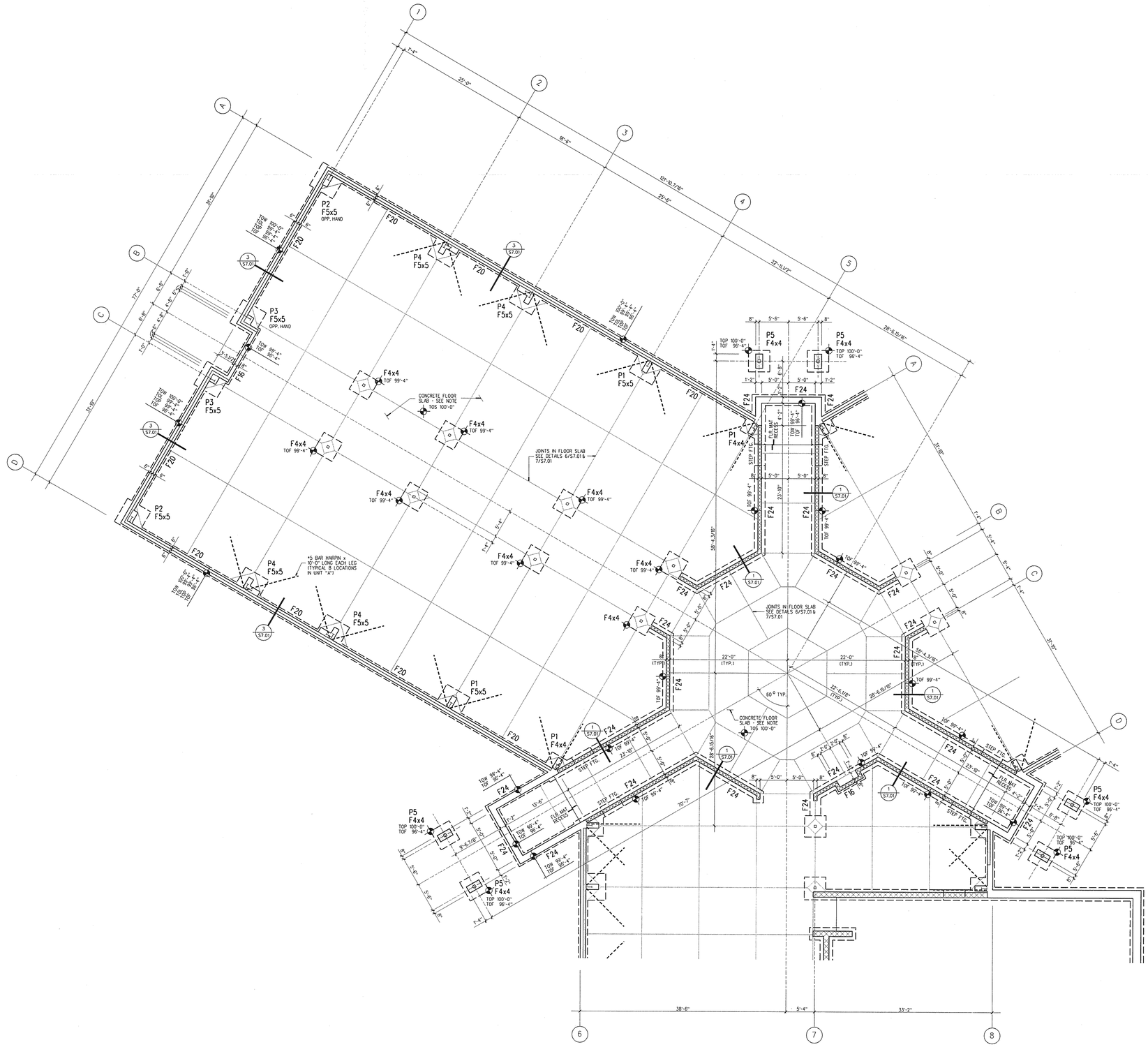


NORTH

UNIT "A" FOUNDATION PLAN

1/8" = 1'-0"

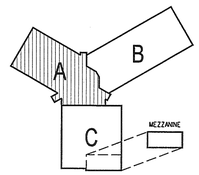
FLOOR SLABS:

FLOOR SLABS ON GRADE SHALL BE MINIMUM 5" THICK CONCRETE WITH 6x6-W2.9xW2.9 WWM AND SYNTHETIC FIBER REINFORCEMENT.

INSTALL SLABS OVER MINIMUM 12" COMPACTED CLEAN SAND FILL PLACED ON 10 MIL VAPOR BARRIER OVER COMPACTED SUB-GRADE.

NOTE:

REFERENCE DRAWING S5.01 FOR SCHEDULES AND NOTES RELATING TO THIS PLAN.



OVERALL KEY PLAN
NOT TO SCALE

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Holland, MI 49423

ISSUANCES	REVISIONS
08/14/06 ALLENDALE TOWNSHIP REVIEW	
10/25/06 OWNER REVIEW SET	
11/29/06 FOR OWNER REVIEW	
12/13/06 FOR PRE-ENGINEERED PACKAGE	
12/08/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: TBM

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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UNIT "A" FOUNDATION PLAN

S2.1A

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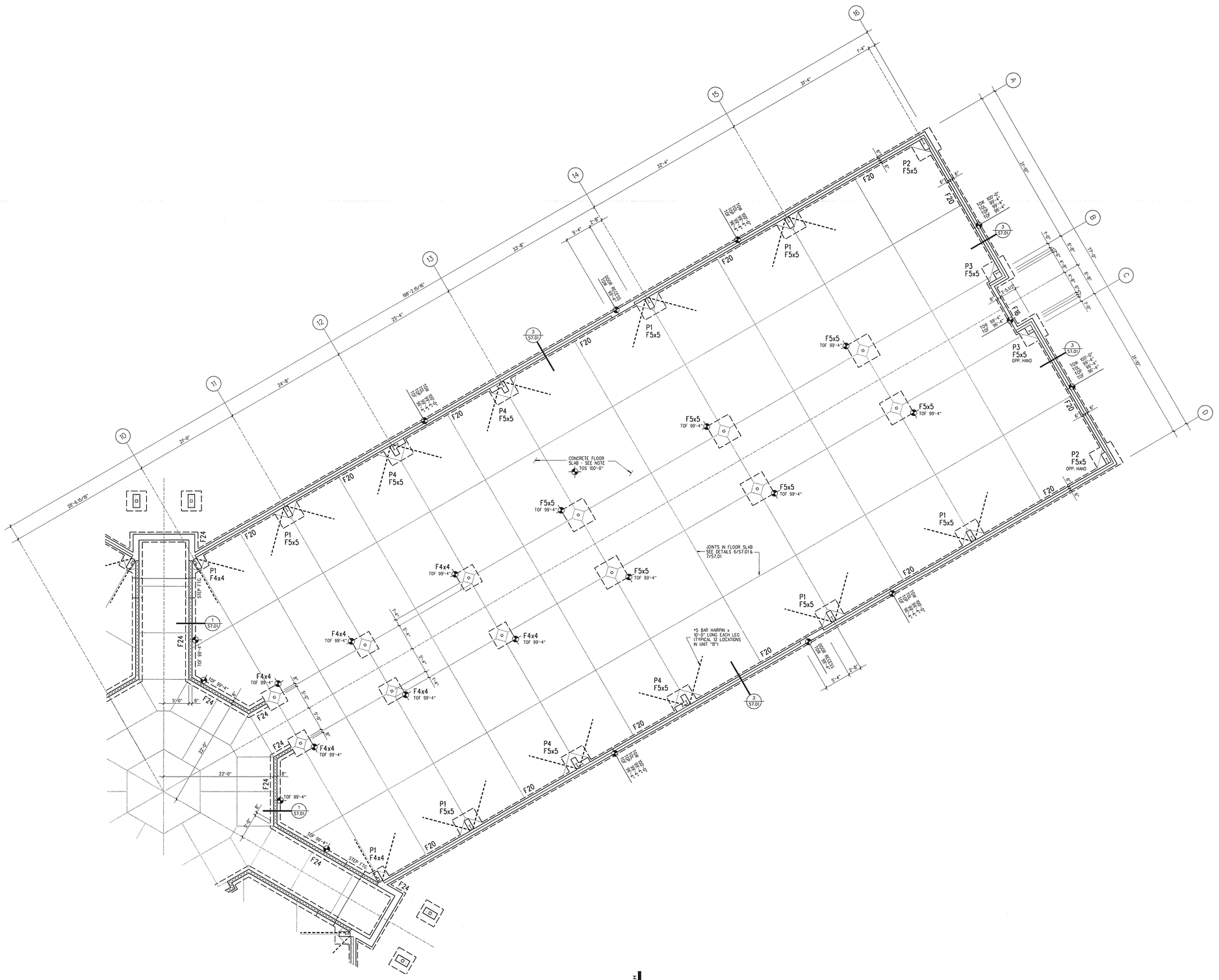
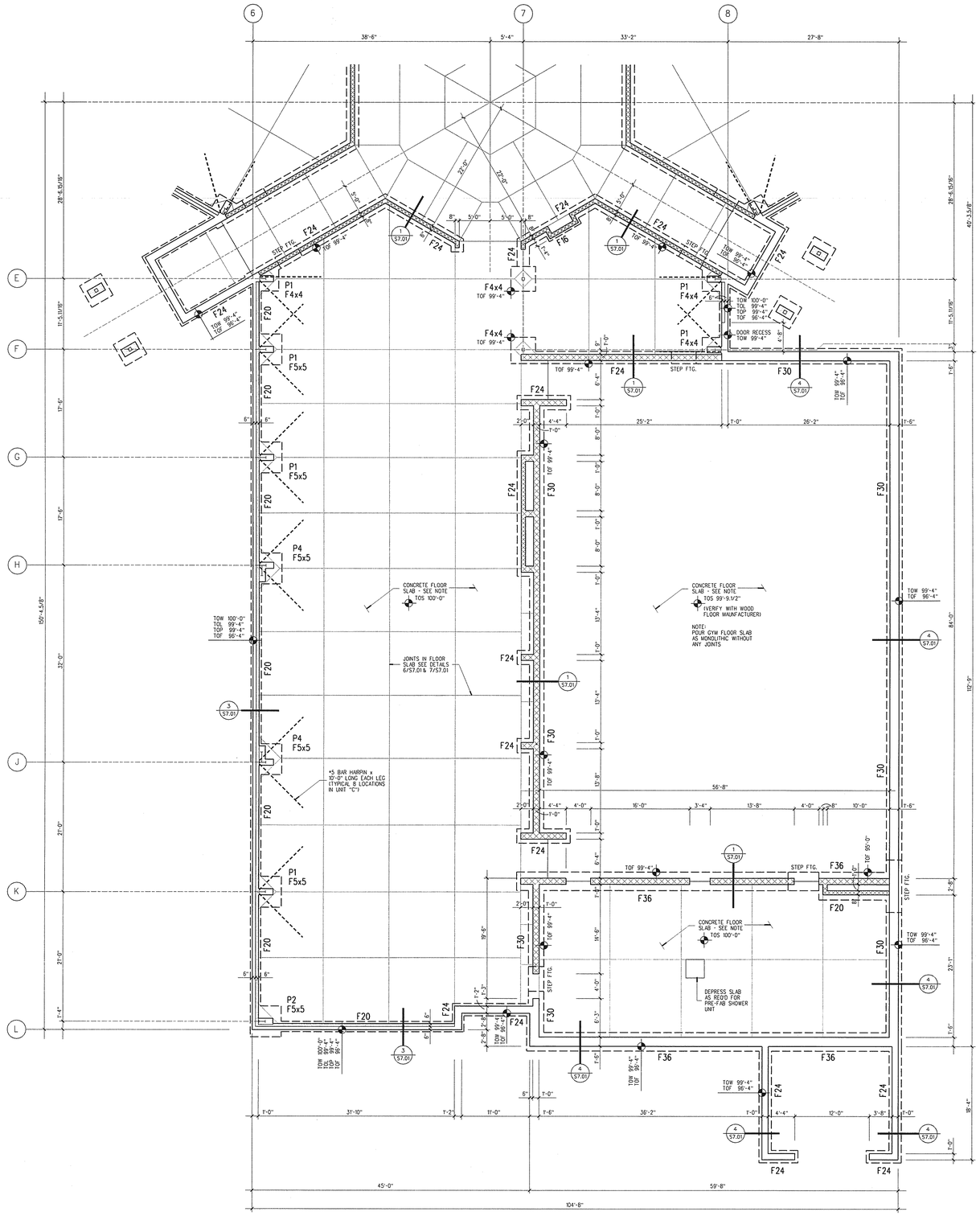

16
15
14
13
12
11
10
A
B
C
D
1'-4"
35'-4"
35'-4"
35'-4"
68'-2 15/16"
25'-4"
24'-6"
21'-0"
26'-6 15/16"
77'-5"
11'-10"
6'-8"
6'-8"
4'-8"
4'-8"
4'-8"
4'-8"
1'-0"
2'-8"
5'-4"
F20
F24
F16
P1 F5x5
P2 F5x5
P3 F5x5
P4 F5x5
P1 F4x4
P2 F5x5 OPP. HAND
P3 F5x5 OPP. HAND
F5x5 TOF 99'-4"
F4x4 TOF 99'-4"
TOP 100'-0" TOS 99'-4"
TOP 99'-4" TOS 98'-4"
TOP 99'-4" TOF 98



NORTH

UNIT "C" FOUNDATION PLAN

1/8" = 1'-0"

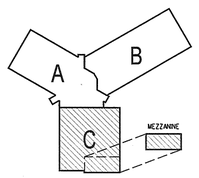
FLOOR SLABS:

FLOOR SLABS ON GRADE SHALL BE MINIMUM 5" THICK CONCRETE WITH 6x6-W2.9xW2.9 WWM AND SYNTHETIC FIBER REINFORCEMENT.

INSTALL SLABS OVER MINIMUM 12" COMPACTED CLEAN SAND FILL PLACED ON 10 MIL VAPOR BARRIER OVER COMPACTED SUB-GRADE.

NOTE:

REFERENCE DRAWING S5.01 FOR SCHEDULES AND NOTES RELATING TO THIS PLAN.



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Holland, MI 49423

DRAWN BY	ISSUANCES	REVISIONS
TBM	06/16/05 ALLENDALE TOWNSHIP REVIEW	
	10/30/06 OWNER REVIEW SET	
	11/29/06 FOR PRE ENGINEERED PACKAGE	
	12/01/06 FOR OWNER REVIEW	
	12/08/06 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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UNIT "C"
FOUNDATION PLAN

S2.1C

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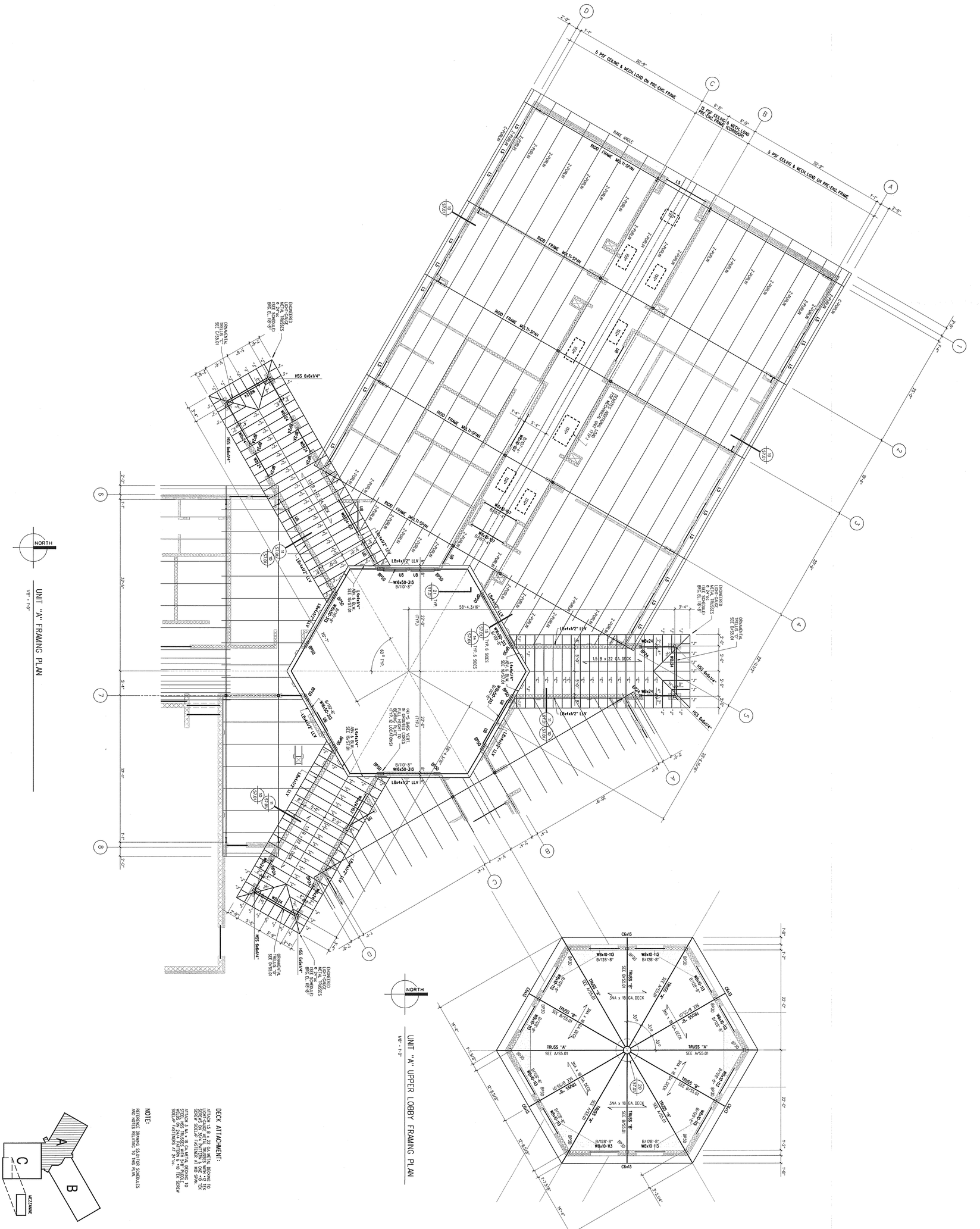

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

DRAWN BY	ISSUANCES	REVISIONS
TBM	08/11/06 ALLENDALE TOWNSHIP REVIEW	
	10/30/06 OWNER REVIEW SET	
	11/29/06 FOR OWNER REVIEW	
	12/01/06 FOR PRE-ENGINEERED PACKAGE	
	12/08/06 FOR BIDS AND CONSTRUCTION	

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PROJECT NO. 5-0630

UNIT "A" FRAMING PLANS

S3.1A

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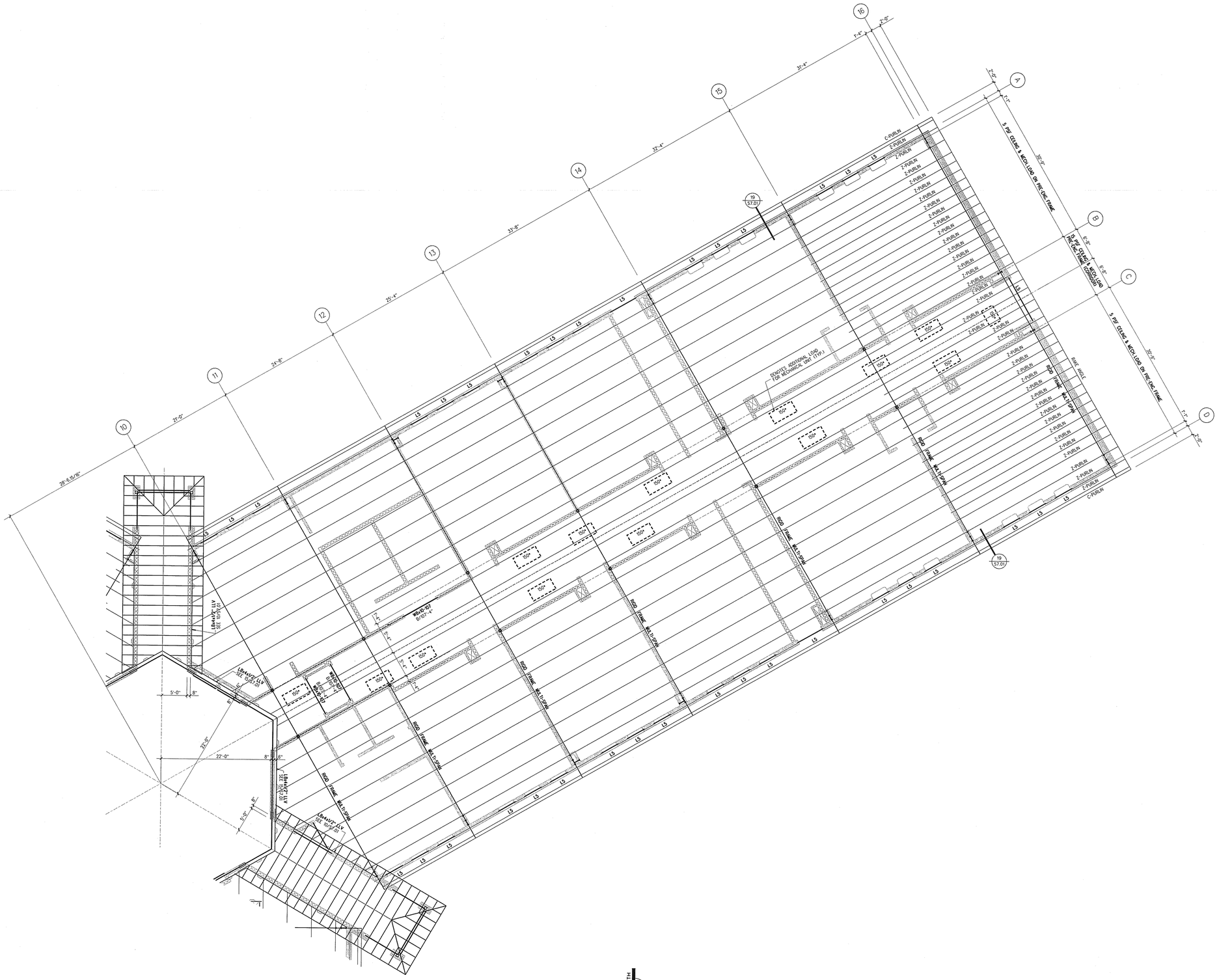
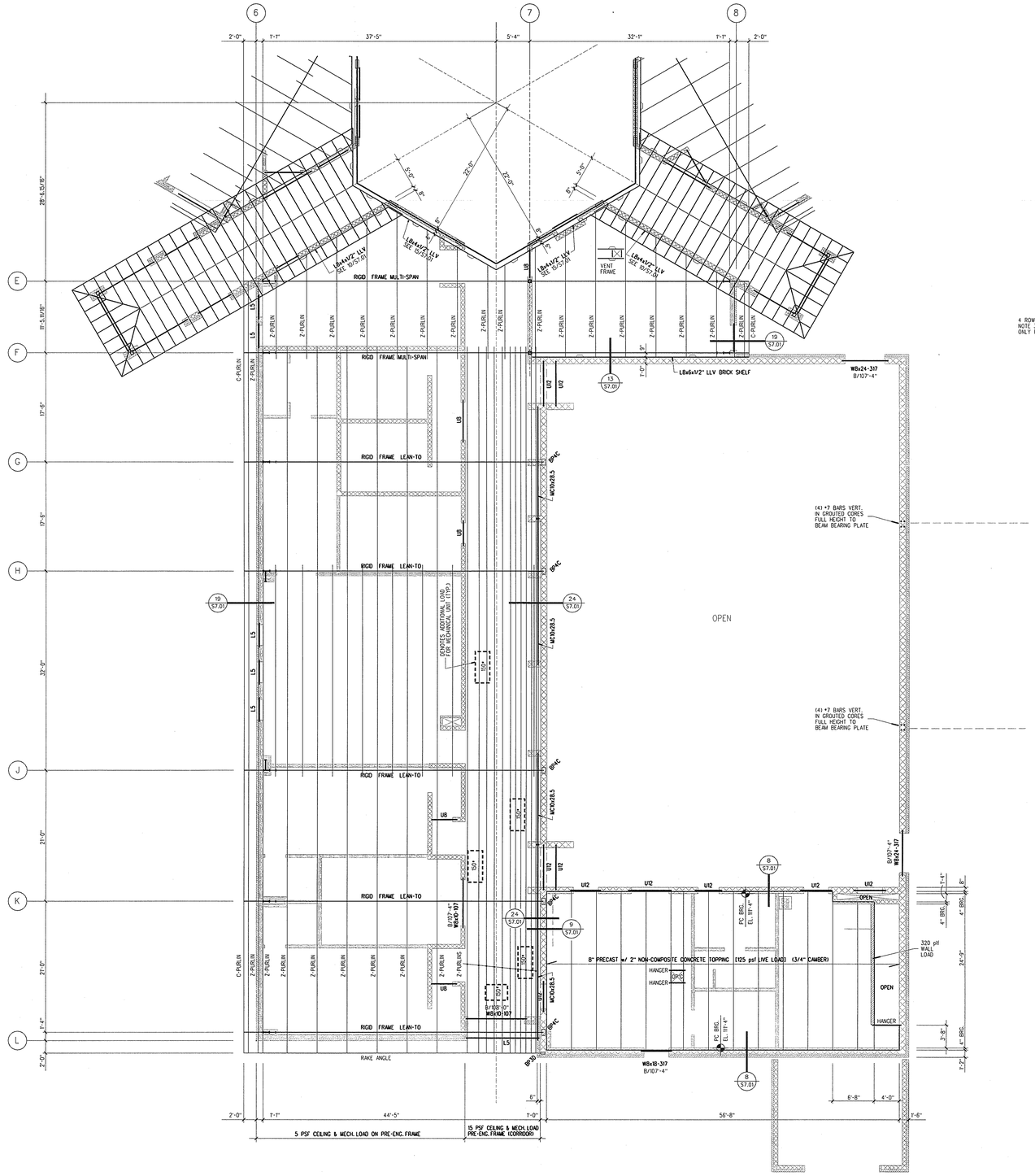
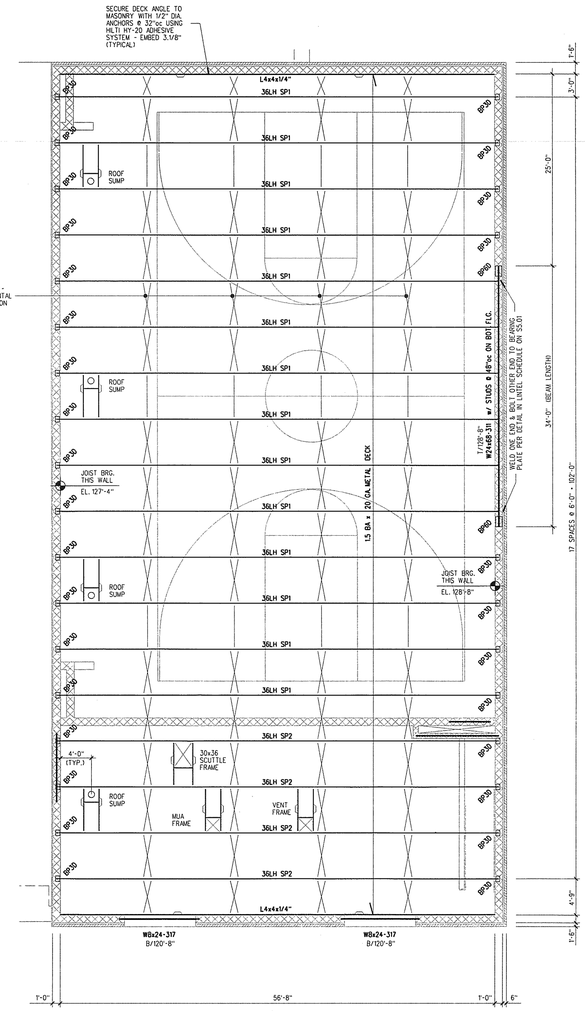

10
11
12
13
14
15
16
A
B
C
D
28'-6 15/16"
27'-0"
24'-8"
25'-4"
33'-8"
35'-4"
1'-4"
2'-0"
2'-0"
1'-1"
30'-3"
6'-9"
6'-9"
30'-3"
1'-1"
2'-0"
5 PSF CEILING & MECH LOAD ON PRE-ENG FRAME
10 PSF CEILING & MECH LOAD ON PRE-ENG FRAME
5 PSF CEILING & MECH LOAD ON PRE-ENG FRAME
C-PURLIN
Z-PURLIN
LS
19
57.01
60#
DENOTES ADDITIONAL LOAD FOR MECHANICAL UNIT (TYP.)
BLKG WALL
RIGID FRAME MK11-SPAN
W24x76
W24x76
W24x76



NORTH

UNIT "C" FRAMING PLAN

1/8" = 1'-0"



NORTH

UNIT "C" UPPER LEVEL FRAMING PLAN

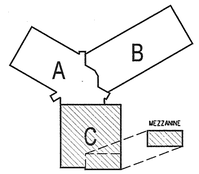
1/8" = 1'-0"

DECK ATTACHMENT:

ATTACH 1.5 BA x 20 GA METAL DECKING TO STEEL HSS TRUSSES WITH 5/8" PUDDLE WELDS ON 36/4 PATTERN & #10 TEK SCREW SIDELAP FASTENERS AT 24"oc.

NOTE:

REFERENCE DRAWING S5.01 FOR SCHEDULES AND NOTES RELATING TO THIS PLAN.



OVERALL KEY PLAN
NOT TO SCALE

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GMB Architecture + Engineering
65 East Elizabeth Avenue
Holland, MI 49423

DRAWN BY	ISSUANCES	REVISIONS
TBM	08/11/05 ALLENDALE TOWNSHIP REVIEW	
	12/30/05 OWNER REVIEW SET	
	01/25/06 75% OWNER REVIEW	
	12/19/06 FOR PRE ENGINEERED PACKAGE	
	12/08/06 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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UNIT "C" FRAMING PLANS

S3.1C

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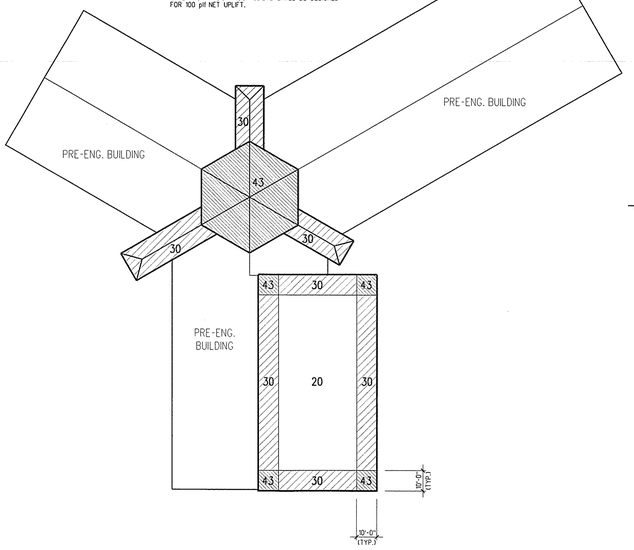
METAL ROOF DECK ATTACHMENT:

ATTACH ALL ROOF DECK WITH 36/4 PATTERN USING 5/8" DIAMETER PUDDLE WELDS AT 12"oc AND #10 TEK SCREW SIDE-LAP FASTENERS AT 30"oc MAX.

ROOF JOISTS:

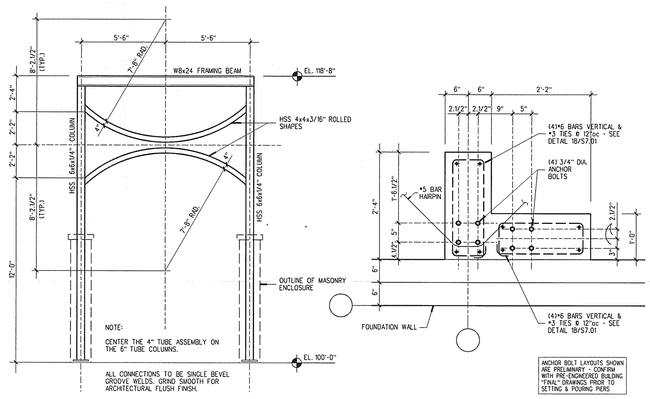
MINIMUM 60 psf NET WIND UPLIFT ON ALL ROOF TRUSSES EXCEPT GYMNASIUM ROOF JOISTS SHALL BE DESIGNED FOR 100 psf NET UPLIFT.



NORTH

OVERALL PLAN - WIND UPLIFT (NUMBERS GIVEN IN psf)

1/32" = 1'-0"



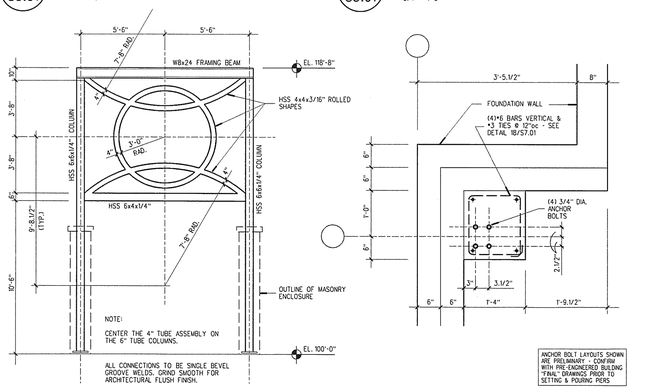
D S5.01 TRELLIS "D" ELEVATION

1/4" = 1'-0"

4 S5.01 PIER "P4" PLAN DETAIL

3/4" = 1'-0"

ANCHOR BOLT LAYOUTS SHOWN ARE PRELIMINARY - CONFIRM WITH PRE-ENGINEERED BUILDING "FINAL" DRAWINGS PRIOR TO SETTING & POURING PIERS



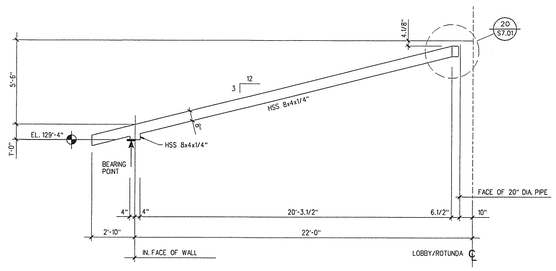
C S5.01 TRELLIS "C" ELEVATION

1/4" = 1'-0"

3 S5.01 PIER "P3" PLAN DETAIL

3/4" = 1'-0"

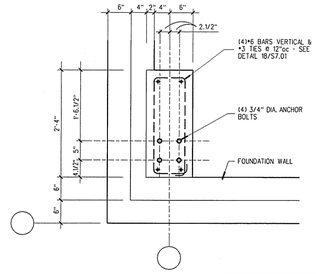
ANCHOR BOLT LAYOUTS SHOWN ARE PRELIMINARY - CONFIRM WITH PRE-ENGINEERED BUILDING "FINAL" DRAWINGS PRIOR TO SETTING & POURING PIERS



ALL CONNECTIONS TO BE SINGLE BEVEL GROOVE WELDS. GRIND SMOOTH FOR ARCHITECTURAL FLUSH FINISH.

B S5.01 TRUSS "B" ELEVATION

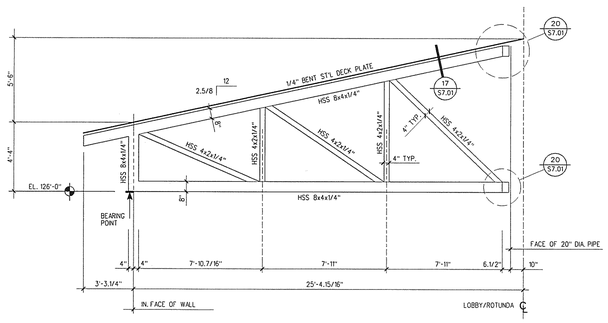
1/4" = 1'-0"



2 S5.01 PIER "P2" PLAN DETAIL

3/4" = 1'-0"

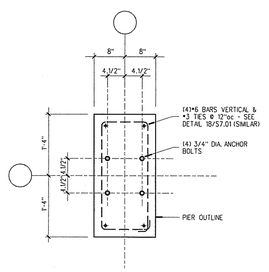
ANCHOR BOLT LAYOUTS SHOWN ARE PRELIMINARY - CONFIRM WITH PRE-ENGINEERED BUILDING "FINAL" DRAWINGS PRIOR TO SETTING & POURING PIERS



ALL CONNECTIONS TO BE SINGLE BEVEL GROOVE WELDS. GRIND SMOOTH FOR ARCHITECTURAL FLUSH FINISH.

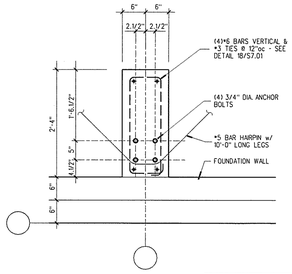
A S5.01 TRUSS "A" ELEVATION

1/4" = 1'-0"



5 S5.01 PIER "P5" PLAN DETAIL

3/4" = 1'-0"



1 S5.01 PIER "P1" PLAN DETAIL

3/4" = 1'-0"

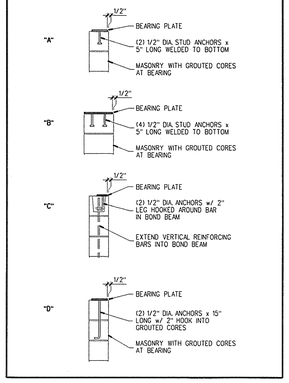
FOOTING SCHEDULE

MARK	SIZE WIDTH	SIZE LENGTH	SIZE THK.	REINFORCING
F16	16"	CONT.	8"	(2)#5 BARS CONT.
F20	20"	CONT.	10"	(2)#5 BARS CONT.
F24	24"	CONT.	12"	(2)#5 BARS CONT.
F30	30"	CONT.	12"	(3)#5 BARS CONT.
F36	36"	CONT.	12"	(3)#5 BARS CONT.
F4x4	4'-0"	4'-0"	12"	(5)#5 BARS EACH WAY
F5x5	5'-0"	5'-0"	14"	(6)#5 BARS EACH WAY
TS	2x WALL WIDTH	CONT.	8"	(2)#4 BARS CONT.

BEARING PLATE SCHEDULE

MARK	MATERIAL
BP1	1/4" x 4" x 8" STL PLATE
BP2	3/8" x 7" x 8" STL PLATE
BP3	3/8" x 6" x 9" STL PLATE
BP4	1/2" x 7" x 12" STL PLATE
BP5	3/8" x 7" x 16" STL PLATE
BP6	1/2" x 10" x 24" STL PLATE

ANCHOR TYPES: (MARK SUFFIX NOTED ON PLANS)



GENERAL FOUNDATION NOTES:

1. PLAN ELEVATION 100'-0" = SITE DATUM EL. 659.00
2. FOUNDATION DESIGN LOADS:
   a. MAXIMUM SOIL BEARING CAPACITY (SEE REPORT) - COLUMN FOOTINGS = 3000 psf WALL FOOTINGS = 3000 psf
   b. CONCRETE COMPRESSIVE STRENGTH (f'c) = 3500 psi
   c. REINF. STEEL YIELD STRENGTH (Fy) = 60,000 psi
3. FOUNDATIONS WILL BE PLACED IN BOTH THE NATURAL SAND AND NEW SAND FILL. PRIOR TO PLACING CONCRETE THE SAND AND/OR SAND FILL SHALL BE COMPACTED TO A DENSITY OF 95.0 PERCENT OF ITS MAXIMUM DENSITY AS DETERMINED BY ASTM D1557. REFERENCE THE SOILS REPORT FOUND IN THE SPECIFICATIONS FOR ADDITIONAL RECOMMENDATIONS.
4. INSTALL 2" EXCD INSULATION ON ALL PERIMETER FOUNDATION WALLS TO A MINIMUM DEPTH OF 2.0 FEET BELOW GRADE.
5. STEP FOOTINGS AT 2 HORIZONTAL TO 1 VERTICAL.
6. LAP CONTINUOUS REINFORCING 24 BAR DIAMETERS UNLESS NOTED OTHERWISE.

GENERAL FLOOR SLAB NOTES:

1. FLOOR SLABS ON GRADE SHALL BE MINIMUM 5" THICK CONCRETE WITH 6x6-W2.9xW2.9 WWM AND SYNTHETIC FIBER REINFORCEMENT IN ADDITION TO MESH IN SLABS.
2. ALL FLOOR SLABS SHALL BE PLACED ON MINIMUM 12" COMPACTED CLEAN SAND FILL OVER 10 MIL VAPOR BARRER OVER PLACED OVER COMPACTED SUITABLE SUB-GRADE.
3. INSTALL CONSTRUCTION AND/OR CONTROL JOINTS FOR SLABS ON GRADE ON A MAXIMUM 10'-0" SQUARE GRID. REFERENCE DETAILS 6 & 7 ON S7.01. FLOOR SLAB AT GYMNASIUM SHALL BE MONOLITHIC POUR WITHOUT ANY JOINTS.
4. FLOOR SLAB DESIGN LOADS:
   a. CONCRETE COMPRESSIVE STRENGTH = 4000 psi (SLAB ON GRADE)
   b. CONCRETE COMPRESSIVE STRENGTH = 4000 psi (PRECAST TOPPING SLAB)
5. SLAB EDGE DETAIL: PROVIDE 1/2" EXPANSION JOINT AT INSIDE OF PERIMETER WALLS AND FELT BOND BREAKER AT ALL OTHER INTERIOR LOCATIONS.

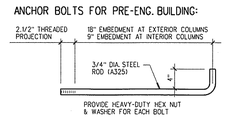
GENERAL STRUCTURAL FRAMING NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS STEEL REQUIRED NOT LIMITED TO ANGLES, PLATES, CHANNELS, RAILINGS, AND POSTS.
2. MASONRY CORES SHALL BE GROUTED FULL 3 COURSES DOWN MINIMUM BELOW ALL LINTELS, BEAMS AND JOISTS BEARING LOCATIONS ON MASONRY.
3. FURNISH & INSTALL 20 GA. FLAT PLATE FILLERS & COVERS AT DECK EDGES AND AT TRANSITION LINES OF ORIENTATION CHANGES AS REQ'D.
4. FURNISH & INSTALL ALL JOIST BRIDGING & BRACING AS NOTED OR AS REQUIRED BY THE STEEL JOIST INSTITUTE (SJI).
5. PROVIDE L3x3x1/4" FRAMES FOR ROOF SUMPS AND FOR ALL OTHER ROOF OPENINGS REQUIRED ON PLANS UNLESS NOTED OTHERWISE.
6. PROVIDE MATERIAL ALLOWANCE OF 10 - "L3" LINTELS FOR AN AVERAGE 24" WIDE MASONRY OPENING AND 24 - "L2 L3" LINTELS FOR AN AVERAGE 24" WIDE OPENING FOR MECHANICAL DUCT PENETRATIONS THRU WALLS NOT SHOWN. VERIFY QUANTITY & LENGTHS.
7. FURNISH & INSTALL BENT STEEL PLATES & FRAMING TO SUPPORT ROOF DECK EDGES AT NON-VENTED RIDGES, HIPS AND VALLEYS AS REQUIRED PER DETAILS 12/S7.01 AND 17/S7.01.
8. ALL ACOUSTICAL DECK (BOTH 1.5 B-N AND 3 NAI SHALL BE PRIME PAINTED AND FINISH PAINTED IN THE FACTORY PRIOR TO SITE DELIVERY.

PRECAST NOTES:

1. PRECAST DESIGN LIVE LOADS SHALL BE AS CALLED OUT ON PLANS.
2. PROVIDE CUTOUTS IN PRECAST AS SHOWN AND COORDINATE ALL OTHER OPENINGS REQUIRED WITH RESPECTIVE CONTRACTORS. OPENINGS SHOWN SHALL BE VERIFIED FOR SIZE & LOCATION PRIOR TO FABRICATION.
3. CONCRETE TOPPING SHALL BE OF THICKNESS SHOWN ON PLANS AND HAVE SYNTHETIC FIBER REINFORCEMENT PER SPECIFICATIONS AND FLAT SHEET 6x6-W2.9xW2.9 WWM. SEE FLOOR PLANS FOR SLOPES REQUIRED TO DRAIN.
4. CONCRETE COMPRESSIVE STRENGTH DESIGN REQUIREMENTS FOR PRECAST = 5000 psi.
5. ALL INCIDENTAL OPENINGS SMALLER THAN 6" WHICH ARE FIELD CUT SHALL BE CENTERED THRU PRECAST CORE AND GROUTED/SEALED.
6. ALL PENETRATIONS THRU THE PRECAST SHALL BE GROUTED/SEALED. PRECAST INSTALLATION SHALL BE 1-HOUR FIRE RATED PER U.L. DESIGN #D931.

ANCHOR BOLTS FOR PRE-ENG. BUILDING:



STRUCTURAL DESIGN LOADS:

1. FLOOR LIVE LOADS:
   CLASSROOMS = 40 psf
   CORRIDORS, LOBBIES, STAIRS & EXITS = 100 psf
   STORAGE ROOMS = 125 psf
   MECHANICAL & MAINTENANCE ROOMS = 125 psf
   GYMNASIUM = 100 psf
2. STRUCTURAL SLAB FLOOR DEAD LOADS:
   8" PRECAST w/ 2" TOPPING = 80 psf
   CEILING & MECHANICAL = 15 psf
3. ROOF LOAD:
   GROUND SNOW LOAD (Pg) = 40 psf
   FLAT ROOF SNOW LOAD (Pf) = 30.8 psf
   SNOW EXPOSURE FACTOR (Ce) = 1.0 (EXPOSURE C)
   SNOW THERMAL FACTOR (Ct) = 1.0
   SNOW LOAD IMPORTANCE FACTOR (I) = 1.1 (CATEGORY II - ASCE 7 CAT. III)
   ROOF DEAD LOAD = 15.0 psf
4. WIND LOAD:
   BASIC WIND SPEED (3 SEC. GUST) = 90 mph
   WIND LOAD IMPORTANCE FACTOR (I) = 1.15 (CATEGORY II - ASCE 7 CAT. III)
   WIND EXPOSURE = C
   INTERNAL PRESSURE COEFFICIENTS (GCpi) = 0.18
   WIND UPLIFT = SEE PLAN ON THIS DRAWING
   COMPONENT & CLADDING PRESSURE = 30 psf
5. SEISMIC DESIGN:
   SEISMIC USE GROUP II, I_E = 1.25
   SITE CLASS "D" SOFT SOIL PROFILE (NOSD)
   SPECTRAL RESPONSE COEFFICIENTS S_{DS} = 0.105, S_{D1} = 0.072
   SEISMIC FORCE RESISTING SYSTEM = ORDINARY REINFORCED MASONRY SHEAR WALLS (I.H.) R=2.5
   ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE (1617.4)
   DESIGN CATEGORY = B
   MINIMUM DESIGN BASE SHEAR = 280 plf
   S_S = 0.098, S_1 = 0.045
   C_S = 0.0336

DEFERRED DOCUMENTS:

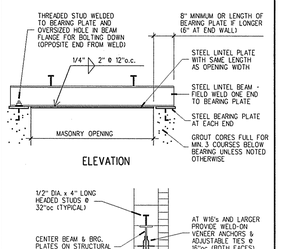
PRE-ENGINEERED METAL BUILDING SYSTEMS DRAWINGS FROM MANUFACTURER SHOWING ALL REACTION LOADS IMPOSED ON ARCHITECTURAL CONSTRUCTION, A SUMMARY OF ALL DESIGN LOADS INCLUDING MODIFICATION FACTORS, AND SEALED BY A REGISTERED MICHIGAN DESIGN PROFESSIONAL.

LEGEND:

TOW	DENOTES TOP OF WALL ELEVATION
TOP	DENOTES TOP OF PIER ELEVATION
TOL	DENOTES TOP OF LEDGE ELEVATION
TOF	DENOTES TOP OF FOOTING ELEVATION
TOS	DENOTES TOP OF SLAB ELEVATION
F36	FOOTING MARK - SEE SCHEDULE FOR SIZE & REINFORCING
P2	PIER MARK - SEE SCHEDULE FOR SIZE & REINFORCING
	CONCRETE FOUNDATION WALL & FOOTING
	MASONRY WALL & CONCRETE FOOTING
U8	DENOTES LINTEL TYPE (SEE SCHEDULE ABOVE)
BP1	DENOTES BEARING PLATE TYPE (SEE SCHEDULE ABOVE)
W16x36(S)	DENOTES BEAM WITH STUDS ON TOP FLANGE (SEE DETAIL B/S7.01 - SIMILAR EXCEPT NO BOTTOM PLATE)
T/100'-0"	DENOTES TOP OF STEEL (SEE PLANS)
B/100'-0"	DENOTES BOTTOM OF STEEL (SEE PLANS)

LINTEL SCHEDULE

MARK	MATERIAL	SHAPE
U6	6" MASONRY U-BLOCK w/ (2) #5 BARS & CONC. FILL	U
U8	8" MASONRY U-BLOCK w/ (2) #5 BARS & CONC. FILL	U
U10	10" MASONRY U-BLOCK w/ (2) #5 BARS & CONC. FILL	U
U12	12" MASONRY U-BLOCK w/ (3) #5 BARS & CONC. FILL	U
L3	L3.1/2 x 3.1/2 x 1/4"	L
L5	L5 x 5 x 1/4" LLV (GALVANIZED)	L
	PLATE THICKNESS: 1 = 1/4", 3 = 3/8" W8x10-107 BEAM SIZE PLATE WIDTH: 07 = 7.1/2", 11 = 11.1/2", 13 = 13.1/2", 17 = 17.1/2", 19 = 19.1/2" ALL BEARING PLATES SHALL BE "BP2A" UNLESS NOTED OTHERWISE ON PLANS. SEE DETAIL BELOW FOR ADDITIONAL REQUIREMENTS.	I

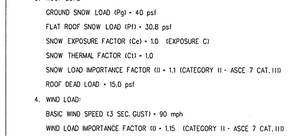


ENGINEERED LT.GA. METAL TRUSS SCHEDULE

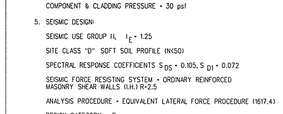
MARK	SHAPE
"C"	12 / 4
"H"	12 / 2.13/16"
"J"	12 / 4

NOTE:
SEE DETAILS 11/S7.01 & 12/S7.01 FOR ADDITIONAL REQUIREMENTS.

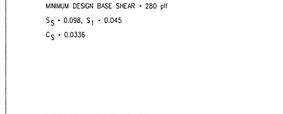
COLUMN BASE PLATE SCHEDULE



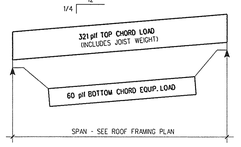
HSS 6x6x1/4"



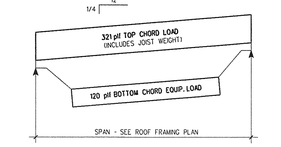
TYPICAL ELEVATION



ALTERNATE ELEVATION



36LH SP1 JOIST DIAGRAM
(GYMNASIUM)



36LH SP2 JOIST DIAGRAM
(MECHANICAL MEZZANINE)

GNB Architects • Engineers
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Pontiac, MI 48343

REVISIONS

ISSUANCES	
08/17/06	ALLENDALE TOWNSHIP REVIEW
10/30/06	OWNER REVIEW SET
11/29/06	FOR OWNER REVIEW
12/01/06	FOR PRE-ENGINEERED PACKAGE
12/08/06	FOR BIDS AND CONSTRUCTION

DRAWN BY: LC

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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STRUCTURAL SCHEDULES & NOTES

S5.01

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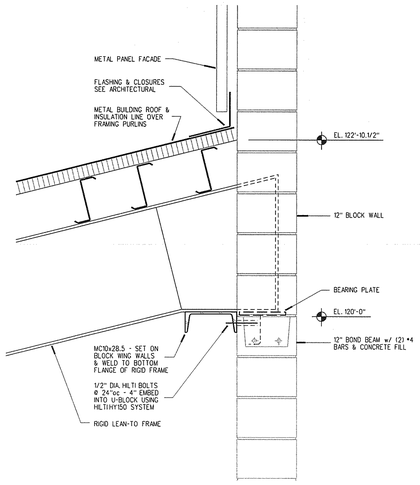
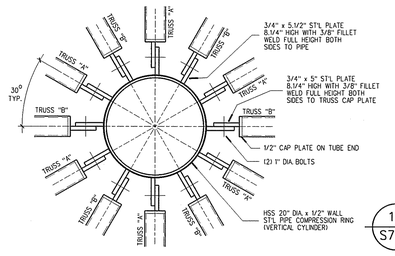
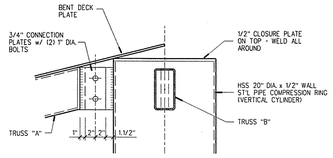


24 S7.01 FRAMING DETAIL

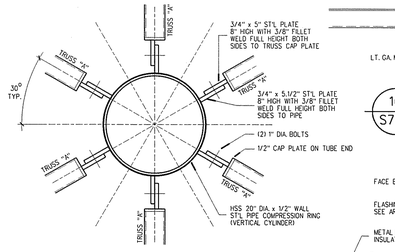
1" = 1'-0"



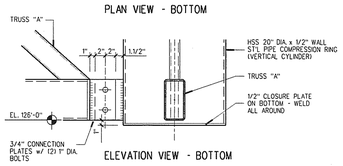
PLAN VIEW - TOP



ELEVATION VIEW - TOP



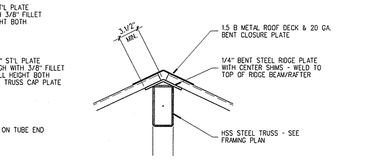
PLAN VIEW - BOTTOM



ELEVATION VIEW - BOTTOM

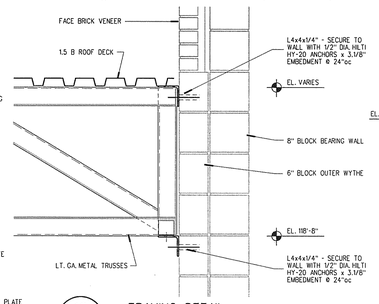
20 S7.01 COMPRESSION RING DETAIL

1" = 1'-0"



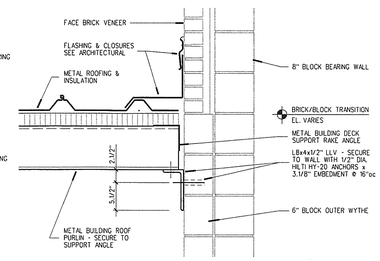
17 S7.01 RIDGE & HIP DETAIL

1" = 1'-0"



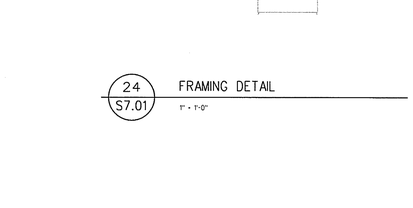
16 S7.01 FRAMING DETAIL

1" = 1'-0"



15 S7.01 FRAMING DETAIL

1" = 1'-0"

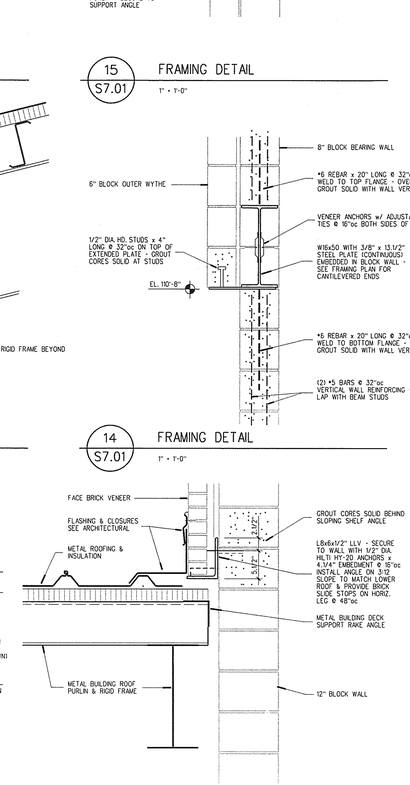


18 S7.01 TYPICAL PIER DETAIL

1/2" = 1'-0"

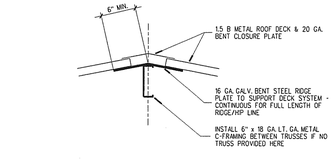
21 S7.01 CANTILEVERED FRAMING DETAIL

1/2" = 1'-0"



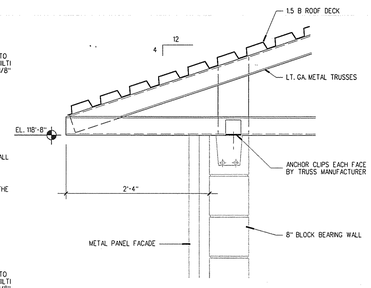
13 S7.01 FRAMING DETAIL

1" = 1'-0"



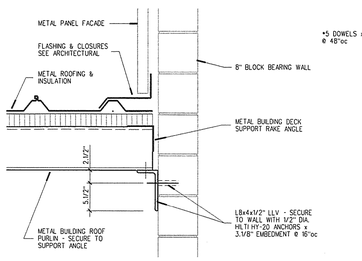
12 S7.01 RIDGE DETAIL

1" = 1'-0"



(ENTRY CORRIDOR ROOF)
11 S7.01 LT. GA. METAL TRUSS DETAIL

1" = 1'-0"

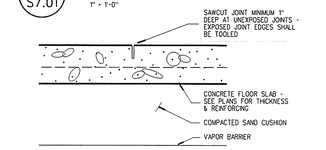


10 S7.01 FRAMING DETAIL

1" = 1'-0"

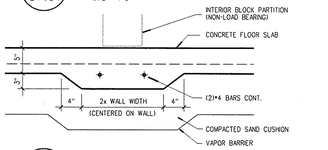
7 S7.01 CONSTRUCTION JOINT DETAIL

1" = 1'-0"



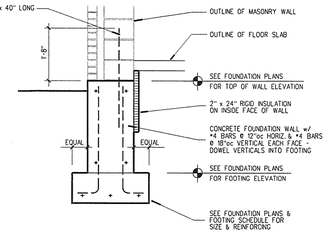
6 S7.01 CONTROL JOINT DETAIL

1.1/2" = 1'-0"



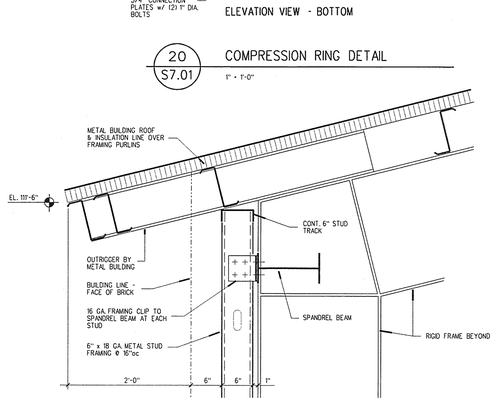
5 S7.01 THICKENED SLAB DETAIL

1" = 1'-0"



(GYMNASIUM)
4 S7.01 TYPICAL EXTERIOR FOUNDATION

1/2" = 1'-0"

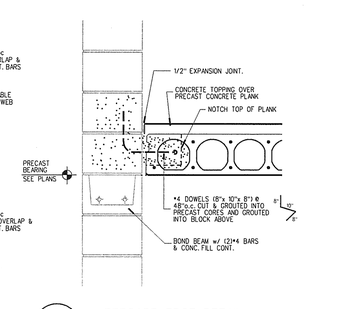


19 S7.01 FRAMING DETAIL

1" = 1'-0"

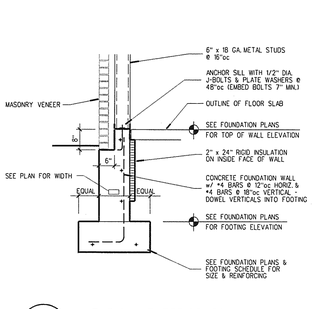
14 S7.01 FRAMING DETAIL

1" = 1'-0"



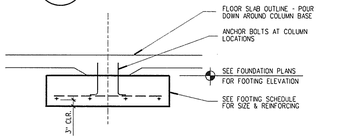
9 S7.01 PRECAST EDGE DETAIL

1" = 1'-0"



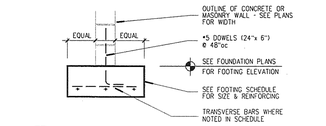
3 S7.01 TYPICAL EXTERIOR FOUNDATION

1/2" = 1'-0"



2 S7.01 TYP. INTERIOR COLUMN FOOTING

1/2" = 1'-0"

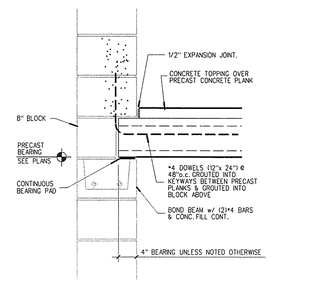


1 S7.01 TYP. INTERIOR STRIP FOOTING

1/2" = 1'-0"

8 S7.01 PRECAST BEARING DETAIL

1" = 1'-0"



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2326 Bond Street, Suite 200
Holland, MI 49423

REVISIONS

DRAWN BY	ISSUANCES	REVISIONS
LE	08/18/05	ALLENDALE TOWNSHIP REVIEW
	10/10/05	OWNER REVIEW SET
	10/29/05	FOR OWNER REVIEW
	12/01/05	FOR PRE-ENGINEERED FASCIAS
	12/09/05	FOR BID AND CONSTRUCTION

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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STRUCTURAL DETAILS

S7.01

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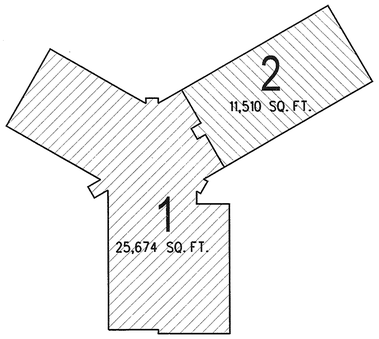
LEGEND - CODE COMPLIANCE PLAN

2-HR — 2 HOUR FIRE RESISTANCE RATING FROM FLOOR SLAB TIGHT TO ROOF DECK ABOVE WITH 90 MINUTE OPENING PROTECTIVES CONSTRUCTION: 8" CONCRETE MASONRY UNITS, 2" RIGID INSULATION & 4" FACE BRICK (14" TOTAL THICKNESS) U.L. DESIGN No. U902 OR 8" CONCRETE MASONRY UNITS U.L. DESIGN No. U905	64"» — BUILDING EXIT WITH EGRESS WIDTH
2-HR/SMOKE — AS NOTED ABOVE ALONG WITH REQUIREMENTS FOR SMOKE	00 — OCCUPANT LOAD
1-HR — ONE HOUR FIRE RESISTANCE RATING FROM FLOOR SLAB TIGHT TO ROOF DECK ABOVE WITH 45 MINUTE OPENING PROTECTIVES CONSTRUCTION: 8" CONCRETE MASONRY UNITS U.L. DESIGN No. U905 OR, ONLY WHERE SHOWN ON DRAWINGS ONE LAYER 5/8" FIRE CODE GYPSUM BOARD EACH SIDE OF 3.5/8" x 20 GA. METAL STUDS @ 16"oc U.L. DESIGN No. U465	20 — DENOTES FIRE RESISTANCE RATING OF OPENING PROTECTIVE (IN MINUTES)
	(P) — DENOTES PANIC HARDWARE DEVICE ON EACH DOOR LEAF
SMOKE — ONE HOUR FIRE RESISTANCE RATING (FOR SMOKE BARRIER WALLS) WITH 20-MINUTE SELF-CLOSING OR SMOKE ACTIVATED LABEL DOORS. INSTALL FROM FLOOR SLAB TO UNDERSIDE OF ROOF DECK ABOVE. GLAZED OPENINGS ARE PERMITTED IF 1/4 HOUR RATED, PER NFPA 257 (U.L. 9) OR 1/4" WIRE GLASS IN STEEL FRAME NOT EXCEEDING 1296 SQ IN PER PANEL. OPENING SHALL BE LESS THAN 25% OF THE SMOKE BARRIER WALL.	MCV — MASTER GAS VALVE
	(X) — FIRE EXTINGUISHER
1-HR HORIZ. — ONE HOUR HORIZONTAL SEPARATION (FLOOR SLAB, BEAMS, JOISTS, BUT NOT SUPPORTING COLUMNS) TO PROVIDE CONTINUOUS SEPARATION WITH FIRE SEPARATION AREA ABOVE. ONE HOUR FIRE DAMPERS AT ALL DUCT PENETRATIONS.	— "ACCESSIBLE" ROUTE/ENTRANCE/EGRESS
	— INDICATES "ACCESSIBLE" 60" DIA. CLEAR FLOOR SPACE
2-HR HORIZ. — TWO HOUR HORIZONTAL SEPARATION (FLOOR SLAB, BEAMS, JOISTS, BUT NOT SUPPORTING COLUMNS) TO PROVIDE CONTINUOUS SEPARATION WITH FIRE SEPARATION AREA ABOVE. 1 1/2 HOUR FIRE DAMPERS AT ALL DUCT PENETRATIONS.	— INDICATES "ACCESSIBLE" 48" x 30" CLEAR FLOOR SPACE
	000'-0" — EXIT ROUTE DISTANCE
SMOKE TIGHT — SMOKE TIGHT (NO FIRE RESISTANCE RATING) FROM FLOOR SLAB TIGHT TO ROOF DECK OR SOLID CEILING ABOVE WITH 1.3/4" SOLID-CORE OR 1/4" CLASS OPENING PROTECTIVES CONSTRUCTION: 8" & 12" CONCRETE MASONRY UNITS OR 3.5/8" & 6" METAL STUDS W/ 5/8" GYP. BD. ON BOTH SIDES	



NORTH

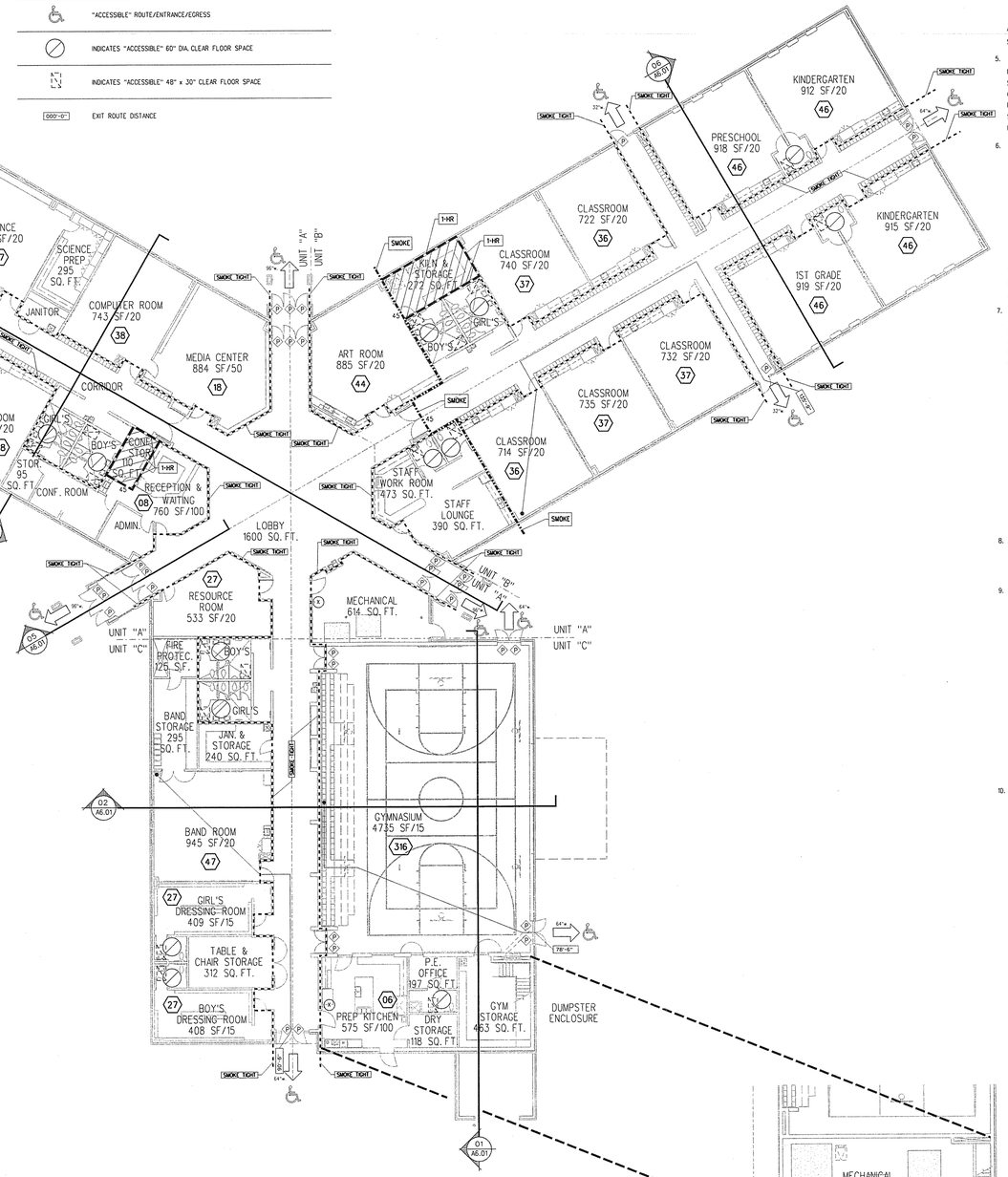
SMOKE COMPARTMENT PLAN

NOT TO SCALE

GENERAL NOTES:

1. FINISH FLOOR ELEVATION = 659.0' = 100'-0"
2. REFERENCE STRUCTURAL DRAWINGS FOR CONCRETE SLAB SIZES AND WALL REINFORCING AT BEARING CONDITIONS.
3. CONSTRUCTION AND/OR CONTROL JOINTS SHALL BE ON A 20'-0" SQUARE GRID (MAX.) UNLESS OTHERWISE NOTED. ALL CONSTRUCTION JOINTS SHALL BE DOWELED W/ 1/2" SMOOTH DOWELS AT 18" o/c. SEE DETAIL 6 & 7/S7.01.
4. INSTALL 1/2" PRE MOLDED EXPANSION MATERIAL AT JOINTS BETWEEN FLOOR SLAB AND FOUNDATION WALL UNLESS NOTED OTHERWISE.
5. SEE FOUNDATION PLANS FOR FLOOR SLAB RECESSES FOR TILE, WOOD FLOOR, ETC. (VERIFY RECESS REQUIRED BY MFGR.)
6. EXTEND ALL INTERIOR WALL PARTITIONS (MASONRY OR STUDS) TO BOTTOM OF DECK ABOVE UNLESS NOTED OTHERWISE. SEE DETAIL 12/A7.02.
7. PROVIDE CONTINUOUS U-BLOCK BOND BEAMS AT THE LOCATIONS INDICATED ON WALL SECTIONS OR DETAILS. FILL U-BLOCKS WITH CONCRETE AND REINFORCE WITH (2) #5 BARS CONTINUOUS FOR 8" AND (3) #5 BARS CONTINUOUS FOR 12" UNLESS NOTED OTHERWISE ON DRAWINGS.
8. SEE SPECIFICATIONS FOR STEEL LINTEL SIZES FOR WALL OPENINGS NOT DETAILED (e.g. HVAC DUCTS, ETC.).
9. FIRESTOP ALL INTERCONNECTIONS BETWEEN VERTICAL AND HORIZONTAL SPACES AND CONCEALED WALL SPACES AT THE CEILING, FLOOR, AND ROOF LEVELS.
10. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF OWNER FURNISHED EQUIPMENT, INCLUDING DIMENSIONS OF SUCH AS THEY RELATE TO HIS/HER OWN WORK.
11. DIMENSIONS GIVEN ARE "NOMINAL" AND ARE TO THE FACE OF MASONRY UNITS OR TO THE FACE OF OR CENTERLINE OF METAL STUD PARTITION WALLS.
12. REFER TO INTERIOR ELEVATIONS DETAIL 01/A8.01 FOR TYPICAL BARRIER FREE DIMENSIONS.
13. REFER TO STAIR SECTIONS AND DETAILS FOR ALL HANDRAIL AND GUARDRAIL CONDITIONS.
14. INSTALL SOLID BLOCK BEHIND ALL RECESSED WALL UNITS AS REQUIRED TO MAINTAIN FIRE RATINGS.
15. SEE FLOOR PLANS FOR WALL REINFORCING REQUIRED. (SEE WALL REINFORCING SCHEDULE)
16. WHERE SPLIT FACED OF STRIATED BLOCK IS REQUIRED ON BOTH SIDES OF A WALL AT A LINTEL CONDITION, USE STEEL ANGLE LINTELS PER SPECIFICATIONS IN LIEU OF A U-BLOCK LINTEL.
17. IN WALLS THAT REQUIRE BURNISHED, STRIATED OR SPLIT FACED BLOCK AT THE SAME HEIGHT ON BOTH SIDES OF WALL, (2) BLOCKS ARE REQUIRED WITH LINTELS PER SPECIFICATIONS.
18. RAKE BED JOINTS AT ALL TRANSITIONS OF PAINT LINES AND BLOCK TYPE PAINT COLORS - SEE INTERIOR ELEVATIONS.
19. ALL EXTERIOR BLOCK CORNERS ARE TO BE BULLNOSE BLOCK EXCEPT CONCRETE BLOCK COLUMNS AND PIERS - UNLESS NOTED OTHERWISE.
20. REFER TO PLUMBING DRAWINGS FOR FLOOR DRAINS.
21. REFER TO REFLECTED CEILING PLANS FOR SOFFITS AND BULKHEADS.
22. REFER TO FLOOR PLANS AND EXTERIOR ELEVATIONS FOR WINDOW FRAME TYPES.
23. REFER TO FLOOR PLANS AND INTERIOR ELEVATIONS FOR BORROWED LITE FRAME TYPES.
24. FURNISH & INSTALL 2x12 HORIZONTAL WOOD BLOCKING BETWEEN STUDS WHERE REQUIRED FOR MOUNTING OF UPPER CABINETS OR OTHER EQUIPMENT SHOWN ON INTERIOR ELEVATIONS OR AS SPECIFIED IN CASEWORK, SCIENCE OR BUILDING SPECIALTIES SECTIONS.
24. LIST OF STANDARD ABBREVIATIONS -

"B.F."	-	BARRIER FREE
"F.D."	-	FLOOR DRAIN
"F.E."	-	FIRE EXTINGUISHER
"F.E.C."	-	RECESSED FIRE EXTINGUISHER CABINET
"S.F.E.C."	-	SEMI-RECESSED FIRE EXTINGUISHER CABINET
"F.F."	-	FINISH FLOOR
"H.D."	-	HAND DRYER
"H.R.D."	-	HAIR DRYER
"M.B."	-	MARKER BOARD
"P.T."	-	PRESSURE TREATED
"P.T.D."	-	PAPER TOWEL DISPENSER (SURFACE MOUNTED)
"R.P.T.D."	-	PAPER TOWEL DISPENSER (SEMI-RECESSED)
"S.N.D."	-	SANITARY NAPKIN DISPOSAL
"S.N.V."	-	SANITARY NAPKIN VENDOR
"T.B."	-	TACK BOARD
"T.P.D."	-	TOILET PAPER DISPENSER
"U.N.O."	-	UNLESS NOTED OTHERWISE

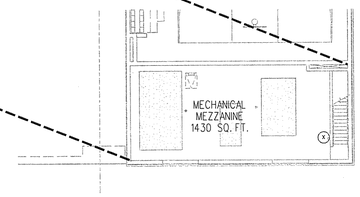


NORTH

OVERALL CODE COMPLIANCE & FLOOR PLAN

1/16" = 1'-0"

37,184 SQ. FT.



NORTH

MEZZANINE FLOOR PLAN

1/16" = 1'-0"

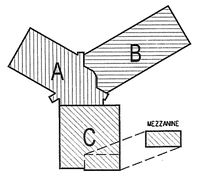
OTHER APPLICABLE CODES

1. **2003 MICHIGAN MECHANICAL CODE**
   BUILDING DESIGNED TO COMPLY WITH
2. **2003 MICHIGAN PLUMBING CODE**
   BUILDING DESIGNED TO COMPLY WITH
3. **2002 MICHIGAN ELECTRICAL CODE**
   BUILDING DESIGNED TO COMPLY WITH
4. **2003 MICHIGAN BUILDING CODE**
   BUILDING DESIGNED TO COMPLY WITH

LIFE SAFETY REVIEW

1. CODE: NFPA 101, 1997 LIFE SAFETY CODE, AS AMENDED BY STATE FIRE MARSHAL
2. CONSTRUCTION TYPE: II (000) COMPLETELY PROTECTED WITH AUTOMATIC FIRE SPRINKLER SYSTEM
   HAZARD OF CONTENTS: ORDINARY HAZARD
3. OCCUPANCY: NEW EDUCATIONAL OCCUPANCY (SPACES SUBJECT TO "ASSEMBLY" OCCUPANCY NOTED ON PLAN)
4. AREA & HEIGHT:
   ALLOWABLE AREA: 14,400 SQ.FT.
   - 28,800 SQ.FT. (AREA INCREASE 200% FOR AUTO. FIRE SUPPRESSION 10-1.6, EXCEPTION NO. 1)
   - 21,600 SQ.FT. (AREA INCREASE 150% FOR TOTAL OPEN PERIMETER 10-1.6, EXCEPTION NO. 4)

   64,800 SQ.FT. TOTAL ALLOWABLE
   ALLOWABLE HEIGHT: 2 STORY
   SMOKE COMPARTMENTS: MINIMUM OF 2 COMPARTMENTS WITH NO LIMIT ON SIZE WHEN BUILDING PROTECTED BY AUTO. SPRINKLER SYSTEM
5. SEPARATION & PROTECTION:
   FIRE AREAS: SEPARATED WITH 2-HOUR FIRE SEPARATION ASSEMBLIES & 90-MINUTE OPENING PROTECTIVES.
   SMOKE AREAS: SEPARATED WITH ONE-HOUR FIRE SEPARATION ASSEMBLIES & 20-MINUTE OPENING PROTECTIVES.
   CORRIDORS: SEPARATED TO RESIST THE PASSAGE OF SMOKE WITH SOLID OPENING PROTECTIVES. (NO FIRE RESISTANCE RATING)
   BOILER & FURNACE ROOMS, STORAGE AREAS, AND JANITOR CLOSETS: NON-RATED SEPARATION & OPENING PROTECTIVES.
   SHOPS AND HAZARDOUS MATERIAL USE/STORAGE AREAS: SEPARATED WITH ONE-HOUR FIRE BARRIER & 45-MINUTE OPENING PROTECTIVES.
   LABORATORIES: SEPARATED WITH ONE-HOUR FIRE BARRIER & 45-MINUTE OPENING PROTECTIVES (NFPA 45 CLASS C LOW HAZARD).
6. OCCUPANT LOAD: (BASED ON FOLLOWING - SEE PLAN)
   CLASSROOMS: 1/20 SF NET
   SHOPS, LABS, VOC. ROOMS: 1/50 SF NET
   ASSEMBLY (CONFERENCE, DINING,
   GYMNASIUM): 1/15 SF NET
   BLEACHERS: 1/18 LIN. INCHES OF SEAT
   KITCHENS: 1/100 SF GROSS
   LIBRARIES (READING AREAS): 1/50 SF NET
   LIBRARIES (STACK AREAS): 1/100 SF GROSS
   STAGES: 1/15 SF NET
   BUSINESS: 1/100 SF GROSS
   LOCKERS: 1/7 SF NET, OR 1/15 SF GROSS INCLUDING SHOWERS, TOILETS & DRYING
7. EGRESS REQUIREMENTS:
   A. 6'-0" MINIMUM CORRIDOR WIDTH (CORRIDOR CAPACITY - OCCUPANT LOAD/REQUIRED NUMBER OF EXITS)
   B. EGRESS WIDTHS - 0.2" PER PERSON (LEVEL OR RAMPED)
   C. 200' MAXIMUM TRAVEL DISTANCE
   D. 20' DEAD-END MAXIMUM TRAVEL IN CORRIDOR.
   E. 75' MAXIMUM COMMON PATH OF TRAVEL
   F. EXITS:
      (1) 2 REMOTE EXITS REQUIRED FOR EDUCATIONAL SPACES >50 PEOPLE OR >1,000 SQ. FT. IN AREA
      (2) MINIMUM NUMBER PER OCCUPANTS: 2 IF < 501, 3 IF < 1001, 4 IF > 1000
      (3) WINDOWS FOR RESCUE NOT REQUIRED IN BUILDINGS PROTECTED BY AUTOMATIC SPRINKLER SYSTEM
      (4) PANIC HARDWARE AT AREAS >100 OCCUPANT LOAD IF DOOR PROVIDED WITH LATCH OR LOCK.
      (5) DISCHARGE: ALL EXITS SHALL TERMINATE AT A PUBLIC WAY OR AN EXTERIOR EXIT DISCHARGE
   G. HORIZONTAL EXITS:
      (1) SUBSTITUTED FOR NO MORE THAN ONE-HALF OF REQUIRED EXITS
      (2) FIRE BARRIERS SEPARATING BUILDING AREAS WITH HORIZ. EXITS BETWEEN SHALL BE 2-HOUR RATED
      (3) WHERE SERVING BOTH SIDES OF FIRE BARRIER ADJACENT OPENINGS REQUIRED WITH DOORS SWINGING IN OPPOSITE DIRECTIONS
   H. DOORS:
      (1) MINIMUM CLEAR WIDTH SHALL BE 32"
      (2) SIDE HINGED
      (3) SWING IN DIRECTION OF TRAVEL WHERE OCCUPANT LOAD IS > 50
      (4) SELF-CLOSING OR AUTOMATIC-CLOSING IN FIRE BARRIERS AND HORIZONTAL EXITS
8. INTERIOR FINISH:
   A. EXITS - CLASS A.
   B. ALL OTHER - CLASS A, B, OR C.
   C. INTERIOR WALL & CEILING FINISH IF LESS THAN 10% OF AGGREGATE WALL & CEILING AREAS OF ANY ROOM MAY BE CLASS C.
9. ILLUMINATION & ALARM SYSTEMS:
   A. ILLUMINATION OF MEANS OF EGRESS
      (1) REQUIRED FOR CORRIDORS & PASSAGEWAYS LEADING TO AN EXIT - SEE ELECTRICAL DRAWINGS FOR LAYOUT
      (2) CONTINUOUS ILLUMINATION DURING OCCUPANCY (MIN. ONE FOOT CANDLE AT FLOOR LEVEL)
   B. EMERGENCY LIGHTING
      (1) REQUIRED FOR CORRIDORS, INTERIOR STAIRS, INTERIOR OR WINDOWLESS AREAS, SHOPS, LABORATORIES, AND OTHER NORMALLY OCCUPIED SPACES EXCEPT ADMINISTRATIVE AREAS, GENERAL CLASSROOMS, MECHANICAL ROOMS, AND STORAGE AREAS.
      (2) DURATION OF 1 1/2 HOURS WITH INITIAL ILLUMINATION AVERAGE OF ONE FOOT CANDLE
      (3) SEE ELECTRICAL DRAWINGS FOR LAYOUT
   C. EXIT SIGNS
      (1) REQUIRED FOR EXITS AND EXIT ACCESS MEANS - SEE ELECTRICAL DRAWINGS FOR LAYOUT
      (2) SIGNS SHALL BE CONTINUOUSLY ILLUMINATED DURING OCCUPANCY AND ALSO BY EMERGENCY LIGHTING FACILITES
   D. FIRE ALARM SYSTEM
      (1) REQUIRED FOR EDUCATIONAL AND ASSEMBLY OCCUPANCIES - SEE ELECTRICAL DRAWINGS FOR LAYOUT
      (2) INITIATION SHALL BE BY MANUAL PULL STATIONS AND/OR OPERATION OF THE AUTOMATIC FIRE SPRINKLER SYSTEM
      (3) NOTIFICATION SHALL BE BY AUDIBLE AND VISIBLE SIGNALS COMPLYING WITH NFPA 72 AND ANSI A117.1
      (4) SHALL ACTUATE THE RELEASE OF HOLD-OPEN DEVICES FOR DOORS & OTHER OPENING PROTECTIVES, SHALL ACTUATE THE EMERGENCY LIGHTING SYSTEM, AND ACTUATE THE EMERGENCY SHUT-OFF OF GAS & FUEL SUPPLIES
      (5) SYSTEM CONTROL STATION LOCATED IN THE GENERAL OFFICE AREA
10. OTHER PROVISIONS:
    BUILDING CONSTRUCTION - NFPA 220, 221 & 251
    OPENING PROTECTIVES (DOORS & WINDOWS) - NFPA 80, 252 & 257
    ELECTRICAL - NFPA 70 (NEC)
    HVAC - NFPA 90A, 90B, 91 & 54
    NATURAL GAS EQUIPMENT & PIPING - NFPA 54
    COMMERCIAL COOKING EQUIPMENT - NFPA 96
    LABORATORIES - NFPA 45
    FIRE ALARM SYSTEM - NFPA 70 & 72
    AUTOMATIC FIRE SPRINKLER SYSTEMS - NFPA 13
    FIRE EXTINGUISHERS - NFPA 10
    WHEELCHAIR LIFT - ANSI A117.1, ASME/ANSI A17.1 & ASME/ANSI A18.1
    FLAMMABLE & COMBUSTIBLE LIQUIDS - NFPA 30, 58, & PUBLIC ACT 207-1941



NORTH

OVERALL KEY PLAN

NOT TO SCALE

GMB
GMB Architects + Engineers
66 East Eighth Street, Holland, MI 49423

DRAWN BY	ISSUANCES	REVISIONS
RLW	09/16/05 PLANNING REVIEW SET	
	09/30/05 OWNER REVIEW SET	
	11/23/05 PDS PERMIT SET	
	12/09/05 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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OVERALL CODE COMPLIANCE & FLOOR PLAN

A1.01

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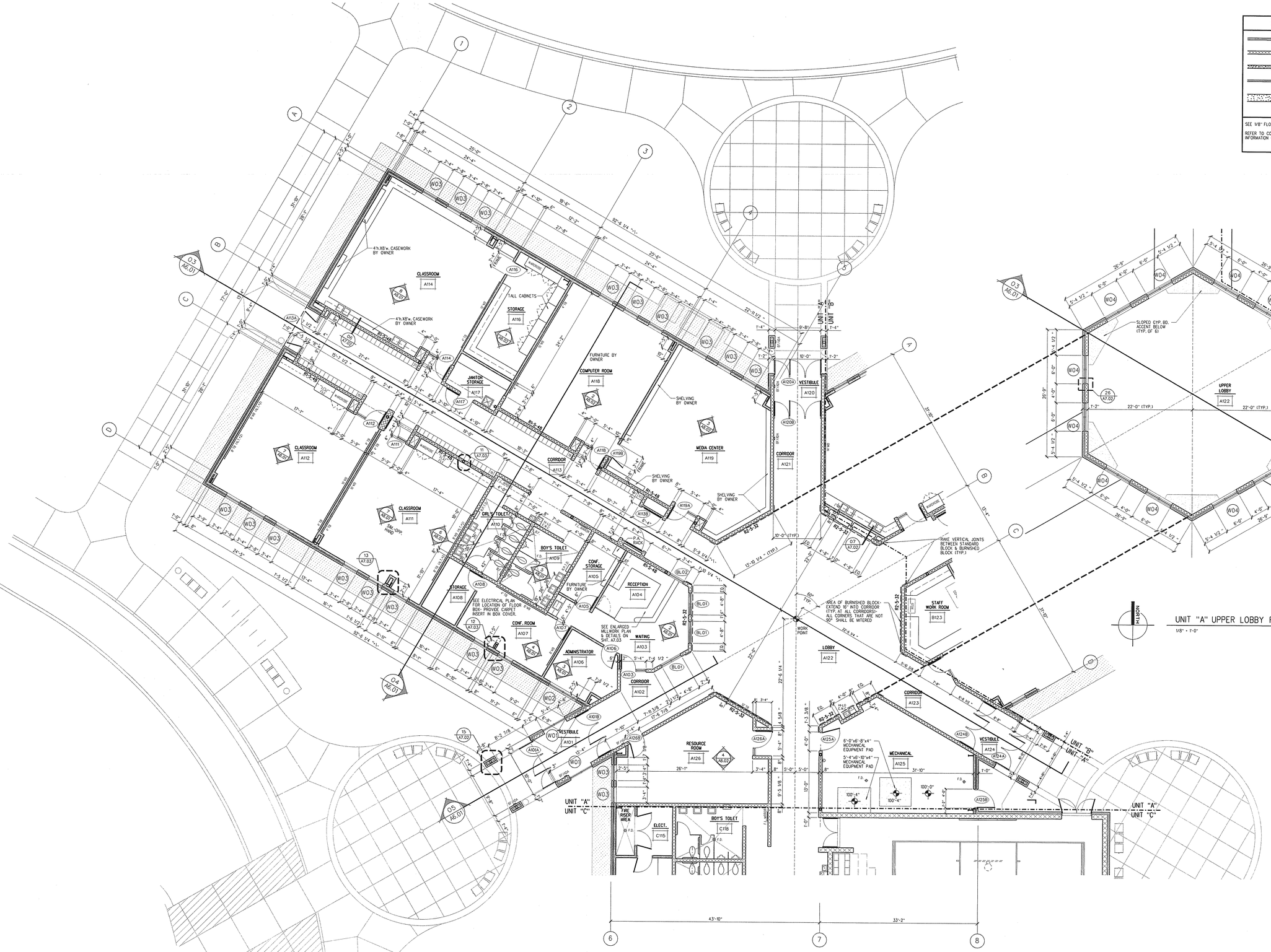
WALL MATERIAL LEGEND	
	3 1/2", 3 5/8" OR 6" METAL STUD FRAMING WITH ACOUSTICAL BATT INSULATION
	4", 6", 8", 12", OR 16" C.M.U.
	C.M.U. WALL WITH SAND OR GROUT FILL FOR SOUND
	BRICK OR STONE VENEER
	POURED CONCRETE

SEE 1/8" FLOOR PLANS FOR WALL MATERIALS

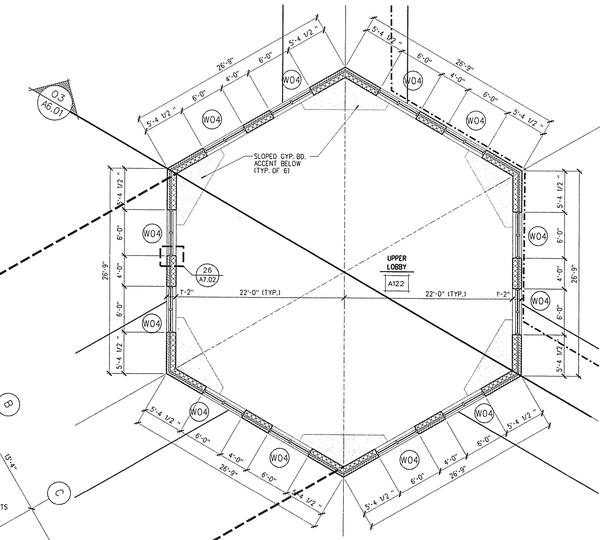
REFER TO CODE COMPLIANCE PLANS FOR FIRE RATING INFORMATION ON WALLS.



NORTH

UNIT "A" FLOOR PLAN

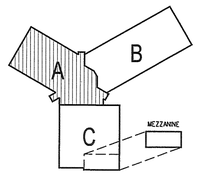
1/8" = 1'-0"



NORTH

UNIT "A" UPPER LOBBY FLOOR PLAN

1/8" = 1'-0"



OVERALL KEY PLAN

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GMB
GMB Architects + Engineers
65 East Eighth Street, Suite 200
Holland, MI 49423

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

ISSUANCES	REVISIONS
DRAWN BY	
ELW	08.14.06 ALTERNATE FLOORING REVIEW
	10.13.06 OWNER REVIEW SET
	11.17.06 FOR BIDS & PERMIT REVISIONS
	12.13.06 FOR BIDS & PERMIT REVISIONS
	12.08.06 FOR BIDS AND CONSTRUCTION

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UNIT "A" FLOOR PLAN

A2.1A

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WALL MATERIAL LEGEND

- 3-1/2",3.5/8" OR 6" METAL STUD FRAMING WITH ACOUSTICAL BATT INSULATION
- 4",6",8",12", OR 16" C.M.U.
- C.M.U. WALL WITH SAND OR GROUT FILL FOR SOUND
- BRICK OR STONE VENEER
- POURED CONCRETE

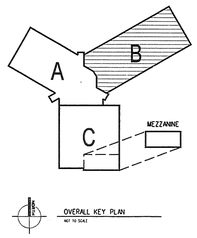
SEE 1/8" FLOOR PLANS FOR WALL MATERIALS

REFER TO CODE COMPLIANCE PLANS FOR FIRE RATING INFORMATION ON WALLS.

NORTH

UNIT "B" FLOOR PLAN

1/8" = 1'-0"



OVERALL KEY PLAN
NOT TO SCALE

GMB Architects + Engineers
2211 Celebration Drive NW
85 East Eighth Street, Suite 200
Holland, MI 49423

DRAWN BY	ISSUANCES	REVISIONS
RLW	08/17/06 ALLENDALE TOWNSHIP REVIEW	
	10/30/06 OWNER REVIEW SET	
	11/29/06 FOR PLC ENGINEERED PACKAGE	
	12/01/06 FOR OWNER REVIEW	
	12/08/06 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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UNIT "B" FLOOR PLAN

A2.1B

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WALL MATERIAL LEGEND	
	3.1/2",3.5/8" OR 6" METAL STUD FRAMING WITH ACOUSTICAL BATT INSULATION
	4",6",8",12",OR 16" C.M.U.
	C.M.U. WALL WITH SAND OR GROUT FILL FOR SOUND
	BRICK OR STONE VENEER
	POURED CONCRETE
SEE 1/8" FLOOR PLANS FOR WALL MATERIALS	
REFER TO CODE COMPLIANCE PLANS FOR FIRE RATING INFORMATION ON WALLS.	

GENERAL NOTES:

1. VERIFY AND APPROVE ALL FLOOR STRIPING & PAINTING (INCLUDING COLORS) WITH OWNER BEFORE WORK IS TO PROCEED.
2. SEE SPECIFICATIONS FOR GYMNASIUM WOOD FLOORING SYSTEM.
3. DIMENSIONS FOR FLOOR LINES ARE TO THE COURT'S EDGE OF LINE UNLESS NOTED AS CENTERLINE.
4. SEE COURT STRIPING NOTES FOR TYP. COURT LINE WIDTHS OR AS NOTED ON PLAN.

COURT STRIPING NOTES:

ACTIVITY	LINE WIDTH	PROOFS
MAIN BASKETBALL	2"+/-	3rd
MINI VOLLEYBALL	2"+/-	2nd
CROSS-COURT BASKETBALL	2"+/-	3rd

OVERALL COURT SIZES:	
MAIN BASKETBALL	42' x 74'
ALL VOLLEYBALL	30' x 60'

WALL REINFORCING SCHEDULE

MARK	NUMBER OF BARS	BAR SIZE (GRADE 60)	BAR SPACING	REMARKS
R2-6-48	2	#6	48" o.c.	SEPARATE IN CORES

NOTE:

MINIMUM REINFORCING (FOR ALL WALLS NOT OTHERWISE NOTED):
ALL BEARING WALLS SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.
ALL EXTERIOR WALLS SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.
ALL INTERIOR NON-BEARING WALLS OVER 16'-0" HIGH SHALL RECEIVE A MINIMUM REINFORCING OF R1-5-48.

ALL MASONRY PIERS SHALL RECEIVE A MINIMUM REINFORCING OF (4) #5 BARS FULL HEIGHT IN GROUTED CORES.

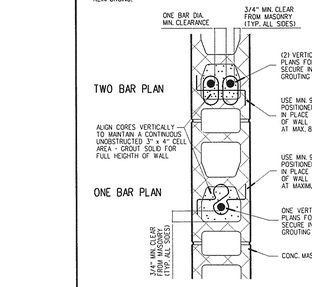
ALL BAR LAPS ARE TO BE 30" MINIMUM.

BLOCK CORES WITH VERTICAL REINFORCING SHALL BE GROUTED SOLID FOR FULL HEIGHT OF WALL.

VERTICAL REINFORCING SHALL BE REQUIRED ON BOTH SIDES OF ALL WALL OPENINGS, BUT IS NOT REQUIRED ABOVE OR BELOW WALL OPENINGS EXCEPT WHERE NOTED OTHERWISE.

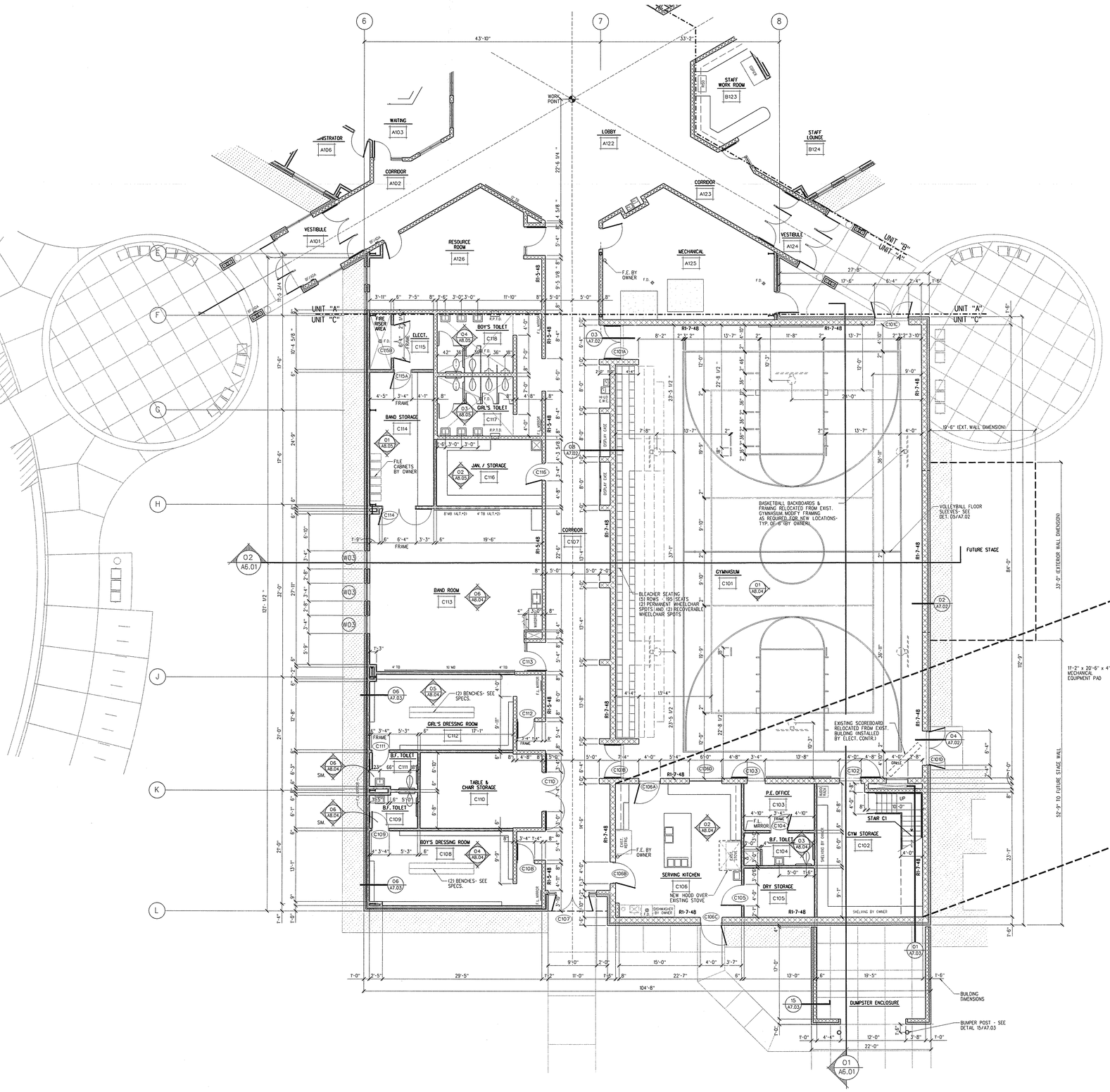
ALL BEARING AND EXTERIOR WALLS NOT OTHERWISE NOTED SHALL RECEIVE A MINIMUM WALL REINFORCING OF R1-5-48. (SEE PLANS)

WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOCK CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN 6 VERTICAL. DOWELS MAY BE GROUTED INTO A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.



WALL REINFORCING DETAIL

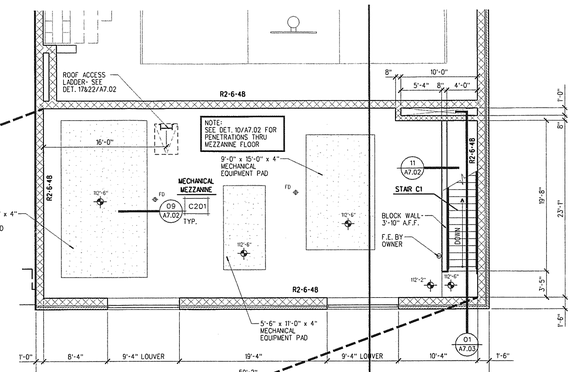
1 1/2" = 1'-0"



NORTH

UNIT "C" FLOOR PLAN

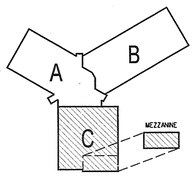
1/8" = 1'-0"



NORTH

UNIT "C" MEZZANINE FLOOR PLAN

1/8" = 1'-0"



NORTH

OVERALL KEY PLAN

NOT TO SCALE

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2211 Woodcreek Oaks Blvd
#3 East of Woodcreek Oaks
Holland, MI 49423

ISSUANCES	REVISIONS
05/31/06 ALLENDALE TOWNSHIP REVIEW	
09/20/06 OWNER REVIEW SET	
11/29/06 FOR PERMIT SET	
12/04/06 FIRE DEPARTMENT REVIEW	
12/08/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: RLW

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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UNIT "C" FLOOR PLAN

A2.1C

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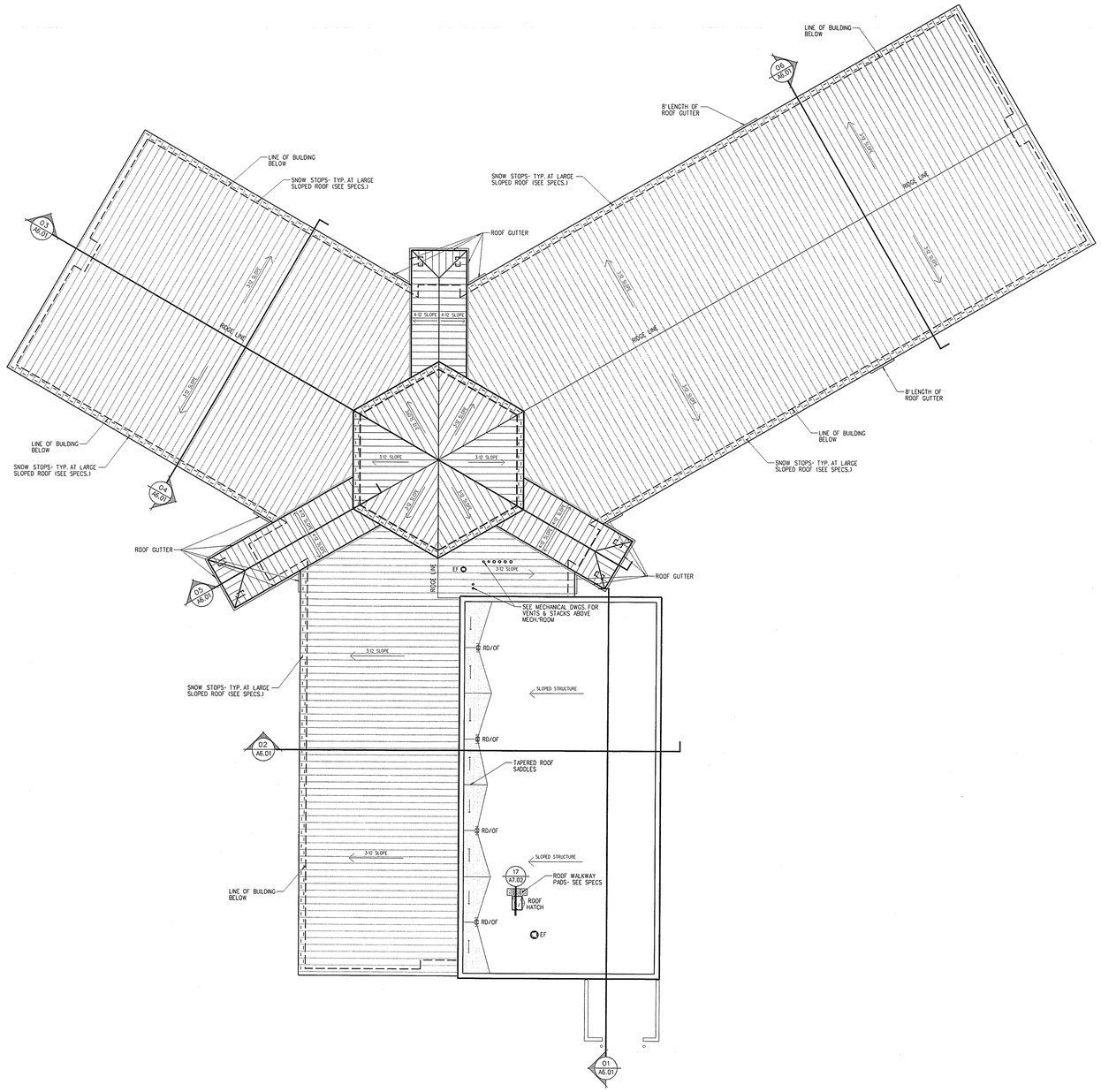
GENERAL NOTES

1. ROOF DETAILS -
   SEE TYPICAL PLUMBING VENT DETAIL 19/A7.02.
   SEE TYPICAL ROOF DRAIN DETAIL 18/A7.02.
   SEE TYPICAL ROOF CURB DETAIL 20&21/A7.02.
   SEE TYPICAL ROOF HATCH DETAIL 17/A7.02.
2. REFER TO PLUMBING DRAWINGS FOR LOCATION AND NUMBER OF PLUMBING VENTS THRU ROOF.
3. REFER TO MECHANICAL DRAWINGS TO COORDINATE ALL ROOF PENETRATIONS & LOCATIONS
4. PROVIDE TAPERED CRICKETS AT ALL ROOF HATCHES AND MECHANICAL ROOF PENETRATIONS. TAPER SHALL PROVIDE DRAINAGE AROUND HATCH AND EQUIPMENT.
5. SEE SPECIFICATION FOR ROOFING SYSTEM TO BE USED AND ROOF PLAN FOR LOCATIONS OF TAPERED INSULATION AND OR SLOPE CHANGES OF ROOF.
6. STANDARD ROOF ABBREVIATIONS -
   "RD" - ROOF DRAIN
   "RD/OF"- ROOF DRAIN W/EMERGENCY OVER FLOW
   "VTR" - VENT THRU ROOF
   "EF" - EXHAUST FAN
   "IV" - INTAKE VENT
   "RTU" - ROOF TOP UNIT
   "RV" - RELIEF VENT

LEGEND

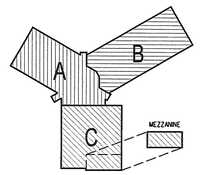
- TAPERED RIGID INSULATION SLOPE TO ROOF DRAINS.
- DIRECTION OF ROOF SLOPE. (SEE STRUCTURAL FOR ALL ROOF FRAMING SLOPES)
- STANDARD ROOF DRAIN
- ROOF DRAIN WITH OVERFLOW
- ROOF HATCH
- ROOF WALKWAY PAD (SEE SPEC FOR MATERIAL)



NORTH

OVERALL ROOF PLAN

1/16" = 1'-0"



OVERALL KEY PLAN
NOT TO SCALE

GMB Architects + Engineers
Suite 200 - Lathrup Village
65 East Edgewood Blvd.
Lansing, MI 48823

ISSUANCES	REVISIONS
08/18/06 ALLENDALE TOWNSHIP REVIEW	
10/30/06 OWNER REVIEW SET	
11/29/06 FOR PRE-ENGINEERED PACKAGE	
12/19/06 FOR OWNER REVIEW	
12/20/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: RLW

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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OVERALL ROOF PLAN

A2.30

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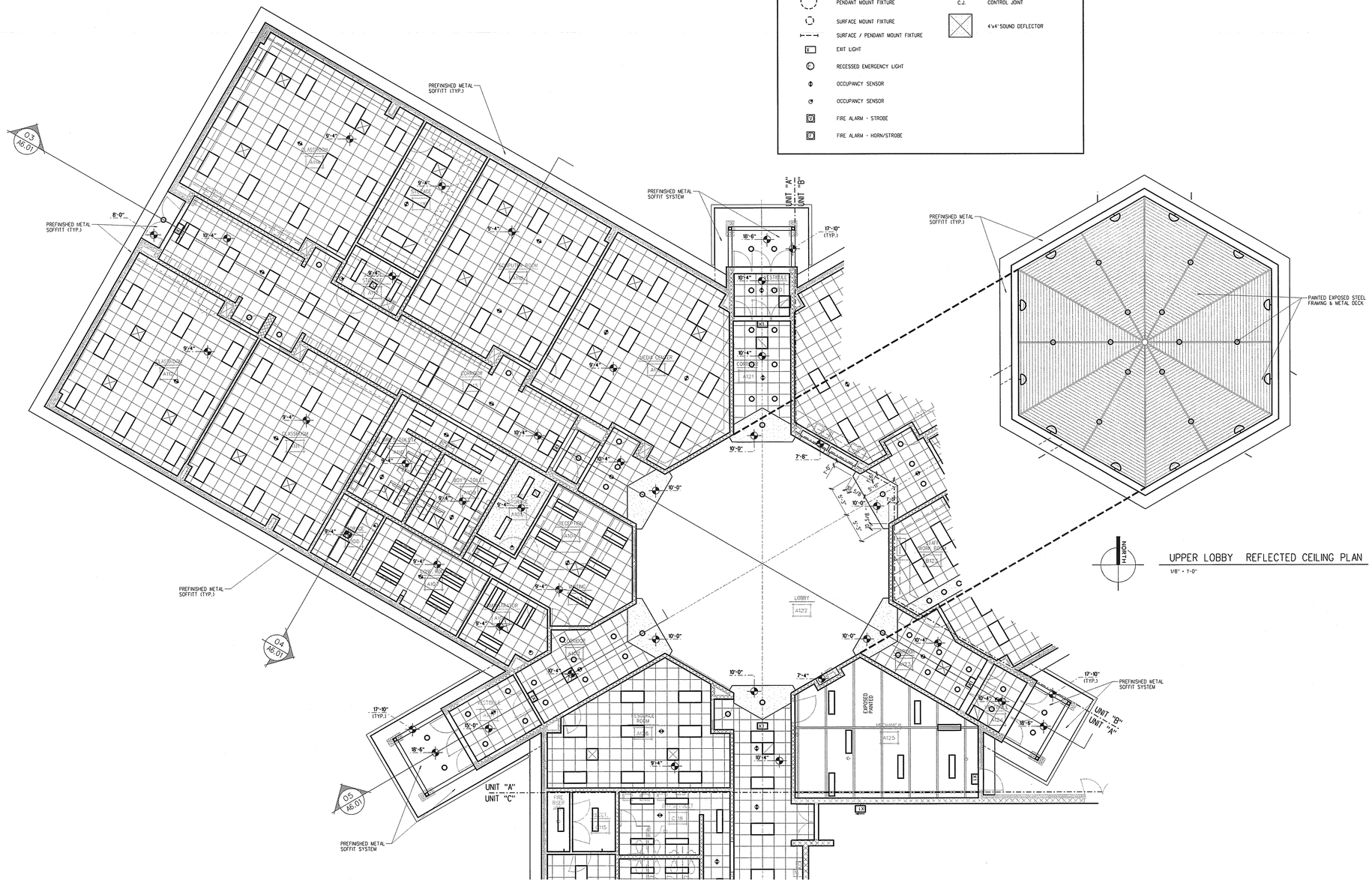
CEILING LEGEND

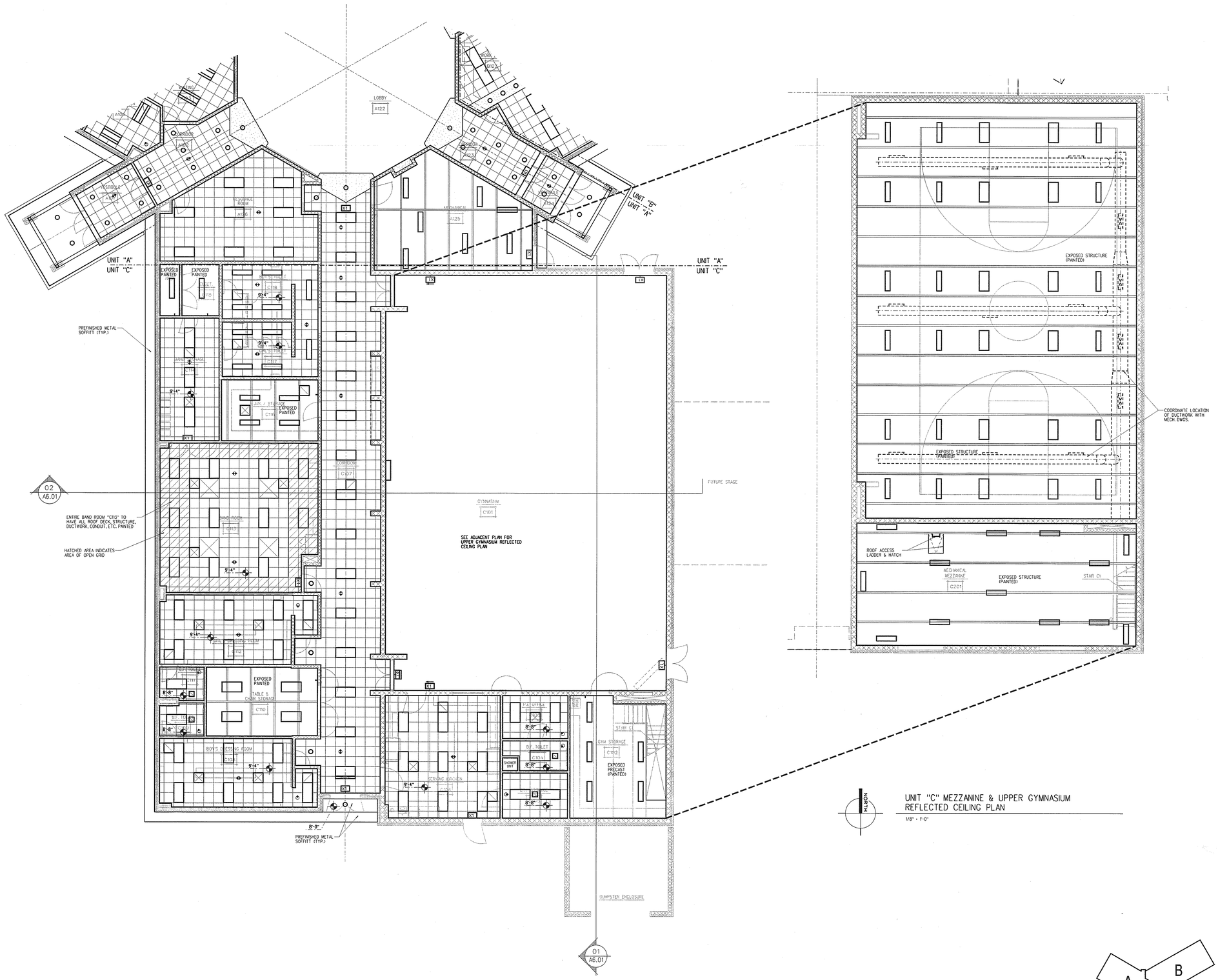
DIRECT FINISH SYSTEM	PA SPEAKER
GYPSUM BOARD CEILING	SMOKE DETECTOR
PREFINISHED VENTED METAL SOFFIT	SUPPLY GRILLE / DIFFUSER
RECESSED LIGHT FIXTURE	RETURN GRILLE / DIFFUSER
RECESSED LIGHT FIXTURE	SLOT DIFFUSER
RECESSED LIGHT FIXTURE	MECHANICAL EQUIPMENT
RECESSED LIGHT FIXTURE	ACCESS DOOR
SURFACE / PENDANT MOUNT FIXTURE	CONTINUOUS SOFFIT VENT
PENDANT MOUNT FIXTURE	SOFFIT GRILLE (8x16 U.O.N.)
SURFACE MOUNT FIXTURE	C.J. CONTROL JOINT
SURFACE / PENDANT MOUNT FIXTURE	4'x4' SOUND DEFLECTOR
EXIT LIGHT	
RECESSED EMERGENCY LIGHT	
OCCUPANCY SENSOR	
OCCUPANCY SENSOR	
FIRE ALARM - STROBE	
FIRE ALARM - HORN/STROBE	

GENERAL CEILING NOTES

1. CONTRACTOR SHALL FOLLOW GRID PATTERN ESTABLISHED ON THE REFLECTED CEILING PLAN. ANY VARIATIONS SHALL BE APPROVED BY THE ARCHITECT.
2. CEILING TYPE NOTED ON ROOM FINISH SCHEDULE. CEILING HEIGHTS NOTED ON REFLECTED CEILING PLANS. CEILING ELEVATIONS ARE FROM ROOM FINISH FLOOR.
3. WIRE CEILING FROM STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.
4. UNLESS OTHERWISE NOTED, CEILING TO BE SUSPENDED METAL TEE AND ACOUSTICAL TILE 2'-0"x 2'-0" OR 2'-0"x 4'-0" TYPICAL. SEE SPECIFICATIONS FOR MANUFACTURER AND STYLE.
5. PENDANT MOUNTED FIXTURES CENTERED ON GRID REQUIRE GRID TO BE CUT AND SUPPORTED ON EACH SIDE.
6. MOUNT SPEAKERS AND SUPPLY AIR DIFFUSERS IN THE CENTER OF WHOLE CEILING PANELS.
7. ADHERE A RIGID PANEL BACKER TO PANELS AT LOCATIONS WHICH INDICATE SPEAKERS, DIFFUSERS, LIGHTS, SMOKE DETECTORS, EXIT LIGHTS AND FIRE PROTECTION SPRINKLERS.
8. PROVIDE 2'-0" CEILING GRID CROSS-TEE AT EACH RETURN AIR GRILLE.
9. PROVIDE AN ADDITIONAL CROSS-TEE AT EACH SLOT DIFFUSER.
10. REFER TO THE MECHANICAL DRAWINGS FOR LOUVERS REQUIRED TO BE FRAMED IN GYPSUM BOARD BULKHEADS.



PREFINISHED METAL SOFFITT (TYP.)
06
A6.01
UNIT "A"
UNIT "B"
VESTIBULE
A101
CORR.
A121
LOBBY
A122
ART ROOM
A108
CLASSROOM
A103
CLASSROOM
A104
CLASSROOM
A105
CLASSROOM
A106
CLASSROOM
A107
ART ROOM
A109
STORAGE
A110
STORAGE
A111
ELEC.
A112
MECH.
A113
ELEC.
A114
MECH.
A115
ELEC.
A116
MECH.
A117
ELEC.
A118
MECH.
A119
ELEC.
A120
MECH.
A124
ELEC.
A125
MECH.
A126
ELEC.
A127
MECH.
A128
ELEC.
A129
MECH.
A130
ELEC.
A131
MECH.
A132
ELEC.
A133
MECH.
A134
ELEC.
A135
MECH.
A136
ELEC.
A137
MECH.
A138
ELEC.
A139
MECH.
A140
ELEC.
A141
MECH.
A142
ELEC.
A143
MECH.

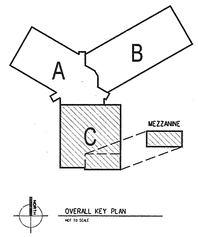


UNIT "C" REFLECTED CEILING PLAN

1/8" = 1'-0"

UNIT "C" MEZZANINE & UPPER GYMNASIUM REFLECTED CEILING PLAN

1/8" = 1'-0"



OVERALL KEY PLAN
not to scale

GMB Architects + Engineers
65 East Elmwood Street - Suite 200
Troy, Michigan 48083

ISSUANCES	REVISIONS
02/15/06 ALLENDALE COMMISSION REVIEW SET	
03/20/06 OWNER REVIEW SET	
04/04/06 FOR PERMANENT MARKING	
07/05/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: RLW

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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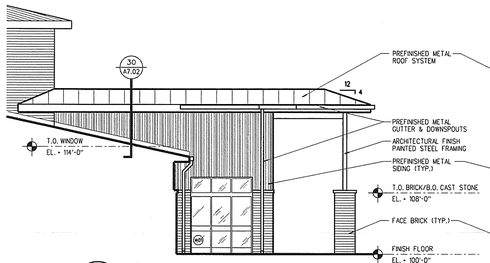
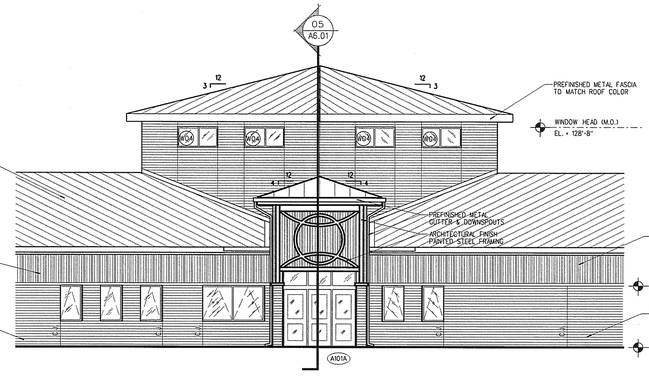
UNIT "C" REFLECTED CEILING PLAN

A3.1C

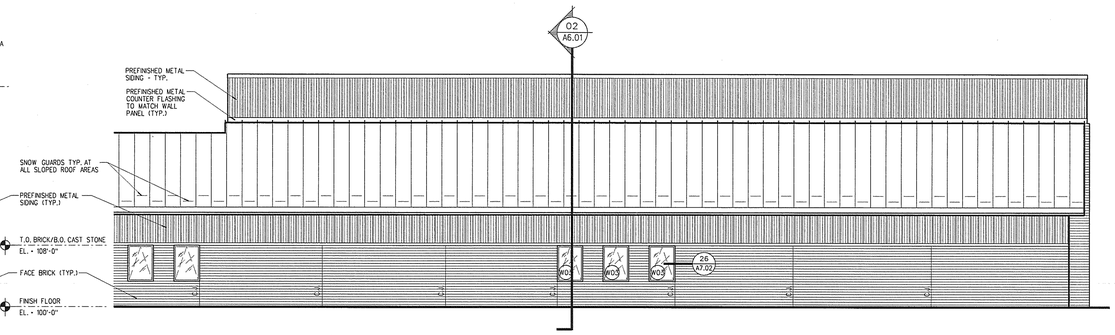
g:\5-0630\5-0630a31c.dgn scott9



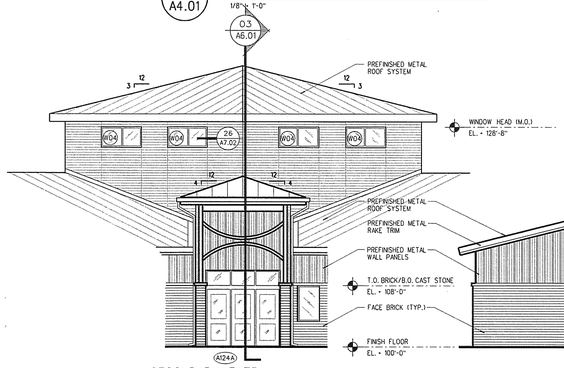
13 A4.01 MAIN ENTRY - SIDE ELEVATION
1/8" = 1'-0"



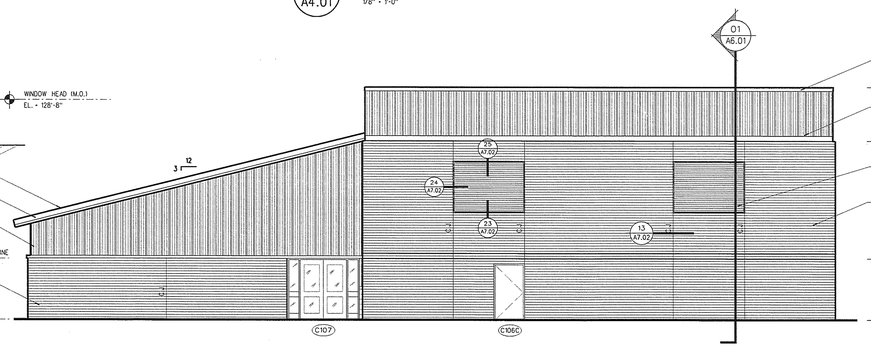
12 A4.01 MAIN ENTRY - FRONT ELEVATION
1/8" = 1'-0"



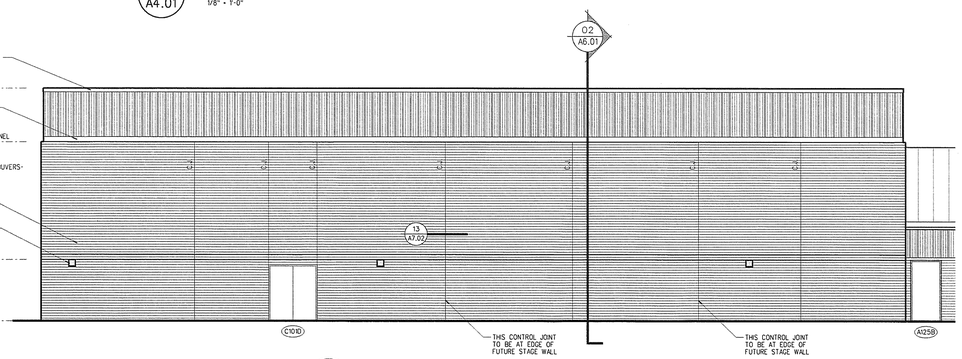
11 A4.01 UNIT "C" - SIDE ELEVATION
1/8" = 1'-0"



10 A4.01 SECONDARY ENTRY FRONT ELEVATION
1/8" = 1'-0"



09 A4.01 UNIT "C" - END ELEVATION
1/8" = 1'-0"



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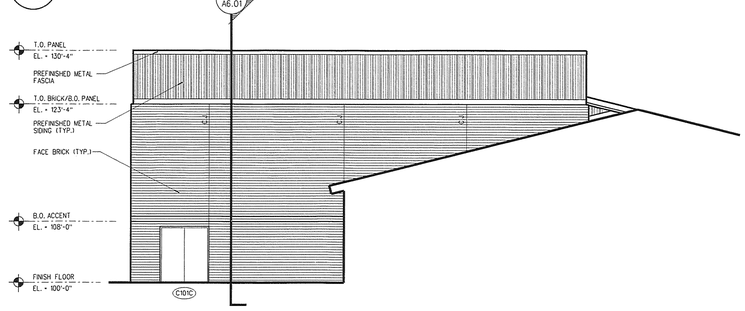
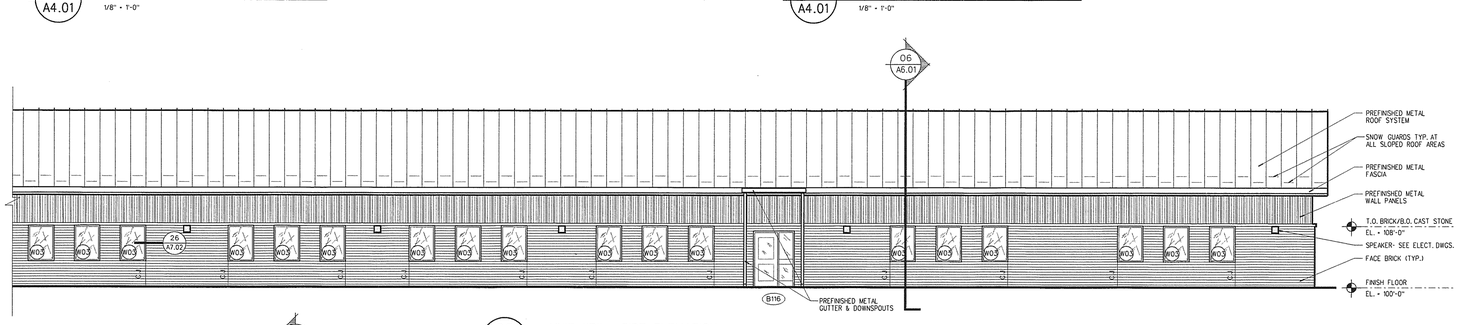
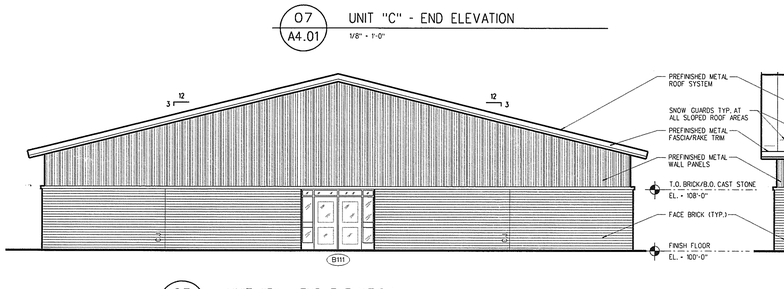
1/8" = 1'-0"



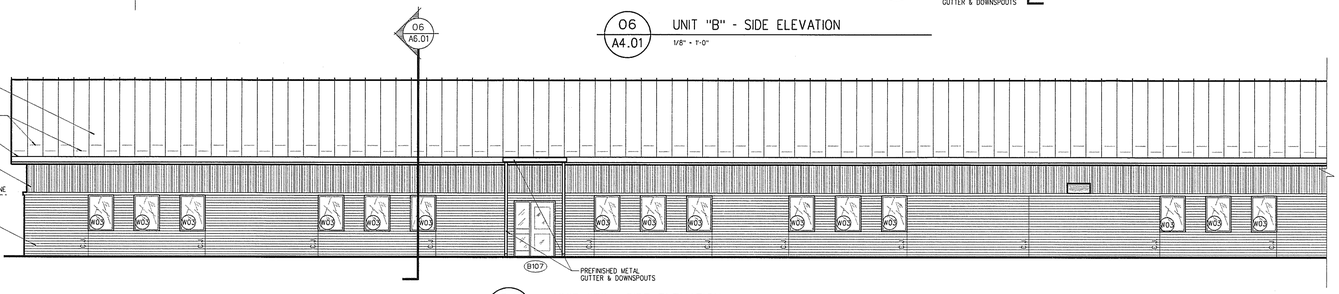
07 A4.01 UNIT "C" - END ELEVATION
1/8" = 1'-0"



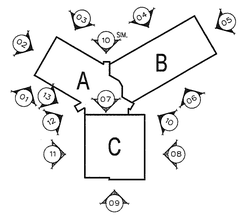
06 A4.01 UNIT "B" - SIDE ELEVATION
1/8" = 1'-0"

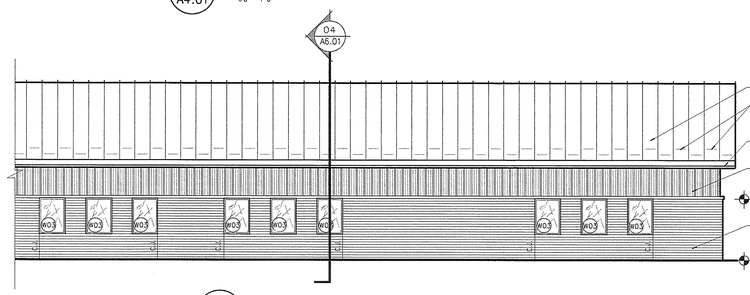


05 A4.01 UNIT "B" - END ELEVATION
1/8" = 1'-0"

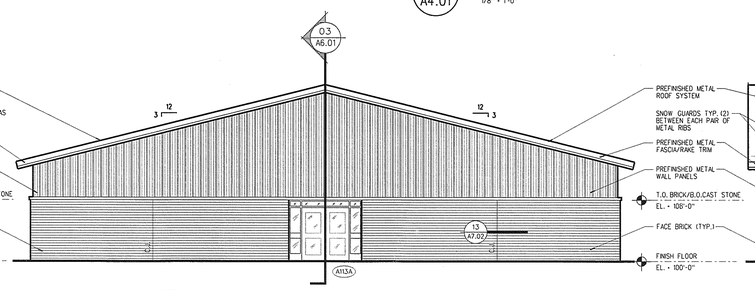


04 A4.01 UNIT "B" - SIDE ELEVATION
1/8" = 1'-0"

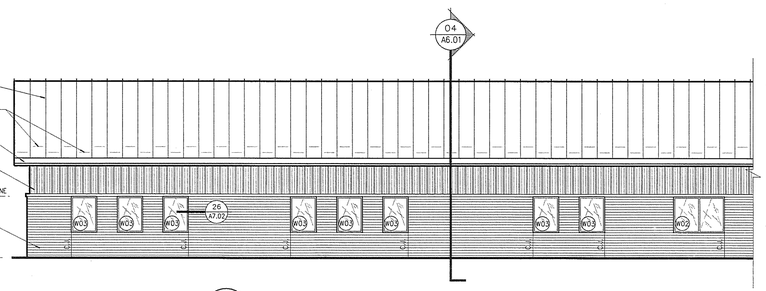




03 A4.01 UNIT "A" - SIDE ELEVATION
1/8" = 1'-0"



02 A4.01 UNIT "A" - END ELEVATION
1/8" = 1'-0"



01 A4.01 UNIT "A" - SIDE ELEVATION
1/8" = 1'-0"

GMB Architects + Engineers
85 East Eighth Street • Suite 200
Holland, MI 49423

ISSUANCES	
08/19/05	ALLENDALE CONCEPT REVIEW
10/30/05	OWNER REVIEW SET
11/29/05	FOR PRE-ENGINEERED FASCIAE
12/19/05	FOR OWNER REVIEW
12/08/06	**FOR BIDS AND CONSTRUCTION**

REVISIONS

DRAWN BY: RLW

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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EXTERIOR ELEVATIONS

A4.01

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GLAZING NOTES:

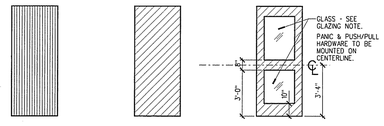
ALL EXTERIOR WINDOWS AND DOOR LITES:
1" INSULATED PER SPECIFICATIONS.

INTERIOR DOOR & BORROWED LITES:
1/4" CLEAR TYPICAL EXCEPT FIRE-RATED - SEE SPECIFICATIONS.

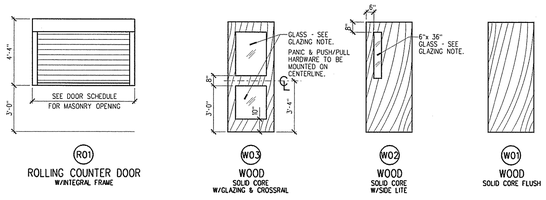
GLASS:
GLASS TO BE TEMERED AS REQUIRED BY SPECIFICATIONS AND APPLICABLE CODES.

MAXIMUM GLASS AREA PER FIRE RATING:
- 180 MIN.LABEL - NO GLASS
- 90 MIN.LABEL - 100 SQ.IN.
- 45 MIN.LABEL - 1296 SQ.IN.
- 20 MIN.LABEL - AS TESTED

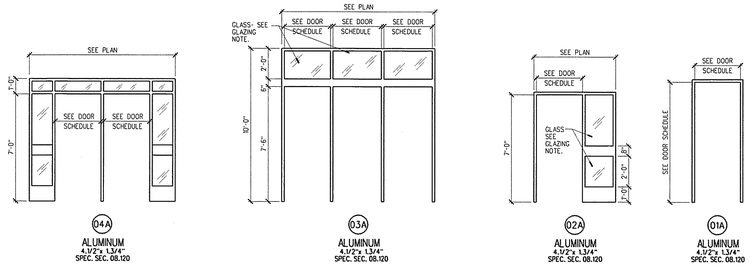
VERIFY COMPLIANCE TO ALL APPLICABLE CODES.



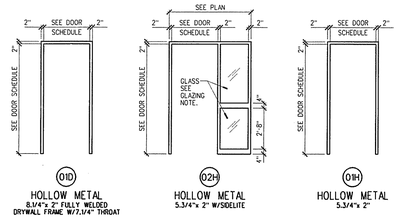
DOOR TYPES



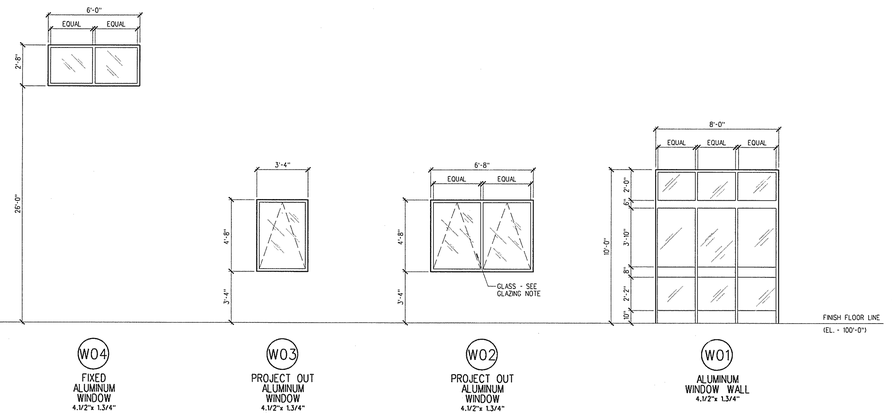
DOOR TYPES



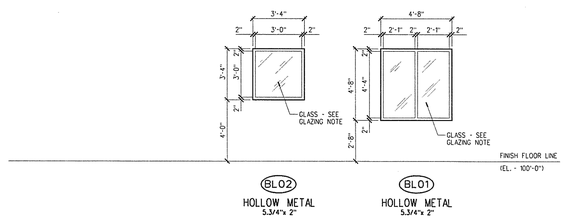
ALUMINUM DOOR FRAME TYPES



HOLLOW METAL DOOR FRAME TYPES



ALUMINUM WINDOW FRAME TYPES



HOLLOW METAL BORROWED LITE FRAME TYPES

DOOR & FRAME SCHEDULE

DOOR NUMBER	DOOR SIZE	DOOR TYPE	FRAME TYPE	FIRE LABEL (MINUTES)	HDWR. SET NO.	DETAILS: HEAD	DETAILS: JAMB	DETAILS: SILL	REMARKS
	UNIT A								
A101A	(2) 3'-0" x 7'-6" x 1.3/4" (1) 3'-4" x 7'-6" x 1.3/4"	A01	03A	--	A01	SIM. 04/A7.01	04/A7.01	04/A7.01	BF/ADA OPERATOR ON 3'-4" DOOR
A101B	(2) 3'-0" x 7'-6" x 1.3/4" (1) 3'-4" x 7'-6" x 1.3/4"	A01	03A	--	A02	05/A7.01	05/A7.01	--------	BF/ADA OPERATOR ON 3'-4" DOOR
A103	3'-0" x 7'-2" x 1.3/4"	W03	02H	--	01	07/A7.01	07/A7.01	--------	------
A105	3'-0" x 7'-0" x 1.3/4"	W01	01D	45	02	08/A7.01	08/A7.01	--------	------
A106	3'-0" x 7'-0" x 1.3/4"	W02	01D	--	03	08/A7.01	08/A7.01	--------	105° SWING
A107	3'-0" x 7'-0" x 1.3/4"	W02	01D	--	03	08/A7.01	08/A7.01	--------	------
A108	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	04	08/A7.01	06&08/A7.01	--------	------
A111	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
A112	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
A113A	(2) 3'-0" x 7'-0" x 1.3/4"	A01	04A	--	A10	01/A7.01	SIM. 02/A7.01	01/A7.01	105° SWING
A113B	(2) 4'-0" x 7'-10" x 1.3/4"	H01	01H	--	06	06/A7.01	09/A7.01	--------	DOOR ON HOLD OPENS
A114	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	07	08/A7.01	07/A7.01	--------	------
A115	3'-0" x 7'-0" x 1.3/4"	W02	01D	--	08	08/A7.01	08/A7.01	--------	------
A117	3'-0" x 7'-2" x 1.3/4"	W01	01H	--	09	06/A7.01	06/A7.01	--------	180° SWING
A118	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
A119A	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
A119B	3'-0" x 7'-0" x 1.3/4"	W04	01D	--	08	08/A7.01	08/A7.01	--------	105° SWING
A120A	(2) 3'-0" x 7'-6" x 1.3/4" (1) 3'-4" x 7'-6" x 1.3/4"	A01	03A	--	A01	04/A7.01	SIM. 02/A7.01	04/A7.01	BF/ADA OPERATOR ON 3'-4" DOOR
A120B	(2) 3'-0" x 7'-6" x 1.3/4" (1) 3'-4" x 7'-6" x 1.3/4"	A01	03A	--	A02	05/A7.01	05/A7.01	--------	BF/ADA OPERATOR ON 3'-4" DOOR
A124A	(2) 3'-0" x 7'-6" x 1.3/4" (1) 3'-4" x 7'-6" x 1.3/4"	A01	03A	--	A04	01/A7.01	SIM. 02/A7.01	01/A7.01	------
A124B	(2) 3'-0" x 7'-6" x 1.3/4" (1) 3'-4" x 7'-6" x 1.3/4"	A01	03A	--	A05	SIM. 05/A7.01	05/A7.01	--------	------
A125A	3'-8" x 7'-2" x 1.3/4"	W01	01H	--	10	06/A7.01	06/A7.01	--------	105° SWING
A125B	3'-8" x 7'-10" x 1.3/4"	A02	01A	--	A06	10/A7.01	10/A7.01	03/A7.01	------
A126A	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	11	08/A7.01	07/A7.01	--------	------
A126B	3'-0" x 7'-2" x 1.3/4"	W02	01H	--	11	06/A7.01	06/A7.01	--------	105° SWING
	UNIT B								
B101	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B102	3'-0" x 7'-0" x 1.3/4"	W01	01D	45	12	08/A7.01	06&08/A7.01	--------	------
B105	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B106	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B107	3'-0" x 7'-2" x 1.3/4"	A01	02A	--	A07	10/A7.01	10/A7.01	03/A7.01	105° SWING
B108	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B109A	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	13	08/A7.01	08/A7.01	--------	------
B109B	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	13	08/A7.01	08/A7.01	--------	------
B110	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B111	(2) 3'-0" x 7'-0" x 1.3/4"	A01	04A	--	A03	01/A7.01	02/A7.01	01/A7.01	105° SWING
B112	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B113A	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	13	08/A7.01	08/A7.01	--------	------
B113B	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	13	08/A7.01	08/A7.01	--------	------
B114	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B115	3'-0" x 7'-2" x 1.3/4"	A01	02A	--	A07	01/A7.01	SIM. 02/A7.01	01/A7.01	105° SWING
B117	4'-0" x 7'-10" x 1.3/4"	H01	01H	45	14	06/A7.01	09/A7.01	--------	DOOR ON HOLD OPENS
B118	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B119	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B120	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	05	08/A7.01	07/A7.01	--------	------
B121	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	15	08/A7.01	08/A7.01	--------	------
B122	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	15	08/A7.01	08/A7.01	--------	------
B124	3'-0" x 7'-2" x 1.3/4"	W01	02H	--	16	07/A7.01	07/A7.01	--------	------
	UNIT C								
C101A	(2) 3'-0" x 7'-2" x 1.3/4"	W02	01H	--	17	06/A7.01	06/A7.01	--------	------
C101B	(2) 3'-0" x 7'-2" x 1.3/4"	W02	01H	--	18	06/A7.01	06/A7.01	--------	------
C101C	(2) 3'-0" x 7'-2" x 1.3/4"	A02	01A	--	A08	03/A7.01	02/A7.01	03/A7.01	105° SWING
C101D	(2) 3'-0" x 7'-2" x 1.3/4"	A02	01A	--	A08	03/A7.01	02/A7.01	03/A7.01	105° SWING
C102	(2) 3'-0" x 7'-2" x 1.3/4"	W01	01H	--	19	06/A7.01	06/A7.01	--------	180° SWING
C103	3'-0" x 7'-2" x 1.3/4"	W01	01H	--	20	06/A7.01	06/A7.01	--------	180° SWING
C104	3'-0" x 7'-0" x 1.3/4"	W01	01H	--	21	08/A7.01	08/A7.01	--------	105° SWING
C105	3'-8" x 7'-0" x 1.3/4"	W01	01H	--	22	08/A7.01	08/A7.01	--------	------
C106A	3'-8" x 7'-2" x 1.3/4"	W02	01H	--	23	06/A7.01	06/A7.01	--------	105° SWING
C106B	3'-8" x 7'-2" x 1.3/4"	W02	01H	--	23	06/A7.01	06/A7.01	--------	105° SWING
C106C	3'-8" x 7'-2" x 1.3/4"	A02	01A	--	A09	03/A7.01	02/A7.01	03/A7.01	105° SWING
C106D	6'-0"w. x 4'-0"h.	R01	---	--	30	11/A7.01	11/A7.01	11/A7.01	ROLLING COUNTER DOOR
C107	(2) 3'-0" x 7'-6" x 1.3/4"	A01	04A	--	A10	01/A7.01	SIM. 02/A7.01	01/A7.01	105° SWING
C108	3'-0" x 7'-0" x 1.3/4"	W01	01H	--	24	08/A7.01	06/A7.01	--------	------
C109	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	21	08/A7.01	08/A7.01	--------	------
C110	(2) 3'-0" x 7'-2" x 1.3/4"	W01	01H	--	25	06/A7.01	06/A7.01	--------	180° SWING
C111	3'-0" x 7'-0" x 1.3/4"	W01	01D	--	21	08/A7.01	08/A7.01	--------	------
C112	3'-0" x 7'-0" x 1.3/4"	W01	01H	--	24	08/A7.01	06/A7.01	--------	------
C113	3'-0" x 7'-0" x 1.3/4"	W01	02H	--	26	08/A7.01	07/A7.01	--------	------
C114	(2) 3'-0" x 7'-0" x 1.3/4"	W02	01D	--	19	08/A7.01	08/A7.01	--------	105° SWING
C115A	3'-0" x 7'-0" x 1.3/4"	H01	01D	--	27	08/A7.01	08/A7.01	--------	105° SWING
C115B	(2) 3'-0" x 7'-0" x 1.3/4"	H01	01D	--	28	08/A7.01	08/A7.01	--------	105° SWING
C116	3'-0" x 7'-2" x 1.3/4"	W01	01H	--	29	06/A7.01	06/A7.01	--------	105° SWING

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RLW	08/11/05 ALLENDALE TOWNSHIP REVIEW	
	10/30/05 OWNER REVIEW SET	
	11/29/05 FOR OWNER REVIEW	
	12/01/05 TCPL PKG ENGINEERED PACKAGE	
	12/08/05 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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DOOR SCHEDULE, DOOR & WINDOW TYPES

A5.01

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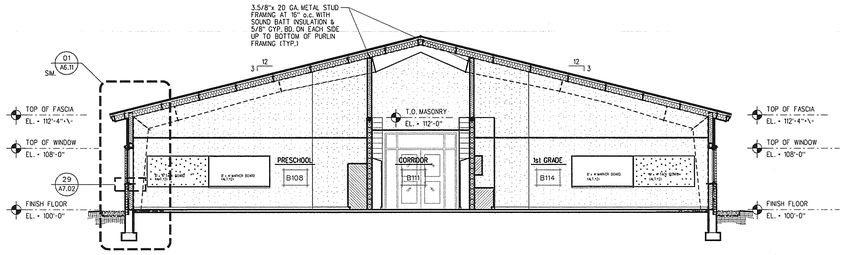
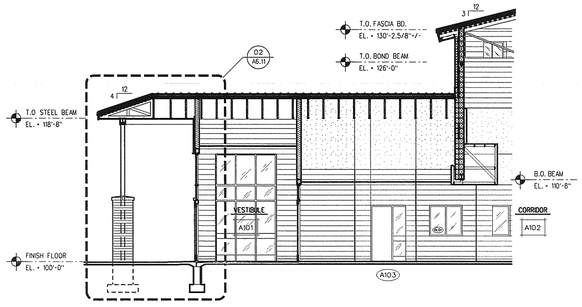
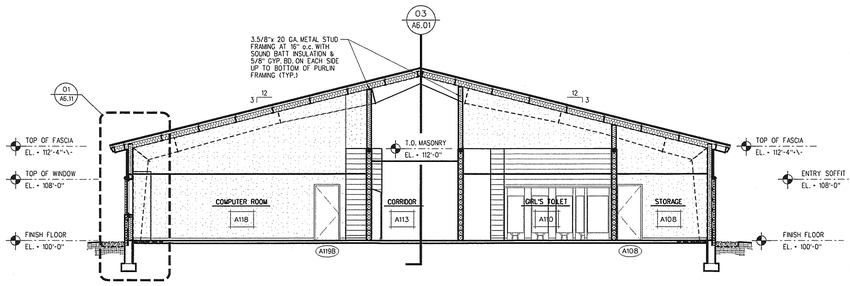
NOTE:
SEE DETAIL 12/A7.02 FOR TYPICAL TOP OF WALL DETAILS AT DECK



06 A6.01 BUILDING SECTION
1/8" = 1'-0"



05 A6.01 BUILDING SECTION
1/8" = 1'-0"



04 A6.01 BUILDING SECTION
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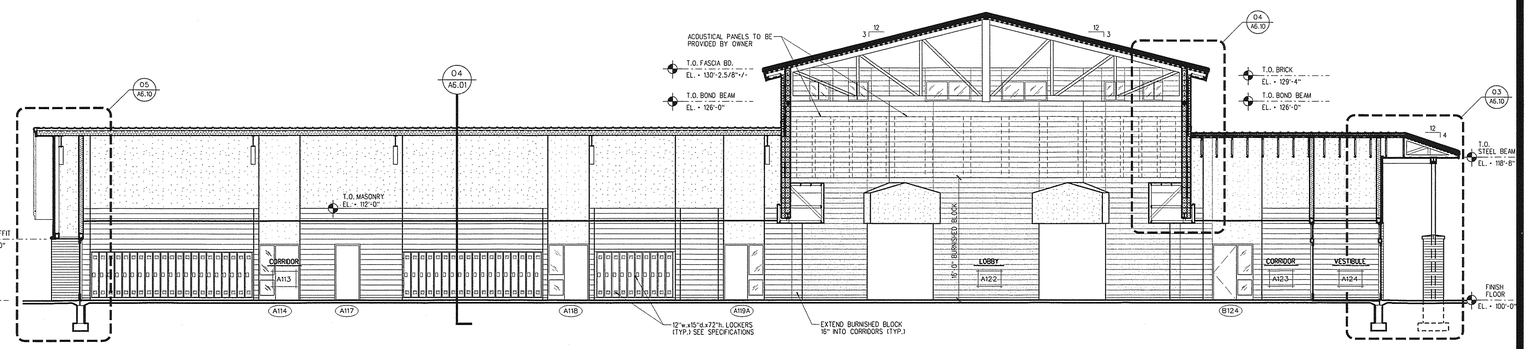
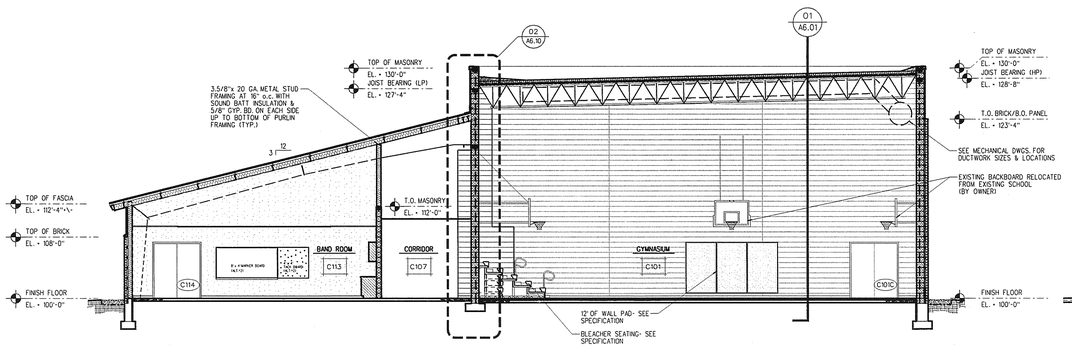
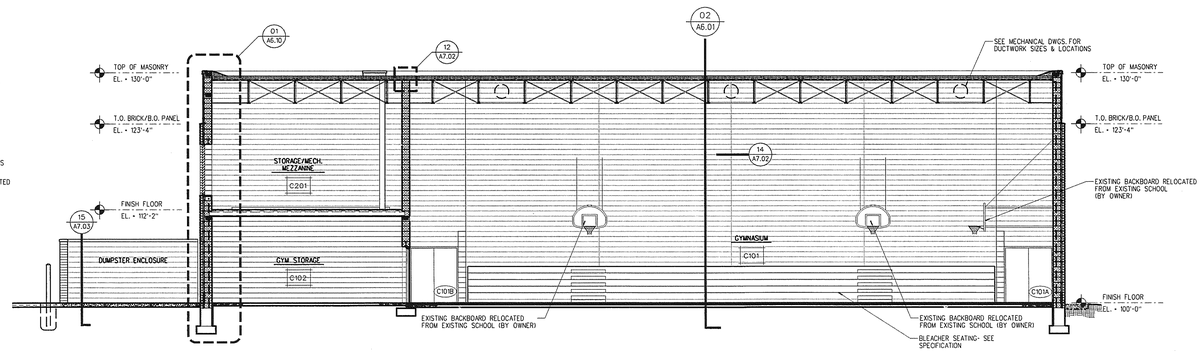


03 A6.01 BUILDING SECTION
1/8" = 1'-0"



02 A6.01 BUILDING SECTION
1/8" = 1'-0"



01 A6.01 BUILDING SECTION
1/8" = 1'-0"

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ISSUANCES
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10/30/06 OWNER REVIEW SET
10/30/06 FOR OWNER REVIEW
12/01/06 FOR PRE-ENGINEERED PACKAGE
12/08/06 FOR BID AND CONSTRUCTION

REVISIONS

NEW PK - 8th GRADE FACILITY
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BUILDING SECTIONS

A6.01

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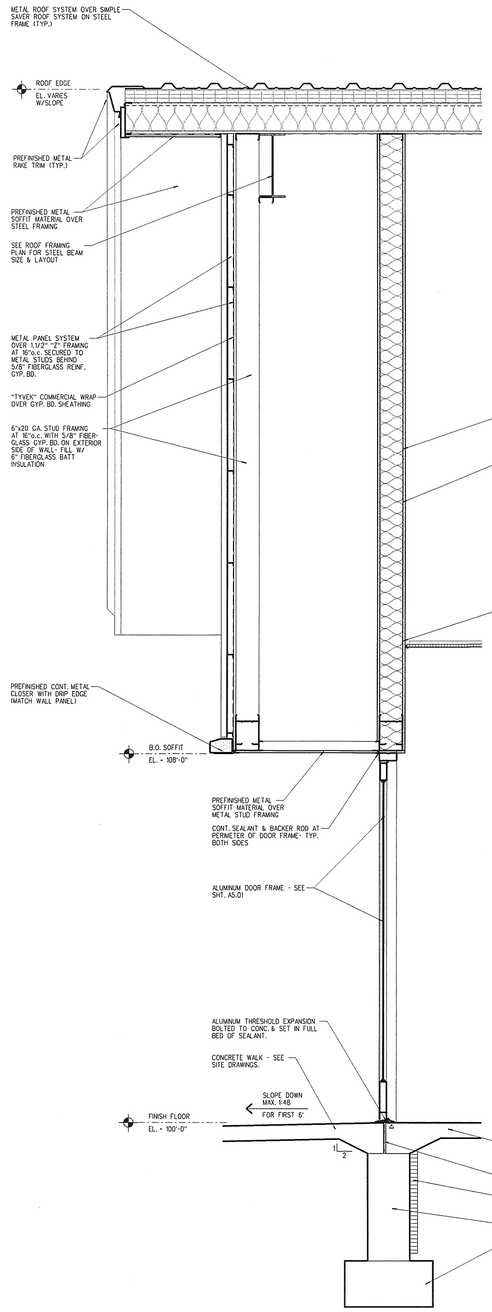
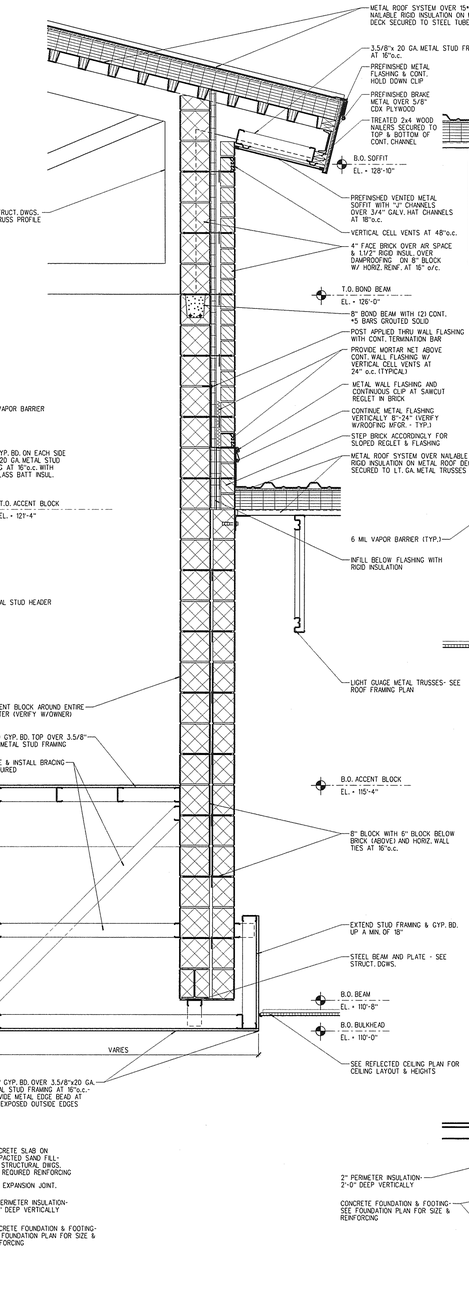
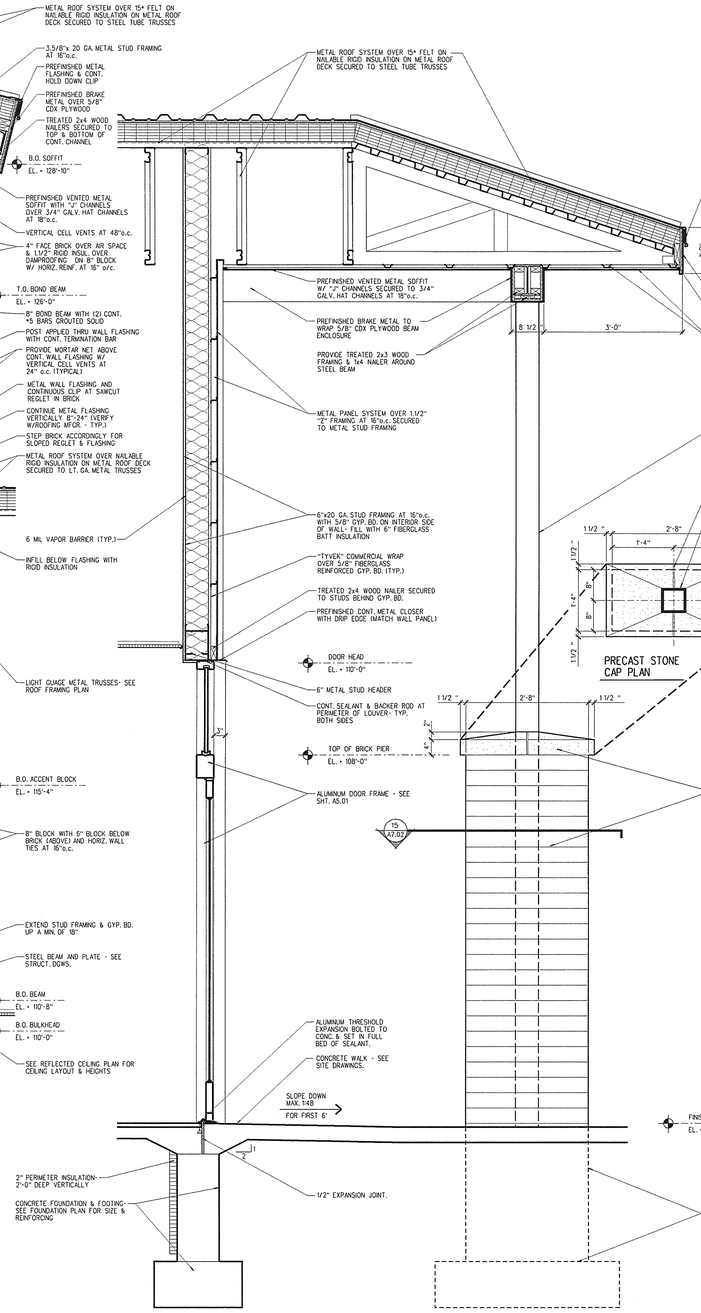
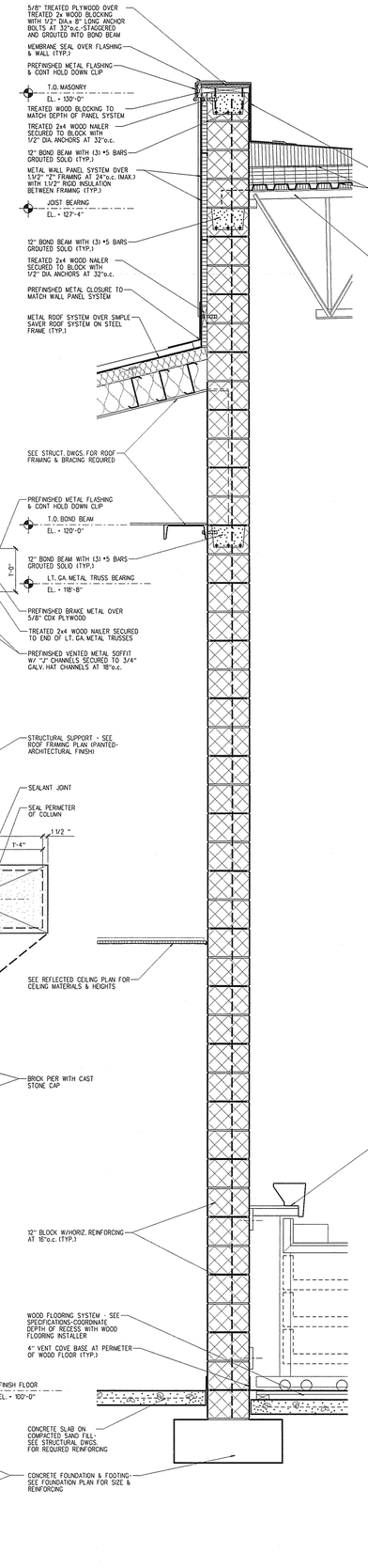
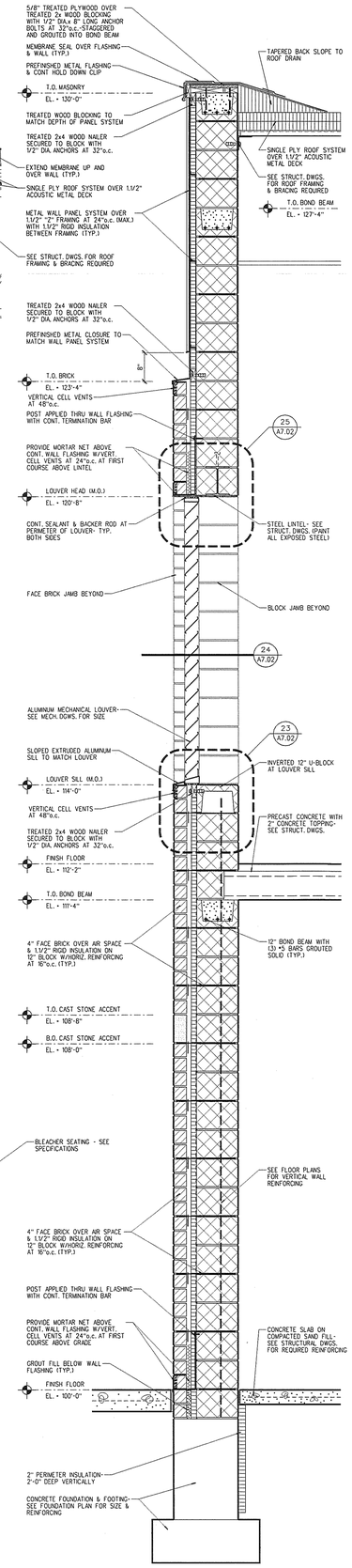
NOTE:
SEE DETAIL 16/A7.02 FOR
TYPICAL COPING SPLICE DETAIL











05 A6.10 WALL SECTION 3/4" • 1'-0"

04 A6.10 WALL SECTION 3/4" • 1'-0"

03 A6.10 WALL SECTION 3/4" • 1'-0"

02 A6.10 WALL SECTION 3/4" • 1'-0"

01 A6.10 WALL SECTION 3/4" • 1'-0"

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11/29/05	FOR OWNER REVIEW
12/19/05	FOR PRE-ENGINEERED PACKAGE
12/30/05	FOR BIDS AND CONSTRUCTION

DRAWN BY: RLW

NEW PK - 8th GRADE FACILITY
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ALLENDALE, MICHIGAN

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WALL SECTIONS

A6.10

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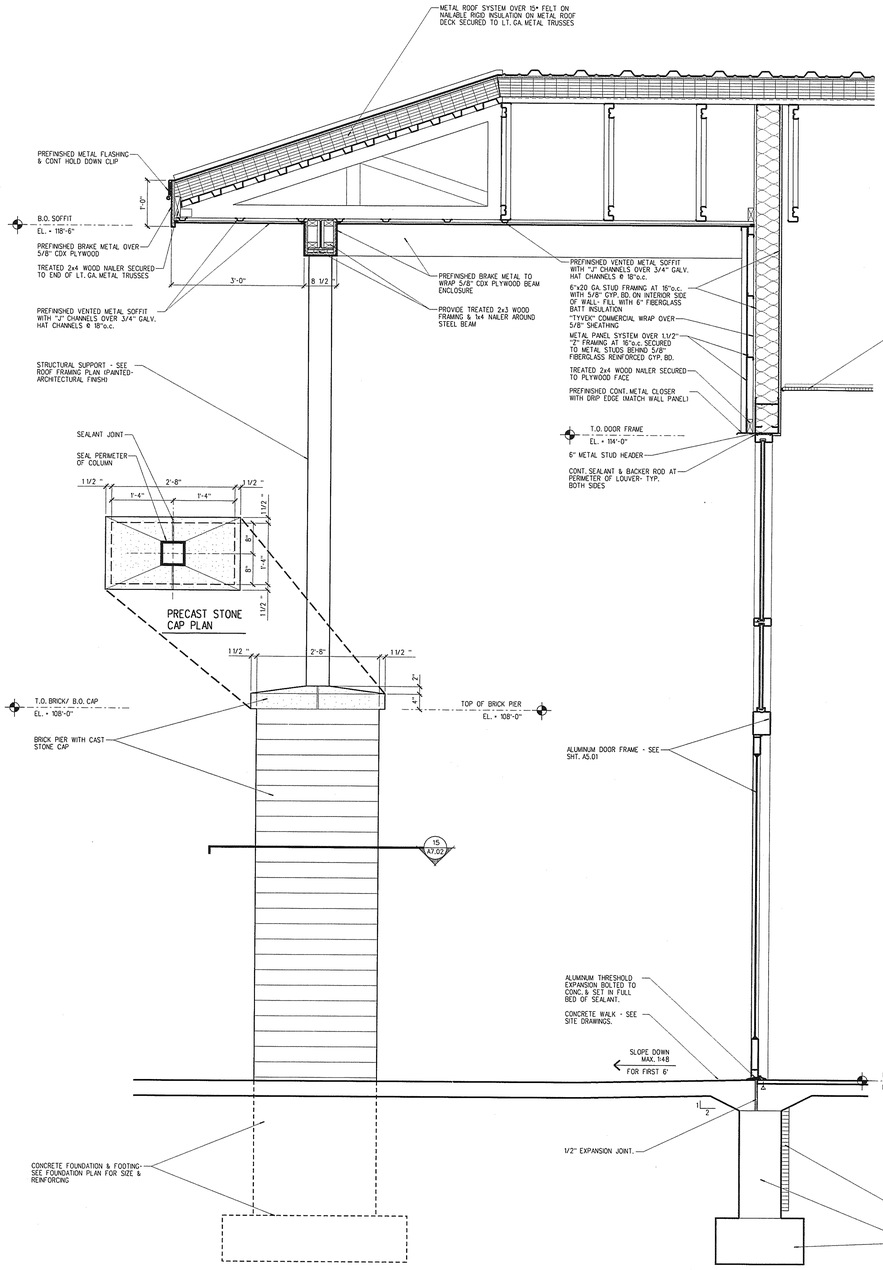

02 / A6.11 WALL SECTION
3/4" = 1'-0"

01 / A6.11 WALL SECTION
3/4" = 1'-0"

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ISSUANCES	REVISIONS
08/11/05 ALLENDALE TOWNSHIP REVIEW	
10/20/05 OWNER REVIEW SET1	
11/29/05 FOR OWNER REVIEW	
12/09/05 FOR PRE-ENGINEERED PACKAGE	
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WALL SECTIONS

A6.11

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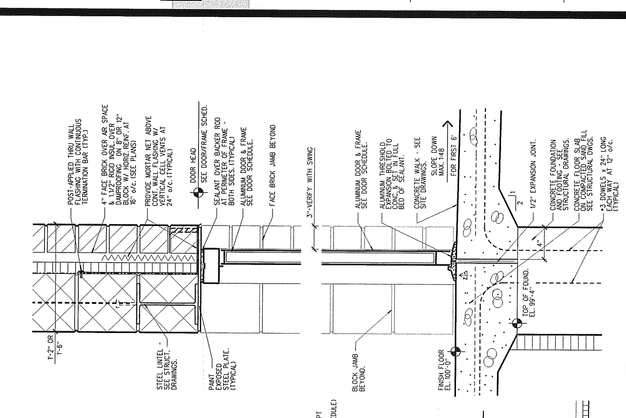
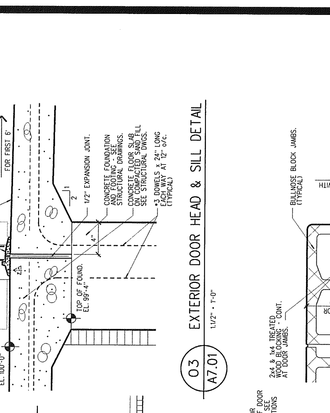
DOOR & WINDOW DETAILS

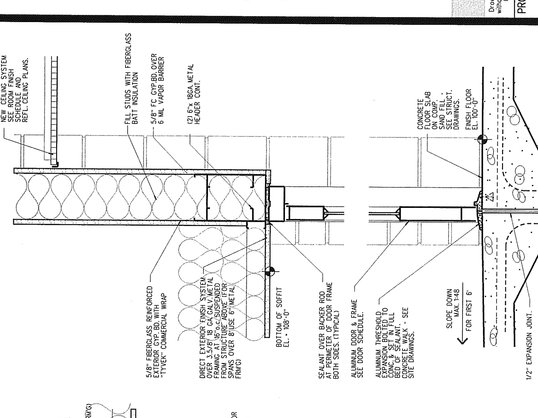
A7.01



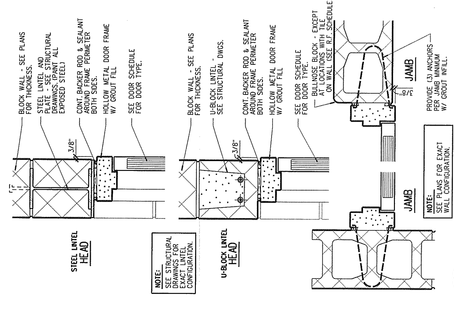
03 A7.01 EXTERIOR DOOR HEAD & SILL DETAIL 1 1/2" = 1'-0"



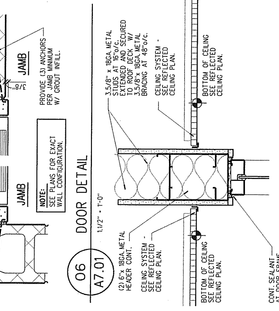
02 A7.01 EXTERIOR DOOR JAMB DETAIL 1 1/2" = 1'-0"



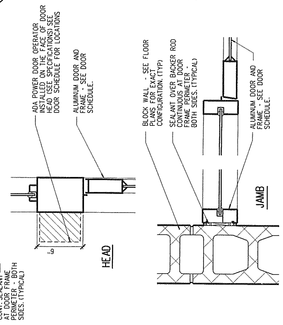
01 A7.01 EXTERIOR DOOR HEAD & SILL DETAIL 1 1/2" = 1'-0"



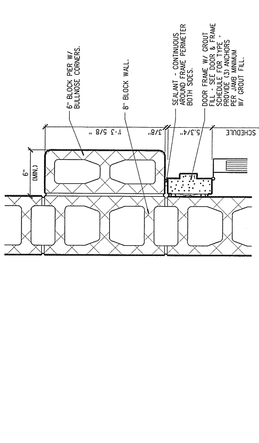
06 A7.01 DOOR DETAIL 1/2" = 1'-0"



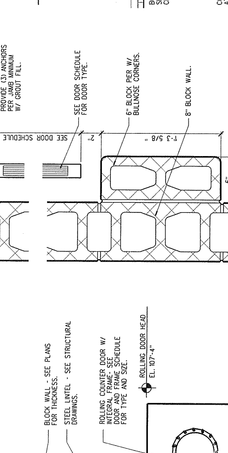
05 A7.01 ADA DOOR OPERATOR VESTIBULE DOOR DETAIL 1 1/2" = 1'-0"

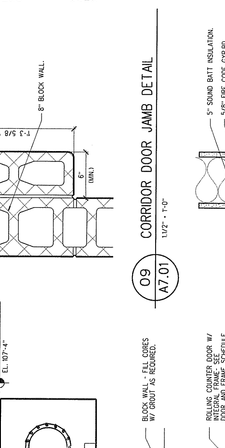


04 A7.01 ADA DOOR OPERATOR ENTRY DOOR HEAD & SILL DETAIL 1 1/2" = 1'-0"

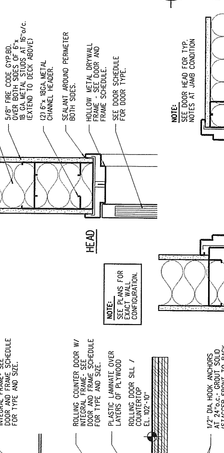


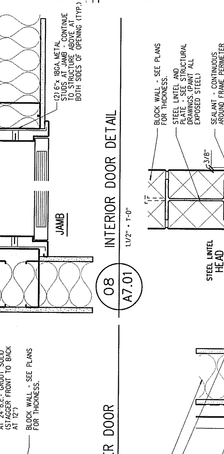
09 A7.01 CORRIDOR DOOR JAMB DETAIL 1 1/2" = 1'-0"



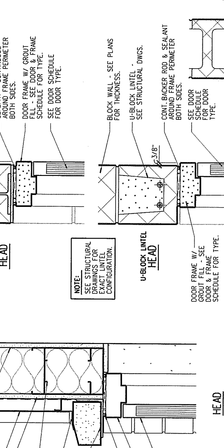


08 A7.01 INTERIOR DOOR DETAIL 1 1/2" = 1'-0"

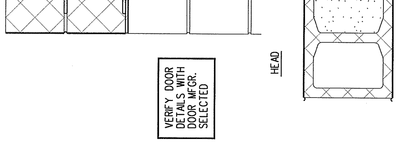




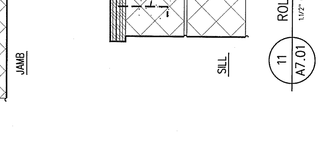
07 A7.01 DOOR W/ SIDE LITE DETAIL 1 1/2" = 1'-0"



10 A7.01 EXTERIOR DOOR HEAD & JAMB 1 1/2" = 1'-0"

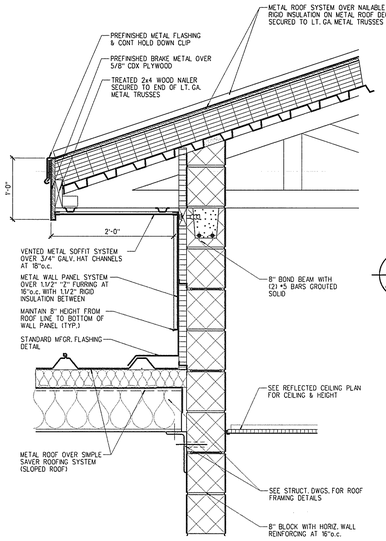


11 A7.01 ROLLING COUNTER DOOR 1 1/2" = 1'-0"

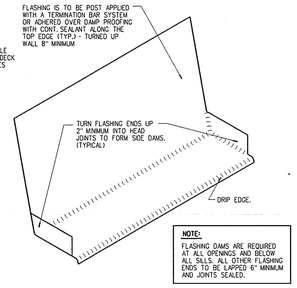


10 A7.01 EXTERIOR DOOR HEAD & JAMB 1 1/2" = 1'-0"

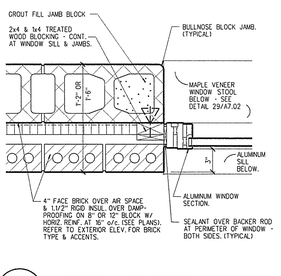
LADDER SCHEDULE				
LADDER LOCATION	LANDING ELEVATION	TOP RUNG ELEVATION	LADDER MATERIAL	CAGE REQ'D.
STORAGE & MECH. MEZZANINE ROOM NO. "C201"	EL. 112'-2"	EL. 129'-2"	STEEL	NO



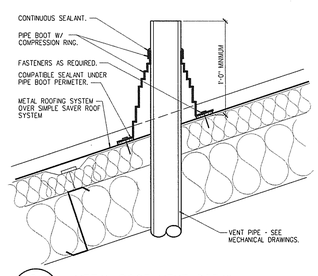
30 / A7.02 WALL TO ROOF TRANSITION DETAIL
1" • 1'-0"



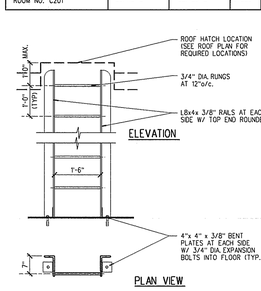
27 / A7.02 TYPICAL FLASHING AND DAM DETAIL
NO SCALE



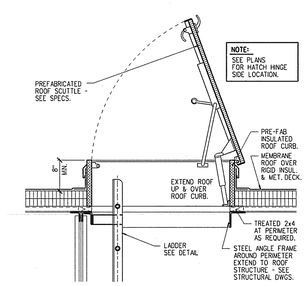
26 / A7.02 WINDOW JAMB DETAIL
1 1/2" • 1'-0"



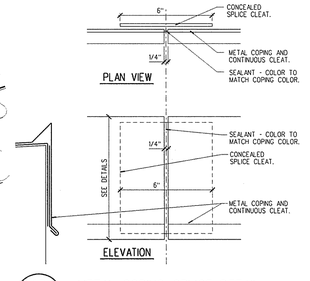
21 / A7.02 METAL ROOF VENT DETAIL
1 1/2" • 1'-0"



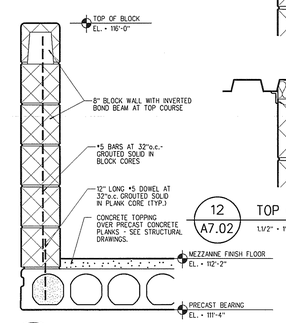
22 / A7.02 TYPICAL LADDER DETAIL
1/2" • 1'-0"



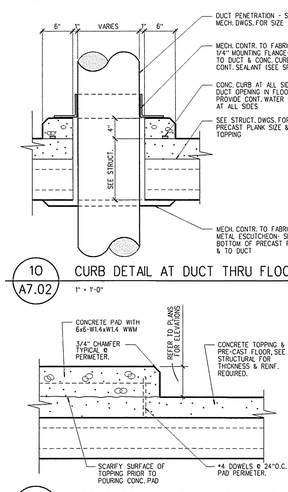
17 / A7.02 ROOF HATCH DETAIL
3/4" • 1'-0"



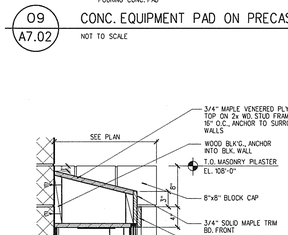
16 / A7.02 METAL COPING SPLICE DETAIL
3" • 1'-0"



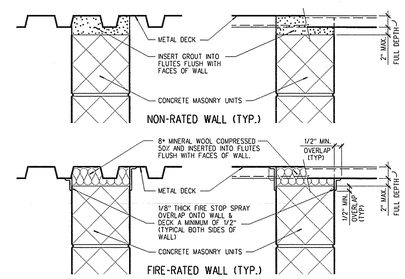
11 / A7.02 PRECAST EDGE DETAIL
1" • 1'-0"



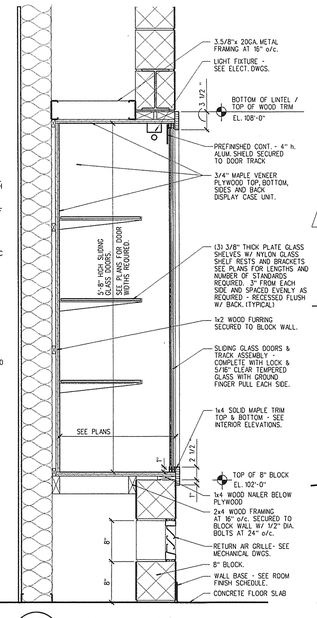
10 / A7.02 CURB DETAIL AT DUCT THRU FLOOR
1" • 1'-0"



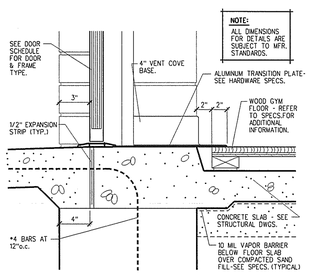
09 / A7.02 CONC. EQUIPMENT PAD ON PRECAST
NOT TO SCALE



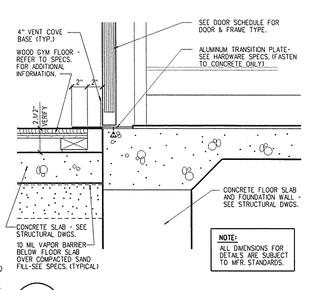
12 / A7.02 TOP OF WALL DETAIL
1 1/2" • 1'-0"



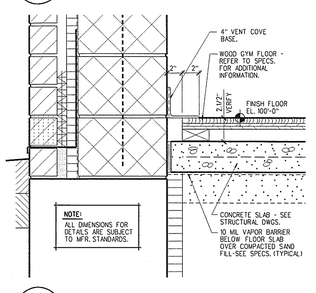
07 / A7.02 DISPLAY CASE DETAIL
1" • 1'-0"



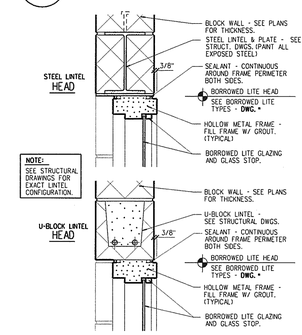
04 / A7.02 FLOOR TRANSITION AT EXT. DOOR
1 1/2" • 1'-0"



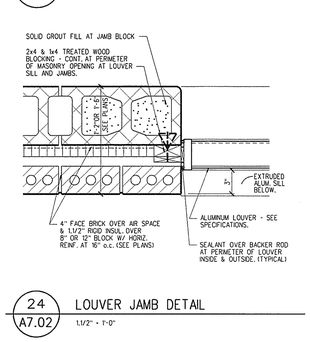
03 / A7.02 FLOOR TRANSITION AT INT. DOOR
1 1/2" • 1'-0"



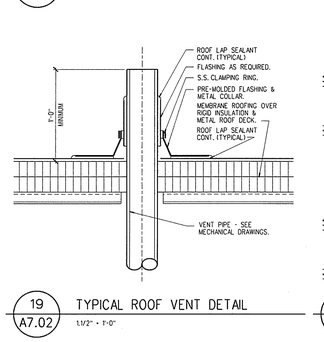
02 / A7.02 TYPICAL GYM FLOOR BASE DETAIL
1 1/2" • 1'-0"



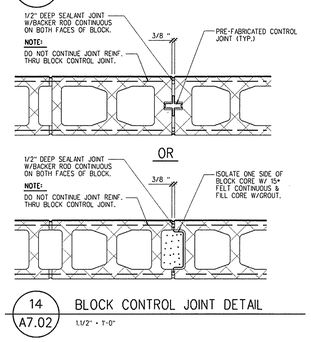
28 / A7.02 MASONRY BORROWED LITE DETAIL
1 1/2" • 1'-0"



24 / A7.02 LOUVER JAMB DETAIL
1 1/2" • 1'-0"

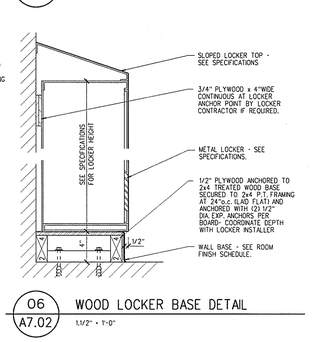


19 / A7.02 TYPICAL ROOF VENT DETAIL
1 1/2" • 1'-0"

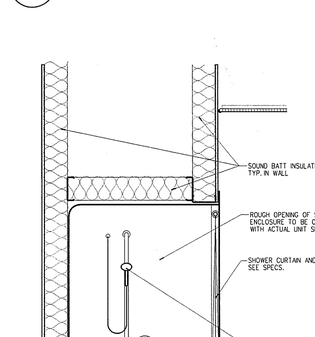


14 / A7.02 BLOCK CONTROL JOINT DETAIL
1 1/2" • 1'-0"

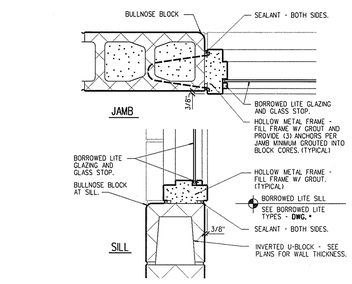
08 / A7.02 DISPLAY CASE DETAIL
1" • 1'-0"



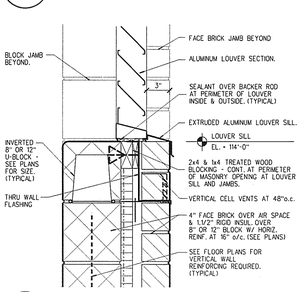
06 / A7.02 WOOD LOCKER BASE DETAIL
1 1/2" • 1'-0"



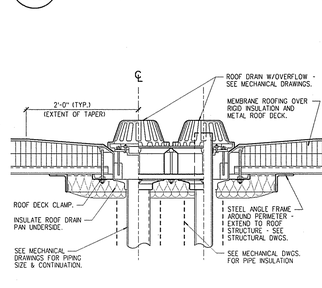
01 / A7.02 BARRIER-FREE INDIVIDUAL SHOWER
3/4" • 1'-0"



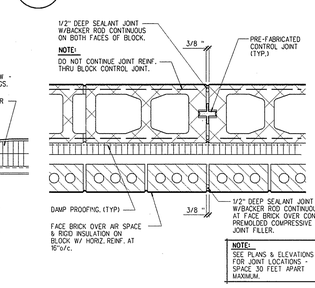
29 / A7.02 WINDOW STOOL DETAIL
1 1/2" • 1'-0"



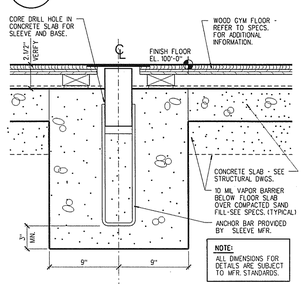
23 / A7.02 LOUVER SILL DETAIL
1 1/2" • 1'-0"



18 / A7.02 ROOF DRAIN W/OVERFLOW DETAIL
1" • 1'-0"



13 / A7.02 MASONRY CONTROL JOINT DETAIL
1 1/2" • 1'-0"



05 / A7.02 FLOOR SLEEVE DETAIL
1 1/2" • 1'-0"

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ISSUANCES	
08/18/06	ALLENDALE TOWNSHIP REVIEW
10/25/06	OWNER REVIEW SET
11/15/06	FOR CONSTRUCTION
12/01/06	FOR PRE-ENGINEERED PACKAGE
12/08/06	FOR BID AND CONSTRUCTION

DRAWN BY	REVISIONS
RLW	

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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A7.02

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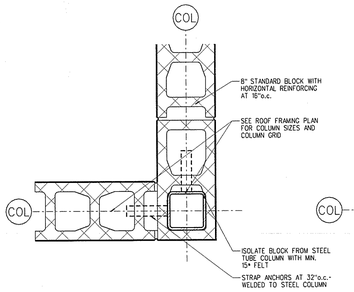
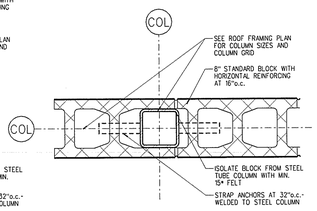
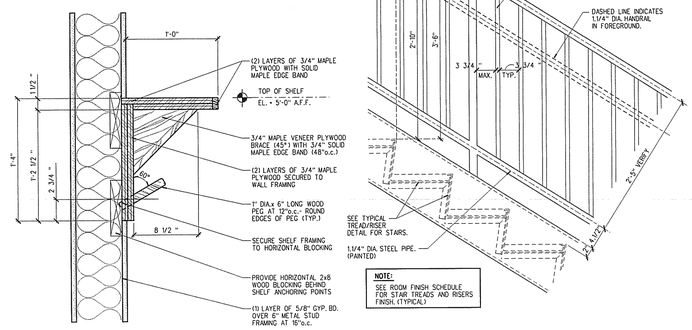


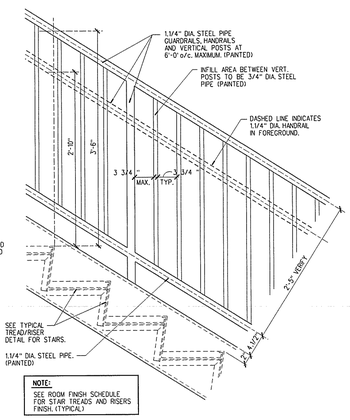
14 A7.03 PLAN DETAIL
1 1/2" = 1'-0"



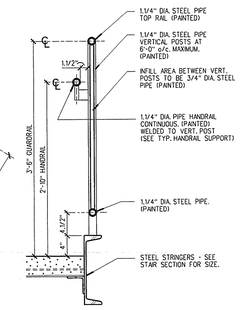
11 A7.03 PLAN DETAIL
1 1/2" = 1'-0"

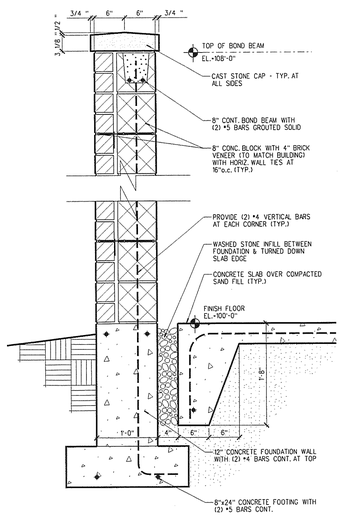


06 A7.03 DRESSING ROOM SHELF DETAIL
1 1/2" = 1'-0"

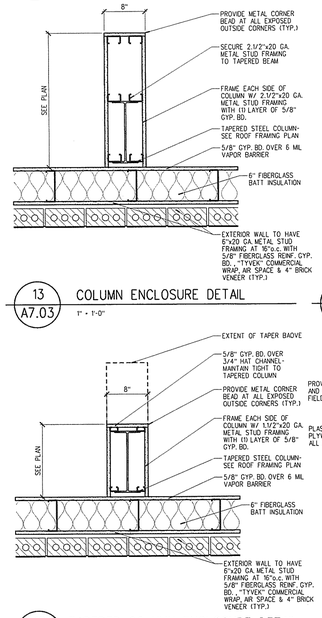


04 A7.03 GUARDRAIL / HANDRAIL SECTION AND DETAIL
1" = 1'-0"

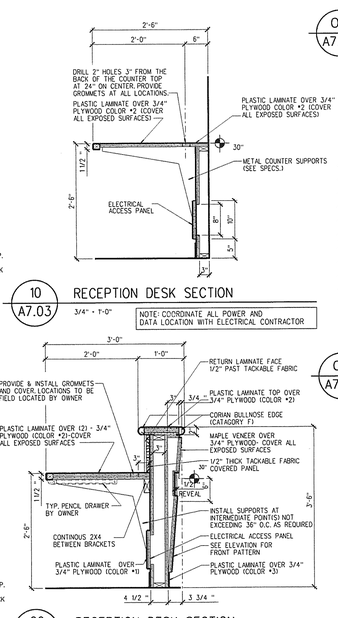




15 A7.03 DUMPSTER ENCLOSURE WALL SECTION
1" = 1'-0"



12 A7.03 TAPERED COLUMN ENCLOSURE DETAIL
1" = 1'-0"

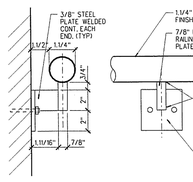


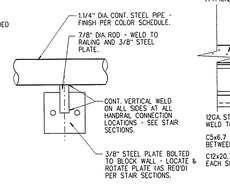
09 A7.03 RECEPTION DESK SECTION
3/4" = 1'-0"

NOTE: COORDINATE ALL POWER AND DATA LOCATION WITH ELECTRICAL CONTRACTOR

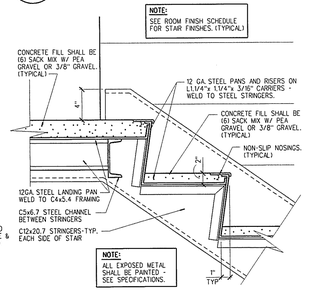
10 A7.03 RECEPTION DESK SECTION
3/4" = 1'-0"

NOTE: COORDINATE ALL POWER AND DATA LOCATION WITH ELECTRICAL CONTRACTOR

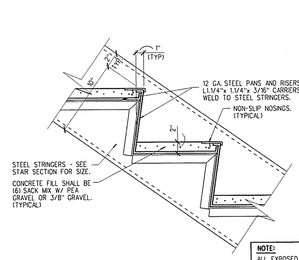




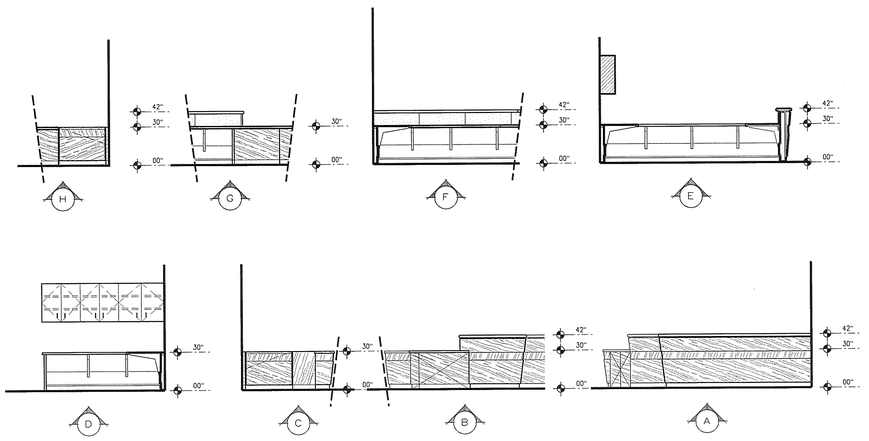
05 A7.03 TYPICAL HANDRAIL SUPPORT DETAIL
NOT TO SCALE



03 A7.03 STEEL PAN STAIR/LANDING DETAIL
1 1/2" = 1'-0"

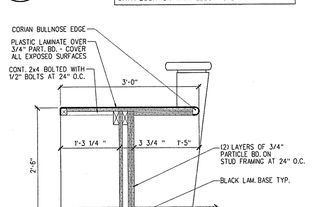


02 A7.03 STEEL PAN STAIR DETAIL
1 1/2" = 1'-0"

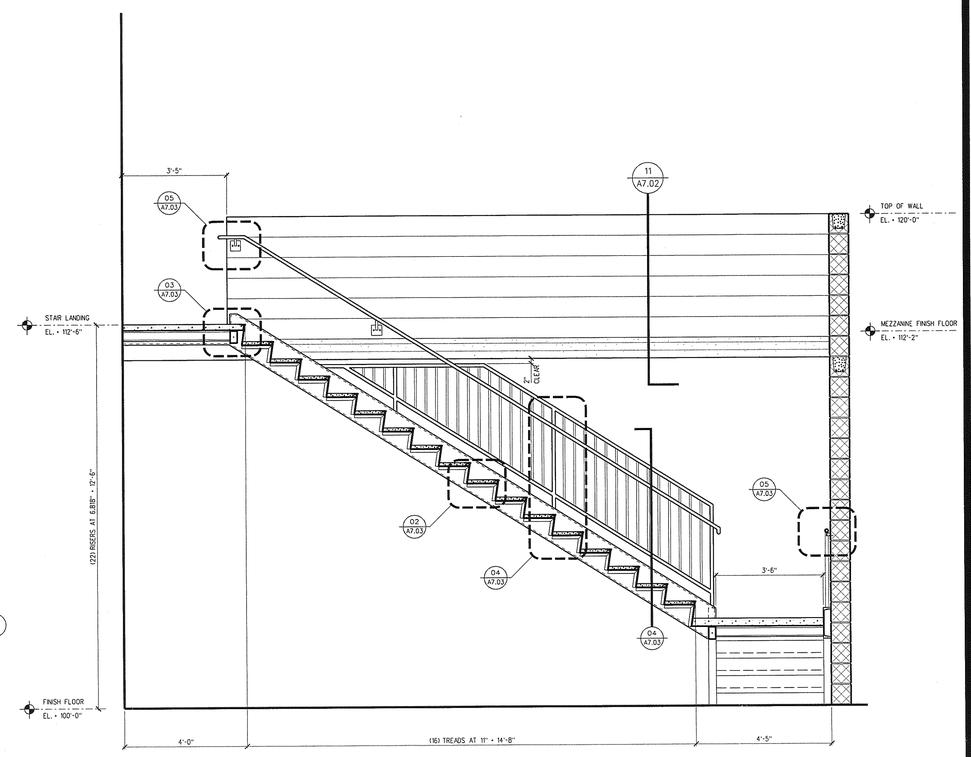


RECEPTION DESK ELEVATIONS
1/4" = 1'-0"

07 A7.03 RECEPTION DESK ENLARGED PLAN
1/4" = 1'-0"



08 A7.03 BARRIER FREE DESK SECTION
SCALE: 3/4" = 1'-0"



01 A7.03 STAIR "C1" SECTION
1/2" = 1'-0"

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R.W	08/19/05 PRELIMINARY CONCEPT REVIEW	
	10/20/05 OWNER REVIEW SET	
	11/29/05 FOR OWNER REVIEW	
	12/21/05 FOR PRE-ENGINEERED PACKAGE	
	12/08/06 FOR BIDS AND CONSTRUCTION	

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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A7.03

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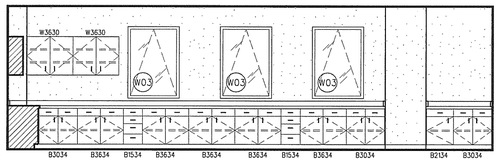
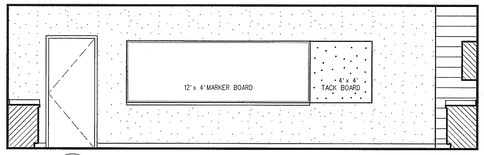
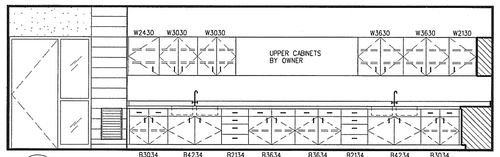
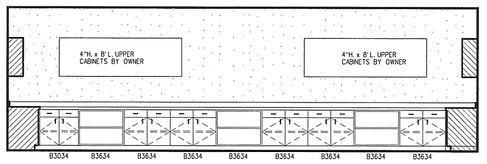
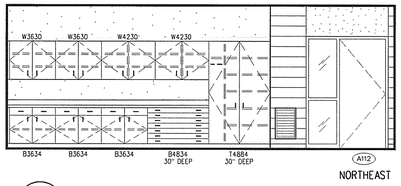


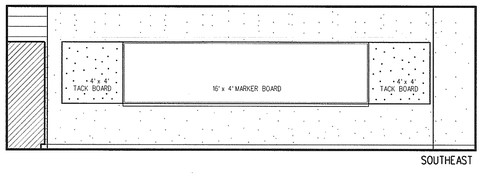


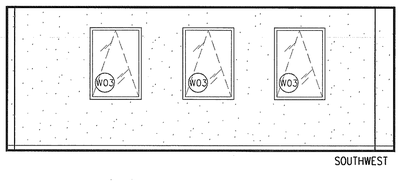


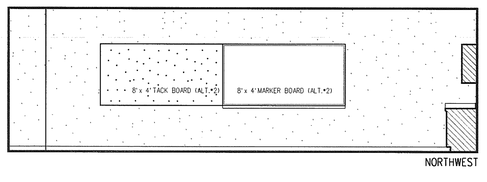


08 A8.01 SCIENCE A114
1/4" = 1'-0"

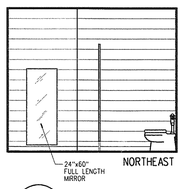


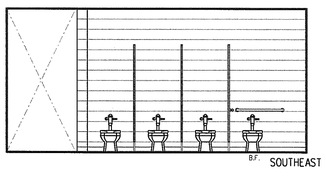


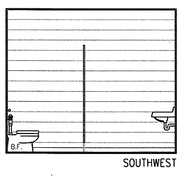


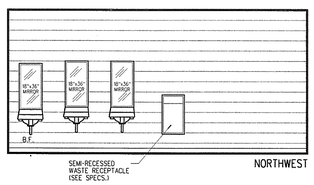


07 A8.01 CLASSROOM A112
1/4" = 1'-0"

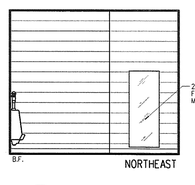


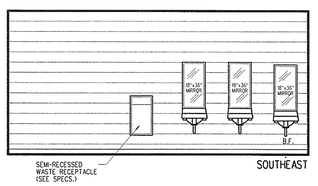


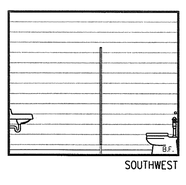


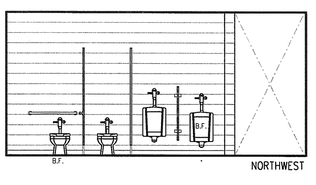


06 A8.01 GIRL'S TOILET A110
1/4" = 1'-0"

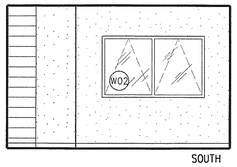


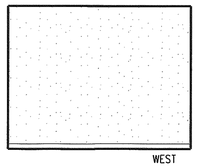




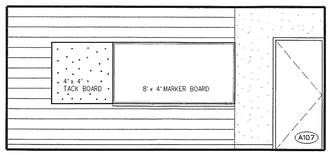


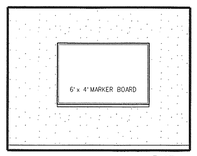
05 A8.01 BOY'S TOILET A109
1/4" = 1'-0"

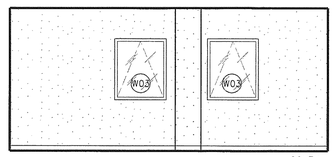


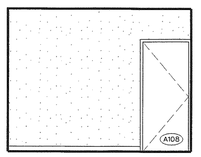


03 A8.01 ADMINISTRATOR A106
1/4" = 1'-0"





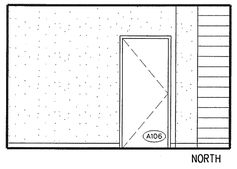


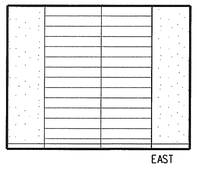


04 A8.01 CONFERENCE ROOM A107
1/4" = 1'-0"

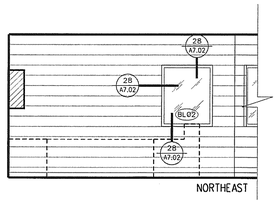
NOTE:
ALL UPPER CASEWORK TO BE BID AS ALTERNATE •1 (BLOCKING IN WALL TO BE BASE BID) - TYP.

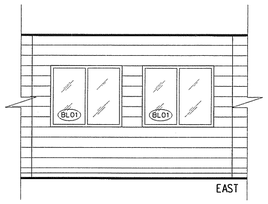
NOTE:
INTERIOR FINISHES AND SCHEDULES COMPLETED BY OTHERS

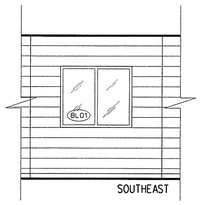


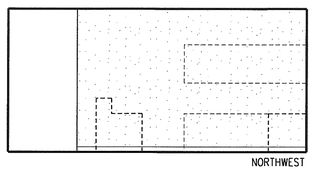


03 A8.01 ADMINISTRATOR A106
1/4" = 1'-0"









02 A8.01 WAITING A103 & RECEPTION A104
1/4" = 1'-0"

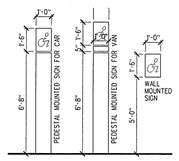
CASEWORK KEY

B1536
- B = BASE CABINET COUNTERTOP HEIGHT (in)
- 15 = WALL & TALL CABINET HEIGHT (in)
- 36 = CABINET WIDTH (in.)
- "B" = BASE UNIT
- "W" = WALL UNIT
- "T" = TALL UNIT

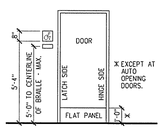
NOTE:
ALL BASE AND TALL UNITS TO BE 24" DEEP UNLESS NOTED OTHERWISE OR SHOWN ON FLOOR PLANS

ALL WALL UNITS TO BE 12" DEEP UNLESS NOTED OTHERWISE OR SHOWN ON FLOOR PLANS

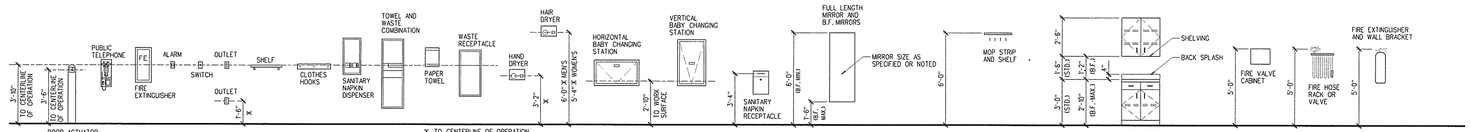
ALL UNITS TO HAVE ADJUSTABLE SHELVING WITH THE EXCEPTION OF SINK BASE CABINETS - QUANTITY OF SHELVES AS INDICATED ON INTERIOR ELEVATIONS UNLESS NOTED OTHERWISE.
ALL UNITS 60" OR HIGHER TO HAVE ONE FIXED SHELF AT MID-HEIGHT WITH ALL OTHERS BEING ADJUSTABLE.
ALL SHELVES OVER 36" WIDE TO HAVE INTERMEDIATE VERTICAL SUPPORT.



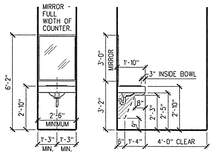
B/F SIGNAGE



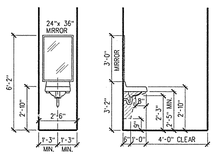
B/F TOILET ROOM SIGNAGE



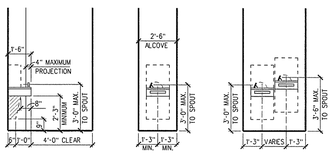
B/F CONTROLS AND ACCESSORIES



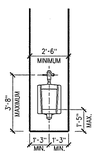
B/F & STAND. SINK w/ COUNTER



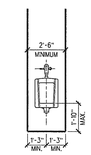
B/F & STANDARD LAVATORY



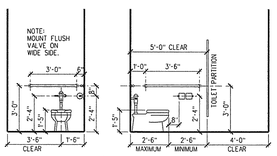
B/F & STANDARD DRINKING FOUNTAINS/COOLERS



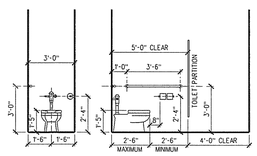
B/F URINAL



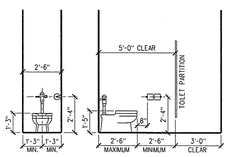
STANDARD URINAL



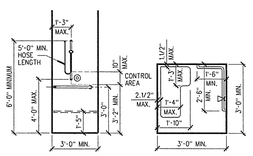
B/F WATER CLOSET STALLS



2ND B/F WATER CLOSET STALL
6' (6) OR MORE WATER CLOSET STALLS ARE PROVIDED.



STANDARD WATER CLOSET STALLS



B/F SHOWER ELEV.

B/F SHOWER PLAN
3/8" = 1'-0"

01 A8.01 BARRIER FREE DIMENSIONS
1/4" = 1'-0" UNLESS NOTED OTHERWISE

VERIFY ALL REQUIREMENTS PER: MICHIGAN BUILDING CODE (CURRENT EDITION) AND AMERICANS WITH DISABILITIES ACT.

GMB Architects + Engineers
85 East Eighth Street, Suite 300
Holland, MI 49423

GMB

REVISIONS

ISSUANCES
08/16/05 ALLENDALE TOWNSHIP REVIEW
10/30/05 OWNER REVIEW SET
11/29/05 FOR PRE-ENGINEERED PACKAGE
12/12/05 FOR OWNER REVIEW
12/08/06 FOR BIDS AND CONSTRUCTION

DRAWN BY ACV/RLW

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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PROJECT NO. 5-0630

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INTERIOR ELEVATIONS

A8.01

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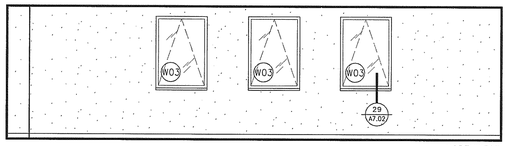
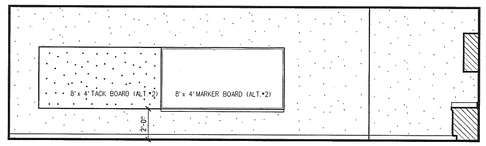
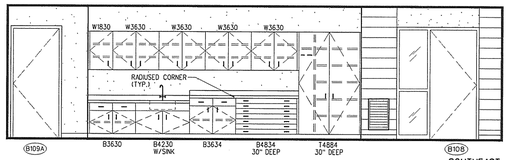


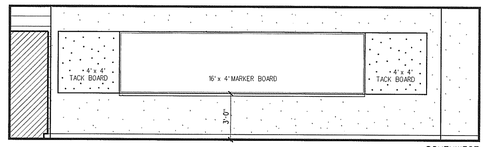
NORTHWEST



NORTHEAST



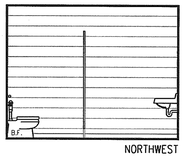
SOUTHEAST



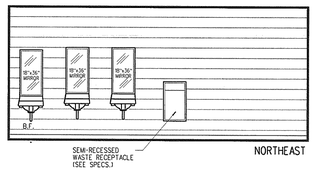
SOUTHWEST

09 / A8.02 PRESCHOOL B108

1/4" = 1'-0"



NORTHWEST



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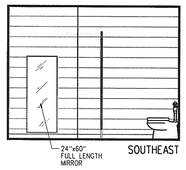
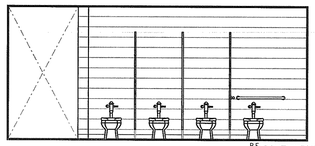


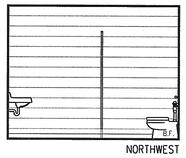
SOUTHEAST



SOUTHWEST

08 / A8.02 GIRL'S TOILET B104

1/4" = 1'-0"



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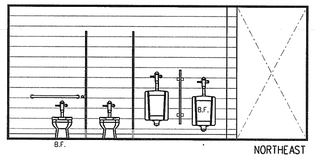
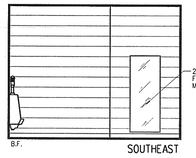
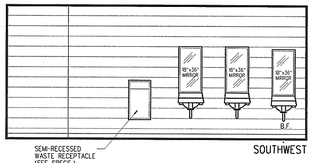


NORTHEAST



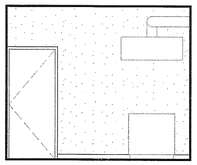
SOUTHEAST



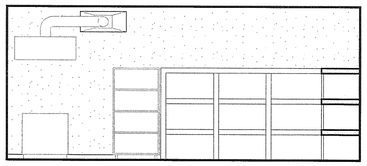
SOUTHWEST

07 / A8.02 BOY'S TOILET B103

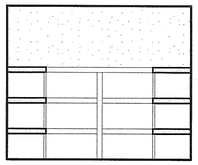
1/4" = 1'-0"



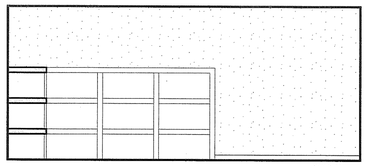
EAST



NORTH



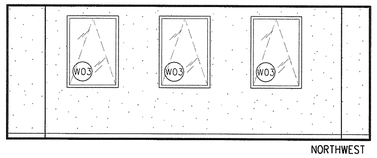
EAST



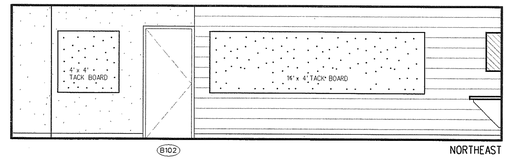
SOUTH

06 / A8.02 KILN ROOM & STORAGE B102

1/4" = 1'-0"



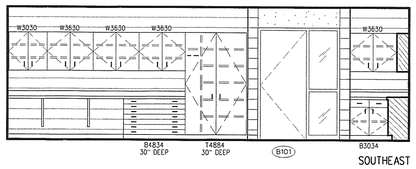
NORTHWEST



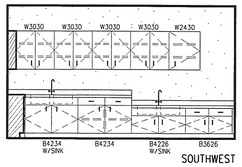
NORTHEAST

05 / A8.02 ART ROOM B101

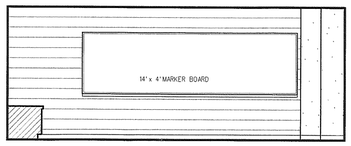
1/4" = 1'-0"



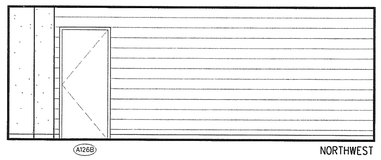
SOUTHEAST



SOUTHWEST

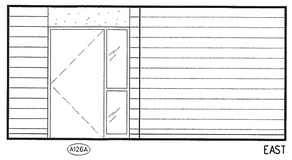


WEST



NORTHWEST

NORTHEAST



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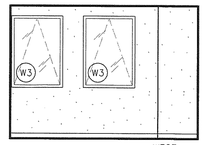


WEST

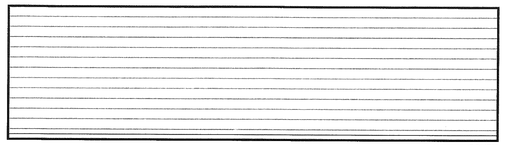
05 / A8.02 ART ROOM B101

30" DEEP

1/4" = 1'-0"

04 / A8.02 RESOURCE ROOM A126

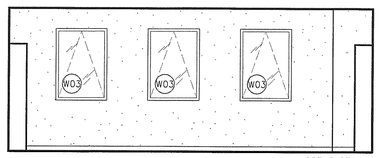
1/4" = 1'-0"



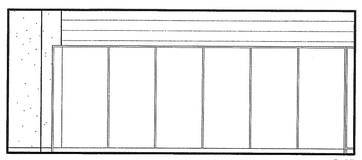
SOUTH

04 / A8.02 RESOURCE ROOM A126

1/4" = 1'-0"



NORTHEAST



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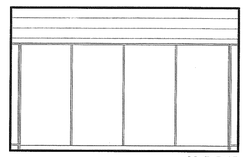
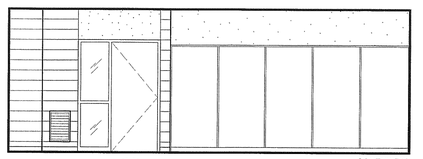


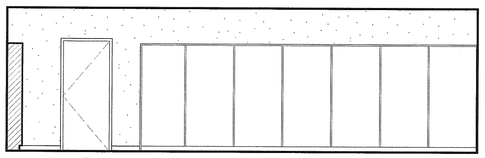
SOUTHEAST



SOUTHWEST

03 / A8.02 MEDIA CENTER A119

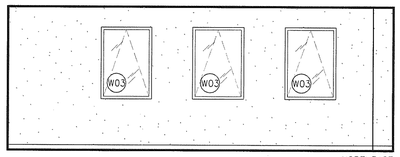
1/4" = 1'-0"



NORTHWEST

03 / A8.02 MEDIA CENTER A119

1/4" = 1'-0"



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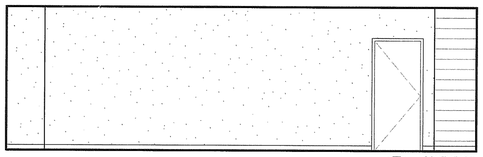
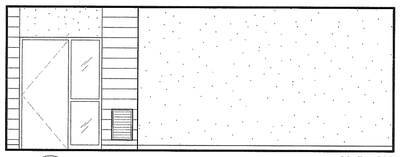


SOUTHEAST



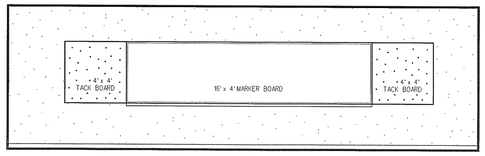
SOUTHWEST

02 / A8.02 COMPUTER ROOM A118

1/4" = 1'-0"

NOTE:
ALL UPPER CASEWORK TO BE BID AS ALTERNATE *1 (BLOCKING IN WALL TO BE BASE BID) - TYP.

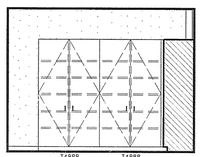
NOTE:
INTERIOR FINISHES AND SCHEDULES COMPLETED BY OTHERS



NORTHWEST

02 / A8.02 COMPUTER ROOM A118

1/4" = 1'-0"



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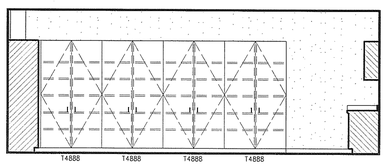
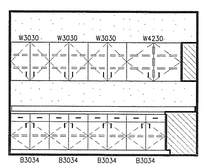
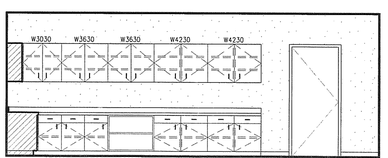


SOUTHEAST



SOUTHWEST



NORTHWEST

01 / A8.02 SCIENCE PREP A116

1/4" = 1'-0"

GMB Architects + Engineers
Troy, Michigan
85 East Eighth Street, Suite 200
Holland, MI 49423

REVISIONS

ISSUANCES

08/01/06	ALLENDALE TOWNSHIP REVIEW
10/30/06	OWNER REVIEW SET
11/29/06	FOR OWNER REVIEW
12/08/06	FOR PRE-ENGINEERED PACKAGE
12/08/06	**FOR BIDS AND CONSTRUCTION**

DRAWN BY: ACV/RLW

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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PROJECT NO. 5-0630

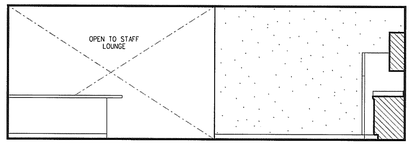
INTERIOR ELEVATIONS

A8.02

g:\5-0630\5-0630a802.dgn scottg

NOTE:
INTERIOR FINISHES AND SCHEDULES COMPLETED BY OTHERS

NOTE:
ALL UPPER CASEWORK TO BE BID AS ALTERNATE #1 (BLOCKING IN WALL TO BE BASE BID) - TYP.



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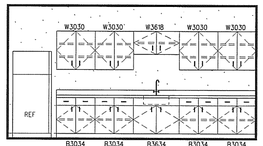

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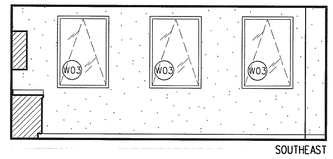
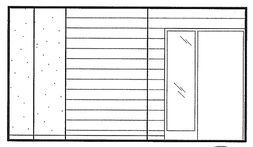


SOUTHEAST

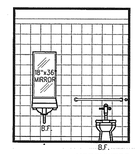


B124

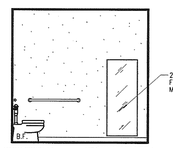
SOUTHWEST

08 / A8.03 STAFF LOUNGE B124

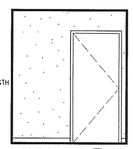
1/4" = 1'-0"



NORTHWEST



NORTHEAST



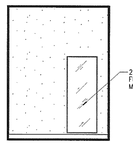
B122

SOUTHEAST

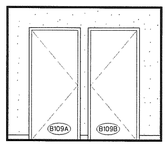
SOUTHWEST

07 / A8.03 B.F. TOILET B122 (B121- OPP. HAND)

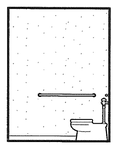
1/4" = 1'-0"



SOUTHWEST



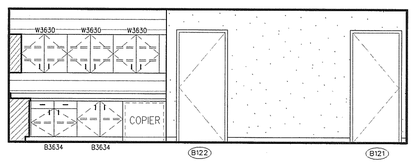
NORTHWEST



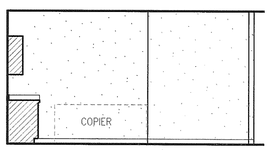
NORTHEAST

05 / A8.03 B.F. TOILET B109

1/4" = 1'-0"



NORTHWEST



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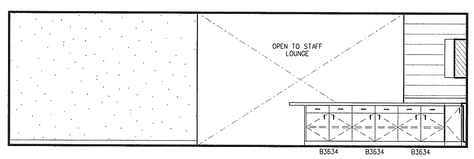
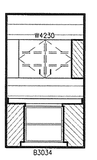
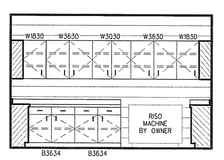


SOUTHEAST



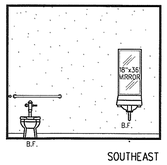
SOUTHWEST



WEST

06 / A8.03 STAFF WORK ROOM B123

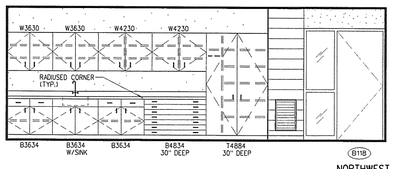
1/4" = 1'-0"



SOUTHEAST

05 / A8.03 B.F. TOILET B109

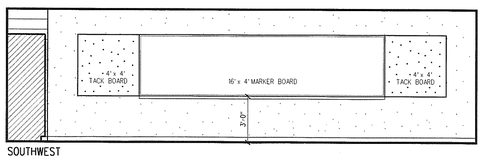
1/4" = 1'-0"



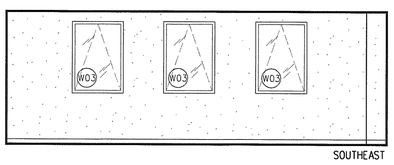
NORTHWEST

04 / A8.03 CLASSROOM B118

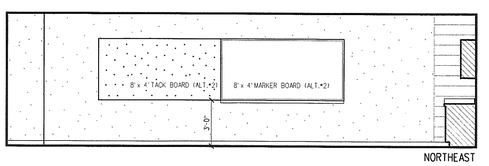
1/4" = 1'-0"



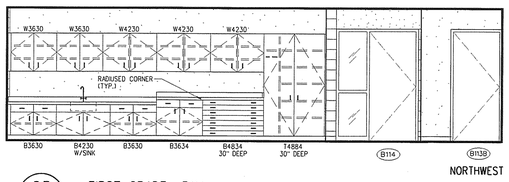
SOUTHWEST



SOUTHEAST



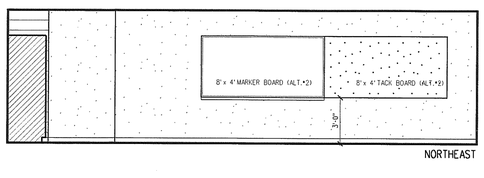
NORTHEAST



NORTHWEST

03 / A8.03 FIRST GRADE B114

1/4" = 1'-0"



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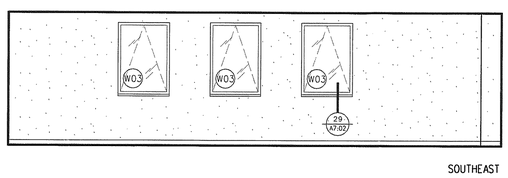
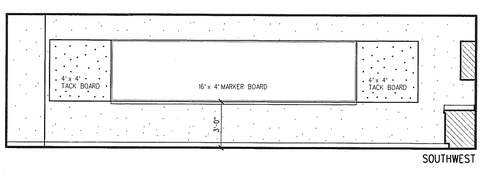
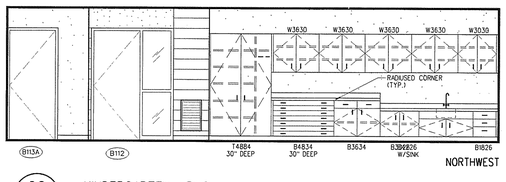


SOUTHEAST



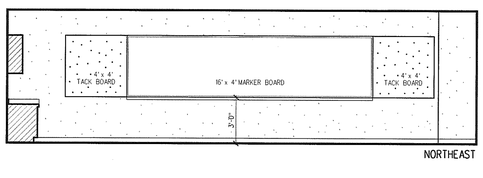
SOUTHWEST



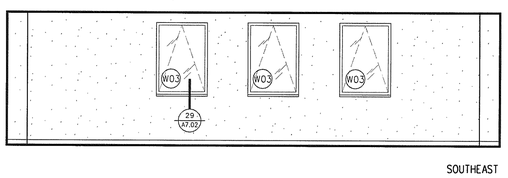
NORTHWEST

02 / A8.03 KINDERGARTEN B112

1/4" = 1'-0"



NORTHEAST



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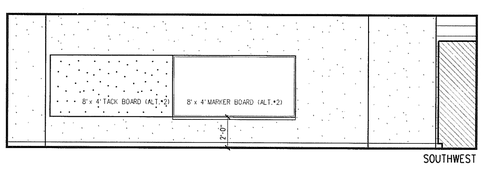

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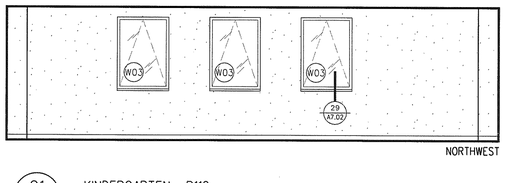
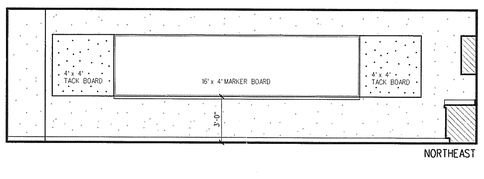


NORTHWEST

01 / A8.03 KINDERGARTEN B110

1/4" = 1'-0"



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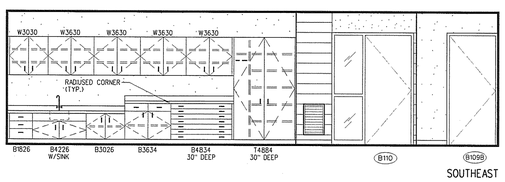

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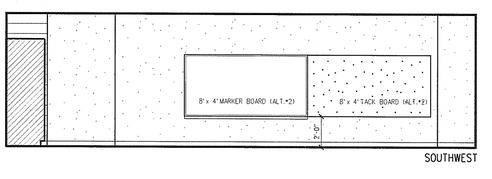

SOUTHWEST

GMB Architects + Engineers
2211 Woodcreek Drive, Suite 200
85 East Eighth Street
Holland, MI 49423

REVISIONS

ISSUANCES

08/31/06	ALLENDALE TOWNSHIP REVIEW
10/30/06	OWNER REVIEW SET
12/19/06	FOR PRELIMINARY PACKAGE
12/20/06	FOR OWNER REVIEW
12/05/06	**FOR BIDS AND CONSTRUCTION**

DRAWN BY: ACV/PLW

NEW PK - 8th GRADE FACILITY

ALLENDALE CHRISTIAN SCHOOL

ALLENDALE, MICHIGAN

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INTERIOR ELEVATIONS

A8.03

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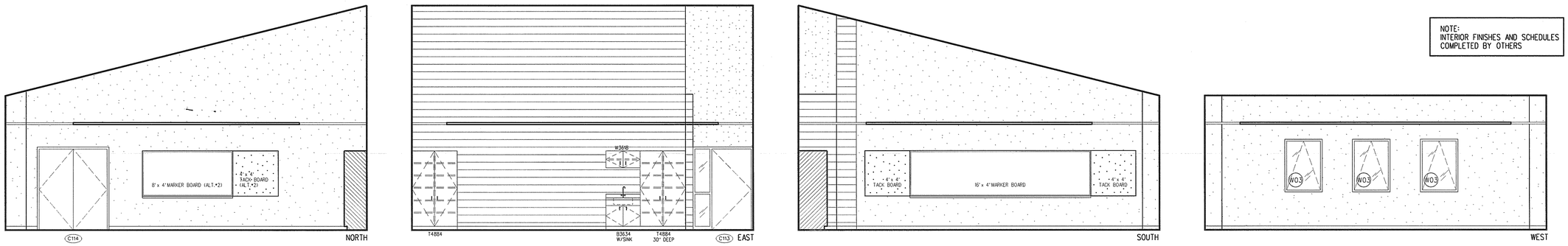
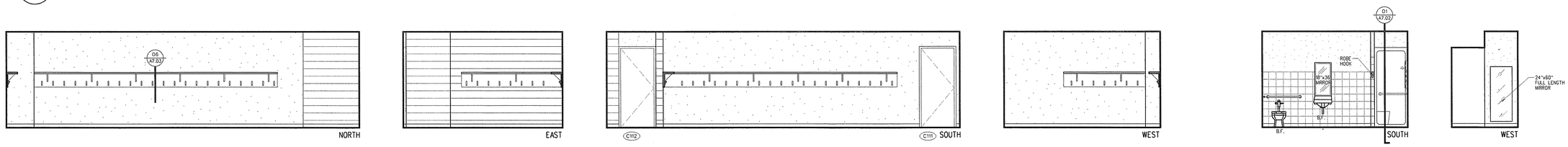
NOTE:
ALL UPPER CASEWORK TO BE BID AS ALTERNATE #1 (BLOCKING IN WALL TO BE BASE BID) - TYP.

NOTE:
INTERIOR FINISHES AND SCHEDULES COMPLETED BY OTHERS

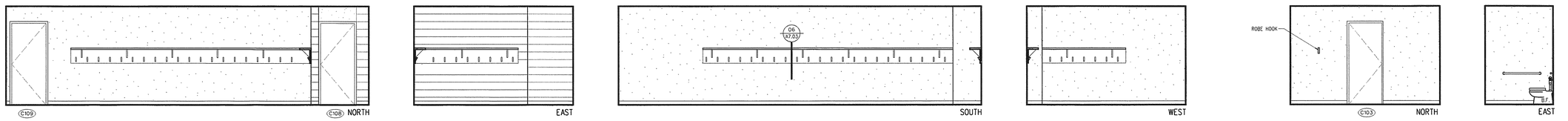


06 A8.04 BAND ROOM C113
1/4" = 1'-0"



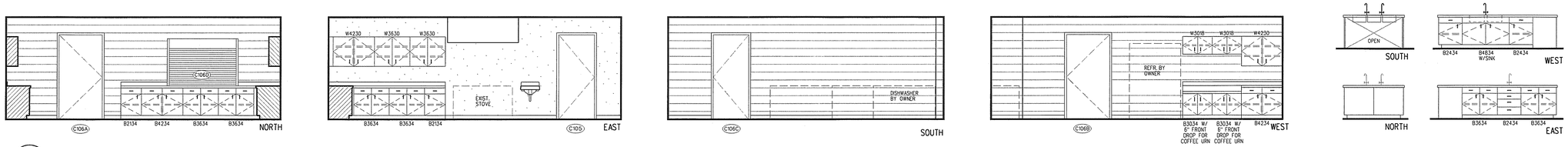
05 A8.04 GIRL'S DRESSING ROOM C112
1/4" = 1'-0"

03 A8.04 B.F. TOILET C104
1/4" = 1'-0"

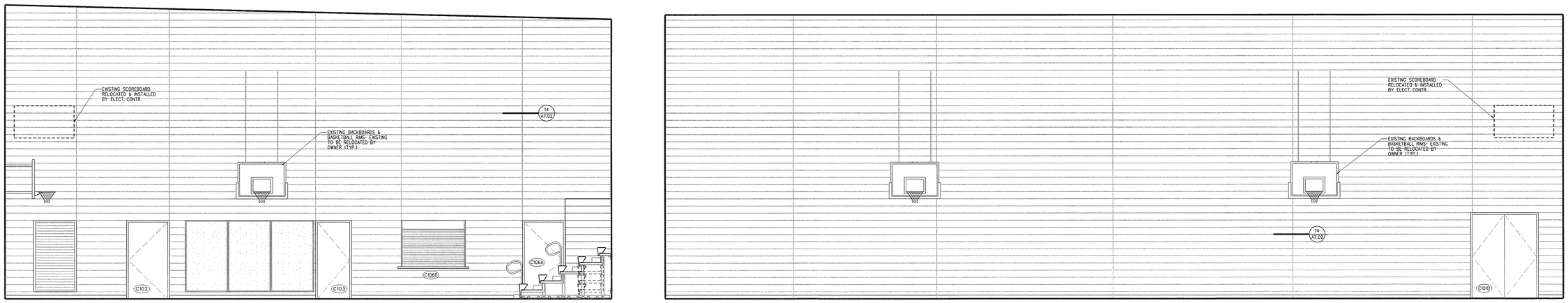


04 A8.04 BOY'S DRESSING ROOM C108
1/4" = 1'-0"

03 A8.04 B.F. TOILET C104
1/4" = 1'-0"



02 A8.04 SERVING KITCHEN C106
1/4" = 1'-0"



01 A8.04 GYMNASIUM C101
1/4" = 1'-0"

GMB Architects + Engineers
2211 Woodcreek Oaks Blvd
65 East Eisenhower Parkway Suite 300
Roseville, MI 48126

REVISIONS

ISSUANCES

DRAWN BY	
ACV/RLW	08/11/05 ALLENDALE TOWNSHIP REVIEW
	10/25/05 FOR OWNER REVIEW SET
	11/21/05 FOR PRE-ENGINEERED PACKAGE
	12/06/05 FOR BIDS AND CONSTRUCTION

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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INTERIOR ELEVATIONS

A8.04

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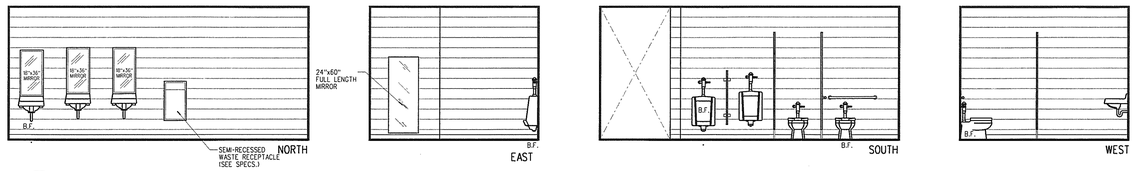
NOTE:
ALL UPPER CASEWORK TO BE BID AS ALTERNATE #1 (BLOCKING IN WALL TO BE BASE BID) - TYP.

NOTE:
INTERIOR FINISHES AND SCHEDULES COMPLETED BY OTHERS



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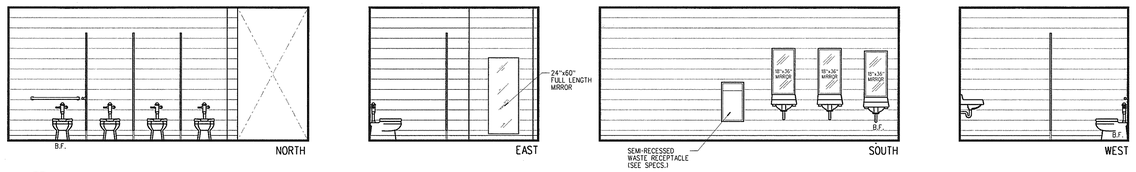
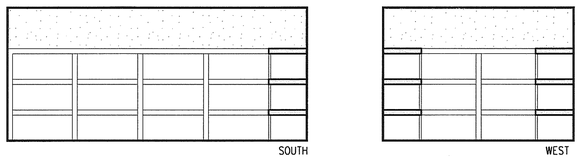
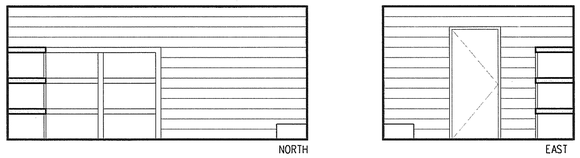
1/4" = 1'-0"



03 A8.05 GIRL'S TOILET C117
1/4" = 1'-0"



02 A8.05 JANITOR/STORAGE C116
1/4" = 1'-0"



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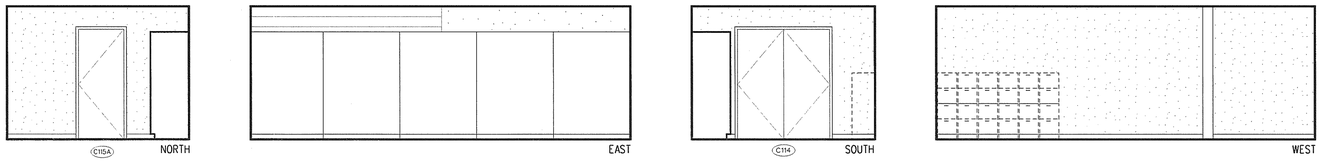
1/4" = 1'-0"



01 A8.05 BAND STORAGE C114
1/4" = 1'-0"

GMB Architects + Engineers
65 East Elder Street, Suite 200
Holland, MI 49423

ISSUANCES	REVISIONS
08/11/06 ALLENDALE TOWNSHIP REVIEW	
10/30/06 OWNER REVIEW SET	
11/29/06 FOR OWNER REVIEW	
12/01/06 FOR PRE-ENGINEERED PACKAGE	
12/08/06 FOR BIDS AND CONSTRUCTION	

DRAWN BY: ACV/RLW

NEW PK - 8th GRADE FACILITY
ALLENDALE CHRISTIAN SCHOOL
ALLENDALE, MICHIGAN

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INTERIOR ELEVATIONS

A8.05

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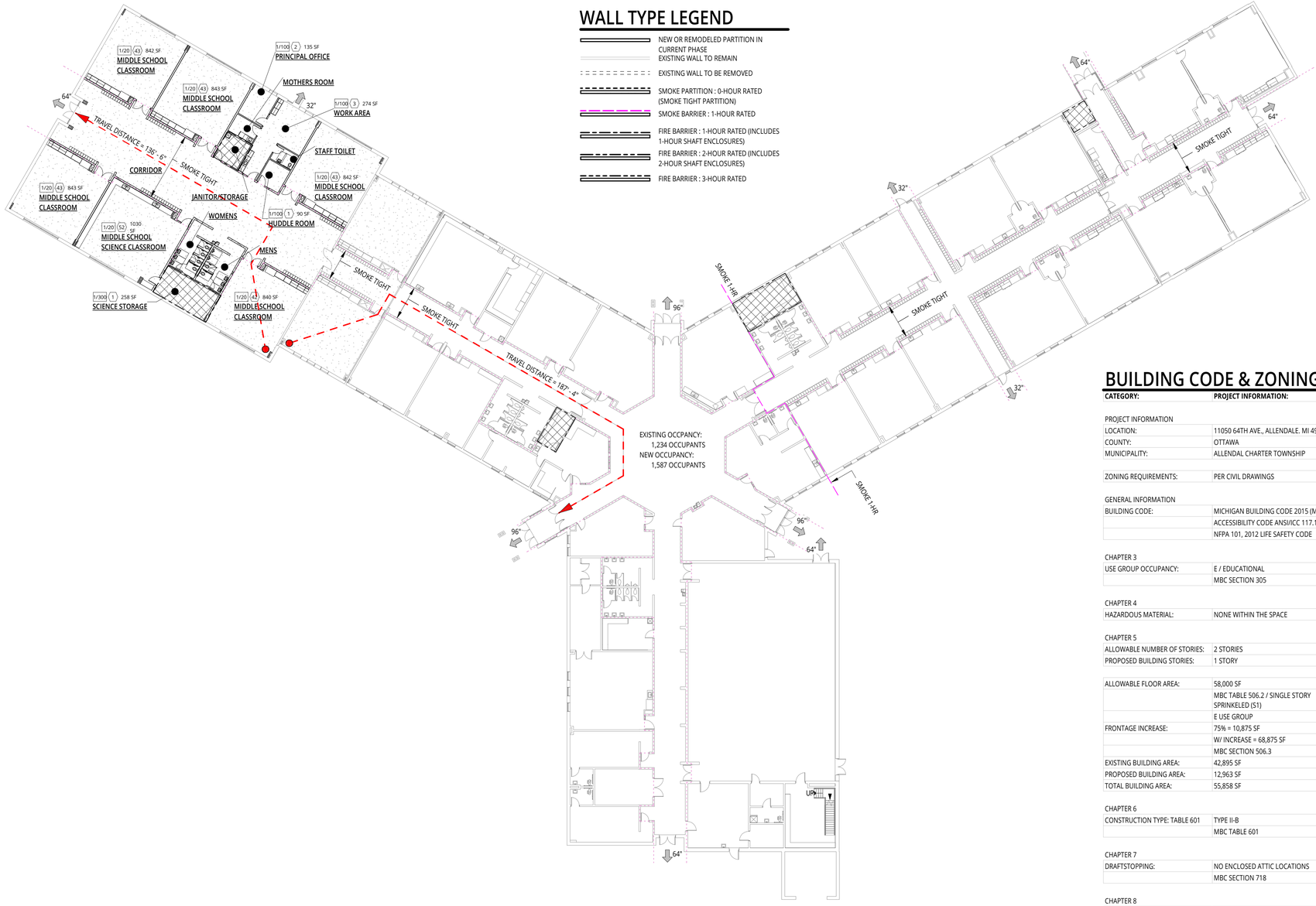

FLOOR PLAN - PHASE 2
3/64" = 1'-0"

WALL TYPE LEGEND

- NEW OR REMODELED PARTITION IN CURRENT PHASE
  EXISTING WALL TO REMAIN
- EXISTING WALL TO BE REMOVED
- SMOKE PARTITION : 0-HOUR RATED (SMOKE TIGHT PARTITION)
- SMOKE BARRIER : 1-HOUR RATED
- FIRE BARRIER : 1-HOUR RATED (INCLUDES 1-HOUR SHAFT ENCLOSURES)
- FIRE BARRIER : 2-HOUR RATED (INCLUDES 2-HOUR SHAFT ENCLOSURES)
- FIRE BARRIER : 3-HOUR RATED

OCCUPANCY SCHEDULE - PHASE 2

NUMBER	NAME	AREA	AREA PER OCCUPANT	OCCUPANT LOAD
A127	5TH GRADE CLASSROOM	851 SF		
A128	5TH GRADE CLASSROOM	847 SF		
A129	CORRIDOR	431 SF		
A130	CORRIDOR	3145 SF		
A131	MIDDLE SCHOOL CLASSROOM	840 SF	20	42.02
A132	SCIENCE STORAGE	258 SF	300	0.86
A133	MENS	164 SF		
A134	WOMENS	166 SF		
A135	MIDDLE SCHOOL SCIENCE CLASSROOM	1030 SF	20	51.48
A136	MIDDLE SCHOOL CLASSROOM	843 SF	20	42.13
A137	MIDDLE SCHOOL CLASSROOM	842 SF	20	42.11
A138	MIDDLE SCHOOL CLASSROOM	843 SF	20	42.17
A139	PRINCIPAL OFFICE	135 SF	100	1.35
A140	MOTHERS ROOM	77 SF		
A141	JANITOR/STORAGE	113 SF	300	0.38
A142	WORK AREA	274 SF	100	2.74
A143	STAFF TOILET	57 SF		
A144	HUDDLE ROOM	90 SF	100	0.9
A145	MIDDLE SCHOOL CLASSROOM	842 SF	20	42.08
Grand total: 19				268.23

BUILDING CODE & ZONING

CATEGORY:	PROJECT INFORMATION:
PROJECT INFORMATION	
LOCATION:	11050 64TH AVE., ALLENDALE. MI 49401
COUNTY:	OTTAWA
MUNICIPALITY:	ALLENDAL CHARTER TOWNSHIP
ZONING REQUIREMENTS:	PER CIVIL DRAWINGS
GENERAL INFORMATION	
BUILDING CODE:	MICHIGAN BUILDING CODE 2015 (MBC)
	ACCESSIBILITY CODE ANSI/ICC 117.1-2009
	NFPA 101, 2012 LIFE SAFETY CODE
CHAPTER 3	
USE GROUP OCCUPANCY:	E / EDUCATIONAL
	MBC SECTION 305
CHAPTER 4	
HAZARDOUS MATERIAL:	NONE WITHIN THE SPACE
CHAPTER 5	
ALLOWABLE NUMBER OF STORIES:	2 STORIES
PROPOSED BUILDING STORIES:	1 STORY
ALLOWABLE FLOOR AREA:	58,000 SF
	MBC TABLE 506.2 / SINGLE STORY SPRINKELED (S1)
	E USE GROUP
FRONTAGE INCREASE:	75% = 10,875 SF
	W/ INCREASE = 68,875 SF
	MBC SECTION 506.3
EXISTING BUILDING AREA:	42,895 SF
PROPOSED BUILDING AREA:	12,963 SF
TOTAL BUILDING AREA:	55,858 SF
CHAPTER 6	
CONSTRUCTION TYPE: TABLE 601	TYPE II-B
	MBC TABLE 601
CHAPTER 7	
DRAFTSTOPPING:	NO ENCLOSED ATTIC LOCATIONS
	MBC SECTION 718
CHAPTER 8	
INTERIOR WALL/CEILING FINISHES:	ALL INTERIOR WALL AND CEILING FINISHES SHALL MAINTAIN THE FOLLOWING:
	MBC SECTION 803.1.1 / TABLE 803.9
	AT EXIT ENCLOSURES, EXIT PASSAGEWAYS, AND CORRIDORS:
	FLAME SPREAD INDEX: 26-75
	SMOKE DEVELOPED INDEX: 0-450
	AT ROOMS AND ENCLOSED SPACES:
	FLAME SPREAD INDEX: 76-200
	SMOKE DEVELOPED INDEX: 0-450

BUILDING CODE & ZONING

CATEGORY:	PROJECT INFORMATION:
CHAPTER 9	
AUTOMATIC SPRINKLER SYSTEM:	E OCCUPANCY / REQUIRED
	SECTION 903.2.3
ALARM SYSTEM:	REQUIRED
	MBC SECTION 903.4
MONITORING SYSTEM:	REQUIRED
	MBC SECTION 903.4.1
FDC STANDPIPE CONNECTION:	NOT REQUIRED
	MBC SECTION 905
FIRE EXTINGUISHERS:	MUST BE LOCATED WITHIN 75' OF EVERY LOCATION WITHIN THE BUILDING
	MBC SECTION 906.3(1)
	MBC SECTION 906.1 ITEM 2
FIRE ALARM SYSTEM:	MANUAL FIRE ALARMS ARE REQUIRED
	MBC SECTION 907.2.3
SMOKE AND HEAT VENTS:	NOT REQUIRED
	MBC SECTION 910
CHAPTER 10	
BUILDING OCCUPANT LOAD:	SEE SCHEDULE
	MBC TABLE 1004.1.2
PROPOSED BUILDING OCCUPANCY:	1,234 EXISTING
PHASE 1:	85 ADDITIONAL
PHASE 2:	269 ADDITIONAL
TOTAL:	1,588 OCCUPANTS
ACTUAL:	46 STAFF + 446 STUDENTS = 492 OCCUPANTS
	MBC SECTION 1004.3
EGRESS SIZING:	.2" PER OCCUPANT
	MBC SECTION 1005.3.2
REQUIRED BUILDING EGRESS SIZING:	317.4" / PROVIDED: 672"
EXITS REQUIRED:	2 EXITS REQUIRED PER OCCUPANT LOAD
	MBC SECTION 1006.6.2.1.1
MAXIMUM COMMON PATH OF EGRESS:	75'-0"
	MBC TABLE 1006.2.1
SEPARATION OF EXITS:	1/3 OF DIAGONAL DISTANCE
	MBC SECTION 1007.1.2
ACCESSBILE EXITS:	2 REQUIRED
	MBC SECTION 1009.1
EXIT DOOR SIZING:	PER OCCUPANT LOAD
	MBC SECTION 1010.1.1
PANIC & FIRE EXIT HARDWARE:	OCCUPANT LOADS OF 50 OR GREATER
	MBC SECTION 1010.1.10
ACCESSIBLE RAMP WIDTH:	.2" PER STAGE OCCUPANT
	MBC SECTION 1012.5.1
EXIT SIGNS REQUIRED:	PER MBC SECTION 1013.1
	EXEMPTION 2
MAXIMUM EXIT ACCESS TRAVEL DISTANCE:	200'-0"
	MBC TABLE 1017.2

LAKEWOOD CONSTRUCTION
Holland, MI | 616.392.6923 | www.lakewoodinc.com

ALLENDALE CHRISTIAN SCHOOL

MIDDLE SCHOOL ADDITION
11050 64TH AVE., ALLENDALE. MI 49401

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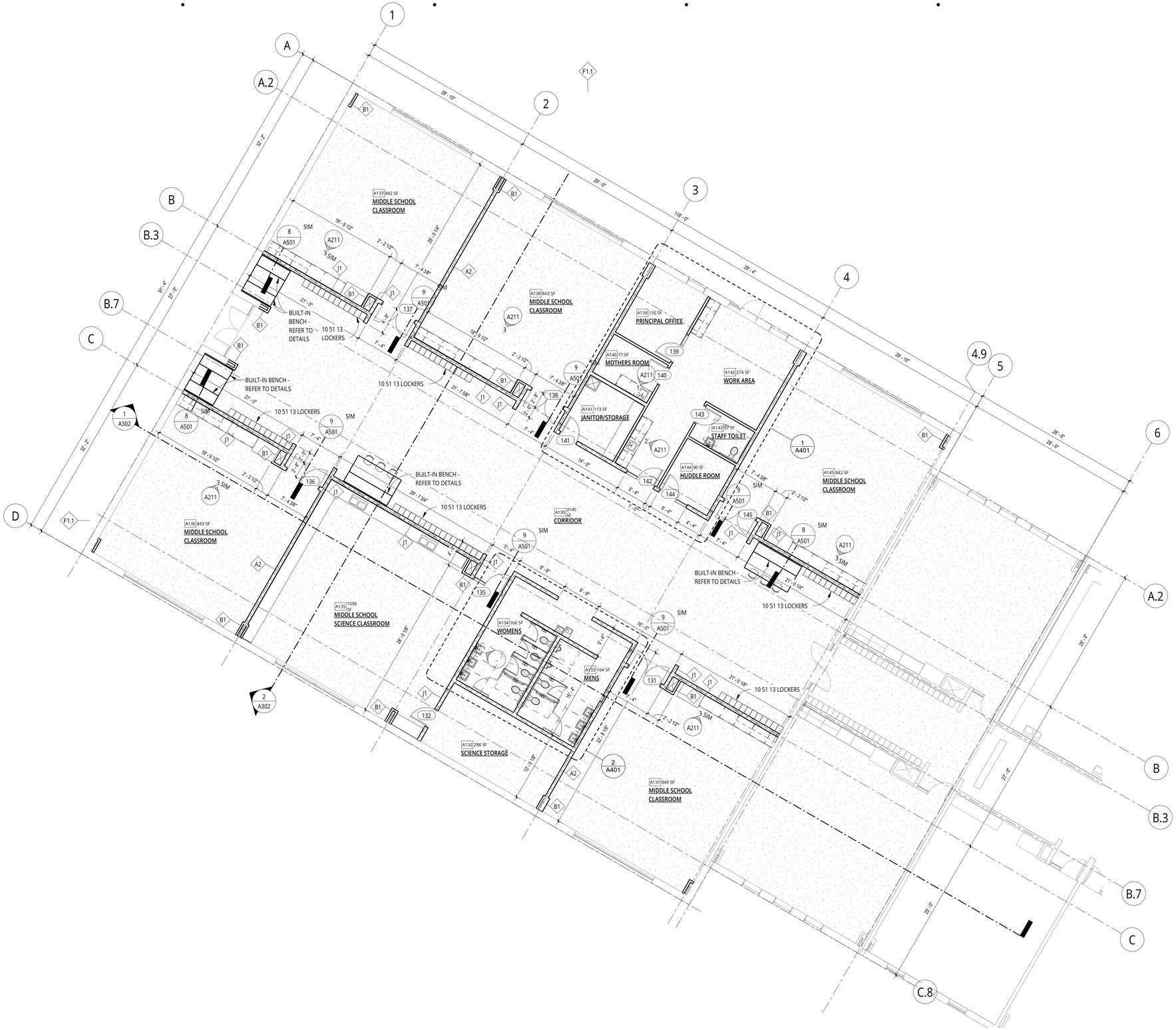
ISSUE DATE:
03.02.2021

REVISIONS:
03.02.2021 PERMIT SET

PROJECT NO: 19841
DRAWN BY: SH
REVIEWED BY: MN
SHEET NAME: BUILDING CODE - PHASE 2
SHEET NO: A003



ADDITION FLOOR PLAN - PHASE 2
1/8" = 1'-0"

FLOOR PLAN NOTES

1 ALL CONSTRUCTION TO MEET APPLICABLE LOCAL, STATE, AND NATIONAL CODES.

2 SUBCONTRACTORS TO REVIEW ALL CIVIL, STRUCTURAL, ARCHITECTURAL & DESIGN BUILD DRAWINGS TO COORDINATE THEIR WORK. NOTIFY ARCHITECT WITH ANY POTENTIAL CONFLICTS.

3 ALL DIMENSIONS ARE TO GRIDS, FINISH FACE OF DRYWALL OR FACE OF FOUNDATION AT EXTERIOR WALLS.

4 SUBCONTRACTOR TO USE CARE IN ALL AIRSEALING AND INSULATION DETAILS. SEE TYPICAL DETAILS FOR FURTHER INFORMATION.

5 SUBCONTRACTORS ARE TO VERIFY AND CHECK ALL DIMENSIONS BEFORE WORK IS STARTED.

6 SUBCONTRACTORS WHO FAIL TO VERIFY, REVIEW, AND COORDINATE WORK SHALL TAKE FULL RESPONSIBILITY OF ANY WORK IMPROPERLY CONSTRUCTED OR LOCATED.

7 SUBCONTRACTORS SHALL NOTIFY ARCHITECT IF DIMENSIONAL ERRORS OR STRUCTURAL CONFLICTS OCCUR; AND SHALL PROCEED UPON CLARIFICATION OR REVISION ISSUED BY ARCHITECT.

8 VERIFY ALL ELECTRICAL, MECHANICAL AND PLUMBING REQUIREMENTS BEFORE FRAMING.

9 ELECTRICAL, MECHANICAL AND PLUMBING SYSTEMS ARE DESIGN BUILD BY OTHERS.

10 ARCHITECT TO COORDINATE DESIGNS BY OTHERS WITH ARCHITECTURAL DRAWINGS.

11 SUBCONTRACTORS TO VERIFY ALL ROUGH OPENINGS WITH PRODUCT SUPPLIERS.

12 TRANSITION LINES OF DIFFERING FLOOR MATERIALS SHALL OCCUR AT CENTERLINE OF CLOSED DOOR.

13 UNLESS NOTED, ALL DOOR FRAMES TO BE 4" FROM ADJACENT FINISHED WALL AT HINGE, OR BE COORDINATED WITH DOOR FRAME SIZE.

14 PROVIDE CONTROL JOINTS IN GYP. WALLBOARD AS RECOMMENDED BY WALLBOARD MANUFACTURER. COORDINATE LOCATION WITH ARCHITECT (APPROX. 30').

15 SLOPE ALL EXTERIOR CONCRETE MIN. 1/8"/ FOOT AWAY FROM BUILDING.

16 FIELD VERIFY LOCATIONS OF ALL DOWNSPOUTS (INTERNAL OR EXTERNAL)

17 SUBCONTRACTOR TO PROVIDE 2X6 MINIMUM BLOCKING, BACKING, AND FRAMING FOR LIGHT FIXTURES, ELECTRICAL UNITS, MILLWORK, COAT HOOKS, MEDIA EQUIPMENT, HARDWARE, AND OTHER ITEMS AS REQUIRED. IF BLOCKING IS BURIED IN WALL FOR FUTURE USE, PHOTOGRAPHS AND DRAWINGS OF THE EXISTING CONDITIONS WILL BE GIVEN TO OWNER FOR FUTURE REFERENCE.

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ALLENDALE CHRISTIAN SCHOOL

MIDDLE SCHOOL ADDITION
11050 64TH AVE., ALLENDALE. MI 49401

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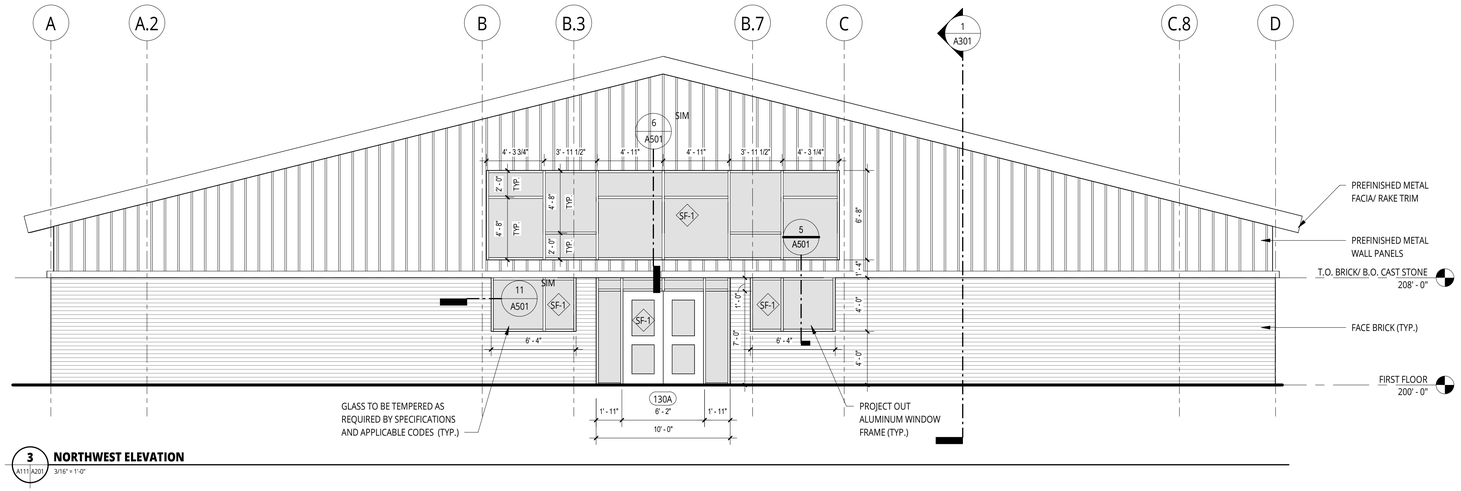
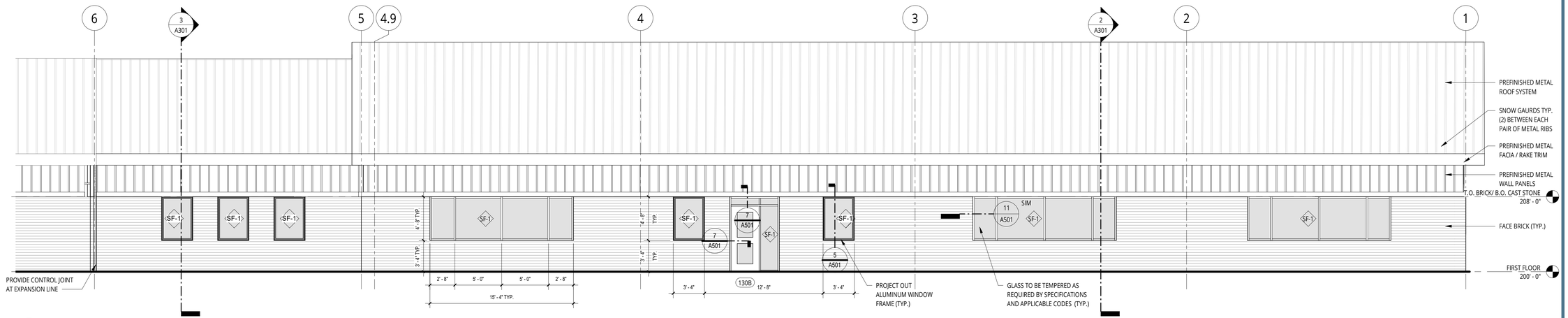
ISSUE DATE:
03.02.2021

REVISIONS:
03.02.2021 PERMIT SET

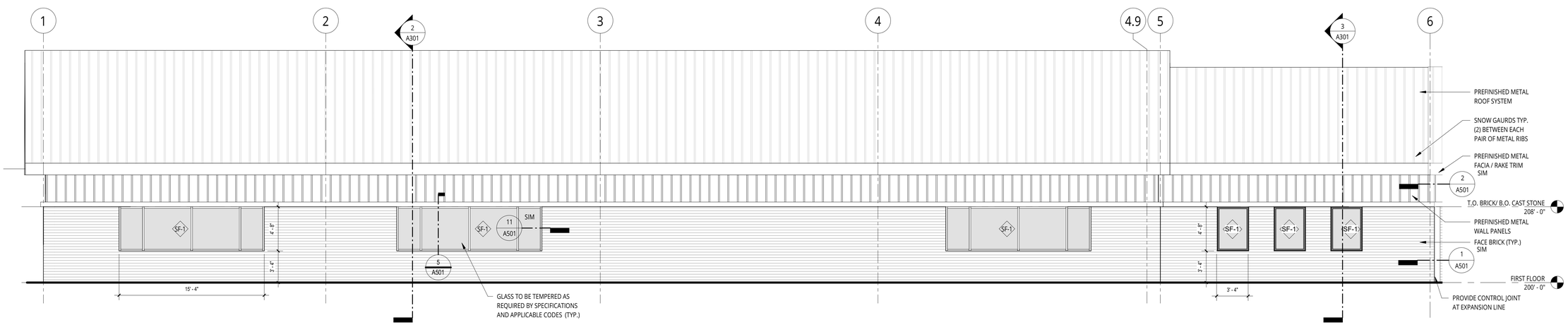
PROJECT NO: 19841
DRAWN BY: SH
REVIEWED BY: MN
SHEET NAME: FLOOR PLAN - PHASE 2
SHEET NO: A112



3 A111|A201 **NORTHWEST ELEVATION** 3/16" = 1'-0"



2 A111|A201 **NORTHEAST ELEVATION** 3/16" = 1'-0"



1 A111|A201 **SOUTHWEST ELEVATION** 3/16" = 1'-0"

ELEVATION NOTES

1 SUBCONTRATOR TO FIELD VERIFY BUILDING HEIGHTS AND ENVELOPE LIMITS. INFORM ARCHITECT OF ANY DISCREPANCIES.

2 ALL EXPOSED MECHANICAL AND PLUMBING VENT LOCATIONS TO BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION. COLOR TO MATCH ADJACENT MATERIALS, OR BE PAINTED TO MATCH. CONFIRM COLOR WITH ARCHITECT.

3 REFER TO EXTERIOR FINISH SCHEDULE AND PROJECT SPECIFICATIONS FOR ALL EXTERIOR INFORMATION.

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ALLENDALE CHRISTIAN SCHOOL

MIDDLE SCHOOL ADDITION
11050 64TH AVE., ALLENDALE. MI 49401

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ISSUE DATE:
03.02.2021

REVISIONS:
03.02.2021 PERMIT SET

PROJECT NO: 19841
DRAWN BY: SH
REVIEWED BY: MN
SHEET NAME: EXTERIOR ELEVATIONS
SHEET NO: A201

Submitted by West Michigan Lighting & Controls	Catalog Number:	Type:
West Michigan Lighting **Job Name:** Allendale Christian School - Shoreline	WPX1 LED P2 50K MVOLT DDBXD Notes:	W WML21-133611

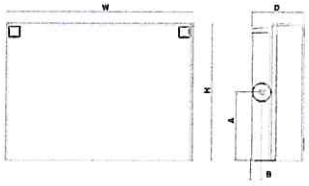
WPX LED
Wall Packs

Catalog Number

Notes

Type

Specifications



Front View Side View

Luminaire	Height (H)	Width (W)	Depth (D)	Side Conduit Location		Weight
				A	B	
WPX1	8.1" (20.6 cm)	11.1" (28.3 cm)	3.2" (8.1 cm)	4.0" (10.3 cm)	0.6" (1.6 cm)	6.1 lbs (2.8kg)
WPX2	9.1" (23.1 cm)	12.3" (31.1 cm)	4.1" (10.5 cm)	4.5" (11.5 cm)	0.7" (1.7 cm)	8.2 lbs (3.7kg)
WPX3	9.5" (24.1 cm)	13.0" (33.0 cm)	5.5" (13.7 cm)	4.7" (12.0 cm)	0.7" (1.7 cm)	11.0 lbs (5.0kg)

Introduction

The WPX LED wall packs are energy-efficient, cost-effective, and aesthetically appealing solutions for both HID wall pack replacement and new construction opportunities. Available in three sizes, the WPX family delivers 1,550 to 9,200 lumens with a wide, uniform distribution.

The WPX full cut-off solutions fully cover the footprint of the HID glass wall packs that they replace, providing a neat installation and an upgraded appearance. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life. Photocell and emergency egress battery options make WPX ideal for every wall mounted lighting application.

Ordering Information

EXAMPLE: WPX2 LED 40K MVOLT DDBXD

Series		Color Temperature		Voltage		Options		Finish	
WPX1 LED P1	1,550 Lumens, 11W[1]	30K	3000K	MVOLT	120V - 277V	(blank)	None	DDBXD	Dark bronze
WPX1 LED P2	2,900 Lumens, 24W	40K	4000K	347	347V[3]	E4WH	Emergency battery backup, CEC compliant (4W, 0°C min)[2]	DWHXD	White
WPX2 LED	6,000 Lumens, 47W	50K	5000K			E14WC	Emergency battery backup, CEC compliant (14W, -20°C min)[2]	DBLXD	Black
WPX3 LED	9,200 Lumens, 69W					PE	Photocell[3]	Note: For other options, consult factory.	

Note: The lumen output and input power shown in the ordering tree are average representations of all configuration options. Specific values are available on request.

NOTES
1. All WPX wall packs come with 6kV surge protection standard, except WPX1 LED P1 package which comes with 2.5kV surge protection standard. Add SPD6KV option to get WPX1 LED P1 with 6kV surge protection.
   Sample nomenclature: WPX1 LED P1 40K MVOLT SPD6KV DDBXD
2. Battery pack options only available on WPX1 and WPX2.
3. Battery pack options not available with 347V and PE options.

FEATURES & SPECIFICATIONS

INTENDED USE
The WPX LED wall packs are designed to provide a cost-effective, energy-efficient solution for the one-for-one replacement of existing HID wall packs. The WPX1, WPX2 and WPX3 are ideal for replacing up to 150W, 250W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution.

CONSTRUCTION
WPX feature a die-cast aluminum main body with optimal thermal management that both enhances LED efficacy and extends component life. The luminaires are IP66 rated, and sealed against moisture or environmental contaminants.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs and LED lumen maintenance of L90/100,000 hours. Color temperature (CCT) options of 3000K, 4000K and 5000K with minimum CRI of 70. Electronic drivers ensure system power factor >90% and THD <20%. All luminaires have 6kV surge protection (Note: WPX1 LED P1 package comes with a standard surge protection rating of 2.5kV. It can be ordered with an optional 6kV surge protection).
All photocell (PE) operate on MVOLT (120V - 277V) input.

Note: The standard WPX LED wall pack luminaires come with field-adjustable drive current feature. This feature allows tuning the output current of the LED drivers to adjust the lumen output (to dim the luminaire).

INSTALLATION
WPX can be mounted directly over a standard electrical junction box. Three 1/2 inch conduit ports on three sides allow for surface conduit wiring. A port on the back surface allows poke-through conduit wiring on surfaces that don't have an electrical junction box. Wiring can be made in the integral wiring compartment in all cases. WPX is only recommended for installations with LEDs facing downwards.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. IP66 Rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

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Performance Data

Electrical Load

Luminaire	Input Power (W)	120V	208V	240V	277V	347V
WPX1 LED P1	11W	0.09	0.05	0.05	0.04	0.03
WPX1 LED P2	24W	0.20	0.12	0.10	0.09	0.07
WPX2	47W	0.39	0.23	0.20	0.17	0.14
WPX3	69W	0.58	0.33	0.29	0.25	0.20

Projected LED Lumen Maintenance

Data references the extrapolated performance projections in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.94	>0.92	>0.90

Lumen Output

Luminaire	Color Temperature	Lumen Output
WPX1 LED P1	3000K	1,537
	4000K	1,568
	5000K	1,602
WPX1 LED P2	3000K	2,748
	4000K	2,912
	5000K	2,954
WPX2	3000K	5,719
	4000K	5,896
	5000K	6,201
WPX3	3000K	8,984
	4000K	9,269
	5000K	9,393

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

HID Replacement Guide

Luminaire	Equivalent HID Lamp	WPX Input Power
WPX1 LED P1	100W	11W
WPX1 LED P2	150W	24W
WPX2	250W	47W
WPX3	400W	69W

Emergency Egress Battery Packs

The emergency battery backup is integral to the luminaire — no external housing or back box is required. The emergency battery will power the luminaire for a minimum duration of 90 minutes and deliver minimum initial output of 550 lumens. Both battery pack options are CEC compliant.

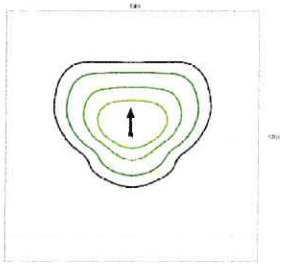
Battery Type	Minimum Temperature Rating	Power (Watts)	Controls Option	Ordering Example
Standard	0°C	4W	E4WH	WPX2 LED 40K MVOLT **E4WH** DDBXD
Cold Weather	-20°C	14W	E14WC	WPX2 LED 40K MVOLT **E14WC** DDBXD

Photometric Diagrams

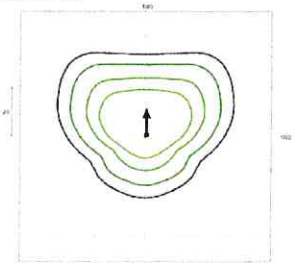
To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WPX LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards

LEGEND
- 0.1 fc
- 0.2 fc
- 0.5 fc
- 1.0 fc

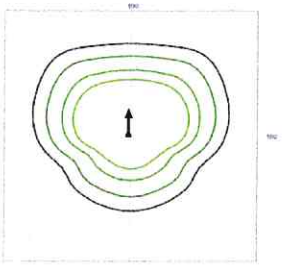
WPX1 LED P1



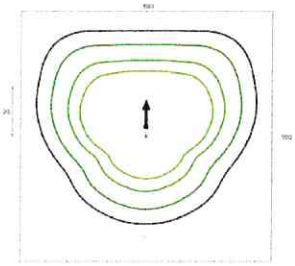
WPX1 LED P2



WPX2 LED



WPX3 LED



Mounting Height = 12 Feet.

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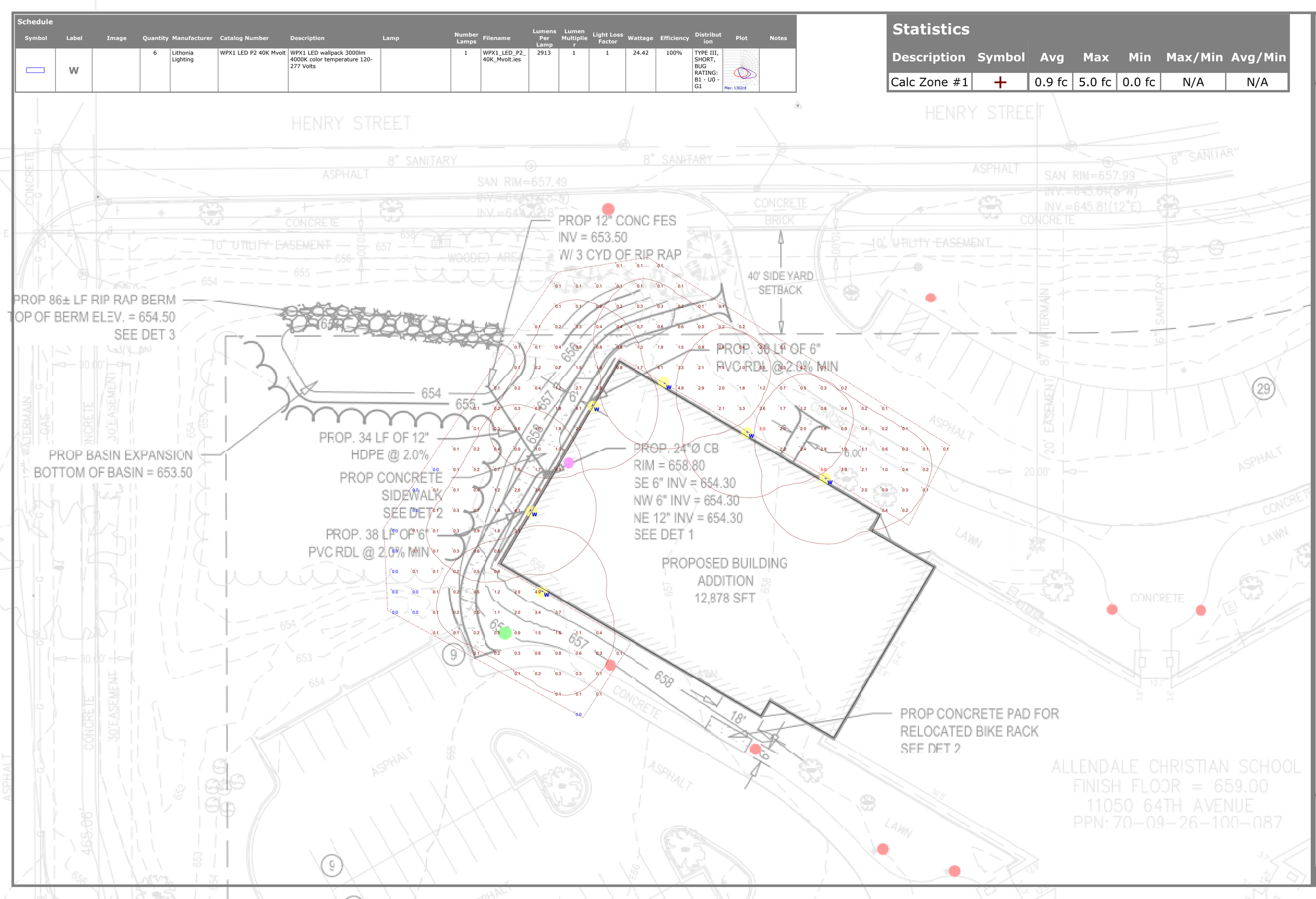
Schedule

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Lumen Multiplier	Light Loss Factor	Wattage	Efficiency	Distribution	Plot	Notes
	W		6	Lithonia Lighting	WPX1 LED P2 40K Mvolt	WPX1 LED wallpack 3000lm 4000K color temperature 120-277 Volts		1	WPX1_LED_P2_40K_Mvolt.ies	2913	1	1	24.42	100%	TYPE III, SHORT, BUG RATING: B1 - U0 - G1	Max: 1302cd	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.9 fc	5.0 fc	0.0 fc	N/A	N/A



Designer

Date
3/10/2021
Scale
Not to Scale
Drawing No.

Summary

1 of 1

ALLENDALE CHRISTIAN SCHOOL EXPANSION

11050 64TH AVENUE
ALLENDALE, MI 49401

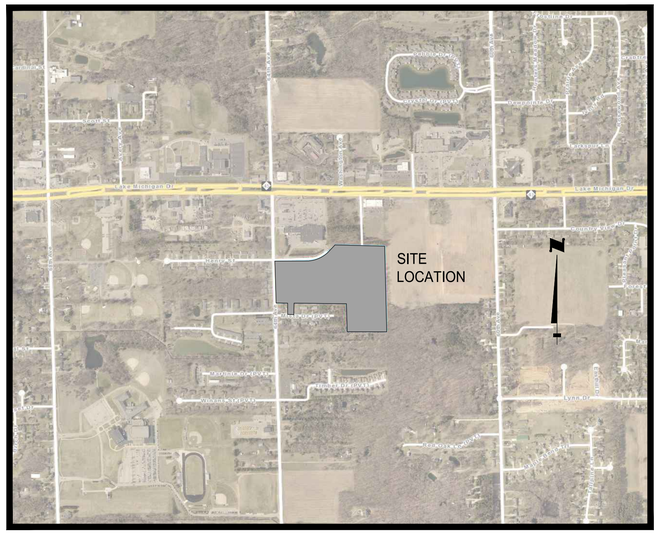
ZONING

R-1 (LOW DENSITY ONE -FAMILY RESIDENTIAL DISTRICT)

SETBACKS:
FRONT YARD 50 FEET MIN.
SIDE YARD 25 FEET TOTAL (10 FT MIN)
REAR YARD 50 FEET MIN.
HEIGHT 30FEET MAX. (2 1/2 STORIES)

LEGAL DESCRIPTION

PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 26; EXCEPTING THAT PART LYING NORTH OF A LINE COMMENCING SOUTH 00 DEGREES 38 MINUTES 18 SECONDS EAST 831.07 FEET; THENCE NORTH 89 DEGREES 21 MINUTES 42 SECONDS EAST 33.00 FEET & SOUTH 00 DEGREES 38 MINUTES 18 SECONDS EAST 33.00 FEET FROM THE NORTHWEST SECTION CORNER; THENCE NORTH 89 DEGREES 21 MINUTES 42 SECONDS EAST 400.54 FEET ALONG the SOUTH LINE OF HENERY STREET; THENCE NORTHEASTERLY 241.15 FEET ALONG A 333.00 FOOT RADIUS CURVE TO THE LEFT, HAVING A CHORD THAT BEARS NORTH 68 DEGREES 36 MINUTES 53 SECONDS EAST 235.92 FEET; THENCE NORTH 47 DEGREES 52 MINUTES 05 SECONDS EAST 135.64 FEET; THENCE SOUTH 88 DEGREES 36 MINUTES 58 SECONDS EAST 564.46 FEET TO THE EAST LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 AND THE END OF SAID LINE. ALSO EXCEPTING THE WEST 50.00 FEET FOR ROAD RIGHT-OF-WAY, ALSO THAT PART OF THE NORTHWEST 1/4 COMMENCING SOUTH 00 DEGREES 39 MINUTES 58 SECONDS EAST 1328.04 FEET & SOUTH 88 DEGREES 48 MINUTES 06 SECONDS EAST 871.76 FEET FROM THE NORTHWEST SECTION CORNER; THENCE SOUTH 88 DEGREES 48 MINUTES 06 SECONDS EAST 447.00 FEET; THENCE SOUTH 00 DEGREES 29 MINUTES 43 SECONDS EAST 329.96 FEET; THENCE NORTH 88 DEGREES 48 MINUTES 06 SECONDS WEST 447.00 FEET; THENCE NORTH 00 DEGREES 29 MINUTES 43 SECONDS WEST 329.96 FEET TO THE POINT OF BEGINNING. BEING PART OF SECTION 26 T.7N.,R.14W.



LOCATION MAP NOT TO SCALE

TABLE OF CONTENTS

SHEET G-100 COVER SHEET
SHEET CD-101 CIVIL DEMOLITION PLAN
SHEET C-101 SITE LAYOUT PLAN

Know what's below. Call before you dig.

LEGEND

- SECTION CORNER
- SITE BENCHMARK
- SOIL BORING
- FOUND STEEL BAR
- FOUND IRON PIPE
- SET STEEL BAR
- MANHOLE
- CATCHBASIN
- HYDRANT
- WATER VALVE
- UTILITY POLE
- LIGHT POLE
- CLEANOUT
- DECIDUOUS TREE
- UNDERGROUND GAS
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- CHAIN LINK FENCE
- MINOR CONTOUR
- INDEX CONTOUR
- ASPHALT
- CONCRETE
- GRAVEL

STATE OF MICHIGAN
LYNNELLE ERIN BENNEMPAS
ENGINEER
No. 6201037378
PROFESSIONAL
3/4/21

HOLLAND ENGINEERING
220 Hoover Boulevard
Holland, Michigan 49423-2366
www.hollandengineering.com
T 616-392-5938 F 616-392-2116

The Surveyor's Engineer's liability for any and all claims, including but not limited to those asserted in the Surveyor's/Engineer's professional services, negligence, gross misconduct, warranties or misrepresentations, shall be deemed limited to an amount no greater than the service fee.

LAKEWOOD CONSTRUCTION
ATTN: MR. Marcel Vander Laan
11253 James Street
Holland, MI 49424

ACS EXPANSION
11050 64TH AVENUE
ALLENDALE, MICHIGAN 49401
PT. OF THE NW 1/4 SEC. 26 T7N, R14W
ALLENDALE TWP, OTTAWA CO., MI

Issued for:

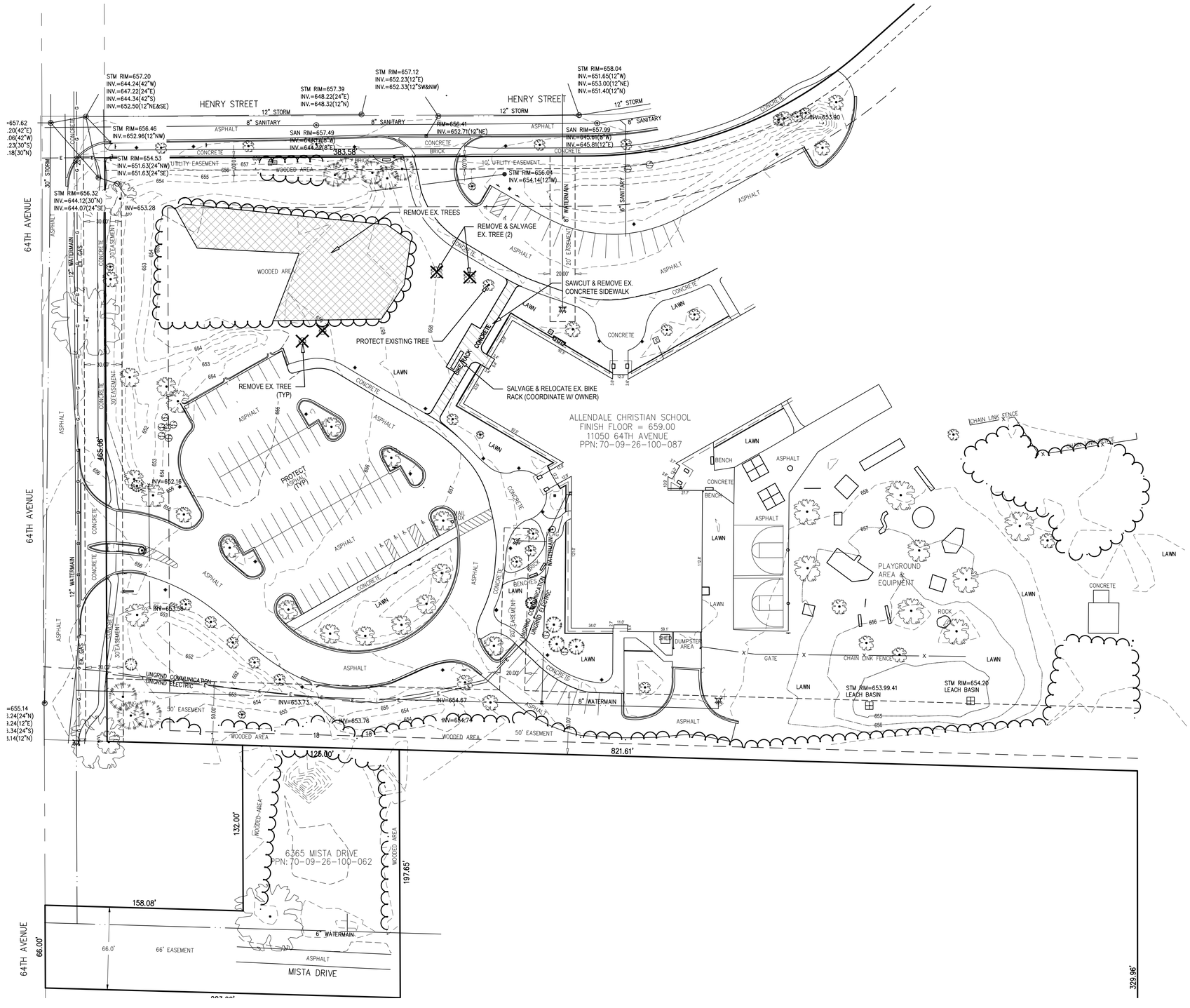
No.	Date	Description
A	12/05/2020	75% DESIGN REVIEW
B	12/18/2020	ISSUED FOR BID
C	02/25/2021	ISSUED FOR PERMITS
D	03/01/2021	ISSUED FOR TOWNSHIP APPROVAL

Plans are preliminary & incomplete until ISSUED FOR CONSTRUCTION

Project Manager: RYAN T. YSSELDYKE, PE
Vertical Datum: LOCAL | Horz. Datum: LOCAL
Drawn by: COLLIN DEPREKEL

Checked by		Date
Survey	.	.
Civil	.	.
Struc.	.	.
L. A.	.	.

HEI Project Number: 19-12-012
Sheet Title: COVER SHEET
Sheet No.: G-100



N

0' 20' 40' 80'

SCALE 1" = 40'

CIVIL DEMOLITION NOTES:

1. THE BOUNDARY AND TOPOGRAPHIC SURVEY WAS COMPLETED BY ANOTHER FIRM AND PROVIDED TO HEI BY THE CLIENT. HEI IS NOT RESPONSIBLE FOR THE ACCURACY OF THE SURVEY INFORMATION OR ANY DESIGN DISCREPANCIES RESULTING FROM THE PROVIDED SURVEY INFORMATION.
2. SEE BOUNDARY AND TOPOGRAPHIC SURVEY SHEET FOR PROPERTY, EASEMENT, BENCHMARK, ETC. INFORMATION.
3. LOCATION OF UNDERGROUND UTILITIES HAVE BEEN SHOWN BASED ON SURFACE EVIDENCE AND RECORD INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. DURING CONSTRUCTION, CONTRACTOR SHALL PROTECT ALL EXISTING AND NEW CONSTRUCTION FROM DAMAGE. SHOULD ANY DAMAGE OCCUR, CONTRACTOR SHALL MAKE ALL NECESSARY REPAIRS AT NO COST TO THE OWNER. THE PAVED ROADWAY SHALL BE SWEPT CLEAN AS NEEDED, BUT AT LEAST ONCE A WEEK.
5. CONTRACTOR SHALL PROVIDE BARRIERS, AS NECESSARY, TO PREVENT PEDESTRIAN AND VEHICULAR TRAFFIC FROM ENTERING THE CONSTRUCTION SITE.
6. CALL MISS DIG AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING ANY EXCAVATION.
7. REMOVAL ITEMS ARE SHOWN BASED ON BEST AVAILABLE INFORMATION AND ARE SHOWN SCHEMATICALLY. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO VERIFY THE EXTENT OF WORK REQUIRED.
8. REMOVE ALL STRUCTURES, CONCRETE CURB, CONCRETE PAVING, ASPHALT PAVING, TREES, STUMPS, UTILITIES, AND OTHER EXISTING SITE FEATURES WITHIN THE LIMITS OF DEMOLITION. ALL DEMOLITION MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED AND DISPOSED OF IN A MANNER ACCEPTABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION.
9. ALL UTILITY LINES SHOWN "X" OUT SHALL BE PHYSICALLY REMOVED ALONG WITH STRUCTURES AND APPURTENANCES. CONTRACTOR SHALL CONFIRM UTILITY LINES REMOVED WILL NOT IMPACT UTILITIES TO REMAIN.
10. ALL REMOVALS OF PAVEMENT, CONCRETE, CURB AND GUTTER, ETC. SHALL BE PERFORMED TO THE NEXT JOINT BEYOND THE LIMITS OF REMOVAL. ALL REMOVALS SHALL BE PERFORMED BY SAWCUTTING.
11. PROTECT ALL TREES AND SHRUBS NOT SCHEDULED FOR REMOVAL. DO NOT OPERATE EQUIPMENT, STORE, STOCKPILE, OR PARK WITHIN DRIP LINE. HOLD NECESSARY DISTURBANCE TO A MINIMUM.
12. ALL TREE STUMPS SHALL BE REMOVED TO BELOW GRADE BY EITHER GRINDING OR COMPLETE REMOVAL IN ALL CASES NO WOODCHIPS AND/OR STUMPS SHALL BE LEFT IN PLACE.
13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL UTILITIES REMOVALS WITH PROPERTY OWNER AND UTILITY PROVIDER.
14. ALL WORK IN ROAD RIGHTS OF WAY SHALL BE COMPLETED IN ACCORDANCE WITH OTTAWA COUNTY ROAD COMMISSION, AND ALLENDALE TOWNSHIP.
15. SEE OTHER SHEETS IN PLAN SET FOR MORE INFORMATION.

HOLLAND ENGINEERING
220 Hoover Boulevard
Holland, Michigan 49423-7765
www.hollandengineering.com
T 616-392-5938 F 616-392-2116

The Surveyor's / Engineer's liability for any and all claims, including but not limited to those arising out of the Surveyor's / Engineer's professional services, negligence, gross misconduct, warranties or representations shall be deemed limited to an amount no greater than the service fee.

LAKEWOOD CONSTRUCTION

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Project Manager
RYAN T. YSSELDYKE, PE

Vertical Datum	Horz. Datum
LOCAL	LOCAL

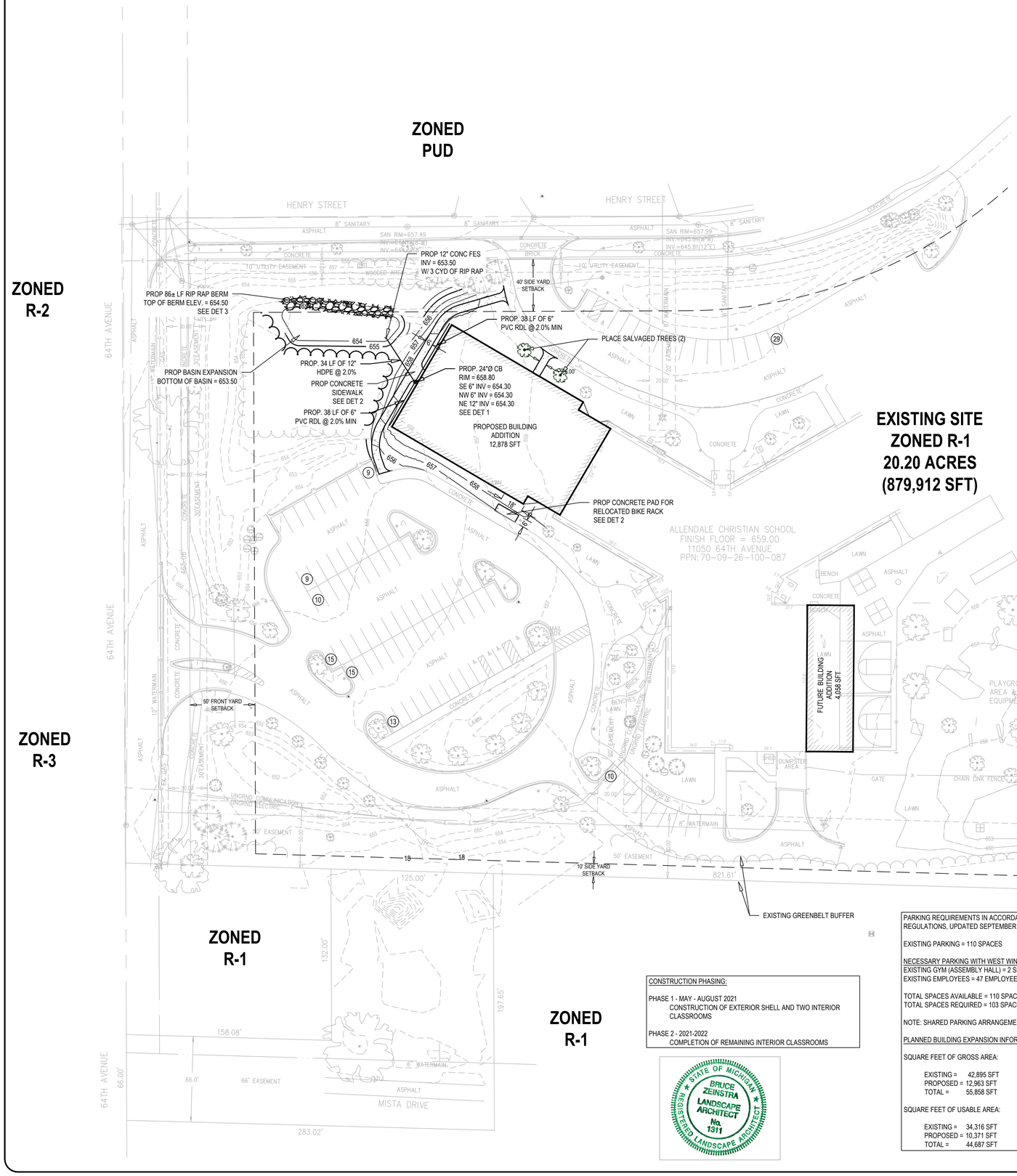
Drawn by
COLLIN DEPREKEL

Checked by	Date
Survey	. .
Civil	. .
Struc.	. .
L. A.	. .

HEI Project Number
19-12-012

Sheet Title
CIVIL DEMOLITION

Sheet No.
CD-101



CONSTRUCTION PHASING:

PHASE 1 - MAY - AUGUST 2021
CONSTRUCTION OF EXTERIOR SHELL AND TWO INTERIOR CLASSROOMS

PHASE 2 - 2021-2022
COMPLETION OF REMAINING INTERIOR CLASSROOMS

PARKING REQUIREMENTS IN ACCORDANCE WITH ALLENDALE TOWNSHIP'S ARTICLE 21 PARKING AND LOADING REGULATIONS, UPDATED SEPTEMBER 7, 2013

EXISTING PARKING = 110 SPACES

NECESSARY PARKING WITH WEST WING EXPANSION:
EXISTING GYM (ASSEMBLY HALL) = 2 SPACES PER 5 SEATS ON THE BENCH = 197 SEATS / 5 SEATS / 2 SPACES = 79 SPACES
EXISTING EMPLOYEES = 47 EMPLOYEES (INCLUDING PART TIME) AT 1 SPACE PER 2 EMPLOYEES = 24 SPACES

TOTAL SPACES AVAILABLE = 110 SPACES
TOTAL SPACES REQUIRED = 103 SPACES

NOTE: SHARED PARKING ARRANGEMENTS WILL BE REVIEWED AS NECESSARY WITH THE FUTURE GYM EXPANSION.

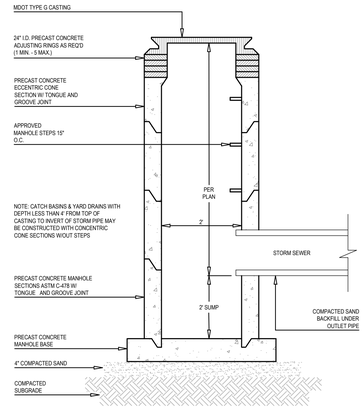
PLANNED BUILDING EXPANSION INFORMATION:

SQUARE FEET OF GROSS AREA:

EXISTING = 42,895 SFT
PROPOSED = 12,963 SFT
TOTAL = 55,858 SFT

SQUARE FEET OF USABLE AREA:

EXISTING = 34,316 SFT
PROPOSED = 10,371 SFT
TOTAL = 44,687 SFT



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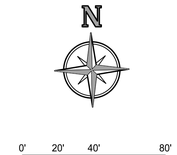
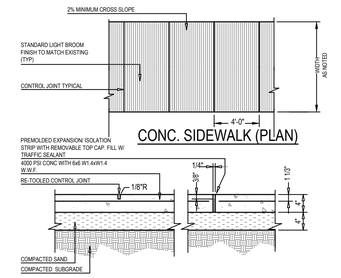
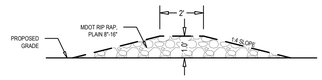
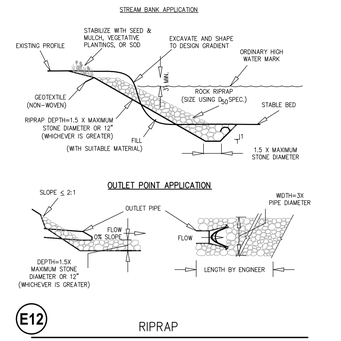




2 4" THICK CONCRETE



3 RIP RAP BERM DETAIL



E12 RIPRAP

LAYOUT & UTILITY NOTES:

1. THE BOUNDARY AND TOPOGRAPHIC SURVEY WAS COMPLETED BY ANOTHER FIRM AND PROVIDED TO HEI BY THE CLIENT. HEI IS NOT RESPONSIBLE FOR THE ACCURACY OF THE SURVEY INFORMATION OR ANY DESIGN DISCREPANCIES RESULTING FROM THE PROVIDED SURVEY INFORMATION.
2. SITE DESIGN WAS DEVELOPED IN ACCORDANCE WITH THE INFORMATION CONTAINED IN THE GEOTECHNICAL REPORT AND SOIL BORINGS COMPLETED NOVEMBER 18, 2006 BY SOILS & STRUCTURES, INC. CONTRACTOR SHALL ACQUIRE A COPY OF THE GEOTECHNICAL REPORT AND SOIL BORING INFORMATION. SOIL CONDITIONS MAY VARY FROM THE GEOTECHNICAL INFORMATION, WHICH MAY AFFECT THE SITE DESIGN, EARTHWORK QUANTITIES, USABLE SOILS, AND SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES. CONTRACTOR SHALL NOTIFY DESIGN ENGINEER AND GEOTECHNICAL ENGINEER IF SITE CONDITIONS VARY FROM SOILS INFORMATION CONTAINED IN THE GEOTECHNICAL INFORMATION.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN ACQUIRED PRIOR TO CONSTRUCTION.
4. CALL MISS DIG AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING ANY EXCAVATION.
5. CONTRACTOR SHALL CONTACT ENGINEER IF ANY DISCREPANCIES ARE DETERMINED BETWEEN SITE LAYOUT DIMENSIONS AND ACTUAL SITE CONDITIONS.
6. COORDINATE ALL UTILITY CONSTRUCTION WITH UTILITY PROVIDER, AS REQUIRED.
7. CONTRACTOR SHALL VERIFY THAT THERE ARE NO UTILITY CONFLICTS PRIOR TO CONSTRUCTION.
8. ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE ALLENDALE TOWNSHIP STANDARDS & SPECIFICATIONS.
9. ALL WATERMAIN, WATER SERVICES, AND FIRE PROTECTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE ALLENDALE TOWNSHIP STANDARDS & SPECIFICATIONS.
10. ALL WORK WITHIN THE PUBLIC ROAD RIGHT-OF-WAY WILL REQUIRE A PERMIT AND OR APPROVAL FROM THE OTTAWA COUNTY ROAD COMMISSION AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THEIR STANDARDS & SPECIFICATIONS.
11. COORDINATE ALL SIGNAGE REMOVAL AND RELOCATION WITHIN THE RIGHT-OF-WAY WITH OTTAWA COUNTY ROAD COMMISSION
12. SITE CONTRACTOR RESPONSIBLE TO CONNECT EXISTING AND PROPOSED BUILDING TO WATER SERVICE AND SANITARY SEWER LATERAL. REFER TO PLUMBING PLANS FOR CONNECTION LOCATION AND DETAILS.
13. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS. BUILDING SHALL BE STAKED BASED ON FOUNDATION PLAN. CONTRACTOR SHALL NOTIFY ENGINEER IF THERE ARE DISCREPANCIES BETWEEN THE BUILDING AND SITE DRAWINGS.
14. ONSITE LIGHTING SHALL DIRECTED DOWNWARD AND AWAY FROM ADJACENT PROPERTIES AS REQUIRED PER THE ALLENDALE TOWNSHIP ZONING ORDINANCE.
15. SITE SIGNAGE SHALL MEET THE STANDARDS AND REQUIREMENTS OF THE ALLENDALE TOWNSHIP ZONING ORDINANCE. A SIGN PERMIT SHALL BE ACQUIRED PRIOR TO CONSTRUCTION.
16. CONTRACTOR SHALL BE RESPONSIBLE TO MEETING THE STANDARDS AND REQUIREMENTS OF THE LOCAL NOISE ORDINANCE FOR ALL CONSTRUCTION PRACTICES.
17. SEE OTHER SHEETS IN PLAN SET FOR MORE INFORMATION.

HOLLAND ENGINEERING
220 Hoover Boulevard
Holland, Michigan 49423-2765
www.hollandengineering.com
T 616-392-5938 F 616-392-2116

The Surveyor's / Engineer's liability for any and all claims, including but not limited to those arising out of the Surveyor's / Engineer's professional services, negligence, gross misconduct, warranties or representations shall not be deemed limited to an amount no greater than the service fee.

LAKEWOOD CONSTRUCTION
ATTN: MR. Marcel Vander Laan
11253 James Street
Holland, MI 49424

ACS EXPANSION
11050 64TH AVENUE
ALLENDALE, MICHIGAN 49401

PT. OF THE NW 1/4 SEC. 26 T7N, R14W
ALLENDALE TWP, OTTAWA CO., MI

Issued for:

No.	Description	Date
A	75% DESIGN REVIEW	02/05/2020
B	ISSUED FOR BID	12/18/2020
C	ISSUED FOR PERMITS	02/25/2021
D	ISSUED FOR TOWNSHIP APPROVAL	03/01/2021

Plans are preliminary & incomplete until ISSUED FOR CONSTRUCTION

Project Manager
RYAN T. YSSELDYKE, PE

Vertical Datum	Horz. Datum
LOCAL	LOCAL

Drawn by
COLLIN DEPREKEL

Checked by		Date
Survey	.	.
Civil	.	.
Struc.	.	.
L. A.	.	.

HEI Project Number
19-12-012

Sheet Title
SITE LAYOUT PLAN

Sheet No.
C-101

Fresh Coast Planning

950 Taylor Avenue, Ste 200
Grand Haven, MI 49417
www.freshcoastplanning.com

Gregory L. Ransford, MPA
616-638-1240
greg@freshcoastplanning.com

Lindsay R. Mohr, MPA
248-990-3525
lindsay@freshcoastplanning.com

Julie Lovelace
616-914-0922
julie@freshcoastplanning.com

Brian Werschem
231-206-4821
bwerschem@gmail.com

MEMORANDUM

To: Allendale Charter Township Planning Commission
From: Gregory L. Ransford, MPA
Date: March 31, 2021
Re: Walgreens Planned Unit Development Major Amendment – Mr. Burger Preliminary Review

---

In accordance with Section 12.07 – Procedures of the Allendale Charter Township Zoning Ordinance (ACTZO), attached is a Planned Unit Development (PUD) major amendment application from Steve Witte of Nederveld, Incorporated on behalf of Allendale Property, LLC to construct a 5,414 square foot Mr. Burger drive-thru and sit down dining restaurant located at 6880 Lake Michigan Drive, parcel number 70-09-27-126-045. As you know, this property was included within the 2007 Walgreens PUD approval, and more recently was authorized to contain the "Raymond Building," which was a multi-tenant building, including an end unit with a drive-thru. As you may know, the Raymond Building was abandoned. Given this, and because the approved building and site layout has changed, the proposed Mr. Burger restaurant drive-thru requires the same formal amendment to the Walgreens PUD as the Raymond Building sought.

For your convenience, we have attached a copy of the original PUD plan (electronic only) that was approved in 2007. As you will note within the proposed plans, a future 8,250 square foot building is also included, however no elevations, floor plan, or other related building details were provided. Similar to the Raymond Building submission, in the instance the applicant decides to proceed with the construction of the future building, the applicant will need to return to the Planning Commission for formal site plan review (and PUD amendment unless otherwise amended concurrent with the Mr. Burger application).

Preliminary Review Observations and Findings

Pursuant to your longstanding direction, the applicant has submitted the site plan for preliminary review prior to scheduling the proposed amendment for final review and public hearing. While the submission is for preliminary review, we conducted a comprehensive review related to the ACTZO to ensure the applicant receives complete guidance early in the process. As you know, our notations within this memorandum are not composed of the traditional review format (i.e. site plan and PUD review standards, suggested conditions, etcetera) given the preliminary nature of the review. Based on this, we provide our ordinance findings and observations below.

Relevant Walgreens PUD Ordinance Provisions

- Ordinance No. 2007-Section 3A25 – The Walgreens PUD prohibits drive-thru car service. Given the proposed Mr. Burger includes a drive-thru, the applicant is seeking an amendment to this provision of the Ordinance.
- Ordinance No. 2007-Section 4A1 – The Walgreens PUD requires all roof-top equipment is fully screened by at least 48-inch parapet walls. The proposed parapet walls appear to be significantly less than 48 inches in height. While we advised the applicant of this deficiency, they requested to discuss the proposed parapets with the Planning Commission and have provided photographs of the same at an existing Mr. Burger location.
- Ordinance No.2007-Section 4AJ – The Walgreens PUD requires that the exterior walls of all structures shall be complete with stone, cement board or similar material. No

EFIS, dryvit, vinyl or exposed fastener type steel is to be used within the PUD zone district. The proposed façade includes split faced CMU as well as Face brick running bond masonry. The Planning Commission will need to determine if the proposed façade materials are acceptable.

Relevant Zoning Ordinance Provisions

- Section 24-06H – Waste Disposal Facilities – It is important to note, that while the applicant provides for steel bump posts at the dumpster gate opening, they are positioned outside of the concrete curb. As a result, the Planning Commission will need to determine if they are acceptable as positioned.
- Section 24.06L – Traffic Impact Study – As you will note within the attached materials, the proposed use exceeds the peak hourly trip count and therefore the Planning Commission could require a formal traffic study.
- Signage – While we informed the applicant that the Planning Commission desires to review sign packages as part of the submission, signage details are minimally provided. We expect the applicant to provide appropriate and complete signage information prior to the public hearing and final plan review, particularly because the Walgreens PUD requires sign details as part of the Final Development Plan.
- Cross Access Easement to Western Property – Similar to the Raymond Building approval, the applicant has provided for an access easement to the west property, leading through their site to the Walgreens property. While the access is not shown on the main site plan set, it is shown within the draft Agreement for Future Reciprocal Access and Use document.
- Southeast Striped Pavement Parking Island – As you will note within the site plan, Sheet C-205, the applicant proposes a striped pavement parking island in the generally southeast corner of the site. We suggested to the applicant that this is modified as a typical landscape island with raised concrete curb to provide for better traffic circulation and defined parking areas. In addition, we recommended that the adjacent landscape island separating the drive-thru stacking area and the parking be extended to the west to provide for a better defined stacking area and to circulate related traffic around the north end of the building to the west to approach the menu order board. In response to both, the applicant seeks to discuss these attributes with the Planning Commission.
- Lighting – Photometric and light specification sheets are pending. We expect these with the Final Development Plan submission.

Raymond Building Resolution

Given the similar nature of the proposed use and its location on the same property as the Raymond Building, below are relevant conditions from the approved resolution for the Raymond Building that we believe you will find important with your current review.

- Any speaker or other similar device used for the drive-through shall not exceed 70 decibels.
- The hours of operation for the entire building shall be limited from 6:00am to 12:00am.
- The existing vegetation identified in the 'Southern Greenbelt' and 'Western Greenbelt B' on Sheet L-201 must be marked by the developer so that Township Staff can inspect and verify that sufficient landscaping is present prior to construction. In the event existing vegetation does not satisfy the greenbelt requirement of the ACTZO, the landscape plan shall be installed as identified on the Plan, to the extent necessary in conjunction with existing vegetation, to comply with the ACTZO.
- The site shall contain sufficient vegetation and or other means, compliant with the Zoning Ordinance, which prevents automobile headlights from shining into the property to the west.
- Parapet walls shall fully screen rooftop equipment from Lake Michigan Drive and 68th Avenue.

Township Staff Reviews

Fire Department

The Fire Department is generally satisfied with the proposed plans.

Township Water and Sewer

The Township Superintendent of Public Utilities is generally satisfied with the proposed plans.

Township Engineer

Review comments from the Township Engineer regarding the traffic data and grading are pending. Once we receive his comments, we will transmit them to you.

Public Hearing

As you know, the Final PUD Site Plan amendment requires a public hearing. Given this, the Planning Commission will need to schedule said hearing when deemed appropriate.

Possible Future Building

Given that the Walgreens PUD was approved with a specific building size and parking lot on the subject property, any further building construction requires additional amendment to the Walgreens PUD. Given this, and in conjunction with the proposed amendment, the applicant seeks to amend the PUD to allow for the Possible Future Building with only a site plan review process rather than an additional PUD amendment.

Planning Commission Considerations

As the Planning Commission performs their preliminary review of this request, the following warrant your review and consideration. They are listed in no particular order.

- Whether an amendment to permit a drive-thru in the Walgreens PUD is appropriate
    - Whether the parapets, which are less than four feet in height, are acceptable to screen rooftop equipment
    - Whether the proposed building façade materials are acceptable
    - Whether the PUD should allow for the future building to only need site plan review (whether a use-by-right or special use)
- Whether a formal traffic impact study is warranted
- The position of the steel bump guard posts outside of the concrete curbing
- Whether the southwest parking lot striped island should become a landscaped island with raised concrete curbing
- Whether the drive-thru island should be extended to the west
- Applicable Raymond Building Resolution provisions

The application has been scheduled for review at your April 5, 2021 meeting. We expect the applicant to be in attendance. If you have any questions, please let us know.

GLR
Planner

Attachments

cc: Adam Elenbaas, Supervisor
Steve Witte, Nederveld

Allendale Charter Township Fire Department

FIRE DEPARTMENT

FIRE CHIEF
MICHAEL KEEFE

DEPUTY CHIEF
RANDY BOSCH

CAPTAIN
BUSINESS
FIRE INSPECTOR
TONY DOLCE

LIEUTENANT
TRAINING OFFICER
SCOTT HARKES

LIEUTENANT
RENTAL INSPECTOR
KYLE GARLANGER

LIEUTENANTS
WILLIAM
O'DONNELL
BRUCE NAGELKIRK
DAVE MARSHALL
STEVE WOLBRINK

SERGEANTS
CHRIS HOLMES
NICK RICHARDS
DOUG ANDERSON
JOE FLAGSTADT
TROY TELLER
ERIC BUSSCHER

March 8, 2021

Gregory Ransford, Planner
Planning Commission
6676 Lake Michigan Drive

RE: 6880 Lake Michigan Drive
Mr. Burger

Greg:

I have reviewed the plans for the proposed MR. Burger. I have found two things that will need to be addressed for Fire Dept approval.

1) All sprinkled building in Allendale will be required to install a post-indicator valve.

2) Knox boxes are required on buildings for Fire Dept. access. **IFC 2012** ***506.1*** *Where required. Where access to or within a structure or an area is unduly difficult because of secured openings or where immediate access is necessary for life-saving or firefighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official.*

Respectfully submitted

Tony Dolce
Fire Inspector
Allendale Fire Department

6676 Lake Michigan Dr., P O Box 539, Allendale MI 49401-0539
Phone: 616-895-6295 Fax: 616-895-6295 ext. 1116 www.allendale-twp.org mikekeefe@allendale-twp.org

AGREEMENT FOR FUTURE RECIPROCAL ACCESS AND USE

THIS AGREEMENT FOR FUTURE RECIPROCAL ACCESS AND USE (the "Agreement") is made and entered into as of the ___ day of _____, 2021, by and between Allendale Property, LLC, ("AP"), a Michigan Limited Liability Company; and Allendale Charter Township (the "Township").

WITNESSETH:

WHEREAS, AP owns real property located at 6880 Lake Michigan Drive, situated in the Township and more particularly described in Exhibit A (the "AP Property");

WHEREAS, current or future owners of the adjacent real property to the west of the AP Property, more particularly described in Exhibit B (the "Adjacent Property"), may eventually come to the Township with development plans;

WHEREAS, AP is willing to grant a reciprocal easement for the Adjacent Property, pursuant to the terms and conditions stated in this Agreement, subject to the owners of the Adjacent Property granting a reciprocal easement for the AP Property at the time the Adjacent Property is developed;

WHEREAS, this Agreement is required as a condition to the Township's final approval of the construction upon the AP Property;

NOW THEREFORE, for and in consideration of the covenants contained in this Agreement, AP and the Township agree as follows, to facilitate the establishment of reciprocal easements over the AP Property and the Adjacent Property at the appropriate time by AP and its successors and the current and future owners of the Adjacent Property (the owners of the AP Property and the Adjacent Property are together referred to as the "Owners").

ARTICLE I
RECIPROCAL MUTUAL ACCESS AGREEMENT

Section 1.

(a) AP agrees to grant to the current or future owners of the Adjacent Property, and their permittees, successors, and assigns, a non-exclusive easement for the ingress and egress of motor vehicles and pedestrians to and from the Adjacent Property and to and from the AP Property, which easement is illustrated as the ingress/egress easement area in Exhibit C, and across such drive aisles as may exist from time to time on the north side of the proposed building on the AP Property.

(b) At such time as the Adjacent Property is developed, the Township shall require the then-owners of the Adjacent Property to grant to AP and its permittees, successors, and assigns, a non-exclusive easement for the ingress and egress of motor vehicles and pedestrians to and from the AP Property and to and from the Adjacent Property, which easement is illustrated as the ingress/egress easement area in Exhibit C, and across such drive aisles as may exist from time to time on the Adjacent Property.

(c) The easement on the AP Property and the easement on the Adjacent Property shall together be referred to as the "Access Easement Area."

Section 2. The Owners shall use the Access Easement Area with due regard for the rights of each other. They will agree to keep the Access Easement Area free and clear of obstacles or obstructions which would prevent or hinder the free passage of vehicular traffic within or across the Access Easement Area except temporarily, for reasonable times and in a reasonable manner, for purposes of performing work permitted by this Agreement.

Section 3.

(a) AP will, at its expense, maintain that portion of the Access Easement Area located on the AP Property. The owners of the Adjacent Property will, at their expense, maintain that portion of the Access Easement Area located on the Adjacent Property. Maintenance responsibilities shall include, but not be limited to, repair of pot holes, deterioration, and damage; cleaning and weed control; repaving if necessary; and snow removal.

(b) In the event owners of the Adjacent Property cause any damage to the Access Easement Area, through the negligent or intentional acts or omissions of the owners of the Adjacent Property, their agents, customers, and employees, the owners of the Adjacent Property shall immediately reimburse AP for such damage to the Access Easement Area upon receipt from AP of a billing with supporting invoices.

(c) In the event AP causes any damage to the Access Easement Area, through the negligent or intentional acts or omissions of AP, its agents, customers, and employees, AP shall immediately reimburse the owners of the Adjacent Property for such damage to the Access Easement Area upon receipt from the owners of the Adjacent Property of a billing with supporting invoices.

Section 4. The Access Easement Area to be granted per this Agreement shall not include the right of the Owners to construct or alter any improvements upon the property of the other.

Section 5. Nothing contained in this Agreement shall be deemed to be a gift or dedication of any portion of the Access Easement Area to the general public.

Section 6. Neither AP nor the owners of the Adjacent Property shall allow any of their respective permittees to park on the other's property. In addition, the Access Easement Area

shall be kept clear of parked vehicles at all times, subject to the provisions of Section 7. The easements to be granted per this Agreement are for the purpose of ingress and egress only and shall not confer any right to park motor vehicles on the property of the other. The AP Property and the Adjacent Property shall have their own separate and independent vehicle parking areas sufficient to satisfy the requirements of the Township.

Section 7. The Owners may from time to time interrupt the use of the Access Easement Area for reasonable periods of time for construction, maintenance, or repair of the Access Easement Area or improvement of their own individual property.

Section 8. This easement is specific only to the site plan layout that is attached as Exhibit C. If the AP property has not been developed and/or if the AP property is developed with a different layout than illustrated in Exhibit C, this agreement is null and void.

ARTICLE II
USE RESTRICTIONS

The Owners shall agree not to use, suffer, permit, or consent to the use or occupancy of any part of the Access Easement Area as an extension of their own individual property for business use or other operations.

This Easement is intended for common everyday vehicular traffic. The use of Construction Traffic on/through the easement for benefit of the adjacent property is prohibited. No construction traffic is allowed on the Easement Area.

ARTICLE III
GENERAL PROVISIONS

Section 1. No amendment to this Agreement shall be effective unless written approval is given to such amendment by AP and the Township.

Section 2.

(a) The owners of the Adjacent Property (and their successors and assigns) shall indemnify, defend, and hold harmless AP (and its successors and assigns) from and against any liability, demands, claims, causes of action, judgments, and costs (including, without limitation, court costs and reasonable attorney's fees) for, by way of illustration only, injury to persons, loss of life, or damage to property occurring within the Access Easement Area which arises out of the use of the Access Easement Area by the owners of the Adjacent Property (and their successors and assigns), or their employees, agents, customers, invitees, designees, licensees, lessees, and tenants.

(b) AP (and its successors and assigns) shall indemnify, defend, and hold harmless the owners of the Adjacent Property (and their successors and assigns) from and against any liability, demands, claims, causes of action, judgments, and costs (including, without limitation, court costs and reasonable attorney's fees) for, by way of illustration only, injury to persons, loss of life, or damage to property

occurring within the Access Easement Area which arises out of the use of the Access Easement Area by AP (and its successors and assigns), or its employees, agents, customers, invitees, designees, licensees, lessees, and tenants.

Section 3. In the event of a default of any of the provisions of the reciprocal easements among the Owners, a non-defaulting owner shall have the right to cure the default at the defaulting owner's sole expense. However, any owner may cure a default immediately in an emergency situation.

Section 4. This Agreement shall be recorded in the office of the Register of Deeds of the County of Ottawa, Michigan.

Section 5. Any and all notices required or permitted to be given under this Agreement shall be in writing, postage pre-paid, and shall be sent by U.S. Postal Service, Certified Mail with Return Receipt Requested, to:

THE TOWNSHIP	**Allendale Property, LLC**
Allendale Township	James Christopoulos
6676 Lake Michigan Drive	Mr. Burger
PO Box 539	2101 Lake Michigan Drive, NW
Allendale, MI 49401	Grand Rapids, MI 49504

Section 6. No waiver of any provision of this Agreement shall be deemed to constitute or imply a further waiver of any other provision of this Agreement.

Section 7. If any provision of this Agreement is declared invalid by a judicial body of competent jurisdiction, the other provisions of this Agreement shall remain in full force and effect.

EXECUTED as of the day and year set forth above.

ALLENDALE CHARTER TOWNSHIP, a Michigan charter township	**Allendale Property, LLC** Owner of 6880 Lake Michigan Drive
By: _____	By: _____
Adam Elenbaas, Supervisor	James Christopolous, Member

STATE OF MICHIGAN)
)ss.
COUNTY OF OTTAWA)

The foregoing Agreement was acknowledged before me this _____ day of _____, 2020, by Adam Elenbaas, the Supervisor of Allendale Charter Township, a Michigan charter township, on behalf of the Township.

_____

Notary Public
Ottawa County, Michigan
Acting in Ottawa County, Michigan
My Commission expires: _____

STATE OF MICHIGAN)
)ss.
COUNTY OF _____)

The foregoing Agreement was acknowledged before me this _____ day of _____, 2021, by James Christopolous, Member of Allendale Property, LLC, who, being duly sworn says that he is the owner of 6880 Lake Michigan Drive, and that he has executed the Agreement on its behalf.

_____

Notary Public
_____ County, Michigan
Acting in _____ County, Michigan
My Commission expires: _____

Prepared by:
Allendale Property, LLC
2101 Lake Michigan Drive, NW
Grand Rapids, MI 49504

EXHIBIT A

LEGAL DESCRIPTION OF ALLENDALE PROPERTY PROPERTY

Parcel Number: 70-09-27-125-045

That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence N89°04'57"W 352.12 feet along the North line of said NW 1/4; thence S00°33'03"E 122.86 feet to the Southerly line of Lake Michigan Drive (Highway M-45) and the PLACE OF BEGINNING of this description; thence S00°33'03"E 471.07 feet; thence S84°44'53"W 260.60 feet; thence N01°47'43"W 440.38 feet: thence S89°04'57"E 66.00 feet: thence N01°47'43"W 64.72 feet; thence Easterly along the Southerly line of Lake Michigan Drive 205.02 feet along a 5784.12 foot radius curve to the left, the chord of which bears S87°30'54”E 205.00 feet to the place of beginning. Subject to easements of record. This parcel contains 2.875 acres.

EXHIBIT B

PARCEL NUMBERS OF ADJACENT PROPERTY

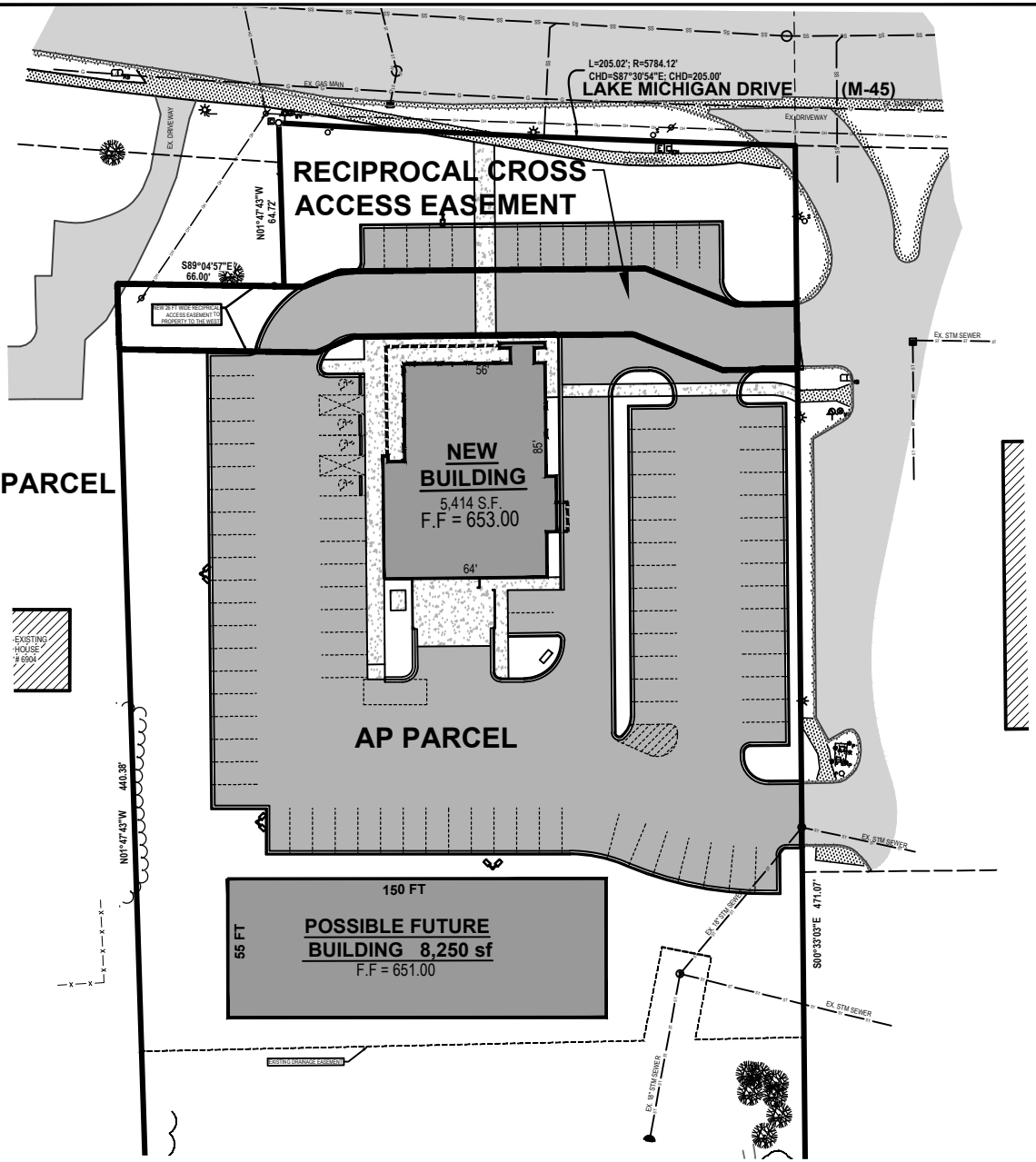
Adjacent Property to the West of the DeJong Property:
Parcel Number 70-09-27-126-041

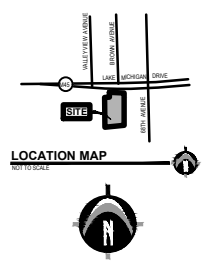
Legal description:

PART OF NW 1/4 COM S 89D 46M 01S E 1910.48 FT & S 01D 14M E 122.5 FT FROM NW SEC COR, TH S 85D 34M 27S E 18.69 FT, E'LY 149.84 FT ALG A 5800.53 FT RAD CURVE TO LEFT (CHD BEARS S 86D 18M 51S E 149.84 FT), S 01D 14M 19S E 49.11 FT, N 89D 46M 01S W 61.9 FT, S 01D 13M 47S E 112 FT, N 89D 46M 01S W 2.51 FT, S 0D 04M W 324.5 FT, N 65D 34M 05S W 106.66 FT ALG CEN LI OF DRAIN, TH N 01D 14M W 452.37 FT TO BEG, EXC M-45 R/W SEC 27 T7N R14W

Experience . . . the Difference

EXHIBIT C





LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS
- PROPOSED CONCRETE
- PROPOSED BUILDING

NEDERVELD
www.nederveld.com
800.222.1868
GRAND RAPIDS
217 Grandville Ave., Suite 302
Grand Rapids, MI 49503
Phone: 616.575.5190
ANN ARBOR
CHICAGO
COLUMBUS
HOLLAND
INDIANAPOLIS
ST. LOUIS

PREPARED FOR:
Reitberg Companies
Greg DeJong
3083 Washington Avenue, SW
Grandville, MI 49418
Phone: 616.538.9460

REVISIONS:

Title: Preliminary Site Plan	V. Date: 02/08/21
Drawn: SW Checked: SW	S. Date: 02/08/21
Title: Site Plan	V. Date: 03/01/21
Drawn: SW Checked: SW	S. Date: 03/01/21

Mr. Burger

Easement Exhibit
6880 Lake Michigan Drive
PART OF THE NORTHWEST 1/4 OF SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

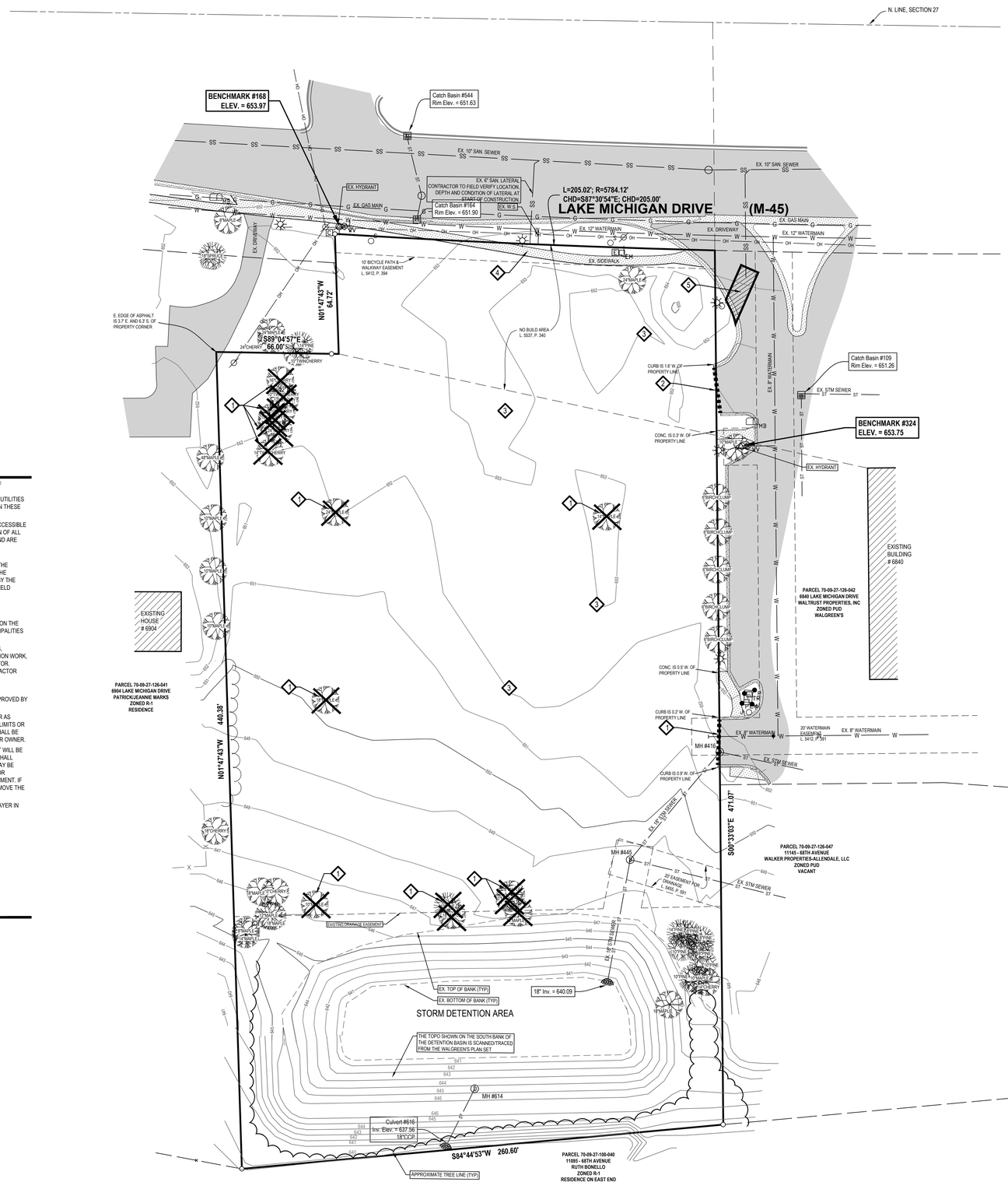
STAMP:

PROJECT NO: 21200247

SHEET NO: Exhib

SHEET: 1 OF 1

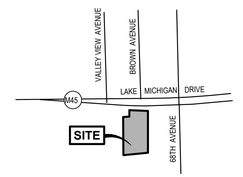
© 2021 Nederveld, Inc.



BENCHMARKS

BENCHMARK #168 ELEV. = 653.97 (NGVD29)
Top of flange bolt (under "E") to hydrant located on the S. side of Lake Michigan Dr., 500' ± W. of C/L 68th Ave.

BENCHMARK #324 ELEV. = 653.75 (NGVD29)
Top of SW. flange bolt (under "USA") to hydrant located 140' ± S. of centerline of Lake Michigan Dr. & 68' W. of Walgreens.



LOCATION MAP
NOT TO SCALE

EX. STRUCTURE INFORMATION

Storm Manhole #416
Rim Elev. = 651.84
12" CPP (E) = 643.72
12" CPP (NE) = 645.92
18" CPP (SW) = 643.82

Storm Manhole #445
Rim Elev. = 648.43
18" CPP (S) = 642.32
18" CPP (NE) = 643.61

Storm Manhole #614
Rim Elev. = 644.52
12" PVC (NE) = 637.72
18" CPP (S) = 637.72

LEGEND

Benchmark		Post	
Catch Basin - Square		Sign	
Cable Riser	C	Stormwater Manhole	D
Culvert		Transformer	TR
Deciduous Tree		Utility Pole	
Electric Meter	EM	Water Valve	MV
Electric Riser	E	Overhead Utility	OH
Evergreen Tree		Storm	ST
Guy Anchor		Fence	X X
Hydrant		Tree	
Iron - Set		Tree stump	
Iron - Found		Asphalt	
Light Pole		Concrete	
Mailbox	MB	Existing Building	

REMOVAL / DEMOLITION NOTES

1) THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AT LEAST THREE WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THERE ARE EXISTING UNDERGROUND UTILITIES WHICH CROSS THE PROPOSED REPLACEMENT WORK AREAS. ALTHOUGH THEIR EXACT LOCATION CANNOT BE DETERMINED, IT IS KNOWN THESE UTILITIES ARE LOCATED WHERE DIGGING IS REQUIRED. THE CONTRACTOR SHALL CONDUCT THE REQUIRED EXCAVATION IN THESE AREAS WITH EXTREME CAUTION.
2) ALL EXISTING UTILITY INFORMATION SHOWN IS TAKEN FROM EXISTING RECORDS, AND FIELD VERIFIED WHERE ACCESSIBLE ONLY. INFORMATION OBTAINED FROM EXISTING RECORDS MAY NOT BE COMPLETE OR ACCURATE. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY FOR ACCURACY, LOCATION AND CONDITION.
3) BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY AND BY THE OWNER, REPRESENTATIVES OF THE CITY, THE OWNER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING UTILITIES AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS AND EXISTING VIDEO TAPES. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE CONTRACTOR.
4) THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION WORK.
5) ALL EXISTING UTILITIES, SEWERS AND WATER LINES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES, MUNICIPALITIES AND AGENCIES BEFORE COMMENCING ANY WORK.
6) THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING POLES, OVERHEAD WIRES, UNDERGROUND UTILITIES, GUY WIRES, GAS LINES, ETC. ALL ADJUSTMENT OR RECONSTRUCTION WORK, EXCEPT FOR THOSE STRUCTURES OTHERWISE NOTED ON THE PLANS, SHALL BE PERFORMED BY THE CONTRACTOR. EXISTING APPURTENANCES SUCH AS UTILITY POLES AND VALVES BOX SHALL NOT BE DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION.
7) THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL ADJOINING PROPERTIES.
8) ALL DEBRIS SHALL BE REMOVED FROM THE SITE, AND NO STOCKPILING ON SITE SHALL BE ALLOWED UNLESS APPROVED BY THE OWNER OR THEIR REPRESENTATIVES.
9) THE CONTRACTOR SHALL LIMIT SAWCUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE REQUIRED OR AS SHOWN. ALL PAVEMENTS TO BE REMOVED SHALL BE SAWCUT AND REMOVED TO FULL DEPTH AT ALL PAVEMENT LIMITS OR EXISTING JOINTS. IF ANY DAMAGE IS INCURRED TO ANY OF THE SURROUNDING PAVEMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR AT NO ADDITIONAL COST TO ANYONE ELSE, INCLUDING THE CITY OR OWNER.
10) ASPHALT AREAS SHOWN TO BE SAWCUT AND REMOVED FULL DEPTH ARE ACTUAL FACE OF PROPOSED CURBS. IT WILL BE NECESSARY TO MAKE OFF-SET SAWCUTS TO PROVIDE CLEARANCE FOR PROPOSED CURBS. THE CONTRACTOR SHALL DETERMINE THE AMOUNT OF OFF-SET NECESSARY TO CONSTRUCT THE PROPOSED CURBS. ADDITIONAL CUTS MAY BE DESIRED TO FACILITATE THE REMOVAL OF THE EXISTING PAVEMENT, BUT THERE WILL BE NO EXTRA PAYMENT FOR ADDITIONAL CUTS. PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE REMAINING PAVEMENT. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL FULL DEPTH SAWCUTS AND REMOVE THE DAMAGE AREAS AS NECESSARY.
11) ALL PAVEMENT REMOVAL AREAS SHALL BE FULL PAVEMENT CROSS-SECTION REMOVAL DOWN TO NATIVE SOIL LAYER IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
12) ALL TREES AND VEGETATION WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.

REMOVAL / DEMOLITION NOTES

1. REMOVE EXISTING TREE/VEGETATION
2. SAWCUT, REMOVE, AND REPLACE EDGE OF EXISTING ASPHALT AS NECESSARY FOR SMOOTH TRANSITION BETWEEN EX. AND PROPOSED.
3. REMOVE ALL EXISTING TREE STUMPS AND ROOTS FROM PROJECT AREA (TYP)
4. SAWCUT, REMOVE, AND REPLACE EXISTING SIDEWALK AS NECESSARY FOR SANITARY LATERAL/UTILITY CONSTRUCTION (TYP).
5. SAWCUT, REMOVE, AND REPLACE EXISTING ASPHALT, CURBING, ETC. AS NECESSARY FOR CONSTRUCTION OF SANITARY LATERAL EXTENSION. CONTRACTOR TO COORDINATE WORK WITH WALGREENS.
6.
7.

811 Know what's below. CALL before you dig.

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NOTE:
THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

LEGAL DESCRIPTION

That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence N89°04'57"W 352.12 feet along the North line of said NW 1/4; thence S00°33'03"E 122.86 feet to the Southerly line of Lake Michigan Drive (Highway M-45) and the PLACE OF BEGINNING of this description; thence S00°33'03"E 471.07 feet; thence S84°44'53"W 260.60 feet; thence N01°47'43"W 440.38 feet: thence S89°04'57"E 66.00 feet: thence N01°47'43"W 64.72 feet; thence Easterly along the Southerly line of Lake Michigan Drive 205.02 feet along a 5784.12 foot radius curve to the left, the chord of which bears S87°30'54"E 205.00 feet to the place of beginning. Subject to easements of record. This parcel contains 2.875 acres. (Description from survey by others).

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Grand Rapids, MI 49503
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ANN ARBOR
CHICAGO
COLUMBUS
HOLLAND
INDIANAPOLIS
ST. LOUIS

PREPARED FOR:
Reitberg Companies
Greg DeJong

3083 Washington Avenue, SW
Grandville, MI 49418
Phone: 616.538.9460

REVISIONS:

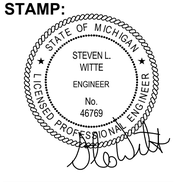
Title: Preliminary Site Plan		V. Date: 02/08/21
Drawn: SW	Checked: SW	S. Date: 02/08/21
Title: Site Plan		V. Date: 03/01/21
Drawn: SW	Checked: SW	S. Date: 03/01/21
Title: Site Plan Resubmittal (per Staff)		V. Date: 03/25/21
Drawn: SW	Checked: SW	S. Date: 03/25/21
Title: Site Plan Resubmittal (per Staff)		V. Date: 03/29/21
Drawn: SW	Checked: SW	S. Date: 03/29/21

Mr. Burger

Existing Conditions and Demolition Plan

6880 Lake Michigan Drive.
PART OF THE NORTHWEST 1/4 OF SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

STAMP:



PROJECT NO:
21200247

SHEET NO:
C-201

SHEET: 1 OF 5

21200247-CP1.dwg SW 3/29/2021 11:18

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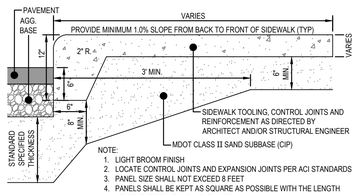


NOTE:
1. LIGHT BROOM FINISH
2. LOCATE CONTROL JOINTS AND EXPANSION JOINTS PER ACI STANDARDS
3. PANEL SIZE SHALL NOT EXCEED 8 FEET
4. PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE WITH THE LENGTH NEVER EXCEEDING 1.25X THE WIDTH
5. 1.0#/CU.YD. FIBER REINFORCEMENT
6. AIR ENTRAINMENT - 6% ± 1%
7. SLUMP 4"±1"

INTEGRAL CURB AND WALK DETAIL

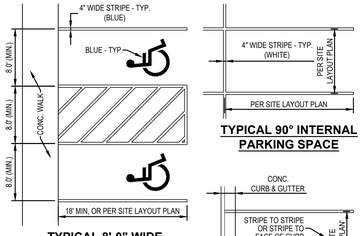
N.T.S.

CONCRETE PAVEMENT DETAIL

N.T.S.

STANDARD DUTY BITUMINOUS PAVEMENT CROSS SECTION DETAIL

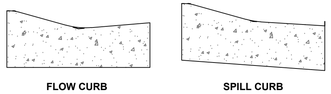
N.T.S.



NOTE:
APPLY TWO COATS OF VOC COMPLIANT, M.D.O.T. APPROVED, UNDILUTED SOLVENT BASED, OR LATEX TRAFFIC PAINT TO ALL PAVEMENT MARKINGS. USE MANUFACTURERS RECOMMENDED APPLICATION RATE, WITHOUT ADDITION OF THINNER, WITH A MAXIMUM OF 100 SFT PER GALLON, OR MINIMUM 15 MILS WET FILM THICKNESS, AND 7.5 MILS DRY FILM THICKNESS PER COAT, WITH MINIMUM 30 DAYS BETWEEN APPLICATIONS. SECOND COAT MUST NOT BE APPLIED EARLIER THAN 7 DAYS BEFORE OCCUPANCY.

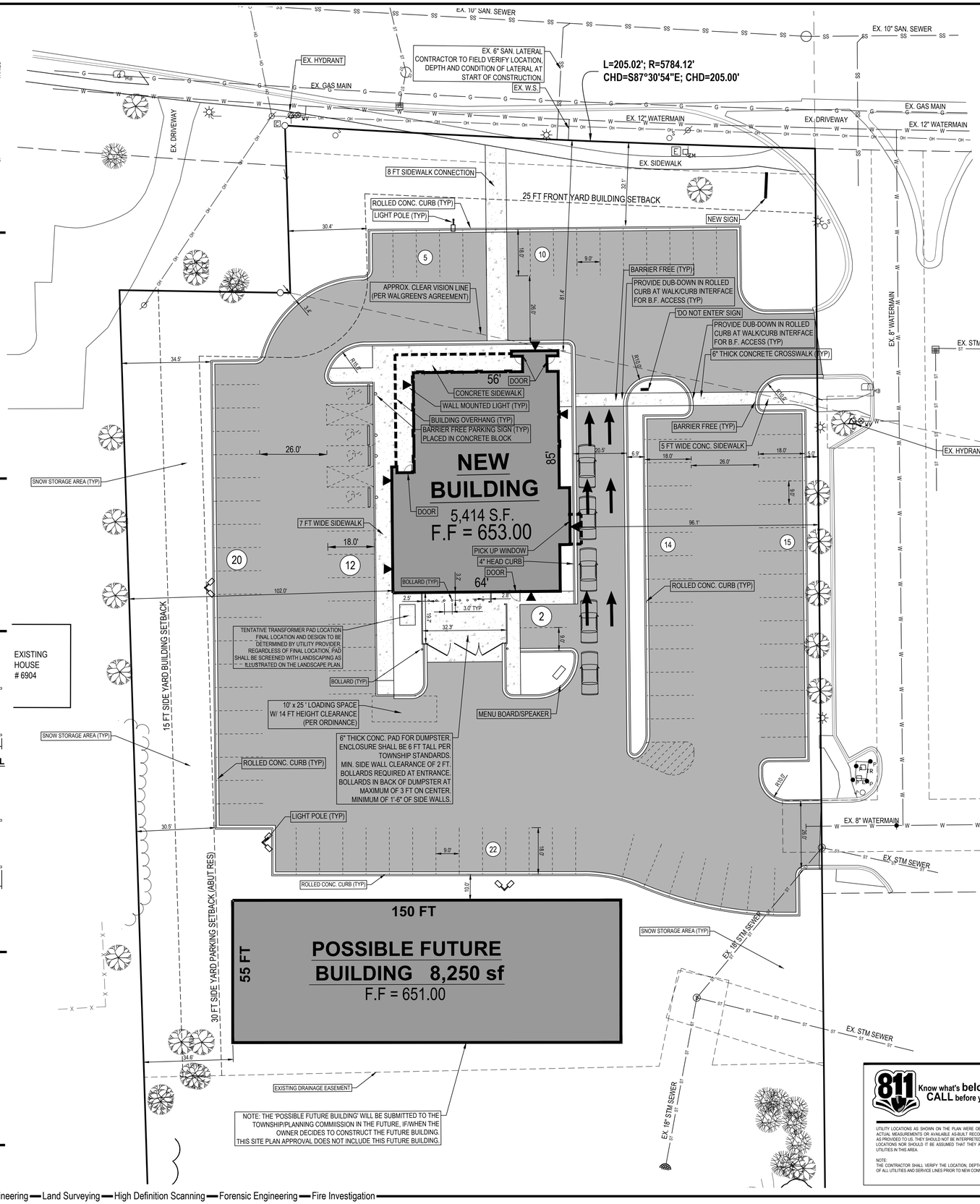
PARKING SPACE MARKING DETAILS

N.T.S.



18" CONCRETE ROLLED CURB DETAIL

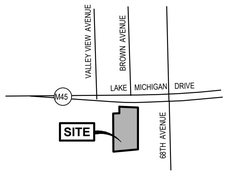
N.T.S.



BENCHMARKS

BENCHMARK #168 ELEV. = 653.97 (NGVD29)
Top of flange bolt (under "E") to hydrant located on the S. side of Lake Michigan Dr., 500' ± W. of C/L 68th Ave.

BENCHMARK #324 ELEV. = 653.75 (NGVD29)
Top of SW. flange bolt (under "USA") to hydrant located 140' ± S. of centerline of Lake Michigan Dr. & 68' W. of Walgreens.



LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS
- PROPOSED CONCRETE
- PROPOSED BUILDING

LOCATION MAP

NOT TO SCALE

0' 10' 20' 40'

SCALE: 1" = 20'

GENERAL NOTES

1) ZONING OF PROPERTY: WALGREEN'S PUD (ASSUMING IT FOLLOWS GC - GENERAL COMMERCIAL)
NORMAL GC ZONING REQUIREMENTS:
MINIMUM LOT AREA = 22,500 SF
MINIMUM LOT WIDTH = 150 FT
MAXIMUM LOT COVERAGE = NOT APPLICABLE
MINIMUM ALLOWED BUILDING SETBACKS:
FRONT YARD = 25 FT
SIDE YARD = 15 FT (ABUTTING RESIDENTIAL; OTHERWISE 0 FT)
REAR YARD = 25 FT (ABUTTING RESIDENTIAL; OTHERWISE 5 FT)

2) SUMMARY OF LAND USE:
A) TOTAL ACREAGE = APPROXIMATELY 2.88 ACRES (APPROX. 125,247 SF) (EXCLUDING R.O.W.)
B) AREA OF NEW BUILDING = APPROXIMATELY 5,414 SF (PLUS POSSIBLE FUTURE 8,250 SF)
C) AREA OF NEW ASPHALT AND CONCRETE = APPROXIMATELY 49,450 SF
D) LOT COVERAGE = APPROX. 10.9% (BUILDING); APPROX. 50.4% (BUILDING & PAVEMENT)
E) THE BUILDING WILL BE USED AS A RESTAURANT, WITH A DRIVE THRU.
THE POSSIBLE FUTURE BUILDING WILL BE AN OFFICE OR RETAIL OR SIMILAR TYPE USE.
F) ZONING OF SURROUNDING PARCELS = P.U.D. TO EAST
= GC TO NORTH
= R-1 TO WEST, SOUTH

3) PARKING REQUIREMENTS:
A) TYPICAL PARKING SPACE = 9'x18' (26 FT. AISLES)
B) TYPICAL BARRIER FREE SPACE = 8'x18' (8' WIDE AISLE FOR VAN ACCESSIBLE)
C) NUMBER OF SPACE REQUIRED = 96
RESTAURANT = 68 (BASED ON 1 PER 70 SF UFA, PLUS 1 PER 3 EMPLOYEES)
(USES 3,700 SF USABLE, PLUS A MAXIMUM OF 15 EMPLOYEES (10-12 ON AVERAGE))
FUTURE OFFICE = 28 (BASED ON 1 PER 300 SF)
C) NUMBER OF SPACES PROVIDED = 98
D) MINIMUM REQUIRED PARKING SETBACKS = 25 FT IN FRONT YARD
= 30 FT IN SIDE AND REAR YARDS ABUTTING RESIDENTIAL
(15 FT OF 30 FT IN SIDE/REAR YARD IS GREENBELT)
E) RAISED CURBING IS REQUIRED ALONG THE PERIMETER OF THE PAVED AREAS.

4) THIS PROJECT IS IN AN AREA THAT PARTICIPATES IN THE NATIONAL FLOOD INSURANCE PROGRAM. HOWEVER, NO 100 YEAR FLOOD PLAIN MAPS ARE AVAILABLE AT THIS TIME.

5) SIGNAGE SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS OF ARTICLE 22 OF THE ALLENDALE TOWNSHIP ZONING ORDINANCE AND WITH SECTION J OF ORDINANCE 2007.4 REGARDING THE WALGREENS PUD. A SEPARATE SIGN PERMIT WILL BE SUBMITTED FOR AND OBTAINED FOR THE SIGNAGE AT THE SITE.
FREE STANDING SIGN: ONE GROUND MOUNTED SIGN IS ALLOWED AND PROPOSED.
MAXIMUM AREA = GROUND MOUNTED = 50 SF (ONE BUSINESS, 100 SF MULTIPLE BUSINESSES)
MINIMUM SETBACK = GROUND MOUNTED = 10 FT
MAXIMUM HEIGHT = GROUND SIGN = 10 FT
WALL SIGN: 125 SF PLUS 0.5 SF FOR EACH LINEAL FOOT OF BUILDING LENGTH IN EXCESS OF 100 FT.

6) BEST MANAGEMENT PRACTICES WILL BE UTILIZED DURING AND AFTER CONSTRUCTION OF THE PROJECT. MEASURES WILL INCLUDE THE USE OF SEEDING AND MULCHING, SEDIMENT INLET FILTERS, COMPACTION AND PAVING. THE OWNER OF THE SUBJECT PARCEL SHALL HAVE THE RESPONSIBILITY TO MAINTAIN THE PERMANENT SOIL EROSION PROTECTION MEASURES.

7) UTILITIES SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

8) CONTRACTOR TO FIELD VERIFY ALL INVERTS.

9) ALL LIGHTING SHALL BE SHIELDED FROM ALL ADJACENT PROPERTIES. PROPOSED LIGHTING SHALL CONSIST OF WALL-MOUNTED LIGHTS AND LIGHT POLES, BOTH FITTED WITH SHOEBOX TYPE FIXTURES. THE MAXIMUM HEIGHT OF THE LIGHT FIXTURES SHALL BE 20 FT (THE PROPERTY TO THE WEST AND SOUTH IS ZONED RESIDENTIAL).

10) THE PERMANENT PARCEL NUMBER FOR THE SITE IS 70-09-27-126-045.
THE ADDRESS OF THE PROPERTY IS 6880LAKE MICHIGAN DRIVE.

11) THE PARCEL IS CURRENTLY VACANT.

12) NO FENCES OR WALLS OTHER THAN WHAT IS SHOWN ON THE SITE PLAN ARE PROPOSED AT THIS TIME.

13) LANDSCAPING SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS OF THE ALLENDALE TOWNSHIP ZONING ORDINANCE.

14) AN UNDERGROUND IRRIGATION SYSTEM WILL BE PROVIDED PER SECTION 21A.03.E AND SECTION 24.05F, IN ALL GRASS AREAS, INCLUDING GRASSED LANDSCAPED ISLANDS.

15) REGIONAL STORM WATER DETENTION IS PROVIDED FOR THE OVERALL P.U.D. THE EXISTING STORM WATER HOLDING AREA IS ON THE SOUTHERN PORTION OF THE PROPERTY. THE DRAINAGE DESIGN IS SUBJECT TO THE REVIEW AND APPROVAL OF THE OTTAWA COUNTY WATER RESOURCES COMMISSION.

16) THE ARCHITECTURE OF THE MR. BURGER BUILDING WILL MEET THE REQUIREMENTS OF SECTION J OF THE ORDINANCE NO. 2007-4 REGARDING THE WALGREENS PUD. THE POSSIBLE FUTURE BUILDING SHOWN ON THIS PLAN WILL ALSO COMPLY WITH THESE STANDARDS. THE APPROVAL OF THE FUTURE BUILDING WILL BE VIA A SEPARATE SITE PLAN SUBMITTAL IN THE FUTURE. APPROVAL OF THIS PLAN DOES NOT INCLUDE APPROVAL OF THE POSSIBLE FUTURE BUILDING.

17) ALL POWER LINES AND RELATED UTILITIES WILL BE BURIED PER SECTION 24.06F OF THE ZONING ORDINANCE.

18) ALL ROOFTOP EQUIPMENT WILL EITHER BE SCREENED OR WILL NOT BE VISIBLE FROM THE ROADWAY PER THE WALGREENS PUD ORDINANCE, SECTION 4A.

19) THE VOLUME OF THE DRIVE THRU SPEAKER SHALL BE LIMITED TO A MAXIMUM OF 70 DECIBELS.

20) THE HOURS OF OPERATION SHALL BE LIMITED TO BETWEEN 6 AM AND MIDNIGHT.

21) ALL SPRINKLED BUILDINGS ARE REQUIRED TO INSTALL A POST INDICATOR VALVE.

22) KNOX BOXES ARE REQUIRED FOR FIRE DEPARTMENT ACCESS. CONTRACTOR TO COORDINATE KNOX BOX LOCATION AND CONSTRUCTION WITH THE FIRE DEPARTMENT.

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REVISIONS:

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Drawn: SW	Checked: SW	S. Date: 03/29/21

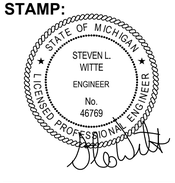
Mr. Burger

Conceptual Site Layout Plan

6880 Lake Michigan Drive.

PART OF THE NORTHWEST 1/4 OF SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

STAMP:



PROJECT NO: 21200247

SHEET NO: C-205

SHEET: 2 OF 5

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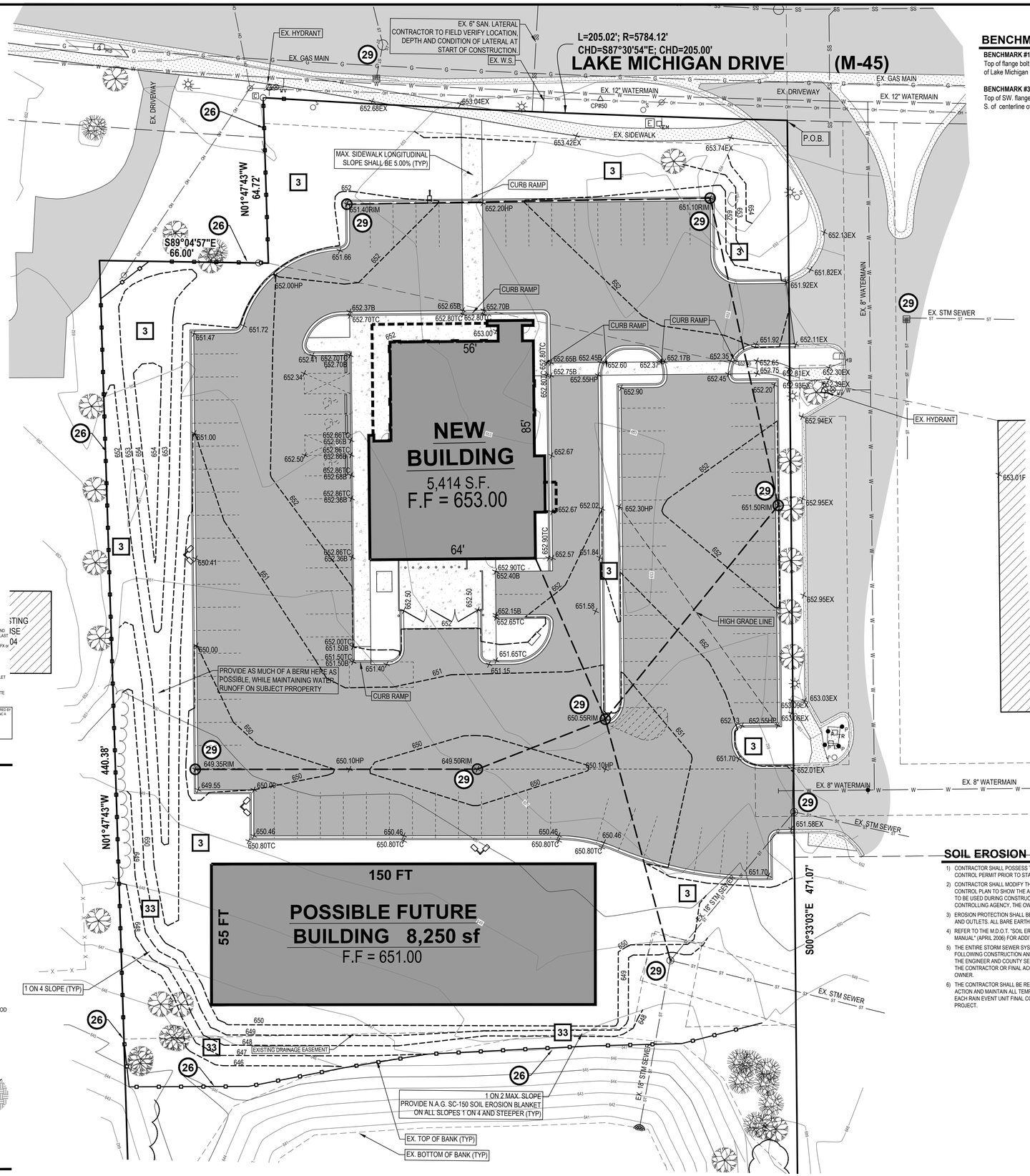

BENCHMARKS

BENCHMARK #168 ELEV. = 653.97 (NGVD29)
Top of flange bolt (under "E") to hydrant located on the S. side of Lake Michigan Dr., 500' ± W. of C/L 68th Ave.

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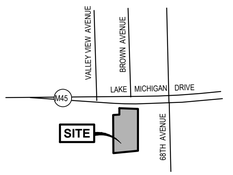
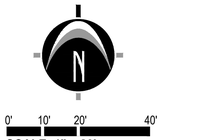


LOCATION MAP

NOT TO SCALE



LEGEND

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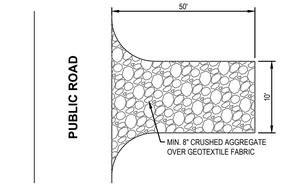
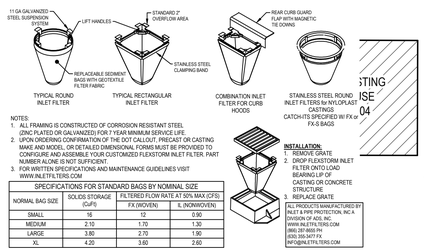


TEMPORARY CRUSHED ROCK TRACKING PAD

N.T.S.



NOTES:
1. ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
2. UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
3. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

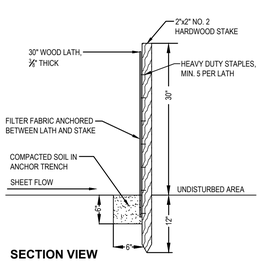
SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE			
NORMAL BAG SIZE	SOLIDS STORAGE (CuFt)	FILTERED FLOW RATE AT 50% MAX (CFS) FX (WOVEN)	IL (NONWOVEN)
SMALL	16	12	0.90
MEDIUM	2.10	1.70	1.30
LARGE	3.80	2.70	1.90
XL	4.20	3.60	2.60

INSTALLATION:
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

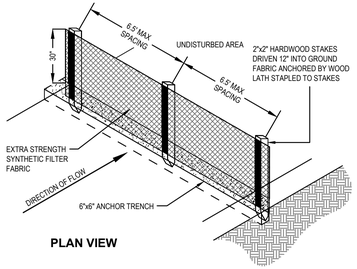
ALL PRODUCTS MANUFACTURED BY FALT & FIRE PROTECTION, INC A DIVISION OF ADS, INC
WWW.INLETFILTERS.COM
(866) 397-8650 PH
(630) 350-3477 FX
INFO@INLETFILTERS.COM

FLEXSTORM INLET FILTER DETAIL

N.T.S.



SECTION VIEW



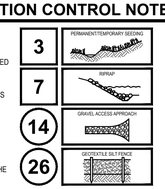
PLAN VIEW

SILT FENCE DETAIL

N.T.S.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1) CONTRACTOR SHALL POSSESS THE SOIL EROSION AND SEDIMENTATION CONTROL PERMIT PRIOR TO START OF ANY EARTH WORK.
2) CONTRACTOR SHALL MODIFY THIS SOIL EROSION AND SEDIMENTATION CONTROL PLAN TO SHOW THE ADDITIONAL CONTROL MEASURES INTENDED TO BE USED DURING CONSTRUCTION. SUBMIT MODIFICATIONS TO THE CONTROLLING AGENCY, THE OWNER, AND THE ENGINEER.
3) EROSION PROTECTION SHALL BE PROVIDED AT ALL STORM SEWER INLETS AND OUTLETS. ALL BARE EARTH SHALL BE STABILIZED WITH SEEDING.
4) REFER TO THE M.D.O.T. "SOIL EROSION AND SEDIMENTATION CONTROL MANUAL" (APRIL 2006) FOR ADDITIONAL INFORMATION
5) THE ENTIRE STORM SEWER SYSTEM SHALL BE CLEANED AND FLUSHED FOLLOWING CONSTRUCTION AND PAID RECEIPT THEREOF PROVIDED TO THE ENGINEER AND COUNTY SESC AGENT PRIOR TO FINAL PAYMENT TO THE CONTRACTOR OR FINAL ACCEPTANCE OF THE CONSTRUCTION BY THE OWNER.
6) THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT, TAKE CORRECTIVE ACTION AND MAINTAIN ALL TEMPORARY SESC MEASURES DAILY AND AFTER EACH RAIN EVENT UNIT FINAL COMPLETION AND ACCEPTANCE OF THE PROJECT.



SOIL EROSION CONTROL SCHEDULE 2020

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PLACE SILT FENCE												
STRIP & STOCKPILE TOPSOIL												
CONSTRUCT CONNECTION TO STORM SEWER												
ROUGH GRADE SITE												
CONSTRUCT BUILDING FOUNDATION AND BUILDING												
CONSTRUCT IMPROVEMENTS AROUND BUILDING												
CONSTRUCT UTILITY LINES TO BUILDING												
FINISH GRADE SITE												
PAVE SITE												
RESPREAD TOPSOIL/COMPACTION												
SEED DISTURBED AREAS												
SITE RESTORATION/CLEAN UP												

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REVISIONS:

Title: Preliminary Site Plan		V. Date: 02/08/21
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Title: Site Plan		V. Date: 03/01/21
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Title: Site Plan Resubmittal (per Staff#)		V. Date: 03/29/21
Drawn: SW	Checked: SW	S. Date: 03/29/21

Mr. Burger

Grading and S.E.S.C. Plan

6880 Lake Michigan Drive.

PART OF THE NORTHWEST 1/4 OF SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

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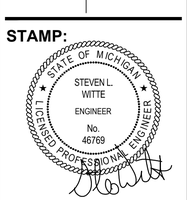

PROJECT NO: 21200247

SHEET NO: C-300

SHEET: 3 OF 5

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EX. STRUCTURE INFORMATION

Storm Manhole #416
Rim Elev. = 651.84
12" CPP (E) = 643.72
12" CPP (NE) = 645.92
18" CPP (SW) = 643.82

Storm Manhole #445
Rim Elev. = 648.43
18" CPP (S) = 642.32
18" CPP (NE) = 643.61

Storm Manhole #614
Rim Elev. = 644.52
12" PVC (NE) = 637.72
18" CPP (S) = 637.72

CONSTRUCTION NOTES

STORM SEWER

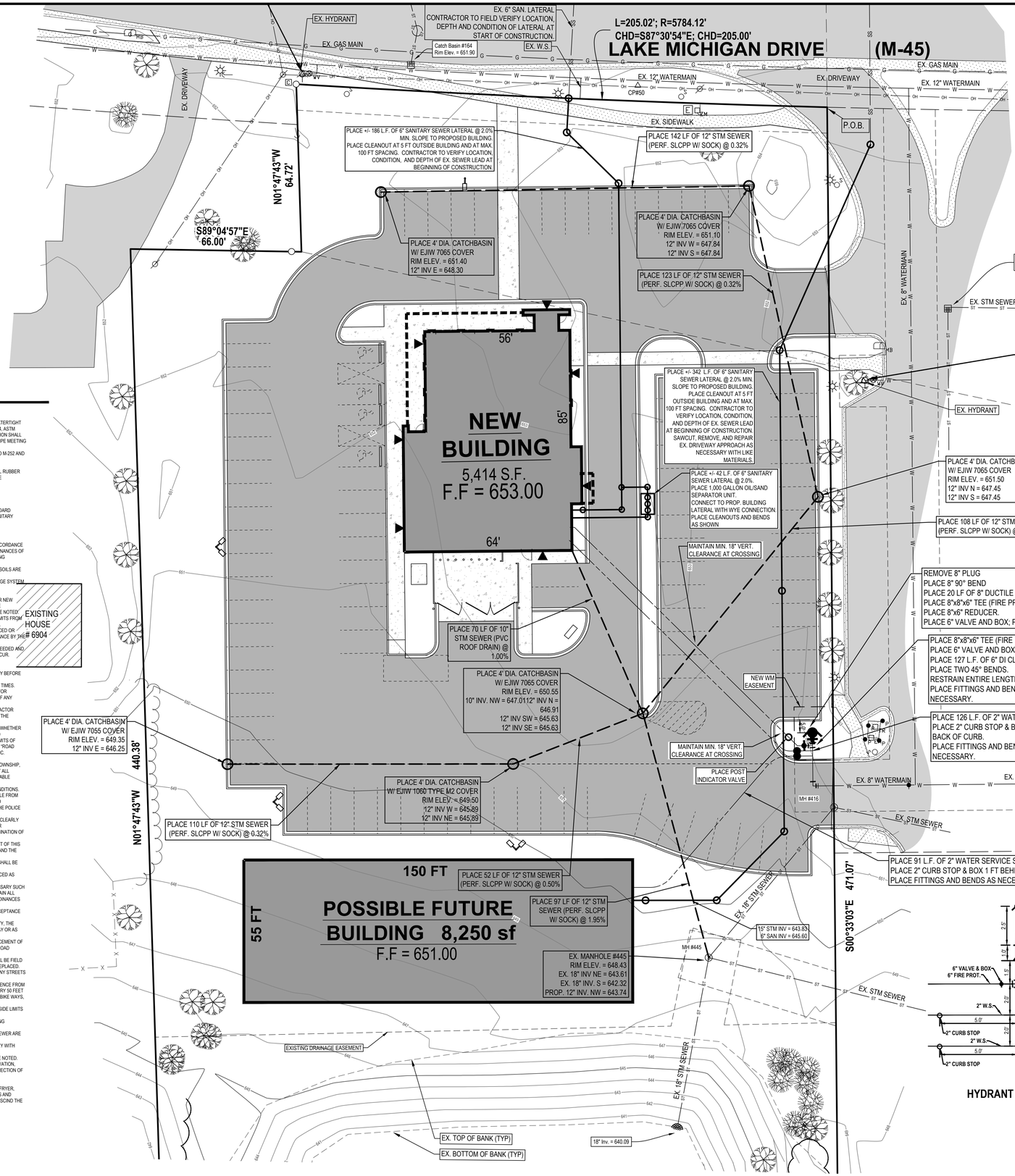
1. ALL CATCH BASINS SHOULD BE PROVIDED WITH A MINIMUM 2' SUMP.
2. ALL STORM SEWER SHALL BE SMOOTH-LINED CORRUGATED POLYETHYLENE PIPE (SLCPP), WITH WATERTIGHT JOINTS MEETING THE REQUIREMENTS OF THE MICHIGAN PLUMBING CODE, AASHTO M-252 AND M-294, ASTM F-2306, F-2648, D-3212, F-477, F-2487, D-3350 AND F-1417, UNLESS OTHERWISE SPECIFIED. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND ASTM D-2321 OR CONCRETE PIPE MEETING THE REQUIREMENTS OF ASTM C-76-III UNLESS OTHERWISE NOTED
3. 6" UNDERDRAIN SHALL BE PERFORATED PIPE WITH SOCK, MEETING THE REQUIREMENTS OF AASHTO M-252 AND THE GEOTEXTILE SHALL MEET AASHTO M-288 REQUIREMENTS
4. ALL FLARED END SECTIONS SHALL BE CONCRETE.
5. ALL CATCH BASINS AND MANHOLES SHALL BE CONCRETE, CONFORMING TO ASTM C-478 WITH BUTYL RUBBER GASKETED JOINTS WITH BOOT TYPE PIPE CONNECTIONS CONFORMING TO ASTM C-923 FOR ALL PIPE CONNECTIONS 24" DIAMETER AND SMALLER.
6. ALL CATCH BASINS ARE DRAWN AND WILL BE STAKED AT CENTER OF CASTING.

WATERMAIN AND SANITARY SEWER

1. ALL WATERMAIN AND SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE TOWNSHIP STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING POST CONSTRUCTION VIDEO INSPECTION OF THE SANITARY SEWER SYSTEM.

GENERAL

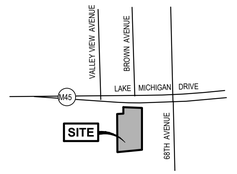
1. ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MDOT CONSTRUCTION AND MATERIALS SPECIFICATIONS (LATEST EDITION) AND THE ORDINANCES OF THE TOWNSHIP. WHERE CONFLICTS OCCUR IN THE ABOVE, THE TOWNSHIP SHALL BE THE GOVERNING AUTHORITY.
2. VARIATION IN EXISTING SOIL CONDITIONS MAY IMPACT THE EARTHWORK QUANTITIES IF UNUSABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWAGE SYSTEM RESULTING FROM NON-CONFORMANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL NEGLIGENCE.
4. ALL WORK, INCLUDING INSPECTIONS AND TESTING COST REQUIRED FOR REMOVAL, RELOCATION OR NEW CONSTRUCTION FOR PRIVATE OR PUBLIC UTILITIES, WILL BE DONE BY AND AT THE EXPENSE OF THE CONTRACTOR AND INCLUDED IN THE BID PRICE FOR THE VARIOUS WORK ITEMS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS FROM THE TOWNSHIP AND COUNTY AND ANY OTHER AGENCY FOR ALL WORK DONE BY THE CONTRACTOR.
5. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE TOWNSHIP OR OWNER WITHOUT ANY ADDITIONAL COST TO THE TOWNSHIP OR OWNER.
6. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED WITH TOPSOIL AND SOD WHERE NEEDED AND SHALL BE RESEEDED AND MULCHED IF SATISFACTORY RE-ESTABLISHMENT OF LAWN DOES NOT OCCUR.
7. ALL PUNCH LIST AND DEFICIENCY WORK SHALL BE COMPLETED WITHIN 1 MONTH OF THE END OF CONSTRUCTION.
8. THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT FROM THE MDOT AND/OR THE COUNTY BEFORE BEGINNING WORK WITHIN ANY PUBLIC STREET RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES.
10. THESE PLANS HAVE BEEN DEVELOPED FOR ELECTRONIC FIELD LAYOUT. DIMENSIONS SHOWN ARE FOR GRAPHIC PRESENTATION ONLY AND SHOULD NOT BE USED FOR LAYOUT. CONTACT THE ENGINEER IF ANY DISCREPANCIES BETWEEN THE PLAN AND ELECTRONIC DATA ARE DISCOVERED.
11. THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LIGHTS, BARRICADES, FLAGMEN, ETC. AS REQUIRED TO PERFORM THE REQUIRED WORK. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE SUCH ADDITIONAL TRAFFIC CONTROL DEVICES LOCATED OUTSIDE THE LIMITS OF CONSTRUCTION AS ARE REQUIRED ON THOSE STREETS WHICH ARE USED AS DETOURS, INCLUDING "ROAD CLOSED" SIGNS AND BARRICADES AT THE POINT WHERE THE ROAD IS CLOSED TO THROUGH TRAFFIC.
12. THE CONTRACTOR SHALL PROTECT LOCATION OF ALL PROPERTY PINS AND BENCHMARKS.
13. ALL WORK CONTEMPLATED SHALL AT ALL TIMES BE SUBJECT TO THE DIRECT INSPECTION OF THE TOWNSHIP, OWNER AND THEIR REPRESENTATIVES. THE TOWNSHIP AND OWNER RESERVES THE RIGHT TO HALT ALL CONSTRUCTION ACTIVITY FOR NONCONFORMANCE OF PLANS, SPECIFICATIONS AND OTHER APPLICABLE STANDARDS OR REGULATIONS.
14. PRICES BID PER FOOT FOR ALL PIPES IS COMPACTED IN PLACE REGARDLESS OF SOIL OR ROCK CONDITIONS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SIGNS, BARRICADES AND SAFETY FENCES TO DETER PEOPLE FROM ENTERING THE WORK AREA AND FOR MAINTAINING AND PROTECTING THE FLOW OF VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE JOB SITE. TRAFFIC CONTROLS SHALL BE COORDINATED WITH THE POLICE DEPARTMENT AND THE TOWNSHIP.
16. PRIOR TO ANY CONSTRUCTION OR GRADING, A PROTECTIVE BARRIER, FENCE, POST AND/OR SIGNS CLEARLY INDICATING LIMITS OF WORK/DISTURBANCE SHALL BE INSTALLED INDICATING NO TREE REMOVAL OR DISTURBANCES OUTSIDE LIMITS, THE TOWNSHIP AND OWNER SHALL BE CONTACTED UPON DETERMINATION OF LIMITS IN THE FIELD.
17. ALL ROAD SURFACES, EASEMENTS OR RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE SATISFACTION OF THE COUNTY, MDOT AND THE OWNER.
18. NO PARKING OF CONTRACTOR OR CONTRACTOR EMPLOYEE'S VEHICLES ON ANY PUBLIC STREETS SHALL BE PERMITTED.
19. ALL DISTURBED SIGNS, GUARDRAILS, MAIL BOXES, AND DRIVEWAYS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE COUNTY, TOWNSHIP, AND THE OWNER.
20. DUST CONTROL: THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY SUCH AS CALCIUM CHLORIDE, WATER OR A MOTORIZED DUST-FREE STREET SWEEPING DEVICE TO MAINTAIN ALL ROADWAYS BEING USED FOR ACCESS TO THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL ORDINANCES OF THE TOWNSHIP, COUNTY, EGLE OR ANY OTHER GOVERNING AUTHORITY.
21. ALL SEWERS, MANHOLES, JUNCTION CHAMBERS AND INLET BASINS MUST BE CLEANED BEFORE ACCEPTANCE BY THE TOWNSHIP AND OWNER.
22. IF MUD, SOIL OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY OR AS REQUIRED DURING THE WORK DAY.
23. ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK SHALL INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT PAVEMENT. DAMAGED PAVEMENT DOWELS OR OTHER SUCH LOAD TRANSFERS DEVICES SHALL BE REPLACED AS DIRECTED BY THE COUNTY AND THE ENGINEER.
24. ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED.
25. COMPACTED PREMIUM BACKFILL (MDOT CLASS II SAND) WILL BE REQUIRED AT ALL FILL AREAS OR ANY STREETS WHERE REMOVAL AND REPLACEMENT OF PAVEMENT IS REQUIRED AND FOR ALL UNDERGROUND CONSTRUCTION UNDER ANY DRIVEWAY OR PAVEMENT INCLUDING THE 45 DEGREE ANGLE OF INFLUENCE FROM THE OUTSIDE EDGE OF PAVEMENT OR TOP OF CURB. COMPACTION TESTS SHALL BE REQUIRED EVERY 50 FEET UNDER PAVEMENT. PAVEMENT INCLUDES, BUT NOT LIMITED TO, ROADWAY SURFACES, SIDEWALKS, BIKE WAYS, DRIVEWAYS, SHOULDERS, BUILDINGS, ETC.
26. NO BUILDING MATERIAL, EQUIPMENT, VEHICLES OR CHEMICALS SHALL BE STORED OR PLACED OUTSIDE LIMITS OF WORK/DISTURBANCE.
27. STORMWATER POLLUTION PREVENTION ITEMS SHALL BE IN PLACE PRIOR TO COMMENCING CLEARING OPERATIONS, EARTHWORK GRADING, OR ANY OTHER TYPE OF CONSTRUCTION ACTIVITY.
28. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
29. CONSTRUCTION NOISE SHALL BE KEPT TO A MINIMUM DURING NIGHTTIME HOURS AND MUST COMPLY WITH MUNICIPAL CODE REQUIREMENTS.
30. ALL TREES AND VEGETATION WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.
31. CONTRACTOR TO FIELD VERIFY AND SCOPE EXISTING SANITARY SEWER LATERAL TO CONFIRM ELEVATION, SLOPE, CONDITION AND PHYSICAL CONNECTION TO PUBLIC SANITARY SEWER MAIN PRIOR TO CONNECTION OF NEW LATERAL SERVICE.
32. EACH BUILDING IS REQUIRED TO HAVE A MASTER WATER METER AND RPZ VALVE.
33. A GREASE TRAP SHALL BE PROVIDED FOR ANY TENANT SPACE FACILITY THAT HAS A KITCHEN, DEP FRYER, GRILL OR OTHER FOOD PREPARATION APPLIANCES. THE GREAS TRAP SHALL INTERCEPT FATS, OILS AND GREASES. IF A GREASE TRAP IS NOT PROVIDED, THEN THE TOWNSHIP RESERVES THE RIGHT TO RESCIND THE CERTIFICATE OF OCCUPANCY DEPENDING ON THE TENANT LEASING THE SUBJECT SPACE.



BENCHMARKS

BENCHMARK #168 ELEV. = 653.97 (NGVD29)
Top of flange bolt (under "E") to hydrant located on the S. side of Lake Michigan Dr., 500' ± W. of C/L 68th Ave.

BENCHMARK #324 ELEV. = 653.75 (NGVD29)
Top of SW. flange bolt (under "USA") to hydrant located 140' ± S. of centerline of Lake Michigan Dr. & 68' W. of Walgreens.



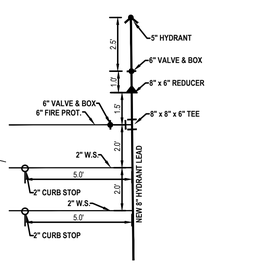
LOCATION MAP

NOT TO SCALE

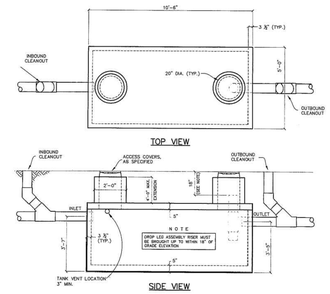
LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS
- PROPOSED CONCRETE
- PROPOSED BUILDING

0' 10' 20' 40'
SCALE: 1" = 20'



HYDRANT DETAIL



TOP VIEW

SIDE VIEW

- ACCESS COVERS MUST BE RATED FOR AWTOP/ATED TRAFFIC LOAD.
- SEAL BETWEEN TANK AND EXTENSIONS MUST BE WATER TIGHT.
- THE TANK JOINT MUST BE EASKETED AND WRAPPED WITH 12" EZ WRAP.
- THE TANK MUST HAVE A VENT ABOVE ALL TANK INVERTS AND MUST BE MADE WATER TIGHT.
- INBOUND AND OUTBOUND PIPES MUST HAVE BOOTED SEAL AT TANK WALL.
- 90° MINIMUM LENGTH ON OUTBOUND DROPLEG.
- A SANITARY TEE MUST BE INCLUDED ON THE DROPLEG ASSEMBLY.

1,000 GALLON OUTDOOR OIL & SAND SEPARATOR

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Mr. Burger

Utility Plan

6880 Lake Michigan Drive.

PART OF THE NORTHWEST 1/4 OF SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

STAMP:

STATE OF MICHIGAN
STEVEN L. WITTE
ENGINEER
No. 46769
LICENSED PROFESSIONAL ENGINEER

PROJECT NO:
21200247

SHEET NO:
C-400

SHEET: 4 OF 5

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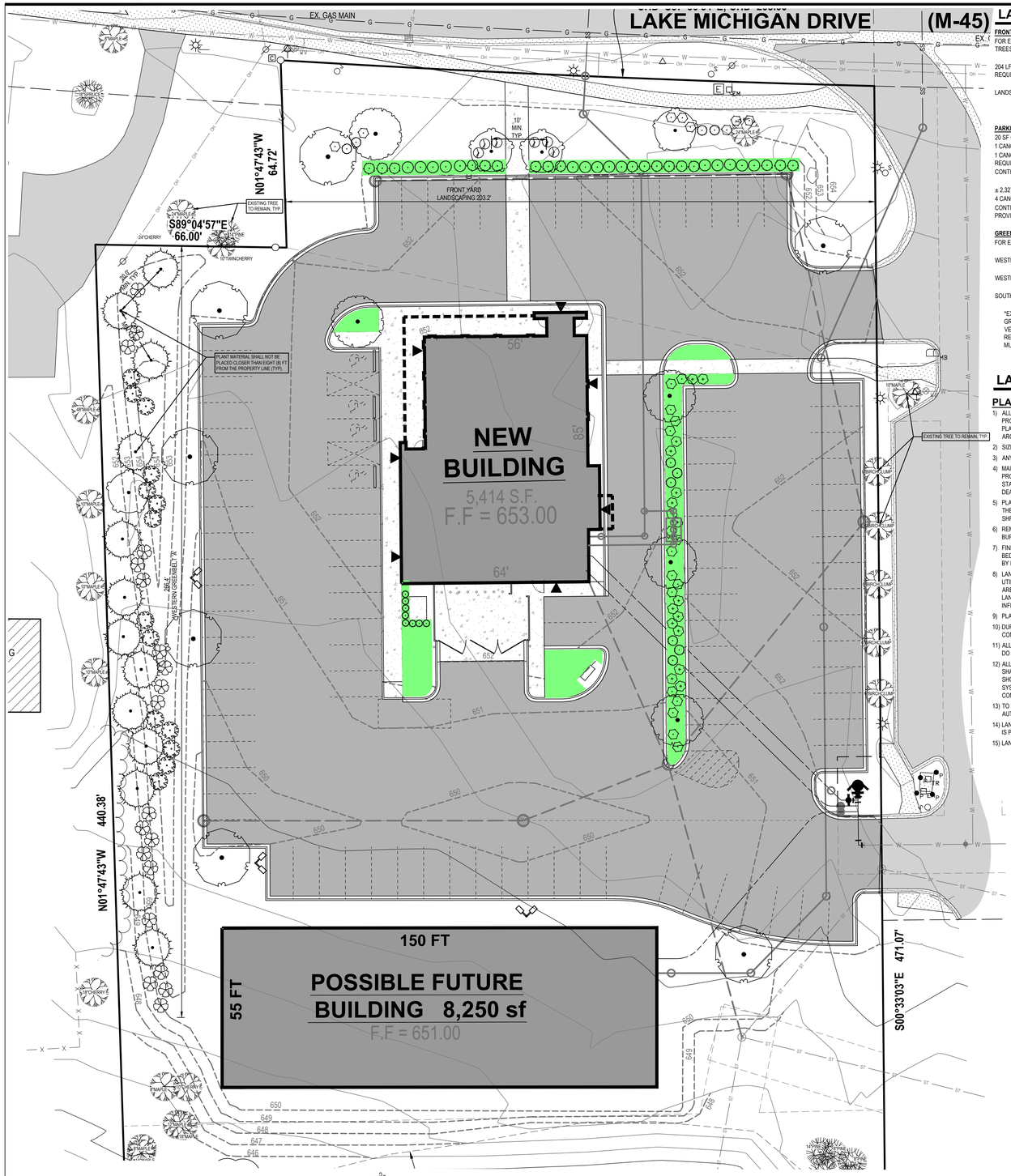


LANDSCAPE REQUIREMENTS

FRONT YARD LANDSCAPING

FOR EACH 150 FT OF FRONTAGE: 2 DECIDUOUS OR EVERGREEN TREES, 2 ORNAMENTAL TREES, AND 3 SHRUBS REQUIRED

204 LF = 3 DECIDUOUS OR EVERGREEN TREES; 3 ORNAMENTAL TREES, AND 18 SHRUBS REQUIRED

LANDSCAPE PROVIDED: 3 DECIDUOUS TREES PROVIDED, 1 EXISTING TO REMAIN
3 ORNAMENTAL TREES PROVIDED
18 SHRUBS PROVIDED

PARKING LOT LANDSCAPING

20 SF OF LANDSCAPE AREA PER PARKING SPACE; 98 PARKING SPACES = 1,960 SF REQUIRED
1 CANOPY TREE PER PARKING ISLAND; 4 ISLANDS = 4 CANOPY TREES REQUIRED
1 CANOPY OR ORNAMENTAL TREE PER 20 PARKING SPACES; 98 SPACES = 5 TREES REQUIRED
CONTINUOUS LANDSCAPE HEDGE REQUIRED AT OFF-STREET PARKING

± 2,327 SF OF LANDSCAPE SPACE PROVIDED
4 CANOPY TREES IN PARKING ISLANDS PROVIDED
CONTINUOUS HEDGE (MIN. 24" HT.) ADJACENT TO FRONT YARD OFF-STREET PARKING PROVIDED (33 SHRUBS)

GREENBELT (MIN. 15 FT WIDE)

FOR EACH 20 LF: 1 TREE AND 2 SHRUBS (30" MIN. HT.) REQUIRED

WESTERN GREENBELT "A": 267 LF = 14 TREES AND 34 SHRUBS PROVIDED

WESTERN GREENBELT "B" : 108 LF = 6 TREES AND 11 SHRUBS PROVIDED *

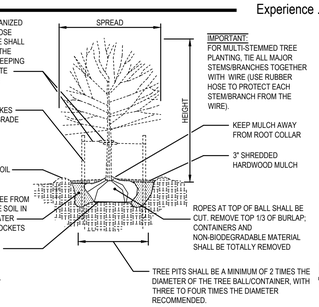
SOUTHERN GREENBELT: 260 LF = 13 TREES AND 26 SHRUBS PROVIDED *

*EXISTING VEGETATION SOUTH OF THE PHASE 2 BUILDING MAY SATISFY THE WESTERN GREENBELT 'B' AND SOUTHERN GREENBELT REQUIREMENTS PENDING ON-SITE VERIFICATION THAT EXISTING PLANT MATERIAL COMPLIES WITH TOWNSHIP REQUIREMENTS. ANY REDUCTION OF THE PROPOSED LANDSCAPING IN THESE AREAS MUST BE APPROVED BY THE TOWNSHIP AND LANDSCAPE ARCHITECT.

LANDSCAPE NOTES

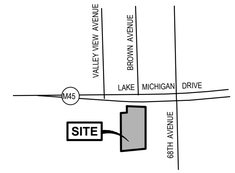
PLANTING NOTES:

1) ALL PLANT MATERIAL SHALL BE LOCALLY NURSERY GROWN NO.1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL MEET CURRENT AMERICAN ASSOCIATION OR NURSERYMEN STANDARDS. DO NOT PLANT MATERIALS UNTIL DIRECTED BY OWNER, LANDSCAPE ARCHITECT, AND/OR CONSTRUCTION MANAGER. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL, FOR ANY REASON BEFORE OR AFTER IT IS INSTALLED.
2) SIZES SPECIFIED ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED.
3) ANY PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER AND THE TOWNSHIP.
4) MAINTENANCE OF LANDSCAPING ITEMS, TREES, AND PLANTS SHALL BE PERFORMED BY THE PROPERTY OWNER OR A QUALIFIED PROFESSIONAL. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE MUNICIPAL STANDARDS AND IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN A NEAT, HEALTHY AND WEED FREE CONDITION. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIALS ARE TO BE REPLACED IMMEDIATELY AFTER NOTIFIED TO DO SO.
5) PLANT TREES AND SHRUBS IN ACCORDANCE WITH PLANTING DETAILS. DIG TREE PITS PER DETAILS. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN AT THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER, APPROX. 1/4 OF THE ROOT BALL ABOVE GRADE, AND BACKFILL TO TOP OF ROOT BALL.
6) REMOVE ALL TWINE, WIRE, NURSERY TREE GUARDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS. REMOVE THE TOP 1/3 OF BURLAP FROM EARTH BALLS AND REMOVE BURLAP FROM AROUND TRUNK.
7) FINELY SHREDDED HARDWARD BARK MULCH, NATURAL COLOR (NON-COLORED), IS REQUIRED FOR ALL PLANTINGS AND PLANTING BEDS. MULCH PER PLANTING DETAILS. MULCH IN PLANT BEDS SHALL BE 3" THICK AT TIME OF INSPECTION AND AFTER COMPACTED BY RAIN OR IRRIGATION. ALL PLANTING BEDS SHALL BE EDGED WITH 6" X 12 GAUGE STEEL LANDSCAPE EDGING.
8) LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL PRIVATE UNDERGROUND AND OVERHEAD UTILITIES. IF A CONFLICT WITH UTILITIES EXIST, NOTIFY OWNER/CONSTRUCTION MANAGER PRIOR TO PLANTING. THE SURFACE AREA IMMEDIATELY OVER PUBLIC UTILITIES SUCH AS WATER MAINS AND SANITARY SEWERS, SHALL REMAIN CLEAR AND FREE FROM LANDSCAPE PLANTINGS AND OTHER OBSTRUCTIONS FOR A MINIMUM DISTANCE OF TEN (10) FEET FROM EACH SIDE OF THE UTILITY INFRASTRUCTURE.
9) PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER PLANTING AND ACCEPTANCE.
10) DURING EXCAVATION, GRADING, AND INSTALLATION OF REQUIRED LANDSCAPING, ALL SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS SHALL BE STRICTLY FOLLOWED AND COMPLIED WITH.
11) ALL LAWN AREAS SHALL RECEIVE SOD OR HYDROSEED. TURF SHALL BE INSTALLED ON TOPSOIL UNLESS APPROVED OTHERWISE. DO NOT PLANT UNTIL ACCEPTANCE OF FINISH GRADE.
12) ALL PLANTING AREAS, LAWN AREAS AND LANDSCAPE ISLANDS SHOWN ARE TO HAVE A COMPLETE IRRIGATION SYSTEM. THE G.C. SHALL BE RESPONSIBLE FOR RETAINING A QUALIFIED FIRM FOR THE DESIGN OF THE IRRIGATION SYSTEM. THE DESIGN MUST SHOW HOW THE SYSTEM TIES INTO THE BUILDING AND MUST SHOW ALL OF THE NECESSARY EQUIPMENT FOR A COMPLETE SYSTEM. THE G.C. SHALL SUBMIT THE IRRIGATION SYSTEM DESIGN TO THE ARCHITECT/OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
13) TO THE EXTENT FEASIBLE, THE APPROVED LANDSCAPING SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF AUTHENTICITY.
14) LANDSCAPING SHALL BE INSTALLED WITHIN 180 DAYS OF OCCUPANCY OF THE BUILDING OR STRUCTURE UNLESS A LONGER PERIOD IS PERMITTED IN WRITING FROM THE ZONING ADMINISTRATOR.
15) LANDSCAPE PLANTINGS ARE PROHIBITED WITHIN ANY TOWNSHIP UTILITY EASEMENT.



TYPICAL TREE PLANTING DETAIL

N.T.S.



LOCATION MAP

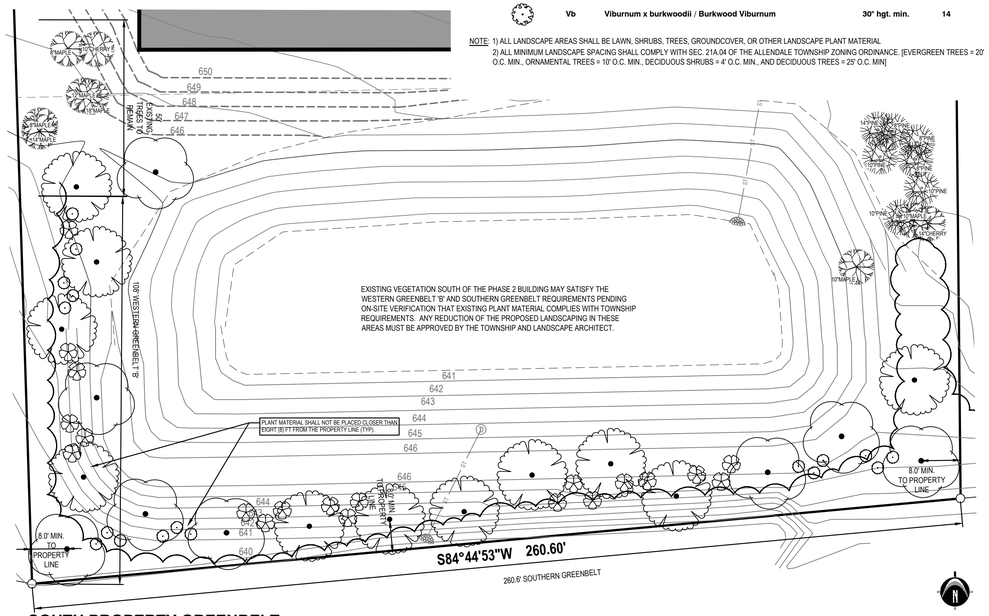
NOT TO SCALE

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	SIZE	QTY
	Cr	Crataegus douglasii / Douglas Hawthorn	2" cal. min.	4
	Ns	Nyssa sylvatica / Sour Gum	2" cal. min.	8
	Pn	Pinus nigra / Austrian Black Pine	8` hgt. avg.	13
	Pa	Platanus x acerifolia / London Plane Tree	2" cal. min.	7
	Qp	Quercus palustris / Pin Oak	2" cal. min.	11
	Tb	Tilia americana `Boulevard` / Boulevard American Linden	2" cal. min.	5

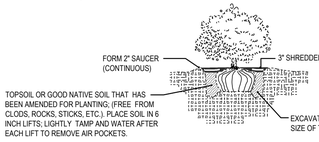
SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	QTY
	Ca	Cornus sericea `Arctic Fire` / Arctic Fire Dogwood	30" hgt. min.	27
	Hl	Hydrangea paniculata `Limelight` / Limelight Panicle Hydrangea	30" hgt. min.	6
	Is	Ilex crenata `Sky Pencil` / Sky Pencil Japanese Holly	30" hgt. min.	8
	Ig	Ilex glabra / Inkberry Holly	30" hgt. min.	15
	Ii	Ilex glabra `Compacta` / Compact Inkberry	30" hgt. min.	16
	Jc	Juniperus chinensis / Juniper	30" hgt. min.	18
	Pl	Physocarpus opulifolius `Little Devil` TM / Dwarf Ninebark	30" hgt. min.	24
	Va	Viburnum dentatum / Viburnum	30" hgt. min.	40
	Vb	Viburnum x burkwoodii / Burkwood Viburnum	30" hgt. min.	14

NOTE: 1) ALL LANDSCAPE AREAS SHALL BE LAWN, SHRUBS, TREES, GROUNDCOVER, OR OTHER LANDSCAPE PLANT MATERIAL
2) ALL MINIMUM LANDSCAPE SPACING SHALL COMPLY WITH SEC. 21A.04 OF THE ALLENDALE TOWNSHIP ZONING ORDINANCE. [EVERGREEN TREES = 20' O.C. MIN., ORNAMENTAL TREES = 10' O.C. MIN., DECIDUOUS SHRUBS = 4' O.C. MIN., AND DECIDUOUS TREES = 25' O.C. MIN]



SOUTH PROPERTY GREENBELT

1" = 20'



TYPICAL SHRUB / PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL

N.T.S.

LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS
- PROPOSED CONCRETE
- PROPOSED BUILDING
- LANDSCAPE AREA

0' 10' 20' 40'

SCALE: 1" = 20'

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Experience . . . the Difference

PREPARED FOR:

Reitberg Companies
Greg DeJong

3083 Washington Avenue, SW
Grandville, MI 49418
Phone: 616.538.9460

REVISIONS:

Title: Preliminary Site Plan		V. Date: 02/08/21
Drawn: SW	Checked: SW	S. Date: 02/08/21
Title: Site Plan		V. Date: 03/01/21
Drawn: SW	Checked: SW	S. Date: 03/01/21
Title: Site Plan Resubmittal (per Staff!)		V. Date: 03/25/21
Drawn: SW	Checked: SW	S. Date: 03/25/21
Title: Site Plan Resubmittal (per Staff!)		V. Date: 03/29/21
Drawn: SW	Checked: SW	S. Date: 03/29/21

Mr. Burger

Landscape Plan

6880 Lake Michigan Drive.

PART OF THE NORTHWEST 1/4 OF SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

STAMP:

STATE OF MICHIGAN
DUSTIN CORR
LANDSCAPE ARCHITECT
No. 3901001645
REGISTERED LANDSCAPE ARCHITECT

PROJECT NO: 21200247

SHEET NO: L-201

SHEET: 5 OF 5

21200247-CPI.dwg SW 3/29/2021 11:15

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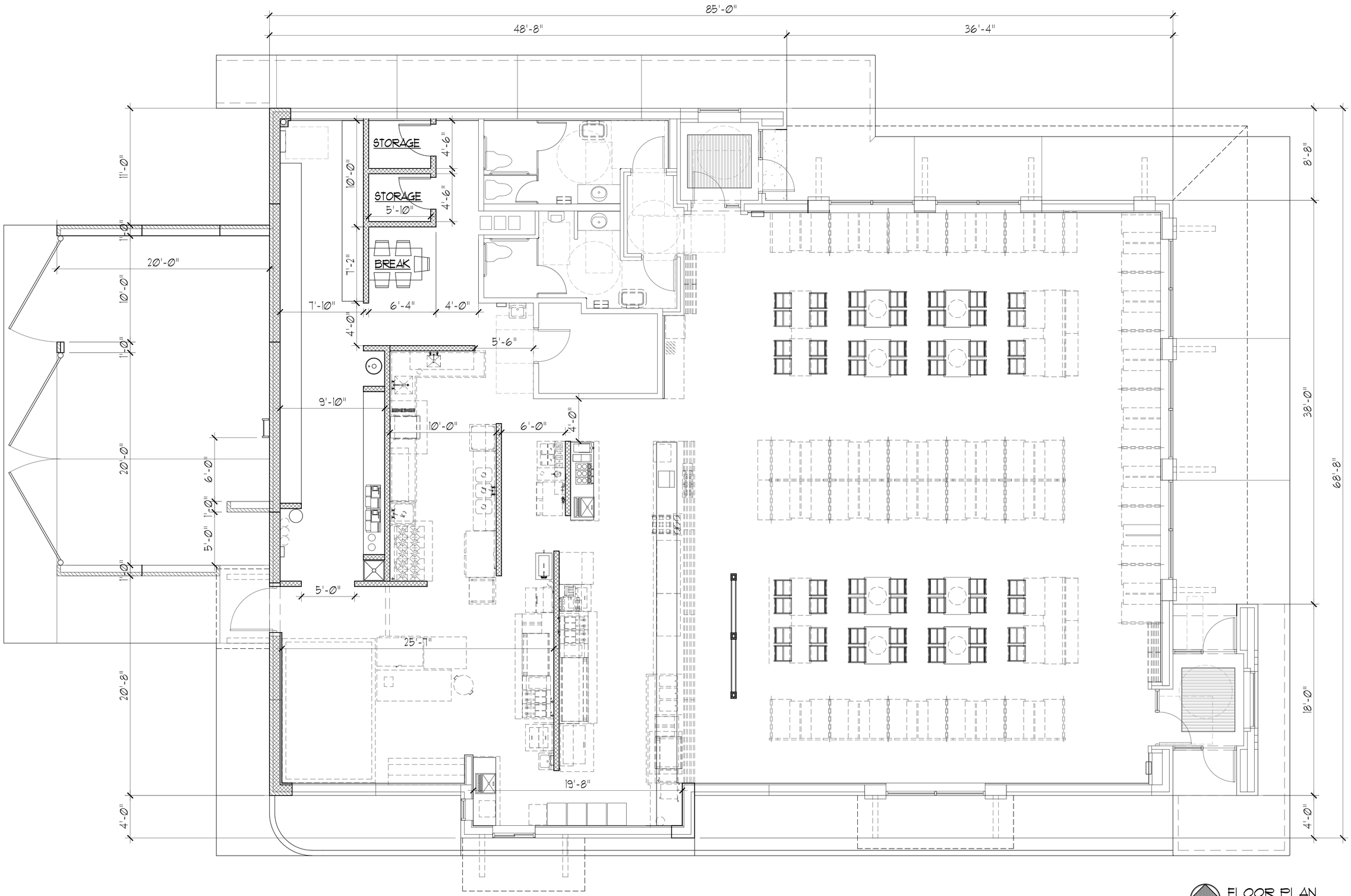

NORTH

FLOOR PLAN

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

OMEGA Architects
3483 Prairie St. SW
Grandville, Michigan 49418

Phone: (616) 532-7775
Fax: (616) 532-1414

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Date	Issued For
02-23-2021	REVIEW
03-03-2021	MUNICIPAL REVIEW

New Restaurant for:

Mr. Burger

6880 Lake Michigan Dr.
Allendale Township, Michigan 49401

PROJECT NUMBER

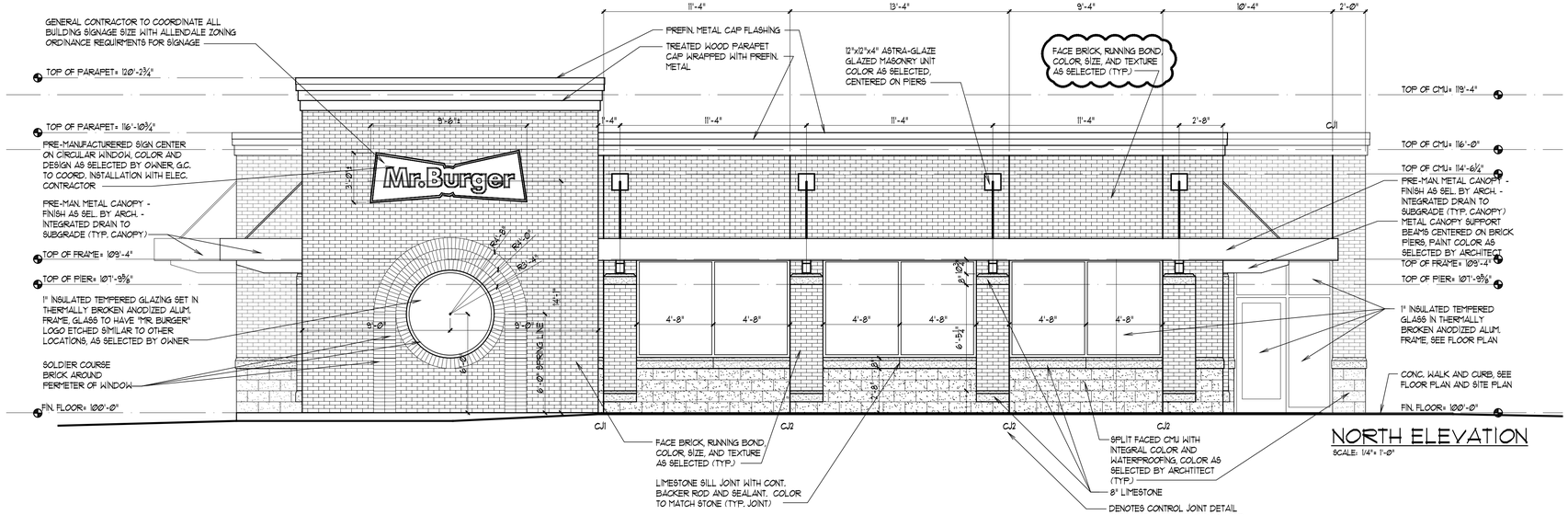
21015

SHEET

A1.01

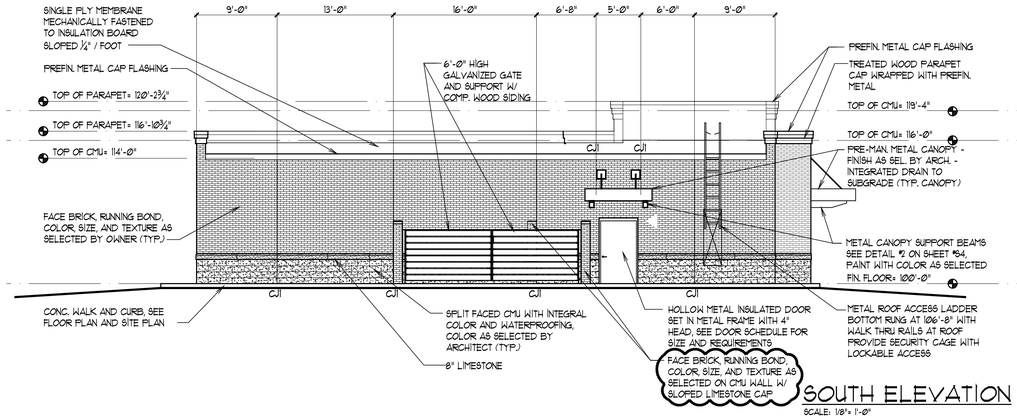
FLOOR PLAN

SIM. TO



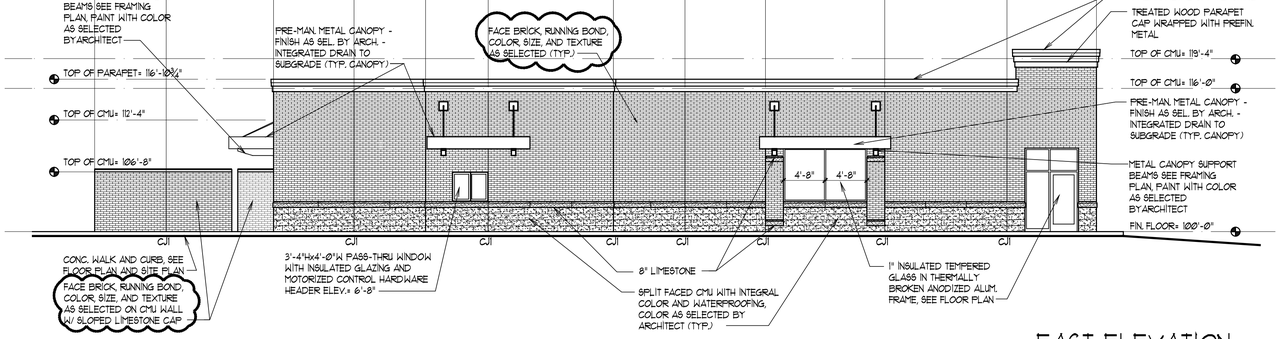
NORTH ELEVATION

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



SOUTH ELEVATION

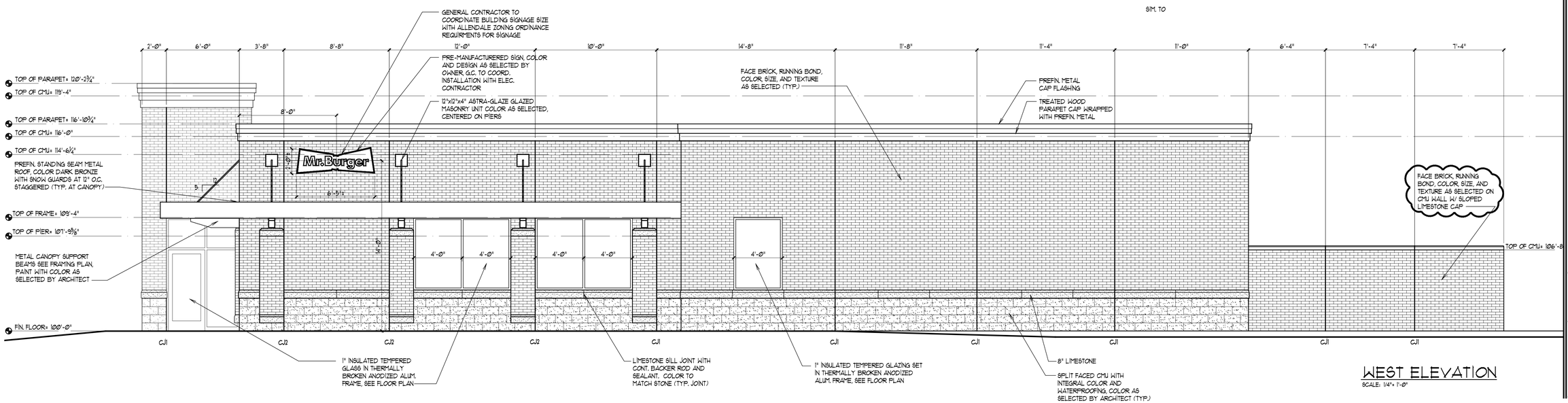
SCALE: 1/8"= 1'-0"



EAST ELEVATION

SCALE: 1/8"= 1'-0"

SIM. TO



WEST ELEVATION

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

OMEGA Architects
3483 Prairie St. SW
Grandville, Michigan 49418
Phone: (616) 532-7775
Fax: (616) 532-1414

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STATE OF MICHIGAN
JOSEPH CHARLES GROCHOWALSKI
ARCHITECT
No. 32598
LICENSED ARCHITECT

Date	Issued For
02-23-2021	REVIEW
03-03-2021	MUNICIPAL REVIEW
03-24-2021	REVISED MUNICIPAL REVIEW
03-29-2021	REVISED MUNICIPAL REVIEW

New Restaurant for:
Mr. Burger
6880 Lake Michigan Dr.
Allendale Township, Michigan 49401

PROJECT NUMBER
21015

SHEET
A4.01
BUILDING ELEVATIONS

Welcome
Mr.Burger

5850 Balsam Dr Hudsonville, Michigan

5820 Balsam Dr Hudsonville, Michigan

BELDEN BRICK -
TUDOR BLEND

INDIANA LIMESTONE - OOLITIC STONE - STANDARD BUFF

FIBERON COMPOSITE WOOD CLADDING - WENGE OPEN JOINT

PUD Process

Project Name Walgreens PUD

Developer/submitter _____ **Phone** _____

Date

_____ Submit project to Planning Commission
_____ Advertise in newspaper of general circulation notice of public hearing 15 days prior
_____ Send notices to neighbors 15 days prior to all persons to whom real property is assessed and occupants of all structures within 300 feet
_____ Hold public hearing for rezoning and preliminary site plan
_____ Review site plan
_____ Hold additional meeting(s), if tabled

_____ Planner prepares staff report for Board and creates the ordinance

01/08/2007 Board...1st meeting
- review and make recommendations to the preliminary development plan
- first reading on the rezoning ordinance
- publish as first reading

02/12/2007 Board...2nd meeting...ORDINANCE 2007-4
- approve of the rezoning ordinance and preliminary development plan
- publish as approved
- developer must be present for this meeting

_____ Planner stamps and signs preliminary plan

_____ Planning Commission...no public hearing is required
- review the final development plan
- make a recommendation to the Board to approve the final PUD development plan

_____ Candy
- call developer for 11 sets of plans for Board packets

02/26/2007 Board... 3rd meeting
- set the public hearing date one month out (2nd board meetings after date is set)
- advertise in newspaper of general circulation notice of public hearing 15 days prior
- send notices to neighbors 15 days prior to all persons to whom real property is assessed and occupants of all structures within 300 feet

03/26/2007 Board...4th meeting...developer must be present for this meeting
- hold public hearing
- approve of the final development plan
- authorize Township Attorney and Planner to prepare a approval resolution for the next meeting

04/09/2007 Board...5th meeting...RESOLUTION 2007-9
- approve of the Resolution prepared by the Township Attorney and Planner

_____ Planner stamps and signs final plan

_____ Sharon keeps the plan on file

ALLENDALE CHARTER TOWNSHIP

Ordinance No. 2007-__4__
Zoning Ordinance Amendment
WALGREENS PUD

AN ORDINANCE TO AMEND THE ZONING MAP OF THE CHARTER TOWNSHIP OF ALLENDALE, OTTAWA COUNTY, MICHIGAN, TO REZONE A PORTION OF SECTION 27 FROM R1-A LOW DENSITY SINGLE FAMILY RESIDENTIAL DISTRICT AND R-3 LOW DENSITY MULTIPLE FAMILY RESIDENTIAL DISTRICT AND C-2 GENERAL BUSINESS DISTRICT TO PUD PLANNED UNIT DEVELOPMENT DISTRICT AND, IN CONNECTION WITH THE REZONING AMENDMENT, TO SPECIFY THE PERMITTED USES AND TO PROVIDE FOR AN EFFECTIVE DATE.

THE CHARTER TOWNSHIP OF ALLENDALE, OTTAWA COUNTY, MICHIGAN, ORDAINS:

Section 1. **Preliminary Development Plan Approval.** The Preliminary Development Plan for the Walgreen's Development ("the PUD") dated February 1, 2007; File No. 062024E, as prepared by Exxel Engineering Inc. is, pursuant to Zoning Ordinance Section 12.03.D, hereby approved. In the event of a conflict between that plan and this Ordinance, the provisions of this Ordinance shall control.

Section 2. **Zoning Map Amendment.** That the Zoning Ordinance and Map of the Charter Township of Allendale, Ottawa County Michigan, that map having been incorporated by reference in the Zoning Ordinance pursuant to Section 4.02, is amended so that the lands described below shall be zoned as and included in the PUD, Planned Unit Development District on the Zoning Map. The lands rezoned as PUD, Planned Unit Development are legally described as follows:

Legal Description:

That part of the NW ¼, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North ¼ corner of Section 27; thence S00°33'03"E 181.19 feet along the East line of said NW ¼ ; thence N70°23'24"W 35.15 to a point on the Westerly line of 68th avenue and the Place of Beginning of this description; thence S00°33'03"E 389.60 feet along said Westerly line; thence S84°44'53"W 580.67 feet; thence N01°47'43"W 440.38 feet; thence S89°04'57"E 66.00 feet; thence N01°47'43"W 64.72 feet; thence Easterly 383.25 feet along the Southerly line of Highway M-45 (Lake Michigan Drive) on a 5784.12 foot radius curve to the left, the chord of which bears S88°23'51"E 383.16 feet; thence

S70°23'24"E 150.01 feet to the place of beginning. Subject to easements of record. This parcel contains 6.124.

Section 3. **Permitted Uses.** Land and/or buildings located in the PUD zone may be used for the following purposes only:

A. Parcels A and B are permitted the following uses:

1. Sandwich & Deli store.
2. Convenience store including those which sell packaged beer, wine and liquor.
3. Offices for generally recognized professions such as doctors, dentists, optometrists, psychologists, attorneys, architects, engineers, surveyors, and urban planners.
4. Medical clinics, mental health clinics.
5. Offices, galleries, or studios of artists and those employed in the graphic arts.
6. Offices for one or more or the following fields: executive, administrative, clerical, stenographic, accounting, insurance, real estate, stock brokers, bans, and similar enterprises.
7. Bakery goods store.
8. Banks, loan and finance offices.
9. Barber and beauty shop.
10. Bicycle sales and repair shop.
11. Book, stationary or gift store.
12. Delicatessen store.
13. Clothing and dry goods store.
14. Candy, soda fountain, ice cream store.
15. Dress and tailor store.
16. Pharmacy store.
17. Dry cleaning and/or laundry pick-up station.
18. Florist and gift shop but not including nursery.
19. Grocery store and meat market.
20. Hardware store.
21. Jewelry store.
22. Exercise and/or weight training store.
23. Photography and film development store.
24. Radio, stereo, television and computer store.
25. Restaurant or café excluding those allowing dancing, floor shows or drive in or drive-through car service.
26. Shoe repair shop and shoe store.
27. Tanning and nail salon.
28. Antique and craft store.
29. Travel agency.
30. Clinic – dental and medical including laboratory.
31. Dance studio and photographic studio.

32. Department store or discount department store.
33. Florist and gift shop.
34. Furniture store and appliance store.
35. Locksmith.
36. Music store.
37. Office supply store.
38. Blueprinting, Photostatting and photo copying.
39. Pet shop.
40. Pool hall or billiard parlor.
41. Other similar retail business or service establishments which supplies convenience commodities or performs services primarily for residents of the surrounding neighborhood; provide, however, such uses shall be found by the Planning Commission to be similar to uses permitted in the district.

B. Parcel C is intended to provide a suitable location for professional and business office uses, to provide a transition between more intensive commercial uses and residential use and should be permitted only those types of office uses which do not , frequently, create a necessity for a large amount of customer, employee, or visitor parking. Land and/or buildings on Parcel C may be used for the following purposes only:

1. Offices for the following professions and occupations: executive, administrative, scientific, scholarly, artistic, architectural, engineering, insurance, accounting, law, secretarial services, drafting, designing, real estate and sales representatives.

2. Offices of banks, savings and loans, credit unions, mortgage lenders, and other financial services, not having drive through facilities.

3. Photographers studies and travel agencies.

4. Medical, dental and optical offices, clinics and laboratories.

5. Miscellaneous business service establishments, including business consulting services, mailing and duplicating services, stenographic – secretarial services, and data processing centers.

6. Health and fitness centers.

7. Government office buildings.

8. Libraries.

9. Funeral homes.

Section 4. **Additional Regulations.**

A. All roof mounted equipment must be screened by a minimum forty-eight inch high parapet exterior wall.

B. All ground mounted heating or cooling equipment must be screened with a constructed architectural wall to match the principal structure.

C. No outdoor storage is permitted and all recycle or waste material shall be stored in appropriate dumpsters and all dumpsters shall be located in enclosures constructed and designed in according with Allendale Charter Township Zoning Ordinance Section 24.07.I.1. and 2. A – F.

D. All utility service is to be installed underground.

E. In the case of project phasing the undeveloped site areas shall be grass seeded and maintained including the mowing of grass, irrigating and fertilizing, no grass area is to exceed four inches in height.

F. All landscaped areas shall be kept free of refuse and debris and shall include with irrigation sufficient to maintain the landscaping in a healthy and growing condition.

G. Signage: All signage shall comply with the signage plan to be submitted and approved with the Final Development Plan.

H. The Lake Michigan Drive driveway and the two 68th Avenue driveways shall serve all of the sites within the PUD zone district and shall be shared ingress and egress driveways. The necessary ingress, egress, shared parking and maintenance agreements are required and must be recorded with the property deeds to each property within the PUD District.

I. The detention pond must be designed and constructed to adequately serve all of the properties within the PUD zone district and the necessary easements and maintenance agreements must be recorded with each property deed as necessary to maintain the proper storage capacity of the pond in accordance with the Ottawa County Drain Commission standards. All ground cover areas to be maintained in accordance with sub-section B above.

J. All exterior walls of all structures within the PUD, shall be complete with stone, cement board or similar material, no EFIS, dryvit, vinyl or exposed fastener type steel is to be used within the PUD zone district. Every attempt must be made to avoid a lower quality façade for any wall which is considered as side or rear wall.

Section 5. **Effective Date.** This ordinance was approved and adopted by the Allendale Charter Township Board, Ottawa County, Michigan, on February 12, 2007,l after introduction and a first reading on January 8, 2007, and publication after such first reading as required by Michigan Act 359 of 1947, as amended, and after a public hearing as required by Michigan Act 110 of 2006, as amended. This ordinance is ordered to take effect on March 5, 2007, which date is more than 7 days after publication of the ordinance in the Advance, a newspaper having general circulation in the Township, as is required by Section 401 of Act 110 of 2006, as amended, provided that this effective date shall be extended as necessary to comply with the requirements of Section 402 of Act 110 of 2006, as amended.

James Beelen, Township Supervisor

Candy Kraker, Township Clerk

CERTIFICATE

We, James Beelen and Candy Kraker, the Supervisor and Clerk, respectively, for the Charter Township of Allendale, Ottawa County, Michigan, do hereby certify that the foregoing Allendale Charter Township Ordinance was adopted at a regular meeting of the Allendale Charter Township Board held on February 26, 2007. The following members of the Township Board were present at the meeting: Beelen, Kraker, Roon, Alkema, DeJong, Knoper, and Mohr. The following members of the Township Board were absent: none. The Ordinance was adopted by the Township Board with members of the Board, Beelen, Kraker, Roon, Alkema, DeJong, Knoper, and Mohr voting in favor and members of the Board, none, voting in opposition. This ordinance was published in the Advance Newspapers, the Ottawa Edition, on March 5, 2007.

James Beelen

Township Supervisor

Township Clerk

EXCERPTS OF MINUTES

At a regular meeting of the Township Board of the Charter Township of Allendale, Ottawa County, Michigan, held at the Township Hall at 6676 Lake Michigan Drive, Allendale Charter Township, Ottawa County, Michigan, on the 9th day of April, at 7:30 p.m., local time.

PRESENT: Jim Beelen, Candy Kraker, Jerry Alkema, Greg DeJong, Ken Knoper, Carl Mohr,

ABSENT: Pierson Roon

After certain other matters of business were concluded, the Supervisor stated the next order of business was the consideration of a proposed resolution concerning Planned Unit Development approval for Phase 1 of the Development for the Southwest Corner of M-45 (Lake Michigan Drive) and 68th Avenue. A draft of this resolution was then reviewed by members of the Township Board. After discussion, the following resolution was offered by Alkema and supported by Knoper:

RESOLUTION 2007- 9

WHEREAS, Charles Geenen, on behalf of Geenen DeKock Properties, L.L.C., a Michigan limited liability company, whose registered address is 12 West 8th Street, Suite 250, Holland, Michigan, 49423 (the "Developer"), applied to the Township for approval of a Planned Unit Development project (the "Project") for a commercial development consisting of the relocation of an existing funeral home structure from M-45 to 68th Avenue, the construction of a Walgreens pharmacy store, the construction of another retail building, parking areas, detention pond, public utilities, and other related site improvements, to be located on those lands and premises (approximately 6.12 acres of property) in Allendale Charter Township, Ottawa County,

Michigan, described specifically on Exhibit A attached hereto; and

WHEREAS, the Township Planning Commission has previously approved the Preliminary Development Plan for the Project as provided in Allendale Charter Township Zoning Ordinance (the "Zoning Ordinance") Section 12.03D; and

WHEREAS, as is also provided by Zoning Ordinance Section 12.03D, the Township Board granted final approval of the Preliminary Development Plan pursuant to a Zoning Ordinance Amendment (Ordinance No. 2007-4) adopted by the Township Board on February 26, 2007; and

WHEREAS, as is provided in Zoning Ordinance Section 12.03E, the Developer has prepared and submitted to the Planning Commission a Final Development Plan for Phase 1 of the Project, along with a detailed traffic impact study prepared by URS Engineering; and

WHEREAS, the Planning Commission has reviewed the Final Development Plan for Phase 1 of the Project and the detailed traffic study prepared by URS Engineering, and has recommended that the Final Development Plan be approved by the Township Board, with conditions; and

WHEREAS, the Township Board has reviewed the Final Development Plan for Phase 1 of the Project along with the Planning Commission's recommendation that the Final Development Plan be approved with conditions; and

WHEREAS, before taking any action to approve or deny a request for Planned Unit Development approval, it is necessary for the Township Board to hold a public hearing on the proposed Planned Unit Development and give notice as required by the Michigan Zoning Enabling Act, Public Act 110 of 2006; and

WHEREAS, proper notice of a public hearing on the Final Development Plan for Phase 1

of the Project has been given as is required by the Michigan Zoning Enabling Act, Public Act 110 of 2006, as is evidenced by the Affidavits of Publication and Mailing on file in the office of the Township Clerk; and

WHEREAS, the Township Board held a public hearing on Phase 1 of the Project at its meeting on March 26, 2007; and

WHEREAS, the Township Board now desires to approve the Final Development Plan for Phase 1 of the Project pursuant to Zoning Ordinance Section 12.03H.

THE ALLENDALE CHARTER TOWNSHIP BOARD RESOLVES THAT:

1. The Allendale Charter Township Board approves the Final Development Plan for Phase 1 of the Walgreens Project, subject to all of the following conditions.

A. *Final Development Plan.* The Final Development Plan approved for Phase 1 of the Project is comprised of the following documents, all of which are on file with the Township Department of Planning and Community Development.

1. a single sheet drawing of the Phase 1 Final PUD – Existing Conditions & Demolition Plan, showing existing building to be relocated, and the existing buildings and structures, etc., to be removed, existing well to be abandoned per state and local codes, etc., which drawing has been prepared by Exxel Engineering, signed and sealed by Todd R. Stuive, Licensed Professional Engineer No. 38273, drawn by CDG, approved by TRS, identified as File No. 062024E, drawing number EF03-08-30-101-400, sheet 1 of 5, dated 2-15-07; and

2. a single sheet drawing of the Phase 1 Final PUD – Site Development Plan, showing the 14,820 square foot Wallgreens building to be constructed and the 3,942 square foot Funeral Home to be relocated, along with drives and parking areas, a detention pond to be done as Phase I, and additional area to be reserved for future development, which drawing has been prepared by Exxel Engineering, signed and sealed by Todd R. Stuive, Licensed Professional Engineer No. 38273, drawn by CDG, approved by TRS, identified as File No. 062024E, drawing number EF03-08-30-101-400, sheet 2 of 4, dated 2-15-07; and

3. a single sheet drawing of the Phase 1 Final PUD – Site Grading and Utility

Plan, showing the grading of the property and the storm sewer, sanitary sewer, and water utilities to be installed to serve the Project,, which drawing has been prepared by Exxel Engineering, signed and sealed by Todd R. Stuive, Licensed Professional Engineer No. 38273, drawn by CDG, approved by TRS, identified as File No. 062024E, drawing number EF03-08-30-101-400, sheet 3 of 5, dated 2-15-07; and

4. a single sheet drawing of the Phase 1 Final PUD – Site Landscape Plan, showing the landscaping to be provided as part of Phase I of the Project, which drawing has been prepared by RJM Design Inc., signed and sealed by Michael R. Bruggink, Registered Landscape Architect No. 1405, and Exxel Engineering, drawn by CDG, approved by TRS, identified as File No. 062024E, drawing number EF03-08-30-101-400, sheet 4 of 5, dated 2-15-07; and

5. a single sheet drawing of the Phase 1 Final PUD 68th Avenue Reconstruction, showing the reconstruction of 68th Avenue with left turn lane and tapers, etc., which drawing has been prepared by Exxel Engineering, signed and sealed by Todd R. Stuive, Licensed Professional Engineer No. 38273, drawn by CDG, approved by TRS, identified as File No. 062024E, drawing number EF03-08-30-101-400, sheet 5 of 5, dated 2-15-07; and

6. two sheets of drawings of the Proposed Photometric Plan and the Photometric Plan Details of the Walgreens PUD, showing the luminaire location and details of the various light fixtures, which drawings have been prepared by Cooper Lighting, Project 0700352A, Drawing DAG, for Rogvoy Architects, drawn by BJC, checked by BJC, approved by MD, identified as File No. 06185, sheets 1 and 2 of 2, dated 2-15-07; and

7. two sheets of drawings, one sheet of drawings of the Proposed Exterior Elevations of the Walgreens building, showing the East, South, West, North, Tower and Sign Monument elevations, as well as a table of the exterior materials and allowable sign area calculations, which drawings have been prepared by Rogvoy Architects, drawn by BJC, checked by BJC, approved by RJC, identified as File No. 06185, sheet A-2.1 dated 06 Feb 07, *and* a second sheet of an unidentified drawing showing an artist's rendering from the corner of M-45 and 68th Avenue; and

8. Letter from Brett A. Lauglin, P.E., the Engineering Director of the Ottawa County Road Commission, dated February 5, 2007, indicating that he has reviewed the URS Traffic Impact Study and the Exxel Engineering preliminary site plan and grants conceptual approval of the proposed driveways on 68th Avenue; and

9. a revised drawing of the dumpster enclosure construction details, specific

to the size, height and material, which shall be submitted by the Developer within thirty (30) days of the Township Board's approval of the Final Development Plan for Phase 1 of the Project, and which shall be subject to the review and approval of the Department of Planning and Community Development, such approval to not be unreasonably withheld.

B. *Compliance with and Modifications to the Final Development Plan.* Except as expressly modified or revised by these conditions, the Developer shall comply with all agreements, plans, representations, and warranties included in the Final Development Plan. Except as expressly modified or revised by these conditions, all improvements, including but not limited to buildings, drive areas, parking spaces, sidewalks, utilities, ground cover, trees and landscaping, lighting, signage, and all other improvements, shall be located and constructed in exact and complete compliance with the Final Development Plan. Any easements, improvements, or other items identified in the Final Development Plan as being "proposed" shall be deemed to be required.

Minor changes in the Final Development Plan (e.g., minor changes in the location and siting of the building, signage, other structures, drives or parking areas, or in the extent of structural coverage, floor space, or setback, or in the amount of open space) may be authorized by the Planning Commission without additional public hearings if required by engineering or other circumstances not foreseen at the time the Final Development Plan was approved. The Planning Commission may, in its discretion, decide to hold a public hearing on any deviation from the Final Development Plan.

Significant changes to the Final Development Plan may only be made by amending the Planned Unit Development approval, after the Township Board holds a public hearing on the proposed amendments to the Final Development Plan. For purposes of this Report, significant changes include, but are not limited to, the following:

(1) a change in use or character of the Project; (2) modification to any building envelope; (3) an increase in anticipated problems related to traffic circulation or public utilities; (4) a reduction in the amount of open space; (5) a reduction in pavement widths or parking spaces.

C. *Compliance with Law.* The Project shall comply with all federal, state, and/or Ottawa County laws, rules, regulations, or requirements.

D. *Compliance with Zoning and Other Ordinances.* Except as expressly modified, revised or altered by these conditions, or by the terms of the Final Development Plan, the Project shall be acquired, developed and completed in conformance with the Allendale Charter Township Zoning Ordinance, as amended, and all other applicable Township Ordinances. The uses that shall be permitted within the Project shall be limited to those uses specifically set forth in Ordinance No. 2007-4. The Project shall also comply with all other additional regulations set forth in Ordinance No. 2007-4.

E. *Phasing and Completion Date.* The Developer has proposed to build the Project in two phases. This approval is for the first phase of the Project only, which involves the relocation of the funeral home structure, the construction of the Walgreens Pharmacy, the necessary parking areas, public utilities, storm water detention, and other related site improvements. The first phase of the Project shall be completed by December 31, 2008. If Developer cannot comply with this condition, Developer shall have the right to request the Township, in its discretion, to extend this completion date.

F. *Funeral Home.* In the event the funeral home structure is damaged during the process of relocating the funeral home structure from M-45 to 68th Avenue, such that

the funeral home structure cannot be reused in its current condition without significant structural modifications as determined by the Township Department of Planning and Community Development, the Planning Commission shall retain its ability to conduct a site plan review of the relocated funeral home structure, pursuant to Article 24 of the Zoning Ordinance. If any brick or other material becomes cracked or otherwise damaged during or as a result of the relocation, the damaged brick and/or materials shall be repaired and/or replaced with the same type of material. In the event fifty percent (50%) or more of the brick falls off of the structure during or as a result of the relocation, the Planning Commission shall retain its ability to conduct a site plan review of the relocated funeral home structure, pursuant to Article 24 of the Zoning Ordinance.

G. *Public Utilities and Improvements.* The Project shall be served by public water and public sewer and shall include public sidewalks. The final utility construction plan(s) shall be subject to the review of all appropriate public agencies and departments, including but not limited to the Township Department of Public Works and the Township Engineer. Installation of these public utilities and public improvements shall be conducted in accordance with all applicable Township utility ordinances, regulations, standards, specifications and policies (including, but not limited to, the Allendale Charter Township Standard Construction Requirements). The public utilities and improvements shall become public upon completion and ownership thereof shall be transferred to the Township. The Developer shall provide the Township with appropriate easements for the public utilities and sidewalks in a form acceptable to the Township Engineer and Township Attorney. These easements shall include, but not be limited to, appropriate easements for the water and sewer utilities, appropriate easements for the sidewalks,

twenty-foot (20') wide easements for all fire hydrants ten feet (10') beyond the hydrant, and a twenty-foot (20') wide easement for the water service to the relocated funeral home structure.

H. *Performance Bond or Letter of Credit for Public Improvements.* The Developer shall post a performance bond or letter of credit in an amount and form acceptable to the Township, such approval not to be unreasonably withheld, to ensure that the public improvements (e.g., the infrastructure of the Project, including the public utilities and improvements) are properly completed in compliance with the Final Development Plan, the standards and specifications adopted by the Township (e.g., the Standard Construction Requirements), and the conditions contained in this Report. This bond or letter of credit shall be in addition to any Development Fee that the Developer is required to submit to the Township. Once the infrastructure of the Project has been completed, the Developer and the Developer's Civil Engineer who presented the Final Development Plan to the Township, shall each certify in writing that the infrastructure of the Project has been completed in complete compliance with the Final Development Plan and the conditions imposed on the Planned Unit Development approval by the Township, which shall be subject to the review and acceptance of the Township's Engineer, at the Developer's sole cost and expense. In the event that the Township's Engineer determines that the infrastructure of the Project has not been properly completed, or in the event the Developer fails to pay the Township's Engineer for the cost of reviewing the written certification to the Township regardless of the outcome of that review, the Township may revoke any building or zoning permit previously issued for any aspect of the Project and issue necessary stop work orders.

I. *Landscaping.* All landscaping must be completed in compliance with the Final Development Plan, except for minor modifications approved by the Office of Planning and Community Development. All landscaping shall be kept free of refuse and debris, and shall be serviced by underground irrigation sufficient to maintain the landscaped setback area in a healthy and growing condition. The Developer and the subsequent owners shall ensure that any landscape materials that exhibit evidence of insects, pests, diseases and/or damage shall be promptly and appropriately treated, and all dead plant material shall be promptly removed and replaced with similar living plant material.

J. *Protection and Replacement of Existing M-45 Landscaping and Public Improvements.* The Township has previously installed numerous public improvements, including but not limited to sidewalks, lighting fixtures, vegetative landscaping materials, and irrigation materials, along the M-45 right of way. Phase 1 of the Project may require that some of those improvements be relocated and/or replaced. The Township will, at the Developer's sole cost and expense, be responsible for relocating and /or replacing the landscaping and public improvements as part of Phase 1 of the Project. Prior to the Township issuing a building or construction permit for Phase 1 of the Project, the Developer shall post a performance bond or letter of credit in an amount and form acceptable to the Township, such approval not to be unreasonably withheld, to ensure that the landscaping and public improvements along M-45, are properly relocated and/or replaced. This bond or letter of credit shall be separate from the bond or letter of credit required by Condition G above.

K. *Michigan Department of Transportation and Ottawa County Road*

Commission Approval. No zoning or building permits shall be issued for the construction of any building or structure within the Project until the Developer provides the Township with a copy of the final approval from the Ottawa County Road Commission and the Michigan Department of Transportation in writing.

L. *Ottawa County Drain Commissioner Approval.* No zoning or building permits shall be issued for the construction of the building or any other structure within the Project until the Ottawa County Drain Commissioner has approved in writing the drainage plan for the Project as a whole and a copy thereof has been delivered to the Township. No occupancy permit shall be issued for until the Township has received written certification from the Drain Commissioner's engineer that all drainage required for the Project and the drainage required for the particular building has been completed to the satisfaction of the Drain Commissioner's engineer. The Developer shall pay all costs incurred in obtaining these written opinions from the Drain Commissioner's engineer.

M. *Easements and Storm Water Maintenance Agreements.* Within four (4) weeks of the Township Board's Final Approval of the Final Development Plan for Phase 1 of the Project, the Developer shall provide, in recordable form, all necessary easements (including but not limited to public utility easements, public sidewalk easements, etc.), and a storm water maintenance agreement, which easements and agreement shall be subject to the Township's review, approval and acceptance. In the event this condition is not timely met by the Developer, the Township may issue a stop work order on any and all construction on the Property.

N. *Binding Effect.* These conditions shall be binding on the Developer and all successor owners or parties in interest in the Project, and on the Township.

O. *Violations.* Any violation of these conditions shall constitute a violation of the Zoning Ordinance and, in addition to the remedies provided therein, shall be cause for the Township Board to suspend or revoke any zoning or building permit applicable to the Project.

P. *Conflicts.* In the event of a conflict between these conditions and the Final Development Plan, these conditions shall control. In the event of conflict in the Final Development Plan, the more rigorous requirement shall control.

Q. *Acceptance and Agreement.* If Developer elects to proceed with Phase 1 of the Project, by so doing Developer shall be deemed to have accepted and agreed to comply fully at all times with all of the terms and provisions of this resolution.

R. *PUD Notice Document to be Recorded with Register of Deeds.* The Township shall, at the Developer's sole cost and expense, record a document with the Ottawa County Register of Deeds to inform potential purchasers of any of the Property involved in the Project that the Project is subject to a planned unit development approved by the Township, the conditions and regulations of which may be reviewed by any interested person in the Office of Planning and Community Development. The Township shall submit an invoice to the Developer for the costs of recording the document with the Ottawa County Register of Deeds, which invoice shall be paid in full by the Developer within thirty (30) calendar days after receipt of the invoice.

2. That all resolutions in conflict herewith in whole or in part are hereby revoked to the extent of such conflict.

YES: All

NO: None

RESOLUTION DECLARED ADOPTED.

Dated: April 9, 2007.

Township Clerk

CERTIFICATE

I, Candy Kraker, the Township Clerk of the Charter Township of Allendale, Ottawa County, Michigan, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Township Board at a regular meeting held on the 9th day of April, 2007. I do further hereby certify that public notice of said meeting was given pursuant to and in full compliance with Michigan Act 267 of 1976, as amended, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

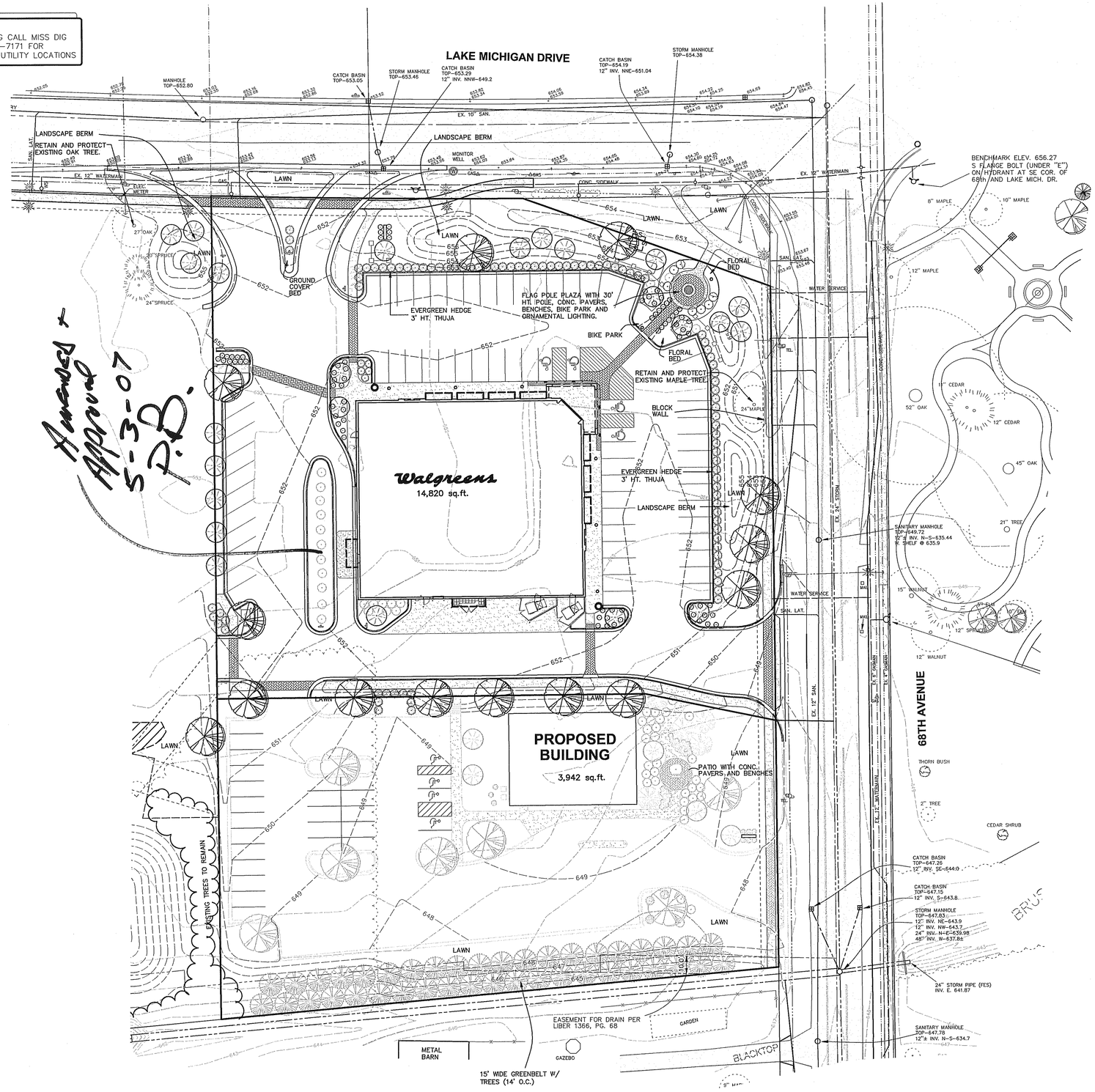
Candy Kraker,
Allendale Charter Township Clerk

Exhibit A

Lands located in the State of Michigan, County of Ottawa, Township of Allendale, described specifically as follows:

That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence S 00 degrees 33 minutes 03 seconds E 181.19 feet along the East line of said NW 1/4; thence N 70 degrees 23 minutes 24 seconds W 35.15 to a point on the Westerly line of 68th Avenue and the PLACE OF BEGINNING of this description: thence S 00 degrees 33 minutes 03 seconds E 389.60 feet along said Westerly line; thence S 84 degrees 44 minutes 53 seconds W 580.67 feet; thence N 01 degree 47 minutes 43 seconds W 440.38 feet; thence S 89 degrees 04 minutes 57 seconds E 66.00 feet; thence N 01 degree 47 minutes 43 seconds W 64.72 feet; thence Easterly 383.25 feet along the Southerly line of Highway M-45 (Lake Michigan Drive) on a 5784.12 foot radius curve to the left, the chord of which bears S 88 degrees 23 minutes 51 seconds E 383.16 feet; thence S 70 degrees 23 minutes 24 seconds E 150.01 feet to the place of beginning. Subject to easements of record. This parcel contains 6.124 acres.

CAUTION:
BEFORE DIGGING CALL MISS DIG
AT 1-800-482-7171 FOR
UNDERGROUND UTILITY LOCATIONS



Amended
Approved
5-3-07
R.B.

LANDSCAPE LEGEND

Final Landscape Plan(s) to have scale 1"=20' or larger.

- Place Canopy Tree – 2" cal. min.
  Acer rubrum, Pyrus calleryana, or Platanus
- Place Evergreen Tree – 6' ht. min.
  Pinus, Picea glauca, or Abies concolor
- Place Ornamental Tree – 1 1/2" cal. min.
  Malus, Cornus kousa, or Crataegus
- Place Flowering Shrubs – 24"
  Viburnum, Spiraea, Ribes, Weigela, or Hibiscus
- Place Evergreen Shrubs – 24"
  Juniperus, Taxus, Thuja, Ilex

Special Storm Water Seed Mix to include a mixture of: Forbs, Grasses, Native Shrubs, and Quick Cover Seed.

Parking Lot Islands to be landscaped with either Ground Cover or Ornamental Grasses.

All maintained landscaped areas to be irrigated with an in-ground irrigation system.

All plants in proposed Green Belt areas to be maintained in a healthy growing condition by property owner.

All lawn areas are to be sodded, seeding is not acceptable.

All proposed landscape berms to be between 2' and 4' ht.

Landscape Architect to evaluate all existing trees on site prior to clearing and determine which trees are practical to transplant.

STATE OF MICHIGAN
MICHAEL R. BRUGGINK
LANDSCAPE ARCHITECT
NO. 1405
REGISTERED LANDSCAPE ARCHITECT

RJM Design Inc.
Land Planning • Landscape Architecture
60 Ottawa NW, Suite 410 Grand Rapids, MI 49503
Phone: (616) 336-8071 Fax: (616) 336-8091

LEGEND

- ○ = IRON STAKE FOUND
- • = IRON STAKE SET
- ◉ = MONUMENT
- = UTILITY POLE & GUY WIRE
- = LIGHT POLE
- = SIGN
- = HYDRANT
- = VALVE
- ⊞ = CATCH BASIN
- ○ = MANHOLE
- △ = BURIED UTILITY MARKER
- = POST INDICATOR VALVE
- = SOIL BORING
- —x—x—x—x— = FENCE LINE
- ——————— = OVERHEAD WIRES
- T. = TOP OF CURB ELEVATION
- G. = GUTTER ELEVATION

N

SCALE: 1"= 30'

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE		BUILDING	
NEW	☒	NEW	☒
REMODELING	☐	EXISTING	☐
RELOCATION	☐	NEW SHELL ONLY	☐
OTHERS	☐		

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number: E | F | 70 co. • 09 twp. • 27 sec. • 102 project • 391 drawing

Geenen DeKock PROPERTIES
12 West 8th St., Suite 250
Holland, Michigan 49423

GDK CONSTRUCTION CO
12 West 8th St., Suite 250 Holland, MI 49423
616-355-0300

ROGVOY
ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025-2404
PH 248.540.7700 FX 248.540.2710
ARCHITECTS@ROGVOY.COM

NO.	DATE	BY	DESCRIPTION	CONST
3	5/1/07	CDG	REV DRIVE THRU	
2	4/9/07	CDG	BIDS / PERMITS	
1	4/9/07	CDG	OWNER / TENANT REVIEW	

REVISIONS

CERTIFICATION AND SEAL

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MICHIGAN AS SIGNIFIED BY MY HAND AND SEAL.

STATE OF MICHIGAN
TODD R. STUIVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

STORE # 11415

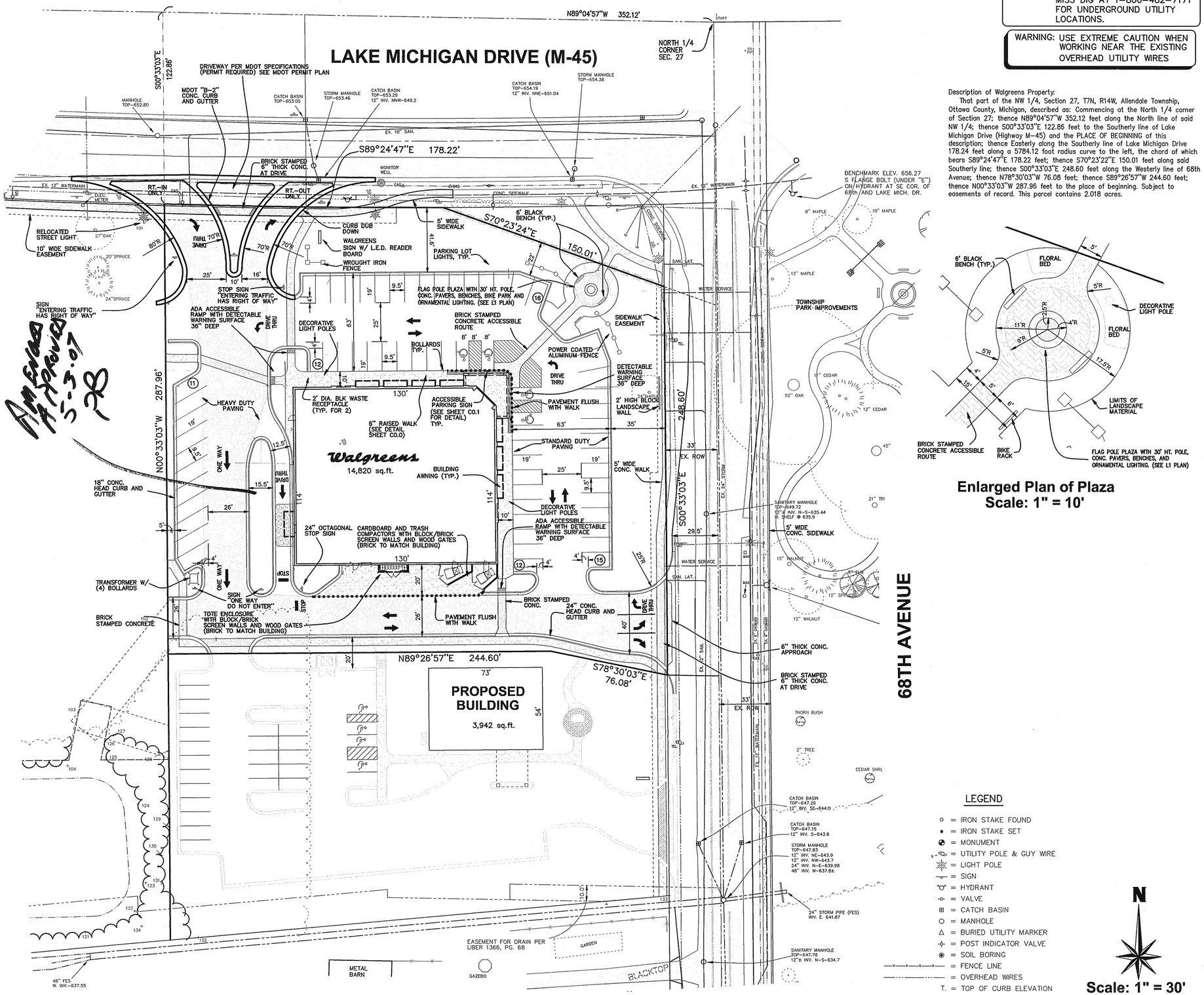
PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
LANDSCAPE PLAN

CADD PLOT: 062024E_L1
VOID PLOT:
SUPERSEDES PLAN DATED:

SCALE: 1"=30'
DRAWN BY: CDG
DATE: 3-15-07
REVIEWED BY: TRS

DRAWING NO. L1
OF DWGS.



CAUTION: BEFORE DIGGING CALL MISS DIG AT 1-800-482-7171 FOR UNDERGROUND UTILITY LOCATIONS.

WARNING: USE EXTREME CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY WIRES

Description of Walgreens Property:

That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence N89°04'57"W 352.12 feet along the North line of said NW 1/4; thence S00°33'03"E 122.86 feet to the Southerly line of Lake Michigan Drive (Highway M-45) and the PLACE OF BEGINNING of this description; thence Easterly along the Southerly line of Lake Michigan Drive 178.24 feet along a 5784.12 foot radius curve to the left, the chord of which bears S89°24'47"E 178.22 feet; thence S70°23'22"E 150.01 feet along said Southerly line; thence S00°33'03"E 248.60 feet along the Westerly line of 68th Avenue; thence N78°30'03"W 76.08 feet; thence S89°26'57"W 244.60 feet; thence N00°33'03"W 287.96 feet to the place of beginning. Subject to easements of record. This parcel contains 2.018 acres.

Enlarged Plan of Plaza
Scale: 1" = 10'

LEGEND

- ○ = IRON STAKE FOUND
- • = IRON STAKE SET
- ◉ = MONUMENT
- = UTILITY POLE & GUY WIRE
- = LIGHT POLE
- = SIGN
- = HYDRANT
- = VALVE
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N

Scale: 1" = 30'

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE		BUILDING	
NEW	☒	NEW	☒
REMODELING	☐	EXISTING	☐
RELOCATION	☐	NEW SHELL ONLY	☐
OTHERS	☐		

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FILE NO.: 062024E
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drawing number: E | F | 70 co. • 09 twp. • 27 sec. • 102 project • 398 drawing

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STATE OF MICHIGAN — TODD R. STUIVE ENGINEER No. 38273 — LICENSED PROFESSIONAL ENGINEER

STORE # 11415

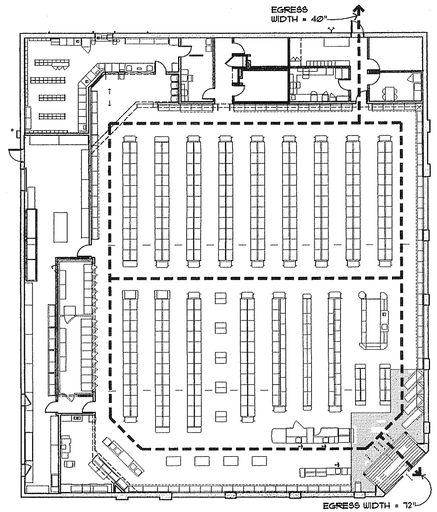
PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
SITE IMPROVEMENT PLAN

CADD PLOT: 062025E_C1.1	SCALE: 1"=30'	DRAWING NO.
VOID PLOT:	DRAWN BY: CDG	C1.1
SUPERSEDES PLAN DATED:	DATE: 3-15-07	
	REVIEWED BY: TRS	OF DWGS.

Walgreens Pharmacy

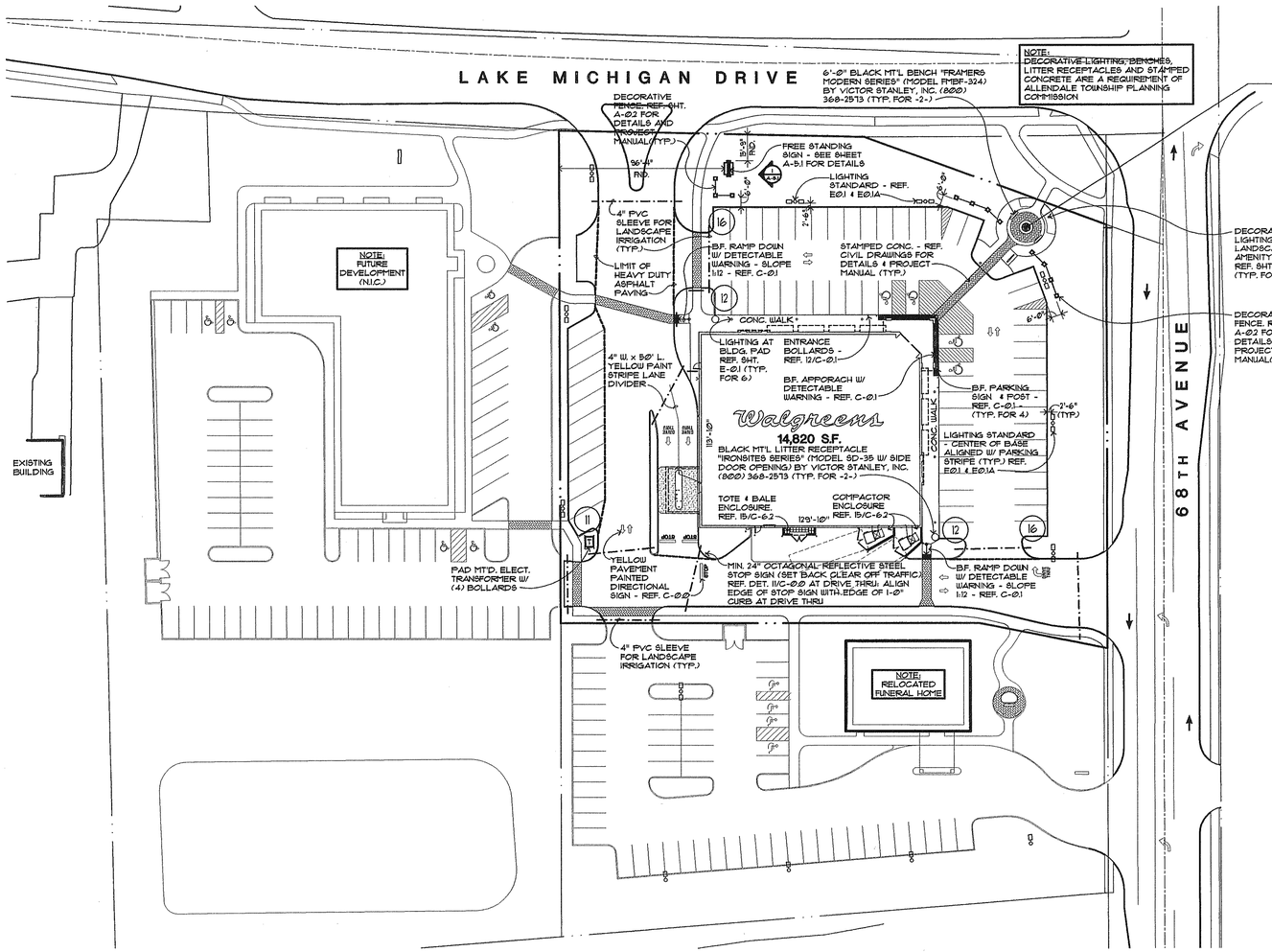
(SWC) Lake Michigan Dr. (M-45) & 68th Avenue
Allendale, Michigan Store #11415



NOTE:
THIS PLAN INDICATES ASSUMED PATH OF EGRESS BASED UPON EMERGENCY LIGHTING LAYOUT - REFERENCE SHEETS A-1.2 & E-1.1.

North

Means of Egress Plan
1" = 20'-0"



Site Plan
1" = 40'-0"
North

THIS SITE PLAN IS ISSUED FOR ORIENTAION ONLY- SEE CIVIL ENGINEERING DRAWINGS

Legal Description

Description of Walgreens Property:
That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence N89°04'57"W 352.12 feet along the North line of said NW 1/4; thence S00°33'03"E 122.86 feet to the Southerly line of Lake Michigan Drive (Highway M-45) and the PLACE OF BEGINNING of this description; thence Easterly along the Southerly line of Lake Michigan Drive 178.24 feet along a 5784.12 foot radius curve to the left, the chord of which bears S89°24'47"E 178.22 feet; thence S70°23'22"E 150.01 feet along said Southerly line; thence S00°33'03"E 248.60 feet along the Westerly line of 68th Avenue; thence N78°30'03"W 76.08 feet; thence S89°26'57"W 244.60 feet; thence N00°33'03"W 287.96 feet to the place of beginning. Subject to easements of record. This parcel contains 2.018 acres.

Mail Box & Post Specifications

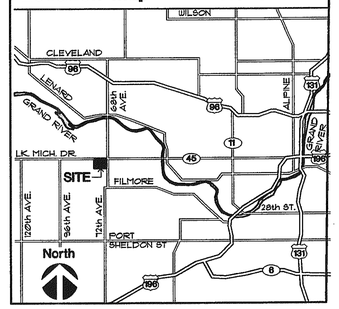
IN AREAS WHERE THE U.S. POST OFFICE REQUIRES A FREESTANDING MAIL BOX, THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR SHALL PROVIDE A HEAVY DUTY, DIE CAST ALUMINUM RURAL MAIL BOX EQUAL TO MODEL #4850-BGE WITH MATCHING POST #4895-BGE AS MANUFACTURED BY SALSBURY INDUSTRIES, LOS ANGELES, CALIFORNIA PHONE: 1-800-MAILBOX.

NOTE:
POST TO MOUNTED IN 18" DIA. CONC. FOOTING W/ BOTTOM OF FTG AT 3'-6" MIN. BELOW FIN. GRADE. VERIFY WITH LOCAL POST OFFICE AS TO BOX LOCATION ON SITE, MOUNTING HEIGHT AND SETBACK FROM FACE OF CURB

Flag Pole Specifications

PROVIDE 30'-0" HIGH FLAG POLE - CLEAR ANODIZED FINISH WITH SPUN ALUMINUM BALL, SHIGLE SHEAVE TRUCK, CAST ALUMINUM REVOLVING, NON-FOULING TYPE, 2 BRONZE SWIVEL SNAPS WITH COVERS PER HALYARD, 1 SET OF HALYARD 90 POLY, 9" CAST ALUMINUM CLEAT MOUNTED AT 5'-0" AFG, ALUMINUM FLASH BASE COLLAR SET IN MINIMUM 3'-6" DEEP 24" DIA 3000 PSI FOOTING PER MANUFACTURERS RECOMMENDATIONS, MODEL #EC20 AS DISTIBUTED BY FLAG POLE WAREHOUSE - 3600 CANTRELL INDUSTRIAL COURT - ACWORTH, GA 30101 - PHONE - 770-974-0501 OR APPROVED EQUAL

Location Map — No Scale



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P-2.1	ENLARGED TOILET ROOM PLANS & PLUMBING DETAILS
FP-1.1	FIRE PROTECTION DETAILS AND GENERAL NOTES
E-0.1	SITE ELECTRICAL PLAN
E-0.1A	PHOTOMETRIC CALCULATIONS
E-1.1	FLOOR PLAN - LIGHTING
E-1.2	FLOOR PLAN - POWER
E-1.3	FLOOR PLAN - ETHERNET AND SATELLITE SYS.
E-1.4	FLOOR PLAN - BURGLAR ALARM & CCTV SYS.
E-1.5	FLOOR PLAN - TELEPHONE & SOUND SYS.
E-1.6	FLOOR PLAN - FIRE ALM. SYS./ SPARE CONDUIT
E-1.7	FLOOR PLAN - CHANNEL LETTER LED SYSTEM
E-2.1	FEEDER DIAG. (120/208)/ ELECTRICAL DTLS.
E-2.1A	LIGHTING CONTROL DIAGRAMS
E-2.1B	LIGHTING CONTROL DIAGRAMS
E-2.1C	TESTING, MISC. ELECTRICAL DET. & SQ. "D" WIRING DIAG.
E-3.1	ELECTRICAL PANEL SCHEDULES (120V)
E-4.1	LIGHTING SCHEDULE AND DETAILS
E-4.2	SATELLITE SYSTEM AND DETAILS
E-4.3	ELECTRICAL DETAILS
E-4.4	ELECTRICAL DETAILS
E-4.5	COOLER/ FREEZER WIRING DIAGRAMS
E-4.6	AIR CURTAIN WIRING DIAGRAMS & DETAILS

Building Code Compliance

BUILDING CODE:
MICHIGAN BUILDING CODE, 2003 EDITION WITH THE MICHIGAN PLUMBING CODE, 2003 EDITION, THE MICHIGAN MECHANICAL CODE, 2003 EDITION AND 2002 NEC.

OCCUPANCY: M-MERCANTILE (309.1)

CONSTRUCTION CLASSIFICATION: II B (603.1)

ALLOWABLE AREA: 12,500 SF. (TB03)

ALLOWABLE HEIGHT: 4 STORIES (TB03)

ALLOWABLE AREA INCREASE: (506.2)
SEPARATION ON (4) SIDES:
INCREASE NOT TO EXCEED 75%
SHORTEST SIDE YARD SETBACK = 56 FT.

75% INCREASE

ALLOWABLE AREA	12,500 SF.
AUTOMATIC SPRINKLER SYSTEM INCREASE	+ 37,500 SF.
FRONTAGE INCREASE	+ 9,375 SF.
TOTAL ALLOWABLE AREA	59,375 SF.
ACTUAL AREA	14,820 SF.

AUTOMATIC FIRE PROTECTION SYSTEM: (506.3 903.3.1.1)
REQUIRED AND PROVIDED

OCCUPANCY LOAD PER EGRESS PURPOSES: (T1004.1.2)

BLDG. COMPONENT DESCRIPTION	AREA	FACTOR PER T1004.1.2	OCCUPANTS
SALES AREA	11694	30	390
OFFICE	1354	30	45
STOCK	1172	300	6
TOTAL OCCUPANTS:			441

EGRESS WIDTH:
441 OCCUPANTS x .0135"/ OCCUPANT = 6.0" OF TOTAL EGRESS WIDTH REQUIRED (T1004.1.2 & T1005.1)
EGRESS WIDTH PROVIDED = 112"
FRONT ENTRY & DOOR "J"

NUMBER OF EXITS: (T1018.1 & T1018.1)
2 REQUIRED
2 PROVIDED

MAXIMUM LENGTH OF TRAVEL: (1018.1 & T1015.1)
250' MAXIMUM PERMITTED
LESS THAN 250' PROVIDED

PLUMBING FIXTURES REQUIRED PER MICHIGAN PLUMBING CODE, TABLE 403.1
FOR 441 OCCUPANTS REQUIRED: (T403.1)

	WATER CLOSETS	URINALS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINK
MEN	1	0	1	-	-
WOMEN	1	-	1	-	-
TOTAL	2	0	2	1	1

PLUMBING FIXTURES PROVIDED:

	WATER CLOSETS	URINALS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINK
MEN	1	1	1	-	-
WOMEN	2	-	2	-	-
TOTAL	3	1	3	HI/LO	1

ROGVOY ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025-2404
PH 248.540.7700 FX 248.540.2710
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STATE OF MICHIGAN — RICHARD J. CLEVE — ARCHITECT — NO. 38435 — LICENSED ARCHITECT

issued for:
OWNER / TENANT REVIEW:
9 APR 07
BIDS & PERMITS:
9 APR 07

project:
Store #11415

Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M-45) & 68th Ave.
Allendale, Michigan

drawing:
Site Plan

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:
A-0.1

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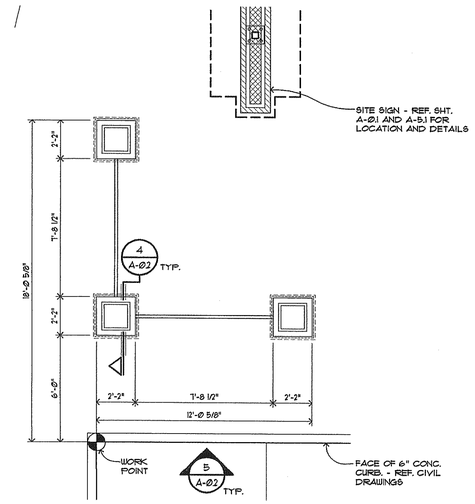
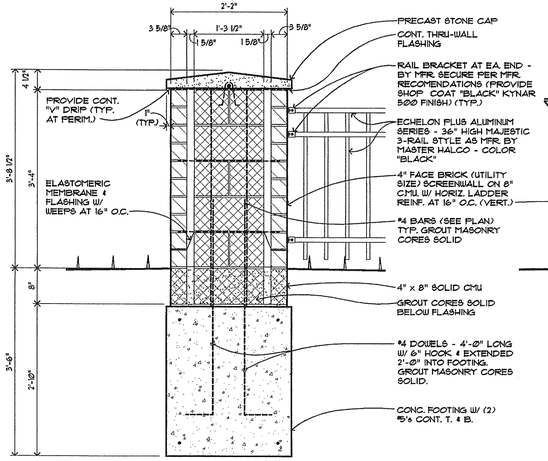
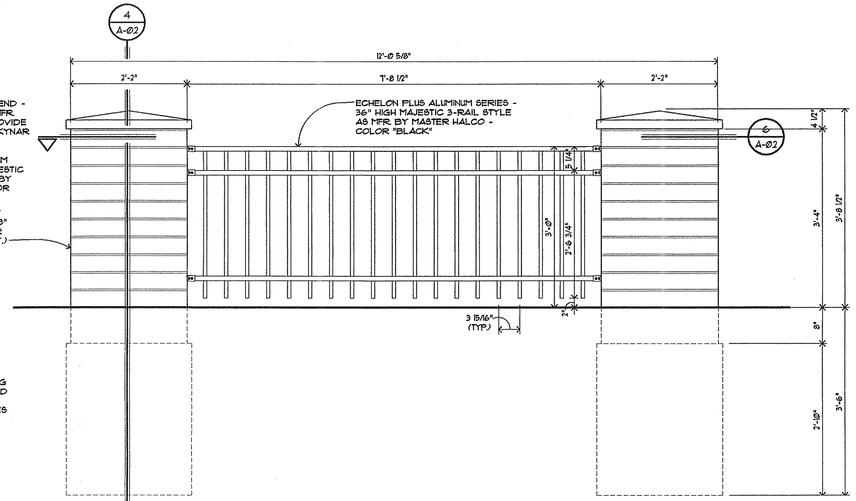


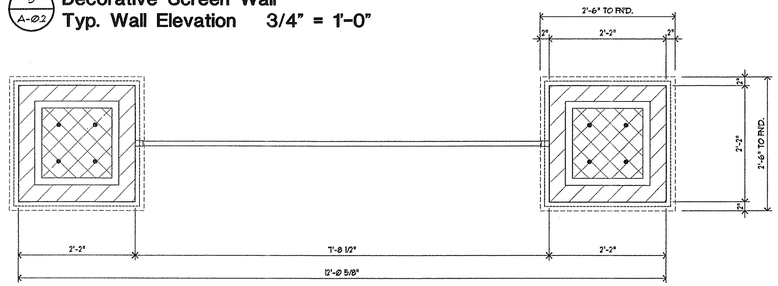
1 A-Ø2 **Enlarged Plan Detail** North
1/4" = 1'-0"



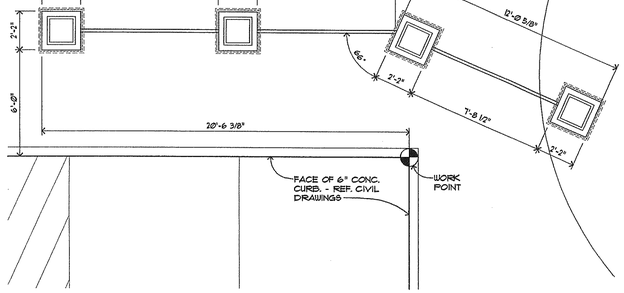
4 A-Ø2 **Decorative Screen Wall -**
Typ. Pier Section 3/4" = 1'-0"



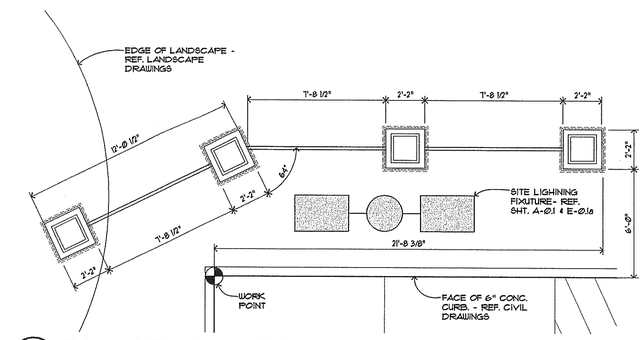
5 A-Ø2 **Decorative Screen Wall -**
Typ. Wall Elevation 3/4" = 1'-0"



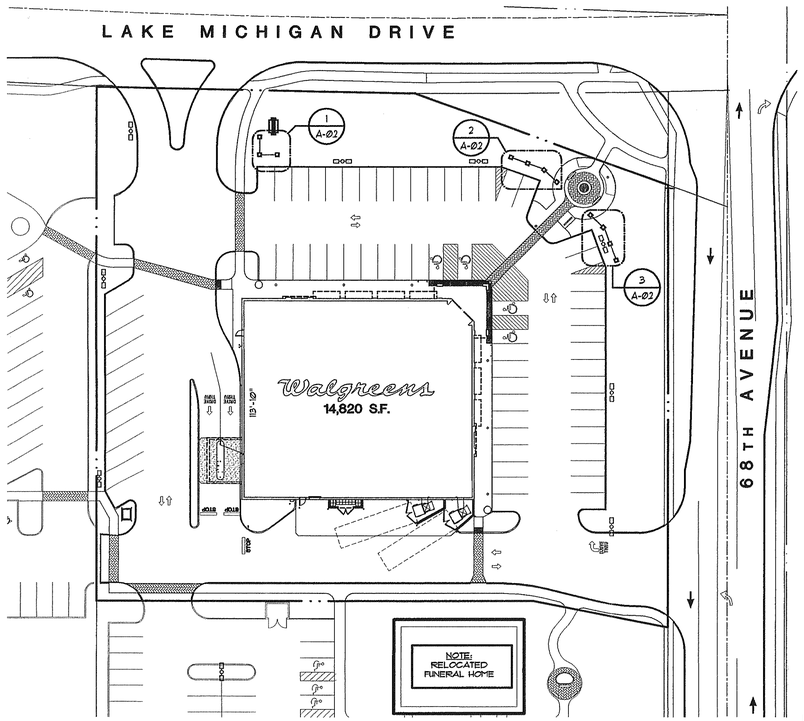
6 A-Ø2 **Decorative Screen Wall -**
Typ. Plan 3/4" = 1'-0"



2 A-Ø2 **Enlarged Plan Detail** North
1/4" = 1'-0"



3 A-Ø2 **Enlarged Plan Detail** North
1/4" = 1'-0"



THIS SITE PLAN IS ISSUED FOR ORIENTAION ONLY- SEE CIVIL ENGINEERING DRAWINGS

Site Plan North
1" = 40'-0"

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issued for:
OWNER / TENANT REVIEW:
9 APR Ø7
BIDS & PERMITS:
9 APR Ø7

project:

Store #11415

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RICHARD J. CLEVE
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LICENSED ARCHITECT

drawing:

Site Fence Details

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:

A-0.2

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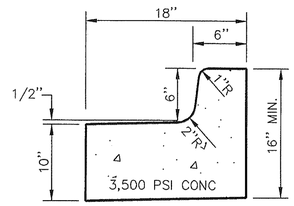
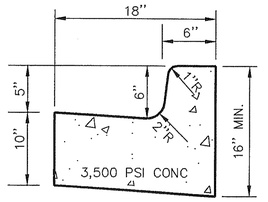
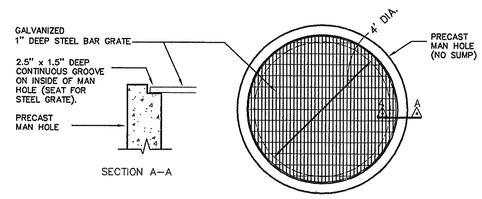


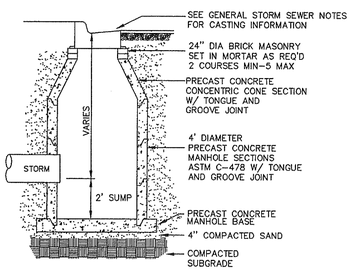
18" HEAD CURB DETAIL
(PITCHED OUT)
"SHOWN HATCHED"



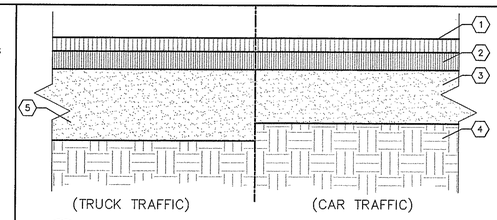
18" HEAD CURB DETAIL
(PITCHED IN)



DROP INLET STRUCTURE



CATCHBASIN DETAIL

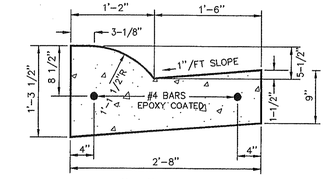


6 PAVEMENT SECTION DETAIL
1 1/2" = 1'-0"

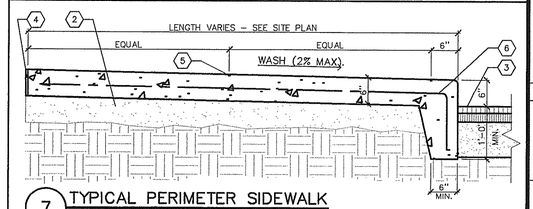
KEYED NOTES

1. 1 1/2" WEARING SURFACE OVER TACK COAT, MDOT 36A.
2. 2" BINDER COURSE OVER PRIME COAT, MDOT 3B
3. 6" (MIN.) GRAVEL (22A)
4. WELL-DRAINED SUB-GRADE (SUB-GRADE TO MODIFIED 95 PROCTOR MIN. COMPACTION).
5. 6" (MIN.) GRAVEL (22A)

NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEO-TECHNICAL DATA OF SPECIFIC PROJECT AND WALGREENS DAILY TRAFFIC DESIGN REQUIREMENT.



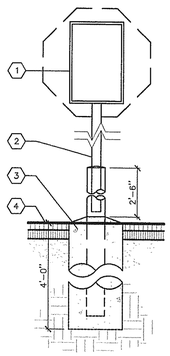
MDOT "B2" CURB DETAIL



7 TYPICAL PERIMETER SIDEWALK
3/4" = 1'-0"

KEYED NOTES

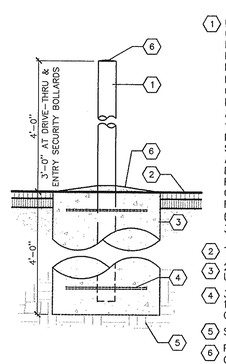
1. N/A
2. 4" COMPACTED AGGREGATE BASE
3. PAVEMENT.
4. COMPRESSIBLE FILLER (3/4" MAXIMUM). CUT BACK AND PROVIDE SEALANT, TYPICAL, AT ALL JOINTS WITH FILLER.
5. 1/4" TOOLED JOINT
6. 6" X 6" #10 W.W.F.



KEYED NOTES

1. TRAFFIC DIRECTIONAL SIGN.
2. 2"X 2" STEEL TUBE EXTENDED INTO CONCRETE FILLED 4" PIPE.
3. 12"ø CONCRETE FOUNDATION 6" BELOW FROST LINE (4 FT. MINIMUM BELOW FIN. GRADE).
4. FINISHED GRADE.

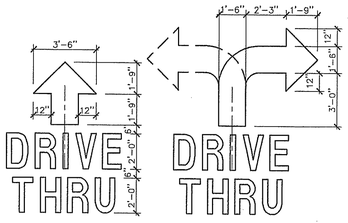
11 TRAFFIC DIRECTIONAL SIGN
3/4" = 1'-0" (FREESTANDING)



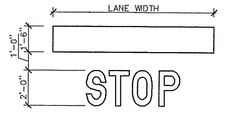
KEYED NOTES

1. 6"ø STANDARD STL. PIPE CONCRETE FILLED IN RECEIVING LOCATIONS INCLUDING UTILITIES, TRASH ENCLOSURE, AND SPRINKLER RISERS; 4"ø STL. PIPE CONCRETE FILLED AT DRIVE-THRU CANOPY ISLAND AND FRONT WALK. PROVIDE 1/4" WELDED CLOSURE PLATE AT BOTTOM. ALL STEEL TO BE RUST FREE AND PRIME COATED. BOLLARDS ON WALK TO RECEIVE GRAY POLYETHYLENE COVER. ALL OTHERS TO RECEIVE A YELLOW COVER (FROM IDEAL SHIELD - 313-842-7290).
2. TOP OF PAVEMENT.
3. 24"ø CONCRETE FOUNDATION. USE SONOTUBE FORM.
4. 3/8"ø WELDED HOOPS. 18"ø TOP, BOTTOM, AND CENTER.
5. SOLID UNDISTURBED SOIL.
6. PROVIDE PITCH, SMOOTH CONCRETE FINISH.

12 TYPICAL PIPE BOLLARD
3/4" = 1'-0"



NOTES:
1. PAINT COLOR TO BE "YELLOW" FOR ARROW AND LETTERS. "DRIVE-THRU" AND "STOP" LETTERS TO BE ELONGATED HELEVETICA MEDIUM - 4" WIDE STROKES.
2. PAINT 2" BLACK OUTLINE AROUND ARROW AND LETTERS FOR PROJECTS WITH CONCRETE PARKING LOTS.



10 PAVEMENT PAINTING
1/4" = 1'-0"

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
- ☐ WALGREENS'
- ☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
- ☐ WALGREENS' CONTRACTOR
- ☒ LANDLORD'S CONTRACTOR (_____)

STORE		BUILDING	
NEW	☒	NEW	☒
REMODELING	☐	EXISTING	☐
RELOCATION	☐	NEW SHELL ONLY	☐
OTHERS	☐		

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number: E | F | 41 • 17 • 33 • ... • ...
(co. | twp. | sec. | project | drawing)

Geenen DeKock PROPERTIES
12 West 8th St., Suite 250
Holland, Michigan 49423

GDK CONSTRUCTION CO
12 West 8th St., Suite 250 Holland, MI 49423
616-355-0300

ROGVOY
ARCHITECTS
32500 TELEGRAPH ROAD
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48025-2404
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NO.	DATE	BY	DESCRIPTION	CONST
2	4/9/07	CDG	BIDS / PERMITS	
1	4/9/07	CDG	OWNER / TENANT REVIEW	

REVISIONS

CERTIFICATION AND SEAL

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MICHIGAN AS SIGNIFIED BY MY HAND AND SEAL.

STATE OF MICHIGAN
TODD R. STUIVE
ENGINEER
No. 38273
REGISTERED PROFESSIONAL ENGINEER

STORE # 11415

PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
CIVIL DETAILS

CADD PLOT: 062024E_C0.0	SCALE: 1"=30'	DRAWING NO.
VOID PLOT:	DRAWN BY: CDG	C0.0
SUPERSEDES PLAN DATED:	DATE: 2-27-07	
	REVIEWED BY: TRS	OF DWGS.

c00-b070559

EXTERIOR SITE AND PARKING AREA

AN ACCESSIBLE ROUTE OR PATH FROM THE PERIMETER OF THE SITE SERVING SIDEWALKS, PUBLIC STREETS OR PUBLIC TRANSPORTATION MUST BE PROVIDED TO WALGREENS ACCESSIBLE STORE ENTRANCE.

PREFERRED LOCATION FOR ACCESSIBLE ROUTE SHALL COINCIDE WITH PEDESTRIAN ACCESS TO CORNER. OTHERWISE, LOCAL ARCHITECT TO DETERMINE BEST LOCATION TO CONFORM TO SLOPE ALLOWANCES DEFINED BY A.D.A. VERIFY COMPLIANCE WITH MORE STRINGENT LOCAL CODES.

AN ACCESSIBLE ROUTE WILL BE A MINIMUM 36" WIDE. 60" IS WALGREENS STANDARD.

AN ACCESSIBLE ROUTE MAY CROSS OPEN PAVEMENT OR FOLLOW A RAMP AS REQUIRED BY SITE-SPECIFIC CONDITIONS. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE ACROSS OPEN PAVEMENT MUST NOT EXCEED 1:20, WITH A CROSS SLOPE NOT EXCEEDING 1:50. SLOPES EXCEEDING 1:20, BUT LESS THAN 1:12, CONSTITUTE RAMPS AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS, RISE AND RUN LIMITS) AS NOTED BELOW. NO RAMP SHALL HAVE A RUNNING SLOPE EXCEEDING 1:12, NOR HAVE A CROSS SLOPE EXCEEDING 1:50.

ACCESSIBLE SPACE REQUIREMENTS

TOTAL OFF STREET PARKING SPACES PROVIDED	NUMBER OF ACCESSIBLE PARKING SPACES REQUIRED
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL
OVER 1000	2% PLUS 1 FOR EACH 100 OVER 1000

THE ADA REQUIRES ONE VAN ACCESSIBLE PARKING SPACE WITH 96" ACCESS AISLE FOR ONE IN EVERY EIGHT ACCESSIBLE SPACES, BUT NOT LESS THAN ONE.

ENTRANCE AREA DOORS

WALGREEN'S STANDARD ENTRANCE DOOR IS AN AUTOMATIC SLIDING DOOR SYSTEM DESIGNED TO COMPLY WITH ALL ACCESS CODES AND LAWS.

ENTRANCE DOORS AND ALL OTHER DOORS ALONG AN ACCESSIBLE ROUTE WILL HAVE A MINIMUM CLEAR OPENING OF 32".

THE EXTERIOR ENTRANCE AREA SHALL NOT HAVE IMPEDIMENTS TO ACCESSIBILITY SUCH AS CART BARRIERS OR "CART CORRALS".

PROTECTIVE SECURITY BOLLARDS, IF USED IN THE ENTRANCE AREA, SHALL BE SPACED A MINIMUM OF 36" CLEAR BETWEEN BOLLARDS.

THRESHOLDS AT AUTOMATIC DOORS SHALL NOT EXCEED 3/4" IN HEIGHT OR 1/2" FOR OTHER TYPES OF DOORS. ALL THRESHOLDS SHALL BE BEVELED WITH A SLOPE OF NO GREATER THAN 1:2.

VESTIBULES

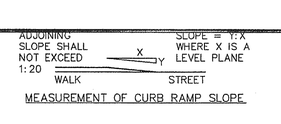
IF THE STORE HAS A VESTIBULE, THE MINIMUM SPACE BETWEEN THE OUTER DOOR AND THE INNER DOOR SHOULD BE 48" PLUS THE WIDTH OF ANY DOOR SWINGING INTO THE SPACE.

REVOLVING DOORS

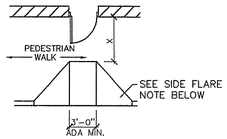
IF THE STORE HAS A REVOLVING DOOR AT THE ENTRANCE, IT MUST HAVE AN ADJACENT "ACCESSIBLE" DOOR. THE ADJACENT ACCESSIBLE DOOR MUST BE UNLOCKED AND USABLE WHEN THE REVOLVING DOOR IS UNLOCKED AND USABLE.

OBSTRUCTIONS

NO OBJECTS SHOULD PROTRUDE (EVEN TEMPORARILY) INTO THE MINIMUM CLEAR SPACE OF THE ACCESSIBLE ROUTES TO THE STORE ENTRANCE. THIS WOULD INCLUDE SHOPPING CARTS, SALES FIXTURES, VENDING MACHINES, DISPLAYS, OR OTHER BARRIERS.



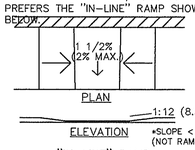
MEASUREMENT OF CURB RAMP SLOPE



CURB RAMP

"X" IS 60" MIN. AT AN OUT SWING DOOR WITH A SLOPE OF 1:50 (2%) MAXIMUM. LEVEL SURFACE IS PREFERED.

SIDE FLARE NOTE: (SEE REFERENCE DIAGRAM ABOVE). SIDE FLARES SHALL HAVE A MAXIMUM SLOPE OF 1:10 (10%). WHERE "X" IS LESS THAN 48", SIDE FLARE SLOPE SHALL BE 1:12 (8.33%) MAXIMUM. WHERE "X" IS LESS THAN 36", WALGREENS PREFERS THE "IN-LINE" RAMP SHOWN BELOW.



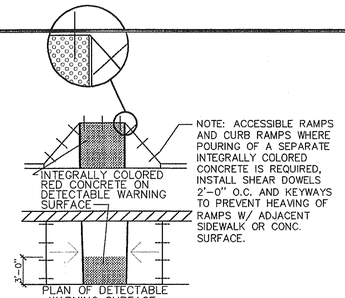
"IN-LINE" RAMP

NOTES: A CURB RAMP(S) MUST BE PROVIDED ALONG AN ACCESSIBLE PATH FROM THE PARKING LOT TO WALGREENS CURBED SIDEWALK.

A CURB RAMP(S) MUST ALSO BE PROVIDED IN THE PARKING LOT AT ALL INTERMEDIATE AND PERIMETER CURBS ALONG THE ACCESSIBLE ROUTE CONNECTING TO PUBLIC SIDEWALKS.

A RAMP IS ANY SLOPE GREATER THAN 1:20 (5%) AND SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.33%). THE MAXIMUM SLOPE IS 1" OF RISE PER FOOT OF DISTANCE TRAVELED. ALL DETECTABLE WARNING AREAS OF THE RAMP ARE TO HAVE AN INTEGRAL RED COLOR.

THE CLEAR WIDTH OF ANY RAMP IS A MINIMUM OF 36".

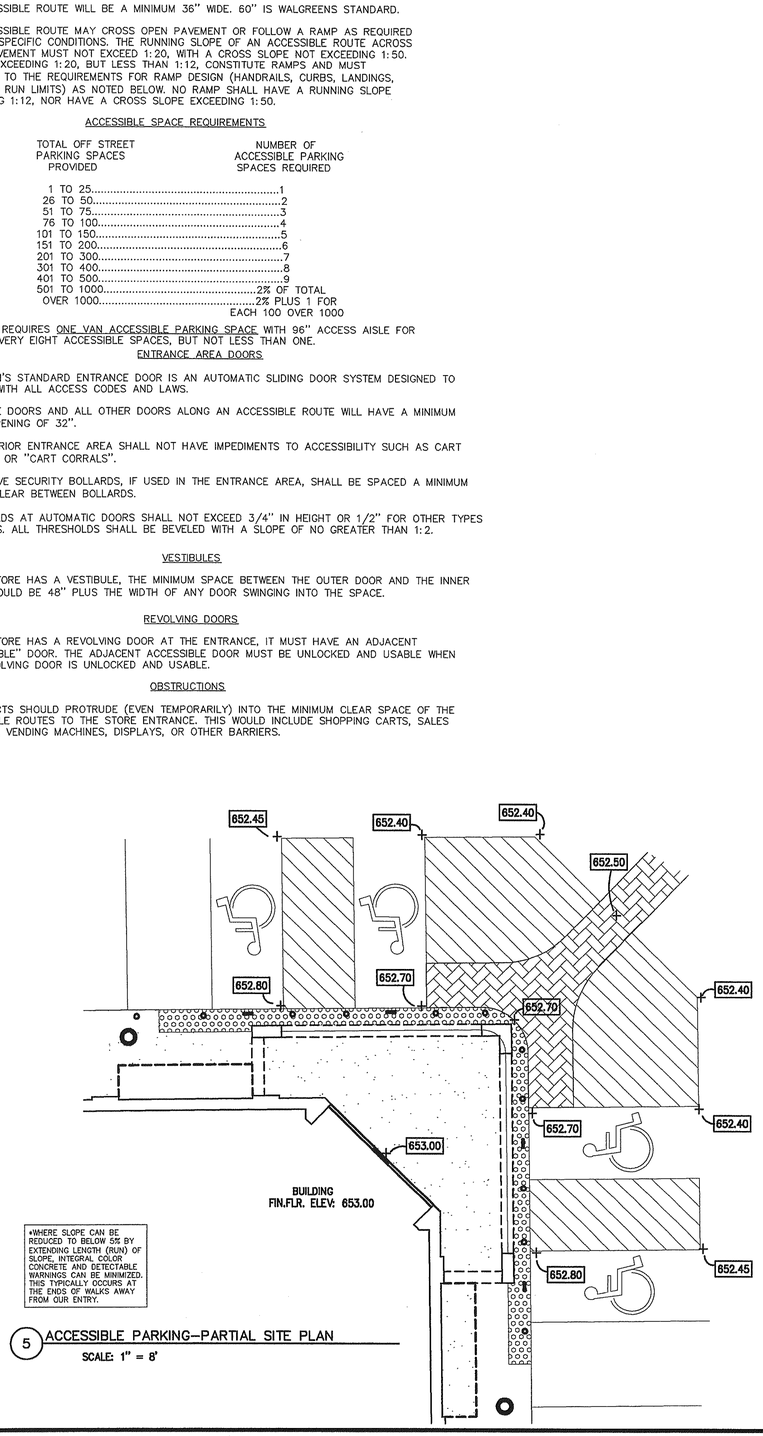


PLAN OF "DOME STAMP" PATTERN IN SURFACE

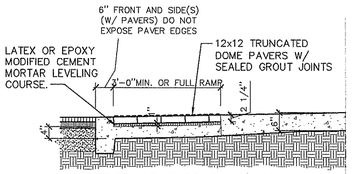
CURB RAMPS MUST HAVE A DETECTABLE WARNING FEATURE EXTENDING THE FULL WIDTH AND DEPTH OF THE RAMP (MID-WALK "IN-LINE" RAMPS ONLY NEED DETECTABLE WARNINGS AT WALK/PARKING TRANSITION). THE DETECTABLE SURFACE MUST CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES, A HEIGHT OF NOMINAL 0.2 INCHES AND A CENTER-TO CENTER SPACING OF NOMINAL 2.35 INCHES. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT). SEE ABOVE.

ACCEPTABLE PAVER MANUFACTURERS:
-HANOVER ARCHITECTURAL PRODUCTS, DETECTABLE WARNING PAVERS, www.hanoverpavers.com/html/detectable.html
-TekWay _DECTECTABLE WARNING SYSTMEM www.stronggo.com/ourproducts.html
-NuWay, CAST IN TACT, DETECTABLE WARNING PAVERS www.nuwayinc.com/ CAST_IN_TACT_1.pdf

LOCAL JURISDICTION
THERE ARE LOCAL JURISDICTIONS THAT SPECIFICALLY REQUIRE DETECTIBLE WARNINGS ON THE SIDE FLARES OR TOP OF RAMP (CA.). THERE ARE LOCAL JURISDICTIONS THAT HAVE REDEFINED DETECTIBLE WARNINGS (e.g. EXPOSED CONTRASTING COLOR AGGREGATE, GROOVES IN A PARALLEL OR DIAMOND PATTERN ETC.). ACCESSIBILITY GUIDLINES DEFINED BY LOCAL ORDINANCE SHOULD SUPERSEDE WHEN MORE STRINGENT THAN ADAAG. IN THE ABSENCE OF A DEFINITION, FOLLOW ADAAG.

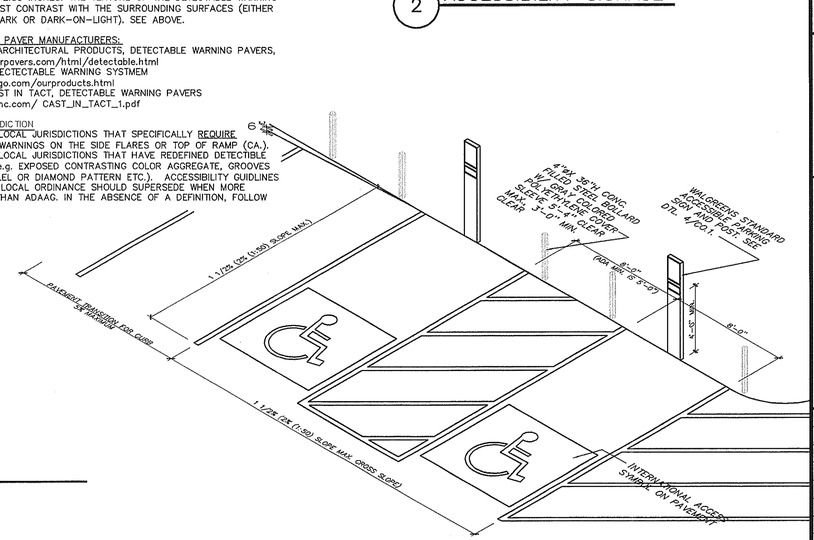


5 ACCESSIBLE PARKING-PARTIAL SITE PLAN
SCALE: 1" = 8'



SECTION AT CURB RAMP WITH ALTERNATE TRUNCATED PAVERS W/DOMES

1 CURB RAMPS AND OTHER RAMPS



STANDARD ACCESSIBLE DIMENSIONING

A U.S. DEPARTMENT OF TRANSPORTATION R7-8 (RESERVED PARKING) AND SUPPLEMENTAL SIGNS AS NOTED ABOVE MUST BE MOUNTED ON A PERMANENT POST NO LOWER THAN FOUR FEET FROM THE PAVEMENT. THE POST MUST BE MOUNTED IN THE CENTER OF THE 8 FOOT WIDE ACCESSIBLE PARKING SPACE, NO MORE THAN 5 FEET FROM THE FRONT OF THE PARKING SPACE. SEE ILLUSTRATION ABOVE.

NOTES:
EACH ACCESSIBLE PARKING SPACE IS TO BE A MINIMUM OF 8 FEET WIDE AND HAVE A 96" MINIMUM ACCESS AISLE FOR VANS OR 60" ACCESS AISLE FOR CARS ADJACENT TO THE SPACE. THE ACCESS AISLE MAY BE ON EITHER THE DRIVER'S SIDE OR THE PASSENGER'S SIDE OF THE ACCESSIBLE SPACE. THIS APPLIES TO 45, 60, AND 90°PARKING.

ACCESSIBLE PARKING SPACES ARE TO BE LOCATED AS CLOSE TO THE STORE ENTRANCE AS POSSIBLE AND SHALL BE IDENTIFIED WITH A SIGN.

ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH A SLOPE OF 1 1/2% (2% MAXIMUM)(EXAMPLE: 1.92 INCHES MAX. VERTICAL IN 8 FEET HORIZONTAL) OR 1:50 IN ALL DIRECTIONS. THIS INCLUDES BOTH "RUNNING SLOPES" AND "CROSS SLOPES."

EACH PARKING SPACE ACCESS AISLE MUST CONNECT TO A COMMON LEVEL WITH AN ACCESSIBLE ROUTE...I.E., EACH ACCESS AISLE NEXT TO A PARKING SPACE MUST HAVE A CURB RAMP AT THE WALGREENS STOREFRONT SIDEWALK OR BLEND TO A LEVEL WALKWAY LEADING TO THE WALGREENS ENTRANCE.

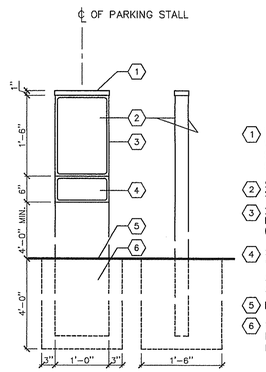
ACCESSIBLE PARKING ACCESS AISLES SHALL BE PART OF AN ACCESSIBLE ROUTE TO THE STORE ENTRANCE.

THE ACCESS AISLE SHALL BE DESIGNATED WITH HIGH QUALITY YELLOW DIAGONAL SURFACE PAINT STRIPING.

RAMPS MUST NOT EXTEND OUT FROM THE CURB INTO THE ACCESS AISLE OF ANY ACCESS PARKING SPACE.

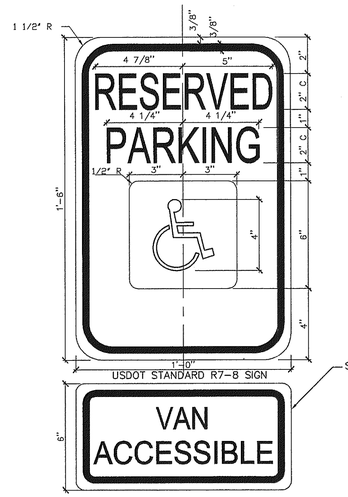
ADA ALLOWS TWO PARKING SPACES TO SHARE AN ACCESS AISLE.

3 ACCESSIBLE PARKING-SIZE AND MARKINGS



KEYED NOTES
1. PREFABRICATED WELDED CAP W/ STAINLESS STEEL SCREWS.
2. STANDARD USDOT R7-8 SIGN (BOTH SIDES).
3. 2" X 12" STEEL TUBE - PAINT ENAMEL WHITE (FILL W/ CONC.).
4. SUPPLEMENTAL SIGNS, "VAN ACCESSIBLE" AND/OR $-FINE AS APPLICABLE.
5. FINISHED GRADE.
6. 18" DIA. CONCRETE FOOTER BELOW FROST LINE (4'-0" MIN.).

4 ACCESSIBLE PARKING SIGN AND POST (FREESTANDING)
3/4" = 1'-0"



NOTE (R7-8 SIGN): THIS IS A STANDARD SIGN AND MAY BE ORDERED FROM ANY TRAFFIC SIGN SUPPLIER BY NUMBER. THE SIGN MUST BE SUPPLEMENTED WITH A "VAN ACCESSIBLE" SIGN AS APPLICABLE AND/OR AMOUNT OF THE FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S) A MUNICIPALITY MAY IMPOSE. CONFIRM WITH LOCAL REGULATIONS.

2 ACCESSIBILITY SIGNAGE

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE	BUILDING
NEW ☒	NEW ☒
REMODELING ☐	EXISTING ☐
RELOCATION ☐	NEW SHELL ONLY ☐
OTHERS ☐	

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

FILE NO.: 062024E
SEC 27, T7N, R14W
drawing number E F 41•17•33• ... • ...
co. twp. sec. project drawing

Geenen DeKock PROPERTIES
12 West 8th St., Suite 250
Holland, Michigan 49423

GDK CONSTRUCTION CO
12 West 8th St., Suite 250 Holland, MI 49423
616-355-0300

ROGVOY ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025-2404
PH 248.540.7700 FX 248.540.2710
ARCHITECTS@ROGVOY.COM

NO.	DATE	BY	DESCRIPTION	CONST
2	4/9/07	CDG	BIDS / PERMITS	
1	4/9/07	CDG	OWNER / TENANT REVIEW	

REVISIONS

CERTIFICATION AND SEAL

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STATE OF MICHIGAN — TODD R. STUIVE ENGINEER No. 38273 — LICENSED PROFESSIONAL ENGINEER

STORE # 11415

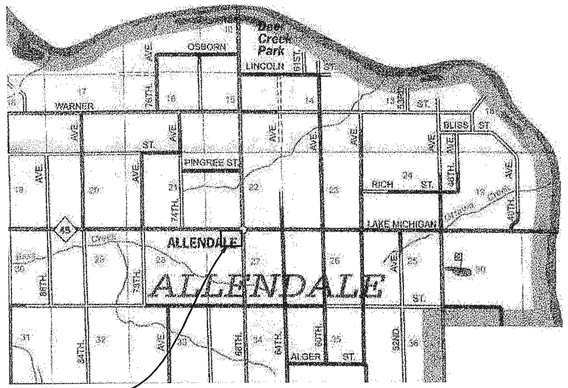
PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
ACCESIBLE PARKING DATA

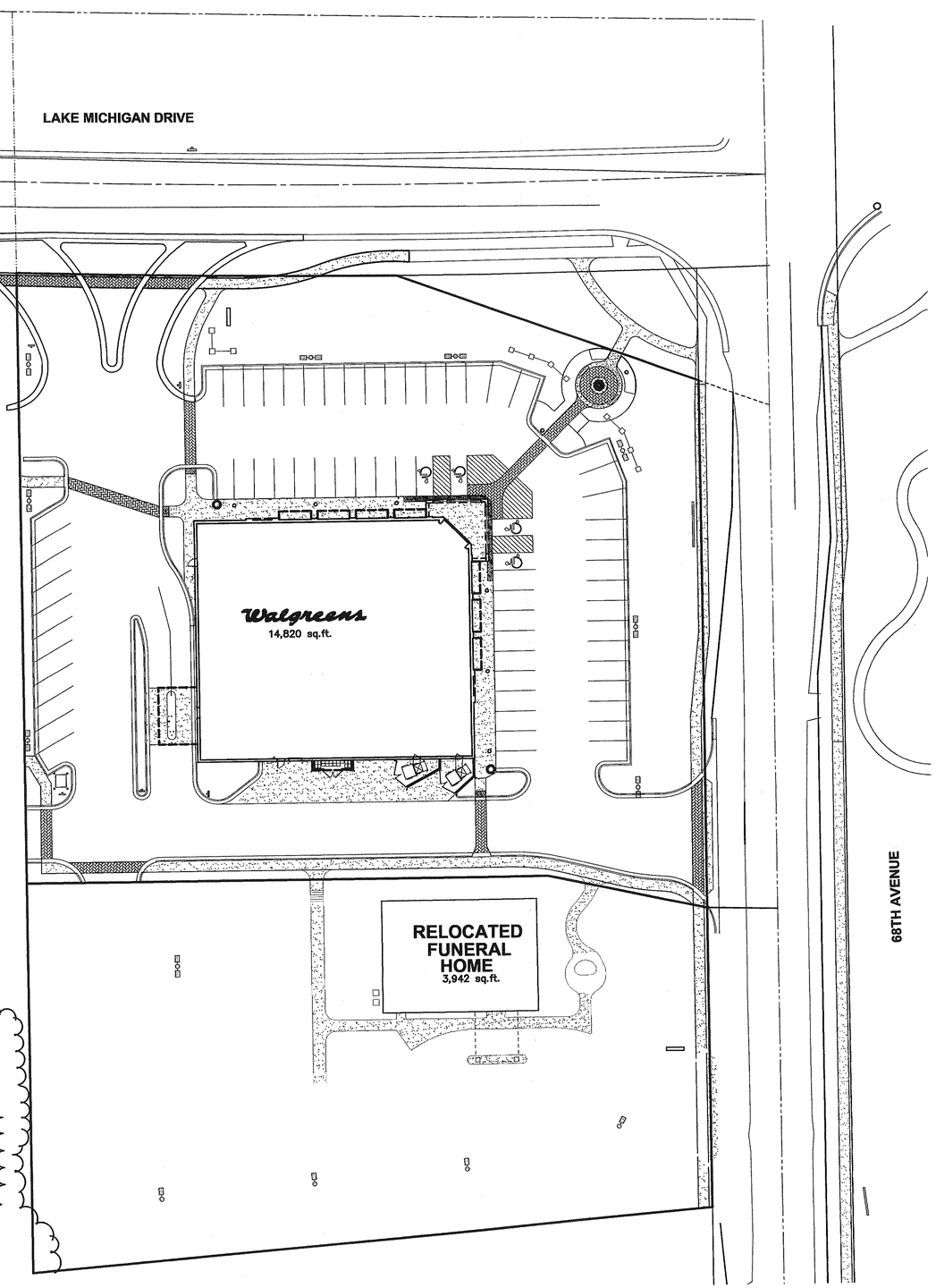
CADD PLOT: 062024E_C0.1	SCALE: 1"=30'	DRAWING NO.
VOID PLOT:	DRAWN BY: CDG	C0.1
SUPERSEDES PLAN DATED:	DATE: 2-27-07	
	REVIEWED BY: TRS	OF DWGS.

c01-p0705

CAUTION:
BEFORE DIGGING CALL MISS DIG
AT 1-800-482-7171 FOR
UNDERGROUND UTILITY LOCATIONS



Location Map



SCALE: 1"= 30'

LEGEND

- ○ = IRON STAKE FOUND
- • = IRON STAKE SET
- ◉ = MONUMENT
- = UTILITY POLE & GUY WIRE
- = LIGHT POLE
- = SIGN
- = HYDRANT
- = VALVE
- = CATCH BASIN
- = MANHOLE
- △ = BURIED UTILITY MARKER
- = POST INDICATOR VALVE
- = SOIL BORING
- = FENCE LINE
- = OVERHEAD WIRES
- T. = TOP OF CURB ELEVATION
- G. = GUTTER ELEVATION

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
108 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE	BUILDING
NEW . . . . . ☒	NEW . . . . . ☒
REMODELING . . . . . ☐	EXISTING . . . . . ☐
RELOCATION . . . . . ☐	NEW SHELL ONLY . . . ☐
OTHERS . . . . . ☐	

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5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
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FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number: E | F | 41 • 17 • 33 • ... • ...
co. twp. sec. project drawing

Geenen DeKock PROPERTIES
12 West 8th St., Suite 250
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STATE OF MICHIGAN
TODD R. STURVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

STORE # 11415

PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
OVERALL SITE PLAN

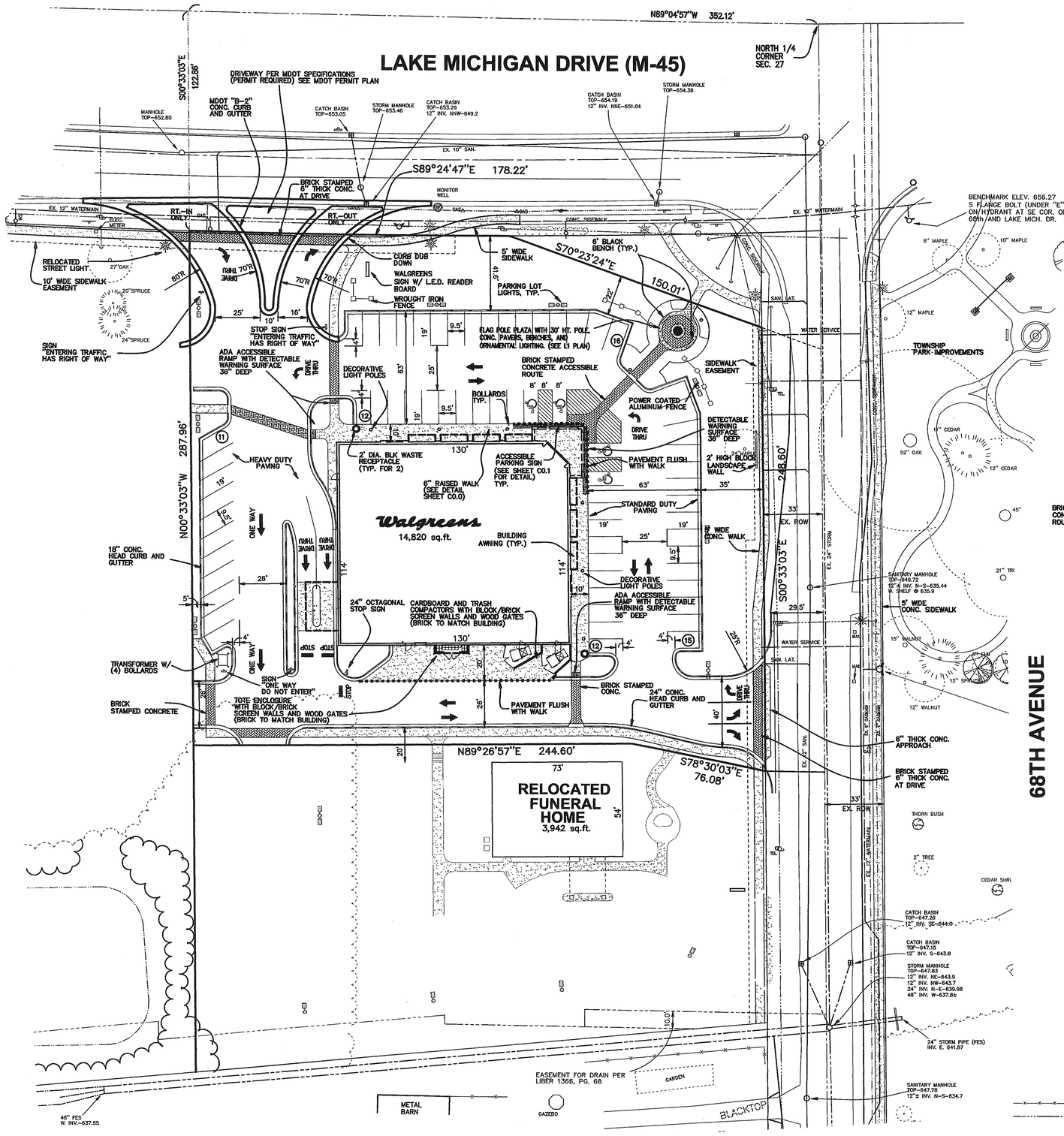
CADD PLOT: 062024E_C1.0
VOID PLOT:
SUPERSEDES PLAN DATED:

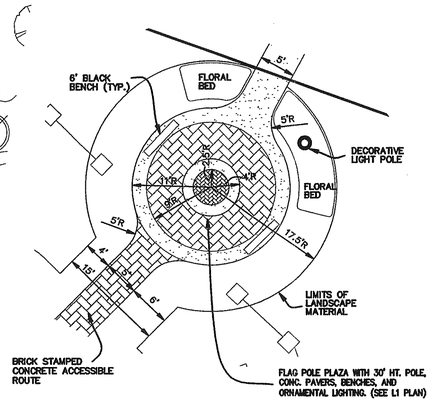
SCALE: 1"=30'
DRAWN BY: CDG
DATE: 3-15-07
REVIEWED BY: TRS

DRAWING NO. C1.0
OF DWGS.

CAUTION: BEFORE DIGGING CALL MISS DIG AT 1-800-482-7171 FOR UNDERGROUND UTILITY LOCATIONS.

WARNING: USE EXTREME CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY WIRES





Enlarged Plan of Plaza
Scale: 1" = 10'

Description of Walgreens Property:
That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence N89°04'57"W 352.12 feet along the North line of said NW 1/4; thence S00°33'03"E 122.86 feet to the Southerly line of Lake Michigan Drive (Highway M-45) and the PLACE OF BEGINNING of this description; thence Easterly along the Southerly line of Lake Michigan Drive 178.24 feet along a 5784.12 foot radius curve to the left, the chord of which bears S89°24'47"E 178.22 feet; thence S70°23'22"E 150.01 feet along said Southerly line; thence S00°33'03"E 248.60 feet along the Westerly line of 68th Avenue; thence N78°30'03"W 76.08 feet; thence S89°26'57"W 244.60 feet; thence N00°33'03"W 287.96 feet to the place of beginning. Subject to easements of record. This parcel contains 2.018 acres.

LEGEND

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- = UTILITY POLE & GUY WIRE
- = LIGHT POLE
- = SIGN
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- = VALVE
- = CATCH BASIN
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- = SOIL BORING
- = FENCE LINE
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- T. = TOP OF CURB ELEVATION
- G. = GUTTER ELEVATION

N

Scale: 1" = 30'

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 W/LMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE		BUILDING	
NEW	☒	NEW	☒
REMODELING	☐	EXISTING	☐
RELOCATION	☐	NEW SHELL ONLY	☐
OTHERS	☐		

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
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FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number E | F 41•17•33• ... • ...
co. twp. sec. project drawing

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STATE OF MICHIGAN — TODD R. STUIVE ENGINEER No. 38273 — LICENSED PROFESSIONAL ENGINEER

STORE # 11415

PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
SITE IMPROVEMENT PLAN

CADD PLOT: 062025E_C1.1	SCALE: 1"=30'	DRAWING NO.
VOID PLOT:	DRAWN BY: CDG	C1.1
SUPERSEDES PLAN DATED:	DATE: 3-15-07	
	REVIEWED BY: TRS	OF DWGS.

CAUTION:
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AT 1-800-482-7171 FOR
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GENERAL STORM SEWER NOTES:

YARD DRAINS

1. ALL 4' DIA. YARD DRAINS (YD) SHALL HAVE 2' DEEP SUMPS. USE E.J.I.W. #1046 CASTING WITH TYPE M1 GRATE.

CATCH BASINS

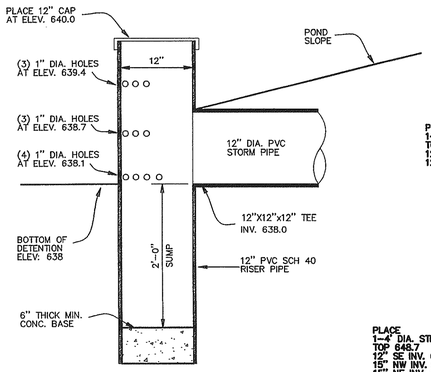
1. ALL 4' DIA. CATCH BASINS (CB) WITHIN PARKING LOT AREAS SHALL HAVE 2' SUMPS AND USE E.J.I.W. #5105 CASTING.
2. ALL 4' DIA. CATCH BASINS (CB) WITHIN 2' CONC. HEAD CURB SHALL HAVE 2' SUMPS AND USE E.J.I.W. #7045 CASTING WITH TYPE M1 GRATE.

MATERIAL TYPE

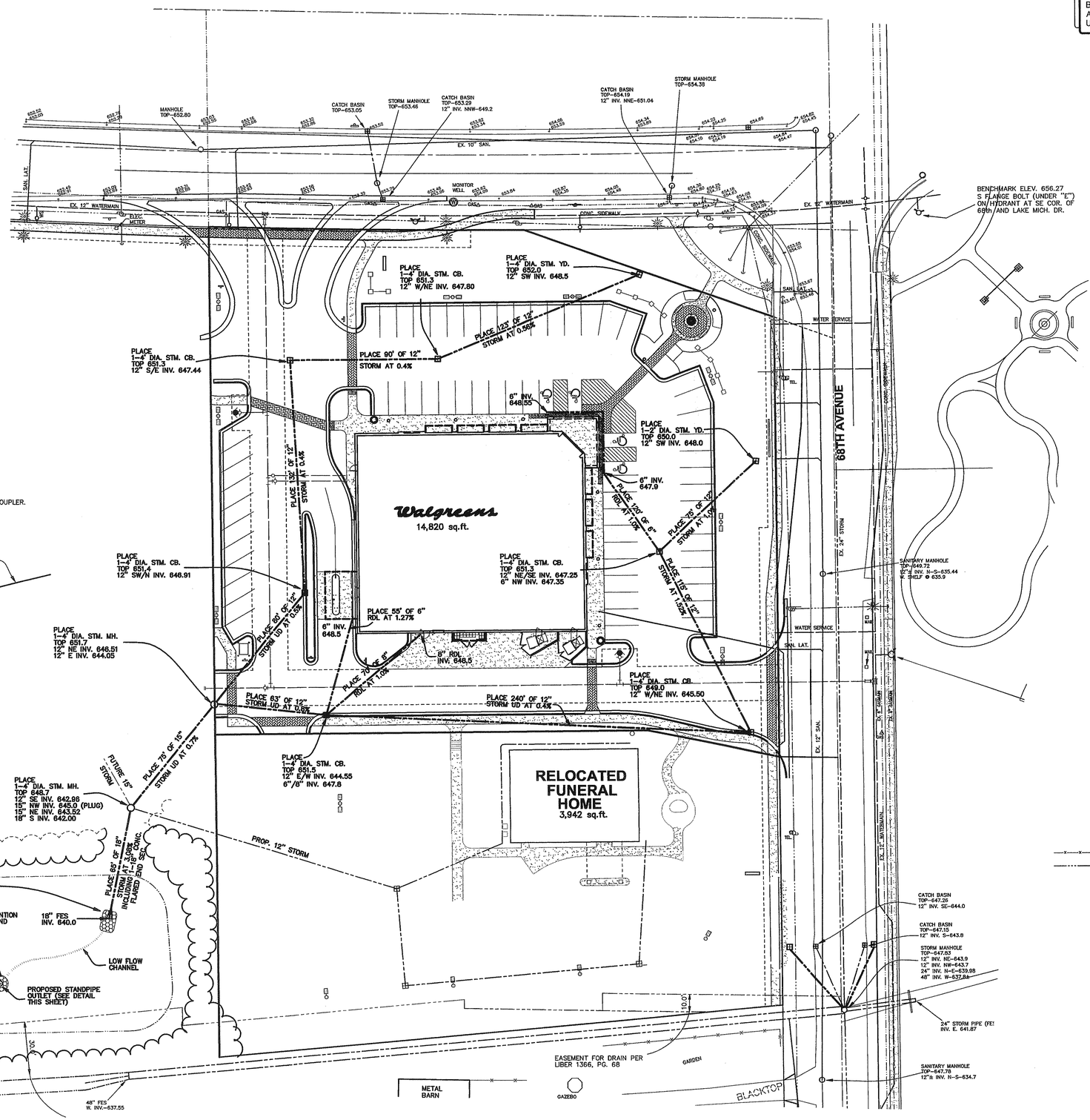
1. ROOF DRAIN LEAD (RDL) SHALL BE PVC SCH. 40
2. ALL STORM LABELED "STORM" SHALL BE SMOOTH-LINED CORRUGATED PLASTIC PIPE (SLCPP), (ADS N-12, HANCOR HI-Q OR APPROVED EQUAL)
3. ALL STORM LABELED "STORM U.D." SHALL BE SMOOTH-LINED CORRUGATED PLASTIC PIPE (SLCPP), PERFORATED W/ SOCK. (ADS N-12, HANCOR HI-Q OR APPROVED EQUAL)

OTHER

1. ALL 12" – 18" (SLCPP) PIPE SHALL HAVE A SILT TIGHT, SURE-LOCK TYPE COUPLER.



STANDPIPE OUTLET DETAIL



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- T. = TOP OF CURB ELEVATION
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SCALE: 1"= 30'

Walgreens

FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE		BUILDING	
NEW	☒	NEW	☒
REMODELING	☐	EXISTING	☐
RELOCATION	☐	NEW SHELL ONLY	☐
OTHERS	☐		

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number: E (co.) F (hsp.) 41•17•33• ... • ... (sec. project drawing)

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STATE OF MICHIGAN — TODD R. STUIVE — ENGINEER — No. 38273 — LICENSED PROFESSIONAL ENGINEER

STORE # 11415

PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
DRAINAGE PLAN

CADD PLOT: 062024E_C2.1	SCALE: 1"=30'	DRAWING NO.
VOID PLOT:	DRAWN BY: CDG	C2.1
SUPERSEDES PLAN DATED:	DATE: 3-15-07	
	REVIEWED BY: TRS	OF DWGS.

CAUTION: BEFORE DIGGING CALL
MISS DIG AT 1-800-482-7171
FOR UNDERGROUND UTILITY
LOCATIONS.

68TH AVENUE AND LAKE MICHICAN (M-45) PUD
PUBLIC WATERMAIN PLAN AND PROFILE

FOR: Geenen Dekock Properties
12 W. 8th Street, Suite 250
Holland, MI 49424

IN: PART OF THE N.W. 1/4, SECTION 27, T7N, R14W,
ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

REVISIONS:

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

DRAWN BY:	CDG
APPROVED BY:	TRS
PROJ. ENG.:	JM
PROJ. SURV.:	VINCE
FILE NO.:	062024E
SHEET	1 OF 1
DATE:	3-27-07

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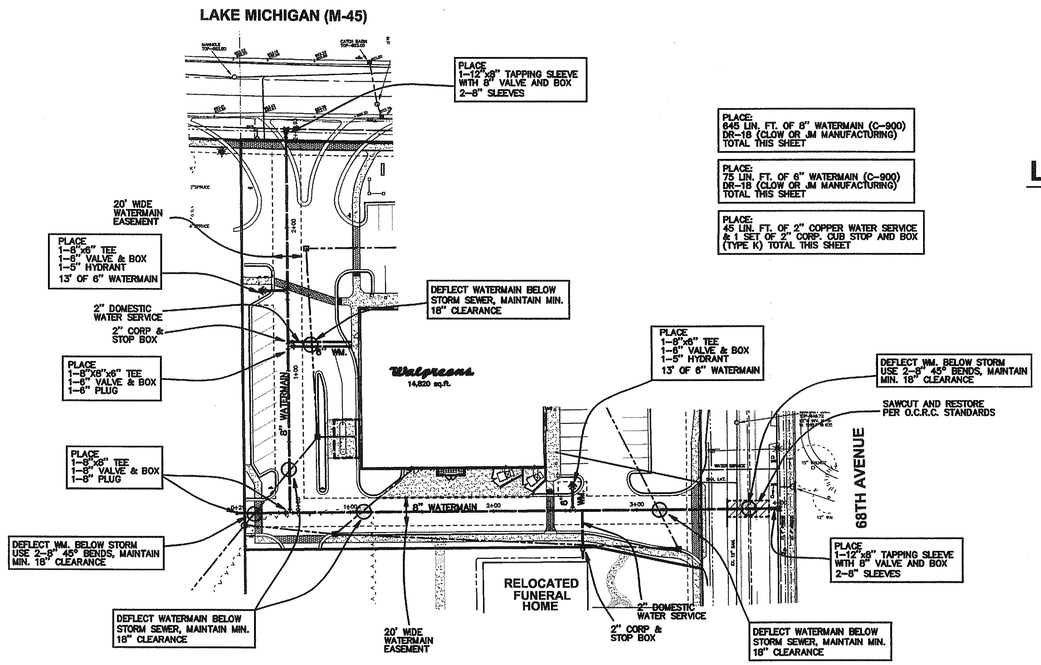
TAB: WM_PP

drawing number E F 03 • 08 • 30 • 101 • 400
co. twp. sec. project drawing

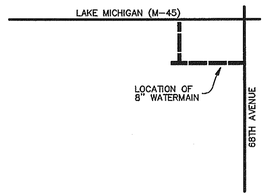
PLAN
SURVEYED BY
PLOTTED
GRADES CHECKED
B. M.'S NOTED
STRUCTURE NOTATIONS CHECKED
NOTE BOOK NO.
DATE



PLACE:
645 LIN. FT. OF 6" WATERMAIN (C-900) DR-18 (CLOW OR JM MANUFACTURING) TOTAL THIS SHEET

PLACE:
75 LIN. FT. OF 6" WATERMAIN (C-900) DR-18 (CLOW OR JM MANUFACTURING) TOTAL THIS SHEET

PLACE:
45 LIN. FT. OF 2" COPPER WATER SERVICE & 1 SET OF 2" CORP. CUB STOP AND BOX (TYPE K) TOTAL THIS SHEET



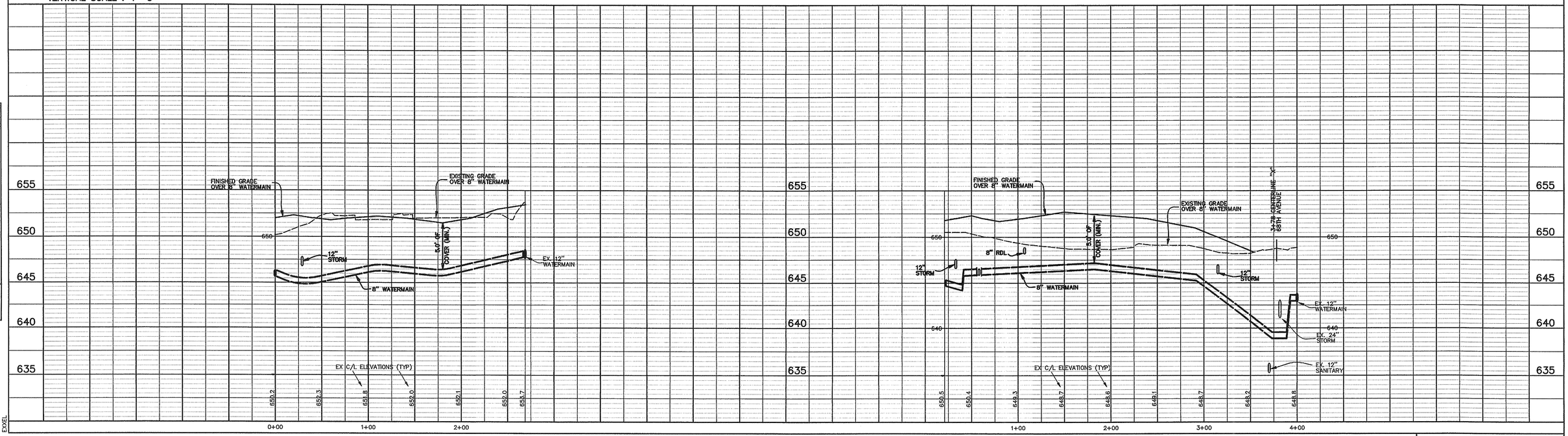
Location Map

Scale: 1" = 50'

WATERMAIN NOTE:
1. THE WATER SYSTEM SHALL BE IN ACCORDANCE WITH THE ALLENDALE CHARTER TOWNSHIP STANDARD CONSTRUCTION REQUIREMENTS

HORIZONTAL SCALE : 1"=50'
VERTICAL SCALE : 1"=5'

PROFILE
SURVEYED BY
PLOTTED
GRADES CHECKED
B. M.'S NOTED
STRUCTURE NOTATIONS CHECKED
NOTE BOOK NO.
DATE



EXXEL

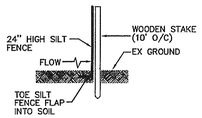
PLAT NAME
SEC --, T-N, R--W

drawing number

CAUTION:
BEFORE DIGGING CALL MISS DIG
AT 1–800–482–7171 FOR
UNDERGROUND UTILITY LOCATIONS

GENERAL SOIL EROSION CONTROL NOTES:

1. TOTAL AREA OF DISTURBANCE – (AREAS).
2. ALL SOIL EROSION CONTROL MEASURES ARE TO BE IN PLACE PRIOR TO THE START OF ANY GRADING.
3. INSPECT AND MAINTAIN ALL TEMPORARY SOIL EROSION CONTROLS AFTER EACH SIGNIFICANT RAINFALL AND UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED.
4. ALL NON–PAVED SURFACES SHALL BE TOPSOILED WITH MINIMUM OF 4" TOPSOIL AND SODDED FOR LAWN.
5. PROTECT ALL NEW STORM INLETS WITH A 5'x5' SILT FENCE UNTIL PAVING BEGINS.
6. PROTECT PROPOSED STORM INLETS BY WRAPPING THE GRATE WITH FILTER FABRIC UNTIL PAVING BEGINS.
7. PLACE SILT FENCE AS SHOWN ON PLAN AND PER DETAIL.



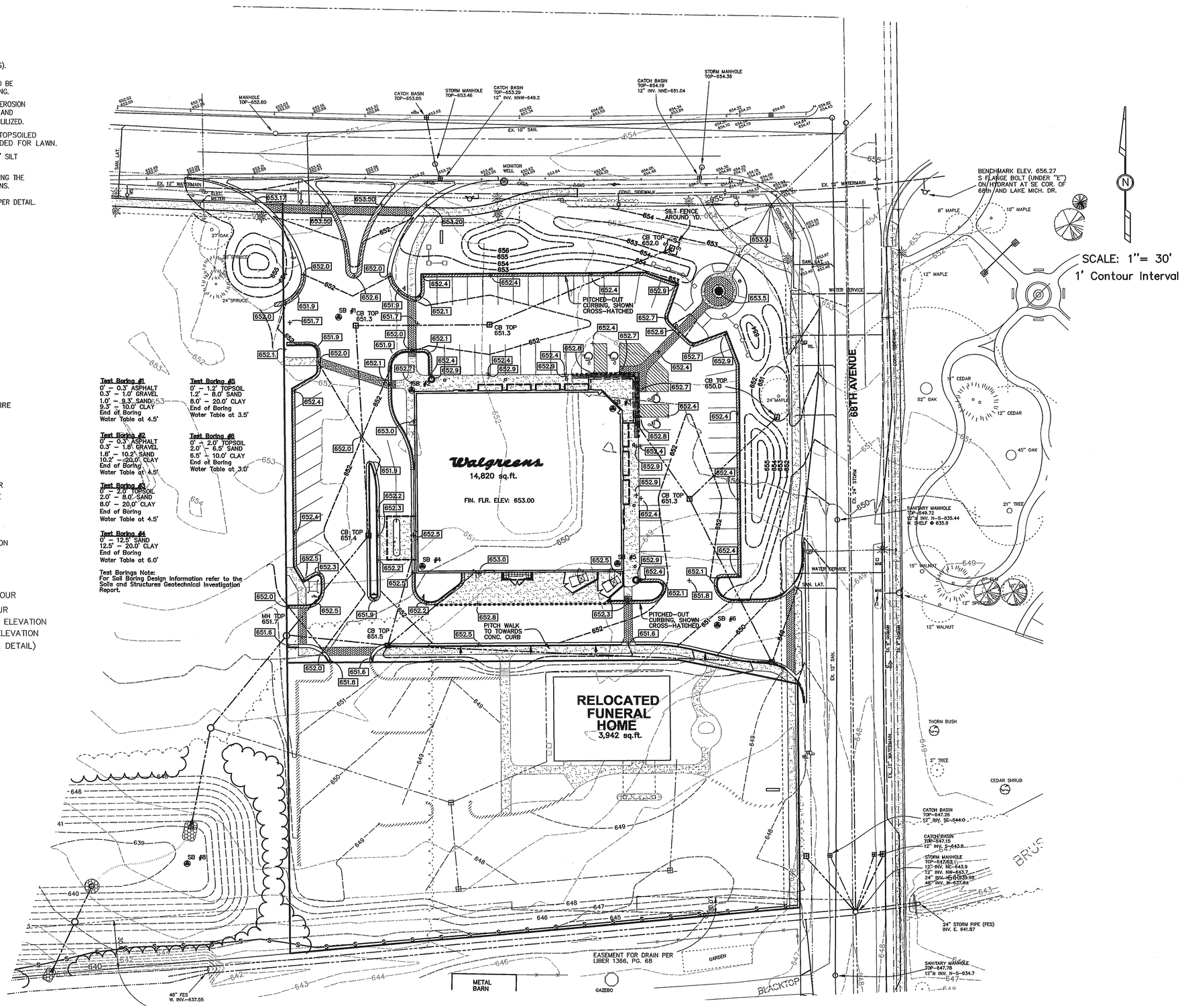
SILT FENCE DETAIL

LEGEND

- ○ = IRON STAKE FOUND
- • = IRON STAKE SET
- ◍ = MONUMENT
- = UTILITY POLE & GUY WIRE
- ✳ = LIGHT POLE
- = SIGN
- = HYDRANT
- = VALVE
- ⊞ = CATCH BASIN
- ○ = MANHOLE
- △ = BURIED UTILITY MARKER
- = POST INDICATOR VALVE
- ◉ = SOIL BORING
- —x—x—x—x— = FENCE LINE
- ———————— = OVERHEAD WIRES
- T. = TOP OF CURB ELEVATION
- G. = GUTTER ELEVATION

LEGEND

- 623 PROPOSED CONTOUR
- 623 EXISTING CONTOUR
- 623.0 PROPOSED SPOT ELEVATION
- + 623.0 EXISTING SPOT ELEVATION
- —S—S—S— SILT FENCE (SEE DETAIL)



Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
108 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR ( )

STORE	BUILDING
NEW ☒	NEW ☒
REMODELING ☐	EXISTING ☐
RELOCATION ☐	NEW SHELL ONLY ☐
OTHERS ☐	

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531–3660 FAX (616) 531–2121

FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number: E | F | 41•17•33• ... • ...
co. | twp. | sec. | project | drawing

Geenen DeKock PROPERTIES
12 West 8th St., Suite 250
Holland, Michigan 49423

GDK CONSTRUCTION CO
12 West 8th St., Suite 250 Holland, MI 49423
616-355-0300

ROGVOY ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025-2404
PH 248.540.7700 FX 248.540.2710
ARCHITECTS@ROGVOY.COM

NO.	DATE	BY	DESCRIPTION	CONST
2	4/9/07	CDG	BIDS / PERMITS	
1	4/9/07	CDG	OWNER / TENANT REVIEW	

REVISIONS

CERTIFICATION AND SEAL

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MICHIGAN AS SIGNIFIED BY MY HAND AND SEAL.

STATE OF MICHIGAN
TODD R. STUIVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

STORE # 11415

PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

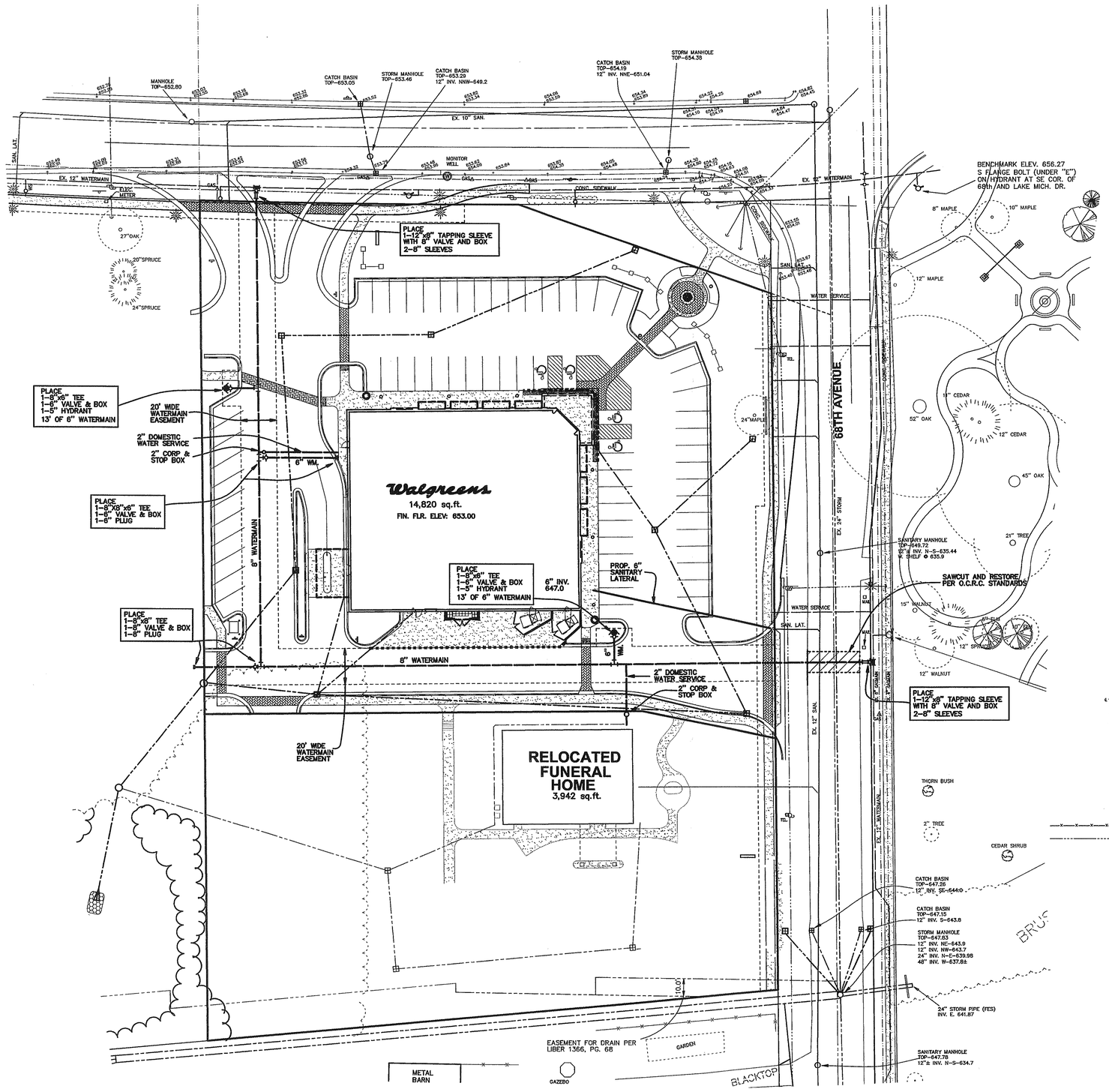
DRAWING TITLE
SITE GRADING PLAN

CADD PLOT: 062024E_C2.2
VOID PLOT:
SUPERSEDES PLAN DATED:

SCALE: 1"=30'
DRAWN BY: CDG
DATE: 3-15-07
REVIEWED BY: TRS

DRAWING NO. C2.2
OF DWGS.

CAUTION:
BEFORE DIGGING CALL MISS DIG
AT 1-800-482-7171 FOR
UNDERGROUND UTILITY LOCATIONS



LEGEND

- o = IRON STAKE FOUND
- • = IRON STAKE SET
- ⊕ = MONUMENT
- ⊂⊃ = UTILITY POLE & GUY WIRE
- ✳ = LIGHT POLE
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- ——————— = OVERHEAD WIRES
- T. = TOP OF CURB ELEVATION
- G. = GUTTER ELEVATION

SCALE: 1"= 30'

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

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☐ WALGREENS'
☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
☐ WALGREENS' CONTRACTOR
☒ LANDLORD'S CONTRACTOR (_____)

STORE	BUILDING
NEW . . . . . ☒	NEW . . . . . ☒
REMODELING . . . . . ☐	EXISTING . . . . . ☐
RELOCATION . . . . . ☐	NEW SHELL ONLY . . . ☐
OTHERS . . . . . ☐	

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FILE NO.: 062024E
SEC 27, T7N, R14W

drawing number: E | F | 41 • 17 • 33 • ... • ...
co. | twp. | sec. | project | drawing

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ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

STORE # 11415

PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
SITE UTILITY PLAN

CADD PLOT: 062024E_C3.1
VOID PLOT:
SUPERSEDES PLAN DATED:
SCALE: 1"=30'
DRAWN BY: CDG
DATE: 3-15-07
REVIEWED BY: TRS
DRAWING NO. C3.1
OF DWGS.

LAKE MICHIGAN DRIVE (M-45)

ARC=383.25'
RAD=5784.12'
CHD=S88°23'51"E
383.16'

That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence S00°33'03"E 181.19 feet along the East line of said NW 1/4; thence N70°23'24"W 35.15 to a point on the Westerly line of 68th Avenue and the PLACE OF BEGINNING of this description: thence S00°33'03"E 389.60 feet along said Westerly line; thence S84°44'53"W 580.67 feet; thence N01°47'43"W 440.38 feet; thence S89°04'57"E 66.00 feet; thence N01°47'43"W 64.72 feet; thence Easterly 383.25 feet along the Southerly line of Highway M-45 (Lake Michigan Drive) on a 5784.12 foot radius curve to the left, the chord of which bears S88°23'51"E 383.16 feet; thence S70°23'24"E 150.01 feet to the place of beginning. Subject to easements of record. This parcel contains 6.124 acres.

BENCHMARK ELEV. 656.27
S FLANGE BOLT (UNDER "E")
ON HYDRANT AT SE COR. OF
68th AND LAKE MICH. DR.

68TH AVENUE

REMOVE SEGMENT OF CONC. WALK SHOWN CROSS HATCHED

REMOVE SEGMENT OF CONC. WALK SHOWN CROSS HATCHED

PARCEL # 70-09-27-128-032

PARCEL # 70-09-27-128-043

PARCEL # 70-09-27-126-027

PARCEL # 70-09-27-128-013

PARCEL # 70-09-27-128-042

PARCEL # 70-09-27-128-020

(RELOCATED) BUILDING No. 11145

(REMOVE) HOUSE No. 11165 FIN. FLOOR ELV. 653.68

HOUSE No. 11159 FIN. FL. ELV. 650.79 FIN. FL. ELV. 653.47

HOUSE No. 11145 (REMOVE) FIN. FLOOR ELV. 653.09

BLOCK GARAGE (REMOVE)

(REMOVE) BARN

GARAGE (REMOVE)

(REMOVE) BLDG

BLDG (REMOVE)

(REMOVE) GRAVEL

(REMOVE) CONC. DRIVE

(REMOVE) ASPHALT

(REMOVE) CONC. SIDEWALK

(REMOVE) ASPHALT DRIVE

(REMOVE) CONC. DRIVE

(REMOVE) CONC. SIDEWALK

(REMOVE) ASPHALT

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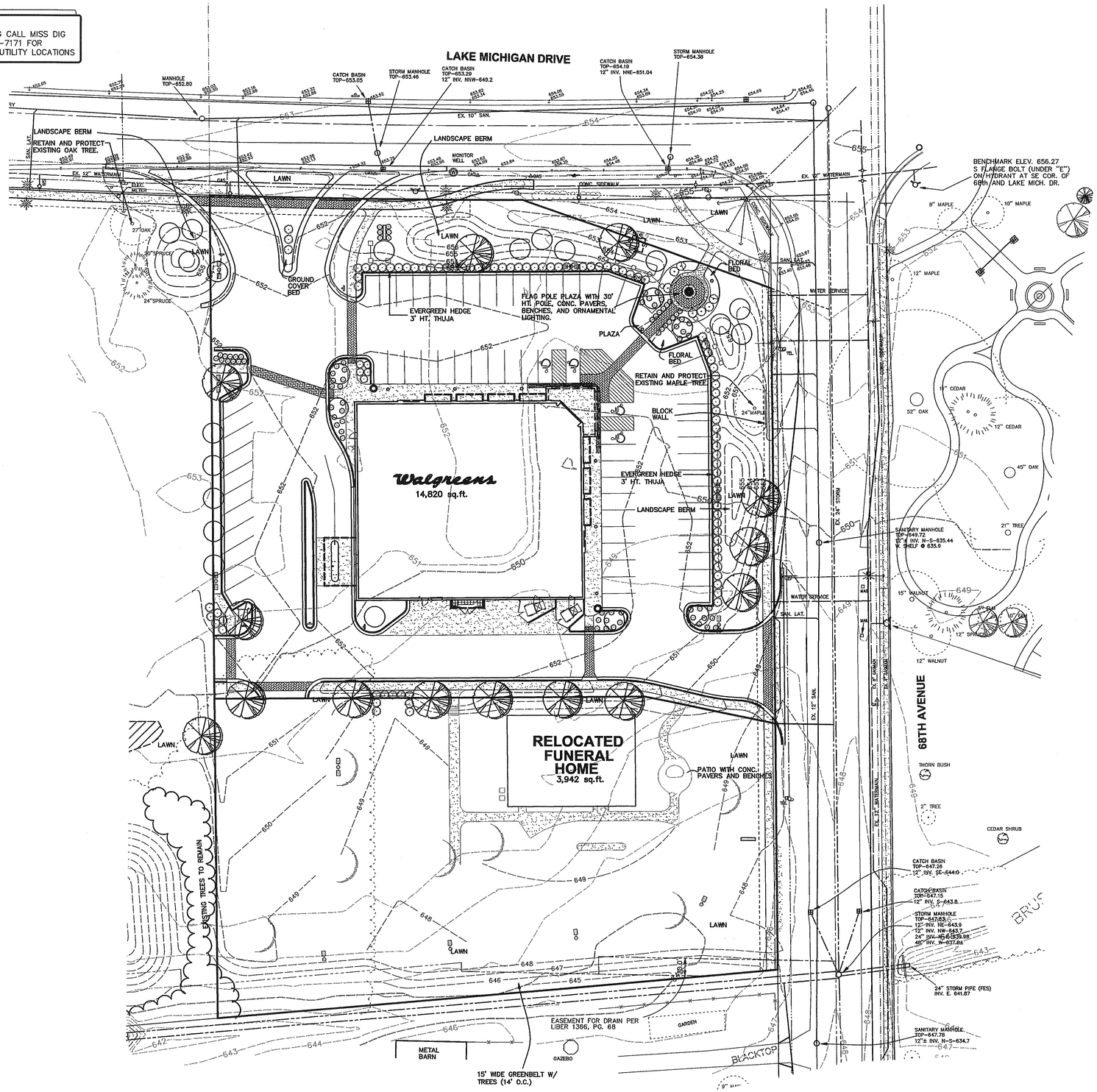

LANDSCAPE LEGEND

Final Landscape Plan(s) to have scale 1"=20' or larger.

Place Canopy Tree – 2" cal. min.
Acer rubrum, Pyrus calleryana, or Platanus

Place Evergreen Tree – 6' ht. min.
Pinus, Picea glauca, or Abies concolor

Place Ornamental Tree – 1 1/2" cal. min.
Malus, Cornus kousa, or Crataegus

Place Flowering Shrubs – 24"
Viburnum, Spiraea, Ribes, Weigela, or Hibiscus

Place Evergreen Shrubs – 24"
Juniperus, Taxus, Thuja, Ilex

Special Storm Water Seed Mix to include a mixture of: Forbs, Grasses, Native Shrubs, and Quick Cover Seed.

Parking Lot Islands to be landscaped with either Ground Cover or Ornamental Grasses.

All maintained landscaped areas to be irrigated with an in-ground irrigation system.

All plants in proposed Green Belt areas to be maintained in a healthy growing condition by property owner.

All lawn areas are to be sodded, seeding is not acceptable.

All proposed landscape berms to be between 2' and 4' ht.

Landscape Architect to evaluate all existing trees on site prior to clearing and determine which trees are practical to transplant.

STATE OF MICHIGAN
MICHAEL R. BRUGGINK
LANDSCAPE ARCHITECT
NO. 1405
REGISTERED LANDSCAPE ARCHITECT

RJM Design Inc.
Land Planning • Landscape Architecture
80 Ottawa NW, Suite 410 Phone: (616) 336-6071
Grand Rapids, MI 49503 Fax: (616) 336-8991

LEGEND

- ○ = IRON STAKE FOUND
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- = MONUMENT
- = UTILITY POLE & GUY WIRE
- = LIGHT POLE
- = SIGN
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- T. = TOP OF CURB ELEVATION
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N

SCALE: 1"= 30'

Walgreens
FACILITIES PLANNING, DESIGN & ENGINEERING
106 WILMOT ROAD
DEERFIELD, IL 60015-4616

PROJECT TYPE

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☒ LANDLORD'S CONSULTANT

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:
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☒ LANDLORD'S CONTRACTOR (_____)

STORE		BUILDING	
NEW	☒	NEW	☒
REMODELING	☐	EXISTING	☐
RELOCATION	☐	NEW SHELL ONLY	☐
OTHERS	☐		

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FILE NO.: 062024E
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drawing number: E | F 41•17•33• ... • ...
co. twp. sec. project drawing

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TODD R. STUIVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

STORE # 11415

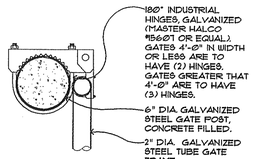
PROJECT NAME
WALGREENS
ALLENDALE, MICHIGAN

DRAWING TITLE
LANDSCAPE PLAN

CADD PLOT: 062024E_L1
VOID PLOT:
SUPERSEDES PLAN DATED:

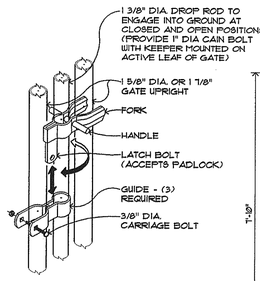
SCALE: 1"=30'
DRAWN BY: CDG
DATE: 3-15-07
REVIEWED BY: TRS

DRAWING NO. L1
OF DWGS.



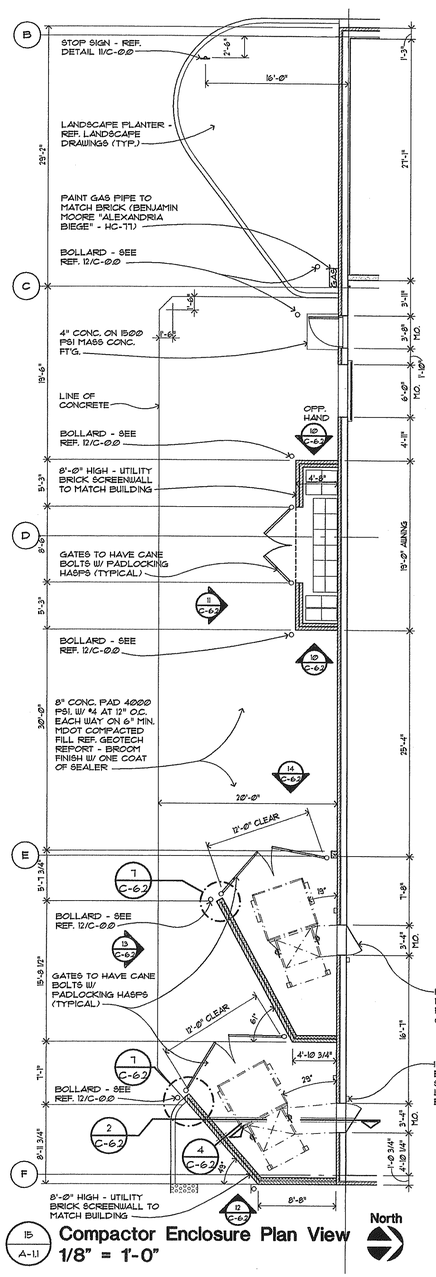
(MINIMUM LEVEL OF QUALITY)

17 C-6.2 **Industrial Hinge Detail N.T.S.**



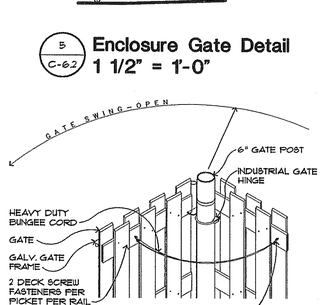
(MINIMUM LEVEL OF QUALITY)

16 C-6.2 **Industrial Latch w/ Drop Rod and Gate Hinge - N.T.S.**

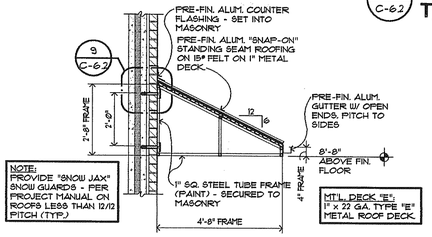


15 A-1.1 **Compactor Enclosure Plan View 1/8" = 1'-0"**

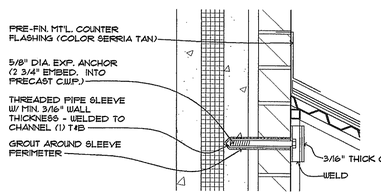
North



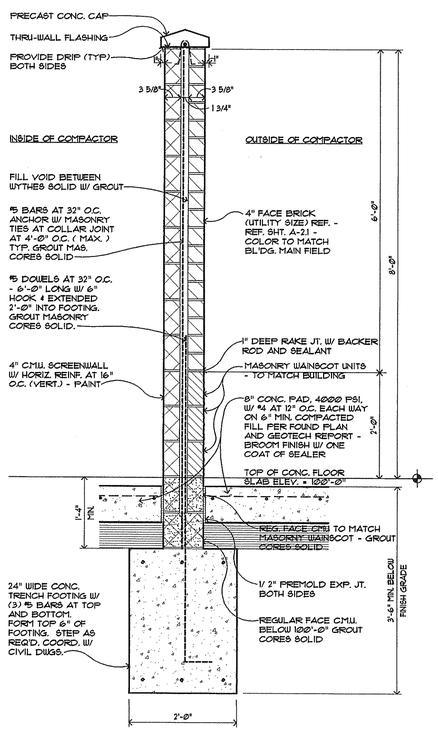
5 C-6.2 **Enclosure Gate Detail 1 1/2" = 1'-0"**



8 C-6.2 **Awning Detail 3/8" = 1'-0"**



9 C-6.2 **Detail 1 1/2" = 1'-0"**



4 C-6.2 **Compactor Section - Typ. Wall Section 3/4" = 1'-0"**

General Notes

CONCRETE:

PAD SHALL BE A MIN. OF 4,000 P.S.I. AIR ENTRAINED CONCRETE 8" THICK WITH #4 BARS X 12" O.C. EACH WAY, ON MDOT COMPACTED FILL PER GEOTECH REPORT - SURFACE TO RECEIVE BROOM FINISH, ONE SEAL COAT AND SHALL BE FLAT EXCEPT FOR WASH (1.66 PERCENT MAX.).

COMPACTOR:

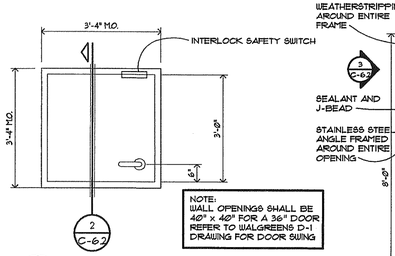
DRAWING DETAILS BASED ON A.C.E.S. COMPANY, INC. COMPACTOR MODEL ACES CPW-40, 450 E. GUNDERSEN DR., SUITE 200, CAROL STREAM, IL. (800) 664-0754. (EMAIL - MFP@acescorp.com) GENERAL CONTRACTOR TO CONTACT AL FREUSKER AT A.C.E.S. COMPACTOR DOOR TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. (COMPACTOR INSTALLED BY WALGREENS CONTRACTOR).

ELECTRIC POWER

ELECTRICAL CONTRACTOR TO PROVIDE POWER FOR 5 H.P., 3 PHASE, 60HZ MOTOR 4'-0" A.F.F. AND 30A. WEATHER PROOF LOCKABLE DISCONNECT SWITCH LOCATED ON EXTERIOR WALL WITHIN 4'-0" OF COMPACTOR. FINAL CONNECTION AND CONTROL WIRING BY COMPACTOR INSTALLER.

WOOD FENCE ENCLOSURE AND GATES:

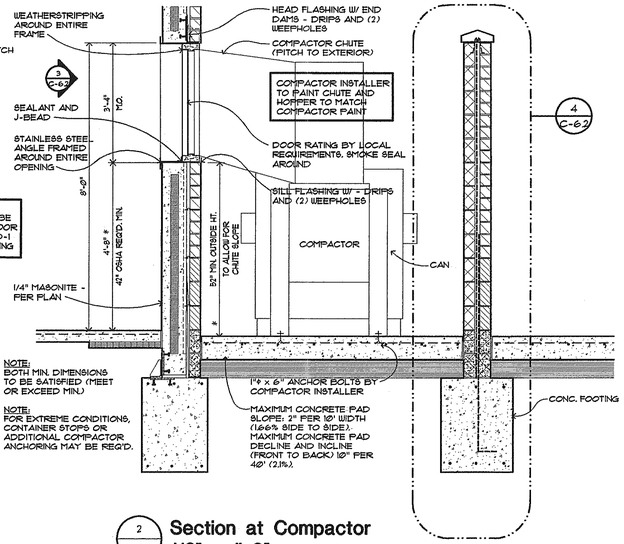
CEDAR WOOD BOARD ON BOARD FENCE WITH CLEAR PROTECTIVE FINISH. CEDAR WOOD GATES TO BE STEEL FRAMED WITH 6" DIA. STEEL HINGE POSTS AND 2.375" O.D. NOMINAL GALVANIZED LINE POSTS. INDUSTRIAL GRADE CANE DROP BOLTS (FOR HOLD OPEN AND SECURE CLOSE POSITIONS) WITH PADLOCK HASP AND GALVANIZED SURFACED MOUNTED BOLT ON HINGES (SIM. TO PART # 1560T) BY MASTER HALCO INC. (800) 229-5615 OR APPROVED EQUAL.



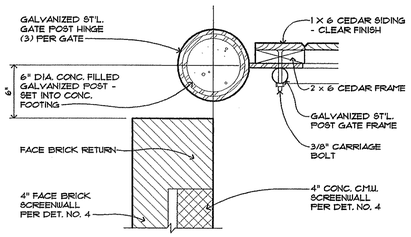
3 C-6.2 **Thru-the-Wall Feed Door Dimensions 1/2" = 1'-0"**

12" W. x 18" H. SIGN "AUTHORIZED PERSONNEL ONLY - NO TRESPASSING" - PLACED ON EXTERIOR SIDE OF ENCLOSURE BY GENERAL CONTRACTOR - MOUNT WITH CORROSION AND TAMPER RESISTANT FASTENERS.

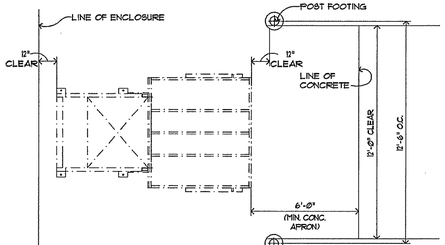
18 C-6.2 **"No Trespassing" Sign N.T.S.**



2 C-6.2 **Section at Compactor 1/2" = 1'-0"**

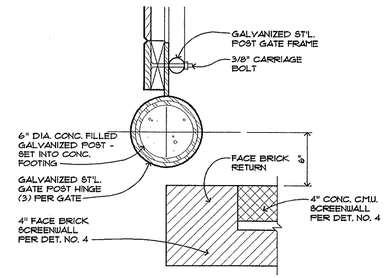


7 C-6.2 **Gate Post Detail 1 1/2" = 1'-0"**

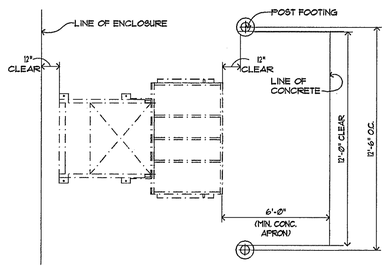


1a C-6.2 **Cardboard Compactor Detail 1/4" = 1'-0"**

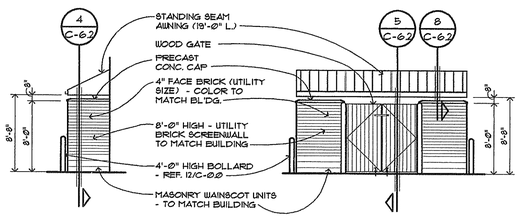
NOTE: SEE DETAILS ON THIS SHEET FOR GATE HINGE AND LATCH.



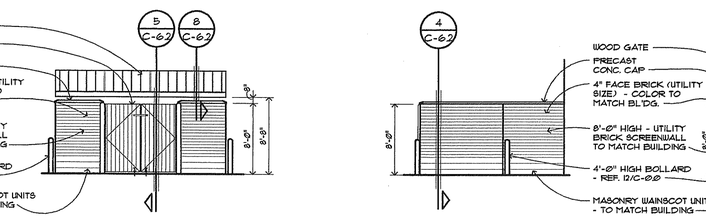
6 C-6.2 **Gate Post Detail 1 1/2" = 1'-0"**



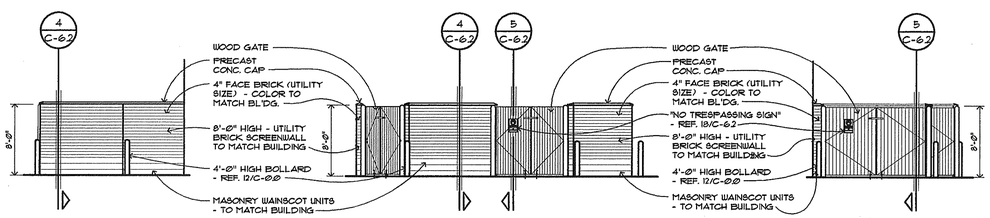
10 C-6.2 **Compactor Detail 1/4" = 1'-0"**



10 C-6.2 **Tote Stor. Screenwall - East Elev. 1/8" = 1'-0"**



11 C-6.2 **Tote Stor. Screenwall - South Elev. 1/8" = 1'-0"**



12 C-6.2 **Compactor Screenwall - East Elev. 1/8" = 1'-0"**

13 C-6.2 **Compactor Screenwall - South Elev. 1/8" = 1'-0"**

14 C-6.2 **Compactor Screenwall - West Elev. 1/8" = 1'-0"**

issued for:
OWNER / TENANT REVIEW:
9 APR 07
BIDS & PERMITS:
9 APR 07

project:

Store #11415

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drawing:

Compactor Enclosure Plans, Sections & Elevations

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:

C-6.2

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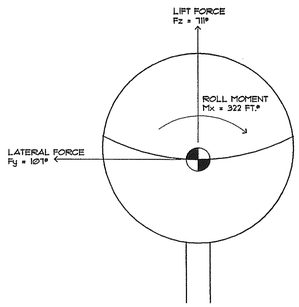
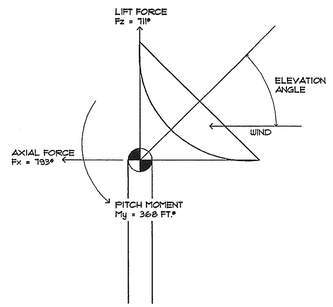
FORCES AND MOMENTS ACTING THROUGH ELEVATION AXIS



Front Elevation

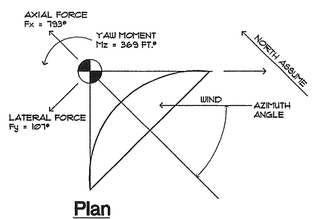


Side Elevation

TOTAL VERTICAL LOAD: 1000 LBS.

DESIGN LIMITS:

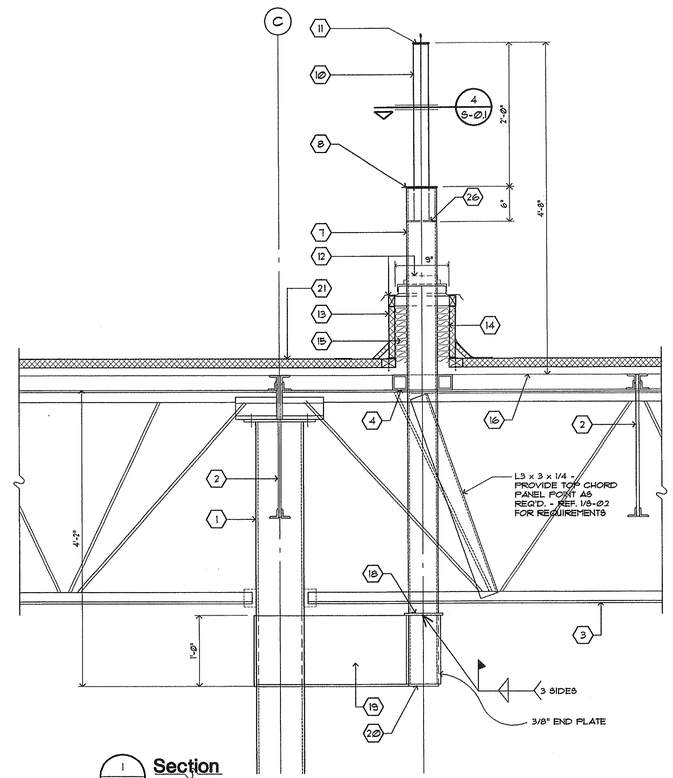
1. MAXIMUM HORIZONTAL ROTATION OF POLE = Ø.2Ø DEGREES AT 45 m.p.h. WIND
2. MAXIMUM HORIZONTAL DISPLACEMENT AT TOP OF POLE = Ø.2Ø INCHES AT 45 m.p.h. WIND



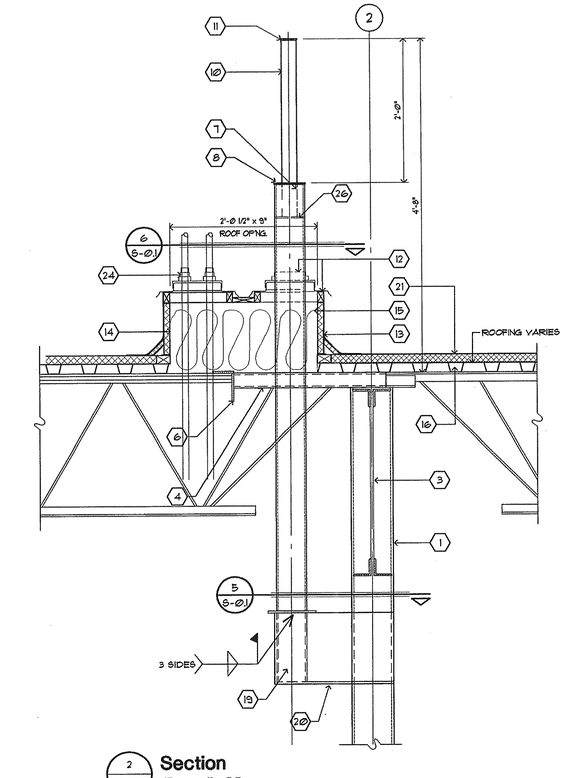
Plan

MAXIMUM LOADS: 125 m.p.h. WIND

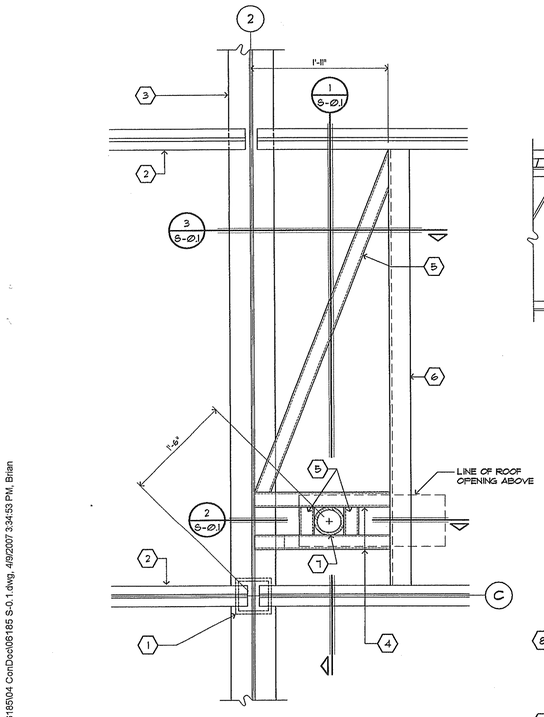
1.2 Meter Satellite Dish Antenna



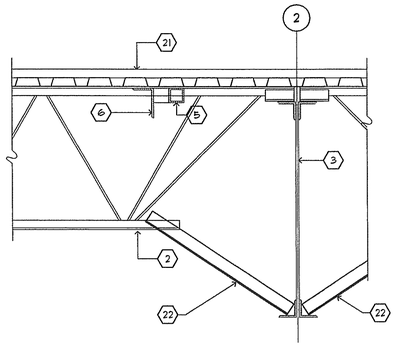
1 S-Ø.1 **Section**
1" = 1'-0"



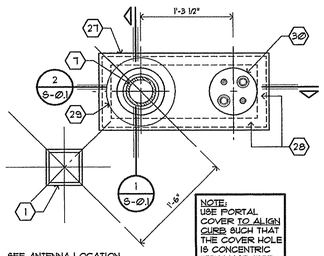
2 S-Ø.1 **Section**
1" = 1'-0"



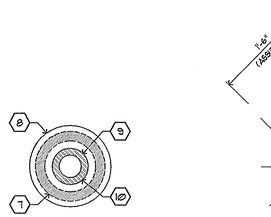
Partial Roof Framing Plan
New Antenna Mast Support
1" = 1'-0" North



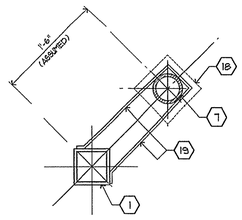
3 S-Ø.1 **Section**
1" = 1'-0"



6 S-Ø.1 **Plan at Roof**
1" = 1'-0" North

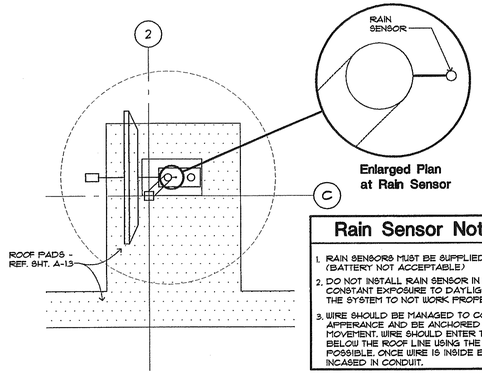


4 S-Ø.1 **Section**
N.T.S.



5 S-Ø.1 **Plan Pipe Connection Below Roof**
1" = 1'-0" North

Not Used



Enlarged Plan at Rain Sensor

7 S-Ø.1 **Rain Sensor Location @ Satellite Dish Mast**
1/4" = 1'-0" North

Rain Sensor Notes:

1. RAIN SENSORS MUST BE SUPPLIED WITH 24V VAC. (BATTERY NOT ACCEPTABLE)
2. DO NOT INSTALL RAIN SENSOR IN THE DIRECTION OF CONSTANT EXPOSURE TO DAYLIGHT. THIS COULD CAUSE THE SYSTEM TO NOT WORK PROPERLY
3. WIRE SHOULD BE MANAGED TO CONCEAL IT'S APPEARANCE AND BE ANCHORED SECURELY TO PREVENT MOVEMENT. WIRE SHOULD ENTER THE BUILDING JUST BELOW THE ROOF LINE USING THE LEASE AMOUNT OF WIRE POSSIBLE. ONCE WIRE IS INSIDE BUILDING, IT SHOULD BE ENCASED IN CONDUIT.

General Notes:

1. ALL NEW STRUCTURAL STEEL SHALL BE ASTM A-36, STEEL TUBING ASTM A-500, STEEL PIPE ASTM A-53, GRADE B.
2. ALL NEW STEEL SHALL COMPLY WITH THE LATEST AISC SPECIFICATIONS FOR "STRUCTURAL STEEL BUILDINGS".
3. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
4. CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND ALL FIELD CONDITIONS PRIOR TO INSTALLATION.
5. CONTRACTOR SHALL PROVIDE ALL THE NECESARY PROTECTION AGAINST DAMAGE AND INJURY TO ALL FACILITIES, MERCHANDISE, EQUIPMENT, PERSONNEL, ETC.
6. ALL EXPOSED STEEL SHALL BE GALVANIZED.

Antenna Location and Orientation

ANTENNA SUPPORT AS SHOWN SHALL BE LOCATED AT THE BUILDING COLUMN NEAREST TO PHARMACY. PRIOR TO INSTALLATION, REVIEW LOCATION WITH WALGREENS FACILITIES PLANNING AND DESIGN DEPARTMENT.

CONDUIT OPENING MUST ALWAYS BE ORIENTED TO THE NORTH OF THE ANTENNA PIPE SUPPORT TO AVOID CONFLICT WITH THE ANTENNA. THE ANTENNA MUST HAVE AN UNOBSTRUCTED POINTING DIRECTION FROM SOUTHEAST TO SOUTHWEST.

Installing Contractor Please Note:

1. FOR PROTO-TYPE STORES - BUILDING COLUMN SUPPORTING ANTENNA PIPE AS SHOWN SHALL BE A MINIMUM OF 6" DIAMETER STANDARD PIPE AND ROOF FRAMING SHALL HAVE HORIZONTAL X-BRACING IN BOTH DIRECTIONS.
2. FOR ANY TYPE OF ROOF FRAMING OR CONSTRUCTION OTHER THAN AS SHOWN, THE SUPPORT AND STABILITY OF THE STRUCTURE SHALL BE CHECKED FOR THE FORCES AND MOMENTS SHOWN ON THIS SHEET.

Keyed Notes

1. TS COLUMN. SEE DETAIL 5/S0.1
2. STEEL ROOF JOISTS.
3. STEEL JOIST GIRDER
4. TS 2 1/2" x 2 1/2" x 1/4" WELD TO JOIST GIRDER, ANGLE AND 5" DIAMETER PIPE.
5. TS 2 1/2" x 2 1/2" x 1/4" WELD TO TS AND ANGLE
6. 6" X 4" X 3/8" ANGLE WELD TO TOP CHORD OF JOISTS AND TO TS 2 1/2" x 2 1/2" x 1/4. SEE SECTION 3/S-Ø.1.
7. 5" DIAMETER DOUBLE EXTRA STRONG PIPE X 38.55#. PIPE SHALL BE WELDED ALL AROUND TO TS SUPPORTS.
8. 5/8" X 6 1/2" ϕ STEEL PLATE
9. 1/2" WELD ALL AROUND (GRIND SMOOTH).
10. 2 1/2" DIAMETER X 13.69 #/FT. DOUBLE-EXTRA STRONG PIPE (2.88" O.D.) EXTEND 6" INTO 5" DIAMETER PIPE.
11. PROVIDE MINIMUM 24 GAUGE GALVANIZED STEEL TEMPORARY CAP. SECURE TO PIPE WITH CAULKING COMPOUND.
12. EPDM RUBBER CAP (CUT TO FIT PIPE DIAMETER) WITH STAINLESS STEEL CLAMP ON ABS RIB REINFORCED PLASTIC CURB COVER AS MANUFACTURED BY: PORTALS PLUS INC. 635 THOMAS DR. BENSENVILLE, IL. TEL: (630) 766-8248 (800) 624-8642
13. NON-METALLIC BASE FLASHING.
14. 18 GAUGE GALVANIZED INSULATED METAL CURB STYLE RC-2A AS MANUFACTURED BY PORTALS PLUS. (CURB SIZE 12" X 21 1/2").
15. PACK SOLID AROUND PIPES AND CONDUIT WITH BATT TYPE INSULATION.
16. METAL DECKING.
17. NOT USED
18. 3/8" x 8" x Ø'-8" PLATE - FABRICATE TO FIT AROUND PIPE COLUMN AND WELD
19. 3/8" BENT PLATE WELD TO COLUMN AND 5" ϕ STEEL PIPE AND BOTTOM PLATE
20. 3/8" x 8" BOTTOM PLATE CUT TO FIT, FULL WELD TO COLUMN.
21. ROOFING ON RIGID INSULATION ON METAL DECK.
22. WELD 3" X 3" X 1/4" ANGLE.
23. NOT USED
24. EPDM RUBBER CAP FOR CONDUIT THRU ROOF. SEE PLAN AT ROOF DETAIL 6/S0.1 AND SHEET E4.6.
25. 3/8" STIFFENER PLATES.
26. 3/8" STEEL PLATE, FIT INSIDE DIAMETER OF 5" ϕ DOUBLE-EXTRA STRONG PIPE WELD TO 2 1/2" ϕ PIPE.
27. MULTI-OPENING PIPE PORTAL SYSTEM 18 GAUGE INSULATED GALVANIZED METAL CURB.
28. ACRYLIC COATED ABS PLASTIC COVERS FOR DOUBLE PIPE PORTAL SYSTEM.
29. EPDM RUBBER CAP SINGLE OPENING (SEE SECTIONS).
30. EPDM RUBBER CAP CUT TO FIT FOR CONDUITS (SEE DETAILS ON SHEET E4.4.). SEE ANTENNA LOCATION AND ORIENTATION NOTE.

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Satellite Dish Plans, Sections, and Details

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:

S-0.1

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GENERAL CONDITIONS:

1. IF ANY GENERAL NOTE CONFLICTS WITH ANY DETAIL OR NOTE ON THE PLANS OR IN THE SPECIFICATIONS, THE STRICTEST PROVISIONS SHALL GOVERN.

2. THE STRUCTURAL DRAWINGS ARE FOR THE PLACEMENT AND SIZE OF STRUCTURAL COMPONENTS ONLY. REQUIREMENTS MADE BY OSHA, DNR, AND ALL APPLICABLE SAFETY CODES ARE TO BE DETERMINED AND PROVIDED BY THE CONTRACTOR.

3. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION/ERECTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES PROVIDING TEMPORARY BRACING, SHORING, GUYS OR TIE-DOWNS. THESE TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL COMPONENTS ARE IN PLACE AND COMPLETED AS THE STRUCTURAL MEMBERS OR SYSTEMS ARE NOT SELF-BRACING UNTIL PERMANENTLY CONNECTED TO THE STRUCTURE.

4. THE ARCHITECT AND STRUCTURAL ENGINEER ASSUME NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. AS SUCH, THE MEANS AND METHODS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR(S).

5. USE OF ENGINEERING DRAWINGS AS ERECTION DRAWINGS BY THE CONTRACTOR IS EXPRESSLY PROHIBITED.

DESIGN CRITERIA PER 2003 MICHIGAN BUILDING CODE.

ROOF LIVE LOAD:
MINIMUM = 20 PSF
ROOF SNOW LOAD:
GROUND SNOW LOAD Pg = 50 PSF
EXPOSURE = B
IMPORTANCE FACTOR Is = 1.00, CATEGORY I
EXPOSURE FACTOR Ce = 1.00
THERMAL FACTOR Ct = 1.00
FLAT ROOF SNOW LOAD Pf = 35 PSF
WIND LOAD:
BASIC WIND SPEED = 90 MPH
WIND IMPORTANCE FACTOR Iw = 1.00, CATEGORY I
WIND EXPOSURE = C
INTERNAL PRESSURE COEFFICIENT = +/- 0.18
MAX. COMPONENTS & CLADDING PRESSURE = 19.5 PSF
SEISMIC DESIGN DATA:
SEISMIC IMPORTANCE FACTOR Ie = 1.00
SEISMIC USE GROUP = II
MAPPED SPECTRAL RESPONCE ACCLERATIONS:
Ss = 0.11g
S1 = 0.064g
SITE CLASS = D
SPECTRAL RESPONSE COEFFICIENTS
Sds = 0.120g
Sd1 = 0.064g
SEISMIC DESIGN CATEGORY = A
BASIC SEISMIC-FORCE-RESISTING SYSTEM
ORDINARY PRECAST SHEAR WALLS
DESIGN BASE SHEAR = 0.01W=0.01k
SEISMIC RESPONSE COEFFICIENTS: Cs = 0.01
RESPONCE MODIFICATION FACTORS: R=3
ANALYSIS PROCEDURE USED:
MINIMUM LATERAL FORCE PER 1616.4

FOUNDATIONS:

1. FOUNDATIONS SHALL BEAR ON FIRM, UNDISTURBED NATIVE SOIL OR ENGINEERED FILL WITH A SAFE BEARING CAPACITY OF 3000 PSF. IN ACCORDANCE WITH THE PROJECT SOILS REPORT #2006.0696 AS PREPARED BY SOILS & STRUCTURES INC., (DATED FEBRUARY 12, 2007). IF SOIL OF THIS CAPACITY IS NOT FOUND AT THE ELEVATIONS INDICATED, THE SOIL SHALL BE REMOVED TO ADEQUATE BEARING ELEVATIONS AND REPLACED WITH ENGINEERED FILL. THIS MAY REQUIRE SIGNIFICANT REMOVAL AND REPLACEMENT. PLEASE REFER TO ABOVE MENTIONED SOILS REPORT. ALLOWABLE SOIL BEARING PRESSURE SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED SOILS ENGINEER.

2. UNLESS OTHERWISE NOTED OR DETAILED, ALL FOUNDATIONS SHALL BE LOCATED SUCH THAT THE CENTERLINE OF FOOTING IS ALSO THE CENTERLINE OF COLUMN.

3. PREPARATION OF THE SITE, BUILDING FOOTPRINT AND SLAB SUB-BASE SHALL PROCEED IN COMPLIANCE WITH LOCAL CODES AND RECOMMENDATIONS OF THE CONTRACTOR'S GEOTECHNICAL ENGINEER, UNLESS OTHERWISE NOTED OR SPECIFIED, ALL FILL UNDER FLOOR SLABS AND BEHIND FOUNDATION WALLS SHALL BE COMPACTED WITH VIBRATORS, COMPACTORS, ETC. TO 95% MAXIMUM DENSITY (MODIFIED PROCTOR) AT OPTIMUM MOISTURE CONTENT.

4. PROVIDE NECESSARY SHEETING, SHORING, FORMING OR BRACING, ETC., DURING EXCAVATION AS REQUIRED TO PROTECT SIDES OF EXCAVATIONS OR AS REQUIRED TO COMPLY WITH SAFETY REGULATIONS.

5. ALL BOTTOM OF FOOTING TRANSITIONS SHALL BE MADE USING STEPS AS SHOWN IN TYPICAL DETAIL THIS SHEET. WHERE NEW FOOTINGS ABUT EXISTING FOUNDATIONS, CAREFULLY HAND EXCAVATE AND PLACE BOTTOM OF NEW FOOTING AT THE SAME ELEVATION AS THE EXISTING.

CONCRETE:

1. MINIMUM CONCRETE STRENGTH SHALL BE f'c=3000 PSI MIN. AT 28 DAYS, UNLESS NOTED OTHERWISE; SLABS SHALL BE f'c=3500 PSI MIN. UNLESS NOTED OTHERWISE. PROVIDE f'c=4000 PSI WITH 6% +/- 1% ENTRAINED AIR WHERE CONCRETE IS EXPOSED TO EXTERIOR ATMOSPHERE OR WEATHER.

2. ALL CONCRETE SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150. AGGREGATE SHALL CONFORM TO ASTM C33.

3. CONCRETE ADMIXTURES SHALL BE USED TO FACILITATE CONCRETE PLACEMENT, AID DIFFICULT PLACING CONDITIONS OR ASSIST IN ATTAINING SPECIFIED CONCRETE QUALITIES. ADMIXTURES SHALL HAVE LESS THAN 0.05 PERCENT CHLORIDE IONS.

AIR ENTRAINMENT PER ASTM C260
WATER REDUCER PER ASTM C494, TYPE A OR B
ACCELERATOR PER ASTM C494, TYPE C, D OR E
SUPERPLASTICIZER PER ASTM C494, TYPE F OR G

4. CONCRETE MIXES SHALL BE PROPORTIONED PER SECTION 3.9 OF ACI-301. THE FOLLOWING SHALL SERVE AS A BASIS FOR EACH MIX DESIGN. DEVIATIONS SHALL BE SUBSTANTIATED WITH CERTIFIED TEST DATA. SUBMIT MIX DESIGN, HISTORICAL TEST DATA OR TRIAL MIX RESULTS FOR APPROVAL PRIOR TO PROCEEDING WITH THE WORK. THE FOLLOWING GUIDELINES SHALL APPLY:

TYPE	COMPRESSIVE STRENGTH, f'c (28 DAY, PSI)	CEMENT CONTENT (LBS./C.Y.)	WATER/CEMENT RATIO (BY WEIGHT)	SLUMP
STANDARD, NORMAL WT.	3000 MIN.	470 MIN.	0.52 MAX.	4" MAX.
STANDARD, NORMAL WT.	3500 MIN.	517 MIN.	0.44 MAX.	4" MAX.
AIR ENTRAINED, NORM. WT.	4000 MIN.	564 MIN.	0.40 MAX.	4" MAX.

5. ALL CONCRETE WORK AND PLACEMENT SHALL CONFORM TO THE LATEST ACI STANDARDS AND RECOMMENDATIONS. FREE FALL SHALL NOT EXCEED 10 FEET FOR ALL CONCRETE CONTAINING HIGH-RANGE WATER-REDUCER (SUPERPLASTICIZER) AND 5 FEET FOR ALL OTHER CONCRETE. PROVIDE ELEPHANT TRUNK, TREMIES OR OTHER PLACING EQUIPMENT OR OPENINGS IN SIDES OF FORMS AS REQUIRED TO LIMIT FREE FALL.

6. ALL REINFORCING BARS, DOWELS AND TIES SHALL CONFORM TO ASTM A615, GRADE 60. ALL REINFORCING STEEL SHALL BE CONTINUOUS AND SHALL HAVE 36 BAR DIAMETER LAP (MIN.) AND SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315 AND ACI 318, LATEST EDITION. HOOK ALL BEAM BARS AT DISCONTINUOUS ENDS.

7. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 FURNISHED IN FLAT MATS OR SHEETS, NOT IN ROLLS. PROVIDE MINIMUM 6" LAP BETWEEN SHEETS. ALL SLAB REINFORCING SHALL BE SUPPORTED ON SAND CHAIRS.

8. REINFORCED CONCRETE WALLS, TRENCH AND WALL FOOTINGS SHALL HAVE CORNER BARS AT EACH INTERSECTION OF THE SAME SIZE AND SPACING AS THE MAIN HORIZONTAL REINFORCING. LAPS SHALL BE MINIMUM 30 BAR DIAMETERS. PROVIDE 2-#5 BARS TOP AND BOTTOM AND EACH SIDE OF ALL OPENINGS AND 2'-6" x 4'-0" DIAGONAL BARS AT CORNERS OF OPENINGS. PROVIDE 2-#5 BARS TOP AND BOTTOM IN SLABS AT ALL RE-ENTRANT (INSIDE) CORNERS.

9. ALL EXPOSED CONCRETE CORNERS AND EDGES SHALL BE CHAMFERED 3/4".

MASONRY:

1. ALL STRUCTURAL MASONRY TO BE IN ACCORDANCE WITH THE LATEST MASONRY STANDARDS JOINT COMMITTEE (MSJC) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5/TMS 402) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602). MASONRY SUBMITTALS ARE REQUIRED BY ACI 530.1/ASCE 6/TMS 602 SECTION 1.5. MASONRY TESTING AND INSPECTIONS ARE REQUIRED BY ACI 530.1/ASCE 6/TMS 602 SECTION 1.6, TABLE 5, LEVEL 2 QUALITY ASSURANCE.

2. ALL STRUCTURAL MASONRY HAS BEEN ENGINEERED IN ACCORDANCE WITH CHAPTER 2, ALLOWABLE STRENGTH DESIGN. COMPRESSION STRENGTH SHALL BE DETERMINED ACCORDING TO THE UNIT STRENGTH METHOD FOR CONCRETE MASONRY MSJC SECTION 1.4.B.2.B.

3. ALL BLOCK SHALL CONFORM TO ASTM C 90 AND C 140, TYPE I, GRADE N

4. MORTAR SHALL CONFORM TO ASTM C 270, AS FOLLOWS:
IN CONTACT WITH EARTH - TYPE M OR S — TYPE M OR S = 1900 PSI
REINFORCED - TYPE S — TYPE N = 2150 PSI
NOT IN CONTACT WITH EARTH - TYPE N, M OR S

5. GROUT SHALL CONFORM TO ASTM C 476, WITH PEA GRAVEL AGGREGATE AND A MINIMUM STRENGTH OF 2000 PSI.

6. MINIMUM MASONRY COMPRESSIVE STRENGTH SHALL BE f'M = 1500 PSI.

7. ALL STRUCTURAL MASONRY SHALL COURSE IN STANDARD RUNNING BOND, UNLESS NOTED OTHERWISE, ALL INTERSECTING BEARING WALLS, SHEAR WALLS AND OTHER STRUCTURAL WALLS SHALL BE LAID UP IN INTERLOCKED, BONDED COURSING. MECHANICAL ANCHORS OR WALL TIES MAY BE SUBSTITUTED WITH PRIOR APPROVAL BY THE ENGINEER.

8. PROVIDE HORIZONTAL WIRE TYPE REINFORCING WITH 9 GAUGE SIDE RODS AND 9 GAUGE CROSS RODS IN EVERY SECOND COURSE (16" O.C.), IN ALL MASONRY WALLS. SPACE AT 8" O.C. AT PARAPET WALLS. PROVIDE "LADDER" TYPE REINFORCING ONLY IN WALLS WITH VERTICAL REINFORCING. PROVIDE ADJUSTABLE TIES AT ALL LINTELS AND CAVITY WALLS AT 16" O.C. MAXIMUM SPACING.

9. PROVIDE 1-#5 VERTICAL BAR EACH SIDE OF EACH CONTROL JOINT; SEE PLANS FOR ADDITIONAL REINFORCING AT CORNERS, OPENINGS, ETC.

10. ALL REINFORCING BARS, DOWELS AND TIES SHALL CONFORM TO ASTM A615, GRADE 60. VERTICAL REINFORCING BARS SHALL BE HELD IN PLACE BY POSITIONERS SPACED NOT FURTHER THAN RECOMMENDED BY CODE.

11. PROVIDE A CONTINUOUS BOND BEAM, WITH 2-#5'S, AT THE TOP OF WALLS PARALLEL WITH ROOF/FLOOR FRAMING. STEP BOND BEAMS ELEVATIONS AS REQUIRED, LAP MINIMUM 32".

12. PERFORM GROUTING ACCORDING TO THE FOLLOWING:
- ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID.
- ALL CORES WITH VERTICAL REINFORCING OR TO RECEIVE DRILLED-IN ANCHORS SHALL BE GROUTED SOLID.
- ALL MASONRY PIERS AND PILASTERS SHALL BE GROUTED SOLID.
- MAXIMUM 4'-0" HIGH LIFTS.

13. ALL BEAMS SUPPORTING MASONRY, INCLUDING STEEL, PRECAST AND MASONRY LINTELS ARE TO BEAR 8" (MIN.) ON 3 COURSES SOLID MASONRY.

14. STRUCTURAL STEEL BEAMS, WIDE FLANGE AND TUBE STEEL LINTELS SHALL BE PROVIDED WITH MIN. 7"X3/8"X0'-7" BEARING PLATE, SET 1" AWAY FROM FACE OF WALL, WITH 2-3/4" DIAMETER ANCHOR BOLTS EACH END, TYPICAL UNLESS NOTED OTHERWISE.

15. UNLESS NOTED OTHERWISE, PROVIDE LOOSE LINTELS AT MISCELLANEOUS ARCHITECTURAL, MECHANICAL AND ELECTRICAL OPENINGS FOR EACH 4" OF MASONRY WALL THICKNESS IN ACCORDANCE WITH THE FOLLOWING:

- L4x3-1/2x5/16 LLV FOR SPANS UP TO 3'-4"
- L5x3-1/2x5/16 LLV FOR SPANS UP TO 5'-4"
- L6x3-1/2x5/16 LLV FOR SPANS UP TO 6'-8" MAX.

AT CONTRACTOR'S OPTION, MASONRY LINTELS ARE ALSO ACCEPTABLE FOR MISCELLANEOUS OPENINGS:

- 8"W (OR 12"W) x 8"H REINF. W/ 2-#5 FOR SPANS UP TO 3'-4"
- 8"W (OR 12"W) x 8"H REINF. W/ 2-#6 FOR SPANS UP TO 5'-4"
- 8"W (OR 12"W) x 16"H REINF. W/ 2-#6 FOR SPANS UP TO 6'-8" MAX.

COORDINATE REQUIREMENTS FOR LOOSE LINTELS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

16. ALL DOUBLE ANGLE LINTELS SHALL BE WELDED BACK TO BACK WITH A MINIMUM 2 INCH STITCH WELD EVERY 8 INCHES.

PRECAST CONCRETE FRAMING PRODUCTS:

1. PRECAST CONCRETE WALL PANELS SHALL BE DESIGNED BY THE PRECAST CONCRETE PRODUCT SUPPLIER. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AND SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MICHIGAN. AS A MINIMUM, THE LOADING GIVEN BELOW SHALL BE USED. ADDITIONAL LOADING OR LOAD COMBINATIONS IF REQUIRED BY CODE SHALL BE DETERMINED AND IMPLEMENTED BY THE PRECAST CONCRETE DESIGNER.

2. THE PRECAST CONCRETE PRODUCT SUPPLIER SHALL BE A MEMBER OF THE PRESTRESSED CONCRETE INSTITUTE (PCI). THE DESIGN AND MANUFACTURE OF ALL PRECAST CONCRETE PRODUCTS SHALL CONFORM TO ALL PROVISIONS OF THE "PCI DESIGN HANDBOOK" AND TO THE LATEST ACI STANDARDS AND GUIDELINES.

3. THE PRECAST CONCRETE SUPPLIER SHALL COORDINATE THE SIZE, LOAD AND LOCATION OF ALL MECHANICAL UNITS WITH THE GENERAL AND MECHANICAL CONTRACTORS.

4. THE PRECAST CONCRETE SUPPLIER SHALL COORDINATE THE LOCATION OF ALL FRAMING MEMBERS TO BE CARRIED BY THE PRECAST CONCRETE UNITS, INCLUDING THE LOCATION OF EMBEDDED PLATES, ANCHORS, TEMPORARY BEAMS, COLUMNS, ETC.

5. ALL HOLES IN PRECAST CONCRETE WALL PANELS ARE TO BE CORE DRILLED. PROVIDE THE LOCATION OF ALL REQUIRED HOLES TO THE PRECAST CONCRETE SUPPLIER TO CONFIRM STRUCTURAL ADEQUACY.

6. DESIGN LOADS
ROOF DEAD: SEE ABOVE
ROOF LIVE: SEE ABOVE
TOTAL: AS A MINIMUM REFER TO SCHEDULE ON SHEETS S1.2
SEISMIC: SEE ABOVE
MAIN WINDFORCE RESISTING SYSTEM WIND: SEE ABOVE
AS A MINIMUM, WIND PARALLEL TO THE WALL SHALL BE AS SCHEDULED ON SHEETS S1.2
COMPONENTS AND CLADDING WIND LOAD: PER 1997 UBC WITH BASIC WIND SPEED = 80 MPH
AS A MINIMUM, WIND PERPENDICULAR TO THE WALL SHALL NOT BE LESS THAN = 15 PSF
PRECAST WALL PANEL SELF WEIGHT LIMIT = LESS THAN OR EQUAL TO 90 PSF
DEFLECTION LIMITATIONS: SPAN/360

STRUCTURAL STEEL:

1. STEEL DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS FOR "STRUCTURAL STEEL BUILDINGS".

2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE LATEST ASTM SPECIFICATIONS ACCORDING TO THE FOLLOWING SERIAL DESIGNATIONS BY SHAPE:
WIDE FLANGES: A992 OR ASTM A572, Fy=50KSI
ANGLES, TEES, BARS AND PLATES: A36
SQUARE OR RECTANGULAR HOLLOW STRUCTURAL SHAPES OR TUBES: ASTM A500, GR. B, Fy=46KSI
ROUND HOLLOW STRUCTURAL SHAPES OR PIPES: ASTM A53, GRADE B, Fy=35 KSI

3. ALL WELDED CONNECTIONS SHALL CONFORM TO THE LATEST AWS CODE, USING E70XX ELECTRODES, WITH WELDING PERFORMED BY QUALIFIED WELDERS.

4. BOLTED CONNECTIONS SHALL BE MADE WITH A325-N OR A490-N BOLTS. LOCATIONS OF SLIP CRITICAL CONNECTIONS, IF ANY, SHALL BE SHOWN ON THE DRAWINGS. IF REQUIRED, ALL BOLTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS FOR "STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

5. THE DESIGN, CONFIGURATION, ERECTION SAFETY AND SEQUENCING OF ALL STRUCTURAL STEEL CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE STRUCTURAL STEEL FABRICATOR. REVIEW AND ACCEPTANCE OF THE SHOP DRAWINGS BY THE ENGINEER SHALL CONSTITUTE APPROVAL OF THE LOAD CARRYING ADEQUACY ONLY.

6. CONNECTIONS SHALL BE DESIGNED FOR ONE-HALF THE TOTAL ALLOWABLE UNIFORM LOAD (MIN.) PER AISC BEAM LOAD TABLES, UNLESS NOTED OTHERWISE.

7. TEMPORARY ERECTION SEATS SHALL BE PROVIDED AS RECOMMENDED ON PAGE 3-59 OF THE LATEST EDITION AISC PUBLICATION "ENGINEERING FOR STEEL CONSTRUCTION".

8. DRILLED-IN ANCHORS SHALL BE EITHER "EXPANSION" OR "ADHESIVE" AS INDICATED ON THE DRAWINGS. INSTALLATION OF DRILLED-IN ANCHORS SHALL BE IN COMPLIANCE WITH MANUFACTURER'S LITERATURE AND GUIDELINES. EXPANSION BOLTS SHALL BE "HILTI KWIK BOLT II" OR APPROVED EQUAL. ADHESIVE SHALL BE "HILTI HVA" OR APPROVED EQUAL.

10. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL ANGLES, PLATES, BARS, CLIPS, ETC., ATTACHED TO STRUCTURAL STEEL. VERIFY EXACT SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS WITH CONTRACTOR INVOLVED.

11. THIS STEEL FRAME IS NON SELF-SUPPORTING PER AISC "CODE OF STANDARD PRACTICE", SECTIONS 7.9.3. AND 7.9.5.; ERECTION, BRACING, SHORING, ETC. SHALL CONFORM TO THESE SECTIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION SEQUENCE AND PROCEDURE.

STEEL JOISTS/JOIST GIRDERS:

1. STEEL JOISTS AND JOIST GIRDERS ARE TO BE FABRICATED BY A MEMBER OF THE STEEL JOIST INSTITUTE AND BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SJI SPECIFICATIONS AND RECOMMENDATIONS. JOISTS SHALL BE DESIGNED FOR A MINIMUM NET UPLIFT OF 15 PSF. UPLIFT BRIDGING SHALL BE PROVIDED AS REQUIRED.

2. ALL PROVISIONS OF THE "RECOMMENDED CODE OF STANDARD PRACTICE FOR STEEL JOISTS AND JOIST GIRDERS" AS ADOPTED BY THE SJI SHALL BE ADHERED TO.

3. STEEL JOISTS BEARING ON STEEL BEAMS OR PLATES, ARE TO BE CONNECTED WITH MIN. 2" LONG, 3/16" FILLET WELD TO EACH SIDE OF BEARING. EXTEND BOTTOM CHORDS OF JOISTS AT COLUMNS TO A STABILIZER PLATE. DO NOT CONNECT UNLESS NOTED OTHERWISE. IF NO JOIST OCCURS DIRECTLY AT A COLUMN, EXTEND BOTTOM CHORDS OF EACH ADJACENT JOIST TO A STABILIZER PLATE.

METAL DECK:

1. METAL DECK SHALL CONFORM TO ALL PROVISIONS OF THE "CODE OF RECOMMENDED STANDARD PRACTICE FOR COMPOSITE DECK, FORM DECK, AND ROOF DECK CONSTRUCTION" AS ADOPTED BY THE STEEL DECK INSTITUTE.

2. METAL DECK SHALL BE PROVIDED WITH NESTING SIDE SEAMS OF DEPTH AND GAGE AS INDICATED ON THE DRAWINGS. METAL ROOF DECK SHALL BE WIDE RIB TYPE "B". PROVIDE DECK MANUFACTURER'S STANDARD ROOF SUMP PANS FOR EACH ROOF SUMP LOCATION.

3. METAL DECK IS DESIGNED TO ACT AS A DIAPHRAGM AND IS INTENDED TO BRACE THE BUILDING. EXTREME CARE SHALL BE UTILIZED TO INSTALL DECK CONNECTIONS.

4. 36/5 DECK WELDS: METAL DECK SHALL BE WELDED TO ALL SUPPORTING STEEL WITH PUDDLE WELDS (MIN. 5/8" DIAMETER) (MIN. 5 PER SHEET; 6-12-12-6 PATTERN) AT ALL SUPPORT POINTS AND AT 6" O.C. AT BUILDING PERIMETER. SIDE LAP CONNECTIONS SHALL BE MADE AT DECK SUPPORT, AT MIDPOINT AND QUARTER POINTS OF DECK SPAN (3 CONNECTIONS PER SPAN) WITH #10 TEK SCREWS. REFER TO SPECIFICATIONS FOR ADDITIONAL ERECTION PROCEDURES.

LIGHT GAGE METAL FRAMING PRODUCTS:

1. LIGHT GAGE METAL FRAMING AND CONNECTIONS SHALL BE DESIGNED BY THE METAL PRODUCT MANUFACTURER. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AND SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MICHIGAN. AS A MINIMUM, THE LOADING GIVEN BELOW SHALL BE USED. ADDITIONAL LOADING OR LOAD COMBINATIONS IF REQUIRED BY CODE SHALL BE DETERMINED AND IMPLEMENTED BY THE LIGHT GAGE DESIGNER.

2. ALL LIGHT GAGE FRAMING SHALL CONFORM TO ASTM A446, GRADE D MINIMUM Fy = 50 KSI FOR 16 GAGE AND HEAVIER, GRADE A (MIN. 33 KSI) FOR 18 GAGE AND LIGHTER. ALL FRAMING TO BE GALVANIZED IN ACCORDANCE WITH ASTM A525 G60 COATING.

3. LIGHT GAGE SECTIONS INDICATED ON THE DRAWINGS ARE MINIMUM AND SHALL BE USED FOR BIDDING PURPOSES ONLY. FINAL SIZES SHALL BE DETERMINED AND PROVIDED IN CONJUNCTION WITH THE METAL PRODUCT MANUFACTURER'S STANDARD SHAPES, SIZES AND DESIGN PROPERTIES. INCREASE SIZE, GAGE, OR DECREASE SPACING AS REQUIRED TO SUSTAIN THE DESIGN LOADS.

4. THE DESIGN AND MANUFACTURE OF ALL LIGHT GAGE METAL FRAMING SHALL CONFORM TO ALL PROVISIONS OF THE "COLD-FORMED STEEL DESIGN MANUAL" AND THE PROVISIONS OF THE AMERICAN IRON AND STEEL INSTITUTE.

5. MINIMUM FLANGE WIDTH OF STUD SHAPES SHALL BE 1-5/8". PROVIDE DOUBLE STUDS AT EACH BEARING END OF LIGHT GAGE METAL HEADERS, TYPICAL UNLESS NOTED OTHERWISE. LIGHT GAGE STUDS SHALL NOT TERMINATE MORE THAN FACTORY PUNCH-OUTS A MINIMUM DISTANCE OF 2 x DEPTH.

6. LIGHT GAGE TRUSS MANUFACTURER SHALL PROVIDE ALL METAL TRUSS HANGERS, WALL ANCHORS AND HURRICANE ANCHORS.

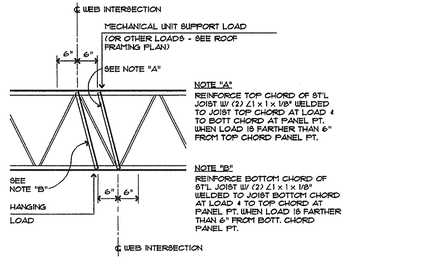
7. DESIGN LOADS

WIND:	(SEE GENERAL NOTES, GENERAL REQUIREMENTS NOTE No. 5 ABOVE)
ROOF CANOPY DEAD:	16 PSF
ROOF CANOPY LIVE:	(SEE GENERAL NOTES, GENERAL REQUIREMENTS NOTE NO. 5 ABOVE)
CANOPY SOFFIT DEAD:	5 PSF
CANOPY SOFFIT LIVE:	10 PSF (MINIMAHBITED ATTIC W/O STORAGE)
CANOPY DEFLECTION LIMITATIONS:	LIVE LOAD - SPAN / 360
STUD WALL DEFLECTION LIMITATIONS:	
SUPPORTING METAL SIDING OR E.I.F.S.	SPAN / 360
SUPPORTING MASONRY	SPAN / 600

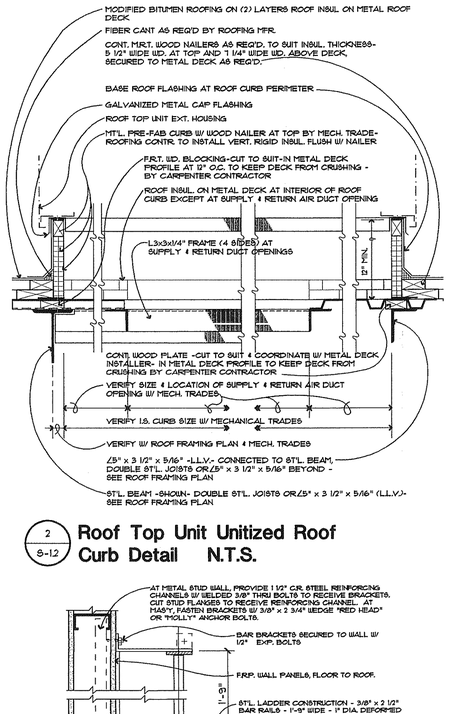
ABBREVIATIONS:

ACI = AMERICAN CONCRETE INSTITUTE
AISC = AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ARCH. = ARCHITECT OR ARCHITECTURAL
ASCE = AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM = AMERICAN STANDARDS FOR TESTING AND MATERIALS
AWS = AMERICAN WELDING SOCIETY
BM. = BEAM
B.O. = BOTTOM OF
BRG. = BEARING
CL. = CENTERLINE
DN. = DOWN
DNR = DEPARTMENT OF NATURAL RESOURCES
DWGS. = DRAWINGS
E.F. = EACH FACE
ELECT. = ELECTRICAL
ELEV. = ELEVATION
E.W. = EACH WAY
EX., EXIST. = EXISTING
EXP. = EXPANSION
HI = HIGH
HORIZ. = HORIZONTAL
IBC = INTERNATIONAL BUILDING CODE
KIPS = KILOPOUNDS
L.L.V. = LONG LEG VERTICAL
L.L.H. = LONG LEG HORIZONTAL
LO = LOW
MAS. = MASONRY
MAX. = MAXIMUM
MBC = MICHIGAN BUILDING CODE
MECH. = MECHANICAL
MIN. = MINIMUM
MPH = MILES PER HOUR
NCMA = NATIONAL CONCRETE MASONRY ASSOCIATION
O.C. = ON CENTER
OSHA = OCCUPATION SAFETY AND HEALTH ADMINISTRATION
PL. PLS = PLATE(S)
PCI = PRESTRESSED CONCRETE INSTITUTE
PSI = POUNDS PER SQUARE INCH
PSF = POUNDS PER SQUARE FOOT
P.E.M.B. = PRE-ENGINEERED METAL BUILDING
SDI = STEEL DECK INSTITUTE
SIM. = SIMILAR
S.J.I. = STEEL JOIST INSTITUTE
STRUCT. = STRUCTURAL
T.O. = TOP OF
TPI = TRUSS PLATE INSTITUTE
TYP. = TYPICAL (REPEATED OCCURRENCES)
U.N.O. = UNLESS NOTED OTHERWISE
V., VERT. = VERTICAL
V.I.F. = VERIFY IN FIELD

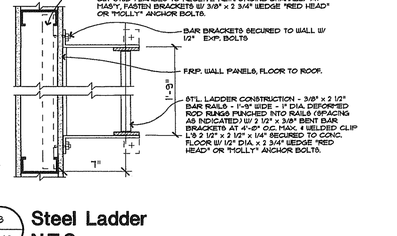
NOTE:
ROOF DETAILS SHOWN APPLY TO MODIFIED BITUMENT ROOFING. IF AN ALTERNATE ROOFING SYSTEM (SEE PROJECT MANUAL) IS PROPOSED, THE DETAILS MUST BE MODIFIED TO COMPLY WITH THE ROOFING MANUFACTURERS RECOMMENDATIONS AND WALGREENS ROOFING CONSULTANTS REQUIREMENTS.



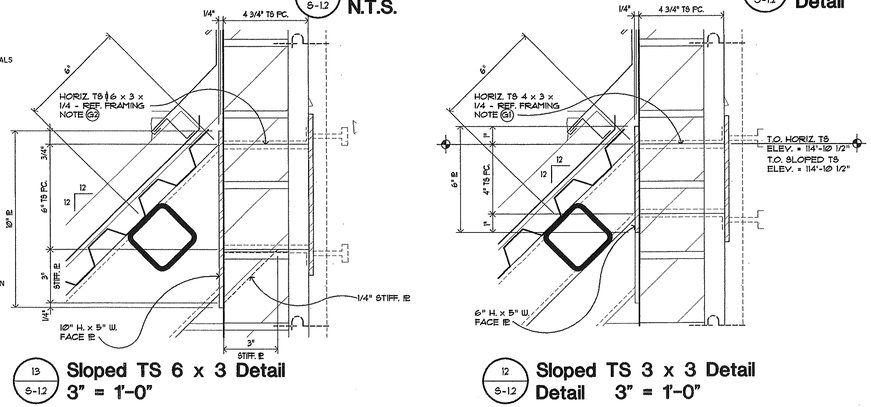
1 / S-12 Typ. Steel Joist Reinf. for Non-Panel Point Loads N.T.S.



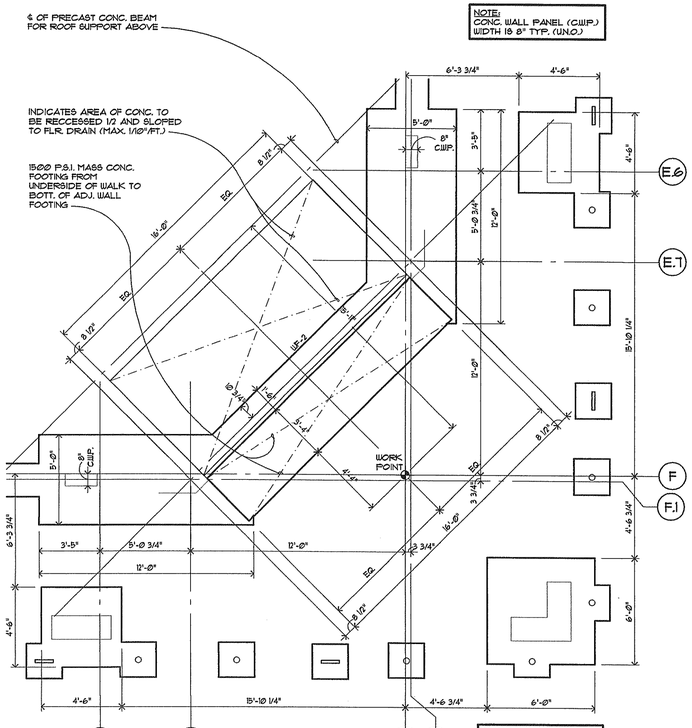
2 / S-12 Roof Top Unit Unitized Roof Curb Detail N.T.S.



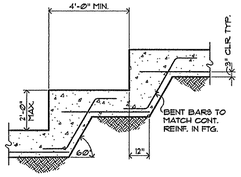
3 / S-12 Steel Ladder N.T.S.



13 / S-12 Sloped TS 6 x 3 Detail 3" = 1'



1 / S-1.1 **Enlarged Foundation Plan at Entrance 1/4" = 1'-0"**



Typ. Step Footing Detail N.T.S.

Footing Schedule

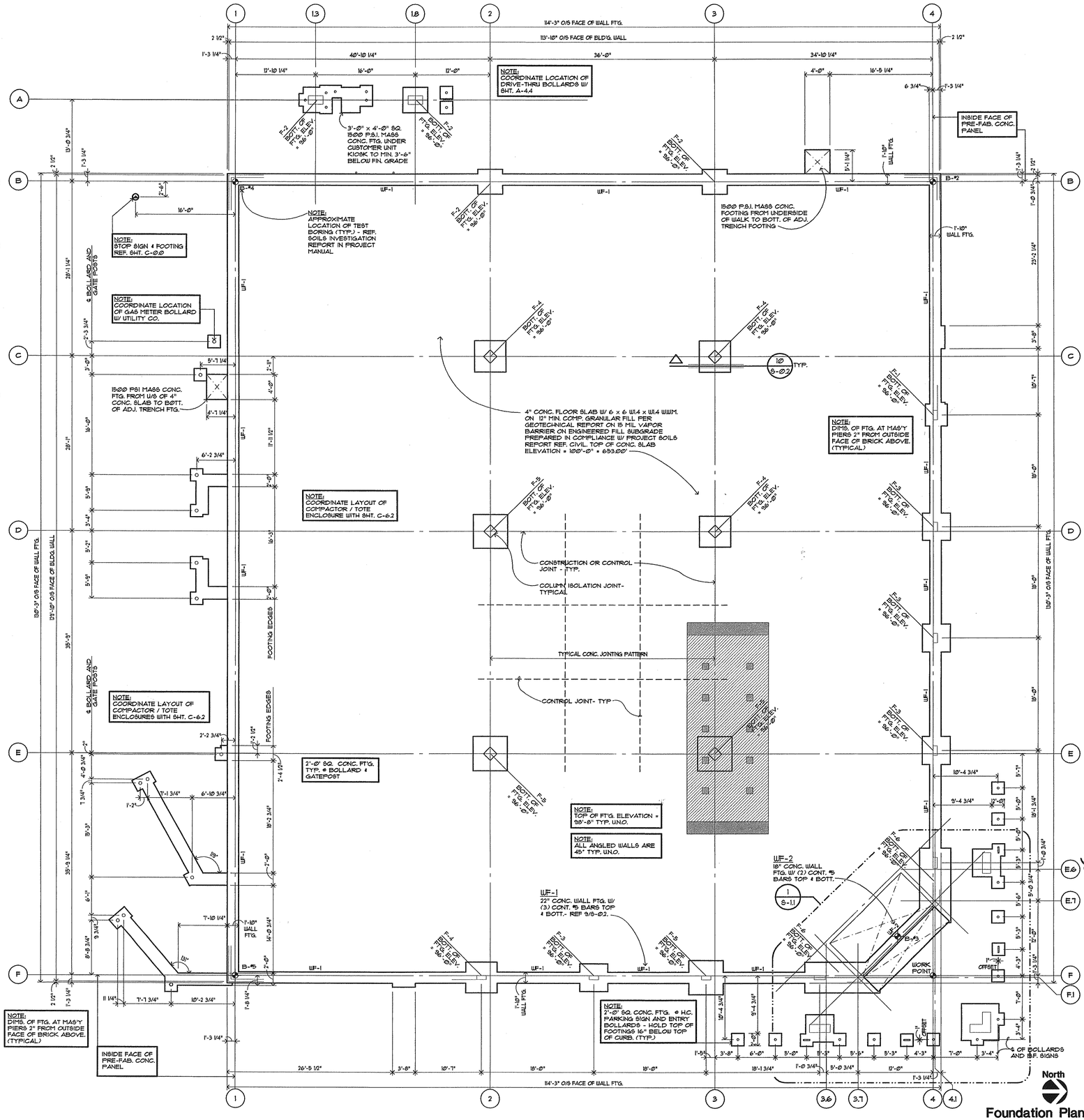
CAPACITY 3000 PSF ASSUMED SOIL BRG.

Mark	Size	Depth	Reinf.	Top of Ftg Elev.	Remarks
F-1	3'-6" x 3'-6"	2'-8"	---	98'-8"	
F-2	4'-0" x 4'-0"	2'-8"	---	98'-8"	
F-3	4'-6" x 4'-6"	2'-8"	---	98'-8"	
F-4	5'-0" x 5'-0"	2'-8"	---	98'-8"	
F-5	5'-6" x 5'-6"	2'-8"	---	98'-8"	
F-6	12'-0" x 5'-0"	2'-8"	(5) #6 LONGIT. & (11) #6 TRANSVERSE	98'-8"	

Bollard/Post Schedule

REF. TYP. DET. ON SHEET C-0.0

Quantity	Size	Location
8	4"ø x 3'-0" HIGH	DRIVE-THRU BOLLARDS
12	4"ø x 3'-0" HIGH	ENTRY BOLLARDS
3	6"ø x 4'-0" HIGH	COMPACTOR ENCLOSURE BOLLARDS
2	6"ø x 4'-0" HIGH	TOTE ENCLOSURE BOLLARDS
1	6"ø x 4'-0" HIGH	OVERHEAD RECEIVING DOOR BOLLARDS
4	6"ø x 4'-0" HIGH	ELECTRICAL TRANSFORMER BOLLARDS
1	6"ø x 4'-0" HIGH	UTIL. METER BOLLARDS (VERIFY LOCATION W/ UTIL. CO.)
4	2" x 12" TUBE	BARRIER FREE SIGNS
VERIFY	SIGN POST	VERIFY LOCATIONS AND QUANTITY WITH CIVIL ENGINEERING SITE DRAWING



Foundation Plan 1/8" = 1'-0"

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project:

Store #11415

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drawing:
Foundation Plan

DO NOT SCALE DRAWING

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approved: R.J.C.

file number: 06185

sheet:
S-1.1

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Column Schedule

Mark	Size	Base Plate	Anchors	B.O. Base Plate Elev.
C-1	TS 6 x 6 x 3/8"	12" x 7/8" x 1'-0"	(4) 3/4"ø x 21" + 3" HOOK	98'-9"
C-2	TS 6 x 6 x 1/2"	12" x 7/8" x 1'-0"	(4) 3/4"ø x 21" + 3" HOOK	98'-9"
C-3	TS 8 x 8 x 3/16"	14" x 3/4" x 1'-2"	(4) 3/4"ø x 21" + 3" HOOK	98'-9"
C-4	TS 8 x 8 x 1/4"	14" x 1" x 1'-2"	(4) 3/4"ø x 21" + 3" HOOK	98'-9"
C-5	TS 8 x4 x 3/16"	14" x 3/4" x 10"	(4) 3/4"ø x 21" + 3" HOOK	98'-9"

Lintel Schedule

Mark	Description	Remark
L-1	W 8 x 18 + 1/4" PLATE	BP-1 AT MAS'Y - CONN. TO EMBED AT PRECAST
L-2	PRE ENG. CONC. ARCH	(REF 2/A-2.6) FOR LINTEL ELEVATION
L-3	PRE ENG. CONC. ARCH	(REF. 2/A-2.3) FOR LINTEL ELEVATION
L-4	TS 8 x 8 x 3/16	CONNECT TO COL. EA. END - B.O. LINTEL ELEV. = 112-1 1/2"

Bearing Plate

Mark	Size	Anchors	Remarks
BP-1	7"x 3/8"x Ø'-7"	(2) 3/4" ø x 1'-4" LONG HEADED STUDS	

Precast Wall Panel Load Schedule

Mark	Vertical Dead Load	Vertical Live Load	Horizontal Wind Load
RA	515 PLF	1100 PLF	130 PLF
RB	440 PLF	960 PLF	145 PLF
RC	N/A	N/A	170 PLF
RD	N/A	N/A	190 PLF
R1	13.6 KIP	31.4 KIP	N/A
R2	12.4 KIP	28.9 KIP	N/A
R3	1.0 KIP	2.8 KIP	N/A
R4	17.4 KIP	40.0 KIP	N/A
R5	15.0 KIP	33.0 KIP	N/A

Framing Notes Legend

A. PROVIDE CONTINUOUS L3x3 ANGLE WITH 3/4" EXPANSION ø ANCHORS IN 13/16" x 1 7/8" VERTICAL SLOTTED HOLES (3 1/4" EMBED.) AT 32" O.C. BUTTWELD ALL SPLICES. CONNECT ROOF DECK WITH 5/8" DIA. PUDDLE WELDS AT 6" O.C. INSTALL ANCHOR IN BOTT. OF SLOT.

B. L3" x 3" x 1/4" (L.L.V.) FRAMING FOR ROOF SCUTTLE - REF. 6/S-0.2 ADD JOIST PANEL POINT AS REQUIRED - REF. 1/S-0.2.

C. L3" x 3" x 1/4" (L.L.V.) FRAMING FOR ROOF SUMP - REF 7a/A-1.4.

D. L5" x 3 1/2" x 5/16" (L.L.V.) FRAMING FOR HVAC UNIT - REF 2/S-0.2. VERIFY EXACT SIZE AND LOCATION WITH MECHANICAL CONTRACTOR. ADD JOIST PANEL POINT AS REQUIRED - REF 1/S-0.2.

E. 6" DEEP POCKET IN PRECAST PANEL (12 1/2" H. x 1'-4" W.) W/ HORIZ. EMBED. PL. FOR JOIST GIRDER BEARING.

F. 5" DIA. x 38.55 STEEL PIPE FOR SATELLITE DISH ANTENNA PER DETAIL SHEET S-0.1

G. L6" x 4" x 5/16" (L.L.V.) BRICK SUPPORT, WELD TO EMBEDDED PLATES. SEE DETAILS 1/A-2.2 & 1/A-2.4

G1. PC TS ϕ4 x 3 x 1/4 - REF. 12/S-0.2

G2. PC TS ϕ 6 x 3 x 1/4 W/ 1/4" STIFF. PLATE - REF. 13/S-0.2

G3. (NA)

G4. L6" x 4" x 5/16" (L.L.V.) BRICK SUPPORT AT OVERFLOW SCUPPER. WELD TO EMBEDDED PLATES. SEE DETAIL 8/A-1.3

H. L3x3x1/4 X-BRACING AT COLUMN. CONNECT TO JOIST CHORDS.

J. WT 7 x 11 TRUSS SUPPORT FRAME UNDER DECK - PROVIDE 2x4 DECK SUPPORT IN DECK CELLS.

J1. WT 7 x 11 TRUSS SUPPORT FRAME UNDER DECK - PROVIDE 2x4 DECK SUPPORT IN DECK CELLS. CONNECT WT'S DIRECTLY TO PRECAST WHEN PARALLEL WITH JOISTS W/ 2L CONNECTION AND MIN. (2) 3/4" DIA. EXPANSION ANCHORS.

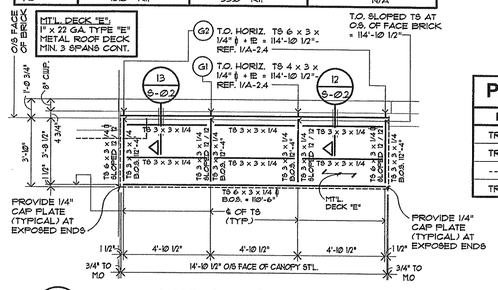
K. (NA)

L. (NA)

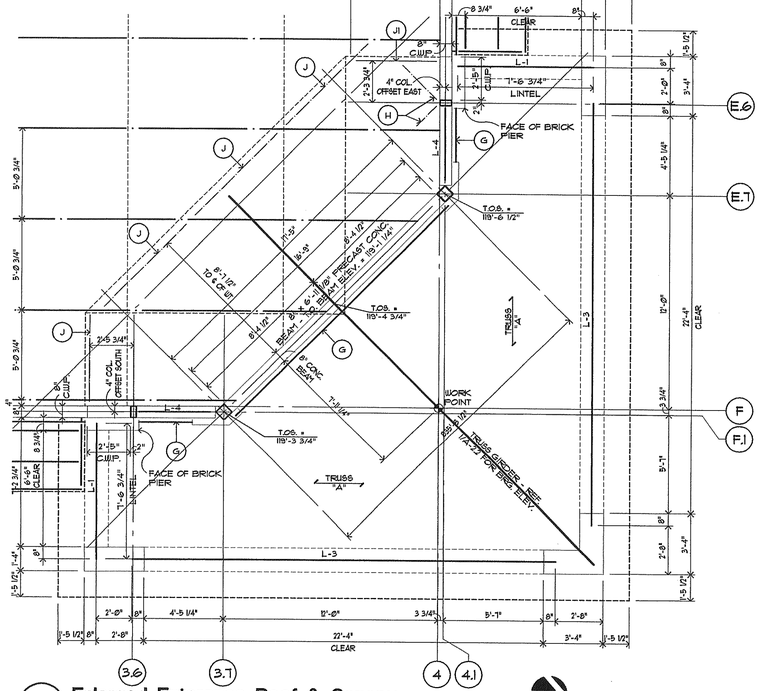
M. TS 1 x 1 x 1/8" FRAME FOR TOTE ENCLOSURE ROOF - REF. DETAILS 8 & 9/C-6.2

Pre-Engineered Truss Legend

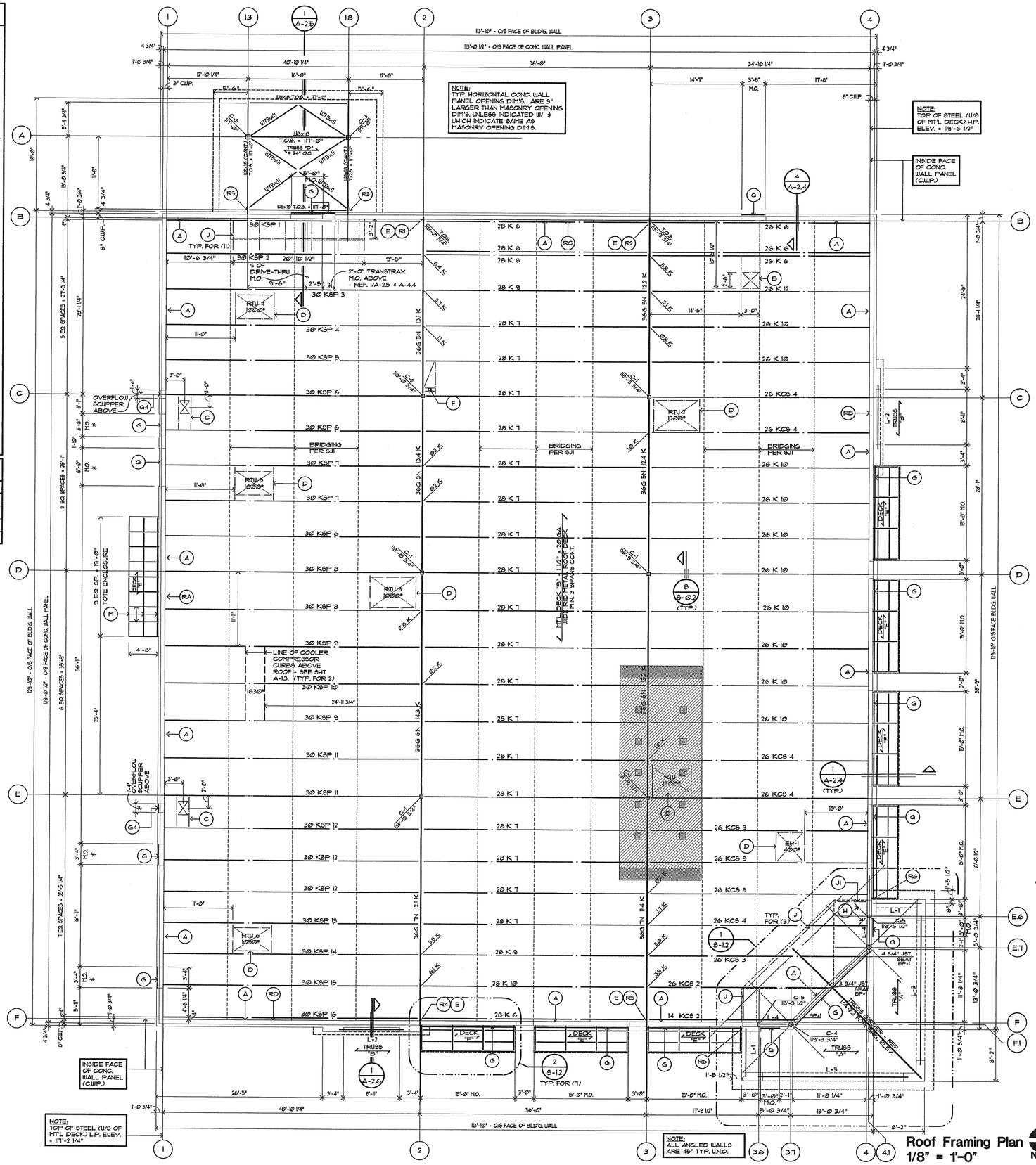
Mark	Remarks AT 24" O.C. (TYP. U.N.O.)
TRUSS "A"	REFER DETAIL 1/A-2.3
TRUSS "B"	REFER DETAILS 1 & 2 /A-2.6
-----	-------
TRUSS "D"	REFER DETAIL 2/A-2.5



2 / S-12 **Enlarged Window Canopy Framing Plan (Typ. for -7-) 1/4" = 1'-0"**



1 / S-12 **Enlarged Enterance Roof & Canopy Framing Plan 1/4" = 1'-0"**



Roof Framing Plan 1/8" = 1'-0"

North

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Framing Plan

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S-1.2

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INTERIOR HANGING SIGNS

GENERAL SALES AREA:
ALL SIGNS AND AISLE MARKERS @ 10'-6" TO BOTTOM OF SIGN UNLESS OTHERWISE NOTED.
SIGN "L" LIQUOR / THANK YOU
SIGN "T" STORE HOURS SIGN
SIGN "GC" GREETING CARD SIGN
SIGN "D" DOWNTOWN CHECKOUT LANE #
SIGN "CA" CALIFORNIA ACCESSIBILITY SIGN (8'-0" TO BOTTOM OF SIGN)

PHARMACY DEPARTMENT:
REFER TO FIXTURE PLAN FOR REQUIRED SIGNS
SIGN "JJ" PICK UP PRESCRIPTIONS
SIGN "K" DROP OFF PRESCRIPTIONS
SIGN "Q" CONSULTATION WINDOW
SIGN "TX" T. A. S.
SIGN "ADA" SYMBOL OF ACCESSIBILITY

ATTACH SIGNS TO UNDERSIDE OF CASED OPENINGS.
REFER TO FIXTURE PLAN FOR SIGN LOCATION.
PROVIDE (2) HOLLOW WALL ANCHORS PER SIGN.
SCREW THREADED EYEBOLT INTO ANCHOR. HANG SIGNS FROM EYEBOLTS WITH "S" HOOKS.

GENERAL NOTES

GENERAL SALES AREA:
1. PLEASE PROVIDE PROPER A.D.A. CLEARANCES ON BOTH SIDES OF ALL DOORS
2. MIRROR ON REAR WALL
3. COSMETIC CORNICE
4. SALES AREA CORNICE (FIXTURE MOUNTED)
5. PHOTO CORNICE (FIXTURE MTD UNLESS NOTED)
6. CARPET TILES & DESIGN LINKS FURNISHED AND INSTALLED BY WALGREENS (WHEN SHOWN)
7. MASTER-BILT REACH-IN REFRIGERATION: (PROVIDE 2" AIR SPACE BETWEEN COOLERS AND FREEZERS)
   OPEN FRONT, MEDIUM TEMP. COOLERS (ADD 2" AT EACH END, FOR END PANELS)
   A. __ MD-06: 6'-0"W X 42 7/8"D X 81 3/16"H
   B. __ MD-08: 8'-0"W X 42 7/8"D X 81 3/16"H
   MODEL TEL-ENDLESS REACH-IN FREEZERS (ADD 2" AT EACH END, FOR END PANELS)
   C. __ TEL-3-24: 74 1/4"W X 37 3/4"D X 80"H
   D. __ TAF-48HD: 52"W X 35 3/4"D X 81.5"H
   E. __ SMB-580 WINE COOLER: 76"W X 32"D X 76.5"H
8. MASTER-BILT WALK-IN COOLER: PROVIDE
   9 #1000R COOLMASTER DOORS 26 3/4" X 73" EACH AND
   6 #100FR FREEZEMASTER DOORS 26 3/8" X 73" EACH BY ANTHONY
   A. __ DOOR(S): FOR EACH DOOR PROVIDE (7) __"D BEV-O-FLOW GRAVITY SHELVES; UPPER (5) WITH SLIDES AND LOWER (2) WITH ROLLERS COMPLETE WITH UPRIGHTS
   B. 9 DOOR(S): FOR EACH DOOR PROVIDE 36"D B-O-F NYLA-LITE SHELVING SYSTEM
   C. __ DOOR(S): __"D ROLLER CONVEYOR AT FLOOR LEVEL
   D. 6 DOOR(S): FOR EACH DOOR PROVIDE 27"D ANTHONY SHELVES
   E. __ DOOR(S): FOR EACH DOOR PROVIDE (2) 27"D ANTHONY SHELVES AND (4) 36"D MERCHANDISER SHELVES
   F. __ DOOR(S): __"D DOUBLE DECK ROLLER CONVEYOR
9. ICE CHEST BY VENDOR
10. CART RAILS W/ DISPLAY SHELF & SLAT WALL ABOVE
11. PROVIDE A 6"H BLACK VINYL BASE AT ALL CHECKOUTS
12. ELECTRONIC ARTICLE SURVEILLANCE SYSTEM

PHARMACY DEPARTMENT:
13. PATIENT SEATING AREA: (4) SEATS
14. PROVIDE ELECTRIC FOR FUTURE ROBOTICS
15. COMPUTER TERMINAL
    15A: INTERCOM PLUS TERMINAL
    15C: TRAINING TERMINAL (IN TRAINING ROOM)
16. RX SINK AND CABINET
17. CRX CABINET
18. RX REFRIGERATOR
19. PROVIDE A CARPETED FLOOR WITH A RUBBER RUNNER. RX UNDERCOUNTER INSERTS:
    #1 - RX 3 DRAWER VIAL INSERT
    #2 - RX 3 DRAWER FILE INSERT
    #3 - RX OPEN INSERT
    #4 - RX CONSULTATION COUNTER UNIT
    #5 - RX PRINTER INSERT
    #6 - RX 5 DRAWER FILE INSERT
    #7 - RX OPEN INSERT WITH CPU SHELF
    #8 - RX OPEN CABINET
    #9 - RX 10 DRAWER FILE CABINET

OFFICE:
20. PROVIDE TILED FLOOR & VINYL WALLCOVERING
21. UNDER COUNTER SHELF UNIT
22. PRINTER
23. LATERAL FILE
24. OFFICE COMPUTERS
    24A: P.O.S. TERMINAL
    24B: AS400 TERMINAL
    24C: OFFICE P.C.
25. TILL LOCKER
26. SAFE
27. TV & VCR (IN TRAINING ROOM)

STOCKROOM:
28. NEST-A-FLEX CONVEYOR
29. GRAVITY CONVEYOR
30. POWER ROLLER CONVEYOR
31. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & POSITIONING OF COMPACTORS
    31A: TRASH COMPACTOR
    31B: BALER
    31C: CARDBOARD COMPACTOR

EMPLOYEE ROOM:
32. EMPLOYEE LOCKERS: (1) 46"W COAT LOCKER W/ PERFORATED DOORS, (6) 6 TIER BOX LOCKERS & (2) ADA LOCKERS W/ SAFETY VIEW DOORS
33. 5'-0"W X 2'-2"D EMPLOYEE COUNTER W/ (1) CABINET
34. EMPLOYEE ROOM REFRIGERATOR (PROVIDE 32" CLEARANCE WHEN NEXT TO COUNTER)
35. EMPLOYEE ROOM SINK (IN COUNTER)
36. 4'-0" MIRROR CENTERED ON WALL ABOVE COUNTER

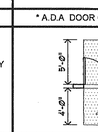
MISCELLANEOUS:
37. "E" - ELECTRICAL OUTLET FOR FUTURE USE
38. VENDOR RACKS: REMOVE BASE DECK & SHOES; (END PANEL TO REMAIN)
39. PROVIDE OPENING FOR ONE-WAY GLASS (SEE INTERIOR ELEVATION FOR LOCATION)
40. NEWSPAPER RACK BY VENDOR
41. PICTURE CARE PLUS TERMINAL

FIXTURE LEGEND

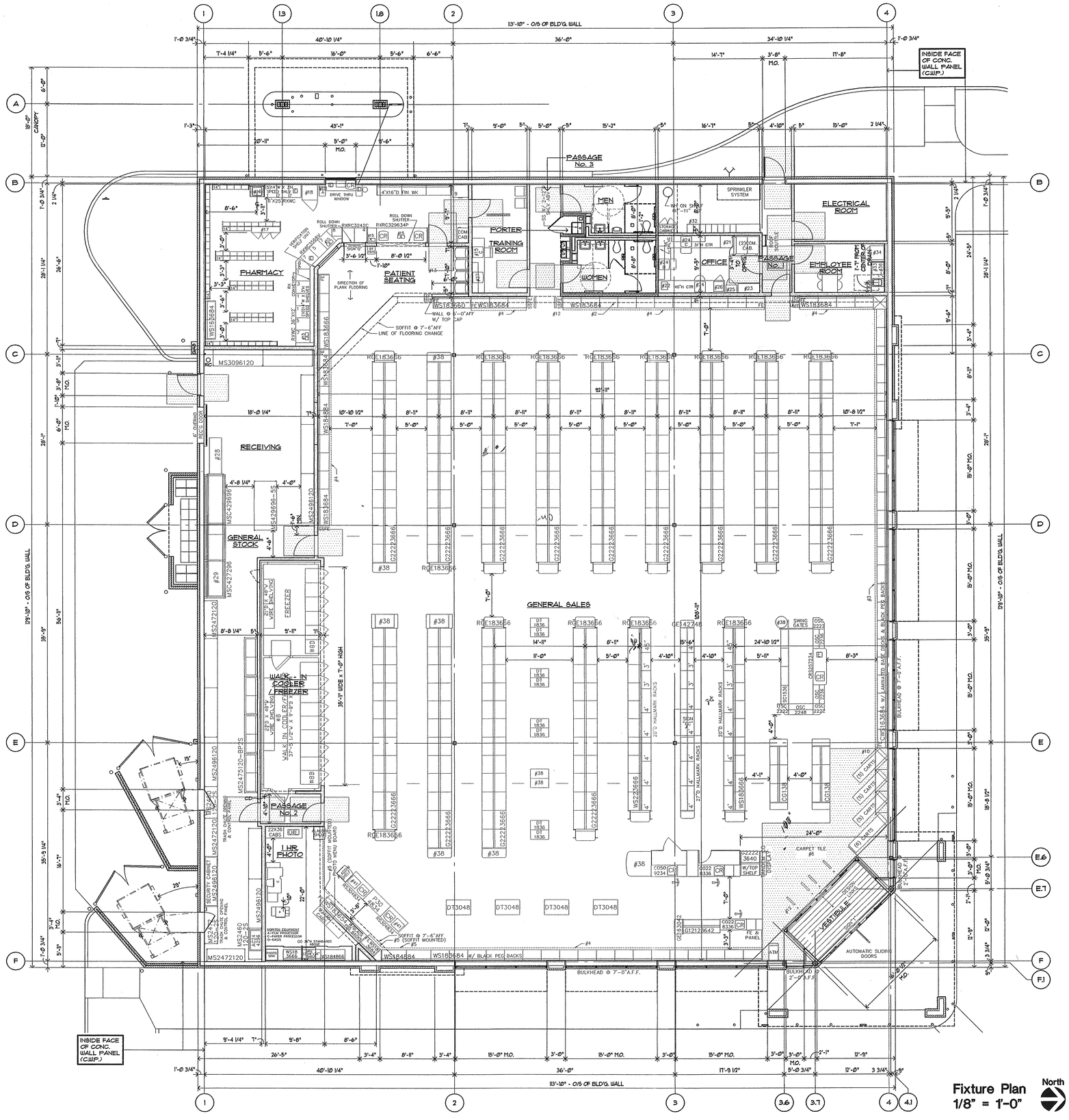
G GONDOLA (EA. SIDE)	1818 D.	36 W.	66 * H.	ALL OTHER FIXTURES ARE TYPICALLY CALLED OUT DEPTH BY WIDTH. EXAMPLE:
GE GONDOLA END	18 D.	39 W.	66 * H.	DT 30 48 DISPLAY D. W. TABLE
WS WALL SHLVG	18 D.	36 W.	84 * H.	

*DOES NOT INCLUDE STANDARDS, WOOD GROUNDS OR FINISHED END PANELS

* A.D.A DOOR CLEARANCES



*ACCESSIBILITY REQUIREMENTS MAY VARY WITH LOCAL JURISDICTIONS & APPROACH TO DOOR SWING



Fixture Plan
1/8" = 1'-0"

North

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Fixture Plan

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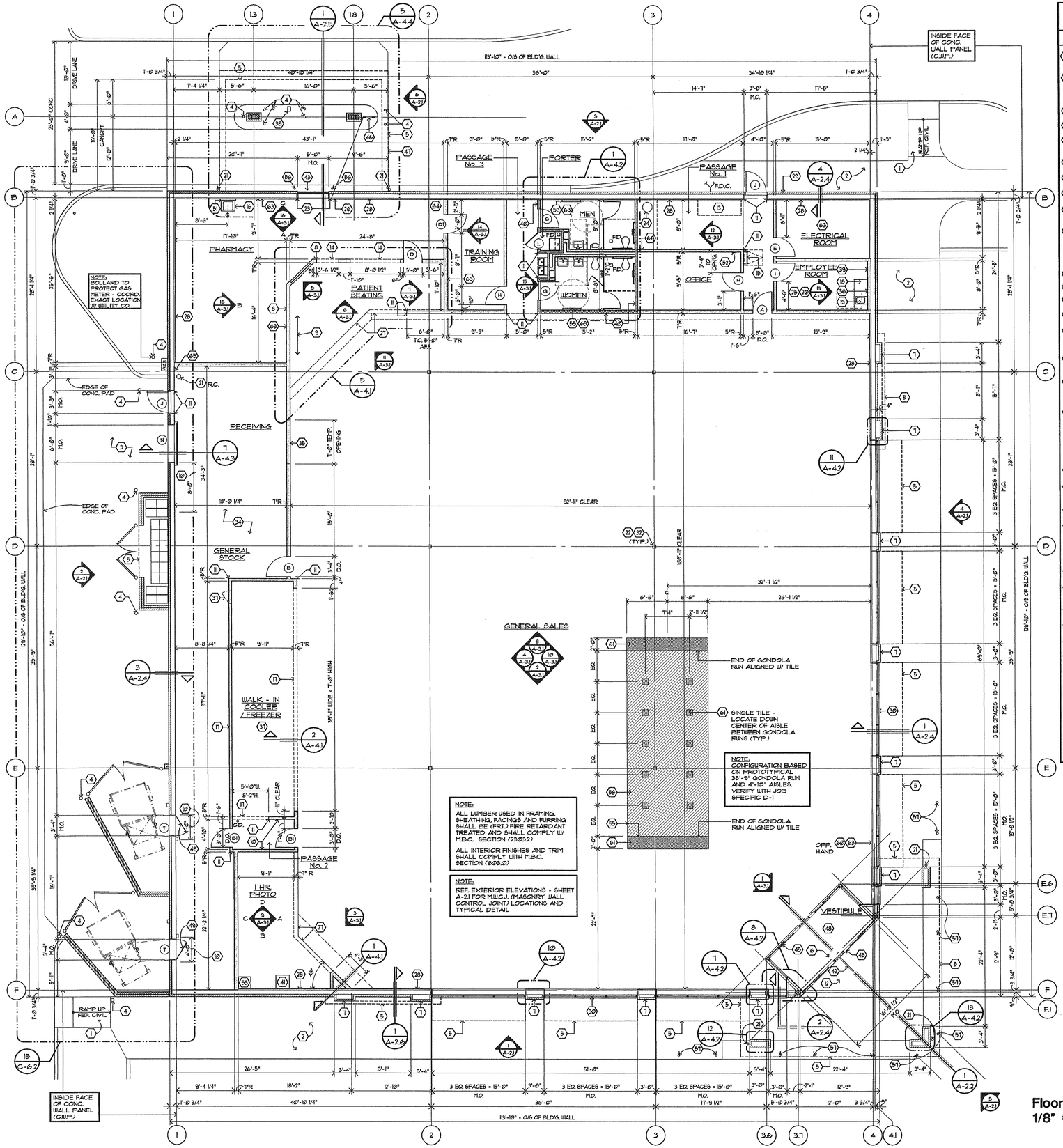

Floor Plan Key Notes

	DESCRIPTION	DET.
1	ACCESSIBLE RAMP (TOWARD ALL PARKING) - WITH DETECTABLE SURFACE - SEE B/C-0.0	C0.1
2	CONCRETE WALK W/ TOOLED CONTROL JOINTS & BROOM FINISH. C.J. AT 5'-0" O.C. (EACH WAY) - 1/2" PREMOLD EXP. JT. AT 20'-0" O.C. MAX.	C0.0
3	RECEIVING PLATFORM.	C6.2
4	PIPE BUMPER GUARDS	
5	LINE OF AWNING ABOVE. SEE EXTERIOR ELEVATIONS ON SHT. A-2.1 AND SECT. 1/A-2.3.	A 2.3
6	GWB CEILING AT ENTRANCE	1/ A2.2
7	BRICK PILASTER	
8	PHARMACY WALL DETAILS. SEE SHT. A4.1	
9	DIRECTION OF PLANK FLOORING USE FEATHERING FELT TO LEVEL PANELS W/ VCT	
10	1/4" THICK X 48" HIGH MASONITE WAINSCOT WITH J-BEAD TOP. NOTE: AT COMPACTOR DOOR, CUT MASONITE 5" BACK FROM MASONRY OPENING TO CLEAR DOOR FLANGE	3/ A4.2
11	CORNER GUARD AT ALL OUTSIDE CORNERS.	6/ A4.2
12	ENTRANCE SLAB.	1/ A2.2
13	SPRINKLER RISER AREA.	
14	RUN TILE THROUGH OPENING INTO ROOM 4" MINIMUM.	
15	LADDER WITH PRP ON WALL AND ROOF SCUTTLE. W/ CLEAR PATH, FLOOR TO ROOF. (COORDINATE W/ ROOF FRAMING)	3.6/ 8-0.2
16	PHARMACY SINK, 4 CABINET FURNISHED BY WALGREENS, (SEE ENGINEERING DRAWING.)	
17	HOLD TILE INSTALLATION BACK ONE ROW PRIOR TO COOLER INSTALLATION. INSTALL LAST ROW OF TILE AFTER COOLER IS INSTALLED	
18	PLASTIC LAMINATE COUNTER AND CABINETS. CONTRACTOR TO PURCHASE FROM MYERS INDUSTRIES (217-735-1241). SEE SHT'S D-1 AND A-3.1 FOR LENGTH. SUPPORT COUNTER ON CABINETS BELOW AND WITH CLEATS ALONG WALL. LEAVE 32" CLEAR FOR REFRIGERATOR.	
19	STAINLESS STEEL SINK. (SEE PLUMBING DRAWINGS.)	
20	SEE FIXTURE PLAN (SHT. D-1) FOR ROOM FURNISHGS. IN EMPLOYEE ROOM.	
21	INTERIOR ROOF CONDUCTOR TO STORM SEWER.	
22	8-AND STEEL COLUMNS EXPOSED IN SALES AREA TO REMOVE BLEMISHES IN FACTORY APPLIED PRIMER. REPRIME AND PAINT. COLUMNS SHALL BE SMOOTH AND UNIFORM FOLLOWING FINAL PAINTING.	
23	WALL CHASE IN FURRING FOR WIRING. SEE DRIVE-THRU DETAILS.	
24	WATER HEATER. (SEE MECH. DRAWINGS.) ON PLATFORM + 7'-11" AFF. SEE D-D/A-3.1 FOR STRUCTURE	4/ A4.2
25	PANELING W/ VINYL COVERING ABOVE ON ALL WALLS.	1/ A44
26	OPENING FOR 2ND LANE CARRIER ABOVE. COORDINATE LINTEL.	
27	LINE OF FLOOR MATERIAL CHANGE.	
28	5/8" GWB OVER 1 5/8" VERTICAL FURRING REQUIRED WHERE EXPOSED IN GENL SALES, PHOTO, OFFICE, EMPLOYEE ROOM, TOILETS, TRAINING ROOM, + RX. ADDITIONAL AREAS REQUIRED W/ INSULATION OPTION SHELVED. SEE SPECS FOR MIN. "R" VALUES AND INSULATION OPTIONS.	
29	SLEVE THRU WALL FOR ELECTRICAL. PROVIDED BY ELECT. CONTR. MASONRY CONTR. TO INSTALL AND COORDINATE WITH ELECT. CONTR. STOREFRONT. SEE INTERIOR AND EXTERIOR ELEVATION.	2B/ A4.1
30	(N.A.).	
31	STAINLESS STEEL COLUMN WRAP, 48"H. PROVIDE ON ALL SALES AREA COLUMNS (BEAMS TOWARDS GONDOLAS).	
32	(N.A.).	
33	ALL STORAGE SHELVING, ETC BY WALGREENS. SEE SHT. D-1 FOR LAYOUT.	
34	LEAVE OUT PORTION OF GYP. BD. IN 1'-0"W X 7'-3"H HEADERED OPENING OPPOSITE RECEIVING DOOR AND 4'-0" MIN. FROM ANY OPENING) FOR PALLET DELIVERY OF FIXTURES. INFILL WALL AFTER DELIVERY.	
35	1/4" PLATE GLASS MIRROR LENGTH OF COUNTER, LESS 12" (FOR ELECTRICAL OUTLET SPACE) CENTER MIRROR WITH COUNTER LENGTH (6" EACH SIDE)	14/ A3.1
37	WALK-IN COOLER FURNISHED AND INSTALLED BY WALGREENS. ALL "ROUGH-IN" BY GENERAL CONTRACTOR. SEE MECHANICAL DRAWINGS FOR LOCATION. PROVIDE 24" x 36" HINGED ACCESS PANEL ABOVE COOLER WITH SILL HEIGHT AT 10' A.F.F. (ACCESS REQUIRED WHEN SURROUNDED BY WALLS).	
38	CUSTOMER STATION AT DRIVE-THRU.	A4.4
39	FURR OUT WALL FOR PLUMBING - ENTIRE LENGTH OF ROOM	
40	SOUND ATTENUATION BLANKETS, FULL LENGTH, HEIGHT, AND DEPTH OF WALL. REF. SHT. A-4.2	A4.2
41	SILVER RECOVERY UNIT (BY WALGREENS).	
42	GUIDE RAIL BY AUTOMATIC DOOR MANUFACTURER. INSTALLED BY G.C.	
43	PHARMACY DRIVE-THRU. SEE DETAILS ON SHEET A-4.4.	
44	(N.A.).	
45	AUTOMATIC SLIDING DOOR ENTRANCE (AS SHOWN)	8.9/ A4.3
46	2" DIAMETER X 30" LONG P.V.C. PIPE WITH CLEAN - OUT COVER IN FACE OF CURB 1" CONDUIT BACK TO WINDOW FOR CAR SENSOR.	
47	CONCRETE PAVEMENT 6" BELOW FINISHED FLOOR. SLOPE ADJACENT PAVEMENT TO MEET CONCRETE.	
48	FVC GRID AT ENTRANCE (BY WALGREENS)	
49	INSULATED H.M. DOOR AND FRAME BY GENERAL CONTRACTOR.	2/ C6.2 A4.3
50	(N.A.).	
51	PIPE CHASE - 28" W. USE 5/8" GWB ON 2 1/2" METAL STUDS FROM FLOOR TO CEILING. PROVIDE 3 PIECES OF 3/4" x 12" PLYWOOD BLOCKING, 28" W CENTERED AT 36", 59" AND 80" AFF. UNDER GWB FOR MOUNTING OF SINK CABINETS.	
52	OFFICE COMMUNICATIONS CABINET BLOCKING UNDER GWB TO BE MIN. 3/4" PLYWOOD X 48"W X 12"H WITH 6 AT 6'-8" AFF. USE STUD CAVITY AS CHASE.	
53	PHOTO SINK SEE PLUMBING DRAWINGS.	
54	(N.A.).	
55	LINE OF VCT COLOR CHANGE	
56	YELLOW DELINEATION POSTS AT DRIVE-UP WINDOW FASTEN TO CONCRETE WITH BOLTS	
57	SECURITY BOLLARD W/ GRAY POLYETHELENE COVER WHEN WALK ADJOINS DRIVE (USED WHEN PERIMETER BOLLARDS ARE ABSENT)	1, 5/ A4.4
58	VCT HALLMARK ACCENT COLOR #2	C-0.0 5-1.1
59	BABY CHANGING STATION. SEE TOILET DETAILS ON A-4.2	
60	SLAT WALL WITH BLACK INSERTS. FURNISHED BY WALGREENS.	
61	VCT HALLMARK ACCENT COLOR #3	
62	(N.A.).	13/ A4.2
63	PROVIDE BLOCKING BEHIND GWB. SEE INTERIOR ELEVATIONS AND TOILET ROOM DETAILS ON A-3.1 + A-4.2	13, 15/ A3.1
64	10 DRAWER FILE CABINET (SEE A3.1 FOR BLOCKING LOCATIONS FOR FASTENING OF CABINET TO WALL).	15/ A3.1
65	GAS PIPING- REF. SHEET M-1.1	
66	ALIGN WALL STUDS WITH PLATFORM FRAMING SEE A-3.1	

Partition Legend

SYMBOL	DESCRIPTION
7"C	6"X 22GA. MTL. STUDS, 24" O.C. TO ROOF DECK (SECURED TO ROOF FRAMING) WITH 5/8" GWB ON GENERAL SALES AREA SIDE TO TOP OF SOFFIT OR CEILING, ON OTHER SIDE TO ROOF DECK.
7"R	6"X 22GA. MTL. STUDS, 24" O.C. TO ROOF DECK (SECURED TO ROOF FRAMING) WITH 5/8" GWB ON BOTH SIDES UP TO ROOF DECK.
7"RF	6"X 22GA. MTL. STUDS, 24" O.C. TO ROOF DECK (SECURED TO ROOF FRAMING) WITH 5/8" FIRECODE GWB EACH SIDE TIGHT UP TO ROOF DECK. (MINIMUM 1 HOUR AS REQUIRED BY CODE).
5"C	3-5/8"X 22GA. MTL. STUDS, 24" O.C. WITH ALTERNATE STUDS SECURED TO ROOF FRAMING AND OTHERS TO STOP AT CEILING PROVIDE 5/8" GWB EACH SIDE UP TO CEILING ONLY.
5"R	3-5/8"X 22GA. MTL. STUDS, 24" O.C. TO ROOF DECK. (SECURE TO ROOF FRAMING) W 5/8" GWB ON EACH SIDE TO ROOF DECK.
5"RF	3-5/8"X 22GA. MTL. STUDS, 24" O.C. TO ROOF DECK (SECURED TO ROOF FRAMING) WITH 5/8" FIRECODE GWB EACH SIDE TIGHT UP TO ROOF DECK. (MINIMUM 1 HOUR AS REQUIRED BY CODE).
1'-2" C	TWO ROWS 3-5/8"X 22GA. MTL. STUDS 24" O.C. WITH ALTERNATE STUDS SECURED TO ROOF FRAMING AND OTHERS TO STOP AT CEILING. PROVIDE 5/8" MR GWB BOTH SIDES UP TO CEILING ONLY.
	PROVIDE SOUND ATTENUATING BLANKETS - REF. ENLARGED TOILET ROOM PLAN SHEET A-4.2

Vestibule

WHERE REQUIRED BY WALGREENS (SPECIFICALLY, BUT NOT LIMITED TO THE STATES OF MN, WI, CO, MI, MA, CT, RI, WESTERN NY, NORTHERN IN, AND NORTHERN OH, BORDERING THE GREAT LAKES.) PROVIDE A CEILING HIGH STOREFRONT VESTIBULE WITH PVC GRID MAT BY IN 1/2" RECESS WITH FLOOR DRAIN. ALL EXTERIOR AND INTERIOR DOORS SHALL BE AUTOMATIC.

Room Finish Schedule

REMARKS:
1) FIBERGLASS POLYESTER PANEL IN PORTER AREA FROM FLOOR TO 8'-0" A.F.F.
2) THESE ROOMS ARE NOT SHOWN ON CRITERIA BUT MAY BE INCLUDED IN SOME PROJECTS.
3) CONCRETE HARDENER/SEALER UNDER WALK-IN COOLER/ FREEZER.
4) BEHIND DOOR AND 1-HOUR PHOTO WALL.
5) FURNISH AND INSTALL VINYL BASE ON COSMETICS, PHOTO AND FRONT CHECK OUT CASEWORK. SEE SHEET D-1.
6) REQUIRED OVER METAL STUDS ONLY.

	ROOM # SPACES	VESTIBULE	GENERAL SALES	GENERAL STOCK	PHARMACY	PATIENT SEATING	PASSAGE #1	BATTLE ROOM	EMPLOYEE ROOM	PORTER	WOMEN'S TOILET	MEN'S TOILET	ELECT. RM/SPACE	OFFICE	PASSAGE #3	PASSAGE #5	ONE-HOUR PHOTO	TRAINING ROOM	GLASS CASE
FLOOR	VINYL COMPOSITION TILE		●			●		●		●				●	●	●	●	●	
	(VINYL REDUCER TO CONCRETE)																		
	3/4" EXT. GRADE PLYWD. PAINTED DEC'R. WHITE																		20
	SOLID VINYL PLANKING				●														
	CERAMIC TILE										●	●							
	CONCRETE HARDENER/SEALER			●			3						●						
	CARPETING (BY WALGREENS)				●				●										
	EXPOSED CONCRETE			●			3						●						
	UL TRA-LINK PVC GRID	●																	
	RUBBER																		20
BASE	VINYL BASE (ON GYP WALL BD ONLY) SEE REMARK 5	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	
	CERAMIC TILE										●	●							
	NONE																		20
WALLS	WATER RESISTANT GYPSUM WALLBOARD										●	●					●		
	GYPSUM WALLBOARD	●	●	6	●	●	●	●		●			●	●	●	●		●	
	CONCRETE PANEL			●															
	SLAT WALL (BY WALGREENS)		●																
	4'-0" HIGH MASONITE WAINSCOT (WHERE NOTED)			●													4		
	CERAMIC TILE				●														
	FIBERGLASS POLYESTER PANELS										●	●	●						
	VINYL WALL COVERING	●	●			●								●		●	●	●	
	4'-0" H. PANELING + WALL COVERING ABOVE								●										
CEILS	ACCOUSTICAL TILE		●		●						●	●	●	●	●	●		●	
	GYPSUM BOARD	●		●			●		●	●							●		20
	NONE - (EXPOSED STRUCTURE)					●		●											
PAINT	SEE INTERIOR ELEVATIONS		●		●	●	●		●	●				●	●	●			
	PHARMACY: HC-113 "EDGECOMB GRAY"				●														
	BACK-UP AREAS: BONE WHITE			●		●		●					●		●				
	SALES AREA COLUMNS: WHITE DOVE		●																
	DOORS AND FRAMES: BM-2112-30 "STONE BROWN"		●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	
	CEILING: DECORATOR WHITE	●					3	●	●	●	●	●	●						
	SOFFIT UNDERSIDE: WHITE DOVE		●		●												●	●	
	REMARKS	2		3							1	1							

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drawing:
Floor Plan

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:
A-1.1

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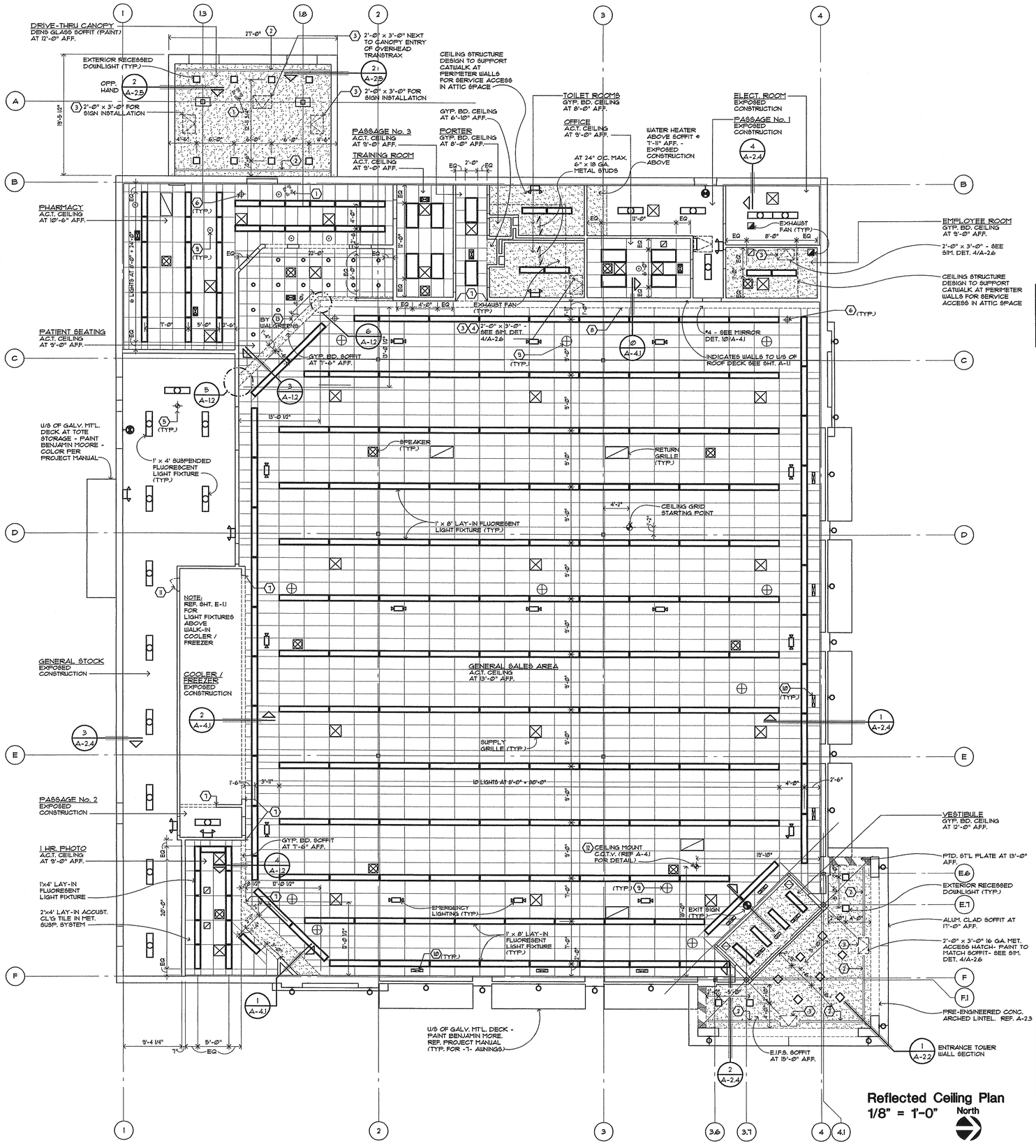


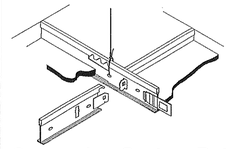
Reflected Ceiling Plan
1/8" = 1'-0" North

Legend

- SUPPLY AIR
- RETURN AIR
- FLUORESCENT LIGHTING - SEE LIGHTING SCHEDULE (DRAWING E0.1) FOR FIXTURES NOTED.
- INCANDESCENT LIGHTING - SEE LIGHTING SCHEDULE (DRAWING E1.1) FOR FIXTURES NOTED.
- PERSONAL VIEW MONITOR
- SPEAKER
- EMERGENCY LIGHTING
- EXIT LIGHTING
- WALL MOUNT LIGHT
- 19" CCTV DOME
- 10" CCTV MULTI-POSITION GLOBE

Reflected Ceiling Notes:

1. LIGHT FIXTURES SHALL BE CONTINUOUS AND UNINTERRUPTED BY COLUMNS.
2. SUPPLY AIR DIFFUSERS ARE TO BE LOCATED A MIN. OF 2'-0" AWAY FROM GENERAL SALES AREA LIGHTS.



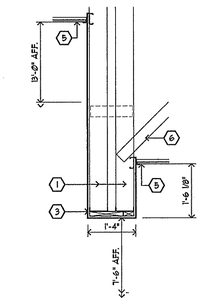
Suspension System Detail:

Detail Keyed Notes

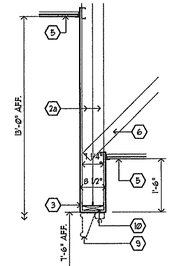
1. 6" METAL STUDS AT 24" O.C.
2. 3 5/8" METAL STUDS AT 24" O.C.
2a. (2) 3 5/8" METAL STUDS BACK-TO-BACK @ 24" O.C.
3. 5/8" GYP. BD.
4. LINE OF MIRRORS.
5. ACOUSTICAL CEILING TILE.
6. 6" METAL STUD BRACING AT 48" O.C. SECURE TO BUILDING STRUCTURE ABOVE.
7. 3 5/8" METAL STUD BRACING AT 24" O.C.
8. ALTERNATE CROSS BRACING - SEE DET. ON SHT. A-4.1.
9. PHOTO CORNICE
10. 1 1/4" x 20 GA. SHEET METAL UNDER GWB. IN FRONT EDGE OF PHOTO SOFFIT

Criteria Notes

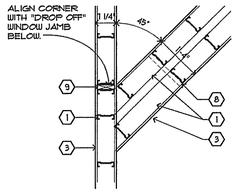
1. GENERAL SALES AREA CEILING SHALL BE A MINIMUM OF 13'-0" AFF. THERE SHALL BE A MINIMUM OF 2'-0" CLEARANCE TO THE BOTTOM OF ANY ROOF STRUCTURE. THIS IS FOR LIGHTING, SPRINKLER PIPING AND MECHANICAL EQUIPMENT.
2. THE LIGHT SPACING SHALL BE A MAXIMUM OF 9'-0" CENTER OF LIGHT FIXTURE TO CENTER LINE OF LIGHT FIXTURE FOR ALL CEILING HEIGHTS.
3. IN SALES AREA CEILING, THE DIMENSIONS FROM FACE OF SOFFIT (OR WALL) TO THE CENTER LINE OF THE 1'-0" WIDE LIGHT FIXTURE RUNNING PARALLEL TO SOFFIT (OR WALL) SHALL BE BETWEEN 1'-6" TO 2'-9"
4. IDENTIFY CEILING LAYOUT STARTING POINT TO ENSURE THAT LIGHT FIXTURES ARE CONTINUOUS AND UNINTERRUPTED BY COLUMNS.
5. SUPPLY AIR DIFFUSERS ARE TO BE LOCATED 2'-0" MINIMUM AWAY FROM GENERAL SALES AREA LIGHTS.
6. CEILINGS SHALL NOT BE USED FOR SUPPORTING ANY BUILDING INSULATION. ROOF CONSTRUCTION SHALL PROVIDE THE REQUIRED INSULATION VALUE. CEILING LIGHTS ARE TO BE WIRED TO BAR JOIST MEMBERS AT THE DIAGONAL CORNERS. DO NOT ATTACH CEILING COMPONENTS TO ROOF DECK!
7. ALL CEILING HEIGHTS, CEILING MATERIALS, AND LIGHT FIXTURE SPACING ARE AS SHOWN ON REFLECTED CEILING PLAN. ANY DEVIATION FROM THESE REQUIREMENTS MUST BE APPROVED BY WALGREENS IN WRITING.
8. PROVIDE LOCKABLE FASCIA ACCESS PANELS BEHIND ALL EXTERIOR SIGNAGE ON CANOPY. PROVIDE 2' x 3/4" FRT. PLYWOOD CATWALK IN CANOPY TO ASSIST IN ACCESS TO SIGNAGE AS REQUIRED.
9. LOCKABLE ACCESS PANEL REQUIRED IN ALL ROOMS WITH GWB CEILINGS
10. WHEN FLOOR PLAN HAS LIQUOR SALES, CEILING GRID IN LIQUOR SALES MUST ALIGN AND BE CONTINUOUS EXTENSION OF CEILING GRID IN GENERAL SALES.
11. LOCATE ACCESS PANELS AWAY FROM PUBLIC PHONES.



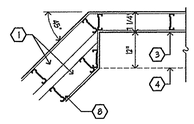
3 / A-1.2 **Detail** 1/2" = 1'-0"



4 / A-1.2 **Detail** 1/2" = 1'-0"



5 / A-1.2 **Detail** 1/2" = 1'-0"



6 / A-1.2 **Detail** 1/2" = 1'-0"

Reflected Ceiling Plan Keyed Notes

1. OPENING AND TRIM FOR DRIVE-THRU EQUIPMENT PENETRATION (REF. DAVIS SHOWN). SEE DRIVE-THRU DETAILS.
2. CONTINUOUS VINYL VENT W/ INSECT SCREEN
3. ACCESS PANEL WITH KEYED LOCK.
4. COORD. ACCESS PANEL LOCATION NOT TO INTERFERE WITH TOILET PARTITIONS BELOW.
5. GLOBE BEAM MOUNT (GBM) KIT AND CONDUIT FURNISHED AND INSTALLED BY ELECT. CONTRACTOR. CONTACT WREN AT (800) 881-2249. MOUNT GLOBE AT 10'-0" AFF.
6. PERSONAL VIEW MONITOR POSITIONED ON AISLE CENTERLINE
7. CASED OPENING. SEE INTERIOR ELEVATIONS
8. LINE OF MIRRORS
9. "SECURITY CAMERA" SIGNAGE HUNG AT THE 19" CCTV DOMES, 10" MULTI-POSITION GLOBES AND EXPOSED CAMERA. FURNISHED AND INSTALLED BY WALGREENS.
10. CENTER SUPPLY REGISTER IN CEILING TILE CLOSEST TO WINDOW CENTER
11. 24" x 36" ACCESS PANEL SILL AT 10'-0" AFF. FOR ACCESS ABOVE COOLER
12. CCTV MONITOR LOCATION OVER CHECK-OUT ENDSTAND. COORDINATE WITH D-1 PIXTURE PLAN. "VIDEO TAPING IN PROGRESS" SIGNAGE, HUNG AT THE PUBLIC VIEW MONITOR. FURNISHED AND INSTALLED BY WALGREENS.
13. WALL-MOUNTED 1/2 DOME MIRROR (MOUNT TOP OF MIRROR @ CEILING.)

NOTE:
SEE SHEET A-3.1 FOR CONTROL JOINT LOCATIONS

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Reflected Ceiling Plan

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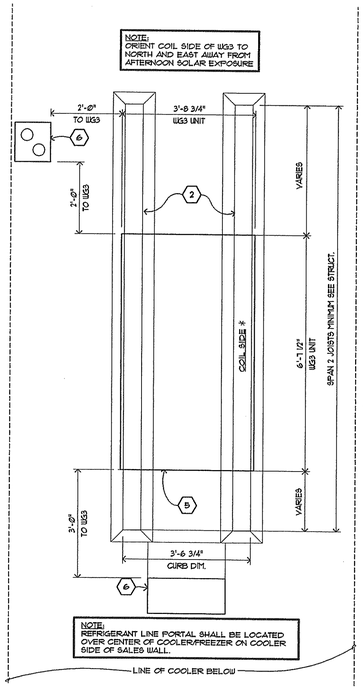


6 / A-1.3 **Plan - Roof Curb**
1/2" = 1'-0"

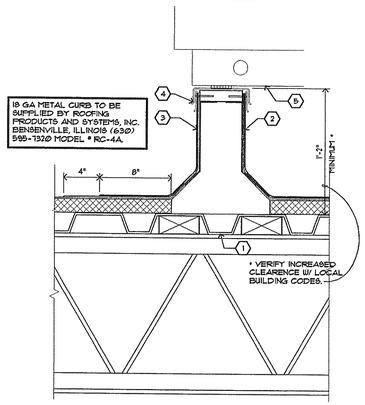
North

Keyed Notes

1. ROOF DECK.
2. PREFAB MT'L CURB WITH WOOD (2x6) NAILER. TOP OF RAIL TO BE LEVEL (REF 1/A-1.3)
3. MEMBRANE BASE FLASHING
4. METAL CAP FLASHING - VFY. ROOF TYPE FOR APPROPRIATE CAP
5. CONDENSING UNIT - SEE ENGINEERING DRAWINGS
6. PIPE CHASE (REFRIGERANT LINE PORTAL SHALL BE LOCATED OVER THE CENTER OF THE COOLER/FREEZER ON THE COOLER/FREEZER SIDE OF SALES WALL/SEE 3/M2.1)

Condensing Unit Weights

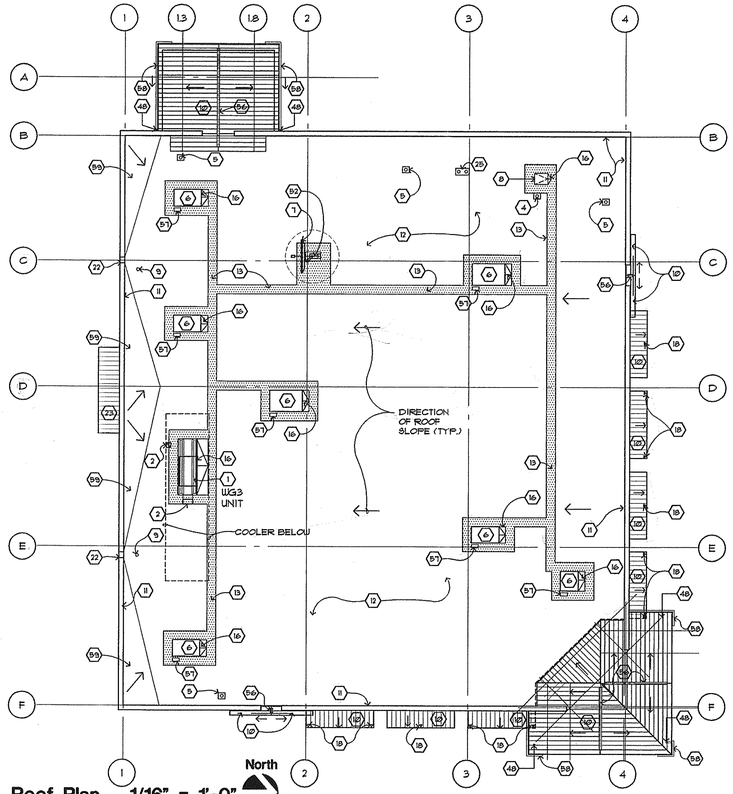
WG3	1630 LBS



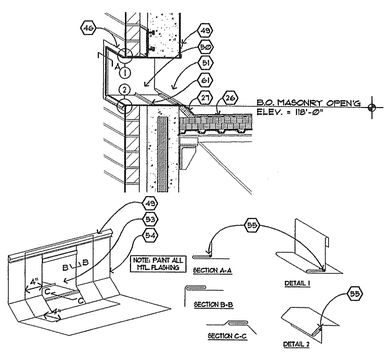
7 / A-1.3 **Section - Roof Curbs**
N.T.S.

Keyed Notes

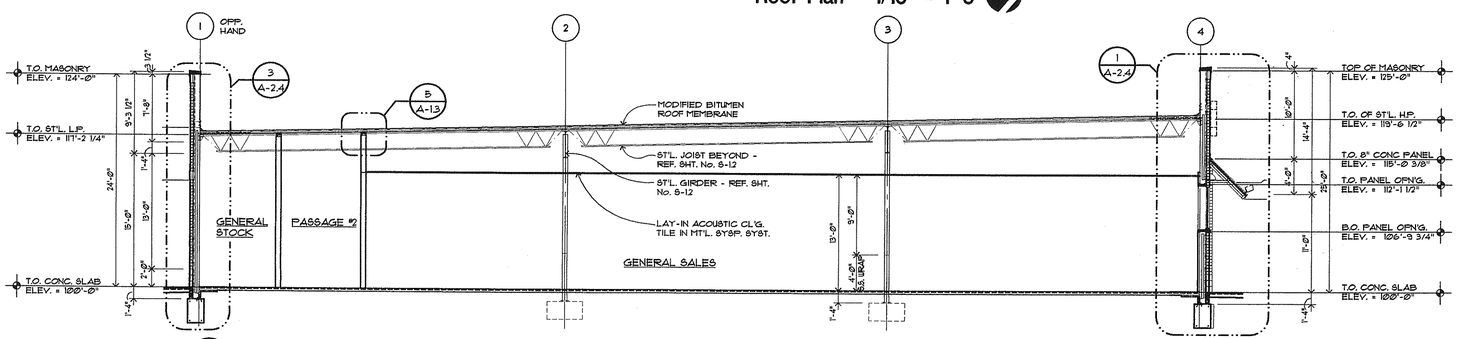
1	COMPRESSOR UNIT. SEE DETAIL A-1.3 AND SHEET M-1.1.	19	N/A
2	PIPE PENETRATION THROUGH ROOF DIRECTLY OVER COOLER/FREEZER. SEE DETAILS 3/A-1.4, AND 5/M2.1	20	N/A
3	-NA-	21	N/A
4	POST HYDRANT- SECURE TO STRUCTURE (SEE MECH. DWGS.).	22	OVERFLOW THRU-WALL SCUPPER 8" H. x 16" W. BOTT. OF OPENING AT 18'-0" A.F.F. - REF. 8/A-1.3
5	VENT THROUGH ROOF. SEE 8/A-1.4. SEE PLUMBING PLAN ON SHEET P1.1.	23	TOTE STORAGE ROOF. REF. DETAIL 8/C-6.2
6	ROOF-TOP HVAC UNIT - SEE DETAIL 6/A-1.4 AND SHEETS M1.1 & M2.1. - ALL ROOF TOP EQUIPMENT TO BE 10'-0" MIN. FROM PARAPET WALL (TYP.)	24	N/A
7	SATELLITE DISH ANTENNA. SEE SHEET S01 PROVIDE 6'-0" CLEARANCE AROUND SATELLITE DISH TO ANY ROOF TOP STRUCTURES. VERIFY CLEAR SITE LINE WHEN IN CLOSE PROXIMITY TO ROOF TOP UNITS. VERIFY DISH HAS CLEAR SIGHT TO SATELLITE (SEE ANTENNA ORIENTATION DETAILS, E42)	25	FLUE.
8	ROOF SCUTTLE. SEE DETAIL 6/S-02. COORDINATE JOIST SPACING TO LADDER LOCATION.	26	ROOF SYSTEM.
9	ROOF DRAINS WITH SLOPING SUMP PAN (CONNECT TO STORM SEWER SYSTEM). REF 7 & 12/A-1.4	27	CANT, AS REQUIRED. (STOP AT BOTH SIDES OF OPENING)
10	CANOPY ROOF. SEE EXTERIOR ELEVATIONS ON SHEET A2.1.	40	SEAL
11	PARAPET WITH SHEET METAL COPING. SEE SHEETS A2.1 & A2.3.	43	N/A
12	MODIFIED BITUMEN ROOF MEMBRANE. PROPER ROOF DRAINAGE WITH DISCHARGE TO STORM SEWER SYSTEM.	48	4" DIA. DOWNSPOUT
13	ROOF PADS TO BE PLACED AROUND ALL ROOF-TOP EQUIPMENT, ROOF HATCH, AND SATELLITE DISH.	49	GALVANIZED SHEET METAL COUNTERFLASHING.
14	N/A	50	STAINLESS STEEL THRU WALL LINER. BOTTOM OF OPENING LOWER THAN COMPLETED ROOF TO ENSURE DRAINAGE.
15	N/A	51	ROOF SIDE OF SCUPPER.
16	PROVIDE CRICKETS AT ALL CURBS.	52	IRRIGATION SENSOR MOUNTING. COORDINATE LOCATION PER MANUFACTURER RECOMMENDATIONS AND JOB SPECIFIC BUILDING ORIENTATION.
17	N/A	53	16"W x 8"H OPENING.
18	CANOPY MOUNTED ACCENT LIGHT FIXTURE - REF. ELECTRICAL DRAWINGS - TYP.	54	FLASHING AT ROOF SIDE OF SCUPPER
		55	SOLDER (TYP.).
		56	CONT. RIDGE VENT
		57	SPLASH BLOCK ON WALKWAY PAD BELOW WATER DISCHARGE ON ROOF. NOTE: IN LOCATIONS ENERGY RECOVERY UNITS (ERV) ARE USED, CONDENSATE SHALL BE PIPED TO AN APPROVED RECEPTOR.
		58	PRE-FIN. ALUMINUM GUTTER AND DOWNSPOUTS. SLOPE GUTTERS 1/16" / FT
		59	TAPERED ROOF INSULATION - SLOPE 1/2" PER FOOT MIN.
		60	N/A
		61	GRAVEL STOP.



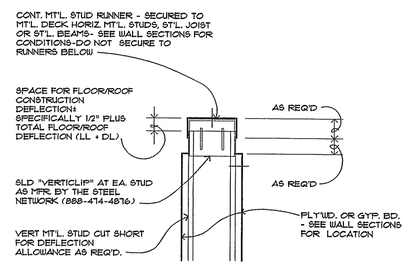
Roof Plan **1/16" = 1'-0"**



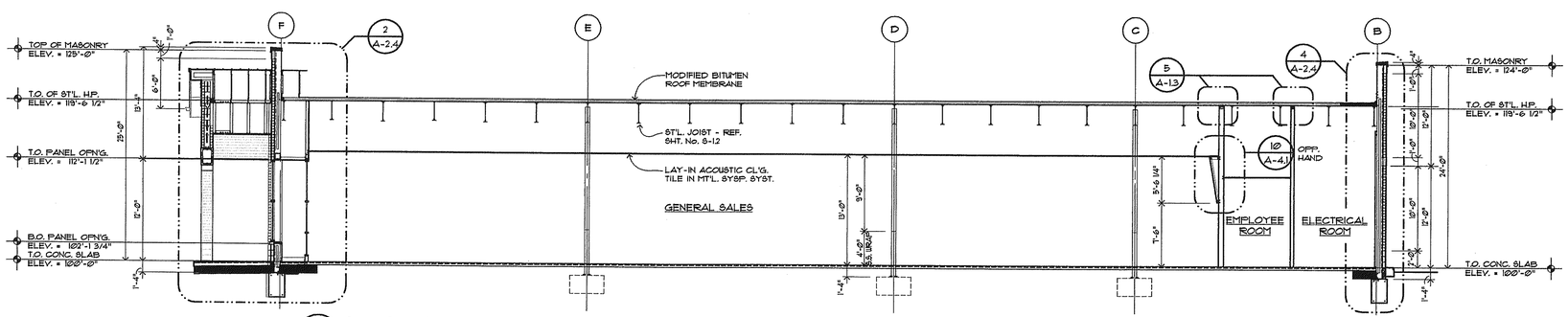
8 / A-1.3 **Detail - Scupper**
N.T.S.



2 / A-2.1 **Tranverse Building Section**
1/8" = 1'-0"



5 / A-1.3 **Roof Deflection Slip Connection Detail**
3" = 1'-0"



1 / A-2.1 **Longintudinal Building Section**
1/8" = 1'-0"

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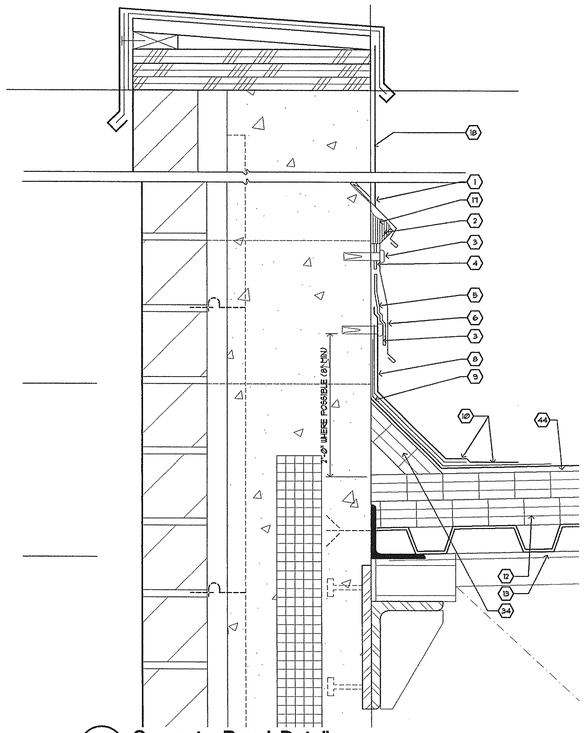
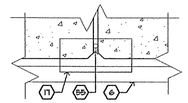
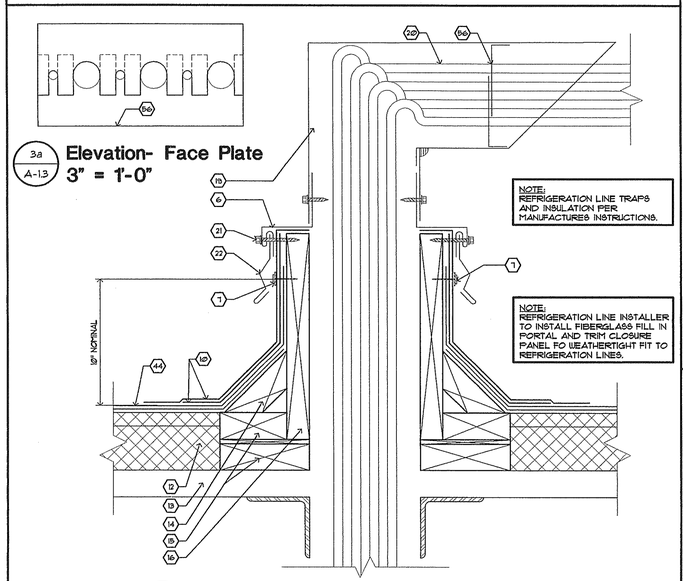


2 / A-2.5 **Concrete Panel Detail**
3" = 1'-0"

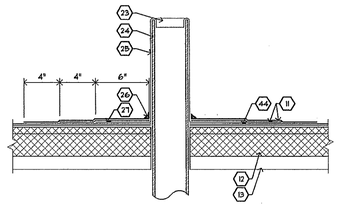


2a / A-1.3 **Pre-Cast Conc. Panel Joint Plan Detail**
1 1/2" = 1'-0"

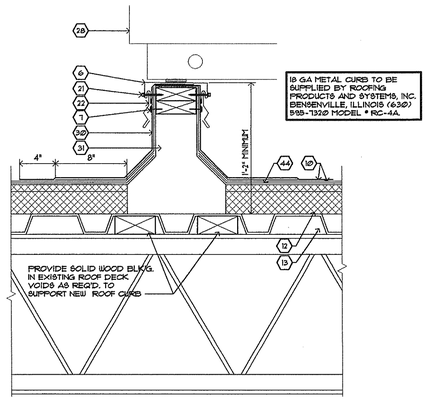


3 / A-1.3 **Refrigeration Pipe Penetration Through Roof**
3" = 1'-0"

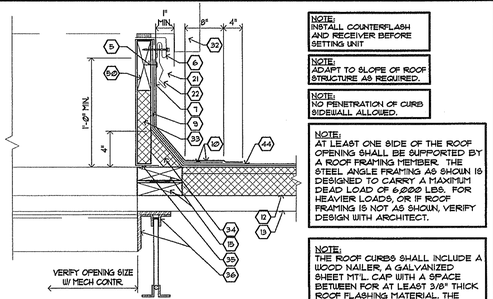
3a / A-1.3 **Elevation- Face Plate**
3" = 1'-0"



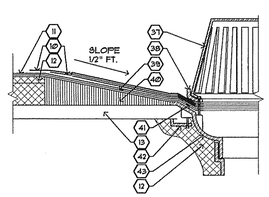
4 / A-1.3 **Plumbing Vent Detail**
N.T.S.



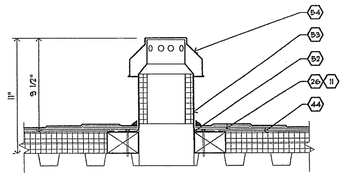
5 / A-1.3 **Section @ Roof Curbs**
N.T.S.



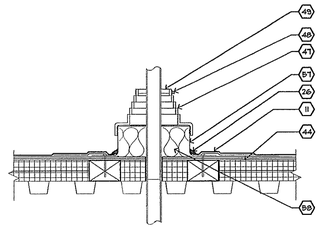
6 / A-1.3 **Section @ HVAC Roof Curb**
N.T.S.



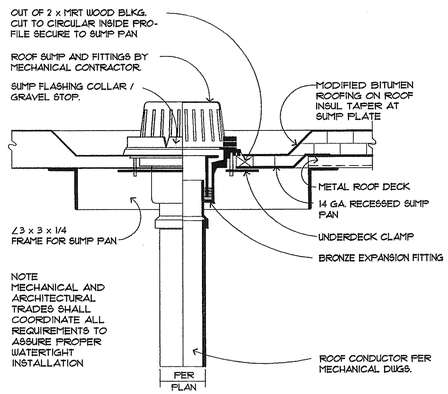
7 / A-1.3 **Section @ Roof Sump**
N.T.S.



8 / A-1.3 **Flat Roof Vent Detail**
1 1/2" = 1'-0"



9 / A-1.3 **Single Pipe Portal Detail**
1 1/2" = 1'-0"



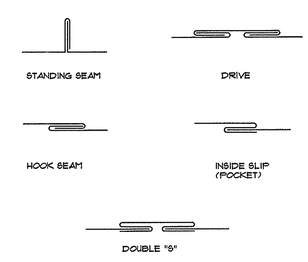
7a / A-1.3 **Typ. Roof Sump with Overflow Detail N.T.S.**

NOTE:
ROOF DETAILS SHOWN APPLY TO MODIFIED BITUMEN ROOFING. IF AN ALTERNATE ROOFING SYSTEM (SEE PROJECT MANUAL) IS PROPOSED, THE DETAILS MUST BE MODIFIED TO COMPLY WITH THE ROOFING MANUFACTURES RECOMMENDATIONS AND WALGREENS ROOFING CONSULTANTS REQUIREMENTS.

Keyed Notes

1. ELASTOMERIC COATING ALLOWED ON CONCRETE PANEL ONLY.
2. INSTALL POLYURETHANE SEALANT AND TOOL TO FACILITATE WATER RUN-OFF.
3. EXPANDING SHANK GASKETED FASTENERS WITH WASHERS
4. COMPRESSIBLE ELASTOMERIC TAPE TO SPAN IRREGULARITIES.
5. SEAL TOP OF FLASHING WITH A 3-COURSE OF VERTICAL GRADE ROOF CEMENT AND REINFORCEMENT FABRIC.
6. SHEET METAL COUNTERFLASHING RECEIVER. SET BEFORE UNIT - BY ROOFING CONTRACTOR.
7. FASTENERS APPROX. 8" O.C.
8. 2" WIDE HOLD-DOWN CLEAT 32" O.C.
9. PARAPET MEMBRANE, SHEATHING, AND BUILDING PAPER. BUILD OUT TO EXTERIOR WALL PLANE.
10. MULTIPLE-PLY MEMBRANE BASE FLASHING (8" MIN. HEIGHT).
11. MULTIPLE-PLY MODIFIED MEMBRANE STRIPPING.
12. (2) LAYERS RIGID INSULATION
13. 1 1/2" MT'L. ROOF DECK.
14. WOOD CANT FASTENED TO NAILERS.
15. TREATED WOOD NAILERS.
16. BEVEL CUT TOP OF WOOD CURB TO DRAIN.
17. 8" WIDE SURFACE MOUNT COUNTER FLASHING. SAW CUT IN CONCRETE PANEL AT PANEL JOINT.
18. MEMBRANE FLASHING REQUIRED ON THE BACK OF MASONRY PARAPETS FROM UNDER COPING TO OVERLAP SHEET METAL COUNTERFLASHING.
19. INSULATE VOID TO PREVENT CONDENSATION.
20. SLOPE PIPES DOWN AND AWAY FROM HOOD.
21. HIGH-DOMED, CAPPED, GASKETED FASTENERS (APPROX. 18" O.C., DEPENDING UPON WIND ZONE & LOCAL CONDITIONS; MINIMUM TWO FASTENERS PER SIDE).
22. REMOVABLE SHEET METAL COUNTERFLASHING.
23. TOP OF FLASHING CAPPED OR ROLLED INTO PIPE APPROX. 1" (25MM).
24. PLUMBING VENT STACK.
25. SOFT METAL PIPE FLASHING.
26. ROOF CEMENT OR SEALANT AT PENETRATION TO MEMBRANE JUNCTURE.
27. SET FLANGE IN ROOF CEMENT. PRIME FLANGE BEFORE STRIPPING.
28. CONDENSING UNIT. SEE ENGINEERING DRAWINGS.
29. METAL CAP FLASHING.
30. 2-PLY FELT FLASHING.
31. PREFABRICATED METAL CURB WITH WOOD (2X6) NAILERS. TOP OF RAIL TO BE LEVEL.
32. H.V.A.C. UNIT (SEE M2.1 FOR DETAIL).
33. PRE-FAB METAL CURB W/ WOOD NAILER (BY MECH CONTR)- ROOF CONTR TO INSTALL VERT. OUTSIDE RIGID INSUL FLUSH W/ NAILER IF NOT FURNISHED W/ CURB
34. RIGID INSULATION FIBER CANT AND TWO PLY FELT FLASHING OR AS REQUIRED PER ROOFING MANUFACTURER SPECIFICATIONS.
35. SEAL EXPOSED ROOF DECK EDGES WITH GALVANIZED SHEET METAL AND SEAL ALL AROUND.
36. SEE STRUCTURAL DRAWINGS FOR STEEL SIZING.
37. DRAIN STRAINER.
38. CLAMPING RING.
39. 30" SQUARE MINIMUM, 2¾ LB. TO 4 LB. LEAD OR COPPER FLASHING SET ON FINISHED ROOF IN ROOF CEMENT, PRIME TOP SURFACE BEFORE STRIPPING.
40. TAPERED INSULATION.
41. MEMBRANE FIELD PLIES, METAL FLASHING AND STRIPPING PLIES ALL EXTEND UNDER CLAMPING RING.
42. DECK CLAMP.
43. DRAIN BOWL.
44. MULTIPLE-PLY MODIFYIED BITUMEN ROOF MEMBRANE
45. CANT, AS REQUIRED.
46. ABS COVER.
47. EPDM CAP, SIZE AS REQUIRED.
48. SS CLAMP.
49. ADAPTER RING AS REQUIRED.
50. 5/4 x 6 NAILER
51. FLASHING AND WEEP HOLES ABOVE COUNTER-FLASHING
52. METAL SLEEVE THROUGH DECK, BY CONTRACTOR.
53. INSULATED LINER: "14626-1 PORTAL PLUS VENT W/INSECT SCREEN SET IN ROOFING CEMENT
54. BACKER ROD AND SEALANT W/ FOAM INSULATION (TYP. AT ALL JOINTS).
55. FACE PLATE
56. "ALUMI-FLASH" BASE SET IN ROOF CEMENT
57. 11" H PIPE PORTAL PLUS SYSTEM.

Coping Details



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drawing:

Roof Details

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A-1.4

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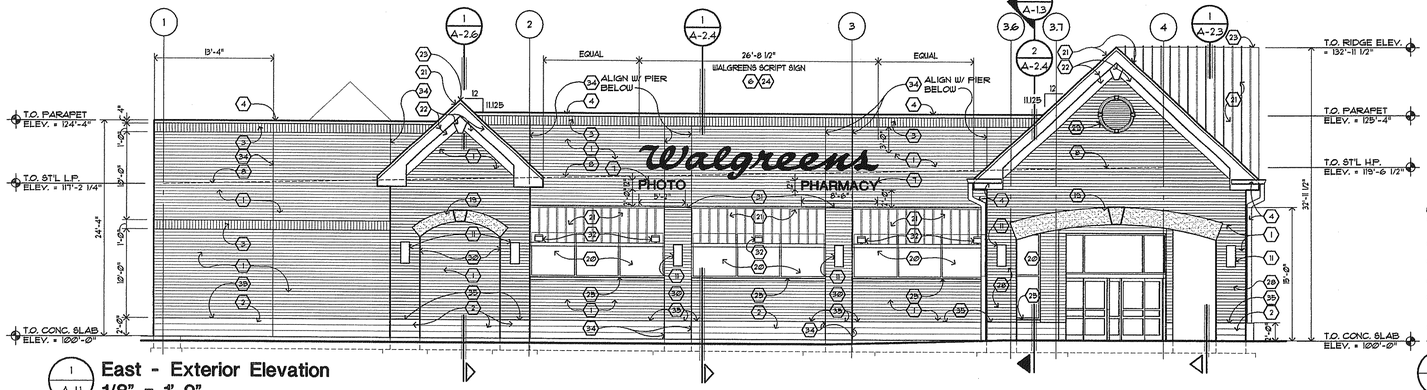
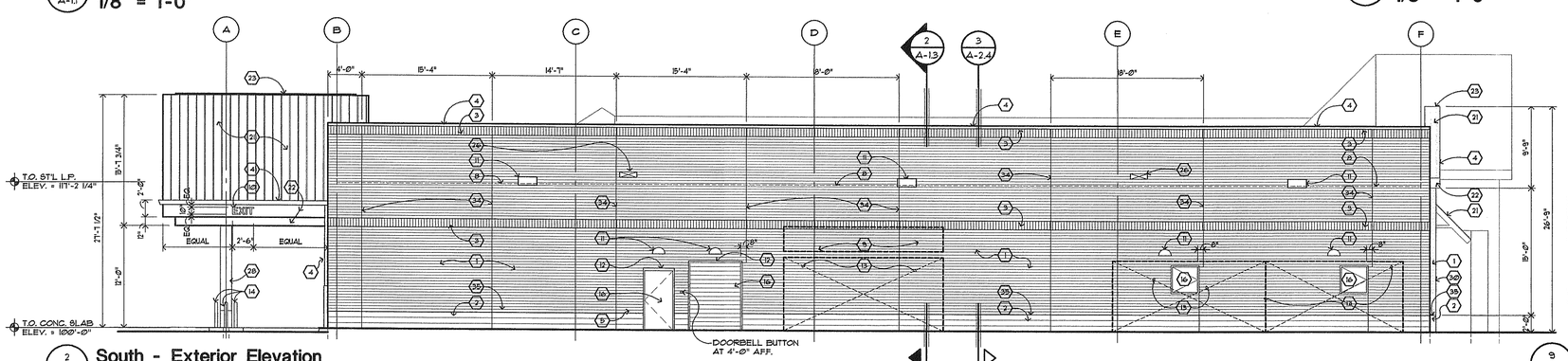
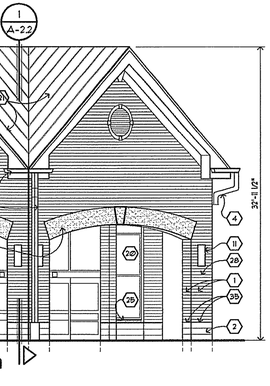


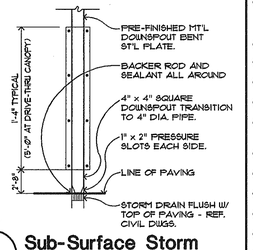
1 / A-1.1 **East - Exterior Elevation**
1/8" = 1'-0"



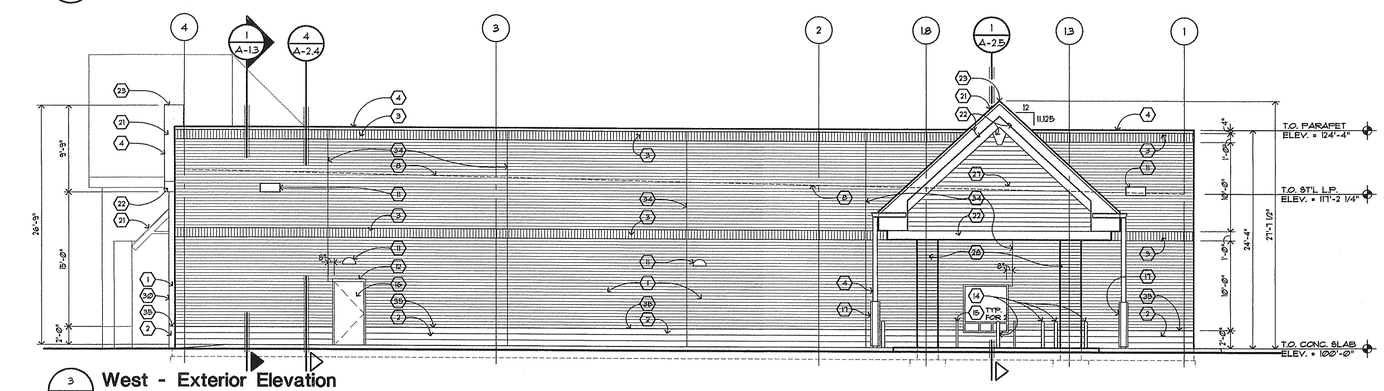
2 / A-1.1 **South - Exterior Elevation**
1/8" = 1'-0"



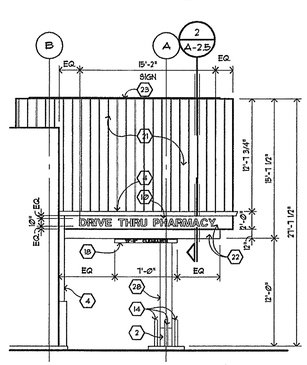
5 / A-1.1 **Tower Elevation**
1/8" = 1'-0"



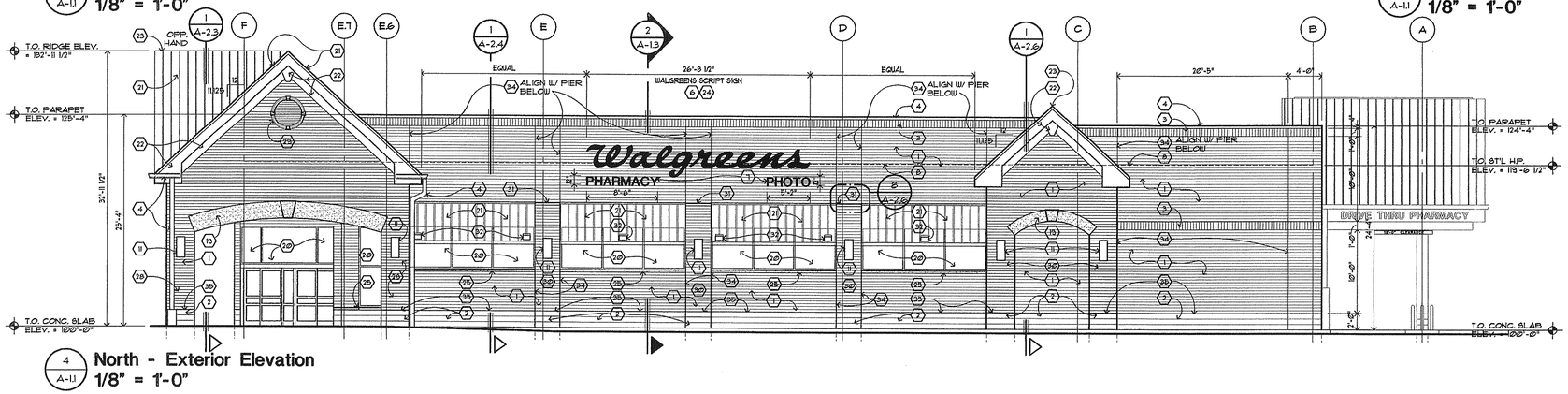
9 / A-2.1 **Sub-Surface Storm Drainage Conn.** N.T.S.



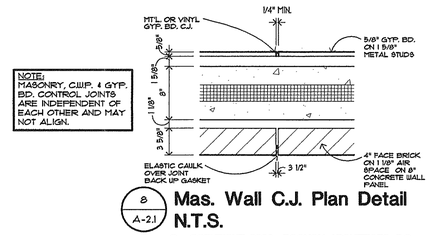
3 / A-1.1 **West - Exterior Elevation**
1/8" = 1'-0"



6 / A-1.1 **Elevation at Drive-Thru**
1/8" = 1'-0"



4 / A-1.1 **North - Exterior Elevation**
1/8" = 1'-0"



NOTE: MASONRY, C.I.U.P. & GYP. BD. CONTROL JOINTS ARE INDEPENDENT OF EACH OTHER AND MAY NOT ALIGN.

8 / A-2.1 **Mas. Wall C.J. Plan Detail**
N.T.S.

Exterior Elevations Keyed Notes

1. FACE BRICK. (UTILITY SIZE - REF. PROJECT MANUAL) NO MITERED CORNERS AT ENTERANCE PIERS. USE 135° SPECIAL BRICK SHAPE
2. CHISELED MASONRY UNITS - REF. PROJECT MANUAL
3. FACE BRICK. (UTILITY SIZE) SOLDIER COURSE W/ 1/2" PROTRUSION FROM WALL.
4. PREFINISHED SHEET METAL COPING, GUTTERS AND DOUNSPOUTS. TIE DOUNSPOUTS TO STORM SYSTEM. GUTTERS AT DRIVE-THRU TO MATCH ROOF COLOR - REF. CIVIL DWGS. & 9/A-2.1
5. WALL HYDRANT
6. WALGREENS SCRIPT SIGN. SEE DETAILS ON SHEET A-5.2.
7. INDIVIDUAL LETTER SIGN. SEE DETAILS ON SHEET A-5.2.
8. ROOF LINE.
9. TOTE ROOF. SEE DETAILS ON SHEET C-6.2.
10. INDIVIDUAL LETTER SIGN. SEE DETAILS ON SHEET A-5.2.
11. WALL-MOUNTED LIGHT. SEE ELECTRICAL DRAWINGS.
12. RAIN SHIELD.
13. TRASH COMPACTOR AND TOTE ENCLOSURE. SEE DETAILS ON SHEET C-6.2.
14. PIPE BOLLARD, REF DETAIL 12/C6.0
15. FLEXIBLE DELINIATION POST.
16. MT'L. DOORS AND FRAMES - SEE DOOR SCHED. - PAINT TO MATCH BRICK.
17. 1/8" THICK BENT STEEL PLATE (TO PROTECT DOUNSPOUT) BOLTED TO MASONRY. REF 9/A-2.1
18. "CLEARANCE" SIGN. SEE DETAIL ON SHEET A-5.2.
19. PRECAST CONCRETE ARCH WITH KEYSTONE - REF. WALL SECTIONS
20. 1" INSULATED GLASS
21. STANDING SEAM METAL ROOF.
22. ALUMINUM CLAD TRIM BOARD - UNDERSIDE OF CANOPY REF. PROJECT MANUAL FOR COLOR
23. CONT. RIDGE VENT
24. BOTTOM OF LOWER CASE LETTERS TO BE A MINIMUM OF 18" BELOW ROOF LINE ; OR SIGN TO CONNECT TO A RACEWAY MOUNTED ON THE BACK OF THE PARAPET W/ AN ELECTRICAL CONNECTION WHIP TO A SINGLE ROOF PORTAL
25. PRECAST STONE SILL - REF. 13/A-2.6
26. ROOF OVERFLOW SCUPPERS.
27. SOLID VINYL DOUBLE 4" LAP SIDING TO MATCH BRICK - REF. PROJECT MANUAL
28. BRICK COLUMN.
29. 3'-6" DIA. DECORATIVE PRE-FINISHED ALUMINUM CANOPY VENT BY FYPON OR APPROVED EQ. COLOR TO MATCH PAC-CLAD "ALMOND"
30. MASONRY PILASTER
31. PRECAST STONE CAP TERMINATING MASONRY PIER BELOW WALGREENS SCRIPT SIGN. REF. 8/A-2.6
32. WALL ACCENT LIGHT - SEE ELECTRICAL DRAWINGS
33. N.A.
34. CONTROL JOINT W/ BACKER ROD AND SEALANT - COLOR TO MATCH ADJACENT MATERIAL - REF. 8/A-2.1 THIS SHEET
35. 1" RAKE JOINT W/ BACKER ROD AND SEALANT - COLOR TO MATCH ADJACENT MATERIAL

Allowable Sign Area Calculations:

NORTH ELEVATION:	
"WALGREENS" CHANNEL LETTER SIGN 26'-8 1/2" LENGTH	102.10 S.F.
"PHARMACY" CHANNEL LETTER SIGN 12" x 8'-6"	8.50 S.F.
"PHOTO" CHANNEL LETTER SIGN 12" x 5'-0"	5.00 S.F.
"DRIVE THRU PHARMACY" SIGN 10" x 15'-2"	N/A
PROVIDED NORTH SIDE SIGN AREA:	115.60 S.F.
ALLOWABLE NORTH SIDE SIGN AREA:	136.00 S.F.
EAST ELEVATION:	
"WALGREENS" CHANNEL LETTER SIGN 26'-8 1/2" LENGTH	102.10 S.F.
"PHARMACY" CHANNEL LETTER SIGN 12" x 8'-6"	8.50 S.F.
"PHOTO" CHANNEL LETTER SIGN 12" x 5'-0"	5.00 S.F.
PROVIDED EAST SIDE SIGN AREA:	115.60 S.F.
ALLOWABLE EAST SIDE SIGN AREA:	136.00 S.F.
SOUTH ELEVATION:	
"EXIT" 10" x 2'-6"	N/A
PROVIDED SOUTH SIDE SIGN AREA:	0.0 S.F.
ALLOWABLE SOUTH SIDE SIGN AREA:	0.0 S.F.
WEST ELEVATION:	
PROVIDED WEST SIDE SIGN AREA:	0.0 S.F.
ALLOWABLE WEST SIDE SIGN AREA:	0.0 S.F.
TOTAL BUILDING SIGN AREA:	231.20 S.F.
TOTAL BUILDING SIGN AREA:	272.00 S.F.
FREESTANDING SIGNAGE:	
WALGREENS SIGN:	
PRIMARY (4'-4 1/2" x 5'-1 1/2")	22.42 S.F.
LED READERBOARD (8'-8" x 2'-8")	23.11 S.F.
TOTAL FREESTANDING SIGNAGE:	45.53 S.F.
ALLOWABLE FREESTANDING SIGNAGE:	50.00 S.F.
TOTAL PROJECT SIGNAGE:	216.13 S.F.
TOTAL ALLOWED PROJECT SIGNAGE:	322.00 S.F.

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drawing:

Exterior Elevations

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checked: R.J.C.
approved: R.J.C

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sheet:

A-2.1

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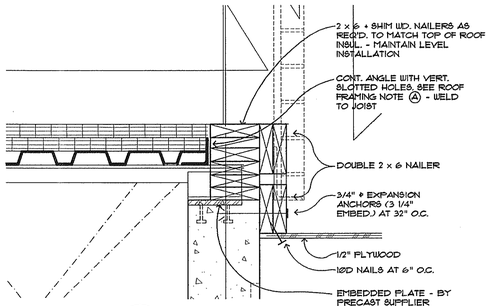
NOTE:
PRE-FIN. MT'L. ROOFING SUPPLIER TO PROVIDE ALL FLASHINGS AND CLOSURES REQ'D. FOR WEATHER TIGHT CONSTRUCTION



2 / A-2.2 **Wall Section**
1 1/2" = 1'-0"

T.O. PLY'WD. ELEV. = 132'-11 1/2"

T.O. MASONRY ELEV. = 118'-8"

32'-11 1/2"

PRE-FIN. MT'L. COPING AND PARAPET WALL - BEYOND

PAC-CLAD PRE-FINISHED MT'L. ROOFING ON 30# FELT ON 3/4" FRT. PLY'WD.

SINGLE-PLY BASE FLASHING UNDER METAL PANEL

(2) CONT. 2 x 6 FRT. WD. NAILER - SECURED TO WT'S W/ 1/2" ø STUD BOLTS AT 24" O.C.

MODIFIED BITUMEN ROOF MEMBRANE ON (2) LAYERS RIGID INSUL. ON 1 1/2" MT'L. ROOF DECK

TOP OF ST'L. ELEV. VARIES FROM ELEV. = 119'-6 1/2" TO 119'-2 1/4"

2 x WOOD BLOCKING - ROOF DECK SUPPORT AT TRUSS

WT TRUSS SUPPORT W/ 1/2" ø STUD BOLTS AT 24" O.C. - REF. ROOF FRAMING NOTE (J)

ROOF DEFLECTION SLIP CONN. - REF. 5/A-1.3

PROVIDE LIGHTGAUGE CONN. BY L.G. CONTR. - AT EA. VERT. STUD TO CONT. L 5 x 3 1/2 x 5/16

CONT. L 5 x 3 1/2" x 5/16" (LLV) WELDED TO JOIST TOP CHORD

GENERAL CONTRACTOR TO PROVIDE GENERAL EXTENSION FOR CCTV MONITOR MOUNTING BRACKET

LAY-IN ACOUST. CL'G. TILE IN MT'L. SUSP. SYST.

TYPE "X" 5/8" GYP. BD. ON 3 5/8" MT'L. FRAMING AT 24" O.C.

9'-5" (TO END OF GIRDER)

2 / A-2.2

LIGHT GA. CLIP BY LIGHT GA. CONTR.

ST'L. JOIST - SEE ROOF ST'L. FRAMING PLAN

7'-1 1/2" (TO FACE OF ANGLE)

8'-7 1/2" (TO WT ø)

4 1/4"

3 3/4"

3 1/2"

1/4"

T.O. PRECAST CONC. ELEV. = 119'-1 1/4"

PRECAST CONCRETE BEAM - BY PRECAST SUPPLIER

DOVETAIL SLOTTED INSERTS @ 24" O.C.

3 5/8" x 20 GA MT'L STUD SOFFIT FRAMING AT 24" O.C. - SECURE TO TRUSSES ABOVE.

E.I.F.S. SOFFIT ON 1" RIGID INSUL. ON 5/8" EXT. GYP. BD. ON MT'L. FRAMING SYST. (COLOR: WHITE)

T.O. MASONRY AT ENTRANCE ELEV. = 116'-4"

3'-9"

FACE BRICK (UTILITY SIZE) ON 1 1/8" AIR SPACE ON 8" CONC. WALL PANEL

ADJUSTABLE MASONRY ANCHORS AT 16" O.C. VERT. AND 24" O.C. HORIZ. (TYP.)

EMBEDDED PLATE - BY PRECAST SUPPLIER

CONT. L BRICK SUPPORT - SEE ROOF FRAMING NOTE (G) - PAINT TO MATCH BRICK

19'-0"

4'-6"

6"

1'-0"

PAC-CLAD PRE-FINISHED MT'L. ROOFING ON 30# FELT ON 3/4" FRT. PLY'WD.

PRE-ENGINEERED GIRDER TRUSS

1/2" FRT. STRUCTURAL I PLY'WD SHEATHING AT TRUSS BOTTOM CHORD.

TRUSS CONNECTION BY LIGHT GAGE MANUF. - TYP.

4 / A-2.3

PROVIDE 4" WIDE OPN'G. IN PLY'WD. - ALIGN W/ SOFFIT VENT BELOW - PROVIDE MT'L. STUD BLK'G. AS REQ'D.

CONT. ALUM. VENT STRIP - "ALCOA" MOD. No. 79 - VENT-A-STRIP OR EQ. FREE AREA = 9.9 SQ. IN PER LINEAL FT. (PRE-FIN COLOR: WHITE)

3 5/8" MT'L. NAILER (TYP.)

1'-2"

5" PREFIN. MT'L GUTTER - REF. PROJECT MANUAL FOR PAC-CLAD COLOR

4'-0"

1'-0"

NOTE:
SEE ELECTRICAL DRAWINGS FOR LIGHTING LOCATIONS AND A-1.2 & A-1.3 FOR VENTING LOCATIONS.

BOTT. OF PRECAST CONC. ARCH HP. ELEV. = 113'-0"

B.O. CONCRETE PANEL ELEV. = 112'-2 1/8"

CONC. ARCH BEARING ELEV. = 111'-4"

17'-0"

19'-0"

PRECAST CONC. ARCH - BEYOND

FACE BRICK (UTILITY SIZE) COLUMN ENCLOSURE - BEYOND - FIELD COLOR

NOTE:
MASONRY CANOPY COLUMN IS SHOWN AT 45° ANGLE

2'-0" MASONRY WAINSCOT

T.O. CONC. SLAB ELEV. = 100'-0"

2T / A-4.1

VINYL WALL COVERING - BEYOND

1/4" SHIM ø SEALANT (TYP. AT GLASS FRAME PERIMETER)

1" INSUL. GLASS IN 2" x 4 1/2" ANOD. ALUM. FRAME

ALIGN BOTT. OF HORIZ. MULLION W/ TOP OF SLIDING DOOR

7'-6"

SLIDING GLASS ø ALUM. DOOR - SEE SHT. A-4.3

CONT. #4 NOSING BAR

RECESS SLAB 1/2" IN VESTIBULE - SEE S-1.1

4" CONC. FLOOR SLAB W/ 6 x 6 W1.4 x W1.4 WWF. ON 12" MIN. COMP. GRANULAR FILL PER GEOTECH. REPORT ON VAPOR BARRIER

ALIGN TOP OF HORIZ. MULLION W/ TOP OF BOTT. RAIL AT SLIDING DOOR

8" H. ANOD. ALUM. SECTION - BEYOND ON 1/4" SHIM ø SEALANT

1'-6"

2'-11"

13 3/4"

13'-0"

3'-6"

4 1/2"

FACE BRICK (UTILITY SIZE) JAMB BEYOND

ALUM. THRESHOLD BY DOOR SUPPLIER SET IN FULL MASTIC BED AND SECURE TO SLAB

1/2" PREMOLD EXP. JT. UNDER THRESHOLD AND AT PERIMETER OF MASS CONC. FT'G.

1500 PSI MASS CONC. FT'G. AT ENTRY - SEE SHT. S-1.1 FOR LOCATION

24" 24" x #4 x 32" DOWELS AT 24" O.C.

NOTE:
ALL LUMBER USED IN FRAMING, SHEATHING, FACINGS AND FURRING SHALL BE (PRT) FIRE RETARDANT TREATED AND SHALL COMPLY W/ M.B.C. SECTION (2303.2)

ALL INTERIOR FINISHES AND TRIM SHALL COMPLY WITH M.B.C. SECTION (803.0)

FACE BRICK COLUMN ENCLOSURE - SEE DETAIL SHT. A-4.2

MASONRY WAINSCOT

6" CONC. SIDEWALK W/ 6 x 6 W1.4 x W1.4 WWF. ON 12" MIN. COMP. GRANULAR FILL PER GEOTECH. REPORT

1 / A-2.1 **Wall Section** 3/4" = 1'-0"

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drawing:

Wall Sections

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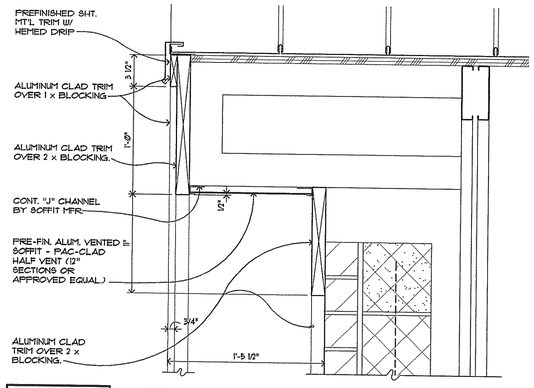
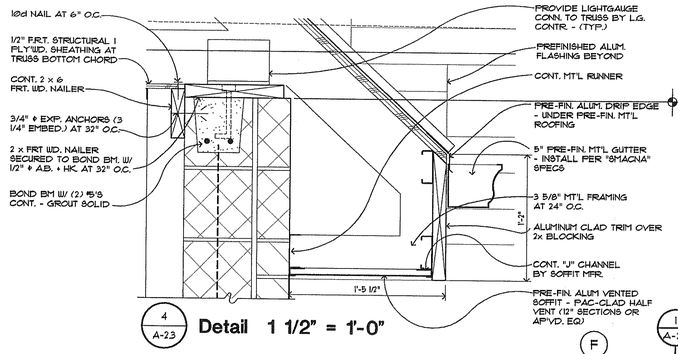
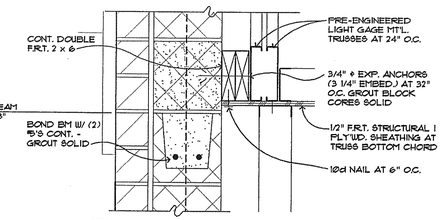


NOTE: SEE WALL SECTIONS FOR ADDT'L NOTES

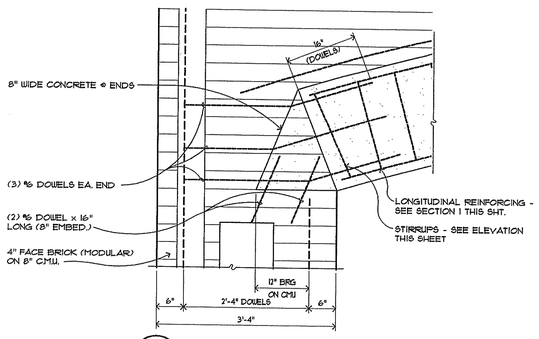
5 / A-2.3 **Detail 1 1/2" = 1'-0"**



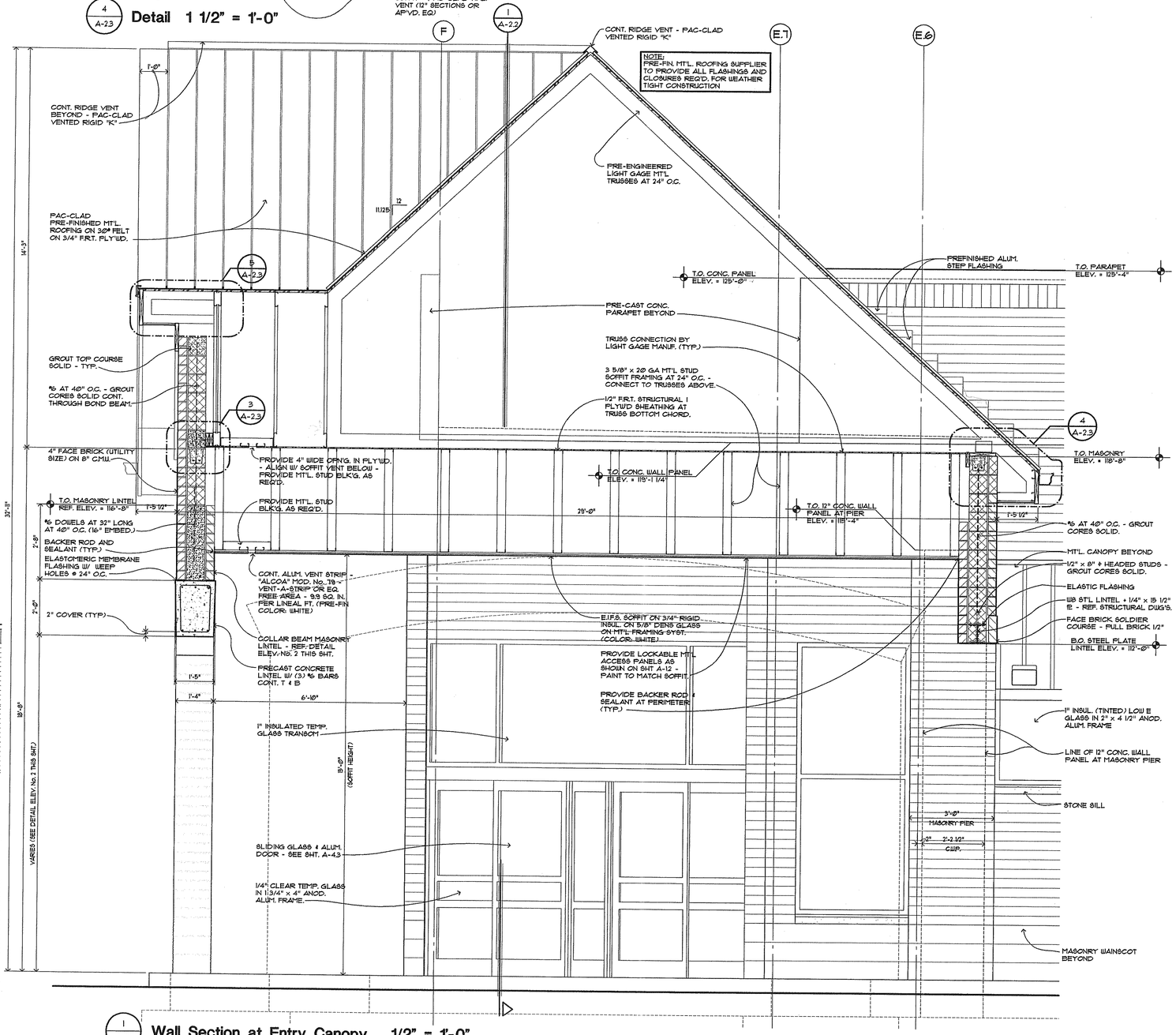
4 / A-2.3 **Detail 1 1/2" = 1'-0"**



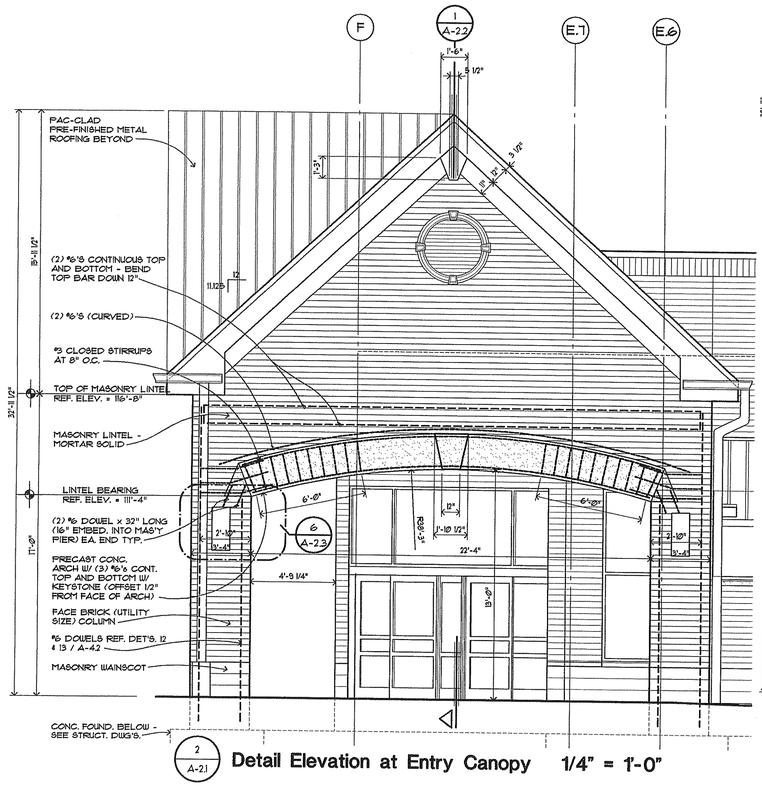
3 / A-2.3 **Detail 1 1/2" = 1'-0"**



6 / A-2.3 **Connection Detail 3/4" = 1'-0"**



1 / A-2.1 **Wall Section at Entry Canopy 1/2" = 1'-0"**



2 / A-2.1 **Detail Elevation at Entry Canopy 1/4" = 1'-0"**

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Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M-45) & 68th Ave.
Allendale, Michigan

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STATE OF MICHIGAN — RICHARD J. CLEVE — ARCHITECT NO. 38436 — LICENSED ARCHITECT

drawing:

Wall Sections

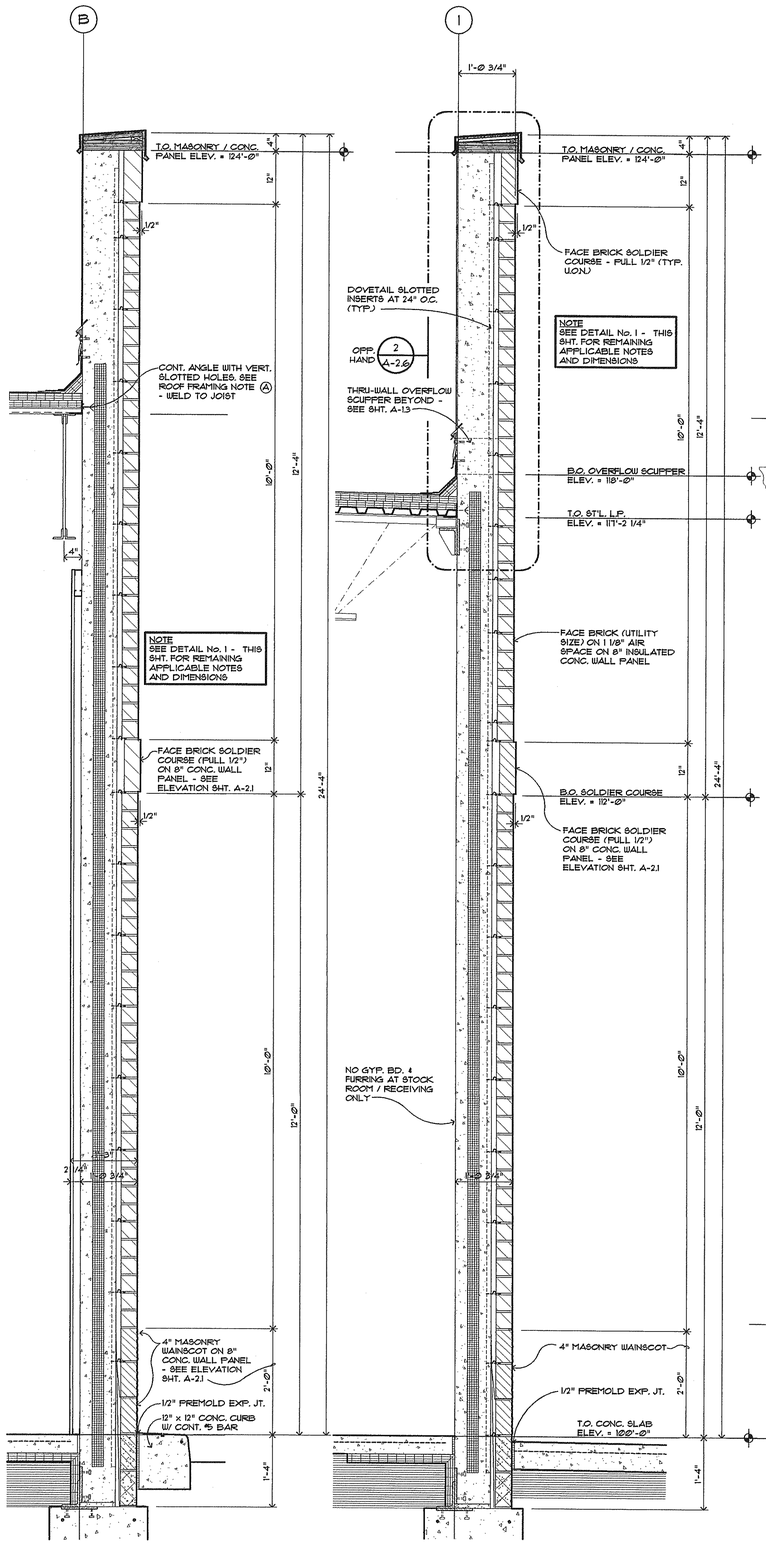
DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C
checked: R.J.C
approved: R.J.C.

file number: 06185

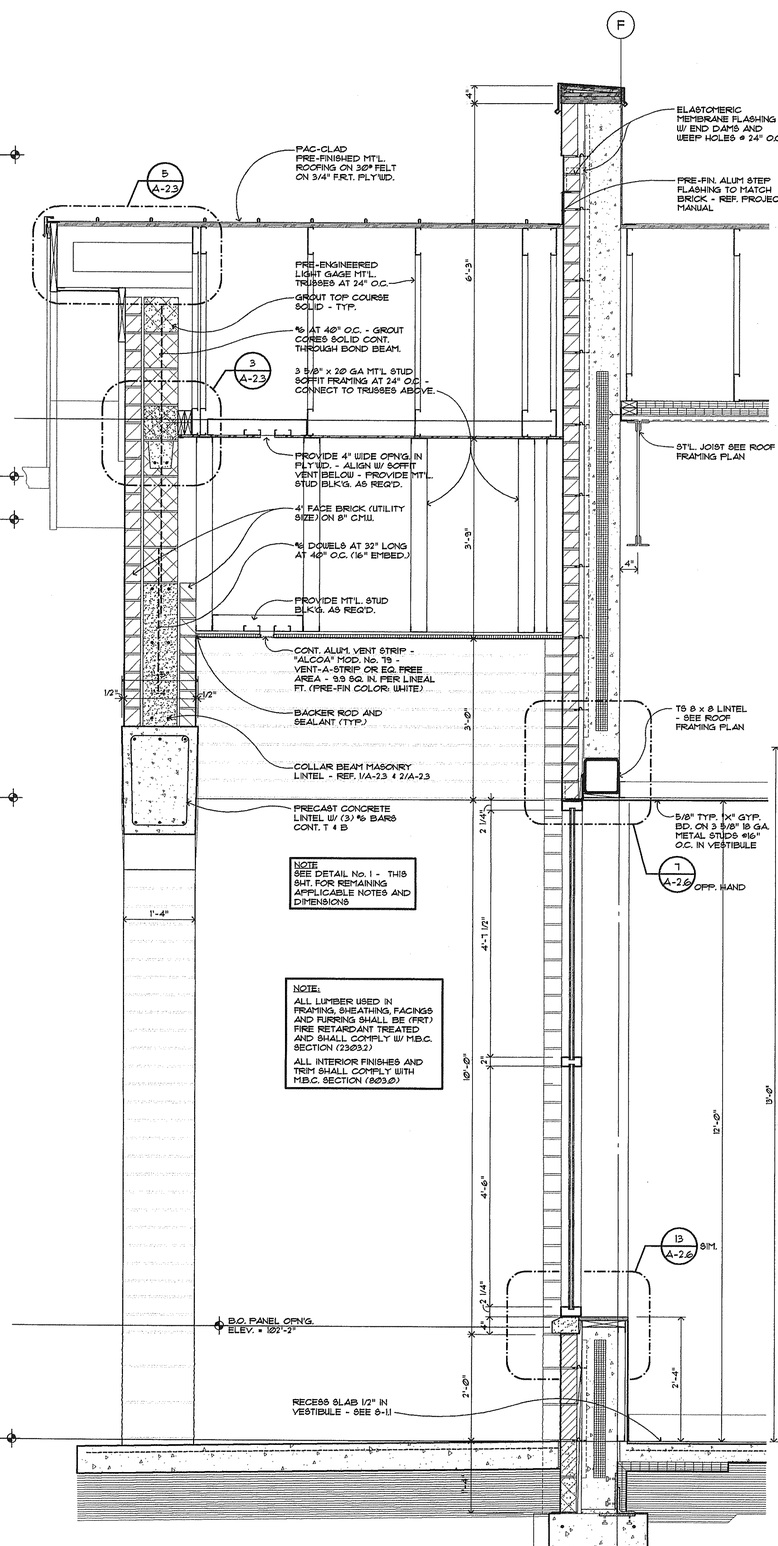
sheet:

A-2.3

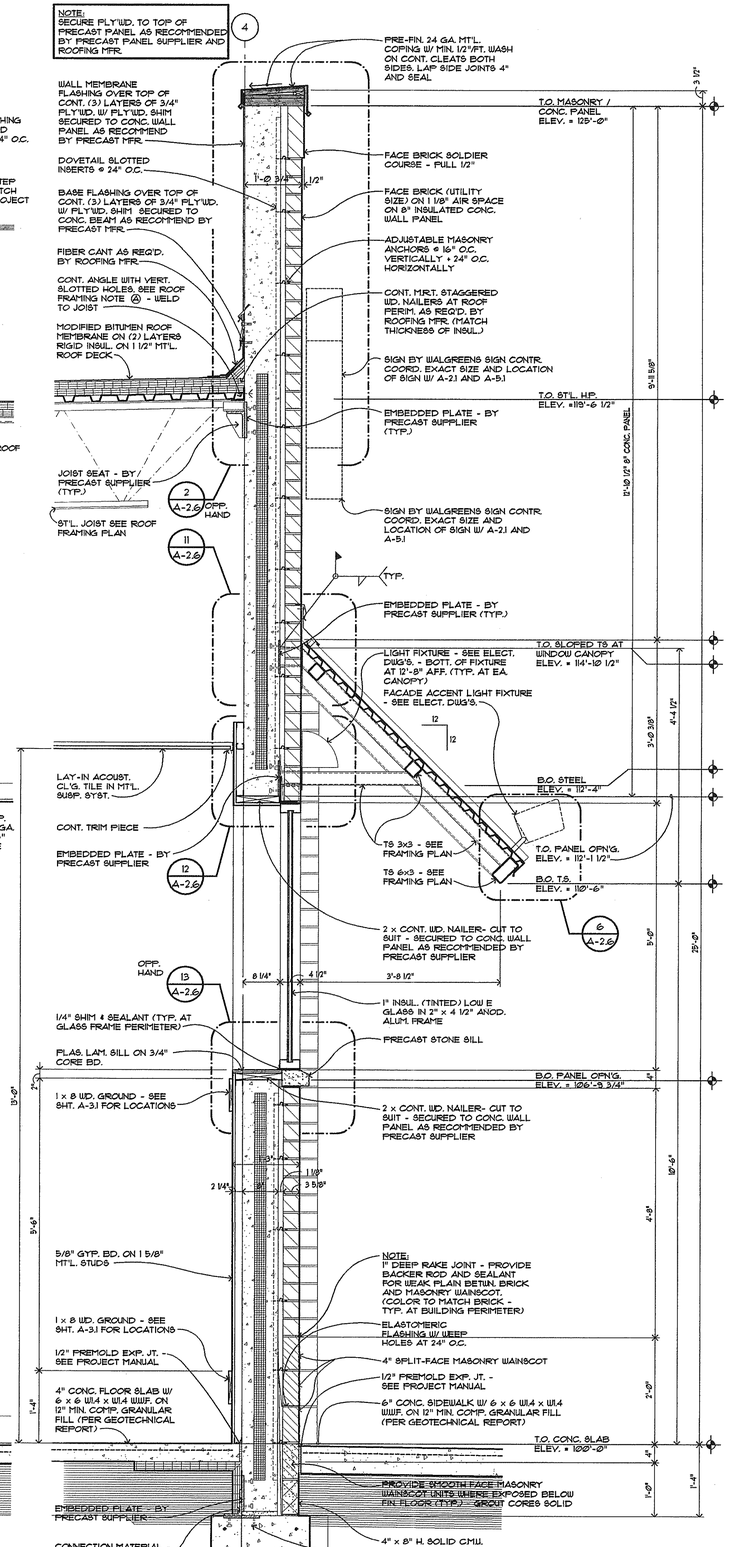


4/A-2.1 **Wall Section** 3/4" = 1'-0"

3/A-2.1 **Wall Section** 3/4" = 1'-0"



2/A-2.1 **Wall Section** 3/4" = 1'-0"



1/A-2.1 **Wall Section** 3/4" = 1'-0"

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drawing:
Wall Sections

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issue date: 9 APR 07
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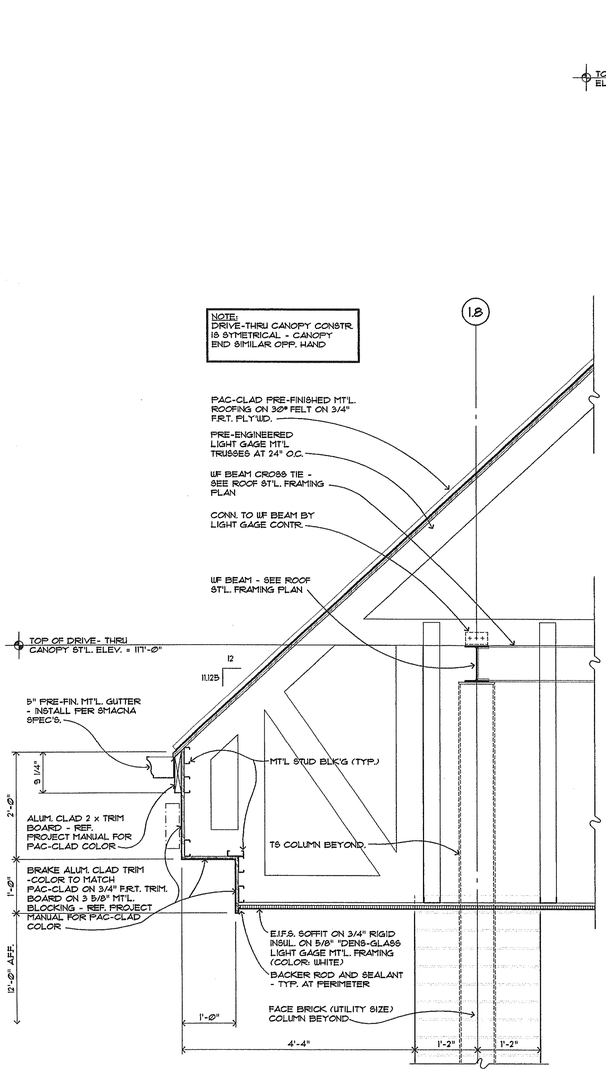
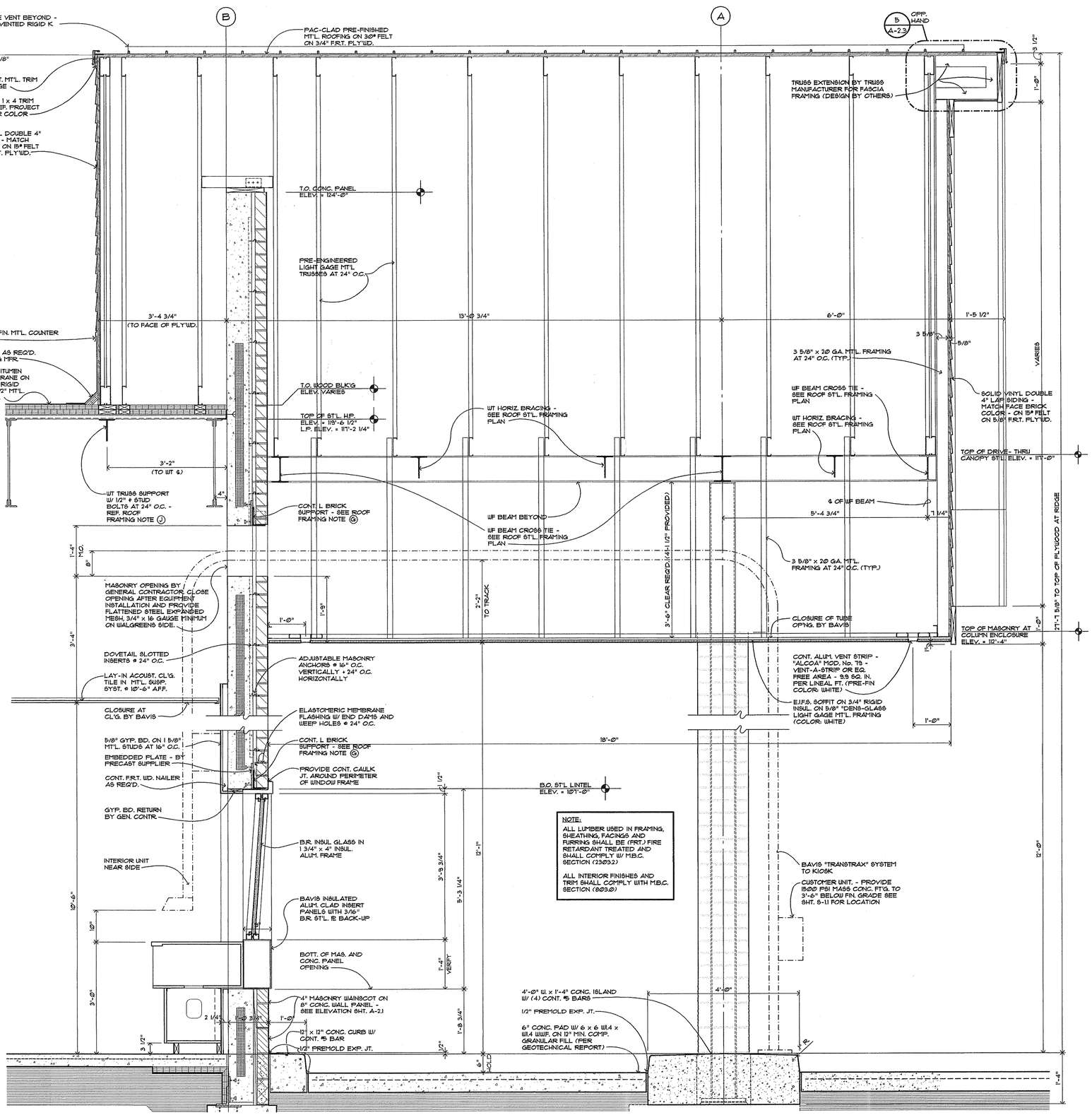
file number: 06185

sheet:
A-2.4



2 / A-2.1 **Wall Section 3/4" = 1'-0"**



1 / A-2.1 **Wall Section 3/4" = 1'-0"**

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ARCHITECT
NO. 38438
LICENSED ARCHITECT

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A-2.5

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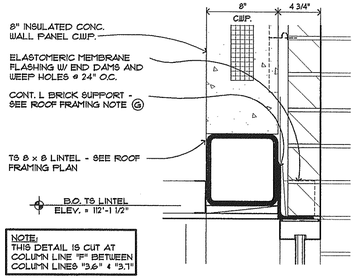
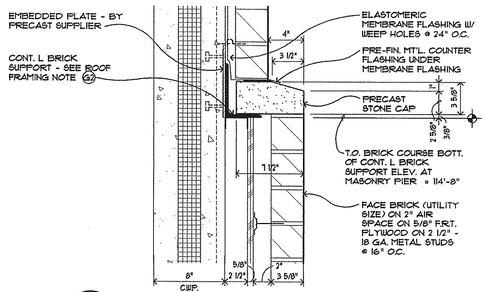
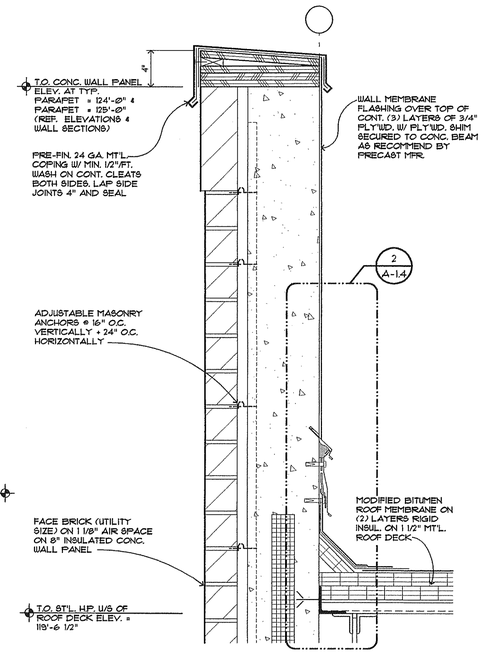


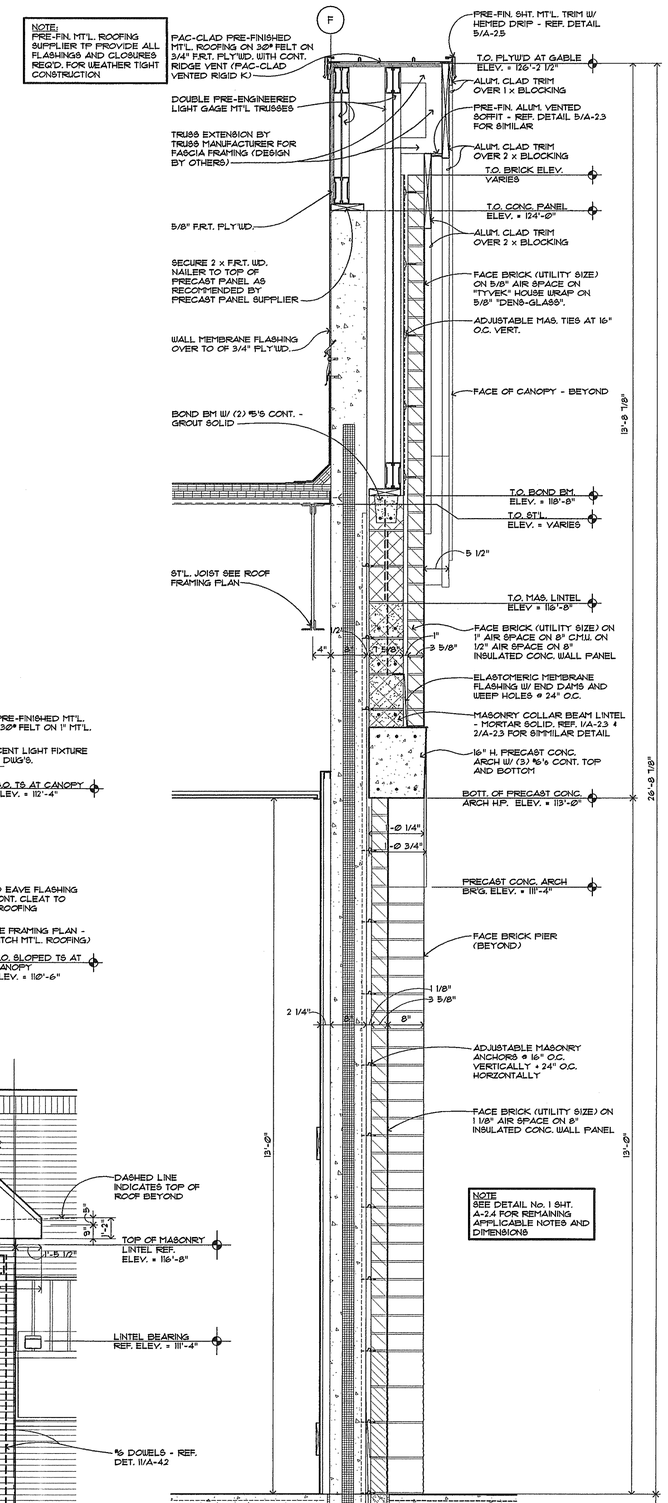
7 / A-2.4 **Detail at Storefront Window Head 1 1/2" = 1'-0"**



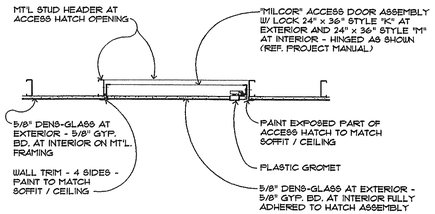
8 / A-2.1 **Detail at Masonry Pier Below Script Signage 1 1/2" = 1'-0"**



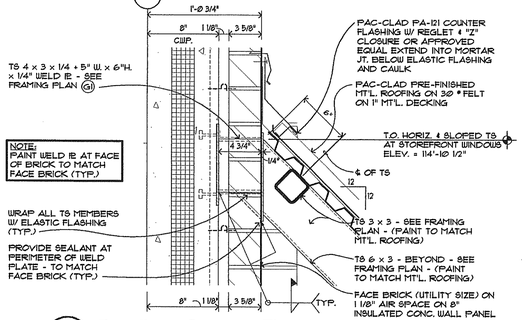
2 / A-2.4 **Wall Parapet Detail 1 1/2" = 1'-0"**



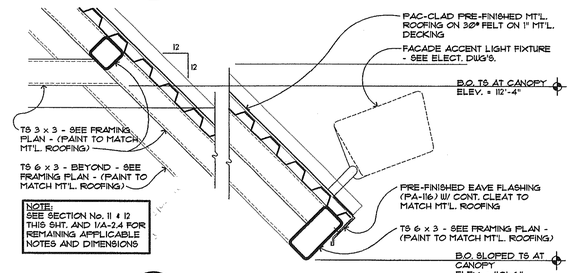
1 / A-2.1 **Wall Section 3/4" = 1'-0"**



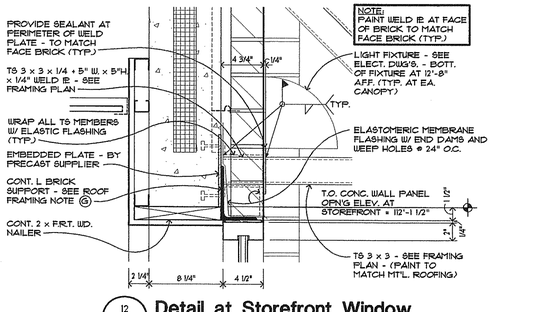
4 / A-1.2 **Detail at Soffit / Ceiling Access Hatch 3/4" = 1'-0"**



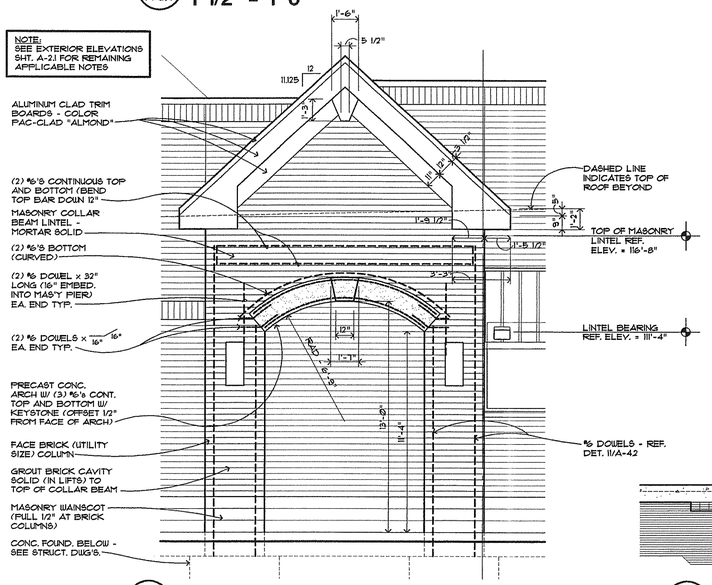
11 / A-2.4 **Detail at Canopy Flashing 1 1/2" = 1'-0"**



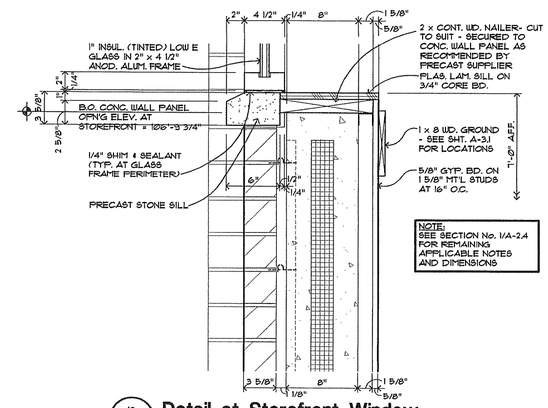
6 / A-2.4 **Detail at Canopy Gutter 1 1/2" = 1'-0"**



12 / A-2.4 **Detail at Storefront Window Sill 1 1/2" = 1'-0"**



2 / A-2.1 **Detail Elevation 1/4" = 1'-0"**



13 / A-2.4 **Detail at Storefront Window 1 1/2" = 1'-0"**

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STATE OF MICHIGAN
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ARCHITECT
NO. 38436
LICENSED

drawing:

Wall Section Detail Elevations

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file number: 06185

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A-2.6

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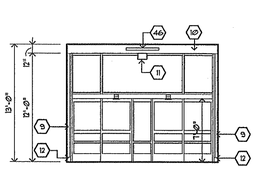
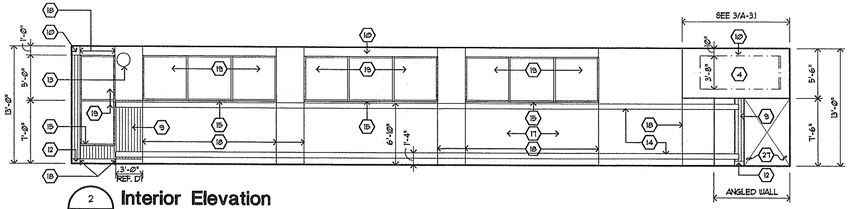
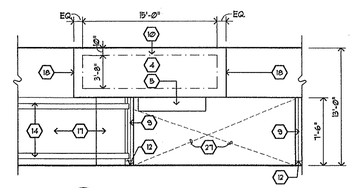


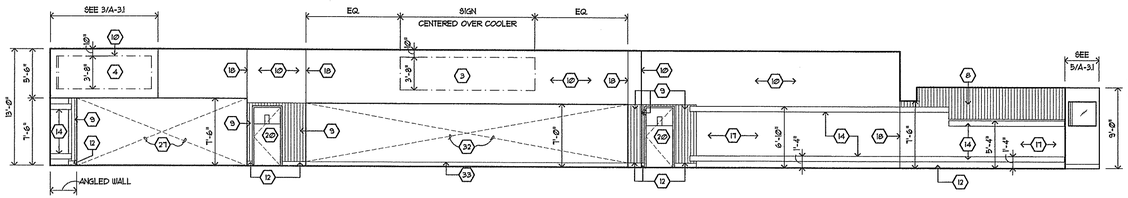
1 A-1.1 **Interior Elevation**
1/8" = 1'-0"



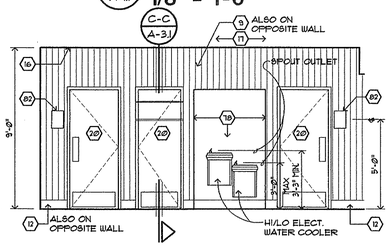
2 A-1.1 **Interior Elevation**
1/8" = 1'-0"



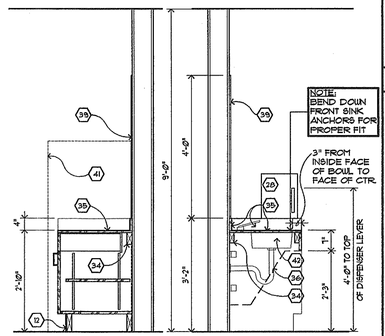
3 A-1.1 **Interior Elevation**
1/8" = 1'-0"



4 A-1.1 **Interior Elevation**
1/8" = 1'-0"

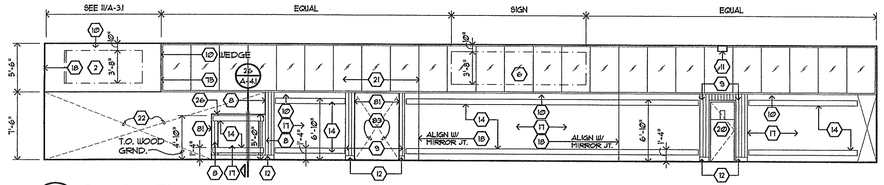


15 A-1.1 **Interior Elevation**
1/4" = 1'-0"
(AT PASSAGE No. 3)

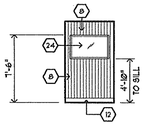


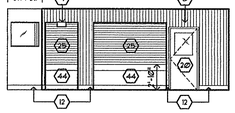
A-A A-3.1 **Section**
1/2" = 1'-0"

B-B A-3.1 **Section**
1/2" = 1'-0"

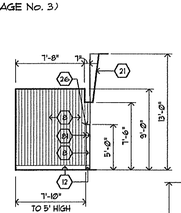


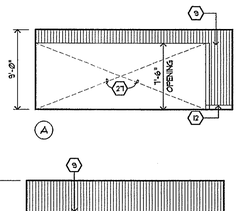
8 A-1.1 **Interior Elevation**
1/8" = 1'-0"

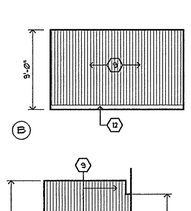


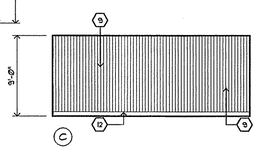


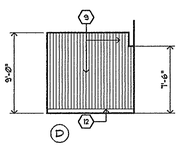
5 A-1.1 6 A-1.1 7 A-1.1 (AT PHARMACY) **Interior Elevation**
1/8" = 1'-0"



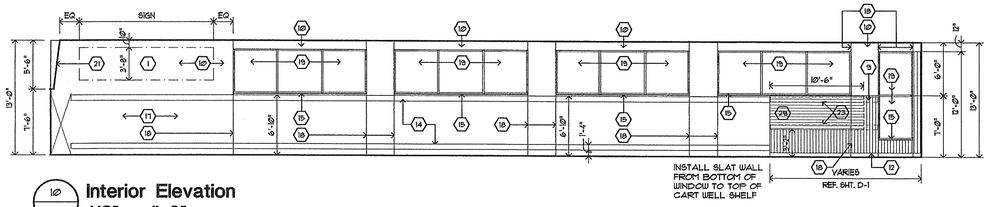




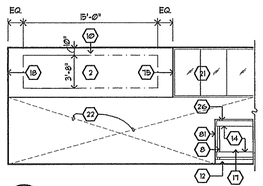




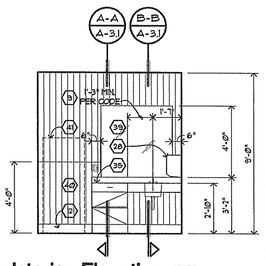
9 A-1.1 **Interior Elevation** (ONE HOUR PHOTO)
1/8" = 1'-0"



10 A-1.1 **Interior Elevation**
1/8" = 1'-0"

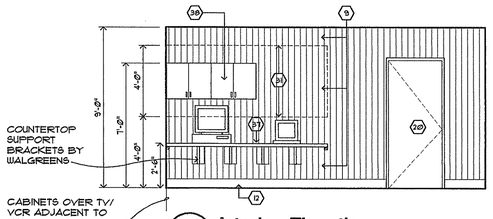


11 A-1.1 **Interior Elevation**
1/8" = 1'-0"

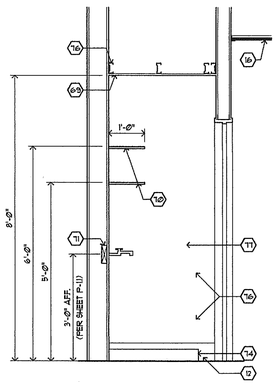


13 A-1.1 **Interior Elevation**
1/8" = 1'-0"
(AT EMPLOYEE ROOM)

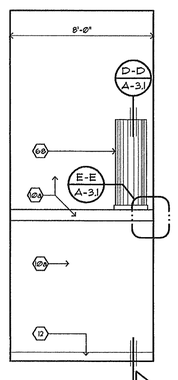
NOTE: MIRROR ON TOP OF BACKSPLASH (A.D.A. 40" MAX)



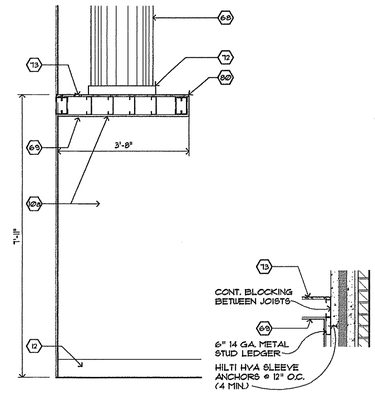
14 A-1.1 **Interior Elevation**
1/8" = 1'-0"
(AT TRAINING ROOM)



C-C A-3.1 **Section**
1/2" = 1'-0"

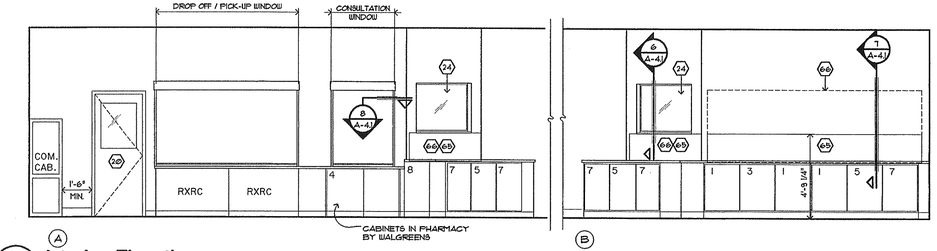


12 A-1.1 **Interior Elevation**
1/4" = 1'-0"

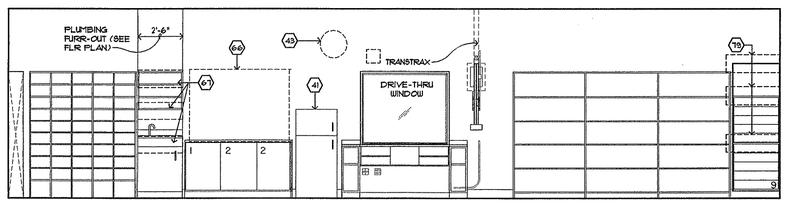


D-D A-3.1 **Section**
1/2" = 1'-0"

E-E A-3.1 **Detail**
1/2" = 1'-0"



16 A-1.1 **Interior Elevation**
1/4" = 1'-0"



Interior Elevation Keyed Notes

ITEMS MARKED N/A ARE NOT APPLICABLE. ALL PAINT NUMBERS ARE BENJAMIN MOORE # CO MATERIALS (EM). FOLLOWING ARE REFERENCE TO INTERIOR ELEVATIONS. FOR OTHER FINISHES, REFER TO INTERIOR MATERIALS AND FINISH SCHEDULE.
PLEASE NOTE:
GRAPHICS APPLIED ON MIRRORS ARE TO BE INDIVIDUAL LETTERS.

Description

1. COSMETIC GRAPHIC FURNISHED BY WALGREENS
2. PHARMACY GRAPHIC FURNISHED BY WALGREENS
3. FOOD MART GRAPHIC FURNISHED BY WALGREENS
4. 1-HR PHOTO GRAPHIC FURNISHED BY WALGREENS
5. PHOTO MENU BOARD FURNISHED BY WALGREENS (20"W X 18"H) CENTERED OVER THE 9' OF 9'4" HIGH WALL SHELVING
6. HEALTH CARE GRAPHIC. (INDIVIDUAL LETTERS ON MIRRORS) FURNISHED BY WALGREENS
7. SIGNS FOR PHARMACY - ONE EACH : PICK UP, DROP OFF, PATIENT CONSULTATION FURNISHED BY WALGREENS
8. VINYL WALL COVERING, TYPE "A". WHERE APPLICABLE, RETURN WALL COVERING AT ALL CORNERS, 1" RETURN ON BACK SIDE OF PHARMACY WALL, AND 11" AT SALES AREA SIDE OF WING WALL.
9. VINYL WALL COVERING TYPE B. WHERE APPLICABLE, RETURN WALL COVERING AT ALL CORNERS, AND 11" ON BACK SIDE OF REFRIGERATOR CASE OPENING.
10. PAINT- BENJAMIN MOORE WHITE DOVE.
10A. PAINT- BENJAMIN MOORE BONE WHITE.
11. EMERGENCY EXIT SIGN REFR TO ELECT DWGS.
12. 6" BLACK VINYL BASE W/ PREFORMED OUTSIDE CORNER. RETURN AT ALL CORNERS AS APPLICABLE.
13. WALL CLOCK - SETH THOMAS #T7610, FURNISHED BY WALGREENS.
14. 1X 8 WOOD GROUNDS OR PLYWOOD. FOR SALES AREA SHELVING (2 X 8 REQUIRED IN SEISMIC ZONES 3 AND 4).
15. PLASTIC LAMINATE STOOL - FRONT WALL.
16. ACOUSTICAL CEILING TILE.
17. NO PAINT OR VINYL REQUIRED BEHIND OR ABOVE SHELVING AND ABOVE CEILING.
18. CONTROL JOINT (TYP.) SEE WALL LOGO AND SIGN SPECS THIS SHEET. DO NOT INTERRUPT GRAPHIC DECALS WITH CONTROL JOINTS. RUN JOINT FROM FLOOR TO FULL HEIGHT OF DRYWALL.
19. TINTED LOW "E" INSUL. GLASS WITH ALUM. STOREFRONT FRAMING
20. PAINT DOORS AND FRAMES (SEE RM. FINISH SCHEDULE).
21. WALL MIRRORS - EQUALLY SPACED, (30"-42" WIDE)
22. OPENING BETWEEN GENERAL SALES AREA AND PATIENT SEATING.
23. 2x6 BLOCKING UNDER GYP. BOARD TO ANCHOR TOP AND BOTTOM OF SLAT WALL.
24. 1/4" LAMINATED SECURITY GLASS W/ LAMINATED SILL. SEE A-4.1.
25. ROLL DOWN SHUTTER. BY WALGREENS.
26. LOW WALL WITH LAMINATED CAP.
26A. -NA-
27. OPENING BETWEEN ONE-HOUR PHOTO AND GENERAL SALES AREA.
28. PAPER TOWEL DISPENSER MT'D. PER ADA REQ'MTS.
29. SLAT WALL. FURNISHED BY WALGREENS.
30. N/A
31. 3/4" PLYWOOD BACKING BETWEEN STUDS UNDER GWB
32. WALK-IN COOLER OPENING
33. APPLY WALL BASE CONTINUOUSLY ALONG EXPOSED PORTION OF COOLER BELOW DOORS. CUT TOP OF BASE AS REQUIRED TO FIT.
34. 2 X 4 CLEAT ALONG WALL FOR SUPPORT OF COUNTERTOP .
35. PLASTIC LAM. COUNTER TOP WITH BACK & SIDE SPLASHES-LENGTH TO ALLOW 32" CLEAR SPACE ALONG WALL FOR REFRIGERATOR. CAULK JOINT BETWEEN BACK/SIDE SPLASH AND WALL. CAULK COLOR TO BE WHITE. BY GENERAL CONTRACTOR. ORDER CABINET & COUNTER THROUGH MYERS. TELE: 217-735-1241
36. A.D.A. CLEARANCE REQUIREMENT.
37. 24" DEEP LAMINATED OFFICE COUNTER TOP W/ KEYBOARD/MOUSE PLATFORM - BY WALGREENS.
38. 30"W X 24"H CABINET - BY WALGREENS.
39. 4'-0" H. x LENGTH OF COUNTER MIRROR (LESS 6" EACH END FOR ELECTRICAL OUTLET - COORDINATE W/ E12) - 1/4" "I QUALITY POLISHED PLATE GLASS ELECTROLYTICALLY COPPER PLATED. GLUE TO GWB BEHIND WITH C.R. LAURENCE "MIRRO- MASTIC #6000GL" (NON-ASBESTOS) SCOOPS 18" O.C. EACH WAY.
40. PANELING - SEE DETAIL 4/A-4.2. WALL VINYL TO RUN 2" BEHIND PANELING.
41. REFRIGERATOR BY WALGREENS.
42. STAINLESS STEEL SINK
43. CONVEX MIRROR BY WALGREENS.
44. CLOSURE WALL BY WALGREENS. SEE DETAIL, SHT. A-4.1.
45. N/A
46. "THANK YOU FOR SHOPPING AT WALGREENS" 3" H.
47. 2'-0"W PLASTIC LAMINATE (SAME AS WINDOW SILL) OVER GYP. BOARD FROM BOTTOM OF WINDOW DOWN. SEE PHARMACY WALL DETAIL
48. 3/4" X 48" PLYWOOD BACKING BETWEEN STUDS UNDER GYP. BOARD FROM 3'-2" TO 7'-2" AFF.
49. 3 PIECES OF 3/4 x 12" BLOCKING, 2'-4" WIDE, BEHIND GWB, CENTERED AT 36" B'S" AND 80" AFF. FOR MOUNTING OF SINK CABINETS. SEE SHT. D-1
50. WATER HEATER ON PLATFORM
51. 5/8" GWB
52. PLASTIC COATED WIRE SHELVING
53. WOOD BLOCKING FOR FAUCET SUPPORT. SEE PLUMBING DRWGS
54. METAL GALVANIZED WATER TRAY WITH OVERFLOW TUBE TO FLOOR DRAIN
55. 3/4" UL LISTED FIRE RETARDANT PLYWOOD ON 6", 18 GA. METAL STUDS AT 6" O.C. - HORIZONTAL
56. MOP BASIN. SEE PLUMBING DRAWINGS
57. CURTAIN WALL CASED GWB RETURNED AT MIRROR END. PAINT EXPOSED GWB WEDGE.
58. PROVIDE 3 5/8" 20 GA. METAL STUDS AT 16" O.C.
59. FIBERGLASS POLYESTER PANELS TO UNDERSIDE OF CEILING
60. FIBERGLASS PANELS TO UNDERSIDE OF OPENING.
61. 3 PIECES OF 3/4 x 12" BLOCKING, 3'-0" WIDE, BEHIND GWB, CENTERED AT 3'1", 6'9" AND 80" AFF. FOR FASTENING OF 10 DRAWER FILE CABINET TO WALL. SEE SHT. D-1.
62. 1x1 METAL EDGE PROTECTION FOR GWB.
63. CLEAR CORNER GUARD
64. ADA TOILET ROOM SIGN
65. OPENING AT PASSAGE #3

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BIDS & PERMITS:
9 APR 07

project:

Store #11415

Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M-45) & 68th Ave.
Allendale, Michigan

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drawing:

Interior Elevations

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:

A-3.1

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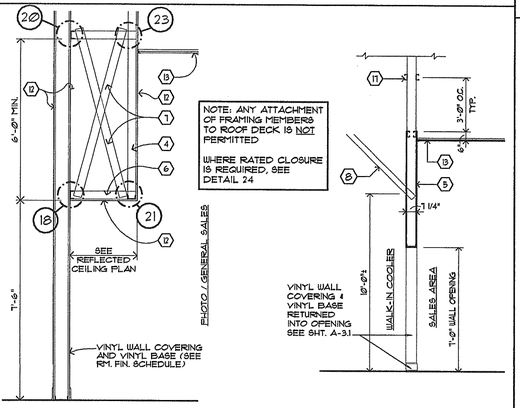
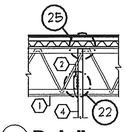
Typical Wall and Soffit Sections and Details

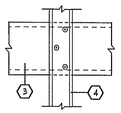


1 / A-1.1 **Soffit Section at Photo** N.T.S.

2 / A-1.1 **Walk-In-Cooler Wall Section** N.T.S.



16 **Detail**
SUSPENSION OF FRAMING FOR SOFFIT/ FASCIA PERPENDICULAR TO ROOF FRAMING



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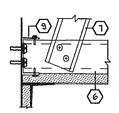

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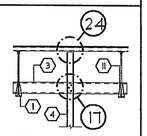
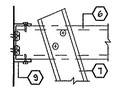


19 **Detail**
SUSPENSION OF FRAMING FOR SOFFIT/ FASCIA PARALLEL TO ROOF FRAMING



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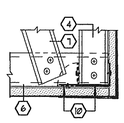
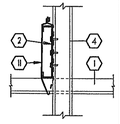
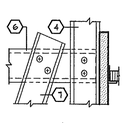


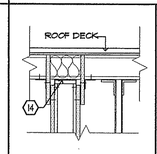
21 **Detail**



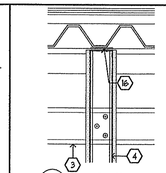
22 **Detail**



23 **Detail**



24 **Detail**



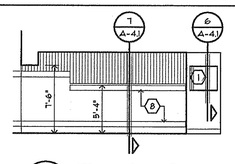
25 **Detail**

General and Keyed Notes for Wall Sections and Details

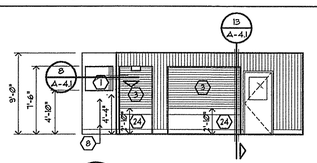
CONNECTIONS: UNLESS SHOWN OTHERWISE, USE THE FOLLOWING-STUD TO STUD: MIN. (2) 1/2" S-12 PAN HEAD SCREWS. STUD TO TRACK: (1) 3/8" S-12 LOW HEAD SCREW AT EACH FLANGE. TRACK TO BACK WALL AND OTHER CONNECTIONS AS SHOWN.

1. BOTTOM CHORD OF STRUCTURAL STEEL BAR JOIST. EXTEND BOTT. CHORD TO PROVIDE FOR FRAMING SUPPORT WHERE REQUIRED.
2. CARRYING 6" METAL STUD, CONTINUOUS.
3. CARRYING 6" METAL STUD @ 24" O.C. MAX.
4. 3-5/8" (6" AT SECTION 2/A4.1) VERTICAL METAL STUDS @ 24" O.C. EXTEND AND ATTACH TO BLD'G. STRUCTURE ABOVE AS PER DETAILS 16 OR 19.
5. 5/8" GYP. BD. (6" ABOVE FINISHED CEILING IS FOR COOLER/FREEZER OPENING AREA ONLY.) EACH SIDE OF 6" METAL STUDS (METAL STUDS TO ROOF DECK).
6. 3-5/8" METAL STUD HORIZONTAL @ 24" O.C.
7. 3-5/8" METAL STUD BRACING @ 24" O.C. ALTERNATE DIRECTIONS.
8. 3-5/8" METAL STUD BRACING @ 48" O.C., SECURE TO BUILDING STRUCTURE ABOVE SIMILAR TO DETAIL 16 OR 19.
9. 3-5/8" METAL TRACK, CONTINUOUS, AT MASONRY, SECURE WITH (2) 3/8" X 2-1/4" WEDGE "RED HEAD" OR "MOLLY BOLT" @ 4'-0" O.C. AT METAL STUD WALLS, USE (2) SELF-DRILLING 3/4" TYPE "S-4" HEX WASHER HEAD AT EACH STUD (24" O.C. MAX.).
10. 3-5/8" METAL TRACK, SNIP INSIDE FLANGE AND ATTACH TO EACH VERTICAL AND HORIZONTAL STUD.
11. 12 GA. MINIMUM GALV. STEEL TIE WIRE.
12. 5/8" GYPSUM BOARD.
13. SUSPENDED CEILING. SEE ROOM FIN. SCHED.
14. DO NOT ATTACH TO DEFLECTION TRACK TO ALLOW VERTICAL MOVEMENT. FIRE CLOSURE AND STUD SUPPORT IN ACCORDANCE WITH MANUFACTURER'S STANDARDS.
15. -NA-
16. COMPRESSIBLE FILLER.
17. PROVIDE HORIZONTAL 3-5/8" METAL STUD BRACING (3'-0" O.C. EACH SIDE± WHERE STUDS ARE EXPOSED.

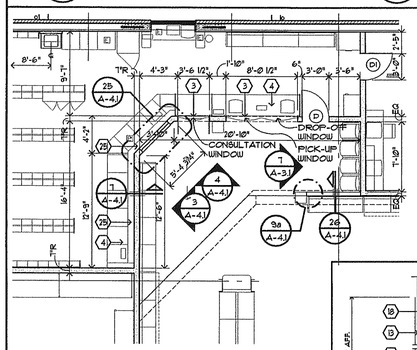
Typical Pharmacy Wall Details



3 / A-4.1 **Elevation One** 1/8" = 1'-0"



4 / A-4.1 **Elevation Two** 1/8" = 1'-0"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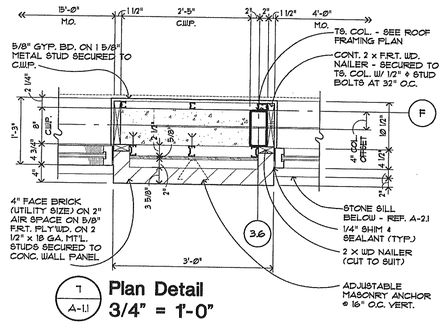
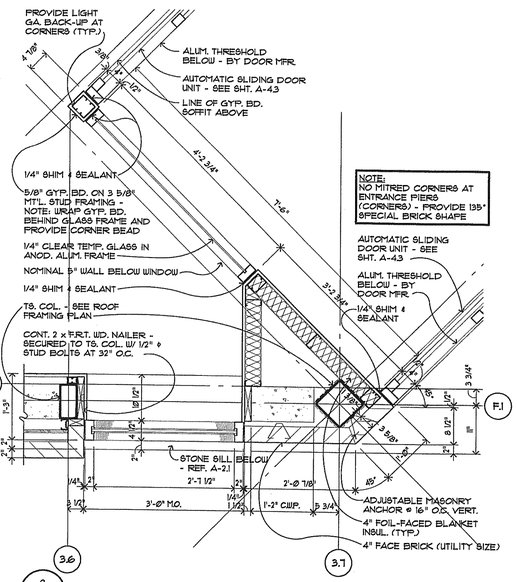


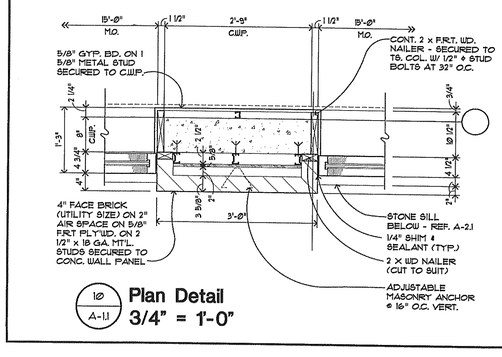
7 A-1.1 **Plan Detail**
3/4" = 1'-0"

Not Used

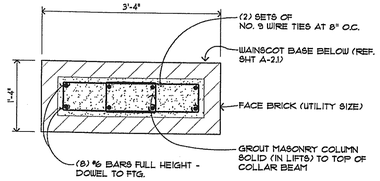
9 A-1.1 **Plan Detail**
3/4" = 1'-0"



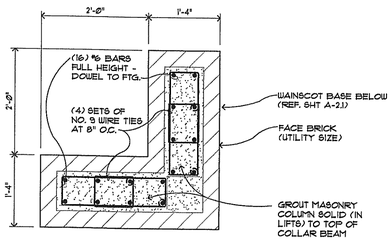
8 A-1.1 **Plan Detail**
3/4" = 1'-0"



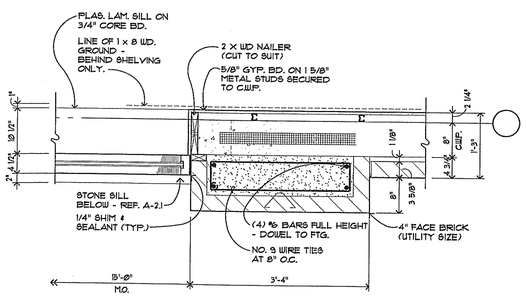
10 A-1.1 **Plan Detail**
3/4" = 1'-0"



12 A-1.1 **Plan Detail** **3/4" = 1'-0"**

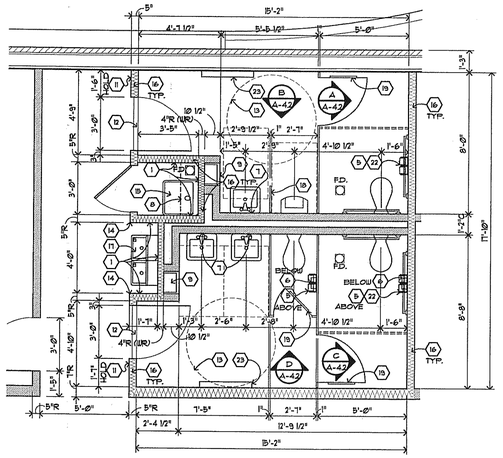


13 A-1.1 **Plan Detail** **3/4" = 1'-0"**



11 A-1.1 **Plan Detail**
3/4" = 1'-0"

Typical Toilet Room Details

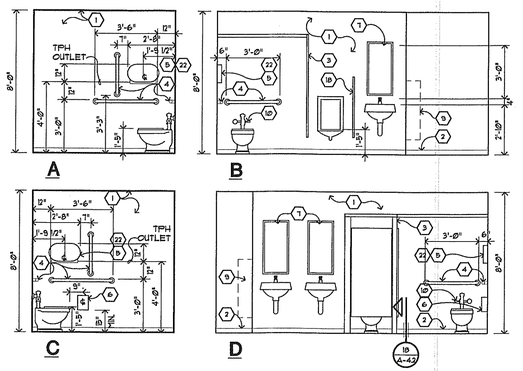


NOTE: SLOPE FLOOR TO FLOOR DRAIN FOR POSITIVE DRAINAGE.

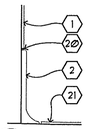
NOTE: ACCESSIBLE SIGNAGE TO COMPLY WITH SECTIONS 1110 OF THE M.B.C. AND SECTION 1203 OF ICC / ANSI A117.1

NOTE: APPLY SOUND INSULATION TO COMMON WALLS OF OFFICE, EMPLOYEE ROOM, OR OTHER SPACES WHERE SOUND ATTENUATION IS DESIRED.

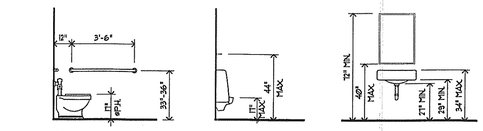
1 A-1.1 **Enlarged Toilet Room Plan**
1/4" = 1'-0"



2 A-1.1 **Toilet Room Elevations**
1/4" = 1'-0"



18 A-42 **Wall Section**
(FRP @ BASE)

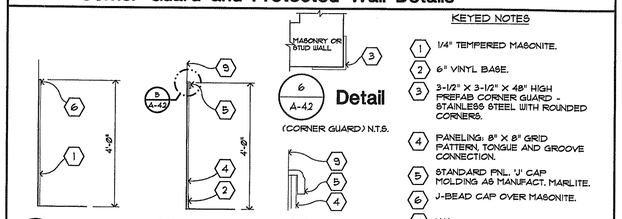


Keyed Notes and Accessory Data

SPECIAL NOTES:
A) TOILET ROOM REQUIREMENTS COMPLY WITH ICC/ANSI (A117.1-LATEST EDITION) AND 2000 MI. BARRIER FREE CODE
B) SEE PROJECT MANUAL FOR TOILET PARTITION SPECIFICATIONS AND TOILET ACCESSORY MANUFACTURERS AND MODEL NUMBERS.

1. FIBERGLASS POLYESTER PANELS.
2. CERAMIC TILE COVE BASE TO TOP OF TILE BASE. BUTT INSTALL TO FLOOR TILE. DO NOT INSTALL ON TOP OF FLOOR TILE.
3. OVERHEAD BRACED TOILET STALL PARTITION
4. GRAB BARS IN EACH TOILET ROOM, MOUNT 3'-0" A.F.F. 18" VERTICAL GRAB BARS IN ACCESSIBLE STALLS.
5. TOILET TISSUE DISPENSER, FURNISHED AND INSTALLED BY WALGREENS.
6. FEMININE NAPKIN DISPOSAL: MOUNT TOP AT 2'-0" A.F.F.
7. MIRROR (AT EACH LAVATORY) MOUNT BOTTOM AT 3'-4" A.F.F.
8. 12" DEEP PLASTIC COATED WIRE SHELVING AT 60" & 72" A.F.F.
9. BRADLEY RECESSED ROLL PAPER TOWEL DISPENSER AND WASTE RECEPTACLE ROUGH OPENING: 15 1/4" x 39" x 10 1/2" DEEP (ROTATE STUDS TO ACCOMODATE REQ'D. DEPTH. TOP OF RO. AT 5'8" A.F.F.
10. PLASTIC COATED WIRE SHELVING.
11. A.D.A. ACCESSIBLE TOILET RM. NAME PLATE ON WALL.
12. CERAMIC TILE BULLNOSE TRIM. SEE DETAIL - 6/A4.3
13. 5'-0" DIAMETER WHEEL CHAIR SPACE ALLOWANCE.
14. CORNER GUARD: SEE DETAIL 6/A-42
15. MOP BASIN.
16. SOUND ATTENUATING BLANKETS FULL LENGTH AND DEPTH OF WALL, AND HEIGHT TO 6" ABOVE FINISHED CEILING.
17. HI/LO ELECTRIC WATER COOLER.
18. URINAL SCREEN.
19. SURFACE MOUNTED TOILET SEAT COVER DISPENSER. IF COAT HOOK ON DOOR PROHIBITS, LOCATE ON SIDE IN STALL WHERE SPACE IS AVAILABLE AND THAT MEETS A.D.A. MOUNT UNIT PLUMB WITH TWO FLAT HEAD SCREWS. (MOUNTING HOLES @ 41 1/4" A.F.F.)
20. SEALANT
21. CERAMIC TILE FLOOR
22. 24"L. x 12"H. BLOCKING UNDER GYP. BOARD FOR TISSUE DISPENSER AND GRAB BARS (TYP.).
23. BABY CHANGING STATION-OPEN BED HEIGHT @ 33". FOLLOW MANUF. STUD SPACING AND ANCHORING TO MEET OR EXCEED DESIGN LOAD CAPACITY. PROVIDE 2x BLOCKING TO MEET OR EXCEED DESIGN LOAD CAPACITY

Corner Guard and Protected Wall Details



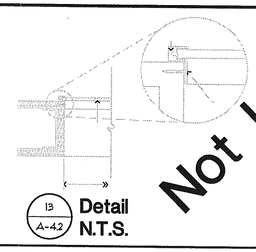
3 A-42 **Wall Section**
(AT PASSAGES W/ CART TRAFFIC) N.T.S.

4 A-42 **Wall Section**
(AT EMPLOYEE ROOM) N.T.S.

6 A-42 **Detail**
(CORNER GUARD) N.T.S.

5 A-42 **Detail**
(TOP TRIM AT PANELING) N.T.S.

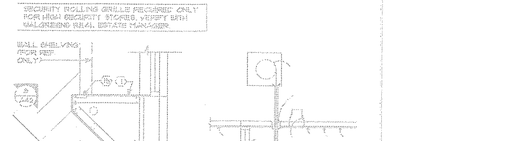
One-Way Mirror Between Office & 1-HR Photo Detail



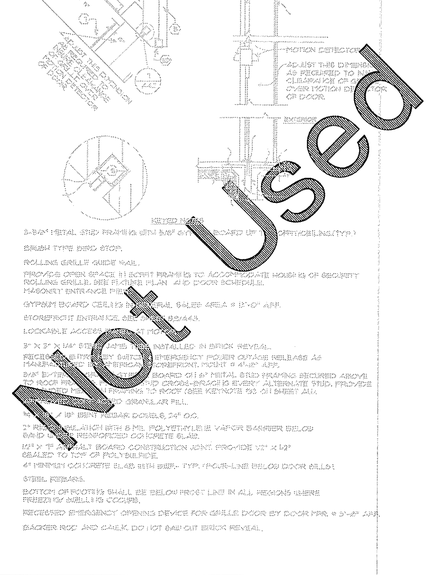
13 A-42 **Detail**
N.T.S.

Not Used

Standard Mounting Heights
N.T.S.



Entrance Details



Not Used

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9 APR 07
BIDS & PERMITS:
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Store #11415

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Allendale, Michigan

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Enlarged Plan Details

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:

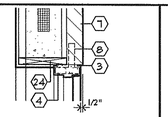
A-4.2

\Drawings\Walgreens\06185\04 Con\Doc\06185 A-4.2.dwg, 4/10/2007 10:25:49 AM, Brian

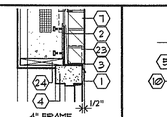
Door Details

KEYED NOTES

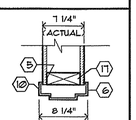
1. STEEL RAIN GUARD FACTORY APPLIED - DORBIN 1Ø1A - AT EXTERIOR H.M. FRAMES. 1" WIDE x 1/4" CONT. BAR STOCK WELDED TO ST'L. @ (DRIP EDGE) @ ROLLING DOOR
2. SEE CONSTRUCTION DRAWINGS FOR LINTEL DESCRIPTION.
3. ELASTIC SEALANT. CAULK AT HEAD AND JAMBS. COLOR TO MATCH FRAME (TYP.).
4. FILL HEAD AND JAMB WITH MORTAR.
5. CONTINUOUS SHIM BEHIND DRYWALL.
6. SALES AREA SIDE OF FRAME TO BE TIGHT AGAINST WALL.
7. WALL MATERIAL. SEE FLOOR PLAN/ELEV.
8. SET ANCHORS PER MANUFACTURERS SPECS.
9. CERAMIC TILE BULLNOSE TRIM 8" X 5/16" THICK.
10. WHERE JAMB MEETS FLOOR CAULK ALL SIDES
11. AIR CURTAIN W/ HEAT ELEMENT REF. M-11 & E-12
12. AIR CURTAIN VERTICAL SUPPORT RODS (3/8" THREADED ROD), EACH END, FASTENED TO UNISTRUT
13. 1/8" BENT STEEL PLATE, FULL HEIGHT, W/ 1/8" X 2" X 8" JAMB STRAPS AT 32" O.C. VERTICALLY. SEAL ALL AROUND.
14. JAMB GUIDES. SILL AND WEATHERSTRIP BY DOOR CONTRACTOR.
15. ALUMINUM THRESHOLD. SEE HARDWARE SCHEDULE, THIS SHEET, DOOR "J".
16. HOOD FOR COILING DOOR & CHAIN DRIVE.
17. VERTICAL WOOD REINFORCING AT JAMBS.
18. BRUSH TYPE WEATHERSTRIP.
19. DOOR BOTT. BRACKET IN OPEN-DOOR POS. TO CLEAR AIR CURTAIN UNIT. PROVIDE STOP AT JAMB
20. UNISTRUT SUPPORT FASTENED TO AIR CURTAIN UNIT
21. WALL BRACKETS TO LATERALLY SUPPORT AIR CURTAIN
22. AIR CURTAIN ELECTRICAL
23. PROVIDE ELASTIC FLASHING AT STRUCTURAL LINTEL W/ END DAMS
24. 2 x WD NAILER AT DOOR "J" AT PASSAGE NOT REQ'D. AT RECEIVING



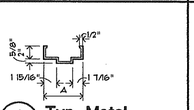
1/A-4.3 **Typ. Jamb at Masonry**



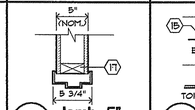
2/A-4.3 **Typ. Head at Masonry**



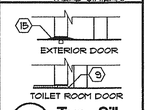
3/A-4.3 **Jamb at 7" Stud Wall** (HEAD SIMILAR)



4/A-4.3 **Typ. Metal Frame**



5/A-4.3 **Jamb 5" Stud Wall** (HEAD SIMILAR)

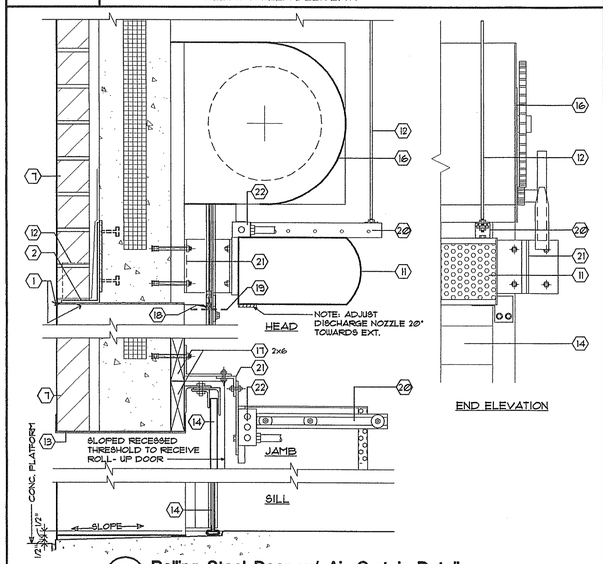


6/A-4.3 **Typ. Sill Details**

TYPICAL METAL FRAME DIMENSIONS

NOTE: ALL METAL FRAMES ARE WELDED

A = 4 3/4" AT 4" (NOM.) MASONRY WALL
A = 5 3/4" AT 6" (NOM.) OR THICKER MASONRY WALL
A = 5 3/4" AT 5" STUD WALL
A = 8 1/4" AT 7" STUD WALL (SPECIAL ORDER - ALLOW 6 WEEK DELIVERY)



7/A-4.3 **Rolling Steel Door w/ Air Curtain Details 1 1/2" = 1'-0"**

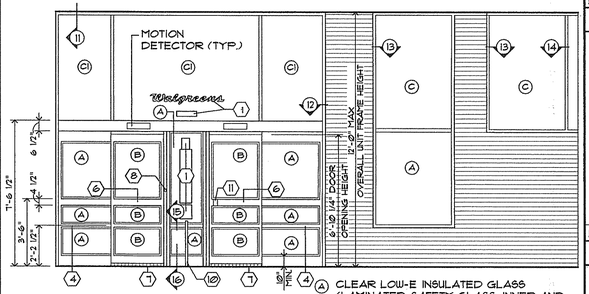
Automatic Sliding Door Entrance Detail (Typical)

KEYED NOTES

1. WALGREENS 5Ø"W. X 5"H. RED DECAL SIGN, STORE ADDRESS DECAL, AND STORE HOURS SIGN BY WALGREENS.
2. N/A
3. N/A
4. 1 3/4" FLUSH CART BARS.
5. N/A
6. "IN EMERGENCY PUSH TO OPEN" DECAL (INSTALL ON MUNTIN BAR, STORE SIDE ONLY).
7. ALUMINUM THRESHOLD (EXTENDED FULL LENGTH OF OPENING) 1/4" X 4" WIDE X CONTINUOUS RIBBED W/ BEVELED EDGES ACROSS MASONRY OPENING.
8. KEYED ENTRY SWITCH 4'-Ø" A.F.F. KEY SWITCH TO BE KEYED ALIKE TO THE ADAMS RITE DOOR HOOK LATCH.
9. SEE GENERAL FLOOR PLAN FOR THIS CONSTRUCTION. SEE SHT. D-1.
10. STAINLESS STEEL GUIDE RAIL 3Ø"H. X 36"L (CORE DRILLED), PROVIDED BY DOOR MFR. INSTALLED BY GENERAL CONTRACTOR.
11. RECESSED PULL HANDLE IN MUNTIN BAR, (ENTRY DOOR ONLY).
12. BASE SET IN SEALANT TAPCON 1/4" X 1 3/4" @ 12" O.C.
13. ANCHORS 18" O.C. 6" FROM ENDS - TYP. (USE #4 POWDER DRIVEN @ STEEL, 1/4" WS @ WOOD, 1/4" TAPCON @ CONCRETE).
14. N/A
15. N/A
16. CONTINUOUS .Ø62 OR EXTRUDED ALUMINUM SILL FLASHING, MATCH COLOR.
17. TYPICAL 1/4" BLOCKING BACKER ROD AND MATCHING SEALANT COLOR.

NOTE: COORDINATE FRAMES OF AUTOMATIC DOORS, WINDOW STOREFRONT, AND DRIVE-THRU WINDOW FINISHES TO MATCH.

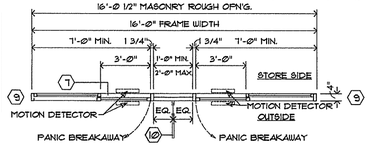
☐ BRONZE ■ CLEAR ANODIZED ☐ OTHER



8/A-4.3 **Exterior Elevation N.T.S.**

Ⓐ CLEAR LOW-E INSULATED GLASS (LAMINATED SAFETY GLASS-INNER AND OUTER PANE).
Ⓑ 1/4" CLEAR LAMINATED SAFETY GLASS.
Ⓒ TINTED LOW-E INSULATED GLASS.
Ⓒ1 LOW-E INSULATED GLASS TINTING IS NOT REQUIRED.
Ⓓ TOWER GLASS ABOVE TO BE 1/4" CLEAR.
1" INSULATED = 1/4" + 1/2" + 1/4" GLASS AIR GLASS

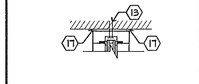
SLIDING DOOR TO TO BE CAPABLE OF BEING OPERATED MANUALLY IN EVENT OF POWER FAILURE AS PER 715.C. SECTIONS 1008.1.3.2 & 1008.1.3.3



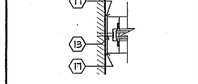
9/A-4.3 **Plan at Entrance Door N.T.S.**

NOTE: DOORS TO BE BI-DIRECTIONAL ACTIVATING WHEN APPROACHED FROM EITHER SIDE.

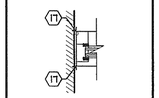
10/A-4.3 **Detail N.T.S.**



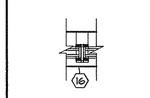
11/A-4.3 **Detail N.T.S.**



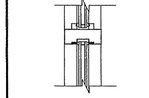
12/A-4.3 **Detail N.T.S.**



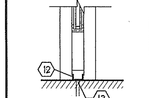
13/A-4.3 **Detail N.T.S.**



14/A-4.3 **Detail N.T.S.**



15/A-4.3 **Detail N.T.S.**



16/A-4.3 **Detail N.T.S.**

NOTE: DETAILS ARE BASED ON MASONRY CONST. REFER TO PLAN AND ELEVATIONS. ADAPT TO ACTUAL CONDITIONS.

Door and Hardware Schedule

1.) LOCKING HARDWARE TO USE STANDARD KEYWAYS AND CYLINDERS. LOCKING HARDWARE TO BE KEYED IN THREE SETS. A) PHARMACY DEADBOLTS SHALL BE KEYED ALIKE. B) ALL COMBINATION LOCKSET OVERRIDE KEYS SHALL BE KEYED ALIKE FOR SERVICE. C) ALL OTHER STORE HARDWARE WITH KEYS SHALL BE KEYED ALIKE.

2.) N/A

3.) SEE FLOOR PLAN FOR DOOR SWINGS.

4.) W.O. = WALL OPENING: VERIFY W/ FLOOR PLAN.

5.) N/A

6.) UNLESS NOTED OTHERWISE, INTERIOR DOORS ARE WOOD, EXTERIOR DOORS ARE METAL.

7.) VISION PANELS: 1Ø" X 1Ø" WITH WIRE GLASS. DOORS "D", "H" AND "I" LAMINATED SECURITY GLASS 15" X 36" (ONE-WAY OR CLEAR AS DESCRIBED BELOW).
USE ONE-WAY GLASS VISION PANELS:
A) IN DOORS ON EXIT CORRIDORS.
B) IN DOORS FACING SALES AREA, EXCEPT DOOR "D" (ALWAYS CLEAR). APPLY REMOVABLE METAL GLASS STOPS ON SECURE SIDE OF DOOR. PRIME AND PAINT.

8.) EXIT DOORS: DURING BUSINESS HOURS EXIT DOORS SHALL BE OPERABLE FROM INSIDE WITHOUT USE OF A KEY. HARDWARE SHALL CONFORM TO ICC/ANSI A117.1-LATEST EDITION. FIRE EXIT DOORS AND FRAMES SHALL BE UL. "B" LABEL RATED 1 1/2 HOURS. FOR EXTERIOR EXIT DOORS (NON-ENTRY) DIRECTLY OFF SALES, USE ALARM LOCK, MODEL 118, DELAYED EGRESS EXIT ALARM INTEGRATE DELAY TO FIRE ALARM SHUNT.

9.) NAME PLATES (TOILET ROOMS): COMMERCIAL GRADE A.D.A. COMPLIANT TACTILE SIGN (MEN, WOMEN, & HANDICAPPED.) SIGNS TO HAVE BRAILLE, REGULAR COPY AND PICTOGRAPH OF WHEELCHAIR SIGN TO BE MOUNTED 6Ø" AFF. ON WALL AT LATCH SIDE OF DOOR.

10.) PROTECTION PLATES: SHALL BE STAINLESS STEEL 2Ø GAUGE, U83D FINISH, 82" HIGH WITH OVERLAP TYPE DOOR EDGE PROTECTORS. (STANDARD 18 GUAGE) APPLIED TO BOTH EDGES OF DOOR. MANUFACTURER: ROCKWOOD. (DOOR EDGE, PART #5Ø8 AND #5Ø9). NOTE: PART #5Ø9 IS TO BE APPLIED TO TAPERED EDGE OF DOOR ONLY.

11.) KICK PLATES: SHALL BE STAINLESS STEEL 2Ø GAUGE WITH U83D FINISH. 1Ø" HIGH AND 2" LESS THAN DOOR WIDTH. MANUFACTURED BY ROCKWOOD OR APPROVED EQUAL. (INSTALL ON PUSH SIDE ONLY.) EXCEPT DOOR "L" TO RECIVE KICK PLATES ON BOTH SIDES.

12.) N/A

13.) SALES AREA DOOR CLOSERS TO BE MOUNTED ON SIDE OF DOOR OPPOSITE SALES AREA. OTHER INTERIOR DOOR CLOSERS TO BE MOUNTED ON ROOM SIDE OF DOOR. ALL CLOSURES SHALL HAVE A MAXIMUM 5 POUND PULL PER A.D.A.

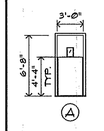
14.) UNDERCUT DOOR 1".

15.) LATCHING IS REQUIRED FOR FIRE-RATED DOORS. USE SCHLAGE AL1Ø3-SAT-626.

16.) COMBINATION LOCKSET WITH SERVICE KEY OVERIDE: TRILOGY DL2100 BY ALARM LOCK. 1-800-252-5625 OR MARKS 121K/26HEX, BY MARKS, U.S.A. 1-800-526-0233.

17.) N/A

Between Sales and Passage

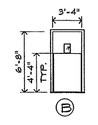


A

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
FULL/PLATE: 8305-8, 4"X16", U526D, IVES
CLOSER: 7500BFDA-M, ALUM. NORTON
FLOOR BUMPER: 436B, U526D. IVES
SILENCERS: RUBBER GJ64 GLYNN JOHNSON

LABEL: REFER TO 2, 3, 6-7, 10, 13, 14, 15 & 17 ABOVE

To Stock Room



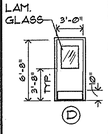
B

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
LOCK: COMBINATION LOCKSET. NOTE 16.
CLOSER: 7500BFH-M, ALUM. NORTON
FLOOR BUMPER: 436B, U526D
SILENCERS: RUBBER GJ64 GLYNN JOHNSON

*(B) = 3'-Ø"

LABEL: REFER TO 1, 2, 3, 6-7, 10, 13 & 16 ABOVE

Between Pharmacy and Patient Seating

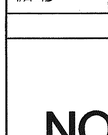


D

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
LOCK: COMBINATION LOCKSET. NOTE 16. DEADBOLT: B662P-626, SCHLAGE. (FOR PHARMACIES WITH (2) DOORS ONLY.)
DEADBOLT CENTERLINE 8" BELOW CYLINDER BORE
CLOSER: 16ØIBP, ALUM. NORTON
FLOOR BUMPER: 436B, U526D .IVES
SILENCERS: RUBBER GJ64 GLYNN JOHNSON

LABEL: REFER TO 1-3, 6-7, 11, 13 & 16 ABOVE

Between Pharmacy/ Training Room

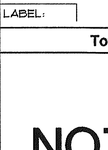


D1

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
LOCK: COMBINATION LOCKSET. NOTE 16. DEADBOLT: B662P-626 SCHLAGE
DEADBOLT CENTERLINE 8" BELOW CYLINDER BORE.
CLOSER: 16ØIBF, ALUM. NORTON
FLOOR BUMPER: 436B, U526D .IVES
SILENCERS: RUBBER GJ64 GLYNN JOHNSON
ONE-WAY VIEWER: #698 190 ALUM. IVES

LABEL: REFER TO 1-3, 6, 11, 13 & 16 ABOVE

To Electrical Room



E

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
LOCKSET: ONE SCHLAGE AL80PD -SAT-626 (STOREROOM FUNCTION). W/ DETECTABLE WARNING KNURLED HANDLE
CLOSER: 7500DA, ALUM. NORTON
FLOOR BUMPER: 436B, U526D .IVES
SILENCERS: RUBBER GJ64 GLYNN JOHNSON

LABEL: REFER TO 1-3, 6-7, 11, 13 & 14 ABOVE

To Storage Room

NOT USED

To Toilet Room (with stalls)

G

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
PULL/PLATE: 8305-8, 4"X16", U526D, IVES
PUSH PLATE: 8200 4" X 16" U526D, IVES
CLOSER: 1601BF, ALUM. NORTON
FLOOR BUMPER: 436B, U526D .IVES
SILENCERS: RUBBER GJ64 GLYNN JOHNSON

UNDERCUT DOOR 1"

LABEL: REFER TO 2, 3, 6, 9, 11, 13, 14 & 15 ABOVE

To Toilet Room (without stalls)

NOT USED

LABEL:

To Office/ Training Room

H

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC STANLEY
LOCKSET: USE COMBINATION LOCKSET, NOTE 16.
CLOSER: 1601BF, ALUM. NORTON
FLOOR BUMPER: 436B, U526D
SILENCERS: RUBBER GJ64 GLYNN JOHNSON .IVES

LABEL: REFER TO 1-3, 6-7, 11, 13 & 16 ABOVE

To Employee Room

I

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
FULL/PLATE: 8305-8, 4"X16", U526D, IVES
PUSH PLATE: 8200 4" X 16" U526D, IVES
CLOSER: 1601BF, ALUM. NORTON
FLOOR BUMPER: 436B, U526D .IVES
SILENCERS: RUBBER GJ64 GLYNN JOHNSON

LABEL: REFER TO 2, 3, 6-7, 11, 13, 14 & 15 ABOVE

To Exterior

J

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC. STANLEY (NON-REMOVABLE PIN W/ SECURITY STUD)
SECURITY PANIC BAR (HIGH SECURITY STORES).
SECURTECH MP, PANIC EXIT LOCK MODEL #4945-US6 W/ STAND. MORTISE CYLINDER

CLOSER: UNI PT1105DA-M, ALUM. NORTON
THRESHOLD: 18A, 4"X 4Ø" ALUM. DORBIN
SWEEP: 83AL, X 4Ø" RUBBER DORBIN
WEATHERSTRIP: 3984V, VINYL DORBIN
ONE-WAY VIEWER: #698 190 ALUM. IVES

LABEL: REFER TO 3, 6, & 8 ABOVE

To Porter Room

L

HARDWARE:
HINGES: 1 1/2" PAIR BUTTS, FBB-179 4 1/2" X 4 1/2" PC, STANLEY
LOCKSET: ONE SCHLAGE AL53PD-SAT-626 (ENTRY FUNCTION).
CLOSER: 16ØIBFH, HOLD OPEN TYPE, ALUM. NORTON

SILENCERS: RUBBER GJ64 GLYNN JOHNSON
UNDERCUT DOOR 1"
KICK PLATES BOTH SIDES

LABEL: REFER TO 1-3, 6, 11, 13 & 14 ABOVE

Loading Dock

N

ONE-WAY VISION PANEL
NOTE: RAISE OH DOOR HOOD TO CLEAR AIR CURTAIN UNIT. SEE DETAIL 1/A-4.3
6'-Ø" M.O.
8'-Ø" M.O.
5'-Ø"
MIN. 9" CLEAR BOTH SIDE. PROVIDE PERIMETER & HOOD WEATHER SEALS.
PULL CHAIN - CHAIN SIDE IS OPPOSITE CONVETOR (SEE FIX. PLAN.)
INDUSTRIAL GRADE (1/4" MINIMUM THICKNESS) SLIDE BOLT FOR PADLOCK EACH SIDE.

REFER TO 1,2,4, & 6 ABOVE

Compactor Door

T

HARDWARE:
HINGES: PAIR OF SPRING LOADED, HINGES STANLEY 2Ø6ØR US9
LOCKSET: ONE SCHLAGE - AL25D-SAT-626
WEATHER STRIP: 3993, VINYL DORBIN OR EQUAL ALL AROUND FRAME

LABEL: REFER TO 2, 3, 4 & 6 ABOVE

Conveyor Shutter

NOT USED

Conveyor Access

NOT USED

Tower Access

NOT USED

LABEL:

Detail 17/A-4.3 N.T.S.

REFER TO 10 ABOVE

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BIDS & PERMITS:
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project:

Store #11415

Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M-45) & 68th Ave.
Allendale, Michigan

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Standard Details & Specifications

DO NOT SCALE DRAWING

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drawn: B.J.C.
checked: R.J.C.
approved: R.J.C.

file number: 06185

sheet:

A-4.3

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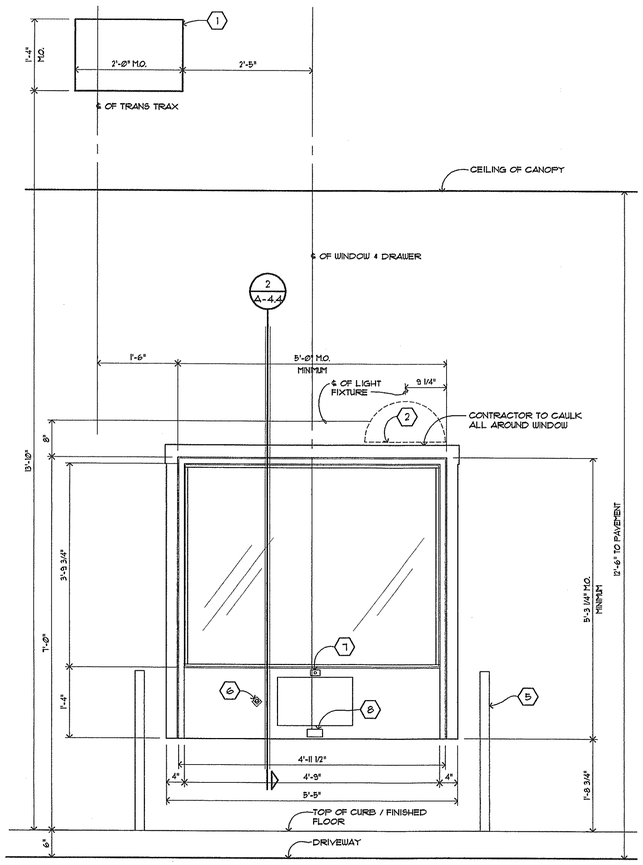
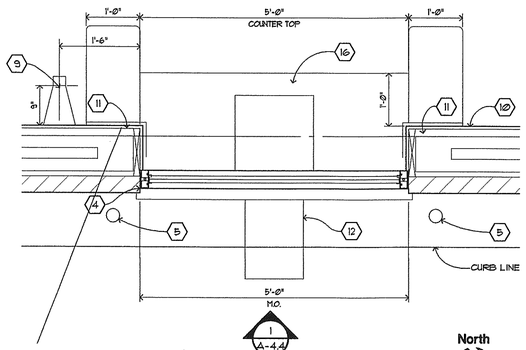
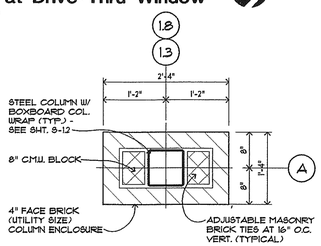


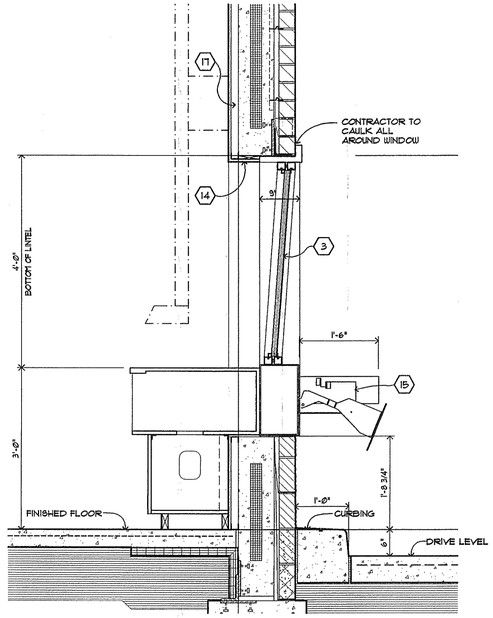
1 A-4.4 **Exterior Elevation**
3/4" = 1'-0"



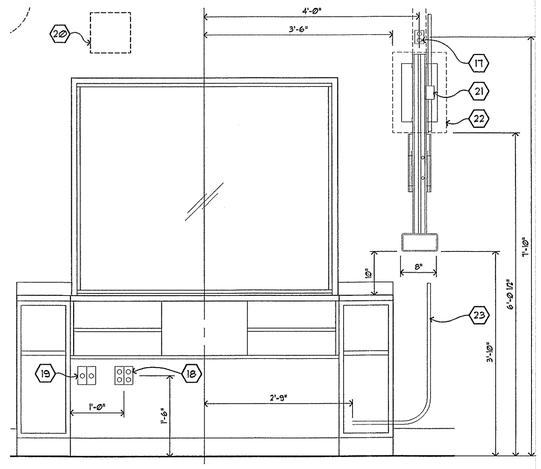
6 A-4.4 **Partial Plan at Drive-Thru Window**
3/4" = 1'-0"



7 A-4.4 **Column Enclosure Detail**
3/4" = 1'-0"



2 A-4.4 **Section**
3/4" = 1'-0"



3 A-4.4 **Interior Elevation**
3/4" = 1'-0"

Keyed Notes

1. MASONRY OPENING BY GENERAL CONTRACTOR. CLOSE OPENING AFTER EQUIPMENT INSTALLATION AND PROVIDE FLATTENED STEEL EXPANDED MESH, 3/4" x 16 GAUGE MINIMUM ON WALGREENS SIDE.
2. LIGHT FIXTURE (TYPE "Q") SEE ELECTRICAL DRAWINGS
3. INSULATED B.R. GLASS & INSULATION 1 3/4 x 4 ALUMINUM FRAME
4. TRIM FRAME. CAULK CONTINUOUS
5. (2) 36" HIGH SURFACE-MOUNTED FLEXIBLE DELINEATOR POST BY "FLEX-STAKE". FASTEN TO CONRETE WITH BOLTS.
6. CALL BUTTON
7. CUSTOMER MICROPHONE
8. CUSTOMER SPEAKER
9. TRANS TRAX INTERIOR UNIT
10. FINISHED WALL BY GENERAL CONTRACTOR
11. PROVIDE 4" WIDE VOID IN WALL FROM ABOVE CEILING TO BELOW COUNTER FOR WIRE CHASE. STOP CORNER FURRING BELOW COUNTER FOR ACCESS TO KNEE SPACE.
12. OUTLINE OF DRAWER EXTENSION (18")
13. N/A
14. DRYWALL RETURN TO WINDOW FRAME BY GENERAL CONTRACTOR
15. TRANSACTION DRAWER IS PART OF E.F. BAVIS WINDOW
16. PLASTIC LAMINATED COUNTER
17. ONE (1) DUPLEX RECEPTACLE 110/120 VAC. 15 AMP, 1 PH. BY ELECTRICAL CONTRACTOR
18. TWO (2) DUPLEX RECEPTACLES WITH 110 V, 1 PH, 15 AMP GFCI, BEHIND KNEE WALL BY ELECTRICAL CONTRACTOR
19. TWO CAT 5 CABLES TERMINATED WITH RJ45 JACKS RUNNING BACK TO TELEPHONE SYSTEM.
20. DRIVE-ALERT CHIME LOCATION
21. 2" x 3" FULL BOX FOR AUDIO
22. 3/4" x 1'-0" x 1'-6" MIN. PLYWOOD BLK'G. TO MOUNT TRANSTRAX TO WALL BY GENERAL CONTRACTOR.
23. 3/4" CONDUIT LOCATED IN KNEE SPACE. BY ELECTRICAL CONTRACTOR.

General Contractor Shall:

CROSS REFERENCE THIS DRAWING WITH THE LATEST SET OF DRAWINGS PROVIDED BY THE ARCHITECT, AND SHALL VERIFY DIMENSIONS AND DETAILS FOR EXACTNESS.

PROVIDE E.F. BAVIS AND ASSOCIATES, INC. CAPTIVE CARRIER TRANSTRAX SYSTEM AND CONTRACTOR SHALL PROVIDE ALL OPENINGS, POWER AND ACCESS PANELS NECESSARY FOR INSTALLATION OF BAVIS EQUIPMENT. SEE ENGINEERING DRAWINGS FOR POWER REQUIREMENTS.

ENSURE THAT THE TRANSTRAX SYSTEM HAS A CLEAR PATHWAY. REMOVAL OF ANY OBSTRUCTION SHALL BE DONE AT THE EXPENSE OF THE GENERAL CONTRACTOR.

ALL CAULKING AROUND THE WINDOW USING THE CAULK SUPPLIED BY BAVIS.

COMPLETE FINISH WORK ON CEILING TYING THE CEILING FLAPS INTO THE CEILING. NOTHING IS TO BE ATTACHED TO THE TRANSTRAX OR THE CEILING TRIM. THESE SYSTEMS MUST BE PERMITTED TO FLOAT IN THE STRUCTURE.

COORDINATE WITH E.F. BAVIS AND ASSOCIATES, INC. FIELD COORDINATOR TO ENSURE CLEAR INTERPRETATION OF THIS DRAWING AND TO DISCUSS MODE OF EQUIPMENT INSTALLATION.

ANY DEVIATION FROM THE DETAILS SHOWN ON THE DRAWING SHALL NOT BE MADE WITHOUT THE APPROVAL OF BAVIS ENGINEERING OR FIELD REPRESENTATIVE: MS. MARGIE STACY AT 513-671-0500.

WHEN ORDERING E.F. BAVIS WINDOW, IDENTIFY WALL THICKNESS FOR WINDOW FRAME ATTACHMENT. EXTERIOR WALL PLANE AT DRIVE-THRU MASONRY OPENING SHALL BE FLUSH FOR WINDOW FRAME. STEP BULL NOSE OR WAINSCOT DETAIL TO ACCOMODATE FRAME LIP. SEE EXTERIOR ELEVATIONS.

IMPORTANT NOTE:

VERIFY FINISHED FLOOR AND DRIVE LEVEL RELATIONSHIP. MAX. DIFFERENCE OF 6" ALLOWED FOR PROPER DRAWER USAGE.

CONTACT BAVIS FOR CLARIFICATION ON THIS POINT IF NEEDED.

General Notes

GENERAL CONTRACTOR:
SHALL PROVIDE WINDOW, COUNTER AND TRANSTRAX AS MANUFACTURED BY E.F. BAVIS AND ASSOC. ALSO, G.C. SHALL PROVIDE WALL OPENINGS, MODULAR ALL-IN-ONE WINDOW UNIT BY E.F. BAVIS AND ASSOCIATES, INC., LINTELS AS REQUIRED AND SPECIFIED BY THE ARCHITECT, INSTALL THE WINDOW AS SPECIFIED AND FINISH UP TO THE WINDOW AND COUNTERTOP UNITS. CONTRACTOR SHALL ENSURE WALL OPENINGS ARE PLUMB AND SQUARE. OPENING SHALL BE OF A MINIMUM DIMENSION OF 5'-0" WIDE BY 4'-3 1/4" HIGH WITH A TOLERANCE OF NO MORE THAN 1/2" LARGER IN EITHER DIMENSION OF HEIGHT OR WIDTH.

ELECTRICAL CONTRACTOR:
SHALL PROVIDE ALL BOXES, OUTLETS, WIRING, AND DRIVE-THRU ALARM & SENSOR AS NOTED. BREAKERS CONTROLLING EQUIPMENT SHALL BE MARKED WITH THE NAME OF THE EQUIPMENT CONTROLLED BY THAT BREAKER IN THE BREAKER BOX. VERIFY COMPUTER AND ADDITIONAL REQUIREMENTS BY WALGREENS.

SPECIFICATIONS:
GLASS: 1 5/8" INSULATED, BULLET RESISTANT GLASS. ALL BULLET RESISTANT GLASS MUST HAVE THIRD PARTY CERTIFICATION TO EITHER THE CURRENT NIJ LEVEL II-A OR UL 752 LEVEL 1 STANDARD.

FRAME:
MODULAR WINDOW SYSTEM BY E.F. BAVIS AND ASSOCIATES, INC. FINISH CONSISTING OF UV STABLE POWDER COAT - US #3D FOR BRONZE ANODIZED.

NOTE: FOR DARK BRONZE ANODIZED STOREFRONTS, ORDER POWDERCOAT US #3D BRONZE. FOR CLEAR ANODIZED STOREFRONTS, ORDER POWDER COAT ASA 70 GRAY.

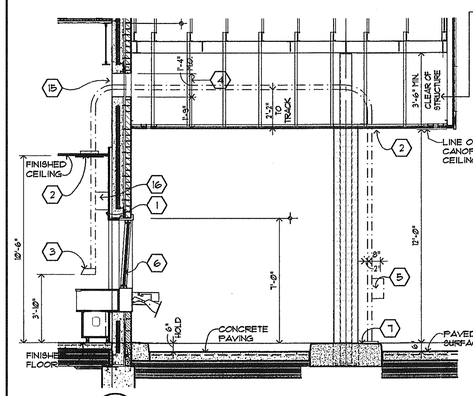
PLASTIC LAMINATE BY WILSONART FOR COUNTERTOP, TOP, SIDE BACK PANELS AND REMOVABLE KNEE WALL.

PLASTIC LAMINATE:
"MATTE BLACK" BY WILSONART FOR COUNTERTOP, TOP, SIDE AND BACK PANELS. "MATTE BLACK" BY WILSONART FOR REMOVABLE KNEE WALL.

AUDIO:
AUDIO SYSTEM TO BE BY E.F. BAVIS AND ASSOCIATES, INC. BAVCOM BRAND TWO ON TWO VERSION. INTERCOM ASSEMBLY LOCATED ON COUNTERTOP. REMOTE INTERCOM LOCATED AT PHARMACIST STATION. SEE ELECTRICAL DRAWINGS.

NOTE:
COORDINATE EQUIPMENT INSTALLATION WITH E.F. BAVIS AND ASSOC., INC., MS. MARSIE STACY AT 513-671-0500. ALLOW 60 DAY LEAD TIME REQUIRED FOR DELIVERY.

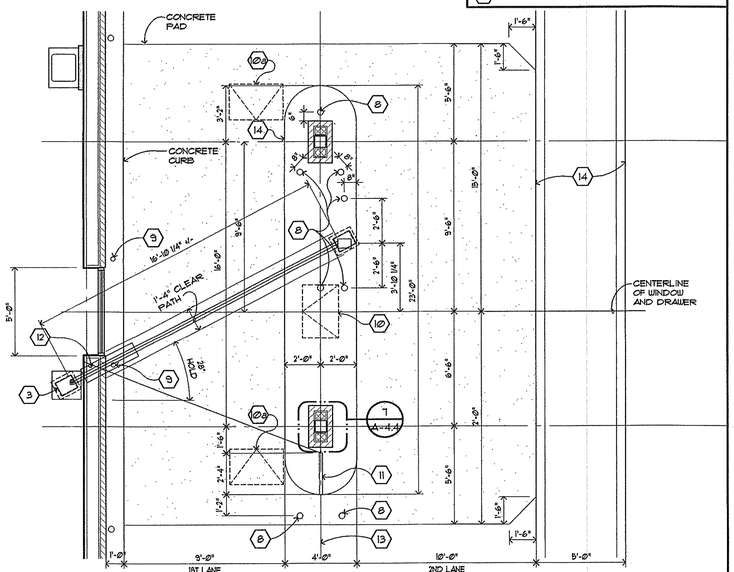
Typical Drive-Up Pharmacy Details



4 A-4.4 **Section at Drive-Up Pharmacy**
1/4" = 1'-0"

Keyed Notes

1. DUPLEX RECEPTACLE
2. CEILING TRIM BY E.F. BAVIS
3. INTERIOR UNIT
4. MASONRY OPENING AND CLEAR PATH
5. CUSTOMER UNIT
6. OUTLINE OF DRIVE-UP WINDOW
7. EXTEND CONCRETE ISLAND TO BELOW FROST LINE BELOW KIOSK
8. 4" DIA. PIPE BUMPER (SEE DETAIL 12/C-0.0)
9. 36" H FLEXIBLE DELINEATOR POST (FASTENED TO CONCRETE WITH BOLTS)
10. 2'-0" x 3'-0" TRANS-TRAX SERVICE ACCESS LOCKABLE CANOPY BY GENERAL CONTR.
20. 2'-0" x 3'-0" SIGN SERVICE ACCESS LOCKABLE CANOPY BY GENERAL CONTR.
11. 2'-6" L x 2" DIA. PVC SLEEVE W/ CLEANOUT COVER IN CURB FACE FOR DRIVE-UP SENSOR. SEE ELECTRICAL DRAWINGS AND DETAIL 16/E-4.4. DRIVE-THRU SENSOR PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
12. CLOSURE OF OPENING BY GENERAL CONTRACTOR
13. YELLOW PAINT STRIPE
14. CONCRETE ISLAND
15. SHEET METAL AIRLOCK. FILL TIGHT TO AIRLOCK HOUSING
16. WALL STANDOFF AND CONTROL BOX



5 A-1.1 **Drive-Up Pharmacy Plan Detail**
1/4" = 1'-0"

North

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9 APR 07
BIDS & PERMITS:
9 APR 07

project:

Store #11415

Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M-45) & 68th Ave.
Allendale, Michigan

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LICENSED ARCHITECT

drawing:

Enlarged Plans & Sections

DO NOT SCALE DRAWING

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drawn: B.J.C.
checked: R.J.C.
approved: R.J.C

file number: 06185

sheet:

A-4.4

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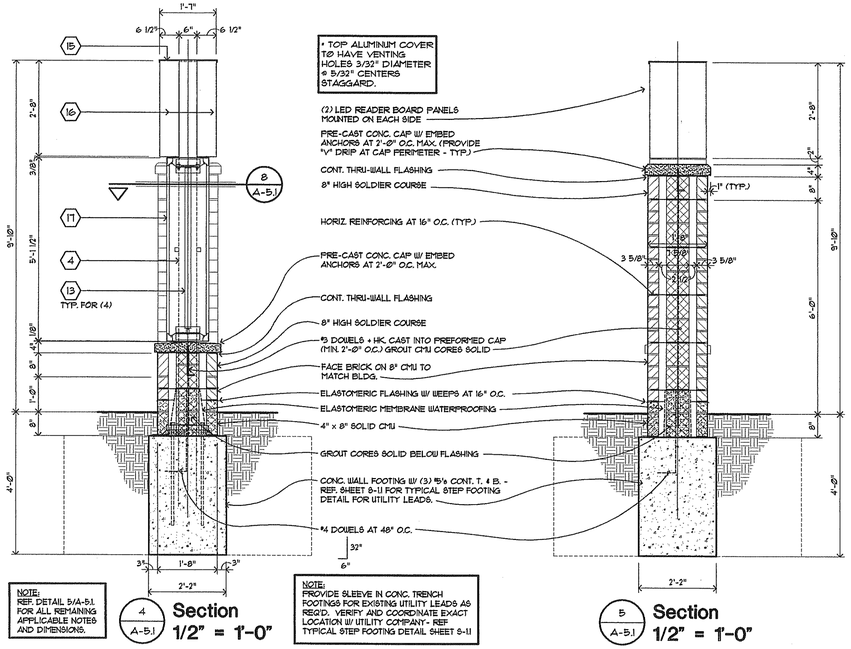

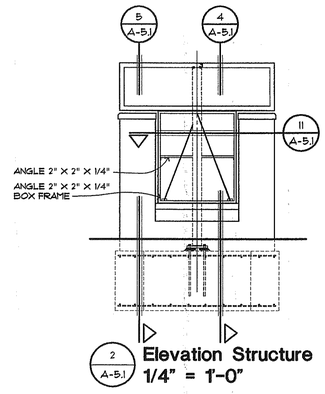

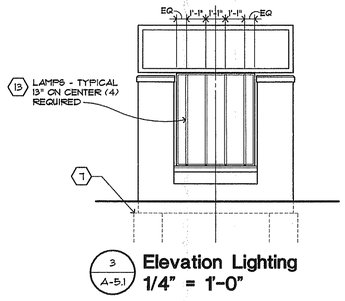

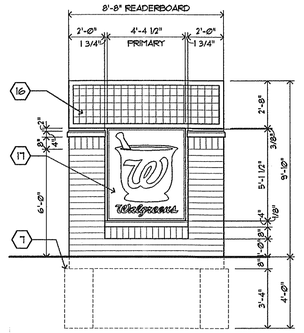

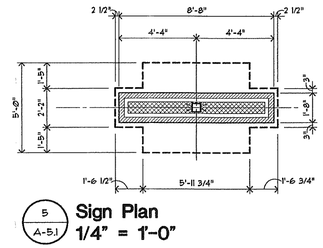

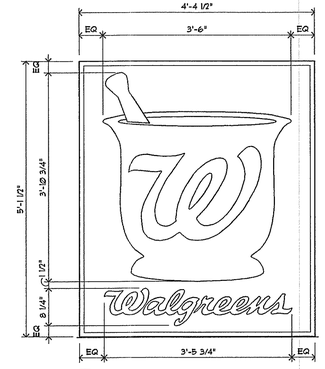

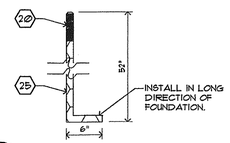

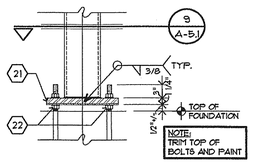

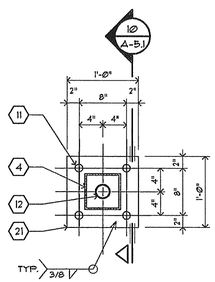

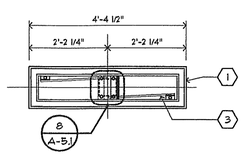

GENERAL NOTES

THIS SIGN WORK SHALL CONSIST OF THE CONSTRUCTION AND INSTALLATION OF ONE NEW DOUBLE-FACED MONUMENT SIGN. SIGN POWER, FOUNDATION, BRICK BASE BY LANDLORD. WALGREENS' SIGN FACES AND CABINETS BY WALGREENS' SIGN CONTRACTOR.

LOCAL SIGN CODE LIMITS THE FACE AREA OF FREESTANDING SIGNAGE TO 50 SQFT. PER FACE AND A MAXIMUM SIGN HEIGHT OF 10'-0".

PROVIDE TWO (2) CONDUITS TO EACH SIGN: ONE FOR LIGHTING CIRCUIT, THE OTHER FOR COAXIAL CABLE FROM CONTROL CENTER TO LED READERBOARD. PROVIDE 30Ø COAXIAL CABLE FOR EACH GROUND SIGN.

DARK BRONZE FINISH ALUMINUM CABINETS FROM Ø63" THICK STOCK.

INTERNAL C.W.H.O. FLUORESCENT ILLUMINATION.

ALL DIMENSIONS AND CONDITIONS TO BE VERIFIED IN THE FIELD BY THE SIGN CONTRACTOR PRIOR TO SIGN FABRICATION.

SIGN CONTRACTOR SHALL BE RESPONSIBLE FOR SIGNS' COMPLIANCE TO ALL APPLICABLE CODES AND ORDINANCES.

SIGN CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY TO INSTALL THE SIGN.

SIGN CONTRACTOR SHALL FURNISH (2) TWO SETS OF SHOP DRAWINGS FOR APPROVAL TO THIS OFFICE BEFORE FABRICATION.

ALL SIGNS TO BE FABRICATED ACCORDING TO THE UNDERWRITERS LABORATORIES SPECIFICATIONS AND TO BEAR UL LABELS.

PROVIDE DISCONNECT SWITCH ON EXTERIOR OF SIGN FOR EACH CIRCUIT TO COMPLY WITH STATE AND LOCAL CODES.

COLORS

STRUCTURE	CABINETS/RETAINERS: PPM DARK BRONZE
FACES	PRIMARY PANEL: 3M PANAFLEX SIGN FACE WITH 7630-53 "CARDINAL RED" BACKGROUND, SCRIPT "W" AND INNER SURFACE OF MORTAR, OUTER SURFACES OF MORTAR & PESTLE ANS SCRIPT "WALGREENS" COPY TO BE WHITE THE MORTAR AND PESTLE SYMBOL: 3'-10 3/4" OVERALL SYMBOL HEIGHT AND 3'-6" OVERALL SYMBOL WIDTH. "WALGREENS" EXTENDED SCRIPT COPY: 8 1/4" CAPITAL AND 4" LOWER CASE LETTER HEIGHTS. 8 1/4" OVERALL COPY HEIGHT, 3'-5 3/4" OVERALL COPY LENGTH. LED READERBOARD PANEL: 2'-8" x 8'-8" OPTION: TWO SINGLE-FACED DISPLAYS WITH RED LED PIXELS. THE 2'-8" CABINET HEIGHT ALLOWS THREE TO SIX LINES OF COPY. HIGH RESOLUTION (APPROXIMATELY .71) WITH SHADING.

STRUCTURAL GENERAL NOTES

1) ALL ALUMINUM SURFACES IN CONTACT WITH STEEL SHALL RECEIVE ONE COAT OF BITUMASTIC PAINT.
2) ALL STRUCTURAL STEEL SHALL BE ASTM A-36.
3) ALL STRUCTURAL STEEL SHALL COMPLY WITH THE AISC MANUAL, LATEST EDITION.
4) ALL STEEL SHALL RECEIVE ONE SHOP COAT OF RUST INHIBITIVE PAINT.
5) TOTAL SIGN WEIGHT = 2300 LB. (INCLUDING ALL STRUCTURAL SUPPORT MEMBERS).
6) DESIGN WIND PRESSURE = 30 LB./SQ. FT.
7) MINIMUM CONCRETE STRENGTH TO BE 3000 P.S.I.
8) REINFORCEMENT STEEL TO BE ASTM A-615 GR 60.
9) ALLOWABLE SOIL PRESSURE 2500 P.S.F.
10) SIGN AND FOUNDATION MUST CONFORM TO LOCAL BUILDING CODES, WIND AND SOIL REQUIREMENTS.

KEYED NOTES

1. EXTRUDED ALUMINUM FRAME.
2. ANGLE 2" X 2" X 1/4".
3. 3/8" DIAMETER SAG ROD.
4. 6" X 6" TUBE POST.
5. PRECOATED ALUMINUM SHEET METAL COVER.
6. N/A.
7. TOP OF FOUNDATION (AT TOP OF STREET CURB HEIGHT MIN).
8. (4) 1 3/4" DIAMETER ANCHOR BOLTS WITH 3/8" STEEL WASHERS (TYPICAL) SEE DETAIL 1/A5.1.
9. #6 BARS TOP AND BOTTOM 12" O.C. EACH WAY (TYPICAL).
10. ANGLE 2 1/2" x 2 1/2" x 1/4"
11. 1 5/16" ROUND HOLE FOR 1 1/8 DIAMETER ANCHOR BOLTS. (4) WITH 3/8" STEEL WASHERS.
12. 2 1/4" ROUND HOLE FOR ELECTRICAL CONDUIT.
13. (4 QUANTITY.) "VOLT-ARC" F120T12/CW/HO FLUORESCENT LAMPS WITH "ADVANCE" COLD WEATHER BALLAST.
14. SIGN FACE.
15. BREATHER PANEL (COVER).
16. (2) NEW LED READER BOARD PANELS MOUNTED ON EACH SIDE OF THE TUBE POST.
17. PRIMARY SIGN PANEL.
18. N/A.
19. N/A.
20. 6" THREADED END.
21. 12" x 12" x 1" STEEL COLUMN BASE PLATE.
22. LEVELING NUTS AND WASHERS
23. N/A.

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9 APR 07

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9 APR 07

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Store #11415

Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M-45) & 68th Ave.
Allendale, Michigan

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drawing:

Freestanding Sign Details

DO NOT SCALE DRAWING

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drawn: B.J.C.
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A-5.1

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Channel Letter L.E.D. Signs

WHITE RETURNS: WITH DARK BACKGROUND

8'-6"
2'-0"
PHARMACY
(1) 8.50 SF.

5'-0"
1'-6"
PHOTO
(3) 5.00 SF

RED #7193 PLEXIGLAS FACE HELVETICA MEDIUM CHANNEL LETTERS. PRE-FINISHED METAL, BRONZE ALUMINUM FILLER. BACKS OF LETTERS .125 ALUMINUM PLATE.

FOR ELECTRICAL DATA & DETAIL SEE SPECIFICATION. PROVIDE (1) 15 AMP CIRCUIT ON TIMER FOR EACH SIGN.

(6) "WALGREENS" FREESTANDING SIGN
SEE SHEET A-5.1.

BRONZE RETURNS: WITH LIGHT BACKGROUND

DRIVE THRU PHARMACY
5'-2"
(4) 12.6 SF

EXIT
2'-6"
(5) 2.1 SF

Walgreens
PHARMACY SINCE 1901
COMING SOON
Visit Our Website at walgreens.com/careers

(9) BANNER BY WALGREENS SIGN MANUFACTURER
CONSTRUCTION SIGN
N.T.S.

Channel Letter L.E.D. Sign Details

RED SCRIPT SIGN DATA ☒

Walgreens (1)

(12)
26'-8 1/2"
LENGTH

RED PLEXIGLAS #7193 FACE SIGN

LENGTH	LOWER CASE LETTER	CAPITAL LETTER	TOP W TO BOTT. G	AREA SQ. FT.	WEIGHT
26'-8 1/2"	24"	34"	47	102.10	122

EXTERIOR SCRIPT SIGN KEYED NOTES

1. SIGN SUPPORTS - GENERAL CONTRACTOR SHALL FURNISH & INSTALL SUPPORTS WHERE STUD TYPE FRAMING OCCURS. BACK SIDE OF WALL SHALL REMAIN OPEN UNTIL ALL ELECTRICAL & SIGN WORK IS COMPLETED. REF: SIGN SPECS ON THIS SHEET.
2. CONDUIT & HOUSING THRU WALL - SIGN CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND INSTALLATION THRU WALL. REF: SPECS ON THIS SHEET.
3. EXPANSION ANCHOR TOGGLE OR EPOXIED STUD TO ANCHOR MOUNTING CLIPS TO WALL SURFACE. USE CLEAR SEALANT AT BUILDING FACE.
4. .063 ALUM. FILLER - WHITE FLUROPAN EXTERIOR OF LETTER, AND FLUROPAN WHITE INTERIOR.
5. 3/16" PLEXIGLAS.

NOTE: SEALANTS FOR OPENINGS ARE TO BE COMPATIBLE WITH THE MATERIALS THEY CONTACT. CONSULT FINISH MANUFACTURER FOR RECOMMENDED SEALANTS.

6. RED FLAT TOP L.E.D. ILLUMINATION SEGMENT (TELEDYNE).
7. .125 ALUM. BACK.
8. 2" X 1-1/2" X 3/16" %6061 ALUM. CHANNEL MOUNTING CLIPS W/ 3/8"-16 HEX HEAD BOLTS W/ NUT AND WASHER.
9. TRIM CAP (1/8" X 1"), COLOR TO MATCH RETURN.
10. SEE ARCHITECTURAL DRAWINGS FOR MATERIAL.
11. WELD-ON 40 AND RESIN BOND.
12. #8 S-S FLAT HEAD SCREWS.
13. PRE-DRILLED 3/8" DIA. DRAIN HOLE W/ SHADOW SCREEN.
14. JUNCTION BOX. SEE ELECT. DRAWINGS.

NOTE: PROVIDE CONDENSATION DRIP DRAINS AT BOTTOM OF ALL LETTERS.

TYPICAL SECTION THROUGH SIGN

AREA COMPUTATIONS FOR SCRIPT SIGNS

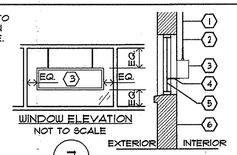
	BOUNDARY	SIGN LENGTH 26'-8 1/2"		
Walgreens		102.10 S.F.		

Sign Specifications

1. GENERAL CONTRACTOR:
   - A. THIS CONTRACTOR SHALL COORDINATE ALL WORK NOTIFY ELECTRICAL CONTRACTOR & SIGN CONTRACTOR AS SOON AS POSSIBLE AFTER THE SIGN WALL OR STRUCTURE IS IN PLACE. GENERAL CONTRACTOR SHALL NOT CLOSE UP THE BACK SIDE OF WALL UNTIL ELECTRICAL CONTRACTOR & SIGN CONTRACTOR HAVE COMPLETED THEIR WORK.
   - B. CONCEALED SIGN SUPPORTS: GENERAL CONTRACTOR SHALL PROVIDE CONCEALED CONTINUOUS WOLMANIZED STRUCTURAL GRADE WOOD SIGN SUPPORTS WHERE STUD OR RAFTER TYPE FRAMING OCCURS.
     1. WHERE SCRIPT SIGNS ARE SHOWN, PROVIDE 2 CONCEALED 2 X 6 MEMBERS AT TOP AND BOTTOM OF SCRIPT FOR ALL SIGNS UP TO 26'-8 1/4". SCRIPT SIGNS OVER 26'-8 1/4" PROVIDE 2 CONCEALED 2 X 8 MEMBERS AT TOP & BOTTOM OF SIGNS.
     2. N/A
     3. WHERE INDIVIDUAL LETTER SIGNS ARE SHOWN, PROVIDE 2 CONCEALED 2 X 6 MEMBERS TOP AND BOTTOM OF SIGNS.
2. ELECTRICAL CONTRACTOR:
   THIS CONTRACTOR SHALL PROVIDE ONE MAIN ELECTRIC SERVICE PANEL AND FEEDS TO THE BACK SIDE OF SIGN WALL. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, FEED AND JUNCTION BOXES ALONG BACK SIDE OF SIGN WALL. PROVIDE JUNCTION BOXES FOR EACH LOCATION APPROXIMATELY WHERE SIGN CONTRACTOR WILL PROVIDE CONDUIT HOUSING THROUGH WALL. PROVIDE ELECTRIC SERVICE CAPACITIES AND CIRCUITS AS SHOWN ON ELECTRICAL DRAWINGS.
3. SIGN CONTRACTOR:
   - A. FOLLOW DRAWINGS & SPECIFICATIONS OF SIGNS AND USE TEMPLATES OF APPROVED DIMENSIONS, CONTOURS, SHAPES AND WITH ELECTRICAL COMPONENTS & CAPACITIES AS SPECIFIED, AND CAPACITIES AS SPECIFIED.
   - B. SIGN CONTRACTOR SHALL FURNISH FOUR SETS OF SHOP DRAWINGS TO WALGREEN FACILITIES PLANNING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
   - C. SIGN CONTRACTOR SHALL CONSTRUCT SIGN IN COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES, AND ACCORDING TO UNDERWRITERS LABORATORIES SPECIFICATIONS AND TO BEAR UL LABELS. SIGN CONTRACTOR SHALL OBTAIN ALL STATE AND MUNICIPAL PERMITS NECESSARY TO INSTALL SIGN(S).
4. SIGN INSTALLATION AT BUILDING FACE WORK BY SIGN CONTRACTOR:
   - A. SIGN CONTRACTOR SHALL ESTABLISH CENTER LINE OF SIGN WALL. MEASURE LOCATION OF EACH ELECTRIC LEAD FROM THE CENTER OUTWARD. PROVIDE 1/2" GALVANIZED CONDUIT AND HOUSING THROUGH 1 1/4" GROUND HOLES. LET THREADED CONDUIT PROJECT THROUGH WALL 1 1/2".
   - B. SIGN CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH ON EXTERIOR OF SIGN FOR EACH CIRCUIT TO COMPLY WITH STATE AND LOCAL CODES. EACH SIGN SHALL BE ACTIVATED BY APPROVED PHOTO CELL AND TIME SWITCH WITH MANUAL OVERIDE SWITCH.
     ELECTRICAL CONTRACTOR TO FURNISH PHOTO CELL, TIME SWITCH, AND MANUAL OVERIDE SWITCH.

Window Sign Installation Details

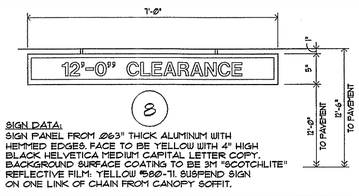
1. ELECTRIC POWER SUPPLY CABLE TO RUN CONCEALED BEHIND OR WITHIN WINDOW MULLIONS WHERE POSSIBLE.
2. STAINLESS STEEL SUSPENSION CABLE TO CEILING STRUCTURE AS UNOBTRUSIVELY AS POSSIBLE.
3. ILLUMINATED SIGN
4. TRANSPARENT STAND-OFF BUM WITH RUBBER TIP AS REQUIRED.
5. WINDOW GLASS SURFACE.
6. WALL CONSTRUCTION.



WINDOW ELEVATION
NOT TO SCALE
(7)

EXTERIOR INTERIOR
WINDOW SECTION
NOT TO SCALE

Clearance Sign



(8)

SIGN DATA:
SIGN PANEL FROM .063" THICK ALUMINUM WITH HEMMED EDGES. FACE TO BE YELLOW WITH 4" HIGH BLACK HELVETICA MEDIUM CAPITAL LETTER COPY. BACKGROUND SURFACE COATING TO BE 3M "SCOTCHLITE" REFLECTIVE FILM, YELLOW #580-71. SUSPEND SIGN ON ONE LINK OF CHAIN FROM CANOPY SOFFIT.

Work Responsibility

ALL EXTERIOR BUILDING SIGNS SHALL BE FURNISHED AND INSTALLED BY WALGREENS AND CONTRACTOR.

ALL OTHER RELATED WORK INCLUDING SIGN SUPPORTS AND ELECTRICAL POWER SUPPLY SHALL BE PER SIGN SPECS - THIS SHEET.

ALL FINAL CONNECTIONS MADE BY SIGN CONTRACTOR.

NOT USED

NOT USED

NOT USED

Entrance Tower Graphic Detail
3/4" = 1'-0"

Wall Openings Layout
3/8" = 1'-0"

(10) A-5.2 Entrance Tower Graphic Sign Details

SIGN MANUFACTURER
KIEFER & CO. 877-543-3337

L.E.D. MANUFACTURER
MINTECH: ASSIGNED TO THE STATES OF ALABAMA, FLORIDA, GEORGIA, ILLINOIS, INDIANA, MICHIGAN, PUERTO RICO, AND TENNESSEE.

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STATE OF MICHIGAN
RICHARD J. CLEVE
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NO. 38436
LICENSED ARCHITECT

drawing:

Sign Details & Elevations

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A-5.2

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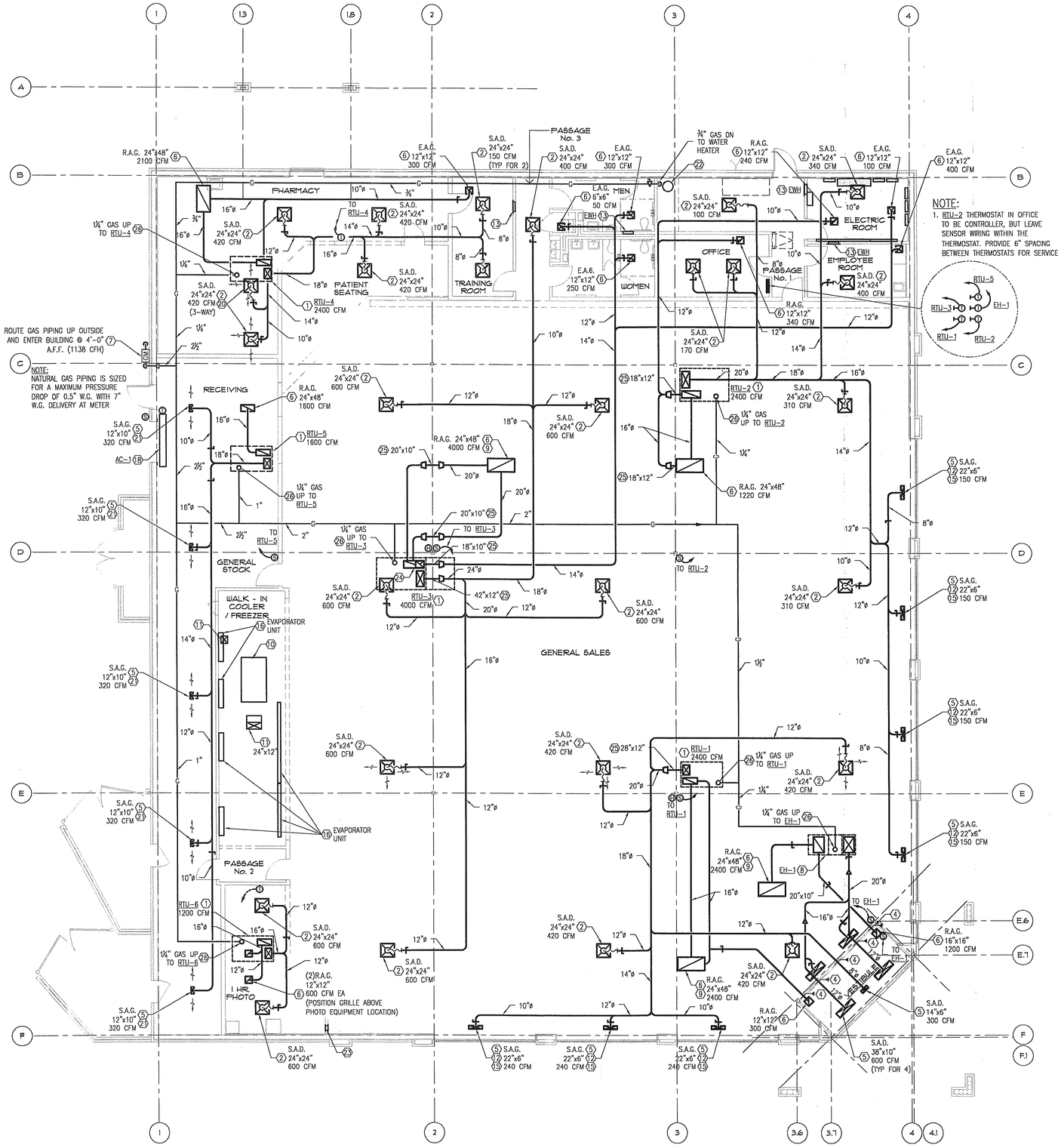

Floor Plan - HVAC
1/8" = 1'-0"

North

MECHANICAL KEYED NOTES

1. HVAC ROOFTOP UNIT. SEE GENERAL NOTES (ABOVE) AND SCHEDULE ON DRAWING M2.2 FOR ADDITIONAL INFORMATION.
2. S.A.D., CFM AND SIZE AS NOTED. S.A.D. SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.20" OR LESS. SEE DETAIL 1/M2.1.
3. NOT USED
4. INSTALL FIRE DAMPER AND ACCESS DOOR PER LOCAL CODE.
5. S.A.G., CFM AND SIZE AS NOTED. S.A.G. SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.20" OR LESS. SEE DETAIL 2/M2.1.
6. E.A.G. & R.A.G., CFM AND SIZE AS NOTED. GRILLE SHALL HAVE A TOTAL STATIC PRESSURE DROP OF 0.20" OR LESS. SEE DETAILS 3 AND 6/M2.1.
7. GAS SERVICE, METER, REGULATOR, AND VALVES. PHYSICAL PROTECTION OF EQUIPMENT BY GENERAL CONTRACTOR.
8. ROOFTOP ENCLOSED BLOWER/ENTRANCE HEATER. INCLUDE FLEXIBLE CONNECTIONS, 100% RETURN AIR (NO OUTSIDE AIR) WITH SENSOR AT ENTRANCE AND THERMOSTAT IN OFFICE.
9. RETURN GRILLES ARE SIZED FOR 100% RETURN AIR QUANTITY.
10. ROOFTOP CONDENSING UNIT FOR WALK-IN COOLER/FREEZER.
11. PIPE PORTAL FOR WALK-IN/COOLER/FREEZER CONDENSING UNIT REFRIGERANT AND ELECTRICAL LINES.
12. ADJUST FRONT HORIZONTAL BARS TO AN ANGLE OF 45° SO THAT THE AIR FLOWS AWAY FROM THE WINDOW. THIS IS TO HELP PREVENT CONDENSATION ON THE GLASS IN HOT, HUMID CLIMATE CONDITIONS.
13. ELECTRIC WALL HEATER (EWH) FURNISHED BY ELECTRICAL CONTRACTOR. SEE DRAWING E1.2 FOR MORE INFORMATION.
14. NOT USED
15. INSTALL S.A.G. IN CENTER OF CEILING TILE CLOSEST TO WINDOW CENTER.
16. EVAPORATIVE UNIT. (FAN COIL) PROVIDE DX PIPING CONNECTION WITH ROOFTOP CONDENSING UNIT.
17. NOT USED
18. OVERHEAD DOOR AIR CURTAIN, WALL MOUNTED AND SUPPORTED FROM BAR-JOIST. POSITION TO CLEAR THE DOOR AND INSTALL PER MANUFACTURER'S DIRECTION. PROVIDE ELECTRIC HEAT, BASED ON WALGREENS DESIGN CRITERIA. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
19. NOT USED
20. DIRECT SUPPLY AIR AWAY FROM WEIGHT SCALE
21. MOUNT REGISTERS ON SPIRAL DUCTWORK. REGISTERS SHALL HAVE DAMPER AND SHALL BE INSTALLED SO THAT THE AIR SUPPLY IS DIRECTED DOWNWARD AT AN ANGLE, SHOWN ON DETAIL 11/M2.1.
22. PROVIDE AIR EXHAUST THRU ROOF FOR GAS FIRED WATER HEATER (IF APPLICABLE). SEE SHEET P1.1, DETAILS 2/P2.1 & 6A/P2.1. PROVIDED BY PLUMBING CONTRACTOR.
23. INSTALL 12"x12" TRANSFER GRILLE 8" A.F.F. COORDINATE WITH FURNITURE.
24. MAINTAIN COMPLETE EXHAUST SEPARATION WITHIN ENERGY RECYCLER UNIT. THIS MAY REQUIRE A FIELD INSTALLED BAFFLE.
25. COORDINATE DUCT CROSSING WITH STEEL AND LIGHTS, TYP.
26. GAS PIPING SHALL BE FACTORY PIPED THROUGH FLOOR OF UNIT. DO NOT PENETRATE ROOF. PROVIDE GAS VALVE THAT IS ACCESSIBLE FROM ABOVE ROOF AT THE UNIT.

CONTROL OF ENTRANCE HEATER (EH-1)

THE TWO STAGE GAS BURNER SHALL BE CONTROLLED BY A TWO STAGE TEMPERATURE SENSOR WALL MOUNTED, OUTSIDE THE VESTIBULE, INSIDE THE SALES AREA. THE SET POINT FOR THIS SENSOR SHALL HAVE AN OPERATIONAL H-O-A SUBBASE.

WHEN A VESTIBULE IS PRESENT, A FREEZE PROTECTION THERMOSTAT SHALL BE PROVIDED TO SENSE AIR TEMPERATURE INSIDE THE RETURN AIR DUCT RIGHT ABOVE THE CEILING GRILLE. THIS THERMOSTAT (SET AT 50 DEGREES F.) SHALL CALL FOR HEAT EVEN IF THE TEMPERATURE SENSOR INSIDE THE STORE IS SATISFIED.

MECHANICAL NOTES

GENERAL:

1.1 REFER TO ALL OTHER PROJECT AND SPECIFICATIONS FOR ADDITIONAL WORK OR CLARIFICATIONS.

1.2 IN AREAS WITHOUT A FINISHED CEILING, MECHANICAL PIPING AND DUCT WORK SHALL BE NOT LOWER THAN 15 FT. COORDINATE LOCATION WITH STOCK ROOM SHELVING AND LIGHTING.

1.3 NON-HVAC COMPRESSORS AND CONDENSERS SHALL BE FURNISHED BY WALGREENS.

EQUIPMENT:

2.1 SEE ARCHITECTURAL DRAWINGS FOR HVAC ROOF CURB, ROOF COMPRESSOR CURB AND SUPPORT DETAILS.

2.2 INSTALL HVAC UNITS LEVEL ON ROOF CURBS.

2.3 OUTSIDE AIR INTAKE ON ROOF SHALL BE LOCATED A MINIMUM OF 15'-0" AWAY FROM ANY EXHAUST DUCT, BLOWER DISCHARGE, PLUMBING VENTS, ETC.

2.4 HVAC UNITS TO INCLUDE FLEXIBLE CONNECTIONS.

2.5 OUTSIDE AIR INTAKE TO BE SIZED FOR 100% OF OUTSIDE AIR WHEN AN ECONOMIZER SYSTEM IS PROVIDED.

2.6 ALL OUTSIDE AND RETURN AIR DAMPERS FOR ECONOMIZER AND NON-ECONOMIZER UNITS SHALL BE MOTORIZED AND HAVE A LOW LEAK GASKET.

2.7 PROVIDE LAMINATED BAKELITE NAME PLATES ON EACH HVAC UNIT AND LOCATE NEXT TO UNIT NAME TAG (RTU-1, ER-1, EF-1, ETC.).

CONDENSATE DRAIN SYSTEM:

3.1 FOR ALL GEOGRAPHICAL LOCATIONS, PROVIDE COSTGARD DEVICE ON EACH RTU, MANUFACTURED BY TRENT TECHNOLOGIES, INC. TYLER TEXAS, TELEPHONE # (903) 509-4843.

3.2 FOR LOCATIONS WEST OF 99 DEG. LONGITUDE OR NORTH OF 33 DEG. LATITUDE, RUN CONDENSATE PIPING 3 INCH BEYOND THE ROOF CURB AND DISCHARGE IN THE DIRECTION OF THE ROOF PITCH. LOCATE DISCHARGE SO THAT CONDENSATE RUNS AWAY FROM RTU. REFER TO ARCHITECTURAL DRAWING (A1.3) FOR THE REQUIRED "SPLASH BLOCK ON WALKWAY PAD BELOW WATER DISCHARGE".

3.3 FOR LOCATIONS BOTH EAST OF 99 DEG. LONGITUDE AND SOUTH OF 33 DEG. LATITUDE, RUN CONDENSATE PIPING FROM RTUs TO AN APPROVED RECEPTOR. THE PREFERRED METHOD IS TO RUN THE CONDENSATE DRAIN PIPING ABOVE THE ROOF SUPPORTED ON 6"x6" BLACK POLYCARBONATE PIPE SUPPORTS, MODEL NO. 1.3/8 I, NRO INDUSTRIES, TELEPHONE (800) 768-6978. PROVIDE STAINLESS STEEL SCREWS AND STRAP TO PERMIT PIPE MOVEMENT. SUPPORT PIPING NOT MORE THAN 6 FT. APART. ADHERE THE PIPE SUPPORT TO ROOF MEMBRANE IN A MANNER APPROVED BY THE MEMBRANE MANUFACTURER.

3.4 RUN CONDENSATE PIPING BELOW THE ROOF IF CODE OR LOCAL AUTHORITIES PROHIBIT PIPING ABOVE THE ROOF OR IF DISCHARGING ONTO THE ROOF IS NOT ALLOWED. USE A PORTAL PLUS PIPE PORTAL TO PENETRATE THE ROOF. PROVIDE A HIGHER THAN NORMAL ROOF CURB TO RAISE THE RTU HIGH ENOUGH TO MAKE THIS SCHEME WORK.

3.5 TRANE UNITS AND SOME CARRIER RTUs (13 TONS AND ABOVE) ARE NOT DELIVERED WITH DRAIN CONNECTIONS IN THE BOTTOM ON THE DRAIN PAN. DRAIN CONNECTIONS FOR THESE UNITS MUST BE MADE IN THE FIELD. DETAILED INSTALLATION INSTRUCTIONS ARE PROVIDED WITH EACH SHIPMENT OF COSTGARD DRAIN SEAL.

3.6 PROVIDE CONDENSATE PIPING, DRAINAGE FITTINGS AND CLEANOUTS WITH A MINIMUM SIZE OF 1.25 INCH. PROVIDE SCHEDULE 40 MIN. PVC OR ABS UNLESS CODE REQUIRES OTHERWISE. PIPING LOCATED OUTSIDE THE BUILDING SHALL BE WEATHER, SUNLIGHT AND UV RESISTANT.

3.7 LOCATE CONDENSATE DRAIN PIPING SO IT WILL NOT INTERFERE WITH THE REQUIRED ACCESS TO THE RTUs.

3.8 INSULATE ALL CONDENSATE DRAIN PIPING INSIDE THE BUILDING TO INCLUDE MAINS, BRANCHES, VENTS AND COSTGARD.

AIR DISTRIBUTION:

4.1 DUCTWORK TO BE GALVANIZED SHEET METAL. SPIRAL PER SMACNA. REFER TO SPECIFICATION 15880. LINED DUCTWORK IS NOT PERMITTED.

4.2 PROVIDE FIRE DAMPERS WITH ACCESS PANELS PER LOCAL CODE AND AS NOTED.

4.3 FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 7'-0". USE ONLY ON FINAL SUPPLY AIR DIFFUSER, AND 3'-0" FROM THE RETURN AIR GRILLE TO THE METAL DUCTWORK. FOR BOTH CASES, 90° TURNS ARE NOT ALLOWED - OFFSET ANGLES SHALL BE KEPT TO A MINIMUM. SEE DETAILS 6/M2.1 & 8/M2.1.

4.4 DO NOT INSTALL SUPPLY AIR DIFFUSERS IN CEILING PANEL ADJACENT TO A ROW OF LIGHT FIXTURES. LOCATE DIFFUSERS IN ACCORDANCE WITH THE REFLECTED CEILING PLAN SHOWN ON THE ARCHITECTURAL DRAWING.

4.5 PAINT THE INTERIOR SURFACE OF DUCTS (WHERE VISIBLE) THROUGH GRILLES, DIFFUSERS ETC. USE FLAT 'DTM' (DIRECT TO METAL), NON-SPECULAR BLACK PAINT.

4.6 SUPPLY AND/OR RETURN AIR CEILING PLENUMS ARE NOT PERMITTED.

4.7 AIR BALANCING. BALANCE AIR TO INDICATED QUANTITIES WITHIN A TOLERANCE OF PLUS OR MINUS 10%.

MISCELLANEOUS:

5.1 ELECTRIC WALL HEATERS (EWH) ARE PROVIDED UNDER THE ELECTRICAL CONTRACT. THEY ARE HERE FOR INFORMATION ONLY.

5.2 DO NOT INSTALL EQUIPMENT, DUCTWORK, PIPE, CONDUIT IN PROXIMITY OF THE ROOF HATCH LADDER AREA.

HVAC CONTROLS:

6.1 EACH HVAC UNIT SHALL HAVE ITS OWN STAND-ALONE CONTROLS.

6.2 PROVIDE THERMOSTATS, HUMIDISTAT AND SENSORS. LABEL WITH RESPECT TO THE HVAC UNIT THEY SERVE.

6.3 THERMOSTAT, HUMIDISTAT AND SENSOR WIRING SHALL BE RUN INSIDE CONDUIT.

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STATE OF MICHIGAN
RICHARD J. CLEVE
ARCHITECT
NO. 38435
REGISTERED ARCHITECT

drawing:
Floor Plan - HVAC

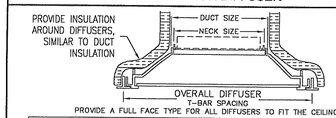
DO NOT SCALE DRAWING

issue date: 09 APR 07
drawn: ED
checked: AGL
approved: AGL

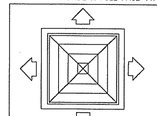
file number: 06185

sheet:
M1.1

SUPPLY AIR DIFFUSER



PROVIDE A FULL FACE TYPE FOR ALL DIFFUSERS TO FIT THE CEILING GRID.



NOTES:
1. ALL ALUMINUM WITH WHITE FACTORY FINISH TO MATCH CEILING GRID.
2. SQUARE, ROUND OR RECTANGULAR NECK. ACCEPTABLE MANUFACTURERS: METALAIRE 5500-6-S4 (*), CARNES SETA (SETJ) C24 (*), KRUEGER SSH (SHPC)-4-23 (*), PRICE AMD (AMDA)-36 (*), TITUS TDC-AA (TDCA-AA)-3-4 (*), OR TUTTLE & BAILEY AM (AMA) L4 (*)
3. FOR OTHER MOUNTING TYPE CONSULT MANUFACTURER.
4. THE DIFFUSER PANEL SHALL FIT THE CEILING GRID, HOWEVER THE DIFFUSER BLADES NEED NOT BE FULL FACE.
5. PROVIDE PROPER MOUNTING OPTION.

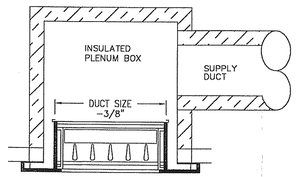
(*) APD AND OBD ONLY IN OFFICE, EMPLOYEE ROOM AND PHARMACY AREA.
APD-AIR PATTERN DEFLECTOR
OBD-OPPOSED BLADE DAMPER

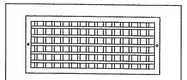
METALAIRE 5500-6-S4
DIFFUSER TYPE (ALUMINUM CONSTR.)
FRAME (LAY-IN)
AIR PATTERN (4-WAY) (SEE PLAN FOR AIR PATTERN ARROWS)

(NO SUBSTITUTION ACCEPTED FOR MANUFACTURERS LISTED ABOVE)

1 / M2.1

SUPPLY AIR GRILLE AND REGISTER





ACCEPTABLE MANUFACTURERS:

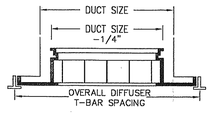
CARNES	RWDAH
METALAIRE	H4004D
KRUEGER	5880H
PRICE	620 DL
TITUS	300FL
TUTTLE & BAILEY	A547

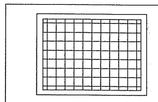
NOTES:
1. ADJUSTABLE, DOUBLE DEFLECTION.
2. ALL ALUMINUM WITH WHITE FACTORY FINISH.
3. FOR OTHER MOUNTING TYPE CONSULT MANUFACTURER.
4. PLENUM BOX TO HAVE FLANGE ALL 4 SIDES.
5. REGISTER SCREWS NUMBER AS REQ'D. PER MFR.
6. PROVIDE PROPER MOUNTING OPTION.

(NO SUBSTITUTION ACCEPTED FOR MANUFACTURERS LISTED ABOVE)

2 / M2.1

EXHAUST & RETURN AIR GRILLE





ACCEPTABLE MANUFACTURERS:

CARNES	RACA-TB FRAME
METALAIRE	CC1TB
KRUEGER	EGC-10
PRICE	82TB
TITUS	50F
TUTTLE & BAILEY	CRE1000

NOTES:
1. 0 DEGREE DEFLECTION.
2. ALL ALUMINUM WITH WHITE FACTORY FINISH.
3. 1"x1"x1" EGGCRATE GRID.
4. FOR OTHER MOUNTING TYPE CONSULT MANUFACTURER.
5. PROVIDE PROPER MOUNTING OPTION.

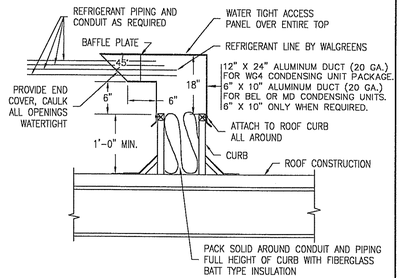
(NO SUBSTITUTION ACCEPTED MANUFACTURERS LISTED ABOVE)

3 / M2.1

NOT USED

4 / M2.1

PIPE PORTAL

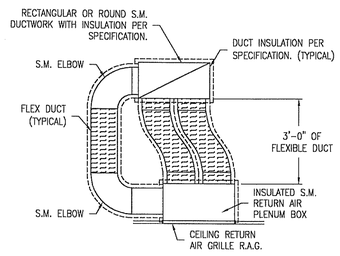


NOTE: PIPE PORTAL SHALL BE PATE OR EQUAL.

NOT TO SCALE

5 / M2.1

RETURN FLEXIBLE DUCTWORK



S.M. = SHEET METAL
(NUMBER OF DUCTS AS REQUIRED)

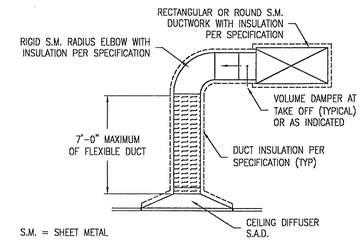
NOT TO SCALE

6 / M2.1

ROOF TOP UNIT ZONING COVERAGE

7 / M2.1

SUPPLY FLEXIBLE DUCTWORK

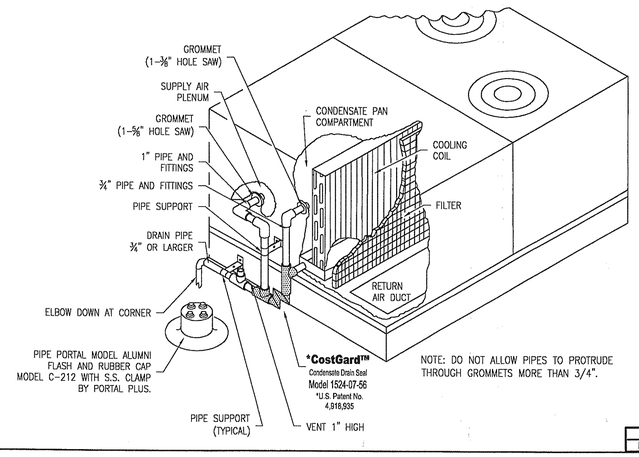


NOT TO SCALE

8 / M2.1

CARRIER MODELS 48HJD008 TO 014 - CONDENSATE DRAIN OUTSIDE THE CURB

NO SCALE

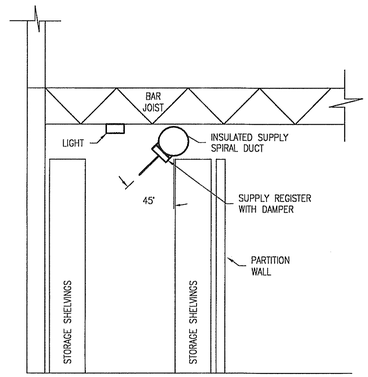


NOTE: DO NOT ALLOW PIPES TO PROTRUDE THROUGH GROMMETS MORE THAN 3/4".

10 / M2.1

STOCKROOM AIR SUPPLY DETAIL

NO SCALE



NOT TO SCALE

11 / M2.1

MECHANICAL LEGEND

	SUPPLY AIR
	RETURN AIR
	EXHAUST AIR
	MANUAL DAMPER
—G—V—	GAS WITH VALVE
H	HUMIDISTAT
T	THERMOSTAT (MOUNT 5'-0" UP, UNLESS OTHERWISE NOTED) SEE CONTROL DIAGRAM, DRAWING M2.2.
S	SENSOR FOR THERMOSTAT; SEE CONTROL DIAGRAM, DWG.M2.2. (MOUNT 6'-0" UP ON COLUMN) OR UNLESS NOTED
GM	GAS METER
	FIRE DAMPER

AHU	AIR HANDLING UNIT
AC	AIR CURTAIN
CFM	CUBIC FEET PER MINUTE
CU	CONDENSING UNIT
EF	EXHAUST FAN
EH	ENTRANCE HEATER
EWH	ELECTRIC WALL HEATER
FD	FIRE DAMPER WITH ACCESS DOOR
SAD	SUPPLY AIR DIFFUSER
SAG	SUPPLY AIR GRILLE
SAR	SUPPLY AIR REGISTER
SF	SUPPLY FAN
SM	STEEL METAL
RAG	RETURN AIR GRILLE
EAG	EXHAUST AIR GRILLE
RTU	ROOF TOP UNIT
UH	UNIT HEATER

COOLING SET POINTS

OCCUPIED (8 A.M. – 10 P.M.) SALES HUMIDITY @ 50% RH		UNOCCUPIED (10 P.M. – 8 A.M.) SALES HUMIDITY @ 50% RH	
SALES DRY BULB	76°F	SALES DRY BULB	76°F
PHARMACY & PATIENT SEATING AREA	72°F	PHARMACY & PATIENT SEATING AREA	76°F
GENERAL STOCK	78°F	GENERAL STOCK	80°F
1 HOUR PHOTO	76°F	1 HOUR PHOTO	76°F

HEATING SET POINTS

OCCUPIED (8 A.M. – 10 P.M.)		UNOCCUPIED (10 P.M. – 8 A.M.)	
SALES	70°F	SALES	60°F
PHARMACY & PATIENT SEATING AREA	70°F	PHARMACY & PATIENT SEATING AREA	60°F
GENERAL STOCK	70°F	GENERAL STOCK	60°F
1 HOUR PHOTO	70°F	1 HOUR PHOTO	60°F

DESIGN CRITERIA SHOWN

BASED ON 2001 ASHRAE FUNDAMENTALS

ASHRAE LOCATION: MUSKEGON, MI

PROJECT ELEVATION: 633 FT.

COOLING TABLE 1B: 83 DEGREES F. DRY BULB; 70 DEGREES F. WET BULB

HEATING TABLE 1A: 07 DEGREES F. DRY BULB

MECHANICAL BUILDING CODE: MICHIGAN 2003

OCCUPANCY CLASSIFICATION: SPECIALTY

issued for:
OWNER / TENANT REVIEW:
09 APR 07
BIDS & PERMITS:
09 APR 07

project:

Store #11415

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drawing:

Mechanical Details

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drawn: ED
checked: AGL
approved: AGL

file number: 06185

sheet:

M2.1

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SEE DRAWING ME1.1 FOR CARRIER ENERGY MANAGEMENT SYSTEM (EMS).

HVAC CONTROLS

BILL OF MATERIAL

THE FOLLOWING CONTROLS TO BE FURNISHED BY CARRIER

QUANTITY	PART NUMBER	REMARKS
1 (PER UNIT) EXCEPT PHARM AND 1 HOUR PHOTO UNIT	ACI/10K-2CP-RSO-CA	SPACE SENSOR W/SET POINT ADJ. MOUNTED IN THE MANAGERS OFFICE
1 (PER UNIT) (PHARM AND 1 HOUR PHOTO)	ACI/1K-CP-RSO-CA	SPACE SENSOR W/SET POINT ADJ. MOUNTED IN PHARMACY AREA
1 (PER UNIT) EXCEPT PHARM AND 1 HOUR PHOTO UNIT	ACI/10K-2CP-R-CA	SPACE SENSOR MOUNTED IN THE SALES AREA
1/UNIT WHEN ENERGY RECYCLER OR HUMIDIMIZER USED	HL--38MG-029	HUMIDISTAT UTILIZED ON ENERGY RECYCLER AND HUMIDIMIZER UNITS ONLY

NOTE:
SPACE SENSOR (ACI/10K-2CP-R-CA) IS TO BE MOUNTED ON COLUMN (OR WALL), 6'-0" UP, AND THE SPACE SENSOR W/SET POINT ADJ LOCATED IN MANAGERS OFFICE. USE CARRIER PROVIDED WIRE. SEE CONTROL WIRING DIAGRAM FOR CONNECTIONS. PHARMACY UNIT WILL UTILIZE SPACE SENSOR W/SET POINT ADJ MOUNTED IN THE PHARMACY AREA (ACI/10K-CP-RSO-CA).

HUMIDISTAT (HL--38MG-029) USED ON ENERGY RECYCLER AND HUMIDIMIZER UNITS ONLY. SEE CONTROL WIRING DIAGRAM FOR CONNECTIONS.

MECHANICAL CONTRACTOR SHALL LABEL SPACE SENSORS (USING P-TOUCH LABELING MACHINE) TO INDICATE WHAT IS CONTROLLED SUCH AS RTU-1, ETC.

REFER TO DRAWING ME-1 FOR SCOPE AND INSTALLATION OF THE CARRIER EMS SYSTEM.

NATIONAL ACCOUNT FOR CARRIER ROOF TOP UNIT

I. HVAC UNITS

WALGREEN CO. SHALL HAVE CARRIER EQUIPMENT INSTALLED FOR STORES LOCATED IN ALABAMA, CONNECTICUT, FLORIDA, GEORGIA, ILLINOIS, INDIANA, KENTUCKY, LOUISIANA, MARYLAND, MASSACHUSETTS, MAINE, MICHIGAN, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT AND WEST VIRGINIA.

FOR CARRIER EQUIPMENT, CALL CARRIER NATIONAL ACCOUNT TEAM @ (800)690-1083 TO COORDINATE YOUR PURCHASE ORDER AGREEMENT AND EQUIPMENT DELIVERY.

PACKAGE ROOFTOP AIR CONDITIONING UNIT (RTU) SCHEDULE

ID MARK	AREAS SERVED	EVAPORATOR FAN DATA					COOLING DATA							HEATING DATA			ELECT.		NOTES	MANUFACTURER	
		DESIGN O.A.I. CFM	EVAP. AIRFLOW CFM	UNIT ESP IN.WC.	EVAP. FAN BHP	FAN MOTOR HP	NO. OF COMP.	CAPACITY LEAVING RTU			DISCHARGE AIR FROM UNIT		EER	RE-HEAT OUT MBH	HEAT PUMP OUT MBH	HEAT NET OUT MBH	208-3-60			MAKE	MODEL
								NOMINAL TONS	TOTAL NET MBH	SENSIBLE NET MBH	D.B. DEG. F.	W.B. DEG. F.					UNIT MCA	UNIT MOA			
RTU-1	SALES - ENTRANCE	0	2000	0.75	1.5	2.9	1	5	62.4	56.5	54	52	13.0	---	---	120	30.6	35	1,3,5,6,8,14	CARRIER	48HJF006
RTU-2	SALES	0	2400	0.75	2.0	2.4	1	6	76.2	61.8	52	51	11.0	---	---	120	32.8	40	1,5,6,8,9,14	CARRIER	48HJF007
ER-1	SALES - INTERIOR	1050	---	0.50	---	---	1	3.3	38.8	13.0	71	59	-	---	24	41	-	-	1,2,14	CARRIER	62AQ200GA
RTU-3	SALES - INTERIOR	NA	4000	0.75	2.4	3.7	2	10	114.8	90.5	55	53	11.0	---	---	200	74.9	80	1,6,8,9,14	CARRIER	48HJF012
RTU-4	PHARMACY	400	2400	0.50	1.7	2.4	1	6	78.2	58.4	53	52	11.0	---	---	120	32.8	40	1,5,6,8,9,14	CARRIER	48HJF007
RTU-5	STOCK ROOM	100	1600	0.50	0.7	1.2	1	4	47.8	40.8	55	52	13.0	---	---	120	22.5	30	1,5,6,8,14	CARRIER	48HJF005
RTU-6	1-HR PHOTO	100	1200	0.50	0.4	1.2	1	3	37.1	29.3	54	52	13.0	---	---	93	18.5	25	1,5,6,8,14	CARRIER	48HJF004
	TOTALS	1650						37.3	455.3	350.3											

NOTES:

NOTE NO.1 COOLING DESIGN CONDITIONS: CONDENSER AIR & OUTSIDE AIR 83°DB & 70°WB.
HEATING DESIGN CONDITION: OUTSIDE AIR 07°DB

NOTE NO.2 ENERGY RECYCLER: CARRIER MODEL 62AQ200GA, ATTACHED TO A 10 TON RTU. MOUNTED ON A FULL ROOF CURB COMMON TO BOTH UNITS.

NOTE NO.3 HUMIDIMIZER OPTION BY CARRIER USING COMPRESSOR REHEAT CONTROLLED BY A HUMIDISTAT.

NOTE NO.4 NOT USED

NOTE NO.5 ECONOMIZER WITH CONTROLS

NOTE NO.6 LOW AMBIENT KIT DOWN TO 25 DEG. F. (SPECIFY IF REQUIRED)

NOTE NO.7 NOT USED

NOTE NO.8 PREMIER LINK CONTROLLER (REQUIRED WHEN THE "EMS" SYSTEM IS SPECIFIED)

NOTE NO.9 DUCT SMOKE DETECTOR FACTORY INSTALLED, WIRED BUT NOT POWERED FROM THE RTU FOR SUPPLY AND RETURN.

NOTE NO.10 NOT USED

NOTE NO.11 NOT USED

NOTE NO.12 NOT USED

NOTE NO.13 NOT USED

NOTE NO.14 FOR ADDITIONAL REQUIREMENTS COMMON TO ALL UNITS REFER TO SPECIFICATION SECTION 15500-1.

ENERGY RECYCLER UNIT

MARK	MANUFACTURER	MODEL	AREA SERVED	BTU CREDIT CAPACITY			CFM		EXTERNAL SP		BHP REQUIRED		MOTOR HP	
				COOLING TOTAL	COOLING LATENT	HEATING BTU	OUTSIDE AIR	EXHAUST AIR	OUTSIDE AIR	EXHAUST AIR	OUTSIDE AIR	EXHAUST AIR	OUTSIDE AIR	EXHAUST AIR
ER-1	CARRIER	62AQ-200-5GA	SALES AREA	SHOWN ON RTU SCHEDULE			1050		0.25	0.50			0.50	0.50

AIR CURTAIN & ENTRANCE HEATER SCHEDULE

UNIT	AREA SERVED	BTU/HR OUTPUT OR KILOWATT	CFM	MOTOR		TYPE	MAKE AND MODEL
				HP.	VOLT PHASE		
AC-1	OVERHEAD RECEIVING DOOR	20 KW 208/3 PH	2072	1/5	208/ 1 PH	AIR CURTAIN WITH ELECTRIC HEAT AND THERMOSTAT.	*** BERNER MODEL MAXAIR MAX1072ED-WAG
EH-1	ENTRANCE	120,000	2400	1-1/2	208/ 3 PH	OUTDOOR, POWER VENTED, GAS FIRED, PACKED DUCT FURNACE/ BLOWER UNIT W/FILTER SECTION.	** REZNOR HRPB-150

** PROVIDE WITH 409 STAINLESS STEEL HEAT EXCHANGER, TWO STAGE BURNER, WALL THERMOSTAT, WALL SENSOR AND 10 YEARS HEAT EXCHANGER WARRANTY. ALTERNATE MANUFACTURERS FOR ENTRANCE HEATER: TRANE-GRAA 15 AND MODINE-HDP150, GREENHECK - 1GX-HV-110. PROVIDE SUPPLY AND RETURN SMOKE DETECTORS.

*** PROVIDE AIR CURTAIN WITH DOOR CONTROL, FAN AND HEAT CONTROL, SUMMER FAN CONTROL, TIME DELAY, 8'-0" CAPILLARY TEMP. SENSOR (PACKAGE CONTROL SYSTEM), MOUNTING BRACKET, 120V, 1ø FOR AIR CURTAIN W/O ELECTRIC HEAT. (CONTACT WILLIAMSON & COMPANY @ 847-674-0000 FOR BERNER UNIT). ALTERNATE - TMI INC.

MECHANICAL CONTRACTOR SHALL FURNISHED AIR CURTAIN. ELECTRICAL CONTRACTOR SHALL INSTALL AIR CURTAIN.

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STATE OF MICHIGAN
RICHARD J. CLEVE
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drawing:
Mechanical Equipment Schedule and HVAC Control Wiring Diagram

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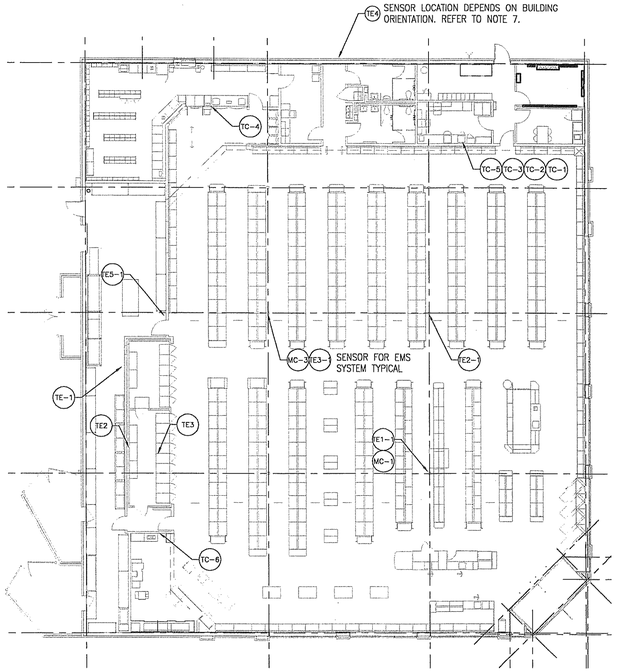
M2.2

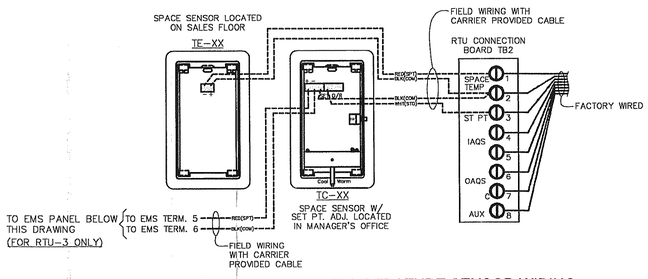


Floor Plan - EMS Space Sensors Location
1/16" = 1'-0"

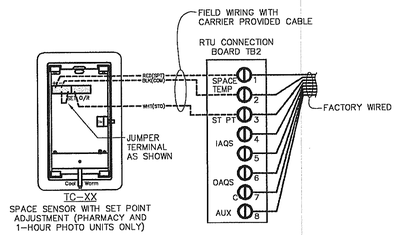
North

NOTES:

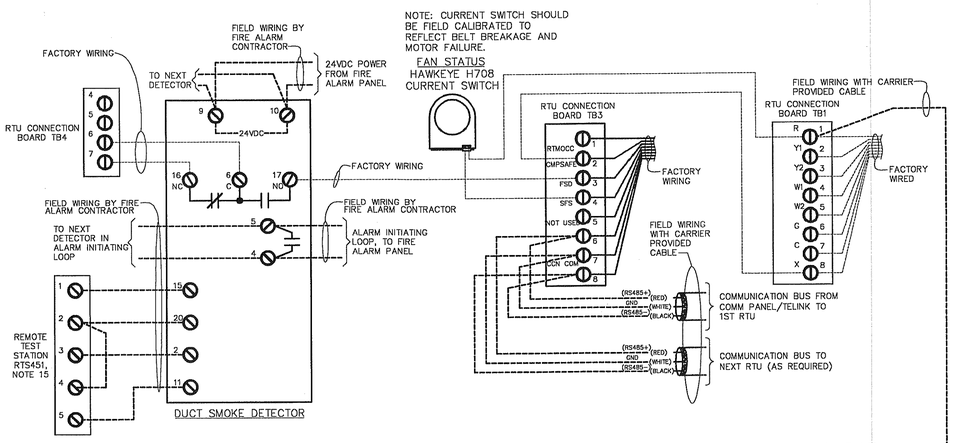
1. SHIELDED STRANDED PLENUM RATED CABLE FURNISHED BY CARRIER, SHALL BE UTILIZED WHERE SHOWN ON THIS DRAWING. ELECTRICAL CONTRACTOR SHALL FURNISH CONDUITS, WIRING, AND TAGS ON EACH CONDUCTOR. FINAL TERMINATION SHALL BE FURNISHED BY CARRIER. ALL WIRING SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE.
2. EMS PANEL (24"L X 24"W X 10"D), FURNISHED BY CARRIER. EMS PANEL SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR IN ELECTRICAL ROOM NEAR PANEL "LP-CR". TOP OF PANEL SHALL BE AT 5'-0" A.F.F.
3. CAT.5E CABLE SHALL BE FURNISHED AND INSTALLED BY WALGREENS CAT.5E INSTALLER. CAT.5E INSTALLER SHALL TERMINATE CAT.5E CABLE IN J-BOX INSTALLED NEAR EMS PANEL. PATCH CABLES TO EMS PANEL AND PHARMACY HUB SHALL BE FURNISHED AND INSTALLED BY WALGREENS DTR.
4. FOR SENSOR LOCATIONS REFER TO FLOOR PLAN ABOVE THIS DRAWING (ACTUAL STORE LAYOUT AND NUMBER OF SENSORS MAY DIFFER FROM SHOWN IN CRITERIA).
5. TEMPERATURE SENSORS TE1 AND TE2 (WALK-IN COOLER AND FREEZER) SHALL BE INSTALLED ON THE BACK WALL PANEL BETWEEN EVAPORATOR FAN ASSEMBLIES, APPROXIMATELY 6" BELOW THE CEILING. PLASTIC TYPE "U" BRACKET SHALL BE UTILIZED FOR SECURING SENSOR ON BACK WALL PANEL WITH SHEET METAL SCREW. PROBE SHALL BE ANGLED UPWARD TO AVOID HAVING PROBE TOUCH THE PANEL.
6. MILK CASE TEMPERATURE SENSOR TE3 INSTALLATION:
   a. OPEN-FRONT CASE:
      SENSOR LEAD WIRES SHALL BE SECURED TO THE CENTER PARTITION (BETWEEN 12 AND 8 FEET CASES). PLASTIC TYPE "U" BRACKET SHALL BE UTILIZED FOR SECURING SENSOR ON ONE OF THE CROSS BRACKETS/METAL SUPPORTS FOR HONEYCOMB DISCHARGE AIR. BRACKETS SHALL BE ATTACHED TO SUPPORTS WITH SHEET METAL SCREW, SENSOR SHALL BE EXTENDED INTO THE "DISCHARGE AIR" (BLOWING DOWNWARD).
   b. GLASS DOORS:
      SENSOR SHALL BE INSTALLED ON HEADER PANEL APPROXIMATELY 6" BELOW THE CEILING, SIMILAR TO SENSOR TE-1 AND TE-2 INSTALLATION ABOVE.
7. OUTDOOR AIR TEMPERATURE SENSOR TE4 SHALL BE INSTALLED ON NORTH WALL OF THE BUILDING, 8'-0" ABOVE THE GROUND (MINIMUM). SENSOR PROBE SHALL BE FACING DOWNWARD.
8. SPACE RELATIVE HUMIDITY SENSOR ME-1 SHALL BE COLUMN MOUNTED 8'-0" AFF.
9. INDOOR RTU SENSOR AND HUMIDISTAT HEIGHTS:
   a. COLUMN MOUNT TEMPERATURE SENSORS TO BE VERTICALLY MOUNTED 6'-0" A.F.F.
   b. COLUMN MOUNT HUMIDISTATS TO BE HORIZONTALLY MOUNTED 7'-0" A.F.F.
   c. TEMPERATURE SENSORS IN DRY WALL TO BE VERTICALLY MOUNTED 6'-0" A.F.F.
   d. TEMPERATURE SET POINT ADJUSTMENT SENSORS IN MANAGER'S OFFICE TO BE VERTICALLY MOUNTED IN 4 X 4 PATTERN WITH 6" BETWEEN SENSORS APPROXIMATELY 5'-0" A.F.F.
10. ALL SENSORS SHALL BE LABELED BY MECHANICAL CONTRACTOR.
11. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL BE AVAILABLE AT START UP.
12. WIRING DIAGRAM ARRANGEMENT SHOWN ON THIS DRAWING IS APPLICABLE FOR PROJECTS WITH OR WITHOUT ECONOMIZER.
13. FOR FIELD INSTALLED DUCT SMOKE DETECTOR REFER TO EMS SUBMITTAL DRAWING. APPLIES ONLY TO RTU WITH DUCT SMOKE DETECTORS.
14. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES THE INSTALLATION OF THE EMS IN ORDER TO HAVE A FULLY OPERATIONAL AND FUNCTIONAL SYSTEM.
15. REMOTE TEST STATIONS SHALL BE INSTALLED ADJACENT TO FIRE ALARM PANEL AND LABELED WITH CORRESPONDING RTU NUMBER.



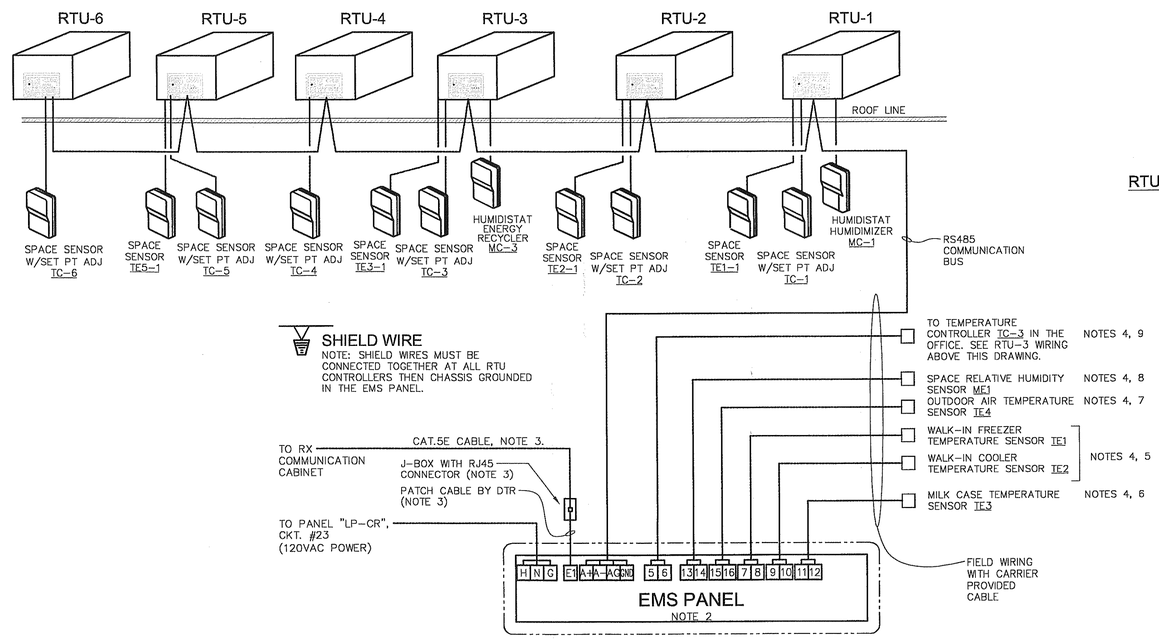
RTU-1, RTU-2, RTU-3 AND RTU-5 TEMPERATURE SENSOR WIRING



RTU-4 AND RTU-6 TEMPERATURE SENSOR WIRING

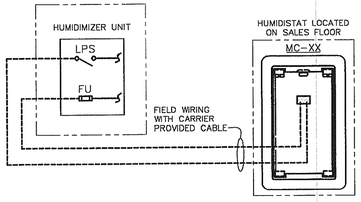


FAN STATUS SWITCH AND FACTORY INSTALLED DUCT SMOKE DETECTOR WIRING DIAGRAM (NOTE 13)



EMS PANEL WIRING BLOCK DIAGRAM

RTU-3 WIRING WITH ENERGY RECYCLER



RTU-1 HUMIDIMIZER WIRING

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OWNER / TENANT REVIEW:
09 APR 07
BIDS & PERMITS:
09 APR 07

project:

Store #11415

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drawing:

EMS Wiring Block Diagram

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drawn: ED
checked: AGL
approved: AGL

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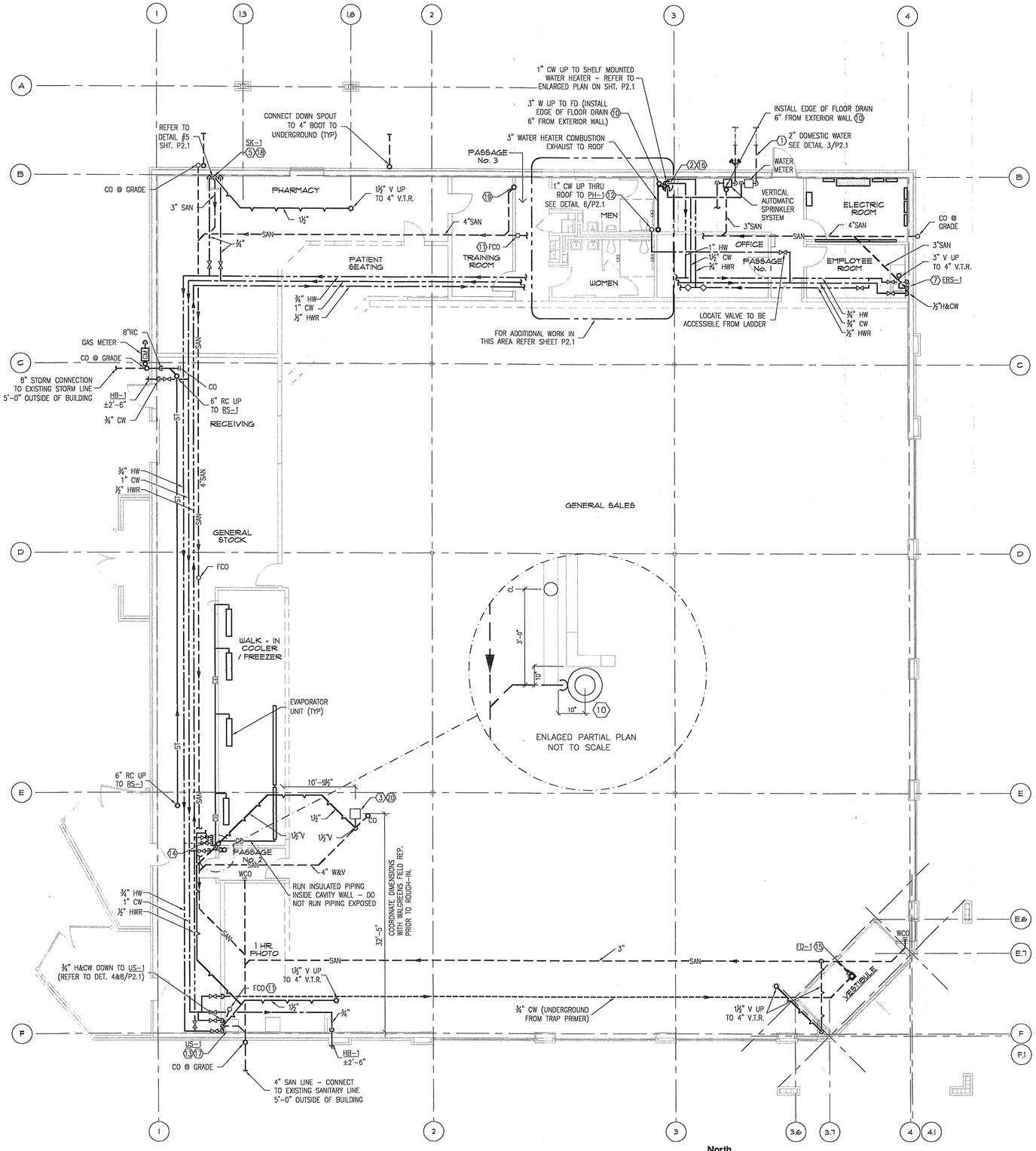
sheet:

ME1.1



Floor Plan - Plumbing
1/8" = 1'-0"

North

PLUMBING DRAWING NOTES

GENERAL:

1.1 REFER TO ALL OTHER DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK AND/OR CLARIFICATIONS TO INCLUDE BUT NOT NECESSARILY LIMITED TO:
15050- BASIC MECHANICAL MATERIALS AND METHODS
15250- MECHANICAL INSULATION
15400- PLUMBING

WATER SERVICE:

2.1 PROVIDE WATER SERVICE FOR DOMESTIC, IRRIGATION AND FIRE PROTECTION. PROVIDE AN INDIVIDUAL SHUT-OFF VALVE FOR EACH SERVICE.

2.2 PROVIDE APPROPRIATE BACKFLOW PREVENTION ON THE FIRE PROTECTION WATER.

2.3 COORDINATE THE LOCATION AND ROUTING OF THE WATER LINES WITH THE WATER COMPANY AND THE WALGREEN CO.

2.4 PROVIDE A PRESSURE-REGULATING VALVE WHEN REQUIRED TO LIMIT WATER PRESSURE TO 50 PSIG.

2.5 PROVIDE SIZES, CHANGES AND ADDITIONAL ITEMS WHEN REQUIRED BY PUBLIC HEALTH DEPARTMENT, THE CODE, THE BUILDING DEPARTMENT, THE WATER COMPANY, INSPECTORS AND/OR OTHERS HAVING JURISDICTION.

METERS:

3.1 PROVIDE A DOMESTIC WATER METER OF THE SMALLEST SIZE PERMITTED (PREFERABLY ONE INCH) WHEN THAT ACTION WILL REDUCE THE MONTHLY BILL.

3.2 PROVIDE A SEPARATE IRRIGATION WATER METER IF THERE IS AN ECONOMIC BENEFIT BY REDUCING THE PERIODIC SEWER AND/OR OTHER COSTS TO WALGREENS.

3.3 PROVIDE WATER METERS THAT ARE ACCEPTABLE TO AND/OR FURNISHED BY LOCAL WATER COMPANY. ALL WATER METERS PROVIDED SHALL READ IN THE SAME UNITS.

DOMESTIC WATER PIPING:

4.1 HOT AND COLD DOMESTIC WATER ABOVE FINISHED FLOOR TO BE COPPER TYPE 'L'.

4.2 DOMESTIC WATER PIPING WITHIN BUILDING TO BE ABOVE GROUND.

4.3 BRANCH LINES TO PLUMBING FIXTURES SHALL HAVE 12" LONG AIR CHAMBERS AND/OR ALTERNATIVE DEVICES THAT ARE CODE APPROVED.

4.4 EXPOSED WATER SUPPLIES FOR PLUMBING FIXTURES SHALL BE CHROME-PLATED BRASS AND HAVE WHEEL OR OVAL (NOT KEY) OPERATED STOPS (EXCEPT URINALS) WITH METAL STEMS, BY BRASSCRAFT OR EQUAL.

4.5 WATER PIPING AND SIMILAR ITEMS THAT RUN THROUGH STUD SPACES SHALL HAVE A MIN. OF ½" CLEAR SPACE ALL AROUND PIPING TO AVOID ANY POSSIBLE CONTACT WITH ADJACENT SURFACES.

4.6 DOMESTIC WATER PIPING ABOVE GRADE SHALL BE INSULATED.

4.7 BRANCH WATER LINES INCLUDING THOSE TO HOSE BIBBS, ROOF HYDRANTS AND POST HYDRANTS SHALL HAVE SHUT OFF VALVES THAT ARE ACCESSIBLE.

4.8 WATER, WASTE AND VENT PIPING SHALL NOT BE LOCATED IN AN EXTERIOR WALL WHEN THE HVAC WINTER TEMPERATURE CAN DROP BELOW 32 DEG. F., UNLESS THOSE PIPE ARE LOCATED ON THE ROOM SIDE OF THE WALL INSULATION. IN THOSE CASES PROVIDE AN ADDITIONAL NON-INSULATED WALL CHASE AS SHOWN FOR THE PHARMACY SINK, DETAIL 1 ON P2.1.

SANITARY WASTE, VENT AND STORM PIPING:

5.1 CLEANOUTS SHALL BE INSTALLED IN THE BUILDING DRAIN, HORIZONTAL WASTE, STORM OR SOIL LINES WITH CHANGES IN DIRECTION GREATER THAN 45°. PROVIDE CLEANOUTS AT THE END OF EACHH BRANCH, AT THE BASE OF EACH STACK AND AS REQUIRED PER CODE. ALL CLEANOUTS TO BE VISIBLE AND ACCESSIBLE.

5.2 DO NOT LOCATE ANY CLEANOUTS IN THE PHARMACY.

5.3 DOUBLE FITTINGS SUCH AS Y, 1/2Y, COMBINATION Y AND 1/8 BEND, T, SANITARY ETC. FITTINGS SHALL NOT BE USED IN THE SEWER PIPING SYSTEM.

5.4 PLUMBING VENTS, SHALL BE LOCATED A MINIMUM OF 15'-0" AWAY FROM ALL FRESH AIR INTAKES.

5.5 FLOOR DRAINS SHALL NOT BE CONSIDERED AS A FUNCTIONAL CLEANOUT.

5.6 TOILET ROOM VENT STACK(S) SHALL BE LOCATED UPSTREAM OF ALL TOILET ROOM PLUMBING FIXTURES.

VALVES FOR PLUMBING:

6.1 DOMESTIC WATER AND GAS SHUT OFF VALVES SHALL BE JOMAR T/S100, BALL TYPE OR EQUAL.

6.2 BALANCING VALVES SHALL BE JOMAR T/S100SS OR EQUAL.

6.3 VALVES LOCATED ABOVE SHALL BE 12" MAX. ABOVE THE FINISHED CEILING OR AT BOTTOM CHORD OF BAR JOIST WHEN NO CEILING EXISTS.

6.4 WHEN DOUBLE TESTABLE CHECK VALVES ARE REQUIRED (WALL AND AND POST HYDRANTS ETC.). THEY SHALL BE INSTALLED 5 FT. MAX. ABOVE FLOOR AS FOLLOWS:

a. AT RECEIVING DOOR MOUNT ON WALL, THEN TO WALL HYDRANT.
b. WHEN WATER DROPS TO SERVE PHOTO SINK, TAKE A BRANCH LINE WITH SHUT-OFF VALVE AND "FEED" TO CHECK VALVE THEN UP IN PARTITION TO ABOVE CEILING, RUN ABOVE CEILING TO HYDRANT.
c. HYDRANT ON ROOF-BRANCH LINE SHALL BE CONNECTED TO CHECK VALVES ON WALL IN PASSAGE #1 THEN UP WALL TO HYDRANT.

COOLER/FREEZER PLUMBING:

7.1 PROVIDE A COMPLETE WALK-IN-COOLER/FREEZER PLUMBING SYSTEM. PLUMBING CONTRACTOR SHALL INSTALL THE CONDENSATE DRAINS.

IRRIGATION SYSTEM:

8.1 REFER TO LANDSCAPING/IMPROVEMENTS SECTION 02900 OF THE SPECIFICATIONS.

8.2 THE IRRIGATION SYSTEM CONTROLS ARE TO BE LOCATED ON THE INSIDE OF THE BUILDING AT THE RISER LOCATION.

FIRE PROTECTION SYSTEM:

9.1 REFER TO THE FIRE PROTECTION DRAWING, FP1.1 AND THE ASSOCIATED SECTION OF THE SPECIFICATIONS.

LEGEND

(HWR)	HOT WATER RECIRCULATION
(CW)	COLD WATER
(HW)	HOT WATER
CD	CONDENSATE DRAIN
SAN	SANITARY SEWER
	WATER METER WITH VALVES

FD	FLOOR DRAIN	WCO	WALL CLEAN OUT
FFD	FUNNEL FLOOR DRAIN		HOSE BIBB
FS	FLOOR SINK		VALVE - SHUT-OFF
FCO	FLOOR CLEAN OUT (NOT ALLOWED IN PHARMACY)		VALVE - BALANCING
GCO	GRADE CLEAN OUT		UNION
PH	POST HYDRANT		VENT
VTR	VENT THRU ROOF	VTR	VENT THRU ROOF
		WCO	WALL CLEAN OUT

PLUMBING KEYED NOTES

1. WATER SERVICE.
2. WH-1, WATER HEATER. WHEN GAS IS AVAILABLE AND PERMITTED BY CODE, PROVIDE GAS-FIRED WATER HEATER(S).
3. FS-1, FLOOR SINK. LOCATE THE FCO IN AN AISLE WITH 18" MINIMUM CLEARANCE AROUND IT AS REQUIRED BY CODE.
4. WATER COOLER. PROVIDE ½" C.W.; 1½" DRAIN AND VENT IN WALL (MOUNTED 3'-0" A.F.F. TO CENTER LINE OF NOZZLE).
5. SK-1, RX SINK. PROVIDE ½"C.W.; ½"H.W.; ASSE 1016 MIXING VALVE; 1½" DRAIN AND VENT IN WALL. SEE DETAIL 1/P2.1.
6. MB-1, MOP BASIN. PROVIDE ½"C.W.; ½"H.W., 105 DEGREE F.; 3" DRAIN AND VENT IN WALL.
7. ERS-1, EMPLOYEE ROOM SINK. PROVIDE ½" C.W.; ½" H.W.; 1½" DRAIN AND VENT IN WALL.
8. NOT USED
9. NOT USED
10. COMBINATION FUNNEL/FLOOR DRAIN.
11. FLOOR CLEAN-OUT TO ACCEPT FLOOR TILE.
12. POST HYDRANT (PH-1) ABOVE ROOF FOR MAINTENANCE OF EQUIPMENT. PROVIDE A DRAIN LINE FROM POST HYDRANT DRAIN PORT TO FUNNEL/FLOOR DRAIN.
13. PROVIDE ½" C.W., ½" H.W, 3" DRAIN AND 1½" VENT IN WALL. SEE DETAIL 4/P2.1 FOR WASTE PIPING CONFIGURATION.
14. ROUGH IN 1½" DRAIN AND 1½" VENT. ROUGH-IN PIPE INSIDE THE WALL CAVITY FOR FUTURE SINK. 1½" DRAIN SHALL BE 12" A.F.F. AND CAP MARK WITH CHROME FINISHED COVER FOR FUTURE USE. CONNECT 1½" DRAIN VENT TO THE VENT FOR COOLER FLOOR DRAIN. ROUGH IN ½" COLD WATER AND ½" HOT WATER WITH BALL VALVE EACH LINE AND CAP AND TERMINATE 12" ABOVE CEILING IN THE SAME AREA OF THE SINK.
15. NOT USED
16. P-1, HOT WATER RECIRCULATION PUMP
17. EW-1, EYE WASH
18. PHARMATE REVERSE OSMOSIS DISPENSER, FAUCET, FILTERS AND INSTALLATION KITS PROVIDED BY WALGREENS, INSTALLED BY THE PLUMBING CONTRACTOR. FAUCET TO BE MOUNTED ON PHARMACY SINK AND DISPENSER AT END OF BOTTLE BAY SHELF (FIELD VERIFY EXACT LOCATION).
19. PROVIDE 1½" DRAIN AND 1½" VENT THRU ROOF FOR FUTURE SINK. INSTALL DRAIN OPENING @ 20" A.F.F. AND CAP WITH CHROME PLATE FOR FUTURE USE. COORDINATE SEWER PIPE LOCATION WITH PLUMBING CONTRACTOR.
20. ZURN MODEL Z-1910, 8"x8" A.R.E. SANI-FLOOR RECEPTOR 6" SUMP DEPTH. PROVIDE TRAP AND VENT. COVER DRAIN WITH 3" TEST PLUG UNTIL BEVERAGE BAR IS INSTALLED. TEST PLUG SHALL BE BY PETERSEN MODEL 14-18823 OR EQUAL. CONTACT PETERSEN @ 800-926-1926. PROVIDE 1" COPPER FOR FUTURE TRAP PRIMER. PROVIDE ½" HOT WATER, ½" HOT WATER RETURN, ½" COLD WATER, 1½" SEWER DRAIN, AND 1½" VENT ROUGH-IN FOR FUTURE SINK.

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drawing:

Floor Plan - Plumbing

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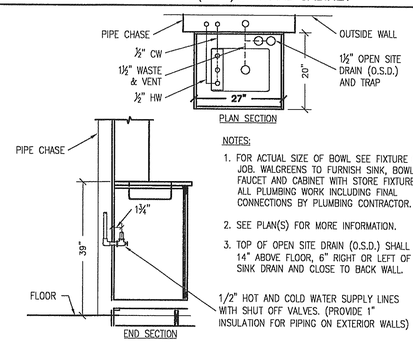
issue date: 09 APR 07
drawn: ED
checked: AGL
approved: AGL

file number: 06185

sheet:

P1.1

PHARMACY (SK-1) SINK AND CABINET



NOTES:

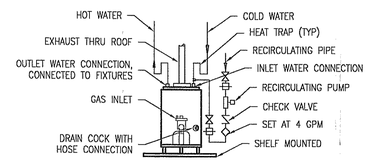
1. FOR ACTUAL SIZE OF BOWL SEE FIXTURE ON JOB. WALGREENS TO FURNISH SINK, BOWL, FAUCET AND CABINET WITH STORE FIXTURES. ALL PLUMBING WORK INCLUDING FINAL CONNECTIONS BY PLUMBING CONTRACTOR.
2. SEE PLAN(S) FOR MORE INFORMATION.
3. TOP OF OPEN SITE DRAIN (O.S.D.) SHALL BE 14" ABOVE FLOOR, 6" RIGHT OR LEFT OF SINK DRAIN AND CLOSE TO BACK WALL.

1/2" HOT AND COLD WATER SUPPLY LINES WITH SHUT OFF VALVES. (PROVIDE 1" INSULATION FOR PIPING ON EXTERIOR WALLS)

SK-1 PHARMACY SINK SHALL BE A SPECIAL RX CABINET SINK COMPLETE WITH FAUCET, ETC. FURNISHED BY WALGREENS, WITH STORE FIXTURE AND INSTALLED BY CONTRACTOR.

1 P2.1

GAS FIRED WATER HEATER (WH-1)

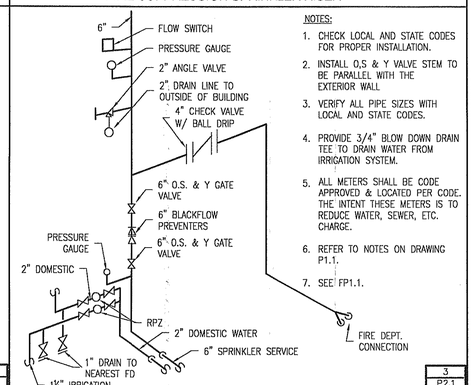


NOTES:

1. PIPE PRESSURE RELIEF VALVE TO FUNNEL/FLOOR DRAIN WITH COPPER TUBING. WATER HEATER FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR.
2. WHEN WATER HEATER IS ABOVE FLOOR PROVIDE A METAL FABRICATED DRAIN PAN WHICH EMPTIES INTO THE FUNNEL/FLOOR DRAIN.
3. IF SUSPENDED WATER HEATER IS NOT ALLOWED BY CODE, CONTACT WALGREENS PROJECT ARCHITECT FOR ALTERNATE LOCATION.
4. REFER TO WALGREENS SPECIFICATION SECTION 15400 FOR FLUE DETAILS.

2 P2.1

FIRE SUPPRESSION SPRINKLER RISER

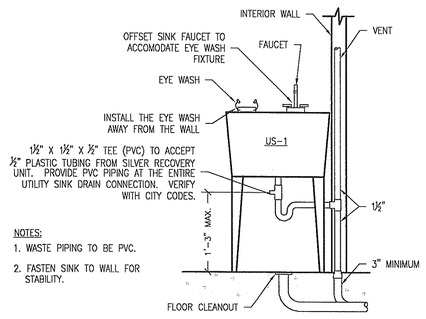


NOTES:

1. CHECK LOCAL AND STATE CODES FOR PROPER INSTALLATION.
2. INSTALL O,S & Y VALVE STEM TO BE PARALLEL WITH THE EXTERIOR WALL
3. VERIFY ALL PIPE SIZES WITH LOCAL AND STATE CODES.
4. PROVIDE 3/4" BLOW DOWN DRAIN TEE TO DRAIN WATER FROM IRRIGATION SYSTEM.
5. ALL METERS SHALL BE CODE APPROVED & LOCATED PER CODE. THE INTENT THESE METERS IS TO REDUCE WATER, SEWER, ETC. CHARGE.
6. REFER TO NOTES ON DRAWING P1.1.
7. SEE FP1.1.

3 P2.1

PHOTO - WASTE DETAIL

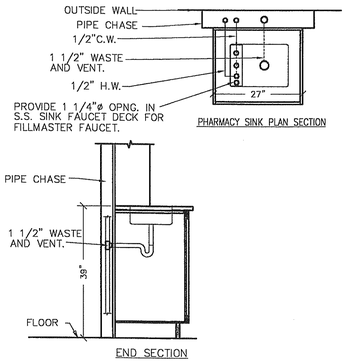


NOTES:

1. WASTE PIPING TO BE PVC.
2. FASTEN SINK TO WALL FOR STABILITY.

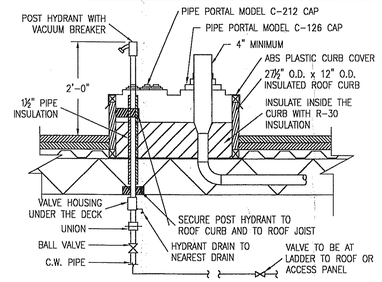
4 P2.1

FILLMASTER FAUCET AND DRAIN DETAIL



5 P2.1

POST HYDRANT AND TOILET VENT DETAIL

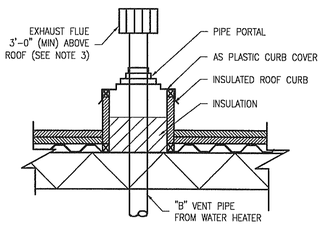


NOTES:

1. INSTALL AND SEAL PIPE PORTAL PER MANUFACTURER DIRECTION.
2. USE STAINLESS STEEL CLAMP ON ALL PIPE.
3. BALL VALVE MUST BE ACCESSIBLE FROM ROOF HATCH LADDER.
4. PIPE PORTALS ARE BASED ON PORTALS PLUS, INC.
5. SEE PLAN FOR EXACT CONFIGURATION AND PENETRATIONS.

6 P2.1

FLUE EXHAUST FOR WATER HEATER

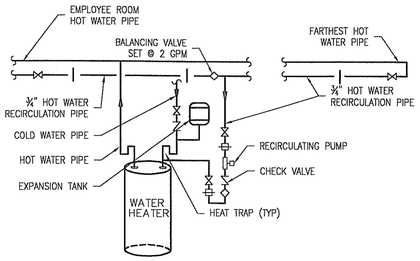


NOTES:

1. INSTALL AND SEAL PIPE PORTAL PER MANUFACTURER DIRECTION.
2. USE STAINLESS STEEL CLAMP ON ALL PIPE.
3. INSTALL FLUE EXHAUST FOR WATER HEATER PER MANUFACTURER DIRECTION.
4. PIPE PORTALS ARE BASED ON PORTALS PLUS, INC.

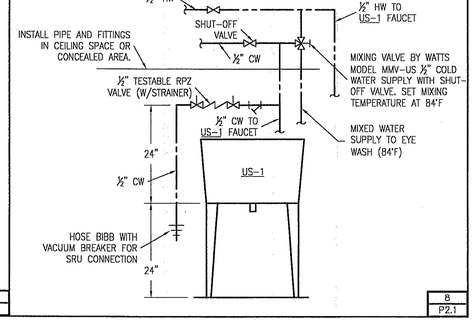
6A P2.1

HOT WATER RECIRCULATION DETAIL

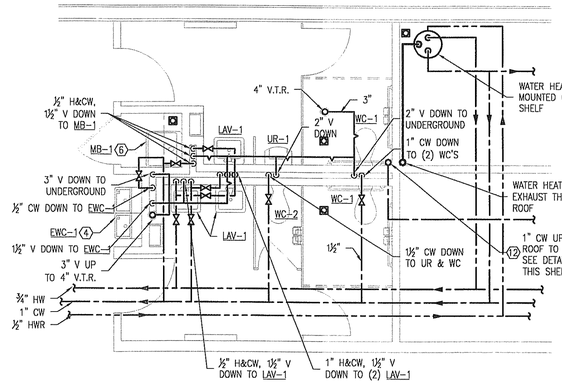


7 P2.1

PHOTO - WATER DETAIL

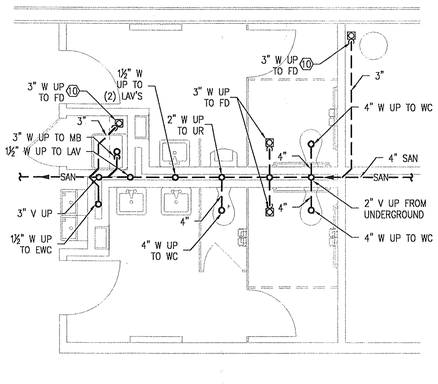


8 P2.1



Enlarged Toilet Room Plan - Above Ground Plumbing
1/4" = 1'-0"

North



Enlarged Toilet Room Plan - UndergroundPlumbing
1/4" = 1'-0"

North

NATIONAL ACCOUNT PLUMBING PROGRAM

THE FOLLOWING PLUMBING PROGRAM FIXTURES, ASSOCIATED ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION AND OTHER PLUMBING ITEMS BELOW SHALL BE PURCHASED THRU THE TRANE NATIONAL ACCOUNT PLUMBING PROGRAM. CONTACT THEM AT (800) 453-6954 TO OBTAIN A QUOTATION, ORDER AND TO COORDINATE DELIVERY.

ERS-1 EMPLOYEE ROOM SINK: (ADA COMPLIANT)
ELKAY NO. LRAD-1522-55-3 LUSTERTONE SINGLE BOWL SINK W/LK35 STRAINER AND STOP AND CHICAGO FAUCET NO. 786-E-3 DECK MOUNT FAUCET WITH GOOSE NECK SPOUT, WRIST BLADE HANDLES AND ASSE 1016 MIXING VALVE.

EWC-1 ELECTRIC WATER COOLER: (SPLIT LEVEL)
ELKAY NO. EZSTL8C, HANDICAP ACCESSIBLE, SELF CONTAINED, WALL HUNG, TWO LEVEL ELECTRIC REFRIGERATED WATER COOLERS.
ACCEPTABLE ALTERNATE MANUFACTURERS:
OASIS-P8AMSL;
HALSEY TAYLOR-HAC8FBL-Q;
HAWS-HWUAC8L; SUNROC-NWCA-8F-BL.

LAV-1 LAVATORY:
AMERICAN STANDARD NO. 0355.012 "LUCERNE" 20"X18" VITREOUS CHINA, WALL HUNG LAVATORY, WITH CHICAGO FAUCET NO. 802-665, 4" CENTERS AND .5 GPM AERATOR, 1 1/4" CHROME PLATED, BRASS (17 GUAGE) P-TRAP, WALL HUNGER, ASSE 1016 MIXING VALVE, ETC.
ACCEPTABLE ALTERNATE MANUFACTURERS:
CRANE- 1-412-V HARWICH;
ELJER- SIGNATURE 051-2108
KOHLER K-2005 KINGSTON;
FAUCETS FOR ALL ABOVE LAVS.

PH-1 POST HYDRANT:
ZURN NO. Z-1385-V8 (3/4"HOSE CONNECTION) EXPOSED HEAD, NON FREEZE POST HYDRANT, KEY OPERATED, VACUUM BREAKER, 24" ABOVE ROOF LINE.
ACCEPTABLE ALTERNATE MANUFACTURER:
WADE 8610.

MB-1 MOP BASIN:
FLORESTONE NO. MSR-2424. 24x24. FURNISH AND INSTALL MOLDED MOP SERVICE RECEPTOR WITH INTEGRAL DRAIN SUCH AS MANUFACTURED BY FLORESTONE PRODUCT CO. MOLDING SHALL BE DONE UNDER HEAT AND PRESSURE USING MATCHED METAL DIES. THE UNIT TO BE ONE PIECE WITH NO SEAMS. SHOULDERS SHALL BE NOT LESS THAN 1" WIDE, AND 9 1/2" INSIDE. UNIT SHALL HAVE RIBBED UNDERBODY AND INTEGRAL DRAIN PROVIDED FOR NON-CAULKING CONNECTION (LEAD CAULKED OPTIONAL) TO A 3" PIPE. DRAIN SHALL BE 18 GAUGE STAINLESS, FLAT TYPE, #430. MODEL SHALL CONFORM TO ANSI-Z-124.2 AND Z-124-6. AMERICAN STANDARD MODEL NO. 8344.112 (ADA) AND VACUUM BREAKER AT 3'-0" A.F.F. OR PER CODE REQUIREMENT.
ACCEPTABLE ALTERNATE MANUFACTURERS:
E.L. MUSTEE -63 M;
SWAN-MS 2424-3;
ADVANCE TABCO-9-OP-20;
ZURN-Z-1996 24x24.
FIAT - MSB 2424.

UR-1 URINAL: (ADA COMPLIANT)
AMERICAN STANDARD NO. 6501.010"WASHBROOK" VITREOUS CHINA, WALL HUNG URINAL, 1.0 GPF, COMPLETE WITHSLOAN "ROYAL" 186-1 FLUSH VALVE WITH VACUUM BREAKER AND SCREW DRIVER STOP, WALL HANGER, ETC.
ACCEPTABLE ALTERNATE MANUFACTURERS:
KOHLER-K-4960-ET BARDON;
CRANE-7160 EMBASSY;
ELJER-161-1090 SAVON.

US-1 UTILITY SINK:
FLORESTONE MODEL 'FM', 23" X 22" FIBERGLASS REINFORCED POLYESTER RESINS, FLOOR UTILITY SINK WITH RUST FREE LEGS, LEVELERS, BACK "SHELF" (APPROX. 4" WIDE x 23"LONG SHALL BE "PLAIN" (NO SOAP DISH ETC.) FOR MOUNTING FAUCETS & EYE WASH) FAUCETS SHALL BE ON RIGHT SIDE WITH THE EYE WASH ON THE LEFT SIDE. CHICAGO FAUCET ASSEMBLY NO. 895 WITH 3 1/2" SPOUT AND ASSE 1016 MIXING VALVE.

P-1 PUMP:
PUMP FOR H.W. RECIRCULATION SYSTEM- BELL & GOSSET MODEL NBF-BS/LW. 1/40 H.P., .38FLA., 115V.,1 PH., RATED @ 4 GPM, @ 4FT OF HEAD ; BRONZE IN-LINE. TACO AS ALTERNATE. CONTROL OF PUMP SHALL BE BY CONNECTING IT TO ELECTRICAL CIRCUIT DESIGNATED "GENERAL SALES MAINTENANCE LIGHTS".

EW-1 EYE WASH:
EYE WASH (FAUCET MOUNT), BRADLEY MODEL S19-270HD. EYE WASH SHALL BE SUPPLIED THRU A MIXING VALVE THAT WILL FAIL OPEN IN COLD WATER BYPASS PER ANSI Z358.1. POWER MODEL ES150RB, BRADLEY OR LAWLER EQUAL. SET FLOW PER EYE WASH RECOMMENDATION (APPROX.. 1 GPM) AT 90 DEG. F.

WC-1 WATER CLOSET: (ADA COMPLIANT)
AMERICAN STANDARD NO. 3043.102 TOP SPUD, MADERA 17"H ELONGATED; 1.6 GPF SLOAN ROYAL # 111 FLUSH VALVE; SIPHON JET; FLOOR MOUNTED; VITREOUS CHINA WATER CLOSET; CHURCH # 295C SOLID PLASTIC OPEN FRONT SEAT LESS COVER WITH CHECK HINGES & CHINA BOLT CAPS. INSTALL 1" WATER SUPPLY PIPE @ 28 3/4" A.F.F.
ACCEPTABLE ALTERNATE MANUFACTURERS:
CRANE -3H701 HYMONT
ELJER-111-2145 SIGNATURE 17"
KOHLER-K-4302-HIGHCREST.

WC-2 WATER CLOSET:
AMERICAN STANDARD NO. 2234.015 TOP SPUD; MADERA ELONGATED, 1.6 GPF, SLOAN # 111 FLUSH VALVE; SIPHON JET, FLOOR MOUNTED; VITREOUS CHINA WATER CLOSET. CHURCH NO.295C SOLID PLASTIC OPEN FRONT SEAT LESS COVER WITH CHECK HINGE & CHINA BOLT CAPS. INSTALL 1" WATER SUPPLY PIPE @ 25 5/8" A.F.F.
ACCEPTABLE ALTERNATE MANUFACTURERS:
CRANE-3325 WHIRLTON
ELJER-111-2125 SIGNATURE.
KOHLER-K-4350-WELL COMME.

COLOR: ALL PLUMBING FIXTURES SHALL BE WHITE UNLESS OTHERWISE NOTED.

WH-1G GAS FIRED WATER HEATER, 40 GALLONS 18" DIA. X 60" HIGH, 40,000 BTUH INPUT, 41 GPH RECOVERY @ 90°F. RISE, 3 IN. DIA. FLUE THRU ROOF, 6 YEARS WARRANTY FOR PARTS AND TANK PER BRADFORD WHITE MODEL M-I-40T6FBN, STATE MODEL GS640YBRT OR A.O. SMITH MODEL GCV-40.

WH-1E ELECTRIC WATER HEATER, 40 GALLONS 18" DIA. X 60" HIGH, 40 GPH RECOVERY @ 90°F RISE, (2) 4.5 KW ELEMENTS @ 208 VOLTS (3) PHASE WIRED FOR CUSTOMER OPERATION, WITH 6 YEARS WARRANTY FOR PARTS AND TANK PER BRADFORD WHITE MODEL M-2-40T6ES. STATE MODEL ES6 40 DORT OR A.O. SMITH MODEL ECT-40.

DOMESTIC WATER PIPING

HOSE BIBB:
HB-1 FLUSH TYPE WALL HYDRANT, ENCASED, ANTI-SIPHON, AUTOMATIC DRAINING. COMPLETE WITH NON-FREEZE TYPE INTEGRAL BACKFLOW PREVENTER, COPPER CASING, ALL BRONZE INTERIOR PARTS. NICKEL BRONZE BOX AND HINGED COVER PER:
JOSAM 71000
SMITH 5509 QT
WADE 8699,175
WOODFORD B65
ZURN Z1320.
ROUTE COLD WATER PIPING AWAY FROM STORAGE SHELVINGS. ALTERNATE ROUTING MAY BE NEXT TO INTERIOR WALL. COORDINATE WITH DRAWING D1.

FLOOR DRAINS
FD-1 WITHOUT FUNNEL, CAST IRON BODY, 6 IN. DIA. STRAINER OF NICKEL-BRONZE, 3 IN. SIZE UNLESS ORDERED DIFFERENT, PER:
JOSAM 30000 SERIES
SMITH 2010 SERIES
WADE 1100 SERIES
ZURN Z-415 SERIES

FD-1P WITHOUT FUNNEL, PVC BODY, 6 IN. DIA. STRAINER, 3 IN. SIZE UNLESS ORDERED DIFFERENT, PER:
SIOUX CHIEF 842-36PNR

FD-2 WITH 4 IN. NICKEL-BRONZE FUNNEL, CAST IRON BODY, 6 IN. DIA. STRAINER OF NICKEL-BRONZE, 3 IN. SIZE UNLESS ORDERED DIFFERENT, PER:
JOSAM 30000 SERIES
SMITH 53510 SERIES
WADE 1100 SERIES
ZURN Z-415 SERIES

FD-2P WITH 4 IN. NICKEL-BROZE FUNNEL, PVC BODY, 6 IN. DIA. STRAINER, 3 IN. SIZE UNLESS ORDERED DIFFERENT, PER:
SIOUX CHIEF 842-36PNR & 863-FN.

CLEANOUTS:
FCO-1 FLOOR TYPE WITH CAST IRON BODY, NICKEL-BRONZE RING AND SECURED COVER, PER:
JOSAM 55000 SERIES
SMITH 4020 SERIES
WADE 6000 SERIES
ZURN ZN-1400 SERIES

FCO-1P FLOOR TYPE WITH PVC BODY, NICKEL-BRONZE RING AND SECURED COVER, PER:
SIOUX CHIEF 842-4PNR

WCO-1 WALL TYPE WITH 6 IN. ROUND SS COVER PLATE, SCREW, CAST IRON BODY, ABS THREADED PLUG PER:
JOSAM 58600 SERIES
SMITH 4710 SERIES
WADE 8480 SERIES
ZURN ZN-1400 SERIES

WCO-1P WALL TYPE, PVC BODY, WITH BRASS CLEANOUT PLUG, ROUND SS COVER PLATE AND OTHER FEATURES SIMILAR TO WCO-1, PER:
SIOUX CHIEF 873-460

WCO-2 WALL TYPE, WITH SMOOTH FACE COVER PLATE, SQUARE FRAME, CAST IRON BODY, 8 IN. X 8 IN. NICKEL-BRONZE RING, PER:
JOSAM 58640 SERIES
SMITH 4730 SERIES
WADE 8480S SERIES
ZURN ZN-1400 SERIES

GCO-1 GRADE CLEAN OUT, YARD TYPE WITH CAST IRON BODY, RING AND COVER PER:
JOSAM 55000 SERIES
SMITH 4100 SERIES
WADE 6000 SERIES
ZURN ZB-1400 SERIES

STORM DRAINAGE PIPING
RD-1 ROOF DRAINS-COATED CAST IRON BODY (PVC BODY IS NOT PERMITTED) WITH ADJUSTABLE EXTENSION, LOW SILHOUETTE POLYPROPYLENE VANDAL PROOF SECURED DOME, CAULKED OUTLET AND A METAL UNDER DECK CLAMP, PER:
JOSAM 21500 SERIES
SMITH 1015 SERIES
WADE 3000 SERIES
ZURN Z-100 SERIES

FLOOR SINKS:
FS-1 ZURN MODEL Z-1910, METAL, 3" A.R.E. SANI-FLOR RECEPTOR 8"x8"X6" SUMP DEPTH. PROVIDE TRAP AND VENT. COVER DRAIN WITH 3" TEST PLUG UNTIL BEVERAGE BAR IS INSTALLED. TEST PLUG SHALL BE BY PETERSEN MODEL 14-18823 OR EQUAL. CONTACT PETERSEN @ 800-926-1926.

FS-2 ZURN Z-1901, METAL 3" A.R.E. SANI-FLOR RECEPTOR 12"x12"x8" DEEP CAST IRON BODY WITH WHITE ACID RESISTANCE PORCELAIN ENAMEL INTERIOR AND TOP WITH ALUMINUM ANTI-SPLASH INTERIOR BOTTOM DOME STRAINER.
ACCEPTABLE ALTERNATE MANUFACTURERS:
JOSAM, WADE AND SMITH.

FS-3 SIOUX CHIEF 861-3PX, PVC 12"x12"x8" SINK DEEP, 861-51 1/2 OPEN TOP GRATE 3/4" THICK PVC, 863-U ALUMINUM BOTTOM DOME STRAINER.
ZURN-FD-2370-PV3

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Enlarged Toilet Room Plans - Plumbing

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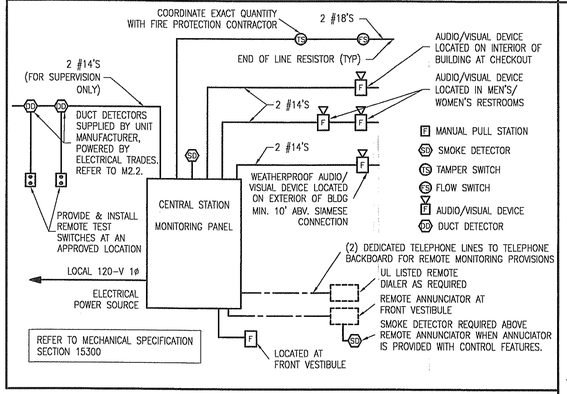
sheet:

P2.1

FIRE PROTECTION MONITORING PANEL DETAIL



SPRINKLER LEGEND

SYMBOL	SIZE	K-FACTOR	TEMP RATING	RESPONSE TYPE	STYLE	FINISH	TRIM	MFR	MODEL	SIN#

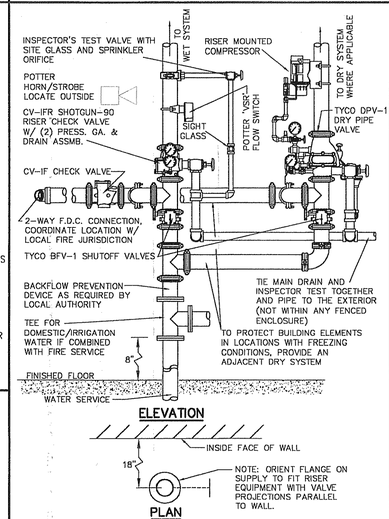
NOTES:

HYDRAULIC DESIGN DATA

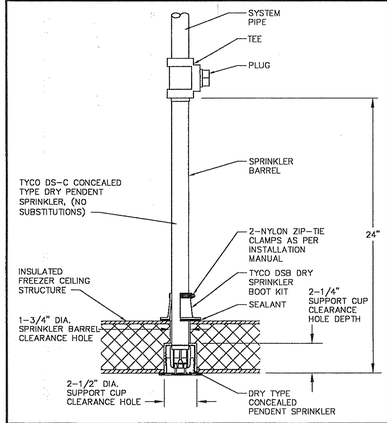
DESIGN DENSITY: _____
DESIGN AREA: _____
REQUIRED SYSTEM GPM: _____
REQUIRED PSI AT SOURCE: _____
HOSE ALLOWANCE: _____

THE FIRE PROTECTION CONTRACTOR SHALL PREPARE AND SUBMIT THE PLANS FOR APPROVAL BY THE AUTHORITY HAVING JURISDICTION. THE CRITERIA SHOWN HERE AND ON THE WALGREENS WEB SITE SHALL PROVIDE THE MINIMUM CRITERIA FOR THE DESIGN. CONTACT THE PROJECT ARCHITECT FOR WEB SITE ACCESS.

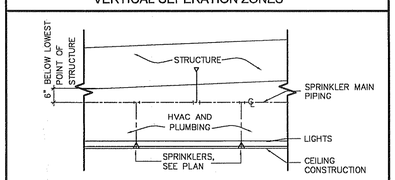
RISER DETAIL



COOLER/FREEZER DRY PENDENT SPRINKLER



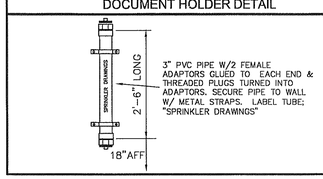
VERTICAL SEPERATION ZONES



INSTALLATION NOTES

1. INSTALLATION OF MECHANICAL AND PLUMBING WORK SHALL CONFORM TO VERTICAL SEPARATION ZONES.
2. SPRINKLERS ARE NOT REQUIRED TO BE PLACED IN THE CENTER OF ACOUSTIC TILES. SPRINKLERS LESS THAN 7 FEET ABOVE FINISHED FLOOR SHALL BE PROTECTED WITH GUARDS. NO SPRINKLER PIPING SHALL BE EXPOSED IN SPACES WITH FINISHED CEILINGS.
3. WALGREENS SHALL LOCATE THE FIELD-DRILLED HOLES FOR DRY PENDENT SPRINKLERS WITHIN COOLER/FREEZER ROOF PANELS. PROVIDE SWING JOINTS AT DROPS ABOVE COOLER CONSTRUCTION TO ALIGN WITH DRY PENDENT SPRINKLER LOCATIONS.
4. ALL SPRINKLERS SHALL BE INSTALLED WITH MANUFACTURER'S WRENCH AND/OR MANUFACTURER REQUIRED METHOD DESIGNATED FOR THAT PARTICULAR SPRINKLER. ANY SPRINKLER INSTALLED WITH OTHER MEANS OR DAMAGED IN ANY MANNER SHALL BE REPLACED AT NO COST TO WALGREENS.

DOCUMENT HOLDER DETAIL



AUTHORITY HAVING JURISDICTION (AHJ)

NAME: _____
TELEPHONE: _____
CONTACT PERSON: _____
SYSTEM DESIGNED PER: _____

WATER FLOW INFORMATION

SOURCE OF TEST DATA: _____
(TEST OF RECORD MUST BE WITHIN 90 DAYS OF DRAWING SUBMITTAL DATE)

LOCATION OF TEST: _____
HYDRANT NUMBERS: _____
DATE OF TEST: _____
TIME OF TEST: _____
STATIC PRESSURE: _____ P.S.I.
RESIDUAL PRESSURE: _____ P.S.I.
FLOW: _____ G.P.M.

GENERAL NOTES

1. THIS DRAWING SHALL DEFINE THE LAYOUT OF THE BUILDING SPRINKLER SYSTEM AND SHALL BE THE BASIS OF THE SPRINKLER CONTRACTOR'S SHOP DRAWING AND OTHER DOCUMENTS. IT SHALL BE INCLUDED IN THE CONSTRUCTION DRAWINGS SUBMITTED TO WALGREENS. PROJECT DRAWING FP1.1 MUST BE APPROVED BY WALGREENS PRIOR TO ANY FIRE PROTECTION PERMIT APPLICATION SUBMISSION TO THE AUTHORITY HAVING JURISDICTION. ARCHITECT OF RECORD SHALL BE RESPONSIBLE FOR DOWNLOADING THE CURRENT WALGREEN FP1.1 BASE SHEET, INSERTING THE PROJECT SPECIFIC CEILING PLAN BACKGROUND IMAGE AND TRANSMITTING IT TO THE FIRE PROTECTION DESIGNER FOR COMPLETION OF THE ABOVE INFORMATION, SPRINKLER LOCATIONS AND PIPE LAYOUT.
2. VERIFY WITH WALGREENS PROJECT ARCHITECT FOR PROJECTS WITH SPECIAL, NON-PROTOTYPICAL DESIGN CONDITIONS SUCH AS BASEMENT STOCK ROOMS. PROTOTYPE STOCK ROOM SHALL ACCOMMODATE MERCHANDISE STORED TO 15 FEET ABOVE FINISH FLOOR AND SHALL BE PROTECTED AS A HIGH-PILED STORAGE REMOTE AREA.
3. DEVIATIONS FROM WALGREEN FIRE PROTECTION CRITERIA REQUIRED TO COMPLY WITH COVERNING CODES AND/OR REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION SHALL BE SUBMITTED, IN WRITING, TO WALGREENS PROJECT ARCHITECT.
4. IF HIGH-PILED STORAGE PERMIT OR LICENSE IS REQUIRED BY AUTHORITY HAVING JURISDICTION, COMPLETE APPLICATION AS REQUIRED AND INCLUDE WITH OTHER SUBMITTALS TO WALGREENS.
5. REFER TO STOCK ROOM FIXTURE KEY AND SITE SPECIFIC WALGREEN FIXTURE FLOOR PLAN, D1, FOR FIXTURE LAYOUT AND DETAILS.
6. REFER TO ELECTRICAL DRAWINGS FOR FIRE ALARM SYSTEM INFORMATION AND CIVIL DRAWINGS FOR FIRE MAIN SERVICE AND OTHER PROJECT SITE COMPONENTS OF FIRE PROTECTION.
7. COORDINATE WITH CIVIL AND SURVEY FOR HYDRANT AND TAP LOCATIONS, SERVICE PIPING AND ITEMS SUCH AS ON-SITE PITS AND VALVES.
8. SPRINKLERS FOR BUILDING ELEMENTS SUBJECT TO FREEZING SHALL BE SERVED BY A DRY SYSTEM.
9. FIRE PROTECTION SYSTEM SHALL PROVIDE DENSITIES FOR HAZARDS DEFINED PER WATER SUPPLY AVAILABLE, WITH AUXILIARY PUMPS AS REQUIRED, BASED ON FLOW TESTS IDENTIFIED ON THIS DRAWING.
10. NOT USED.
11. EXTERIOR BUILDING ELEMENTS OF COMBUSTIBLE CONSTRUCTION SHALL BE SPRINKLERED.

WATER DENSITIES AND SPRINKLER SPECIFICATIONS

GENERAL SALES:
SPRINKLERS IN THE GENERAL SALES AREA SHALL PROVIDE A DENSITY OF 0.20 GPM PER SF CALCULATED OVER THE MOST HYDRAULICALLY DEMANDING 1,500 SF (OR 5 SPRINKLERS MINIMUM) PER NFPA 13, 2002 EDITION, ORDINARY HAZARD GROUP II (FIGURE 11.2.3.1.5 & SECTION 11.2.3.2.2.4).
SPRINKLERS SHALL BE SERIES EC-11 OR EC-14, 155 F/68C EXTENDED COVERAGE ORDINARY HAZARD RECESSED PENDENT, STYLE 40, IN WHITE POLYESTER FINISH PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 220. SPRINKLERS SHALL BE SPACED AT A MAXIMUM OF 16 FEET ON CENTER, COORDINATED PER CEILING PLAN.

PHARMACY & PATIENT SEATING:
SPRINKLERS IN THE PHARMACY & PATIENT SEATING AREAS SHALL PROVIDE A DENSITY OF 0.20 GPM PER SF PER NFPA 13, 2002 EDITION, ORDINARY HAZARD GROUP II (FIGURE 11.2.3.1.5).
SPRINKLERS SHALL BE SERIES RFII, CONCEALED, STANDARD COVERAGE (130 SF MAXIMUM SPACING), QUICK RESPONSE, 155F/68C SPRINKLER WITH 135F/57C COVER PLATE. COVER PLATE SHALL BE WHITE FINISH, PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 181.

SERVICE AREAS & PHOTO:
SPRINKLERS IN SERVICE AREAS SHALL PROVIDE A DENSITY OF 0.10 GPM PER SF PER NFPA 13, 2002 EDITION, LIGHT HAZARD (FIGURE 11.2.3.1.5). SPRINKLERS SHALL BE SERIES RFII, CONCEALED, STANDARD COVERAGE (225 SF MAXIMUM SPACING), QUICK RESPONSE, 155F/68C SPRINKLER WITH 135F/57C COVER PLATE. COVER PLATE SHALL BE WHITE FINISH, PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 181.

GENERAL STOCK:
SPRINKLERS IN THE GENERAL STOCK AREA SHALL PROVIDE A DENSITY OF 0.35 GPM PER SF CALCULATED OVER THE ENTIRE STOCK AREA, BASED ON NFPA 13, 2002 EDITION, FIGURE 12.3.2.1.2 AND FIGURE 12.3.2.1.2(d) CURVE "C" (0.56 GPM/SF OVER 2,000 SF, DENSITY IS REDUCED PER NFPA 13 FIGURE 12.3.2.1.5.1 TO 0.58 GPM/SF x 60% = 0.348 GPM/SF, ROUNDED UP TO 0.35 GPM/SF.)
SPRINKLERS SHALL BE SERIES ELO-231B, STANDARD RESPONSE, 286F/141C BRASS FINISH SPRINKLER PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 342.

NO IN-RACK SPRINKLERS ARE USED. CEILING SPRINKLER DEFLECTORS SHALL BR LOCATED 1" TO 12" FROM ROOF DECK PER NFPA 13(8.6.4.1.1.1.). A MINIMUM CLEARANCE OF 18" FROM DEFLECTOR TO TOP OF PILE SHALL BE MAINTAINED PER NFPA 13(8.6.6.1.). SPRINKLERS ARE PLACED OVER AISLES.

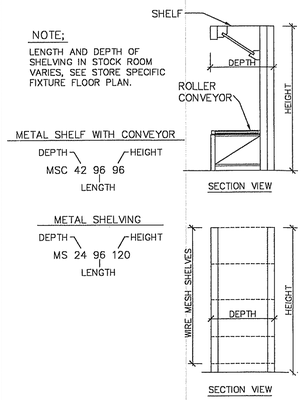
FIRE HAZARD CLASSIFICATION INFORMATION

1. THE BULK OF MERCHANDISE IS RECEIVED DETRASHED IN PLASTIC TOTES WITH THE EXCEPTION OF BULK ITEMS SUCH AS PAPER GOODS WHICH ARE RECEIVED IN THEIR ORIGINAL CORRUGATED CARDBOARD BOXES. BULK ITEMS COMPRISE NOT GREATER THAN 10%, BY WEIGHT, OF THE DELIVERY.
2. ITEMS RECEIVED IN TOTES ARE IMMEDIATELY PLACED ON SALES FLOOR WITH EXCESS PRODUCT STORED IN THE STOCK ROOM. PLASTIC TOTES ARE EMPTIED, STACKED AND AS A GENERAL RULE, PLACED IN AN EXTERIOR CORRAL FOR RETURN TO THE DISTRIBUTION CENTER UPON THE NEXT STORE DELIVERY. BULK ITEMS THAT CAN NOT BE IMMEDIATELY PLACED ON THE SALES FLOOR ARE ALSO STORED IN THE STOCK ROOM.
3. PRODUCTS STORED ARE CLASS III, WITH MINIMAL EXCEPTIONS OF CLASS IV, SUCH AS LEVEL 2 AEROSOLS AND PRODUCTS CONTAINING GROUP A AND GROUP B PLASTICS.
4. THE BULK OF GROUP A PLASTIC STORED IS PACKAGING AND LIMITED PLASTIC PARTS. THE PERCENTAGE BY WEIGHT OF UNEXPANDED PLASTIC IS LESS THAN 15% WITH NO APPRECIABLE VOLUME OF EXPANDED PLASTICS. IN ACCORDANCE WITH IFC SECTION 2303.7.4 AND FIGURE 2303.7.4 THE PRODUCTS STORED MEET A CLASS IV COMMODITY CLASSIFICATION.
5. COMMODITIES STORED IN HIGH-PILED REMOTE AREA ARE CLASS I THROUGH IV, NON-ENCAPSULATED. SPRINKLER DESIGN IS BASED ON CLASS IV, WORST CASE AS ALL CLASS IV AS DEFINED IN IFC 2303.2 THROUGH 2303.6, IN A MIXED ARRAY.
6. STORAGE CONFIGURATION IS FLOOR SUPPORTED, METAL, SINGLE-ROW OR WALL RACKS WITH METAL SHELVING WITH GREATER THAN 50% OPENINGS ALIGNED WITH AISLES AS DEFINED ON WALGREEN FIXTURE PLAN.
7. NO FORKLIFTS ARE UTILIZED AND ALL STOCK IS HAND PLACED. THE STOCK ROOM IS SECURED AT ALL TIMES AND IS ACCESSIBLE ONLY TO STAFF AND STAFF SUPERVISED VISITORS.

LEGEND

- SUPPLY AIR
- RETURN AIR
- FLUORESCENT LIGHTING
- SPEAKER
- EMERGENCY LIGHTING
- EXIT LIGHTING
- CAN LIGHT
- WALL MOUNT LIGHT
- CCTV MOUNTING HARDWARE
- CEILING OR ROOF HATCH
- DRIVE-THRU TUBE OR TRACK

STOCK ROOM FIXTURE KEY



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Fire Protection Plan

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approved: AGL

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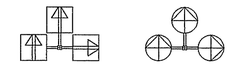
REFLECTOR ORIENTATION LEGEND

McGRAW–EDISON



SYMBOL ON FACTORY PHOTOMETRICS

LAMP PLACEMENT IN FIXTURE

Y–1: WCAL–250–MH–MT–3F

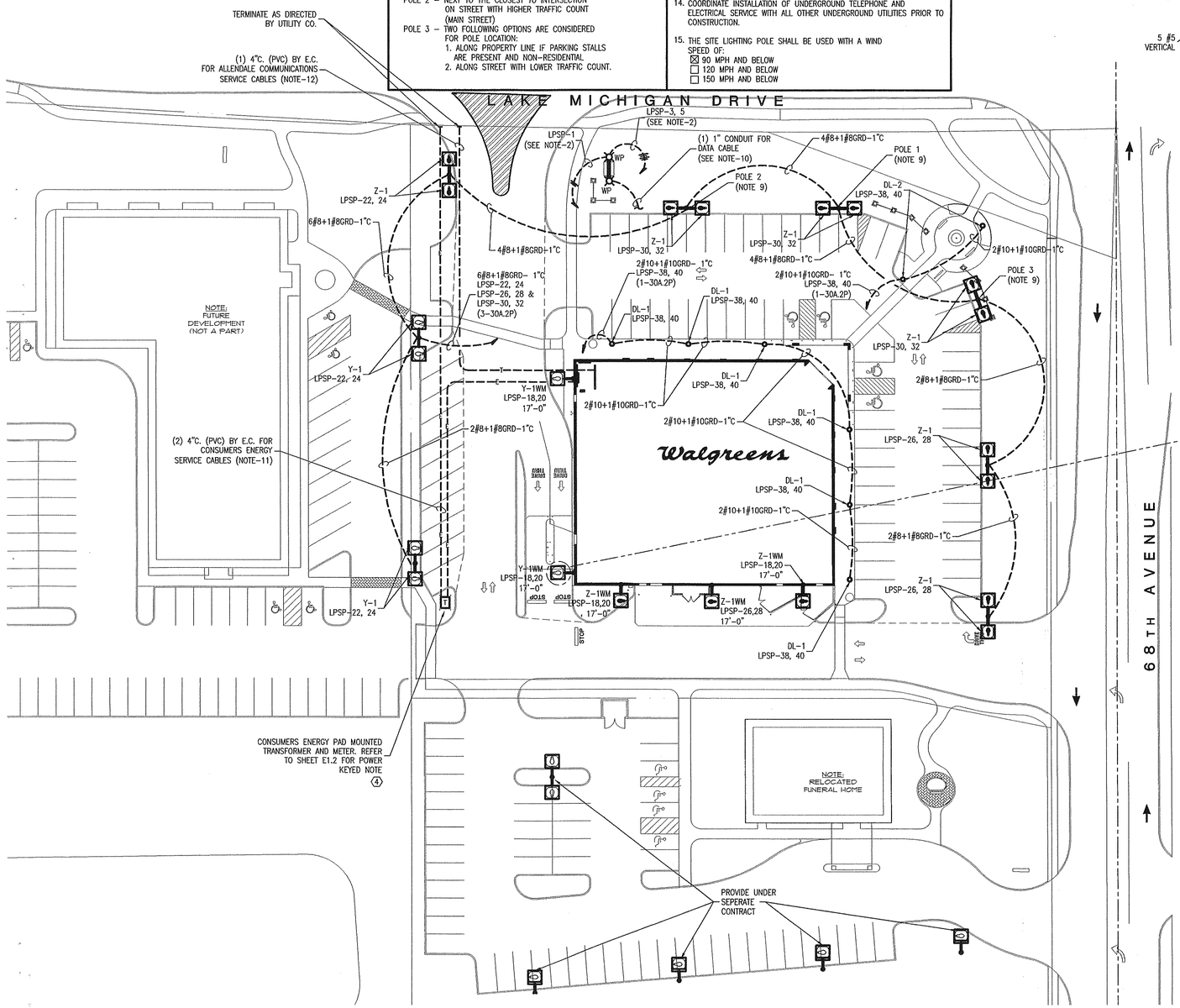
Z–1: WCAL–250–MH–MT–4F

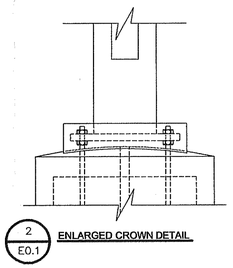
NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. FOR WALGREENS MONUMENT SIGN, PROVIDE (1) 20A, 120V CIRCUIT FROM LP–SP TO MONUMENT SIGN, FOR PRIMARY PANEL. REFER TO PRIMARY PANEL ELECTRICAL DATA, SHOWN ON THIS DRAWING.

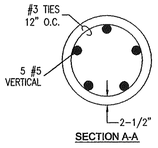
   LED READERBOARD POWER REQUIREMENTS SHALL BE BASED ON LED READERBOARD PANEL ELECTRICAL DATA, SHOWN ON THIS DRAWING. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH LED READERBOARD BRANCH CIRCUIT. LED READERBOARD BRANCH CIRCUIT CONDUCTOR SIZES SHALL BE SHOWN ON THIS DRAWING.
3. FURNISH AND INSTALL THE DRIVE ALARM SENSOR, WITH CABLE ROUTED BACK TO THE CONTROL PANEL, WHICH IS MOUNTED ON THE INTERIOR WALL OF THE DRIVE–THRU WINDOW UNIT. SEE DRAWING E1.2 FOR ELECTRICAL REQUIREMENTS.
4. SEE LUMINAIRE SCHEDULE ON DRAWING E4.1 FOR LUMINAIRE INFORMATION.
5. THE SITE LIGHTING IS BASED ON:
   ☒ McGRAW–EDISON
   ☐ LITHONIA
6. PROVIDE CROWN ON TOP OF CONCRETE BASE TO COMPLETELY SHED WATER.
7. NOT USED.
8. NOT USED
9. GROUP 8, DRAWING E2.1A OF CONTROL SCHEDULE CONTROLS LIGHTS REQUIRED TO ILLUMINATE PATH OF TRAVEL FROM THE STORE ENTRANCE TO THE DESIGNATED EMPLOYEE PARKING SPACES. SELECTION OF POLES IS BASED ON THE FOLLOWING LOGIC:

   POLE 1 – CLOSEST TO INTERSECTION
   POLE 2 – NEXT TO THE CLOSEST TO INTERSECTION ON STREET WITH HIGHER TRAFFIC COUNT (MAIN STREET)
   POLE 3 – TWO FOLLOWING OPTIONS ARE CONSIDERED FOR POLE LOCATION:
   1. ALONG PROPERTY LINE IF PARKING STALLS ARE PRESENT AND NON–RESIDENTIAL
   2. ALONG STREET WITH LOWER TRAFFIC COUNT.
10. PROVIDE A MINIMUM OF TWO (2) 1" DIAMETER PVC CONDUITS TO PYLON SIGN(S) TO SEPARATE DATA CABLE AND POWER CIRCUITS. 2'–0" SEPARATION SHALL BE MAINTAINED BETWEEN POWER AND DATA CONDUITS. RUN DATA CONDUIT (WITH #12 WIRE FOR PULL STRING) TO OFFICE SPACE. SEE DRAWING E1.3 HEXAGON 14 – ETHERNET SYSTEM, FOR EXACT LOCATION. ALL CONDUIT AND POWER SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PYLON DATA CABLE FURNISHED AND INSTALLED BY WALGREEN CONTRACTOR.
11. ELECTRICAL CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR THE COST OF FURNISHING AND INSTALLING 240' LINEAL FEET OF (2)–4" PVC MIN. 36" BELOW GRADE FROM CONSUMER ENERGY PAD MOUNTED TRANSFORMER TO ELECTRICAL SERVICE POINT TO BE DETERMINED BY CONSUMER ENERGY. (PROVIDE ADDITIONAL LINEAL FOOT ADD AND DEDUCT UNIT PRICES FOR OVER AND UNDER 240 FT. OF SERVICE RUN). COORDINATE ALL WORK FOR THE INSTALLATION OF THE NEW ELECTRICAL UNDERGROUND SERVICE AND THE PAD MOUNTED TRANSFORMER WITH VICTORIA KEAVEY OF CONSUMER ENERGY (616)494–5304, PRIOR TO STARTING WORK. SYSTEM IS DESIGNED BASED ON SINGLE PRIMARY FEED. COORDINATE WITH SERVICE ENGINEER LISTED TO SEE IF A LOOP SYSTEM IS TO BE PROVIDED TO SERVICE ADJACENT + DEV., WALGREENS & RELOCATED FUNERAL HOME.
12. ELECTRICAL CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR THE COST OF FURNISHING AND INSTALLING 265' LINEAL FEET OF (1)–4" PVC MIN. 36" BELOW GRADE FROM TELEPHONE SERVICE BOARD TO TELEPHONE SERVICE POINT TO BE DETERMINED BY ALLENDALE COMMUNICATIONS. (PROVIDE ADDITIONAL LINEAL FOOT ADD AND DEDUCT UNIT PRICES FOR OVER AND UNDER 265' FT. OF SERVICE RUN). COORDINATE ALL WORK FOR THE INSTALLATION OF THE NEW TELEPHONE UNDERGROUND SERVICE WITH MR. CURT GULKER, ALLENDALE COMMUNICATIONS SERVICE PLANNER AT (231)941–2755, PRIOR TO STARTING THIS WORK.
13. THE ELECTRICAL TRADES CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ALL COSTS ASSESSED BY CONSUMERS ENERGY FOR THE NEW ELECTRICAL UNDERGROUND SERVICE.
14. COORDINATE INSTALLATION OF UNDERGROUND TELEPHONE AND ELECTRICAL SERVICE WITH ALL OTHER UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
15. THE SITE LIGHTING POLE SHALL BE USED WITH A WIND SPEED OF:
    ☒ 90 MPH AND BELOW
    ☐ 120 MPH AND BELOW
    ☐ 150 MPH AND BELOW

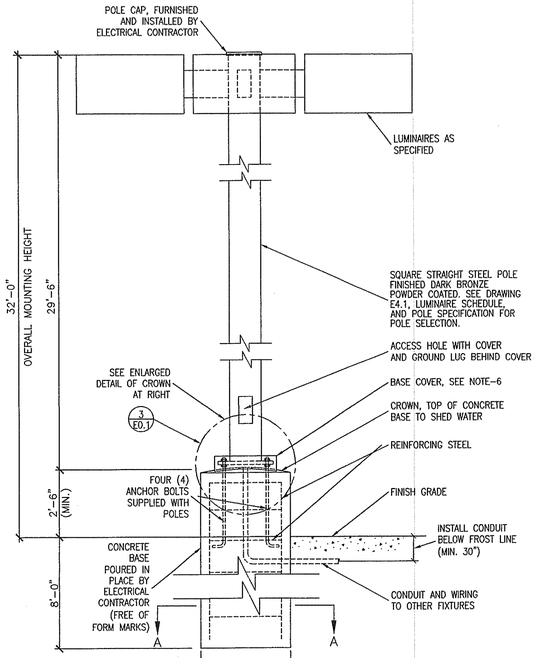




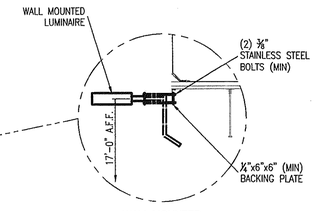
2 / E0.1 **ENLARGED CROWN DETAIL**



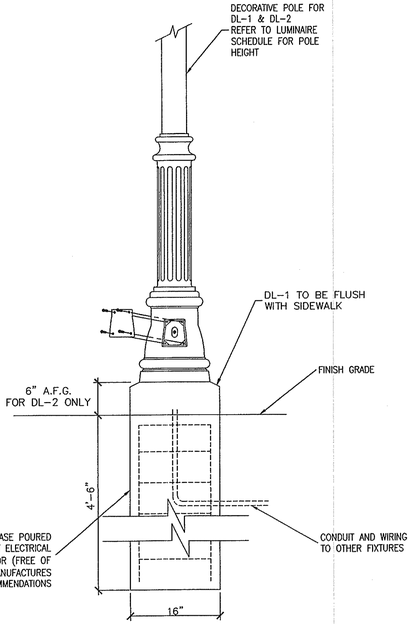
SECTION A–A



1 / E0.1 **LIGHTING STANDARD ELEVATION**
NOT TO SCALE



WALL MOUNTED LUMINAIRE DETAIL



2 / E0.1 **DECORATIVE POST TOP**
NOT TO SCALE

LED READERBOARD PANEL ELECTRICAL DATA							
LED READER–BOARD	VENDOR	OPTION	DESCRIPTION	AMPS	VA (PER FACE) MAXIMUM/TYPICAL (SEE NOTE BELOW)	CIRCUITS	PANEL, CIRCUIT #
	HITECH	LED	3'–8"x10'–11" GROUND SOLID RED – PHASE III	-------	1900/600	(2)–20 AMP, 120V (PER SIGN)	LPSP, CKT #3 & 5

PRIMARY PANEL ELECTRICAL DATA						
	LAMPS	BALLAST	AMPS	V.A.	CIRCUITS	PANEL, CIRCUIT#
PRIMARY PANEL	(8) F120T12 CWHO	(2) ASB–2040 24–BL (ADVANCE)	8.8	1056	(1)–20AMP, 120V	LPSP, CKT # 1

Site Plan - Electrical
1" = 30'–0"

North

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STATE OF MICHIGAN — RICHARD J. CLEVE — ARCHITECT — NO. 36408 — REGISTERED ARCHITECT

drawing:

Site Electrical Plan

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issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:

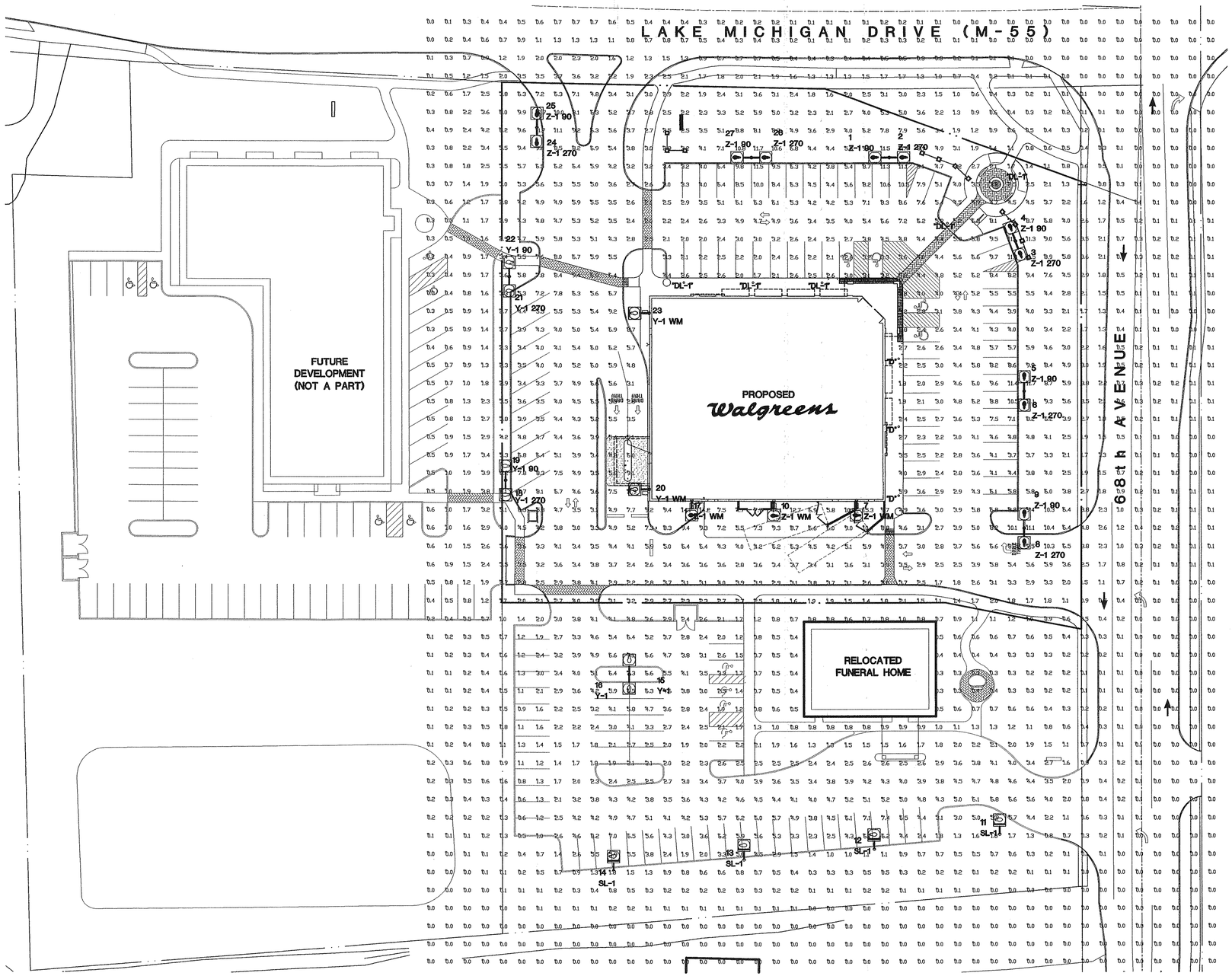
E0.1

Numeric Summary										
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	# Pts	PtSpcLr	PtSpcTb
CalcPts	Illuminance	Fc	2.28	15.3	0.0	N.A.	N.A.	2211	10	10

Statistical Area Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
WALGREENS	5.00	15.3	1.7	2.94	9.00
FUNERAL HOME	3.46	7.4	0.5	6.92	14.80

ROTATE REFLECTOR FOR CORRECT SOCKET POSITION BEFORE FIXTURE INSTALLATION

Luminaire Schedule						
Symbol	Qty	Label	Lumens	LLF	Description	Remarks
	2	Y-1 270	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	Optics Rotated 270 deg
	2	Y-1 90	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	Optics Rotated 90 deg
	2	Y-1 WM	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	Wall Mounted
	2	Y-1	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	
	6	Z-1 270	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-4F-BZ	Optics Rotated 270 deg
	6	Z-1 90	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-4F-BZ	Optics Rotated 90 deg
	3	Z-1 WM	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-4F-BZ	Wall Mounted
	4	SL-1	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-SL-BZ	



NOTE:
REF. SHEET SL-2 FOR FIXTURE DETAILS

Luminaire Location Summary						
Seq #	Label	X	Y	Z	Orient	Tilt
1	Z-1 90	213.5	427.25	32	180	0
2	Z-1 270	213.5	427.25	32	0	0
3	Z-1 270	286.75	377.5	32	270	0
4	Z-1 90	286.75	377.5	32	90	0
5	Z-1 90	286.75	300.25	32	90	0
6	Z-1 270	286.75	300.25	32	270	0
7	Z-1 WM	198.236	239.05	20	270.02	0
8	Z-1 270	290.75	222.5	32	270	0
9	Z-1 90	290.75	222.5	32	90	0
10	Z-1 WM	152.736	238.80	20	270.02	0
11	SL-1	273.75	54.5	22.5	90	0
12	SL-1	204.75	46.5	22.5	90	0
13	SL-1	133	40.75	22.5	90	0
14	SL-1	61.25	34.5	22.5	90	0
15	Y-1	70.5	143.75	32	270	0
16	Y-1	70.5	143.75	32	90	0
17	Z-1 WM	104.486	239.05	20	270.02	0
18	Y-1 270	3.5	249	32	90	0
19	Y-1 90	3.5	249	32	270	0
20	Y-1 WM	81.028	245.122	20	180	0
21	Y-1 270	15.5	363.75	32	90	0
22	Y-1 90	15.5	363.75	32	270	0
23	Y-1 WM	81.028	342.872	20	180	0
24	Z-1 270	19.5	445.5	32	90	0
25	Z-1 90	19.5	445.5	32	270	0
26	Z-1 270	138.25	429.75	32	0	0
27	Z-1 90	138.25	429.75	32	180	0
Total Quantity = 27						

Photometric Plan
1" = 30'-0"

North

THIS SITE PLAN IS ISSUED FOR ORIENTATION ONLY- SEE CIVIL ENGINEERING DRAWINGS

PREPARED BY:

COOPER Lighting

Project: National Accounts Pillpuf-Grist & Assoc.	
Client: Walgreens #1415 - ALLENDALE TOWNSHIP, MI	
Scale: 1" = 30'-0"	Project #: 0700352A
Date: 2/15/2007	Drawing: DAG

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STATE OF MICHIGAN
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ARCHITECT
NO. 38436
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drawing:

Photometric Plan

DO NOT SCALE DRAWING

issue date: 9 APR 07
drawn: B.J.C.
checked: R.J.C
approved: R.J.C

file number: 06185

sheet:

E-0.1a

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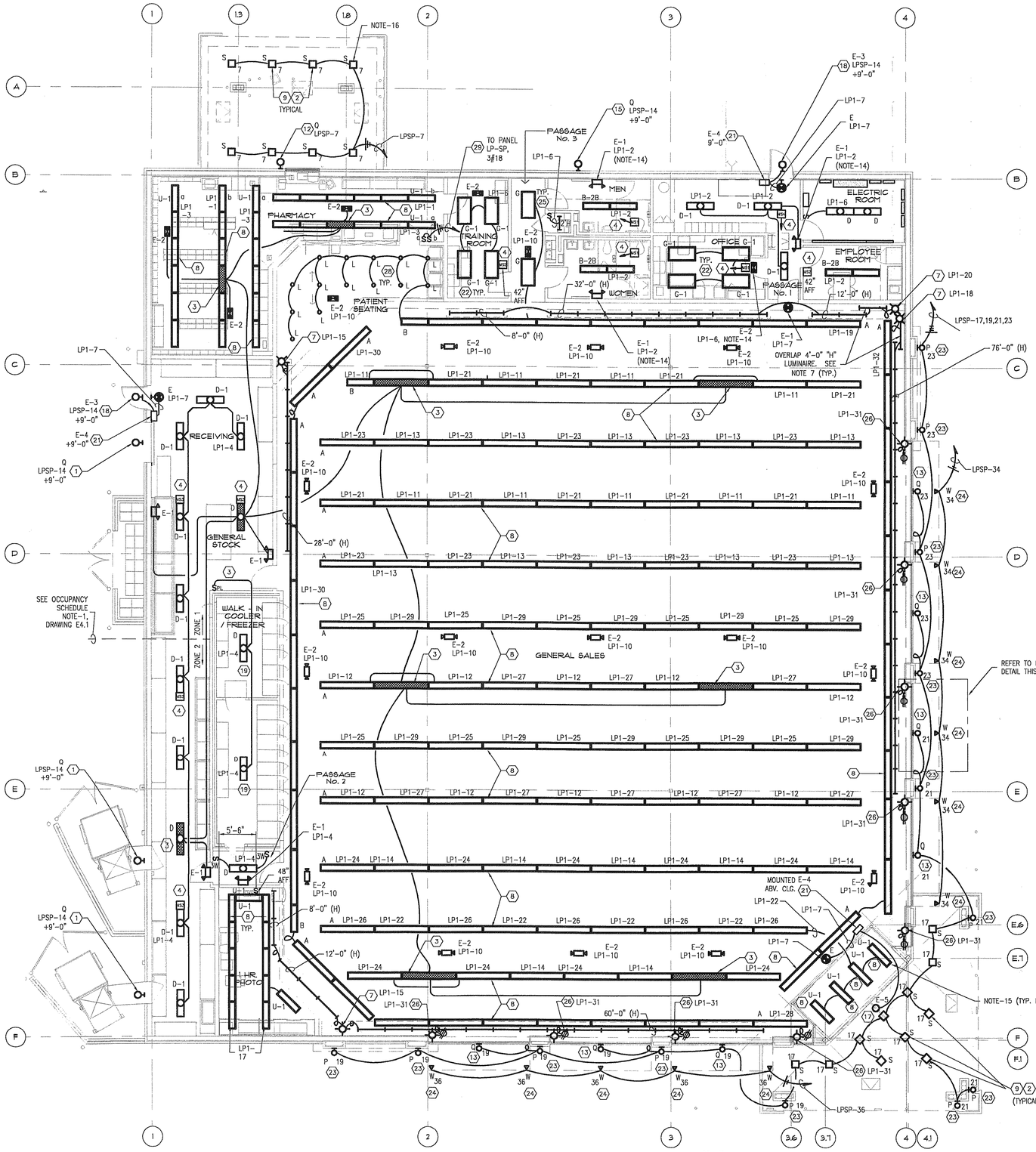
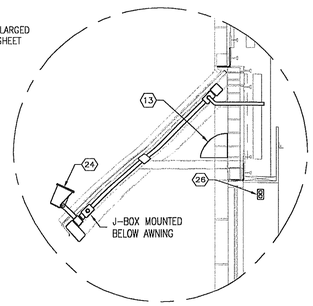


Floor Plan - Lighting
1/8" = 1'-0"

North



Enlarged Detail
N.T.S.

LEGEND

- FLUORESCENT LIGHTING – SEE DRAWING E4.1 FOR LUMINAIRE SCHEDULE AND DETAILS.
- FLUORESCENT NIGHT LIGHT
- EXTERIOR LUMINAIRE (WALL MOUNTED)
- OUTLET (WATTAGE AND LOCATION AS NOTED)
- OUTLET, WALL MOUNTED (WATTAGE AND LOCATION AS NOTED)
- EXIT LIGHT: 'E' (CEILING MOUNTED WITH PENDANT)
- EXIT LIGHT: 'E' (WALL MOUNTED)
- EMERGENCY LIGHT: 'E-1' (WALL/COLUMN MOUNTED)
- EMERGENCY LIGHT: 'E-2' (CEILING GRID MOUNTED)
- EMERGENCY LIGHTING UNIT LESS HEADS
- $ SWITCH
- $PL SWITCH WITH PILOT LIGHT
- $3W SWITCH, 3-WAY
- MS MOTION SENSOR SWITCH, ARROW INDICATES DIRECTION OF RECEIVER (IF APPLICABLE)

NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. SEE LUMINAIRE SCHEDULE AND DETAILS, DRAWING E4.1, FOR INFORMATION.
3. SEE DETAILS ON DRAWINGS E2.1A, E2.1B AND E2.1C FOR LIGHTING PANEL "LP-1" AND SIGN PANEL "LP-SP" CONTROL SCHEDULE AND WIRING.
4. NOT USED.
5. LUMINAIRES INSTALLED IN CONTINUOUS ROWS SHALL BE GROUNDED WITH A CONDUCTOR ROUTED FROM LUMINAIRE TO LUMINAIRE, MOUNTED TO EACH WITH GROUNDING LUG OR SCREW. ALIGNING CLIPS ARE NOT ACCEPTABLE. LUMINAIRE GROUNDING SHALL BE INSTALLED IN COMPLIANCE WITH NATIONAL ELECTRICAL CODE, ARTICLE 410-21.
6. DO NOT CONNECT EMERGENCY LIGHTS OR EXIT SIGNS WITH ANY OTHER LUMINAIRE. PROVIDE ENTIRELY SEPARATE RACEWAY SYSTEM ONLY WHERE REQUIRED, SUCH AS CHICAGO. CONNECT TO NORMAL ELECTRICAL SYSTEM WHERE ACCEPTABLE TO THE LOCAL CODE AUTHORITY.
7. "H" LUMINAIRE, LENGTHS SHOWN FOR REFERENCE ONLY. LUMINAIRE LENGTHS DEPEND ON THE LOCATION OF F.E.(FINISHED END) SHOWN ON DRAWING D-1 (FIXTURE PLAN). PROVIDE 6" SPACE (MAXIMUM) FROM FINISHED ENDS TO LUMINAIRES. DO NOT PROVIDE MORE THAN 6" OF UNLIGHTED AREA AT THE END OF SHELVINGS. OVERLAP "H" LUMINAIRES IF REQUIRED. CONTACT THE PROJECT ARCHITECT FOR A COPY OF DRAWING D-1.
8. LIGHTING FOR WALK-IN COOLER/FREEZER UNIT TO BE WALL SWITCHED.
9. STOCK AREA LIGHTING TO BE MOUNTED ABOVE AISLE, DO NOT MOUNT ABOVE SHELVING.
10. NOT USED.
11. CEILING LIGHTS ARE TO BE WIRED TO THE BAR JOIST MEMBERS AT THE DIAGONAL CORNERS.
12. CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT), RIGID STEEL (1/2" MIN.), OR MC CABLE WHERE ALLOWED BY CODE.
13. PROVIDE EMERGENCY LIGHTING TO MEET THE REQUIRED FOOT CANDLE LEVEL PER LOCAL CODE.
14. FOR EMERGENCY UNIT BATTERIES FED FROM CIRCUITS 2 & 6, REFER TO DETAIL 4 DRAWING E2.1C FOR WIRING.
15. TYPE "U-1" FIXTURES MOUNTED IN VESTIBULE SHALL HAVE FLANGE KIT TO ALLOW FOR INSTALLATION IN GYP. BOARD CEILING.
16. TYPE "S" FIXTURES AT PHARMACY DRIVE THRU TO BE WITH FLAT LENS TO CONFORM TO DARK SKY COMPLIANCE.

LIGHTING KEYED NOTES

1. LUMINAIRE "Q", HEIGHT AS NOTED.
2. LUMINAIRE "S", RECESSED CANOPY LUMINAIRE WIRED FROM SIGN PANEL "LP-SP".
3. NIGHT LIGHTS (TO BE CIRCUITED AND SWITCHED SEPARATELY).
4. OCCUPANCY SENSOR, PURCHASE THROUGH NATIONAL ACCOUNT (SEE NOTE III AND SCHEDULE ON DRAWING E4.1). (LAYOUT OF OCCUPANCY SENSORS SHOWN ON PLAN IS FOR LEVITON).
5. NOT USED
6. NOT USED
7. OUTLET BOX IN WALL, ±6'-10" A.F.F., CONNECT TO CORNICE MOUNTED LUMINAIRE "H". (LENGTH AS NOTED). SEE NOTE 7 AND DETAILS 1 AND 2/E4.1. COORDINATE TO AVOID WALL SHELVING STANDARD.
8. RECESSED SLIMLINE LUMINAIRE, SEE LUMINAIRE SCHEDULE, DRAWING E4.1.
9. OUTLET BOX ABOVE CEILING FOR RECESSED LUMINAIRE "S".
10. NOT USED
11. NOT USED
12. LUMINAIRE "Q", SEE ARCHITECTURAL EXTERIOR ELEVATION DRAWING A4.4/A4.4D FOR MOUNTING.
13. LUMINAIRE "Q", MOUNTED ABOVE WINDOW HEADER. COORDINATE WITH ARCHITECTURAL DRAWING A2.2 FOR FIXTURE LOCATION.
14. NOT USED
15. FOR LEFT HAND ENTRY STORES (MIRROR IMAGE) ADD LUMINAIRE "Q" TO DRIVE-THRU ELEVATION IN LIEU OF "E-3" @ +9'-0".
16. NOT USED
17. RECESSED CANOPY MOUNTED, EMERGENCY EGRESS LUMINAIRE "E-5" SEE SHEET E4.1 FOR DETAILS.
18. WALL MOUNTED, EMERGENCY EGRESS LUMINAIRE "E-3" SEE SHEET E4.1 FOR DETAILS.
19. LUMINAIRE "D", MOUNTED ABOVE WALK-IN COOLER/FREEZER UNIT FOR MAINTENANCE OF EQUIPMENT (SWITCH AS SHOWN).
20. NOT USED
21. SURFACE MOUNTED POWER PACK "E-4". SEE LUMINAIRE SCHEDULE, DRAWING E4.1.
22. RECESSED MOUNTED "G-1" LUMINAIRE(S).
23. LUMINAIRE "P" WALL MOUNT SURFACE LUMINAIRE. MOUNT 9'-6" A.F.F. (ON CENTER) AND WIRED FROM SIGN PANEL "LP-SP".
24. FACADE ACCENT FIXTURE. LUMINAIRE TYPE "W", MOUNT ON TOP OF AWNING. SEE LUMINAIRE SCHEDULE DRAWING E4.1
25. RECESS MOUNTED "G" LUMINAIRE(S).
26. PROVIDE 200W OUTLET WITH RECEPTACLE FLUSH MOUNTED IN WINDOW JAMB AT WINDOW HEAD 11'-10"± FOR WINDOW SIGN. (1 HR PHOTO, HALLMARK AND ATM). CONNECT TO LIGHTING CIRCUIT FROM PANEL "LP-1".
27. NOT USED
28. RECESSED DOWNLIGHT, LUMINAIRE TYPE "L", COMPACT FLUORESCENT. SEE LUMINAIRE SCHEDULE, DRAWING E4.1.
29. PHARMACY LOCAL OVERRIDE LOW VOLTAGE MOMENTARY SWITCHES. REFER TO DRAWING E2.1B AND E2.1C FOR CONTROL WIRING DETAILS.

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STATE OF MICHIGAN RICHARD J. CLEVE ARCHITECT NO. 36-05 LICENSED

drawing:
Floor Plan - Lighting

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issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:
E1.1

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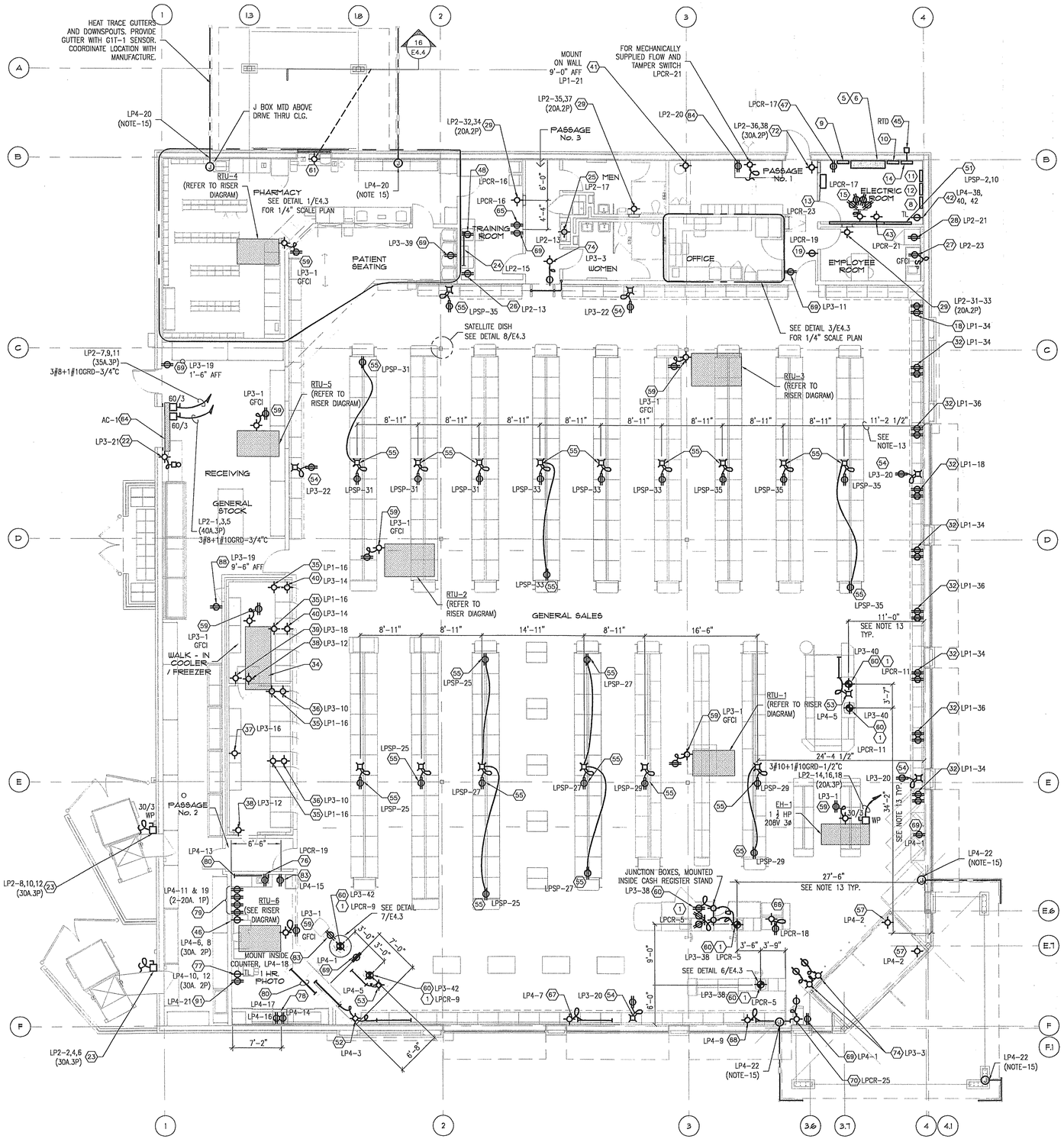

Floor Plan - Power
1/8" = 1'-0"

North

POWER KEYED NOTES (CONT.)

(71) TWO (2) 20A.120V.1ø CIRCUITS FROM PANEL "LP-CR" FOR RX COMMUNICATION EQUIPMENT RECEPTACLES.

(72) ELECTRIC WALL HEATER, RAYWALL AFC SERIES, 208V, 4000W, FORCED AIR, BUILT-IN THERMOSTAT, RECESS MOUNTED, 1'-0" A.F.F.. ACCEPTABLE ALTERNATE: CADET NLW SERIES.

(73) THREE (3) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR TECH EQUIPMENT CABINET RECEPTACLES.

(74) ONE(1) 20A.120V.1ø CIRCUIT, WITH SIMPLEX RECEPTACLE (QUANTITY NOTED), MOUNTED ABOVE CEILING FOR ELECTRONIC ARTICLE SURVEILLANCE (EAS) SYSTEM. SEE DETAIL 2/E4.4 FOR FURTHER INFORMATION. PROVIDE LOCK-ON CIRCUIT BREAKER.

(75) ONE (1) 20A.120V.1ø CIRCUIT TO OUTLET 1'-0" A.F.F. FOR CONVEYOR. BALDOR DRIVE MOTOR WITH SCR (SPEED CONTROL) BY CONVEYOR MFG. FINAL CONNECTION BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL THREE (3) HUBBELL NO.CS1221 SWITCHES WIRED IN SERIES AND EQUALLY SPACED ALONG COUNTER AT 3'-8" A.F.F., SEE PHARMACY COUNTER ELEVATION DETAIL 2/E4.3.

(76) ONE (1) 20A.120V.1ø CIRCUIT FOR 1-HOUR PHOTO TERMINAL. RECEPTACLE MOUNTED 45" A.F.F., CIRCUIT FROM PANEL "LP-CR".

(77) 20BV.1ø (30A.2P.C/B) 1/2"C.(2NO.10 & 1NO.10 DEDICATED GROUND, MIN.) TO HUBBELL NO. HBL 2620SR2 (30A. 250V. TWIST-LOCK) RECEPTACLE FOR NORITSU FILM PROCESSOR, MOUNTED 1'-6" A.F.F. GROUND SHALL CONNECT TO LUG ATTACHED TO PANELBOARD ENCLOSURE (OF PANEL FEEDING THIS EQUIPMENT). ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND INSTALL A CODE APPROVED POWER SUPPLY CORD FOR POWER CONNECTION.

(78) TWO(2) 20A.120V.1ø CIRCUIT, CONNECT TO EACH DUPLEX RECEPTACLES, MOUNTED 1'-6" A.F.F. FOR SILVER RECOVERY UNIT AND CONTROL PANEL.

(79) TWO (2) 20A., 120V, 1ø DEDICATED CIRCUIT FOR GENERAL PURPOSE DUPLEX RECEPTACLES (IN A 2-GANG BOX WITH COVER - QUANTITY OF TWO). RECEPTACLES (MOUNTED IN 2-GANG BOX WITH COVER) SHALL BE MOUNTED 1'-6" A.F.F. WITH A 6" SEPARATION.

(80) 500W OUTLET WITH SOLID CONNECTION TO 5'-0" MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK), MOUNTED ON WALL 39" A.F.F. TO CENTERLINE OF PLUGMOLD.

(81) 1000W OUTLET WITH SOLID CONNECTION TO 4'-0" MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK), MOUNT ON Rx "FILLING" COUNTER BACKSPLASH (RACEWAY FLUSH WITH TOP OF BACKSPLASH). RECEPTACLES SHALL BE 6" ON CENTER.

(82) ONE(1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" (WITH WIRES COILED INSIDE JUNCTION BOX) MOUNTED ABOVE CEILING FOR FUTURE PHARMACY ROBOTICS POWER.

WALGREEN CONTRACTOR TO PROVIDE ONE LOW VOLTAGE CABLE (CAT.5E), FROM Rx COMMUNICATION CABINET, ROUTED ABOVE PHARMACY CEILING, FOR FUTURE PHARMACY ROBOTICS COMMUNICATION. PROVIDE 25' OF CABLE SLACK.

(83) ONE (1) 20A.120V.1ø CIRCUIT, CONNECT TO DUPLEX RECEPTACLE, 1'-6" A.F.F. (UNLESS NOTED OTHERWISE) FOR ALADDIN KIOSK.

(84) ONE (1) 20A.120V.1ø CIRCUIT, CONNECT TO DUPLEX RECEPTACLE, 1'-6" A.F.F. FOR IRRIGATION CONTROLS.

(85) NOT USED

(86) NOT USED

(87) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR CCTV CAMERA, CONNECT TO DUPLEX RECEPTACLE, MOUNTED ABOVE PHARMACY CEILING.

(88) 200W GENERAL PURPOSE DUPLEX RECEPTACLE, MOUNTED AT 10'-6" A.F.F. (AT ACCESS TO AREA ABOVE WALK-IN COOLER/FREEZER), FOR MAINTENANCE USE.

(89) NOT USED

(90) BAWIS TRANS-TRAX SYSTEM - ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ONE (1) 1/2" CONDUIT (FOR AUDIO CABLES) FROM KNEE SPACE AT DRIVE-THRU WINDOW STUB UP ABOVE CEILING VIA A 2" X 3" PULL BOX MOUNTED IN PLYWOOD BLOCKING. SEE DWG. A4.4.

(91) ONE(1) 20A.120V.1ø CIRCUIT (1/2"C., 2NO.12 & 1NO.12 DEDICATED GROUND) WITH DUPLEX RECEPTACLE, MOUNTED AT 1'-6" A.F.F. FOR PHOTO LAB RECEPTACLE. GROUND SHALL CONNECT TO LUG ATTACHED TO PANELBOARD ENCLOSURE (OF PANEL FEEDING THIS EQUIPMENT)

NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. REFERENCE TO HEIGHT OF OUTLET OR RECEPTACLE SHALL BE MEASURED FROM FINISHED SALES AREA FLOOR TO CENTER OF OUTLET OR RECEPTACLE.
3. ALL RECEPTACLES SHALL BE GROUNDING TYPE.
4. WALK-IN COOLER/FREEZER NOTES:
   a. CONTRACTOR TO PROVIDE: DISCONNECT AT REFRIGERATION CONDENSING UNIT(S), INTERNAL WIRING OF CONDENSING UNIT(S),CONTROL WIRING TO EVAPORATOR COILS, WIRING OF DRAIN LINE HEATERS, ALL LIGHTS, WIRING OF LIGHTS AND WIRING CIRCUIT TO DOORS, AND WIRING OF PRESSURE RELIEF PORTS --- (ALL FINAL CONNECTIONS).
   b. FOR ADDITIONAL INFORMATION SEE COOLER/FREEZER ELECTRICAL REQUIREMENTS (SEE PANEL SCHEDULE, E3.1) AND WIRING DIAGRAMS ON DRAWING E4.5.
5. ALL COMPRESSORS LISTED (SEE DWG. M2.2C OR M2.2T) TO BE INSTALLED BY CONTRACTOR. ALL CIRCUITS TO BE ON LOCK-ON BREAKERS. (ALL COMPRESSORS TO HAVE BUILT-IN MAGNETIC STARTERS AND DISCONNECTS.)
6. CONDUIT SIZE TO BE 3/4" MINIMUM. PVC CONDUIT AND FITTINGS ARE ACCEPTABLE ONLY BELOW SUBBASE MATERIAL OF GROUND BEARING FLOOR SLABS WHERE SUCH USE IS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
7. NOT USED.
8. TEMPERATURE CONTROL WIRING - SEE MECHANICAL SPECIFICATIONS.
9. SEE DRAWING E1.6 FOR SPARE CONDUIT REQUIREMENTS.
10. ALL RECEPTACLES AND SWITCHES SHALL HAVE TWO (2) REVOLUTIONS OF ELECTRICAL TAPE (SCOTCH 33+) OVER ALL THE TERMINALS, TO PREVENT ACCIDENTAL CONTACT WITH THE JUNCTION BOX OR OUTLET BOX.
11. NOT USED.
12. ELECTRICAL CONNECTION FOR ROOF-TOP HVAC UNITS SHALL BE ROUTED UP THRU ROOF WITHIN UNIT CURB.
13. DIMENSION IS FROM FINISHED WALL, SEE ARCHITECTURAL FOR WALL THICKNESS.
14. CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT), RIGID STEEL (3/4" MINIMUM), OR MC CABLE WHERE ALLOWED BY CODE. WHERE MC CABLE IS USED, PROPER SECUREMENT AND SUPPORT (AT INTERVALS NOT EXCEEDING 6 FEET) SHALL BE FOLLOWED PER NEC ART. 330.
15. PROVIDE IN-LINE FUSING FOR INDIVIDUAL RUNS OF HEAT TRACE.

LEGEND

- $K — KEY SWITCH
- $P — SWITCH WITH PILOT LIGHT
- S/C — SOLID STATE SPEED CONTROL
- $T — FRACTIONAL HORSEPOWER SINGLE POLE MANUAL STARTER WITH THERMAL OVERLOAD PROTECTION
- OUTLET (WATTAGE AND LOCATION AS NOTED)
- FLOOR JUNCTION BOX (WATTAGE & LOCATION AS NOTED)
- STANDARD SINGLE RECEPTACLE
- STANDARD DUPLEX RECEPTACLE
- TL STANDARD SIMPLEX, TWIST-LOCK (TL), RECEPTACLE
- TL STANDARD DUPLEX, TWIST-LOCK (TL), RECEPTACLE (SEE DETAIL 11/E4.4)
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS) DUPLEX RECEPTACLE (SEE DETAIL 13/E4.4).
- HOMERUN
- MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK)
- MOTOR (SEE MECHANICAL PLAN AND SCHEDULE FOR SPECIFICATION)
- UNFUSED SAFETY DISCONNECT SWITCH
- FUSIBLE SAFETY DISCONNECT SWITCH
- OR — FINAL CONNECTION TO EQUIPMENT
- S — SENSOR FOR THERMOSTAT (SEE DRAWING M1.1)
- T — THERMOSTAT, 5'-0" A.F.F. MAX. (SEE DRAWING M1.1)
- P — PHOTO CONTROL/PHOTOCELL
- M — METER SOCKET
- GROUNDING ELECTRODE (SEE DETAIL 5/E2.1)
- SUPPLEMENTAL GROUND ROD (SEE DETAIL 5/E2.1)
- SPS — SURGE SUPPRESSION UNIT
- WP — WEATHER PROOF
- RTD — RESISTIVE TEMPERATURE DETECTOR

POWER KEYED NOTES

(1) ONE(1) 20A.120V.1ø CIRCUIT FOR CASH REGISTER (CR) LOCATION. SEE DETAILS 1/E4.4, 4/E4.4, &/OR 5/E4.4 FOR OUTLET MOUNTING. HOMERUN BACK TO PANEL "LP-CR".

(2) TWO (2) 20A.120V.1ø CIRCUITS FOR OFFICE SYSTEM EQUIPMENT RECEPTACLES, CIRCUIT FROM PANEL "LP-CR". SEE DETAIL 12/E4.4.

(3) ONE(1) 20A.120V.1ø CIRCUIT FOR PHARMACY TERMINAL RECEPTACLES, CIRCUIT FROM PANEL "LP-CR". SEE DETAIL 10/E4.4 AND DETAIL 2/E4.3 FOR MOUNTING REFERENCE.

(4) C/T'S & METER MOUNTED AT TRANSFORMER. REFER TO SHEET E0.1.

(5) MAIN DISTRIBUTION PANELBOARD, TOP 7'-6" UP.

(6) 800 AMP FEED & 800 AMP MAIN CIRCUIT BREAKER: 208/120V.3ø.4W. TOP 6'-6" UP.

(7) NOT USED

(8) SURFACE MOUNTED ELECTRICAL PANEL "LP-4", TOP 6'-6" UP.

(9) SURFACE MOUNTED ELECTRICAL PANEL "LP-CR", DEDICATED TO SPECIAL ELECTRONIC EQUIPMENT. SEE PANEL SCHEDULE ON DRAWING E3.1.

(10) SURFACE MOUNTED ELECTRICAL PANEL "LP-1".

(11) SURFACE MOUNTED ELECTRICAL PANEL "LP-2", TOP 6'-6" UP.

(12) SURFACE MOUNTED ELECTRICAL PANEL "LP-3", TOP 6'-6" UP.

(13) EMS PANEL REFER TO DRAWING ME1.1 FOR ADDITIONAL INFORMATION.

(14) SIGN PANEL "LP-SP".

(15) ONE(1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR", CONNECT TO FOUR (4) DUPLEX RECEPTACLES, FOR BURGLAR ALARM, TELEPHONE AND SOUND SYSTEMS. SEE DETAIL 14/E4.4 FOR ADDITIONAL INFORMATION.

(16) NOT USED

(17) ONE(1) 20A.120V.1ø SATELLITE DIGITAL INTERFACE UNIT (DIU) CIRCUIT FROM PANEL "LP-CR". SEE DETAIL 13/E4.4 FOR ADDITIONAL INFORMATION.

(18) NOT USED.

(19) ONE(1) 20A.120V.1ø TIME/ATTENDANCE SYSTEM (ELECTRONIC TIMECLOCK) CIRCUIT FROM PANEL "LP-CR", RECEPTACLE 3'-6" UP. SEE DETAIL 9/E4.4.

(20) NOT USED

(21) 200W OUTLET (ABOVE ROOF) WITH GFCI DUPLEX RECEPTACLE AND TAYMAC NO.20510 SAFETY OUTLET ENCLOSURE (RAINTITE WHILE IN USE) OR PASS & SEYMOUR "WEATHERPROOF WHILE-IN-USE COVER" ON ROOF FOR MAINTENANCE OF EQUIPMENT. SEE DETAILS 1/E4.2 AND 8/E4.3.

(22) 200W OUTLET, MOUNTED 10'-6" A.F.F., FOR DOORBELL/TRANSFORMER.

(23) COMPACTOR (5 H.P.208V.3ø), PROVIDE A 30A. WEATHERPROOF, LOCKABLE, DISCONNECT SWITCH LOCATED ON EXTERIOR WALL (4'-0"A.F.F.) WITHIN 4'-0" OF THE COMPACTOR. FINAL CONNECTION AND CONTROL WIRING BY THE COMPACTOR INSTALLER.

(24) 1000W OUTLET WITH SOLID CONNECTION TO 5'-0" MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK) MOUNTED 1'-3" A.F.F. UNLESS NOTED OTHERWISE.

(25) 500W WATER COOLER OUTLET, MOUNTED 1'-6" A.F.F. PROVIDE LOCK-ON CIRCUIT BREAKER.

(26) 300W RECEPTACLE, MOUNTED 1'-6" A.F.F. FOR TV/VCR.

(27) 100W GFCI OUTLET, RECEPTACLE LOCATED 3'-8" A.F.F. AND BEYOND MIRROR EDGE, WITH PILOT LIGHT SWITCH. REFER TO ARCHITECTURAL INTERIOR ELEVATION.

(28) 500W RECEPTACLE, MOUNTED 1'-6" A.F.F. FOR EMPLOYEE ROOM REFRIGERATOR PROVIDE LOCK-ON CIRCUIT BREAKER.

(29) ELECTRIC WALL HEATER, RAYWALL AFC SERIES, 208V.1ø, 2000W, FORCED AIR, BUILT-IN THERMOSTAT, RECESS MOUNTED, 1'-0" A.F.F. ACCEPTABLE ALTERNATE: CADET NLW SERIES.

(30) 500W OUTLET, RECEPTACLE 1'-6" A.F.F. FOR PHARMACY BIOLOGICAL REFRIGERATOR. PROVIDE LOCK-ON CIRCUIT BREAKER.

(31) 200W OUTLET, RECEPTACLE 3'-8" A.F.F. FLUSH ABOVE WORK COUNTER, UNLESS NOTED OTHERWISE. SEE DETAIL 2/E4.3.

(32) 360W OUTLET (6'-9" A.F.F.) CONNECTED TO (2) RECEPTACLE MOUNTED ON BOTTOM OF COSMETIC SHELVING CANOPY, CIRCUIT FROM PANEL "LP1-18, 34, & 36". SEE DRAWING E2.1A, GROUP 2 CONTROL SCHEDULE AND DETAIL 2/E4.1.

(33) 1.5A. 120V OUTLET ABOVE PHARMACY CEILING FOR MOTORIZED ROLL DOWN SHUTTER, WITH THERMAL OVERLOAD SWITCH MOUNTED 4'-6" UP AS SHOWN, UNLESS NOTED OTHERWISE. (SWITCH LOCATED INSIDE Rx AREA).

(34) 20BV.3ø WALK-IN COOLER/FREEZER CONDENSING UNIT (WG-3) WITH 60A.3P. NON-FUSED SAFETY DISCONNECT SWITCH ON ROOF. HACR CIRCUIT BREAKER AT PANEL. SEE NOTES 4 & 5.

(35) ONE(1) 20A.120V.1ø CIRCUIT FOR ANTHONY FREEZER/COOLER DOOR LIGHTING (FLUORESCENT), OUTLET MOUNTED 8'-6" A.F.F.

(36) ONE(1) 20A.120V.1ø CIRCUIT FOR ANTHONY COOLER GLASS DOOR & FRAME HEATERS, OUTLET MOUNTED 8'-6" A.F.F.

(37) ONE(1) 20A.120V.1ø CIRCUIT FOR COOLER #1 AND #2 EVAPORATOR, OUTLET MOUNTED 9'-6" A.F.F.

(38) ONE(1) 20A.120V.1ø CIRCUIT FOR WALK-IN COOLER/FREEZER MANDOOR HEATERS, OUTLET MOUNTED 8'-6" A.F.F., SEE NOTE #4.

(39) ONE(1) 20A.120V.1ø CIRCUIT FOR WALK-IN FREEZER DRAIN LINE HEATER, OUTLET MOUNTED 8'-6" A.F.F.

(40) ONE(1) 20A.120V.1ø CIRCUIT FOR ANTHONY FREEZER GLASS DOOR & FRAME HEATERS, OUTLET MOUNTED 8'-6"A.F.F., SEE NOTE #4.

(41) 200W RECEPTACLE (MOUNTED 9'-6" A.F.F.) FOR "HOT WATER RECIRCULATING PUMP", CONNECT TO PANEL "LP-1", CIRCUIT 21. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

(42) ONE(1) 20A.3ø.5W.120/208V. TWIST-LOCK RECEPTACLE, NEMA CONFIGURATION L21-20R FOR POWER MONITORING EQUIPMENT. MOUNT RECEPTACLE DIRECTLY BELOW PANELBOARD.

(43) ONE(1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR", FOR CENTRAL STATION MONITORING. HARD WIRED TO CENTRAL STATION MONITORING.

(44) NOT USED

(45) RTD. SEE DRAWING E2.1B AND E2.1C FOR ADDITIONAL INFORMATION.

(46) 208V.1ø (30A.2P.C/B) 1/2"C.(2NO.10 & 1NO.10 DEDICATED GROUND, MIN.) TO HUBBELL NO. HBL 2620SR2 (30A. 250V. TWIST-LOCK) RECEPTACLE FOR NORITSU PAPER PROCESSOR, MOUNTED 1'-6" A.F.F. GROUND SHALL CONNECT TO LUG ATTACHED TO PANELBOARD ENCLOSURE (OF PANEL FEEDING THIS EQUIPMENT). ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND INSTALL A CODE APPROVED POWER SUPPLY CORD FOR POWER CONNECTION.

(47) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR UPS COMMUNICATION. MOUNT RECEPTACLE 3'-6" A.F.F..

(48) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR TRAINING TERMINAL. MOUNT RECEPTACLE 1'-6" A.F.F..

(49) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR COVERT CCTV SYSTEM. SEE DRAWING E1.4 FOR ADDITIONAL INFORMATION.

(50) TWO(2) 20A.120V CIRCUITS FOR DRIVE-THRU WINDOW AUDIO SYSTEM AND DRIVE ALERT. MOUNT JUNCTION BOX 1'-6" A.F.F. INSIDE DRIVE-THRU WINDOW UNIT. SEE DETAIL 1/E4.3.

(51) LED SIGN POWER SUPPLY RACK, SEE DWG. E1.7 FOR COMPLETE INFORMATION.

(52) 1000W FLOOR OUTLET FOR MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK) TO BE MOUNTED ON SHELVING FIXTURE. 5'-0" MULTI- OUTLET RACEWAY ASSEMBLY, 1'-0" A.F.F. SEE DETAIL 8/E4.4.

(53) 1000W FLOOR OUTLET CONNECTED TO 3'-0" PLUGMOLD AS SHOWN. CONNECT PLUGMOLD OR RECEPTACLE TO FLOOR OUTLET UNDER GONDOLA, SEE DETAIL 8/E4.4.

(54) 200W FLOOR OUTLET CONNECTED TO RECEPTACLE, 2 1/2" UP ON FACE OF BASE. MOUNT RECEPTACLE HORIZONTALLY, SEE DETAIL 1/E4.1.

(55) 350W FLOOR OUTLET CONNECTED TO RECEPTACLE(S) ON TOP OF GONDOLA, SEE DETAIL 8/E4.4. (CIRCUITS FROM PANEL "LP-SP", SEE DWG. E2.1A GROUP 11 CONTROL SCHEDULE.)

(56) NOT USED

(57) 5A.120V OUTLET ABOVE CEILING FOR AUTOMATIC SLIDING DOOR(S).

(58) NOT USED

(59) PROVIDE 20A CIRCUIT TO GFCI RECEPTACLE AND TAYMAC NO.20510 SAFETY OUTLET ENCLOSURE (RAINTITE WHILE IN USE) OR PASS & SEYMOUR "WEATHERPROOF WHILE-IN-USE COVER" ON ROOF FOR MAINTENANCE OF EQUIPMENT. REFER TO NEC ARTICLE 210-63.

(60) 200W OUTLET, WITH RECEPTACLE MOUNTED INSIDE CASH REGISTER STAND. REFER TO DETAILS 1, 4, AND/OR 5 ON DRAWING E4.4 FOR OUTLET MOUNTING.

(61) DRIVE-ALERT SYSTEM-ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL MODEL DA-500 WITH DA-BE DRIVE-ALERT CHIME (CHIME MOUNTED ABOVE DRIVE-THRU WINDOW). PROVIDE CONDUIT (ROUTED & BELOW GRADE) STUB-UP FROM INSIDE DRIVE-THRU WINDOW TO DRIVE THRU-ISLAND, FOR DRIVE-ALERT CABLE AND SENSOR. SYSTEM SHALL BE PURCHASED FROM A.D.I. DISTRIBUTORS AT (800) 388-9505. REFER TO DETAIL 16/DRAWING E4.4 FOR ADDITIONAL INFORMATION.

(62) BAWIS TRANS-TRAX SYSTEM-ONE(1) 15A. 120V CIRCUIT CONNECTED TO ONE DUPLEX RECEPTACLE MOUNTED 7'-10"A.F.F. REFER TO DRAWING A4.4 FOR ADDITIONAL INFO.

(63) NOT USED

(64) AIR CURTAIN #1 (AC-1). FURNISH BY MECHANICAL CONTRACTOR & INSTALL BY ELECTRICAL CONTRACTOR. REFER TO DWGS. 5A.5, E3.1, E4.6, M1.1, & M2.2 FOR ADDITIONAL INFORMATION.

(65) ONE(1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR", CONNECTED TO RECEPTACLE FOR FUTURE TERMINAL. MOUNT RECEPTACLE 1'-6" A.F.F.

(66) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR CCTV MONITOR, WITH DUPLEX RECEPTACLE MOUNTED ABOVE CEILING. (SEE DRAWING E1.4, CCTV NOTE 12).

(67) 500W FLOOR OUTLET, CONNECT TO 5'-0" MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK) MOUNTED ON TOP OF SHELVING FIXTURE (DETAIL 8/E4.4).

(68) 500W WALL OUTLET, CONNECT TO 5'-0" MULTI-OUTLET RACEWAY (PLUGMOLD OR PLUGTRAK) MOUNTED ON TOP OF SHELVING. (RECEPTACLES 6" ON CENTER)

(69) 200W GENERAL PURPOSE DUPLEX RECEPTACLE, MOUNTED AT 1'-6" A.F.F., UNLESS NOTED OTHERWISE.

(70) ONE (1) 20A.120V.1ø.3W ATM OUTLET, UNSWITCHED DIRECT INDIVIDUAL BRANCH CIRCUIT FROM PANEL "LP-CR". PROVIDE THREE (3) #12, WITH THIRD AS GROUND. (CONDUIT GROUND NOT ACCEPTABLE). SEE DETAIL 9/E4.4.

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STATE OF MICHIGAN — RICHARD J. CLEVE — ARCHITECT — NO. 36035 — LICENSED — 07/31/2007

drawing:

Floor Plan - Power

DO NOT SCALE DRAWING

issue date: 09 APR 07
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E1.2

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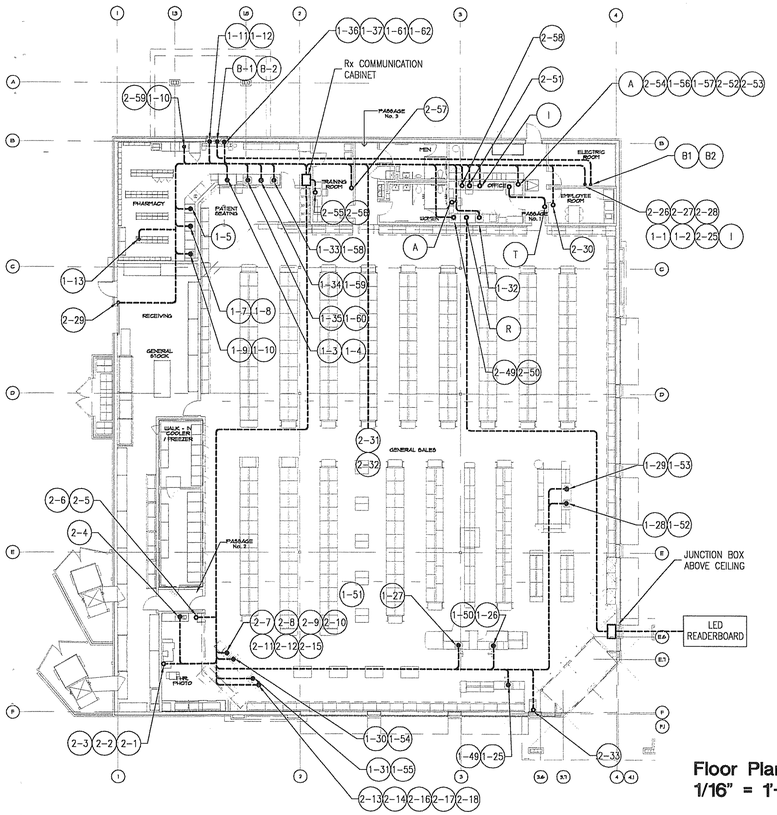
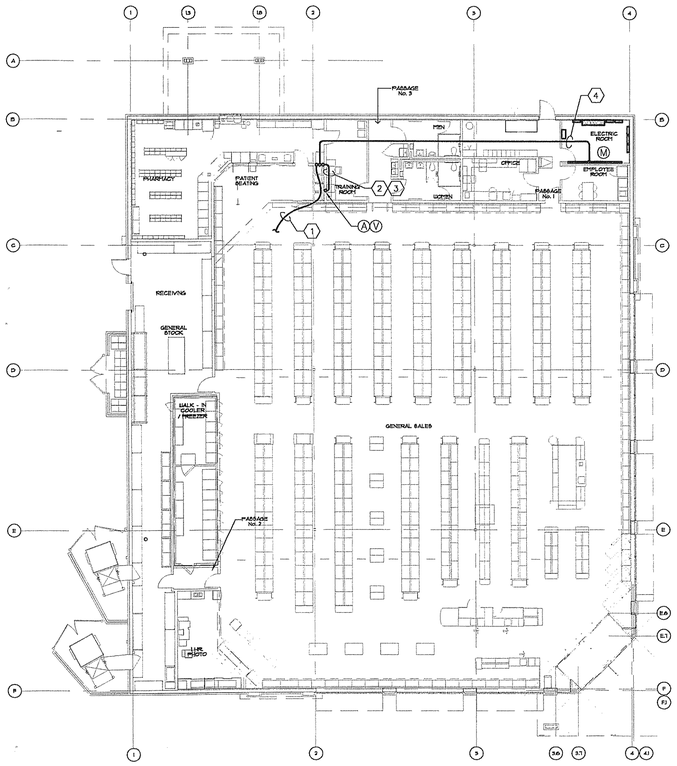


Floor Plan - Ethernet System
1/16" = 1'-0"

North



Floor Plan - Satellite System
1/16" = 1'-0"

North

PHARMACY COMMUNICATION CABINET CABLING			
CABLE LABEL	CABLE TYPE	FROM	TO
1-1	CAT.5E	Rx COMMUNICATION CABINET	ELECTRICAL EQUIPMENT ROOM
1-2			ELECTRICAL EQUIPMENT ROOM
1-3			Rx CONSULTATION WINDOW
1-4			Rx CONSULTATION WINDOW
1-5	CAT.5E	Rx COMMUNICATION CABINET	FRONT COUNTER
1-6		OPEN PORT	
1-7	CAT.5E	Rx COMMUNICATION CABINET	FRONT COUNTER
1-8			FRONT COUNTER
1-9			FRONT COUNTER
1-10			Rx REAR WORK COUNTER
1-11			Rx DRIVE THRU
1-12			Rx DRIVE THRU
1-13	CAT.5E	Rx COMMUNICATION CABINET	Rx ROBOTICS, DRAWING D-1 #14
1-14		OPEN PORT	
1-15		OPEN PORT	
1-16		OPEN PORT	
1-17		OPEN PORT	
1-18		OPEN PORT	
1-19		OPEN PORT	
1-20		OPEN PORT	
1-21		OPEN PORT	
1-22		OPEN PORT	
1-23		OPEN PORT	
1-24		OPEN PORT	
1-25	CAT.5E	Rx COMMUNICATION CABINET	FRONT CASH REGISTER
1-26			FRONT CASH REGISTER
1-27			FRONT CASH REGISTER
1-28			COSMETIC CASH REGISTER
1-29			COSMETIC CASH REGISTER
1-30			PHOTO CASH REGISTER
1-31			PHOTO CASH REGISTER
1-32			OFFICE DRAWING D-1 #24A
1-33			Rx CASH REGISTER
1-34			Rx CASH REGISTER
1-35			Rx CASH REGISTER
1-36			DRIVE-THRU CASH REGISTER
1-37	CAT.5E	Rx COMMUNICATION CABINET	DRIVE-THRU CASH REGISTER
1-38		OPEN PORT	
1-39		OPEN PORT	
1-40		OPEN PORT	
1-41		OPEN PORT	
1-42		OPEN PORT	
1-43		OPEN PORT	
1-44		OPEN PORT	
1-45		OPEN PORT	
1-46		OPEN PORT	
1-47		OPEN PORT	
1-48		OPEN PORT	
1-49	CAT.5E	Rx COMMUNICATION CABINET	FRONT CASH REGISTER
1-50			FRONT CASH REGISTER
1-51			FRONT CASH REGISTER
1-52			COSMETIC CASH REGISTER
1-53			COSMETIC CASH REGISTER
1-54			PHOTO CASH REGISTER
1-55			PHOTO CASH REGISTER
1-56			TECH EQUIPMENT CABINET
1-57			TECH EQUIPMENT CABINET
1-58			Rx CASH REGISTER
1-59			Rx CASH REGISTER
1-60			Rx CASH REGISTER
1-61			DRIVE-THRU CASH REGISTER
1-62	CAT.5E	Rx COMMUNICATION CABINET	DRIVE-THRU CASH REGISTER
1-63		OPEN PORT	
1-64		OPEN PORT	
1-65		OPEN PORT	
1-66		OPEN PORT	
1-67		OPEN PORT	
1-68		OPEN PORT	
1-69		OPEN PORT	
1-70		OPEN PORT	

PHARMACY COMMUNICATION CABINET CABLING (CONT'D)			
CABLE LABEL	CABLE TYPE	FROM	TO
1-71		OPEN PORT	
1-72		OPEN PORT	
2-1	CAT.5E	Rx COMMUNICATION CABINET	PHOTO PROCESSOR – 1
2-2			PHOTO PROCESSOR – 2
2-3			PHOTO DEVICE – 1
2-4			SPARE
2-5			ALADDIN KIOSK #1
2-6			INK JET CAFE
2-7			PICTURE CARE PLUS
2-8			PICTURE CARE PLUS
2-9			PHOTO COUNTER – SPARE
2-10			PHOTO COUNTER – SPARE
2-11			PHOTO COUNTER – SPARE
2-12			PHOTO COUNTER – SPARE
2-13			PICTURE CARE PLUS
2-14			PICTURE CARE PLUS
2-15			ALADDIN KIOSK #2
2-16			PHOTO COUNTER – SPARE
2-17			PHOTO COUNTER – SPARE
2-18	CAT.5E	Rx COMMUNICATION CABINET	PHOTO COUNTER – SPARE
2-19		OPEN PORT	
2-20		OPEN PORT	
2-21		OPEN PORT	
2-22		OPEN PORT	
2-23		OPEN PORT	
2-24		OPEN PORT	
2-25	CAT.5E	Rx COMMUNICATION CABINET	ELECTRICAL EQUIPMENT ROOM
2-26			ELECTRICAL EQUIPMENT ROOM
2-27			ELECTRICAL EQUIPMENT ROOM
2-28			ELECTRICAL EQUIPMENT ROOM
2-29			GENERAL STOCK – RECEIVING ROOM
2-30			EMPLOYEE ROOM
2-31			SALES – CEILING CENTER
2-32			SALES – CEILING CENTER
2-33	CAT.5E	Rx COMMUNICATION CABINET	ATM
2-34		OPEN PORT	
2-35		OPEN PORT	
2-36		OPEN PORT	
2-37		OPEN PORT	
2-38		OPEN PORT	
2-39		OPEN PORT	
2-40		OPEN PORT	
2-41		OPEN PORT	
2-42		OPEN PORT	
2-43		OPEN PORT	
2-44		OPEN PORT	
2-45		OPEN PORT	
2-46		OPEN PORT	
2-47		OPEN PORT	
2-48		OPEN PORT	
2-49	CAT.5E	Rx COMMUNICATION CABINET	OFFICE DRAWING D-1 #22
2-50			OFFICE – SPARE
2-51			OFFICE DRAWING D-1 #24C
2-52			TECH EQUIPMENT CABINET
2-53			TECH EQUIPMENT CABINET
2-54			TECH EQUIPMENT CABINET
2-55			TRAINING TERM DRAWING D-1 #15C
2-56			TRAINING TERMINAL
2-57			TRAINING/MULTIPURPOSE ROOM
2-58			OFFICE
2-59	CAT.5E	Rx COMMUNICATION CABINET	Rx REAR WORK COUNTER
2-60		OPEN PORT	
2-61		OPEN PORT	
2-62		OPEN PORT	
2-63		OPEN PORT	
2-64		OPEN PORT	
2-65		OPEN PORT	
2-66		OPEN PORT	
2-67		OPEN PORT	
2-68		OPEN PORT	

ETHERNET SYSTEM NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. ETHERNET "CATEGORY 5E" CABLES TO BE FURNISHED AND INSTALLED BY WALGREENS' CONTRACTOR (CERTIFIED CATEGORY 5E INSTALLER) AND SHALL FOLLOW EIA/TIA CATEGORY 5E SPECIFICATIONS. THE ETHERNET (CATEGORY 5E) SYSTEM SHALL ALSO BE TESTED WITH A WAVETECH/WIRESCOPE DEVICE AND REPORT SUBMITTED TO WALGREEN COMPANY.
3. CONDUIT BENDS SHALL HAVE A MINIMUM RADIUS OF EIGHT TIMES THE CONDUIT DIAMETER.
4. ALL CONDUITS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE PULL BOX AT Rx COMMUNICATION CABINET LOCATION. ELECTRICAL CONTRACTOR SHALL FURNISH #12 PULL STRING IN EACH CONDUIT.
5. **IF CABLES ARE ROUTED BELOW FLOOR, THEN USE 1" CONDUIT (MINIMUM).**
6. **IF CABLES ARE ROUTED ABOVE CEILING (SEE DETAIL 7/E4.4 – FOR CONDUIT IN WALL), THEN NO CONDUIT NECESSARY (ABOVE CEILING) WHEN CABLES ARE RATED IN ACCORDANCE TO NATIONAL ELECTRICAL CODE FOR USE ABOVE CEILING, OTHERWISE PROVIDE 3/4" CONDUIT MINIMUM.**
7. FOR FURTHER INFORMATION CONTACT FACILITIES MANAGEMENT DEPARTMENT AT WALGREENS'. (MANAGER OF FACILITIES TECHNOLOGY).

PHARMACY COMMUNICATION CABINET CABLING (CONT'D.)			
CABLE LABEL	CABLE TYPE	FROM	TO
2-69		OPEN PORT	
2-70		OPEN PORT	
2-71		OPEN PORT	
2-72		OPEN PORT	

MISCELLANEOUS CABLING			
CABLE LABEL	CABLE TYPE	FROM	TO
A	CAT.5E	TECH EQUIPMENT CABINET	OFFICE DRAWING D-1 #24B
B1	CAT.5E	ELECTRICAL EQUIPMENT ROOM	Rx DRIVE-THRU
B2	CAT.5E	ELECTRICAL EQUIPMENT ROOM	Rx DRIVE-THRU
I	CAT.5E	ELECTRICAL EQUIPMENT ROOM	OFFICE (INDYME)
R	CAT.5E	OFFICE	LED READERBOARD
T	CAT.5E	TECH EQUIPMENT CABINET	TIME CLOCK, DRAWING E1.2 (19)

CONDUIT AND CABLE SCHEDULE	
CONDUIT SIZE	BELDEN 1700A CATEGORY 5e
3/4"	3
1"	5
1 1/4"	8
1 1/2"	15
2"	20

LEGEND

- JUNCTION BOX IN NEAREST WALL
- JUNCTION BOX UNDERNEATH FIXTURE

CONDUIT AND CABLE SCHEDULE	
CONDUIT SIZE	BELDEN 9116A COAX RG6
3/4"	1
1"	3
1 1/4"	4
1 1/2"	7
2"	10

SATELLITE SYSTEM KEYED NOTES

1. COAXIAL DIGITAL INTERFACE UNIT (DIU) CABLE, FURNISHED BY WALGREEN AND INSTALLED BY ELECTRICAL CONTRACTOR. ROUTE TO SATELLITE ANTENNA LOCATION ON ROOF. SEE DETAIL 1/E4.2. PROVIDE 15' OF SLACK CABLE AT EACH END. COIL THE REMAINING CABLE IN THE CEILING. DO NOT CUT CABLE.
2. CABLE LABELED (A)
   RG6 – 9116 FURNISHED AND INSTALLED BY WALGREENS.
   FROM RX COMMUNICATION CABINET
   TO TRAINING/MULTIPURPOSE ROOM.
   CONDUIT AND #12 PULL STRING BY ELECTRICAL CONTRACTOR.
3. CABLE LABELED (V)
   RG6 – 9116 FURNISHED AND INSTALLED BY WALGREENS.
   FROM RX COMMUNICATION CABINET
   TO TRAINING /MULTIPURPOSE ROOM.
   CONDUIT AND #12 PULL STRING BY ELECTRICAL CONTRACTOR.
4. CABLE LABELED (M)
   RG6 – 9116 FURNISHED AND INSTALLED BY WALGREENS.
   FROM RX COMMUNICATION CABINET
   TO ELECTRICAL EQUIPMENT ROOM.
   CONDUIT AND #12 PULL STRING BY ELECTRICAL CONTRACTOR.

SATELLITE SYSTEM NOTES

1. CABLE ROUTING
   INTERCONNECTING IFL CABLES (LOW ENERGY)
   THE INTERCONNECTING IFL CABLES CONSISTS OF THE COAXIAL DIU/O CABLE AND THE COAXIAL VIDEO CABLE.
   A. CABLES ARE TO BE ENCLOSED IN A RACEWAY WHEN ROUTED THRU WALLS.
   B. A MINIMUM BEND RADIUS OF 6" IS REQUIRED FOR ALL CABLES AND A SUITABLE JUNCTION BOX OR OTHER APPROPRIATE ACCESS IS REQUIRED FOR TIGHT BENDS GREATER THAN 60 DEGREES.
   C. CABLES MAY BE RUN EXPOSED IN CEILING SPACE. COAXIAL DIU/O CABLE FURNISHED BY WALGREENS AND INSTALLED BY THE CONTRACTOR. COAXIAL VIDEO CABLE (BELDEN RG6–9116) FURNISHED AND INSTALLED BY WALGREENS.
   D. PROVIDE RACEWAY IN PLENUM CEILING SPACE. HOWEVER, AS AN ALTERNATIVE, USE PLENUM TYPE (TEFLON) CABLES AS ACCEPTED BY THE NATIONAL ELECTRICAL CODE, AS CLASSIFIED BY UNDERWRITERS LABORATORIES, INC. (UL) FOR USE WITHOUT CONDUIT IN RETURN–AIR DUCTS AND PLENUMS, AND AS SPECIFIED BY HUGHES.
2. GROUNDING
   SEE GROUNDING NOTES #1 AND #2 ON DRAWING E2.1.
3. GROUNDING TEST
   THE DC RESISTANCE BETWEEN THE GROUND WIRE (GREEN GROUND WIRE) AND THE ELECTRICAL JUNCTION BOX (EQUIPMENT CHASIS GROUND OR MECHANICAL GROUND) SHALL BE:
   A. CONNECTION TO METALLIC COLD WATER PIPE: 2 OHMS OR LESS
   B. CONNECTION TO GROUNDED STRUCTURAL STEEL MEMBER: 2 OHMS OR LESS
   C. CONNECTION TO DRIVEN GROUND ROD: 2 OHMS OR LESS. UNDER ADVERSE CONDITIONS WHEN 2 OHMS IS NOT ACHIEVABLE CONTACT WALGREENS CONSTRUCTION SUPERINTENDENT FOR FURTHER DIRECTION.

   NOTE: WHEN TESTING, SEPARATE FROM EXISTING GROUNDING SYSTEM OF SERVICE PANELBOARD.

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drawing:

Floor Plan - Ethernet and Satellite System

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E1.3

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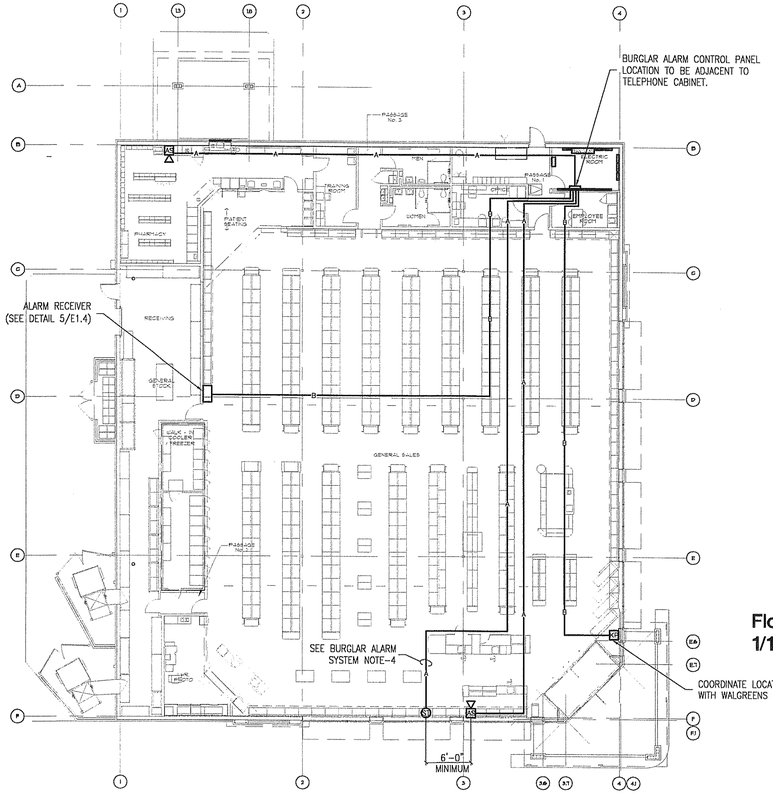
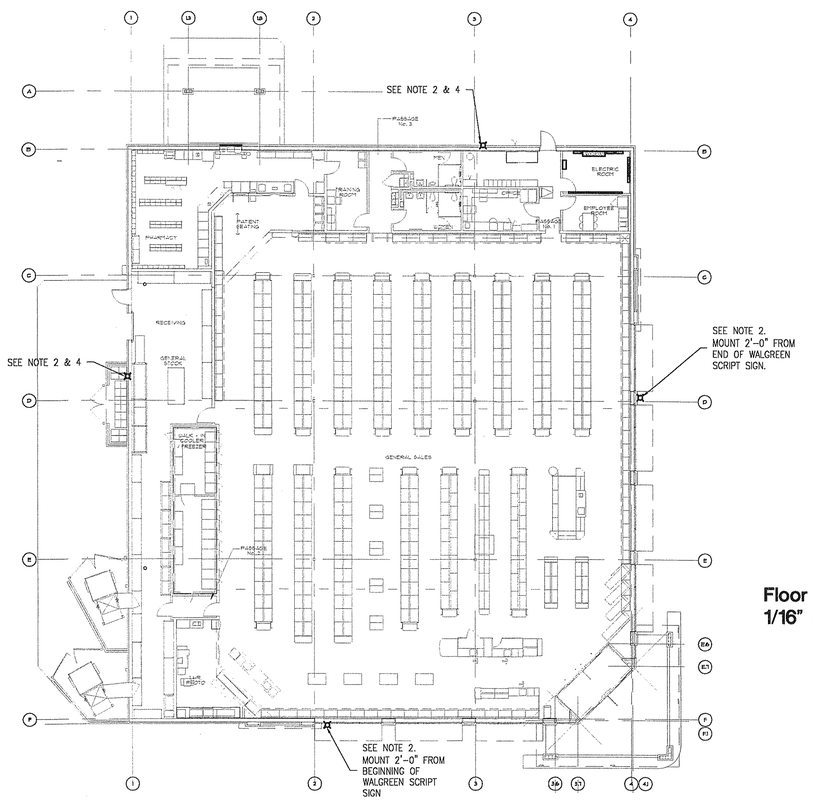


Floor Plan - Burglar Alarm System
1/16" = 1'-0"

North



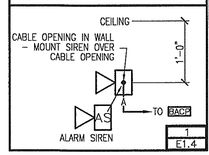
Floor Plan - Covert CCTV System
1/16" = 1'-0"

North

BURGLAR ALARM SYSTEM NOTES

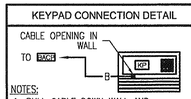
1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. BURGLAR ALARM SYSTEM DEVICES FURNISHED BY WALGREENS, CABLES FURNISHED AND INSTALLED BY LANDLORD'S CONTRACTOR. FINAL TERMINATION OF BURGLAR ALARM SYSTEM DEVICES WILL BE BY WALGREEN'S DATA TERMINAL REPAIR (DTR) OR WALGREEN'S CONTRACTOR.
3. THIS DRAWING SHOWS ONLY WORK DONE BY THE ELECTRICAL CONTRACTOR AND DOES NOT SHOW A COMPLETE SYSTEM. ADDITIONAL PIR MOTION DETECTOR & DOOR CONTACT INSTALLATION BY WALGREENS (DTR).
4. CABLE REQUIREMENTS:
   (A)- 18 GAUGE, 2 CONDUCTOR, TWISTED & STRANDED (BELDEN 5300UE) (B)- 18 GAUGE, 4 CONDUCTOR, TWISTED & STRANDED (BELDEN 5302UE)
5. ALARM STROBE AND ALARM SIREN TO BE INSTALLED A MINIMUM OF 6'-0" APART.

ALARM SIREN CONNECTION DETAIL



1 / E1.4

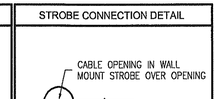
KEYPAD CONNECTION DETAIL



NOTES:
1. PULL CABLE DOWN WALL AND OUT AT 48" A.F.F.
2. PROVIDE 3 FT. OF SLACK CABLE. KEYPAD TO BE MOUNTED ON
3. WALL (OVER CABLE OPENING) 48" A.F.F.

2 / E1.4

STROBE CONNECTION DETAIL

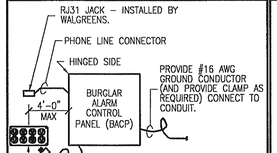


3 / E1.4

LEGEND

BACP	BURGLAR ALARM CONTROL PANEL
AS	ALARM SIREN
ST	STROBE
KPI	ALPHA KEYPAD
PIR	PIR MOTION DETECTOR
—A—	CABLE – SEE BURGLAR ALARM SYSTEM NOTE #4
—B—	CABLE – SEE BURGLAR ALARM SYSTEM NOTE #4

BURGLAR ALARM CONTROL PANEL DETAIL

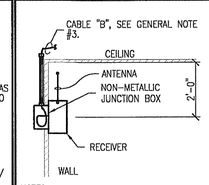


(1 CIRCUIT FOR BURGLAR ALARM, TELEPHONE, & SOUND SYSTEM)SEE DWG. E1.2.

(MOUNT ON 8' X 8' PLYWOOD TELEPHONE PANEL)

4 / E1.4

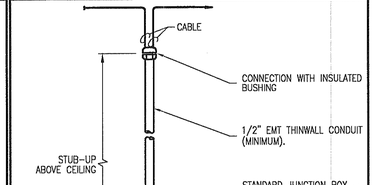
BURGLAR ALARM RECEIVER DETAIL



NOTES:
1. RECEIVER TO BE MOUNTED AWAY FROM METALLIC OBJECTS.
2. SEE EQUIPMENT CONNECTION STUB-UP DETAIL.
3. NOT USED.
4. POSITION RECEIVER TO AVOID WALL GRAPHIC.

5 / E1.4

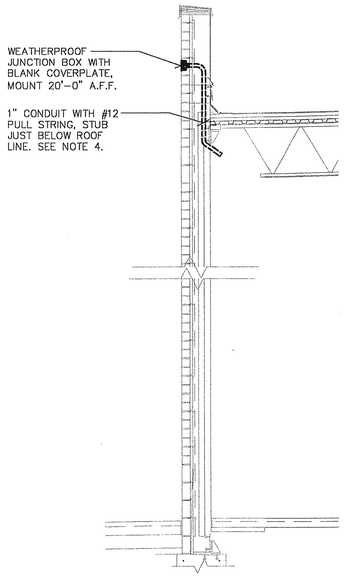
EQUIPMENT CONNECTION STUB-UP DETAIL



6 / E1.4

COVERT CCTV SYSTEM NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. ONE(1) 1" CCTV CONDUIT WITH #12 PULL STRING. PROVIDE WEATHERPROOF JUNCTION BOX AND BLANK COVERPLATE, WITH CONDUIT STUB JUST BELOW ROOF LINE (REFER TO DETAIL 1 FOR ADDITIONAL INFORMATION).
3. ELECTRICAL CONTRACTOR TO COORDINATE WITH MASON TO PROVIDE IN-WALL CONDUIT FROM ALL WALL MOUNTED ELECTRICAL ITEMS (i.e. LIGHTS, SIGNS, CAMERAS, etc.) TO BELOW ROOF LINE.
4. REAR CAMERA TO HAVE CLEAR SIGHT OF RECEIVING DOOR AND REAR OF VEHICLE AT DRIVE-THRU WINDOW.



DETAIL 1
NOT TO SCALE

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Floor Plan - Burglar Alarm & CCTV System

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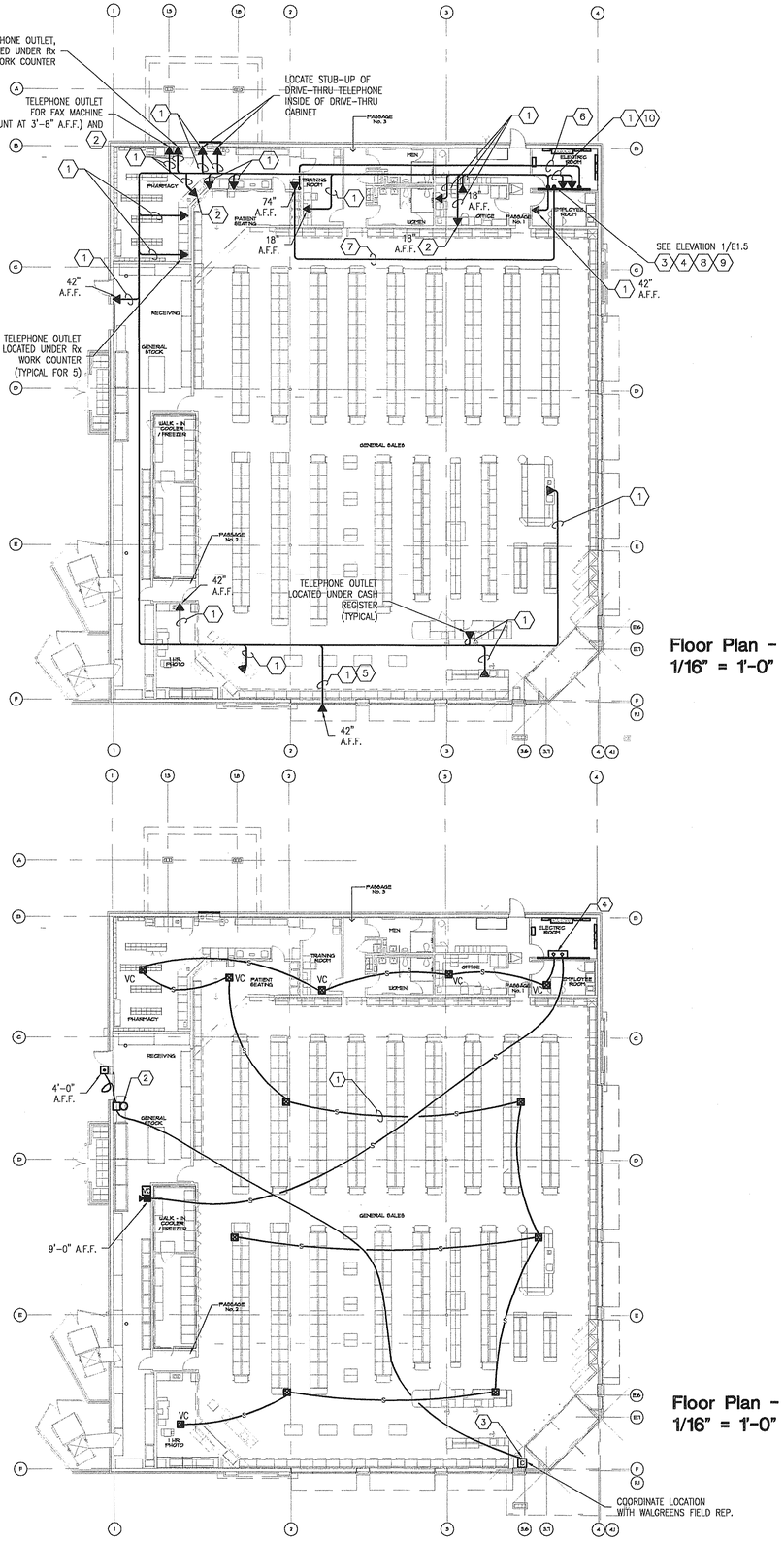


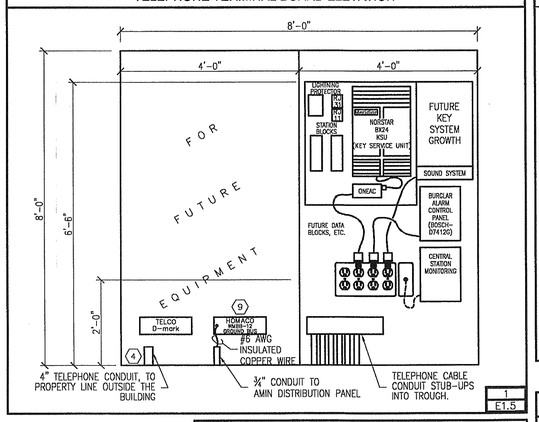
Floor Plan - Telephone System
1/16" = 1'-0"

North

Floor Plan - Sound System
1/16" = 1'-0"

North

TELEPHONE TERMINAL BOARD ELEVATION



1 / E1.5

TELEPHONE SYSTEM NOTES

1. THE GENERAL CONTRACTOR/DEVELOPER SHALL COORDINATE THE INSTALLATION OF TELEPHONE CABLE (25 PAIR MINIMUM) TO TELEPHONE BOARD. GENERAL CONTRACTOR SHALL PLACE ORDER WITH THE DOMINANT CARRIER IN THE MARKET (QWEST, BELL SOUTH, SBC, VERIZON AND SPRINT) AT LEAST 90 DAYS IN ADVANCE OF FIXTURE DATE. DO NOT PLACE ORDERS WITH A COMPETITIVE LOCAL EXCHANGE CARRIER (CLEC) AS THIS WILL DELAY COPPER CABLE INSTALLATIONS. IF THE TELEPHONE COMPANY SUGGESTS TWO (2) SIX-PAIR CABLES OR SEEMS RELUCTANT TO PROCEED WITH THE ORDER IN A TIMELY MANNER, CONTACT WALGREEN'S TELECOMMUNICATIONS DEPARTMENT (847-914-8067), AS SOON AS POSSIBLE.
2. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
3. TELEPHONE WIRING TO BE FURNISHED AND INSTALLED BY WALGREEN'S CONTRACTOR. CONDUIT AND #12 PULL STRING IS FURNISHED AND INSTALLED BY LANDLORD'S CONTRACTOR.
4. NOT USED
5. TELEPHONE CABLES SHALL NOT BE PLACED OR ROUTED OVER FLUORESCENT FIXTURES OR BALLASTS.
6. NO EXPOSED TELEPHONE CABLES ARE PERMITTED IN THE SALES AREA.

TELEPHONE SYSTEM KEYED NOTES

1. 3/4" CONDUIT SHALL BE PROVIDED AS REQUIRED PER NOTES AND/OR STATE AND LOCAL CODES.
2. TELEPHONE POWER FAILURE JACKS ARE TELEPHONE OUTLETS WHICH BYPASS THE NORSTAR SYSTEM AND ARE USED DURING ELECTRICAL POWER INTERRUPTIONS. THE TELEPHONE POWER FAILURE JACKS ARE WIRED DIRECTLY TO THE STATION BLOCKS. TELEPHONE POWER FAILURE JACKS ARE LOCATED IN THE PHARMACY AND THE OFFICE.
3. THE LANDLORD'S CONTRACTOR SHALL FURNISH AND INSTALL A 8' X 8', 3/4" A-C GRADE PLYWOOD (TREATED PER CODE) FOR TELEPHONE BOARD MOUNTING.
4. THE LANDLORD'S CONTRACTOR SHALL FURNISH AND INSTALL A 3" CONDUIT FROM THE PROPERTY LINE, OUTSIDE THE BUILDING, AND TERMINATE AT THE TELEPHONE TERMINAL BOARD.
5. PUBLIC TELEPHONE LOCATION WITH A RECESSED JUNCTION BOX AND WEATHERPROOF BLANK COVER PLATE. THE LANDLORD'S CONTRACTOR SHALL FURNISH AND INSTALL A RECESSED CONDUIT SYSTEM FROM THE PUBLIC TELEPHONE LOCATION TO THE TELEPHONE TERMINAL BOARD. NOTE: OMIT PUBLIC TELEPHONE FOR HIGH SECURITY STORES. REFER TO DRAWING D-1 FOR CLASSIFICATION. DO NOT INSTALL PUBLIC TELEPHONE BELOW CANOPY ACCESS.
6. CABLE LABELED 'C' CATEGORY 3 (25 PAIR) FURNISHED AND INSTALLED BY WALGREEN'S CONTRACTOR. FROM RX COMMUNICATION CABINET TO ELECTRICAL EQUIPMENT ROOM, CONDUIT BY LANDLORD'S CONTRACTOR.

TELEPHONE SYSTEM KEYED NOTES (CONT'D.)

7. LANDLORD'S CONTRACTOR SHALL PROVIDE A 1" CONDUIT FROM THE TELEPHONE TERMINAL BOARD TO THE Rx COMMUNICATION CABINET. WALGREEN'S CONTRACTOR SHALL FURNISH AND INSTALL THREE (3) PAIR (MIN.) TELEPHONE CABLE AND AN ADDITIONAL #12 PULL STRING (FOR DTR USE) IN THAT CONDUIT. THE THREE (3) PAIR (MIN.) TELEPHONE CABLE WILL BE TERMINATED BY A DTR (DATA TERMINAL REPAIR) TECHNICIAN AT THE TELEPHONE TERMINAL BOARD.
8. UTILITY SERVICE ENTRANCE LOCATION (COORDINATE WITH UTILITY SITE PLAN).
9. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL "HOMACO" WMBB-12 GROUND BUS. [CALL ANIXTER @ (847) 390-4530].
10. TWO (2) TELEPHONE LINES FOR THE FIRE ALARM SYSTEM (IF REQUIRED BY CODE). FIRE ALARM CONTROL PANEL IS LOCATED AT THE TELEPHONE TERMINAL BOARD. SEE DRAWING E1.6 FOR ADDITIONAL INFORMATION.

LEGEND

- TELEPHONE OUTLET
- JUNCTION BOX IN NEAREST WALL
- JUNCTION BOX UNDERNEATH FIXTURE

SOUND SYSTEM NOTES

1. WALGREEN COMPANY SHALL FURNISH AND INSTALL SOUND SYSTEM EQUIPMENT UNLESS NOTED OTHERWISE.
2. LANDLORD'S ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SOUND SYSTEM WIRING.
3. COORDINATE SPEAKER LOCATIONS WITH REFLECTED CEILING PLAN, DRAWING A1.2.

SOUND SYSTEM KEYED NOTES

1. SOUND SYSTEM CABLE, 22 GAUGE, 2/C, STRANDED (UL) TYPE CM-CL2 (BELDEN 5500UE), FURNISHED AND INSTALLED BY LANDLORD'S CONTRACTOR.
2. COMMERCIAL GRADE, LOW VOLTAGE BELL (EDWARDS PART NUMBER 744) WITH TRANSFORMER (EDWARDS PART NUMBER 598) AND WEATHER-PROOF PUSHBUTTON (EDWARDS #1785), FURNISHED AND INSTALLED BY LANDLORD'S CONTRACTOR. MOUNT PUSHBUTTON @ 4'-0" A.F.F., ADJACENT TO ROLL-UP RECEIVING DOOR. SEE POWER PLAN E1.2, KEY NOTE #22 FOR ADDITIONAL INFORMATION. BELL SHALL BE FED FROM 8 VOLT TRANSFORMER TAP.
3. DOOR CHIME (EDWARDS PART NUMBER C210), FURNISHED AND INSTALLED BY LANDLORD'S CONTRACTOR. MOUNT AT FRONT WALL, WIRE WITH #18 AWG WIRE TO RECEIVING DOOR BELL 16 VOLT TRANSFORMER TAP.
4. SOUND SYSTEM RECEIVER, SEE DETAIL 1/E1.5, ABOVE.

LEGEND

- SPEAKER (CEILING MOUNTED)
- SPEAKER WITH INTEGRAL VOLUME CONTROL
- PUSHBUTTON
- DOORBELL/TRANSFORMER
- DOOR CHIME
- SOUND SYSTEM (MOUNTED ADJACENT TO TELEPHONE BOARD)
- PAGING HORN (WALL MOUNTED 9'-0" A.F.F.), WITH SEPARATE VOLUME CONTROL UNIT (WALL MOUNTED 5'-0" A.F.F.)
- SOUND SYSTEM CABLE

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drawing:

Floor Plan - Telephone & Sound System

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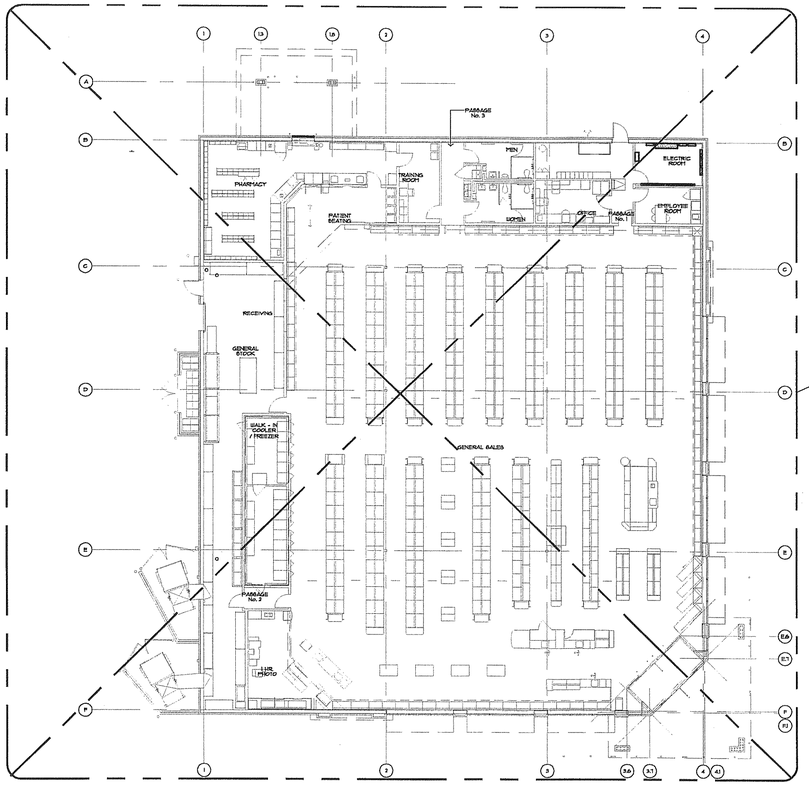
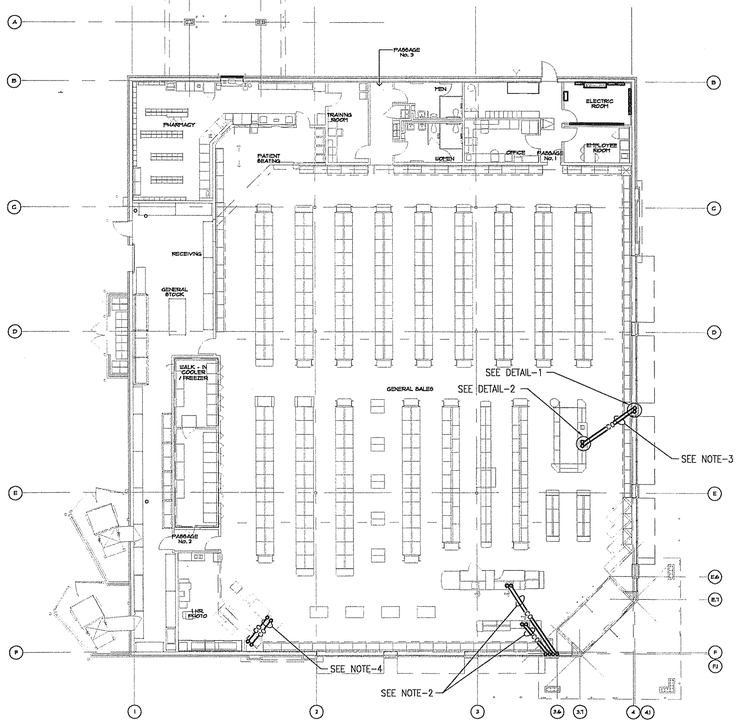
E1.5



Floor Plan - Fire Alarm System
1/16" = 1'-0"

North



Floor Plan - Spare Conduit
1/16" = 1'-0"

North

PER THE 2003 MICHIGAN BUILDING CODE AND 2003 INTERNATIONAL FIRE CODE A MANUAL FIRE ALARM SYSTEM IS NOT REQUIRED. REFER TO MECHANICAL SPECIFICATIONS 15300 AND MECHANICAL DRAWINGS FOR SIGNALING SYSTEM ACCOMPANYING THE FIRE PROTECTION SYSTEM (CENTRAL STATION MONITORING SYSTEM)

FIRE ALARM SYSTEM NOTES

1. FIRE ALARM SYSTEM SHALL BE INSTALLED WHEN REQUIRED BY LOCAL CODE.
2. **PROVIDE REMOTE FIRE ALARM SYSTEM MONITORING ONLY WHEN REQUIRED BY LOCAL CODE.**
3. DESIGN ENGINEER TO VERIFY LOCAL REQUIREMENTS WITH THE AUTHORITY HAVING JURISDICTION.
4. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
5. THE FIRE ALARM SUPPLIER SHALL FURNISH AND INSTALL A COMPLETE FIRE ALARM SYSTEM AS DESCRIBED IN SECTION 16720 OF THE WALGREEN CRITERIA SPECIFICATIONS. THE SYSTEM SHALL BE MONITORED BY WALGREENS PREFERRED FIRE ALARM VENDORS. SEE NATIONAL ACCOUNT NOTE BELOW.
6. LOCATE DEVICES AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
7. FOR DUCT SMOKE DETECTORS WIRING, REFER TO DRAWING ME1.1.

NATIONAL ACCOUNT

FIRE ALARM SYSTEM MONITORING:

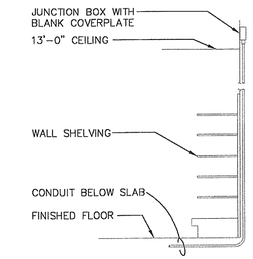
CONTACT F.E. MORAN INC. FIRE PROTECTION AT (586) 228-5788 FOR WALGREEN STORES LOCATED IN CONNECTICUT, DELAWARE, ILLINOIS, INDIANA, MASSACHUSSETTS, MICHIGAN, NEW HAMPSHIRE, NEW YORK, OHIO, RHODE ISLAND, TENNESSEE, VERMONT, WASHINGTON D.C., WISCONSIN, KENTUCKY, MAINE, MARYLAND, NORTH CAROLINA, NEW JERSEY, PENNSYLVANIA, VIRGINIA, AND WEST VIRGINIA.

SPARE CONDUIT NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. TWO(2) 1" CONDUIT FROM EACH FRONT CASH REGISTERS ISLAND TO NEAREST FURRED-OUT WALL, STUB-UP ABOVE CEILING..
3. TWO(2) 1" CONDUIT FROM EACH FROM COSMETIC ISLAND TO NEAREST FURRED-OUT WALL, STUB-UP ABOVE CEILING.
4. TWO(2) 1 1/2" CONDUIT FROM 1 HOUR PHOTO FRONT COUNTER TO 45 DEGREE BACK WWALL, STUB-UP ABOVE PHOTO CEILING..

LEGEND

—— CO ——	CONDUIT ONLY, BELOW FLOOR.
	JUNCTION BOX



DETAIL 1
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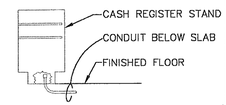

DETAIL 2
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drawing:

Floor Plan - Fire Alarm & Spare Conduit

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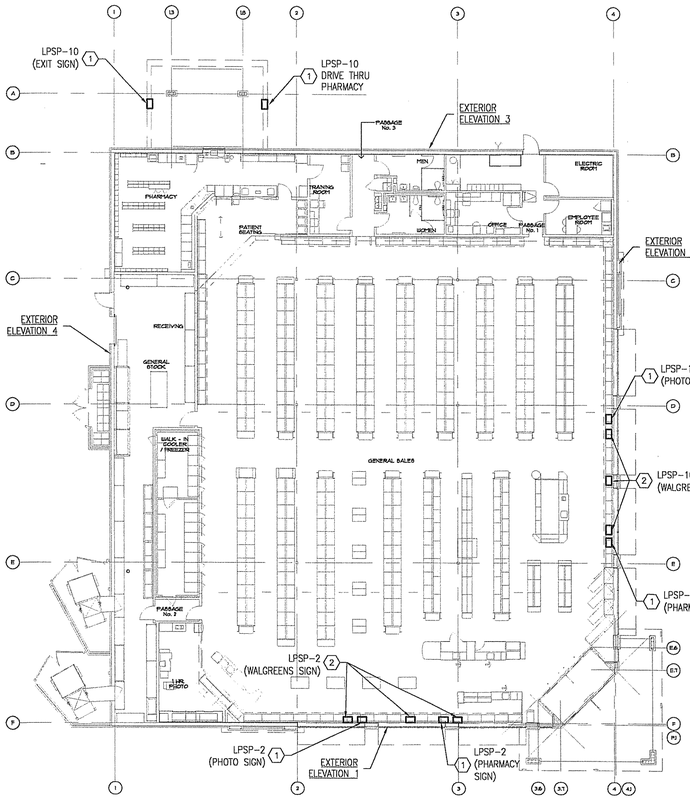


Floor Plan - Channel Letter LED System
1/16" = 1'-0"

North

CHANNEL LETTER LED SYSTEM KEYED NOTES

1. JUNCTION BOX FOR EXTERIOR INDIVIDUAL LETTER SIGN.
2. 3 JUNCTION BOXES FOR EXTERIOR SCRIPT SIGN.

CHANNEL LETTER LED SYSTEM NOTES

1. ALL WORK SHOWN SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES, ORDINANCES, ETC.
2. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR EXACT SIGN POSITIONS.
3. ELECTRICAL CONTRACTOR SHALL FURNISH WIRING BETWEEN LOW VOLTAGE 12-CIRCUIT BARRIER TERMINAL BLOCKS AND J-BOXES NEAR SIGNS (#10 AWG). TAGS MUST BE FURNISHED BY ELECTRICAL CONTRACTOR AND ATTACHED ON BOTH ENDS OF EACH LOW VOLTAGE CONDUCTOR. FINAL CONNECTION OF LOW VOLTAGE CONDUCTORS TO BARRIER TERMINAL BLOCKS AND AT THE J-BOXES SHALL BE FURNISHED BY SIGN CONTRACTOR.
4. WIRING BETWEEN PANEL "LP-SP", CIRCUITS 2 AND 10 AND POWER DISTRIBUTION J-BOX SHALL BE FURNISHED BY ELECTRICAL CONTACTOR.
5. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL PLYWOOD BOARD FOR POWER SUPPLY RACK. PLYWOOD BOARD SHALL BE INSTALLED NEXT TO TELEPHONE TERMINAL BOARD.
6. LED POWER SUPPLY RACK (FURNISHED BY THE SIGN CONTRACTOR) SHALL BE INSTALLED ON PLYWOOD BOARD BY ELECTRICAL CONTRACTOR. RACK SHALL BE FURNISHED COMPLETE WITH FACTORY INSTALLED POWER SUPPLIES, POWER DISTRIBUTION J-BOX AND LOW VOLTAGE 12-CIRCUIT BARRIER TERMINAL BLOCKS.
   POWER SUPPLIES SHALL BE FACTORY PRE-WIRED TO POWER DISTRIBUTION J-BOX AND LOW VOLTAGE 12-CIRCUITS BARRIER TERMINAL BLOCKS. EACH POWER SUPPLY SHALL BE FACTORY IDENTIFIED WITH VINYL COPY INDICATING LETTERS OF SIGN AND LOCATION OF SIGN. EACH TERMINAL AT 12-CIRCUIT BARRIER TERMINAL BLOCK SHALL BE FACTORY IDENTIFIED WITH VINYL COPY INDICATING POLARITY, LETTERS OF SIGN AND LOCATION OF SIGN.
7. CONSULTANT SHALL VERIFY QUANTITY AND SIZE OF LED SIGNS.
8. DRAWING A5.2 HAS THE DIVISION OF STATES, FOR THE WALGREENS NATIONAL ACCOUNT PROGRAM, BETWEEN SLOAN AND TELEDYNE.

WARNING:
CHANGE IN WIRING POLARITY WILL CAUSE FAILURE IN DC CONTROLLERS AND POWER SUPPLY.

WHITE WITH RED TRACER:
POSITIVE (+)

SOLID WHITE: NEGATIVE (-)

WARNING:
LETTERS WILL NOT LIGHT IF WIRING POLARITY IS REVERSED.

WHITE/RED: POSITIVE (+)
SOLID WHITE: NEGATIVE (-)

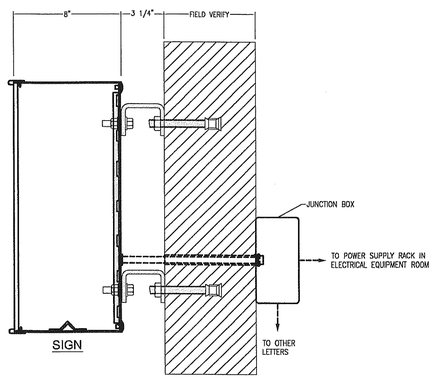
TELEDYNE LED SIGN ELECTRICAL DATA (0.6PF)

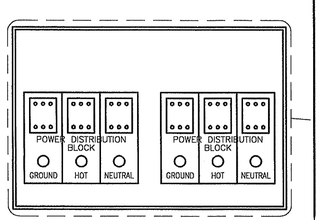
SIGN	THE MOST COMMON SIZES, NOTE 7		WATTS
WALGREENS SCRIPT:			
13'-6 3/4"			41
16'-9"			85
20'-8 1/2"			93
26'-8 1/2"			154
30'-7 1/2"	30'-7 1/2"		203
33'-4 1/2"	33'-4 1/2"		241
37'-3 1/2"			301
37'-10 1/2"			310
40'-2"			347
46'-4"			463
PHARMACY:			
12"			39
14"			45
16"			56
18"	18"		74
24"			127
PHOTO:			
12"			24
14"			53
16"			60
18"	18"		78
24"			133

SIGN	THE MOST COMMON SIZES, NOTE 7		WATTS
DRIVE-THRU PHARMACY:			
10"	10"		54
12"			81
14"			92
16"			115
18"			148
24HR:			
12"			19
14"			22
16"			28
18"	18"		33
24"			58
EXIT:			
10"	10"		9
14"			16
ENTER:			
10"	10"		16
14"			26

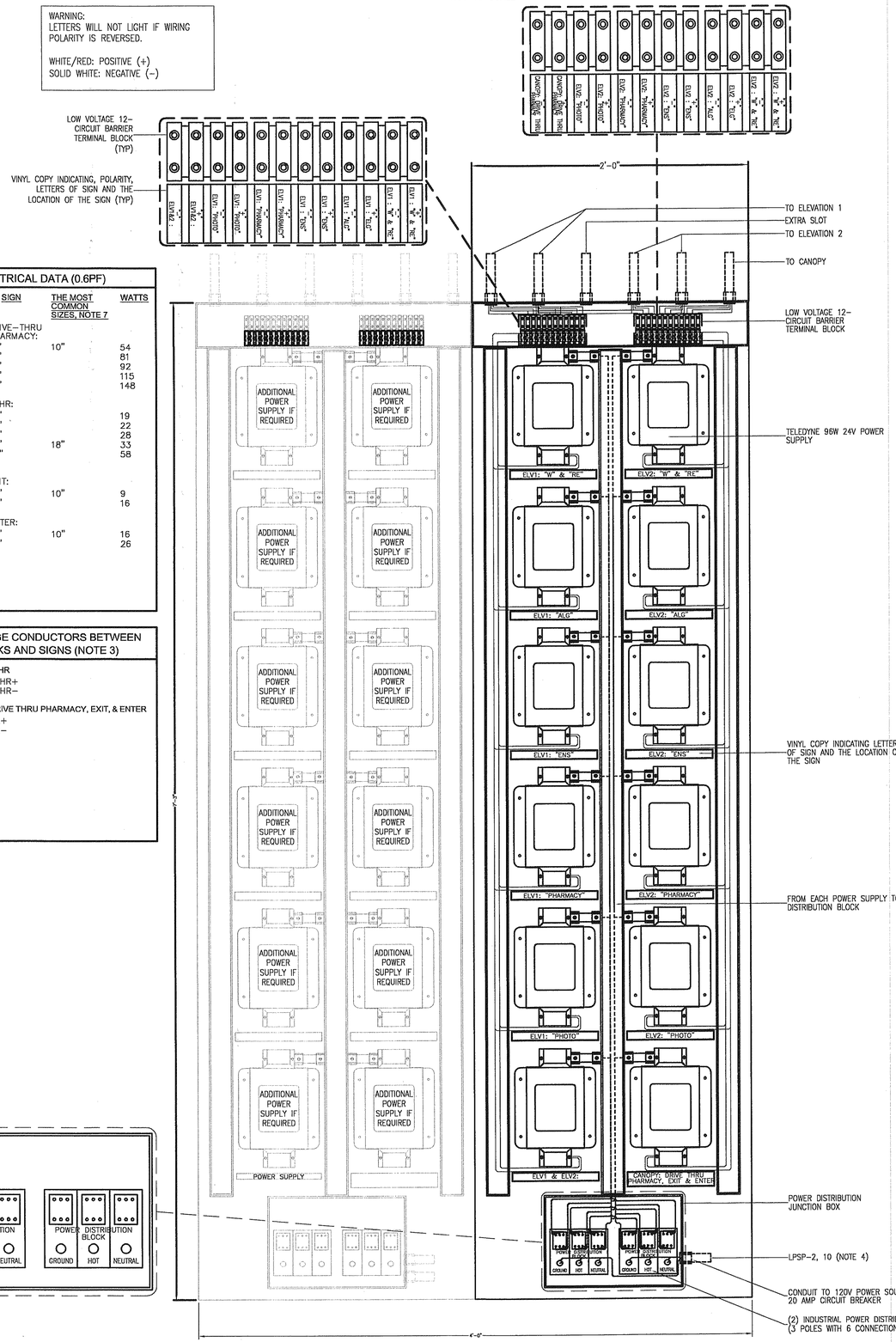
TYPICAL TAGS FOR LOW VOLTAGE CONDUCTORS BETWEEN 12-CIRCUIT TERMINAL BLOCKS AND SIGNS (NOTE 3)

WALGREENS SCRIPT		24HR	
W/RE-1+	W/RE-2+	24HR+	
W/RE-1-	W/RE-2-	24HR-	
ALG-1+	ALG-2+	DRIVE THRU PHARMACY, EXIT, & ENTER	
ALG-1-	ALG-2-	DR+	
ENS-1+	ENS-2+	DR-	
ENS-1-	ENS-2-		
PHARMACY			
RX-1+	RX-2+		
RX-1-	RX-2-		
PHOTO			
PHOTO-1+	PHOTO-2+		
PHOTO-1-	PHOTO-2-		





TYPICAL LED SIGN POWER SUPPLY RACK ELEVATION
NOT TO SCALE



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drawing:

Floor Plan - Channel Letter LED System

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E1.7

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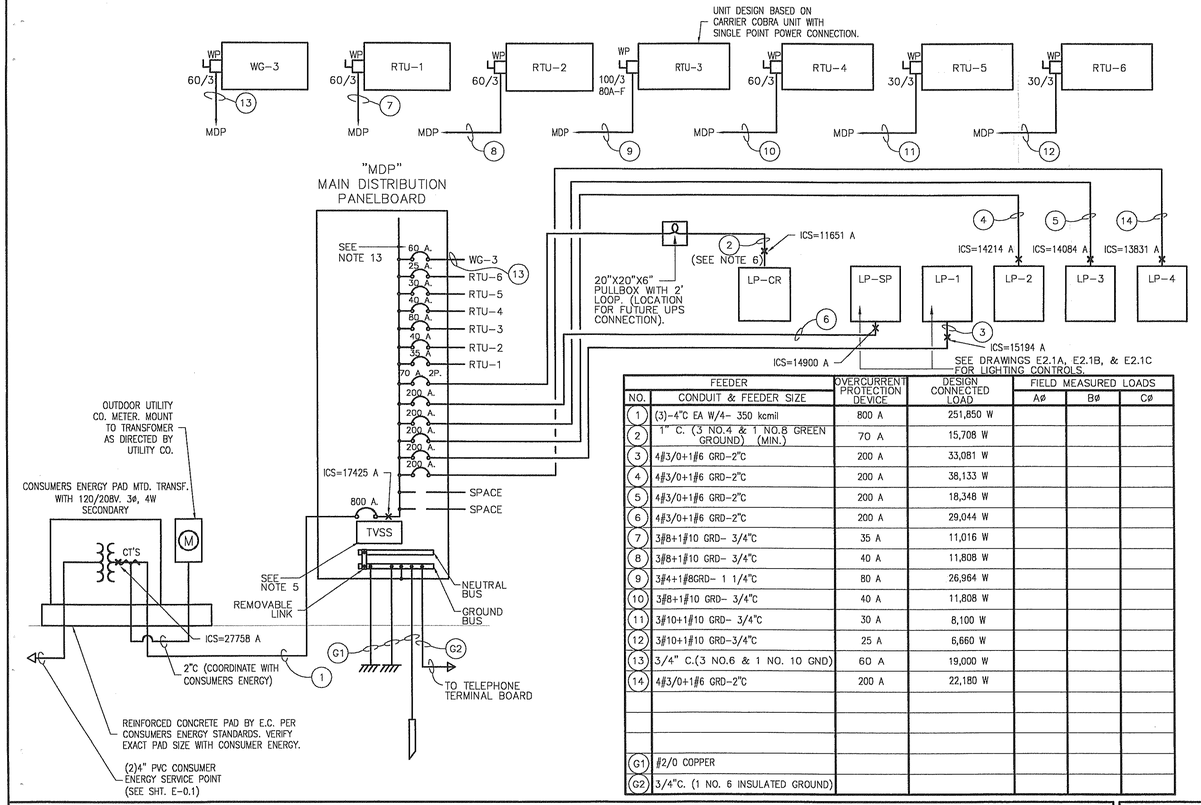
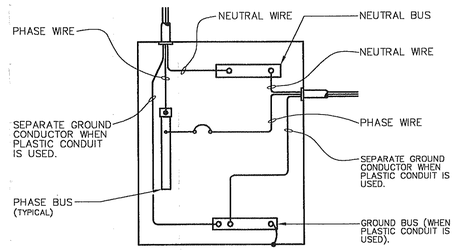
FEEDER DIAGRAM FOR 208Y/120V.3Ø.4W. MAIN SERVICE



NO.	FEEDER CONDUIT & FEEDER SIZE	OVERCURRENT PROTECTION DEVICE	DESIGN CONNECTED LOAD	FIELD MEASURED LOADS A∅	B∅	C∅
1	(3)-4"C EA W/4- 350 kcmil	800 A	251,850 W			
2	1" C. (3 NO.4 & 1 NO.8 GREEN GROUND) (MIN.)	70 A	15,708 W			
3	4#3/0+1#6 GRD-2"C	200 A	33,081 W			
4	4#3/0+1#6 GRD-2"C	200 A	38,133 W			
5	4#3/0+1#6 GRD-2"C	200 A	18,348 W			
6	4#3/0+1#6 GRD-2"C	200 A	29,044 W			
7	3#8+1#10 GRD- 3/4"C	35 A	11,016 W			
8	3#8+1#10 GRD- 3/4"C	40 A	11,808 W			
9	3#4+1#8GRD- 1 1/4"C	80 A	26,964 W			
10	3#8+1#10 GRD- 3/4"C	40 A	11,808 W			
11	3#10+1#10 GRD- 3/4"C	30 A	8,100 W			
12	3#10+1#10 GRD-3/4"C	25 A	6,660 W			
13	3/4" C.(3 NO.6 & 1 NO. 10 GND)	60 A	19,000 W			
14	4#3/0+1#6 GRD-2"C	200 A	22,180 W			
G1	#2/0 COPPER					
G2	3/4"C. (1 NO. 6 INSULATED GROUND)					

TYPICAL ELECTRICAL PANEL DETAIL



NOTE:
FOR CASH REGISTER LIGHTING PANEL (LP-CR), SEE DETAIL 5/E2.1.

1 / E2.1

2 / E2.1

NOTES

1. CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT), RIGID STEEL (1/2" MINIMUM), OR MC CABLE WHERE ALLOWED BY CODE. WHERE MC CABLE IS USED, PROPER SECUREMENT AND SUPPORT (AT INTERVALS NOT EXCEEDING 6 FEET) SHALL BE FOLLOWED PER NEC ART. 330.
2. MAIN DISTRIBUTION PANELBOARD SHALL BE CIRCUIT BREAKER TYPE.
3. EXIT SIGNS AND EMERGENCY LIGHTS SHALL HAVE THEIR OWN SELF-CONTAINED STANDBY BATTERY POWER SUPPLY. IF LOCAL CODE REQUIRES A DIRECT TAP BEFORE ANY CIRCUIT BREAKERS THEN INCORPORATE INTO THE FEEDER DIAGRAM AT LEFT.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE THIS INSTALLATION IN COMPLIANCE WITH ALL ELECTRICAL AND FIRE PREVENTION CODES, SUPERCEDING ALL SPECIFICATIONS, DRAWINGS AND NOTES.
5. MDP IS SHIPPED WITH FACTORY MOUNTED TVSS. REFER TO SPECIFICATIONS SECTION 16400, PARAGRAPH #2.01F.
6. **PANEL "LP-CR" FEEDER AND BRANCH CIRCUIT CONDUCTORS MUST BE RUN SEPARATE FROM OTHER PANEL CONDUCTORS. (DO NOT RUN THROUGH A COMMON RACEWAY OR TROUGH).**
7. FEEDERS TO BE SIZED UTILIZING A 25% SPARE CONSIDERATION FACTOR FOR FUTURE LOADS.
8. FOR PANELS "LP-1" AND "LP-SP" LIGHTING CONTROLS SEE DRAWINGS E2.1A, E2.1B AND E2.1C.
9. THE AVAILABLE SHORT CIRCUIT CURRENT FROM THE ELECTRICAL UTILITY COMPANY IS 27758 AMPERES. INTERRUPTING RATING OF ALL PROTECTIVE DEVICES IS THE RESPONSIBILITY OF THE DESIGN ENGINEER.
10. ALL BUSES IN ELECTRICAL SERVICE EQUIPMENT, DISTRIBUTION PANELS, ETC., ARE TO BE STANDARD ALUMINUM ALLOY. ALL FEEDERS AND BRANCH CIRCUITS ARE TO BE COPPER.
11. FOR LEGEND OF SYMBOLS, SEE DRAWING E1.2.
12. PANELBOARDS SHALL NOT BE USED AS RACEWAY OR JUNCTION BOX.
13. WALGREENS PROTOTYPICAL MASTER-BILT WALK-IN COOLER/FREEZER IS 6-GLASS FREEZER DOORS AND 9-GLASS COOLER DOORS, WITH DIMENSION 37'-5 1/2" W X 9'-8" D X 8'-6" H. THE MAXIMUM OVERCURRENT PROTECTION (MOP) REQUIREMENT FOR PROTOTYPICAL MASTER-BILT CONDENSING UNIT IS 60A. FOR **NON-PROTOTYPICAL** MASTER-BILT WALK-IN COOLER/FREEZER, CONTACT **MASTER-BILT @ (662) 534-9061 EXT. 254**, FOR THE MAXIMUM OVERCURRENT PROTECTION (MOP) REQUIREMENT.

NATIONAL ACCOUNTS

I. ELECTRICAL POWER DISTRIBUTION EQUIPMENT & LIGHTING CONTROL SYSTEM

A. THE GENERAL CONTRACTOR WILL SELECT AN ELECTRICAL CONTRACTOR TO PURCHASE AND INSTALL THE ELECTRICAL POWER DISTRIBUTION EQUIPMENT AND LIGHTING CONTROL SYSTEM. PURCHASE ORDERS WILL BE ISSUED BY THE ELECTRICAL CONTRACTOR.

1. NOT USED
2. STORES LOCATED IN ARIZONA, ARKANSAS, CALIFORNIA, INDIANA, KENTUCKY, LOUISIANA, MARYLAND, MICHIGAN, NEW JERSEY, PUERTO RICO, TENNESSEE, TEXAS, VERMONT, VIRGINIA, WEST VIRGINIA AND WISCONSIN SHALL USE SQUARE "D" ELECTRIC POWER DISTRIBUTION EQUIPMENT AND LIGHTING CONTROL SYSTEM.
3. NOT USED

B. WALGREENS, ITS DEVELOPERS AND THEIR CONTRACTORS WORKING ON WALGREEN PROJECTS MUST PURCHASE ELECTRICAL POWER DISTRIBUTION EQUIPMENT AND LIGHTING CONTROL SYSTEMS THROUGH THE NATIONAL ACCOUNTS PROGRAM. CALL SIEMENS, OR SQUARE "D" NATIONAL ACCOUNTS DEPARTMENT FOR PRICE QUOTES AND BILL OF MATERIAL CONFIRMATION FOR THEIR SPECIFIC PROJECT.

1. FOR SQUARE "D" CALL (866) 773-8326 EXT.3

PANEL "LP-CR" BRANCH CIRCUITING

ELECTRICAL CIRCUITS OF THE STORE CASH REGISTERS AND RELATED COMPUTER/ELECTRONIC SYSTEMS, MUST BE PROVIDED AND INSTALLED IN A SPECIFICALLY PRESCRIBED MANNER. THE INTENT OF THIS TEXT IS TO EXPLAIN THE NEW TERMINOLOGY AS WELL AS WHAT IS NEEDED FOR A SUCCESSFUL INSTALLATION IN TERMS THAT EVERYONE CAN UNDERSTAND.

A.C. ELECTRICAL POWER REQUIRED TO OPERATE COMPUTERS AND THEIR RELATED EQUIPMENT MUST BE AS CLEAN AS POSSIBLE; I.E., NO OTHER EQUIPMENT (NON-COMPUTER RELATED) CAN BE CONNECTED TO THESE CIRCUITS. THIS IS KNOWN AS A DEDICATED CIRCUIT. THIS WILL INSURE THAT NO OTHER EQUIPMENT CAN INDUCE NOISE OR LINE SPIKES INTO THE CASH REGISTERS, OFFICE SYSTEM EQUIPMENT, PHARMACY TERMINALS, TIME/ATTENDANCE SYSTEM, SATELLITE ANTENNA SYSTEM, BURGLAR ALARM SYSTEM, AND TELEPHONE SYSTEM. IN ADDITION, COMPUTER-TYPE CIRCUITS MUST NEVER BE RUN IN CONDUITS, TROUGHS OR JUNCTION BOXES TOGETHER WITH NON-COMPUTER RELATED CIRCUITS, PHYSICAL CONTACT BETWEEN THESE TWO TYPES WOULD ALLOW FOR NOISE OR LINE SPIKES TO BE MAGNETICALLY INDUCED TO THE COMPUTER-TYPE CIRCUITS.

INSTALL A CONDUIT (1/2" MIN.) FROM EACH SYSTEMS EQUIPMENT OUTLETS (AS MENTIONED ABOVE) TO THE CRITICAL (DEDICATED) PANEL "LP-CR". EACH 1/2" CONDUIT "HOMERUN" SHALL CONSIST OF A MAXIMUM OF THREE CIRCUITS. THE PANEL "LP-CR" WILL RECEIVE ELECTRICAL POWER FROM THE MAIN DISTRIBUTION PANEL.

EACH LP-CR CONDUIT SHALL HAVE A MECHANICAL GROUND CONDUCTOR FROM PANEL "LP-CR" TO THE RECEPTACLE. THE GROUND WIRE FOR THIS CIRCUIT SHALL BE RUN BACK TO THE MAIN DISTRIBUTION PANELBOARD GROUND (EARTH GROUND). ALL CIRCUIT BREAKERS (IN "LP-CR") FOR THE COMPUTER SYSTEMS MUST BE LOCKED IN THE "ON" POSITION AND MUST BE CLEARLY IDENTIFIED AT THE PANEL.

CASH REGISTER NOTE

TL

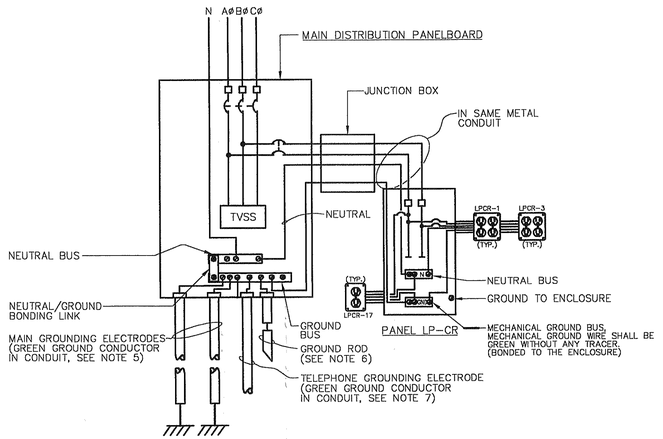
DEDICATED DUPLEX TWIST-LOCK (TL) RECEPTACLE SYMBOL: RECEPTACLES ARE FED FROM PANEL "LP-CR". PROVIDE "LOCK-ON" HARDWARE FOR EACH "LP-CR" CIRCUIT. CIRCUITS AND JUNCTION BOXES ARE NOT TO SERVE OTHER LOADS (eg. LIGHTING, GENERAL PURPOSE RECEPTACLES, ETC.). RECEPTACLES ARE TO BE HUBBELL #HBL4700I. CASH REGISTERS ARE FURNISHED WITH HUBBELL #HBL4723VY CAP. WALGREENS SUPERINTENDENT TO HAVE HOLE CUT IN CASH REGISTER COUNTER TO INSERT CORD DOWN TO OUTLET BELOW (AS REQUIRED), CORD NOT TO BE EXPOSED.

(NO SUBSTITUTIONS ACCEPTED FOR HUBBELL)

NOTES:
1. A.C. BRANCH CIRCUITING: #12 WIRE, 1/2" CONDUIT.
2. ALL CIRCUIT BREAKERS AND PANELS MUST BE CLEARLY LABELED WITH ELECTRICAL DECALS.
3. SEE DRAWING E3.1 FOR PANEL LP-CR SCHEDULE.
4. SEE POWER AND SYSTEMS PLAN (E1.2) FOR QUANTITY AND LOCATION OF EACH SYSTEM.
5. UTILIZE CONVENTIONAL WIRING METHODS (i.e. NETWORK HOMERUNS FOR ALL WIRING SHOWN).

4 / E2.1

SERVICE CONFIGURATION - LP-CR PANEL - SURGE SUPPRESSION UNIT (FOR 120/208 VOLT MAIN SERVICE)



NOTES:
1. ALL EQUIPMENT, CONDUCTOR AND RACEWAY SIZES SHALL BE IN ACCORDANCE WITH FACILITIES PLANNING, DRAWINGS AND SPECIFICATIONS.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LOCAL REQUIREMENTS AND ALL APPLICABLE LAWS AND REGULATIONS.
3. GROUND CONDUCTOR FROM MAIN DISTRIBUTION PANELBOARD TO EARTH GROUND MUST BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL AND LOCAL CODES.
4. FEEDER AND GROUND CONDUCTOR FROM PANEL LP-CR TO MAIN DISTRIBUTION PANELBOARD SHALL BE INSTALLED IN ONE CONTINUOUS LENGTH WITHOUT SPLICES OR JOINTS IN THE SAME RACEWAY.
5. MAIN GROUNDING ELECTRODES:
   A. METAL UNDERGROUND WATER PIPE.
   B. METAL FRAME OF BUILDING WITH CADWELD CONNECTION.
   C. IF ONE OF THE ABOVE TWO ITEMS ARE NOT AVAILABLE, THEN FURNISH A CONCRETE ENCASED ELECTRODE. [SEE NEC 250.52 (A) (3)].
6. GROUND ROD WITH CADWELD CONNECTION.
7. TELEPHONE GROUNDING ELECTRODE, SEE DETAIL 1 ON DRAWING E1.5.

5 / E2.1

SHORT CIRCUIT PROTECTION NOTE

SHALL BE U.L. LISTED SERIES RATING BETWEEN CKT. BREAKERS LOCATED AT THE DISTRIBUTION PANEL AND THE DOWNSTREAM 10k A.I.C. RATED CIRCUIT BREAKERS AT PANELS LP-CR, LP-1, LP-2, LP-3, & LP-SP BASED ON THE MAXIMUM FAULT CURRENT AS DETERMINED AT THE SERVICE ENTRANCE.

GROUNDING NOTES

1. GROUNDING (ELECTRICAL SYSTEM)

   ONE OF THE MOST IMPORTANT PARTS IN THE INSTALLATION OF ELECTRICAL SYSTEMS IS GROUNDING. PROPER GROUNDING WILL PROVIDE PROTECTION OF PERSONNEL, EQUIPMENT, AND CIRCUITS BY ELIMINATING THE POSSIBILITY OF DANGEROUS OR EXCESSIVE VOLTAGES.

   * GROUNDING SYSTEM MUST BE IN ACCORDANCE WITH APPLICABLE NATIONAL, STATE OR LOCAL ELECTRICAL CODES.
   * THE GROUND PATH MUST BE PERMANENT AND CONTINUOUS, AND THE RESISTANCE OF THE GROUND PATHS MUST NOT EXCEED TWO (2) OHMS.
   * ALL GROUNDING ELECTRODES OF DIFFERENT SYSTEMS MUST BE BONDED TOGETHER.
   * METALLIC CONDUIT USED TO ENCLOSE A GROUNDING CONDUCTOR MUST BE BONDED TO THE GROUNDING CONDUCTOR AT BOTH ENDS TO REDUCE IMPEDANCE.
   * RECEPTACLE BOXES MUST BE GROUNDED BY RACEWAY BACK TO THE GROUNDED LP-CR PANEL.
   * GROUNDING SYSTEM FOR THE LP-CR PANEL MUST BE BONDED TO THE MAIN DISTRIBUTION PANELBOARD GROUNDING SYSTEM AND IN TURN BONDED TO THE SYSTEM'S NEUTRAL.

2. GROUNDING TESTS

   AFTER INSTALLATION OF THE LP-CR PANEL, TESTS MUST BE PERFORMED TO CHECK THE FOLLOWING:

   * EXCESSIVE GROUND POTENTIAL DIFFERENCES BETWEEN DIFFERENT AREAS, DO NOT EXIST.
   * GROUNDING SYSTEM INTEGRITY.

   TESTS TO BE PERFORMED ARE:

   * GROUND POTENTIAL DIFFERENCE MEASUREMENT

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drawing:

Feeder Diagram (120/208V) Electrical Details

DO NOT SCALE DRAWING

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E2.1

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CONTROL SCHEDULE - NON 24 HOUR STORE **(SEE NOTE 10)**

GROUP	PANEL	CIRCUIT	DESCRIPTION	DAY	EVENTS	FUNCTION	
1	"LP-1"	21,24,25	GENERAL SALES – MAINTENANCE LIGHTS AND HOT WATER RECIRCULATING PUMP	MON-SUN	BURGLAR ALARM DISARMED	ON	
		2,6	OFFICE, ELECTRICAL, TRAINING/MULTI-PURPOSE, EMPLOYEE ROOMS		BURGLAR ALARM ARMED	OFF	
		4	GEN. STOCK ROOM, PASSAGEWAY				NOTE 8
		17	PHOTO LTG.		BURGLAR ALARM TRIGGERED	ON	
2	"LP-1"	11,12,19,23,29	GENERAL SALES – NORMAL LIGHTING	MON-SAT	7:55 AM	ON	
		14,26,28,30,32			10:10 PM	OFF	
		20	"H" FIXTURES LIGHTING	SUN	8:55 AM	ON	
		31	ATM/HALLMARK/ONE HOUR PHOTO SIGNS		9:10 PM	OFF	
		33	SPARE				
		16	WALK-IN COOLER/FREEZER FLUORESCENT LIGHTING				
		18, 34, 36	"H" FIXTURE COSMETIC LIGHTS & LIGHT BOX RECEPTACLES				
		15	"H" FIXTURE–SOUTH AND EAST WALLS		BURGLAR ALARM ARMED	OFF	
		34	SPARE		BURGLAR ALARM TRIGGERED	ON	
3	"LP-1"	13,22,27	GENERAL SALES – EVENING LIGHTS	MON-SAT	7:55 AM	ON	
					10:30 PM	OFF	
				SUN	8:55 AM	ON	
					9:30 PM	OFF	
					BURGLAR ALARM ARMED	OFF	
					BURGLAR ALARM TRIGGERED	ON	
4	"LP-1"	CIRCUIT BREAKER 40	WALL HEATERS INTERLOCK	WALL HEATERS CIRCUITS SHALL BE DE- ENERGIZED (RELAY 40 CONTACT OPEN) IF ANY OF THE FOLLOWING CONDITIONS ARE MET: 1. BURGLAR ALARM ARMED AND OUTSIDE TEMPERATURE IS ABOVE 25° F 2. OUTSIDE TEMPERATURE IS ABOVE 50° F			SEE NOTE 3
4A	"LP-1"	RELAY R1	ENTRANCE HEATER INTERLOCK	ENTRANCE HEATER SHALL NOT FUNCTION (RELAY CONTACT IS OPEN) IF ANY OF THE FOLLOWING CONDITIONS ARE MET: 1. OUTSIDE TEMPERATURE IS ABOVE 50°F, 2. NOT USED 3. BURGLAR ALARM SYSTEM IS ARMED AND OUTSIDE TEMPERATURE IS ABOVE 32°F			SEE NOTE 12
5	"LP-1"	1,3	PHARMACY	MON-FRI	7:55 AM	ON	
					10:30 PM	OFF	
				SAT	7:55 AM	ON	
					6:30 PM	OFF	
				SUN	8:55 AM	ON	
					5:30 PM	OFF	
					BURGLAR ALARM ARMED	OFF	
					BURGLAR ALARM TRIGGERED	ON	
6	"LP-SP"	14	WALLPACK FIXTURES	MON-SUN	OUTDOOR LIGHTING LESS THAN 20FC	ON	
					OUTDOOR LIGHTING MORE THAN 20FC	OFF	
					BURGLAR ALARM TRIGGERED	ON	
7	"LP-SP"	1	MONUMENT SIGN PRIMARY PANEL	MON-SAT	8:00AM TILL 10:00PM AND OUTDOOR LIGHTING IS LESS THAN 100FC	ON	
		2,10	SIGNS				
		19,21,23	AWNING/CANOPY				
		17	AWNING/ENTRANCE LIGHTS				NOTE 14
		16	ENTRANCE CANOPY "H-1" FIXTURES	SUN	9:00AM TILL 9:00PM AND OUTDOOR LIGHTING IS LESS THAN 100FC	ON	
		42	DECORATIVE POST TOPS				
		4,12	SPARE				
					BURGLAR ALARM ARMED	OFF	
					BURGLAR ALARM TRIGGERED	ON	
8	"LP-SP"			MON-SUN	AFTER 7:30 AM AND OUTDOOR LIGHTING LESS THAN 20FC OR ASTRO	ON	SEE NOTE 11
		30/32	PARKING LOT LIGHTS				
			PATH TO EMPLOYEE PARKING SPACES		15MIN AFTER BURGLAR ALARM SYSTEM ARMED	OFF	
					BURGLAR ALARM TRIGGERED	ON	
9	"LP-SP"	18/20, 22/24	PARKING LOT LIGHTS	MON-SAT	8:00AM TILL 10:20PM AND OUTDOOR LIGHTING IS LESS THAN 20FC OR ASTRO	ON	
		26/28	(BUSINESS HOURS)	SUN	9:00AM TILL 9:20PM AND OUTDOOR LIGHTING IS LESS THAN 20FC OR ASTRO	ON	
					15MIN AFTER BURGLAR ALARM SYSTEM ARMED	OFF	
					BURGLAR ALARM TRIGGERED	ON	
10	"LP-SP"	7	DRIVE-THRU CANOPY LIGHTS AND "Q" FIXTURE	MON-FRI	8:00AM TILL 10:00PM AND OUTDOOR LIGHTING IS LESS THAN 100FC	ON	
				SAT	8:00AM TILL 6:00PM AND OUTDOOR LIGHTING IS LESS THAN 100FC	ON	
				SUN	8:00AM TILL 5:00PM AND OUTDOOR LIGHTING IS LESS THAN 100FC	ON	
					BURGLAR ALARM TRIGGERED	ON	
					BURGLAR ALARM ARMED	OFF	
11	"LP-SP"	25,27,29,31,33,35	CONDOLA RECEPTACLES	MON-SAT	7:55 AM	ON	
					10:10 PM	OFF	
				SUN	8:55 AM	ON	
					9:10 PM	OFF	
					BURGLAR ALARM ARMED	OFF	

COORDINATE CONTROL POINT WITH WALGREENS & STORE D NOT PART OF STANDARD CRITERIA

CONTROL SCHEDULE - NON 24 HOUR STORE (CONT'D.)

GROUP	PANEL	CIRCUIT	DESCRIPTION	DAY	EVENTS	FUNCTION	
12	"LP-SP"	34,36	FACADE ACCENT FIXTURES	MON-SAT	8:00AM TILL 10:00PM & OUTDOOR LIGHTING IS LESS THAN 20FC	ON	
				SUN	9:00AM TILL 9:00PM & OUTDOOR LIGHTING IS LESS THAN 20FC	ON	
					BURGLAR ALARM ARMED	OFF	
13	"LP-SP"	3,5	L.E.D. READERBOARD		FACTORY DEFAULT SETTING: 24 HOUR OPERATION		NOTE 13

NOTES:

1. PANELS "LP-1" AND "LP-SP" ARE **SHIPPED FACTORY PRE-PROGRAMMED** PER CONTROL SCHEDULE ABOVE. ELECTRICAL CONSULTANT AND ELECTRICAL CONTRACTOR MUST FURNISH PANELS "LP-1" AND "LP-SP" CIRCUITING **EXACTLY** AS SHOWN ON THE CRITERIA DRAWINGS E0.1, E1.1, E1.2, E2.1A, E2.1B, E2.1C AND E3.1. THE ONLY ACCEPTABLE DEVIATIONS ARE LIMITED TO SPECIAL LOCAL CODE REQUIREMENTS AND UNUSUAL SIZE OF THE STORE. IF STORE IS BIGGER THAN NORMAL – SPARE CIRCUITS SHALL BE UTILIZED. IF STORE IS SMALLER THAN NORMAL – UNUSED CIRCUITS WILL BECOME SPARE.
   IF CIRCUITING DEVIATES FROM CRITERIA AND FIELD RE-PROGRAMMING IS REQUIRED, ELECTRICAL CONSULTANT/ ELECTRICAL CONTRACTOR WILL BE LIABLE FOR ALL THE **EXPENSES INCLUDING SIEMENS/SQ. D PERSONNEL TRAVELING AND LABOR.**
2. FOR SQ. D PANELS LAYOUT AND WIRING, REFER TO DRAWING E2.1C.

2a. ETHERNET COMMUNICATION.
   CONTROL SYSTEM IN EVERY STORE MUST COMMUNICATE WITH WALGREENS HELP CENTER. ETHERNET COMMUNICATION SHALL ALLOW HELP CENTER TO PERFORM UPLOADING OF REVISED PROGRAMS, REMOTE MONITORING, AND MANUAL CONTROL INCLUDING OVERRIDES.

2b. SYSTEM ALARM CONDITIONS.
   ALARM CONDITIONS INCLUDING "SYSTEM OVERRIDE", AND MISCELLANEOUS MUST BE E-MAILED TO WALGREENS HELP CENTER.

3. APPLIES TO STORES WITH WALL HEATERS ONLY.
4. NOT USED
5. ELECTRICAL CONTRACTOR SHALL INSTALL PANELS "LP-1" AND "LP-SP" SO THAT THE BOTTOM OF THE PANEL SHALL BE AT 12" A.F.F.
6. ALL THE CIRCUITS WITHIN EACH GROUP SHALL BE PROGRAMMED NOT TO BE ENERGIZED AT THE SAME TIME, BUT SHALL BE STAGGERED WITH A ONE SECOND INTERVAL BETWEEN EACH CIRCUIT.
7. OVERRIDES:
   1.) OVERRIDE STATION ON PANEL "LP-SP" DOOR.
      a. STATION INCLUDES (4) PUSHBUTTONS/SWITCHES AND ALLOW OVERRIDE OF THE FOLLOWING GROUPS:
         –GENERAL SALES AND MISCELLANEOUS – GROUPS #1, #2, #3, AND #11.
         –PHARMACY – GROUP #5.
         –SIGNS AND AWNING/CANOPY – GROUPS #7, #10, AND #13.
         –PARKING LOT – GROUPS #6, #8, #9 & #12.
      b. SQ. D UTILIZE PUSHBUTTONS.
         TO OVERRIDE THE GROUP PUSHBUTTON SHALL BE PRESSED. THE STATUS OF OVERRIDE MODE IS INDICATED BY PUSHBUTTON PILOT LIGHT. IF PILOT LIGHT IS **ON**, IT INDICATES THAT THE GROUP IS IN OVERRIDE MODE. IF PUSHBUTTON IS PRESSED AGAIN, PILOT LIGHT IS TURNED **OFF** INDICATING THAT THE GROUP IS SWITCHED TO NORMAL = AUTOMATIC MODE.
      c. NOT USED
      d. DURATION OF OVERRIDE MODE IS LIMITED TO 2HOURS. IF MORE OVERRIDE TIME IS REQUIRED– OVERRIDE PUSHBUTTON/SWITCH SHALL BE INITIATED AGAIN.
      e. OVERRIDE FOR ALL THE GROUPS EXCEPT PARKING LOT OVERRIDE MODE WILL BE DISABLED WHEN SECURITY SYSTEM IS ARMED. FOR GROUP #8 (PARKING LOT) OVERRIDE MODE WILL BE DISABLED 15 MINUTES AFTER SECURITY SYSTEM IS ARMED.
   2.) PHARMACY LOCAL OVERRIDE SWITCHES.
   THERE ARE TWO MOMENTARY SWITCHES. OFF FUNCTION WILL BE DISABLED WHEN LIGHTS SUPPOSED TO BE ON PER TIME SCHEDULE.

   SEE DETAIL 4, DRAWING E2.1C FOR DETAILS.

   NOT USED

8. NON-24 HOUR STORE CONTROL SCHEDULE IS BASED ON TYPICAL STORE OPERATING HOURS:
9. MONDAY THRU SATURDAY: 8:00AM TO 10:00PM SUNDAY:9:00AM TO 9:00PM CONSULTANT MUST VERIFY WITH THE ARCHITECT ACTUAL STORE OPERATING HOURS AND ADJUST CONTROL SCHEDULE ACCORDINGLY.
10. FOR LIGHTING POLE LOCATIONS, REFER TO NOTE #9 DRAWING E0.1.

    APPLIES ONLY TO STORES WITH ENTRANCE HEATERS. ONLY THE FOLLOWING
11. TWO CONDITIONS (OUT OF THREE SHOWN IN CRITERIA) MUST BE SHOWN ON CONSULTANT DRAWINGS:
      a. CONDITIONS 1 AND 2 (FOR STORES WITHOUT
12. VESTIBULE).
      b. CONDITIONS 1 AND 3 (FOR STORES WITH VESTIBULE).
      CONSULTANT MUST NOT SHOW ALL THREE CONDITIONS ON THE DRAWINGS.

    IF 24HOUR OPERATION OF L.E.D. READERBOARD IS NOT ALLOWED (TO BE VERIFIED BY HELP CENTER) GROUP #13 SHALL BE RE-PROGRAMMED BY HELP CENTER TO OPERATE SIMILAR TO GROUP #11.

13. IN HIGH SECURITY NON-24 HOUR STORES, CIRCUIT 17 MUST BE MOVED FROM GROUP #7 TO GROUP #14.
14. NOT USED

issued for:
OWNER / TENANT REVIEW:
09 APR 07
BIDS & PERMITS:
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Store #11415

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drawing:

Control Schedules

DO NOT SCALE DRAWING

issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:

E2.1A

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NOT USED

1
E2.1B

NOT USED

2
E2.1B

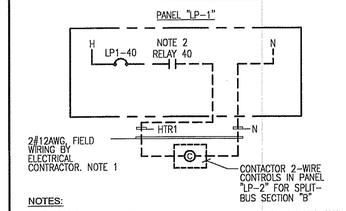
NOT USED

4
E2.1B

NOT USED

5
E2.1B

SQ. D STORES WITH WALL HEATERS ONLY



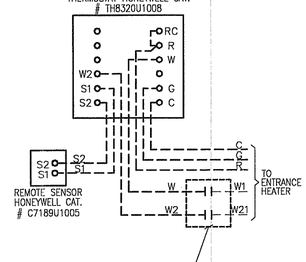
NOTES:

1. ELECTRICAL CONTRACTOR SHALL INSTALL THE FOLLOWING WARNING SIGN ON PANEL "LP-2":
   "CAUTION - EXTERNAL VOLTAGE IS PRESENT."
2. THERE WOULD BE NO RELAY IN SQ. D PANEL.

INTERLOCK WITH WALL HEATERS CONTROLS

6
E2.1B

ENTRANCE HEATER THERMOSTAT HONEYWELL CAT. # TH8320U1008



INTERLOCK WITH ENTRANCE HEATER

NOTES:

1. APPLIES TO STORES WITH ENTRANCE HEATER ONLY.
2. THERMOSTAT SHALL BE PROGRAMMED AS:
   a. NON-PROGRAMMABLE FROM MAIN SET-UP MENU.
   b. FULLY LOCKED KEYPAD FROM ADVANCED SETTINGS MENU.

7
E2.1B

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drawing:

Control Diagrams

DO NOT SCALE DRAWING

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checked: B.D.
approved: R.R.T.

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sheet:

E2.1B

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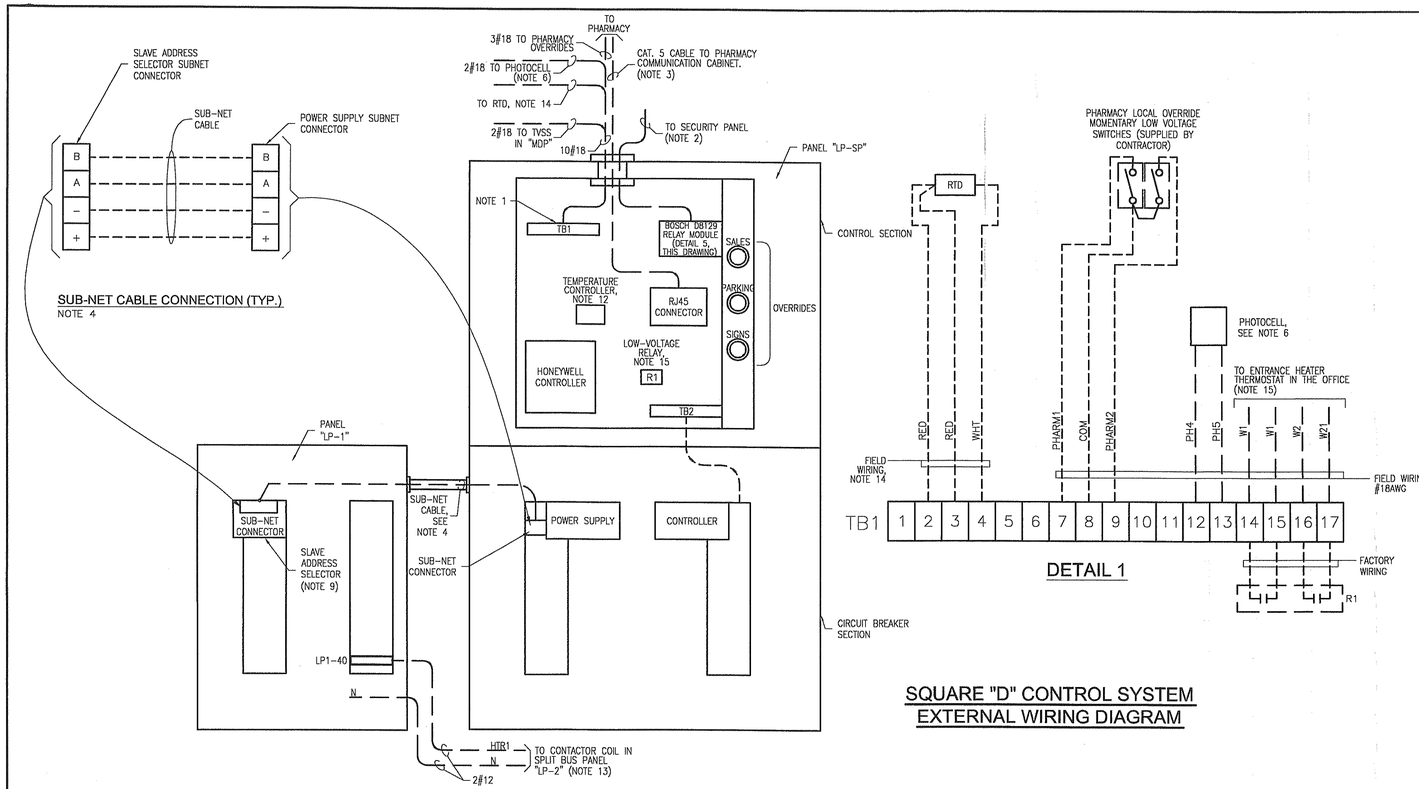


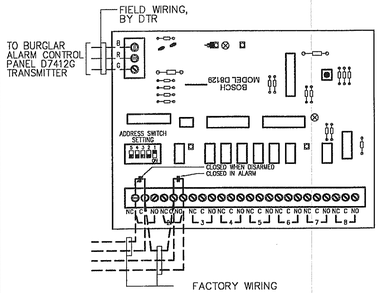
DETAIL 1

SQUARE "D" CONTROL SYSTEM EXTERNAL WIRING DIAGRAM

NOTES:

1. FOR TERMINAL BLOCK TB1 EXTERNAL WIRING REFER TO DETAIL 1 (THIS DRAWING).
2. WIRING BETWEEN D8129 RELAY MODULE (IN PANEL "LP-SP") AND SECURITY CONTROL PANEL SHALL BE FURNISHED BY WALGREENS DTR. SEE DETAIL 5 THIS DRAWING.
3. CAT.5 CABLE SHALL BE FURNISHED AND INSTALLED BY WALGREENS CAT.5 INSTALLER. FINAL CONNECTION TO CONCENTRATOR IN PHARMACY AND RJ45 CONNECTOR INSIDE PANEL "LP-SP" SHALL BE FURNISHED BY DTR.
4. SUB-NET CABLE SHALL BE FURNISHED WITH PANEL "LP-SP". ELECTRICAL CONTRACTOR SHALL INSTALL SUB-NET CABLE IN CONDUIT AND TERMINATE IT AT SUB-NET CONNECTORS IN PANELS "LP-SP" AND "LP-1", AS SHOWN ON THIS DRAWING.
5. PANELS "LP-SP" AND "LP-1" SHALL BE INSTALLED ADJACENT TO EACH OTHER.
6. REFER TO PHOTOCELL INSTALLATION DETAIL 3/E2.1C, THIS SHEET.
7. IMPORTANT:
   BEFORE DRILLING CONDUIT OPENINGS IN THE PANELS, ALL INTERIOR COMPONENTS MUST BE WRAPPED TO PROTECT SENSITIVE ELECTRONIC EQUIPMENT.
8. DO NOT RUN LOW VOLTAGE WIRING IN THE SAME CONDUIT WITH POWER WIRING.
9. SLAVE ADDRESS SELECTOR, FACTORY PRESET TO ADDRESS 1.
10. NOT USED.
11. SQUARE "D" PANEL DIMENSIONS:
    PANEL "LP-SP": 68"H X 20"W X 5.75"D
    PANEL "LP-1": 50"H X 20"W X 5.75"D
12. THREE OUTPUT CHANNELS CONTROLS SHALL BE TSI (TEMPERATURE SYSTEM INTERNATIONAL) PART #T11466. IT INCLUDES CONTROLLER AND PT100 RTD ELEMENT 3-WIRE, 3/16" OD X 3" PROBE 316SS WITH 15 FEET TEFLON INSULATED SHIELDED LEADWIRES. FOR RTD PROBE LOCATION, REFER TO DRAWING E4.3, DETAIL 9. FOR ADDITIONAL CONTROLLER INFORMATION REFER TO DETAIL 1, DRAWING E2.1B. TSI CONTROLS (INCLUDES CONTROLLER, RTD ELEMENT WITH SHIELDED LEADWIRES) SHALL BE PURCHASED BY SQ."D". CONTROLLER MUST BE FACTORY INSTALLED AND PRE-WIRED TO POWERLINK INPUT TERMINALS. APPLY ONLY TO STORES WITH WALL HEATERS.
13. APPLIES TO STORES WITH WALL HEATERS ONLY. REFER TO DETAIL 6 DRAWING E2.1B (WALL HEATER INTERLOCK).
14. RUN RTD WIRE LEADS (FURNISHED WITH RTD) IN DEDICATED 1/2" CONDUIT. AVOID PARALLEL RUN WITH POWER WIRING. SPLICES NOT ALLOWED. APPLY TO STORES WITH WALL HEATERS ONLY.
15. LOW VOLTAGE RELAY R1 WITH (2)-N.O. CONTACTS (RATED FOR 5 AMPS INDUCTIVE LOAD). FOR CONTACT WIRING REFER TO DETAIL 7, DRAWING E2.1B. FOR PROGRAMMING, REFER TO GROUP 4A, DRAWING E2.1A. APPLY TO STORES WITH ENTRANCE HEATER ONLY.

1 E2.1C



BOSCH D8129 RELAY MODULE

NOT TO SCALE

5 E2.1C

TESTING

THE FOLLOWING TEST MUST BE PERFORMED BY ELECTRICAL CONTRACTOR:

1. **PHARMACY OVERRIDES**
   CHECK THAT LOCAL OVERRIDES AND OVERRIDE PUSHBUTTON ON PANEL "LP-SP" DOOR WORKS.

2. **OVERRIDES OTHER THAN PHARMACY**
   CHECK THAT OVERRIDE WORKS.

3. **SECURITY INTERLOCK**
   INITIAL CONDITIONS:
   - OVERRIDE PUSHBUTTONS/SWITCHES ON PANEL "LP-SP" DOOR SHALL BE OFF.
   - ALL THE LIGHTS INSIDE THE STORE SHALL BE **ON**.
   - ALL EXTERIOR LIGHTS SHALL BE **OFF** (EXCEPT LIGHTS ON CIRCUIT 14 COULD BE ON IF IT IS DARK OUTSIDE).

   ACTIONS:
   - DISCONNECT WIRE ON TERMINAL "NC" (RELAY 1) IN D8129 RELAY MODULE

   RESULTS:
   - ALL INTERIOR LIGHTS (EXCEPT NIGHT LIGHTS) SHALL TURN **OFF**.

4. **SECURITY INTERLOCK,** (CONT'D.)
   INITIAL CONDITIONS:
   - WIRE ON TERMINAL "NC" IS STILL DISCONNECTED AND ALL INTERIOR LIGHTS (EXCEPT NIGHT LIGHTS) ARE STILL **OFF**.

   ACTIONS:
   - INSTALL JUMPER BETWEEN TERMINALS "C" AND "NO" (RELAY 2) IN D8129 RELAY MODULE.

   RESULTS:
   - ALL INTERIOR LIGHTS AND ALL EXTERIOR LIGHTS MUST TURN **ON**.

   REMOVE JUMPER BETWEEN TERMINALS "C" AND "NO" (RELAY 2) AND RESTORE WIRE ON TERMINAL "NC" (RELAY 1).

5. **INTERLOCK WITH HONEYWELL CONTROLLER**
   (APPLIES TO SQ. "D" ONLY)
   - HONEYWELL CONTROLLER: SET STAGE 1 DIAL AT #3 AND STAGE 2 DIAL AT #8 (THESE SETTINGS ARE PRELIMINARY!!!).
   - **"SET/RUN"** SWITCH MUST BE IN **"RUN"** POSITION.
   - SECURITY SYSTEM SHALL BE DISARMED.

   a. ACTIONS: COVER PHOTOCELL
   (USE TWO GLOVES OR CARDBOARD BOX. MUST NOT USE TAPE!!!).
   RESULTS:
   - TIME BEFORE 7:30 AM – ALL OUTSIDE LIGHTS (EXCEPT LIGHTS ON CIRCUIT #14) MUST BE **OFF**.
   - TIME BETWEEN 7:30 AM–8:00 AM: CIRCUIT #14 MUST BE **ON**.
     PARKING LIGHTS (CIRCUITS 30/32 = GROUP 8) SHALL TURN **ON**.
   - TIME AFTER 8:00 AM – SIGNS, CANOPY, FLOODS AND THE REST OF THE PARKING LOT LIGHTS (ALL THE CIRCUITS, GROUPS #6, 7, 8, 9, 10, 12) MUST TURN **ON**.

   b. ACTIONS: WITH ALL EXTERIOR LIGHTS STILL **ON** DISCONNECT WIRE ON TERMINAL "NC" (RELAY 1) IN D8129 RELAY MODULE.
   RESULTS:
   - SIGNS, CANOPY, FLOODS (GROUPS 7, 10, 12) MUST TURN **OFF**.
   - 15 MINUTES LATER ALL PARKING LOT LIGHTS (GROUPS 8 & 9) MUST TURN **OFF**.
   - RESTORE WIRE ON TERMINAL "NC" (RELAY 1) IN D8129 RELAY MODULE.
     UNCOVER PHOTOCELL.

FINAL HONEYWELL CONTROLLER ADJUSTMENT:
(APPLIES TO SQ. "D" ONLY)
SETTING #3 FOR STAGE 1 DIAL (PARKING LOT) AND #8 FOR STAGE 2 DIAL (SIGNS AND AWNING/CANOPY) MENTIONED ABOVE ARE PRELIMINARY. THE ACTUAL SETTINGS MUST BE DONE IN THE EVENING BEFORE DARK OR EARLY IN THE MORNING WHEN IT IS STILL DARK.

EVENING ADJUSTMENT:

1. REMOVE HONEYWELL CONTROLLER PLASTIC COVER (ONE SCREW).
2. SET "SET/RUN" SWITCH TO "SET" POSITION. SET BOTH DIALS (STAGE 1 AND STAGE 2) AT #1. BOTH RED LED'S SHALL BE **OFF**. ALL EXTERIOR LIGHTS SHALL BE **OFF**.
3. AT DUSK (APPROXIMATELY 100FC) SLOWLY ROTATE STAGE 2 DIAL TOWARD BIGGER NUMBERS UNTIL RED LED BELOW DIAL TURNS **ON**. CHECK THAT ALL SIGNS AND AWNINGS/CANOPY LIGHTS ARE **ON**.
4. WAIT TILL IT GETS DARKER. AT APPROXIMATELY 20 FC SLOWLY ROTATE STAGE 1 DIAL TOWARDS BIGGER NUMBERS UNTIL RED LED BELOW DIAL TURNS **ON**. CHECK THAT ALL EXTERIOR LIGHTS ARE ON.
5. TURN "SET/RUN" SWITCH TO "RUN" POSITION AND REPLACE PLASTIC COVER.

MORNING ADJUSTMENT:

1. REMOVE HONEYWELL CONTROLLER PLASTIC COVER (ONE SCREW).
2. SET "SET/RUN" SWITCH TO "SET" POSITION. SET BOTH DIALS (STAGE 1 AND STAGE 2) AT #10. BOTH RED LED'S SHALL BE ON. ALL EXTERIOR LIGHTS SHALL BE **ON**.
3. WAIT TILL IT GETS BRIGHTER. AT LIGHT LEVEL SLIGHTLY HIGHER THAN 20 FC SLOWLY ROTATE STAGE 1 DIAL TOWARD SMALLER NUMBERS UNTIL RED LED BELOW TURNS OFF. CHECK THAT PARKING LOT, WALLPACKS, AND FLOODLIGHTS ARE **OFF**.
4. WAIT. AT LIGHT LEVEL SLIGHTLY HIGHER THAN 100FC SLOWLY ROTATE STAGE 2 DIAL TOWARD SMALLER NUMBERS UNTIL RED LED BELOW TURNS OFF. CHECK THAT ALL EXTERIOR LIGHTS ARE **OFF**.
5. TURN "SET/RUN" SWITCH TO "RUN" POSITION AND REPLACE PLASTIC COVER.

6. **SALES AREA** (REFER TO GROUPS 1, 2 & 3 LOGIC, E2.1A)
   VERIFY THE FOLLOWING:
   a. TIME: BEFORE 7:55 AM AND SECURITY SYSTEM IS DISARMED – ONLY "MAINTENANCE LIGHTS" – CIRCUITS (21,24,25) MUST BE **ON**. (EVERY OTHER FIXTURE IN SIX ROWS OF LIGHTS SPACED EVENLY).
   b. TIME: AFTER 7:55 AM – ALL THE SALES AREA AND THE REST OF GROUP 2 CIRCUITS MUST BE **ON**.
   c. TIME: 10:10 PM – 10:30 PM – ONLY SIX CIRCUITS. (21,24,25,13,22,27) MUST BE **ON** (EVERY OTHER FIXTURE IN TWELVE ROWS OF LIGHTS SPACED EVENLY). ALL THE CIRCUITS OF GROUP 2 MUST BE **OFF**.
   d. TIME: AFTER 10:30 PM – ALL THE CIRCUITS TURN **OFF** EXCEPT GROUP #1.

7. **PHARMACY** (REFER TO GROUP 5 LOGIC, E2.1A)
   VERIFY THE FOLLOWING:
   a. TIME: BEFORE 7:55 AM PHARMACY LIGHTS (CIRCUITS 1, & 3) MUST BE **OFF**.
   b. TIME: AFTER 7:55 AM ALL PHARMACY LIGHTS MUST BE **ON**.
   c. TIME: 10:30 PM – ALL PHARMACY LIGHTS MUST BE **OFF**.

8. **GONDOLA RECEPTACLES**
   VERIFY THE FOLLOWING:
   a. TIME: BEFORE 7:55 AM – RECEPTACLES (CIRCUITS 25,27,29,31,33,35) MUST BE DE-ENERGIZED.
   b. TIME: AFTER 7:55 AM – ALL RECEPTACLES CIRCUITS MUST BE ENERGIZED.
   c. TIME: 10:10 PM – ALL RECEPTACLE CIRCUITS MUST BE DE-ENERGIZED.

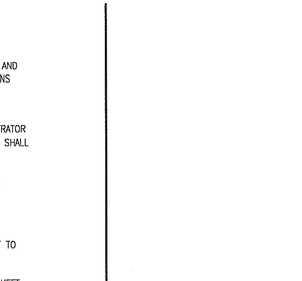
9. **TEMPERATURE CONTROLLER:**
   NOTES:
   1. **TORCH OR HEAT GUN MUST NOT BE USED TO WARM SENSOR**
   2. HEATER MAY NOT TURN ON BECAUSE ITS THERMOSTAT SETTING IS TOO LOW (DURING THE TEST THERMOSTAT SETTING COULD BE RAISED TEMPORARILY).
   3. SENSOR WARMING TAKES A FEW MINUTES.

   ABBREVIATION:
   WH = WALL HEATERS
   EH = ENTRANCE HEATER
   TERMINAL "NC" = TERMINAL "NC" (RELAY 1) IN D8129 RELAY MODULE
   WARM SENSOR = SENSOR SHOULD BE WARMED WITH HANDS
   COOL SENSOR WITH SPRAY = SPRAY SENSOR WITH "COMPONENT COOLER" (PURCHASE THROUGH RADIO SHACK)
   COOL SENSOR WITH ICE = USE CUP WITH ICE
   T = TEMPERATURE

   A. NON-24 HOUR STORE
   1. OUTSIDE TEMPERATURE (SHOWN ON CONTROLLER DISPLAY) BELOW 25°F.
      a. WITH SECURITY DISARMED VERIFY THAT WH AND EH ARE ON. WARM SENSOR. VERIFY THAT WH AND EH TURN OFF (AT T ABOVE 50°F).
         ALLOW SENSOR TO COOL TO OUTSIDE TEMPERATURE (WATCH CONTROLLER DISPLAY).
      b. DISCONNECT WIRE ON TERMINAL "NC".
         VERIFY THAT WH AND EH (FOR STORE WITH VESTIBULE) ARE ON; EH FOR STORE WITHOUT VESTIBULE SHALL BE OFF. WARM SENSOR.
         VERIFY THAT WH TURN OFF (AT T ABOVE 25°F) AND EH FOR STORES WITH VESTIBULES TURN OFF (AT T ABOVE 32°F).
         RESTORE WIRE ON TERMINAL "NC".
   2. OUTSIDE TEMPERATURE ABOVE 25°F BUT BELOW 50°F.
      a. WITH SECURITY DISARMED VERIFY THAT WH AND EH ARE ON. WARM SENSOR. VERIFY THAT WH AND EH TURN OFF (AT T ABOVE 50°F).
         ALLOW SENSOR TO COOL TO OUTSIDE TEMPERATURE.
      b. DISCONNECT WIRE ON TERMINAL "NC".
         VERIFY THAT:
         1. WH AND EH FOR STORE WITHOUT VESTIBULE ARE OFF; EH FOR STORE WITH VESTIBULE SHALL BE ON (IF T BELOW 32°F).
            FOR STORE WITH VESTIBULE WARM SENSOR AND VERIFY THAT EH TURN OFF (AT T ABOVE 32°F).
            COOL SENSOR WITH SPRAY.
            WH AND EH SHALL TURN ON.
            RESTORE WIRE ON TERMINAL "NC".
   3. OUTSIDE TEMPERATURE ABOVE 50°F.
      a. WITH SECURITY DISARMED VERIFY THAT WH AND EH ARE OFF.
      b. DISCONNECT WIRE ON TERMINAL "NC" – VERIFY THAT WH AND EH ARE OFF. RESTORE WIRE ON TERMINAL "NC".
      c. COOL SENSOR WITH SPRAY. VERIFY THAT WH AND EH TURN ON. DISCONNECT WIRE ON TERMINAL "NC"– WH AND EH SHALL BE ON.
         RESTORE WIRE ON TERMINAL "NC".

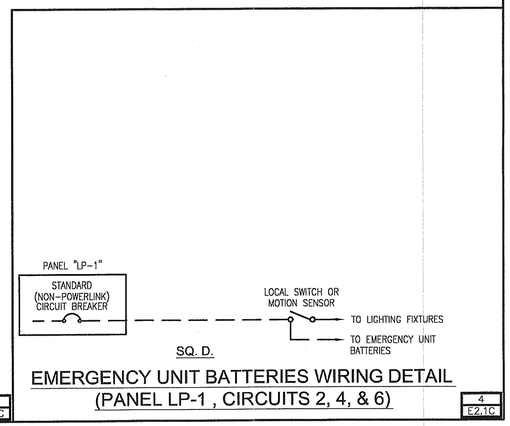
   B. 24 HOUR STORES
   1. OUTSIDE TEMPERATURE ABOVE 50°F.
      a. WH AND EH SHALL BE OFF.
      b. COOL SENSOR WITH ICE. WH AND EH SHALL TURN ON (AT T BELOW 50°F).
   2. OUTSIDE TEMPERATURE BELOW 50°F.
      a. WH AND EH SHALL BE ON.
      b. WARM SENSOR. WH AND EH SHALL TURN OFF (AT T ABOVE 50°F).

2 E2.1C



SQ. D. PHOTOCELL INSTALLATION DETAIL

NOT TO SCALE



EMERGENCY UNIT BATTERIES WIRING DETAIL
(PANEL LP-1 , CIRCUITS 2, 4, & 6)

3 E2.1C

4 E2.1C

issued for:
OWNER / TENANT REVIEW:
09 APR 07
BIDS & PERMITS:
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Store #11415

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Testing Diagrams Electrical Details & Sq. "D" Wiring Diagram

DO NOT SCALE DRAWING

issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:

E2.1C

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PANEL LP-1

* SEE NOTE 8

SPACES	MOUNTING	LOCATION	MAIN LUG	MAIN	VOLTAGE	MAIN BUS	FEED
42	SURFACE	ELEC. ROOM	ONLY 225A	BREAKER	120/208V. 3ø. 4W	RAT. 225A	BOTTOM

CKT. NO.	DESCRIPTION	LOADS A ø	LOADS B ø	LOADS C ø	BKR SIZE	POLE	BKR SIZE	POLE	LOADS A ø	LOADS B ø	LOADS C ø	DESCRIPTION	CKT. NO.
1	PHARMACY LIGHTING	900W			20	1	20	1	775W			TOILET, EMPLOYEE RM. & UTILITY AREA	2
3	PHARMACY LIGHTING		1425W		20	1	20	1		625W		GENERAL STOCK LIGHTING	4
5	SPARE			–	20	1	20	1			875W	ELECTRIC ROOM, OFFICE, TRAINING/MULTI-PURPOSE ROOM	6
7	EXIT AND EGRESS EMERGENCY	205			20	1	20	1	–			SPARE	8
9	SPARE		–		20	1	20	1		1345W		NIGHT LIGHTS/EMERGENCY	10
11	GENERAL SALES LIGHTING			1000W	20	1	20	1			1225W	GENERAL SALES LIGHTING	12
13	GENERAL SALES LIGHTING	1250W			20	1	20	1	1075W			GENERAL SALES LIGHTING	14
15	'H' FIXTURE LIGHTING (SOUTH & EAST WALL)		1225W		20	1	20	1		1236W		ANTHONY COOLER/FREEZER DOOR LIGHTS (FLUOR.)	16
17	PHOTO LIGHTING			1525W	20	1	20	1			1200W	'H' FIXTURE COSMETIC LIGHTS & RECEPTACLES	18
19	GENERAL SALES & PATIENT SEATING LIGHTING	1800W			20	1	20	1	825W			'H' FIXTURES LIGHTING (WEST WALL)	20
21	GEN SALES LIGHTING & HOT WATER RECIRCULATING PUMP		1325W		20	1	20	1		725W		GENERAL SALES LIGHTING	22
23	GENERAL SALES LIGHTING			1225W	20	1	20	1			950W	GENERAL SALES LIGHTING	24
25	GENERAL SALES LIGHTING	1225W			20	1	20	1	625W			GENERAL SALES LIGHTING	26
27	GENERAL SALES LIGHTING		1000W		20	1	20	1		900W		GENERAL SALES LIGHTING	28
29	GENERAL SALES LIGHTING			1225W	20	1	20	1			1675W	GENERAL SALES LIGHTING	30
31	ATM/HALLMARK/1HR PHOTO(WIN)	1600W			20	1	20	1	1365W			GENERAL SALES LIGHTING	32
33	MORTAR & PESTLE (SIGN LIGHTING)		1200		20	1	20	1		1600W		COSMETIC LIGHT BOXES RECEPTACLES	34
35	SPARE			–	20	1	20	1			1200W	COSMETIC LIGHT BOXES RECEPTACLES	36
37	SPARE	–			20	1	20	1	–			SPARE	38
39	SPARE		–		20	1	20	1		200W		WALL HEATERS INTERLOCK	40
41	SPARE			–	20	1	20	1			100W	LIGHTING CONTROLS	42
	TOTAL	6980W	6175W	4975W					4665W	6631W	7225W		

NOTE 9 (CKT. 1, 3) — NOTE 9 (CKT. 1–41) — NOTE 7 (CKT. 15, 16) — NOTE 9 (CKT. 25–41) — NOTE 14 (CKT. 40) — NOTE 11 (CKT. 42) — NOTE 15 (CKT. 2, 6)

PANEL LP-SP

COORDINATE EXTERIOR SIGN LOCATIONS, SHOWN ON DRAWING A2.1 WITH CIRCUITING SHOWN ON DRAWING E1.1.

* SEE NOTE 8

SPACES	MOUNTING	LOCATION	MAIN LUG	MAIN	VOLTAGE	MAIN BUS	FEED
42	SURFACE	ELEC. ROOM	ONLY 225A	BREAKER	120/208V. 3ø. 4W	RAT. 225A	BOTTOM

CKT. NO.	DESCRIPTION	LOADS A ø	LOADS B ø	LOADS C ø	BKR SIZE	POLE	BKR SIZE	POLE	LOADS A ø	LOADS B ø	LOADS C ø	DESCRIPTION	CKT. NO.
1	MONUMENT SIGN (WALGREENS)	1080W			20	1	20	1	241W			'WALGREENS' SIGNS (EXTERIOR ELEV 1 & 4)	2
3	LED READERBOARD		1350W		20	1	20	1		–		SPARE	4
5	LED READERBOARD			1350W	20	1	20	1			–	SPARE	6
7	DRIVE-THRU CANOPY – LIGHTING	1045W			20	1	20	1	–			SPARE	8
9	SPACE				–	–	20	1		304W		'WALGREENS' SIGNS (EXTERIOR ELEV 2 & 3)	10
11	SPACE				–	–	20	1			–	SPARE	12
13	SPACE				–	–	20	1	720W			"O" FIXTURES (COMPACTOR, DRIVE-THRU, & RECEIVING AREAS)	14
15	SPACE				–	–	20	1		124W		ENTRANCE CANOPY (FIXTURE "H-1")	16
17	AWNING/CANOPY LIGHTING			1470W	20	1	30				920W	SITE LIGHTING	18
19	AWNING/CANOPY LIGHTING	1260W			20	1	2	920W				SITE LIGHTING	20
21	AWNING/CANOPY LIGHTING		1260W		20	1	30			1380W		SITE LIGHTING	22
23	AWNING/CANOPY LIGHTING			1680W	20	1	2				1380W	SITE LIGHTING	24
25	GONDOLA RECEPTACLES	1750W			20	1	30	1150W				SITE LIGHTING	26
27	GONDOLA RECEPTACLES		350W		20	1	2		1150W			SITE LIGHTING	28
29	GONDOLA RECEPTACLES			1000W	20	1	30				1380W	SITE LIGHTING	30
31	GONDOLA RECEPTACLES	1400W			20	1	2	1380W				SITE LIGHTING	32
33	GONDOLA RECEPTACLES		1400W		20	1	20	1		225W		FACADE ACCENT FIXTURES	34
35	GONDOLA RECEPTACLES			700W	20	1	20	1			225W	FACADE ACCENT FIXTURES	36
37	SPARE	–			20	1	30	840				DECORATIVE POST TOPS	38
39	SPARE		–		20	1	2		840			DECORATIVE POST TOPS	40
41	LIGHTING CONTROLS			–	20	1	20	1		–		SPARE	42
	TOTAL	6535W	4360W	6200W					5251W	4023W	3905W		

NOTE 9 & NOTE 16 (TYP.) — NOTE 9 — NOTES 10 & 11

PANEL LP-CR

SPACES	MOUNTING	LOCATION	MAIN LUG	MAIN	VOLTAGE	MAIN BUS	FEED
42	SURFACE	ELEC. ROOM	ONLY 225A	BREAKER	120/208V. 1ø. 3W	RAT. 225A	TOP

CKT. NO.	DESCRIPTION	LOADS A ø	LOADS B ø	BKR SIZE	POLE	BKR SIZE	POLE	LOADS A ø	LOADS B ø	DESCRIPTION	CKT. NO.
1	OFFICE SYSTEM EQUIPMENT	1000W		20	1	20	1			SPARE	2
3	OFFICE SYSTEM EQUIPMENT		500W	20	1	20	1			SPARE	4
5	(3) FRONT CASH REGISTERS	900W		20	1	20	1	1000W		Rx "FILLING" TERMINALS	6
7	(2) Rx FRONT CASH REGISTERS		600W	20	1	20	1		1000W	Rx "VERIFICATION" TERMINALS	8
9	(2) 1-HR PHOTO CASH REGISTERS	600W		20	1	20	1	500W		Rx "CONSULTATION" TERMINALS	10
11	(2) COSMETICS CASH REGISTERS		600W	20	1	20	1		500W	Rx COMMUNICATIONS CABINET	12
13	FUTURE PRESCRIPTION FILLING ROBOT	1680W		20	1	20	1	500W		Rx COMMUNICATIONS CABINET	14
15	COVERT CCTV SYSTEM		500W	20	1	20	1		500W	TRAINING TERMINAL	16
17	BURGLAR/TELEPHONE/SOUND SYSTEM	800W		20	1	20	1	700W		Rx CAMERA & CCTV MONITOR	18
19	TIME/ATTENDANCE (ELECTRONIC TIME CLOCK) & 1-HR PHOTO TERMINAL		700W	20	1	20	1		500W	TECH EQUIPMENT CABINET	20
21	FIRE ALARM SYSTEM	200W		20	1	20	1	400W		SAT ANTENNA-DIGITAL INTERFACE UNIT (DIU/O)	22
23	ENERGY MANAGEMENT SYSTEM (EMS)		28W	20	1	20	1			SPARE	24
25	AUTOMATED TELLER MACHINE (ATM)	200W		20	1	20	1	500W		Rx "DRIVE THRU" TERMINAL	26
27	Rx DRIVE-THRU CASH REGISTER		300W	20	1	20	1		500W	TECH EQUIPMENT CABINET	28
29	SPARE			20	1	20	1	500W		TECH EQUIPMENT CABINET	30
31	SPARE			20	1	20	1			SPARE	32
33	SPACE	–	–	–	–	–	–			SPACE	34
35	SPACE	–	–	–	–	–	–			SPACE	36
37	SPACE	–	–	–	–	–	–			SPACE	38
39	SPACE	–	–	–	–	–	–			SPACE	40
41	SPACE	–	–	–	–	–	–			SPACE	42
	TOTAL	5380W	3228W					4100W	3000W		

NOTE 24

NOTES

1. ALL PANELBOARDS SHALL BE NEW AND HAVE BOLT-ON CIRCUIT BREAKERS 20A, 1-POLE (UNLESS NOTED OTHERWISE) HAVE THERMOMAGNETIC TRIP, QUICK MAKE/QUICK BREAK, AND TRIP FREE HANDLES. FOR SHORT CIRCUIT RATING REFER TO WALGREEN CO. CRITERIA SPECIFICATIONS SECTION 160400, PAR. 2.02.
2. PROVIDE "LOCK-ON" HARDWARE FOR ALL CRITICAL LOADS, COOLER/FREEZER, WATER COOLER, REFRIGERATORS, ETC.
3. NO SPACES ALLOWED IN PANELS UNLESS NOTED OTHERWISE. ALL PANELS SHALL HAVE 42 CIRCUIT BREAKERS UNLESS NOTED OTHERWISE.
4. NOT USED.
5. PANEL "LP-CR" SHALL HAVE A NEUTRAL BUS WITH 43 SCREWS (MINIMUM).
6. THE FOLLOWING WARNING SIGN SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR ON EACH PANELBOARD ENCLOSURE: **"AREA IN FRONT OF THIS ELECTRICAL PANEL MUST BE KEPT CLEAR FOR 36" PER OSHA-NEC REGULATIONS."**
7. WALK-IN COOLER/FREEZER WIRING:
   1) LP1, CIRCUIT 16-FEEDS FLUORESCENT LIGHTING FIXTURES ONLY (CONTROLLED BY SQ."D" PANEL LP1). **DO NOT CONNECT DOOR HEATERS AND (OR) ALARM UNIT TO THIS CIRCUIT.**
   2) LP3, CIRCUIT 10-FEEDS ANTHONY FREEZER GLASS DOOR HEATERS AND FRAME HEATERS.
   3) LP3, CIRCUIT 12-FEEDS "V MODEL" WALK-IN COOLER/FREEZER MANDOOR FRAME HEATER AND INCANDESCENT LIGHT FIXTURE(S) AND ALARM UNIT ONLY.
8. LIGHTING PANELBOARDS "LP-1" & "LP-SP" MUST BE BOTTOM FED TO ACCOMODATE LIGHTING CONTROL LOW VOLTAGE RELAY SECTION.
9. DENOTES CIRCUITS REMOTELY CONTROLLED BY SIEMENS INSTABUS RELAY OR SQUARE "D" POWERLINK PANELS. FOR SEQUENCE OF OPERATION REFER TO DRAWING E2.1A.
   SIEMENS INSTABUS ONLY.
10. FACTORY PREWIRED.
11. NOT USED.
12. NOT USED.
13. FOR SPLIT BUS PANEL "LP-2" (VERSION 2), SECTION "B" CONTACTOR CONTROL CIRCUIT REFER TO DETAIL 6/E2.1B.
14. DENOTES CIRCUITS REMOTELY CONTROLLED BY SIEMENS INSTABUS RELAY. (MANUAL CONTROL – FOR SQUARE "D" SYSTEM). REFER TO DETAIL 4 DRAWING E2.1C.
15. FOR SIGN ELEVATIONS, REFER TO DRAWING E1.7.
16. CIRCUIT BREAKER MUST BE FACTORY PRE-WIRED TO CONTACTOR FOR SIEMENS AND SQ. D PANELS. CIRCUIT BREAKER MUST BE WIRED IN THE FIELD TO CONTACTOR FOR G.E. PANELS.
17. EACH REMOTELY CONTROLLED RELAY (SYSTEMS SIMILAR TO SIEMENS) MUST BE EQUIPPED WITH MANUAL MECHANICAL OVERRIDE PROVISIONS. MECHANICAL OVERRIDE PROVISION WOULD ALLOW STORE PERSONNEL TO CONTROL LIGHTS MANUALLY WHEN SYSTEM IS NOT FUNCTIONAL.
18. APPLIES ONLY TO STORES WITH OUTSIDE TEMPERATURE (PER SECTION 18) 34°F. AND BELOW.
19. APPLIES ONLY TO STORES WITH OUTSIDE TEMPERATURE (PER SECTION 18) ABOVE 34°F.
20. APPLIES ONLY TO STORES WHEN DESIGN TEMPERATURE IS 19°F AND BELOW.
21. THE LATEST COPY OF PANELS LP-1 AND LP-SP SCHEDULES MUST BE FAXED BY ELECTRICAL CONTRACTOR TO WALGREENS HELP CENTER AT (847) 948-6883.
22. NOT USED.
23. APPLIES ONLY TO STORES WITH CARRIER HVAC ROOF-TOP UNITS. REFER TO DRAWING ME1.1 FOR ADDITIONAL INFORMATION.
24. NOT USED.

PANEL LP-2 (VERSION 2) – SPLIT BUS PANEL – APPLIES TO STORES WITH WALL HEATERS ONLY (SEE NOTE 14).

SPACES	MOUNTING	LOCATION	MAIN LUG	MAIN	VOLTAGE	MAIN BUS	FEED
42	SURFACE	ELEC. ROOM	ONLY 225A	BREAKER	120/208V. 3ø. 4W	RAT. 225A	TOP

CKT. NO.	DESCRIPTION	LOADS A ø	LOADS B ø	LOADS C ø	BKR SIZE	POLE	BKR SIZE	POLE	LOADS A ø	LOADS B ø	LOADS C ø	DESCRIPTION	CKT. NO.
1	AIR CURTAIN	3543W			40	3	30	3	1801W			CARDBOARD COMPACTOR	2
3			3543W							1801W			4
5				3543W							1801W		6
7	AIR CURTAIN	3338W			35	3	30	3	1801W			TRASH COMPACTOR	8
9			3338W							1801W			10
11				3338W							1801W		12
13	TRAIN. RM/MULTI-PURPOSE RM RECEPTACLES	500W			20	1	20	1	828W			ENTRANCE HEATER	14
15	TRAIN. RM/MULTI-PURPOSE RM PLUGMOLD		1000W		20	1				828W			16
17	WATER COOLER			500W	20	1	3				828W		18
19	HOT WATER VENTING SYSTEM	300W			20	1	20	1	400W			IRRIGATION CONTROLLER	20
21	EMPLOYEE ROOM REFRIGERATOR		500W		20	1	20	1				SPARE	22
23	EMPLOYEE ROOM GFCI RECEPTACLE			1000W	20	1	20	1				SPARE	24
25	SECTION "B" FEEDER CIRCUIT BREAKER				60	3	20	1				SPARE	26
27							20	1				SPARE	28
29							20	1				SPARE	30
	NOTE: PROVIDE 60A, 3P, PANEL MOUNTED CONTACTOR												
31	WALL HEATER-EMPLOYEE ROOM	1000W			20	2	30	2	1000W			WALL HEATER-TRAINING RM/MULTI-PURPOSE RM	32
33			1000W							1000W			34
35	WALL HEATER – TOILET			1000W	20	2	30	2			2000W	WALL HEATER – PASSAGE # 1	36
37		1000W							2000W				38
39	SPARE				20	1	20	1				SPARE	40
41	SPARE				20	1	20	1				SPARE	42
	TOTAL	7681W	8381W	8381W					4830W	4430W	4430W		

NOTE 17 — SECTION A — SECTION B — NOTE 21

PANEL LP-3

SPACES	MOUNTING	LOCATION	MAIN LUG	MAIN	VOLTAGE	MAIN BUS	FEED
42	SURFACE	ELEC. ROOM	ONLY 225A	BREAKER	120/208V. 3ø. 4W	RAT. 225A	TOP

CKT. NO.	DESCRIPTION	LOADS A ø	LOADS B ø	LOADS C ø	BKR SIZE	POLE	BKR SIZE	POLE	LOADS A ø	LOADS B ø	LOADS C ø	DESCRIPTION	CKT. NO.
1	ROOFTOP UNIT MAINTENANCE RECEPTACLES	1260W			20	1	20	1				SPARE	2
3	ELECTRONIC ARTICLE SURVEILLANCE (EAS)		400W		20	1	20	1				SPARE	4
5	PHARMACY BIOLOGICAL REFRIGERATOR			500W	20	1	20	1				SPARE	6
7	OFFICE PLUGMOLD	1000W			20	1	20	1				SPARE	8
9	OFFICE PLUGMOLD		1000W		20	1	20	1		993W		ANTHONY COOLER GLASS DOOR & FRAME HEATERS	10
11	OFFICE PLUGMOLD, CONV RECEPTACLE (PASSAGE #1)			1200W	20	1	20	1			720W	"V MODEL" WALK-IN COOLER/FREEZER MANDOOR HEATERS	12
13	SPARE				20	1	20	1	1635W			ANTHONY FREEZER GLASS DOOR & FRAME HEATERS	14
15	SPARE				20	1	20	1		480W		COOLER #1 & #2 EVAPORATORS	16
17	SPARE				20	1	20	1			60W	WALK-IN FREEZER CONDENSATE DRAIN LINE HEATER	18
19	STOCKROOM GENERAL PURPOSE RECEPTACLES	400W			20	1	20	1	600W			RECEPTACLES (SHELVING)	20
21	STOCKROOM DOORBELL TRANSFORMER		100W		20	1	20	1		400W		RECEPTACLES (SHELVING)	22
23	Rx DRIVE-THRU AUDIO & ALERT SYSTEM			100W	20	1	20	1			200W	GENERAL PURPOSE RECEPTACLE (SATELLITE DISH)	24
25	Rx DRIVE-THRU AUDIO & ALERT SYSTEM	100W			20	1	20	1				SPARE	26
27	Rx WORK COUNTER CONVEYOR OUTLET		500W		20	1	20	1				SPARE	28
29	BAVIS TRANS-TRAX SYSTEM (OR DIEBOLD)			400W	20	1	20	1				SPARE	30
31	RX WORK COUNTER PLUGMOLD	1000W			20	1	20	1				SPARE	32
33	RX WORK COUNTER PLUGMOLD		1000W		20	1	20	1				SPARE	34
35	Rx ROLL DOWN SHUTTER			300W	20	1	20	1				SPARE	36
37	Rx RECEPTACLE (INSIDE CASH REG STAND)	600W			20	1	20	1	600W			FRONT RECEPTACLES (INSIDE CASH REG STAND)	38
39	PATIENT SEATING CONV RECEPTACLE		1000W		20	1	20	1		400W		COSMETICS RECEPTACLES (INSIDE CASH REG STAND)	40
41	Rx WORK COUNTER RECEPTACLES			1000W	20	1	20	1			400W	1-HR PHOTO RECEPTACLES (INSIDE CASH REG STAND)	42
	TOTAL	4360W	4000W	3500W					2835	2273W	1380W		

NOTE 7

PANEL LP-4

SPACES	MOUNTING	LOCATION	MAIN LUG	MAIN	VOLTAGE	MAIN BUS	FEED
42	SURFACE	ELEC. ROOM	ONLY 225A	BREAKER	120/208V. 3ø. 4W	RAT. 225A	TOP

CKT. NO.	DESCRIPTION	LOADS A ø	LOADS B ø	LOADS C ø	BKR SIZE	POLE	BKR SIZE	POLE	LOADS A ø	LOADS B ø	LOADS C ø	DESCRIPTION	CKT. NO.
1	GENERAL PURPOSE RECEPTACLES	800W			20	1	20	1	1200W			AUTOMATIC SLIDING DOORS	2
3	SHELVING PLUGMOLD		1000W		20	1	20	1				SPARE	4
5	SHELVING PLUGMOLD			2000W	20	1	30				3000W	1-HR PHOTO LAB PAPER PROCESSOR	6
7	SHELVING PLUGMOLD	500W			20	1	2P	3000W				1-HR PHOTO LAB PAPER PROCESSOR	8
9	SHELVING PLUGMOLD		500W		20	1	30			2100W		1-HR PHOTO LAB FILM PROCESSOR	10
11	1-HR PHOTO LAB RECEPTACLES			400W	20	1	2P				2100W	1-HR PHOTO LAB FILM PROCESSOR	12
13	1-HR PHOTO LAB PLUGMOLD	500W			20	1	20	1	500W			SILVER RECOVERY UNIT	14
15	ALADDIN KIOSK #1 (WALL)		300W		20	1	20	1		500W		SILVER RECOVERY UNIT	16
17	1-HR PHOTO LAB PLUGMOLD			500W	20	1	20	1			300W	ALADDIN KIOSK #2 (COUNTER)	18
19	1-HR PHOTO LAB RECEPTACLES	400W			20	1	20	1	1200W			HEAT TRACE	20 GFI
21	1-HR PHOTO LAB RECEPTACLE		180W		20	1	20	1		1200W		HEAT TRACE	22 GFI
23	SPARE				20	1	20	1				SPARE	24
25	SPARE				20	1	20	1				SPARE	26
27	SPARE				20	1	20	1				SPARE	28
29	SPARE				20	1	20	1				SPARE	30
31	SPARE				20	1	20	1				SPARE	32
33	SPARE				20	1	20	1				SPARE	34
35	SPARE				20	1	20	1				SPARE	36
37	SPARE				20	1	20	1				SPARE	38
39	SPARE				20	1	20	1				POWER MONITORING EQUIPMENT	40
41	SPARE				20	1	3P						42
	TOTAL	2200W	1980W	2900W					5900W	3800W	5400W		

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STATE OF MICHIGAN — RICHARD J. CLEVE — ARCHITECT — NO. 38436 — LICENSED ARCHITECT

drawing:

Electrical Panel Schedules (120V)

DO NOT SCALE DRAWING

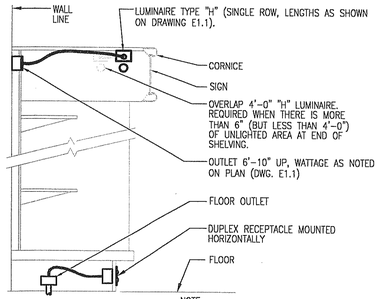
issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:

E3.1

SELF SERVICE SHELVING LIGHTING DETAIL - LUMINAIRE TYPE 'H' AND RECEPTACLE DETAIL

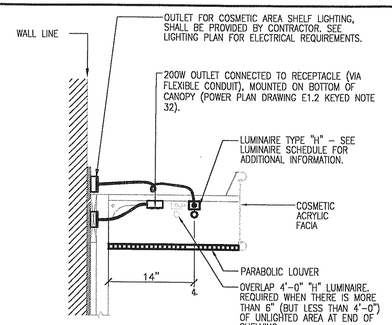


SCALE: NOT TO SCALE

NOTE:
OUTLET BOXES AND RECEPTACLES FURNISHED AND INSTALLED BY CONTRACTOR.

1 / E4.1

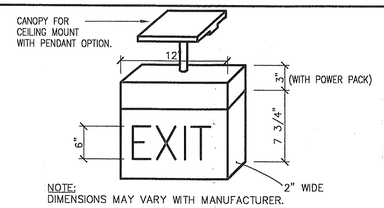
LIGHTING DETAIL - LUMINAIRE TYPE 'H' (COSMETICS AREA)



SCALE: NOT TO SCALE

2 / E4.1

EXIT SIGN DETAIL



NOTE:
DIMENSIONS MAY VARY WITH MANUFACTURER.

3 / E4.1

POLE SELECTION TABLE

CONSULTANT SHALL EVALUATE SITE SPECIFIC CONDITIONS AND APPLICABLE CODES BEFORE MAKING FINAL SELECTION OF POLES ON DWG. E0.1, NOTE 11. THE FOLLOWING POLES ARE TYPICAL WITH A 1.3 GUST FACTOR.

		WIND SPEED 90MPH AND BELOW	WIND SPEED 120MPH AND BELOW	WIND SPEED 150MPH AND BELOW
1-HEAD	NOT USED			
2-HEADS	McGRAW/EDISON	WSSS-5M-29'-6"-SFE2		
3-HEADS	NOT USED			
3-HEADS WITH ONE "W-2" AT POLE TOP	NOT USED			
3-HEADS WITH ONE "W-1" AT 9 FEET	NOT USED			
4-HEADS	NOT USED			
4-HEADS WITH ONE "W-1" AT 9 FEET	NOT USED			

NATIONAL ACCOUNTS

I. LUMINAIRES

A. WALGREENS, ITS DEVELOPERS AND THEIR CONTRACTORS WORKING ON WALGREENS PROJECTS LOCATED IN ALABAMA, CALIFORNIA, CONNECTICUT, DELAWARE, FLORIDA, GEORGIA, HAWAII, ILLINOIS, INDIANA, KENTUCKY, MARYLAND, MASSACHUSETTS, MICHIGAN, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, OHIO, PENNSYLVANIA, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, TEXAS, VERMONT, VIRGINIA, WASHINGTON D.C., WEST VIRGINIA, WISCONSIN AND PUERTO RICO MUST CALL GESCO FOR COOPER LUMINAIRES FOR PRICE QUOTES AND BILL OF MATERIAL CONFIRMATION FOR THEIR SPECIFIC PROJECT AT (630) 718-6599.

B. WALGREENS, ITS DEVELOPERS AND THEIR CONTRACTORS WORKING ON WALGREENS PROJECTS LOCATED IN ARIZONA, ARKANSAS, COLORADO, IDAHO, IOWA, KANSAS, LOUISIANA, MINNESOTA, MISSOURI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, SOUTH DAKOTA, UTAH, WASHINGTON, AND WYOMING MUST CALL VILLA LIGHTING FOR LITHONIA LUMINAIRES FOR PRICE QUOTES AND BILL OF MATERIAL CONFIRMATION FOR THEIR SPECIFIC PROJECT AT (800) 325-0963.

II. LAMPS

A. WALGREENS, ITS DEVELOPERS AND THEIR CONTRACTORS WORKING ON WALGREENS PROJECTS MUST CALL VILLA LIGHTING (SUE MYERS) AT (800) 325-0963.

B. THE GENERAL CONTRACTORS WILL SELECT AN ELECTRICAL CONTRACTOR TO PURCHASE AND INSTALL THE LAMP PACKAGE. PURCHASE ORDERS TO VILLA LIGHTING WILL BE ISSUED BY THE ELECTRICAL CONTRACTOR FOR ALL STORES.

III. OCCUPANCY SENSORS

A. WALGREENS, ITS DEVELOPERS AND THEIR CONTRACTORS WORKING ON WALGREENS PROJECTS LOCATED IN ALABAMA, CALIFORNIA, CONNECTICUT, DELAWARE, FLORIDA, GEORGIA, HAWAII, ILLINOIS, INDIANA, KENTUCKY, MARYLAND, MASSACHUSETTS, MICHIGAN, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, OHIO, PENNSYLVANIA, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, TEXAS, VERMONT, VIRGINIA, WASHINGTON D.C., WEST VIRGINIA, WISCONSIN AND PUERTO RICO MUST CALL GESCO FOR LEVITON OCCUPANCY SENSORS AT (630) 718-6599.

B. WALGREENS, ITS DEVELOPERS AND THEIR CONTRACTORS WORKING ON WALGREENS PROJECTS LOCATED IN ARIZONA, ARKANSAS, COLORADO, IDAHO, IOWA, KANSAS, LOUISIANA, MINNESOTA, MISSOURI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, SOUTH DAKOTA, UTAH, WASHINGTON, AND WYOMING MUST CALL VILLA LIGHTING FOR MYTECH OCCUPANCY SENSORS AT (800) 325-0963.

C. THE GENERAL CONTRACTORS WILL SELECT AN ELECTRICAL CONTRACTOR TO PURCHASE AND INSTALL THE OCCUPANCY SENSORS. PURCHASE ORDERS TO GESCO OR VILLA LIGHTING WILL BE ISSUED BY THE ELECTRICAL CONTRACTOR FOR ALL STORES.

OCCUPANCY SENSOR SCHEDULE

LOCATION	MOTION SENSOR TYPE	CATALOG NUMBER	MANUFACTURER	VOLTAGE	MOUNTING	REMARKS
OFFICE	MS1	OSC05-UOW-WAL	LEVITON	120VAC	MOUNT ON CEILING	LEVITON-UTILIZE W/ POWER PACK, OSP20-0D0-WAL.
MENS BATHROOM	MS1	OSC05-UOW-WAL	LEVITON	120VAC	MOUNT ON CEILING	LEVITON-UTILIZE W/ POWER PACK, OSP20-0D0-WAL.
WOMENS BATHROOM	MS1	OSC05-UOW-WAL	LEVITON	120VAC	MOUNT ON CEILING	LEVITON-UTILIZE W/ POWER PACK, OSP20-0D0-WAL.
EMPLOYEE ROOM	MS2	ODS15-ID-WAL	LEVITON	120VAC	MOUNT ON WALL @ 42" A.F.F.	SEE NOTE 3
TRAINING ROOM/ MULTI-PURPOSE ROOM	MS2	ODS15-ID-WAL	LEVITON	120VAC	MOUNT ON WALL @ 42" A.F.F.	SEE NOTE 3
PASSAGEWAY #1	MS4	OSC20-UOW-WAL	LEVITON	120VAC	MOUNT ON LUMINAIRE, AS NOTED ON DRAWING E1.1 (OR CEILING, IF APPLICABLE)	LEVITON-UTILIZE W/ POWER PACK, OSP20-0D0-WAL.
GENERAL STOCKROOM	MS3	OSC04-IOW-WAL	LEVITON	120VAC	MOUNT ON LUMINAIRE, AS NOTED ON DRAWING E1.1 (OR CEILING, IF APPLICABLE)	LEVITON-UTILIZE W/ POWER PACK, OSP20-0D0-WAL & MOUNTED IN A 3" J-BOX. SEE NOTE 1.

NOTES:

1. OCCUPANCY SENSORS IN STOCKROOM/RECEIVING AREA SHALL BE DIVIDED INTO TWO (2) ZONES:
   ZONE 1 – RECEIVING AREA AND PARTIAL STOCKROOM, COMPRISING OF:
   LEVITON (2) OSC04-IOW-WAL SENSOR & (1) ODP20-WAL POWER PACK, OR
   HUBBELL (2) OMNI IR SENSOR & (1) MP POWER PACK.
   ZONE 2 – LONG STOCKROOM HALLWAY, COMPRISING OF:
   LEVITON (2) OSC04-IOW-WAL SENSOR & (1) ODP20-WAL POWER PACK, OR
   HUBBELL (2) OMNI IR SENSOR AND (1) MP POWER PACK.
2. OCCUPANCY SENSORS SHOWN IN DRAWING E1.1 ARE FOR PROTOTYPICAL WALGREENS STORE LAYOUT, CONTACT LEVITON OR HUBBELL FOR ADDITIONAL TECHNICAL, LAYOUT, WIRING, OR INSTALLATION QUESTIONS ON OTHER STORE LAYOUT.

PATRICK CLAPP
LEVITON MANUFACTURING CO., INC
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LITTLE NECK, NY 11362-2591
TEL – (718) 281-6923
FAX – (718) 281-6047
e-mail:pclapp@leviton.com

RANDY DANA
HUBBELL BUILDING AUTOMATION, INC
TEL – (815) 744-6805
FAX – (815) 744-7046
e-mail:
rdana@hubbell-automation.com

3. LOAD REQUIREMENT: LHIRS1 IS 0-1000W BALLAST @ 120VAC, 50/60HZ AND 0-1800W BALLAST @ 277VAC, 50/60HZ.
   ODS15-ID-WAL IS 1800VA @120V/4000VA@277V (FLUORESCENT)
4. ULTRASONIC SENSOR IS MADE FOR OFF-CENTER CEILING MOUNT. SEE DRAWING E1.1 FOR AN APPROXIMATE LOCATION. ULTRASONIC CEILING MOUNT SENSOR REQUIRE IT BE MOUNTED NO CLOSER THAN 4' TO AIR SUPPLY/RETURN REGISTERS.
5. WHEN SPECIFYING THE PLACEMENT OF ULTRASONIC SENSORS, DIRECTION OF THE RECEIVERS SHOULD BE CLEARLY SHOWN.
6. FINAL DETERMINATION OF CIRCUITING, VOLTAGE AND QUANTITY OF POWER PACKS REQUIRED ARE THE RESPONSIBILITY OF THE CONSULTING ENGINEER/ ELECTRICAL CONTRACTOR.
7. OCCUPANCY SENSORS SETTINGS (TIME DELAY, SENSITIVITY, ETC) ARE FACTORY PRE-PROGRAMMED PRIOR TO SHIPPING IN STORE.

LUMINAIRE SCHEDULE

LUMINAIRE TYPE	CATALOG NUMBER	MANUFACTURER	LAMPS (SEE NOTE 3 BELOW)	MOUNTING		BALLAST INPUT WATTAGE	REMARKS
A	W8TRCG-232-CSC-EB-81	METALUX	4-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP4P32SC	RECESSED	120	95	
B	WRCG-232-EB-81	METALUX	2-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP2P32SC	RECESSED	120	48	
D	WIC-232-EB-81	METALUX	2-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP2P32SC	BOTTOM OF JOISTS OR CEILING	120	48	LUMINAIRE TO BE MOUNTED 14'-0" A.F.F. DO NOT ATTACH TO THE ROOF METAL DECK. ATTACH FROM ROOF SUPPORT.
E	WSLX-70-RWH	SURE-LITES	LED	CEILING OR WALL MOUNT	120	3.8	SEE DETAIL 3/E4.1.
G	W2GR8-332A-EB-81	METALUX	3-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP3P32SC	RECESSED	120	72	
H	WSN-132-IS-EB-81	METALUX	GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP1P32SC	CORNICE	120	25	SEE LIGHTING PLAN FOR TOTAL LENGTH REQUIRED, INCLUDE GLASS TOWER. 4 FOOT FIXTURE
H2	WSN-117-IS-EB-81	METALUX	GE# F17T8/SPX35	PORTAL	120	20	SEE LIGHTING PLAN FOR TOTAL LENGTH REQUIRED – 2 FOOT FIXTURE
L	PD6V-142E-6VWB	PORTFOLIO	GE#F26DBXT4SPX35	RECESSED	120	26	PHARMACY PATIENT SEATING AREA
P	WLGW-F140F-120E-WAL-TS-35K	TLI	GE#F40/30BX/SPX35	WALL-MOUNT	120	50	EXTERIOR SEE NOTE 8
Q	WMHIP-S-100-MT	LUMARK	GE#MXR100/U/MED	SURFACE	120	129	UNDER AWNING, DRIVE-THRU WINDOW AND COMPACTOR AREA SEE NOTE 8
S	HDR100MDT93/85	FAIL-SAFE	GE# MXR100/U/MED	RECESSED	120	130	EXTERIOR SEE NOTE 8. FIXTURE TO BE PROVIDED WITH A FLAT TEMPERED GLASS LENS/PLOYCARBONATE OVERLAY TO COMPLY WITH DARK SKY REQUIREMENTS.
W	MHFF-50N-120V-RBC-FOS	LUMARK	GE#MXR50/U/MED	SURFACE	120	67	FACADE ACCENT FIXTURE. (MOUNT ON TOP OF AWNING) SEE NOTE 8. FIXTURE HOUSING TO MATCH AWNING COLOR. WALGREENS PROTOTYPICAL STANDARD AWNING COLOR-ATAS KYNAR 500 "FOREST GREEN". ALTERNATE AWNING COLOR AVAILABLE FROM MANUFACTURER. (UTILIZE ONLY WITH AWNING ELEVATIONS)
D-1	WIC-232-ADV-IOP2S32SC	METALUX	2-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP2S32SC	BOTTOM OF JOISTS OR CEILING	120	49	LUMINAIRE TO BE MOUNTED 14'-0" A.F.F. DO NOT ATTACH TO THE ROOF METAL DECK. ATTACH FROM ROOF SUPPORT.
E-1	WXR6C	SURELITE	6V, 12W HALOGEN	ON COLUMN OR WALL	120	24	
G-1	W2GR8-332A-ADV-IOP3S32SC	METALUX	3-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP3S32SC	RECESSED	120	72	
U-1	WG-232A-EB-81	METALUX	2-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP2P32SC	RECESSED	120	48	
DL-1	WA-70MH-20-B-3-B-4 POLE #CH-16-SS12-CA-BK	McGRAW-EDISON	70W METAL HALIDE	POST TOP	208	95	
DL-2	WA-175MH-20-B-3-B-4 POLE #CH-14-SS12-CA-BK	McGRAW-EDISON	175W METAL HALIDE	POST TOP	208	213	
Y-1	WAG-CAL-400-MH-MT ADVANCE-3F-BZ/CA40BZ	McGRAW-EDISON	GE#MVR400/HOR/BT28	ON POLE OR WALL (SEE NOTE 9)	208	460	SEE NOTE 6, TYPE III DISTRIBUTION. FOR LIGHT POLE, SEE POLE SELECTION TABLE. TYPE Y-1 90 AND TYPE Y-1 270 ARE SIMILIAR EXCEPT WITH ROATATED OPTICS
Z-1	WAG-CAL-400-MH-MT ADVANCE-4F-BZ/MBZ	McGRAW-EDISON	GE#MVR400/HOR/BT28	ON POLE OR WALL (SEE NOTE 9)	208	460	SEE NOTE 6, TYPE IV DISTRIBUTION. FOR LIGHT POLE, SEE POLE SELECTION TABLE.
B-2	NOT USED						
B-2A	NOT USED						
B-2B	W8TW-232A-EB-81	METALUX	2-GE#F28T8/SP35/UMX/ECO WITH ADVANCE BALLAST # IOP4P32SC	SURFACE	120	95	8'-0" TANDEM UNIT.
B-2C	NOT USED						
E-2	WGC-1507-2	SURE-LITES	6V, 12W HALOGEN	RECESSED CEILING	120	24	
W-2	NOT USED						
E-3	WMHIP-S-100-MT-EM/SC/12V	LUMARK	GE#MXR100/U/MED GE#Q35MR16/G/FL40	SURFACE	120	120	FRONT ENTRANCE, RECEIVING AND PASSAGE 1 EXIT DOORS. SEE NOTE 8.
E-4	CC7 (NO HEADS)	SURE-LITES	N/A	SURFACE	120	–	FRONT ENTRANCE, RECEIVING AND PASSAGE 1 EXIT DOORS.
E-5	RFR-1S3	SURE-LITES	–	RECESSED CANOPY	120		FRONT ENTRANCE SEE NOTE 8

ALL COMPONENTS FURNISHED AND INSTALLED BY THE LANDLORD'S CONTRACTOR (UNLESS NOTED OTHERWISE).

NOTES:

1. ALL FLUORESCENT LUMINARIES TO HAVE ADVANCE TRANSFORMER ELECTRONIC BALLASTS.
   ALL HID LUMINARIES TO HAVE ADVANCE TRANSFORMER MAGNETIC BALLASTS.
2. ALL LUMINAIRES ARE TO HAVE QUICK ACCESS BALLASTS FROM BELOW CEILING (THROUGH FIXTURE).
3. G.E. INDICATES GENERAL ELECTRIC COMPANY.
4. ALL LUMINAIRES SHALL BE SHIPPED WITHOUT LAMPS.
5. NOT USED.
6. (ADD "CA11" (TYPE III) OR "CA18" (TYPE IV) SUFFIX TO LUMARK FOR HOUSE SIDE CUTOFF).
   (ADD "KSF2HS" SUFFIX TO LITHONIA FOR HOUSE SIDE SHIELD).
7. VERIFY ALL LUMINAIRE DIMENSIONS WITH MANUFACTURER TO AVOID CONFLICTS WITH OTHER DISCIPLINES.
8. U.L. LISTED WET LOCATION AND IP64 FOR MAXIMUM INSECT, DUST, AND WATER PROTECTION.
9. SEE DRAWINGS E0.1 AND E0.1A FOR MOUNTING LOCATION. COORDINATE MOUNTING WITH WALL THICKNESS AND MATERIALS INVOLVED. HARDWARE PER MANUFACTURER'S INSTRUCTIONS.
10. ALL 250 WATT METAL HALIDE FIXTURES, WITH HORIZONTAL BURNING LAMP, MUST HAVE A SOCKET THAT ACCEPTS A "POS MOG E" LAMP.

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STATE OF MICHIGAN
RICHARD J. CLEVE
ARCHITECT
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drawing:

Luminaire Schedule and Details

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checked: B.D.
approved: R.R.T.

file number: 06185

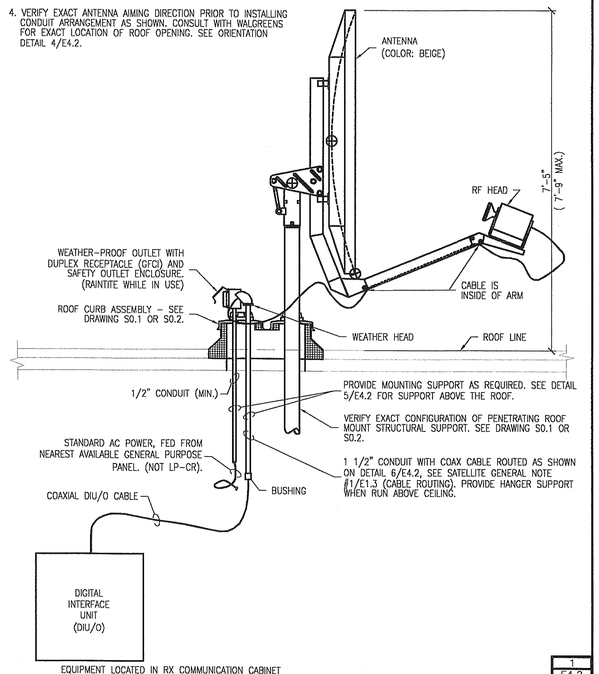
sheet:

E4.1

ROOF EQUIPMENT POWER CONNECTION/INTERCONNECTING CABLE DETAIL (PENETRATING ROOF MOUNT)

NOTES:

1. DIU/O CABLE FURNISHED BY WALGREEN AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
2. NOT USED
3. NOT USED
4. VERIFY EXACT ANTENNA AIMING DIRECTION PRIOR TO INSTALLING CONDUIT ARRANGEMENT AS SHOWN. CONSULT WITH WALGREENS FOR EXACT LOCATION OF ROOF OPENING. SEE ORIENTATION DETAIL 4/E4.2.



EQUIPMENT LOCATED IN RX COMMUNICATION CABINET

1 / E4.2

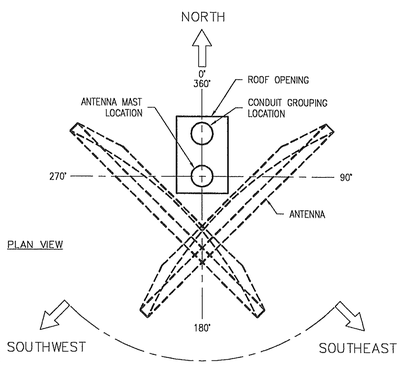
SATELLITE ANTENNA WORK RESPONSIBILITIES

NEW STORE - TURNKEY PROJECT WITH ANTENNA INSTALLATION

NOTES:

1. STRUCTURAL MOUNT BY LANDLORD'S CONTRACTOR
2. ELECTRICAL (ROUGH-IN) CLEAN POWER BY LANDLORD'S CONTRACTOR.
3. ELECTRICAL (ROUGH-IN) POWER BY LANDLORD'S CONTRACTOR.
4. ELECTRICAL (ROUGH-IN) PROVISIONS (INCLUDING COAXIAL DIU/O CABLE) BY LANDLORD'S CONTRACTOR.
5. INSTALLATION AND FINAL CONNECTIONS OF ANTENNA PROPER BY WALGREENS DATA TERMINAL REPAIR (DTR).

ANTENNA EQUIPMENT ORIENTATION DETAIL



PLAN VIEW

UNOBSTRUCTED POINTING DIRECTION. EXACT AIMING ANGLE TO BE DETERMINED PER LOCATION.

NOTE:

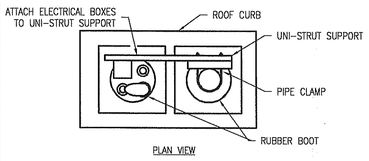
NOTES:
CONDUIT GROUP OPENING MUST ALWAYS BE ORIENTED TO THE NORTH OF THE ANTENNA PIPE SUPPORT TO AVOID CONFLICT WITH THE ANTENNA. THE ANTENNA MUST HAVE AN UNOBSTRUCTED POINTING DIRECTION FROM SOUTHEAST TO SOUTHWEST.

SELECT AREA AND THEIR CORRESPONDING APPROXIMATE ORIENTATION ANGLE (VERIFY EXACT AIMING ANGLE FOR EACH LOCATION).

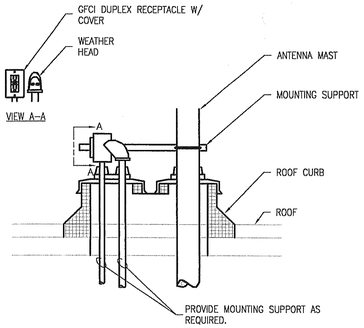
	AZIMUTH (ANGLE AS SHOWN ABOVE)	ELEVATION
CHICAGO	187	42
DENVER	161	43
HOUSTON	174	56
MIAMI	207	58
MINNEAPOLIS	180	38
NY/CONNECTICUT	208	40
PHOENIX	146	46
SAN FRANCISCO	136	37
ST. LOUIS	183	46

4 / E4.2

CONDUIT GROUPING MOUNTING SUPPORT DETAIL



PLAN VIEW

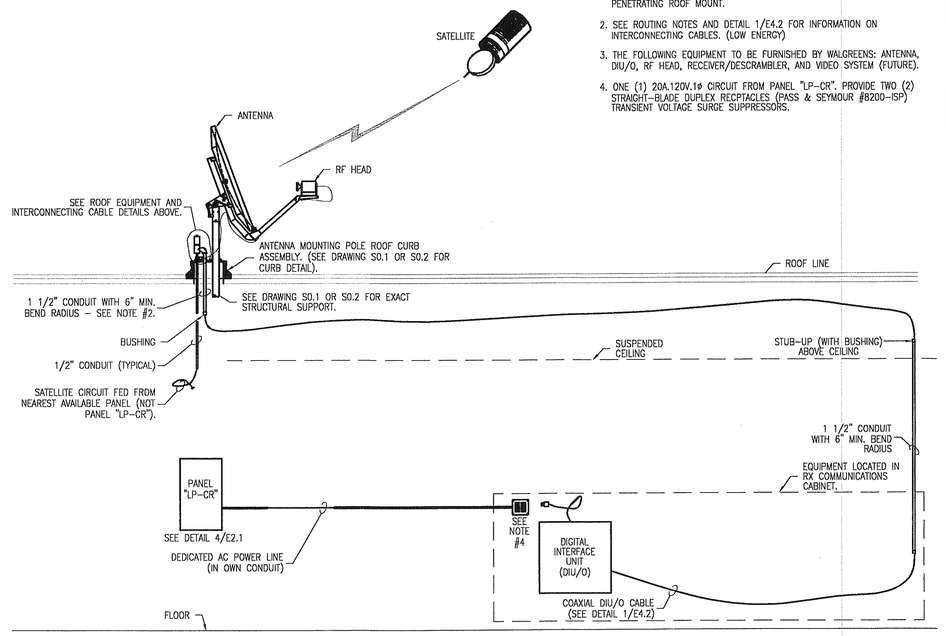


VIEW A-A

5 / E4.2

SATELLITE ANTENNA SYSTEM

NOTES:
1. SEE THE FOLLOWING DETAILS FOR EQUIPMENT POWER CONNECTION (DEPENDENT UPON MOUNTING TYPE):
   VERIFY ACTUAL SATELLITE ANTENNA MOUNTING CONFIGURATION. DETAIL 1/E4.2 - PENETRATING ROOF MOUNT.
2. SEE ROUTING NOTES AND DETAIL 1/E4.2 FOR INFORMATION ON INTERCONNECTING CABLES. (LOW ENERGY)
3. THE FOLLOWING EQUIPMENT TO BE FURNISHED BY WALGREENS: ANTENNA, DIU/O, RF HEAD, RECEIVER/DESCRAMBLER, AND VIDEO SYSTEM (FUTURE).
4. ONE (1) 20A,120V,1ϕ CIRCUIT FROM PANEL "LP-CR". PROVIDE TWO (2) STRAIGHT-BLADE DUPLEX RECPTACLES (PASS & SEYMOUR #8200-ISP) TRANSIENT VOLTAGE SURGE SUPPRESSORS.



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RICHARD J. CLEVE
ARCHITECT
NO. 38436
LICENSED ARCHITECT

drawing:

Satellite System Details

DO NOT SCALE DRAWING

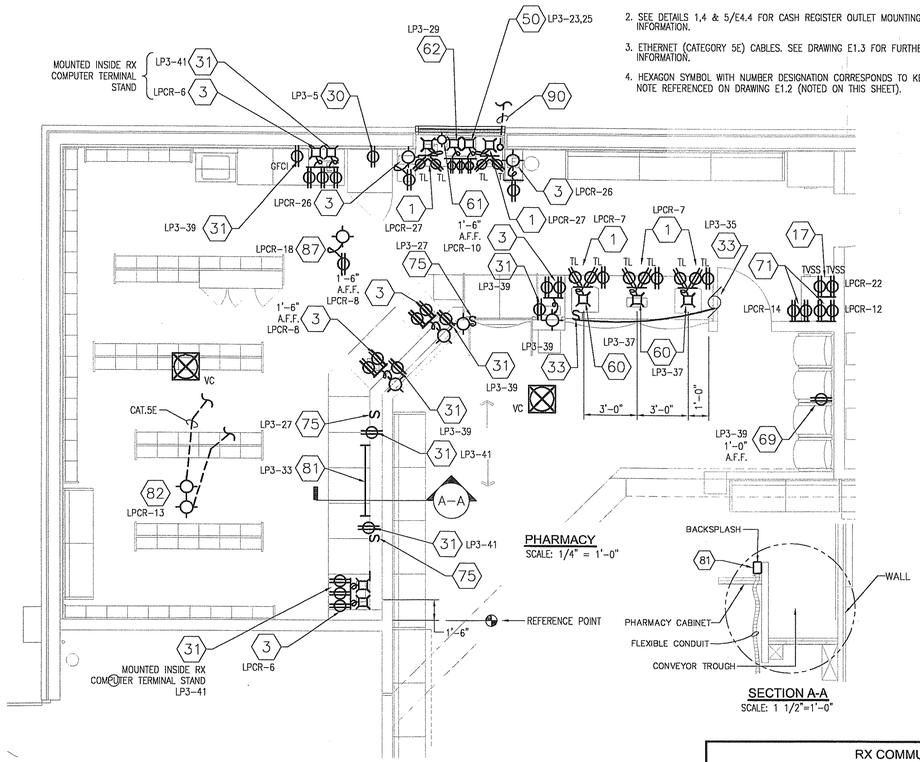
issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:

E4.2

PHARMACY LAYOUT - POWER AND SYSTEMS DETAIL



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

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

NOTES:

1. NOT USED
2. SEE DETAILS 1,4 & 5/E4.4 FOR CASH REGISTER OUTLET MOUNTING INFORMATION.
3. ETHERNET (CATEGORY 5E) CABLES. SEE DRAWING E1.3 FOR FURTHER INFORMATION.
4. HEXAGON SYMBOL WITH NUMBER DESIGNATION CORRESPONDS TO KEY NOTE REFERENCED ON DRAWING E1.2 (NOTED ON THIS SHEET).

POWERED KEYED NOTES:

(1) ONE(1) 20A.120V.1ø CIRCUIT FOR CASH REGISTER (CR) LOCATION. SEE DETAILS 1/E4.4, 4/E4.4, &/OR 5/E4.4 FOR OUTLET MOUNTING. HOMERUN BACK TO PANEL "LP-CR".

(3) ONE(1) 20A.120V.1ø CIRCUIT FOR PHARMACY TERMINAL RECEPTACLES, CIRCUIT FROM PANEL "LP-CR". SEE DETAIL 10/E4.4 AND DETAIL 2/E4.3 FOR MOUNTING REFERENCE.

(17) ONE(1) 20A.120V.1ø SATELLITE DIGITAL INTERFACE UNIT (DIU) CIRCUIT FROM PANEL "LP-CR". SEE DETAIL 13/E4.4 FOR ADDITIONAL INFORMATION.

(30) 500W OUTLET, RECEPTACLE 1'-6" A.F.F. FOR PHARMACY BIOLOGICAL REFRIGERATOR. PROVIDE LOCK-ON CIRCUIT BREAKER.

(31) 200W OUTLET, RECEPTACLE 3'-8" A.F.F. FLUSH ABOVE WORK COUNTER, UNLESS NOTED OTHERWISE. SEE DETAIL 2/E4.3.

(33) 1.5A. 120V OUTLET ABOVE PHARMACY CEILING FOR MOTORIZED ROLL DOWN SHUTTER, WITH THERMAL OVERLOAD SWITCH MOUNTED 4'-6" UP AS SHOWN, UNLESS NOTED OTHERWISE (SWITCH LOCATED INSIDE RX AREA).

(50) TWO(2) 20A.120V CIRCUITS FOR DRIVE-THRU WINDOW AUDIO SYSTEM AND DRIVE ALERT. MOUNT JUNCTION BOX 1'-6" A.F.F. INSIDE DRIVE-THRU WINDOW UNIT. SEE DETAIL 1/E4.3.

(60) 200W OUTLET, WITH RECEPTACLE MOUNTED INSIDE CASH REGISTER STAND. REFER TO DETAILS 1, 4, AND/OR 5 ON DRAWING E4.4 FOR OUTLET MOUNTING.

(61) DRIVE-ALERT SYSTEM- ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL MODEL DA-500 WITH DA-655 DRIVE-ALERT CHIME, (CHIME MOUNTED ABOVE DRIVE-THRU WINDOW). PROVIDE CONDUIT (ROUTED 6" BELOW GRADE) STUB-UP FROM INSIDE DRIVE-THRU WINDOW TO DRIVE-THRU ISLAND FOR DRIVE-ALERT CABLE AND SENSOR. SYSTEM SHALL BE PURCHASED FROM A.D.I. DISTRIBUTORS @(800) 388-9505. REFER TO DETAIL 16/E4.4 FOR ADDITIONAL INFORMATION.

(62) BAVIS TRANS-TRAX SYSTEM-ONE(1) 15A, 120V CIRCUIT CONNECTED TO ONE DUPLEX RECEPTACLE MOUNTED 7'-10"A.F.F. REFER TO DRAWING A4.4 FOR ADDITIONAL INFO.

(69) 200W GENERAL PURPOSE DUPLEX RECEPTACLE, MOUNTED AT 1'-6" A.F.F., UNLESS NOTED OTHERWISE.

(71) TWO (2) 20A.120V.1ø CIRCUITS FROM PANEL "LP-CR" FOR RX COMMUNICATION EQUIPMENT RECEPTACLES.

(75) ONE (1) 20A.120V.1ø CIRCUIT TO OUTLET, 1'-0" A.F.F. FOR CONVEYOR. BALDOR DRIVE MOTOR WITH SCR (SPEED CONTROL) BY CONVEYOR MFG. FINAL CONNECTION BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL THREE (3) HUBBELL NO.CS1221 SWITCHES WIRED IN SERIES AND EQUALLY SPACED ALONG COUNTER AT 3'-8" A.F.F., SEE PHARMACY COUNTER ELEVATION DETAIL 2/E4.3.

(81) 1000W OUTLET WITH SOLID CONNECTION TO 4'-0" MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK), MOUNT ON Rx "FILLING" COUNTER BACKSPLASH (RACEWAY FLUSH WITH TOP OF BACKSPLASH). RECEPTACLES SHALL BE 6" ON CENTER.

(82) ONE(1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" (WITH WIRES COILED INSIDE JUNCTION BOX) MOUNTED ABOVE CEILING FOR FUTURE PHARMACY ROBOTICS POWER.

WALGREEN CONTRACTOR TO PROVIDE ONE LOW VOLTAGE CABLE (CAT.5E), FROM Rx COMMUNICATION CABINET, ROUTED ABOVE PHARMACY CEILING, FOR FUTURE PHARMACY ROBOTICS COMMUNICATION. PROVIDE 25' OF CABLE SLACK.

(86) NOT USED

(87) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR CCTV CAMERA, CONNECT TO DUPLEX RECEPTACLE MOUNTED ABOVE PHARMACY CEILING.

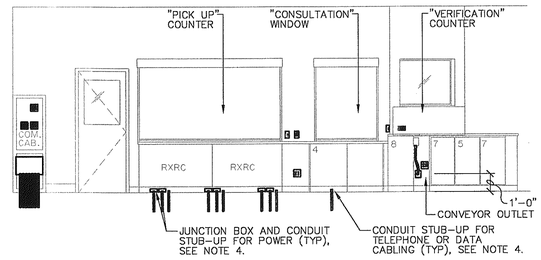
(90) BAVIS TRANS-TRAX SYSTEM – ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ONE STUB UP ABOVE CEILING VIA A 2"x3" PULL BOX MOUNTED IN PLYWOOD BLOCKING. SEE DWG. A4.4.

1 E4.3

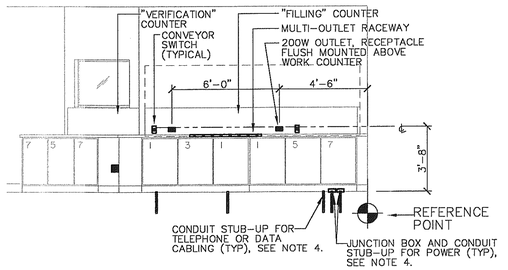
PHARMACY COUNTER ELECTRICAL ELEVATION

NOTES:

1. THIS ELEVATION CORRELATES TO THE PARTIAL FLOOR PLAN AT LEFT. UTILIZE EXACT CONFIGURATION OF EQUIPMENT BASED ON THE ACTUAL "D-1" PLAN.
2. NOT USED.
3. FOR ADDITIONAL INFORMATION ON POWER AND LOW VOLTAGE CABLING WORK ASSOCIATED WITH ELECTRONIC, COMPUTER, AND SATELLITE SYSTEMS REFER TO DRAWINGS E4.2 THRU E4.4.
4. SEE ELECTRICAL PLAN (E1.2) AND SYSTEMS PLANS (E1.3 THRU E1.6) FOR ROUTING OF LOW VOLTAGE CABLING AND/OR LOCATION OF STUB-UPS, RECEPTACLES, TELEPHONE OUTLETS AND SYSTEMS WIRING. STUB-UPS SHOWN IN THIS ELEVATION IS FOR INFORMATIONAL ONLY.
5. HEIGHT DIMENSIONS ARE SUITABLE FOR PHARMACIES WITH OR WITHOUT RAISED FLOOR, AND IS REFERENCED FROM SALES AREA FINISHED FLOOR.



PHARMACY PICK-UP, CONSULTATION, AND VERIFICATION COUNTER ELEVATION
SCALE: 1/4" = 1'-0"



PHARMACY VERIFICATION AND FILLING COUNTER ELEVATION
SCALE: 1/4" = 1'-0"

2 E4.3

OFFICE LAYOUT - POWER AND SYSTEMS DETAIL

NOTES:

1. NOT USED.
2. NOT USED
3. ETHERNET (CATEGORY 5) CABLES, SEE DRAWING E1.3 FOR FURTHER INFORMATION.
4. TWINAXIAL CABLE, FURNISHED BY WALGREENS AND INSTALLED BY LANDLORD'S CONTRACTOR, BELDEN 9207, (PROVIDE 10 FEET OF SLACK AT EACH END), ROUTE FROM AS/400 TERMINAL (DRAWING D-1, #24B) TO TECH EQUIPMENT CABINET, (1 1/2" CONDUIT), STUB-UP CONDUIT TO ABOVE CEILING AT AS/400 TERMINAL AND AT TECH EQUIPMENT CABINET, SEE DETAIL 7/E4.4).
5. ONE (1) 1" (SPARE) COMMUNICATIONS CONDUIT WITH #12 PULL STRING TO TECH EQUIPMENT CABINET.

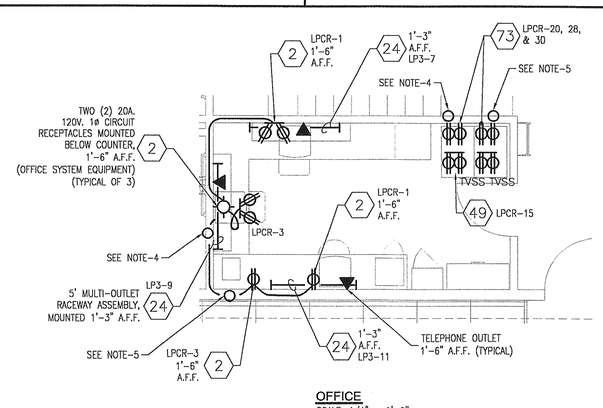
POWER KEYED NOTES:

(2) TWO (2) 20A.120V.1ø CIRCUIT FOR OFFICE SYSTEM EQUIPMENT RECEPTACLES, CIRCUIT FROM PANEL "LP-CR". SEE DETAIL 12/E4.4.

(24) 1000W OUTLET WITH SOLID CONNECTION TO 5'-0" MULTI-OUTLET RACEWAY ASSEMBLY (PLUGMOLD OR PLUGTRAK) MOUNTED 1'-3" A.F.F., UNLESS NOTED OTHERWISE.

(49) ONE (1) 20A.120V.1ø CIRCUIT FROM PANEL "LP-CR" FOR COVERT CCTV SYSTEM. SEE DRAWING E1.4 FOR ADDITIONAL INFORMATION.

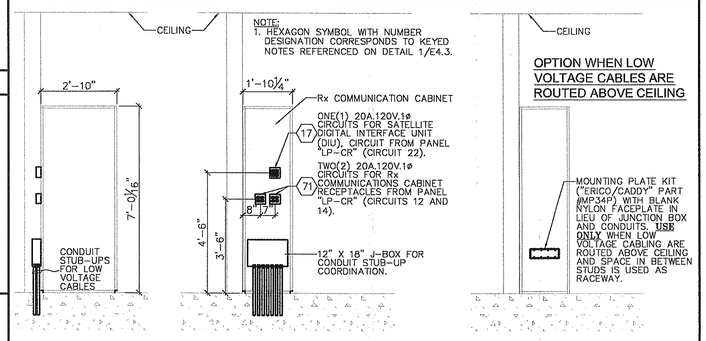
(73) THREE(3) 20A.120V.1ø CIRCUITS FROM PANEL "LP-CR" FOR TECH EQUIPMENT CABINET RECEPTACLES.



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

3 E4.3

RX COMMUNICATIONS CABINET - ELEVATION (NOT TO SCALE)



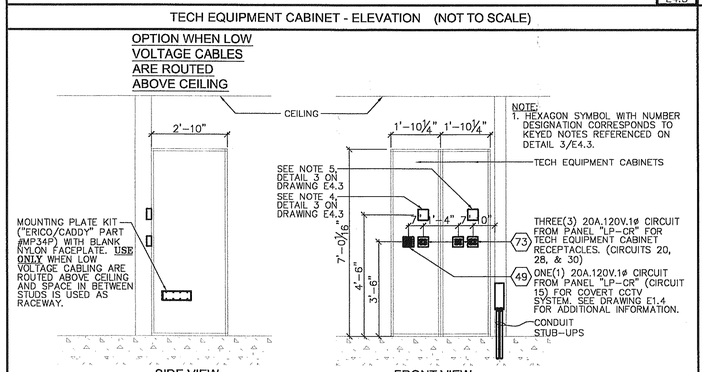
SIDE VIEW
SCALE: 3/8" = 1'-0"

FRONT VIEW
SCALE: 3/8" = 1'-0"

FRONT VIEW
SCALE: 3/8" = 1'-0"

4 E4.3

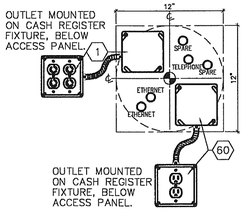
TECH EQUIPMENT CABINET - ELEVATION (NOT TO SCALE)



SIDE VIEW
SCALE: 3/8" = 1'-0"

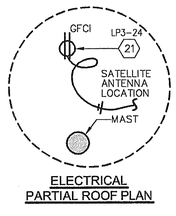
FRONT VIEW
SCALE: 3/8" = 1'-0"

5 E4.3



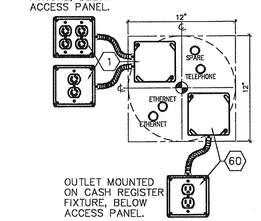
SCALE: 1 1/2" = 1'-0"

6 E4.3



ELECTRICAL
PARTIAL ROOF PLAN

8 E4.3



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

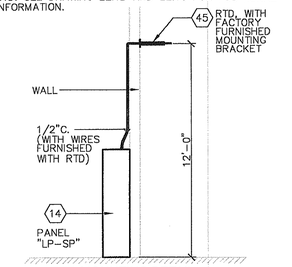
7 E4.3

NOTE:
1. NOT USED
2. ATTACH RTD TO THE WALL WITH BRACKET.

POWER KEYED NOTES:

(14) SIGN PANEL "LP-SP".

(45) RTD. SEE DRAWING E2.1B AND E2.1C FOR ADDITIONAL INFORMATION.



RTD MOUNTING DETAIL
NOT TO SCALE

9 E4.3

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Electrical Details

DO NOT SCALE DRAWING

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approved: R.R.T.

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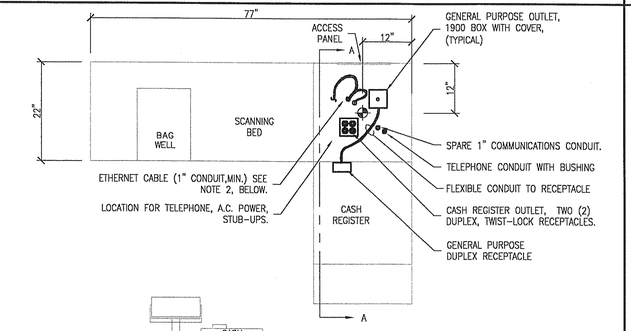
sheet:

E4.3

SCANNING CASH REGISTER STAND



VIEW A–A

NOTES:

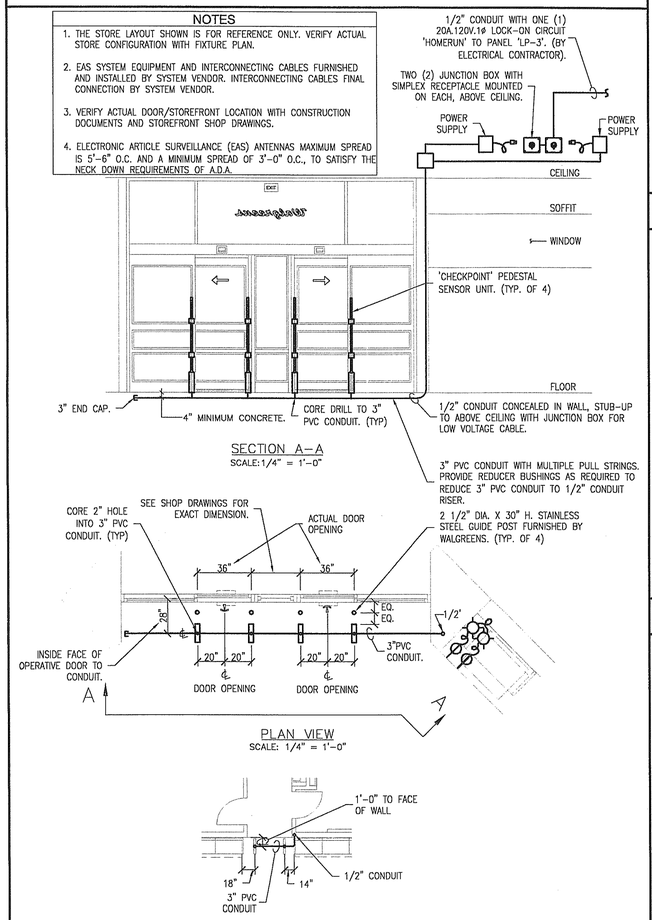
1. A.C. POWER BRANCH CIRCUITS FROM PANEL LP–CR TO DUPLEX RECEPTACLE.
2. ETHERNET (CAT.5) CABLES FROM RX COMMUNICATIONS CABINET, SEE DRAWING E1.3 FOR FURTHER INFORMATION.
3. SEE ELECTRICAL PLAN, DRAWING E1.2, FOR EXACT LOCATION OF STUB–UPS.
4. SEE DETAIL 6/E4.4 FOR TYPE AND CONFIGURATION OF STUB–UPS.

1 / E4.4

ELECTRONIC ARTICLE SURVEILLANCE (EAS) SYSTEM

NOTES

1. THE STORE LAYOUT SHOWN IS FOR REFERENCE ONLY. VERIFY ACTUAL STORE CONFIGURATION WITH FIXTURE PLAN.
2. EAS SYSTEM EQUIPMENT AND INTERCONNECTING CABLES FURNISHED AND INSTALLED BY SYSTEM VENDOR. INTERCONNECTING CABLES FINAL CONNECTION BY SYSTEM VENDOR.
3. VERIFY ACTUAL DOOR/STOREFRONT LOCATION WITH CONSTRUCTION DOCUMENTS AND STOREFRONT SHOP DRAWINGS.
4. ELECTRONIC ARTICLE SURVEILLANCE (EAS) ANTENNAS MAXIMUM SPREAD IS 5'–6" O.C. AND A MINIMUM SPREAD OF 3'–0" O.C., TO SATISFY THE NECK DOWN REQUIREMENTS OF A.D.A.



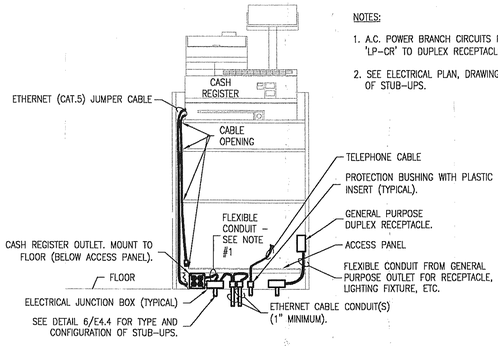
SECTION A–A
SCALE: 1/4" = 1'–0"

PLAN VIEW
SCALE: 1/4" = 1'–0"

FLOOR PLAN PARTIAL – PASSAGE #3
SCALE: 1/8" = 1'–0"

2 / E4.4

STANDARD CASH REGISTER STAND ELEVATION

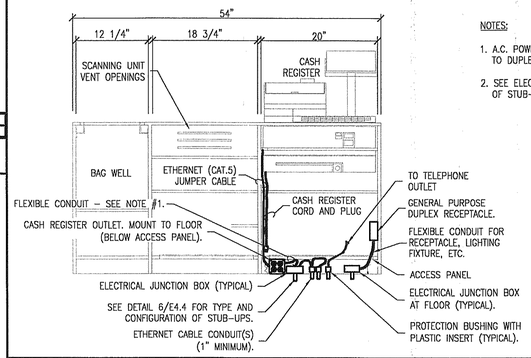


NOTES:

1. A.C. POWER BRANCH CIRCUITS FROM PANEL 'LP–CR' TO DUPLEX RECEPTACLE.
2. SEE ELECTRICAL PLAN, DRAWING E1.2, FOR LOCATION OF STUB–UPS.

4 / E4.4

IN–LINE SCANNING CASH REGISTER STAND ELEVATION

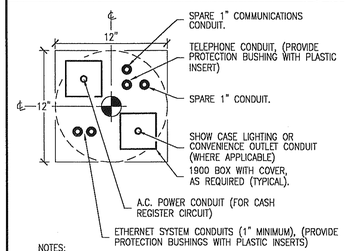


NOTES:

1. A.C. POWER BRANCH CIRCUITS FROM PANEL 'LP–CR' TO DUPLEX RECEPTACLE.
2. SEE ELECTRICAL PLAN, DRAWING E1.2, FOR LOCATION OF STUB–UPS.

5 / E4.4

CONDUIT STUB–UP CONFIGURATION FOR CASH REGISTER STAND

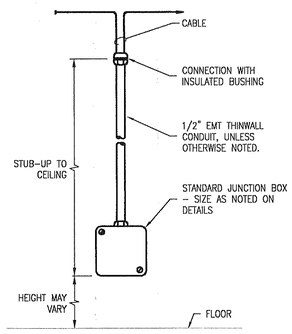


NOTES:

1. THIS IS A GENERIC DETAIL OF THE CONDUIT STUB–UP SYSTEM. VERIFY TYPE OF CASH REGISTER STAND, SEE DETAILS 1/E4.4, 4/E4.4 &/OR 5/E4.4 FOR LOCATION OF STUB–UP IN RELATION TO THE TYPE OF CASH REGISTER STAND INVOLVED.
2. FOR EXACT LOCATION OF ELECTRICAL OUTLETS ASSOCIATED WITH CASE WORK (CASH REGISTER LOCATIONS), SEE ELECTRICAL PLAN E1.2.

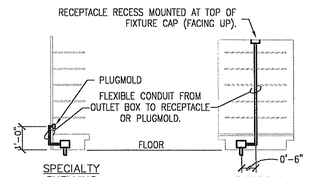
6 / E4.4

EQUIPMENT CONNECTION STUB–UP ELEVATION



7 / E4.4

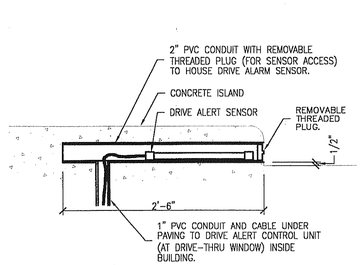
GONDOLA AND SPECIALTY SHELVING PLUGMOLD AND RECEPTACLE DETAIL



NOTES:
1. ALL PLUGMOLDS TO BE WIREMOLD CO.
   CAT. # 2GB306 (3'–0" LONG)
   2GB512 (5'–0" LONG)
   (OR PLUGTRAK EQUAL)
   PROVIDE 500W FOR EACH 5'–0" LENGTH OR SEE ELECTRICAL PLAN E1.2. PLUGMOLDS FURNISHED AND INSTALLED BY CONTRACTOR.
2. FLOOR OUTLETS FURNISHED AND INSTALLED BY CONTRACTOR.
3. RECEPTACLES FURNISHED AND INSTALLED BY CONTRACTOR.

8 / E4.4

DRIVE ALARM SENSOR SECTION

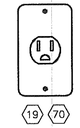


NOTE:
IN STORES WITH SINGLE DRIVE–THRU LANE, FURNISH AND INSTALL SENSOR ON WALL INSIDE THE PHARMACY, 6" ABOVE FINISHED FLOOR.

16 / E4.4

TIME/ATTENDANCE AND ATM RECEPTACLE

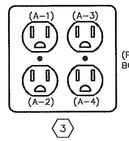
MANUFACTURER: HUBBELL (NO SUBSTITUTION)
CATALOG NUMBER: HBL5261
SERVICES: (KRONOS) ELECTRONIC TIME CLOCK (LOCATED IN THE VICINITY OF OFFICE)
AUTOMATED TELLER MACHINE (ATM) – LOCATED BY FRONT CASH REGISTERS
SERVICE FROM: LP–CR PANEL



9 / E4.4

PHARMACY TERMINAL RECEPTACLES

MANUFACTURER: HUBBELL PASS & SEYMOUR
CATALOG NUMBER: HBL5252 5262A
SERVICES: (A–1) PC BASE
(A–2) MONITOR
(A–3) FUTURE
(A–4) FUTURE
SERVICE FROM: LP–CR PANEL

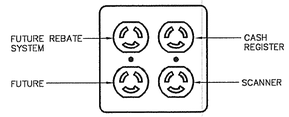


(PROVIDE 2–GANG BOX WITH COVER)

10 / E4.4

CASH REGISTER RECEPTACLES

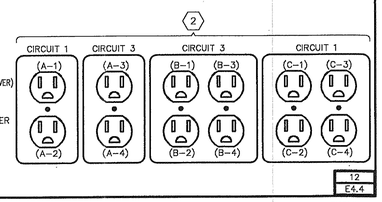
MANUFACTURER: HUBBELL (NO SUBSTITUTION)
CATALOG NUMBER: HBL4700 (TWIST–LOCK RECEPTACLE)
SERVICES: CASH REGISTER
SCANNER
SERVICE FROM: LP–CR PANEL
NOTE: PHOTO AREA CASH REGISTERS TO HAVE THREE (3) DUPLEX RECEPTACLES.



11 / E4.4

OFFICE SYSTEM EQUIPMENT RECEPTACLES

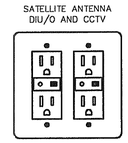
MANUFACTURER: HUBBELL PASS & SEYMOUR
CATALOG NUMBER: HBL5252 5262A
SERVICES:
(A–1) MONITOR (A–2) MISCELLANEOUS
(A–3) STORE CONTROLLER (A–4) MISCELLANEOUS
(B–1) AS400 MONITOR (B–2) AXIS (NETWORK PRINT SERVER)
(B–3) MISCELLANEOUS (B–4) MISCELLANEOUS
(C–1) OFFICE PC (C–2) OFFICE MONITOR
(C–3) MISCELLANEOUS (C–4) LED SIGN CONTROLLER
SERVICE FROM: LP–CR PANEL



12 / E4.4

TVSS RECEPTACLES

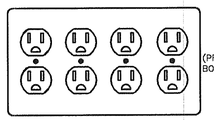
MANUFACTURER: PASS & SEYMOUR (NO SUBSTITUTIONS)
CATALOG NUMBER: 8200–SP (DUPLEX TVSS RECEPTACLE)
SERVICES: SATELLITE ANTENNA – DIU/O (DOUBLE DUPLEX RECEPTACLE)
CCTV EQUIPMENT (DOUBLE DUPLEX RECEPTACLE)
SERVICE FROM: LP–CR PANEL



13 / E4.4

BURGLAR ALARM/TELEPHONE/SOUND SYSTEM RECEPTACLES

MANUFACTURER: HUBBELL PASS & SEYMOUR
CATALOG NUMBER: HBL5252 5262A
SERVICES: TELEPHONE TERMINAL BOARD
BURGLAR ALARM CONTROL PANEL
SPARE
SOUND SYSTEM
SERVICE FROM: LP–CR PANEL



(PROVIDE 4–GANG BOX WITH COVER)

14 / E4.4

NOTES

1 – ⬡ SYMBOL WITH NUMBER DESIGNATION CORRESPONDS TO POWER KEYED NOTES REFERENCED ON DRAWING E1.2.

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issued for:
OWNER / TENANT REVIEW:
09 APR 07
BIDS & PERMITS:
09 APR 07

project:

Store #11415

Walgreens Pharmacy
(SWC) Lake Michigan Dr. (M–45) & 68th Ave.
Allendale, Michigan

ROGVOY ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025–2404
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EAM ENGINEERS, INC.
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4101 John R, Suite 205 • Troy, Michigan 48098–3920
Phone: (248) 828–8870 Fax: (248) 828–1640
email: eam@eam–engineers.com
http://www.eam–engineers.com

STATE OF MICHIGAN
RICHARD J. CLEVE
ARCHITECT
NO. 38436
REGISTERED

drawing:

Electrical Details

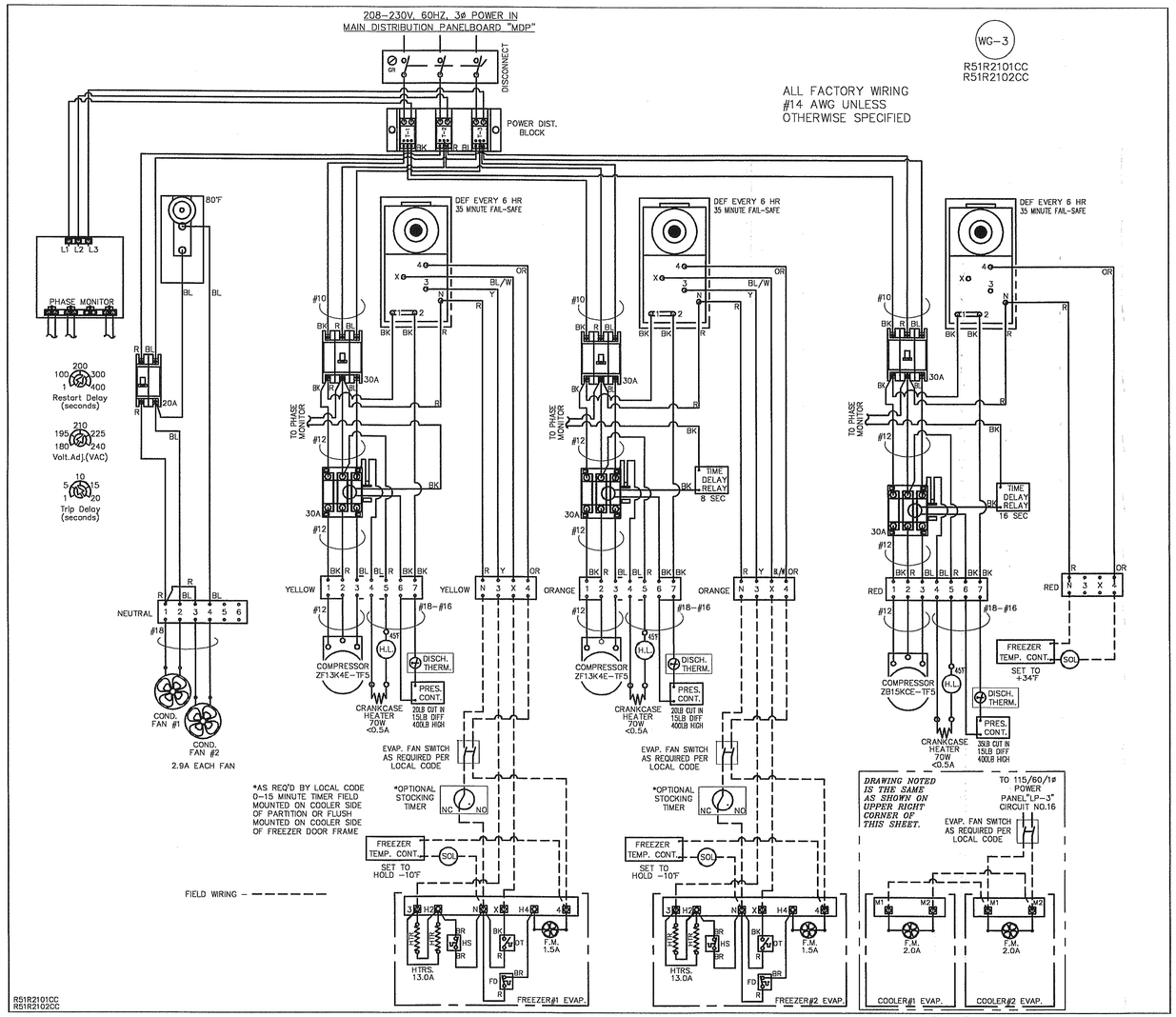
DO NOT SCALE DRAWING

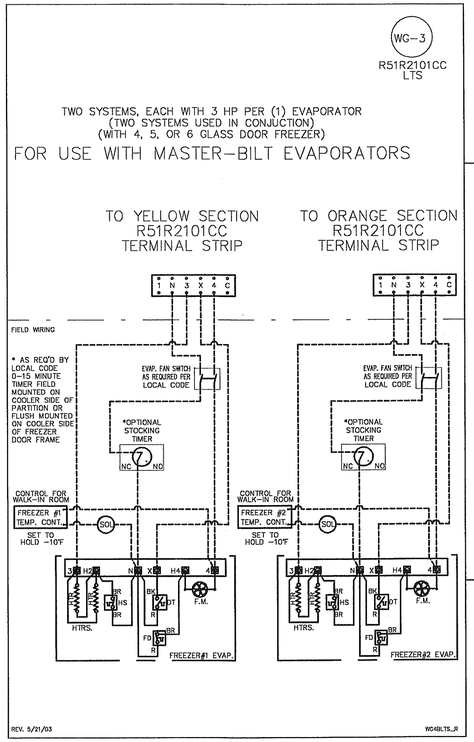
issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

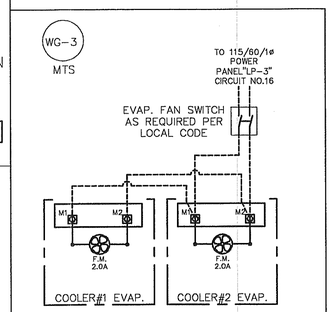
file number: 06185

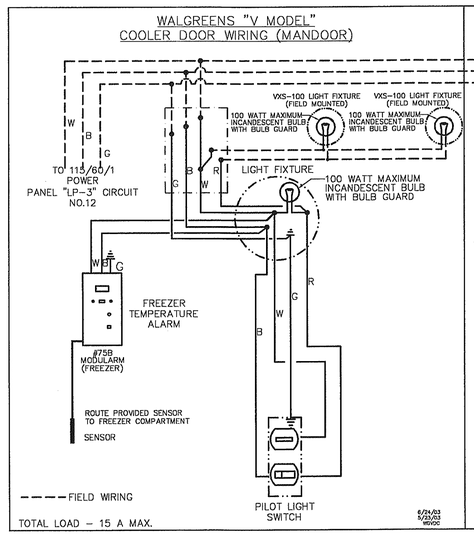
sheet:

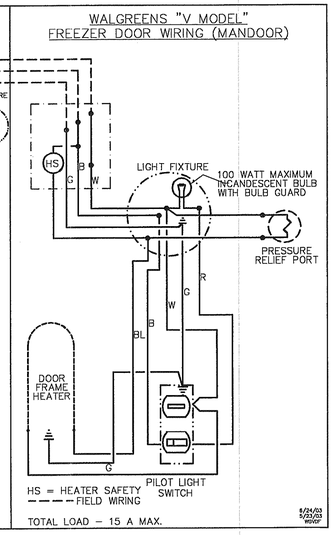
E4.4

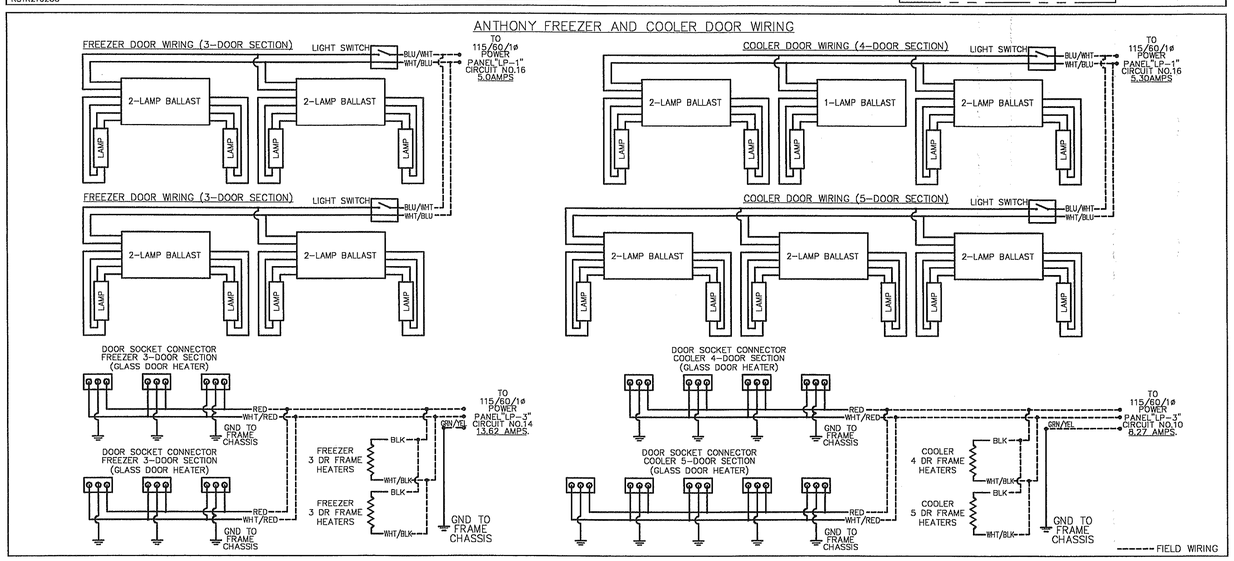


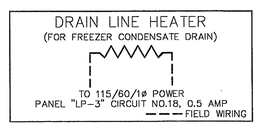












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Walgreens Pharmacy
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http://www.eam-engineers.com

STATE OF MICHIGAN
RICHARD J. CLEVE
ARCHITECT
NO. 18436
REGISTERED ARCHITECT

drawing:

Cooler/Freezer Wiring Diagrams

DO NOT SCALE DRAWING

issue date: 09 APR 07
drawn: D.M.
checked: B.D.
approved: R.R.T.

file number: 06185

sheet:

E4.5

CAUTION: BEFORE DIGGING CALL MISS DIG AT 1-800-482-7171 FOR UNDERGROUND UTILITY LOCATIONS.

WARNING: USE EXTREME CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY WIRES

LAKE MICHIGAN DRIVE (M-45)

BENCHMARK ELEV. 653.97
SW FLANGE BOLT (UNDER "E") ON HYDRANT SIDE OF LAKE MICH. DR. 500' W OF 68th

N 1/4 COR SEC. 27

ARC=383.25'
RAD=5784.12'
CHD=S88°23'51"E 383.16'

S00°33'03"E 181.19'

BENCHMARK ELEV. 656.27
S FLANGE BOLT (UNDER "E") ON HYDRANT AT SE COR. OF 68th AND LAKE MICH. DR.

REMOVE SEGMENT OF CONC. WALK SHOWN CROSS HATCHED

S70°23'24"E 150.01'

P.O.B.

N70°23'24"W 53.15'

N01°47'43"W 64.72'

S89°04'57" 66.00'

N01°47'43"W 440.28'

S84°44'53"W 580.67'

S00°33'03"E 389.60'

30.01'

PARCEL # 70-09-27-126-032

PARCEL # 70-09-27-126-043

(RELOCATED) BUILDING No. 11145
FIN. FLOOR ELV. 652.40

PARCEL # 70-09-27-126-027

(REMOVE) HOUSE No. 11165
FIN. FLOOR ELV. 653.68

PARCEL # 70-09-27-126-013

(REMOVE) HOUSE No. 11159
FIN. FL. ELV. 650.79
FIN. FL. ELV. 653.47

BLOCK GARAGE (REMOVE)

PARCEL # 70-09-27-126-042

PARCEL # 70-09-27-126-020

(REMOVE) HOUSE No. 11145
FIN. FLOOR ELV. 653.09

GARAGE (REMOVE)

BLDG (REMOVE)

(REMOVE) BARN

(REMOVE) BLDG

(ABANDON WELL PER STATE AND LOCAL CODES)

REMOVE ALL TREES WITHIN PROPERTY EXCEPT AS NOTED ON PLAN

SEE GRADING PLAN FOR TREE REMOVAL

EASEMENT FOR DRAIN LIBER 1355, PG. 972 AND LIBER 1355, PG. 974

EASEMENT FOR DRAIN PER LIBER 1366, PG. 68

METAL BARN

GAZEBO

GARDEN

68TH AVENUE

REMOVE SEGMENT OF CONC. WALK SHOWN CROSS HATCHED

BENCHMARK ELEV. 650.60
HYDRANT 31' E OF 68th AND 300' S OF LAKE MICH. DR.

CATCH BASIN TOP=647.15 12" INV. S=643.8

CATCH BASIN TOP=647.26 12" INV. SE=644.0

STORM MANHOLE TOP=647.83 12" INV. NE=643.9 12" INV. SW=643.7 24" INV. N=E=639.98 48" INV. W=637.55

24" STORM PIPE (FES) INV. E. 641.87

SANITARY MANHOLE TOP=649.72 12"± INV. N=S=635.44 W. SHELF ± 635.9

SANITARY MANHOLE TOP=647.78 12"± INV. N=S=634.7

48" FES W. INV.=637.55

EX. 10" SANITARY

EX. 10" SAN.

EX. 12" WATERMAIN

EX. 24" STORM

EX. 12" SAN.

SAN. LAT.

WATER SERVICE

CONC. SIDEWALK

CONCRETE

BLACKTOP

WOODS

R-1A

R-3

C-2

Location Map

SITE LOCATION

Description:
That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence S00°33'03"E 181.19 feet along the East line of said NW 1/4; thence N70°23'24"W 35.15 to a point on the Westerly line of 68th Avenue and the PLACE OF BEGINNING of this description: thence S00°33'03"E 389.60 feet along said Westerly line; thence S84°44'53"W 580.67 feet; thence N01°47'43"W 440.39 feet; thence S89°04'57"E 66.00 feet; thence N01°47'43"W 64.72 feet; thence Easterly 383.25 feet along the Southerly line of Highway M-45 (Lake Michigan Drive) on a 5784.12 foot radius curve to the left, the chord of which bears S88°23'51"E 383.16 feet; thence S70°23'24"E 150.01 feet to the place of beginning. Subject to easements of record. This parcel contains 6.124 acres.

N

Scale: 1" = 30'

STATE OF MICHIGAN
TODD R. STUIVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

LEGEND

- ○ = IRON STAKE FOUND
- • = IRON STAKE SET
- ◕ = MONUMENT
- ⊸ = UTILITY POLE & GUY WIRE
- ✳ = LIGHT POLE
- ⊸ = SIGN
- ⊸ = HYDRANT
- ⊸ = VALVE
- ⊞ = CATCH BASIN
- ○ = MANHOLE
- △ = BURIED UTILITY MARKER
- ⊹ = POST INDICATOR VALVE
- ◉ = SOIL BORING
- x—x—x—x— = FENCE LINE
- ——— = OVERHEAD WIRES
- T. = TOP OF CURB ELEVATION
- G. = GUTTER ELEVATION

PHASE 1 FINAL PUD

EXISTING CONDITIONS & DEMOLITION PLAN

FOR: Geenen Dekock Properties
12 W. 8th Street, Suite 250
Holland, MI 49424

IN: PART OF THE N.W. 1/4, SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

REVISIONS:

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

DRAWN BY:	CDG
APPROVED BY:	TRS
PROJ. ENG.:	TRS
PROJ. SURV:	VINCE
FILE NO.:	062024E
SHEET	1 OF 5
DATE:	2-15-07

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co. twp. sec. project drawing

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CAUTION: BEFORE DIGGING CALL MISS DIG AT 1-800-482-7171 FOR UNDERGROUND UTILITY LOCATIONS.

WARNING: USE EXTREME CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY WIRES

LAKE MICHIGAN DRIVE (M-45)

BENCHMARK ELEV. 653.97
SW FLANGE BOLT (UNDER "E") ON HYDRANT SIDE OF LAKE MICH. DR. 500' W OF 68th

N 1/4 COR SEC. 27

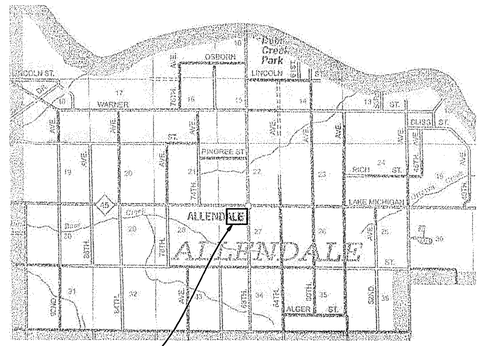
ARC=383.25'
RAD=5784.12'
CHD=S88°23'51"E
383.16'

S00°33'03"E 181.19'

BENCHMARK ELEV. 656.2
S FLANGE BOLT (UNDER
ON HYDRANT AT SE COR.
68th AND LAKE MICH. DR.

CATCH BASIN TOP=651.64
CATCH BASIN TOP=651.89 12" INV. NNE=648.6
STORM MANHOLE TOP=652.06
MANHOLE TOP=652.80
CATCH BASIN TOP=653.05
STORM MANHOLE TOP=653.46
CATCH BASIN TOP=653.29 12" INV. NNW=649.2
CATCH BASIN TOP=654.19 12" INV. NNE=651.04
STORM MANHOLE TOP=654.38

EX. 10" SANITARY
EX. 10" SAN.
SAN. LAT.
MONITOR WELL
EX. 12" WATERMAIN
WATER SERVICE
EX. 12" WATERMAIN
EX. 24" STORM
EX. ROW
CONC. SIDEWALK
CONC. CURB
GAS
ELEC. METER
TELE. BOX
SPRINKLER VALVE
MAIL BOX
3" MAPLE
205
178'
S70°23'24"E 150.01'
N70°23'24"W 531.15'
RT.-IN ONLY
RT.-OUT ONLY
50'R TYP.
RELOCATED STREET LIGHT
27" OAK
20" SPRUCE
24" SPRUCE
SIGN "ENTERING TRAFFIC HAS RIGHT OF WAY"
STOP SIGN "ENTERING TRAFFIC HAS RIGHT OF WAY"
5' WIDE SIDEWALK
WALGREENS SIGN W/ L.E.D. READER BOARD
WROUGHT IRON FENCE
FLAG POLE PLAZA WITH 30' HT. POLE, CONC. PAVERS, BENCHES, BIKE PARK, AND ORNAMENTAL LIGHTING. (SEE L.S. PLAN)
P.O.B.
5' WIDE SIDEWALK EASEMENT
ADA ACCESSIBLE RAMP WITH DETECTABLE WARNING
BRICK STAMPED CONCRETE ACCESSIBLE ROUTE
WROUGHT IRON FENCE
DRIVE THRU
288'
63'
25'
9.5'
19'
40'
130'
16'
18'
2'
4'
8' 8' 8'
35'
33'
63'
Parcel "B"
2.02 Acres
24" CONC. HEAD CURB AND GUTTER
ONE WAY
Walgreens
14,820 sq.ft.
(Phase 1)
BUILDING AWNING (TYP.)
66 PROPOSED PARKING SPACES
DECORATIVE LIGHT POLES
5' WIDE CONC. WALK
5' WIDE CONC. SIDEWALK
114'
253'
29.5'
25'R
CARDBOARD AND TRASH COMPACTORS WITH BLOCK/BRICK SCREEN WALLS AND WOOD GATES (BRICK TO MATCH BUILDING)
SIGN "ONE WAY DO NOT ENTER"
TOTE ENCLOSURE WITH BLOCK/BRICK SCREEN WALLS AND WOOD GATES (BRICK TO MATCH BUILDING)
BRICK STAMPED CONCRETE
ADA ACCESSIBLE RAMP WITH DETECTABLE WARNING
TRASH RECEPTICAL
24" CONC. HEAD CURB AND GUTTER
471'
245'
73'
80'
76'
RELOCATED FUNERAL HOME
3,942 sq.ft.
(Phase 1)
PATIO WITH CONC. PAVERS AND BENCHES
FUNERAL HOME IS TO BE RELOCATED FROM ON SITE AND THEREFORE THE ARCHITECTURE AND MATERIALS SHALL REMAIN THE SAME (ROOFTOP MECH. UNITS WILL BE RELOCATED TO THE INSIDE OF THE BUILDING WITH AIR COND. UNITS LOCATED AS SHOWN.
AIR COND. UNITS
FUNERAL HOME SIGN
SCREENED DUMPSTER WITH BLOCK/BRICK SCREEN WALLS AND WOOD GATES (BRICK TO MATCH BUILDING)
Parcel "A"
2.87 Acres
Parcel "C"
1.23 Acres
24" WIDE CONC. HEAD CURB AND GUTTER
24" WIDE CONC. ROLLED CURB
LIMITS OF PUD
TOWNSHIP PARK IMPROVEMENTS
PAVEMENT WIDENING
CATCH BASIN TOP=647.15 12" INV. S=643.8
CATCH BASIN TOP=647.26 12" INV. SE=644.0
STORM MANHOLE TOP=647.83 12" INV. NE=643.9 12" INV. SW=643.7 24" INV. N-E=639.98 48" INV. W=637.01
24" STORM PIPE (FES) INV. E 641.87
SANITARY MANHOLE TOP=649.72 12" S INV. N=S=635.44 W. SHELF @ 635.9
SANITARY MANHOLE TOP=647.78
BENCHMARK ELEV. 650.60 HYDRANT 31' E OF 68th AND 300' S OF LAKE MICH. DR.
68TH AVENUE
305' LEFT TURN LANE
132'± LEFT TURN LANE
75' LEFT TURN LANE
CENTERLINE DRIVE
S00°33'03"E 349.60'
N01°47'43"W 440.38'
S89°04'57"E 66.00'
N01°47'43"W 64.72'
S84°44'53"W 580.67'
S84°44'53"W 580.67'
R-1A
R-3
C-2
BLACKTOP
CONCRETE
HOUSE
DECK
6" SPRUCE
10" W.W. CHERRY
12" W.W. CHERRY
10" W. CHERRY
SAVE TREES
WOODS
DETENTION POND
FUTURE DEVELOPMENT
METAL BARN
GAZEBO
GARDEN
EASEMENT FOR DRAIN PER LIBER 1366, PG. 68
EASEMENT FOR DRAIN LIBER 1355, PG. 972 AND LIBER 1355, PG. 974
48" FES W. INV.=637.55
8" MAPLE
10" MAPL
12" MAPLE
11" CEDAR
15" WALNUT
12" SPRUCE
4" SYC.
9" MAPLE
20" MAPLE
3" CAT?



SITE LOCATION

Location Map

GENERAL NOTES:

1. Property Description: (PUD Boundary)

That part of the NW 1/4, Section 27, T7N, R14W, Allendale Township, Ottawa County, Michigan, described as: Commencing at the North 1/4 corner of Section 27; thence S00°33'03"E 181.19 feet along the East line of said NW 1/4; thence N70°23'24"W 35.15 to a point on the Westerly line of 68th Avenue and the PLACE OF BEGINNING of this description: thence S00°33'03"E 389.60 feet along said Westerly line; thence S84°44'53"W 580.67 feet; thence N01°47'43"W 440.38 feet; thence S89°04'57"E 66.00 feet; thence N01°47'43"W 64.72 feet; thence Easterly 383.25 feet along the Southerly line of Highway M-45 (Lake Michigan Drive) on a 5784.12 foot radius curve to the left, the chord of which bears S88°23'51"E 383.16 feet; thence S70°23'24"E 150.01 feet to the place of beginning. Subject to easements of record. This parcel contains 6.124 acres.

2. Mapping
   a. Boundary is based on title work furnished by the applicant.
   b. Existing ground contours are based on field topography by Exxel Engineering Inc.
   c. Utilities and topographical features are based on field surveys and construction records.
   d. This site is not located within any FEMA Flood Hazard Zone.
3. Zoning: Existing classification is R1-A Residential, R-3 Multi-Family and C-2 General Business (adjacent zoning is R1-A).
4. Proposed Development: Commercial - full service PUD
5. PUD Summary:

	Ac	S.f.	Percent
a. Lot Area			
Buildings	0.80	34,678	13
Parking, Drives	2.83	123,275	46
Open Space	2.49	108,590	41
Totals	6.12	266,587	100

   b. Building Coverage (35% maximum) = 32,678 s.f. / 266,587 s.f. = 12.2%

c. Parking	Required	Provided
Funeral Home (2000 s.f. of parlor space)	40	53
Walgreens (1 per 200 sf)	74	66
Commercial Building (1per 200 sf)	80	68
Totals	194	187

   d. Minimum parking space size for PUD - 9' x 19' with a 25' wide isle.
6. Proposed Improvements
   a. This site will be serviced by public municipal water and sanitary sewer per the standards of Allendale Charter Township.
   b. The site drainage will be conveyed via storm sewer to a proposed detention basin in the southwest corner of the property and will conform to the Ottawa County Drain Commission standards and specifications.
   c. Construction will conform to all State and Local codes, including, but not limited to Soil Erosion and Sedimentation Control and National Pollutant Discharge Elimination Systems (NPDES).
   d. All slopes greater than 30% will be protected from erosion concerns with the use of silt fence and/or erosion control matting.

STATE OF MICHIGAN
TODD R. STUIVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

N

Scale: 1" = 30'

PHASE 1 FINAL PUD

SITE DEVELOPMENT PLAN

FOR: Geenen Dekock Properties
12 W. 8th Street, Suite 250
Holland, MI 49424

IN: PART OF THE N.W. 1/4, SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

REVISIONS:

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

DRAWN BY:	CDG
APPROVED BY:	TRS
PROJ. ENG.:	TRS
PROJ. SURV.:	VINCE
FILE NO.:	062024E
SHEET	2 OF 4
DATE:	2-15-07

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co. twp. sec. project drawing

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LAKE MICHIGAN DRIVE (M-45)

BENCHMARK ELEV. 653.97
SW FLANGE BOLT (UNDER "E") ON HYDRANT SIDE OF LAKE MICH. DR. 500' W OF 68th

N 1/4 COR SEC. 27

ARC=383.25'
RAD=5784.12'
CHD=S88°23'51"E 383.16'

S00°33'03"E 181.19'

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CATCH BASIN TOP=651.89 12" INV. NNE=648.6
STORM MANHOLE TOP=652.06
MANHOLE TOP=652.80
CATCH BASIN TOP=653.05
STORM MANHOLE TOP=653.46
CATCH BASIN TOP=653.29 12" INV. NNW=649.2
CATCH BASIN TOP=654.19 12" INV. NNE=651.04
STORM MANHOLE TOP=654.38

EX. 10" SANITARY
EX. 10" SAN.
EX. 12" WATERMAIN
SAN. LAT.
MONITOR WELL
SPRINKLER VALVE
MAIL BOX
TELE BOX
GAS
CONC. SIDEWALK
CONC. WALK
D.I.C. METER
WATER SERVICE
PROP. 6" SAN. LAT.
EX. 24" STORM
EX. 12" SAN.

S70°23'24"E 150.01'
N70°23'24"W 53.15'
P.O.B.
TOE 652.0
TOP EL.

N01°47'43"W 64.72'
S89°04'57"E 66.00'
N01°47'43"W 440.38'
S00°33'03"E 389.60'
S84°44'53"W 580.67'

Walgreens
14,820 sq.ft.
(Phase 1)
F.F. ELEV: 653.00

RELOCATED FUNERAL HOME
3,942 sq.ft.
(Phase 1)
F.F. ELEV: 650.00

CB TOP 651.3
CB TOP 651.4
CB TOP 651.5
CB TOP 649.0
CB TOP 648.0
CB TOP 647.7
MH TOP 651.8
STORM SEWER
PROP. STORM SEWER
6" FIRE
2" DOM.
6" SAN. LAT.
CREST

68TH AVENUE

BLACKTOP
CONCRETE
HOUSE
DECK
FUTURE DEVELOPMENT
GARDEN
METAL BARN
GAZEBO
EASEMENT FOR DRAIN PER LIBER 1366, PG. 68

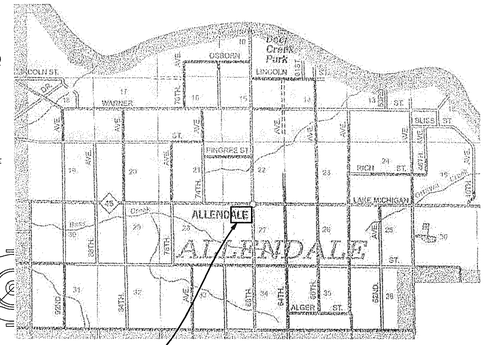
SAVE TREES
1 ON 4 SLOPES
1 ON 3 SLOPES
POND DETENTION AREA
4' DIA. OVERFLOW STRUCTURE TOP 644.5 SEE DETAIL THIS SHEET
LOW FLOW CHANNEL
8' WIDE BERM
18" STORM
18" INV. 637.5
48" FES W. INV.=637.55
EXISTING DRAIN
EASEMENT FOR DRAIN LIBER 1355, PG. 972 AND LIBER 1355, PG. 974
2' PERFORATED STANDPIPE, LOWEST PERFORATIONS AT INV. 638.0

24" MAPLE
24" CHERRY
3" MAPLE
6" MAPLE
24" OAK
20" SPRUCE
24" SPRUCE
10" W.CHERRY
10" CHERRY
6" SPRUCE
8" MAPLE
10" MAPLE
12" MAPLE
15" CEDAR
12" CEDAR
24" MAPLE (SAVE)
15" OAK
15" WALNUT
12" SPRUCE
12" WALNUT
THORN BUSH
2" TREE
CED.
3" CATALPA
4" SYC.
20" MAPLE
9" MAPLE

CATCH BASIN TOP=647.15 12" INV. S=643.6
CATCH BASIN TOP=647.26 12" INV. SE=644.0
STORM MANHOLE TOP=647.83 12" INV. NE=643.9 12" INV. SW=643.7 24" INV. N-E=639.98 48" INV. N=637.81
24" STORM PIPE (FES) INV. E. 641.67
SANITARY MANHOLE TOP=649.72 12" d INV. N-S=635.44 W. SHELF @ 635.9
SANITARY MANHOLE TOP=647.78 12"± INV. N-S=634.7

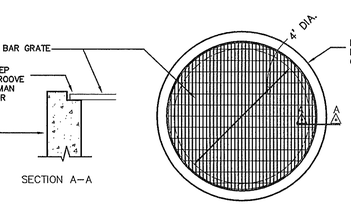
BENCHMARK ELEV. 650.60
HYDRANT 31' E OF 68th AND 300' S OF LAKE MICH. DR.

Location Map



SITE LOCATION

GENERAL NOTES:
1. THE WATER AND SANITARY SEWER SYSTEMS SHALL BE IN ACCORDANCE WITH THE ALLENDALE CHARTER TOWNSHIP STANDARD CONSTRUCTION REQUIREMENTS.
2. THE DETENTION BASIN DESIGN SHALL BE IN ACCORDANCE WITH THE OTTAWA COUNTY DRAIN COMMISSION STANDARDS.
3. A SOIL EROSION CONTROL PERMIT FROM THE OTTAWA COUNTY DRAIN COMMISSION WILL BE REQUIRED.



DROP INLET STRUCTURE

N

Scale: 1" = 30'

STATE OF MICHIGAN
TODD R. STUIVE
ENGINEER
No. 38273
LICENSED PROFESSIONAL ENGINEER

PHASE 1 FINAL PUD

SITE GRADING AND UTILITY PLAN

FOR: Geenen Dekock Properties
12 W. 8th Street, Suite 250
Holland, MI 49424

IN: PART OF THE N.W. 1/4, SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

REVISIONS:

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

DRAWN BY:	CDG
APPROVED BY:	TRS
PROJ. ENG.:	TRS
PROJ. SURV.:	VINCE
FILE NO.:	062024E
SHEET	3 OF 5
DATE:	2-15-07

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TAB: F-PUD_3

drawing number E F 03•08•30• 101 • 400
co. twp. sec. project drawing

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CAUTION: BEFORE DIGGING CALL MISS DIG AT 1-800-482-7171 FOR UNDERGROUND UTILITY LOCATIONS.

WARNING: USE EXTREME CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY WIRES

LAKE MICHIGAN DRIVE (M-45)

BENCHMARK ELEV. 653.97
SW FLANGE BOLT (UNDER "E") ON HYDRANT SIDE OF LAKE MICH. DR. 500' W OF 68th

N 1/4 COR SEC. 27

ARC=383.25'
RAD=5784.12'
CHD=S88°23'51"E
383.16'

S00°33'03"E 181.19'

BENCHMARK ELEV. 656.27
S FLANGE BOLT (UNDER "E") ON HYDRANT AT SE COR. OF 68th AND LAKE MICH. DR.

RELOCATED FUNERAL HOME
3,942 sq.ft.
(Phase 1)

Walgreens
14,820 sq.ft.
(Phase 1)

FUTURE DEVELOPMENT

FUTURE LANDSCAPING

PHASE 1 LANDSCAPING

68TH AVENUE

EXISTING TREES TO REMAIN

SAVE TREES

SPECIAL STORM WATER SEED MIX

EVERGREEN HEDGE 3' HT. THUJA

FLAG POLE PLAZA WITH 30' HT. POLE, CONC. PAVERS, BENCHES, BIKE PARK, AND ORNAMENTAL LIGHTING.

BIKE PARK

RETAIN AND PROTECT EXISTING MAPLE TREE

RETAIN AND PROTECT EXISTING OAK TREE.

LANDSCAPE BERM

PATIO WITH CONC. PAVERS AND BENCHES

EASEMENT FOR DRAIN PER LIBER 1366, PG. 68

EASEMENT FOR DRAIN LIBER 1355, PG. 972 AND LIBER 1355, PG. 974

15' WIDE GREENBELT W/ TREES (14' O.C.)

METAL BARN

GAZEBO

GARDEN

HOUSE

BLACKTOP

CONCRETE

WOODS

P.O.B.

S70°23'24"E 150.01'

N70°23'24"W 53.15'

S84°44'53"W 580.67'

N01°47'43"W 440.38'

N01°47'43"W 64.72'

S89°04'57"E 66.00'

Location Map

SITE LOCATION

PRELIMINARY LANDSCAPE PLAN

Final Landscape Plan(s) to have scale 1"=20' or larger.

Place Canopy Tree – 2" cal. min.
Acer rubrum, Pyrus calleryana, or Platanus

Place Evergreen Tree – 6' ht. min.
Pinus, Picea glauca, or Abies concolor

Place Ornamental Tree – 1 1/2" cal. min.
Malus, Cornus kousa, or Crataegus

Place Flowering Shrubs – 24"
Viburnum, Spiraea, Ribes, Weigela, or Hibiscus

Place Evergreen Shrubs – 24"
Juniperus, Taxus, Thuja, Ilex

Special Storm Water Seed Mix to include a mixture of: Forbs, Grasses, Native Shrubs, and Quick Cover Seed.

Parking Lot Islands to be landscaped with either Ground Cover or Ornamental Grasses.

All maintained landscaped areas to be irrigated with an in-ground irrigation system.

All plants in proposed Green Belt areas to be maintained in a healthy growing condition by property owner.

All lawn areas to include class "A" sunny seed mix.

All proposed landscape berms to be between 2' and 4' ht.

Landscape Architect to evaluate all existing trees on site prior to clearing and determine which trees are practical to transplant.

N

Scale: 1" = 30'

STATE OF MICHIGAN
MICHAEL R BRUGGINK
LANDSCAPE ARCHITECT
NO. 1405
REGISTERED LANDSCAPE ARCHITECT

RJM Design Inc.
Land Planning • Landscape Architecture
80 Ottawa NW, Suite 410 Phone: (616) 336-6071
Grand Rapids, MI 49503 Fax: (616) 336-8091

PHASE 1 FINAL PUD

SITE LANDSCAPE PLAN

FOR: Geenen Dekock Properties
12 W. 8th Street, Suite 250
Holland, MI 49424

IN: PART OF THE N.W. 1/4, SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

REVISIONS:

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

DRAWN BY:	CDG
APPROVED BY:	TRS
PROJ. ENG.:	TRS
PROJ. SURV.:	VINCE
FILE NO.:	062024E
SHEET	4 OF 5
DATE:	2-15-07

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drawing number E F 03·08·30· 101 · 400
co. twp. sec. project drawing

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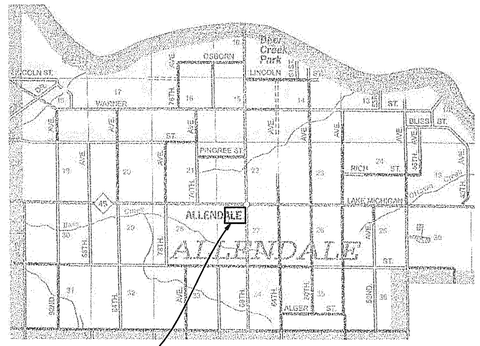
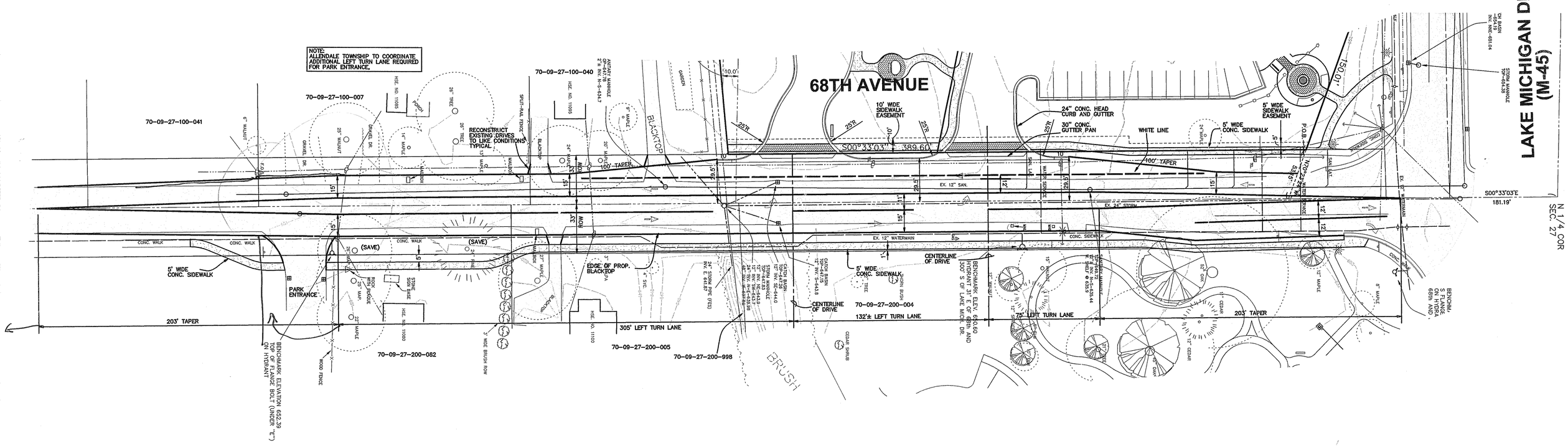
CAUTION: BEFORE DIGGING CALL MISS DIG AT 1-800-482-7171 FOR UNDERGROUND UTILITY LOCATIONS.

WARNING: USE EXTREME CAUTION WHEN WORKING NEAR THE EXISTING OVERHEAD UTILITY WIRES



Location Map



Scale: 1" = 30'

PHASE 1 FINAL PUD

68th AVENUE RECONSTRUCTION

FOR: Geenen Dekock Properties
12 W. 8th Street, Suite 250
Holland, MI 49424

IN: PART OF THE N.W. 1/4, SECTION 27, T7N, R14W, ALLENDALE TOWNSHIP, OTTAWA COUNTY, MICHIGAN

REVISIONS:

exxel engineering inc.
5252 CLYDE PARK, S.W. • GRAND RAPIDS, MI. 49509
PHONE (616) 531-3660 FAX (616) 531-2121

DRAWN BY:	CDG
APPROVED BY:	TRS
PROJ. ENG.:	TRS
PROJ. SURV.:	VINCE
FILE NO.:	062024E
SHEET	5 OF 5
DATE:	2-15-07

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TAB: F-PUD_5

drawing number: E | F | 03 • 08 • 30 • 101 • 400
co. twp. sec. project drawing

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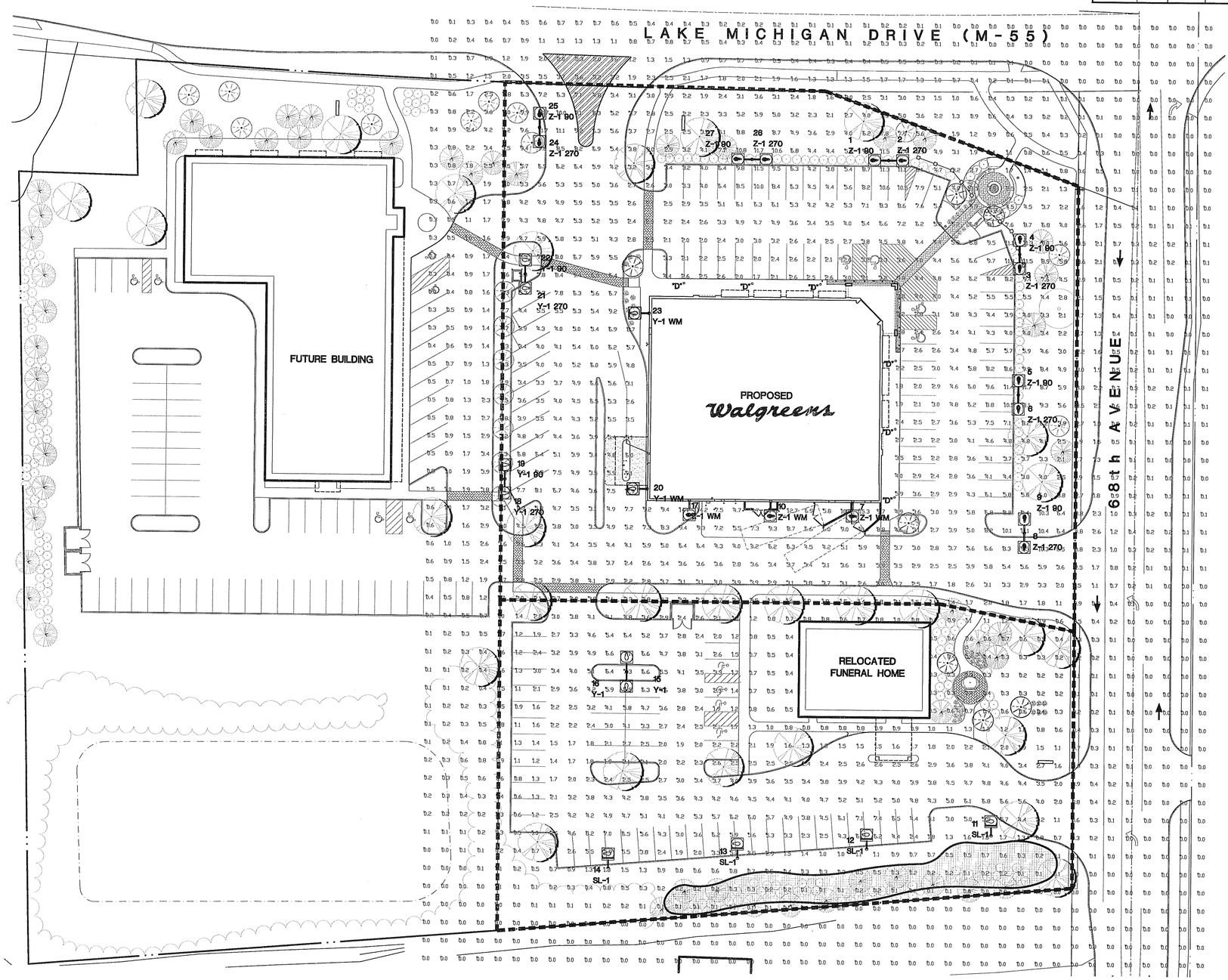
Numeric Summary										
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	# Pts	PtSpcLr	PtSpcTb
CalcPts	Illuminance	Fc	2.28	15.3	0.0	N.A.	N.A.	2211	10	10

Statistical Area Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
WALGREENS	5.00	15.3	1.7	2.94	9.00
FUNERAL HOME	3.46	7.4	0.5	6.92	14.80

ROTATE REFLECTOR FOR CORRECT SOCKET POSITION BEFORE FIXTURE INSTALLATION

Luminaire Schedule						
Symbol	Qty	Label	Lumens	LLF	Description	Remarks
	2	Y-1 270	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	Optics Rotated 270 deg
	2	Y-1 90	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	Optics Rotated 90 deg
	2	Y-1 WM	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	Wall Mounted
	2	Y-1	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-3F-BZ	
	6	Z-1 270	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-4F-BZ	Optics Rotated 270 deg
	6	Z-1 90	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-4F-BZ	Optics Rotated 90 deg
	3	Z-1 WM	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-4F-BZ	Wall Mounted
	4	SL-1	40000	0.750	WAG-CAL-400-MH-MT-ADVANCE-SL-BZ	



PROPOSED
Photometric Plan

SCALE: 1"=30'-0"

NOTE:
REF. SHEET SL-2 FOR FIXTURE DETAILS

Luminaire Location Summary						
Seq #	Label	X	Y	Z	Orient	Tilt
1	Z-1 90	213.5	427.25	32	180	0
2	Z-1 270	213.5	427.25	32	0	0
3	Z-1 270	286.75	377.5	32	270	0
4	Z-1 90	286.75	377.5	32	90	0
5	Z-1 90	286.75	300.25	32	90	0
6	Z-1 270	286.75	300.25	32	270	0
7	Z-1 WM	198.236	239.25	20	270.02	0
8	Z-1 270	290.75	222.5	32	270	0
9	Z-1 90	290.75	222.5	32	90	0
10	Z-1 WM	152.736	238.80	20	270.02	0
11	SL-1	273.75	54.5	22.5	90	0
12	SL-1	204.75	46.5	22.5	90	0
13	SL-1	133	40.75	22.5	90	0
14	SL-1	61.25	34.5	22.5	90	0
15	Y-1	70.5	143.75	32	270	0
16	Y-1	70.5	143.75	32	90	0
17	Z-1 WM	104.486	239.05	20	270.02	0
18	Y-1 270	3.5	249	32	90	0
19	Y-1 90	3.5	249	32	270	0
20	Y-1 WM	81.028	245.122	20	180	0
21	Y-1 270	15.5	363.75	32	90	0
22	Y-1 90	15.5	363.75	32	270	0
23	Y-1 WM	81.028	342.872	20	180	0
24	Z-1 270	19.5	445.5	32	90	0
25	Z-1 90	19.5	445.5	32	270	0
26	Z-1 270	138.25	429.75	32	0	0
27	Z-1 90	138.25	429.75	32	180	0
Total Quantity = 27						

PREPARED BY:

COOPER Lighting

Project: National Accounts Pillput-Grist & Assoc.	
Client: Walgreens #1415 - ALLENDALE TOWNSHIP, MI	
Scale: 1" = 30'-0"	Project #: 01100352A
Date: 2/15/2007	Drawing: DAG

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issued for:
06 FEB 07
12 FEB 07

project:

PROPOSED
Walgreens
(SWC) Lake Michigan Drive (M-45) & 68th Avenue
Allendale Township, Michigan

ROGVOY ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025-2404
PH 248.540.7700 FX 248.540.2710
ARCHITECTS@ROGVOY.COM

drawing:
Proposed Photometric Plan

DO NOT SCALE DRAWING

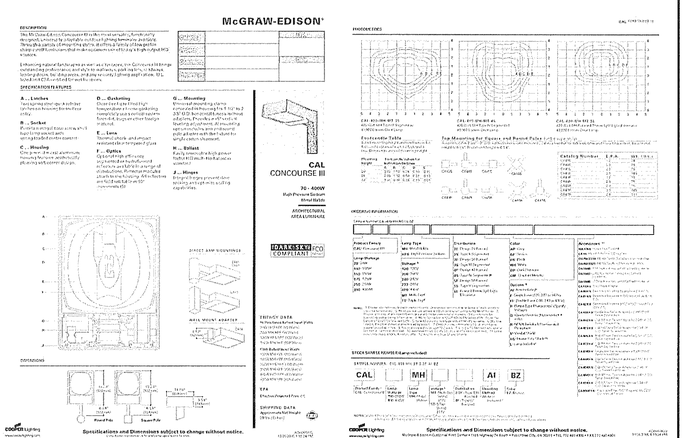
issue date:
drawn: B.J.C.
checked: B.J.C.
approved: M.D.

file number: 06185

sheet:
SL-1
06185 Lighting 07-0131

J:\Drawings\Walgreens\06185\02 Scheme\06185 Lighting Plan 07-0212.dwg, 2/15/2007 3:23:02 PM, Rich

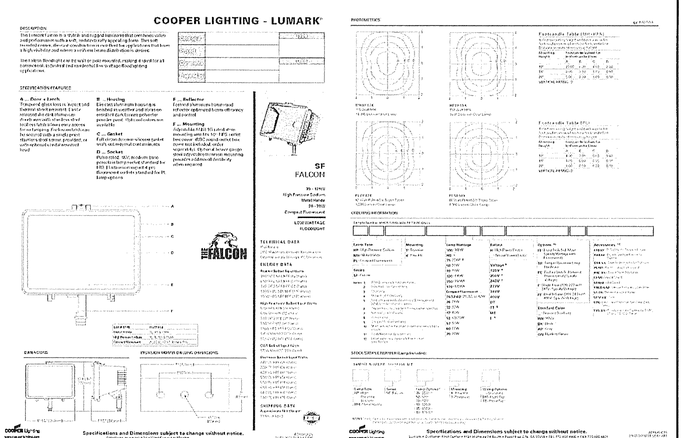
PROPOSED SITE FIXTURE



"Z-1", "Y-1", AND "SL-1" FIXTURES

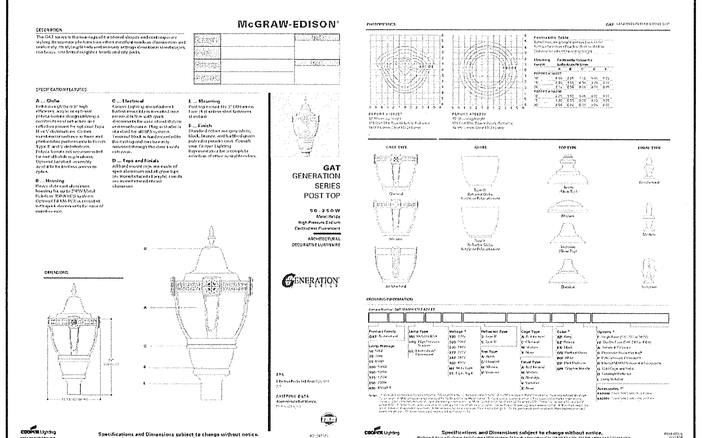
NOTE: REF. PHOTOMETRIC PLAN FOR LOCATIONS AND QUANTITY.

PROPOSED EXTERIOR FACADE ACCENT FIXTURE



"W" FIXTURE

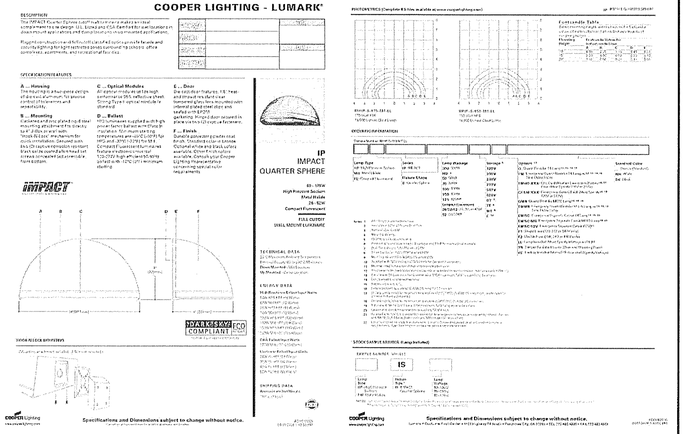
PROPOSED DECORATIVE STREET FIXTURES



"D" FIXTURE

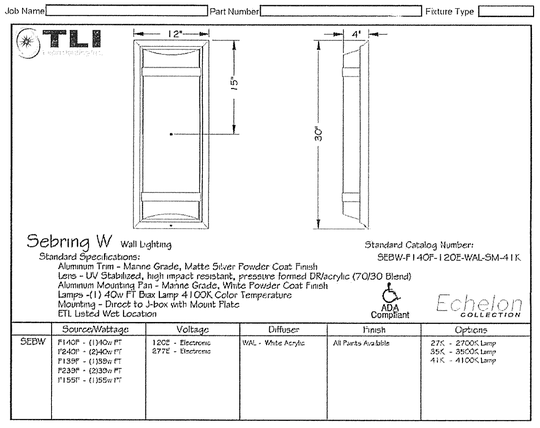
NOTE: DECORATIVE STREET LIGHTING FIXTURE TO BE COORDINATED WITH EXISTING DECORATIVE FIXTURES REQUIRED BY THE LOCAL MUNICIPLAITY. CONTACT CITY AND/ OR TOWNSHIP OFFICES FOR FURTHER DETAILS.

PROPOSED EXTERIOR WALL MOUNTED BUILDING FIXTURE



MHIP-S-175 "Q" FIXTURE

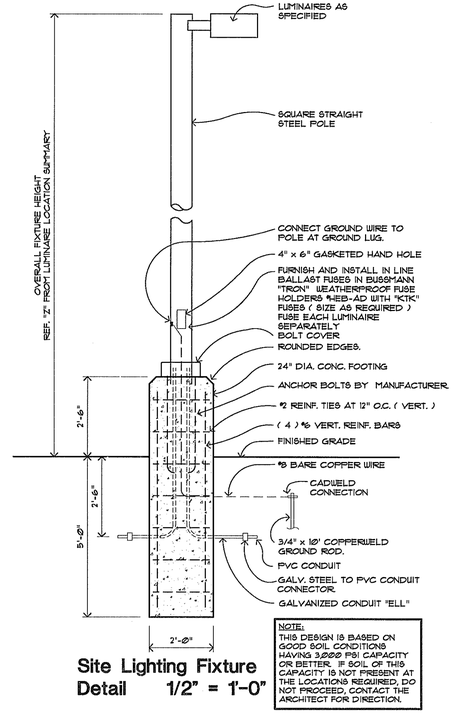
PROPOSED EXTERIOR WALL SCONCE FIXTURE



"P" FIXTURE

NOTE:
PROPOSED EXTERIOR FACADE ACCENT LIGHT FIXTURES ARE CANOPY MOUNTED WITH THE PRIMARY TASK OF ILLUMINATING THE PRIMARY WALL SIGNAGE. THESE FIXTURES HAVE NO EFFECT ON THE SITE LIGHTING LEVELS. THEREFORE THEY ARE NOT SHOWN ON THE PHOTOMETRIC PLAN.

NOTE:
REF. SHEET SL-1 FOR FIXTURE LOCATIONS



NOTE:
THIS DESIGN IS BASED ON GOOD SOIL CONDITIONS HAVING 3,000 PSI CAPACITY OR BETTER. IF SOIL OF THIS CAPACITY IS NOT PRESENT AT THE LOCATIONS REQUIRED, DO NOT PROCEED, CONTACT THE ARCHITECT FOR DIRECTION.

Site Lighting Fixture Detail 1/2" = 1'-0"

issued for:
06 FEB 07

project:

PROPOSED
Walgreens
(SWC) Lake Michigan Drive (M-45) & 68th Avenue
Allendale Township, Michigan

ROGVOY ARCHITECTS
32500 TELEGRAPH ROAD
SUITE 250
BINGHAM FARMS, MICHIGAN
48025-2404
PH 248.540.7700 FX 248.540.2710
ARCHITECTS@ROGVOY.COM

drawing:

Photometric Plan Details

DO NOT SCALE DRAWING

issue date:
drawn: B.J.C.
checked: B.J.C.
approved: M.D.

file number: 06185

sheet:

SL-2

06185 Lighting Details 07-0206

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Georgetown Township

January 21, 2021

Allendale Township
Planning Commission
6676 Lake Michigan Drive
Allendale, MI 49401

To Planning Commission Members:

In accordance with the requirements of the Michigan's Township Planning Act, this is to notify you that Georgetown Township, Ottawa County, Michigan, is initiating the process to amend the Master Plan for the Township.

The Township is asking for your cooperation and assistance in this process. We would like to know if you have any thoughts, concerns, or issues you feel should be addressed in this effort that would allow us to work more cooperatively with you in land use planning for our area.

Later in the process, the Township will send you a notification when the draft copy of the text of the plan will be available on the Township website at https://www.georgetown-mi.gov/DocumentCenter/View/5164/Draft-Master-Plan-on-Website and a draft copy of the Future Land Use Map will be available at the Township website at https://www.georgetown-mi.gov/DocumentCenter/View/5171/Draft-Future-Land-Use-Map-on-Website.

The draft copy will be for your review and comment, as required by the Act. If you would prefer a paper copy, please let me know at the address below. At that time, your comments regarding the Plan's content and how you feel it may affect planning efforts in our community and neighboring communities would be appreciated.

Thank you in advance for your cooperation and assistance. In the future, if you would be in need of our cooperation, we would be happy to oblige.

Sincerely,

Victor Vuong
Zoning Administrator