Village of Bayside
9075 N Regent Road
Village Hall Board Room
April 27, 2020, 6:00pm

ARCHITECTURAL REVIEW COMMITTEE
AGENDA

PLEASE TAKE NOTE: Due to the COVID-19 Pandemic, the Architectural Review Committee will be meeting via remote conferencing at the above noted time and date, at which the following items of business will be discussed and possibly acted upon. There will be a few chairs socially distanced in the Board Room for those wishing to attend in person.

I. **CALL TO ORDER AND ROLL CALL**

II. **APPROVAL OF MINUTES**

A. Approval of March 2, 2020 meeting minutes.

III. **BUSINESS**

A. **8530 N. Fielding Road- Robert Mueller-** The proposed project is for a rubber roof installation over the garage and front door. A 3' x 16' horizontal band roof will be added over the garage door and a 6' x 10' horizontal band roof will be added over front door. Four square recessed LED lights will be added in the bottom of roof structure over the garage. Bamboo decking to be used for horizontal banding on roof matching existing design.

Please review detailed plans here.

B. **9070 N Bayside Drive- Tim Wayman-** The proposed project is a garden shed that is 10'4" X 14'6" in size. The shed is constructed with a combination of board, batten and cedar shingle siding to match the home, and will be constructed on a 150 square foot concrete slab. The shed will be located in the southwest corner of the rear yard.

Please review detailed plans here.

C. **1150 E. Standish Place- Max & Anneliese Dickman-** The proposed project is to replace an existing 450 square foot deck. The footprint will remain the same. The existing surface will be removed and replaced with grey composite decking and framed.

Please review detailed plans here.

D. **8835 N Tennyson Drive- Donna Miller-** The proposed project is a fence. A 6' high by 98' long wood privacy fence will be installed on southside of backyard inside lot line.

Please review detailed plans here.

E. **1434 E. Brown Deer Rd.- Kathryn Kamm-** The proposed project is a 3' cedar fence in the front yard with black PVC coated mesh panels, approximately 160 linear feet. The redwood pergola would be installed over spa on concrete

pad/redwood deck. The project also requires review by the Board of Zoning Appeals.

Please review detailed plans here.

F. **1440 E. Hermitage Road-Village of Bayside-** The proposed project is located in an existing easement and includes a new Control Building for a Sanitary Sewer Lift Station to replace the existing building. The size of new building is 8' (long) by 7' (wide) and 7' tall, which will allow accessibility into the control building. The new building will be constructed of wood, with cement board siding. The existing generator would be replaced with a new generator and would be located on a pad next to the building, similar to the existing arrangement.

Please review detailed plans here.

G. **1460 E. Bay Point Rd- Village of Bayside-** The proposed project is located in Village right-of-way and includes a new Control Building for a Sanitary Sewer lift station to replace the existing building in the right-of-way. The structure will be located slightly east of original location, above the floodplain to eliminate existing flooding issues. The existing generator will be replaced and relocated to a concrete pad in the location of the existing control building. The new size of building is 8' (long) by 7' (wide) and 7' tall with accessibility into the control building. The new building will be constructed of wood, with cement board sidings.

Please review detailed plans here.

IV. ADJOURNMENT

The Architectural Review Committee will utilize Zoom video conferencing software for this meeting. To join the zoom meeting using a computer or tablet: https://zoom.us/j/91892015206?pwd=SFV2SzhOS0xmem1WdFNjOVEvT3BJQT09, if using a telephone to dial in: 312-626- 6799. The meeting id is: 918 9201 5206, password 114390.

Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. Contact Village Hall at 414-206-3915. It is possible that members of and possibly a quorum of members of other Boards, Commissions, or Committees of the Village may be in attendance in the above stated meeting to gather information; no action will be taken by any other Boards, Commissions, or Committees of the Village except by the Board, Commission, or Committee noticed above. Agendas and minutes are available on the Village website (www.baysidewi.gov).

Village of Bayside
9075 N. Regent Rd.
Architectural Review Committee Meeting Minutes
March 2, 2020

I. CALL TO ORDER

Chairperson Marisa Roberts called the meeting to order at 6:00pm

II. ROLL CALL

Trustee Liaison:	Mike Barth
Chair:	Marisa Roberts
Members:	John Krampf
	Dan Zitzer
	Liz Levins
Also Present:	La'Neka Horton
	There was one person in the audience

III. APPROVAL OF MINUTES

A. Approval of the January 13, 2020 minutes.

Motion by Trustee Barth, seconded by John Krampf, to approve the March 2, 2020 minutes. Motion carried unanimously.

IV. BUSINESS

A. Window replacement & enlargement. Storm & door replacement. 803 E. Donges Rd.

John McDonald appeared on behalf of the project. There were no neighbors in attendance.

The applicant proposes replacing three windows with larger windows starting 20 inches below current windowsill. A new exterior door and storm door will also be installed.

Chairperson Roberts questioned whether the door and window styles would be changing. Mr. McDonald stated this was a new door and noted the window style would be the same as the existing windows.

Dan Zitzer requested an explanation of double shoulders. Mr. McDonald stated double shoulders are double 2 x 4 used for support between the windows.

Motion by Liz Levins, seconded by John Krampf to approve the window replacements and new exterior door and storm door replacements. Motion carried unanimously.

V. ADJOURNMENT

Motion by Chairperson Roberts, seconded by Dan Zitzer, to adjourn the meeting at 6:10 p.m. Motion carried unanimously.

Respectfully submitted,

La'Neka Horton

Project Proposal

Date 3/30/20

Property Address 8530 N FIELDING RD

Zoning

- ☐ Accessory Structures/Generators
- ☐ Additions/Remodel
- ☐ Bluff Management
- ☐ Commercial Signage
- ☐ Decks/Patios
- ☐ Fence
- ☐ Fire Pits
- ☐ Landscaping requiring Impervious Surface/Fill/Excavation Permit
- ☐ New Construction
- ☐ Play Structures
- ☐ Recreational Facilities/Courts
- ☐ Roofs
- ☐ Solar Panels/Skylights
- ☐ Swimming Pools
- ☐ Windows/Doors-change exceeds 25% of opening
- ☒ Other

Proposed project details (type of work, size, materials, etc.):

ADD HORIZONTAL BAND ROOF OVER GARAGE DOOR & OVER FRONT DOOR BAMBOO FACING ON HORIZONTAL BAND/ SQUARE LED LIGHTS RECESSED IN BOTTOM OF ROOF STRUCTURE

********** *For Office Use Only* **********

Yes	No	
☐	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☐	☐	Survey
☐	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	Parcel Number
☐	☐	ARC Agenda Date:
☐	☐	Building Permit
☐	☐	Fill Permit
☑	☐	Impervious Surface Permit
☐	☐	Plan Commission/Conditional Use Permit
☐	☐	Tax Key Number
☐	☐	Right-of-Way/Excavation Permit
☐	☐	Variance Required

SAFEbuilt Wisconsin, LLC
2108A Silvernail Road #317
Pewaukee, WI 53072

4/15/2020

Attention:
Village of Bayside, WI
Architecture Review Committee

PROJECT/SITE OWNER: Robert Mueller PROJECT ADDRESS: 8530 N Fielding Rd	PROJECT SUMMARY: Add roof with horizontal band (bamboo facing) over garage and front door.

VILLAGE CODE REVIEW
Reviewer believes this project complies with the following Village Code sections:

14-2(a)(2) Architectural Review Committee: *Construction and renovation should be made so that exterior architectural appearance shall be substantially consistent with structures already constructed in the immediate neighborhood, or with the character of the applicable district.*

STURCTUAL NOTE
New roof will add additional loads to the cantilevered bump out wall. New and existing framing is to have adequate structural support.

STRUCTURAL IS APPROVED AS NOTED

Dan Povolo, PE
Plans Examiner
608-208-2516
dpovolo@safebuilt.com

1-262-346-4577
SAFEbuilt, Inc.

WI UNIFORM PERMIT APPLICATION

hartfordinspections@safebuilt.com
Inspections need to be called in by 4 pm for next business day inspections

PERMIT NO.

TAXKEY#

ISSUING MUNICIPALITY

☐ TOWN ☒ VILLAGE ☐ CITY
OF Bayside
COUNTY: Milwaukee

PROJECT LOCATION (Building Address): 8530 N Fielding Rd

PROJECT DESCRIPTION: Front Porch Roof

☐ COMMERCIAL ☐ ONE & TWO FAMILY

	Mailing Address - Include City & Zip	Telephone - Include Area Code
Owner's Name: Robert Mueller	8530 N Fielding Rd, Bayside, WI 53217	414 520 9760
Construction Contractor (DC Lic No.): Stansen Building and Remodeling	16800 Greenfield Ave #300 PO 1265 Brookfield, WI 53005	262 789 7508
Dwelling Contractor Qualifier (DCQ Lic No.)	Dwelling Contractor Qualifier shall be an owner, CEO, COB, or employee of Dwelling Contractor	
Plumbing Contractor (Lic No.)		
Electrical Contractor (Lic No.): Stansen Building and Remodeling	16800 Greenfield Ave #300 PO 1265 Brookfield, WI 53005	262 789 7508
HVAC Contractor (Lic No.)		

PROJECT INFORMATION

Subdivision Name: Pelham Heath | Lot No.: 9 | Block No.: 6

Zoning District: Section 9 | Lot Area: 13508 Sq. Ft.

N.S.E.W. Setbacks: Front 50 Ft. | Rear 99 Ft. | Left 12 Ft. | Right 12 Ft.

1a. PROJECT
☐ New ☐ Addition ☐ Raze
☒ Alteration ☐ Repair ☐ Move
☐ Other

1b. GARAGE
☒ Attached ☐ Detached

2. AREA
Basement 800 Sq. Ft.
Living Area 1784 Sq. Ft.
Garage 486 Sq. Ft.
Other ____ Sq. Ft.
TOTAL 3070

3. TYPE
☒ Single Family
☐ Two Family
☐ Multi
☐ Commercial

4. CONST. TYPE
☒ Site Constructed
☐ Mfd. UDC
☐ Mfd. HUD

5. ELECTRICAL
Entrance Panel
Size: 150 amp
Service: ☒ New ☐ Rewire
1 Phase 120 Volts
☐ Underground
☒ Overhead
Power Company: WeEnergies

6. STORIES
☐ 1-Story
☒ 2-Story
☐ Other

7. FOUNDATION
☐ Concrete
☒ Masonry
☐ Treated Wood
☐ ICF
☐ Other

8. USE
☐ Seasonal
☒ Permanent
☐ Other

9. HVAC EQUIPMENT
☒ Forced Air Furnace
☐ Radiant Baseboard or Panel
☐ Heat Pump
☐ Boiler
☒ Central Air Conditioning
☐ Other

10. PLUMBING
Sewer
☒ Municipal
☐ Septic No.

11. WATER
☒ Municipal Utility
☐ Private On-Site Well

12. ENERGY SOURCE

Fuel	Nat. Gas	LP.	Oil	Elec. *	Solid	Solar
Space Htg	☒	☐	☐	☐	☐	☐
Water Htg	☒	☐	☐	☐	☐	☐

*☐ Dwelling unit will have 3 kilowatt or more installed electric space heater equipment capacity.

13. HEAT LOSS (Calculated)
Total ____ BTU//HR

14. ESTIMATED COST
$ 5000

I understand that I: am subject to all applicable codes, laws, statutes and ordinances, including those described on the Notice to Permit Applicants form; am subject to any conditions of this permit; understand that the issuance of this permit creates no legal liability, express or implied, on the state or municipality; and certify that all the above information is accurate. If one acre or more of soil will be disturbed, I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and the owner shall sign the statement on the Notice to Permit Applicants form. I expressly grant the building inspector, or the inspector's authorized agent, permission to enter the premises for which this permit is sought at all reasonable hours and for any proper purpose to inspect the work which is being done.

☒ I vouch that I am or will be an owner-occupant of this dwelling for which I am applying for an erosion control or construction permit without a Dwelling Contractor Certification and have read the cautionary statement regarding contractor responsibility on the Notice to Permit Applicants form.

ROBERT MUELLER 3/30/20
Robert Mueller
Signature

INSPECTIONS NEEDED Building ☐ Footing ☐ Foundation ☐ Rough ☐ Insulation ☐ Bsmt. Fl. ☐ Final
Electric ☐ Rough ☐ Service ☐ Final Plumbing ☐ Rough ☐ Underfloor ☐ Final HVAC ☐ Rough ☐ Final

FEES:

Building Fee	85
Zoning Fee	
WI Seal	
Electric Fee	60
Plumbing Fee	
HVAC Fee	
Adm. Fee	
Other SBC	60
Total	205

PERMIT(S) ISSUED
Bldg. # At top of form
Zoning # Section 9
Elec. #
Plmb. #
HVAC #

SEAL NO. ____ Municipality No. ___ - ___

RECEIPT
CK# 1994
Amount $ 205
Date 4/6/2020
From Robert
Rec By. DSH

PERMIT EXPIRATION:
Permit expires two years from date issued unless municipal ordinance is more restrictive.

PERMIT ISSUED BY MUNICIPAL AGENT:
Name
Date
Certification No.

White - Municipal Files | Yellow - Applicant | Pink - Clerk/Assessor

COPY

Scope of Work

Only items listed are part of this permit. If work is done on items not listed on this permit they will be considered to have been completed without a permit and are subject to double fees.

Item	Cost
Install horizontal roof over garage door and over front door	$4000
Install lights in bottom of horizontal structure	$1000

Total Cost $5000

Signature _____ Date 3/30/20

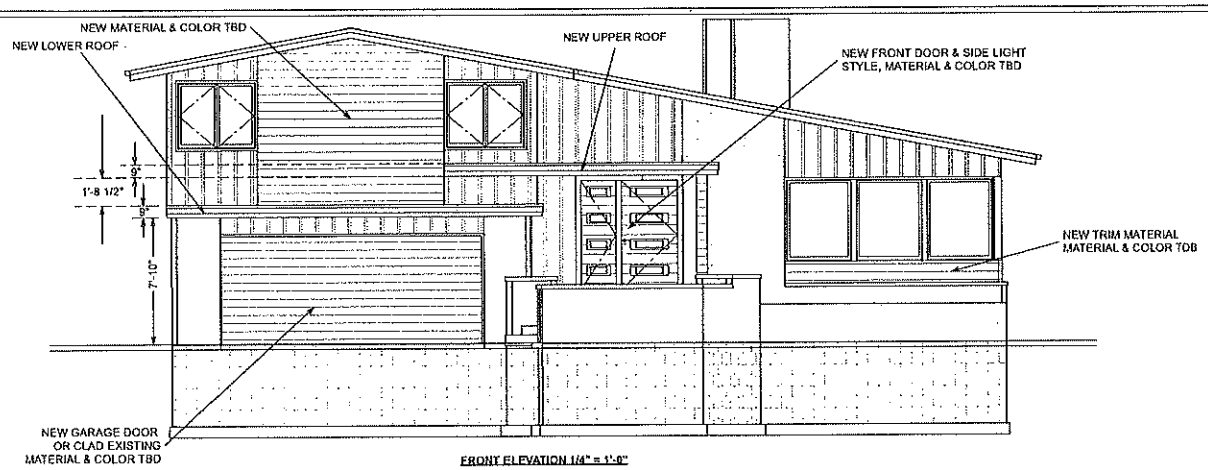
Requested Changes at time of work

Must be submitted to the Village prior to or same day work is completed. Failure to return the same day will result in double permit fees.

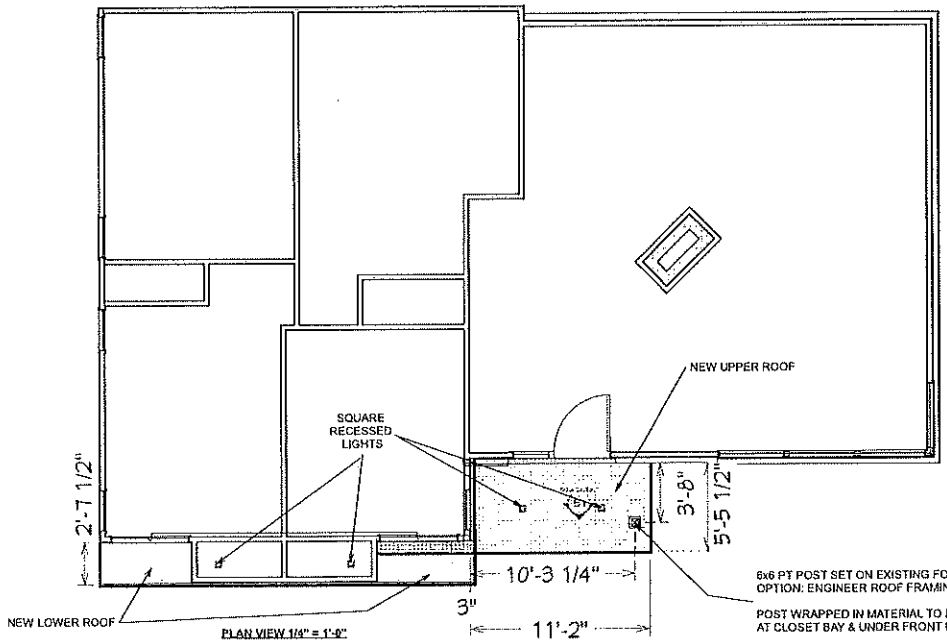
Item	Cost

Total Cost _____

Signature _____ Date _____



FRONT ELEVATION 1/4" = 1'-0"



PLAN VIEW 1/4" = 1'-0"

PRELIMINARY BID SET PLANS
FOR ESTIMATING ONLY.
NOT TO BE USED FOR CONSTRUCTION.
ALL DIMENSIONS ARE APPROXIMATE
AND MUST BE DETERMINED AND VERIFIED
BY INSTALLING CONTRACTOR.
FRAMING IS FOR REFERENCE ONLY, IT IS
RESPONSIBILITY OF INSTALLING CONTRACTOR
TO DETERMINE APPROPIATE FRAMING
SPECIFICATIONS AND INSTALLATION.

NOTE: DIMENSIONS FROM HOUSE
SHEATHING TO NEW ROOF FRAMING

NEW ROOF LEGEND

UPPER NEW ROOF

LOWER NEW ROOF

6x6 PT POST SET ON EXISTING FOOTED PLANTER (SEE FRAMING PLAN)
OPTION: ENGINEER ROOF FRAMING TO ELIMINATE POST

POST WRAPPED IN MATERIAL TO MATCH NEW SELECTION
AT CLOSET BAY & UNDER FRONT LIVING ROOM WINDOWS

CHRIS EGNER
DESIGN-BUILD-REMODEL

PROJECT DESCRIPTION:
FRONT ELEVATION REMODEL
NEW FLAT ROOFS OVER
GARAGE DOOR AND FRONT DOOR
EXTERIOR MATERIAL CHANGES & PAINT

OWNERS:
BOB & CJ MUELLER
8540 N. FIELDING RD.
BAYSIDE, WI. 53217

DRAWINGS PROVIDED BY:
CHRIS EGNER DESIGN-BUILD-REMODEL LLC
& FOUR SEASONS SUNROOMS
13116 W. NATIONAL AVE. NEW BERLIN, WI. 53151
262-797-5518

DATE:
4/27/2014

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

SHEET:
A-1

PRELIMINARY BID SET PLANS
FOR ESTIMATING ONLY.
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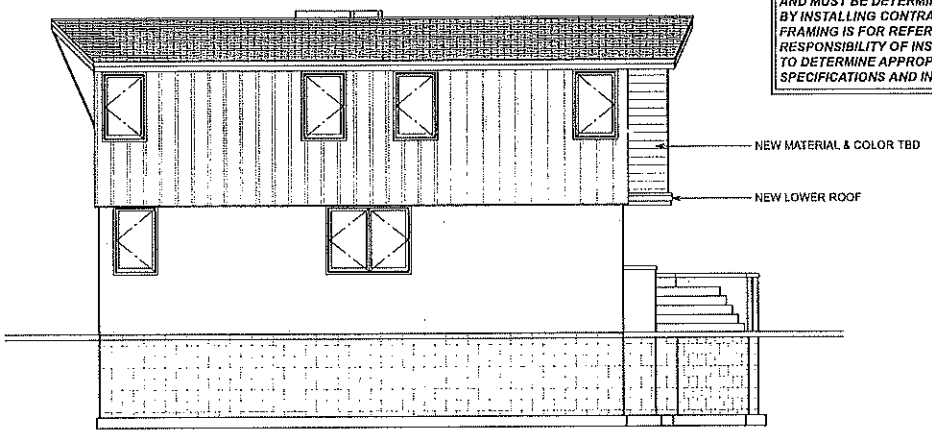
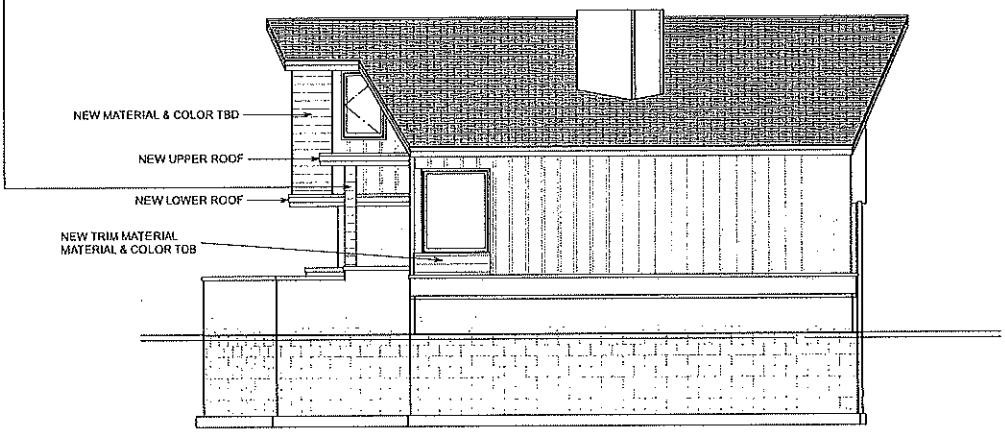


NORTH SIDE ELEVATION 1/4" = 1'-0"

POST SET ON EXISTING FOOTED PLANTER (SEE FRAMING PLAN)
OPTION: ENGINEER ROOF FRAMING TO ELIMINATE POST

POST WRAPPED IN MATERIAL TO MATCH NEW SELECTION
AT CLOSET BAY & UNDER FRONT LIVING ROOM WINDOWS



SOUTH SIDE ELEVATION 1/4" = 1'-0"

CHRIS EGNER
DESIGN-BUILD-REMODEL

PROJECT DESCRIPTION:
FRONT ELEVATION REMODEL
NEW FLAT ROOFS OVER
GARAGE DOOR AND FRONT DOOR
EXTERIOR MATERIAL CHANGES & PAINT

OWNERS:
BOB & CJ MUELLER
8530 N. FIELDING RD.
BAYSIDE, WI. 53217

DRAWINGS PROVIDED BY:
CHRIS EGNER DESIGN-BUILD-REMODEL LLC
& FOUR SEASONS SUNROOMS
3316 W. MATHEWS AVE. NEW BERLIN, WI. 53151

DATE:
4/27/2019

SCALE:

SHEET:
A-2

PRELIMINARY BID SET PLANS
FOR ESTIMATING ONLY.
NOT TO BE USED FOR CONSTRUCTION.
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AND MUST BE DETERMINED AND VERIFIED
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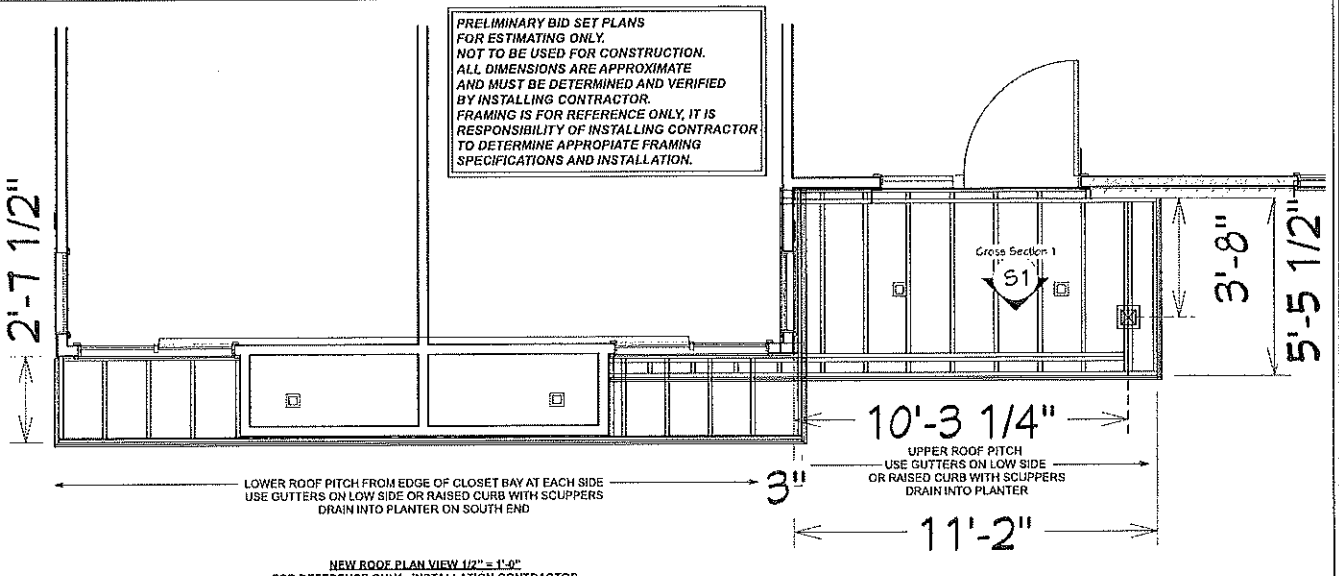
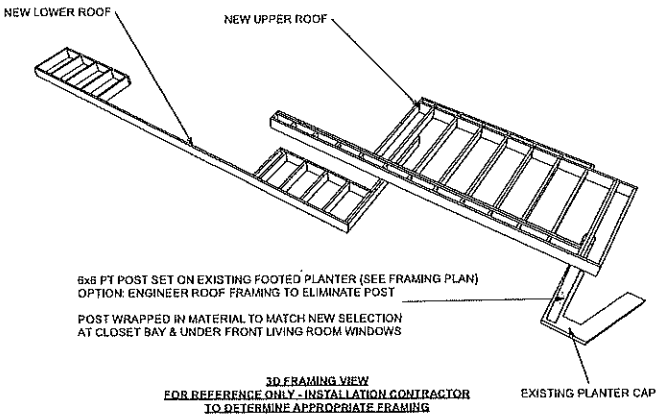
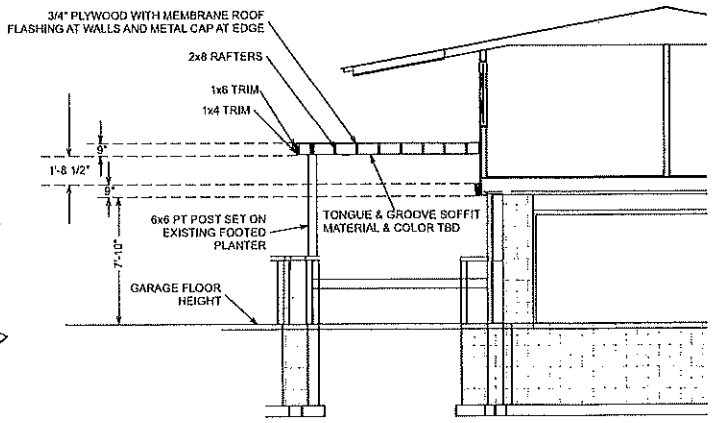
SPECIFICATIONS AND INSTALLATION.



NEW ROOF PLAN VIEW 1/2" = 1'-0"
FOR REFERENCE ONLY - INSTALLATION CONTRACTOR
TO DETERMINE APPROPRIATE FRAMING



3D FRAMING VIEW
FOR REFERENCE ONLY - INSTALLATION CONTRACTOR
TO DETERMINE APPROPRIATE FRAMING



NEW ROOF CROSS SECTION 1/4" = 1'-8"
FOR REFERENCE ONLY - INSTALLATION CONTRACTOR
TO DETERMINE APPROPRIATE FRAMING

CHRIS EGNER
DESIGN-BUILD-REMODEL

PROJECT DESCRIPTION:
FRONT ELEVATION REMODEL
NEW FLAT ROOFS OVER
GARAGE DOOR AND FRONT DOOR
EXTERIOR MATERIAL CHANGES & PAINT

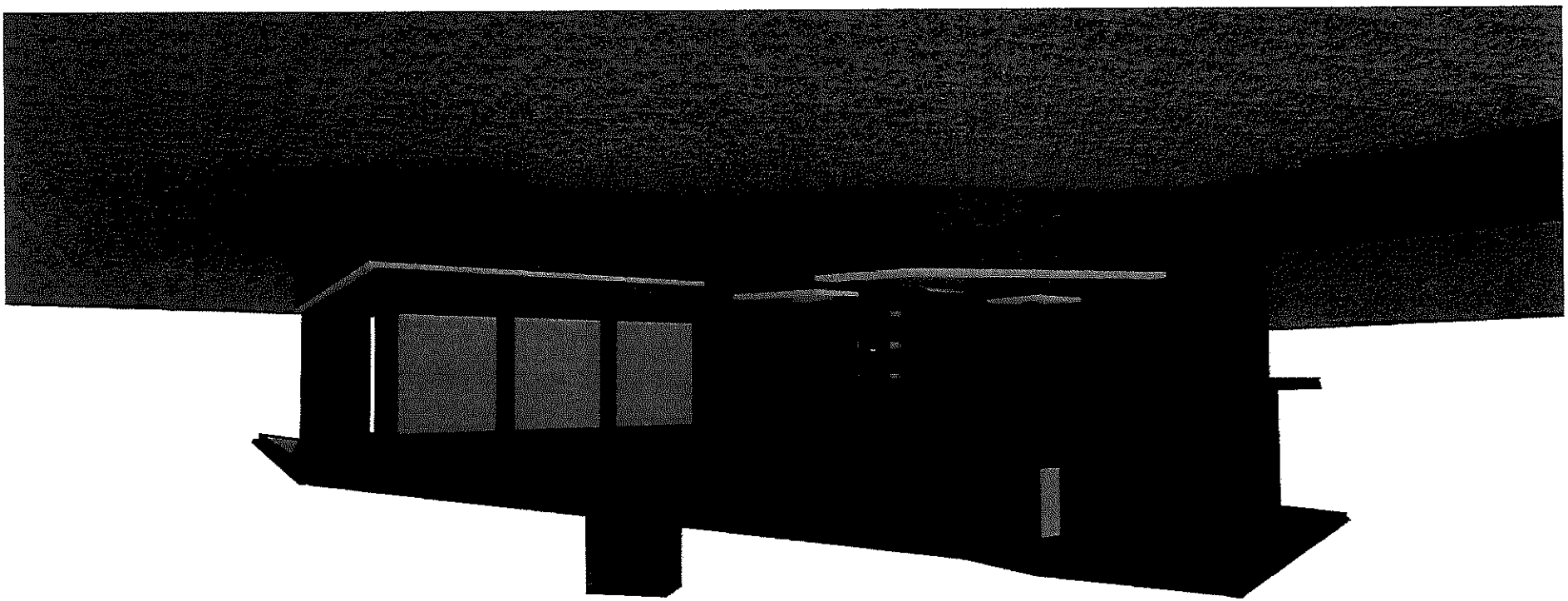
OWNERS:
BOB & CJ MUELLER
8530 N. FIELDING RD.
BAYSIDE, WI. 53217

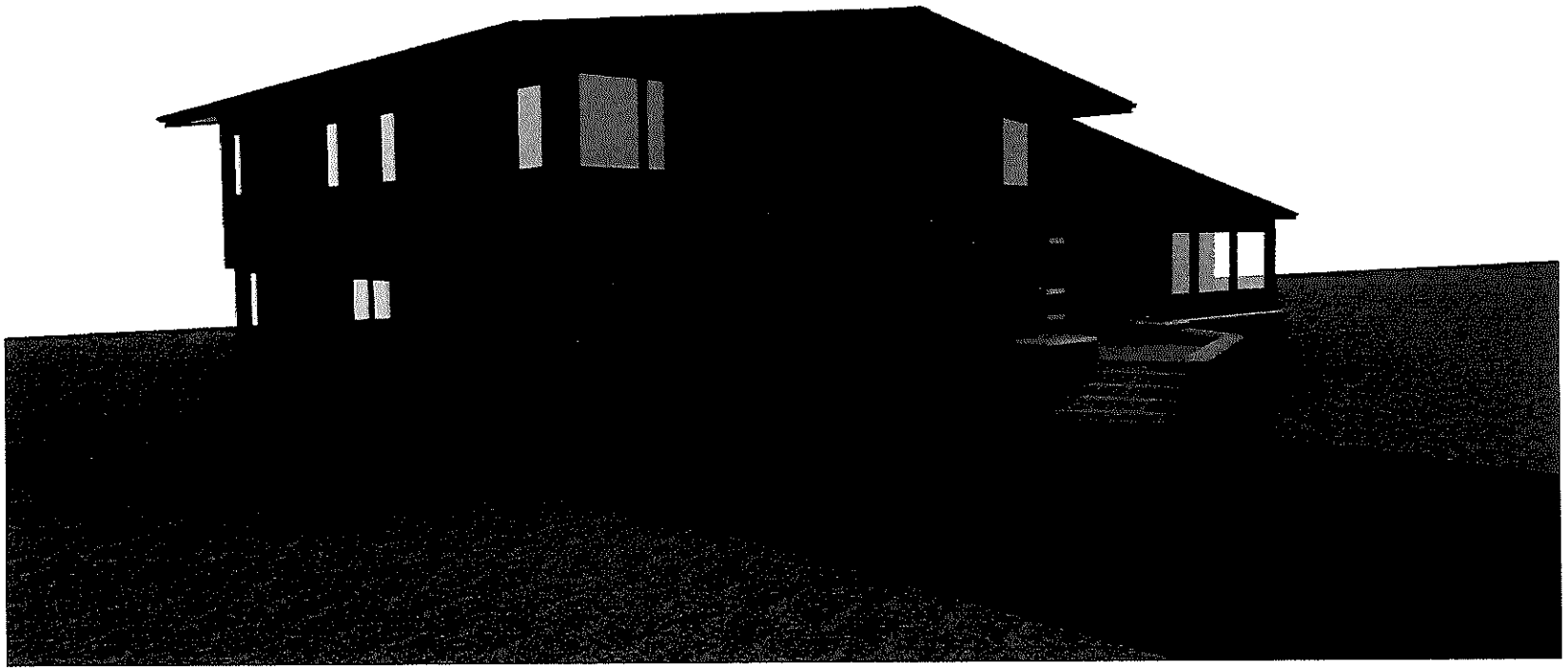
DRAWINGS PROVIDED BY:
CHRIS EGNER DESIGN-BUILD-REMODEL LLC
& FOUR SEASONS SUNROOMS
13298 W. NATIONAL AVE, NEW BERLIN, WI. 53151
262-797-4818

DATE:
4/21/2019

SCALE:

SHEET:
A-3





Support document for Mueller 8530 N Fielding Rd Horizontal Band Roof Permit

Current view of 8530 N Fielding Rd

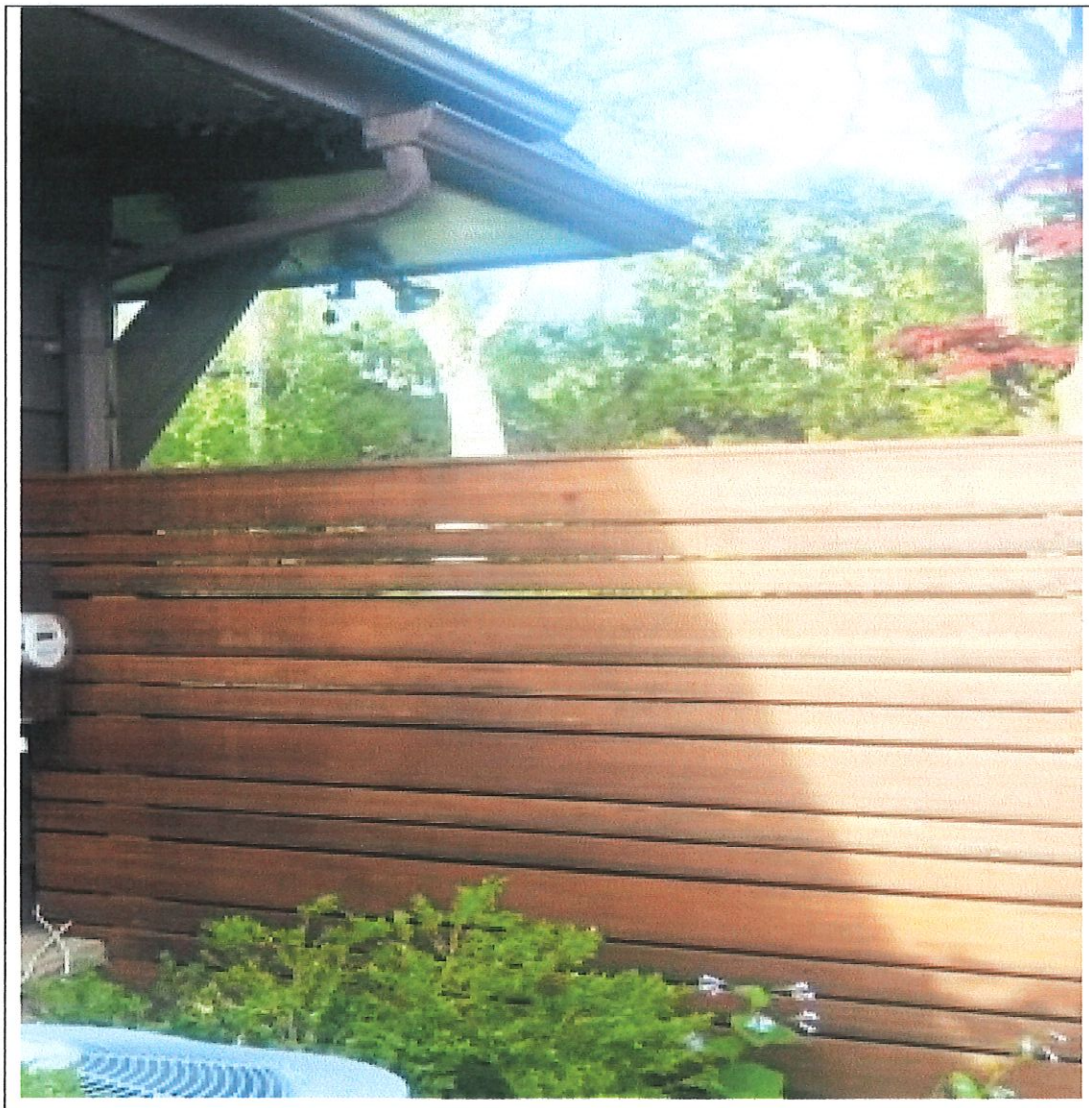
Support document for Mueller 8530 N Fielding Rd Horizontal Band Roof Permit

Second current view of 8530 N Fielding Rd

Support document for Mueller 8530 N Fielding Rd Horizontal Band Roof Permit

Rendering of 8530 N Fielding with horizontal band roof in place

Support document for Mueller 8530 N Fielding Rd Horizontal Band Roof Permit



Bamboo decking to be used for horizontal banding on roof

Support document for Mueller 8530 N Fielding Rd Horizontal Band Roof Permit

defects found in other natural-based materials.
In-House Processing: Lamboo® utilizes commercial grade processing equipment which provides the highest level of fabrication and finishing capacities to meet and exceed our customer's expectations.
Fire Rating: Class A fire-rated products for exterior applications

VERTICAL HAZEL*
PRE-FINISHED

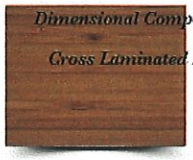
VERTICAL GOLDEN HONEY*
PRE-FINISHED

Top of Page ○
Dimensional Components ○
Cross Laminated Panels ●

LAMBOO® ELEMENTS™ - UNFINISHED MATERIAL

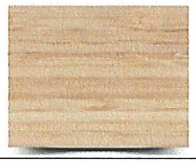
If you are interested in purchasing unfinished Lamboo® Elements™ products, please note that all materials must be finished on-site or prior to installation. All Lamboo® products that are installed without finish will void any warranty provided by Lamboo®. If you are in need of a finish recommendation, please contact Lamboo® today.

VERTICAL DEEP AMBER
PRE-FINISHED



VERTICAL FAWN
PRE-FINISHED

VERTICAL OXFORD BROWN
PRE-FINISHED



Lamboo® Elements™ Nominal 1x6 #VSPC-106-EXT

Exterior Grade Product

Top of Page ○
Dimensional Components ●
Cross Laminated Panels ○

Thickness	Width	Length(s)	Profile
3/4"	5-1/2"	8', 12' or 16'	Square Edges (Standard) or Eased 4 Edges (E4E)

Request A Quote

Tech sheet for Bamboo material to be used for Horizontal Band

Stansen
Building and Remodeling, LLC

David "Stan" Stanislawski
Corey Stanislawski
General Contractors

May 9, 2019

Estimate

Bob & CJ Mueller
8530 N Fielding Rd
Bayside, WI 53217
Email:
Phone: 262-352-2379

Front Overhang:

1) Remove necessary siding and dispose of
2) Supply and install the necessary rough lumber per plan
3) Install rubber roofing and all the necessary flashing
4) Supply and install all the necessary electrical per plan
5) Install owner supplied siding in all the area that were discussed
6) Caulk all necessary areas and clean up during the process and upon completion

Total = $5,000.000

Please let me know what you think or if you have any questions

David Stanislawski

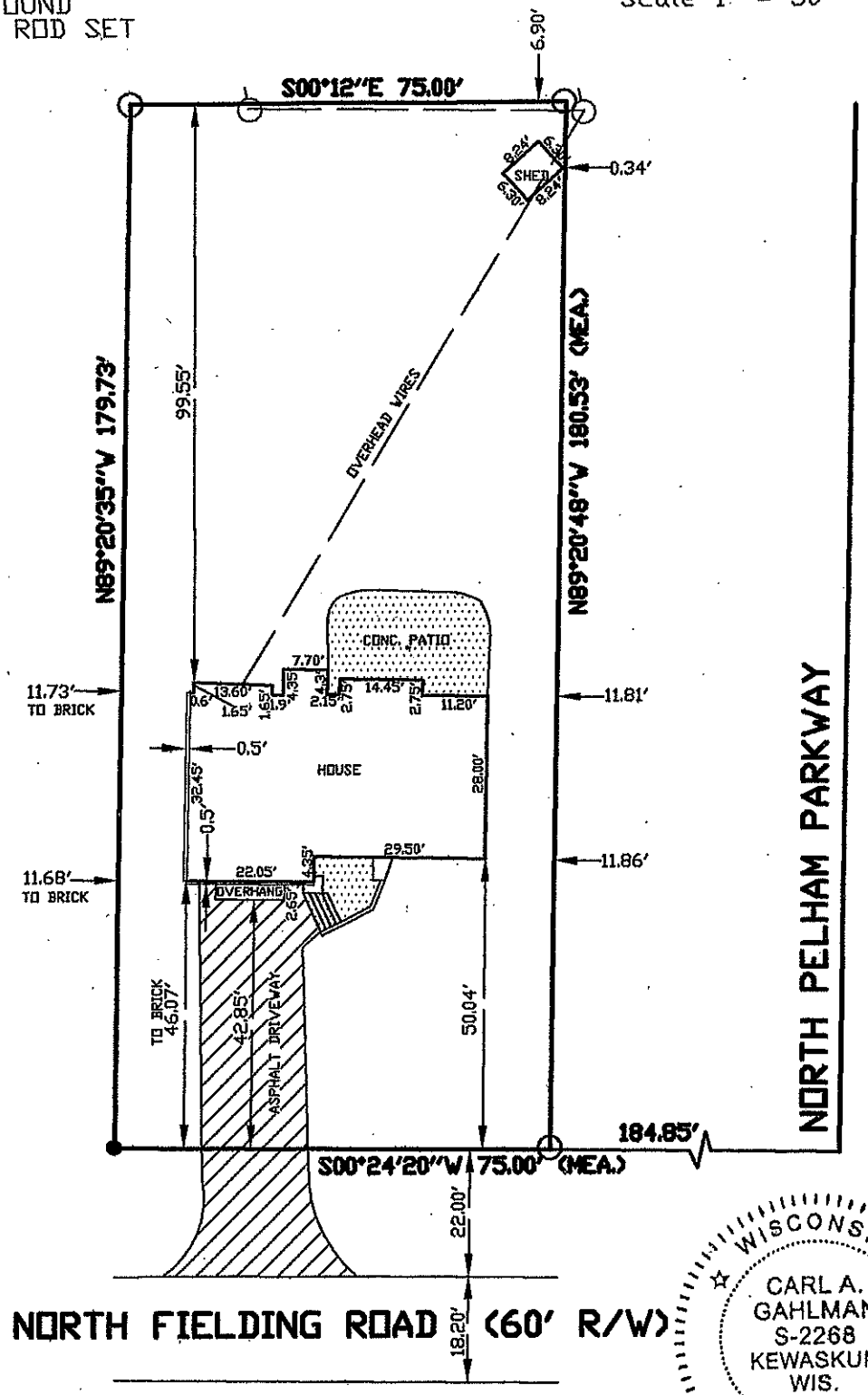
**total may vary depending on the length of labor

16800 W Greenfield Ave. #300 * P.O. Box 1265 * Brookfield, WI 53005
Cell: 262-424-4354 Phone: 262-789-7508 Fax: 262-789-8063

LEGEND

○ 1" LOT PIPES FOUND
● 3/4" X 18" IRON ROD SET
⏱ POWER POLES

Scale 1" = 30'



WISCONSIN
CARL A. GAHLMAN S-2268 KEWASKUM WIS.
LAND SURVEYOR

Carl A. Gahlman

CARL A. GAHLMAN, P.L.S.

ROBERT & CAROL MUELLER
8530 NORTH FIELDING ROAD
BAYSIDE, WISCONSIN 53217-2465

THIS IS AN ORIGINAL PRINT ONLY IF SEAL IS IMPRINTED IN RED.
I have surveyed the above property, and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all structures thereon, fences, apparent easements, roadways, and visible encroachments.

This survey is made for the exclusive use of the present owner of the property; also those who purchase, mortgage, or guarantee the title thereto, within one year from the date hereof.

THIS INSTRUMENT WAS DRAFTED ON 07/19/2016 BY CARL A. GAHLMAN, P.L.S.
569 WASHINGTON COURT, KEWASKUM, WISCONSIN, 53040 (262) 894-3443 (CELL)

Project Proposal

Date 3 | 2 | 2020

Property Address 9070 N BAYSIDE Drive

Zoning

- [x] Accessory Structures/Generators
- [ ] Additions/Remodel
- [ ] Bluff Management
- [ ] Commercial Signage
- [ ] Decks/Patios
- [ ] Fence
- [ ] Fire Pits
- [ ] Landscaping requiring Impervious Surface/Fill/Excavation Permit
- [ ] New Construction
- [ ] Play Structures
- [ ] Recreational Facilities/Courts
- [ ] Roofs
- [ ] Solar Panels/Skylights
- [ ] Swimming Pools
- [ ] Windows/Doors
- [ ] Other

Proposed project details (type of work, size, materials, etc.):

Garden Shed, concrete pad, wood construction combination board + batten + cedar shingle siding to match home

********** *For Office Use Only* **********

Yes	No	
☐	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☐	☐	Survey
☐	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	ARC Agenda Date:
☐	☐	Building Permit
☐	☐	Fill Permit
☐	☐	Impervious Surface Permit
☐	☐	Plan Commission/Conditional Use Permit
☐	☐	Right-of-Way/Excavation Permit
☐	☐	Variance Required

SAFEbuilt Wisconsin, LLC
2108A Silvernail Road #317
Pewaukee, WI 53072

4/16/2020

Attention:
Village of Bayside, WI
Architecture Review Committee

PROJECT/SITE OWNER: Tim Wayman PROJECT ADDRESS: 9070 N Bayside Drive	PROJECT SUMMARY: Backyard garden shed with concrete pad. 2x4 construction, 10'4" x 14'6" with 12'10" height at the peak.

VILLAGE CODE REVIEW
Reviewer believes this project complies with the following Village Code sections:

104-2(a)(2) Architectural Review Committee: *Construction and renovation should be made so that exterior architectural appearance shall be substantially consistent with structures already constructed in the immediate neighborhood, or with the character of the applicable district.*

ACCESORY STRUCTURE SETBACK REQUIREMENTS:
Exact dimensions are not provided for the location of the new shed. Village code section 125-91 - "C" residence district regulations requires that accessory structures be located a minimum of 10ft from both rear yard and side yard property lines. Owner is to verify 10' setbacks.
NEW ACCESSORY STRUCTURE COMPLIES

Dan Povolo, PE
Plans Examiner
608-208-2516
dpovolo@safebuilt.com

1-262-346-4577
SAFEbuilt, Inc.

WI UNIFORM PERMIT APPLICATION

hartfordinspections@safebuilt.com
Inspections need to be called in by 4 pm for next business day inspections

PERMIT NO.

TAX KEY#

ISSUING MUNICIPALITY

☐ TOWN ☒ VILLAGE ☐ CITY
OF BAYSIDE
COUNTY: MILWAUKEE

PROJECT LOCATION (Building Address): 9070 N BAYSIDE DRIVE

PROJECT DESCRIPTION

☐ COMMERCIAL ☐ ONE & TWO FAMILY

	Mailing Address - Include City & Zip	Telephone - Include Area Code
Owner's Name: Tim WAYMAN	9070 N BAYSIDE DR BAYSIDE 53217	414-491-4856
Construction Contractor (DC Lic No.): SELF		
Dwelling Contractor Qualifier (DCQ Lic No.): SELF	Dwelling Contractor Qualifier shall be an owner, CEO, COB, or employee of Dwelling Contractor	
Plumbing Contractor (Lic No.): N/A		
Electrical Contractor (Lic No.): N/A		
HVAC Contractor (Lic No.): N/A		

PROJECT INFORMATION

Subdivision Name: BAYSIDE
Lot No.: 9
Block No.: 9

Zoning District	Lot Area	N.S.E.W. Setbacks	Front	Rear	Left	Right
C	18,400 Sq. Ft.		43 Ft.	104 Ft.	15-20 Ft.	18 Ft.

1a. PROJECT
☒ New ☐ Addition ☐ Raze
☐ Alteration ☐ Repair ☐ Move
☐ Other SHED

1b. GARAGE / SHED
☐ Attached ☒ Detached

2. AREA
Basement ____ Sq. Ft.
Living Area ____ Sq. Ft.
Garage ____ Sq. Ft.
Other 150 Sq. Ft.
TOTAL ____

3. TYPE
☐ Single Family
☐ Two Family
☐ Multi
☐ Commercial

4. CONST. TYPE
☒ Site Constructed
☐ Mfd. UDC
☐ Mfd. HUD

5. ELECTRICAL
Entrance Panel
Size: ____ amp
Service: ____ New ____ Rewire
____ Phase ____ Volts
____ Underground
____ Overhead
Power Company: ____

6. STORIES
☒ 1-Story
☐ 2-Story
☐ Other ____

7. FOUNDATION
☒ Concrete
☐ Masonry
☐ Treated Wood
☐ ICF
☐ Other ____

8. USE
☐ Seasonal
☐ Permanent
☐ Other ____

9. HVAC EQUIPMENT
☐ Forced Air Furnace
☐ Radiant Baseboard or Panel
☐ Heat Pump
☐ Boiler
☐ Central Air Conditioning
☐ Other ____

10. PLUMBING
Sewer
☐ Municipal
☐ Septic No. ____

11. WATER
☐ Municipal Utility
☐ Private On-Site Well

12. ENERGY SOURCE

Fuel	Nat. Gas	LP.	Oil	Elec. *	Solid	Solar
Space Htg	☐	☐	☐	☐	☐	☐
Water Htg	☐	☐	☐	☐	☐	☐

*☐ Dwelling unit will have 3 kilowatt or more installed electric space heater equipment capacity.

13. HEAT LOSS (Calculated)
Total ____ BTU/HR

14. ESTIMATED COST
$ 2500.00 / 3,000.00

I understand that I: am subject to all applicable codes, laws, statutes and ordinances, including those described on the Notice to Permit Applicants form; am subject to any conditions of this permit; understand that the issuance of this permit creates no legal liability, express or implied, on the state or municipality; and certify that all the above information is accurate. If one acre or more of soil will be disturbed, I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and the owner shall sign the statement on the Notice to Permit Applicants form. I expressly grant the building inspector, or the inspector's authorized agent, permission to enter the premises for which this permit is sought at all reasonable hours and for any proper purpose to inspect the work which is being done.

☐ I vouch that I am or will be an owner-occupant of this dwelling for which I am applying for an erosion control or construction permit without a Dwelling Contractor Certification and have read the cautionary statement regarding contractor responsibility on the Notice to Permit Applicants form.

APPLICANT (PRINT): Tim WAYMAN Tim Wayman 3/2/2020
SAFEbuilt, Inc.

INSPECTIONS NEEDED Building ☐ Footing ☐ Foundation ☐ Rough ☐ Insulation ☐ Bsmt. Fl. ☐ Final
Electric ☐ Rough ☐ Service ☐ Final Plumbing ☐ Rough ☐ Underfloor ☐ Final HVAC ☐ Rough ☐ Final

FEES:		PERMIT(S) ISSUED	SEAL NO.	Municipality No.
Building Fee	125	Bldg. # At top of form		
Zoning Fee		Zoning #		
WI Seal		Elec. #		
Electric Fee		Plmb. #		
Plumbing Fee		HVAC #		
HVAC Fee				
Adm. Fee				
Other				
Total	125			

RECEIPT	PERMIT EXPIRATION:	PERMIT ISSUED BY MUNICIPAL AGENT:
CK#	Permit expires two years from date issued unless municipal ordinance is more restrictive.	Name
Amount $		Date
Date 3/3/2020		Certification No.
From		
Rec By. LH		

White - Municipal Files Yellow - Applicant Pink - Clerk/Assessor

Scope of Work

Only items listed are part of this permit. If work is done on items not listed on this permit they will be considered to have been completed without a permit and are subject to double fees.

Item	Cost
Concrete	$400.00
Rough + Finish Materials	$1300.00
Windows/Doors	$800.00

Total Cost $2500.00

Signature Tim Wajuray Date 3/2/2020

Requested Changes at time of work

Must be submitted to the Village prior to or same day work is completed. Failure to return the same day will result in double permit fees.

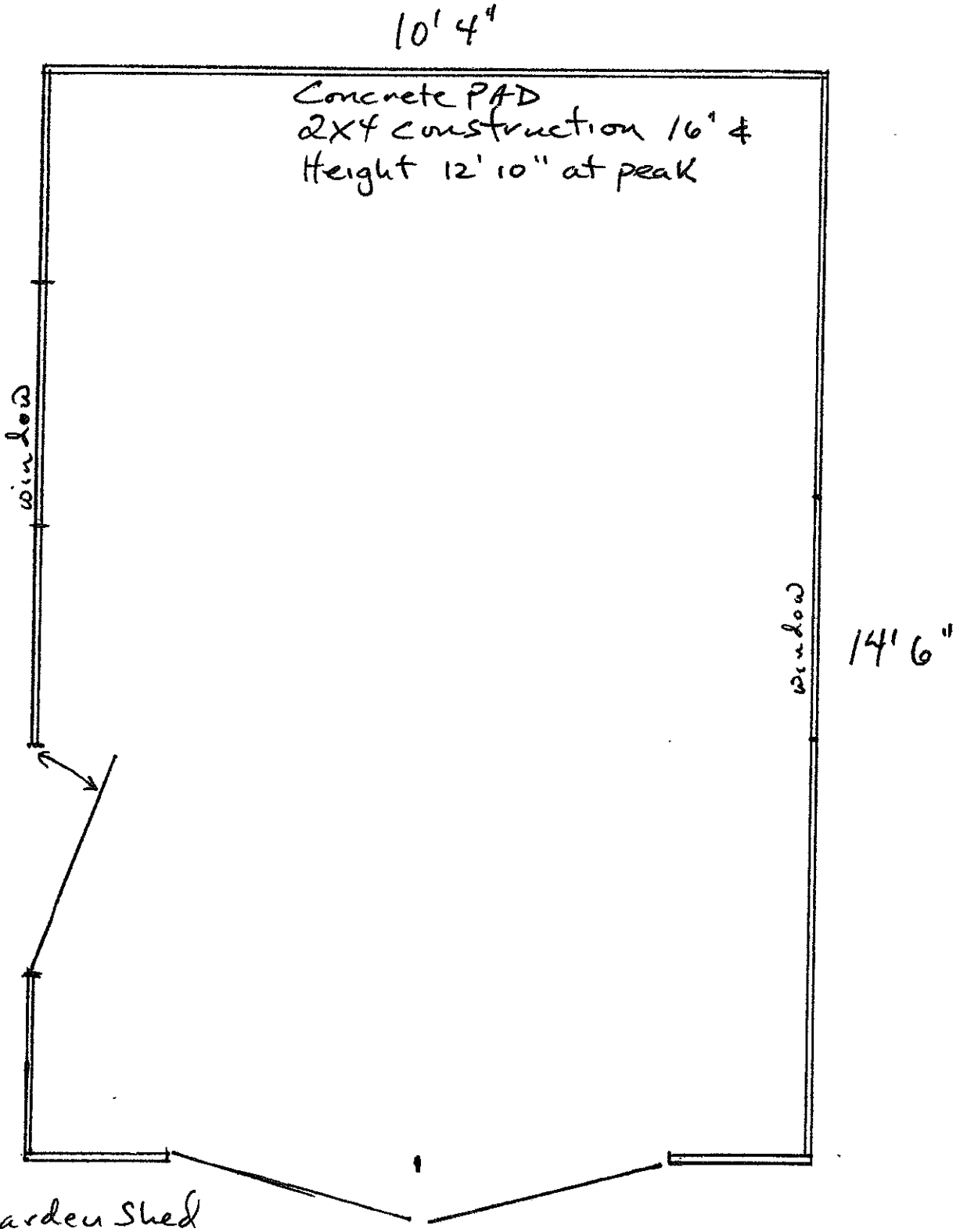
Item	Cost

Total Cost _____

Signature _____ Date _____

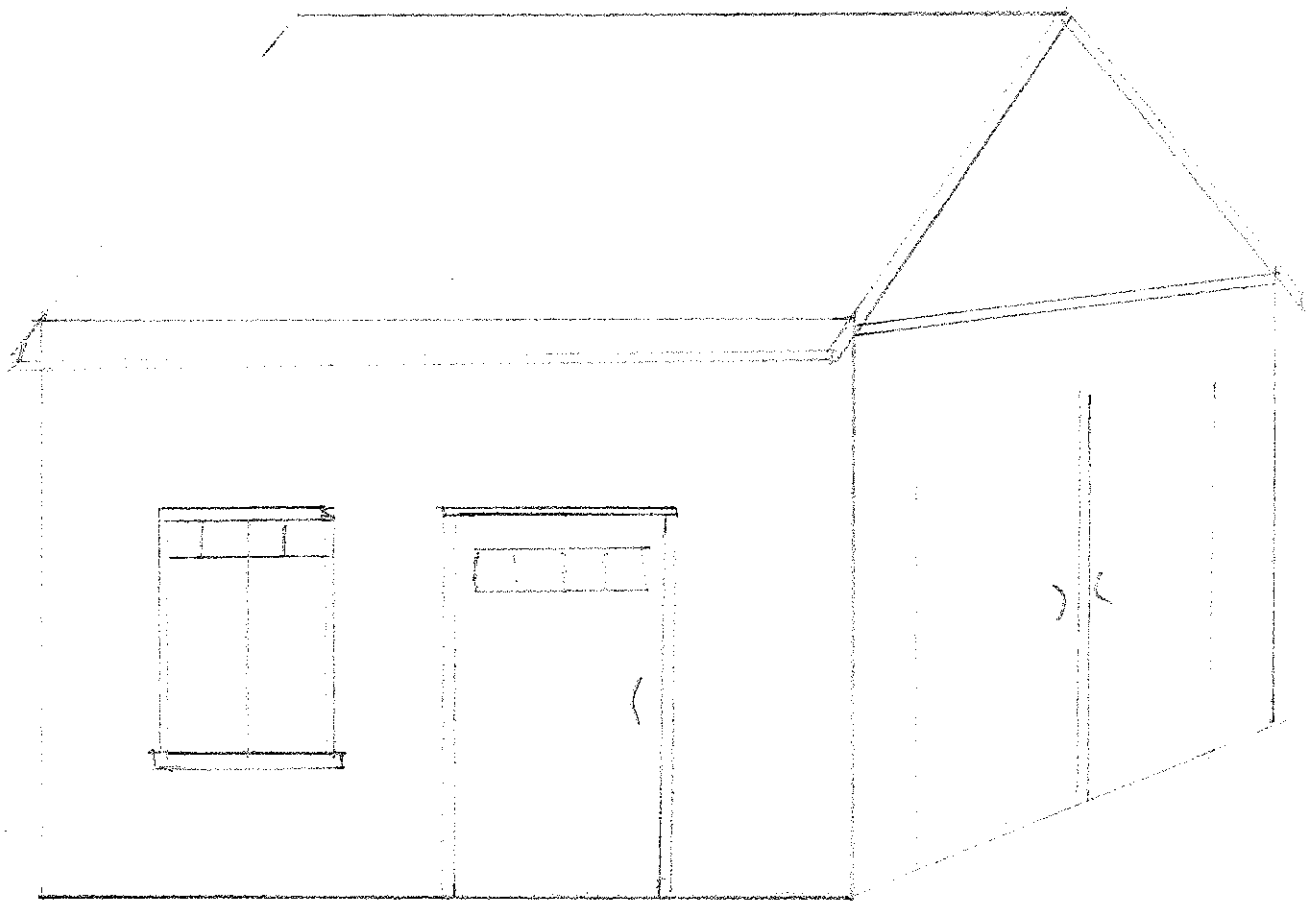
3/2020

East



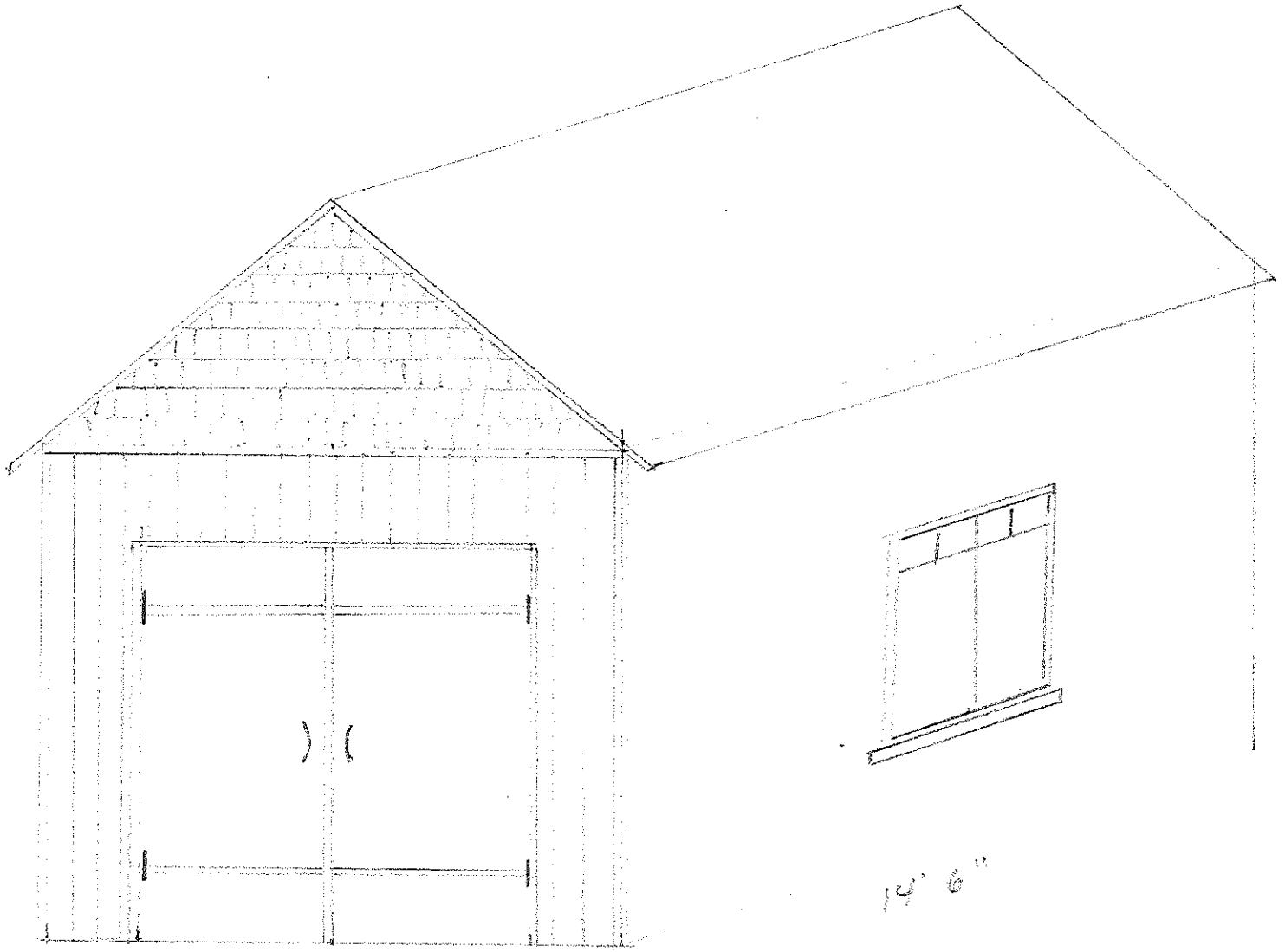
Garden Shed
Rear yard 9070 N BAYSIDE DRIVE

Estimated cost $2500.00



Shed Rear yard
9070 N BAYSIDE DRIVE

North - west



sides, Back + Gable
Cedar shingles to
match home
Front - Vertical
board + batten

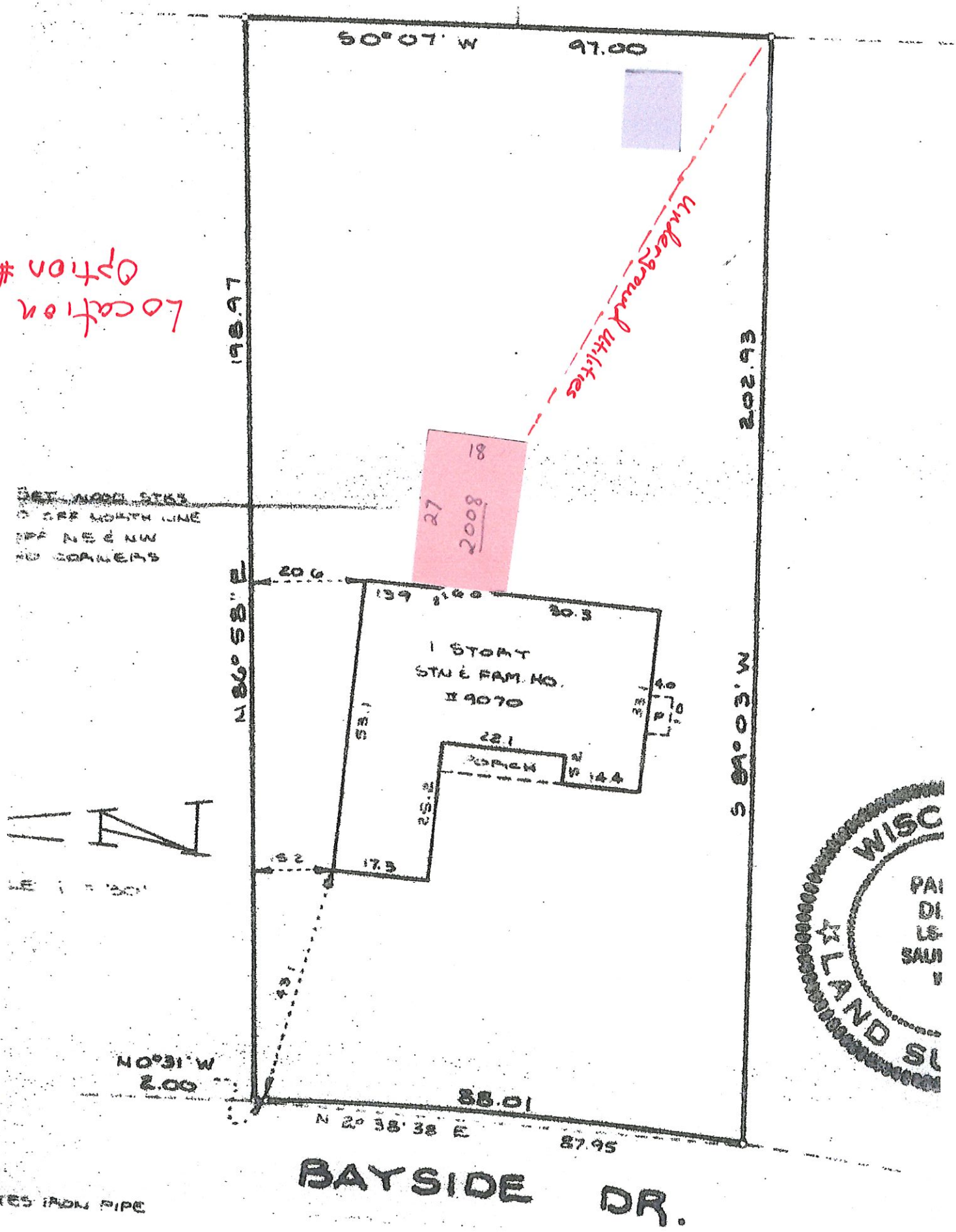
10' 4"

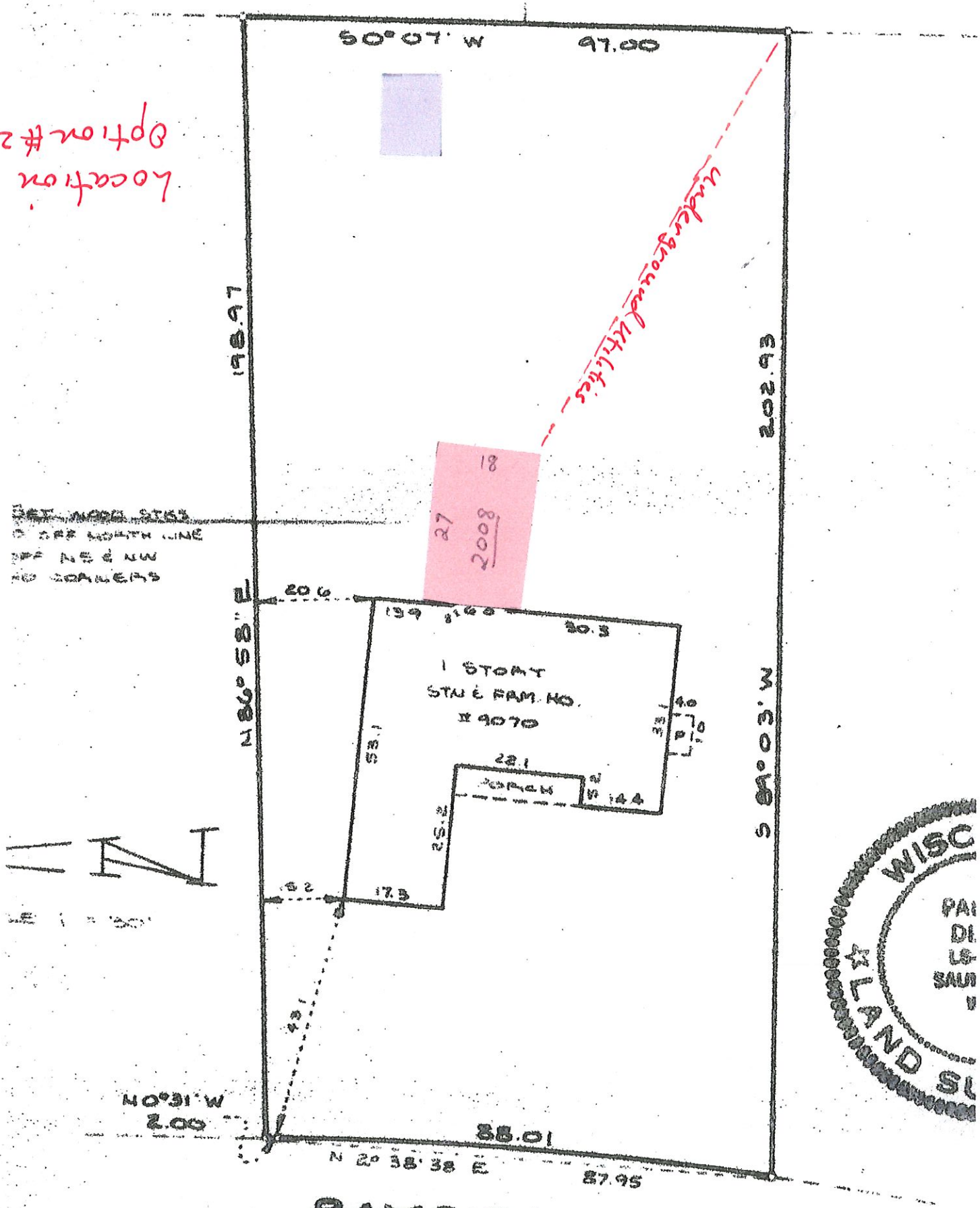
14' 6"

Shed Rear yard
9070 N BAYSIDE Drive

West + South

3/2020


Location Option #1
S0°07' W
97.00
198.97
N 86° 58' E
20.6
139
140
30.3
1 STORY
STN & FAM. NO.
II 9070
53.1
33.1
4.0
10.0
22.1
PORCH
5.2
14.4
25.2
5.2
17.5
N
N 0°31' W
2.00
88.01
N 2° 38' 38 E
87.95
S 86° 03' W
202.93
BAYSIDE DR.
underground utilities
18
27
2008
WISC
LAND SU


location option #2
Muskellunge Lithiates
S 50° 07' W
97.00
198.97
202.93
S 86° 58' E
N 86° 58' E
20.6
139
140
30.3
1 STORY
STN & FAM. NO.
II 9070
53.1
33.1
4.0
10.0
22.1
PORCH
5.2
14.4
25.2
6.2
17.3
43.1
N 0° 31' W
2.00
88.01
N 2° 38' 38" E
87.95
BAYSIDE DR.
2008
27
18
WISC
LAND SU


Cedar Shingles
Sides, Back +
Gables
9070


Similar Board + Batten
Front Face

Project Proposal

Date 4/8/2020

Property Address 1150 E Standish Pl

Zoning 1-Residential

- ☐ Accessory Structures/Generators
- ☐ Additions/Remodel
- ☐ Bluff Management
- ☐ Commercial Signage
- ☒ Decks/Patios
- ☐ Fence
- ☐ Fire Pits
- ☐ Landscaping requiring Impervious Surface/Fill/Excavation Permit
- ☐ New Construction
- ☐ Play Structures
- ☐ Recreational Facilities/Courts
- ☐ Roofs
- ☐ Solar Panels/Skylights
- ☐ Swimming Pools
- ☐ Windows/Doors-change exceeds 25% of opening
- ☐ Other

Proposed project details (type of work, size, materials, etc.):

Deck replacement. Footprint will remain the same. Existing surface removed. Structure will be properly framed. Composite decking (Trex) to be installed.

********** ***For Office Use Only*** **********

Yes	No	
☐	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☐	☐	Survey
☐	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	Parcel Number
☐	☐	ARC Agenda Date:
☐	☐	Building Permit
☐	☐	Fill Permit
☐	☐	Impervious Surface Permit
☐	☐	Plan Commission/Conditional Use Permit
☐	☐	Tax Key Number
☐	☐	Right-of-Way/Excavation Permit
☐	☐	Variance Required

SAFEbuilt Wisconsin, LLC
2108A Silvernail Road #317
Pewaukee, WI 53072

4/9/2020

Attention:
Village of Bayside, WI
Architecture Review Committee

PROJECT/SITE OWNER: Max & Anneliese Dickman PROJECT ADDRESS: 1150 E Standish Place	PROJECT SUMMARY: Replace deck within the existing footprint. New composite deck (450 SF).

VILLAGE CODE REVIEW
Reviewer believes this project complies with the following Village Code sections:

104-2(a)(2) Architectural Review Committee: *Construction and renovation should be made so that exterior architectural appearance shall be substantially consistent with structures already constructed in the immediate neighborhood, or with the character of the applicable district.*

Homeowner should be aware of additional UDC requirements. Provide additional information to the building inspector as noted below:
Deck guards/railing is to be provided on all open sides of the deck that is more than 24" above grade. Guards and posts are to meet the opening, attachment and other requirements provided in SPS 320 to 325 Appendix B Section 13.

Dan Povolo, PE
Plans Examiner
608-208-2516
dpovolo@safebuilt.com

1-262-346-4577
SAFEbuilt, Inc.

WI UNIFORM PERMIT APPLICATION

hartfordinspections@safebuilt.com
Inspections need to be called in by 4 pm for next business day inspections

PERMIT NO.

TAXKEY# Parcel #: 0200105

ISSUING MUNICIPALITY

☐ TOWN ☒ VILLAGE ☐ CITY
OF Bayside
COUNTY: Milwaukee

PROJECT LOCATION (Building Address): 1150 E Standish Pl. Bayside, WI 53217

PROJECT DESCRIPTION: Deck construction

☐ COMMERCIAL ☒ ONE & TWO FAMILY

Owner's Name: Max and Anneliese Dickman
Mailing Address - Include City & Zip: 1150 E Standish Pl. Bayside, WI 53217
Telephone - Include Area Code: 414-247-1134

Construction Contractor (DC Lic No.): Bogwardt Construction LLC #DC# 4741
Mailing Address - Include City & Zip: N1329 Silvercreek Cascade Rd Alell, WI 53001
Telephone - Include Area Code: 920-994-4954

Dwelling Contractor Qualifier (DCQ Lic No.): Jan Bogwardt DCQ# 4743
Dwelling Contractor Qualifier shall be an owner, CEO, COB, or employee of Dwelling Contractor
Telephone - Include Area Code: 920-944-4954

Plumbing Contractor (Lic No.): N/A
Mailing Address - Include City & Zip:
Telephone - Include Area Code:

Electrical Contractor (Lic No.): N/A
Mailing Address - Include City & Zip:
Telephone - Include Area Code:

HVAC Contractor (Lic No.): N/A
Mailing Address - Include City & Zip:
Telephone - Include Area Code:

PROJECT INFORMATION

Subdivision Name: Breeze Terrace
Lot No.: 4
Block No.: 3

Zoning District: 1-Residential
Lot Area: 23,043 Sq. Ft.
N.S.E.W. Setbacks: Front existing Ft. Rear existing Ft. Left existing Ft. Right existing Ft.

1a. PROJECT
☐ New ☐ Addition ☐ Raze
☐ Alteration ☐ Repair ☐ Move
☒ Other deck replacement

1b. GARAGE
☒ Attached ☐ Detached

2. AREA
Basement 300 Sq. Ft.
Living Area 2000 Sq. Ft.
Garage 450 Sq. Ft.
Other N/A Sq. Ft.
TOTAL 23043

3. TYPE
☒ Single Family
☐ Two Family
☐ Multi
☐ Commercial

4. CONST. TYPE
☒ Site Constructed
☐ Mfd. UDC
☐ Mfd. HUD

5. ELECTRICAL
Entrance Panel
Size: ___ amp
Service: ___ New ___ Rewire
___ Phase ___ Volts
___ Underground
___ Overhead
Power Company: WE-Energy

6. STORIES
☐ 1-Story
☐ 2-Story
☒ Other 1.5 story

7. FOUNDATION
☒ Concrete
☐ Masonry
☐ Treated Wood
☐ ICF
☐ Other

8. USE
☐ Seasonal
☒ Permanent
☐ Other

9. HVAC EQUIPMENT
☐ Forced Air Furnace
☒ Radiant Baseboard or Panel
☐ Heat Pump
☒ Boiler
☒ Central Air Conditioning
☐ Other
N/A

10. PLUMBING
Sewer
☒ Municipal
☐ Septic No.

11. WATER
☒ Municipal Utility
☐ Private On-Site Well

12. ENERGY SOURCE

Fuel	Nat. Gas	L.P.	Oil	Elec.*	Solid	Solar
Space Htg	☒	☐	☐	☐	☐	☐
Water Htg	☒	☐	☐	☐	☐	☐

*☐ Dwelling unit will have 3 kilowatt or more installed electric space heater equipment capacity.

13. HEAT LOSS (Calculated)
Total ___ BTU//HR

14. ESTIMATED COST
$ 13,000

I understand that I: am subject to all applicable codes, laws, statutes and ordinances, including those described on the Notice to Permit Applicants form; am subject to any conditions of this permit; understand that the issuance of this permit creates no legal liability, express or implied, on the state or municipality; and certify that all the above information is accurate. If one acre or more of soil will be disturbed, I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and the owner shall sign the statement on the Notice to Permit Applicants form. I expressly grant the building inspector, or the inspector's authorized agent, permission to enter the premises for which this permit is sought at all reasonable hours and for any proper purpose to inspect the work which is being done.

☐ **I vouch that I am or will be an owner-occupant of this dwelling for which I am applying for an erosion control or construction permit without a Dwelling Contractor Certification and have read the cautionary statement regarding contractor responsibility on the Notice to Permit Applicants form.**

APPLICANT (PRINT): Max Dickman/Anneliese Dickman

SAFEbuilt, Inc.

INSPECTIONS NEEDED **Building** ☐ Footing ☐ Foundation ☐ Rough ☐ Insulation ☐ Bsmt. Fl. ☐ Final
Electric ☐ Rough ☐ Service ☐ Final **Plumbing** ☐ Rough ☐ Underfloor ☐ Final **HVAC** ☐ Rough ☐ Final

FEES:		PERMIT(S) ISSUED	RECEIPT	PERMIT EXPIRATION:	PERMIT ISSUED BY MUNICIPAL AGENT:
Building Fee		Bldg. # At top of form	CK#	Permit expires two years from date issued unless municipal ordinance is more restrictive.	Name
Zoning Fee		Zoning #	Amount $		Date
WI Seal		Elec. #	Date		Certification No.
Electric Fee		Plmb. #	From		
Plumbing Fee		HVAC #	Rec By.		
HVAC Fee					
Adm. Fee					
Other					
Total					

SEAL NO. ___ Municipality No. ___ - ___

White - Municipal Files Yellow - Applicant Pink - Clerk/Assessor

Scope of Work

Only items listed are part of this permit. If work is done on items not listed on this permit they will be considered to have been completed without a permit and are subject to double fees.

Item	Cost
Remove existing deck	entire project: $13,250
Dispose of all old materials	
Reconfigure underside support to account for existing damage and additional support for composite decking.	
Install composite decking	
Install railing on west edge.	

Total Cost $13,250

Signature [signature] Date 4-6-2020

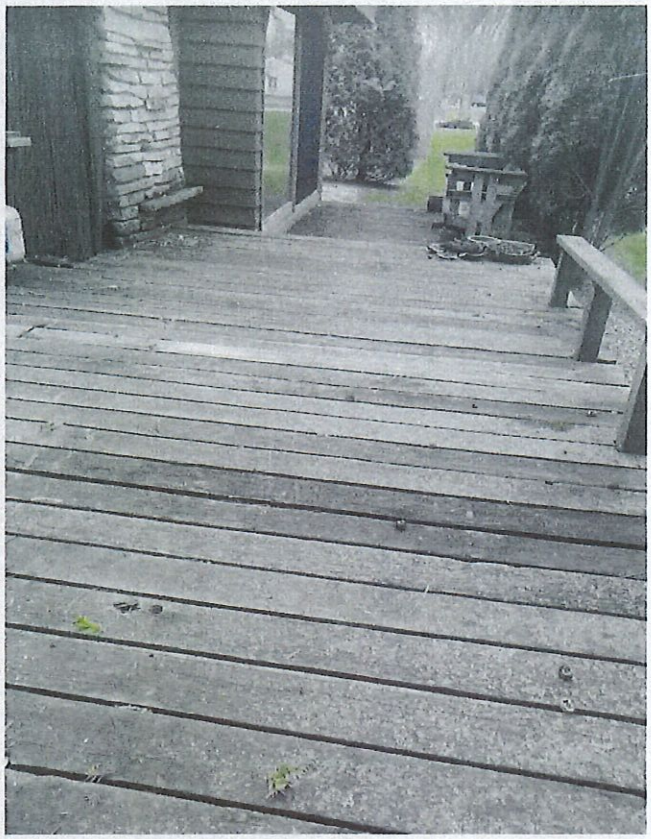
Requested Changes at time of work

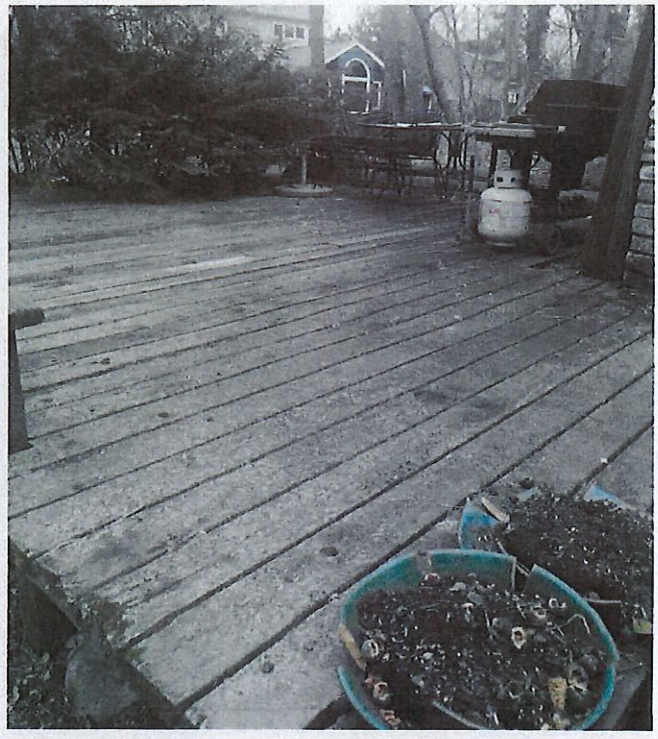
Must be submitted to the Village prior to or same day work is completed. Failure to return the same day will result in double permit fees.

Item	Cost

Total Cost _____

Signature _____ Date _____





ShopTrex®

HOME / DECKING / TREX SELECT / **PEBBLE GREY**

4.6 ★★★★★
Google
Customer Reviews

12 inch Composite Deck Board Sample

Add to compare list

SKU: PGS90000

Free shipping

Price: $5.00

QTY: 1

ADD TO CART

Overview Specifications

COLOR STORY

Pebble Grey is a light heather grey with an easy-to-maintain, wood-like grain pattern, making it the simple choice.

- The perfect pairing of price and minimal maintenance
- Made of affordable high-performance composite; won't rot, warp or splinter
- Protective outer shell for durability; resists fading and staining
- Quality low-maintenance material; cleans easily with soap and water
- Solid profile for traditional lumber-like appearance \
- Made of 95% recycled materials, with a low carbon footprint
- Backed by 25-year Limited Residential and Fade & Stain warranties
- Available in grooved-edge boards for our hidden deck fasteners or square-edge for traditional installation
- Made in USA

SPECIFICATIONS

1 INCH x 6 INCHES x 12 INCHES

Customers who bought this item also bought

Project Proposal

Date 2/29/2020

Property Address 8835 N. Tennyson D

Zoning

- ☐ Accessory Structures/Generators
- ☐ Additions/Remodel
- ☐ Bluff Management
- ☐ Commercial Signage
- ☐ Decks/Patios
- ☑ Fence
- ☐ Fire Pits
- ☐ Landscaping requiring Impervious Surface/Fill/Excavation Permit
- ☐ New Construction
- ☐ Play Structures
- ☐ Recreational Facilities/Courts
- ☐ Roofs
- ☐ Solar Panels/Skylights
- ☐ Swimming Pools
- ☐ Windows/Doors-change exceeds 25% of opening
- ☐ Other

Proposed project details (type of work, size, materials, etc.):

wood picket 6' privacy fence on south side on back yard - 100'
wood picket 3.5' open picket fence on west of north side backyard

********** *For Office Use Only* **********

Yes	No	
☐	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☐	☐	Survey
☐	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	Parcel Number
☐	☐	ARC Agenda Date:
☐	☐	Building Permit
☑	☐	Fill Permit
☐	☐	Impervious Surface Permit
☐	☐	Plan Commission/Conditional Use Permit
☐	☐	Tax Key Number
☐	☐	Right-of-Way/Excavation Permit
☐	☐	Variance Required

SAFEbuilt Wisconsin, LLC
2108A Silvernail Road #317
Pewaukee, WI 53072

4/19/2020

Attention:
Village of Bayside, WI
Architecture Review Committee

PROJECT/SITE OWNER: Donna Miller PROJECT ADDRESS: 8835 N Tennyson	PROJECT SUMMARY: 6 ft wood privacy fence south backyard (100 ft - replacing existing privacy fence). 3.5 ft wood picket fence west and north side of backyard.

VILLAGE CODE REVIEW

LENGTH

Per Village Code Sec. 104-125 (i) – Fence Type: *No solid fence may be constructed with a total horizontal linear length in excess of fifteen percent of the total linear feet of the perimeter of the property except as screening along an adjacent railroad, state highway, interstate highway, county highway, or commercial parking lot property.*

Property total perimeter length per recorded dimensions on Plat of Survey:
200.29'(north) + 121.06'(east) + 213.43'(south) + 120'(west) = 654.78' total

Proposed solid fence length = 98'
Allowable solid fence length = 98.21' (15% of 510.26')
PROPOSED LENGTH COMPLIES

TYPE

Picket fence is to have at least 25 percent open design
Per Village Code Sec. 104-125 (i) – Fence Type: *All other permitted fences (picket fence) shall be constructed with at least 25 percent open design.*
FENCE TYPE IS TO COMPLY

MATERIAL / FINISH

Per Village Code Sec. 104-125 (i) – Fence Type: *Wood fences shall be unfinished or stained or oiled and allowed to weather naturally to help them blend into the landscape.*

Proposed fence is not to be painted and have natural finish.
PROPOSED MATERIAL / FINISH COMPLIES

HEIGHT

Per Village Code Sec. 104-125 (k) – Fence Height: *Fences constructed behind the rear elevation of the home shall not exceed six feet in height except when adjacent to an active railroad property, state or county highway, or commercial parking lot property, in which case it shall not exceed eight feet. Fences constructed within the side yards of a home but behind the forward most point of the adjacent structures shall not exceed six feet in height.*

Proposed 6ft fence is in the back yard of house, behind the forward most point of the house.
PROPOSED HEIGHT COMPLIES

FOOTINGS
Per Village Code Sec. 104-125 (m) –Footings: *All new fences are required to have a minimum of four-foot footings. Fence replacement or repair projects of existing fences are not required to incorporate footings unless 50 percent or more of the fence is being replaced or repaired.*

FOOTING COMPLIES

Dan Povolo, PE
Plans Examiner
608-208-2516
dpovolo@safebuilt.com

Fence Project

Donna Miller
8835 N Tennyson Drive

Proposal Clarifications

1. Length
    a. Proposed length is 98 feet. Along the south side of backyard
2. Type
    a. Pressure-treated wood with cedar-toned finish
    b. Design

3. Footings
    a. Four-foot footings will be used

Southwest view from back door

↓ 1136 E Brown Deer.

FENCE →

1136 E Brown Deer
Vernon

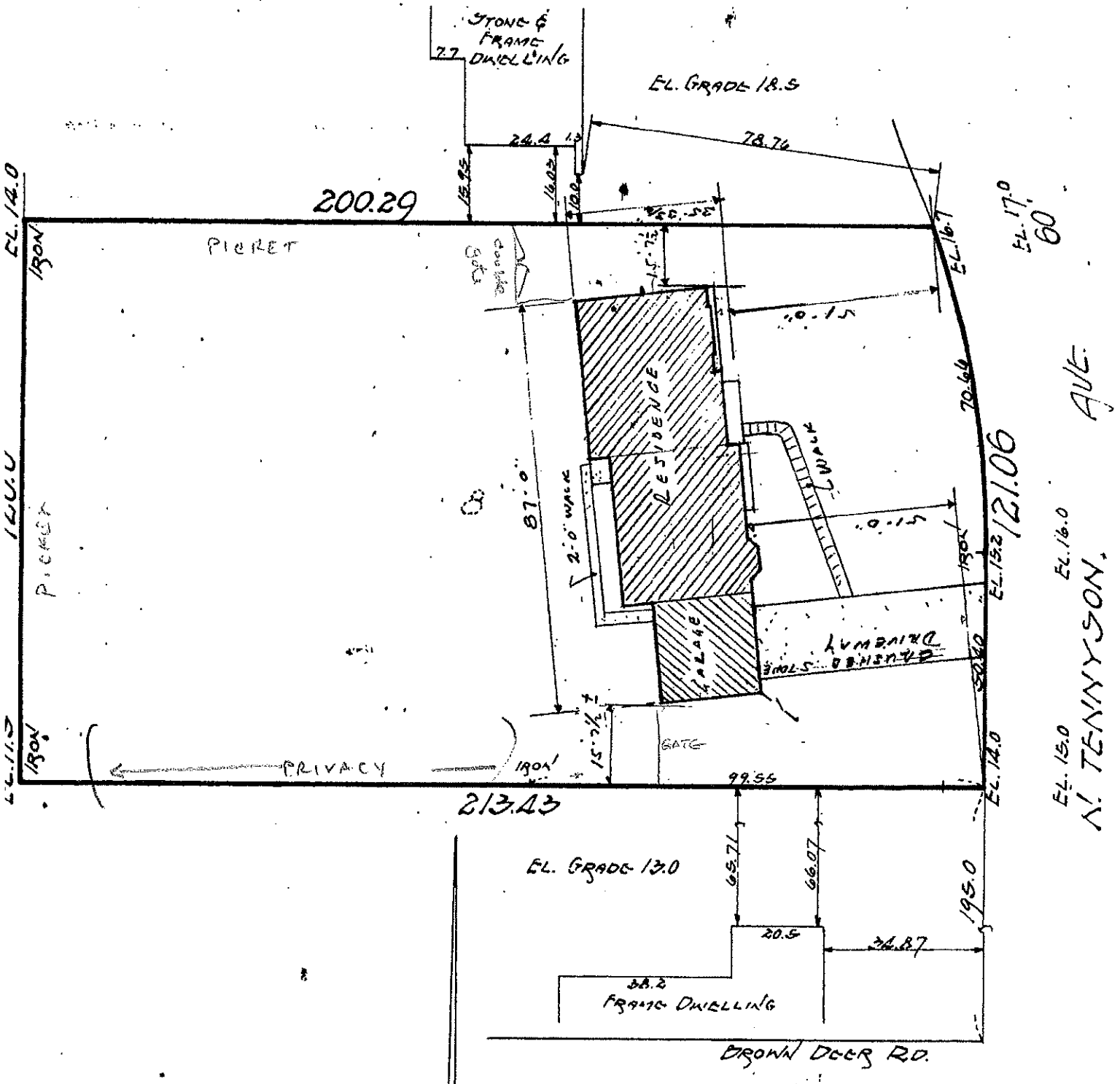
South view from back door

Plat of Survey

020-0073201

Known as North Tennyson Avenue, V of Bayside, Wisconsin
Lot 8 in Block 1 in BREEZE TERRACE, being a Subdivision of a part of the S. W. 1/4 of the S. E. 1/4 of Section 4, T 8 N, R 22 E, in the Village of Bayside, Milwaukee County, Wisconsin.
May 19, 1955

Survey No. 67913-S



1-262-346-4577
SAFEbuilt, Inc.

WI UNIFORM PERMIT APPLICATION

hartfordinspections@safebuilt.com
Inspections need to be called in by 4 pm for next business day inspections

PERMIT NO.

TAX KEY#

ISSUING MUNICIPALITY

☐ TOWN ☑ VILLAGE ☐ CITY
OF Bayside
COUNTY: Milwaukee

PROJECT LOCATION (Building Address): 8835 N Tennyson Dr Bayside WI 53217

PROJECT DESCRIPTION: fence

☐ COMMERCIAL ☐ ONE & TWO FAMILY

	Mailing Address - Include City & Zip	Telephone - Include Area Code
Owner's Name: Donna I Michael Miller	8835 N Tennyson Dr Bayside WI 53217	414-540-0958
Construction Contractor (DC Lic No.): self		
Dwelling Contractor Qualifier (DCQ Lic No.)	Dwelling Contractor Qualifier shall be an owner, CEO, COB, or employee of Dwelling Contractor	
Plumbing Contractor (Lic No.)		
Electrical Contractor (Lic No.)		
HVAC Contractor (Lic No.)		

PROJECT INFORMATION

Subdivision Name: Breeze Terrace
Lot No.: 8
Block No.: 1

Zoning District	Lot Area	N.S.E.W. Setbacks	Front	Rear	Left	Right
	24,000 Sq. Ft.		121 Ft.	120 Ft.	213 Ft.	200 Ft.

1a. PROJECT
☑ New ☐ Addition ☐ Raze
☐ Alteration ☑ Repair ☐ Move
☐ Other Fence

1b. GARAGE
☑ Attached ☐ Detached

2. AREA
Basement _____ Sq. Ft.
Living Area _____ Sq. Ft.
Garage _____ Sq. Ft.
Other _____ Sq. Ft.
TOTAL _____

3. TYPE
☑ Single Family
☐ Two Family
☐ Multi
☐ Commercial

4. CONST. TYPE
☐ Site Constructed
☐ Mfd. UDC
☐ Mfd. HUD

5. ELECTRICAL
Entrance Panel
Size: ____ amp
Service: ☐ New ☐ Rewire
☐ Phase ☐ Volts
☐ Underground
☐ Overhead
Power Company:

6. STORIES
☑ 1-Story
☐ 2-Story
☐ Other

7. FOUNDATION
☐ Concrete
☑ Masonry
☐ Treated Wood
☐ ICF
☐ Other

8. USE
☐ Seasonal
☑ Permanent
☐ Other

9. HVAC EQUIPMENT
☑ Forced Air Furnace
☐ Radiant Baseboard or Panel
☐ Heat Pump
☐ Boiler
☐ Central Air Conditioning
☐ Other

10. PLUMBING
Sewer
☐ Municipal
☐ Septic No.

11. WATER
☐ Municipal Utility
☐ Private On-Site Well

12. ENERGY SOURCE

Fuel	Nat. Gas	L.P.	Oil	Elec.*	Solid	Solar
Space Htg	☐	☐	☐	☐	☐	☐
Water Htg	☑	☐	☐	☐	☐	☐

*☐ Dwelling unit will have 3 kilowatt or more installed electric space heater equipment capacity.

13. HEAT LOSS (Calculated)
Total _____ BTU//HR

14. ESTIMATED COST
$ 800

I understand that I: am subject to all applicable codes, laws, statutes and ordinances, including those described on the Notice to Permit Applicants form; am subject to any conditions of this permit; understand that the issuance of this permit creates no legal liability, express or implied, on the state or municipality; and certify that all the above information is accurate. If one acre or more of soil will be disturbed, I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and the owner shall sign the statement on the Notice to Permit Applicants form. I expressly grant the building inspector, or the inspector's authorized agent, permission to enter the premises for which this permit is sought at all reasonable hours and for any proper purpose to inspect the work which is being done.

☐ **I vouch that I am or will be an owner-occupant of this dwelling for which I am applying for an erosion control or construction permit without a Dwelling Contractor Certification and have read the cautionary statement regarding contractor responsibility on the Notice to Permit Applicants form.**

APPLICANT (PRINT): Donna O. Miller _____ 3/1/2020

SAFEbuilt, Inc.

INSPECTIONS NEEDED **Building** ☐ Footing ☐ Foundation ☐ Rough ☐ Insulation ☐ Bsmt. Fl. ☐ Final
Electric ☐ Rough ☐ Service ☐ Final **Plumbing** ☐ Rough ☐ Underfloor ☐ Final **HVAC** ☐ Rough ☐ Final

FEES:		PERMIT(S) ISSUED	SEAL NO. _____ Municipality No. ___-___		
Building Fee		Bldg. # At top of form	**RECEIPT**	**PERMIT EXPIRATION:**	**PERMIT ISSUED BY MUNICIPAL AGENT:**
Zoning Fee		Zoning #	CK # 4807	Permit expires two years from date issued unless municipal ordinance is more restrictive.	Name
WI Seal		Elec. #	Amount $ 120		Date
Electric Fee		Plmb. #	Date 3/2/2020		Certification No.
Plumbing Fee		HVAC #	From DM		
HVAC Fee			Rec By. ZH		
Adm. Fee					
Other	120				
Total	120				

White - Municipal Files Yellow - Applicant Pink - Clerk/Assessor

Scope of Work

Only items listed are part of this permit. If work is done on items not listed on this permit they will be considered to have been completed without a permit and are subject to double fees.

Item	Cost
13 6x8' panels $40 = $520	≈ $700
14 doors x $14 = 196	

Total Cost_____

Signature_____ Date_____

Requested Changes at time of work

Must be submitted to the Village prior to or same day work is completed. Failure to return the same day will result in double permit fees.

Item	Cost

Total Cost_____

Signature_____ Date_____

Project Proposal

Date 3-20-2020

Property Address 1434 E Brown Deer Rd

Zoning A

- ☑ Accessory Structures/Generators
- ☐ Additions/Remodel
- ☐ Bluff Management
- ☐ Commercial Signage
- ☐ Decks/Patios
- ☑ Fence
- ☐ Fire Pits
- ☐ Landscaping requiring Impervious Surface/Fill/Excavation Permit
- ☐ New Construction
- ☐ Play Structures
- ☐ Recreational Facilities/Courts
- ☐ Roofs
- ☐ Solar Panels/Skylights
- ☐ Swimming Pools
- ☐ Windows/Doors-change exceeds 25% of opening
- ☐ Other

Proposed project details (type of work, size, materials, etc.):

3' Fenced area at side yard, Pergola (Redwood) over Spa on Concrete pad/Redwood deck.

********** *For Office Use Only* **********

Yes	No	
☑	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☑	☐	Survey
☑	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	Parcel Number
☑	☐	ARC Agenda Date:
☑	☐	Building Permit
☐	☐	Fill Permit
☐	☑	Impervious Surface Permit
☐	☑	Plan Commission/Conditional Use Permit
☐	☐	Tax Key Number
☐	☑	Right-of-Way/Excavation Permit
☐	☑	Variance Required

SAFEbuilt Wisconsin, LLC
2108A Silvernail Road #317
Pewaukee, WI 53072

4/4/2019

Attention:
Village of Bayside, WI
Architecture Review Committee

PROJECT/SITE OWNER: Kathryn Kamm PROJECT ADDRESS: 1434 E. Brown Deer Road	PROJECT SUMMARY: 3' Fenced area at side yard, pergola (redwood) over spa on concrete pad/redwood deck.

VILLAGE CODE REVIEW

MATERIAL/FINISH
Village code section 104-125 (C): *Certain fences prohibited.* No barbed wire, wire mesh, above-ground electrically charged fence, or chainlink (cyclone) fences shall be allowed except in the case of chainlink fences to enclose tennis courts, sports fields, school yards, or municipal properties; and in the case of wire mesh fencing in the "G" nature center district. Photos provided indicate a wire mesh fence.
PROPOSED MATERIAL/FINISH DOES NOT COMPLY

FENCE HEIGHT
Village code section 104-125 (K): Fences constructed within the front yard of a home shall not exceed three feet in height.
PROPOSED HEIGHT COMPLIES

FENCE LENGTH
Village code section 104-125 (I): *Fence type.* Solid fences may be constructed with a total horizontal linear length not to exceed 15 percent of the total linear feet of the perimeter of the property except as screening along an adjacent railroad, state highway, interstate highway, county highway, or commercial parking lot property. A solid fence may have at least a 25 percent open design within the fence height. All other permitted fences shall be constructed with at least a 25 percent open design. When proposing a new fence adjacent to a property that already has a fence, the applicant should consider (and the architectural review committee may encourage) matching that fence to achieve a harmonious look. Wood fences shall be unfinished, stained, or oiled and allowed to weather naturally to help them blend into the landscape. Other finishes may be acceptable but are subject to review and approval. The side of the fence facing neighboring properties shall always be a finished and not structural side of the fence. If a fence style contains posts on one side and a more finished side on the other, the more finished side shall face the neighboring property.
PROPOSED LENGTH COMPLIES

Dan Povolo
Plans Examiner
608-208-2516
dpovolo@safebuilt.com

1-262-348-4577
SAFEbuilt, Inc.

WI UNIFORM PERMIT APPLICATION

hartfordinspections@safebuilt.com
Inspections need to be called in by 4 pm for next business day inspections

PERMIT NO.

TAXKEY# 020-9982-000

ISSUING MUNICIPALITY

☐ TOWN ☒ VILLAGE ☐ CITY
OF Bayside
COUNTY:

PROJECT LOCATION (Building Address): 1434 E. Brown Deer Rd.

PROJECT DESCRIPTION

☐ COMMERCIAL ☒ ONE & TWO FAMILY

	Mailing Address - Include City & Zip	Telephone - Include Area Code
Owner's Name: Kathryn Kamm	1434 E. Brown Deer Rd.	414-617-5146
Construction Contractor (DC Lic No.): Dwelling Renovations	1545 Woodland Dr. Grafton, WI	262-322-0060
Dwelling Contractor Qualifier (DCQ Lic No.)	Dwelling Contractor Qualifier shall be an owner, CEO, COB, or employee of Dwelling Contractor	Telephone - Include Area Code
Plumbing Contractor (Lic No.): N/A	Mailing Address - Include City & Zip	Telephone - Include Area Code
Electrical Contractor (Lic No.): N/A	Mailing Address - Include City & Zip	Telephone - Include Area Code
HVAC Contractor (Lic No.): N/A	Mailing Address - Include City & Zip	Telephone - Include Area Code

PROJECT INFORMATION

Subdivision Name | Lot No. | Block No.

Zoning District | Lot Area Sq. Ft. | N.S.E.W. Setbacks | Front Ft. | Rear Ft. | Left Ft. | Right Ft.

1a. PROJECT
☐ New ☐ Addition ☐ Raze
☐ Alteration ☐ Repair ☐ Move
☒ Other Pergola + Fence

1b. GARAGE
☐ Attached ☐ Detached

2. AREA
Basement ____ Sq. Ft.
Living Area ____ Sq. Ft.
Garage ____ Sq. Ft.
Other ____ Sq. Ft.
TOTAL 120 sf.

3. TYPE
☒ Single Family
☐ Two Family
☐ Multi
☐ Commercial

4. CONST. TYPE
☒ Site Constructed
☐ Mfd. UDC
☐ Mfd. HUD

5. ELECTRICAL
Entrance Panel
Size: ____ amp
Service: ___ New ___ Rewire
____ Phase ____ Volts
___ Underground
___ Overhead
Power Company:

6. STORIES
☒ 1-Story
☐ 2-Story
☐ Other

7. FOUNDATION
☒ Concrete
☐ Masonry
☐ Treated Wood
☐ ICF
☐ Other

8. USE
☐ Seasonal
☒ Permanent
☐ Other

9. HVAC EQUIPMENT
☐ Forced Air Furnace
☐ Radiant Baseboard or Panel
☐ Heat Pump
☐ Boiler
☐ Central Air Conditioning
☐ Other N/A

10. PLUMBING
Sewer
☐ Municipal
☐ Septic No.

11. WATER
☐ Municipal Utility
☐ Private On-Site Well

12. ENERGY SOURCE

Fuel	Nat. Gas	LP.	Oil	Elec. *	Solid	Solar
Space Htg	☐	☐	☐	☐	☐	☐
Water Htg	☐	☐	☐	☐	☐	☐

*☐ Dwelling unit will have 3 kilowatt or more installed electric space heater equipment capacity.

13. HEAT LOSS (Calculated)
Total ____ BTU/HR

14. ESTIMATED COST
$ 9,000 -

I understand that I: am subject to all applicable codes, laws, statutes and ordinances, including those described on the Notice to Permit Applicants form; am subject to any conditions of this permit; understand that the issuance of this permit creates no legal liability, express or implied, on the state or municipality; and certify that all the above information is accurate. If one acre or more of soil will be disturbed, I understand that this project is subject to ch. NR 151 regarding additional erosion control and stormwater management and the owner shall sign the statement on the Notice to Permit Applicants form. I expressly grant the building inspector, or the inspector's authorized agent, permission to enter the premises for which this permit is sought at all reasonable hours and for any proper purpose to inspect the work which is being done.

☒ **I vouch that I am or will be an owner-occupant of this dwelling for which I am applying for an erosion control or construction permit without a Dwelling Contractor Certification and have read the cautionary statement regarding contractor responsibility on the Notice to Permit Applicants form.**

APPLICANT (PRINT): Kathryn Kamm 03/20/2020
SAFEbuilt, Inc.

INSPECTIONS NEEDED **Building** ☐ Footing ☐ Foundation ☐ Rough ☐ Insulation ☐ Bsmt. Fl. ☐ Final
Electric ☐ Rough ☐ Service ☐ Final **Plumbing** ☐ Rough ☐ Underfloor ☐ Final **HVAC** ☐ Rough ☐ Final

FEES		PERMIT(S) ISSUED	SEAL NO.	Municipality No.
Building Fee	195	Bldg. # At top of form		
Zoning Fee		Zoning #		
WI Seal		Elec. #		
Electric Fee		Plmb. #		
Plumbing Fee		HVAC #		
HVAC Fee				
Adm. Fee				
Other APC	60			
Total				

RECEIPT	PERMIT EXPIRATION:	PERMIT ISSUED BY MUNICIPAL AGENT:
CK #	Permit expires two years from date issued unless municipal ordinance is more restrictive.	Name
Amount $		Date
Date		Certification No.
From		
Rec By		

Scope of Work

Only items listed are part of this permit. If work is done on items not listed on this permit they will be considered to have been completed without a permit and are subject to double fees.

Item	Cost
3' Cedar + black Coated wire fence	$10,000 -
Redwood Pergola	$ 9,000 -

Total Cost $19,000

Signature [redacted] Date 20 · MAR · 2020

Requested Changes at time of work

Must be submitted to the Village prior to or same day work is completed. Failure to return the same day will result in double permit fees.

Item	Cost

Total Cost

Plat No. GR 18-8-9

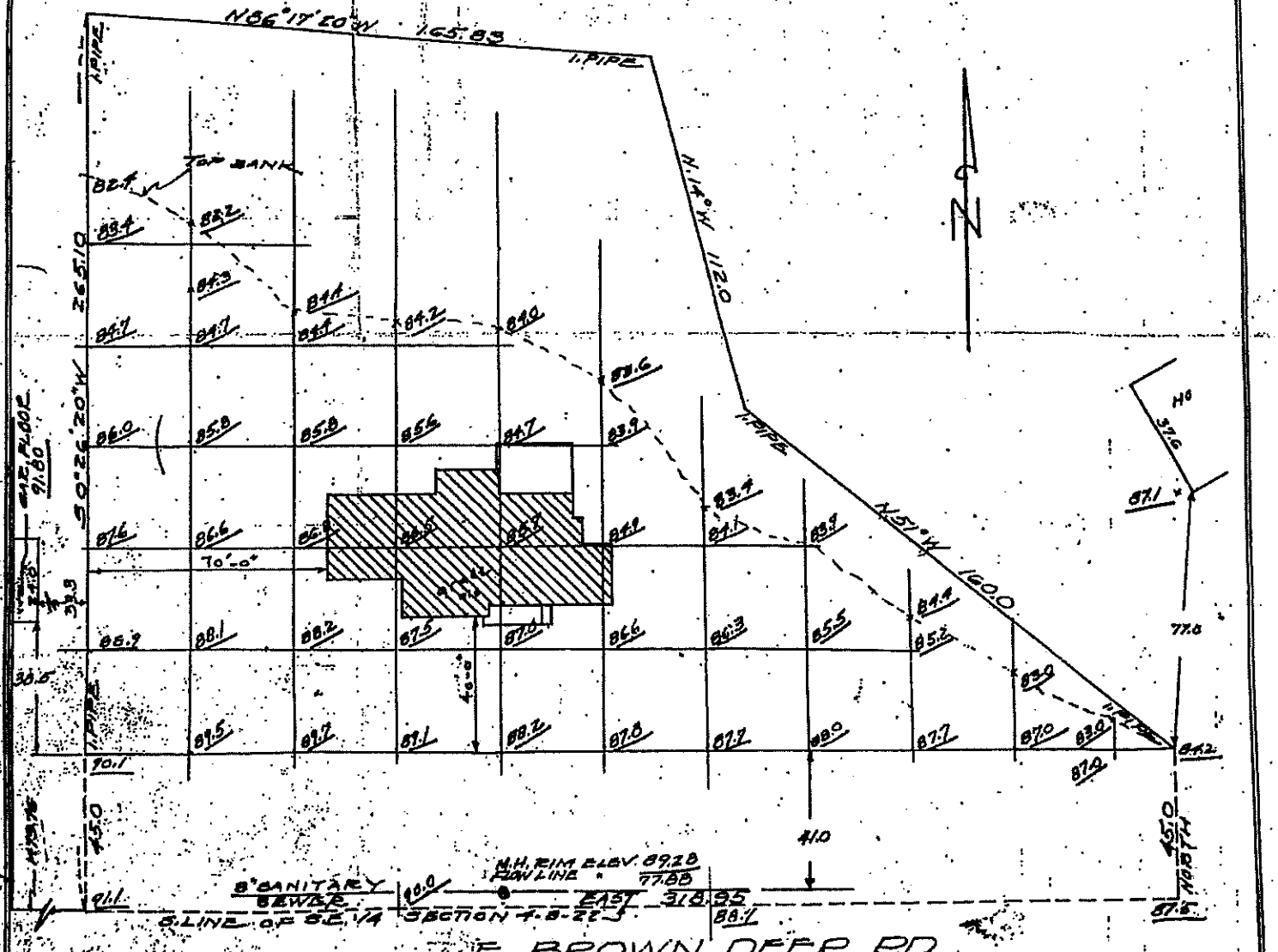
PLAT OF SURVEY

OF PROPERTY OF Parma Schlay (for owner)

described as follows: That part of the NE ¼ of Section 4, Town 8 North, Range 22 East in the Town of Lake, Milwaukee County, Wisconsin, bounded and described as follows, to-wit: Commencing at a point in the South line of said ¼ Section, 1479.76 ft. East of the Southwest corner of said ¼ Section, running; thence East along the South line of said ¼ Section, 318.95 ft. to a point; thence North 45.0 ft. to a point; thence N.51° W. 160.0 ft. to a point; thence N.14° W. 112.0 ft. to a point; thence N.86° 17' 20" W., 165.83 ft. to a point; thence S.0° 26' 20" W. 265.10 ft. to the place of commencement. Reserving the South 45.0 ft. for public street purposes.

1166

APPROVED
VILLAGE OF BAYSIDE
BUILDING COMMITTEE
DATE: March 24 - 56



SCALE 1" = 30 FT.

H. C. WEBSTER & SON
739 North Second Street Milwaukee, Wis.
DONALD W. WEBSTER
REGISTERED CIVIL ENGINEER
ASSOCIATE
ROY J. CHARMOCK

AFFIDAVIT:

I hereby certify that I have made a survey on .....195...., and that the location of the.....Building as above described property is correctly shown on the above plat.

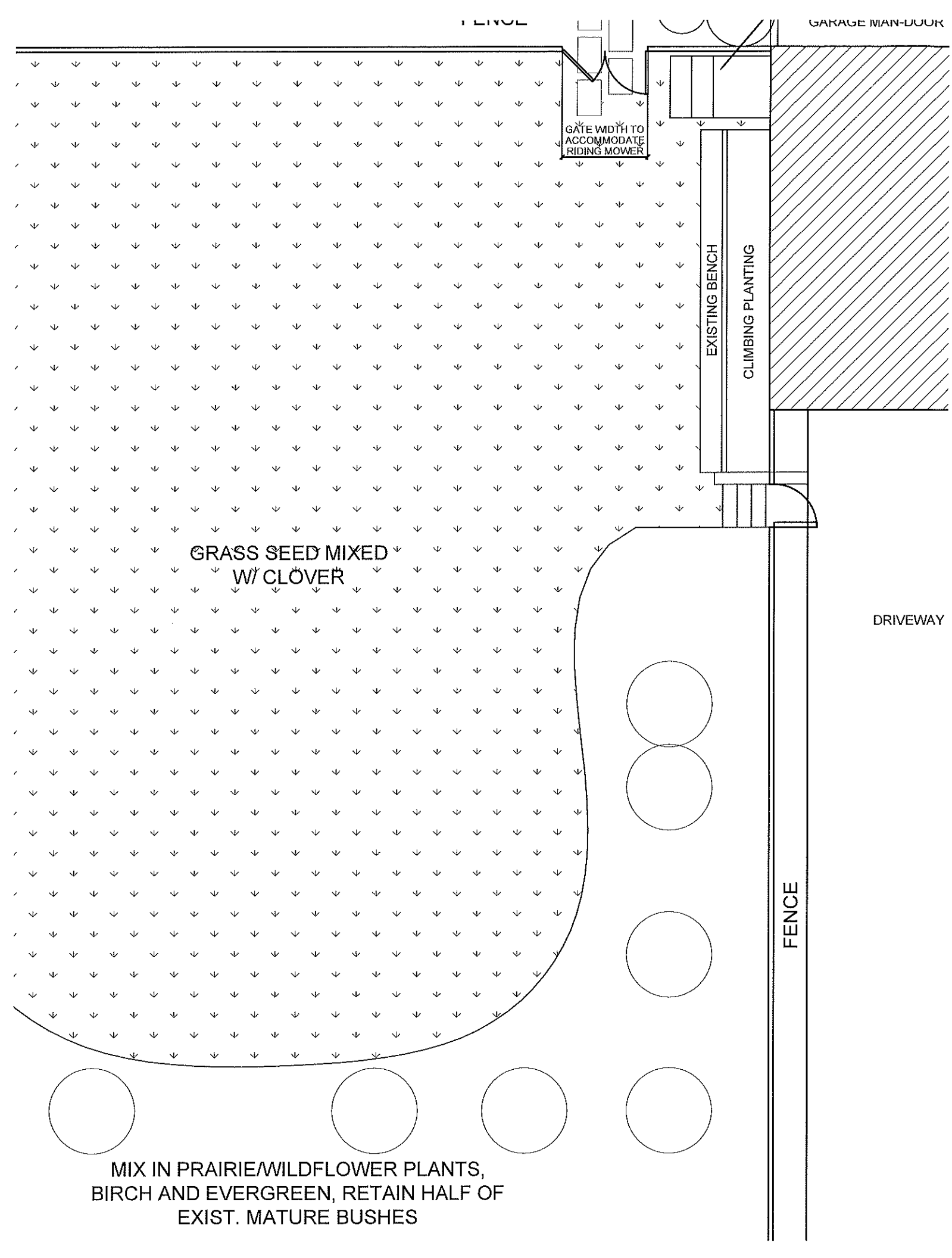
.....

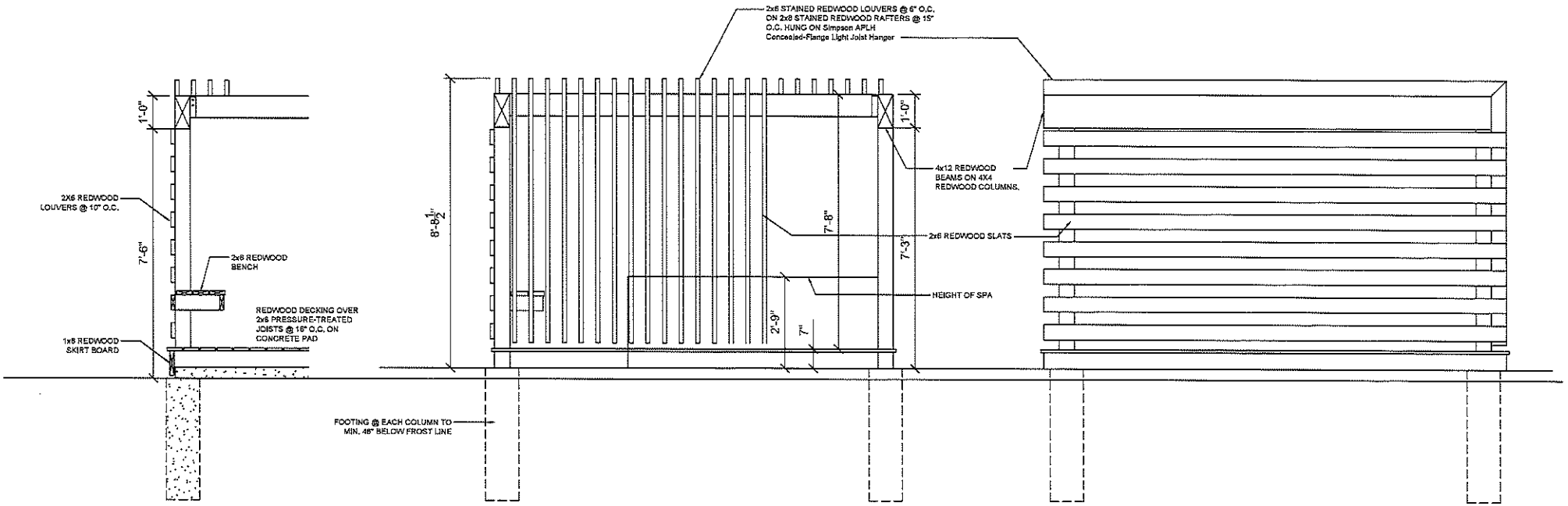
STATE OF WISCONSIN
COUNTY OF MILWAUKEE

I, D. W. WEBSTER, Surveyor, do hereby certify that I have made a survey of the above described property and that the above plat is a true representation of said survey.

Milwaukee, Wis. July 6, 1956

D. W. Webster

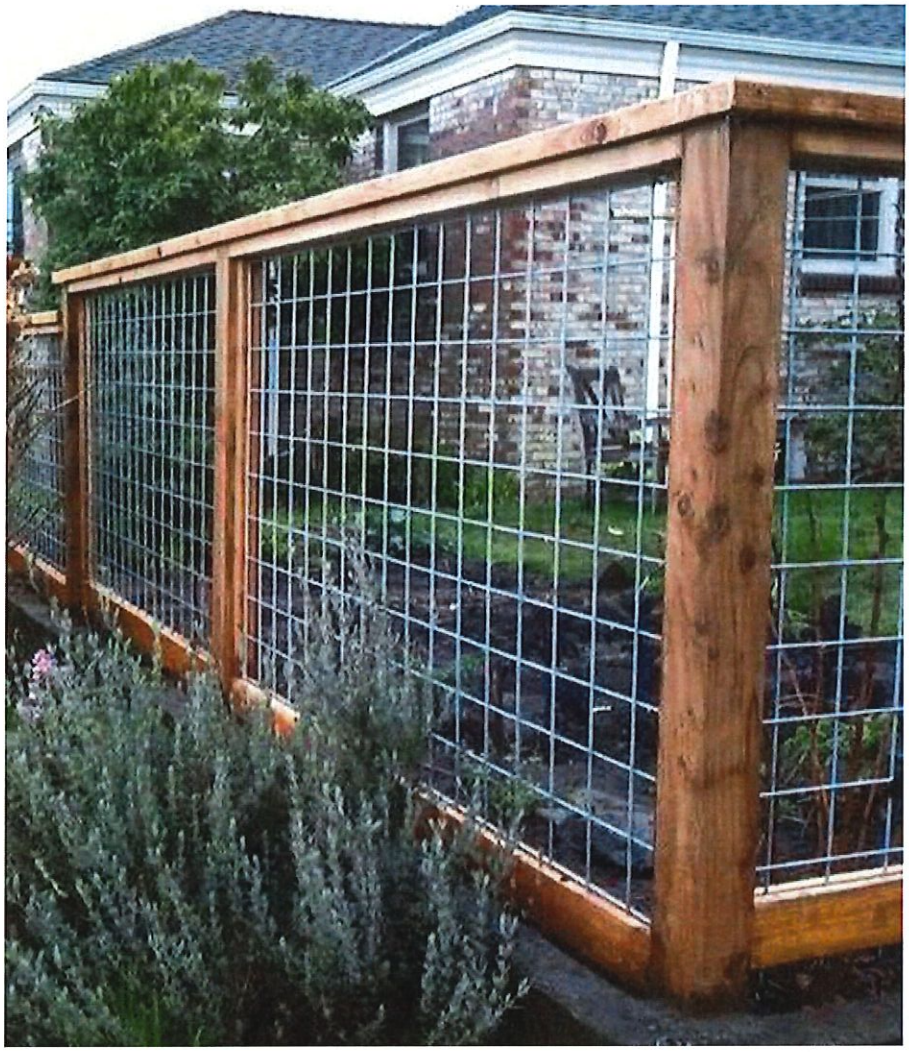

FENCE
GARAGE MAN-DOOR
GATE WIDTH TO ACCOMMODATE RIDING MOWER
EXISTING BENCH
CLIMBING PLANTING
GRASS SEED MIXED W/ CLOVER
DRIVEWAY
FENCE
MIX IN PRAIRIE/WILDFLOWER PLANTS, BIRCH AND EVERGREEN, RETAIN HALF OF EXIST. MATURE BUSHES

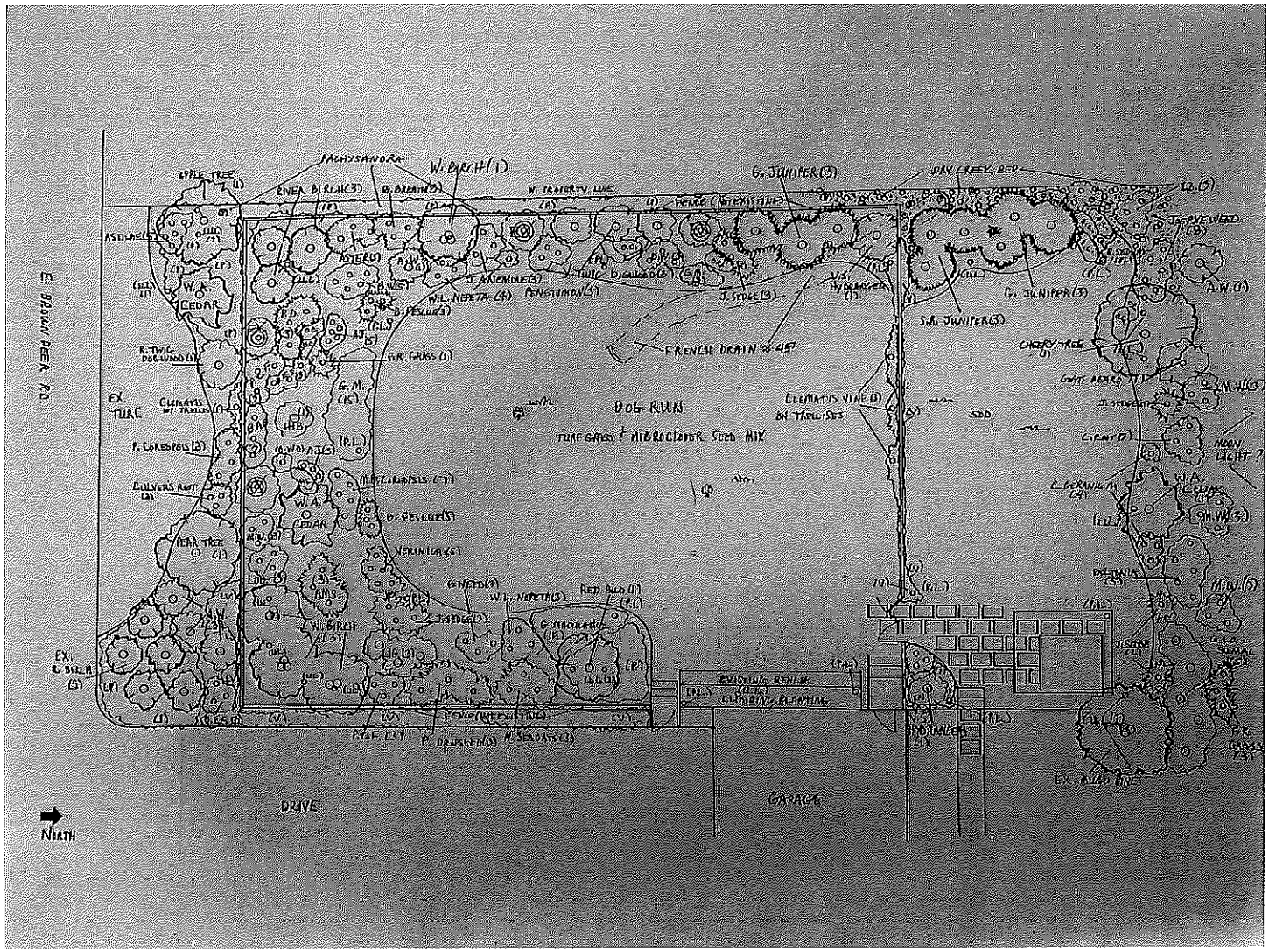


S-1 PERGOLA - DETAIL SECTION
SCALE 1/2" = 1'-0"

E-2 PERGOLA - SOUTH ELEVATION
SCALE 1/2" = 1'-0"

E-1 PERGOLA - WEST ELEVATION
SCALE 1/2" = 1'-0"




BRAWN PEEK RD.
DOG RUN
FRENCH DRAIN @ 45°
DRIVE
GARAGE
NORTH

Plat No. CR 18-8-0

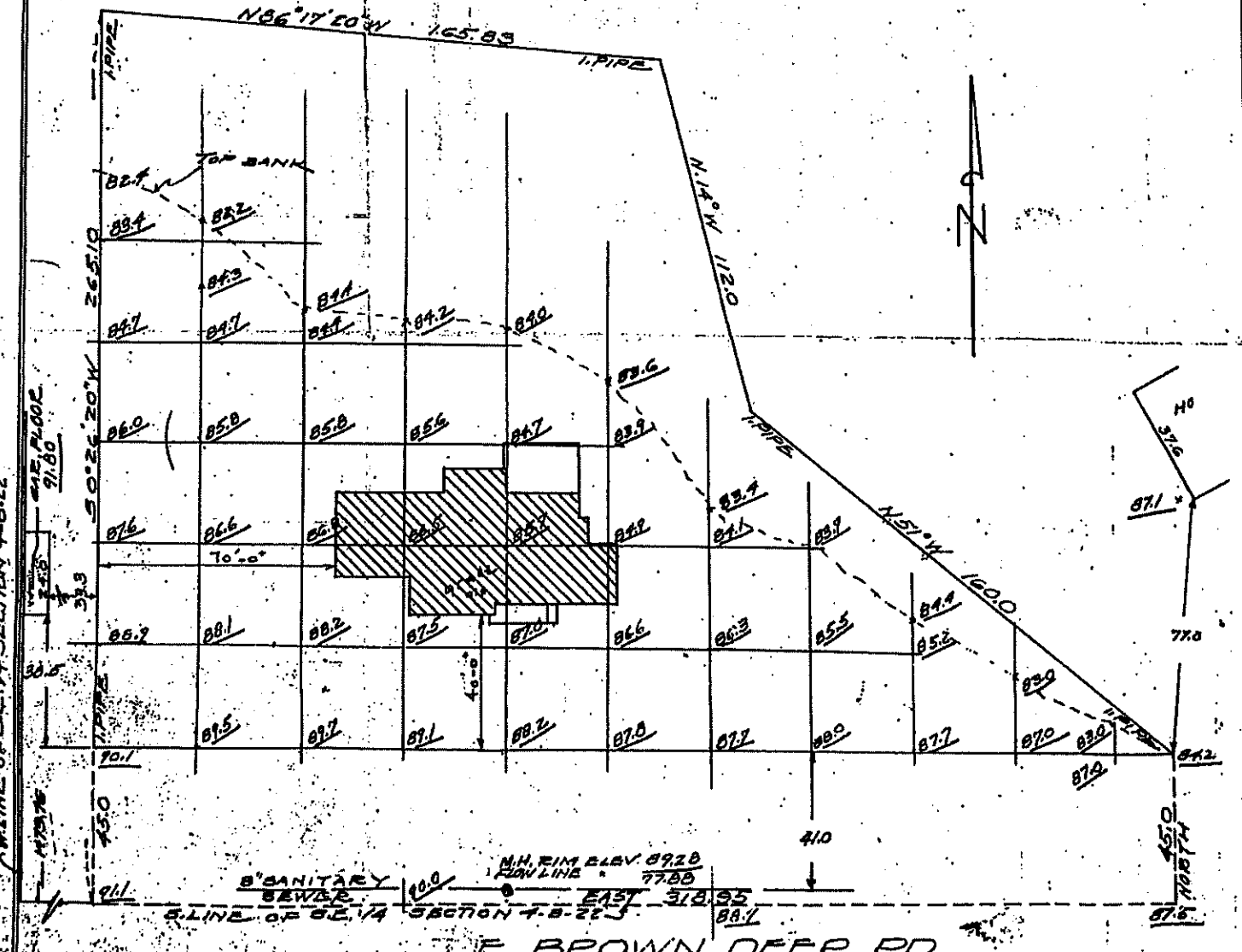
PLAT OF SURVEY

OF PROPERTY OF Pamo Schley (for owner)

described as follows: That part of the [illegible] of Section 4, Town 8 North, [illegible] bounded and described as follows, to-wit: Commencing at a point in the South line of said [illegible] Section, 1479.76 ft. East of the Southwest corner of said [illegible] Section, running thence East along the South line of said [illegible] Section, 318.95 ft. to a point; thence North 45.0 ft. to a point; thence N.51° W. 160.0 ft. to a point; thence N.14° W. 112.0 ft. to a point; thence N.86° 17' 20" W., 165.83 ft. to a point; thence S.0° 26' 20" W. 265.10 ft. to the place of commencement. Reserving the South 45.0 ft. for public street purposes.

1166

APPROVED
VILLAGE OF BAYSIDE
BUILDING COMMITTEE
DATE: Thurs 29 - 56



SCALE 1" = 30 FT.

H. C. WEBSTER & SON
728 North Second Street Milwaukee, Wis.
DONALD W. WEBSTER
REGISTERED CIVIL ENGINEER
ASSOCIATE
ROY J. CHARMOCK

AFFIDAVIT:

I hereby certify that I have made a survey on .....195...., and that the location of the.....Building as above described property is correctly shown on the above plat.

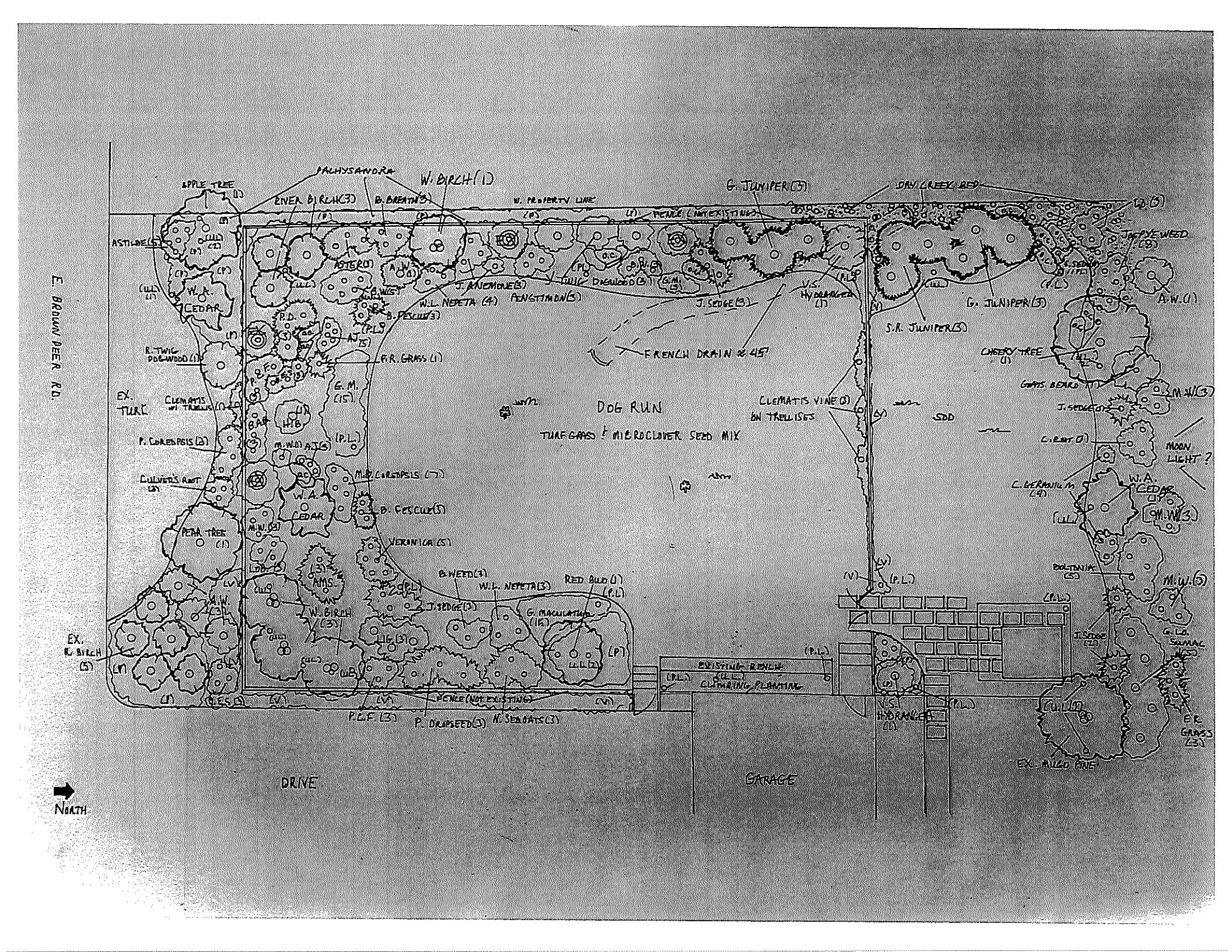
.....

STATE OF WISCONSIN
COUNTY OF MILWAUKEE

I, D. W. WEBSTER, Surveyor, do hereby certify that I have made a survey of the above described property and that the above plat is a true representation of said survey.

Milwaukee, Wis. Feb 6 1956

D. W. Webster


E. BROWN BEER RD.
APPLE TREE (1)
PACHYSANDRA
W. BIRCH (1)
G. JUNIPER (5)
DAY CREEK RED
W. PROPERTY LINE
FENCE (NOT EXISTING)
RIVER BIRCH (3)
B. BREATH (3)
ASTILBE (5)
ASTER (1)
A.W. (1)
W.A. CEDAR
J. ANEMONE (5)
PENSTEMON (5)
W.L. NEPETA (4)
B. FESCUE (3)
TWIG DOGWOOD (5)
J. SEDGE (5)
HYDRANGEA (1)
S.R. JUNIPER (5)
G. JUNIPER (5)
JOE PYE WEED (5)
A.W. (1)
R. TWIG DOGWOOD (1)
F.R. GRASS (1)
FRENCH DRAIN @ 45°
CHERRY TREE (1)
GRASS BEARD (1)
M.W. (3)
EX. TURF
CLEMATIS w/ TRELLIS (1)
DOG RUN
TURF GRASS & MICROCLOVER SEED MIX
CLEMATIS VINE (5) ON TRELLISES
SOD
J. SEDGE (5)
C. ERICOIDES (9)
MOON LIGHT ?
P. CORDIFOLIA (3)
CULVERS ROOT (3)
M.P. CORDIFOLIA (7)
W.A. CEDAR
B. FESCUE (5)
PEAR TREE (1)
M.W. (3)
VERONICA (5)
M.W. (3)
BOLTONIA (5)
M.W. (5)
B. WEED (3)
W.L. NEPETA (3)
RED BUD (1)
J. SEDGE (3)
G. MACULATUM (16)
W. BIRCH (3)
J. SEDGE (2)
G. LO. SUMAC (3)
EX. R. BIRCH (5)
EXISTING BENCH
CLEMATIS PLANTING
HYDRANGEA (1)
P.C.F. (3)
P. DROPSEED (3)
N. SEDGATS (3)
E.R. GRASS (3)
EX. MUGO PINE
DRIVE
GARAGE
NORTH

Project Proposal

Date 4-14-2020

Property Address

Zoning

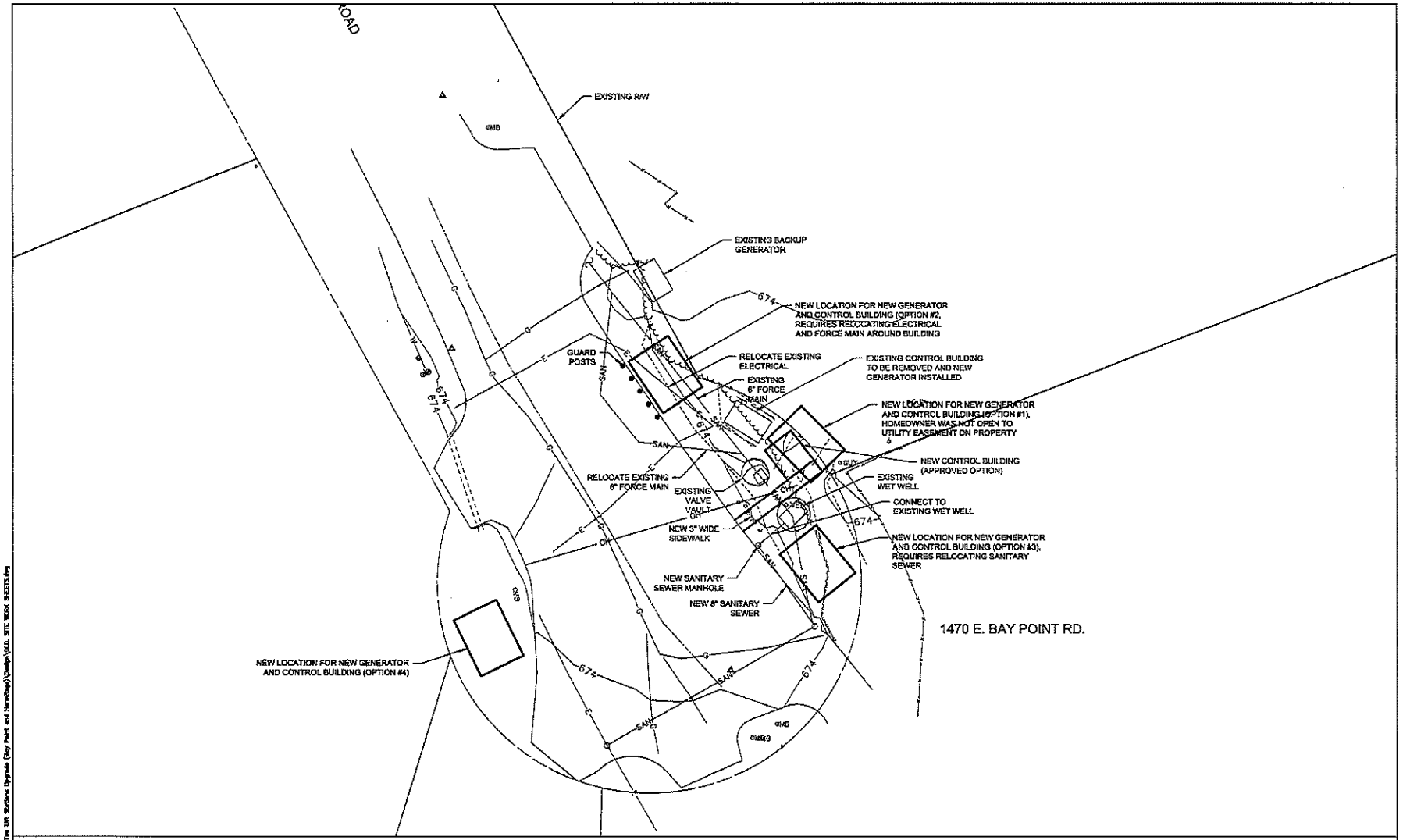
- ☐ Accessory Structures/Generators
- ☐ Additions/Remodel
- ☐ Bluff Management
- ☐ Commercial Signage
- ☐ Decks/Patios
- ☐ Fence
- ☐ Fire Pits
- ☐ Landscaping requiring Impervious Surface/Fill/Excavation Permit
- ☐ New Construction
- ☐ Play Structures
- ☐ Recreational Facilities/Courts
- ☐ Roofs
- ☐ Solar Panels/Skylights
- ☐ Swimming Pools
- ☐ Windows/Doors-change exceeds 25% of opening
- ☒ Other UTILITY BUILDING

Proposed project details (type of work, size, materials, etc.):

NEW CONTROL BUILDING FOR SANITARY SEWER LIFT STATION TO REPLACE EXISTING LIFT STATION

********** *For Office Use Only* **********

Yes	No	
☐	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☐	☐	Survey
☐	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	Parcel Number
☐	☐	ARC Agenda Date:
☐	☐	Building Permit
☐	☐	Fill Permit
☐	☐	Impervious Surface Permit
☐	☐	Plan Commission/Conditional Use Permit
☐	☐	Tax Key Number
☐	☐	Right-of-Way/Excavation Permit
☐	☐	Variance Required



BAY POINT LIFT STATION SITE PLAN

SCALE: 1" = 10'

FILENAME: S:\Villa_Za\Bayside\GOV\190270 - Two Lift Stations Upgrade (Bay Point and Heritage)\Design\GEN_SITE_WORK SHEETS.dwg

kapur
7715 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
PRELIMINARY

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 10'

SEAL:

all in

SHEET:
BAY POINT SITE PLAN

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSB-C-1

SHEET NUMBER:
12

11 A 19

IA 2d

HERMITAGE AND BAYPOINT LIFT STATION CONDITION ASSESSMENT REPORT

Village of Bayside
Wisconsin

Prepared for:

Village of Bayside
9075 North Regent Road
Bayside, WI 53217

Prepared By:

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Consulting Engineers
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February 2019

village of BAYSIDE

KAPUR & ASSOCIATES
CONSULTING ENGINEERS

Village of BAYSIDE

DATE: 1/18/2019

TO: Village of Bayside – Shane Albers, Andy Pederson

FROM: Kapur & Associates, Inc.

SUBJECT: Hermitage and Baypoint Lift Station Condition Assessment Report

1. EXECUTIVE SUMMARY

Kapur & Associates, Inc. has been retained by the Village of Bayside to inspect and prepare a condition assessment for two aging lift stations: Hermitage and Baypoint. This assessment will be used in the planning of the anticipated lift station improvements. In general, the scope of services for the condition assessment is to perform a site inspection and lift station analysis to determine future improvements to the system.

Based on the site inspection and lift station analysis, Kapur recommends that pressure transducers be installed in both wet wells, a SCADA system installed at each lift station and the electrical controls be upgraded for both lift stations. Inverted "J" tubes are not required but recommended for both lift station valve vaults to supply fresh air to the structure. Standpipes should be installed at the wet well and valve vault to allow bypass pumping in the event of an emergency. The city owned portable pump can utilize these connections.

Additional recommendations for the lift stations include replacing the backup generator at the Baypoint Lift Station with a new generator and moving the existing Baypoint Lift Station generator to the Hermitage Lift Station to replace the existing generator. A new control building to house the new generator and new controls should be built at the Baypoint Lift Station. A new control building to only house the controls should be constructed at the Hermitage Lift Station. An infiltration and inflow (I&I) study should be conducted in both service areas to identify locations of I&I into the system.

2. SITE INVESTIGATION AND RECOMMENDATIONS

Site investigations were conducted by Kapur & Associates, Inc. on December 4, 2018 from 9:00 am to 10:00 am at the Hermitage and Baypoint Lift Stations.

- Hermitage lift station is located at 1440 E. Hermitage Rd.
- Baypoint lift station is located at 1460 E. Bay Point Rd.

2.1 Hermitage Lift Station

Hermitage Lift Station Condition Assessment			
Lift Station Components		**Condition (Good or Poor)**	**Comments**
Site Components	Parking for Maintenance Vehicles	Good	Shared driveway
	Site Drainage Away from Structure	Good	No known issues at this site
	Surrounding Foliage (Trees, bushes, shrubs)	Good	No obstructs to access equipment
	Site and Structure Security	Poor	Install unlawful entry alarm
	By-Pass Availability	None	By pass is not required
Structural Components	Condition of Valve Vault	Good	Permanent concrete structure should last over 60 years
	Condition of Wet Well	Good	Permanent concrete structure should last over 60 years
	Valve Vault Ventilation	None	Ventilation is not required, inverted "J" tube is recommended
	Pump Removal	Good	Structure has a hatch for pump maintenance
Mechanical Components	Pump Condition	Good	Repairs on an as needed basis
	Motor Condition	Good	Repairs on an as needed basis
	Valve Condition	Good	Repairs on an as needed basis
	Pipe Condition	Good	Repairs on an as needed basis
Electrical Components	On-Site Generator	Poor	Recommended to be replaced because of age
	Motor Starters	Good	No known issues
	Controls	Poor	Recommend Updating Controls
	SCADA System	Poor	Recommend new system
	Exterior Conduits	Good	No known issues
	Interior Conduits	Good	No known issues
	Flow Meter	None	Not recommended for small lift stations
	Level Sensor	Poor	Recommend replacing floats with pressure transducers

Site Components

Parking at Hermitage Lift Station consists of a residential driveway to reach the lift station easement (Figure 1). Maintenance vehicles have an adequate amount of space to park at this location. There were no signs of drainage issues at the site and access to the valve vault, wet well, control building and generator are not blocked by dense foliage. The control building is kept locked when not in use. Additional site security, such as an entry alarm, is recommended.

Figure 1: Hermitage Lift Station Site

Structural Components

The Hermitage Lift Station was constructed in 1992. The concrete valve vault and wet well at the Hermitage Lift Station are in good condition. The concrete wet well and valve vaults are permanent structures and should last over 60 years. A hatch is available for pump removal. The wet well has an inverted "J" tube for ventilation. Valve vaults can be vented with a portable ventilator when maintenance is required. An inverted "J" tube is not required for this type of structure, but one is recommended to provide continuous fresh air.

Mechanical Components

The mechanical components in the wet well includes two 80 gallons per minute (gpm) Flygt pumps with 2.7 HP motors. The pumps provide a TDH (total dynamic head) of 26 feet. Kapur does not recommend replacing the pumps as they are still working as designed.

The mechanical components in the valve vault includes four plug valves, two swing check valves and ductile iron piping. The piping and valves are in good condition and replacement is not recommended.

It is unknown if there is excessive infiltration and inflow (I&I) entering the lift station. Kapur recommends an I&I investigation at this location to identify if I&I is entering the system.

A pump bypass is not available for this lift station and is not required. Kapur recommends that standpipes should be installed and connected to the wet well to provide a bypass if the pumps were out of service for an extended length of time. When the pumps are not working in an emergency, stand pipes will allow for easy and fast connections to the city owned portable pump. The nearest manhole for discharge to with a hose is about 360 feet away. Discharging to this manhole with a hose is not recommended.

Electrical Components

The existing control operating system has reached the end of its useful life. Kapur recommends that the control system should be updated. New controls will provide a screen that will display the condition of the lift station in real time. A new SCADA monitoring system should be installed with the new controls. The SCADA system will record and store operational information about the lift station that can be accessed by the owner on a secure website. The system would also provide immediate alarm notification via text and email. Kapur recommends an Antx Aquavx Scout cellular alarm dialer as a cost-effective system.

Floats are currently being used in the wet well as a level sensor. Kapur recommends replacement of the floats with a pressure transducer. Pressure transducers provide an accurate reading and are easy to install. The floats can be used as a backup system for a high-level alarm.

The generator at the Hermitage Lift Station is 25 years old and has reached the end of its useful life (Figure 2). Kapur recommends that the generator should be replaced. The generator located at the Baypoint Lift Station is in good condition and should be moved to this site to save replacement costs.

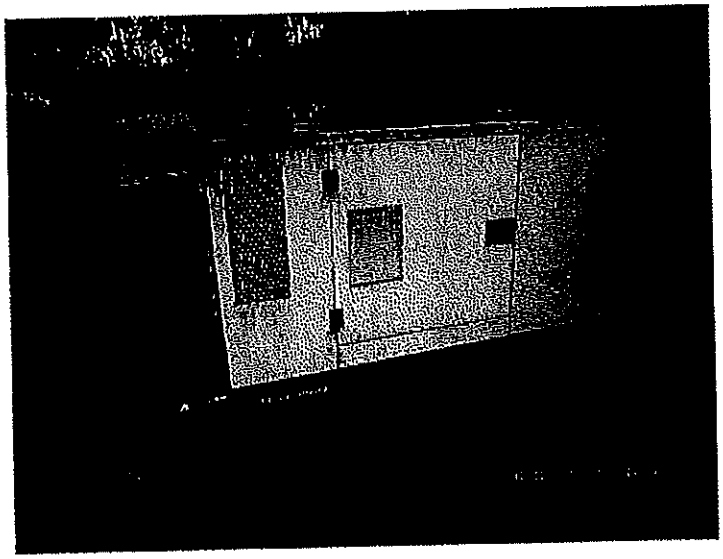


Figure 2: Hermitage Lift Station Generator

Kapur recommends that the existing control building (Figure 3) be replaced with a similar structure that is easier to access for maintenance. The existing entry to the control building is short and requires operators to crouch to enter the control building. The roof on the existing structure also needs repairs. Significant upgrades to the relocated generator would be required to store it in the

control building. Since the recommended control building does not need to house the generator, the building would have a similar footprint as the existing.

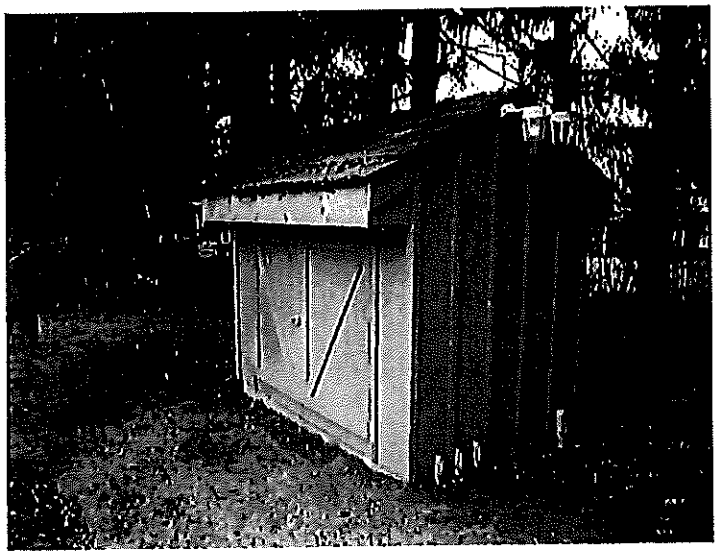


Figure 3: Hermitage Lift Station Control Building

Generators should continue to be run weekly. During discussions with the operators, it was brought to Kapur's attention that, during backup generator testing when the pumps are running, the pumps do not turn on after the testing is complete. This causes the high-level alarm to activate at the lift station. With new controls and a new generator, this issue will be alleviated.

2.2 Baypoint Lift Station

Baypoint Lift Station Condition Assessment			
Lift Station Components		**Condition (Good or Poor)**	**Comments**
Site Components	Parking for Maintenance Vehicles	Good	Shared driveway
	Site Drainage Away from Structure	Poor	Control building has been known to flood during heavy rain events
	Surrounding Foliage (Trees, bushes, shrubs)	Good	No obstructs to access equipment
	Site and Structure Security	Poor	Install unlawful entry alarm
	By-Pass Available	None	By pass is not required
Structural Components	Condition of Valve Vault	Good	Permanent concrete structure should last over 60 years
	Condition of Wet Well	Good	Permanent concrete structure should last over 60 years
	Valve Vault Ventilation	None	Ventilation is not required, inverted "J" tube is recommended
	Pump Removal	Good	Structure has a hatch for pump maintenance
Mechanical Components	Pump Condition	Good	Repairs on an as needed basis
	Motor Condition	Good	Repairs on an as needed basis
	Valve Condition	Good	Repairs on an as needed basis
	Pipe Condition	Good	Repairs on an as needed basis
Electrical Components	On-Site Generator	Good	Recommend relocating and constructing new enclosed structure for a new generator
	Motor Starters	Good	No known issues
	Controls	Poor	Recommend updating controls
	SCADA System	Poor	Recommend new system
	Exterior Conduits	Good	No known issues
	Interior Conduits	Good	No known issues
	Flow Meter	None	Not recommended for small lift stations
	Level Sensor	Poor	Recommend replacing floats with pressure transducers

Site Components

Parking at Baypoint Lift Station consists of a street parking to reach the lift station easement (Figure 4). Maintenance vehicles have an adequate amount of space to park at this location. The control building has been known to flood at this location. Access to the valve vault, wet well, control building and generator are not blocked by dense foliage. The control building is kept locked when not in use. Additional site security, such as an entry alarm, is recommended.

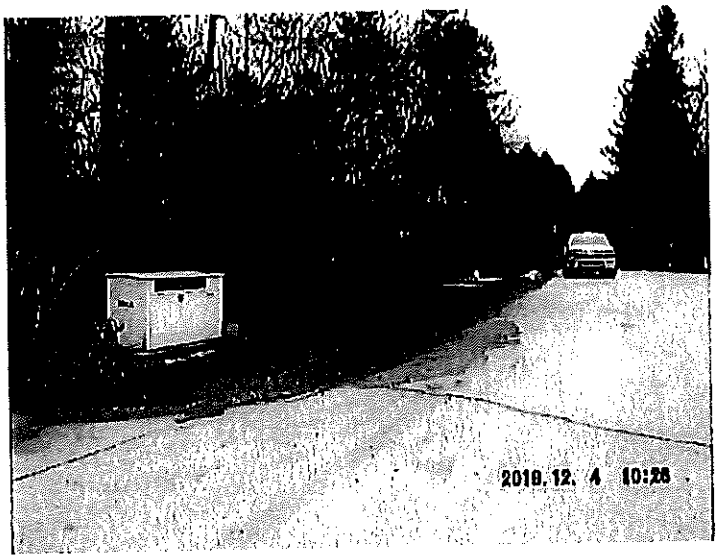


Figure 4: Baypoint Lift Station Site

Structural Components

The Baypoint Lift Station was constructed in 1992. The concrete valve vault and wet well at the Baypoint Lift Station are in good condition. The concrete wet well and valve vaults are permanent structures and should last over 60 years. A hatch is available for pump removal. The wet well has an inverted "J" tube for ventilation. Valve vaults can be vented with a portable ventilator when maintenance is required. An inverted "J" tube is not required for this type of structure, but one is recommended to provide continuous fresh air.

Mechanical Components

The mechanical components in the wet well includes two 80 gallons per minute (gpm) Flygt pumps with 2.7 HP motors. The pumps provide a TDH (total dynamic head) of 22.5 feet. Kapur does not recommend replacing the pumps as they are still working as designed.

The mechanical components in the valve vault includes four plug valves, two swing check valves and ductile iron piping. The piping and valves are in good condition and replacement is not recommended.

Infiltration and Inflow (I&I) is expected to be a major cause of large flows at this lift station. During the beginning of rainfall events, flows at the lift station tend to increase drastically. Kapur recommends an I&I investigation at this location to identify how I&I is entering the system.

A pump bypass is not available for this lift station and is not required. Kapur recommends that standpipes should be installed and connected to the wet well to provide a bypass if the pumps were out of service for an extended length of time. When the pumps are not working in an emergency, stand pipes will allow for easy and fast connections to the city owned portable pump. The nearest manhole for discharge to with a hose is about 880 feet away. Discharging to this manhole with a hose is not recommended.

Electrical Components

The existing control operating system has reached the end of its useful life. Kapur recommends that the control system should be updated. New controls will provide a screen that will display the condition of the lift station in real time. A new SCADA monitoring system should be installed with the new controls. The SCADA system will record and store operational information about the lift station that can be accessed by the owner on a secure website. The system would also provide immediate alarm notification via text and email. Kapur recommends an Antx Aquavx Scout cellular alarm dialer as a cost-effective system.

Floats are currently being used in the wet well as a level sensor. Kapur recommends replacement of the floats with a pressure transducer. Pressure transducers provide an accurate reading and are easy to install. The floats can be used as a backup system for high level alarm.

The generator at the Baypoint Lift Station is 10-12 years old and continues to run as intended (Figure 5). Outside generators typically last around 20 years before they should be replaced. The Baypoint generator has an estimated 8-10 years left before replacement would be recommended. Kapur recommends that this generator should be moved to the Hermitage Lift Station and a new indoor generator be purchased for this site. A new control building is recommended at this site and a newly purchased generator should be put in this new building. Generators should continue to be run weekly.

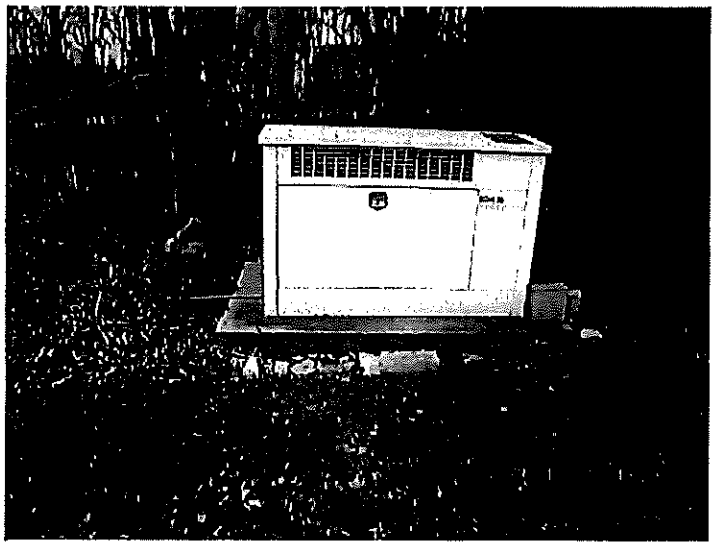


Figure 5: Baypoint Lift Station Generator

Kapur recommends that a new heated control building should be constructed to replace the existing structure (Figure 6). The new building would house the control equipment and the new generator, like the Lake Drive Lift Station. The enclosed structure will extend the life of the generator by providing protection from the elements. The structure will be located above the floodplain to prevent flooding in the control building. This has been a problem at the site in the past. Existing easements will need to be analyzed during design to ensure adequate space is available for a new structure. If space is not available, easement discussion with local property owners would be required to increase the size of the existing easement for a new building. The control building will be designed to be above flood level to eliminate the existing flooding issue at this location.

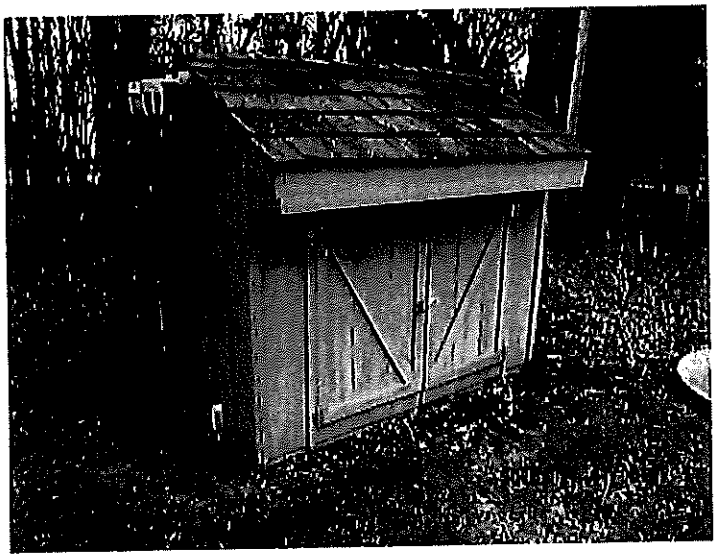


Figure 6: Baypoint Lift Station Control Building

3. CONCLUSION

Possible recommendations for the Bayside lift stations are listed in Table 1. Costs per recommendation are provided.

Table 1: Possible Recommendations for Bayside Lift Stations

Recommendation	Cost
New control building (to house controls and generator)	$85,000
New control building (to house controls only)	$45,000
Replace generator	$35,000
New controls with pressure transducers	$25,000
New SCADA	$6,000
I&I investigation	$6,000
Relocated generator	$5,000
New standpipe	$5,000
Inverted "J" tube for ventilation	$800

Hermitage Lift Station:

Kapur recommendations are listed in Table 2 for the Hermitage Lift Station. The lift station does not require a new generator if the Bay Point Lift Station is relocated to this site. A new control building is recommended for the new controls but is not required to house the generator. These options alleviate the most issues and increase the life of the new equipment while decreasing maintenance costs to the equipment. An I&I investigation at this location should be conducted to identify how I&I is entering the system.

Table 2: Hermitage Lift Station Recommendations

Recommendation	Cost
New control building (to house controls only)	$45,000
New controls with pressure transducers	$25,000
New SCADA	$6,000
I&I investigation	$6,000
Relocated generator	$5,000
New standpipe	$5,000
Inverted "J" tube for ventilation	$800
Total:	**$92,800**

Bay Point Lift Station:

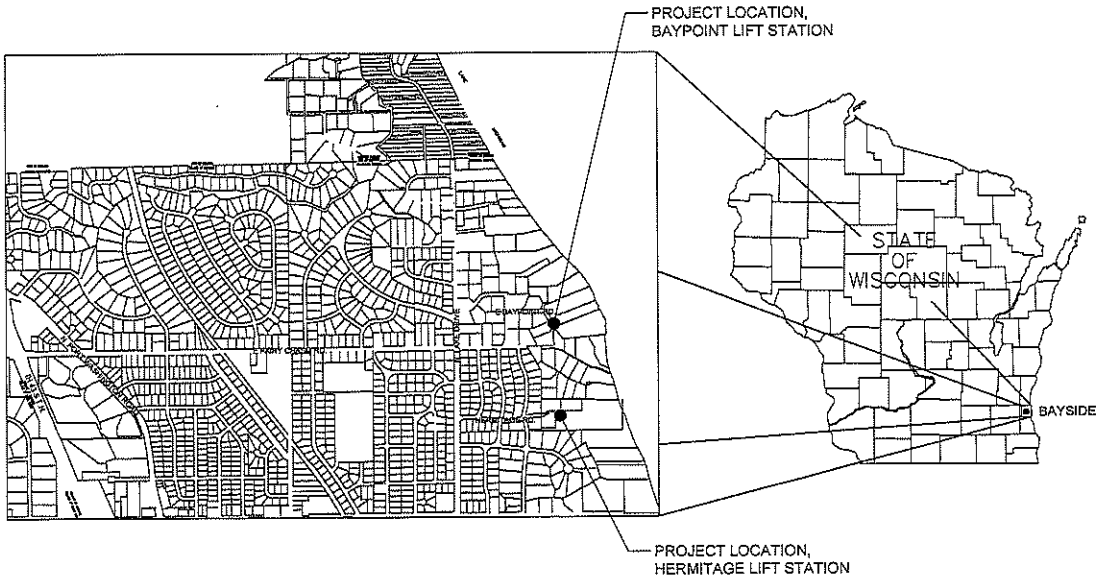
Kapur recommendations are listed in Table 3 for the Baypoint Lift Station. The current generator at this site should be relocated to the Hermitage Lift Station site and a new generator purchased. The generator and new controls should be housed in a new control building to be constructed at this site. These options alleviate the most issues and increase the life of the new equipment while decreasing maintenance costs to the equipment. An I&I investigation at this location should be conducted to identify how I&I is entering the system.

Table 3: Baypoint Lift Station Recommendations

Recommendation	Cost
New control building (to house controls and generator)	$85,000
Replace generator	$35,000
New controls with pressure transducers	$25,000
New SCADA	$6,000
I&I investigation	$6,000
New standpipe	$5,000
Inverted "J" tube for ventilation	$800
Total:	**$162,800**

HERMITAGE AND BAYPOINT LIFT STATION GENERATOR PROJECT

BAYSIDE, WISCONSIN



LOCALITY MAP

INDEX TO DRAWINGS

BID AND CONSTRUCTION SET 3/2020

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET: COVER

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: G-1

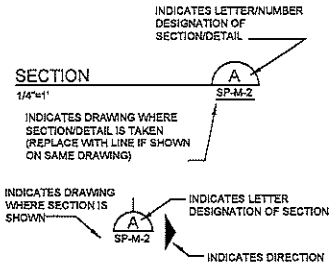
SHEET NUMBER: 1

CIVIL LEGEND

EXISTING	PROPOSED	
		FORCE MAIN
		SANITARY SEWER AND MANHOLE
		WATER MAIN, HYDRANT AND VALVE
G	G	GAS MAIN
T	T	UNDERGROUND TELEPHONE CABLE
E	E	UNDERGROUND ELECTRIC CABLE
		EDGE OF CONCRETE
		EDGE OF BITUMINOUS PAVEMENT
800 / 801	800 / 801	CONTOUR LINE
5+00	5+00	℄ STATIONING
		ROAD
		CULVERT
		STORMWATER INLET
		ELECTRICAL MANHOLE
		ELECTRICAL HANDHOLE
		AREA-LIGHTING BASE
		DRAINAGE WAY OR DITCH
		MATCH LINE AND BREAK LINE
		ALUMINUM HANDRAIL
		STRUCTURE
		FENCE
		POWER POLE WITH GUY SUPPORT

	BITUMINOUS CONCRETE PAVEMENT
	GRAVEL SHOULDER
	CONCRETE WALK
	CONTROL POINT
	BENCHMARK
	EXISTING GRADE } IN PROFILE
	ESTABLISHED GRADE } IN PROFILE
	RAILROAD TRACKS
	SIGN
P/L	PROPERTY LINE
R/W	RIGHT-OF-WAY LINE
	EASEMENT LINE
	BASELINE
	SURVEY REFERENCE LINE
	CHAIN-LINK RAILING
	POST OR GUARD POST
	TREE REMOVAL
	WOODED AREA
	RESTORATION TOPSOIL W/ SEED
	ABANDONED PIPES
	PIPES TO BE ABANDONED
B-1	BORING LOCATION
	PROPOSED SILT FENCE

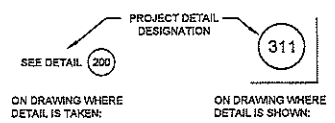
SECTION DESIGNATION



PROJECT DETAIL DESIGNATION

PROJECT DETAIL NUMBERING DESIGNATION

CIVIL	100	THRU 199
ARCHITECTURAL	200	THRU 299
STRUCTURAL	300	THRU 399
MECHANICAL	400	THRU 499
HVAC	500	THRU 599
I&C	600	THRU 699
ELECTRICAL	700	THRU 799



PIPE IDENTIFICATION

PF	FIRE PROTECTION
PW	POTABLE WATER
XN	SANITARY
WS	SERVICE WATER
XW	WASTE WATER
SS	STORM SEWER
FM	FORCE MAIN
S	SANITARY SEWER
W	WATER MAIN
	WETLAND
	REMOVAL

CURVE DATA

R = RADIUS L = LENGTH

Δ = DELTA ST = SEMITANGENT

ABBREVIATIONS

A	AIR (PLANT UTILITY)
AL	ALUMINUM
BRG.EL	BEARING ELEVATION
CHWR	CHILLED WATER RETURN CHILLED
CHWS	WATER SUPPLY
C/L	CENTER LINE
CO	CLEAN OUT
CONC.	CONCRETE
CJ	CONTROL JOINT
CMP	CORRUGATED METAL PIPE
CW	COLD WATER
CMU	CONCRETE MASONRY UNIT
D	DRAIN
DCT	DECANT
D.I.	DUCTILE IRON
DIPS	DUCTILE IRON PIPE SIZE
DS	DIGESTED SLUDGE
EL	ELEVATION
ELEC	ELECTRICAL
E.S.	EACH SIDE
EXIST	EXISTING
E.W.	EACH WAY
F.F.EL	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
G	NATURAL GAS
GALV.	GALVANIZED
HW	HOT WATER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
INSUL.	INSULATION
OC	ON CENTER
PD	PLANT DRAIN
PL	PLATE
RD	ROOF DRAIN
RDGR	REDUCER
R.O.	ROUGH OPENING
SAN	SANITARY
SE	SECONDARY EFFLUENT
SS	STORM SEWER
SST	STAINLESS STEEL
T.O.F	TOP OF FOOTING
T.O.W.	TOP OF WALL
V.I.F	VERIFY IN THE FIELD
V	VENT
WAS	WASTE ACTIVATED SLUDGE
WWM	WELDED WIRE MESH
Ø	DIAMETER

NOTES:

1. THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE USED ON THE PLANS.
2. EXISTING PIPING, EQUIPMENT, STRUCTURE, AND TOPOGRAPHY ARE SHOWN SCREENED AND/OR LIGHT LINED. NEW PIPING, EQUIPMENT, STRUCTURE, AND FINISHED GRADE ARE SHOWN HEAVY-LINED.

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

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BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET:
CIVIL LEGEND

DESIGNED BY:	--
DRAWN BY:	--
CHECKED BY:	--
APPROVED BY:	--
PROJECT NO:	--
DRAWING NO:	---

SHEET NUMBER:
2

FILENAME: S:\Mke_Civil\Projects\CIVIL\10270 - The Lift, Harbors Upgrade (Bay Point, and Hamilton)\Sheets\G. GENERAL SHEETS.dwg

PLUMBING LINE SCHEDULE

LINE TYPE	DESCRIPTION	ABBREVIATION
———	COLD WATER	CW
———	HOT WATER	HW
- - - - - -	SOFT WATER	SW
———	HOT WATER RETURN	HWR
———	VENT	V
———	DRAIN (SANITARY SEWER)	D
———	STORM SEWER	SS
——— G ———	NATURAL GAS	G
——— CW ———	POTABLE WATER	CW
——— W2 ———	NON-POTABLE WATER	W2
——— FE ———	PLANT WATER (FINAL EFFLUENT)	FE
——— PS ———	PROCESS PIPING	PS

MATERIAL LEGEND

SYMBOL	LEGEND
	CONCRETE
	CMU PLAN
	CMU SECTION
	METAL STUD WALL PLAN
	RIGID INSULATION
	BATT INSULATION
	PLYWOOD
	STEEL
	MASONRY VENEER
	WOOD, ROUGH NON-CONTINUOUS
	WOOD, FINISHED
	GROUND SURFACE
	COMPACTED STRUCTURAL FILL
	CONCERT FILL
	DRAIN FILL
WALL — FEXT X	FIRE EXTINGUISHER "X" = No. IN SPECS
WALL — ②	INDICATES 1 HOUR FIRE RATED CONST.
WALL — ②	INDICATES 2 HOUR FIRE RATED CONST.

HEATING, VENTILATING, AND AIR CONDITIONING SYMBOLS

SYMBOL	DESCRIPTION
HWS	LOW TEMPERATURE HEATING WATER SUPPLY
HWR	LOW TEMPERATURE HEATING WATER RETURN
G	NATURAL GAS
D	COIL CONDENSATE DRAIN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
	DUCT RISE THRU PLANE OF VIEW
	SUPPLY DUCT DROP
	EXHAUST/RETURN DUCT RISE THRU PLANE OF VIEW
	EXHAUST/RETURN DUCT DROP
12x12 RG-1 700 CFM	RETURN GRILLE (TYPE, QTY, SIZE, CFM)
(6)12"MCD-1 1000 CFM EA.	ROUND SUPPLY DIFFUSER (TYPE, QTY, SIZE, CFM)
(3)12x12 CD-3 1000 CFM EA.	RECTANGULAR SUPPLY DIFFUSER (TYPE, QTY, SIZE, PATTERN, CFM)
24x12 DG-1 700 CFM	DOOR GRILLE (TYPE, SIZE, CFM)
BDD	BACKDRAFT DAMPER
	FIRE DAMPER HORIZONTAL POS. VERTICAL POS. SMOKE DAMPER
	ACCESS DOOR
	CEILING DIFFUSER IN FIRE RATED CEILING
	ELBOW WITH TURNING VANES
	FLEXIBLE DUCT CONNECTION
	TERMINAL UNIT, VAV
	BOOSTER COIL WITH ACCESS DOORS
24/12	RECTANGULAR DUCT
24Ø	ROUND DUCT
	ACOUSTICALLY LINED DUCT
	DUCT SECTION, SUPPLY
	DUCT SECTION, EXHAUST/RETURN
R	RISER (R) OR DROP (D) IN DIRECTION OF FLOW

	SPLITTER DAMPER
	MANUAL VOLUME DAMPER
MOD	MOTORIZED CONTROL DAMPER (PARALLEL BLADE INDICATED)
	GATE VALVE, RISING STEM
	GLOBE VALVE, RISING STEM
	BUTTERFLY VALVE
	BALL VALVE, 2-PIECE
	BALANCE VALVE, CALIBRATED
	NEEDLE VALVE
	CHECK VALVE, SWING
	DRAIN VALVE, HOSE END
	GAS COCK
	CONTROL VALVE, 2-WAY, PNEUMATIC
	CONTROL VALVE, 3-WAY
PR	PRESSURE REDUCING VALVE
	RELIEF OR SAFETY VALVE
	AIR VENT, MANUAL
	TEE, HORIZONTAL
	TEE, TOP TAKEOFF
	TEE, BOTTOM TAKEOFF
	TEE, 45° UP TAKEOFF
	ELBOW, UP
	ELBOW, DOWN
	PIPE RISE
	PIPE DROP
	REDUCER, CONCENTRIC
	PIPE CAP
	PIPE BLIND FLANGE
	PIPE UNION
	PIPE FLANGE
	ELBOW, HORIZONTAL
	FLEXIBLE CONNECTOR, BRAIDED HOSE
	STRAINER
	INSERTION WELL
	PRESSURE GAUGE
	THERMOMETER
	P/T PLUG
FS	FLOW SWITCH
P	PRESSURE SWITCH
A	AQUASTAT
T	THERMOSTAT
T	TEMPERATURE
H	HUMIDITY
	VELOCITY

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO COLUMN GRID ON CENTERLINES, NOMINAL SURFACE OF MASONRY, FACE OF STUDS AND FACE OF CONCRETE WALLS.
2. "FIRST FLOOR EL" REFERS TO TOP OF CONCRETE SLABS, FINISH FLOORING IS INSTALLED ABOVE THE FLOOR LINE FOR DEPRESSED FLOORS AND CURBS, SEE STRUCTURAL DRAWINGS.
3. REPETITIVE FEATURES ARE NOT DRAWN IN THEIR ENTIRETY AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
4. WHERE DOOR IS LOCATED NEAR CORNER OF ROOM AND IS NOT LOCATED BY DIMENSION ON PLAN OR DETAILS, DIMENSION SHALL BE 4-INCHES FROM FACE OF MASONRY (WALL) AND 2" FROM FACE OF METAL STUD WALL TO FACE OF ROUGH OPENING.
5. AT SOUND INSULATED WALLS, FULL HEIGHT PARTITIONS SHALL BE SEALED BOTH SIDES WITH ACOUSTIC SEALANT; TOP, BOTTOM, INTERSECTIONS, DOOR FRAMES, GLAZED OPENING FRAMES, AND OTHER PENETRATIONS.
6. LINE OF EXISTING GRADES, AS SHOWN ON THE BUILDING ELEVATIONS AND SECTIONS ARE APPROXIMATE. THEY ARE AT THE BUILDING FACE, OR ON THE SECTION END EXCEPT AS NOTED.
7. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS CONTRACT, OR BY OTHERS.
8. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND OTHER CATEGORIES OF DRAWINGS FOR ADDITIONAL NOTES.
9. VERIFY SIZE AND LOCATION OF, AND PROVIDE: ALL OPENINGS THROUGH FLOORS AND WALLS, ACCESS DOORS, FURRING, CURBS, ANCHORS AND INSERTS, PROVIDE ALL BASES, BLOCKING REQUIRED FOR ACCESSORIES, MECHANICAL, ELECTRICAL AND OTHER EQUIPMENT.

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET: ARCHITECTUAL LEGEND

DESIGNED BY:	—
DRAWN BY:	—
CHECKED BY:	—
APPROVED BY:	—
PROJECT NO:	—
DRAWING NO:	—

SHEET NUMBER: 3

FILENAME: S:\Mfr_Dy\Bayside\(20)\130220 - Two Lift Stations Upgrade (Bay Point and Hereford)\Design\G_GENERAL SHEETS.dwg

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	NAMEPLATE OR LEGEND PLATE - SEE SCHEDULE
2-[2"C-E]	INDICATES TWO 2" EMPTY CONDUITS
MCC-A	MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME OR IDENTIFYING SYMBOL AS SHOW
	BRANCH CIRCUIT PANEL
MH	ELECTRICAL MANHOLE
HH	ELECTRICAL HANDHOLE
PB	ELECTRICAL PULLBOX
(3)	MOTOR, SQUIRREL CAGE INDUCTION-HORSEPOWER INDICATED
(1)	LUMINAIRE - SEE SCHEDULE
2	LUMINAIRE - SEE SCHEDULE
(3)	POLE MOUNTED LUMINAIRE - SEE SCHEDULE
(4)	WALL MOUNTED LUMINAIRE - SEE SCHEDULE
	MOTOR OUTLET
	120V FLOOR OUTLET = HUBBELL #B2529 FLOOR BOX WITH STANDARD DUPLEX RECEPTACLE AND #S3925 DUPLEX COVER
	TELEPHONE FLOOR OUTLET = HUBBELL #B2529 FLOOR BOX WITH #S2725 COVER
	TELEPHONE OUTLET, WALL MOUNT WITH 3/4" CONDUIT TO TELEPHONE TERMINAL CABINET (W-INDICATES 54" MOUNTING HEIGHT FOR PHONE)
a	SMALL LETTER SUBSCRIPT ON SWITCH AND LUMINAIRE INDICATES SWITCHING
LA-2	HOME RUN CONDUCTOR-DESTINATION SHOWN FOR EXPOSED CONDUIT, MINIMUM 2#12, 1#12 GND AND IN 3/4" C.
LA-2	HOME RUN CONDUCTOR-DESTINATION SHOWN FOR CONCEALED OR UNDERGROUND CONDUIT
OR	EXPOSED CONDUIT AND CONDUCTORS*
OR	CONCEALED CONDUIT AND CONDUCTORS*

NOTE: *ALL UNMARKED CONDUIT RUNS CONSIST OF TWO NO.12 THW CONDUCTORS IN CONDUIT. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF NO.12 THW WIRE. CROSSHATCH WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.

	CROSSHATCHES WITH BAR INDICATE #10 THW WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.
	CONDUIT, DOWN
	CONDUIT, UP
	CONDUIT, STUBBED AND CAPPED AS SHOWN
CE	UNDERGROUND CONCRETE ENCASED CONDUIT
S	WALL SWITCH: 2-DOUBLE POLE, 3-THREE WAY, 4-FOUR WAY, WP-WATERPROOF, CRE-CORROSION RESISTANT, P-PILOT LIGHT, K-KEY OPERATED, D-DIMMER, LS-LIMIT SWITCH
Sm	MANUAL MOTOR STARTER SWITCH
2	3 POLE MANUAL MOTOR STARTER SWITCH, NEMA TYPE 4 ENCLOSURE
	CONVENIENCE RECEPTACLE-DUPLEX UNLESS INDICATED OTHERWISE. C-COUNTER, R-RETRACTABLE COIL, WP-WEATHERPROOF, CRE-CORROSION RESISTANT, TL-TWIST LOCK, GFI-GROUND FAULT INTERRUPTER WHILE IN USE

SYMBOL	DESCRIPTION
	CONVENIENCE RECEPTACLE, PEDESTAL, DUPLEX SINGLE FACE UNLESS INDICATED OTHERWISE
30	RECEPTACLE-240V, 1-PHASE, AMPERAGE AS INDICATED
	2 DUPLEX GROUNDED RECEPTACLES IN SAME OUTLET BOX WITH DOUBLE DUPLEX PLATE
30	RECEPTACLE, SPECIAL PURPOSE, AMPERAGE AS INDICATED
J OR HH	GENERAL ELECTRICAL CONTROL OR WIRING DEVICE, NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. LETTER SYMBOLS OR ABBREVIATIONS INDICATE TYPE OF DEVICE
PBS	PUSH-BUTTON STATION, NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. (WP=NEMA 4 ENCLOSURE). SEE CONTROL DIAGRAMS FOR TYPE PUSH-BUTTON REQUIRED
DS	CIRCUIT BREAKER DISCONNECT SWITCH
30	NONFUSED DISCONNECT SWITCH, SIZE INDICATED. 3 POLE UNLESS OTHERWISE INDICATED. NEMA 1 ENCLOSURE. (WP=NEMA 3R OR 4X, AS INDICATED ON PLANS)
60/40 F	FUSED DISCONNECT SWITCH, SIZE INDICATED (60/40, 60=SWITCH RATING, 40=FUSE RATING), 3 POLE UNLESS OTHERWISE INDICATED. NEMA 1 ENCLOSURE. (WP=NEMA 3R OR 4X, AS INDICATED ON PLANS)
2	MANUAL STARTER WITH PILOT LIGHT
30 L	LIGHTING CONTRACTOR, CURRENT RATING INDICATED. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. SEE CONTROL DIAGRAM FOR NUMBER OF POLES
	THREE PHASE MAGNETIC STARTER
	THREE PHASE COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH
2	SINGLE PHASE STARTER, MAGNETIC, NEMA SIZE INDICATED. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. SEE CONTROL DIAGRAM
2	COMINATION (FUSE OR CIRCUIT BREAKER AS INDICATED) MAGNETIC STARTER, NEMA SIZE INDICATED. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. SEE CONTROL DIAGRAM
T	TRANSFORMER, RATING AS INDICATED
	CONTACT, NORMALLY OPEN WITH NEMA SIZE INDICATED AS APPLICABLE
	CONTACT, NORMALLY CLOSED WITH NEMA SIZE INDICATED AS APPLICABLE
	OVERLOAD RELAY HEATER
100M	CIRCUIT BREAKER, MAGNETIC TRIP ONLY, CONTINUOUS CURRENT RATING SHOWN. 3 POLE UNLESS OTHERWISE INDICATED
400	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE UNLESS OTHERWISE INDICATED
400 400	CIRCUIT BREAKER WITH CURRENT LIMITING FUSES. TRIP AND FUSE RATING INDICATED, 3 POLE UNLESS OTHERWISE INDICATED
400 225	FUSED SWITCH, SWITCH AND FUSE CURRENT RATING INDICATED. 3 POLE UNLESS OTHERWISE INDICATED
100	SWITCH, CURRENT AND VOLTAGE RATING INDICATED. 3 POLE UNLESS OTHERWISE INDICATED
	FUSE
	GROUND
120V OR	TRANSFORMER, SECONDARY VOLTAGES, PHASE AND RATING INDICATED AS APPLICABLE
120/240V 15 KVA 1Ø	
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY CLOSED
A	PUSH-BUTTON, SWITCH, MAINTAINED CONTACTS WITH MECHANICAL INTERLOCK

SYMBOL	DESCRIPTION
	SELECTOR SWITCH, MAINTAINED CONTACT
TDR TC	TIME DELAY RELAY CONTACT, NORMALLY OPEN — TIME ACTION INDICATED
TDR TO	TIME DELAY RELAY CONTACT, NORMALLY CLOSED — TIME ACTION INDICATED
	CONTACT FROM REMOTE DEVICE SELECTOR SWITCH-MAINTAINED CONTACT-CHART
H. O. A.	DEFINES OPERATION:

CKT.	POSITION HAND	OFF	AUTO
1	X	O	O
2	O	O	X

X - CLOSED CONTACT
O - OPEN CONTACT

A	INDICATING LIGHT, PUSH-TO-TEST, LETTER INDICATES COLOR
A	INDICATING LIGHT - LETTER INDICATES COLOR: A - AMBER, B - BLUE, C - CLEAR, G - GREEN, R - RED, W - WHITE
	LIGHTNING ARRESTER
$	WALL SWITCH:
X-Y-Z	INCANDESCENT FIXTURE - SURFACE, WALL MOUNTED; X = FIXTURE TYPE, Y = CIRCUIT, Z = SWITCH
X-Y-Z	HIGH INTENSITY DISCHARGE - SURFACE, WALL MOUNTED; X = FIXTURE TYPE, Y = CIRCUIT, Z = SWITCH

1PR #16TS 1PAIR #16 AWG, TWISTED AND SHIELDED SEE SPECIFICATIONS.

ELECTRICAL ABBREVIATIONS & LETTER SYMBOLS

A	AMPERES OR ANALOG SIGNAL	LSL	LOW LEVEL SWITCH
AC	AIR CONDITIONER	LT	LEVEL TRANSMITTER
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
AHP	AIR, HIGH PRESSURE	MIN	MINIMUM
ALP	AIR, LOW PRESSURE	M1	MOTOR NO. 1 STARTER
ALT	ALTERNATING RELAY	MIS	METROPOLITAN INTERCEPTOR SEWER
CB	CIRCUIT BREAKER		
CAP	SURGE CAPACITOR	NTB	COMMUNICATIONS NETWORK TERMINATION BOX
CE	CONCRETE ENCASED		
CHBR	CHAMBER	OC	OPEN-CLOSED
CS	COMBINED SEWER	OD	OUTSIDE DIAMETER
CSO	COMBINED SEWER OVERFLOW	OL	MOTOR THERMAL OVERLOAD
CR	CONTROL RELAY	OSC	OPEN-STOP-CLOSE
CYL	CYLINDER	P	PUMP
DM	DAMPER MOTOR	PF	PROPELLER FAN
EF	EXHAUST FAN	PH	PHASE
EXP	EXPLOSION PROOF	P&ID	PROCESS & INSTRUMENTATION DIAGRAM
FG	FLOW GATE		
FCG	FLOW CONTROL GATE	PNL	PANEL
FO	FULL OPEN	PP	POWER PANEL
FR	FLOW REGULATOR, VORTEX TYPE	PSLL	LOW PRESSURE SWITCH (ALARM)
FSS	FUSED SAFETY SWITCH	PSL	LOW PRESSURE SWITCH
FV	FLOW VALVE	PSH	HIGH PRESSURE SWITCH
G	GROUND	PSHH	HIGH PRESSURE SWITCH (ALARM)
GEN	GENERATOR	QL	INDICATING LIGHT
GFI	GROUND FAULT INTERRUPTER	RA	REVERSE ACTING
GND	GROUND	RCPT	RECEPTACLE
HPU	HYDRAULIC POWER UNIT	RGS	RIGID GALVANIZED STEEL
HS	HAND SWITCH	RTU	REMOTE TELEMETRY UNIT
HYD	HYDRAULIC	SA	SAMPLE
ID	INSIDE DIAMETER	SST	STAINLESS STEEL
IND	INDICATING	SV	SOLENOID VALVE
ISB	INTRINSICALLY SAFE BARRIER	T	THERMOSTAT
ISR	INTRINSICALLY SAFE RELAY	TSP	TWISTED SHIELDED PAIR
JSL	VOLTAGE/PHASE CONDITION MONITORING RELAY	TYP	TYPICAL
		3PDT	THREE POLE DOUBLE THROW
KWH	KILOWATT-HOUR METER	UH	UNIT HEATER
KQI	ELAPSED TIME METER	UGND	UNDERGROUND
L	LOUVER	UPS	UNINTERRUPTIBLE POWER SUPPLY
LA	LIGHTNING ARRESTER	V	VOLTS
LCP	LOCAL CONTROL PANEL (SITE NUMBER BEFORE LCP DENOTES LOCATION)	WE	WE ENERGIES
		WP	WEATHER PROOF
LE	LEVEL ELEMENT	XFMR	TRANSFORMER
LI	LEVEL INDICATOR	ZE	POSITION ELEMENT
LP	LIGHTING PANEL (NUMBER BEFORE LP DENOTES LOCATION)	ZL	POSITION INDICATING LIGHTS
		ZS	POSITION (LIMIT) SWITCH
LR	LOCAL REMOTE	ZT	POSITION TRANSMITTER

NOTE:

1. THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE USED ON THE PLANS.

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DESIGNED BY:	—
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GENERAL NOTES

HORIZONTAL AND VERTICAL CONTROL

1. DESCRIPTIONS AND VALUES OF HORIZONTAL AND VERTICAL CONTROLS ARE AVAILABLE FROM THE ENGINEER.

SITE PLANS

1. THE CONTRACTORS ARE TO VERIFY THE LOCATION, DIMENSIONS, AND ELEVATIONS OF ALL EXISTING STRUCTURES, PIPING, UNDERGROUND WIRING, CABLES, ETC., WHICH HAVE ANY BEARING OR RELATION TO NEW CONSTRUCTION, EQUIPMENT, OR PIPING UNDER HIS CONTRACT.
2. THE CONTRACTOR IS TO VERIFY & OR DETERMINE & PROVIDE ALL REQUIRED FITTINGS FOR VERTICAL CHANGES IN ELEVATION AS WELL AS IN DIRECTION OF ALL NEW OUTSIDE PIPING. ALL OUTSIDE PIPING IS TO BE LAID ON FIRM FOOTING (SEE SPECIFICATIONS).
3. TEMPORARY RELOCATION AND SUPPORT OF ALL UTILITIES SHALL BE DONE ACCORDING TO SPECIFICATIONS.
4. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS. THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL OTHER DISTURBED OR GRADED AREAS SHALL STABILIZED WITHIN FOURTEEN CALENDAR DAYS.
5. ALL SEWER AND WATER CONSTRUCTION SHALL MEET STANDARDS SET BY THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION DECEMBER 22 2003 INCLUDING ADDENDUMS. (EXCEPT AS NOTED)
6. ALL EXISTING PIPING WHICH IS TO BE ABANDONED SHALL BE PLUGGED WITH CONCRETE AT ALL POINTS EXPOSED DURING CONSTRUCTION.
7. THE INFORMATION IN THIS PLAN SET IS THE BEST INFORMATION AVAILABLE THE CONTRACTOR MUST VERIFY ALL INFORMATION IN THE FIELD.

UNDERGROUND PIPING

ALL CONSTRUCTION SHALL MEET STANDARDS IN THE CONTRACT DOCUMENTS, "WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER" AND "DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION", LATEST EDITION AND AMENDMENTS.

RESTORATION

1. RESTORATION TOPSOIL 4" MIN, FERTILIZE, SEED AND MAT ALL AREAS DISTURBED BY CONSTRUCTION. CONTRACTOR TO WATER AND MAINTAIN FOR A MIN. OF 30 DAYS.

REINFORCED CONCRETE

1. REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318.89)" AND ACI COMMITTEE 350 REPORT NO. 350R-89 "CONCRETE SANITARY ENGINEERING STRUCTURES."
2. DESIGN COMPRESSIVE STRENGTH FOR CAST-IN-PLACE CONCRETE AT 28 DAYS:

   f'c = 4,000 PSI AS THE BASIC DESIGN STRENGTH.

   f'c = 50 PSI FOR CELLULAR CONCRETE BACKFILL TO PIPING, AND BLOCKS.
3. DESIGN CONCRETE STRESSES FOR SANITARY STRUCTURES SHALL BE LIMITED TO THE SERVICE LOAD RECOMMENDED VALUES IN TABLE 2.6.7b OF ACI 350 "CONCRETE SANITARY ENGINEERING STRUCTURES."
4. DESIGN STRENGTH FOR REINFORCING STEEL: REINFORCEMENT SHALL BE DEFORMED BILLET STEEL BARS CONFORMING TO ASTM-A615, GRADE 60, Fy = 60,000 PSI AS THE BASIC DESIGN STRENGTH FOR ALL SANITARY CONCRETE STRUCTURES.
5. REINFORCEMENT DETAILS SHALL CONFORM TO THE REQUIREMENTS OF THE "ACI DETAILING MANUAL". SPLICES AND EMBEDMENT LENGTHS NOT GIVEN ON THE CONTRACT DRAWINGS SHALL BE ASSUMED TO BE IN TENSION AND SHALL CONFORM TO THE REQUIREMENTS OF THE ABOVE CODE.
6. BAR BENDS AND HOOKS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE "ACI DETAILING MANUAL."
7. BAR BENDS AND DEVELOPMENT LENGTH SHALL BE AS SHOWN ON THE CONTRACT DRAWINGS OR IN ACCORDANCE WITH REQUIREMENTS OF ACI 318.
8. SPACING OF BARS SHOWN ON THE CONTRACT DRAWINGS SHALL BE A MAXIMUM.
9. MECHANICAL CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.
10. COLD-DRAWN STEEL WIRE SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS FOR WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT (ASTM-A185 AND A82):

    YIELD STRENGTH, Fy = 60,000 PSI.
    ALLOWABLE STRESS fs = 30,000 PSI.
11. CONSTRUCTION JOINTS AND REINFORCING STEEL SPLICES SHALL BE WHERE SHOWN ON THE CONTRACT DRAWINGS. OPTIONAL HORIZONTAL OR VERTICAL CONSTRUCTION JOINTS MAY BE PROPOSED BY THE CONTRACTORS, SUBJECT TO THE APPROVAL OF THE ENGINEER.

WOOD TRUSSES

1. ALL WOOD TRUSSES SHALL HAVE A MAX. 19% MOISTURE CONTENT, CONTRACTOR SHALL PROVIDE ALL ACCESSORIES FOR INSTALLATION
2. ALL FASTENERS AND ANCHORS SHALL BE HOT DIPPED GALVANIZED.

ASPHALT SHINGLES

1. ROOFING MATERIALS SHALL BE ASPHALT SHINGLES WITH FIBERGLASS CORE, WITH 40 YEAR WARRANTY, SHINGLES. CONTRACTOR TO SUBMIT SAMPLES TO OWNER FOR APPROVAL, TIMBERLINE OR EQUAL.
2. SHEET FLASHING SHALL CONFORM TO ASTM B209.

REINFORCING DETAILS

1. UNLESS OTHERWISE SHOWN, CONCRETE WALLS AND SLABS SHALL BE REINFORCED AS FOLLOWS: #4 @ 12 INCHES EACH WAY CENTER OF 6 INCH SECTIONS; #5 @ 12 INCHES EACH WAY CENTER OF 8 INCH SECTIONS; #4 @ 12 INCHES EACH WAY EACH FACE OF 10 INCH SECTIONS; #5 @ 12 INCHES EACH WAY EACH FACE OF 12 INCH SECTIONS. SINGLE MAT REINFORCEMENT SHALL BE AT CENTER OF SECTION, UNLESS SHOWN OTHERWISE.
2. MINIMUM CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE 3 INCHES WHEN PLACED ON GROUND; FOR SURFACES EXPOSED TO WATER OR WEATHERING, 2 INCHES CLEARANCE ; INTERIOR BEAMS AND COLUMNS 1-1/2 INCH CLEARANCE.
3. UNLESS OTHERWISE NOTED, ALL WALL REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTION WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS. VERTICAL WALL BARS SHALL BE LAPPED WITH DOWELS FROM BASE SLABS. UNLESS INDICATED OTHERWISE, CONTRACTOR MAY SPLICE CONTINUOUS SLAB OR LONGITUDINAL BEAM BARS AT LOCATIONS OF HIS CHOOSING, EXCEPT THAT TOP BAR SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES SHALL BE LOCATED AT SUPPORTS.
   STAGGER ADJACENT SPLICES PER ACI 318 WITH A MINIMUM OF 2'-0". ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENT:

REINFORCEMENT BAR LAP SPLICES

LAP LENGTH * - INCHES

BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
A. HORIZONTAL BARS SO PLACED THAT MORE THAN 12-INCHES OF CONCRETE WILL BE CAST BELOW THE BARS.	17	24	29	35	45	59	74	94	116
B. HORIZONTAL BARS SO PLACED THAT LESS THAN 12-INCHS OF CONCRETE WILL BE CAST BELOW THE BARS, AND VERTICAL BARS.	17	16	21	25	32	42	53	67	83

* THE LAP LENGTH FOR REINFORCEMENT BARS SPACED LESS THEN 6-INCHES ON CENTER SHALL BE INCREASED BY 25 PERCENT. WHERE A SMALLER BAR LAPS WITH A LARGER BAR, THE LAP LENGTH FOR THE SMALLER BAR SHALL GOVERN, UNLESS SHOWN OTHERWISE.

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4

GENERAL NOTES

GENERAL CONSTRUCTION

BENCHMARKS ARE PROVIDED ON PLAN SHEETS, AS NEEDED.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

EXCAVATION BELOW SUBGRADE (EBS), IF DETERMINED BY THE ENGINEER, SHALL BE PAID FOR AS COMMON EXCAVATION. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER. SUCH EBS IS NOT USED TO BALANCE YARDAGE.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

PROPERTY CORNERS: CONTRACTOR SHALL LOCATE, PROTECT AND, IF REMOVED OR DISTURBED, REPLACE PROPERTY CORNERS AT CONTRACTOR'S EXPENSE.

CONCRETE CONSTRUCTION

TRANSVERSE JOINTS IN CONCRETE WALKS SHALL BE CONSTRUCTED AT INTERVALS EQUAL TO THE WIDTH OF THE CONCRETE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

CONCRETE SIDEWALK SHALL BE REMOVED TO NEAREST JOINT, OR SAWCUT BEYOND NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER. MINIMUM LENGTH OF SLAB NOT TO BE LESS THAN 3 FEET, OR HALF THE WIDTH, WHICHEVER IS GREATER.

½-INCH FELT EXPANSION JOINT MATERIAL REQUIRED BETWEEN BACK OF CURB AND FRONT OF WALK, WHERE APPLICABLE.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER ADJACENT TO ASPHALTIC PAVEMENT.

CONCRETE CURB AND GUTTER JOINT SPACING SHALL BE 10 FEET UNLESS AUTHORIZED BY THE ENGINEER.

FOR CONCRETE SIDEWALK, IF SOFT OR UNSTABLE MATERIALS EXIST, EXCAVATE TO SUITABLE MATERIAL, PLACE & COMPACT BASE AGGREGATE DENSE TO PROPER SUBGRADE ELEVATION (PER ENGINEER). COST TO EXCAVATE, UP TO 12" BELOW SUBGRADE, SHALL BE INCIDENTAL TO THE COST OF CORRESPONDING CONCRETE OR CONCRETE REMOVAL ITEM. EXCAVATION OVER 12" WILL BE PAID AS COMMON EXCAVATION. AGGREGATE TO BE PAID FOR UNDER BASE AGGREGATE DENSE ITEM.

EROSION CONTROL NOTES

1. CONTRACTOR TO INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS INDICATED ON THIS PLAN AND PER THE LATEST WDNR TECHNICAL STANDARDS. TECHNICAL STANDARDS MAY BE VIEWED ONLINE AT: HTTP://DNR.WI.GOV/RUNOFF/STORMWATER/TECHSTDS.HTM

2. INLETS AND CATCH BASINS SHALL BE PROTECTED WITH INLET FILTERS THAT ARE PHASED IN WITH CONSTRUCTION TO REDUCE SEDIMENT FROM ENTERING THESE AREAS PER WDNR TECHNICAL STANDARD 1060 AS FOLLOWS:

   A. ALL FABRIC BARRIERS SELECTED FOR INLET/CATCH BASIN PROTECTION DEVICES SHALL BE SELECTED FROM THE LIST OF APPROVED FABRICS CERTIFIED FOR INLET PROTECTION, GEOTEXTILE FABRIC, TYPE FF IN THE CURRENT EDITION OF THE WDOT PRODUCT ACCEPTABILITY LIST, TO OBTAIN THE PAL, PLEASE REFER TO THIS WEBSITE: HTTP://WWW.DOT.WISCONSIN.GOV/BUSINESS/ENGRSERV/PAL.HTM

   B. INLET PROTECTION SHALL BE AT A MINIMUM INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT OF 1/2 INCH OR GREATER DURING A 24-HOUR PERIOD.

   C. PLACEMENT OF SPOIL MATERIAL, DEBRIS, SOILS, ETC. ON TOP OF INLETS/CATCH BASINS, EVEN IF TEMPORARY, IS STRICTLY DISCOURAGED AND PROHIBITED.

   D. SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED BETWEEN 1/3 TO 1/2 THE DESIGN DEPTH OF THE DEVICE, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING PER MANUFACTURER'S SPECIFICATIONS. ALL SEDIMENT COLLECTED SHALL BE PROPERLY DISPOSED OF TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.

   E. DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLETS/CATCH BASINS AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET/CATCH BASIN SHALL BE REMOVED AND PROPERLY DISPOSED OF PER NOTE D ABOVE.

   F. INLET FILTERS MAY BE REMOVED AND PROPERLY DISPOSED OF UPON COMPLETION OF CONSTRUCTION, HAULING OR MOVEMENT OF CONSTRUCTION EQUIPMENT THROUGHOUT THE SITE, AND ONCE THE SITE IS ADEQUATELY STABILIZED, UNLESS AS OTHERWISE NOTIFIED BY THE WDNR.

3. THE CONSTRUCTION SITE PERIMETER AND TOPSOIL STOCKPILE AREA SHALL BE PROTECTED WITH SILT FENCE AS SHOWN ON THE PLAN SHEET PRIOR TO THE START OF CONSTRUCTION TO INTERCEPT AND REDUCE THE FLOW OF SEDIMENT-LADEN SHEET FLOW RUNOFF FROM THE CONSTRUCTION SITE PER WDNR TECHNICAL STANDARD 1056 AS FOLLOWS:

   A. SILT FENCE ENDS SHALL BE EXTENDED UPSLOPE TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE FENCE AS SHOWN ON THE PLAN SHEET.

   B. INSTALLED SILT FENCE SHALL BE A MINIMUM 14 INCHES HIGH AND SHALL NOT EXCEED 28 INCHES IN HEIGHT MEASURED FROM THE INSTALLED GROUND ELEVATION.

   C. SILT FENCE SHALL BE SUPPORTED BY EITHER STEEL OR WOOD SUPPORT POSTS.

   D. THE MAXIMUM SPACING OF POSTS FOR NONWOVEN SILT FENCE SHALL BE 3 FEET OR FOR WOVEN FABRIC 6 FEET.

   E. SILT FENCE SHALL HAVE A SUPPORT CORD AT THE TOP OF THE FENCE.

   F. WHERE JOINTS ARE NEEDED, EACH END OF THE FABRIC SHALL BE SECURELY FASTENED TO A POST. THE POSTS SHALL BE WRAPPED AROUND EACH OTHER TO PRODUCE A STABLE AND SECURE JOINT OR SHALL BE OVERLAPPED THE DISTANCE BETWEEN TWO POSTS.

   G. A MINIMUM OF 20 INCHES OF THE POSTS SHALL EXTEND INTO THE GROUND AFTER INSTALLATION.

   H. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF THE FABRIC IN A 4 INCH WIDE BY 6 INCH DEEP TRENCH, OR 8 INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. THE TRENCH SHALL BE BACKFILLED AND COMPACTED. TRENCHES SHALL NOT BE EXCAVATED ANY WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.

   I. ON THE TERMINAL ENDS OF THE SILT FENCE THE FABRIC SHALL BE WRAPPED AROUND THE POST SUCH THAT THE STAPLES ARE NOT VISIBLE.

   J. GEOTEXTILE FABRIC SPECIFICATIONS SHALL MEET VALUES ESTABLISHED IN TECHNICAL STANDARD 1056.

   K. SILT FENCE SHALL BE REMOVED ONCE THE SITE IS ADEQUATELY STABILIZED.

   L. WHEN PLACING SILT FENCE NEAR TREES, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE ROOT SYSTEM BY AVOIDING COMPACTION AND ROOT CUTTING WITHIN 1.5 FEET MULTIPLIED BY THE INCH DIAMETER OF THE TREE.

   M. THE CONTRACTOR MAY FURTHER STRENGTHEN THE SILT FENCE BY USING HAY BALES ON THE DOWN SLOPE SIDE AS NEEDED.

   N. SILT FENCE SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 1/2 INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD.

   O. DAMAGED OR DECOMPOSED SILT FENCE, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.

   P. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE THE DEPOSITS REACH 1/2 THE HEIGHT OF THE FENCE TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.

4. A COPY OF EROSION CONTROL INSPECTION REPORTS AND THE APPROVED EROSION CONTROL PLANS SHALL BE KEPT ON SITE.

5. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL PRACTICES BY THE END OF EACH WORKDAY.

6. LOCAL ROADS SHALL BE CLEAN BY THE END OF EACH WORKDAY. CONTRACTOR SHALL HAVE LOCAL ROADS SWEPT WHERE SEDIMENT ACCUMULATES.

7. SEEDING AND/OR SODDING TECHNIQUES SHALL BE USED AT AREAS OF EXPOSED SOIL WHERE THE ESTABLISHMENT OF VEGETATION IS DESIRED. TEMPORARY SEEDING APPLIES TO DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND-DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 30 DAYS, REQUIRING VEGETATIVE COVER FOR LESS THAN ONE YEAR. SEED AND EROSION MAT SHALL BE UTILIZED THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH TEMPORARY VEGETATION TO HELP REDUCE EROSION PER WDNR TECHNICAL STANDARDS 1059 AND 1058 RESPECTIVELY AS FOLLOWS:

   A. TEMPORARY SEEDING REQUIRES A SEEDBED OF LOOSE SOIL TO A MINIMUM DEPTH OF 2 INCHES.

   B. FERTILIZER APPLICATION IS NOT GENERALLY REQUIRED FOR TEMPORARY SEEDING.

   C. ALL SEED SHALL CONFORM TO THE REQUIREMENTS OF THE WISCONSIN STATE STATUTES AND OF THE ADMINISTRATIVE CODE CHAPTER ATCP 20.01 REGARDING NOXIOUS WEED SEED CONTENT AND LABELING. SEED SHALL NOT BE USED LATER THAN ONE YEAR AFTER THE TEST DATE ON THE LABEL.

   D. IN THE SPRING AND SUMMER CONTRACTOR SHALL USE OATS APPLIED AT 131 LBS/ACRE FOR TEMPORARY SEEDING PURPOSES. IN THE FALL THE CONTRACTOR SHALL USE WINTER WHEAT APPLIED AT 131 LBS/ACRE. NO MULCH SHALL BE USED ON THIS PROJECT. DORMANT SEED SHALL BE USED WHEN SOIL TEMPERATURE IS CONSISTENTLY BELOW 53 DEGREES FAHRENHEIT (TYPICALLY OCT. 15 UNTIL SNOW COVER ANNUALLY). NEVER PLACE SEED ON TOP OF SNOW. IF COVER IS NEEDED AFTER SNOW FALL, CONTRACTOR MAY CHOOSE TO USE A DRY, NONTOXIC TYPE B SOIL STABILIZER PER MANUFACTURER'S SPECIFICATIONS AS REQUIRED BY THE WDNR. SOIL STABILIZERS SHALL NOT BE USED WITHIN 30 FEET OF WETLANDS OR WATERS.

   E. SEEDING SHALL NOT TAKE PLACE WHEN THE SOIL IS TOO WET.

   F. CONTRACTOR MAY CONSIDER WATERING TO HELP ESTABLISH THE SEED. WATER APPLICATION RATES SHALL BE CONTROLLED TO HELP PREVENT RUNOFF AND EROSION.

   G. DURING CONSTRUCTION, AREAS THAT HAVE BEEN SEEDED AND MATTED SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ¼ INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD. INSPECT WEEKLY DURING THE GROWING SEASON UNTIL VEGETATION IS DENSELY ESTABLISHED OR THE SOD IS PLACED. REPAIR AND RESEED/RESOD AREAS THAT HAVE EROSION DAMAGE AS NECESSARY.

   H. CONTRACTOR IS TO LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED AS MUCH AS POSSIBLE. RESEED DRIVEN OVER AREAS AS NEEDED.

   I. THIS PROJECT SHALL USE URBAN CLASS I, TYPE B (NON-NETTED) EROSION MATTING INSTALLED IN PLACE OF MULCH. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.

REGIONAL UTILITY CONTACTS - FOR INFORMATIONAL PURPOSES

VILLAGE OF BAYSIDE
DEPARTMENT OF PUBLIC WORKS
9075 N. REGENT ROAD
BAYSIDE, WI 53217
ANDY PEDERSON (414) 206-3925

AT&T WISCONSIN
2005 PEWAUKEE RD.
WAUKESHA, WI 53188
JEFF OLDENBURG (414) 412-7047

ATC MANAGEMENT, INC. - ELECTRICITY
W234N2000 RIDGEVIEW PARKWAY
WAUKESHA, WI 53188-1000
ANTHONY MARCINIAK (262) 506-6814

SPECTRUM
1320 N. DR. MARTIN LUTHER KING DR.
MILWAUKEE, WI 53202-4002
STEVE CRAMER (414) 277-4045

WE ENERGIES - GAS/PETROLEUM
333 W. EVERETT ST. ROOM A299
MILWAUKEE, WI 53203
DAN SANDE (414) 221-4576

WE ENERGIES - ELECTRICITY
333 W. EVERETT ST. ROOM A299
MILWAUKEE, WI 53203
LaTROY BRUMFIELD (414) 221-5617 OFFICE
(414) 975-9053 CELL

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW

SCALE: NTS

0 20 40 80

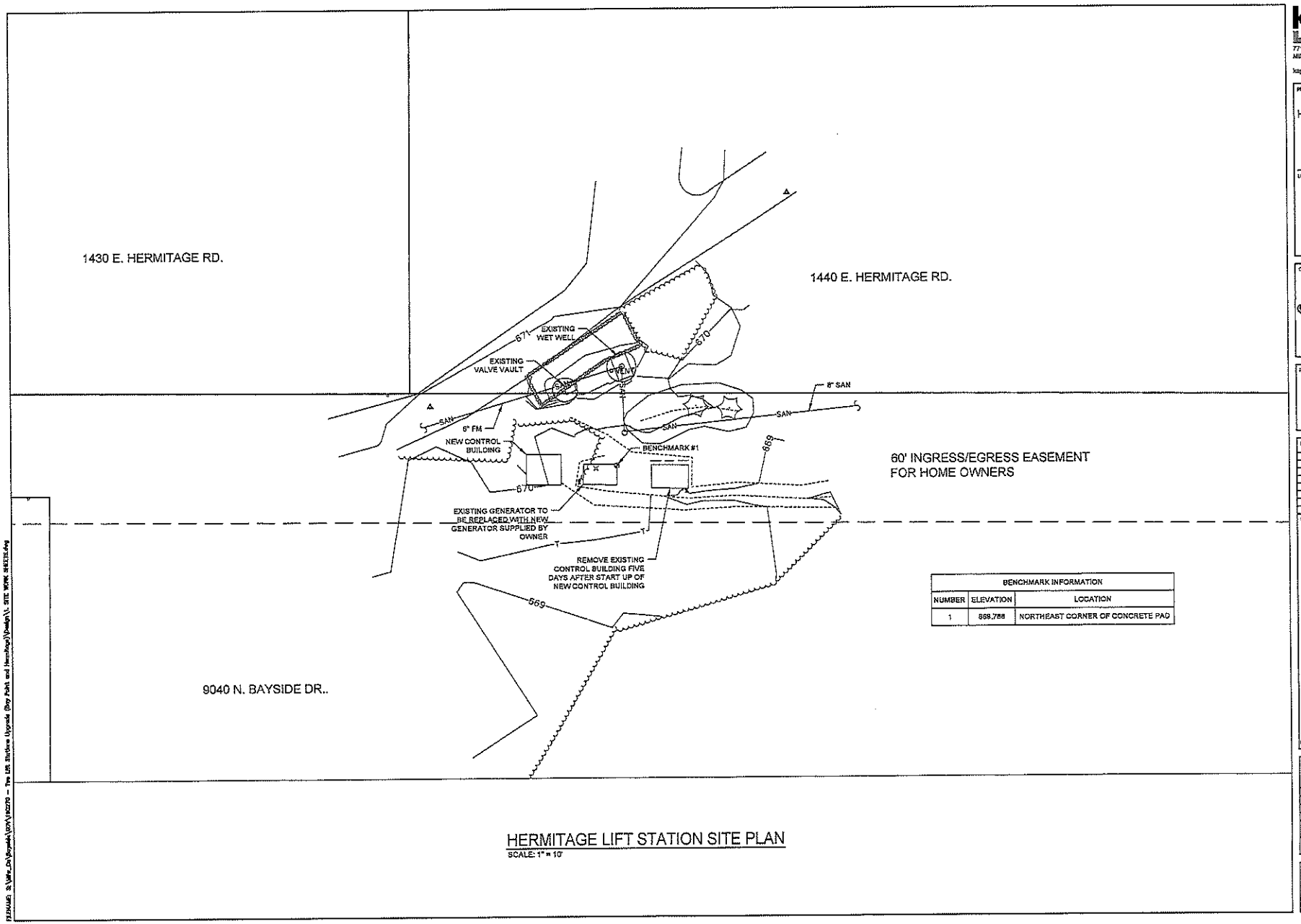
SEAL:

all in

SHEET:
CIVIL NOTES

DESIGNED BY:	—
DRAWN BY:	—
CHECKED BY:	—
APPROVED BY:	—
PROJECT NO:	—
DRAWING NO:	—

SHEET NUMBER:
4



BENCHMARK INFORMATION		
NUMBER	ELEVATION	LOCATION
1	668.788	NORTHEAST CORNER OF CONCRETE PAD

HERMITAGE LIFT STATION SITE PLAN

SCALE: 1" = 10'

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 10'

SEAL:

all in

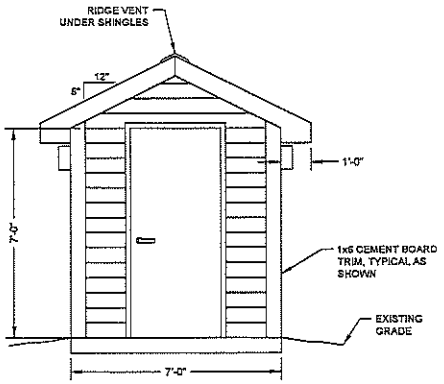
SHEET: HERMITAGE SITE PLAN

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 18.0270.01

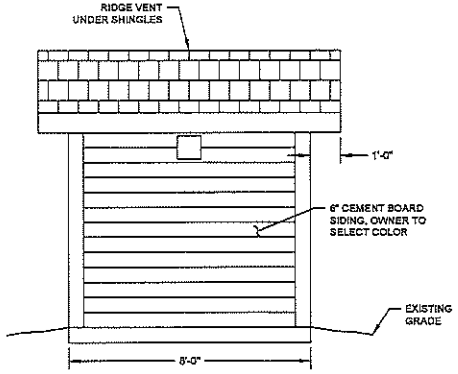
DRAWING NO: LSH-C-1

SHEET NUMBER: 7



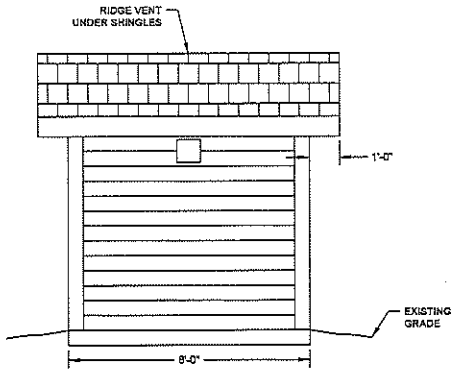
WEST ELEVATION VIEW

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



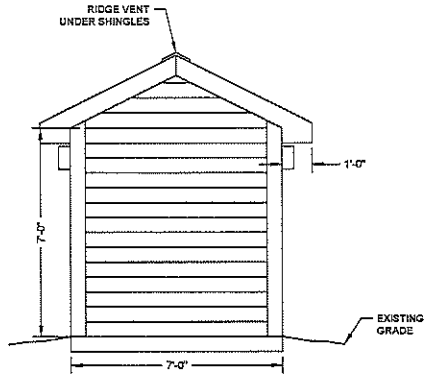
NORTH ELEVATION VIEW

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



SOUTH ELEVATION VIEW

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



EAST ELEVATION VIEW

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

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1/2" = 1'

SEAL:

all in

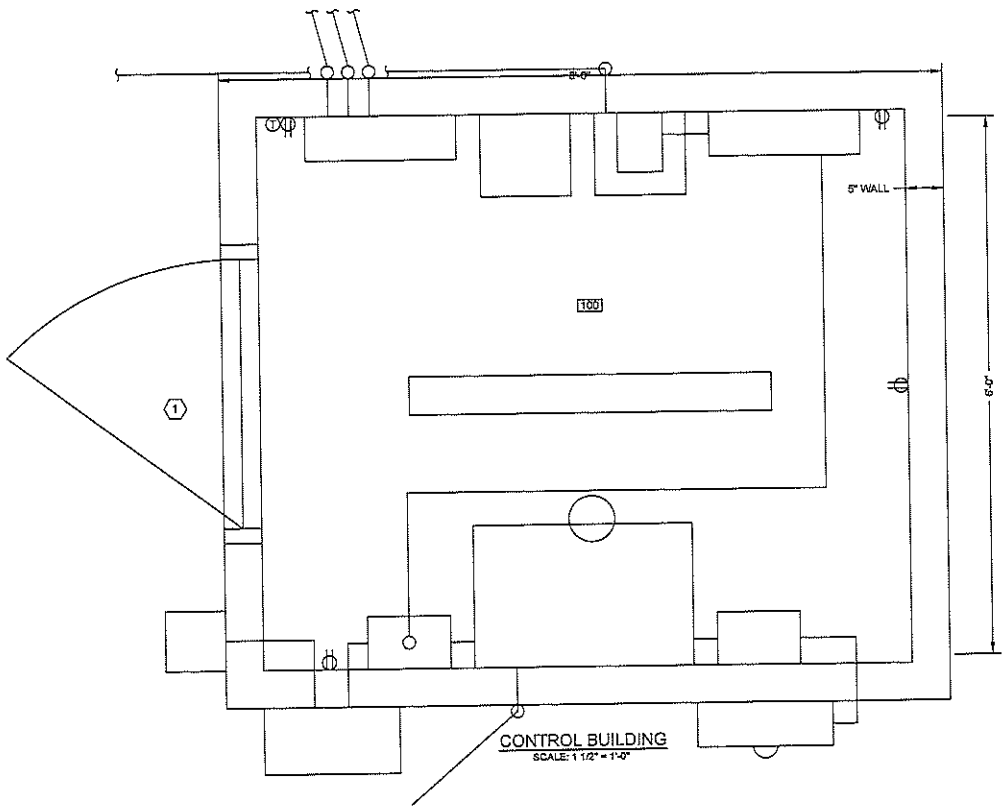
SHEET: HERMITAGE LS EXTERIOR ELEV.

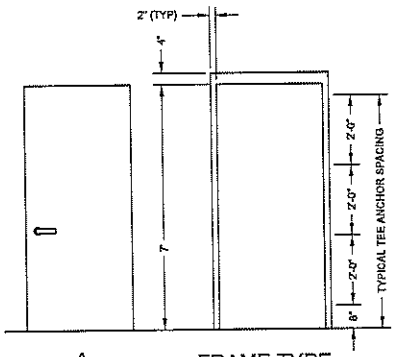
DESIGNED BY:	J.J.G.
DRAWN BY:	J.D.K.
CHECKED BY:	T.A.
APPROVED BY:	T.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSH-A-1

SHEET NUMBER:
8





A FRAME TYPE

ROOM FINISH SCHEDULE									
NO.	FLOOR		WALLS AND FINISH				CEILING		
	MTL	FINISH	NORTH	WEST	EAST	SOUTH	MTL	FINISH	HEIGHT
100	CONC.	EFS	NUDO	NUDO	NUDO	NUDO	NUDO	N/A	7'-6"

100 ROOM NUMBER, SEE INTERIOR FINISH SCHEDULE AND DESIGN REQUIREMENTS FOR ROOM FINISHES.

1 DOOR NUMBER, SEE DOOR SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

W1 WINDOW NUMBER, SEE WINDOW SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

EFS- EPOXY FLOOR SEALER
CNS- ONE COAT CURE-N-SEAL (CLEAR)
GWB- GYPSUM BOARD
WRGWB- WATER RESISTANCE GYPSUM BOARD
NUDO- 1/2" WALL SYSTEM, SEE SPEC.

DOOR SCHEDULE														
DOOR NUMBER	ROOM NUMBER	ROUGH OPENING	DOOR						FRAME				HARDWARE SET NO. SEE SPECS	REMARKS
			WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	COLOR	TYPE	MATERIAL	DEPTH	COLOR		
1	100	3'-4"x 7'-2"	3'-0"	7'-0"	1 3/4"	A	H.M. GALV.	SEE NOTE 6	A	H.M. GALV.	5 3/4"	SEE NOTE 6	1	INSULATED

NOTES:
1. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR DOORS
2. PROVIDE 6" WIDE MIN. THRESHOLD AT ALL DOORS
3. PAINT H.M. DOORS BOTH FACES, ALL FOUR EDGES AND H.M. FRAMES COMPLETELY
4. PAINT STEEL LINTELS TO MATCH DOOR FRAMES
5. HARDWARE ITEMS SEE SPECS.
6. CONTRACTOR SHALL SUBMIT PAINT CHIP AND COLOR TO THE OWNER FOR APPROVAL.

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1 1/2" = 1'

SEAL:

all in

SHEET: HERMITAGE LS SCHEDULE

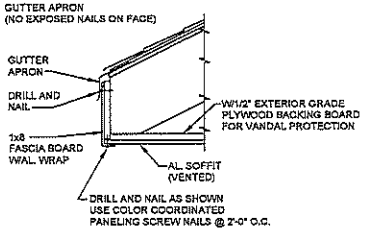
DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	T.A.
APPROVED BY:	T.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSH-A-2

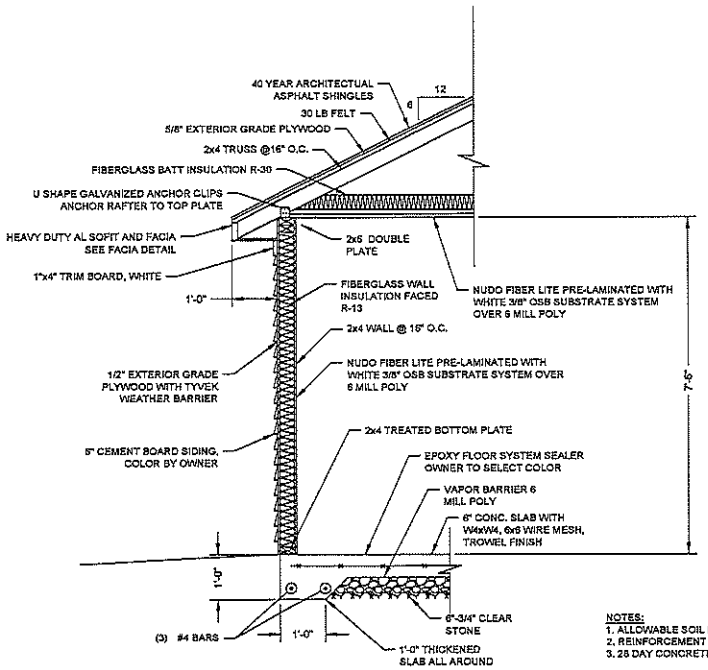
SHEET NUMBER
9

NOTE:
NAIL FASCIA
BEFORE INSTALLING
GUTTER APRON
(NO EXPOSED NAILS ON FACE)



NOTE: OWNER TO SELECT COLOR OF AL. TRIM.

FASCIA W/AL. WRAP
N.T.S



NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE = 1600 PSF
2. REINFORCEMENT STEEL YIELD STRENGTH fy = 60,000 PS
3. 28 DAY CONCRETE COMPRESSIVE STRENGTH fy = 4000 PSI

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

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE:

SEAL:

all in

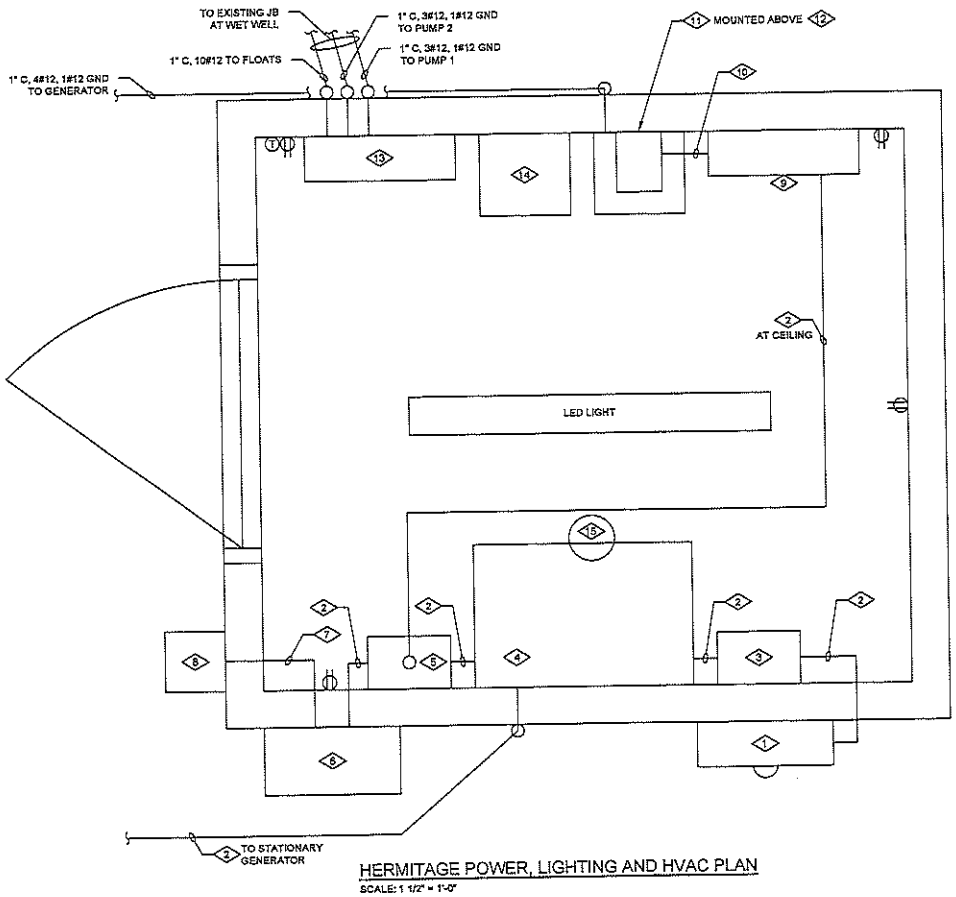
SHEET:
HERMITAGE LS WALL SECTION

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSH-A-3

SHEET NUMBER:
10



HERMITAGE POWER, LIGHTING AND HVAC PLAN

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

◇ PLAN NOTES:

1. METERING PEDESTAL WITH KWH METER, 240V, 3PH, 100A SERVICE. WE ENERGIES ELECTRIC SERVICE AND METERING MANUAL PAGES U-6 AND M-15. COORDINATE WITH WE ENERGIES.
2. 2" C, 3#1, 1#6 GND. RMC EXTERIOR; IMC INTERIOR.
3. SERVICE DISCONNECT SWITCH, 3 POLE, 100A, NEMA 1, TYPE R FUSES.
4. AUTOMATIC TRANSFER SWITCH RELOCATED FROM BAYPOINT. DO NOT REMOVE FROM BAYPOINT UNTIL REPLACEMENT IS IN HAND.
5. MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR RECEPTACLE. 240V, 3PH, 100A. NON FUSED, NEMA 1 OR 3R.
6. PORTABLE GENERATOR MANUAL DISCONNECT SWITCH 200A/100A FUSE, NEMA 3R, 3PH.
7. 2" RMC, 3#2/0, 1#6 GND.
8. PORTABLE GENERATOR RECEPTACLE. MFG: _____, MODEL_____, _____A, 240V, 3PH.
9. PANEL B, 240V, 3PH, 100A, 18 SPACES, 100A/3P MCB, 20A/2P CB FOR ELECTRIC HEATER, 30A/2P CB FOR 10KVA STEPDOWN TRANSFORMER.
10. PRIMARY: 1" IMC, 2#6, 1#6 GND, FROM PANEL B; SEC: 1 ½" IMC, 3#6, 1#6 GND TO PANEL A.
11. STEPDOWN TRANSFORMER 240V - 120/240V, 1PH, 10KVA, NEMA 1 , WALL MOUNTED ABOVE PANEL A.
12. PANEL A 120/240V, 1PH - 3W, 100A, 50 A MCB, 18 SPACES. 15A/1P CB FOR SMOKE DETECTOR, 6 OF 20/1P CB FOR 1) BATTERY CHARGER, 2) BLOCK HEATER, 3) LIGHTING, 4) RECEPTACLE (1ST GFI), 5) BUILDING VENT FAN, 6) SPARE.
13. PUMP CONTROL PANEL.
14. SCADA PANEL 9BY OTHERS)
15. SMOKE DETECTOR.

CONTROL PARAMETERS	
PARAMETER	ELEVATION
HIGH LEVEL ALARM	68.0
START LAG PUMP	68.5
START LEAD PUMP	66.0
STOP PUMPS	67.4
LOW LEVEL ALARM	67.0
WET WELL INVERT	64.0

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1 1/2" = 1'

SEAL:

all in

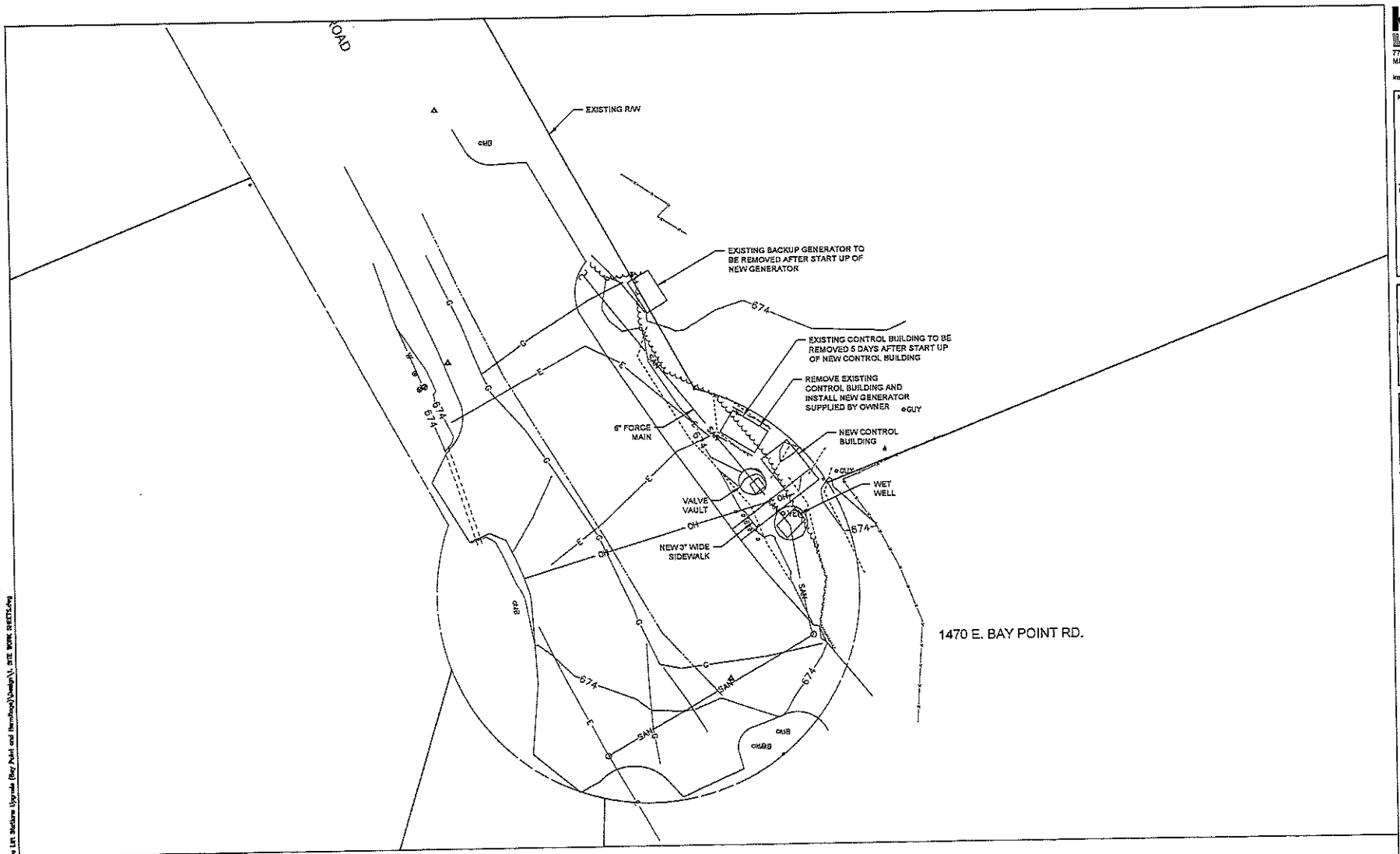
SHEET: HERMITAGE LS LIGHTING & HVAC

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.S.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSH-EH-1

SHEET NUMBER: 11



BAY POINT LIFT STATION SITE PLAN

SCALE: 1" = 5'

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1"=5'

SEAL:

all in

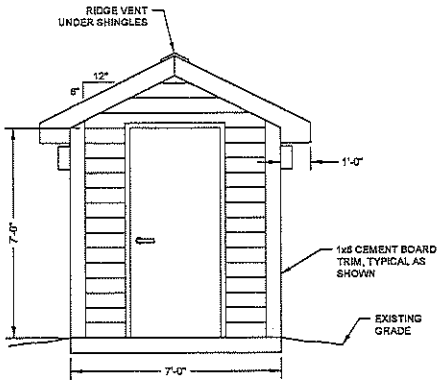
SHEET: BAY POINT SITE PLAN

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.S.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

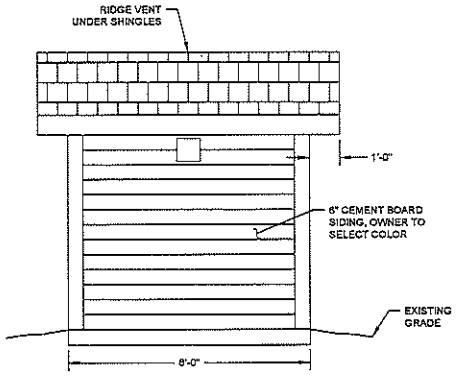
PROJECT NO: 19.0270.01

DRAWING NO: LSB-C-1

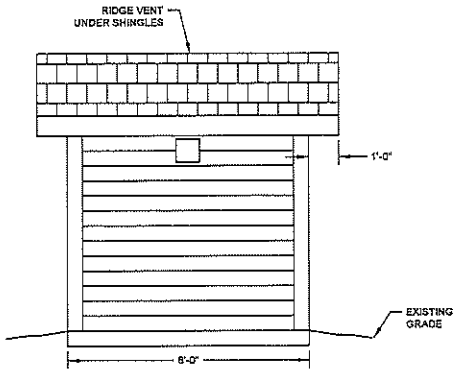
SHEET NUMBER: 12



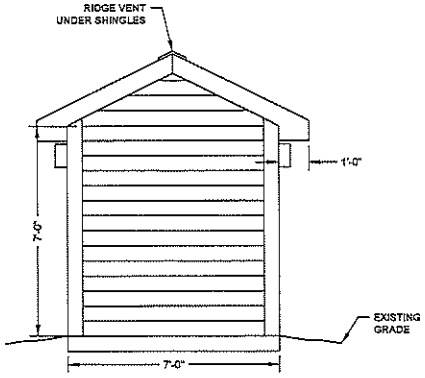
SOUTH ELEVATION VIEW
SCALE: 1/2" = 1'-0"



EAST ELEVATION VIEW
SCALE: 1/2" = 1'-0"



WEST ELEVATION VIEW
SCALE: 1/2" = 1'-0"



NORTH ELEVATION VIEW
SCALE: 1/2" = 1'-0"

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1/2" = 1'

SEAL:

all in

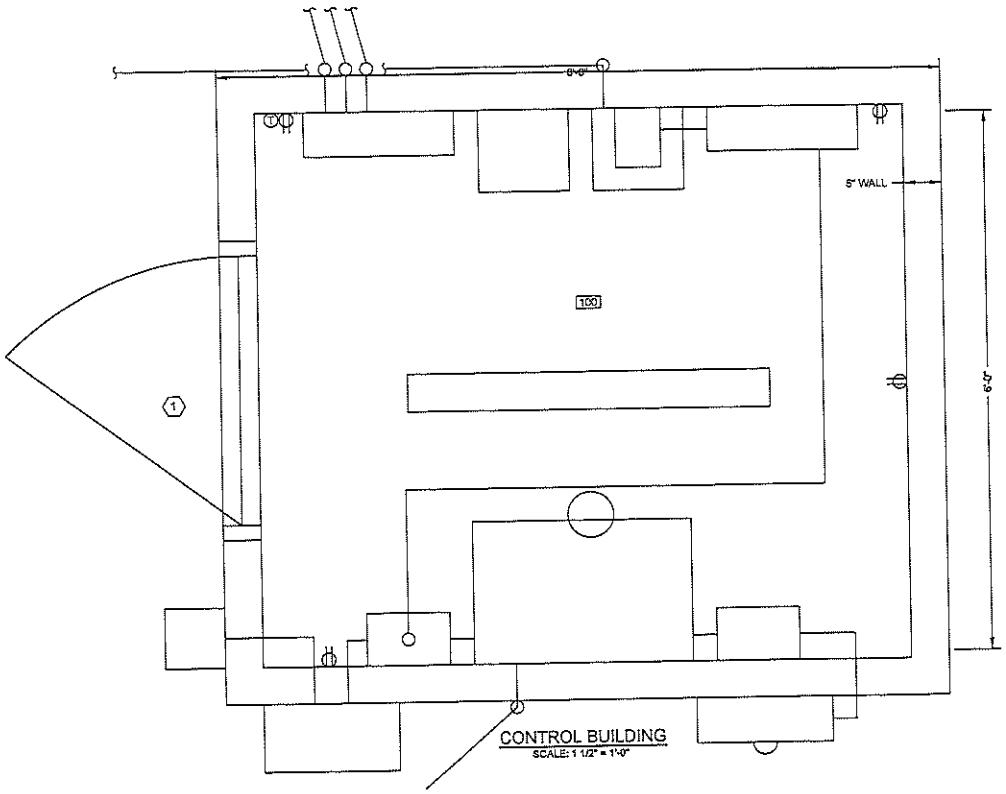
SHEET:
BAYPOINT LS EXTERIOR ELEV.

DESIGNED BY:	JJG
DRAWN BY:	JDE
CHECKED BY:	TA
APPROVED BY:	TA

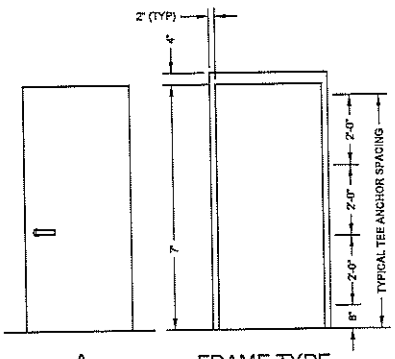
PROJECT NO: 19.0270.01

DRAWING NO: LSB-A-1

SHEET NUMBER:
13



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



A FRAME TYPE

ROOM FINISH SCHEDULE									
NO.	FLOOR		WALLS AND FINISH				CEILING		HEIGHT
	MTL	FINISH	NORTH	WEST	EAST	SOUTH	MTL	FINISH	
100	CONC.	EFS	NUDO	NUDO	NUDO	NUDO	NUDO	N/A	7'-6"

100 ROOM NUMBER, SEE INTERIOR FINISH SCHEDULE AND DESIGN REQUIREMENTS FOR ROOM FINISHES.

1 DOOR NUMBER, SEE DOOR SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

W1 WINDOW NUMBER, SEE WINDOW SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

EFS- EPOXY FLOOR SEALER
CNS- ONE COAT CURE-N-SEAL (CLEAR)
GWB- GYPSUM BOARD
WRGWB- WATER RESISTANCE GYPSUM BOARD
NUDO- 1/2" WALL SYSTEM, SEE SPEC.

DOOR SCHEDULE														
DOOR NUMBER	ROOM NUMBER	ROUGH OPENING	DOOR						FRAME				HARDWARE SET NO. SEE SPEC'S	REMARKS
			WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	COLOR	TYPE	MATERIAL	DEPTH	COLOR		
1	100	3'-4"X 7'-2"	3'-0"	7'-0"	1 3/4"	A	H.M. GALV.	SEE NOTE 6	A	H.M. GALV.	5 3/4"	SEE NOTE 6	1	INSULATED

NOTES:
1. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR DOORS
2. PROVIDE 6" WIDE MIN. THRESHOLD AT ALL DOORS
3. PAINT H.M. DOORS BOTH FACES, ALL FOUR EDGES AND H.M. FRAMES COMPLETELY
4. PAINT STEEL LINTELS TO MATCH DOOR FRAMES
5. HARDWARE ITEMS SEE SPECS.
6. CONTRACTOR SHALL SUBMIT PAINT CHIP AND COLOR TO THE OWNER FOR APPROVAL.

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Milwaukee, Wisconsin 53217
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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1 1/2" = 1'

SEAL:

all in

SHEET: BAYPOINT LS SCHEDULE

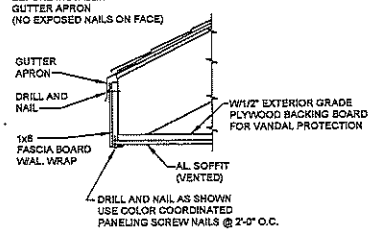
DESIGNED BY:	JJG
DRAWN BY:	JGK
CHECKED BY:	TA
APPROVED BY:	TA

PROJECT NO: 19.0270.01

DRAWING NO: LSB-A-2

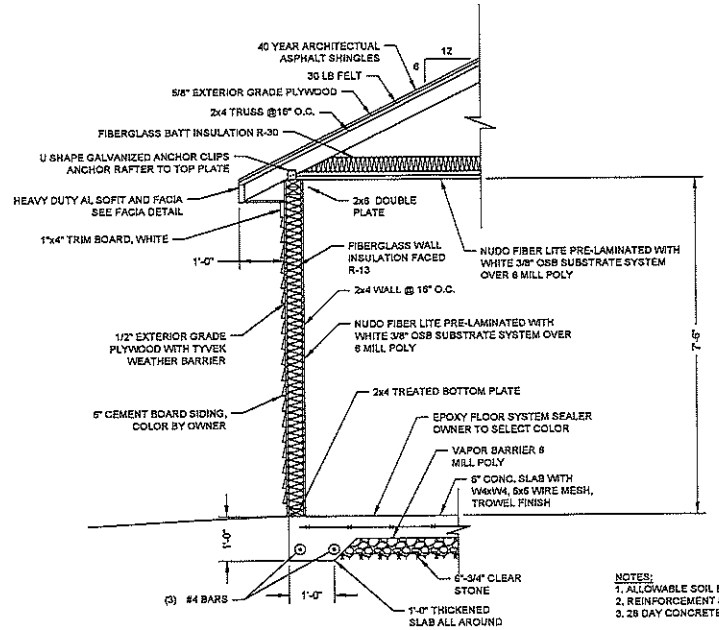
SHEET NUMBER: 14

NOTE:
NAIL FASCIA
BEFORE INSTALLING
GUTTER APRON
(NO EXPOSED NAILS ON FACE)



NOTE: OWNER TO SELECT COLOR OF AL. TRIM.

FASCIA W/AL. WRAP
N.T.S



NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF
2. REINFORCEMENT STEEL YIELD STRENGTH fy = 60,000 PS
3. 28 DAY CONCRETE COMPRESSIVE STRENGTH fy = 4000 PSI

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

FILENAME: S:\Mke_Ea\Projects\2019\19027 - Two Lift Stations Upgrade (Bay Point and Hemlock)\Drawings\LS_BAYSIDE LS 19027S.dwg

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 3/4" = 1'

SEAL:

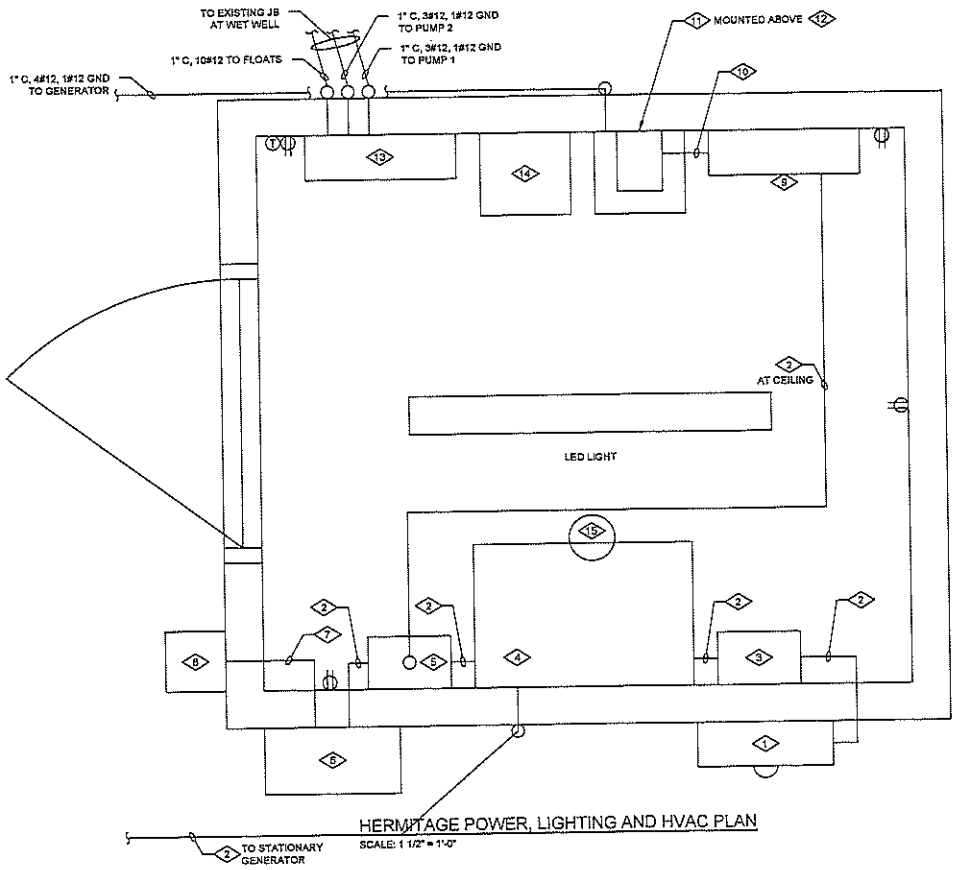
BAYPOINT LS WALL SECTION

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.A.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSB-A-3

SHEET NUMBER:
15



HERMITAGE POWER, LIGHTING AND HVAC PLAN

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

◇ PLAN NOTES:

1. METERING PEDESTAL WITH KWH METER, 240V, 3PH, 100A SERVICE. WE ENERGIES ELECTRIC SERVICE AND METERING MANUAL PAGES U-6 AND M-15. COORDINATE WITH WE ENERGIES.
2. 2" C, 3#1, 1#6 GND. RMC EXTERIOR; IMC INTERIOR.
3. SERVICE DISCONNECT SWITCH, 3 POLE, 100A, NEMA 1, TYPE R FUSES.
4. AUTOMATIC TRANSFER SWITCH RELOCATED FROM BAYPOINT. DO NOT REMOVE FROM BAYPOINT UNTIL REPLACEMENT IS IN HAND.
5. MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR RECEPTACLE. 240V, 3PH, 100A. NON FUSED, NEMA 1 OR 3R.
6. PORTABLE GENERATOR MANUAL DISCONNECT SWITCH 200A/100A FUSE, NEMA 3R, 3PH.
7. 2" RMC, 3#2/0, 1#6 GND.
8. PORTABLE GENERATOR RECEPTACLE. MFG: _____, MODEL_____, _____A, 240V, 3PH.
9. PANEL B, 240V, 3PH, 100A, 18 SPACES, 100A/3P MCB, 20A/2P CB FOR ELECTRIC HEATER, 30A/2P CB FOR 10KVA STEPDOWN TRANSFORMER.
10. PRIMARY: 1" IMC, 2#6, 1#6 GND, FROM PANEL B; SEC: 1 ¼" IMC, 3#6, 1#6 GND TO PANEL A.
11. STEPDOWN TRANSFORMER 240V - 120/240V, 1PH, 10KVA, NEMA 1 , WALL MOUNTED ABOVE PANEL A.
12. PANEL A 120/240V, 1PH - 3W, 100A, 50 A MCB, 18 SPACES. 15A/P CB FOR SMOKE DETECTOR, 6 OF 20/P CB FOR 1) BATTERY CHARGER, 2) BLOCK HEATER, 3) LIGHTING, 4) RECEPTACLE (1ST GFI), 5) BUILDING VENT FAN, 6) SPARE.
13. PUMP CONTROL PANEL.
14. SCADA PANEL 9BY OTHERS)
15. SMOKE DETECTOR.

CONTROL PARAMETERS	
PARAMETER	ELEVATION
HIGH LEVEL ALARM	75.0
START LAG PUMP	74.5
START LEAD PUMP	74.0
STOP PUMPS	73.5
LOW LEVEL ALARM	73.0
WET WELL INVERT	70.0

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW

SCALE: 1 1/2" = 1'

SEAL:

all in

SHEET: BAYPOINT LS LIGHTING & HVAC

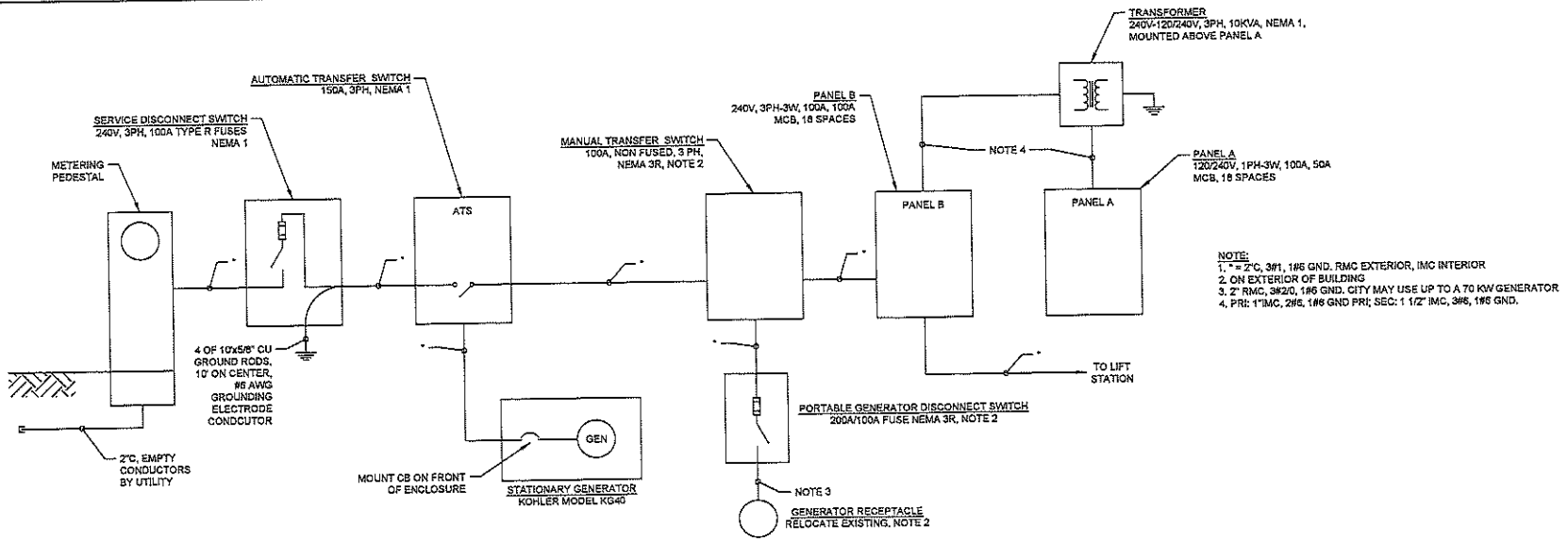
DESIGNED BY:	J.J.C.
DRAWN BY:	J.D.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 18.0270.01

DRAWING NO: LSB-E-1

SHEET NUMBER: 16

FILENAME: S:\Mke_Eng\Projects\009\18270 – Two Lift Stations Upgrade (Bay Point and Hermitage)\Design\14. BAYSIDE LS SHEETS.dwg



ONE-LINE DIAGRAM

NTS

MISCELLANEOUS WIRING REQUIREMENTS

Description	From	To	Conduit & Cable	Remarks
Lighting	Panel A	2 Lights	3/4" C, 2#12, 1#12 GND	Switch by door
Vent Fan	Panel A	Vent Fan	3/4" C, 2#12, 1#12 GND	
	Vent Fan	T-Stat	1/2" C, 2#14, 1#14 GND	T-Stat on opposite side of room. Reverse acting T-STAT
Block Heater	Panel A	Block Heater	3/4" C, 2#12, 1#12 GND	Route via floor slab.
Battery Charger	Panel A	Battery Charger	3/4" C, 2#12, 1#12 GND	Route via floor slab.
Receptacle	Panel A	Receptacles	3/4" C, 2#12, 1#12 GND	GFI, 2 receptacles
SCADA	Generator	Scada in Lift STA. See Note	1-1/2" C, 10 #14	Signals (unpower contacts except #4) 1. Generator start/run 2. Generator Fail 3. Smoke/Fire in Building 4. Red Alarm Light from Lift Sta. 5. Spare
	Smoke Detector	JB for Scada Signals	1/2"c, 2#14	See signal list above
Alarm Light	Scada JB in Bldg	Alarm Light	3/4" C, 2#12, 1#12 GND	Power for light via SCADA signal wiring. See SCADA list above.
Smoke Detector	Panel A	Smoke Detector	1/2" C, 2#14, 1#14 GND	Power
Gen Louvers	Panel A	Generator	3/4" C, 2#12, 1#12 GND	Contacts at Gen to control, via floor slab
	Generator	Inlet & Exhaust Louvers	3/4" C, 2#12, 1#12 GND	to both louvers MOD's
Room Heater	EUH	Panel B	1" C, 3#10, 1#10 GND	Intregal T-STAT
Exterior Light	Panel A	LED Wall Pac Light	3/4" C, 2#12, 1#12 GND	Wall switch to do disable, PE on light.

NOTE: ROUTE FROM BUILDING TO LOWER LEVEL IN LIFT STATION. PROVIDE JB ADJACENT TO SCADA IN LIFT STATION. SCADA CONNECTION BY OTHERS. ID WIRING. TERMINATE SPARE IN JB IN BUILDING AND JB AT SCADA. APPROXIMATE 40' OF CONDUIT AND WIRING IN LIFT STATION. ROUTE PARALLEL TO EXISTING CONDUIT IN LIFT STATION.

PANEL A	BUSS AMPS 100	MAIN BREAKER 50 AMPS	MOUNTING	REMARKS
	VOLTAGE 120/240		SURFACE X	
	PHASE 1		FLUSH	
	WIRE 3			

CIRCUIT DESCRIPTION	AMP/POLE	CKT	BUS	CKT	AMP/POLE	CIRCUIT DESCRIPTION
MAIN BREAKER	50/2	1		2	20/1	BLOCK HEATER
		3		4	20/1	INTERIOR & EXTERIOR LIGHTING
BATTERY CHARGER	20/1	5		6	20/1	RECEPTACLES (1ST RECEPT IS GFI)
BUILDING VENTILATION FAN	20/1	7		8	20/1	GENERATOR LOUVERS
SMOKE DETECTOR	15/1	9		10	---	SPACE
SPACE	---	11		12	---	SPACE
SPACE	---	13		14	---	SPACE
SPACE	---	15		16	---	SPACE
SPACE	---	17		18	---	SPACE

SQUARE D MODEL NQ18L1C

PANEL B	BUSS AMPS 100	MAIN BREAKER 100 AMPS	MOUNTING	REMARKS
	VOLTAGE 240		SURFACE X	
	PHASE 3		FLUSH	
	WIRE 3			

CIRCUIT DESCRIPTION	AMP/POLE	CKT	BUS	CKT	AMP/POLE	CIRCUIT DESCRIPTION
MAIN BREAKER	100/3	1		2	100/3	SUBFEED TO LIFT STA
		3		4		
		5		6		
10 KVA TRANSFORMER	50/2	7		8	20/3	ELECTRIC UNIT HEATER
		9		10		
SPACE	---	11		12		
SPACE	---	13		14	---	SPACE
SPACE	---	15		16	---	SPACE
SPACE	---	17		18	---	SPACE

SQUARE D MODEL NQ418L1C

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASED: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET: ONE-LINE DIAGRAM

DESIGNED BY:	J.J.G.
DRAWN BY:	J.D.S.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: E-1

SHEET NUMBER: 17

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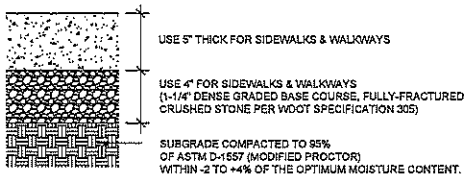
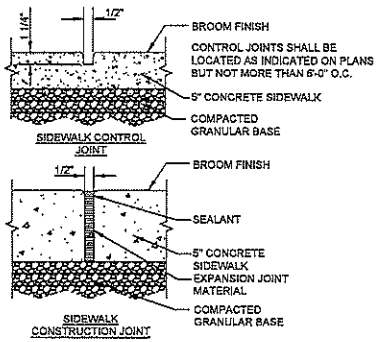


CONCRETE SIDEWALK/SLAB

NTS

001

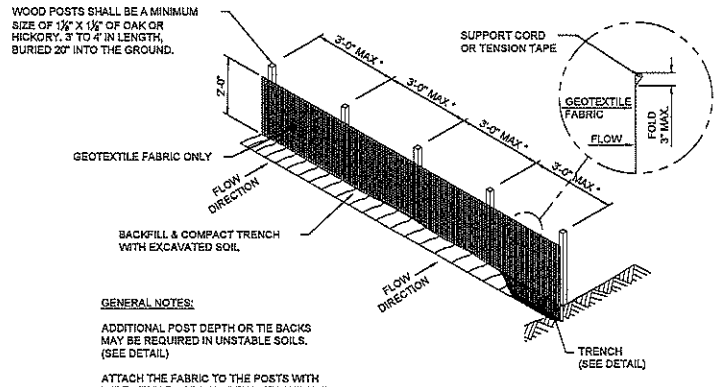


EXPANSION MATERIAL SHALL BE INSTALLED WHERE SIDEWALK ABUTS BUILDING WALL AND BACK OF CURB.

SIDEWALK JOINT DETAIL (TYP.)

NTS

002



GENERAL NOTES:

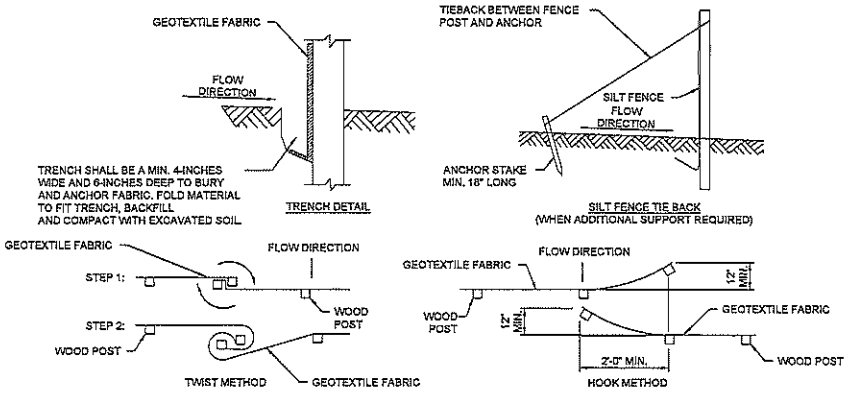
ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS. (SEE DETAIL)

ATTACH THE FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH AND NAILS

"8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

IF POSSIBLE, CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING METHODS:
(1)TWIST METHOD: OVERLAP END POSTS & TWIST AT LEAST 180 DEGREES.
(2)HOOK METHOD: HOOK THE END OF EACH SILT FENCE LENGTH.

AXONIMETRIC VIEW



JOINING TWO LENGTHS OF SILT FENCE

FILTER FABRIC SILT FENCE DETAIL

NTS

003

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET:
DETAILS

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	T.A.
APPROVED BY:	T.A.

PROJECT NO: 18.0270.01

DRAWING NO: D-1

SHEET NUMBER:
18

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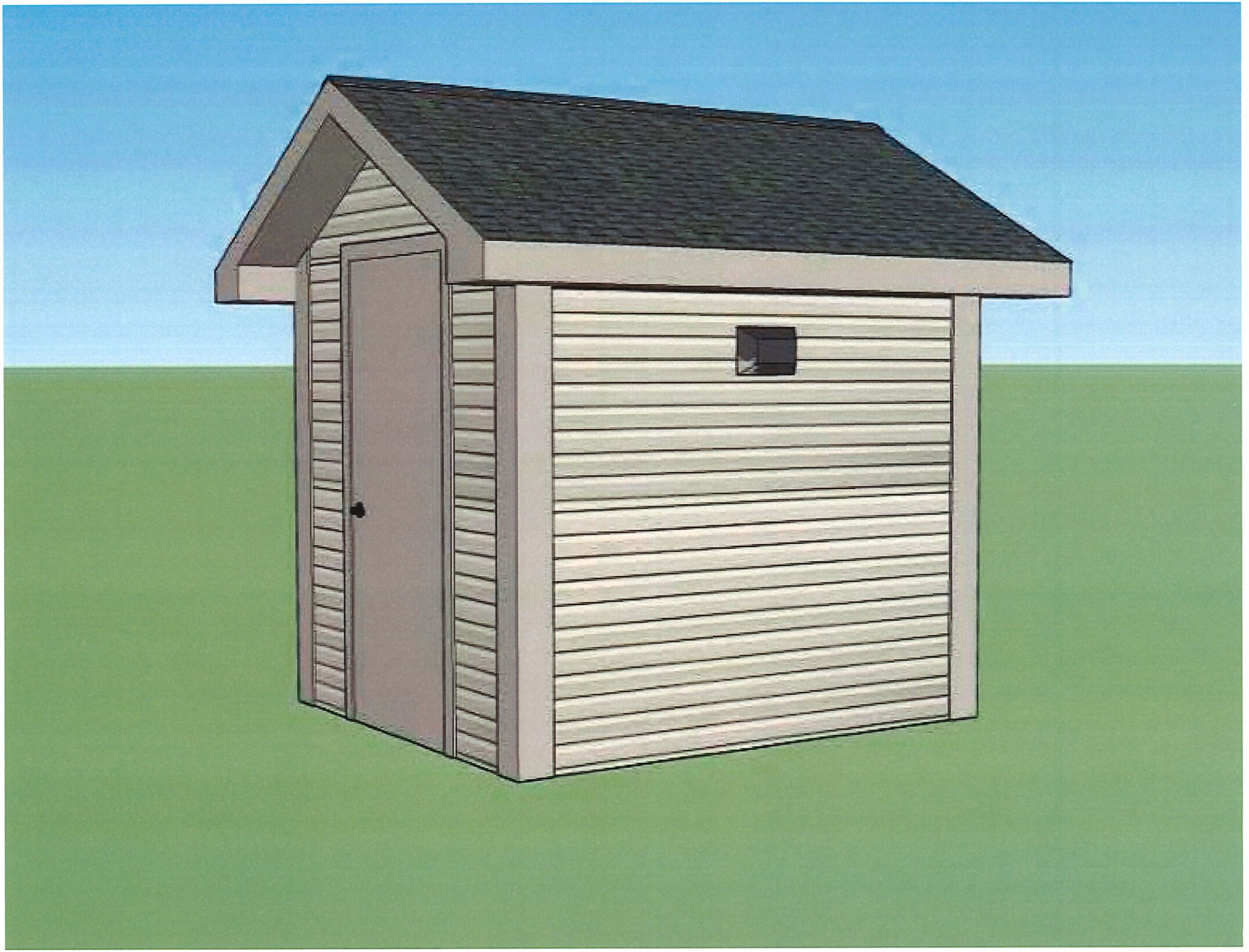
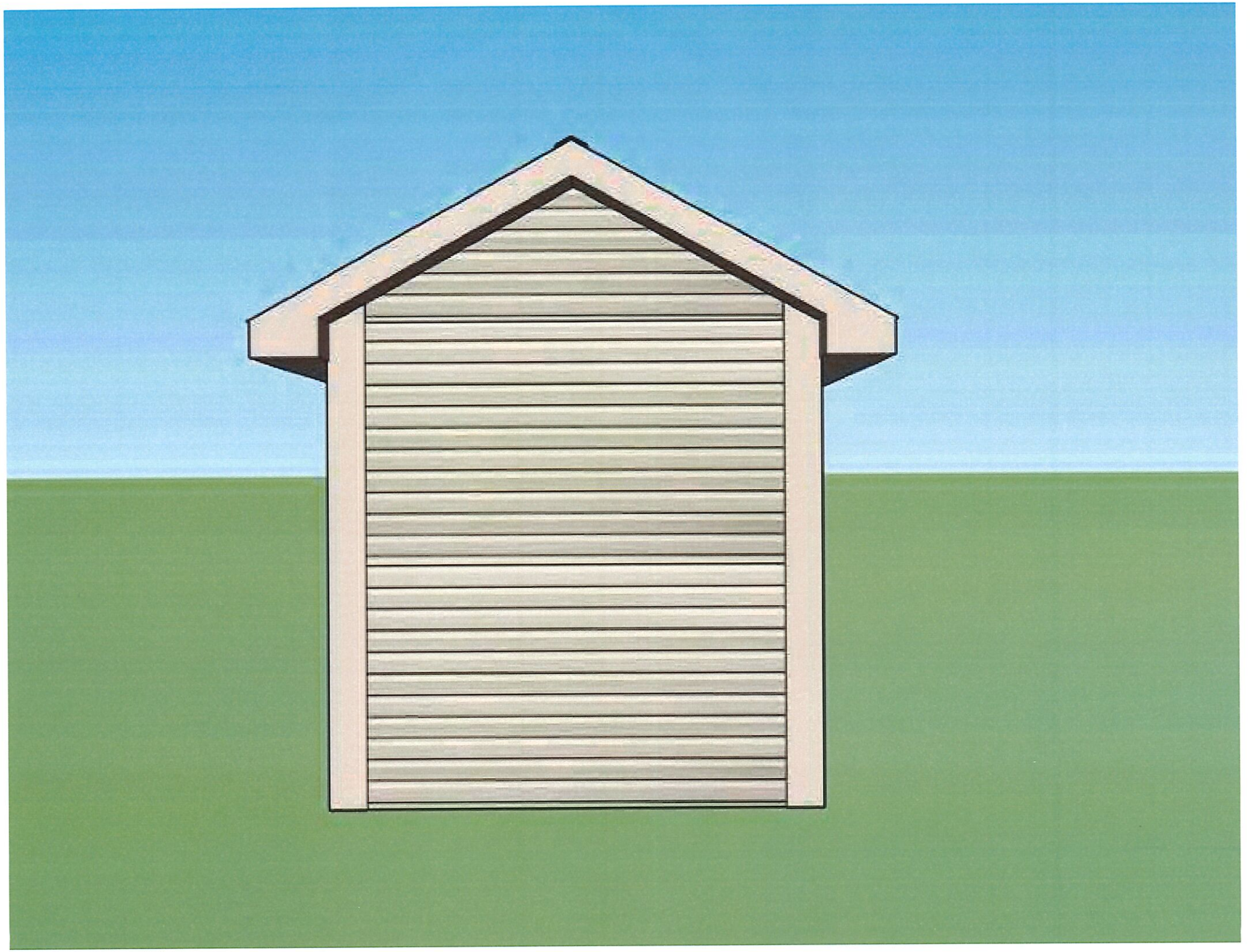
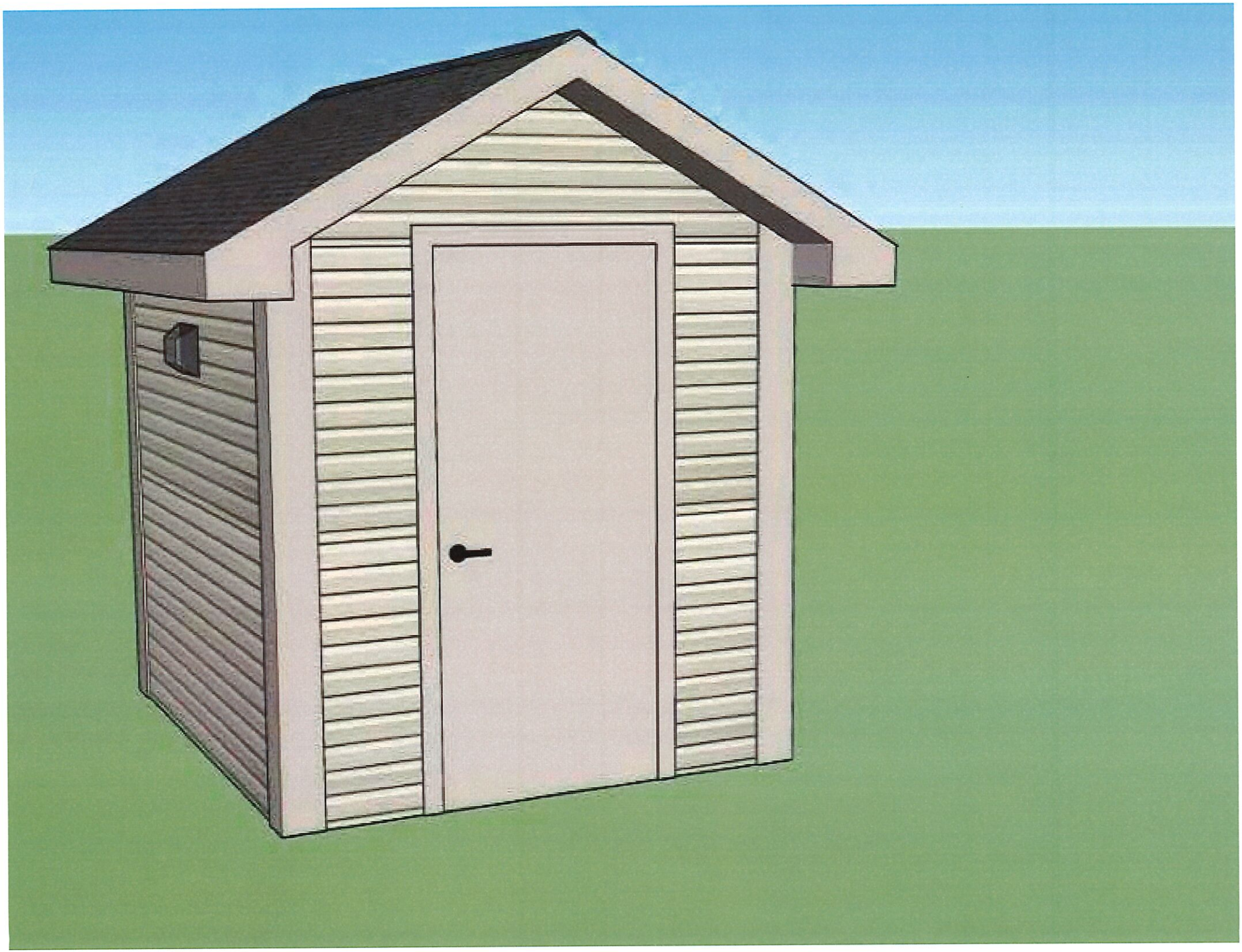
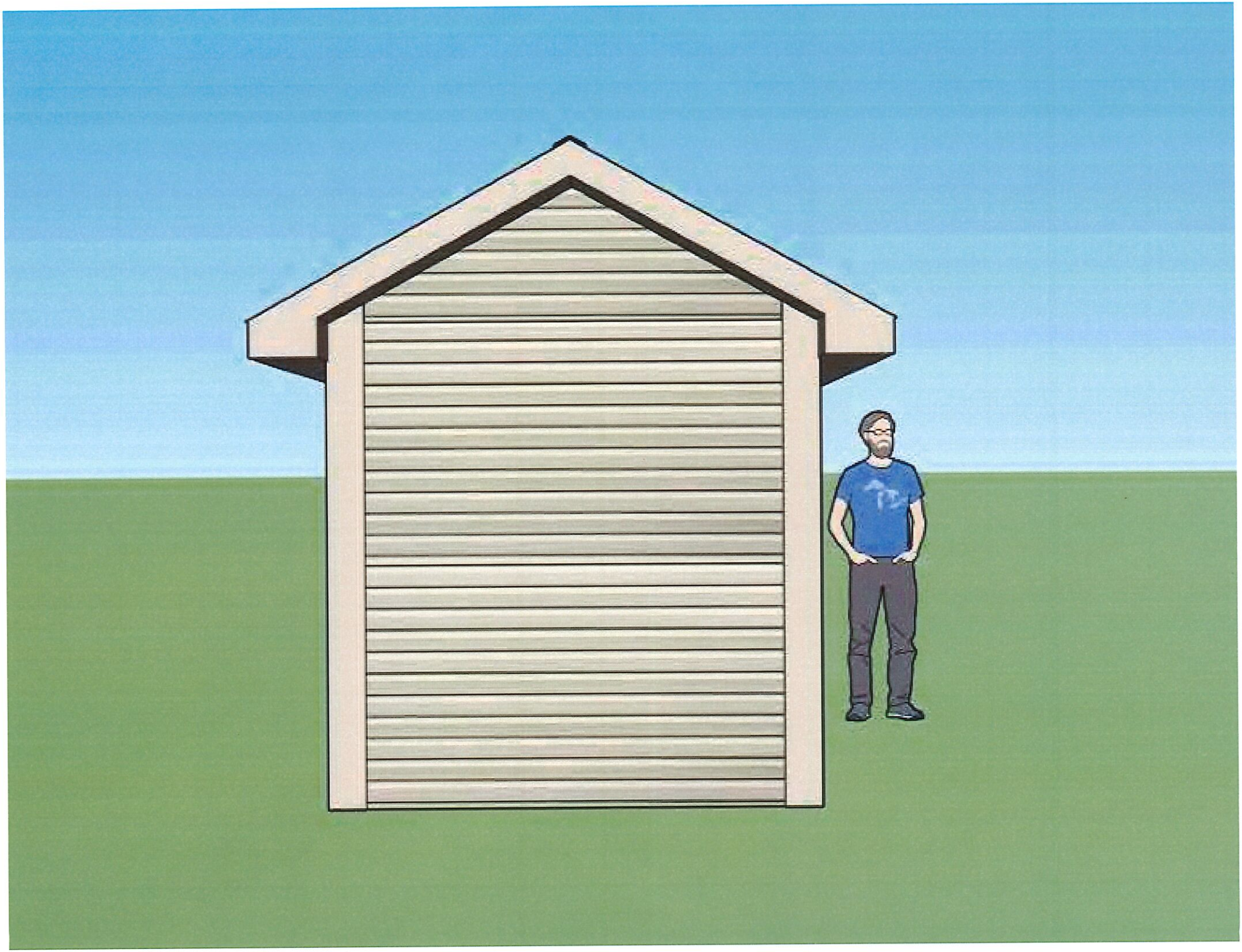
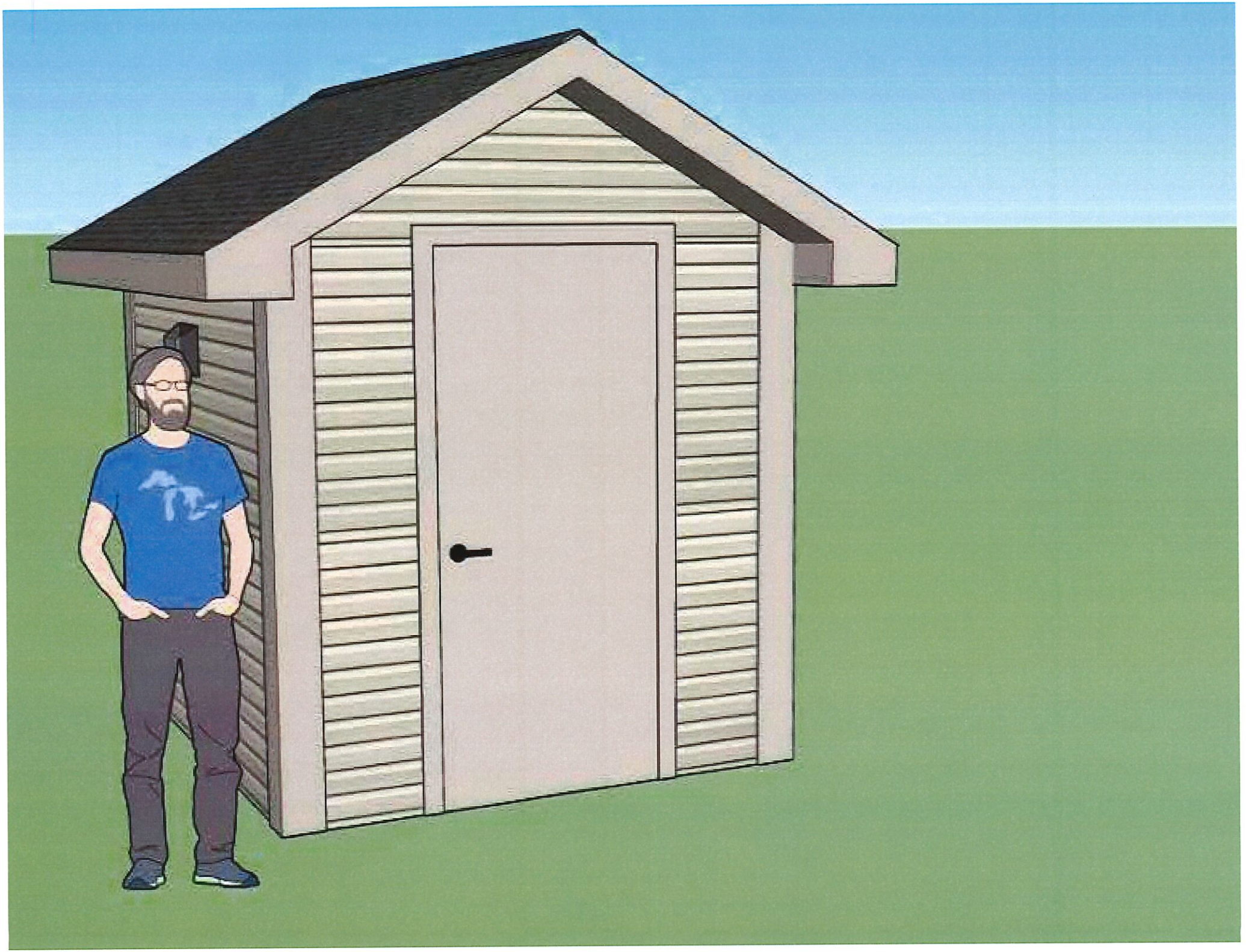
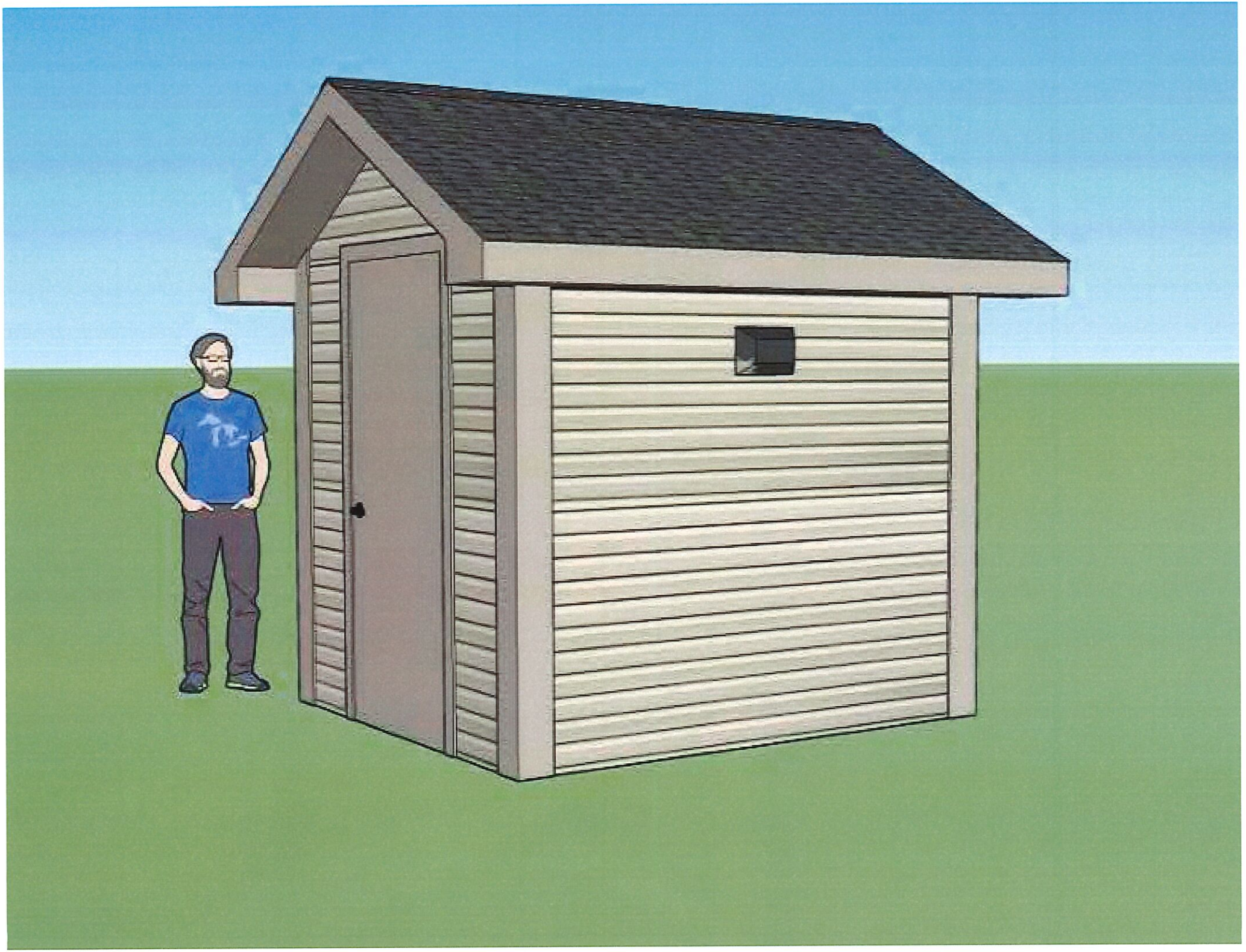












Project Proposal

Date 4-14-2020

Property Address _____

Zoning _____

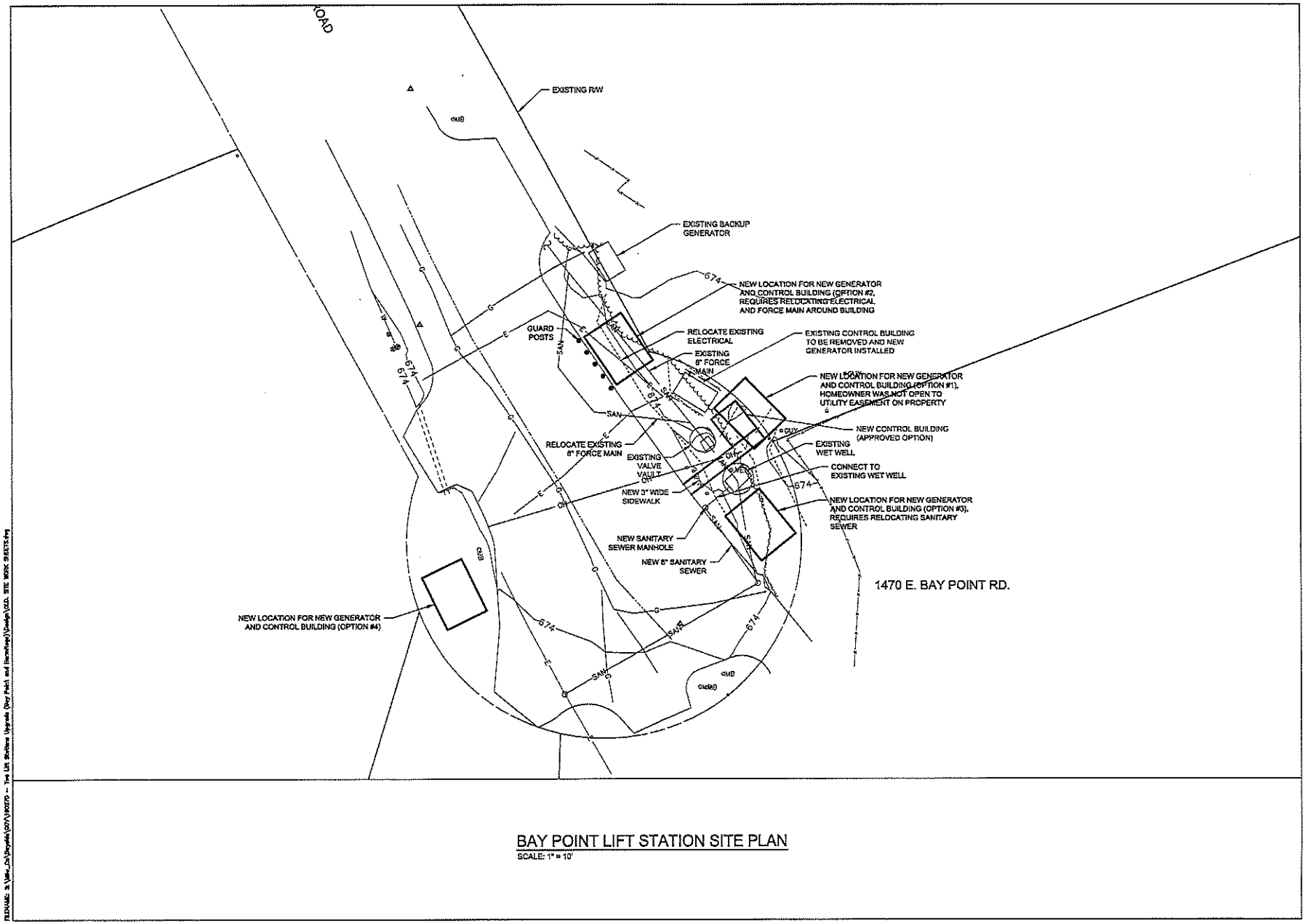
- ☐ Accessory Structures/Generators
- ☐ Additions/Remodel
- ☐ Bluff Management
- ☐ Commercial Signage
- ☐ Decks/Patios
- ☐ Fence
- ☐ Fire Pits
- ☐ Landscaping requiring Impervious Surface/Fill/Excavation Permit
- ☐ New Construction
- ☐ Play Structures
- ☐ Recreational Facilities/Courts
- ☐ Roofs
- ☐ Solar Panels/Skylights
- ☐ Swimming Pools
- ☐ Windows/Doors-change exceeds 25% of opening
- ☒ Other UTILITY BUILDING

Proposed project details (type of work, size, materials, etc.):

NEW CONTROL BUILDING FOR SANITARY SEWER LIFT STATION TO REPLACE EXISTING LIFT STATION.

********** *For Office Use Only* **********

Yes	No	
☐	☐	Color photographs showing project location, elevations and surrounding views
☐	☐	Two (2) complete sets of building plans (including elevations and grading)
☐	☐	Survey
☐	☐	Samples or brochures showing materials, colors and designs
☐	☐	Application Fee
☐	☐	Parcel Number
☐	☐	ARC Agenda Date:
☐	☐	Building Permit
☐	☐	Fill Permit
☐	☐	Impervious Surface Permit
☐	☐	Plan Commission/Conditional Use Permit
☐	☐	Tax Key Number
☐	☐	Right-of-Way/Excavation Permit
☐	☐	Variance Required



BAY POINT LIFT STATION SITE PLAN

SCALE: 1" = 10'

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: PRELIMINARY

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 10'

SEAL:

all in

SHEET: BAY POINT SITE PLAN

DESIGNED BY:	J.J.O.
DRAWN BY:	J.B.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSB-C-1

SHEET NUMBER: 12

FILENAME: S:\Mke_Civil\Projects\2019\190270 - Two Lift Stations Upgrade (Bay Point and Hacienda)\Design\CAD\LSB SITE WORK SHEETS.dwg

IV A 2d

HERMITAGE AND BAYPOINT LIFT STATION CONDITION ASSESSMENT REPORT

Village of Bayside
Wisconsin

Prepared for:

Village of Bayside
9075 North Regent Road
Bayside, WI 53217

Prepared By:

Kapur & Associates, Inc.
Consulting Engineers
7711 N. Port Washington Rd.
Milwaukee, Wisconsin 53217
Phone: (414) 751-7200

February 2019

village of BAYSIDE

KAPUR & ASSOCIATES CONSULTING ENGINEERS

VILLAGE OF BAYSIDE

DATE: 1/18/2019

TO: Village of Bayside – Shane Albers, Andy Pederson

FROM: Kapur & Associates, Inc.

SUBJECT: Hermitage and Baypoint Lift Station Condition Assessment Report

1. EXECUTIVE SUMMARY

Kapur & Associates, Inc. has been retained by the Village of Bayside to inspect and prepare a condition assessment for two aging lift stations: Hermitage and Baypoint. This assessment will be used in the planning of the anticipated lift station improvements. In general, the scope of services for the condition assessment is to perform a site inspection and lift station analysis to determine future improvements to the system.

Based on the site inspection and lift station analysis, Kapur recommends that pressure transducers be installed in both wet wells, a SCADA system installed at each lift station and the electrical controls be upgraded for both lift stations. Inverted "J" tubes are not required but recommended for both lift station valve vaults to supply fresh air to the structure. Standpipes should be installed at the wet well and valve vault to allow bypass pumping in the event of an emergency. The city owned portable pump can utilize these connections.

Additional recommendations for the lift stations include replacing the backup generator at the Baypoint Lift Station with a new generator and moving the existing Baypoint Lift Station generator to the Hermitage Lift Station to replace the existing generator. A new control building to house the new generator and new controls should be built at the Baypoint Lift Station. A new control building to only house the controls should be constructed at the Hermitage Lift Station. An infiltration and inflow (I&I) study should be conducted in both service areas to identify locations of I&I into the system.

2. SITE INVESTIGATION AND RECOMMENDATIONS

Site investigations were conducted by Kapur & Associates, Inc. on December 4, 2018 from 9:00 am to 10:00 am at the Hermitage and Baypoint Lift Stations.

- Hermitage lift station is located at 1440 E. Hermitage Rd.
- Baypoint lift station is located at 1460 E. Bay Point Rd.

2.1 Hermitage Lift Station

Hermitage Lift Station Condition Assessment			
Lift Station Components		**Condition (Good or Poor)**	**Comments**
Site Components	Parking for Maintenance Vehicles	Good	Shared driveway
	Site Drainage Away from Structure	Good	No known issues at this site
	Surrounding Foliage (Trees, bushes, shrubs)	Good	No obstructs to access equipment
	Site and Structure Security	Poor	Install unlawful entry alarm
	By-Pass Availability	None	By pass is not required
Structural Components	Condition of Valve Vault	Good	Permanent concrete structure should last over 60 years
	Condition of Wet Well	Good	Permanent concrete structure should last over 60 years
	Valve Vault Ventilation	None	Ventilation is not required, inverted "J" tube is recommended
	Pump Removal	Good	Structure has a hatch for pump maintenance
Mechanical Components	Pump Condition	Good	Repairs on an as needed basis
	Motor Condition	Good	Repairs on an as needed basis
	Valve Condition	Good	Repairs on an as needed basis
	Pipe Condition	Good	Repairs on an as needed basis
Electrical Components	On-Site Generator	Poor	Recommended to be replaced because of age
	Motor Starters	Good	No known issues
	Controls	Poor	Recommend Updating Controls
	SCADA System	Poor	Recommend new system
	Exterior Conduits	Good	No known issues
	Interior Conduits	Good	No known issues
	Flow Meter	None	Not recommended for small lift stations
	Level Sensor	Poor	Recommend replacing floats with pressure transducers

Site Components

Parking at Hermitage Lift Station consists of a residential driveway to reach the lift station easement (Figure 1). Maintenance vehicles have an adequate amount of space to park at this location. There were no signs of drainage issues at the site and access to the valve vault, wet well, control building and generator are not blocked by dense foliage. The control building is kept locked when not in use. Additional site security, such as an entry alarm, is recommended.

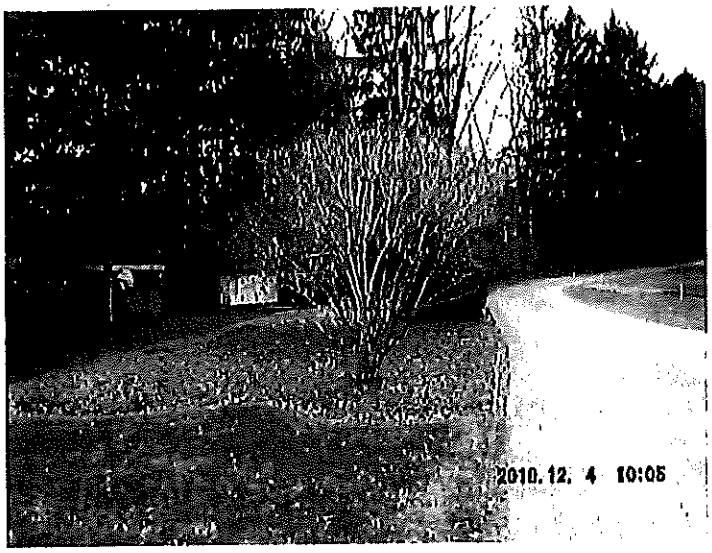


Figure 1: Hermitage Lift Station Site

Structural Components

The Hermitage Lift Station was constructed in 1992. The concrete valve vault and wet well at the Hermitage Lift Station are in good condition. The concrete wet well and valve vaults are permanent structures and should last over 60 years. A hatch is available for pump removal. The wet well has an inverted "J" tube for ventilation. Valve vaults can be vented with a portable ventilator when maintenance is required. An inverted "J" tube is not required for this type of structure, but one is recommended to provide continuous fresh air.

Mechanical Components

The mechanical components in the wet well includes two 80 gallons per minute (gpm) Flygt pumps with 2.7 HP motors. The pumps provide a TDH (total dynamic head) of 26 feet. Kapur does not recommend replacing the pumps as they are still working as designed.

The mechanical components in the valve vault includes four plug valves, two swing check valves and ductile iron piping. The piping and valves are in good condition and replacement is not recommended.

It is unknown if there is excessive infiltration and inflow (I&I) entering the lift station. Kapur recommends an I&I investigation at this location to identify if I&I is entering the system.

A pump bypass is not available for this lift station and is not required. Kapur recommends that standpipes should be installed and connected to the wet well to provide a bypass if the pumps were out of service for an extended length of time. When the pumps are not working in an emergency, stand pipes will allow for easy and fast connections to the city owned portable pump. The nearest manhole for discharge to with a hose is about 360 feet away. Discharging to this manhole with a hose is not recommended.

Electrical Components

The existing control operating system has reached the end of its useful life. Kapur recommends that the control system should be updated. New controls will provide a screen that will display the condition of the lift station in real time. A new SCADA monitoring system should be installed with the new controls. The SCADA system will record and store operational information about the lift station that can be accessed by the owner on a secure website. The system would also provide immediate alarm notification via text and email. Kapur recommends an Antx Aquavx Scout cellular alarm dialer as a cost-effective system.

Floats are currently being used in the wet well as a level sensor. Kapur recommends replacement of the floats with a pressure transducer. Pressure transducers provide an accurate reading and are easy to install. The floats can be used as a backup system for a high-level alarm.

The generator at the Hermitage Lift Station is 25 years old and has reached the end of its useful life (Figure 2). Kapur recommends that the generator should be replaced. The generator located at the Baypoint Lift Station is in good condition and should be moved to this site to save replacement costs.

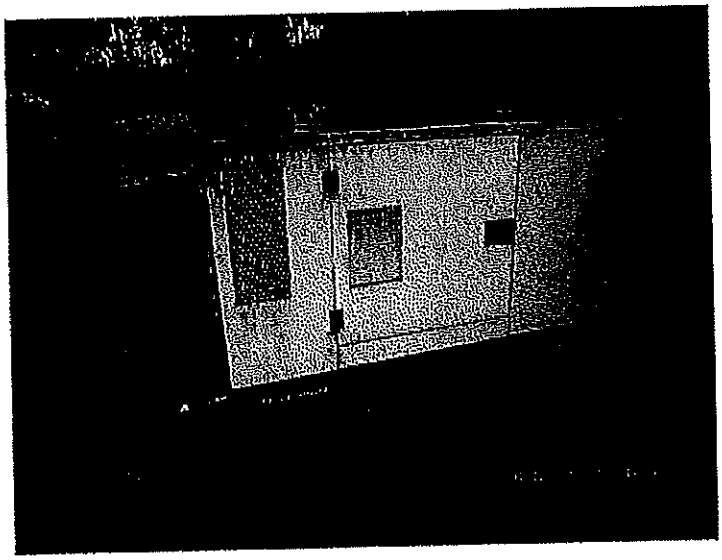


Figure 2: Hermitage Lift Station Generator

Kapur recommends that the existing control building (Figure 3) be replaced with a similar structure that is easier to access for maintenance. The existing entry to the control building is short and requires operators to crouch to enter the control building. The roof on the existing structure also needs repairs. Significant upgrades to the relocated generator would be required to store it in the

control building. Since the recommended control building does not need to house the generator, the building would have a similar footprint as the existing.

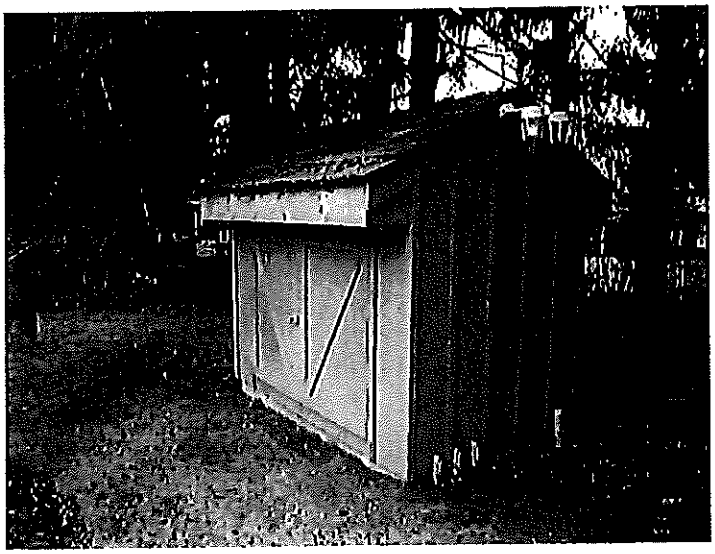


Figure 3: Hermitage Lift Station Control Building

Generators should continue to be run weekly. During discussions with the operators, it was brought to Kapur's attention that, during backup generator testing when the pumps are running, the pumps do not turn on after the testing is complete. This causes the high-level alarm to activate at the lift station. With new controls and a new generator, this issue will be alleviated.

2.2 Baypoint Lift Station

Baypoint Lift Station Condition Assessment			
Lift Station Components		**Condition (Good or Poor)**	**Comments**
Site Components	Parking for Maintenance Vehicles	Good	Shared driveway
	Site Drainage Away from Structure	Poor	Control building has been known to flood during heavy rain events
	Surrounding Foliage (Trees, bushes, shrubs)	Good	No obstructs to access equipment
	Site and Structure Security	Poor	Install unlawful entry alarm
	By-Pass Available	None	By pass is not required
Structural Components	Condition of Valve Vault	Good	Permanent concrete structure should last over 60 years
	Condition of Wet Well	Good	Permanent concrete structure should last over 60 years
	Valve Vault Ventilation	None	Ventilation is not required, inverted "J" tube is recommended
	Pump Removal	Good	Structure has a hatch for pump maintenance
Mechanical Components	Pump Condition	Good	Repairs on an as needed basis
	Motor Condition	Good	Repairs on an as needed basis
	Valve Condition	Good	Repairs on an as needed basis
	Pipe Condition	Good	Repairs on an as needed basis
Electrical Components	On-Site Generator	Good	Recommend relocating and constructing new enclosed structure for a new generator
	Motor Starters	Good	No known issues
	Controls	Poor	Recommend updating controls
	SCADA System	Poor	Recommend new system
	Exterior Conduits	Good	No known issues
	Interior Conduits	Good	No known issues
	Flow Meter	None	Not recommended for small lift stations
	Level Sensor	Poor	Recommend replacing floats with pressure transducers

Site Components

Parking at Baypoint Lift Station consists of a street parking to reach the lift station easement (Figure 4). Maintenance vehicles have an adequate amount of space to park at this location. The control building has been known to flood at this location. Access to the valve vault, wet well, control building and generator are not blocked by dense foliage. The control building is kept locked when not in use. Additional site security, such as an entry alarm, is recommended.

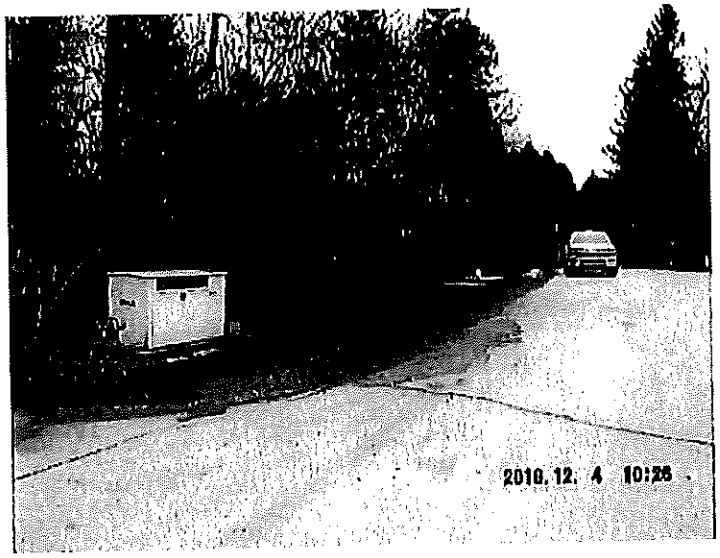


Figure 4: Baypoint Lift Station Site

Structural Components

The Baypoint Lift Station was constructed in 1992. The concrete valve vault and wet well at the Baypoint Lift Station are in good condition. The concrete wet well and valve vaults are permanent structures and should last over 60 years. A hatch is available for pump removal. The wet well has an inverted "J" tube for ventilation. Valve vaults can be vented with a portable ventilator when maintenance is required. An inverted "J" tube is not required for this type of structure, but one is recommended to provide continuous fresh air.

Mechanical Components

The mechanical components in the wet well includes two 80 gallons per minute (gpm) Flygt pumps with 2.7 HP motors. The pumps provide a TDH (total dynamic head) of 22.5 feet. Kapur does not recommend replacing the pumps as they are still working as designed.

The mechanical components in the valve vault includes four plug valves, two swing check valves and ductile iron piping. The piping and valves are in good condition and replacement is not recommended.

Infiltration and Inflow (I&I) is expected to be a major cause of large flows at this lift station. During the beginning of rainfall events, flows at the lift station tend to increase drastically. Kapur recommends an I&I investigation at this location to identify how I&I is entering the system.

A pump bypass is not available for this lift station and is not required. Kapur recommends that standpipes should be installed and connected to the wet well to provide a bypass if the pumps were out of service for an extended length of time. When the pumps are not working in an emergency, stand pipes will allow for easy and fast connections to the city owned portable pump. The nearest manhole for discharge to with a hose is about 880 feet away. Discharging to this manhole with a hose is not recommended.

Electrical Components

The existing control operating system has reached the end of its useful life. Kapur recommends that the control system should be updated. New controls will provide a screen that will display the condition of the lift station in real time. A new SCADA monitoring system should be installed with the new controls. The SCADA system will record and store operational information about the lift station that can be accessed by the owner on a secure website. The system would also provide immediate alarm notification via text and email. Kapur recommends an Antx Aquavx Scout cellular alarm dialer as a cost-effective system.

Floats are currently being used in the wet well as a level sensor. Kapur recommends replacement of the floats with a pressure transducer. Pressure transducers provide an accurate reading and are easy to install. The floats can be used as a backup system for high level alarm.

The generator at the Baypoint Lift Station is 10-12 years old and continues to run as intended (Figure 5). Outside generators typically last around 20 years before they should be replaced. The Baypoint generator has an estimated 8-10 years left before replacement would be recommended. Kapur recommends that this generator should be moved to the Hermitage Lift Station and a new indoor generator be purchased for this site. A new control building is recommended at this site and a newly purchased generator should be put in this new building. Generators should continue to be run weekly.

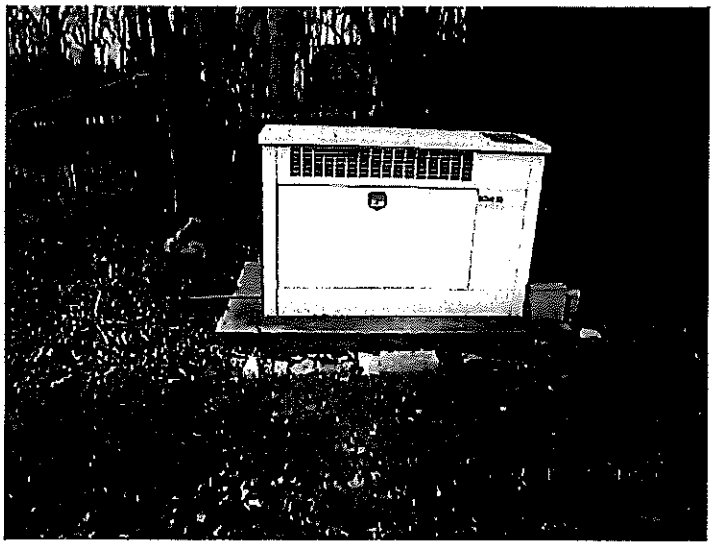


Figure 5: Baypoint Lift Station Generator

Kapur recommends that a new heated control building should be constructed to replace the existing structure (Figure 6). The new building would house the control equipment and the new generator, like the Lake Drive Lift Station. The enclosed structure will extend the life of the generator by providing protection from the elements. The structure will be located above the floodplain to prevent flooding in the control building. This has been a problem at the site in the past. Existing easements will need to be analyzed during design to ensure adequate space is available for a new structure. If space is not available, easement discussion with local property owners would be required to increase the size of the existing easement for a new building. The control building will be designed to be above flood level to eliminate the existing flooding issue at this location.

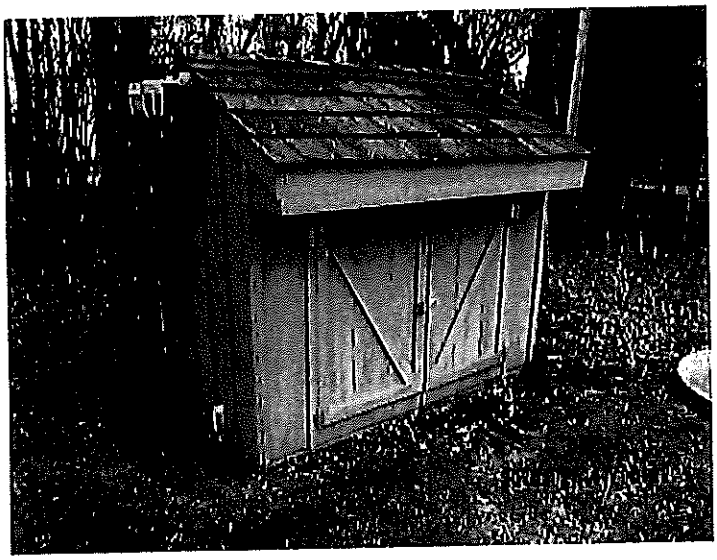


Figure 6: Baypoint Lift Station Control Building

3. CONCLUSION

Possible recommendations for the Bayside lift stations are listed in Table 1. Costs per recommendation are provided.

Table 1: Possible Recommendations for Bayside Lift Stations

Recommendation	Cost
New control building (to house controls and generator)	$85,000
New control building (to house controls only)	$45,000
Replace generator	$35,000
New controls with pressure transducers	$25,000
New SCADA	$6,000
I&I investigation	$6,000
Relocated generator	$5,000
New standpipe	$5,000
Inverted "J" tube for ventilation	$800

Hermitage Lift Station:

Kapur recommendations are listed in Table 2 for the Hermitage Lift Station. The lift station does not require a new generator if the Bay Point Lift Station is relocated to this site. A new control building is recommended for the new controls but is not required to house the generator. These options alleviate the most issues and increase the life of the new equipment while decreasing maintenance costs to the equipment. An I&I investigation at this location should be conducted to identify how I&I is entering the system.

Table 2: Hermitage Lift Station Recommendations

Recommendation	Cost
New control building (to house controls only)	$45,000
New controls with pressure transducers	$25,000
New SCADA	$6,000
I&I investigation	$6,000
Relocated generator	$5,000
New standpipe	$5,000
Inverted "J" tube for ventilation	$800
Total:	**$92,800**

Bay Point Lift Station:

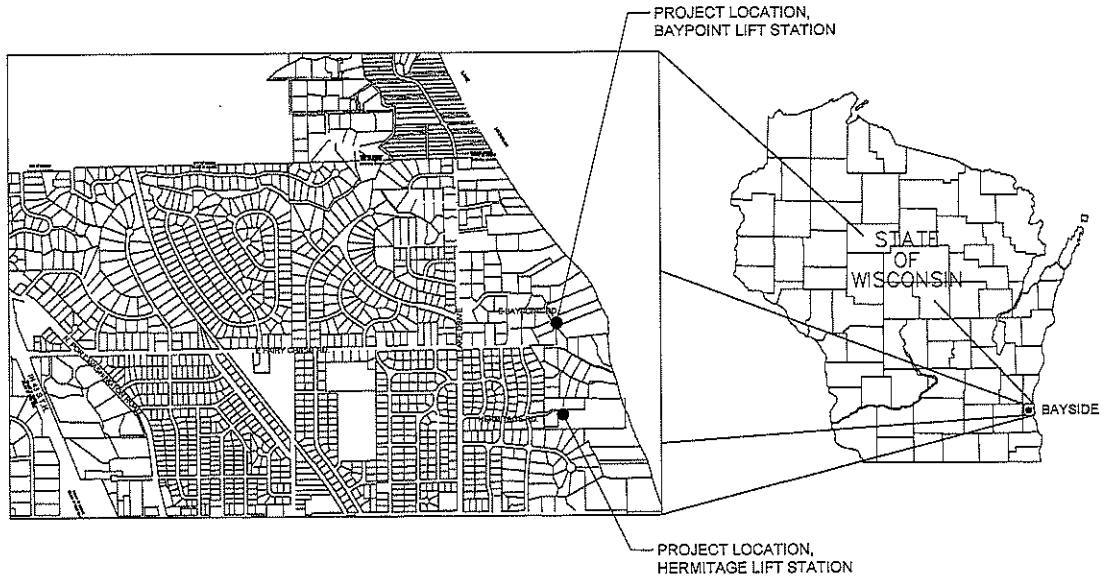
Kapur recommendations are listed in Table 3 for the Baypoint Lift Station. The current generator at this site should be relocated to the Hermitage Lift Station site and a new generator purchased. The generator and new controls should be housed in a new control building to be constructed at this site. These options alleviate the most issues and increase the life of the new equipment while decreasing maintenance costs to the equipment. An I&I investigation at this location should be conducted to identify how I&I is entering the system.

Table 3: Baypoint Lift Station Recommendations

Recommendation	Cost
New control building (to house controls and generator)	$85,000
Replace generator	$35,000
New controls with pressure transducers	$25,000
New SCADA	$6,000
I&I investigation	$6,000
New standpipe	$5,000
Inverted "J" tube for ventilation	$800
Total:	**$162,800**

HERMITAGE AND BAYPOINT LIFT STATION GENERATOR PROJECT

BAYSIDE, WISCONSIN



LOCALITY MAP

INDEX TO DRAWINGS

SHEET NO.	DRAWING NO.	TITLE
GENERAL		
1	G-1	TITLE SHEET
2	G-2	CIVIL LEGEND
3	G-3	ARCHITECTURAL LEGEND
4	G-4	ELECTRICAL LEGEND
5	G-5	GENERAL SHEETS
6	G-6	CIVIL NOTES
HERMITAGE LIFT STATION		
7	LSH-C-1	HERMITAGE SITE PLAN
8	LSH-A-1	HERMITAGE LS EXTERIOR ELEV.
9	LSH-A-2	HERMITAGE LS SCHEDULE
10	LSH-A-3	HERMITAGE LS WALL SECTION
11	LSH-EH-1	HERMITAGE LS LIGHTING & HVAC
BAYPOINT LIFT STATION		
12	LSB-C-1	BAYPOINT SITE PLAN
13	LSB-A-1	BAYPOINT LS EXTERIOR ELEV.
14	LSB-A-2	BAYPOINT LS SCHEDULE
15	LSB-A-3	BAYPOINT LS WALL SECTION
16	LSB-EH-1	BAYPOINT LS LIGHTING & HVAC
TYPICAL SHEETS		
17	E-1	ONE-LINE DIAGRAM
18	H-1	HVAC SCHEDULE
DETAILS		
19	D-1	DETAILS

BID AND CONSTRUCTION SET 3/2020

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET: COVER

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: G-1

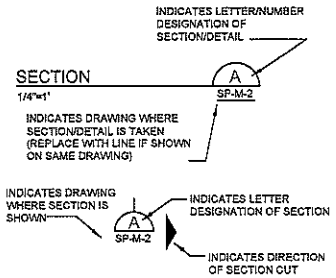
SHEET NUMBER: 1

CIVIL LEGEND

EXISTING	PROPOSED	
		FORCE MAIN
		SANITARY SEWER AND MANHOLE
		WATER MAIN, HYDRANT AND VALVE
G	G	GAS MAIN
T	T	UNDERGROUND TELEPHONE CABLE
E	E	UNDERGROUND ELECTRIC CABLE
		EDGE OF CONCRETE
		EDGE OF BITUMINOUS PAVEMENT
800 / 801	800 / 801	CONTOUR LINE
5+00	5+00	℄ STATIONING
		ROAD
		CULVERT
		STORMWATER INLET
		ELECTRICAL MANHOLE
		ELECTRICAL HANDHOLE
		AREA-LIGHTING BASE
		DRAINAGE WAY OR DITCH
		MATCH LINE AND BREAK LINE
		ALUMINUM HANDRAIL
		STRUCTURE
		FENCE
		POWER POLE WITH GUY SUPPORT

	BITUMINOUS CONCRETE PAVEMENT
	GRAVEL SHOULDER
	CONCRETE WALK
	CONTROL POINT
	BENCHMARK
	EXISTING GRADE (IN PROFILE)
	ESTABLISHED GRADE (IN PROFILE)
	RAILROAD TRACKS
	SIGN
P/L	PROPERTY LINE
R/W	RIGHT-OF-WAY LINE
	EASEMENT LINE
	BASELINE
	SURVEY REFERENCE LINE
	CHAIN-LINK RAILING
	POST OR GUARD POST
	TREE REMOVAL
	WOODED AREA
	RESTORATION TOPSOIL W/ SEED
	ABANDONED PIPES
	PIPES TO BE ABANDONED
B-1	BORING LOCATION
	PROPOSED SILT FENCE

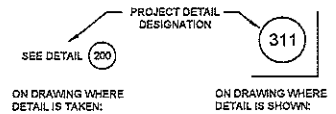
SECTION DESIGNATION



PROJECT DETAIL DESIGNATION

PROJECT DETAIL NUMBERING DESIGNATION

CIVIL	100	THRU	199
ARCHITECTURAL	200	THRU	299
STRUCTURAL	300	THRU	399
MECHANICAL	400	THRU	499
HVAC	500	THRU	599
I&C	600	THRU	699
ELECTRICAL	700	THRU	799



PIPE IDENTIFICATION

PF	FIRE PROTECTION
PW	POTABLE WATER
XN	SANITARY
WS	SERVICE WATER
XW	WASTE WATER
SS	STORM SEWER
FM	FORCE MAIN
S	SANITARY SEWER
W	WATER MAIN
	WETLAND
	REMOVAL

CURVE DATA

R = RADIUS L = LENGTH

Δ = DELTA ST = SEMITANGENT

ABBREVIATIONS

A	AIR (PLANT UTILITY)
AL	ALUMINUM
BRG.EL	BEARING ELEVATION
CHWR	CHILLED WATER RETURN CHILLED
CHWS	WATER SUPPLY
C/L	CENTER LINE
CO	CLEAN OUT
CONC.	CONCRETE
CJ	CONTROL JOINT
CMP	CORRUGATED METAL PIPE
CW	COLD WATER
CMU	CONCRETE MASONRY UNIT
D	DRAIN
DCT	DECANT
D.I.	DUCTILE IRON
DIPS	DUCTILE IRON PIPE SIZE
DS	DIGESTED SLUDGE
EL	ELEVATION
ELEC	ELECTRICAL
E.S.	EACH SIDE
EXIST	EXISTING
E.W.	EACH WAY
F.F.EL	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
G	NATURAL GAS
GALV.	GALVANIZED
HW	HOT WATER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
INSUL.	INSULATION
OC	ON CENTER
PD	PLANT DRAIN
PL	PLATE
RD	ROOF DRAIN
RDCR	REDUCER
R.O.	ROUGH OPENING
SAN	SANITARY
SE	SECONDARY EFFLUENT
SS	STORM SEWER
SST	STAINLESS STEEL
T.O.F	TOP OF FOOTING
T.O.W.	TOP OF WALL
V.I.F	VERIFY IN THE FIELD
V	VENT
WAS	WASTE ACTIVATED SLUDGE
WWM	WELDED WIRE MESH
Ø	DIAMETER

NOTES:

1. THIS IS A STANDARD LEGEND SHEET, SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE USED ON THE PLANS.
2. EXISTING PIPING, EQUIPMENT, STRUCTURE, AND TOPOGRAPHY ARE SHOWN SCREENED AND/OR LIGHT LINED. NEW PIPING, EQUIPMENT, STRUCTURE, AND FINISHED GRADE ARE SHOWN HEAVY-LINED.

kapur
7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET:
CIVIL LEGEND

DESIGNED BY:	--
DRAWN BY:	--
CHECKED BY:	--
APPROVED BY:	--
PROJECT NO:	---
DRAWING NO:	---

SHEET NUMBER:
2

PLUMBING LINE SCHEDULE

LINE TYPE	DESCRIPTION	ABBREVIATION
	COLD WATER	CW
	HOT WATER	HW
	SOFT WATER	SW
	HOT WATER RETURN	HWR
	VENT	V
	DRAIN (SANITARY SEWER)	D
	STORM SEWER	SS
G	NATURAL GAS	G
CW	POTABLE WATER	CW
W2	NON-POTABLE WATER	W2
FE	PLANT WATER (FINAL EFFLUENT)	FE
PS	PROCESS PIPING	PS

MATERIAL LEGEND

SYMBOL	LEGEND
	CONCRETE
	CMU PLAN
	CMU SECTION
	METAL STUD WALL PLAN
	RIGID INSULATION
	BATT INSULATION
	PLYWOOD
	STEEL
	MASONRY VENEER
	WOOD, ROUGH NON-CONTINUOUS
	WOOD, FINISHED
	GROUND SURFACE
	COMPACTED STRUCTURAL FILL
	CONCERT FILL
	DRAIN FILL
WALL FEXT X	FIRE EXTINGUISHER "X" = No. IN SPECS
WALL ②	INDICATES 1 HOUR FIRE RATED CONST.
WALL ②	INDICATES 2 HOUR FIRE RATED CONST.

HEATING, VENTILATING, AND AIR CONDITIONING SYMBOLS

SYMBOL	DESCRIPTION
HWS	LOW TEMPERATURE HEATING WATER SUPPLY
HWR	LOW TEMPERATURE HEATING WATER RETURN
G	NATURAL GAS
D	COIL CONDENSATE DRAIN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
	DUCT RISE THRU PLANE OF VIEW
	SUPPLY DUCT DROP
	EXHAUST/RETURN DUCT RISE THRU PLANE OF VIEW
	EXHAUST/RETURN DUCT DROP
12x12 RD-1 700 CFM	RETURN GRILLE (TYPE, QTY, SIZE, CFM)
	ROUND SUPPLY DIFFUSER (TYPE, QTY, SIZE, CFM)
	RECTANGULAR SUPPLY DIFFUSER (TYPE, QTY, SIZE, PATTERN, CFM)
24x12 DG-1 700 CFM	DOOR GRILLE (TYPE, SIZE, CFM)
BDD	BACKDRAFT DAMPER
	FIRE DAMPER
	HORIZONTAL POS.
	VERTICAL POS.
	SMOKE DAMPER
	ACCESS DOOR
	CEILING DIFFUSER IN FIRE RATED CEILING
	ELBOW WITH TURNING VANES
	FLEXIBLE DUCT CONNECTION
	TERMINAL UNIT, VAV
	BOOSTER COIL WITH ACCESS DOORS
24/12	RECTANGULAR DUCT
24Ø	ROUND DUCT
	ACOUSTICALLY LINED DUCT
	DUCT SECTION, SUPPLY
	DUCT SECTION, EXHAUST/RETURN
R	RISER (R) OR DROP (D) IN DIRECTION OF FLOW

	SPLITTER DAMPER
	MANUAL VOLUME DAMPER
MOD	MOTORIZED CONTROL DAMPER (PARALLEL BLADE INDICATED)
	GATE VALVE, RISING STEM
	GLOBE VALVE, RISING STEM
	BUTTERFLY VALVE
	BALL VALVE, 2-PIECE
	BALANCE VALVE, CALIBRATED
	NEEDLE VALVE
	CHECK VALVE, SWING
	DRAIN VALVE, HOSE END
	GAS COCK
	CONTROL VALVE, 2-WAY, PNEUMATIC
	CONTROL VALVE, 3-WAY
	PRESSURE REDUCING VALVE
	RELIEF OR SAFETY VALVE
	AIR VENT, MANUAL
	TEE, HORIZONTAL
	TEE, TOP TAKEOFF
	TEE, BOTTOM TAKEOFF
	TEE, 45° UP TAKEOFF
	ELBOW, UP
	ELBOW, DOWN
	PIPE RISE
	PIPE DROP
	REDUCER, CONCENTRIC
	PIPE CAP
	PIPE BLIND FLANGE
	PIPE UNION
	PIPE FLANGE
	ELBOW, HORIZONTAL
	FLEXIBLE CONNECTOR, BRAIDED HOSE
	STRAINER
	INSERTION WELL
	PRESSURE GAUGE
	THERMOMETER
	P/T PLUG
FS	FLOW SWITCH
P	PRESSURE SWITCH
A	AQUASTAT
T	THERMOSTAT
T	TEMPERATURE
H	HUMIDITY
	VELOCITY

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO COLUMN GRID ON CENTERLINES, NOMINAL SURFACE OF MASONRY, FACE OF STUDS AND FACE OF CONCRETE WALLS.
2. "FIRST FLOOR EL" REFERS TO TOP OF CONCRETE SLABS, FINISH FLOORING IS INSTALLED ABOVE THE FLOOR LINE FOR DEPRESSED FLOORS AND CURBS, SEE STRUCTURAL DRAWINGS.
3. REPETITIVE FEATURES ARE NOT DRAWN IN THEIR ENTIRETY AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
4. WHERE DOOR IS LOCATED NEAR CORNER OF ROOM AND IS NOT LOCATED BY DIMENSION ON PLAN OR DETAILS, DIMENSION SHALL BE 4-INCHES FROM FACE OF MASONRY (WALL) AND 2" FROM FACE OF METAL STUD WALL TO FACE OF ROUGH OPENING.
5. AT SOUND INSULATED WALLS, FULL HEIGHT PARTITIONS SHALL BE SEALED BOTH SIDES WITH ACOUSTIC SEALANT: TOP, BOTTOM, INTERSECTIONS, DOOR FRAMES, GLAZED OPENING FRAMES, AND OTHER PENETRATIONS.
6. LINE OF EXISTING GRADES, AS SHOWN ON THE BUILDING ELEVATIONS AND SECTIONS ARE APPROXIMATE. THEY ARE AT THE BUILDING FACE, OR ON THE SECTION END EXCEPT AS NOTED.
7. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS CONTRACT, OR BY OTHERS.
8. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND OTHER CATEGORIES OF DRAWINGS FOR ADDITIONAL NOTES.
9. VERIFY SIZE AND LOCATION OF, AND PROVIDE: ALL OPENINGS THROUGH FLOORS AND WALLS, ACCESS DOORS, FURRING, CURBS, ANCHORS AND INSERTS, PROVIDE ALL BASES, BLOCKING REQUIRED FOR ACCESSORIES, MECHANICAL, ELECTRICAL AND OTHER EQUIPMENT.

kapur
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RELEASE:
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REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:
all in

SHEET:
ARCHITECTUAL LEGEND

DESIGNED BY:	—
DRAWN BY:	—
CHECKED BY:	—
APPROVED BY:	—
PROJECT NO:	—
DRAWING NO:	—

SHEET NUMBER:
3

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	NAMEPLATE OR LEGEND PLATE - SEE SCHEDULE
2- 2"C	INDICATES TWO 2" EMPTY CONDUITS
MCC-A	MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME OR IDENTIFYING SYMBOL AS SHOW
	BRANCH CIRCUIT PANEL
MH	ELECTRICAL MANHOLE
HH	ELECTRICAL HANDHOLE
PB	ELECTRICAL PULLBOX
5	MOTOR, SQUIRREL CAGE INDUCTION-HORSEPOWER INDICATED
1	LUMINAIRE - SEE SCHEDULE
2	LUMINAIRE - SEE SCHEDULE
3	POLE MOUNTED LUMINAIRE - SEE SCHEDULE
4	WALL MOUNTED LUMINAIRE - SEE SCHEDULE
	MOTOR OUTLET
	120V FLOOR OUTLET = HUBBELL #S2529 FLOOR BOX WITH STANDARD DUPLEX RECEPTACLE AND #S3925 DUPLEX COVER
	TELEPHONE FLOOR OUTLET = HUBBELL #S2529 FLOOR BOX WITH #S2725 COVER
	TELEPHONE OUTLET, WALL MOUNT WITH 3/4" CONDUIT TO TELEPHONE TERMINAL CABINET (W-INDICATES 54" MOUNTING HEIGHT FOR PHONE)
a	SMALL LETTER SUBSCRIPT ON SWITCH AND LUMINAIRE INDICATES SWITCHING
LA-2	HOME RUN CONDUCTOR-DESTINATION SHOWN FOR EXPOSED CONDUIT, MINIMUM 2#12, 1#12 GND AND IN 3/4" C.
LA-2	HOME RUN CONDUCTOR-DESTINATION SHOWN FOR CONCEALED OR UNDERGROUND CONDUIT
OR	EXPOSED CONDUIT AND CONDUCTORS*
OR	CONCEALED CONDUIT AND CONDUCTORS*

NOTE: *ALL UNMARKED CONDUIT RUNS CONSIST OF TWO NO.12 THW CONDUCTORS IN CONDUIT. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF NO.12 THW WIRE. CROSSHATCH WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.

#12/G	CROSSHATCHES WITH BAR INDICATE #10 THW WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.
	CONDUIT, DOWN
	CONDUIT, UP
	CONDUIT, STUBBED AND CAPPED AS SHOWN
CE	UNDERGROUND CONCRETE ENCASED CONDUIT
S	WALL SWITCH: 2-DOUBLE POLE P-PILOT LIGHT 3-THREE WAY K-KEY OPERATED 4-FOUR WAY D-DIMMER WP-WATERPROOF LS-LIMIT SWITCH CRE-CORROSION RESISTANT
S	MANUAL MOTOR STARTER SWITCH
(S)3	3 POLE MANUAL MOTOR STARTER SWITCH, NEMA TYPE 4 ENCLOSURE
	CONVENIENCE RECEPTACLE-DUPLEX UNLESS INDICATED OTHERWISE C-COUNTER CRE-CORROSION RESISTANT R-RETRACTABLE COIL TL-TWIST LOCK WP-WEATHERPROOF GFI-GROUND FAULT INTERRUPTER WHILE IN USE

SYMBOL	DESCRIPTION
	CONVENIENCE RECEPTACLE, PEDESTAL, DUPLEX SINGLE FACE UNLESS INDICATED OTHERWISE
20	RECEPTACLE-240V, 1-PHASE, AMPERAGE AS INDICATED
	2 DUPLEX GROUNDED RECEPTACLES IN SAME OUTLET BOX WITH DOUBLE DUPLEX PLATE
30	RECEPTACLE, SPECIAL PURPOSE, AMPERAGE AS INDICATED
J OR HH	GENERAL ELECTRICAL CONTROL OR WIRING DEVICE. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. LETTER SYMBOLS OR ABBREVIATIONS INDICATE TYPE OF DEVICE
PBS	PUSH-BUTTON STATION, NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. (WP=NEMA 4 ENCLOSURE). SEE CONTROL DIAGRAMS FOR TYPE PUSH-BUTTON REQUIRED
CB	CIRCUIT BREAKER DISCONNECT SWITCH
30	NONFUSED DISCONNECT SWITCH, SIZE INDICATED. 3 POLE UNLESS OTHERWISE INDICATED. NEMA 1 ENCLOSURE. (WP=NEMA 3R OR 4X, AS INDICATED ON PLANS)
60/40 F	FUSED DISCONNECT SWITCH, SIZE INDICATED (60/40, 60=SWITCH RATING, 40=FUSE RATING). 3 POLE UNLESS OTHERWISE INDICATED. NEMA 1 ENCLOSURE. (WP=NEMA 3R OR 4X, AS INDICATED ON PLANS)
2	MANUAL STARTER WITH PILOT LIGHT
30 L	LIGHTING CONTRACTOR, CURRENT RATING INDICATED. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. SEE CONTROL DIAGRAM FOR NUMBER OF POLES
	THREE PHASE MAGNETIC STARTER
	THREE PHASE COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH
2	SINGLE PHASE STARTER, MAGNETIC, NEMA SIZE INDICATED. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. SEE CONTROL DIAGRAM
2	COMINATION (FUSE OR CIRCUIT BREAKER AS INDICATED) MAGNETIC STARTER, NEMA SIZE INDICATED. NEMA 1 ENCLOSURE UNLESS OTHERWISE INDICATED. SEE CONTROL DIAGRAM
T	TRANSFORMER, RATING AS INDICATED
	CONTACT, NORMALLY OPEN WITH NEMA SIZE INDICATED AS APPLICABLE
	CONTACT, NORMALLY CLOSED WITH NEMA SIZE INDICATED AS APPLICABLE
	OVERLOAD RELAY HEATER
100/M	CIRCUIT BREAKER, MAGNETIC TRIP ONLY, CONTINUOUS CURRENT RATING SHOWN. 3 POLE UNLESS OTHERWISE INDICATED
400	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE UNLESS OTHERWISE INDICATED
400 400	CIRCUIT BREAKER WITH CURRENT LIMITING FUSES. TRIP AND FUSE RATING INDICATED, 3 POLE UNLESS OTHERWISE INDICATED
400 225	FUSED SWITCH, SWITCH AND FUSE CURRENT RATING INDICATED. 3 POLE UNLESS OTHERWISE INDICATED
100	SWITCH, CURRENT AND VOLTAGE RATING INDICATED. 3 POLE UNLESS OTHERWISE INDICATED
	FUSE
	GROUND
120V OR 120/240V	TRANSFORMER, SECONDARY VOLTAGES, PHASE AND RATING INDICATED AS APPLICABLE
15 KVA 1ø	
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY CLOSED
A	PUSH-BUTTON, SWITCH, MAINTAINED CONTACTS WITH MECHANICAL INTERLOCK

SYMBOL	DESCRIPTION
	SELECTOR SWITCH, MAINTAINED CONTACT
TDR TC	TIME DELAY RELAY CONTACT, NORMALLY OPEN — TIME ACTION INDICATED
TDR TO	TIME DELAY RELAY CONTACT, NORMALLY CLOSED — TIME ACTION INDICATED
	CONTACT FROM REMOTE DEVICE SELECTOR SWITCH-MAINTAINED CONTACT-CHART

DEFINES OPERATION:

CKT	POSITION		
	HAND	OFF	AUTO
1	X	O	O
2	O	O	X

X - CLOSED CONTACT
O - OPEN CONTACT

A	INDICATING LIGHT, PUSH-TO-TEST, LETTER INDICATES COLOR
A	INDICATING LIGHT - LETTER INDICATES COLOR A - AMBER G - GREEN B - BLUE R - RED C - CLEAR W - WHITE
	LIGHTNING ARRESTER
$	WALL SWITCH:
X-Y-Z	INCANDESCENT FIXTURE - SURFACE, WALL MOUNTED; X = FIXTURE TYPE Y = CIRCUIT Z = SWITCH
X-Y-Z	HIGH INTENSITY DISCHARGE - SURFACE, WALL MOUNTED; X = FIXTURE TYPE Y = CIRCUIT Z = SWITCH
1PR #16TS	1PAIR #16 AWG, TWISTED AND SHIELDED SEE SPECIFICATIONS.

ELECTRICAL ABBREVIATIONS & LETTER SYMBOLS

A	AMPERES OR ANALOG SIGNAL
AC	AIR CONDITIONER
AFF	ABOVE FINISHED FLOOR
AHP	AIR, HIGH PRESSURE
ALP	AIR, LOW PRESSURE
ALT	ALTERNATING RELAY
CB	CIRCUIT BREAKER
CAP	SURGE CAPACITOR
CE	CONCRETE ENCASED
CHBR	CHAMBER
CS	COMBINED SEWER
CSO	COMBINED SEWER OVERFLOW
CR	CONTROL RELAY
CYL	CYLINDER
DM	DAMPER MOTOR
EF	EXHAUST FAN
EXP	EXPLOSION PROOF
FG	FLOW GATE
FCG	FLOW CONTROL GATE
FO	FULL OPEN
FR	FLOW REGULATOR, VORTEX TYPE
FSS	FUSED SAFETY SWITCH
FV	FLOW VALVE
G	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
HPU	HYDRAULIC POWER UNIT
HS	HAND SWITCH
HYD	HYDRAULIC
ID	INSIDE DIAMETER
IND	INDICATING
ISB	INTRINSICALLY SAFE BARRIER
ISR	INTRINSICALLY SAFE RELAY
JSL	VOLTAGE/PHASE CONDITION MONITORING RELAY
KWH	KILOWATT-HOUR METER
KQI	ELAPSED TIME METER
L	LOUVER
LA	LIGHTNING ARRESTER
LCP	LOCAL CONTROL PANEL (SITE NUMBER BEFORE LCP DENOTES LOCATION
LE	LEVEL ELEMENT
LI	LEVEL INDICATOR
LP	LIGHTING PANEL (NUMBER BEFORE LP DENOTES LOCATION)
LR	LOCAL REMOTE
LSL	LOW LEVEL SWITCH
LT	LEVEL TRANSMITTER
MAX	MAXIMUM
MIN	MINIMUM
M1	MOTOR NO. 1 STARTER
MIS	METROPOLITAN INTERCEPTOR SEWER
NTB	COMMUNICATIONS NETWORK TERMINATION BOX
OC	OPEN-CLOSED
OD	OUTSIDE DIAMETER
OL	MOTOR THERMAL OVERLOAD
OSC	OPEN-STOP-CLOSE
P	PUMP
PF	PROPELLER FAN
PH	PHASE
P&ID	PROCESS & INSTRUMENTATION DIAGRAM
PNL	PANEL
PP	POWER PANEL
PSLL	LOW PRESSURE SWITCH (ALARM)
PSL	LOW PRESSURE SWITCH
PSH	HIGH PRESSURE SWITCH
PSHH	HIGH PRESSURE SWITCH (ALARM)
QL	INDICATING LIGHT
RA	REVERSE ACTING
RCPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RTU	REMOTE TELEMETRY UNIT
SA	SAMPLE
SST	STAINLESS STEEL
SV	SOLENOID VALVE
T	THERMOSTAT
TSP	TWISTED SHIELDED PAIR
TYP	TYPICAL
3PDT	THREE POLE DOUBLE THROW
UH	UNIT HEATER
UGND	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
WE	WE ENERGIES
WP	WEATHER PROOF
XFMR	TRANSFORMER
ZE	POSITION ELEMENT
ZL	POSITION INDICATING LIGHTS
ZS	POSITION (LIMIT) SWITCH
ZT	POSITION TRANSMITTER

NOTE:

1. THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE USED ON THE PLANS.

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LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:		
#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET: ELECTRICAL LEGEND

DESIGNED BY:	--
DRAWN BY:	--
CHECKED BY:	--
APPROVED BY:	--
PROJECT NO:	--
DRAWING NO:	--

SHEET NUMBER: 4

GENERAL NOTES

HORIZONTAL AND VERTICAL CONTROL

1. DESCRIPTIONS AND VALUES OF HORIZONTAL AND VERTICAL CONTROLS ARE AVAILABLE FROM THE ENGINEER.

SITE PLANS

1. THE CONTRACTORS ARE TO VERIFY THE LOCATION, DIMENSIONS, AND ELEVATIONS OF ALL EXISTING STRUCTURES, PIPING, UNDERGROUND WIRING, CABLES, ETC., WHICH HAVE ANY BEARING OR RELATION TO NEW CONSTRUCTION, EQUIPMENT, OR PIPING UNDER HIS CONTRACT.
2. THE CONTRACTOR IS TO VERIFY & OR DETERMINE & PROVIDE ALL REQUIRED FITTINGS FOR VERTICAL CHANGES IN ELEVATION AS WELL AS IN DIRECTION OF ALL NEW OUTSIDE PIPING. ALL OUTSIDE PIPING IS TO BE LAID ON FIRM FOOTING (SEE SPECIFICATIONS).
3. TEMPORARY RELOCATION AND SUPPORT OF ALL UTILITIES SHALL BE DONE ACCORDING TO SPECIFICATIONS.
4. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS. THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL OTHER DISTURBED OR GRADED AREAS SHALL STABILIZED WITHIN FOURTEEN CALENDAR DAYS.
5. ALL SEWER AND WATER CONSTRUCTION SHALL MEET STANDARDS SET BY THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, SIXTH EDITION DECEMBER 22 2003 INCLUDING ADDENDUMS. (EXCEPT AS NOTED)
6. ALL EXISTING PIPING WHICH IS TO BE ABANDONED SHALL BE PLUGGED WITH CONCRETE AT ALL POINTS EXPOSED DURING CONSTRUCTION.
7. THE INFORMATION IN THIS PLAN SET IS THE BEST INFORMATION AVAILABLE THE CONTRACTOR MUST VERIFY ALL INFORMATION IN THE FIELD.

UNDERGROUND PIPING

ALL CONSTRUCTION SHALL MEET STANDARDS IN THE CONTRACT DOCUMENTS, "WISCONSIN STANDARD SPECIFICATIONS FOR SEWER AND WATER" AND "DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION", LATEST EDITION AND AMENDMENTS.

RESTORATION

1. RESTORATION TOPSOIL 4" MIN, FERTILIZE, SEED AND MAT ALL AREAS DISTURBED BY CONSTRUCTION. CONTRACTOR TO WATER AND MAINTAIN FOR A MIN. OF 30 DAYS.

REINFORCED CONCRETE

1. REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318.89)" AND ACI COMMITTEE 350 REPORT NO. 350R-89 "CONCRETE SANITARY ENGINEERING STRUCTURES."
2. DESIGN COMPRESSIVE STRENGTH FOR CAST-IN-PLACE CONCRETE AT 28 DAYS:

   f'c = 4,000 PSI AS THE BASIC DESIGN STRENGTH.

   f'c = 60 PSI FOR CELLULAR CONCRETE BACKFILL TO PIPING, AND BLOCKS.
3. DESIGN CONCRETE STRESSES FOR SANITARY STRUCTURES SHALL BE LIMITED TO THE SERVICE LOAD RECOMMENDED VALUES IN TABLE 2.6.7b OF ACI 350 "CONCRETE SANITARY ENGINEERING STRUCTURES."
4. DESIGN STRENGTH FOR REINFORCING STEEL: REINFORCEMENT SHALL BE DEFORMED BILLET STEEL BARS CONFORMING TO ASTM-A615, GRADE 60, Fy = 60,000 PSI AS THE BASIC DESIGN STRENGTH FOR ALL SANITARY CONCRETE STRUCTURES.
5. REINFORCEMENT DETAILS SHALL CONFORM TO THE REQUIREMENTS OF THE "ACI DETAILING MANUAL". SPLICES AND EMBEDMENT LENGTHS NOT GIVEN ON THE CONTRACT DRAWINGS SHALL BE ASSUMED TO BE IN TENSION AND SHALL CONFORM TO THE REQUIREMENTS OF THE ABOVE CODE.
6. BAR BENDS AND HOOKS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE "ACI DETAILING MANUAL"
7. BAR BENDS AND DEVELOPMENT LENGTH SHALL BE AS SHOWN ON THE CONTRACT DRAWINGS OR IN ACCORDANCE WITH REQUIREMENTS OF ACI 318.
8. SPACING OF BARS SHOWN ON THE CONTRACT DRAWINGS SHALL BE A MAXIMUM.
9. MECHANICAL CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.
10. COLD-DRAWN STEEL WIRE SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS FOR WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT (ASTM-A185 AND A82):

    YIELD STRENGTH, Fy = 60,000 PSI.
    ALLOWABLE STRESS fs = 30,000 PSI.
11. CONSTRUCTION JOINTS AND REINFORCING STEEL SPLICES SHALL BE WHERE SHOWN ON THE CONTRACT DRAWINGS. OPTIONAL HORIZONTAL OR VERTICAL CONSTRUCTION JOINTS MAY BE PROPOSED BY THE CONTRACTORS, SUBJECT TO THE APPROVAL OF THE ENGINEER.

WOOD TRUSSES

1. ALL WOOD TRUSSES SHALL HAVE A MAX. 19% MOISTURE CONTENT. CONTRACTOR SHALL PROVIDE ALL ACCESSORIES FOR INSTALLATION
2. ALL FASTENERS AND ANCHORS SHALL BE HOT DIPPED GALVANIZED.

ASPHALT SHINGLES

1. ROOFING MATERIALS SHALL BE ASPHALT SHINGLES WITH FIBERGLASS CORE, WITH 40 YEAR WARRANTY, SHINGLES, CONTRACTOR TO SUBMIT SAMPLES TO OWNER FOR APPROVAL, TIMBERLINE OR EQUAL.
2. SHEET FLASHING SHALL CONFORM TO ASTM B209.

REINFORCING DETAILS

1. UNLESS OTHERWISE SHOWN, CONCRETE WALLS AND SLABS SHALL BE REINFORCED AS FOLLOWS: #4 @ 12 INCHES EACH WAY CENTER OF 6 INCH SECTIONS; #5 @ 12 INCHES EACH WAY CENTER OF 8 INCH SECTIONS; #4 @ 12 INCHES EACH WAY EACH FACE OF 10 INCH SECTIONS; #5 @ 12 INCHES EACH WAY EACH FACE OF 12 INCH SECTIONS. SINGLE MAT REINFORCEMENT SHALL BE AT CENTER OF SECTION, UNLESS SHOWN OTHERWISE.
2. MINIMUM CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE 3 INCHES WHEN PLACED ON GROUND; FOR SURFACES EXPOSED TO WATER OR WEATHERING, 2 INCHES CLEARANCE ; INTERIOR BEAMS AND COLUMNS 1-1/2 INCH CLEARANCE.
3. UNLESS OTHERWISE NOTED, ALL WALL REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTION WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS. VERTICAL WALL BARS SHALL BE LAPPED WITH DOWELS FROM BASE SLABS. UNLESS INDICATED OTHERWISE, CONTRACTOR MAY SPLICE CONTINUOUS SLAB OR LONGITUDINAL BEAM BARS AT LOCATIONS OF HIS CHOOSING, EXCEPT THAT TOP BAR SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES SHALL BE LOCATED AT SUPPORTS.
   STAGGER ADJACENT SPLICES PER ACI 318 WITH A MINIMUM OF 2'-0". ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENT:

REINFORCEMENT BAR LAP SPLICES

LAP LENGTH * - INCHES

BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
A. HORIZONTAL BARS SO PLACED THAT MORE THAN 12-INCHES OF CONCRETE WILL BE CAST BELOW THE BARS.	17	24	29	35	45	59	74	94	116
B. HORIZONTAL BARS SO PLACED THAT LESS THAN 12-INCHS OF CONCRETE WILL BE CAST BELOW THE BARS, AND VERTICAL BARS.	17	16	21	25	32	42	53	67	83

* THE LAP LENGTH FOR REINFORCEMENT BARS SPACED LESS THEN 6-INCHES ON CENTER SHALL BE INCREASED BY 25 PERCENT. WHERE A SMALLER BAR LAPS WITH A LARGER BAR, THE LAP LENGTH FOR THE SMALLER BAR SHALL GOVERN, UNLESS SHOWN OTHERWISE.

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GENERAL NOTES

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DRAWING NO:	---

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4

GENERAL NOTES

GENERAL CONSTRUCTION

BENCHMARKS ARE PROVIDED ON PLAN SHEETS, AS NEEDED.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

EXCAVATION BELOW SUBGRADE (EBS), IF DETERMINED BY THE ENGINEER, SHALL BE PAID FOR AS COMMON EXCAVATION. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER. SUCH EBS IS NOT USED TO BALANCE YARDAGE.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

PROPERTY CORNERS: CONTRACTOR SHALL LOCATE, PROTECT AND, IF REMOVED OR DISTURBED, REPLACE PROPERTY CORNERS AT CONTRACTOR'S EXPENSE.

CONCRETE CONSTRUCTION

TRANSVERSE JOINTS IN CONCRETE WALKS SHALL BE CONSTRUCTED AT INTERVALS EQUAL TO THE WIDTH OF THE CONCRETE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

CONCRETE SIDEWALK SHALL BE REMOVED TO NEAREST JOINT, OR SAWCUT BEYOND NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER. MINIMUM LENGTH OF SLAB NOT TO BE LESS THAN 3 FEET, OR HALF THE WIDTH, WHICHEVER IS GREATER.

½-INCH FELT EXPANSION JOINT MATERIAL REQUIRED BETWEEN BACK OF CURB AND FRONT OF WALK, WHERE APPLICABLE.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER ADJACENT TO ASPHALTIC PAVEMENT.

CONCRETE CURB AND GUTTER JOINT SPACING SHALL BE 10 FEET UNLESS AUTHORIZED BY THE ENGINEER.

FOR CONCRETE SIDEWALK, IF SOFT OR UNSTABLE MATERIALS EXIST, EXCAVATE TO SUITABLE MATERIAL, PLACE & COMPACT BASE AGGREGATE DENSE TO PROPER SUBGRADE ELEVATION (PER ENGINEER). COST TO EXCAVATE, UP TO 12" BELOW SUBGRADE, SHALL BE INCIDENTAL TO THE COST OF CORRESPONDING CONCRETE OR CONCRETE REMOVAL ITEM. EXCAVATION OVER 12" WILL BE PAID AS COMMON EXCAVATION. AGGREGATE TO BE PAID FOR UNDER BASE AGGREGATE DENSE ITEM.

EROSION CONTROL NOTES

1. CONTRACTOR TO INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS INDICATED ON THIS PLAN AND PER THE LATEST WDNR TECHNICAL STANDARDS. TECHNICAL STANDARDS MAY BE VIEWED ONLINE AT: HTTP://DNR.WI.GOV/RUNOFF/STORMWATER/TECHSTDS.HTM

2. INLETS AND CATCH BASINS SHALL BE PROTECTED WITH INLET FILTERS THAT ARE PHASED IN WITH CONSTRUCTION TO REDUCE SEDIMENT FROM ENTERING THESE AREAS PER WDNR TECHNICAL STANDARD 1060 AS FOLLOWS:
   A. ALL FABRIC BARRIERS SELECTED FOR INLET/CATCH BASIN PROTECTION DEVICES SHALL BE SELECTED FROM THE LIST OF APPROVED FABRICS CERTIFIED FOR INLET PROTECTION, GEOTEXTILE FABRIC, TYPE FF IN THE CURRENT EDITION OF THE WDOT PRODUCT ACCEPTABILITY LIST, TO OBTAIN THE PAL, PLEASE REFER TO THIS WEBSITE: HTTP://WWW.DOT.WISCONSIN.GOV/BUSINESS/ENGRSERV/PAL.HTM
   B. INLET PROTECTION SHALL BE AT A MINIMUM INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT OF 1/2 INCH OR GREATER DURING A 24-HOUR PERIOD.
   C. PLACEMENT OF SPOIL MATERIAL, DEBRIS, SOILS, ETC. ON TOP OF INLETS/CATCH BASINS, EVEN IF TEMPORARY, IS STRICTLY DISCOURAGED AND PROHIBITED.
   D. SEDIMENT DEPOSITS SHALL BE REMOVED AND THE INLET PROTECTION DEVICE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED BETWEEN 1/3 TO 1/2 THE DESIGN DEPTH OF THE DEVICE, OR WHEN THE DEVICE IS NO LONGER FUNCTIONING PER MANUFACTURER'S SPECIFICATIONS. ALL SEDIMENT COLLECTED SHALL BE PROPERLY DISPOSED OF TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.
   E. DUE CARE SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT FALL INTO THE INLETS/CATCH BASINS AND IMPEDE THE INTENDED FUNCTION OF THE DEVICE. ANY MATERIAL FALLING INTO THE INLET/CATCH BASIN SHALL BE REMOVED AND PROPERLY DISPOSED OF PER NOTE D ABOVE.
   F. INLET FILTERS MAY BE REMOVED AND PROPERLY DISPOSED OF UPON COMPLETION OF CONSTRUCTION, HAULING OR MOVEMENT OF CONSTRUCTION EQUIPMENT THROUGHOUT THE SITE, AND ONCE THE SITE IS ADEQUATELY STABILIZED, UNLESS AS OTHERWISE NOTIFIED BY THE WDNR.

3. THE CONSTRUCTION SITE PERIMETER AND TOPSOIL STOCKPILE AREA SHALL BE PROTECTED WITH SILT FENCE AS SHOWN ON THE PLAN SHEET PRIOR TO THE START OF CONSTRUCTION TO INTERCEPT AND REDUCE THE FLOW OF SEDIMENT-LADEN SHEET FLOW RUNOFF FROM THE CONSTRUCTION SITE PER WDNR TECHNICAL STANDARD 1056 AS FOLLOWS:
   A. SILT FENCE ENDS SHALL BE EXTENDED UPSLOPE TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE FENCE AS SHOWN ON THE PLAN SHEET.
   B. INSTALLED SILT FENCE SHALL BE A MINIMUM 14 INCHES HIGH AND SHALL NOT EXCEED 28 INCHES IN HEIGHT MEASURED FROM THE INSTALLED GROUND ELEVATION.
   C. SILT FENCE SHALL BE SUPPORTED BY EITHER STEEL OR WOOD SUPPORT POSTS.
   D. THE MAXIMUM SPACING OF POSTS FOR NONWOVEN SILT FENCE SHALL BE 3 FEET OR FOR WOVEN FABRIC 8 FEET.
   E. SILT FENCE SHALL HAVE A SUPPORT CORD AT THE TOP OF THE FENCE.
   F. WHERE JOINTS ARE NEEDED, EACH END OF THE FABRIC SHALL BE SECURELY FASTENED TO A POST. THE POSTS SHALL BE WRAPPED AROUND EACH OTHER TO PRODUCE A STABLE AND SECURE JOINT OR SHALL BE OVERLAPPED THE DISTANCE BETWEEN TWO POSTS.
   G. A MINIMUM OF 20 INCHES OF THE POSTS SHALL EXTEND INTO THE GROUND AFTER INSTALLATION.
   H. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8 INCHES OF THE FABRIC IN A 4 INCH WIDE BY 6 INCH DEEP TRENCH, OR 6 INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. THE TRENCH SHALL BE BACKFILLED AND COMPACTED. TRENCHES SHALL NOT BE EXCAVATED ANY WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
   I. ON THE TERMINAL ENDS OF THE SILT FENCE THE FABRIC SHALL BE WRAPPED AROUND THE POST SUCH THAT THE STAPLES ARE NOT VISIBLE.
   J. GEOTEXTILE FABRIC SPECIFICATIONS SHALL MEET VALUES ESTABLISHED IN TECHNICAL STANDARD 1056.
   K. SILT FENCE SHALL BE REMOVED ONCE THE SITE IS ADEQUATELY STABILIZED.
   L. WHEN PLACING SILT FENCE NEAR TREES, CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO THE ROOT SYSTEM BY AVOIDING COMPACTION AND ROOT CUTTING WITHIN 1.5 FEET MULTIPLIED BY THE INCH DIAMETER OF THE TREE.
   M. THE CONTRACTOR MAY FURTHER STRENGTHEN THE SILT FENCE BY USING HAY BALES ON THE DOWN SLOPE SIDE AS NEEDED.
   N. SILT FENCE SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 1/2 INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD.
   O. DAMAGED OR DECOMPOSED SILT FENCE, UNDERCUTTING, OR FLOW CHANNELS AROUND THE END OF BARRIERS SHALL BE REPAIRED OR CORRECTED.
   P. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE THE DEPOSITS REACH 1/2 THE HEIGHT OF THE FENCE TO PREVENT DISCHARGE INTO AREA WATERWAYS AND WETLANDS.
4. A COPY OF EROSION CONTROL INSPECTION REPORTS AND THE APPROVED EROSION CONTROL PLANS SHALL BE KEPT ON SITE.
5. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL PRACTICES BY THE END OF EACH WORKDAY.
6. LOCAL ROADS SHALL BE CLEAN BY THE END OF EACH WORKDAY. CONTRACTOR SHALL HAVE LOCAL ROADS SWEPT WHERE SEDIMENT ACCUMULATES.
7. SEEDING AND/OR SODDING TECHNIQUES SHALL BE USED AT AREAS OF EXPOSED SOIL WHERE THE ESTABLISHMENT OF VEGETATION IS DESIRED. TEMPORARY SEEDING APPLIES TO DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND-DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 30 DAYS, REQUIRING VEGETATIVE COVER FOR LESS THAN ONE YEAR. SEED AND EROSION MAT SHALL BE UTILIZED THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH TEMPORARY VEGETATION TO HELP REDUCE EROSION PER WDNR TECHNICAL STANDARDS 1059 AND 1058 RESPECTIVELY AS FOLLOWS:
   A. TEMPORARY SEEDING REQUIRES A SEEDBED OF LOOSE SOIL TO A MINIMUM DEPTH OF 2 INCHES.
   B. FERTILIZER APPLICATION IS NOT GENERALLY REQUIRED FOR TEMPORARY SEEDING.
   C. ALL SEED SHALL CONFORM TO THE REQUIREMENTS OF THE WISCONSIN STATE STATUTES AND OF THE ADMINISTRATIVE CODE CHAPTER ATCP 20.01 REGARDING NOXIOUS WEED SEED CONTENT AND LABELING. SEED SHALL NOT BE USED LATER THAN ONE YEAR AFTER THE TEST DATE ON THE LABEL.
   D. IN THE SPRING AND SUMMER CONTRACTOR SHALL USE OATS APPLIED AT 131 LBS/ACRE FOR TEMPORARY SEEDING PURPOSES. IN THE FALL THE CONTRACTOR SHALL USE WINTER WHEAT APPLIED AT 131 LBS/ACRE. NO MULCH SHALL BE USED ON THIS PROJECT. DORMANT SEED SHALL BE USED WHEN SOIL TEMPERATURE IS CONSISTENTLY BELOW 53 DEGREES FAHRENHEIT (TYPICALLY OCT. 15 UNTIL SNOW COVER ANNUALLY). NEVER PLACE SEED ON TOP OF SNOW. IF COVER IS NEEDED AFTER SNOW FALL, CONTRACTOR MAY CHOOSE TO USE A DRY, NONTOXIC TYPE B SOIL STABILIZER PER MANUFACTURER'S SPECIFICATIONS AS REQUIRED BY THE WDNR. SOIL STABILIZERS SHALL NOT BE USED WITHIN 30 FEET OF WETLANDS OR WATERS.
   E. SEEDING SHALL NOT TAKE PLACE WHEN THE SOIL IS TOO WET.
   F. CONTRACTOR MAY CONSIDER WATERING TO HELP ESTABLISH THE SEED. WATER APPLICATION RATES SHALL BE CONTROLLED TO HELP PREVENT RUNOFF AND EROSION.
   G. DURING CONSTRUCTION, AREAS THAT HAVE BEEN SEEDED AND MATTED SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES ½ INCH OF RAIN OR MORE DURING A 24 HOUR PERIOD. INSPECT WEEKLY DURING THE GROWING SEASON UNTIL VEGETATION IS DENSELY ESTABLISHED OR THE SOD IS PLACED. REPAIR AND RESEED/RESOD AREAS THAT HAVE EROSION DAMAGE AS NECESSARY.
   H. CONTRACTOR IS TO LIMIT VEHICLE TRAFFIC AND OTHER FORMS OF COMPACTION IN AREAS THAT ARE SEEDED AS MUCH AS POSSIBLE. RESEED DRIVEN OVER AREAS AS NEEDED.
   I. THIS PROJECT SHALL USE URBAN CLASS I, TYPE B (NON-NETTED) EROSION MATTING INSTALLED IN PLACE OF MULCH. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.

REGIONAL UTILITY CONTACTS - FOR INFORMATIONAL PURPOSES

VILLAGE OF BAYSIDE
DEPARTMENT OF PUBLIC WORKS
9075 N. REGENT ROAD
BAYSIDE, WI 53217
ANDY PEDERSON (414) 208-3925

AT&T WISCONSIN
2005 PEWAUKEE RD.
WAUKESHA, WI 53188
JEFF OLDENBURG (414) 412-7047

ATC MANAGEMENT, INC. - ELECTRICITY
W234N2000 RIDGEVIEW PARKWAY
WAUKESHA, WI 53186-1000
ANTHONY MARCINIAK (262) 506-6814

SPECTRUM
1320 N. DR. MARTIN LUTHER KING DR.
MILWAUKEE, WI 53202-4002
STEVE CRAMER (414) 277-4045

WE ENERGIES - GAS/PETROLEUM
333 W. EVERETT ST. ROOM A299
MILWAUKEE, WI 53203
DAN SANDE (414) 221-4578

WE ENERGIES - ELECTRICITY
333 W. EVERETT ST. ROOM A266
MILWAUKEE, WI 53203
LaTROY BRUMFIELD (414) 221-5617 OFFICE
(414) 975-9053 CELL

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS
0 2X 4X 8X

SEAL:
pll in

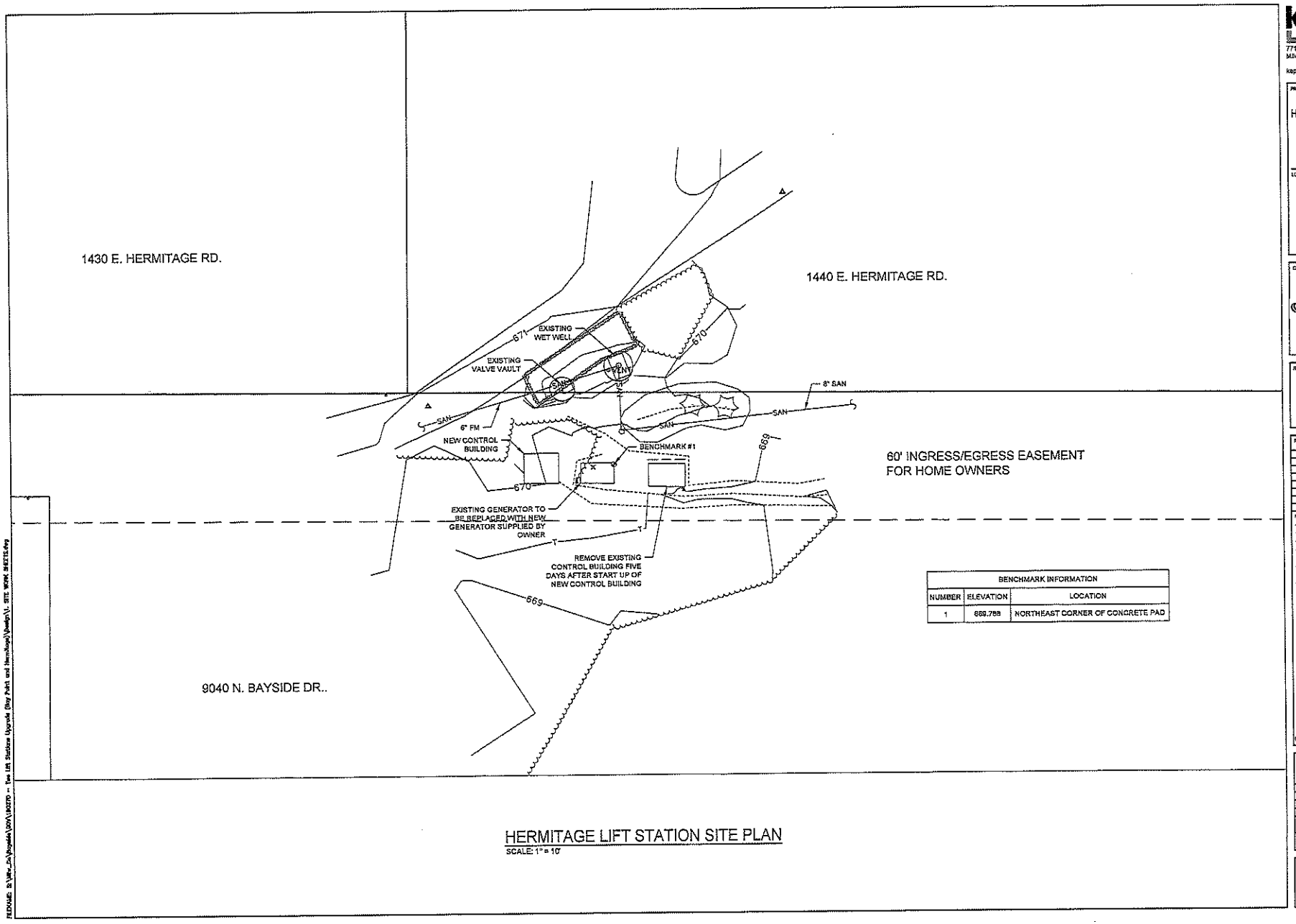
SHEET:
CIVIL NOTES

DESIGNED BY: —
DRAWN BY: —
CHECKED BY: —
APPROVED BY: —

PROJECT NO: —

DRAWING NO: —

SHEET NUMBER:
4



BENCHMARK INFORMATION		
NUMBER	ELEVATION	LOCATION
1	669.788	NORTHEAST CORNER OF CONCRETE PAD

HERMITAGE LIFT STATION SITE PLAN

SCALE: 1" = 10'

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 10'

SEAL:

all in

SHEET: HERMITAGE SITE PLAN

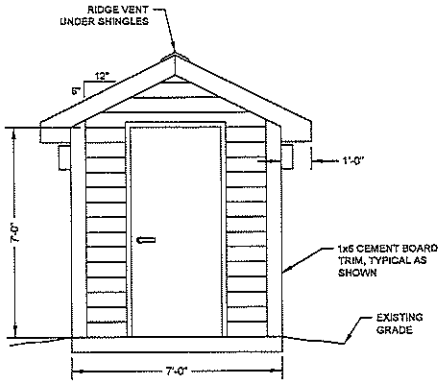
DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.S.
CHECKED BY:	T.A.
APPROVED BY:	T.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSH-C-1

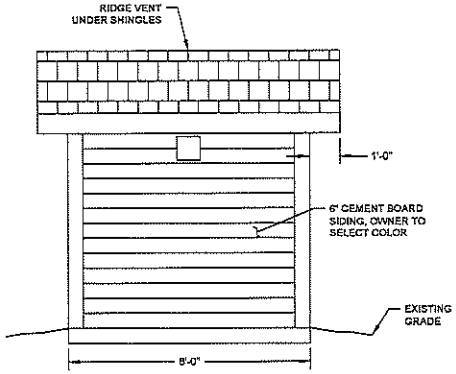
SHEET NUMBER: 7

FILENAME: S:\Mke_Data\Projects\2019\19.0270 - Bay Lift Station Upgrade (Bay Point and Hermitage)\Design\1- SITE WORK SHEETS.dwg



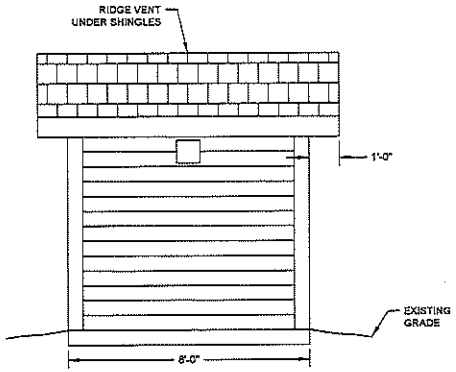
WEST ELEVATION VIEW

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



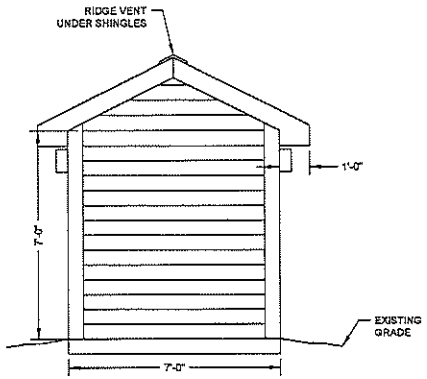
NORTH ELEVATION VIEW

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



SOUTH ELEVATION VIEW

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



EAST ELEVATION VIEW

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

FILENAME: S:\Mke_Dx\Projects\2021\192270 – Two LSS Stations Upgrade (Bay Point and Hermitage)\Design\LS_HERMITAGE LS SHEETS.dwg

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PROJECT:

HERITAGE AND BAY POINT LS GENERATORS

LOCATION:

VILLAGE OF BAYSIDE

CLIENT:

BAYSIDE

RELEASE:

BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1/2" = 1'

SEAL:

all in

SHEET:

HERMITAGE LS EXTERIOR ELEV.

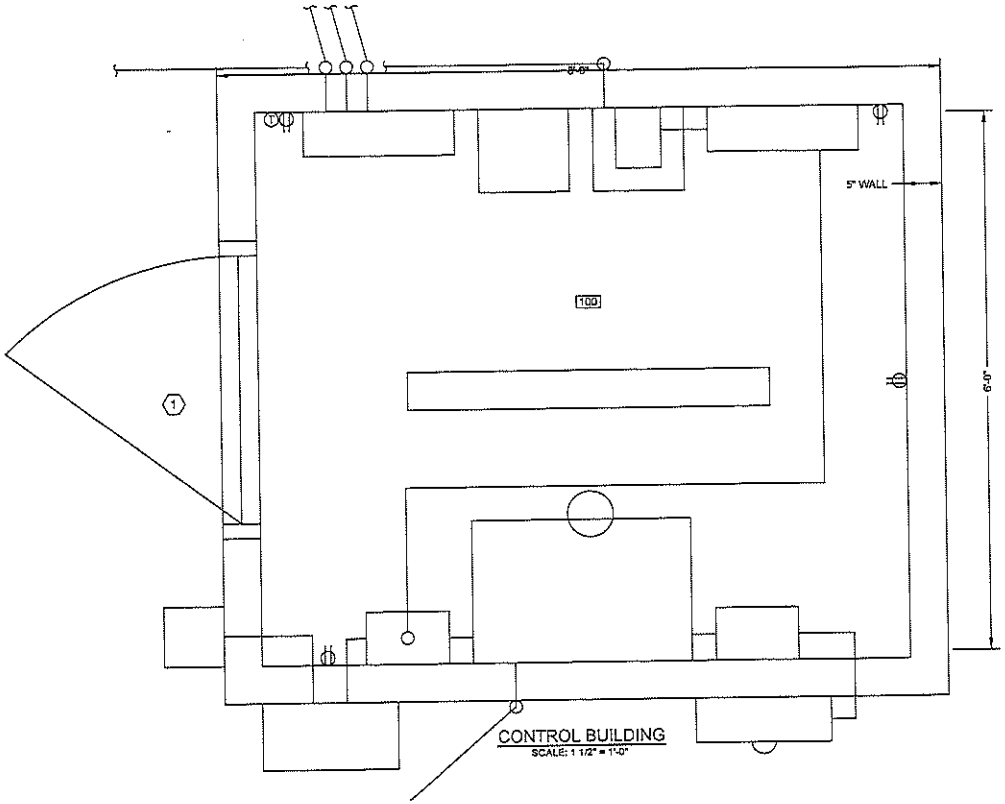
DESIGNED BY:	JJG
DRAWN BY:	JDK
CHECKED BY:	YA
APPROVED BY:	YA

PROJECT NO: 19.0270.01

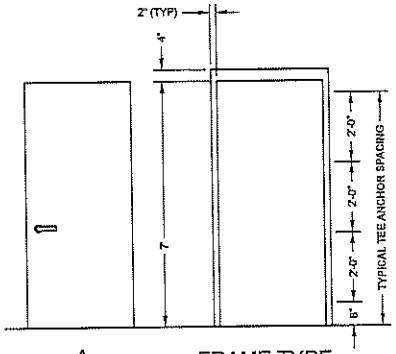
DRAWING NO: LSH-A-1

SHEET NUMBER:

8



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



A FRAME TYPE

ROOM FINISH SCHEDULE									
NO.	FLOOR		WALLS AND FINISH				CEILING		
	MTL.	FINISH	NORTH	WEST	EAST	SOUTH	MTL	FINISH	HEIGHT
100	CONC.	EFS	NUDO	NUDO	NUDO	NUDO	NUDO	N/A	7'-5"

100 ROOM NUMBER, SEE INTERIOR FINISH SCHEDULE AND DESIGN REQUIREMENTS FOR ROOM FINISHES.

1 DOOR NUMBER, SEE DOOR SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

W1 WINDOW NUMBER, SEE WINDOW SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

EFS- EPOXY FLOOR SEALER
CNS- ONE COAT CURE-N-SEAL (CLEAR)
GWB- GYPSUM BOARD
WRGWB- WATER RESISTANCE GYPSUM BOARD
NUDO- 1/2" WALL SYSTEM, SEE SPEC.

DOOR SCHEDULE														
			DOOR						FRAME					
DOOR NUMBER	ROOM NUMBER	ROUGH OPENING	WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	COLOR	TYPE	MATERIAL	DEPTH	COLOR	HARDWARE SET NO. SEE SPECS	REMARKS
1	100	3'-4"x 7'-2"	3'-0"	7'-0"	1 3/4"	A	H.M. GALV.	SEE NOTE 6	A	H.M. GALV.	5 3/4"	SEE NOTE 6	1	INSULATED

NOTES:
1. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR DOORS
2. PROVIDE 6" WIDE MIN. THRESHOLD AT ALL DOORS
3. PAINT H.M. DOORS BOTH FACES, ALL FOUR EDGES AND H.M. FRAMES COMPLETELY
4. PAINT STEEL LINTELS TO MATCH DOOR FRAMES
5. HARDWARE ITEMS SEE SPECS.
6. CONTRACTOR SHALL SUBMIT PAINT CHIP AND COLOR TO THE OWNER FOR APPROVAL.

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1/8"=1'

SEAL:

all in

SHEET: HERMITAGE LS SCHEDULE

DESIGNED BY:	JJG
DRAWN BY:	JGS
CHECKED BY:	YA
APPROVED BY:	YA

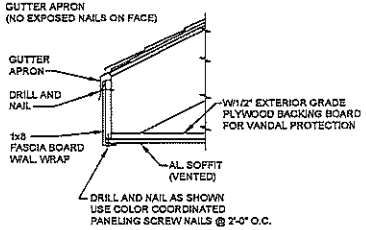
PROJECT NO: 19.0270.01

DRAWING NO: LSH-A-2

SHEET NUMBER:
9

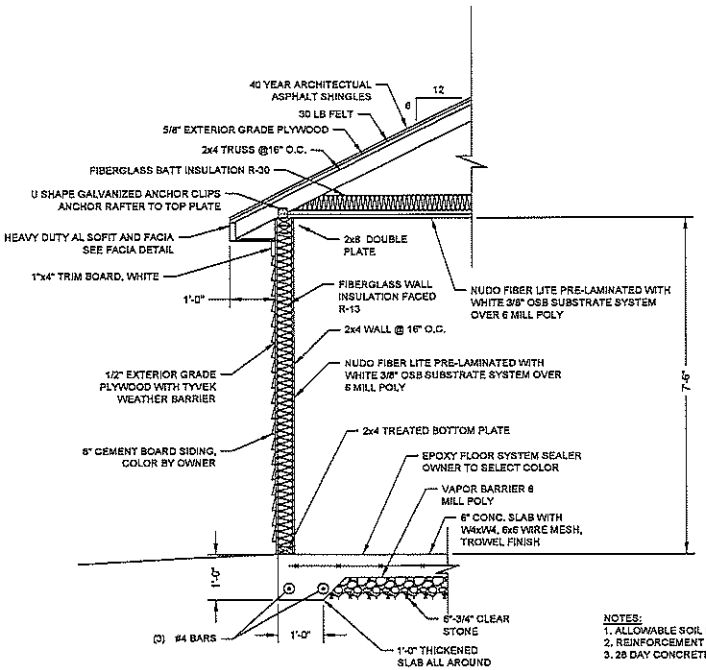
FILENAME: S:\Mfr_Dr\Bayside\009\19027D - Two LRS Backup Upgrade (Bay Point and Hermitage)\Design\25. HERITAGE LS SHEET.dwg

NOTE:
NAIL FASCIA
BEFORE INSTALLING
GUTTER APRON
(NO EXPOSED NAILS ON FACE)



NOTE: OWNER TO SELECT COLOR OF AL. TRIM.

FASCIA W/AL. WRAP
N.T.S



NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE = 1600 PSF
2. REINFORCEMENT STEEL YIELD STRENGTH fy = 60,000 PS
3. 28 DAY CONCRETE COMPRESSIVE STRENGTH fy = 4000 PSI

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

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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 3/4" = 1'

SEAL:

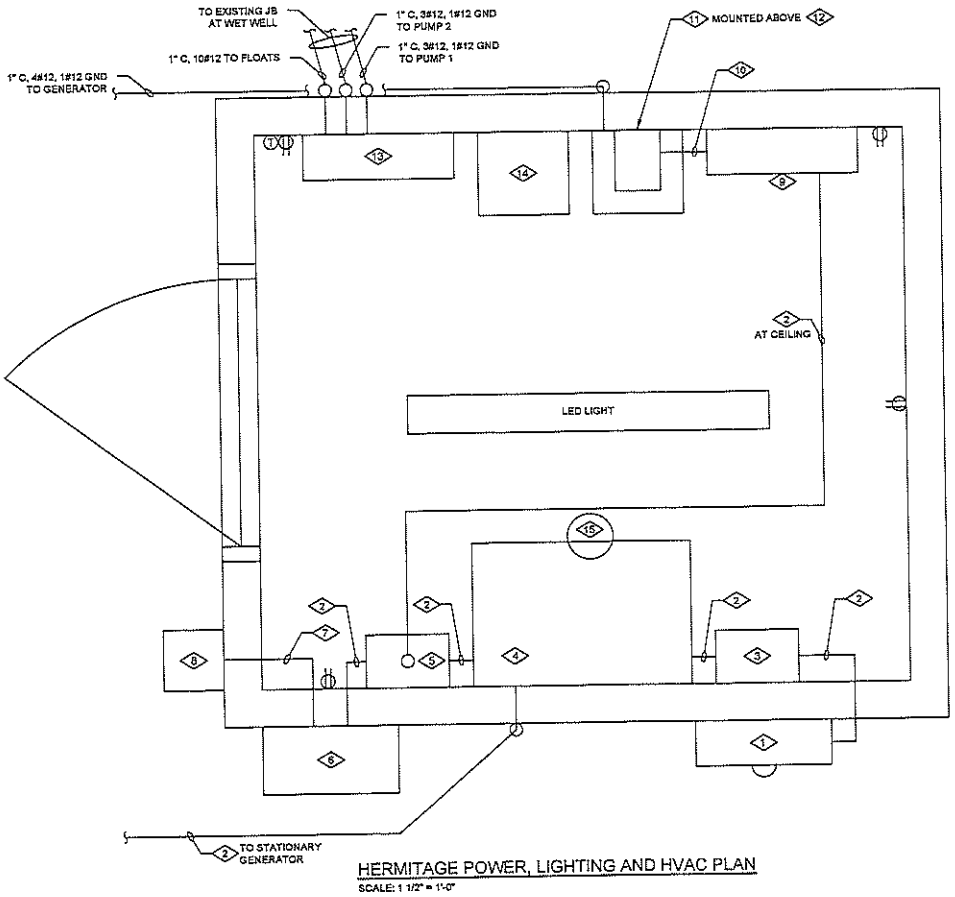
SHEET:
HERMITAGE LS WALL SECTION

DESIGNED BY:	J.J.G.
DRAWN BY:	J.G.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSH-A-3

SHEET NUMBER:
10



HERMITAGE POWER, LIGHTING AND HVAC PLAN

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

◇ PLAN NOTES:

1. METERING PEDESTAL WITH KWH METER, 240V, 3PH, 100A SERVICE. WE ENERGIES ELECTRIC SERVICE AND METERING MANUAL PAGES U-6 AND M-15. COORDINATE WITH WE ENERGIES.
2. 2" C, 3#1, 1#6 GND. RMC EXTERIOR; IMC INTERIOR.
3. SERVICE DISCONNECT SWITCH, 3 POLE, 100A, NEMA 1, TYPE R FUSES.
4. AUTOMATIC TRANSFER SWITCH RELOCATED FROM BAYPOINT. DO NOT REMOVE FROM BAYPOINT UNTIL REPLACEMENT IS IN HAND.
5. MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR RECEPTACLE, 240V, 3PH, 100A, NON FUSED, NEMA 1 OR 3R.
6. PORTABLE GENERATOR MANUAL DISCONNECT SWITCH 200A/100A FUSE, NEMA 3R, 3PH.
7. 2" RMC, 3#2/0, 1#6 GND.
8. PORTABLE GENERATOR RECEPTACLE. MFG: _____, MODEL_____, _____A, 240V, 3PH.
9. PANEL B, 240V, 3PH, 100A, 18 SPACES, 100A/3P MCB, 20A/2P CB FOR ELECTRIC HEATER, 30A/2P CB FOR 10KVA STEPDOWN TRANSFORMER.
10. PRIMARY: 1" IMC, 2#6, 1#6 GND, FROM PANEL B; SEC: 1 ½" IMC, 3#6, 1#6 GND TO PANEL A.
11. STEPDOWN TRANSFORMER 240V - 120/240V, 1PH, 10KVA, NEMA 1 , WALL MOUNTED ABOVE PANEL A.
12. PANEL A 120/240V, 1PH - 3W, 100A, 50 A MCB, 18 SPACES. 15A/P CB FOR SMOKE DETECTOR, 6 OF 20/P CB FOR 1) BATTERY CHARGER, 2) BLOCK HEATER, 3) LIGHTING, 4) RECEPTACLE (1ST GFI), 5) BUILDING VENT FAN, 6) SPARE.
13. PUMP CONTROL PANEL.
14. SCADA PANEL 95Y OTHERS)
15. SMOKE DETECTOR.

CONTROL PARAMETERS	
PARAMETER	ELEVATION
HIGH LEVEL ALARM	69.0
START LAG PUMP	68.5
START LEAD PUMP	68.0
STOP PUMPS	67.4
LOW LEVEL ALARM	67.0
WET WELL INVERT	64.0

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

LOCATION: VILLAGE OF BAYSIDE

CLIENT: BAYSIDE

RELEASE: BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1 1/2" = 1'

SEAL:

SHEET: HERMITAGE LS LIGHTING & HVAC

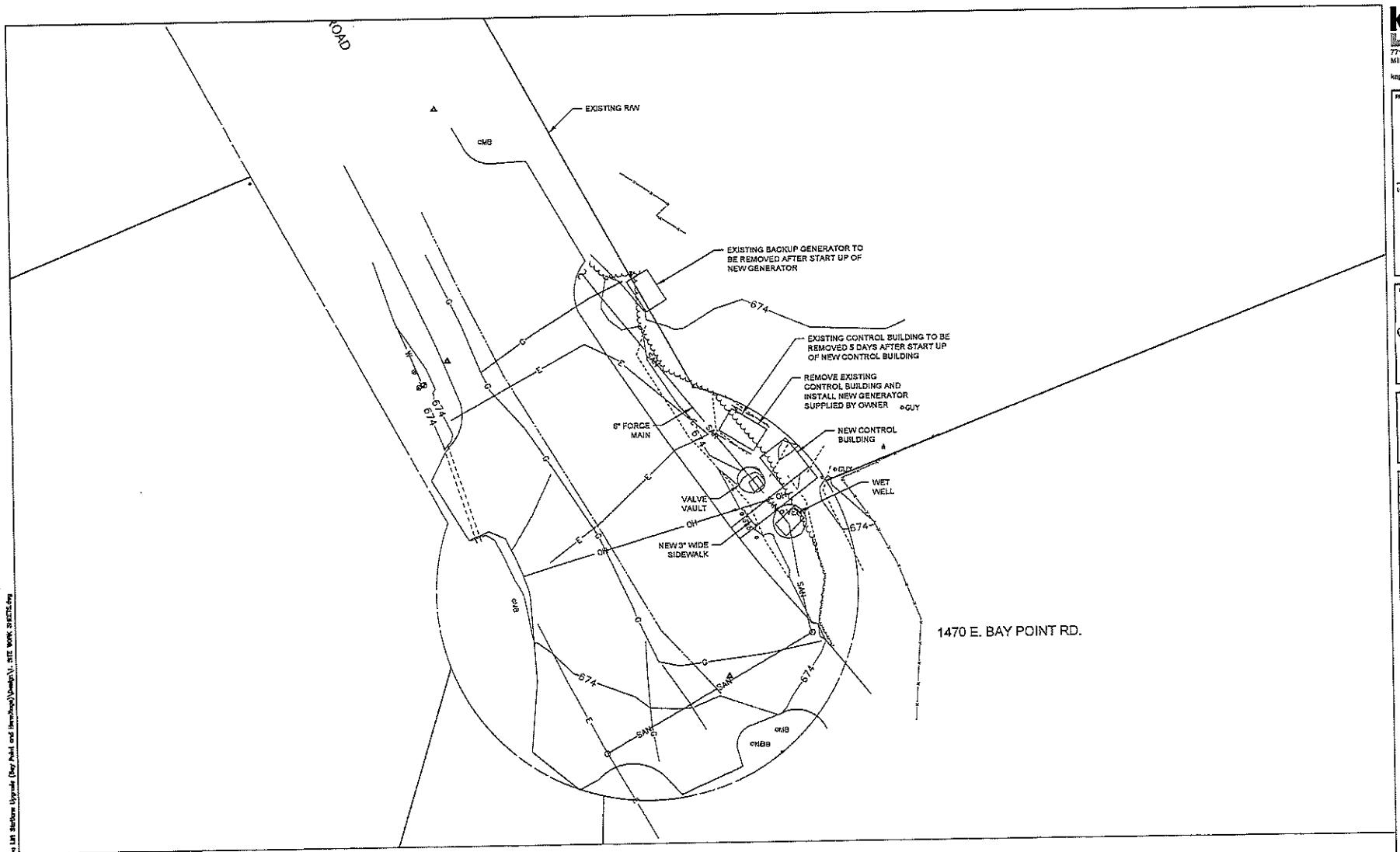
DESIGNED BY:	J.LS
DRAWN BY:	J.D.K
CHECKED BY:	Y.A
APPROVED BY:	Y.A

PROJECT NO: 19.0270.01

DRAWING NO: LSH-EH-1

SHEET NUMBER: 11

FILENAME: S:\Mke_Eng\Projects\19\0270 – Two Lift Stations Upgrade (Bay Point and Hermitage)\Design\05_HERITAGE LS SHEETS.dwg



BAY POINT LIFT STATION SITE PLAN

SCALE: 1" = 5'

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Milwaukee, Wisconsin 53217
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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE:

SEAL:

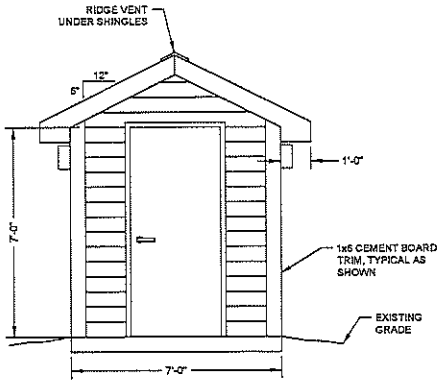
SHEET:
BAY POINT SITE PLAN

DESIGNED BY:	JJG
DRAWN BY:	JDS
CHECKED BY:	YA
APPROVED BY:	YA

PROJECT NO: 19.0270.01

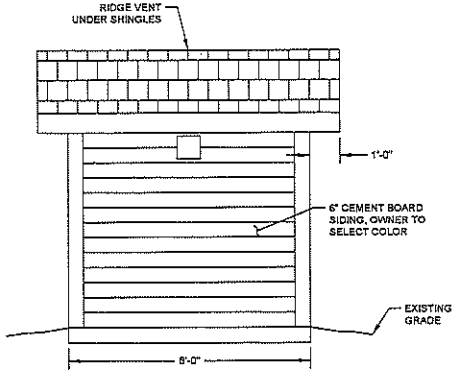
DRAWING NO: LSB-C-1

SHEET NUMBER:
12



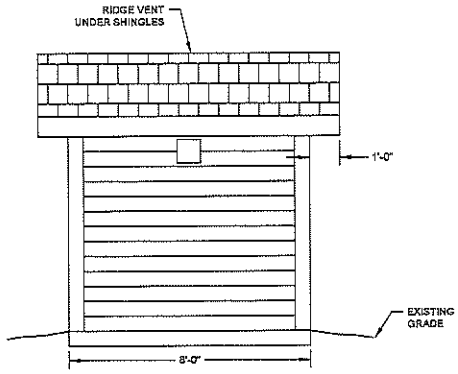
SOUTH ELEVATION VIEW

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



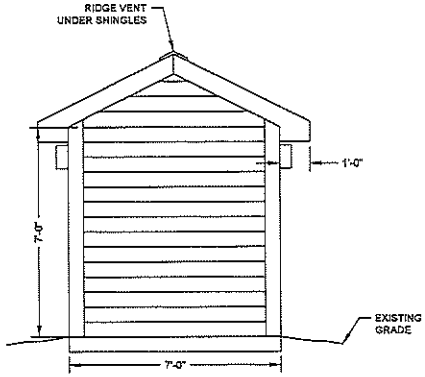
EAST ELEVATION VIEW

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



WEST ELEVATION VIEW

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



NORTH ELEVATION VIEW

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

0 1/2 1 1 1/2 2 INCHES

0 1 2 3 4 FEET

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PROJECT:

HERITAGE AND BAY POINT LS GENERATORS

LOCATION:

VILLAGE OF BAYSIDE

CLIENT:

BAYSIDE

RELEASE:

BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1/2" = 1'

SEAL:

all in

SHEET: BAYPOINT LS EXTERIOR ELEV.

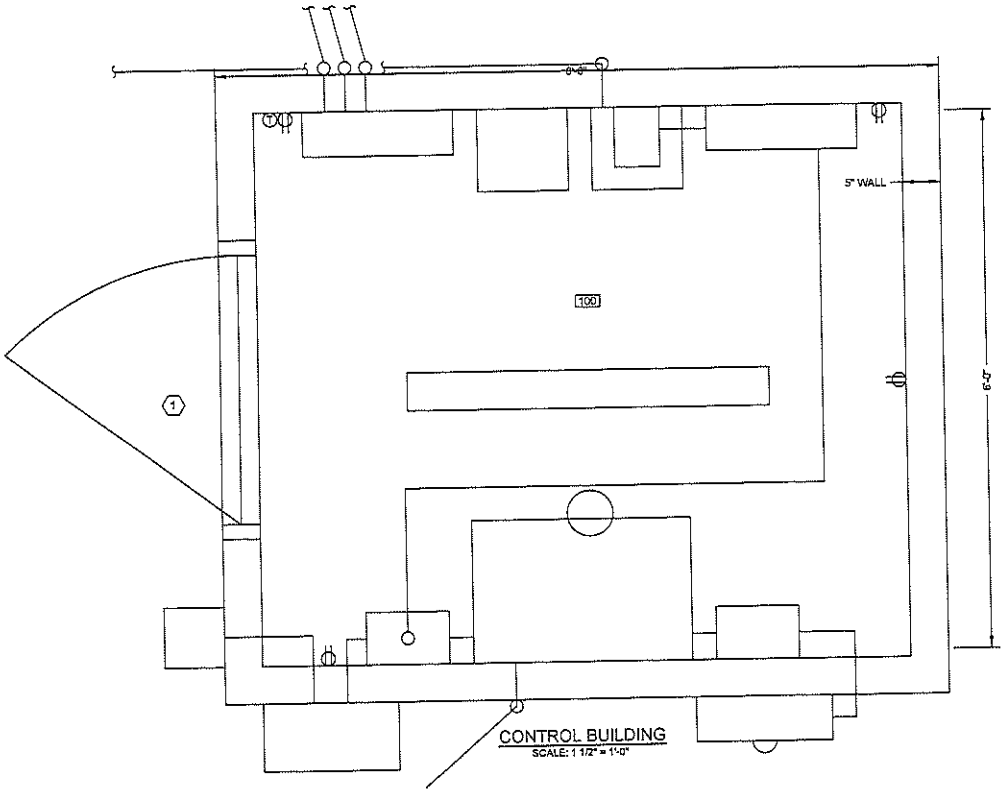
DESIGNED BY:	JJG
DRAWN BY:	JCK
CHECKED BY:	YA
APPROVED BY:	YA

PROJECT NO: 19.0270.01

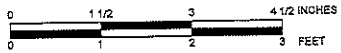
DRAWING NO: LSB-A-1

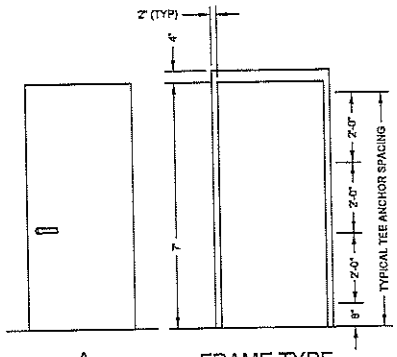
SHEET NUMBER: 13

FILENAME: S:\Mke_Dir\Bayside\2019\190270 - Two LIft Stations Upgrade (Bay Point and Hemlock)\Design\LS_BAYSIDE LS SHEETS.dwg



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





A FRAME TYPE

ROOM FINISH SCHEDULE									
	FLOOR		WALLS AND FINISH				CEILING		
NO.	MTL.	FINISH	NORTH	WEST	EAST	SOUTH	MTL	FINISH	HEIGHT
100	CONC.	EFS	NUDO	NUDO	NUDO	NUDO	NUDO	N/A	7'-6"

100 ROOM NUMBER, SEE INTERIOR FINISH SCHEDULE AND DESIGN REQUIREMENTS FOR ROOM FINISHES.

1 DOOR NUMBER, SEE DOOR SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

W1 WINDOW NUMBER, SEE WINDOW SCHEDULE AND DESIGN REQUIREMENTS FOR SIZE AND TYPE.

EFS- EPOXY FLOOR SEALER
CNS- ONE COAT CURE-N-SEAL (CLEAR)
GWB- GYPSUM BOARD
WRGWB- WATER RESISTANCE GYPSUM BOARD
NUDO- 1/2" WALL SYSTEM, SEE SPEC.

DOOR SCHEDULE														
			DOOR						FRAME					
DOOR NUMBER	ROOM NUMBER	ROUGH OPENING	WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	COLOR	TYPE	MATERIAL	DEPTH	COLOR	HARDWARE SET NO. SEE SPEC'S	REMARKS
1	100	3'-4"X 7'-2"	3'-0"	7'-0"	1 3/4"	A	H.M. GALV.	SEE NOTE 5	A	H.M. GALV.	5 3/4"	SEE NOTE 6	1	INSULATED

NOTES:
1. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR DOORS
2. PROVIDE 6" WIDE MIN. THRESHOLD AT ALL DOORS
3. PAINT H.M. DOORS BOTH FACES, ALL FOUR EDGES AND H.M. FRAMES COMPLETELY
4. PAINT STEEL LINTELS TO MATCH DOOR FRAMES
5. HARDWARE ITEMS SEE SPECS.
6. CONTRACTOR SHALL SUBMIT PAINT CHIP AND COLOR TO THE OWNER FOR APPROVAL.

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Milwaukee, Wisconsin 53217
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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASED:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE:

SEAL:

all in

SHEET: BAYPOINT LS SCHEDULE

DESIGNED BY:	J.J.G.
DRAWN BY:	J.D.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

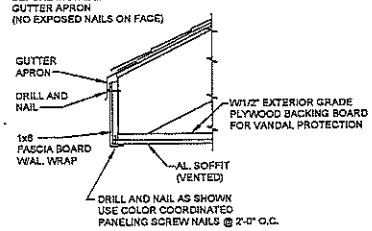
PROJECT NO: 19.0270.01

DRAWING NO: LSB-A-2

SHEET NUMBER:
14

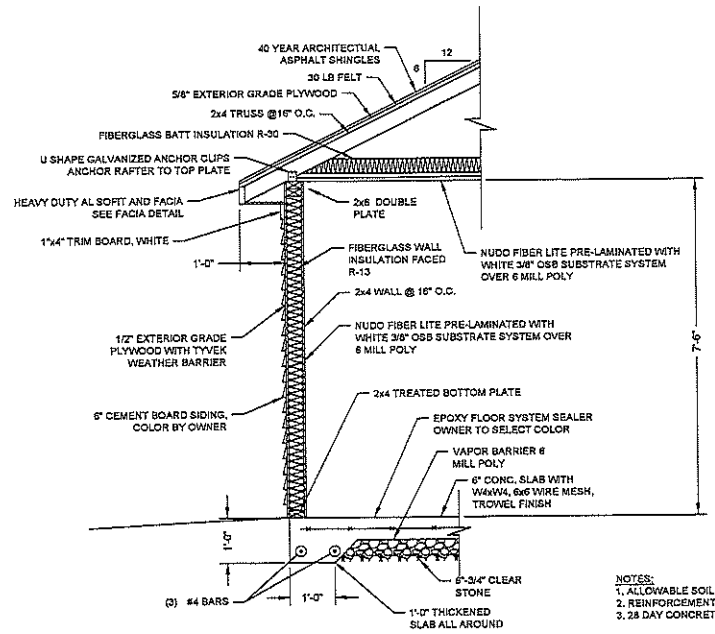
FILENAME: S:\Mfr_Eng\Projects\2019\19.0270 - Two 150 Kw Kohler Upgrade (Bay Point and Hamilton)\Drawings\LS_BAYSIDE LS SHEETS.dwg

NOTE:
NAIL FASCIA
BEFORE INSTALLING
GUTTER APRON
(NO EXPOSED NAILS ON FACE)



NOTE: OWNER TO SELECT COLOR OF AL. TRIM.

FASCIA WAL. WRAP
N.T.S



NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF
2. REINFORCEMENT STEEL YIELD STRENGTH fy = 60,000 PS
3. 28 DAY CONCRETE COMPRESSIVE STRENGTH f'y = 4000 PSI

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

FILENAME: S:\Mke_Dc\Projects\2019\19270 - The Lift Stations Upgrade (Bay Point and Hemlock)\Drawings\LS_BAYSIDE LS SHEETS.dwg

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Milwaukee, Wisconsin 53217
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PROJECT:
HERITAGE AND BAY POINT LS GENERATORS

LOCATION:
VILLAGE OF BAYSIDE

CLIENT:
BAYSIDE

RELEASE:
BID AND CONSTRUCTION

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 3/4" = 1'

SEAL:

all in

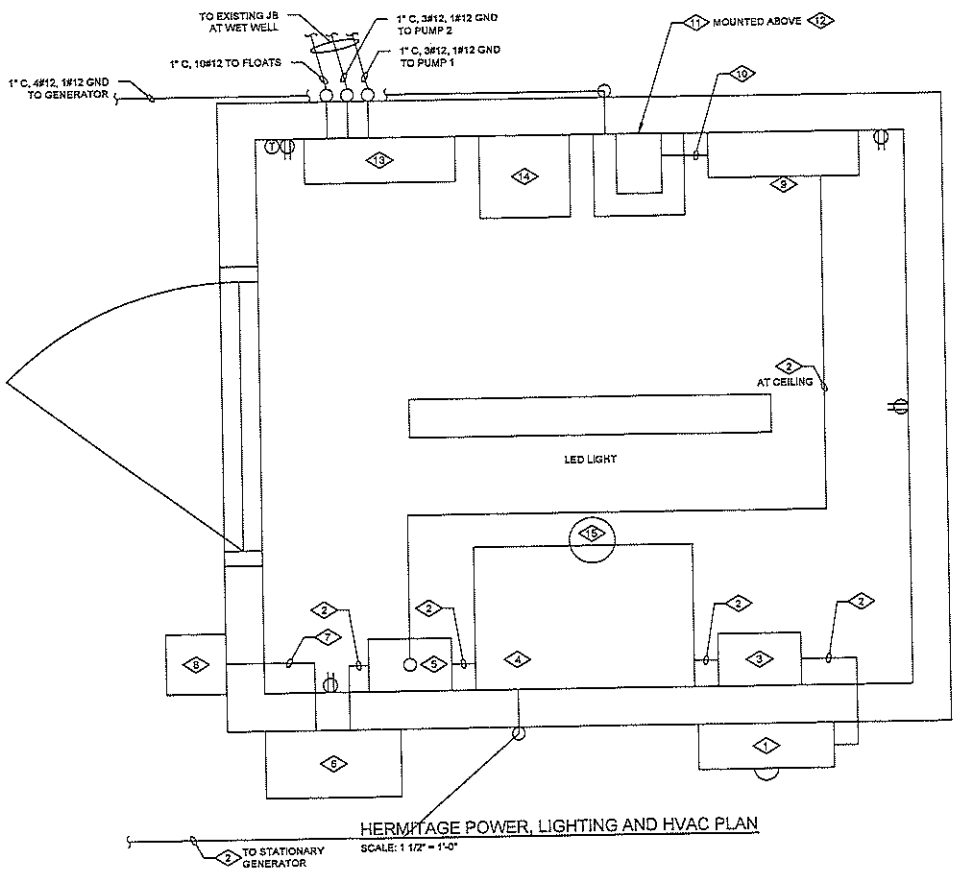
TITLE:
BAYPOINT LS WALL SECTION

DESIGNED BY:	J.J.G.
DRAWN BY:	J.D.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSB-A-3

SHEET NUMBER:
15



HERMITAGE POWER, LIGHTING AND HVAC PLAN

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

◇ PLAN NOTES:

1. METERING PEDESTAL WITH KWH METER. 240V, 3PH, 100A SERVICE. WE ENERGIES ELECTRIC SERVICE AND METERING MANUAL PAGES U-6 AND M-15. COORDINATE WITH WE ENERGIES.
2. 2" C, 3#1, 1#6 GND. RMC EXTERIOR; IMC INTERIOR.
3. SERVICE DISCONNECT SWITCH, 3 POLE, 100A, NEMA 1, TYPE R FUSES.
4. AUTOMATIC TRANSFER SWITCH RELOCATED FROM BAYPOINT. DO NOT REMOVE FROM BAYPOINT UNTIL REPLACEMENT IS IN HAND.
5. MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR RECEPTACLE. 240V, 3PH, 100A. NON FUSED, NEMA 1 OR 3R.
6. PORTABLE GENERATOR MANUAL DISCONNECT SWITCH 200A/100A FUSE, NEMA 3R, 3PH.
7. 2" RMC, 3#2/0, 1#6 GND.
8. PORTABLE GENERATOR RECEPTACLE. MFG: _____, MODEL_____, _____A, 240V, 3PH.
9. PANEL B, 240V, 3PH, 100A, 18 SPACES. 100A/3P MCB, 20A/2P CB FOR ELECTRIC HEATER, 30A/2P CB FOR 10KVA STEPDOWN TRANSFORMER.
10. PRIMARY: 1" IMC, 2#6, 1#6 GND, FROM PANEL B; SEC: 1 ½" IMC, 3#6, 1#6 GND TO PANEL A.
11. STEPDOWN TRANSFORMER 240V - 120/240V, 1PH, 10KVA, NEMA 1 , WALL MOUNTED ABOVE PANEL A.
12. PANEL A 120/240V, 1PH - 3W, 100A, 50 A MCB, 18 SPACES. 15A/1P CB FOR SMOKE DETECTOR, 6 OF 20/1P CB FOR 1) BATTERY CHARGER, 2) BLOCK HEATER, 3) LIGHTING, 4) RECEPTACLE (1ST GFI), 5) BUILDING VENT FAN, 6) SPARE.
13. PUMP CONTROL PANEL.
14. SCADA PANEL 9BY OTHERS)
15. SMOKE DETECTOR.

CONTROL PARAMETERS	
PARAMETER	ELEVATION
HIGH LEVEL ALARM	75.0
START LAG PUMP	74.5
START LEAD PUMP	74.0
STOP PUMPS	73.5
LOW LEVEL ALARM	73.0
WET WELL INVERT	70.0

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PROJECT: HERITAGE AND BAY POINT LS GENERATORS

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RELEASE: BID AND CONSTRUCTION

#	DATE	DESCRIPTION

NORTH ARROW

SCALE: 1 1/2" = 1'

SEAL

all in

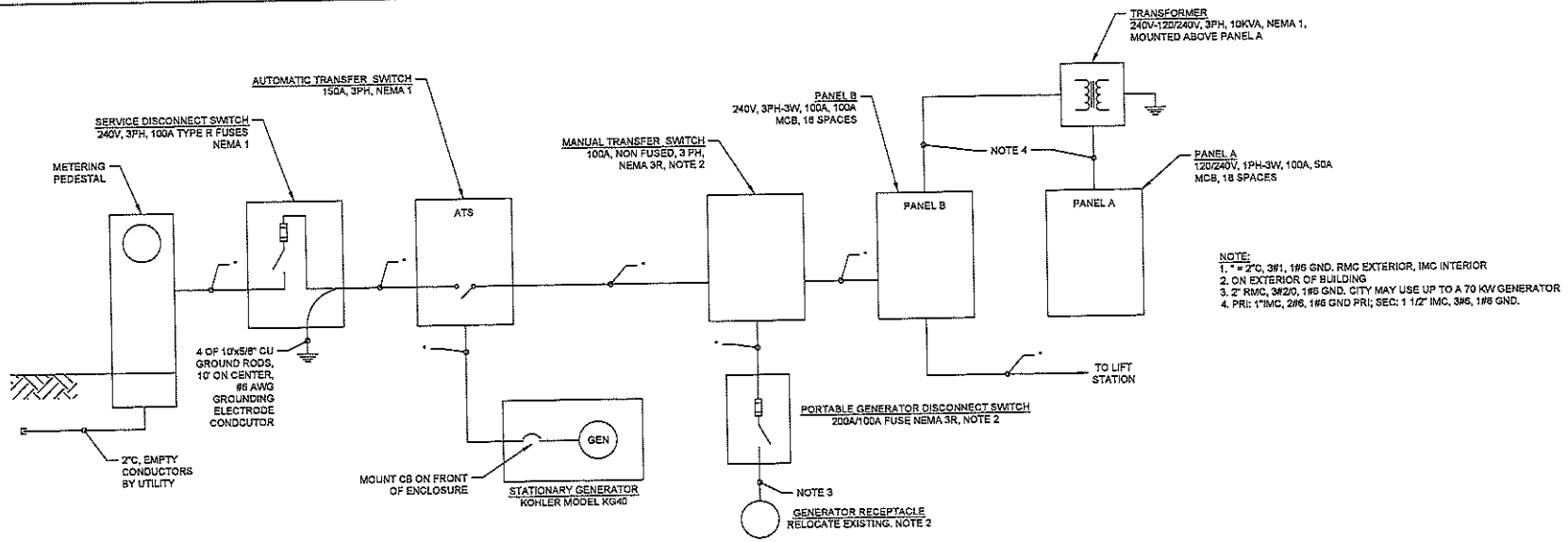
SHEET: BAYPOINT LS LIGHTING & HVAC

DESIGNED BY:	J.J.C.
DRAWN BY:	J.D.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: LSB-E-1

SHEET NUMBER: 16



ONE-LINE DIAGRAM

NTS

MISCELLANEOUS WIRING REQUIREMENTS

Description	From	To	Conduit & Cable	Remarks
Lighting	Panel A	2 Lights	3/4" C, 2#12, 1#12 GND	Switch by door
Vent Fan	Panel A	Vent Fan	3/4" C, 2#12, 1#12 GND	
	Vent Fan	T-Stat	1/2" C, 2#14, 1#14 GND	T-Stat on opposite side of room. Reverse acting T-STAT
Block Heater	Panel A	Block Heater	3/4" C, 2#12, 1#12 GND	Route via floor slab.
Battery Charger	Panel A	Battery Charger	3/4" C, 2#12, 1#12 GND	Route via floor slab.
Receptacle	Panel A	Receptacles	3/4" C, 2#12, 1#12 GND	GFI, 2 receptacles
SCADA	Generator	Scada in Lift STA. See Note	1-1/2" C, 10 #14	Signals (unpower contacts except #4) 1. Generator start/run 2. Generator Fail 3. Smoke/Fire in Building 4. Red Alarm Light from Lift Sta. 5. Spare
	Smoke Detector	JB for Scada Signals	1/2"c, 2#14	See signal list above
Alarm Light	Scada JB in Bldg	Alarm Light	3/4" C, 2#12, 1#12 GND	Power for light via SCADA signal wiring. See SCADA list above.
Smoke Detector	Panel A	Smoke Detector	1/2" C, 2#14, 1#14 GND	Power
Gen Louvers	Panel A	Generator	3/4" C, 2#12, 1#12 GND	Contacts at Gen to control, via floor slab
	Generator	Inlet & Exhaust Louvers	3/4" C, 2#12, 1#12 GND	to both louvers MOD's
Room Heater	EUH	Panel B	1" C, 3#10, 1#10 GND	Intregal T-STAT
Exterior Light	Panel A	LED Wall Pac Light	3/4" C, 2#12, 1#12 GND	Wall switch to do disable. PE on light.

NOTE: ROUTE FROM BUILDING TO LOWER LEVEL IN LIFT STATION. PROVIDE JB ADJACENT TO SCADA IN LIFT STATION. SCADA CONNECTION BY OTHERS. ID WIRING. TERMINATE SPARE IN JB IN BUILDING AND JB AT SCADA. APPROXIMATE 40' OF CONDUIT AND WIRING IN LIFT STATION. ROUTE PARALLEL TO EXISTING CONDUIT IN LIFT STATION.

PANEL A — BUSS AMPS 100; VOLTAGE 120/240; PHASE 1; WIRE 3 — MAIN BREAKER 50 AMPS — MOUNTING: SURFACE X; FLUSH — REMARKS

CIRCUIT DESCRIPTION	AMP/POLE	CKT	BUS	CKT	AMP/POLE	CIRCUIT DESCRIPTION
MAIN BREAKER	50/2	1		2	20/1	BLOCK HEATER
		3		4	20/1	INTERIOR & EXTERIOR LIGHTING
BATTERY CHARGER	20/1	5		6	20/1	RECEPTACLES (1ST RECEPT IS GFI)
BUILDING VENTILATION FAN	20/1	7		8	20/1	GENERATOR LOUVERS
SMOKE DETECTOR	15/1	9		10	---	SPACE
SPACE	---	11		12	---	SPACE
SPACE	---	13		14	---	SPACE
SPACE	---	15		16	---	SPACE
SPACE	---	17		18	---	SPACE

SQUARE D MODEL NQ1BL1C

PANEL B — BUSS AMPS 100; VOLTAGE 240; PHASE 3; WIRE 3 — MAIN BREAKER 100 AMPS — MOUNTING: SURFACE X; FLUSH — REMARKS

CIRCUIT DESCRIPTION	AMP/POLE	CKT	BUS	CKT	AMP/POLE	CIRCUIT DESCRIPTION
MAIN BREAKER	100/3	1		2	100/3	SUBFEED TO LIFT STA
		3		4		
		5		6		
10 KVA TRANSFORMER	50/2	7		8	20/3	ELECTRIC UNIT HEATER
		9		10		
SPACE	---	11		12		
SPACE	---	13		14	---	SPACE
SPACE	---	15		16	---	SPACE
SPACE	---	17		18	---	SPACE

SQUARE D MODEL NQ418L1C

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REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 1'0"

SEAL:

all in

SHEET: ONE-LINE DIAGRAM

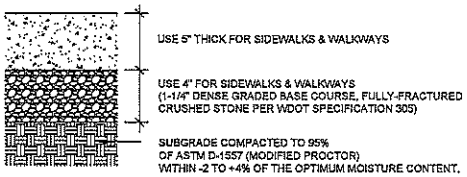
DESIGNED BY:	J.J.G.
DRAWN BY:	J.D.K.
CHECKED BY:	Y.A.
APPROVED BY:	Y.A.

PROJECT NO: 19.0270.01

DRAWING NO: E-1

SHEET NUMBER: 17

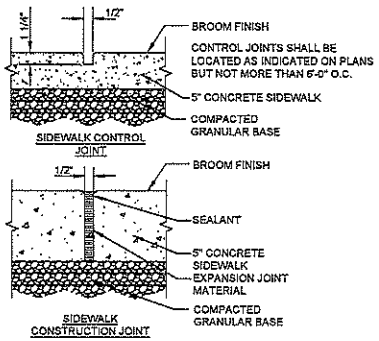
FILENAME: R:\Mke_Dr\Projects\2019\190270 — Two Lift Stations Upgrade (Bay Point and Hermitage)\Graphics\1. TYPICAL SHEETS.dwg



CONCRETE SIDEWALK/SLAB

NTS

001

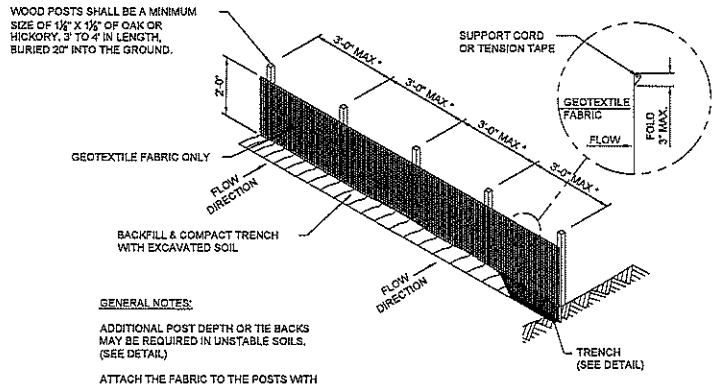


EXPANSION MATERIAL SHALL BE INSTALLED WHERE SIDEWALK ABUTS BUILDING WALL AND BACK OF CURB.

SIDEWALK JOINT DETAIL (TYP.)

NTS

002



AXONIMETRIC VIEW

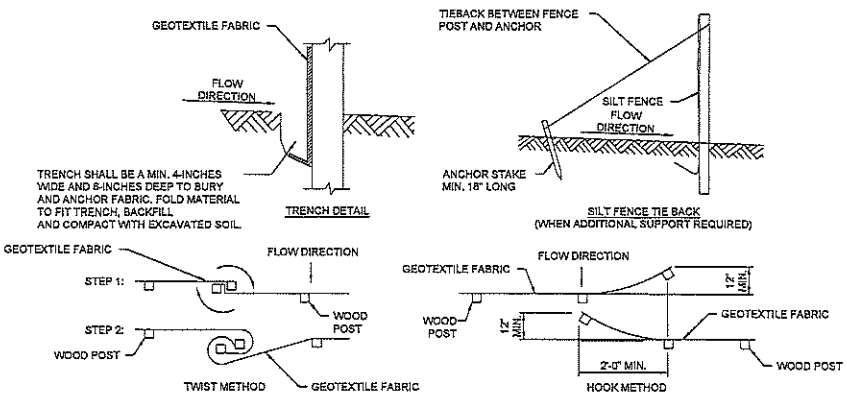
GENERAL NOTES:

ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS. (SEE DETAIL)

ATTACH THE FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH AND NAILS

*8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

IF POSSIBLE, CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING METHODS:
(1)TWIST METHOD: OVERLAP END POSTS & TWIST AT LEAST 180 DEGREES.
(2)HOOK METHOD: HOOK THE END OF EACH SILT FENCE LENGTH.



JOINING TWO LENGTHS OF SILT FENCE

FILTER FABRIC SILT FENCE DETAIL

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003

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#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: NTS

SEAL:

all in

SHEET:
DETAILS

DESIGNED BY:	J.J.O.
DRAWN BY:	J.D.K.
CHECKED BY:	T.A.
APPROVED BY:	T.A.

PROJECT NO: 19.0270.01

DRAWING NO: D-1

SHEET NUMBER:
18