

AN ORDINANCE APPROVING A PRELIMINARY DEVELOPMENT PLAN LOCATED AT 704 AND 708 SE OLDHAM COURT IN DISTRICT CS FOR THE PROPOSED ARISTOCRAT MOTORS IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 33, UNIFIED DEVELOPMENT ORDINANCE, OF THE LEE'S SUMMIT CODE OF ORDINANCES, FOR THE CITY OF LEE'S SUMMIT, MISSOURI.

WHEREAS, Application #PL2019-204 submitted by Aristocrat Motors, requesting approval of a preliminary development plan in District CS (Commercial Services) on land located at 704 and 708 SE Oldham Court was referred to the Planning Commission to hold a public hearing; and,

WHEREAS, the Unified Development Ordinance provides for the approval of a preliminary development plan by the City following public hearings by the Planning Commission and City Council; and,

WHEREAS, after due public notice in the manner prescribed by law, the Planning Commission held a public hearing for the consideration of the preliminary development plan on August 8, 2019, and rendered a report to the City Council recommending that the preliminary development plan be approved; and,

WHEREAS, after due public notice in the manner prescribed by law, the City Council held a public hearing on September 3, 2019, and rendered a decision to approve the preliminary development plan for said property.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI, as follows:

SECTION 1. That a preliminary development plan is hereby approved in District CS on the following described property:

*Lots 2 and 3, Oldham East Business Park, a recorded subdivision in Lee's Summit, Jackson County, Missouri.*

SECTION 2. That the following conditions of approval apply:

1. The developer shall construct the segment of sidewalk along SE Oldham Pkwy located west of the driveway as part of this development. The developer shall make payment to the City of Lee's Summit for construction cost in lieu of actual construction for the segment of sidewalk along SE Oldham Pkwy located east of the driveway.

SECTION 3. That development shall be in accordance with the preliminary development plan, date stamped July 16, 2019, appended hereto and made a part hereof.

SECTION 4. Nonseverability. All provisions of this ordinance are so essentially and inseparably connected with, and so dependent upon, each other that no such provision would be enacted without all others. If a court of competent jurisdiction enters a final judgment on the merits that is not subject to appeal and that declares any provision or part of this ordinance void, unconstitutional, or

**BILL NO. 19-195****ORDINANCE NO. 8725**

unenforceable, then this ordinance, in its collective entirety, is invalid and shall have no legal effect as of the date of such judgment.

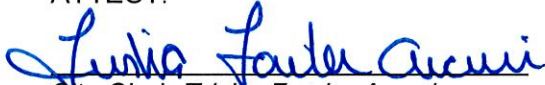
SECTION 5. That failure to comply with all of the provisions contained in this ordinance shall constitute violations of both this ordinance and Chapter 33, the Unified Development Ordinance, of the Code of Ordinances of the City of Lee's Summit.

SECTION 6. That this ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this 17<sup>th</sup> day of September, 2019.

  
Mayor William A. Baird

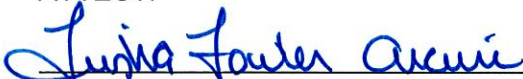
ATTEST:

  
City Clerk Trisha Fowler Arcuri

APPROVED by the Mayor of said city this 20<sup>th</sup> day of September, 2019.

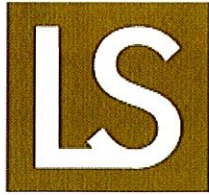
  
Mayor William A. Baird

ATTEST:

  
City Clerk Trisha Fowler Arcuri

APPROVED AS TO FORM:

  
**ACTING** City Attorney ~~Brian W. Head~~  
**DAVID W. BUSHEK**



# LEE'S SUMMIT MISSOURI

## DEVELOPMENT REVIEW FORM TRANSPORTATION IMPACT

**DATE:** July 30, 2019  
**SUBMITTAL DATE:** June 14, 2019  
**APPLICATION #:** PL2019204  
**PROJECT NAME:** ARISTOCRAT MOTORS

**CONDUCTED BY:** Michael K Park, PE, PTOE  
**PHONE:** 816.969.1800  
**EMAIL:** Michael.Park@cityofls.net  
**PROJECT TYPE:** Prel Dev Plan (PDP)

### SURROUNDING ENVIRONMENT *(Streets, Developments)*

The proposed development is located along the north side Oldham Parkway, east of Hamblen Road, across from Century Drive. The surrounding property is commercial/industrial and bordered by US 50 Highway to the north/northeast.

### ALLOWABLE ACCESS

Access to the site is proposed from an existing driveway (a vacated public street, Oldham Court) along Oldham Parkway.

### EXISTING STREET CHARACTERISTICS *(Lanes, Speed limits, Sight Distance, Medians)*

Oldham Parkway is a two/three-lane, undivided, commercial collector with a posted speed limit of 40 mph. There is adequate sight distance at the existing intersection with the private driveway.

**ACCESS MANAGEMENT CODE COMPLIANCE?** Yes ☒ No ☐

The driveway location along Oldham Parkway is existing and complies with the Access Management Code. The driveway has a left-turn lane in compliance with code requirements.

### TRIP GENERATION

| Time Period    | Total | In  | Out |
|----------------|-------|-----|-----|
| Weekday        | 200   | 100 | 100 |
| A.M. Peak Hour | 16    | 12  | 4   |
| P.M. Peak Hour | 28    | 13  | 15  |

**TRANSPORTATION IMPACT STUDY REQUIRED?** Yes ☐ No ☒

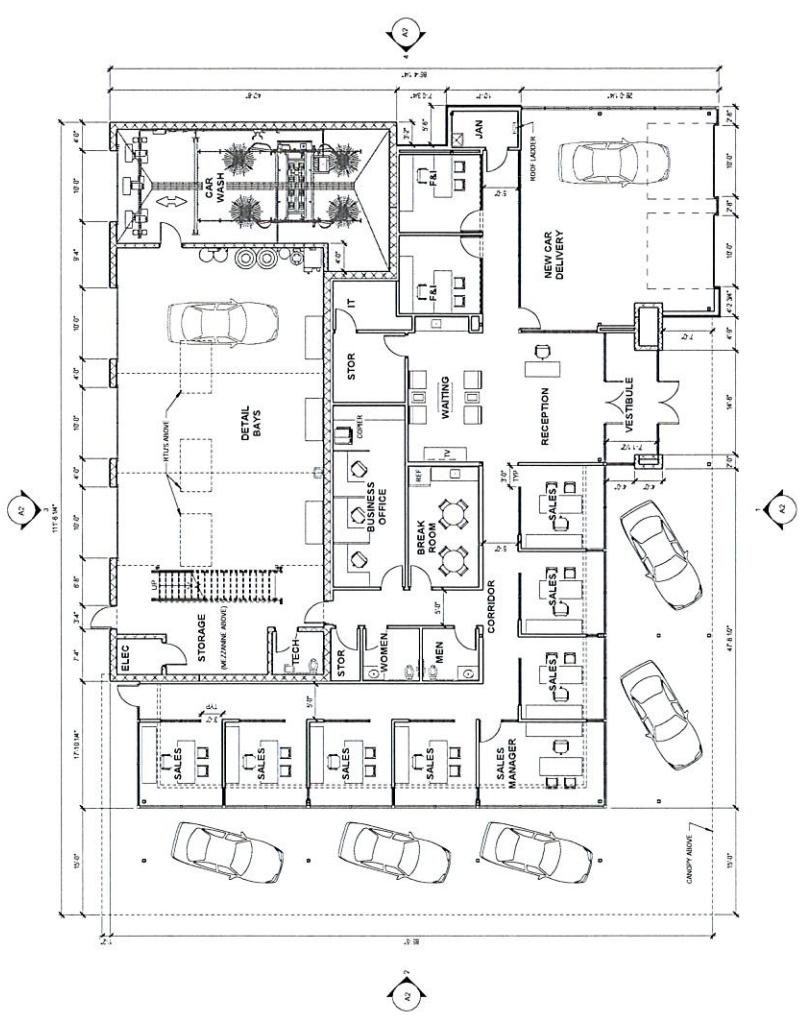
The proposed development will not likely generate more than 100 vehicle trips during a weekday peak hour; the minimum condition for traffic impact study requirements.

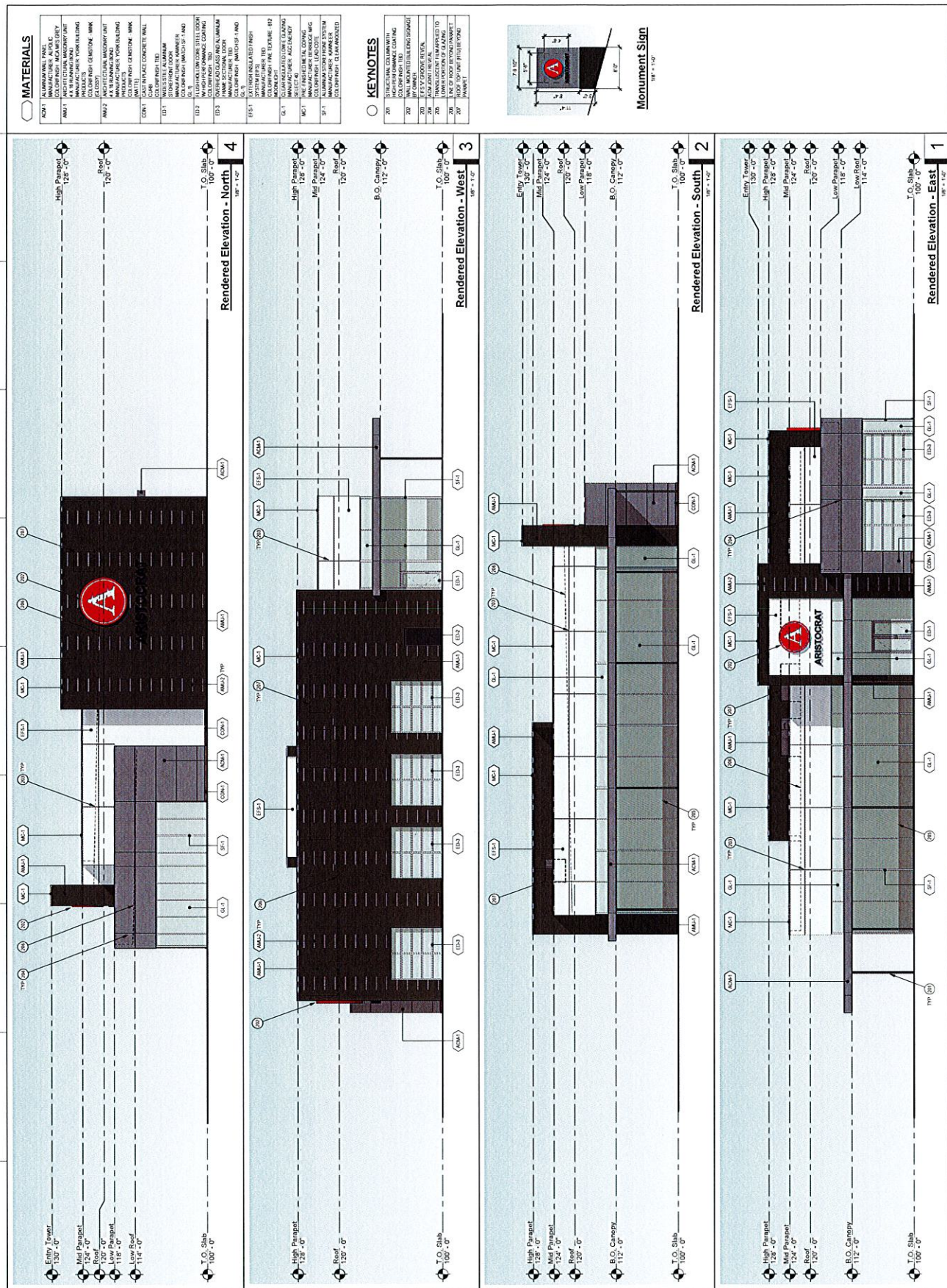
**LIVABLE STREETS *(Resolution 10-17)*** COMPLIANT ☒ EXCEPTIONS ☐

The proposed development includes all Livable Streets elements identified in the City's adopted Comprehensive Plan, associated Greenway Master Plan and Bicycle Transportation Plan attachments, and elements otherwise required by ordinances and standards in full compliance with the Livable Streets Policy adopted by Resolution 10-17. Sidewalk will be constructed west of the existing driveway in accordance with code requirements. Staff supports payment in lieu of sidewalk construction east of the existing driveway in consideration of the US 50 Highway frontage proximity to Oldham Parkway and unavailable land for development whereby sidewalk could not continue eastward nor likely have pedestrian use in the future.

**RECOMMENDATION:**      **APPROVAL** ☒      **DENIAL** ☐      **N/A** ☐      **STIPULATIONS** ☐  
*Recommendations for Approval refer only to the transportation impact and do not constitute an endorsement from City Staff.*

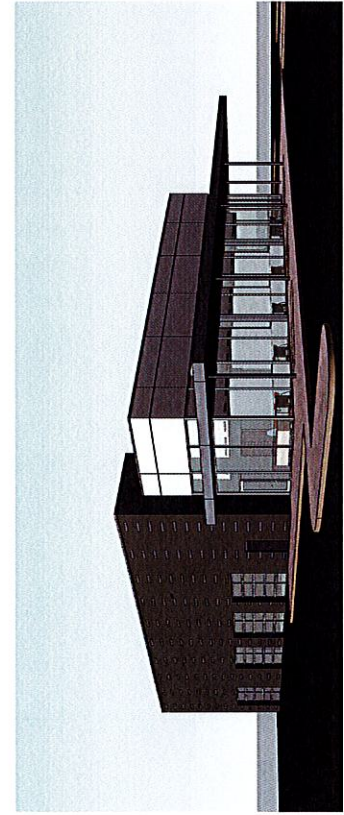
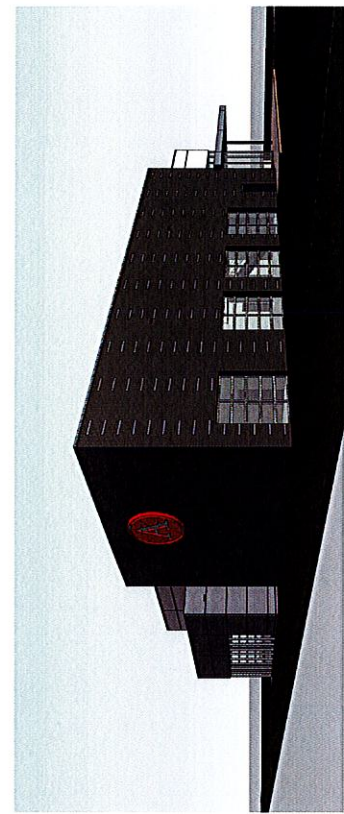
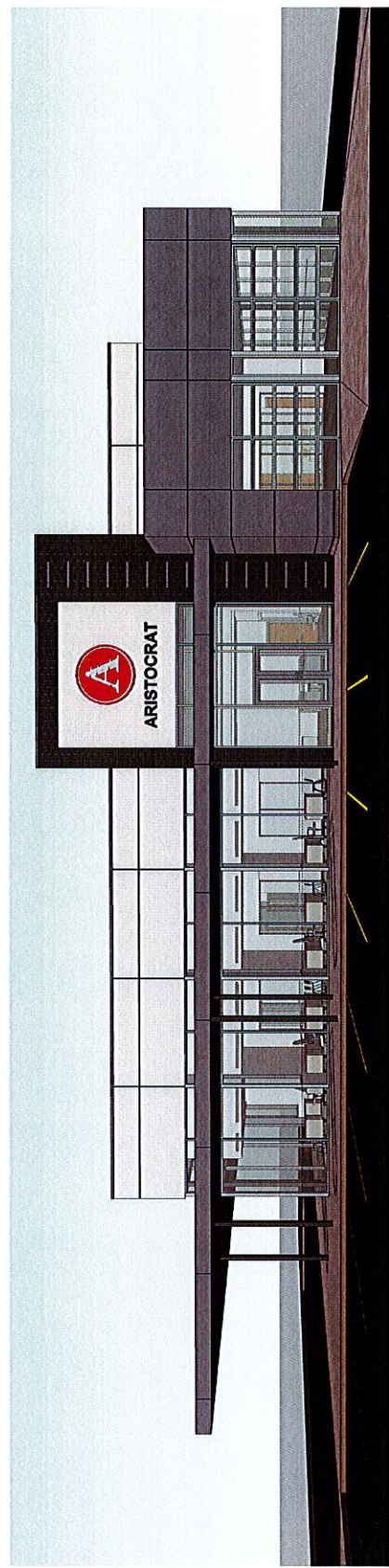
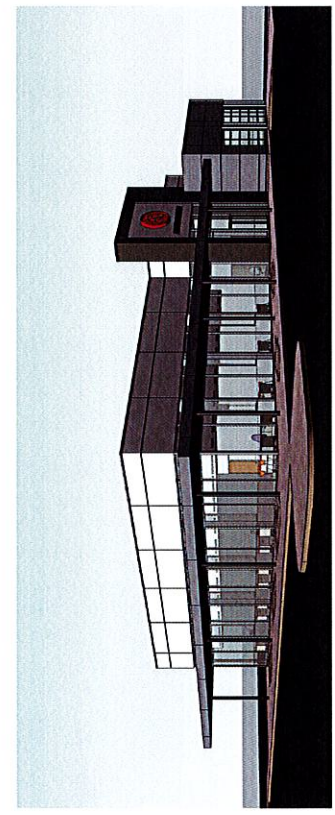
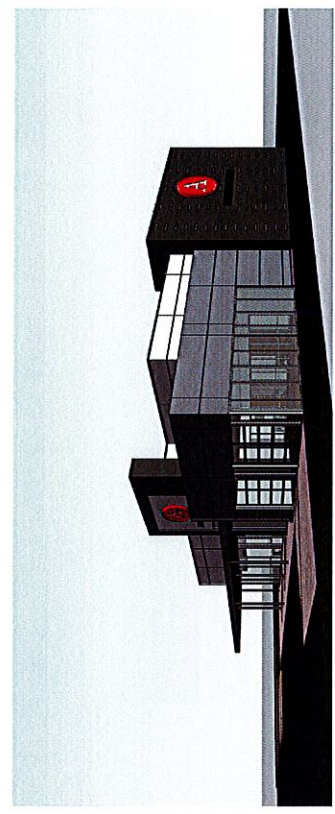
Staff recommends approval of the proposed preliminary development plan.





|                         |            |
|-------------------------|------------|
| Project #               | 160506     |
| Preliminary Development |            |
| Plan Resubmittal        | 07/15/2016 |
| Revisions               |            |
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Aristocrat Pre-Owned Sales Building  
New Construction  
Soave Automotive Group  
Lee's Summit, MO



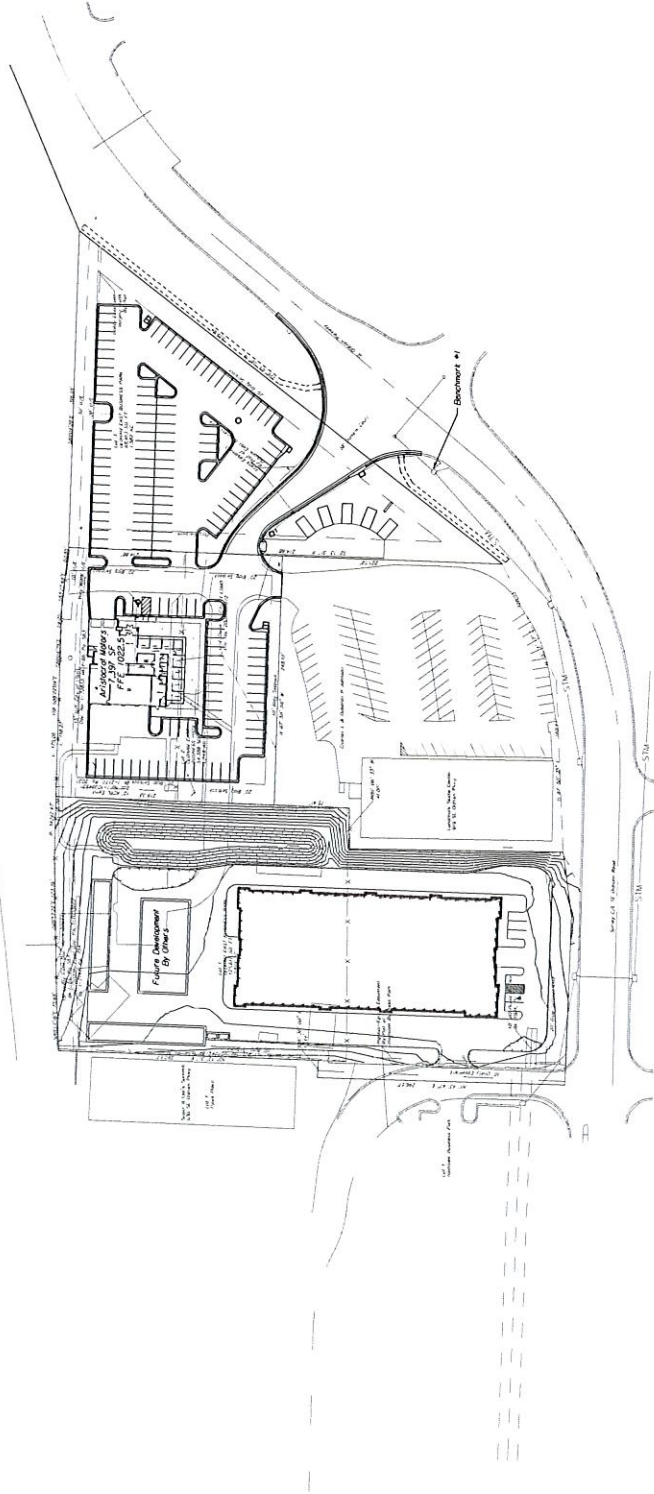
# INDEX

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- 3 DIMENSION PLAN
- 4 EXISTING UTILITIES
- 5 ADA RAMP DETAIL
- 6 STORM SEWER PLAN
- 7 DRAINAGE AREA MAP
- 8 UTILITY PLAN
- 9 EROSION CONTROL PLAN
- 10-14 DETAIL SHEETS

APPENDIX:  
ARCHITECTURAL FLOORPLANS AND ELEVATIONS  
LANDSCAPING PLANS  
LIGHTING PLANS AND SPECS  
AUS STORM TECH DETENTION PLANS

## ARISTOCRAT MOTORS LOTS 2 AND 3 OLDHAM EAST BUSINESS PARK LEE'S SUMMIT - JACKSON COUNTY MO PRELIMINARY DEVELOPMENT PLAN

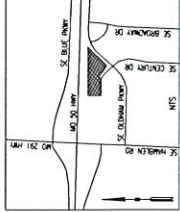
SCALE: 1" = 60'  
60' 0 60



PREPARED FOR  
**ARISTOCRAT MOTORS**  
6102 West 65th Street  
Merriam, KS 66203  
Attn: Kevin Killilea

PROJECT BENCHMARK  
#1 SE Corner of Existing Field Inlet  
N: 9957288.08  
E: 2287531.64  
ELEV: 1010.12

### VICINITY MAP



### UTILITIES

- City of Lee's Summit  
Department of Public Works  
215 N. Spring  
Lee's Summit, Mo.  
816-969-1800
- KCPD  
130 SE Hamilton Road  
Lee's Summit, Mo.  
816-347-4320
- Missouri Gas Energy  
3025 SE Oliver Road  
Lee's Summit, Mo.  
816-537-4681
- AT&T  
215 N. Spring  
Independence, Mo.  
816-325-5610
- Time Warner  
6550 Winchester Avenue  
Kansas City, Mo.  
913-643-1901
- Missouri One Call  
1-800-344-7483

COVER SHEET

ARISTOCRAT MOTORS

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

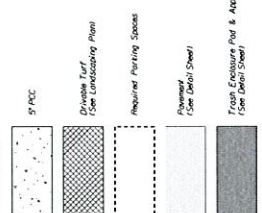
**Consult Inc**  
engineers  
planners  
7/16/19

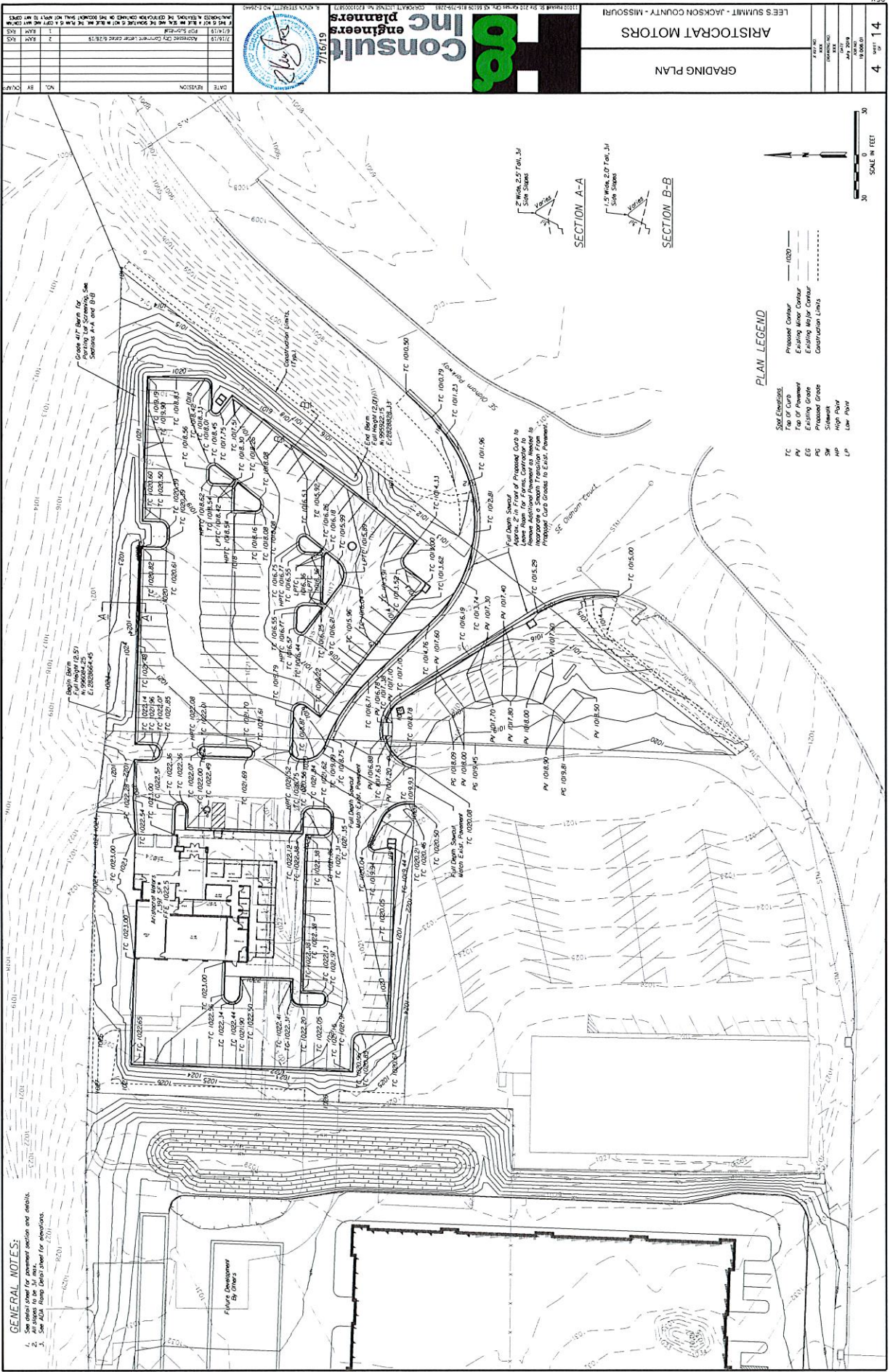


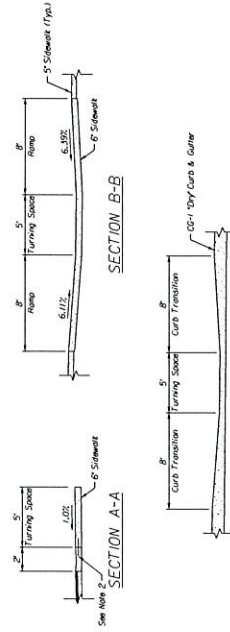
| DATE    | REVISION                                     | NO. | BY  | OUTLINE |
|---------|----------------------------------------------|-----|-----|---------|
| 7/16/19 | Revised City Government Letter dated 5/28/19 | 2   | BAV | RJS     |
| 7/16/19 | Final                                        | 1   | BAV | RJS     |

REV. 1 14









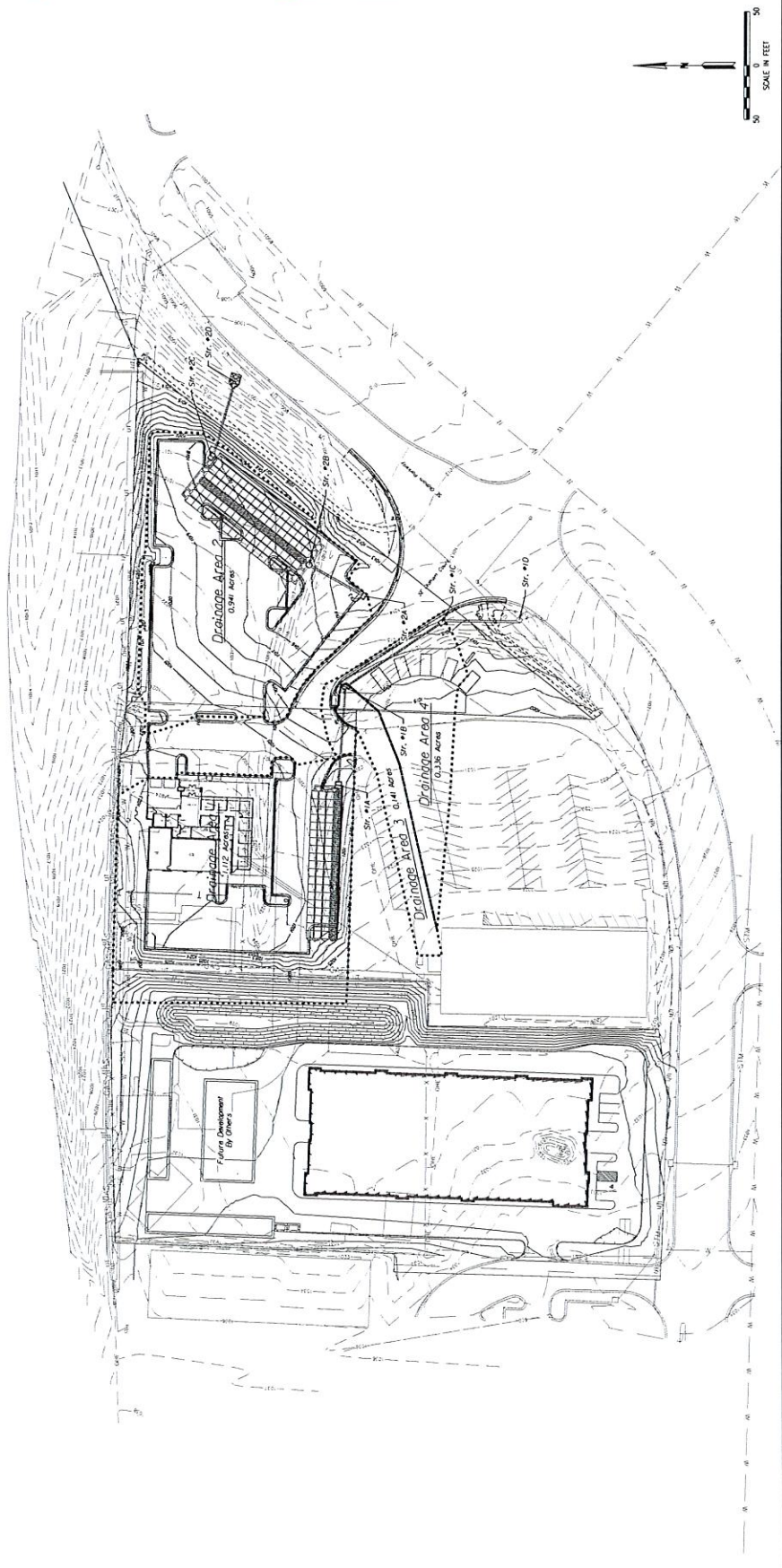
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWING).

| Spot Elevations |                 |
|-----------------|-----------------|
| TC              | Top Of Curb     |
| PV              | Top Of Pavement |
| EG              | Existing Grade  |
| PG              | Proposed Grade  |
| SW              | Sidewalk        |
| HP              | High Point      |
| LP              | Low Point       |

**JOINT DETAILS**  
Not to Scale

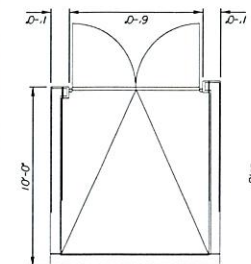


**DRAINAGE SUMMARY:**

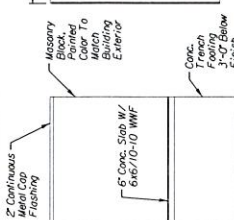
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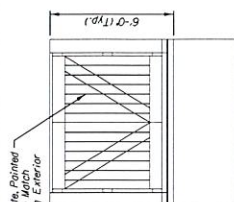




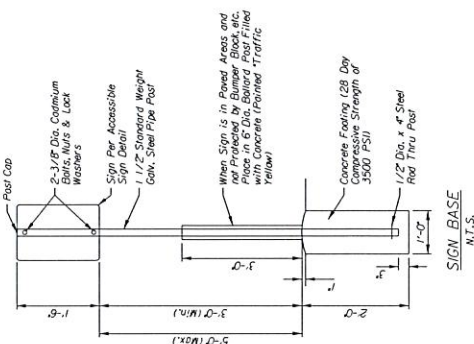
Up/



MASONRY TRASH ENCLOSURE



From



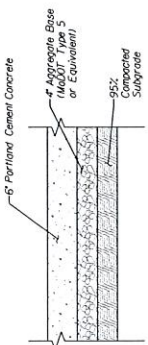
SIGN BASE  
N.T.S.



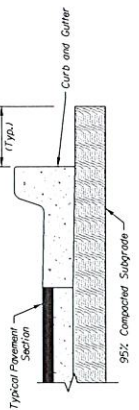
1. All signs should comply with U.S. Department of Transportation Federal Highway Administration's "Uniform Traffic Control Devices", and local codes as specified. Mount signs in accordance with manufacturer's instructions.



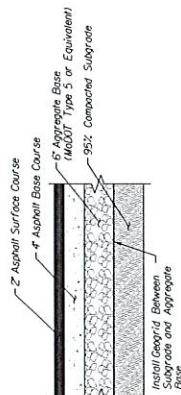
ACCESSIBLE SIGN DETAIL



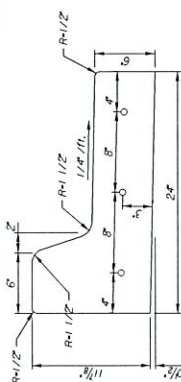
TRASH ENCLOSURE PAD  
& APPROACH SECTION



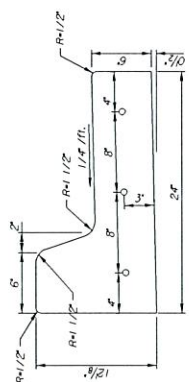
PAVING DETAIL  
N.T.S.



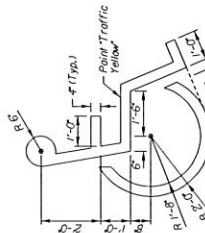
PAVEMENT SECTION  
NTS



"DRY" STRAIGHT BACK CURB & GUTTER  
(TYPE "DRY" CG-1)  
N.T.S.



STRAIGHT BACK CURB & GUTTER  
(TYPE CG-1)  
N.T.S.



ACCESSIBLE PARKING SYMBOL

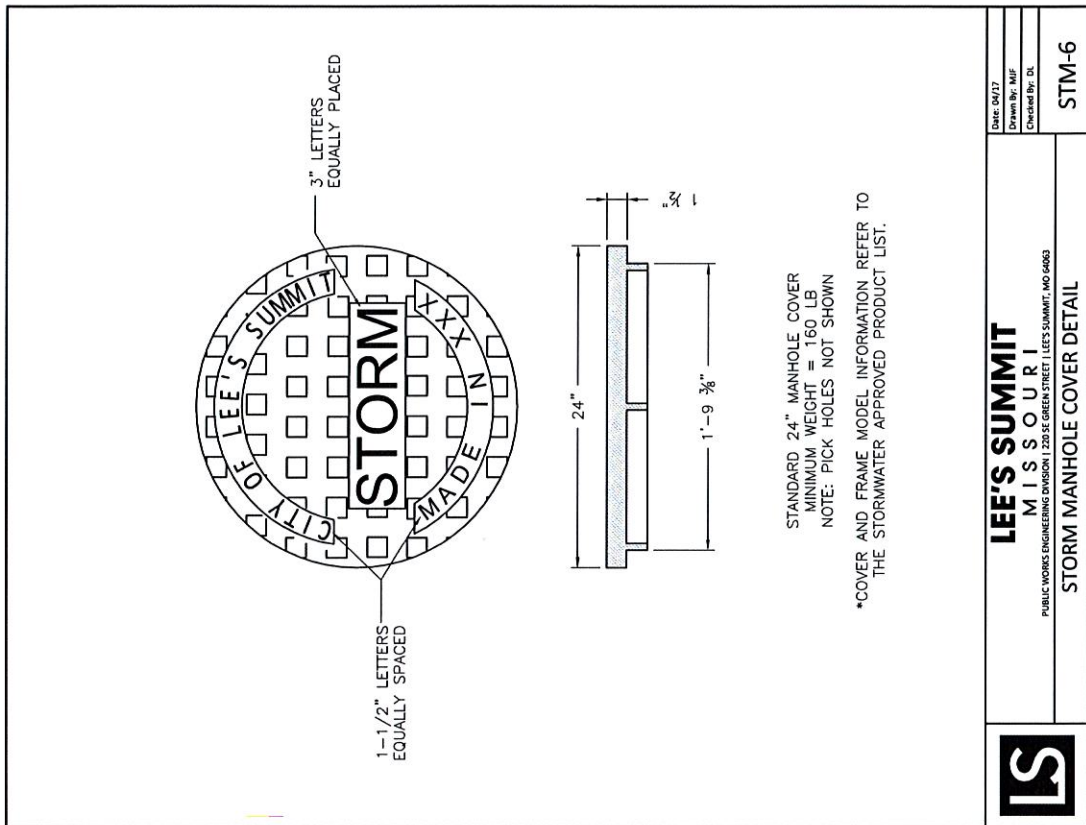
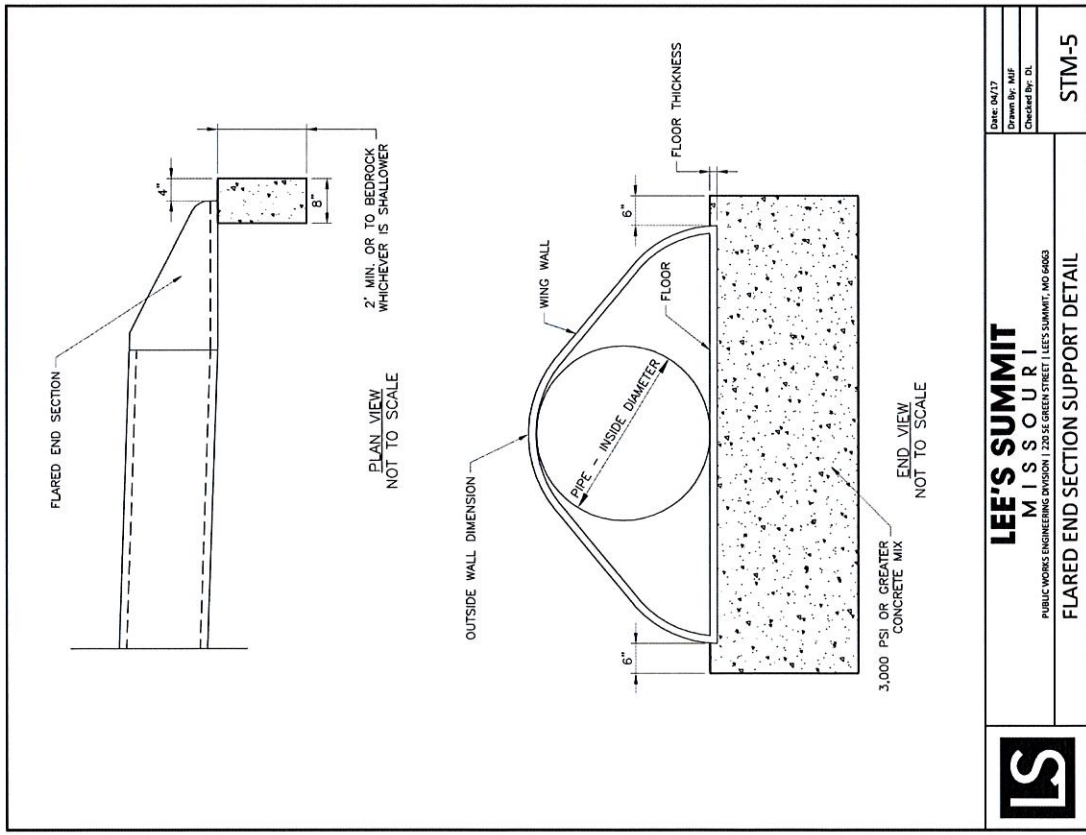
NOTE: Symbol to be centered in parking space and oriented as illustrated on plans.

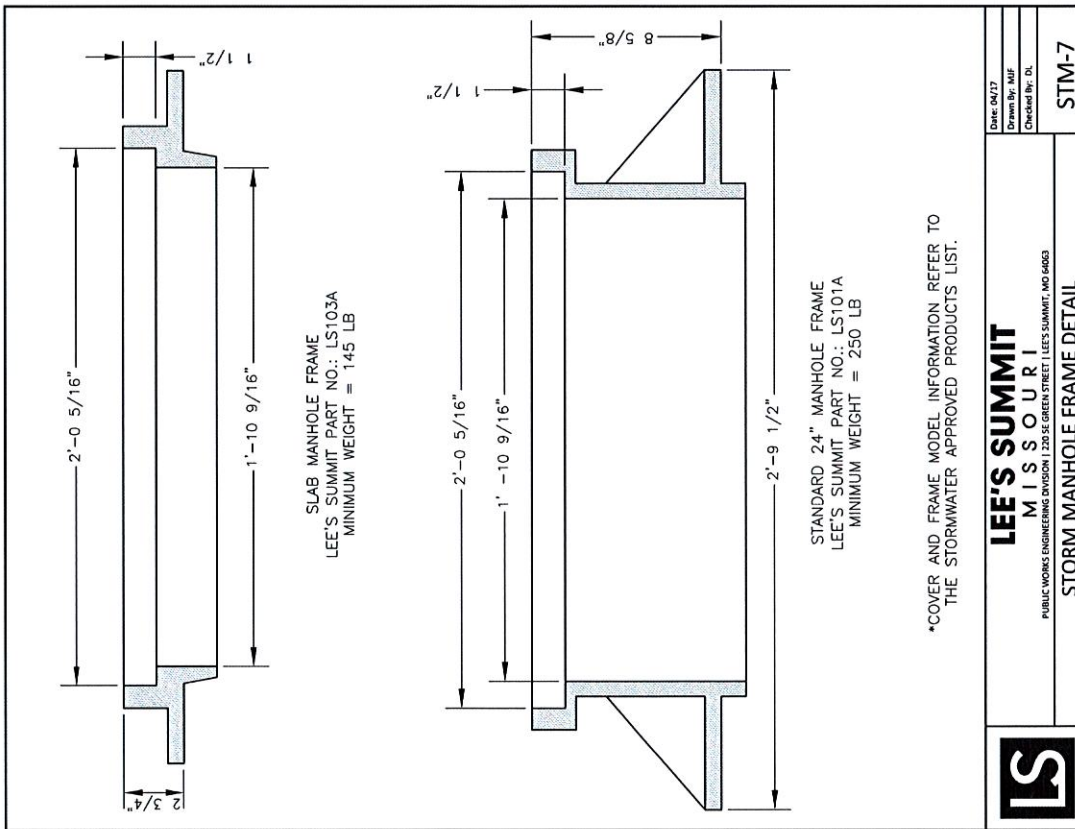
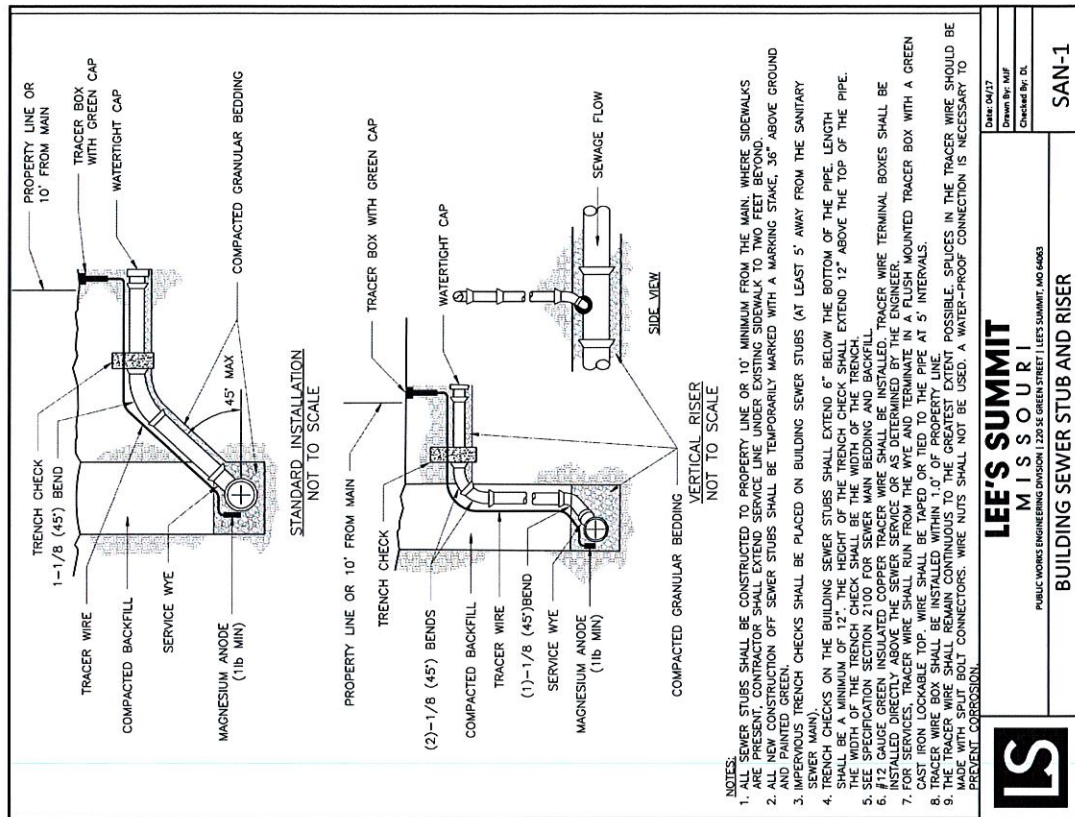
**CURB & GUTTER EXPANSION:**

1. J/F Expansion joints with 2 epoxy-coated dowels shall be placed at radius points and at 150' intervals. These dowels shall be greased and wrapped on an end with expansion tubes.
2. Deep contraction joints shall be installed at approximately 10' intervals. These joints shall pass across the entire curb face.
3. Fix dowels with bar chairs or equal.
4. Depth of curb shall be minimum of 8" through the handicap access ramp.









| PROJECT INFORMATION              |                                                                   |
|----------------------------------|-------------------------------------------------------------------|
| ENGINEERED<br>PRODUCT<br>MANAGER | GARRETT KLINGLER<br>816-401-7559<br>GARRETT.KLINGLER@ADS-PIPE.COM |
| ADS SALES REP:                   | JOHN WHITWOOD<br>816-805-5570<br>JOHN.WHITWOOD@ADS-PIPE.COM       |
| PROJECT NO:                      | 181081                                                            |



ADVANCED DRAINAGE SYSTEMS, INC.

# KANSAS CITY MOTORS

LEE'S SUMMIT, MO

## STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
5. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
  - a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
  - b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
  - c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

## IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
  - STORMTECH RECOMMENDS 3 BACKFILL METHODS:
  - STONESHOOTER LOCATED OFF THE CHAMBER BED.
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM 1" - 9" (250 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm) MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

## NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO TRUCK OR EXCAVATOR IS ALLOWED ON CHAMBERS UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT: WEST

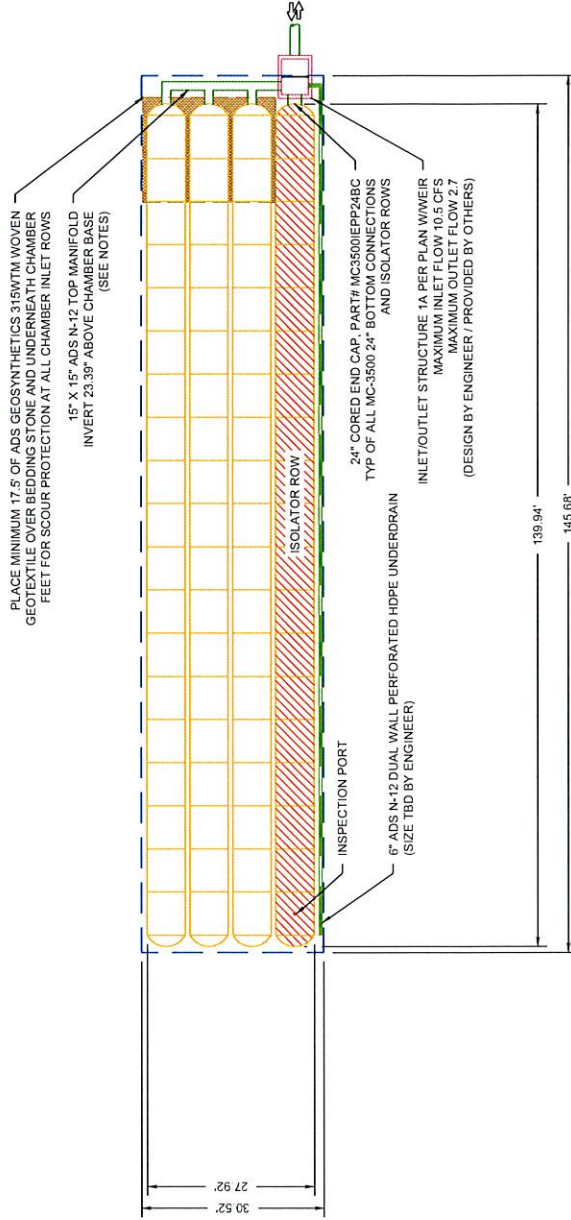
|        |                                |
|--------|--------------------------------|
| 76     | STORMTECH MC-3500 CHAMBERS     |
| 8      | STORMTECH MC-3500 END CAPS     |
| 12     | STONE ABOVE (in)               |
| 9      | STONE BELOW (in)               |
| 40     | % STONE VOID                   |
| 14,865 | INSTALLED SYSTEM VOLUME (CF)   |
|        | (PERIMETER STONE INCLUDED)     |
| 4,445  | SYSTEM AREA (ft <sup>2</sup> ) |
| 354    | SYSTEM PERIMETER (ft)          |

PROPOSED ELEVATIONS: WEST

|                                                      |         |
|------------------------------------------------------|---------|
| MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):   | 1024.90 |
| MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):      | 1019.40 |
| MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):        | 1018.90 |
| MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): | 1018.90 |
| MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT):     | 1018.90 |
| TOP OF STONE:                                        | 1017.90 |
| TOP OF MC-3500 CHAMBER:                              | 1016.90 |
| 15" TOP MANIFOLD INVERT:                             | 1015.10 |
| 24" ISOLATOR ROW INVERT:                             | 1013.32 |
| BOTTOM OF MC-3500 CHAMBER:                           | 1013.15 |
| UNDERDRAIN INVERT:                                   | 1012.40 |
| BOTTOM OF STONE:                                     | 1012.40 |

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH SHEET #7 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



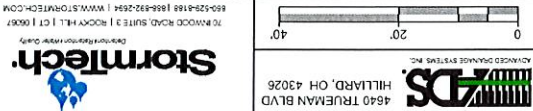
## PROPOSED ELEVATIONS

|                                                      |         |
|------------------------------------------------------|---------|
| MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):   | 1019.20 |
| MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):      | 1013.70 |
| MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):        | 1013.20 |
| MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): | 1013.20 |
| MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT):     | 1013.20 |
| TOP OF STONE:                                        | 1012.20 |
| TOP OF MC-3500 CHAMBER:                              | 1011.20 |
| 15' TOP MANIFOLD INVERT:                             | 1009.40 |
| 24' ISOLATOR ROW INVERT:                             | 1007.62 |
| 15' BOTTOM MANIFOLD / CONNECTION INVERT:             | 1007.58 |
| BOTTOM OF MC-3500 CHAMBER:                           | 1007.45 |
| UNDERGRAIN INVERT:                                   | 1006.70 |
| BOTTOM OF STONE:                                     | 1006.70 |

## PROPOSED ELEVATIONS

|                                                      |         |
|------------------------------------------------------|---------|
| MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):   | 1019.20 |
| MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):      | 1013.70 |
| MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):        | 1013.20 |
| MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): | 1013.20 |
| MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT):     | 1013.20 |
| TOP OF STONE:                                        | 1012.20 |
| TOP OF MC-3500 CHAMBER:                              | 1011.20 |
| 15' TOP MANIFOLD INVERT:                             | 1009.40 |
| 24' ISOLATOR ROW INVERT:                             | 1007.62 |
| 15' BOTTOM MANIFOLD / CONNECTION INVERT:             | 1007.58 |
| BOTTOM OF MC-3500 CHAMBER:                           | 1007.45 |
| UNDERGRAIN INVERT:                                   | 1006.70 |
| BOTTOM OF STONE:                                     | 1006.70 |

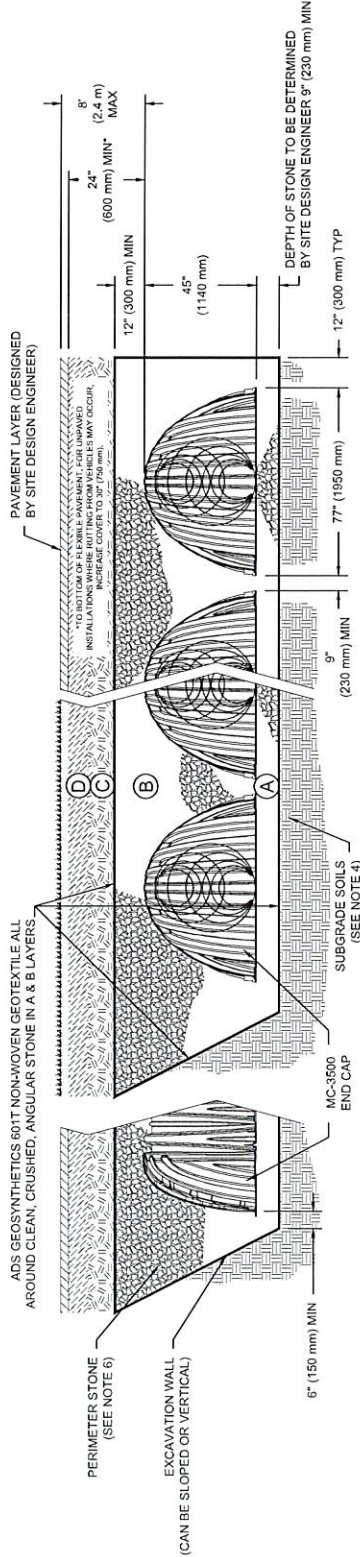
- MANHOLE SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH SHEET #7 FOR MANHOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANHOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

| MATERIAL LOCATION                                                                                                                                                                                            | DESCRIPTION                                                                                                                                            | AASHTO MATERIAL CLASSIFICATIONS                                                                                                           | COMPACTION / DENSITY REQUIREMENT                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D<br>FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE EMBEDMENT OR UNPAVED PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.              | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.                                        | N/A                                                                                                                                       | PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.                                                                                                                               |
| C<br>INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.<br>MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145 <sup>1</sup><br>A-1, A-2-4, A-3<br>OR<br>AASHTO M43 <sup>1</sup><br>3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. |
| B<br>EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.                                                                                            | CLEAN, CRUSHED, ANGULAR STONE                                                                                                                          | AASHTO M43 <sup>1</sup><br>3, 4                                                                                                           | NO COMPACTION REQUIRED.                                                                                                                                                                                                                               |
| A<br>FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.                                                                                                         | CLEAN, CRUSHED, ANGULAR STONE                                                                                                                          | AASHTO M43 <sup>1</sup><br>3, 4                                                                                                           | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2, 3</sup>                                                                                                                                                                                      |

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION. EQUIPMENT, FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

- MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.







**LP101**

**PL2019-204 PRELIM DEV PLAN and  
PL2019-203 SUP  
Artistocrat Motors**

