

**West Michigan Airport Authority**

**Regular Meeting Agenda**

**May 14, 2018**

**11:30am – 1:00pm**

**Airport Business Center, 60 Geurink Boulevard, Main Conference Room (Holland)**

1. Public Comment
2. Consideration of April 9 and April 30 meeting minutes. (Action Requested)
3. Review of 4-point approach to airport activities.
4. Bids for airport entranceway improvements. (Action Requested)
5. Review of five-year airport capital improvement program.
6. Mead&Hunt proposal for new public hangar preliminary layouts. (Action Requested)
7. FBO report.
8. Communications report.
9. Items from Aaron Thelenwood:
  - A. Site plan approval.
  - B. Selected airport operational expenses for FY18.
10. Appointments to Authority sub-committees. (Action Requested)
11. Financial reports, including MDOT/AERO grants close-outs.
12. Other Business.
13. Next meeting: June 11, 2018, 11:30am, Location to be determined.
14. Adjourn.

**If you are not able to attend the meeting, please contact Greg Robinson ([g.robinson@wmairportauthority.com](mailto:g.robinson@wmairportauthority.com)) or Aaron Thelenwood ([a.thelenwood@cityofholland.com](mailto:a.thelenwood@cityofholland.com)). We must have at least one of the three representatives of each unit of government present at the meeting to attain a quorum. Thank you.**

# **West Michigan Airport Authority**

## **MEETING MINUTES**

**April 9th, 2018**

**11:30am – 1:00pm**

**Airport Business Center, Holland, MI.**

**PRESENT:** Authority Members: Sylte, Hoekstra, Bos, Blanton, Klynstra, Hoogland, Keeter, Haverdink

**ABSENT:** Corbin, Matthysse

**Others Present:** Authority Assistant Manager Thelenwood, Communications Coordinator Scholten, Boer (FBO), King (Public)

*Board Member Sylte called the meeting to order at 11:36 a.m.*

### **18.04.01      Public Comments.**

No Public Comments

### **18.04.02      Consideration of February 12<sup>th</sup>, 2018 Meeting Minutes**

Motion to approve the February 12<sup>th</sup> by Bos, supported by Keeter and approved unanimously by the board.

### **18.04.03      Public Hearing on the Fiscal year 2019 Operating and Capital Budgets.**

The Public Hearing on the Fiscal Year 2019 Operating & Capital Budgets opened at 11:40 am.

Annually, the Airport Authority Manager prepares and submits the fiscal year Operating and Capital budgets to the Authority Board for consideration.

The FY 18 Action Plan update was presented to the Board in December 2017. Much progress has been made on the FY18 Action Plan and an aggressive Action Plan is proposed for FY19.

Revenues in the proposed FY19 Operating budget are estimated to decrease by about 1.6% from the estimated FY18 year-end revenues. This is due primarily to a decrease in tax revenue from the Cities of Holland and Zeeland as the result of the elimination of the personal property

tax. The other revenues are expected to remain stable. The millage rate is recommended to remain at one-tenth of a mill.

Operating expenses are proposed to decrease by about 1.6% as well due primarily to a decrease in communication and outreach costs.

It is recommended that \$152,700 from revenues be placed in reserves to provide the local match for future Capital Projects. There are two (2) new projects proposed for FY19: The Entryway Landscaping & Parking Lot Rehabilitation Project and Proposed Public Hangar Site Work.

Also, it is recommended that \$25,000 continue to be placed in the Reserves for Business Center Maintenance and Repairs to save for future needs

No corrections, additions, or edits were proposed by members of the Board or Public. Jeff King (Public) asked for clarification on the \$300,000 proposed for site work and it was explained that this was for the preliminary review of available parcels for potential sites of new hangars and prepping selected sites to build. It was also explained that this number is an estimate only.

The public hearing closed at 11:55am.

#### **18.04.04 Resolution to Adopt the Fiscal Year 2019 Operating and Capital Budgets.**

It was moved by Blanton, supported by Bos to Adopt the Fiscal Year 2019 Operating and Capital Budgets as presented. Motion was approved unanimously by the board.

#### **18.04.05 Bids for Demolition and Restoration at Airport Entranceway**

In December of 2017, the former office building was demolished. The next step following the demolition is to improve the airport entryway at Geurink Boulevard. The Airport Authority has hired Elzinga and Volkers to serve as project manager for both projects.

The scope of this project is to remove approximately half of the existing parking lot adjacent the former office building and restore to lawn. The remaining parking lot will be entirely replaced with new pavement. For site demo, final grading, and seeding as well as new paving and requisite permitting, Elzinga and Volkers is estimating a total project cost of \$55,825.00. Elzinga and Volkers expects to have bids back for review by

May 1st, 2018. The duration of this project will be approximately one week and is slated to begin early June.

Due to the proximity of this property to the runway ramp, and potential future interest in developing this site, staff have decided to forgo any significant landscaping work on this site at this time. The goal is simply to restore the site and make it more presentable.

Once bids are received, Airport Authority Staff are requesting the Board approve staff to award the lowest bidder for the demo and landscaping work so long as the costs for work do not exceed the \$55,825.00 estimate presented by E&V. This would allow the authority to avoid any possible delays in getting started on this project.

The Board expressed hesitance in making any major investment or improvement to the property identified until there is a more clear plan for it's future use. The Board asked staff to procure the following bids from potential contractors by the Board's May 14<sup>th</sup> meeting:

- **Bid Option 1** – Bids to remove half of the existing lot and restore to lawn with no improvements to the remaining parking area.
- **Bid Option 2** - Bids for the work described in the initial report – removal of half the existing lot, restoring to lawn and installing new pavement in the remaining lot.
- **Bid Option 3** -The same work described in Bid Option 2 with the addition of a landscape feature.

No Action was taken on this item.

#### **18.04.06      Bids for Fence Repair**

In October of 2017, the Airport Authority Board approved a bid from Fence Consultants of West Michigan to repair two sections of fence surrounding the Airport: one 100' section south of the tunnel, and one small section over a creek on the south side of the runway. The section south of the tunnel was repaired in March of 2018 and the section on the south side of the runway will be completed later this Spring.

Following the winter snowplow season of 2017-18, an additional 150' of fencing south of the tunnel has been damaged and is in need of repair. Authority Staff have received a quote from Fence Consultants of West Michigan for \$3,418.00. Additionally, staff requested a quote for a snow fence as well to create a barrier and prevent additional damage from snow plows. The quote for 200' of snow fence from Fence Consultants of West Michigan is \$3,920.00. The snow fence was recommended as this section of the



fence needs to be repaired on a near annual basis. The cost of the snow fence breaks out to about \$19.60/foot and the standard fence is \$22.76/foot – as compared to \$26.12/foot in 2017.

Typically, Staff would seek an alternative bid to compare for this work; however, Fence Consultants of West Michigan has performed these repairs for the Airport Authority in the past. Further, when considering the alternative bid from AAA Fence last year for the same work at a total cost of \$10,400.00 Staff recommends accepting the bid from Fence Consultants of West Michigan.

The Board requested that staff review with the contractor whether the snow fence was the best option to prevent future damage or if another system might be more beneficial.

It was moved by Klynstra, supported by Keeter and approved by the Board unanimously to Accept the bid for (1) repair of an additional 150' of fence damaged by snow removal and (2) installation of 200' of snow barrier fencing -**Contingent on the Contractor's response to the feasibility of the Snow Fence**

#### **18.04.07 FBO Report**

Snow removal has dropped significantly over the past month from 200+ hours to 20. Freight has been up significantly, with a minimum of two freight trips per day. Fuel sales are up by 15%.

#### Report on MDOT Annual Meeting

MDOT is emphasizing the need to pursue community engagement as part of Land Use Planning. MDOT is encouraging land use practices that both increase revenues for airports and are more focused on improving the community overall.

One unique approach to come out of the meeting is establishing Idea Center's/Innovation Centers on airport properties. The board raised the idea of creating such on the former office building site.

It was also discussed at the MDOT meeting that Michigan ranks as number 2 in the nation for Aerospace Companies. The Board expressed interest in exploring options to attract Aerospace companies from the East Side of the state to Holland and what that would take. Would it be worth joining relevant Aerospace Business Focused Associations.

Additionally, MDOT will be increasing Airport inspections to every two years rather than

every three.

#### **18.04.08      Communication's Report**

Communications Coordinator Scholten has been tracking how the WMAA's social media presence compares to other similar airports. West Michigan Regional ranks 2<sup>nd</sup> (2,594), behind Muskegon County (4,721) as far as social media "Likes"; just ahead of Kalamazoo/Battle Creek (2,136).

Communications Committee is beginning preparations for the Tulip Time Parade, Wings of Mercy CareAffaire, and Pumpkinfest Parade in Zeeland.

#### **18.04.09      Project and Activity Updates**

##### **A.   FAA Land Release**

As explained to the Board in November 2017, the Authority Board received a presentation regarding a strategy for developing certain properties at the airport. The Building & Development Committee has been working on this strategy and urgency was given to it when a company expressed interest in purchasing a portion of airport property.

The company remains interested in developing on airport property, however, the company is not an airport-related use, so a release of the property by the Federal Aviation Administration is necessary in order for this to occur. The company owner is interested in a portion of Parcel K which is located along the north side of 64<sup>th</sup> Street, east of the railroad tracks. Parcel K, as well as the other parcels in the strategy, are shown in the attachment to this report.

There is a process involved in requesting a FAA land release that involves a property appraisal, survey, environmental clearance and rationale for the release. Airport consultant Mead & Hunt is familiar with the process and has submitted a proposal for conducting this work on behalf of the Authority. The proposal has been prepared in phases so that if the FAA stopped the process at some point during one of the phases, the Board would not have spent the total potential amount.

The first step in the process was the preparation of a checklist to be submitted to MDOT/Aeronautics (AERO) before proceeding with preparation of the full land release documentation. At the November 13, 2017 meeting, the Board authorized staff to proceed with Mead & Hunt on the Phase 1 portion of this work which was preparation of the project scope and checklist. The Board authorized a not to

exceed cost of \$12,200 for this Phase. This Phase has been completed and MDOT/AERO has recently approved the checklist, meaning that the Authority can proceed with preparing the full land release documentation. To date, the Authority has been billed \$4861 for this Phase.

Now the Board can proceed with Phases 2-4 which will include field investigation, Categorical Exclusion, wetland boundaries, property survey, property appraisal, and the full land release package. It is estimated that these three Phases will cost \$42,173, however, it is likely that Authority staff will bid and oversee the survey and appraisal work which could reduce this cost somewhat. If the FAA approves the land release package, the FAA/MDOT requires a revision to the Airport Layout Plan which is estimated to cost another \$9,000.

The prospective company remains interested in parcel K and it may be in the Authority's best interest to obtain a commitment from this potential owner before encumbering all of the land release costs. The Authority may wish to proceed with this land release regardless of whether it has a potential buyer/lessee and if this is the case, then a commitment from the potential company is not necessary. The land release costs, or a portion thereof, might also be part of the property sale or lease costs. The Building & Development Committee has discussed this, and I will be meeting with the company representative to discuss how this commitment would be provided.

The Board was hesitant to proceed further on this project without commitment from the potential buyer. The Board felt that, before incurring additional cost for the land release, it would be prudent to obtain a formal commitment from the potential buyer/lessee.

The Board took No Action on this item and requested additional review from staff.

#### **B. Crack Sealing Schedule**

Crack Sealing is Scheduled to be Complete by May 15, 2018

#### **C. Engineering/Planning Consultant Procurement Process**

The Building & Development Committee has been secured to stand as the Search Committee in this Process. MDOT requires the Airport to go out to bid for these services every 5 years. The process is designed to take 60 days start to finish and will begin either June or July.

### **18.04.10 Appointments to Authority Sub-Committees**

This item was tabled by the board for the May 14<sup>th</sup> Board Meeting

#### **18.04.11      Financial Reports**

Due to current budget preparations by the City of Holland Finance Department, they were unable to provide the typical Investment and Budget Reports in time for the April 9<sup>th</sup> meeting. These reports will be included in the May 14 meeting.

The Board did review expenditures and a motion to approve the expenditures was made by Keeter, supported by Klynstra and approved unanimously.

#### **Meeting Adjourn – 12:56pm**

**Minutes Approved:**\_\_\_\_\_

(Secretary)

**Date:**\_\_\_\_\_

**West Michigan Airport Authority**

**Fiscal Year 2019 (July 1, 2018 – June 30, 2019) Action Plan**

**April 2, 2018**

**Mission Statement**

To provide the community with state-of-the-art global air access to strengthen the local economy and improve the area's quality of life.

**Fiscal Year 2019 Action Plan**

**Operations**

- Conduct crack sealing and paint markings. (Spring - Summer 2018)
- Update the Airport Emergency Plan. (August 2018)
- Update the Airport Operations Procedures. (December 2018)
- Work with the City of Holland Public Safety Department on conducting an emergency response simulation at the airport. (August 2018)
- Update the Management Agreement with the City of Holland. (December 2018)
- Update the Airport Building Standards. (August 2018)

**Communications**

- Coordinate periodic updates to informational displays in the Airport Business Center.
- Participate in at least three community events.
- Distribute information on airport activities through videos, website updates, periodic newsletters, media releases and community presentations.
- Continue to be active in social media venues such as Facebook and Twitter.
- Interact with airport tenants and users on airport activities, needs and matters of interest:
  - i. E-newsletter.
  - ii. Periodic meetings.
  - iii. One-on-one contacts.

**Capital Projects**

- Remove the entrance parking lot and install landscaping on this site. (Summer 2018)

**Economic Structuring**

- Prepare an evaluation of site improvements needed to the east of the present T hangar buildings in order to determine opportunities for additional public and private hangars. (September 2018)

- Determine a business plan and schedule for an additional public hangar building.  
(November 2018)
- Continue implementation of an airport development effort in cooperation with area economic development partners that will:
  2. Further define reasonable development opportunities of airport properties based on FAA requirements and anticipated airport needs.
  3. Work with local and regional companies to determine opportunities at the airport;
  4. Develop a network with airport-related companies and governmental entities to determine opportunities at the airport.

## West Michigan Airport Authority

270 South River Avenue, Holland, MI 49423  
P (616) 510-2332

*Comprising City of Zeeland, Park Township and City of Holland*



May 14, 2018

### REPORT 4.

**To:** West Michigan Airport Authority Board.  
**From:** Aaron Thelenwood, Airport Authority Assistant Manager.  
**Subject:** **Bids for Demolition and restoration at Airport Entryway.**

---

In December of 2017, the former office building was demolished. The next step following the demolition is to improve the airport entryway at Geurink Boulevard. The Airport Authority has hired Elzinga and Volkers to serve as project manager for both projects.

The scope of this project is to remove approximately half of the existing parking lot adjacent the former office building and restore to lawn. The remaining parking lot will be either entirely replaced with new pavement or kept in its current condition. This portion of the parking lot is needed to service the Hangar 3 Partners facility.

Attached to this report is a table depicting five options for improvements to this property ranging in cost from \$3,750 (leave the site as is) to \$71,950. The Authority has spent \$28,200 to date for demolition of the former office building and site restoration.

Due to the possibility of future development on this site, it is recommended that only demolition of the parking lot, seeding of this portion, and maintaining the east parking spaces be conducted at this time. The estimated cost for this work is nearly \$33,000. The appearance of this site is important since this is the primary entranceway to the airport. Whatever is done should present the airport in a positive manner as one enters the airport. To accomplish this, irrigation should also be installed in order for the new grass to fully grow and be maintained in a healthy, green manner just as is done at the Airport Business Center. We do not yet have a good estimate for irrigation, but a preliminary number is \$10,000.

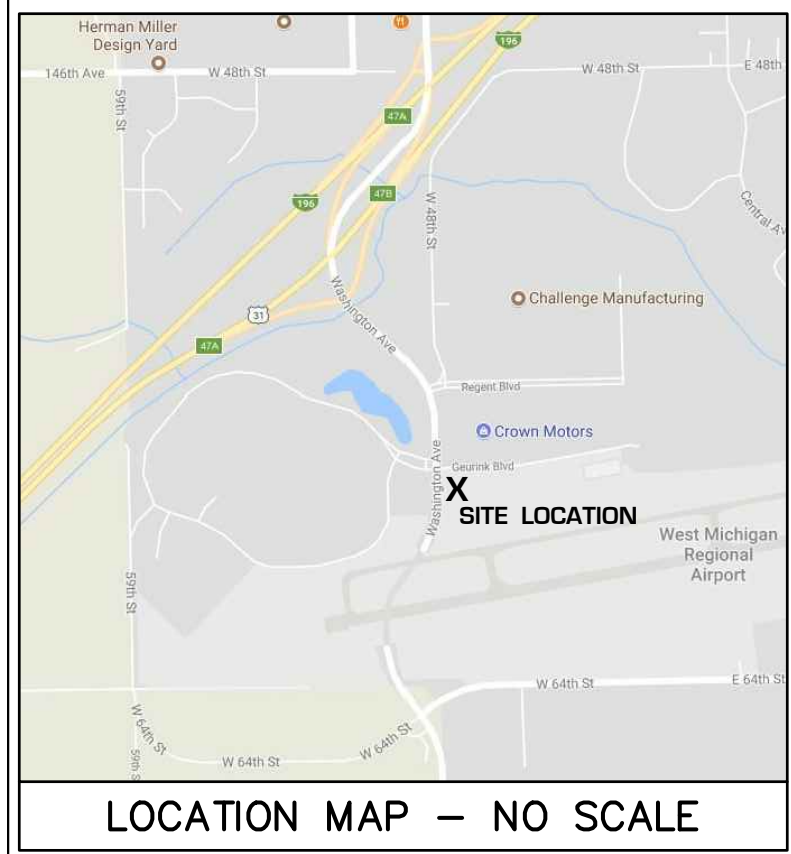
### **Recommendation**

It is recommended that the Board authorize staff to proceed with bidding Option #1 on the attached table, including irrigation; and that these bids are to be brought to the Board for approval at the June 11, 2018 meeting.

### Attachments

*The West Michigan Airport Authority will provide the public with state-of-the-art global air access to strengthen the local economy and improve the area's quality of life.*

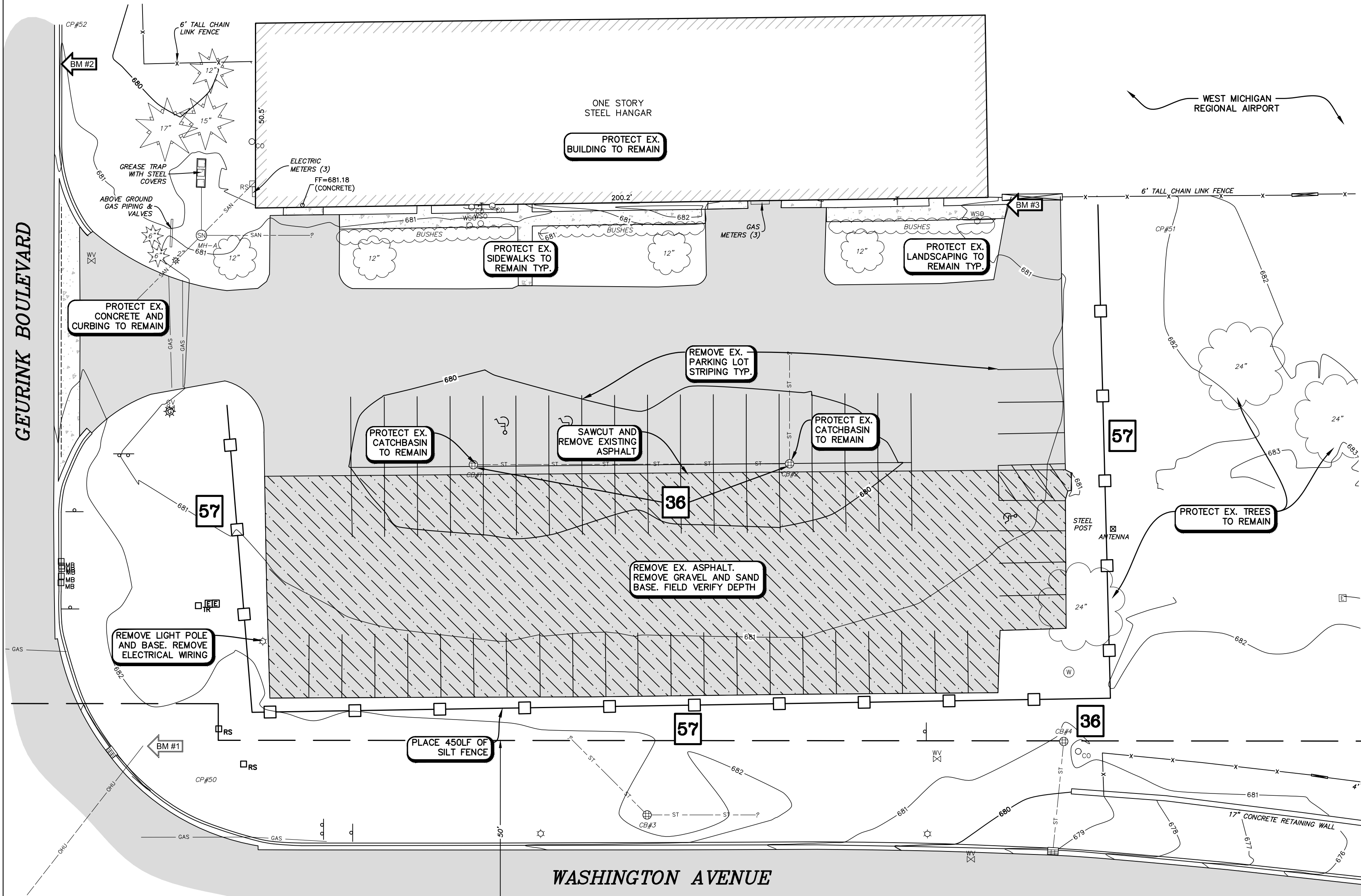




### SOIL EROSION & SEDIMENTATION CONTROL (SESC) NOTES:

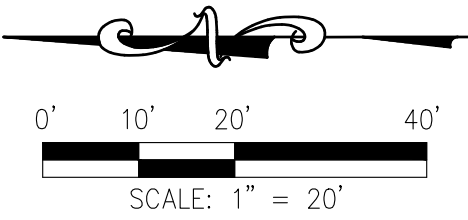
1. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE SESC PERMIT.
2. PLACE TEMPORARY SESC MEASURES AS INDICATED ON DRAWING PRIOR TO EARTH MOVING AND GRADING ACTIVITIES.
3. CONTRACTOR SHALL AVOID THE UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER.
4. INSPECT AND MAINTAIN ALL TEMPORARY SESC MEASURES AFTER STORM EVENTS AND AS NECESSARY TO ASSURE PROPER FUNCTION.
5. ALL SOIL STOCKPILES LEFT UNDISTURBED FOR MORE THAN 7 DAYS SHALL HAVE PERIMETER SILT FENCE. ALL SOIL STOCKPILES LEFT UNDISTURBED FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING.
6. DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE AND PERMANENTLY STABILIZED WITHIN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING.
7. TEMPORARY SEEDING SHALL CONSIST OF OATS AND/OR BARLEY AT AN APPLICATION RATE OF 2.0 LBS/1000 SFT MINIMUM APRIL 1 THROUGH AUGUST 31, OR ANNUAL RYEGRASS AT AN APPLICATION RATE OF NOT LESS THAN 2.0 LBS/1000 SFT AUGUST 1 THROUGH NOVEMBER 15. IRRIGATE IF NECESSARY TO ESTABLISH TEMPORARY COVER.
8. TEMPORARY SESC MEASURES SHALL REMAIN IN PLACE UNTIL ALL PERMANENT SESC MEASURES ARE INSTALLED, AND VEGETATION IS UNIFORMLY ESTABLISHED. RE-GRADE, RE-SEED AND PLACE ADDITIONAL TOPSOIL IN ERODED AREAS AS NECESSARY UNTIL FINAL LANDSCAPING IS INSTALLED.
9. CONSTRUCTION OF SEDIMENT BASINS AND DIVERSION DITCHES SHALL BE COMPLETED PRIOR TO SITE CLEARING AND GRADING.
10. INSTALL INLET SEDIMENT TRAPS (SILT SACK OR EQUAL) IN ALL PROPOSED CATCH BASINS AS INDICATED ON THIS DRAWING. CLEAN INLET SEDIMENT TRAPS ON A WEEKLY BASIS AND AFTER RAIN EVENTS AS REQUIRED.
11. CONTRACTOR SHALL INSPECT AND CLEAN OUT ALL EXISTING AND PROPOSED STORM SEWER CATCHBASINS AND MANHOLES WITHIN THE PROJECT LIMITS, OR OUTSIDE THE PROJECT LIMITS IF SUBJECT TO CONSTRUCTION SITE RUNOFF, AS NECESSARY DURING CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE.
12. PLACE SILT FENCE ALONG DISTURBED AREAS WHERE SURFACE WATER WILL FLOW INTO EXISTING SWALES, DITCHES AND ADJACENT PROPERTIES. ANCHOR SILT FENCE TO PREVENT UNCONTROLLED RELEASE OF SILT LADEN WATER.
13. THE CONTRACTOR IS RESPONSIBLE FOR THE DAILY SWEEPING OF TRACKED MATERIALS FROM ALL ROADWAYS.
14. THE SESC MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM MEASURES REQUIRED. DUE TO SITE ACTIVITIES AND SCHEDULES, ADDITIONAL MEASURES WILL LIKELY BE REQUIRED TO MAINTAIN SITE ACCORDING TO APPLICABLE STATE AND FEDERAL GUIDELINES AT NO ADDITIONAL COST TO THE OWNER.

6	SEEDING WITH MULCH AND/OR MATING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY. EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATION RUNOFF MAY USE FILTER CLOTH OVER INLET
57		USES GEOTEXTILE FABRIC AND POSTS OR POLES, EASY TO CONSTRUCT AND LOCATE AS NECESSARY.



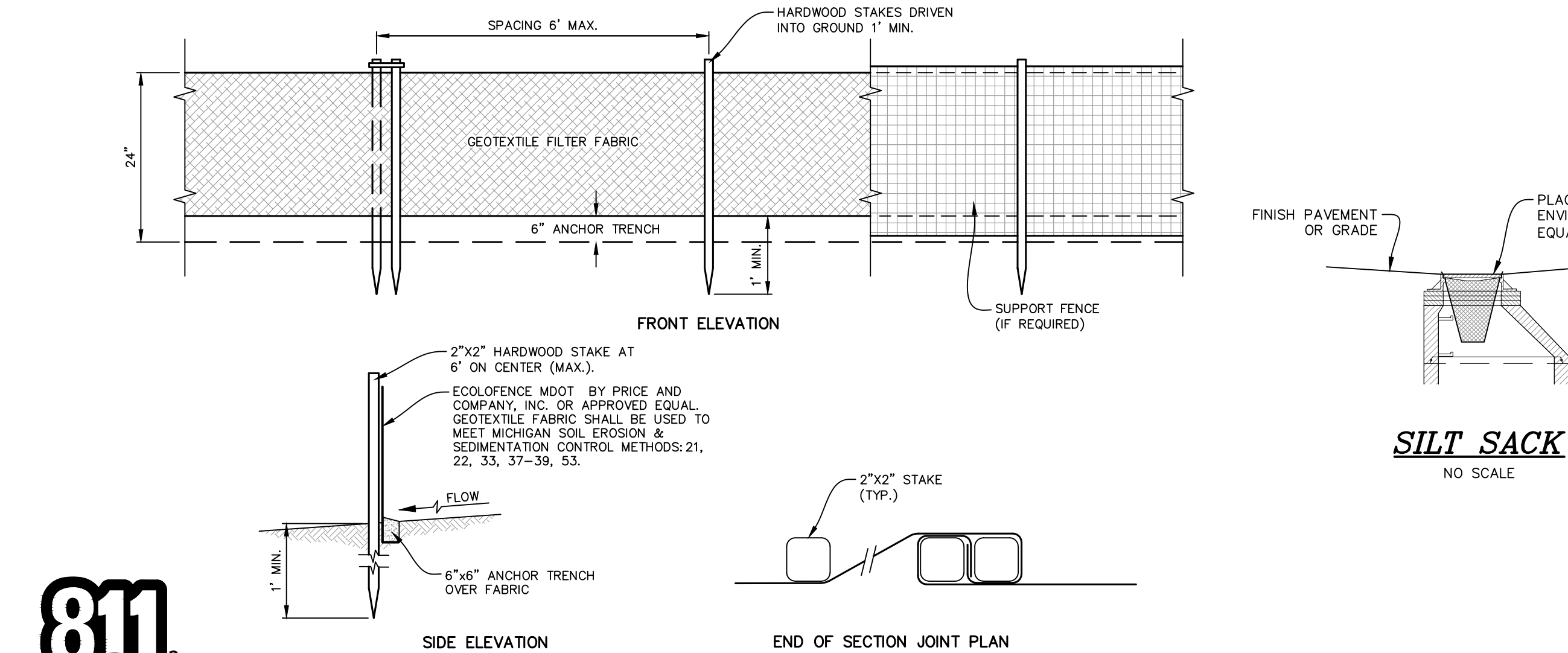
### DEMOLITION & SOIL EROSION PLAN

640 FT. DISTANCE TO NEAREST WATER BODY



### REMOVAL LEGEND:

- ASPHALT REMOVAL
- ASPHALT MILL REMOVAL
- TREE/SHRUB REMOVAL
- FENCE/GUARDRAIL/WALL/UTILITY REMOVAL



### SEDIMENT CONTROL FENCE

### SILT SACK

NO SCALE



Know what's below.  
Call before you dig.

### CLEARING & DEMOLITION NOTES:

1. REMOVE ALL STRUCTURES, SUPPORT COLUMNS, FOOTINGS, ASPHALT PAVING, CONCRETE CURB, SIDEWALKS, CONCRETE PADS, TREES, STUMPS, HEDGES, UTILITIES, AND OTHER EXISTING SITE FEATURES WITHIN LIMITS OF DEMOLITION. ALL DEMOLITION MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE INDICATED AND DISPOSED OF IN A MANNER ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
2. MOVEMENT OF CLEARED WOOD IS RESTRICTED; REFER TO EMERALD ASH BORER QUARANTINE INFORMATION AT WWW.MICHIGAN.GOV. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL QUARANTINE REQUIREMENTS.
3. CONSTRUCTION FENCE SHALL BE PLACED AT THE DRIP LINE OF ALL TREES WITHIN THE PROJECT AREA THAT ARE INDICATED TO BE PROTECTED. DO NOT OPERATE EQUIPMENT OR STORE MATERIALS OR VEHICLES WITHIN THIS AREA.
4. UNLESS INDICATED TO BE ABANDONED IN PLACE, ALL UTILITIES TO BE DEMOLISHED SHALL BE REMOVED IN THEIR ENTIRETY. UTILITIES TO BE ABANDONED IN PLACE SHALL BE FILLED WITH FLOWABLE FILL AND SECURELY CAPPED.
5. EXCEPT FOR THOSE UTILITIES INDICATED TO BE ABANDONED OR REMOVED, RECONNECT ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.
6. ANY REMOVAL OF PAVEMENT, SIDEWALK, CURB AND GUTTER OR OTHER HARD SURFACES SHALL BE TO A SAWCUT LINE AT THE NEXT JOINT BEYOND REMOVAL LIMITS SHOWN.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE DAILY SWEEPING OF TRACKED MATERIALS FROM ALL ROADWAYS.
8. DEMOLITION WORK IS INDICATED BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL INSPECT THE SITE AND BE FAMILIAR WITH THE EXTENT OF DEMOLITION WORK REQUIRED.

### STORM STRUCTURE DATA

CB #1 - 2/0 CONCRETE  
RIM 679.24  
INV (S) 8" PVC=676.29  
SUMP=676.24  
(FILLED WITH WATER - NO OTHER PIPES VISIBLE)

CB #2 - 2/0 CONCRETE  
RIM 679.44  
INV (E) 8" PVC=677.84  
INV (N) 8" PVC=676.79  
SUMP=676.79

CB #3 - 2/0 CONCRETE  
RIM 681.60  
INV (S) 6" CPP=679.80  
INV (NE) 4" CPP=679.90  
SUMP=677.90

CB #4 - 2/0 CONCRETE  
RIM 680.81  
INV (W) 8" PVC=679.06  
SUMP=677.21

### SANITARY STRUCTURE DATA

MHA - 4/0 CONCRETE  
RIM 681.20  
INV (S) 4" PVC=676.05  
INV (SE) 4" PVC=676.05  
INV (E) 4" PVC=676.05  
INV (NW) 8" PVC=675.90

### LEGAL DESCRIPTION FROM: ALLEGAN COUNTY GIS PARCEL NUMBER.: 53-02-08-300-028

ALL OF SW 1/4 EC THAT PT WHICH LIES NLY OF A LN DESC AS FOLLOWS: BEG AT A PT ON W LINE OF SEC 8 WHICH IS S 01DEG52'00"E A DIST OF 71.97' FROM W 1/4 COR OF SD SEC; TH N 88DEG46'51"E A DIST OF 697.33'; TH N 78DEG07'54"E 1954.16' TO A PT OF ENDING ON THE N/2 LN OF SD SEC 8 WHICH IS S 01DEG57'36"E A DIST OF 411.97' FROM CENTER POST OF SD SECTION. ALSO EX THAT PART TAKEN USED OR DEEDED FOR STREET SEC 8 T4N R15W.

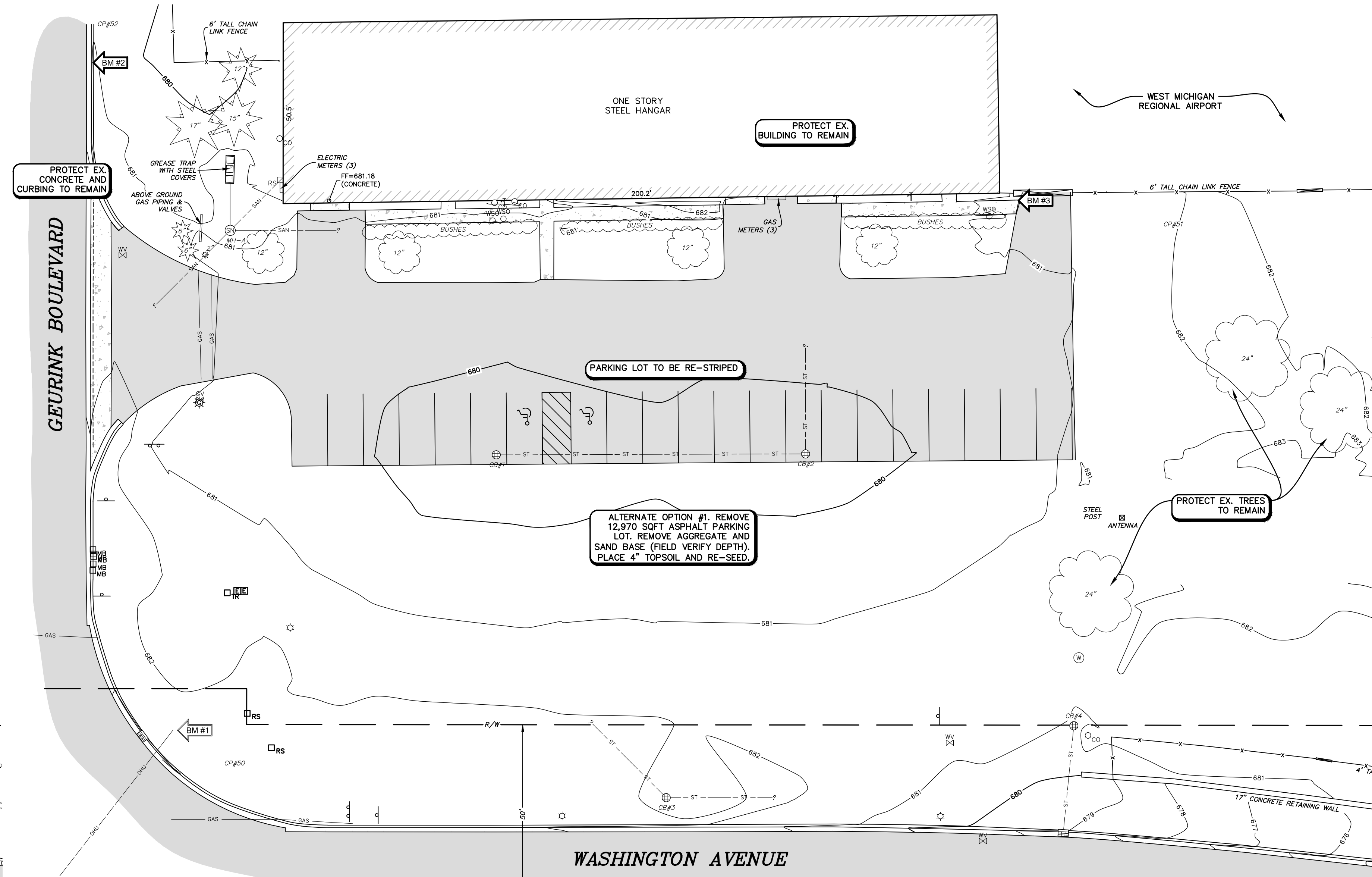
### BENCHMARK DATA

NAVD '88 AS DERIVED FROM GPS OBSERVATIONS UTILIZING VRS CONUS 128

BM #1 EL= 682.58' (NAVD '88 DATUM)  
CUT "X" IN 2" DIA. LIGHT POLE BASE, LOCATED 8.3' SOUTHEAST OF SOUTHERLY BACK OF CURB OF WASHINGTON AVENUE, 79' SOUTHWEST OF TULIP CITY AIRPORT SIGN, AND 36' NORTHWEST OF NORTHWEST CORNER OF ASPHALT PARKING LOT.

BM #2 EL= 681.04' (NAVD '88 DATUM)  
CUT "X" ON SOUTHERLY BACK OF CURB OF GEURINK BOULEVARD, LOCATED 22.7' NORTH OF 6' CHAIN LINK FENCE CORNER, 66' NORTHEAST OF NORTHWEST CORNER OF STEEL BUILDING, AND 107' NORTHEAST OF TULIP CITY AIRPORT SIGN.

BM #3 EL= 681.19' (NAVD '88 DATUM)  
CUT "X" IN CONCRETE SIDEWALK, LOCATED 5.5' SOUTHWEST OF THE SOUTHWEST CORNER OF STEEL BUILDING, 134' NORTH OF 6' CHAIN LINK FENCE CORNER, AND 85' EAST OF HANDICAP PARKING SYMBOL.



### ALTERNATE 1

### LEGEND

- BENCHMARK
- STORM SEWER MANHOLE
- CATCH BASIN
- SANITARY SEWER MANHOLE
- CLEANOUT
- WELL HEAD
- FIRE HYDRANT
- SPRINKLER CONTROL VALVE
- SPRINKLER HEAD
- VALVE (WATER & GAS)
- GAS METER
- UTILITY RISERS
- UTILITY POLE
- LIGHT POLE
- QUIV ANCHOR
- TRANSFORMER
- HAND HOLE (ELECTRIC)
- ELECTRIC METER
- GROUND MOUNTED LIGHT
- SIGN
- SOIL BORING

- EXISTING
- PROPOSED

- BOLLARD POST
- POST
- GATE
- FENCE LINE
- OVERHEAD UTILITIES
- UNDERGROUND ELECTRIC
- COMMUNICATIONS
- TELEPHONE
- FIBER OPTIC
- GAS LINE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER

- EXISTING BITUMINOUS SURFACE
- PROPOSED BITUMINOUS SURFACE
- EXISTING CONCRETE SURFACE
- PROPOSED CONCRETE SURFACE
- EXISTING GRAVEL SURFACE
- PROPOSED GRAVEL SURFACE

- CONIFEROUS TREE
- DECIDUOUS TREE
- ORNAMENTAL BUSH

**PRELIMINARY**  
NOT FOR CONSTRUCTION

### REVISIONS

- 1. SUBMITTED FOR OWNER REVIEW 05-03-2018

WEST MICHIGAN REGIONAL AIRPORT  
SEC. 08, T04N, R15W CITY OF HOLLAND, ALLEGAN CO.  
ELIZINGA & VOLKERS  
86 EAST 6TH STREET  
HOLLAND, MICHIGAN 49423

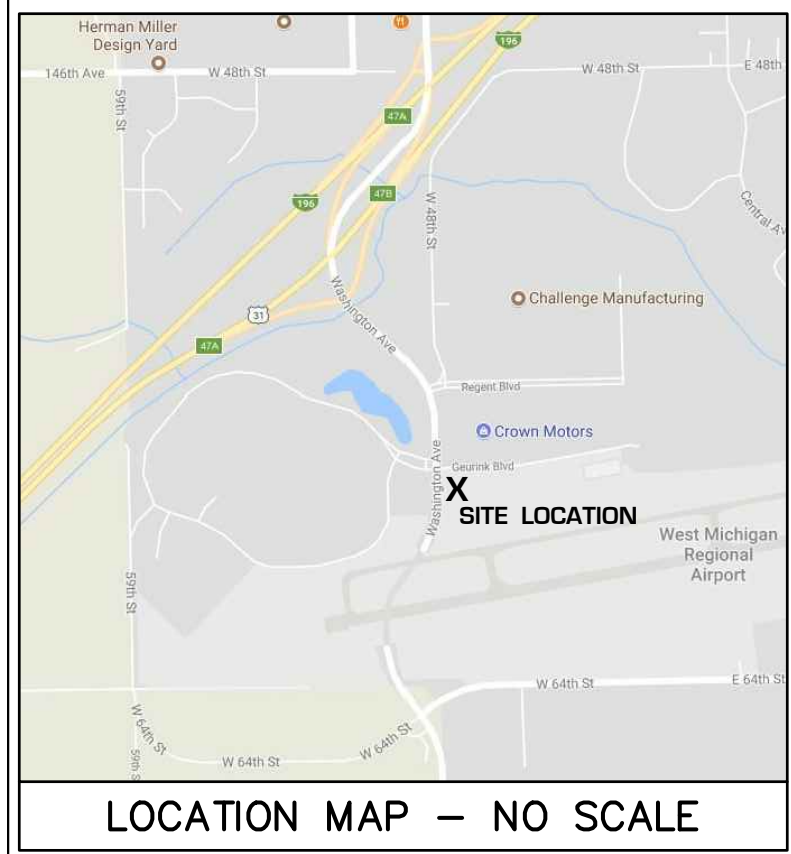
Designed By: TMP  
Drawn By: MJD  
Checked By: [ ]  
Date: [ ]

1"=20'  
Scale  
05-03-2018  
Date  
1710791.1B  
Job No.

Sheet No.:  
**EX-1**  
1 of 2

**DRIESENGA & ASSOCIATES, INC.**  
Engineering • Surveying • Testing  
www.driesenga.com  
Holland, MI - 616-396-0255  
Grand Rapids, MI - 616-243-3800  
Kalamazoo, MI - 269-544-1455  
Detroit, MI - 734-368-9400





CLEARING & DEMOLITION NOTES:

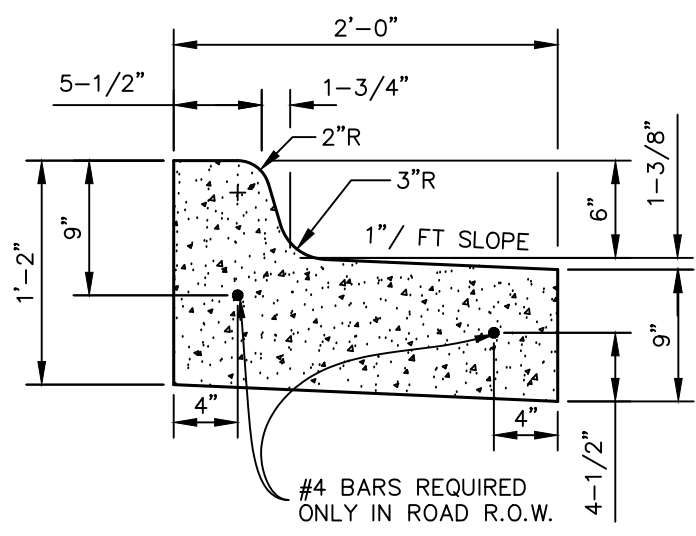
1. REMOVE ALL STRUCTURES, SUPPORT COLUMNS, FOOTINGS, ASPHALT PAVING, CONCRETE CURB, SIDEWALKS, CONCRETE PADS, TREES, STUMPS, HEDGES, UTILITIES, AND OTHER EXISTING SITE FEATURES WITHIN LIMITS OF DEMOLITION. ALL DEMOLITION MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE INDICATED AND DISPOSED OF IN A MANNER ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
2. MOVEMENT OF CLEARED WOOD IS RESTRICTED; REFER TO EMERALD ASH BORER QUARANTINE INFORMATION AT WWW.MICHIGAN.GOV. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL QUARANTINE REQUIREMENTS.
3. CONSTRUCTION FENCE SHALL BE PLACED AT THE DRIP LINE OF ALL TREES WITHIN THE PROJECT AREA THAT ARE INDICATED TO BE PROTECTED. DO NOT OPERATE EQUIPMENT OR STORE MATERIALS OR VEHICLES WITHIN THIS AREA.
4. UNLESS INDICATED TO BE ABANDONED IN PLACE, ALL UTILITIES TO BE DEMOLISHED SHALL BE REMOVED IN THEIR ENTIRETY. UTILITIES TO BE ABANDONED IN PLACE SHALL BE FILLED WITH FLOWABLE FILL AND SECURELY CAPPED.
5. EXCEPT FOR THOSE UTILITIES INDICATED TO BE ABANDONED OR REMOVED, RECONNECT ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION.
6. ANY REMOVAL OF PAVEMENT, SIDEWALK, CURB AND GUTTER OR OTHER HARD SURFACES SHALL BE TO A SAWCUT LINE AT THE NEXT JOINT BEYOND REMOVAL LIMITS SHOWN.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE DAILY SWEEPING OF TRACKED MATERIALS FROM ALL ROADWAYS.
8. DEMOLITION WORK IS INDICATED BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL INSPECT THE SITE AND BE FAMILIAR WITH THE EXTENT OF DEMOLITION WORK REQUIRED.

GENERAL NOTES:

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY LOCAL, STATE AND FEDERAL PERMITS REQUIRED.
2. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF AUTHORITIES HAVING JURISDICTION.
3. CALL "MISS DIG", 811, 72 HOURS PRIOR TO THE START OF ANY EXCAVATION.
4. EXISTING UNDERGROUND UTILITIES ARE SHOWN BASED ON AVAILABLE RECORDS AND/OR TOPOGRAPHIC SURVEY DATA. THIS PLAN MAY NOT SHOW UTILITIES IN THEIR EXACT LOCATION AND MAY NOT SHOW ALL UTILITIES IN THE AREA.
5. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES AT ALL TIMES. ANY INTERRUPTION IN SERVICES TO THIS SITE OR ADJACENT SITES MUST BE SCHEDULED WITH THE OWNER, UTILITY PROVIDER, AND AFFECTED PROPERTIES 48 HOURS PRIOR TO THE INTERRUPTION.
6. 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.
7. IF ANY DISCREPANCIES OR CONFLICTS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY PRIOR TO CONSTRUCTION OF AFFECTED WORK TO DETERMINE COURSE OF ACTION.
8. CONTRACTOR SHALL COORDINATE THEIR WORK WITH OTHER CONTRACTORS ON OR ADJACENT TO THE PROJECT SITE.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING AND COORDINATING THEIR WORK WITH ALL UTILITY PROVIDERS PRIOR TO CONSTRUCTION.
10. PROVIDE BARRIERS OR OTHER PROTECTION TO KEEP VEHICULAR AND PEDESTRIAN TRAFFIC AWAY FROM CONSTRUCTION AREA AND OFF NEWLY PAVED AREAS.

LAYOUT NOTES:

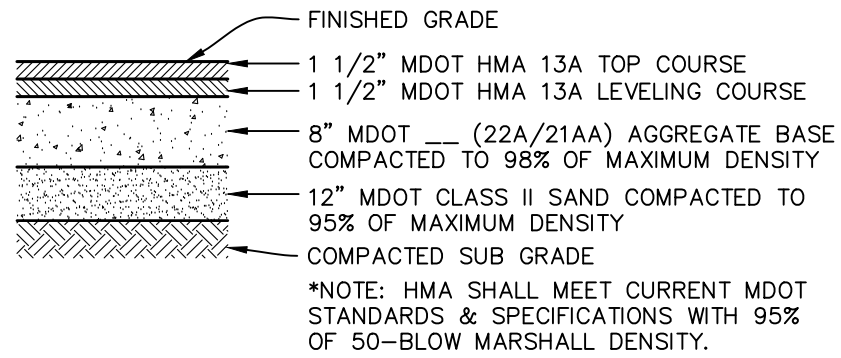
1. CONTRACTOR SHALL REVIEW AND VERIFY SITE LAYOUT PRIOR TO CONSTRUCTION.
2. CONTRACTOR SHALL ENGAGE A LICENSED SURVEYOR TO PERFORM ALL CONSTRUCTION LAYOUT AND STAKING AS NECESSARY.
3. ALL COORDINATE POINTS AND DIMENSIONS GIVEN, UNLESS OTHERWISE NOTED, ARE TO BACK OF CURB AND FACE OF BUILDING WALL.
4. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING DIMENSIONS.
5. INSTALL EXPANSION JOINTS AT ALL LOCATIONS WHERE NEW CONCRETE MEETS EXISTING CONCRETE OR BITUMINOUS PAVEMENT.



- NOTES:
1. CONTRACTION JOINTS SHALL BE PLACED EVERY 10'.
  2. PLACE EXPANSION JOINTS AT 350' MIN. AND ALL RADIUS POINTS.
  3. CONCRETE SHALL CONFORM TO MDOT SPEC. 802.

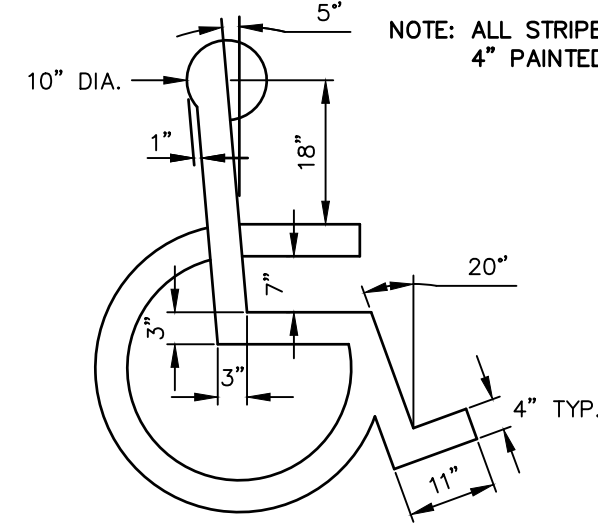
CURB & GUTTER - F4 INVERTED GUTTER

NO SCALE



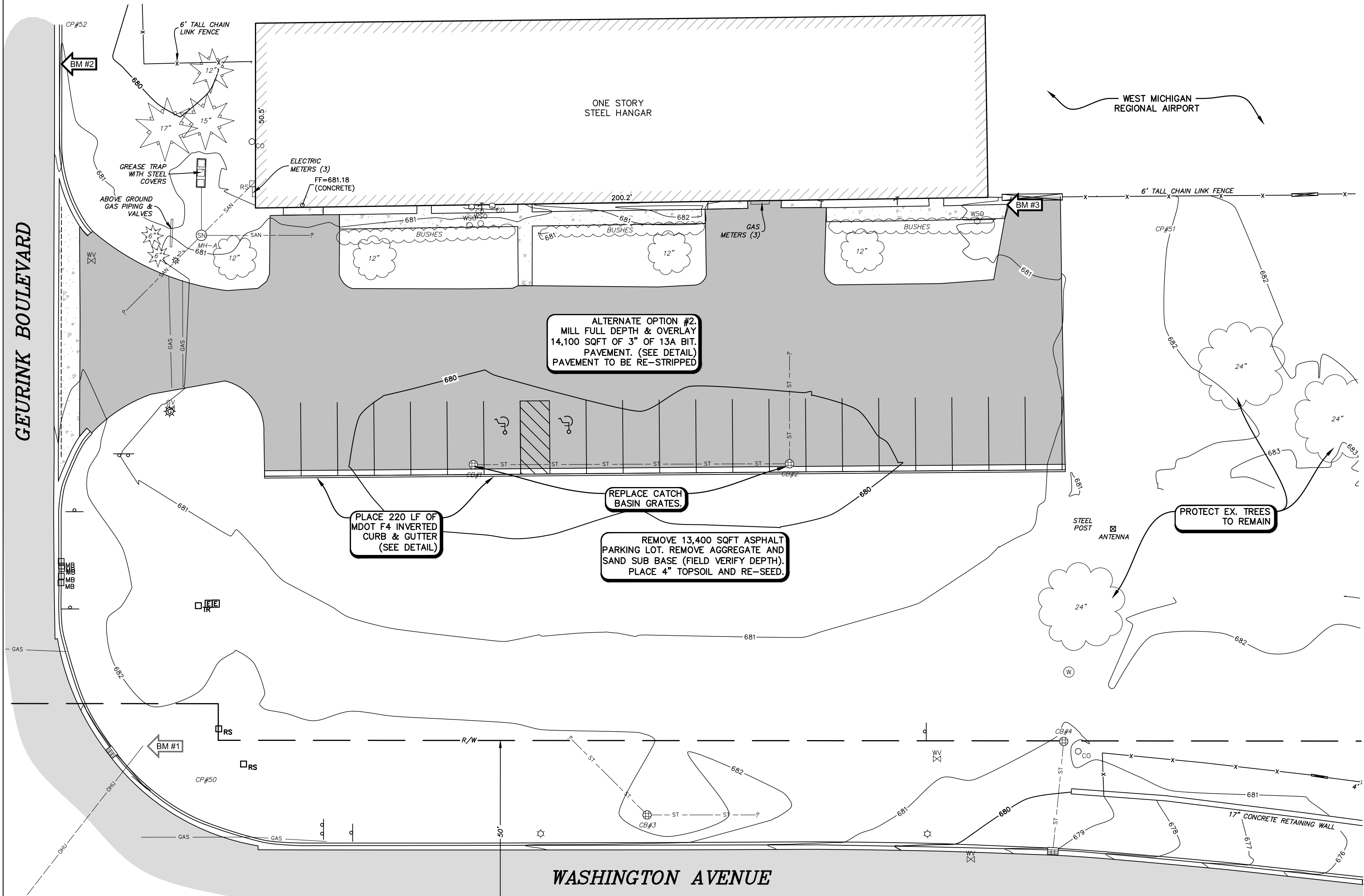
HMA PAVEMENT SECTION (STANDARD DUTY)

NO SCALE



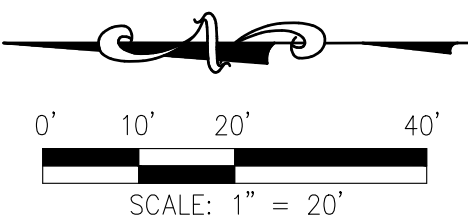
HANDICAPPED SYMBOL

NO SCALE



ALTERNATE 2

640 FT. DISTANCE TO NEAREST NEAREST WATER BODY



LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
BENCHMARK		BOLLARD POST	
STORM SEWER MANHOLE		GATE	
CATCH BASIN		FENCE LINE	
SANITARY SEWER MANHOLE		OVERHEAD UTILITIES	
CLEANOUT		UNDERGROUND ELECTRIC	
WELL HEAD		COMMUNICATIONS	
FIRE HYDRANT		TELEPHONE	
SPRINKLER CONTROL VALVE		FIBER OPTIC	
SPRINKLER HEAD		GAS LINE	
VALVE (WATER & GAS)		EXISTING WATER LINE	
GAS METER		PROPOSED WATER LINE	
UTILITY RISERS		EXISTING STORM SEWER	
LIGHT POLE		PROPOSED STORM SEWER	
QUIV ANCHOR		EXISTING SANITARY SEWER	
TRANSFORMER		PROPOSED SANITARY SEWER	
HAND HOLE (ELECTRIC)		EXISTING BITUMINOUS SURFACE	
ELECTRIC METER		PROPOSED BITUMINOUS SURFACE	
GROUND MOUNTED LIGHT		EXISTING CONCRETE SURFACE	
SIGN		PROPOSED CONCRETE SURFACE	
SOIL BORING		EXISTING GRAVEL SURFACE	
		PROPOSED GRAVEL SURFACE	
		CONFEROUS TREE	
		DECIDUOUS TREE	
		ORNAMENTAL BUSH	

PRELIMINARY  
NOT FOR CONSTRUCTION

**DRIESENGA & ASSOCIATES, INC.**  
Engineering • Surveying • Testing  
www.driesenga.com  
Kalamazoo, MI • 269-544-1455  
Detroit, MI • 313-368-9400

REVISIONS

1. SUBMITTED FOR OWNER REVIEW - 05-03-2018

WEST MICHIGAN REGIONAL AIRPORT  
SEC. 08, 70+4N, R15W CITY OF HOLLAND, ALLEGAN CO.  
ELZINGA & VOLKERS  
86 EAST 6TH STREET  
HOLLAND, MICHIGAN 49423  
ALTERNATE 2 & 3

Designed By: TMP  
Drawn By: MJD  
Checked By: [ ] Date: [ ]

1"=20'  
Scale:  
05-03-2018  
Date:  
1710791.1B  
Job No.:

Sheet No.:  
**EX-2**  
2 of 2



Airport Entrance Area Improvements

5/9/2018

Options

Already spent = \$28,200 on demolition

<u>Work Items</u>	<u>Estimated Cost</u>	<u>As is</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Construction Mgmt	\$3,750	\$3,750	\$3,750	\$3,750	\$3,750	\$3,750
Site supervision	\$3,400		\$3,400	\$3,400	\$3,400	\$3,400
Permits/fees	\$700		\$700	\$700	\$700	\$700
Parking lot demo, grading, seeding	\$20,000		\$20,000	\$20,000	\$20,000	\$20,000
Maintain row of parking - leave as is	5,000		5,000		5,000	
Maintain row of parking - resurface	21,200			21,200		21,200
Landscaping						
Trees	2,100				2,100	2,100
Shrubs	5,300				5,300	5,300
Perrenials	15,500				15,500	15,500
Irrigation	10,000					
Signage	25,000					
		\$3,750	\$32,850	\$49,050	\$55,750	\$71,950

5 Year Capital Improvement Program  
3/26/2018

<u>Project</u>	<u>Total Est. Cost</u>	<u>Local Share</u>	<u>FAA</u>	<u>MDOT</u>
<b>Fiscal Year 2019</b>				
Entranceway improvements	\$60,000	\$60,000		\$0
Crack sealing	\$16,000	16,000		
New public hangar(s):				
Engineering	\$30,000	30,000		
Site work	\$300,000	300,000		
Construction	\$500,000	500,000		
	\$0			
<b>Subtotal</b>	<b>\$906,000</b>	<b>\$906,000</b>	<b>\$0</b>	<b>\$0</b>
<b>Fiscal Year 2020</b>				
Runway rehab design	225,000	11,250	202,500	11,250
Runway/taxiway lighting rehab design	55,500	2,775	49,950	2,775
	0			
<b>Subtotal</b>	<b>280,500</b>	<b>14,025</b>	<b>252,450</b>	<b>14,025</b>
<b>Fiscal Year 2021</b>				
Runway rehabilitation	2,795,000	139,750	2,515,500	139,750
Runway/taxiway lighting rehab	694,500	34,725	625,050	34,725
	0			
<b>Subtotal</b>	<b>3,489,500</b>	<b>174,475</b>	<b>3,140,550</b>	<b>174,475</b>
<b>Fiscal Year 2022</b>				
No projects planned				
<b>Fiscal Year 2023</b>				
West apron rehab design	102,000	24,575	73,350	4,075
<b>Subtotal</b>	<b>102,000</b>	<b>24,575</b>	<b>73,350</b>	<b>4,075</b>

**Fiscal Year 2024**

West apron rehab construction	1268000	304,681	912,618	50,701
<b>Subtotal</b>	<b>1268000</b>	<b>304681</b>	<b>912618</b>	<b>50701</b>
<b>Grand Total</b>	<b>\$6,046,000</b>	<b>\$1,423,756</b>	<b>\$4,378,968</b>	<b>\$243,276</b>

## West Michigan Airport Authority

270 South River Avenue, Holland, MI 49423  
P (616) 510-2332

*Comprising City of Zeeland, Park Township and City of Holland*



May 14, 2018

### REPORT 6.

**To:** West Michigan Airport Authority Board.  
**From:** Greg Robinson, Airport Authority Manager.  
**Subject:** **Mead & Hunt Proposal for New Public Hangar Preliminary Layouts**

---

The Fiscal Year 2018 Airport Authority Action Plan includes preparing a plan for development of a new public hangar building. The Airport Layout Plan depicts an area east of the present public hangars (along the north side of 64th Street) as an area for additional public hangars. Currently, Tulip City Air Service has a waiting list for public hangar spaces and the Authority Board should position itself to be ahead of demand, rather than reacting to it. The last public hangar building was constructed in 1995.

Airport consultant Mead & Hunt has submitted a proposal in the estimated cost of \$10,000 - \$13,500 to prepare preliminary hangar layouts. This work will include wetland delineation, preliminary layouts, preliminary fleet mix and pavement design, as well as construction cost estimates. The work will be charged to the Authority on a time and materials basis.

The Building & Development Committee has discussed this proposal with Jeff Thoman of Mead & Hunt and is recommending that the Board proceed with this first step. The Committee will be working with Jeff on this project and has asked that other airport property be considered as well so that the Authority can be certain that the suggested site is the best for this development.

The costs for new public hangar development is likely to be the responsibility of the Authority without funding support from the FAA and MDOT. However, the possibility of FAA and/or MDOT funding will be evaluated as the project design is developed.

#### Recommendation

It is recommended that the Authority Board approve the proposal submitted by Mead & Hunt in the amount of \$10,000 - \$13,500 for preparation of preliminary new public hangar layouts as described in this report.

Attachment: Mead & Hunt proposal.

RUNWAY SAFETY AREA

	FUTURE 8	FUTURE 26	FUTURE 18	FUTURE 36
RUNWAY PROTECTION ZONE (RPZ)	1,000' x 1,750' x 2,500'	1,000' x 1,750' x 2,500'	500' x 700' x 1,000'	500' x 700' x 1,000'
FAR PART-77 APPROACH SURFACE	1,000' x 16,000' x 50,000'	1,000' x 16,000' x 50,000'	500' x 1,500' x 5,000'	500' x 1,500' x 5,000'
RUNWAY SAFETY AREA (RSA)	1,000' x 500'	1,000' x 500'	300' x 150'	300' x 150'
OBJECT FREE AREA (OFA)	1,000' x 800'	1,000' x 800'	300' x 500'	300' x 500'
OBSTACLE FREE ZONE (OFZ)	200' x 400'	200' x 400'	200' x 250'	200' x 250'
PRECISION OBSTACLE FREE ZONE* (POFZ)	200' x 800'	200' x 800'	N/A	N/A

NOTE:  
\*THE PRECISION OBSTACLE FREE ZONE IS IN EFFECT ONLY WHEN ALL OF THE FOLLOWING OPERATIONAL CONDITIONS ARE MET:  
1. VERTICAL GUIDED APPROACH  
2. REPORTED CEILING BELOW 250 FEET AND/OR VISIBILITY LESS THAN 3/4 STATUTE MILE (OR RVR BELOW 4,000 FEET)  
3. AN AIRCRAFT ON FINAL APPROACH WITHIN TWO MILES OF THE RUNWAY THRESHOLD

RUNWAY DATA

	FUTURE 8	FUTURE 26	FUTURE 18	FUTURE 36
LATITUDE (LAT.)	42° 44' 27.84" N	42° 44' 39.31" N	42° 45' 03.92" N	42° 44' 29.48" N
LONGITUDE (LONG.)	86° 07' 14.34" W	86° 05' 48.61" W	86° 06' 00.97" W	86° 05' 56.77" W
ELEVATION (EL.)	698'	686'	672'	672'
STATION (STA.)	67+02	02+00	100+00	135+00
BEARING	N 79° 42' 18.36" E	N 79° 42' 18.36" E	N 174° 51' 36" E	N 174° 51' 36" E
APPROACH TYPE	PRECISION	PRECISION	VISUAL	VISUAL
TOUCHDOWN ZONE LATITUDE (LAT.)	42° 44' 27.84" N	42° 44' 39.31" N	42° 45' 03.92" N	42° 44' 29.48" N
TOUCHDOWN ZONE LONGITUDE (LONG.)	86° 07' 14.34" W	86° 05' 48.61" W	86° 06' 00.97" W	86° 05' 56.77" W
TOUCHDOWN ZONE ELEVATION (EL.)	698'	686'	672'	672'

APRON DATA

	EXISTING 1	EXISTING 2	EXISTING 3	FUTURE 4
DESCRIPTION	HOLD APRON	HANGAR APRON	HANGAR APRON	TERMINAL APRON
SIZE	260' x 270'	876' x 278'	350' x 148'	775' x 370'

DIMENSIONAL INFORMATION

	FUTURE 8	FUTURE 26	FUTURE 18	FUTURE 36
RUNWAY LENGTH	6,502'	6,502'	3,500'	3,500'
RUNWAY WIDTH	100'	100'	75'	75'
RUNWAY SHOULDER WIDTH	0'	0'	0'	0'
TAXIWAY WIDTH	VARIES	VARIES	VARIES	VARIES
TAXIWAY EDGE SAFETY MARGIN	7.5'	7.5'	7.5'	7.5'
TAXIWAY SHOULDER WIDTH	0'	0'	0'	0'
TAXIWAY SAFETY AREA WIDTH	79'	79'	79'	79'
TAXIWAY OBJECT FREE AREA WIDTH	131'	131'	131'	131'
RUNWAY CENTERLINE TO TAXIWAY HOLD LINE	250'	250'	250'	250'
RUNWAY CENTERLINE TO TAXIWAY CENTERLINE LENGTH	400'	400'	300'	300'
RUNWAY CENTERLINE TO BUILDING RESTRICTION LINE LENGTH	745'	745'	495'	495'

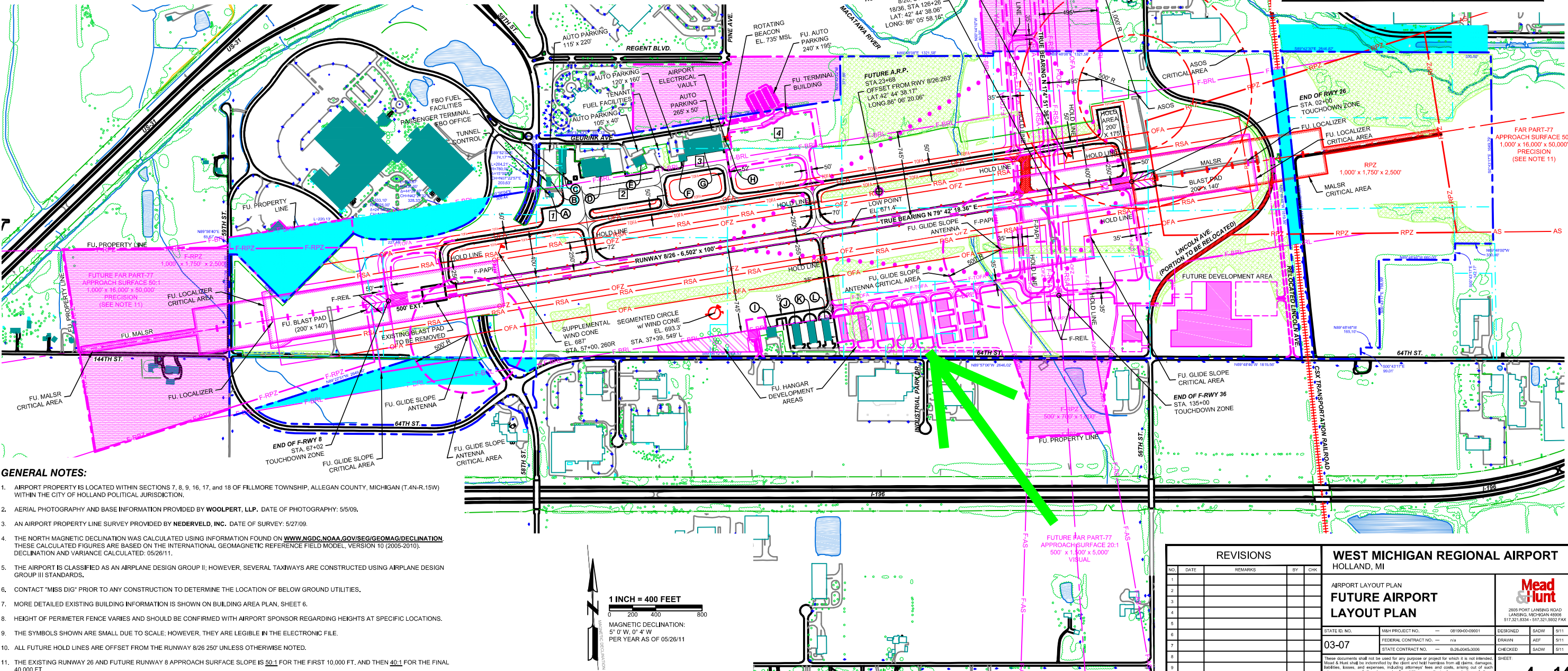
BUILDING DATA TABLE

STRUCTURE	DESCRIPTION	HEIGHT - AGL	TOP ELEVATION - MSL
(A)	TUNNEL CONTROL	15.5'	698'
(B)	TERMINAL / FBO	18'	701'
(C)	CORPORATE HANGAR	24.5'	708'
(D)	FBO MAINTENANCE HANGAR	29'	709'
(E)	TENANT COMMUNITY HANGAR	23'	702'
(F)	TENANT OFFICE BUILDING	16'	694'
(G)	TENANT COMMUNITY HANGAR	40.5'	718'
(H)	ELECTRICAL VAULT	10'	688'
(I)	BOX HANGAR	30'	708'
(J)	T-HANGARS (8 UNIT)	18.5'	693'
(K)	T-HANGARS (8 UNIT)	18.5'	692'
(L)	T-HANGARS (8 UNIT)	18.5'	692'

NOTE:  
AGL = ABOVE GROUND LEVEL  
MSL = MEAN SEA LEVEL

LEGEND

FUTURE	EXISTING	ITEM
		BUILDINGS
		TREES AND TREE LINES
		FENCE LINES
		ROADS
		RAILROAD
		WETLANDS
		RIVERS, LAKES, COUNTY DRAINS
		GROUND CONTOURS
		WIND CONE
		ROTATING BEACON
		RUNWAY / TAXIWAY LIGHTING
		POWER POLE
		AIRPORT PROPERTY LINE
		PROPERTY ACQUISITION - FEE
		PROPERTY PARCELS
		SECTION LINES
		AVIGATION EASEMENT
		RUNWAYS, TAXIWAYS, PARKING
		PAVEMENT TO BE REMOVED
		RUNWAY MARKINGS
		CENTERLINES
		RUNWAY PROTECTION ZONE
		RUNWAY SAFETY AREA
		OBJECT FREE AREA
		OBSTACLE FREE ZONE
		BUILDING RESTRICTION LINE
		APPROACH SURFACE
		TAXIWAY OBJECT FREE AREA
		RUNWAY VISIBILITY ZONE



GENERAL NOTES:

- AIRPORT PROPERTY IS LOCATED WITHIN SECTIONS 7, 8, 9, 16, 17, AND 18 OF FILLMORE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN (T.4N.R.15W) WITHIN THE CITY OF HOLLAND POLITICAL JURISDICTION.
- AERIAL PHOTOGRAPHY AND BASE INFORMATION PROVIDED BY WOOLPERT, LLP. DATE OF PHOTOGRAPHY: 5/5/08.
- AN AIRPORT PROPERTY LINE SURVEY PROVIDED BY NEDERVELD, INC. DATE OF SURVEY: 5/27/09.
- THE NORTH MAGNETIC DECLINATION WAS CALCULATED USING INFORMATION FOUND ON [WWW.NGDC.NOAA.GOV/SEG/GEOMAG/DECLINATION](http://WWW.NGDC.NOAA.GOV/SEG/GEOMAG/DECLINATION). THESE CALCULATED FIGURES ARE BASED ON THE INTERNATIONAL GEOMAGNETIC REFERENCE FIELD MODEL, VERSION 10 (2005-2010). DECLINATION AND VARIANCE CALCULATED: 05/26/11.
- THE AIRPORT IS CLASSIFIED AS AN AIRPLANE DESIGN GROUP II; HOWEVER, SEVERAL TAXIWAYS ARE CONSTRUCTED USING AIRPLANE DESIGN GROUP III STANDARDS.
- CONTACT "MISS DIG" PRIOR TO ANY CONSTRUCTION TO DETERMINE THE LOCATION OF BELOW GROUND UTILITIES.
- MORE DETAILED EXISTING BUILDING INFORMATION IS SHOWN ON BUILDING AREA PLAN, SHEET 6.
- HEIGHT OF PERIMETER FENCE VARIES AND SHOULD BE CONFIRMED WITH AIRPORT SPONSOR REGARDING HEIGHTS AT SPECIFIC LOCATIONS.
- THE SYMBOLS SHOWN ARE SMALL DUE TO SCALE; HOWEVER, THEY ARE LEGIBLE IN THE ELECTRONIC FILE.
- ALL FUTURE HOLD LINES ARE OFFSET FROM THE RUNWAY 8/26 250' UNLESS OTHERWISE NOTED.
- THE EXISTING RUNWAY 26 AND FUTURE RUNWAY 8 APPROACH SURFACE SLOPE IS 50:1 FOR THE FIRST 10,000 FT. AND THEN 40:1 FOR THE FINAL 40,000 FT.

1 INCH = 400 FEET

MAGNETIC DECLINATION:  
5° 0' W, 0° 4' W  
PER YEAR AS OF 05/26/11

REVISIONS

NO.	DATE	REMARKS	BY	CHK
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

WEST MICHIGAN REGIONAL AIRPORT

AIRPORT LAYOUT PLAN		FUTURE AIRPORT LAYOUT PLAN	
STATE ID. NO.		M&H PROJECT NO.	
03-07		09199-00-09001	
FEDERAL CONTRACT NO.		DESIGNED	
STATE CONTRACT NO.		SAW	
DRAWN		SAW	
CHECKED		SAW	
SHEET		4 OF 14	



## West Michigan Airport Authority

60 Geurink Boulevard, Holland, MI 49423  
P (616) 510-2332

*Comprising City of Zeeland, Park Township and City of Holland*



May 14, 2018

### REPORT 9-A

**To:** West Michigan Airport Authority Board.

**From:** Aaron Thelenwood, Assistant Airport Authority Manager.

**Subject:** **Site Plan Review – 1900 Lamar Ct**

---

A site plan has been submitted by Formed Solutions, Inc, 1900 Lamar Ct, to construct a total of 62,300 square feet in building additions (in two phases) to their existing facility. These additions will be located on the west side of the building and will have a height of approximately 30 feet (to match existing building's height); Phase 2 construction will be contingent on future demand. Please see the attached site plans. The City of Holland's airport zoning ordinance requires the West Michigan Airport Authority to review the site plan and submit a recommendation to the City Planning Commission before the Commission can approve the site plan.

The property does not fall within any building restriction or object-free areas & Airport Consultant Mead & Hunt has reviewed this project and notes that the proposed maximum building height of 40 feet will not conflict with the airspace requirements for the West Michigan Regional Airport.

It is the opinion of Mead & Hunt, Inc. that the preliminary design does not pose a hazard to existing airport operations or future airport planning efforts as long as the proposed structure height does not rise about 848' above mean sea level (AMSL). Below are a few reasons to support this opinion.

- The proposed structure does not fall within an existing or planned Approach/Departure Runway Protection Zone (RPZ) or runway safety areas (i.e. RSA, ROFA).
- The proposed structure does not fall within an existing or planned FAR Part-77 runway approach surface, PAPI Obstacle Clearance Surface (OCS) or Threshold Siting Surface.
- The proposed structure does not fall within the FAR Part-77 Transitional Surface (7:1).
- The airspace above the site is controlled by the FAR Part-77 Horizontal Surface which has an allowable building height of 848' AMSL. The information provided in the application shows an overall structure height of  $\pm 714'$  AMSL for both phases. Therefore, the proposed location is acceptable as long as the overall height of the structure stays below that allowable height.

*The West Michigan Airport Authority will provide the public with state-of-the-art global air access to strengthen the local economy and improve the area's quality of life.*

## **West Michigan Airport Authority**

60 Geurink Boulevard, Holland, MI 49423

P (616) 510-2332

*Comprising City of Zeeland, Park Township and City of Holland*



As a final note, during the construction process the developer may still need to file an FAA 7460 form and MI Tall Structures permit. There's a possibility that one of these two entities may find a reason to reject this proposed building location; however, with the proposed location and minimal building height this is unlikely to occur.

Airport Authority Staff approved this site plan, subject to the following conditions:

- That the application receives FAA approval and complies with all FAA requirements.
- That the elevation of the additions, including all rooftop appurtenances, not exceed a height of 40 feet.
- That any improvements to storm water detention pond be designed to be mowable throughout.
- That any emission from the building not be visible so as to create hazardous conditions to air traffic.
- That any external material of the building, including rooftop appurtenances, be non-reflective to reduce glare that could obstruct a pilot's vision.
- That any external lighting be directed downwards so as not to create any visual hazards for pilots.
- That any crane utilized during construction be flagged during the day and lowered at night.

Attachments: M&H Site Plan Review, Planning Application & Site Plan





# Soil Map—Allegan County, Michigan



Map Scale: 1:1,390 if printed on A landscape (11" x 8.5") sheet.

0 20 40 80 120 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

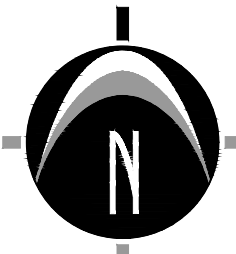
3/30/2018  
Page 1 of 3





UTILITY LOCATIONS ARE 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 THE AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "UNKNOWN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.



SCALE: 1" = 30'

## LEGEND

	Benchmark		Sanitary Sewer Manhole
	Catch Basin - Round		Stormwater Manhole
	Catch Basin - Square		Transformer
	Cleanout		Underground Gas Marker
	Culvert		Water Valve
	Deciduous Tree		Underground Electric
	Electric Riser		Gas
	Evergreen Tree		Sanitary
	Flag		Storm
	Gas Meter		Underground Telephone
	Hydrant		Watermain
	Iron - Found		Silt Fence
	Light Pole		Asphalt
	Mailbox		Concrete
	Manhole		Building
	Phone Riser		

## BENCHMARKS

**BENCHMARK #23** ELEV. = 687.57 (NAVD 88)  
Top flange bolt under "W" of "EJW" on hydrant, located on the South property line 111'± Southeast from the SE building corner.

**BENCHMARK #25** ELEV. = 686.04 (NAVD 88)  
Centerline of storm manhole cover in Lamar Court turn around.

## STRUCTURE INFORMATION

<b>Catch Basin #1071</b> Rim Elev. = 684.90 12" CPP Inv E = ? Water at 680.30	<b>Catch Basin #1275</b> Rim Elev. = 684.87 24" Conc Inv E = 680.27 24" Conc Inv W = 680.17	<b>Storm Manhole #1472</b> Rim Elev. = 686.97 36" CPP Inv E = 677.57 36" Conc Inv S = 677.67 Can't measure 15" Inv to North Water at 675.89
<b>Catch Basin #1097</b> Rim Elev. = 684.69 12" CPP Inv W = 679.74 10" CPP Inv ENE = 679.72	<b>Storm Manhole #1279</b> Rim Elev. = 686.04 12" Conc Inv S = 680.44 24" Conc Inv W = 680.64	<b>Catch Basin #1473</b> Rim Elev. = 685.28 15" CPP Inv S = 677.86 15" CPP Inv NW = 678.03
<b>Catch Basin #1113</b> Rim Elev. = 683.90 10" CPP Inv WSW = 678.92 15" CPP Inv N = 679.00	<b>Storm Manhole #1372</b> Big structure Rim Elev. = 684.41 6" PVC Inv S = 679.01 44" Conc Inv NE = 675.29 Can't see pipe to West Water at 675.89	<b>Sanitary Manhole #1474</b> Rim Elev. = 685.62 12" PVC Inv E = 672.07 12" PVC Inv W = 671.96 8" PVC Inv S = 671.99
<b>Catch Basin #1131</b> Rim Elev. = 682.26 15" CPP Inv N = 677.76 12" CPP Inv W = 678.06± 15" CPP Inv S = 677.96±	<b>Catch Basin #1384</b> Rim Elev. = 687.46 36" CPP Inv W = 675.70 36" CPP Inv E = 675.70 15" Conc Inv S = 675.70 15" Conc Inv N = 675.66	<b>Catch Basin #1509</b> Rim Elev. = 685.65 Silt cloth over top Water at 678.80
<b>Catch Basin #1150</b> Rim Elev. = 680.57 15" Conc Inv NNW = 675.99 Pipe running South Water at 675.97	<b>Sanitary Manhole #1400</b> Rim Elev. = 683.81 8" PVC Inv N = 672.86 6" PVC Inv SE = 672.86	<b>Manhole #1528</b> Rim Elev. = 687.55 Bolted shut
<b>Sanitary Manhole #1157</b> Rim Elev. = 678.87 6" PVC Inv S = 673.15 12" PVC Inv E = 673.12 12" PVC Inv W = 673.01	<b>Sanitary Manhole #1403</b> Rim Elev. = 683.15 Bolted shut	<b>Storm Manhole #1530</b> Rim Elev. = 687.46 36" Conc Inv N = 679.88 15" Conc Inv SW = 679.76 15" Conc Inv SE = 679.73
<b>Catch Basin #1222</b> Rim Elev. = 684.83 12" Conc Inv W = 680.58	<b>Catch Basin #1466</b> Rim Elev. = 685.56 36" Conc Inv S = 677.91 36" Conc Inv N = 677.82	<b>Catch Basin #1534</b> Rim Elev. = 687.01 Silt sac in it

## TITLE INFORMATION

The Title Description and Schedule B items hereon are from Transnation Title Insurance Company, Policy No. 670809, dated March 17, 2004)

## TITLE DESCRIPTION

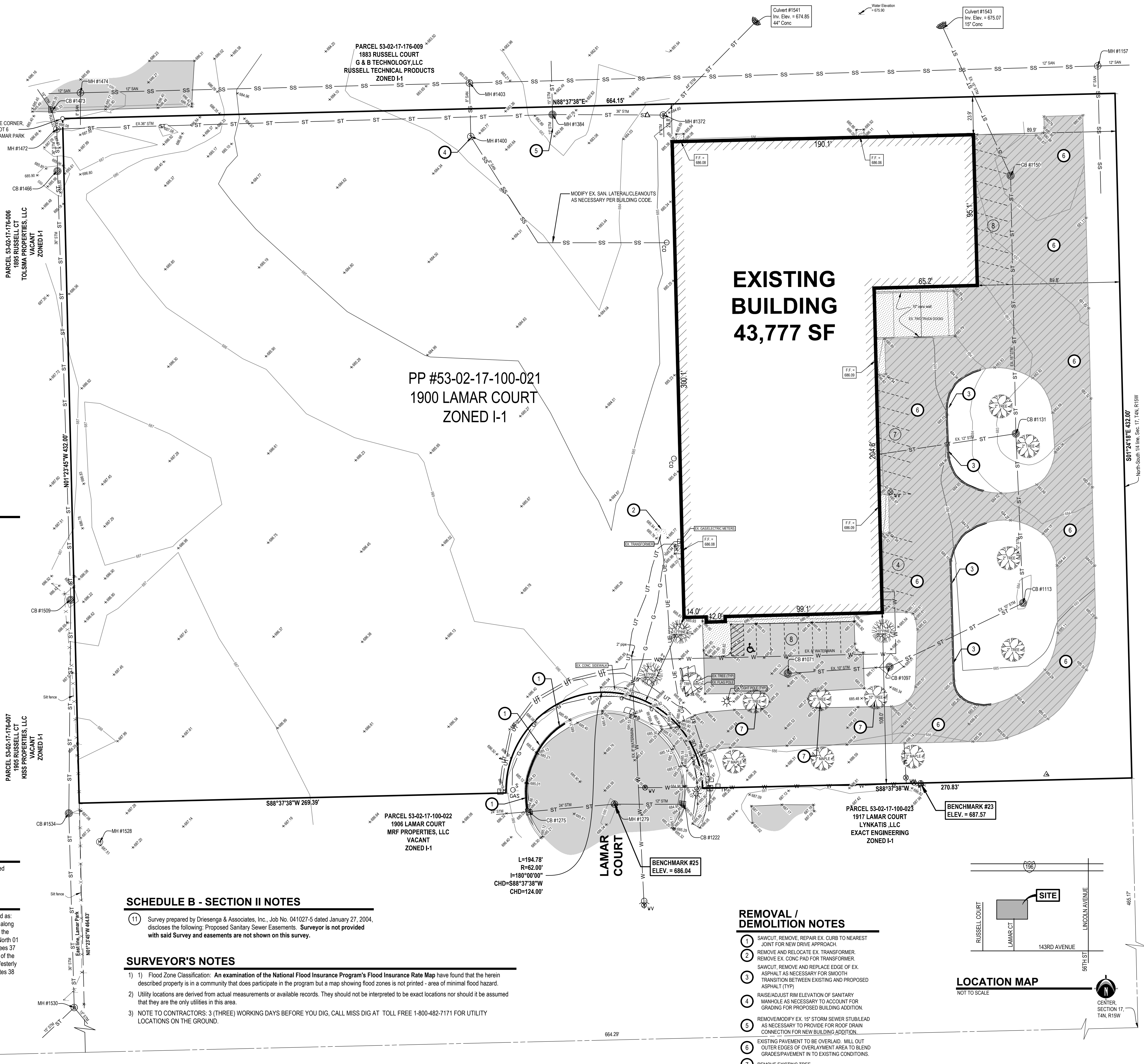
Part of the Northwest 1/4 of Section 17, Town 4 North, Range 15 West, City of Holland, Allegan County, Michigan, described as: commencing at the West 1/4 corner of said Section 17; thence North 88 degrees 39 minutes 23 seconds East 1992.87 feet along the South line of the Northwest 1/4 of said Section; thence North 01 degree 23 minutes 45 seconds West 464.83 feet along the East line of Lamar Park (as recorded in Liber 15 of Plats on Pages 15 and 16) to the point of beginning; thence continuing North 01 degree 23 minutes 45 seconds West 432.00 feet to the Northeast corner of Lot 6 of said Lamar Park; thence North 88 degrees 37 minutes 38 seconds East 664.15 feet; thence South 01 degree 24 minutes 18 seconds East 432.00 feet along the East line of the Northwest 1/4 of said Section; thence South 88 degrees 37 minutes 38 seconds West 270.83 feet; thence Northwesterly, Westerly and Southwesterly 194.78 feet along a 62.00 foot radius arc to the left, the chord of which bears South 88 degrees 37 minutes 38 seconds West 124.00 feet; thence South 88 degrees 37 minutes 38 seconds West 269.39 feet to the point of beginning.

## SCHEDULE B - SECTION II NOTES

- 11 Survey prepared by Driesenga & Associates, Inc., Job No. 041027-5 dated January 27, 2004, discloses the following: Proposed Sanitary Sewer Easements. Surveyor is not provided with said Survey and easements are not shown on this survey.

## SURVEYOR'S NOTES

- 1) Flood Zone Classification: An examination of the National Flood Insurance Program's Flood Insurance Rate Map have found that the herein described property is in a community that does participate in the program but a map showing flood zones is not printed - area of minimal flood hazard.
- 2) Utility locations are 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.
- 3) NOTE TO CONTRACTORS: 3 (THREE) WORKING DAYS BEFORE YOU DIG, CALL MISS DIG AT TOLL FREE 1-800-482-7171 FOR UTILITY LOCATIONS ON THE GROUND.



EXISTING  
BUILDING  
43,777 SF

PP #53-02-17-100-021  
1900 LAMAR COURT  
ZONED I-1

## REMOVAL / DEMOLITION NOTES

- 1 SAWCUT, REMOVE, REPAIR EX. CURB TO NEAREST JOINT FOR NEW DRIVE APPROACH.
- 2 REMOVE AND RELOCATE EX. TRANSFORMER. REMOVE EX. CONC PAD FOR TRANSFORMER. SAWCUT, REMOVE AND REPLACE EDGE OF EX. ASPHALT AS NECESSARY FOR SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED ASPHALT (TYP).
- 3 RAISE/ADJUST RIM ELEVATION OF SANITARY MANHOLE AS NECESSARY TO ACCOUNT FOR GRADING FOR PROPOSED BUILDING ADDITION.
- 4 REMOVE/MODIFY EX. 15" STORM SEWER STUB/LEAD AS NECESSARY TO PROVIDE FOR ROOF DRAIN CONNECTION FOR NEW BUILDING ADDITION.
- 5 EXISTING PAVEMENT TO BE OVERLAD. MILL OUT OUTER EDGES OF OVERLAYMENT AREA TO BLEND GRADES/PAVEMENT IN TO EXISTING CONDITIONS.
- 6 REMOVE EXISTING TREE

## LOCATION MAP

NOT TO SCALE



**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:

Duke Construction  
Duke Schut

11307 Edgewater Drive  
Allendale, MI 49401  
Telephone: (616) 895-4466

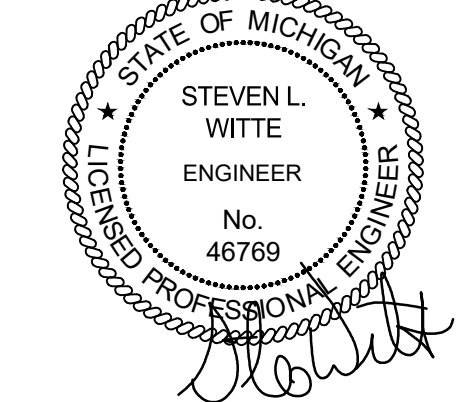
## REVISIONS:

Title: Preliminary Site Plan	V. Date: 04/02/18	
Drawn: SW	Checked: SW	S. Date: 04/02/18
Title: Site Plan Submittal	V. Date: 04/16/18	
Drawn: SW	Checked: SW	S. Date: 04/16/18

## FSI Formed Solutions Addition

Existing Conditions and Demolition Plan  
1900 Lamar Court, Holland, MI 49423  
PART OF THE NORTHWEST 1/4 OF SECTION 17, T4N, R15W,  
CITY OF HOLLAND, ALLEGAN COUNTY, MICHIGAN

## STAMP:



**PROJECT NO:**  
17201342

**SHEET NO:**  
**C-201**  
**SHEET: 1 OF 4**



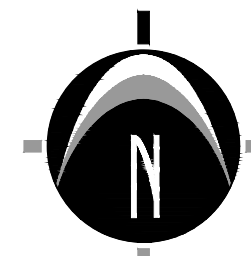
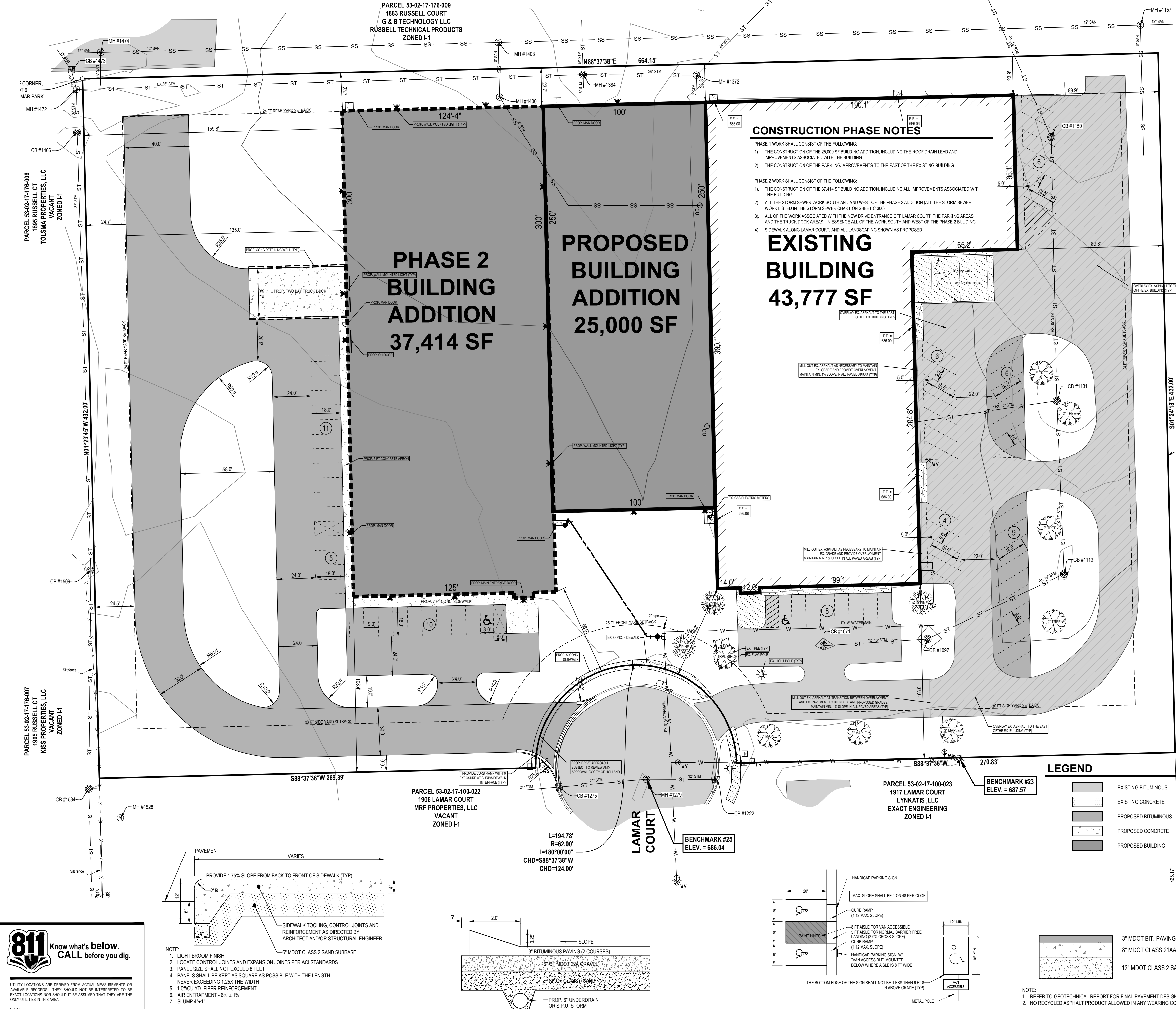
## BENCHMARKS

BENCHMARK #23 ELEV. = 687.57 (NAVD 88)

Top flange bolt under "W" of "EJW" on hydrant, located on the South property line 111'± Southeast from the SE building corner.

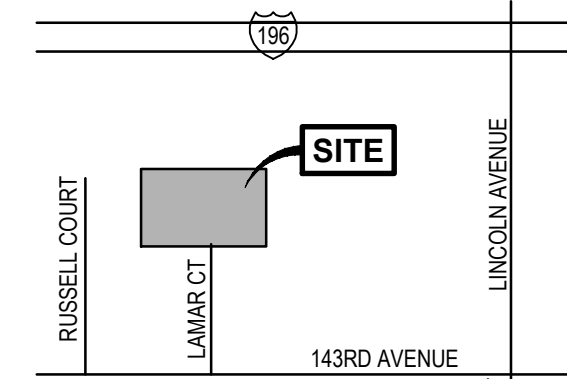
BENCHMARK #25 ELEV. = 686.04 (NAVD 88)

Centerline of storm manhole cover in Lamar Court turn around.



0' 15' 30' 60'

SCALE: 1" = 30'



LOCATION MAP

NOT TO SCALE

## GENERAL NOTES

- ZONING OF PROPERTY: I-1 INDUSTRIAL
- ZONING REQUIREMENTS
  - MINIMUM LOT AREA = NOT APPLICABLE
  - MINIMUM LOT WIDTH = NOT APPLICABLE
  - MAXIMUM BUILDING HEIGHT = 40 FT
  - MAXIMUM LOT COVERAGE = NOT APPLICABLE
  - MINIMUM ALLOWED BUILDING SETBACKS:
    - FRONT YARD = 25 FT
    - SIDE YARD = 30 FT
    - REAR YARD = 24 FT
- SUMMARY OF LAND USE:
  - A) TOTAL ACREAGE: 6.44 ACRES (APPROXIMATELY 280,890 SF) (EXCLUDING R.O.W.)
  - B) AREA OF EXISTING BUILDING = APPROXIMATELY 43,777 SF
  - C) AREA OF EXISTING PAVEMENT AND CONCRETE = APPROXIMATELY 40,025 SF
  - D) AREA OF PHASE 1 BUILDING ADDITION = APPROXIMATELY 25,000 SF
  - E) AREA OF PHASE 2 BUILDING ADDITION = APPROXIMATELY 37,414 SF
  - F) ON-SITE AREA OF PAVEMENT AND CONCRETE AFTER CONSTRUCTION = APPROX. 84,000 SF (INCLUDES APPROX. 40,025 SF EXISTING)
  - G) BUILDING COVERAGE = APPROXIMATELY 37.8% (AFTER PHASE 2 ADDITION)
  - H) THE BUILDING AND SITE WILL CONTINUE TO BE OWNED AND USED BY FORMED SOLUTIONS AS A PLACE OF BUSINESS. THE USE OF THE PROPERTY WILL NOT CHANGE.
  - I) THE NORMAL HOURS OF OPERATION FOR FORMED SOLUTIONS IS:
    - MANUFACTURING: MONDAY THROUGH THURSDAY: FIRST SHIFT: 6 AM - 4:30 PM
    - SECOND SHIFT: 4:30 PM - 10 PM
    - OFFICE: MONDAY THROUGH FRIDAY: 7 AM - 5 PM
  - J) BUILDING HEIGHT = APPROXIMATELY 30 FT (WILL MATCH EXISTING HEIGHT)
  - K) ZONING OF SURROUNDING PARCELS: I-1 INDUSTRIAL
- PARKING REQUIREMENTS:
  - A) MINIMUM ALLOWED PARKING SPACE = 160 SF = 9' x 18' (24 FT TWO-WAY AISLES) (ORDINANCE DOES NOT SPECIFY MIN. DRIVE WIDTH)
  - B) TYPICAL BARRIER FREE SPACE = 9' x 18' (8 FT WIDE VAN ACCESSIBLE AISLE)
  - C) NUMBER OF PARKING SPACES REQUIRED PER ORDINANCE = 20 TOTAL
    - BASED ON 1 PER 2 EMPLOYEES FOR MANUFACTURING/STORAGE = 8 (15 EMPLOYEES)
    - BASED ON 1 PER 1.5 EMPLOYEES FOR OFFICE = 5 (7 EMPLOYEES)
    - FOR FUTURE ADDITIONAL EMPLOYEES = 7 (ASSUMES 10 FUTURE ADD'L EMPLOYEES)
  - D) NUMBER OF PROPOSED PARKING SPACES = 65 (27 EXISTING)
  - E) PARKING SETBACK = 10 FT FROM ALL PROPERTY LINES
- THE BUILDING WILL BE SERVICED BY THE EXISTING WATER AND SANITARY SEWER SERVICES TO THE SITE.
- LANDSCAPING SHALL BE AS SHOWN ON THE SITE PLAN SET AND PER THE CITY OF HOLLAND ZONING ORDINANCE.
- THIS PROJECT IS LOCATED IN AN AREA THAT PARTICIPATES IN THE NATIONAL FLOOD INSURANCE PROGRAM. HOWEVER, NO FLOODPLAIN MAPS ARE AVAILABLE AT THIS TIME FOR THIS AREA.
- 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, AND COMPACTION. THE OWNER OF THE SUBJECT PARCEL SHALL HAVE THE RESPONSIBILITY TO MAINTAIN THE PERMANENT SOIL EROSION PREVENTION MEASURES.
- NO NEW SIGNS ARE PROPOSED AT THIS TIME. ANYVALL FUTURE SIGNS SHALL COMPLY WITH ARTICLE XIV OF THE CITY OF HOLLAND ZONING ORDINANCE.
  - NORMAL FREE-STANDING SIGN REGULATIONS:
    - MAXIMUM SIZE = 1 SF FOR EACH FOOT OF FRONTAGE, WITH A MAXIMUM OF 75 SF.
    - MAXIMUM HEIGHT = 10 FT
    - MINIMUM SETBACK = 25 FT FROM ALL PROPERTY LINES
  - NORMAL WALL SIGN REGULATIONS:
    - MAXIMUM SIZE = 10% OF WALL FACE
    - ALL SIGNS SHALL NOT EXCEED 2 SF PER LINEAR FOOT OF STREET FRONTAGE.
- LIGHTING SHALL BE SHIELDED FROM ALL ADJACENT PROPERTIES WITH FULL CUT OFF FIXTURES WITH SHOEBOX TYPE FIXTURES. LIGHTING SHALL COMPLY WITH SECTION 39-25(D) AND OTHER SECTIONS OF THE ZONING ORDINANCE AS APPLICABLE.
- THE PERMANENT PARCEL NUMBER FOR THE SITE IS 53-02-17-100-021.
- THE ADDRESS OF THE PROPERTY IS 1900 LAMAR COURT, HOLLAND, MICHIGAN 49423.
- UTILITIES SHOWN APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.
- CONTRACTOR SHALL FIELD VERIFY ALL INVERTS.
- THE STORM WATER RUNOFF FROM THE SITE WILL CONTINUE TO BE COLLECTED BY CATCHBASINS AND STORM PIPES THAT WILL DISCHARGE TO THE STORM SEWER INTERNAL TO THE SITE. REGIONAL STORM WATER DETENTION IS PROVIDED TO THE NORTH OF THE SITE.
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CURRENT CITY OF HOLLAND STANDARD CONSTRUCTION REQUIREMENTS.
- THE PROJECT WILL BE COMPLETED IN TWO PHASES, WITH THE FIRST PHASE STARTING PROMPTLY PENDING APPROVALS AND PERMIT. THE SECOND PHASE WILL BE CONSTRUCTED BASED ON DEMAND FOR THE ADDITIONAL SPACE.
- THE SITE SOIL IS PRIMARILY RIMER LOAMY SAND, BASED ON THE USDA SOIL SURVEY MAP.
- NO DUMPSTER IS EXISTING OR PROPOSED/REQUIRED AT THIS TIME. TRASH IS KEPT IN A PUSH CART INSIDE THE BUILDING UNTIL TRASH PICK UP.

**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:

Duke Construction  
Duke Schut

11307 Edgewater Drive  
Allendale, MI 49401  
Telephone: (616) 895-4466

## REVISIONS:

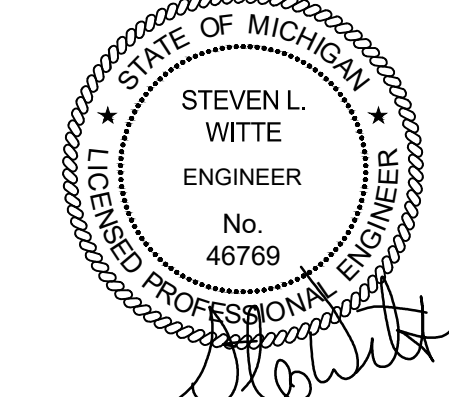
Title: Preliminary Site Plan V. Date: 04/02/18  
Drawn: SW Checked: SW S. Date: 04/02/18  
Title: Site Plan Submittal V. Date: 04/16/18  
Drawn: SW Checked: SW S. Date: 04/16/18

# FSI Formed Solutions Addition

## Site Layout Plan

1900 Lamar Court, Holland, MI 49423  
PART OF THE NORTHWEST 1/4 OF SECTION 17, T4N, R15W,  
CITY OF HOLLAND, ALLEGAN COUNTY, MICHIGAN

## STAMP:



PROJECT NO:  
17201342

SHEET NO:  
**C-205**  
SHEET: 2 OF 4

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

UTILITY LOCATIONS ARE 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.

NOTE:  
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLANS" WERE OBTAINED FROM AVAILABLE, AS-BUILT, RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

- NOTE:
- LIGHT BROOM FINISH
  - LOCATE CONTROL JOINTS AND EXPANSION JOINTS PER ACI STANDARDS
  - PANEL SIZE SHALL NOT EXCEED 8 FEET
  - PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE WITH THE LENGTH NEVER EXCEEDING 1.25X THE WIDTH
  - 1.0% C.U. YD. FIBER REINFORCEMENT
  - AIR ENTRAPMENT - 6% ± 1%
  - SUMP 4" ± 1"

## INTEGRAL CURB AND WALK

N.T.S.

## TYPICAL BITUMINOUS VALLEY GUTTER DETAIL

N.T.S.

## TYPICAL BARRIER FREE ACCESSIBLE PARKING SPACES

N.T.S.

## STANDARD DUTY PAVEMENT CROSS SECTION

N.T.S.

## CONCRETE PAVEMENT DETAIL

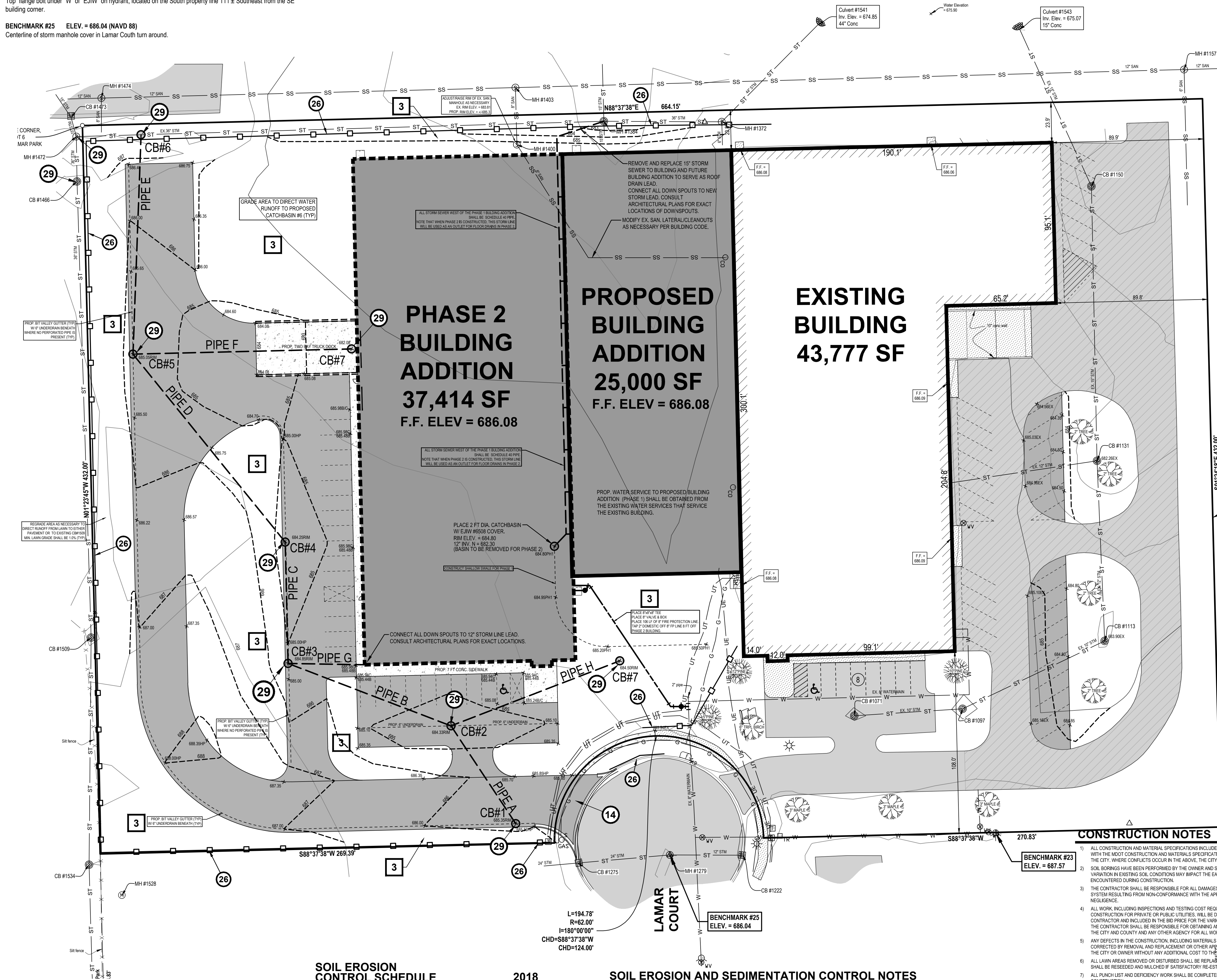
N.T.S.



## BENCHMARKS

**BENCHMARK #23** ELEV. = 687.57 (NAVD 88)  
Top flange bolt under "W" of "EJW" on hydrant, located on the South property line 111'± Southeast from the SE building corner.

**BENCHMARK #25** ELEV. = 686.04 (NAVD 88)  
Centerline of storm manhole cover in Lamar Court turn around.

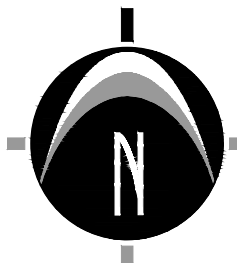


## STORM SEWER CHART

PROP. CB #1 4" DIA. CATCH-BASIN W/ E.J.I.W. #7055 COVER RIM ELEV. = 685.50 12" INV. NW = 681.50
PROP. CB #2 4" DIA. CATCH-BASIN W/ E.J.I.W. #1050 TYPE M2 COVER RIM ELEV. = 684.33 12" INV. SE = 681.28 12" INV. NW = 681.28
PROP. CB #3 4" DIA. CATCH-BASIN W/ E.J.I.W. #7055 COVER RIM ELEV. = 684.85 12" INV. SE = 680.95 12" INV. E = 680.95 18" INV. N = 680.85
PROP. CB #4 4" DIA. CATCH-BASIN W/ E.J.I.W. #7055 COVER RIM ELEV. = 684.25 18" INV. S = 680.25 18" INV. NW = 680.25
PROP. CB #5 4" DIA. CATCH-BASIN W/ E.J.I.W. #7055 COVER RIM ELEV. = 685.05 12" INV. E = 678.65 18" INV. SE = 678.65 18" INV. N = 678.65
PROP. CB #6 3" DIA. CATCH-BASIN W/ E.J.I.W. #6508 COVER RIM ELEV. = 686.00 18" INV. S = 676.25 36" INV. W = 677.34 (MATCH EX.) 36" INV. E = 677.34 (MATCH EX.)
PROP. CB #7 4" DIA. CATCH-BASIN W/ E.J.I.W. #1050 TYPE M2 COVER RIM ELEV. = 682.08 12" INV. W = 679.08
NOTE: ALL CATCHBASINS SHALL HAVE 2 FT SUMP (TYP)
PROP. CB #7 RELOCATED 2 FT CATCHBASIN FROM PH. 1 W/ E.J.I.W. #6508 COVER RIM ELEV. = 684.50 12" INV. SW = 681.82

## LOCATION MAP

NOT TO SCALE



0' 15' 30' 60'  
SCALE: 1" = 30'

## LEGEND

- EX. GRADE CONTOUR
- PROP. GRADE CONTOUR
- PROP. GRADE ELEV.
- PROP. GRADE ELEV. (BLACKTOP)
- PROP. GRADE ELEV. (CONCRETE)
- PROP. GRADE ELEV. (GUTTER)
- PROP. GRADE ELEV. (EDGE OF METAL)
- PROP. GRADE ELEV. (HIGH POINT)
- EX. BITUMINOUS
- EX. CONCRETE
- PROP. BITUMINOUS
- PROP. CONCRETE
- PROP. STORM SEWER
- PROP. SANITARY SEWER
- PROP. WATERMAIN
- FLOW DIRECTION
- PROP. LIMITS OF GRADING
- SILT FENCE

## CONSTRUCTION PHASE NOTES

PHASE 1 WORK SHALL CONSIST OF THE FOLLOWING:

1. THE CONSTRUCTION OF THE 25,000 SF BUILDING ADDITION, INCLUDING THE ROOF DRAIN LEAD AND IMPROVEMENTS ASSOCIATED WITH THE BUILDING.
2. THE CONSTRUCTION OF THE PARKING IMPROVEMENTS TO THE EAST OF THE EXISTING BUILDING.

PHASE 2 WORK SHALL CONSIST OF THE FOLLOWING:

1. THE CONSTRUCTION OF THE 37,414 SF BUILDING ADDITION, INCLUDING ALL IMPROVEMENTS ASSOCIATED WITH THE BUILDING.
2. ALL THE STORM SEWER WORK SOUTH AND WEST OF THE PHASE 2 ADDITION (ALL THE STORM SEWER WORK LISTED IN THE STORM SEWER CHART ON SHEET C-300).
3. ALL OF THE WORK ASSOCIATED WITH THE NEW DRIVE ENTRANCE OFF LAMAR COURT, THE PARKING AREAS, AND THE TRUCK DOCK AREAS. IN ESSENCE ALL OF THE WORK SOUTH AND WEST OF THE PHASE 2 BUILDING.
4. SIDEWALK ALONG LAMAR COURT, AND ALL LANDSCAPING SHOWN AS PROPOSED.

## CONSTRUCTION NOTES

1. ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MOST CONSTRUCTION AND MATERIALS SPECIFICATIONS LATEST EDITION, AND THE ORDINANCES OF THE CITY, WHERE CONFLICTS OCCUR IN THE ABOVE, THE CITY SHALL BE THE GOVERNING AUTHORITY.
2. SOIL BORINGS HAVE BEEN PERFORMED BY THE OWNER AND SHALL BE PROVIDED TO THE CONTRACTOR. THE VARIATION IN EXISTING SOIL CONDITIONS MAY IMPACT THE EARTHWORK QUANTITIES IF UNDESIRABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWERAGE SYSTEMS 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 WORKS AND MATERIALS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS FROM THE CITY AND COUNTY AND ANY OTHER AGENCY FOR ALL WORK DONE BY THE CONTRACTOR.
5. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OF WORKMANSHIP SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE CITY OR OWNER WITHOUT ANY ADDITIONAL COST TO THE CITY OR OWNER.
6. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED WITH TOPSOIL AND SOIL WHERE NEEDED AND SHALL BE RESEEDED AND MULCHED IF SATISFACTORY RESEEDING 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 CITY 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 CLOSURE 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 CONTINGENT UPON ALL AT TIMES BE SUBJECT TO THE DIRECT INSPECTION OF THE CITY, OWNER AND THEIR REPRESENTATIVES. THE CITY AND OWNER RESERVES THE RIGHT TO HALT ALL CONSTRUCTION ACTIVITY FOR NON-COMPLIANCE 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 THROUGHOUT THE CONSTRUCTION. THE CONTRACTOR SHALL BE COOPERATED WITH THE POLICE DEPARTMENT AND THE CITY.
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 CITY 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 CITY AND THE OWNER.
18. NO PARKING OF CONTRACTOR OR CONTRACTOR EMPLOYEES 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 CITY 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 CITY, COUNTY, IDEO OR ANY OTHER GOVERNING AUTHORITY.
21. ALL SEWERS, MANHOLES, JUNCTION CHAMBERS AND INLET BASINS MUST BE CLEANED BEFORE ACCEPTANCE BY THE CITY 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 (DOT 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 INCLUDING BUT NOT LIMITED TO, ROADWAY SURFACES, SIDEWALKS, BIKEWAYS, DRIVEWAYS, SHOULDERS, BUILDINGS, ETC.
26. NO BUILDING MATERIAL, EQUIPMENT, VEHICLES OR CHEMICALS SHALL BE STORED OR PLACED OUTSIDE LIMITS OF WORK/STORAGE.
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 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.

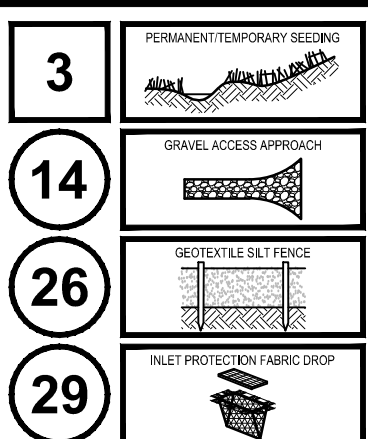
## SOIL EROSION CONTROL SCHEDULE

2018

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PLACE SILT FENCE												
STRIP & STOCKPILE TOPSOIL												
CONTRACTOR SHALL NOTIFY 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.												
CONSTRUCT UTILITY LINES TO BUILDING												
FINISH GRADE SITE												
PAVE SITE												
RESPIREAD TOPSOIL/COMPACTION												
SEED DISTURBED AREAS												
SITE RESTORATION/CLEAN UP												

## SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. CONTRACTOR SHALL POSSESS THE SOIL EROSION AND SEDIMENTATION CONTROL MANUAL (APRIL 2006) FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL NOTIFY 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 SSSO AGENT PRIOR TO FINAL PAYMENT TO THE CONTRACTOR OR FINAL ACCEPTANCE OF THE CONSTRUCTION BY THE OWNER.



- TEMPORARY MEASURE
- ◻ PERMANENT MEASURE
- REFER TO MOST STANDARD PLAN R-64-D



UTILITY LOCATIONS ARE 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.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLANS" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

**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:

Duke Construction  
Duke Schut

11307 Edgewater Drive  
Allendale, MI 49401  
Telephone: (616) 895-4466

## REVISIONS:

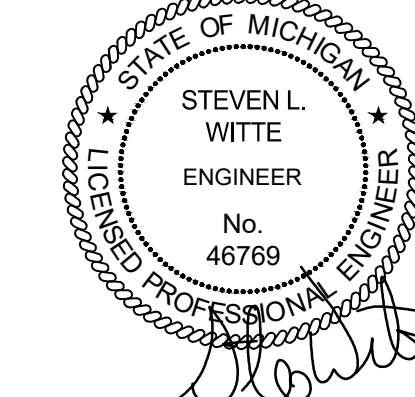
Title: Preliminary Site Plan V. Date: 04/02/18  
Drawn: SW Checked: SW S. Date: 04/02/18  
Title: Site Plan Submittal V. Date: 04/16/18  
Drawn: SW Checked: SW S. Date: 04/16/18

# FSI Formed Solutions Addition

## Grading, Utility, and S.E.S.C. Plan

1900 Lamar Court, Holland, MI 49423  
PART OF THE NORTHWEST 1/4 OF SECTION 17, T4N, R15W,  
CITY OF HOLLAND, ALLEGAN COUNTY, MICHIGAN

## STAMP:



## PROJECT NO:

17201342

## SHEET NO:

C-300

## SHEET: 3 OF 3

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:

Duke Construction

Duke Schut

11307 Edgewater Drive

Allendale, MI 49401

Telephone: (616) 895-4466

REVISIONS:

Title: Preliminary Site Plan

V. Date: 04/02/18

Drawn: SW

Checked: SW

S. Date: 04/02/18

Title: Site Plan Submittal

V. Date: 04/16/18

Drawn: SW

Checked: SW

S. Date: 04/16/18

FSI Formed Solutions

Addition

Landscape Plan

1900 Lamar Court, Holland, MI 49423

PART OF THE NORTHWEST 1/4 OF SECTION 17, T4N, R15W,  
CITY OF HOLLAND, ALLEGAN COUNTY, MICHIGAN

STAMP:

STATE OF MICHIGAN

JAMES C. WALTER, JR.

LANDSCAPE ARCHITECT

No. 1588

PROJECT NO:

17201342

SHEET NO:

L-201

SHEET:

4 OF 4

PARCEL 53-02-17-176-009  
1883 RUSSELL COURT  
G & B TECHNOLOGY,LLC  
RUSSELL TECHNICAL PRODUCTS  
ZONED I-1

PARCEL 53-02-17-176-005  
1895 RUSSELL CT  
TOLSONA PROPERTIES, LLC  
VACANT  
ZONED I-1

PARCEL 53-02-17-176-007  
1895 RUSSELL CT  
KSS PROPERTIES, LLC  
VACANT  
ZONED I-1

PARCEL 53-02-17-100-022  
1906 LAMAR COURT  
MRF PROPERTIES, LLC  
VACANT  
ZONED I-1

PARCEL 53-02-17-100-023  
1917 LAMAR COURT  
LYNKATIS,LLC  
EXACT ENGINEERING  
ZONED I-1

PHASE 2  
BUILDING  
ADDITION  
37,414 SF

PROPOSED  
BUILDING  
ADDITION  
25,000 SF

EXISTING  
BUILDING  
43,777 SF

LEGEND

EXISTING BITUMINOUS

EXISTING CONCRETE

PROPOSED BITUMINOUS (STANDARD DUTY)

PROPOSED BITUMINOUS (HEAVY DUTY)

PROPOSED CONCRETE (STANDARD DUTY)

PROPOSED CONCRETE (HEAVY DUTY)

TYPICAL SHRUB / PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL

N.T.S.

N

0' 15' 30' 60'

SCALE: 1" = 30'

LOCATION MAP

NOT TO SCALE

LANDSCAPE LEGEND / SCHEDULE

CODE	BOTANICAL NAME / COMMON NAME	SIZE	QTY
AJ	Acer saccharum 'John Pair' / John Pair Maple	2.5" cal. min.	3
BH	Betula nigra 'Heritage' / Heritage River Birch	2.5" cal. min.	3
EE	Varies / Existing Tree	N/A	13

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 LANDSCAPE ARCHITECT.

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 HARDWOOD 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 UNDERGROUND AND OVERHEAD UTILITIES. IF A CONFLICT WITH UTILITIES EXIST, NOTIFY OWNER/CONSTRUCTION MANAGER PRIOR TO PLANTING.

9) PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER PLANTING AND ACCEPTANCE.

TOPSOIL AND TURF NOTES:

1) WHEREVER GROUND IN ITS NATURAL STATE HAS BEEN DISTURBED, APPROVED LANDSCAPING OR GRASS SHALL BE FULLY INSTALLED, AND ESTABLISHED WITHIN A REASONABLE PERIOD OF TIME, BUT NO LONGER THAN ONE GROWING SEASON (UNLESS OTHERWISE NOTED AND APPROVED).

2) DURING EXCAVATION, GRADING, AND INSTALLATION OF REQUIRED LANDSCAPING, ALL SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS SHALL BE STRICTLY FOLLOWED AND COMPLIED WITH.

3) 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.

3) SOD SHALL BE GROWN ON TOPSOIL UNLESS APPROVED OTHERWISE. SOD SHALL BE 2 YEARS OLD AND STRONGLY ROOTED. PLACE SOD TIGHTLY WITH NO GAPS AND WITH GRAIN IN SAME DIRECTION. SEAMS OF SOD SHALL BE STAGGERED IN A RUNNING BOND PATTERN. SOD SHALL BE WATERED IMMEDIATELY TO AVOID DRYING OUT. DO NOT INSTALL SOD UNTIL ACCEPTANCE OF FINISH GRADE AND IRRIGATION SYSTEM IS OPERATING PROPERLY UNLESS DIRECTED IN WRITING TO DO OTHERWISE. FINISH ROLL SOD WITH A WATER FILLED LAWN ROLLER. ROLL PERPENDICULAR TO LENGTH OF SOD.

4) TURF SHALL BE INSTALLED ON A MIN. OF 3/4" OF LIGHTLY COMPACTED APPROVED TOPSOIL. TOPSOIL SHALL BE FERTILE, SCREENED, FRIABLE TOPSOIL FREE OF STONES 1/2" IN DIA. AND LARGER, ROOTS, STICKS, OR OTHER EXTRANEOUS MATERIAL INCLUDING NOXIOUS PLANTS. PH BETWEEN 6.0 AND 6.5, SALTS 500 PARTS PPM, ORGANIC CONTENT 3% MIN. DO NOT INSTALL TOPSOIL UNTIL APPROVED BY OWNER/M.C. TOPSOIL SHALL BE FINE GRADED TO A SMOOTH FINISH, FREE OF LUMPS AND DEPRESSIONS.

5) ALL LANDSCAPE ISLANDS WITHIN PARKING LOTS SHALL BE BACK FILLED WITH TOPSOIL TO A DEPTH OF 18" MIN.

IRRIGATION NOTES:

1) 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.

REQUIRED LANDSCAPING NOTES:

CITY OF HOLLAND ZONING ORDINANCE - SEC.39-25(g)

1) STREET TREES: 1 STREET TREE / 30 LF  
REQUIRED STREET TREES (195 LF/30 LF) = 7 TREES  
PROPOSED STREET TREES = 7 (3 EXISTING + 4 PROPOSED)  
PROPOSED STREET TREES TO BE LOCATED OUTSIDE OF R.O.W. FOR CONSISTENCY WITH EXISTING STREET TREES AND TO AVOID CONFLICT WITH EXISTING GAS LINE.

2) PARKING LOT LANDSCAPE AREA = 15,146 SF  
PROPOSED LANDSCAPE AREA (15,146 SF / 10 SF) = 1,515 SF  
PROPOSED LANDSCAPE AREA = +1,515 SF

TYPICAL TREE PLANTING DETAIL

N.T.S.

Land Planning — Landscape Architecture — Civil Engineering — Land Surveying — Environmental Consulting — High Definition Scanning — Forensic Engineering — Fire Investigation

© 2017 Nederveld, Inc.



Building For:  
**FORMED SOLUTIONS INC.**

PROPOSED  
**BUILDING**

1900 Lamar Ct.  
Holland, MI, 49423

ISSUED FOR	
DATE	DESCRIPTION
04-12-2018	SCHEM. REVIEW
04-13-208	SITE PLAN REVIEW

Revision Schedule		
Date	No.	Description

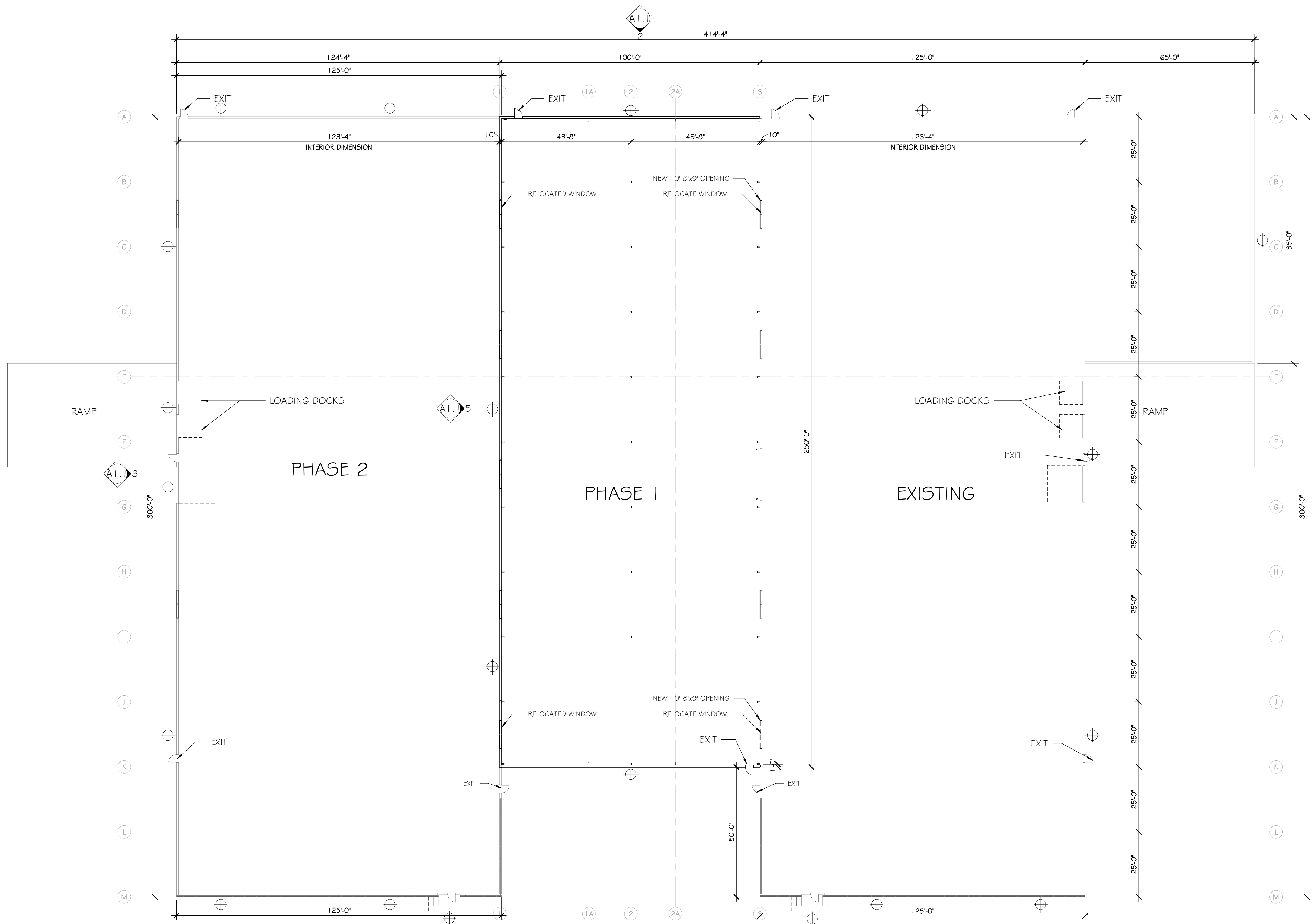
Drawn by: JCH

**SITE PLAN**

SCALE: AS NOTED

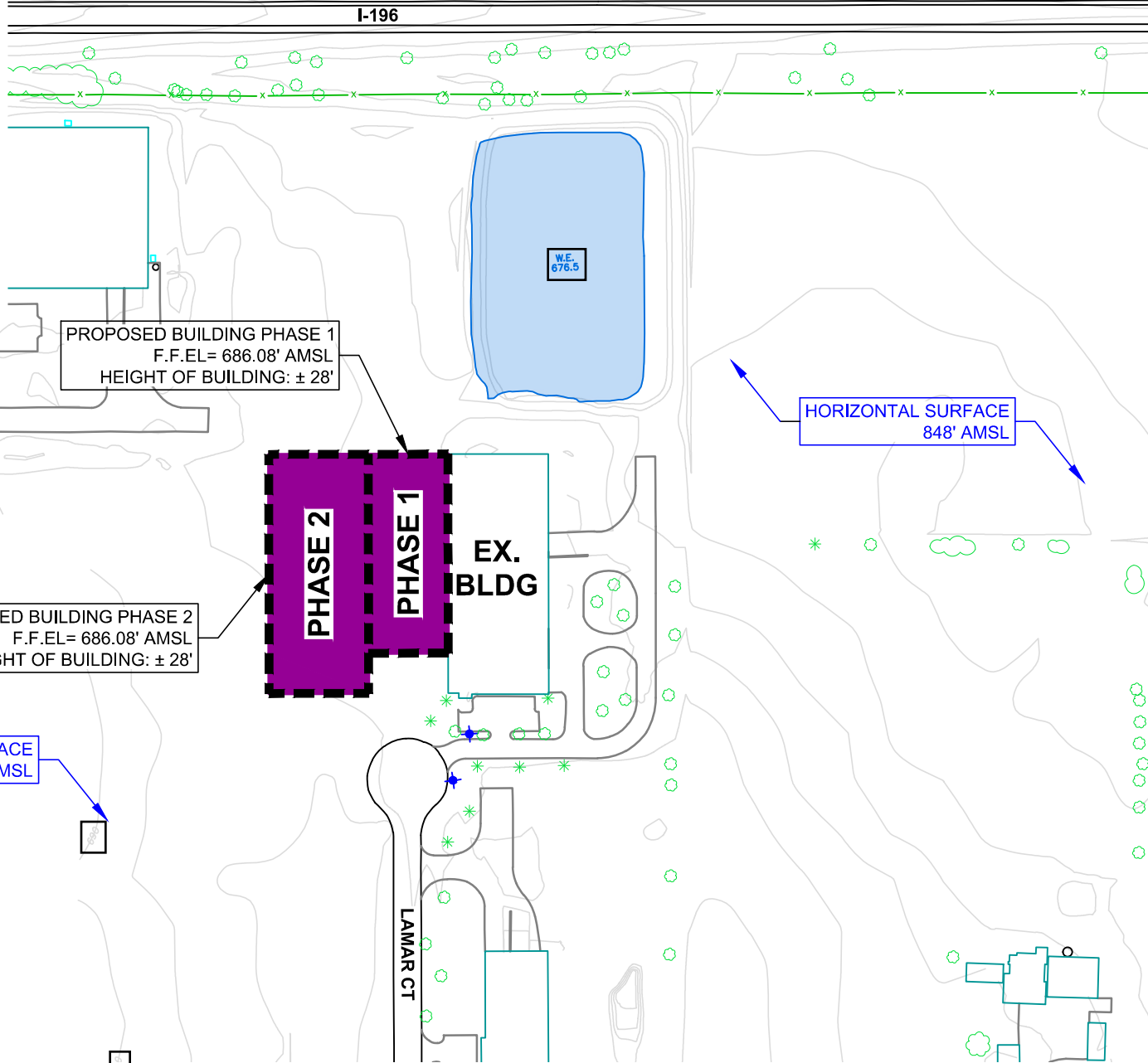
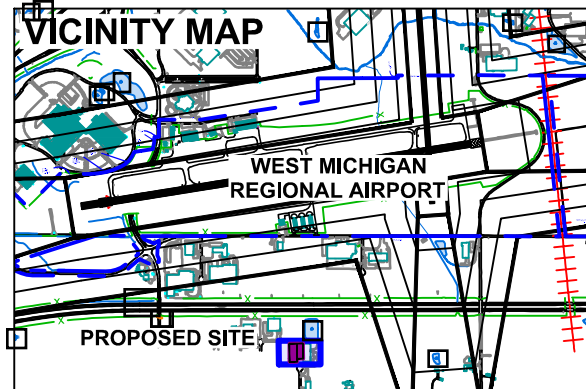
Sheet No.  
**CI.1**

Project No.  
**18-024**



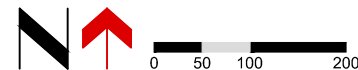
**1 SITE PLAN**  
1" = 20'-0"

## VICINITY MAP



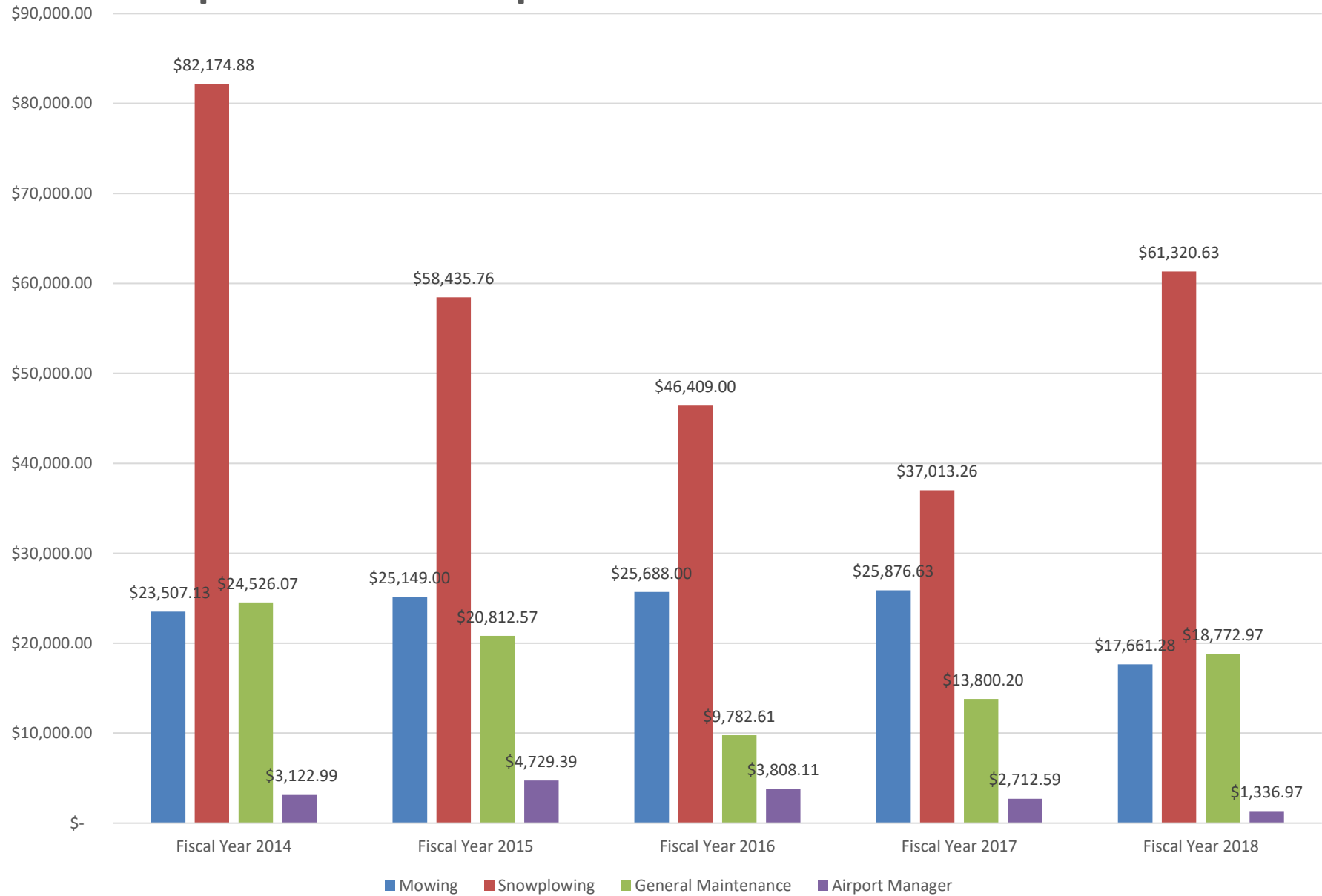
## NOTES

1. THE AIRSPACE ABOVE THE SITE IS CONTROLLED BY THE FAR PART-77 HORIZONTAL SURFACE, WHICH HAS AN ALLOWABLE HEIGHT OF 848' AMSL.
2. RUNWAY 26 END INFORMATION:  
LATITUDE: N 42° 44' 39.31"  
LONGITUDE: W 086° 05' 48.61"  
END EL= 686.0' AMSL
3. 'AMSL' IS DEFINED AS 'ABOVE MEAN SEA LEVEL'.





## Airport Selected Expenses for Fiscal Years 2014 - 2018



## West Michigan Airport Authority

270 South River Avenue, Holland, MI 49423  
P (616) 510-2332

*Comprising City of Zeeland, Park Township and City of Holland*



May 14, 2018

### REPORT 10.

**To:** West Michigan Airport Authority Board.  
**From:** Greg Robinson, Authority Manager.  
**Subject:** **Appointments to Subcommittees.**

---

Each year the Authority Board reviews and sets the membership for its various subcommittees. The number of subcommittees has fluctuated over the years in order to best address the needs of the Authority. Attached to this report is the Authority organizational chart and the current subcommittee membership.

The Operations Committee deals with administrative, financial, staff, policy development, and day-to-day airport operational items. It meets on an as needed basis, 4-6 times per year.

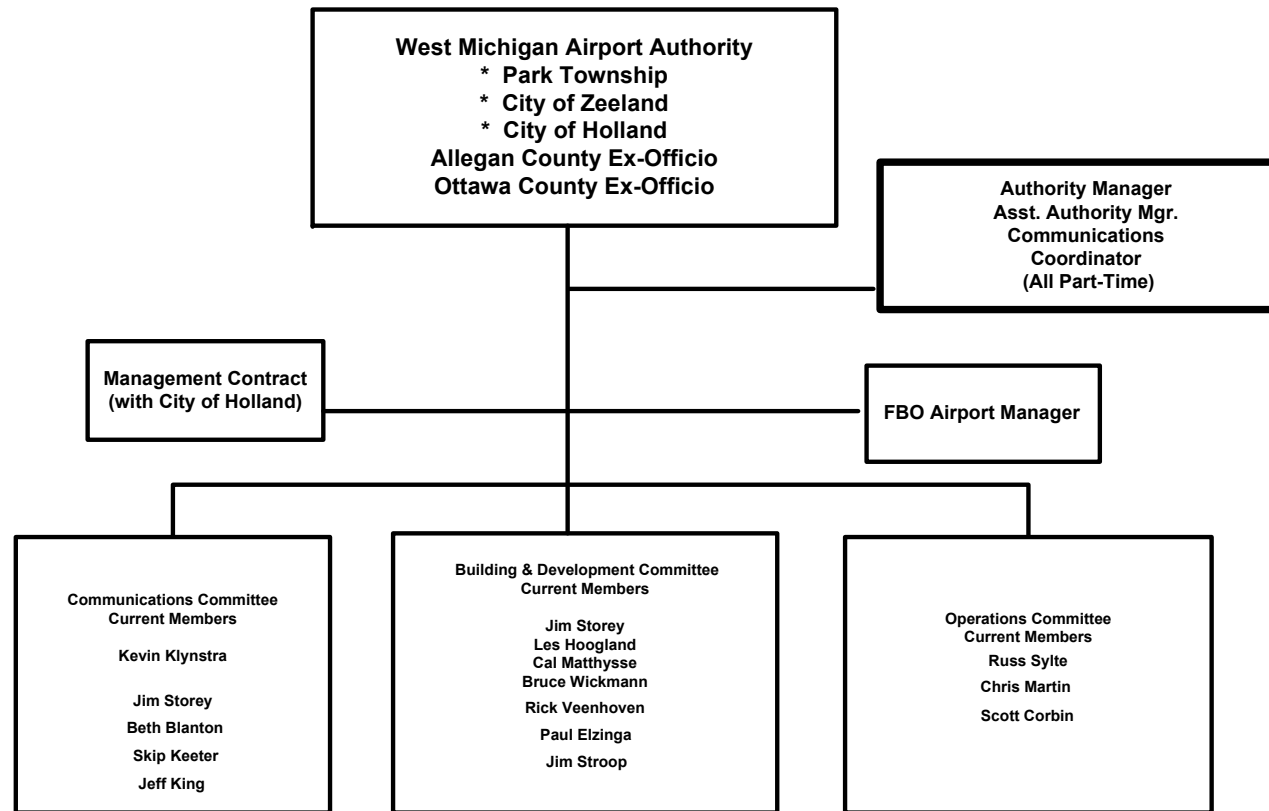
The Building & Development Committee deals with capital projects and development of airport properties. This Committee has been very active over the past several years as it assisted with the planning and construction of the Airport Business Center and new Apron projects. It is anticipated that the Committee will meet every other month throughout the coming year.

The Communications Committee is involved with the planning and implementation of all Authority public communication items, including social media, events, press releases, speaking engagements, etc. It is anticipated that this Committee will meet at least 6 times in the coming year.

### **Recommendation**

It is recommended that the Authority Board appoint representatives to the various subcommittees.

**West Michigan Airport Authority Organizational Structure**  
**January 2017**





# Budget Performance Report

Fiscal Year to Date 04/25/18

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year Total
Fund <b>Z01 - WMAA (Airport) General Fund</b>										
REVENUE										
Department <b>541 - Business Center</b>										
490675.AIR	Private Donations WMAA - From Companies	.00	.00	.00	.00	.00	.00	.00	+++	136,580.00
490675.INDV	Private Donations WMAA - From Individuals	.00	.00	.00	.00	.00	.00	.00	+++	225.00
Department <b>541 - Business Center Totals</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$136,805.00
REVENUE TOTALS		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	+++	\$136,805.00
EXPENSE										
Department <b>541 - Business Center</b>										
721933.0	Equipment Maintenance General	8,000.00	2,830.00	10,830.00	.00	.00	.00	10,830.00	0	885.00
722801.9010	Contr-Printing/Promo Advertising/Promotional	.00	.00	.00	.00	.00	.00	.00	+++	65.00
722808.1	Contr-Bldgs&Grnds Janitorial	10,570.00	.00	10,570.00	.00	.00	5,272.78	5,297.22	50	650.00
723850.0	Communications Telephone	2,400.00	.00	2,400.00	504.50	.00	2,714.50	(314.50)	113	1,705.50
723850.WIFI	Communications WIFI Internet Connection	3,900.00	.00	3,900.00	.00	.00	312.50	3,587.50	8	312.50
723920.BPW	Public Utilities BPW	13,500.00	.00	13,500.00	.00	.00	11,417.84	2,082.16	85	7,681.03
723920.GAS	Public Utilities Natural Gas	5,500.00	.00	5,500.00	.00	.00	4,116.03	1,383.97	75	1,246.04
723955.Q5	Misc. Signage/Billboards	.00	.00	.00	.00	.00	.00	.00	+++	15,934.86
723955.STRP	Misc. Stripe Fees	.00	.00	.00	.00	.00	.00	.00	+++	1.03
730975.0	Buildings & Structures General	.00	.00	.00	18,257.90	.00	269,366.43	(269,366.43)	+++	310,768.17
730977.0	Machinery & Equipment General	.00	.00	.00	.00	.00	320.00	(320.00)	+++	60,012.37
Department <b>541 - Business Center Totals</b>		\$43,870.00	\$2,830.00	\$46,700.00	\$18,762.40	\$0.00	\$293,520.08	(\$246,820.08)	629%	\$399,261.50
Department <b>546 - Airport East Connector Project</b>										
730974.0	Land Improvements General	.00	.00	.00	.00	.00	23,500.00	(23,500.00)	+++	.00
730975.0	Buildings & Structures General	.00	.00	.00	.00	.00	.00	.00	+++	1,150.00
Department <b>546 - Airport East Connector Project Totals</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,500.00	(\$23,500.00)	+++	\$1,150.00
EXPENSE TOTALS		\$43,870.00	\$2,830.00	\$46,700.00	\$18,762.40	\$0.00	\$317,020.08	(\$270,320.08)	679%	\$400,411.50
Fund <b>Z01 - WMAA (Airport) General Fund Totals</b>										
REVENUE TOTALS		.00	.00	.00	.00	.00	.00	.00	+++	136,805.00
EXPENSE TOTALS		43,870.00	2,830.00	46,700.00	18,762.40	.00	317,020.08	(270,320.08)	679%	400,411.50
Fund <b>Z01 - WMAA (Airport) General Fund Totals</b>		(\$43,870.00)	(\$2,830.00)	(\$46,700.00)	(\$18,762.40)	\$0.00	(\$317,020.08)	\$270,320.08		(\$263,606.50)
Grand Totals										
REVENUE TOTALS		.00	.00	.00	.00	.00	.00	.00	+++	136,805.00
EXPENSE TOTALS		43,870.00	2,830.00	46,700.00	18,762.40	.00	317,020.08	(270,320.08)	679%	400,411.50
Grand Totals		(\$43,870.00)	(\$2,830.00)	(\$46,700.00)	(\$18,762.40)	\$0.00	(\$317,020.08)	\$270,320.08		(\$263,606.50)



# Fund Equity Changes Report

Through 04/25/18

Detail Listing

Exclude Rollup Account

Account	Account Description	Beginning Balance	YTD Credits	YTD Debits	Current Balance	Prior Year Fund Equity Adjustment	YTD Revenues	YTD Expenses	Estimate Fund Balance
Fund Category	<b>GOVERNMENTAL</b>								
Fund Type	<b>GENERAL FUND</b>								
Fund	<b>Z01 - WMAA (Airport) General Fund</b>								
341390.A	Fund Balance - Assigned (By Action) Apron, Building & Sitework	314,815.00	.00	.00	314,815.00				
341390.E	Fund Balance - Assigned (By Action) For Emergencies	.00	.00	.00	.00				
341390.R	Fund Balance - Assigned (By Action) For Capital Acquisitions	142,421.00	.00	.00	142,421.00				
342390	Fund Balance-Unassigned	571,538.15	.00	.00	571,538.15				
345390.C	Fund Balance Committed (By Resolution) For Capital Projects	.00	.00	.00	.00				
345390.E	Fund Balance Committed (By Resolution) For Emergencies	.00	.00	.00	.00				
Fund	<b>Z01 - WMAA (Airport) General Fund Totals</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$530,769.63</b>	<b>\$630,110.88</b>	<b>\$929,432.90</b>
Fund Type	<b>GENERAL FUND Totals</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$530,769.63</b>	<b>\$630,110.88</b>	<b>\$929,432.90</b>
Fund Category	<b>GOVERNMENTAL Totals</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$530,769.63</b>	<b>\$630,110.88</b>	<b>\$929,432.90</b>
	<b>Grand Totals</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,028,774.15</b>	<b>\$0.00</b>	<b>\$530,769.63</b>	<b>\$630,110.88</b>	<b>\$929,432.90</b>



# Budget Performance Report

Fiscal Year to Date 04/25/18

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year Total
<b>Fund Z01 - WMAA (Airport) General Fund</b>										
<b>REVENUE</b>										
Department <b>000 - General Revenues</b>										
420502.24	Federal Grant FAA Capital	.00	.00	.00	.00	.00	.00	.00	+++	1,269,984.49
430502.24	State Grant MDOT State Capital	.00	.00	.00	.00	.00	.00	.00	+++	481,249.27
440573	State-Reim Local PPT Tax Loss	.00	.00	.00	.00	.00	3,298.70	(3,298.70)	+++	21,951.97
450582.C	Contributions from Other Govts From City of Holland	98,400.00	.00	98,400.00	987.75	.00	99,529.84	(1,129.84)	101	97,389.15
450582.P	Contributions from Other Govts From Park Township	104,000.00	.00	104,000.00	2.35	.00	96,936.56	7,063.44	93	96,516.70
450582.Z	Contributions from Other Govts From City of Zeeland	55,400.00	.00	55,400.00	.00	.00	73,408.24	(18,008.24)	133	60,737.98
460647.7	Sales Sale of Merchandise-Taxable	.00	.00	.00	.00	.00	1,643.28	(1,643.28)	+++	.00
460654.1	Franchise Fees FBO Franchise Fees	22,400.00	.00	22,400.00	.00	.00	16,838.28	5,561.72	75	22,239.00
460654.5	Franchise Fees Fuel Flowage Fee	62,000.00	.00	62,000.00	3,429.50	.00	54,031.24	7,968.76	87	74,625.28
460654.7	Franchise Fees Landing Fees	33,000.00	.00	33,000.00	.00	.00	22,182.93	10,817.07	67	33,249.45
480665.0	Investment Income General	2,500.00	.00	2,500.00	.00	.00	6,281.35	(3,781.35)	251	7,719.34
480665.X	Investment Income Market Adjustment	.00	.00	.00	.00	.00	.00	.00	+++	(3,205.58)
480669.A	Rental Airport Business Center	7,900.00	.00	7,900.00	.00	.00	5,914.89	1,985.11	75	6,032.60
480669.24	Rental Hangar Land Lease	85,000.00	.00	85,000.00	4,639.54	.00	98,537.56	(13,537.56)	116	92,183.61
480669.25	Rental Agricultural Land Lease	11,950.00	.00	11,950.00	.00	.00	11,978.76	(28.76)	100	11,775.81
480669.26	Rental T-Hangars	53,000.00	.00	53,000.00	.00	.00	38,720.00	14,280.00	73	58,280.00
490685.1	Recoveries Insurance	.00	.00	.00	.00	.00	.00	.00	+++	21,082.78
490692.0	Miscellaneous General	.00	.00	.00	.00	.00	1,468.00	(1,468.00)	+++	7,370.50
Department <b>000 - General Revenues Totals</b>		<b>\$535,550.00</b>	<b>\$0.00</b>	<b>\$535,550.00</b>	<b>\$9,059.14</b>	<b>\$0.00</b>	<b>\$530,769.63</b>	<b>\$4,780.37</b>	<b>99%</b>	<b>\$2,359,182.35</b>
<b>REVENUE TOTALS</b>		<b>\$535,550.00</b>	<b>\$0.00</b>	<b>\$535,550.00</b>	<b>\$9,059.14</b>	<b>\$0.00</b>	<b>\$530,769.63</b>	<b>\$4,780.37</b>	<b>99%</b>	<b>\$2,359,182.35</b>
<b>EXPENSE</b>										
Department <b>540 - Airport Operations</b>										
710701.0	Payroll-Regular General	.00	.00	.00	.00	.00	10,911.99	(10,911.99)	+++	8,368.74
710701.3	Payroll-Regular Allocated	17,600.00	.00	17,600.00	.00	.00	.00	17,600.00	0	.00
710707.0	Payroll-Temporary Help General	.00	.00	.00	1,341.25	.00	16,839.31	(16,839.31)	+++	28,998.05
710707.8	Payroll-Temporary Help Allocated	32,500.00	.00	32,500.00	.00	.00	.00	32,500.00	0	.00
711702.0	Payroll-Vacation/PTO General	500.00	.00	500.00	.00	.00	736.15	(236.15)	147	791.24
711703	Payroll-Holidays	500.00	.00	500.00	.00	.00	447.48	52.52	89	348.93
711716.1	Insurance Health	3,000.00	.00	3,000.00	.00	.00	4,344.12	(1,344.12)	145	11,565.78
711716.2	Insurance Dental	50.00	.00	50.00	.00	.00	46.09	3.91	92	48.36
711717	Insurance-Life & AD&D	25.00	.00	25.00	.00	.00	22.94	2.06	92	21.32
711718.1	Retirement Contribution MERS	325.00	.00	325.00	.00	.00	862.96	(537.96)	266	633.52
711720	Insurance-Income Protection	50.00	.00	50.00	.00	.00	87.96	(37.96)	176	80.05
712715	Employer FICA/Medicare Contribution	1,500.00	.00	1,500.00	102.61	.00	2,085.00	(585.00)	139	2,785.44
712723	Unemployment Comp Insurance	25.00	.00	25.00	.00	.00	5.72	19.28	23	54.28
712724	Workers Comp Insurance	25.00	.00	25.00	.00	.00	14.28	10.72	57	13.69
721730.0	Postage General	200.00	.00	200.00	.00	.00	(4,492.07)	4,692.07	-2246	66.10
721740.0	Operating Supplies General	500.00	.00	500.00	.00	.00	889.79	(389.79)	178	2,544.78



# Budget Performance Report

Fiscal Year to Date 04/25/18

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year Total
Fund <b>Z01 - WMAA (Airport) General Fund</b>										
EXPENSE										
Department <b>540 - Airport Operations</b>										
721740.CAP	Operating Supplies Controlled Items-Capital Type	.00	.00	.00	.00	.00	1,520.00	(1,520.00)	+++	.00
721905.0	Photocopies/In-House Printing General	100.00	.00	100.00	.00	.00	.00	100.00	0	.00
721931.0	Bldg & Grnds Maint General	10,000.00	2,625.00	12,625.00	520.00	1,200.00	8,155.25	3,269.75	74	8,620.20
721933.0	Equipment Maintenance General	21,000.00	.00	21,000.00	95.00	.00	15,900.40	5,099.60	76	20,390.23
721933.INS	Equipment Maintenance Repairs-Insurance Claims	.00	.00	.00	.00	.00	.00	.00	+++	22,210.00
722801.9000	Contr-Printing/Promo Printing	.00	.00	.00	.00	.00	1,295.49	(1,295.49)	+++	5,309.66
722801.9010	Contr-Printing/Promo Advertising/Promotional	40,000.00	1,700.00	41,700.00	170.30	.00	40,941.85	758.15	98	20,254.32
722804.0	Contractual-Legal General	4,000.00	.00	4,000.00	.00	.00	6,305.27	(2,305.27)	158	11,045.25
722805.1	Contractual-Finance Independent Audit	7,600.00	.00	7,600.00	.00	.00	7,400.00	200.00	97	7,350.00
722805.4	Contractual-Finance Financial Service Fees	.00	.00	.00	24.06	.00	238.30	(238.30)	+++	274.92
722807.2	Contractual-Architect/Engineer Plan Development	.00	.00	.00	.00	.00	1,468.05	(1,468.05)	+++	.00
722807.5	Contractual-Architect/Engineer Engineering	5,000.00	.00	5,000.00	.00	.00	.00	5,000.00	0	.00
722808.1	Contr-Bldgs&Grnds Janitorial	.00	.00	.00	.00	.00	1,300.00	(1,300.00)	+++	625.00
722808.MOW	Contr-Bldgs&Grnds Mowing	26,000.00	.00	26,000.00	.00	.00	17,661.28	8,338.72	68	25,876.63
722808.MTCE	Contr-Bldgs&Grnds Maintenance-General Repairs	20,000.00	.00	20,000.00	995.20	.00	14,624.39	5,375.61	73	20,424.45
722808.SNOW	Contr-Bldgs&Grnds Snowplowing	65,000.00	.00	65,000.00	1,476.00	.00	59,132.13	5,867.87	91	37,013.26
722809.25	Contractual-Misc FAA Land Release	.00	.00	.00	.00	.00	4,861.25	(4,861.25)	+++	.00
722809.61	Contractual-Misc Management Services	24,500.00	.00	24,500.00	2,039.16	.00	20,521.18	3,978.82	84	29,160.00
722809.62	Contractual-Misc Airport Manager-Tulip City Air	4,000.00	.00	4,000.00	129.50	.00	1,077.97	2,922.03	27	2,712.59
723850.0	Communications Telephone	.00	.00	.00	.00	.00	1,719.56	(1,719.56)	+++	2,981.35
723850.CELL	Communications Cellular	.00	.00	.00	50.00	.00	500.00	(500.00)	+++	600.00
723850.WIFI	Communications WIFI Internet Connection	.00	.00	.00	.00	.00	.00	.00	+++	625.00
723860.0	Travel, Conf, Seminars General	1,500.00	.00	1,500.00	.00	.00	1,220.00	280.00	81	786.82
723910.0	Commercial Insurance Premiums General	26,000.00	.00	26,000.00	.00	.00	23,886.00	2,114.00	92	25,113.00
723920.BPW	Public Utilities BPW	.00	.00	.00	.00	.00	.00	.00	+++	9,179.42
723920.GAS	Public Utilities Natural Gas	.00	.00	.00	.00	.00	727.48	(727.48)	+++	2,983.13
723920.GATE	Public Utilities Fence Gates	500.00	.00	500.00	.00	.00	632.92	(132.92)	127	1,111.16
723920.LAND	Public Utilities Landing Lights & System	4,000.00	.00	4,000.00	.00	.00	2,860.46	1,139.54	72	4,091.88
723920.PLOT	Public Utilities Parking Lot Lights	900.00	.00	900.00	.00	.00	837.58	62.42	93	887.19
723920.RUNW	Public Utilities Runway Lights	6,000.00	.00	6,000.00	.00	.00	3,764.06	2,235.94	63	7,172.35
723920.THAN	Public Utilities T-Hangars	3,300.00	.00	3,300.00	.00	.00	3,637.27	(337.27)	110	3,826.00
723955.0	Misc. General	2,300.00	.00	2,300.00	137.79	.00	3,958.84	(1,658.84)	172	4,075.37
723955.STRP	Misc. Stripe Fees	.00	.00	.00	.00	.00	3.09	(3.09)	+++	.00
723961.0	Dues & Subscriptions General	400.00	.00	400.00	.00	.00	557.00	(157.00)	139	295.00
723962.0	Assessments & Taxes General	.00	.00	.00	.00	.00	.00	.00	+++	15,822.80
723963.2	Write-Offs Uncoll Property Taxes	.00	.00	.00	.00	.00	.00	.00	+++	13.36
723964.2	Refunds Property Tax Prior Years	.00	.00	.00	.00	.00	10.50	(10.50)	+++	714.39
730974.0	Land Improvements General	.00	.00	.00	.00	.00	2,403.41	(2,403.41)	+++	4,341.34

# Budget Performance Report

Fiscal Year to Date 04/25/18

Exclude Rollup Account

Account	Account Description	Adopted Budget	Budget Amendments	Amended Budget	Current Month Transactions	YTD Encumbrances	YTD Transactions	Budget - YTD Transactions	% Used/ Rec'd	Prior Year Total
Fund <b>Z01 - WMAA (Airport) General Fund</b>										
EXPENSE										
Department <b>540 - Airport Operations</b>										
730975.0	Buildings & Structures General	.00	.00	.00	.00	11,800.00	31,168.10	(42,968.10)	+++	1,884,951.13
730980.0	Office Equipment/Furniture General	2,000.00	.00	2,000.00	.00	.00	.00	2,000.00	0	.00
770956.0	Contingency General	160,780.00	.00	160,780.00	.00	.00	.00	160,780.00	0	.00
Department <b>540 - Airport Operations Totals</b>		<b>\$491,680.00</b>	<b>\$4,325.00</b>	<b>\$496,005.00</b>	<b>\$7,080.87</b>	<b>\$13,000.00</b>	<b>\$313,090.80</b>	<b>\$169,914.20</b>	<b>66%</b>	<b>\$2,237,157.48</b>
EXPENSE TOTALS		<b>\$491,680.00</b>	<b>\$4,325.00</b>	<b>\$496,005.00</b>	<b>\$7,080.87</b>	<b>\$13,000.00</b>	<b>\$313,090.80</b>	<b>\$169,914.20</b>	<b>66%</b>	<b>\$2,237,157.48</b>
Fund <b>Z01 - WMAA (Airport) General Fund Totals</b>										
REVENUE TOTALS		535,550.00	.00	535,550.00	9,059.14	.00	530,769.63	4,780.37	99%	2,359,182.35
EXPENSE TOTALS		491,680.00	4,325.00	496,005.00	7,080.87	13,000.00	313,090.80	169,914.20	66%	2,237,157.48
Fund <b>Z01 - WMAA (Airport) General Fund Totals</b>		<b>\$43,870.00</b>	<b>(\$4,325.00)</b>	<b>\$39,545.00</b>	<b>\$1,978.27</b>	<b>(\$13,000.00)</b>	<b>\$217,678.83</b>	<b>(\$165,133.83)</b>		<b>\$122,024.87</b>
Grand Totals										
REVENUE TOTALS		535,550.00	.00	535,550.00	9,059.14	.00	530,769.63	4,780.37	99%	2,359,182.35
EXPENSE TOTALS		491,680.00	4,325.00	496,005.00	7,080.87	13,000.00	313,090.80	169,914.20	66%	2,237,157.48
Grand Totals		<b>\$43,870.00</b>	<b>(\$4,325.00)</b>	<b>\$39,545.00</b>	<b>\$1,978.27</b>	<b>(\$13,000.00)</b>	<b>\$217,678.83</b>	<b>(\$165,133.83)</b>		<b>\$122,024.87</b>





# Trial Balance Listing

Through 04/25/18  
Detail Balance Sheet Listing  
Exclude Rollup Account

Account	Account Description	Balance Forward	YTD Debits	YTD Credits	Ending Balance	Prior Year YTD Balance
<b>Fund Z01 - WMAA (Airport) General Fund</b>						
<i>CURRENT ASSETS</i>						
110001.675	Cash Due from Cash/Inv Pool	789,881.24	643,103.51	724,542.82	708,441.93	839,236.25
113040.0	Accounts Receivable General	14,795.04	261,100.50	267,191.30	8,704.24	716.60
11304P	Accounts Receivable In/Out	.00	24,945.50	96,910.90	(71,965.40)	.00
114026.2011	Taxes Receivable 2011	1.20	.00	1.20	.00	67.91
114026.2012	Taxes Receivable 2012	38.30	.00	1.78	36.52	38.42
114026.2013	Taxes Receivable 2013	28.13	.00	2.15	25.98	28.81
114026.2014	Taxes Receivable 2014	33.06	.00	1.92	31.14	35.23
114026.2015	Taxes Receivable 2015	32.96	.00	4.35	28.61	53.41
114026.2016	Taxes Receivable 2016	51.28	.00	2.46	48.82	.00
114027.2012	IFT Taxes Receivable 2012	40.65	.00	.00	40.65	40.65
114031	Allowance for Uncollectible Taxes	(217.26)	.00	.00	(217.26)	(277.73)
118123.I	Prepaid Items Insurance	12,334.00	.00	12,334.00	.00	.00
119073.2	Due from Local Govt Units Due from Park Township	.00	96,934.21	96,934.21	.00	.00
119073.3	Due from Local Govt Units Due from Zeeland City	32.60	73,408.24	73,440.84	.00	.00
119078.1	Due from State of Michigan Due from State-Aeronautics	284,257.67	.00	.00	284,257.67	418,427.01
<i>CURRENT ASSETS Totals</i>		\$1,101,308.87	\$1,099,491.96	\$1,271,367.93	\$929,432.90	\$1,258,366.56
<i>CURRENT LIABILITIES</i>						
210202.0	Accounts Payable General	(28,154.47)	670,646.14	642,491.67	.00	.00
211202	Contracts Payable	(43,442.99)	53,859.99	10,417.00	.00	.00
212257.0	Accrued Wages Payable General	(432.00)	432.00	.00	.00	.00
212262.1	Accrued Fringes Payable FICA-Social Security/Medicare	(33.05)	33.05	.00	.00	.00
21B339.0	Deferred Revenue General	(472.21)	472.21	.00	.00	.00
<i>CURRENT LIABILITIES Totals</i>		(\$72,534.72)	\$725,443.39	\$652,908.67	\$0.00	\$0.00
<i>FUND BALANCE</i>						
341390.A	Fund Balance - Assigned (By Action) Apron, Building & Sitework	(314,815.00)	.00	.00	(314,815.00)	(314,815.00)
341390.R	Fund Balance - Assigned (By Action) For Capital Acquisitions	(142,421.00)	.00	.00	(142,421.00)	(142,421.00)
342390	Fund Balance-Unassigned	(571,538.15)	.00	.00	(571,538.15)	(713,119.78)
<i>FUND BALANCE Totals</i>		(\$1,028,774.15)	\$0.00	\$0.00	(\$1,028,774.15)	(\$1,170,355.78)
	Fund Revenues	.00	5.86	530,775.49	(530,769.63)	(697,052.30)
	Fund Expenses	.00	650,248.06	20,137.18	630,110.88	609,041.52
<b>Fund Z01 - WMAA (Airport) General Fund Totals</b>		\$0.00	\$2,475,189.27	\$2,475,189.27	\$0.00	\$0.00
<b>Grand Totals</b>		\$0.00	\$2,475,189.27	\$2,475,189.27	\$0.00	\$0.00



# Trial Balance Listing

Through 04/25/18  
Detail Balance Sheet Listing  
Exclude Rollup Account

City of Holland

# Accounts Payable Payment Post Listing

Batch Department / Invoice Department		Bank Account	Check Date		Starting Check Number	
AIR Airport		PAYABLES ACCOUNT	05/03/2018		46320	
Selected Invoices	Vendor	Invoice Number	Invoice Description	Invoice Date	Due Date	Invoice Net Amount
AIR Airport	1295 - COUNTY OF OTTAWA TREASURER	63839A	AIRPORT - DUE FROM CITY 2ND QTR	04/06/2018	04/30/2018	1.35
	3500 - CSM SERVICES	19282	AIRPORT - APRIL CLEANING SERVICES	04/30/2018	04/30/2018	650.00
	101 - CUNNINGHAM DALMAN P.C.	244315	AIRPORT - LEGAL SERVICES	09/05/2017	04/30/2018	322.26
	101 - CUNNINGHAM DALMAN P.C.	247789	AIRPORT - LEGAL SERVICES	01/05/2018	04/30/2018	1,044.44
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003705	AIRPORT - ACCT #77527804-01	04/08/2018	04/30/2018	1,373.46
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003706	AIRPORT - ACCT #77526597-00	04/08/2018	04/30/2018	21.14
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003707	AIRPORT - ACCT #77524873-01	04/08/2018	04/30/2018	47.40
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003708	AIRPORT - ACCT #05614220-01	04/08/2018	04/30/2018	478.19
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003709	AIRPORT - ACCT #05614000-01	04/08/2018	04/30/2018	117.13
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003710	AIRPORT - ACCT #05613990-01	04/08/2018	04/30/2018	127.43
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003711	AIRPORT - ACCT #05613700-01	04/08/2018	04/30/2018	725.50
	146 - HOLLAND BOARD OF PUBLIC WORKS	2018-00003712	AIRPORT - ACCT #05613100-02	04/08/2018	04/30/2018	153.17
	2087 - KAREN SCHOLTEN	2018-00003713	AIRPORT - REIMBURSEMENT FOR PARADE FLOAT DECORATIONS	04/30/2018	04/30/2018	79.00
Total Selected Invoices: 13						\$5,140.47

City of Holland

# Payment Batch Register

Bank Account: CITY AP - PAYABLES ACCOUNT  
Batch Date: 05/02/2018

Type	Date	Number	Source	Payee Name	EFT Bank/Account	Transaction Amount
<b>Bank Account: CITY AP - PAYABLES ACCOUNT</b>						
Check	05/03/2018	46320	Accounts Payable	COUNTY OF OTTAWA TREASURER		1.35
	Invoice		Date	Description	Amount	
	63839A		04/06/2018	AIRPORT - DUE FROM CITY 2ND QTR	1.35	
Check	05/03/2018	46321	Accounts Payable	CSM SERVICES		650.00
	Invoice		Date	Description	Amount	
	19282		04/30/2018	AIRPORT - APRIL CLEANING SERVICES	650.00	
Check	05/03/2018	46322	Accounts Payable	CUNNINGHAM DALMAN P.C.		1,366.70
	Invoice		Date	Description	Amount	
	244315		09/05/2017	AIRPORT - LEGAL SERVICES	322.26	
	247789		01/05/2018	AIRPORT - LEGAL SERVICES	1,044.44	
Check	05/03/2018	46323	Accounts Payable	HOLLAND BOARD OF PUBLIC WORKS		3,043.42
	Invoice		Date	Description	Amount	
	2018-00003705		04/08/2018	AIRPORT - ACCT #77527804-01	1,373.46	
	2018-00003706		04/08/2018	AIRPORT - ACCT #77526597-00	21.14	
	2018-00003707		04/08/2018	AIRPORT - ACCT #77524873-01	47.40	
	2018-00003708		04/08/2018	AIRPORT - ACCT #05614220-01	478.19	
	2018-00003709		04/08/2018	AIRPORT - ACCT #05614000-01	117.13	
	2018-00003710		04/08/2018	AIRPORT - ACCT #05613990-01	127.43	
	2018-00003711		04/08/2018	AIRPORT - ACCT #05613700-01	725.50	
	2018-00003712		04/08/2018	AIRPORT - ACCT #05613100-02	153.17	
Check	05/03/2018	46324	Accounts Payable	KAREN SCHOLTEN		79.00
	Invoice		Date	Description	Amount	
	2018-00003713		04/30/2018	AIRPORT - REIMBURSEMENT FOR PARADE FLOAT DECORATIONS	79.00	
CITY AP PAYABLES ACCOUNT Totals:						\$5,140.47

Transactions: 5

Checks: 5 \$5,140.47

# City of Holland

## Accounts Payable Payment Post Listing

Batch Department / Invoice Department		Bank Account	Check Date		Starting Check Number	
AIR Airport		PAYABLES ACCOUNT	05/10/2018		46478	
Selected Invoices	Vendor	Invoice Number	Invoice Description	Invoice Date	Due Date	Invoice Net Amount
AIR Airport						
101 - CUNNINGHAM DALMAN P.C.		250919	AIRPORT - LEGAL SERVICES	05/04/2018	05/10/2018	548.10
2780 - DEANNE BUCKLAND		2018-00003824	AIRPORT - REIMBURSEMENT OF PETTY CASH	04/30/2018	04/30/2018	124.89
454 - ELZINGA & VOLKERS INC		35142	Project Admin - Office Demo and ENtryway Rehab	04/10/2018	04/30/2018	2,300.00
159 - FRIS OFFICE OUTFITTERS		911548-0	AIRPORT - SUPPLIES	05/01/2018	05/10/2018	29.40
146 - HOLLAND BOARD OF PUBLIC WORKS		2018-00003825	AIRPORT - ACCT #77524493-01	04/22/2018	04/30/2018	109.53
800 - STATE OF MICHIGAN		591-10348119	AIRPORT - WEATHER OBS DATA SYSTEM	04/27/2018	04/30/2018	103.50
322 - TULIP CITY AIR SERVICE INC		18-043158	AIRPORT - MAY PHONES AND INTERNET	04/24/2018	04/30/2018	504.50
322 - TULIP CITY AIR SERVICE INC		18-043346	AIRPORT - APRIL SERVICES	04/30/2018	04/30/2018	2,903.92
Total Selected Invoices: 8						\$6,623.84

City of Holland

# Payment Batch Register

Bank Account: CITY AP - PAYABLES ACCOUNT  
Batch Date: 05/09/2018

Type	Date	Number	Source	Payee Name	EFT Bank/Account	Transaction Amount
<b>Bank Account: CITY AP - PAYABLES ACCOUNT</b>						
Check	05/10/2018	46478	Accounts Payable	CUNNINGHAM DALMAN P.C.		548.10
	Invoice		Date	Description	Amount	
	250919		05/04/2018	AIRPORT - LEGAL SERVICES	548.10	
Check	05/10/2018	46479	Accounts Payable	DEANNE BUCKLAND		124.89
	Invoice		Date	Description	Amount	
	2018-00003824		04/30/2018	AIRPORT - REIMBURSEMENT OF PETTY CASH	124.89	
Check	05/10/2018	46480	Accounts Payable	ELZINGA & VOLKERS INC		2,300.00
	Invoice		Date	Description	Amount	
	35142		04/10/2018	Project Admin - Office Demo and Entryway Rehab	2,300.00	
Check	05/10/2018	46481	Accounts Payable	FRIS OFFICE OUTFITTERS		29.40
	Invoice		Date	Description	Amount	
	911548-0		05/01/2018	AIRPORT - SUPPLIES	29.40	
Check	05/10/2018	46482	Accounts Payable	HOLLAND BOARD OF PUBLIC WORKS		109.53
	Invoice		Date	Description	Amount	
	2018-00003825		04/22/2018	AIRPORT - ACCT #77524493-01	109.53	
Check	05/10/2018	46483	Accounts Payable	STATE OF MICHIGAN		103.50
	Invoice		Date	Description	Amount	
	591-10348119		04/27/2018	AIRPORT - WEATHER OBS DATA SYSTEM	103.50	
Check	05/10/2018	46484	Accounts Payable	TULIP CITY AIR SERVICE INC		3,408.42
	Invoice		Date	Description	Amount	
	18-043158		04/24/2018	AIRPORT - MAY PHONES AND INTERNET	504.50	
	18-043346		04/30/2018	AIRPORT - APRIL SERVICES	2,903.92	
CITY AP PAYABLES ACCOUNT Totals:						\$6,623.84
Transactions: 7						
Checks:			7	\$6,623.84		