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690 Chesterfield Pkwy W • Chesterfield MO 63017-0760  
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## Architectural Review Board Staff Report

**Project Type:** Site Development Section Plan, Lot 2

**Meeting Date:** May 11, 2017

**From:** Cecilia Hernandez  
Project Planner

**Location:** 18600 Olive Street Road, Lot 2

**Applicant:** MW Weber Architects

**Description:** **18600 Olive Street Rd (Canaan Crossing, Lot 2)**: A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect’s Statement of Design for a 1.02 acre tract of land zoned “PI” Planned Industrial District located south of Olive Street Road west of its intersection with Spirit Airpark West Drive.

### **PROPOSAL SUMMARY**

The request is for a Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect’s Statement of Design for a new 10,000 square foot professional and technical service facility. The proposed building is to be constructed of brick, EIFS, cast stone, and aluminum. The subject site is zoned “PI” Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance 2903.

### **HISTORY OF SUBJECT SITE**

At 1.02 acres in size, the subject site is roughly one-fifth of a 5.0 acre parcel and was originally zoned “M3” Planned Industrial District by St. Louis County prior to the incorporation of the City of Chesterfield. The site is currently vacant and was rezoned to “PI” Planned Industrial District via ordinance 2903 in July of 2016. Since that time, a Site Development Concept Plan has been approved and the Record Plat was approved by City Council on May 1<sup>st</sup>.



Figure 1: Site Photo

## **STAFF ANALYSIS**

### **General Requirements for Site Design:**

#### **A. Site Relationships**

The proposed structure is to be set back behind two rows of accessory parking, with additional parking along the rear of the building. The placement of the structure behind the parking is consistent with the Site Development Concept Plan, which provides a cross access easement along the front parking areas. This configuration serves to connect all 5 lots of the development and ensures a maximum of 2 curb cuts for this development (both off of Spirit Airpark West Drive). For reference, see the Site Development Concept Plan excerpt in Figure 2 below.

#### **B. Circulation System and Access**

Proposed access to the site would be from the shared curb cut off of Spirit Airpark West Drive that also provides direct access to Lot 1. A cross-access easement through the parking lot of each lot serves to create a loop between the two curb cuts and Spirit Airpark West Drive, permitting access to all 5 lots within the development.

The Unified Development Code includes a number of specific requirements for commercial and industrial developments within the Chesterfield Valley. These requirements include utilizing architectural elements from the front façade on the side and rear of the structure and screening trash enclosures which are to be constructed with materials consistent to the building. With the current proposal, the applicant provides a 360-degree architecture, integrating consistent materials on all four sides of the building and the trash enclosure alike.

Additionally, the applicant is providing a sidewalk along Spirit Airpark West Drive as shown on the Site Development Concept Plan excerpt in Figure 2 below.

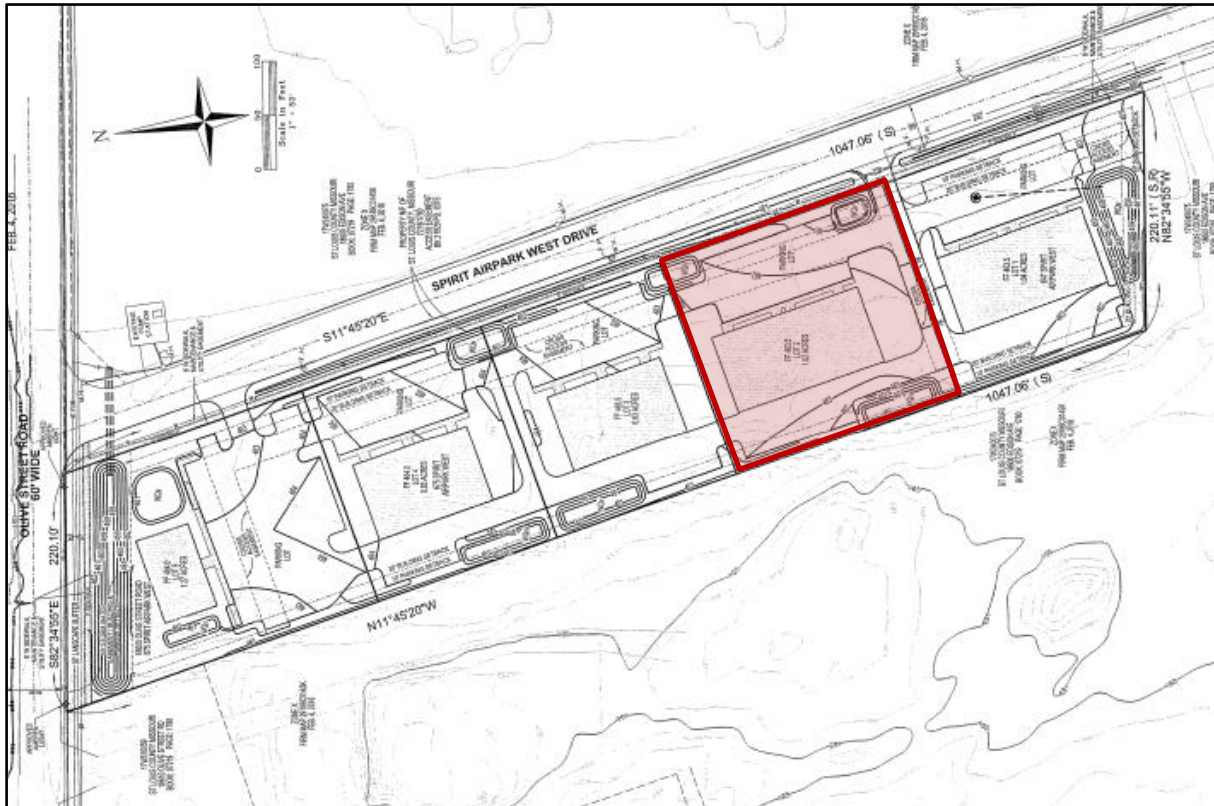


Figure 2: Site Development Concept Plan Excerpt

### C. Topography & Retaining Walls

The subject site is relatively flat and the applicant does not propose significant grade alterations or retaining walls.

### General Requirements for Building Design:

#### A. Scale, Design, Materials and Color

The proposed one-story structure is consistent in height and scale with other stand-alone buildings in the area, and matches the architecture of the building proposed on the adjacent Lot 1 which was before this board in April. The main entry to the building is provided on the eastern elevation near the proposed parking. The applicant is proposing four entry points along the front façade, two of which are on the articulated end caps of the building. Additionally, the eastern (front) elevation is further broken down by details such as glazing bars, columns, and canopies, all of various materials. Additional design themes on the frontages have been carried onto the side elevations as desired for structures within the Chesterfield Valley. Mechanical equipment is planned to be located along the northwestern and southwestern elevations and will be screened by brick walls and cast stone tops which are consistent with the building design.

Materials planned for this proposal include brick, EIFS, cast stone, and aluminum. Material samples will be made available for the Board's consideration at the meeting.

## **B. Landscape Design and Screening**

Landscaping is planned in association with the proposed development as required by the City of Chesterfield. The landscape design provides a variety of deciduous and evergreen trees along Spirit Airpark West Drive and near parking areas. Additionally, low-maintenance and pollinator species have been integrated to ensure a variety of seasonal color and texture is present throughout the site.

The trash enclosure and screened mechanical equipment area are to be constructed of the same material and color proposed for the main structure. As previously mentioned, this is a design element which is required for development within the Chesterfield Valley.

In conjunction with the review of Lot 1, the Architectural Review Board discussed the possibility of provided landscaping around the proposed trash enclosure; however, the location of the enclosure against the property line made that very difficult. With this in mind, the applicant has placed some vegetation on the north side of the abutting trash enclosures for Lots 1 and 2.

## **C. Signage**

Signage will be approved by a separate City process. However, the proposed locations of monument signs are required to be shown on the site plan. No monument signs are being proposed at this time, and the applicant has been advised that any future monument signs may require an amended site development section plan.

## **D. Lighting**

The proposed lighting for this development consists of three (3) light standards within the front parking field, one (1) light standard along the southern drive aisle, and ten (10) wall mounted lighting fixtures. No accent lighting is proposed for this building.

## **DEPARTMENTAL INPUT**

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design. Be advised that this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission.

## **MOTION**

The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design, for 18600 Olive Street Road, Lot 2, as presented, with a recommendation for approval (or denial) to the Planning Commission."
- 2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design, for 18600 Olive Street Road, Lot 2, to the Planning Commission with the following recommendations..."

## **Attachments**

1. Architectural Review Packet Submittal





RECEIVED  
MAY -1 2017  
City of Chesterfield  
Department of Public Services

**ARCHITECTURAL REVIEW BOARD  
Project Statistics and Checklist**

**Date of First Comment Letter Received from the City of Chesterfield** \_\_\_\_\_

**Project Title:** Airpark Centre (Building 2) **Location:** 657 Spirit Airpark West Drive

**Developer:** Kurt Odle **Architect:** mw Weber architects **Engineer:** Volz

**PROJECT STATISTICS:**

**Size of site (in acres):** 1.02 acres **Total Square Footage:** 10,048 sf **Building Height:** 31' (to roof ridge)

**Proposed Usage:** Service building

**Exterior Building Materials:** Brick, EIFS, cast stone, aluminum fascia soffit & storefront system

**Roof Material & Design:** Architectural shingles

**Screening Material & Design:** HVAC units: 6' h. Brick wall with cast stone cap. Trash: 6' h. brick w/ aluminum cap

**Description of art or architecturally significant features (if any):** Please refer to the Architectural Design Statement.

**ADDITIONAL PROJECT INFORMATION:**

**Checklist: Items to be provided in an 11" x 17" format**

- Color Site Plan with contours, site location map, and identification of adjacent uses.
- Color elevations for all building faces.
- Color rendering or model reflecting proposed topography.
- Photos reflecting all views of adjacent uses and sites.
- Details of screening, retaining walls, etc.
- Section plans highlighting any building off-sets, etc. (as applicable)
- Architect's Statement of Design which clearly identifies how each section in the Standards has been addressed and the intent of the project.
- Landscape Plan.
- Lighting cut sheets for any proposed building lighting fixtures. (as applicable)
- Large exterior material samples. (to be brought to the ARB meeting)
- Any other exhibits which would aid understanding of the design proposal. (as applicable)
- Pdf files of each document required.



April 24, 2017

Architectural Review Board  
City of Chesterfield  
Department of Planning  
690 Chesterfield Parkway West  
Chesterfield, MO 63017-0760

**Re: Architect's Statement  
Airpark Centre (Building 2)**

Dear members of the Architectural Review Board,  
The following is the Architect's Statement for the Airpark Centre (Building 2), located at 657 Spirit Airpark West Drive.

**The Site:**

***Physical features and Access:***

The 1.02 acre project site will contain a one story, 10,000 square foot service building. The site is adjacent to a 1.06 acre undeveloped site (located to the south of the project). Both sites will share a single entry drive off of Spirit Airpark West Drive. The site has a very gentle slope from north to south and will contain a detention pond on the south side of the property. The adjacent properties are all undeveloped with very few trees or shrubs.

***Site Relationship & Circulation:***

The site which is accessed off of Spirit Airpark West Drive, contains parking in the front and the rear of the building but will be screened from the street, adjacent neighbors, and the building with layers of landscape buffers. Mechanical equipment will be located on the 2 side elevations of the building but will be screened with a 6' high brick wall with cast stone cap that naturally extrudes from the brick/cast stone walls of the building. The trash dumpster will also be screened with a similarly designed brick wall with stained wood swinging gates, which tucks in quietly at the rear of the property. The type and location of site and building lighting fixtures were designed to reduce excess glare into the neighboring properties. Many of the fixtures are indirect fixtures and will be located within the entry alcoves or back from the main face of the building, which allows the mass of the building to shield the glare from the side neighboring properties.

***Topography & Retaining walls:***

The natural topography is relatively level and will not require any retaining walls. The storm water management systems includes a bio-retention basin to handle water quality, and will be approved by the City and MSD.

**The Building:**

***Materials:***

The materials on the building include one color of brick, accent bands of light colored cast stone trim, one light color of EIFS, darker architectural shingles, clear aluminum storefront window and door frames with bluish gray tinted glazing. Light colored aluminum gutters, downspouts and entry canopies will complement the light colored EIFS and cast stone.

**Scale & Design:**

The one story building is appropriately scaled to the few buildings that are near the area, and matches the architecture of the building that is proposed to be built to the south of the site. In order to break down the scale of the building, taller masonry entry masses were created at the 2 front corners. The building is further broken down to a human scale with simple lower horizontal entry canopies that are integrated with the recessed entries or brick and cast stone pilaster entries. Lastly, a light colored cast stone trim was used as a linear thread that weaves throughout the building and acts as a unifying element that further breaks down the masses, forms an edge between the masonry (foreground mass) and EIFS (background mass), and ties all of the building elements together.

**Landscape design and screening:**

The required number of trees has been provided and, along the street frontage, have been located to provide shade at strategic points while also allowing "view corridors" into the site. Landscaping is also added to the buildings to buffer the spaces between this and the adjacent building.

The plant palette, designed for low maintenance, has been selected from Chesterfield's list of approved trees. The chosen plants also provide pollinators (especially at the bio-retention pond) and seasonal color & texture throughout the site.

**Signage:**

The signage shall be secondary to the architectural design, in order to not distract from the building architecture. Signage shall be designated in the area directly above the entry canopies. Address signage shall consist of individual aluminum numbers mounted directly to the top edge of the entry canopies.

**Lighting standards:**

The parking areas will be illuminated by full cutoff, low profile, LED roadway fixtures and equipped with house side shields where located at property lines to minimize glare and light trespass. Total fixture height is 18'-0" above finished grade. Building entries will incorporate a combination of full cutoff, low profile, LED surface mounted accent fixtures and recessed LED can lighting. Service bays will incorporate full cutoff, low profile, LED surface mounted accent fixtures. Foot candles at parking and drive areas are 0.5 minimum and 3.4 average. Maximum foot candles at the property lines are at 0.4 or below with most areas at 0.0. Average foot candles at all building entries are above 5.0.

Sincerely,  
mw Weber Architects



Michael J. Reardon  
Project Manager



**AIRPARK CENTRE (BUILDING 2)**  
Chesterfield, Missouri



**RENDERING**

**mw**  
**weber**  
**architects**

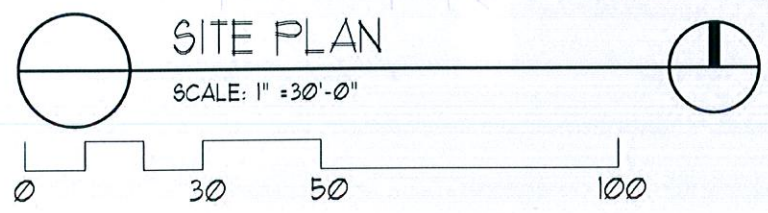
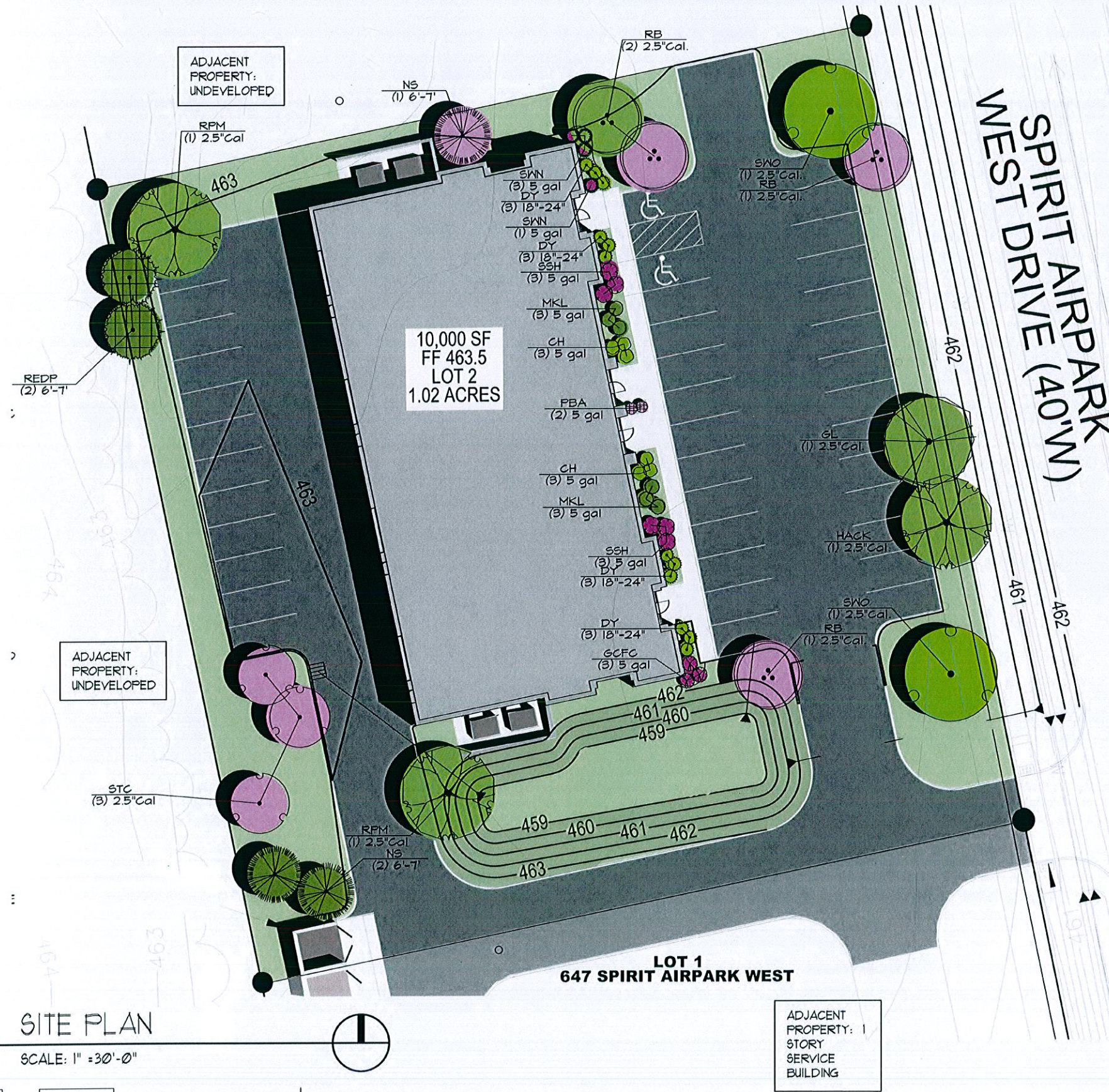
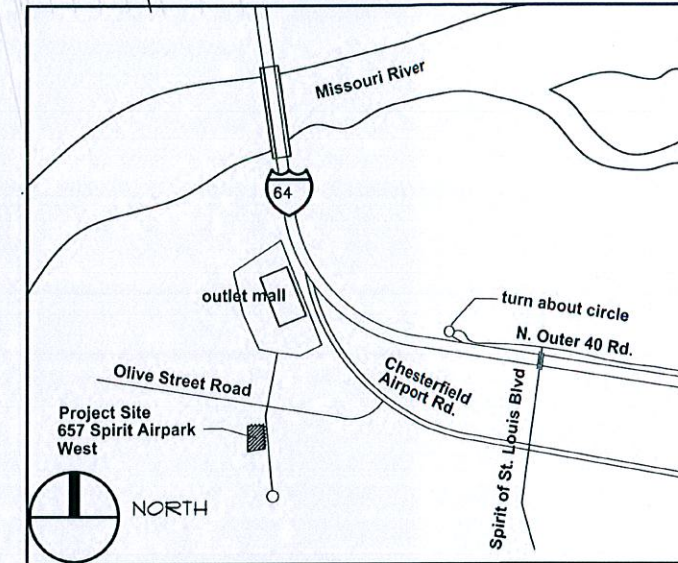
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24 APRIL 2011  
17036



# AIRPARK CENTRE (BUILDING 2)

Chesterfield, Missouri



**SITE PLAN**  
Scale: 1" = 30'-0"



636.519.1400

14 APRIL 2017  
11036



**AIRPARK CENTRE (BUILDING 2)**  
Chesterfield, Missouri



VIEW LOOKING NORTH (TOWARDS OLIVE STREET RD.)



VIEW LOOKING EAST (ACROSS SPIRIT AIRPARK WEST DRIVE)



VIEW LOOKING SOUTH (TOWARDS SPIRIT AIRPORT)

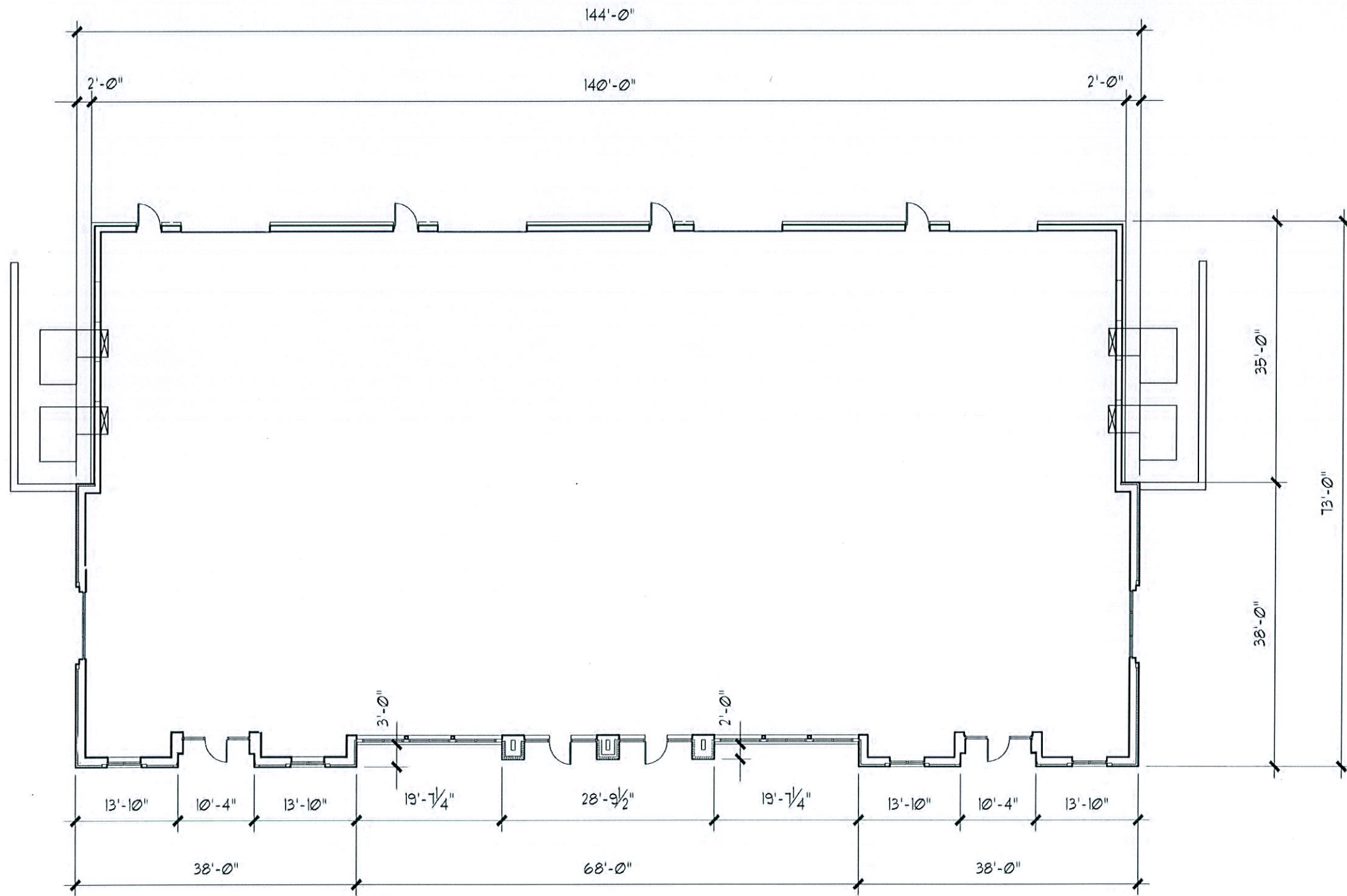


VIEW LOOKING WEST

**ADJACENT SITE PHOTOS**



**AIRPARK CENTRE (BUILDING 2)**  
Chesterfield, Missouri



**mw**  
**weber**  
architects

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**FLOOR PLAN**

Scale: 1/16" = 1'-0"

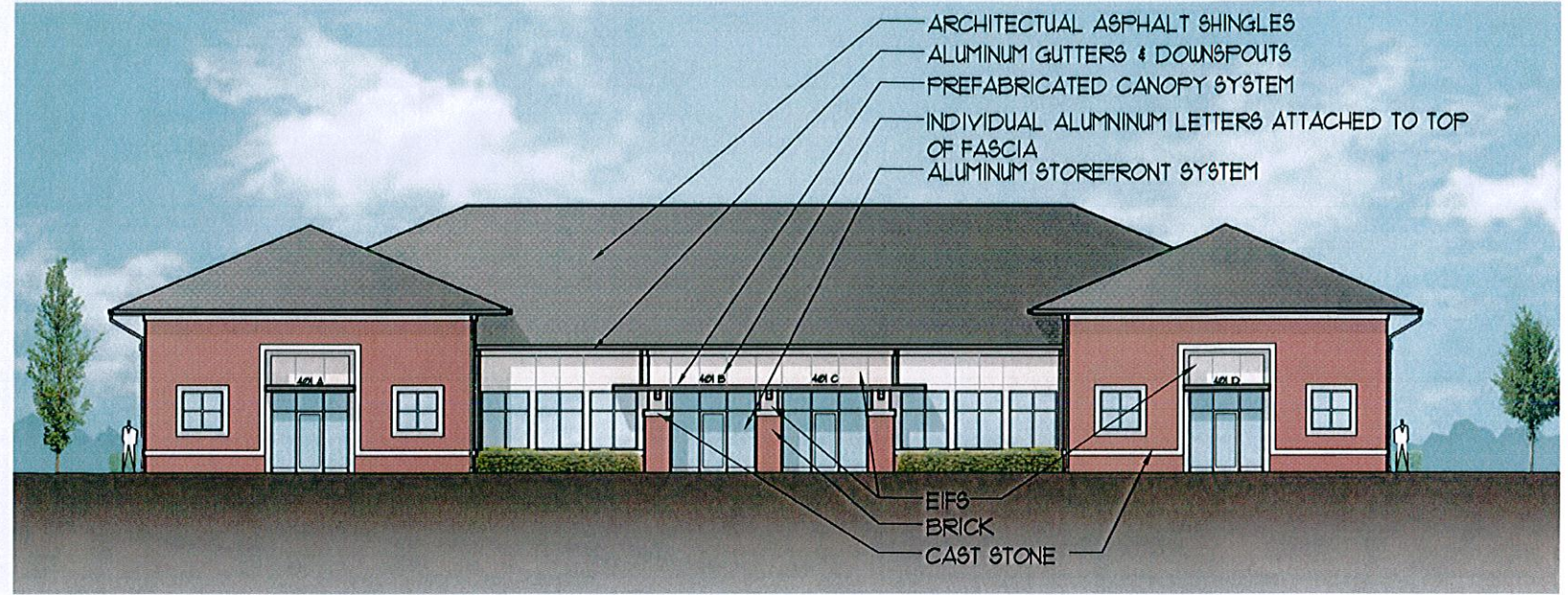
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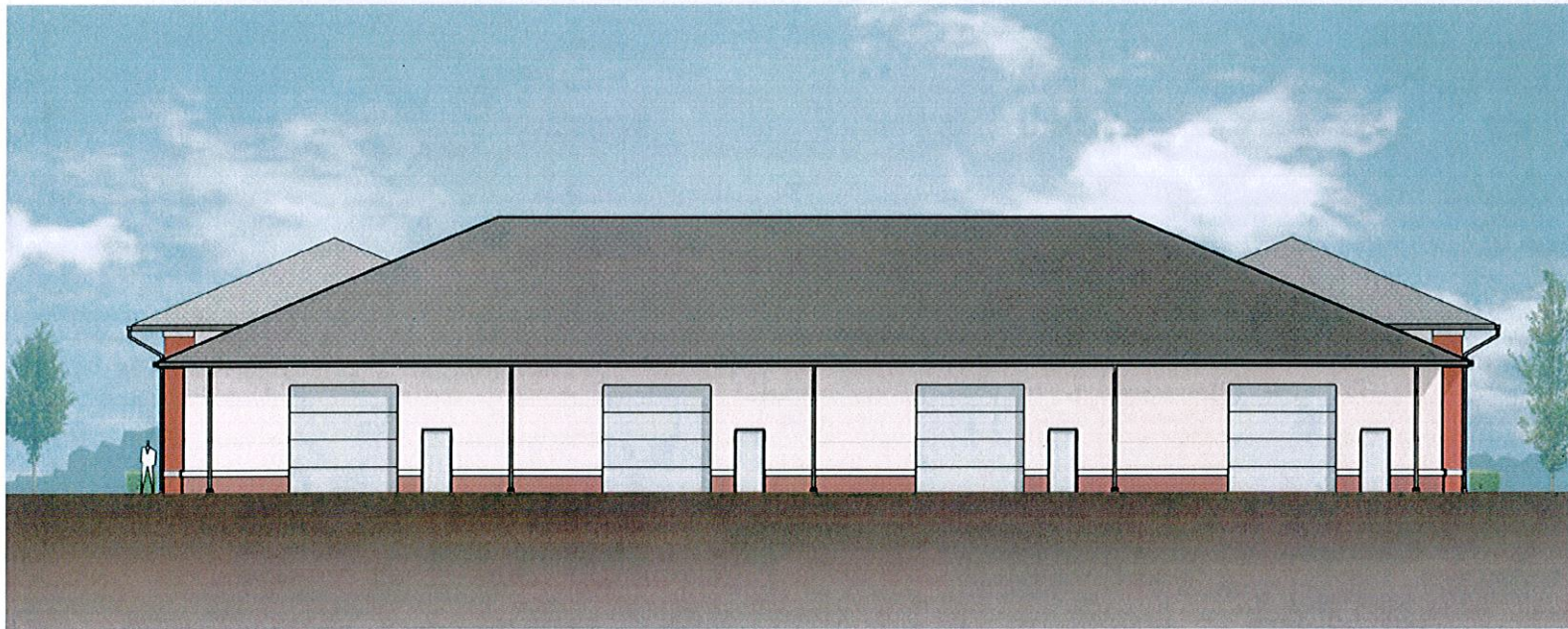
**AIRPARK CENTRE (BUILDING 2)**  
 Chesterfield, Missouri



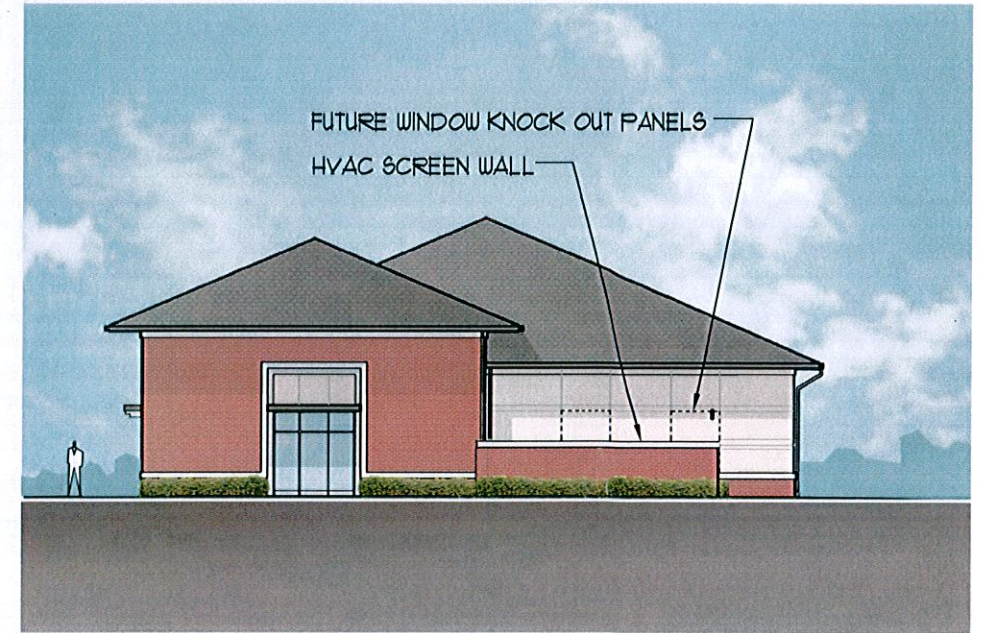
SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION

**EXTERIOR ELEVATIONS**

Scale: 1" = 20'-0"

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**weber**  
**architects**

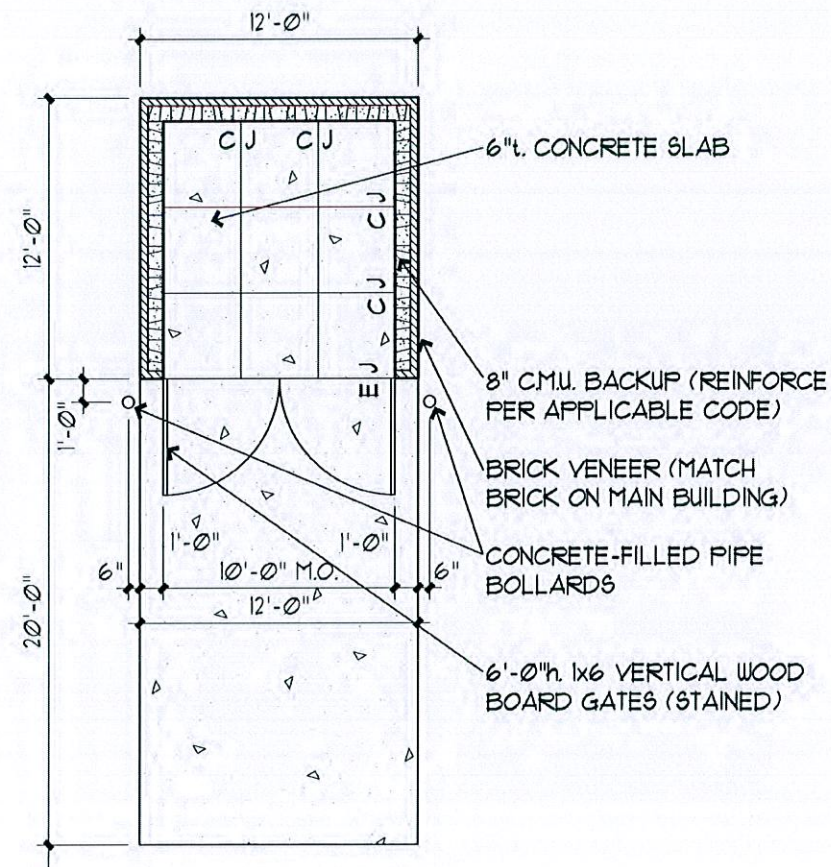
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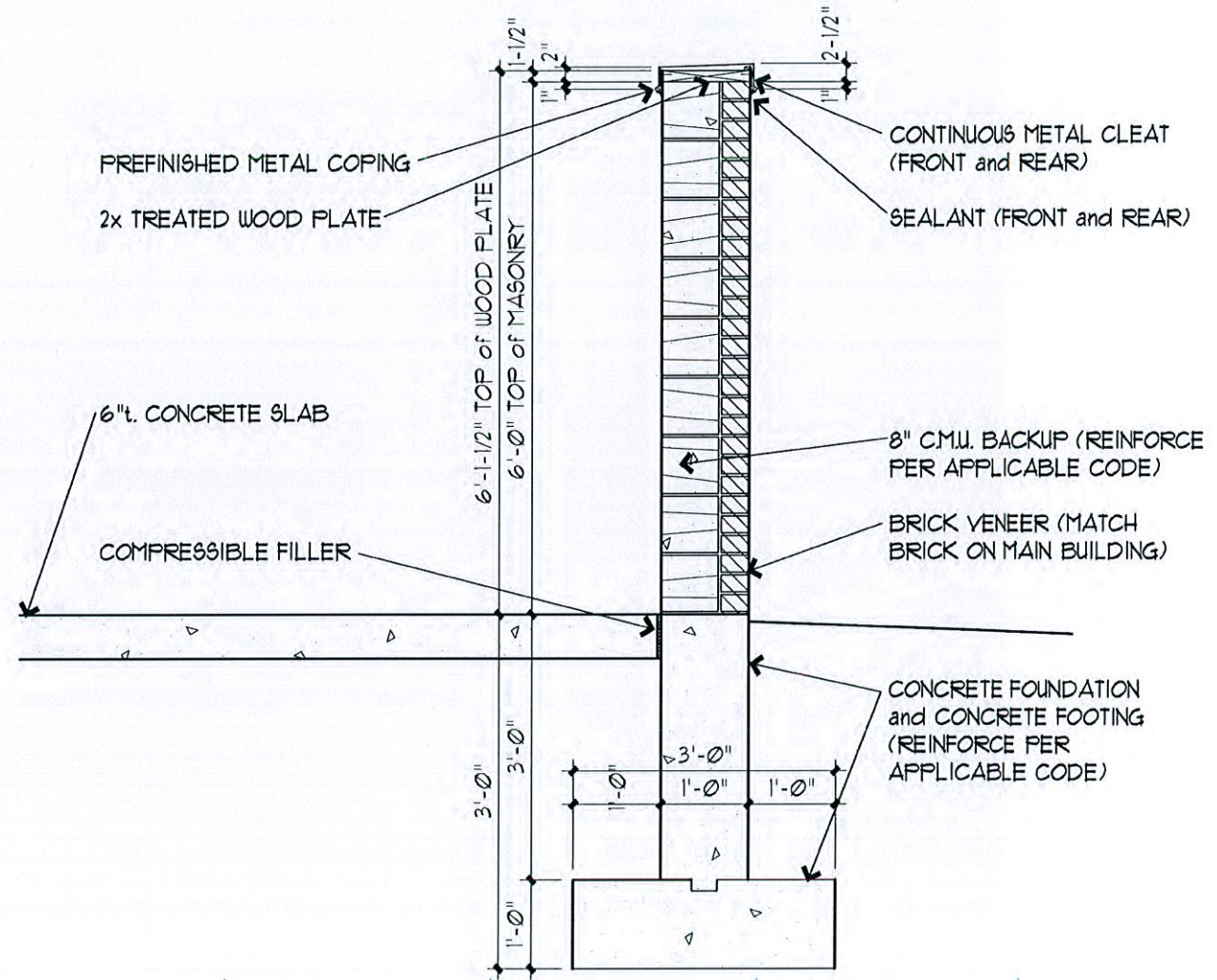


# AIRPARK CENTRE (BUILDING 2)

Chesterfield, Missouri



○ TRASH ENCLOSURE PLAN  
SCALE: 1/8" = 1'-0"

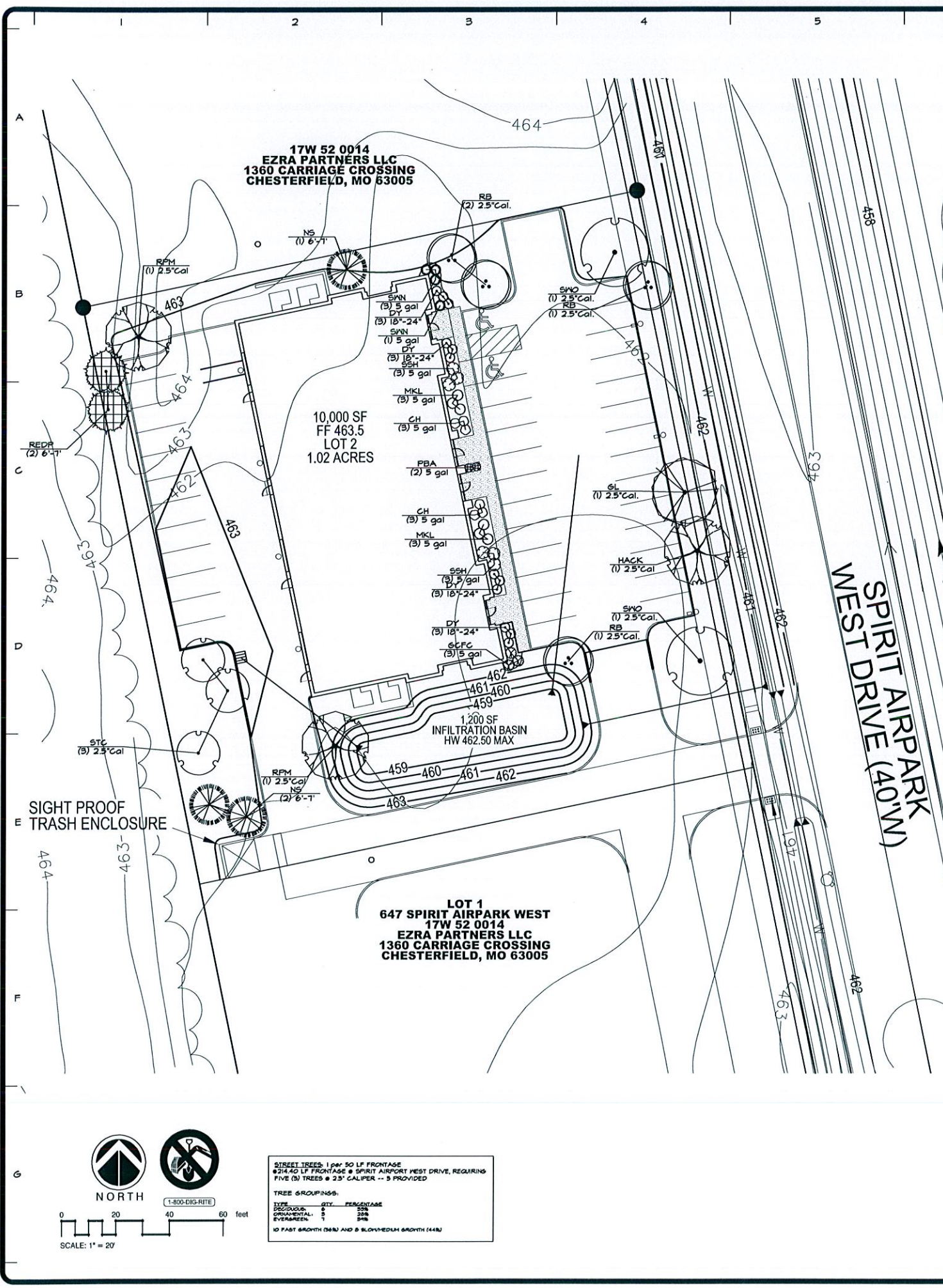


○ SECTION @ TRASH ENCLOSURE  
SCALE: 1/2" = 1'-0"

## PLAN & ELEVATIONS- TRASH ENCLOSURE

Scale: 1/16" = 1'-0"



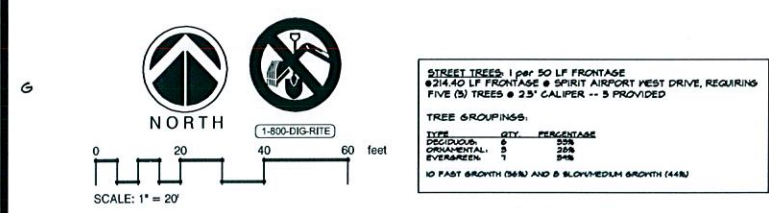


**LANDSCAPE GUIDELINE SPECS:**

- GENERAL:**
- All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing structures or vegetation from damage due to equipment usage. Contractors shall at all times protect all materials and work against injury to public.
  - The landscape contractor shall be responsible for any coordination and sequencing with other site related work being performed by other contractors. Refer to additional drawings for further coordination of work to be done.
  - Underground facilities, structures and utilities must be considered approximate only. There may be others not presently known or shown. It shall be the landscape contractor's responsibility to determine or verify the existence of and exact location of the above (call 1-800-DIG-RITE in Missouri).
  - Plant material are to be planted in the same relationship to grade as now grown in nursery conditions. All planting beds shall be cultivated to 6" depth minimum and graded smooth immediately before planting of plants. Plant groundcover to within 12" of trunk of trees or shrubs planted within the area.
  - It shall be the landscape contractor's responsibility to:
    - Verify all existing and proposed features shown on the drawings prior to commencement of work.
    - Report all discrepancies found with regard to existing conditions or proposed design on the landscape architect immediately for a decision.
    - Submit the locations of all proposed plant material and obtain the approval of the owner's representative or landscape architect ten (10) days prior to installation.
  - Items shown on the drawing take precedence over the material list. It shall be the landscape contractor's responsibility to verify all quantities and conditions prior to implementation of the plan. No substitutions of types or plant materials will be accepted without written approval from the landscape architect. Provide single-stem trees unless otherwise noted in plant schedule.
  - All plant material shall comply with the recommendations and requirements of ANSI Z601 "American Standards for Nursery Stock".
  - It shall be the contractor's responsibility to provide for inspection of the plant material by the Landscape Architect (or Owner's Representative) prior to acceptance. Inspections may take place before, during or after installation. Plants not conforming exactly to the plant list will not be accepted and shall be replaced at the landscape contractor's expense.
  - All bids are to have unit prices listed. The Owner has the option to delete any portion of the contract prior to signing the contract or suspending work. This will be a unit price contract; quotes shall be valid for 12 months.
  - Should auger equipment be utilized in excavating any plant pits, vertical sides of plant pits shall be thoroughly scarified to avoid creation of "pointed side mounds" prior to plant material installation.
  - All excess topsoil, rocks, debris and/or loosed soils shall be removed by the general contractor prior to plant project's turned over to the landscape contractor to commence landscape installation.
    - Keep all plant material (except turf) a minimum of 5' clear of fire hydrants.
    - Landscape contractor shall kill & remove all existing weeds within the project site.
    - All logs, nursery stakes, labels, etc. shall be removed by the landscape contractor at completion of all landscape installation.
    - Landscape contractor shall be in compliance with all Federal, state and local laws / regulations relating to insect infestation and/or plant diseases.
    - Transported material will not be guaranteed by the landscape contractor.
  - PRUNING:**
    - Lightly prune trees at time of planting. Prune only the crossover limbs, intermingled leaders and/or any broken branches. Some interior limbs and lateral branches may be pruned. However, do not remove the terminal buds of branches that extend to the edge of the crown.
    - All pruning shall comply with ANSI A300 standards.
  - INSURANCE:**
    - The landscape contractor shall submit certificates of insurance for workman's compensation and general liability.
  - MULCH:**
    - All mulch to be shredded oak bark mulch at 5" depth (after compaction) unless otherwise noted. Mulch shall be clean and free of all foreign materials, including weeds, mold, detritus, etc.
    - No plastic sheeting or filter fabric shall be placed beneath shredded bark mulch beds. Filter fabric shall be used beneath all gravel mulch beds. Edge all beds with spaced-out edge unless otherwise noted.
  - MAINTENANCE:**
    - Landscape Contractor shall provide a separate proposal to maintain all plants, shrubs, groundcover, perennials and annuals for a period of 12 months after acceptance.
    - Contractor shall ensure that only competent and trained personnel shall provide such services and that such services be provided in a timely manner.
  - SIGHT TRIANGLES:**
    - No landscape material or other obstructions shall be placed or be maintained within the sight distance area so as not to impede the vision between a height of thirty inches (30") and ten feet (10') above the adjacent street or paving surfaces.
    - Sight triangles at the intersection of a public street and a private access way (except for single family residences) shall also be formed by measuring from the point of intersection of the street frontage curb and the entrance curb lines a distance of 35' and connecting the points so established to form the sight triangle area.
    - All shrubs/perennials within sight triangle zones to be maintained at a maximum height of 24"; All trees to be maintained at a clear height from grade of ten (10) feet.

- TOPSOIL:**
- Topsoil mix for all proposed landscape plantings shall be five (5) parts well-drained screened organic topsoil to one (1) part Condition sphagnum peat moss on per planting details. Roto-till topsoil mix to a depth of 8" minimum and grade smooth.
  - Provide a soil analysis, as requested, made by an independent soil-testing agency outlining the % of organic matter, inorganic matter, detritus material, pH and mineral content.
  - Any foreign topsoil used shall be free of roots, stumps, weeds, broken stones (larger than 1"), litter or any other extraneous or toxic material. Landscape contractor shall be fully responsible for correcting all negative soil issues prior to plant installation. Killing and removal of all weeds shall be the responsibility of the landscape contractor as part of the task.
  - Landscape contractor to apply pre-emergent herbicide to all planting beds upon completion of planting operations and before application of shredded bark mulch.
  - Install siltation controls prior to commencement of any grading operations. Inspect and maintain all siltation fences on a weekly basis until vegetation is established.
- TREE MISCELLANEOUS MATERIALS:**
- Provide stakes and deadmen of sound, non hardwood, free of knots and defects.
  - Tree wrap tape shall be 4" minimum, designed to prevent borar damage and winter freezing. Additionally, only 5-ply tying material shall be used.
- TURF:**
- All disturbed lawn areas to be seeded with a mixture of Turf-type fescue (100% per acre) and bluegrass (10% per acre) seed mix to be uniformly distributed for a period of 40 days from date of final acceptance. Bare areas more than one square foot per any 50 square feet shall be replaced.
  - The turf contractor shall be responsible for protection of finished grade, restore and repair any erosion or water damage and obtain owner's approval prior to seeding or sod installation.
  - Landscape contractor shall offer an alternate price for sod in law of seed. Sod shall be cut at a uniform thickness of 3/4". No broken pieces, straw, grass or any other debris shall be accepted.
  - Any points carrying concentrated water loads and all slopes of 10% or greater shall be sodded.
  - All sod shall be placed a maximum of 24 hours after harvesting.
  - Recondition existing lawn areas damaged by Contractor's operations including equipment/material storage and movement of vehicles.
  - Sod Contractor to ensure sod is placed below sidewalk and all paved areas elevations to allow for proper drainage.
- EROSION CONTROL BLANKET (Where applicable):**
- All seeded areas shall receive an erosion control blanket which shall consist of loose straw mat and anchor pins as manufactured by North American Green, 50" W or approved equal. Install per manufacturer's recommendations.
- PLUG PLANTING NOTES:**
- All plugs to be 4-1/2" deep X 3" diameter minimum.
  - Plugs are to be planted in a hole dug with a trowel, spade or planting bar such that the hole is of a minimum diameter and depth to accommodate the plug and its roots, without damage.
  - Plugs shall be spaced in a triangular layout approximately 24" on center. Plugs shall be planted above erosion control blanket where appropriate.
  - Obtain plugs from a reputable nursery.
  - Water plugs upon completion of planting so that soil is moist but not saturated.
  - If planting is delayed more than six hours after delivery, store plugs in the shade, protect from weather and mechanical damage and keep them moist and cool. All plugs shall be planted within 24 hours after delivery.
- WARRANTY:**
- All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months after complete installation of all landscape material at 100% of the installed price.
  - Any plant material found to be defective shall be removed and replaced within 30 days of notification or in growth season determined to be best for that plant.
  - Only one replacement per tree or shrub shall be required at the end of the warranty period, unless loss is due to failure to comply with warranty.
  - Lawn establishment period will be in effect once the lawn has been mowed three times. Plant establishment period shall commence on the date of acceptance and 100% completion.
  - A written guarantee shall be provided to the owner per conditions outlined in #1 above.
- MISCELLANEOUS:**
- All landscape areas & islands shall be provided with a mechanical underground irrigation system (by others). Coordinate landscaping with irrigation contractor.
  - Adjust tree locations for light standards and underground utilities.
  - No trees or other obstructions shall be located within 6'-0" of fire hydrants.

PLANT SCHEDULE			
TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
HACK	1	Common Hackberry / <i>Celtis occidentalis</i>	2.5" Cal.
GL	1	Greenspire Littleleaf Linden / <i>Tilia cordata 'Greenspire'</i>	2.5" Cal.
RPM	2	Redpointe Maple / <i>Acer rubrum 'Frank Jr.'</i>	2.5" Cal.
SNO	2	Swamp White Oak / <i>Quercus bicolor</i>	2.5" Cal.
EVERGREEN TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
NS	3	Norway Spruce / <i>Picea abies</i>	6'-7"
REDP	2	Red Pine / <i>Pinus resinosa</i>	6'-7"
FLOWERING TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
RB	4	Redbud / <i>Cercis canadensis</i>	2.5" Cal.
STC	3	Sugarbyme Flowering Crab / <i>Malus 'Sutyzan'</i>	2.5" Cal.
SHRUBS	QTY	COMMON NAME / BOTANICAL NAME	SIZE
CH	6	China Boy/Giri Holly / <i>Ilex meserveae 'China Boy/Giri'</i> TM	5 gal
DY	12	Dance Yam / <i>Toxus media 'Densiformis'</i>	18"-24"
SCFC	3	Golden Charm False Cypress / <i>Chamaecyparis pisifera filifera 'Golden Charm'</i>	5 gal
MKL	6	Miss Kim Lilac / <i>Syringa patula 'Miss Kim'</i>	5 gal
FBA	2	Pinky Belts Abelia / <i>Abelia x 'Pinky Belts'</i>	5 gal
SBN	6	Strawberry Sundae Hydrangea / <i>Hydrangea paniculata 'Strawberry Sundae'</i>	5 gal
SNN	4	Summer Wine Ninebark / <i>Physocarpus opulifolius 'Summer Wine'</i>	5 gal
FORBS	QTY	COMMON NAME / BOTANICAL NAME	SIZE
GBS	56	Ozark Blue Star / <i>Amsonia illinoensis</i>	1 gal @ 80" OC
PFPM	63	Party Favor Rose Mallow / <i>Hibiscus lasiocarpus</i>	1 gal @ 80" OC
SMR	113	Swamp Milkweed / <i>Asclepias incarnata</i>	2 Qt. @ 24" OC
NATIVE GRASSES	QTY	COMMON NAME / BOTANICAL NAME	SIZE
SBI	581	Brown Fox Sedge / <i>Carex vulpinoidea</i>	Plug at 18" OC
	271	Great Green Bulrush / <i>Scirpus atrovirens</i>	Plug at 18" OC
	244	Morning Star Sedge / <i>Carex grayi</i>	Plug at 18" OC
	166	Palm Sedge / <i>Carex muskingumensis</i>	Plug at 18" OC



REVISIONS BY

3/4/17	RPH
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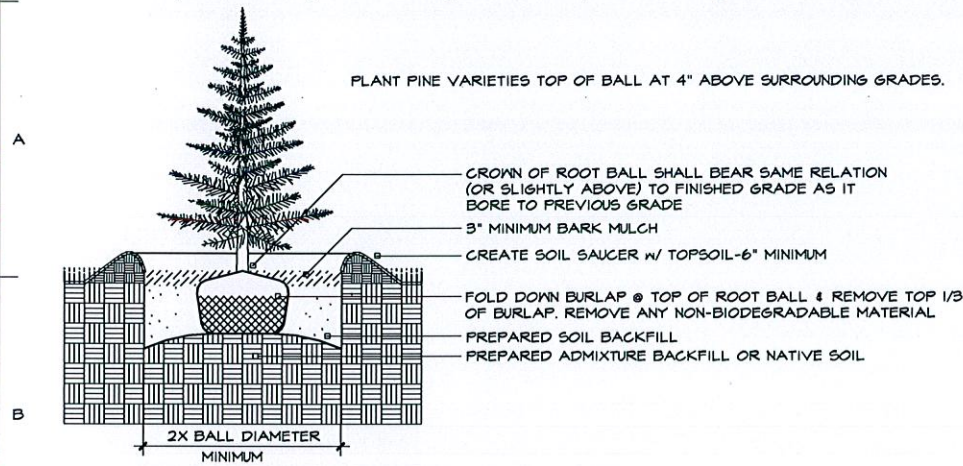
LANDSCAPE TECHNOLOGIES

PLANTING PLAN FOR THE PROPOSED Spirit Service Center-Lot 2 CHESTERFIELD, MISSOURI

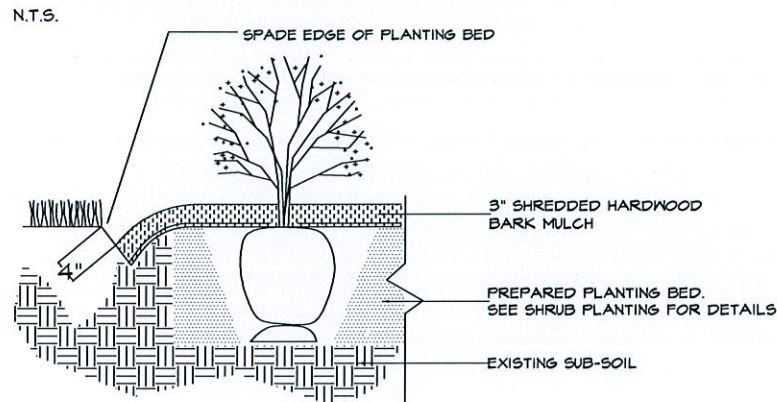
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CHECKED BY: R. M. HARRIS  
DATE: 4/5/17  
SCALE: 1" = 20'-0"  
JOB No.: 2016-190  
SHEET: L-1

OF TWO SHEETS





### EVERGREEN TREE PLANTING

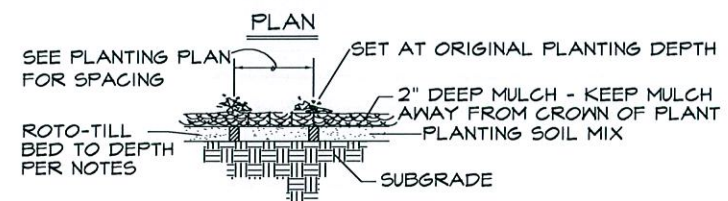


### SPADE-CUT EDGE DETAIL

N.T.S.

SPACING "D"	ROW "A"	# OF PLANTS PER SQ. FT.
30"	26"	0.16
24"	20.8"	0.25
18"	15.6"	0.45
15"	13"	0.64
12"	10.4"	1.00
10"	8.66"	1.44
8"	6.93"	2.25

STAGGER ROWS AS SHOWN

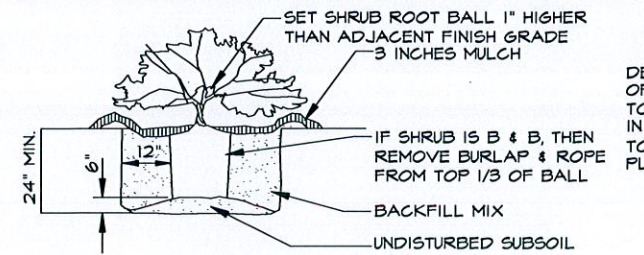


### FORB/GRASS PLANTING DETAIL

N.T.S.

NOTE:

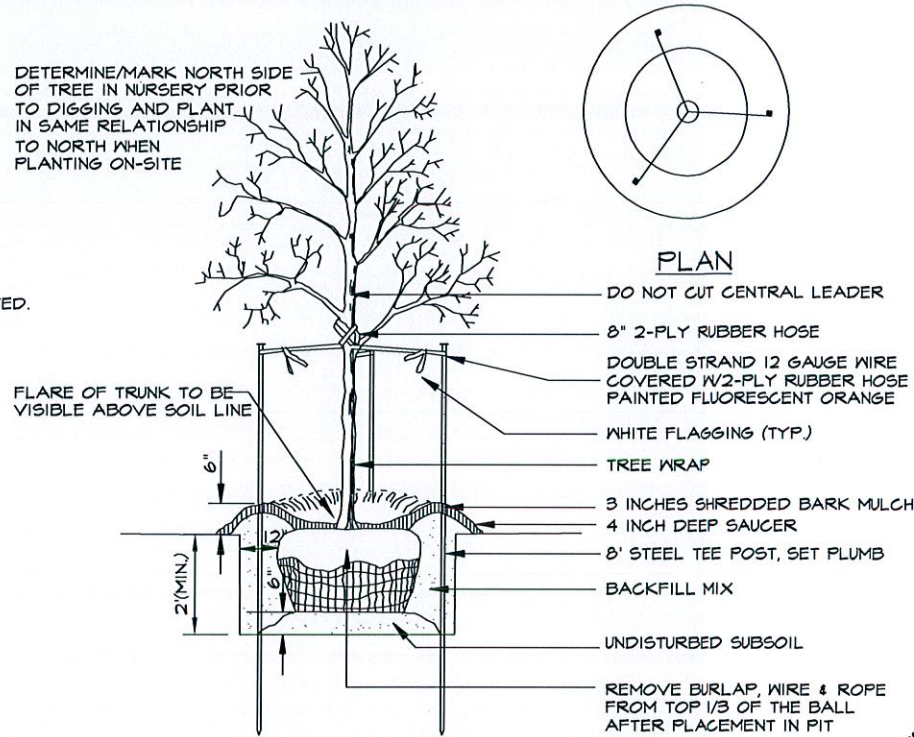
- MSD BASE MAP
- P# P-
- ZIP CODE: 63005



PRUNE ANY BROKEN BRANCHES AFTER PLANTING. DAMAGED SHRUBS OR BROKEN / CRUMBLING ROOT BALLS WILL BE REJECTED.

### SHRUB PLANTING

N.T.S.



### DECIDUOUS TREE PLANTING

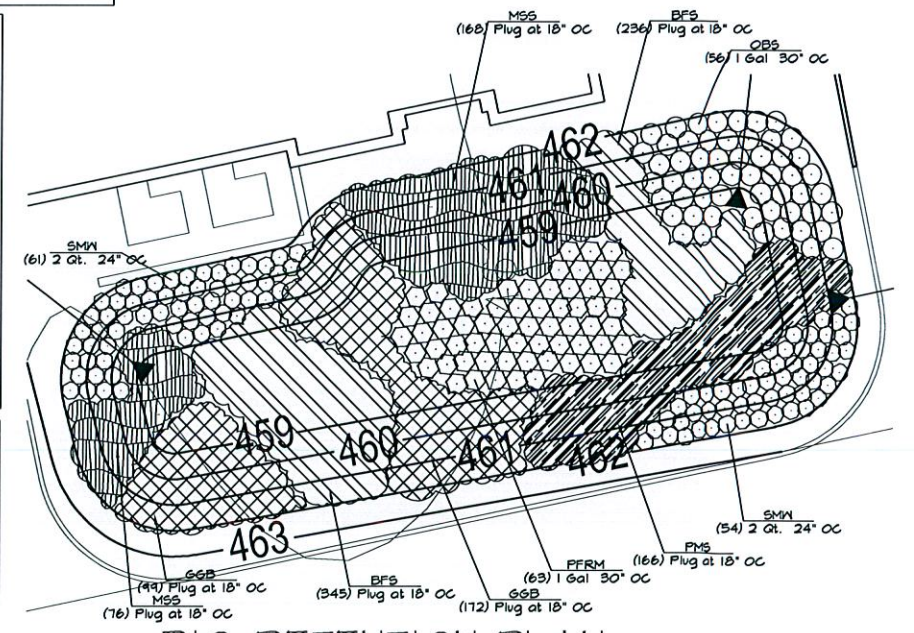
N.T.S.

### PLANTING, WATER and MULCH REQUIREMENTS

WATER AVAILABILITY	REQUIRED PLANTING PERIOD	MINIMUM CONTAINER SIZE	WATER REQUIREMENT FIRST 3 WEEKS	WATER REQUIREMENT AFTER 3 WEEKS	MAXIMUM MULCH DEPTH
NO AVAILABILITY TO WATER AFTER	LATE FEB. - APRIL ONLY	2.25"x3.75" OR LARGER	WATER EACH PLUG IMMEDIATELY		1.5" FOR PLUGS
MANUAL WATERING WITH STANDARD SPRINKLER	LATE FEB. - EARLY JUNE or SEPT. - OCTOBER	4.5"x5" OR LARGER IN SPRING & FALL	1" (60 MIN) EVERY 4 DAYS	1" (60 MIN) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED	1.5" FOR PLUGS 2.5" FOR QUARTS
AUTOMATIC IRRIGATION (WATER MORE FREQUENTLY THAN NORMAL DURING FIRST TWO MONTHS AFTER PLANTING)	LATE FEB. - EARLY OCTOBER	2.25"x3.75" OR LARGER IN SPRING & FALL	1" (60 MIN) EVERY 4 DAYS IN SPRING AND FALL	1" (60 MIN) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED	1.5" FOR PLUGS 2.5" FOR QUARTS

- BIO-RETENTION MAINTENANCE PROCEDURES:
- ADD 2-4 INCHES OF MULCH (SEE CIVIL DWGS. FOR TYPE) TO THE ENTIRE NEWLY PLANTED RAIN GARDEN/BIO-RETENTION AREA. DO NOT COVER THE CROWNS OF THE PERENNIALS. REPLENISH THE MULCH AS NEEDED.
  - AVOID FINE CUT OR LIGHTER WEIGHT MULCHES AS THEY FLOAT IN WET CONDITIONS.
  - PRUNE ANY DEAD, DISEASED OR DAMAGED PLANTS AS SOON AS THE PROBLEM IS NOTICED. DEADHEAD PLANTS AS NEEDED AND DIVIDE PERENNIALS EVERY 3-4 YEARS AS NEEDED. LEAVE STEMS AND SEED HEADS STANDING IN FALL/WINTER TO ADD VISUAL INTEREST AND TO PROVIDE FOOD AND COVER FOR BIRDS.
  - PRUNE THE FOLIAGE OF PERENNIALS WHEN THEY DIE BACK FOR THE WINTER AND ORNAMENTAL GRASSES BEFORE NEW GROWTH BEGINS IN THE SPRING.
  - HAND WEED BIWEEKLY UNTIL PLANTS ARE ESTABLISHED. THEREAFTER, REMOVE OR SPOT NEEDS AS NECESSARY.
  - WATER THE GARDEN DURING ITS ESTABLISHMENT AND EXTENDED DRY PERIODS. ONE INCH OF WATER PER WEEK IS RECOMMENDED.
  - DO NOT USE LAWN FERTILIZERS NEAR GARDEN AREA AS THIS WILL STIMULATE WEED GROWTH.
  - EACH SPRING, MOW AND REMOVE DEAD VEGETATION. USE BURNING ONLY UNDER SUPERVISION OF LOCAL FIRE DEPARTMENT (NATIVE PLANTS THRIVE UNDER FIRE MANAGEMENT).

- NOTE:
- ALL NATIVE GRASS PLUGS ARE TO BE A MINIMUM 4.5" DEEP X 2" DIAMETER
  - CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER AND MSD. CONTACT MSD AT 314/335-2072.
  - DURING CONSTRUCTION, THE BIO-RETENTION AREAS MAY TRAP SEDIMENT. FINAL CONSTRUCTION AND PLANTING OF THE BIO-RETENTION AREAS SHALL BE COMPLETED AFTER SILT AND DEBRIS IS REMOVED.
  - HEAVY EQUIPMENT SHALL BE KEPT OFF OF THE SOIL MIX DURING CONSTRUCTION OPERATIONS TO AVOID COMPACTING. FOOT TRAFFIC AND PRE-SOAKING TO AID NATURAL COMPACTION IS ALLOWABLE.
  - SOIL PH SHALL FALL IN THE RANGE OF 5.5 AND 7.
  - SEE CIVIL DRAWINGS FOR CROSS-SECTIONAL DETAILS OF MULCH AND SOIL MAKEUP.



### BIO-RETENTION PLAN

SCALE: 1"=10'-0"

REVISIONS	BY
3/4/17	RPH

*Landscare*  
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STATE OF MISSOURI  
RANDALL W. MARDIS  
REGISTERED LANDSCAPE ARCHITECT NO. 0000000000  
019

PLANTING PLAN FOR THE PROPOSED  
**Spirit Service Center-Lot 2**  
CHESTERFIELD, MISSOURI

DRAWN	BY
CHECKED	BY
DATE	
SCALE	
JOB NO.	
DATE	
SHEET	











