



Memorandum

To: Planning Commission Members
From: Elizabeth J Corwin, PE, AIPC; Planning Director
Date: August 30, 2024
Re: SPR 24-05
Applicant and Property Owner: Tarek Gayar, G&G Investments, LLC
394 N Milford
PIN 11-22-376-008

Your packet includes resubmittal materials for the proposed gas station at the SE corner of Milford Road and Highland Road (M-59). The changes mostly amount to a minor modification of the sidewalk a change in the siding materials for the building. The applicant has also added a vinyl fence to the south property line and suggests that the grade differential between Wee Friends property and the building wall can be managed onsite without a grading agreement. The applicant intends to submit new details for the canopy which were not ready at the time your packet was posted.

Although you discussed site plan issues as part of the discussions on August 1, 2024, you did not take any specific action on a site plan review or approval. The Planning Commission still needs to discuss whether they will undertake ordinance amendments for lot coverage and/or parking ratios so that the applicant may be guided into the appropriate review process—whether that be preliminary approval and direction to seek the agency approvals or variances for the areas that do not comply with the current zoning ordinance requirements.

Prior to your meeting, I'll prepare a draft ordinance amendment for your consideration so that we are prepared for further action.



a) the canopy must be modified with architectural features to qualify for consideration of a greater height than 18 feet;

CANOPY ROOF WILL BE OF GABLE ROOF AND SHINGLES TO MATCH RESIDENTIAL ECSTATIC LOOK

b) Landscape features shall be modified to utilize greater variety of trees and consider canopy trees along right-of-way

A FOURTH TREE TYPE IS INTRODUCED ALONG THE RIGHT OF WAY – RED MAPLE AS A CANOPY TREE

c) the internal traffic circulation should be refined to improve traffic flow;

THE FUEL TRUCK CIRCULATION IS FOR A 40'-0" LONG TRUCK AND AND AROUND 11'-0" HIGH

d) grading agreements must be obtained for any offsite grading on the south or east property lines

PROPERTIES TO THE WEST AND TO THE SOUTH ARE HIGHER THEN THE SITE BY ONE TO 2 FEET. STORM WATER WILL NOT RUNOFF TO THE WEST AND AND THE SOUTH PROPERTIES

e) consideration of utilizing horizontal siding and other architectural features to improve compliance with the Highland Station Design Guidelines,

f) hours of operation limited to 6 am to 12 midnight

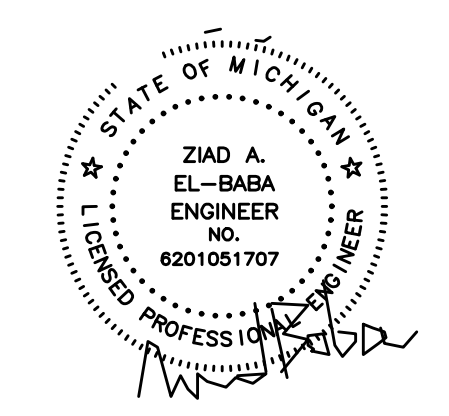
DESPITE TRAFFIC FROM 12 AM TO 6 AM IS AT LOW CAPACITY, STATION WILL OFFER CONVENIENCE FOR MOTORISTS AT THESE DIFFICULT HOURS TO DRIVE

g) reasonable screening between the gas station and the child care center to the south.

EXISTING WOOD FENCE WILL BE REMOVED AND REPLACED WITH DECORATIVE WHITE VINYL FENCE

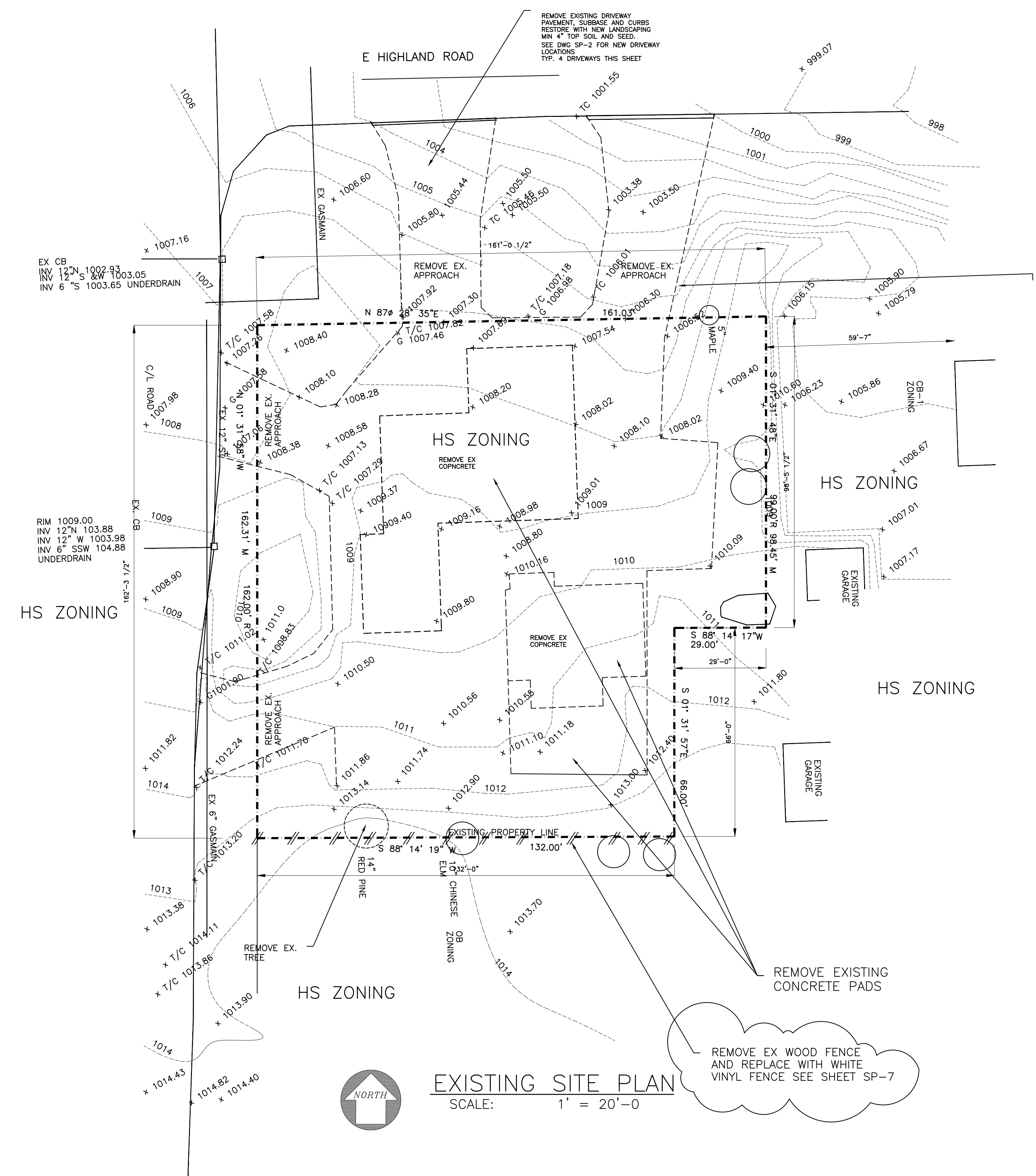


CAUTION !!!
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ZIAD EL-BABA ENGINEERING

674 GAUTHIER
 TECUMSEH ONTARIO
 N8N3P8 CANADA
 CELL : 313-938-8767
 CELL - 519-796-9882



EXISTING SITE PLAN
 SCALE: 1" = 20'-0"

Legal Description
 T3N, R7E, SEC 22 RUGGLES & ST JOHNS PLAT LOTS 52 & 54, ALSO
 W 29 FT OF LOT 56 ON M-59 HWY, ALSO LOT 96 ON MILFORD RD

394 N MILFORD RD HIGHLAND, MI 48357-4538 (Property Address)
 Parcel Number: H -11-22-376-009

DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
 NEW GAS STATION
 394 N MILFORD ROAD
 HIGHLAND TWP ,MI
 OWNER

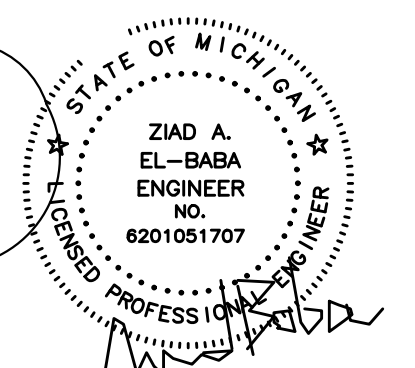
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 EXISTING SITE PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

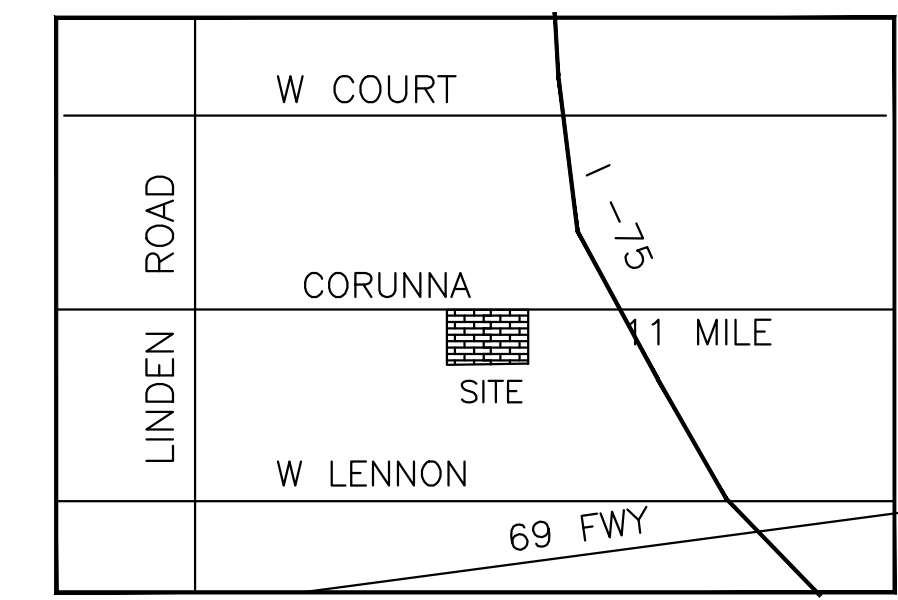
Drawing No.
 SP-1

SITE DATA

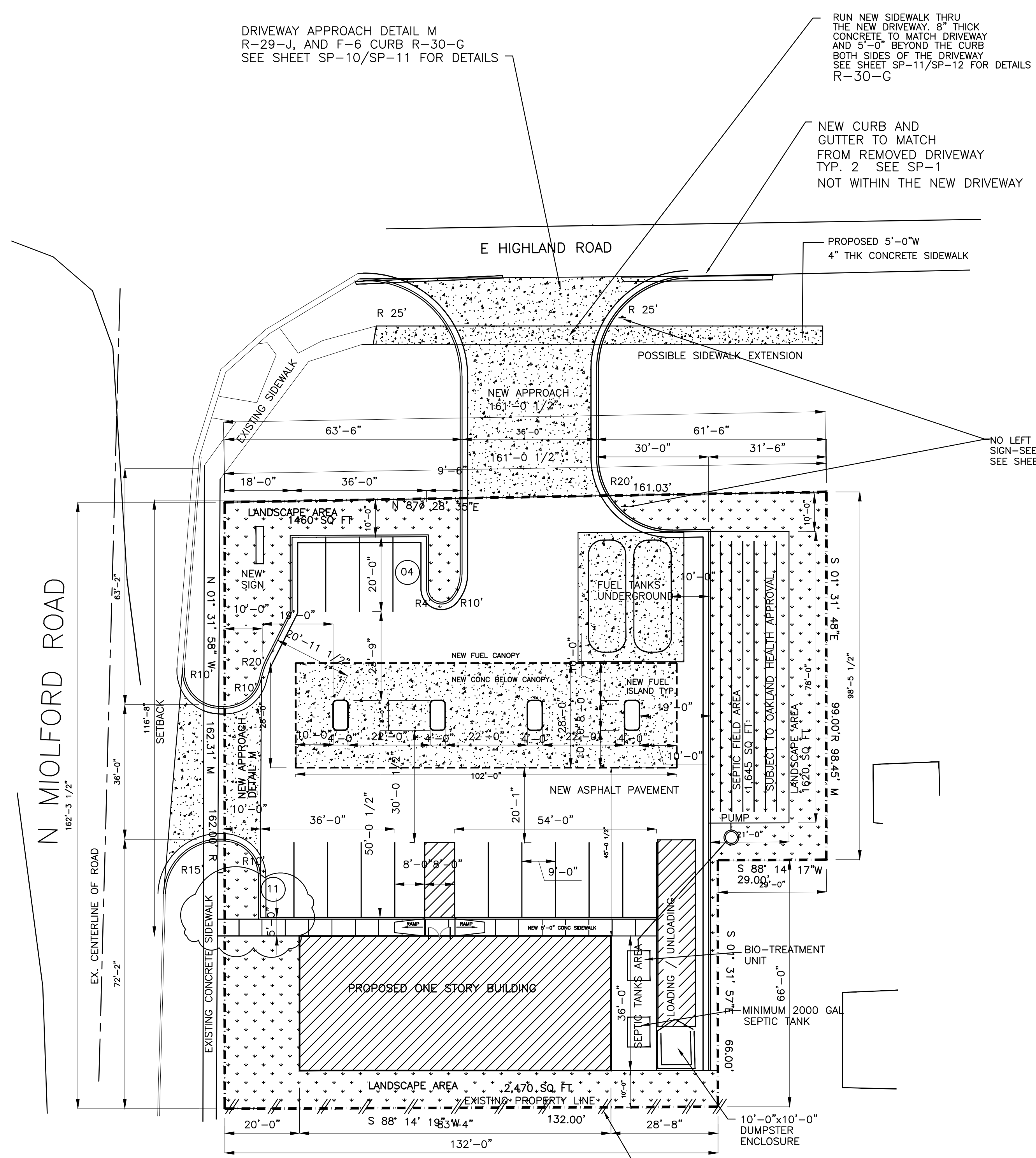
ZONING HS
 TOTAL SITE AREA 24,389 sq ft=.56 AC
 USE GROUP M
 CONSTRUCTION III
 NEW BUILDING 3000 SQ.FT.
 REQUIRED PARKING .. = 3000/200 = 15 SPACES
 PROVIDED LANDSCAPE AREA = 7195 SQ FT=.165 AC= 30 %
 TOTAL IMPERVIOUS AREA = 17,194 SQ FT = .395 AC<.5 AC= 70%
 (CONCRETE , ASPHALT, BUILDING)
 REQUIRED PARKING .. = 3000/200 = 15 SPACES
 CARRY OUT CORNER IS AN ACCESSORY TO THE STATION
 HOURS OF OPERATION 6 AM TO 10 PM
 FUEL DELIVERY BETWEEN 2 AM AND 4 AM



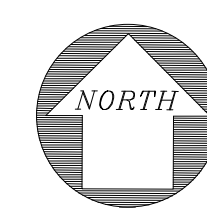
ZIAD EL-BABA ENGINEERING
 674 GAUTHIER
 TECUMSEH ONTARIO
 N8N3P8 CANADA
 CELL : 313-938-8767
 CELL - 519-796-9882



KEY PLAN



PROPOSED SITE PLAN
 SCALE: 1" = 20'-0"



REMOVE EX WOOD FENCE AND REPLACE WITH WHITE VINYL FENCE SEE SHEET SP-7

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG
 -811- (TOLL FREE)
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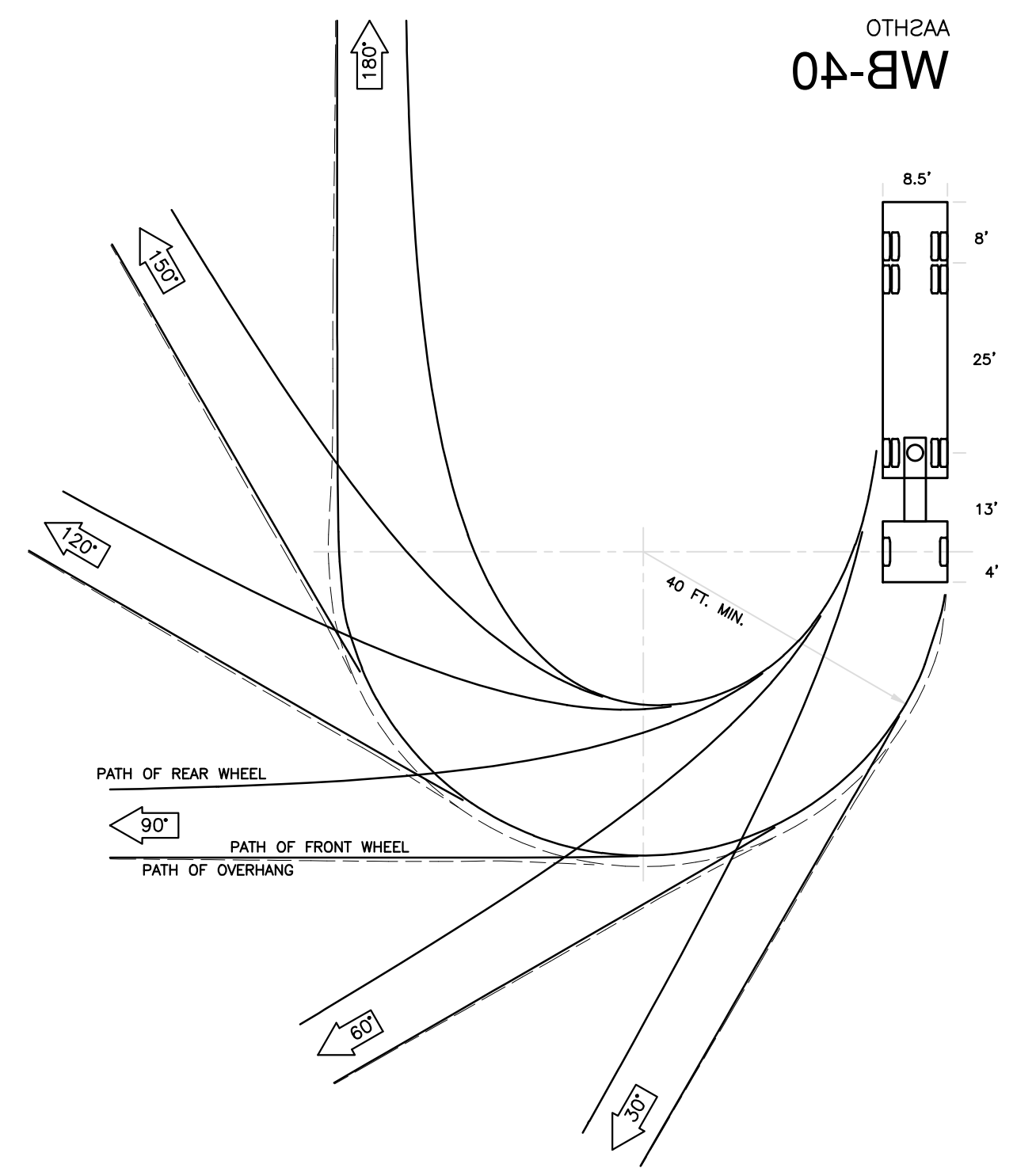
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 394 N MILFORD ROAD
 HIGHLAND TWP ,MI
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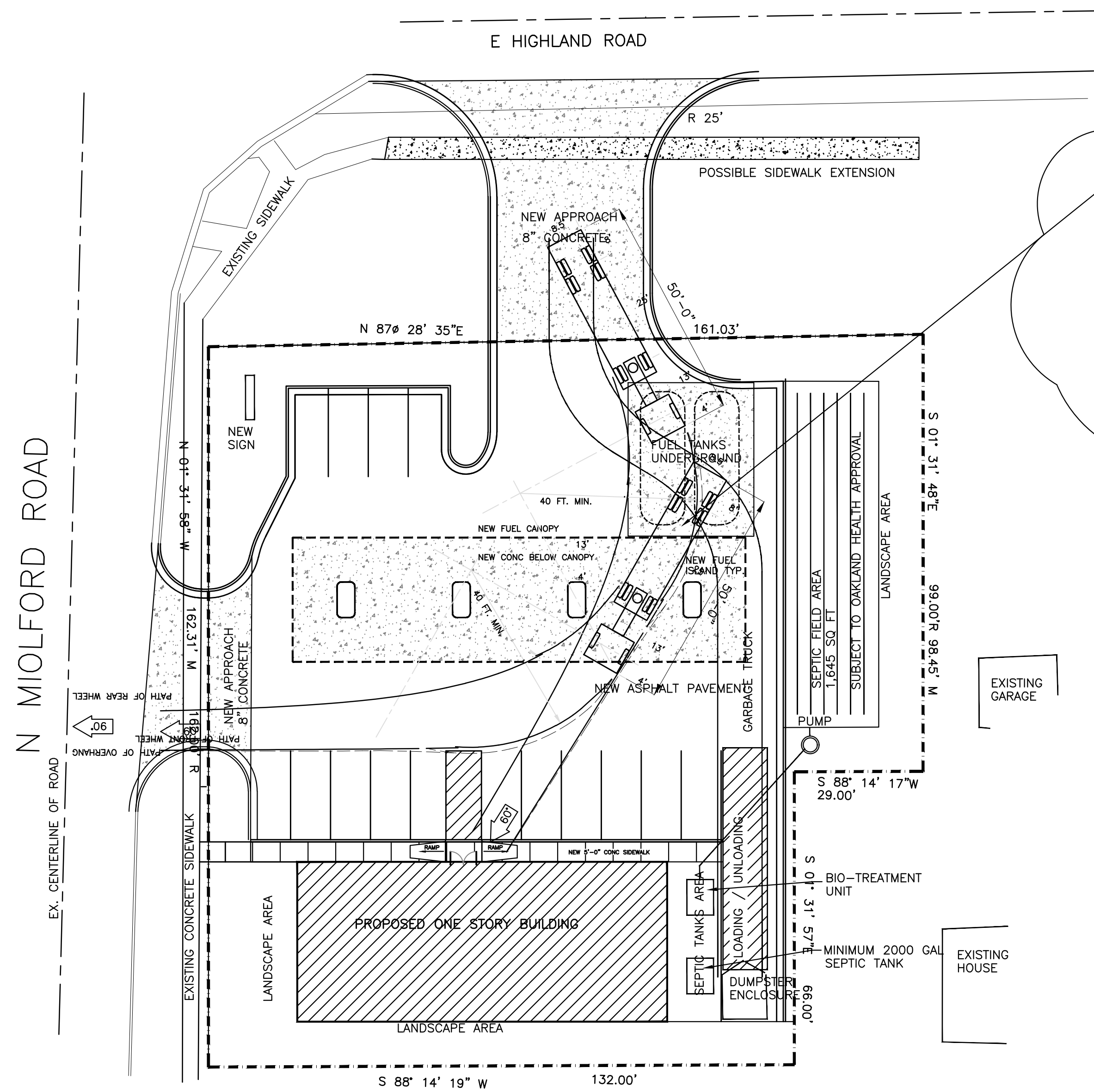
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 EXISTING SITE PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
 SP-2



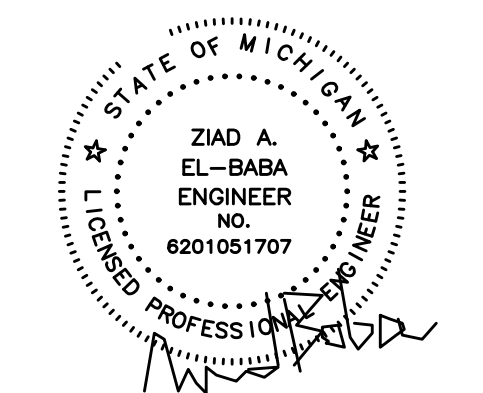
50' FUEL TRUCK
SCALE: 1"=20'-0"



TRUCK CIRCULATION
SCALE: 1"=20'-0"

THIS IS CIRCULATION FOR
50'-0" TRUCK
NOT THE MINIMUM 68'-0"
HIGHWAY TRUCK

TOP OF FUEL TRUCK 11'-0"+/-
UNDERSIDE OF CANOPY IS
16'-0"



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ENGINEERING**

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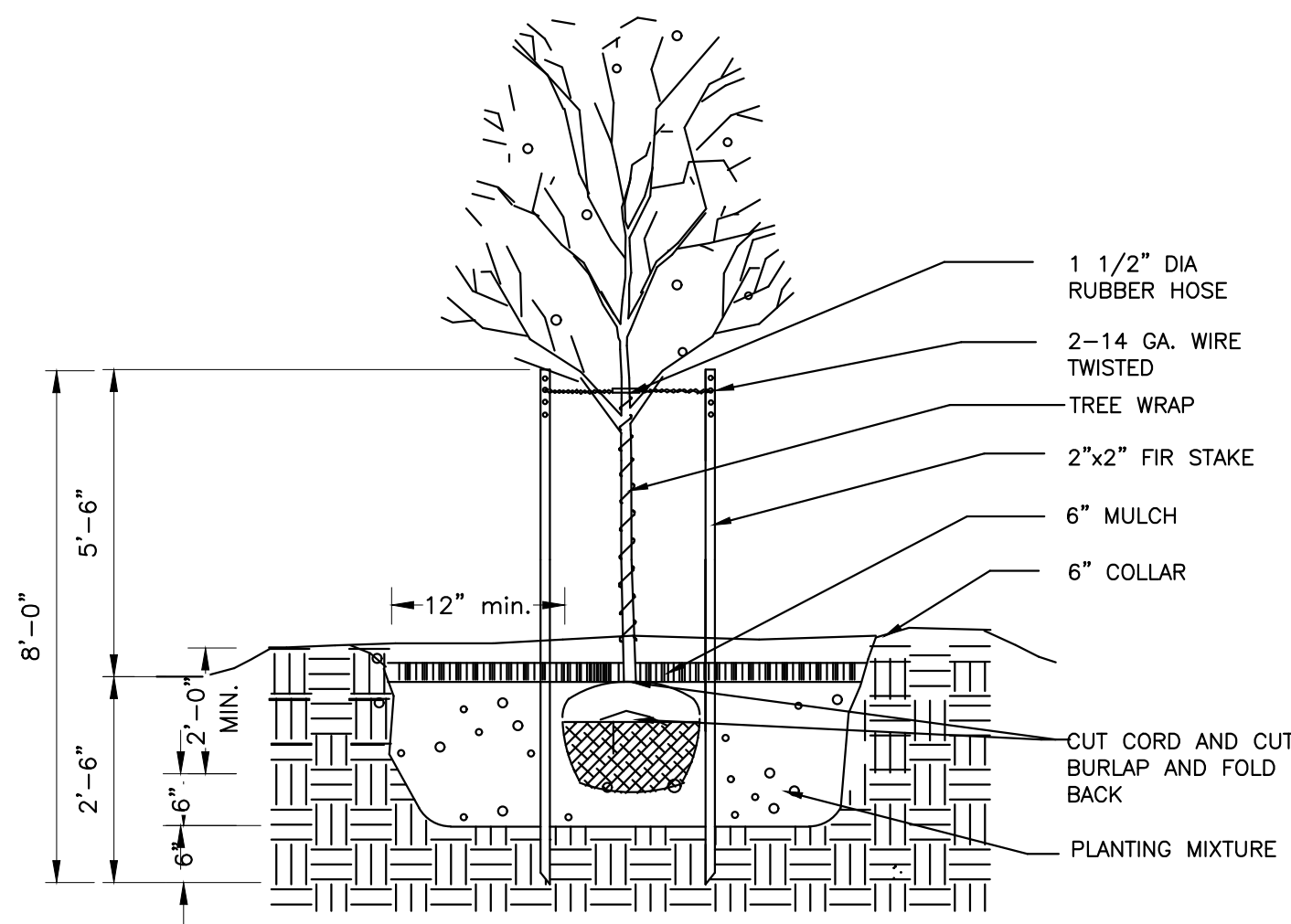
Project:
NEW GAS STATION
394 N MILFORD ROAD
HIGHLAND TWP ,MI
OWNER

Drawing Title:
TRUCK CIRCULATION

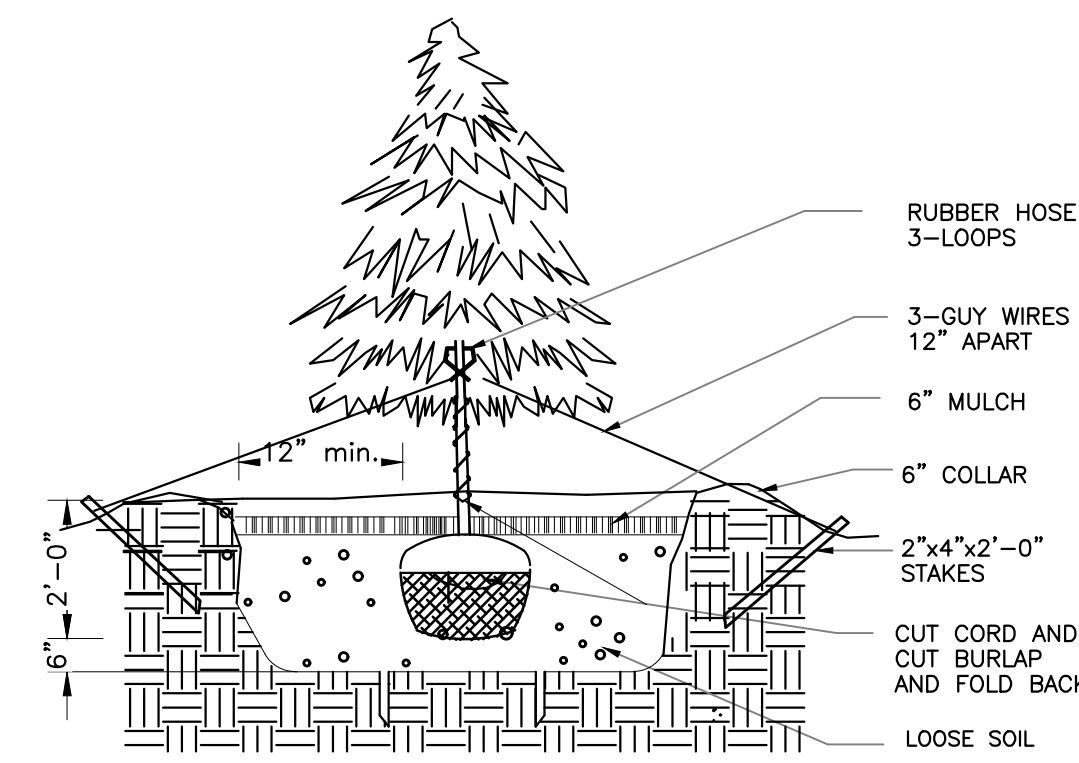
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Drawing No.

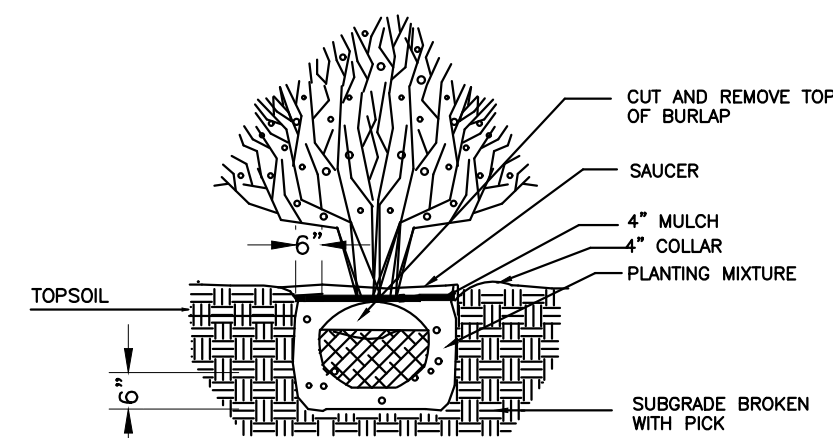
SP-3



Deciduous Tree Planting NTS



Evergreen Tree Planting NTS



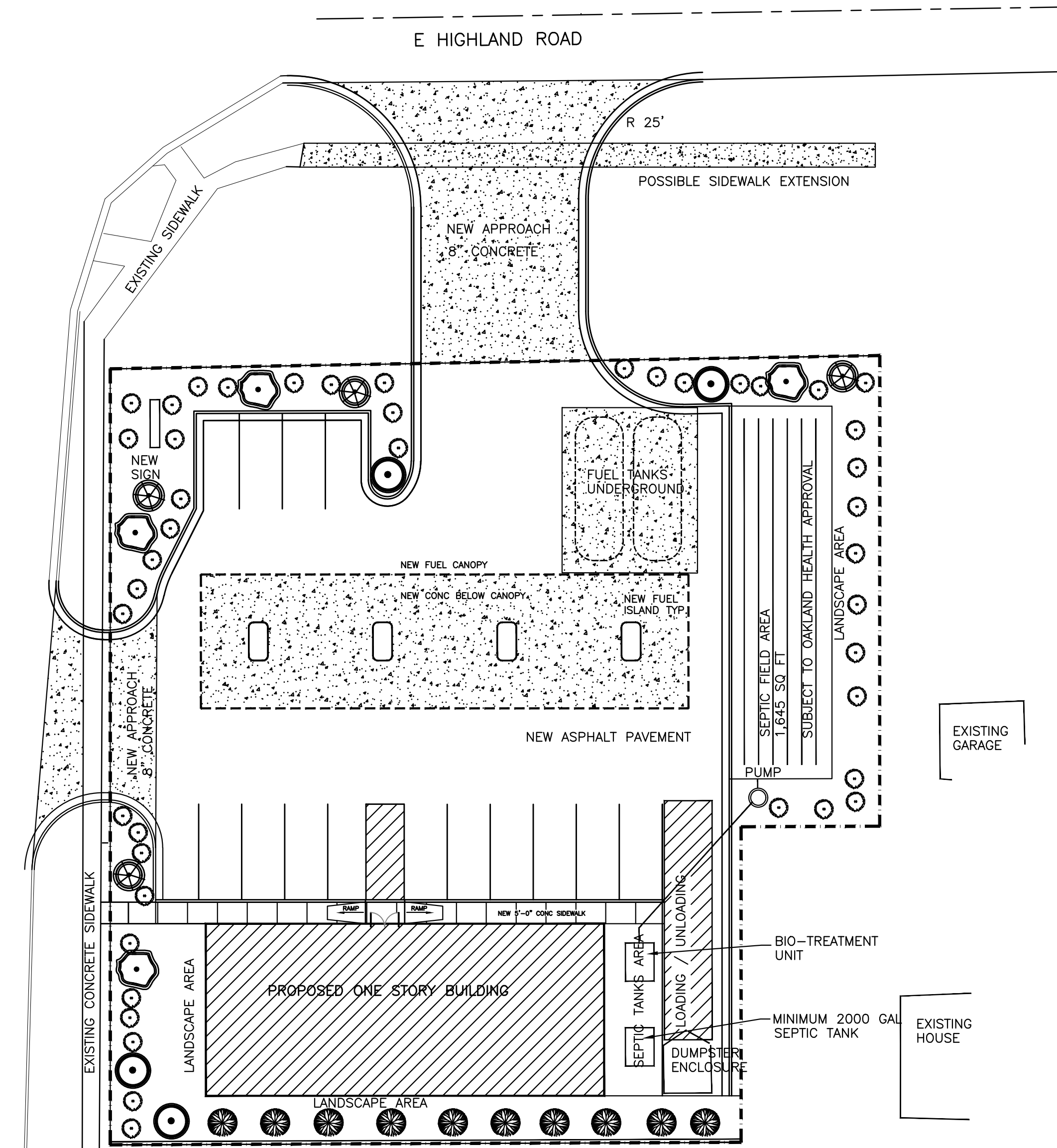
Shrub Planting NTS

NEW LANDSCAPING TABLE				
TYPE	SYMBOL	SIZE	BOTANICAL	QUANTITY
SHRUB	⊙	2'-0" FT. HIGH MIN 4'-6" C/C	SPIREA SHRUB	44
SNOWDRIFT CRABAPPLE	⊙	5	4" CAL. 7' CLEAR STEM MIN	4
DECIDUOUS BLOODGOOD MAPLES	⊙	B&B ROOT 4" CALIP.	ACER REBRUM	4
DECIDUOUS BLOODGOOD MAPLES	⊙	B&B ROOT 3" CALIP. @ 25' C/C	ACER PALMATUM-CANOPY TREE	4
EVERGREEN SILVER FIR	⊙	B&B ROOT, 5 HIGH 2 1/2" CALIP.	ABIES ALBA	10

- NOTES:**
- A TREE PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ALL TREE REMOVAL ACTIVITY INVOLVING TREES SIX INCHES OR MORE DBH IN ACCORDANCE WITH THE VILLAGE OF BEVERLY HILLS
 - TREES MUST BE PLANTED NO CLOSER THAN SIX FEET (6') TO PUBLIC UTILITIES.
 - ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON APPROVED PLANS WILL BE REQUIRED THROUGH THE LIFE OF THE PROJECT AND MUST BE REPLACED IF REMOVED OR DEAD.
 - 4 FOOT(4") HIGH WOOD SNOW FENCING OR OTHER RIGID MATERIAL IS TO BE ERCTED AROUND THE DRIP LINE OF ALL TREES TO BE SEEDED IN ACCORDANCE WITH VILLAGE OF BEVERLY HILLS
 - REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS AND BE:
 - a. NURSERY GROWN
 - b. STATE DEPARTMENT OF AGRICULTURE INSPECTED
 - c. NO. 1 GRADE WITH STRAIGHT UNSCARRED TRUNK AND WELL DEVELOPED UNIFORM CROWN (PARK GRADE TREES WILL NOT BE ACCEPTED)
 - d. PLANTED PER CITY OF TRENTON DETAILS AND SPECIFICATIONS AND IN ACCORDANCE WITH THE VILLAGE OF BEVERLY HILLS
 - e. GUARANTEED FOR ONE YEAR.
 - f. REPLACEMENT TREES SHALL HAVE SHADE POTENTIAL AND

N MILFORD ROAD

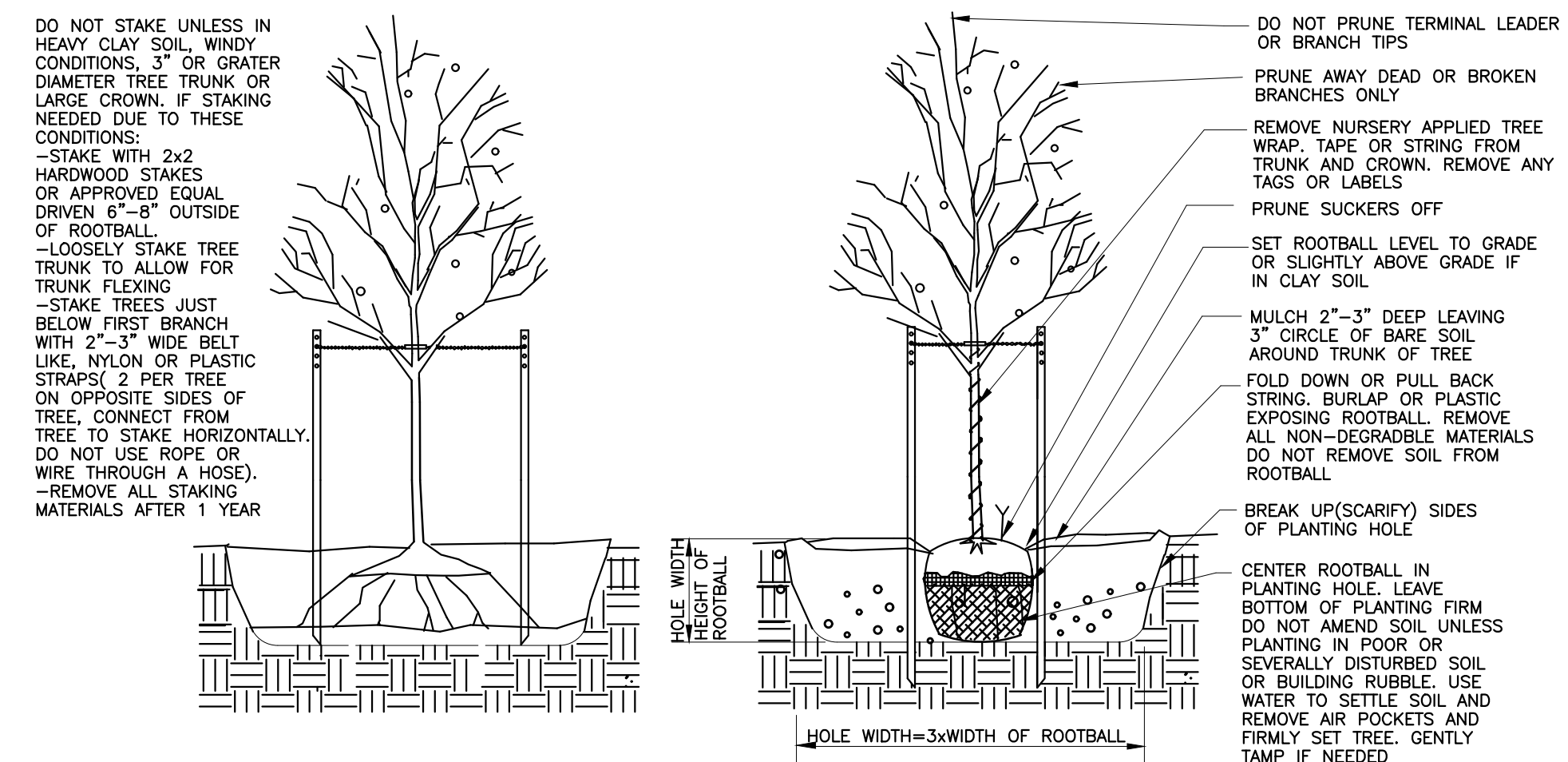
EX. CENTERLINE OF ROAD



LANDSCAPING PLAN

SCALE: 1"=20'-0"

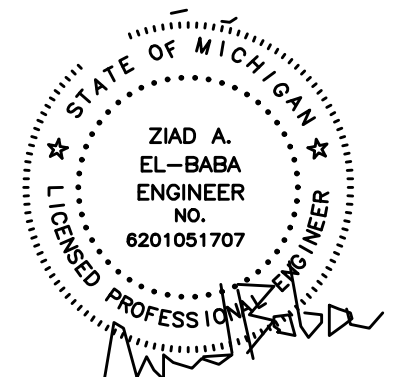
ALL LANDSCAPE AREAS TO RECEIVE UNDERGROUND IRRIGATION SYSTEM



Deciduous Tree Planting Detail



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ZIAD EL-BABA ENGINEERING

674 GAUTHIER
TECUMSEH ONTARIO
N9N3P8 CANADA
CELL : 313-938-8767
CELL - 519-796-9882

DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
NEW GAS STATION
394 N MILFORD ROAD
HIGHLAND TWP ,MI
OWNER

Drawing Title:
LANDSCAPING PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
SP-4

RESPONSIBLE FOR THE SOIL EROSION

TYPE OF SOIL

SOIL TYPE : MORLEY LOAM

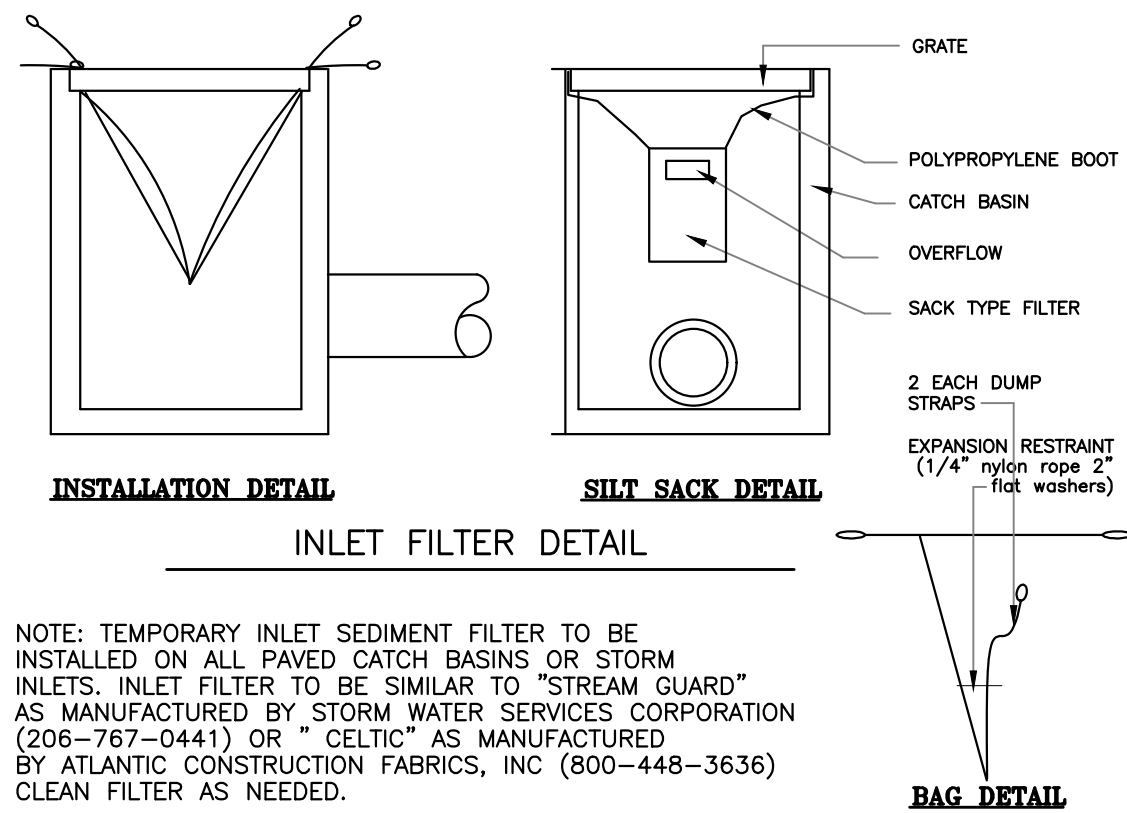
SOIL EROSION NOTES.

1. INSTALL SILT FENCE AND/OR CONSTRUCTION FENCES SHOWN ON THE PLAN
2. CITY OF GARDEN CITY ENGINEERING DIVISION MUST BE NOTIFIED WHEN ALL SILT FENCE FOR THIS PROJECT HAS BEEN PLACED, WITH SUFFICIENT TIME TO ALLOW INSPECTION OF SAME PRIOR TO THE START OF ANY SITE WORK
3. THE PROPOSED WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH APPROVED EARTH CHANGE PLANS AND IN COMPLIANCE WITH ALL THE REQUIREMENTS OF THE PERMIT-ACT 451 OF PUBLIC ACTS OF 1994 AND RULES PROMULGATED THEREUNDER
4. ACCESS TO CONSTRUCTION SITE SHALL BE OVER AN EXISTING APPROACH
- 5- CONTRACTOR TO PERFORM DAILY STREET SWEEPING MAY BE NEEDED TO KEEP SOIL THAT IS TRACKED ONTO THE ROADS FROM REACHING THE STORM SEWER SYSTEM.
6. ALL MUD AND/OR DIRT TRACKED ONTO EXISTING ROADS AND DRIVEWAYS OR ADJACENT PARKING LOT AREAS FROM SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED DAILY BY THE GENERAL CONTRACTOR OR HIS DESIGNEE
7. ALL OF THE SOIL EROSION DEVICES SHALL BE MAINTAINED DAILY BY THE CONTRACTOR.
8. **ALL CONTRACTORS:** DO NOT NEEDLESSLY DESTROY VEGETATION OF ANY TYPE. DUST CONTROL IS TO BE MAINTAINED ON SITE DURING CONSTRUCTION. ALL DIRT AND DEBRIS ARE TO BE KEPT OF ALL ADJACENT ROADS. IN NO EVENT SHALL WORK AREA EXTEND BEYOND THE LIMITS OF CONSTRUCTION INDICATED ON THE PLAN.
9. DURING CONSTRUCTION OF THE NEW STORM STORAGE PIPE THE ENDS OF ALL OPEN PIPES WILL BE PROTECTED BY FILTER BAGS, STONE FILTERS, OR OTHER APPROVED MEANS (UNTIL FULLY INSTALLED)

10- AREA OF DISTURBANCE .39 AC
 NEW CONC CURBS, LANDSCAPING
 NEW PAVEMENT, NEW BUILDING
 NEW STORM DRAINAGE SYSTEM

RULE ADOPTED:
 PART 91, SOIL EROSION & SEDIMENTATION CONTROL, PA 451 OF 1994 AS AMENDED AND THE RULES 323, 1701-1714 PROMULGATED UNDER PART 91 ARE HEREBY ADOPTED BY REFERENCE AND MADE A PART OF THIS ORDINANCE AS IF FULLY SET FORTH HEREIN

10. APPROXIMATE STARTING DATE: MID 2019
11. APPROXIMATE COMPLETION DATE: END OF 2019
12. TOTAL ACRES OF DISTURBANCE : 0.39 ACRES
13. EXISTING LOAMY SOIL
14. NEAREST BODY OF WATER = 1000+/- FT RIVER ROUGE

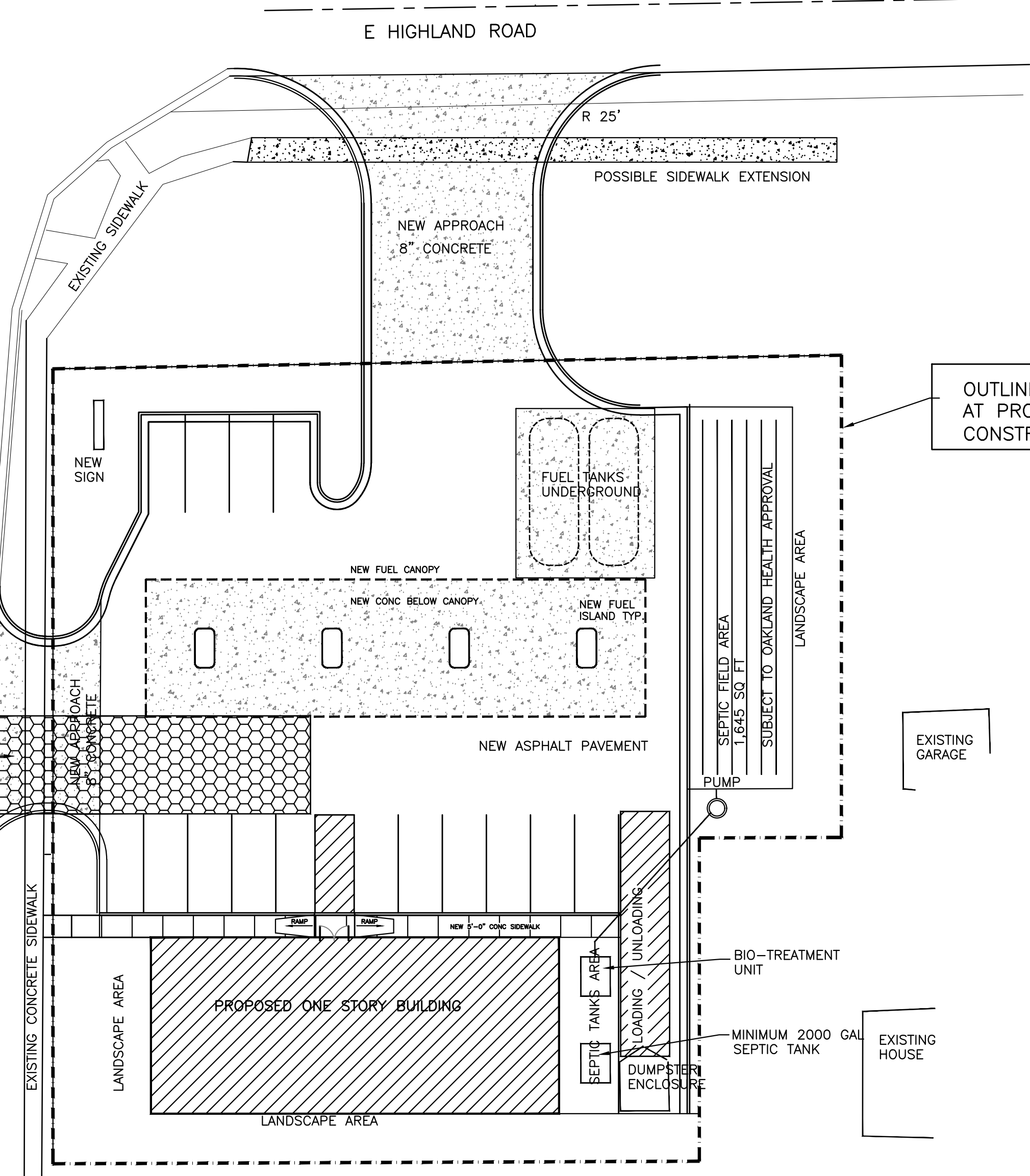
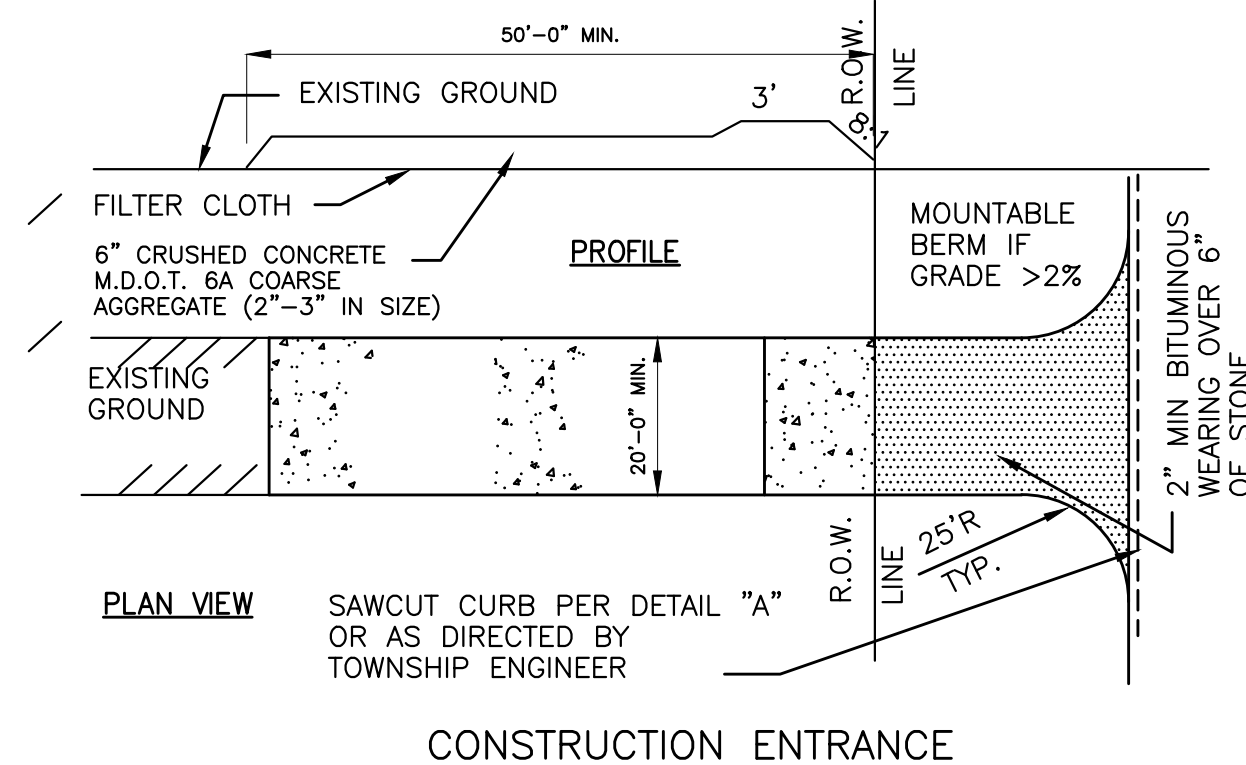


NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAM GUARD" AS MANUFACTURED BY STORM WATER SERVICES CORPORATION (206-767-0441) OR "CELTIC" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC (600-448-3636) CLEAN FILTER AS NEEDED.

CONSTRUCTION SEQUENCE	OPERATION TIME SCHEDULE MID 2020				
	FIRST	SECOND	THIRD	FOURTH	FIFTH
A	SOIL EROSION CONTROL MEASURE				
B	BUILDING STRUCTURAL				
C	SITE PREPARATION				
D	NEW PAVEMENT				
E	NEW LANDSCAPING/CURBING				
F	STORM SEWER				

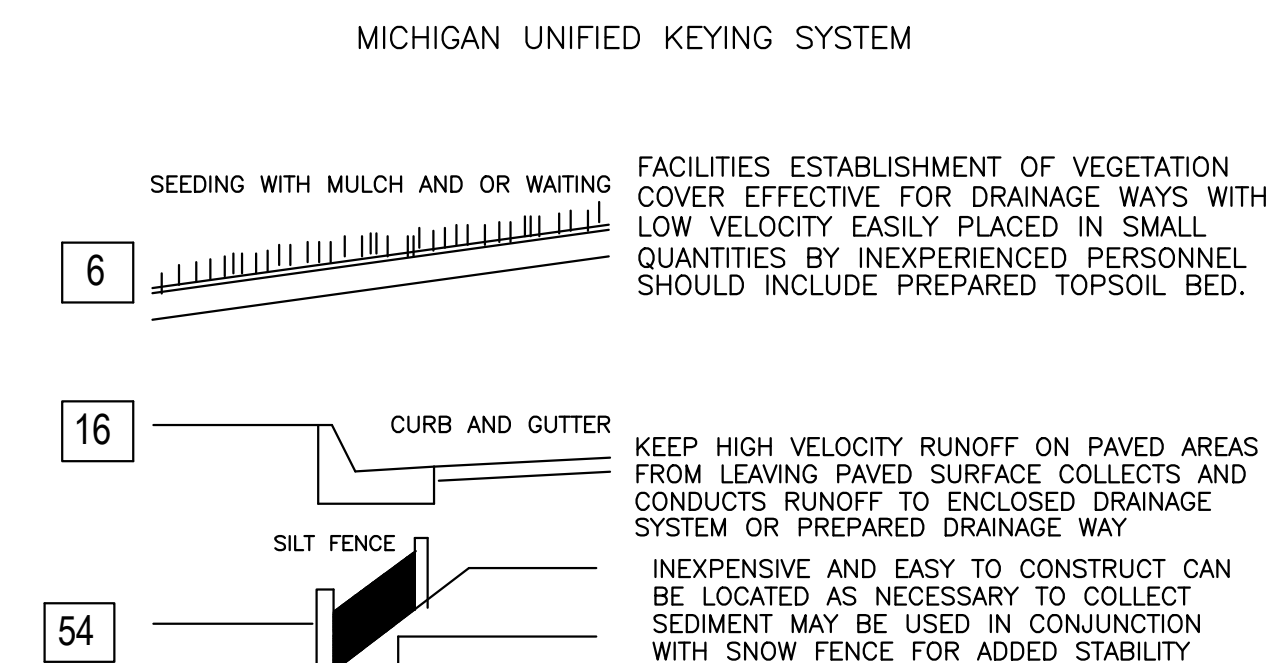
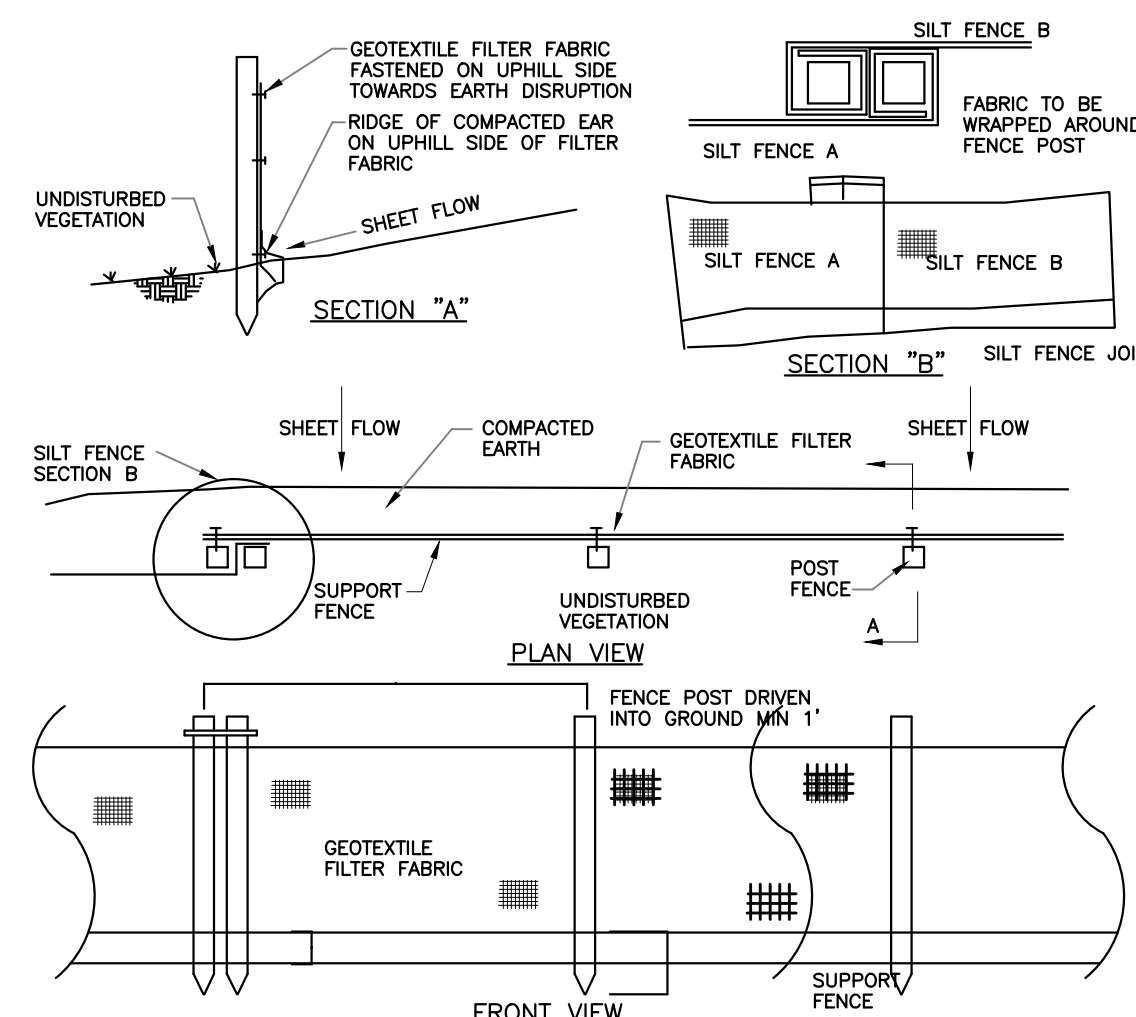
PROPOSED WORK:

NEW PARKING LOT - AND LANDSCAPING



EROSION PLAN
 SCALE: 1"=20'-0"

THIS PLAN ILLUSTRATES THE MINIMUM SESC MEASURES NEEDED TO PREVENT SOILS FROM LEAVING THE SITE AND IS SUBJECT TO CHANGE AS CONDITIONS IN THE FIELD WARRANT

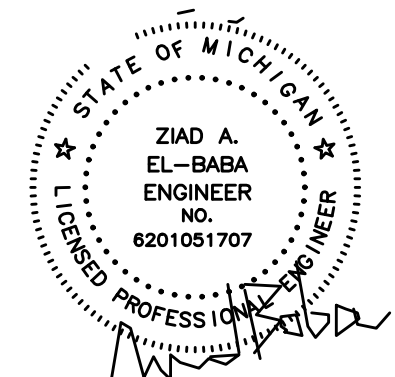


NOTE: EARTHWORK, GRADING AND PAVING SHALL COMELY WITH COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE CITY STANDARDS AND SPECIFICATIONS FOR LAND DEVELOPMENT PROJECTS. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN SPECIFICATIONS AND BECOME FAMILIAR WITH THEIR REQUIREMENTS.

CLOSEST SURFACE WATER IS MDOT STORM SYSTEM



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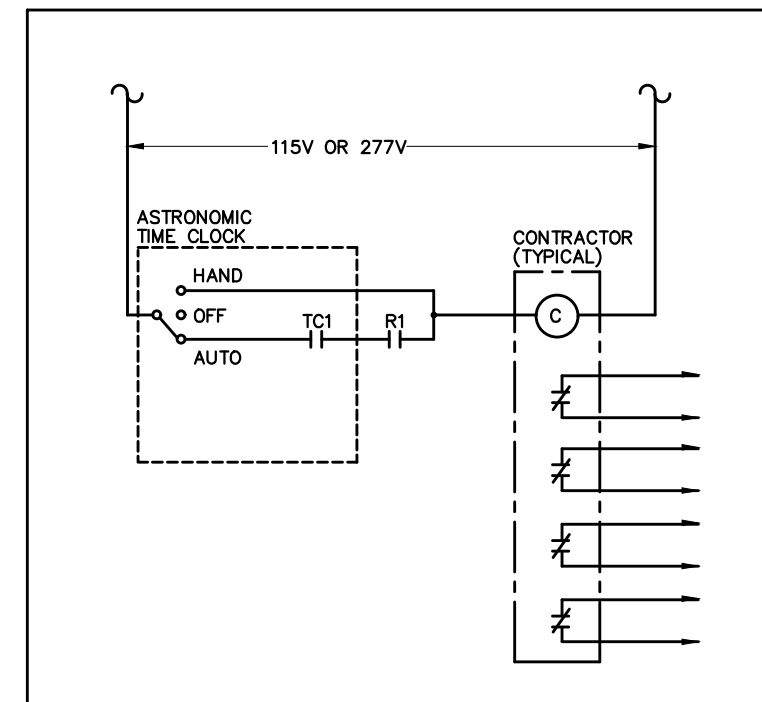
Project:
 NEW GAS STATION
 394 N MILFORD ROAD
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Drawing Title:
 EROSION PLAN

Project Number	
Scale	AS NOTED
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Drawn By	
Checked By	

Drawing No.
 SP-5

WATTSTOPPER # EM-24A2
(OPTIONAL)



WATTSTOPPER # HINCXX-VOLT
NOTE:
XX = SPECIFY QUANTITY OF CONTRACTOR
POLES REQUIRED (MULTIPLES OF 4)
VOLT = SPECIFY 115V OR 277V
CONTRACTOR TO SPECIFY NUMBER OF CIRCUITS REQUIRED

- SEE MH COLUMN OF LUMINARIES LOCATIONS FOR MOUNTING HEIGHTS.
- SEE LUMINARIES SCHEDULE FOR LIGHT LOSS FACTORS.
- CALCULATIONS ARE SHOWN IN FOOTCANDLES AT GRADE SURFACE.

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	4.0 fc	9.50 fc	0.1 fc	9.5/0.1	50.0:1

LUMINAIRE SCHEDULE

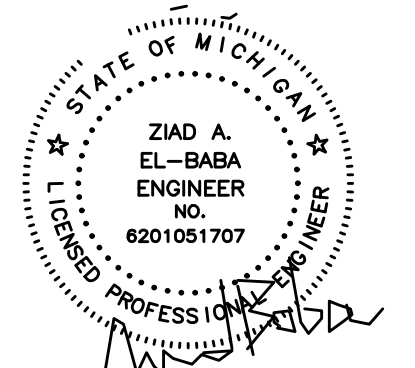
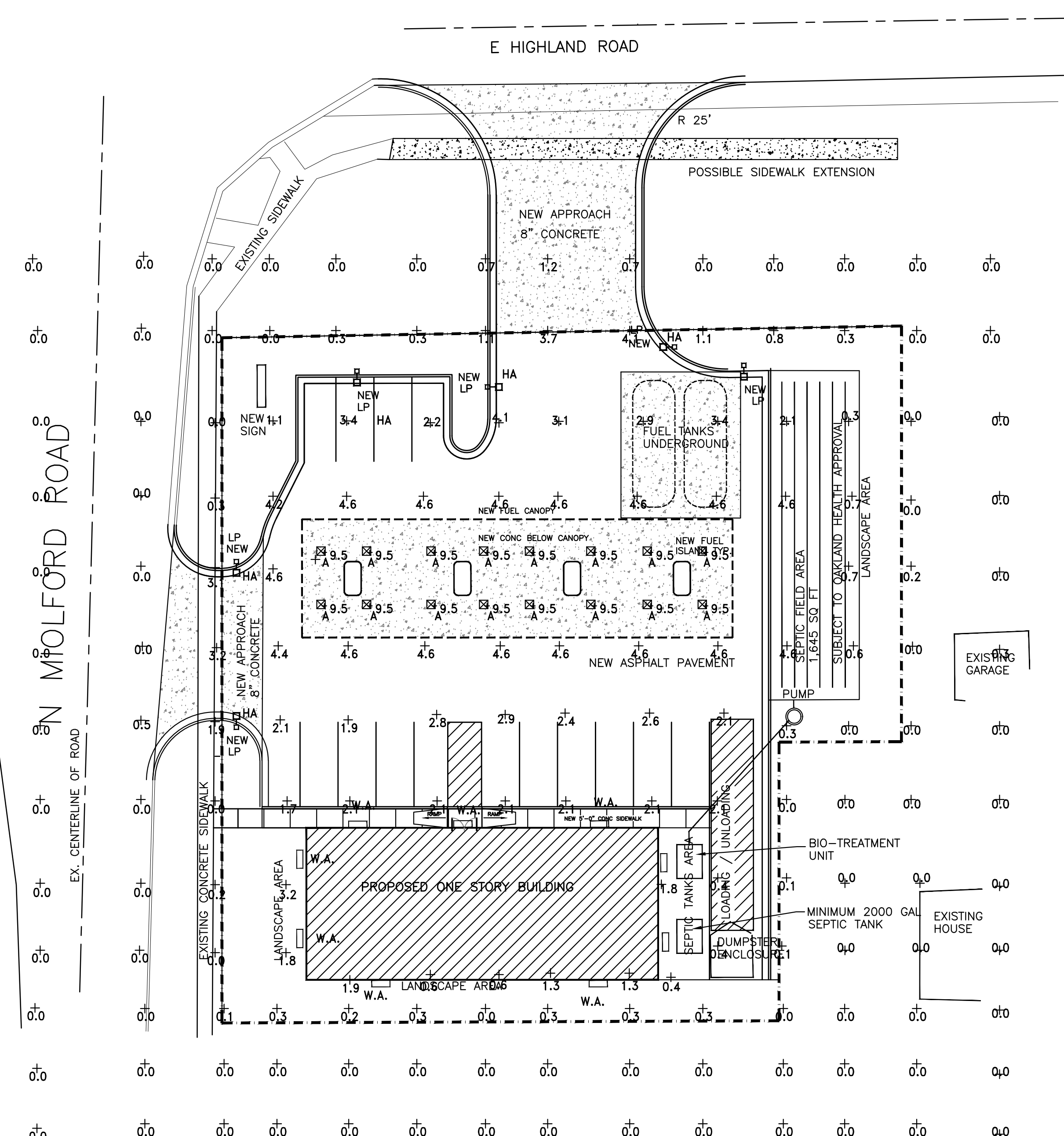
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
WA	9		LITHONIA #WST 100M FT (WALL MTD)	ARCHITECTURAL SCORCE WITH FORWARD THROW DISTRIBUTION WITH CLEAR, FLAT GLASS	ONE 100-WATT CLEAR ED-17 METAL HALIDE, HORIZONTAL POSITION.	LTL11348.IES	8500	0.72	140

CANOPY LIGHTING BY ENCORE OR EQUAL

Symbol	Label	Qty	Catalog Number	Description	Lamp	LENS	LINE VOLTAGE	LUMINAIRE	Watts
☒	A	16		RECESSED	250W CLEAR SMH	F	MT	WHT	250

LUMINARIES SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
NEW LP	8			TOP MOUNTED FIXTURES STANDARD SIMPLE STYLE CASTING W/ LUNAR OPTICS	145 HP 150W, 55V, HPS BALLAST DOWNWARD POSITION.	GV05012SB3NNZ	12000	0.72	213



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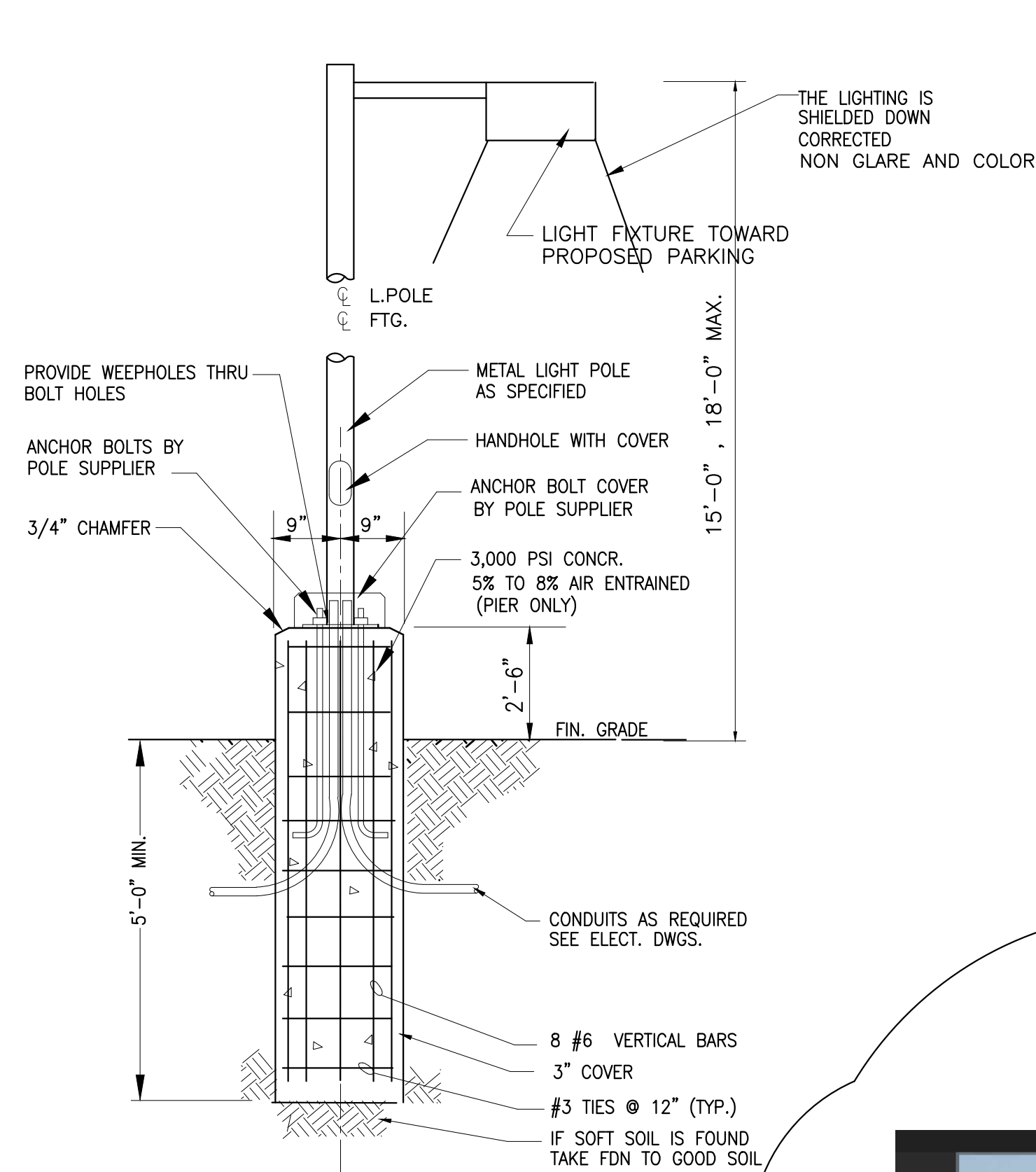
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Drawing Title:
PHOTOMETRIC PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
SP-6

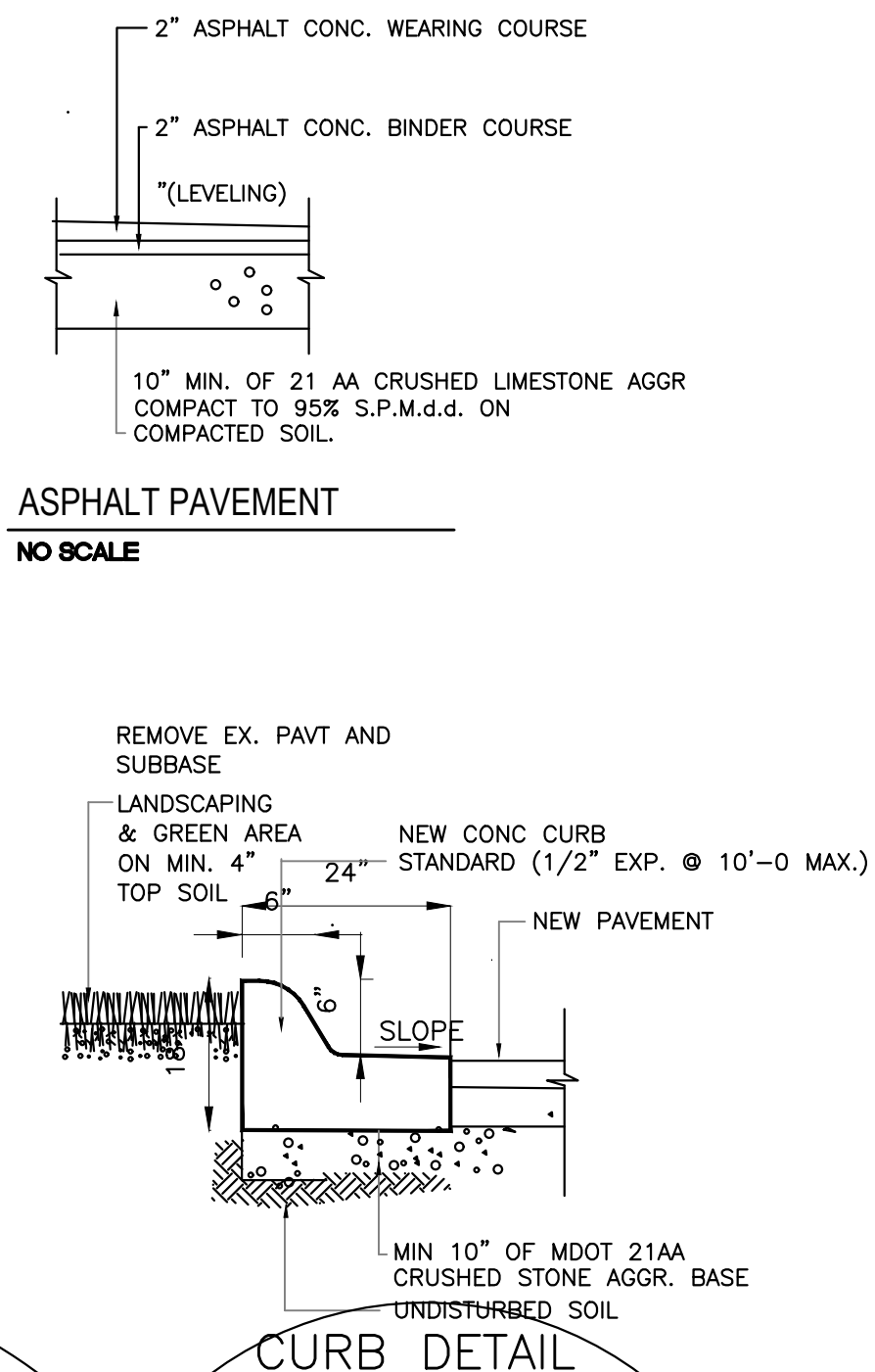


TYP. LIGHT POLE BASE DETAIL

NOTE: ALL NEW LIGHTING TO BE SHIELDED AND DIRECTED DOWN WARD.

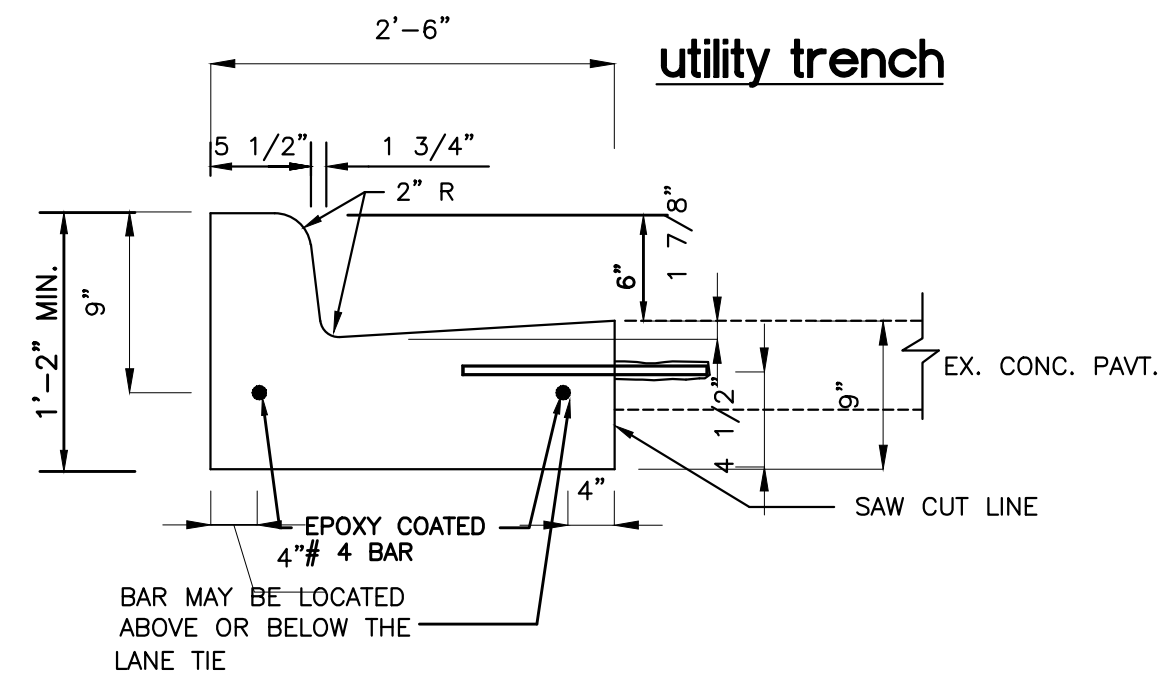
LIGHTING NOTES:

- 1- PARKING LOT LIGHTING POLE LENS TO BE LIMITED TO 250 W
- 2- FUEL CANOPY LIGHTING IS LIMITED TO 400 W. AND RECESSED IN
- 3- WALL PACKS ARE LIMITED TO 1745 W
- 4- ALL LIGHTS TO BE SHIELDED FROM ADJACENT PROPERTY.

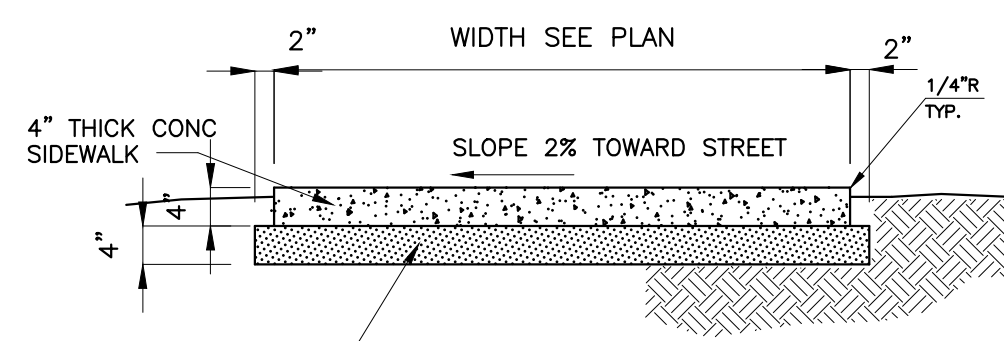


ASPHALT PAVEMENT
NO SCALE

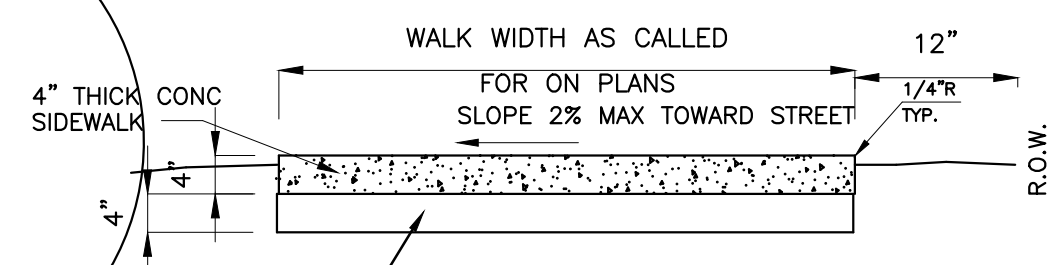
CURB DETAIL



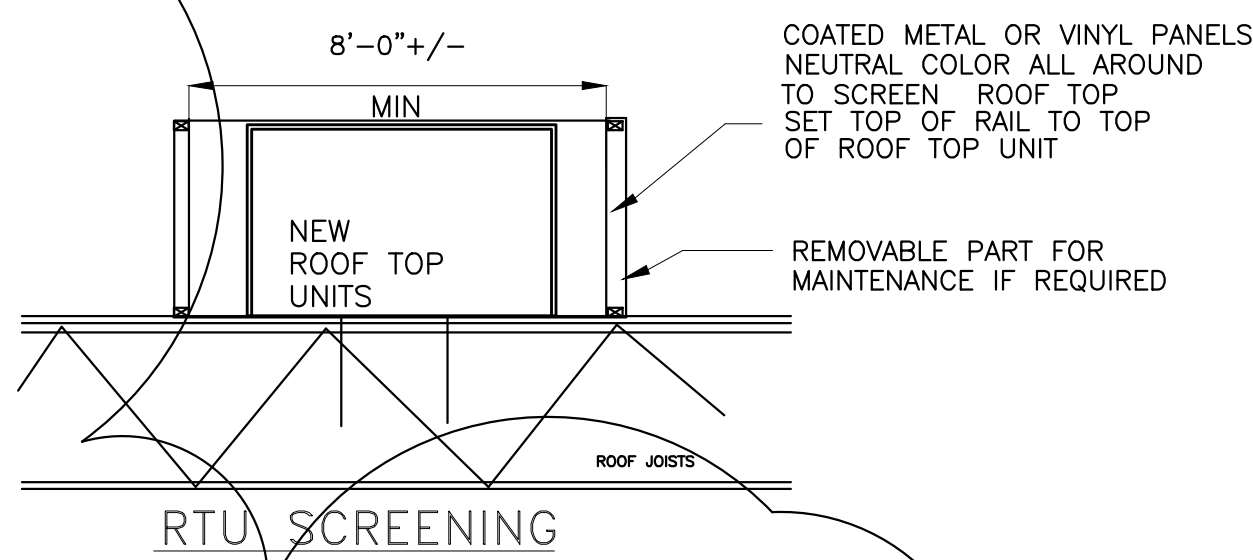
CURB + GUTTER TYPE F-5
M.DOT R-30 E



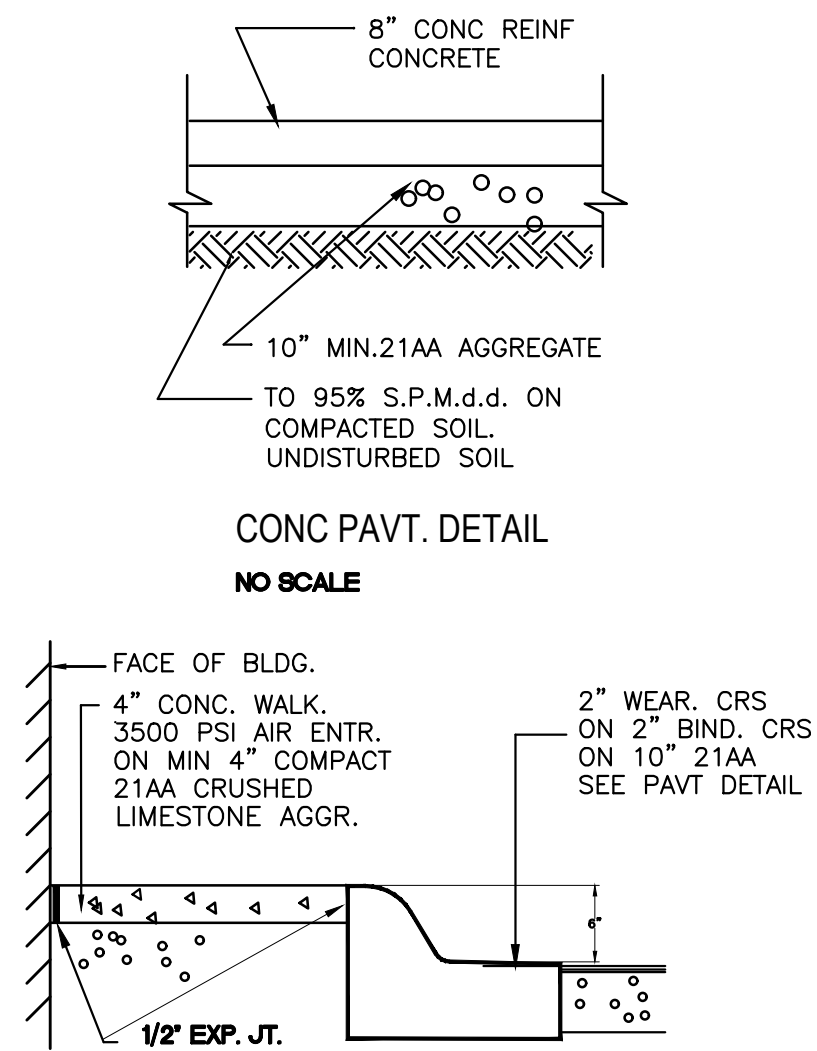
4" CONCRETE SIDEWALK



4" CONCRETE SIDEWALK



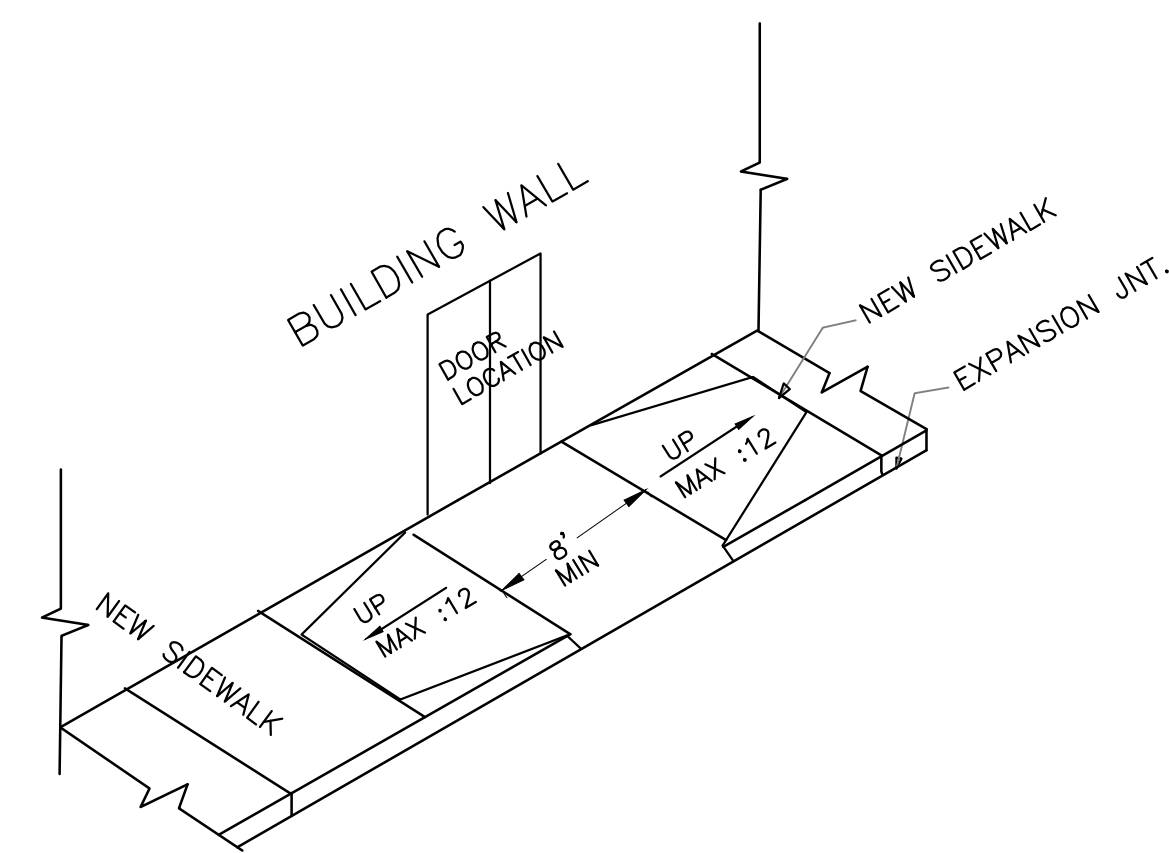
RTU SCREENING



CONC PAVT. DETAIL
NO SCALE

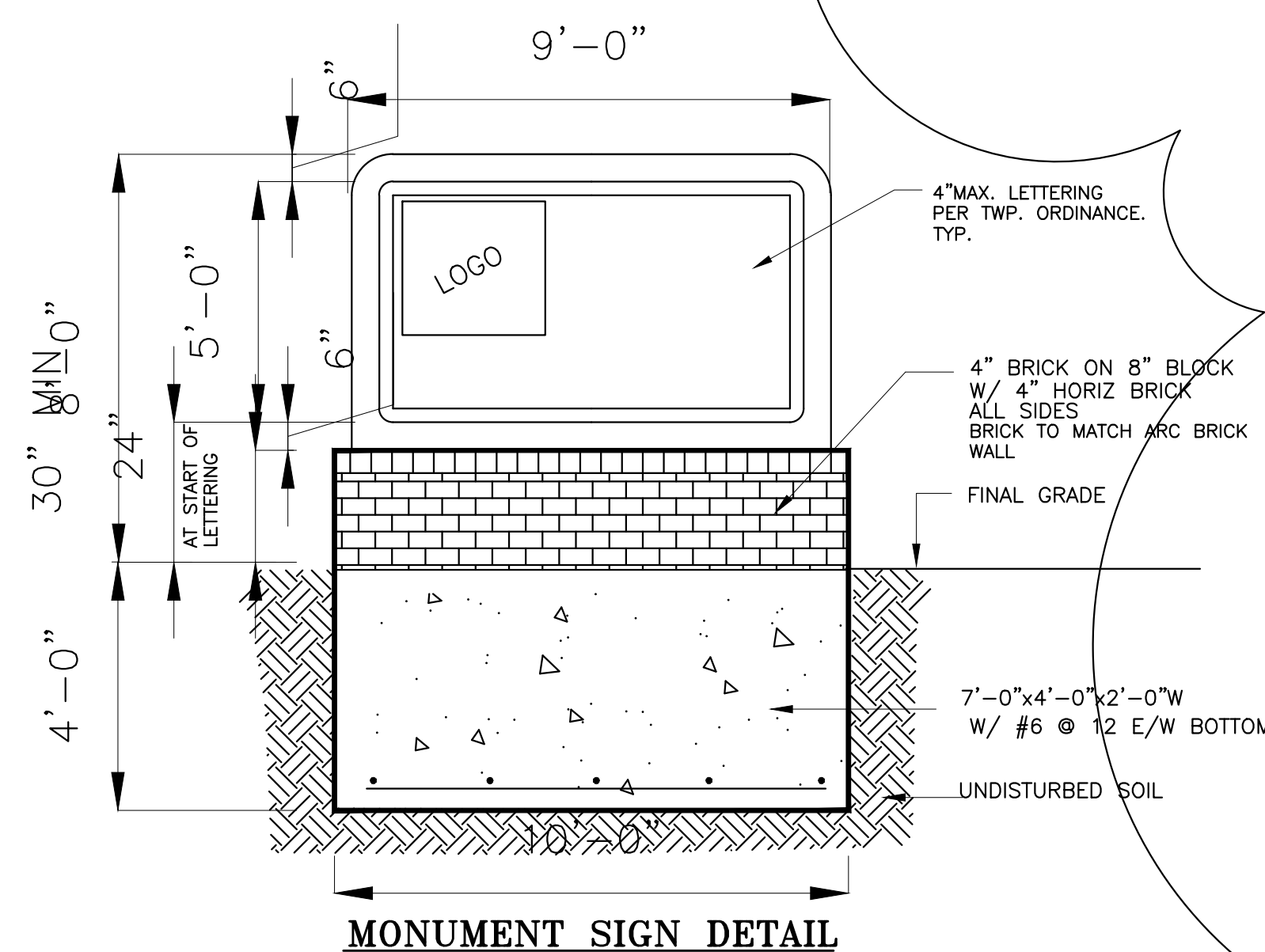
INTEGRATED SIDEWALK DETAIL

N.T.S.



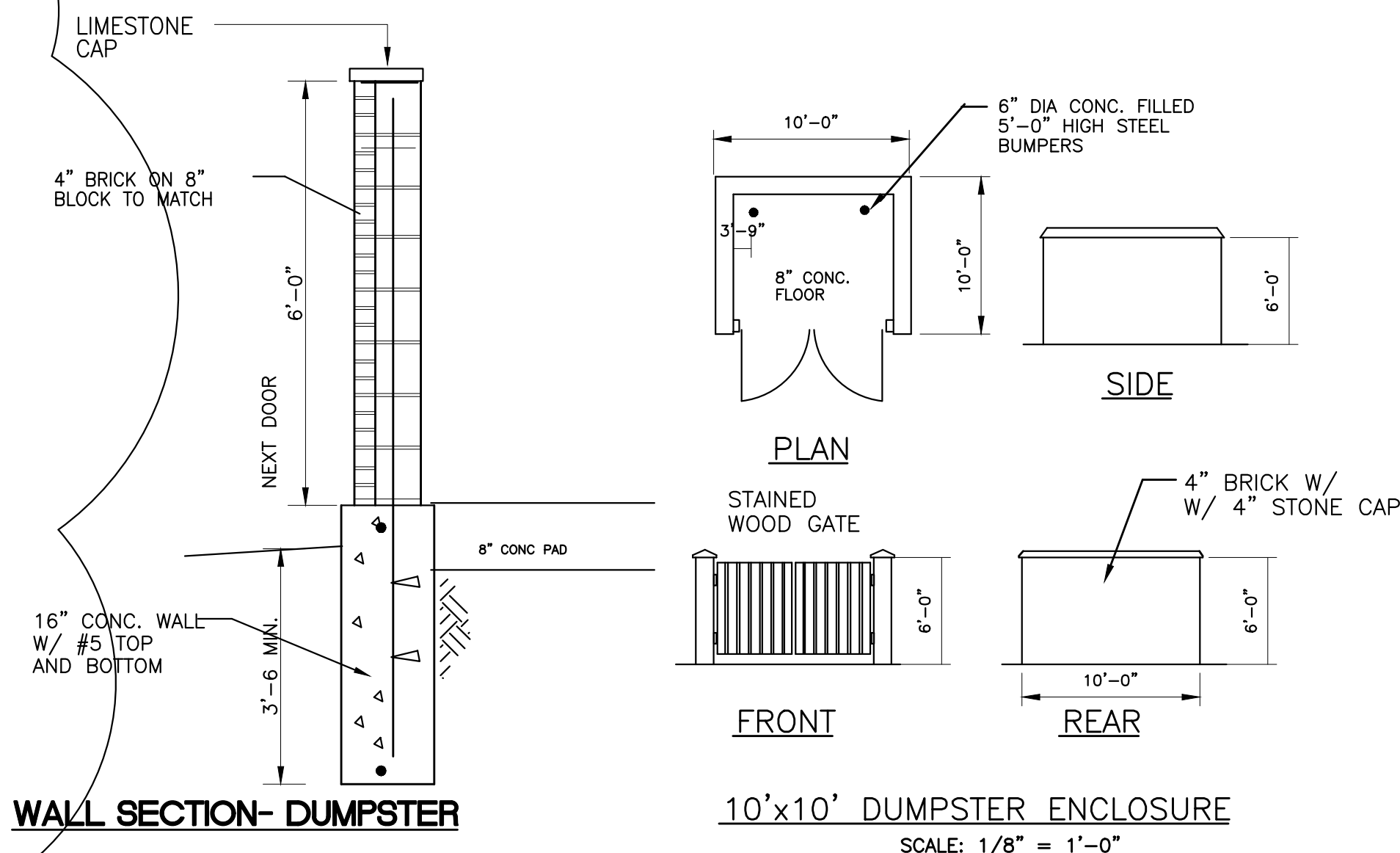
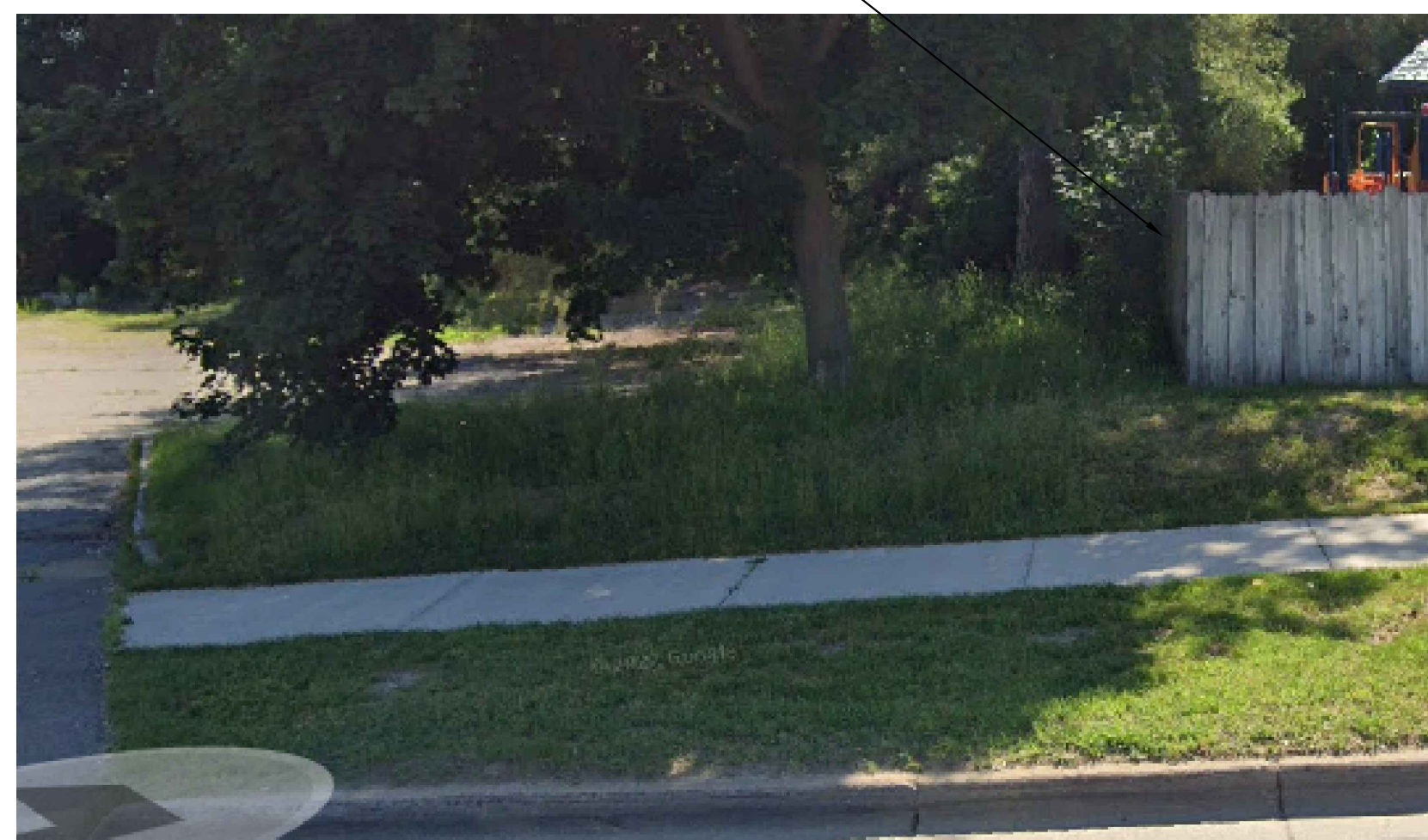
HANDICAP RAMP DETAIL

NO SCALE



MONUMENT SIGN DETAIL

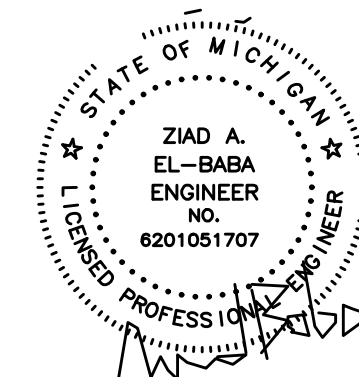
TO THE SOUTH FACING THE DY CARE CENTER EXISTING WOOD FENCE WILL BE REPLACED WITH DECORATIVE VINYL FENCE



WALL SECTION- DUMPSTER

10'x10' DUMPSTER ENCLOSURE

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



ZIAD EL-BABA ENGINEERING

674 GAUTHIER
TECUMSEH ONTARIO
N8N3P8 CANADA
CELL : 313-938-8767
CELL - 519-796-9882

DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
NEW GAS STATION
394 N MILFORD ROAD
HIGHLAND TWP ,MI
OWNER

Drawing Title:
EROSION PLAN

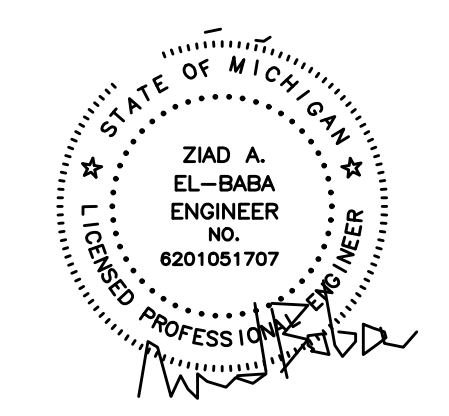
Project Number	Scale	Date	Drawn By	Checked By
	AS NOTED			

Drawing No.

SP-7

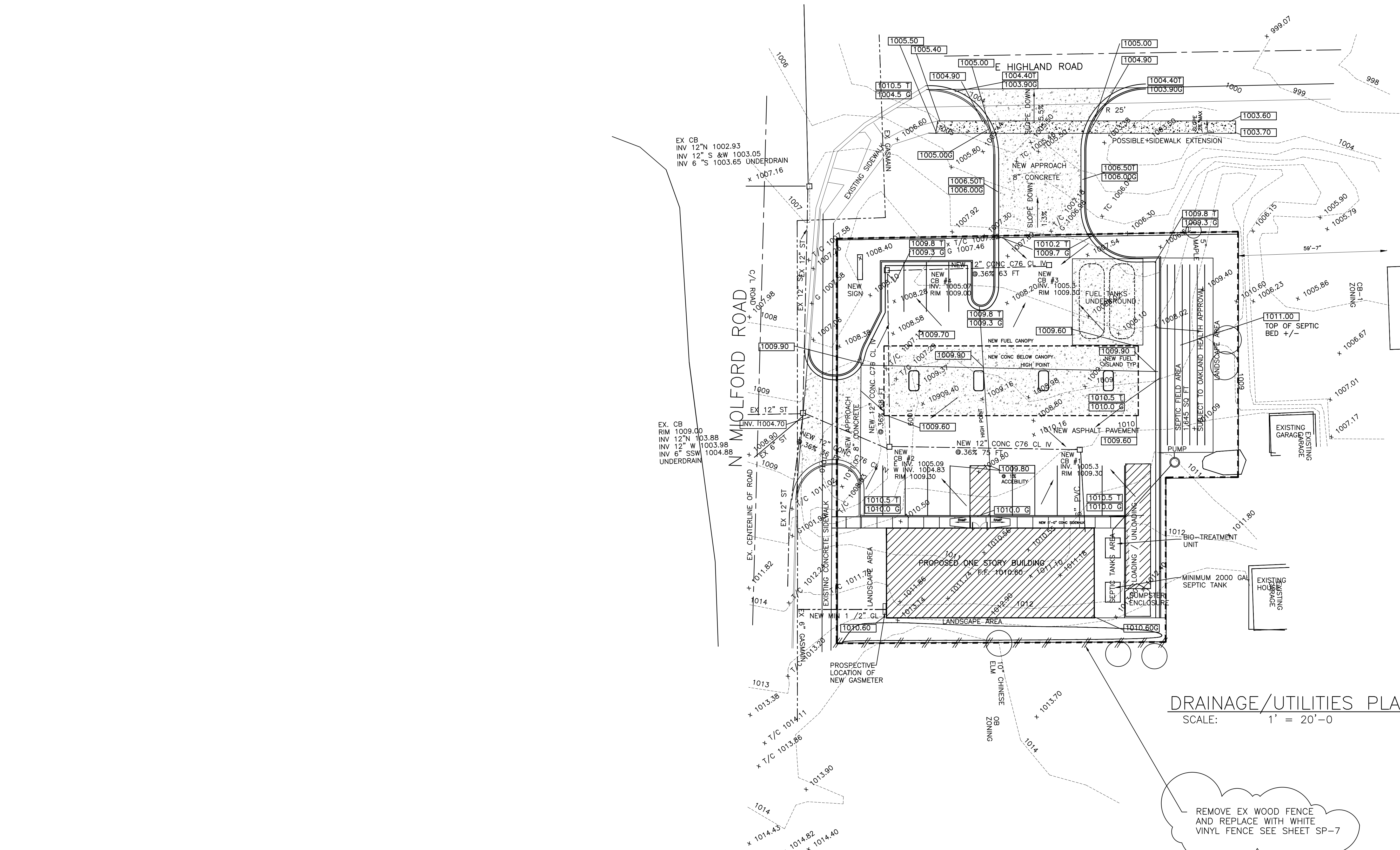


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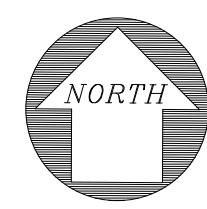


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DRAINAGE/UTILITIES PLAN
 SCALE: 1" = 20'-0"



REMOVE EX WOOD FENCE AND REPLACE WITH WHITE VINYL FENCE SEE SHEET SP-7

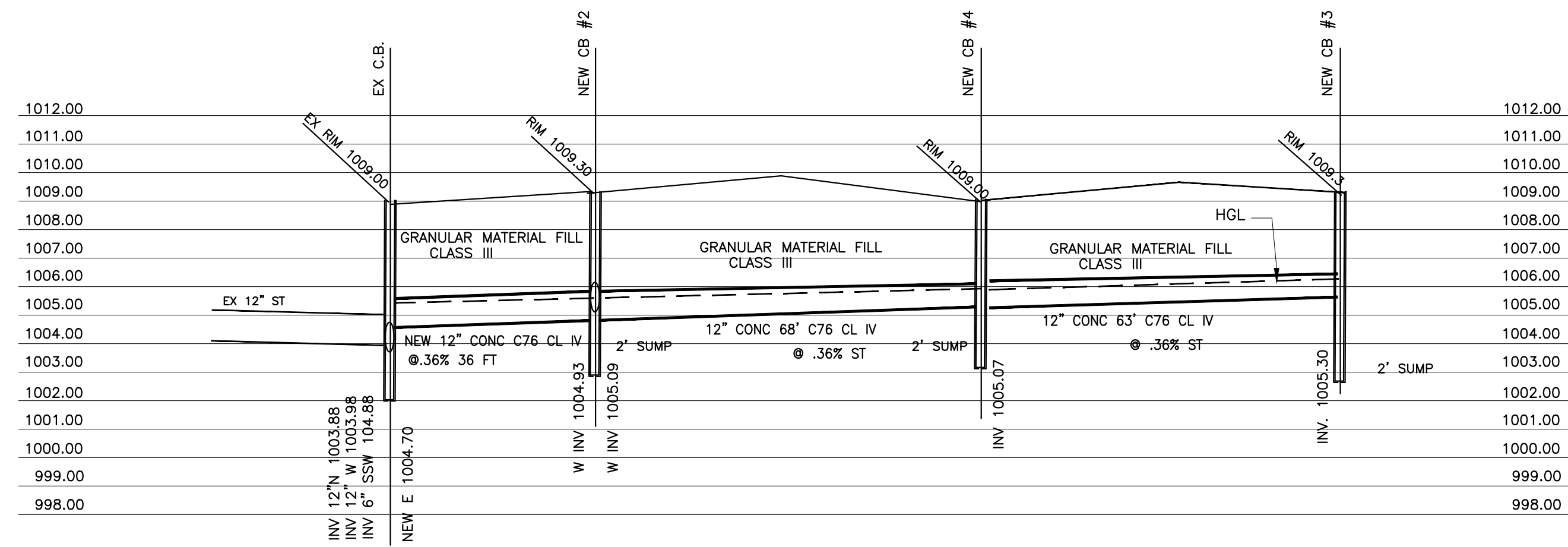
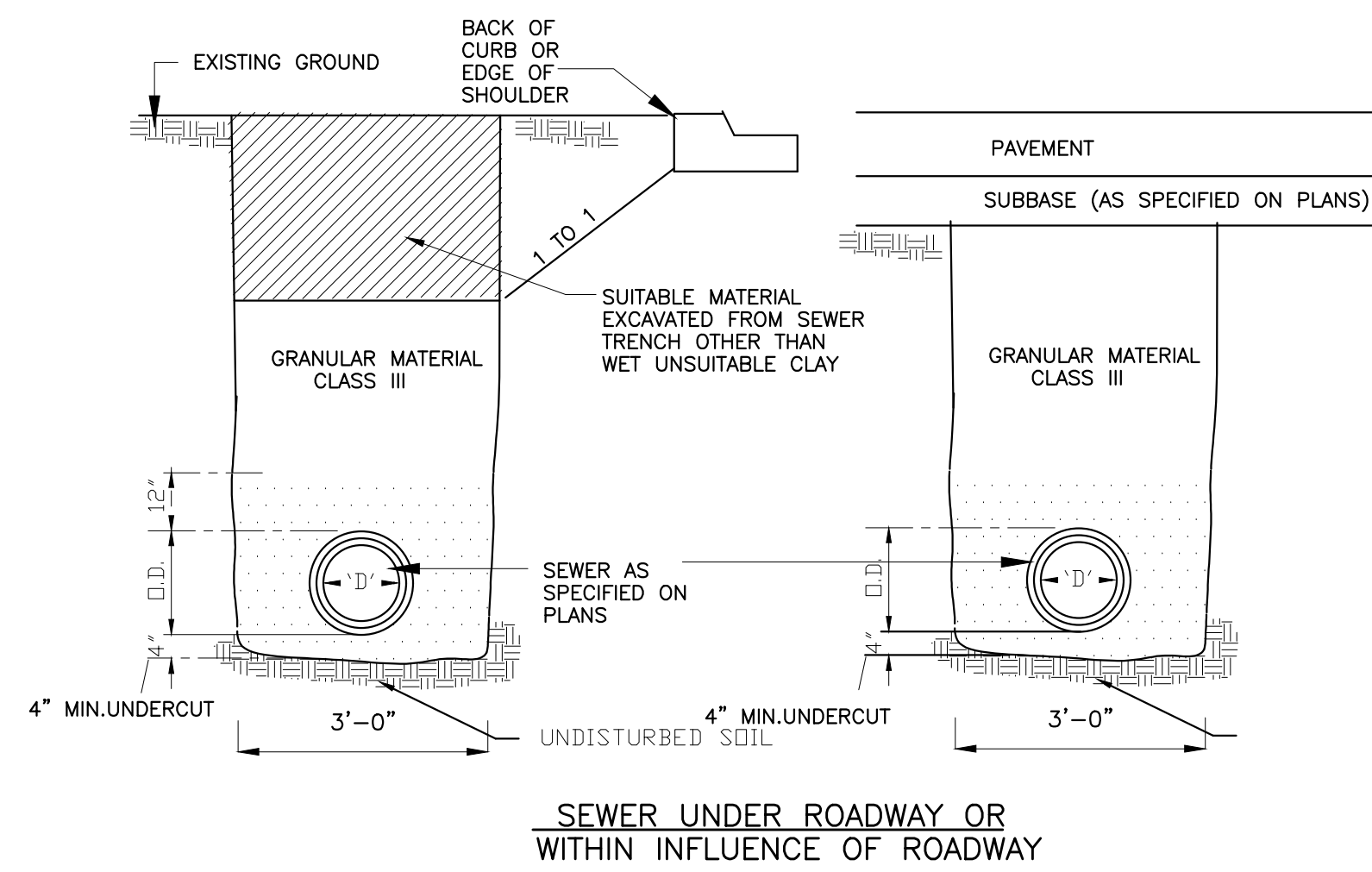
DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
 NEW GAS STATION
 394 N MILFORD ROAD
 HIGHLAND TWP ,MI
 OWNER

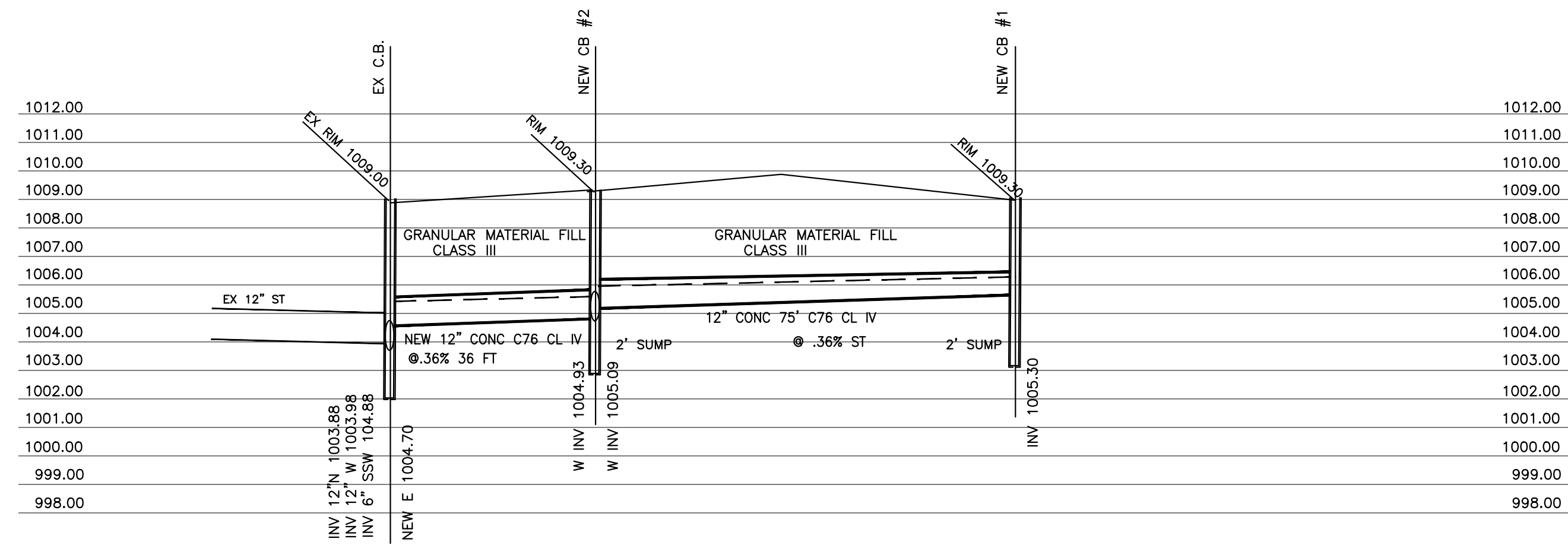
Drawing Title:
 DRAINAGE/UTILITIES PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
 SP-8



STORM PROFILE FROM CB #3 TO EXISTING CB
SCALE: HORIZ. 1"=20'-0"
VERT. 1"=4'-0"



STORM PROFILE FROM CB #1 TO EXISTING CB
SCALE: HORIZ. 1"=20'-0"
VERT. 1"=4'-0"

TC = 242 / 60(2.7) = 1.5 MIN

$$T_c = \frac{L}{60V}$$

$$I = \frac{30.20p^{0.22}}{(T_c + 9.17)^{0.81}}$$

Eq. III-7	$I = \frac{30.20p^{0.22}}{(T_c + 9.17)^{0.81}}$
I =	Average rainfall intensity in inches/hour
p =	Design storm return period in years
T _c =	Time of concentration in minutes

C Values		
Green Space	HSG A	0.15
	HSG B	0.20
	HSG C	0.25
	HSG D	0.30
Impervious Areas		0.95
Water		1.00

*HSG = Hydrological Soil Group

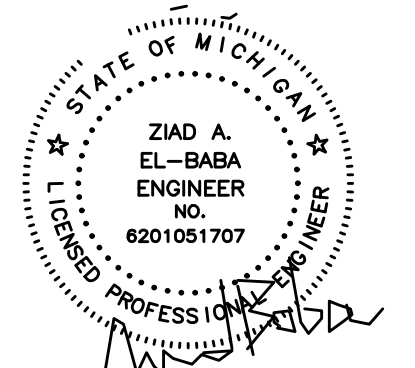
STORM CALCULATION:

10 YEAR STORM USE TC = 10 MIN
 $I_{10} = 30.20(10)^{0.22} / (9.17 + 10)^{0.81} = 4.58$ in/hr

$Q = C.I.A.$ $C = \frac{.25 \times 7900 + .95 \times 17600}{25,500} = .73$

$t = L/V * 60$ T (START) = 10 MIN. $n = 0.012$

FROM MH	TO MH	AREA ACRES	TOTAL AREA ACRES	C	T	I	Q C.I.A. FT3/S	L FT	D IN.	S SLOPE	Q full FT3/S	V full FT3	INV UPST	INV. DNST	RIM ELEV	H.G. UPPER	RIM - HGL MINIMUM 2.5	
CB #1	CB #2	.24 INCL BLDG	.24	.78	.78	10.00	4.58	0.86	75	12	.32	2.1	2.7	1005.30	1005.09	1009.30	1006.1	3.2
CB #3	CB #4	.13	.13	.67	.67	10.46	4.58	0.40	63	12	.32	2.1	2.7	1005.30	1005.07	1009.30	1006.1	3.2
CB #4	CB #2	.07	.20	.68	.70	10.46	4.50	0.63	68	12	.32	2.1	2.7	1005.07	1004.93	1009.00	1005.87	3.13
CB #2	EX CB	.12	.56	.80	.73	10.46	4.46	1.80	36	12	.32	2.1	2.7	1004.93	1004.70	1009.30	1005.73	3.57



ZIAD EL-BABA ENGINEERING
 674 GAUTHIER
 TECUMSEH ONTARIO
 N8N3P8 CANADA
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 CELL - 519-796-9882

DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
 NEW GAS STATION
 394 N MILFORD ROAD
 HIGHLAND TWP ,MI
 OWNER

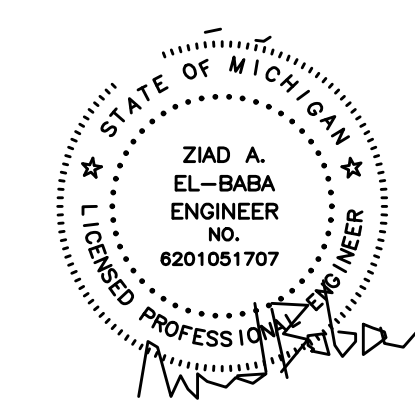
Drawing Title:
 DRAINAGE/UTILITIES PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
 SP-9



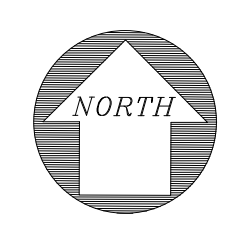
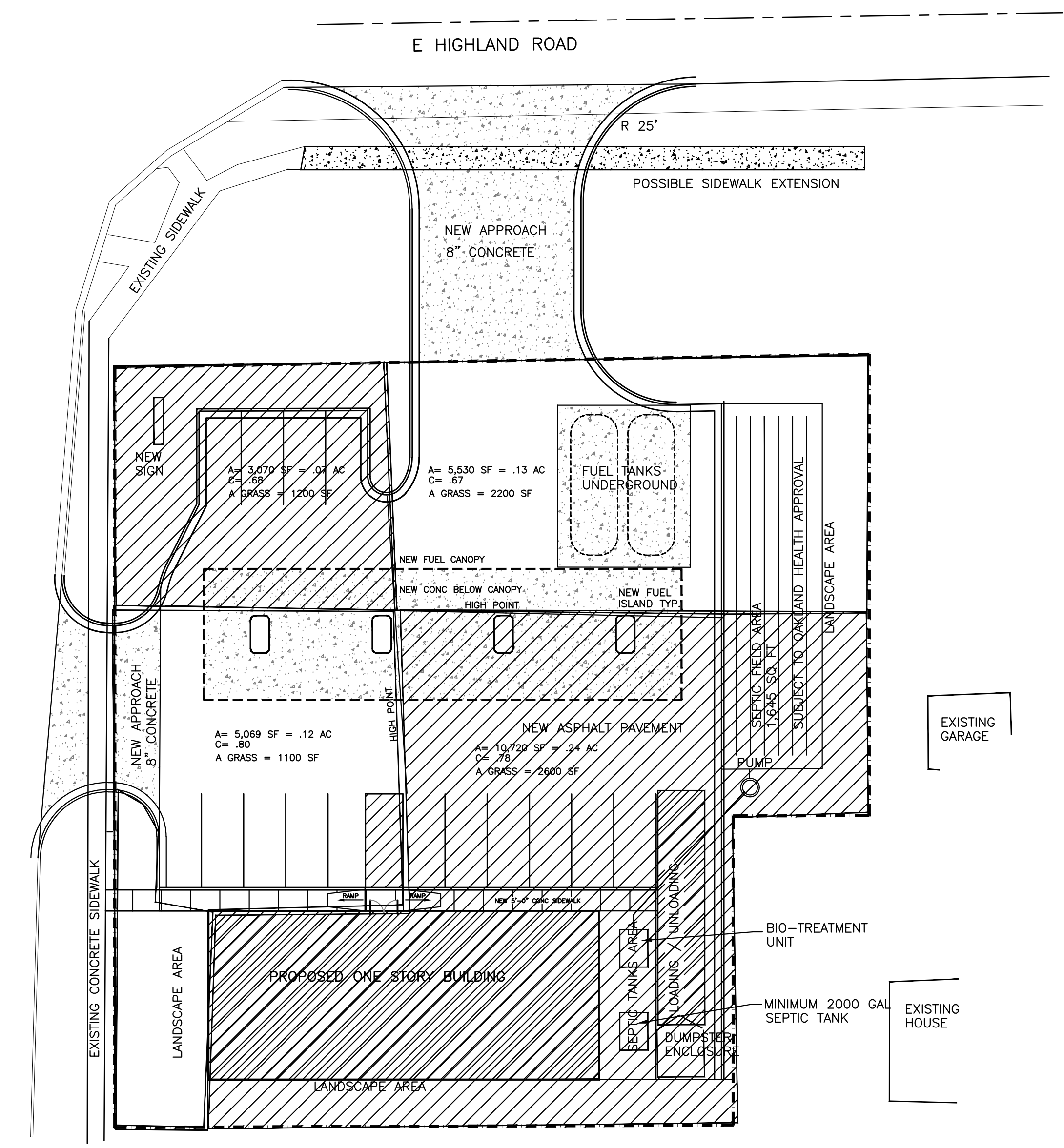
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N MILFORD ROAD
 EX. CENTERLINE OF ROAD



DRAINAGE AREAS
 SCALE: 1" = 20'-0"

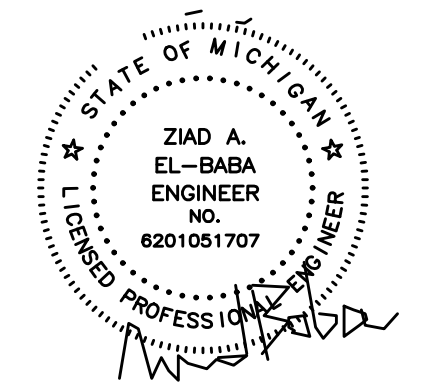
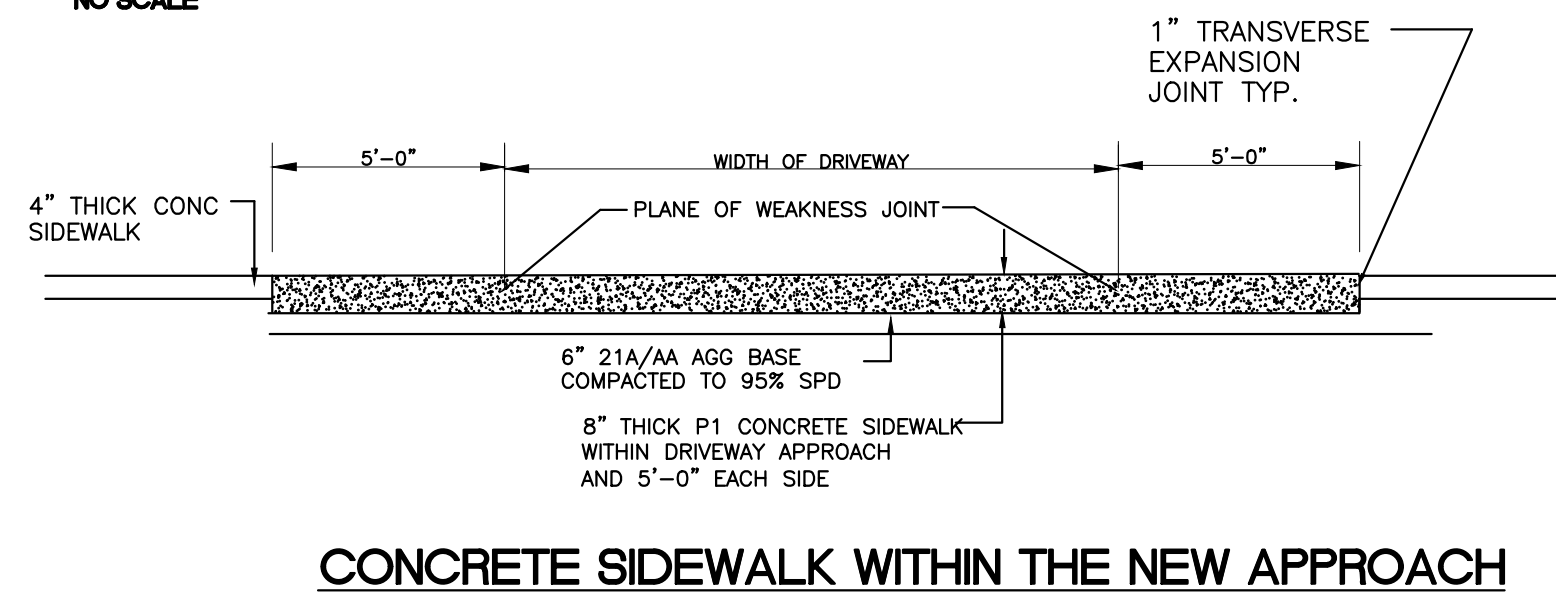
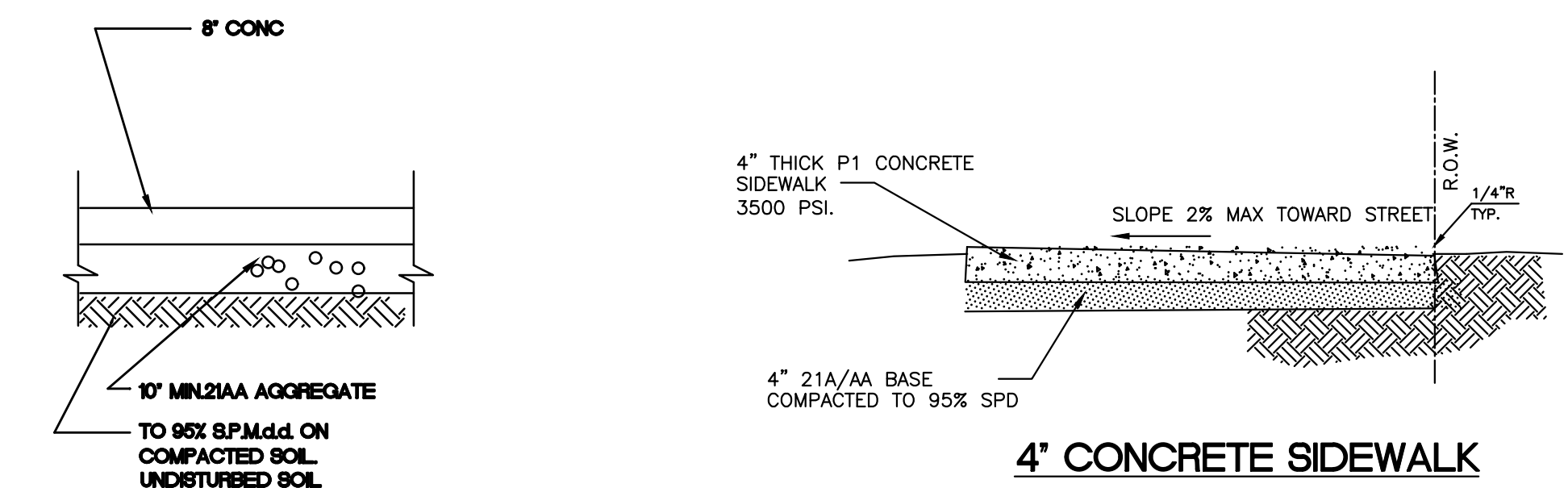
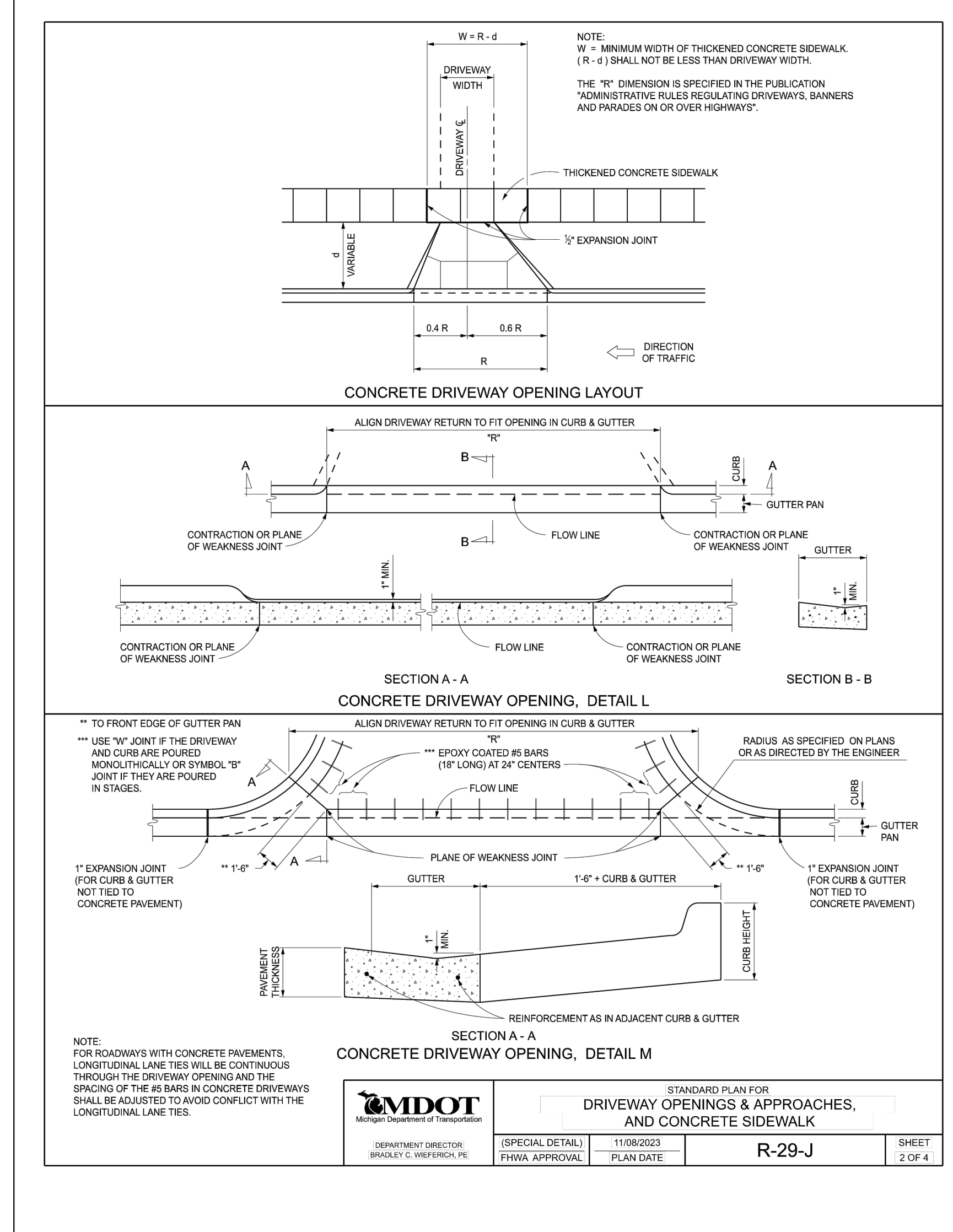
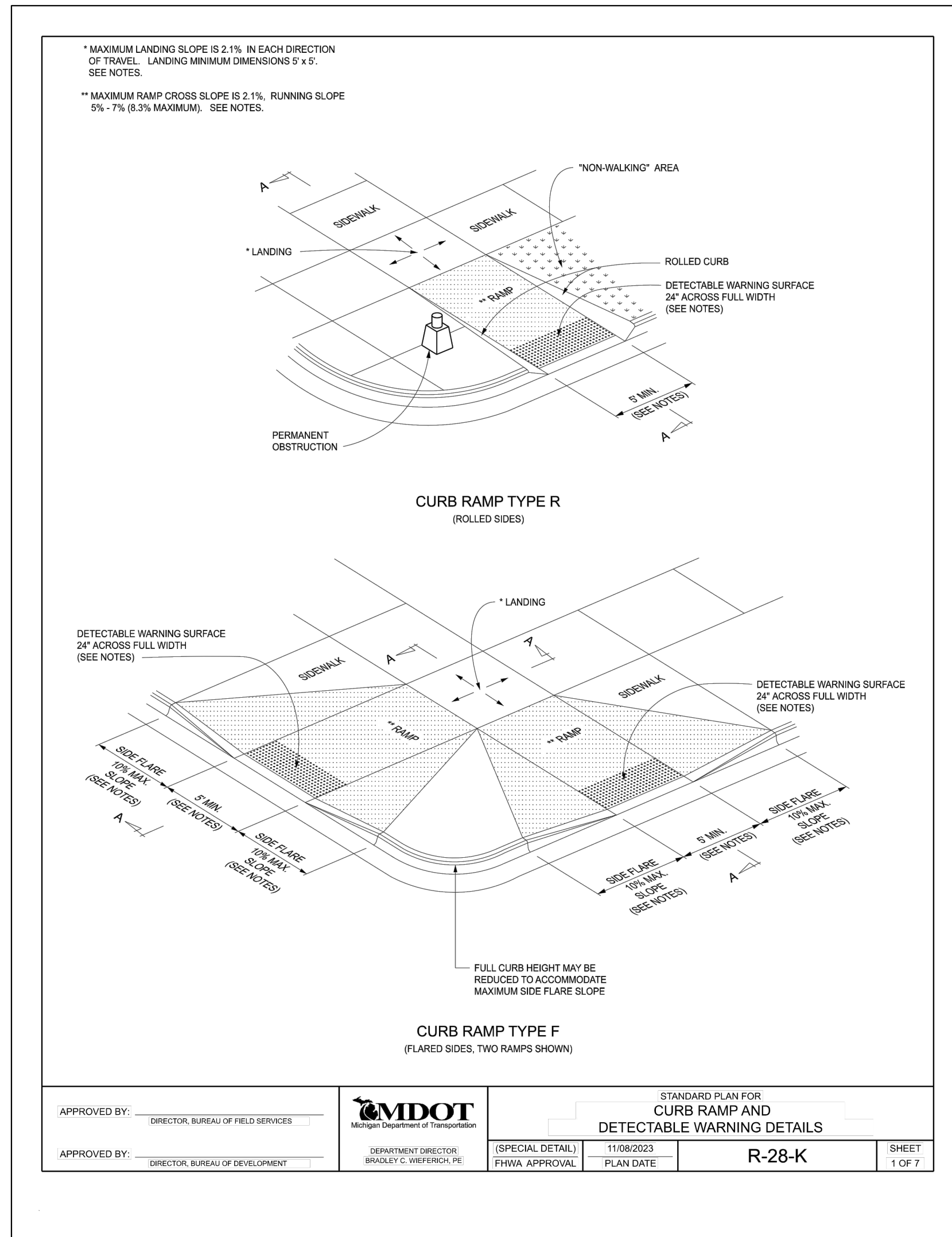
DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
 NEW GAS STATION
 394 N MILFORD ROAD
 HIGHLAND TWP ,MI
 OWNER

Drawing Title:
 DRAINAGE AREAS

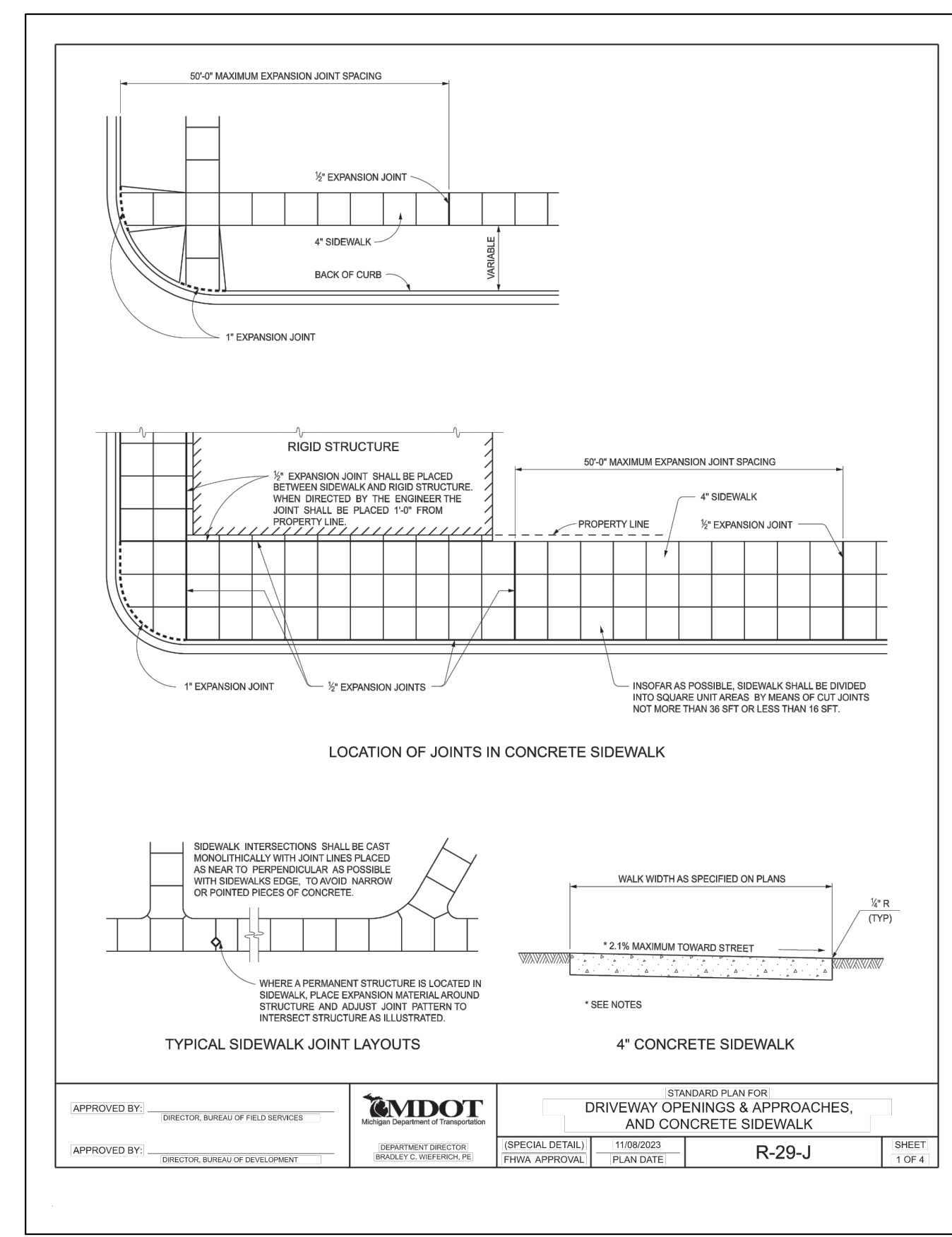
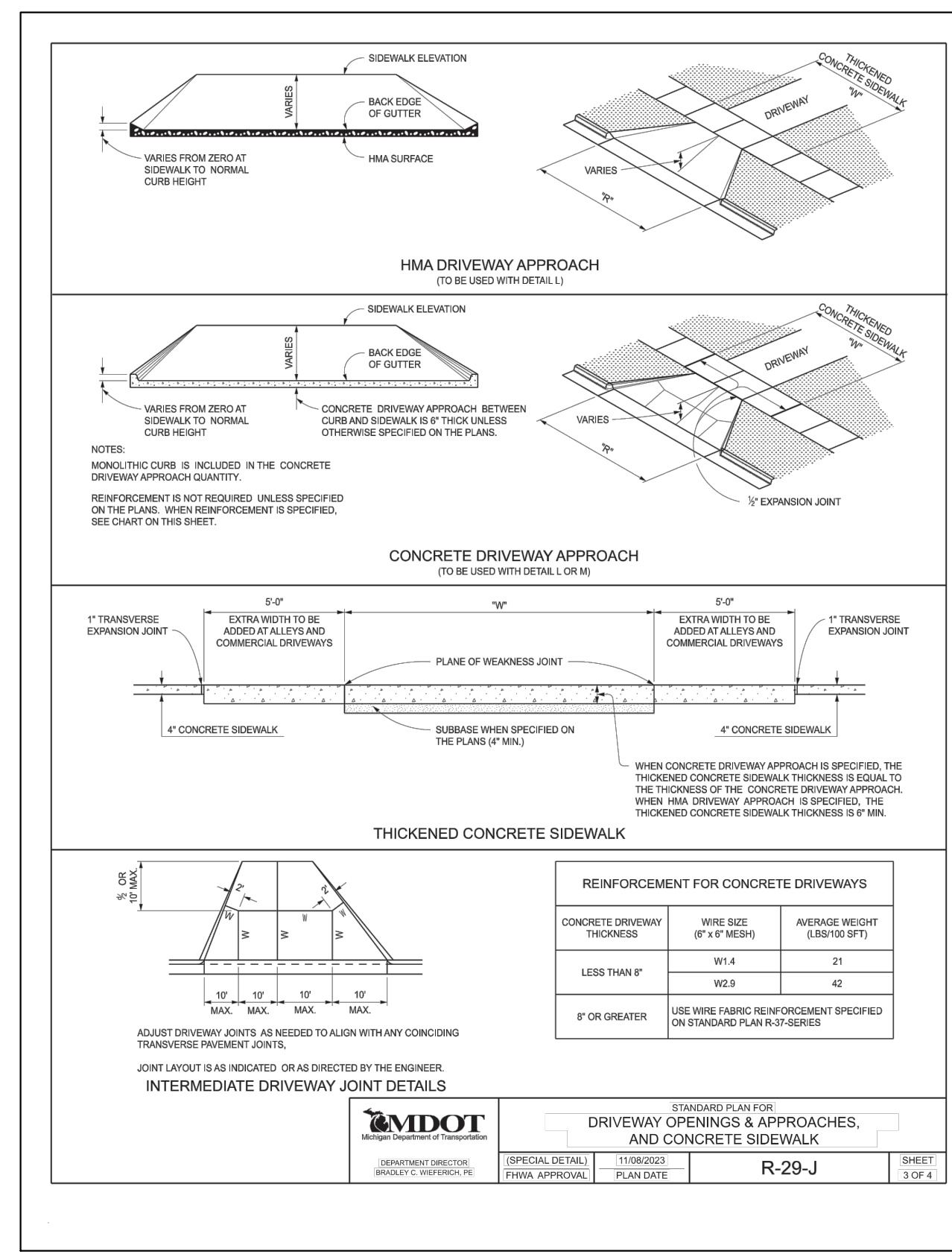
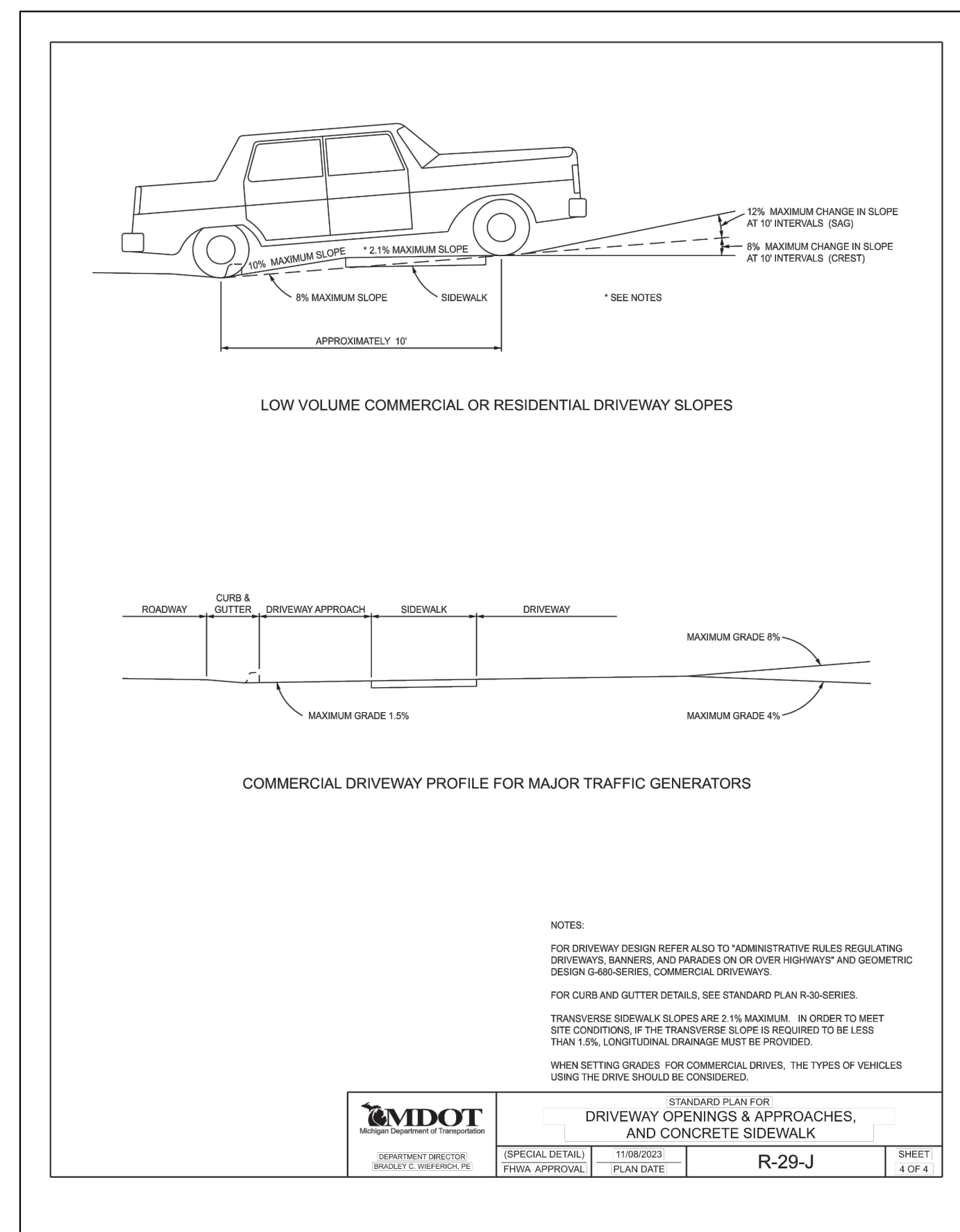
Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
 SP-10



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DATE	REV. NO.	ISSUED FOR
DATE		ISSUED FOR
AUG.26.24		SITE PLAN

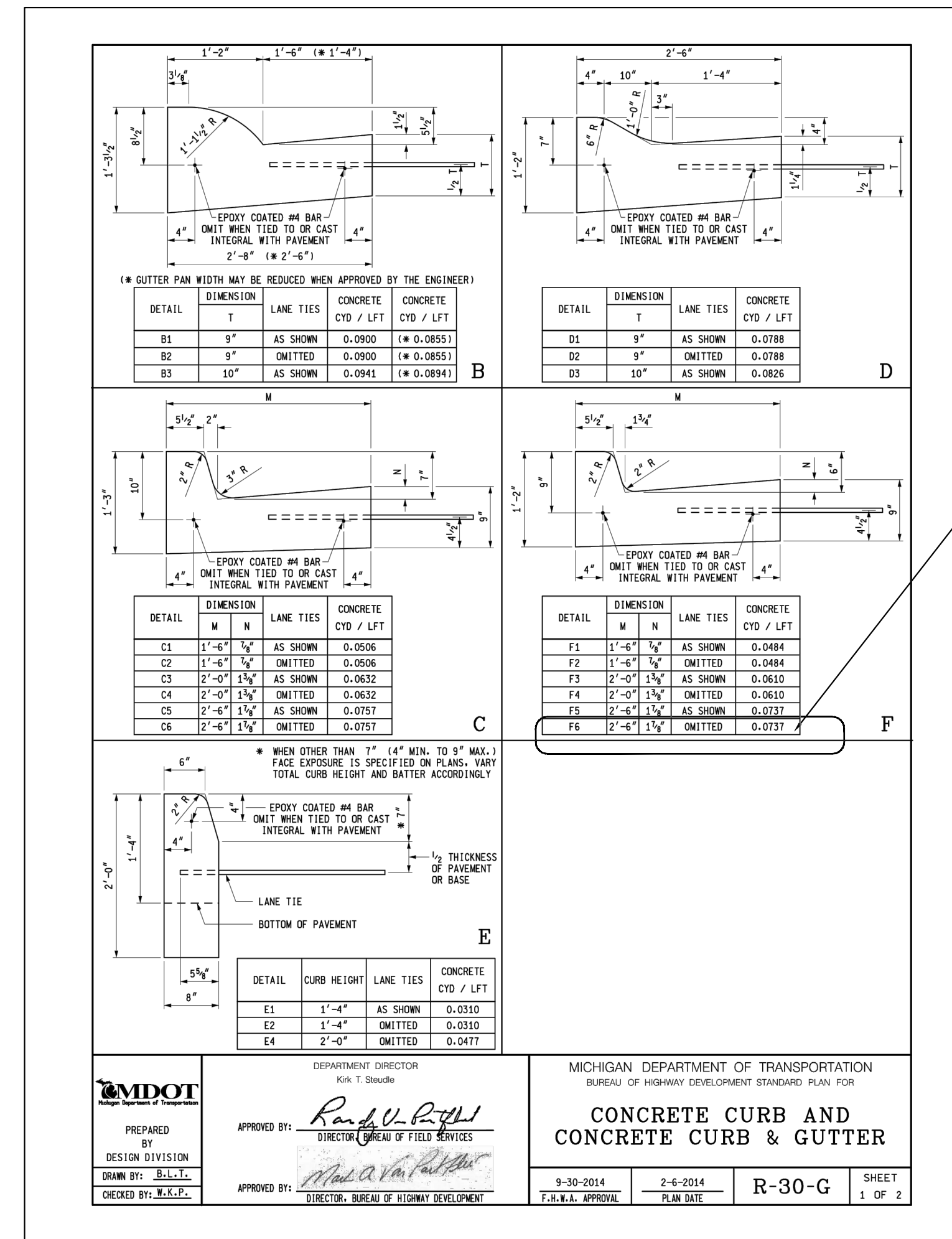
Project:
 NEW GAS STATION
 394 N MILFORD ROAD
 HIGHLAND TWP ,MI
 OWNER

Drawing Title:
 MDOT DETAILS

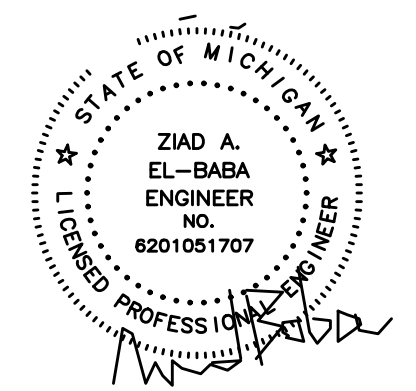
Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.

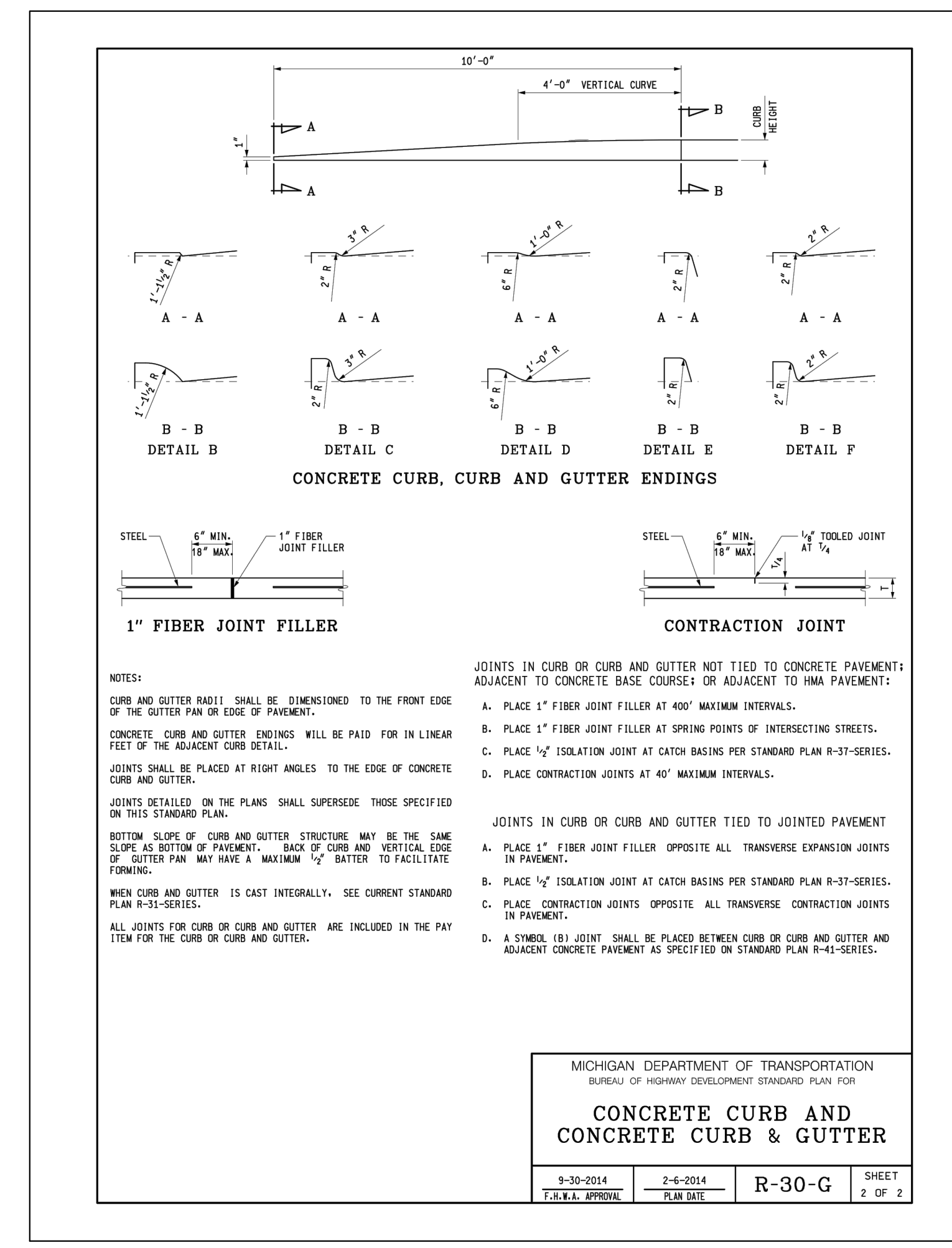
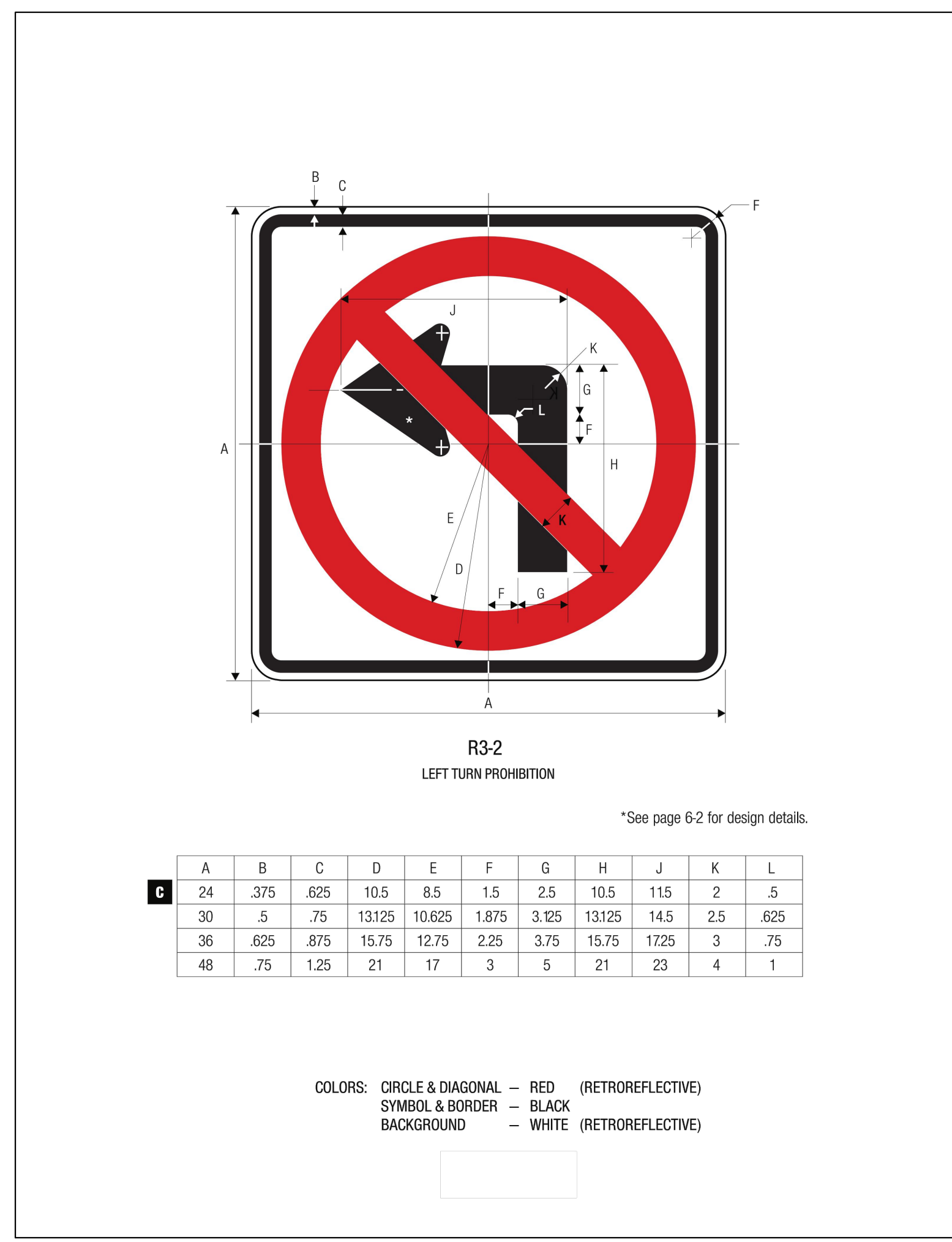
SP-11



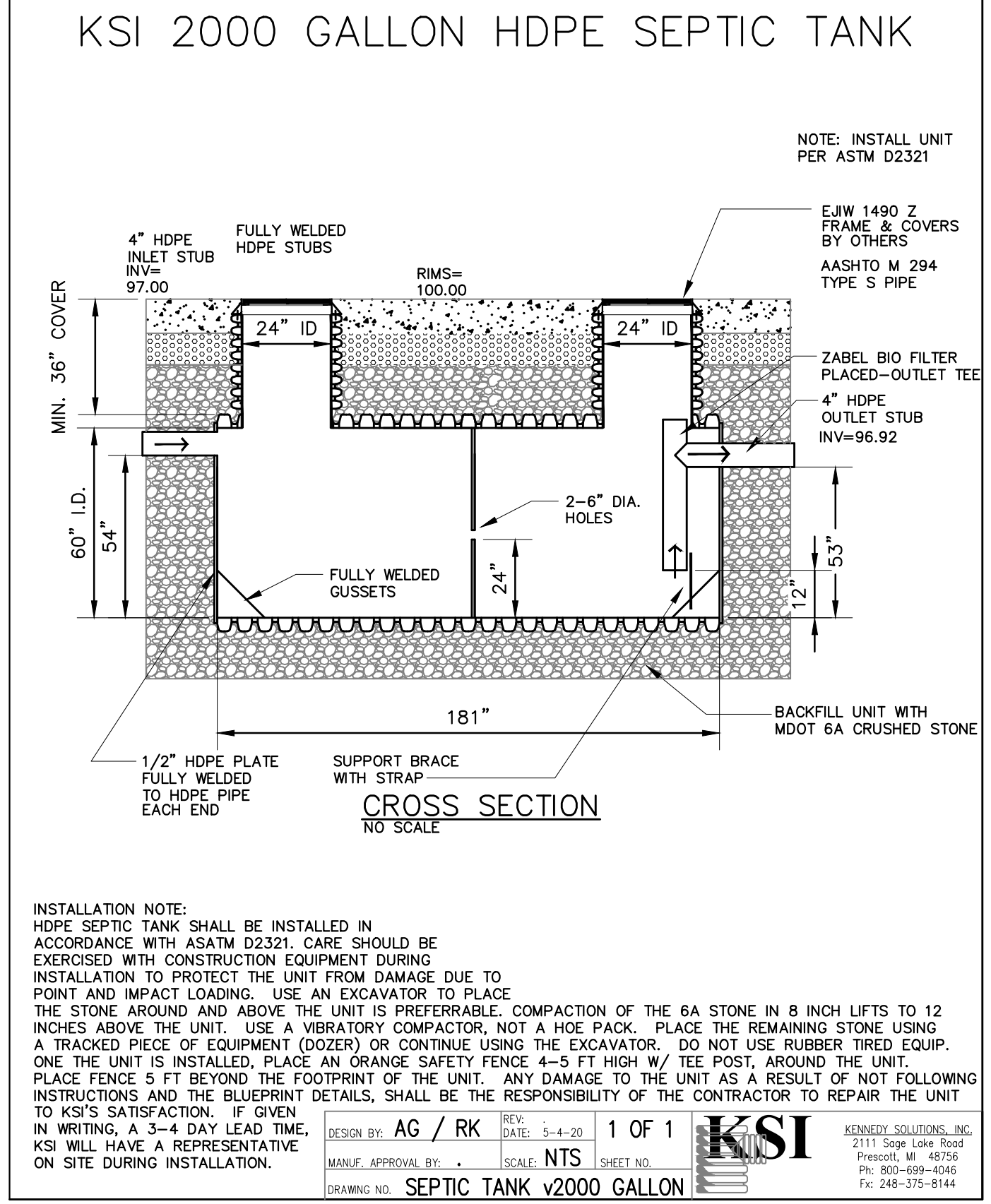
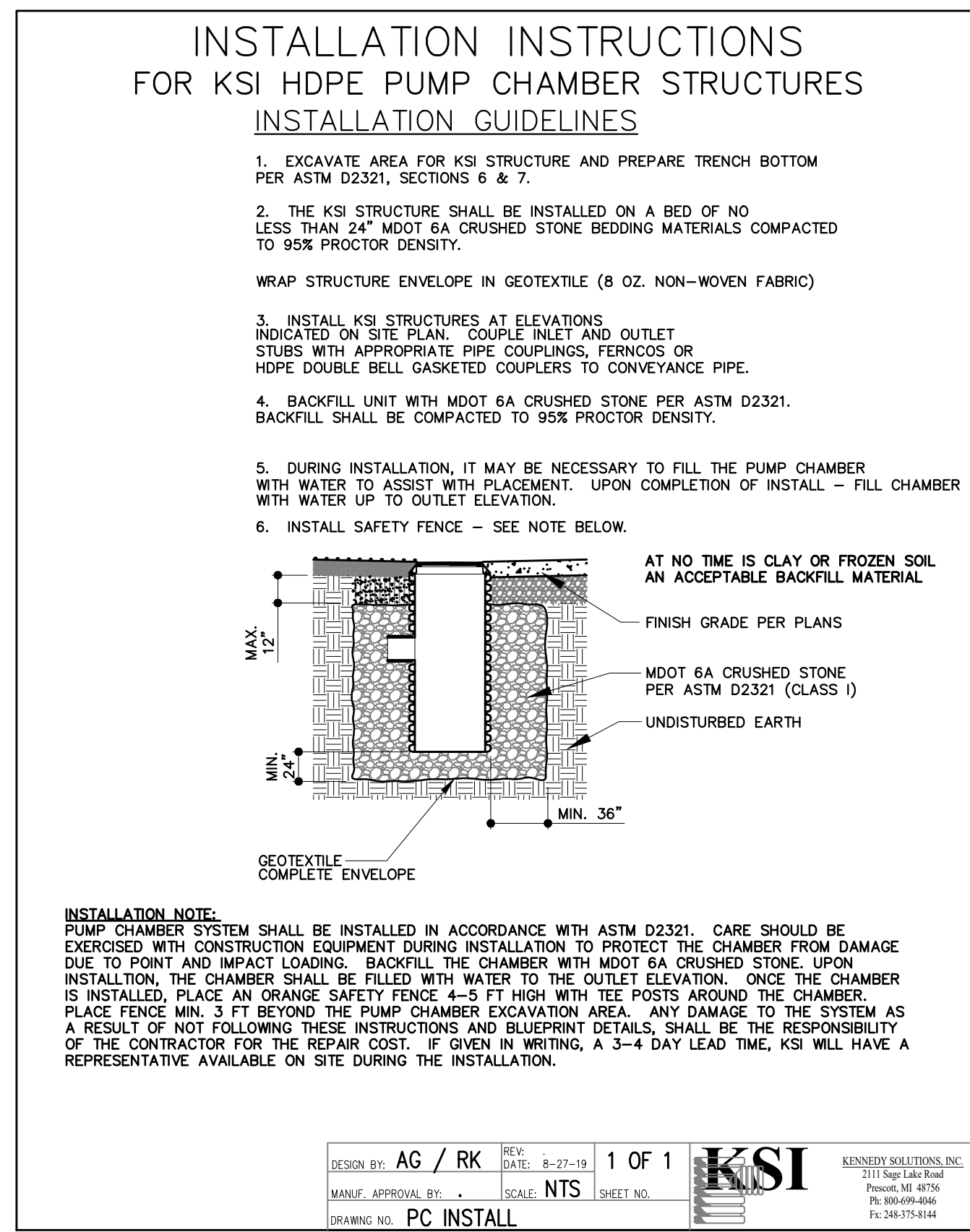
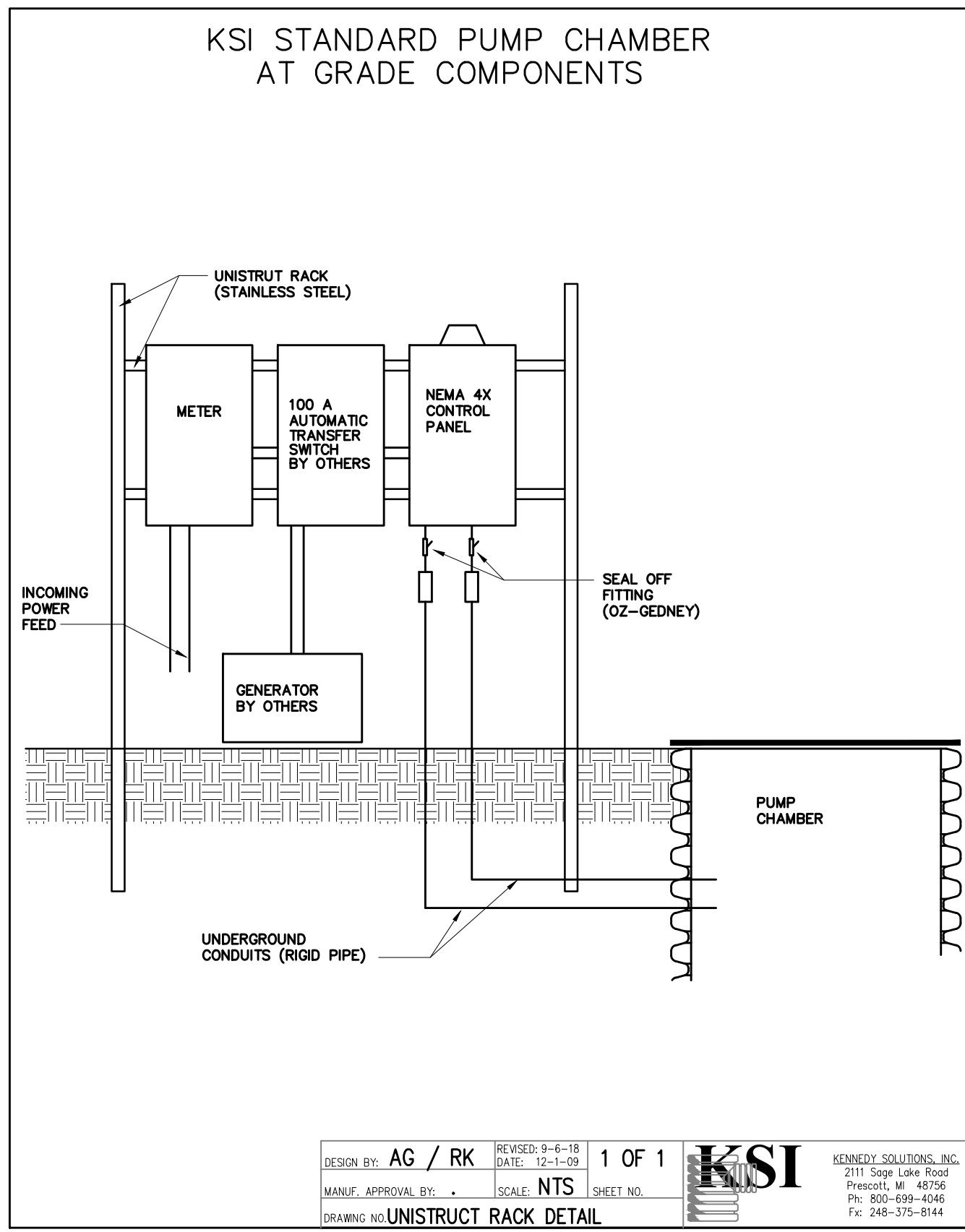
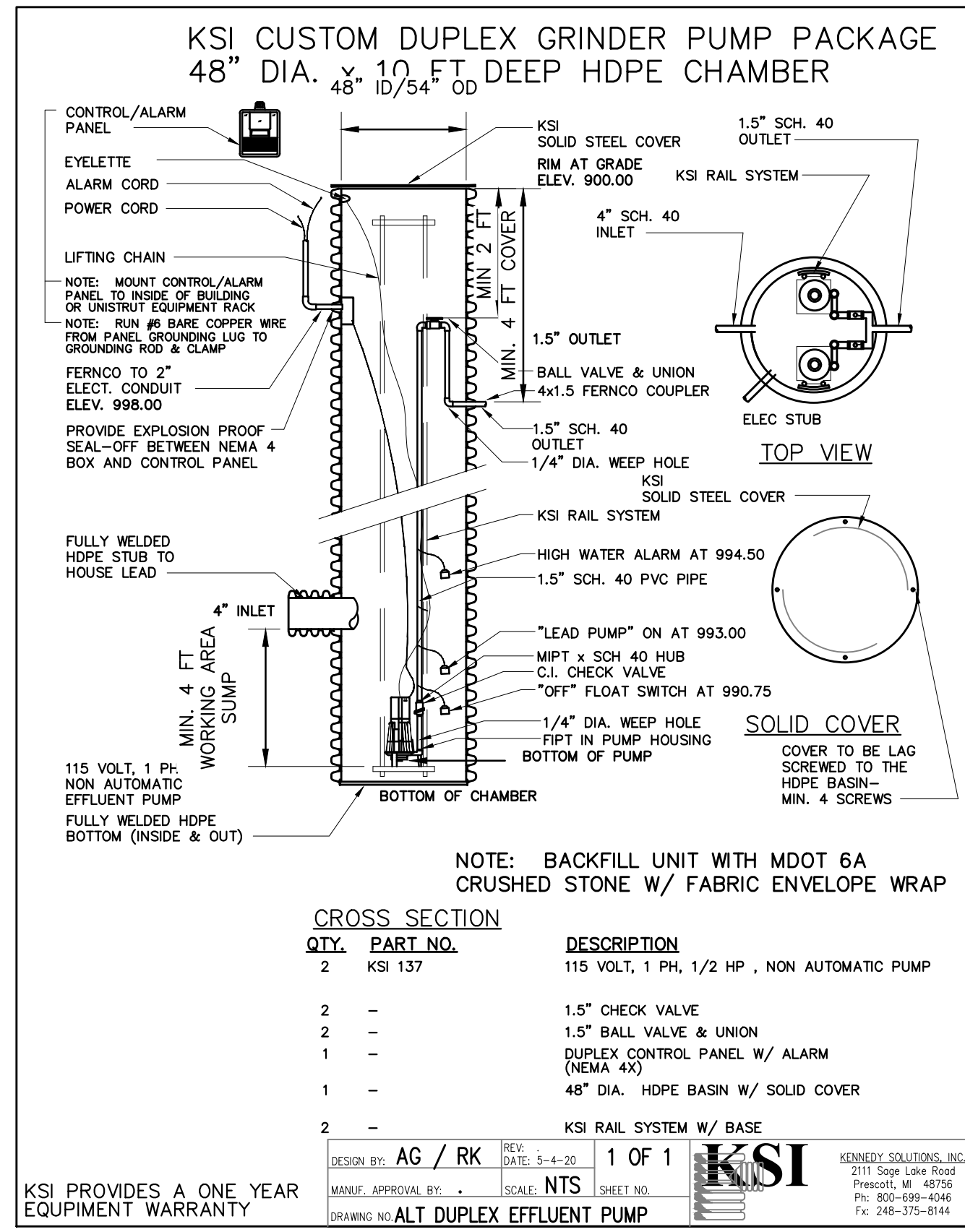
CURB F-6



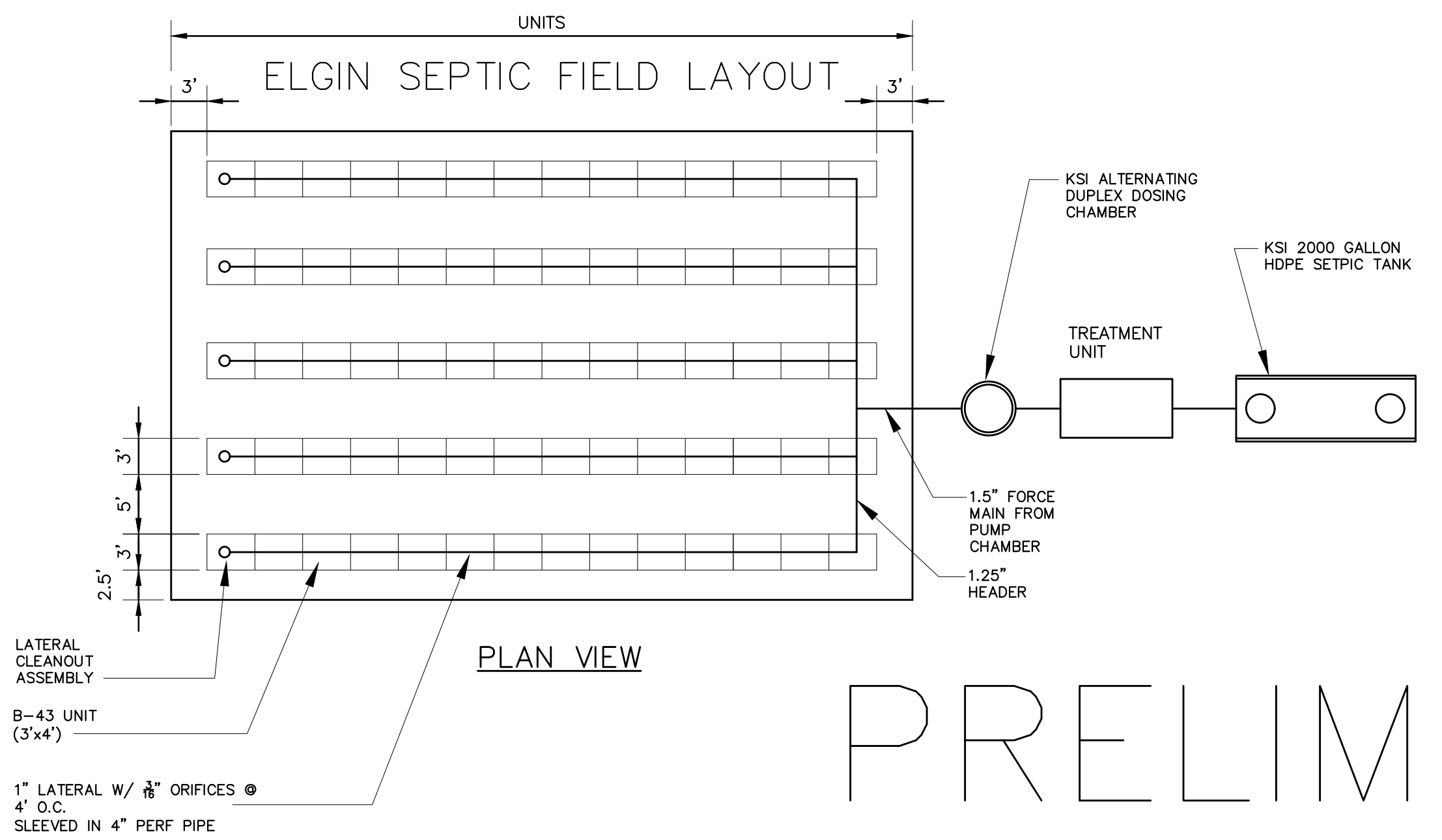
ZIAD EL-BABA ENGINEERING
674 GAUTHIER
TECUMSEH ONTARIO
N8N3P8 CANADA
CELL : 313-938-8767
CELL - 519-796-9882



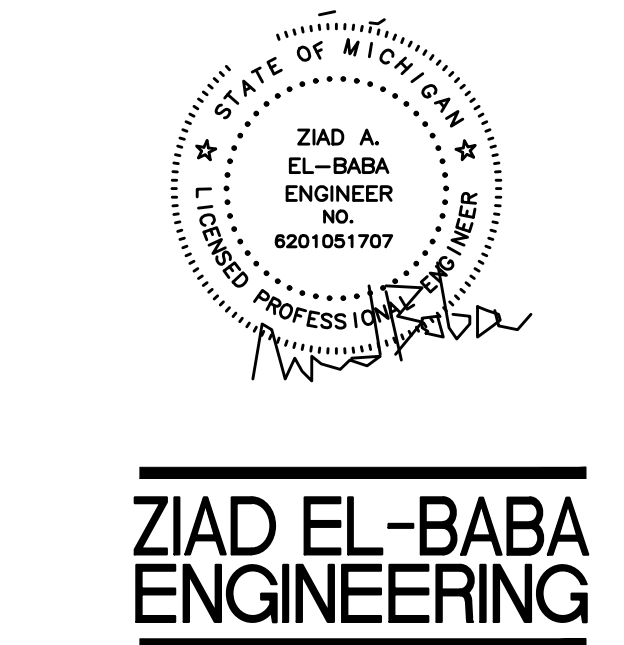
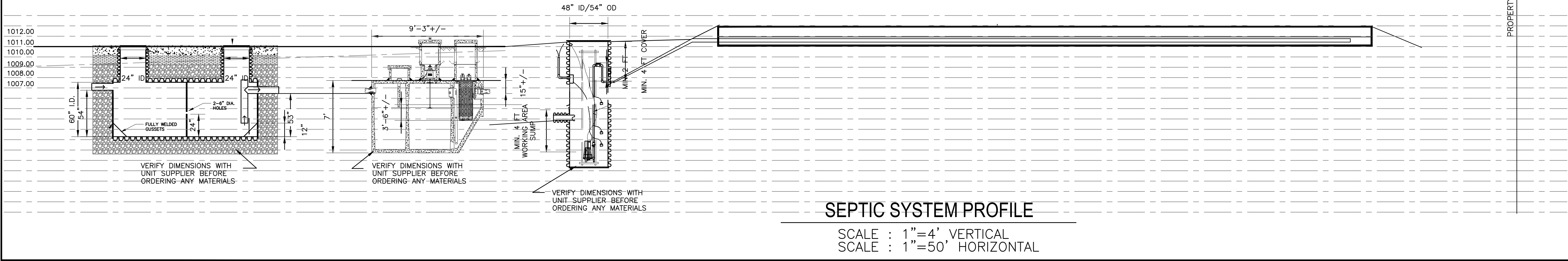
DATE	REV. NO.	ISSUED FOR
AUG.26.24		SITE PLAN
Project: NEW GAS STATION 394 N MILFORD ROAD HIGHLAND TWP ,MI OWNER		
Drawing Title: MDOT DETAILS		
Project Number	AS NOTED	
Scale	AS NOTED	
Date		
Drawn By		
Checked By		
Drawing No. SP-12		



- GENERAL NOTES:**
- AFTER INSTALLATION OF SYSTEM, VACUUM AND CLEAN TO CONFIRM WATER TIGHT AND TESTED
 - PROVIDE FENCED AREA SIMILAR TO EXISTING W/ BOLLARD AND ROPES AND INSTALL A SIGN FOR NO TRAFFIC OF ANY KIND
 - THE SUPPLIER/OR INSTALLER MUST INSPECT THE SYSTEM FOR ONE YEAR, AND SUBMIT REPORT TO OKLAHOMA COUNTY HEALTH DEPARTMENT. THE HEALTH DEPARTMENT MAY REQUEST ADDITIONAL TIME FOR INSPECTIONS BEYOND THE FIRST YEAR.
 - THE INSTALLER/CONTRACTOR SHALL PREPARE THE FIELD, BY REMOVING ALL EXISTING CONNECTION TO EXISTING SYSTEM
 - PREPARE FINAL DISPOSAL AREA BY REMOVING ALL EXISTING DRAINFIELD, CONTAMINATED SOILS, PARKING SURFACE, GRAVEL, TOP SOIL AND FILL MATERIAL APPROX. 5 FEET, HEALTH DEPT MUST INSPECT.
 - BACKFILL WITH SAND
 ALL SAND BACKFILL SHALL BE MDOT CLASS II SAND
 - BOTH THE FINAL DISPOSAL AND RE-CIRCULATION PUMP SYSTEM TO BE DUPLEX PUMPS. THE PUMPS ARE TO ALTERNATE BETWEEN CYCLES.
 - RE-CIRCULATION SYSTEM:
 - SYSTEM TO ALARM ON HIGH WATER AND POWER FAILURE.
 - PUMPS TO ALTERNATE BETWEEN CYCLES.
 - PUMPS TO OPERATE ON A TIMED DOSE, PER MANUFACTURER'S RECOMMENDATIONS.
 - FINAL DISPOSAL SYSTEMS:
 SYSTEM TO ALARM ON HIGH WATER AND POWER FAILURE.
 - PUMPS TO OPERATE BETWEEN CYCLES.
 - PUMPS TO OPERATE ON FLOAT LEVEL CONTROL DOSING THE FINAL DISPOSAL 121.7 GAL /DOSE



PRELIMINARY



**ZIAD EL-BABA
ENGINEERING**

674 GAUTHIER
 TECUMSEH ONTARIO
 N8N3P8 CANADA
 CELL : 313-938-8767
 OFFICE : 510-796-9882

PROJECT:
 NEW GAS STATION
 394 N MILFORD ROAD
 HIGHLAND TWP ,MI

OWNER

Drawing Title:
SEPTIC SYSTEM DETAILS

Project Number

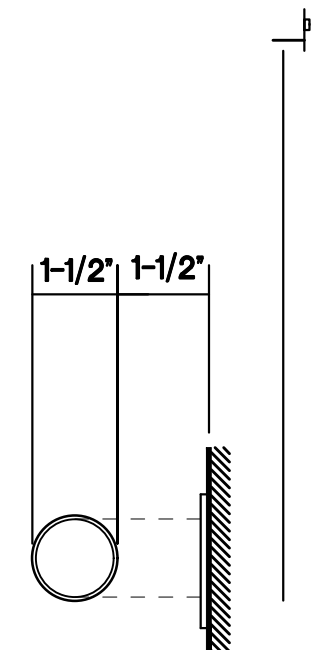
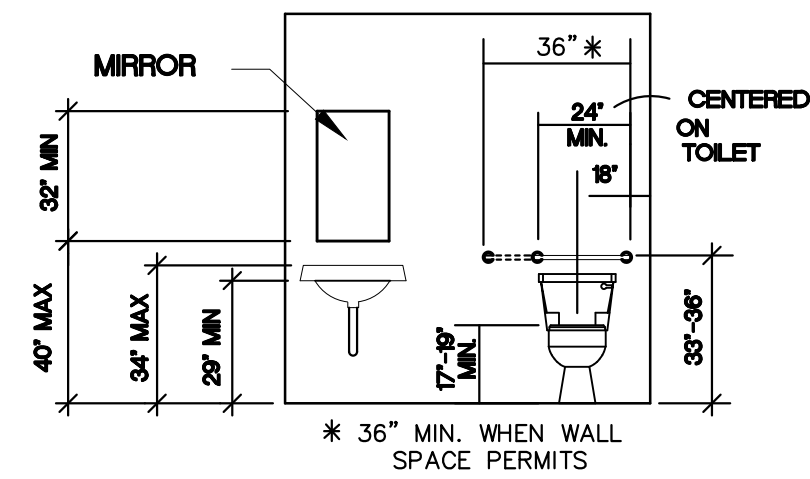
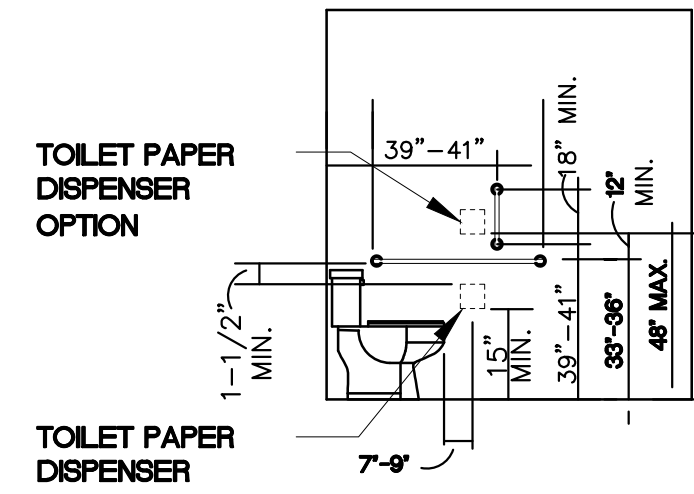
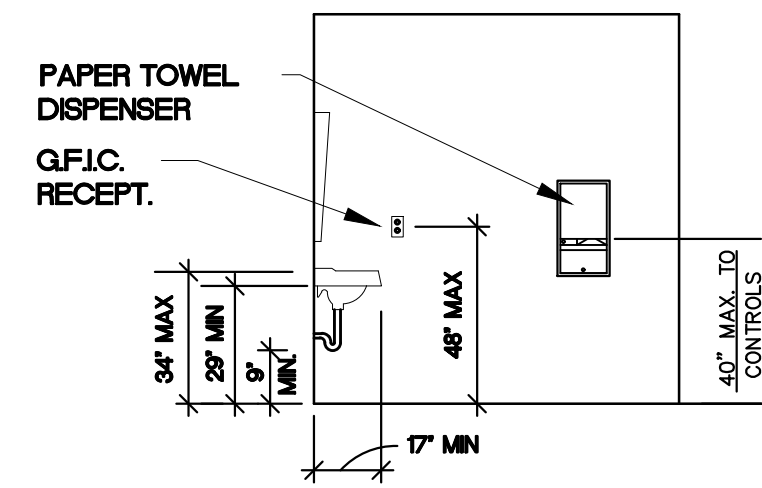
Scale AS NOTED

Date

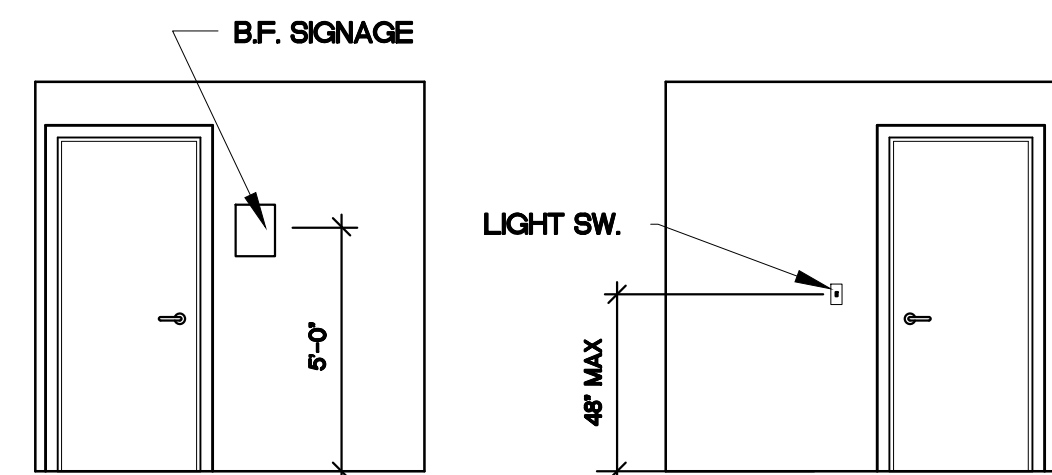
Drawn By

Checked By

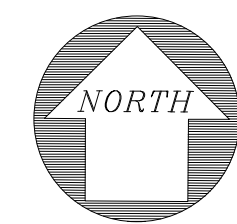
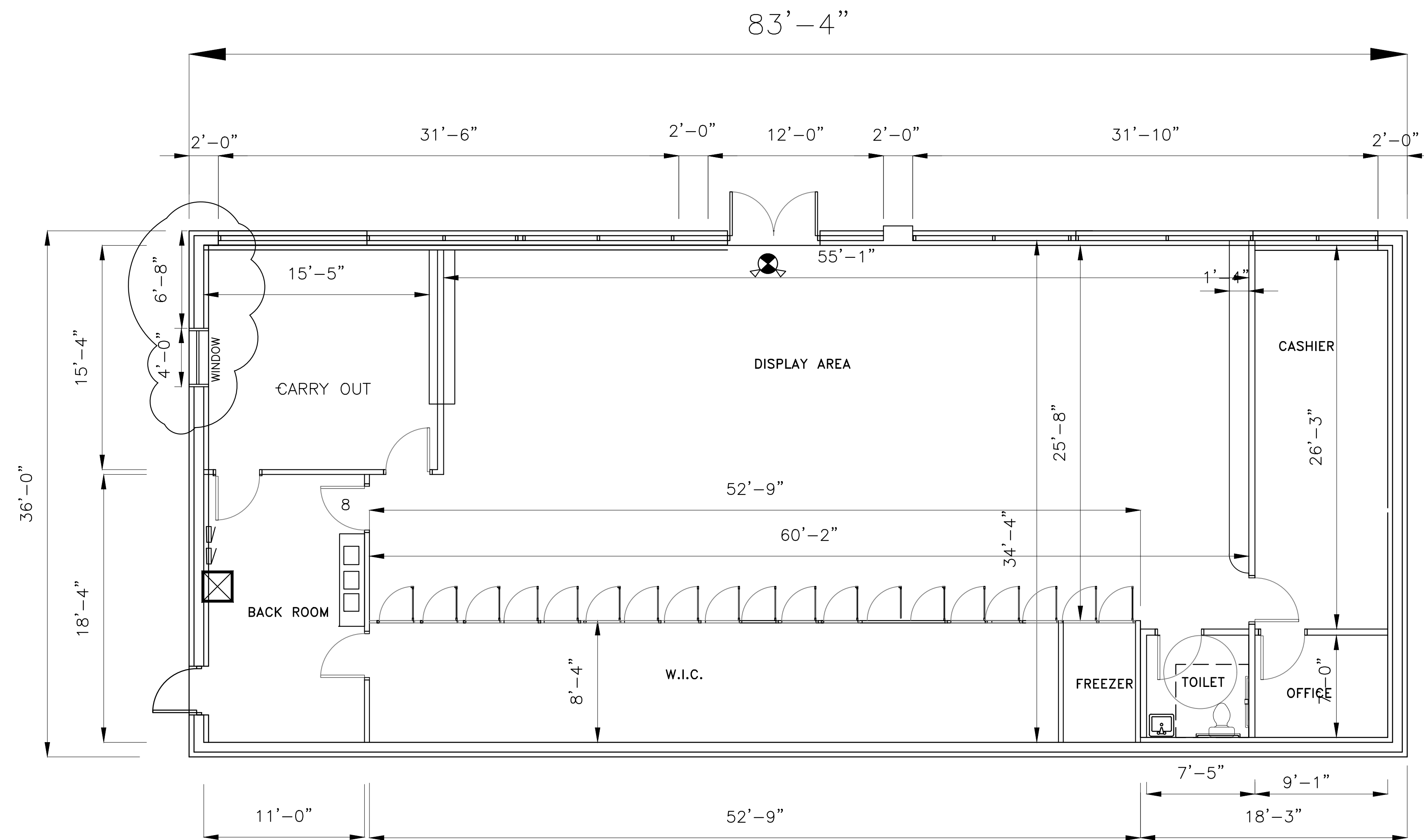
Drawing No.
SP-13



GRAB BAR DETAIL



TYPICAL BARRIER FREE STANDARDS
SINGLE OCCUPANCY (NOT TO SCALE)



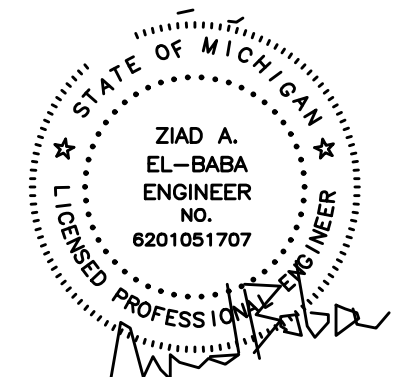
FLOOR PLAN
SCALE: 3/16" = 1'-0"

USE GROUP M
CONSTRUCTION III B

NEW BUILDING AREA 3000 SQ.FT.
BUILDING IS NOT SPRINKLERED

FOR EMERGENCY LIGHTS AND EXIT LIGHTS SEE ALSO DWG E-1
"EM" EMERGENCY LIGHTING UNIT WITH SEALED BATTERY TEST SWITCH AND READY LIGHT 120VAC OPERATION LITHONIA CAT# ELU-2H OR APPROVED EQUAL DURATION NOT LESS THAN 90 MIN IN THE EVENT OF POWER LOSS
"X" EXIT LIGHT STENCIL FACE 6" HIGH RED LETTERS SEALED BATTERY. LITHONIA CAT# ESIR-ELC OR APPROVED EQUAL DURATION NOT LESS THAN 90 MIN IN THE EVENT OF POWER LOSS

CODE COMPLIANCE
ALL WORK MUST CONFORM TO
2015 MICHIGAN BUILDING CODE
2018 INTERNATIONAL FIRE CODE
2015 MICHIGAN MECHANICAL CODE
2018 MICHIGAN PLUMBING CODE
2018 NATIONAL ELECTRIC CODE WITH PART 8 RULES
ANSI 117.1-2015 (ACCESSIBILITY)
ASHRAE 90.1 - 1999



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N8N3P8 CANADA
CELL : 313-938-8767
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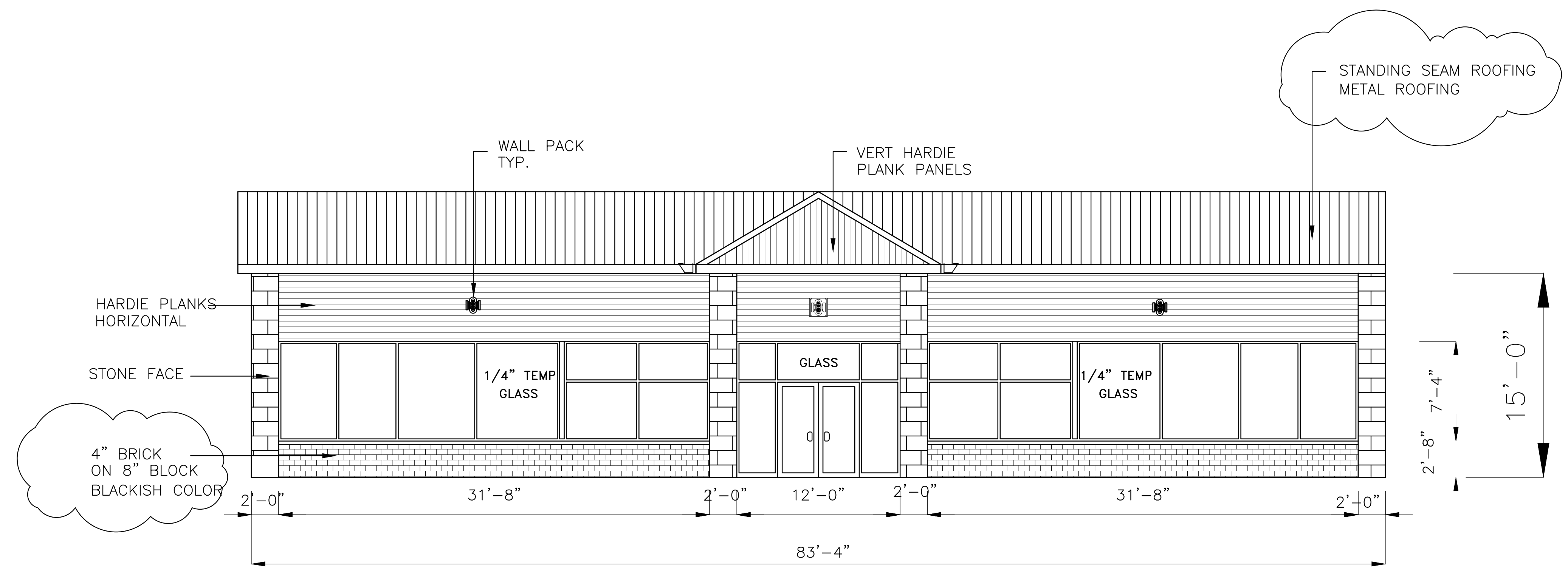
DATE	REV. NO.	ISSUED FOR
JUN.27.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
NEW GAS STATION
394 N MILFORD ROAD
HIGHLAND TWP ,MI
OWNER

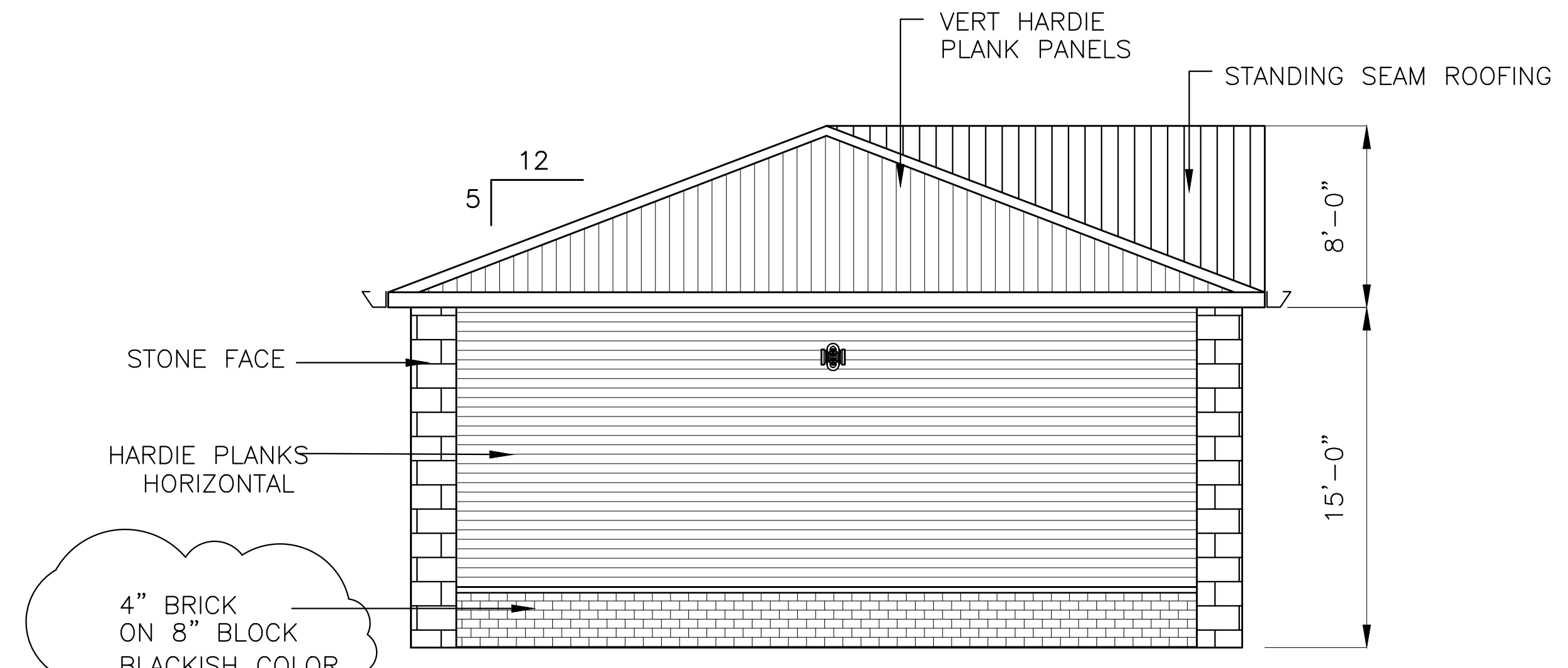
Drawing Title:
FLOOR PLAN

Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

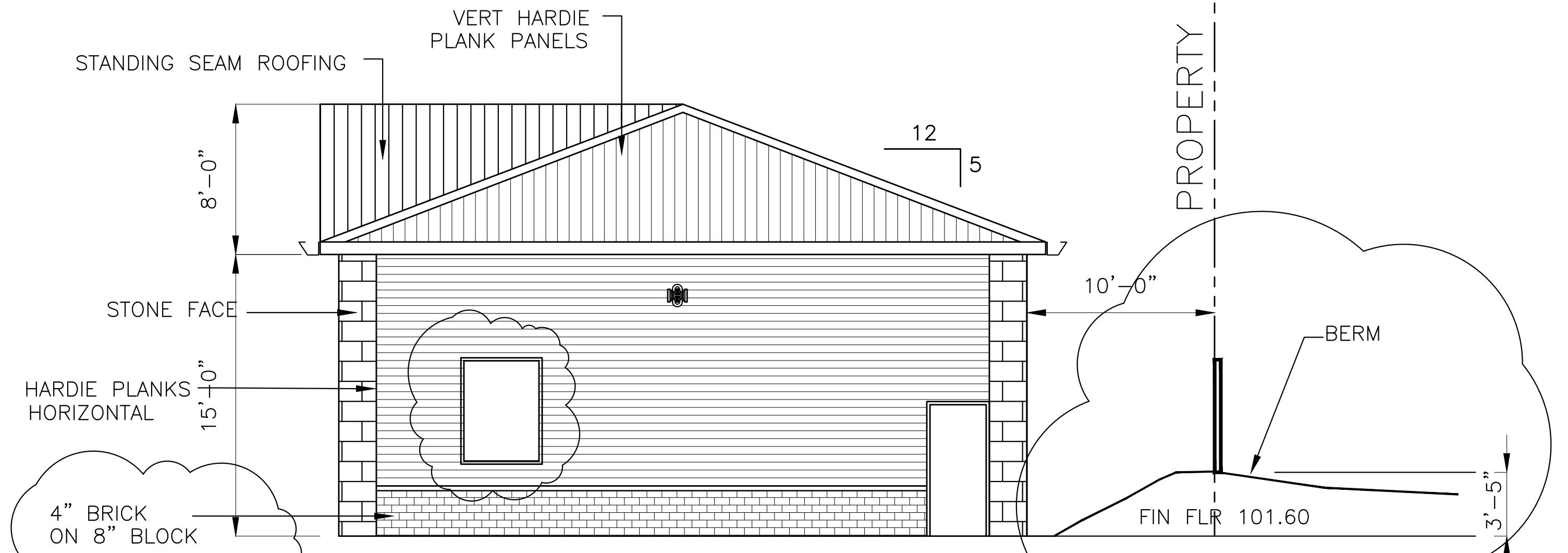
Drawing No.
A-1



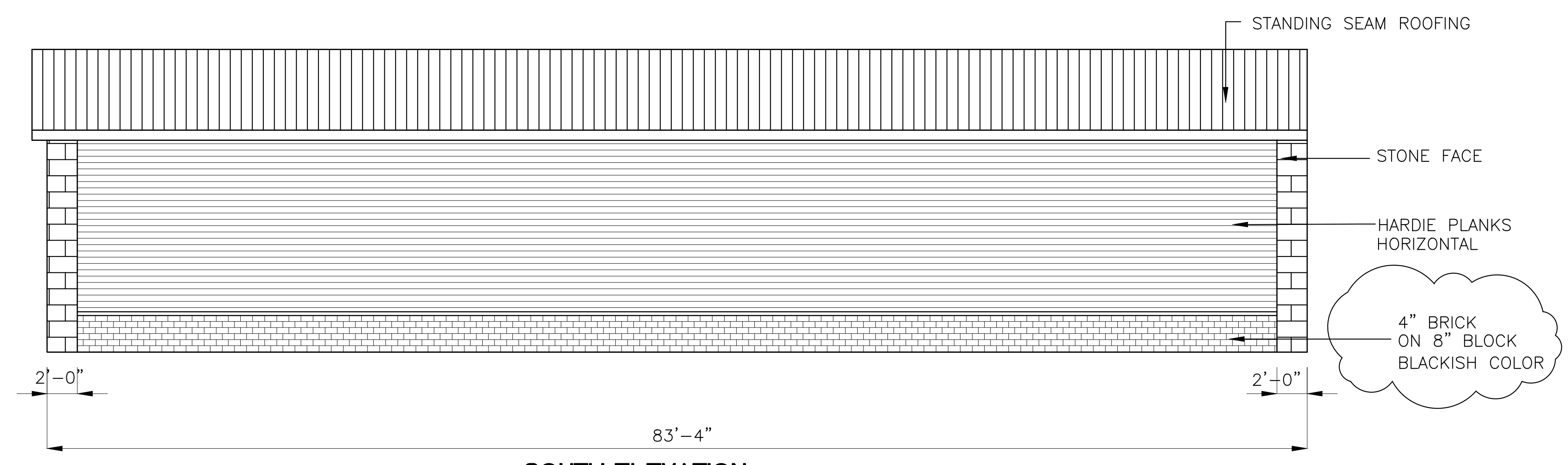
NORTH ELEVATION
SCALE: 1/8" = 1'-0"



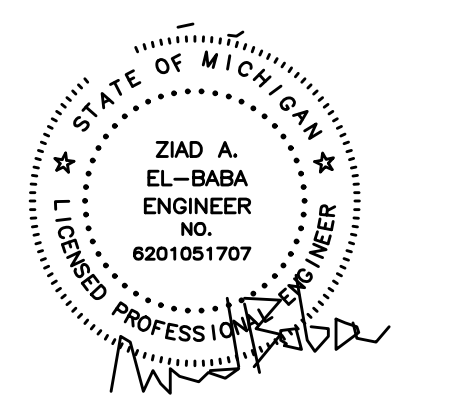
EAST ELEVATION
SCALE: 1/8" = 1'-0"



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



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



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AUG.26.24		SITE PLAN

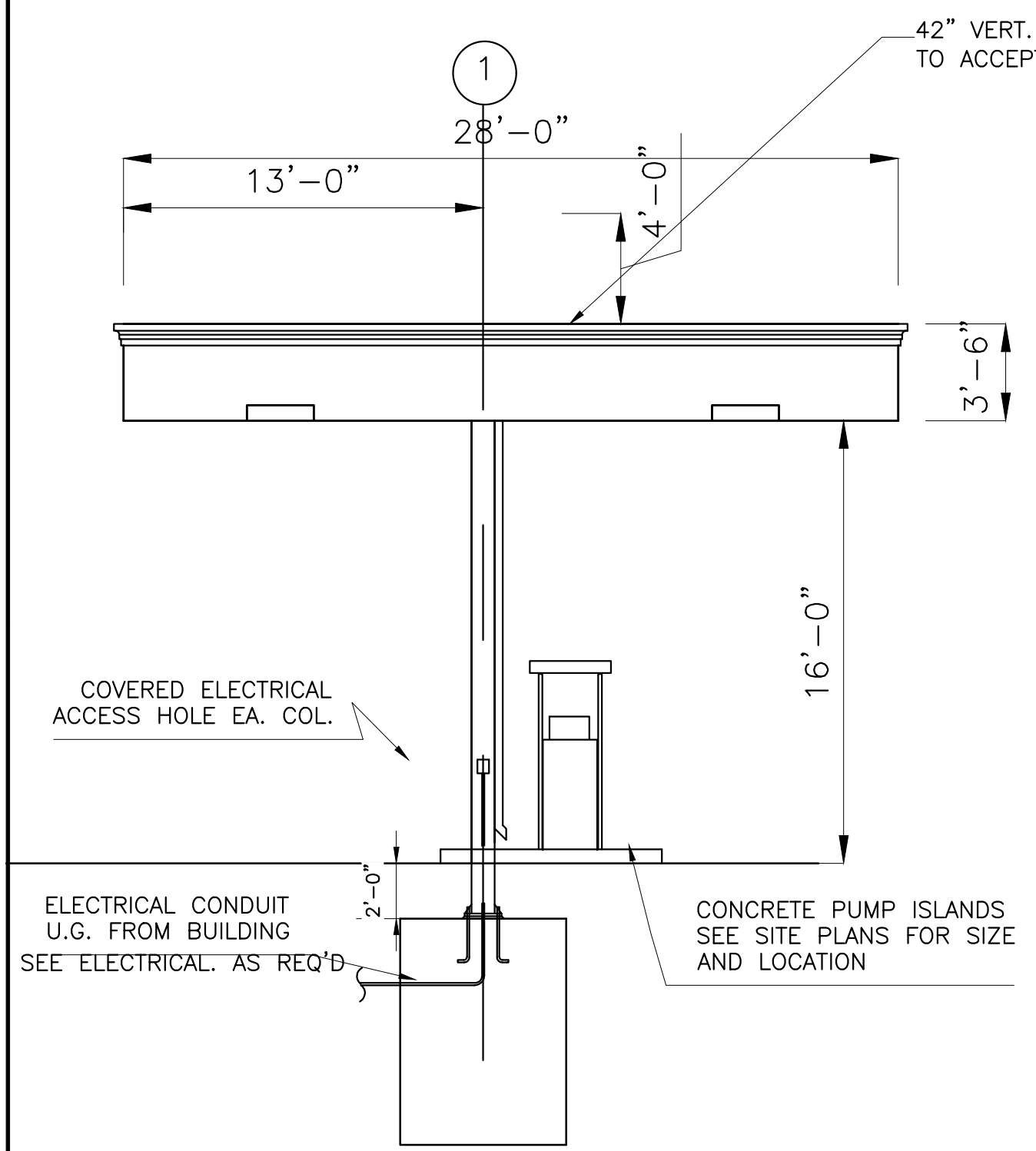
Project:
NEW GAS STATION
394 N MILFORD ROAD
HIGHLAND TWP ,MI
OWNER

Drawing Title:
ELEVATIONS

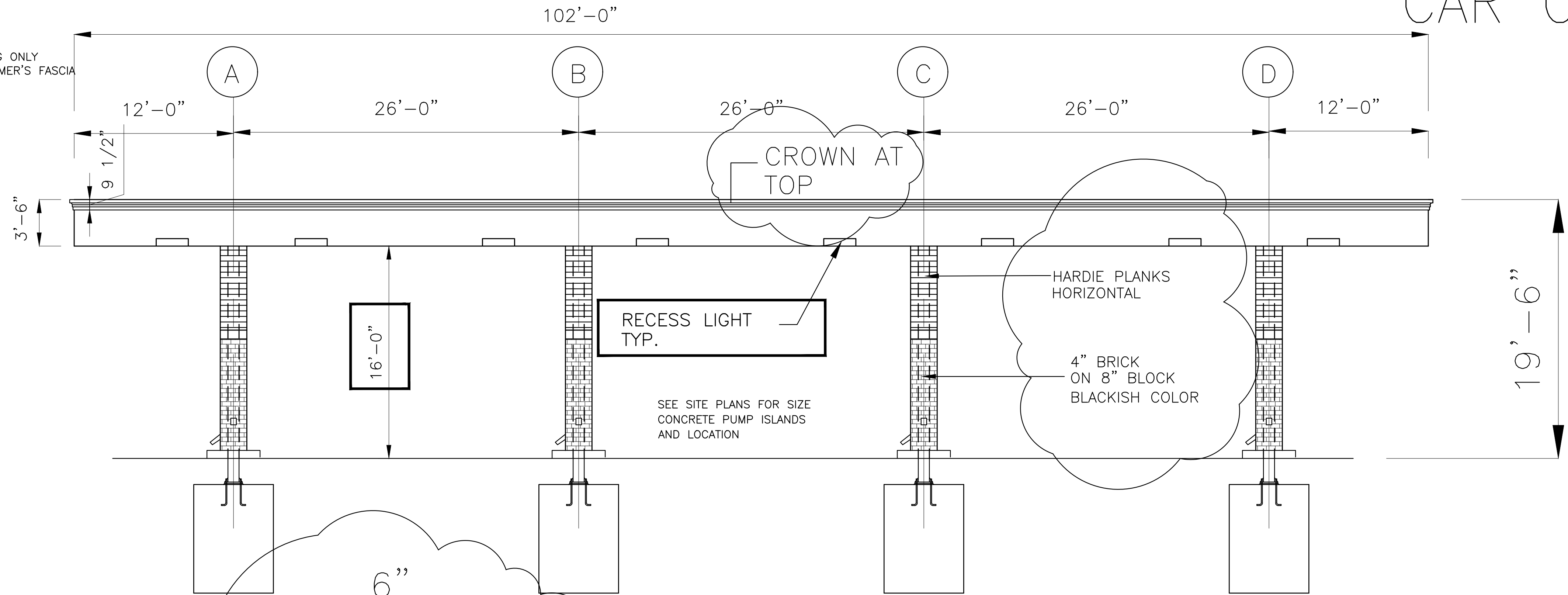
Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
A-2

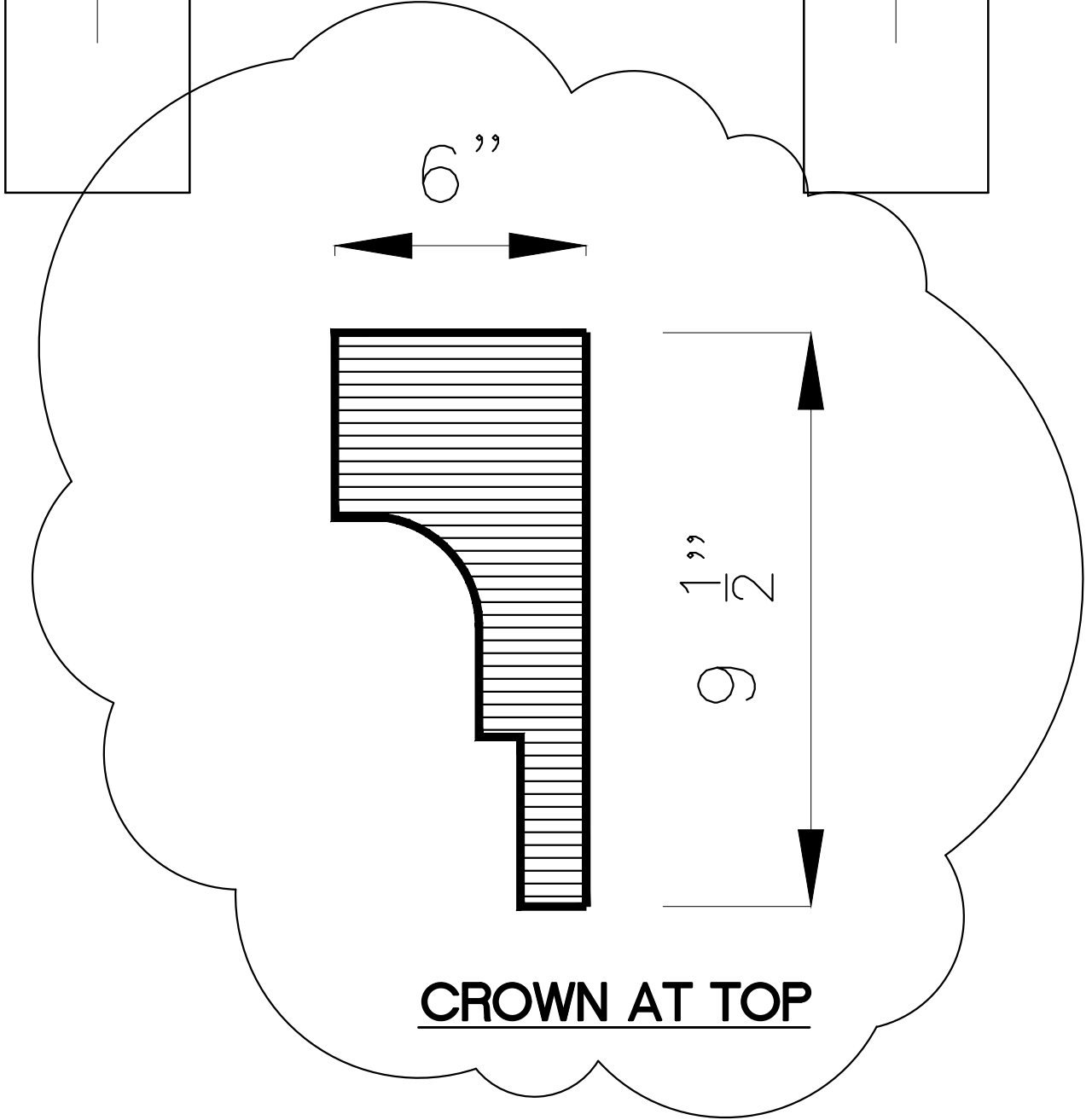
CAR CANOPY



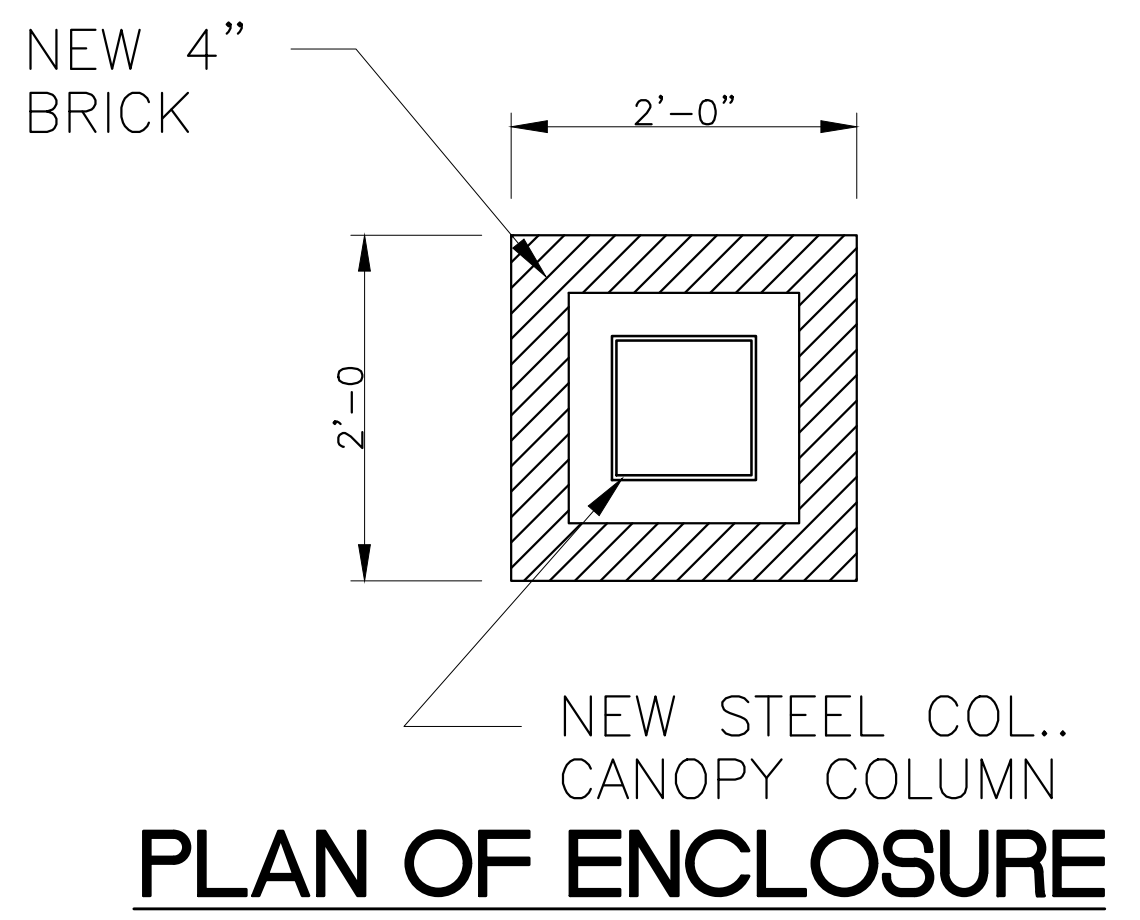
NORTH AND SOUTH SIDE ELEVATION
N.T.S.



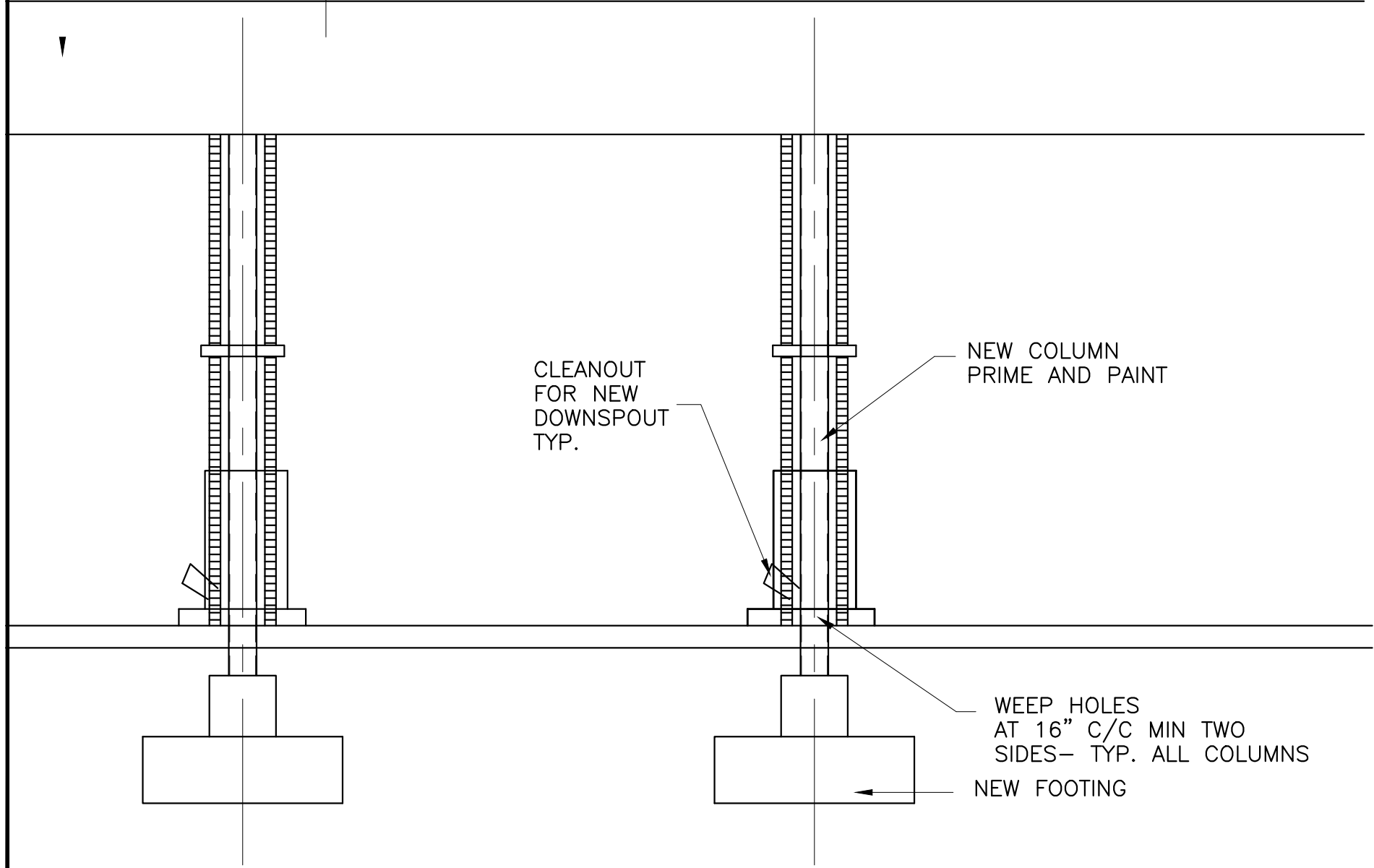
CROSS ELEVATION - FRONT CANOPY
N.T.S.



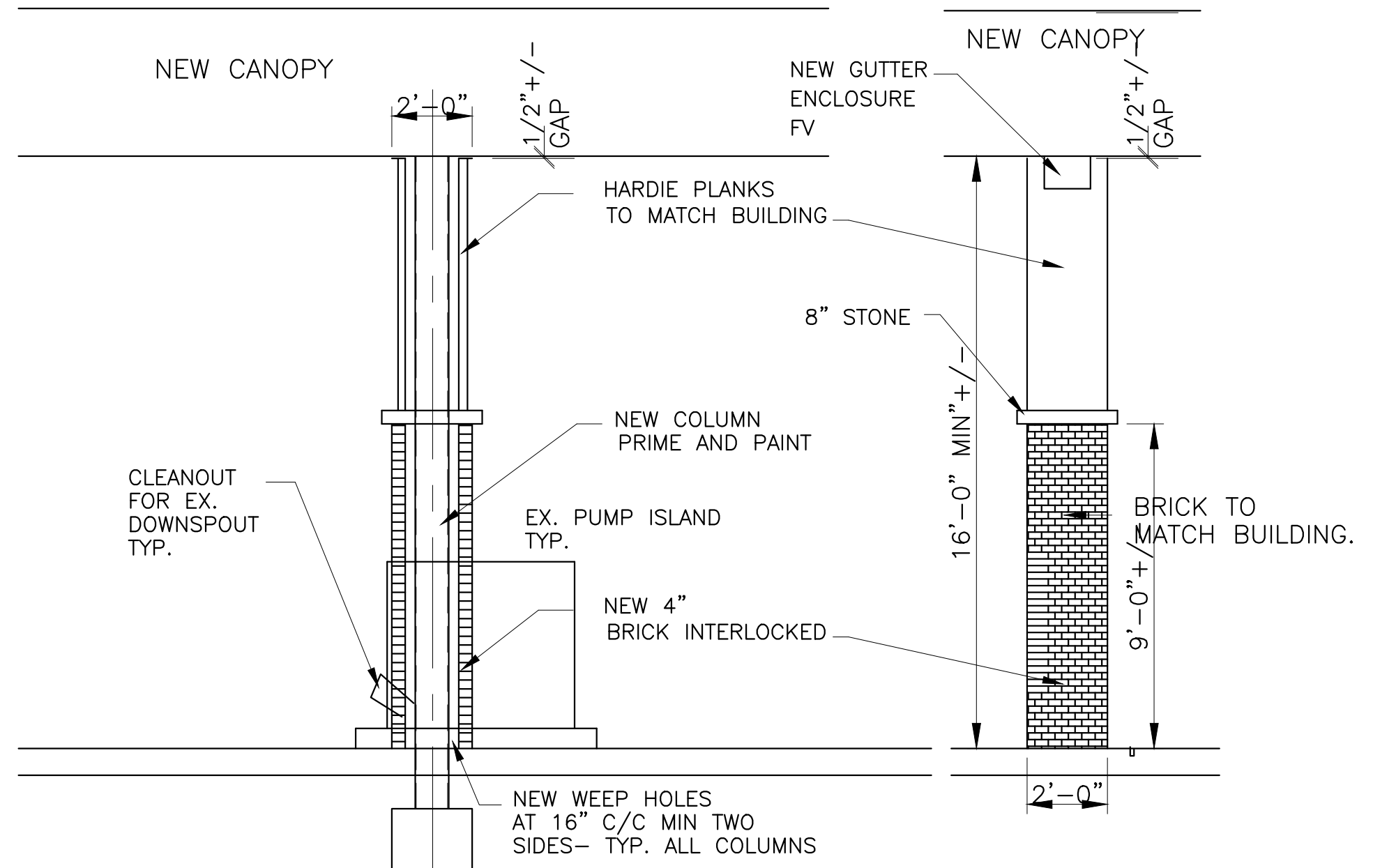
CROWN AT TOP



PLAN OF ENCLOSURE

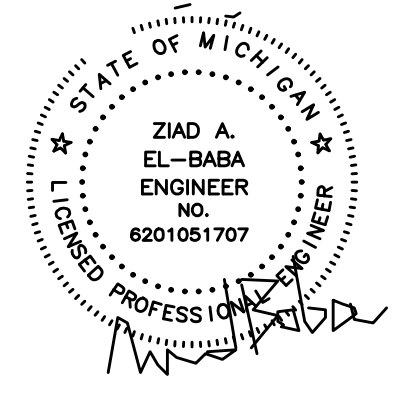


TYP. CANOPY ELEVATION
SCALE: 1/4"=1'-0"



TYP. SECTION THRU BRICK COL

BRICK ENCLOSURE ELEVATION



ZIAD EL-BABA ENGINEERING
674 GAUTHIER
TECUMSEH ONTARIO
N9N3P8 CANADA
CELL : 313-938-8767
CELL - 519-796-9882

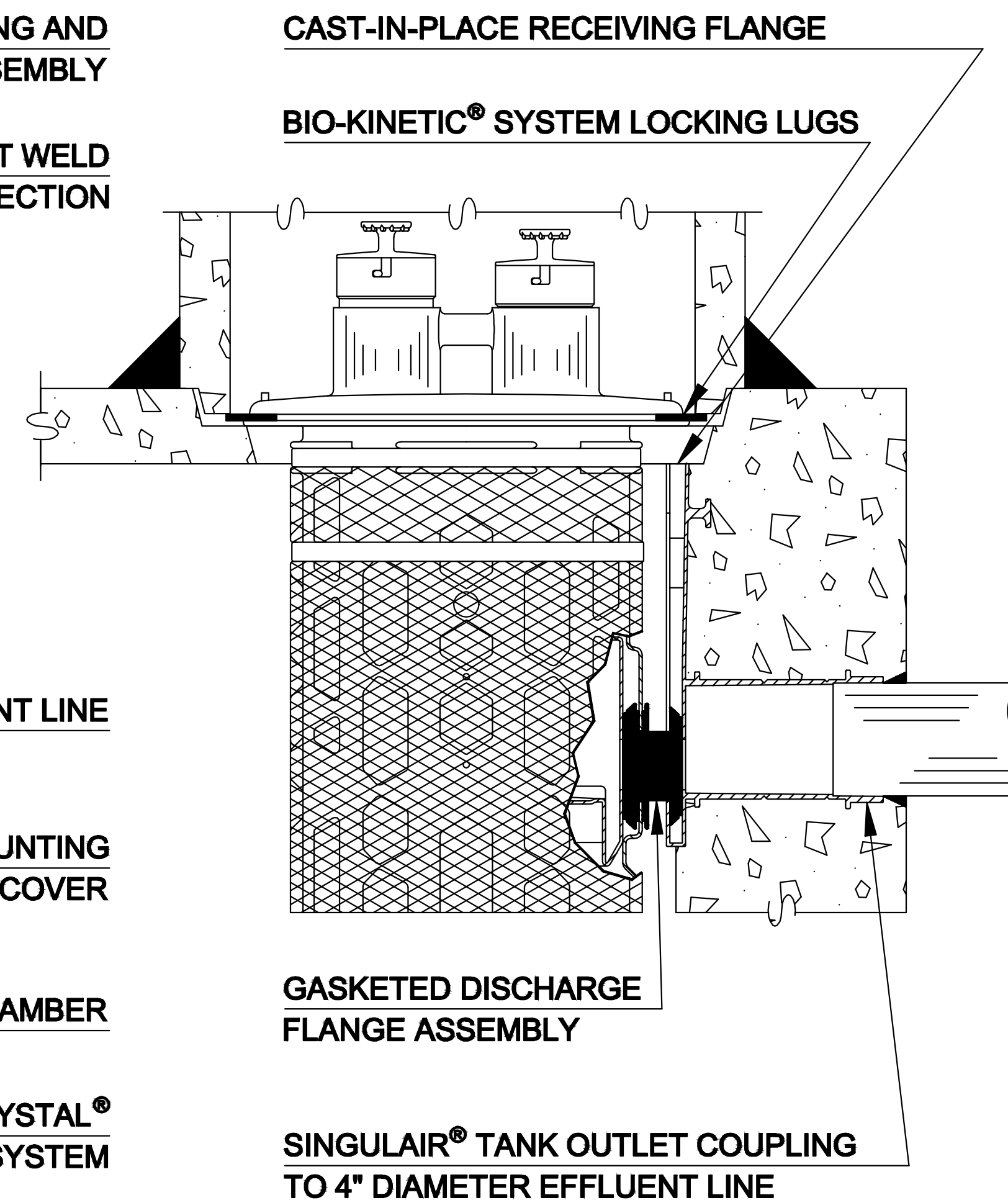
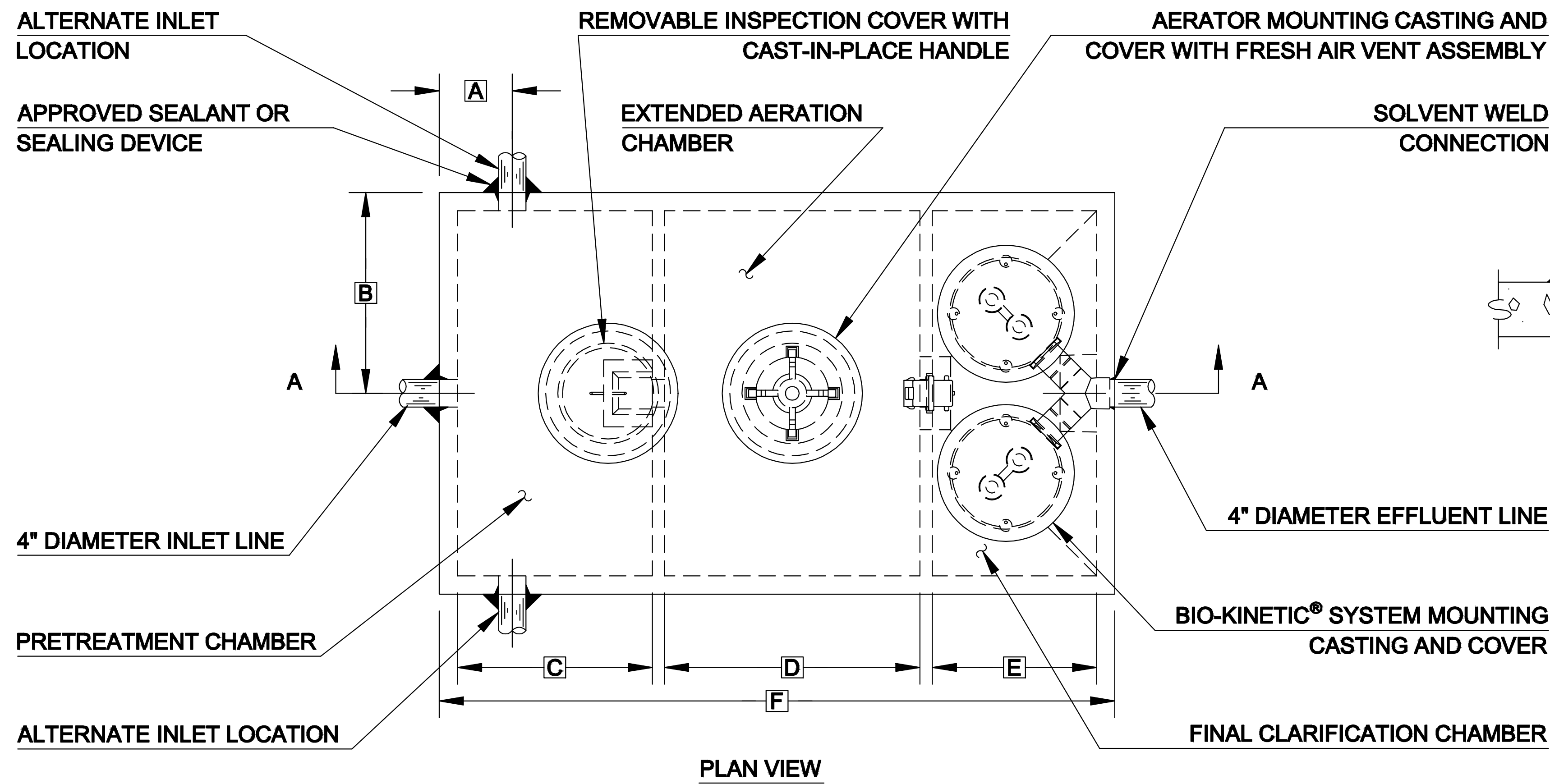
DATE	REV. NO.	ISSUED FOR
JUL.31.24		SITE PLAN
AUG.26.24		SITE PLAN

Project:
NEW GAS STATION
394 N MILFORD ROAD
HIGHLAND TWP ,MI
OWNER

Drawing Title:
FUEL CANOPY ELEVATIONS

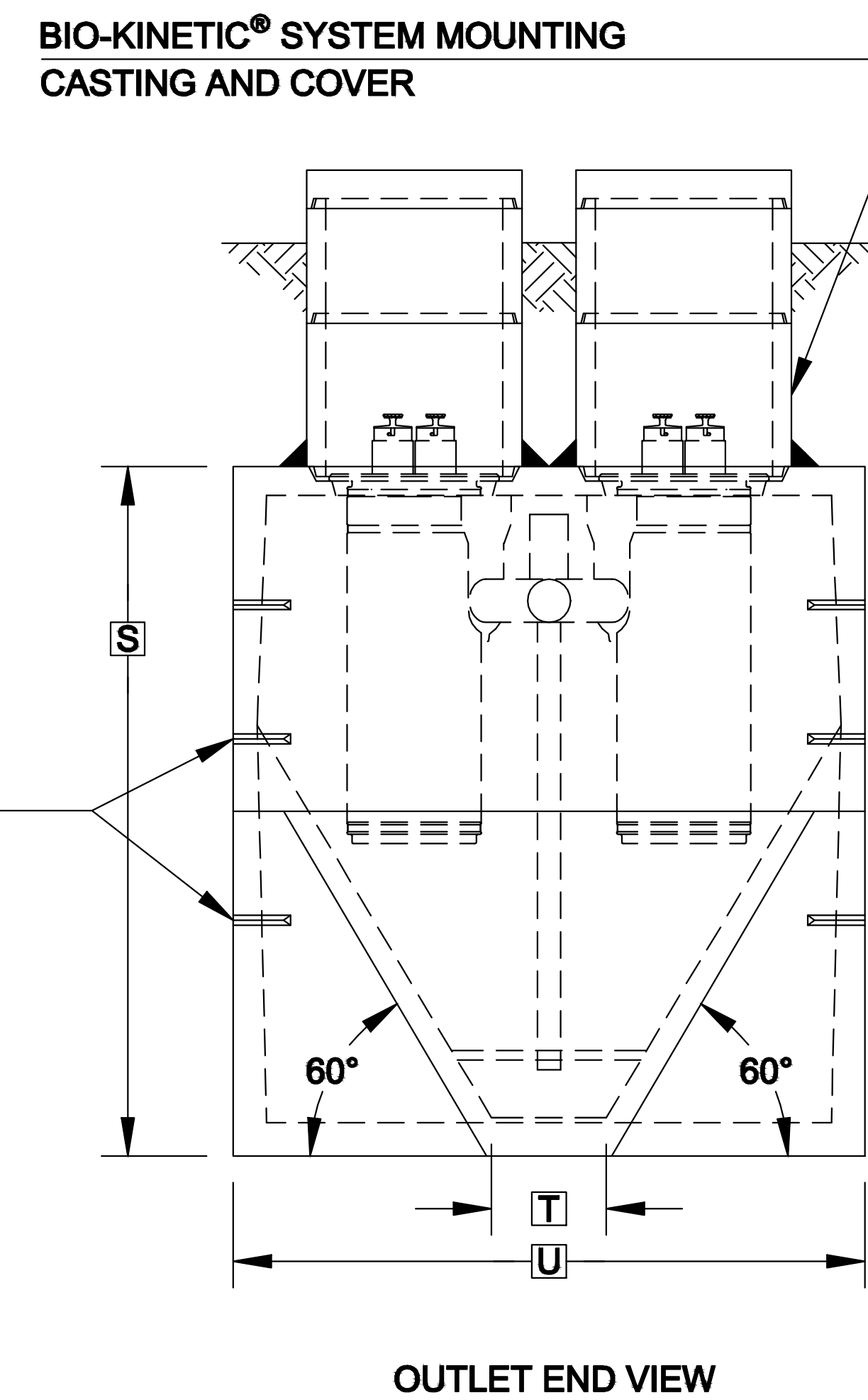
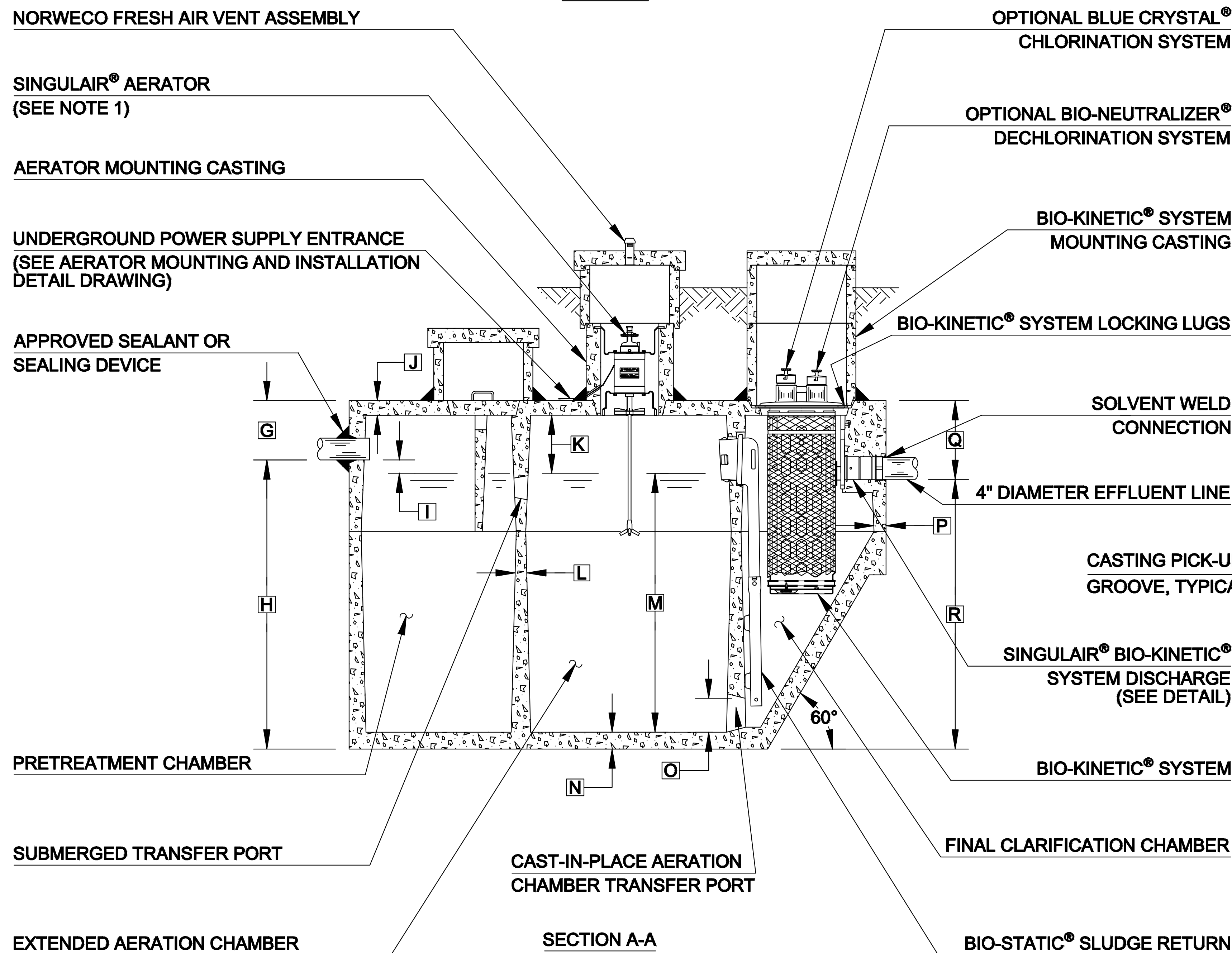
Project Number	
Scale	AS NOTED
Date	
Drawn By	
Checked By	

Drawing No.
A-3



GENERAL NOTES:

- ① SINGULAIR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
- ② FALL THROUGH SINGULAIR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
- ③ ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE. INSPECTION COVER ON PRETREATMENT CHAMBER MUST BE DEVELOPED TO WITHIN TWELVE INCHES OF GRADE.
- ④ TANK REINFORCED PER ACI STD. 318.
- ⑤ REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
- ⑥ CONTACT THE LOCAL, LICENSED SINGULAIR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.



NOTE: TOTAL SYSTEM CAPACITY: 1,600 GALLONS
 RATED CAPACITY: 800 GALLONS PER DAY

PROJECT ENGINEER'S APPROVAL:
 I (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

DATE: _____

NAME: _____

CONTRACTOR'S CERTIFICATION:
 I (WE) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

DATE: _____

NAME: _____

CRITICAL DIMENSIONS

A	1'-0"	N	0'-3"
B	2'-9"	O	0'-6"
C	2'-8"	P	0'-2 1/2"
D	3'-7"	Q	1'-4"
E	2'-3"	R	5'-8"
F	9'-3"	S	7'-0"
G	1'-0"	T	1'-0"
H	6'-0"	U	5'-6"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	5'-6"	Z	

U.S. AND FOREIGN PATENTS PENDING	norweco	REVISION DATE	6-21-07	REVISION	B
		DRAWN BY	BDS	APPROVED BY	JMM
© MMVII	SINGULAIR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL TNT - 750 GPD	DATE	2-16-06	SCALE	NTS
		DRAWING NO.			
		PC-5-7066			