

AGENDA

Regular Meeting Wednesday, March 29 - 7:00 a.m. Page Memorial Building Lake Odessa, Michigan

- 1. Call to Order / Roll Call
- 2. Approval of Agenda
- 3. Public Comment on Agenda Items

Under the Open Meetings Act, any citizen may come forward at this time and make comment on items that appear on the agenda. Comments will be limited to five minutes per person. Anyone who would like to speak shall state his/her name and address for the record. Remarks should be confined to the question at hand and addressed to the chair in a courteous tone. No person shall have the right to speak more than once on any particular subject until all other persons wishing to be heard on that subject have had the opportunity to speak.

- 4. Minutes
 - a) 1/10/2023 Regular Meeting
 - b) 2/14/2023 Special Meeting
- 5. Finance Report
 - a) Revenue/Expense Report for Period Ending 2/28/2023
 - b) Check Register February 2023
 - c) Bank Reconciliation February 2023
 - d) Bank Statement February 2023
- 6. Action/Discussion Items:
 - a) Food Trucks
 - b) Village Welcome Sign
 - c) Discuss plan for preparation of report to taxing jurisdictions (Ionia County, Odessa Township, Library, etc.)
 - d) Art in the Park Sponsorship
 - e) Mural Project
 - f) Alley Maintenance
 - g) Parking
- 7. <u>Beautification Committee</u>
 - a) Spring planting
 - Schedule work day (Saturday, May 27?)
 - Recruit volunteers
- 8. <u>Board Member Comments</u>
- 9. Adjournment

Next Regular Meeting: Tuesday, May 9, 2023 - 7:00 a.m.

VILLAGE OF LAKE ODESSA DOWNTOWN DEVELOPMENT AUTHORITY

MINUTES

Regular Meeting - Tuesday, January 10, 2023 Page Memorial Building, Lake Odessa MI

PRESENT: Karen Banks, Sue Dahms, Bill Rogers, Marilyn Danielson, Sarah

McGarry

ABSENT: Darwin Thompson, Bob Green

STAFF: Village Manger Reagan, Village Clerk/Treasurer Forman

VISITORS: None

I. <u>Call to Order:</u> Meeting called to order by McGarry at 7:01 a.m.

II. <u>Approval of Agenda</u>: Motion by Dahms, support by Banks, to approve agenda as presented. All ayes; motion carried, 5-0.

III. Public Comment: None.

IV. Approval of Minutes:

- a) Minutes from 11/8/22 regular meeting. Motion by Danielson, support by McGarry, to approve. All ayes; motion carried, 5-0.
- b) Minutes from 12/13/22 special meeting. Motion by Dahms, support by McGarry, to approve. All ayes; motion carried 5-0.

V. Finance Report:

a) Revenue & Expense report and December 2022 bank statement were reviewed. Current account balance is \$80,731.43 as of 12/31/22. Discussed capture and negative capture. Banks noted the Sunset Date is 2025. A condensed annual report should be created with a narrative including the history and future views of the DDA. This report should be presented to the county when complete.

VI. <u>Action/Discussion Items</u>:

a) Election of Officers:

Motion by Banks, support by Dahms, to nominate Sarah McGarry for position of Chairperson. All ayes; motion carried, 5-0.

Motion by Banks, support by McGarry, to nominate Bill Rogers for position of Vice-Chairperson. All ayes; motion carried, 5-0.

Motion by Banks, support by McGarry, to nominate Sue Dahms for position of Treasurer. All ayes; motion carried, 5-0.

Motion by Dahms, support by McGarry, to nominate Karen Banks for position of Secretary. All ayes; motion carried, 5-0.

- b) <u>Food Truck Survey</u>: Reagan displayed a sample questionnaire for review. Phase I will distribute the questionnaire to restaurants in the village. A special meeting will be held on Tuesday, February 14, 2023 to review the surveys. After the special meeting, Phase II will distribute the questionnaire to other businesses in the village.
- c) <u>Proposed 2023-2024 DDA Budget:</u> Reagan placed before the DDA the proposed budget. Discussion was held and changes were made. Motion by Banks, supported by McGarry, to approve the revised budget with Revenues of \$31,605 and Expenditures of \$85,725. All ayes; motion carried, 5-0

VII. Beautification Committee Report:

a) Christmas Garland sponsorship program: Banks recapped the 2022 campaign. Revenue \$860.00 and Expenses \$864.00. 35 garlands were sponsored.

VIII. Miscellaneous Correspondence: None

IX. Board Member Comments:

- a) McGarry clarified that going forward contact with GEI will be through Gregg Guetschow, Karen Banks, or Kathy Forman.
- b) Banks thanked Patrick Regan for his hard work with the DDA.
- **X. Adjournment:** Without objection, meeting adjourned at 8:24 a.m.

Respectfully submitted,

Kathy Forman Village Clerk/Treasurer

VILLAGE OF LAKE ODESSA DOWNTOWN DEVELOPMENT AUTHORITY

MINUTES

Special Meeting - Tuesday, February 14, 2023 Page Memorial Building, Lake Odessa MI

PRESENT: Karen Banks, Sue Dahms, Bill Rogers, Marilyn Danielson, Sarah

McGarry, Bob Green

ABSENT: Darwin Thompson

STAFF: Interim Village Manger Guetschow, Village Clerk/Treasurer Forman

VISITORS: None

I. <u>Call to Order:</u> Meeting called to order by McGarry at 7:04 a.m.

II. <u>Approval of Agenda</u>: Motion by Banks, support by McGarry, to approve agenda as presented. All ayes; motion carried, 6-0.

III. Public Comment: None.

IV. <u>Action/Discussion Items</u>:

a) Review of Survey Monkey Food Truck Responses:

The survey results were presented along with business owner comments. Several questions were brought up for discussion regarding what the next step should be. If food trucks are allowed what limits should be enforced? Will there be a fee charged? Does the DDA need to ask the local businesses their opinion on food trucks, if they do should they let them know the restaurant owners opinions? At this time the ordinance does not allow transient food trucks on public property. Guetschow spoke about researching whether permanent food trucks can be allowed as part of the zoning ordinance. If food trucks are allowed on a limited basis, what would those limits be? If allowed for a special event what is the definition of a special event?

Discussion took place about a possible open house to talk with business owners about their thoughts.

Guetschow suggested waiting for council direction before moving forward with a recommendation. There should be more interface with the zoning ordinance and questions that have arisen. Any changes would need to be addressed in the Peddler's and Solicitor's Ordinance.

b) <u>Develop survey questions for Lake Odessa businesses:</u>

After a discussion, it was decided that the DDA should await further direction from Lake Odessa Village Council before doing a survey.

V. Board Member Comments: None

VI. Adjournment: Without objection, meeting adjourned at 8:01 a.m.

Respectfully submitted,

Kathy Forman Village Clerk/Treasurer 03/10/2023 09:21 AM

REVENUE AND EXPENDITURE REPORT FOR LAKE ODESSA VILLAGE

Page: 1/1

7,263.19

50,374.75

(43,111.56)

23.38

88.65

32.67

User: KATHY

TOTAL REVENUES

TOTAL EXPENDITURES

NET OF REVENUES & EXPENDITURES

DB: Lake Odessa Vil

PERIOD ENDING 02/28/2023

YTD BALANCE ACTIVITY FOR AVAILABLE 2022-23 02/28/2023 MONTH 02/28/2023 BALANCE % BDGT GL NUMBER NORMAL (ABNORMAL) INCREASE (DECREASE) DESCRIPTION AMENDED BUDGET NORMAL (ABNORMAL) REMAIN Fund 248 - DOWNTOWN DEVELOPMENT AUTHORITY Revenues Dept 000 - BALANCE SHEET / GENERAL 248-000-402.000 CURRENT REAL PROPERTY TAXES 30,000.00 22,843.72 0.00 7,156.28 23.85 248-000-665.000 INTEREST 60.00 93.09 15.44 (33.09)(55.15)1,000.00 860.00 0.00 140.00 14.00 248-000-674.000 DONATIONS-PRIVATE SOURCES 31,060.00 23,796.81 15.44 7,263.19 23.38 Total Dept 000 - BALANCE SHEET / GENERAL 23.38 TOTAL REVENUES 31,060.00 23,796.81 15.44 7,263.19 Expenditures Dept 275 - DDA 248-275-727.000 OFFICE SUPPLIES 50.00 0.00 0.00 50.00 100.00 248-275-750.000 DUES & MEMBERSHIPS 25.00 25.00 0.00 0.00 0.00 248-275-752.000 EDUCATION & TRAINING 500.00 0.00 0.00 500.00 100.00 248-275-801.000 8,000.00 769.00 99.00 7,231.00 90.39 CONTRACTED SERVICES 248-275-806.000 AUDIT SERVICES 150.00 128.95 0.00 21.05 14.03 1,000.00 89.70 0.00 910.30 91.03 248-275-880.000 COMMUNITY PROMOTION 0.00 (250.00)248-275-881.000 ADVERTISING 500.00 750.00 (50.00)248-275-967.000 BEAUTIFICATION 44,000.00 3,823.60 0.00 91.31 40,176.40 248-275-967.002 CHRISTMAS DECORATIONS 2,600.00 864.00 0.00 1,736.00 66.77 Total Dept 275 - DDA 56,825.00 6,450.25 99.00 50,374.75 88.65 99.00 88.65 TOTAL EXPENDITURES 56,825.00 6,450.25 50,374.75 Fund 248 - DOWNTOWN DEVELOPMENT AUTHORITY:

31,060.00

56,825.00

(25,765.00)

23,796.81

6,450.25

17,346.56

15.44

99.00

(83.56)

03/10/2023 09:23 AM User: KATHY DB: Lake Odessa Vil CHECK REGISTER FOR VILLAGE OF LAKE ODESSA Page: 1/1 CHECK DATE FROM 02/01/2023 - 02/28/2023

Check Date Bank Check Vendor Vendor Name Amount Bank DDA 6015 DOWNTOWN DEVELOPMENT AUTHORITY 02/10/2023 DDA CARDMEMBER SERVICE 99.00 1211 CARDMEMBER DDA TOTALS: Total of 1 Checks: 99.00 Less 0 Void Checks: 0.00 99.00 Total of 1 Disbursements:

03/03/2023 01:40 PM

DB: Lake Odessa Vil

User: KATHY

BANK RECONCILIATION FOR LAKE ODESSA VILLAGE Bank DDA (6015 DOWNTOWN DEVELOPMENT AUTHORITY)

FROM 02/01/2023 TO 02/28/2023 Reconciliation Record ID: 1873 Page 1/1

Final	ized
T	

GL Number Beginning Balance Description 248-000-001.024 CASH-DDA CHECKING 80,559.85 Beginning GL Balance: 80,559.85 Less: Cash Disbursements (99.00)Add: Journal Entries/Other 15.44 80,476.29 Ending GL Balance: GL Number Description Ending Balance 80,476.29 248-000-001.024 CASH-DDA CHECKING Ending GL Balance: 80,476.29 80,476.29 Ending Bank Balance: 0.00 Add: Deposits in Transit Less: Outstanding Checks Total - 0 Outstanding Checks: 80,476.29 Adjusted Bank Balance Unreconciled Difference: 0.00 REVIEWED BY: DATE:



VILLAGE OF LAKE ODESSA DOWNTOWN DEVELOPMENT AUTHORITY 839 FOURTH AVENUE LAKE ODESSA MI 48849 Date 2/28/23 Account Number Enclosures

Page 1 XXXXXXXXXXXXX6015

Bank from anywhere with our NEW Virtual Branch! Access the Virtual Branch via our website: UBMich.com

CHECKING ACCOUNTS

ACTIVITY	IN DATE ORDER		
Date	Description	Amount	
2/28	Interest Deposit	15.44	

CHECKS IN SERIAL NUMBER ORDER Date Check No Amount

2/16 1211 99.00

*Indicates Skip in Check Number

DAILY BALAN	CE INFORMATION					
Date	Balance	Date	Balance	Date	Balance	
2/01	80,559.85	2/16	80,460.85	2/28	80,476.29	

INTEREST RATE SUMMARY

Date

1/31

0.250000%

In case of errors or questions about your electronic transfers please contact Union Bank at 933 Fourth Avenue, Lake Odessa, Mi 48849 You may also contact us for a full Funds Availability Disclosure.



Karen Banks Village President Gregg Guetschow Village Manager Kathy Forman Village Treasurer

Kendra Backing Chief of Police Jesse Trout
DPW Supervisor

TO: Downtown Development Authority

FROM: Gregg Guetschow, Village Manager

SUBJECT: Regulation Food Trucks

DATE: March 8, 2023

The purpose of this memorandum is to elaborate on matters discussed during the Downtown Development Authority's February 14, 2023 meeting related to food trucks.

BBQ Trailer, 1409 Jordan Lake Street. During its October 18, 2021 meeting, the Village's Planning Commission approved a special use permit application submitted by Michael Mouch to allow the temporary location of a BBQ trailer on the east side of the structure housing Cobb's Quick Lube and Wash.

This application was accepted for review based on an August 6, 2021 email from Zoning Administrator Jeanne Vandersloot to Village Manager Patrick Reagan. Ms. Vandersloot confirmed that there was no language in the zoning ordinance addressing food trucks or trailers. She wrote "We could write language to add to the ordinance food trucks and trailers to allow them which is the best legal way."

Elsewhere in the email, however, she indicated that Mr. Mouch could "apply for a special use permit as a restaurant second use on the property." This was based on two interpretations that, I believe, are not especially straightforward.

Ms. Vandersloot cites a section of the zoning ordinance that she described as permitting a restaurant as a second use on the site. The provision that addresses this, Section 36.63 (c) (4) reads as follows: "Erection of more than one principal structure on a lot. In any district, more than one structure housing a permitted or permissible principal use may be erected on a single lot ..." There are a couple of problems with the use of this language to support a food trailer. One is that there is a mixture of zoning terms of art. Uses are typically referred to as principal permitted uses (uses permitted by right), uses subject to special conditions (conditional uses), and accessory uses. In the Highway Commercial zoning district, restaurants are a conditional use. It appears that the term "permissible principal use" conflates terms in a way that allows for interpretation that would include conditional uses. If that was the intent, it would have been clearer had they used that term. Because that clarity was absent, Ms. Vandersloot's guidance on the matter is understandable.

Another more consequential problem is that the language permits two structures. The presumption of this language is that each of the uses is housed within its own building. A BBQ wagon is not a structure.

A stipulation that customer transactions must take place within completely enclosed buildings is common in many zoning ordinances, although I could find no similar language in Lake Odessa's ordinance. The problem with using the cited language as the basis for allowing a second use on the property is that it opens the door to many other types of temporary uses. For example, florist shops are permitted uses in the Highway Commercial district. Using the same logic as for the BBQ trailer, this would allow someone to show up with a van full of flowers for sale.

The second area of misinterpretation relates to defining "restaurant" to include a BBQ trailer. The zoning ordinance offers some guidance here. "Restaurant" is defined as "an establishment where food and drink are prepared, served and consumed." Because the zoning ordinance refers to take-out restaurants in another section, one need not interpret this definition as requiring that food be consumed on the premises. On the other hand, the use of the term establishment would appear to contemplate that the food preparation takes place within a building.

Equally problematic in evaluating the conditional use application is the requirement that "restaurants must front on M-50 or Jordan Lake Avenue." Once again, it appears that in drafting the zoning ordinance, the Planning Commission had in mind the typical restaurant configuration of a building with the front parallel to the adjacent street. Mr. Mouch's trailer was located alongside the existing building. It does not face the street.

The agenda packet for the Planning Commission meeting at which Mr. Mouch's application was considered did not contain a written report from either Ms. Vandersloot or Mr. Reagan addressing any of these background issues, nor does it appear that the Commission was provided a copy of Ms. Vandersloot's August 6 email. The Commission, then, may be forgiven for failing to take up Ms. Vandersloot's suggestion for additional language or the concerns I have raised. Mr. Mouch has relied upon the approval granted by the Commission in operating the BBQ trailer on his premises. It would seem to be bad faith on the part of the Village to subsequently deny him that use.

Nevertheless, that action should not be relied upon as precedent for similar requests that might arise in the future. Particularly concerning in that respect is the fact that the Central Business zoning district allows restaurants as a permitted use. If the logic that allowed Mr. Mouch's request to be approved was applied to similar requests in the CBD, it is conceivable that many would be allowed without the necessity for Planning Commission review.

The decision to approve Mr. Mouch's application, in my view, was an unforced error on the Village's part. Mr. Mouch had indicated he was uncertain he would operate the BBQ trailer until 2022. That allowed adequate time to take up the question of drafting appropriate zoning

ordinance language to address the issue. In the following paragraphs, I will suggest some areas where language might be added to more definitively address this subject.

<u>Temporary Uses.</u> I have been able to identify only one section of the zoning ordinance that explicitly allows for temporary uses. The Public Recreational District, the zoning district for park areas and the fairgrounds, includes as uses permitted by right, "temporary or seasonal uses fitting the intent and purpose of the district, including circuses, carnivals or fairs; and associated activities, buildings and structures, for a period not to exceed seven days."

I can find no similar language applicable to any other zoning district. The conclusion to be drawn from this is that the Planning Commission and the Council intended temporary uses, such as food trucks, to be rare and limited both in scope and duration.

I suspect there have been temporary uses that have occurred outside of the Public Recreational District that were allowed without giving consideration to whether the zoning ordinance permitted them. It is not uncommon, for example, for a business to set up a tent in a parking lot for a grand opening or a special promotion. At times, those businesses might also wish to have a food vendor on site. At present, there is no allowance for such temporary uses.

Accessory Uses. Zoning ordinances frequently include among permitted uses those that are customarily incidental to the main use of the property. In the Highway Commercial district, the only permitted accessory uses are parking lots and on-site storage. In the Central Business district, only parking lots are permitted accessory uses. This language might be stricter than desirable. It is easy to imagine a BBQ restaurant that would wish to have a wagon used to smoke its meat. Setting that aside, however, the important issue to note is that the accessory uses must be customary for a business of the type that is on the site.

<u>Licensing of Peddlers.</u> The Village's Code of Ordinances includes language requiring the licensing of peddlers. There is an important exception, however, that could apply to food trucks:

Any person selling items, good, wares, services, merchandise, food or produce from a stand, booth, display case or other temporary or portable structure or fixture, which is at all times located upon private property with the express approval and invitation of the owner of such property.

I refer to this as the lemonade stand provision. I believe it is likely those who drafted the ordinance had something of this nature in mind when they included the language. Food trucks were not especially common in small towns until recently but lemonade and produce stands have been around for a long time. It is also likely that some version of this provision predated the adoption the zoning ordinance.

Because a zoning ordinance now exists, any commercial use that would fall under the peddlers provisions of the code, whether or not exempt from licensing, must comply with zoning regulations. I suspect that need has been overlooked in the past in order to accommodate food venders for community events. This oversight is one that could easily be

corrected by adding language to the zoning ordinance that sets out standards for temporary uses.

Recommendation. In summary, there are a number of obstacles to allowing food trucks and the like to operate legally in Lake Odessa, even to the limited extent supported by those restaurants that submitted responses to the recent survey. I think it would be prudent for the Downtown Development Authority to ask that the Planning Commission and the Village Council to institute a moratorium on the granting of licenses or other permits for food trucks and similar temporary businesses until such time as appropriate zoning ordinance language can be drafted and adopted.

LAKE ODESSA SIGN

VILLAGE OF LAKE ODESSA 1003 JORDAN LAKE STREET, LAKE ODESSA VILLAGE PARK, 48849



STATE MAP (NO SCALE)



SITE LOCATION MAP (NO SCALE)

PREPARED FOR:

VILLAGE OF LAKE ODESSA 1003 JORDAN LAKE STREET LAKE ODESSA VILLAGE PARK, 48849

PREPARED BY:

L02

GEI CONSULTANTS OF MICHIGAN, P.C. 230 N. WASHINGTON SQUARE SUITE 203 LANSING, MI 48933 (517)803-2836



GEI Project 2200254 FEBRUARY 27, 2023

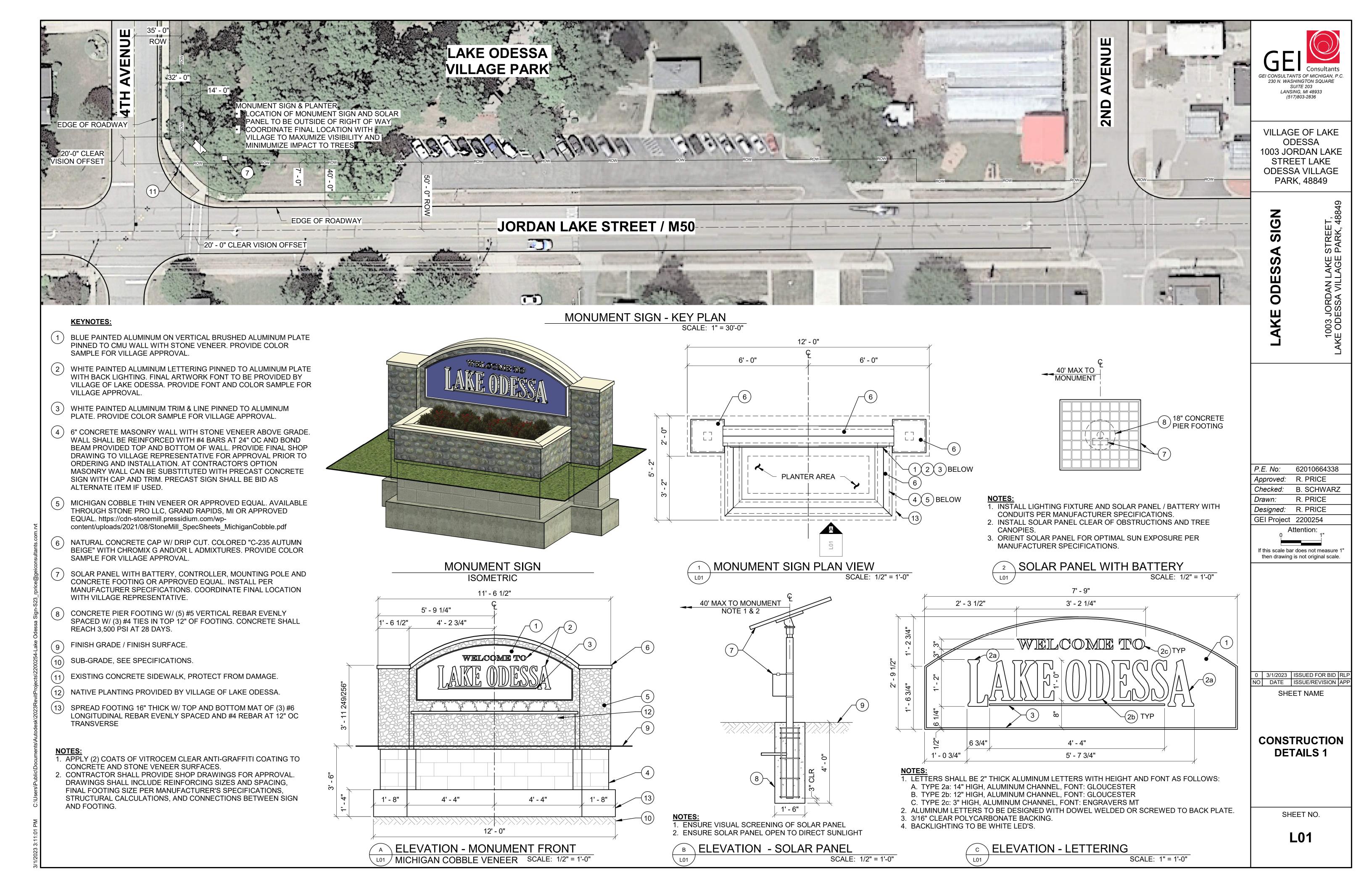
SHEET NO. **G01** 0 3/1/2023 NO DATE ISSUED FOR BID ISSUE/REVISION

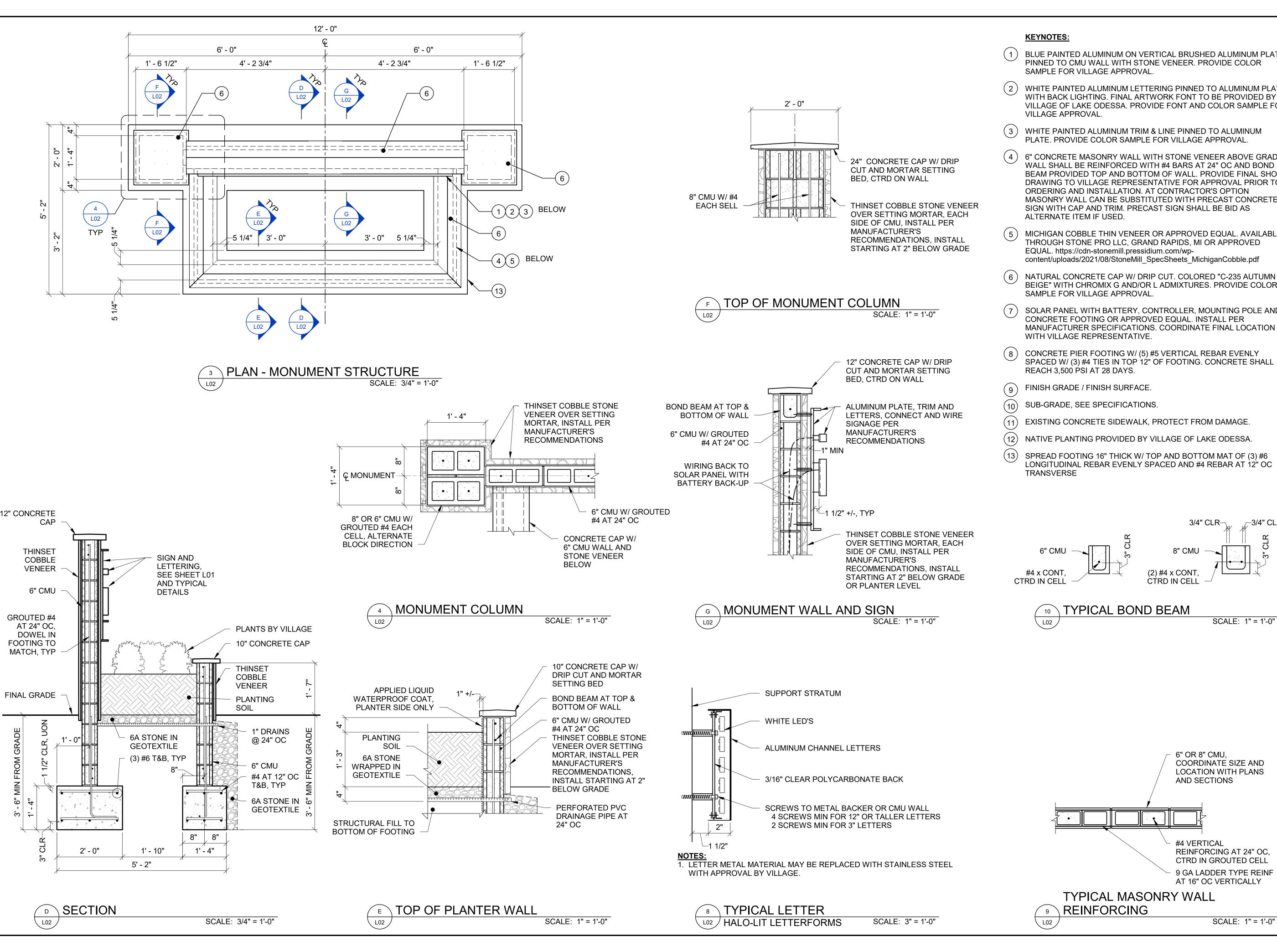
SHEET INDEX

SHEET NAME **COVER SHEET CONSTRUCTION DETAILS 1**

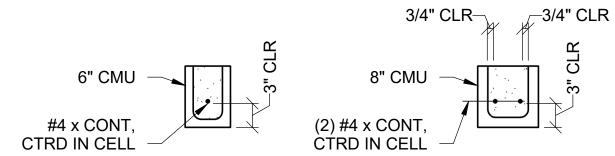
CONSTRUCTION DETAILS 2 SPECIFICATIONS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, IS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF GEI CONSULTANTS, AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF GEI CONSULTANTS.





- (1) BLUE PAINTED ALUMINUM ON VERTICAL BRUSHED ALUMINUM PLATE PINNED TO CMU WALL WITH STONE VENEER. PROVIDE COLOR
- WHITE PAINTED ALUMINUM LETTERING PINNED TO ALUMINUM PLATE WITH BACK LIGHTING. FINAL ARTWORK FONT TO BE PROVIDED BY VILLAGE OF LAKE ODESSA. PROVIDE FONT AND COLOR SAMPLE FOR
- (3) WHITE PAINTED ALUMINUM TRIM & LINE PINNED TO ALUMINUM
- (4) 6" CONCRETE MASONRY WALL WITH STONE VENEER ABOVE GRADE WALL SHALL BE REINFORCED WITH #4 BARS AT 24" OC AND BOND BEAM PROVIDED TOP AND BOTTOM OF WALL. PROVIDE FINAL SHOP DRAWING TO VILLAGE REPRESENTATIVE FOR APPROVAL PRIOR TO MASONRY WALL CAN BE SUBSTITUTED WITH PRECAST CONCRETE SIGN WITH CAP AND TRIM. PRECAST SIGN SHALL BE BID AS
- MICHIGAN COBBLE THIN VENEER OR APPROVED EQUAL. AVAILABLE THROUGH STONE PRO LLC, GRAND RAPIDS, MI OR APPROVED
- NATURAL CONCRETE CAP W/ DRIP CUT. COLORED "C-235 AUTUMN BEIGE" WITH CHROMIX G AND/OR L ADMIXTURES. PROVIDE COLOR
- SOLAR PANEL WITH BATTERY, CONTROLLER, MOUNTING POLE AND MANUFACTURER SPECIFICATIONS. COORDINATE FINAL LOCATION
- CONCRETE PIER FOOTING W/ (5) #5 VERTICAL REBAR EVENLY SPACED W/ (3) #4 TIES IN TOP 12" OF FOOTING. CONCRETE SHALL
- LONGITUDINAL REBAR EVENLY SPACED AND #4 REBAR AT 12" OC



SHEET NAME COORDINATE SIZE AND LOCATION WITH PLANS

AT 16" OC VERTICALLY

SCALE: 1" = 1'-0"

GEI CONSULTANTS OF MICHIGAN, P.C. 230 N. WASHINGTON SQUARE SUITE 203 LANSING, MI 48933 (517)803-2836

VILLAGE OF LAKE ODESSA **1003 JORDAN LAKE** STREET LAKE **ODESSA VILLAGE** PARK, 48849

> SIG り Ш 大 下 E

STREE PARK.

LAKE LAGE

1003 JORDAN L AKE ODESSA VILL

P.E. No: 62010664338 R. PRICE Approved: B. SCHWARZ Checked: R. PRICE Drawn: Designed: R. PRICE GEI Project 2200254 Attention:

If this scale bar does not measure 1 then drawing is not original scale.

0 3/1/2023 ISSUED FOR BID RLF NO DATE ISSUE/REVISION API

CONSTRUCTION **DETAILS 2**

SHEET NO.

L02

- 1. EXISTING CONDITIONS
- A. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH ENGINEER.
- 2. DRAWING USAGE
- A. DETAILS MARKED "TYPICAL" MAY OR MAY NOT BE CUT ON PLANS BUT SHALL APPLY UNLESS NOTED OTHERWISE
- B. SECTIONS, DETAILS, AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE, UNLESS OTHERWISE SHOWN.
- C. DO NOT SCALE DRAWINGS.
- 3. COORDINATION
- A. THE STRUCTURAL NOTES & SPECIFICATIONS ARE INTENDED TO AUGMENT THE DRAWINGS. SHOULD CONFLICTS EXIST BETWEEN THE DRAWINGS, SPECIFICATIONS AND THE STRUCTURAL NOTES, THE STRICTEST PROVISION SHALL GOVERN.
- B. COORDINATE WITH SOLAR POWER AND SITE ELECTRICAL FOR SLEEVES, INSERTS, ETC. NOT SHOWN ON STRUCTURAL PLANS.
- 4. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED PER REQUIREMENTS OF CONTRACT DOCUMENTS. CONTRACTOR SHALL DETERMINE ERECTION PROCEDURES AND SEQUENCE AND ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE-DOWNS IF NECESSARY. CONTRACTOR SHALL RETAIN OWNERSHIP OF SUCH MATERIAL AFTER COMPLETION OF THE PROJECT
- 5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SITE SAFETY AND ALL ACCIDENTS WHICH RESULT IN DEATH, PERSONAL INJURY, OR DAMAGE TO PROPERTY ARISING OUT OF OR IN CONNECTION WITH THE PERFORMANCE
- 6. CONSTRUCTION SHALL COMPLY FULLY WITH THE APPLICABLE PROVISIONS OF OSHA AND THE LOCAL GOVERNING CODES, CURRENT EDITION, AND ALL REQUIREMENTS SPECIFIED IN THE CODES SHALL BE ADHERED TO AS IF THEY WERE CALLED FOR OR SHOWN ON THE DRAWINGS. THIS SHALL NOT BE CONSTRUED TO MEAN THAT REQUIREMENTS SET FORTH ON THE DRAWING MAY BE MODIFIED BECAUSE THEY ARE MORE STRINGENT THAN THE CODE REQUIREMENTS OR BECAUSE THEY ARE NOT SPECIFICALLY REQUIRED BY CODE.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, SEQUENCES AND PROCEDURES OF CONSTRUCTION
- 8. GOVERNING BUILDING CODE MICHIGAN (INTERNATIONAL) BUILDING CODE 2015. STANDARDS LISTED IN STRUCTURAL NOTE SECTIONS REFER TO THE VERSION AND EFFECTIVE DATE IDENTIFIED IN THE REFERENCED STANDARDS CHAPTER IN THE GOVERNING BUILDING CODE.

- 1. SHOP DRAWINGS SHALL BE SUBMITTED FOR STRUCTURAL ITEMS AS REQUIRED BY THE SPECIFICATIONS OR AS CALLED FOR ON CONSTRUCTION DRAWINGS. CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS AND PRODUCT DATA FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTAL. REVIEWED SUBMITTALS SHALL BE STAMPED BY THE CONTRACTOR. ANY SHOP DRAWING OR PRODUCT DATA NOT REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR WILL BE REJECTED. GENERAL CONTRACTOR SHALL CLOUD OR FLAG ALL ITEMS NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SHALL VERIFY ALL DIMENSIONS
- ANY CHANGES. SUBSTITUTIONS OR DEVIATIONS FROM THE ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS WHICH ARE CLOUDED OR FLAGGED BY SUBMITTING PARTIES SHALL NOT BE CONSIDERED APPROVED AFTER THE ENGINEER'S REVIEW, UNLESS SPECIFICALLY NOTED ACCORDINGLY BY THE ENGINEER.
- THE APPROVED SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY ARE NOT TO BE CONSIDERED CHANGES TO THE ORIGINAL CONTRACT DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ITEMS OMITTED OR SHOWN INCORRECTLY ARE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DRAWINGS.
- ALLOW IN THE SCHEDULE DETAILING, FABRICATION AND ERECTION A MINIMUM OF 10 WORKING DAYS FOR REVIEW OF EACH SHOP DRAWING SUBMITTAL BY THE ENGINEER. SUBMIT SHOP DRAWINGS IN REASONABLE QUANTITIES AT REASONABLE INTERVALS (NOT MORE THAN 70 DRAWINGS PER SUBMITTAL PER WEEK). THE 10 WORKING DAYS STATED HEREIN, WILL BE IN ADDITION TO THE REVIEW TIME REQUIRED BY OTHER PROJECT TEAM MEMBERS. SUBMIT A SHOP DRAWING SUBMITTAL SCHEDULE PRIOR TO THE FIRST SUBMITTAL.
- . SHOP DRAWINGS WILL BE RETURNED FOR RE-SUBMITTAL IF MAJOR ERRORS ARE FOUND DURING REVIEW.
- REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO CHECK THE SHOP DRAWINGS PRIOR TO SUBMITTAL. ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS NOT CONFORMING TO THE CONSTRUCTION DOCUMENTS ARE THE RESPONSIBILITY OF THE SHOP DRAWING PREPARER.
- SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE CONTRACT DOCUMENTS. CONTRACTOR SHALL ENSURE THAT CONSTRUCTION IS IN ACCORDANCE WITH THE LATEST CONTRACT DOCUMENTS. SHOP DRAWING REVIEW IS ONLY FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. REVIEW OF THE SHOP DRAWINGS BY THE STRUCTURAL ENGINEER DOES NOT GUARANTEE THAT THE SHOP DRAWINGS ARE CORRECT NOR INFER THAT THE SHOP DRAWINGS SUPERSEDE THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL PROVIDE A SET OF APPROVED SHOP DRAWINGS BEARING THE REVIEW STAMP OF THE STRUCTURAL ENGINEER, TO THE LOCAL BUILDING DEPARTMENT AND TO THE PROJECT SITE.
- 10. CONTRACTOR SHALL VERIFY ALL RELEVANT DIMENSIONS AND ELEVATIONS FOR EQUIPMENT INSTALLATIONS AGAINST PURCHASED MANUFACTURER'S CERTIFIED EQUIPMENT DRAWINGS. CONTRACTOR SHALL COORDINATE DIMENSIONS THAT DEPEND UPON SPECIFIC EQUIPMENT PRIOR TO SUBMITTAL SUCH DIMENSIONS SHALL BE PROVIDED ON THE SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER.

DESIGN LOADS:

- 1. DESIGN CODES
- A. 2015 MICHIGAN BUILDING CODE B. ASCE/SEI 7-10 - MINIMUM DESIGN LOADS
- C. RISK CATEGORY I (ASCE TABLE 1.5-1)
- 2. DESIGN LOAD DATA
- A. DEAD: SELF-WEIGHT B. LIVE LOAD: 40 PSF ON TOP OF WALLS AND BENCH
- C. SNOW LOAD
- a. GROUND SNOW LOAD: Pg = 40 PSF (MBC FIGURE 1608.2)
- D. WIND DESIGN DATA
- a. ULTIMATE DESIGN WIND SPEED (3-SECOND GUST): Vult = 105 MPH
- b. RISK CATEGORY: I
- c. WIND IMPORTANCE FACTOR: Iw = 1.0
- d. EXPOSURE CATEGORY: B
- e. MINIMUM PRESSURES: 20 PSF E. SEISMIC LOADS
- a. RISK CATEGORY: I
- b. SEISMIC IMPORTANCE FACTOR: le = 1.0
- c. SEISMIC DESIGN CATEGORY: B
- d. SITE CLASS: D e. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS:
- SHORT-PERIOD: Ss = 0.078g
- 1-SECOND PERIOD: S1 = 0.045g f. DOES NOT CONTROL DESIGN

3. GEOTECHNICAL DATA

- A. MBC PRESUMPTIVE LOAD-BEARING VALUES TABLE 1806.2
- B. SHALLOW FOOTINGS:
- a. FROST DEPTH: 42 INCHES
- b. MINIMUM COLUMN FOUNDATION WIDTH: 12 INCHES
- c. LOAD BEARING VALUE OF SOIL: 1,500 PSF
- d. ULTIMATE FRICTION FACTOR: 0.35

BACKFILLING NOTES / SPECIFICATIONS

- 1. CONTRACTOR SHALL VERIFY ALL CONDITIONS, INCLUDING UNDERGROUND UTILITIES AND FIELD MEASUREMENTS AT JOB SITE AND REPORT ANY DISCREPANCIES TO VILLAGE'S REPRESENTATIVE.
- 2. PROVIDE NECESSARY SHEETING, SHORING, BRACING, ETC. AS REQUIRED
- DURING EXCAVATIONS TO PROTECT SIDES OF EXCAVATIONS. 3. COMPLY FULLY WITH REQUIREMENTS OF OSHA AND OTHER REGULATORY
- AGENCIES FOR SAFETY PROVISIONS. 4. TOP OF FOOTING ELEVATIONS NOTED ON DRAWINGS ARE MINIMUM ELEVATIONS. IN ALL CASES, FOOTINGS ARE TO BEAR ON UNDISTURBED NATURAL SOILS OR ENGINEERED FILL HAVING A MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1,500 PSF.
- 5. ALL BEARING SURFACES SHALL BE LEVEL (WITHIN 1 IN 12) PRIOR TO
- POURING CONCRETE. 6. SIDES OF FOUNDATIONS SHALL BE FORMED UNLESS CONDITIONS PERMIT EARTH FORMING. FOUNDATIONS POURED AGAINST THE EARTH REQUIRE SLOPE SIDES OF EXCAVATIONS TO ANGLE OF REPOSE AND CLEAN UP
- SLOUGHING BEFORE AND DURING CONCRETE PLACEMENT. 7. FOUNDATIONS SHALL BE CENTERED UNDER WALLS UNLESS SPECIFICALLY DETAILED OTHERWISE ON THE DRAWINGS
- 8. NO FOUNDATIONS SHALL BE PLACED ON OR AGAINST SUB-GRADE CONTAINING FREE WATER, FROST OR ICE. SHOULD WATER OR FROST HOWEVER SLIGHT, ENTER A FOOTING EXCAVATION AFTER SUB-GRADE APPROVAL, THE SUB-GRADE SHALL BE RE-INSPECTED BY THE GEOTECHNICAL ENGINEER/TESTING LABORATORY AFTER REMOVAL OF WATER OR FROST
- 9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY FROST OR ICE FROM PENETRATING ANY FOUNDATION OR SLAB SUB-GRADE BEFORE AND AFTER PLACING OF CONCRETE UNTIL THE FULL BUILDING ENCLOSURE IS COMPLETED AND HEATED
- 10. EXCAVATED MATERIAL SHALL BE LEGALLY DISPOSED OF OFF THE VILLAGE'S PROPERTY OR STORED AT THE SITE OR USED FOR BACKFILLING OPERATIONS.
- 11. CONTRACTOR SHALL FURNISH ALL REQUIRED DE-WATERING EQUIPMENT AS NECESSARY TO MAINTAIN A DRY EXCAVATION UNTIL BACKFILL IS COMPLETE.
- 12. FOUNDATION BEARING SOILS SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL ENGINEER. THE TESTING SHALL INCLUDE, BUT NOT BE LIMITED TO, IDENTIFICATION OF SOILS AT AND BELOW THE FOUNDATION BEARING LEVEL, AND THE ALLOWABLE BEARING CAPACITY OF THESE
- 13. A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF MICHIGAN THE PROJECT SHALL INSPECT THE CONDITION AND ASSURE THE ADEQUACY OF ALL SUBGRADES, FILLS, BACKFILLS BEFORE PLACEMENT OF FOOTINGS. THEY SHALL SUBMIT REPORTS TO THE ENGINEER DESCRIBING THEIR INVESTIGATIONS, INCLUDING ANY NON-CONFORMING WORK.

CONCRETE NOTES / SPECIFICATIONS

- 1. SPECIFICATIONS
 - A. DESIGN, MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS CONTAINED THEREIN, UNLESS OTHERWISE NOTED ON THE DRAWINGS
 - a. ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS b. ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- 2. CONCRETE MIX
- A. THE CONCRETE SUPPLIER SHALL PROVIDE A MIX DESIGN SUBMITTAL TO THE VILLAGE AND THE ENGINEER FOR REVIEW. THE MIX DESIGN SUBMITTAL SHALL INCLUDE, BUT IS NOT LIMITED TO, THE SOURCE AND TYPE OF CEMENTIOUS MATERIALS, THE SOURCES, TYPES, AND INDIVIDUAL GRADATION FOR EACH AGGREGATE, THE VENDOR AND TYPE OF ALL ADMIXTURES PROPOSED FOR USE, THE QUANTITY OF CEMENTIOUS MATERIAL BY MASS, THE SLUMP, UNIT WEIGHT, AND AIR CONTENT OF FRESHLY MIXED CONCRETE AND ANY COMPRESSIVE STRENGTH DATA, IF AVAILABLE.
- B. THE MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 1", UNLESS NOTED OTHERWISE. REFERENCE ASTM C33 FOR GRADATION. PROPORTIONS OF AGGREGATE TO CEMENT FOR ANY CONCRETE MIX SHALL BE SUCH AS TO PRODUCE A MIXTURE WHICH, CONSISTENT WITH THE METHOD OF PLACING, WILL WORK READILY INTO CORNERS AND ANGLES OF THE FORMS AND AROUND REINFORCEMENT WITHOUT PERMITTING THE MATERIALS TO SEGREGATE OR EXCESS WATER TO COLLECT ON THE SURFACE. C. CONCRETE SLUMP SHALL BE MEASURED AT THE POINT OF PLACEMENT
- D. 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A MAX W/C OF 0.42
- E. CONCRETE SHALL BE AIR-ENTRAINED WITH 5 PERCENT AIR CONTENT (PLUS OR MINUS 1.5 PERCENT).
- 3. REINFORCEMENT
- A. PRIOR TO FABRICATION OF REINFORCING STEEL, SHOP DRAWINGS SHALL BE SUPPLIED TO THE ENGINEER FOR REVIEW.
- B. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60. REINFORCING STEEL SHALL NOT BE WELDED
- C. FIELD BENDING OF REINFORCING STEEL SHALL NOT BE DONE WITHOUT AUTHORIZATION OF THE ENGINEER
- D. ALL REINFORCEMENT SHALL BE BENT COLD, UNLESS OTHERWISE PERMITTED BY THE BUILDING OFFICIAL. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT
- E. PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING AS FOLLOWS: a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- b. CONCRETE EXPOSED TO EARTH OR WEATHER: 2" F. THE PROPER TYPE AND QUANTITIES OF ACCESSORIES SHALL BE FURNISHED TO HOLD THE REINFORCING STEEL IN PLACE WHILE THE CONCRETE IS BEING PLACED. REINFORCEMENT SHALL BE TIED OFF AT A MINIMUM OF 50% OF THE INTERSECTIONS.
- G. LAP SPLICES OF REINFORCING SHALL BE PER ACI 318 SECTION 12.15, CLASS B, UNLESS NOTED OTHERWISE.
- H. PROVIDE CORNER BARS FOR ALL HORIZONTAL REINFORCING STEEL AT ALL CORNERS AND INTERSECTIONS. CORNER BARS SHALL BE THE SAME DIAMETER AND SPACING AS HORIZONTAL REINFORCING AND SHALL LAP HORIZONTAL REINFORCING (2'-0"x2'-0" MINIMUM).
- A. FORMWORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 347. B. WHERE WOOD FORMS ARE USED. THEY SHALL BE PLY FORM OR GRADED EXTERIOR TYPE PLYWOOD, GRADE B-B OR BETTER.
- 5. CONSTRUCTION
- A. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 117. B. REINFORCING STEEL SHALL BE TIED AND SUPPORTED FIRMLY TO PREVENT DISPLACEMENT DURING THE PLACEMENT OF CONCRETE
- C. CONCRETE FORMS SHALL BE STRONG, STABLE, AND TIGHT TO SUPPORT WET CONCRETE LOADS. D. REFER TO VENDOR DRAWINGS FOR SOLAR PANEL ELECTRICAL CONDUITS
- AND FOR EMBEDDED ITEMS NOT SHOWN ON STRUCTURAL DRAWINGS. E. ALL CONCRETE PLACED IN COLD WEATHER SHALL CONFORM TO
- REQUIREMENTS OF ACI 306R. COLD WEATHER CONDITIONS EXIST IF FOR 3 CONSECUTIVE DAYS THE AVERAGE DAILY TEMPERATURE IS LESS THAN 40 DEG F, AND THE AIR TEMPERATURE IS NOT GREATER THAN 50 DEG F FOR MORE THAN 12.
- F. ALL CONCRETE PLACED IN HOT WEATHER SHALL CONFORM TO REQUIREMENTS OF ACI 305R. HOT WEATHER CONDITIONS EXIST FOR HIGH AMBIENT OR CONCRETE TEMPERATURES, HIGH WIND SPEED, HIGH SOLAR RADIATION, OR LOW HUMIDITY.
- G. PLACING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 304. ARRANGE EQUIPMENT SUCH THAT THE CONCRETE HAS AN UNRESTRICTED VERTICAL DROP TO THE POINT OF PLACEMENT OR INTO THE CONTAINER RECEIVING IT. THE STREAM OF CONCRETE SHALL NOT BE SEPARATED BY FALLING FREELY OVER RODS, SPACERS, REINFORCEMENT. OR OTHER EMBEDDED MATERIALS. CONCRETE SHALL BE DEPOSITED AT OR NEAR ITS FINAL POSITION.
- H. CONCRETE SHALL BE CONSOLIDATED BY INTERNAL VIBRATION. WORKERS SHALL BE EXPERIENCED OR SHALL BE TRAINED IN USE OF THE VIBRATORS. USE INTERNAL VIBRATORS OF THE LARGEST SIZE AND POWER THAT CAN PROPERLY BE USED IN THE WORK. THOROUGHLY WORK CONCRETE AROUND REINFORCEMENT AND EMBEDDED ITEMS AND INTO CORNERS OF FORMS. ELIMINATING AIR AND STONE POCKETS THAT MAY CAUSE HONEYCOMBING, PITTING, OR PLANES OF WEAKNESS. VIBRATORS SHALL NOT BE USED TO MOVE CONCRETE LATERALLY WITHIN THE FORMS.
- WALLS AND EQUIPMENT FOUNDATIONS, SHALL HAVE A 3/4" CHAMFER AT

ALL EXPOSED EDGES OF CONCRETE. INCLUDING INTERIOR FOUNDATION

- J. EXPOSED CONCRETE SURFACES AND SURFACES WHERE FORMS ARE REMOVED PRIOR TO 7 DAYS AFTER CASTING SHALL BE CURED BY ONE OF THE FOLLOWING METHODS:
- a. WATER SATURATED BURLAP. BURLAP SHALL MEET THE REQUIREMENTS OF AASHTO M182-91, AND SHALL BE FREE OF HARMFUL SUBSTANCES. INCLUDING SUGAR OR FERTILIZERS. BURLAP SHOULD BE THOROUGHLY RINSED IN WATER BEFORE PLACING IT ON THE CONCRETE. WATER SHALL BE POTABLE OR SHALL MEET THE REQUIREMENTS OF ASTM C94, AND SHALL BE FREE OF MATERIALS THAT HAVE THE POTENTIAL TO STAIN CONCRETE. CONCRETE SURFACES SHALL BE KEPT CONTINUOUSLY WET AND SHALL NOT BE ALLOWED TO DRY FOR A MINIMUM OF 7 DAYS.
- b. LIQUID MEMBRANE-FORMING COMPOUND. COMPOUNDS SHALL MEET THE REQUIREMENTS OF ASTM C309. APPLY MEMBRANE-FORMING COMPOUND PER MANUFACTURER'S RECOMMENDATIONS.

MASONRY NOTES / SPECIFICATIONS

- 1. CONCRETE MASONRY HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 530.1, "SPECIFICATIONS FOR MASONRY STRUCTURES".
- 2. ALL CMU SHALL BE GRADE N, TYPE I, MEDIUM WEIGHT (MINIMUM), HOLLOW CORE 2 CELL UNITS (ASTM C90).
 - A. MEDIUM WEIGHT UNITS: 105 TO 125 PCF
 - B. NORMAL WEIGHT UNITS: GREATER THAN 125 PCF
- 3. CONCRETE MASONRY TO HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH F'm= 1,500 PSI UNLESS NOTED OTHERWISE.
- 4. MORTAR FOR ALL MASONRY SHALL CONFORM TO ASTM C270 WITH MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI. MORTAR BELOW GRADE SHALL BE TYPE M. ELSEWHERE MORTAR MAY BE EITHER TYPE M OR S UNLESS SPECIFICALLY INDICATED OTHERWISE. USE EITHER PORTLAND CEMENT/LIME OR MASONRY CEMENT FOR MORTAR.
- 5. GROUT SHALL CONFORM TO ASTM C476 WITH MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,500 PSI.
- STEEL BAR REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60. HORIZONTAL JOINT REINFORCEMENT SHALL BE "LADDER" TYPE WITH 3/16 INCH DIAMETER LONGITUDINAL BARS.
- 7. VERTICAL CELLS CONTAINING REINFORCING AND GROUT SHALL FORM A CONTINUOUS CAVITY, FREE OF MORTAR DROPPINGS.
- 8. MINIMUM VERTICAL CMU WALL REINFORCING SHALL BE CONTINUOUS #4 BARS AT 24" ON CENTER, UNLESS NOTED OTHERWISE. DOWELS TO CONCRETE FOUNDATION TO MATCH SIZE AND SPACING OF REINFORCING UNLESS NOTED OTHERWISE. REINFORCE CMU CORE AT CORNERS, EACH SIDE OF CONTROL JOINTS AND EACH SIDE OF WALL OPENINGS WITH ADDITIONAL (2) #4 CONTINUOUS VERTICAL REINFORCING BARS.
- 9. HORIZONTAL BOND BEAM AND VERTICAL REINFORCING SHALL BE CONTINUOUS UNLESS NOTED OTHERWISE. LAP SPLICE REINFORCING PER THE SCHEDULE BELOW OR USE MECHANICAL SPLICES ADEQUATE FOR 125% OF SPECIFIED YIELD STRENGTH OF THE BAR. LAP VERTICAL REINFORCEMENT WITH DOWELS PREVIOUSLY INSTALLED IN THE FOUNDATIONS. DOWEL EMBEDMENT IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE CAST-IN-PLACE CONCRETE NOTES
- A. BAR SIZE LAP SPLICE LENGTH
- a. #4 = 24"
- b. #5 = 30"
- 10. REINFORCING BARS SHALL BE HELD IN POSITION BY WIRE TIES OR OTHER APPROVED MEANS TO INSURE DESIGN LOCATION AND LAP. PLACE BARS AND LAP PRIOR TO GROUTING.
- 11. GROUTING OF MASONRY WALLS SHALL CONFORM TO RECOMMENDED PROCEDURE FOR "LOW LIFT GROUTING" OR "HIGH LIFT GROUTING" AS OUTLINED IN THE NCMA TEK 3-2A - "GROUTING CONCRETE MASONRY WALLS" AND ACI 530.1/ASCE 6 "SPECIFICATION FOR MASONRY STRUCTURES". GROUT LIFTS SHALL NOT EXCEED 5 FEET WITHOUT MECHANICALLY CONSOLIDATED (VIBRATED) GROUT POURS.
- 12. LIFTS OF GROUT SHALL BE KEYED 4 INCHES INTO THE PREVIOUS COURSE OF MASONRY BELOW.
- 13. MASONRY BELOW GRADE SHALL BE GROUTED SOLID. 14. SAMPLING AND TESTING OF MORTAR AND GROUT SHALL BE IN ACCORDANCE
- ASTM C780 AND ASTM C1019, RESPECTIVELY. ONE TEST OF EACH IS REQUIRED FOR EACH 5,000 SQUARE FOOT OF WALL
- 15. CONSTRUCTION AND TESTING OF MASONRY PRISMS SHALL BE IN
- ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE ASTM C1314. 16. SPECIAL INSPECTION OF MASONRY CONSTRUCTION IS REQUIRED. REFER TO MBC CHAPTER 17 AND ACI 530 FOR QUALITY ASSURANCE REQUIREMENTS. SPECIAL INSPECTION SHALL INCLUDE AT MINIMUM:
- A. MORTAR AND GROUT TESTING.
- B. REINFORCEMENT PLACEMENT AND LAP VERIFICATION
- C. VERIFICATION OF CLEAR GROUT SPACE PRIOR TO GROUTING. D. VERIFICATION OF PROPER GROUTING PROCEDURES (GROUT LIFT AND
- CONSOLIDATION). 17. CONTRACTOR SHALL BRACE MASONRY WALLS TO RESIST WIND LOADS UNTIL THE MASONRY HAS REACHED 75% OF THE REQUIRED STRENGTH F'm. BRACING SHALL BE PROVIDED IN ACCORDANCE WITH OSHA – CONSTRUCTION

SAFETY STANDARDS FOR MASONRY WALL BRACING AND NCMA TEK 3-4B -

"BRACING CONCRETE MASONRY WALLS DURING CONSTRUCTION". 18. CONTRACTOR SHALL SHORE MASONRY WALLS ABOVE MASONRY BOND BEAM LINTELS UNTIL THE MASONRY IS PLACED FULL HEIGHT AND HAS REACHED THE REQUIRED STRENGTH

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P.E. No: 62010664338 R. PRICE Approved: B. SCHWARZ R. PRICE Drawn: Designed: R. PRICE GEI Project 2200254

Attention:

If this scale bar does not measure 1'

then drawing is not original scale.

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SHEET NAME

SPECIFICATIONS

SHEET NO.