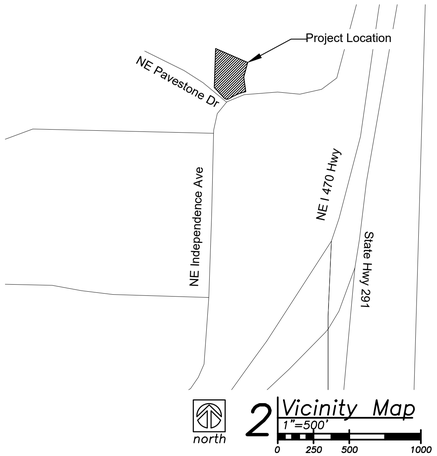
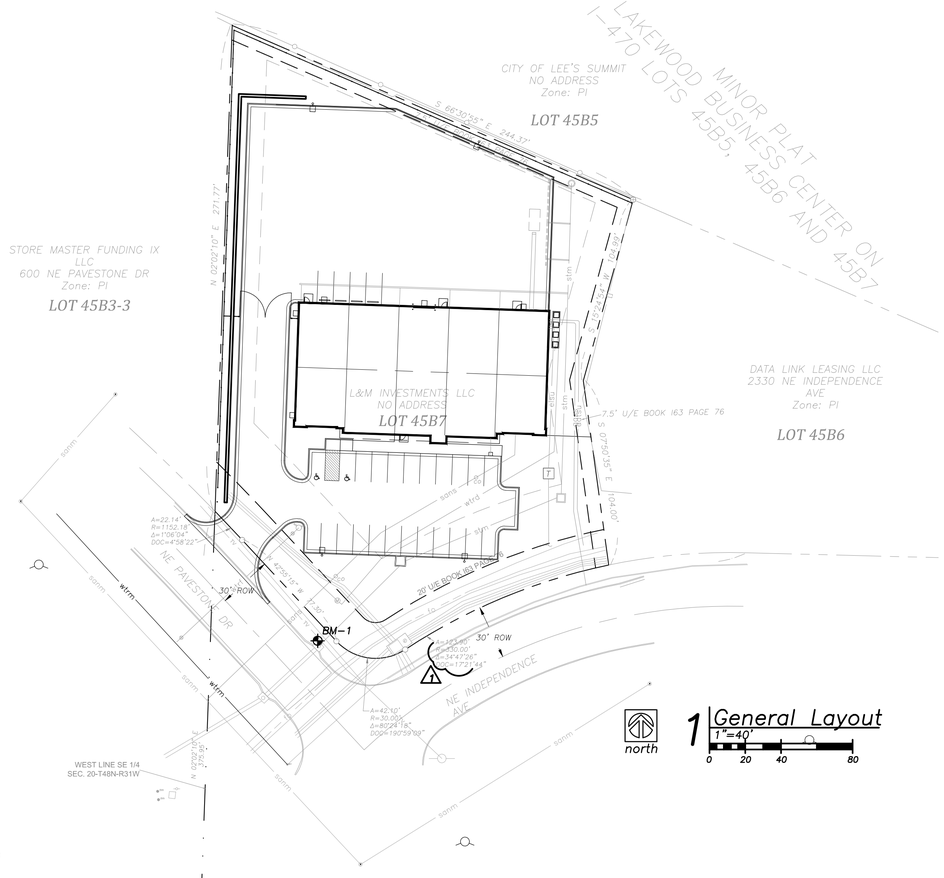


A new development for IBC

Section 20, Township 48 North, Range 31 West
City of Lee's Summit, Jackson County, Missouri



Sheet Index

Legal description:

Lot 45B7, LAKEWOOD BUSINESS CENTER ON I–470, LOTS 45B5, 45B6 AND 45B7, a subdivision in Lee's Summit, Jackson County, Missouri.

Local Benchmarks: BM–#

BM–1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101

Floodplain Note:

The subject property is located in zone X of FEMA FIRM MAP number 29095C0430G, revised January 20, 2017, Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

Civil Engineer:

Davidson Architecture & Engineering, LLC
Mr. Paul A. Miller, P.E.
4301 Indian Creek Pkwy.
Overland Park, KS 66207
Phone: (913) 451–9390
Email: Paul@davidsonae.com

Owner Information

International Builders & Consultants (IBC)
1213 West 8th Street
Kansas City, MO 64101
Phone: (816) 220–0812

Utility Contacts

Sanitary sewers – City of Lee's Summit, phone (816) 969–1900
Water – City of Lee's Summit, phone (816) 969–1900
Electric – KCP&L, phone (888) 471–5275
Gas – Spire, phone (816) 969–2266
Telephone – AT&T, phone (800) 464–7928
Cable – AT&T, phone (800) 464–7928
Storm sewer – City of Lee's Summit, phone (816) 969–1800
***call before you dig – one call system (800) 344–7483

Utility Notes

- Boundary information, existing utilities and topographic features shown are based on information supplied by owner, surveyor, and others.
- The existing utility locations shown on these plans are approximate and may not include all utility lines present. The contractor shall be responsible to make One Call and coordinate field location of all existing underground utilities prior to beginning excavation/construction activities.
- The contractor shall be responsible for any damage to any utilities or their structures during excavation/construction activities.
- The contractor shall coordinate and be responsible for connection fees, system development fees, taxes, etc. for all main connections and/or extensions with and from the city and/or respective utility unless otherwise coordinated with the Owner. All utility services for this project shall be coordinated with respective utility company by contractor.
- The contractor shall be responsible for adjusting all at–grade utilities such as manhole covers, valve box covers, etc. to finish grade, whether specifically indicated in these plans or not.
- Utilities shown on the plan with specific elevations and/or structure locations are SUE quality level "B", ie: storm sewer, sanitary sewer, water hydrants & valves, utility poles, etc. All other existing utility information shown is SUE quality level "D", primarily retracement of one–call and city records.

Property Legend

- right of way
- property lines
- easements
- setbacks

Utility Legend

- existing
- proposed

Linetypes

- sanm — sanitary main
- sans — sanitary service
- storm sewer (existing)
- storm sewer (solid wall, proposed)
- stm — storm sewer (solid wall, proposed)
- storm sewer (perforated, proposed)
- wtrm — water main
- wtrf — water service (fire)
- wtrd — water service (domestic)
- wtri — water service (irrigation)
- gasm — natural gas main
- gass — natural gas service schematic
- elpu — underground primary electric
- elsu — underground secondary electric
- datu — underground cable/phone/data
- datsu — underground cable/phone/data service

Symbols

- sanitary manhole
- co — service cleanout
- fmv — force main release valve
- rectangular structure
- circular structure
- fire hydrant
- wv — water valve
- M — water meter
- BFP — backflow preventer
- g — natural gas meter
- T — service transformer (pad mount)
- S — primary switch gear
- light pole
- C — cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 DIGI STOP-CALL BEFORE YOU DIG!

According to the MDNR Record Database and Field Survey, there is no evidence suggesting presence of any active, inactive or capped oil and/or gas wells on the property

General Notes

- All work within the road right–of–way shall conform to the technical specifications and design criteria for public improvement projects of the city of Lee's Summit, Missouri.
- Erosion Control shall be per the Erosion and Sediment Control Program Manual of the City of Lee's Summit, Missouri.
- All work and materials shall be subject to inspection and approval by the owner or the owner's representative. Any change or deviation from these plans must be authorized by the owner or the owner's representative.
- All traffic control in connection with construction in the right–of–way shall be in conformance with the Manual of Uniform Traffic Control Devices.
- The contractor shall be required to provide a stabilized construction entrance to prevent mud from being deposited onto adjacent roads.
- The contractor shall be responsible for obtaining all required permits, paying all fees, and otherwise complying with all applicable regulations governing the project.
- The contractor shall protect from damage or injury all property including survey monuments, property markers, benchmarks, etc. Items damaged shall be reset by a professional land surveyor licensed in the state of Missouri, at the contractor's expense.
- The contractor shall be responsible for the restoration of the right–of–way and for damaged improvements such as curbs, sidewalks, street light and traffic signal junction boxes, traffic signal loop lead–ins, signal poles, etc. Damaged improvements shall be repaired in conformance with the latest city standards and to the city's satisfaction.
- The contractor shall sod all disturbed areas within the public street right–of–way.
- Paving shall conform to the soils report, and these drawings, any identified discrepancies shall be brought to the attention of the engineer.
- Contractor shall provide 48–hour notification to the city engineering division to schedule all required inspections.
- All concrete for public improvements shall comply with the Standards and Specifications of the Kansas City Metropolitan Materials Board (KCMMB). Structural concrete shall be 5,000 psi and nonstructural concrete shall be 4,000 psi.
- A right–of–way work permit and/or street excavations permit shall be obtained by the contractor to complete all utility work within the public street right–of–way.

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Certificate # 006278

STATE OF MISSOURI
PAUL A. MILLER
NUMBER E-28140
REGISTERED PROFESSIONAL ENGINEER

09/21/2018
Paul A. Miller
Licensee # E-28140

a new development for
IBC
2320 NE Independence Ave.
Lee's Summit, Missouri 64064

date
08.06.2018
drawn by
ANH
checked by
PAM
revisions
09.21.2018 1

sheet number
C1.0
drawing type
fdp
project number
18091

General Notes:

- The Contractor shall be responsible for obtaining all required permits, paying all fees, and otherwise complying with all applicable regulations governing the project.
- All materials, workmanship, and construction shall meet or exceed the city standards. Where there is conflict between these plans and standards, the higher quality standard as determined by the engineer shall apply. All work shall be inspected and approved by contractor.
- All work and materials shall be subject to inspection and approval by the owner or the owner's representative. Any change or deviation from these plans must be authorized in writing by the owner or the owner's representative prior to work being completed.
- The work associated with and based on these plans, shall be subject to the requirements of, and conform to, the Municipal Code of Lee's Summit, Missouri, and the standards and specifications in current use. The standards, specifications, details, and procedures sub-referenced therein are hereby incorporated by reference.
- Lineal foot measurements shown on the plans are horizontal measurements, not slope measurements. All payments shall be made on horizontal measurements.
- No geological information is shown in these plans.
- Prior to commencement of work, the contractor shall notify all utility companies which have facilities in the near vicinity of the construction to be performed.
- All waste material resulting from the project shall be disposed of off-site in an approved landfill. All excavation shall be unclassified. No separate payment will be made for rock excavation. Contractor is responsible for all haul off material.
- The Contractor shall be required to provide a stabilized construction entrance to prevent mud from being deposited onto adjacent roads.
- All mud, dirt, and debris tracked onto the parking lot or any roadway shall be removed immediately by the contractor.
- The Contractor shall be responsible for keeping the public streets in the vicinity of the job site clean and free of rocks, soil and debris. Streets and/or parking areas will be scraped and swept on a daily basis by the general contractor.
- The Contractor shall protect from damage all survey monuments, property markers, benchmarks, etc. Items damaged shall be reset by a professional land surveyor licensed in the state of Missouri, at the contractor's expense.
- Paving shall conform to the geotechnical report and these drawings, any identified discrepancies shall be brought to the attention of the engineer immediately. If no geotech. report is provided for the project, the contractor shall use the minimum design standards as required by the city.
- The Contractor shall provide 48-hour notification to the city engineering division or proper city staff to schedule all required inspections.
- All concrete for public improvements shall comply with the city standards and specifications. If no city standards and specifications are provided, then the contractor shall comply with the standards and specifications of the Kansas City Metropolitan Materials Board (KCMMB) unless otherwise noted. Structural concrete shall be 5,000 psi and nonstructural concrete shall be 4,000 psi.
- The contractor shall be responsible for the restoration of the right-of-way and for damaged improvements such as curbs, sidewalks, street light and traffic signal junction boxes, traffic signal loop lead-ins, signal poles, etc (offsite and onsite). Damaged improvements shall be repaired in conformance with the latest city standards and to the city's satisfaction.
- All work within the road right-of-way shall conform to the technical specifications and design criteria for public improvement projects of the city of Lee's Summit, Missouri or the transportation department of Missouri. A right-of-way work permit and/or street excavations permit shall be obtained by the contractor if required to complete all work within the public right-of-way.
- All traffic control in connection with construction in the right-of-way shall be in conformance with the Manual of Uniform Traffic Control Devices and/or the jurisdictional authority. It is the contractor's responsibility to obtain a traffic control permit if required.
- All waste materials, trash and construction debris shall be collected and stored in dumpsters. No construction waste shall be buried on site. All hazardous waste materials will be disposed of in the manner specified by local, state and federal regulations. Site personnel shall be instructed in these practices, and the construction manager shall be responsible for seeing that these practices are followed.
- Recommendations made by the geotechnical engineer, to be retained by the owner, and contained in the geotechnical report shall govern project conditions unless noted otherwise. Paving shall conform to the geotechnical report. Any discrepancies shall be brought to the attention of the engineer.
- The Contractor shall grade areas to provide positive drainage.
- The contractor shall be responsible for the coordination of work between suppliers and subcontractors involved in the project, including staging of construction details.
- All disturbed areas shall be maintained for dust control. Sprinkling tank trucks shall be available at all times & used on on-site disturbed areas, and other areas where dust becomes a problem as a result of construction activity.
- Nothing indicated on these drawings shall relieve the contractor from complying with appropriate safety regulations.

Utility Notes:

- Boundary information, existing utilities and topographic features shown are based on information supplied by owner, surveyor, and others.
- The existing utility locations shown on these plans are approximate and may not include all utility lines present. The contractor shall be responsible to contract "One Call" and coordinate field location of all existing underground utilities prior to beginning excavation/construction activities.
- The contractor shall be responsible for any damage to any utilities or their structures during excavation/construction activities. Utilities include but are not limited to a service such as electricity, communication, water, public transportation (including traffic signals), storm systems, and items provided by a public utility.
- The contractor shall coordinate and be responsible for connection fees, system development fees, taxes, etc. for all main connections and/or extensions with and from the city and/or respective utility unless otherwise coordinated with the Owner. All utility services for this project shall be coordinated with respective utility company by contractor.
- The contractor shall be responsible for adjusting all at-grade utilities such as manhole covers, valve box covers, etc. to finish grade, whether specifically indicated in these plans or not.
- Utilities shown on the plan with specific elevations and/or structure locations are SUE quality level "B", ie: storm sewer, sanitary sewer, water hydrants & valves, utility poles, etc. All other existing utility information shown is SUE quality level "D", primarily retracement of one-call and city records.
- Refer to mechanical, electrical, and plumbing (MEP) plans for utility service sizes and exact locations. Refer to site electric plans for electric construction details.
- Provide temporary support for existing utility lines that are encountered during construction until backfilling is complete.
- Backfill all utility trenches according to the most recent edition of the jurisdictional standards.
- All utilities shall be brought within 5' of the building to connect to plumbing contractors work unless otherwise specified.
- The Contractor shall adjust all utility fixtures, manholes and inlets to finished grade as required.
- The Contractor shall maintain 18'' minimum vertical clearance between storm sewer and sanitary sewer pipes and 18'' minimum vertical clearance between sanitary sewer and water main unless otherwise specified.
- Contractor shall prevent entry of mud, dirt, debris, and other material into new and existing storm sewer systems. Should any contamination occur during construction, the contractor shall clean at contractor's expense. Upon completition of all storm sewer improvements, all new and existing pipe and structures shall be cleaned out.
- Electrical, lighting, and data conduit layout shown is for graphical purposes only. See MEP plans for more detail.
- The Contractor shall provide all temporary power, process, and utility service bypasses and connections as required.

Erosion Control Notes:

- The installation of the silt fencing, the maintenance of the drainage swales, and the construction of the stabilized entrance shall be completed prior to any clearing and grading of any portions of the site. Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with permanent seeding no later than 14 days after the last construction activity, refer to SWPPP. Roadway swales shall be stabilized with Erosion Control Devices. Once construction activity ceases permanently in an area, that area shall be stabilized with permanent seed and mulch. Only after the entire site has been stabilized, the silt fencing shall be removed.
- The general contractor, or designated erosion control contractor, shall be responsible for construction and maintenance of erosion control devices and practices. The contractor shall be responsible for implementation of, and ensuring compliance of, the project Storm Water Pollution Prevention Plan (SWPPP), a copy of which shall be obtained from the Design Engineer. The SWPPP shall be maintained on site per NPDES requirements and shall be available for review at any time, by any authorized Federal, State, or local review official, as well as the Design Engineer. The general contractor, or designated erosion control contractor, shall also be responsible for ensuring compliance with, and paying any fees associated with, the State of Missouri General Permit for Stormwater Runoff associated with construction activities, a copy of which shall be maintained in the aforementioned SWPPP.
- This project shall be constructed in compliance with the soil erosion and sedimentation control permit, and conform to the standards and specifications of the city of Lee's Summit, Missouri, prior to any land disturbance changes.
- Erosion and any sedimentation from work on this site shall be contained on the site and not allowed to collect on any offsite areas or in waterways. Waterways include both natural and man-made open ditches, streams, storm drains, lakes and ponds. Refer to erosion control plans for more information.
- The contractor shall be responsible to control downstream erosion and siltation during all phases of construction. Erosion control work and procedures shall be in place prior to beginning excavation/construction activities. To ensure progressive stabilization of disturbed earth, Erosion control devices shall be staged, installed and maintained throughout land disturbance activities as directed in the drawings, project manual and in accordance with all federal, state and local standards until the site is stabilized.
- The contractor shall implement and maintain Erosion Control Devices as shown in the drawings and project manual before, and at all times during the construction of this project. Any modifications to the devices due to construction or changed conditions shall be complied with as required or as directed by the city of Lee's Summit, Missouri.
- The contractor shall be responsible for installation and maintenance of all Erosion Control devices. This includes providing berms, silt fence, or other means to prevent erosion from reaching the right of way and offsite boundaries. In the event the prevention measures are not effective, the contractor shall remove any debris and erosion, restoring the right of way to original or better condition.
- Contractor is to provide erosion protection for all storm sewer inlets.
- If any of the Erosion control devices on the site are deemed inadequate or ineffective, the city of Lee's Summit, Missouri has the right to require additional Erosion control measures at the expense of the general contractor.
- If any pump-driven dewatering is needed, it shall be discharged though a filter bag over a well-vegetated area. The pump must discharge at a non-erosive velocity. If necessary, an approved energy dissipater may be used.
- Permanent BMP's for any disturbed land area shall be completed by the general contractor within 5 calendar days after final grading or the final earth change has been completed. When it is not possible to permanently stabilize a disturbed area after land disturbance activity ceases, temporary Erosion control devices shall be implemented immediately. All temporary Erosion control devices shall be maintained until permanent BMP devices are implemented. All permanent BMP's will be implemented and established before a certificate of compliance is issued.
- Strip topsoil only from those areas that will be disturbed by excavation, filling, road building, or compaction by equipment. Refer to the geotechnical report for depths of stripping. Put sediment basins, diversions, and other controls into place before stripping.
- When topsoiling, maintain needed erosion control practices such as diversions, grade stabilization structures, berm, dikes, level spreaders, waterways and sediment basins.
- Grades on the areas to be topsoiled which have been previously established shall be maintained.
- Bonding – Immediately prior to dumping and spreading of topsoil, loosen the subgrade by discing or scarifying to a depth of at least 4", to permit bonding of the topsoil and subsoil.
- The general contractor shall inspect the Erosion Control devices once every 14 days under any circumstances, within 24 hours of rainfall, and daily during a prolonged rain event unless otherwise noted in the SWPPP or by the jurisdictional authority. A log of inspection report shall be maintained and accessible in accordance with National Pollution Discharge Elimination System (NPDES) requirements. Any required maintenance shall be provided within 72 hours.
- Install silt fence, inlet filters, and other Erosion Control devices as indicated in the drawings, per APWA and authority regulations, and at additional affected areas as necessary. Build-up of sediment shall be removed promptly per authorities regulations. If silt fence decomposes or becomes ineffective prior to the end of expected usable life and the barrier is still required, the silt fence shall be replaced promptly. Sediment shall be removed from sediment traps or basins when design capacity has been reduced to 50%. Contractor shall flare the ends of the silt fence uphill in order to temporarily impound runoff.
- Earthen berms shall be regularly inspected, and inspected after each rainfall event. Repairs to earthen berms shall be made immediately. If the earthen berm shows signs of erosion, and it is determined that material must be added to fix the berm, the material shall be properly placed, compacted and reseeded. The berm shall be reseeded and stabilized, as needed, to maintain its soundness whether or not there has been any rainfall.
- Drainage swales shall be inspected regularly and after every rainfall event. Repairs to drainage swales shall be made immediately. If the flow channel and/or outlets show signs of deficiency, the damaged area(s) shall be restabilized and reseeded, as needed, to prevent further damage. If additional measures are needed to eliminate issues, contractor shall notify the engineer for possible modifications.
- Refer to the jurisdictional authority for temporary gravel construction entrance details. If not specified, refer to APWA standards. The entrance and exit areas of the project shall be cleared of all vegetation, roots, and other objectionable material. The gravel shall be placed to the proper dimensions and graded to a smooth and even slope. Construction entrance drainage shall be provided to carry water to a sediment trap or other suitable outlet.

Stockpiling Notes:

- Select stockpile location to avoid slopes and natural drainageways, avoiding traffic routes. On large sites, re-spreading is easier and more economical where topsoil is stockpiled in small piles located near areas where they will be used.
- Sediment Barriers – Use sediment fences or other barriers where necessary to retain sediment.
- Temporary Seeding – Protect topsoil stockpiles by temporarily seeding as soon as possible, not to exceed 14 days, weather permitting, after the formation of the stockpile.
- Permanent Vegetation – If stockpiles will not be used within 12 months, they must be stabilized with permanent vegetation to control erosion and weed growth.
- All stockpiled soils shall be maintained in such a way as to prevent erosion from leaving the site. Silt fence must be installed around the perimeter of the stockpile.

Seeding Notes:

- Seeding shall be as follows unless otherwise stated in the landscape plans.
- Annual rye grass, wheat, or oats should be used for temporary seeding. Apply rye grass at 120lbs. per acre, wheat or oats at 100lbs. per acre.
- A mixture of 65% kentucky bluegrass and 35% chewing fescue or creeping red fescue should be used for permanent seeding. Apply the mixture at 2lbs. per 1000ft^2.
- Seedbed preparation-Install necessary mechanical erosion and sedimentation control practices before seeding, and complete grading according to the approved plan. Lime and fertilizer needs should be determined by soil test. Apply the lime and fertilizer evenly and incorporate into the top 4"-6" of soil by discing or other suitable means.
- All seeding shall be performed during favorable weather conditions and only during normal and accepted planting seasons when satisfactory growing conditions exist. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by owner's representative. The contractor assumes full and complete responsibility for all such plantings and operations.
- Seed should be labeled in accordance with U.S. Department of Agriculture rules and regulations under the federal seed act and comply with the requirements of the Missouri seed law. Labels contain important information on seed purity, germination, and presence of weeds. Weed seed should not exceed 1.0% by weight of the mixture.
- Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydroseeder. Small grains should be planted no more than 1" deep, and grasses and legumes no more than ½".
- Generally, a permanent stand of vegetation cannot be determined to be fully established until soil cover has been maintained for one full year from planting. Inspect seeded areas for failure and make necessary repairs and re-seedings within the same season, if possible.
- The Contractor shall seed all disturbed areas unless otherwise noted by landscape plans. Immediately after seeding, mulch all seeded areas with unweathered small grain straw, spread uniformly at the rate of 1-2 tons per acre or 100lbs (2-3 bales) per 1000ft^2. The mulch should be anchored with disc type mulch anchoring tool or other means as approved by the jurisdictional authority. Mulch matting may be used in lieu of loose mulch.
- The Contractor shall sod all disturbed areas within the public street right-of-way. Refer to city and state standards for proper installation.

Demolition Notes:

- At the site, the Contractor shall maintain the required documents for immediate review, included but not limited to: Site Safety Plan, Demolition Permits, Street Closure Permits, Contract Documents, Demolition Plans, Salvage Verification Forms, SWPPP Etc.
- The Contractor shall notify all utility companies for field verification and disconnection of utilities prior to any work. Coordination is required for both temporary and permanent utility services that serve the site including, but not limited to: water lines, power, telephone, cable, storm sewer, sanitary sewer with the city and/or respective utility.
- The Contractor is specifically cautioned that the locations and/or elevation of existing utilities as shown on these plans are based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. Contractor shall contact One Call utility information service for utility locates. The Contractor must call the appropriate utility companies at least 72 hours before any excavation to request exact field location of utilities. The Contractor shall also coordinate and allow access for utility companies to perform any disconnection or relocation activities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
- Remaining building structures and remaining utility services shall be protected from damage. Damage to any existing features to remain will be replaced at the Contractor's expense.
- Areas disturbed during demolition shall be thoroughly evaluated by the geotechnical engineer responsible for site preparation prior to placement of structural fill. All disturbed soils shall be undercut prior to placement of structural fill, per the geotechnical recommendations. Contractor shall notify the geotechnical engineer at least 72 hours prior to placement of structural fill.
- Excavations created by the removal of any existing utility lines that extend below design grades shall be cut wide enough to allow use of heavy construction equipment to compact the fill. Base of the excavations shall be thoroughly evaluated by the geotechnical engineer prior to placement of fill. If existing utilities are to be left in-place, existing trench backfill shall be evaluated in accordance with the recommendations of evaluation of existing fill.
- The Contractor shall be responsible for obtaining all Federal, State, and local permits, obtaining all inspections, and shall conform to all governing codes and regulations required to perform necessary abatement during demolition, should hazardous materials be encountered.
- Contractor is responsible for legally disposing of all materials and associated cost of interim storage facilities.
- For tree & stump removal, the Contractor shall remove all root systems from the site not designated to be saved. Materials disturbed during removal of stumps shall be undercut and replaced with structural fill. A zone of desiccated soils may exist in the vicinity of the trees. The desiccated soils have a higher swell potential and shall be undercut and replaced with structural fill.
- No construction waste shall be buried on site. All hazardous waste materials will be disposed of in the manner specified by local, state and federal regulations unless approved by owner's representative.

Retaining Wall Notes:

- Site retaining wall improvements shall be designed by a licensed professional engineer retained by the contractor. The wall engineer and contractor shall satisfy themselves of the conditions of the surrounding site features and any interactions with the proposed improvements.
- Retaining wall design drawings and specificiations shall be provided to the owner and owners representative for review and approval. All retaining wall designs shall be signed and sealed by a registered Professional Engineer licensed in the state of Missouri. Design services shall be included in retaining wall pricing.
- Refer to Retaining Wall drawings for wall information. Civil plan set shall only be used for general location and spot elevations.
- The Contractor is responsible for coordinating all inspections, certifications, permits, fees and close out of the wall unless otherwise determined. Contractor shall notify wall design engineer for final inspection. Contractor shall include in construction cost for all of the above items related to the installation of the retaining wall.
- Any wall shown is a schematic representation of the proposed walls. The spot elevations denoting retaining walls are provided on the site grading plan.
- If the wall is greater than 30'' and is in an accessible area, guard rails are required per code.

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a new development for
IBC
2320 NE Independence Ave.
Lee's Summit, Missouri 64064

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Local Benchmarks: BM–#

BM–1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP-CALL BEFORE YOU DIG!

Construction Notes

1. Construct Standard Type CG–1 Curb & Gutter where indicated. (see construction legend)
2. Construct Standard Type CG–1 Dry Curb & Gutter where indicated. (see construction legend)
3. Construct Standard Type CG–2 Dry Roll Back Curb & Gutter where indicated. (see construction legend)
4. Construct Standard concrete pavement, typ. (see construction legend) Re: C4.1 for sections.
5. Construct Standard concrete sidewalk, typ. (see construction legend)
6. Construct gravel storage yard, typ. (see construction legend)
7. Construct commercial entrance per Lee's Summit standards.
8. 4" parking striping, white, incl. universal ADA symbol, re: Arch plans.
9. Construct Accessible ramp per ADA Standards. Re: C2.4 for spot elevations
10. Light poles. (See lighting plans for details)
11. Not Used.
12. Concrete retaining wall. Design by others.
13. Install primary electric and concrete transformer pad per KCPL standards. Coordinate installation and sizing with KCPL.
14. Coordinate with KCPL to install electrical service line.
15. Telephone/Cable/Data service lines. Coordinate installation with utility.
16. Gas service line. Coordinate installation with utility.
17. Connect to existing 8" sanitary main. Install approx. 234 l.f. of 4" PVC SDR–26 sanitary service @ 2.0% min. slope to building. Re: MEP plans for continuation at building. Maintain min. 36" cover.
    FL @ main≈ 995.20
    FL @ building= 1002.00
18. Install 8"x6" tee on existing 8" water main. Install approx. 94 l.f. of 6" C900 PVC.
19. Storm sewer. Re: C3.2.
20. Install car charging station and required utility connections per manufacturer specifications.
    Re: Site Electric for power to station.
21. Install double wall fuel tank and required utilities per manufacturer specifications. Coordinate with owner on location.
    Re: Site Electric Plan
22. Install fence per Architectural Plans.
23. Install motorized swing gate and required utility connections per manufacturer specifications. See Architectural Plans and Site Electric. Provide Knox padlock installed on gate per fire department requirements.
24. Tap 6" line and install 43 l.f. of 1" type "K" water service line to 1" meter and pit, per city standards. Install 226 l.f. of 1.5" type "K" water service line from meter to building, as shown. Maintain min. 48" cover. Install reduced pressure backflow preventer on water service line inside building. Re: MEP plans for continuation at building.
25. Construct Heavy Duty concrete pavement, typ. (see construction legend) Re: C4.1 for sections.
26. Construct Heavy Duty asphalt pavement, typ. (see construction legend) Re: C4.1 for sections.
27. Construct Heavy Duty asphalt pavement, typ. (see construction legend) Re: C4.1 for sections.

Contractor Notes:

**Contractor shall field verify location & depth of existing utilities and notify the engineer immediately of any conflicts.

Utility Contacts

Sanitary sewers – City of Lee's Summit, phone (816) 969–1900
Water – City of Lee's Summit, phone (816) 969–1900
Electric – KCP&L, phone (888) 471–5275
Gas – Spire, phone (816) 969–2266
Telephone – At&T, phone (800) 464–7928
Cable – Time Warner, phone (816) 358–8833
Storm sewer – City of Lee's Summit, phone (816) 969–1800
***call before you dig – one call system (800) 344–7483

Utility Legend

existing
proposed

Linetypes

sanm	sanitary main
sans	sanitary service
	storm sewer (existing)
	storm sewer (solid wall, proposed)
stm	storm sewer (solid wall, proposed)
	storm sewer (perforated, proposed)
wtrm	water main
wtrf	water service (fire)
wtrd	water service (domestic)
wtri	water service (irrigation)
gasm	natural gas main
gass	natural gas service schematic
elpu	underground primary electric
elsu	underground secondary electric
datu	underground cable/phone/data
datsu	underground cable/phone/data service

Property Legend

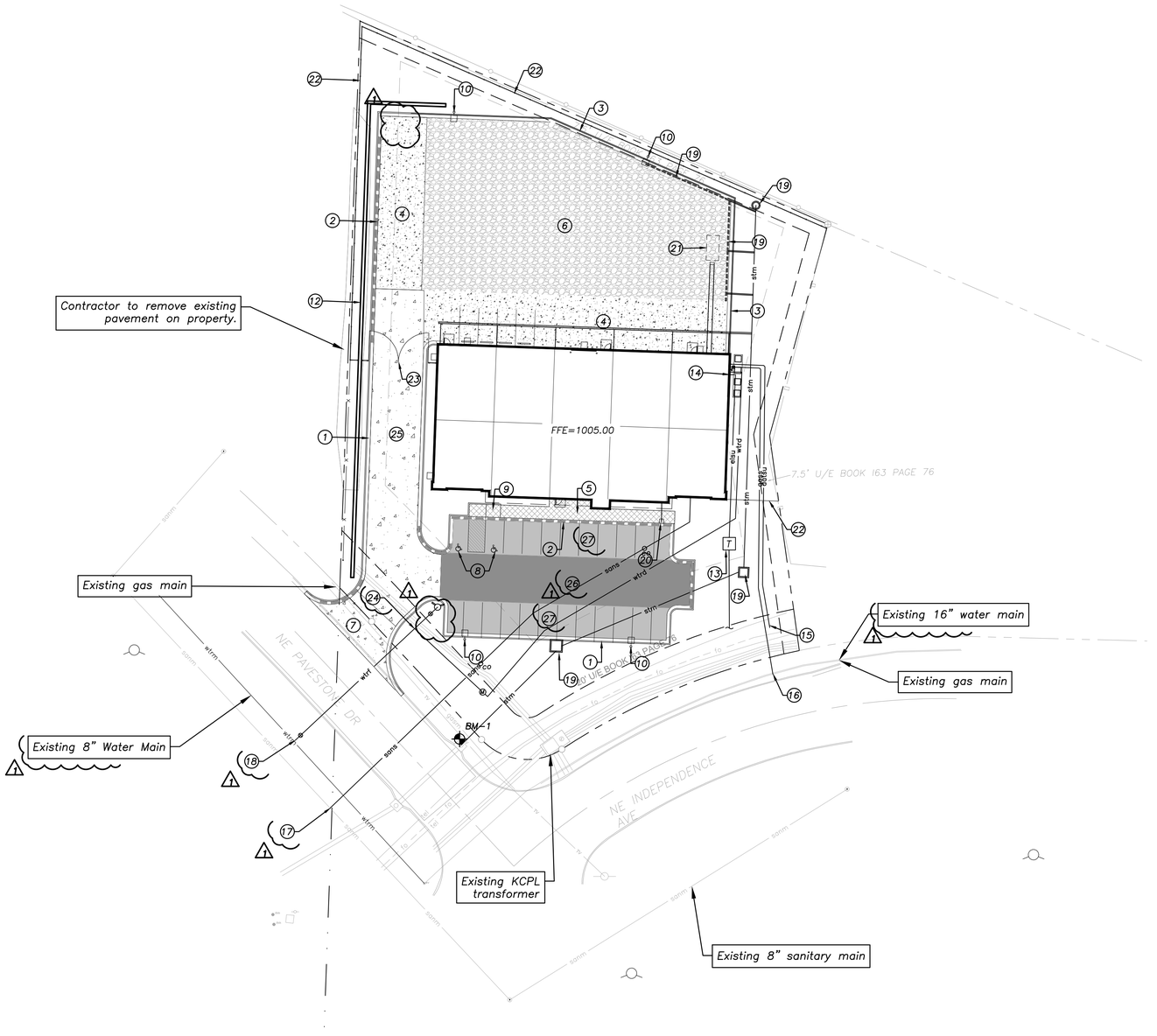
right of way
property lines
easements
setbacks

Construction Legend

heavy duty asphalt pavement
standard asphalt pavement
standard concrete pavement
heavy duty concrete pavement
gravel pavement
concrete sidewalk
standard curb & gutter
standard dry curb & gutter
dry roll back curb & gutter

Symbols

sanitary manhole
service cleanout
force main release valve
rectangular structure
circular structure
fire hydrant
water valve
water meter
backflow preventer
natural gas meter
service transformer (pad mount)
primary switch gear
light pole
cable/phone/data junction box
street light
pedestrian street light
electric pole
guy wire
end section



north

1 Site & Utility Plan
1"=30'
0 15 30 60

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STATE OF MISSOURI
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09/21/2018
Paul A. Miller
Licensee # E-28140

a new development for
IBC
2320 NE Independence Ave.
Lee's Summit, Missouri 64064

date
08.06.2018
drawn by
ANH
checked by
PAM
revisions
09.21.2018 1

sheet number
C1.2
drawing type
fdp
project number
18091

Symbols

- sanitary manhole
- service cleanout
- force main release valve
- rectangular structure
- circular structure
- fire hydrant
- water valve
- water meter
- backflow preventer
- natural gas meter
- service transformer (pad mount)
- primary switch gear
- light pole
- cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

Property Legend

- right of way
- property lines
- easements
- setbacks

Grading Legend

- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

Utility Legend

- existing
- proposed

Linetypes

sanm	sanitary main
sans	sanitary service
	storm sewer (existing)
	storm sewer (solid wall, proposed)
stm	storm sewer (solid wall, proposed)
	storm sewer (perforated, proposed)
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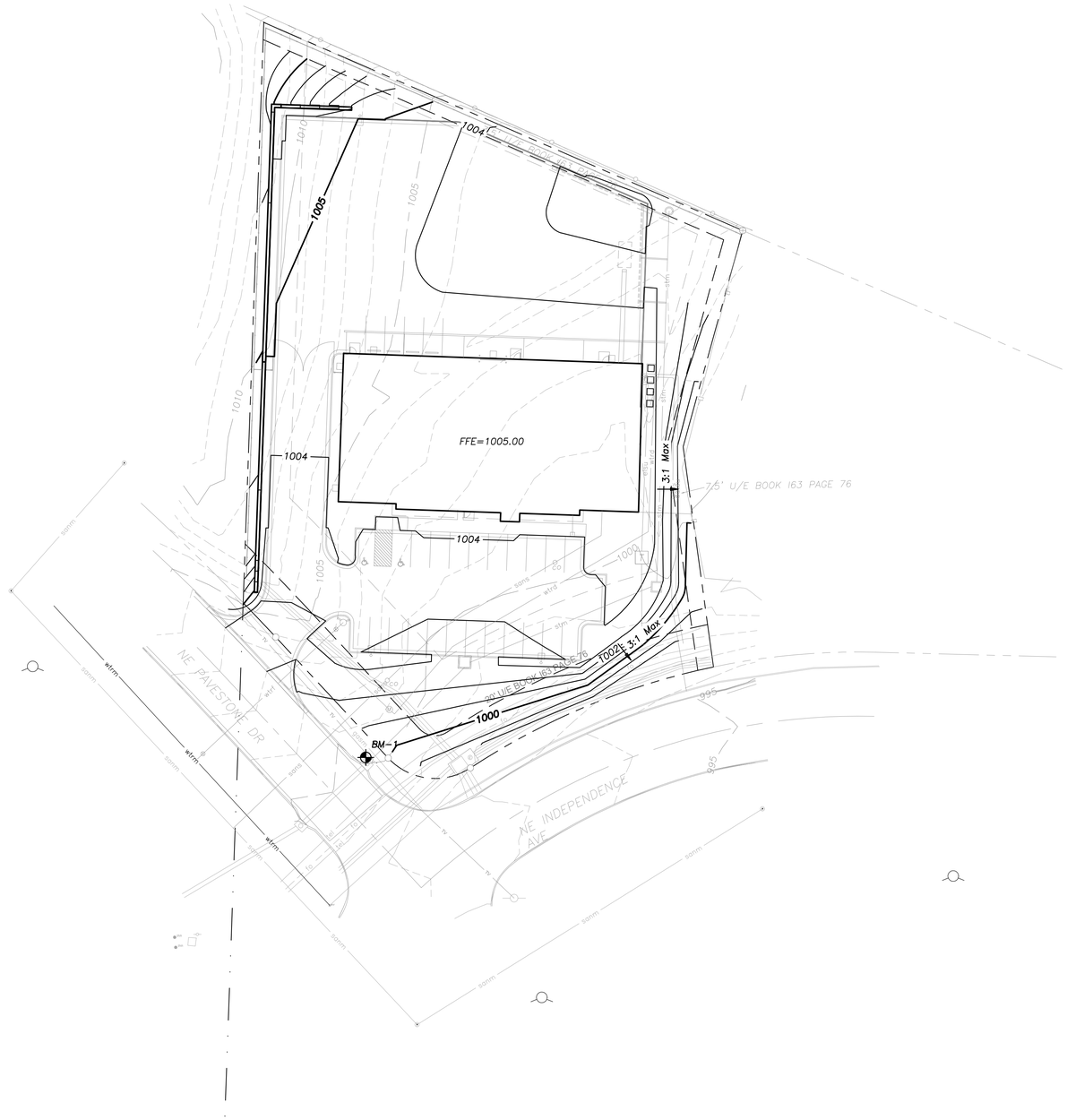
wtrd	water service (domestic)
wtri	water service (irrigation)
gasm	natural gas main
gass	natural gas service schematic
elpu	underground primary electric
elsu	underground secondary electric
datu	underground cable/phone/data
datsu	underground cable/phone/data service

Local Benchmarks:

BM-#

BM-1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101



north

1 Grading Plan
1"=30'
0 15 30 60

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drawing type
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Floodplain Note:

The subject property is located in zone X of FEMA FIRM MAP number 29095C0430G, revised January 20, 2017, Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

Local Benchmarks: BM-#

BM-1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101

Erosion Control Legend

- Phase I Silt fence
- Phase I Inlet protection
- limits of disturbance
- construction entrance
- topsoil stockpile area
- concrete washout area

Property Legend

- right of way
- property lines
- easements
- setbacks

Grading Legend

- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

Utility Legend

- existing
- proposed

Linetypes

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	storm sewer (existing)
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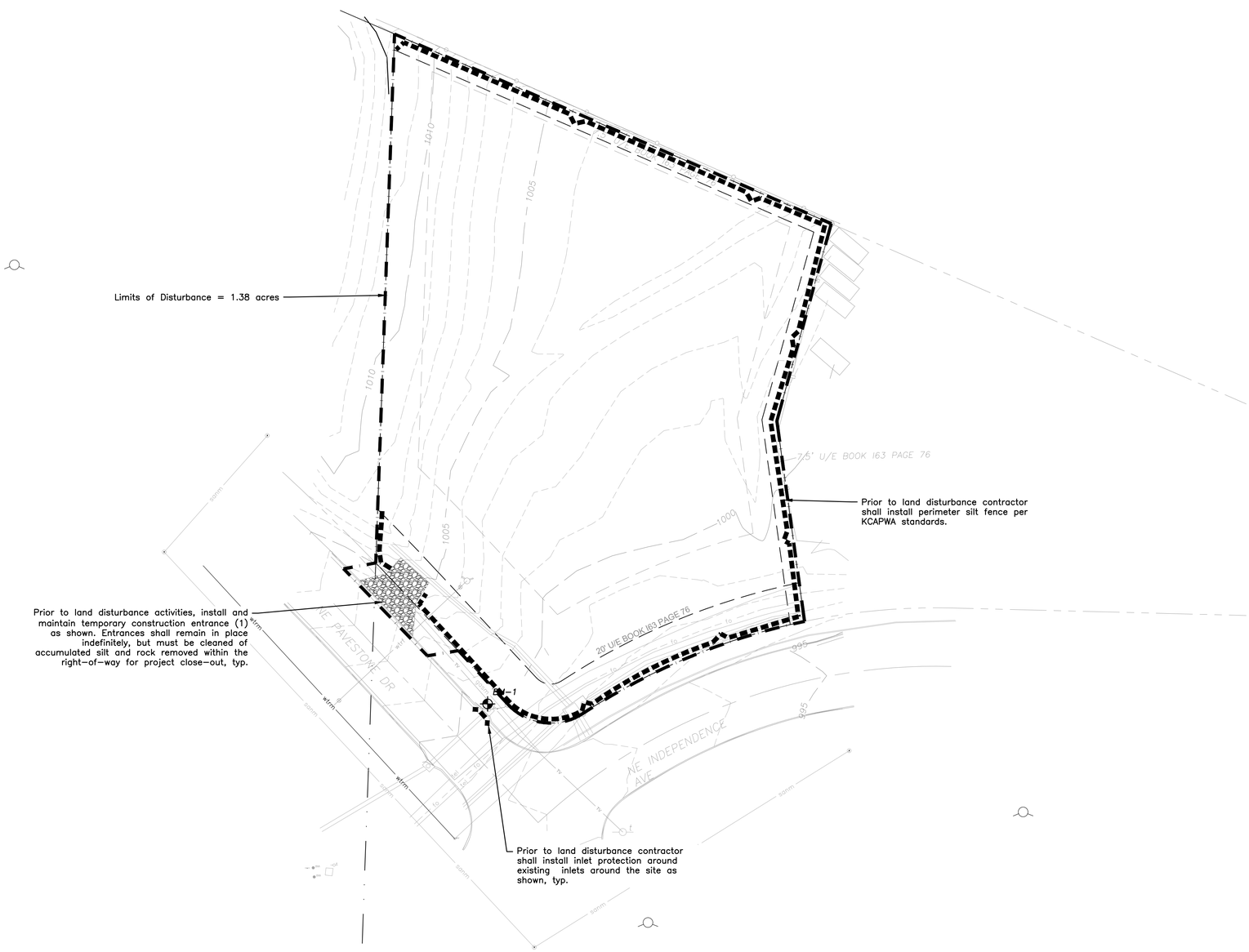
gasm	natural gas main
gass	natural gas service schematic
elpu	underground primary electric
elsu	underground secondary electric
datu	underground cable/phone/data
datsu	underground cable/phone/data service

Symbols

- sanitary manhole
- co — service cleanout
- fmv — force main release valve
- rectangular structure
- circular structure
- fire hydrant
- wv — water valve
- M — water meter
- BFP — backflow preventer
- natural gas meter
- T — service transformer (pad mount)
- S — primary switch gear
- light pole
- C — cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP! CALL BEFORE YOU DIG!



1 Erosion Control Phase I
1"=30'
0 15 30 60

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fdp
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Floodplain Note:

The subject property is located in zone X of FEMA FIRM MAP number 29095C0430G, revised January 20, 2017, Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

Local Benchmarks: BM–#

BM–1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101

Erosion Control Legend

- Phase I Silt fence
- Phase I Inlet protection
- Phase II Silt fence
- Phase II Inlet protection
- limits of disturbance
- construction entrance
- topsoil stockpile area
- concrete washout area

Property Legend

- right of way
- property lines
- easements
- setbacks

Grading Legend

- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

Utility Legend

- existing
- proposed

Linetypes

sanm	sanitary main
sans	sanitary service
	storm sewer (existing)
	storm sewer (solid wall, proposed)
stm	storm sewer (solid wall, proposed)
	storm sewer (perforated, proposed)
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wtrf	water service (fire)
wtrd	water service (domestic)
wtri	water service (irrigation)
gasm	natural gas main
gass	natural gas service schematic
elpu	underground primary electric
elsu	underground secondary electric
datu	underground cable/phone/data
datsu	underground cable/phone/data service

Symbols

- sanitary manhole
- service cleanout
- force main release valve
- rectangular structure
- circular structure
- fire hydrant
- water valve
- water meter
- backflow preventer
- natural gas meter
- service transformer (pad mount)
- primary switch gear
- light pole
- cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

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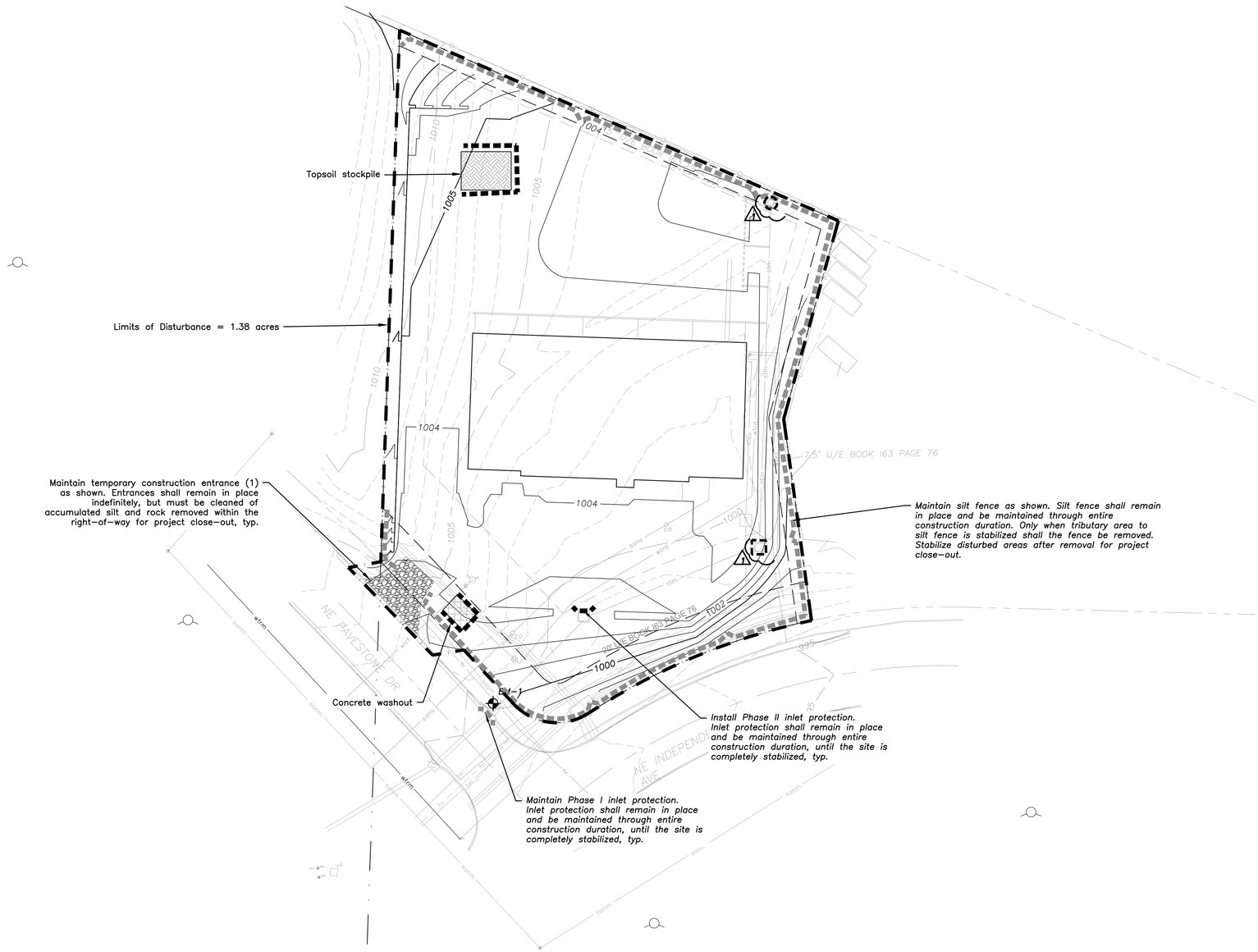

north

1 Erosion Control Phase II

1"=30'
0 15 30 60

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sheet number
C2.3
drawing type
fdp
project number
18091

Floodplain Note:

The subject property is located in zone X of FEMA FIRM MAP number 29095C0430G, revised January 20, 2017, Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

Erosion Control Legend

- Phase I Silt fence
- Phase I Inlet protection
- Phase II Silt fence
- Phase II Inlet protection
- limits of disturbance
- construction entrance
- topsoil stockpile area
- concrete washout area

Property Legend

- right of way
- property lines
- easements
- setbacks

Grading Legend

- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

Utility Legend

- existing
- proposed

Linetypes

sanm	sanitary main
sans	sanitary service
	storm sewer (existing)
	storm sewer (solid wall, proposed)
stm	storm sewer (solid wall, proposed)
	storm sewer (perforated, proposed)
wtrm	water main
wtrf	water service (fire)
wtrd	water service (domestic)
wtri	water service (irrigation)
gasm	natural gas main
gass	natural gas service schematic
elpu	underground primary electric
elsu	underground secondary electric
datu	underground cable/phone/data
datsu	underground cable/phone/data service

Symbols

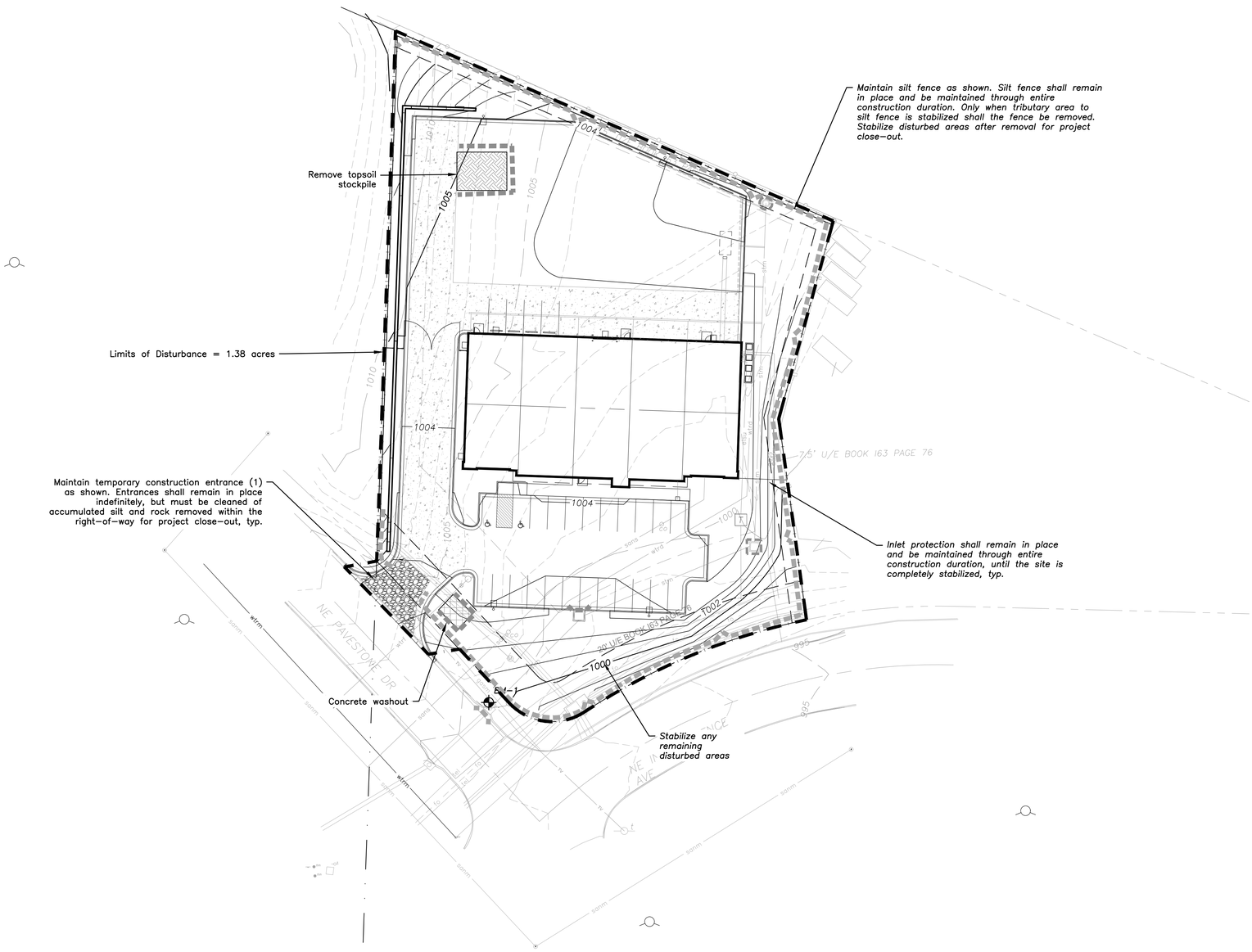
- sanitary manhole
- service cleanout
- force main release valve
- rectangular structure
- circular structure
- fire hydrant
- water valve
- water meter
- backflow preventer
- natural gas meter
- service transformer (pad mount)
- primary switch gear
- light pole
- cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP! CALL BEFORE YOU DIG!

Local Benchmarks:

BM-#

BM-1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101



north

1 Erosion Control Phase III

1"=30'

0 15 30 60

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sheet number
C2.4
drawing type
fdp
project number
18091

Symbols

- sanitary manhole
- service cleanout
- fmv force main release valve
- rectangular structure
- circular structure
- fire hydrant
- wv water valve
- water meter
- BFP backflow preventer
- natural gas meter
- T service transformer (pad mount)
- S primary switch gear
- light pole
- C cable/phone/data junction box
- street light
- pedestrian street light
- electric pole
- guy wire
- end section

Property Legend

- right of way
- property lines
- easements
- setbacks

Grading Legend

- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

Utility Legend

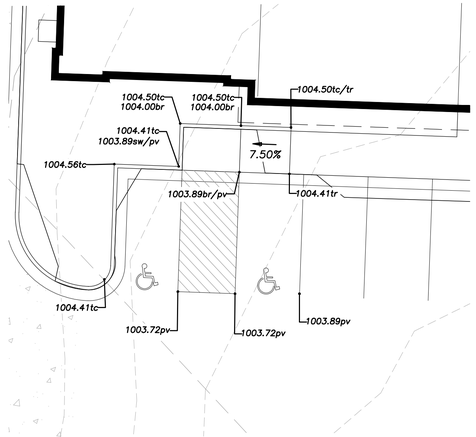
- existing
- proposed

Linetypes

- sanm — sanitary main
- sans — sanitary service
- storm sewer (existing)
- storm sewer (solid wall, proposed)
- stm — storm sewer (solid wall, proposed)
- storm sewer (perforated, proposed)
- wtrm — water main
- wtrf — water service (fire)
- wtrd — water service (domestic)
- wtri — water service (irrigation)
- gasm — natural gas main
- gass — natural gas service schematic
- elpu — underground primary electric
- elsu — underground secondary electric
- datu — underground cable/phone/data
- datsu — underground cable/phone/data service

Local Benchmarks: BM–#

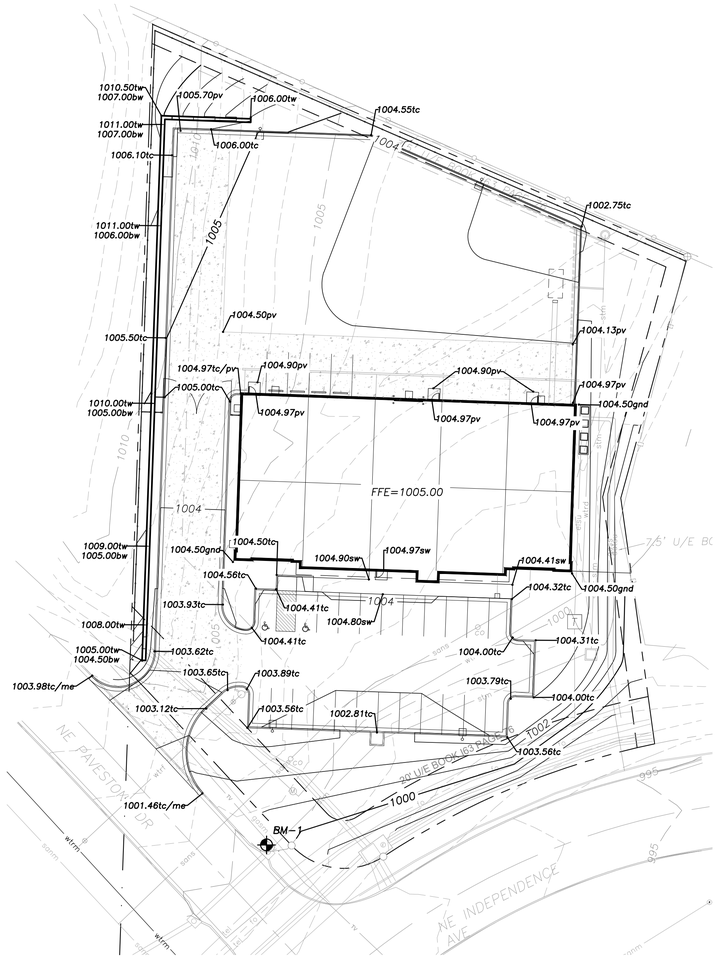
BM–1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101



north 2 ADA Detail
1"=10'
0 5 10 20

Spot Elevation Legend

br	=	bottom of ramp
tr	=	top of ramp
me	=	match existing
pv	=	pavement
bw	=	bottom of wall
tw	=	top of wall
tc	=	top of curb
sw	=	sidewalk
ti	=	top of inlet
bldg	=	building
FFE	=	finished floor elevation



north 1 Spot Elevation Plan
1"=30'
0 15 30 60

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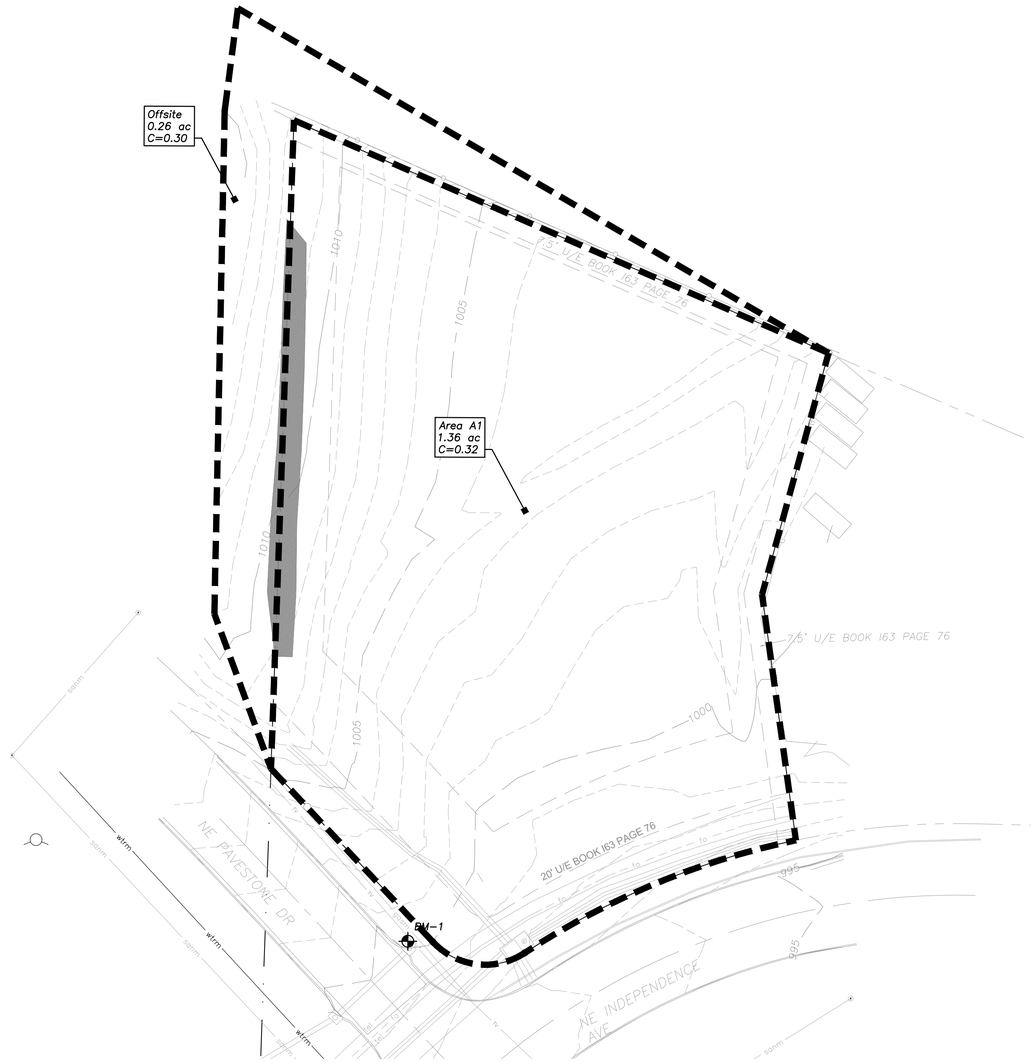
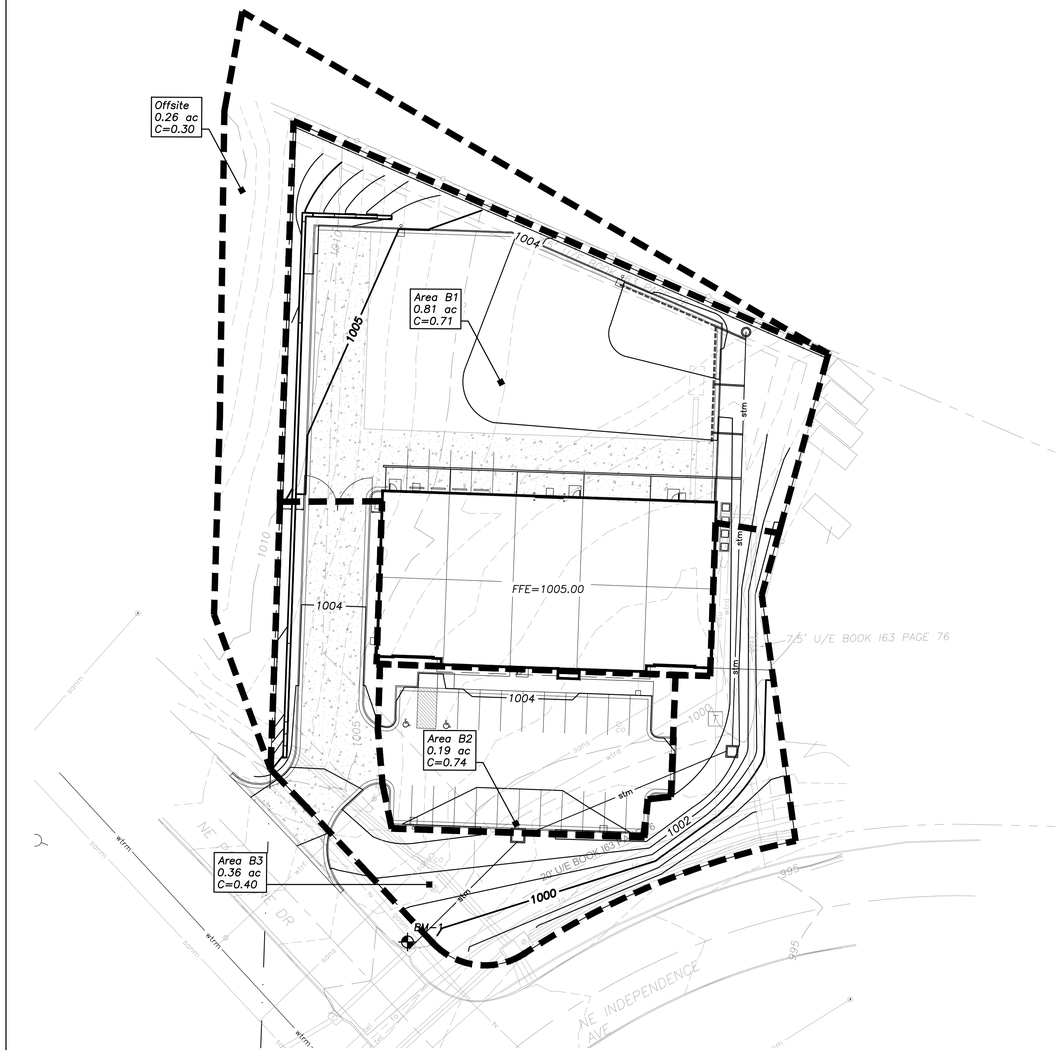


north

1 Existing Drainage Area Map

1"=30'

0 15 30 60



north

2 Proposed Drainage Area Map

1"=30'

0 15 30 60

Pre-Construction Impervious Area Calculations

	Square Feet	Acres
Area of Site	59,242	1.36
Impervious Area	1,307	0.03
Pervious Area	57,935	1.33

Q: 2 year 2.77 cfs
10 year 3.77 cfs
100 year 6.61 cfs

Post-Construction Impervious Area Calculations

	Square Feet	Acres
Area of Site	59,242	1.36
Impervious Area	24,829	0.71
Pervious Area	34,413	0.65
Increased Impervious Area		0.68

Q: 2 year 5.07 cfs
10 year 6.89 cfs
100 year 12.07 cfs

Q: Post Detention
2 year 1.20 cfs
10 year 2.34 cfs
100 year 5.75 cfs

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP-CALL BEFORE YOU DIG!

Floodplain Note:

The subject property is located in zone X of FEMA FIRM MAP number 29095C0430G, revised January 20, 2017. Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

Local Benchmarks:

BM-#

BM-1: Chiseled Square in Northwest Corner of Curb Inlet on North side of NE Pavestone Drive
Northing = 999983.011
Easting = 1000072.494
Elevation = 1000.101

Utility Legend

existing
proposed

Linetypes

sanm	sanitary main
sans	sanitary service
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wtri	water service (irrigation)
gasm	natural gas main
gass	natural gas service schematic
elpu	underground primary electric
elsu	underground secondary electric
datu	underground cable/phone/data
datsu	underground cable/phone/data service

Drainage Legend

drainage area

Property Legend

right of way
property lines
easements
setbacks

Grading Legend

existing minor contour
existing major contour
proposed minor contour
proposed major contour

STORM SEWER CALCULATIONS

10-year Storm Event

Drainage Areas	Structure Type	InletTime (min)	iInlet (in/hr)	Q (cfs)	Total CxA	Tc (min)	iSys (in/hr)	Flow Rate (cfs)	Line Size (in)	Line Slope (%)	Inv Up (ft)	Inv Dn (ft)	Pipe Travel (min)	Capacity Full (cfs)	VelUp (ft/s)	VelDn (ft/s)	VelAve (ft/s)	Line Length (ft)	HGLUp	HGLDn
B1 & B2	Orifice Plate	5.00	0.00	1.66	0.00	5.00	0.00	1.66	15.00	0.48	996.66	996.34	0.82	4.50	1.67	1.35	1.51	66.00	997.60	997.57

100-year Storm Event

Drainage Areas	Structure Type	InletTime (min)	iInlet (in/hr)	Q (cfs)	Total CxA	Tc (min)	iSys (in/hr)	Flow Rate (cfs)	Line Size (in)	Line Slope (%)	Inv Up (ft)	Inv Dn (ft)	Pipe Travel (min)	Capacity Full (cfs)	VelUp (ft/s)	VelDn (ft/s)	VelAve (ft/s)	Line Length (ft)	HGLUp	HGLDn
B1 & B2	Orifice Plate	5.00	0.00	4.31	0.00	5.00	0.00	4.31	15.00	0.48	996.66	996.34	0.31	4.50	3.63	3.52	3.58	66.00	997.82	997.57

** The flow has been manually entered to be modeled through the 18" pipe using output numbers from Hydraflow where the detention basin has been modeled. See storm study for more information on tl

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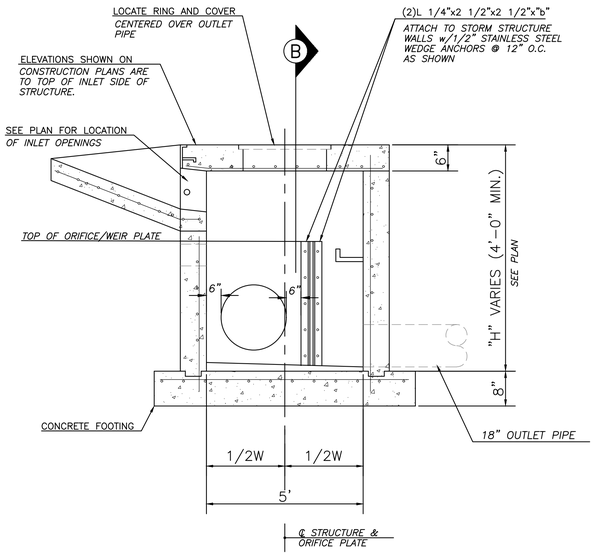
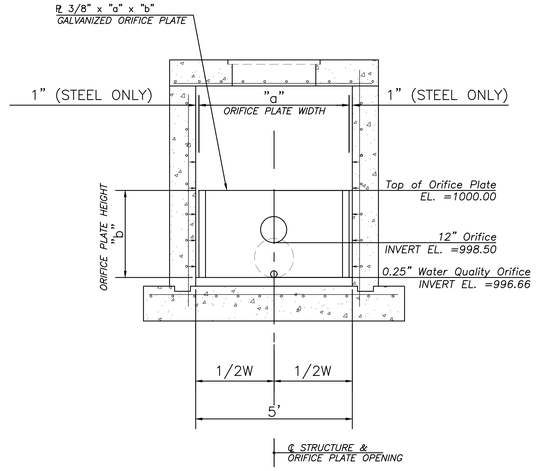
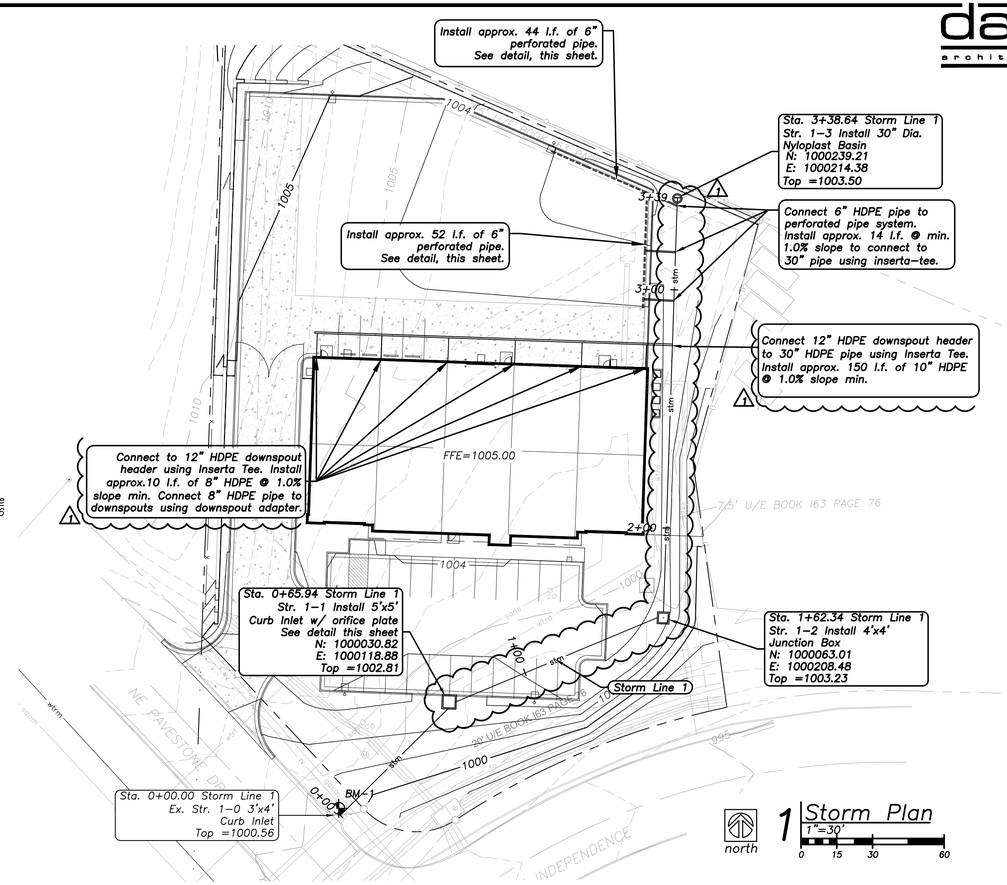


A TYPICAL SECTION OF STORM STRUCTURE w/ ORIFICE PLATE



B TYPICAL ELEVATION OF STORM STRUCTURE w/ ORIFICE PLATE

3 Orifice Plate Details
not to scale



1 Storm Plan
1"=30'
0 15 30 60

Local Benchmarks: BM–#

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Easting = 1000072.494
Elevation = 1000.101

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Property Legend
- right of way
- property lines
- easements
- setbacks

Grading Legend
- existing minor contour
- existing major contour
- proposed minor contour
- proposed major contour

Utility Legend
- existing
- proposed

Linetypes
- sanm — sanitary main
- sans — sanitary service
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- storm sewer (solid wall, proposed)
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- gass — natural gas service schematic
- elpu — underground primary electric
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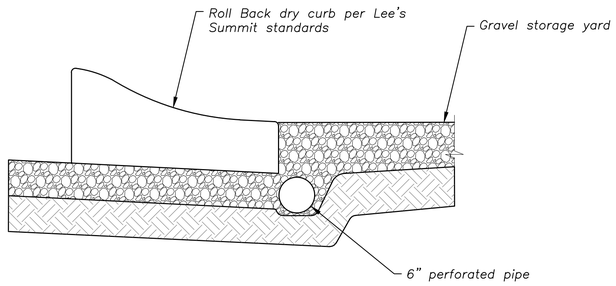
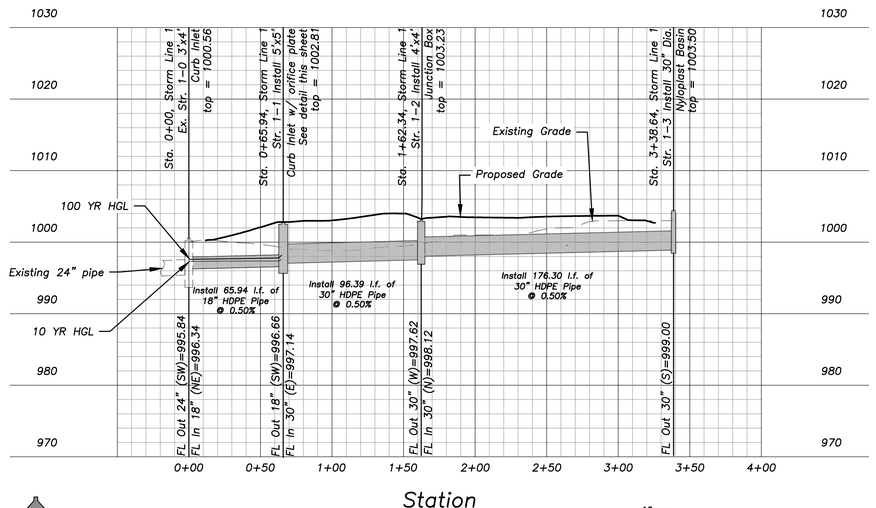


4 Perforated Pipe Detail
not to scale

Storm Line 1



Proposed Pipe and Structures

Existing Pipe and Structures

2 Storm Profile
V: 1"=10' H: 1"=50'
10 5 0
0 25 50 100
north

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Davidson Architecture & Engineering, LLC
Certificate # 006278

STATE OF MISSOURI PAUL A. MILLER NUMBER E-28140 PROFESSIONAL ENGINEER
09/21/2018
Paul A. Miller
Licensee # E-28140

a new development for
IBC
2320 NE Independence Ave.
Lee's Summit, Missouri 64064

date
08.06.2018
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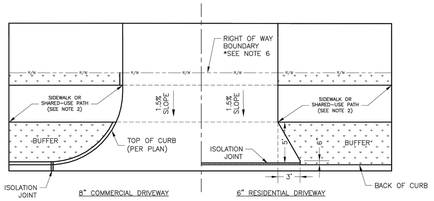
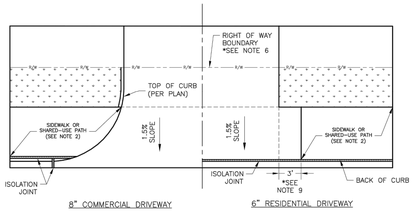
09.21.2018	1

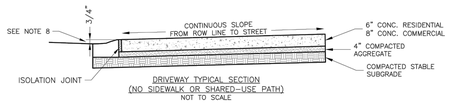
sheet number
C3.2
drawing type
fdp
project number
18091



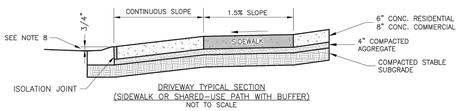
DRIVEWAY WITH BUFFER
NOT TO SCALE



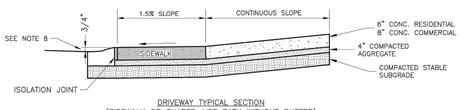
DRIVEWAY WITHOUT BUFFER
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED-USE PATH)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITH BUFFER)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITHOUT BUFFER)
NOT TO SCALE

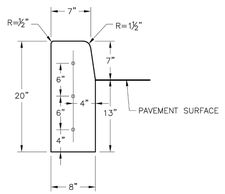
GENERAL NOTES
1. SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL).
3. JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
4. KCMMB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
5. COMMERCIAL DRIVEWAYS AND DRIVEWAY APPROACHES, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
6. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ¾" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CC-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
9. SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
10. THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

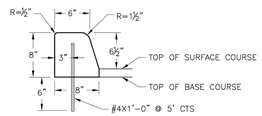
Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: DRIVEWAY DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

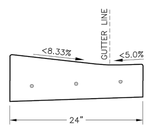
GEN-1



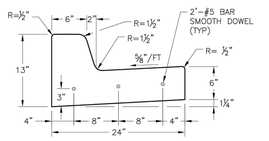
STRAIGHT CURB
(TYPE C-1)



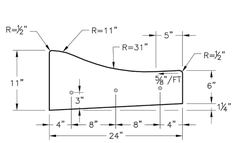
DOWELLED CURB
(TYPE DC)



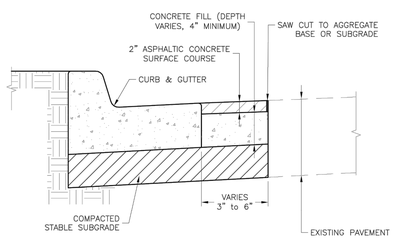
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



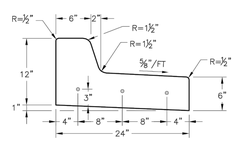
STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



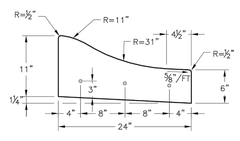
ROLL BACK CURB & GUTTER
(TYPE CG-2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)

GENERAL NOTES
1. ¾" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
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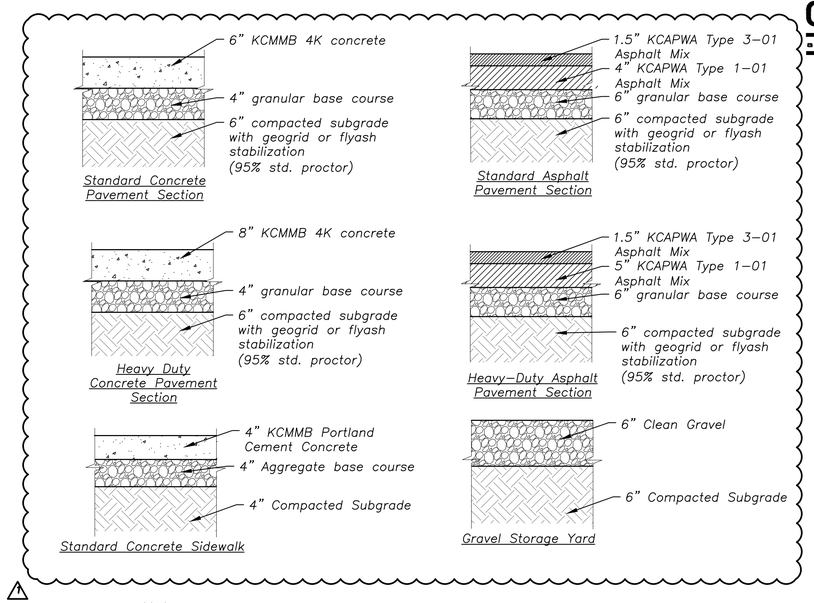
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: CURB & GUTTER DETAIL

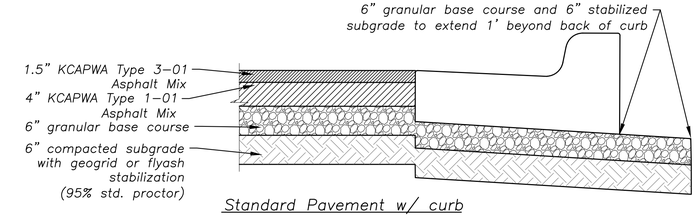
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4

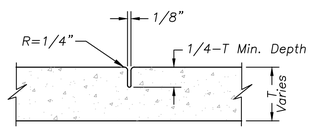


1

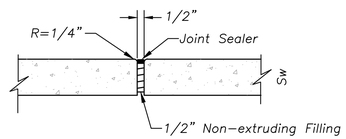
Notes:
1. All pavements shall conform to Lee's Summit City Standard.
2. Refer to the geotech for site recommendations.
3. Where city pavement standards and geotech recommendations differ, contractor shall use the more stringent of the two.
4. Any discrepancies shall be brought to the attention of the engineer.



Standard Pavement w/ curb



Contraction Joint
(see Note 2)



Isolation Joint
(see Note 3)

Joint Details

Notes

1. Concrete shall be KCMMB-4K unless otherwise noted.
2. Key all construction joints or use tie bars #4 Epoxy coated @ 12" o.c.
3. Longitudinal joint spacing to match width of sidewalk.
4. Isolation joints shall be placed where walk abuts driveways and similar structures, and 250' centers max.
5. Install 18" tie bars #4 Epoxy coated @ 18" o.c.

Pavement Details
not to scale

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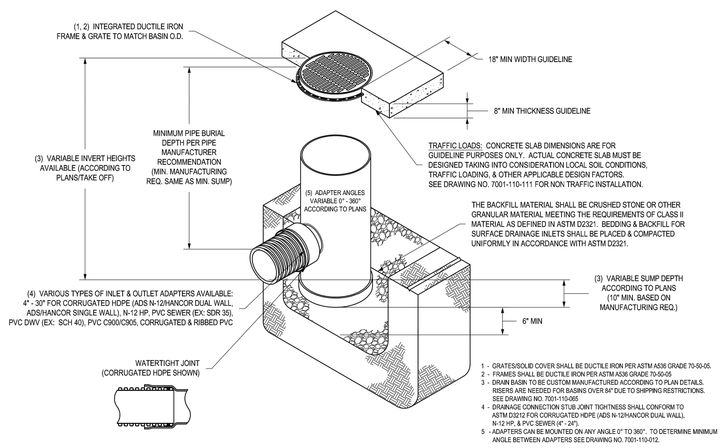
NYLOPLAST 30" DRAIN BASIN: 2830AG _ _X



1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-085
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

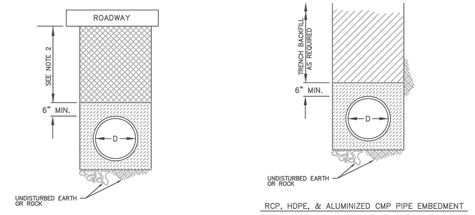
GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-20	3099CGP	7001-110-220
STANDARD	MEETS H-20	3099CGS	7001-110-221
SOLID COVER	MEETS H-20	3099CGC	7001-110-222
DOME	N/A	3099CGD	7001-110-223

DRAWN BY	EBC	MATERIAL	
DATE	4-3-06		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	3-11-10		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

Nyloplast
3126 VERONA AVE.
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE
30 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-193 REV D



STORM PIPE EMBEDMENT BENEATH ROADWAY

RCP, HDPE, & ALUMINIZED CMP PIPE EMBEDMENT

LEGEND	
D	NOMINAL PIPE DIAMETER
	TRENCH BACKFILL
	TAMPED GRANULAR BACKFILL (AB-3)
	GRANULAR BEDDING

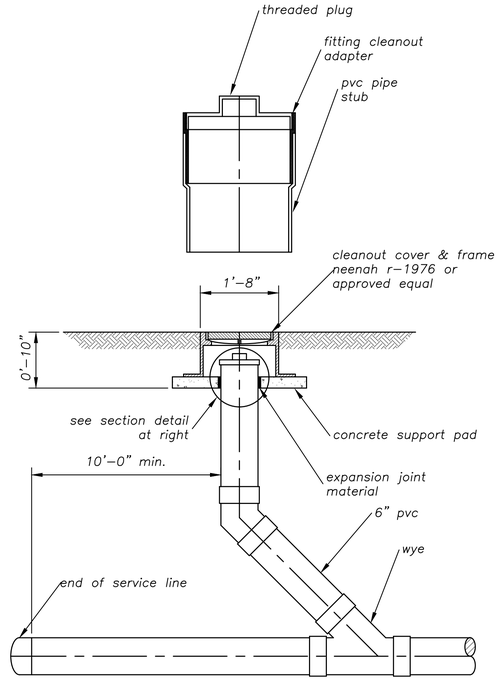
MINIMUM PIPE CLEARANCES (IN)		
D	PIPE SIDE CLEARANCE[2] (SOIL/ROCK)	PIPE BOTTOM CLEARANCE (SOIL/ROCK)
0"–27"	6/6	4/6
30"–60"	8/9	6/9
66"–UP	12/12	8/12

NOTES: 1. GRANULAR BEDDING SHALL BE 1/2" CLEAN ROCK WITH A MAXIMUM PARTICLE SIZE 3/4 INCH ROCK, PASSING #200 SIEVE ≤ 35% (PI ≤ 10 AND LL ≤ 40). MATERIAL TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL OR VIBRATING.

2. TAMPED GRANULAR BACKFILL (AB-3) SHALL BE GRANULAR MATERIAL WITH A MAXIMUM PARTICLE SIZE 1 – 1/2 INCH ROCK, PASSING #40 SIEVE (PI ≤ 8) 15 TO 50% AND #200 SIEVE ≤ 35%. THIS MATERIAL SHALL BE USED FOR ALL EXISTING AND PROPOSED STREET CROSSINGS.

3. TRENCH BACKFILL SHALL BE FINELY DIVIDED MATERIAL FREE FROM DEBRIS AND STONES, COMPACTED TO 95% MAXIMUM DENSITY.

HDPE Pipe Embedment
not to scale



Sanitary Cleanout Details
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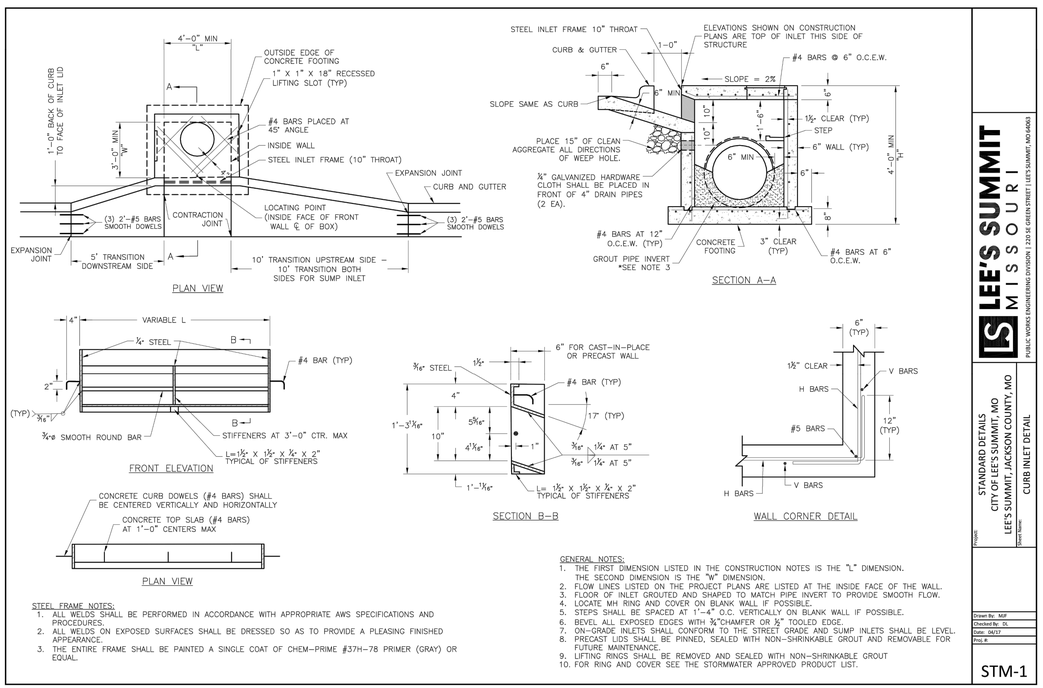

STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM-PRIME #37H-78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON-SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-1

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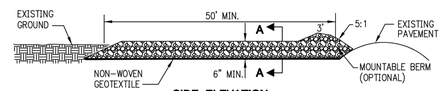
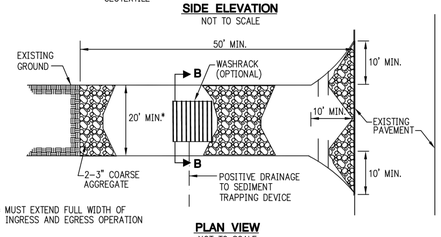
TEMPORARY CONSTRUCTION ENTRANCE



SIDE ELEVATION
NOT TO SCALE



PLAN VIEW
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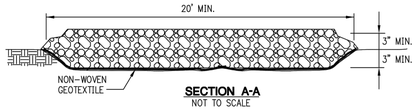

SECTION A-A
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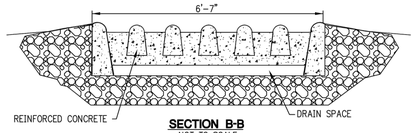


SECTION B-B
NOT TO SCALE

SOURCE: MODIFIED FROM VA. DCR, 1992

TEMPORARY CONSTRCUTION ENTRANCE PAD NOTES:

A) INSTALLATION:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6-TO 8-INCH HIGH RIDGE WITH 3H:1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
4. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
5. PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE.
7. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.

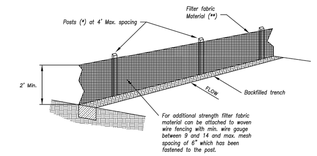
B) TROUBLESHOOTING:

1. CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
   a. INADEQUATE RUNOFF CONTROL TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROAD – INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES.
   b. SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL – INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC.
   c. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC – EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

C) INSPECTION AND MAINTENANCE:

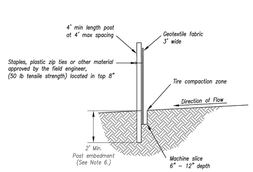
1. INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER 1/2-INCH OR GREATER STORM EVENTS.
2. RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL.
3. TOPDRESS WITH CLEAN 2-AND 3-INCH STONE AS NEEDED.
4. IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
5. REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METROPOLITAN CHAPTER
TEMPORARY CONSTRUCTION ENTRANCE	STANDARD DRAWING NUMBER ESC-01 ADOPTED:



(*) POSTS
- MIN. LENGTH 4'
- HARDWOOD 1 ⅜" x 1 ⅜"
- NO.2 SOUTHERN PINE 2 ⅜" x 2 ⅜"
- STEEL 1.33 LB/FT

(**) – Geotextile Fabric shall meet the requirements of AASHTO M288



SILT FENCE DETAILS
Not to Scale

Notes:
1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2" into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:
1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of silt fence.
2. Repair as necessary to maintain function and structure.

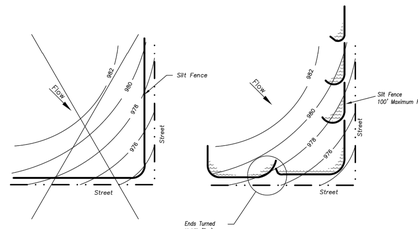
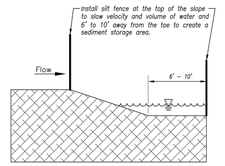
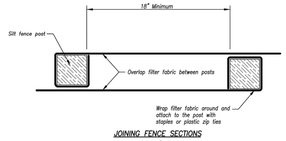


Figure A

SILT FENCE LAYOUT
Not to Scale

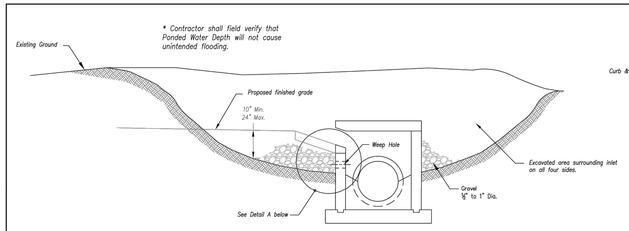


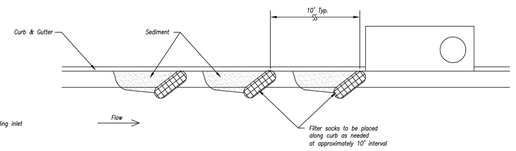


JOINING FENCE SECTIONS
Not to Scale

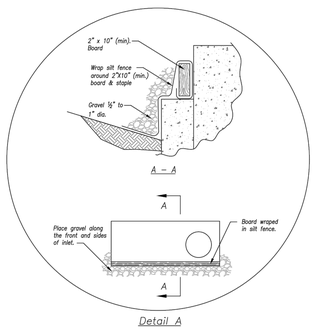
Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016





On Grade Curb Inlet Protection

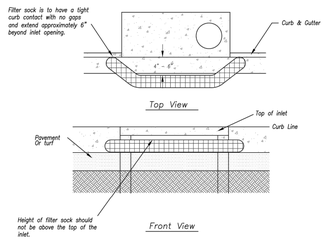


Detail A

EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

Notes:
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
3. Contractor to field verify ponding water shall not create a traffic hazard.

Maintenance:
1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.



Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METRO CHAPTER
CURB INLET PROTECTION	STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

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STATE OF MISSOURI
PAUL A. MILLER
NUMBER E-28140
PROFESSIONAL ENGINEER

09/21/2018
Paul A. Miller
Licensee # E-28140

a new development for
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sheet number
C4.3
drawing type
fdp
project number
18091

Tree and Shrub Planting List

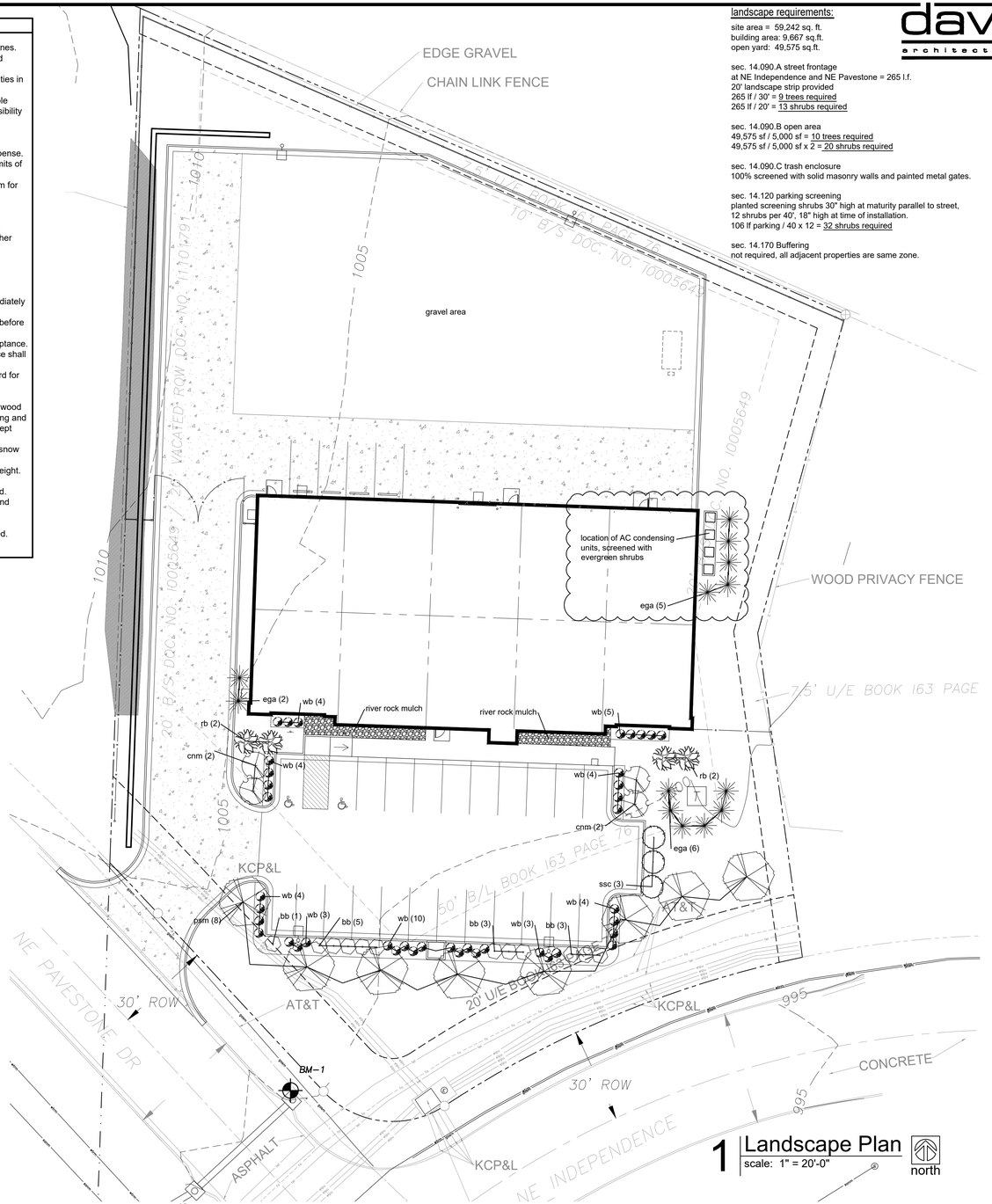
		item	qty.	common name	botanical name	size and condition
shade trees		psm	8	pacific sunset maple	acer truncatum x a. platanoides 'warrenred'	3" cal.
		cnm	4	columnar norway maple	acer platanoides 'columnare'	3" cal.
ornamtl.		ssc	3	spring snow crabapple	malus 'spring snow' (fruitless)	3" cal.
		rb	4	redbud	cercis canadensis	3" cal.
dec.shrub		bb	12	dwarf burning bush	euonymus alata 'compacta'	3 gallon, 18-24 inches
evrgrn.shrub		wb	40	wintergreen boxwood	buxus microphylla	3 gallon, 18-24 inches
		ega	13	emerald green arborvitae	thuja occidentalis 'emerald green'	4' -5' high
				washed river rock mulch area		

total: 19 trees, 65 shrubs

Evergreen arborvitae shrubs listed above will be used to screen all pad mounted hvac equipment.

landscape notes:

1. Landscaping shall be coordinated with the location of utilities, driveways and traffic clearance zones.
2. The contractor doing excavation on public right-of-way shall give 48 hours advance notice to and obtain information from utility companies.
3. Prior to commencement of work, the contractor shall notify all those companies which have facilities in the near vicinity of the construction to be performed.
4. Existing underground, overhead, utilities and drainage structures have been plotted from available information and therefore, their locations must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies to locate their utilities before actual construction.
5. Contractor shall verify location of and protect all utilities and structures. Damage to utilities and structures shall be repaired by the contractor to the satisfaction of the owner at no additional expense.
6. Entire landscaped site to be irrigated by underground system, including right of way as req'd. (limits of sod including all other disturbed area's and all planting beds)
7. Irrigation system shall include an automatic rain sensor. Contractor shall provide irrigation system for all planted and seeded areas on site.
8. All landscape materials shall be installed in accordance with the current planting procedures established by the most recent addition of the American Standard for Nursery Stock.
9. Trees planted per this plan shall be installed during the spring (march 15 through june 15) or fall (september 15 through december 1). Written city approval will be required for planting during other times of the year.
10. Stake and guy all trees per planting details.
11. Install all shrubs and groundcover per planting details.
12. Elevation of top of mulch shall be 1/2" below any adjacent pavement/turf areas.
13. Root stimulator shall be applied to the soil backfill of each plant during installation.
14. Contractor shall verify all landscape material quantities and shall report any discrepancies immediately to the Landscape Architect.
15. Contractor shall stake plant locations in the field and have approval by the Landscape Architect before proceeding with installation.
16. Contractor shall guarantee all plant material for a period of one (1) year from date of initial acceptance. Contractor is responsible for maintaining plant material until acceptance is received. Maintenance shall include watering, maintaining plants in vertical position and shrub bed weed control.
17. All plant material shall meet or exceed minimum requirements defined by the "American Standard for Nursery Stock" ANSI Z60.1.
18. No plant material shall be substituted without written approval.
19. Trees and seasonal color areas shall be mulched with three (3) inches minimum shredded hardwood mulch. Planting beds as delineated shall be separated from pavement/turf areas with metal edging and mulched with three (3) inches minimum shredded hardwood mulch over weed barrier fabric, except where otherwise specified.
20. All existing plant material to be retained shall be wrapped with orange, or bright, colored plastic snow fence around base of trees and around all shrubs. Stake to hold in place during construction.
21. All shrubs used as parking buffer to be min. 18" tall at planting and maintained to at least 2'-6" height. Install plants not to encroach upon cars parked, when at full growth.
22. All trees with above a 3" caliper shall be double staked, while smaller trees shall be single staked.
23. Ground mechanical and electrical equipment shall be wholly screened from street right-of-way and residential developments.
24. Maximum slope shall be not greater than 3 : 1.
25. All portions of site not covered by building, paving, gravel, mulch, plantings, etc. are to be sodded.



1 Landscape Plan
scale: 1" = 20'-0"

north

landscape requirements:

site area = 59,242 sq. ft.
building area: 9,667 sq.ft.
open yard: 49,575 sq.ft.

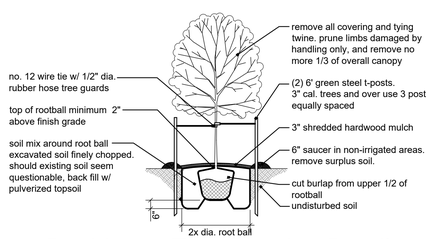
sec. 14.090.A street frontage
at NE Independence and NE Pavestone = 265 l.f.
20' landscape strip provided
265 lf / 30' = 9 trees required
265 lf / 20' = 13 shrubs required

sec. 14.090.B open area
49,575 sf / 5,000 sf = 10 trees required
49,575 sf / 5,000 sf x 2 = 20 shrubs required

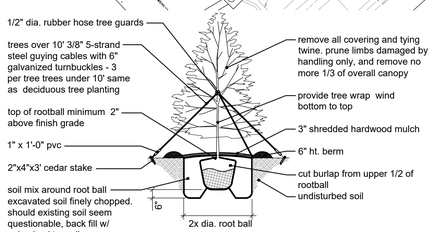
sec. 14.090.C trash enclosure
100% screened with solid masonry walls and painted metal gates.

sec. 14.120 parking screening
planted screening shrubs 30" high at maturity parallel to street,
12 shrubs per 40', 18" high at time of installation.
106 lf parking / 40 x 12 = 32 shrubs required

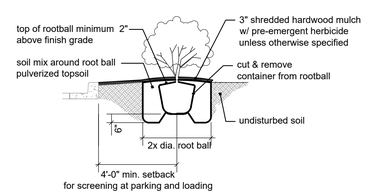
sec. 14.170 Buffering
not required, all adjacent properties are same zone.



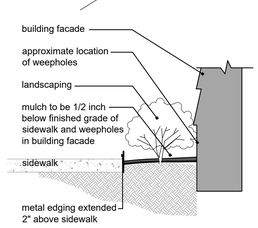
5 Deciduous Tree Planting Detail
not to scale



4 Evergreen Tree Planting Detail
not to scale



3 Shrub Planting Detail
not to scale



2 Edging Detail
not to scale

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STATE OF MISSOURI
POWELL
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MINNIS
NUMBER
A-2006
REGISTERED ARCHITECT

09.21.2018

a new development for
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2320 NE Independence Ave.
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09.21.2018 01

sheet number
L1.1
drawing type
fdp
project number
18091

general notes

- All construction shall conform to the standards and specifications of the municipality of Lee's Summit, Missouri.
- The general contractor shall contact all utility companies prior to the start of construction and verify the location and depth of any utilities that may be encountered during construction.
- The contractor shall field verify existing surface & subsurface ground conditions prior to start of construction
- Slopes shall maintain a maximum 3:1 ratio.
- The contractor shall be responsible for obtaining all required permits, paying all fees, and otherwise complying with all applicable regulations governing the project.
- Place silt fence per civil for erosion control.
- Provide a temporary gravel access drive to prevent mud from being deposited onto the adjacent road.
- Prior to installing any structure on a public storm sewer, the contractor shall submit shop drawings for the structure(s). Installation shall not occur until drawings have been approved by public works.
- Prior to installing, constructing, or performing any work on the public storm sewer line (including connecting private drainage to the storm system) contact the city for inspection of the work. Contact must be made at least 48 hours prior to the start of work.
- Connections to the public storm sewer between structures will not be permitted.
- Plan shows existing grades for reference purposes only. Refer to civil drawings for proposed grade locations.
- Dimensions shown are from back of curb, unless noted otherwise.

construction notes

1. 6'-0" wide concrete sidewalk. 4" thick with 6x6 10/10 wwf steel mesh. Control joints at 6'-0" o.c. Broom finish for non-slip surface.
2. Handicap parking signage. Mount sign at not more than 60" a.f.g. to bottom. Sign to contain the universal handicap symbol and "van accessible" as required per ADA. See detail 2/A1.1.
3. Furnish and install ADA accessible ramp and sidewalk per detail 2/A1.1 and per civil.
4. Handicap striping and universal symbol painted white with 4" stroke.
5. Parking lot striping to be painted white with 4" stroke.
6. Sawcut existing curb & gutter as required to install new drive. Match new drive elevation with existing surface. Re: civil.
7. Furnish and install concrete pavement per civil.
8. Concrete curb and gutter, typ. see civil.
9. All site lighting is design/build. Comply with Lee's Summit, MO regulations. Site pole lighting shall be LED type fixtures with cutoff and non-adjustable flat lens on poles. Fixture height shall not exceed 28' high from grade (incl. base) and shall be mounted to reinforced 2'-0" dia. concrete bases. Base depth below grade shall be designed per pole manufacturer, or min. 6'-0". See detail 3/A1.1.
10. Building mounted LED light fixture, see electrical.
11. 4" thick concrete walk at front entrance, with 6x6 10/10 wwf steel mesh. Broom finish for non-slip surface.
12. Gravel area, see civil.
13. Install (2) bollards at exterior side of overhead door. Bollards are pea gravel filled 6" dia. galv. steel bollards, 4' high per detail.
14. Provide and install reinforced concrete retaining wall per civil and structural.
15. Install concrete stoop at exit door location. See floor plan for exact location and structural drawings for detail.
16. Install 6' high pvc solid fence system. Terminate at existing solid wood fence on east property side. See fence detail 4/A1.1.
17. Provide and install motorized swing gate with solid pickets, 6'-0" high.
18. Provide and install 6" wide conc. wheel stops.
19. Install 4' high galv. chainlink fence system.
20. Provide electrical and data connections to fuel storage tank location, see civil.
21. Provide electrical to charging station, see civil.
22. Provide Knox padlock installed on gate, per fire department requirements.
23. Provide and install conc. pad for electrical transformer.
24. Furnish and install asphalt pavement per civil.
25. Location of HVAC ground mounted condensing units on concrete pad. Screen per Landscape Plan L1.1.

project information:

Governing Municipality:	Lee's Summit, Missouri
Governing Code:	2012 IBC, 2012 IMC, 2012 IPC, 2012 IFGC, 2012 IFC, 2011 NEC, Life Safety Code, ADA/ANSI 117.1
zoning:	PI - planned industrial
site area:	59,242 s.f., 1.36 acres +/-
building height:	n/a
actual building height:	32' 1 story
setbacks:	50' - front 10' - sideyard 20' - rear yard

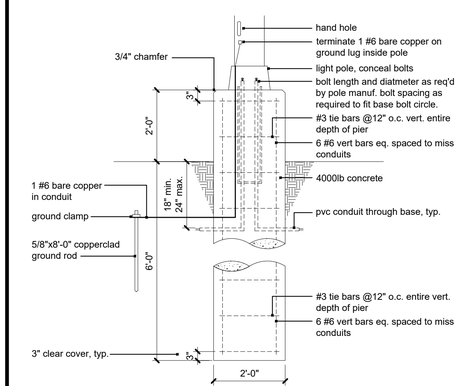
building occupancy type: S-1
(B occupancy and S-1 occupancy no separation requirement)
building construction type: V-B
tabular allow area: 9,000s.f.
increase area (open on 3 sides):
[350'/420'-.25] 30/30 = .583 x 9,000 = 5,247 increase. 9,000 + 5,247 = 14,247 s.f. total allowed

building footprint area:	9,967 s.f.
mezzanine area:	1,996 s.f.
total building area:	11,963 s.f.

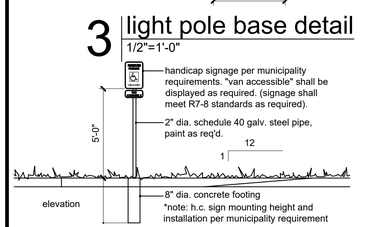
Warehouse will be used for storage of metal tools, non-combustible traffic control equipment and metal signage. Building will be non-sprinklered and comply with IBC section 903:

- fire area does not exceed 12,000 s.f.
- buidling is one story
- combined areas do not exceed 24,000 s.f.
- no storage of commercial trucks/buses
- no storage of upholstered furniture/mattresses

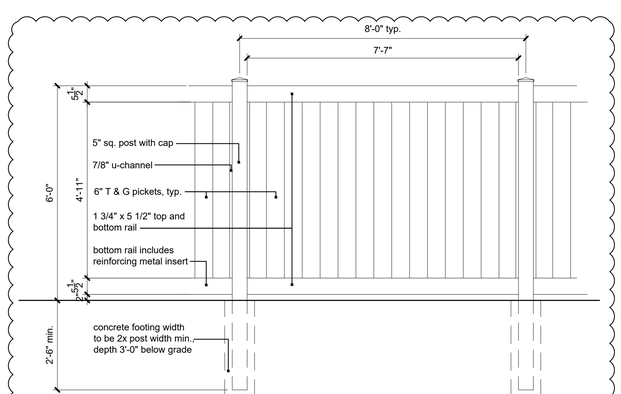
parking required:
office 4 per 1000 s.f.
warehouse 1 per 1000 s.f.
office area: 5,800s.f., warehouse 4,000s.f.
office 4x5.8 = 23 spaces
warehouse 1x4 = 4 spaces
Total required: 27spaces
Total provided: 27 spaces
(2 accessible spaces included)



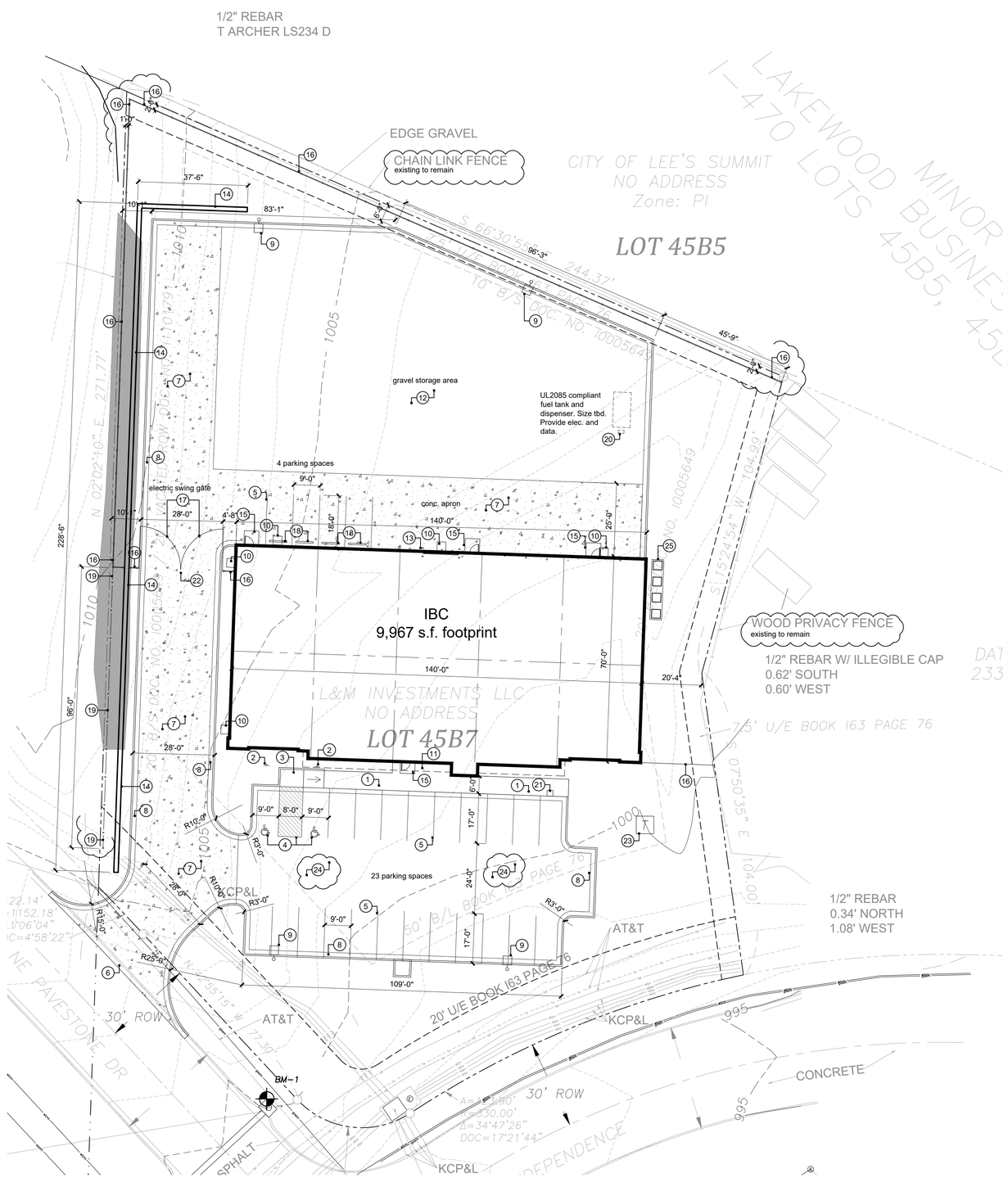
3 light pole base detail
1/2"=1'-0"



2 ada details
no scale



4 pvc fence detail
scale: 1/2" = 1'-0"



1 Site Plan
scale: 1" = 20'-0"

north

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09.21.2018

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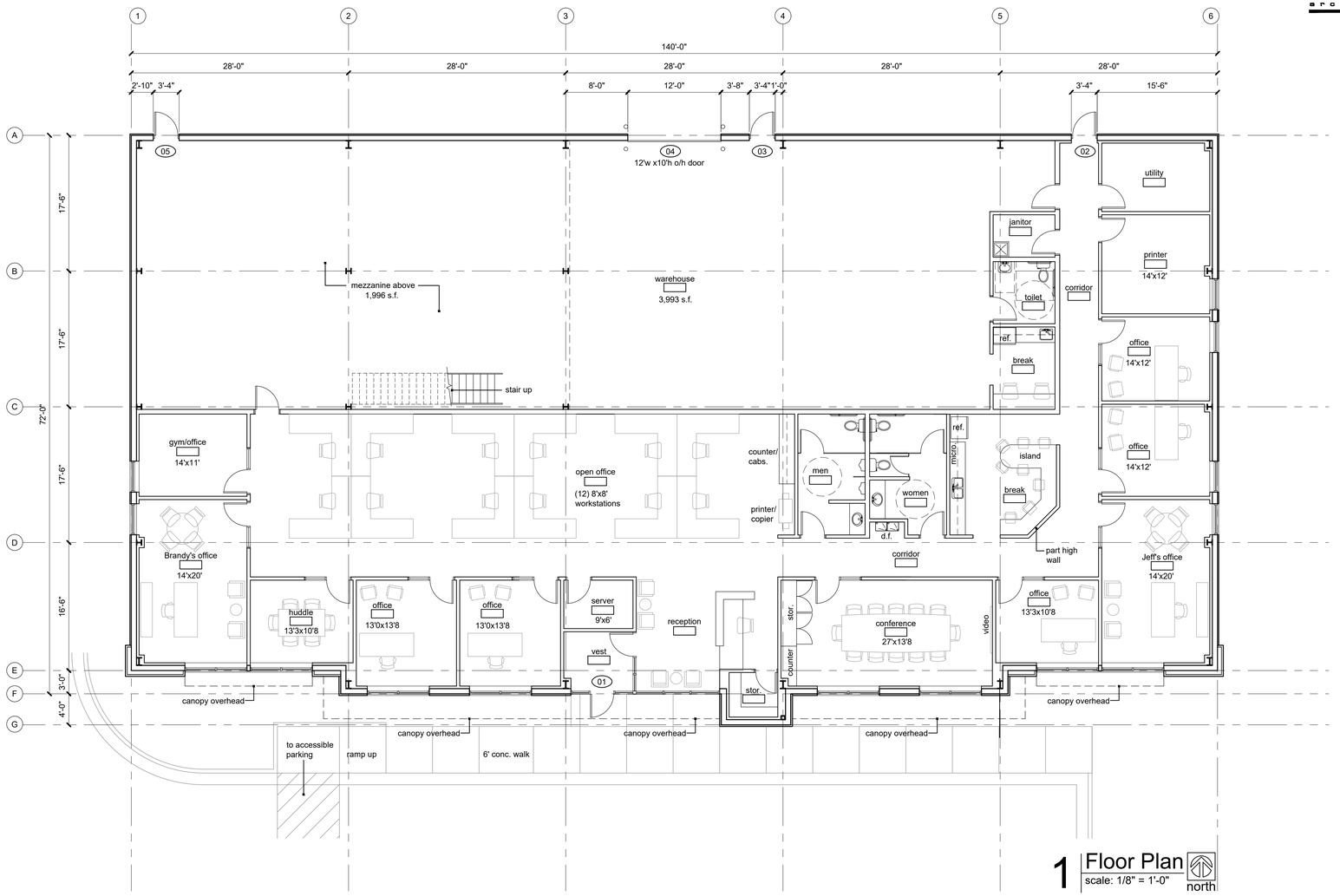

1 Floor Plan
scale: 1/8" = 1'-0"
north

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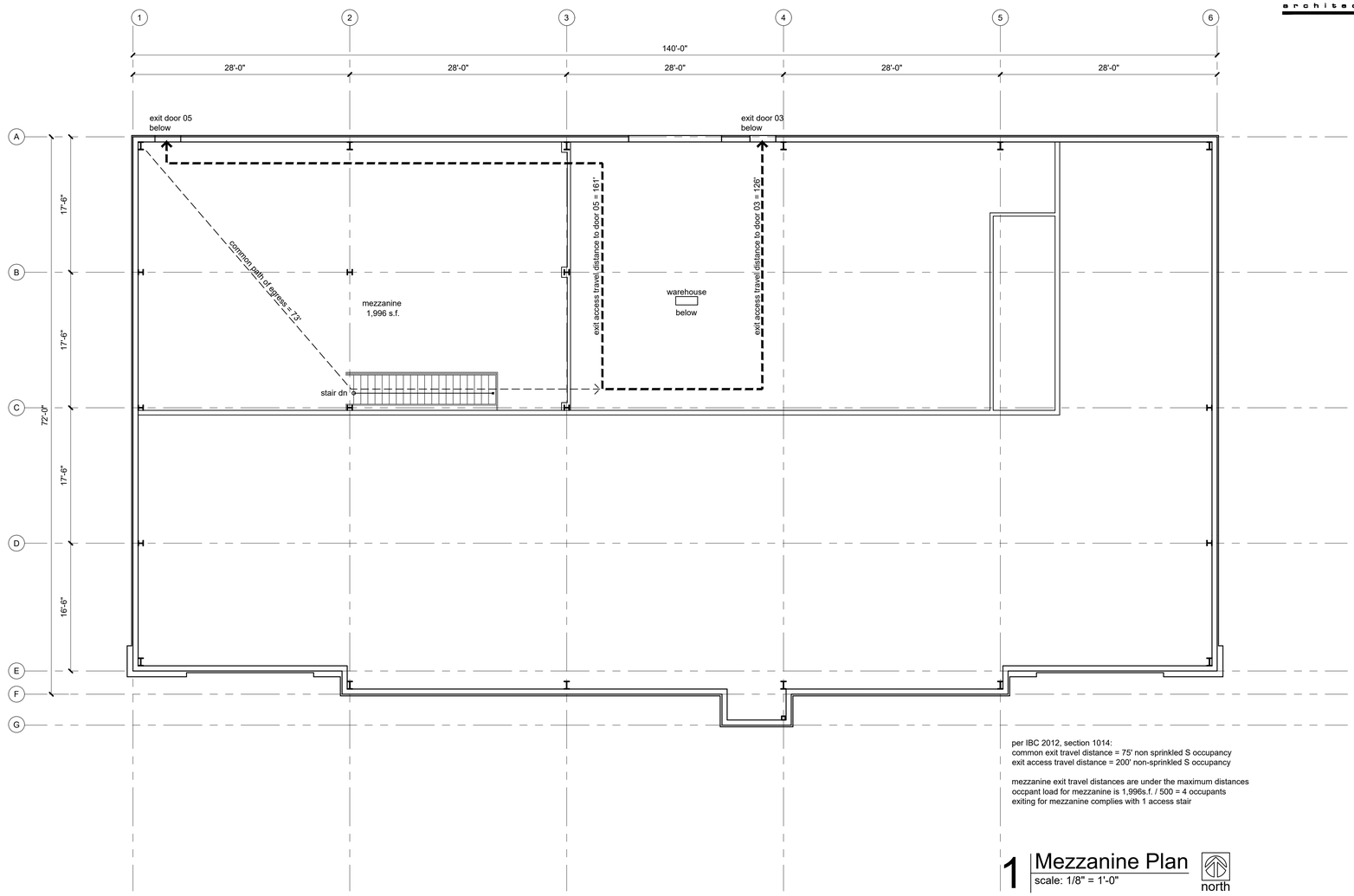

per IBC 2012, section 1014:
common exit travel distance = 75' non sprinkled S occupancy
exit access travel distance = 200' non-sprinkled S occupancy

mezzanine exit travel distances are under the maximum distances
occpant load for mezzanine is 1,996s.f. / 500 = 4 occupants
exiting for mezzanine complies with 1 access stair

1 Mezzanine Plan
scale: 1/8" = 1'-0"

north

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STATE OF MISSOURI
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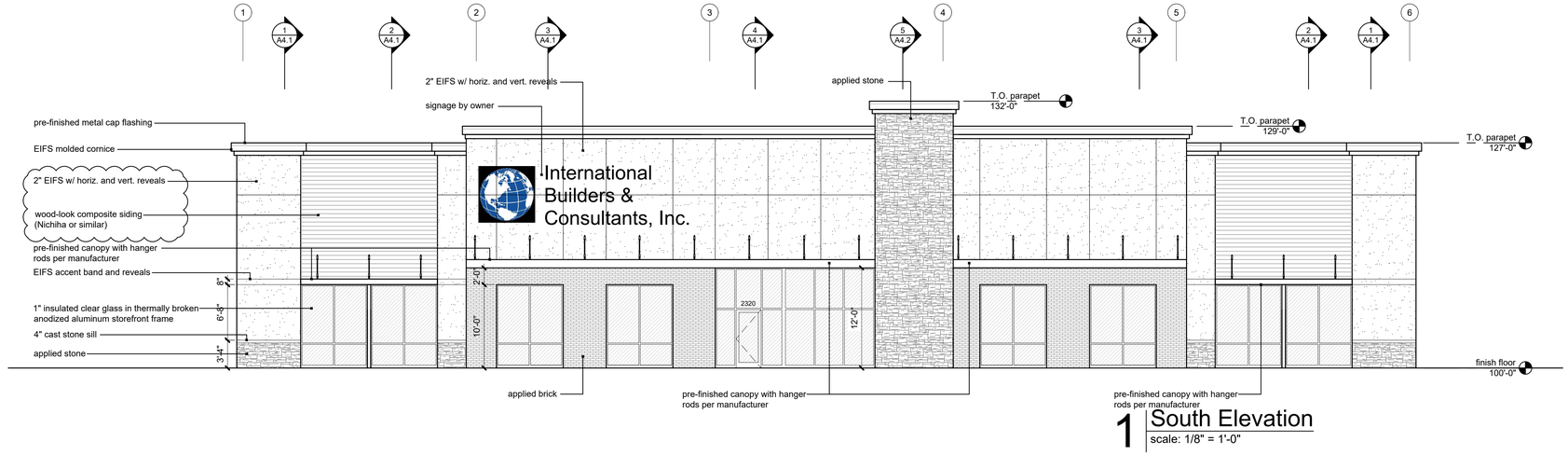

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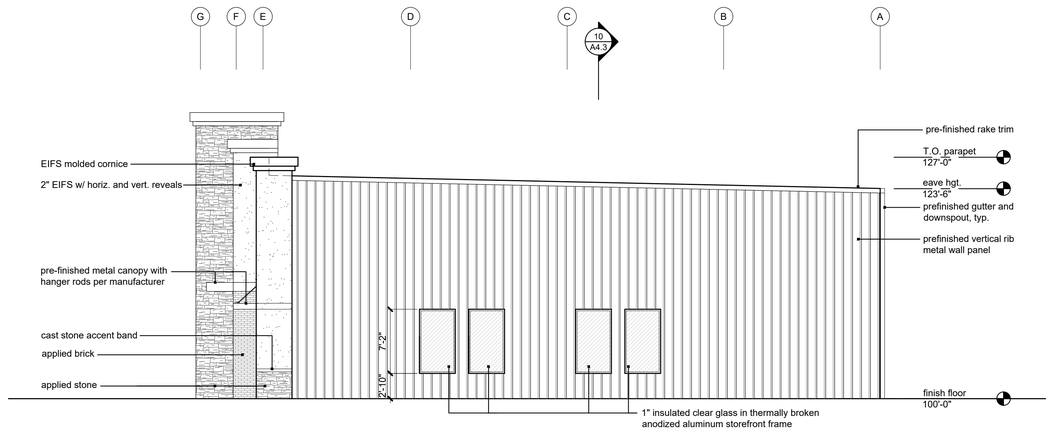
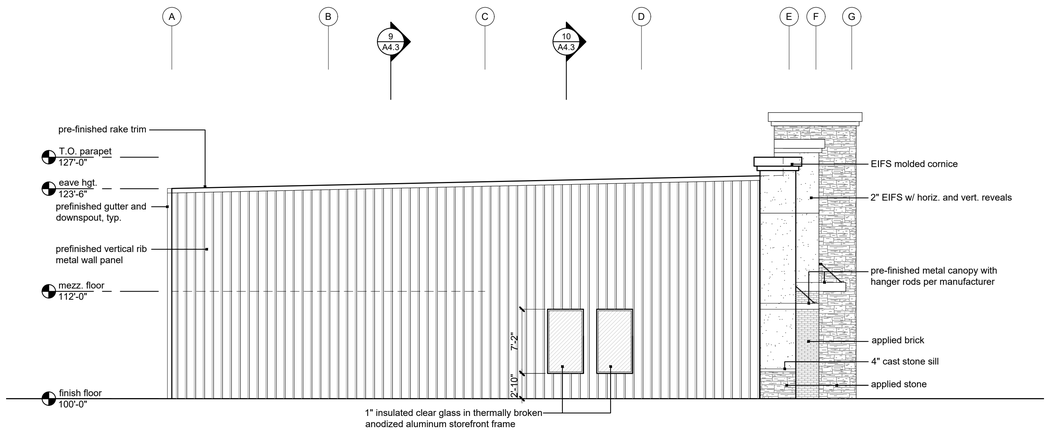
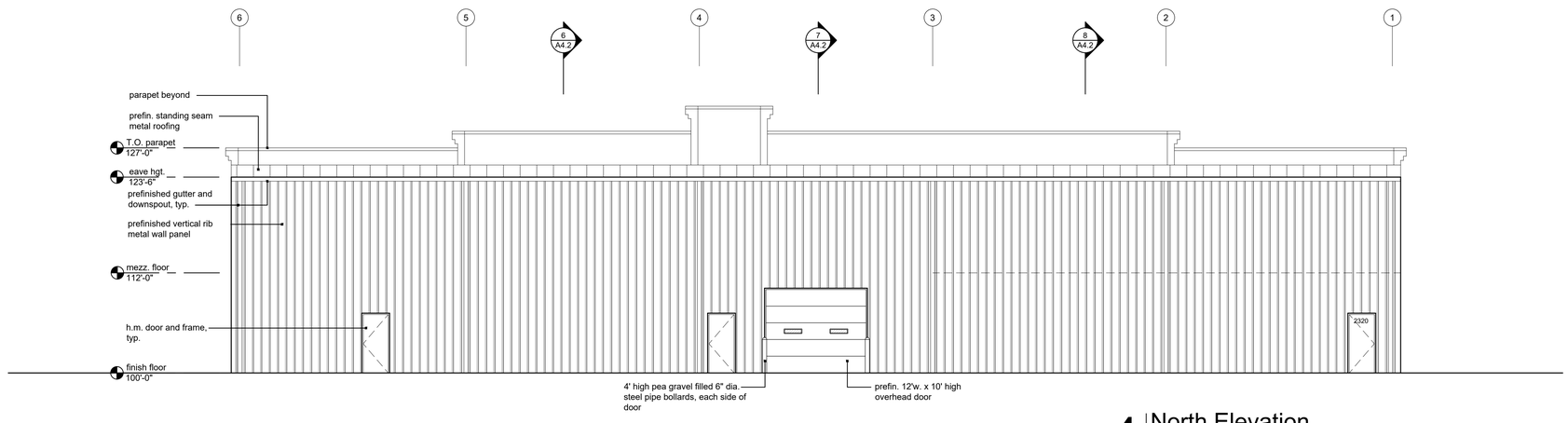
scale: 1/8" = 1'-0"



3 East Elevation
scale: 1/8" = 1'-0"



2 West Elevation
scale: 1/8" = 1'-0"



4 North Elevation
scale: 1/8" = 1'-0"

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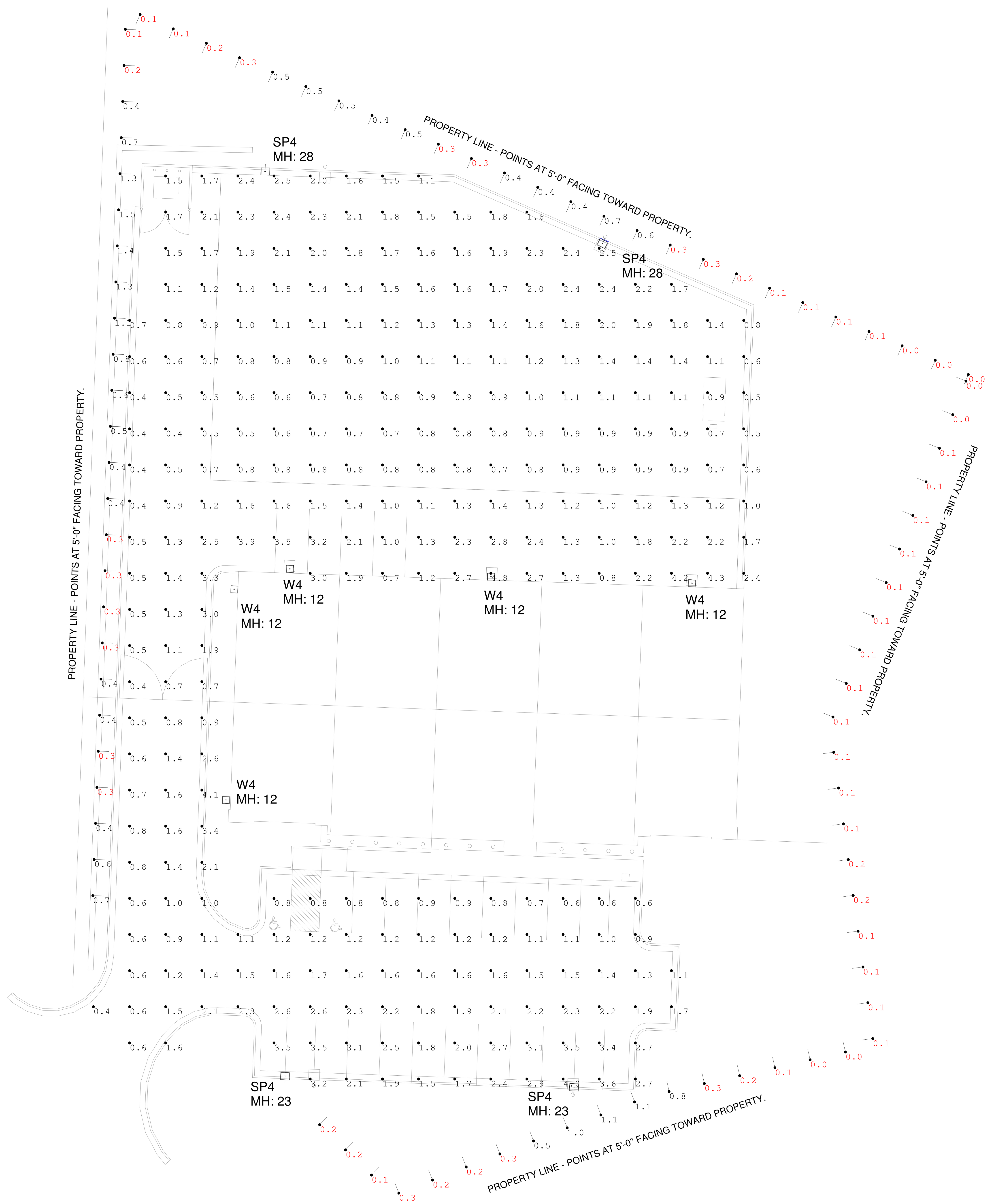
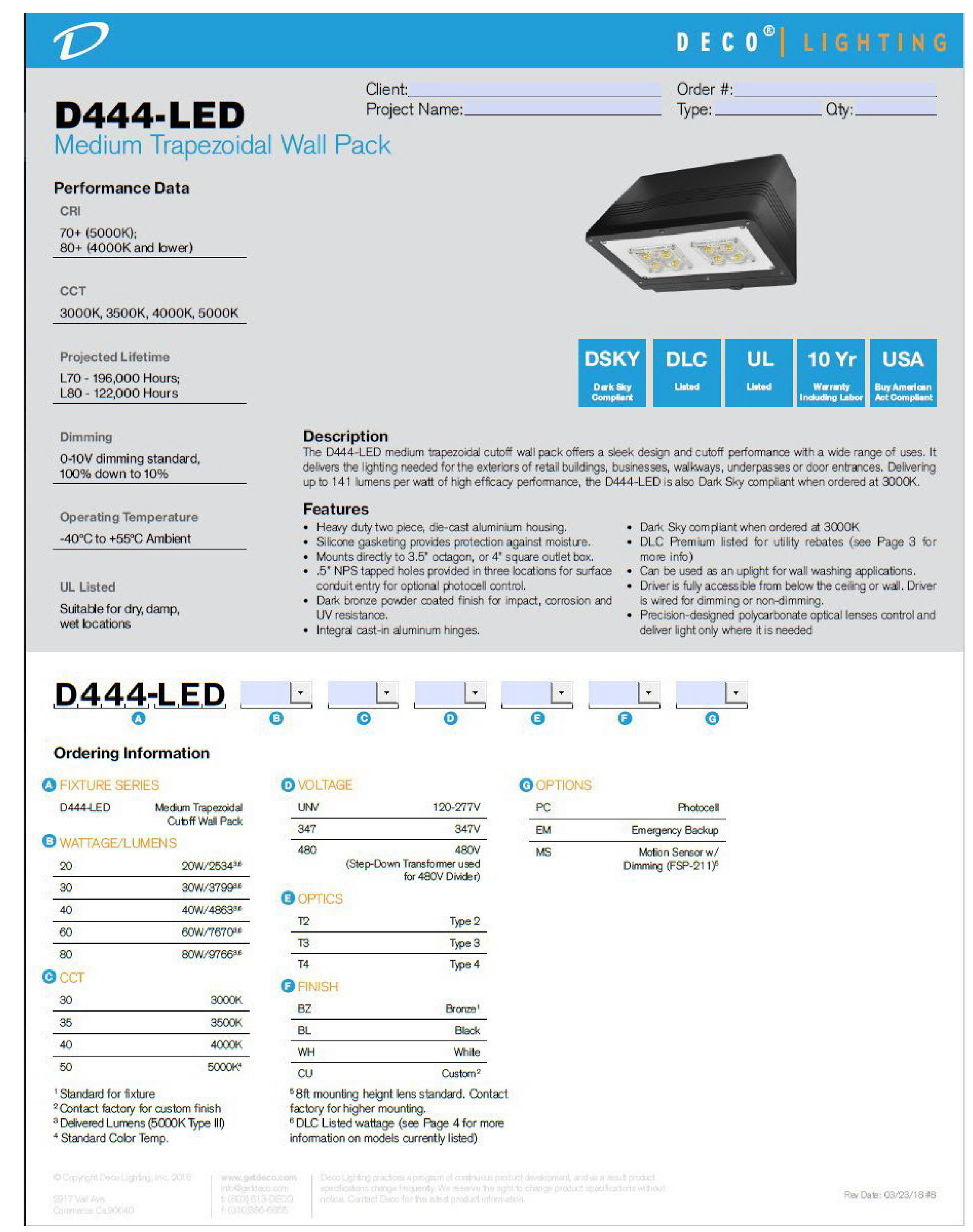


SITE LIGHTING PHOTOMETRIC PLAN

Calculation Summary							
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**
Property Line	Illuminance	Fc	0.35	1.5	0.0	N.A.	N.A.
Site Lighting	Illuminance	Fc	1.47	4.8	0.4	3.68	12.00

Luminaire Schedule						
Tag	**Description**	**Lum. Lumens**	**LLD**	**LDD**	**LLF**	**Lum. Watts**
W4	D444-LED-40-40-UNV-T4	4339	0.900	0.950	0.855	40
SP4	D824-LED-120-40-UNV-LP-T4	14072	0.900	0.950	0.855	113.9

TYPE SP4 SPECIFICATION SHEET



TYPE W4 SPECIFICATION SHEET

PREMIER LIGHTING & CONTROLS

#	Date	Comments

Revisions

Drawn By: TATE BETZ
Checked By:
Date:8/3/2018
Scale: 1" = 4'-0"

INTERNATIONAL BUILDERS AND CONSULTANTS, INC
LEE'S SUMMIT

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