

**PREPARED FOR:**

Ted Lott  
Lott 3 Metz Architecture

645 Cherry Street SE  
Grand Rapids, MI 49503  
Phone: 616.454.5175

**REVISIONS:**

|                                 |              |                 |
|---------------------------------|--------------|-----------------|
| Title: CITY SITE PLAN SUBMITTAL |              | V. Date: 09.16. |
| Drawn: BMS                      | Checked: RJB | S. Date: 09.16. |
| Title: LUDS SUBMITTAL           |              | V. Date: 01.11. |
| Drawn: BMS                      | Checked: RJB | S. Date: 01.11. |
| Title: PLAN UPDATE              |              | V. Date: 01.16. |
| Drawn: LRS                      | Checked: RJB | S. Date: 01.16. |
| Title: LUDS RE-SUBMITTAL        |              | V. Date: 04.05. |
| Drawn: BMS                      | Checked: RJB | S. Date: 04.05. |

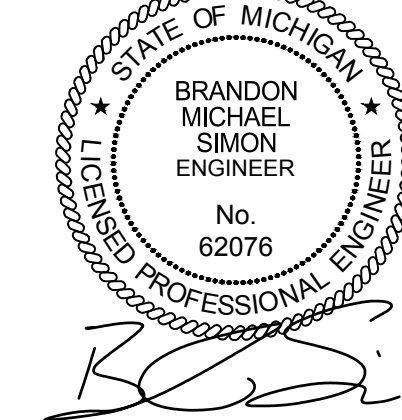
**2115 Plainfield**

**Existing Site Conditions Plan**

2115 Plainfield Ave NE Grand Rapids, MI 49505

PART OF THE SOUTHEAST 1/4 OF SECTION 7, T7N, R17W,  
CITY OF GRAND RAPIDS, KENT COUNTY, MICHIGAN

**STAMP:**



**PROJECT NO:**

16400859

**SHEET NO:**

**C-201**

**STRUCTURE INFORMATION**

**SAN MH #43**  
Rim Elev. = 692.21  
10" Clay Inv NE-SW = 682.24

**SAN MH #163**  
Rim Elev. = 693.72  
10" Inv NE-SW = 683.28  
10" Inv NW = 684.97

**STM MH #164**  
Rim Elev. = 693.97  
12" Conc Inv NW = 687.32  
30" Conc Inv SW = 686.81  
24" Conc Inv NE = 686.79

**CB #166**  
Rim Elev. = 691.51  
6" CPP Inv NE = 687.81  
5" PVC Inv NE = 680.05  
5" Steel Inv SE = 689.08

**STM MH #167**  
Rim Elev. = 691.78  
12" Conc Inv NW = 685.62  
30" Conc Inv NE-SW = 688.33

**SAN MH #168**  
Rim Elev. = 691.86  
10" Inv NE-SW = 682.00  
10" Inv NW = 683.44

**CB #170**  
Rim Elev. = 691.23  
6" CPP Inv NE = 687.73  
Water at 688.13

**SAN MH #199**  
Rim Elev. = 696.06  
12" Clay Inv N = 686.96  
12" Clay Inv SE = 686.70  
12" Clay Inv W = 686.68

**CB #327**  
Rim Elev. = 695.41  
8" Conc Inv NE = 690.58

**4" CB #436**  
Rim Elev. = 69693.39  
Full of debris

**BENCHMARKS**

**BENCHMARK #4** ELEV. = 695.25 (NAVD 88)

Set spindle in Northerly side of utility pole (0.8'± above ground level), located 15'± Southerly of centerline of Julia Street and 100'± Westerly from back of walk on Westerly side of Plainfield Avenue.

**BENCHMARK #5** ELEV. = 692.83 (NAVD 88)

Set spindle in Westerly side of utility pole (0.7'± above ground level), located 24'± Westerly of centerline of Plainfield Avenue and 86'± Northerly from back of walk on Northerly side of Julia Street.

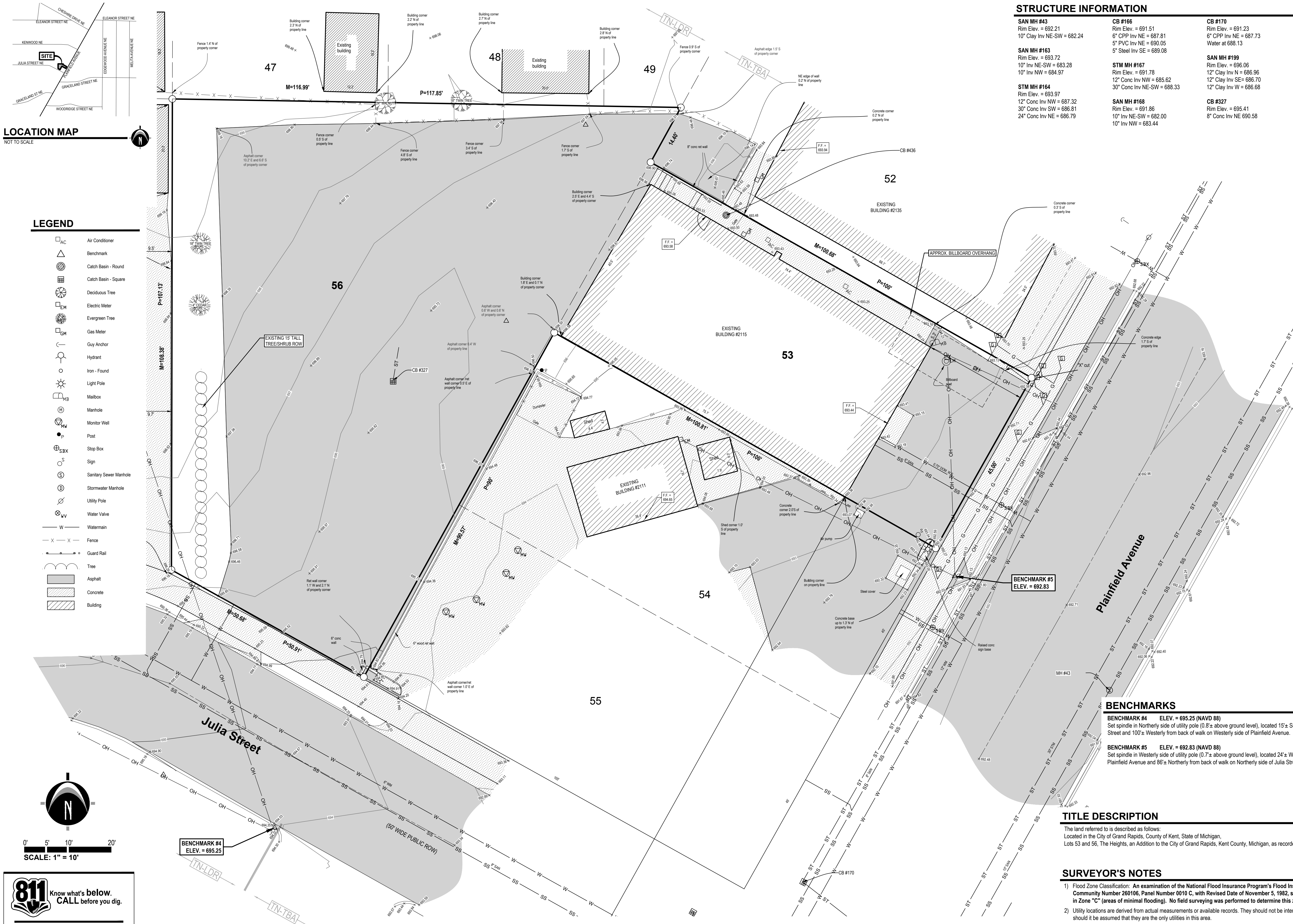
**TITLE DESCRIPTION**

The land referred to is described as follows:

Located in the City of Grand Rapids, County of Kent, State of Michigan,  
Lots 53 and 56, The Heights, an Addition to the City of Grand Rapids, Kent County, Michigan, as recorded in Liber 21 of Plats, Page 12.

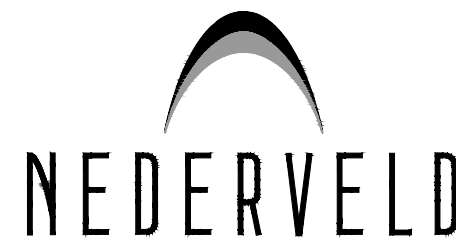
**SURVEYOR'S NOTES**

- Flood Zone Classification: An examination of the National Flood Insurance Program's Flood Insurance Rate Map for Community Number 260106, Panel Number 0010 C, with Revised Date of November 5, 1982, shows this parcel to be located in Zone "C" (areas of minimal flooding). No field surveying was performed to determine this zone.
- Utility locations are derived from actual measurements or available records. They should not be interpreted to be exact locations nor should it be assumed that they are the only utilities in this area.
- NOTE TO CONTRACTORS: 3 (THREE) WORKING DAYS BEFORE YOU DIG, CALL MISS DIG AT TOLL FREE 1-800-482-7171 FOR UTILITY LOCATIONS ON THE GROUND.



UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

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www.nederveld.com  
800.222.1868

## GRAND RAPIDS

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## 2115 Plainfield

## Demolition Plan

2115 Plainfield Ave NE Grand Rapids, MI 49505

PART OF THE SOUTHEAST 1/4 OF SECTION 7, T7N, R1W,  
CITY OF GRAND RAPIDS, KENT COUNTY, MICHIGAN

## STAMP:

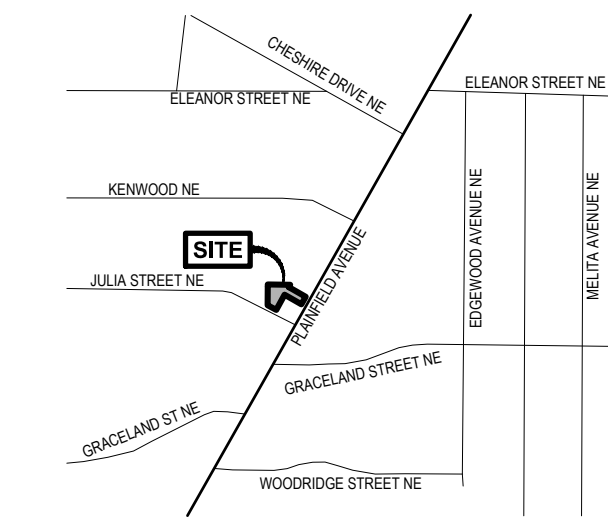


## PROJECT NO:

16400859

## SHEET NO:

C-203



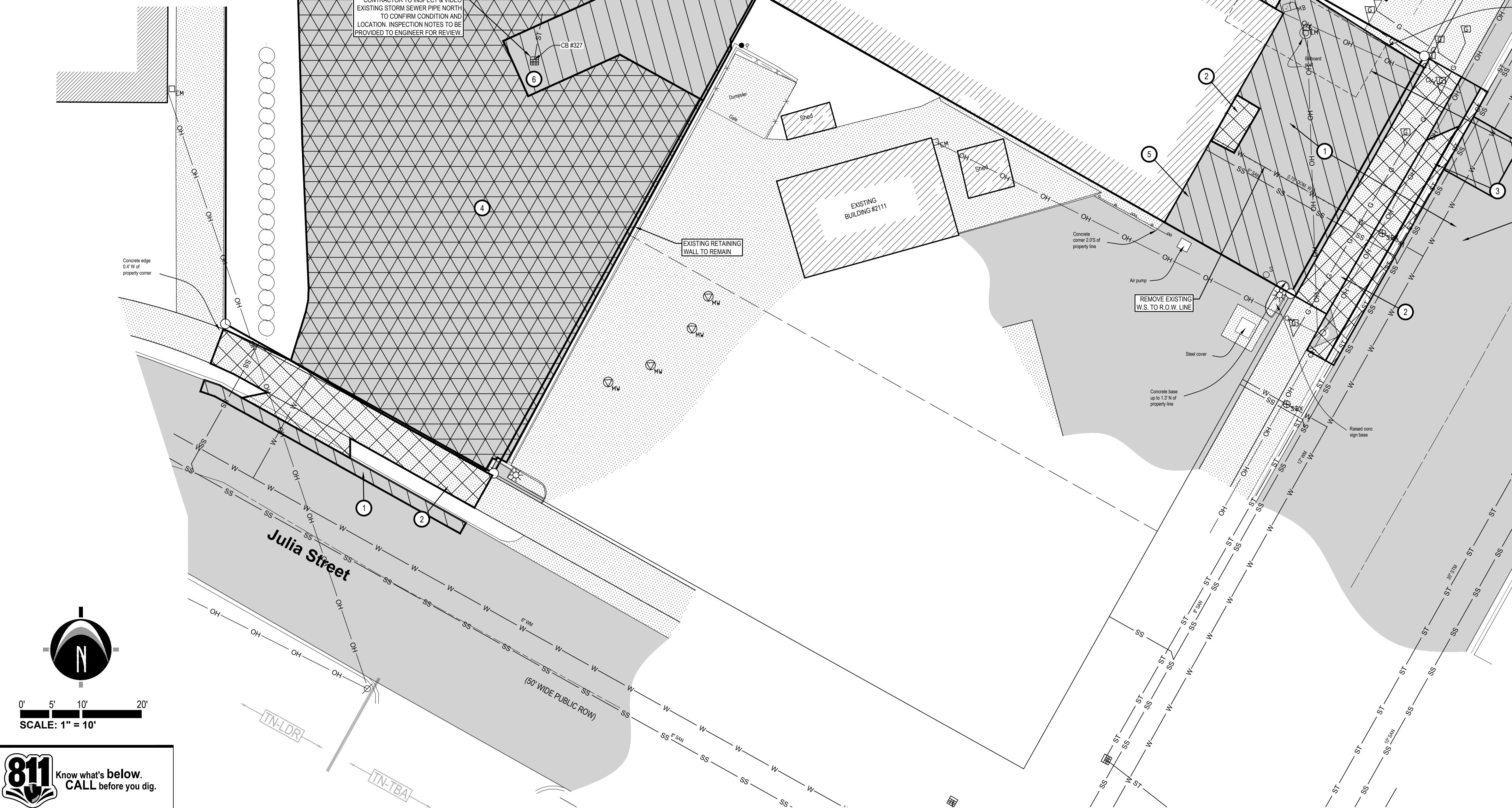
## LOCATION MAP

NOT TO SCALE



## LEGEND

- EXISTING GRADE CONTOUR
- EXISTING FULL DEPTH BITUMINOUS REMOVAL
- EXISTING CONCRETE REMOVAL
- EXISTING BITUMINOUS MILL & OVERLAY (1.5" MILL)
- EXISTING UTILITY LINE REMOVAL

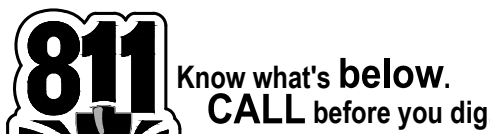


## REMOVAL / DEMOLITION NOTES

- 1 REMOVE EXISTING CONCRETE CURB & GUTTER
- 2 REMOVE CONCRETE SIDEWALK
- 3 REMOVE EXISTING CONCRETE DRIVEWAY
- 4 MILL 1.5" OF EXISTING PAVEMENT
- 5 REMOVE EXISTING BITUMINOUS PAVEMENT
- 6 REMOVE EXISTING STORM WATER STRUCTURE

## REMOVAL / DEMOLITION NOTES

- 1) THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AT LEAST THREE WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THERE ARE EXISTING UNDERGROUND UTILITIES WHICH CROSS THE PROPOSED REPLACEMENT WORK AREAS. ALTHOUGH THEIR EXACT LOCATION CANNOT BE DETERMINED, IT IS KNOWN THESE UTILITIES ARE LOCATED WHERE DIGGING IS REQUIRED. THE CONTRACTOR SHALL CONDUCT THE REQUIRED EXCAVATION IN THESE AREAS WITH EXTREME CAUTION.
- 2) ALL EXISTING UTILITY INFORMATION SHOWN IS TAKEN FROM EXISTING RECORDS, AND FIELD VERIFIED WHERE ACCESSIBLE ONLY. INFORMATION OBTAINED FROM EXISTING RECORDS MAY NOT BE COMPLETE OR ACCURATE. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY FOR ACCURACY, LOCATION AND CONDITION.
- 3) BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY AND BY THE OWNER, REPRESENTATIVES OF THE CITY, THE OWNER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING UTILITIES AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS AND EXISTING VIDEO TAPES. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE CONTRACTOR.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION WORK.
- 5) ALL EXISTING UTILITIES, SEWERS AND WATER LINES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES, MUNICIPALITIES AND AGENCIES BEFORE COMMENCING ANY WORK.
- 6) THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING POLES, OVERHEAD WIRES, UNDERGROUND UTILITIES, GUY WIRES, GAS LINES, ETC. ALL ADJUSTMENT OR RECONSTRUCTION WORK, EXCEPT FOR THOSE STRUCTURES OTHERWISE NOTED ON THE PLANS, SHALL BE PERFORMED BY THE CONTRACTOR. EXISTING APPURTENANCES SUCH AS UTILITY POLES AND VALVES BOX SHALL NOT BE DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION.
- 7) THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL ADJOINING PROPERTIES.
- 8) ALL DEBRIS SHALL BE REMOVED FROM THE SITE, AND NO STOCKPILES ON SITE SHALL BE ALLOWED UNLESS APPROVED BY THE OWNER OR THEIR REPRESENTATIVES.
- 9) THE CONTRACTOR SHALL LIMIT SAWCUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE REQUIRED OR AS SHOWN. IF ANY DAMAGE IS INCURRED TO ANY OF THE SURROUNDING PAVEMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR AT NO ADDITIONAL COST TO ANYONE ELSE, INCLUDING THE CITY OR OWNER.
- 10) ASPHALT AREAS SHOWN TO BE SAWCUT AND REMOVED FULL DEPTH ARE ACTUAL FACE OF PROPOSED CURBS. IT WILL BE NECESSARY TO MAKE OFF-SET SAWCUTS TO PROVIDE CLEARANCE FOR PROPOSED CURBS. THE CONTRACTOR SHALL DETERMINE THE AMOUNT OF OFF-SET NECESSARY TO CONSTRUCT THE PROPOSED CURBS. ADDITIONAL CUTS MAY BE DESIRED TO FACILITATE THE REMOVAL OF THE EXISTING PAVEMENT, BUT THERE WILL BE NO EXTRA PAYMENT FOR ADDITIONAL CUTS. PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE REMAINING PAVEMENT. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL FULL DEPTH SAWCUTS AND REMOVE THE DAMAGE AREAS AS NECESSARY.



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

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| Title: LUDS RE-SUBMITTAL        | V. Date: 04.05.17 |
| Drawn: BMS                      | Checked: RJB      |

**2115 Plainfield**

**Site Layout Plan**

2115 Plainfield Ave NE Grand Rapids, MI 49505  
PART OF THE SOUTHEAST 1/4 OF SECTION 7, T7N, R11W,  
CITY OF GRAND RAPIDS, KENT COUNTY, MICHIGAN

**STAMP:**



**PROJECT NO:**

16400859

**SHEET NO:**

**C-205**

**GENERAL NOTES**

- ZONING OF PROPERTY: TN-TBA TRADITIONAL BUSINESS DISTRICT (PARKING AREA = TN-LDR)  
TN-TBA ZONING REQUIREMENTS:  
A) MINIMUM LOT AREA = 3,000 SQ. FT.  
B) MINIMUM LOT WIDTH = 36 FT.  
C) MAXIMUM BUILDING HEIGHT = 45 FT OR 3 STORIES  
D) MAXIMUM LOT COVERAGE = 90%  
SETBACKS:  
A) FRONT YARD = N/A FT.  
B) SIDE YARD = 10 FT.  
C) REAR YARD = 18 FT.  
2) SUMMARY OF LAND USE:  
A) TOTAL ACREAGE = 0.34 ACRES (14,660 SQ. FT.) (EXCLUDING R.O.W.)  
B) AREA OF PROPOSED BUILDING = 2,980 SQ. FT.  
C) BUILDING HEIGHT APPROX. 20 FT.  
D) BUILDING LOT COVERAGE = 20.3%  
E) IMPERVIOUS LOT COVERAGE = 84.1%  
F) PREVIOUS LOT COVERAGE (INCLUDING PERVIOUS PATIO) = 15.9%  
G) GREEN SPACE = 1,735 S.F. (NOT INCLUDING PERVIOUS PATIO) = 11.8%  
H) ZONING OF PARCELS TO SOUTH-EAST AND WEST = TN-TBA  
ZONING OF PARCELS TO NORTH AND EAST = TN-LDR  
3) PARKING REQUIREMENTS:  
A) MINIMUM REQUIRED SPACE PER CITY = 8.5x18' (22' AISLE)  
B) TYPICAL PARKING SPACE PROVIDED = 9x18' (24' AISLE)  
C) TYPICAL BARRIER FREE SPACE = 13x18'  
D) NUMBER OF SPACES REQUIRED = 32 (BASED ON .753 OCCUPANCY W/ 127 OCCUPANCY)  
E) NUMBER OF SPACES PROVIDED = 19  
4) THIS PROJECT IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN, BASED ON THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAPS  
5) BEST MANAGEMENT PRACTICES WILL BE UTILIZED DURING AND AFTER CONSTRUCTION OF THE PROJECT. MEASURES WILL INCLUDE THE USE OF SEEDING AND MULCHING, SEDIMENT INLET FILTERS, COMPACTION AND PAVING. THE OWNER OF THE SUBJECT PARCEL SHALL HAVE THE RESPONSIBILITY TO MAINTAIN THE PERMANENT SOIL EROSION PROTECTION MEASURES.  
6) UTILITIES SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.  
7) THE PERMANENT PARCEL NUMBER FOR THE SITE IS 41-14-07-453-036.  
THE ADDRESS OF THE PROPERTY IS 2115 PLAINFIELD AVE. NE.

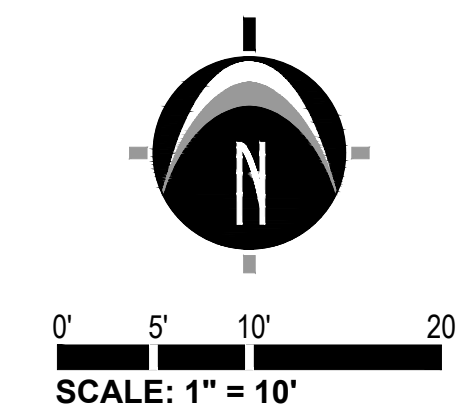


**LOCATION MAP**

NOT TO SCALE

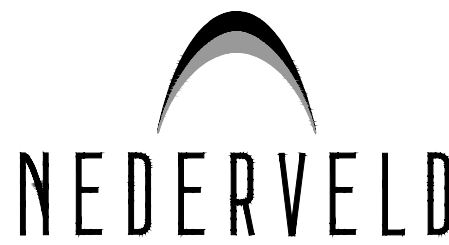
**LEGEND**

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED 1.5" OVERLAY BITUMINOUS (STD. DUTY)
- PROPOSED FULL DEPTH BITUMINOUS (STD. DUTY)
- PROPOSED CONCRETE (STANDARD DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)
- PROPOSED POROUS PAVER PATIO



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| Title: LUDS RE-SUBMITTAL        | V. Date: 04.05.17 |
| Drawn: BMS                      | Checked: RJB      |

## 2115 Plainfield

## S.E.S.C. &amp; Grading Plan

2115 Plainfield Ave NE Grand Rapids, MI 49505

PART OF THE SOUTHEAST 1/4 OF SECTION 7, T7N, R17W,  
CITY OF GRAND RAPIDS, KENT COUNTY, MICHIGAN

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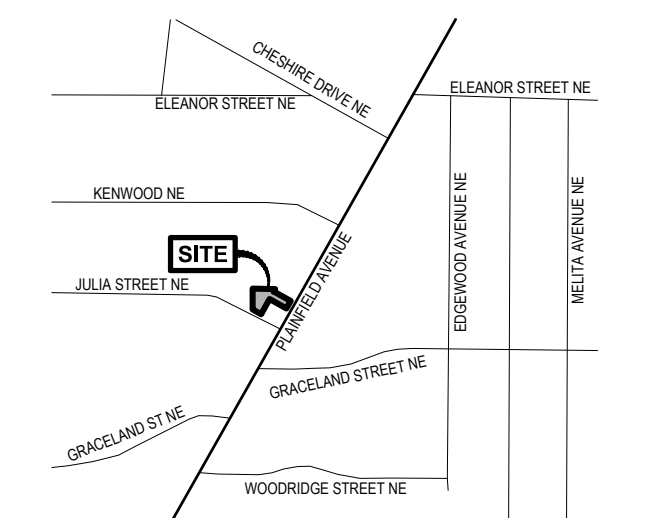
PROJECT NO:  
16400859SHEET NO:  
**C-300**

## C-EXISTING, Overall

|                                                                                         | Area (s.f.) | Quantity | Area (Ac)    |
|-----------------------------------------------------------------------------------------|-------------|----------|--------------|
| A. Impervious Area (C=0.9)                                                              | 12,925      | 1        | 0.2967       |
| B. Pervious Area (C=0.3)                                                                | 1,735       | 1        | 0.0398       |
| C. Total Site Area                                                                      |             |          | 0.3365       |
| D. Calculate C-dev = $(.9(\text{area } 9) + 0.3(\text{area } 0.3)) / \text{total area}$ |             |          | C-dev = 0.83 |

## C-EXISTING, Proposed

|                                                                                         | Area (s.f.) | Quantity | Area (Ac)    |
|-----------------------------------------------------------------------------------------|-------------|----------|--------------|
| A. Impervious Area (C=0.9)                                                              | 12,335      | 1        | 0.2832       |
| B. Pervious Area (C=0.3)                                                                | 2,325       | 1        | 0.0534       |
| C. Total Site Area                                                                      |             |          | 0.3365       |
| D. Calculate C-dev = $(.9(\text{area } 9) + 0.3(\text{area } 0.3)) / \text{total area}$ |             |          | C-dev = 0.80 |



## LOCATION MAP

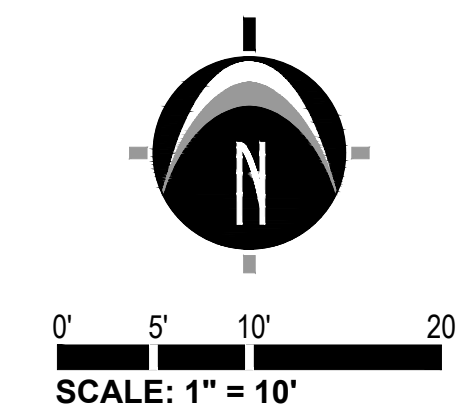
NOT TO SCALE

## LEGEND

- EX. GRADE CONTOUR
- PROP. GRADE CONTOUR
- PROP. GRADE ELEV. (BLACKTOP)
- PROP. GRADE ELEV. (CONCRETE)
- PROP. GRADE ELEV. (LOW POINT)
- EX. BITUMINOUS
- EX. CONCRETE
- PROPOSED 1" OVERLAY BITUMINOUS (STD. DUTY)
- PROPOSED FULL DEPTH BITUMINOUS (STD. DUTY)
- PROPOSED CONCRETE (STANDARD DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)
- PROPOSED POROUS PAVER PATIO
- PROP. STORM SEWER
- FLOW DIRECTION
- EMERGENCY OVERFLOW STORMWATER FLOW ROUTE
- PROP. LIMITS OF GRADING

## GENERAL NOTES

- TOTAL DISTURBANCE: 10,555 S.F. (0.24 AC)
- SOIL TYPE: POORLY GRADED SAND (PER MTC BORING 09/29/16)
- PERCOLATION RATE: 15 IN/HR @ 3.5' BELOW GRADE (PER MTC TEST 09/29/16)
- NEAREST WATER BODY: GRAND RIVER @ 4,300 FT WEST
- NO STOCKPILE LOCATION ASSUMED DUE TO SMALL SIZE OF SITE. CONTRACTOR TO IMMEDIATELY REMOVE EXCAVATED MATERIAL OFF SITE.
- DE-WATERING IS NOT ASSUMED TO BE NECESSARY DURING CONSTRUCTION.

SILT FENCE / EROSION EELS TO BE  
INSTALLED DURING CONSTRUCTION  
TO KEEP SEDIMENTATION ON SITE  
DURING MILLING OPERATIONS.THIS ENTRANCE TO BE USED AS  
MAIN CONSTRUCTION ENTRANCE

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**2115 Plainfield**

**Utility Plan**

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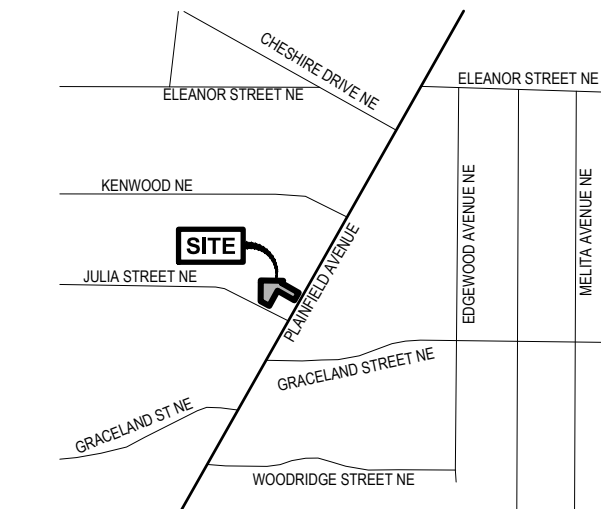


**PROJECT NO:**

16400859

**SHEET NO:**

**C-400**

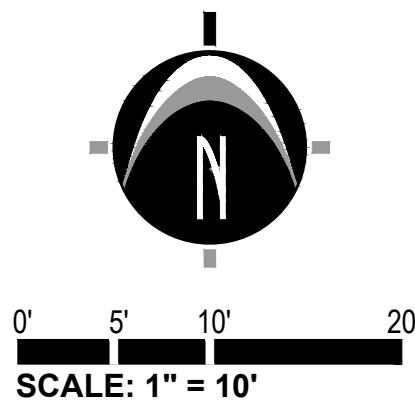


**LOCATION MAP**

NOT TO SCALE

**LEGEND**

|  |                                              |
|--|----------------------------------------------|
|  | EX. BITUMINOUS                               |
|  | EX. CONCRETE                                 |
|  | PROPOSED 1.5' OVERLAY BITUMINOUS (STD. DUTY) |
|  | PROPOSED FULL DEPTH BITUMINOUS (STD. DUTY)   |
|  | PROPOSED CONCRETE (STANDARD DUTY)            |
|  | PROPOSED CONCRETE (HEAVY DUTY)               |
|  | PROPOSED POROUS PAVER PATIO                  |
|  | PROP. STORM SEWER                            |



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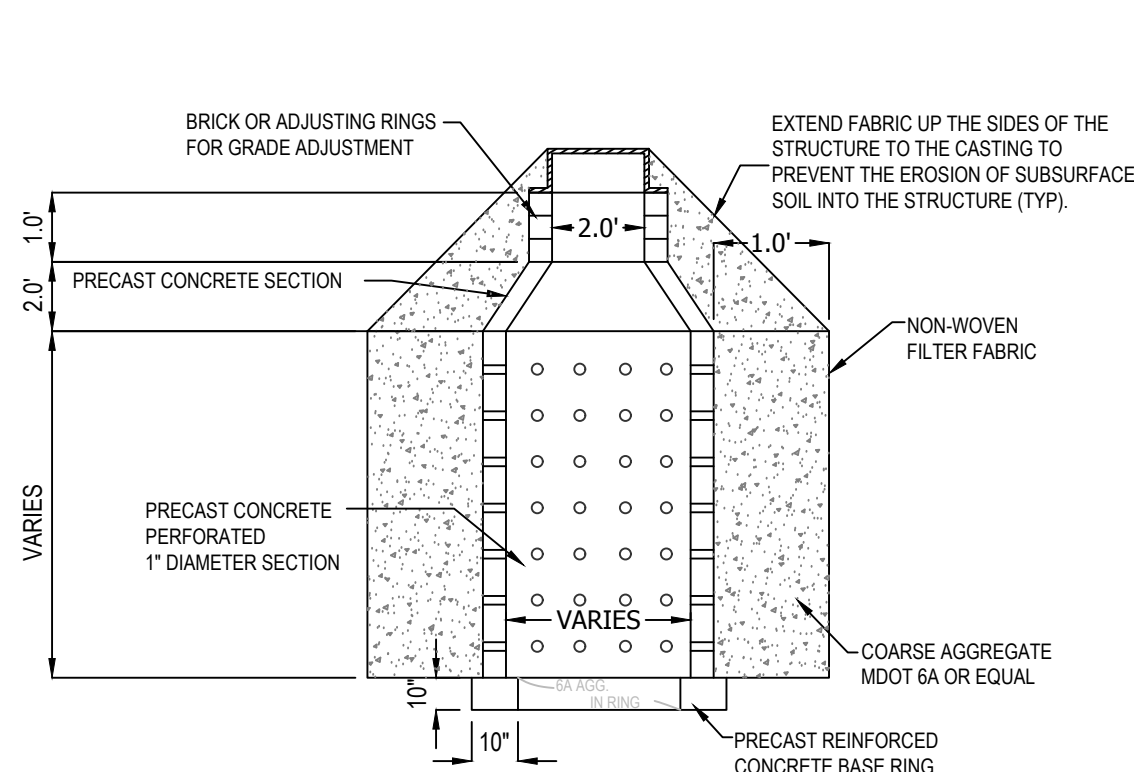
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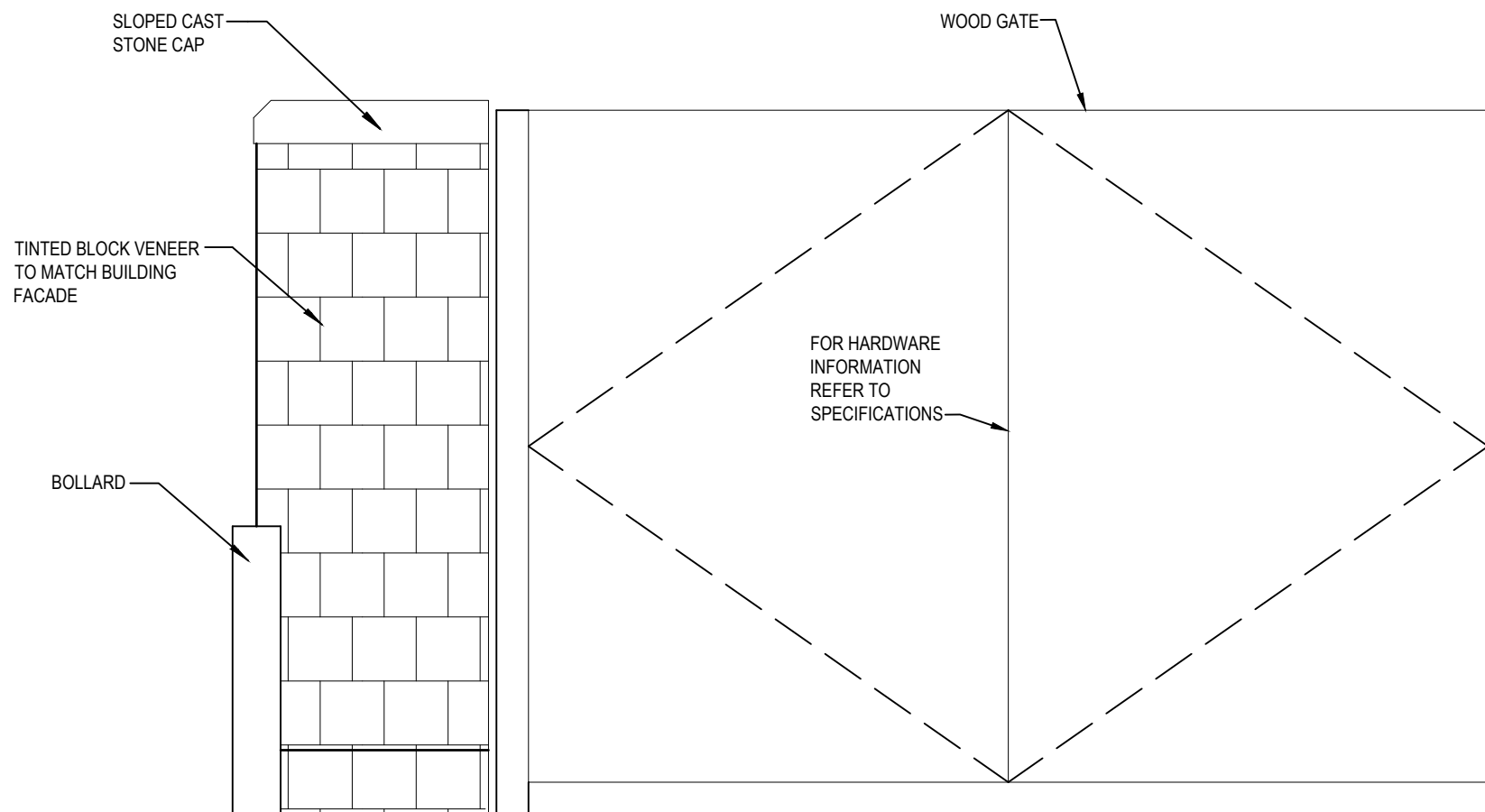
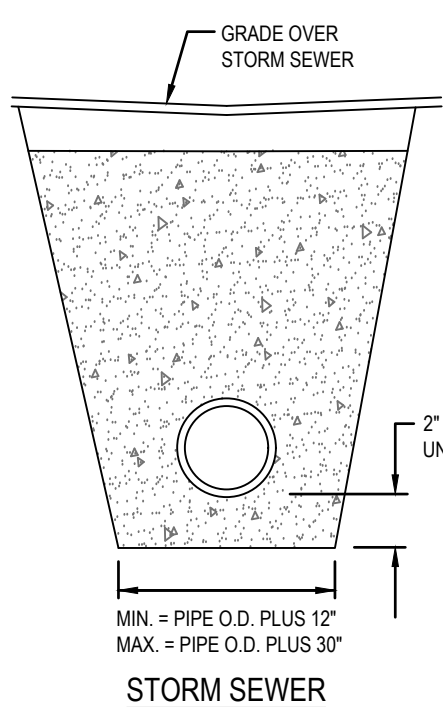
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| Title: LUDS SUBMITTAL           |              | V. Date: 01.11.11 |
| Drawn: BMS                      | Checked: RJB | S. Date: 01.11.11 |
| Title: PLAN UPDATE              |              | V. Date: 01.16.11 |
| Drawn: LRS                      | Checked: RJB | S. Date: 01.16.11 |
| Title: LUDS RE-SUBMITTAL        |              | V. Date: 04.05.11 |
| Drawn: BMS                      | Checked: RJB | S. Date: 04.05.11 |

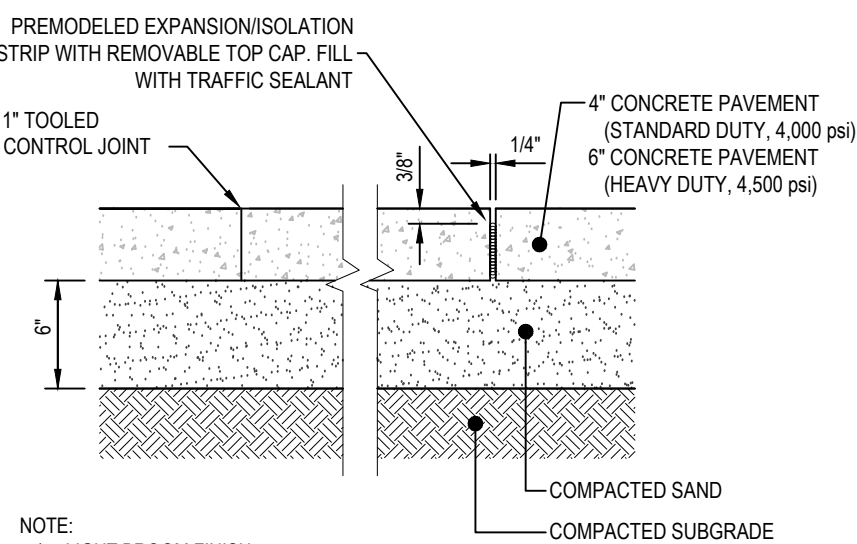
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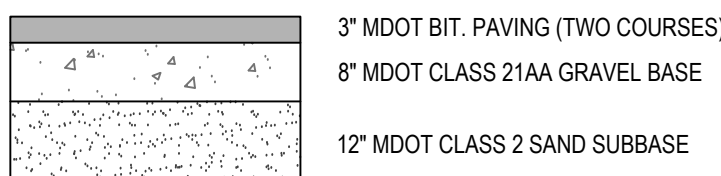


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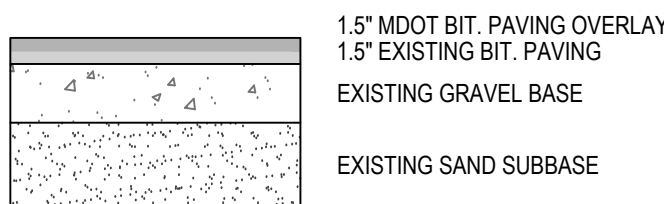
- NOTE:
1. LIGHT BROOM FINISH
  2. LOCATE CONTROL JOINTS AND EXPANSION JOINTS PER ACI STANDARDS
  3. PANEL SIZE SHALL NOT EXCEED 8 FEET
  4. PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE WITH THE LENGTH NEVER EXCEEDING 1.25X THE WIDTH
  5. 1.0#/CU.YD. FIBER REINFORCEMENT
  6. AIR ENTRAPMENT -  $6\% \pm 1\%$
  7. SLUMP  $4" \pm 1"$

## NTS



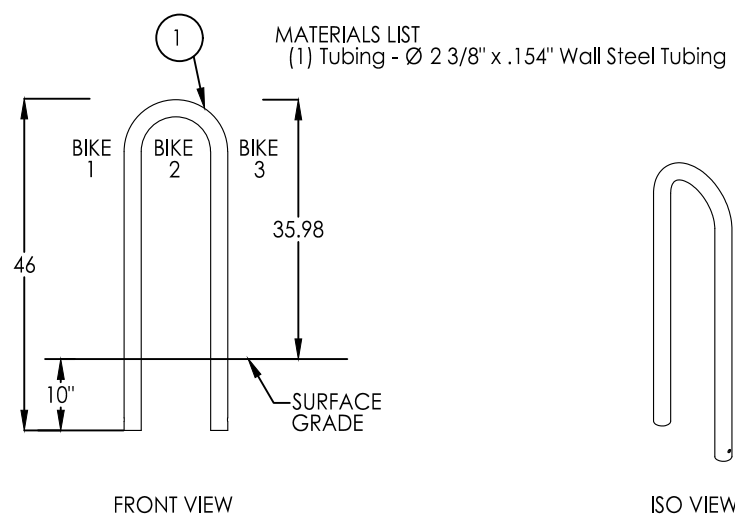
- NOTE:
1. REFER TO GEOTECHNICAL REPORT FOR FINAL PAVEMENT DESIGN SPECIFICATION
  2. HMA MIXTURE TO BE TIER I OR TIER II
  3. BINDER GRADE TO BE A MINIMUM OF PG 58-28

N.T.S.

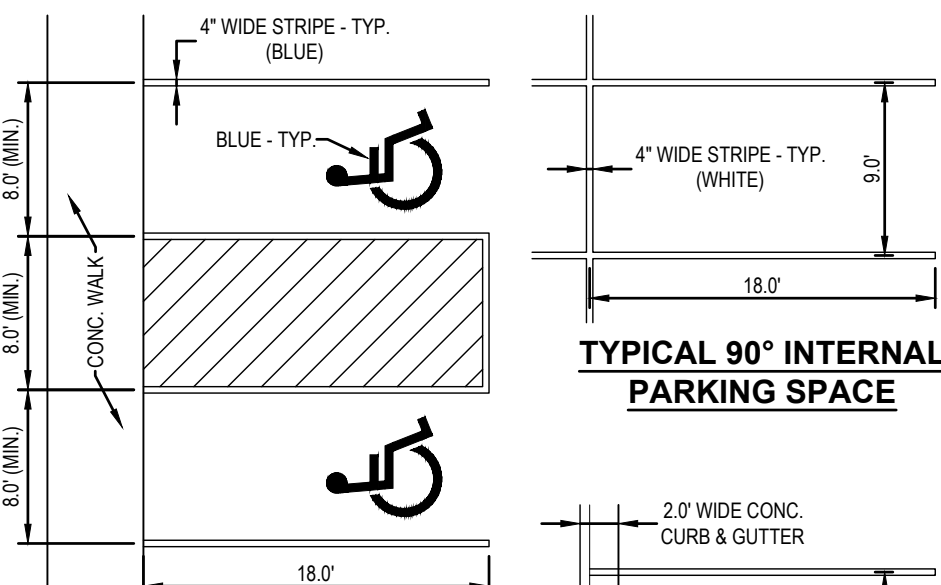


- NOTE:
1. REFER TO GEOTECHNICAL REPORT FOR FINAL PAVEMENT DESIGN SPECIFICATION
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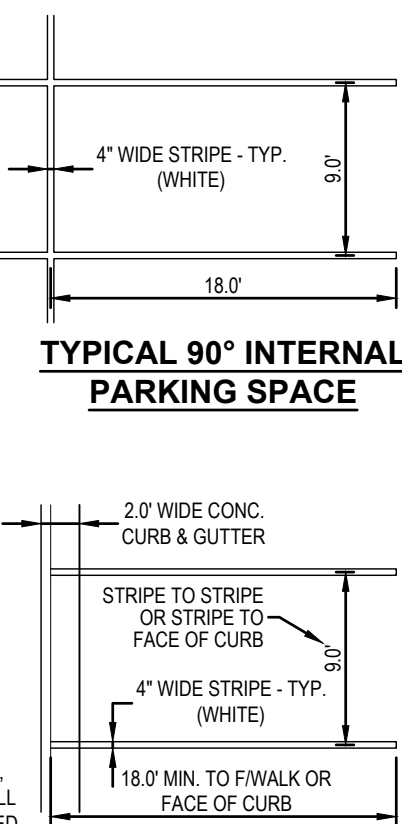


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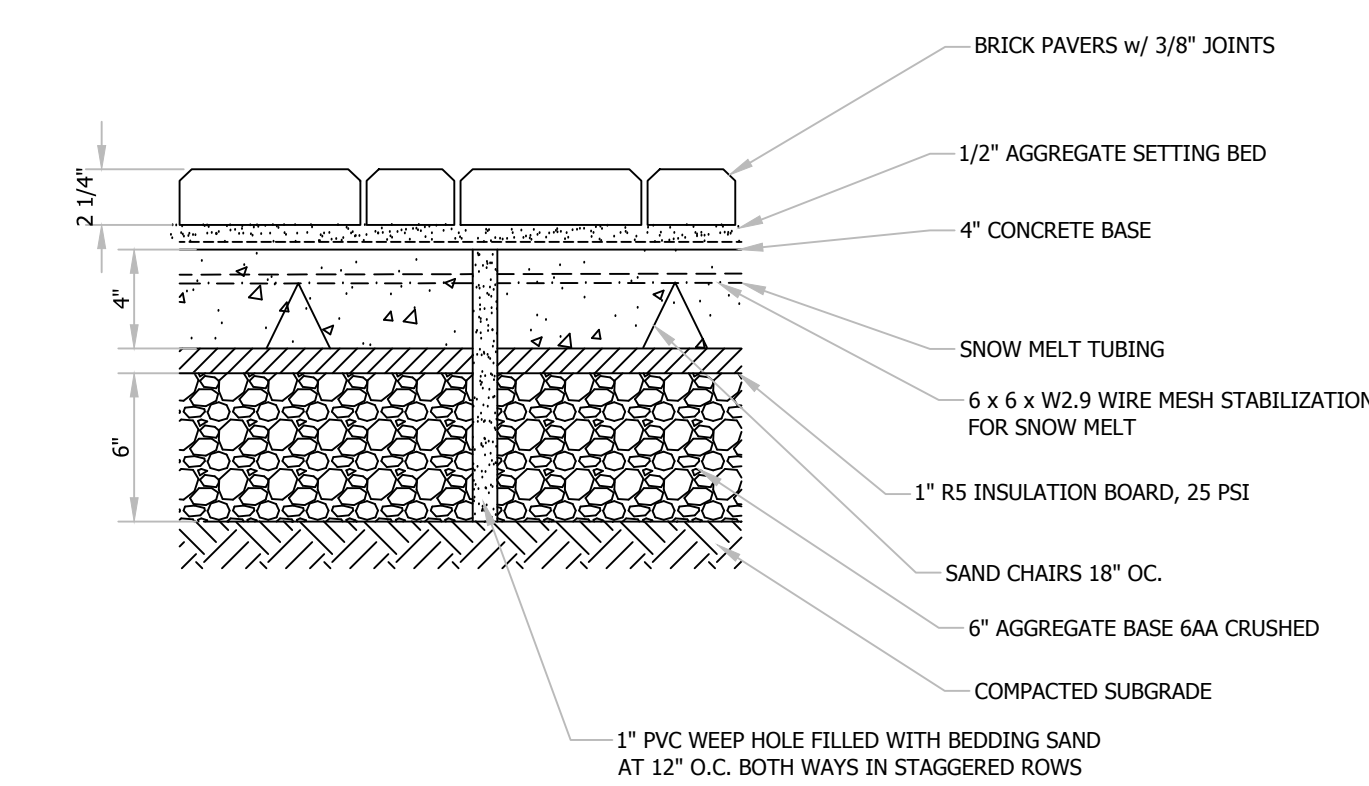


**TYPICAL 8'-0" WIDE**  
**HANDICAP VAN PARKING SPACE**

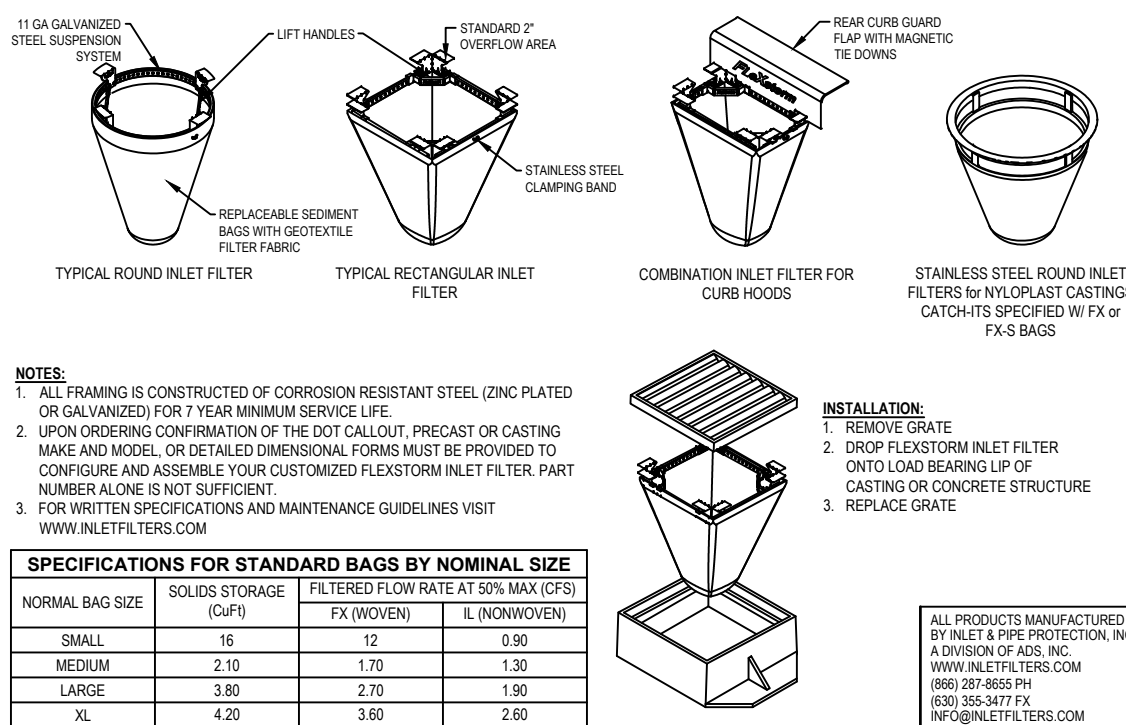
- NOTE:**  
APPLY TWO COATS OF VOC COMPLIANT, M.D.O.T. APPROVED, UNDILUTED SOLVENT BASED, OR LATEX TRAFFIC PAINT TO ALL PAVEMENT MARKINGS. USE MANUFACTURERS RECOMMENDED APPLICATION RATE, WITHOUT ADDITION OF THINNER, WITH A MAXIMUM OF 100 SFT PER GALLON, OR MINIMUM 15 MILS WET FILM THICKNESS, AND 7.5 MILS DRY FILM THICKNESS PER COAT, WITH MINIMUM 30 DAYS BETWEEN APPLICATIONS. SECOND COAT MUST NOT BE APPLIED EARLIER THAN 7 DAYS BEFORE OCCUPANCY.



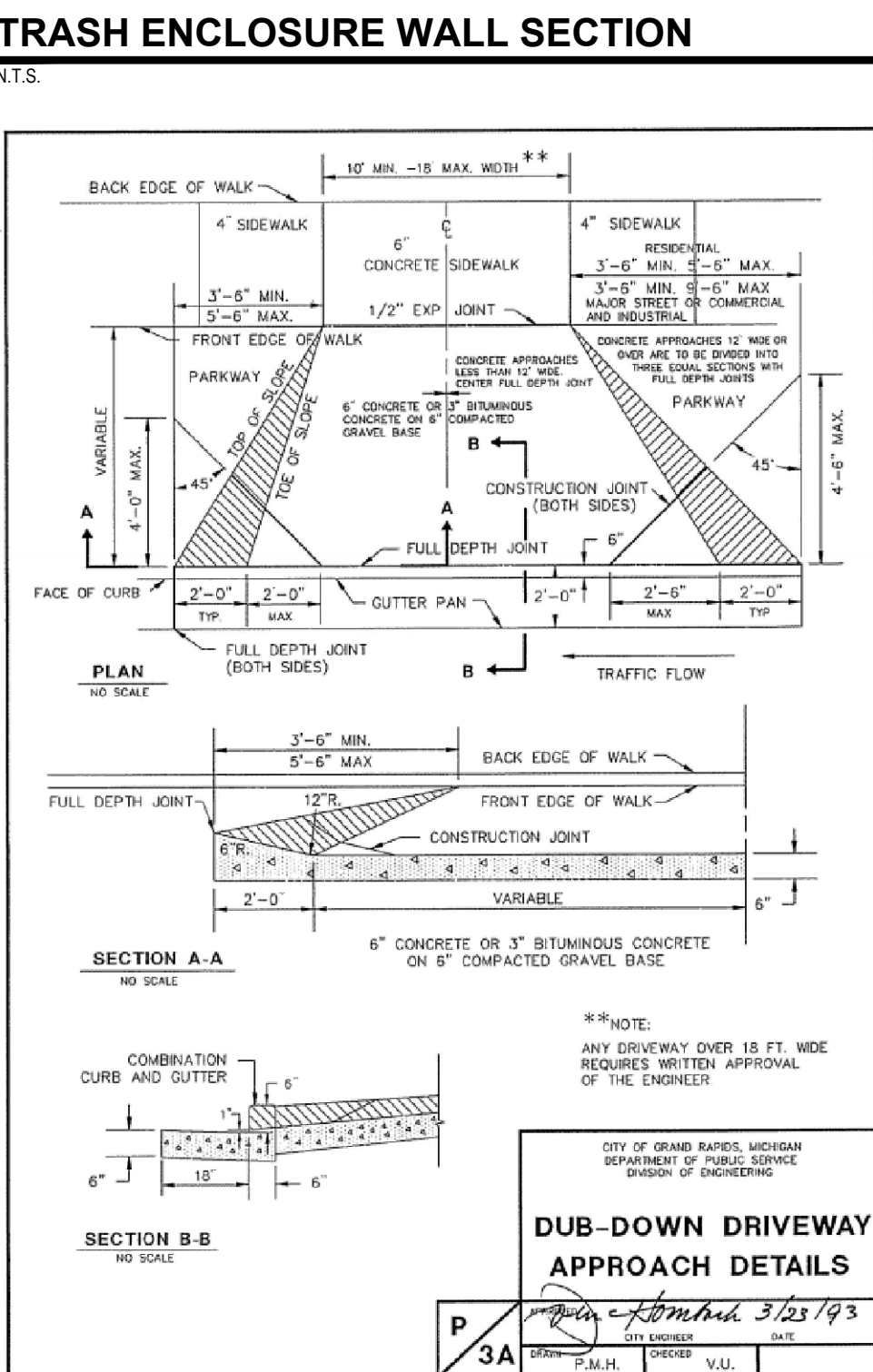
## NTS



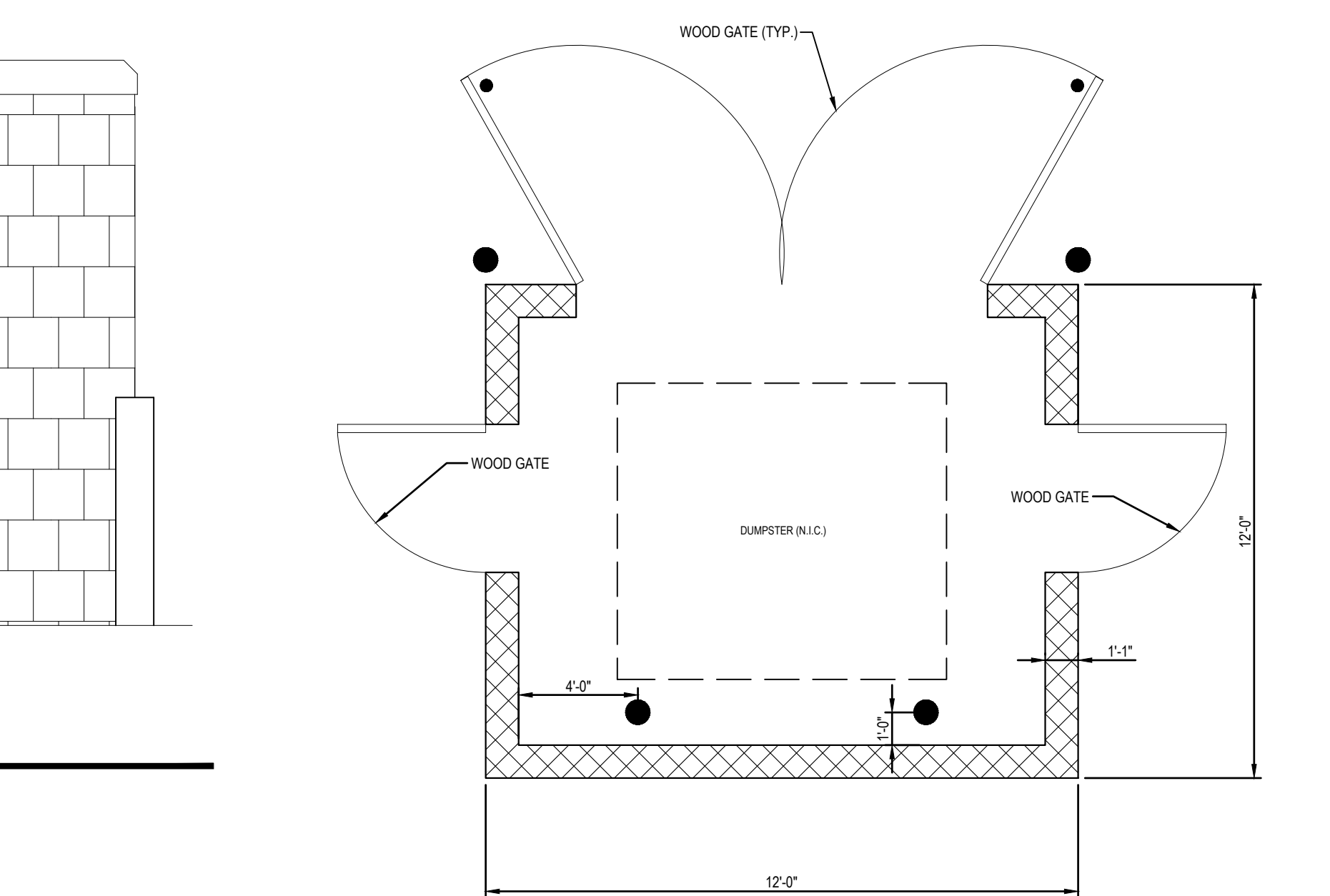
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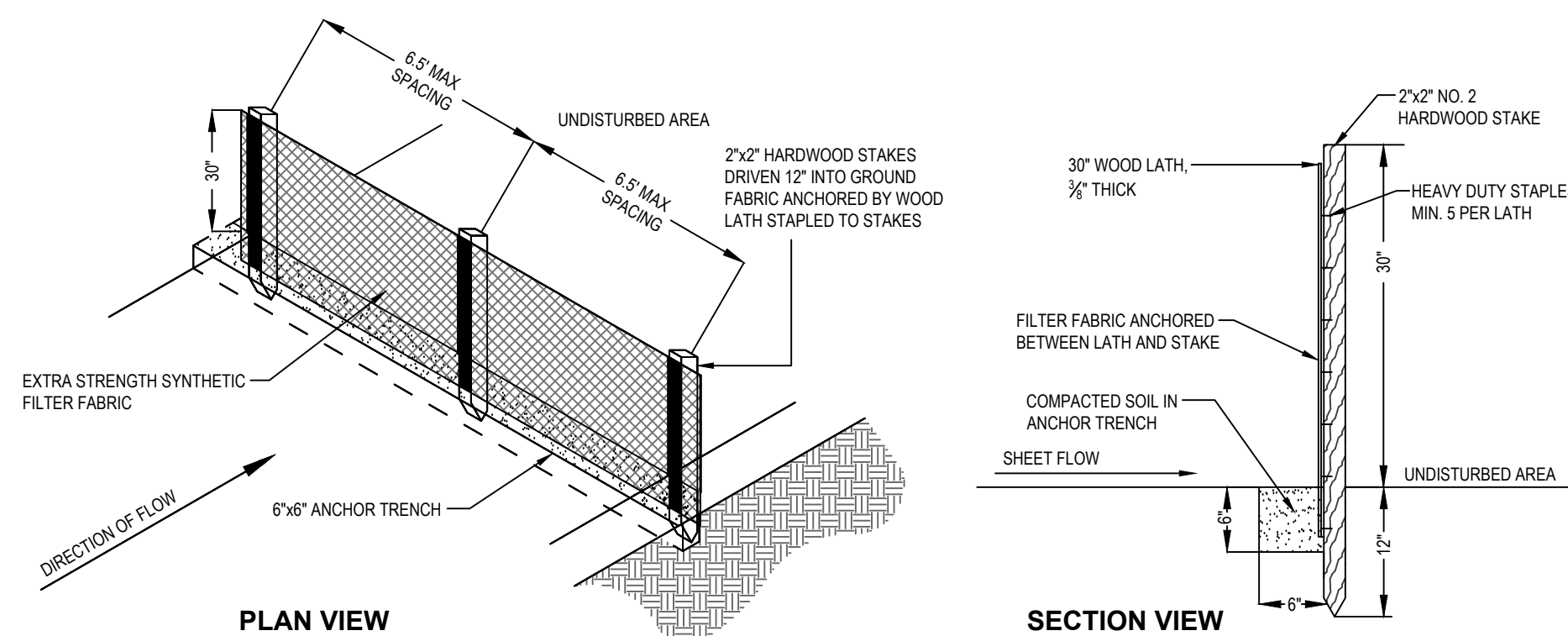
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NTS.



N.T.S.



**N.T.S.**

## STORM SEWER

## STORM SEWER

1. ALL CATCH BASINS SHOULD BE PROVIDED WITH A MINIMUM 3' SLUMP.
2. ALL STORM SEWER SHALL BE LEACH TYPE PIPE AND SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE (SLCSP), WITH PERFORATED PIPE SOCK MEETING THE REQUIREMENTS OF THE MICHIGAN PLUMBING CODE ASHITO M-294-294 TYPE 3P, ASTM F-2008, F-2648, D-3212, F-447, F-2487, D-3350 AND F-1417. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND ASTM D-2321 6" UNDERDRAIN SHALL BE USED AND PERFORATED PIPE SHALL MEET THE REQUIREMENTS OF ASHITO M-2321 6" AND THE GEOTEKSTILE SHALL MEET ASHITO M-2386 REQUIREMENTS.
3. ALL CATCH BASINS AND MANHOLES SHALL BE CONCRETE UNLESS OTHERWISE NOTED, CONFORMING TO ASTM C-478 WITH BUTYL RUBBER GASKETED JOINTS WITH BOOT TYPE PIPE CONNECTIONS CONFORMING TO ASTM C-623 FOR ALL PIPE CONNECTIONS 24" DIAMETER AND SMALLER.
4. ALL CATCH BASINS ARE DRAWN AND WILL BE STAKED AT CENTER OF CASTING.

## GENERAL

- [illegible]

ENTERING THE WORK AREA AND FOR MAINTAINING AND PROTECTING THE FLOW OF VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE JOB SITE, TRAFFIC CONTROLS SHALL BE COORDINATED WITH THE POLICE DEPARTMENT AND THE CITY.

- [illegible]

STATE OF MICHIGAN  
★ ★  
BRANDON  
MICHAEL  
SIMON  
ENGINEER  
No.  
62076  
LICENSED PROFESSIONAL ENGINEER

**PROJECT NO:**  
1640085

# C-500

**PREPARED FOR:**

Ted Lott  
Lott 3 Metz Architecture

645 Cherry Street SE  
Grand Rapids, MI 49503  
Phone: 616.454.5175

**REVISIONS:**

|                                 |                   |
|---------------------------------|-------------------|
| Title: CITY SITE PLAN SUBMITTAL | V. Date: 08.16.16 |
| Drawn: BMS                      | Checked: RJB      |
| Title: LUDS SUBMITTAL           | V. Date: 01.11.17 |
| Drawn: BMS                      | Checked: RJB      |
| Title: PLAN UPDATE              | V. Date: 01.16.17 |
| Drawn: LRS                      | Checked: RJB      |
| Title: LUDS RE-SUBMITTAL        | V. Date: 04.05.17 |
| Drawn: BMS                      | Checked: RJB      |

**2115 Plainfield**

**Landscaping Plan**

2115 Plainfield Ave NE Grand Rapids, MI 49505  
PART OF THE SOUTHEAST 1/4 OF SECTION 7, T7N, R1W,  
CITY OF GRAND RAPIDS, KENT COUNTY, MICHIGAN

**STAMP:**



**PROJECT NO:**

16400859

**SHEET NO:**

**L-201**

**LANDSCAPE CALCS**

TOTAL SITE AREA = 14,660 SQ. FT. (0.34 ACRES) (EXCLUDING R.O.W.)

GREEN SPACE  
REQUIRED = 1,466 SQ. FT. (10%)  
PROPOSED = 1,735 SQ. FT. (11.8%) (NOT INCLUDING PERVIOUS PATIO)

TREE CANOPY  
REQUIRED = 1,759 SQ. FT. (12.0%)  
TOTAL PROPOSED = 4,065 SQ. FT. (27.7%)  
EXISTING = 2,465 SQ. FT. (16.8%)  
PROPOSED = 1,600 SQ. FT. (10.9%)

**LANDSCAPE BUFFERS & SCREENS:**

PARKING LOT SCREENING  
50 LF FRONTAGE - 37 LF (DRIVE + CLEAR VISION) = 13 LF OF TYPE IV SCREEN  
REQUIRED = 13 LF OF TYPE IV SCREEN  
PROPOSED = 13 LF OF TYPE IV SCREEN

REAR YARD LANDSCAPE BUFFER (2 TREES & 10 SHRUBS PER 50 LF)  
117 LF REAR YARD - 50 LF EXISTING FENCE = 67 LF TO BUFFER  
REQUIRED = 3 TREES  
13 SHRUBS  
PROPOSED = 3 TREES  
13 SHRUBS

SIDE YARD LANDSCAPE BUFFER (2 TREES & 10 SHRUBS PER 50 LF)  
108 LF REAR YARD - 45 LF EXISTING EVERGREEN BUFFER = 62 LF TO BUFFER  
REQUIRED = 3 TREES  
13 SHRUBS  
PROPOSED = 3 TREES  
13 SHRUBS

**LANDSCAPE NOTES**

**PLANTING NOTES:**

- ALL PLANT MATERIAL SHALL BE LOCALLY NURSERY GROWN NO 1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL MEET CURRENT AMERICAN ASSOCIATION OR NURSERYMEN STANDARDS. DO NOT PLANT MATERIALS UNTIL DIRECTED BY OWNER, LANDSCAPE ARCHITECT, AND/OR CONSTRUCTION MANAGER. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL, FOR ANY REASON BEFORE OR AFTER IT IS INSTALLED.
- SIZES SPECIFIED ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED.
- ANY PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
- MAINTENANCE OF LANDSCAPING ITEMS, TREES, AND PLANTS SHALL BE PERFORMED BY THE PROPERTY OWNER OR A QUALIFIED PROFESSIONAL. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE MUNICIPAL STANDARDS AND IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN A NEAT, HEALTHY AND WEED FREE CONDITION. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIALS ARE TO BE REPLACED IMMEDIATELY AFTER NOTIFIED TO DO SO.
- PLANT TREES AND SHRUBS IN ACCORDANCE WITH PLANTING DETAILS. DIG TREE PITS PER DETAILS. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN AT THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER, APPROX. 1/4 OF THE ROOT BALL ABOVE GRADE, AND BACKFILL TO TOP OF ROOT BALL.
- REMOVE ALL TWINE, WIRE, NURSERY TREE GUARDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS. REMOVE THE TOP 1/3 OF BURLAP FROM EARTH BALLS AND REMOVE BURLAP FROM AROUND TRUNK.
- FINELY SHREDDED HARDWARD BARK MULCH, NATURAL COLOR (NON-COLORED), IS REQUIRED FOR ALL PLANTINGS AND PLANTING BEDS. MULCH PER PLANTING DETAILS. MULCH IN PLANT BEDS SHALL BE 3" THICK AT TIME OF INSPECTION AND AFTER COMPACTED BY RAIN OR IRRIGATION. ALL PLANTING BEDS SHALL BE EDGED WITH 6" X 12 GAUGE STEEL LANDSCAPE EDGING.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES. IF A CONFLICT WITH UTILITIES EXIST, NOTIFY OWNER/CONSTRUCTION MANAGER PRIOR TO PLANTING.
- PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER PLANTING AND ACCEPTANCE.

**TOPSOIL AND TURF NOTES:**

- WHEREVER GROUND IN ITS NATURAL STATE HAS BEEN DISTURBED, APPROVED LANDSCAPING OR GRASS SHALL BE FULLY INSTALLED, AND ESTABLISHED WITHIN A REASONABLE PERIOD OF TIME, BUT NO LONGER THAN ONE GROWING SEASON (UNLESS OTHERWISE NOTED AND APPROVED).
- DURING EXCAVATION, GRADING, AND INSTALLATION OF REQUIRED LANDSCAPING, ALL SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS SHALL BE STRICTLY FOLLOWED AND COMPLIED WITH.
- ALL LAWN AREAS SHALL RECEIVE SOD OR HYDROSEED. TURF SHALL BE INSTALLED ON TOPSOIL UNLESS APPROVED OTHERWISE. DO NOT PLANT UNTIL ACCEPTANCE OF FINISH GRADE.
- SOD SHALL BE GROWN ON TOPSOIL UNLESS APPROVED OTHERWISE. SOD SHALL BE 2 YEARS OLD AND STRONGLY ROOTED. PLACE SOD TIGHTLY WITH NO GAPS AND WITH GRAIN IN SAME DIRECTION. SEAMS OF SOD SHALL BE STAGGERED IN A RUNNING BOND PATTERN. SOD SHALL BE WATERED IMMEDIATELY TO AVOID DRYING OUT. DO NOT INSTALL SOD UNTIL ACCEPTANCE OF FINISH GRADE AND IRRIGATION SYSTEM IS OPERATING PROPERLY UNLESS DIRECTED IN WRITING TO DO OTHERWISE. FINISH ROLL SOD WITH A WATER FILLED LAWN ROLLER. ROLL PERPENDICULAR TO LENGTH OF SOD.
- TURF SHALL BE INSTALLED ON A MIN. OF 3"-4" OF LIGHTLY COMPACTED APPROVED TOPSOIL. TOPSOIL SHALL BE FERTILE, SCREENED, FRIABLE TOPSOIL, FREE OF STONES 1/2" IN DIA. AND LARGER, ROOTS, STICKS, OR OTHER EXTRANEOUS MATERIAL INCLUDING NOXIOUS PLANTS. PH BETWEEN 6.0 AND 6.5, SALTS 500 PARTS PPM, ORGANIC CONTENT 3% MIN. DO NOT INSTALL TOPSOIL UNTIL APPROVED BY OWNER/CM. TOPSOIL SHALL BE FINE GRADED TO A SMOOTH FINISH, FREE OF LUMPS AND DEPRESSIONS.
- ALL LANDSCAPE ISLANDS WITHIN PARKING LOTS SHALL BE BACK FILLED WITH TOPSOIL TO A DEPTH OF 18" MIN.

**IRRIGATION NOTES:**

- ALL PLANTING AREAS, LAWN AREAS AND LANDSCAPE ISLANDS SHOWN ARE TO HAVE A COMPLETE IRRIGATION SYSTEM. THE G.C. SHALL BE RESPONSIBLE FOR RETAINING A QUALIFIED FIRM FOR THE DESIGN OF THE IRRIGATION SYSTEM. THE DESIGN MUST SHOW HOW THE SYSTEM TIES INTO THE BUILDING AND MUST SHOW ALL OF THE NECESSARY EQUIPMENT FOR A COMPLETE SYSTEM. THE G.C. SHALL SUBMIT THE IRRIGATION SYSTEM DESIGN TO THE ARCHITECT/OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.

**LANDSCAPE LEGEND / SCHEDULE**

**TREES**

| SYMBOL | QUANTITY | SCIENTIFIC NAME                  | COMMON NAME             | SIZE        |
|--------|----------|----------------------------------|-------------------------|-------------|
|        | 1        | Gleditsia triacanthos f. inermis | Thornless Honeylocust   | 2 1/2" cal. |
|        | 2        | Picea pungens                    | Colorado Blue Spruce    | 6' hgt.     |
|        | 3        | N/A                              | Existing Deciduous Tree | Varies      |
|        | 6        | N/A                              | Existing Evergreen Tree | Varies      |

**SHRUBS**

| SYMBOL | QUANTITY | SCIENTIFIC NAME                      | COMMON NAME            | SIZE   |
|--------|----------|--------------------------------------|------------------------|--------|
|        | 18       | Clethra alnifolia                    | Sweet Pepperbush       | 3 gal. |
|        | 8        | Physocarpus opulifolius 'Darts Gold' | Darts Gold Ninebark    | 5 gal. |
|        | 14       | Thuja occidentalis 'Woodward'        | Woodward's White Cedar | 5 gal. |

**PERENNIALS & GRASSES**

| SYMBOL | QUANTITY | SCIENTIFIC NAME    | COMMON NAME  | SIZE |
|--------|----------|--------------------|--------------|------|
|        | 14       | Andropogon gerardi | Big Bluestem |      |

**GROUND COVER**

| SYMBOL | QUANTITY                 | SCIENTIFIC NAME             | COMMON NAME            | SIZE     |
|--------|--------------------------|-----------------------------|------------------------|----------|
|        | As Needed <sup>(1)</sup> | N/A                         | Bark Mulch             | 3" depth |
|        | As Needed <sup>(2)</sup> | Poa pratensis               | Kentucky Bluegrass Sod | Roll     |
|        | As Needed <sup>(3)</sup> | Monarda 'Cambridge Scarlet' | Scarlet Bee Balm       | 1 gal.   |

- (1) All disturbed areas programmed as planting beds shall receive bark mulch to a depth of 3".  
(2) All disturbed areas not otherwise programmed shall receive turf grass sod.  
(3) All areas programmed as Scarlet Bee Balm shall be planted with spacing of 16" o.c.

**TYPICAL TREE PLANTING DETAIL**

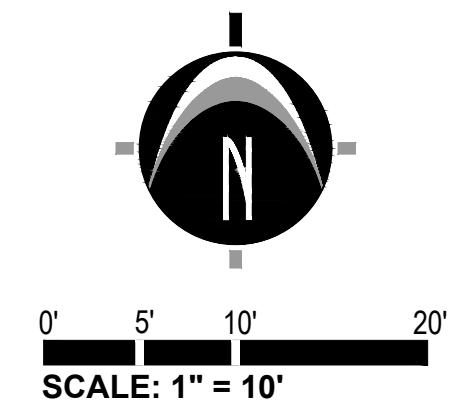
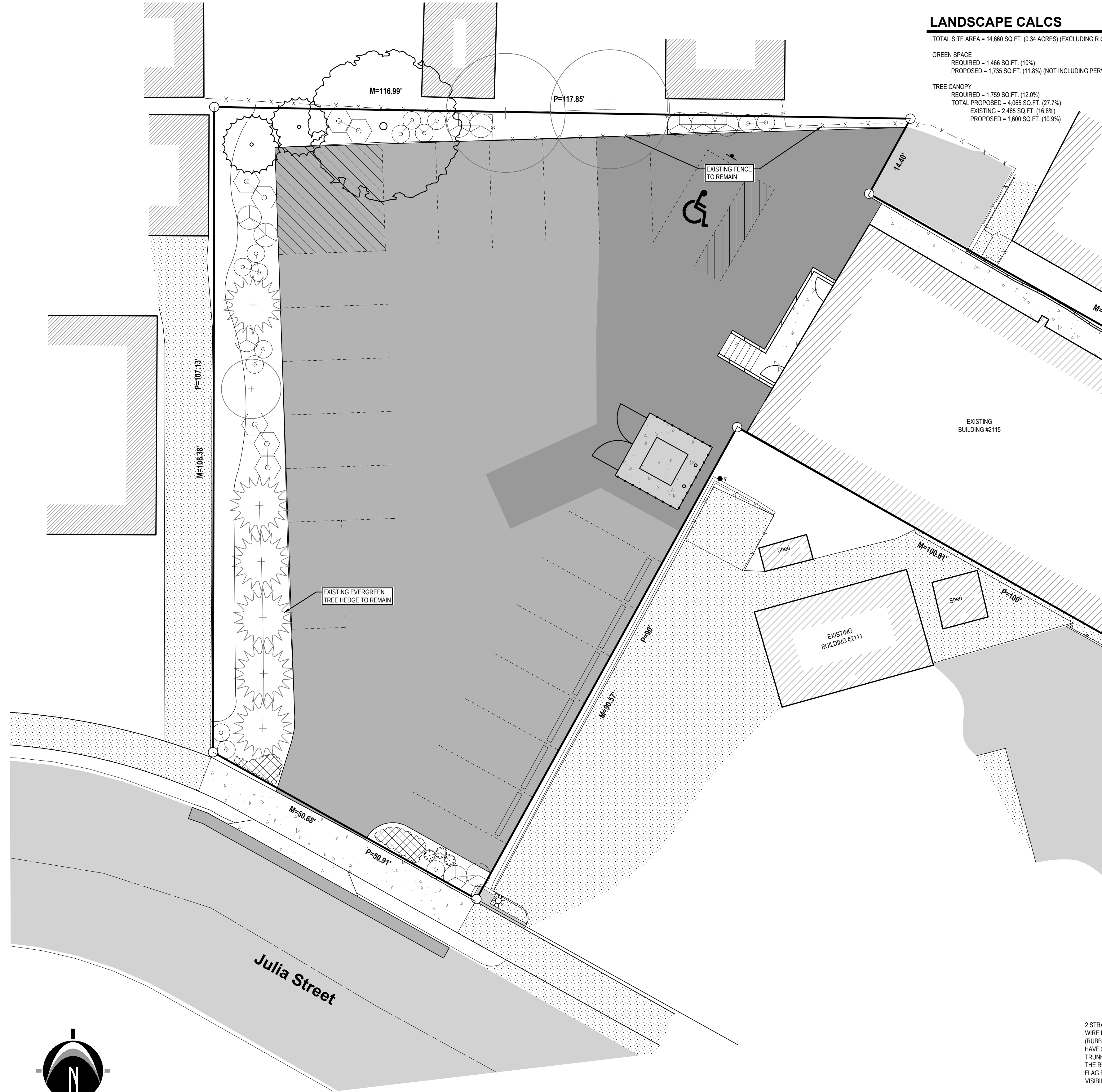
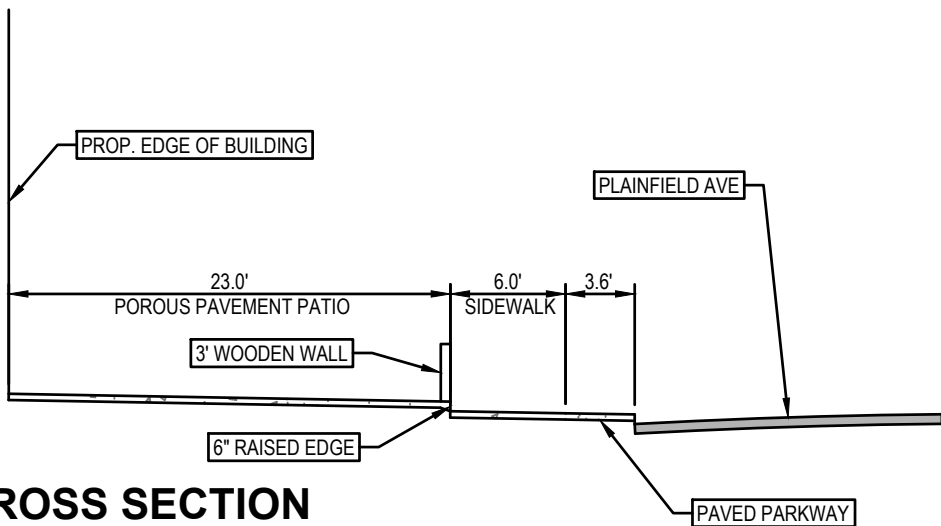
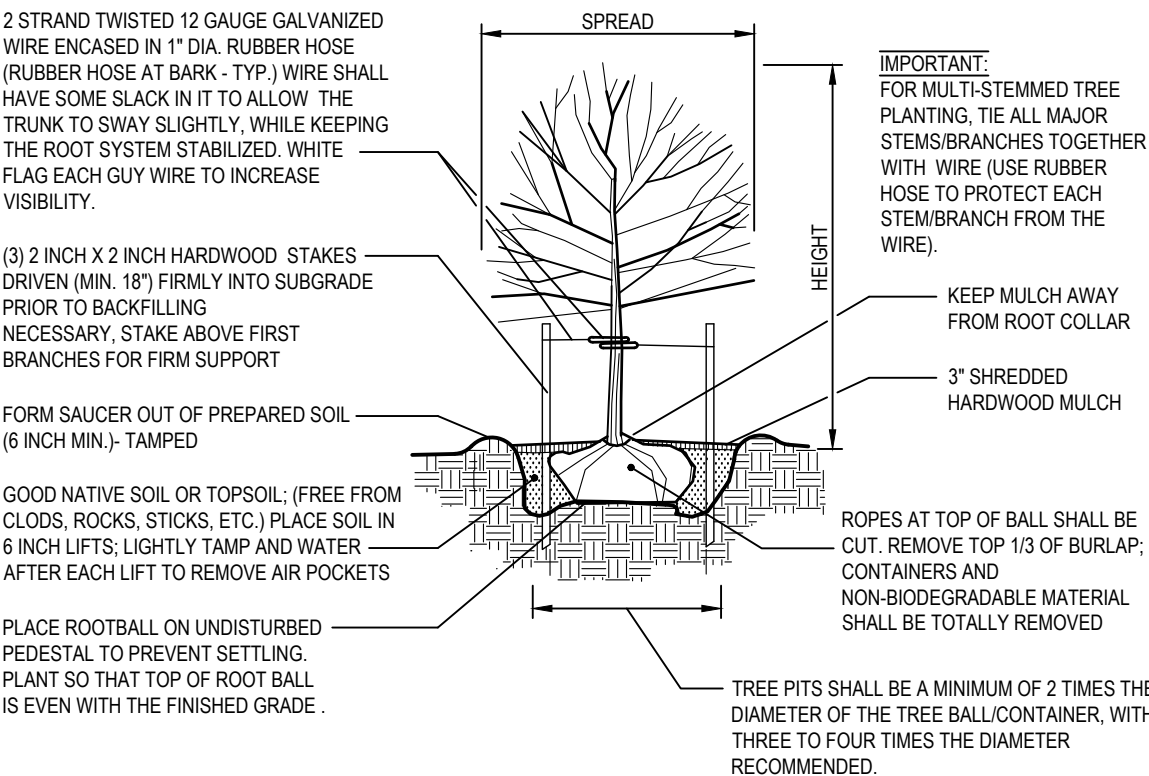
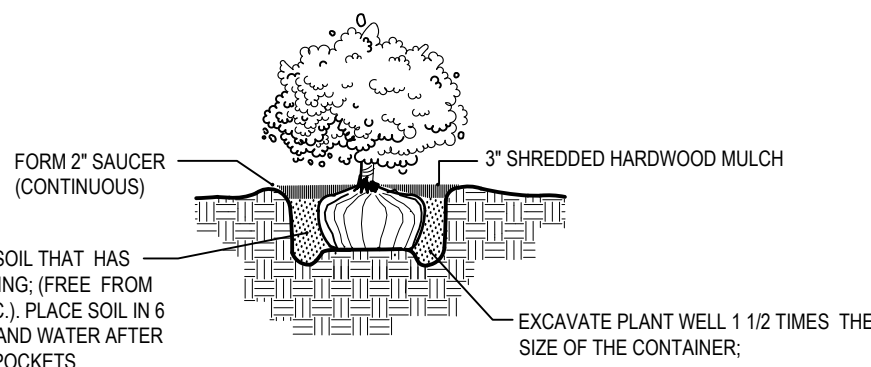
N.T.S.

**TYPICAL SHRUB / PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL**

N.T.S.

**CROSS SECTION A-A**

1" = 1'



UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.  
NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLANS" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.