K-1 SPEED
FINAL DEVELOPMENT PLAN

LEE'S SUMMIT, MISSOURI 64064

2911 NORTHEAST INDEPENDENCE AVE

SHEET INDEX

CVR	COVER SHEET
C0.1	GENERAL INFORMATION
--	SURVEY
CIVIL	
C1.0	DEMOLITION PLAN
C2.0	SITE PLAN
C3.0	GRADING PLAN
C3.1	DETAILED GRADING (SW)
C3.2	DETAILED GRADING (SE)
C3.3	DETAILED GRADING (NE)
C3.4	DETAILED GRADING (ADA)
C4.0	PRE-CONST EROSION CONTROL PLAN
C4.1	MID-CONST EROSION CONTROL PLAN
C4.2	POST-CONST EROSION CONTROL PLAN
C5.0	UTILITY PLAN
C5.1	SANITARY PLAN
C6.0	EXISTING DRAINAGE MAP
C6.1	PROPOSED DRAINAGE MAP
C6.2	PIPE PLAN
C6.3	PROPOSED PIPE CALCS
C6.4	STORM LINE 100
C6.5	STORM LINE 100 (CONT.)
C6.6	STORM LINE 200
C6.7	STORM LINE 300
C6.8	ROOF DRAIN PLAN
C7.0	CONSTRUCTION DETAILS
C7.1	PAVEMENT DETAILS
C7.2	ADA DETAILS
C7.3	SANITARY DETAILS
C7.4	EROSION CONTROL DETAILS
ARCHITECTURAL	
A100	PRELIMINARY FLOORPLAN
A101	TRASH ENCLOSURE DETAILS
A200	PRELIMINARY EXTERIOR ELEVATIONS
-	EXTERIOR RENDERINGS
-	EXTERIOR RENDERINGS
LANDSCAPING	
L100	LANDSCAPE PLAN
L101	LANDSCAPE DETAILS
L200	LAYOUT PLAN
L300	HARDSCAPE DETAILS
MECHANICAL, ELECTRICAL, PLUMBING	
ME201P	SITE PLAN - PHOTOMETRIC
ME202P	LIGHTING - CUTSHEETS
ME203P	LIGHTING - CUTSHEETS
ME204P	LIGHTING - CUTSHEETS
ME205P	LIGHTING - CUTSHEETS
ME206P	LIGHTING - CUTSHEETS
ME207P	LIGHTING - CUTSHEETS

UTILITY CONTACTS

CITY OF LEE'S SUMMIT, MO

PLANNING AND DEVELOPMENT
CITY HALL
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1600
FAX: (816) 969-1619

PUBLIC WORKS
CITY HALL
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1800
FAX: (816) 969-1809

LEE'S SUMMIT FIRE DEPARTMENT
207 SE DOUGLAS ROAD
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1300

TELEPHONE COMPANY
AT&T
TEL: (800) 464-7928

CODES ADMINISTRATION
CITY HALL
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1200
FAX: (816) 969-1201

WATER UTILITIES
CITY HALL
1200 SE HAMBLEN RD
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1900
FAX: (816) 969-1935

ELECTRIC COMPANY
EVERGY
TEL: (888) 471-5275

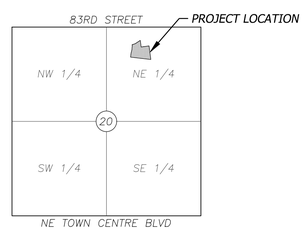
GAS COMPANY
MISSOURI GAS ENERGY
TEL: (816) 756-5252

All existing utility locations shown are approximate only and are not guaranteed to be accurate or all inclusive. Contractor shall be responsible for contacting all utility companies and verifying the actual field locations of all utilities prior to any construction activity. Contractor shall keep all utility locations current. Utilities damaged through the negligence of the contractor to obtain the proper field locations shall be the responsibility of the contractor to repair or replace at their expense and at the direction of the utility company. The contractor shall pothole and survey all utility crossings prior to construction of any portion of storm sewer, sanitary sewer laterals, underdrains, conduit and any other subsurface element of the project. The survey information shall be forwarded to the project engineer for review. The contractor shall not begin construction on any subsurface element on the project without the approval of the project engineer. Utility coordination, potholing/surveying shall be subsidiary to other bid items.

Dig Safely. Missouri One-Call 811
1-800-344-7483

VICINITY MAP

SCALE: 1" = 1000'



SECTION MAP

SCALE: 1" = 2000'
SECTION 20-T48N-R31W
LEE'S SUMMIT, MISSOURI

SURVEYOR OF RECORD

OLSSON
1301 BURLINGTON ST.
NORTH KANSAS CITY, KANSAS 64116
P (816) 361-1177
F (816) 361-1888
CONTACT: JASON S. ROUDEBUSH
EMAIL: JROUDEBUSH@OLSSON.COM

DEVELOPER/OWNER

DH4 HOLDINGS
10624 S EASTERN AVE, SUITE A-975
HENDERSON, NEVADA 89052
P (816) 853.8323
CONTACT: DAVID HILL
EMAIL: DAVID.HILL@DH4L.COM

CIVIL ENGINEER

BHC
7101 COLLEGE BOULEVARD, SUITE 400
OVERLAND PARK, KANSAS 66210
P (913) 663-1900
F (913) 663-1633
CONTACT: AUSTIN LAGE
EMAIL: AUSTIN.LAGE@IBHC.COM

APPROVED BY:

Administrator, Engineering Services Division *Date*

SUBMITTED BY:

BHC
OVERLAND PARK, KANSAS

06/22/2022

Austin Lage , P.E. *Date*
MO P.E. No. 2021029127

BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed
Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

COVER SHEET

CVR

LEGAL DESCRIPTION

LOT 4C, STROTHER CROSSING, LOTS 4A-4C, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

OIL/GAS WELL LOCATION NOTE

PER MO DNR ARC GIS SYSTEM NO OIL/GAS WELLS ARE ON THE SUBJECT PROPERTY.

GRADING NOTES

1. Contractor shall obtain a copy of the Geotechnical Services Report for the project and be familiar with the existing conditions and recommendations contained in the report if such a report has been prepared.

2. Contractor is responsible for any over excavation of existing unsuitable soils that will be required under building and pavement areas. Contractor shall perform over excavation of unsuitable soils as a part of this work.

3. Contractor shall obtain soils suitable as structural fill from off-site sources. All borrow materials must be tested and approved by the Geotechnical Engineer prior to importing the soils to the project site.

4. Contractor shall operate under the terms and permits included in the Stormwater Pollution Prevention Plan (SWPPP) prepared for this project and permitted through the State of Missouri. Contractor shall employ a qualified person to conduct regular inspections of the site erosion control measures and document such inspections in the SWPPP document maintained by the Contractor.

5. All topsoil, vegetation, root structures, and deleterious materials shall be stripped from the ground surface prior to the placement of embankments. Contractor shall obtain the on-site geotechnical representative's acceptance of the existing ground surface materials and the proposed fill material prior to the placement of fill.

6. All proposed contour lines and spot elevations shown are finish ground elevations. Contractor shall account for pavement depths, building pads, topsoil, etc when grading the site.

7. All disturbed areas that are not to be paved (green spaces) shall be finish graded with a minimum of six inches of topsoil.

8. All excavation and embankments shall comply with the recommendations provided by the geotechnical engineer.

9. Prior to placing any concrete or asphalt pavement the contractor shall perform a proof roll of the pavement sub-grade with a fully loaded tandem axle dump truck. The proof roll shall be conducted in the presence of the on-site geotechnical representative. Areas that display rutting or pumping that are unsatisfactory to the geotechnical representative shall be re-worked and a follow-up proof roll shall be conducted prior to acceptance of the sub-grade for paving. The contractor may, at its own expense, stabilize the sub-grade using Class C fly ash or quicklime, as approved by the geotechnical engineer.

10. Finished grades shall not be steeper than 3:1.

11. All grading work shall be considered unclassified. No additional payments shall be made for rock excavation. Contractor shall satisfy himself as to any rock excavation required to accomplish the improvements shown hereon.

12. A 2.0% maximum cross slope shall be maintained on all pedestrian sidewalks and paths.

FLOOD STATEMENT

The subject property lies within Flood Zone " X " (unshaded) (Areas determined to be outside the 0.2% annual chance floodplain.), as shown on the Jackson County, Kansas and Incorporated Areas Flood Insurance Rate Map (F.I.R.M.).

Map Number: 29095C0430G
Panel No: 417 of 625
Map Revised Date: January 20, 2017

NOTE: This statement is provided for informational purposes only and shall in no way constitute a basis for a flood certificate. No field work was performed to establish the boundaries of this zone. The information was derived by scaling the subject property on the above referenced map.

GENERAL NOTES

1. All work in public easement and Right-of-Way shall be installed per the requirements and specifications of the City of Lee's Summit, Misouri.

2. All existing topographic, survey, and utility information shown was provided to BHC in the form of an Topographic Survey prepared by Olsson and dated January 31, 2022. BHC makes no guaranties as to the accuracy of the existing information shown hereon. Contractors shall satisfy themselves as to the existing conditions of the site and have all utilities located prior to commencing construction.

3. The Contractor shall be required to obtain all Federal, State, and Local permits required for this project prior to commencing construction.

4. Any work adjacent to or crossing existing streets requires proper traffic control devices. Traffic control devices shall be placed in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

5. The contractor shall be required to demolish, remove and dispose of all existing structures, pavements, and features as shown on the demolition plan to construct the improvements shown hereon. Any waste materials generated during construction shall be removed from the site by the Contractor and disposed of in accordance with all local, State, and Federal regulations governing such disposal.

6. The contractor shall prevent any trash, debris, or liquid wastes from being disposed of in sanitary sewers, storm sewers, or open drainage systems.

7. The Contractor shall be solely responsible to protect adjacent property, structures, and other improvements from damage during construction. In the event of damage to adjacent property, structures, or improvements, the contractor shall repair or replace such damage to the Owners's satisfaction at the Contractor's expense.

8. Contractors at the site shall be solely responsible for jobsite safety for all aspects of work shown hereon.

9. All work and materials used in the construction of the improvements shown hereon shall comply with all referenced standards, specifications, and plan notes.

10. All buildings are shown as a reference only. All buildings shall be located and constructed per the Architectural drawings prepared by others.

11. Contractor shall be responsible for contacting all utility companies for field locations of underground utilities affected by the contract. All existing utilities indicated on these plans are according to the best information available to the engineer; however, all utilities actually existing may not be shown. Utilities damaged through the negligence of the contractor to obtain the location of same shall be repaired or replaced at the expense of the contractor.

12. Coordinate with facility representative as to when construction activities may be performed to work with the operations of the facility.

13. Any and all hazards shall be properly identified and barricaded from access during all non-construction periods.

14. Unless specified otherwise, all construction shall follow City of Lee's Summit's Design and Construction Manual.

15. Third party inspection of the storm sewer is required, after inspection, provide documentation to the City of Lee's Summit, Missouri.

16. Private Erosion & Sediment Control inspections are required in accordance with NPDES schedule and requirements. After inspections, provide the City of Lee's Summit, Missouri with reports and documentation.

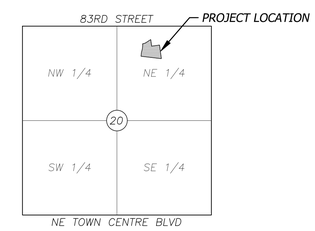
17. A Right-of-Way permit is required from the City of Lee's Summit, Missouri Public Works Department for any work within the public right-of-way.

18. The contractor shall contract the City's Development Services Engineering Inspection to schedule a pre-construction meeting with an inspector prior to any land disturbance work at (816) 969-1200.

BENCHMARKS

OLSSON BENCHMARK
BENCHMARK NUMBER: 1536
ELEVATION= 979.78

LOCATED ON THE CURB INLET ON THE SOUTH SIDE OF THE STUB ROAD JUST NORTH OF THE NE INDEPENDENCE AVE & NE JONES INDUSTRIAL DRIVE INTERSECTION. BENCHMARK IS A SQUARE CUT IN THE SOUTH WEST CORNER OF THE BOX.



SECTION MAP

SCALE: 1" = 2000'
SECTION 20-T48N-R31W
LEE'S SUMMIT, MISSOURI

LEGEND

Proposed Line Types and Symbols shown. Existing Line Types and Symbols shall be the same, but screened, unless designated otherwise by the inclusion of a survey by others.

- *Set Survey Monument*
- *Set Survey Monument (in concrete)*
- *Found Survey Monument*
- *Found Survey Monument in Box*
- (O.U.) *Origin Unknown*
- *Found Right-of-Way Marker*
- *Control Point*
- *Benchmark*
- *Set Hub*
- OHC *Overhead Utility Line(s)*
- *Underground Electric Line Marker*
- UGE *Underground Electric Line*
- KCP&L *Underground KCP&L Line (e.g.)*
- *Utility Pole*
- *Utility Pole with Transformer*
- *Guy Anchor*
- *Utility Pole w/Light & arm*
- *Street Light Pole w/ arm*
- *Street Light Pole (14')*
- EP *Electric Pedestal (above ground)*
- EM *Electric Meter*
- EV *Electric Access Vault (underground)*
- EB *Electric Access Box (mounted)*
- E *Electric Manhole*
- *Electric Pull Box (underground)*
- *Transformer (pad mounted)*
- *Yard Light*
- AC *Air Conditioner Unit*
- W *Water Line*
- WS *Water Service Line*
- *Underground Water Line Marker*
- *Water Valve*
- *Fire Hydrant*
- *Fire Hydrant Assembly*
- WM *Water Meter*
- W *Water Manhole*
- WV *Water Vault (underground)*
- SC *Sprinkler Control Box*
- *Sprinkler Head*
- *Yard Hydrant*
- BFV *Backflow Valve (BFV)*
- BFP *Backflow Preventer (BFP)*
- BO *Blow-Off Assembly*
- GAS *Gas Line*
- GS *Gas Service Line*
- SPIRE *Underground Spire Line (e.g.)*
- *Underground Gas Line Marker*
- *Gas Manhole or Access Lid*
- *Gas Valve*
- RG *Regulator Unit*
- GM *Gas Meter*
- *Casing Vent*
- P *Underground Pipe Line (High Capacity)*
- *Underground Pipe Line Marker*
- UGT *Underground Telephone Line*
- ATT *Underground AT&T Line (e.g)*
- *Underground Telephone Line Marker*
- T *Telephone Pedestal (above ground)*
- T *Telephone Manhole*
- TA *Telephone Access Vault (underground)*
- TB *Telephone Access Box (mounted)*
- FO *Underground Fiber Optic Line*
- *Underground Fiber Optic Line Marker*
- F *Fiber Optic Pedestal*
- F *Fiber Optic Manhole*
- FV *Fiber Optic Vault (underground)*
- FM *Fiber Optic Pedestal on top of Vault*
- [36'] *Traffic Signal Post w/ Mast Arm*
- *Pedestrian Signal Pole*
- TC *Traffic Control Manhole*
- TC *Traffic Control Cabinet*
- TV *Traffic Control Vault (underground)*
- UGTV *Underground Cable TV Line*
- SPC *Underground Spectrum Line (e.g.)*
- *Underground Cable TV Marker*
- TV *Cable TV Pedestal (above ground)*
- U *Manhole-Unknown Purpose*
- GT *Grease Trap Access Lid*
- MW *Monitoring Well*
- BH *Bore Hole*
- *Fill Lid (for Underground Tank)*
- SAN *Sanitary Sewer Line*
- SS *Sanitary Sewer Service Line*
- S *Sanitary Sewer Manhole*
- *Clean-out*
- VCP *Vitrified Clay Pipe*
- DIP *Ductile Iron Pipe*
- PVC *Polyvinyl Chloride Pipe*
- CIP *Cast Iron Pipe*
- *Underground Utility Line Marker*
- *Metal Guard Rail or Handrail*
- *Flag Pole*
- *Satellite Dish*
- *Mailbox*
- *Concrete or Metal Bollard*
- *Wood Bollard or Wood Post*
- STM *Storm Sewer Line*
- ST *Storm Sewer Manhole*
- *Curb Inlet*
- *Field Inlet*
- *Junction Box*
- *Grate Inlet*
- *Grate Inlet (Round/Domed)*
- *End Section*
- *Headwall*
- *Down Spout*
- RD *Roof Drain*
- CMP *Corrugated Metal Pipe*
- CMAP *Corrugated Metal Arch Pipe*
- CPP *Corrugated Plastic Pipe*
- HDPE *High Density Polyethylene Pipe*
- RCP *Reinforced Concrete Pipe*
- RCAP *Reinforced Concrete Arch Pipe*
- RCB *Reinforced Concrete Box*
- FES *Flared End Section*
- *Pipe Continues-Outlet or Source Not Found or Not Surveyed*
- *Wood Fence*
- *Chain Link Fence*
- *Wire Fence (with or without barb)*
- *Barbed Wire Fence*
- *Plastic Fence*
- *Iron or Metal Fence*
- *Gate Post*
- *Retaining Wall*
- *Single Pole Sign*
- *Single Pole Sign*
- *Double Pole Sign*
- *Railroad Crossing Gate*
- *Railroad Switch Machine*
- *Railroad Tracks*
- *Wheel Stop*
- *ADA Parking Stall*
- *ADA Detection Warning Pad*
- *Bush*
- *Deciduous Tree and Size (Scaled for Size)*
- *Coniferous Tree and Size (Scaled for Size)*
- *Tree Stump*
- *Foliage Drip Line/Edge of Timber*
- *Hedge*
- ℄ *Center Line*
- PL *Property Line*
- R/W *Right-of-Way Line*
- R= *Radius*
- L= *Arc Length*
- CB *Chord Bearing*
- CD *Chord Distance*
- Δ *Interior Angle (Delta)*
- I.T.B. *Initial Tangent Bearing*
- R/W *Right-of-Way*
- (M) *Monumented*
- (m) *Measured*
- (D) *Deeded*
- (P) *Platted*
- (C) *Calculated*
- (CR) *Calculated from Record Dimensions*
- (CM) *Calculated from Found Monuments*
- (PR) *Proportioned*
- BK. *Book*
- PG. *Page*
- DOC. *Document Number*
- INS. *Instrument Number*
- VOL. *Volume*
- ESMT. *Easement*
- B/L *Building Setback Line*
- U/E *Utility Easement*
- D/E *Drainage Easement*
- ST/E *Storm Sewer Easement*
- S/E *Sanitary Sewer Easement*
- IE/E *Ingress/Egress Easement*
- TC/E *Temporary Construction Easement*
- SQ. FT. *Square Feet*
- AC *Acres*
- CY *Cubic Yard*
- LF *Linear Feet*
- CO. *Company*
- L/S *Landscaping (Bushes, Trees, Flowers, Border, Mulch, any or all of them)*
- ASPH *Asphalt*
- CONC *Concrete*
- COR *Corner*
- R.WALL *Retaining Wall*
- STA. *Station*
- Lt *Left*
- Rt *Right*
- PI *Point of Intersection*
- PC *Point of Curve*
- PT *Point of Tangent*
- NTS *Not To Scale*
- NTS *Not To Scale*

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

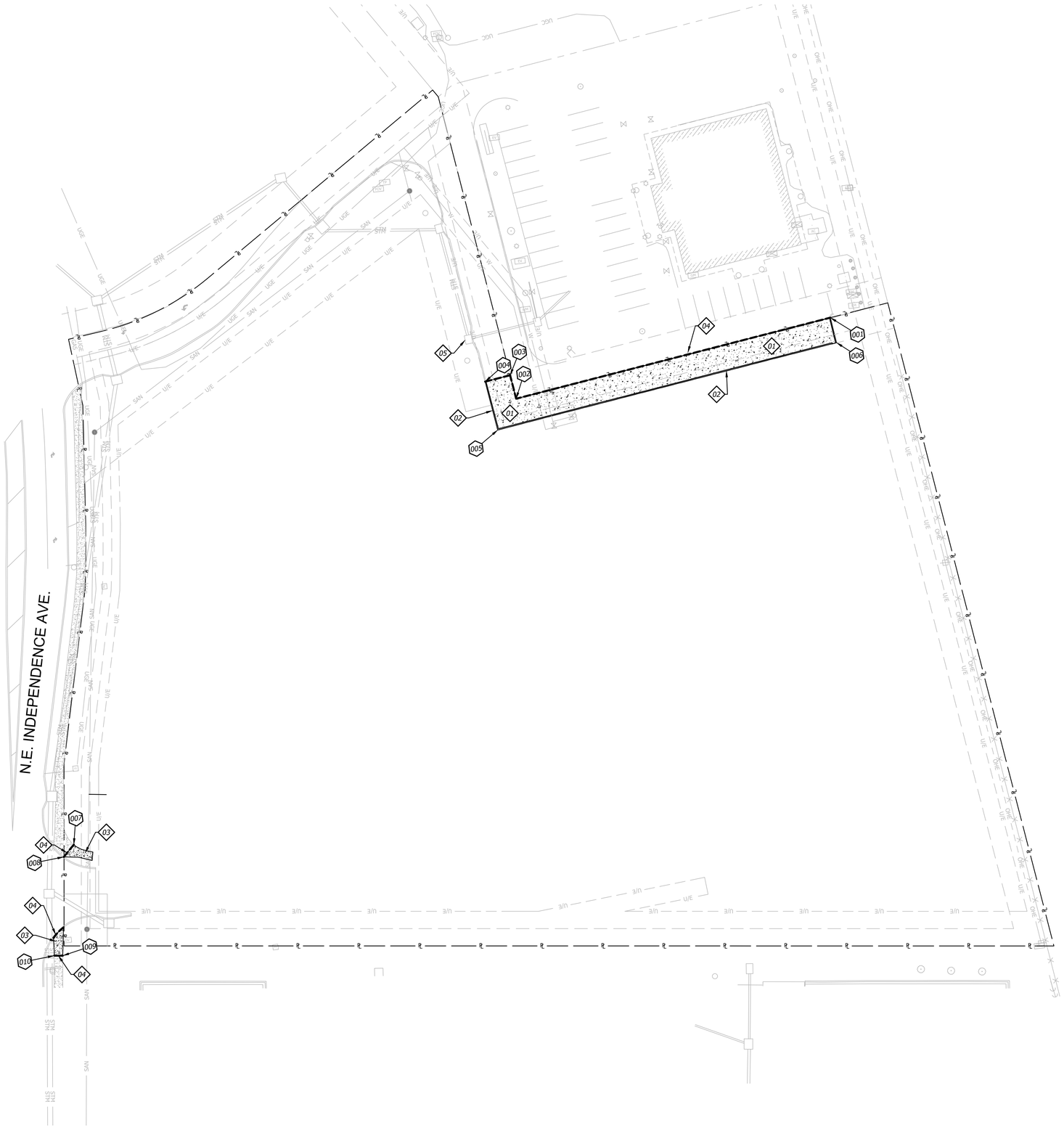
Final Development Plans

June 21, 2022

GENERAL INFORMATION

C0.1

BHCR Project #: 033050



GENERAL NOTES

1. *Contractor shall verify the location, size, material and depth of all utilities prior to any excavation or construction activity.*
2. *All materials shall be removed and disposed of off-site. It is the contractors responsibility to meet all applicable laws and regulations pertaining to the disposal of construction/demolition material.*
3. *The Contractor shall ensure that any structures to remain which are damaged during demolition operations shall be repaired to meet current code, at no additional cost to the owner.*
4. *The Contractor shall remove any and all existing debris which is encountered from the existing site. This shall include, but shall not be limited to, footings, concrete slabs, conduits, granular subgrade, utility services, and/or unsuitable structural fill material as determined by the owner's engineer. The cost for these removals shall be considered incidental to the project. Said debris shall become property of the contractor and it shall be the responsibility of the contractor to dispose of properly off-site.*
5. *It shall be the Contractor's responsibility to meet all applicable laws and regulations pertaining to the disposal of construction/demolition material.*
6. *The Contractor shall be responsible for obtaining and payment of any permits for demolition that pertain to this project.*
7. *All protection fencing shall be installed prior to demolition/construction activity. The Contractor shall provide a 6-foot security fence around the entire job site with locked gated access points, if required by the owner or the city.*
8. *All existing utilities removed during construction shall have their trenches backfilled with structural fill and be compacted to the requirements for structural fill.*
9. *All removals required to properly perform the work (whether shown on the plans or not) shall be performed by the Contractor at no additional cost to the owner.*

00 DEMOLITION NOTES

01 *REMOVE & DISPOSE OF EXISTING CONCRETE PAVEMENT.*

02 *REMOVE & DISPOSE OF EXISTING CURB.*

03 *REMOVE AND DISPOSE OF CONCRETE SIDEWALK.*

04 *SAW CUT EXISTING PAVEMENT TO FULL DEPTH AND CLEAN EDGE.*

05 *EXISTING CONCRETE STORM STRUCTURE; DO NOT DISTURB.*

DEMOLITION LEGEND

SAW CUT LINE

CONCRETE PAVEMENT TO BE REMOVED

CONCRETE SIDEWALK TO BE REMOVED

000

Points		
PNT#	NORTHING	EASTING
001	1019363.8084	2828634.4277
002	1019338.7761	2828448.6746
003	1019352.6509	2828446.8048
004	1019350.6860	2828432.0359
005	1019322.0598	2828435.9341
006	1019349.0793	2828636.2455
007	1019113.1829	2828164.4788
008	1019106.8341	2828157.9213
009	1019050.2132	2828150.5795
010	1019050.8230	2828145.7202

N

GRAPHIC SCALE

30 0 30

BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings

Strother Crossing

2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final Development Plans

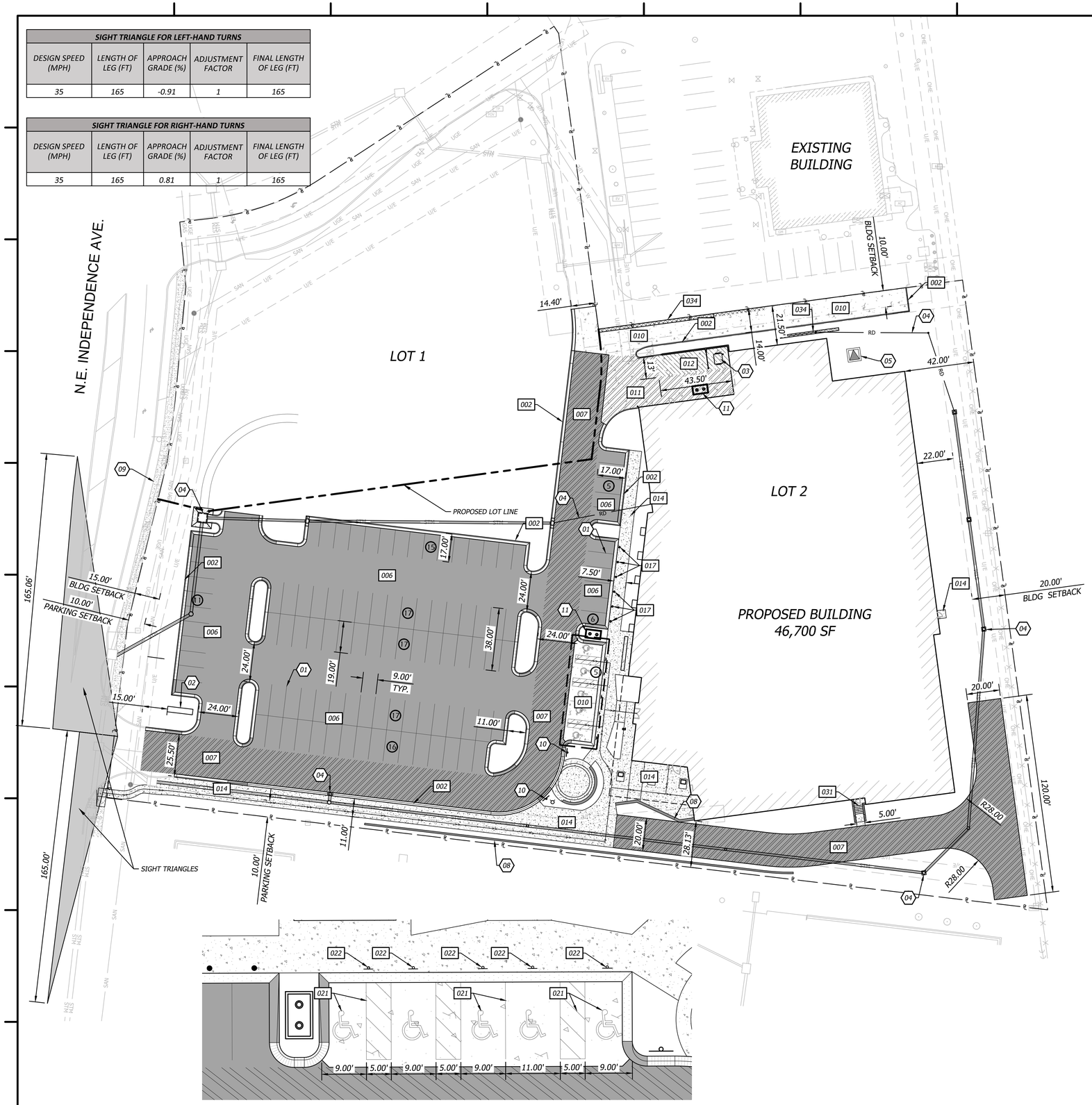
June 21, 2022

DEMOLITION PLAN

C1.0

SIGHT TRIANGLE FOR LEFT-HAND TURNS				
DESIGN SPEED (MPH)	LENGTH OF LEG (FT)	APPROACH GRADE (%)	ADJUSTMENT FACTOR	FINAL LENGTH OF LEG (FT)
35	165	-0.91	1	165

SIGHT TRIANGLE FOR RIGHT-HAND TURNS				
DESIGN SPEED (MPH)	LENGTH OF LEG (FT)	APPROACH GRADE (%)	ADJUSTMENT FACTOR	FINAL LENGTH OF LEG (FT)
35	165	0.81	1	165



SITE DATA

SITE		
SITE AREA:	3.31	AC
	144,113	SF
IMPERVIOUS AREA:	108,535	SF (75.3%)
BUILDING		
BUILDING LOT 2:	46,700	SF (32.4%)
	FAR	.32
PARKING		
PARKING PROVIDED:	110	STANDARD
	5	HANDICAP (1 VAN)
PARKING REQUIRED:		
CUSTOMER & EMPLOYEE STALLS: (6/1000 SF NON-TRACK AREA - 14,830)	89	
ADA STALLS: (BASED ON THE 110 STALLS)	5	

NOTE:

LOT 1 BY SEPARATE CONTRACT

ZONING

CP-2 (PLANNED GENERAL BUSINESS DISTRICT)

00 CONSTRUCTION NOTES

01 LEAD FREE, WATER-BORNE EMULSION BASED TRAFFIC PAINT FOR PARKING LOT STRIPING (WHITE ON ASPHALT & YELLOW ON CONCRETE).
02 PROPOSED MONUMENT SIGN; RE. ARCHITECTURAL PLANS.
03 PROPOSED TRASH DUMPSTER; RE ARCHITECTURAL PLANS.
04 PROPOSED STORM SYSTEM; RE. SHEETS C6.2-C6.8.
05 PROPOSED TRANSFORMER PAD LOCATION; COORDINATE WITH EVERGY.
06 PROPOSED SITE LIGHTING; RE. SHEET #####.
07 6" CONCRETE STEP.
08 RETAINING WALL; CONTRACTOR TO DESIGN BUILD.
09 EXISTING SIDEWALK.
10 SIGNAGE - "FIRE LANE - NO PARKING"
11 PROPOSED SANITARY STRUCTURES; RE. SHEET C5.1.

000 DETAILS

SEE CONSTRUCTION DETAILS - SHEETS C7.0-C7.4

002 CONCRETE CURB & GUTTER; RE. LEGEND FOR TYPE
006 MEDIUM DUTY ASPHALT PAVEMENT
007 HEAVY DUTY ASPHALT PAVEMENT
010 MEDIUM DUTY PCC PAVEMENT
011 HEAVY DUTY PCC PAVEMENT
012 CONCRETE DUMPSTER PAD
014 CONCRETE SIDEWALK
017 STEEL/CONCRETE BOLLARD
019 SIDEWALK RAMP (PRIVATE)
021 (ADA HANDICAP PARKING STRIPING
022 (ADA) HANDICAP PARKING SIGNAGE
031 CONCRETE STAIRS
034 CONCRETE VALLEY GUTTER

SITE LEGEND

PROPOSED BUILDING
FUTURE BUILDABLE AREA
MEDIUM DUTY ASPHALT PAVEMENT
HEAVY DUTY ASPHALT PAVEMENT
MEDIUM DUTY PCC PAVEMENT
HEAVY DUTY PCC PAVEMENT
CONCRETE PAD
CONCRETE SIDEWALK
PARKING STALL COUNT
CURB & NO GUTTER
ROLLOVER CURB & GUTTER
STANDARD CURB & GUTTER
ACCESSIBLE ADA ROUTE
RETAINING WALL

GRAPHIC SCALE
30 0 30

BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

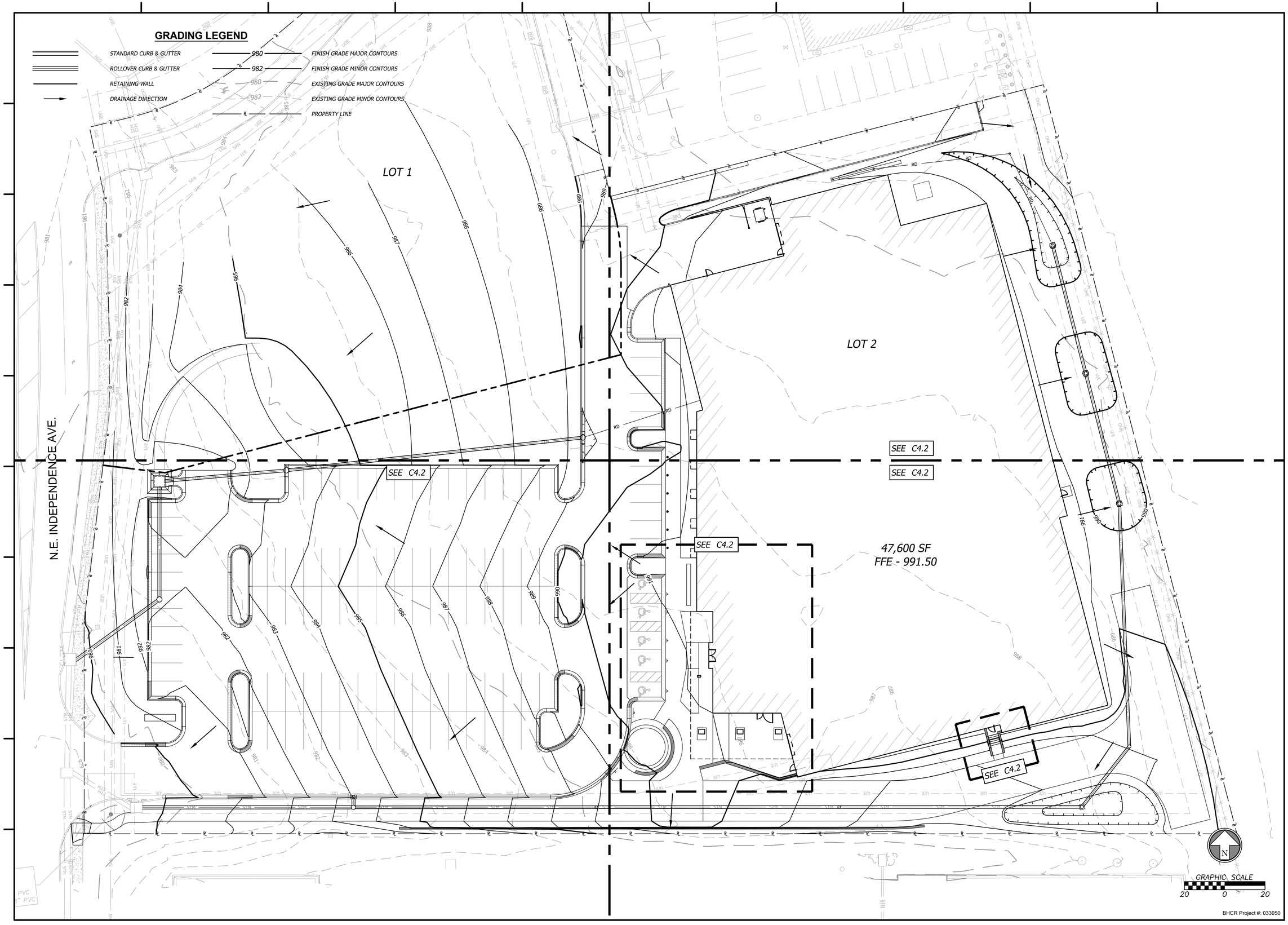
Project #: 211107

Final Development Plans

June 21, 2022

SITE PLAN

C2.0



BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

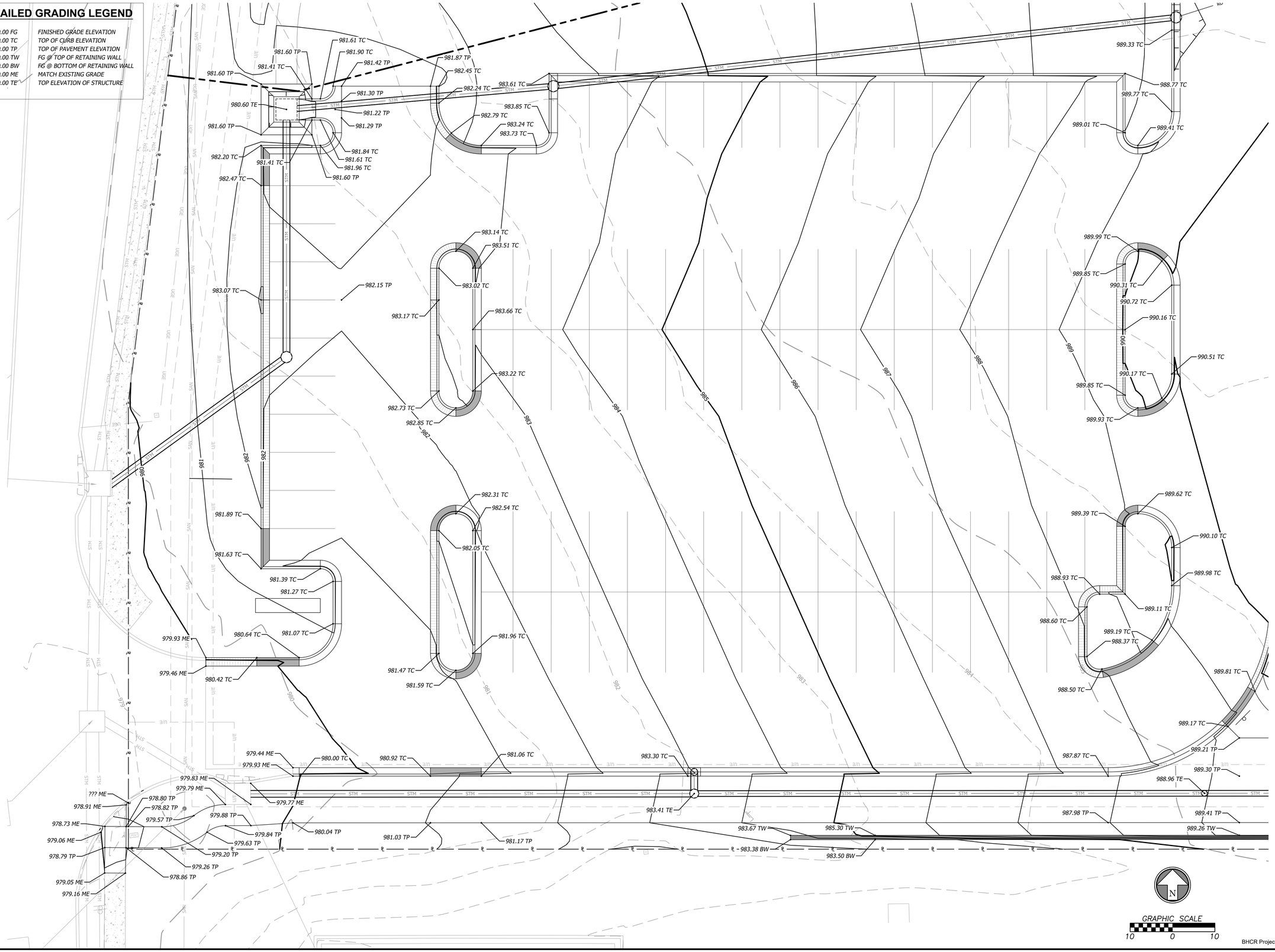
June 21, 2022

GRADING PLAN

C3.0

DETAILED GRADING LEGEND

0000.00 FG	FINISHED GRADE ELEVATION
0000.00 TC	TOP OF CURB ELEVATION
0000.00 TP	TOP OF PAVEMENT ELEVATION
0000.00 TW	FG @ TOP OF RETAINING WALL
0000.00 BW	FG @ BOTTOM OF RETAINING WALL
0000.00 ME	MATCH EXISTING GRADE
0000.00 TE	TOP ELEVATION OF STRUCTURE



BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri ● Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings

Strother Crossing

2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

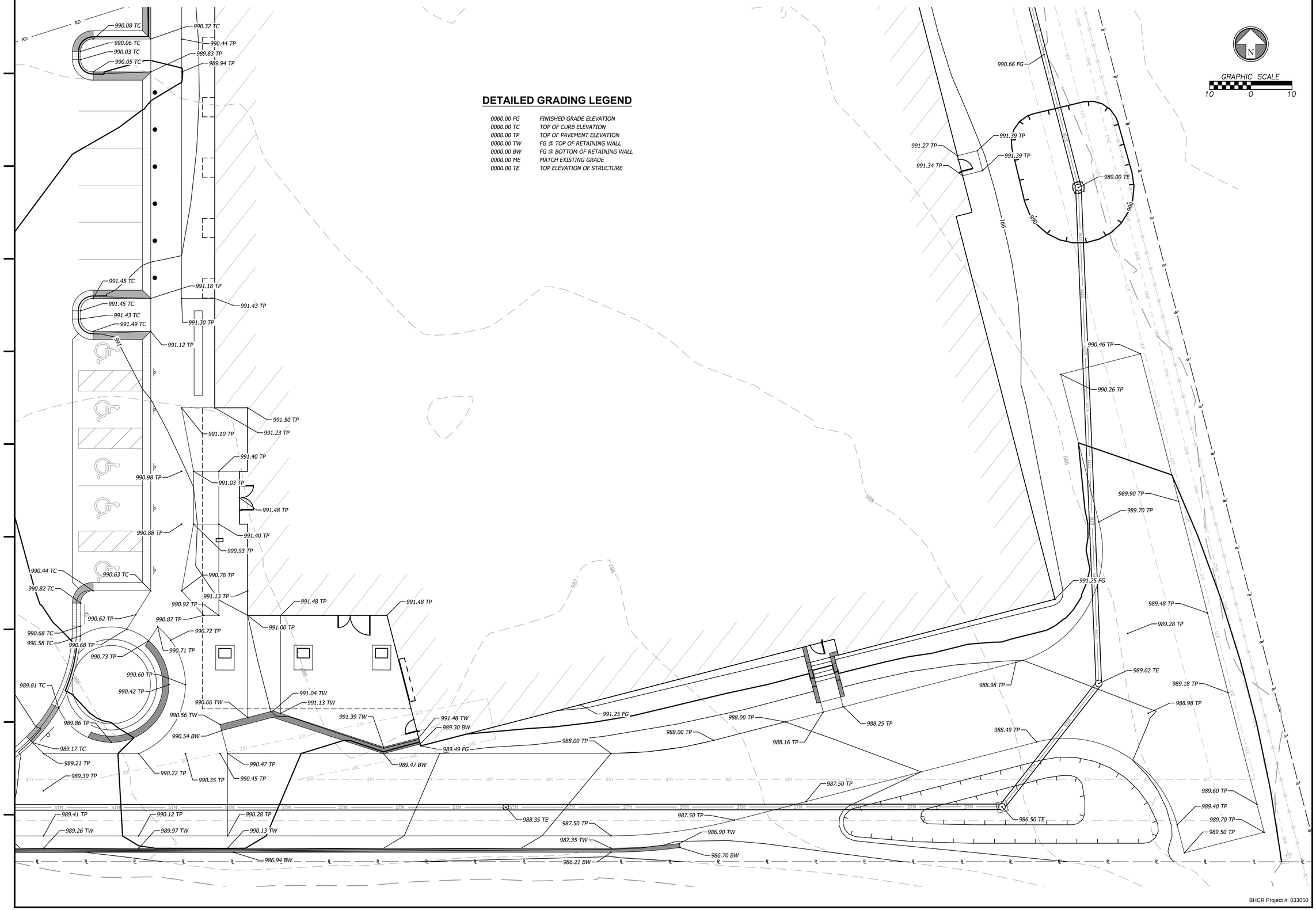
June 21, 2022

DETAILED GRADING (SW)

C3.1

DETAILED GRADING LEGEND

0000.00 FG	FINISHED GRADE ELEVATION
0000.00 TC	TOP OF CURB ELEVATION
0000.00 TP	TOP OF PAVEMENT ELEVATION
0000.00 TW	FG @ TOP OF RETAINING WALL
0000.00 BW	FG @ BOTTOM OF RETAINING WALL
0000.00 ME	MATCH EXISTING GRADE
0000.00 TE	TOP ELEVATION OF STRUCTURE



BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
08/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

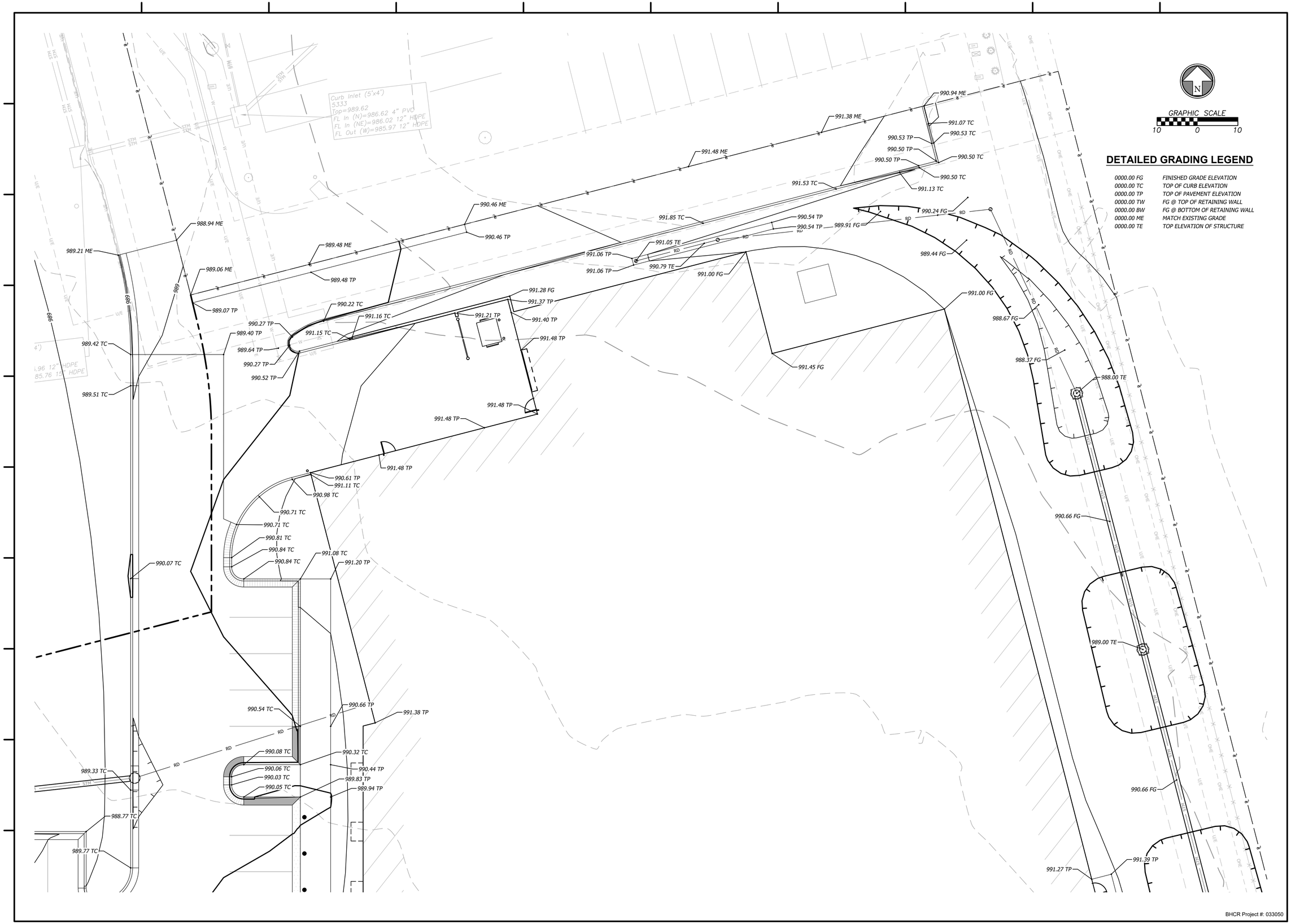
Project #: 211107

Final Development Plans

June 21, 2022

DETAILED GRADING (SE)

C3.2



SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri ● Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

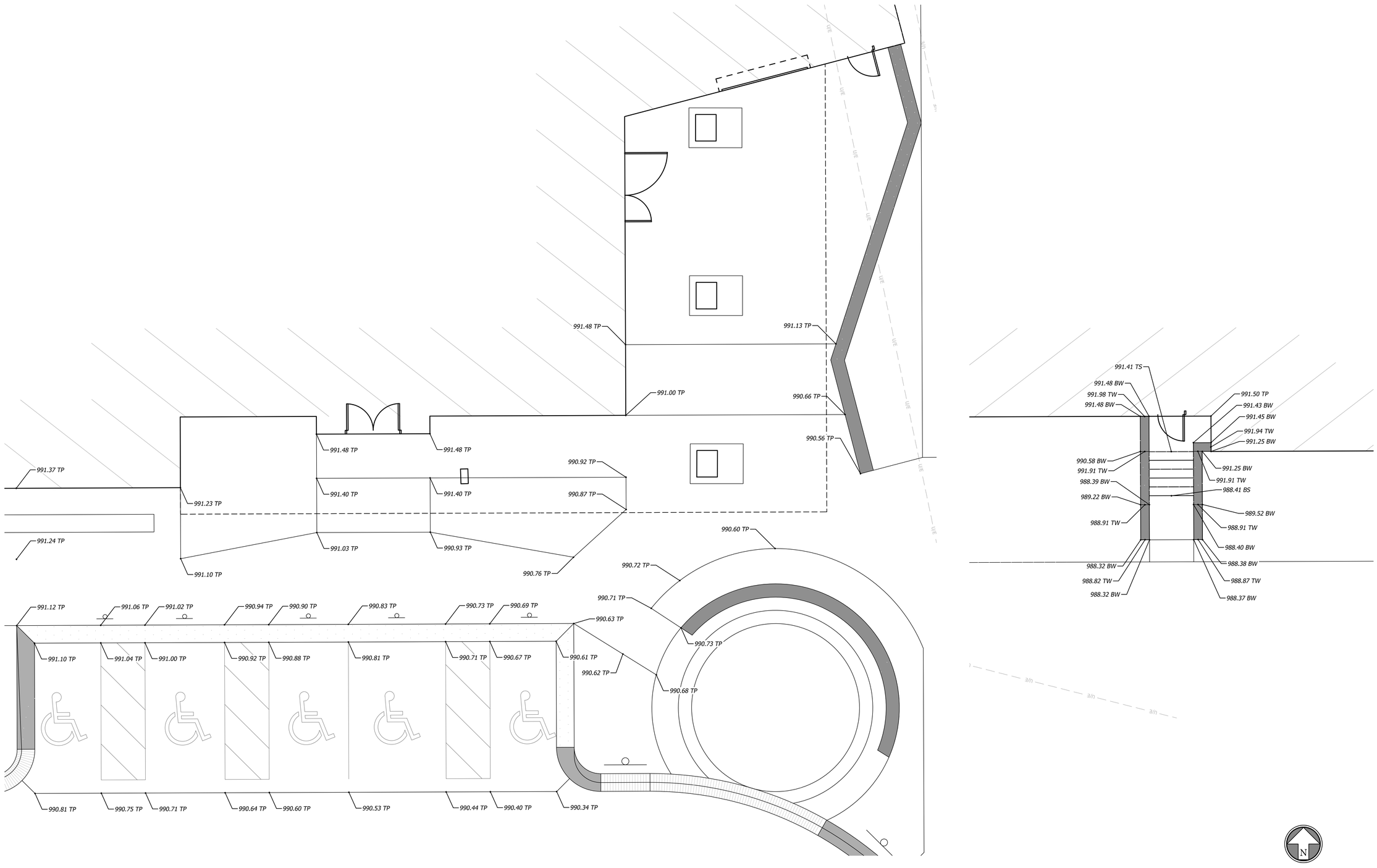
Final Development Plans

June 21, 2022

DETAILED GRADING (NE)

C3.3

BHCR Project #: 033050



BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

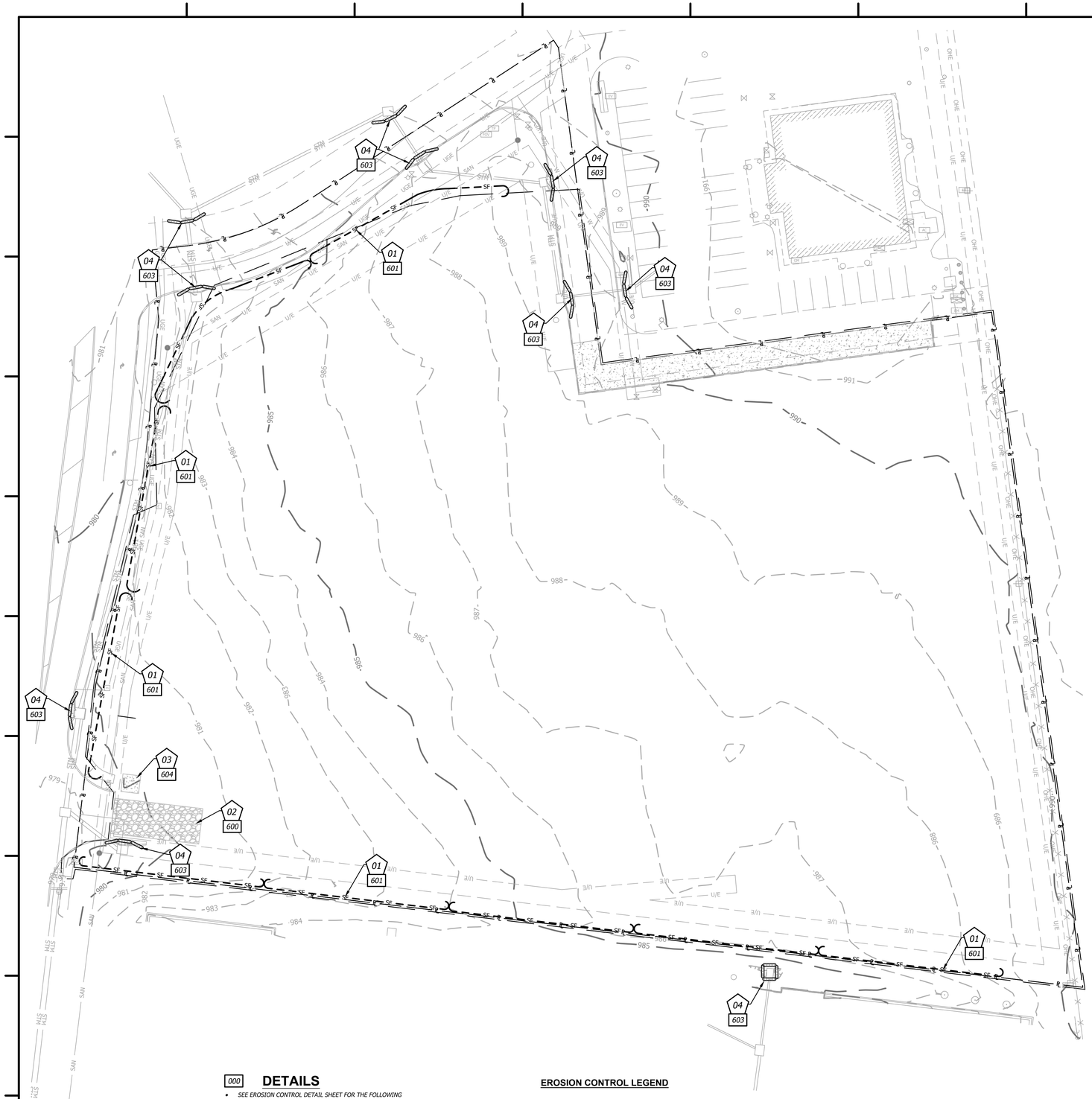
Project #: 211107

Final Development Plans

June 21, 2022

DETAILED GRADING (ADA)

C3.4



EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. Prior to Land Disturbance activities, the contractor shall:
   - Delineate the outer limits of any natural stream corridor designated with construction fencing.
   - Install perimeter controls and request the inspection of the pre-construction erosion and sediment control measures designated on the approved erosion and sediment control plan. Land disturbance work shall not proceed until there is a satisfactory inspection.
   - Identify the limits of construction on the ground with easily recognizable indications such as construction staking, construction fencing, and placement of physical barriers or other means acceptable to the City inspector and in conformance with the erosion and sediment control plan.

2. The contractor shall comply with all requirements of the Storm Water Pollution Prevention Plan, including but not limited to:
   - The contractor shall seed, mulch, or otherwise stabilize any disturbed area where the land disturbance activity has ceased for more than 14 days.
   - The contractor shall perform inspections of erosion and sediment control measures at the following minimum intervals:
     - o During active construction phases - at least once per week
     - o During periods of inactivity - at least once per 14 days
     - o After each rainfall event of ½ inch or more - within 24 hours of the rain event
   - The contractor shall maintain an inspection log including the inspector's name, date of inspection, observations as to the effectiveness of the erosion and sediment control measures, actions necessary to correct deficiencies, when the deficiencies were corrected, and the signature of the person performing the inspection. The inspection log shall be available for review by the regulatory authority.
   - The contractor shall have the erosion and sediment control plan routinely updated to show all changes and amendments to the plan. A copy of the erosion and sediment control plan shall be kept on site and made available for review by the regulatory authority.

3. Unless otherwise noted in the plans, all seeding must conform to Division II-Construction and Materials Specification-Section 2150 published by the Kansas City Metropolitan Chapter of the American Public Works Association dated May 21, 2008. Permanent seeding shall be installed after completion of final grading except when seeding will occur outside of the acceptable seeding season as specified in Section 2150. When temporary seeding is installed, permanent seeding shall be installed at the next seeding season. Temporary seeding shall not be used as a stabilization measure for a period exceeding 12 months. The Permit will not be closed until permanent seeding has been established to a minimum of 70% density over the entire disturbed area.

4. The contractor shall maintain installed erosion and sediment control devices in a manner that preserves their effectiveness for preventing sediment from leaving the site or entering a sensitive area such as a natural stream corridor, areas of the site intended to be left undisturbed, a storm sewer, or an on-site drainage channel.

5. The contractor is responsible for providing erosion and sediment control for the duration of a project. If the City determines that the BMPs in place do not provide adequate erosion and sediment control at any time during the project, the contractor shall install additional or alternate measures that provide effective control.

6. Concrete wash or rinse water from concrete mixing equipment, tools and/or ready-mix trucks, tools, etc. may not be discharged into or be allowed to run directly into any existing water body or storm inlet. One or more locations for concrete wash out will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place.

7. Chemicals or materials capable of causing pollution may only be stored onsite in their original container. Materials stored outside must be in closed and sealed water-proof containers and located outside of drainage ways or areas subject to flooding. Locks and other means to prevent or reduce vandalism shall be used. Spills will be reported as required by law and immediate actions taken to contain them.

8. Silt fences and erosion control BMPs which are shown along the back of curb must be installed within two weeks of curb backfill and prior to placement of base asphalt. Exact locations of these erosion control methods may be field adjusted to minimize conflicts with utility construction; however, anticipated disturbance by utility construction shall not delay installation.

9. Interior Silt Fence as necessary during construction. Portions may be limited as vegetation is established and hardscape is installed. Entire length may be installed at the contractor's option to aid in stabilizing slopes.

10. Private Erosion & Sediment Control inspections are required in accordance with NPDES schedule and requirements. After inspections, provide the City of Leewith reports and documentation.

EROSION & SEDIMENT CONTROL STAGING CHART

Phase	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage:
Phase I (PRE–CON)	A – Place BMP's Prior to Land Disturbance	01	Perimeter Silt Fence	D
		02	Construction Entrance & Staging Area	C
		03	Concrete Wash–Out	C
		04	Existing Inlet Protection	D
Phase II (MID–CON)	B – After Utility Storm Sewer Construction	05	Storm Inlet Protection	D
Phase III (POST–CON)	C – After Construction of Building and Parking Lot	06	Steep Slope Protection	D
	D – Final Grading, Paving & Landscaping	07	Final Seeding, Sod, and Landscaping	N/A

000 **DETAILS**

- SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING

600 TEMPORARY CONSTRUCTION ENTRANCE
601 FILTER FABRIC SILT FENCE
602 STEEP SLOPE PROTECTION
603 STORM INLET PROTECTION
604 CONCRETE WASH-OUT

EROSION CONTROL LEGEND

DISTURBED AREA (4.28 AC)
SILT/SEDIMENT FENCE
INLET PROTECTION FILTER BAGS
CONSTRUCTION ENTRANCE
CONCRETE CLEANOUT

N

GRAPHIC SCALE
30 0 30

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

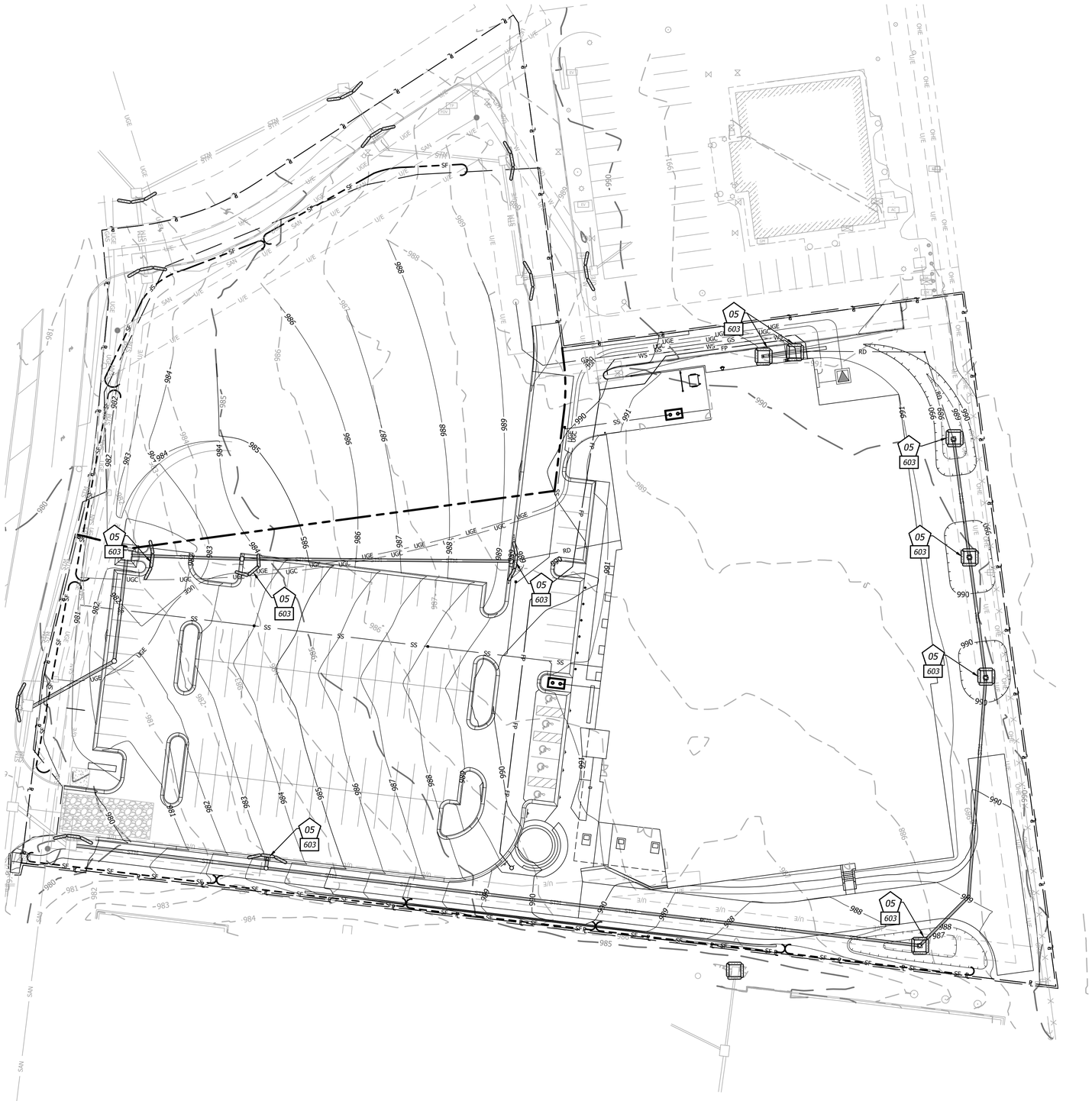
Project #: 211107

Final Development Plans

June 21, 2022

PRE-CONSTRUCTION EROSION CONTROL PLAN

C4.0



000 DETAILS

- *SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING*

600 TEMPORARY CONSTRUCTION ENTRANCE
601 FILTER FABRIC SILT FENCE
602 STEEP SLOPE PROTECTION
603 STORM INLET PROTECTION
604 CONCRETE WASH-OUT

EROSION CONTROL LEGEND

- *DISTURBED AREA (4.28 AC)*
- *SILT/SEDIMENT FENCE*
- *INLET PROTECTION FILTER BAGS*
- *CONSTRUCTION ENTRANCE*
- *CONCRETE CLEANOUT*

EROSION & SEDIMENT CONTROL STAGING CHART

Phase	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage:
Phase I (PRE–CON)	*A – Place BMP's Prior to Land Disturbance*	01	*Perimeter Silt Fence*	*D*
		02	*Construction Entrance & Staging Area*	*C*
		03	*Concrete Wash–Out*	*C*
		04	*Existing Inlet Protection*	*D*
Phase II (MID–CON)	*B – After Utility Storm Sewer Construction*	05	*Storm Inlet Protection*	*D*
Phase III (POST–CON)	*C – After Construction of Building and Parking Lot*	06	*Steep Slope Protection*	*D*
	D – Final Grading, Paving & Landscaping	07	*Final Seeding, Sod, and Landscaping*	*N/A*

N

GRAPHIC SCALE
30 0 30

BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

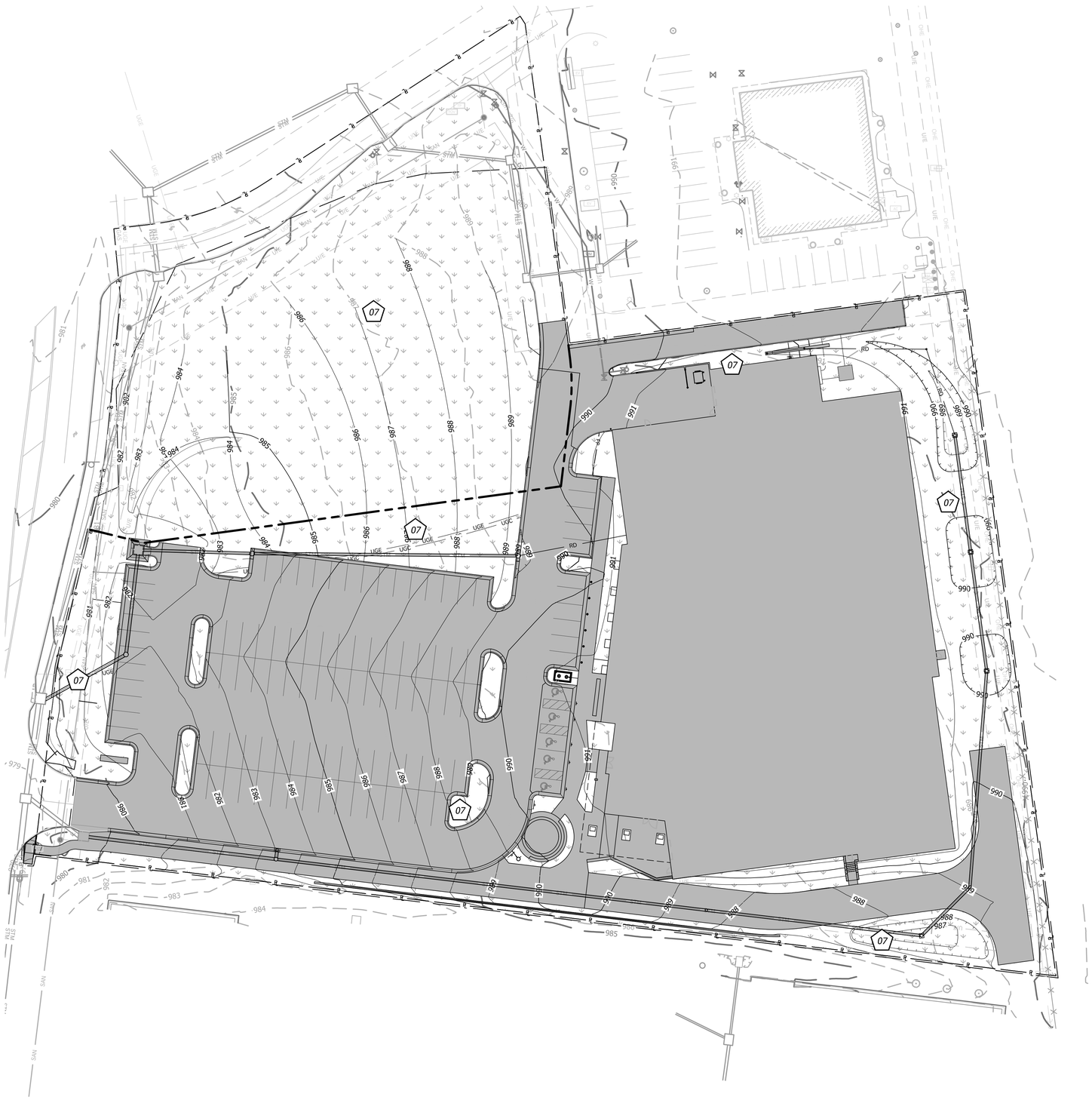
Project #: 211107

Final Development Plans

June 21, 2022

MID-CONSTRUCTION EROSION CONTROL PLAN

C4.1



000 **DETAILS**

- *SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING*

600 TEMPORARY CONSTRUCTION ENTRANCE
601 FILTER FABRIC SILT FENCE
602 STEEP SLOPE PROTECTION
603 STORM INLET PROTECTION
604 CONCRETE WASH-OUT

EROSION CONTROL LEGEND

DISTURBED AREA (4.28 AC)
FINAL SEEDING (SOD &/OR LANDSCAPING)
PROP. IMPERVIOUS AREA (2.53 AC)

EROSION & SEDIMENT CONTROL STAGING CHART

Phase	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage:
Phase I (PRE–CON)	*A – Place BMP's Prior to Land Disturbance*	01	*Perimeter Silt Fence*	*D*
		02	*Construction Entrance & Staging Area*	*C*
		03	*Concrete Wash–Out*	*C*
		04	*Existing Inlet Protection*	*D*
Phase II (MID–CON)	*B – After Utility Storm Sewer Construction*	05	*Storm Inlet Protection*	*D*
Phase III (POST–CON)	*C – After Construction of Building and Parking Lot*	06	*Steep Slope Protection*	*D*
	D – Final Grading, Paving & Landscaping	07	*Final Seeding, Sod, and Landscaping*	*N/A*

GRAPHIC SCALE
30 0 30

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

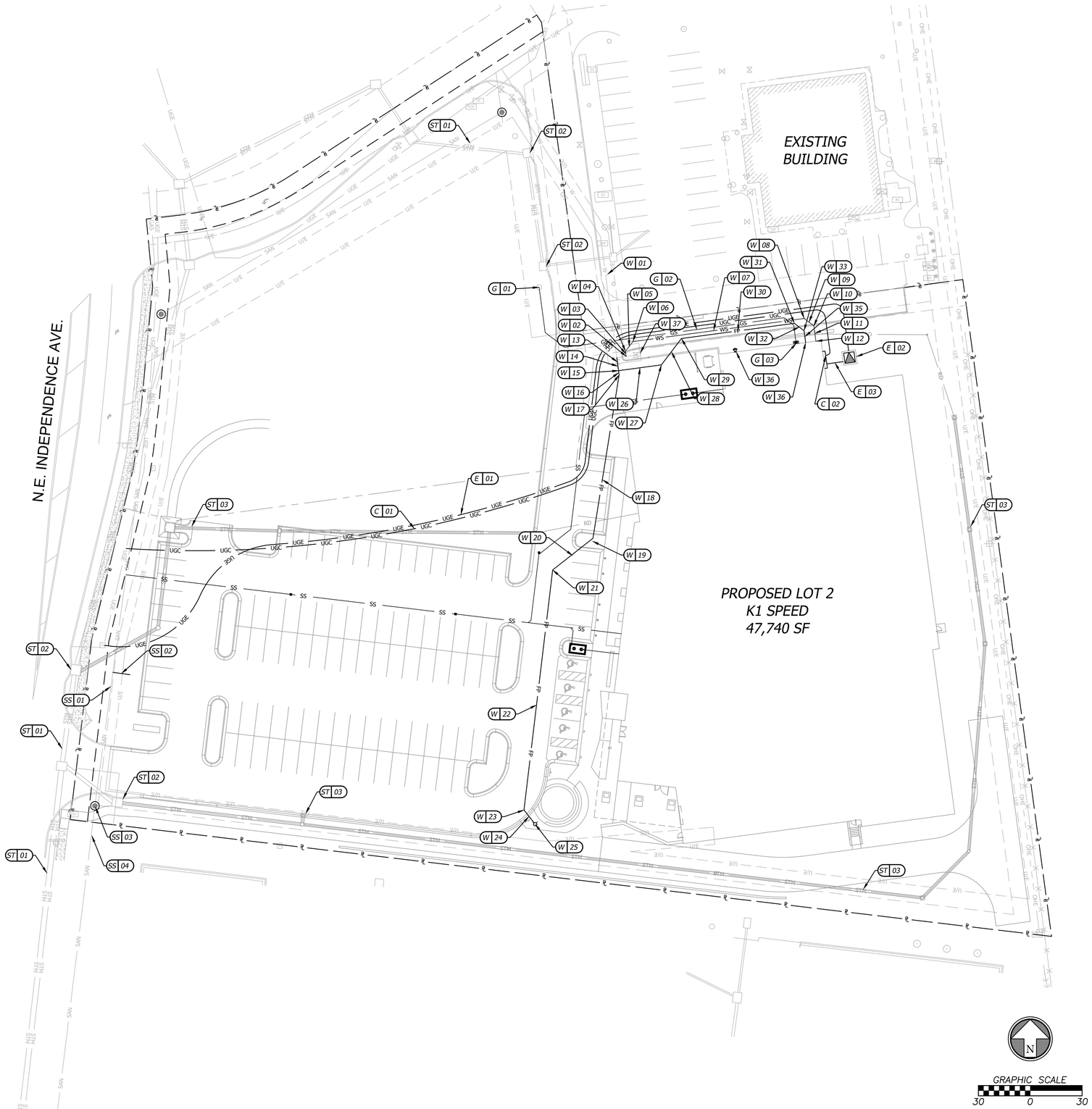
Project #: 211107

Final Development Plans

June 21, 2022

POST-CONSTRUCTION EROSION CONTROL PLAN

C4.2



X 00 CONSTRUCTION NOTES

W - WATER SERVICE INFORMATION - CITY OF LEE'S SUMMIT

- 01 EXISTING 6" WATER MAIN LINE, CONTRACTOR TO VERIFY LOCATION AND DEPTH
- 02 2.5" TAPPING SLEEVE AND 2.5" TAPPING VALVE TO BE INSTALLED ON EXISTING 6" WATER MAIN. CONTRACTOR TO EXCAVATE TAP HOLE.
- 03 INSTALL 3.0 LF OF 2.5" DOMESTIC WATER LINE.
- 04 INSTALL 2.5" 45° BEND.
- 05 INSTALL 7.0 LF OF 2.5" DOMESTIC WATER LINE.
- 06 INSTALL 2.5" 45° BEND.
- 07 INSTALL 100.0 LF OF 2.5" DOMESTIC WATER LINE.
- 08 INSTALL 2.5" 45° BEND.
- 09 INSTALL 7.0 LF OF 2.5" DOMESTIC WATER LINE.
- 10 INSTALL 2.5" 45° BEND.
- 11 INSTALL 9.0 LF OF 2.5" DOMESTIC WATER LINE.
- 12 CONNECT DOMESTIC SERVICE LINE TO BUILDING PLUMBING; RE. PLUMBING PLANS.
- 13 CONNECT 6" FIRE PROTECTION LINE AT EXISTING WATER VALVE; COORDINATE WITH CITY OF LEE'S SUMMIT WATER DIVISION.
- 14 INSTALL 5.0 LF OF 6" FIRE PROTECTION LINE.
- 15 INSTALL 6"x6"x6" TEE.
- 16 INSTALL 2.5 LF OF 6" FIRE PROTECTION LINE.
- 17 INSTALL 6" 11.25° BEND.
- 18 INSTALL 97.5 LF OF 6" FIRE PROTECTION LINE.
- 19 INSTALL 6" 45° BEND.
- 20 INSTALL 28.5 LF OF 6" FIRE PROTECTION LINE.
- 21 INSTALL 6" 45° BEND.
- 22 INSTALL 140.0 LF OF 6" FIRE PROTECTION LINE.
- 23 INSTALL 6" 45° BEND.
- 24 INSTALL 9.5 LF OF 6" FIRE PROTECTION LINE.
- 25 INSTALL FIRE HYDRANT.
- 26 INSTALL 25.0 LF OF 6" FIRE PROTECTION LINE.
- 27 INSTALL 6" 45° BEND.
- 28 INSTALL 19.0 LF OF 6" FIRE PROTECTION LINE.
- 29 INSTALL 6" 45° BEND.
- 30 INSTALL 66.0 LF OF 6" FIRE PROTECTION LINE.
- 31 INSTALL 6" 45° BEND.
- 32 INSTALL 7.0 LF OF 6" FIRE PROTECTION LINE.
- 33 INSTALL 6" 45° BEND.
- 34 INSTALL 7.0 LF OF 6" FIRE PROTECTION LINE.
- 35 CONNECT FIRE PROTECTION LINE TO BUILDING PLUMBING; RE. PLUMBING PLANS.
- 36 BUILDING MOUNTED FDC.
- 37 EXISTING FIRE HYDRANT; DO NOT DISTURB.

E - ELECTRIC SERVICE INFORMATION - EVERGY

- 01 CONTRACTOR TO INSTALL PRIMARY UNDERGROUND ELECTRIC SERVICE FROM EXISTING ELECTRIC STRUCTURE TO TRANSFORMER PAD.
- 02 PROPOSED TRANSFORMER PAD.
- 03 CONTRACTOR TO INSTALL SECONDARY UNDERGROUND ELECTRIC SERVICE LINE FROM PROPOSED TRANSFORMER TO BUILDING

C - COMMUNICATION SERVICE INFORMATION - AT&T

- 01 CONTRACTOR TO INSTALL COMMUNICATION CONDUIT W/ PULL WIRE FROM THE BUILDING TO THE CONNECTION AT COMMUNICATION BOX; COORDINATE W/ COMMUNICATION UTILITY PROVIDER.
- 02 CONNECT COMMUNICATIONS CONDUITS TO BUILDING; REFER TO: ELECTRICAL PLAN.

G - GAS SERVICE INFORMATION - MISSOURI GAS ENERGY

- 01 EXISTING GAS STRUCTURE.
- 02 INSTALL 230 LF GAS SERVICE LINE.
- 03 GAS CONNECTION TO BLDG.

ST - STORM SEWER INFORMATION - CITY OF LEE'S SUMMIT

- 01 EXISTING STORM SEWER LINE.
- 02 EXISTING CURB INLET.
- 03 PROPOSED STORM SEWER; RE. SHEETS C6.1-C6.8.

SS - SANITARY SEWER INFORMATION - CITY OF LEE'S SUMMIT

- 01 EXISTING SANITARY SEWER MAIN.
- 02 EXISTING SANITARY SEWER SERVICE STUB TO BE ABANDONED BACK TO MAIN PER LEE'S SUMMIT SANITARY STANDARDS.
- 03 PROPOSED SANITARY SERVICE; RE. SHEET C5.1.

UTILITY NOTES

1. Contractor shall refer to all specifications, guidelines, and installation drawings from City of Lee's Summit Water, Stormwater, Sanitary; Missouri Gas Energy, AT&T, & Evergy for the installation of all service lines.
2. Contractor to ensure 6" minimum separation between utilities at crossings. Contractor to call civil if any conflicts between utilities are found.
3. Fire Line Notes:
   - 3.1. All private fire lines shall be installed in accordance with NFPA 24, and other applicable codes and standards.
   - 3.2. Contact the fire department to schedule inspections prior to private fire lines being backfilled.
   - 3.3. Contact the fire department to witness scheduled hydrostatic tests and flushes of private fire lines.

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

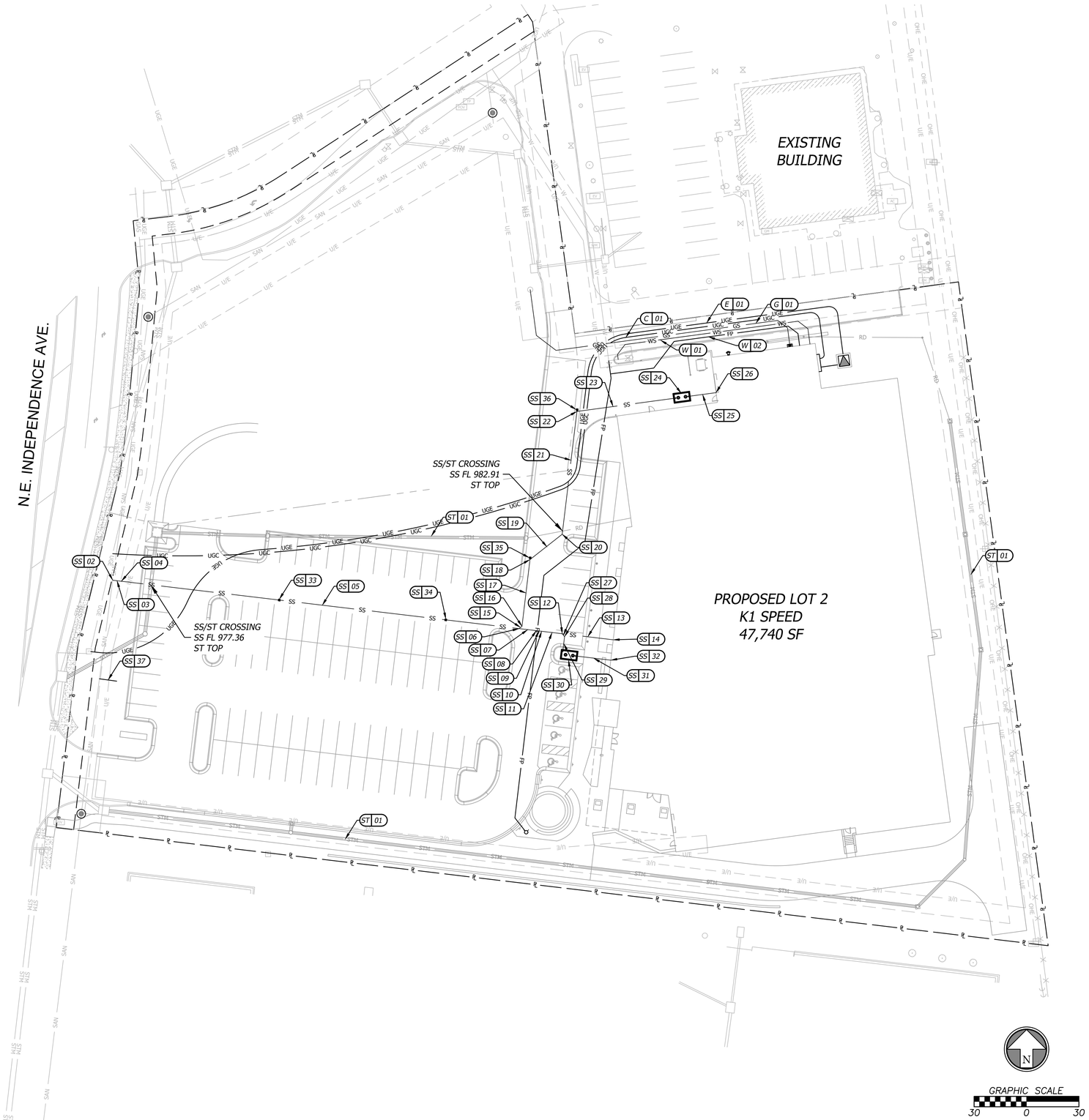
Final Development Plans

June 21, 2022

UTILITY PLAN

C5.0

BHCR Project #: 033050



(X|00) CONSTRUCTION NOTES

W - WATER SERVICE INFORMATION - CITY OF LEE'S SUMMIT
01 WATER SERVICE LINE; RE. C5.0.
02 FIRE PROTECTION LINE; RE. C5.0.

E - ELECTRIC SERVICE INFORMATION - EVERGY
01 ELECTRICAL SERVICE LINE; RE. C5.0.

C - COMMUNICATION SERVICE INFORMATION - AT&T
01 COMMUNICATION SERVICE LINE; RE. C5.0.

G - GAS SERVICE INFORMATION - MISSOURI GAS ENERGY
01 GAS SERVICE LINE; RE. C5.0.

ST - STORM SEWER INFORMATION - CITY OF LEE'S SUMMIT
01 PROPOSED STORM SEWER; RE. SHEETS C6.1-C6.7.

SS - SANITARY SEWER INFORMATION - CITY OF LEE'S SUMMIT
01 EXISTING 12" SDR-26 SANITARY SEWER MAIN.
02 CONNECT SANITARY SERVICE TO EXISTING MAIN PER LEE'S SUMMIT STANDARD INSTALLATION, SANITARY SEWER STUB DETAIL; RE. DETAIL ON SHEET C7.3.
FL SERVICE LINE = 972.00
FL MAIN LINE = 971.37
03 INSTALL 7.0 LF 6" SDR-26 SANITARY PIPE RISER @ 100.00% SLOPE.
04 INSTALL 6" VERTICAL 45° BEND.
FL 977.02
05 INSTALL 229.3 LF 6" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
06 INSTALL 6"x6"x4" 45° WYE.
FL 981.61
07 INSTALL 10.0 LF LF 6" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
08 INSTALL 6" VERTICAL 45° BEND.
FL 981.81
09 INSTALL 4.2 LF 6" SDR-26 SANITARY PIPE RISER @ 100.00% SLOPE.
10 INSTALL 6" VERTICAL 45° BEND.
FL 984.81
11 INSTALL 11.9 LF 6" SDR-26 SANITARY PIPE @ 2.90% SLOPE.
12 INSTALL 6"x6"x4" 45° WYE.
FL 985.15
13 INSTALL 29.4 LF 6" SDR-26 SANITARY PIPE @ 2.90% SLOPE.
14 CONNECT TO BUILDING; RE. PLUMBING PLANS.
FL 986.00
15 INSTALL 2.1 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
16 INSTALL 4" 45° BEND.
FL 981.65
17 INSTALL 38.5 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
18 INSTALL 4"x4"x4" 45° WYE.
FL 982.42
19 INSTALL 22.6 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
20 INSTALL 4" 45° BEND.
FL 982.87
21 INSTALL 72.1 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
22 INSTALL ONE 4"x4"x4" 60° WYE & ONE 4" 15° BEND WITH 1.0 LF BETWEEN BENDS.
FL 984.31
23 INSTALL 56.4 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
24 INSTALL 1,500 GALLON SAND/OIL INTERCEPTOR; RE. PLUMBING PLANS.
TOP OF STRUCTURE=991.44
FL IN (E)=985.69
FL OUT (W)=985.44
25 INSTALL 15.5 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
26 CONNECT TO BUILDING; RE. PLUMBING PLANS.
FL 986.00
27 INSTALL 2.1 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
28 INSTALL 4" 45° BEND.
FL 985.19
29 INSTALL 8.0 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
30 INSTALL 1,500 GALLON GREASE INTERCEPTOR; RE. PLUMBING PLANS.
TOP OF STRUCTURE=991.33
FL IN (E)=985.6
FL OUT (N)=985.35
31 INSTALL 19.8 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE.
32 CONNECT TO BUILDING; RE. PLUMBING PLANS.
FL 986.00
33 INSTALL CLEANOUT; RE. DETAIL ON SHEET C7.3.
FG 984.00
FL 978.84
34 INSTALL CLEANOUT; RE. DETAIL ON SHEET C7.3.
FG 988.07
FL 980.76
35 INSTALL MINIMUM 1.0 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE & CLEANOUT; RE. DETAIL ON SHEET C7.3.
FG 989.12
FL 982.44
36 INSTALL MINIMUM 1.0 LF 4" SDR-26 SANITARY PIPE @ 2.00% SLOPE & CLEANOUT; RE. DETAIL ON SHEET C7.3.
FG 989.91
FL 984.33
37 EXISTING SANITARY SEWER SERVICE STUB TO BE ABANDONED BACK TO MAIN PER LEE'S SUMMIT SANITARY STANDARDS.

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

SANITARY PLAN

C5.1

DRAINAGE AREAS

Basin ID	AREA		PERVIOUS		IMPERVIOUS		CN-Value	C-VALUE
EX-1	19,501 SF	(0.45 ac)	18,800 SF	(0.43 ac)	701 SF	(0.02 ac)	81	0.32
EX-2	67,154 SF	(1.54 ac)	67,065 SF	(1.54 ac)	089 SF	(0.00 ac)	80	0.30
EX-3	29,961 SF	(0.69 ac)	29,073 SF	(0.67 ac)	888 SF	(0.02 ac)	81	0.32
EX-4	12,797 SF	(0.29 ac)	9,800 SF	(0.22 ac)	2,997 SF	(0.07 ac)	84	0.44
EX-5	3,489 SF	(0.08 ac)	1,508 SF	(0.03 ac)	1,981 SF	(0.05 ac)	90	0.64
EX-6	2,708 SF	(0.06 ac)	1,427 SF	(0.03 ac)	1,281 SF	(0.03 ac)	89	0.58
EX-7	4,070 SF	(0.09 ac)	709 SF	(0.02 ac)	3,362 SF	(0.08 ac)	95	0.80
EX-8	56,911 SF	(1.31 ac)	56,301 SF	(1.29 ac)	610 SF	(0.01 ac)	80	0.31
Total	**196,591 SF**	**(4.51 ac)**	**184,683 SF**	**(4.24 ac)**	**11,908 SF**	**(0.27 ac)**	**81**	**0.34**

KANSAS CITY FACIAL & ORAL SURGERY

KC F&O	27,500 SF	(0.63 ac)	6,000 SF	(0.14 ac)	21,500 SF	(0.49 ac)	94	0.77

DRAINAGE LEGEND

- *DRAINAGE AREA BOUNDARY*
- Field — *AREA/DIRECTION OF DRAINAGE BOUNDARY*
- 980 — *EXISTING GRADE MAJOR CONTOUR*
- 982 — *EXISTING GRADE MINOR CONTOUR*
- ℄ — *PROPERTY LINE*

GRAPHIC SCALE
30 0 30

BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

EXISTING DRAINAGE MAP

C6.0

DRAINAGE AREAS

Basin ID	AREA			PERVIOUS			IMPERVIOUS			CN-Value	C-VALUE
DA 1	11,741	SF	(0.27 ac)	3,694	SF	(0.08 ac)	8,047	SF	(0.18 ac)	92	0.71
DA 2	17,542	SF	(0.40 ac)	841	SF	(0.02 ac)	16,701	SF	(0.38 ac)	97	0.87
DA 3	9,408	SF	(0.22 ac)	966	SF	(0.02 ac)	8,442	SF	(0.19 ac)	96	0.84
DA 4	6,513	SF	(0.15 ac)	2,524	SF	(0.06 ac)	3,990	SF	(0.09 ac)	91	0.67
DA 5	8,706	SF	(0.20 ac)	4,658	SF	(0.11 ac)	4,048	SF	(0.09 ac)	88	0.58
DA 6	3,375	SF	(0.08 ac)	3,375	SF	(0.08 ac)	000	SF	(0.00 ac)	80	0.30
DA 7	2,777	SF	(0.06 ac)	2,777	SF	(0.06 ac)	000	SF	(0.00 ac)	80	0.30
DA 8	6,219	SF	(0.14 ac)	5,462	SF	(0.13 ac)	757	SF	(0.02 ac)	82	0.37
DA 9	18,094	SF	(0.42 ac)	17,182	SF	(0.39 ac)	913	SF	(0.02 ac)	81	0.33
DA 10	24,585	SF	(0.56 ac)	18,478	SF	(0.42 ac)	6,107	SF	(0.14 ac)	84	0.45
DA 11	10,801	SF	(0.25 ac)	5,202	SF	(0.12 ac)	5,599	SF	(0.13 ac)	89	0.61
DA 12	6,435	SF	(0.15 ac)	1,129	SF	(0.03 ac)	5,306	SF	(0.12 ac)	95	0.79
DA 13	9,597	SF	(0.22 ac)	6,597	SF	(0.15 ac)	2,999	SF	(0.07 ac)	86	0.49
DA 14	3,491	SF	(0.08 ac)	1,851	SF	(0.04 ac)	1,640	SF	(0.04 ac)	88	0.58
DA 15	2,372	SF	(0.05 ac)	426	SF	(0.01 ac)	1,945	SF	(0.04 ac)	95	0.79
DA 16	9,740	SF	(0.22 ac)	2,373	SF	(0.05 ac)	7,366	SF	(0.17 ac)	94	0.75
BLDG	45,195	SF	(1.04 ac)	000	SF	(0.00 ac)	45,195	SF	(1.04 ac)	98	0.90
Total	**196,591**	**SF**	**(4.51 ac)**	**77,536**	**SF**	**(1.78 ac)**	**119,055**	**SF**	**(2.73 ac)**	**91**	**0.66**

KANSAS CITY FACIAL & ORAL SURGERY

KC F&O	27,500	SF	(0.63 ac)	6,000	SF	(0.14 ac)	21,500	SF	(0.49 ac)	94	0.77

DRAINAGE LEGEND

- *DRAINAGE AREA BOUNDARY*
- 000 — *PROPOSED STRUCTURE IDENTIFIER*
- Field — *AREA/DIRECTION OF DRAINAGE BOUNDARY*
- 980 — *PROPOSED FINISH GRADE MAJOR CONTOUR*
- 982 — *PROPOSED FINISH GRADE MINOR CONTOUR*
- 980 — *EXISTING GRADE MAJOR CONTOUR*
- 982 — *EXISTING GRADE MINOR CONTOUR*
- *PROPOSED STORM SEWER LINE*
- *PROPERTY LINE*

GRAPHIC SCALE
30 0 30

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speedway Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

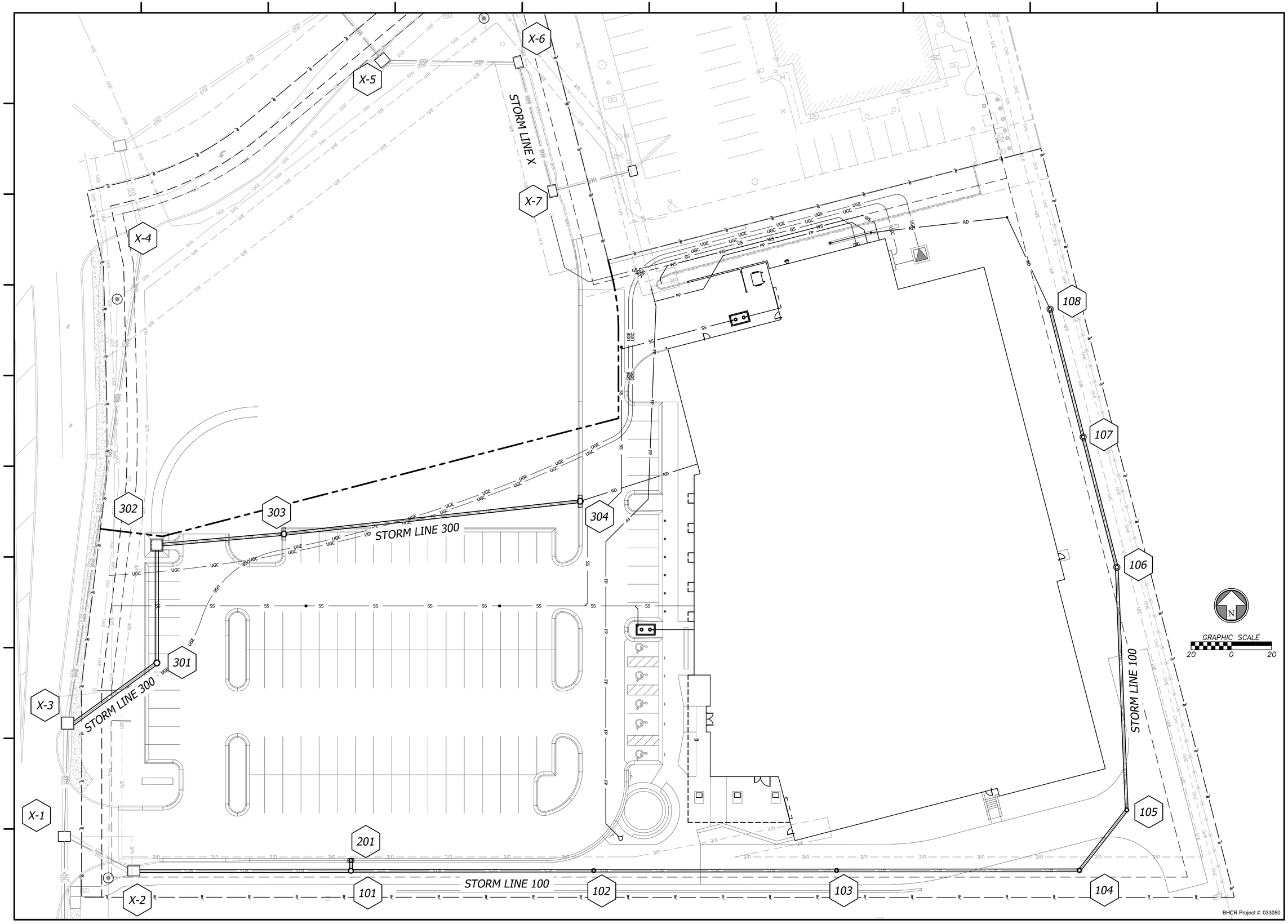
Project #: 211107

Final Development Plans

June 21, 2022

PROPOSED DRAINAGE MAP

C6.1



BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

PIPE PLAN

C6.2

Runoff Calculations - 10 - Year Storm Event

Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Up Piped Inlets	Up Piped Inlets	Up Area (acres)	Up CxA	Pipe Properties: Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.
LINE 100																									DS TAILWATER @ STR #X-1	FREE
X-2	0.40	0.87	1.10	0.74	7.1	6.83	2.38	5.07	35.09	11.17			0.00	0.00	X-2	X-1	HDPE	0.012	24	38.47	2.05	0.50	975.61	974.82	979.76	976.55
101	0.00	0.00	0.70	0.39	6.8	6.90	0.00	2.72	11.38	6.44	201		0.22	0.18	101	X-2	HDPE	0.012	18	107.71	1.00	0.20	977.19	976.11	983.42	977.93
102	0.00	0.00	0.48	0.21	6.5	6.97	0.00	1.46	7.82	6.38			0.00	0.00	102	101	HDPE	0.012	15	120.46	1.25	0.00	978.89	977.39	988.96	979.45
103	0.00	0.00	0.48	0.21	6.2	7.05	0.00	1.48	7.82	6.38			0.00	0.00	103	102	HDPE	0.012	15	120.46	1.25	0.00	980.40	978.89	988.39	980.96
104	0.20	0.58	0.48	0.21	5.8	7.13	0.83	1.50	7.82	6.38			0.00	0.00	104	103	HDPE	0.012	15	120.46	1.25	0.35	981.90	980.40	986.50	982.48
105	0.00	0.00	0.28	0.09	5.7	7.15	0.00	0.67	7.82	6.38			0.00	0.00	105	104	HDPE	0.012	15	38.06	1.25	0.35	982.73	982.25	989.03	983.10
106	0.08	0.30	0.28	0.09	5.4	7.24	0.17	0.68	7.00	5.70			0.00	0.00	106	105	HDPE	0.012	15	120.53	1.00	0.25	984.28	983.08	989.00	984.66
107	0.06	0.30	0.20	0.07	5.2	7.28	0.13	0.51	7.00	5.70			0.00	0.00	107	106	HDPE	0.012	15	66.73	1.00	0.20	985.20	984.53	989.00	985.52
108	0.14	0.37	0.14	0.05	5.0	7.33	0.38	0.38	7.00	5.70			0.00	0.00	108	107	HDPE	0.012	15	65.52	1.00	N/A	986.06	985.40	989.00	986.34
LINE 200																			Drop in Inlet 101			0.50				
201	0.22	0.84	0.22	0.18	5.0	6.83	1.26	1.26	15.89	8.99			0.00	0.00	201	101	HDPE	0.012	18	5.12	1.95	N/A	977.79	977.69	1000.00	978.28
LINE 300																									DS TAILWATER @ STR #X-3	FREE
301	0.00	0.00	1.64	1.36	5.5	6.83	0.00	9.27	13.51	7.65			0.00	0.00	301	X-3	HDPE	0.012	18	53.34	1.41	0.50	975.95	975.20	982.12	977.43
302	0.51	0.81	1.64	1.36	5.4	6.90	2.85	9.36	13.07	7.40			0.00	0.00	302	301	HDPE	0.012	18	58.50	1.32	0.25	977.22	976.45	980.60	978.71
303	0.24	0.63	1.13	0.94	5.3	6.97	1.05	6.58	12.12	9.88			0.00	0.00	303	302	HDPE	0.012	15	63.24	3.00	0.25	979.37	977.47	983.11	980.69
304	0.89	0.89	0.89	0.79	5.0	7.05	5.59	5.59	12.04	9.81			0.00	0.00	304	303	HDPE	0.012	15	147.90	2.96	N/A	984.00	979.62	988.79	985.19
LINE X																									DS TAILWATER @ STR #X-5	FREE
X-6	0.05	0.77	0.89	0.69	5.2	6.83	0.26	4.74	6.89	5.62			0.00	0.00	X-6	X-5	HDPE	0.012	15	67.31	0.97	0.20	985.01	984.36	988.51	986.10
X-7	0.84	0.78	0.84	0.66	5.0	6.90	4.52	4.52	6.38	5.20			0.00	0.00	X-7	X-6	HDPE	0.012	15	66.15	0.83	N/A	985.76	985.21	989.06	986.82

Runoff Calculations - 25 - Year Storm Event

Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Up Piped Inlets	Up Piped Inlets	Up Area (acres)	Up CxA	Pipe Properties: Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.
LINE 100																									DS TAILWATER @ STR #X-1	FREE
X-2	0.40	0.87	1.10	0.74	7.1	7.92	3.03	6.47	35.09	11.17			0.00	0.00	X-2	X-1	HDPE	0.012	24	38.47	2.05	0.50	975.61	974.82	979.76	976.68
101	0.00	0.00	0.70	0.39	6.8	8.00	0.00	3.47	11.38	6.44	201		0.22	0.18	101	X-2	HDPE	0.012	18	107.71	1.00	0.20	977.19	976.11	983.42	978.03
102	0.00	0.00	0.48	0.21	6.5	8.08	0.00	1.86	7.82	6.38			0.00	0.00	102	101	HDPE	0.012	15	120.46	1.25	0.00	978.89	977.39	988.96	979.54
103	0.00	0.00	0.48	0.21	6.2	8.16	0.00	1.88	7.82	6.38			0.00	0.00	103	102	HDPE	0.012	15	120.46	1.25	0.00	980.40	978.89	988.39	981.05
104	0.20	0.58	0.48	0.21	5.8	8.24	1.05	1.90	7.82	6.38			0.00	0.00	104	103	HDPE	0.012	15	120.46	1.25	0.35	981.90	980.40	986.50	982.55
105	0.00	0.00	0.28	0.09	5.7	8.27	0.00	0.85	7.82	6.38			0.00	0.00	105	104	HDPE	0.012	15	38.06	1.25	0.35	982.73	982.25	989.03	983.15
106	0.08	0.30	0.28	0.09	5.4	8.36	0.22	0.86	7.00	5.70			0.00	0.00	106	105	HDPE	0.012	15	120.53	1.00	0.25	984.28	983.08	989.00	984.71
107	0.06	0.30	0.20	0.07	5.2	8.41	0.17	0.65	7.00	5.70			0.00	0.00	107	106	HDPE	0.012	15	66.73	1.00	0.20	985.20	984.53	989.00	985.56
108	0.14	0.37	0.14	0.05	5.0	8.46	0.48	0.48	7.00	5.70			0.00	0.00	108	107	HDPE	0.012	15	65.52	1.00	N/A	986.06	985.40	989.00	986.37
LINE 200																			Drop in Inlet 101			0.50				
201	0.22	0.84	0.22	0.18	5.0	7.92	1.61	1.61	15.89	8.99			0.00	0.00	201	101	HDPE	0.012	18	5.12	1.95	N/A	977.79	977.69	1000.00	978.35
LINE 300																									DS TAILWATER @ STR #X-3	FREE
301	0.00	0.00	1.64	1.36	5.5	7.92	0.00	11.82	13.51	7.65			0.00	0.00	301	X-3	HDPE	0.012	18	53.34	1.41	0.50	975.95	975.20	982.12	977.67
302	0.51	0.81	1.64	1.36	5.4	8.00	3.63	11.93	13.07	7.40			0.00	0.00	302	301	HDPE	0.012	18	58.50	1.32	0.25	977.22	976.45	980.60	978.95
303	0.24	0.63	1.13	0.94	5.3	8.08	1.34	8.38	12.12	9.88			0.00	0.00	303	302	HDPE	0.012	15	63.24	3.00	0.25	979.37	977.47	983.11	980.90
304	0.89	0.89	0.89	0.79	5.0	8.16	7.11	7.11	12.04	9.81			0.00	0.00	304	303	HDPE	0.012	15	147.90	2.96	N/A	984.00	979.62	988.79	985.38
LINE X																									DS TAILWATER @ STR #X-5	FREE
X-6	0.05	0.77	0.89	0.69	5.2	7.92	0.34	6.05	6.89	5.62			0.00	0.00	X-6	X-5	HDPE	0.012	15	67.31	0.97	0.20	985.01	984.36	988.51	986.27
X-7	0.84	0.78	0.84	0.66	5.0	8.00	5.76	5.76	6.38	5.20			0.00	0.00	X-7	X-6	HDPE	0.012	15	66.15	0.83	N/A	985.76	985.21	989.06	986.98

Runoff Calculations - 100 - Year Storm Event

Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Up Piped Inlets	Up Piped Inlets	Up Area (acres)	Up CxA	Pipe Properties: Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.
LINE 100																									DS TAILWATER @ STR #X-1	FREE
X-2	0.40	0.87	1.10	0.74	7.1	9.58	4.17	8.89	35.09	11.17			0.00	0.00	X-2	X-1	HDPE	0.012	24	38.47	2.05	0.50	975.61	974.82	979.76	976.89
101	0.00	0.00	0.70	0.39	6.8	9.66	0.00	4.76	11.38	6.44	201		0.22	0.18	101	X-2	HDPE	0.012	18	107.71	1.00	0.20	977.19	976.11	983.42	978.20
102	0.00	0.00	0.48	0.21	6.5	9.75	0.00	2.56	7.82	6.38			0.00	0.00	102	101	HDPE	0.012	15	120.46	1.25	0.00	978.89	977.39	988.96	979.65
103	0.00	0.00	0.48	0.21	6.2	9.84	0.00	2.58	7.82	6.38			0.00	0.00	103	102	HDPE	0.012	15	120.46	1.25	0.00	980.40	978.89	988.39	981.17
104	0.20	0.58	0.48	0.21	5.8	9.94	1.44	2.61	7.82	6.38			0.00	0.00	104	103	HDPE	0.012	15	120.46	1.25	0.35	981.90	980.40	986.50	982.68
105	0.00	0.00	0.28	0.09	5.7	9.96	0.00	1.17	7.82	6.38			0.00	0.00	105	104	HDPE	0.012	15	38.06	1.25	0.35	982.73	982.25	989.03	983.23
106	0.08	0.30	0.28	0.09	5.4	10.07	0.30	1.18	7.00	5.70			0.00	0.00	106	105	HDPE	0.012	15	120.53	1.00	0.25	984.28	983.08	989.00	984.79
107	0.06	0.30	0.20	0.07	5.2	10.12	0.23	0.88	7.00	5.70			0.00	0.00	107	106	HDPE	0.012	15	66.73	1.00	0.20	985.20	984.53	989.00	985.63
108	0.14	0.37	0.14	0.05	5.0	10.18	0.66	0.66	7.00	5.70			0.00	0.00	108	107	HDPE	0.012	15	65.52	1.00	N/A	986.06	985.40	989.00	986.43
LINE 200																			Drop in Inlet 101			0.50				
201	0.22	0.84	0.22	0.18	5.0	9.58	2.21	2.21	15.89	8.99			0.00	0.00	201	101	HDPE	0.012	18	5.12	1.95	N/A	977.79	977.69	1000.00	978.45
LINE 300																									DS TAILWATER @ STR #X-3	FREE
301	0.00	0.00	1.64	1.36	5.5	9.58	0.00	16.24	13.51	7.65			0.00	0.00	301	X-3	HDPE	0.012	18	53.34	1.41	0.50	975.95	975.20	982.12	978.44
302	0.51	0.81	1.64	1.36	5.4	9.66	4.99	16.38	13.07	7.40			0.00	0.00	302	301	HDPE	0.012	18	58.50	1.32	0.25	977.22	976.45	980.60	980.32
303	0.24	0.63	1.13	0.94	5.3	9.75	1.84	11.50	12.12	9.88			0.00	0.00	303	302	HDPE	0.012	15	63.24	3.00	0.25	979.37	977.47	983.11	982.71
304	0.89	0.89	0.89	0.79	5.0	9.84	9.75	9.75	12.04	9.81			0.00	0.00	304	303	HDPE	0.012	15	147.90	2.96	N/A	984.00	979.62	988.79	986.07
LINE X																									DS TAILWATER @ STR #X-5	FREE
X-6	0.05	0.77	0.89	0.69	5.2	9.58	0.46	8.31	6.89	5.62			0.00	0.00	X-6	X-5	HDPE	0.012	15	67.31	0.97	0.20	985.01	984.36	988.51	986.86
X-7	0.84	0.78	0.84	0.66	5.0	9.66	7.91	7.91	6.38	5.20			0.00	0.00	X-7	X-6	HDPE	0.012	15	66.15	0.83	N/A	985.76	985.21	989.06	988.03

BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

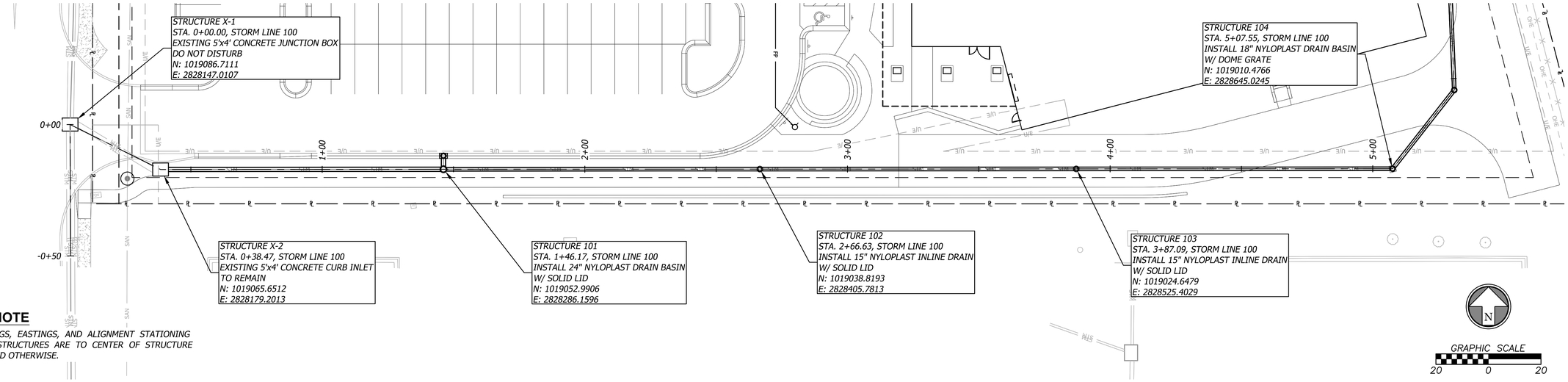
Project #: 211107

Final Development Plans

June 21, 2022

PROPOSED PIPE CALCS

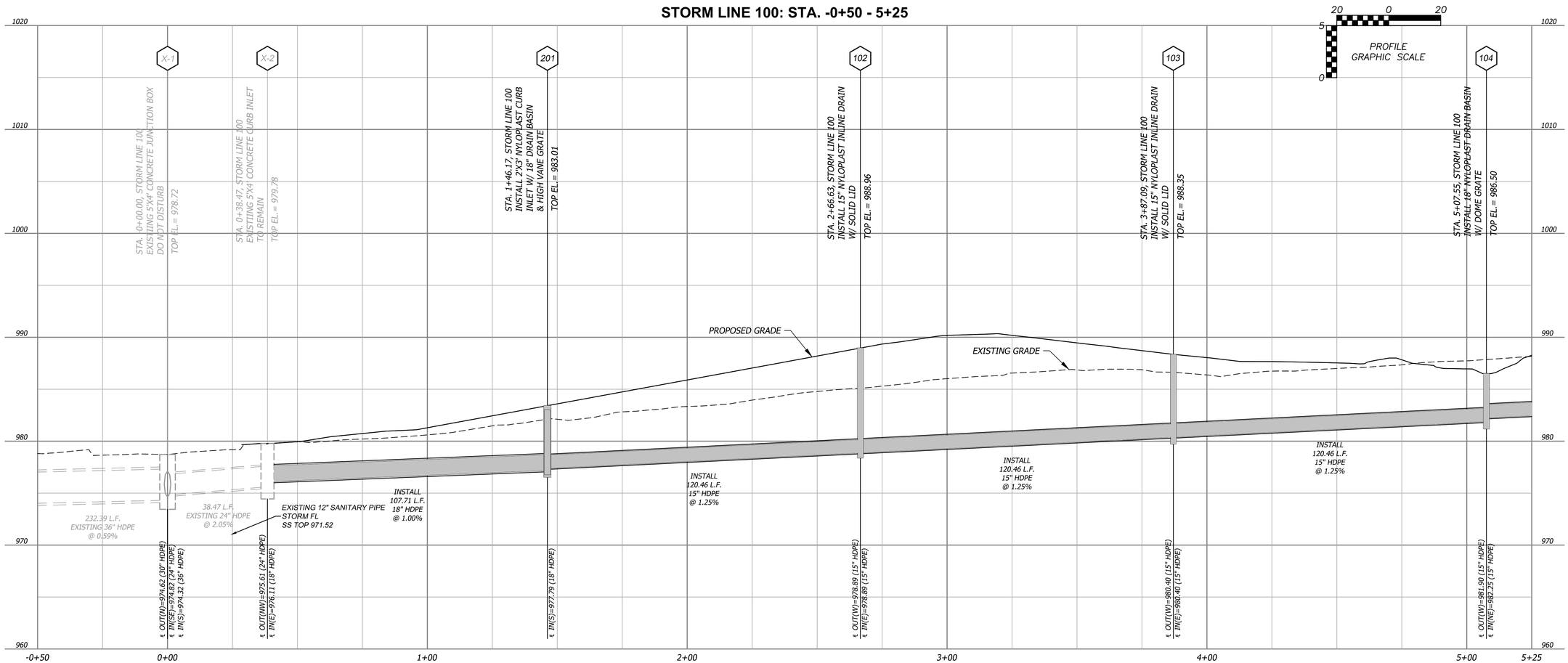
C6.3



STORM NOTE

ALL NORTHINGS, EASTINGS, AND ALIGNMENT STATIONING FOR STORM STRUCTURES ARE TO CENTER OF STRUCTURE UNLESS STATED OTHERWISE.

STORM LINE 100: STA. -0+50 - 5+25



BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

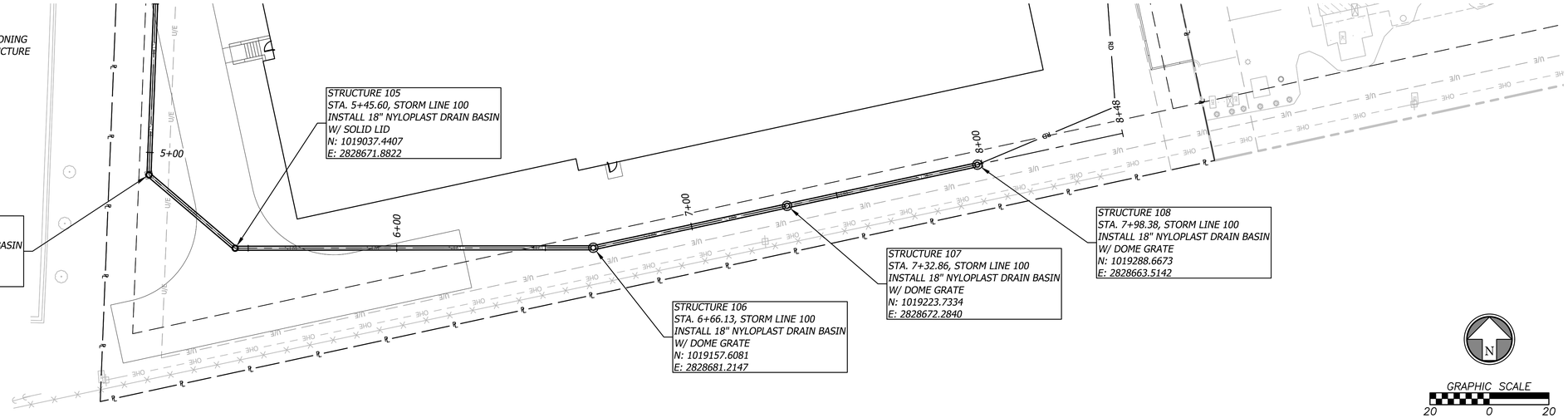
Project #: 211107

Final Development Plans

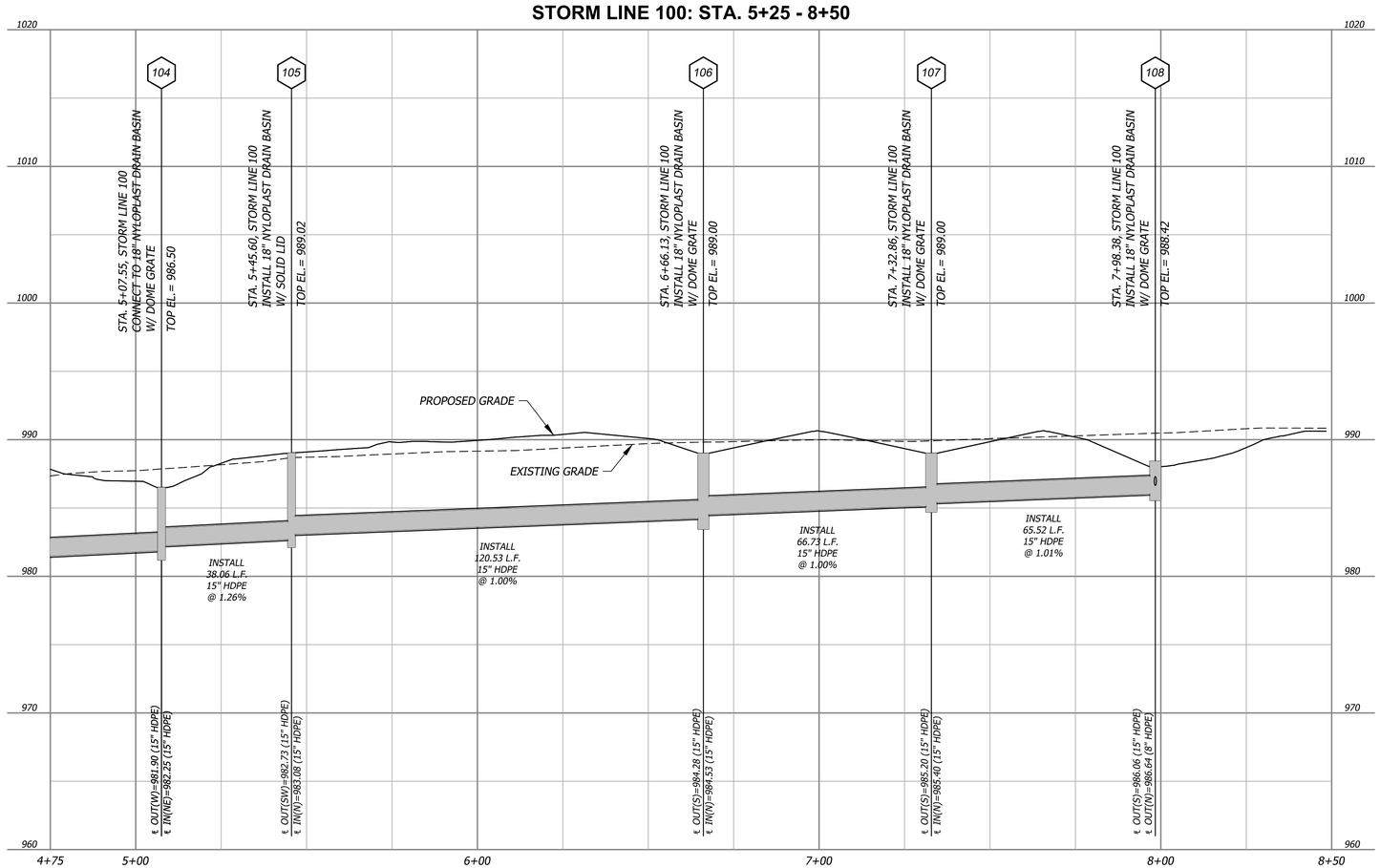
June 21, 2022

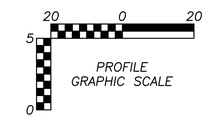
STORM NOTE

ALL NORTHINGS, EASTINGS, AND ALIGNMENT STATIONING FOR STORM STRUCTURES ARE TO CENTER OF STRUCTURE UNLESS STATED OTHERWISE.



STORM LINE 100: STA. 5+25 - 8+50





SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

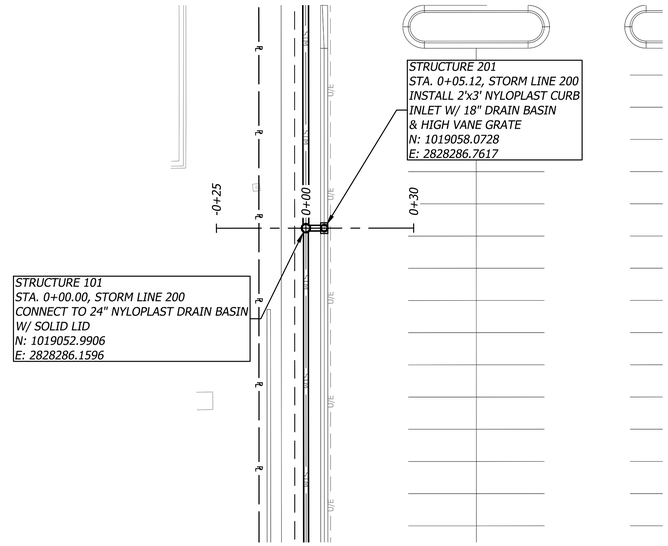
STORM LINE 100 (CONT.)

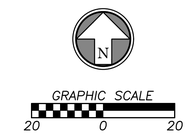
C6.5

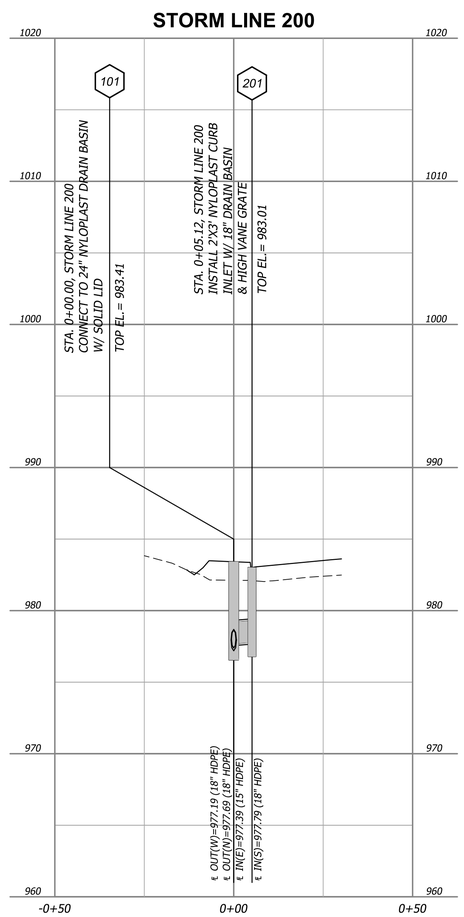
BHCR Project #: 033050

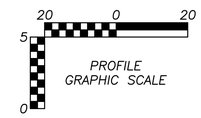
STORM NOTE

ALL NORTHINGS, EASTINGS, AND ALIGNMENT STATIONING FOR STORM STRUCTURES ARE TO CENTER OF STRUCTURE UNLESS STATED OTHERWISE.









SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

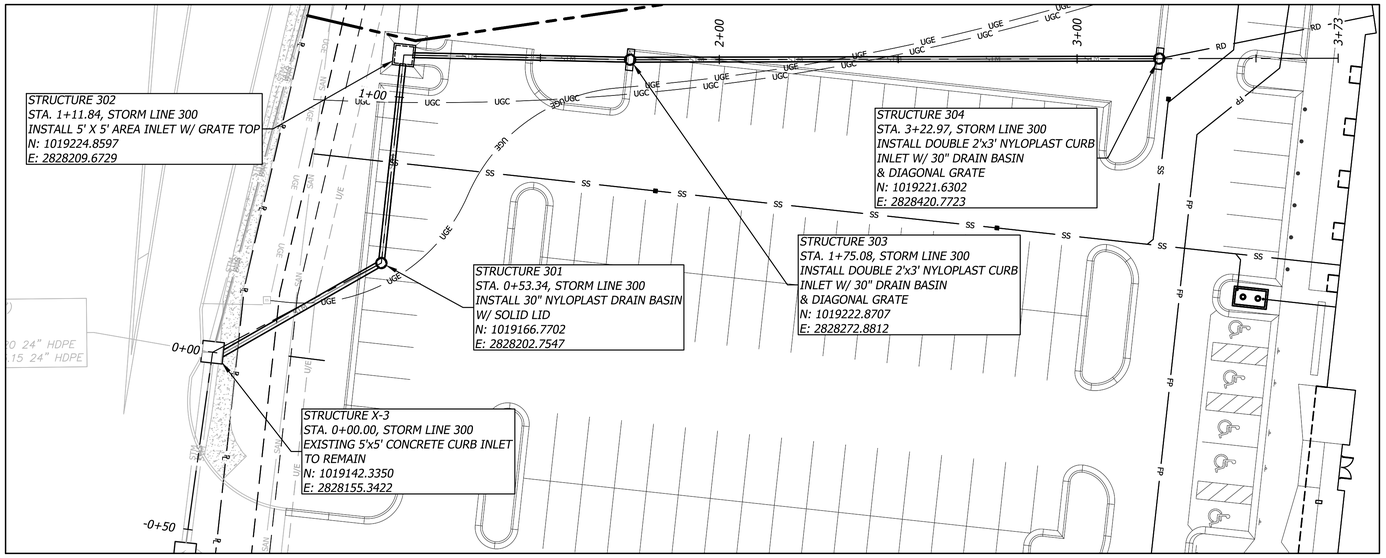
STORM LINE 200

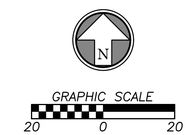
C6.6

BHCR Project #: 033050

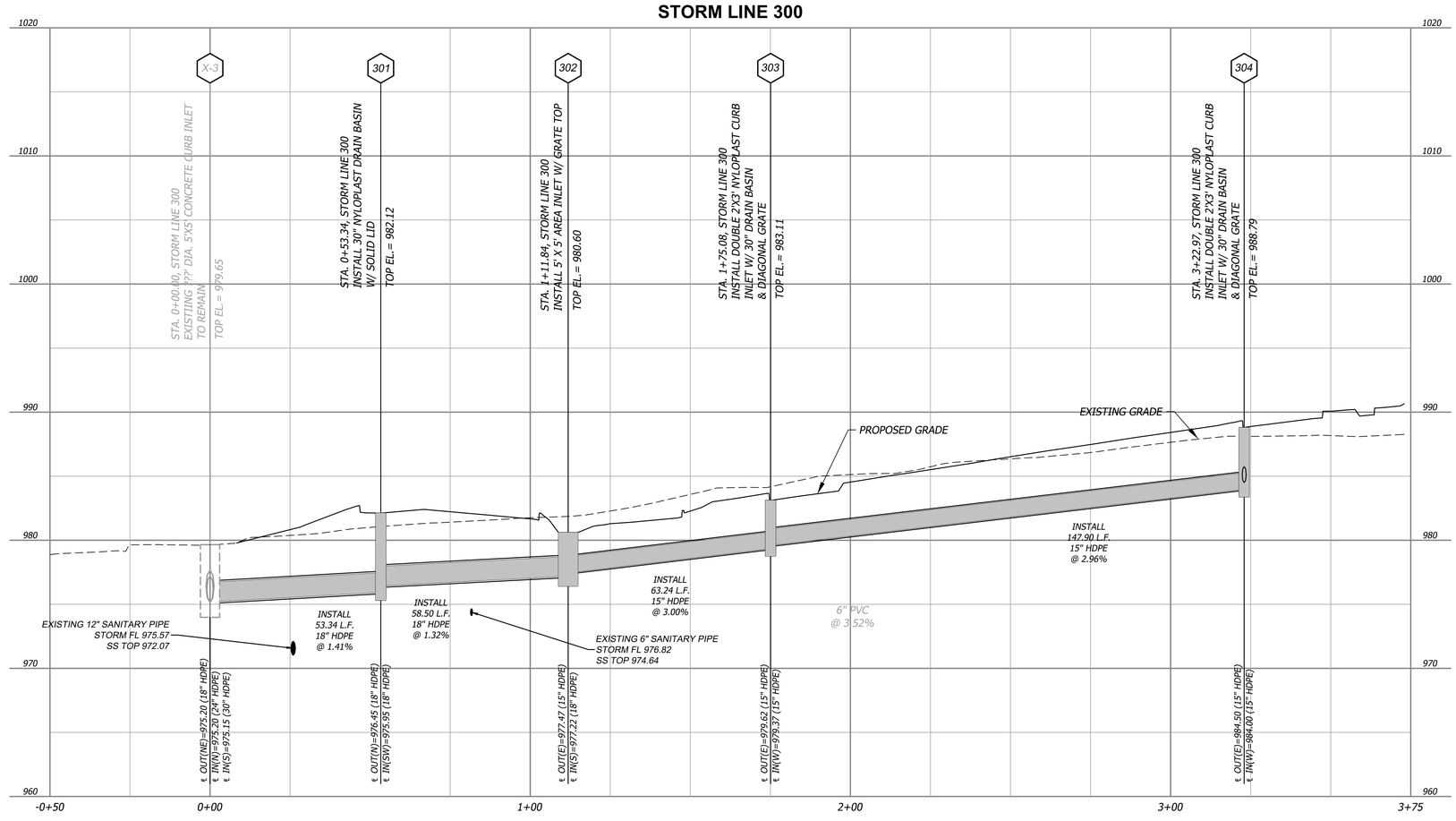
STORM NOTE

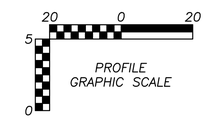
ALL NORTHINGS, EASTINGS, AND ALIGNMENT STATIONING FOR STORM STRUCTURES ARE TO CENTER OF STRUCTURE UNLESS STATED OTHERWISE.





STORM LINE 300





BHCR Project #: 033050

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

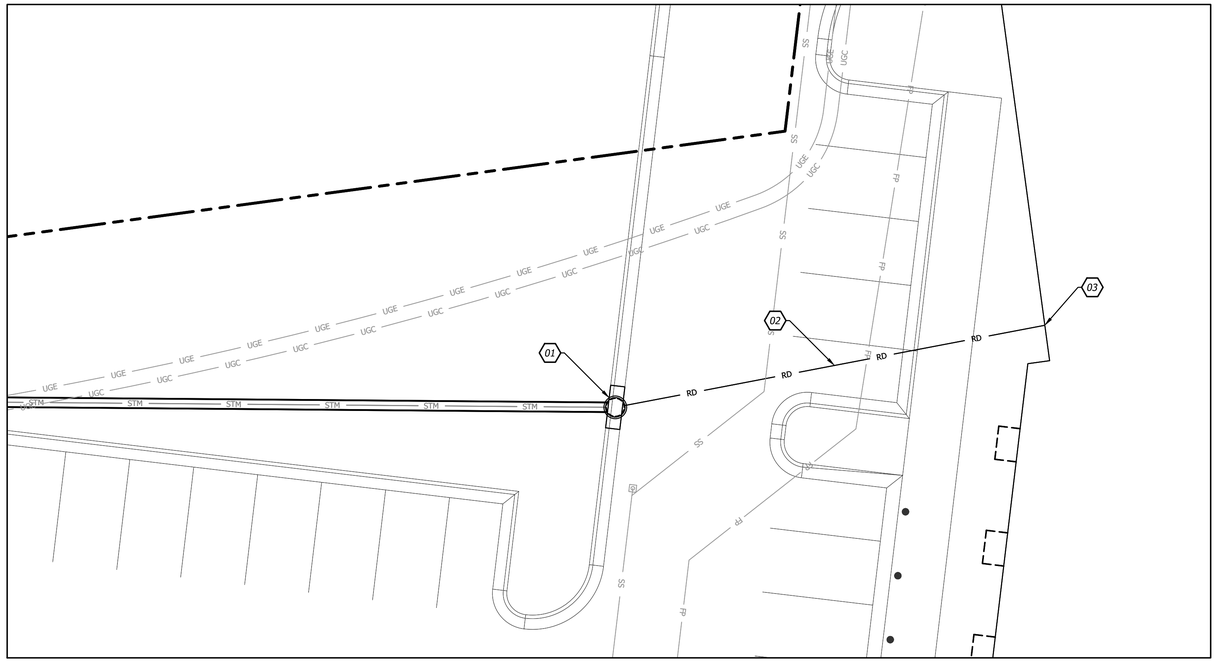
Project #: 211107

Final Development Plans

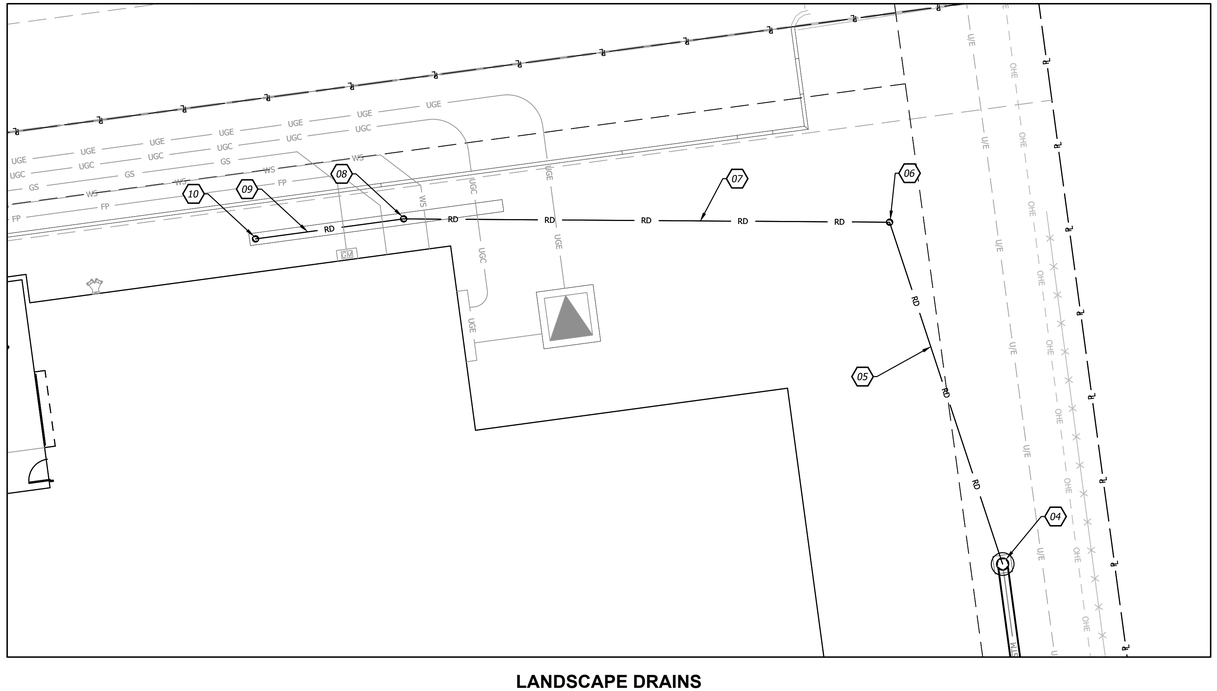
June 21, 2022

STORM LINE 300

C6.7



ROOF DRAIN



LANDSCAPE DRAINS

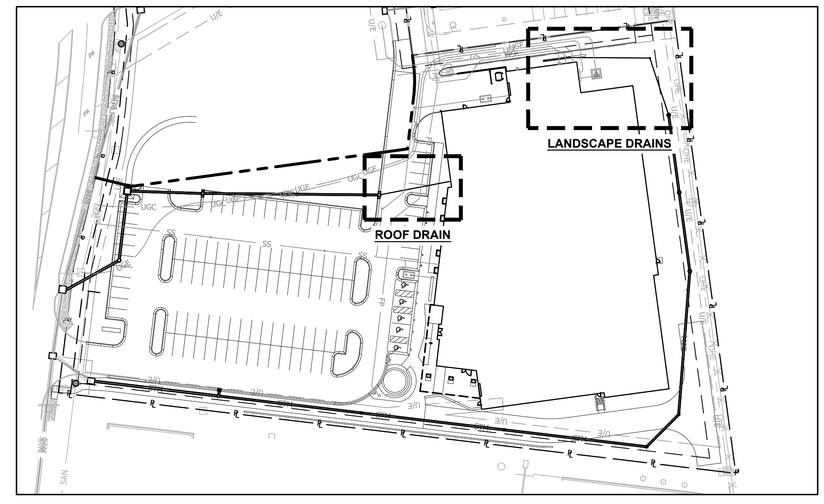
00 ROOF DRAIN NOTES

01 CONNECT ROOF DRAIN LINE TO STRUCTURE 304; RE. C6.7.
FL 984.50
02 INSTALL 61.0 LF OF 12" HDPE DRAIN PIPE @ 2.05%.
03 CONNECT ROOF DRAIN LINE TO BUILDING; RE. PLUMBING PLANS.
FL 985.75
04 CONNECT DRAIN LINE TO STRUCTURE 108; RE. C6.5.
FL 986.64
05 INSTALL 50.5 LF OF 8" HDPE DRAIN PIPE @ 1.50%.
06 INSTALL 10" NYLOPLAST DRAIN BASIN W/ SOLID LID.
FG 990.21
FL 987.16
07 INSTALL 68.0 LF OF 8" HDPE DRAIN PIPE @ 1.50%.
08 INSTALL 8" NYLOPLAST DRAIN BASIN W/ BEEHIVE GRATE.
FG 990.74
FL 988.18
09 INSTALL 21.0 LF OF 8" HDPE DRAIN PIPE @ 1.50%.
10 INSTALL 8" NYLOPLAST DRAIN BASIN W/ BEEHIVE GRATE.
FG 991.05
FL 988.49

GENERAL NOTES

1. ALL LENGTHS/SLOPES OF ROOF DRAIN LINES ARE APPROXIMATE. CONTRACTOR TO OBTAIN OWN QUANTITIES.

2. CONTRACTOR TO ENSURE 6" MINIMUM SEPARATION BETWEEN ROOF DRAIN AND ANY UTILITY CROSSING. CONTRACTOR TO CALL CIVIL ENGINEER IF ANY CONFLICTS BETWEEN UTILITIES ARE FOUND.



LOCATION MAP

SCALE: 1" = 60'

ROOF DRAIN LEGEND

RD — PROPOSED ROOF LINE DRAIN
STM — PROPOSED STORM SEWER LINE
℄ — PROPERTY LINE

GRAPHIC SCALE
10 0 10

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

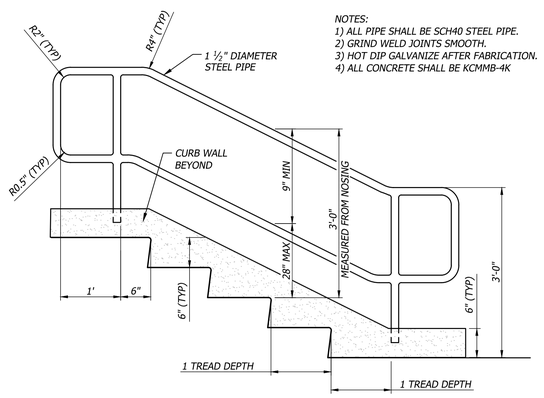
Project #: 211107

Final Development Plans

June 21, 2022

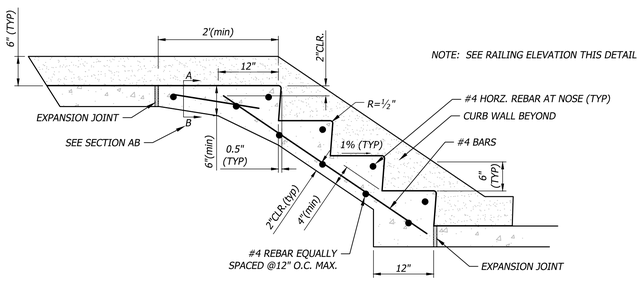
ROOF DRAIN PLAN

C6.8



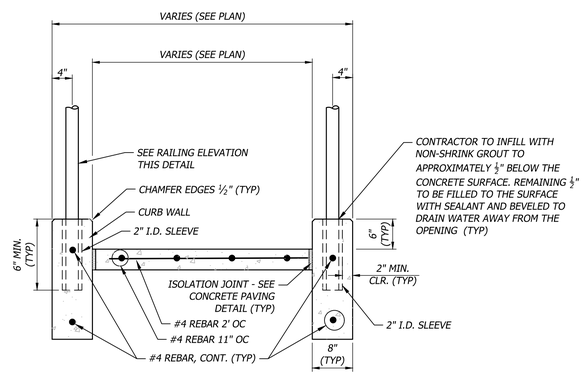
NOTES:
1) ALL PIPE SHALL BE SCH40 STEEL PIPE.
2) GRIND WELD JOINTS SMOOTH.
3) HOT DIP GALVANIZE AFTER FABRICATION.
4) ALL CONCRETE SHALL BE KCMMB-4K

HANDRAIL ELEVATIONS



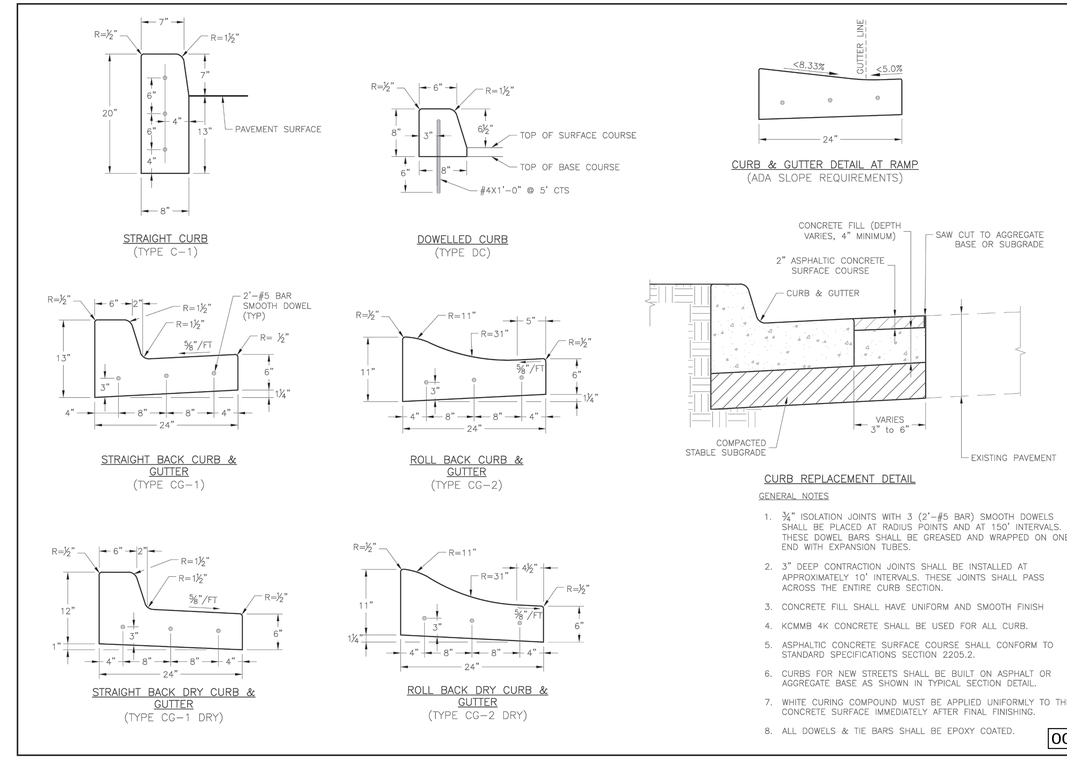
NOTE: SEE RAILING ELEVATION THIS DETAIL

SECTION



SECTION A-B

031 Concrete Stair & Stairs
Not to Scale



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 APPROXIMATELY 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.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

002 GEN-4

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 & GUTTER DETAIL

Drawn By: MGF
Checked By: DL
Date: 05/2021
Proj. #:

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final Development Plans

June 21, 2022

CONSTRUCTION DETAILS

C7.0

BHCR Project #: 033050

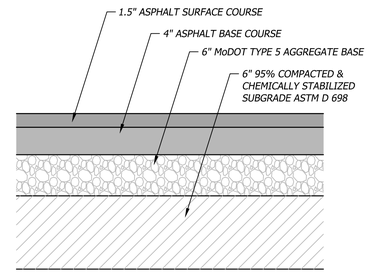
PAVEMENT SECTION NOTES

CONCRETE:

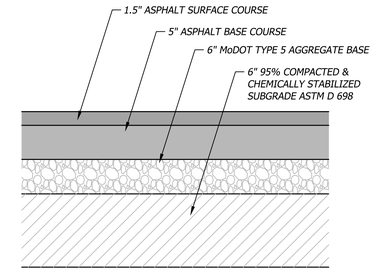
1. CONTROL JOINT SPACING SHALL MATCH WIDTH OF SIDEWALK/DRIVE.
2. ISOLATION JOINTS SHALL BE PLACED @ 250' CENTERS OR WHERE WALKS ABUT CURBS, BUILDINGS, ETC....
3. ALL EXTERIOR CONCRETE SHALL HAVE A BROOM FINISH.
4. MoDOT 3500 PSI AT 28 DAYS, 4-INCH MAXIMUM SLUMP AND 5%-7% AIR ENTRAINED, MIX.

ASPHALT:

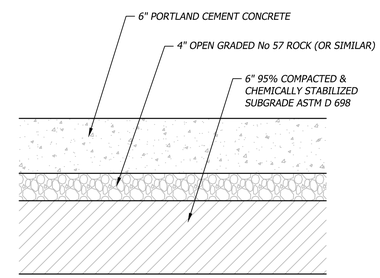
1. SHOP DRAWINGS FOR ASPHALT SHALL BE SUBMITTED PRIOR TO BATCHING. DENSITY TESTING FOR ASPHALT SHALL BE AT A MINIMUM OF 3 PER LIFT PER DAY DURING THE ASPHALT LAYING OPERATION. FINAL THICKNESS OF ASPHALT SHALL BE MEASURED AT 3 RANDOM LOCATIONS WITHIN THE SITE BY CORING THE PAVEMENT. THE AVERAGE OF THESE 3 CORES MUST BE GREATER THAN THE MINIMUM THICKNESS SPECIFIED IN THE PLANS.
2. ASPHALT PAVEMENT CONSTRUCTION SHALL ONLY COMMENCE WHEN AMBIENT TEMPERATURE IS 32 DEGREES FAHRENHEIT AND RISING.



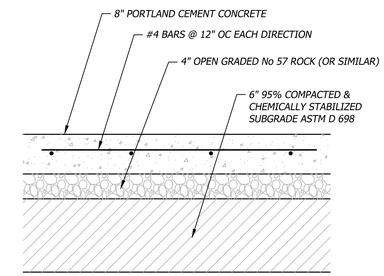
006 Medium Duty Asphalt Section
Not to Scale



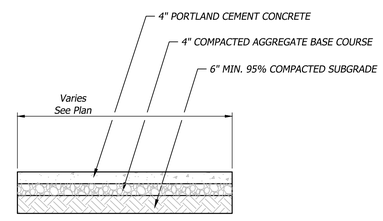
007 Heavy Duty Asphalt Section
Not to Scale



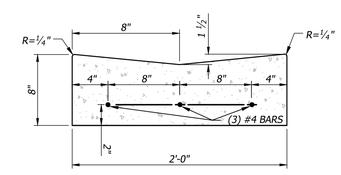
010 Medium Duty Concrete Section
Not to Scale



012 Concrete Dumpster Pad Section
Not to Scale



014 Concrete Sidewalk Section
Not to Scale



034 Concrete Valley Gutter
Not to Scale

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
08/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

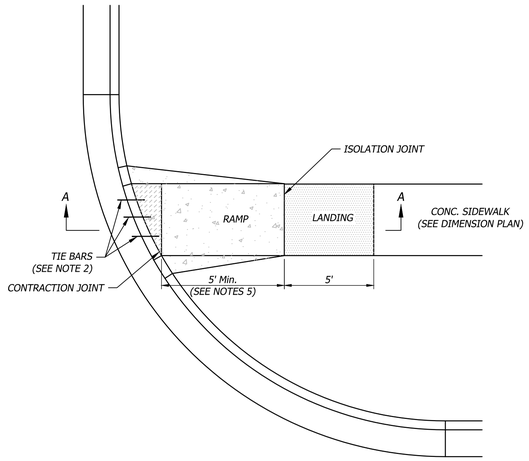
Project #: 211107

Final Development Plans

June 21, 2022

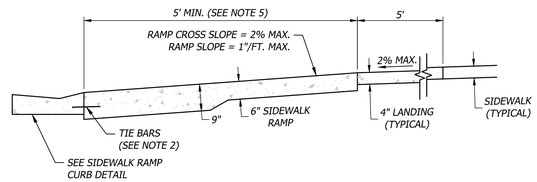
PAVEMENT DETAILS

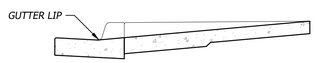
C7.1



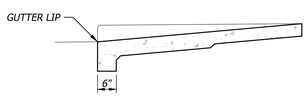
NOTES:

1. SIDEWALK RAMP LOCATION DETERMINED FROM THE INTERSECTION OF THE EXTENSION OF BACK OF SIDEWALK AND BACK OF CURB & GUTTER.
2. TIE BARS #4 EPOXY COATED @ 12"OC.
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. SIDEWALK RAMP SHALL BE LENGTHENED TO PROVIDE ADA COMPLIANCE SLOPE BUT NEED NOT EXCEED 15'.
6. ADA RAMP SLOPE MAX. = 1"/FT. ADA CROSS SLOPE MAX. = 2%.
7. SEE DETECTABLE WARNING DETAIL FOR THE INSTALLATION REQUIREMENTS.

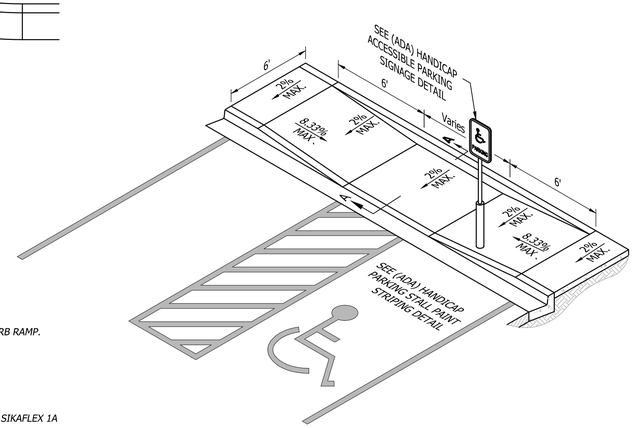




SECTION A-A



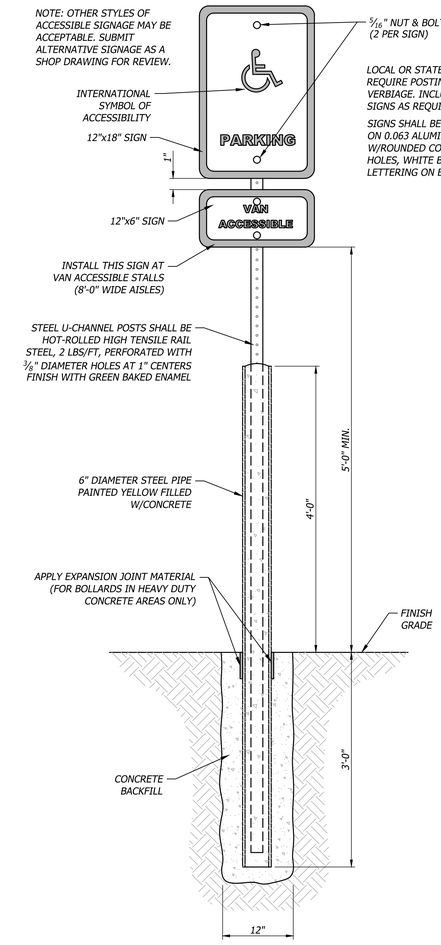
SECTION A-A
MONOLITHIC CURB & SIDEWALK



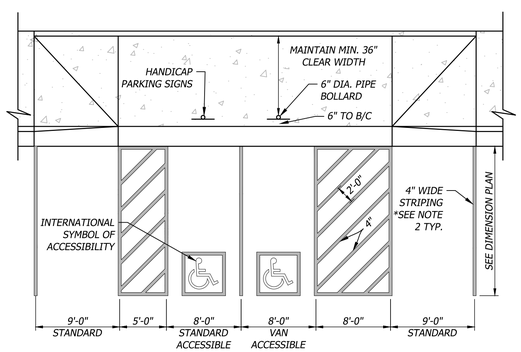
GENERAL NOTES:

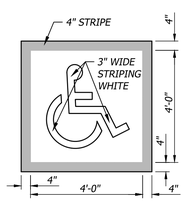
1. PLACE TRUNCATED DOME DETECTABLE WARNING PANELS @ BASE OF CURB RAMP. INSTALL ACROSS FULL WIDTH OF RAMP 24"MIN. DEPTH.
2. TOOLED JOINTS ARE REQUIRED AT ALL SIDEWALK RAMP SLOPE BREAKS.
3. THICKEN CONCRETE UNDER DETECTABLE WARNING PANEL.
4. IN FREEZE THAW ZONES, LEAVE $\frac{3}{16}$" GAP IN BETWEEN PANELS & SEAL W/ SIKAFLEX 1A SEALANT OR APPROVED EQUAL.

019 Sidewalk Ramp
Not to Scale



022 ADA Parking Signage
Not to Scale





INTERNATIONAL SYMBOL
OF ACCESSIBILITY

NOTE:

1. SEE SITE GRADING AND DRAINAGE PLAN FOR PAVEMENT AND CURB ELEVATIONS, AND ASSOCIATED ALLOWABLE SLOPES FOR ACCESSIBLE PARKING
2. PARKING STRIPING COLOR TO BE YELLOW ON CONCRETE AND WHITE ON ASPHALT.

021 ADA Parking Striping
Not to Scale

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

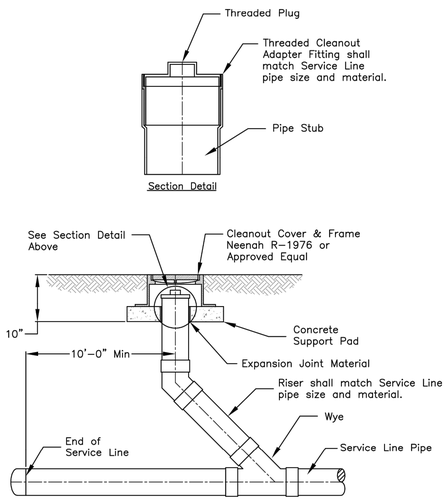
Final
Development Plans

June 21, 2022

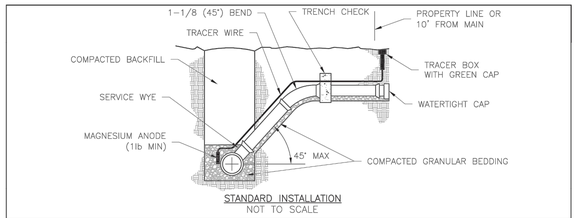
ADA DETAILS

C7.2

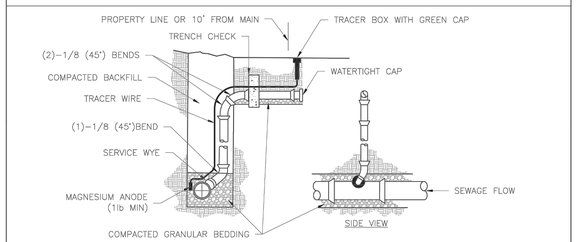
BHCR Project #: 033050



CLEANOUT DETAIL



STANDARD INSTALLATION
NOT TO SCALE



VERTICAL RISER
NOT TO SCALE

NOTES:
1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN, WHICHEVER IS GREATER. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.
2. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
3. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
8. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.

LS	LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063	Date: 12/2015 Drawn By: MJF Checked By: DL
	SANITARY SEWER STUB DETAIL	SAN-1

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

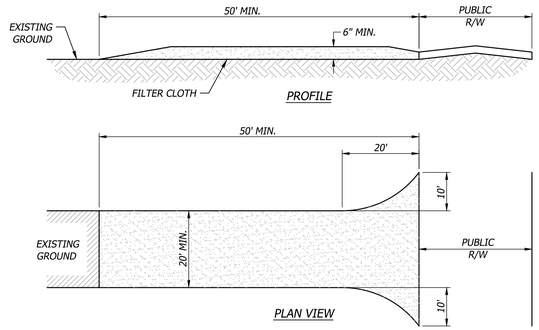
Final Development Plans

June 21, 2022

SANITARY DETAILS

C7.3

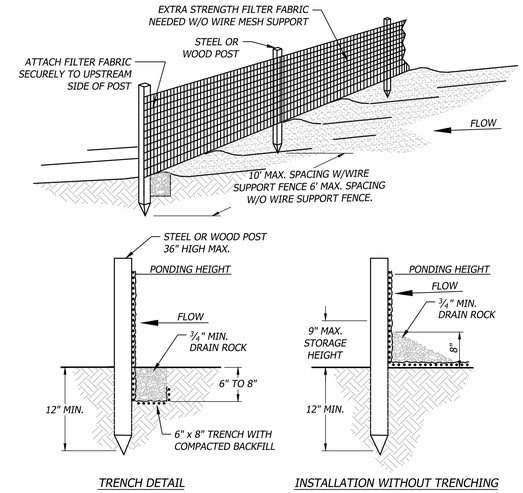
BHCR Project #: 033050



CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE - USE (2) INCH STONE, OR RECLAIMED OR RECYCLED EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN (50) FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AS NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

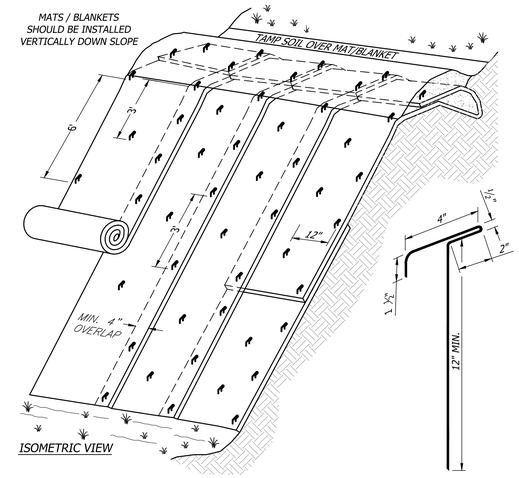
600 Temporary Construction Entrance
Not to Scale



NOTES:

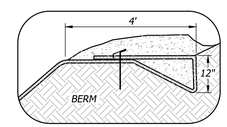
1. MUST BE INSTALLED PROPERLY TO AVOID NOTICE OF VIOLATION.
2. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE POUNDING EFFICIENCY.
3. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
4. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

601 Filter Fabric Silt Fence
Not to Scale

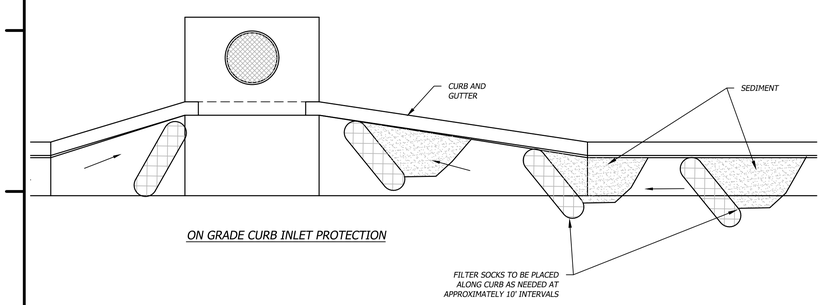


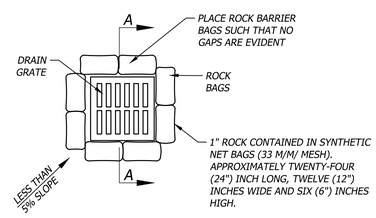
NOTES:

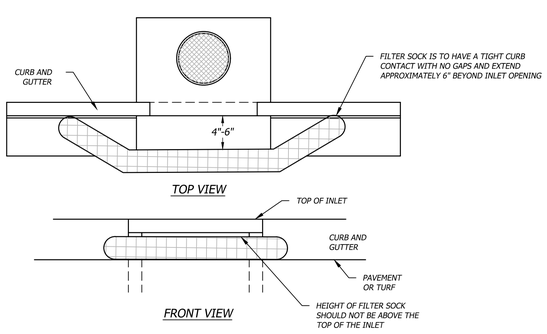
1. SLOPE SURFACE SHALL BE FREE OF ROCKS CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

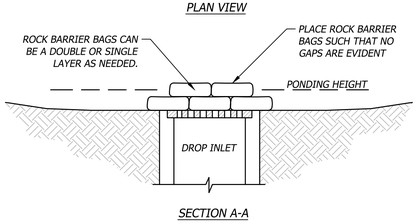


602 Steep Slope Protection
Not to Scale





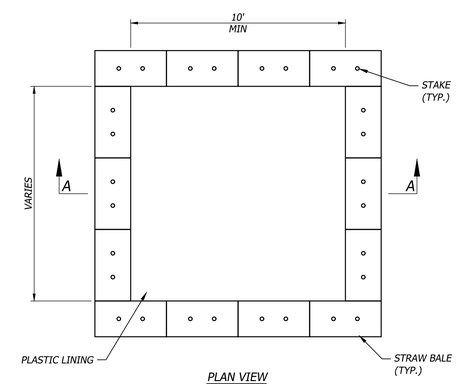


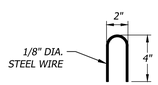


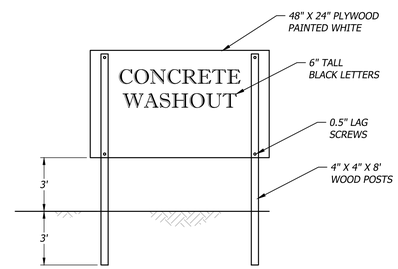
CATCH BASIN

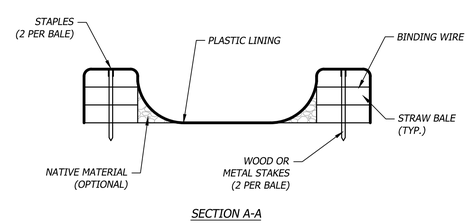
1. PLACE CURB TYPE ROCK BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY

603 Storm Inlet Protection
Not to Scale









NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY

604 Concrete Washout
Not to Scale

BHCR Project #: 033050

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

BHC
CIVIL ENGINEERING / SURVEYING / UTILITIES

STATE OF MISSOURI
AUSTIN K. LAGE
NUMBER PE-2021029127
06/22/2022
PROFESSIONAL ENGINEER

K-1 Speed Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

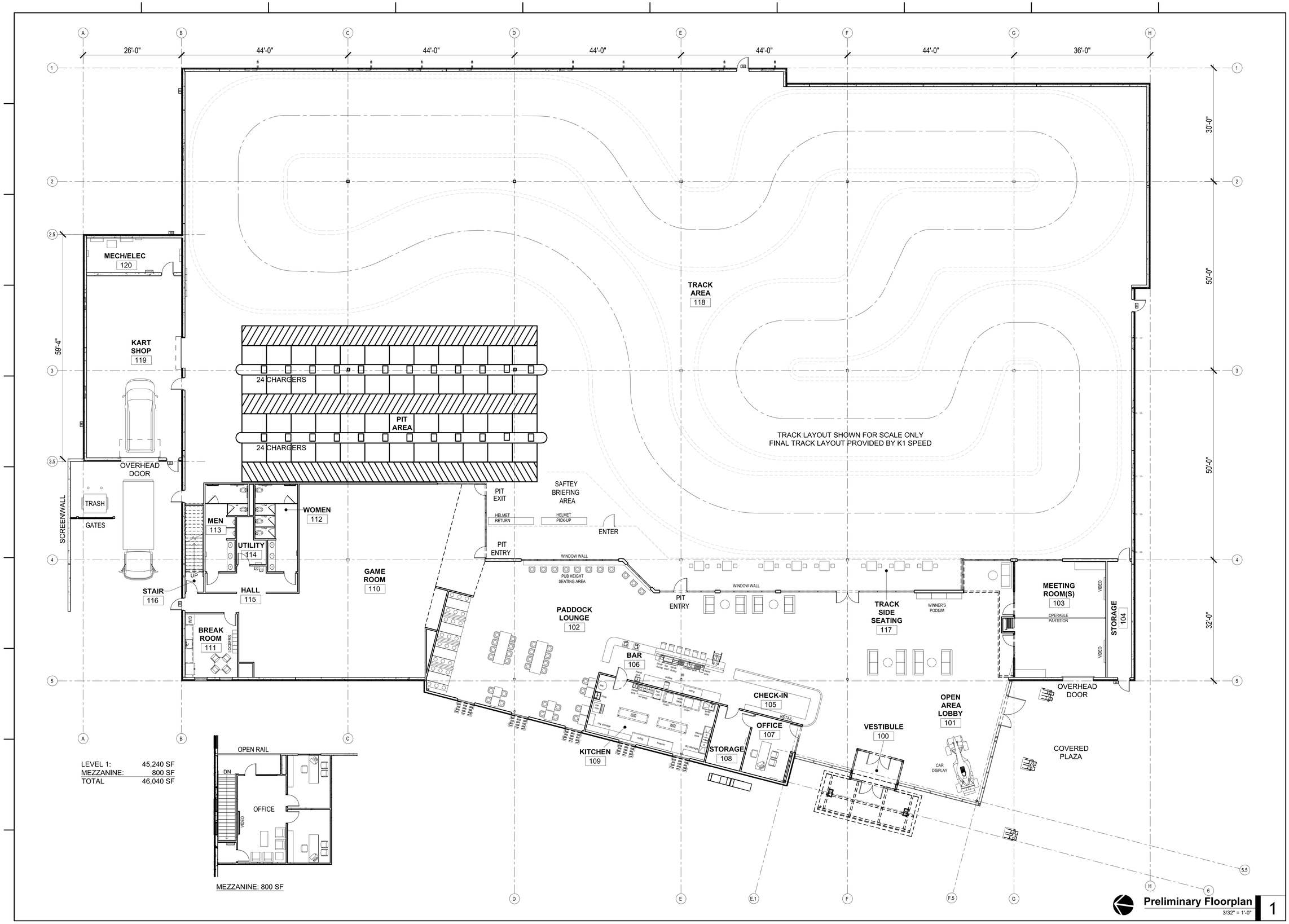
Project #: 211107

Final Development Plans

June 21, 2022

EROSION CONTROL DETAILS

C7.4



SAL

SLAGGIE ARCHITECTS, INC. © 2022

Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

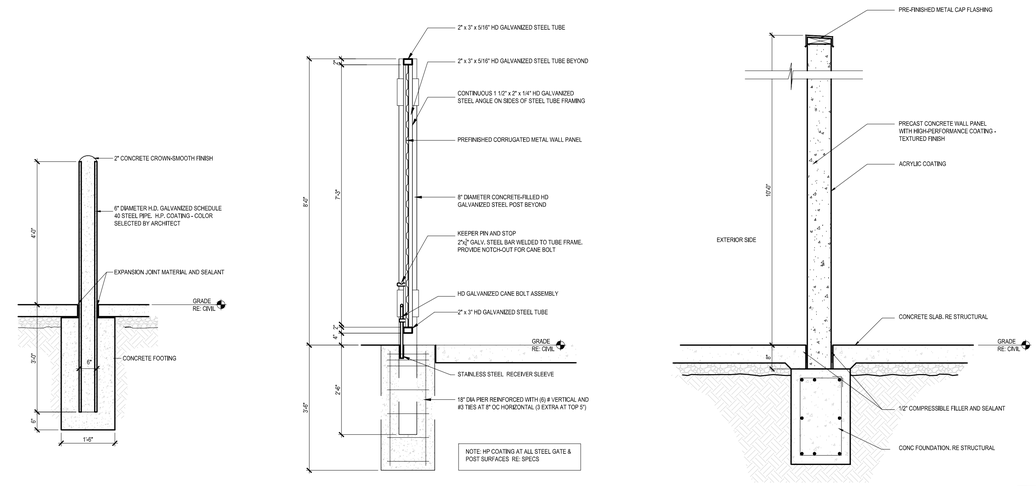
Project #: 211107

Final
Development Plan

20 June 2022

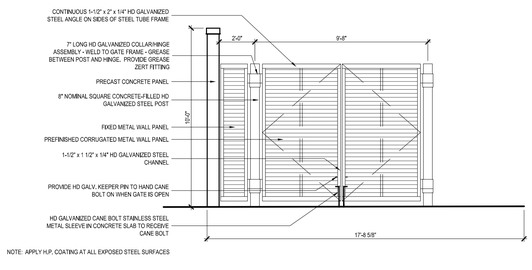
Preliminary
Floorplan

A100



Enlarged Trash Enclosure Details 2

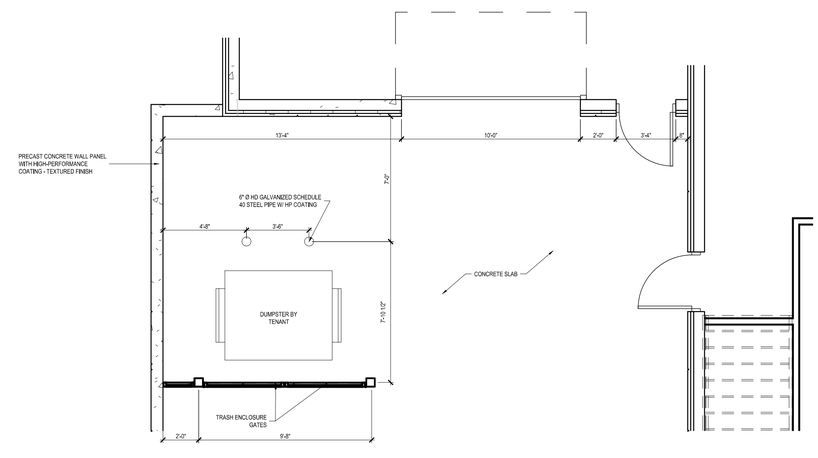
1/2" = 1'-0"



NOTE: APPLY H.P. COATING AT ALL EXPOSED STEEL SURFACES

Enlarged Trash Enclosure Elevation 3

1/4" = 1'-0"



Enlarged Trash Enclosure Plan 1

1/4" = 1'-0"

SAL

SLAGGIE ARCHITECTS, INC. © 2022

Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

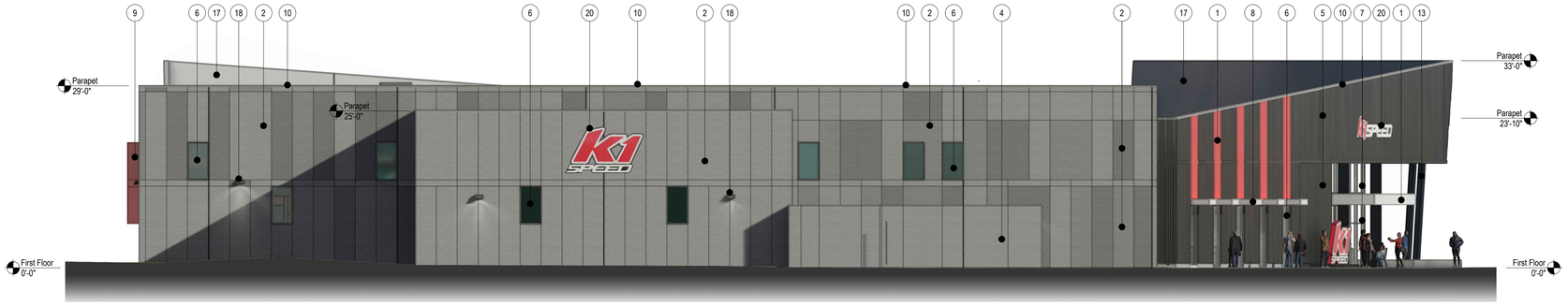
Project #: 211107

Final
Development Plan

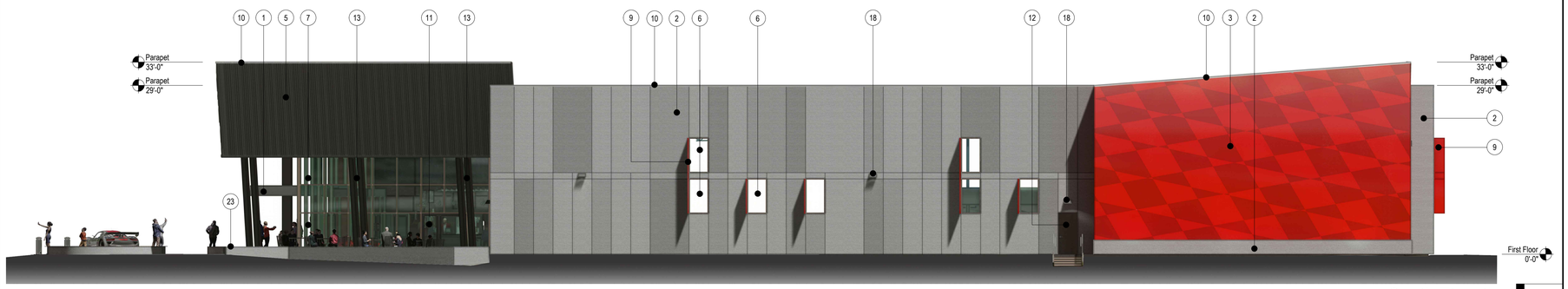
20 June 2022

Trash Enclosure
Details

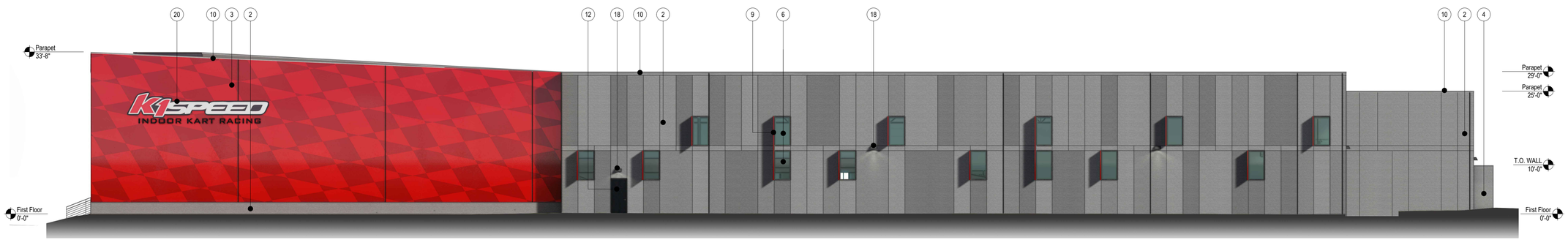
A101



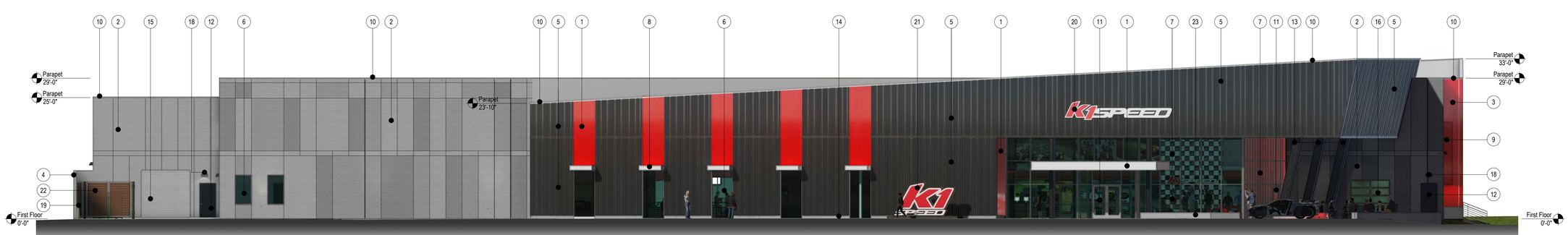
North Elevation 3/32" = 1'-0" **4**



South Elevation 3/32" = 1'-0" **3**



East Elevation 3/32" = 1'-0" **2**



West Elevation 3/32" = 1'-0" **1**

MATERIALS LEGEND

1. ALUMINUM COMPOSITE METAL WALL PANEL
2. SITE CAST TILT-UP CONCRETE WALL PANEL WITH ACRYLIC COATING - TEXTURED FINISH (3 COLOR TONES)
3. SITE CAST TILT-UP CONCRETE WALL PANEL WITH ACRYLIC COATING - SMOOTH FINISH (2 COLOR TONES)
4. SITE CAST TILT-UP CONCRETE SCREEN WALL WITH ACRYLIC COATING - TEXTURED FINISH
5. PRE-FINISHED METAL WALL PANEL SYSTEM
6. ALUMINUM STOREFRONT SYSTEM WITH LOW-E GLAZING - GLAZING TO BE TRANSLUCENT AT KITCHEN, KARTSHOP & TRACK AREAS
7. ALUMINUM CURTAINWALL SYSTEM WITH LOW-E GLAZING
8. PRE-FINISHED METAL CANOPY SYSTEM
9. HD GALVANIZED STRUCTURAL STEEL VERTICAL SUNSHADE SYSTEM WITH HIGH PERFORMANCE COATING
10. PRE-FINISHED METAL COPING
11. ALUMINUM/GLASS STOREFRONT DOOR(S)
12. FLUSH HOLLOW CORE STEEL DOOR
13. STRUCTURAL STEEL COLUMNS WITH PRE-FINISHED METAL PANEL SYSTEM COLUMN WRAP
14. EXPOSED CONCRETE CURB WITH ARCHITECTURAL RUBBED FINISH
15. INSULATED COILING STEEL OVERHEAD DOOR
16. ALUMINUM FRAME GLASS OVERHEAD DOOR
17. EXTERIOR INSULATED FINISH SYSTEM - WALL
18. WALL-MOUNTED EXTERIOR LIGHTING
19. 6" HD GALVANIZED CONCRETE FILLED STEEL PIPE BOLLARD WITH HP COATING
20. INTERNALLY ILLUMINATED BUILDING MOUNTED SIGNAGE - ALL SIGNAGE TO CONFORM TO CITY SIGNAGE REQUIREMENTS AND SUBMITTED FOR REVIEW UNDER A SEPARATE APPLICATION
21. FREESTANDING PHOTO OPPORTUNITY LOCATION
22. TRASH ENCLOSURE GATE - PRE-FINISHED METAL PANEL IN HD GALVANIZED STEEL FRAME
23. SITE CAST CONCRETE SEAT WALL

NOTE:
1. ALL ROOF-MOUNTED EQUIPMENT SHALL BE SCREENED ENTIRELY FROM VIEW.
2. DEVELOPER TO STUDY THE FEASIBILITY OF USING ROOF PANEL SOLAR ENERGY. SIZE AND FINAL LOCATION OF ROOF PANELS TO BE DETERMINED.
3. ARCHITECTURAL ELEVATION NOTATION 0'-0" TO CORRESPOND WITH A SPECIFIC CIVIL ELEVATION.

SLAGGIE ARCHITECTS, INC. © 2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final
Development Plan

20 June 2022

Preliminary
Exterior Elevations

A200

SAI
SLAGGIE
ARCHITECTS INC

K1 Speed FDP - Exterior Renderings

Lee's Summit, MO

SAI# 211107 **06.20.2022**

SAI
SLAGGIE
ARCHITECTS INC

K1 Speed FDP - Exterior Renderings

Lee's Summit, MO

SAI# 211107 **06.20.2022**

LEE'S SUMMIT LANDSCAPE REQUIREMENTS

INTERIOR PARKING LOT LANDSCAPING

CODE REQUIREMENT	
	PER SEC. 8.810 (A-C) LANDSCAPE ISLANDS, STRIPS OR OTHER PLANTING AREAS SHALL BE LOCATED WITHIN THE PARKING LOT AND SHALL CONSTITUTE AT LEAST FIVE PERCENT OF THE ENTIRE AREA DEVOTED TO PARKING SPACES, AISLES AND DRIVEWAYS. EVERY FOUR ROWS OF PARKING SHALL INCLUDE A LANDSCAPE ISLAND OF AT LEAST TEN FEET IN WIDTH.THE ISLAND SHALL BE PLANTED IN TREES, SHRUBS, GRASS, OR GROUND COVER, EXCEPT FOR THOSE AREAS THAT ARE MULCHED.

REQUIREMENT AREA	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
+/- 45,000 SF INTERIOR PARKING LOT AREA	45,000 X .05 = 2,250 2,250 // 180 (ISLAND AREA)= 12.5 = 13	14 TREES + SHRUBS, GRASS, OR GROUNDCOVER	14 TREES + PARKING LOT SHRUBS PROVIDED

PARKING LOT SCREENING

CODE REQUIREMENT	
	PER SEC. 8.820 (A-C) FOR ANY PARKING LOT DESIGNED TO ACCOMMODATE 5 CARS OR MORE- IF SUCH PARKING LOT OR LOADING AREA IS VISIBLE FROM A STREET ROW, A VISUAL SCREEN SHALL BE PROVIDED. SCREENING TO A HEIGHT OF 2.5' MUST BE PROVIDED ALONG THE EDGE OF THE PARKING LOT OR LOADING AREA CLOSEST TO AND PARALLEL TO THE STREET. SCREENING SHALL BE DECORATIVE AND 100% OPAQUE TO A HT OF 2.5' ABOVE THE ELEVATION OF THE PARKING AREA OR THE STREET (HIGHEST). PLANTED ONLY- A HEDGE CONSISTING OF AT LEAST 12 SHRUBS PER 40 LF THAT WILL SPREAD INTO A CONTINUOUS VISUAL SCREEN WITHIN 2 GROWING SEASONS. SHRUBS MUST BE AT LEAST 18" TALL AT THE TIME OF PLANTING AND BE OF A SPECIES THAT WILL NORMALLY GROW TO AT LEAST 2.5' IN HT AT MATURITY AND BE SUITABLE FOR THE PARKING LOT APPLICATION. THE STREET-SIDE SCREENING TREATMENT MAY BE LOCATED WITHIN THE LANDSCAPE STRIP REQUIRED UNDER THIS DIVISION ALONG THE FRONT YARD OF THE PROPERTY.

REQUIREMENT AREA	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
- NE INDEPENDENCE AV = 184 LF	184 / 40 = 4.6 x 12 = 55	55 SHRUBS (+ 9 SHRUBS PER STREET FRONTAGE LANDSCAPING REQD = 64 TOTAL	83 SHRUBS

STREET FRONTAGE LANDSCAPING

CODE REQUIREMENT	
	PER SEC. 8.790-A(1-3) 1 TREE SHALL BE PLANTED FOR EACH 30 FT OF STREET FRONTAGE, PUBLIC OR PRIVATE, WITHIN THE LANDSCAPED SETBACK ABUTTING SAID STREET FRONTAGE. SUCH TREES MAY BE CLUSTERED OR ARRANGED WITHIN THE SETBACK. IF APPROVED AS PART OF THE LANDSCAPE PLAN. A MINIMUM 20-FOOT-WIDE LANDSCAPE STRIP SHALL BE PROVIDED ALONG THE FULL LENGTH OF ANY STREET FRONTAGE, EXCEPT WHERE THE BUILDING SETBACK IS LESS THAN 20 FEET.2.IN COMMERCIAL AND INDUSTRIAL DISTRICTS, ANY PARKING OR LOADING AREA VISIBLE FROM A STREET SHALL BE SEPARATED FROM THE STREET RIGHT-OF WAY WITH A LANDSCAPE STRIP AT LEAST 20 FEET WIDE. 1 SHRUB SHALL BE PROVIDED FOR EACH 20 FEET OF STREET FRONTAGE, OR PORTION THEREOF, WITHIN THE LANDSCAPED SETBACK ABUTTING SUCH FRONTAGE. SUCH SHRUBS MAY BE CLUSTERED OR ARRANGED WITHIN THE SETBACK.

REQUIREMENT AREA	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
NE INDEPENDENCE AV= 184 LF PRIVATE RD= 222 LF	184 / 30 = 6 // 184/20 = 9 222 / 30 = 8 // 222/20 = 12	- 6 TREES + 9 SHRUBS - 8 TREES + 12 SHRUBS	- 8 TREES + 83 SHRUBS - 8 TREES + 16 SHRUBS

OPEN YARD AREAS

CODE REQUIREMENT	
	PER SEC. 8.790-B(1-3) THE MIN. OPEN YARD AREA LANDSCAPING REQUIREMENTS SHALL BE TWO SHRUBS PER 5,000 SQUARE FEET OF TOTAL LOT AREA- EXCLUDING BUILDING FOOTPRINT AREA. ALL PORTIONS OF THE SITE NOT COVERED WITH PAVING OR BUILDINGS SHALL BE LANDSCAPED. OPEN AREAS NOT COVERED WITH OTHER MATERIALS SHALL BE COVERED WITH SOD. GROUND COVER SHALL BE UTILIZED ON ALL SLOPES IN EXCESS OF 3:1 SLOPE. IN ADDITION TO THE TREES REQUIRED BASED UPON STREET FRONTAGE, ADDITIONAL TREES SHALL BE REQUIRED AT A RATIO OF 1 TREE FOR EVERY 5,000 SF OF LOT AREA NOT COVERED BY BUILDINGS/STRUCTURES.

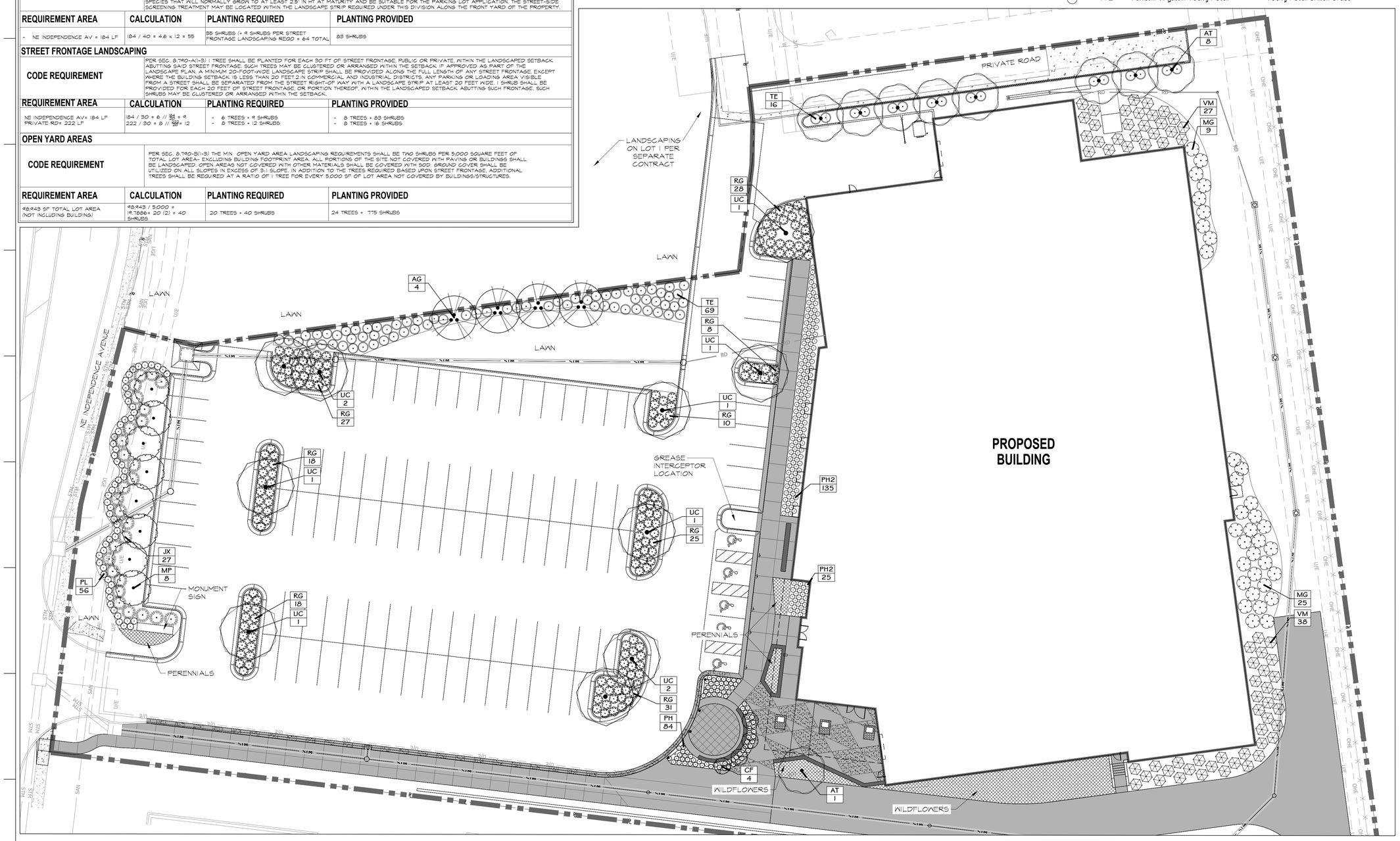
REQUIREMENT AREA	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
98,443 SF TOTAL LOT AREA (NOT INCLUDING BUILDING)	98,443 / 5,000 = 19.7886= 20 (2) = 40 SHRUBS	20 TREES + 40 SHRUBS	24 TREES + 775 SHRUBS

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE
	AT	Acer truncatum	Shantung Maple	---
	AG	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	---
	CF	Carpinus betulus 'Frans Fontaine'	Frans Fontaine Hornbeam	---
	MP	Malus x 'Prairifire'	Prairifire Crabapple	---
	UC	Ulmus x 'Frontier'	Frontier Elm	---

PLANT SCHEDULE

SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE
	JX	Juniperus x 'Grey Owl'	Grey Owl Juniper	---
	MG	Miscanthus sinensis 'Gracillimus'	Maiden Grass	---
	PL	Physocarpus opulifolius 'Podaras 3' TM	Lemon Candy Dwarf Ninebark	---
	RG	Rhus aromatica 'Gro-Low'	Gro-Low Sumac	---
	TE	Taxus x media 'Everlow'	Everlow Anglo-Japanese Yew	---
	VM	Viburnum dentatum 'Blue Muffin'	Blue Muffin Viburnum	---
GRASSES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
	PH2	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	---



LANDSCAPE PLAN 1

SCALE: 1"=20'

0 20 40 60 feet

SCALE: 1" = 20'

SAL SLAGGIE ARCHITECTS, INC. ©2021
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex

Lot 4C Strother Crossing
Lots 4A-4C Lee's Summit, MO

#	Revisions:
01	PDP- CITY COMMENTS 03/15/2022

Project #: 211107

Preliminary Landscape Plan

10 February 2022

LANDSCAPE PLAN

L100

DECIDUOUS TREE PLANTING NOTES:

1) DO NOT HEAVILY PRUNE THE TREE AT PRUNING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS & UNBROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS & LATERAL BRANCHES MAY BE PRUNED IF REQUIRED. DO NOT REMOVE THE TERMINAL BUDS OF THE BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

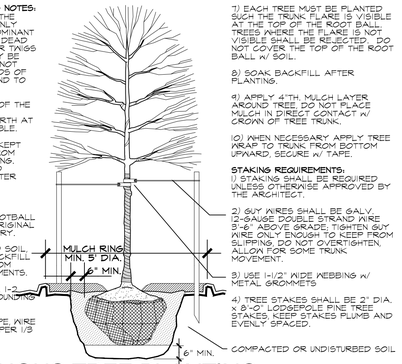
2) MARK THE NORTH SIDE OF THE TREE IN THE NURSERY AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.

3) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.

4) PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY. PLACE ROOTBALL ON UNEXCAVATED OR TAMPED SOIL. TYP. SCARIFY HOLE & BACKFILL WITH SOIL EXCAVATED FROM HOLE & SPECIFIED AMENDMENTS.

5) SET TOP OF ROOT BALL 1-2 INCHES HIGHER THAN SURROUNDING GRADE.

6) REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM THE UPPER 1/3 OF THE ROOTBALL.



7) EACH TREE MUST BE PLANTED SUCH THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL W/ SOIL.

8) SOAK BACKFILL AFTER PLANTING.

9) APPLY 4"TH. MULCH LAYER AROUND TREE. DO NOT PLACE MULCH IN DIRECT CONTACT W/ CROWN OF TREE TRUNK.

10) WHEN NECESSARY APPLY TREE WRAP TO TRUNK FROM BOTTOM UPWARD, SECURE W/ TAPE.

STAKING REQUIREMENTS:

1) STAKING SHALL BE REQUIRED UNLESS OTHERWISE APPROVED BY THE ARCHITECT.

2) GUY WIRES SHALL BE GALV. 12-GAUGE DOUBLE STRAND WIRE 3'-6" ABOVE GRADE; TIGHTEN GUY WIRE ONLY ENOUGH TO KEEP FROM SLIPPING. DO NOT OVERTIGHTEN. ALLOW FOR SOME TRUNK MOVEMENT.

3) USE 1-1/2" WIDE WEBBING W/ METAL GROMMETS

4) TREE STAKES SHALL BE 2" DIA. X 8'-0" LODGEPOLE PINE TREE STAKES. KEEP STAKES PLUMB AND EVENLY SPACED.

COMPACTED OR UNDISTURBED SOIL

1 DECIDUOUS TREE PLANTING

SCALE: N.T.S.

PERENNIAL PLANTING NOTES:

1) BREAK UP EXISTING TOPSOIL TO A DEPTH OF 24"

2) PROVIDE NEW TOPSOIL TO A DEPTH OF 18"

3) THOROUGHLY MIX PEAT IN TOP 3-4" OF SOIL

4) DO NOT ALLOW PERENNIALS TO DRY OUT. KEEP MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING.

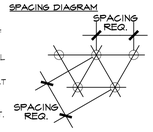
5) PLACE PLANT IN VERTICAL PLUMB POSITION

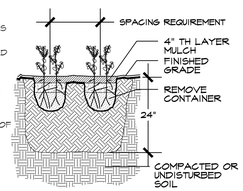
6) DIG HOLE AS DEEP AS INITIAL ROOT SYSTEM

7) BACKFILL W/ SOIL AND PACK FIRMLY BY HAND. ADD ROOT STIMULATOR PER MANUFACTURER'S RECOMMENDATIONS. WATER THOROUGHLY TO FINISH PACKING SOIL AROUND ROOTS.

8) APPLY 4" TH LAYER OF MULCH ON PERENNIAL PLANT BED. DO NOT COVER PLANTS

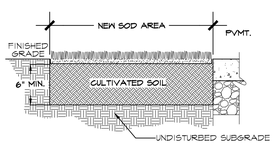
SPACING DIAGRAM





2 PERENNIAL PLANTING

SCALE: N.T.S.



SOD INSTALLATION NOTES:

1) FINISHED GRADES SHALL BE ACCURATE.

2) CULTIVATE ENTIRE AREA TO A MINIMUM 6" DEPTH. EXCEPTIONS TO AREAS MAY BE MADE IF TREE ROOTS ARE ENCOUNTERED WITHIN THE DRIPLINE OF EXISTING TREES. HAND RAKE SMOOTH.

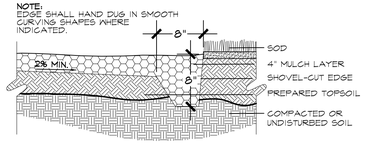
3) ADD ADDITIVES (AS PER SOIL TEST RECOMMENDATIONS) AND TILL INTO SOIL.

4) LAY AND ROLL SOD. WATER THOROUGHLY.

3 SOD INSTALLATION

SCALE: N.T.S.

NOTE:
EDGE SHALL HAND DUG IN SMOOTH CURVING SHAPES WHERE INDICATED.



4 SHOVEL-CUT EDGING

SCALE: N.T.S.

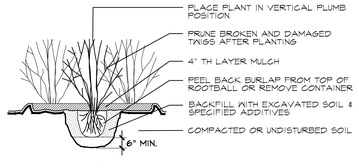
SHRUB PLANTING NOTES:

1) SET SHRUB AT SAME DEPTH AT WHICH IT GREW IN THE FIELD OR CONTAINER.

2) PRUNE, THIN & SHAPE SHRUBS IN ACCORDANCE W/ STANDARD HORTICULTURAL PRACTICE

3) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.

4) WHEN BACKFILL IS 2/3 COMPLETE, WATER THOROUGHLY UNTIL NO MORE IS ABSORBED.



5 SHRUB PLANTING

SCALE: N.T.S.

PLANTING REQUIREMENTS

PLANT SIZE (PER LEE'S SUMMIT)	SIZE REQUIREMENT (AT TIME OF PLANTING)
TREES	
DECIDUOUS TREES	MINIMUM 3" CALIPER MEASURED AT 6" ABOVE THE GROUND OR TOP OF THE ROOT BALL
EVERGREEN TREES	MINIMUM HEIGHT OF 8 FT
EXISTING DECIDUOUS TREES	MINIMUM 2" CALIPER
EXISTING EVERGREEN TREES	MINIMUM HEIGHT OF 6 FT
GROUND COVER	
GROUND COVER (ALL TYPES)	TWO AND ONE-HALF-INCH PEAT POT
SHRUBS	
MEDIUM SHRUBS	18- TO 24-INCH BALLED AND BURLAPPED OR TWO-GALLON CONTAINER
LARGE SHRUBS	24- TO 30-INCH BALLED AND BURLAPPED OR 5-GALLON CONTAINER

GENERAL NOTES

1. THE LANDSCAPE CONTRACTOR SHALL READ ALL LANDSCAPE PLANS, SPECIFICATIONS AND VISIT THE PROJECT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT.

2. ANY AND ALL QUESTIONS CONCERNING THE LANDSCAPE PLANS AND SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT.

3. THE LANDSCAPE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES (INCLUDING THOSE INDICATED ON THE PLAN) PRIOR TO INSTALLATION OF PLANT MATERIAL.

4. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING, MULCHING, AND OTHER REQUIREMENTS OF PLANT MATERIALS WHILE THEY ARE TEMPORARILY STORED ON OR OFF SITE.

5. THE LANDSCAPE CONTRACTOR SHALL COORDINATE LAYOUT OF PLANTING BEDS, PLANT MASSING, STAKED LOCATION OF TREES AND INSTALLATION OF PLANT MATERIAL WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.

6. ALL PLANT MATERIAL (EXCEPT SHADE TREES) IS DELINEATED AT MATURE SIZE OF PLANT MATERIAL. SHADE TREES ARE DELINEATED AT 85% OF ACTUAL MATURE SIZE.

7. ALL LANDSCAPE MATERIAL SHALL MEET THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-1996) PER THE AMERICAN ASSOCIATION OF NURSERYMEN.

8. PER OWNER'S DIRECTION, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT ALL PLANT MATERIAL AT THE NURSERY, PRIOR TO SELECTION OR DIGGING.

9. CONDUCT PLANTING UNDER FAVORABLE WEATHER CONDITIONS DURING EITHER THE SPRING PLANTING SEASON, MARCH 1 TO JUNE 1, OR THE FALL PLANTING SEASON, SEPTEMBER 30 UNTIL FREEZING OF THE GROUND. DURING THE FALL PLANTING SEASON, PLANTING SHALL BE CONDUCTED AUGUST 15 TO OCTOBER 1. DEVIATION FROM THE ABOVE PLANTING DATES WILL ONLY BE PERMITTED WITH APPROVAL IN WRITING BY THE LANDSCAPE ARCHITECT.

10. THE PLANTING SOIL MIXTURE FOR ALL TREE PLANTINGS SHALL INCLUDE SOIL EXCAVATED FROM THE HOLE. RATIO: 50% VIRGIN SOIL + 50% AMENDED TOP SOIL.

11. ROOT STIMULATOR SHALL BE APPLIED TO ALL PLANT MATERIALS WITH THE EXCEPTION OF LAWN AREAS.°°APPLY°AS°PER°THE MANUFACTURERS SPECIFICATIONS.

12. THE LANDSCAPE CONTRACTOR SHALL RESTORE FINISH GRADES IN ALL PLANTING AREAS (PER GRADING PLANS) WHICH MAY HAVE BEEN DISTURBED DURING PLANTING OPERATIONS.

13. ALL TREE SAUCERS AND PLANTING BEDS ARE TO BE MULCHED WITH A MINIMUM OF 4" DOUBLE-GROUND HARDWOOD MULCH (COLOR DYED DARK BROWN). LANDSCAPE CONTRACTOR TO PROVIDE MULCH SAMPLE TO LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION. WHERE PLANTING BEDS ARE ADJACENT TO WALKS AND CURBS THE SOIL LEVEL SHALL BE 3" LOWER TO ALLOW FOR MULCH LAYER. WHERE SOD IS INDICATED, ITS THICKNESS SHALL ALSO BE ACCOUNTED FOR SO THAT THE SOIL SURFACE IN THE SOD IS 1/2" BELOW THE HARDSCAPE SURFACE.

14. THE LANDSCAPE CONTRACTOR SHALL READ ALL LANDSCAPE PLANS, SPECIFICATIONS AND VISIT THE PROJECT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT.

15. ALL SHRUB/PERENNIAL PLANTING BEDS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE SUCH AS TREFLAN OR EQUAL. APPLY PER MANUFACTURER'S SPECIFICATIONS. THE PRE-EMERGENT°SHALL°NOT BE APPLIED UNTIL AFTER ALL PLANTING WITHIN THESE AREAS IS COMPLETE, BUT BEFORE THESE AREAS ARE MULCHED. DO NOT DISTURB AREAS AFTER APPLICATION. WATER IN AS DIRECTED.

16. MULCH, STAKES, GUY WIRE, PRE-EMERGENT HERBICIDES, ETC. SHALL BE SUBSIDIARY TO INDIVIDUAL PLANTS.

17. ALL SLOPES THAT EXCEED A 3:1 GRADE SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET WITH NORTH AMERICAN GREEN S150. INSTALL PER THE MANUFACTURER'S SPECIFICATIONS.

18. LABEL EACH TREE AND SHRUB WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTH BOTANICAL AND COMMON NAME. LABEL EACH ORNAMENTAL GRASS, GROUNDCOVER, PERENNIAL AND ANNUAL WITH THE LABEL PROVIDED BY THE ORIGINAL GROWER OF THE PLANT. LABELS SHALL NOT BE REMOVED UNTIL AFTER PROVISIONAL ACCEPTANCE BY LANDSCAPE ARCHITECT.

19. STAKES AND GUY WIRES SHALL BE REMOVED AT THE END OF ONE FULL GROWING SEASON.

20. LOOSEN SOIL FOR ALL PLANTING ISLANDS AND SHRUB/PERENNIAL BEDS TO A DEPTH OF 12". ALL AREAS DENOTED AS SOD (LAWN AREAS) SHALL HAVE A 6" MINIMUM TOPSOIL LAYER. TOPSOIL SHALL BE LAID IN 3" LIFTS. IN AREAS WHERE CONSTRUCTION GRADING HAS NOT OCCURRED AND THE VIRGIN GRADES YET EXIST, THE TOPSOIL LAYER MAY NOT BE REQUIRED BASED ON THE DECISION OF THE LANDSCAPE ARCHITECT.

21. TOPSOIL SHALL BE FERTILE NATURAL TOPSOIL, TYPICAL OF THE LOCALITY, OBTAINED FROM WELL DRAINED AREAS. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF STONES, LUMPS, STICKS, PLANTS OR THEIR ROOTS, TOXIC SUBSTANCES OR OTHER EXTRANEOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL PH RANGE SHALL BE 5.5 TO 7.0.

22. THERE SHALL BE NO ADDITIONS, DELETIONS OR SUBSTITUTION OF PLANT MATERIAL SPECIES WITHOUT THE WRITTEN APPROVAL BY THE OWNER OR LANDSCAPE ARCHITECT. ANY SUBSTITUTION THAT HAS NOT BEEN APPROVED SHALL BE REMOVED AND REPLACED WITH THE CORRECT PLANT AT LANDSCAPE CONTRACTOR'S EXPENSE.

23. IN THE CONDITION WHERE THE PLANT MATERIAL HAS BEEN SUPPLIED BY THE OWNER THROUGH A PLANT PROCUREMENT PROGRAM WITH A MYKE PRO 2-YEAR WARRANTY, THE LANDSCAPE CONTRACTOR'S WARRANTY OF PLANT MATERIAL SHALL BEGIN FROM THE TIME OF HANDLING PLANT MATERIAL AT TIME OF DELIVERY THROUGH INSTALLATION AND END AFTER SUBSTANTIAL COMPLETION AND FINAL PUNCH-LIST APPROVAL BY LANDSCAPE ARCHITECT.

24. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR THE COLLECTION, REMOVAL, AND PROPER DISPOSAL OF ANY AND ALL DEBRIS GENERATED DURING THE INSTALLATION OF THE LANDSCAPE CONSTRUCTION.

25. IRRIGATION SYSTEM SHALL UTILIZE A RAIN SENSOR. DRIP IRRIGATION SHALL BE UTILIZED AT LANDSCAPE BEDS.

26. COORDINATE WITH THE OWNER AND GENERAL CONTRACTOR FOR SLEEVE LOCATIONS AND TIMING OF SLEEVE INSTALLATION. ALL SLEEVING REQUIRED UNDER HARDSCAPE SURFACES FOR THE IRRIGATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.

27. COORDINATE LANDSCAPE PLANTING WITH IRRIGATION CONTRACTOR. THE TREE PLANTINGS SHALL BE IN PLACE BEFORE IRRIGATION LINE ROUTING BEGINS. WATER TREES BY HAND UNTIL IRRIGATION SYSTEM IS FULLY FUNCTIONAL. SHRUBS AND PERENNIALS SHALL NOT BE INSTALLED UNTIL THE IRRIGATION SYSTEM IS FULLY FUNCTIONAL. THE IRRIGATION SYSTEM SHALL BE COMPLETE AND FULLY FUNCTIONAL IN ALL LAWN AREAS BEFORE SOD IS PLACED.

28. THE OWNER OF FEE TITLE TO ANY PROPERTY ON WHICH PLANT MATERIAL HAS BEEN ESTABLISHED IN ACCORDANCE WITH AN APPROVED LANDSCAPE/PLANTING PLAN, SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR AND REPLACEMENT OF THE APPROVED PLANT MATERIAL, AS REQUIRED BY THE ORDINANCE.

SAL
SLAGGIE ARCHITECTS, INC. ©2021
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
Lot 4C Strother Crossing
Lots 4A-4C Lee's Summit, MO

#	Revisions:
01	PDP- CITY COMMENTS 03/15/2022

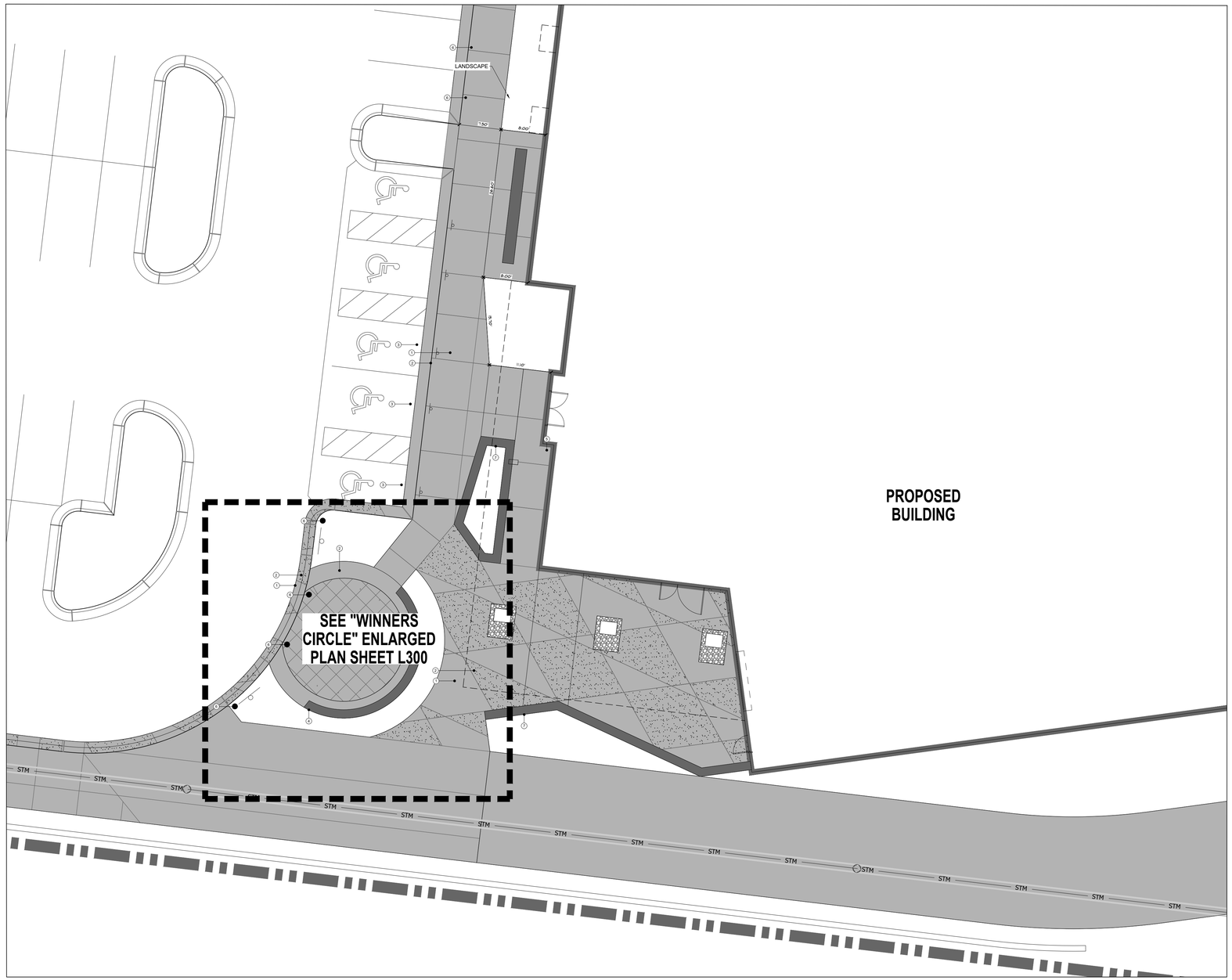
Project #: 211107

Preliminary
Landscape Plan

10 February 2022

LANDSCAPE NOTES & DETAILS

L101



LAYOUT PLAN 1

SCALE:1"=10'

0 10 20 30 feet

SCALE: 1" = 10'

LEGEND

- CONCRETE PAVING: SANDBLASTED
- CONCRETE PAVING: BROOM FINISHED

GENERAL HARDSCAPE NOTES

1. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL FLAG OR MARK UTILITIES , AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

2. THE LAYOUT OF SITE ELEMENTS WITHIN THESE PLANTS REFERENCE THE COORDINATE SYSTEM DETERMINED BY THE ARCHITECT. DISCREPANCIES SHOULD BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT AND CONTRACTOR.

3. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED PERMITS AND/OR FEES TO CONSTRUCT THE SITE IMPROVEMENTS.

4. WRITTEN DIMENSIONS SHALL PREVAIL. REPORT ALL DISCREPANCIES TO THE LANDSCAPE ARCHITECT. ALL DIMENSIONS ARE PULLED FROM BACK OF CURBS AND OUTSIDE FACE OF BUILDINGS.

5. LANDSCAPE WALLS ARE DEPICTED IN PLAN VIEWS WITHOUT COPING. DIMENSIONS ARE FROM OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.

6. ALL LIGHT FIXTURES, DRAIN INLETS, AND OTHER SITE ELEMENTS ARE DIMENSIONED TO THE CENTERLINE UNLESS OTHERWISE NOTED.

7. ALL STONE AND MASONRY VENEERED WALLS SHALL PROVIDE A MINIMUM ON ONE VENEER COURSING BELOW THE FINISHED GRADE (HOLD BRICK LEDGE DOWN). DOES NOT APPLY TO PYLONS WITH CONCRETE FINISH PEDESTAL BASES.

8. THE CONTRACTOR SHALL COORDINATE HARDSCAPE DETAILS, PLAN LAYOUT, AND FINISHED PAVEMENT ELEVATIONS WITH CIVIL STORM WATER AND UTILITY PLANS.

9. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL STONE MODULAR MASONRY UNITS, CONCRETE, MORTAR REINFORCEMENT, AND OTHER NECESSARY MATERIALS TO CONSTRUCT THE IMPROVEMENTS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. ALL PRECAST STONE WILL BE ORDERED, INSTALLED, AND COORDINATED BY THE CONTRACTOR.

10. PRODUCT MOCK-UPS SHALL BE REQUIRED PRIOR TO THE COMMENCEMENT OF ANY MASONRY WORK. WALL SYSTEM MOCK-UPS SHALL BE 4'X4' MIN.

11. THE CONTRACTOR SHALL SUPPLY AND INSTALL FLASHINGS, WEEP HOLES, AND/OR VENTS AS REQUIRED PROTECTING FINISHES FROM MOISTURE DAMAGE AND EFFLORESCENCE.

12. ALL MATERIALS SPECIFIED AND WORKMANSHIP INVOLVED SHALL BE OF THE BEST QUALITY FOR THE PURPOSE INTENDED AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY MATERIALS AND WORKMANSHIP NOT IN ACCORDANCE WITH THESE SPECIFICATIONS OR MEETING WITH APPROVAL EITHER BEFORE OR AFTER.

13. LOCATE AND PLACE IRRIGATION AND LIGHTING SLEEVES PRIOR TO CASTING FOOTINGS FOR SEAT WALLS, PLANTER CURBS, AND GENERAL PAVEMENT.

14. IRRIGATIONS SLEEVES ARE SHOWN AT APPROXIMATE LOCATIONS AND SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

15. THE CONTRACTOR SHALL COORDINATE IRRIGATION OF PLANTER POTS WITH THE LANDSCAPE ARCHITECT AND IRRIGATION DESIGNER.

16. DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE BUT SHALL BE REMOVED AT FREQUENT INTERVALS. AT COMPLETION OF IN EACH AREA, THE CONTRACTOR SHALL REMOVE ALL DEBRIS, EQUIPMENT, AND EXCESS MATERIAL. AT FINAL COMPLETION OF ALL WORK, THE CONTRACTOR SHALL REMOVE ALL SUCH ITEMS FROM THE PREMISES.

17. WASTE MATERIALS RESULTING FROM THIS PROJECT SHALL BE DISPOSED OF OFF-SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DISPOSE OF ANY WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

18. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL PRECAST CONCRETE PIECES FOR EACH PARTICULAR APPLICATION TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CASTING.

19. BELOW GRADE CONCRETE FOUNDATION WALLS WITH VENEERED FACES SHALL BE WATERPROOFED ON THE BACKFILLED SIDE. APPLY TWO COATS OF KARANK CORPORATION 'ONE-KOTE ELASTOMERIC LIQUID MEMBRANE' TO A CLEAN, DRY, DEBRIS-FREE SURFACE AS PER THE MANUFACTURER'S PRINTED INSTRUCTIONS.

20. WHERE WELDS MUST BE COMPLETED IN THE FIELD, TOUCHUP PAINTING WILL BE REQUIRED. AFTER STEEL STRUCTURES ARE FULLY ERECTED, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS OF SHOP PAINT, APPLY PAINT NEATLY BY BRUSH OR SPRAY USING THE SAME MATERIAL AS USED FOR SHOP PAINTING.

21. ALL FIELD WELDS SHALL BE COMPLETED BY AN AWS CERTIFIED WELDER.

DETAILS LEGEND

KEY	DETAIL	DESCRIPTION	SHEET
1	PAVEMENT #1	BROOM FINISHED CONCRETE	RE: CIVIL
2	PAVEMENT #2	SAND BLASTED CONCRETE	RE: CIVIL
3	WHEEL STOPS	ADA WHEEL STOPS RE: CIVIL	RE: CIVIL
4	SEAT WALL	POURED CONCRETE SEAT WALL- ARCHITECTURAL SMOOTH FORM FACE FINISH	2 L300
5	TRASH RECEPTACLE	TRASH / RECYCLING RECEPTACLE BY SITE SCAPES	1 L300
6	BOLLARDS	BOLLARDS TO PROTECT DISPLAY VEHICLE	RE: CIVIL
7	RETAINING WALL	POURED CONCRETE RETAINING SEAT WALL /PLANTER-ARCHITECTURAL SMOOTH FORM FACE FINISH	3 L300

SAL
SLAGGIE ARCHITECTS, INC. ©2021
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
Lot 4C Strother Crossing
Lots 4A-4C Lee's Summit, MO

Revisions:

#		
01	PDP- CITY COMMENTS	03/15/2022

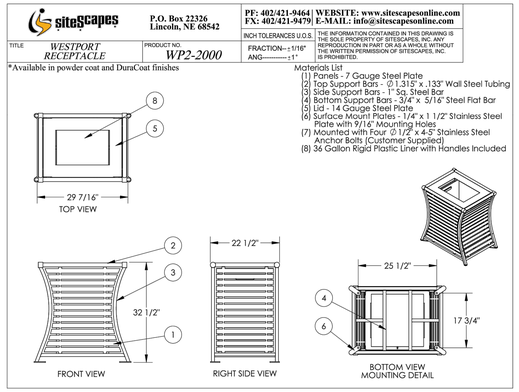
Project #: 211107

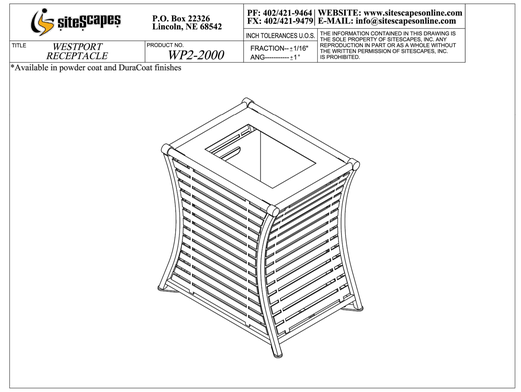
Preliminary Landscape Plan

10 February 2022

LAYOUT PLAN

L200

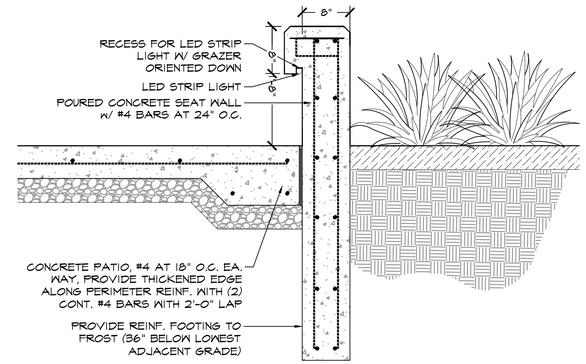




1 TRASH/RECYCLING RECEPTACLE

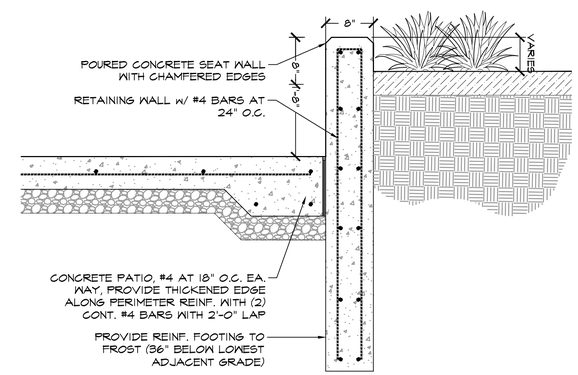
SCALE: N.T.S.

NOTES:
SITESCAPES WESTPORT TRASH AND/OR RECYCLING RECEPTACLES; FINISH: DURACOAT; COLOR: STERLING



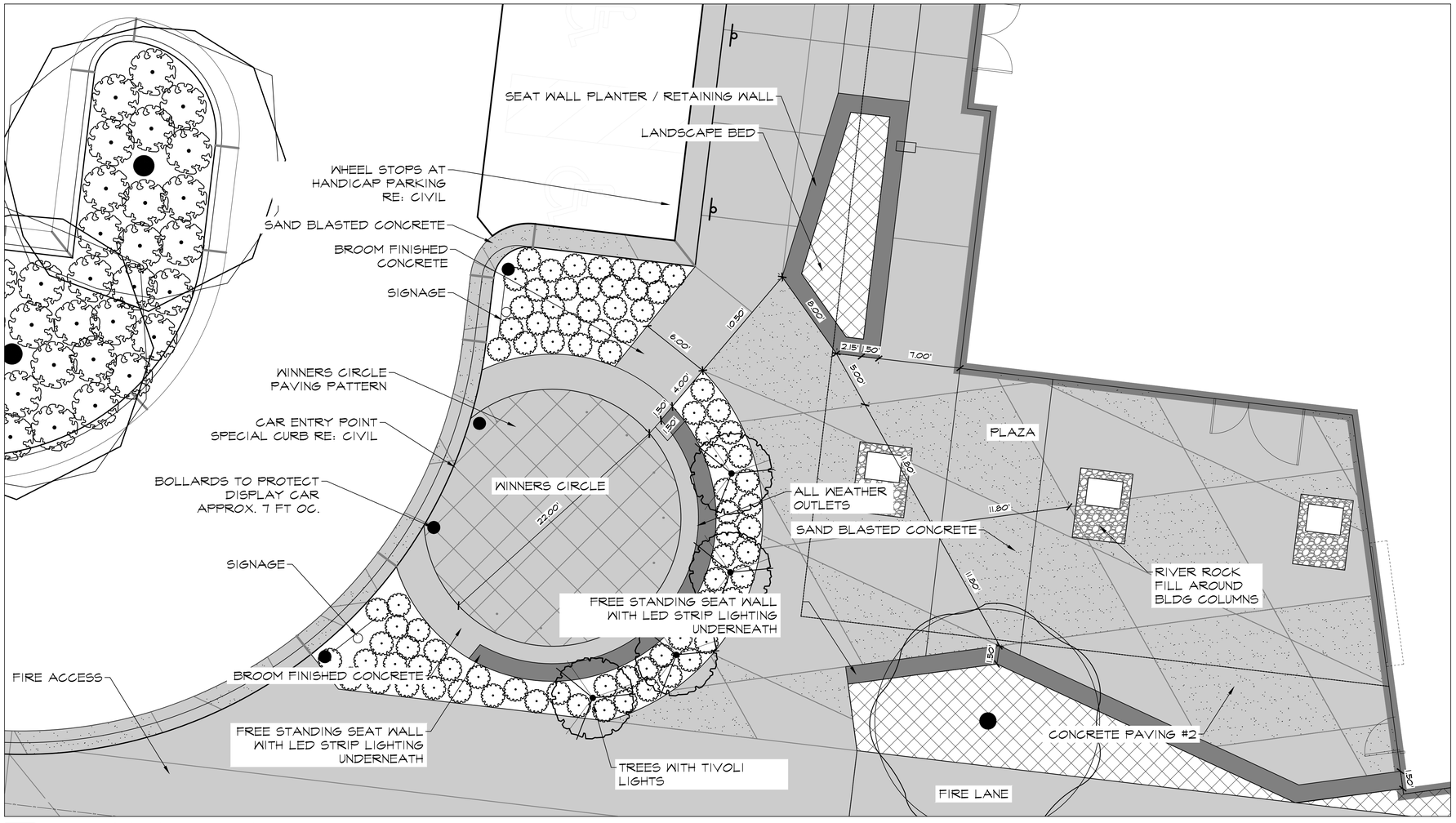
2 FREE STANDING POURED CONCRETE SEAT WALL

SCALE: 1" = 1'-0" *SECTION*



3 POURED CONRETE PLANTER SEAT WALL

SCALE: 1" = 1'-0" *SECTION*



4 WINNERS CIRCLE ENLARGED PLAN

SCALE: 1" = 5'-0" *SECTION*

SAL
SLAGGIE ARCHITECTS, INC. ©2021
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
Lot 4C Strother Crossing
Lots 4A-4C Lee's Summit, MO

#	Revisions:	
01	PDP- CITY COMMENTS	03/15/2022

Project #: 211107

Preliminary Landscape Plan

10 February 2022

HARDSCAPE DETAILS

L300

FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	LAMP	VOLTS	MANUFACTURER	V-A
PP2	ARCHITECTURAL PEDESTRIAN POLE. M1075 29" LENGTH HEAD. TYPE 2 DISTRIBUTION. HOUSE SIDE SHIELD. 750 mA DRIVER. ARCHITECT TO SELECT FINISH OF FIXTURE & POLE. PROVIDE WITH STRUCTURA SQUARE STEEL POLE 16'-0" MOUNT TO "SIDE A" OF POLE AT TOP OF POLE.	CONCRETE BASE	LED 4620 LUMENS 4000K 70 CRI	UNV	STRUCTURA - LINEAL SERIES OR APPROVED EQUAL	40
PP4	ARCHITECTURAL PEDESTRIAN POLE. M1075 29" LENGTH HEAD. TYPE 4 DISTRIBUTION. HOUSE SIDE SHIELD. 750 mA DRIVER. ARCHITECT TO SELECT FINISH OF FIXTURE & POLE. PROVIDE WITH STRUCTURA SQUARE STEEL POLE 16'-0" MOUNT TO "SIDE A" OF POLE AT TOP OF POLE.	CONCRETE BASE	LED 4620 LUMENS 4000K 70 CRI	UNV	STRUCTURA - LINEAL SERIES OR APPROVED EQUAL	40
SA	18FT TOTAL LENGTH LINEAR INGROUND EXTERIOR LED FIXTURE. WALL WASH OPTICS. 0-10V DIMMING DRIVER. IP68 RATING.	RECESSED	LED 909 LUM/FT 4000K 80 CRI	UNV	LUMENPULSE - LUMENFACADE INGROUND OR APPROVED EQUAL.	5 LF
SD SDX	6" WET LOCATION LED DOWNLIGHT. OPEN REFLECTOR. WIDE DISTRIBUTION. CLEAR SEMI-SPECULAR TRIM. 0-10V DIMMING DRIVER. X = EMERGENCY BATTERY PACK.	RECESSED	LED 1000 LUMENS 4000K 80 CRI	UNV	HE WILLIAMS - 6DR SERIES OR APPROVED EQUAL.	8.7
SF	EXTERIOR SINGLE HEAD LED FLOODLIGHT/COLUMN PROJECTOR. 1-10V DIMMING DRIVER. VERY WIDE DISTRIBUTION (58 X 67 DEGREE) ARCHITECT TO SELECT FINISH.	SURFACE	LED 4874 LUMENS 4000K 80 CRI	208 (1-PHASE)	LIGMAN - KWH7 KWH-50001 SERIES	54
SG1	4FT LONG EXTERIOR LINEAR GRAZING FIXTURE. 10x10 DEGREE OPTICS. INTEGRAL 0-10V DIMMING DRIVER. WET LOCATION RATED. ARCHITECT TO SELECT FINISH.	SURFACE	LED 466 LUM/FT 4000K 80 CRI	277	INSIGHT LIGHTING - MEDLEY EXTERIOR SERIES OR PRE-APPROVED EQUAL	3.5 LF
SG2	8FT LONG EXTERIOR LINEAR GRAZING FIXTURE. 10x10 DEGREE OPTICS. INTEGRAL 0-10V DIMMING DRIVER. WET LOCATION RATED. ARCHITECT TO SELECT FINISH.	SURFACE	LED 466 LUM/FT 4000K 80 CRI	277	INSIGHT LIGHTING - MEDLEY EXTERIOR SERIES OR PRE-APPROVED EQUAL	3.5 LF

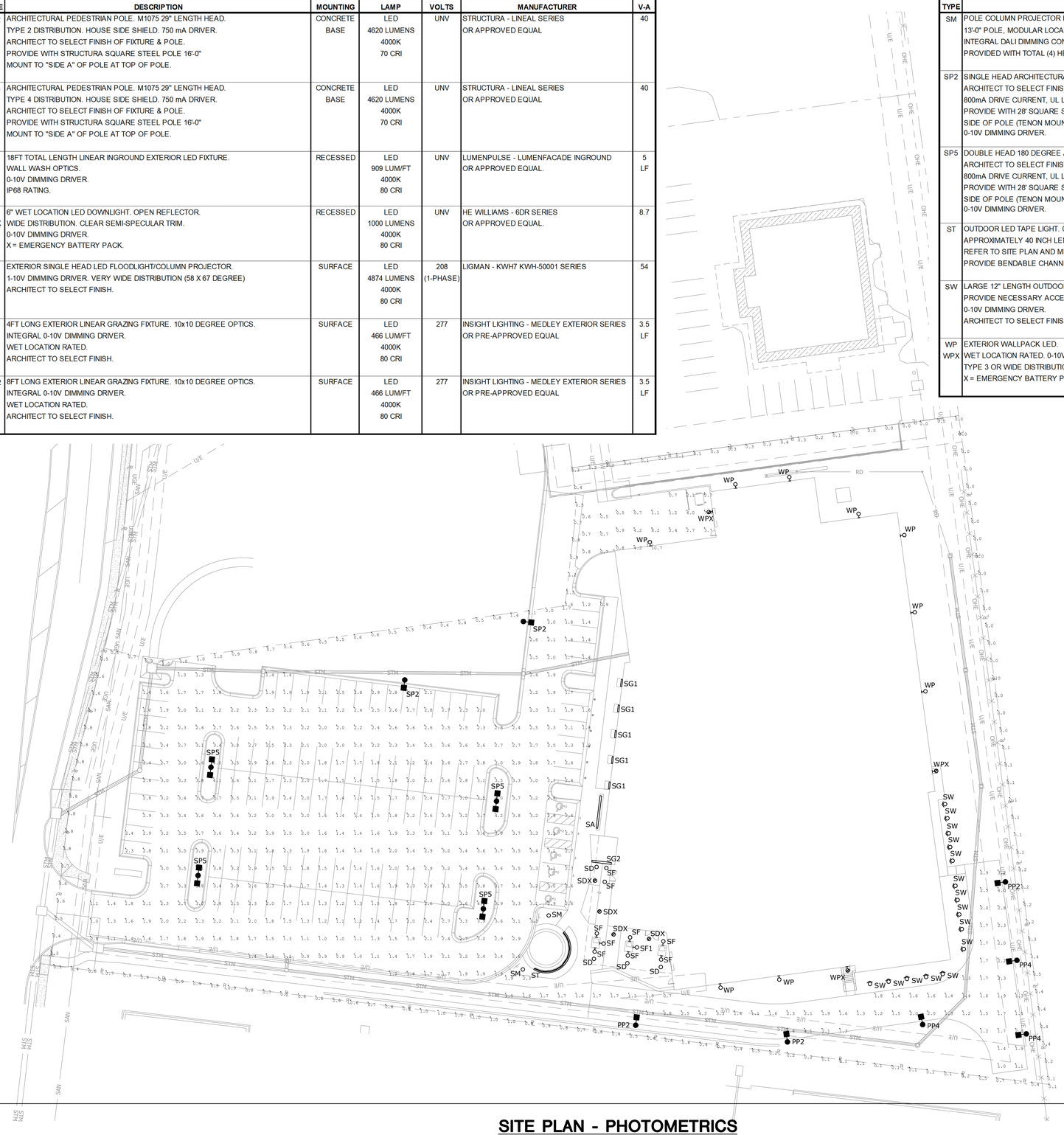
FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	LAMP	VOLTS	MANUFACTURER	V-A
SM	POLE COLUMN PROJECTOR FLOOD 4x9 LED FIXTURE. 13'-0" POLE, MODULAR LOCATION PER MANUFACTURER RECOMMENDATIONS. INTEGRAL DALI DIMMING CONTROLS. WIDE OPTIC (34 DEGREE). PROVIDED WITH TOTAL (4) HEADS, VERIFY WITH MANUFACTURER.	POLE BASE	(4) LED HEADS 2108 LUM/HEAD 4000K 80 CRI	208 (1-PHASE)	LIGMAN - LADOR LD-20011 SERIES OR PRE-APPROVED EQUAL	21 PER HEAD
SP2	SINGLE HEAD ARCHITECTURAL LED EXTERIOR PARKING LOT FIXTURE. ARCHITECT TO SELECT FINISH. TYPE 2 DISTRIBUTION WITH HOUSESIDE SHIELD. 800mA DRIVE CURRENT, UL LISTED FOR WET LOCATION. PROVIDE WITH 28' SQUARE STEEL POLE, MOUNT HEAD TO SIDE OF POLE (TENON MOUNTING PROHIBITED). INTEGRAL 10% 0-10V DIMMING DRIVER.	CONCRETE BASE	LED 11,508 LUMENS 4000K 70 CRI	120	MCGRAW-EDISON GALLEON II LITHONIA SERIES DSX1 BEACON SERIES VPL GARDCO SERIES P26 LSI SERIES MRM OR PRE-BID APPROVED EQUAL	121
SP5	DOUBLE HEAD 180 DEGREE APART ARCHITECTURAL LED EXTERIOR PARKING FIXTURE. ARCHITECT TO SELECT FINISH. TYPE 5WQ DISTRIBUTION. 800mA DRIVE CURRENT, UL LISTED FOR WET LOCATION. PROVIDE WITH 28' SQUARE STEEL POLE, MOUNT HEAD TO SIDE OF POLE (TENON MOUNTING PROHIBITED). INTEGRAL 10% 0-10V DIMMING DRIVER.	CONCRETE BASE	LED 17,778 LUMENS 4000K 70 CRI	120	MCGRAW-EDISON GALLEON II LITHONIA SERIES DSX1 BEACON SERIES VPL GARDCO SERIES P26 LSI SERIES MRM OR PRE-BID APPROVED EQUAL	121 PER HEAD
ST	OUTDOOR LED TAPE LIGHT. 0-10V DIMMABLE MODULE/DRIVER. APPROXIMATELY 40 INCH LENGTH OF TAPE. HARDWIRE FEED. REFER TO SITE PLAN AND MEASURE OFF PLANS. PROVIDE BENDABLE CHANNEL CH-602. *MAY NEED TO CONSULT FACTORY.*		LED 250 LUM/FT 4000K 90 CRI	120	KELVIX - OREX SERIES	3 LF
SW	LARGE 12" LENGTH OUTDOOR WALL WASHING FLOOD LED FIXTURE. PROVIDE NECESSARY ACCESSORIES TO MOUNT FROM GROUND TO WASH WALL. 0-10V DIMMING DRIVER. ARCHITECT TO SELECT FINISH.	GROUND MOUNT	LED 3160 LUMENS 4000K 80 CRI	UNV	ELLIPTIPAR - S172 LED SERIES OR PRE-APPROVED EQUAL	27
WP WPX	EXTERIOR WALLPACK LED. WET LOCATION RATED. 0-10V DIMMING DRIVER. TYPE 3 OR WIDE DISTRIBUTION. ARCHITECT TO SELECT FINISH. X = EMERGENCY BATTERY PACK.	WALL	LED 3,000 LUMENS 4000K 70 CRI	UNV	HE WILLIAMS VWPH SERIES LITHONIA WDGE2 LED SERIES OR APPROVED EQUAL	36

CALCULATION SUMMARY

AREA NAME	*AVE*	*MAX*	*MIN*	*AVE/MIN*	*MAX/MIN*
GARAGE ENTRY/DRIVEWAY	3.2	10.7	0.6	6.4	21.4
PARKING LOT	2.4	4.2	0.7	3.4	6.0
DRIVE LANE - BACKSIDE	1.9	4.6	0.7	2.8	6.6
PROPERTY LINE	0.48	2.10	0.00	N.A.	N.A.

NOTES:
1. ILLUMINANCE VALUES ARE IN FC.
2. MAINTENANCE FACTOR OF 0.9 WAS USED AS FIXTURES ARE LED.



SITE PLAN - PHOTOMETRICS
SCALE: 1"=30'-0"

scale: 1" = 30'-0" 15 0 15 30 45 75 feet

PROJECT NAME: 2214800 K1 Speed – Lees Summit, Mo
AUTOCAD FILE LOCATION \ NAME: X:\22\2214800\Design\Photometrics\01-2214800_ME201P.dwg
LAST CORRECTION BY ◆ DATE ◆ TIME: CBooty Wednesday, June 15, 2022 4:37:08 PM
PLOTTED BY ◆ DATE ◆ TIME: Charles Booty Wednesday, June 15, 2022 4:40:25 PM

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final Development Plan

20 June 2022

smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

SITE PLAN - PHOTOMETRICS

ME201P

Lineal LED Luminaire — structura

FIXTURE TYPE: _____

PROJECT NAME: _____

Lineal mounted on Structura Tilt pole.

SPECIFICATIONS:

CONSTRUCTION: Seamless aluminum housing comprised of 6005A-T61 extrusion and 6061-T6 end plates. Gasketed aluminum electrical access cover attached with captive stainless steel hardware and safety cable.

ELECTRICAL: Integral Class P, 120-277V or 347-480V, dimmable constant current driver. Luminaire is pre-wired with watertight 5 conductor 18 gauge SJEOOW whip. 10kA surge suppression is standard with optional external 20kA surge suppression. Operating temperature of -40°C to 50°C.

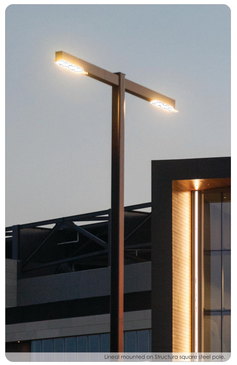
OPTICAL SYSTEM: LED boards have solderless connections for field upgradability. Available in CCT of 2700, 3000, 3500, and 4000K. >80 CRI. Optics are UV resistant molded PMMA in Type II and IV distributions. Consult factory for additional lumen output, CCT, and optical distribution options.

CONTROLS: Dimming through 0-10V input is standard. Available with integral motion sensor with photocell providing on/off and full light to dim control. Also available with wireless smart city control. See SmartCity control documentation for more information.

FINISHES: All exterior aluminum parts are polyester powder coat painted to meet AAMA 2604 standards. See Structura's finish options for available colors. Care and Maintenance

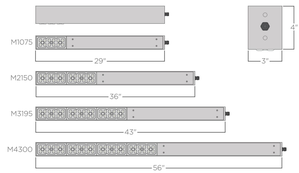
LISTINGS & RATINGS: Luminaire CSA listed according to CSA C22.2 No. 250.0-18/UL Standard 1598. Suitable for wet locations. LM-80 test reported L70 > 90,000 hours and calculated L70 > 110,000 hours. Bug rating: B1-U0-G1.

WARRANTY: 5-year warranty on LED and drivers.



Lineal mounted on Structura square steel pole.

structura



			2700K		3000K		3500K		4000K			
mA	Wattage	CRI	Lumen[1]	Efficacy	Lumen[1]	Efficacy	Lumen[1]	Efficacy	Lumen[1]	Efficacy	EPA	Weight
750	40	>80	4164	103.3	4266	105.9	4437	110.1	4620	114.6	0.8ft^2	12.3lbs.
1500	76	>80	8327	109.6	8532	112.3	8837	116.8	9240	121.6	1.00ft^2	14.2lbs.
1950	104	>80	10825	104.0	11091	106.6	11535	110.9	12012	115.5	1.19ft^2	16.2lbs.
3000	152	>80	16653	109.6	17063	112.3	17745	116.7	18479	121.6	1.55ft^2	20.7lbs.

ORDERING GUIDE: EXAMPLE: LIN-M2150-UNV-L30-4-C4-SP-WC-MS/L3-STD

LIN								
1	2	3	4	5	6	7	8	9

1 Series
- LIN — Lineal

2 Output[2]
- M1075 — 750mA, 1500mA
- M2150 — 1950mA
- M3195 — 3000mA
- M4300

3 Voltage
- UNV — 120-277V, 347-480V
- HIGH

4 Color Temperature
- L27 — 2700K[3]
- L30 — 3000K[3]
- L35 — 3500K
- L40 — 4000K
- AMB — Amber

5 Distribution[4]
- 2 — Type II
- 4 — Type IV

6 Metal Finish
- C* — See color options on finishes technical sheet
- CSM — Custom Color

7 Mounting
- SP — Structura Pole[5]
- ST — Square Steel Pole by Structura[6]
- NA — Pole by Others

8 Options
- WC — Wireless Control[7]
- MS/L* — Motion Sensor/Photocell[8]
- SS — 20kA Surge Suppressor[9]
- HSS — House-Side Shield

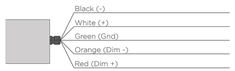
9 Special
- STD — Standard
- MOD — Modified

1. Lumen output based upon Type II distribution.
2. Contact factory for alternative output options.
3. 2700K or 3000K color temperature required for IDA certification.
4. Type IV not available in 56" fixture length.
5. Structura pole specification sheet must be completed showing mounting locations and quantities as a separate item.
6. Specify steel pole on page 96 as separate item.
7. Synapse Wireless site gateway controller must be ordered seperately. Please contact factory for design assistance.
8. Specify coverage pattern (see page 95 for detail). Requires wireless handheld configuration tool.
9. 20kA surge suppressor is only available when pole is supplied by Structura. 10kA surge supressor supplied as standard in the fixture.

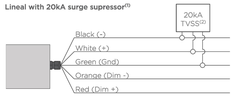
Product specification sheets subject to change.

Lineal LED Luminaire — structura

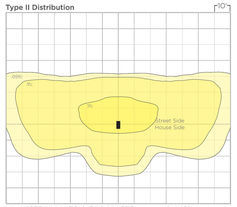
Lineal with standard wiring[1]



Lineal with 20kA surge supressor[1]

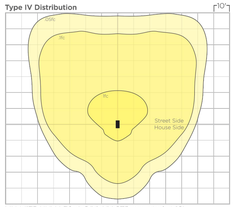


Type II Distribution



LIN-M1075-UNV-L30-2-C(X)-XX-STD mounted at 16'

Type IV Distribution



LIN-M175-UNV-L30-4-C(X)-XX-STD mounted at 16'

IES file download

1. All fixtures are provided with a 12' 18/3 SJEOOW whip. Cap dimming wires if dimming is not required.
2. 20kA surge suppressors and step down transformers are mounted in pole base when pole is supplied by Structura.

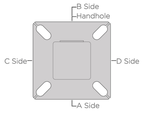
ST Straight Square Steel Pole — structura

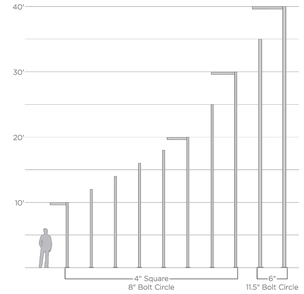
FIXTURE TYPE: _____

PROJECT NAME: _____

FEATURES:
- Heights available from 10 to 40'
- Polyster powder coat painted (AAMA 2604 standard)
- Supplied with a two piece casted aluminum base cover
- Multiple mounting options

Fixture Orientation





ORDERING GUIDE: EXAMPLE: ST-20-C7-A20-B12-STD

ST								
1	2	3	4	5	6	7	8	9

1 Series
- ST — Square Steel Pole

2 Pole Height
- 10 — 10'
- 40 — 40'
- ** — Specify

3 Pole Finish
- **** — See color options on finishes technical sheet
- CSM — Custom Color

4 A Side Fixture Mounting Height
- Blank — No fixture on this side
- A10 — 10' A Side
- A12 — 12' A Side
- A** — Specify

B Side Fixture Mounting Height
- **5**
- Blank — No fixture on this side
- B** — Specify

C Side Fixture Mounting Height
- **6**
- Blank — No fixture on this side
- C** — Specify

7 D Side Fixture Mounting Height
- Blank — No fixture on this side
- D** — Specify

8 Options
- BNR — Banner[1]
- GALV — Galvanization[2]
- GFCI — GFCI Box
- VD — Vibration Dampener

9 Special
- STD — Standard
- MOD — Modified

1. Consult factory for allowable EPA for banners.
2. Due to the nature of galvanization, some surface smoothness imperfections can be present.

Product specification sheets subject to change.

TYPE "PP2 & PP4" FULL CUT-OFF

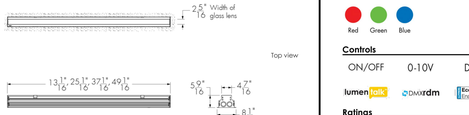
NOT TO SCALE

Specification Sheet — lumenfacade Inground LOI

WHITE AND STATIC COLORS

Project Name _____ Qty _____

Type _____ Catalog / Part Number _____

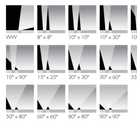


Photometric Summary

	Delivered output (lm)	Intensity (peak cd)
WW	3534	10,793
8"x8"	4512	59,238
10"x10"	4410	33,872
10"x30"	4586	25,296
10"x60"	3876	12,062
10"x90"	4077	6927
15"x25"	4346	19,773
30"x30"	4730	16,886
30"x60"	4035	5317
35"x35"	4612	11,616
50"x80"	4656	3904
60"x60"	3868	3368
80"x80"	4548	2992
90"x90"	4070	2132

Based on 40K full output, 4ft (1219mm), DMX/RDM configuration.
2.5° factory set tilt setting for WW optic, 0° tilt setting for all other optics.
Photometric performance is measured in compliance with IESNA LM/PV-08.

Optics



Description

The Lumenfacade Inground is an LED luminaire designed for ground-recessed lighting applications, including asymmetric wall washing, grazing, and linear wayfinding. An innovative, plug and play design simplifies installation, protecting the system from water infiltration and ensuring long-lasting performance. Featuring second generation LED technology, the Lumenfacade Inground is available in four different sizes (12 in, 24 in, 36 in or 48 in), with a wide choice of outputs, color temperatures, color-mixing systems, optics and controls. A unique asymmetric wallwash distribution is also available, providing exceptional uniformity and brightness for walls and signage.

Features

Construction	Walk over compliant up to 500 kg in any type of ground. Walk over compliant up to 1000 kg in concrete
Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Length (nominal)	12 in, 24 in, 36 in, 48 in
Optics	Asymmetric wallwash, 8" x 8", 10" x 10", 10" x 30", 10" x 60", 10" x 90", 15" x 25", 30" x 30", 30" x 60", 35" x 35", 50" x 80", 60" x 60", 80" x 80", 90" x 90"
Tilt Setting (factory set)	0 degrees, 2.5 degrees, 5 degrees, 20 degrees
Optical Option	Internal louver
Options	Anti-slip lens, CE (certification covers European Economic Area)
Power Consumption	5 W/ft (meets ASHRAE standards for linear lighting on building facades - not available for 12 in fixture lengths), 8.5 W/ft (RO version), 15.25 W/ft (HO version). Typically 20% higher for 12 in fixture lengths
Warranty	5-year limited warranty

Performance

Maximum Delivered Output	4,730 lm (48 in fixture, 4000K, 30° x 30°, 0° tilt setting, DMX/RDM)

lumenpulse™ — 1220 Marie-Victorin Blvd., Longueuil, QC J4G 3H9 CA info@lumenpulse.com **www.lumenpulse.com** T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 F 514.937.6289 **www.lumenpulse.com/products/2247**

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2021.07.22 copyright © 2021 LMPG Inc.
SA - R22 — 1 / 10

Specification Sheet — lumenfacade Inground LOI

WHITE AND STATIC COLORS

Colors and Color Temperatures

2200K 2700K 3000K 3500K 4000K

Red Green Blue

Controls

ON/OFF 0-10V DALI

lumen talk DMXrdm Ecosystem Enabled

Ratings

IP68 IK10

Certifications

Maximum Delivered Intensity	59,238 cd at nadir (48 in fixture, 4000K, 8° x 8°, 0° tilt setting, DMX/RDM)
Illuminance at Distance	Minimum 1 fc at 243 ft (48 in fixture, 4000K, 8° x 8°, 0° tilt setting, DMX/RDM)
Color Consistency	2 SDCM, 3 SDCM (2200K)
Color Rendering	Minimum CRI 80
Lumen Maintenance	L70 280,000 hrs, L95 35,000 hrs

Physical

Optical Chamber Material	Aluminum
Blockout Material	Polymer recycled PVC reinforced with a stainless steel frame
Trim Material	Anodized aluminum
Lens Material	Tempered glass
End Cap Material	Die cast aluminum
Hardware Material	Stainless steel
Weight	12 in: 7.5 lbs, 24 in: 15.3 lbs, 36 in: 21.4 lbs, 48 in: 27 lbs

Electrical and control

Voltage	120 to 277 volts
Fixture Cable	Power and data in one cable
Leader Cable Conductor	5C #16-5
Connectors	IP68 push-lock
Control	On/Off control, Lumentalk, 0-10V dimming, DALI dimming, Lutron® EcoSystem® Enabled dimming, DMX/RDM enabled
Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-bit or 16-bit

Environmental

Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP68 rated for up to 1 ft, not suitable for permanent immersion applications
Impact Resistance Rating	IK10

Accessories (order separately)

Cables	Lumenfacade Inground Leader Cable, Lumenfacade Inground Jumper Cable
Electrical Accessories	Lumenfacade Inground Junction Box
Control Boxes	DMX/RDM enabled (daisy chain or star configuration), Ethernet enabled (daisy chain or star configuration)
Control Systems	Lumentone™ 2, Pharos® kit
Diagnostic and Addressing Tools	LumenID, LumentalkID

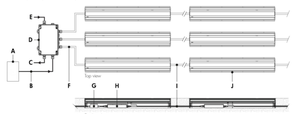
lumenpulse™ — 1220 Marie-Victorin Blvd., Longueuil, QC J4G 3H9 CA info@lumenpulse.com **www.lumenpulse.com** T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 F 514.937.6289 **www.lumenpulse.com/products/2247**

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2021.07.22 copyright © 2021 LMPG Inc.
SA - R22 — 2 / 10

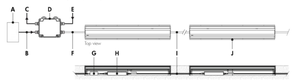
Specification Sheet — lumenfacade Inground LOI

WHITE AND STATIC COLORS

Star Layout (DMX/RDM)



Daisy Chain Layout (DMX/RDM)



- **A** - DMX/RDM controller (order separately from Lumenpulse, or by others)
- **B** - Data input (Belden 9841 or equivalent, by others)
- **C** - Data output to next CBX (optional, not isolated/not boosted)
- **D** - CBX-ST
- **E** - Power input (120-277V, wiring by others)
- **F** - Leader cable (LOILC)
- **G** - IP68 LOI-JBOX (optional)
- **H** - PACBOX
- **I** - Jumper cable (LOIJC)
- **J** - Lumenfacade Inground

- **A** - DMX/RDM controller (order separately from Lumenpulse, or by others)
- **B** - Data input (Belden 9841 or equivalent, by others)
- **C** - Data output to next CBX (optional, not isolated/not boosted)
- **D** - CBX-DS
- **E** - Power input (120-277V, wiring by others)
- **F** - Leader cable (LOILC)
- **G** - IP68 LOI-JBOX (optional)
- **H** - PACBOX
- **I** - Jumper cable (LOIJC)
- **J** - Lumenfacade Inground

Maximum Run of Fixtures, Lumenfacade® LOI ASHRAE White & Static Colors 5 W/ft	
Voltage	**120/277V**
Maximum Run of Fixtures*	1288
Maximum Run of Fixtures, Lumenfacade® LOI RO White & Static Colors 8.5 W/ft	
Voltage	**120/277V**
Maximum Run of Fixtures*	1208
Maximum Run of Fixtures, Lumenfacade® LOI HO White & Static Colors 15.25 W/ft	
Voltage	**120/277V**
Maximum Run of Fixtures*	688

Based on 1.5A maximum, 50ft leader cable
*Example: 120V = 1208 maximum run of end to end fixtures (30 fixtures maximum for 48 (LOI RO).

- Consult the installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations. Maximum run length calculations are typically based on 48 in fixtures.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 6 outputs per CBX-ST; maximum of 1 output per CBX-DS.
- Each fixture requires 1 DMX address.
- 1% minimum dimming value.
- ASHRAE version (not available for 12 in fixture lengths): 5 W/ft: Regular Output version: 8.5 W/ft: High Output version: 15.25 W/ft.

lumenpulse™ — 1220 Marie-Victorin Blvd., Longueuil, QC J4G 3H9 CA info@lumenpulse.com **www.lumenpulse.com** T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 F 514.937.6289 **www.lumenpulse.com/products/2247**

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2021.07.22 copyright © 2021 LMPG Inc.
SA - R22 — 9 / 10

Specification Sheet — lumenfacade Inground LOI

WHITE AND STATIC COLORS

How to order

Housing [1] [2] [3] [4]	Voltage	Length	Color and Color Temperature [5]	Optics	Tilt Setting [6] [10]	Optical Option	Control	Options
LOI ASHRAE Lumenfacade™ Inground, 5 W/ft ASHRAE compliant [7] **LOI RO** Lumenfacade™ Inground, Regular Output, 8.5 W/ft **LOI HO** Lumenfacade™ Inground, High Output, 15.25 W/ft	**120/277** 120-277 volts	**12** 12 1/16 in (12.5 lbs) **24** 24 1/16 in (15.3 lbs) **36** 37 1/16 in (21.4 lbs) **48** 49 1/16 in (27 lbs)	**22K** 2200K **27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **RD** Red [8] **GR** Green [8] **BL** Blue [8]	**WW** Asymmetric Wallwash [9] **8x8** 8" x 8" [9] **10x10** 10" x 10" [9] **10x30** 10" x 30" [9] **10x60** 10" x 60" [9] **10x90** 10" x 90" [9] **15x25** 15" x 25" [9] **30x30** 30" x 30" **30x60** 30" x 60" **35x35** 35" x 35" **50x80** 50" x 80" **60x60** 60" x 60" **80x80** 80" x 80" **90x90** 90" x 90"	**T50** 0 degrees **T52.5** 2.5 degrees **T55** 5 degrees **T520** 20 degrees	**INTL** Internal louver [11]	**NO** On/Off control **LT** Lumentalk [12] **DIM** 0-10V dimming **DALI** DALI dimming **E3** Lutron® EcoSystem® Enabled dimming **DMX/RDM** DMX/RDM enabled [13]	**ASL** Anti-slip lens **CE** CE Certification (covers European Economic Area) [14]

Notes:
1. A Lumenfacade Inground fixture includes one optical chamber (LOIC), one power and control box (PACBOX) and one mounting kit (MKO). The LOIC, PACBOX and MKO are provided according to the output/color, length and control configuration.
2. ASHRAE version not available for 12 in fixture lengths.
3. Consult the installation instructions to plan all aspects of the fixture installation.
4. Power consumption is typically 20% higher for 12 in fixture lengths.
5. Consult factory for availability of static Royal Blue, 6500K and RGY CRI.
6. Static colors made to order 8-10 weeks.
7. 8x8, 10x10, 10x30, 10x60, 10x90, 15x25 and WW distributions come with a half-frosted lens to bring light low on the wall for grazing applications. Clear lens also available, consult factory.
8. For best results use with HO fixtures at a 6 in setback from surface. Contact factory for application support.
9. Use specific a-W setting for the asymmetric wallwash option. The asymmetric wallwash optic is factory set with a 2.5 degree tilt.
10. Tilt setting is factory set and cannot be adjusted in the field.
11. The addition of an internal louver will affect beam distribution. Consult factory for application support.
12. A Lumentranslator 2 (LTL2) and Lumentalk® (LIDL) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.
13. A control box (CB16) and LumenID (LID) must be specified.
14. Consult European specification sheet and installation instructions for CE wiring information.

lumenpulse™ — 1220 Marie-Victorin Blvd., Longueuil, QC J4G 3H9 CA info@lumenpulse.com **www.lumenpulse.com** T United States 617.307.5700 | Canada 1.877.937.3003 | 514.937.3003 F 514.937.6289 **www.lumenpulse.com/products/2247**

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately 2021.07.22 copyright © 2021 LMPG Inc.
SA - R22 — 10 / 10

TYPE "SA" INGROUND

NOT TO SCALE

SAL SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed Entertainment Complex

D4 Holdings

Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

#	Revisions:

Project #: 211107

Final Development Plan

20 June 2022

LIGHTING - CUTSHEETS

smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

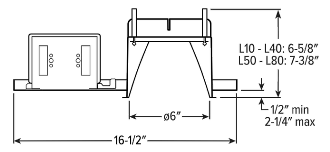
ME202P

2214800 K1 Speed – Lees Summit, Mo
X:\22\2214800\Design\Photometrics\01-2214800_ME202P.dwg
CBooty Wednesday, June 15, 2022 4:37:45 PM
Charles Booty Wednesday, June 15, 2022 4:40:39 PM

PROJECT NAME:
AUTOCAD FILE LOCATION \ NAME:
LAST CORRECTION BY◆ DATE◆ TIME:
PLOTTED BY◆ DATE◆ TIME:

6DR LED 6" Downlight – Round

Williams



CATALOG #:

TYPE:

PROJECT:

NEW CONSTRUCTION AND REMODEL

FEATURES

TrimLock®

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Available on QuickShip

SPECIFICATIONS

- HOUSING – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2" – 2-1/4".
- TRIMLOCK – Innovative TrimLock reflector retention system ensures the trim remains flush with the ceiling plane.
- OPEN REFLECTOR – Low-iridescent anodized aluminum. Clear semi-specular finish standard.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. Minimum 24" O.C. marked spacing required for L60 - L80 lumen packages.
- LISTINGS –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC or TD options.
  - ENERGY STAR® certified in select configurations, see www.energystar.gov
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Title 24 (JA8) compliant in select configurations, see www.cacertappliances.energy.ca.gov.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ENERGY STAR

bios ILLUMINATED — *Available with BIOS® consult factory*

ORDERING EXAMPLE: 6DR - TL - L20/835 - OPTIONS - DIM - UNV - OW - OF - CS - TRIM OPTIONS - N - F1 (HOUSING / TRIM / MOUNT.)

HOUSING

SERIES	LUMENS [1]	CRI	CCT	OPTIONS		CONTROL [2]	VOLTAGE
6DR - TL TrimLock	L10 1,000lm [3]	8 80	27 2700K	SCA_ _	Sloped ceiling adapter [5]	DIM Dimming driver, 0-10V	UNV 120-277V
	L15 1,500lm	9 90 [4]	30 3000K	ATH	Airtight construction	DIM1 1% Dimming driver, 0-10V	347 347V [6]
	L20 2,000lm		35 3500K	F	Fuse		
	L30 3,000lm		40 4000K	EM/7W	7-watt emergency battery [7]		
	L40 4,000lm		50 5000K	EM/10W	10-watt emergency battery [8]		
	L50 5,000lm			EM/10W/RTS	10-watt emergency battery with regressed test switch [9]		
	L60 6,000lm			CP	Chicago plenum (CCEA) [10]		
	L70 7,000lm			SDT	Stepdown transformer [11]		
	L80 8,000lm						

TRIM [12]

TRIM TYPE
- O Open reflector
- L Flush lens
- R Regressed lens
- A Angled lens [14]
- S Non-conductive flush lens for shower applications [15]

DISTRIBUTION [13]
- W Wide: 65° Open, 55° Flush, 55° Regressed
- M Medium [16]: 35° Open, 35° Flush, 35° Regressed
- N Narrow [17]: 10° Open, 25° Flush, 25° Regressed
- WW Wall wash [18]

FLANGE TYPE
- OF 1/2" standard flange
- SF 1/4" mud-in flange [19]

REFLECTOR FINISH

Open trim types
- CS Clear semi-specular anodize
- SG Satin-glow anodize
- GD Gold anodize
- CG Champagne gold anodize
- PW Pewter anodize
- SPC Clear specular anodize
- RG Rose gold anodize
- WH White texture powder coat
- BL Black texture powder coat

Lens trim types
- CS Clear semi-specular powder coat
- WH White texture powder coat
- BL Black texture powder coat
- MB Black texture splay with white flange [27]

TRIM OPTIONS
- MWT Textured white trim flange [20]
- IP IP65 rated trim [21]
- AD Diffuse acrylic lens [22]
- PD Diffuse 1/8" polycarbonate lens [23]
- TD Diffuse polycarbonate lens media at top of open reflector [24]
- WET/CC Wet location, covered ceiling listed [25]
- AM Anti-microbial [26]

MOUNTING

MOUNTING TYPE [28]
- N Open pan for new construction
- I IC-rated enclosure for new construction [30]
- R Remodel kit [31]

MOUNTING HARDWARE [29]
- F1 Integral 2-position fixed pan bracket, universal bar hanger included [32]
- BA1 Adjustable butterfly pan bracket, bar hanger not included [33]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included [34]

NOTES

1. Lumen output based on O trim type, W distribution and CS finish, 3500K/80CRI. Actual lumens may vary +/-5%.See page 2 for FIXTURE PERFORMANCE DATA.
2. See page 3 for ADDITIONAL CONTROL OPTIONS.
3. Not available with EM/10W emergency batteries.
4. Extended lead times may apply. Consult factory for availability.
5. 11-1/2" aperture, specify degrees of slope in 5° increments, 05°-30°. Not available with I Mounting Type, ATH or WET/CC options. Painted white. Other colors available, consult factory. See page 3 for SLOPED CEILING ADAPTOR DETAILS.
6. Not available with EM batteries or DMX controls.
7. N and R Mounting Types only. Not available with ATH or IP options.
8. N and R Mounting Types only. Not available with ATH or IP options.
9. Not available with WET/CC, ATH or IP options. N and R Mounting Types only. See page 5 for EM/10W/RTS DETAILS.
10. I Mounting Type required.
11. May be required for 347V, see product builder at hew.com/product-builder.
12. Trim ships separately.
13. Beam angle based on CS or WH reflector finish. See page 2 for FIXTURE PERFORMANCE DATA.
14. Available with WW Distribution only.
15. W Distribution, OF Flange Type and WH Reflector Finish only. Standard with AD diffuse acrylic lens. IP and WET/CC options standard.
16. Not available with lumen stops L50 and higher when specified with flush or regressed trim types.
17. Not available with lumen stops L50 and higher when specified with flush or regressed trim types.
18. O and A Trim Types only.
19. For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for FLANGE TYPE DETAILS. Not available with ATH or IP options.
20. Not available with WH Reflector Finish, L or S Trim Types.
21. L and R trim types only.
22. Not available with O trim type. W and WW distributions only.
23. Not available with O trim type. W and WW distributions only.
24. O Trim Type only. WET/CC standard unless ordered with EM/RTS. L50 lumen package max.
25. L50 lumen package max with O Trim Type. Not available with PD trim option.
26. WH and BL Reflector Finishes only. Not available with S Trim Type.
27. R Trim Type only. Not available with MWT.
28. Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
29. Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
30. L30 lumen package max.
31. Also used in new construction sheetrock ceilings.
32. N and I Mounting Types only. I Mounting requires external brackets.
33. N Mounting Type only.
34. N Mounting Type only.

6DR LED 6" Downlight – Round

FIXTURE PERFORMANCE DATA

OPEN REFLECTOR TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1014	8.7	116.9
	M	982	8.7	113.2
	N	1003	8.7	115.7
L15	W	1497	13.8	108.6
	M	1495	13.8	108.4
	N	1528	13.8	110.8
L20	W	1988	19.0	104.6
	M	1983	19.1	103.8
	N	2026	19.1	106.1
L30	W	3062	26.9	114.0
	M	3003	26.9	111.8
	N	3000	26.9	111.7
L40	W	4094	36.5	112.2
	M	4016	36.4	110.3
	N	4011	36.4	110.2
L50	W	5014	43.9	114.1
	M	4935	43.9	112.3
	N	5047	43.9	114.9
L60	W	6043	54.0	111.9
	M	5948	54.0	110.1
	N	6083	54.0	112.6
L70	W	7008	67.8	103.3
	M	6898	67.8	101.7
	N	7055	67.8	104.0
L80	W	8018	79.8	100.5
	M	7891	79.8	98.9
	N	8071	79.8	101.2

FLUSH LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	774	8.7	89.2
	M	910	8.7	104.9
	N	909	8.7	104.8
L15	W	1178	13.8	85.4
	M	1385	13.8	100.4
	N	1384	13.8	100.4
L20	W	1562	19.5	80.1
	M	1837	19.1	96.1
	N	1836	19.5	94.2
L30	W	2335	26.9	86.9
	M	2782	26.9	103.6
	N	2718	26.9	101.2
L40	W	3122	36.5	85.5
	M	3720	36.4	102.2
	N	3635	36.4	99.9
L50	W	3824	43.9	87.0
	M	–	–	–
	N	–	–	–
L60	W	4609	54.0	85.4
	M	–	–	–
	N	–	–	–
L70	W	5345	67.8	78.8
	M	–	–	–
	N	–	–	–
L80	W	6115	79.8	76.7
	M	–	–	–
	N	–	–	–

REGRESSED LENS TRIM TYPE

	DIST.	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	716	8.7	82.5
	M	883	8.7	101.7
	N	897	8.7	103.4
L15	W	1090	13.8	79.0
	M	1344	13.8	97.4
	N	1366	13.8	99.1
L20	W	1445	19.5	74.1
	M	1782	19.1	93.3
	N	1812	19.5	92.9
L30	W	2160	26.9	80.4
	M	2699	26.9	100.5
	N	2683	26.9	99.9
L40	W	2889	36.5	79.1
	M	3609	36.4	99.1
	N	3587	36.4	98.6
L50	W	3537	43.9	80.5
	M	–	–	–
	N	–	–	–
L60	W	4264	54.0	79.0
	M	–	–	–
	N	–	–	–
L70	W	4945	67.8	72.9
	M	–	–	–
	N	–	–	–
L80	W	5657	79.8	70.9
	M	–	–	–
	N	–	–	–

MULTIPLIER TABLES

COLOR TEMPERATURE

	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
	5000K	1.02
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

REFLECTOR FINISH

	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	SG [1]	0.92
	GD	0.93
	CG	0.96
	PW	0.86
	SPC	1.02
	RG	0.88
	WH [1]	0.89
	BL [1]	0.47
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

TRIM

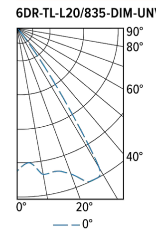
CATALOG NUMBER	CONVERSION FACTOR
S	0.85
AD	0.85
PD	0.85
TD	0.75
WET/CC [2]	0.85

1. Distribution will also be affected, consult factory.
2. Use multiplier when specified with O Trim Type.

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier tables to calculate additional options.

PHOTOMETRY

6DR-TL-L20/835-DIM-UNV-OW-OF-CS Report #: 20687; 12/12/18 | Total Luminaire Output: 1988 lumens; 19.0 Watts | Efficacy: 104.6 lm/W | 82.9 CRI; 3457K CCT



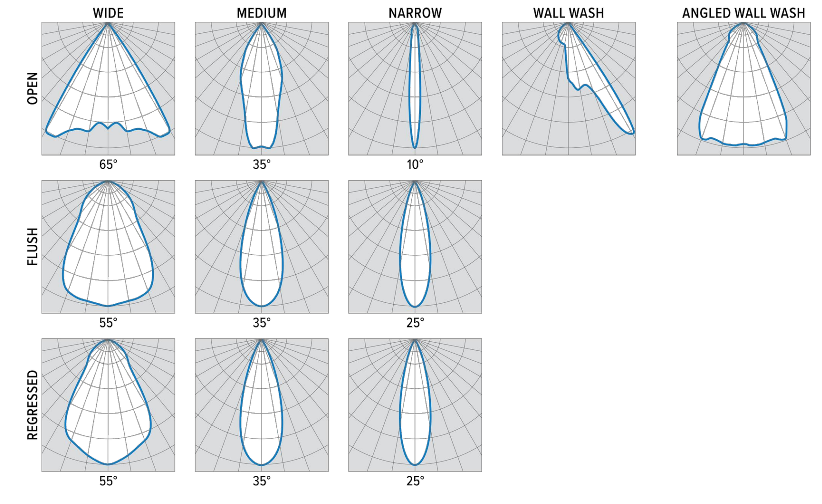
CANDLEPOWER DISTRIBUTION

VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	1672	
5	1579	151
15	1735	492
25	1982	917
35	604	380
45	46	36
55	13	12
65	2	2
75	0	0
85	0	0
90	0	

LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0 - 40	1939	98
0 - 60	1987	100
0 - 90	1988	100
0 - 180	1988	100

6DR LED 6" Downlight – Round



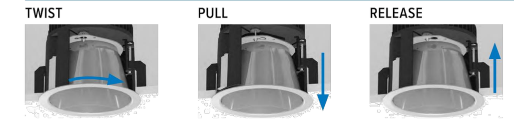
ADDITIONAL CONTROL OPTIONS

Lumen restrictions apply: L40 max for DMX driver, L40 max for Lutron drivers, L50 max for ELDO drivers, L15 minimum for DIM LINE driver, L60 max for DIM LINE driver. R Mounting Type not available with DMX controls. R Mounting Type requires 12" minimum plenum depth when specified with VRF/DBI controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder. I Mounting Type not available with Lutron controls.

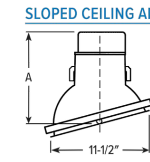
CATALOG NUMBER	DESCRIPTION
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DMX	0.1% dimming driver for DMX controls
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

TRIMLOCK DETAILS

TWIST PULL RELEASE



SLOPED CEILING ADAPTOR DETAILS



Ceiling cutout: ø11-7/8"

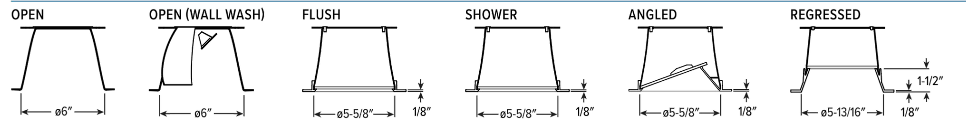
LUMENS	A (HEIGHT) 5°	10°	15°	20°	25°	30°	PLENUM HEIGHT
L10 - L40	10-11/16"	10-7/8"	10-15/16"	10-7/8"	10-13/16"	10-5/8"	11-1/4"
L50 - L80	11-7/16"	11-9/16"	11-5/8"	11-5/8"	11-1/2"	11-1/4"	12"

15° Shown

6DR LED 6" Downlight – Round

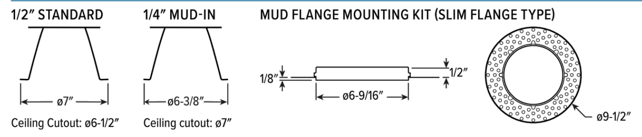
TRIM TYPE DETAILS

OPEN · OPEN (WALL WASH) · FLUSH · SHOWER · ANGLED · REGRESSED



FLANGE TYPE DETAILS

1/2" STANDARD · 1/4" MUD-IN · MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)

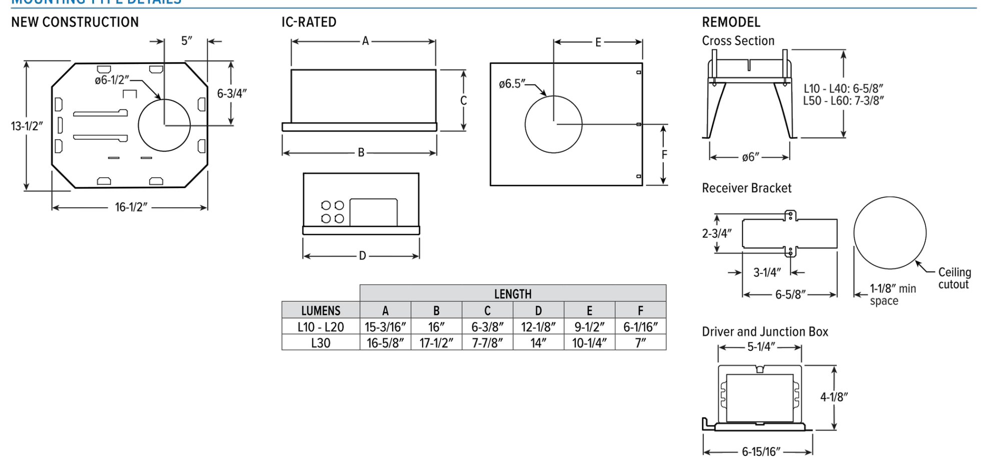


REFLECTOR FINISH DETAILS

SPC Clear specular · SG Satin-glow · PW Pewter · GD Gold · CG Champagne gold · RG Rose gold · CS Clear semi-specular · WH White · BL Black

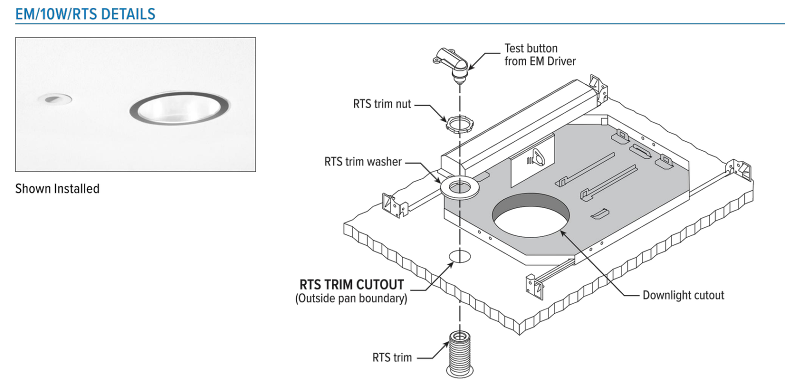
MOUNTING TYPE DETAILS

NEW CONSTRUCTION · IC-RATED · REMODEL



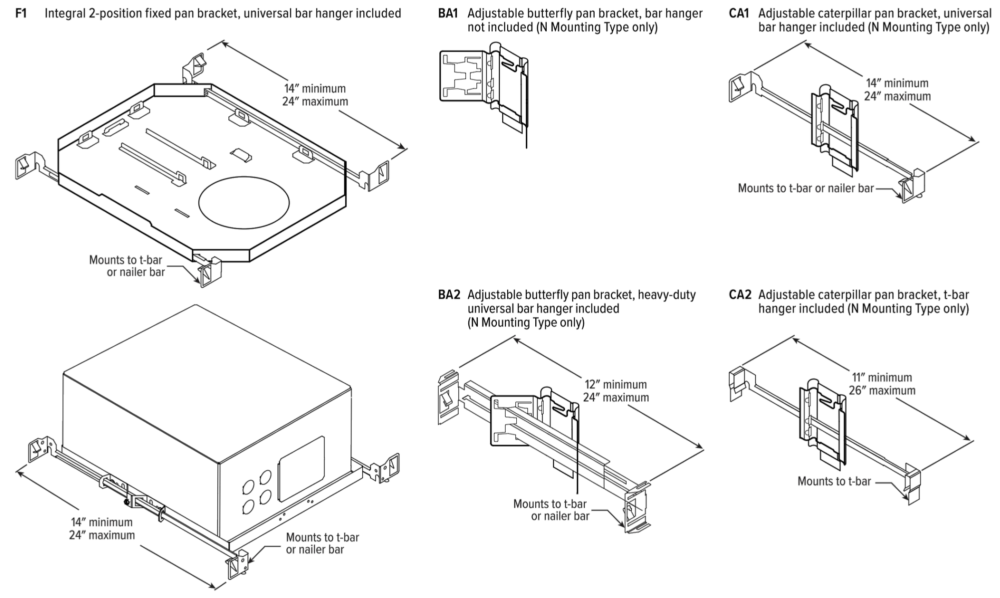
6DR LED 6" Downlight – Round

EM/10W/RTS DETAILS



MOUNTING HARDWARE DETAILS

- F1 Integral 2-position fixed pan bracket, universal bar hanger included
- BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)
- BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)
- CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)



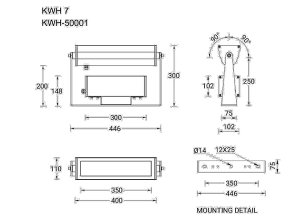
TYPE "SD"

NOT TO SCALE

LIGMAN — Outdoor | Floodlights, projectors and column projectors | KWH

KWH 7 (KWH-50001)

CE · IP65 · IK08 · microVos™ TECHNOLOGY



Luminaire Structure

- Die-cast aluminium end-caps
- Extruded aluminium housing
- Pre-treated before powder coating ensuring high corrosion resistance
- Thermal heat dissipation body
- Single or double head configuration for all three sizes
- Each of the heads can be aimed, adjusted and locked for precise aiming
- Single cable entry, through wiring upon request
- One IP68 connector supplied with 0.2 m of 3x1.0 sqmm outdoor cable for KWH-50001, KWH-50011, KWH-50021, KWH-50031, KWH-50041, KWH-50051
- Three IP68 connectors supplied with 0.2 m of 3x1.0 sqmm outdoor cable and 2x0.2 m of 2x0.5 sqmm outdoor shielded cable for KWH-50002, KWH-50003, KWH-50012, KWH-50013, KWH-50022, KWH-50023, KWH-50032, KWH-50033, KWH-50042, KWH-50043, KWH-50052, KWH-50053
- Stainless steel fasteners in grade 304 with zinc flake coating (ZFC)
- Durable silicone rubber gasket
- Clear toughened glass
- High-efficiency PMMA lens
- Integral control gear
- Hot-dipped galvanised steel mounting bracket allows for ceiling, wall or surface mounting

Product description

Small - 1 head

Light symbol · Product colour · Special finishes upon request

Technical information

Light source	4x9 LED
Light source type	LED
Dimming type	DALI, 1-10V, On/Off

Luminaire	
Power	54 W
Lumen	4874 - 5915 lm

Optic	E [12°x43°], M [17°], N [10°], VW [58°x67°], W [33°]
Bug	B4-U0-G0, B3-U0-G0

We reserve the right to make technical and design changes.

05:05, 15-06-2022

https://www.ligman.com/kwh-7-kwh-50001/

Europe
LIGMAN EUROPE s.r.o.
VGP Park Ústí nad Labem
P 2 120
40317, Přestanov
Czech Republic
+420 477 071 500
sales.cz@ligman.com

ASIA PACIFIC
LIGMAN Lighting Co.,Ltd.
17/2 Moo4 Monthong
Bangnampreaw
24150, Chachoengsao
Thailand
+66 2 108 6700
info@ligman.com

LIGMAN — Outdoor | Floodlights, projectors and column projectors | KWH

KWH 7 (KWH-50001)

Material	Aluminium
Weight	7.2 kg
Operating temperature	-20 °C to 40 °C

Efficacy	104 - 126 lm/W
CCT / CRI	3000K CRI80, 4000K CRI80
Drive current	850 mA
Driver option	Integral control gear
Driver	Constant current (CC)
Input voltage	220-240 V 50/60 Hz

ULR	0%
ULOR	0%
CIE flux code nº3	100, 99

We reserve the right to make technical and design changes.

05:05, 15-06-2022

https://www.ligman.com/kwh-7-kwh-50001/

Europe
LIGMAN EUROPE s.r.o.
VGP Park Ústí nad Labem
P 2 120
40317, Přestanov
Czech Republic
+420 477 071 500
sales.cz@ligman.com

ASIA PACIFIC
LIGMAN Lighting Co.,Ltd.
17/2 Moo4 Monthong
Bangnampreaw
24150, Chachoengsao
Thailand
+66 2 108 6700
info@ligman.com

TYPE "SF" FLOOD LIGHT

NOT TO SCALE

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri ● Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final Development Plan

20 June 2022

LIGHTING - CUTSHEETS

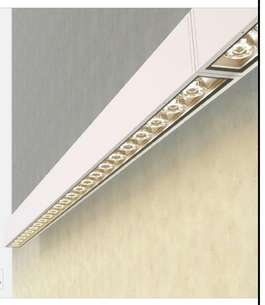
smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

ME203P

PROJECT NAME: 2214800 K1 Speed - Lees Summit, Mo
AUTOCAD FILE LOCATION \ NAME: X:\22\22148\2214800\Design\Photometrics\01-2214800_ME203P.dwg
LAST CORRECTION BY ◆ DATE ◆ TIME: CBooty Wednesday, June 15, 2022 4:38:15 PM
PLOTTED BY ◆ DATE ◆ TIME: Charles Booty Wednesday, June 15, 2022 4:40:49 PM

PROFILE

OUTPUT	LO (3.5W/FT), MO (9.0 W/FT), HO (15.0 W/FT)
OPTICS	7° X 60°, 10° X 10°, 10° X 60°, 10° X 90°, 20° X 20°, 20° X 60°, 40° X 40°, 40° X 60°, 40° X 90°, 60° X 60°, 90° X 90° 80° X 80°, ASY
CRI	82 (OPTIONAL 90+)
CCT	27K, 30K, 35K, 40K, RED, GREEN, BLUE, AMBER
PERFORMANCE	UP TO 117530 PEAK CANDELA
VOLTAGE	120V OR 277V
POWER	INTEGRAL POWER SUPPLY
CONTROL	0-10V, DMX, LUTRON HI-LUME
DIMENSIONS	2.60" X 2.00"
WEIGHT	2.75 LB (1.25 KG) PER FOOT
HOUSING	PRECISION EXTRUDED ALUMINUM
LENS	HIGH DENSITY TEMPERED GLASS
FINISH	HIGH DURABILITY POWDER COATING
OPERATING TEMP	-20° C TO 50° C
WARRANTY	5-YEAR LIMITED
LUMEN MAINTENANCE	75,000 HOURS
CERTIFICATION	ETL AND cETL FOR IP67, IK07, 5G/3G OPTIONS

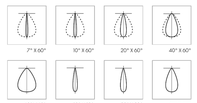


IP67 IK07 3G ANSI C136.31 5G ANSI C136.37

STANDARD FINISHES

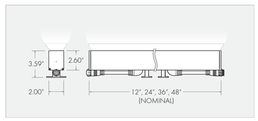
TEXTURED WHITE | TEXTURED BLACK | TEXTURED BRONZE | TEXTURED L. BRONZE | TEXTURED GRAY | TEXTURED S. STONE

OPTICS



PROFILE

Go to Fixture Dimensions >



OPTIONS

PERFORMANCE SAMPLE

Go to Performance Data >

40K, HO, 48.00"	10° X 10°	10° X 60°	20° X 20°	80° X 80°	100°
LUMENS	6316	5417	6475	6161	6439
CANDELA	117530	19943	52385	3960	2739
EFFICACY	91.2 LM/W	77.3 LM/W	93.3 LM/W	88.8 LM/W	84.4 LM/W

SPECIFICATION

Separate options with dashes

ME										
■	2	3	4	5	6	7	8	9	10	

1 FIXTURE

MEDLEY EXTERIOR	ME

2 WATTAGE

LOW OUTPUT 3.5 W/FT	LO
MEDIUM OUTPUT 9.0 W/FT	MO
HIGH OUTPUT 15.0 W/FT	HO

3 CCT

2700K	27K
3000K	30K
3500K	35K
4000K	40K
RED	R
GREEN	G
BLUE	B
AMBER	A

4 OPTIC

7° X 60°	760
10° X 10°	1010
10° X 60°	1060
10° X 90°	1090
20° X 20°	2020
20° X 60°	2060
20° X 90°	2090
40° X 40°	4040
40° X 60°	4060
40° X 90°	4090
60° X 60°	6060
60° X 90°	6090
80° X 80°	8080
100° X 100°	100
ASYMMETRIC DIRECT Direct – down light	AD
ASYMMETRIC INDIRECT Indirect – up light	AI

5 MOUNTING

SURFACE MOUNT 5G And C136.31 rated	SM
GROUND MOUNT	GM
EXTENDED ARM X = extended arm length specify 6", 12" or 18" 6.00" arm is 3G And C136.3 rated	EA-X
EXTENDED ARM, BACK X = extended arm length specify 6", 12" or 18"	EAB-X
SURFACE BACK MOUNT	SMB
FIXED MOUNT Not intended for continuous run applications	FM
END MOUNT Not intended for continuous run applications	EM
STAKE MOUNT	STM

6 FIXTURE LENGTH

12"	12
24"	24
36"	36
48"	48

Nominal lengths

7 VOLTAGE

120V	120
277V	277

8 CONTROL OPTIONS

0-10V DIMMING (TS) Not available with 12.00" HO fixtures	DIM
LUTRON HI-LUME Hi-Lume 1% EcoSystem Available with 36.00" and 48.00" fixtures in LO and MO outputs only	L3DA
DMX DIMMING Not available with 12.00" HO fixtures DMX control system must be ordered separately DMX Programming Kit required - see below	DMX

9 FINISH

TEXTURED WHITE	TW
TEXTURED BLACK	TB
TEXTURED BRONZE	TBR
TEXTURED LIGHT BRONZE	TLB
TEXTURED GRAY	TG
TEXTURED SANDSTONE	TS
ANODIZED ALUMINUM Includes CRF	AA
CUSTOM COLOR Contact factory for custom color - additional charges will apply	CC

10 OPTIONS

HIGH CRI, 90+	HCRI
LOUVER Field installable anodized louver LU of 10% -15% depending on color	LV
VISOR Field installable visored louver LU of 10% -15% depending on color	VS
INTEGRAL HEX LOUVER Not available with Asymmetric (AD & AI) optics	IHL
DIRECT VIEW DOME LENS Field installable LU OF 30% Only available with 100° X 100°	DVD
WHITE LENS LU OF 30% Only available with 100° X 100°	WL
CONCEALED WIRING Not available with 12" fixture	CW
WHITE CABLING White cabling is standard with textured white finish	WC
CORROSION RES. FINISH Corrosion Resistance Finish Complies with ASTM B117 standard CRF is recommended for coastal or extreme exterior environments	CRF

CONTROL & WIRING ORDER OPTIONS

Go to DMX Guide >

DMX DISTRIBUTION & PROGRAMMING KIT - REQUIRED FOR DMX DIMMING

DMX/RDM DISTRIBUTION KIT (4 OUTPUTS) - IP67	COS-RDM

DMX/RDM Distribution Kit consists of four output
Each output is limited to (1) run per output - up to 32 fixtures max
Four terminators are included for end of line termination

Go to Cable Guide >

EXTERIOR LEADER CABLE - REQUIRED

5.0 FT LEADER CABLE	LC-5

A leader cable is required for each single fixture and for each fixture run for connection from the first fixture to the j-box
Black cables are standard unless White Cabling (WC) option or Textured White (TW) fixture finish is selected

EXTERIOR JUMPER CABLES

1.0 FT JUMPER CABLE	JC-1
2.0 FT JUMPER CABLE	JC-2
5.0 FT JUMPER CABLE	JC-5
10.0 FT JUMPER CABLE	JC-10
25.0 FT JUMPER CABLE	JC-25

Required if fixtures are not mounted in an end-to-end continuous manner and for line voltage only
Black cables are standard unless White Cabling (WC) option or Textured White (TW) fixture finish is selected

PERFORMANCE

CCT AND LENGTH	OPTIC	LOW OUTPUT (3.5 W/FT) DELIVERED LUMENS	LUMINAIRE EFFICACY	PEAK CANDELA	MEDIUM OUTPUT (9.0 W/FT) DELIVERED LUMENS	LUMINAIRE EFFICACY	PEAK CANDELA	HIGH OUTPUT (15.0 W/FT) DELIVERED LUMENS	LUMINAIRE EFFICACY	PEAK CANDELA
4000K 24.00"	7° X 60°	998 LM	107.0 LM/W	3662	1685 LM	110.0 LM/W	6189	3366 LM	98.0 LM/W	12363
	10° X 10°	932 LM	100.5 LM/W	17011	1566 LM	103.0 LM/W	28686	3158 LM	91.2 LM/W	58765
	10° X 60°	804 LM	86.6 LM/W	2903	1348 LM	88.4 LM/W	4871	2709 LM	77.3 LM/W	9972
	20° X 20°	948 LM	102.1 LM/W	7658	1601 LM	102.4 LM/W	12983	3238 LM	93.3 LM/W	26993
	20° X 60°	862 LM	92.8 LM/W	1893	1451 LM	96.2 LM/W	3207	2914 LM	84.6 LM/W	6379
	40° X 40°	1001 LM	108.0 LM/W	1395	1688 LM	111.0 LM/W	2338	3392 LM	98.8 LM/W	4733
	40° X 60°	896 LM	96.7 LM/W	724	1497 LM	98.6 LM/W	1211	3039 LM	88.1 LM/W	2470
	60° X 60°	993 LM	107.1 LM/W	882	1666 LM	109.3 LM/W	1485	3354 LM	97.7 LM/W	2999
	80° X 80°	912 LM	98.2 LM/W	585	1525 LM	100.1 LM/W	976	3081 LM	88.8 LM/W	1980
	100° X 100°	620 LM	86.8 LM/W	263	1964 LM	93.3 LM/W	829	3230 LM	94.4 LM/W	1370
	ASY	888 LM	96.3 LM/W	3134	1473 LM	97.8 LM/W	5199	2890 LM	88.2 LM/W	9369
4000K 36.00"	7° X 60°	1496 LM	107.0 LM/W	5492	2527 LM	110.0 LM/W	9283	5048 LM	98.0 LM/W	18544
	10° X 10°	1398 LM	100.5 LM/W	25516	2349 LM	103.0 LM/W	43029	4737 LM	91.2 LM/W	88948
	10° X 60°	1205 LM	86.6 LM/W	4357	2022 LM	88.4 LM/W	7306	4063 LM	77.3 LM/W	14957
	20° X 20°	1421 LM	102.1 LM/W	11486	2402 LM	102.4 LM/W	19474	4856 LM	93.3 LM/W	39289
	20° X 60°	1292 LM	92.8 LM/W	2840	2177 LM	96.2 LM/W	4810	4371 LM	84.6 LM/W	9569
	40° X 40°	1502 LM	108.0 LM/W	2093	2531 LM	111.0 LM/W	3506	5088 LM	98.8 LM/W	7100
	40° X 60°	1344 LM	96.7 LM/W	1086	2245 LM	98.6 LM/W	1817	4559 LM	88.1 LM/W	3754
	60° X 60°	1489 LM	107.1 LM/W	1322	2499 LM	109.3 LM/W	2228	5031 LM	97.7 LM/W	4499
	80° X 80°	1368 LM	98.2 LM/W	877	2287 LM	100.1 LM/W	1464	4621 LM	88.8 LM/W	2970
	100° X 100°	929 LM	86.8 LM/W	394	2946 LM	93.3 LM/W	1244	4844 LM	94.4 LM/W	2054
	ASY	1332 LM	96.3 LM/W	4700	2209 LM	97.8 LM/W	7798	4335LM	88.2 LM/W	14053
4000K 48.00"	7° X 60°	1995 LM	107.0 LM/W	7323	3369 LM	110.0 LM/W	12377	6731 LM	98.0 LM/W	24725
	10° X 10°	1864 LM	100.5 LM/W	34021	3132 LM	103.0 LM/W	57372	6316 LM	91.2 LM/W	117530
	10° X 60°	1607 LM	86.6 LM/W	5809	2696 LM	88.4 LM/W	9741	5417 LM	77.3 LM/W	19943
	20° X 20°	1895 LM	102.1 LM/W	15315	3202 LM	102.4 LM/W	25965	6475 LM	93.3 LM/W	52385
	20° X 60°	1723 LM	92.8 LM/W	3786	2902 LM	96.2 LM/W	6413	5828 LM	84.6 LM/W	12758
	40° X 40°	2002 LM	108.0 LM/W	2790	3375 LM	110.7 LM/W	4675	6784 LM	98.8 LM/W	9466
	40° X 60°	1792LM	96.7 LM/W	1448	2993 LM	98.6 LM/W	2422	6078 LM	88.1 LM/W	4939
	60° X 60°	1985 LM	107.1 LM/W	1763	3332 LM	109.3 LM/W	2970	6708 LM	97.7 LM/W	5998
	80° X 80°	1824 LM	98.2 LM/W	1169	3049 LM	100.1 LM/W	1952	6161 LM	88.8 LM/W	3960
	100° X 100°	1239 LM	86.8 LM/W	525	3928 LM	93.3 LM/W	1658	6459 LM	94.4 LM/W	2739
	ASY	1776 LM	96.3 LM/W	6267	2945 LM	97.8 LM/W	10397	5780 LM	88.2 LM/W	18787

WIRING

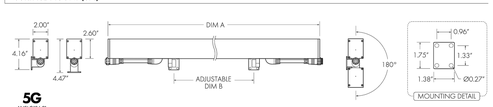
MAXIMUM FIXTURES PER CIRCUIT (CIRCUITS MAY NOT BE LOADED OVER 10 AMPS)

FIXTURE	LOW OUTPUT (3.5 W/FT) 120V	277V	MEDIUM OUTPUT (9.0 W/FT) 120V	277V	HIGH OUTPUT (15 .0 W/FT) 120V	277V
12.00"	343	791	133	308	71	163
24.00"	171	396	67	154	35	81
36.00"	114	264	44	103	24	54
48.00"	86	198	33	77	18	41

DIMENSIONS

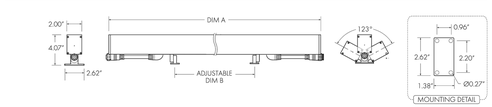
	12.00"	24.00"	36.00"	48.00"
DIM A	12.10"	23.85"	35.60"	47.35"
DIM B	9.28"	4.00" MIN | 6.00" MAX	12.00" MIN | 18.00" MAX	18.00" MIN | 30.00" MAX

SURFACE MOUNT (SM)

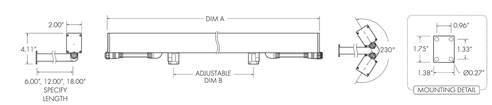


5G ANSI C136.31

GROUND MOUNT (GM)



EXTENDED ARM (EA-X)

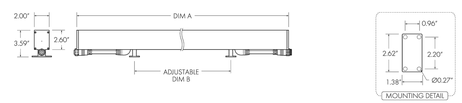


3G ANSI C136.3
3G rated with 6.00" arm

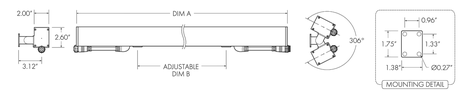
DIMENSIONS

	12.00"	24.00"	36.00"	48.00"
DIM A	12.10"	23.85"	35.60"	47.35"
DIM B	9.28"	4.00" MIN | 6.00" MAX	12.00" MIN | 18.00" MAX	18.00" MIN | 30.00" MAX

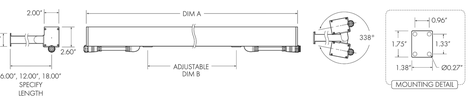
FIXED MOUNT (FM)



SURFACE, BACK MOUNT (SMB)



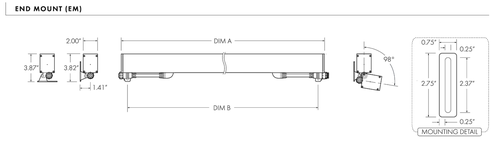
EXTENDED ARM, BACK MOUNT (EAB-X)



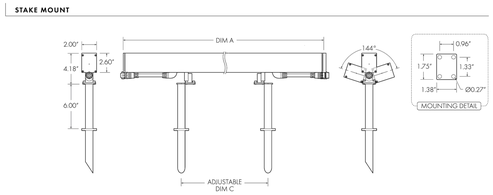
DIMENSIONS

	12.00"	24.00"	36.00"	48.00"
DIM A	12.10"	23.85"	35.60"	47.35"
DIM B	11.65	22.31"	34.06"	45.81"
DIM C	10.56"	4.00" MIN | 6.00" MAX	12.00" MIN | 18.00" MAX	18.00" MIN | 30.00" MAX

END MOUNT (EM)

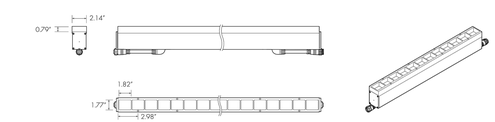


STAKE MOUNT

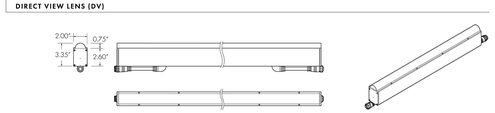


ACCESSORIES

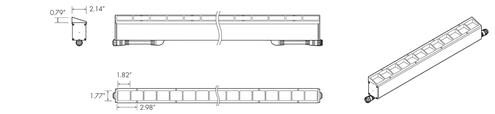
LOUVER (LV)



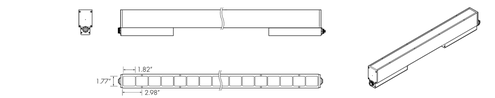
DIRECT VIEW LENS (DV)



VISOR (VS)



CONCEALED WIRING (CW)



TYPE "SG1 & SG2" GRAZER

NOT TO SCALE

SAL
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex

D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final
Development Plan

20 June 2022

LIGHTING - CUTSHEETS

smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

ME204P

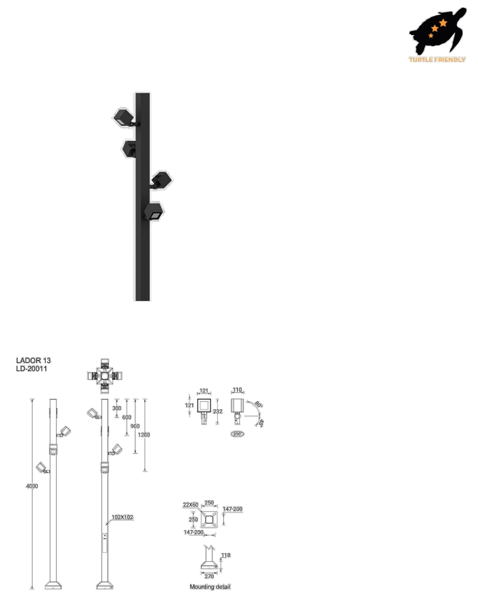
PROJECT NAME: 2214800 K1 Speed – Lees Summit, Mo
AUTOCAD FILE LOCATION \ NAME: X:\22\2148\2214800\Design\Photometrics\01-2214800_ME204P.dwg
LAST CORRECTION BY◆ DATE◆ TIME: CBooty Wednesday, June 15, 2022 4:38:36 PM
PLOTTED BY◆ DATE◆ TIME: Charles Booty Wednesday, June 15, 2022 4:40:59 PM

LIGMAN

Outdoor | Floodlights, projectors and column projectors | LADOR

LADOR 13 (LD-20011)

CE | IP66 | IK08



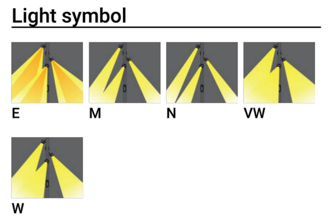
Luminaire Structure

- Die-cast aluminium housing
- Pre-treated before powder coating ensuring high corrosion resistance
- Thermal heat dissipation body
- Single cable entry, through wiring upon request
- Stainless steel fasteners in grade 304 with zinc flake coating (ZFC)
- Durable silicone rubber gasket
- High-efficiency PMMA lens
- Clear toughened glass
- Integral control gear
- Maximum wind load resistance is 140 km/h
- Surge protection 10kV

Product description

Supplied with specific 4 m square, straight aluminium pole: APC140102-LD

Light symbol



Product colour

01 - Black (RAL 9011)
02 - Dark Grey (RAL 7043)
03 - White (RAL 9003)
05 - Matt Silver (RAL 9006)
06 - Bronze (RAL 6014)

Special finishes upon request

SU01 - Concrete - Urban
SU02 - Softscape - Urban
SU03 - Stone - Urban
SU04 - Corten - Urban
SW01 - Oak - Woodland
SW02 - Walnut - Woodland
SW03 - Pine - Woodland

Technical information

Light source	4x9 LED
Light source type	LED
Dimming type	DALI, On/Off
Material	Aluminium
Weight	21.4 kg
Operating temperature	-20 °C to 40 °C

Luminaire	
Power	84 W
Lumen	7684 - 9456 lm
Efficacy	91 - 113 lm/W
CCT / CRI	3000K CRI80, 4000K CRI80
Drive current	700 mA
Driver option	Integral control gear
Driver	Constant current (CC)
Input voltage	220-240 V 50/60 Hz

Optic	E [43°x11°], M [17°], N [10°], VW [70°], W [34°]
Bug	B2-U0-G0, B3-U0-G0
ULR	0%
ULOR	0%
CIE flux code nº3	100
MacAdam Ellipse	3 SDCM
Lifetime L90B10 (hours)	120,000
Lifetime L80B10 (hours)	120,000
Lifetime L80B50 (hours)	120,000

We reserve the right to make technical and design changes.

05:55, 14-06-2022

https://www.ligman.com/lador-13-ld-20011/

Europe
LIGMAN EUROPE s.r.o.
VGP Park Ústí nad Labem
P 2 120
40317, Přestanov
Czech Republic
+420 477 071 500
sales.cz@ligman.com

ASIA PACIFIC
LIGMAN Lighting Co.,Ltd.
17/2 Moo4 Monthong
Bangnampreaw
24150, Chachoengsao
Thailand
+66 2 108 6700
info@ligman.com

TYPE "SM" MODULAR FLOODS

NOT TO SCALE

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Light ARchitect™

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Product Certifications

ISO Systems Certified | DLC Listed [1] | DLC Premium [1] | 3G VIB | IP66 | UL Certified | ida Dark Sky Approved [2] | BAA Buy American Act | 5 Year Limited Warranty

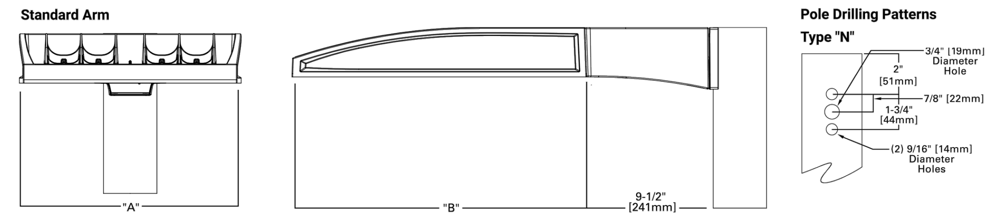
Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Connected Systems

- WaveLinx Lite
- WaveLinx

Dimensional Details



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified (3000K CCT and warmer only, fixed mounting options)

McGraw-Edison GALN Galleon II

Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

[illegible]

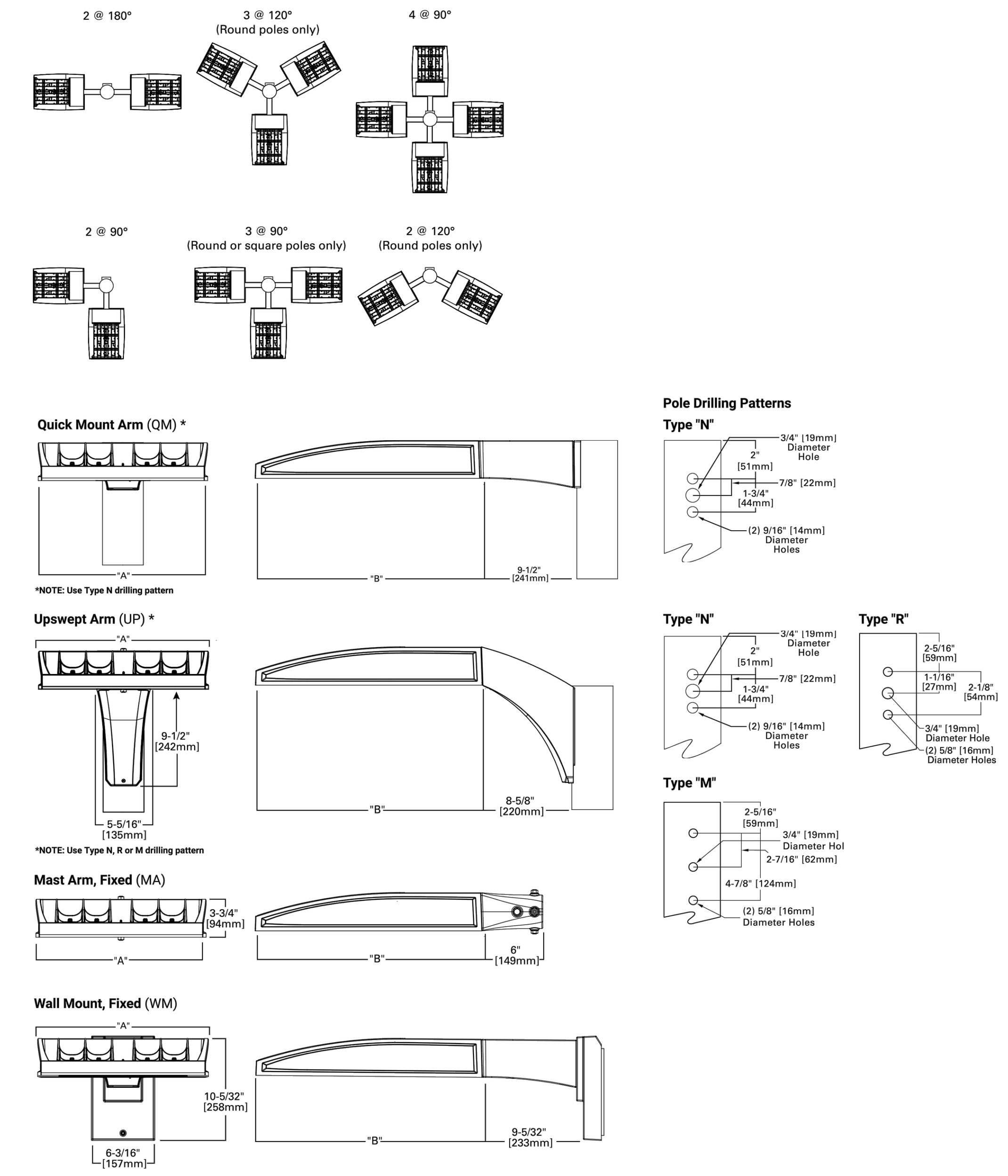
LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

[illegible]

McGraw-Edison GALN Galleon II

Mounting Details

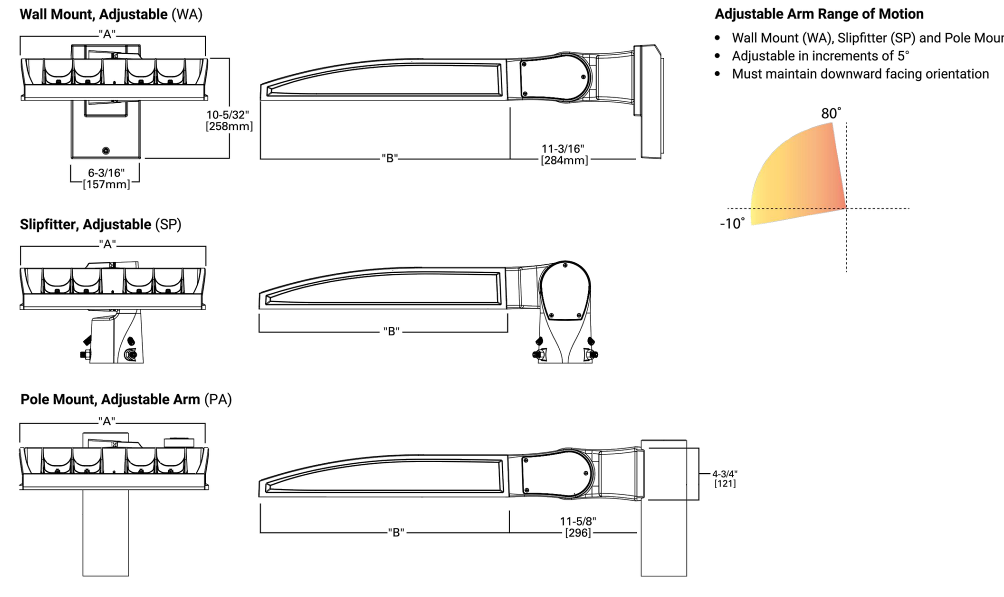
Pole Configuration Options



[illegible]

McGraw-Edison GALN Galleon II

Mounting Details



Adjustable Arm Range of Motion

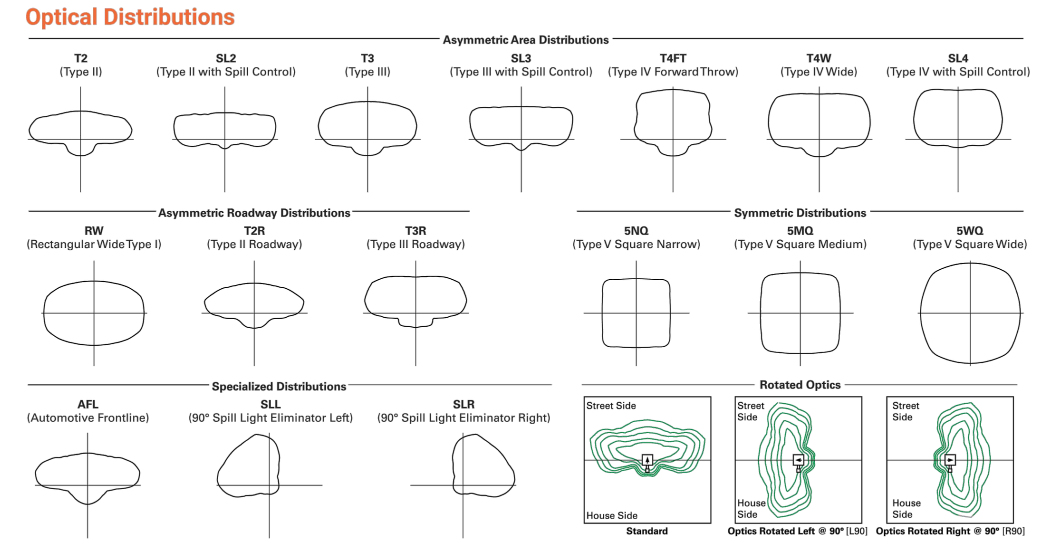
- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation

Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

McGraw-Edison GALN Galleon II

Optical Distributions



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Typical Applications
- Outdoor, Parking Lots, Walkways, Roadways, Building Areas

Warranty
- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

McGraw-Edison GALN Galleon II

Performance Table, Drive Current "B" (800mA)

[illegible]

TYPE "SP2 & SP5" FULL CUT-OFF

NOT TO SCALE

SAI
SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final
Development Plan

20 June 2022

smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

LIGHTING - CUTSHEETS

ME205P

PROJECT NAME: 2214800 K1 Speed - Lees Summit, Mo
AUTOCAD FILE LOCATION \ NAME: X:\22\22148\2214800\Design\Photometrics\01-2214800_ME205P.dwg
LAST CORRECTION BY ◆ DATE ◆ TIME: CBooty Wednesday, June 15, 2022 4:39:01 PM
PLOTTED BY ◆ DATE ◆ TIME: Charles Booty Wednesday, June 15, 2022 4:41:10 PM

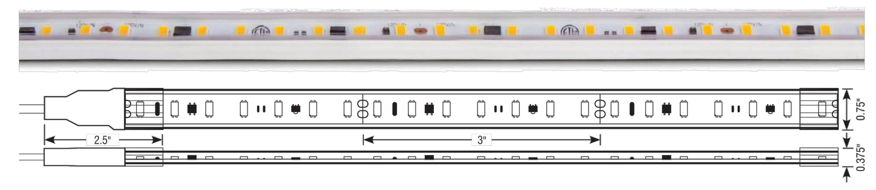
OREX™ (INDOOR/OUTDOOR)

LINE VOLTAGE | LINEAR LED LIGHTING

Fixture Type: ____________

Project: ____________

Location: ____________



MODEL	RX-24K	RX-27K	RX-30K	RX-35K	RX-40K	RX-50K	RX-65K
KELVIN	2400K	2700K	3000K	3500K	4000K	5000K	6500K
250 OUTPUT LUMENS	223 lm/ft	249 lm/ft	255 lm/ft	263 lm/ft	268 lm/ft	275 lm/ft	278 lm/ft
500 OUTPUT LUMENS	444 lm/ft	497 lm/ft	509 lm/ft	524 lm/ft	535 lm/ft	549 lm/ft	555 lm/ft

PRODUCT FEATURES

- 120V Line Voltage
- Integral AC/DC Rectifier
- ELV
- Triac
- 0-10V (with LCX-1041)
- Hardwire or Plug-in Installation
- IP65

0-10V DIMMABLE WITH OPTIONAL LCX-1041 MODULE

SPECIFICATIONS

Model	RX—OREX™
Input Voltage	120VAC
Watts per Foot	250 lm/ft = 3W/ft
	500 lm/ft = 6W/ft
Beam Spread	120º
Max Run Length	250 lm/ft = 120ft per Power Feed
	500 lm/ft = 100ft per Power Feed
Length Increments	3" (76mm)
End Cap Dimensions	0.75" (19mm) × 0.375" (10mm) × 2.5" (63.5mm)
Orex Dimensions	0.563" (14.3mm) × 0.25" (6.5mm)
CRI	90+
Diode	3056
Dimming Options	ELV, Triac, 0-10V*
Temp Range	-22ºF (-30ºC) to 122ºF (50ºC)

ORDERING INFORMATION

Example: RX-24K-250-HW72-120V-42FT-6IN

Item	CCT	Output	Power Feed	Voltage	Feet	Inches
RX				120V	__FT	__IN
RX—OREX™	**24K**—2400K **27K**—2700K **30K**—3000K **35K**—3500K **40K**—4000K **50K**—5000K **65K**—6500K	**250**—250 lm/ft **500**—500 lm/ft	**HW72**—72" Hardwire Feed **HW240**—240" Hardwire Feed **PL72**—72" Plug-in Feed **PL144**—144" Plug-in Feed *Consult Following Page For Power Feed Options*	**120V**	**Length**— Enter number of feet, followed by any remaining inches. (i.e. 42FT-6IN) *Max run length is 120ft per Power Feed for 250 output and 100ft per Power Feed for 500 output.*	

Conforms to ANSI/UL Standard 1598

Certified to CAN/CSA Standard C22.2 No. 250.0

RoHS COMPLIANT | WET LOCATION RATED | DAMP LOCATION RATED

Questions/Support | 800-789-3810 | quotes@kelvix.com 082721JH

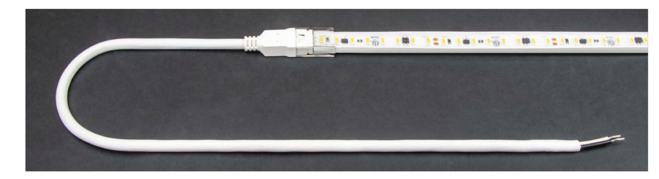
OREX™ FACTORY POWER AND CONNECT OPTIONS

LINE VOLTAGE | LINEAR LED LIGHTING

Fixture Type: ____________

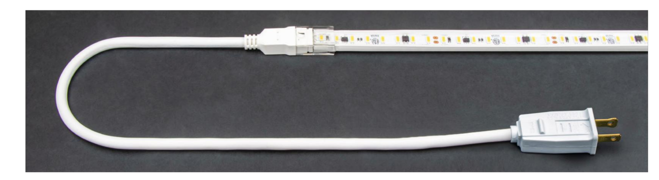
Project: ____________

Location: ____________



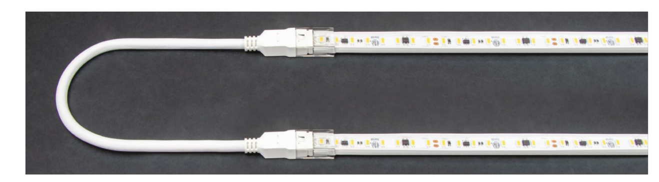
FACTORY INSTALLED HARDWIRE POWER FEED

Specify 72" or 240" length in component builder on preceding page.



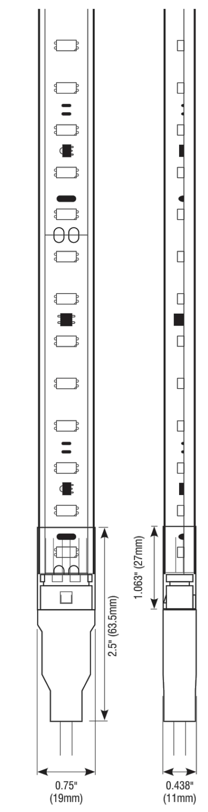
FACTORY INSTALLED PLUG-IN POWER FEED

Specify 72" or 144" length in component builder on preceding page.



FACTORY INSTALLED JUMP CABLES (CONSULT FACTORY FOR CONFIGURATION)

Available in 6", 24", and 48" cable lengths.



Questions/Support | 800-789-3810 | quotes@kelvix.com 082721JH

OREX™ MOUNTING OPTIONS

ENCLOSED MOUNTS

Fixture Type: ____________

Project: ____________

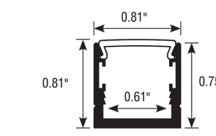
Location: ____________

FLAT ALUMINUM CHANNEL

Includes 1 Set of End Caps, 5 Mounting Clips, and Flat Pixel Free Lens

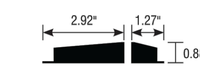
SPECIFICATIONS

Model	RX-CH-TL-2-FL
Channel Material	Aluminum
Lens Material	Acrylic
Length	78.74" (2m)
Width	0.81" (20mm)
Internal Width	0.61" (15.6mm)



RX-EC-FL-SD
Included with Aluminum Channel

	Start Cap	Finish Cap
Height	0.88" (22.5mm)	0.88" (22.5mm)
Length	2.92" (74.23mm)	1.27" (32.25mm)
Width	1.52" (38.82mm)	1.52" (38.82mm)

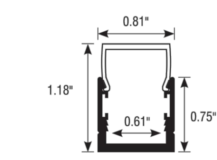


SQUARE ALUMINUM CHANNEL

Includes 1 Set of End Caps, 5 Mounting Clips, and Square Pixel Free Lens

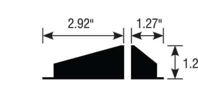
SPECIFICATIONS

Model	RX-CH-TL-2-SQ
Channel Material	Aluminum
Lens Material	Acrylic
Length	78.74" (2m)
Width	0.81" (20mm)
Internal Width	0.61" (15.6mm)

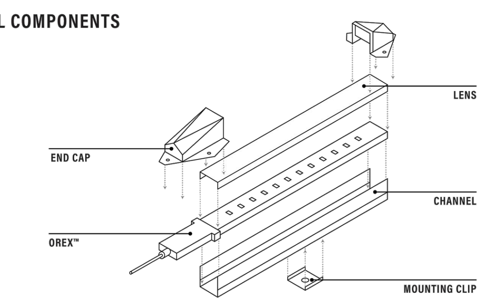


RX-EC-SQ-SD
Included with Aluminum Channel

	Start Cap	Finish Cap
Height	1.26" (32mm)	1.26" (32mm)
Length	2.92" (74.23mm)	1.27" (32.25mm)
Width	1.52" (38.82mm)	1.52" (38.82mm)



ALUMINUM CHANNEL COMPONENTS



Questions/Support | 800-789-3810 | quotes@kelvix.com 082721JH

OREX™ MOUNTING OPTIONS

EXPOSED MOUNTS

Fixture Type: ____________

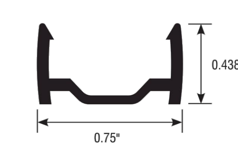
Project: ____________

Location: ____________

PLASTIC MOUNTING BASE

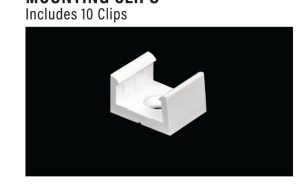
SPECIFICATIONS

Model	RX-CH-PL-2M
Material	Polycarbonate
Length	78.74" (2m)
Width	0.75" (18.9mm)
Height	0.438" (14.3mm)



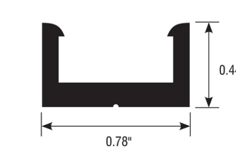
MOUNTING CLIPS

Includes 10 Clips



SPECIFICATIONS

Model	RX-CLP-F1-PAK-P
Material	Polycarbonate
Length	0.563" (15mm)
Width	0.78" (19.8mm)
Height	0.44" (11.3mm)

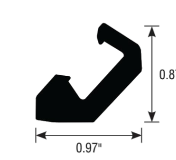


45° MOUNTING CLIPS

Includes 10 Clips

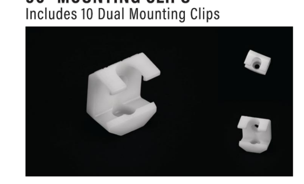
SPECIFICATIONS

Model	RX-CLP-A1-PAK-P
Material	ABS Plastic
Length	0.78" (19.7mm)
Width	0.97" (24.7mm)
Height	0.87" (22mm)



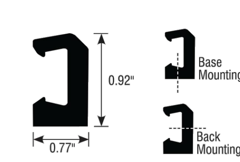
90° MOUNTING CLIPS

Includes 10 Dual Mounting Clips



SPECIFICATIONS

Model	RX-CLP-V1-PAK-P
Material	ABS Plastic
Length	0.77" (19.6mm)
Width	0.52" (13.3mm)
Height	0.92" (23.3mm)



Questions/Support | 800-789-3810 | quotes@kelvix.com 082721JH

CH-602

EXTRUDED ALUMINUM MOUNTING CHANNEL

Fixture Type: ____________

Project: ____________

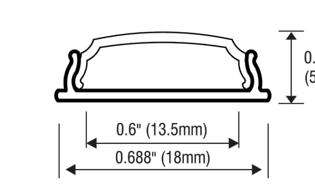
Location: ____________

PRODUCT FEATURES

- Available in 2 meter sections
- Extruded aluminum construction
- Anodized matte finish
- Consult factory for custom lengths

SPECIFICATIONS

Model	CH-602
Length	78.74" (2m)
External Width	0.688" (18mm)
Internal Width	0.6" (13.5mm)
Height	0.25" (5.7mm)



ORDERING INFORMATION

Example: **CH602-2-WH-CP-EC**

Series	Length	Lens	Mounting	End Cap
CH602	2	WH	CP	EC
CH-602	**2 meter**	**WH** - White	**CP** - Mounting Clip	**EC** - End Caps (included)

Questions/Support | 800-789-3810 | quotes@kelvix.com 110519DM

TYPE "ST W/ BENDABLE CHANNEL"

NOT TO SCALE

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final Development Plan

20 June 2022

smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

LIGHTING - CUTSHEETS

ME206P

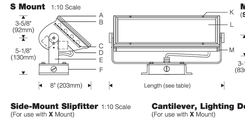
PROJECT NAME: 2214800 K1 Speed - Lees Summit, Mo
AUTOCAD FILE LOCATION \ NAME: X:\22\22148\2214800\Design\Photometrics\01-2214800_ME206P.dwg
LAST CORRECTION BY ◆ DATE ◆ TIME: CBooty Wednesday, June 15, 2022 4:39:23 PM
PLOTTED BY ◆ DATE ◆ TIME: Charles Booty Wednesday, June 15, 2022 4:41:19 PM

Lighting the Vertical
Large outdoor, integral driver

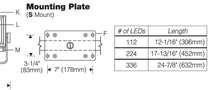
Solid State (LED)

Style S172

S Mount 1:10 Scale

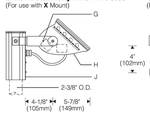


Mounting Plate
(S Mount)

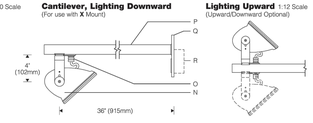


# of LEDs	Length
112	12-1/16" (306mm)
224	17-13/16" (452mm)
336	24-7/8" (632mm)

Side-Mount Slipfitter 1:10 Scale
(For use with **X** Mount)



Cantilever, Lighting Downward
(For use with **X** Mount)



Lighting Upward 1:12 Scale
(Upward/Downward Optional)

Specifications

A Mitred extruded aluminum door frame
B Precured silicone door and lens gasket
C Field serviceable light engine with asymmetric optic
D Integral driver
E Aluminum yoke
F Surface splice box
G Locking set screw
H Specular extruded aluminum housing
J Extruded aluminum slipfitter
K Tamper-resistant captive door screws
L Micro-prismatic impact resistant tempered glass lens
M Aluminum reveal plate (black)
N Die-cast aluminum end plates
O 1/2" NPT nipple
P 1-1/2" aluminum arm
Q Welded aluminum mounting plate with splice access cover
R Outlet box (by others)

Optic Assembly:
Two-piece extruded aluminum heat sink housing and light engine. Exterior heat sink anodized for maximum emissivity. Precision extruded polymer refractive lens with optimized asymmetric distribution. Light engine may be removed for service or upgrade. Clear Tempered micro-prismatic glass lens. Stainless steel hardware.

Finish:
Exterior surfaces – 6 stage pretreatment and electrostatically applied thermoset polyester powder coating for a durable abrasion, fade and corrosion resistant finish. Choice of semigloss colors (see ordering information). Extruded aluminum heat sink/housing plus yoke, door frame and decorative end plates are finished in color. All hardware and components – non-corrosive stainless steel or aluminum.

Mounting:
S mount provided with 1/2" NPT nipple, wet location outlet box and cover finished to match the luminaire.
X mount for use with required aluminum cantilever or slipfitter — ordered and priced separately, see SV3.1. Top or side mount slipfitter for 2-3/8" O.D. stanchion, pole (by others).
Fixture weights: 12" fixture 12.4 lb (5.6 kg); 17" fixture 16.2 lb (7.3 kg); 24" fixture 24.0 lb (10.9 kg).

Electrical:
Use 90°C wire for supply connections. Integral electronic HPF constant current driver. For complete driver specifications, see website, reference document **MA-1303**.

Standard:
CSA certified to UL1598, UL8750, CSA C22.2 for wet locations. 5 year warranty, maximum ambient temperature 45°C (113°F).

4/21

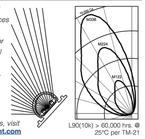
Features

- *Extruded aluminum housing, die-cast aluminum end plates. 1000 hour salt-spray test to ASTM B117-90*
- *Silicone gaskets – keep dirt and moisture out*
- *Yoke set screw – securely locks aiming*
- *Asymmetric distribution – illuminates planes evenly*

SV 3.0

Performance

Precisely extruded acrylic lens produces an asymmetric distribution ideal for illuminating vertical surfaces evenly from top to bottom.



For LM79 and photometric reports, visit **thelightingquotient.com**

L90(10k) > 60,000 hrs @ 25°C per TM-21

elliptipar

To Order

Style S172

To form a Catalog Number

S 1 7 2 - _ _ - _ _ - _ _ - _ _ - _ _ - _ _ - _ _ - _ _ - _ _ - _ _
1 2 3 4 5 6 7 8 9 10

Project:

Type:

1 Source
S = Solid State (LED)

2 Style
172 = Large outdoor, integral driver

3 Length / Light Output / Power

ORDER CODE	LENGTH	LUMENS	INPUT WATTS	NUMBER OF LEDS	DRIVE CURRENT
L112	12"	3160	27	112	150mA
M112	12"	6111	54	112	300mA
L224	17"	6320	54	224	150mA
M224	17"	12221	109	224	300mA
L336	24"	9480	81	336	150mA
M336	24"	18332	163	336	300mA

Based on 3500K, 80+CRI. **Click here** for scaled performance table.

4 Mounting
S = External yoke with 1/2" NPT nipple, wet location outlet box and cover finished to match luminaire
X = External yoke for use with required cantilever or slipfitter — ordered and priced separately, see hangers at right

SV 3.1

5 Finish
02 = Semigloss white
06 = Dark bronze*
07 = Silver*
08 = Semigloss black
15 = Metallic
17 = Champagne*
18 = Copper*
99 = Custom or RAL, consult sales rep.*

02 07* 15* 08 06* 18* 17*

* = non-cancellable/returnable

6 Voltage
M = 120-277V Universal voltage input
K = 347V input

7 Option (see Accessories Section for specifications)
00 = No options
V0 = Visor option
XX = For modification not listed, include detailed description. Consult factory prior to specification.

8 Destination Requirement
0 = UL listed or CSA certified for U.S.
J = UL listed or CSA certified for Canada

9 Color Temperature / CRI
827 = 2700K, 80+ CRI
830 = 3000K, 80+ CRI
835 = 3500K, 80+ CRI
840 = 4000K, 80+ CRI
740 = 4000K, 70+ CRI
927 = 2700K, 90+ CRI
930 = 3000K, 90+ CRI
935 = 3500K, 90+ CRI
940 = 4000K, 90+ CRI

Note: Additional CCT and CRI options are available; consult factory.

RGBW - Consult factory.

10 Dimming**
00 = Non-dimming
TD = ERP forward phase or reverse phase (120V only), dimming range 100-10% power, compatible controls by others
ZX = 0-10V analog dimming 120-277V input, dimming range 100%-5%, 0-10V controls by others
EL = eldoLED SOLOdrive 120-277V input, dimming range 100%-0.1%, 0-10V controls by others.

**Dimming range refers to % power input, % light output will vary.

Refer to Driver Information document MA-1303
Note: Number of drivers varies with number of LEDs, drive current and driver type.

Required Mounting Hangers (X mount)
Required **ACL** or **ASF** mounting hangers for **X** mount cantilever or slipfitter fixtures are ordered and priced separately. See installation sheets on website.

AC ___ **36** ___ = **Cantilever**, 36" (914mm) setback (for use with **X** mount unit)
0 = U.S.
J = Canada
5 Finish
L = single unit (downward or upward facing only)

ASF ___ **T10** = **Top-mount slipfitter**, for 2-3/8" O.D. stanchion, pole or tenon (for use with single **X** mount unit)
5 Finish

ASF ___ **S10** = **Side-mount slipfitter**, for 2-3/8" O.D. pole, stanchion or tenon (for use with single **X** mount unit)
5 Finish

Accessories
AE ___ **V** ___ **0D0** = External vertical blade **baffle**, black, for lengthwise shielding
2 = 25° shielding
4 = 45°
C = 12 inch fixtures
D = 17 inch fixtures
F = 24 inch fixtures

AV ___ **0D0** = Cutoff **visor**
5 Finish
C = 12 inch fixtures
D = 17 inch fixtures
F = 24 inch fixtures

elliptipar

4/21

*The external shapes of the housings are trademarks of Sylvan R. Shemitz Designs, LLC dba **The Lighting Quotient**, makers of **elliptipar**, **tambient** and **fractir**.*

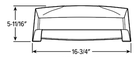
elliptipar from **The Lighting Quotient**
114 Boston Post Road, West Haven, Connecticut 06516, USA
Voice 203.931.4455 • Fax 203.931.4464 • **thelightingquotient.com**

Certain products illustrated may be covered by applicable patents and patents pending. These specifications supersede all prior publications and are subject to change without notice. Copyright © 2021 Sylvan R. Shemitz Designs, LLC, all rights reserved.

TYPE "SW" FLOOD
NOT TO SCALE

VWP LED Voltaire Architectural Wall Pack

Williams



VWPH Front View
Weight: 15 lbs

CATALOG #:

TYPE:

PROJECT:

FEATURES
- Designed to illuminate sidewalks, entryways, perimeters or facades
- Intended for use in both uplight and downlight applications
- Savings of up to 80% energy compared to HID systems
- Blends seamlessly with a variety of architectural styles
- Made Right Here® in the USA

SPECIFICATIONS
- HOUSING – Die-cast aluminum enclosure.
- THERMAL MANAGEMENT – Integral die-cast aluminum heatsink and LED assembly provide passive thermal management. Rated -30°C to 40°C ambient operating temperature (-20°C to 40°C with EM/10WC; 0°C to 35°C with EM/4W).
- OPTICAL SYSTEM – Precision, injection-molded, refractive acrylic lensing produces standard IES distributions.
- LED ASSEMBLY – ANSI 3000K, 4000K, or 5000K CCT, minimum 70 CRI LEDs.
- LED DRIVER – 0-10V dimming.
- ELECTRICAL – 120-277, 347, and 480 VAC input range; 50-60Hz; power factor > 90; THD <20% at full load. FCC Class A compliant. 10kA/10kV surge protection standard. Quick-disconnect wiring provided. L70 >50,000 hours per IES TM-21.
- FINISH – Super durable polyester powder coat bonded to phosphate-free, multi-stage pretreated metal, meets and exceeds AAMA 2604 specifications for outdoor durability.
- MOUNTING – Surface mounts directly over a 4" maximum outlet box. Must be anchored to adequate structure that can safely support fixture weight (VWPH – 15 lbs, VWPV – 23 lbs).
- LISTINGS –
  - cCSAus certified as luminaire suitable for wet locations.
  - IDA Dark-Sky approved (downlight applications only).
  - RoHS compliant.
  - IP65 rated.
  - Title 24 compliant with OCCWS FSP-311-L_ option.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: VWP H · L30/740 · T3 · DBZ · SDGL · OPTIONS · DIM · UNV

ORDERING INFO

SERIES	TYPE	LUMENS [1]	CRI	CCT	DISTRIBUTION [2]
VWP	**H** Horizontal **V** Vertical	**L30** 3,000lm **L60** 6,000lm	**7** 70	**30** 3000K **40** 4000K **50** 5000K	**T3** Type III **TFT** Type forward throw

FINISH OPTIONS [3]
BLK Black (RAL #9004)
DBZ Dark bronze
DBR Medium bronze
GRAY Standard gray
SLV Satin aluminum (RAL #9006)
WHT White (RAL #9003)

SHIELDING
SDGL Micro-prismatic tempered glass lens
CGL Clear tempered glass lens

OPTIONS
EM/4W 4-watt integral emergency LED driver [4]
SF Single fuse [5]
DF Double fuse [6]
PC Factory-installed button-style photocell [7]
HSGX Empty housing extension used to match units with EM, OCC, or conduit entry options.
TP Tamper-resistant Torx head screws [8]

CONDUIT ENTRY [9]
CR Right side conduit entry [10]
CL Left side conduit entry [11]
CD Dual conduit entry

VWPH ONLY
EM/10WC 10-watt emergency LED driver [12]
OCCWS FSP-311-L_ Factory-installed occupancy sensor [13]

CONTROL
DIM Dimming driver prewired for 0-10V controls

VOLTAGE
120 120V
208 208V
240 240V
277 277V
UNV 120-277V
347 347V [14]
480 480V [15]

ACCESSORIES
TPTX-25 TOOL Tamper-resistant tool for Torx head screws. [16]

NOTES
1. Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA. Additional lumen package available, see options
2. See page 2 for DISTRIBUTION DETAILS.
3. See page 3 for FINISH OPTIONS.
4. 120-277V only; VWPV includes housing extension, increases fixture depth. See page 2 for FIXTURE DETAILS.
5. 120V, 277V, or 347V only; must specify voltage
6. 208V, 240V, or 480V only; must specify voltage.
7. 120V, 208V, or 277V only; must specify voltage. Not available when specified with OCCWS option. See page 3 for OPTIONS DETAILS. Right side when viewed from behind fixture.
8. Silver finish only. Safety screws providing added support to the lens are not tamper-resistant (lens is sealed to the fixture via adhesion). Requires a tamper-resistant tool, see Accessories.
9. Fixtures require housing extension when specified with conduit entry. Increases fixture depth. Conduit entry provided with 1/2" NPT tapered pipe thread and plug. Increases fixture height. Conduit fitting to be supplied by others. Left and right when viewed from behind fixture.
10. Left and right when viewed from behind fixture.
11. Left and right when viewed from behind fixture.
12. Low temperature, includes housing extension increases fixture depth; 120-277V only; not available with CR and CD options. See page 2 for FIXTURE DETAILS.
13. Includes housing extension (increases fixture depth), must specify lens. See page 3 for OCCUPANCY SENSOR DETAILS.
14. Includes stepdown transformer.
15. Includes stepdown transformer.
16. Tamper-resistant tool must be ordered separately. Please specify quantity required per project.

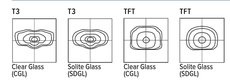
VWP LED Voltaire Architectural Wall Pack

FIXTURE PERFORMANCE DATA

	LED PACKAGE	DISTRIBUTION	WATTAGE	CCT	CLEAR GLASS(CGL) DELIVERED LUMENS	CLEAR GLASS(CGL) EFFICACY(lm/W)	SOLITE GLASS (SDGL) DELIVERED LUMENS	SOLITE GLASS (SDGL) EFFICACY(lm/W)	BUG RATINGS
VWPH	L30	T3	36	3000	3174	88.2	2963	82.3	B1-U0-G1
				4000	3327	92.4	3106	86.3	
				5000	3438	95.5	3209	891	
		TFT		3000	2713	75.4	2533	70.4	B1-U0-G1
				4000	2844	79.0	2655	73.8	
				5000	2939	81.6	2743	76.2	
	L60	T3	70	3000	5933	84.8	5887	84.1	B1-U0-G1
				4000	6611	94.4	6172	88.2	
				5000	6831	97.6	6376	911	
		TFT		3000	5470	78.1	5065	72.4	B2-U0-G1
				4000	5688	81.3	5309	75.8	
				5000	5876	83.9	5486	78.4	
VWPV	L30	T3	36	3000	3115	86.5	2908	80.8	B1-U0-G1
				4000	3403	94.5	3177	88.3	
				5000	3385	94.0	3160	87.8	
		TFT		3000	2840	78.9	2651	73.6	B2-U0-G1
				4000	3103	86.2	2896	80.4	
				5000	3086	85.7	2881	80.0	
	L60	T3	70	3000	6171	88.2	5813	83.0	B2-U0-G2
				4000	6804	97.2	6351	90.7	
				5000	6767	96.7	6317	90.2	
		TFT		3000	5822	83.2	5126	73.2	B3-U0-G1
				4000	5999	85.7	5600	80.0	
				5000	5967	85.2	5570	79.6	

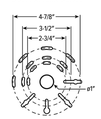
- Photometric tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277 input.

DISTRIBUTION DETAILS



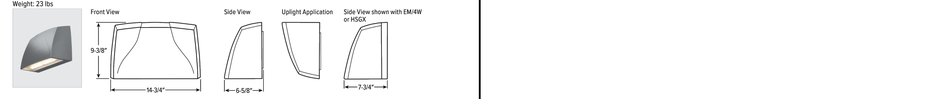
FIXTURE DETAILS

BOLT PATTERN DETAIL



VWPH
Weight: 15 lbs; maximum weight with EM/10WC or HSGX: 27 lbs.

VWPV
Weight: 23 lbs



TYPE "WP" WALL PACK
NOT TO SCALE

SLAGGIE ARCHITECTS, INC. ©2022
Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

NOT FOR CONSTRUCTION

K-1 Speed
Entertainment Complex
D4 Holdings
Strother Crossing
2911 NE Independence Avenue, Lee's Summit, MO 64063

Revisions:

Project #: 211107

Final
Development Plan

20 June 2022

LIGHTING - CUTSHEETS

smith & boucher engineers
25618 west 103rd St olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 2214800-P

ME207P

PROJECT NAME: 2214800 K1 Speed - Lees Summit, Mo
AUTOCAD FILE LOCATION \ NAME: X:\22\2214800\Design\Photometrics\01-2214800_ME207P.dwg
LAST CORRECTION BY ◆ DATE ◆ TIME: CBooty Wednesday, June 15, 2022 4:39:45 PM
PLOTTED BY ◆ DATE ◆ TIME: Charles Booty Wednesday, June 15, 2022 4:41:28 PM