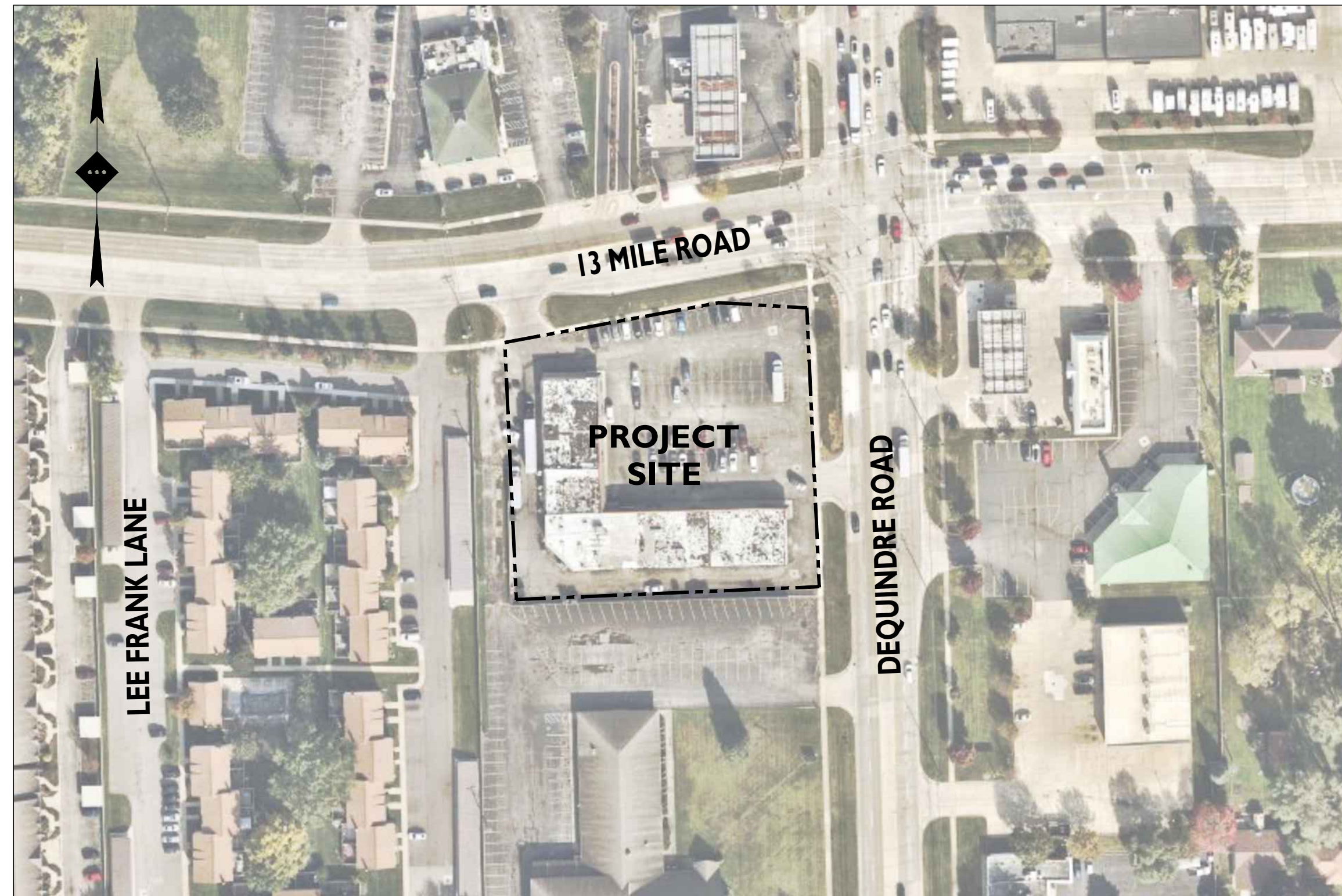


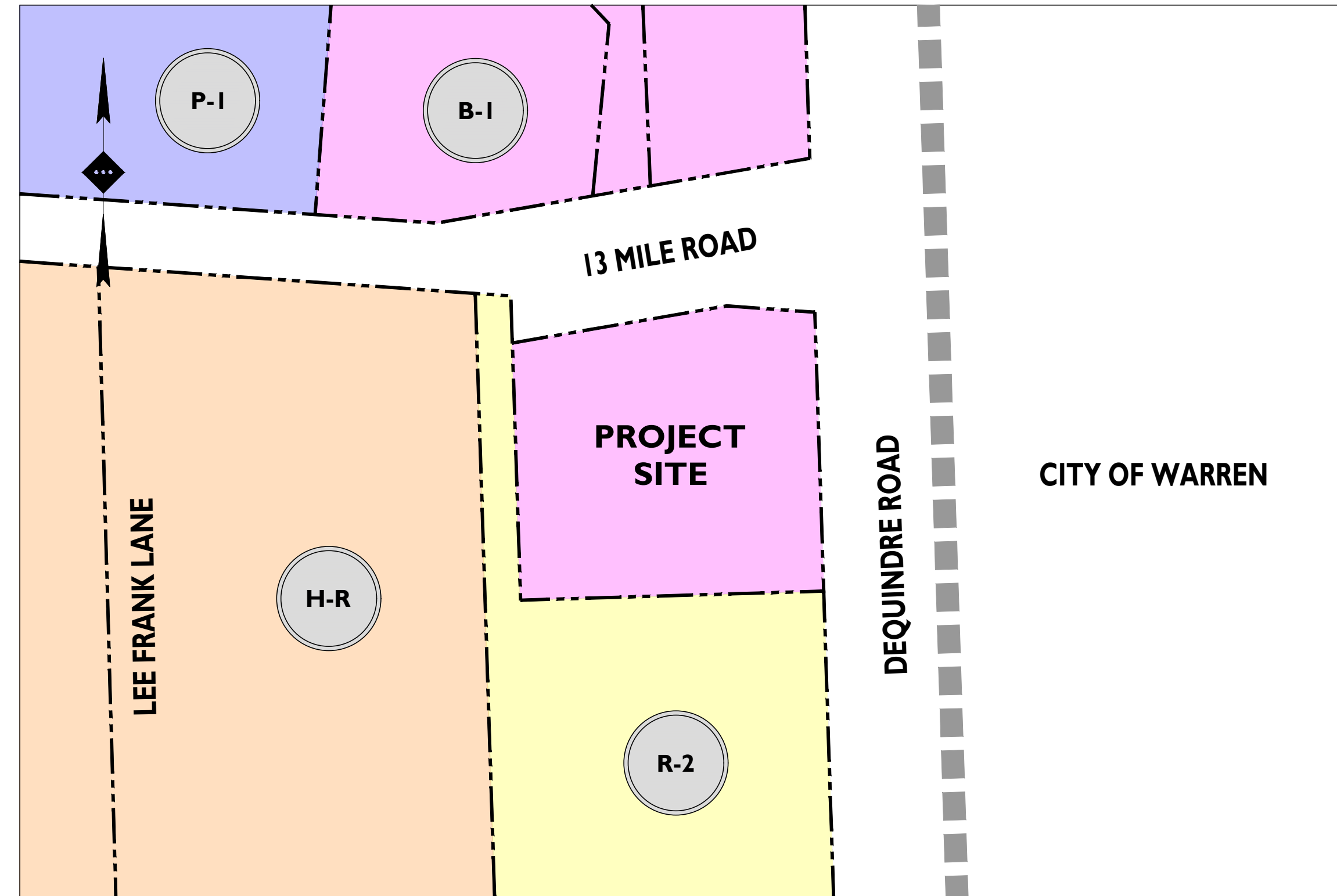
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SCALE: 1" = 2000'±


CITY OF MADISON HEIGHTS, OAKLAND COUNTY, MICHIGAN



SCALE: 1" = 100'±



SCALE: 1" = 100'±



607 Shelby Suite 200, Detroit, MI 48226  
Phone 248.247.1115

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:

- ALTA SURVEY PREPARED BY KEM-TEC, DATED 11/01/2023
- ARCHITECTURAL ELEVATIONS PREPARED BY CONIENCE ARCHITECTURE AND DESIGN P.C., DATED 04/03/2023
- AERIAL MAP PROVIDED BY NEARMAPS ONLINE MAPPING SYSTEM, DATE RETRIEVED 01/09/2024
- LOCATION MAP PROVIDED BY USGS TOPOGRAPHIC MAPS, DATE RETRIEVED 01/09/2024

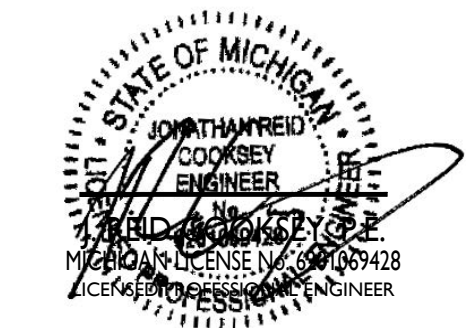
2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS CONTRACT. ANY INFORMATION OBTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX	
DRAWING TITLE	SHEET #
COVER SHEET	C-1
SITE PLAN	C-2
FUEL TRUCK CIRCULATION	C-3
LANDSCAPING PLAN & DETAILS	C-4 & C-5

ADDITIONAL SHEETS	
DRAWING TITLE	SHEET #
ALTA / NSPS LAND TITLE SURVEY	C-1



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



SCALE: AS SHOWN	PROJECT ID: DET-230258
-----------------	------------------------

**TITLE:**

COVER SHEET

**DRAWING:**

## C-1

[illegible]

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## SITE DEVELOPMENT PLANS

**SHEETZ, INC.**  
**PROPOSED FUEL STOP/**  
**CONVENIENCE STOP**  
**RESTAURANT**  
PID: 25-12-226-008

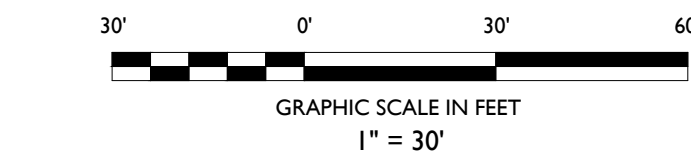
PID: 25-12-226-008  
30901 DEQUINDRE ROAD  
CITY OF MADISON HEIGHTS  
OAKLAND COUNTY, MICHIGAN



- (1) PER SEC. 10.010.(6) OF MADISON HEIGHTS ZONING ORDINANCE, INTERIOR LANDSCAPING SHALL BE PROVIDED EQUAL TO AT LEAST 5% OF TOTAL IMPERVIOUS AREA =  $(51.932 \text{ SF}) / (0.05) = 2,563 \text{ SF}$
- (2) PER SEC. 10.010.(7)(a) OF MADISON HEIGHTS ZONING ORDINANCE, PARKING AREAS CONTAINING TEN OR MORE PARKING SPACES SHALL PROVIDE 5 SF OF PARKING LOT LANDSCAPING PER PARKING SPACE =  $(58 \text{ SPACES}) / (5 \text{ SF / SPACE}) = 290 \text{ SF}$
- (3) PER SEC. 10.401.(iv).3 OF MADISON HEIGHTS ZONING ORDINANCE, THE MAXIMUM FRONT YARD SETBACK FOR NEW STRUCTURES SHALL BE 5 FT
- (4) PER SEC. 10.010.(3) AND 10.018.(5)(a)(ii)(b) OF MADISON HEIGHTS ZONING ORDINANCE, AN 8 FT CONSIDERING WALL SHALL BE REQUIRED WHEN ADJACENT TO RESIDENTIAL DISTRICTS
- (5) PER SEC. 10.401.(iv).1 OF MADISON HEIGHTS ZONING ORDINANCE, MINIMUM YARD BUILDING SETBACKS ADJACENT TO A SINGLE-FAMILY RESIDENTIAL DISTRICTS SHALL BE INCREASED BY 1 FT PER EACH 1 FT OF BUILDING HEIGHT IN EXCESS OF 20 FT

**GENERAL NOTES**

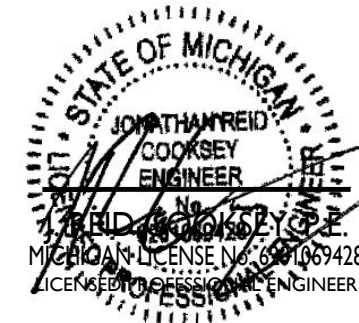
1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO THE START OF CONSTRUCTION. IF THE CONTRACTOR FINDS ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC OF THE DISCREPANCY IMMEDIATELY.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. ALL PERMITS, APPROVALS AND PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, BE RESPONSIBLE FOR A HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING FROM ANY CLAIMS BY ANY PARTY AGAINST THE CONTRACTOR, IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UPROOTED TREES, BUSHES, OR PLANTS TO ORIGINAL CONDITION AND REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE LOCAL ORDINANCES AND REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SUPERVISOR ON SITE AT ALL TIMES DURING CONSTRUCTION, CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT CONSTITUTE AN ENDORSEMENT OF THE PROJECT OR THE PROJECT AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



## SITE DEVELOPMENT PLANS

**SHEETZ, INC.**  
**PROPOSED FUEL STOP**  
**CONVENIENCE STORE**  
**RESTAURANT**

PID: 25-12-226-008  
3090I DEQUINDRE ROAD  
CITY OF MADISON HEIGHTS  
OAKLAND COUNTY, MICHIGAN



**STONEFIELD**  
engineering & design

**SCALE:** 1" = 30' | **PROJECT ID:** DET-230258

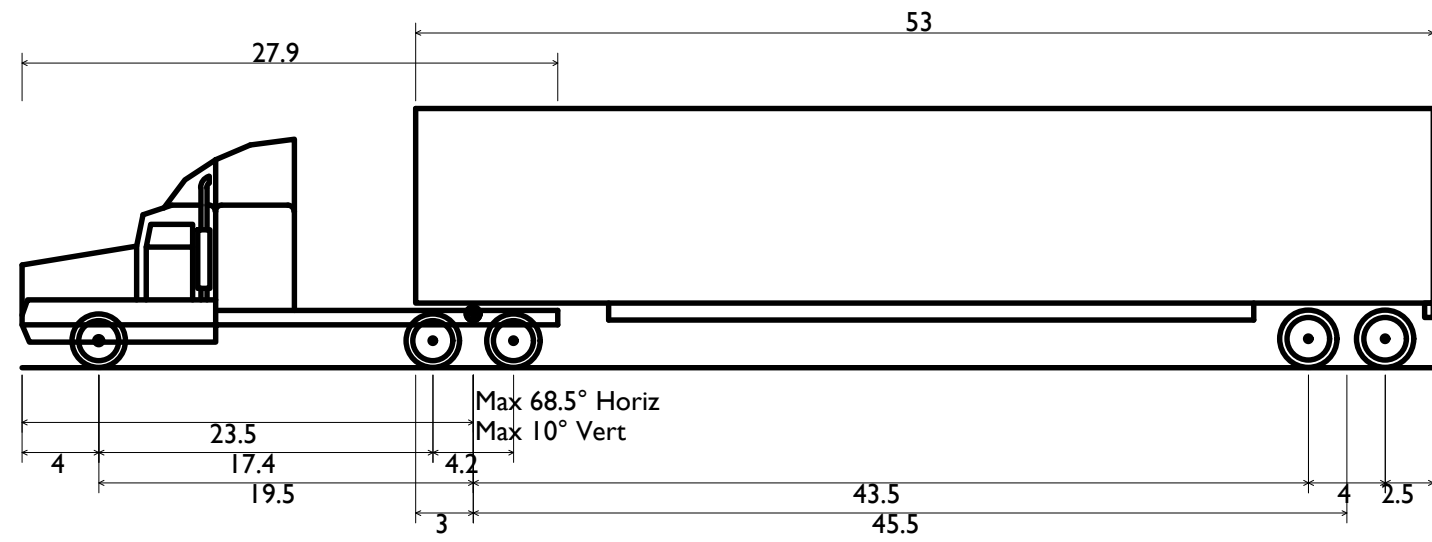
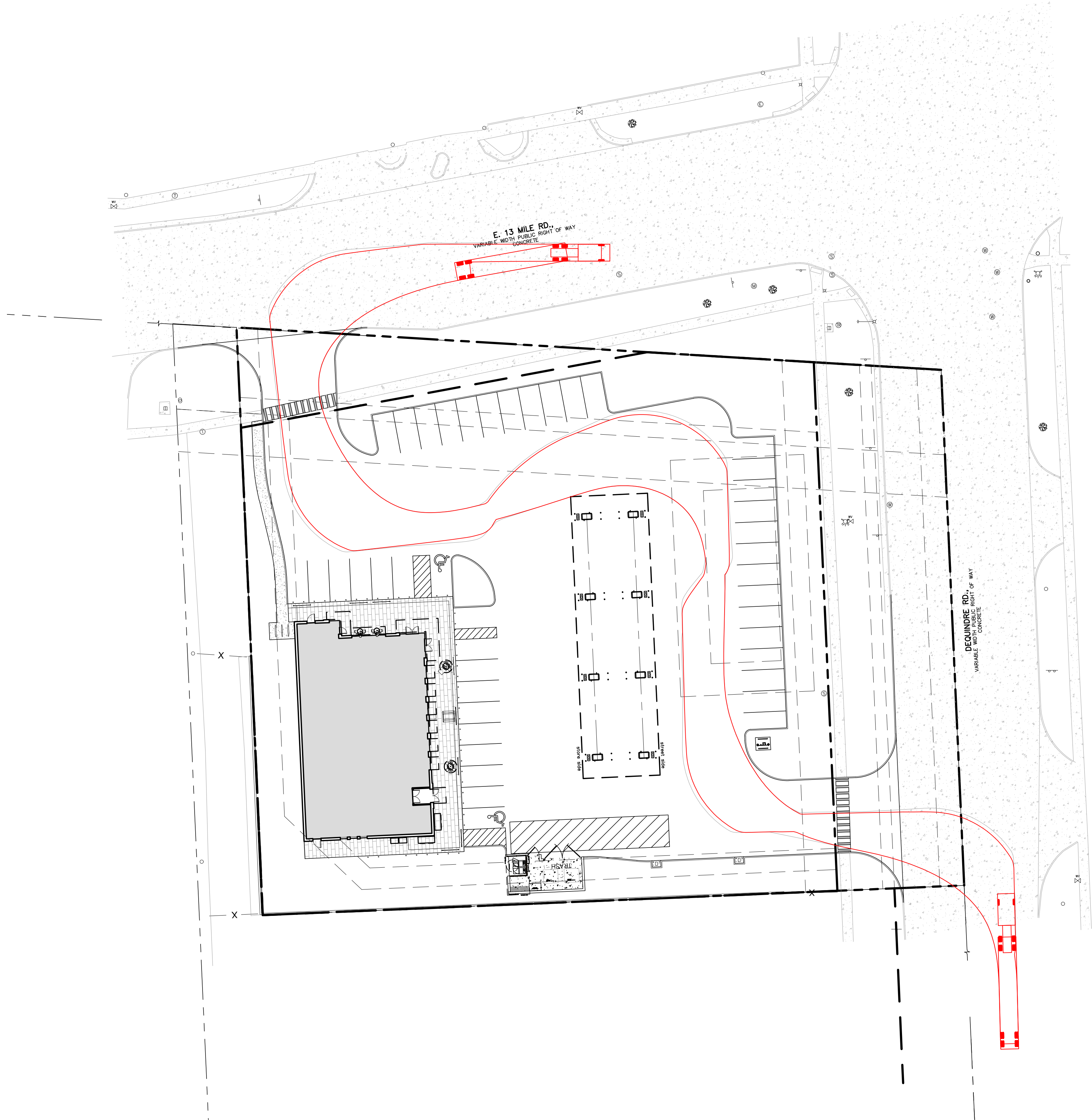
## SITE PLAN

**DRAWING:**

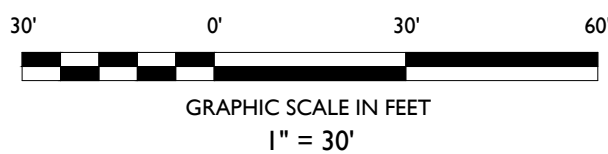
**C-2**



V:\071021\DET230258-SKETCH-GOLD-3000-DEQUINDRE ROAD, MADISON HEIGHTS, MI\CAAD\PKT\DET230258-3 SITE PLAN.dwg



WB-67 - Interstate Semi-Trailer  
Overall Length 73.50 ft  
Overall Width 8.50 ft  
Overall Body Height 13.50 ft  
Min Body Ground Clearance 1.334 ft  
Max Track Width 8.500 ft  
Lock-to-lock time 6.00 s  
Max Steering Angle (Virtual) 28.40°

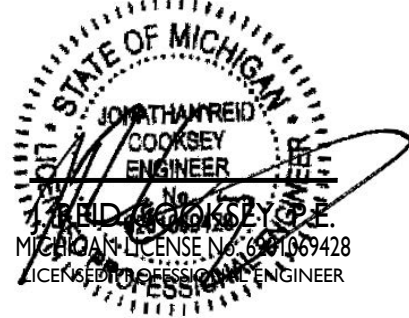


SITE DEVELOPMENT PLANS

## SHEETZ, INC.

### PROPOSED FUEL STATION WITH CONVENIENCE STORE & RESTAURANT

PID: 25-17-2724-008  
3090 I DEQUINDRE ROAD  
CITY OF MADISON HEIGHTS  
OAKLAND COUNTY, MICHIGAN



SCALE: 1" = 30' PROJECT ID: DET-230258

TITLE:

FUEL TRUCK  
CIRCULATION

DRAWING:

C-3



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FOR SPECIAL LAND USE APPROVAL  
FOR CLIENT REVIEW

DESCRIPTION

BY

DATE

ISSUE

2

1

01/09/2024

11/13/2023

NB

KG



NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE



**IRRIGATION NOTE:**

IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO PROVIDE A DESIGN FOR A LAWN AREA WITH AVERAGE DEPTH MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITH HARDSCAPE AREAS.

### LANDSCAPING NOTES

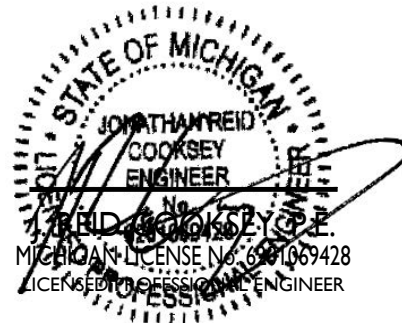
1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
3. THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
4. ALL SLOPES SHALL BE SEED FLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS. UPON CONSTRUCTION, THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
6. THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.



# SHEETZ, INC.

# PROPOSED FUEL STATION WITH CONVENIENCE STORE & RESTAURANT

PID: 25-12-226-008  
3090I DEQUINDRE ROAD  
CITY OF MADISON HEIGHTS  
OAKLAND COUNTY, MICHIGAN



**STONEFIELD**  
engineering & design

SCALE:	1" = 30'	PROJECT ID: DET-230258
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**TITLE:**

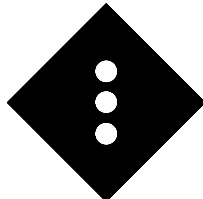
## LANDSCAPING PLAN

### DRAWING

# C-4

[illegible]

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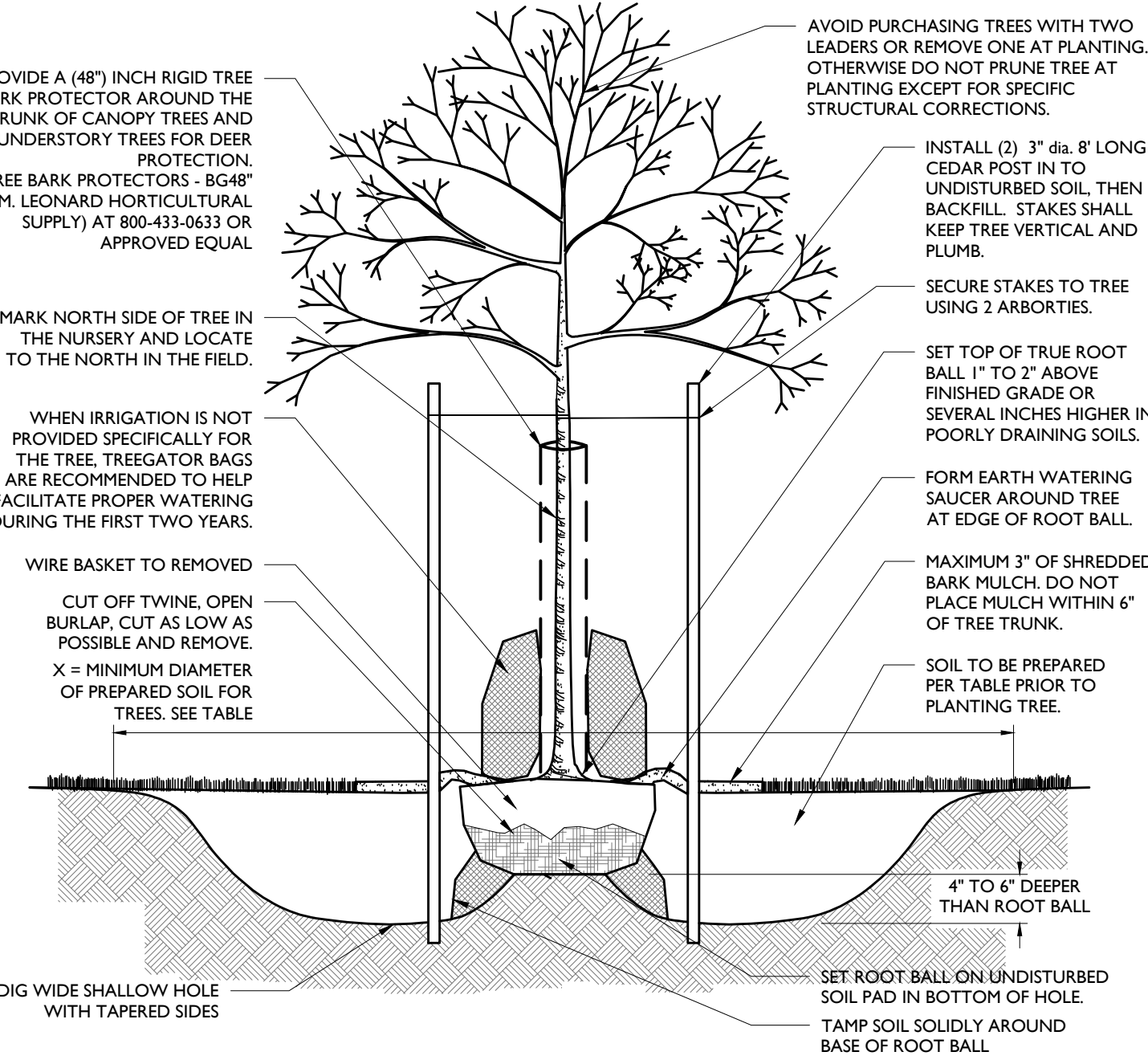
607 Shelby Suite 200, Detroit, MI 48226

Phone 248.247.1115



NOTES:

- FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- SOIL AMENDMENTS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX

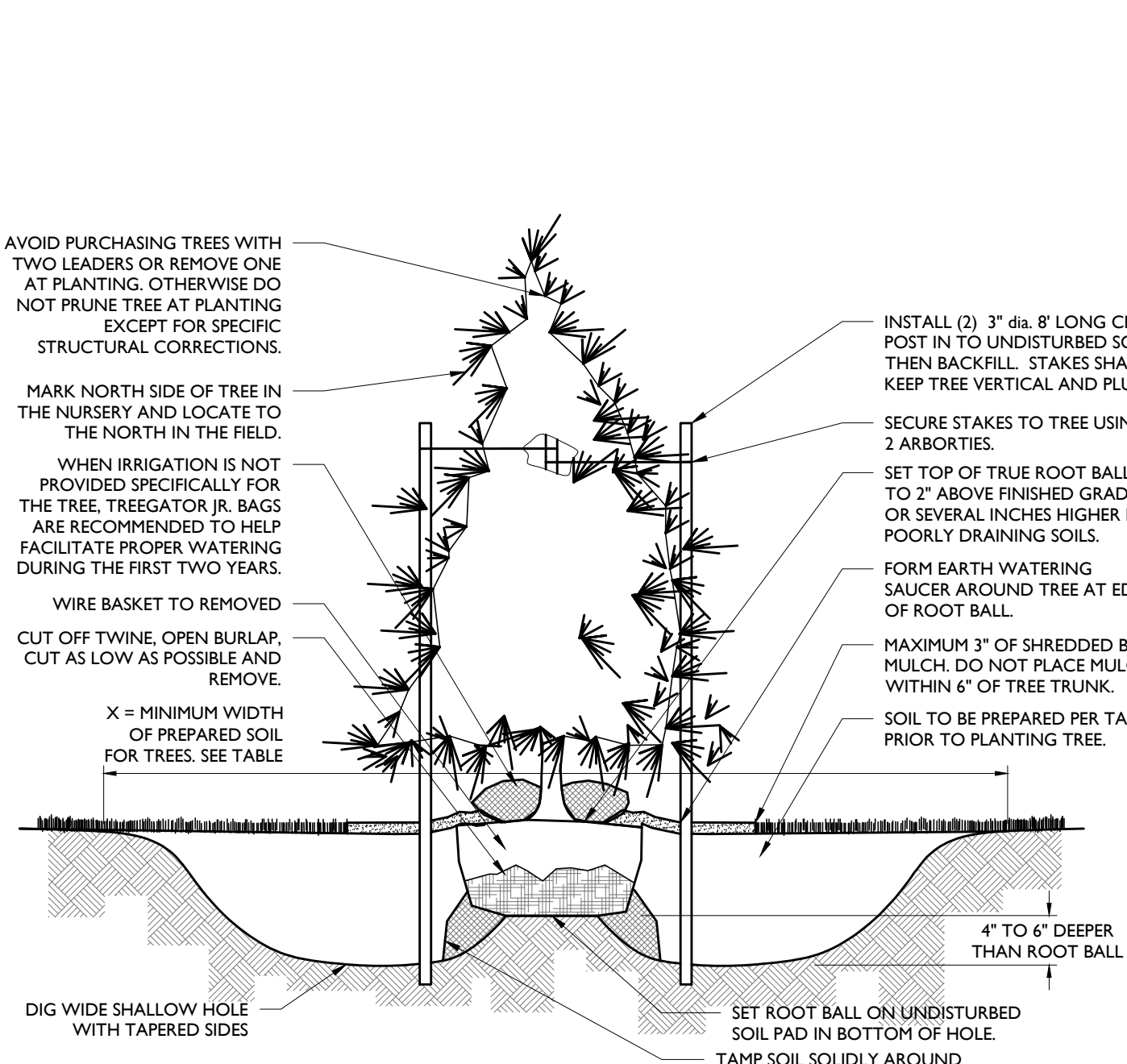


## DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

NOTES:

- FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- SOIL AMENDMENTS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX



## CONIFEROUS TREE PLANTING DETAIL

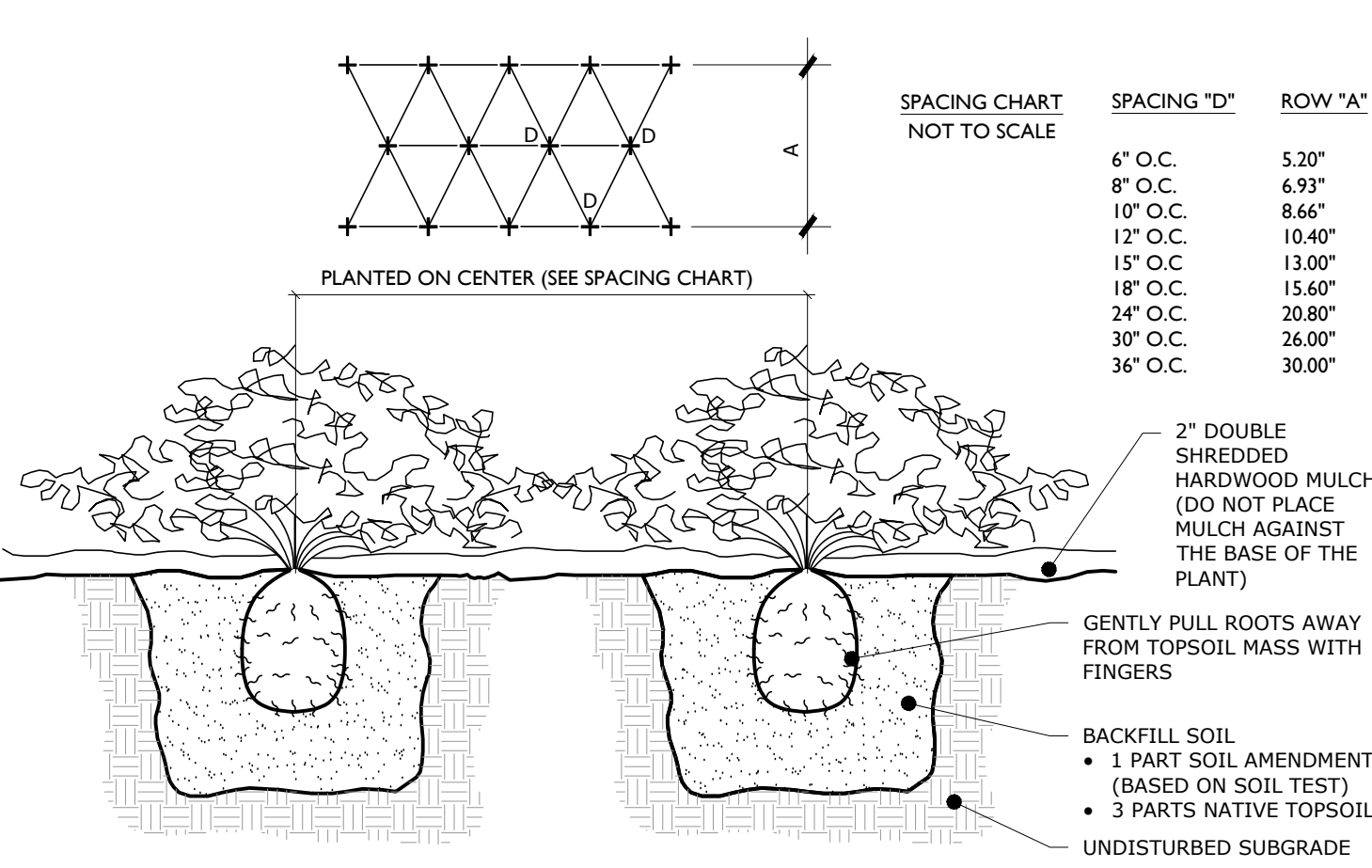
NOT TO SCALE

NOTES:

- FOR THE CONTAINER-GROWN SHRUBS, USE FINGERS OR SMALL HAND TOOL TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- THOROUGHLY SOAK THE SHRUB ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL

NOTES:

- THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- SOIL AMENDMENTS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX
- ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT PER MANUFACTURER'S SPECIFICATIONS

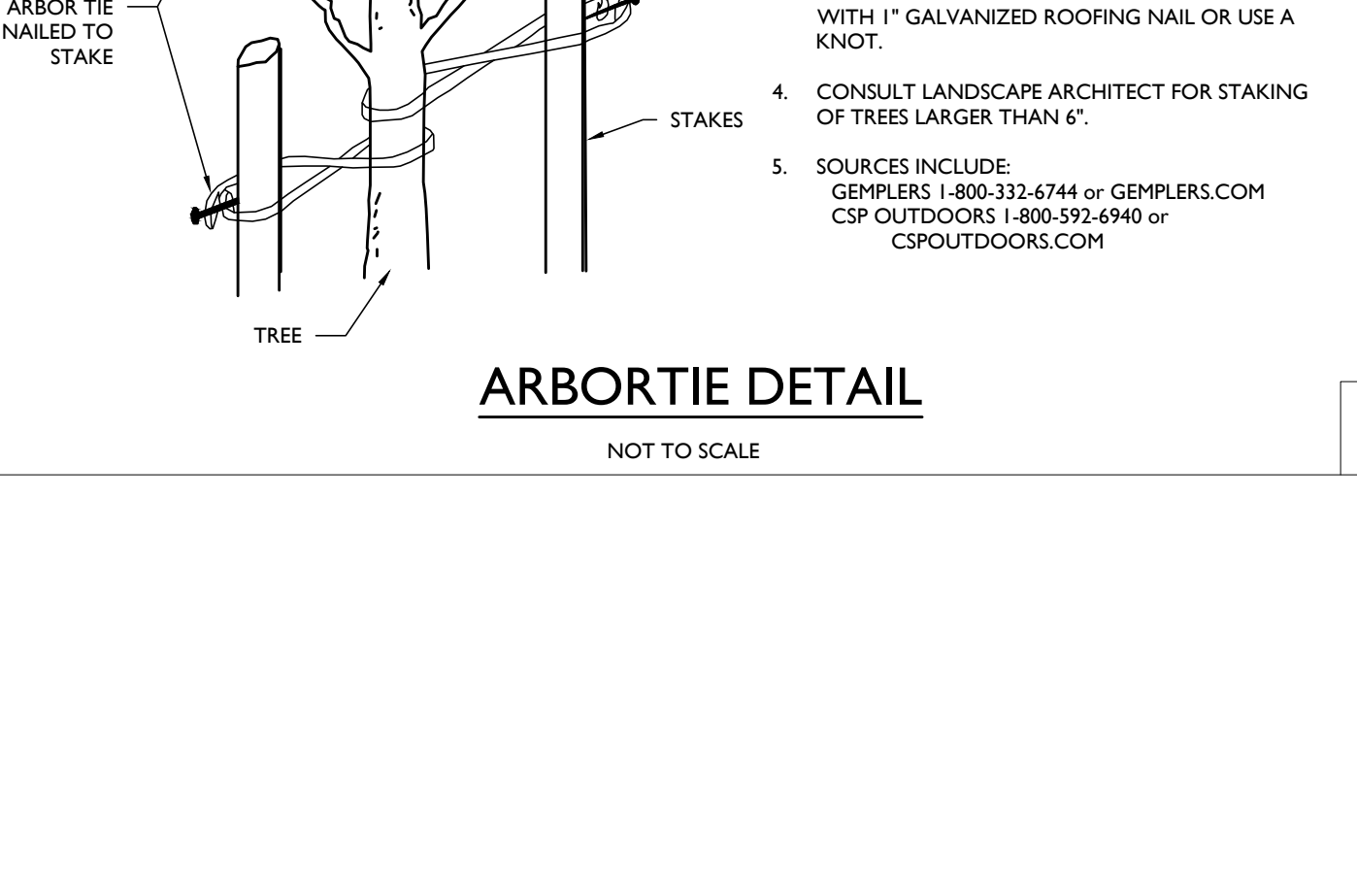


## GROUND COVER/PERENNIAL/ANNUAL PLANTING DETAIL

NOT TO SCALE

NOTES:

- THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- SOIL AMENDMENTS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX
- ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT PER MANUFACTURER'S SPECIFICATIONS



## ARBORTIE DETAIL

NOT TO SCALE

GENERAL LANDSCAPING NOTES:

- THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY.
- WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL.
- IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL, IF SO REQUESTED.
- IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY.
- UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS.) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF ANY PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER, OR GOVERNING MUNICIPAL OFFICIAL.
- THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.

PROTECTION OF EXISTING VEGETATION NOTES:

- BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING. FENCING SHALL BE LOCATED AT THE DRIPLINE OR LIMIT OF DISTURBANCE AS DEPICTED WITHIN THE APPROVED OR FINAL PLAN SET, ESTABLISHING THE TREE PROTECTION ZONE. FENCE INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE PROTECTION FENCE DETAIL." NO WORK MAY BEGIN UNTIL THIS REQUIREMENT IS FULFILLED. THE FENCING SHALL BE INSPECTED REGULARLY BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- IN ORDER TO AVOID DAMAGE TO ROOTS, BARK OR LOWER BRANCHES, NO VEHICLE, EQUIPMENT, DEBRIS, OR OTHER MATERIALS SHALL BE DRIVEN, PARKED OR PLACED WITHIN THE TREE PROTECTION ZONE. ALL ON-SITE CONTRACTORS SHALL USE ANY AND ALL PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, WALKS, PAVEMENTS, UTILITIES, AND ANY OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED UNDER THIS CONTRACT.
- IN RARE INSTANCES WHERE EROSION, OR GRADING IS REQUIRED WITHIN THE DRIPLINE OF TREES TO REMAIN, THE WORK SHALL BE PERFORMED AS FOLLOWS:
  - TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN, THE TREE ROOTS SHALL NOT BE CUT, BUT THE TRENCH SHALL BE TUNNELED UNDER OR AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO THE ROOTS. NO ROOTS, LIMBS OR WOODS ARE TO HAVE ANY PAINT OR MATERIAL APPLIED TO ANY SURFACE.
  - RAISING GRADES: WHEN THE GRADE AT AN EXISTING TREE IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 6 INCHES (6") IS REQUIRED, CLEAN, WASHED GRAVEL FROM ONE TO TWO INCHES (1" - 2") IN SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES (18"). THE GRAVEL SHALL BE PLACED IN A MINIMUM OF TWO LAYERS, EACH LAYER BEING APPROXIMATELY 1/2" THICK. GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNK OF ANY TREE REQUIRING FILL. WHERE FILL EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID TREE WELL SHALL BE CONSTRUCTED. IF APPLICABLE, TREE WELL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE WELL DETAIL."
  - LOWERING GRADES: EXISTING TREES LOCATED IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED, SHALL HAVE RE-GRADING WORK DONE BY HAND TO THE INDICATED ELEVATION, NO GREATER THAN SIX INCHES (6"). ROOTS SHALL BE CUT CLEANLY THREE INCHES (3") BELOW FINISHED GRADE UNDER THE DIRECTION OF A LICENSED ARBORIST. WHERE CUT EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID RETAINING WALL SHALL BE CONSTRUCTED. IF APPLICABLE, THE RETAINING WALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE RETAINING WALL DETAIL."

SOIL PREPARATION AND MULCH NOTES:

- LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS.
- BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIME AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL AMENDMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM.
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
- TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL, OBTAINED FROM A WELL-DRAINABLE ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1").
- TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN LESS THAN 6% ORGANIC MATTER BY WEIGHT.
- OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE.
- CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS.
- UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE GRADING WITHIN THE DISTURBED AREA OF THE SITE.
- LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS THE REQUIRED TOPSOIL), IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN.
- ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER.
- DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR, GROUND COVER, PERENNIAL AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2") TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
- WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
- SOIL SHALL BE LOOSENED WITH A BACKHOE OR OTHER LARGE COARSE-TILING EQUIPMENT UNLESS THE SOIL IS FROZEN OR EXCESSIVELY WET. TILING THAT PRODUCES LARGE, COARSE CHUNKS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER THE AREA IS LOOSENED IT SHALL NOT BE DRIVEN OVER BY ANY VEHICLE.
- APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
- ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:

- MYCORB® TREE SAVER - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS.
- DIRECTIONS FOR USE: USE 3 OZ PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-OZ PER INCH CALIPER, MIX INTO THE BACKFILL WHEN TRANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8 INCHES, AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8 INCHES INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION.
  - MYCORB® TREE SAVER IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ERICOID MYCORRHIZAE.
  - SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9.
  - FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON THE INOCULATION PROGRAM. SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION.
  - OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.

HEALTHY START MACRO TABS 12-8-8

- FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS.
- TABLETS ARE FORMULATED FOR LOW-NITROGEN RELEASE RATE AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA, AND A COMPONENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE: FOR PLANTING BALLED & BURLAPPED (BBB) TREES AND SHRUBS, MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT 1/2 TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL, EVENLY DISTRIBUTED AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES.

SIZE AT PLANTING	IRRIGATION FOR VITALITY	IRRIGATION FOR SURVIVAL
< 2" CALIPER	DAILY FOR TWO WEEKS, EVERY OTHER DAY FOR TWO MONTHS, WEEKLY UNTIL ESTABLISHED	TWO TO THREE TIMES WEEKLY FOR TWO TO THREE MONTHS
2"-4 CALIPER	DAILY FOR ONE MONTH, EVERY OTHER DAY FOR THREE MONTHS, WEEKLY UNTIL ESTABLISHED	TWO TO THREE TIMES WEEKLY FOR THREE TO FOUR MONTHS
4" > CALIPER	DAILY FOR SIX WEEKS, EVERY OTHER DAY FOR FIVE MONTHS, WEEKLY UNTIL ESTABLISHED	TWICE WEEKLY FOR FOUR TO FIVE MONTHS

TABLE NOTES:

- AT EACH IRRIGATION, APPLY TWO TO THREE GALLONS PER INCH TRUNK CALIPER TO THE ROOT BALL SURFACE. APPLY IT IN A MANNER SO ALL WATER SOAKS THE ENTIRE ROOT BALL, DO NOT WATER IF ROOT BALL IS WET/SATURATED ON THE IRRIGATION DAY.
- WHEN IRRIGATING FOR VITALITY, DELETE DAILY IRRIGATION WHEN PLANTING IN WINTER OR WHEN PLANTING IN COOL CLIMATES. ESTABLISHMENT TAKES THREE TO FOUR MONTHS PER INCH TRUNK CALIPER, NEVER APPLY IRRIGATION IF THE SOIL IS SATURATED.
- WHEN IRRIGATION FOR SURVIVAL, TREES TAKE MUCH LONGER TO ESTABLISH THAN REGULARLY IRRIGATED TREES. IRRIGATION MAY BE REQUIRED IN THE NORMAL HOT, DRY PORTIONS OF THE FOLLOWING YEAR.

PLANT QUALITY AND HANDLING NOTES:

- ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLANT LIST SHALL TAKE PRECEDENCE OVER COMMON NAMES.
- ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEAVY, TIGHTLY KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND, HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE.
- PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REJECTED.
- ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE.
- THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF.
- ALL PLANTS DESIGNATED BALL AND BURLAP (BB&B) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEeled-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK AND ALL BURLAP IS TO BE REMOVED.
- PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INJURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT, OR IMPROPER HANDLING OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOST, FRESH, AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
- ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING DETAILS.

- LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN POSSIBLE. THE ROOT BALL SHALL BE KEPT MOIST AT ALL TIME AND COVERED WITH MOISTENED MULCH OR AGED WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED SO AS TO NOT ALLOW THE ROOT BALL TO DRY OUT. PLANTINGS SHALL BE UNITED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEaled IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.
- NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL.
- PLANTS WITH INJURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY DISEASED OR INJURED PLANTS SHALL BE REMOVED.
- IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO RELOCATE OR ENCASE PLANTING FROM THE OBSTRUCTION.
- IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF EIGHT FEET (8') ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2') ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY.
- INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:
  - PLANTS (MARCH 15 - DECEMBER 15)
  - LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER 1 - DECEMBER 1)
 THE FOLLOWING TREES ARE SUSCEPTIBLE TO TRANSPORT SHOCK AND SHALL NOT BE PLANTED DURING THE FALL SEASON (STARTING SEPTEMBER 15):
  - ABIES CONCOLOR
  - ACER BUEGERIANUM
  - ACER FREESIANUM
  - ACER RUBRUM
  - ACER SACCHARINUM
  - BETULA VARIETIES
  - CARPINUS VARIETIES
  - CEDRUS DEODARA
  - CELTIS VARIETIES
  - CERCIDIPHYLLUM VARIETIES
  - VERICUS CANADENSIS
  - CORNUS VARIETIES
  - CRATAEGUS VARIETIES
  - CORNUS VARIETIES
  - CRATAEGUS VARIETIES
  - NYSSA SYLVATICA
- IF A PROPOSED PLANT IS UNATTAINABLE OR ON THE FALL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL PRIOR TO ORDERING AND INSTALLATION.
- DURING THE COURSE OF CONSTRUCTION/PLANT INSTALLATION, EXCESS AND WASTE MATERIALS SHALL BE CONTINUOUSLY REMOVED PROMPTLY REMOVED AT THE END OF EACH WORK DAY. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF AND ALL PAVED AREAS SHALL BE CLEANED.
- THE LANDSCAPE CONTRACTOR SHALL DISPOSE OF ALL RUBBISH AND EXCESS SOIL AT HIS EXPENSE TO AN OFF-SITE LOCATION AS APPROVED BY THE LOCAL MUNICIPALITY.
- 90-DAY MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER ALL PLANTS HAVE BEEN SATISFACTORILY INSTALLED.
- MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS IF ORIGINALLY REQUIRED, WATERING WHEN NEEDED OR DIRECTED, WEEDING, PRUNING, SPRAYING, FERTILIZING, MOWING THE LAWN, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
- MOW ALL GRASS AREAS AT REGULAR INTERVALS TO KEEP THE GRASS HEIGHT FROM EXCEEDING THREE INCHES (3"). MOWING SHALL BE PERFORMED ONLY WHEN GRASS IS DRY. MOWER BLADE SHALL BE SET TO REMOVE NO MORE THAN ONE THIRD (1/3) OF THE GRASS LENGTH. WHEN THE AMOUNT OF GRASS IS HEAVY, IT SHALL BE REMOVED TO PREVENT DESTRUCTION OF THE UNDERLYING TURF. MOW GRASS AREAS IN SUCH A MANNER AS TO PREVENT CLIPPINGS FROM BLOWING ON PAVED AREAS, AND SIDEWALKS. CLEANUP AFTER MOWING SHALL INCLUDE SWEEPING OR BLOWING OF PAVED AREAS AND SIDEWALKS TO CLEAR THEM FROM MOWING DEBRIS.
- GRASSED AREAS DAMAGED DURING THE PROCESS OF THE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL RESTORE THE DISTURBED AREAS TO A CONDITION SATISFACTORY TO THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE. THIS MAY INCLUDE FILLING TO GRADE, FERTILIZING, SEEDING, AND MULCHING.
- SHOULD THE OWNER REQUIRE MAINTENANCE BEYOND THE STANDARD 90-DAY MAINTENANCE PERIOD, A SEPARATE CONTRACT SHALL BE ESTABLISHED.
- LANDSCAPE CONTRACTOR SHALL WATER NEW PLANTINGS FROM TIME OF INSTALL AND THROUGHOUT REQUIRED 90-DAY MAINTENANCE PERIOD UNTIL PLANTS ARE ESTABLISHED. IF ON-SITE WATER IS NOT AVAILABLE AT THE PROJECT LOCATION, THE LANDSCAPE CONTRACTOR SHALL FURNISH IT BY MEANS OR A WATERING TRUCK OR OTHER ACCEPTABLE MANNER.
- THE QUANTITY OF WATER APPLIED AT ONE TIME SHALL BE SUFFICIENT TO PENETRATE THE SOIL TO A MINIMUM OF EIGHT INCHES (8") IN SHRUB BEDS AND SIX INCHES (6") IN TURF AREAS AT A RATE WHICH WILL PREVENT SATURATION OF THE SOIL.
- IF AN AUTOMATIC IRRIGATION SYSTEM HAS BEEN INSTALLED, IT CAN BE USED FOR WATERING PLANT MATERIAL. HOWEVER, FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY OF PLANT HEALTH AND ESTABLISHMENT.

PLANT MATERIAL GUARANTEE NOTES:

- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (1 YR.) FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE.
- THE LANDSCAPE CONTRACTOR SHALL REMOVE AND REPLACE DYING, DEAD, OR DEFECTIVE PLANT MATERIAL AT HIS EXPENSE. THE LANDSCAPE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS COMPANY'S OPERATIONS.
- ALL REPLACEMENT PLANTS SHALL BE OF THE SAME SPECIES AND SIZE AS SPECIFIED ON THE APPROVED OR FINAL PLANT LIST. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTALMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
- THE CONTRACTOR SHALL INSTRUCT THE OWNER AS TO THE PROPER CARE AND MAINTENANCE OF ALL PLANTINGS.

LAWN (SEED OR SOD) NOTES:

- SEED MIXTURE SHALL BE FRESH, CLEAN, NEW CROP SEED. SOD SHALL BE STRONGLY ROOTED, UNIFORM IN THICKNESS, AND FREE OF WEEDS, DISEASE, AND PESTS.
- SEED OR SOD SHALL BE PURCHASED FROM A RECOGNIZED DISTRIBUTOR AND SHALL BE COMPOSED OF THE MIX OR BLEND WITHIN THE PROVIDED "SEED SPECIFICATION" OR "SOD SPECIFICATION".
- REFERENCE LANDSCAPE PLAN FOR AREAS TO BE SEED OR LAID WITH SOD.
- SEEDING SHALL NOT BE PERFORMED IN WINDY WEATHER. IF THE SEASON OF THE PROJECT COMPLETION PROHIBITS PERMANENT STABILIZATION, TEMPORARY STABILIZATION SHALL BE PROVIDED IN ACCORDANCE WITH THE "TEMPORARY SEEDING SPECIFICATION".
- PROTECT NEW LAWN AREAS AGAINST TRESPASSING WHILE THE SEED IS GERMINATING. FURNISH AND INSTALL FENCES, SIGNS, BARRIERS OR ANY OTHER NECESSARY TEMPORARY PROTECTIVE DEVICES. DAMAGE RESULTING FROM TRESPASS, EROSION, WASHOUT, SETTLEMENT OR OTHER CAUSES SHALL BE REPAIRED BY THE LANDSCAPE CONTRACTOR AT HIS EXPENSE. REMOVE ALL FENCES, SIGNS, BARRIERS OR OTHER TEMPORARY PROTECTIVE DEVICES ONCE LAWN HAS BEEN ESTABLISHED.

FOR SPECIAL LAND USE APPROVAL	FOR CLIENT REVIEW	DESCRIPTION
NB	KG	BY
01/09/2023	11/13/2023	DATE
2	1	ISSUE

NOT APPROVED FOR CONSTRUCTION

**STONEFIELD**  
engineering & design

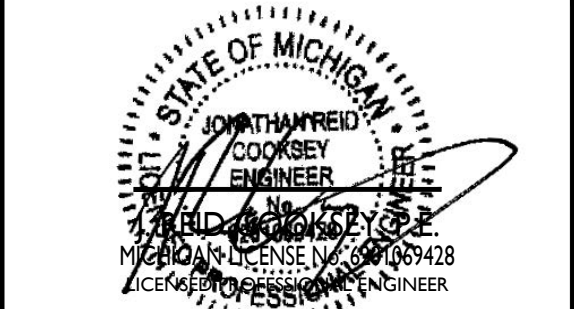
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OAKLAND COUNTY, MICHIGAN



**STONEFIELD**  
engineering & design

SCALE: AS SHOWN PROJECT ID: DET-230258

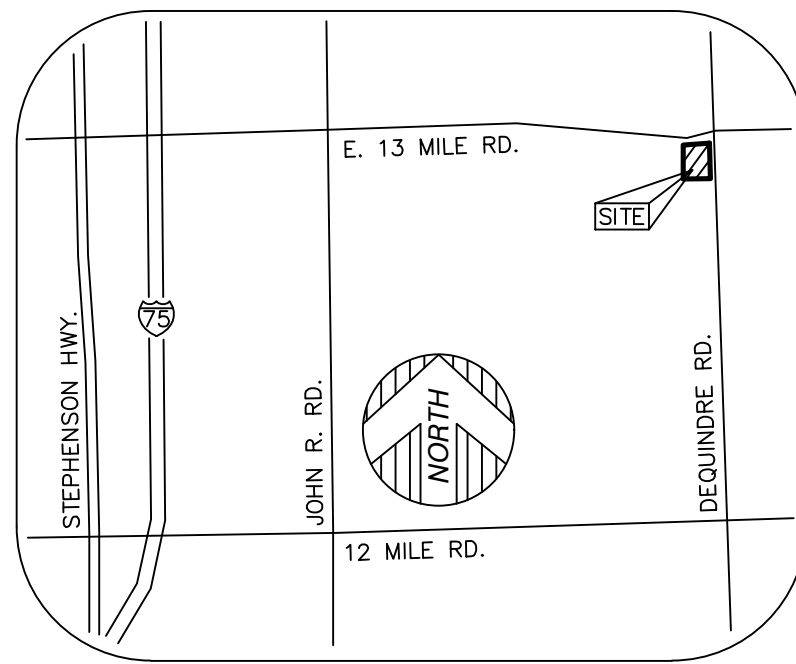
TITLE:

LANDSCAPING DETAILS

DRAWING:

**C-5**





VICINITY MAP  
(NOT TO SCALE)

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NO. 63121731NITS, DATED OCTOBER 5, 2023, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

3. RIGHT-OF-WAY TO THE WALKER RELIEF DRAINS INTER-COUNTY DRAINAGE DISTRICT ACTING THROUGH THE INTER-COUNTY DRAINAGE

BOARD FOR THE WALKER RELIEF DRAINS AS SET FORTH BELOW:  
RECORDING NO: LIBER 5385, PAGE 445. (AS SHOWN)

4. RIGHT(S) OF WAY AND/OR EASEMENT(S) AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CONSUMERS POWER COMPANY (NOW KNOWN AS CONSUMERS ENERGY)  
RECORDING NO: LIBER 7814, PAGE 421. (AS SHOWN)

5. RIGHT-OF-WAY AGREEMENT (FOR INGRESS AND EGRESS) IN FAVOR OF THE CHRISTIAN MISSIONARY ALLIANCE CHURCH ON MADISON HEIGHTS, A MICHIGAN ECCLESIASTICAL CORPORATION, AS SET FORTH BELOW:

RECORDING NO: LIBER 7909, PAGE 7. (AS SHOWN)

6. RIGHT(S) OF WAY AND/OR EASEMENT(S) AND RIGHTS AS GRANTED TO CITY OF MADISON HEIGHTS, IN A DOCUMENT:

RECORDING NO: LIBER 8077, PAGE 378. (AS SHOWN)

7. ANY IRREGULARITIES, RESERVATIONS, EASEMENTS OR OTHER MATTERS IN THE PROCEEDINGS OCCASIONING THE ABANDON OR VACATION OF THE STREET/ROAD SHOWN BELOW:

NAME: THIRTEEN MILE ROAD RIGHT-OF-WAY  
RECORDING NO: LIBER 8084, PAGE 642 AND AMENDED BY LIBER 8128, PAGE 520. (AS SHOWN)

LEGEND

	FOUND MONUMENT (AS NOTED)
	FOUND SECTION CORNER (AS NOTED)
	RECORD AND MEASURED DIMENSION
	RECORD DIMENSION
	MEASURED DIMENSION
	GROUND ELEVATION
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC PANEL
	TRANSFORMER
	UTILITY POLE
	GAS LINE MARKER
	GAS METER
	LIGHT POLE WITH STREET LAMP
	TELEPHONE MANHOLE
	CABLE TV RISER
	TRAFFIC SIGNAL
	TRAFFIC SIGNAL MANHOLE
	CLEANOUT
	SANITARY MANHOLE
	ROUND CATCH BASIN
	SQUARE CATCH BASIN
	STORM DRAIN MANHOLE
	FIRE HYDRANT
	WATER GATE MANHOLE
	WATER VALVE
	UNKNOWN MANHOLE
	BOLLARD
	LIGHTPOST/LAMP POST
	SINGLE POST SIGN
	HANDICAP PARKING
	DECIDUOUS TREE (AS NOTED)
	PARCEL BOUNDARY LINE (AS ASSESSED & SURVEYED)
	PARCEL BOUNDARY LINE (PER TITLE COMMITMENT)
	ADJOINER PARCEL LINE
	SECTION LINE
	EASEMENT (AS NOTED)
	RIGHT-OF-WAY
	BUILDING
	BUILDING OVERHANG
	CONCRETE CURB
	RAISED CONCRETE
	PARKING
	EDGE OF CONCRETE (CONC.)
	EDGE OF ASPHALT (ASPH.)
	FENCE (AS NOTED)
	WALL (AS NOTED)
	OVERHEAD UTILITY LINE
	COMMUNICATION LINE
	GAS LINE
	SANITARY LINE
	STORM LINE
	WATER LINE
	MINOR CONTOUR LINE
	MAJOR CONTOUR LINE
	BUILDING AREA
	ASPHALT
	CONCRETE

SURVEYOR'S NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

BASIS OF BEARING

NORTH 82°47'00" WEST, BEING THE NORTH LINE OF SECTION 12, AS DESCRIBED.

BENCHMARK

SITE BENCHMARK #1  
ARROW ON HYDRANT, AT EAST SIDE OF PROPERTY.  
ELEVATION = 630.12' (NAVD 88)

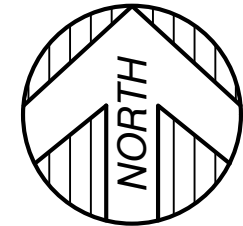
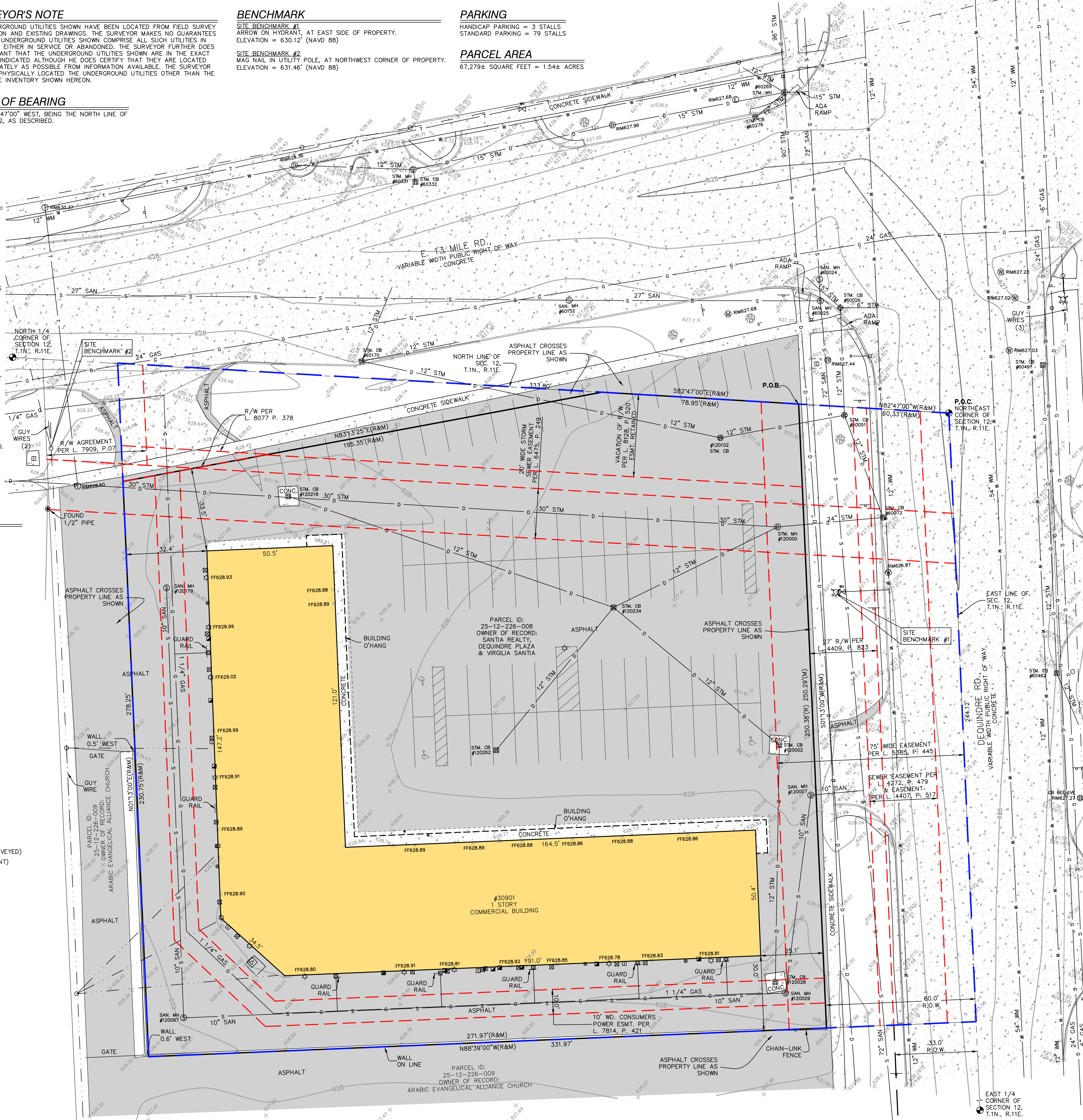
SITE BENCHMARK #2  
NAIL IN UTILITY POLE, AT NORTHWEST CORNER OF PROPERTY.  
ELEVATION = 631.46' (NAVD 88)

PARKING

HANDICAP PARKING = 3 STALLS  
STANDARD PARKING = 79 STALLS

PARCEL AREA

67,279± SQUARE FEET = 1.54± ACRES



GRAPHIC SCALE



(IN FEET)  
1 inch = 20 ft.

PROPERTY DESCRIPTION

LAND SITUATED IN THE STATE OF MICHIGAN, COUNTY OF OAKLAND, CITY OF MADISON HEIGHTS.

PART OF THE NORTHEAST 1/4 OF SECTION 12, TOWN 1 NORTH, RANGE 11 EAST, BEGINNING AT THE NORTHEAST SECTION CORNER, THENCE NORTH 82 DEGREES 47 MINUTES WEST 333.80 FEET; THENCE SOUTH 01 DEGREE 13 MINUTES WEST 278.25 FEET; THENCE SOUTH 88 DEGREES 39 MINUTES EAST 331.97 FEET; THENCE NORTH 01 DEGREE 13 MINUTES EAST 244.12 FEET TO THE POINT OF BEGINNING. SUBJECT TO THE RIGHTS OF THE PUBLIC AND OF ANY GOVERNMENTAL UNIT IN ANY PART THEREOF TAKEN, USED OR DEEDED FOR STREET, ROAD OR HIGHWAY PURPOSES.

ASSESSED AS:

PART OF THE NORTHEAST 1/4 OF SECTION 12, TOWN 1 NORTH, RANGE 11 EAST, DESCRIBED AS BEGINNING AT A POINT DISTANT NORTH 82 DEGREES 47'00" WEST 60.33 FEET FROM THE NORTHEAST SECTION CORNER; THENCE SOUTH 01 DEGREE 13'00" WEST 250.38 FEET; THENCE NORTH 88 DEGREES 39'00" WEST 271.97 FEET; THENCE NORTH 01 DEGREE 13'00" EAST 195.35 FEET; THENCE SOUTH 82 DEGREES 47'00" EAST 78.95 FEET TO THE POINT OF BEGINNING.

MANHOLE SCHEDULE

NUM	TYPE	RIM (FT)	SIZE (IN)	DIR	INV	ELEV (FT)
60024	SANITARY MANHOLE	627.24	T/DEBRIS			620.29
60025	SANITARY MANHOLE	627.28	72	S		604.14
		627.28	27	W		604.37
		627.28	72	N		604.48
60026	CATCH BASIN	626.62	15	NW		620.32
		626.62	6	E		624.62
60051	CATCH BASIN	627.22	12	SE		622.42
60072	CATCH BASIN	626.92	24	W		617.82
		626.92	12	N		621.57
		626.92	12	E		621.02
60152	SANITARY MANHOLE	627.52	27	NW		606.52
		627.52	27	SE		606.57
60170	CATCH BASIN	628.02	12	ESE		622.22
		628.02	12	NE		624.12
		628.02	12	E		624.12
60269	STORM MANHOLE	627.42	12	NW		620.22
		627.42	12	SW		622.17
		627.42	15	E		621.22
		627.42	96	N		609.72
		627.42	90	S		609.72
60276	CATCH BASIN	626.89	12	NE		622.49
60331	STORM MANHOLE	627.94	15	NW		623.64
		627.94	15	NE		623.69
		627.94	12	S		623.79
60332	CATCH BASIN	627.87				COULD NOT OPEN
60462	CATCH BASIN	627.02	12	SSE		623.62
		627.02	12	N		623.17
		626.66	12	S		620.56
60491	CATCH BASIN	626.66	6	S		620.56
120000	STORM MANHOLE	627.81	12	SW		618.36
		627.81	24	E		613.96
		627.81	30	W		614.01
120002	CATCH BASIN	627.34	12	S		621.69
120007	SANITARY MANHOLE	627.34	12	NW		621.54
120007	SANITARY MANHOLE	627.98	10	E		618.98
120007	SANITARY MANHOLE	627.98	10	S		618.98
120028	CATCH BASIN	627.25	12	N		622.65
120029	SANITARY MANHOLE	627.35	10	W		619.55
120029	SANITARY MANHOLE	627.35	10	N		619.55
120097	SANITARY MANHOLE	628.94	10	E		620.79
		628.94	10	N		620.89
120102	CATCH BASIN	627.15	12	W		620.30
		627.15	12	E		619.45
120179	SANITARY MANHOLE	627.84	10	S		621.59
120218	CATCH BASIN	627.12	12	SE		620.52
120234	CATCH BASIN	627.20	12	SE		620.80
		627.20	12	SW		620.80
		627.20	12	NW		619.20
		627.20	12	NE		618.90
		627.20	8	S		625.00
120262	CATCH BASIN	627.38	12	NE		621.38

FLOOD NOTE

SUBJECT PARCEL LIES WITHIN:

OTHER AREA (ZONE X): AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON FLOOD INSURANCE RATE MAP: MAP NUMBER 261250C564F, DATED 9/29/2006, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

SURVEYOR'S CERTIFICATION

TO OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY; NORTHWEST TITLE FAMILY OF COMPANIES, INC.; AND MC DEVELOPMENT HOLDINGS, LLC:

THIS IS TO CERTIFY THAT THIS MAP OR PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 7A, 8, 9, 11A, AND 11B OF TABLE A, THEREOF, THE FIELD WORK WAS COMPLETED ON 08/08/23.

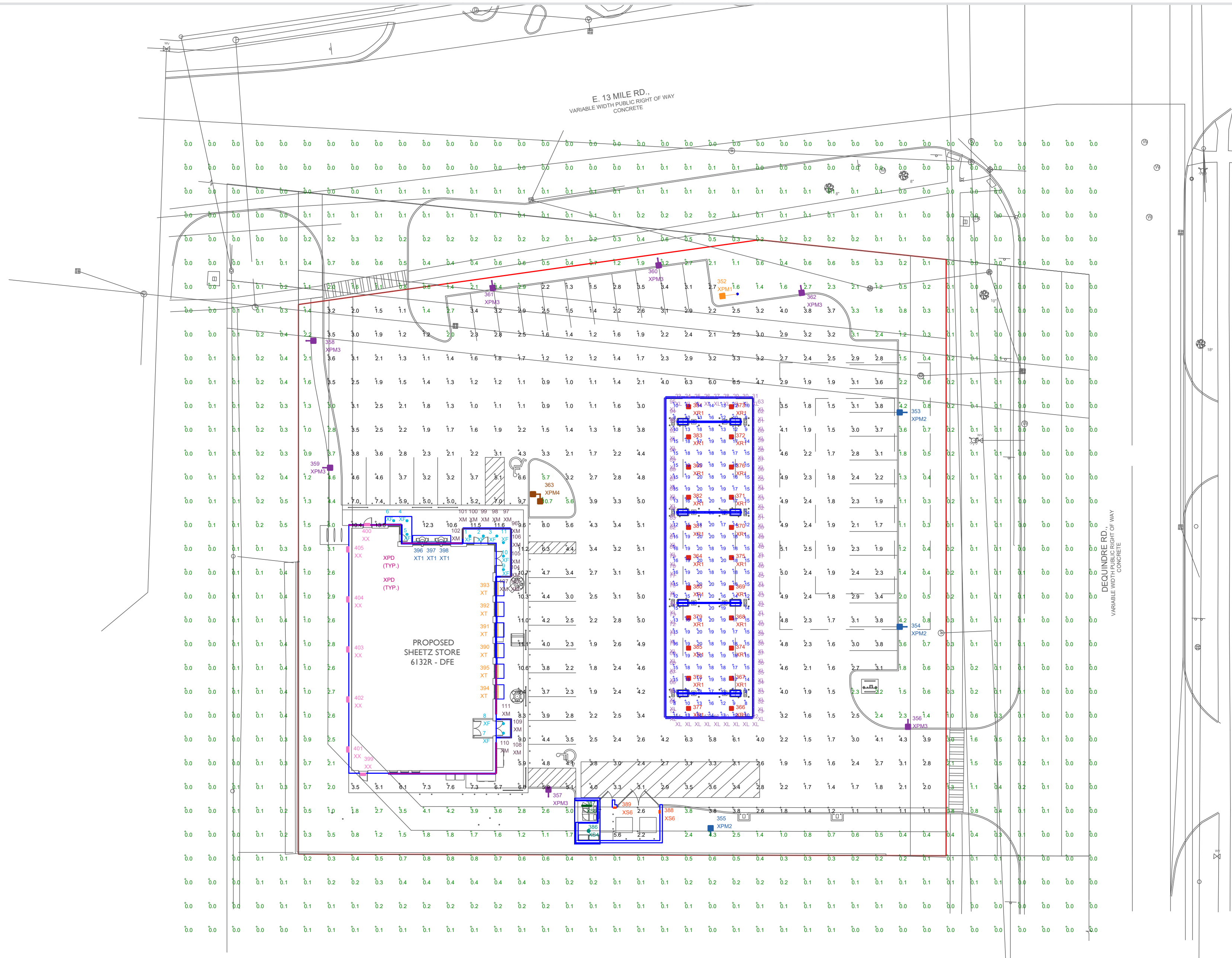
DATE OF PLAT OR MAP: 08/28/23

ANTHONY T. SYCKO, JR., P.S.  
PROFESSIONAL SURVEYOR  
MICHIGAN LICENSE NO. 47978  
22556 GRATIOT AVE., EASTPOINTE, MI 48021  
TSycko@kemttec-survey.com



DATE	08/18/23	DATE	08/28/23	DATE	AUGUST 28, 2023	SCALE	1" = 20'
CHECKED BY	ATS	CHECKED BY	ATS	CHECKED BY	ATS	CHECKED BY	ATS
PROJECT NO.	23-01671	PROJECT NO.	23-01671	PROJECT NO.	23-01671	PROJECT NO.	23-01671
REVISION	1	REVISION	1	REVISION	1	REVISION	1
DATE	08/18/23	DATE	08/28/23	DATE	AUGUST 28, 2023	DATE	AUGUST 28, 2023
BY	LU	BY	ATS	BY	ATS	BY	ATS





LUMINAIRE LOCATION SUMMARY			
LUM NO.	LABEL	MTG. HT.	TILT
1 - 11	XF	11.33	0
12	XL	17.887	0
13	XL	21.079	0
14	XL	18.062	5
15	XL	18.415	5
16	XL	18.77	5
17	XL	19.123	5
18	XL	19.476	5
19	XL	19.83	5
20	XL	20.183	5
21	XL	20.537	5
22	XL	20.89	5
23	XL	18.062	5
24	XL	18.415	5
25	XL	18.77	5
26	XL	19.123	5
27	XL	19.476	5
28	XL	19.83	5
29	XL	20.183	5
30	XL	20.537	5
31	XL	20.89	5
32 - 63	XL	21.079	0
64 - 95	XL	17.887	0
96 - 111	XM	12	0
112 - 275	XP	18	0
276 - 351	XPD	18	0
352	XPM1	1	169
353 - 355	XPM2	20	0
356 - 362	XPM3	20	0
363	XPM4	20	0
364, 365	XR1	17.45	0
366 - 376	XR1	19.02	0
377 - 385	XR1	17.45	0
386	XS4	8.25	-5
387	XS5	9.08	0
388, 389	XS6	6.5	90
390 - 395	XT	13.5	0
396 - 399	XT1	13.5	0
400	XX	11.333	0
401 - 405	XX	15.5	0

NOTE:  
- ALL AREA LIGHTS ON NEW 17 FT. POLE MOUNTED ON 3 FT. CONCRETE BASE

THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS  
REGULATED BY LOCAL ORDINANCES

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	11	XF	SINGLE	1037	1.000	B1-U0-G0	13	143	LF ILLUMINATION LLC (LEDL)	BULLET MINI-5911-1AA-T-13C-9230-M-DMU-BLACK COLOR 90CRI
	84	XL	SINGLE	136	1.000	N.A.	4.12	346.08	BLAIR COMPANIES	4 FT. LINEAR STRIP LIGHT (BY OTHERS, SHOWN FOR CONTRIBUTION)
	16	XM	SINGLE	136	0.700	N.A.	4.12	65.92	BLAIR COMPANIES	LB-110-00-XX-025-RD[1]FR4-15 (BY OTHERS, SHOWN FOR CONTRIBUTION)
	164	XP	SINGLE	305	1.000	N.A.	3.66	600.24	P-LED	STREET WRAP FLEX BACK BEND 4000K (3000K REQUIRED, VERIFY AVAILABILITY)
	76	XPD	SINGLE	25	1.000	N.A.	0.305	23.18	P-LED	STREET WRAP FLEX BACK BEND 4000K (3000K REQUIRED, VERIFY AVAILABILITY)
	1	XPM1	SINGLE	10550	1.020	B4-U0-G1	68	68	CREE LIGHTING	OSQM-ML-C-AA-XX w/PGM-1 + OSQM-C-11L-30K7-33-UL-NM-XX
	3	XPM2	SINGLE	6900	1.020	B1-U0-G2	68	204	CREE LIGHTING	OSQM-ML-C-DA-XX + OSQM-C-11L-30K7-3B-UL-NM-XX
	7	XPM3	SINGLE	6325	1.020	B1-U0-G1	68	476	CREE LIGHTING	OSQM-ML-C-DA-XX + OSQM-C-11L-30K7-4B-UL-NM-XX
	1	XPM4	2 @ 90 DEGREES	10025	1.020	B2-U0-G2	68	136	CREE LIGHTING	OSQM-ML-C-DA-XX + OSQM-C-11L-30K7-4M-UL-NM-XX
	22	XR1	SINGLE	5500	1.020	B2-U2-G1	36	792	CREE LIGHTING	CP5-8L-30K8-DF-UL-DM-XX-Q4-HZ
	1	XS4	SINGLE	2230	1.000	B1-U1-G0	20	20	HE WILLIAMS	WLRD-O-L22-830-BZ-OCC-S2X
	1	XS5	SINGLE	3004	1.000	B1-U3-G1	19.7	19.7	HE WILLIAMS	75S-4-L30-830-DIM-UNV
	2	XS6	SINGLE	1858	1.000	B1-U1-G0	20	40	HE WILLIAMS	WLRD-C-L22-830-BZ-OCC-S2X
	6	XT	SINGLE	1840	1.000	N.A.	20	120	SPI LIGHTING INC.	SEW12146 I 5FT-L20W[AN08] I120-277V I 3000K I SMA (12IN PROJECTION STEM, BLACK, 80CRI)
	3	XT1	SINGLE	1472	1.000	N.A.	16	48	SPI LIGHTING INC.	SEW12146 I 4FT-L16W[AN08] I 120-277V I 3000K I SMA (12IN PROJECTION STEM, BLACK, 80CRI)
	7	XX	SINGLE	1921	1.000	B1-U0-G0	16	112	WILLIAMS OUTDOOR	VWM-H-L17/830-TL-DBZ-CGL-DIM-UNV (BRONZE COLOR 80CRI)

ILLUMINATION LEVELS ARE THE RESULT OF CONDITIONS OR REQUESTS BY OTHERS  
RED LEONARD ASSOCIATES IS NOT RESPONSIBLE  
FOR INCIDENTS CAUSED BY INSUFFICIENT LIGHTING  
AND DOES NOT RECOMMEND THESE LEVELS FOR  
SECURITY AND SAFETY REASONS

OWNER/OWNER'S REPRESENTATIVE TO ADJUST DRIVE  
CURRENT ON FIXTURE XR1 VIA DIAL ACCESSED IN  
DRIVER ENCLOSURE TO SWITCH POSITION NOTED IN  
CATALOG LOGIC COLUMN OF LUMINAIRE SCHEDULE

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
SITE PAVED AREA	3.34	13.6	0.9	3.71	15.11
UNDEFINED	0.45	10.7	0.0	N.A.	N.A.
UNDER CANOPY	16.10	20	8	2.01	2.50



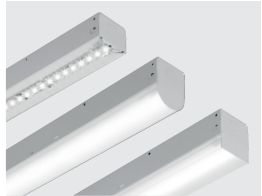




QTY	LABEL	DESCRIPTION
1	XS5	75S-4-L30-830-DIM-UNV



## 75 LED Narrow Strip



- Small form profile allows inconspicuous placement in cove or confined spaces
- Round end square viewed feature provides a clean look for architectural environments
- Non application specific illumination; light with minimal interruption between fixtures
- Diffuse acrylic lens on 75S and 75S enhances uniformity and minimizes glare
- Variety of mounting accessories for surface and suspended applications
- Special effects are available to provide precise light distribution (75 only)
- High performance up to 964 lm/W
- Available on QuickShip
- Works in fixture control systems available
- Made Right Here® in the USA

## SPECIFICATIONS

- HOUSING – 22 gauge die-formed 3.5, FR-4® – 35% minimum average effective white light output per foot delivered to photometric view, multi-stage preheated (75S) All parts coated after fabrication to facilitate installation, increase efficiency, and extend corrosion.
- ELECTRICAL – High quality mid power LED based. See fixture performance data and operating temperature, 40°C (104°F)
- WARRANTY – 5 year limited warranty, see Newcomer warranty

- LISTINGS – ETL certified to UL STD E86, Certified to UL CAN CSA C22.2 No. 200.5 Suitable for damp locations

- QUICKSHIP – 10 business days

- WARRANTY – 5 year limited warranty, see Newcomer warranty

- DESIGNED AND MANUFACTURED IN THE USA

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QTY	LABEL	DESCRIPTION
6	XT	SEW12146 I 6FT-L20W[AN08] I120-277V I 3000K I SMA (12IN PROJECTION STEM, BLACK, 80CR)



## Styk Exterior Wall - Stem

SEW12146 2 in

JOB NAME: SHEETZ  
TYPE:  
NOTES:

ORDERING CODE: SEW12146 I 5FT-L20W[AN08] I 120-277V I 4000K I SMA

Please Note: Default specifications "DF\_XXX" will not appear in the ordering code.

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QTY	LABEL	DESCRIPTION
7	XX	VWM-H-L17/830-TL-DB2-CGL-DIM-UNV (BRONZE COLOR 80CR)



## Shimstone Design Studio LIGHTING DESIGN

JOB NAME: SHEETZ  
TYPE:  
NOTES:

ORDERING CODE: SEW12146 I 5FT-L20W[AN08] I 120-277V I 4000K I SMA

Please Note: Default specifications "DF\_XXX" will not appear in the ordering code.

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### SHEETZ 2.0

JOB NAME: SHEETZ  
TYPE:  
NOTES:

ORDERING CODE: SEW12146 I 5FT-L20W[AN08] I 120-277V I 4000K I SMA

Please Note: Default specifications "DF\_XXX" will not appear in the ordering code.

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1340 Kemper Meadow Dr. Forest Park, OH 45420  
513-674-9500 | redleonard.com



PROJECT NAME:  
**SHEETZ**  
**MADISON HEIGHTS, MI**  
DRAWING NUMBER:  
**RL-9432-S1**





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DOWNLIGHT





STREET WRAP





AREA/FLOOD




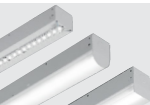
CANOPY





WALL MOUNTED



LINEAR



WALL MOUNTED



WALL MOUNTED

