PARAGON STAR SOCCER COMPLEX

1401 NW View High Drive, Lee's Summit, MO

May 15, 2019

Final Development Plan - RESUBMITTAL

SHEET INDEX

CIVIL
C-100 GENERAL LAYOUT
C-101 GENERAL LAYOUT
C-200 GRADING PLAN
C-201 GRADING PLAN
C-202 GRADING PLAN
C-203 GRADING PLAN
C-204 GRADING PLAN
C-205 GRADING PLAN
C-206 GRADING PLAN
C-207 GRADING PLAN
C-208 GRADING PLAN
C-209 GRADING ENLARGEMENT
C-210 GRADING ENLARGEMENT
C-211 GRADING ENLARGEMENT
C-212 GRADING ENLARGEMENT
C-213 GRADING ENLARGEMENT
C-214 GRADING ENLARGEMENT
C-215 GRADING ENLARGEMENT
C-216 GRADING ENLARGEMENT
C-217 GRADING ENLARGEMENT
C-218 GRADING ENLARGEMENT
C-219 GRADING ENLARGEMENT
C-300 DIMENSION PLAN
C-301 DIMENSION PLAN
C-302 DIMENSION PLAN
C-303 DIMENSION PLAN
C-304 DIMENSION PLAN
C-305 DIMENSION PLAN
C-306 DIMENSION PLAN
C-307 DIMENSION PLAN
C-308 DIMENSION PLAN
C-309 EMERGENCY VEHICLE ACCESS
C-400 UTILITY PLAN
C-401 UTILITY PLAN
C-402 UTILITY PLAN
C-403 UTILITY PLAN
C-404 UTILITY PLAN
C-405 UTILITY PLAN
C-406 UTILITY PLAN
C-407 UTILITY PLAN
C-408 UTILITY PLAN
C-500 CONSTRUCTION DETAILS
C-501 CONSTRUCTION DETAILS
C-502 CONSTRUCTION DETAILS
C-503 UTILITY DETAILS
C-504 UTILITY DETAILS
C-505 STORM SEWER DETAILS
C-506 STORM SEWER DETAILS
C-507 STORM SEWER DETAILS
C-508 STORM SEWER DETAILS
C-509 STORM SEWER DETAILS
C-510 STORM SEWER DETAILS
C-600 STORM SEWER PROFILES
C-601 STORM SEWER PROFILES
C-602 STORM SEWER PROFILES
C-700 DRAINAGE MAP
C-800 DRAINAGE CALCULATIONS
C-900 EROSION CONTROL PLAN
C-901 EROSION CONTROL PLAN
C-902 EROSION CONTROL PLAN
C-903 EROSION CONTROL PLAN

C-904 EROSION CONTROL PLAN
C-905 EROSION CONTROL PLAN
C-906 EROSION CONTROL PLAN
C-907 EROSION CONTROL PLAN
C-1000 EROSION CONTROL NOTES
C-1001 EROSION CONTROL DETAILS
C-1002 EROSION CONTROL DETAILS
C-1003 EROSION CONTROL DETAILS
C-1004 EROSION CONTROL DETAILS
C-1005 EROSION CONTROL DETAILS
C-1006 EROSION CONTROL DETAILS

PLAYING FIELD

PF-101 FIELD 1 & 2 MATERIALS & DETAILS
PF-102 FIELD 3 & 4 MATERIALS & DETAILS
PF-103 FIELD 5 & 6 MATERIALS & DETAILS
PF-104 FIELD 7 & 8 MATERIALS & DETAILS
PF-105 FIELD 9 & 10 MATERIALS & DETAILS

ARCHITECTURE

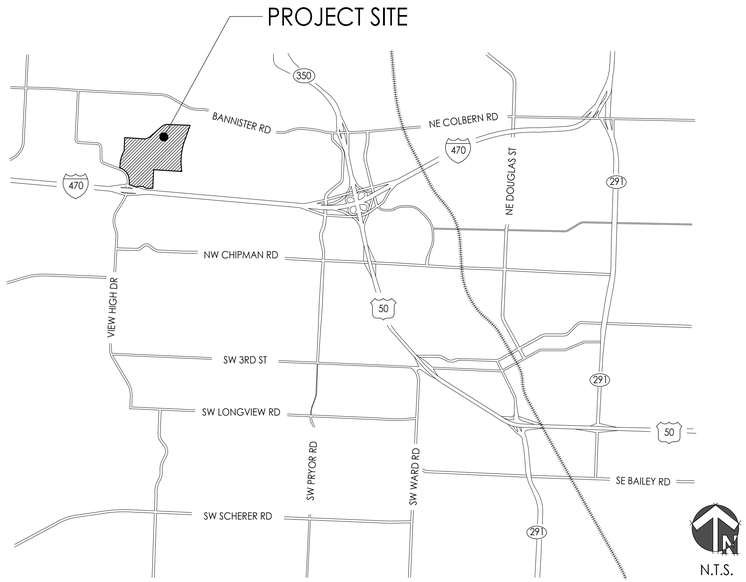
A-1.01 FLOOR PLANS
A-2.01 BUILDING ELEVATIONS

LANDSCAPE & IRRIGATION

L-001 OVERALL SITE PLAN
L-500 LANDSCAPE PLAN
L-501 LANDSCAPE PLAN
L-502 LANDSCAPE PLAN
L-503 LANDSCAPE PLAN
L-504 LANDSCAPE PLAN
L-505 LANDSCAPE PLAN
L-506 LANDSCAPE PLAN
L-507 LANDSCAPE PLAN
L-508 LANDSCAPE SCHEDULE
L-700 SITE DETAILS
L-800 PLANTING DETAILS

ELECTRICAL

E-000 ELECTRICAL SYMBOLS & LEGENDS
E-100 ELECTRICAL SITE PLAN
E-200 PHOTOMETRIC PLAN
E-300 ELECTRICAL ONE-LINE DIAGRAM
P-000 PLUMBING SYMBOLS & NOTES
P-001 PLUMBING SITE PLAN



PLANS PREPARED BY

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Engineering Corp 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
816.207.6019
www.land3studio.com
MO Landscape Arch Corp 2008001860

Hoerr Schaudt
Landscape Architects
2100 Central St, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Landscape Arch Corp 2019004088

Henderson Engineers, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
MO Engineering Corp 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
MO Architecture Corp 00453304

OWNER

Paragon Star, LLC
801 NW Commerce Drive
Lee's Summit, MO 64086
855.802.6800
www.paragonstarusa.com

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex
Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

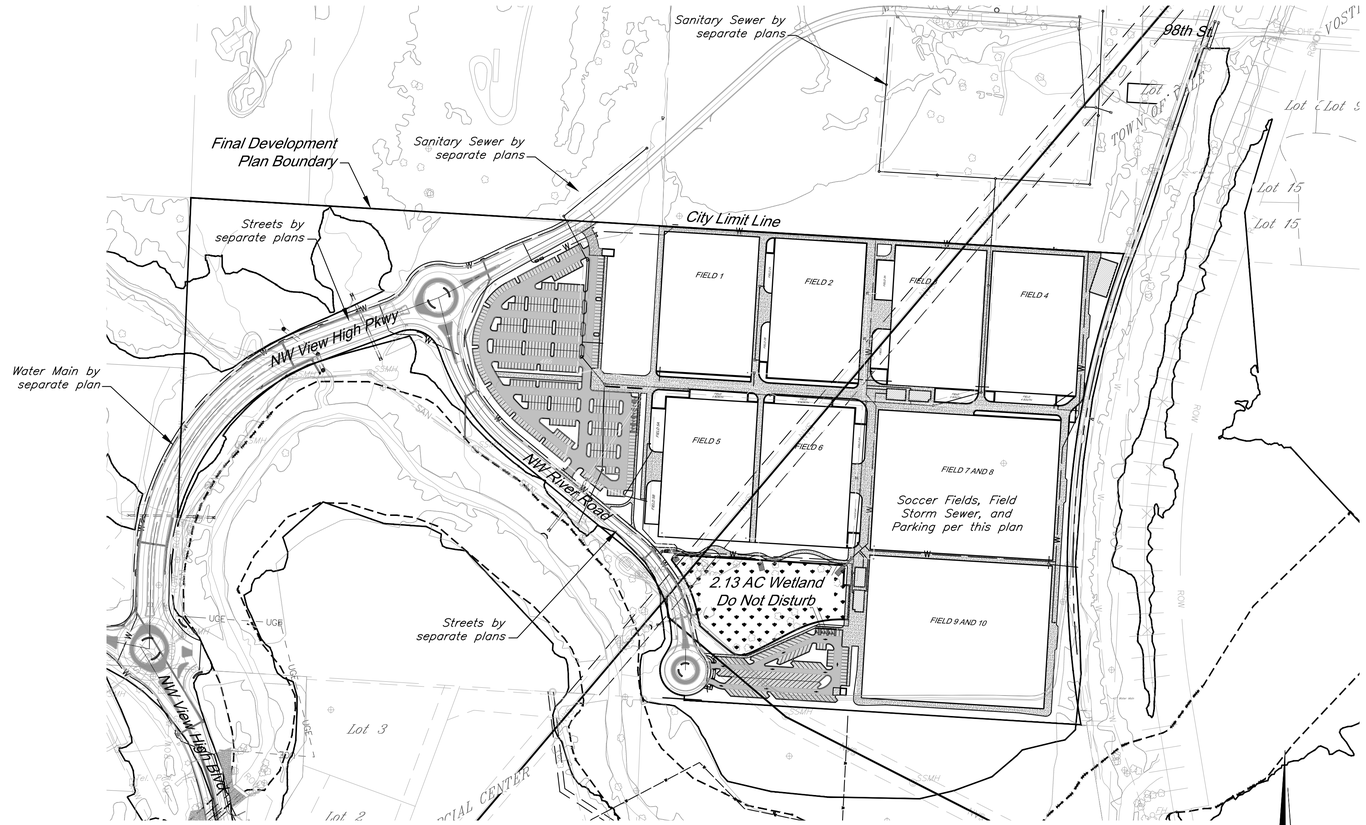
COVER

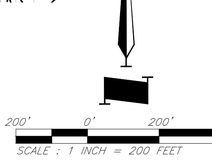
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: EDD,RWB

SHEET NO:

000

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





Boundary Description:

All that part of the Northwest Quarter of Section 34, Township 48 North, Range 32 West, of the 5th P.M., and all of GRAHAM COMMERCIAL CENTER, a subdivision in the in the City of Lee's Summit, Jackson County, Missouri, being more particularly described as follows:

BEGINNING at the Northwest corner of said Northwest Quarter of Section 34; thence South 86°33'45" East, along the North line of said Northwest Quarter, a distance of 2611.91 feet, to a point on the Westerly Right-of-Way line of Union Pacific Railroad, as now established; thence South 18°46'13" West, departing said North line, along said Westerly Right-of-Way line, a distance of 76.95 feet, to a point of curvature; thence Southwesterly and Southeasterly, continuing along said Westerly Right-of-Way line, along a curve to the left, having a radius of 2508.01 feet, and a central angle of 28°06'45", a distance of 1230.57 feet, to a point of tangency; thence South 09°20'32" East, continuing along said Westerly Right-of-Way line, a distance of 30.31 feet, to a point on the South line of the North half of said Northwest Quarter; thence South 86°26'21" East, continuing along said Westerly Right-of-Way line, and along said South line of the North half of the Northwest Quarter, a distance of 16.41 feet; thence South 09°20'32" East, departing said South line of the North half of the Northwest Quarter, continuing along said Westerly Right-of-Way line, a distance of 354.98 feet, to a point on the East line of said Northwest Quarter; thence South 02°29'17" West, continuing along said Westerly Right-of-Way line, and along said East line of the Northwest Quarter, a distance of 468.48 feet, to a point on the North Right-of-Way line of Interstate 470, as now established; thence North 85°05'37" West, departing said Westerly Right-of-Way line, along said North Right-of-Way line of Interstate 470, a distance of 899.87 feet; thence North 75°10'03" West, continuing along said North Right-of-Way line, a distance of 203.04 feet; thence South 77°15'22" West, continuing along said North Right-of-Way line, a distance of 228.93 feet, to a point on the East line of the Southwest Quarter of said Northwest Quarter, said point also being the Southeast corner of said GRAHAM COMMERCIAL CENTER; thence continuing South 77°15'22" West, continuing along said North Right-of-Way line, and along the South line of said subdivision, a distance of 1.94 feet; thence South 88°33'58" West, continuing along said North Right-of-Way line, and along said South line of said subdivision, a distance of 181.11 feet; thence North 85°01'31" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 100.18 feet; thence North 60°06'43" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 165.44 feet; thence North 85°08'16" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 199.96 feet; thence South 60°28'02" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 97.23 feet; thence North 69°50'05" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 342.03 feet, to the Southwest corner of said subdivision; thence North 30°28'52" West, continuing along said North Right-of-Way line, and along the West line of said subdivision, a distance of 87.88 feet; thence North 07°21'08" East, continuing along said North Right-of-Way line and it's transition to the East Right-of-Way line of View High Drive, as now established, and said West line of said subdivision, a distance of 106.53 feet; thence North 20°25'39" East, departing said West line of said subdivision, continuing along said East Right-of-Way line of View High Drive, a distance of 185.39 feet; thence North 45°30'34" West, continuing along said East Right-of-Way line, a distance of 129.40 feet; thence North 12°40'32" West, continuing along said East Right-of-Way line, a distance of 278.96 feet, to a point on said South line of the North half of the Northwest Quarter; thence North 86°26'21" West, continuing along said East Right-of-Way line, and along said South line of the North half of the Northwest Quarter, a distance of 130.00 feet, to the Southwest corner of said North half of the Northwest Quarter; thence North 02°25'47" East, along the West line of said Northwest Quarter, a distance of 1316.45 feet, to the POINT OF BEGINNING, containing 5,217,462.56 square feet or 119.78 acres, more or less.

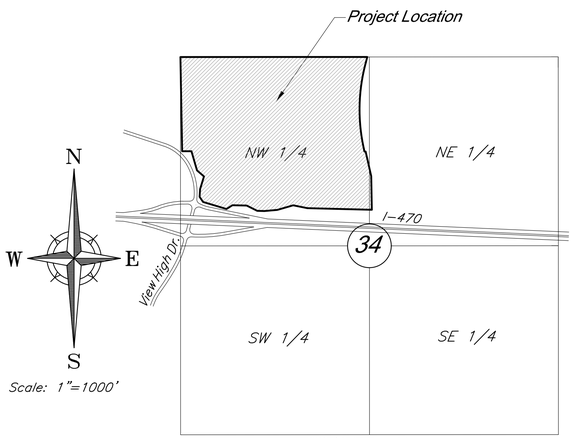
See Sheet C-101 for dimensioned boundary.

Project Benchmark:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive.
EL=833.80

Floodplain:

According to FEMA Flood Insurance Rate Map (FIRM) Community Panel No. 29095C0404G, effective Date 1/20/17, the tract lies partially within an area designated as Special Flood Hazard Areas. Special Flood Hazard Areas defined on portions of the site include regulatory floodway, Zone AE (with depths identified on site from 810 to 811), and 0.2% Annual Chance Flood Hazard Areas.



VICINITY MAP

Section 33 & 34-T48N-R32W

General Notes:

1. All Construction shall conform to the City of Lee's Summit Technical Specifications in effect at the time of the City's approval date shown on the approved plans and incorporated herein by reference.
2. All traffic control shall be the responsibility of the Contractor and shall be in conformance with the Manual of Uniform Traffic Control Devices (MUTCD).
3. Property Corners and/or Section corners disturbed or damaged by construction activities shall be reset by a Registered Land Surveyor licensed in the state of Missouri, at the Contractor's expense.
4. The Contractor shall be responsible for the restoration of the Right-of-Way and for damaged improvements such as curbs, driveways, sidewalks, street light and traffic signal junction boxes, traffic signal equipment, irrigation systems, etc. Damaged improvements shall be repaired in conformance with the latest City standards and to the City's satisfaction.
5. All work shall be confined within easements and/or construction limits as shown on the plans.
6. The Contractor shall, prior to the commencement of work, investigate surface and subsurface conditions to be encountered across the site and notify the Engineer if any discrepancies or changed conditions are noted.
7. All trash and debris identified on site shall be properly handled and disposed of in accordance with state of Missouri regulations.
8. All measurements on these plans are horizontal distances, not slope distances.
8. This project will include numerous activities occurring on site including storm sewer, sanitary sewer, grading, erosion control, etc. Contractor shall coordinate his work with other contractors on site.
9. Initial construction staking will be performed by GBA – Refer to Bid Documents.
10. All concrete shall be KCMMB 4,000 psi.
11. Oil / Gas Wells are not present on site per Missouri Department of Natural Resources.

Permitting:

12. Contractor is responsible for obtaining all required permits, paying all fees, and for otherwise complying with all applicable regulations governing the work.
13. No work shall be completed within the existing floodway until the CLOMR has been issued.
14. The U.S. Corps of Engineers Section 404 permit has been issued for this project. All work shall adhere to the terms and conditions of this permit, including the preservation of 2.13 Acres of the existing wetland.
15. All work within KCMO city limits shall adhere to KCMO Site disturbance requirements.

Erosion Control:

16. The Contractor is responsible for providing erosion and sediment control BMP's to prevent sediment from reaching paved areas, storm sewer systems, drainage courses, and adjacent properties. In the event the prevention measures are not effective, the contractor shall remove any debris, silt, or mud and restore the Right-Of-Way, or adjacent properties to original or better condition.
17. Contractor shall ensure that all construction shall conform to the requirements of the Stormwater Pollution Prevention Plan (SWPPP) a copy of which shall be maintained and updated on site by the Contractor.
18. The Contractor shall sod all disturbed areas within the Public Street Right-of-Way unless otherwise noted in the plans.
19. No trees shall be damaged or removed without prior authorization from owner unless otherwise shown on this plan.

Earthwork:

20. Slopes shall be constructed to a maximum slope of 3:1 (Horiz:Vert) unless specifically noted otherwise in the referenced Geotechnical reports.
21. Refer to "Geotechnical Engineering Report – Paragon Star Roadways and Borrow Site" Dated December 8, 2016 – along with Addendum #1 dated 1/4/17, and "Geotechnical Engineering Report – Soccer Fields" Dated July 27, 2016 prepared by Terracon Consultants, Inc. for grading recommendations and boring logs. All earthwork shall conform to the recommendations of the Reports.
22. Unless otherwise noted, all spot elevations and contours are shown to "finish" grade surface.
23. All temporary slopes and excavations should conform to Occupational Safety and Health Administration (OSHA) standards for the Construction Industry (29 CFR part 1026, subpart P).
24. Earthwork for this phase of development is intended to balance. Contractor to cut only enough fill material from the borrow source at the north end of the project as required to accomplish the fills shown on this plan set.
25. All Permanent seeded shall be dressed with 12" topsoil and permanent seed. All other disturbed areas shall be seeded with the temporary seed mix.
26. Earthwork quantities shown on the plans assume 15% shrinkage for all fill material. The Contractor shall perform the fill to achieve the grades shown on the drawings. The determination of the actual adjustment of fill required due to shrink/swell of various materials shall be the responsibility of the Contractor.

Utility:

27. All Manholes, Catch Basins, Utility Valves, Meter Pits, and other utility equipment shall be adjusted or rebuilt to grade as required.
28. Prior to beginning work, the Contractor shall notify all utility companies who have facilities in the vicinity of the project area of the work to be performed.

Storm Sewer:

29. All RCP shall be Class III.
30. All HDPE Pipe shall be ADS N-12 or equivalent. Pipe shall meet AASHTO M294.
31. Pipe Lengths are called out from center of structure to center of structure.
32. Drainage across the project site during construction shall be the Contractor's responsibility. Surface drainage shall be controlled to reduce or prevent the flow of surface water onto adjacent grounds. Contractor shall control downstream erosion and silting during construction. Flexibility is given to to the Contractor to make minor grading revisions along roads or between building pads to improve drainage during construction, with prior approval of the engineer.
33. Prior to ordering precast storm sewer structures, Contractor shall provide shop drawings to the Engineer for review and approval.

Utility Contacts

Sanitary Sewers	Mr. Jeff Thorn, PE City of Lee's Summit Water Utilities 1200 SE Hamblen Road Lee's Summit, MO 64063 (816) 969-1922 email: jeff.thorn@cityofLS.net	Gas	Mr. Donnie Richards Missouri Gas Energy 7500 E 35th Terrace Kansas City, MO 64129 (816) 472-9464 Fax (816) 472-3488 email: donnie.richards@sug.com
	Mr. Jeff Shook Little Blue Valley Sewer District 21101 East 78 Highway Independence, MO 64057 (816) 285-1522 email: jshook@lbvsd.net	Cable Television	Mr. Greg Thomas Time Warner Cable 8221 W. 119th Street Overland Park, KS 66213 (913) 643-1950 email: greg.thomas@twcable.com
	Kansas City, MO Public Works Department (816) 513-2600		
	Kansas City, MO Water Services Department (816) 513-2215	Telephone	Ms. Glenda Charles AT&T 1425 Oak Street Kansas City, MO 64106 (816) 365-1669 Fax (816) 275-1109 email: gc6954@att.com
Water	Mr. Jeff Thorn, PE City of Lee's Summit Water Utilities 1200 SE Hamblen Road Lee's Summit, MO 64063 (816) 969-1922 email: jeff.thorn@cityofLS.net	Electric Service	Mr. Nathan Michael Kansas City Power & Light P.O. Box 418679 Kansas City, MO 64141 (816) 220-5210 Fax (816) 245-3623 email: Nathan.Michael@kcpl.com
Missouri One Call System	1-800-344-7483 (DIG-RITE)		

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

General Layout

JOB NO: 1197 SCALE:

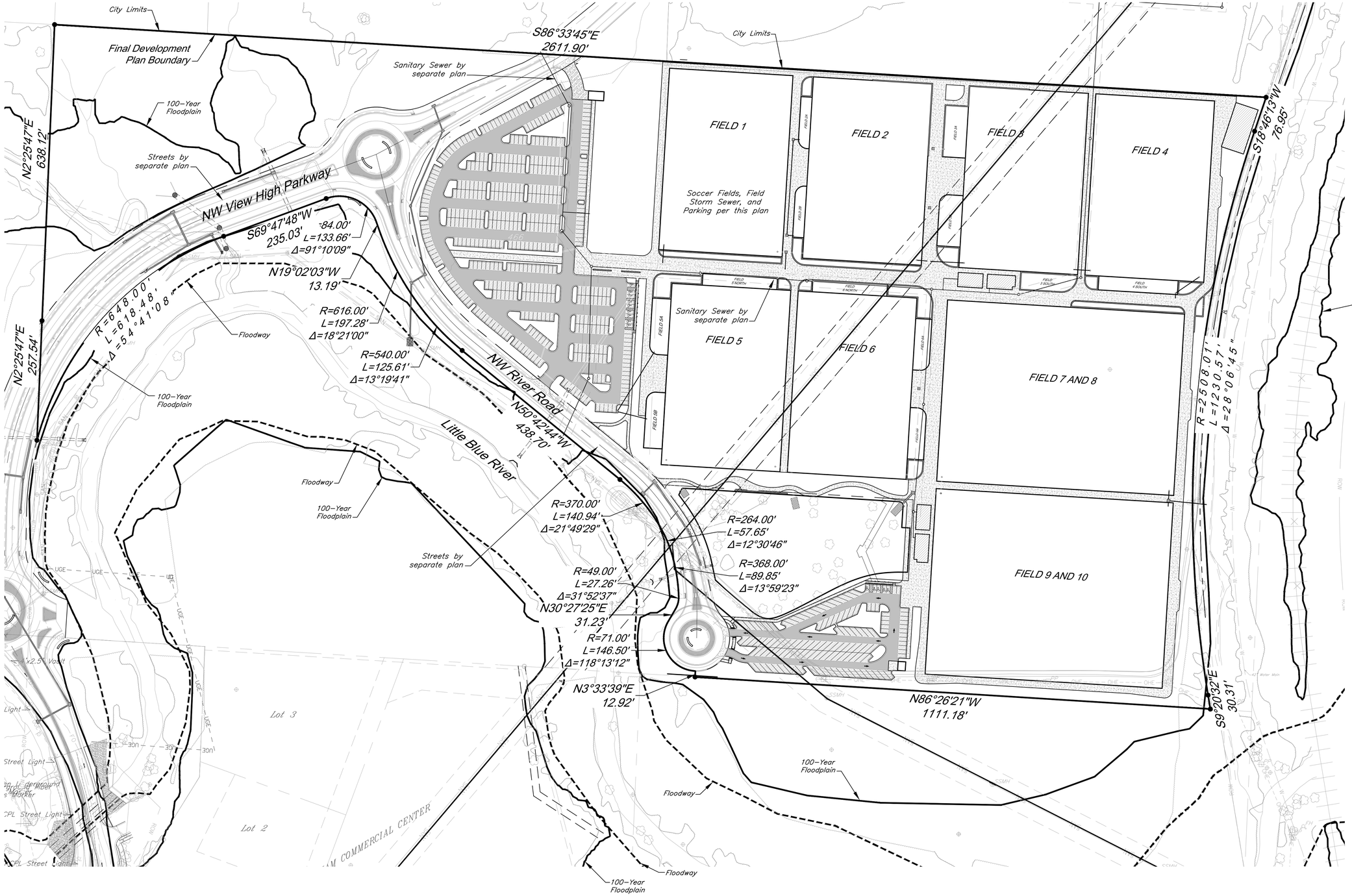
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-100

G:\1272\Civil 3D\Production Drawings\Construction Site Plans\1272000200.dwg Layout: C-100 General Layout -- Tuesday May 14, 2019, 2:30pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

C:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CC200.dwg Layout: C-101 General Layout -- Tuesday, May 14, 2019, 2:31pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



Note: Floodplain and Floodway based on proposed CLOMR.

Project Benchmark:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

100' 0' 100' 200'
SCALE : 1 INCH = 100 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

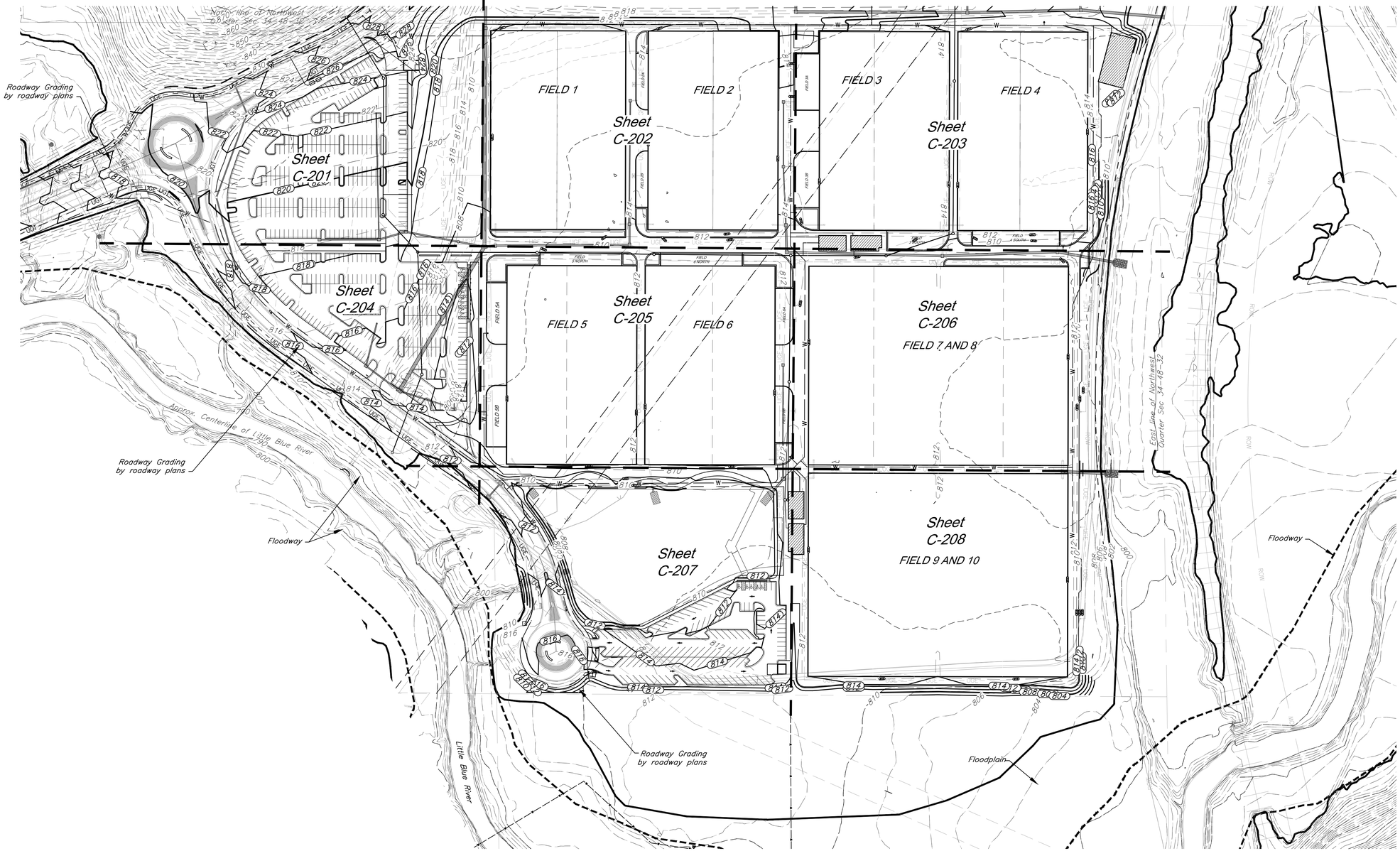
General Layout

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-101

Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720001701.dwg Layout: C-200 Grading Plan -- Tuesday, May 14, 2019, 4:09pm -- Copyright
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



100' 0' 100' 200'
SCALE : 1 INCH = 100 FEET

LEGEND

900	Existing Contour
900	Proposed Contour
× 900.00	Proposed Spot Grade
TC 900.00	Proposed Top of Curb Grade
	Drainage Flow Arrow
	Drainage Swale
TW 900.00 / BW 900.00	Proposed Top of Wall / Bottom of Wall

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:
Grading Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

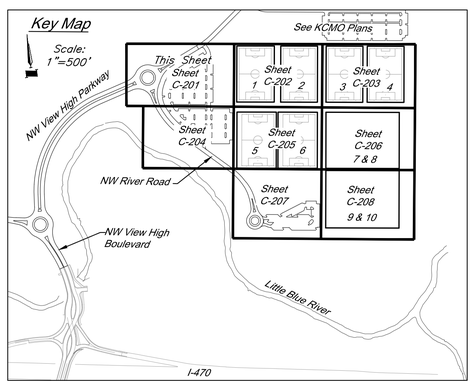
SHEET NO:
C-200

Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-201 Grading Plan -- Tuesday May 14, 2019, 4:10pm -- Copyright
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



Notes:

1. *TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.*
2. *All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.*
3. *All earthwork shall adhere to the Geotechnical Report.*
4. *All walls over 30 inches in height will be provided with a railing or fence.*



LEGEND

900	Existing Contour
900	Proposed Contour
900.00	Proposed Spot Grade
TC 900.00	Proposed Top of Curb Grade
	Drainage Flow Arrow
	Drainage Swale
TW 900.00 / BW 900.00	Proposed Top of Wall / Bottom of Wall
	Type CG-1 "Dry Curb"

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

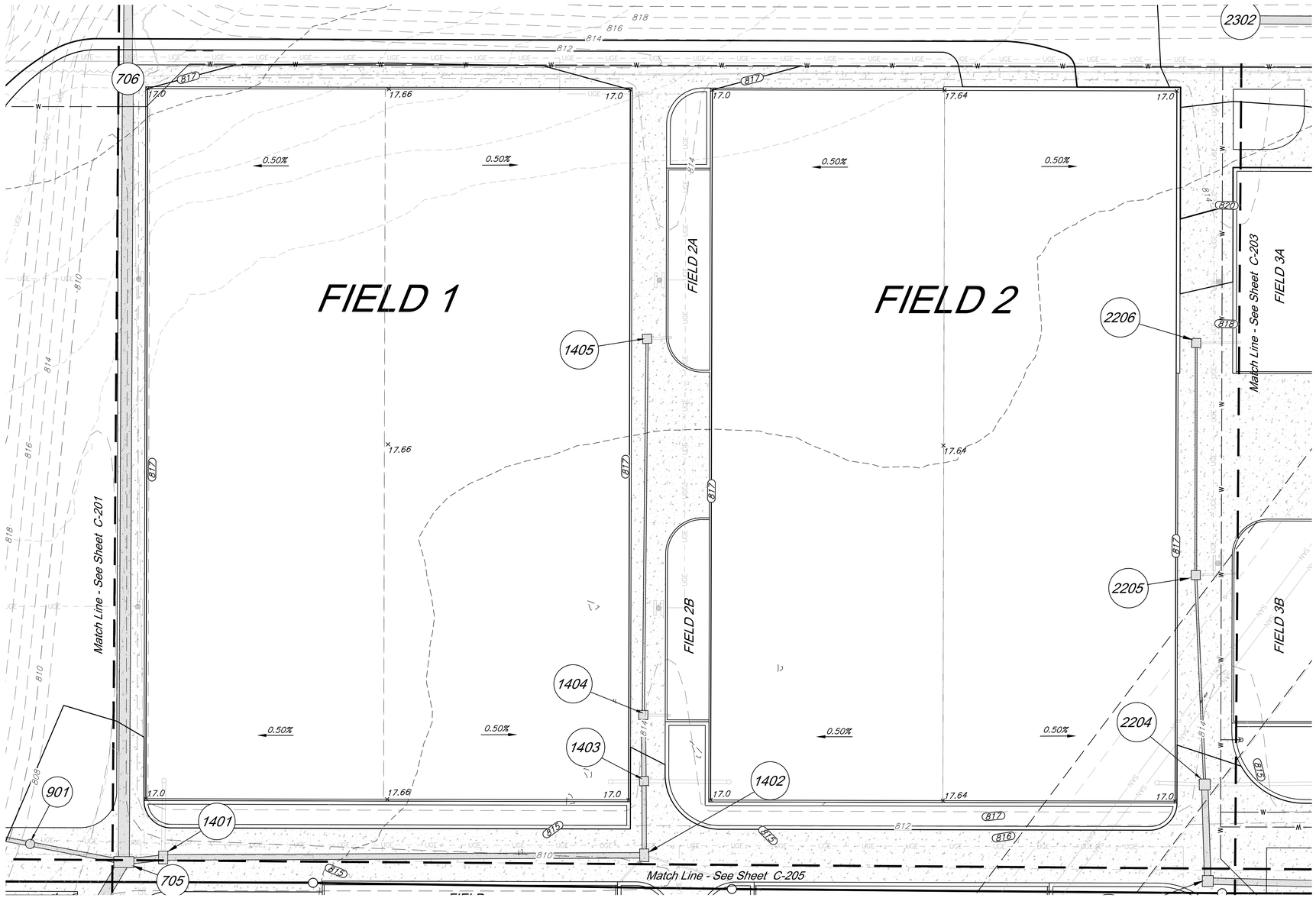
DRAWING TITLE:

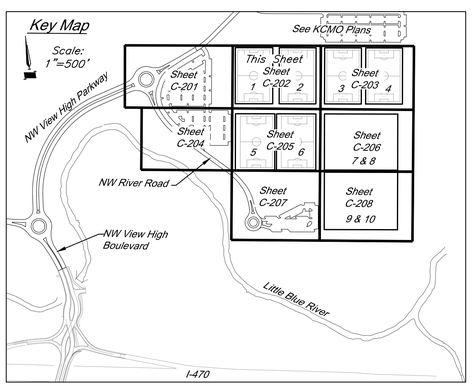
Grading Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-201





Notes:

1. *TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.*
2. *All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.*
3. *All earthwork shall adhere to the Geotechnical Report.*
4. *All walls over 30 inches in height will be provided with a railing or fence.*

LEGEND

900 — Existing Contour	Drainage Flow Arrow
900 — Proposed Contour	Drainage Swale
900.00 — Proposed Spot Grade	TW 900.00 / BW 900.00 — Proposed Top of Wall/ Bottom of Wall
TC 900.00 — Proposed Top of Curb Grade	

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Grading Plan

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

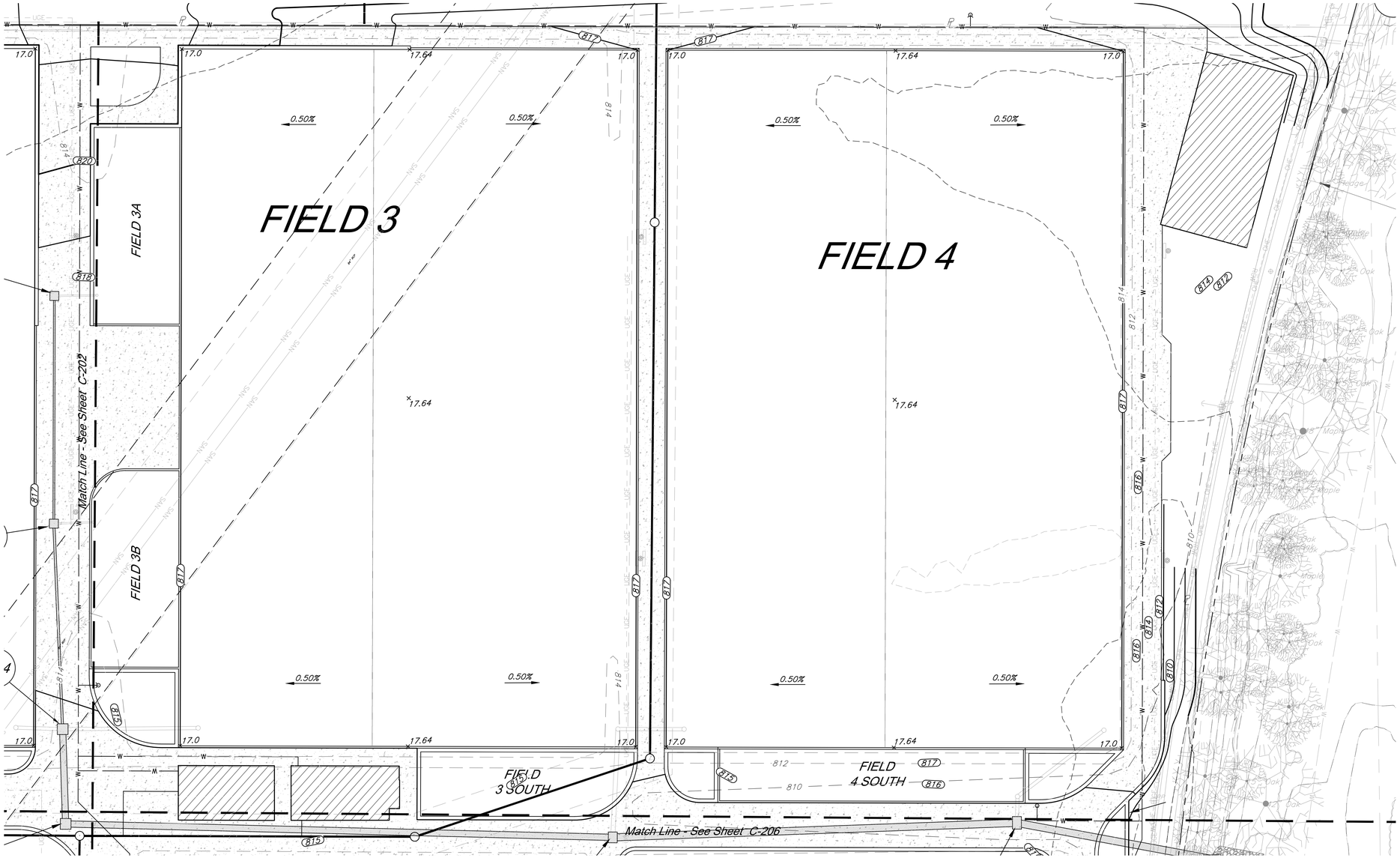
SHEET NO:

C-202

G:\12220\Civil 3D\Production Drawings\Construction Site Plans\12220C0701.dwg Layout: C-202 Grading Plan -- Tuesday, May 14, 2019, 4:10pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059

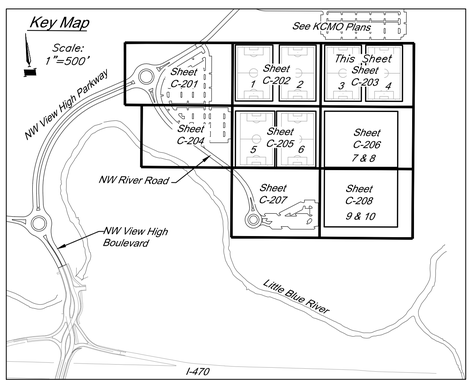
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

C:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-203 Grading Plan -- Tuesday, May 14, 2019, 4:11pm -- Copyright 2019, George Butler Associates, Inc.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
-- THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DECLARES PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



Notes:

1. *TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.*
2. *All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.*
3. *All earthwork shall adhere to the Geotechnical Report.*
4. *All walls over 30 inches in height will be provided with a railing or fence.*



LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- TC 900.00 — Proposed Top of Curb Grade
- Drainage Flow Arrow
- Drainage Swale
- TW 900.00 / BW 900.00 — Proposed Top of Wall/ Bottom of Wall

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

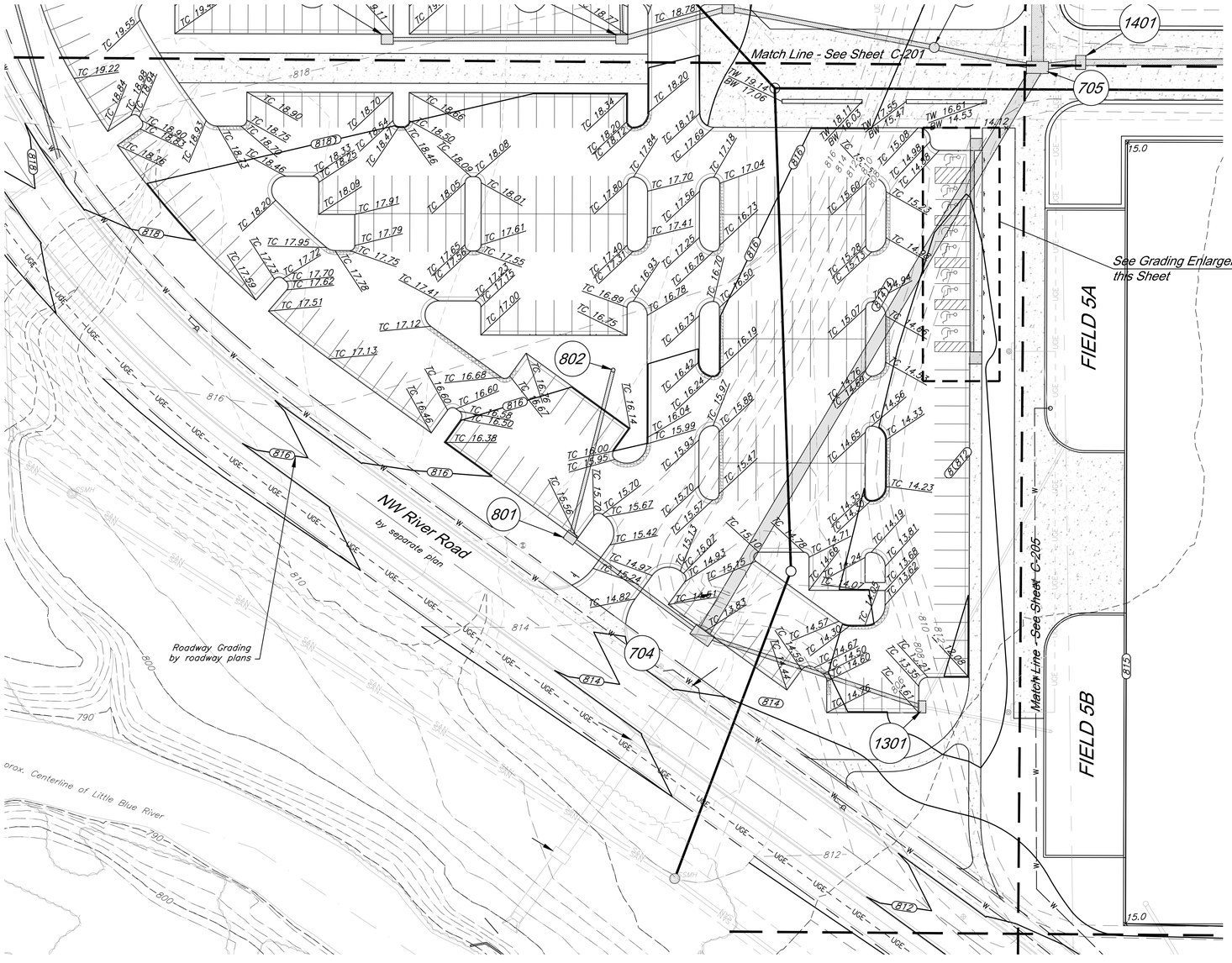
DRAWING TITLE:

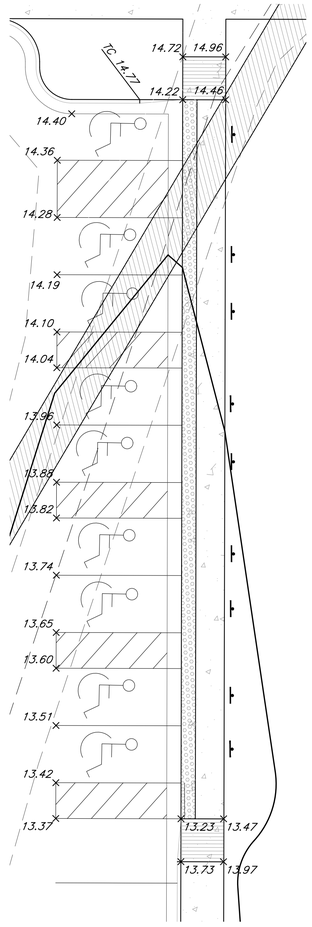
Grading Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

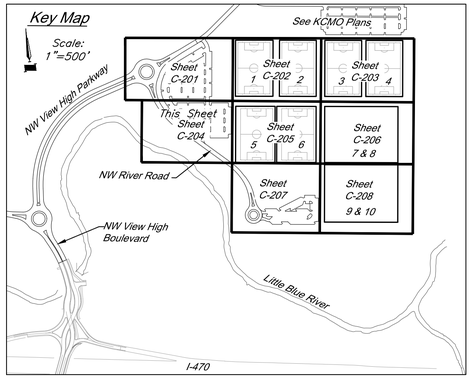
SHEET NO:

C-203





GRADING ENLARGEMENT
Scale: 1"=10'



Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

LEGEND

900	Existing Contour
900	Proposed Contour
900.00	Proposed Spot Grade
TC 900.00	Proposed Top of Curb Grade
	Drainage Flow Arrow
	Drainage Swale
TW 900.00 / BW 900.00	Proposed Top of Wall/ Bottom of Wall
	Type CG-1 "Dry Curb"

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

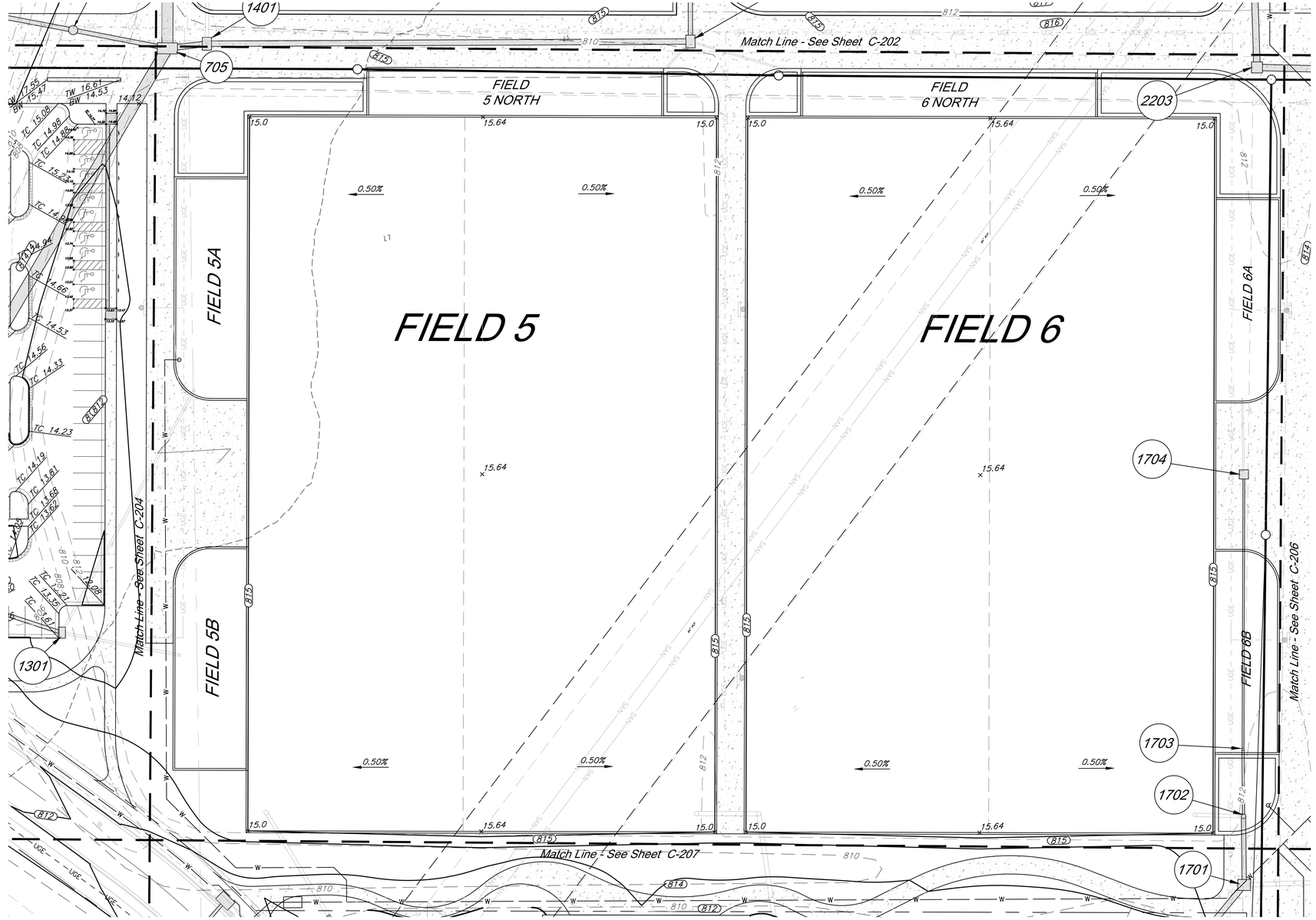
Grading Plan

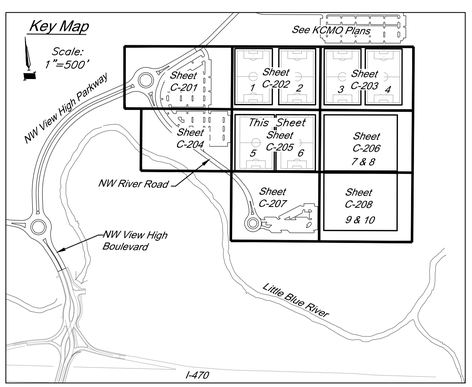
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-204

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-204 Grading Plan -- Tuesday May 14, 2019, 4:12pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





Notes:

1. *TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.*
2. *All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.*
3. *All earthwork shall adhere to the Geotechnical Report.*
4. *All walls over 30 inches in height will be provided with a railing or fence.*

LEGEND

900 — Existing Contour	Drainage Flow Arrow
900 — Proposed Contour	Drainage Swale
900.00 × Proposed Spot Grade	TW 900.00 / BW 900.00 — Proposed Top of Wall/ Bottom of Wall
TC 900.00 — Proposed Top of Curb Grade	

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Grading Plan

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

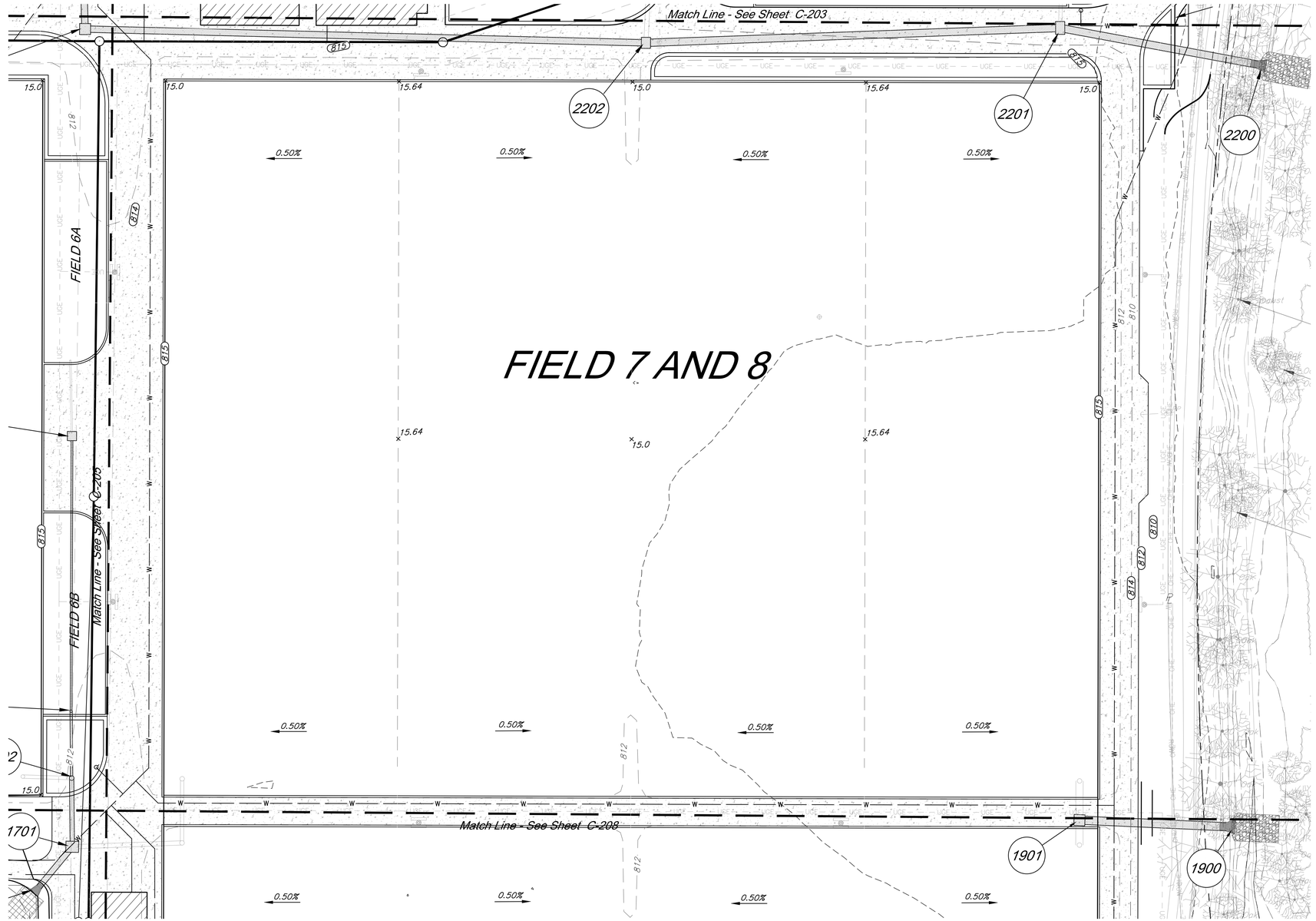
SHEET NO:

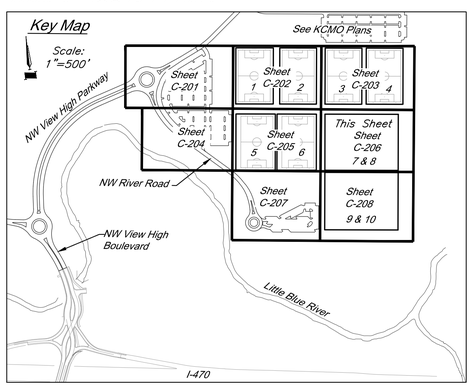
C-205

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-205 Grading Plan -- Tuesday May 14, 2019, 4:13pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 Copyright 2019, George Butler Associates, Inc.

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-206 Grading Plan -- Tuesday, May 14, 2019, 4:14pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





Notes:

1. *TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.*
2. *All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.*
3. *All earthwork shall adhere to the Geotechnical Report.*
4. *All walls over 30 inches in height will be provided with a railing or fence.*

LEGEND

900 Existing Contour	Drainage Flow Arrow
900 Proposed Contour	Drainage Swale
900.00 Proposed Spot Grade	TW 900.00 / BW 900.00 Proposed Top of Wall/ Bottom of Wall
TC 900.00 Proposed Top of Curb Grade	

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

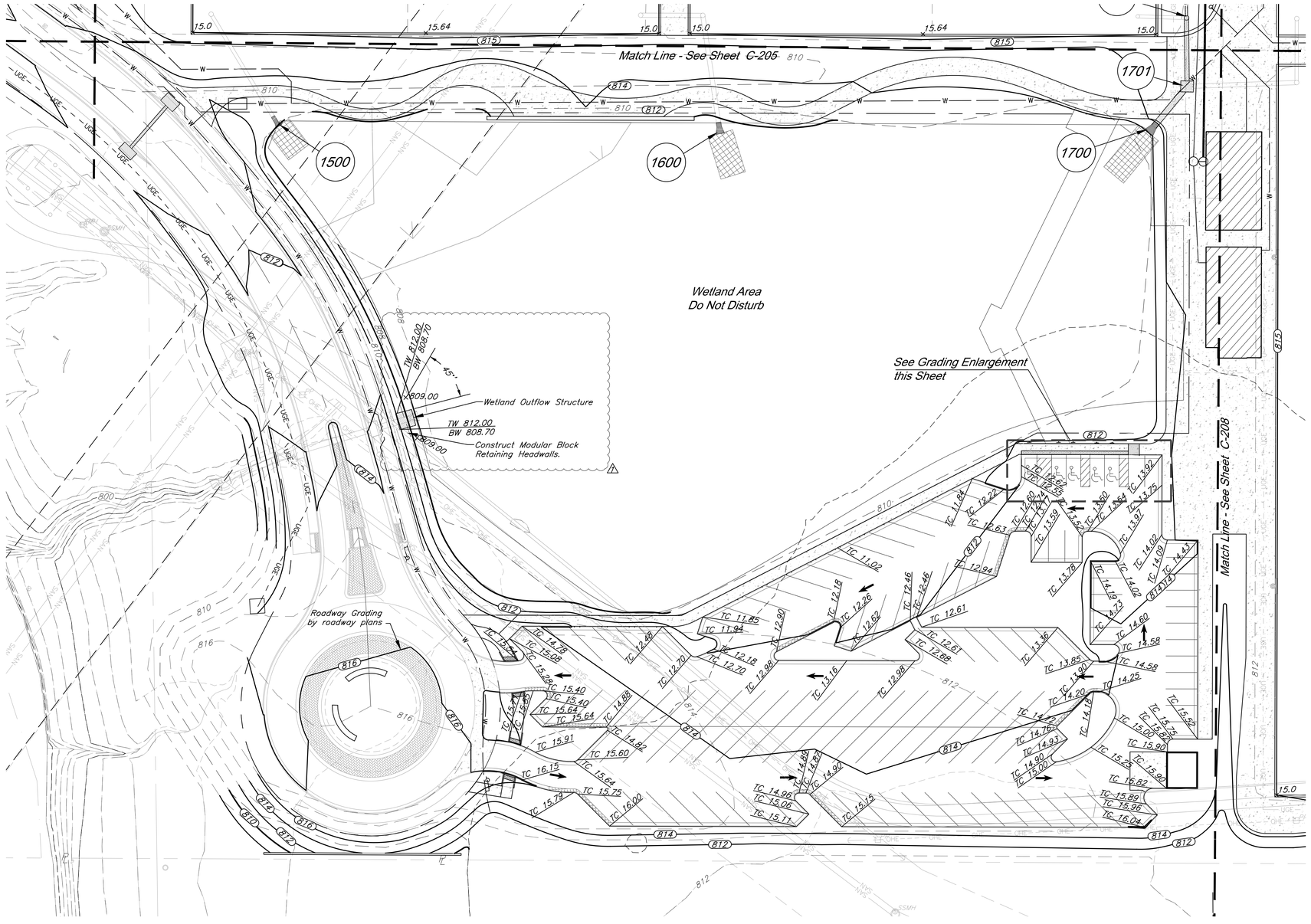
Grading Plan

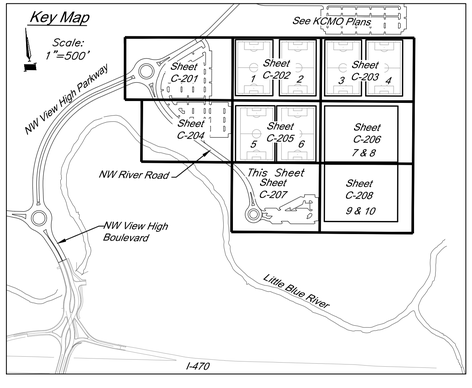
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

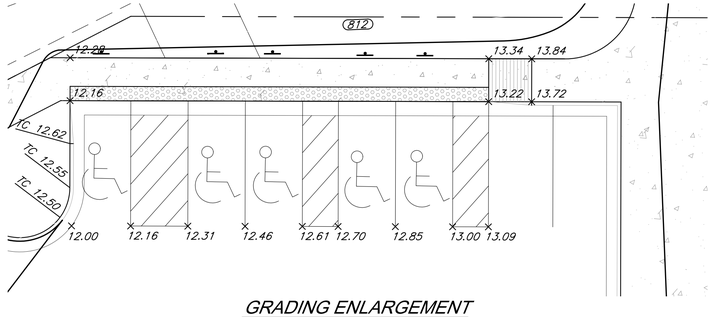
SHEET NO:

C-206

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-207 Grading Plan -- Tuesday May 14, 2019, 4:15pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059







GRADING ENLARGEMENT
Scale: 1"=10'

Notes:

1. *TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.*
2. *All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.*
3. *All earthwork shall adhere to the Geotechnical Report.*
4. *All walls over 30 inches in height will be provided with a railing or fence.*

LEGEND

900 — Existing Contour	Drainage Flow Arrow
900 — Proposed Contour	Drainage Swale
900.00 Proposed Spot Grade	TW 900.00 / BW 900.00 Proposed Top of Wall/ Bottom of Wall
TC 900.00 Proposed Top of Curb Grade	Type CG-1 "Dry Curb"

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

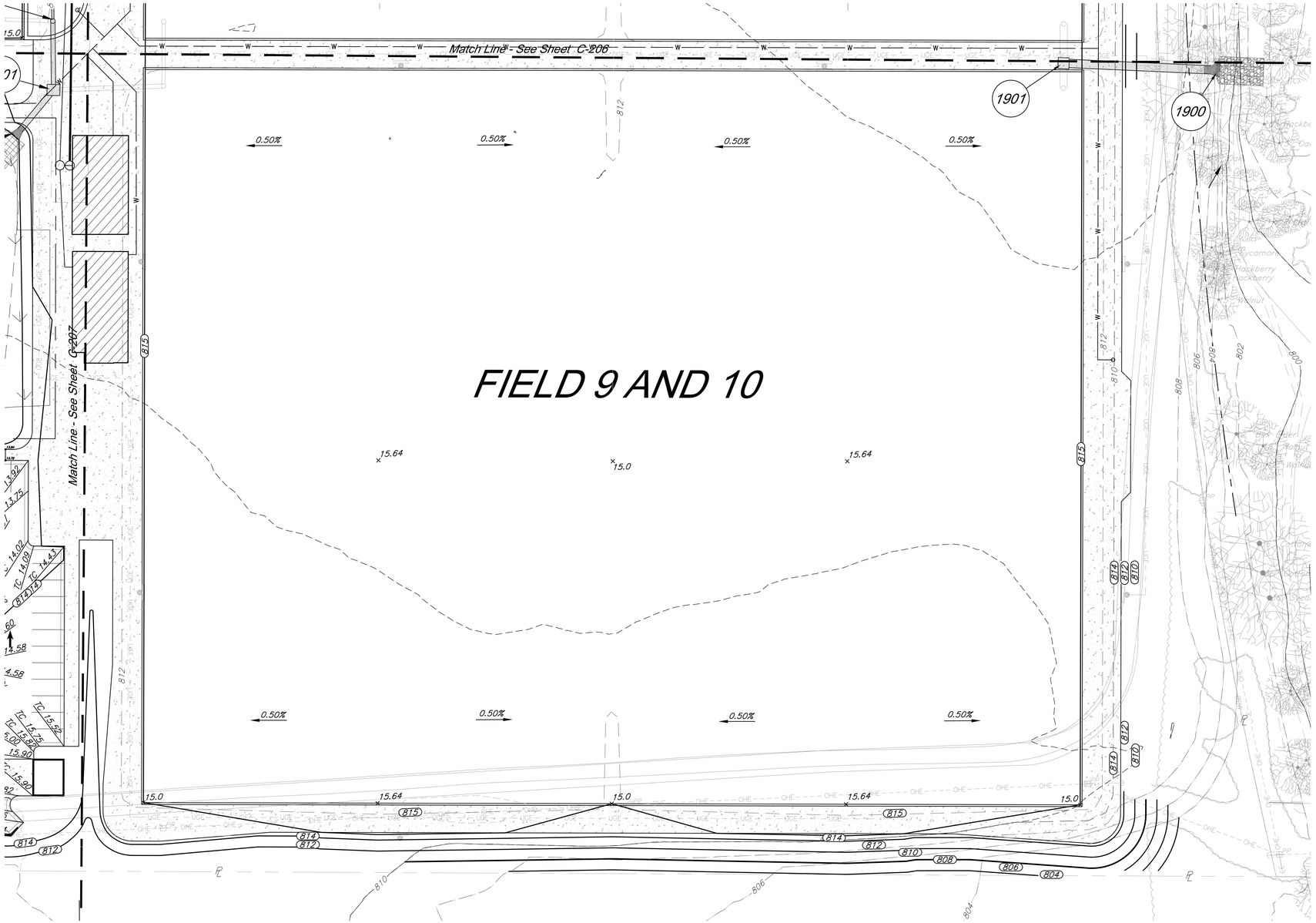
Grading Plan

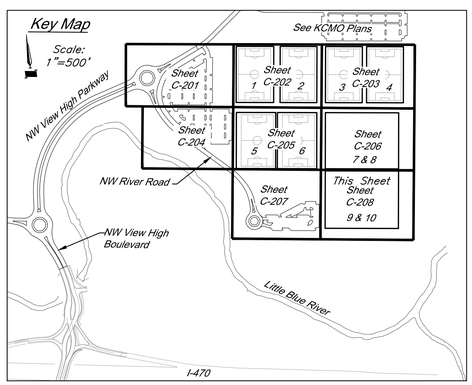
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-207

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0701.dwg Layout: C-208 Grading Plan -- Tuesday May 14, 2019, 4:16pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





LEGEND

- 900 — Existing Contour
- (900) — Proposed Contour
- 900.00 — Proposed Spot Grade
- TC 900.00 — Proposed Top of Curb Grade
- Drainage Flow Arrow
- Drainage Swale
- TW 900.00 / BW 900.00 — Proposed Top of Wall/ Bottom of Wall

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

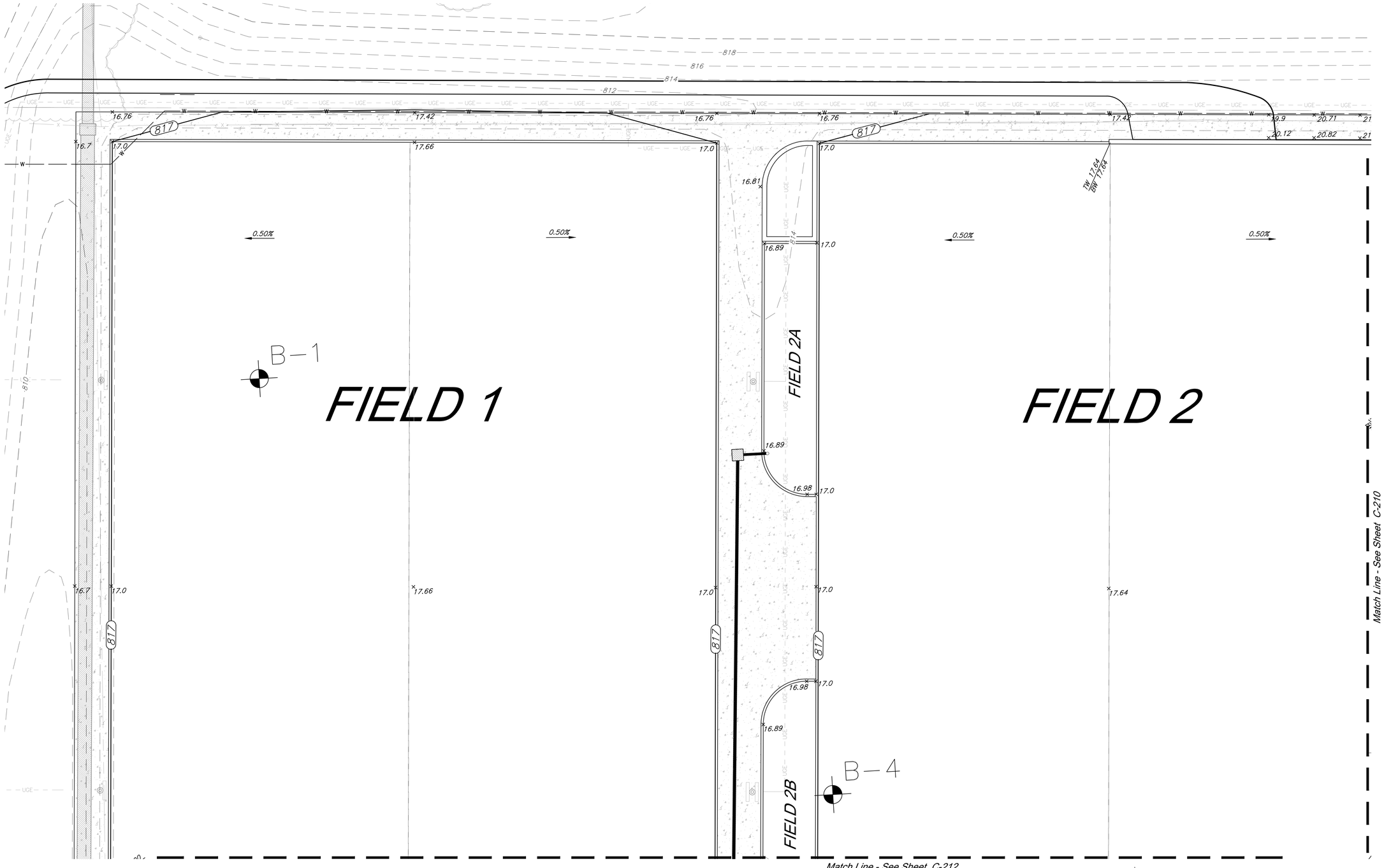
Grading Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-208

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0702.dwg Layout: C-209 Grading Enlargement -- Tuesday May 14, 2019, 4:17pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

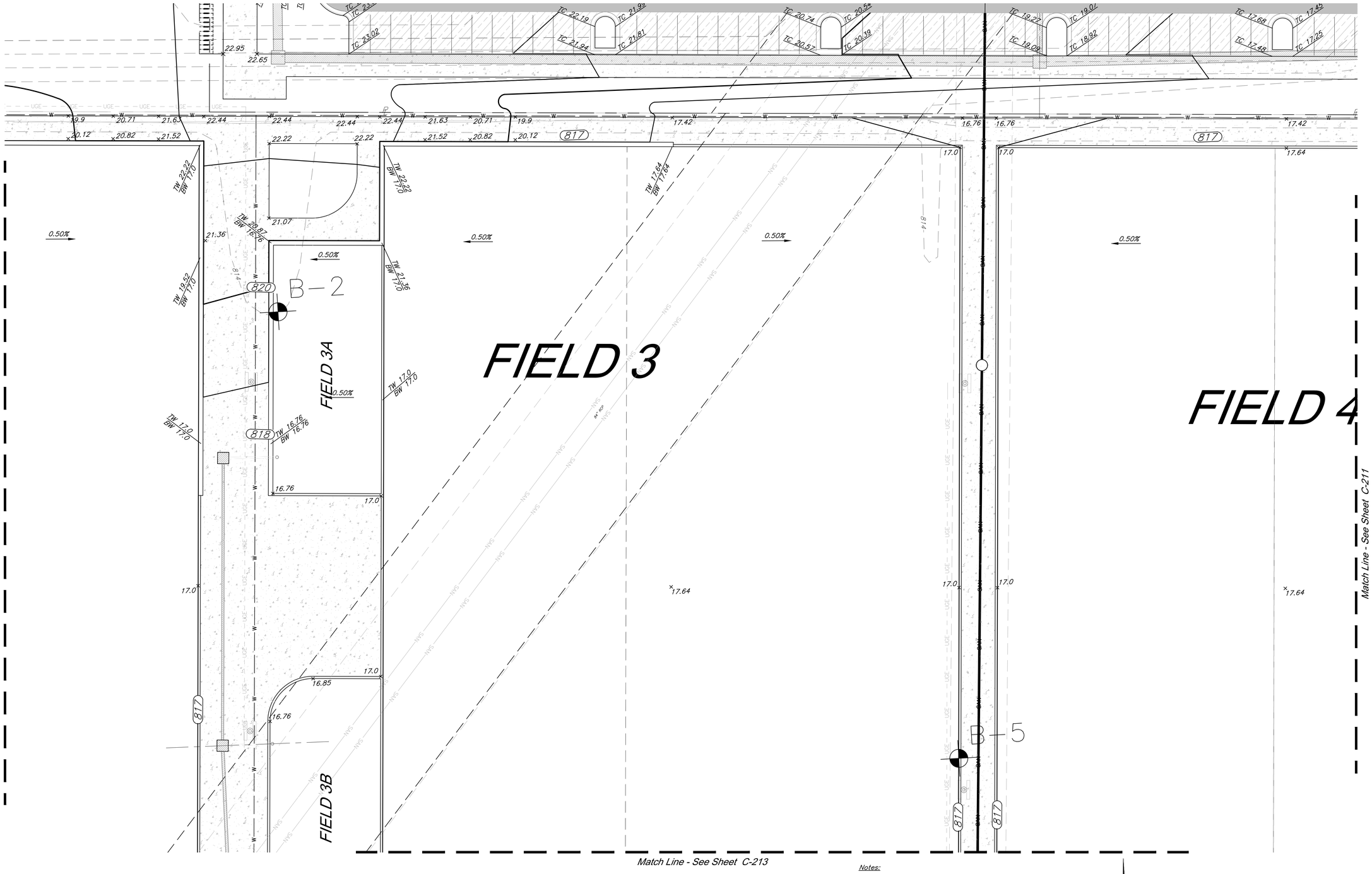
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-209

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CO702.dwg Layout: C-210 Grading Enlargement -- Tuesday May 14, 2019, 4:17pm -- Architect 00212, Professional Engineer 00133, Professional Land Surveyor 00059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Copyright 2019, George Butler Associates, Inc.



LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

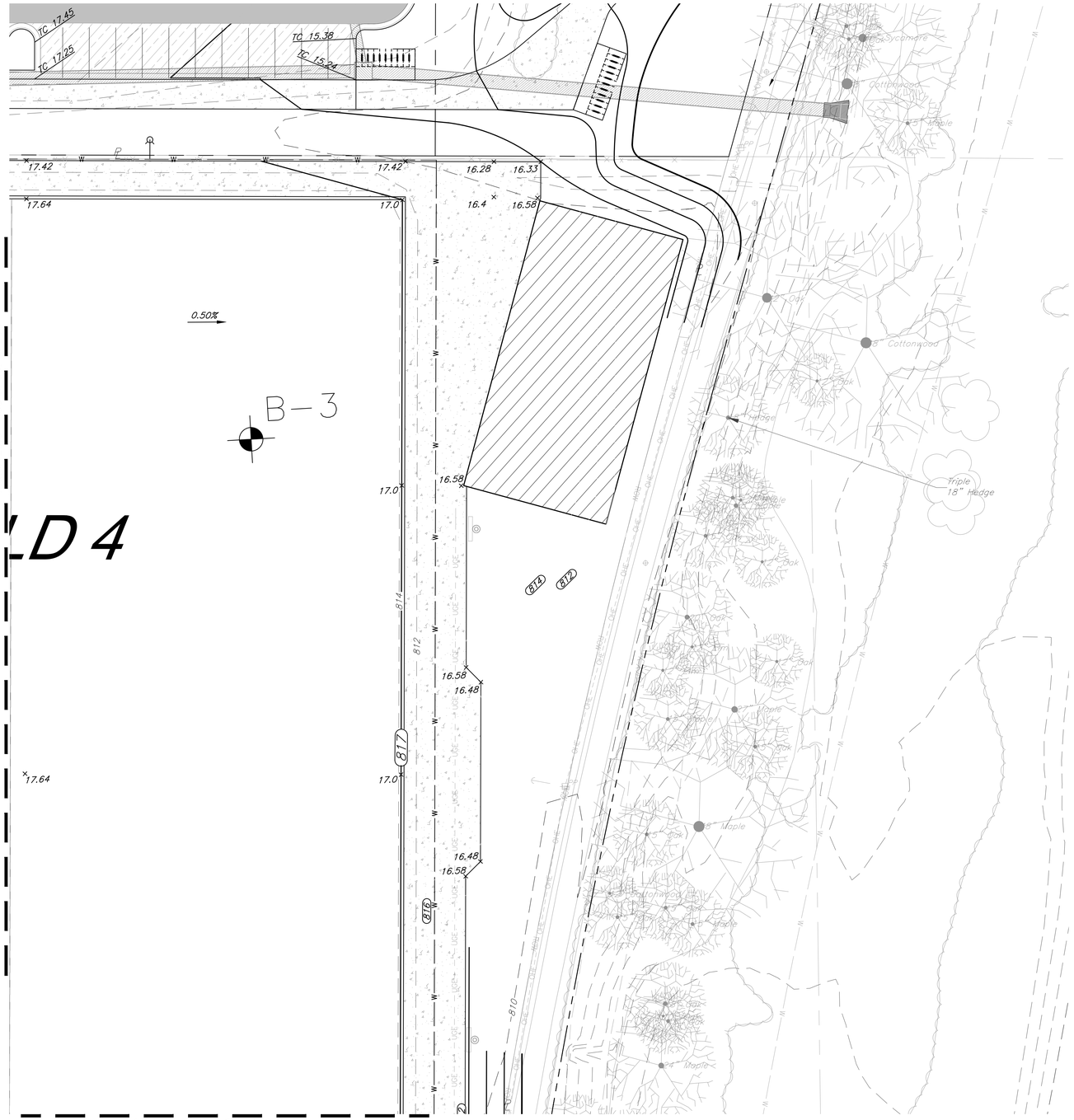
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-210

C:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0702.dwg Layout: C-211 Grading Enlargement -- Tuesday, May 14, 2019, 4:18pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DECLARES (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



LEGEND

- 900 — Existing Contour
- (900) — Proposed Contour
- × 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 14.70 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

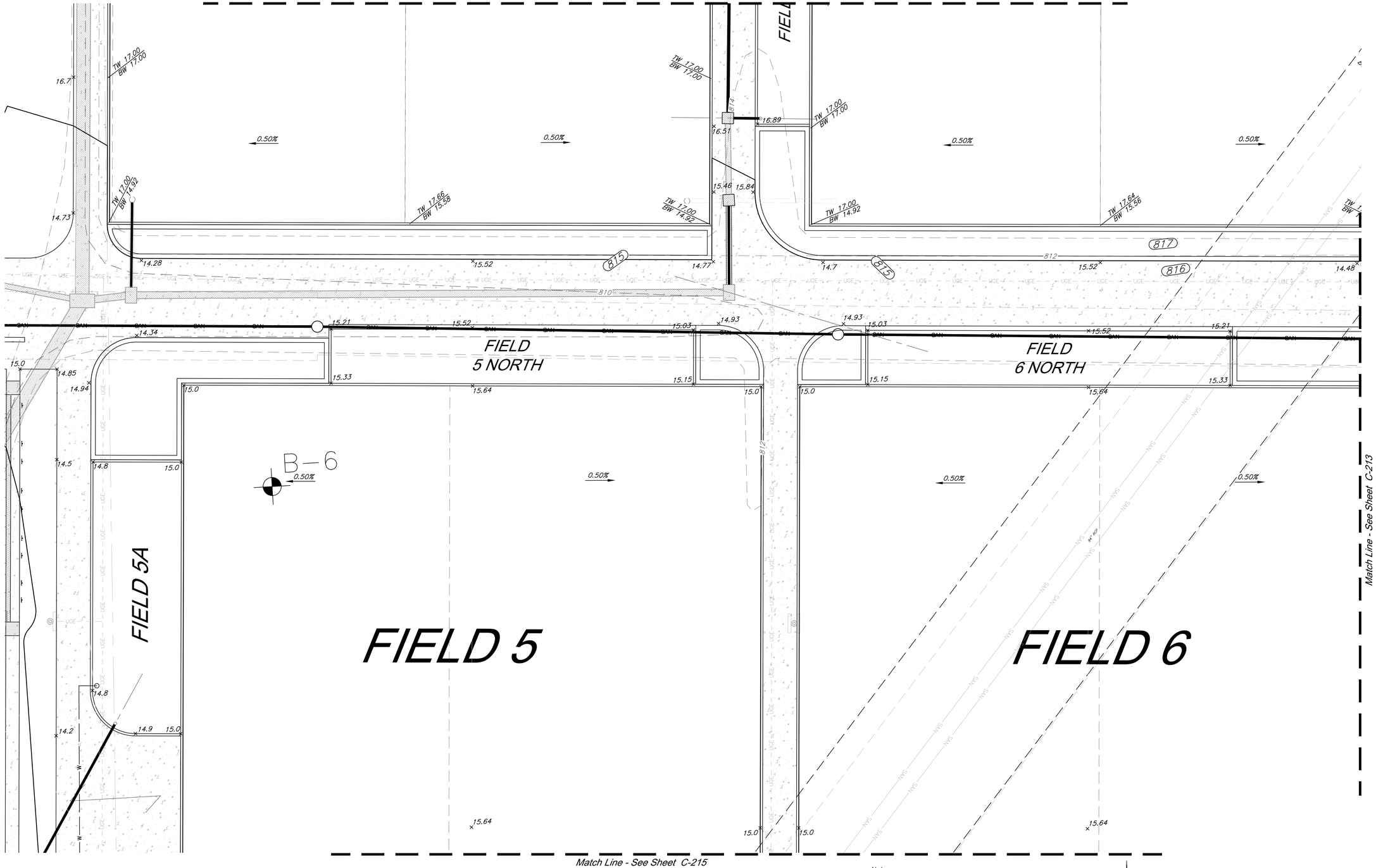
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-211

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CO702.dwg Layout: C-212 Grading Enlargement -- Tuesday, May 14, 2019, 4:18pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



LEGEND

- 900 — Existing Contour
- (900) — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

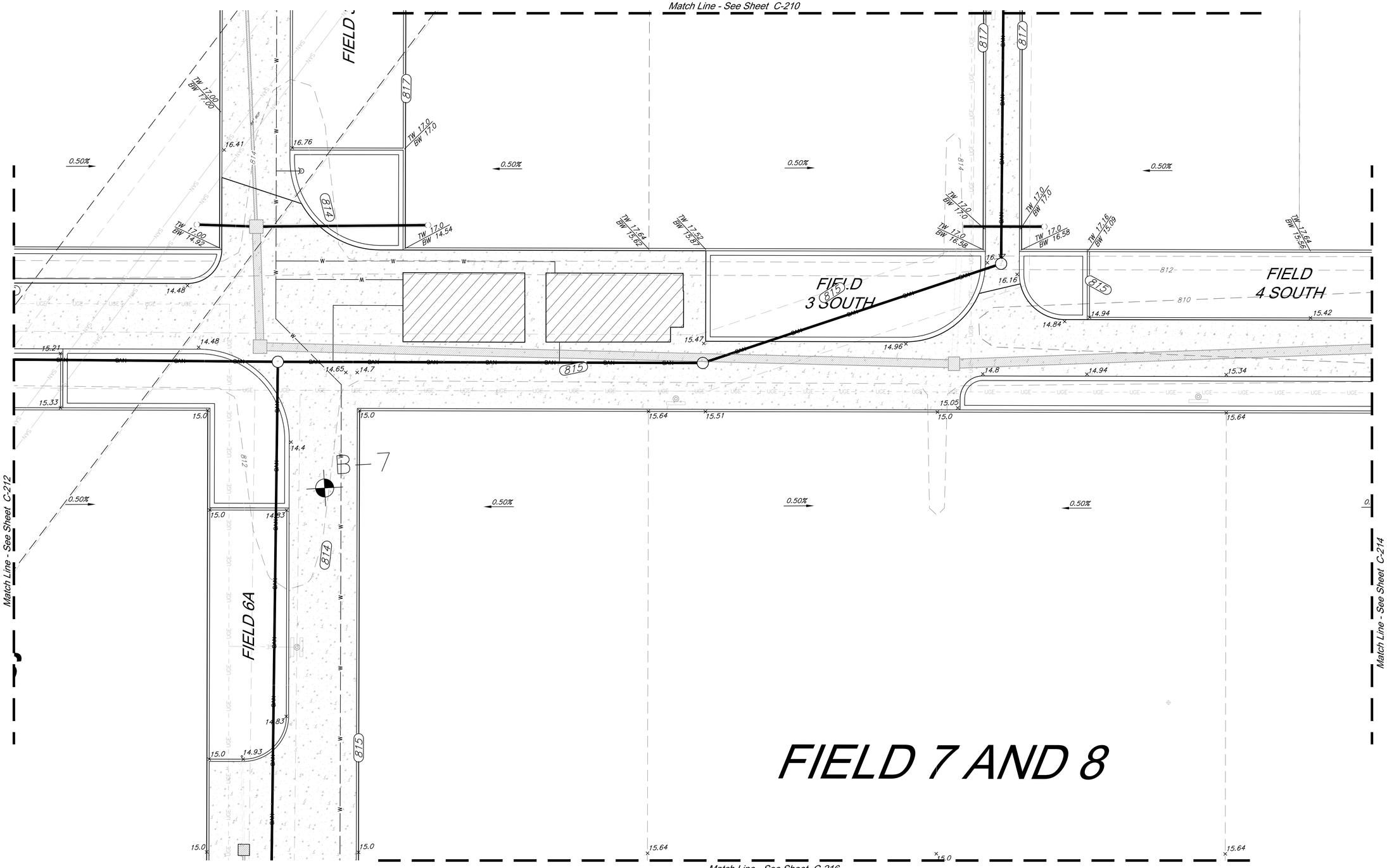
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-212

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0702.dwg Layout: C-213 Grading Enlargement -- Tuesday, May 14, 2019, 4:19pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



LEGEND

- Existing Contour (900)
- Proposed Contour (900)
- Proposed Spot Grade (900.00)
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

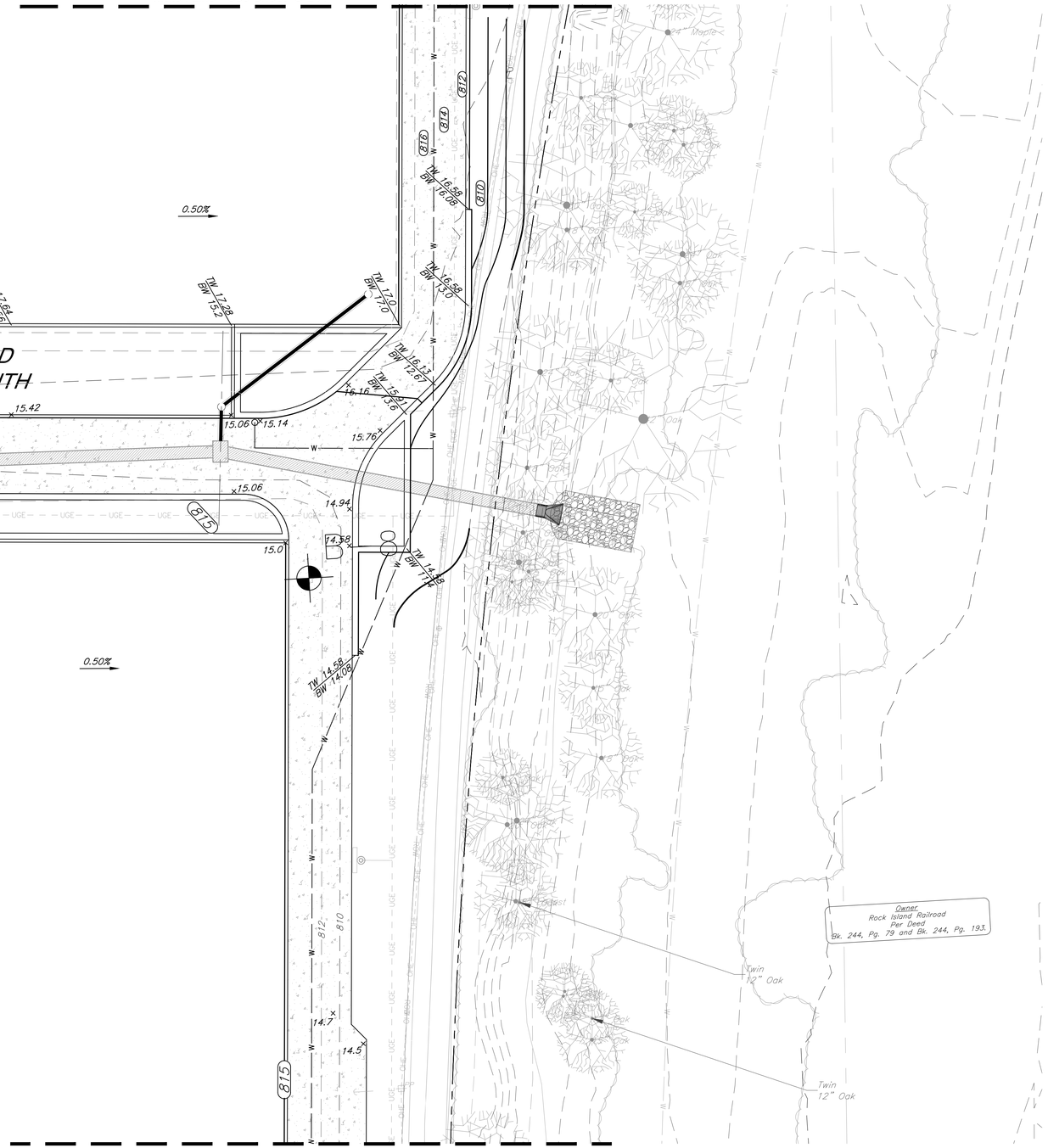
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-213

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CD702.dwg Layout: C-214 Grading Enlargement -- Tuesday, May 14, 2019, 4:19pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive.
EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

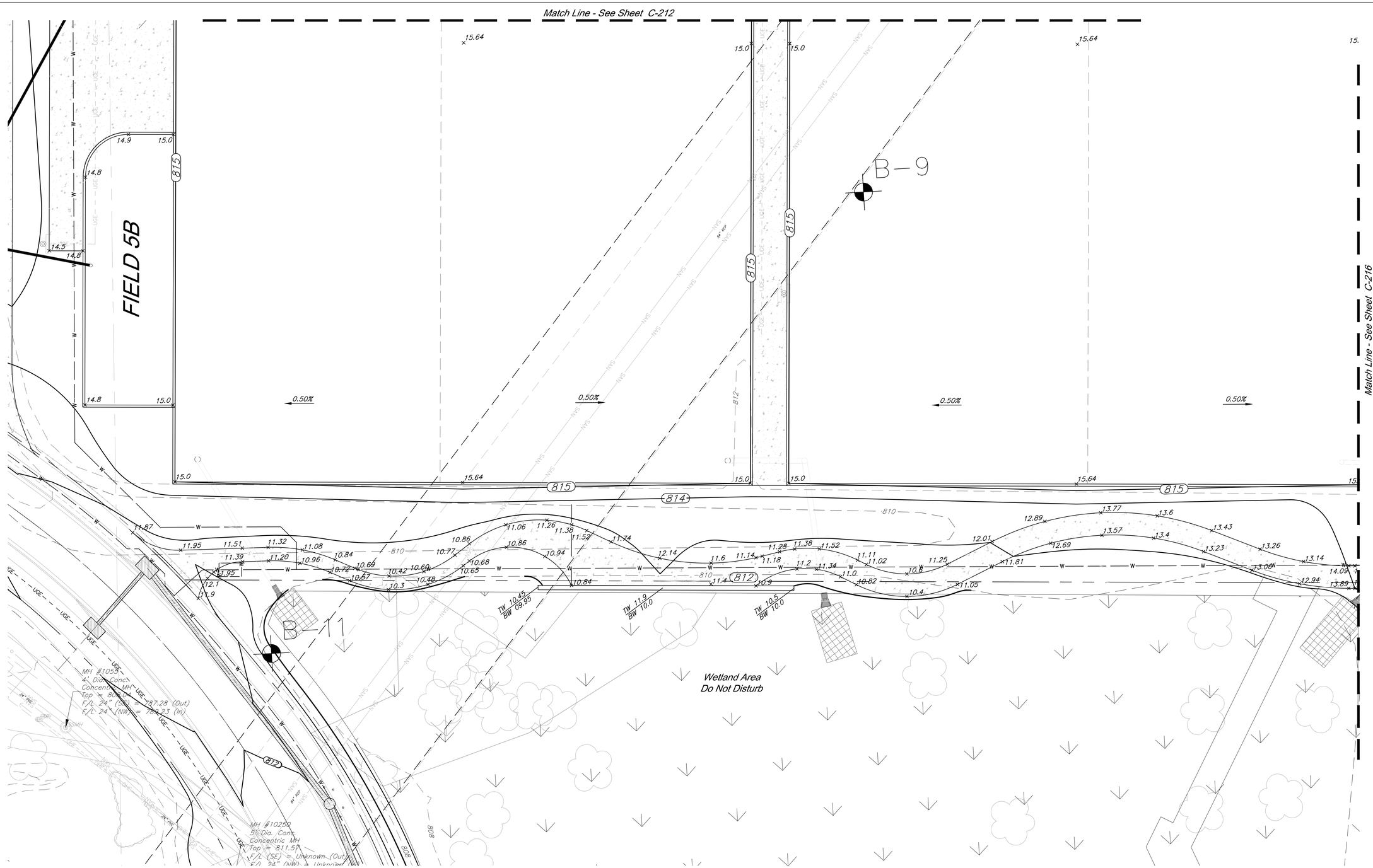
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-214

G:\1272\Civil 3D\Production Drawings\Construction Site Plans\1272DC0702.dwg Layout: C-215 Grading Enlargement -- Tuesday, May 14, 2019, 4:20pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMO) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



LEGEND

- Existing Contour
- Proposed Contour
- Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

900.00
TC 900.00

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

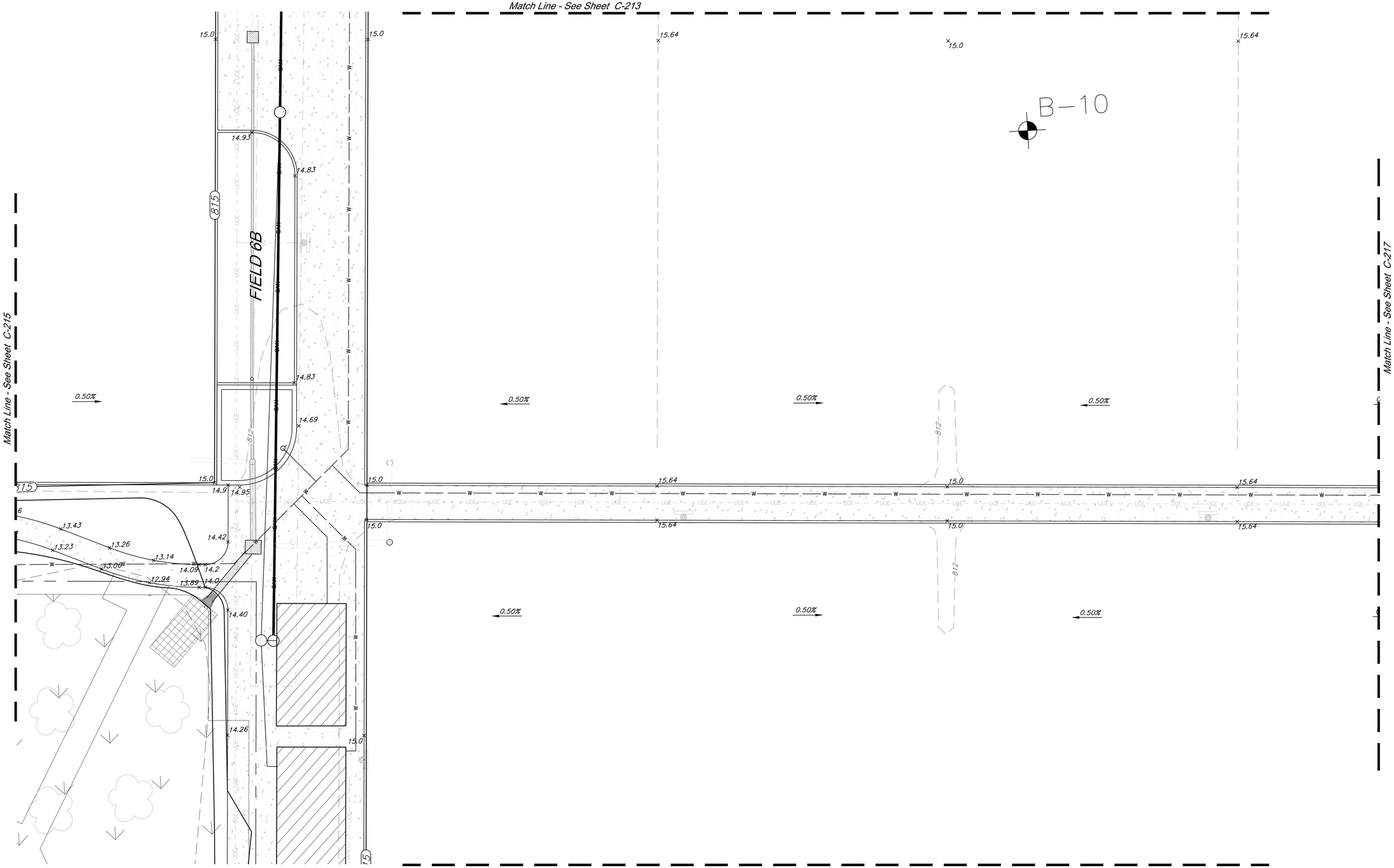
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-215

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0702.dwg Layout: C-216 Grading Enlargement -- Tuesday, May 14, 2019, 4:20pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Copyright 2019, George Butler Associates, Inc.



LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

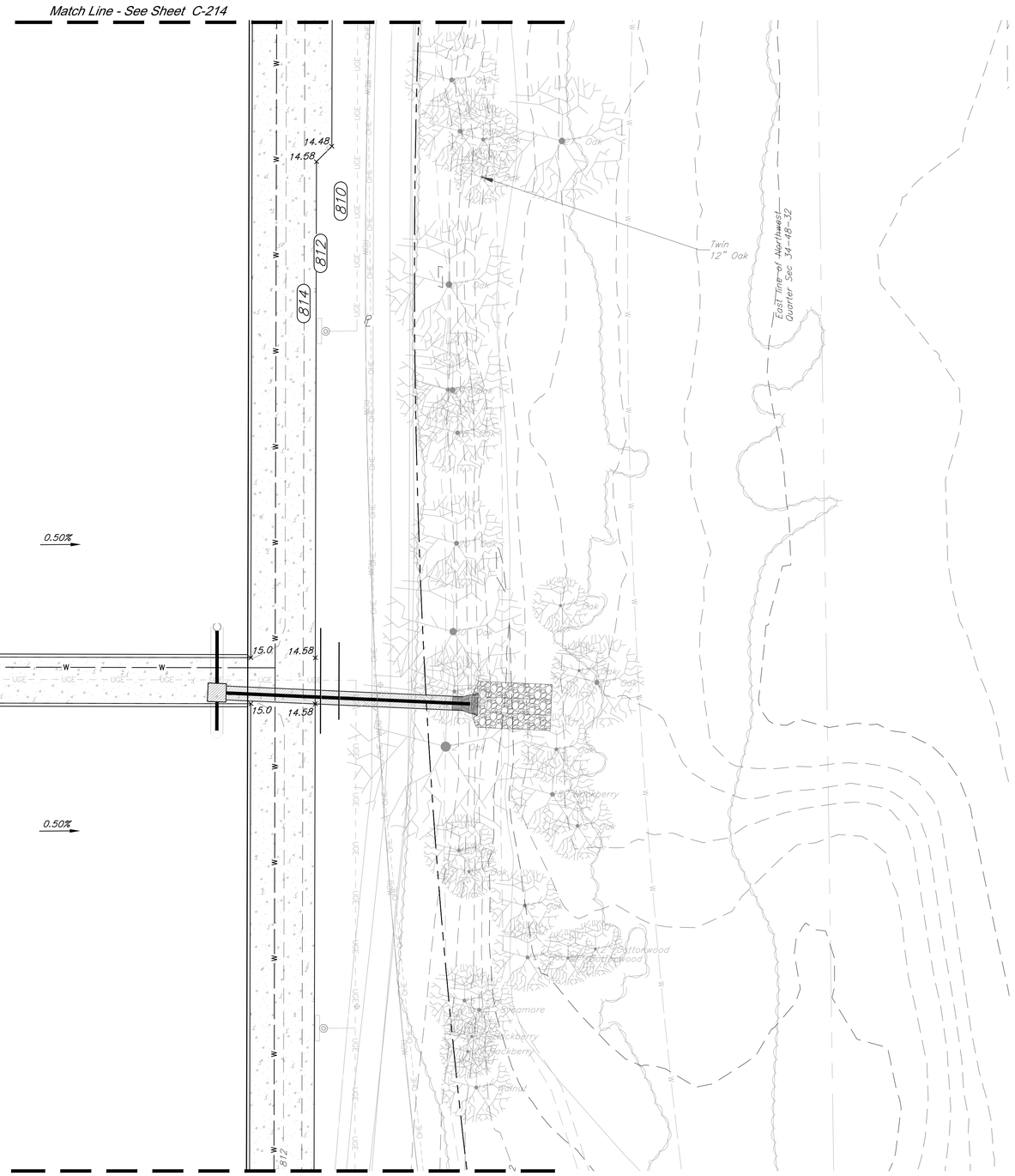
DRAWING TITLE:

Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-216



LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'

SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive.
EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

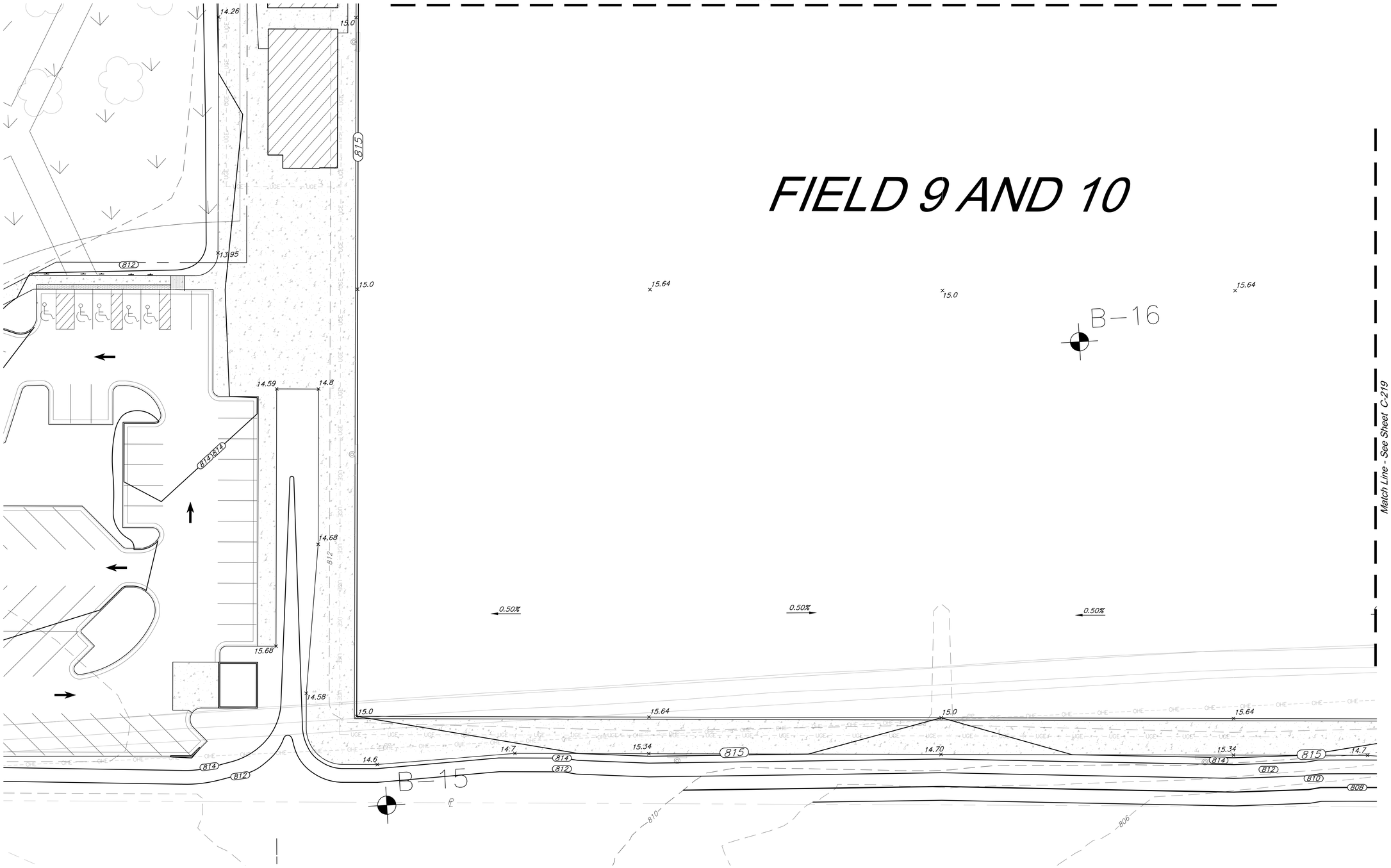
C-217

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CD702.dwg Layout: C-217 Grading Enlargement -- Tuesday May 14, 2019, 4:21pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

C:\12220\Civil 3D\Production Drawings\Construction Site Plans\12220CD702.dwg Layout: C-218 Grading Enlargement -- Tuesday, May 14, 2019, 4:21pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

Match Line - See Sheet C-216

FIELD 9 AND 10



Match Line - See Sheet C-219

LEGEND

- 900 — Existing Contour
- 900 — Proposed Contour
- 900.00 — Proposed Spot Grade
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'

SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

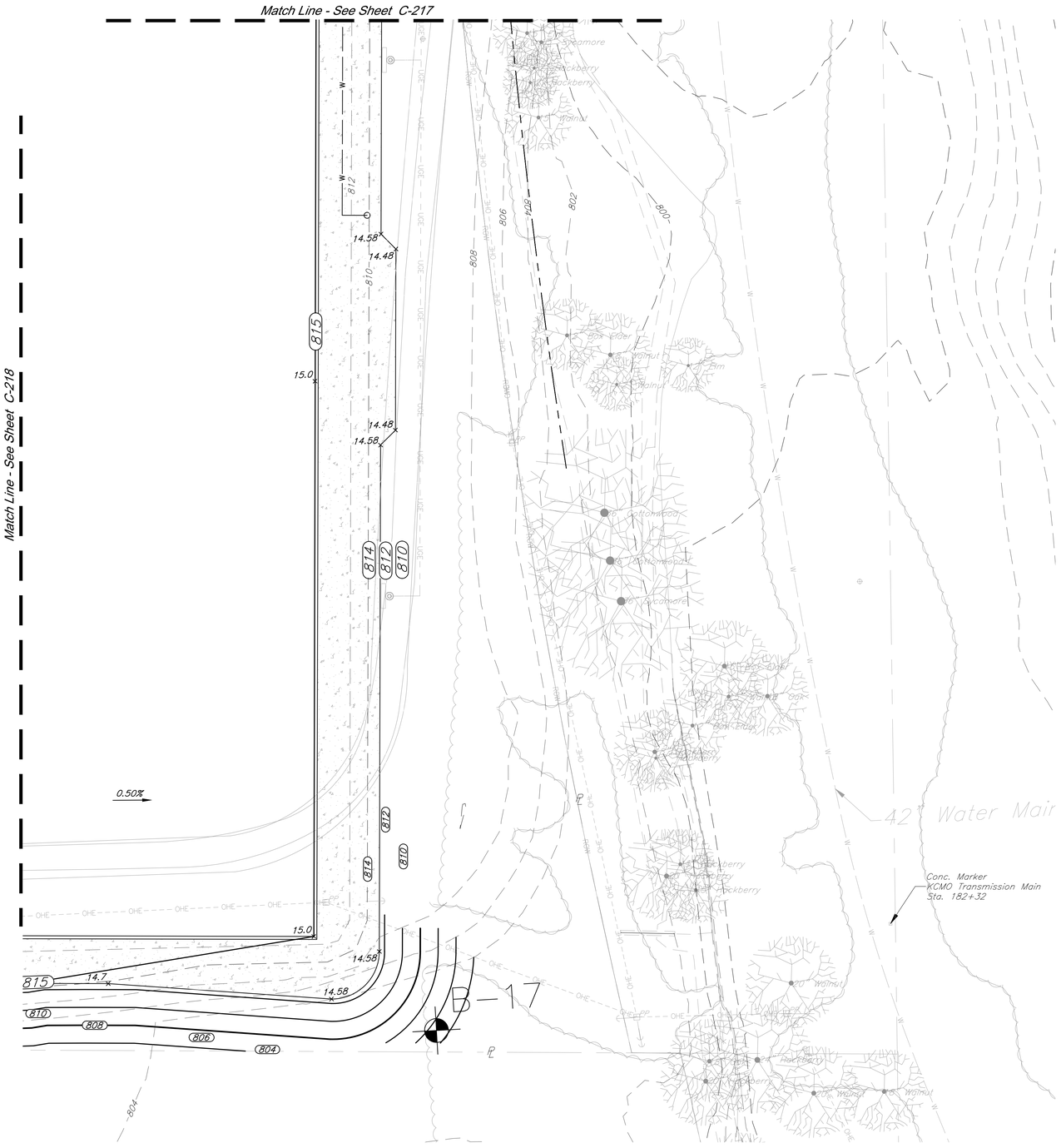
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-218

C:\12220\Civil 3D\Production Drawings\Construction Site Plans\12220CD702.dwg Layout: C-219 Grading Enlargement -- Tuesday, May 14, 2019 - 4:22pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



LEGEND

- Existing Contour (900)
- Proposed Contour (900)
- Proposed Spot Grade (900.00)
- Drainage Flow Arrow
- Drainage Swale

Notes:

1. TW and BW elevations noted on plans are to the top of the wall and to the surface grade at the base of wall. Any additional depth of wall required for structural purposes is the responsibility of the structural Engineer designing the wall.
2. All ADA accessible parking spaces are to be constructed at 2.0% maximum slope in any direction. ADA accessible routes shall be constructed with 2.0% maximum cross slope and a maximum 5.0% longitudinal slope.
3. All earthwork shall adhere to the Geotechnical Report.
4. All walls over 30 inches in height will be provided with a railing or fence.

20' 0' 20' 40'
SCALE : 1 INCH = 20 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive.
EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

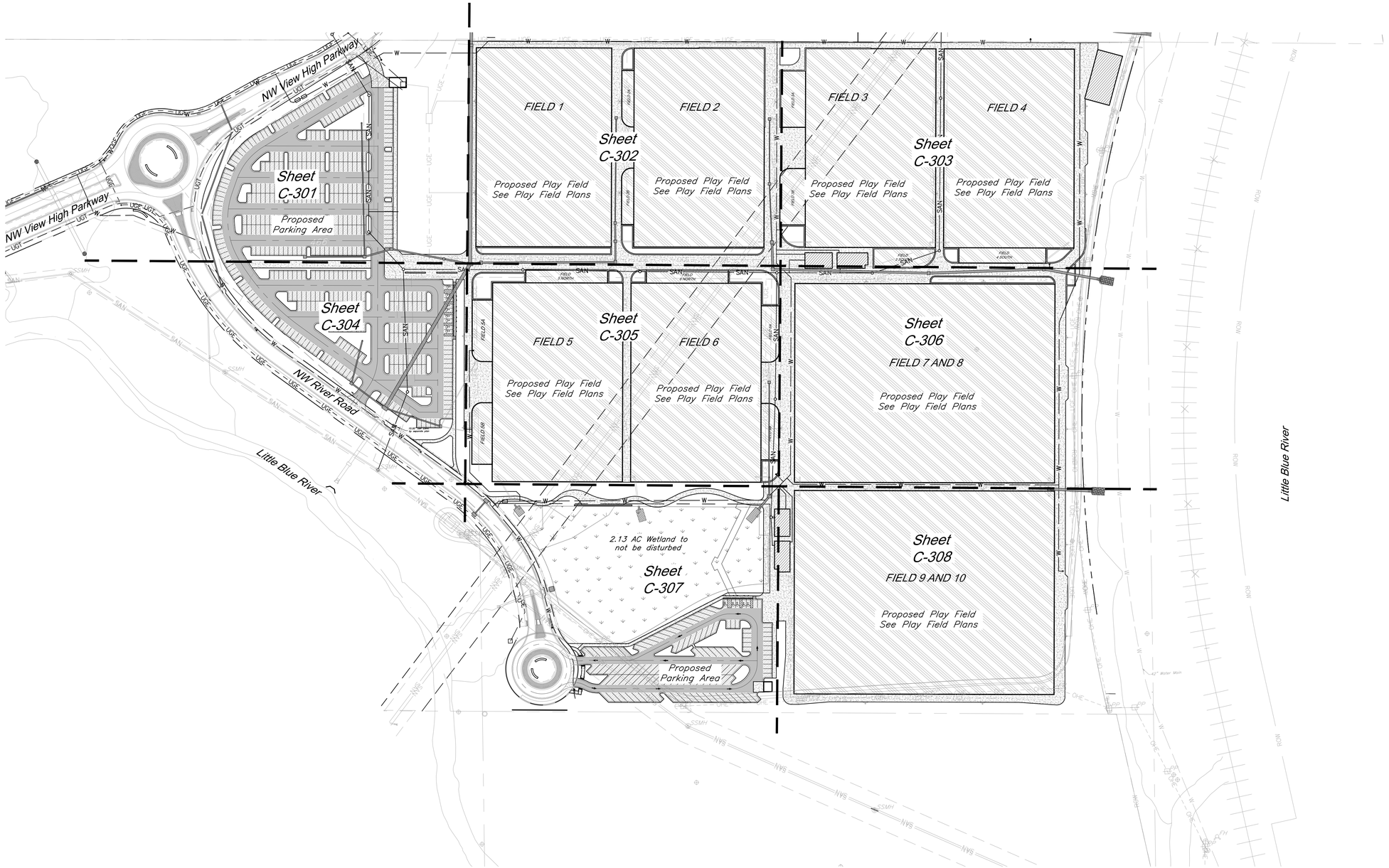
Grading Enlargement

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-219

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0801.dwg Layout: C-300 Dimension Plan -- Tuesday May 14, 2019, 2:51pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Copyright 2019, George Butler Associates, Inc.



LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Jurisdictional Wetland Area Do Not Disturb
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — Existing Sanitary Sewer
- SSMH

100' 0' 100' 200'
SCALE : 1 INCH = 100 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

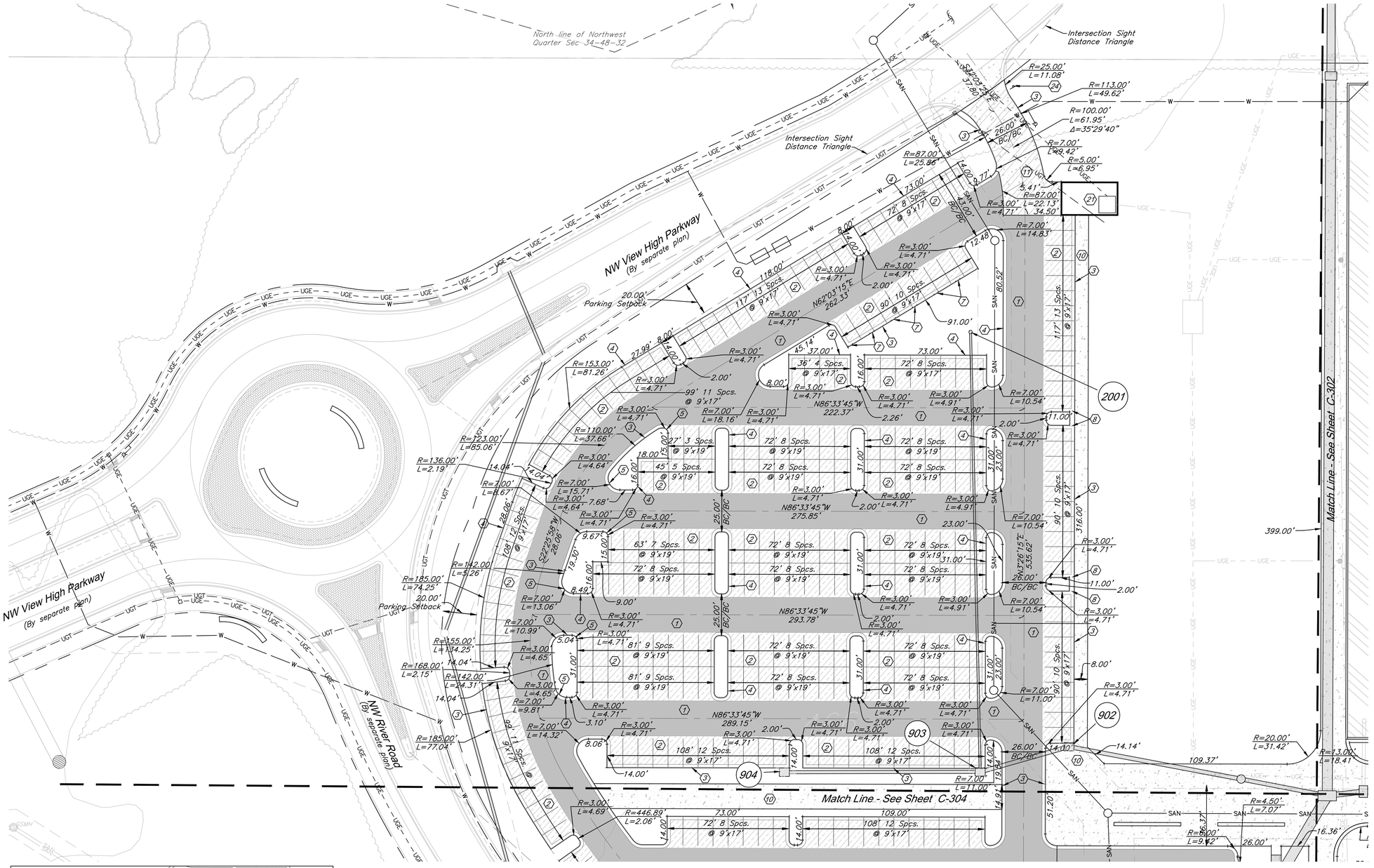
Dimension Plan

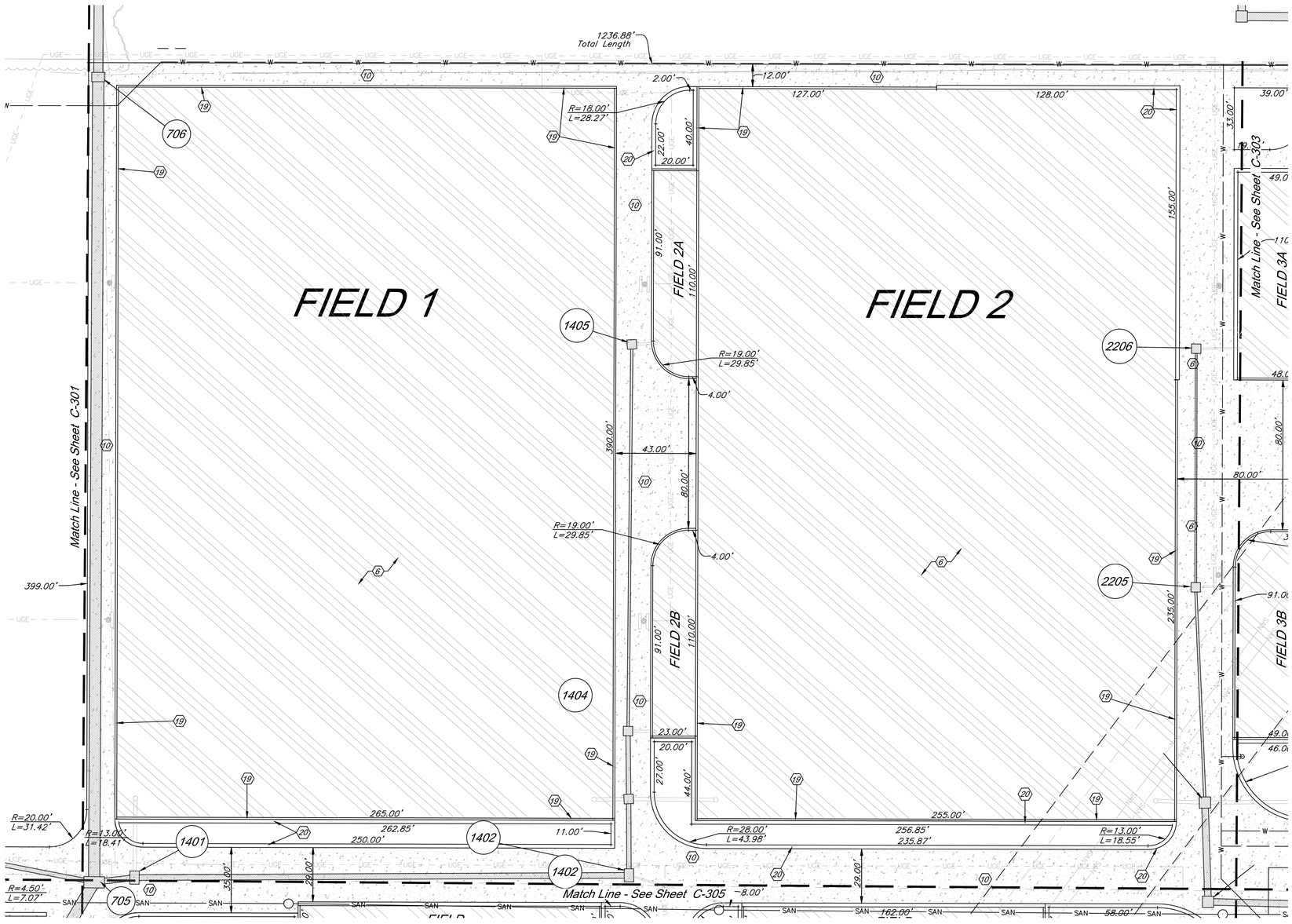
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

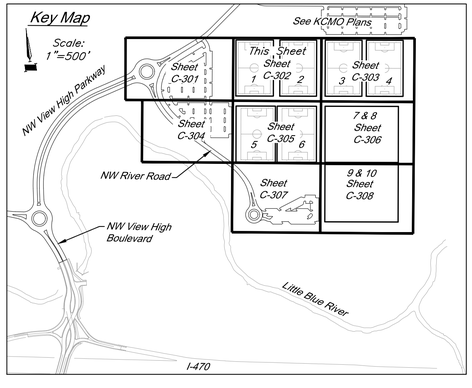
SHEET NO:

C-300

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0801.dwg Layout: C-301 Dimension Plan -- Tuesday, May 14, 2019, 2:51pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.


North line of Northwest Quarter Sec 34-48-32
Intersection Sight Distance Triangle
NW View High Parkway (By separate plan)
20.00' Parking Setback
NW River Road (By separate plan)
Match Line - See Sheet C-302
Match Line - See Sheet C-304
2001
902
903
904
399.00'
109.37'
91.00'
80.52'
N62°03'15"E 262.33'
N86°33'45"W 222.37'
N86°33'45"W 275.85'
N86°33'45"W 293.78'
N86°33'45"W 289.15'
S22°25'58"W 28.66'
N47°26'15"E 535.62'
72' 8 Spcs. @ 9'x17'
117' 13 Spcs. @ 9'x17'
90' 10 Spcs. @ 9'x17'
99' 11 Spcs. @ 9'x17'
36' 4 Spcs. @ 9'x17'
27' 3 Spcs. @ 9'x19'
45' 5 Spcs. @ 9'x19'
63' 7 Spcs. @ 9'x19'
81' 9 Spcs. @ 9'x19'
108' 12 Spcs. @ 9'x17'
108' 12 Spcs. @ 9'x19'
108' 12 Spcs. @ 9'x19'
72' 8 Spcs. @ 9'x19'
72' 8 Spcs. @ 9'x17'
R=25.00' L=11.08'
R=113.00' L=49.62'
R=100.00' L=61.95' Δ=35°29'40"
R=7.00' L=29.42'
R=5.00' L=6.95'
R=87.00' L=22.13'
R=87.00' L=25.86'
R=87.00' L=34.50'
R=153.00' L=81.26'
R=123.00' L=85.06'
R=136.00' L=2.19'
R=110.00' L=37.66'
R=142.00' L=5.26'
R=185.00' L=74.25'
R=155.00' L=134.25'
R=142.00' L=24.31'
R=168.00' L=2.15'
R=185.00' L=77.04'
R=446.89' L=2.06'
R=3.00' L=4.71'
R=3.00' L=4.69'
R=3.00' L=4.65'
R=7.00' L=14.83'
R=7.00' L=10.54'
R=7.00' L=11.00'
R=7.00' L=15.71'
R=7.00' L=13.06'
R=7.00' L=10.99'
R=7.00' L=9.81'
R=7.00' L=14.32'
R=7.00' L=18.16'
R=20.00' L=31.42'
R=13.00' L=18.41'
R=4.50' L=7.07'
R=3.00' L=4.91'
R=3.00' L=4.64'
R=3.00' L=4.65'
R=3.00' L=4.67'
R=3.00' L=4.91'
R=3.00' L=4.71'
R=3.00' L=4.71'
R=3.00' L=4.71





CONSTRUCTION NOTES:

(6) See Playing Field Plans for Field Details

(10) Construct 6" Depth Conc. Sidewalk. See Construction Details.

(19) 12" Conc. Field Edge. See Playing Field Plans for details.

(20) Limestone Block Wall per Construction Details, Grading Plan, and Landscape Plans

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — Existing Sanitary Sewer
- SSMH

Note: See Sheets C-500-C-506 for construction details.

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Dimension Plan

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

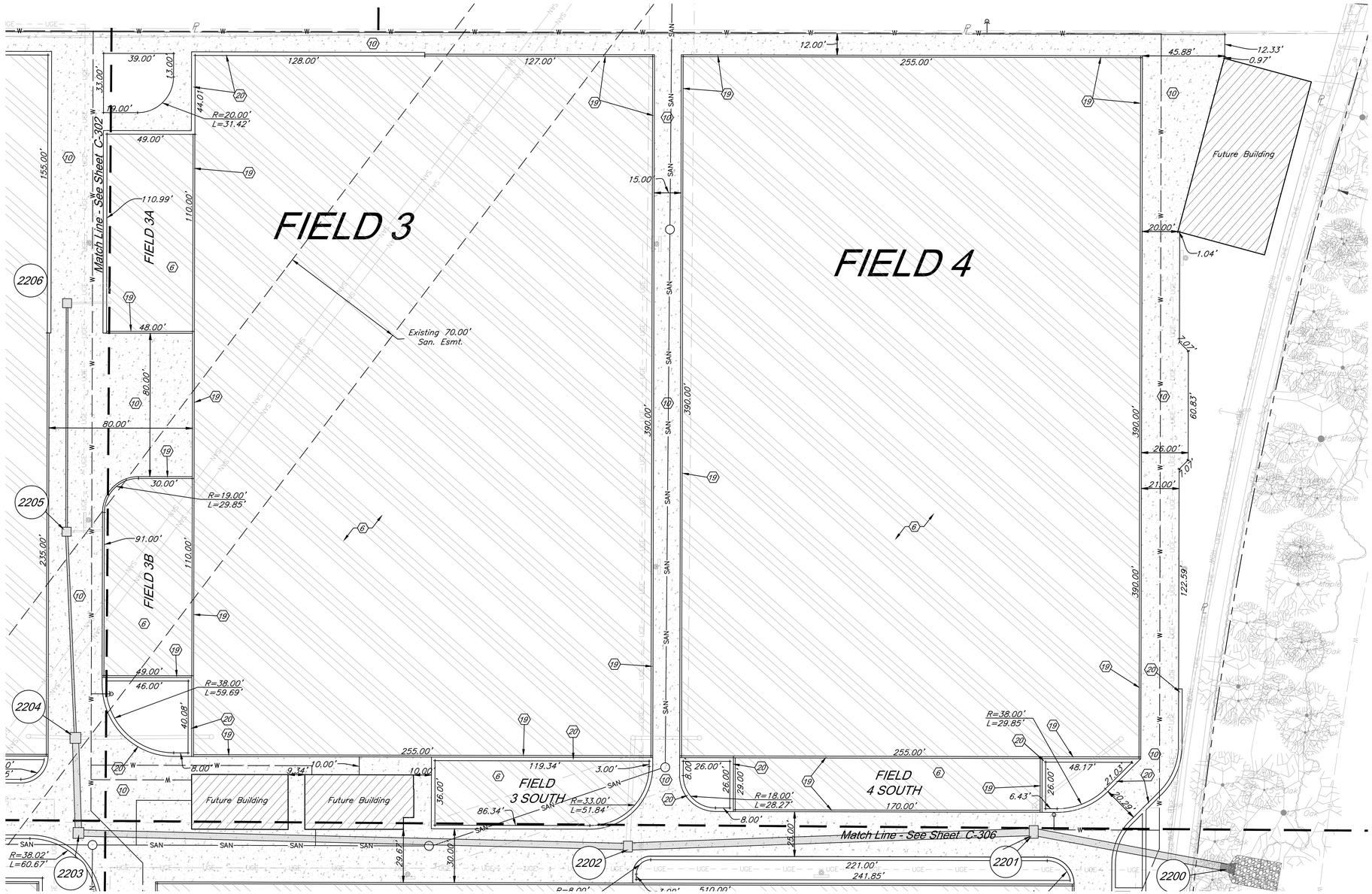
C-302

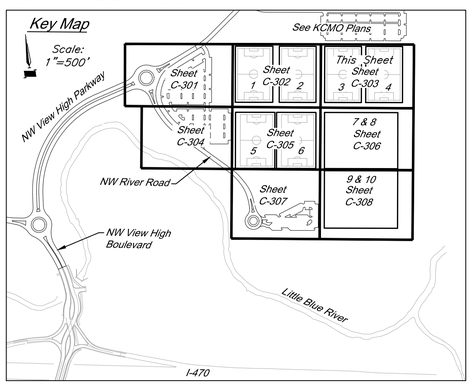
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0801.dwg Layout: C-302 Dimension Plan -- Tuesday, May 14, 2019, 2:52pm -- Copyright 2019, George Butler Associates, Inc.

Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059

-- THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CD801.dwg Layout: C-303 Dimension Plan -- Tuesday, May 14, 2019, 2:53pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059





CONSTRUCTION NOTES:

(6) See Playing Field Plans for Field Details

(10) Construct 6" Depth Conc. Sidewalk. See Construction Details.

(19) 12" Conc. Field Edge. See Playing Field Plans for details.

(20) Limestone Block Wall per Construction Details, Grading Plan, and Landscape Plans

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — Existing Sanitary Sewer
- SSMH

Note: See Sheets C-500-C-506 for construction details.

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

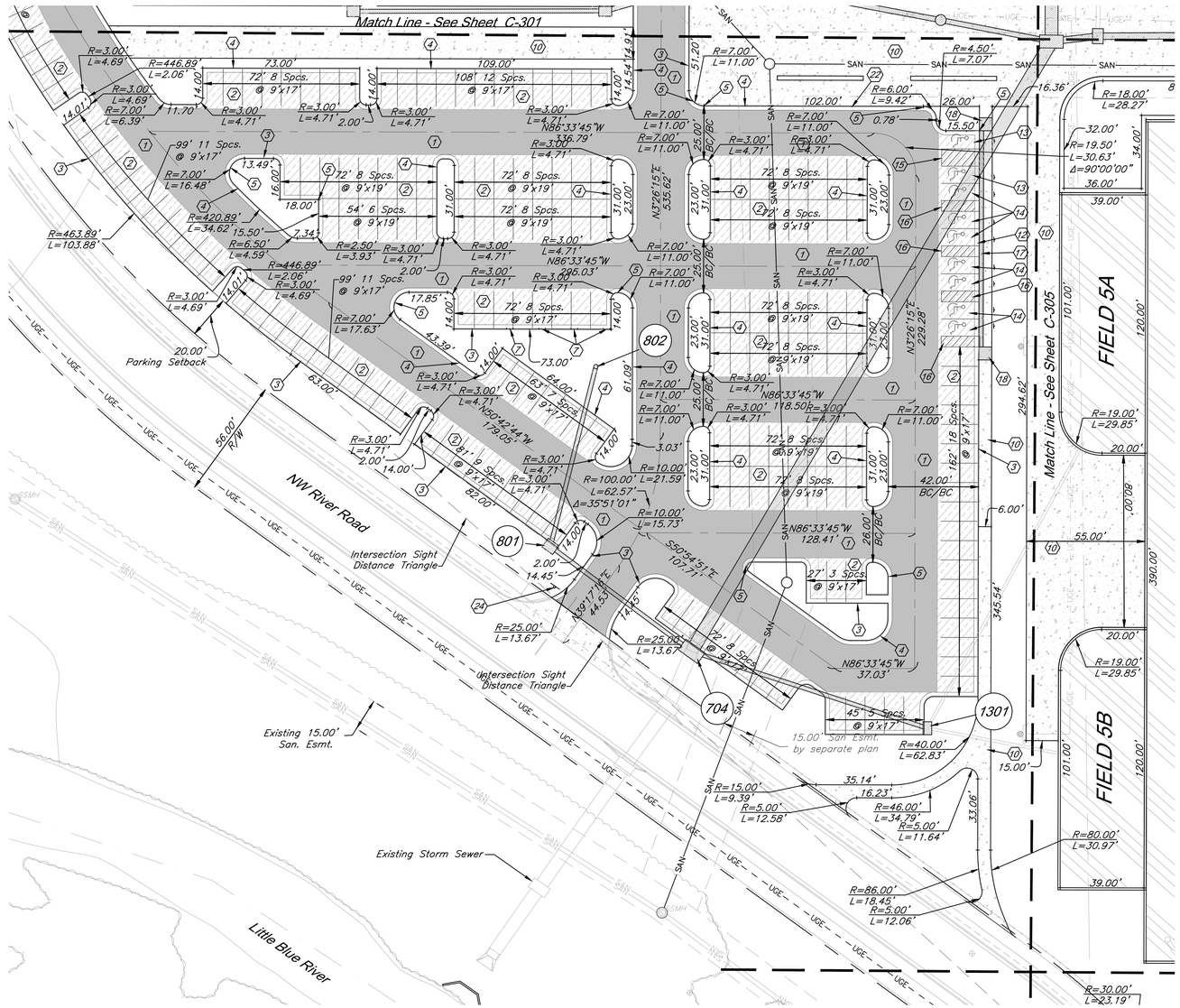
Dimension Plan

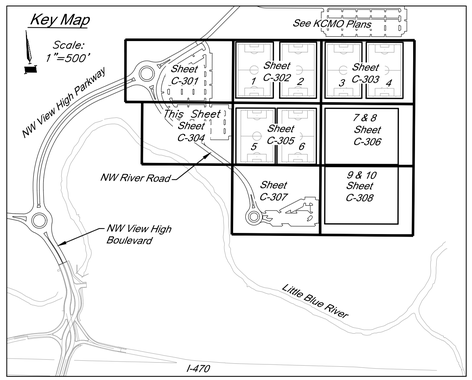
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-303

G:\12220\Civil 3D\Production Drawings\Construction Site Plans\12220CD801.dwg Layout: C-304 Dimension Plan -- Tuesday, May 14, 2019, 2:54pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





CONSTRUCTION NOTES:

1. Construct HD Asphalt Pavement
2. Construct LD Asphalt Pavement
3. Construct CG-1 Curb and Gutter
4. Construct CG-1 "Dry" Curb and Gutter
5. Transition Curb Types
7. Construct 3' Width Curb Cut at 15' O.C. See Construction Details.
10. Construct 6" Depth Conc. Sidewalk. See Construction Details.
12. 2' Width Flat Curb
13. Construct 8'x17' Van Accessible ADA Parking Space w/ stop block, signage, and pavement markings per construction details. Max cross slope=2%.
14. Construct 8'x17 ADA Parking Space w/ stop block, signage, and pavement markings per construction details. Max cross slope=2%.
15. Construct 8'x17' ADA Access Aisle
16. Construct 5'x17' ADA Access Aisle
17. 2' ADA Detectable Warning per construction details.
18. ADA Ramp
22. Construct Mountable Curb
24. Construct Stop Sign and Stop Bar per construction details.

LEGEND

- Proposed Concrete Pavement
- Artificial Turf Area See Playing Field Plans
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SSMH — SAN — Existing Sanitary Sewer

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

Note: See Sheets C-500-C-506 for construction details.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Dimension Plan

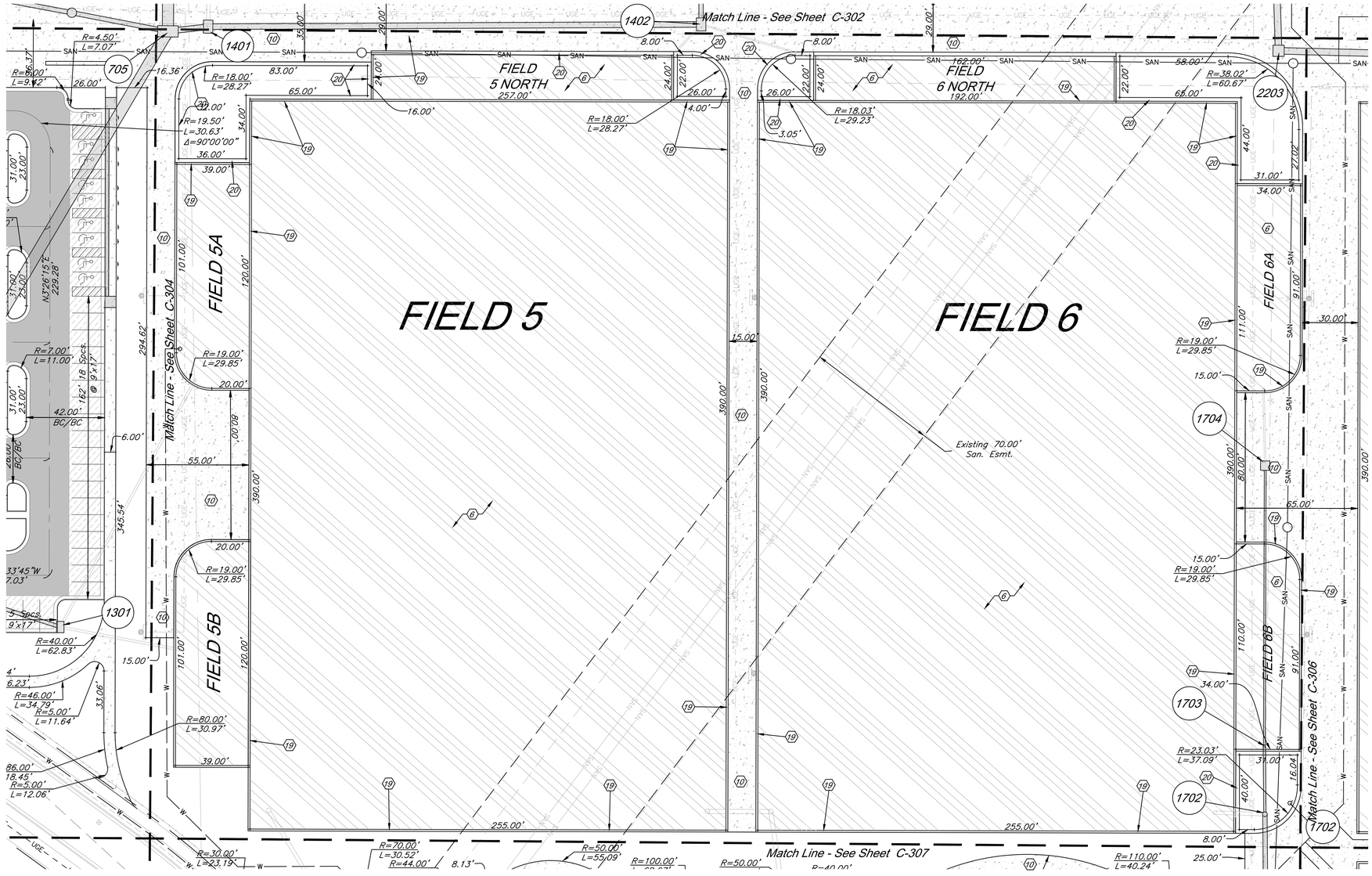
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

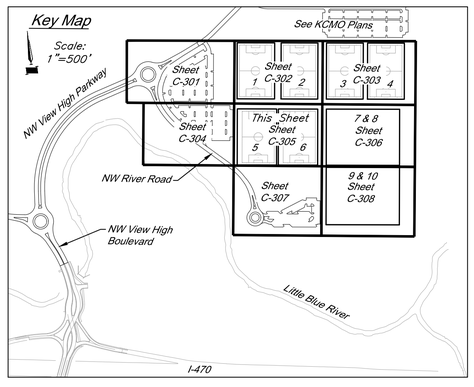
SHEET NO:

C-304

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CD801.dwg Layout: C-305 Dimension Plan -- Tuesday May 14, 2019, 2:54pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
-- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



Note: See Sheets C-500–C-506 for construction details.



CONSTRUCTION NOTES:

(6) See Playing Field Plans for Field Details

(10) Construct 6" Depth Conc. Sidewalk. See Construction Details.

(19) 12" Conc. Field Edge. See Playing Field Plans for details.

(20) Limestone Block Wall per Construction Details, Grading Plan, and Landscape Plans

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — Existing Sanitary Sewer
- SSMH

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

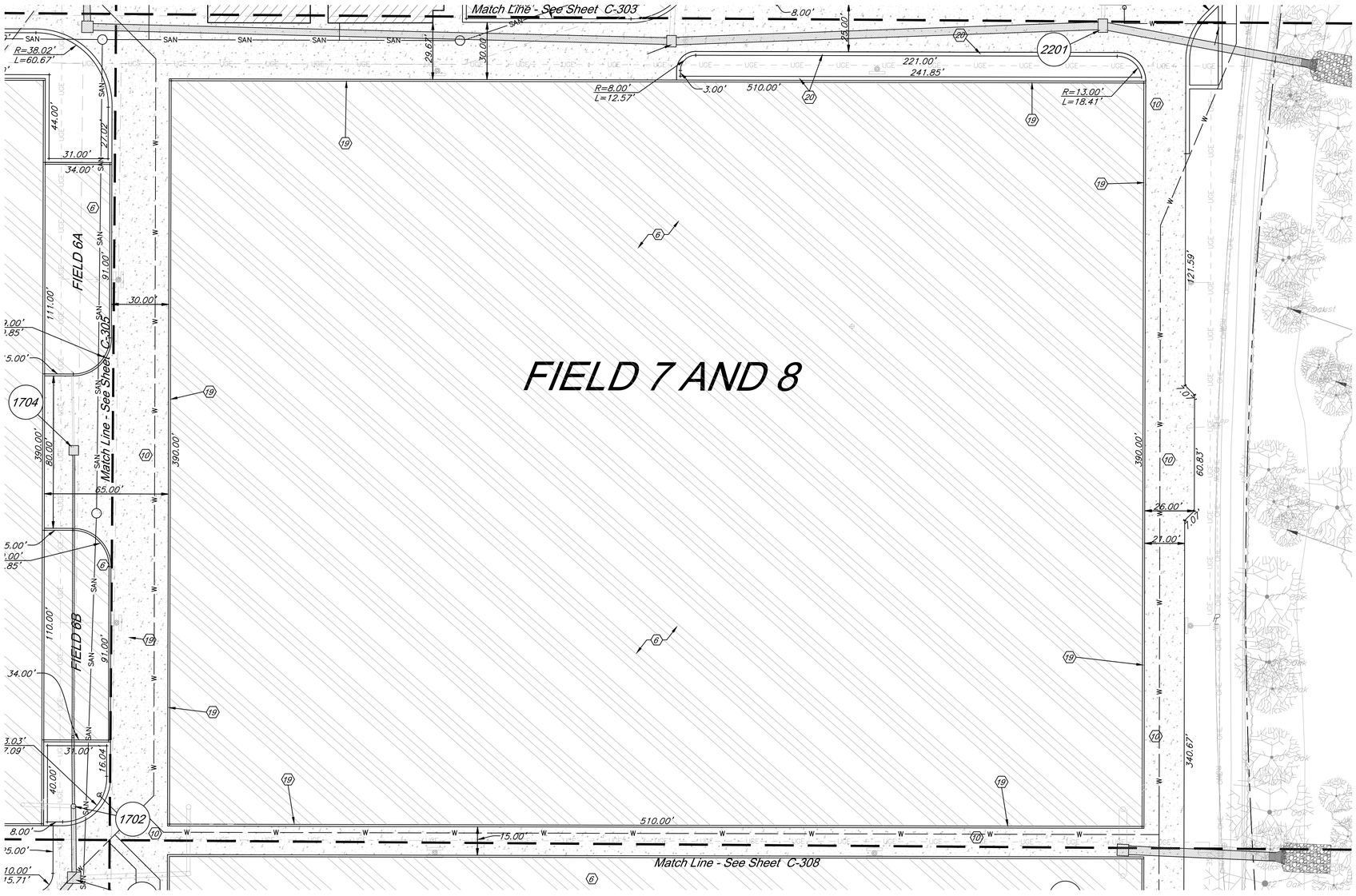
Dimension Plan

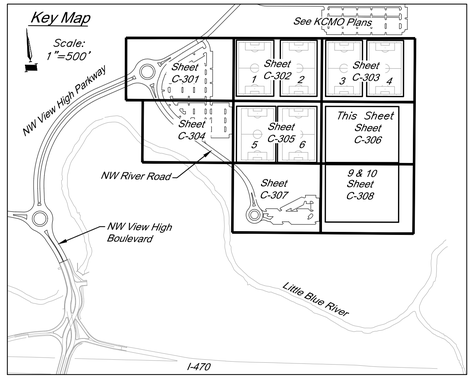
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-305

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0801.dwg Layout: C-306 Dimension Plan -- Tuesday, May 14, 2019, 2:55pm -- Copyright 2019, George Butler Associates, Inc.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





CONSTRUCTION NOTES:

(6) See Playing Field Plans for Field Details

(10) Construct 6" Depth Conc. Sidewalk. See Construction Details.

(19) 12" Conc. Field Edge. See Playing Field Plans for details.

(20) Limestone Block Wall per Construction Details, Grading Plan, and Landscape Plans

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — Existing Sanitary Sewer
- SSMH

Note: See Sheets C-500-C-506 for construction details.

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

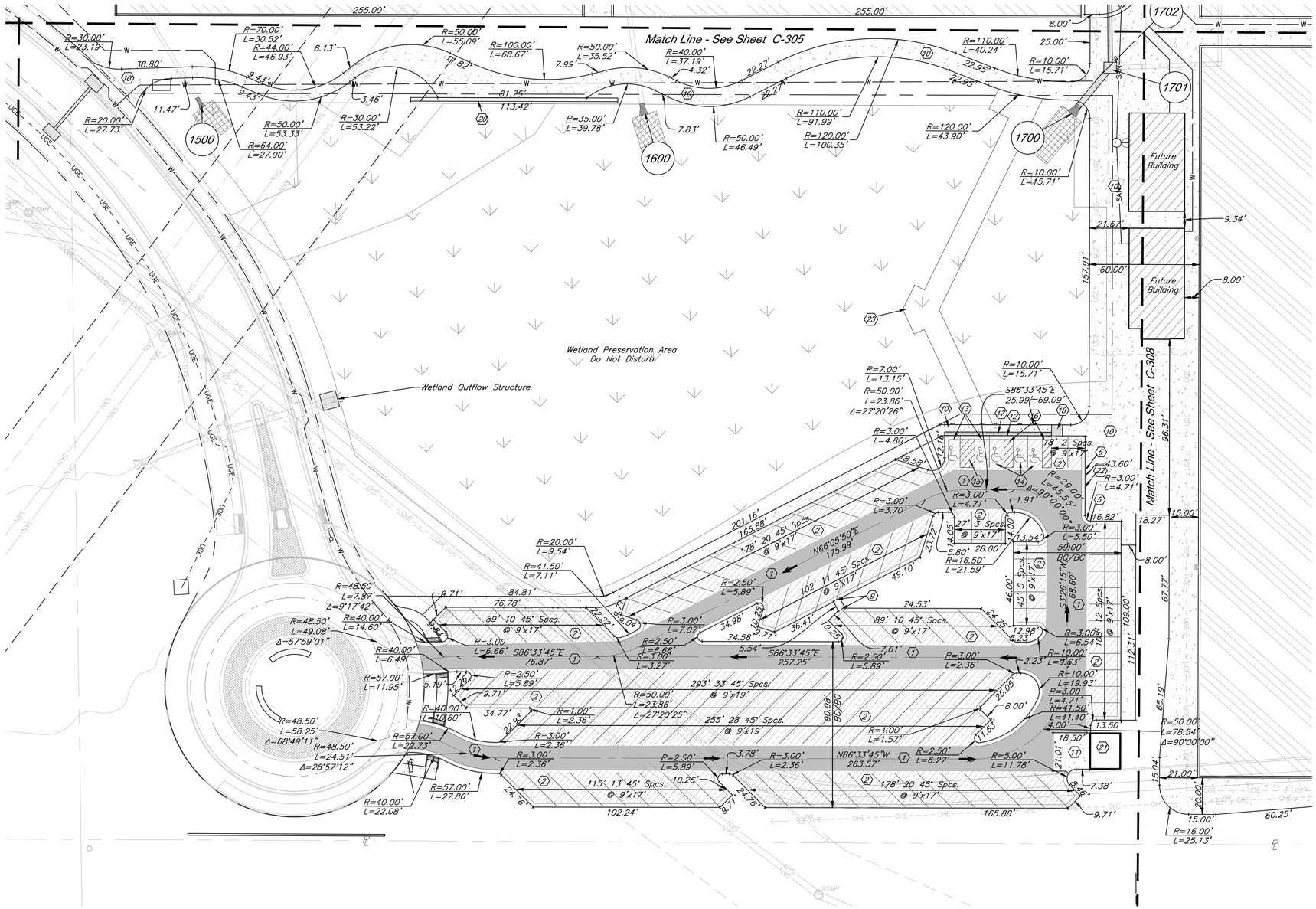
Dimension Plan

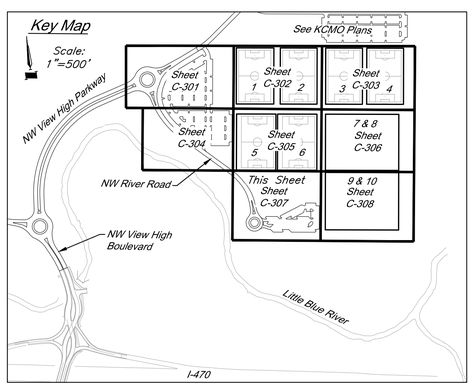
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-306

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0801.dwg Layout: C-307 Dimension Plan -- Tuesday, May 14, 2019, 2:56pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059





CONSTRUCTION NOTES:

1. Construct HD Asphalt Pavement
2. Construct LD Asphalt Pavement
3. Construct CG-1 Curb and Gutter
4. Construct CG-1 "Dry" Curb and Gutter
5. Transition Curb Types
9. Construct 3' Width Curb Cut and Conc. Flume. See Construction Details.
10. Construct 6" Depth Conc. Sidewalk. See Construction Details.
11. Construct 9" Concrete Pavement. See Construction Details.
12. 2' Width Flat Curb
13. Construct 8'x17' Van Accessible ADA Parking Space w/ stop block, signage, and pavement markings per construction details. Max cross slope=2%.
14. Construct 8'x17 ADA Parking Space w/ stop block, signage, and pavement markings per construction details. Max cross slope=2%.
15. Construct 8'x17' ADA Access Aisle
16. Construct 5'x17' ADA Access Aisle
17. 2' ADA Detectable Warning per construction details.
18. ADA Ramp
20. Limestone Block Wall per Construction Details, Grading Plan, and Landscape Plans
21. Construct Dumpster per Architect and Landscape Plans
22. Construct Mountable Curb
23. Construct Elevated Boardwalk. See Landscape Plans.

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Jurisdictional Wetland Area Do Not Disturb
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — Existing Sanitary Sewer
- SSMH

Note: See Sheets C-500-C-506 for construction details.

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

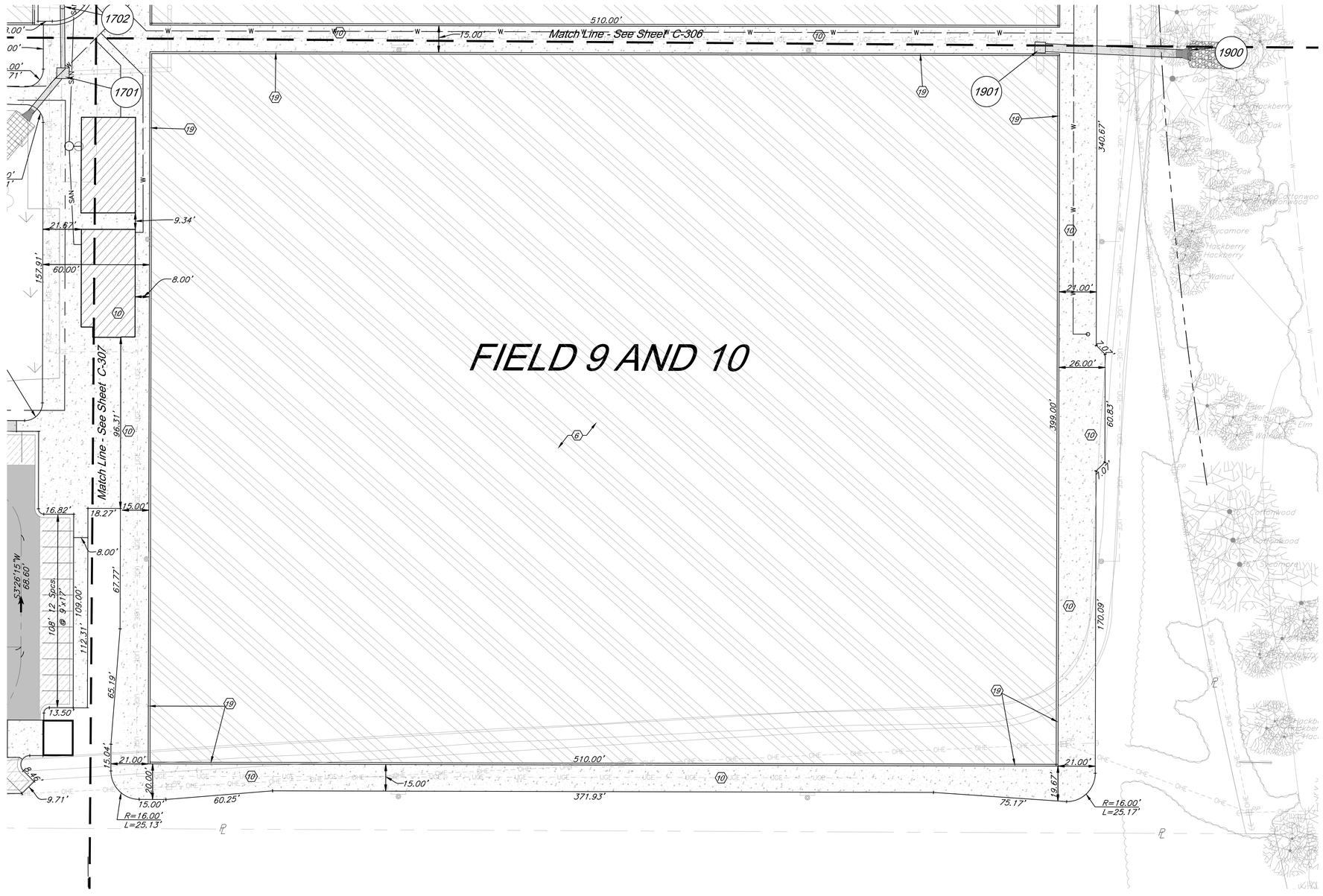
Dimension Plan

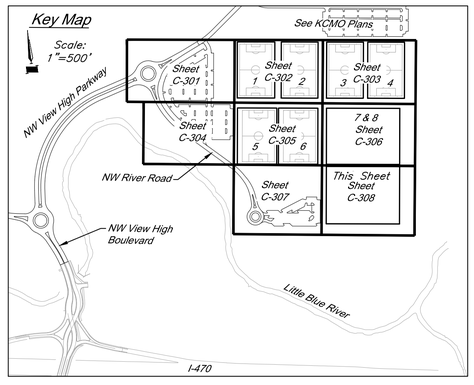
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-307

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0801.dwg Layout: C-308 Dimension Plan -- Tuesday, May 14, 2019, 2:57pm -- Copyright 2019, George Butler Associates, Inc.
Architect 00212, Professional Engineer 0001331, Professional Land Surveyor 000059
-- THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





CONSTRUCTION NOTES:

(6) See Playing Field Plans for Field Details

(10) Construct 6" Depth Conc. Sidewalk. See Construction Details.

(19) 12" Conc. Field Edge. See Playing Field Plans for details.

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SAN — SSMH — Existing Sanitary Sewer

Note: See Sheets C-500-C-506 for construction details.

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Dimension Plan

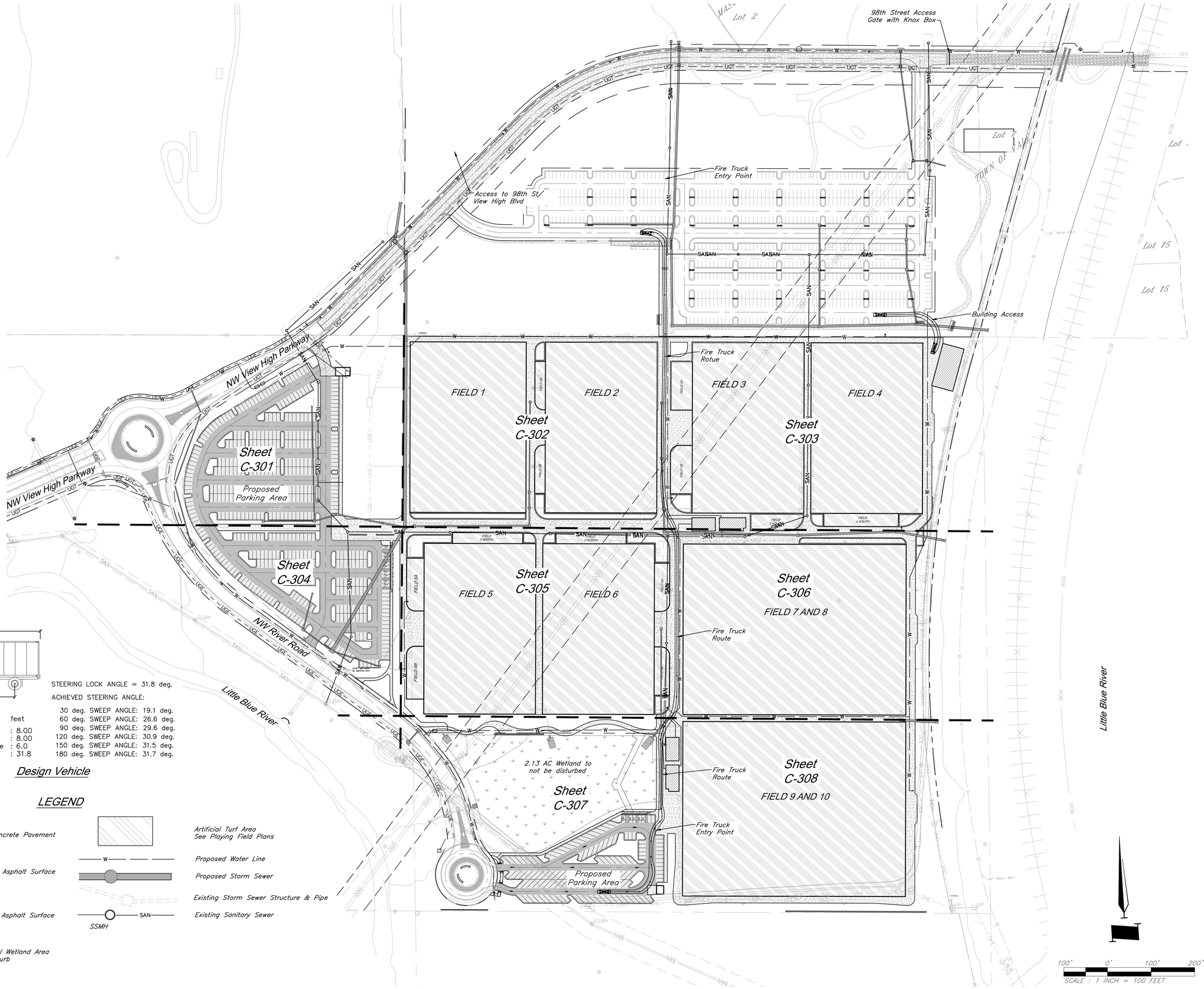
JOB NO: 1197 SCALE:

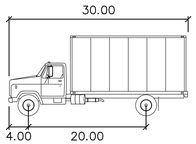
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-308

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C802.dwg Layout: C-309 Emergency Vehicle Access -- Friday, May 31, 2019, 1:25pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





SU	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

STEERING LOCK ANGLE = 31.8 deg.

ACHIEVED STEERING ANGLE:

30 deg. SWEEP ANGLE: 19.1 deg.
60 deg. SWEEP ANGLE: 26.6 deg.
90 deg. SWEEP ANGLE: 29.6 deg.
120 deg. SWEEP ANGLE: 30.9 deg.
150 deg. SWEEP ANGLE: 31.5 deg.
180 deg. SWEEP ANGLE: 31.7 deg.

Design Vehicle

LEGEND

- Proposed Concrete Pavement
- Proposed HD Asphalt Surface
- Proposed LD Asphalt Surface
- Jurisdictional Wetland Area Do Not Disturb
- Artificial Turf Area See Playing Field Plans
- W — Proposed Water Line
- Proposed Storm Sewer
- Existing Storm Sewer Structure & Pipe
- SSMH — SAN — Existing Sanitary Sewer

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

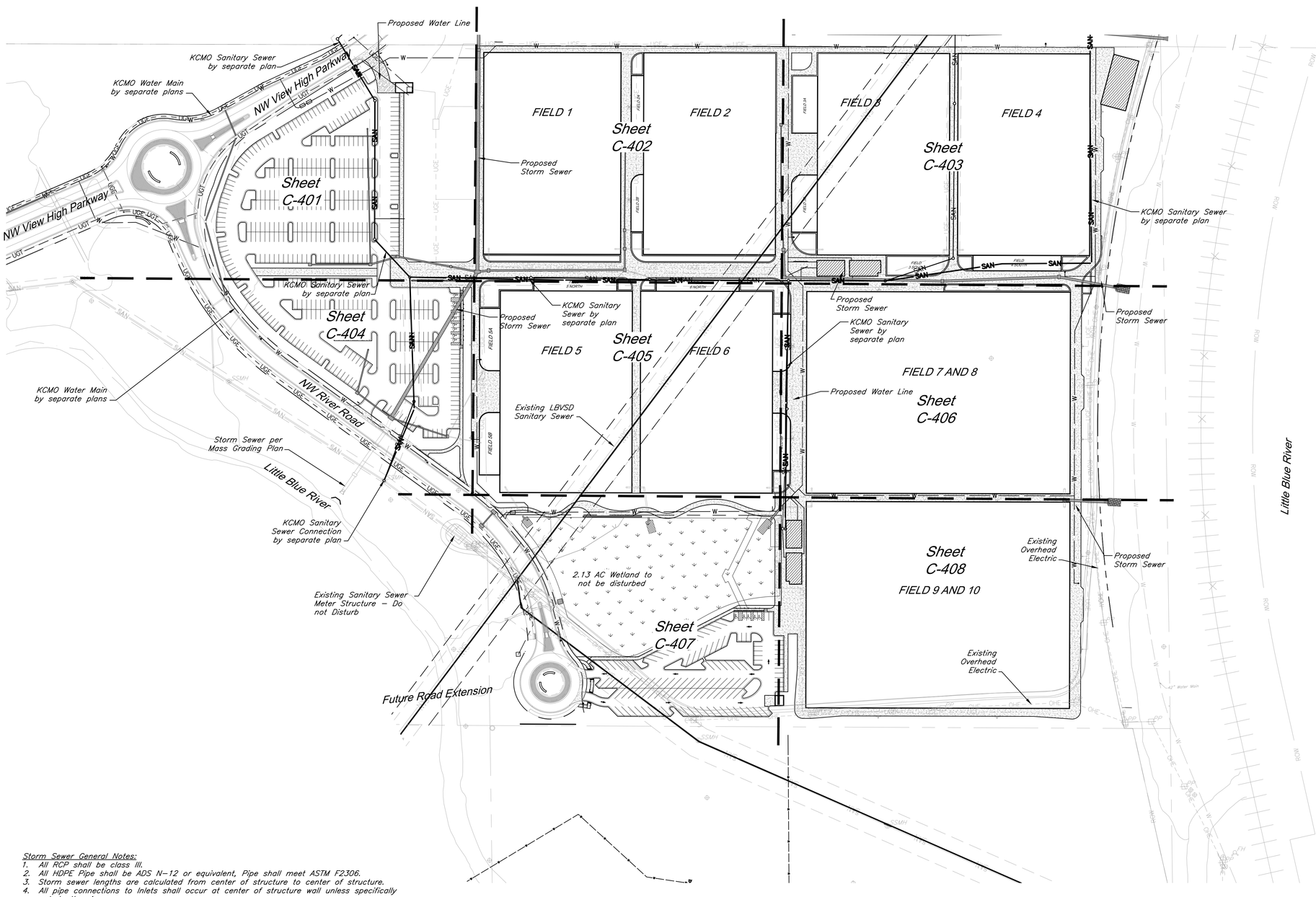
Emergency Vehicle Access

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-309

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0901.dwg Layout: C-400 Utility Plan -- Tuesday, May 14, 2019, 3:00pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



Storm Sewer General Notes:

1. All RCP shall be class III.
2. All HDPE Pipe shall be ADS N-12 or equivalent, Pipe shall meet ASTM F2306.
3. Storm sewer lengths are calculated from center of structure to center of structure.
4. All pipe connections to Inlets shall occur at center of structure wall unless specifically noted otherwise.
5. All work shall conform to City of Lee's Summit, MO standards.
6. Precast structures shall be constructed with KCMMB 4,000 psi concrete. Shop drawings shall be submitted to the Engineer for review prior to casting.
7. All in grade inlets shall match adjacent slope.
8. Drainage across the project site during construction shall be the Contractor's responsibility. Surface drainage shall be controlled to reduce or prevent the flow of surface water onto adjacent grounds. Contractor shall control downstream erosion and silting during construction. Flexibility is given to to the Contractor to make minor grading revisions along roads or between building pads to improve drainage during construction, with prior approval of the engineer.
9. See Sheets Sheets C-500-C-506 for construction details.
10. All water line shall be retrained joint C900 PVC.
11. All joints, fittings, tees, and bends required for construction shall be subsidiary to these plans.
12. All Fire Hydrants within Lee's Summit City Limits shall meet City of Lee's Summit requirements.

Utility Legend

CATV Ped.	Cable TV Pedestal
P.P.	Power Pole
	Guy Anchor
EMH	Electrical Manhole
	Electrical Transformer
G.M.	Gas Meter
	Curb Inlet
SSMH	Sanitary Sewer Manhole
C.O.	Sanitary Cleanout
L.P.	Light Pole
	Boring Hole
	Sign
Tel. Ped.	Telephone Pedestal
T.S.	Traffic Signal Post
RMH	Traffic Manhole
F.H.	Fire Hydrant
W.M.	Water Meter
FO	Fiber Optic Line
FP	Fire Protection Line
G	Gas Line
OHE	Over Head Electric
OHT	Over Head Telephone
OHTV	Over Head Cable TV
R	Property Line
ROW	Right-of-Way Line
SAN	Existing Sanitary Sewer Line
UGE	Existing Underground Electric
UGT	Existing Underground Telephone
UGTV	Existing Underground Cable TV
W	Existing Water Line
	Proposed Storm Sewer
	Existing Storm Sewer
SAN	Proposed Sanitary Sewer Line

SCALE : 1 INCH = 100 FEET

CAUTION!

Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

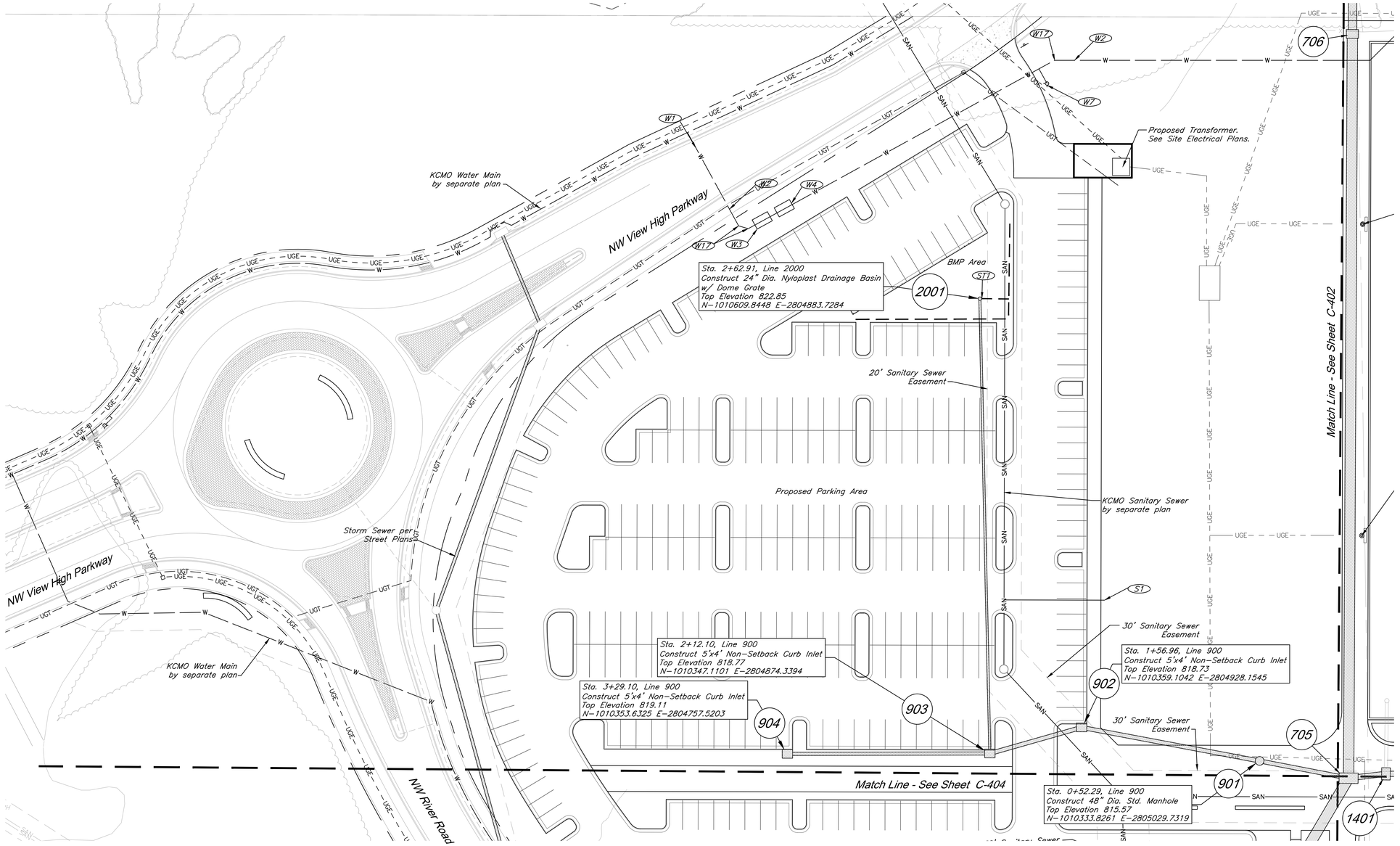
Utility Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

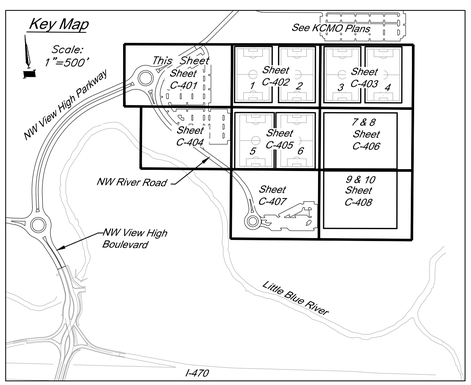
SHEET NO:

C-400

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0900.dwg Layout: C-401 Utility Plan -- Tuesday, May 14, 2019, 3:02pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.



Water Construction Notes:

- (W1) Connect 6" C900 PVC Water Line via 8"x8"x6" Tee. Construct Thrust Block.
- (W2) Furnish and Install 6" C900 PVC Water Line at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W3) Install Backflow Preventer in concrete vault. Backflow preventer to be sized by MEP.
- (W4) Install Water Meter in concrete vault. Water Meter to be sized by MEP.
- (W7) Install 6" Fire Hydrant Assembly. See Detail. Install Snake Pit Magnetized Tracer Box, color blue.
- (W17) Install 45° Bend W/ Thrust Block

Storm Sewer Construction Notes:

- (ST1) Connect Perforated 4" HDPE Underdrain to structure 2001, ℄=819.30 Install 150 LF perforated 4" HDPE pipe @ min. 1% as shown. See construction details.

Sanitary Sewer Construction Notes:

- (S1) Existing E.O.S ℄= 810.40

Utility Legend

- CATV Ped. — Existing Cable TV Pedestal
- P.P. — Existing Power Pole
- Existing Guy Anchor
- EMH — Existing Electrical Manhole
- Existing Electrical Transformer
- G.M. — Existing Gas Meter
- Existing Curb Inlet
- SSMH — Existing Sanitary Sewer Manhole
- C.O. — Existing Sanitary Cleanout
- L.P. — Existing Light Pole
- Existing Boring Hole
- Existing Sign
- Tel. Ped. — Existing Telephone Pedestal
- T.S. — Existing Traffic Signal Post
- TRMH — Existing Traffic Manhole
- F.H. — Existing Fire Hydrant
- W.M. — Existing Water Meter
- FO — Existing Fiber Optic Line
- FP — Existing Fire Protection Line
- G — Existing Gas Line
- OHE — Existing Over Head Electric
- OHT — Existing Over Head Telephone
- OHTV — Existing Over Head Cable TV
- ℄ — Property Line
- ROW — Right-of-Way Line
- SAN — Existing Sanitary Sewer Line
- UGE — Existing Underground Electric
- UGT — Existing Underground Telephone
- UGTV — Existing Underground Cable TV
- W — Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

Note: Water and sanitary sewer construction notes shown as informational only.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

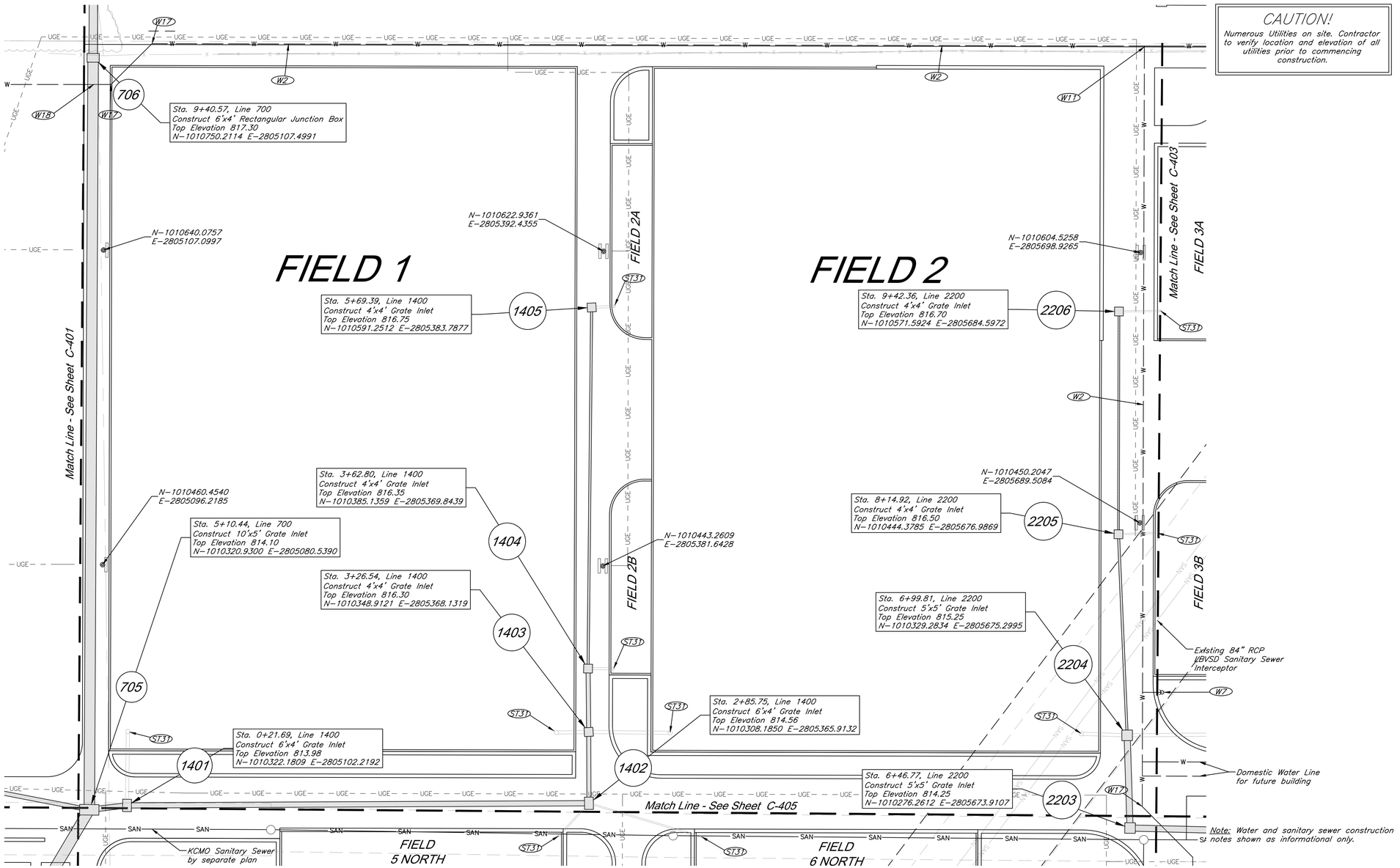
PROFESSIONAL SEAL:

DRAWING TITLE:
Utility Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

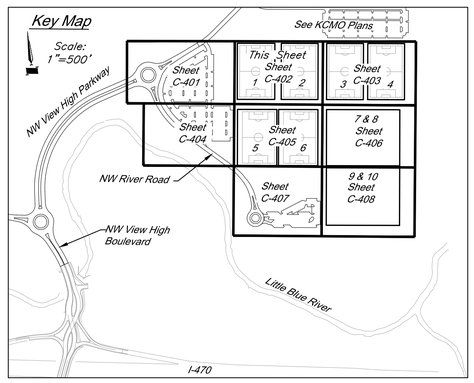
SHEET NO:
C-401

C:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CD900.dwg Layout: C-402 Utility Plan -- Tuesday, May 14, 2019, 3:03pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DECLARES PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



CAUTION!

Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.



Storm Sewer Construction Notes:

ST31 See Athletic Field Plans for field storm sewer

Water Construction Notes:

W2 Furnish and Install 6" C900 PVC Water Line at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.

W7 Install 6" Fire Hydrant Assembly. See Detail. Install Snake Pit Magnetized Tracer Box, color blue.

W11 Install 6"x6"x6" Tee C900 PVC.

W17 Install 45° Bend W/ Thrust Block.

W18 Install 20 LF. Conc. Encasement on Waterline, Centered on Crossing.

Utility Legend

- Exsiting Cable TV Pedestal
- Existing Power Pole
- Existing Guy Anchor
- Existing Electrical Manhole
- Existing Electrical Transformer
- Existing Gas Meter
- Existing Curb Inlet
- Existing Sanitary Sewer Manhole
- Existing Sanitary Cleanout
- Existing Light Pole
- Existing Boring Hole
- Existing Sign
- Existing Telephone Pedestal
- Existing Traffic Signal Post
- Existing Traffic Manhole
- Existing Fire Hydrant
- Existing Water Meter
- Existing Fiber Optic Line
- Existing Fire Protection Line
- Existing Gas Line
- Existing Over Head Electric
- Existing Over Head Telephone
- Existing Over Head Cable TV
- Property Line
- Right-of-Way Line
- Existing Sanitary Sewer Line
- Existing Underground Electric
- Existing Underground Telephone
- Existing Underground Cable TV
- Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

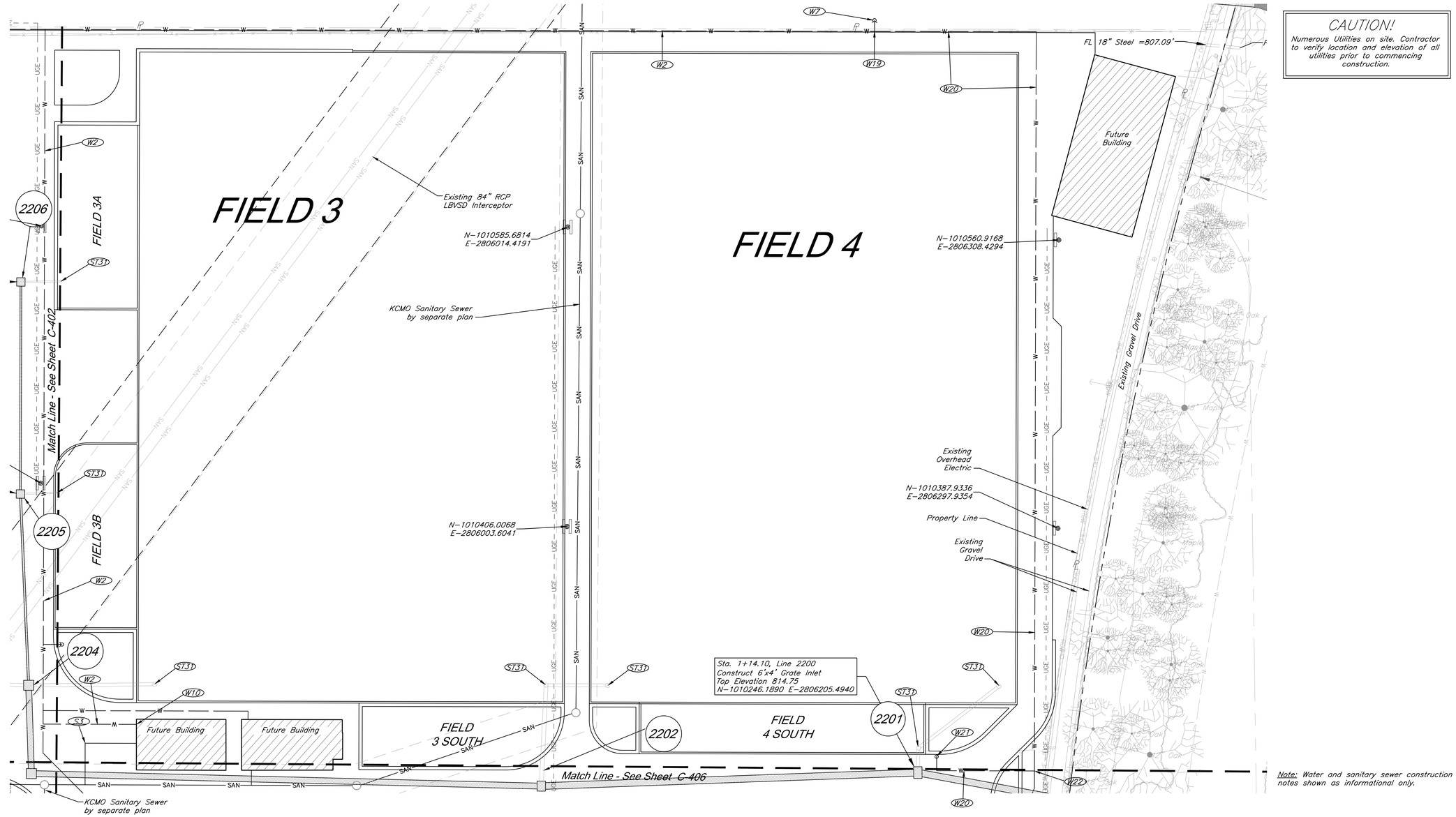
DRAWING TITLE:

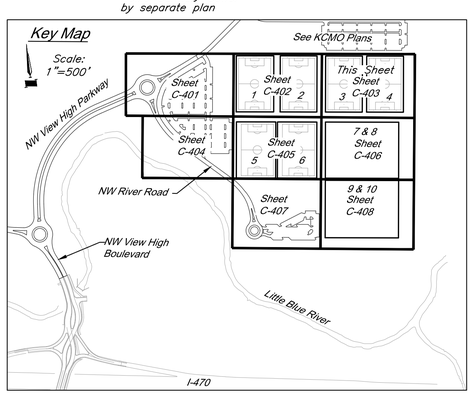
Utility Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-402





Storm Sewer Construction Notes:

(ST31) See Athletic Field Plans for field storm sewer

Water Construction Notes:

(W2) Furnish and Install 6" C900 PVC Water Line at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.

(W7) Install 6" Fire Hydrant Assembly. See Detail. Install Snake Pit Magnetized Tracer Box, color blue.

(W10) Connect Water Line to Building as per MEP.

(W19) Install 6"x6"x1.5" Tee w/ Thrust Block

(W20) Furnish and Install 1.5" AWWA C901 4710 DR9 PC250 HDPE Water Line with end stiffeners and at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.

(W21) Water Fountain per landscape plans

(W22) 1.5"x1.5"x1.5" HDPE Tee

Sanitary Sewer Construction Notes:

(S3) Existing E.O.S ℄ = 808.00

Utility Legend

- CATV Ped. — Exsiting Cable TV Pedestal
- P.P. — Existing Power Pole
- Existing Guy Anchor
- EMH — Existing Electrical Manhole
- Existing Electrical Transformer
- G.M. — Existing Gas Meter
- Existing Curb Inlet
- SSMH — Existing Sanitary Sewer Manhole
- S.O. — Existing Sanitary Cleanout
- L.P. — Existing Light Pole
- Existing Boring Hole
- Existing Sign
- Tel. Ped. — Existing Telephone Pedestal
- T.S. — Existing Traffic Signal Post
- TRMH — Existing Traffic Manhole
- F.H. — Existing Fire Hydrant
- W.M. — Existing Water Meter
- F.O. — Existing Fiber Optic Line
- F.P. — Existing Fire Protection Line
- G — Existing Gas Line
- OHE — Existing Over Head Electric
- OHT — Existing Over Head Telephone
- OHTV — Existing Over Head Cable TV
- ℄ — Property Line
- ROW — Right-of-Way Line
- SAN — Existing Sanitary Sewer Line
- UGE — Existing Underground Electric
- UGT — Existing Underground Telephone
- UGTV — Existing Underground Cable TV
- W — Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Utility Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

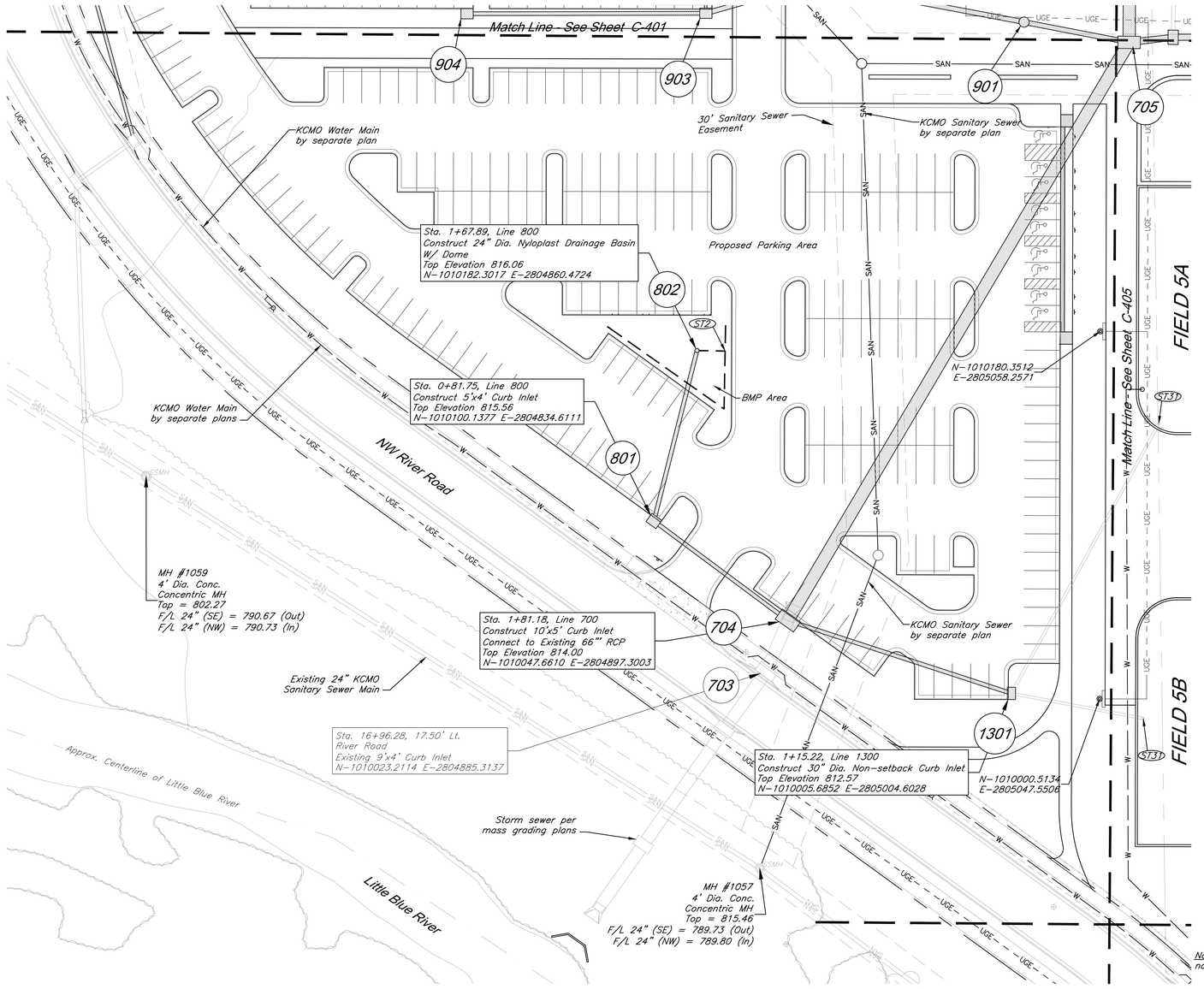
SHEET NO:

C-403

Note: Water and sanitary sewer construction notes shown as informational only.

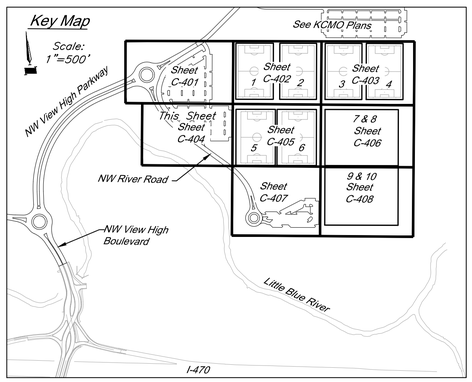
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720CD900.dwg Layout: C-403 Utility Plan -- Tuesday May 14, 2019, 3:03pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
-- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0900.dwg Layout: C-404 Utility Plan -- Tuesday, May 14, 2019, 3:04pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



CAUTION!

Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.



Storm Sewer Construction Notes:

(ST2) Connect Perforated 4" HDPE Underdrain to structure 802, ℄=812.00. Install 120 LF perforated 4" HDPE pipe @ min. 1% as shown. See construction details.

(ST31) See Athletic Field Plans for field storm sewer

Utility Legend

- CATV Ped. — Exsiting Cable TV Pedestal
- P.P. — Existing Power Pole
- Existing Guy Anchor
- EMH — Existing Electrical Manhole
- Existing Electrical Transformer
- G.M. — Existing Gas Meter
- Existing Curb Inlet
- SSMH — Existing Sanitary Sewer Manhole
- S.O. — Existing Sanitary Cleanout
- L.P. — Existing Light Pole
- Existing Boring Hole
- Existing Sign
- Tel. Ped. — Existing Telephone Pedestal
- T.S. — Existing Traffic Signal Post
- TRMH — Existing Traffic Manhole
- F.H. — Existing Fire Hydrant
- W.M. — Existing Water Meter
- FO — Existing Fiber Optic Line
- FP — Existing Fire Protection Line
- G — Existing Gas Line
- OHE — Existing Over Head Electric
- OHT — Existing Over Head Telephone
- OHTV — Existing Over Head Cable TV
- Property Line
- ROW — Right-of-Way Line
- SAN — Existing Sanitary Sewer Line
- UGE — Existing Underground Electric
- UGT — Existing Underground Telephone
- UGTV — Existing Underground Cable TV
- W — Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Utility Plan

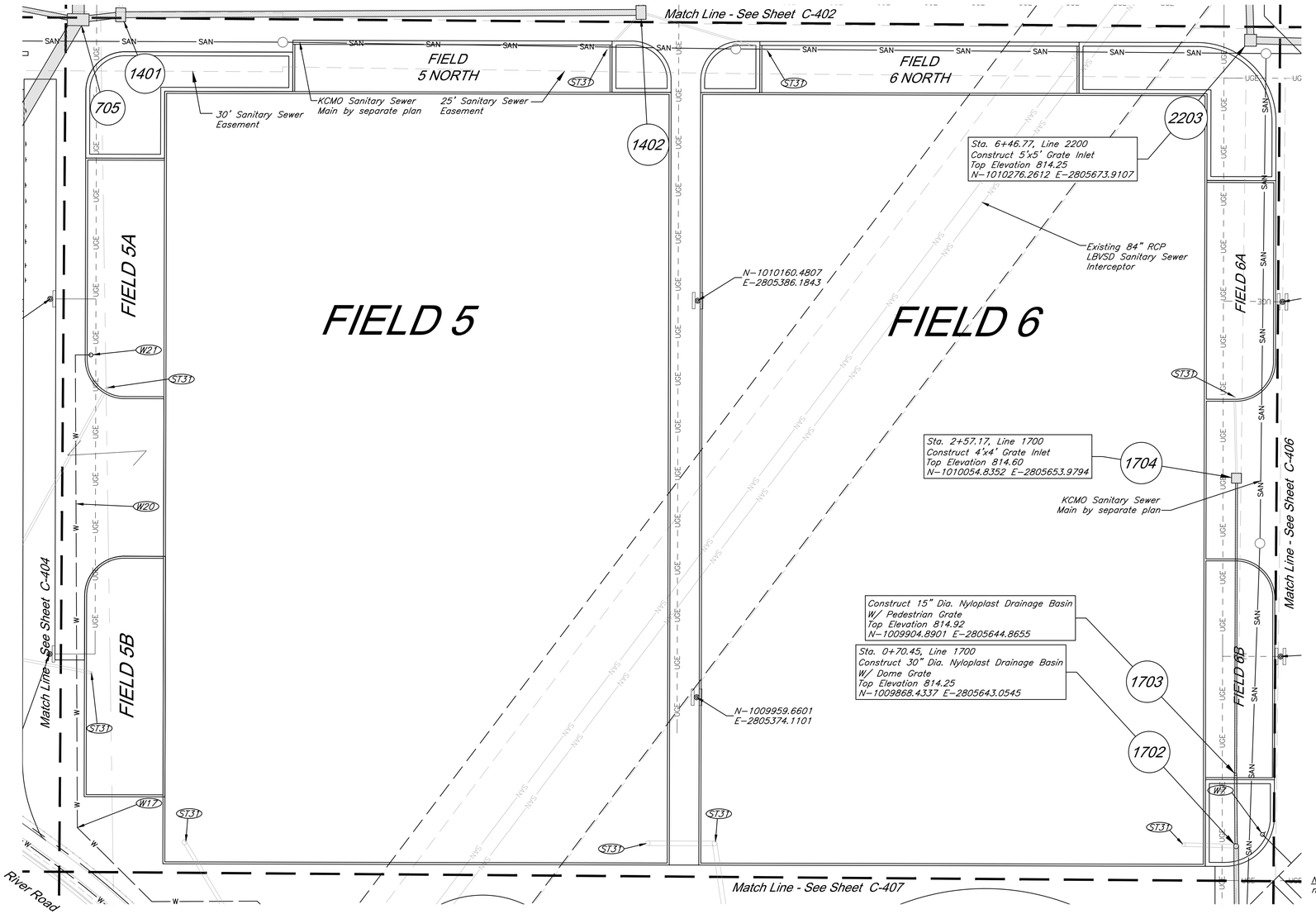
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

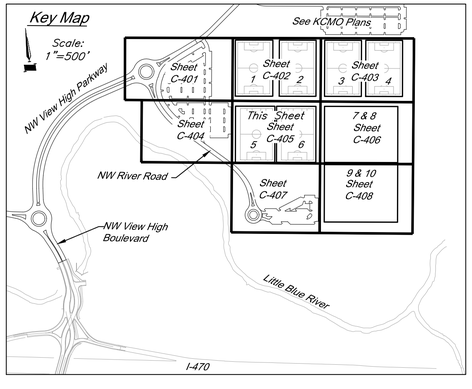
SHEET NO:

C-404

Copyright 2019, George Butler Associates, Inc.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0900.dwg Layout: C-405 Utility Plan -- Tuesday, May 14, 2019, 3:04pm --
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.



Water Construction Notes:

- (W7) Install 6" Fire Hydrant Assembly. See Detail. Install Snake Pit Magnetized Tracer Box, color blue.
- (W17) Install 45° Bend W/ Thrust Block.
- (W20) Furnish and Install 1.5" AWWA C901 4710 DR9 PC250 HDPE Water Line with end stiffeners and at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W21) Water Fountain per landscape plans

Storm Sewer Construction Notes:

- (ST31) See Athletic Field Plans for field storm sewer

Utility Legend

CATV Ped.	Exsiting Cable TV Pedestal
P.P.	Existing Power Pole
	Existing Guy Anchor
EMH	Existing Electrical Manhole
	Existing Electrical Transformer
G.M.	Existing Gas Meter
	Existing Curb Inlet
SSMH	Existing Sanitary Sewer Manhole
S.O.	Existing Sanitary Cleanout
L.P.	Existing Light Pole
	Existing Boring Hole
	Existing Sign
Tel. Ped.	Existing Telephone Pedestal
T.S.	Existing Traffic Signal Post
TRMH	Existing Traffic Manhole
F.H.	Existing Fire Hydrant
W.M.	Existing Water Meter
FO	Existing Fiber Optic Line
FP	Existing Fire Protection Line
G	Existing Gas Line
OHE	Existing Over Head Electric
OHT	Existing Over Head Telephone
OHTV	Existing Over Head Cable TV
	Property Line
ROW	Right-of-Way Line
SAN	Existing Sanitary Sewer Line
UGE	Existing Underground Electric
UGT	Existing Underground Telephone
UGTV	Existing Underground Cable TV
W	Existing Water Line
	Proposed Storm Sewer
	Existing Storm Sewer
	Underdrain

Note: Water and sanitary sewer construction notes shown as informational only.

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

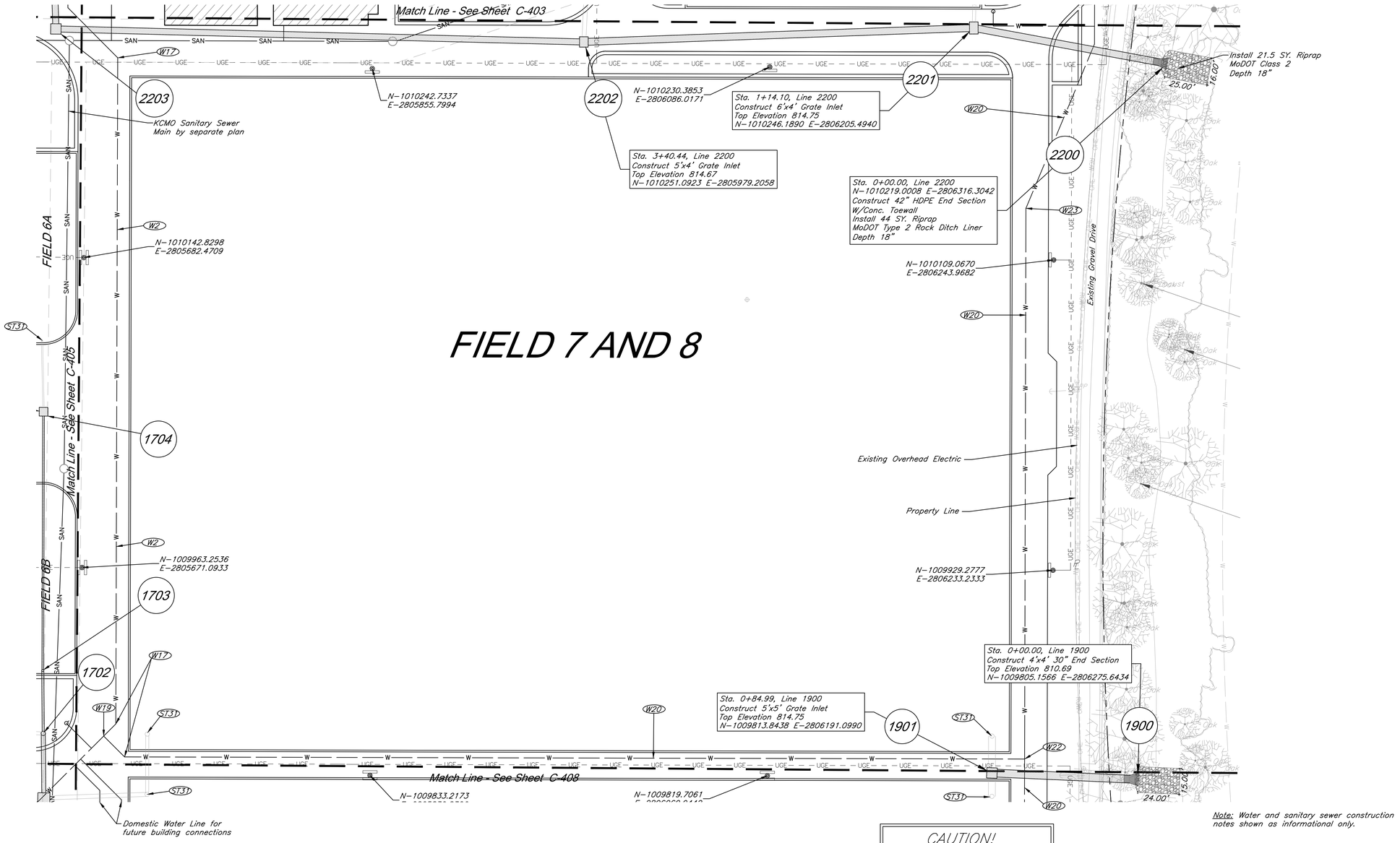
Utility Plan

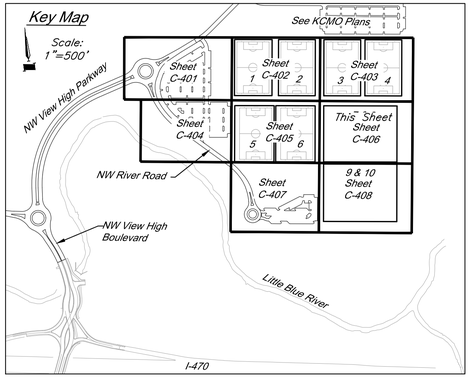
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-405

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0900.dwg Layout: C-406 Utility Plan -- Tuesday, May 14, 2019, 3:05pm -- Copyright 2019, George Butler Associates, Inc.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





Water Construction Notes:

- (W2) Furnish and Install 6" C900 PVC Water Line at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W11) Install 6"x6"x6" Tee C900 PVC.
- (W17) Install 45° Bend W/ Thrust Block.
- (W19) Install 6"x6"x1.5" Tee w/ Thrust Block
- (W20) Furnish and Install 1.5" AWWA C901 4710 DR9 PC250 HDPE Water Line with end stiffeners and at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W21) Water Fountain per landscape plans
- (W22) 1.5"x1.5"x1.5" HDPE Tee

Storm Sewer Construction Notes:

- (ST31) See Athletic Field Plans for field storm sewer

Note: Water and sanitary sewer construction notes shown as informational only.

CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.

Utility Legend

- Existing Cable TV Pedestal
- Existing Power Pole
- Existing Guy Anchor
- Existing Electrical Manhole
- Existing Electrical Transformer
- Existing Gas Meter
- Existing Curb Inlet
- Existing Sanitary Sewer Manhole
- Existing Sanitary Cleanout
- Existing Light Pole
- Existing Boring Hole
- Existing Sign
- Existing Telephone Pedestal
- Existing Traffic Signal Post
- Existing Traffic Manhole
- Existing Fire Hydrant
- Existing Water Meter
- Existing Fiber Optic Line
- Existing Fire Protection Line
- Existing Gas Line
- Existing Over Head Electric
- Existing Over Head Telephone
- Existing Over Head Cable TV
- Property Line
- Right-of-Way Line
- Existing Sanitary Sewer Line
- Existing Underground Electric
- Existing Underground Telephone
- Existing Underground Cable TV
- Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

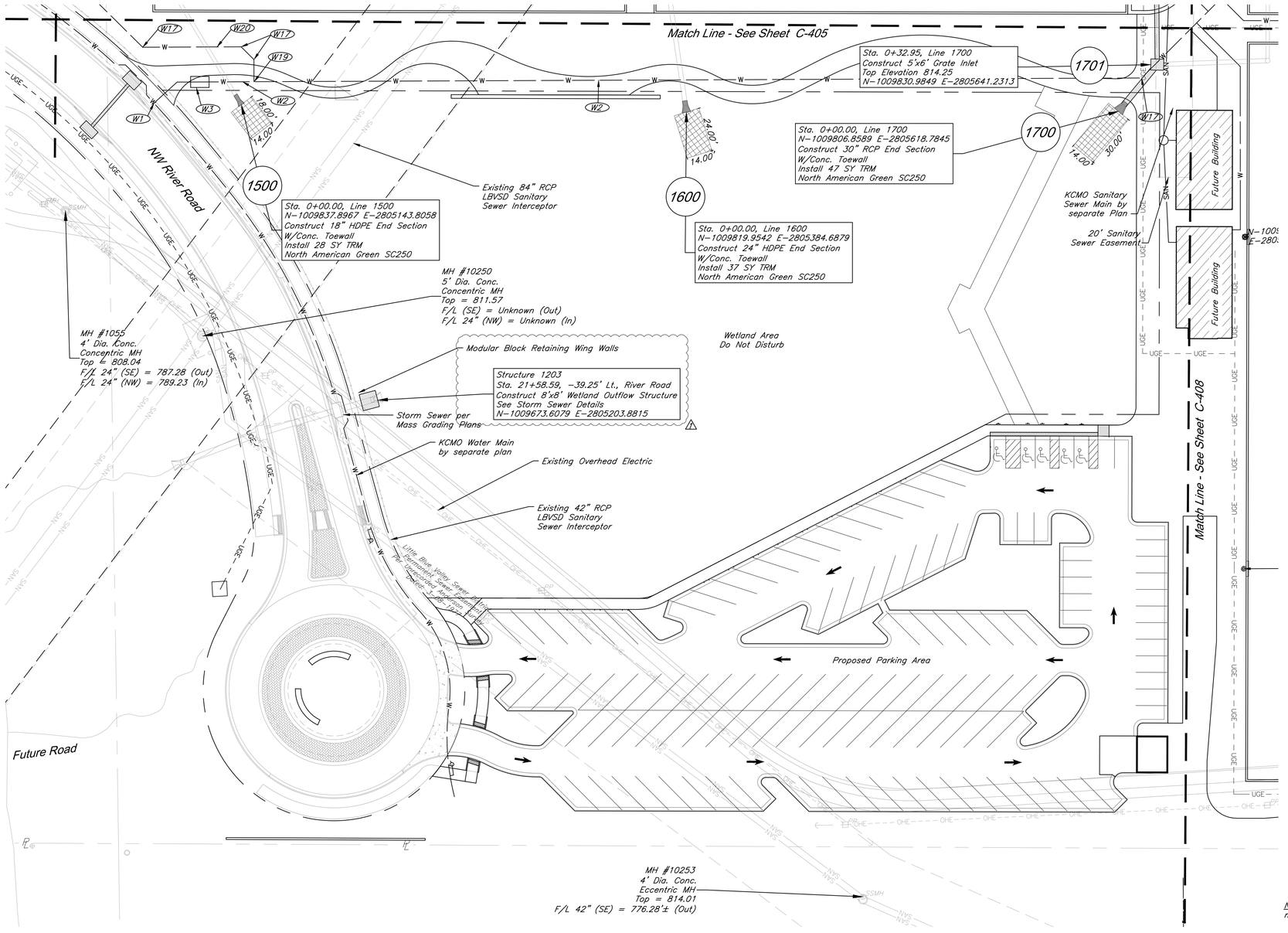
ISSUE:

PROFESSIONAL SEAL:

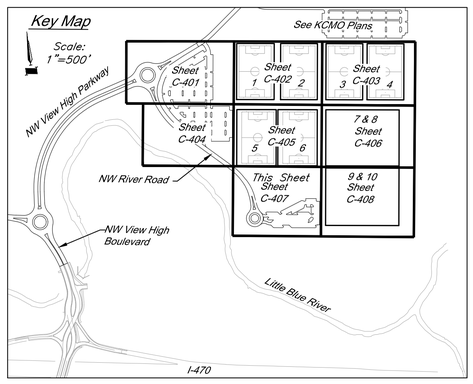
DRAWING TITLE:
Utility Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:
C-406



Note: Water and sanitary sewer construction notes shown as informational only.



Water Construction Notes:

- (W1) Connect 6" C900 PVC Water Line via 8"x8"x6" Tee. Construct Thrust Block.
- (W2) Furnish and Install 6" C900 PVC Water Line at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W3) Install Backflow Preventer in concrete vault. Backflow preventer to be sized by MEP. Install Snake Pit Magnetized Tracer Box, color blue.
- (W17) Install 45° Bend W/ Thrust Block.
- (W19) Install 6"x6"x1.5" Tee w/ Thrust Block
- (W20) Furnish and Install 1.5" AWWA C901 4710 DR9 PC250 HDPE Water Line with end stiffeners and at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.

Sanitary Sewer Construction Notes:

- (S5) Existing E.O.S ℄ 810.00

Utility Legend

- Exsiting Cable TV Pedestal
- Existing Power Pole
- Existing Guy Anchor
- Existing Electrical Manhole
- Existing Electrical Transformer
- Existing Gas Meter
- Existing Curb Inlet
- Existing Sanitary Sewer Manhole
- Existing Sanitary Cleanout
- Existing Light Pole
- Existing Boring Hole
- Existing Sign
- Existing Telephone Pedestal
- Existing Traffic Signal Post
- Existing Traffic Manhole
- Existing Fire Hydrant
- Existing Water Meter
- Existing Fiber Optic Line
- Existing Fire Protection Line
- Existing Gas Line
- Existing Over Head Electric
- Existing Over Head Telephone
- Existing Over Head Cable TV
- Property Line
- Right-of-Way Line
- Existing Sanitary Sewer Line
- Existing Underground Electric
- Existing Underground Telephone
- Existing Underground Cable TV
- Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

SCALE : 1 INCH = 30 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Utility Plan

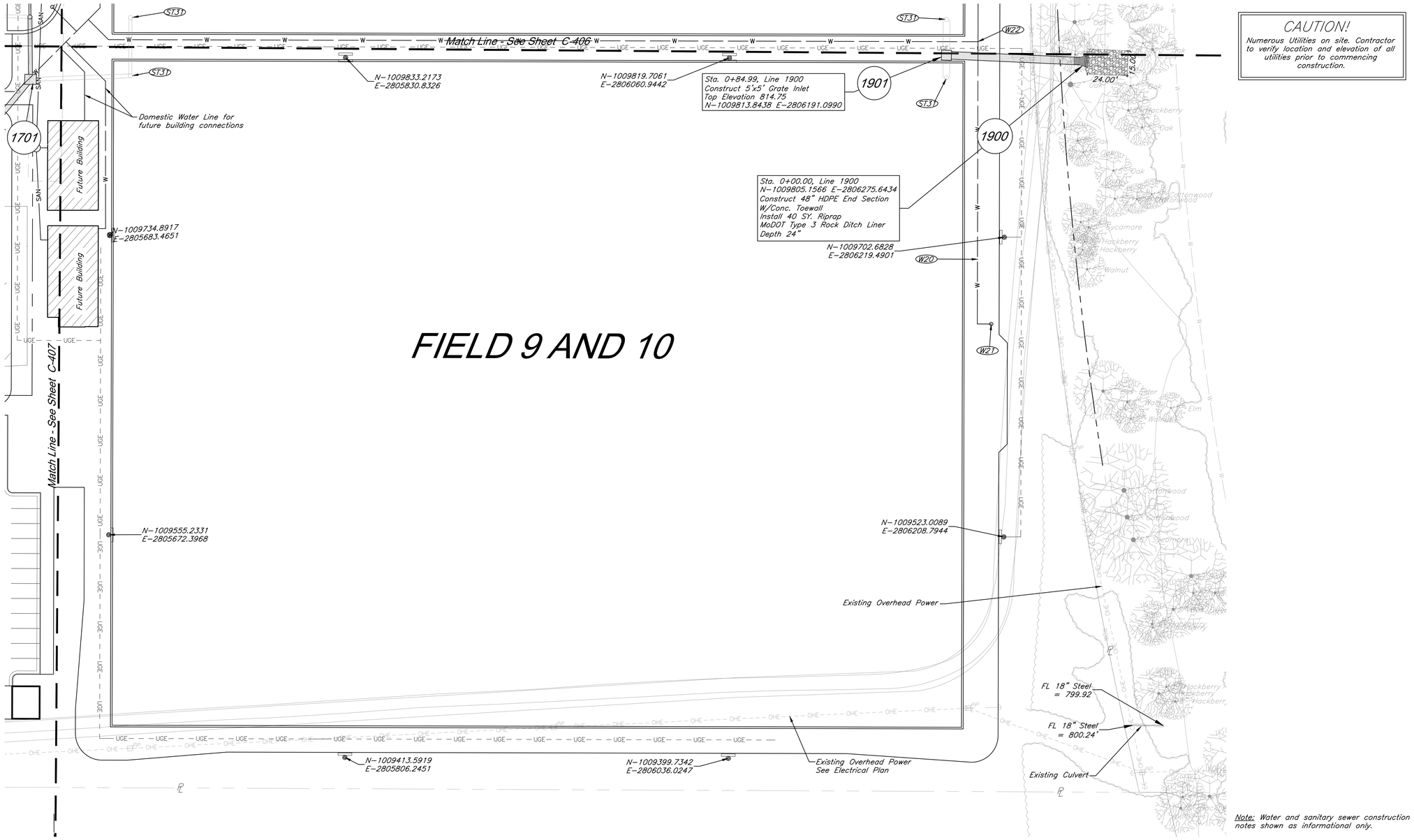
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

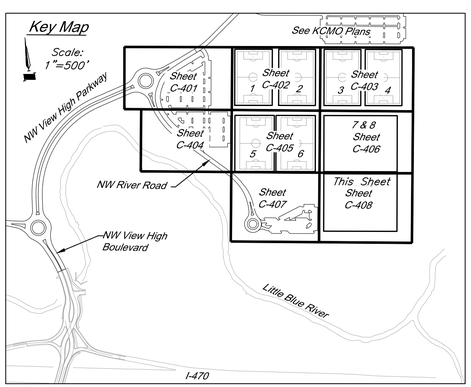
C-407

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0900.dwg Layout: C-407 Utility Plan -- Tuesday May 14, 2019, 3:06pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C0900.dwg Layout: C-408 Utility Plan -- Tuesday, May 14, 2019, 3:07pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



FIELD 9 AND 10



Water Construction Notes:

- (W2) Furnish and Install 6" C900 PVC Water Line at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W17) Install 45° Bend W/ Thrust Block.
- (W20) Furnish and Install 1.5" AWWA C901 4710 DR9 PC250 HDPE Water Line with end stiffeners and at 42" minimum cover. Line to include #12 AWG Copperhead Reinforced Trace Wire, color blue.
- (W21) Water Fountain per landscape plans
- (W22) 1.5"x1.5"x1.5" HDPE Tee

Storm Sewer Construction Notes:

- (ST31) See Athletic Field Plans for field storm sewer

Utility Legend

- CATV Ped. Exsiting Cable TV Pedestal
- P.P. Existing Power Pole
- Existing Guy Anchor
- EMH Existing Electrical Manhole
- Existing Electrical Transformer
- G.M. Existing Gas Meter
- Existing Curb Inlet
- SSMH Existing Sanitary Sewer Manhole
- C.O. Existing Sanitary Cleanout
- L.P. Existing Light Pole
- Existing Boring Hole
- Tel. Ped. Existing Telephone Pedestal
- T.S. Existing Traffic Signal Post
- TRMH Existing Traffic Manhole
- F.H. Existing Fire Hydrant
- W.M. Existing Water Meter
- FO Existing Fiber Optic Line
- FP Existing Fire Protection Line
- G Existing Gas Line
- OHE Existing Over Head Electric
- OHT Existing Over Head Telephone
- OHTV Existing Over Head Cable TV
- Property Line
- ROW Right-of-Way Line
- SAN Existing Sanitary Sewer Line
- UGE Existing Underground Electric
- UGT Existing Underground Telephone
- UGTV Existing Underground Cable TV
- W Existing Water Line
- Proposed Storm Sewer
- Existing Storm Sewer
- Underdrain

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

Note: Water and sanitary sewer construction notes shown as informational only.

CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

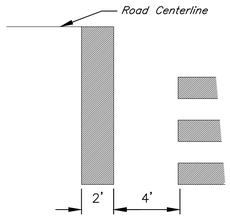
PROFESSIONAL SEAL:

DRAWING TITLE:
Utility Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

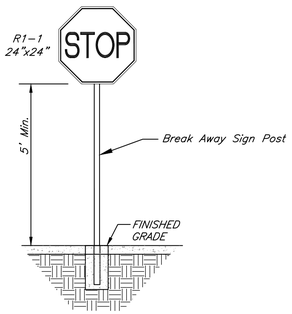
SHEET NO:
C-408

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2100.dwg Layout: C-500 Construction Details -- Tuesday May 14, 2019, 3:07pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



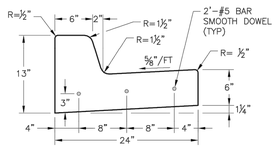
STOP BAR MARKING DETAIL

N.T.S.

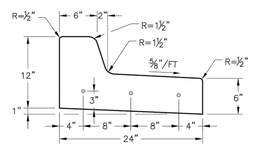


STOP SIGN DETAIL

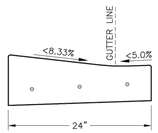
Not to Scale



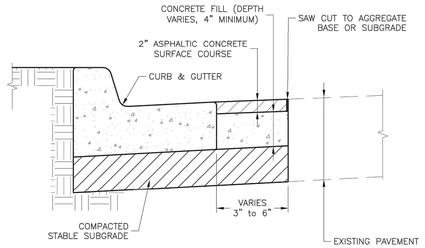
STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



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



CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



CURB REPLACEMENT DETAIL

GENERAL NOTES

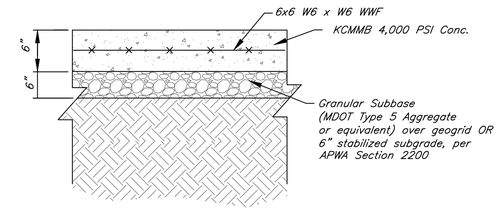
1. ¾" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS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

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

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

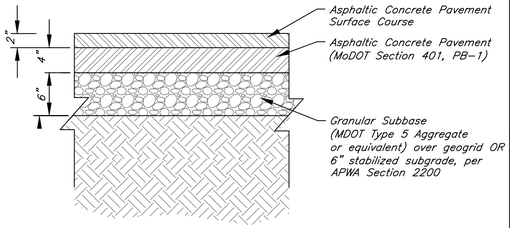
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4



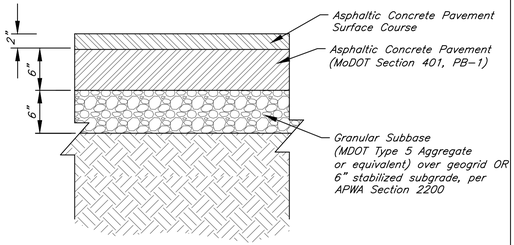
CONCRETE PAVEMENT SECTION

Not To Scale



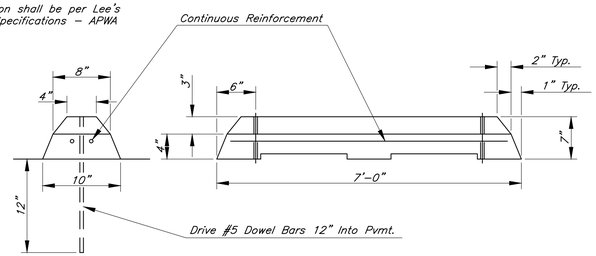
LIGHT DUTY ASPHALT PAVEMENT SECTION

Not To Scale



HEAVY DUTY ASPHALT PAVEMENT SECTION

Not To Scale

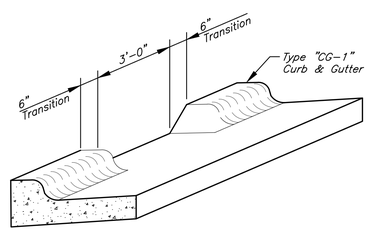


PRECAST CONCRETE STOP BLOCK

Not to Scale

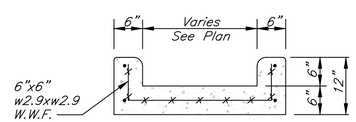
Pavement Notes:

1. *Pavement sections from geotechnical report title "Geotechnical Engineering Report – Soccer Fields", dated July 27, 2016, prepared by Terracon Consultants, Inc.*
2. *All pavement shall meet City of Lee's Summit UDO Section 8.620 requirements.*
3. *Asphalt mix shall be APWA*
   Base: 1-01, 2-01 or 5-01
   Surface: 2-01, 3-01 or 5-01
4. *Subgrade stabilization shall be per Lee's Summit Standard Specifications – APWA Section 2200.*



TYPICAL CURB CUT DETAIL

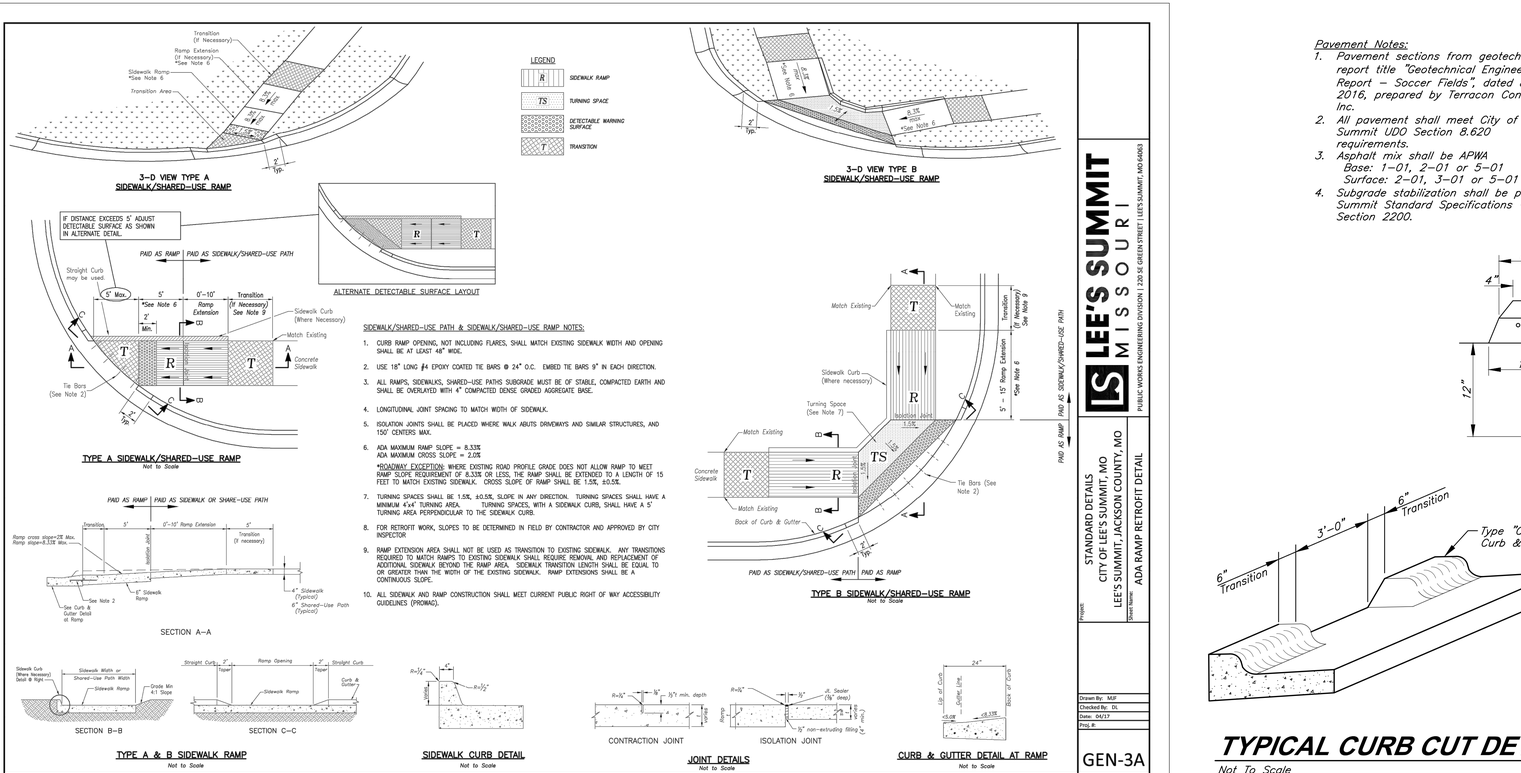
Not To Scale



Section

CONCRETE FLUME

Not To Scale



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: ADA RAMP RETROFIT DETAIL

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

GEN-3A

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

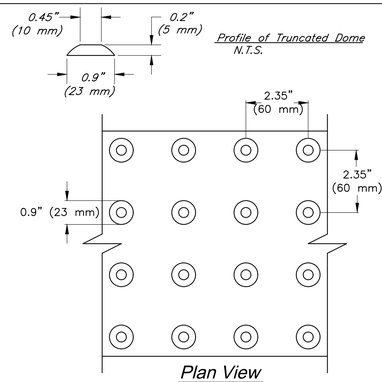
Construction Details

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-500



Profile of Truncated Dome
N.T.S.

Plan View
N.T.S.

Detectable Warnings:

1. Curb ramps shall have detectable warnings extending the full length and width of the curb ramp.
2. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9 in (23 mm), a height of nominal 0.2 in (5 mm) and a center-to-center spacing of nominal 2.35 in (60 mm) and shall contrast visually with adjoining surfaces, either light-on-dark, or dark-on-light.

   The material used to provide contrast shall be an integral part of the walking surface and should contrast by at least 70%. Contrast in percent is determined by:

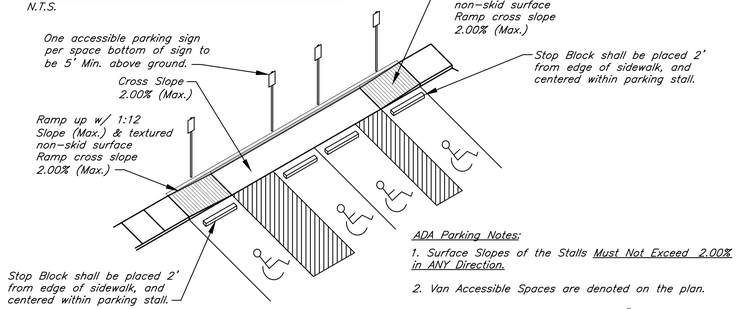
   Contrast = [(B1 – B2)/B1] x 100

   where B1 = light reflectance value (LRV) of the lighter area and B2 = light reflectance value (LRV) of the darker area.

   Note that in any application both white and black are never absolute; thus, B1 never equals 100 and B2 is always greater than 0.
3. If a walk crosses or adjoins a vehicular way, and the walking surfaces are not separated by curbs, railings, or other elements between the pedestrian areas and vehicular areas, the boundary between the areas shall be defined by a continuous detectable warning which is 36 in (915 mm) wide.
4. Contractor shall install Detectable Warnings in compliance with current ADA standards.

DETECTABLE WARNINGS

N.T.S.

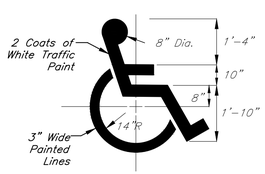


ADA Parking Notes:

1. Surface Slopes of the Stalls Must Not Exceed 2.00% in ANY Direction.
2. Van Accessible Spaces are denoted on the plan.
3. Parking Blocks shall be placed 24" from edge of sidewalk to center line of parking block.

ADA PARKING DETAIL

Not to Scale

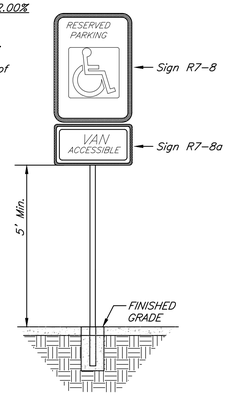


ACCESSIBLE PARKING SYMBOL DETAIL

Not to Scale

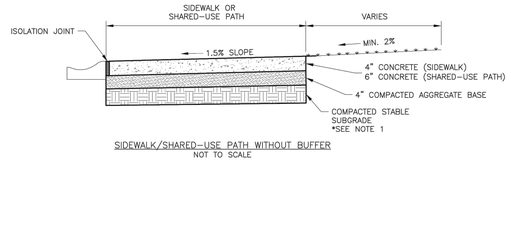
ADA Sign Notes:

1. Accessible Sign (R7-8) Shall be mounted on a pole or other structure 5'-6" above the parking surface, at the head of the parking space, and shall be at least 12"x18" in area.
2. Supplemental Accessible Sign (R7-8a) shall be used on all required Van Accessible Spaces.
3. Signs shall be blue with white lettering.

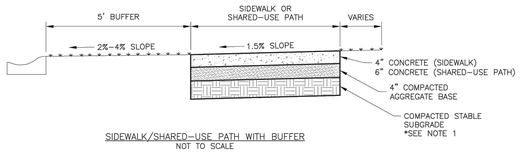


TYPICAL ACCESSIBLE SIGNAGE

Not to Scale



SIDEWALK/SHARED-USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED-USE PATH WITH BUFFER
NOT TO SCALE

GENERAL NOTES:

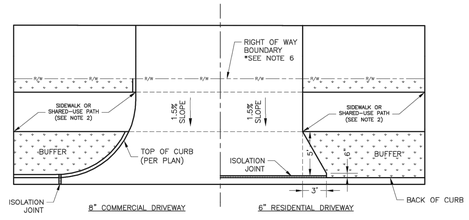
1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS AND SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
4. ALL SIDEWALKS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN EXPANSION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK, BUT NO GREATER THAN 10 FT.
6. SHARED-USE PATH WIDTH SHALL BE 10 FT. WIDE.
7. SIDEWALK FINISHING (NO PICTURE FRAMING) AS DIRECTED BY CITY INSPECTOR.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

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

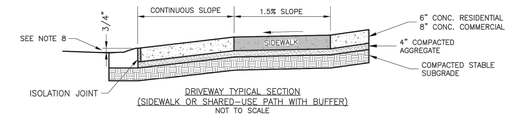
SIDEWALK/SHARED-USE PATH DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

GEN-2



DRIVEWAY WITH BUFFER
NOT TO SCALE



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

GENERAL NOTES

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

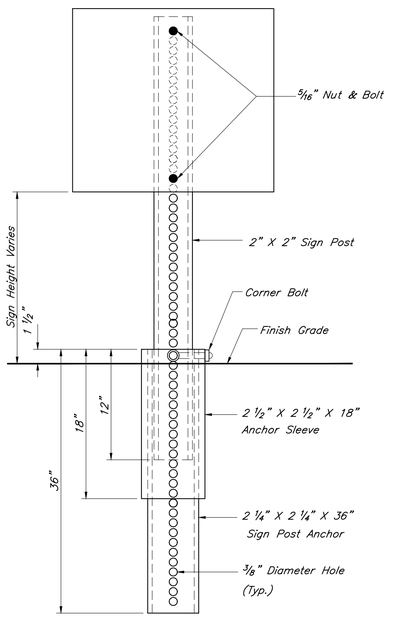
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: DRIVEWAY DETAIL

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

GEN-1



Pavement Installation Sequence

1. Sign post anchor driven into subgrade prior to the placement of the pavement.
2. Anchor sleeve driven into subgrade over the sign post anchor prior to the placement of the pavement.
3. Insert sign post into the sign post anchor and bolt in place.

Ground Installation Sequence

1. Sign post anchor driven into the ground.
2. Anchor sleeve driven into the ground over the sign post anchor.
3. Insert sign post into the sign post anchor and bolt in place.

Note:
In all installations the first hole above the finished grade level in all three units must be in line for insertion of the corner bolt.

All corner bolts and nuts for fastening the signs and sign post assembly shall comply the applicable ANSI standards and ASTM testing requirements and shall be subidiary items.

All Components shall be galvanized.

BREAK-AWAY SIGN POST DETAIL

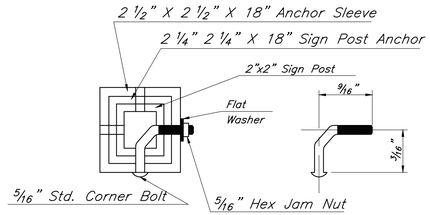
Not to Scale

Sign Notes:

1. All letter, number & symbol sizes, spacing & colors, and the sign colors shall conform to the current "Manual On Uniform Traffic Control Devices."
2. Sign blank material shall be as follows:

Signs 36"X36" or greater	0.100" thick
Guide Signs	0.125" thick
All other signs	0.080" thick

3. All sign mounting hardware shall be galvanized.
4. All sign faces shall be fabricated using ASTM Type III Prismatic reflective sheeting.



SECTION A-A

5/16" CORNER BOLT DETAIL (all bolts)

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

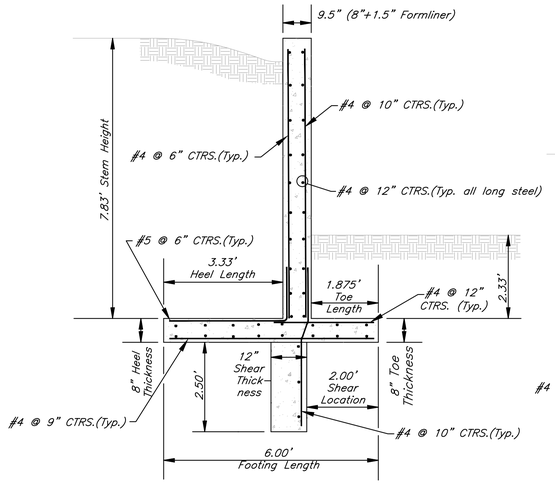
DRAWING TITLE:
Construction Details

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:
C-501

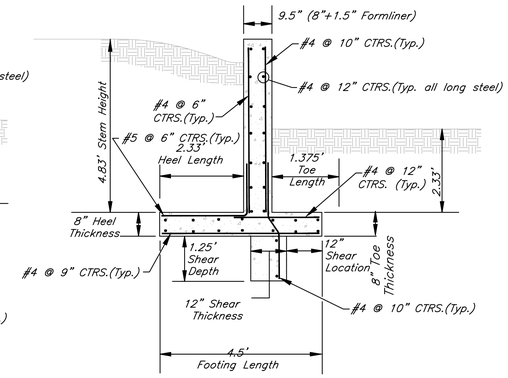
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2100.dwg Layout: C-501 Construction Details -- Tuesday May 14, 2019, 3:07pm -- Architect 00212, Professional Engineer 00133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMO) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Copyright 2019, George Butler Associates, Inc.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2100.dwg Layout: C-502 Construction Details -- Tuesday, May 14, 2019, 3:07pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



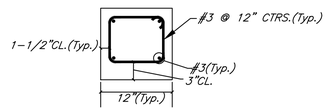
5.5' Exposed Wall with 8' Fence Detail

Not to Scale



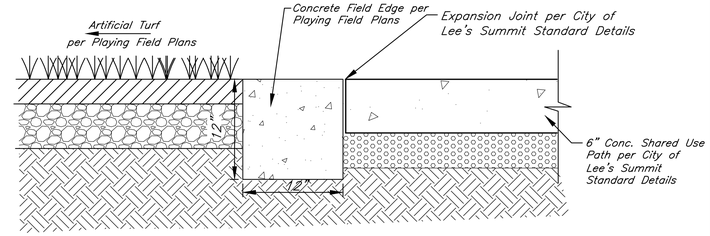
2.5' Exposed Wall with 8' Fence Detail

Not to Scale



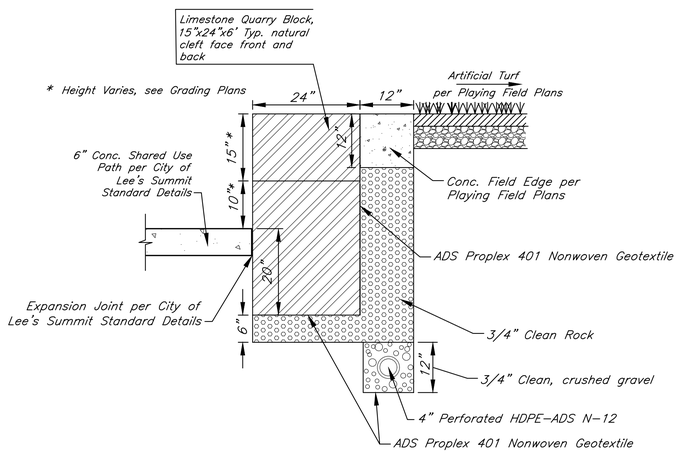
Concrete Field Edge

Not to Scale



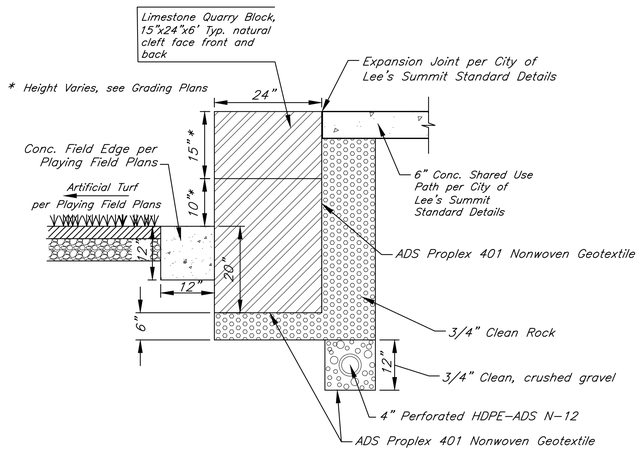
CONCRETE FIELD EDGE DETAIL

To be used between artificial turf installation. See Playing Field Plan.
Not to Scale



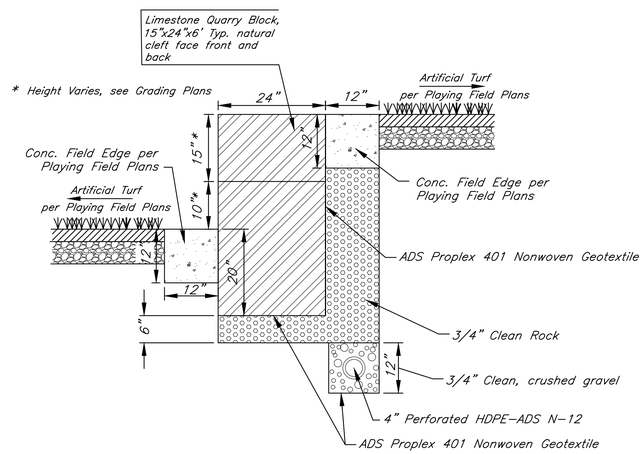
LIMESTONE WALL DETAIL ADJACENT FIELD AND WALK

Not to Scale



LIMESTONE WALL DETAIL ADJACENT FIELD AND WALK

Not to Scale



LIMESTONE WALL DETAIL TWO ADJACENT FIELDS

Not to Scale

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

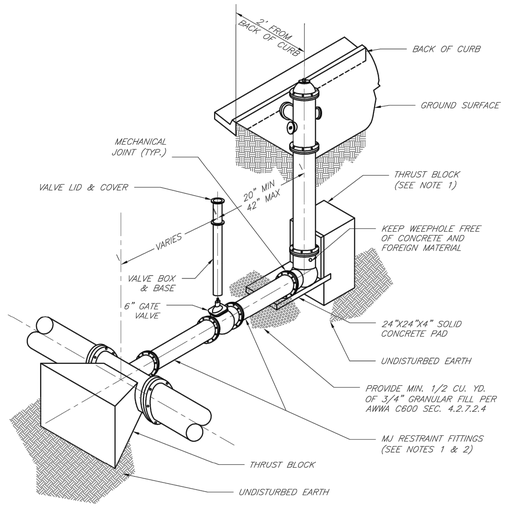
DRAWING TITLE:

Construction Details

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-502



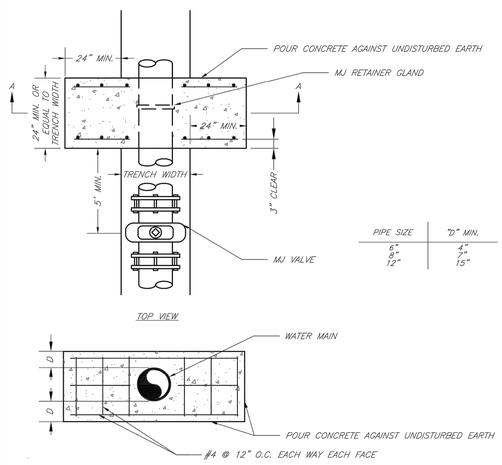
NOTES:

1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

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

HYDRANT INSTALLATION – STRAIGHT SET

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-7
Rev:	1/14
Rev:	



TOP VIEW

SECTION A

NOTE:

THIS DETAIL NOT TO BE USED FOR PIPE GREATER THAN 12"

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

STRADDLE BLOCK

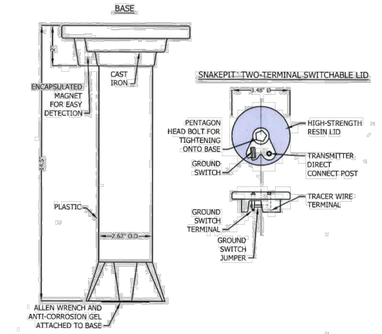
Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-3
Rev:	1/14
Rev:	

SnakePit® Concrete/Driveway
with Two-terminal Switchable Lid
Access Point

APPLICATION

Use to terminate tracer wire systems and provide direct connection to tracer wire and ground rod, at ground level, in low traffic roads and driveway applications. Two-terminal Switchable Lid allows locator to switch ground off and on from top of lid to isolate targeted sections of tracer wire systems. **No need to remove lid.**

Package includes: base, lid, anti-corrosion gel, Allen wrench, installation instructions



APWA UNIFORM COLOR CODE

- ELECTRIC
- GAS
- COMMUNICATION
- POTABLE WATER
- SEWER
- RECLAIMED WATER

*CD14*2T-SW– SnakePit Concrete/Driveway with Two-terminal Switchable Lid*
(denotes color)*



Patent Pending

FEATURES AND BENEFITS

- Once-and-done installation
- Two-terminal, switchable lid allows for direct connection to tracer wire and ground rod from the top of the lid; single terminal also available
- 2" cast iron collar provides good support in concrete/driveway applications
- Anti-corrosion gel protects wire
- Locking cover protects against tampering
- Encapsulated magnet allows for detection by a ferrous metal detector
- Lid color-coded to meet American Public Works (APWA) standards for utility identification

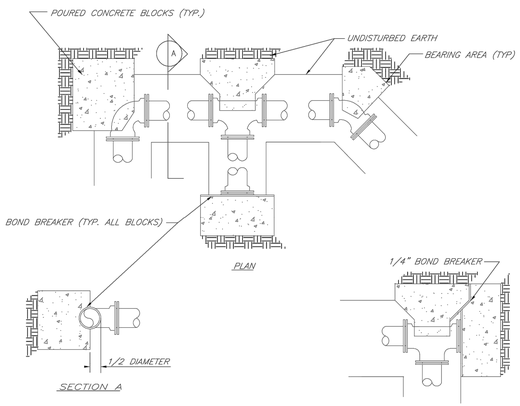
copperheadwire.com | 877-726-5644 | 9530 Fallon Avenue NE / P.O. Box 1081 Monticello, MN 55362 MADE IN THE USA

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

NOTES:

1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



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

HORIZONTAL THRUST BLOCKS

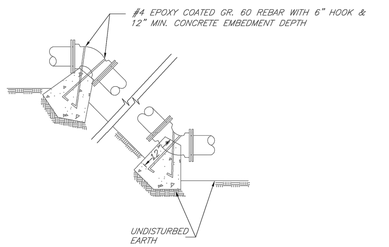
Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-1
Rev:	1/14
Rev:	

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	REST. JT.	154.6	78.8	39.6
14	REST. JT.	REST. JT.	210.4	107.3	53.9
16	REST. JT.	REST. JT.	REST. JT.	140.1	70.4
18	REST. JT.	REST. JT.	REST. JT.	177.3	89.1
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4

NOTES:

1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



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

VERTICAL THRUST BLOCKS

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-2
Rev:	1/14
Rev:	

SPECIFICATIONS

SCOPE

These specifications apply to the SnakePit® Concrete/Driveway Access Point with the Two-terminal Switchable Lid.

MATERIAL AND DESIGN

Lid Material
- Non-corrosive, injection molded resin
- Flexural modulus 986000 psi, Conditioned (ISO 178)
- Flexural strength 28300 psi, Conditioned (ISO 178)
- Impact rating 43 (-22°F) / 44 (73°F) ft lb/in², Charpy unnotched (ISO 179/1eU)
- Melting temperature 451° F (ISO 11357-3)
- Hardware
  - pentagon head bolt - anodized aluminum
  - terminals and jumper - brass

Base Material
- High-grade ABS rigid plastic (ASTM D1788, Type 1)
- Cast iron collar

Detection
- Access point base designed with magnet securely attached to be easily detected by magnetic locators even when access point is covered by soil, sod and/or paving material

Security
- Locking mechanism secures lid to base in a closed position
- Notched bolt end prevents loss of locking mechanism
- Locking mechanism can only be removed with the proper pentagon wrench

Shape
- Tubular (cylindrical) construction with removable round lid
- Support flange at base

Wire Connections
- Ground switch/terminal used to connect ground wire and to engage/disengage the ground connection
- Ground switch designed to resist unintentional switching - use pliers to switch on/off
- Ground switch, when in 'OFF' position, may be used to ground locate transmitter
- Direct connect post designed for utility locate transmitter positive lead
- Set screws used to secure tracer wire and ground wire to terminals
- Anti-corrosion gel supplied with lid must be applied to wire connections and ground switch jumper to protect connection points
- Access point designed for operational access to underground tracer wire systems

Lid Position
- Access point designed so that when installed, the collar will be flush with the surface and contain the lid so that it will not be in contact with the adjoining backfill or pavement
- The top surface of the access point lid is flush with the top of the base. The top of the bolt, when completely tightened, is flush with or below the lid surface.

QUALITY ASSURANCE

- Copperhead products are manufactured under a quality control system that ensures products are free of defects and meet performance requirements.
- Copperhead provides best-in-class customer service. We promise to put forth our best efforts for our customers and to treat everyone we encounter with courtesy and respect.

copperheadwire.com | 877-726-5644 | 9530 Fallon Avenue NE / P.O. Box 1081 Monticello, MN 55362 MADE IN THE USA

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Utility Details

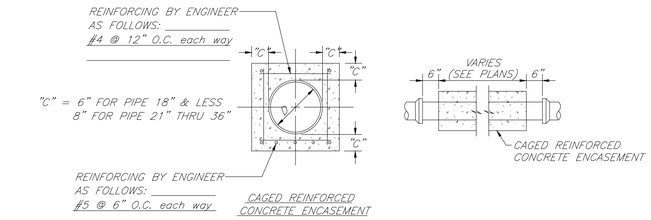
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-503

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2100.dwg Layout: C-503 Utility Details -- Tuesday, May 14, 2019, 3:07pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc. -- ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SP

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2100.dwg Layout: C-504 Utility Details -- Tuesday May 14, 2019, 3:07pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

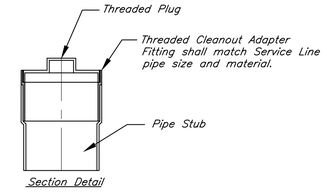


"C" = 6" for pipe 18" & less 8" for pipe 21" thru 36"

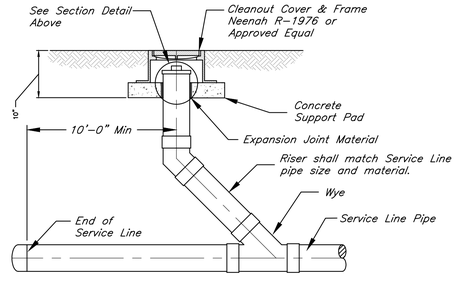
CAGED REINFORCED CONCRETE ENCASEMENT

Not to Scale

Notes:
1. All encasements shall be centered on the crossing.
2. All concrete shall be KCMMB 4K



Section Detail



CLEANOUT DETAIL

No Scale

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

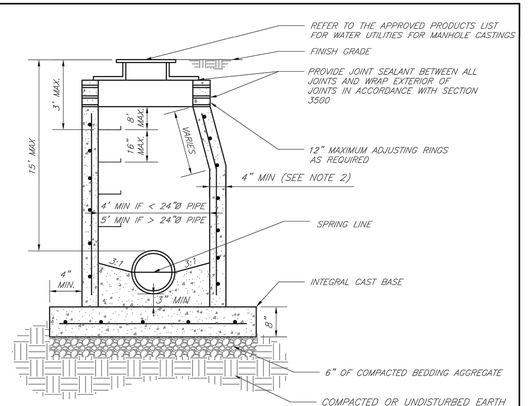
Utility Details

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

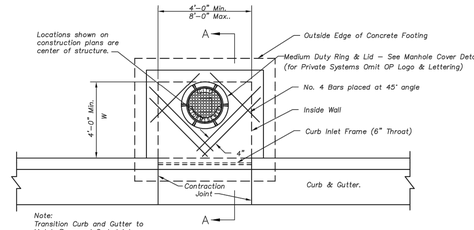
SHEET NO:

C-504

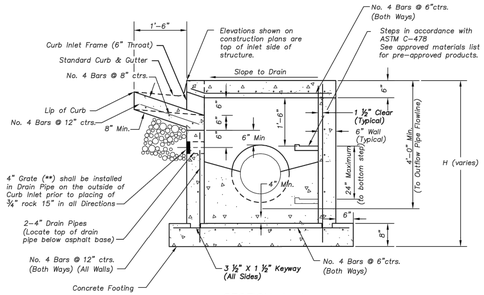


NOTES:
1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS.
2. A WALL THICKNESS NOT LESS THAN ONE-TWELFTH ($\frac{1}{12}$D) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THEN 15'.
3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 14 MILS OF BITUMINOUS COATING.
4. ONLY ECCENTRIC MANHOLE CONES WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.
6. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR APPROVED MANHOLE GASKET MODELS.
7. REFER TO THE APPROVED PRODUCTS LIST FOR APPROVED STEPS.

LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063	Date: 02/13
	Drawn By: JN
	Checked By: DL
STANDARD PRECAST MANHOLE – SANITARY SEWER	FILE: SAN-2
	Rev: 1/14
	Rev:



PLAN
Not to Scale



SECTION A–A
Not to Scale

NON–SETBACK CURB INLET (6"THROAT)

Non–Setback Curb Inlet Notes

General

1. *City of Lee's Summit Municipal Code, Design Standards, and Specifications are incorporated except as otherwise noted.*
2. *All storm sewer structures shall be pre–cast or poured in place. If pre–cast structures are used for publicly financed, maintained or administered construction, the tops shall be poured in place and the wall steel shall be left exposed to a height 2" below the finish top elevation, or as directed by the City Engineer.*
3. *Pre–cast shop drawings are to be approved by the City Engineer for publicly financed or administered projects. Pre–cast shop drawings for privately financed projects are to be submitted to the Engineering Services Division of the Planning and Development Services Department upon request.*
4. *Do not scale these drawings for dimensions or clearances. Any questions regarding dimensions shall be brought to the attention of the City Engineer prior to construction.*
5. *On–grade inlets shall conform to the street grade. Sump inlets shall be level.*
6. *The first dimension listed in the construction notes is the "L" dimension. The second dimension is the "W" dimension. The concrete thickness and reinforcement shown is for boxes with ("L"+"W") and ("W"+"W") less than or equal to 20. For boxes with either of these calculations greater than 20, a special design is required.*

Concrete

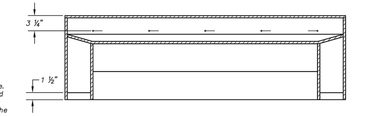
7. *Concrete used in this work shall be KCMMB4K, as approved by the Kansas City Metropolitan Materials Board, and shall meet the requirements of the Overland Park Municipal Code.*
8. *Inlet floors shall be shaped with non–reinforced concrete inverts to provide smooth flow.*
9. *Bevel all exposed edges with ¾" triangular molding.*

Reinforcing Steel

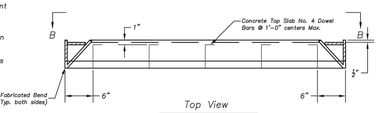
10. *Reinforcing steel shall be new billet, minimum Grade 60 as per ASTM A615, and shall be bent cold.*
11. *All dimensions relative to reinforcing steel are to centerline of bars. 2" clearance shall be provided throughout unless noted otherwise. Tolerance of +/– ½" shall be permitted.*
12. *All lap splices not shown shall be a minimum of 40 bar diameters in length.*
13. *All reinforcing steel shall be supported on fabricated steel bar supports @ 3'–0" maximum spacing.*
14. *All dowels shall be accurately placed and securely tied in place prior to placement of bottom slab concrete. Sticking of dowels into fresh or partially hardened concrete will not be acceptable.*

Construction

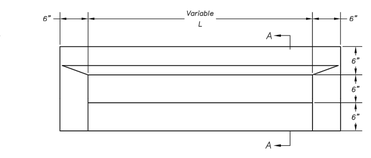
15. *The bottom slab shall be at least 24 hours old before placing sidewall concrete. All sidewall forms shall remain in place a minimum of 24 hours after sidewalls are poured before removal, and after removal shall be immediately treated with membrane curing compound.*
16. *All curb inlet tops are to be contructed after final curb string line has been approved by the engineer and prior to curb construction or as directed by the city engineer.*
17. *Pipe connections to pre–cast structures shall have a minimum of 6" of concrete around the entire pipe within 2' of the structure.*
18. *Material selection and compaction requirements for backfill around structures shall be as specified in the Manual of Infrastructure Standards for Right of Way Restoration, as promulgated by the City Engineer.*



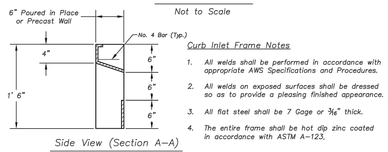
Rear View (Section B–B)
Not to Scale



Top View
Not to Scale



Front View
Not to Scale



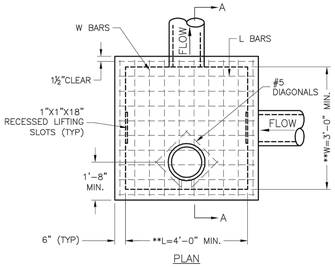
Side View (Section A–A)
Not to Scale

Curb Inlet Frame Notes

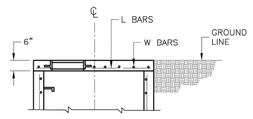
1. *All welds shall be performed in accordance with appropriate AWS Specifications and Procedures.*
2. *All welds on exposed surfaces shall be dressed so as to provide a pleasing finished appearance.*
3. *All flat steel shall be 7 Gage or 3/16" thick.*
4. *The entire frame shall be hot dip zinc coated in accordance with ASTM A–123.*

NON-SETBACK CURB INLET DETAIL

No Scale



PLAN

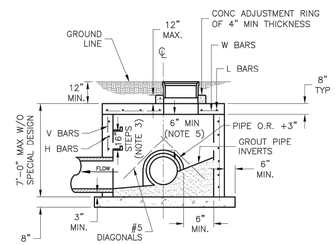


SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)

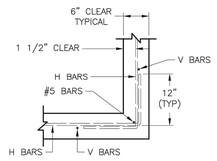
** INCREASE IN MULTIPLES OF 6" (7'–0") MAX WITHOUT SPECIAL DESIGN. (SEE PROJECT PLANS FOR DETAILS)

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6



SECTION A–A



WALL CORNER DETAIL

GENERAL NOTES:
1. LOCATE RING AND COVER ON BLANK WALL.
2. USE ¾" CHAMFER STRIP OR ½" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H–BAR OVER A CAST–IN–PLACE PIPE AND 2 H–BARS OVER A PRECAST BOXOUT.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

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

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

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

STM-3

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

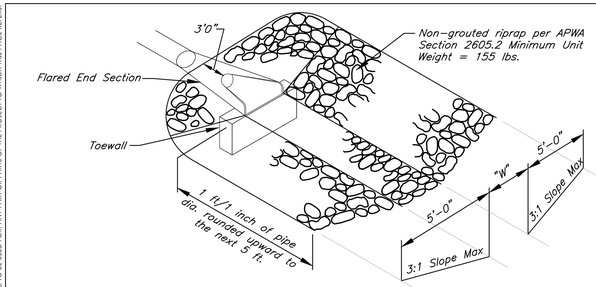
Storm Sewer Details

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

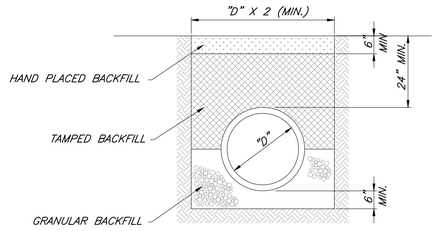
C-505

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2200.dwg Layout: C-505 Storm Sewer Details -- Tuesday May 14, 2019, 3:08pm -- Architect 00212, Professional Engineer 00133, Professional Land Surveyor 00059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

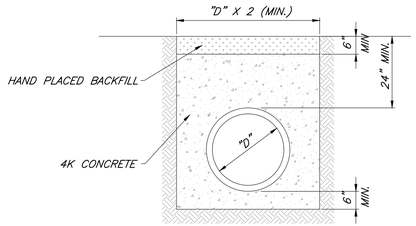


OUTLET EROSION PROTECTION - RIPRAP

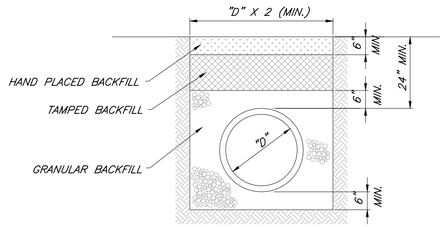
Not to Scale



FIRST CLASS BEDDING (RCP) CLASS B



CONCRETE ENCASEMENT CLASS A



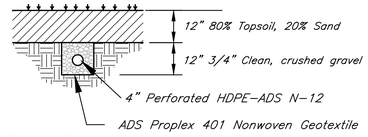
HDPE/PVC PIPE BEDDING CLASS C

NOTES:

1. GRANULAR FILL SHALL BE 1/2" CLEAN ROCK, PLACED IN 6" LIFTS AND COMPACTED BY SLICING WITH A SHOVEL.
2. TAMPED FILL SHALL BE FINELY DIVIDED, JOB EXCAVATED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL, AND STONES, COMPACTED TO TYPE AA MR-5 COMPACTION.
3. HAND PLACED FILL SHALL BE FINELY DIVIDED MATERIAL, FREE OF DEBRIS AND STONES, COMPACTED TO TYPE AA MR-5 COMPACTION.
4. ALL PIPE SHALL BE INSPECTED PRIOR TO BACKFILL. ALL PIPE COVERED PRIOR TO INSPECTION SHALL BE UNCOVERED AT THE CONTRACTORS EXPENSE.

PIPE BEDDING DETAILS

No Scale

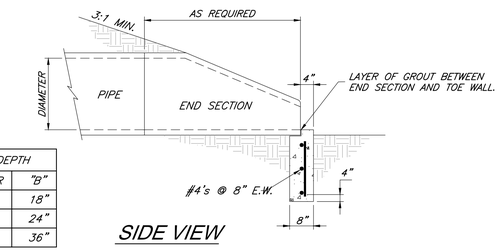


TYPICAL UNDERDRAIN DETAIL

Not to Scale

END SECTION NOTES:

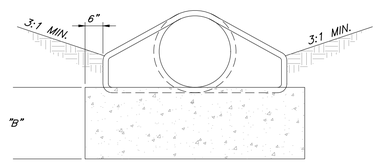
1. THE DEPTH OF THE TOE WALL SHALL BE PER TABLE. IF BEDROCK IS ENCOUNTERED A MINIMUM OF 12" INTO BEDROCK IS REQUIRED.
2. ALL CONCRETE SHALL BE KCMMB-4K.



TABLE

TOE WALL DEPTH	
PIPE DIAMETER	"B"
12" - 21"	18"
24" - 48"	24"
54" - 66"	36"

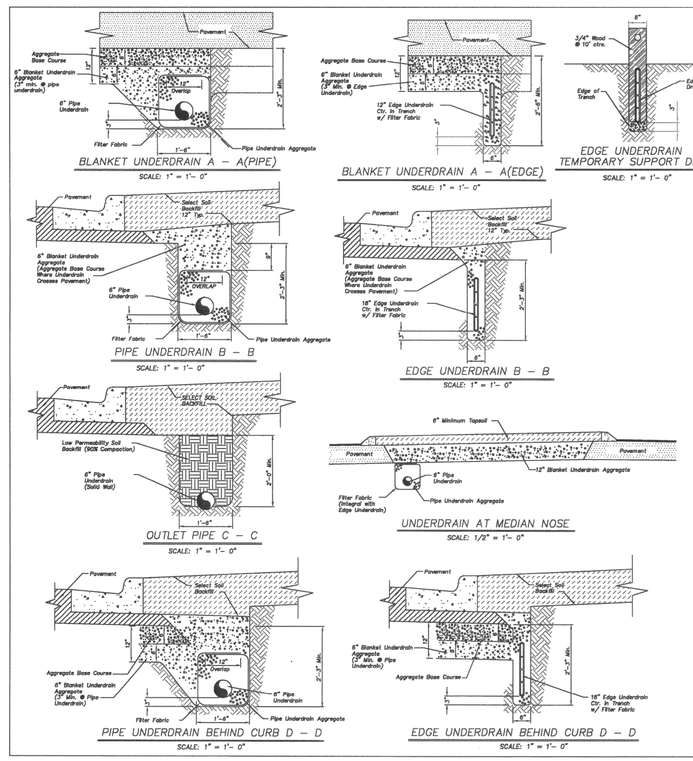
SIDE VIEW



FRONT VIEW

END SECTION DETAIL

NOT TO SCALE



Underdrain Notes:

1. All roadway excavation in rock will be undercut no less than 15" for the full width of the roadway as shown.
2. In areas where underdrains are not required, undercut and overbreakage in limestone and shale shall be brought to within 6" of the subgrade line with properly compacted crushed stone, shot rock, and/or rock rubble. The remaining 6" shall conform to Standard Specifications Section 2202.
3. Layers of earth or shale shall not be permitted for backfill up to the bottom of the crushed stone.
4. A minimum of 12" of select soil (topsoil) shall be placed on exposed rock cut or fill slope outside the limits of the roadway. All rock and shale slopes shall be benched @ maximum 2' vertical intervals prior to placement of select soil.
5. Proposed underdrain pipe layout, Sanitary elevations, inlet connection points, and details shall be approved prior to construction by the City Engineer.
6. Where pipe underdrains are used, all underdrain outlet pipes shall be solid wall with watertight joints. All outlet pipes shall be tied into the nearest storm sewer inlet as approved. Where edge underdrains are used, all underdrain outlet pipes shall be solid wall with manufacturer joints approved by the City Engineer. All connections between pipes and edge connectors or curb inlets shall be made with 2' minimum length of pipe.
7. All underdrain pipes shall be installed at a minimum slope of 1%. Underdrain pipe shall be installed with the perforations placed down.
8. Blanket underdrains shall be placed on bedrock unless otherwise directed by the City Engineer. Undercut and overbreakage in limestone and shale shall be brought to within 12" of the subgrade line with properly compacted crushed stone, shot rock and/or rock rubble.
9. All filter fabric used for pipe underdrain construction shall conform to Standard Specifications Section 2203.6.
10. The Contractor may, at his option, use either pipe underdrain or edge underdrain, but shall not mix underdrain types within any underdrain system.
11. All edge underdrain shall be held in the center of the trench by mechanical methods while placing granular backfill. See detail on this sheet. Alternate methods may be used with prior approval by the City Engineer.
12. Blanket underdrain aggregate, pipe underdrain aggregate, pipe underdrain, edge underdrain and outlet pipe shall conform to Standard Specifications Section 2203.6

AMERICAN PUBLIC WORKS ASSOCIATION
APWA KANSAS CITY METROPOLITAN CHAPTER
UNDERDRAIN DETAILS
STANDARD DRAWING UD-1
ADOPTED: MAY 23, 2001

Section 2721

Engineered Surface Drainage Products

GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for structure sizes 8", 10", 12", 15", 18", 24", 30" and 36" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2013 NYLOPLAST

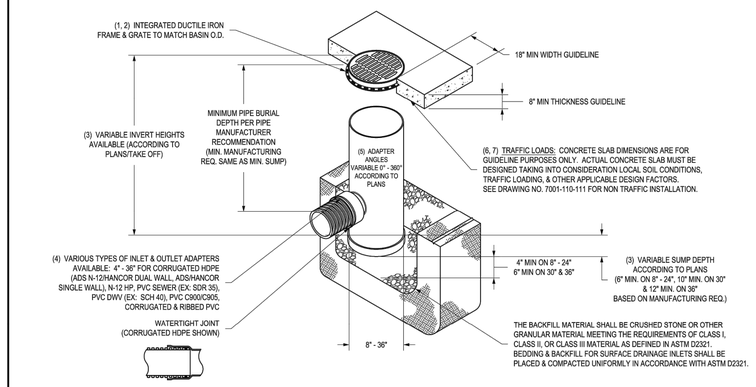
DRAWN BY	CJA	MATERIAL	
DATE	3-10-00		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	02-21-18		
DWG SIZE	A	SCALE 1:1	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 8 IN - 36 IN DRAIN BASIN SPECIFICATIONS

DWG NO. 7001-110-011 REV J

NYLOPLAST DRAIN BASIN WITH STANDARD GRATE



1 - 8" - 30" STANDARD GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" STANDARD GRATES FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 36").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 30" STANDARD GRATES SHALL MEET H-20 LOAD RATING.
7 - 8" & 10" STANDARD GRATES ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2011 NYLOPLAST

DRAWN BY	EBC	MATERIAL	
DATE	1-23-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	06-12-18		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: DRAIN BASIN WITH STANDARD GRATE QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-144 REV J

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Storm Sewer Details

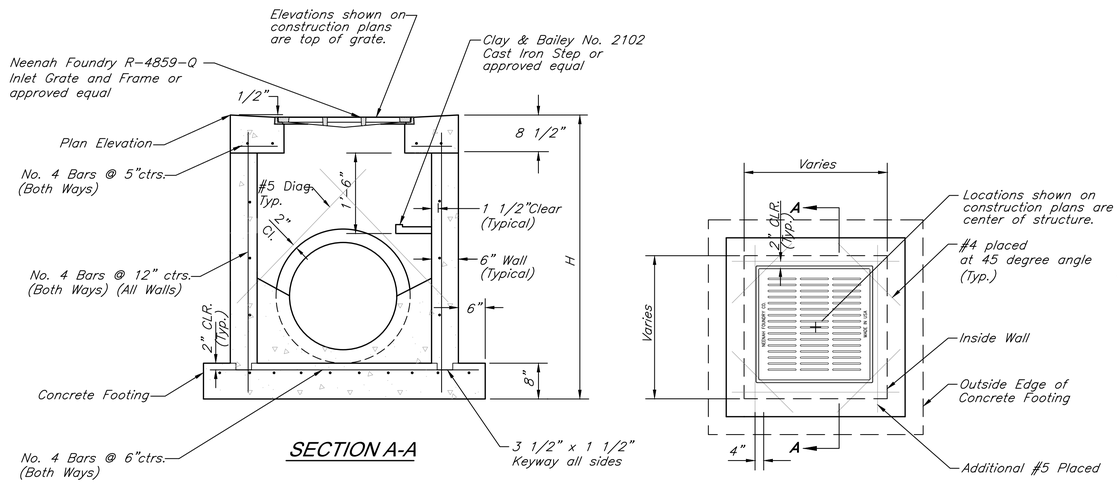
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-506

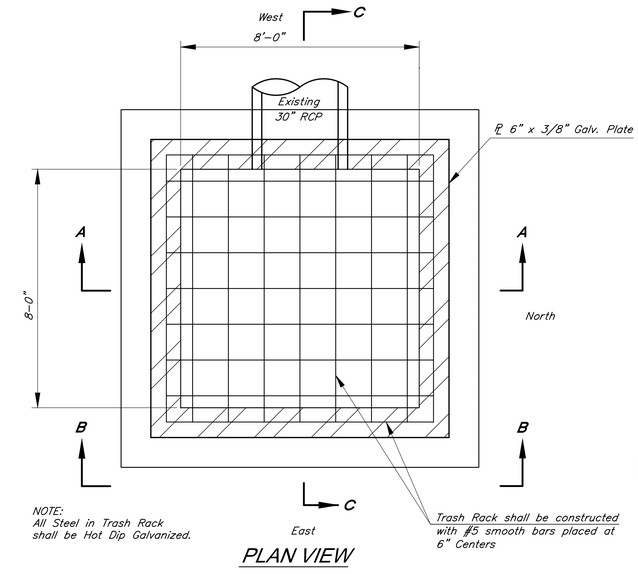
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
G:\1272O\Civil 3D\Production Drawings\Construction Site Plans\1272OC2200.dwg Layout: C-506 Storm Sewer Details -- Tuesday, May 14, 2019, 3:08pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 00059

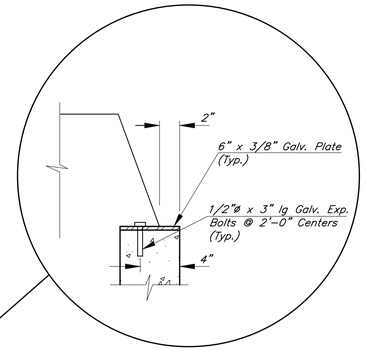
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2200.dwg Layout: C-507 Storm Sewer Details -- Tuesday May 14, 2019, 3:08pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

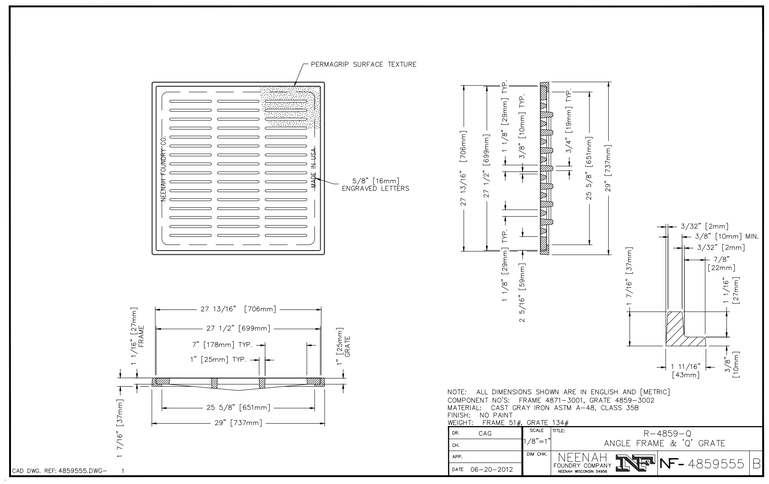


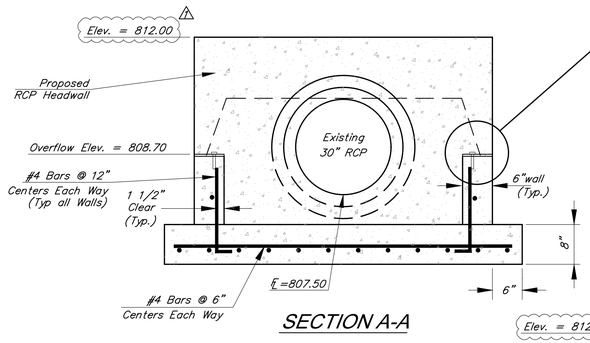
PRE-CAST GRATE INLET DETAIL

Not To Scale



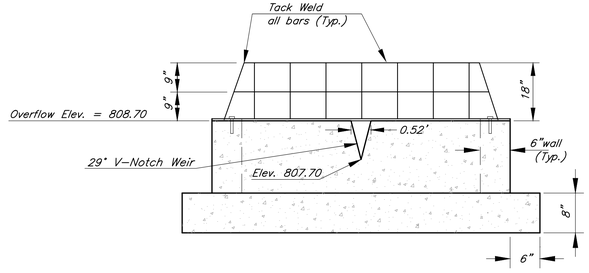


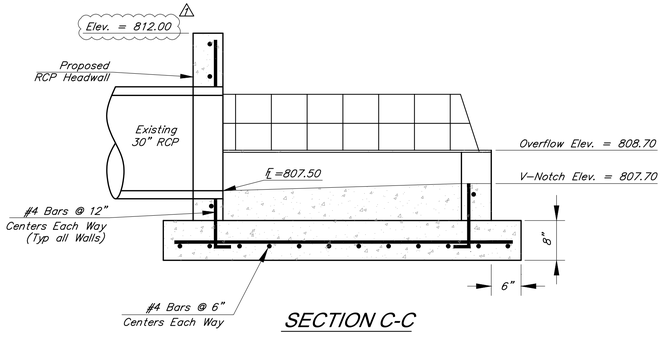




OUTLET STRUCTURE NOTES:

1. ALL CONCRETE SHALL BE KCMMB-4K.
2. FLOOR OF JUNCTION BOX SHALL HAVE A SHAPED CONCRETE INVERT TO PROVIDE FOR SMOOTH FLOW.
3. A MIN. 2'X2' LOCKABLE ACCESS GATE SHALL BE PROVIDED IN THE TRASH RACK.





WETLAND OUTFLOW STRUCTURE DETAIL

Not to Scale

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Storm Sewer Details

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

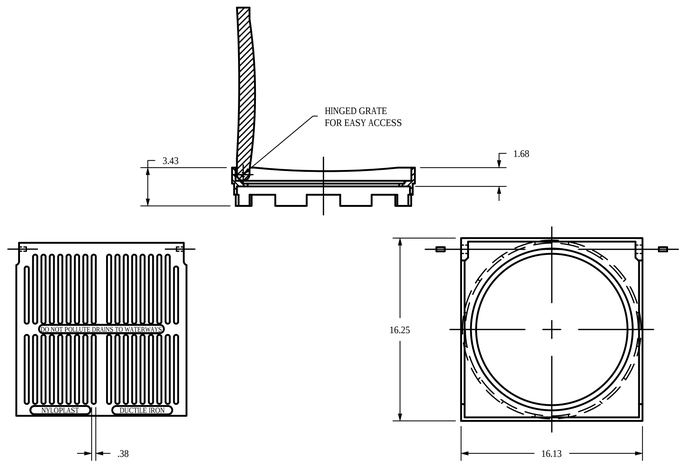
SHEET NO:

C-507

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2200.dwg Layout: C-508 Storm Sewer Details -- Tuesday, May 14, 2019, 3:08pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Copyright 2019, George Butler Associates, Inc.

1599CGP

APPROX. DRAIN AREA = 81.25 SQ IN
APPROX. WEIGHT WITH FRAME = 53.70 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-10 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-031

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2010 NYLOPLAST

DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	3-7-06		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	3-13-10		
DWG SIZE	A	SCALE 1:8	SHEET 1 OF 1

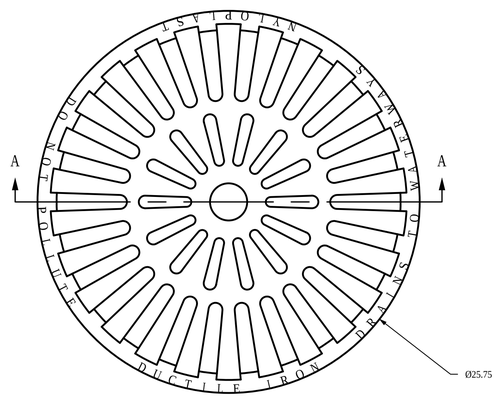
Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

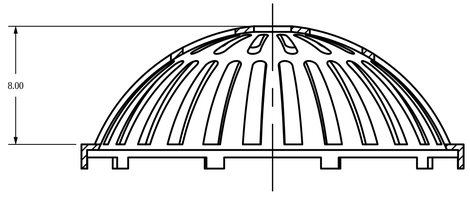
TITLE: 15 IN PEDESTRIAN GRATE ASSEMBLY

DWG NO. 7001-110-207 REV C

2499CGD

APPROX. DRAIN AREA = 270.64 SQ IN
APPROX. WEIGHT = 53.00 LBS





SECTION A-A

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2011 NYLOPLAST

DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	3-8-06		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	3-24-11		
DWG SIZE	A	SCALE 1:6	SHEET 1 OF 1

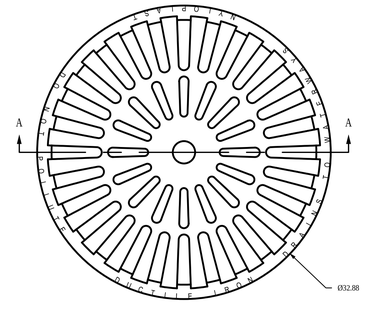
Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

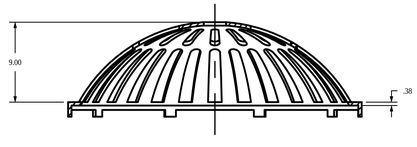
TITLE: 24 IN DOME GRATE

DWG NO. 7001-110-219 REV D

3099CGD

APPROX. DRAIN AREA = 409.94 SQ IN
APPROX. WEIGHT WITH FRAME = 93.00 LBS





SECTION A-A

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST. ©2011 NYLOPLAST

DRAWN BY	EBC	MATERIAL	DUCTILE IRON
DATE	3-8-06		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	3-10-11		
DWG SIZE	A	SCALE 1:8	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 30 IN DOME GRATE

DWG NO. 7001-110-223 REV D

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Storm Sewer Details

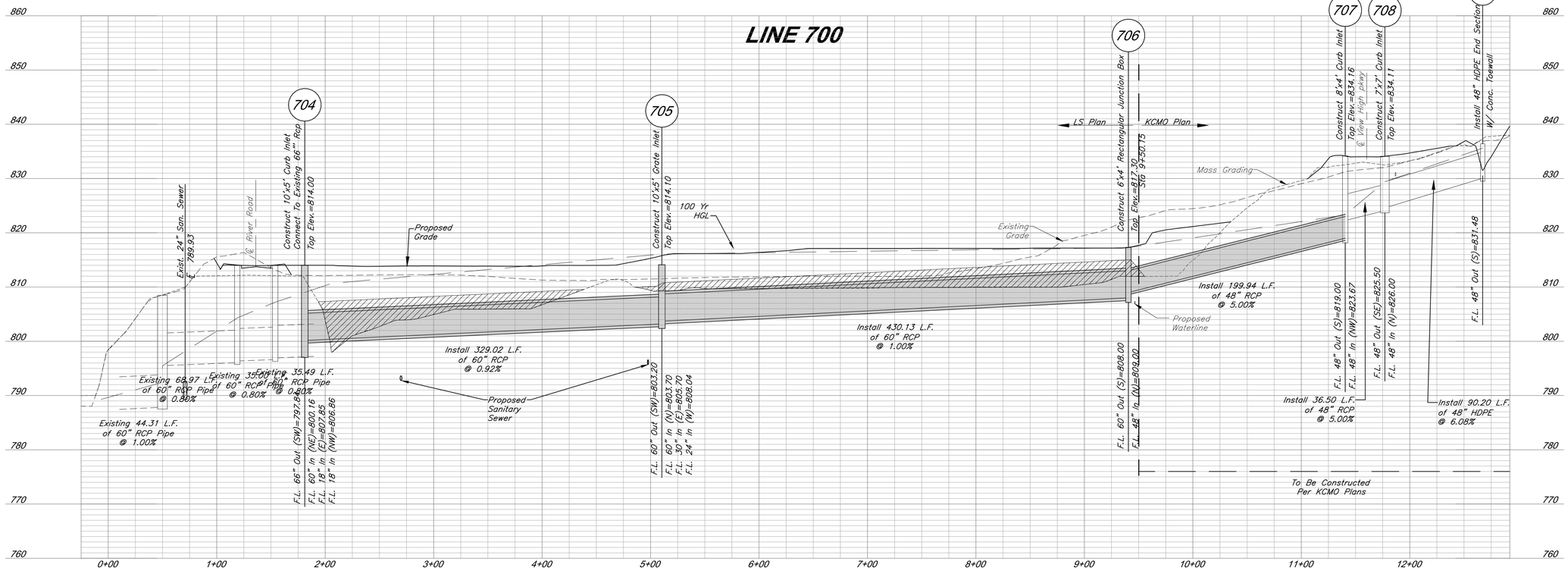
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

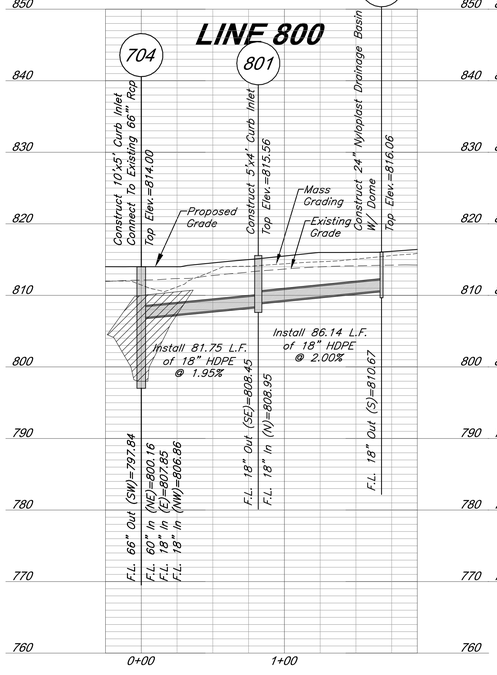
C-508

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C1400.dwg Layout: C-600 Storm Sewer Profiles -- Tuesday, May 14, 2019, 3:09pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Copyright 2019, George Butler Associates, Inc.

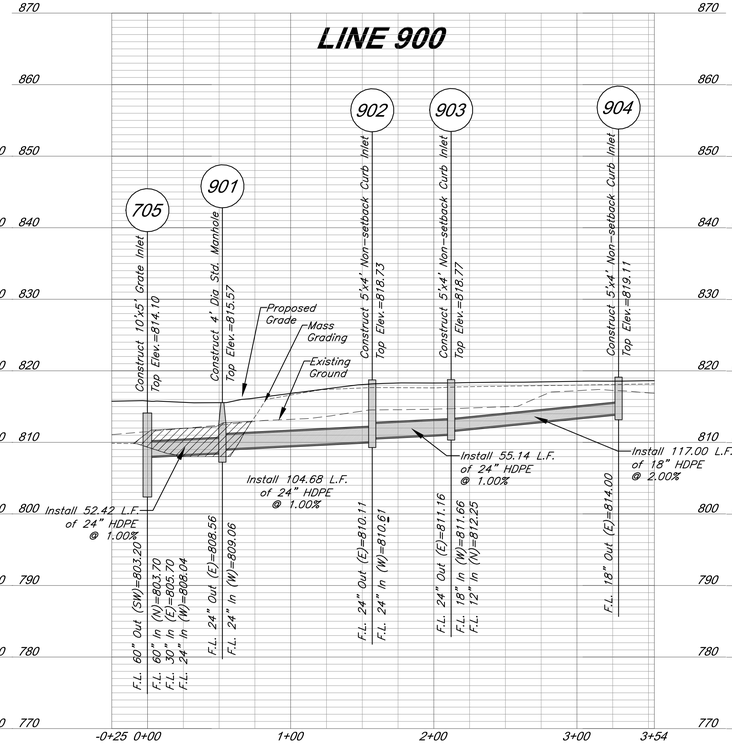
LINE 700



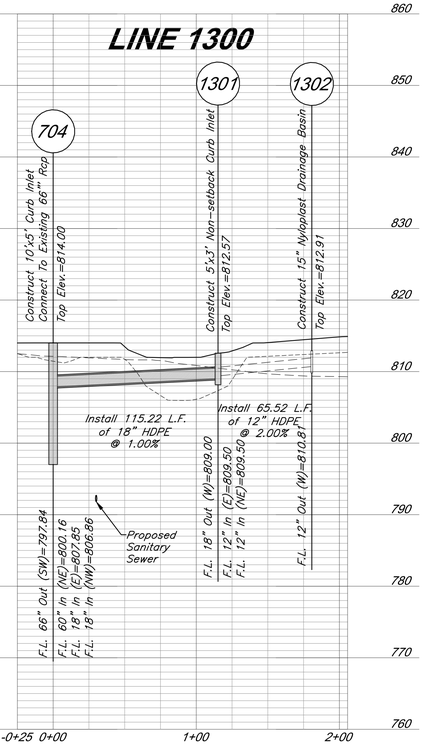
LINE 800



LINE 900



LINE 1300



LEGEND

Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

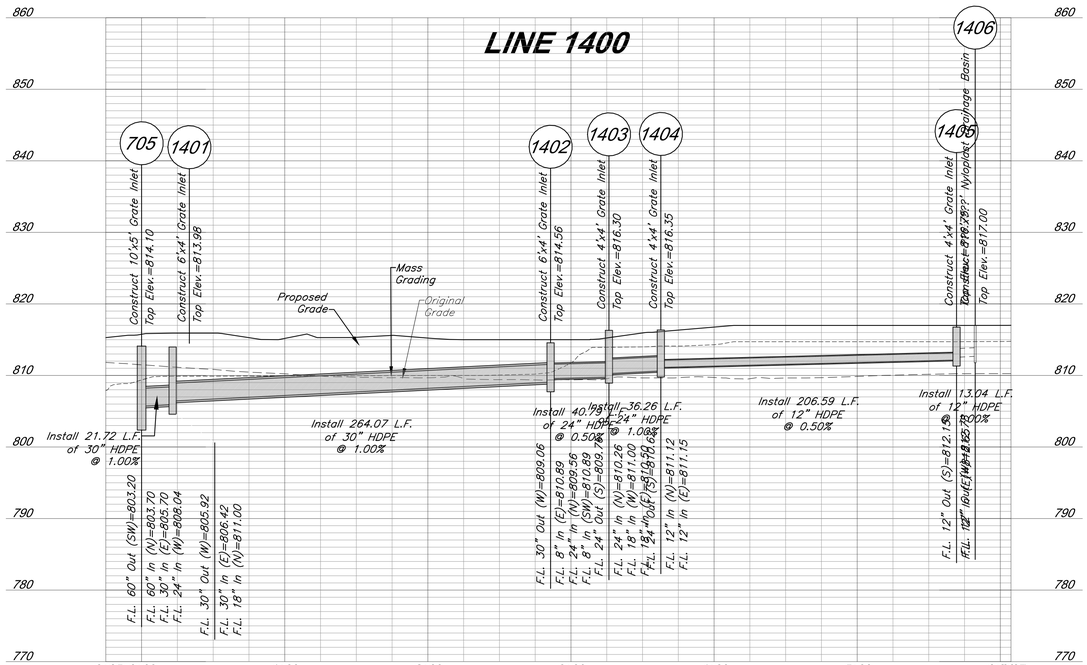
Storm Sewer Profiles

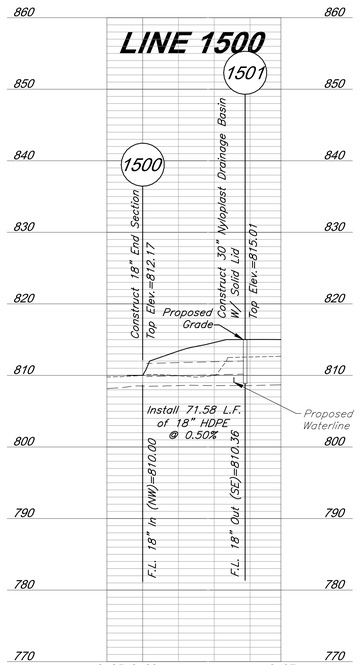
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

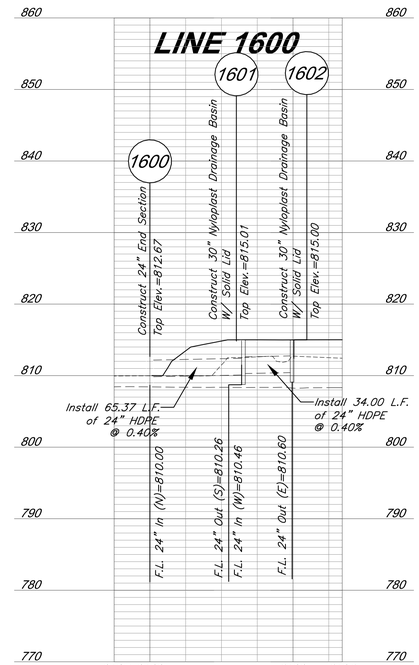
SHEET NO:

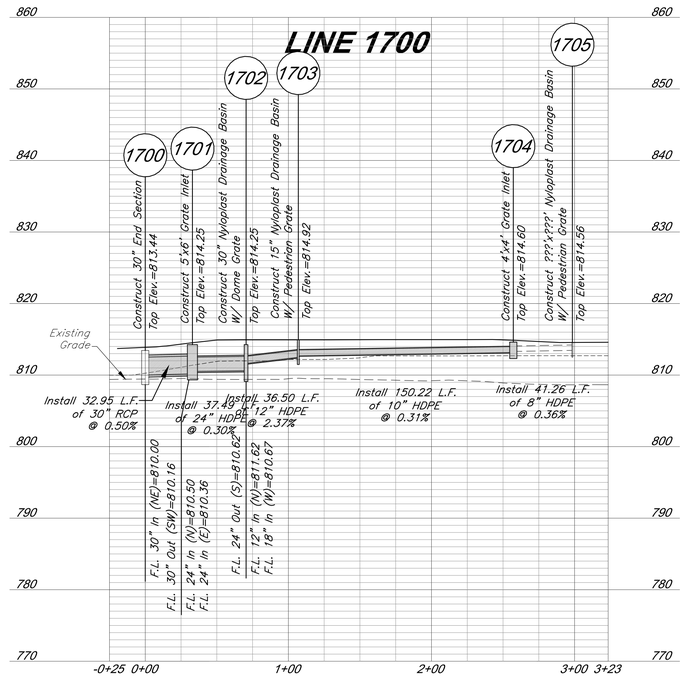
C-600

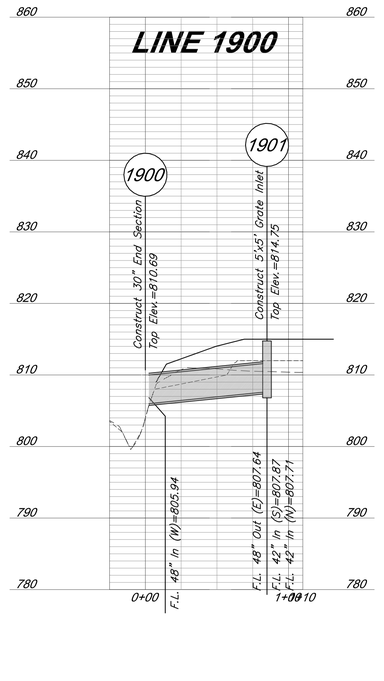
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C1400.dwg Layout: C-601 Storm Sewer Profiles -- Tuesday, May 14, 2019, 3:09pm -- Architect 00212, Professional Engineer 0001.33, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.











LEGEND

Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'
10' 5' 0'
0' 50' 100'

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

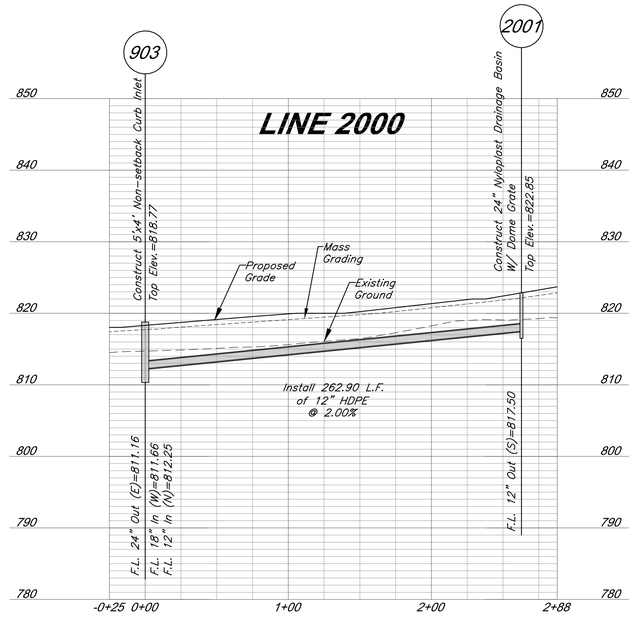
Storm Sewer Profiles

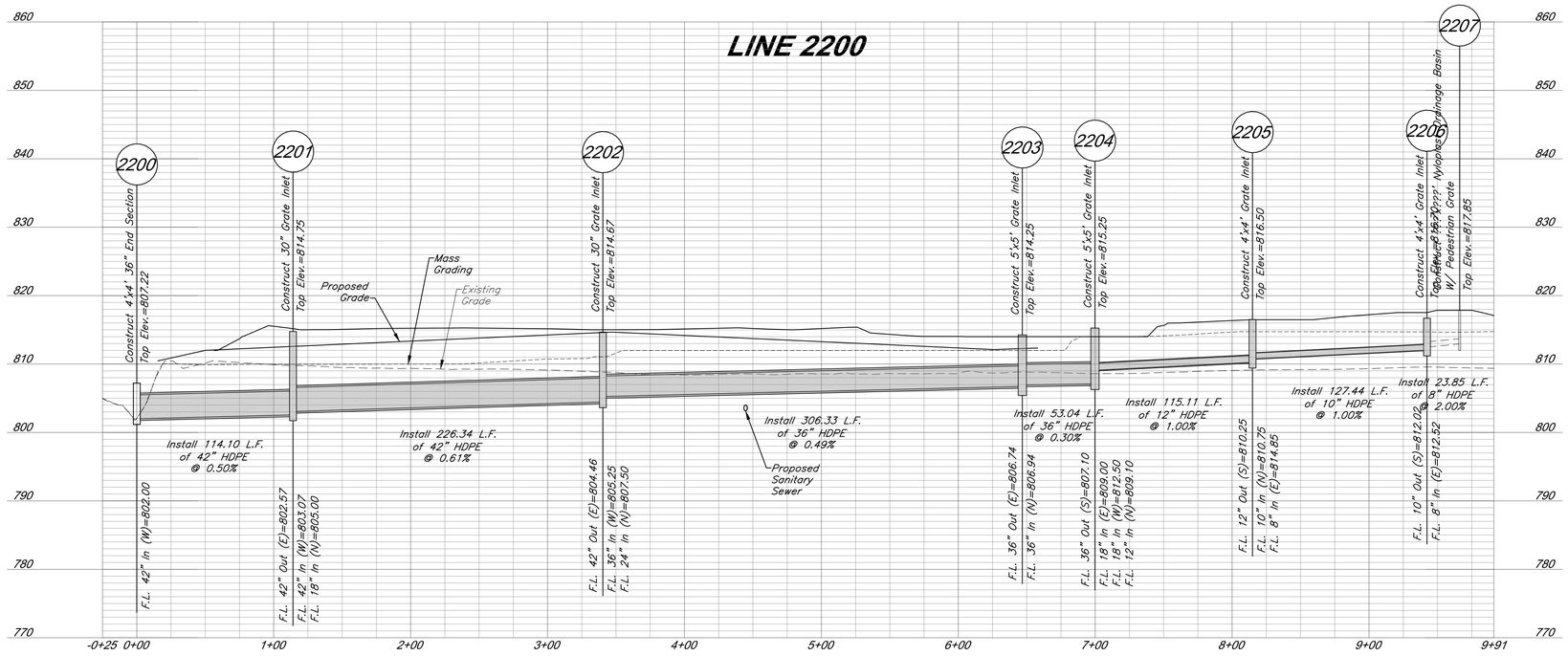
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-601

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C1400.dwg Layout: C-602 Storm Sewer Profiles -- Tuesday, May 14, 2019, 3:09pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





<u>Note:</u> Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Storm Sewer Profiles

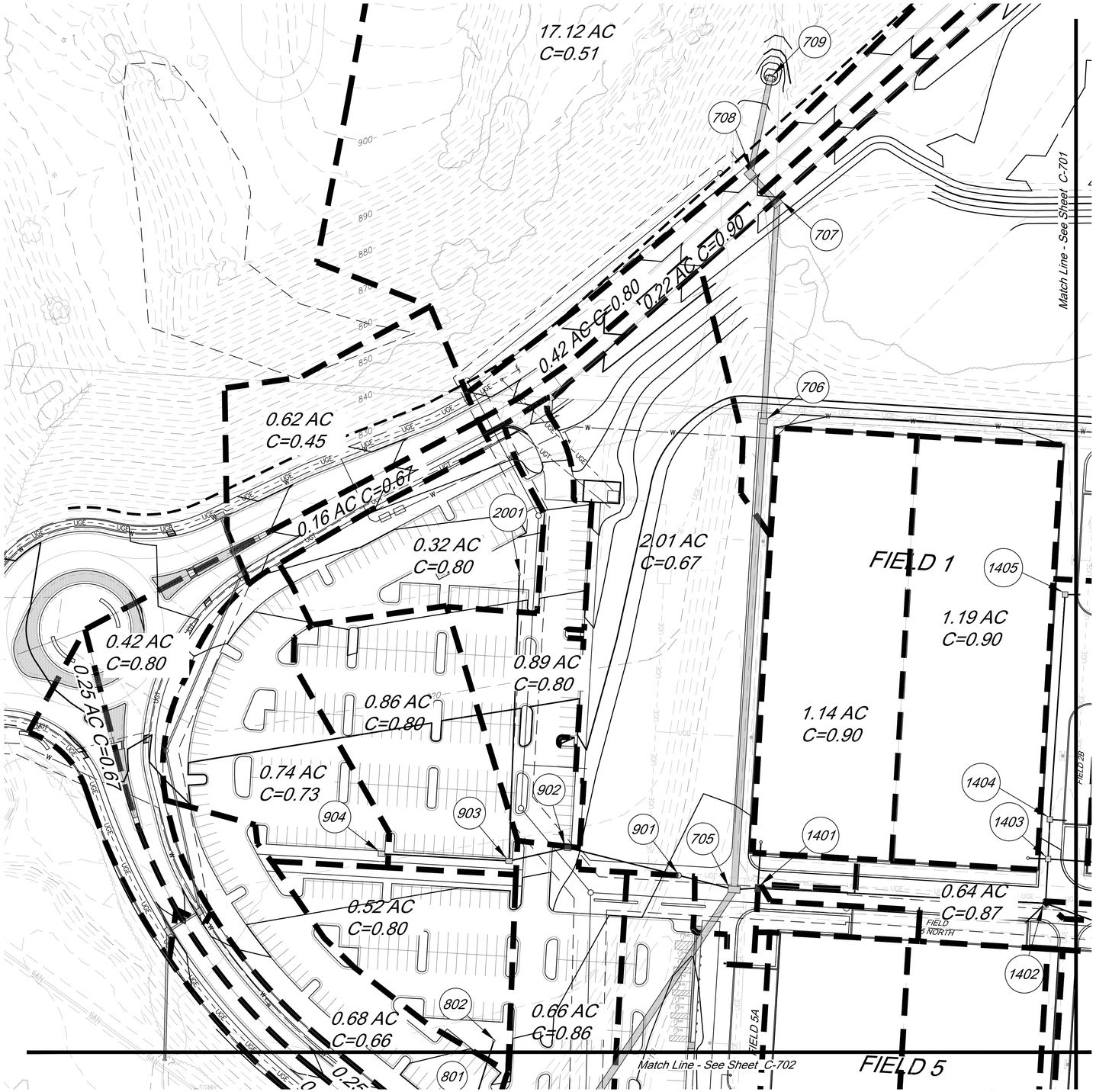
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-602

G:\12220\Civil 3D\Production Drawings\Construction Site Plans\12220C2000.dwg Layout: C-700 Drainage Map -- Tuesday May 14, 2019, 3:17pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



Legend

- 800 — Proposed Contours
- 800 — Existing Contour
- Proposed Drainage Area
- 0.28 Acres — Drainage Area
- Proposed Storm Sewer
- Future Storm Sewer

100' 0' 100' 200'

SCALE : 1 INCH = 100 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

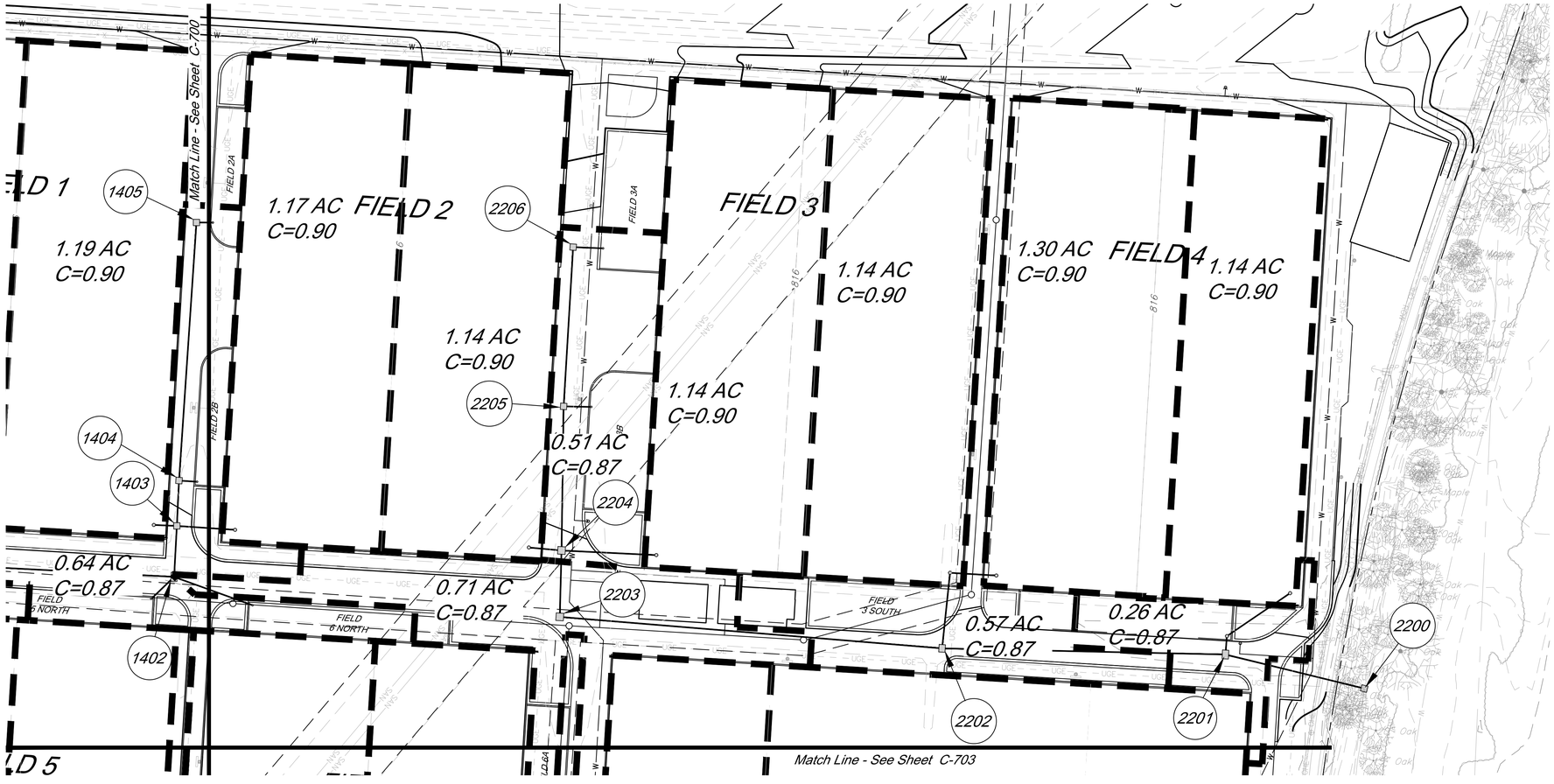
Drainage Map

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-700



Legend

- 800 — Proposed Contours
- 800 — Existing Contour
- Proposed Drainage Area
- 0.28 Acres — Drainage Area
- Proposed Storm Sewer
- Future Storm Sewer

100' 0' 100' 200'

SCALE : 1 INCH = 100 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Drainage Map

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

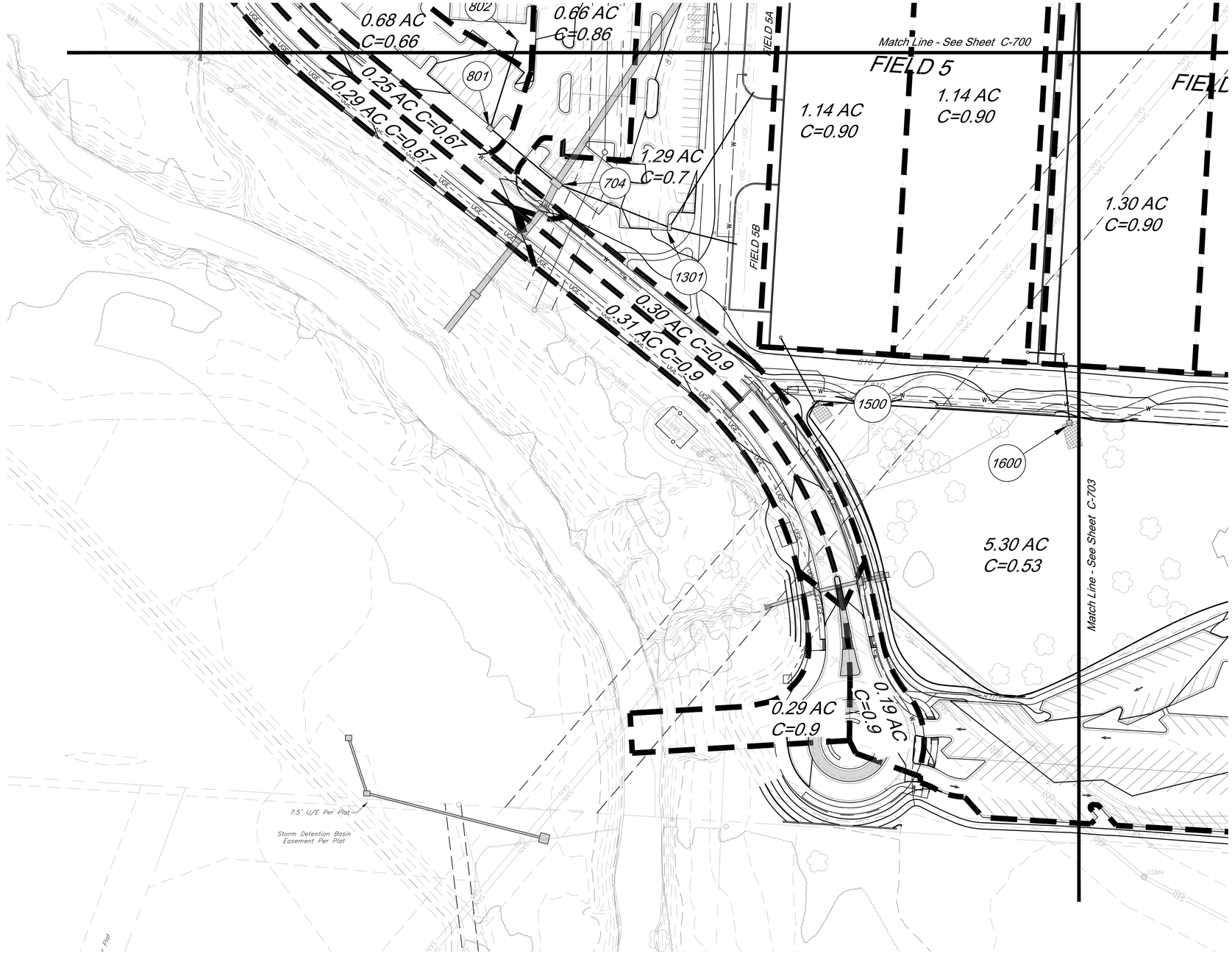
SHEET NO:

C-701

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2000.dwg Layout: C-701 Drainage Map -- Tuesday, May 14, 2019, 3:11pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2000.dwg Layout: C-702 Drainage Map -- Tuesday, May 14, 2019, 3:12pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



Legend

- 800 — Proposed Contours
- 800 — Existing Contour
- Proposed Drainage Area
- 0.28 Acres — Drainage Area
- Proposed Storm Sewer
- Future Storm Sewer

100' 0' 100' 200'

SCALE : 1 INCH = 100 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

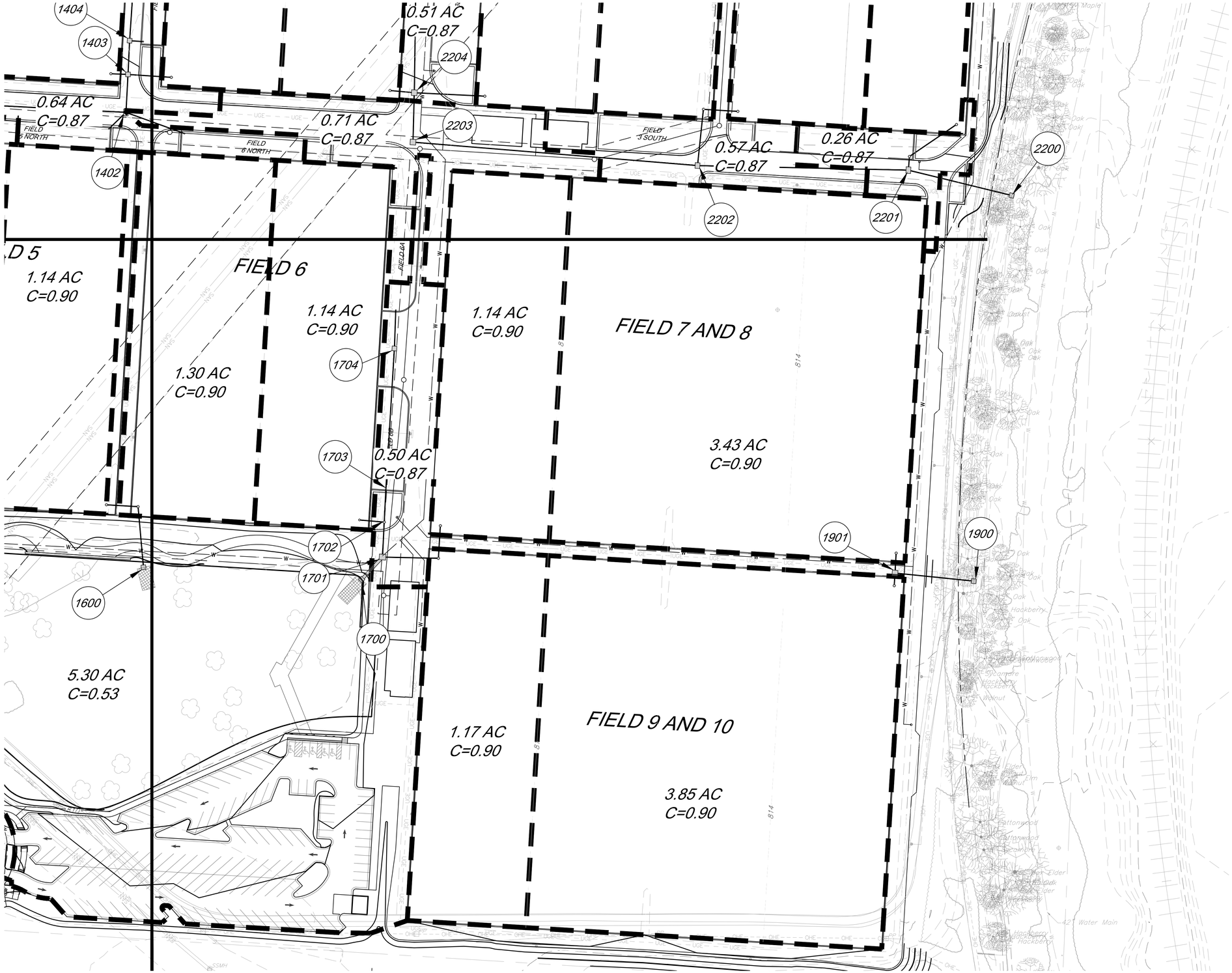
Drainage Map

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-702

C:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2000.dwg Layout: C-703 Drainage Map -- Tuesday, May 14, 2019, 3:13pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DECLARES PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059



Legend

- 800 — Proposed Contours
- 800 — Existing Contour
- Proposed Drainage Area
- 0.28 Acres — Drainage Area
- Proposed Storm Sewer
- Future Storm Sewer

100' 0' 100' 200'

SCALE : 1 INCH = 100 FEET

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Drainage Map

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-703

Structures		Runoff Calculations																Pipe Design									Design Checks								
From	To	Direct Area (acre)	Line In (acre)	Total Area (acre)	C	K	Tc (min)	Flow Time (min)	Intensity (in/hr)	Design Q (cfs)	Inlet Width (ft.)	Curb Type	Q Inlet (cfs)	Gutter Spread (ft.)	Street Slope (ft./ft.)	Capture (cfs)	Q Bypass (cfs)	Description	Pipe length (lin ft)	Pipe Slope Slope, %	Pipe dia (in)	Manning's n Value	Q full (cfs)	Pipe Area, sf	V full fps	Design V fps	Hw/D	outlet head, H	HW, Inlet Control, (ft)	HW, Outlet Control, (ft)	Inlet Top Elevation	upstream flowline	downstream flowline	Invert Drop (ft)	Downstream water elevation	Hydraulic Grade Elev. (Calculated)	Hydraulic Grade (allowable)	Comments
Line 700 (100 Yr)	709		17.12			0.51	1.25	18.92		6.61	72.2							End Section												N/A					834.49	836.00	
		708			17.12	0.51	1.25	18.92	0.07	6.61	72.2							RCP	90.20	6.08	48	0.013	355.14	12.57	28.26	20.62	1.0	1.12	834.49	829.72		830.50	825.01		828.60			
	708		0.42			0.80	1.25	5.50		10.12	4.2	5.0	CG-1 (B) Sx,2%	4.25			0.017	2.88	1.370	Curb Inlet										834.22			0.5		828.60	832.39	
		707			17.54	0.52	1.25	18.99	0.03	6.60	74.8							RCP	36.50	5.00	48	0.013	322.06	12.57	25.63	20.84	1.0	0.88	828.60	824.05		824.51	822.69		823.17			
	707		0.22			0.90	1.25	6.21		9.84	2.4		CG-1 (B) Sx,2%	2.44			0.017	1.46	0.979	Curb Inlet										834.16			3.67		823.17	832.33	
		706			17.76	0.52	1.25	19.02	0.16	6.59	76.4							RCP	199.94	5.00	48	0.013	322.06	12.57	25.63	20.84	1.0	1.94	823.17	813.91		819.02	809.02		811.97			
	706		0.00			0.80	1.25	5.00		10.32	0.0		CG-1 (B) Sx,2%	0.00			0.017	0.00	0.000	Junction Box										817.47			1		811.97	815.64	
		705			17.76	0.52	1.25	19.18	0.62	6.57	76.1							RCP	430.13	1.00	60	0.013	261.14	19.63	13.30	11.60	0.8	1.09	811.97	809.61		808.02	803.72		808.52			
	705		0.00	9.16		0.67	1.25	5.85		9.98	0.0							Curb Inlet												814.78			0.5		808.52	813.45	
		704			26.92	0.63	1.25	19.80	0.35	6.46	137.2							RCP	304.65	1.00	60	0.013	261.14	19.63	13.30	14.43	1.1	2.78	808.52	808.42		803.22	800.17		805.64			
	704		0.66	2.49		0.86	1.25	5.00		10.32	7.3		CG-1 (B) Sx,2%	7.32			0.020	1.79	5.531	Curb Inlet										814.1			2.3		805.64	812.77	
		703			30.07	0.65	1.25	20.15	0.06	6.41	156.5							RCP	51.87	0.80	60	0.013	233.57	19.63	11.90	14.78	1.2	1.60	803.73	805.64		797.85	797.44		804.04			
	703		0.25			0.90	1.25	5.00		10.32	2.9	9.0	CG-1 (B) Sx,2%	3.32	9.633		0.010	2.53	0.786	Curb Inlet										813.98			0.3		804.04	812.15	
		702			30.32	0.65	1.25	20.21	0.04	6.40	158.0							RCP	35.00	0.80	60	0.013	233.57	19.63	11.90	14.80	1.2	1.49	803.07	804.04		797.14	796.86		802.55			
	702		0.29			0.90	1.25	5.00		10.32	3.4	8.0	CG-1 (B) Sx,2%	3.60	10.908		0.010	2.71	0.889	Curb Inlet										813.98			0.3		802.55	812.15	
		701			30.61	0.65	1.25	20.25	0.08	6.39	160.0							RCP	68.97	0.80	60	0.013	233.57	19.63	11.90	14.84	1.2	1.81	802.55	795.18		796.56	796.01		793.37			
	701		0.00			0.90	1.25	5.00		10.32	0.0							Junction Box												808.48			8.63		793.37	807.15	
		700			30.32	0.66	1.25	20.25	0.06	6.39	160.0							RCP	56.70	1.00	60	0.013	261.14	19.63	13.30	14.84	1.2	1.71	793.37	791.02		787.38	786.81		789.31			
																																		789.31			
Line 700 (25 Yr)	709		17.12			0.51	1.10	18.92		5.38	51.7							End Section												N/A					833.85	836.00	
		708			17.12	0.51	1.10	18.92	0.07	5.38	51.7							RCP	90.20	6.08	48	0.013	355.14	12.57	28.26	20.62	0.8	0.57	833.85	828.49		830.50	825.01		827.92			
	708		0.42			0.80	1.10	5.50		8.35	3.1	5.0	CG-1 (B) Sx,2%	3.09			0.017	2.23	0.859	Curb Inlet										834.22			0.5		827.92	832.39	
		707			17.54	0.52	1.10	18.99	0.03	5.37	53.6							RCP	36.50	5.00	48	0.013	322.06	12.57	25.63	20.84	0.9	0.45	827.92	822.90		824.51	822.69		822.45			
	707		0.22			0.90	1.10	6.21		8.12	1.8		CG-1 (B) Sx,2%	1.77			0.017	1.21	0.553	Curb Inlet										834.16			3.67		822.45	832.33	
		706			17.76	0.52	1.10	19.02	0.16	5.37	54.7							RCP	199.94	5.00	48	0.013	322.06	12.57	25.63	20.84	0.9	0.99	822.45	812.67		819.02	809.02		811.68			
	706		0.00			0.80	1.10	5.00		8.53	0.0							Junction Box												817.47			1		811.68	815.64	
		705			17.76	0.52	1.10	19.18	0.62	5.34	54.5							RCP	430.13	1.00	60	0.013	261.14	19.63	13.30	11.60	0.7	0.56	811.68	808.13		808.02	803.72		807.57			
	705		0.00	9.16		0.67	1.10	5.85		8.24	0.0							Curb Inlet												814.78			0.5		807.57	813.45	
		704			26.92	0.63	1.10	19.80	0.35	5.26	98.2							RCP	304.65	1.00	60	0.013	261.14	19.63	13.30	14.43	0.9	1.42	807.57	804.27		803.22	800.17		802.84			
	704		0.66	2.49		0.86	1.10	5.00		8.53	5.3		CG-1 (B) Sx,2%	5.33			0.020	1.75	3.579	Curb Inlet										814.1			2.3		802.84	812.77	
		703			30.07	0.65	1.10	20.15	0.06	5.21	112.0							RCP	51.87	0.80	60	0.013	233.57	19.63	11.90	14.78	0.9	0.82	802.50	802.84		797.85	797.44		802.03			
	703		0.25			0.90	1.10	5.00		8.53	2.1	9.0	CG-1 (B) Sx,2%	2.90			0.010	2.24	0.662	Curb Inlet										813.98			0.3		802.03	812.15	
		702			30.32	0.65	1.10	20.21	0.04	5.20	113.1							RCP	35.00	0.80	60	0.013	233.57	19.63	11.90	14.80	0.9	0.76	801.81	802.03		797.14	796.86		801.26			
	702		0.29			0.90	1.10	5.00		8.53	2.4	8.0	CG-1 (B) Sx,2%	3.34	10.417		0.010	2.53	0.804	Curb Inlet										813.98			0.3		801.26	812.15	
		701			30.61	0.65	1.10	20.25	0.08	5.20	114.5							RCP	68.97	0.80	60	0.013	233.57	19.63	11.90	14.84	0.9	0.93	801.26	793.01		796.56	796.01		792.08			
	701		0.00			0.90	1.10	5.00		8.53	0.0							Junction Box												808.48			8.63		792.08	807.15	
		700			30.32	0.66	1.10	20.25	0.06	5.20	114.5							RCP	56.70	1.00	60	0.013	261.14	19.63	13.30	14.84	0.9	0.88	792.08	790.19		787.38	786.81		789.31			
																																		789.31			
Line 800	802		0.52			0.90	1.00	5.00		7.35	3.4	6.3	N/A	3.44	0, (0.33 FT Head)		3.44	0.00		Area Inlet										816.06					811.83	814.73	
		801			0.52	0.90	1.00	5.00	0.16	7.35	3.4							HDPE	86.14	2.00	18	0.01	19.36	1.77	10.96	9.07	0.8	0.27	811.83	810.53		810.67	808.95		810.25			
	801		0.68			0.90	1.00	5.50		7.20	4.4	5.0	CG-1 (B) Sx,2%	4.41	20.500	1.330	4.41	0.00		Curb Inlet										815.12			0.5		810.25	813.79	
		705			1.20	0.90	1.00	5.16	0.12	7.30	7.9							HDPE	79.58	2.00	18	0.01	19.36	1.77	10.96	10.64	1.2	1.36	810.25	808.97		808.45	806.86		807.61			Connect to Line 700
																																		807.61			
Line 900	904		0.74			0.74	1.00	5.00		7.35	4.0	5.0	CG-1 (B) Sx,2%	4.03	19.500	1.330	4.03	0.00		Area Inlet										819.11					815.57	817.78	
		903			0.74	0.74	1.00	5.00	0.24	7.35	4.0							HDPE	117.00	2.00	18	0.01	19.36	1.77	10.96	8.02	0.8	0.48	815.22	815.57		814.00	811.66		815.09			
	903		0.86	0.32		0.80	1.00	5.00		7.35	5.1	5.0	CG-1 (B) Sx,2%	5.06	22.500	1.330	5.06	0.00		Area Inlet										818.77			0.5		815.09	817.44	
		902			1.92	0.78	1.00	5.24	0.09	7.28	10.9							HDPE	55.14	1.00	24	0.01	29.49	3.14	9.39	10.17	0.9	0.50	812.98	815.09		811.16	810.61		814.59			
	902		0.89			0.80	1.00	5.50		7.20	5.1	5.0	CG-1 (B) Sx,2%	5.13	23.000	1.330	5.13	0.00		Area Inlet										818.73			0.5		814.59	817.40	
		901			2.81	0.78	1.00	5.33	0.15	7.25	16.0							HDPE	104.77	1.00	24	0.01	29.49	3.14	9.39	11.52	1.2	1.64	812.48	814.59		810.11	809.06		812.95			
	901		0.00	2.01		0.80	1.00	5.50		7.20	0.0							Manhole												816.35			0.5		812.95	815.02	
		802			4.82	0.79	1.00	5.49	0.07	7.21	27.5							HDPE	52.42	1.00	24	0.01	29.49	3.14	9.39	11.78	2.2	3.13	812.95	812.17		808.56	808.04		809.04			Connect to Line 700
																																		809.04			
Line 1300	1301		1.29			0.70	1.00	5.00		7.35	6.6							Area Inlet												814.00					810.57	812.17	
		3304			1.29	0.70	1.00	5.00	0.10	7.35	6.6							HDPE	50.26	1.00	18	0.01	13.69	1.77	7.75	8.36	1.0	0.71	810.57	809.96		809.00	808.50		809.25			Connect to Line 700
																																		809.25			
Line 1400	1402		3.20			0.90	1.00	7.54		6.64	19.1							Area Inlet												814.56					811.45	813.23	
		1401			3.20	0.90	1.00	7.54	0.43	6.64	19.1							HDPE	275.43	1.00	30	0.01	53.47	4.91	10.89	10.67	0.9	1.61	811.45	810.28		809.17	806.42		808.67			
	1401		1.14			0.90	1.00	5.56		7.18	7.4							Curb Inlet												813.98			0.5		808.67	812.65		Connect to Line 700
		1400			4.34	0.90	1.00	7.97	0.03	6.54	25.5							HDPE	21.72	1.00	30	0.01	53.47	4.91	10.89	11.66	1.1	0.69	808.67	807.64		805.92	805.70		806.95			
																																		806.95			
Line 1500	1501		1.14			0.86	1.00	5.00		7.35	7.2							Area Inlet												815.00					812.38	813.67	
		1500			1.14	0.86	1.00	5.00	0.21	7.35	7.2							HDPE	77.24	0.92	18	0.01	13.13	1.77	7.43	6.04	1.1	1.11	812.38	811.86		810.71	810.00		810.75			
																																		810.75			
Line 1600	1602		1.14			0.90	1.00	5.00		7.35	7.5							Area Inlet												815.00					812.91	813.68	
		1601			1.14	0.90	1.00	5.00	0.09	7.35	7.5							HDPE	34.00	0.50	24	0.01	20.85	3.14	6.64	6.64	0.8	0.19	812.28	812.91		810.71	810.54		812.72			
	1601		1.30			0.90	1.00	5.00		7.35	8.6							Area Inlet												815.00			0.2		812.72	813.67	
		1600			2.44	0.90	1.00	5.09	0.15	7.33	16.1							HDPE	67.58	0.50	24	0.01	20.85	3.14	6.64	7.51	1.2	1.24	812.72	812.24		810.34	810.00		811.00			
																																		811.00			
Line 1700	1602		1.64			0.90	1.00	5.00		7.35	10.9							Area Inlet												815.00					813.31	813.68	
		1601			1.64	0.90	1.00	5.00	0.08	7.35	10.9							HDPE	37.49	0.30	24	0.01	16.15	3.14	5.14	7.39	0.9	0.41	812.43	813.31		810.61	810.50		812.90			
	1601		2.31			0.90	1.00	5.00		7.35	15.3							Area Inlet												814.71			0.4		812.90	813.38	
		1600			3.95	0.90	1.00	5.08	0.07	7.33	26.0							RCP	32.95	0.30	30	0.013	22.53	4.91	4.59	8.29	1.1	0.82	812.90	812.07		810.10	810.00		811.25			
																																		811.25			
Line 1900	1902		3.43			0.90	1.00	5.79		7.12	22.0							Area Inlet												815.00					815.06	813.67	
		1901			3.43	0.90	1.00	5.79	0.04	7.12	22.0							HDPE	15.00	0.50	24	0.01	20.85	3.14	6.64	6.23	1.6	1.22	812.13	815.06		808.84	808.77		813.83			
	1901		3.85			0.90	1.00	5.79		7.12	24.7							Area Inlet												815.00			0.2		813.83	813.67	
		1900			7.28	0.90	1.00	5.79	0.14	7.12	46.6							HDPE	69.00	0.50	30	0.01	37.81	4.91	7.70	8.49	2.1	3.65	813.83	813.12		808.57	808.22		809.47			
																																		809.47			
Line 2000	2001		0.32			0.80	1.00	5.00		7.35	1.9	6.3	N/A	1.88	0, (0.23 FT Head)		1.88	0.00		Area Inlet										822.85					818.40	821.52	
		902			0.32	0.80	1.00	5.00	0.57	7.35	1.9							HDPE	262.40	2.00	12	0.01	6.57	0.79	8.36	7.65	0.9	1.72	818.40	814.47		817.50	812.25		812.75			Connect to Line 900
																																		812.75			
Line 2200	2204		2.66			0.90	1.00	5.00		7.35	17.6							Area Inlet												812.10					809.35	810.77	
		2203			2.66	0.90	1.00	5.00	0.09	7.35	17.6							HDPE	32.16	0.50	36	0.01	61.48	7.07	6.22	5.84	0.8	0.17	809.35	809.30		807.09	806.93		809.14			
	2203		0.71			0.90	1.00	5.00		7.35	4.7							Area Inlet												812.00			0.2		809.14	810.67	
		2202			3.37	0.90	1.00	5.09	0.71	7.32	22.2							HDPE	297.44	0.50	36	0.01	61.48	7.07	8.61	6.97	0.8	0.91	809.14	808.49		806.73	805.25		807.58			
	2202		3.26			0.90	1.00	5.00		7.35	21.6							Area Inlet												814.67			0.79		807.58	813.34	
		2201			6.63	0.90	1.00	5.80	0.67	7.11	42.4							HDPE	278.19	0.50	42	0.01	92.73	9.62	8.61	6.97	0.9	1.46	807.58	807.44		804.46	803.07		805.99			
	2201		1.40			0.90	1.00	5.00		7.35	9.3							Area Inlet												812.00			0.5		805.99	810.67	
		2200			8.03	0.90	1.00	6.47	0.12	6.93	50.1							HDPE	56.54	1.00	42	0.01	131.14	9.62	13.63	8.11	1.0	0.81	805.99	804.56		802.57	802.00		803.75			
	2200																																	803.75			

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C2000.dwg Layout: C-800 Drainage Calculations -- Tuesday, May 14, 2019, 3:13pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DECLARES PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

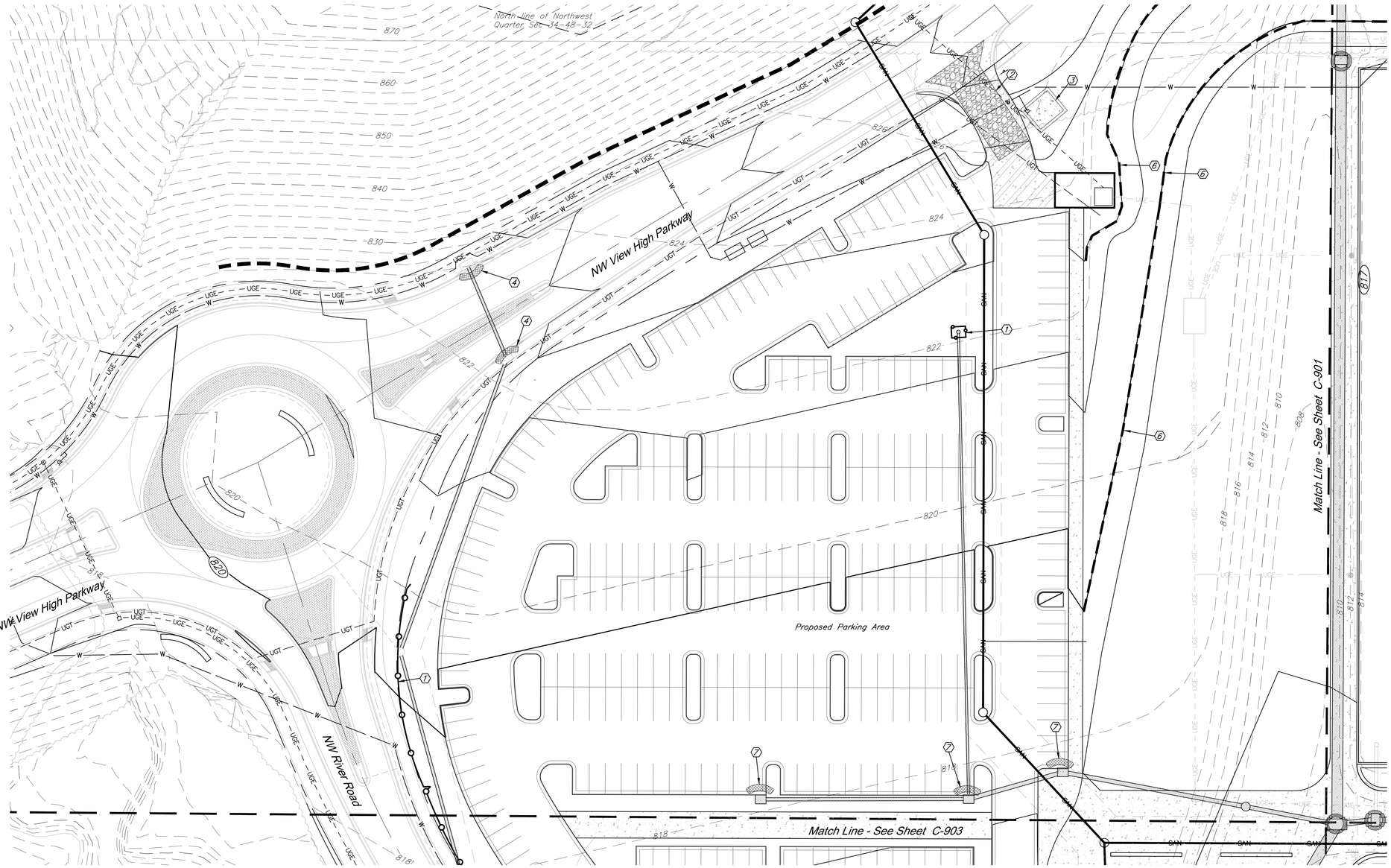
DRAWING TITLE:

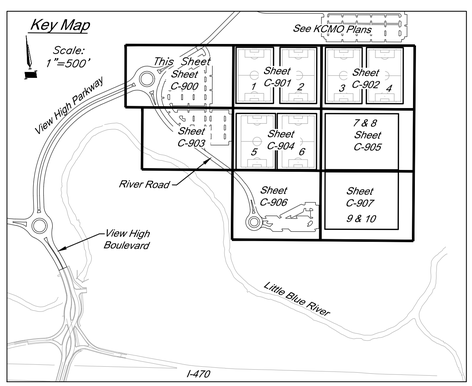
Drainage Calculations

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-800





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	(1)	Install Perimeter Silt Fence	4	Install as shown on plans
	(2)	Construct Gravel Construction Entrance	4	Install as shown on plans
	(3)	Construct Concrete Wash-out	4	Install as shown on plans
	(4)	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	(5)	Install Interior Silt Fence	4	Install as shown on plans
	(6)	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	(7)	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	(8)	Install Erosion Control Blanket	N/A	Install as shown on plans
	(9)	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Temporary Construction Entrance
- Inlet Sediment Trap
- Concrete Wash-out

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Erosion Control Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

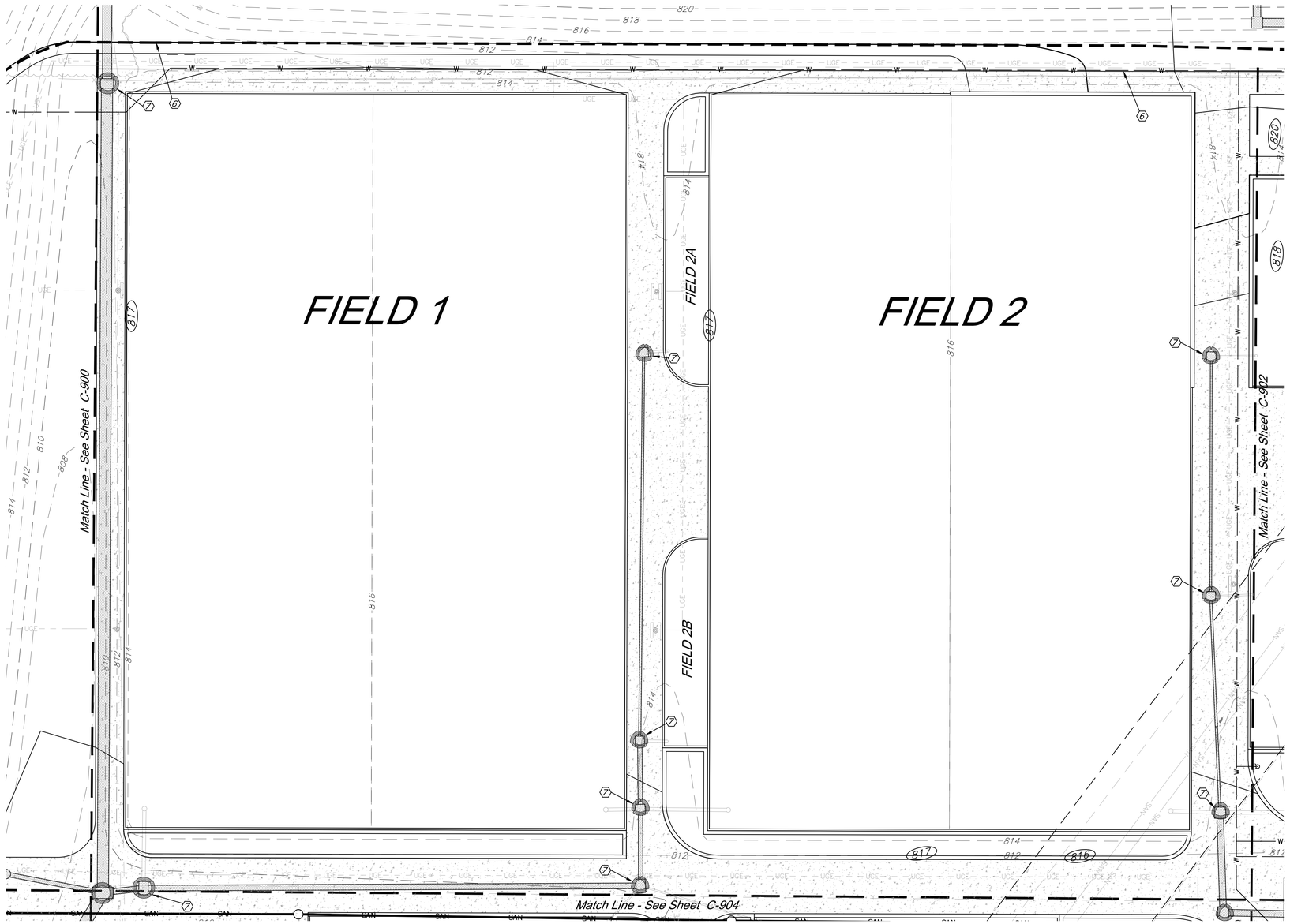
SHEET NO:

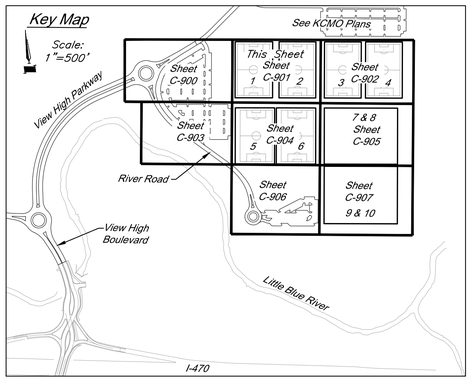
C-900

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4000.dwg Layout: C-900 Erosion Control Plan -- Tuesday, May 14, 2019, 3:14pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4000.dwg Layout: C-901 Erosion Control Plan -- Tuesday, May 14, 2019, 3:15pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash-out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	8	Install Erosion Control Blanket	N/A	Install as shown on plans
	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Inlet Sediment Trap

30' 0' 30' 60'
SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

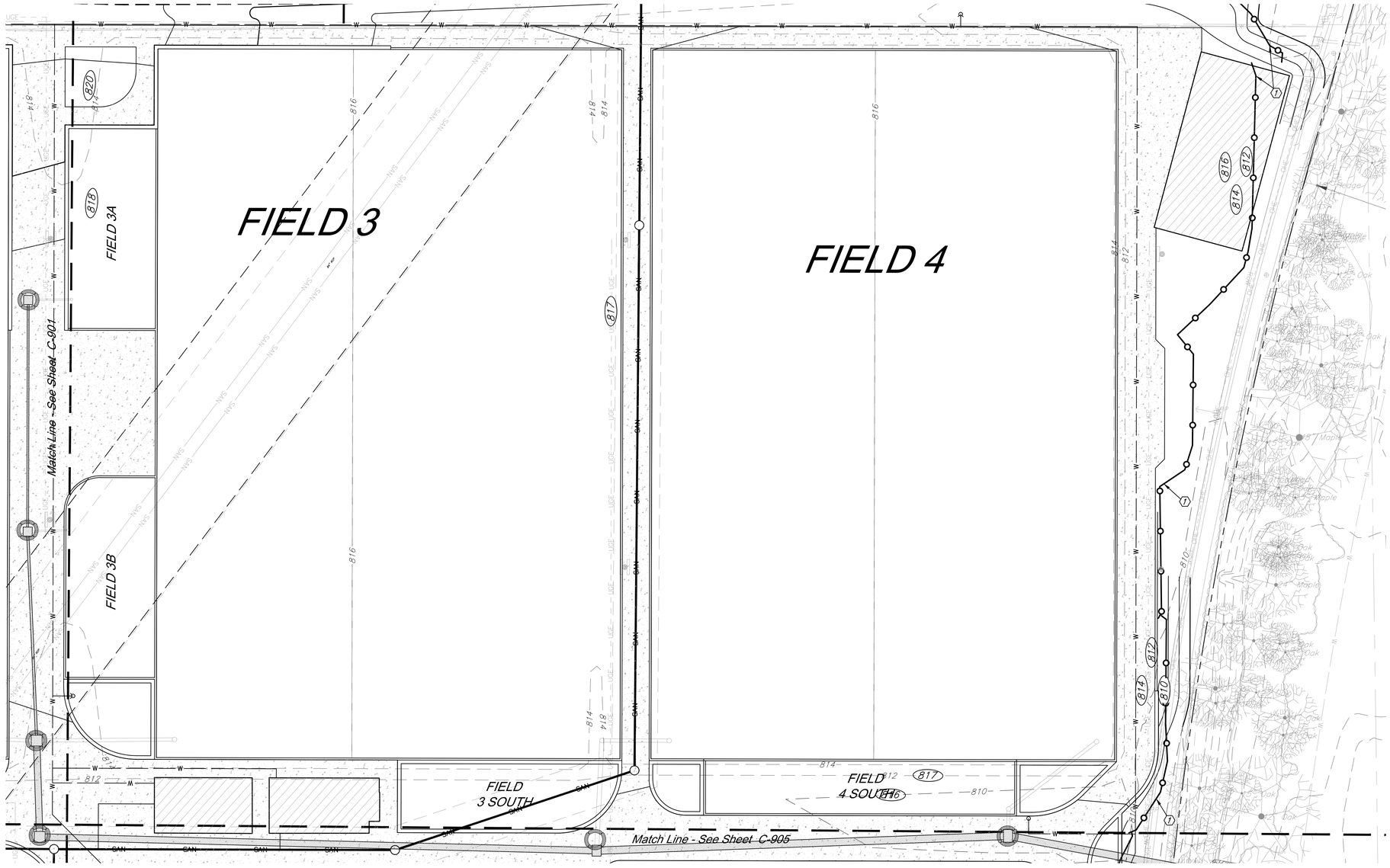
Erosion Control Plan

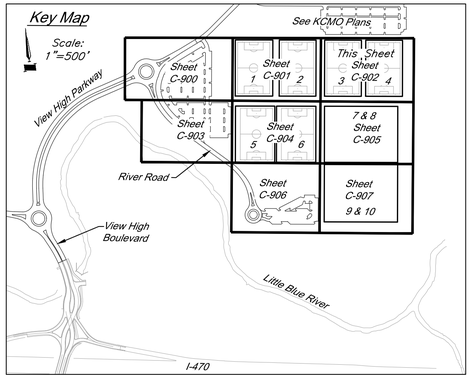
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-901

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4000.dwg -- Layout: C-902 Erosion Control Plan -- Tuesday, May 14, 2019, 3:16pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash-out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	8	Install Erosion Control Blanket	N/A	Install as shown on plans
	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Inlet Sediment Trap

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive.
EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Erosion Control Plan

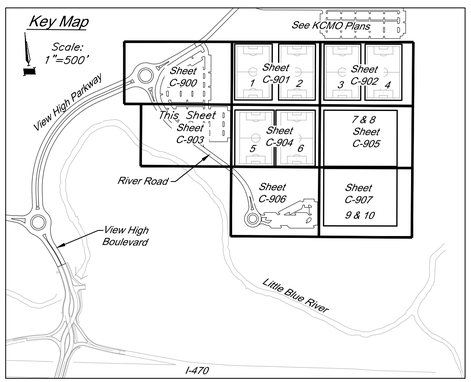
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-902

G:\12220\Civil 3D\Production Drawings\Construction Site Plans\12220C4000.dwg Layout: C-903 Erosion Control Plan -- Tuesday May 14, 2019, 3:17pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash-out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	8	Install Erosion Control Blanket	N/A	Install as shown on plans
	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Inlet Sediment Trap

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

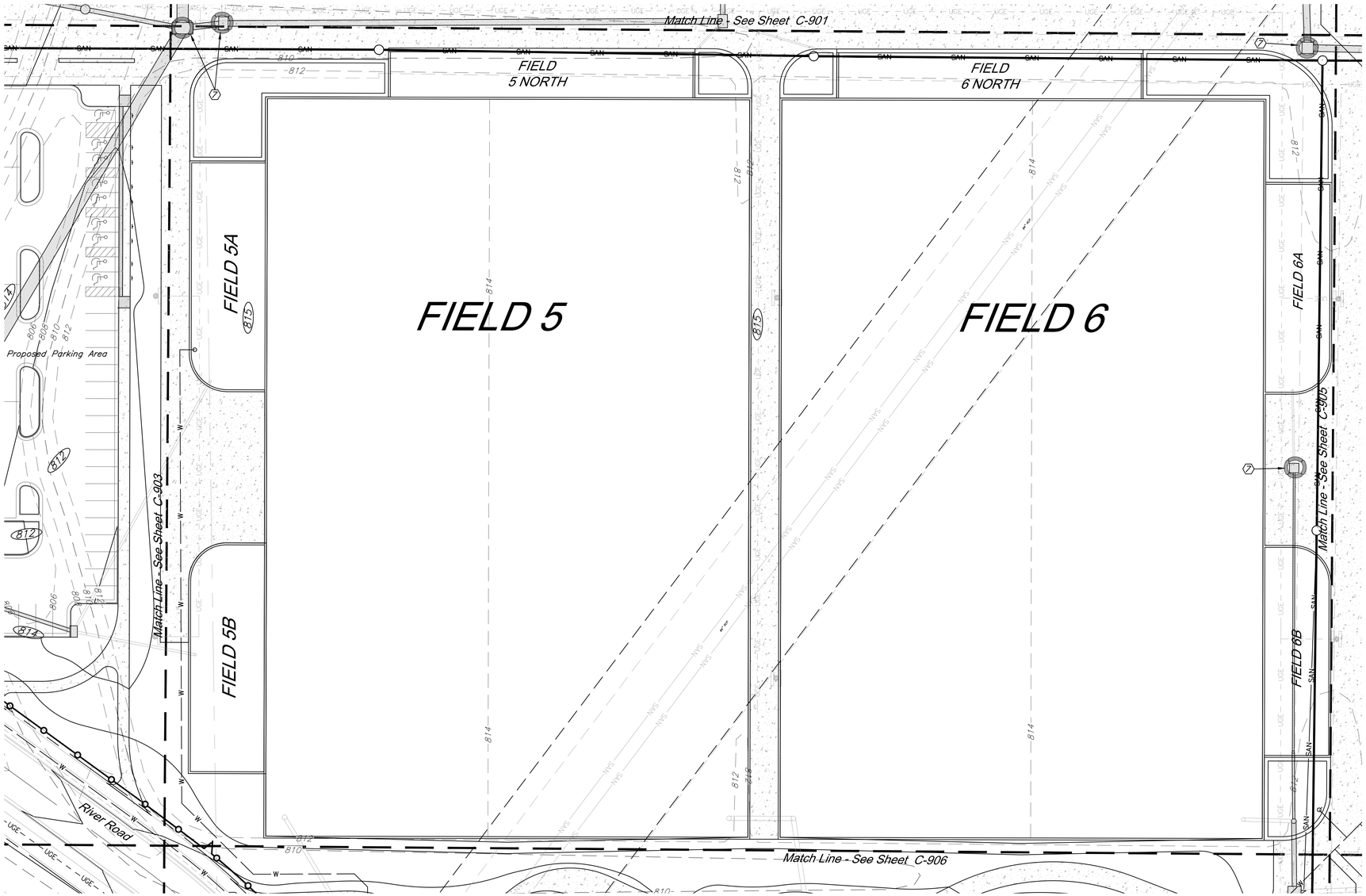
Erosion Control Plan

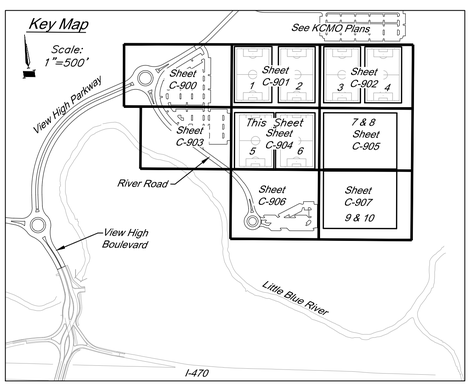
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-903

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4000.dwg Layout: C-904 Erosion Control Plan -- Tuesday May 14, 2019, 3:18pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash-out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	8	Install Erosion Control Blanket	N/A	Install as shown on plans
	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Inlet Sediment Trap

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

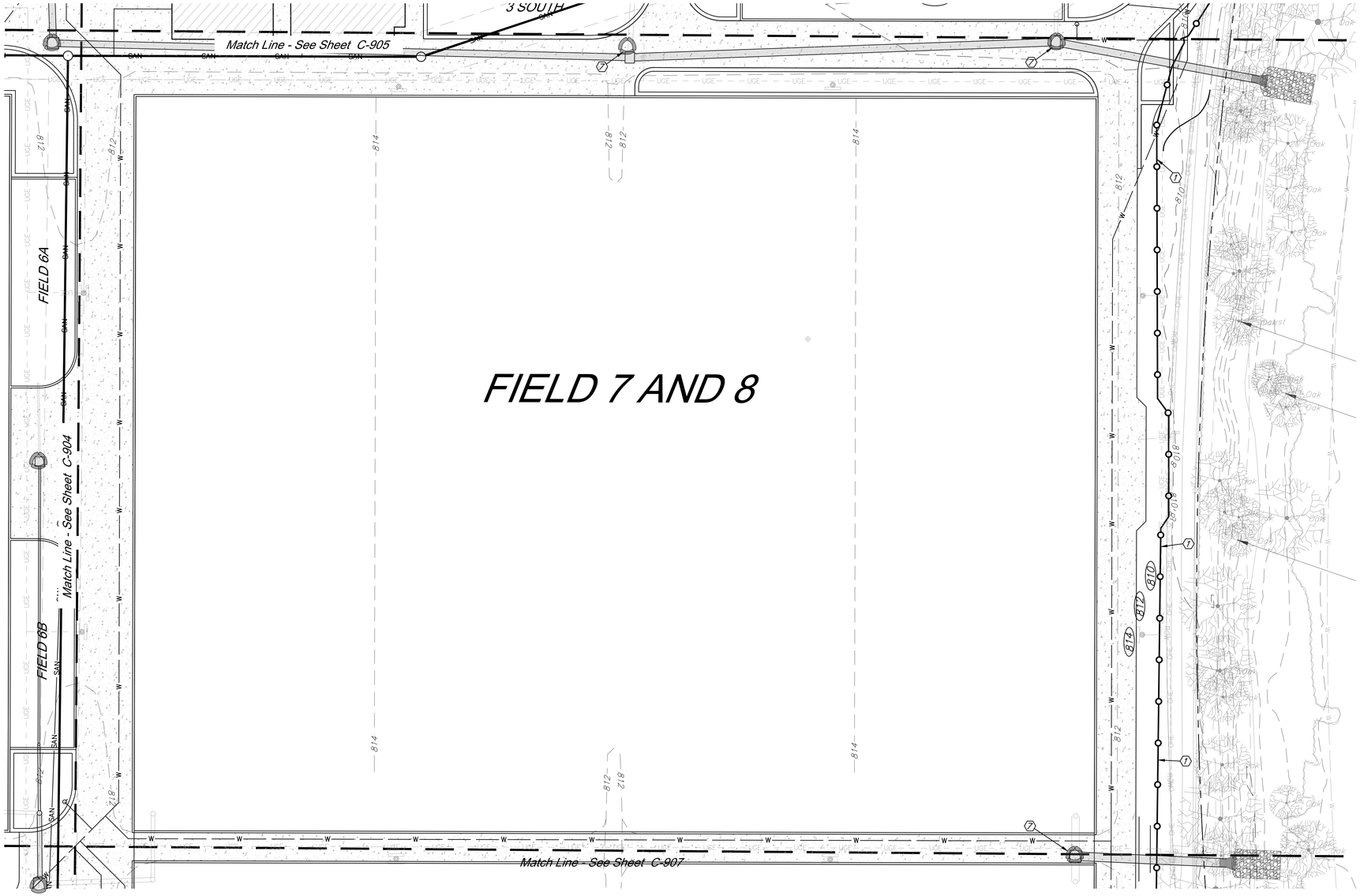
Erosion Control Plan

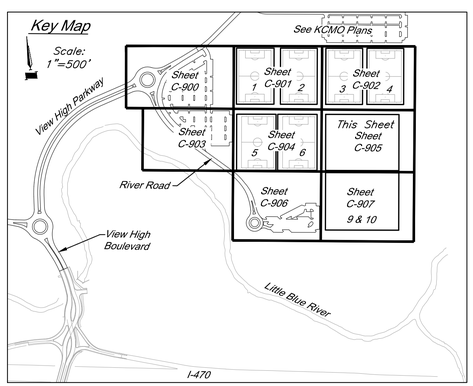
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-904

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4000.dwg Layout: C-905 Erosion Control Plan -- Tuesday, May 14, 2019, 3:19pm -- Architect 00212, Professional Engineer 0001.33, Professional Land Surveyor 000059
-- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THE PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash-out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	8	Install Erosion Control Blanket	N/A	Install as shown on plans
	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Inlet Sediment Trap

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Erosion Control Plan

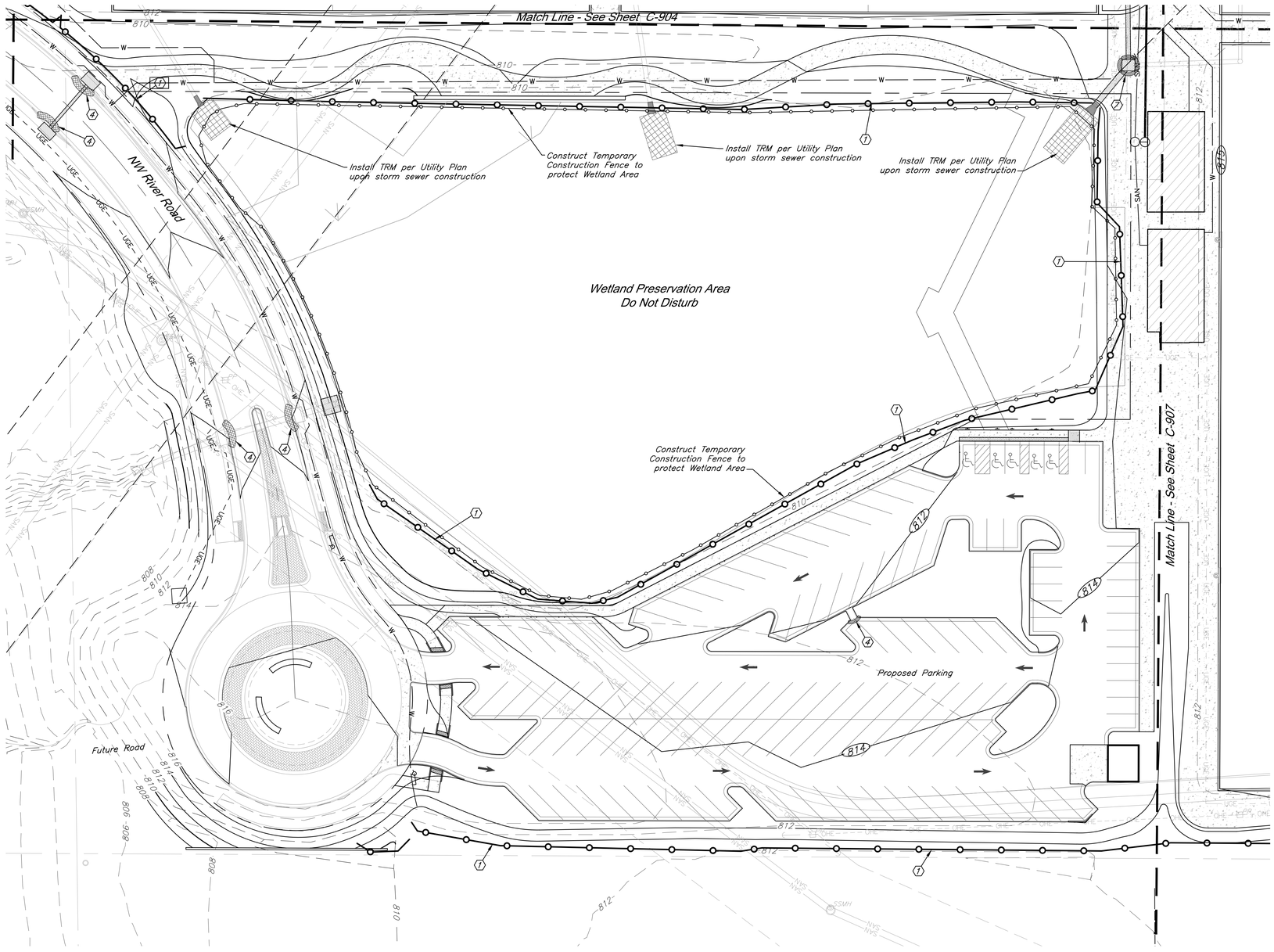
JOB NO: 1197 SCALE:

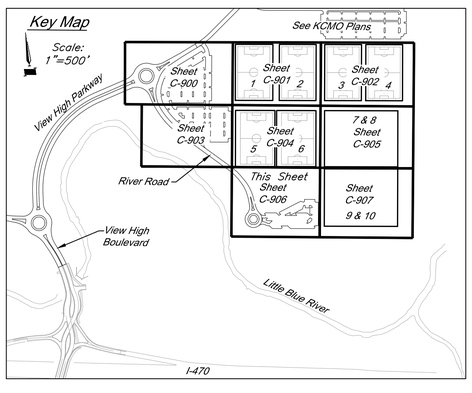
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-905

C:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720c4000.dwg Layout: C-906 Erosion Control Plan -- Tuesday, May 14, 2019, 3:20pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash-out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	8	Install Erosion Control Blanket	N/A	Install as shown on plans
	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Inlet Sediment Trap

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of I470 bridge spanning View High Drive.
EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

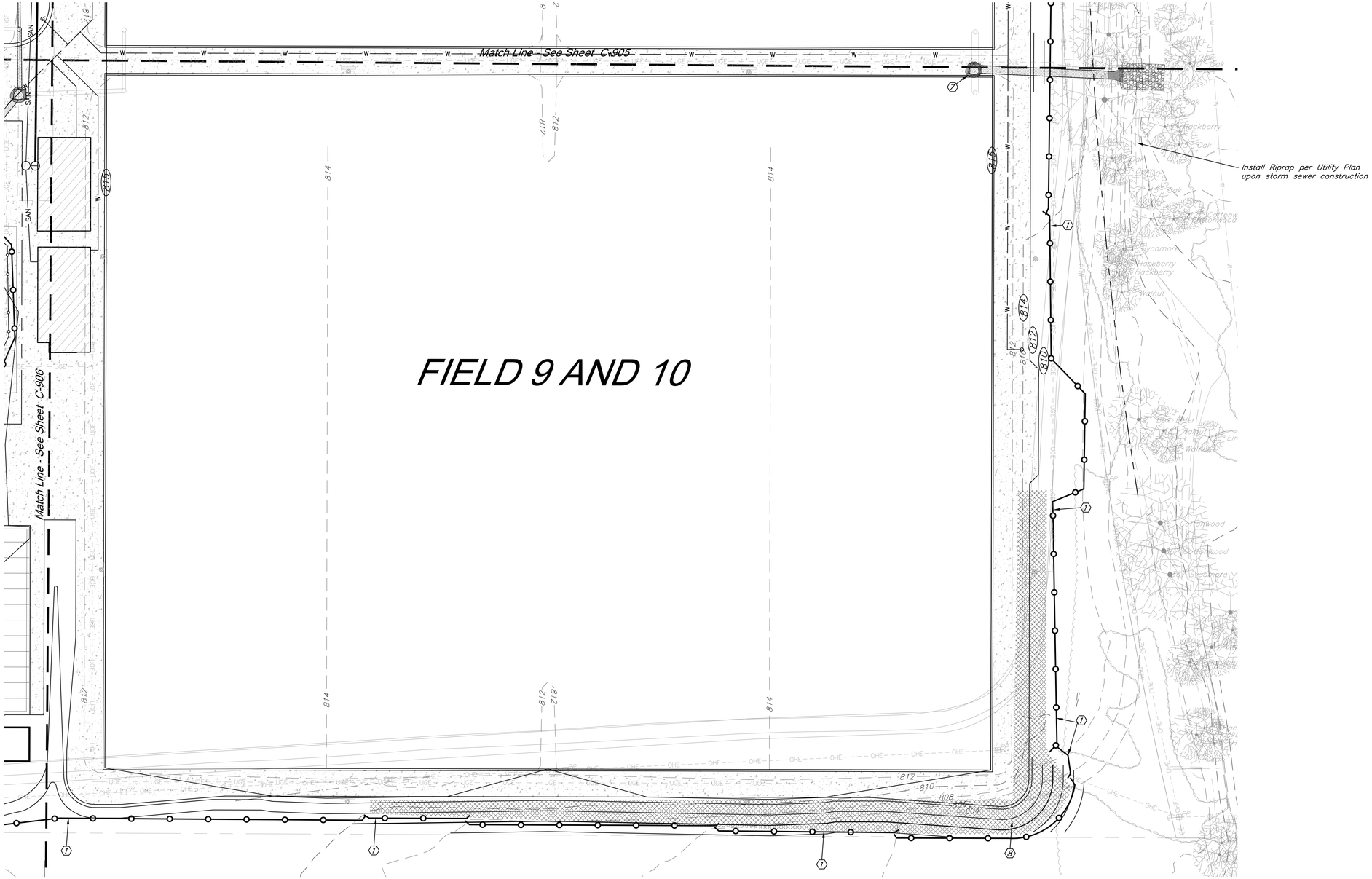
Erosion Control Plan

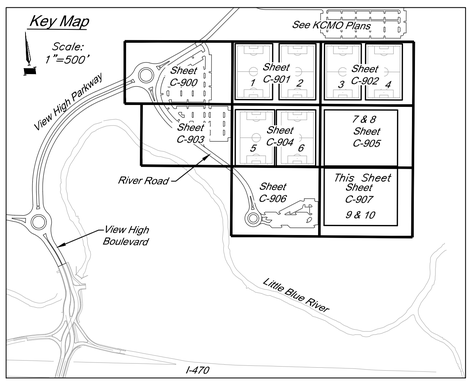
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-906

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4000.dwg Layout: C-907 Erosion Control Plan -- Tuesday, May 14, 2019, 3:21pm -- Copyright 2019, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





EROSION CONTROL STAGING CHART

Project Phase	Reference No.	Description	Remove After Phase:	Notes
1 – Place Erosion Control Prior to Land Disturbance	1	Install Perimeter Silt Fence	4	Install as shown on plans
	2	Construct Gravel Construction Entrance	4	Install as shown on plans
	3	Construct Concrete Wash–out	4	Install as shown on plans
	4	Install Adjacent Inlet Protection	4	Install as shown on plans
2 – After Stripping, Grubbing, and Mass Grading	5	Install Interior Silt Fence	4	Install as shown on plans
	6	Install Straw Wattles	4	Install as shown on plans
3 – After Storm Sewer Construction	7	Install Inlet Protection	4	Install as shown on plans
	8	Install Erosion Control Blanket	N/A	Install as shown on plans
4 – Final Grading, Paving, and Landscaping	9	Final Grading, Seeding, Sodding, and Landscaping of all disturbed areas	N/A	Interior erosion control measures and inlet protection may be removed once seed and sodded areas are established to cover 80% of the site.

Erosion Control Legend

- Straw Wattle
- Sediment Fence
- Erosion Control Blanket
- Inlet Sediment Trap

30' 0' 30' 60'

SCALE : 1 INCH = 30 FEET

PROJECT BENCHMARK:

BM #11 – Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive. EL=833.80

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Erosion Control Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-907

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1000 Erosion Control Notes -- Tuesday May 14, 2019, 3:21pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

EROSION AND SEDIMENT CONTROL NOTES

The layout of erosion control best management practices (BMPs) shown on the engineering plans is intended to control erosion and minimize, if not eliminate, the transport of sediment from the disturbed areas. The Contractor shall be responsible for the evaluation of existing surface drainage patterns and for making adjustments to the BMP locations to best control erosion and minimize, if not eliminate, the transport of sediment from the disturbed areas. The following are measures to achieve the control of erosion and sediment.

1. Stabilization Practices – Stabilization practices are very effective at preventing erosion by shielding the soil surface from the impact of rain, slowing the velocity of runoff, holding soils in place, and increasing infiltration of runoff and allowing the soil to absorb more rainfall.

   a. Temporary Seeding Stabilization – During acceptable growing periods (see Table 1 below); temporary seeding of annual vegetation with a straw mulch cover shall be used as a temporary cover until permanent vegetation is established. If there is a possibility that a vegetative cover will be required to control erosion for more than 1 year, then consider the addition of a perennial/permanent grass species as part of a seeding mixture.

Table 1. Temporary Seeding Dates and Minimum Application Rates

Seeding Dates	Temporary Seed Species	Minimum Application Rates (pure live seed lbs. per acre)	Straw Mulch (tons per acre)
Jan. 1 – Jan. 31	None	Not Applicable	2.5
Feb. 1 – May 31	Annual Ryegrass	120	1.5
June 1 – Aug.4	None	Not Applicable	2.5
Aug. 15 – Nov. 15	Cereal/Winter Rye	120	1.5
Nov. 16 – Dec. 31	None	Not Applicable	2.5

Seedbed Preparation – For broadcast seeding or drilling, loosen soil to depth of 3 inches. For no till drilling, loosen soil if it is compacted. Loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions. For establishment and long–term growth, apply a complete fertilizer at rates recommended by soil tests or as specified in plans and specifications. If soil pH is less than 6.0, apply lime according to soil tests. Incorporate necessary lime and fertilizer to a depth of 3 to 6 inches of soil.

Installation – For the best results use certified seed. Apply seed uniformly using a cyclone seeder, drop–type spreader, drill, cultipacker seeder or hydroseeder. When using a drill seeder, plant rye or other grains about 1 inch deep and plant grasses no more than ½ inch. A vegetative straw mulch cover shall be applied over the seed mixture to help germinate and establish plant cover, control weeds, and protect seed mixture against temperature extremes. Follow straw mulch preparation and application procedures described herein.

   b. Temporary Mulch Stabilization – During non–growing periods, a straw mulch cover shall be applied in unseeded areas to protect against erosion until temporary or permanent vegetation is established.

Site Preparation – Divert runoff water from areas above the site that will be mulched. Remove stumps, roots and other debris from the construction area. Grade area as needed to permit the use of equipment for seeding, mulching and maintenance. Shape area so that it is relatively smooth.

Application – Spread straw mulch uniformly over the area with a power blower, hydroseeder, or by hand. No more than 25% of the ground surface should be visible after spreading. Apply straw mulch at a rate of 1.5 tons per acre as a seed cover or 2.5 tons per acre as a stand alone cover. The straw should be dry, unchopped, unweathered; free of weed seeds and rot. In areas of steep slopes or high winds, or in critical areas such as swales, mulching may need to be secured to the ground with a binder, netting, or tacking.

   c. Permanent Seeding Stabilization – All disturbed areas shall be permanently seeded with a cool season grass mixture as specified in the Standards and Specifications of the City of Lee's Summit, Missouri..

Seedbed Preparation – loosen soil to depth of 3 inches. For no till drilling, loosen soil if it is compacted. Loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions. For establishment and long–term growth, apply a complete fertilizer at rates recommended by soil tests or as specified in plans and specifications. If soil pH is less than 6.0, apply lime according to soil tests. Incorporate necessary lime and fertilizer to a depth of 3 to 6 inches of soil.

Installation – For the best results use certified seed. Apply seed uniformly using a hydroseeder. A vegetative straw mulch cover shall be applied over the seed mixture to help germinate and establish plant cover, control weeds, and protect seed mixture against temperature extremes. Follow straw mulch preparation and application procedures described in the Standards and Specifications of the City of Lee's Summit, Missouri.

2. Structural Practices

   a. Silt Fence – A temporary sediment barrier consisting of a geotextile fabric shall be installed as shown on the attached engineering plans and details. Silt fencing shall be installed to maintain sediment onsite.

      Minimum Requirements:

      Location – Fence should be built on a nearly level grade and at least 10 feet from the toe of the slope to provide a broad shallow sediment pool. Install on the contour, where fence can intercept runoff as a sheet flow; not located crossing channels, waterways or other concentrated flow paths; not attached to existing trees.

      Spacing of Support Posts – 10 feet maximum for fence supported by wire; 6 feet maximum for high strength fabric without supportive wire backing. Support posts should be driven into the ground a minimum of 10 inches deep.

      Trench – Bottom 1 foot of fence must be buried minimum of 4 inches deep.

   b. Inlet Protection – When installation of the storm drainage system is complete, gravel curb inlet sediment traps will be placed at the drainage system inlets. Construction shall be in accordance with attached engineering plans and details.

   c. Stockpiles – The toe of stockpiles shall be placed a minimum of 10 feet from erosion control measures. If stockpiles are to remain for more than 14 days, they shall be temporarily stabilized with vegetative mulch and temporary seeding.

3. Maintenance – The contractor shall repair all erosion control measures or re–seed areas that are disturbed or damaged as a result of weather or other situations, within 2 days after the occurrence. This will include all areas bare of vegetation.

EROSION CONTROL GENERAL NOTES

1. The Contractor is responsible for erosion control during construction and until the Owner and City accepts the work as complete. The erosion control measures shown on this plan are a typical minimum installation. The Contractor shall be responsible for adjusting or adding to these measures as necessary during the phasing of the construction to assure adequate control.

2. Clearing and grubbing within 50' of a defined drainage course should be avoided when possible. Where changes to a defined drainage course occur, work should be delayed until all materials and equipment necessary to protect and complete the drainage change are on site. Changes shall be completed as quickly as possible once the work has been initiated. The area impacted by the construction activities shall be revegetated or protected from erosion as soon as possible, areas within 50' of a defined drainage ways should be recontoured as needed or otherwise protected within five (5) working days after grading has ceased.

3. Where soil disturbing activities cease in an area for more than 14 days, the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control measures. If the slope of the area is greater than 3:1 or if the slope is greater than 3% and greater than 150 feet in length, then the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control measures if activities cease for more than seven (7) days.

4. Existing vegetation shall be preserved to the extent and where practical. In no case shall disturbed areas remain without vegetative ground cover for a period in excess of 60 days.

5. Additional site management practices which shall be adhered to during the construction process shall include:

   –Solid and hazardous waste management including providing trash containers and regular site clean up for proper disposal of solid waste such as building and construction material, product/material shipping waste, food containers and cups, and providing containers for the proper disposal of waste paints solvents, and cleaning compounds.

   –Provisions of portable toilets for proper disposal of sanitary sewage.

   –Storage of construction materials away from drainage courses and low areas.

   –Installation of containment berms and use of drip pans at petroleum product and liquid storage tanks and containers.

6. All disturbed areas shall be seeded, fertilized and mulched, or sodded, in accordance with the Standards and Specifications adopted by the City of Lee's Summit, Missouri and good engineering practices. This shall be completed within fourteen (14) days after completing the work, in any area. If this is outside of the seeding period, silt barriers or other similarly effective measures shall be provided until such time that the areas can be seeded.

7. All erosion control measures, temporary or permanent, require maintenance to preserve their effectiveness. All erosion control devices shall be inspected immediately after each heavy rainstorm and at least daily during prolonged rainfall. Any required repairs should be made immediately. All costs associated with the repair work including related incidentals will be the contractor's responsibility and shall be included in the Contractor's bid for the proposed work. Only after the project is complete and accepted can the erosion control be removed.

8. Seeding shall be done before the proposed seedbed becomes eroded, crusted over, or dried out and shall not be done when the ground is frozen, or covered with snow. The seed shall comply with requirements of the Missouri Seed Law and the Federal Seed Act. Also, it shall contain no seed of any plant on the Federal Noxious Weed List. Other weed seed shall not exceed one percent by weight of mix.

9. During the dates Dec. 15 through May 30 ALL lime, fertilizer, seed, and mulch shall be applied to finished slopes of disturbed areas. During the months of June, July, October, and November 1st through December 15th, lime, fertilizer, seed, and mulch shall be applied at the following rates:

   Lime – 100% of the specified quantity
   Fertilizer – 75% of the specified quantity
   Seed – 50% of the specified quantity
   Mulch – 100% of the specified quantity

10. Mulch shall be Vegetative type, cereal straw form stalks of oats, rye, or barley, or approved equal. The straw shall be free of prohibited weed seed and relatively free of all other noxious and undesirable seed. Apply straw mulch at a rate of 1.5 tons per acre as a seed cover or 2.5 tons per acre as a stand alone cover. Mulch shall be embedded by a mulch anchoring tool or disk type roller having flat serrated disks spaced not more than 10 inches apart and cleaning scrapers shall be provided.

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoer Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Erosion Control Notes

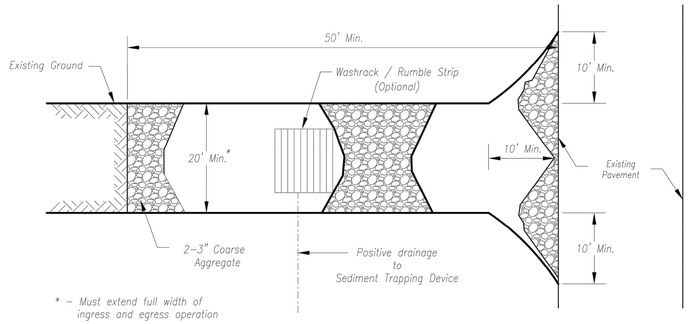
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY: GBA

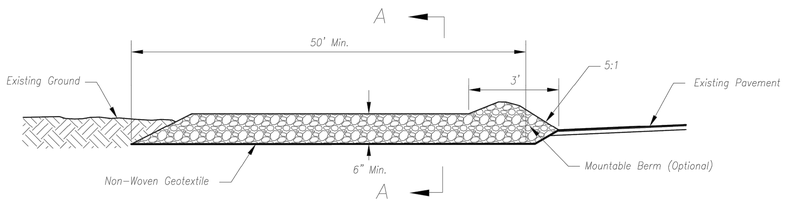
SHEET NO:

C-1000

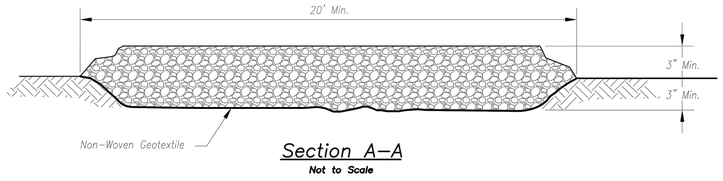
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1001 Erosion Control Details -- Tuesday, May 14, 2019, 3:21pm -- Architect 00212, Professional Engineer 00133, Professional Land Surveyor 00059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



Plan View
Not to Scale



Side Elevation
Not to Scale



Section A–A
Not to Scale

Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6– to 8–inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate as needed.

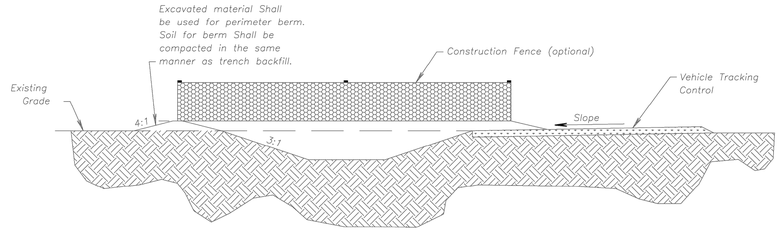
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one–piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water–tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

AMERICAN PUBLIC WORKS ASSOCIATION
Kansas City Metro Chapter
KANSAS CITY METRO CHAPTER

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING NUMBER ESC-01
ADOPTED: 10/24/2016

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

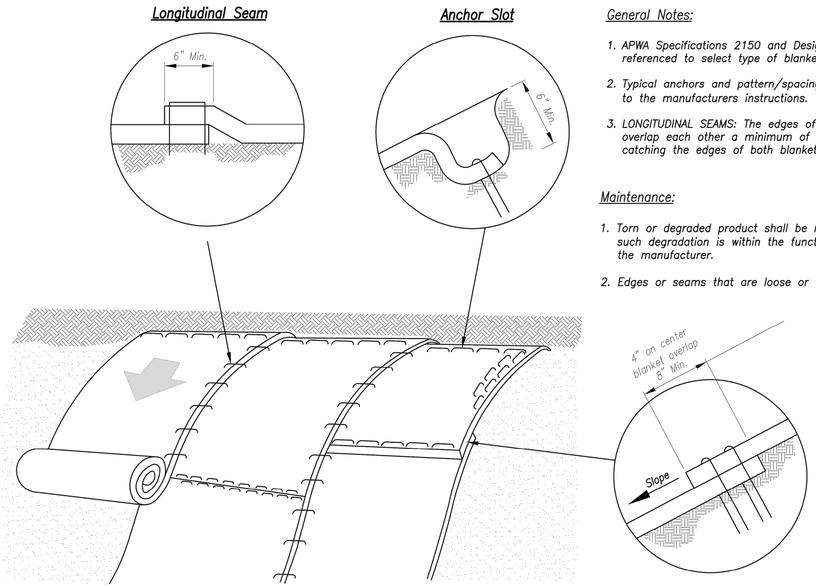
DRAWING TITLE:
Erosion Control Details

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:
C-1001

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1002 Erosion Control Details -- Tuesday, May 14, 2019, 3:21pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059

Installation on Slopes



General Notes:

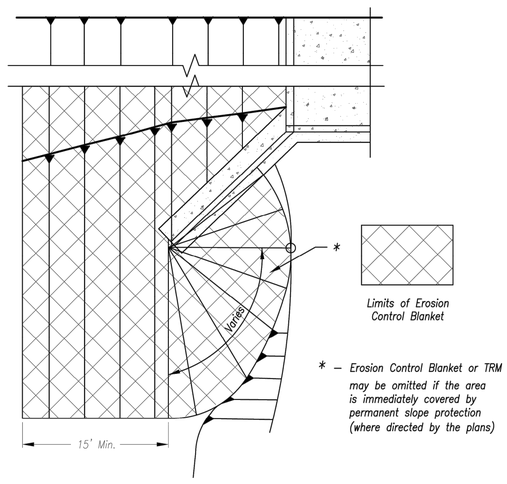
1. *APWA Specifications 2150 and Design Guidance 5100 shall be referenced to select type of blanket or mat to be used.*
2. *Typical anchors and pattern/spacing shall be installed according to the manufacturers instructions.*
3. *LONGITUDINAL SEAMS: The edges of the blanket or mat should overlap each other a minimum of 6 inches, with anchors catching the edges of both blankets.*

Maintenance:

1. *Torn or degraded product shall be repaired or replaced, unless such degradation is within the functional longevity specified by the manufacturer.*
2. *Edges or seams that are loose or frayed shall be secured.*

Partial Box Culvert Plan

Not to Scale



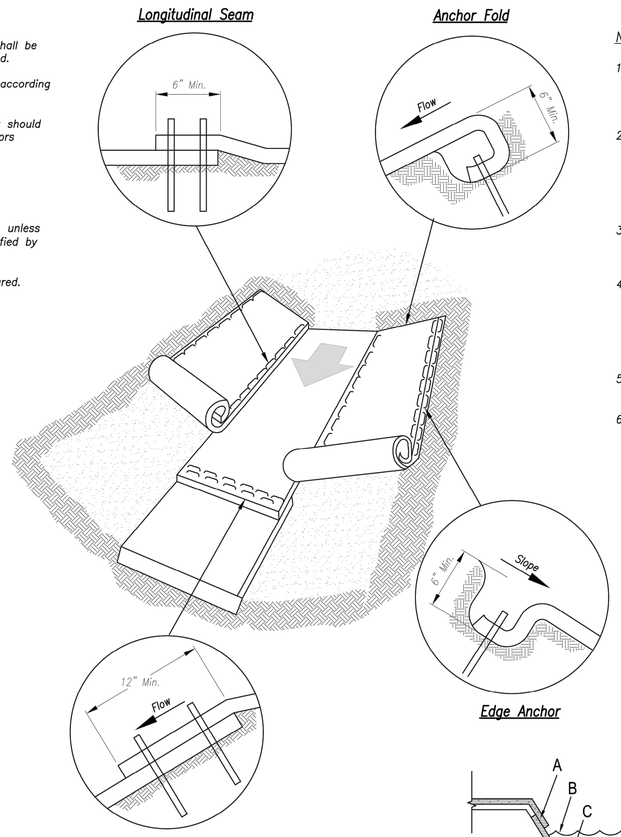
* – *Erosion Control Blanket or TRM may be omitted if the area is immediately covered by permanent slope protection (where directed by the plans)*

Notes for Installation on Slopes:

1. *Erosion Control Blankets and TRMs shall be laid in the direction of the slope. In order for blanket to be in contact with the soil, lay blanket loosely, avoiding stretching.*
2. *ANCHOR SLOTS: The top of the blanket should be "slotted in" at the top of the slope and anchored in place with anchors 6 inches apart. The slots should be 6 inches wide x 6 inches deep with the blanket anchored in the bottom of the slot, then backfilled, tamped and seeded.*
3. *SPLICE SEAM: When splices are necessary, overlap end a minimum of 8 inches in direction of water flow. Stagger splice seams.*
4. *TERMINAL FOLD: The bottom edge of the blanket shall be turned under a minimum of 4 inches, then anchored in place with anchors 9 inches apart.*

Installation Around Culvert Slope

Installation in Channels



Notes for Installation in Channels:

1. *Erosion Control Blankets and TRMs shall be laid in the direction of the flow, with the first course at the centerline of channel, where applicable. In order for the mat to be in contact with the soil, lay the mat loosely, avoiding stretching.*
2. *ANCHOR FOLD: The top of the mat should be folded under, buried and secured with wood or other approved anchors placed 6 inches apart. The top edge of the mat should be buried in a slot 6 inches wide x 6 inches deep, anchored in the bottom of the slot, backfilled, and the mat folded over the top as shown in detail.*
3. *SPLICE SEAM: When splices are necessary, overlap end a minimum of 12 inches in direction of water flow. Stagger splice seams.*
4. *CHECK SLOTS: Establish check slots transverse to slope every 30 feet. The slots should be 6 inches wide x 6 inches deep. The mat shall be cut to a length 12 inches beyond the slot. The top of the downstream mat shall be slotted in, secured and buried similar to the edge anchor fold. The upstream mat shall then cover the slot and be anchored as shown.*
5. *EDGE ANCHORS: Lay outside edge of mat into trench at top of the slope and anchor.*
6. *TERMINUS: The bottom edge of the mat shall be anchored.*

Critical Points:

A – *Overlaps and seams;*

B – *Projected water line;*

C – *Channel bottom / side slope vertices;*

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

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

EROSION CONTROL BLANKETS AND TURF REINFORMENT MATS

STANDARD DRAWING NUMBER ESC-02

ADOPTED: 10/24/2016

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

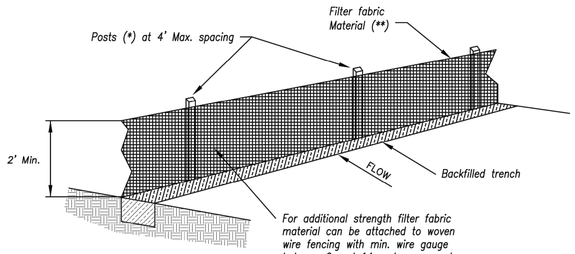
Erosion Control Details

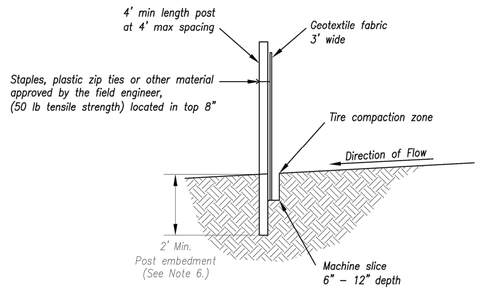
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-1002

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1003 Erosion Control Details -- Tuesday, May 14, 2019, 3:21pm -- Architect 00212, Professional Engineer 00133, Professional Land Surveyor 00059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.





(*) POSTS

- MIN. LENGTH 4'
- HARDWOOD 1 3/16" x 1 3/16"
- NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
- STEEL 1.33 LB/FT

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

SILT FENCE DETAILS

Not to Scale

Notes:

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

Maintenance:

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

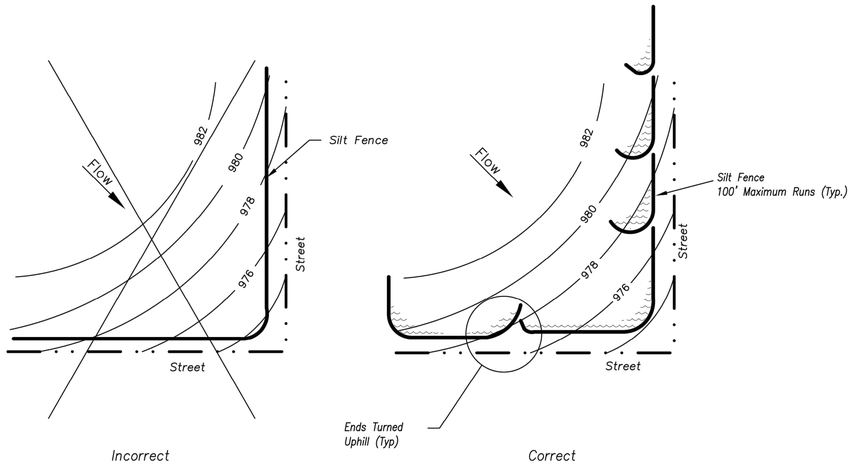
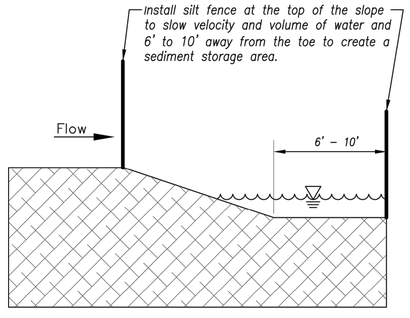
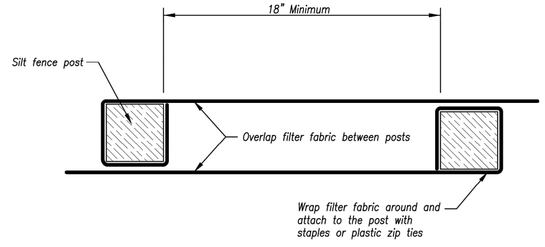


Figure A

SILT FENCE LAYOUT

Not to Scale





JOINING FENCE SECTIONS

Not to Scale

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

AMERICAN PUBLIC WORKS ASSOCIATION		
Kansas City Metro Chapter APWA American Public Works Association	KANSAS CITY METRO CHAPTER	
SILT FENCE	STANDARD DRAWING NUMBER ESC-03	
	ADOPTED: 10/24/2016	

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

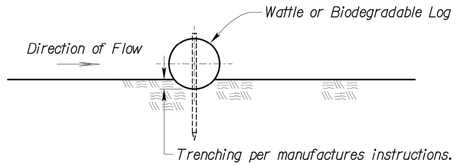
DRAWING TITLE:

Erosion Control Details

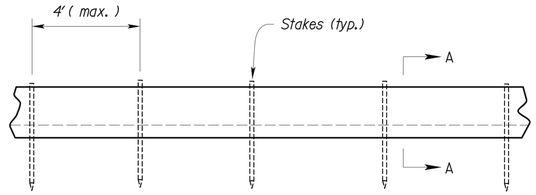
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:

C-1003



Section A–A



Typical Elevation

Notes for Wattles and Biodegradable Log Slope Protection:

1. *The Slope barriers shall be placed along contour lines, with a short section turned upgrade at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered.*
2. *Install wattles and biodegradable logs per manufacturer's instructions.*
3. *Spacing of stakes per manufacturer's instructions with 4' max. spacing. Length of stakes shall be a minimum of 2 times the diameter of the log with minimum of 24".*

WATTLES AND BIODEGRADABLE LOG

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

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

WATTLES/BIODEGRADABLE LOG AND MULCH/COMPOST FILTER BERM

STANDARD DRAWING NUMBER ESC-04

ADOPTED: 10/24/2016

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

Erosion Control Details

JOB NO: 1197 SCALE:

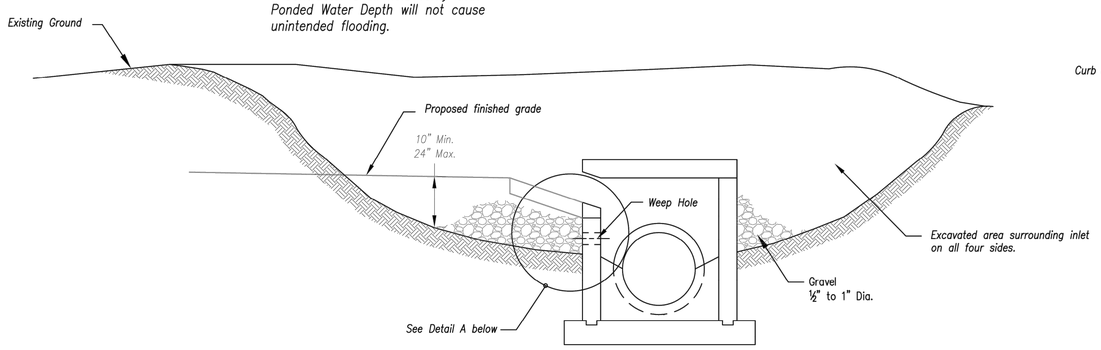
DATE: 05.15.2019 DRAWN BY: GBA

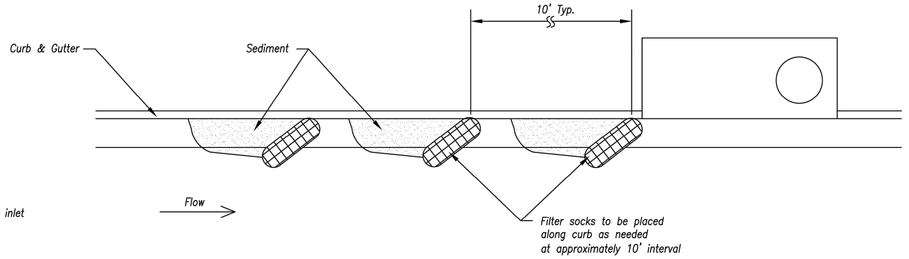
SHEET NO:

C-1004

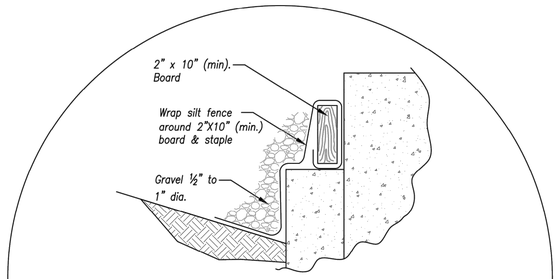
G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1004 Erosion Control Details -- Tuesday, May 14, 2019, 3:21pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1005 Erosion Control Details -- Tuesday, May 14, 2019, 3:21pm -- Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.
Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059





On Grade Curb Inlet Protection



Detail A

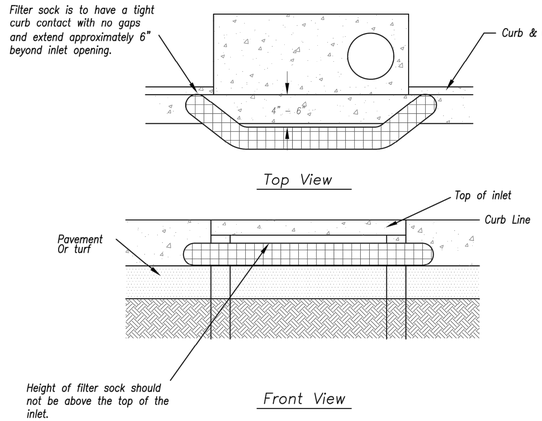
EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

Notes:

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

Maintenance:

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



Sump Inlet Sediment Filter

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

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

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

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

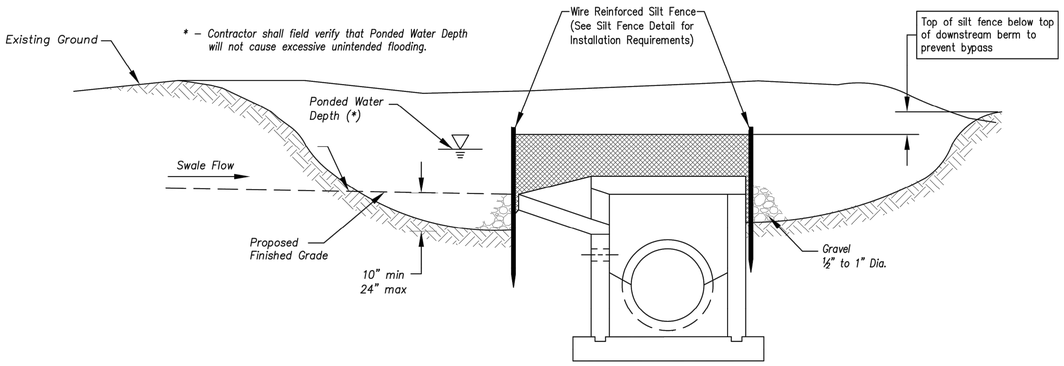
PROFESSIONAL SEAL:

DRAWING TITLE:
Erosion Control Details

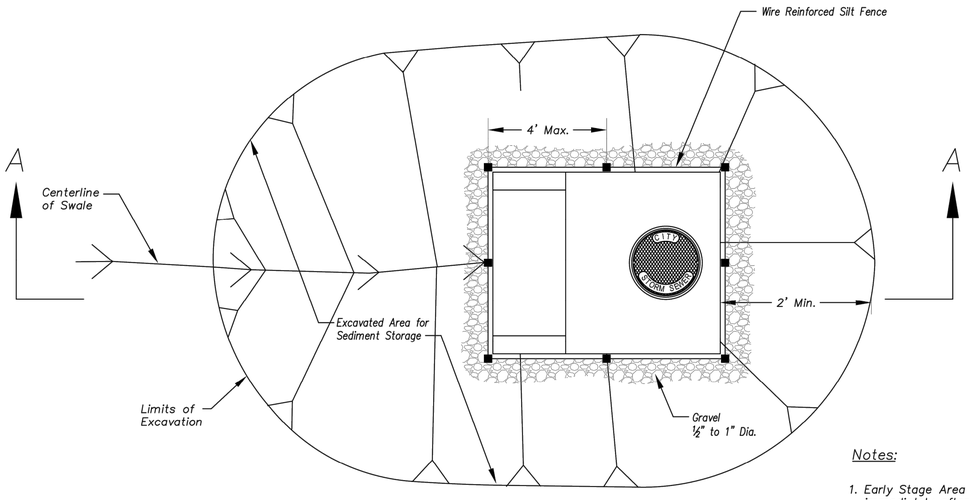
JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:
C-1005

G:\12720\Civil 3D\Production Drawings\Construction Site Plans\12720C4600.dwg Layout: C-1006 Erosion Control Details -- Tuesday, May 14, 2019, 3:22pm -- Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
Copyright 2019, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THE PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL, RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

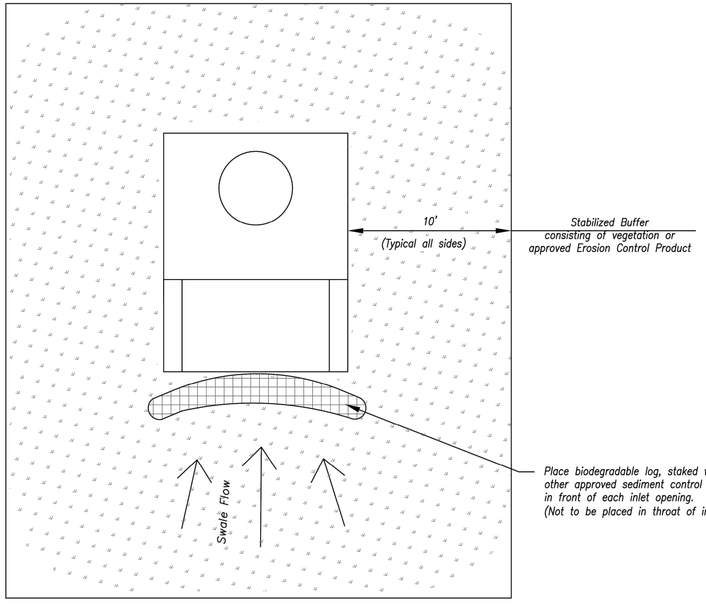


Section A–A
Not to Scale

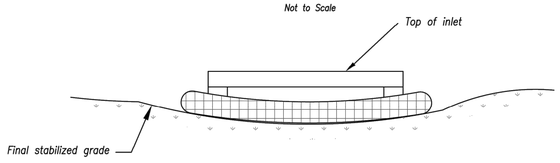


Plan
Not to Scale

EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)



Plan
Not to Scale



Front View

LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

Notes:

1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.

Maintenance:

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

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

AMERICAN PUBLIC WORKS ASSOCIATION
Kansas City Metro Chapter APWA American Public Works Association
KANSAS CITY METRO CHAPTER

AREA INLET AND JUNCTION BOX PROTECTION

STANDARD DRAWING NUMBER ESC-07
ADOPTED: 10/24/2016

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

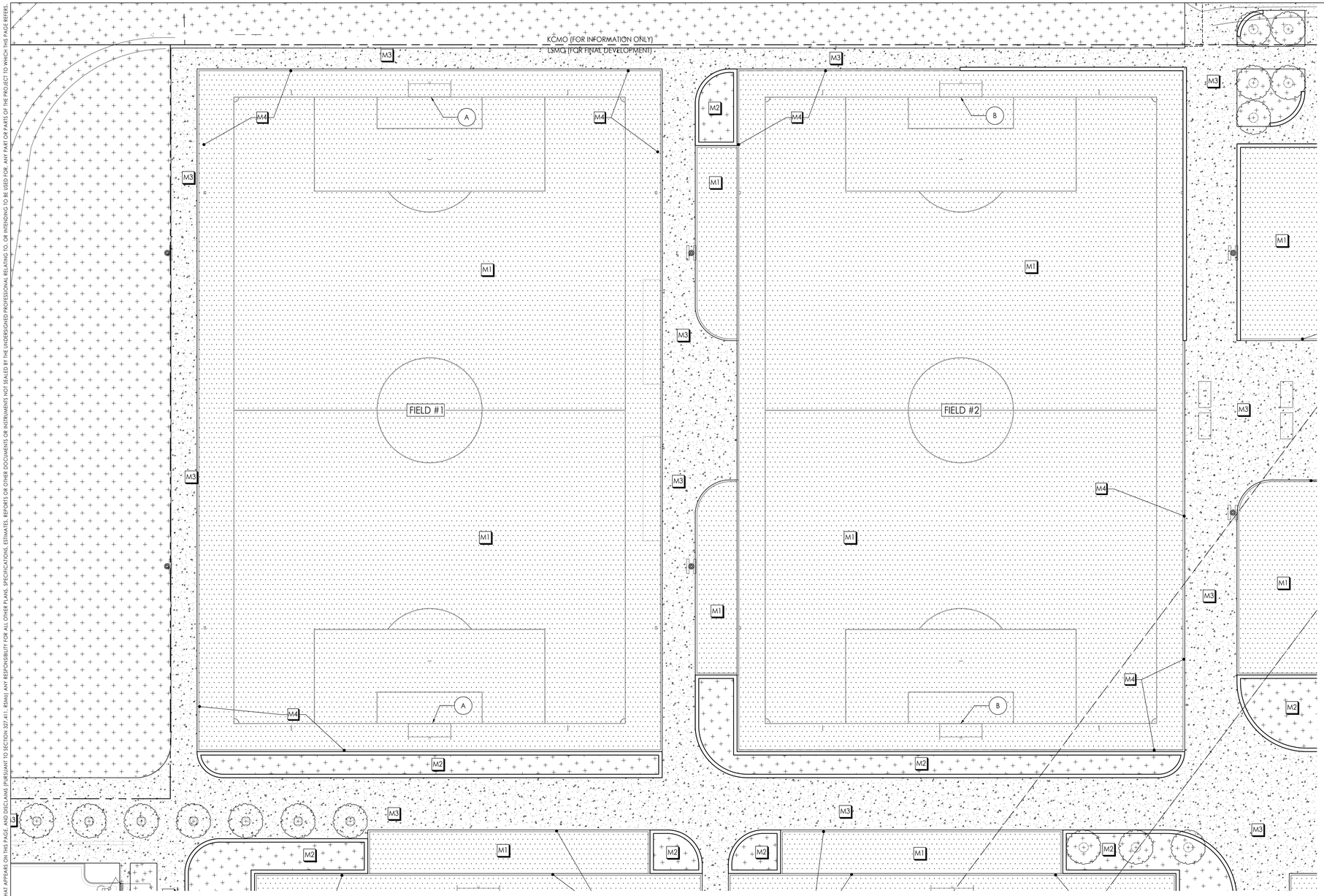
PROFESSIONAL SEAL:

DRAWING TITLE:
Erosion Control Details

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: GBA

SHEET NO:
C-1006

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



1 FIELD 1 AND 2 MATERIALS PLAN

Scale: 1" = 30'

30 15 0 30 90

SCALE: 1"=30'

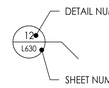
MATERIALS LEGEND

SYMBOL	DESCRIPTION	DETAIL REFERENCE
M1	ARTIFICIAL TURF SURFACE (BY OTHERS) CONSTRUCT ALL BASE CONDITIONS UNDER SYNTHETIC TURF	
M2	PLANTING AREA (REFER TO LANDSCAPE SHEETS L-500-L510)	
M3	CONCRETE WALK (RE: CIVIL DWGS)	
M4	FIELD PERIMETER EDGE	6 / PF-801

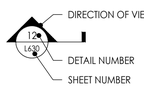
EQUIPMENT SCHEDULE

KEY	DESCRIPTION	DETAIL REFERENCE
A	SOCCER GOAL	RE: SPEC #116500

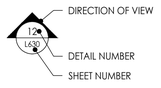
DETAIL / ENLARGEMENT CALLOUT



SECTION CALLOUT



ELEVATION CALLOUT



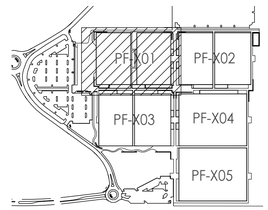
MATERIAL / CONDITION CALLOUT



MATERIALS AND EQUIPMENT NOTES

1. THE MATERIALS, EQUIPMENT, FEATURES AND CONDITIONS ILLUSTRATED ON THIS PLAN ARE ASPECTS OF THE WORK THAT THE CONTRACTOR SHALL CONSTRUCT.
   - 1.1. MATERIALS IDENTIFIED BY HATCHES ARE TO THE APPROXIMATE LIMITS. DO NOT SCALE PLANS; REFER TO DETAILS FOR THE LIMITS OF THE MATERIAL AND THE EDGE ADJACENCIES PROVIDED BY OTHERS OR CONSTRUCTED BY THE TRACK AND FIELD CONTRACTOR
   - 1.2. EQUIPMENT IDENTIFIED BY KEY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. REFER TO SPECS AND REFERENCED DETAILS FOR ADDITIONAL INFORMATION.
   - 1.3. EDGE CONDITIONS IDENTIFIED BY KEY NUMBER PROVIDE GUIDANCE ON THE CONSTRUCTED CONDITION BETWEEN DIFFERING MATERIALS. REFER TO THE IDENTIFIED DETAIL FOR ADDITIONAL INFORMATION.
2. OTHER SCOPES OF WORK DIRECTLY RELATED TO THESE MATERIALS AND CONDITIONS INCLUDE SUBSURFACE DRAINAGE, SUB- AND SURFACE GRADING, FENCING AND UTILITIES. REFER TO OTHER PF-SERIES DRAWINGS THAT ILLUSTRATE THESE SCOPES OF WORK.

KEYPLAN



CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:



DRAWING TITLE:

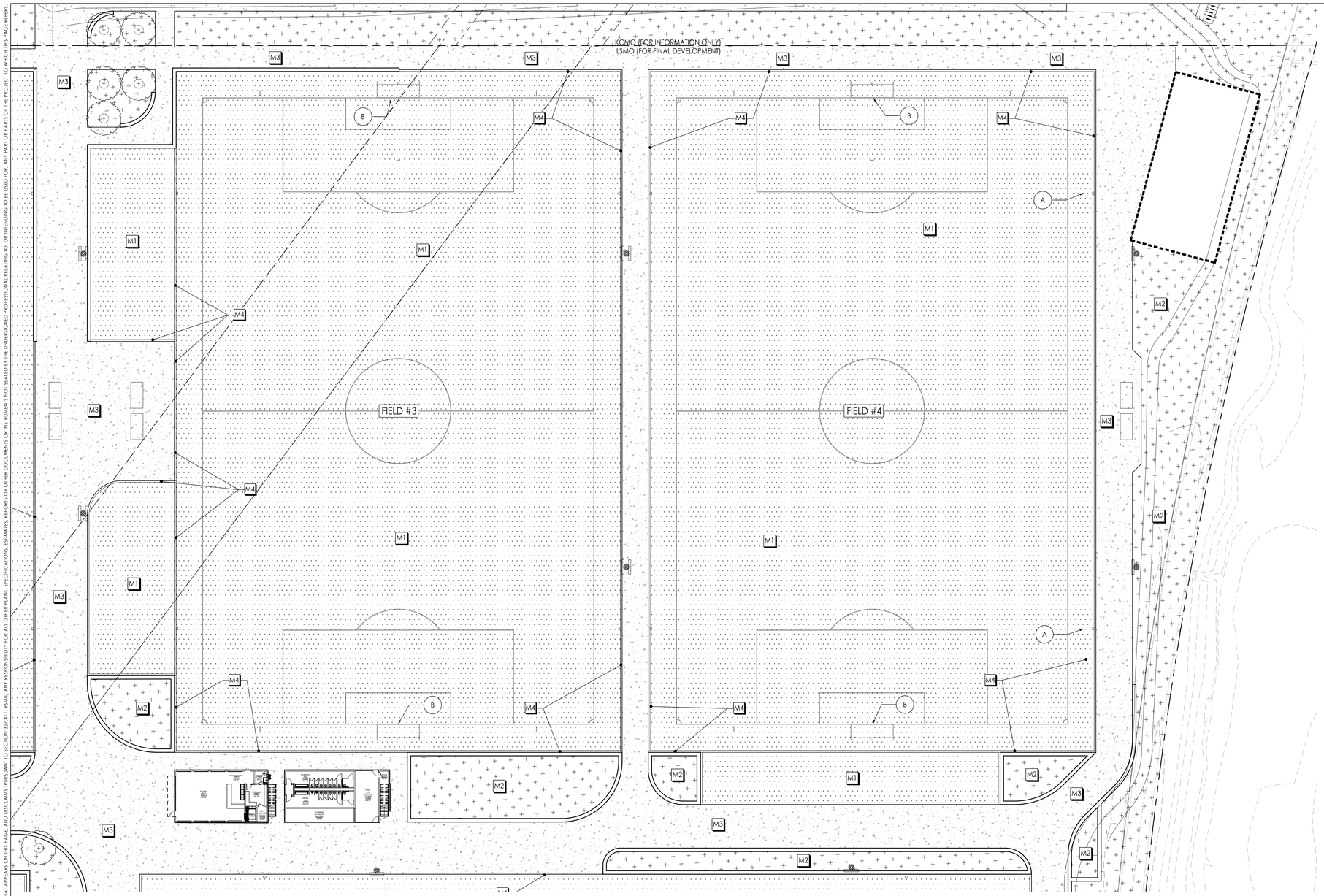
Field 1 & 2
Material & Details
Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:

PF-101

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



1 FIELD 3 AND 4 MATERIALS PLAN

Scale: 1" = 30'

30 15 0 30 90

SCALE: 1"=30'

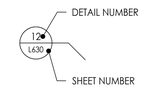
MATERIALS LEGEND

SYMBOL	DESCRIPTION	DETAIL REFERENCE
M1	ARTIFICIAL TURF SURFACE (BY OTHERS) CONSTRUCT ALL BASE CONDITIONS UNDER SYNTHETIC TURF	
M2	PLANTING AREA (REFER TO LANDSCAPE SHEETS L-500-L510)	
M3	CONCRETE WALK (RE: CIVIL DWGS)	
M4	FIELD PERIMETER EDGE	6 / PF-801

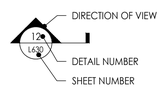
EQUIPMENT SCHEDULE

KEY	DESCRIPTION	DETAIL REFERENCE
A	SOCCER GOAL	RE: SPEC #116500

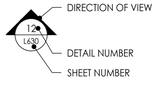
DETAIL / ENLARGEMENT CALLOUT



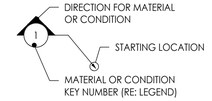
SECTION CALLOUT



ELEVATION CALLOUT



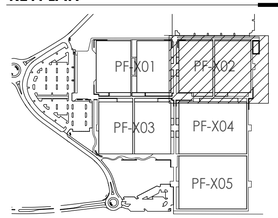
MATERIAL / CONDITION CALLOUT



MATERIALS AND EQUIPMENT NOTES

1. THE MATERIALS, EQUIPMENT, FEATURES AND CONDITIONS ILLUSTRATED ON THIS PLAN ARE ASPECTS OF THE WORK THAT THE CONTRACTOR SHALL CONSTRUCT.
   - 1.1. MATERIALS IDENTIFIED BY HATCHES ARE TO THE APPROXIMATE LIMITS. DO NOT SCALE PLANS; REFER TO DETAILS FOR THE LIMITS OF THE MATERIAL AND THE EDGE ADJACENCIES PROVIDED BY OTHERS OR CONSTRUCTED BY THE TRACK AND FIELD CONTRACTOR
   - 1.2. EQUIPMENT IDENTIFIED BY KEY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. REFER TO SPECS AND REFERENCED DETAILS FOR ADDITIONAL INFORMATION.
   - 1.3. EDGE CONDITIONS IDENTIFIED BY KEY NUMBER PROVIDE GUIDANCE ON THE CONSTRUCTED CONDITION BETWEEN DIFFERING MATERIALS. REFER TO THE IDENTIFIED DETAIL FOR ADDITIONAL INFORMATION.
2. OTHER SCOPES OF WORK DIRECTLY RELATED TO THESE MATERIALS AND CONDITIONS INCLUDE SUBSURFACE DRAINAGE, SUB- AND SURFACE GRADING, FENCING AND UTILITIES. REFER TO OTHER PF-SERIES DRAWINGS THAT ILLUSTRATE THESE SCOPES OF WORK.

KEYPLAN



CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

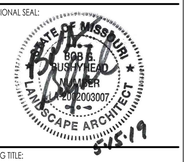
PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:



DRAWING TITLE:

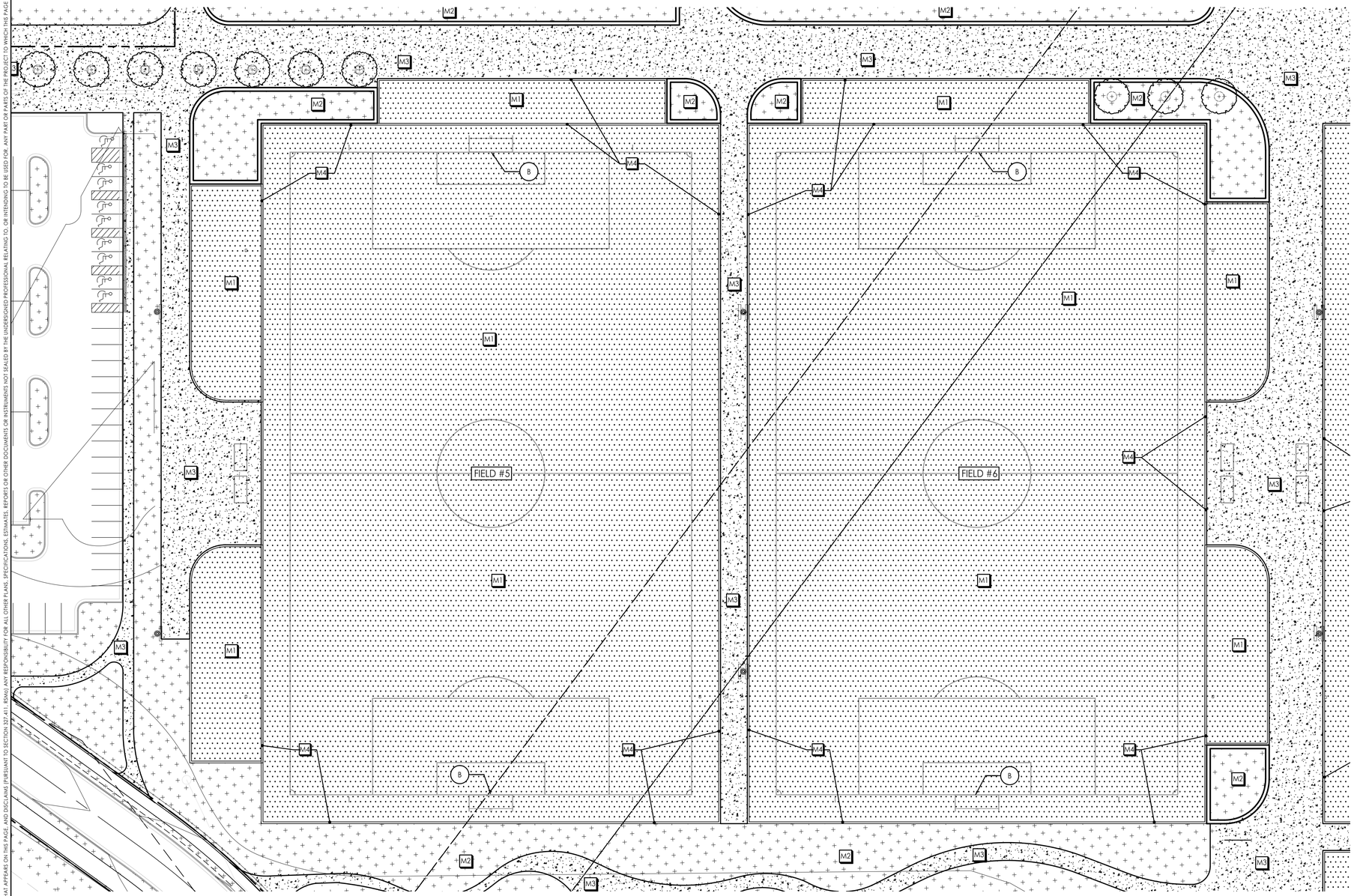
Field 3 & 4 Material & Details Plan

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY:

SHEET NO:

PF-102



1 FIELD 5 AND 6 MATERIALS PLAN

Scale: 1" = 30'

30 15 0 30 90

SCALE: 1"=30'

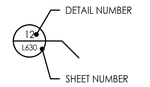
MATERIALS LEGEND

SYMBOL	DESCRIPTION	DETAIL REFERENCE
M1	ARTIFICIAL TURF SURFACE (BY OTHERS) CONSTRUCT ALL BASE CONDITIONS UNDER SYNTHETIC TURF	
M2	PLANTING AREA (REFER TO LANDSCAPE SHEETS L-500-L510)	
M3	CONCRETE WALK (RE: CIVIL DWGS)	
M4	FIELD PERIMETER EDGE	6 / PF-801

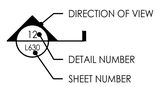
EQUIPMENT SCHEDULE

KEY	DESCRIPTION	DETAIL REFERENCE
A	SOCCER GOAL	RE: SPEC #116500

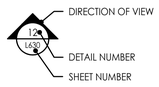
DETAIL / ENLARGEMENT CALLOUT



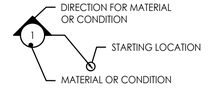
SECTION CALLOUT



ELEVATION CALLOUT



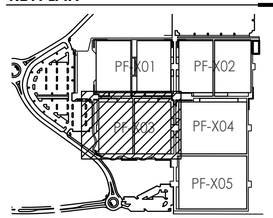
MATERIAL / CONDITION CALLOUT



MATERIALS AND EQUIPMENT NOTES

1. THE MATERIALS, EQUIPMENT, FEATURES AND CONDITIONS ILLUSTRATED ON THIS PLAN ARE ASPECTS OF THE WORK THAT THE CONTRACTOR SHALL CONSTRUCT.
   - 1.1. MATERIALS IDENTIFIED BY HATCHES ARE TO THE APPROXIMATE LIMITS. DO NOT SCALE PLANS; REFER TO DETAILS FOR THE LIMITS OF THE MATERIAL AND THE EDGE ADJACENCIES PROVIDED BY OTHERS OR CONSTRUCTED BY THE TRACK AND FIELD CONTRACTOR
   - 1.2. EQUIPMENT IDENTIFIED BY KEY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. REFER TO SPECS AND REFERENCED DETAILS FOR ADDITIONAL INFORMATION.
   - 1.3. EDGE CONDITIONS IDENTIFIED BY KEY NUMBER PROVIDE GUIDANCE ON THE CONSTRUCTED CONDITION BETWEEN DIFFERING MATERIALS. REFER TO THE IDENTIFIED DETAIL FOR ADDITIONAL INFORMATION.
2. OTHER SCOPES OF WORK DIRECTLY RELATED TO THESE MATERIALS AND CONDITIONS INCLUDE SUBSURFACE DRAINAGE, SUB- AND SURFACE GRADING, FENCING AND UTILITIES. REFER TO OTHER PF-SERIES DRAWINGS THAT ILLUSTRATE THESE SCOPES OF WORK.

KEYPLAN



CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

STATE OF MISSOURI
BOB B. HUSKAMP
NUMBER
2012003007
LANDSCAPE ARCHITECT
5.15.19

DRAWING TITLE:

Field 5 & 6 Material & Details Plan

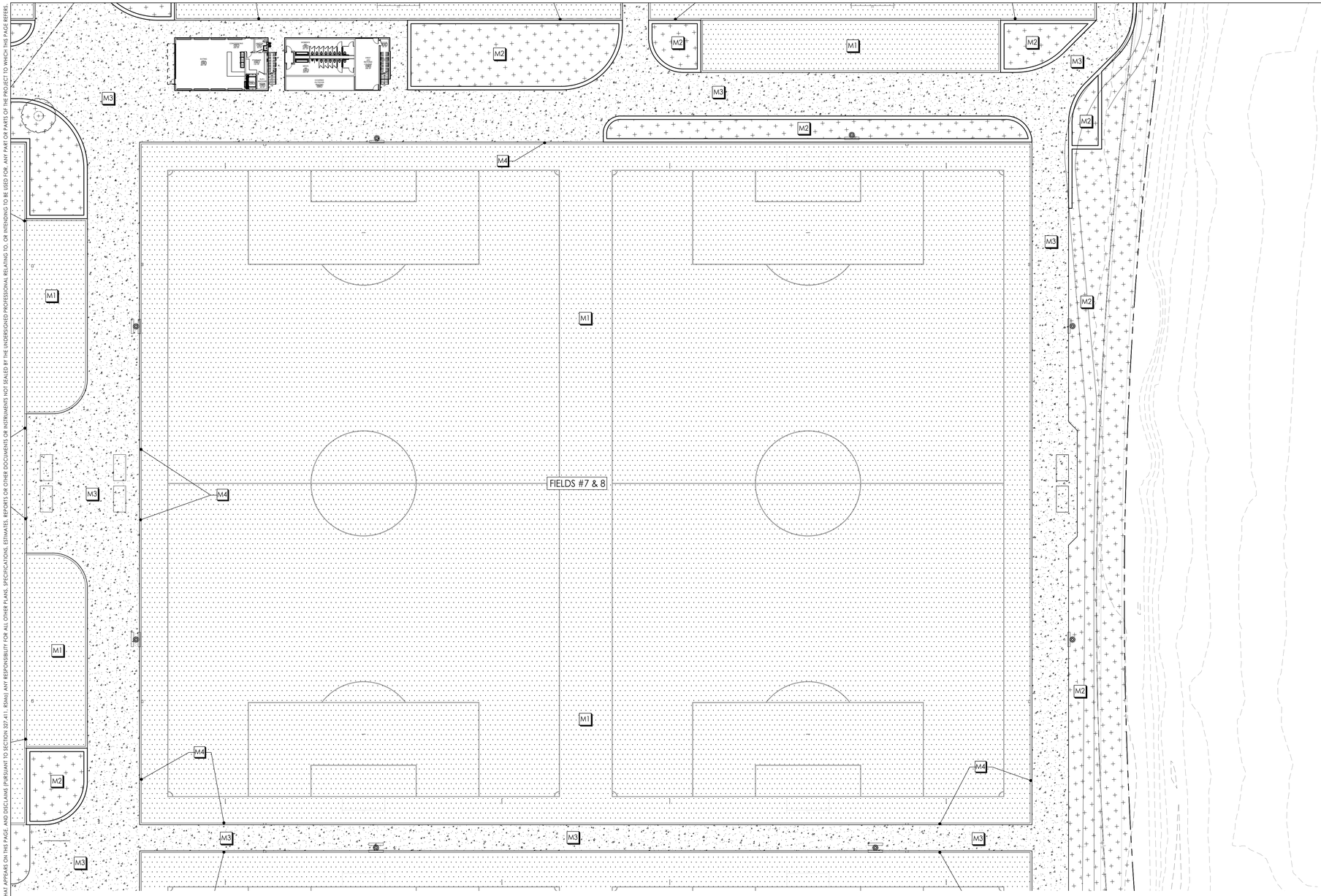
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY:

SHEET NO:

PF-103

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMO) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



1 FIELD 7 AND 8 MATERIALS PLAN

Scale: 1" = 30'

30 15 0 30 90

SCALE: 1"=30'

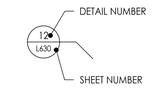
MATERIALS LEGEND

SYMBOL	DESCRIPTION	DETAIL REFERENCE
M1	ARTIFICIAL TURF SURFACE (BY OTHERS) CONSTRUCT ALL BASE CONDITIONS UNDER SYNTHETIC TURF	
M2	PLANTING AREA (REFER TO LANDSCAPE SHEETS L-500-L510)	
M3	CONCRETE WALK (RE: CIVIL DWGS)	
M4	FIELD PERIMETER EDGE	6 PF-801

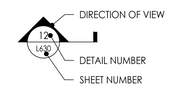
EQUIPMENT SCHEDULE

KEY	DESCRIPTION	DETAIL REFERENCE
A	SOCCER GOAL	RE: SPEC #116500

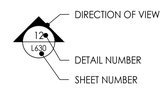
DETAIL / ENLARGEMENT CALLOUT



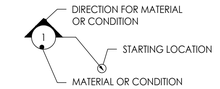
SECTION CALLOUT



ELEVATION CALLOUT



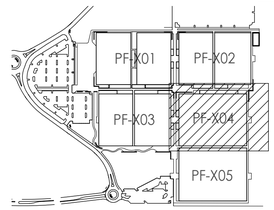
MATERIAL / CONDITION CALLOUT



MATERIALS AND EQUIPMENT NOTES

1. THE MATERIALS, EQUIPMENT, FEATURES AND CONDITIONS ILLUSTRATED ON THIS PLAN ARE ASPECTS OF THE WORK THAT THE CONTRACTOR SHALL CONSTRUCT.
   - 1.1. MATERIALS IDENTIFIED BY HATCHES ARE TO THE APPROXIMATE LIMITS. DO NOT SCALE PLANS; REFER TO DETAILS FOR THE LIMITS OF THE MATERIAL AND THE EDGE ADJACENCIES PROVIDED BY OTHERS OR CONSTRUCTED BY THE TRACK AND FIELD CONTRACTOR
   - 1.2. EQUIPMENT IDENTIFIED BY KEY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. REFER TO SPECS AND REFERENCED DETAILS FOR ADDITIONAL INFORMATION.
   - 1.3. EDGE CONDITIONS IDENTIFIED BY KEY NUMBER PROVIDE GUIDANCE ON THE CONSTRUCTED CONDITION BETWEEN DIFFERING MATERIALS. REFER TO THE IDENTIFIED DETAIL FOR ADDITIONAL INFORMATION.
2. OTHER SCOPES OF WORK DIRECTLY RELATED TO THESE MATERIALS AND CONDITIONS INCLUDE SUBSURFACE DRAINAGE, SUB- AND SURFACE GRADING, FENCING AND UTILITIES. REFER TO OTHER PF-SERIES DRAWINGS THAT ILLUSTRATE THESE SCOPES OF WORK.

KEYPLAN



CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

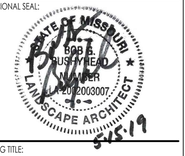
PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:



DRAWING TITLE:

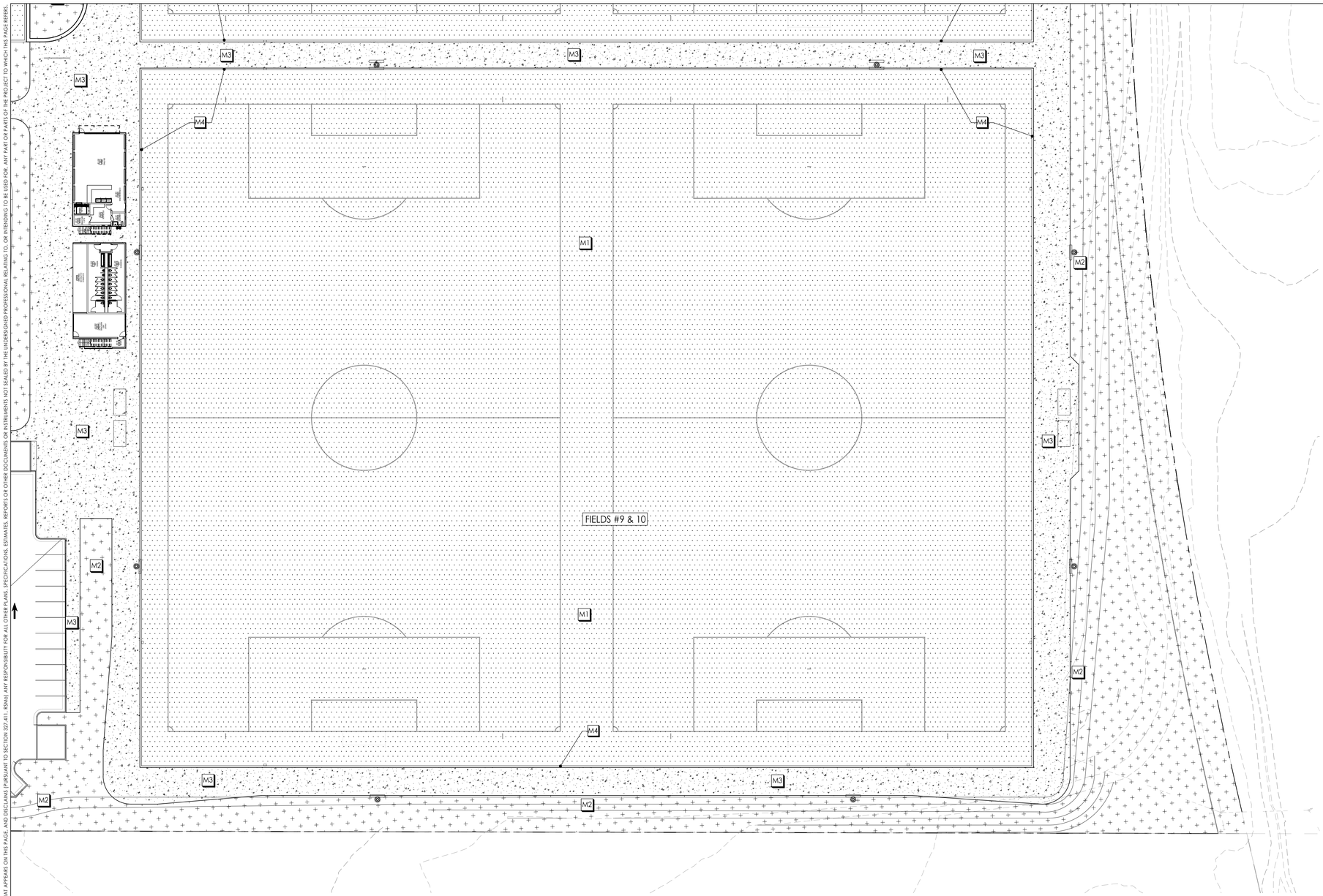
Field 7 & 8
Material & Details Plan

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:

PF-104

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



1 FIELD 9 AND 10 MATERIALS PLAN

Scale: 1" = 30'

30 15 0 30 90

SCALE: 1"=30'

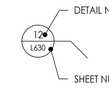
MATERIALS LEGEND

SYMBOL	DESCRIPTION	DETAIL REFERENCE
M1	ARTIFICIAL TURF SURFACE (BY OTHERS) CONSTRUCT ALL BASE CONDITIONS UNDER SYNTHETIC TURF	
M2	PLANTING AREA (REFER TO LANDSCAPE SHEETS L-500-L510)	
M3	CONCRETE WALK (RE: CIVIL DWGS)	
M4	FIELD PERIMETER EDGE	6 / PF-801

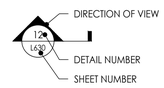
EQUIPMENT SCHEDULE

KEY	DESCRIPTION	DETAIL REFERENCE
A	SOCCER GOAL	RE: SPEC #116500

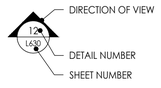
DETAIL / ENLARGEMENT CALLOUT



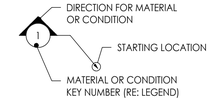
SECTION CALLOUT



ELEVATION CALLOUT



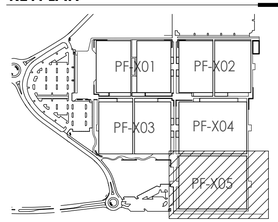
MATERIAL / CONDITION CALLOUT



MATERIALS AND EQUIPMENT NOTES

1. THE MATERIALS, EQUIPMENT, FEATURES AND CONDITIONS ILLUSTRATED ON THIS PLAN ARE ASPECTS OF THE WORK THAT THE CONTRACTOR SHALL CONSTRUCT.
   - 1.1. MATERIALS IDENTIFIED BY HATCHES ARE TO THE APPROXIMATE LIMITS. DO NOT SCALE PLANS; REFER TO DETAILS FOR THE LIMITS OF THE MATERIAL AND THE EDGE ADJACENCIES PROVIDED BY OTHERS OR CONSTRUCTED BY THE TRACK AND FIELD CONTRACTOR
   - 1.2. EQUIPMENT IDENTIFIED BY KEY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. REFER TO SPECS AND REFERENCED DETAILS FOR ADDITIONAL INFORMATION.
   - 1.3. EDGE CONDITIONS IDENTIFIED BY KEY NUMBER PROVIDE GUIDANCE ON THE CONSTRUCTED CONDITION BETWEEN DIFFERING MATERIALS. REFER TO THE IDENTIFIED DETAIL FOR ADDITIONAL INFORMATION.
2. OTHER SCOPES OF WORK DIRECTLY RELATED TO THESE MATERIALS AND CONDITIONS INCLUDE SUBSURFACE DRAINAGE, SUB- AND SURFACE GRADING, FENCING AND UTILITIES. REFER TO OTHER PF-SERIES DRAWINGS THAT ILLUSTRATE THESE SCOPES OF WORK.

KEYPLAN



CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:



DRAWING TITLE:

Field 9 & 10 Material & Details Plan

JOB NO: 1197 SCALE:

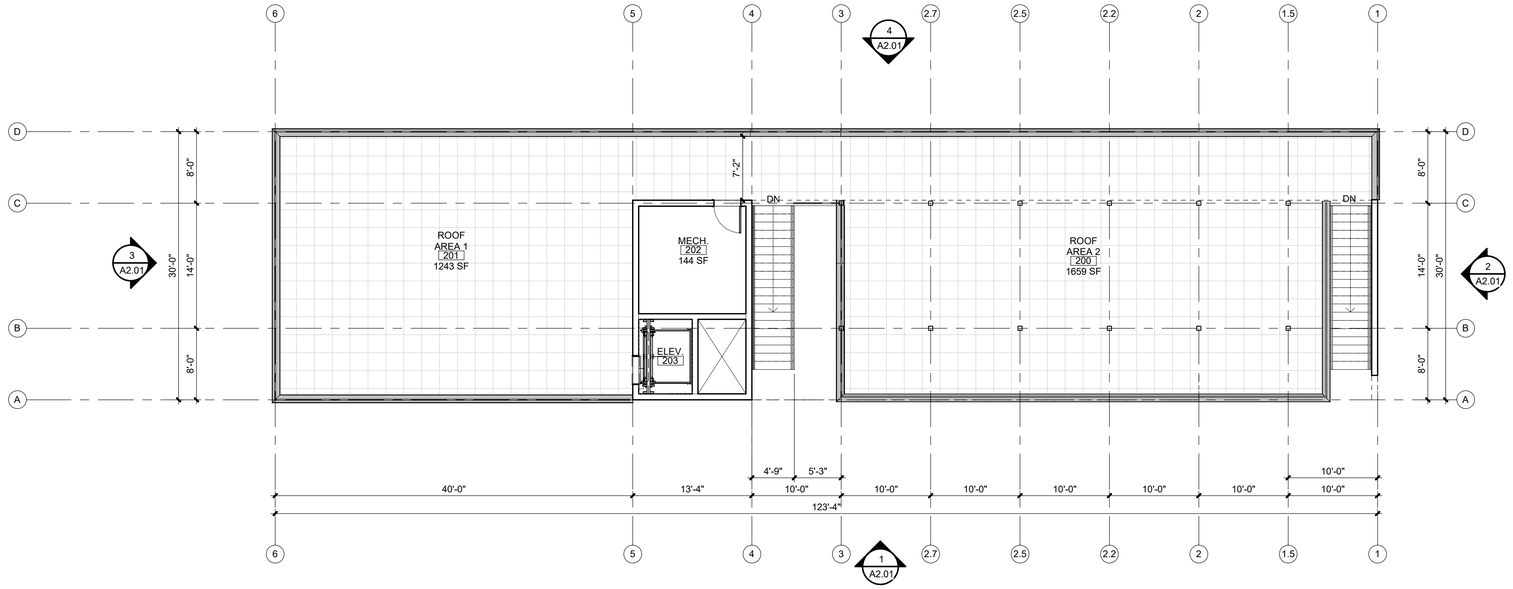
DATE: 05.15.2019 DRAWN BY:

SHEET NO:

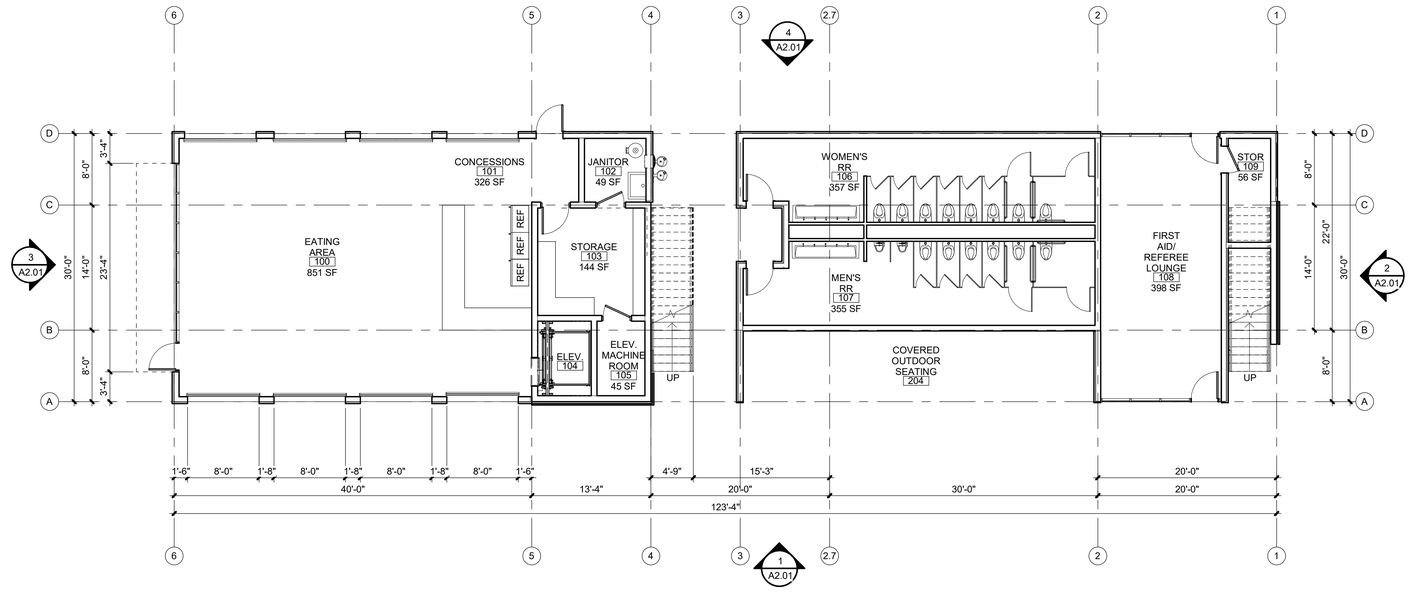
PF-105

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL, APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS, PURSUANT TO SECTION 327.411, RSMo§ ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



2	SECOND FLOOR PLAN
A1.01	SCALE : 1/8" = 1'-0"



1	FIRST FLOOR PLAN
A1.01	SCALE : 1/8" = 1'-0"

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:



DRAWING TITLE:

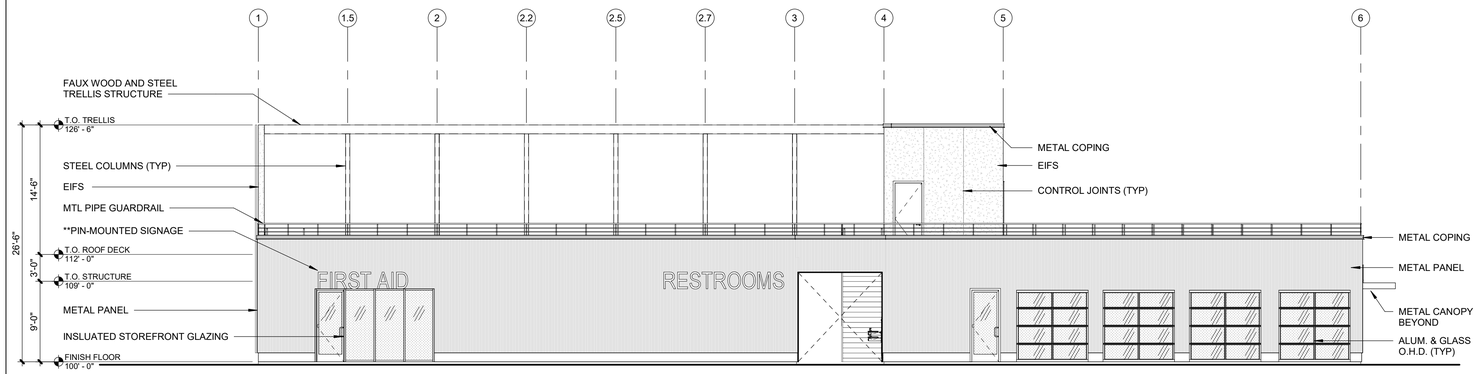
BUILDING PLANS

JOB NO: 1197 SCALE:

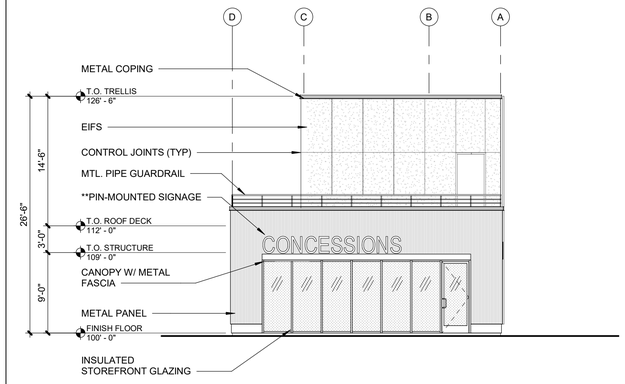
DATE: 05.15.2019 DRAWN BY:

SHEET NO:

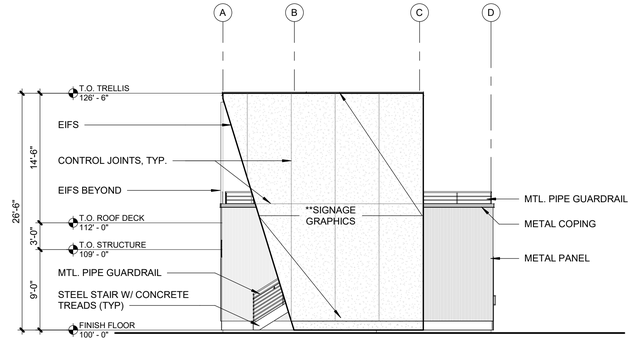
A1.01



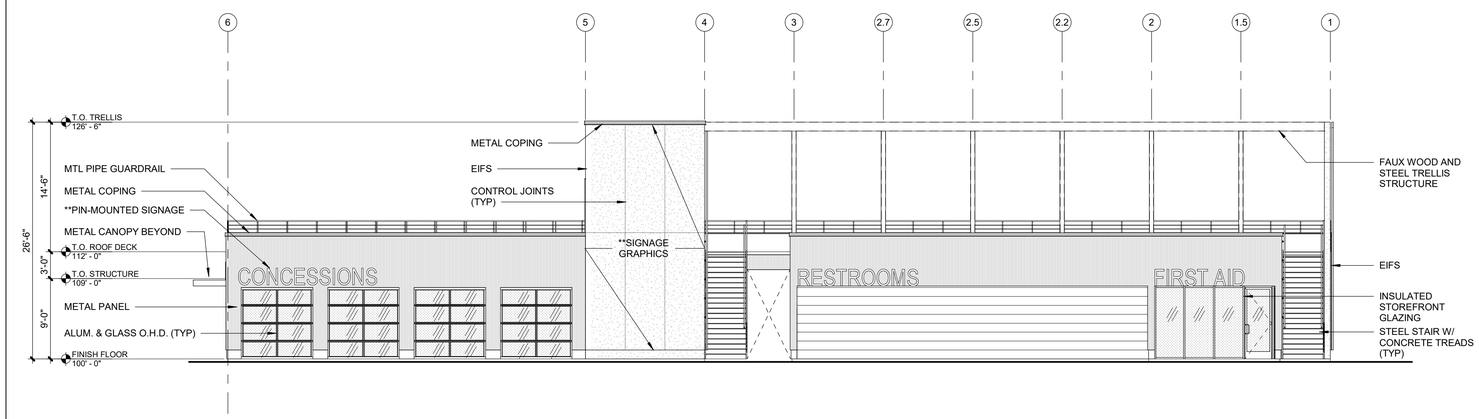
4	NORTH ELEVATION
A2.01	SCALE : 1/8" = 1'-0"



3	WEST ELEVATION
A2.01	SCALE : 1/8" = 1'-0"



2	EAST ELEVATION
A2.01	SCALE : 1/8" = 1'-0"



1	SOUTH ELEVATION
A2.01	SCALE : 1/8" = 1'-0"

**** ALL SIGNAGE COMPONENTS WILL MATCH THE INTENT OUTLINED IN THE DESIGN GUIDELINES AND WILL ABIDE BY THE FORTHCOMING ENVIRONMENTAL GRAPHICS PACKAGE.***

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5500
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:



DRAWING TITLE:

BUILDING ELEVATIONS

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY:

SHEET NO:

A2.01

THE PROFESSIONAL SIGNOFF, SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



A OVERALL SITE PLAN
0'-1" = 100'-0"

10' 100'
0 50' 200'

NORTH

	A	B
1	Sheet List Table	
2	Sheet Number	Sheet Title
3	L-001	OVERALL SITE PLAN
4	L-500	LANDSCAPE PLAN
5	L-501	LANDSCAPE PLAN
6	L-502	LANDSCAPE PLAN
7	L-503	LANDSCAPE PLAN
8	L-504	LANDSCAPE PLAN
9	L-505	LANDSCAPE PLAN
10	L-506	LANDSCAPE PLAN
11	L-507	LANDSCAPE PLAN
12	L-513	LANDSCAPE SCHEDULE
13	L-700	SITE DETAILS
14	L-800	PLANTING DETAILS

PLAN NOTES

1. CONCESSION / RESTROOM / SHADE AND AMENITY BUILDING (TYPICAL - TWO LOCATIONS)

   GENERAL DESCRIPTION IS AS FOLLOWS; ADDITIONAL DETAIL SHALL BE PROVIDED WITH SUBSEQUENT SUBMITTAL TO THE CITY OF LEE'S SUMMIT.

   - STRUCTURE SHALL BE A ONE-STORY BUILDING, CMU/TIMBER CONSTRUCTION
   - SCREENING OF ROOFTOP MECHANICAL UNITS WILL BE INCORPORATED INTO ROOFLINE DESIGN FOR SCREENING.
   - ROOF MATERIAL SHALL BE RAISED SEAM METAL PANEL.
   - SQUARE FOOTAGE VALUES PROVIDED IN LAND USE SCHEDULE REPRESENT ANTICIPATED MINIMUMS - ADJUSTMENTS TO TOTALS OR ALLOCATION FOR ADDITIONAL USES SUCH AS TRAINING, FIRST AID, OFFICIAL'S LOUNGE, ETC. MAY BE EXPLORED.

2. FUTURE MAINTENANCE BUILDING

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

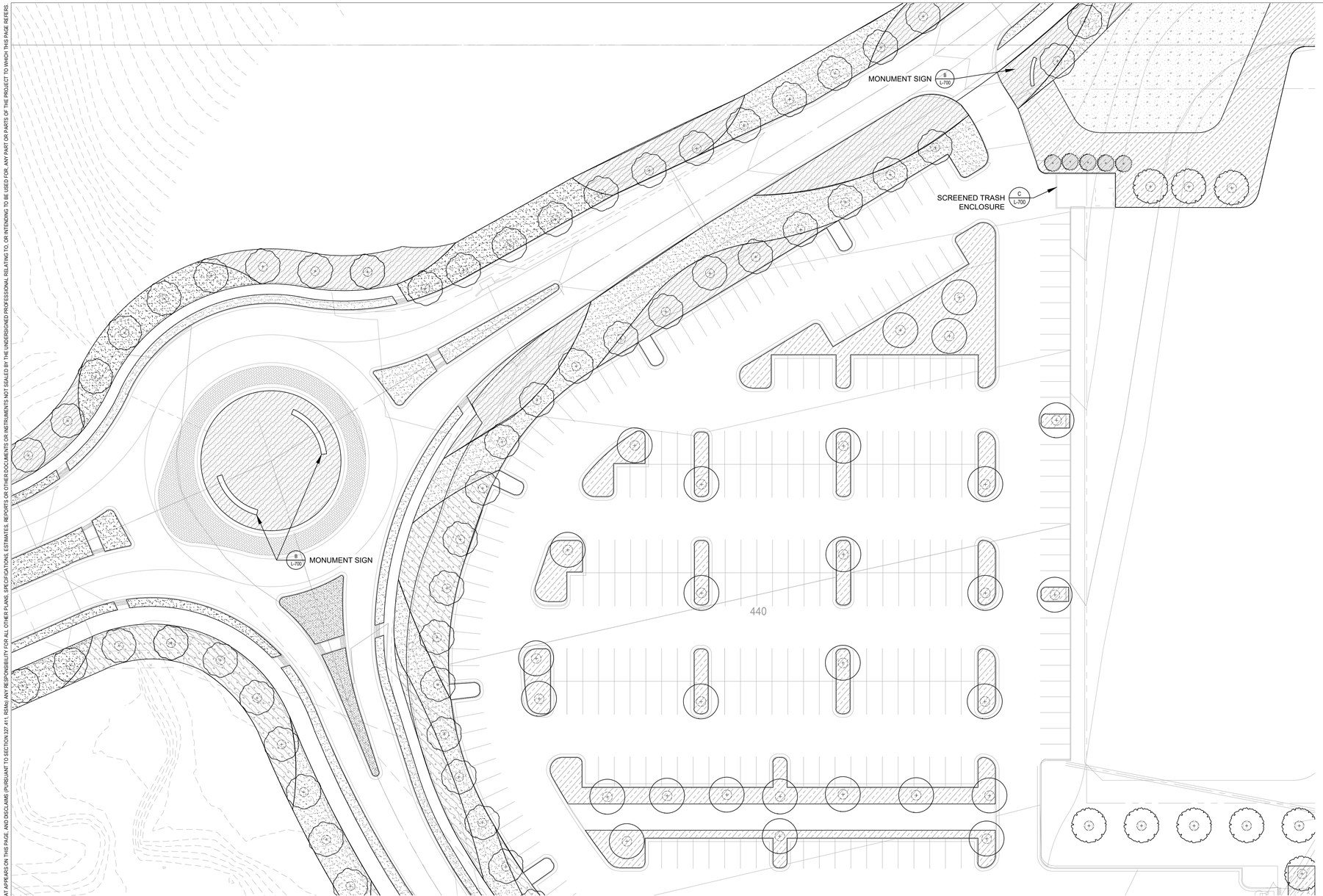
PROFESSIONAL SEAL:

DRAWING TITLE:
OVERALL SITE PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:
L-001

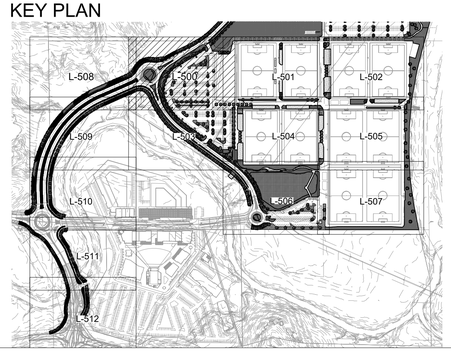
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



A LANDSCAPE PLAN

0'-1" = 30'-0"

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

LANDSCAPE PLAN

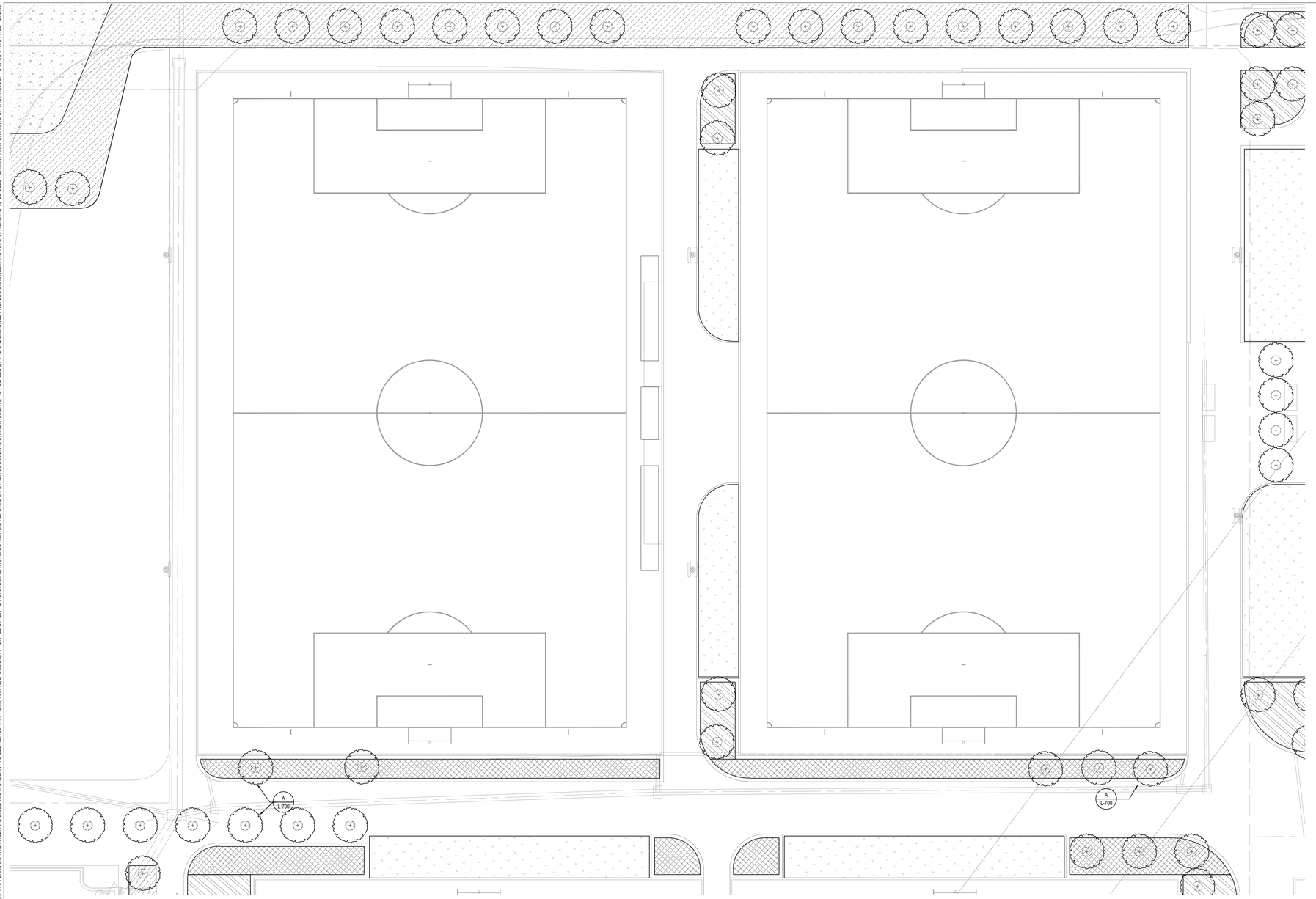
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY:

SHEET NO:

L-500

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



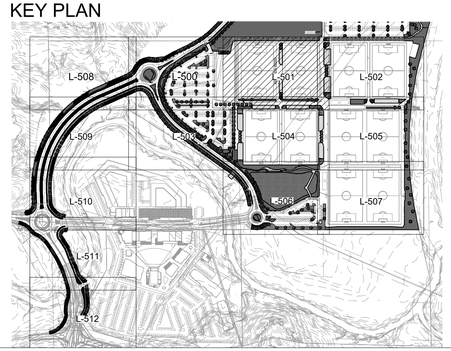
A LANDSCAPE PLAN

0'-1" = 30'-0"

10' 30'
0 20' 60'

NORTH

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

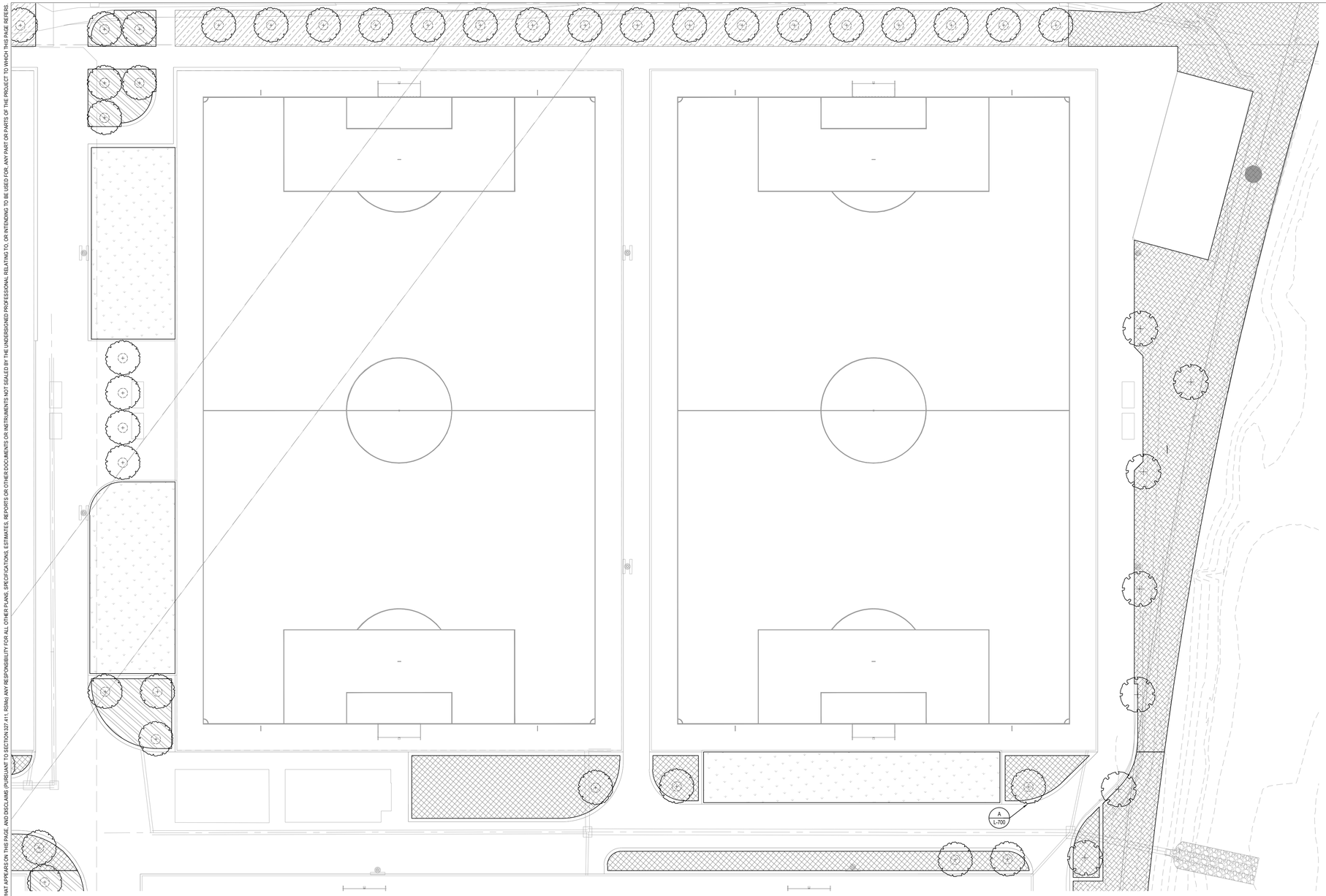
PROFESSIONAL SEAL:

DRAWING TITLE:
LANDSCAPE PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: ADS

SHEET NO:
L-501

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



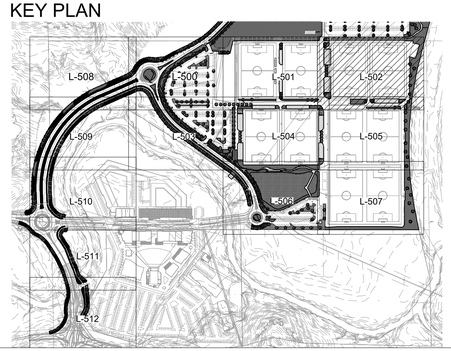
A LANDSCAPE PLAN

0'-1" = 30'-0"

10' 30'
0 20' 60'

NORTH

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRAIDBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

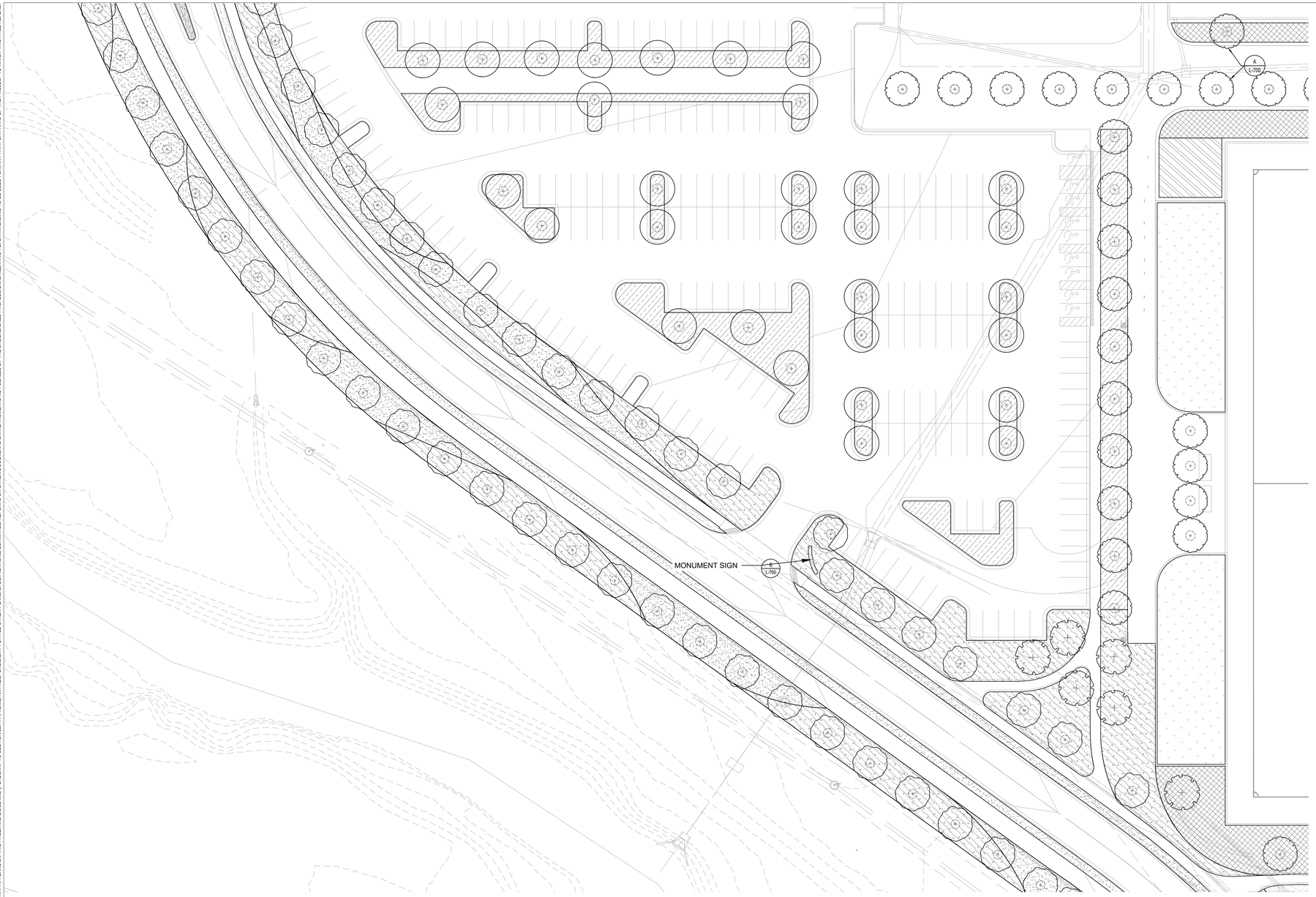
PROFESSIONAL SEAL:

DRAWING TITLE:
LANDSCAPE PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:
L-502

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

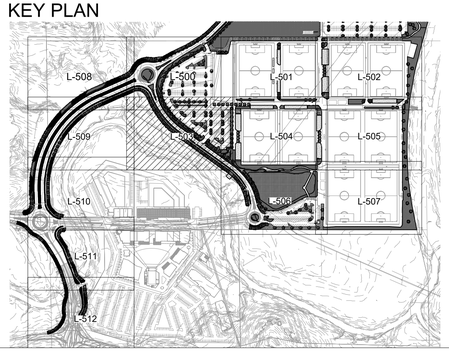


A LANDSCAPE PLAN

0'-1" = 30'-0"

10' 30'
0 20' 60'
NORTH

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

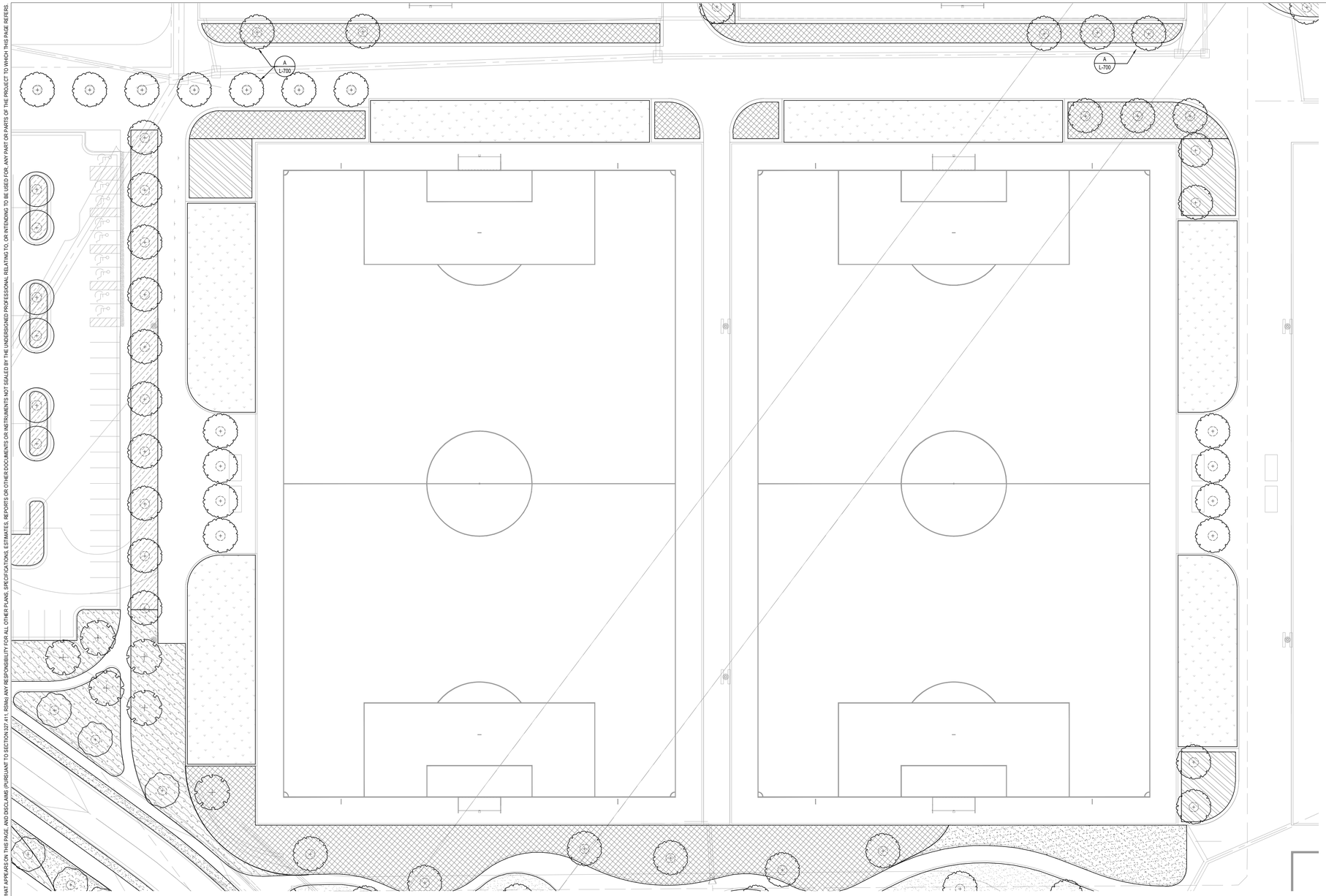
PROFESSIONAL SEAL:

DRAWING TITLE:
LANDSCAPE PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:
L-503

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



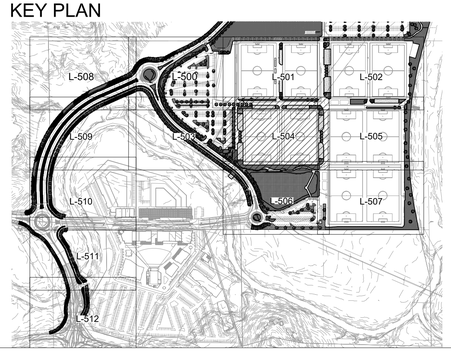
A LANDSCAPE PLAN

0'-1" = 30'-0"

10' 30'
0 20' 60'

NORTH

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

LANDSCAPE PLAN

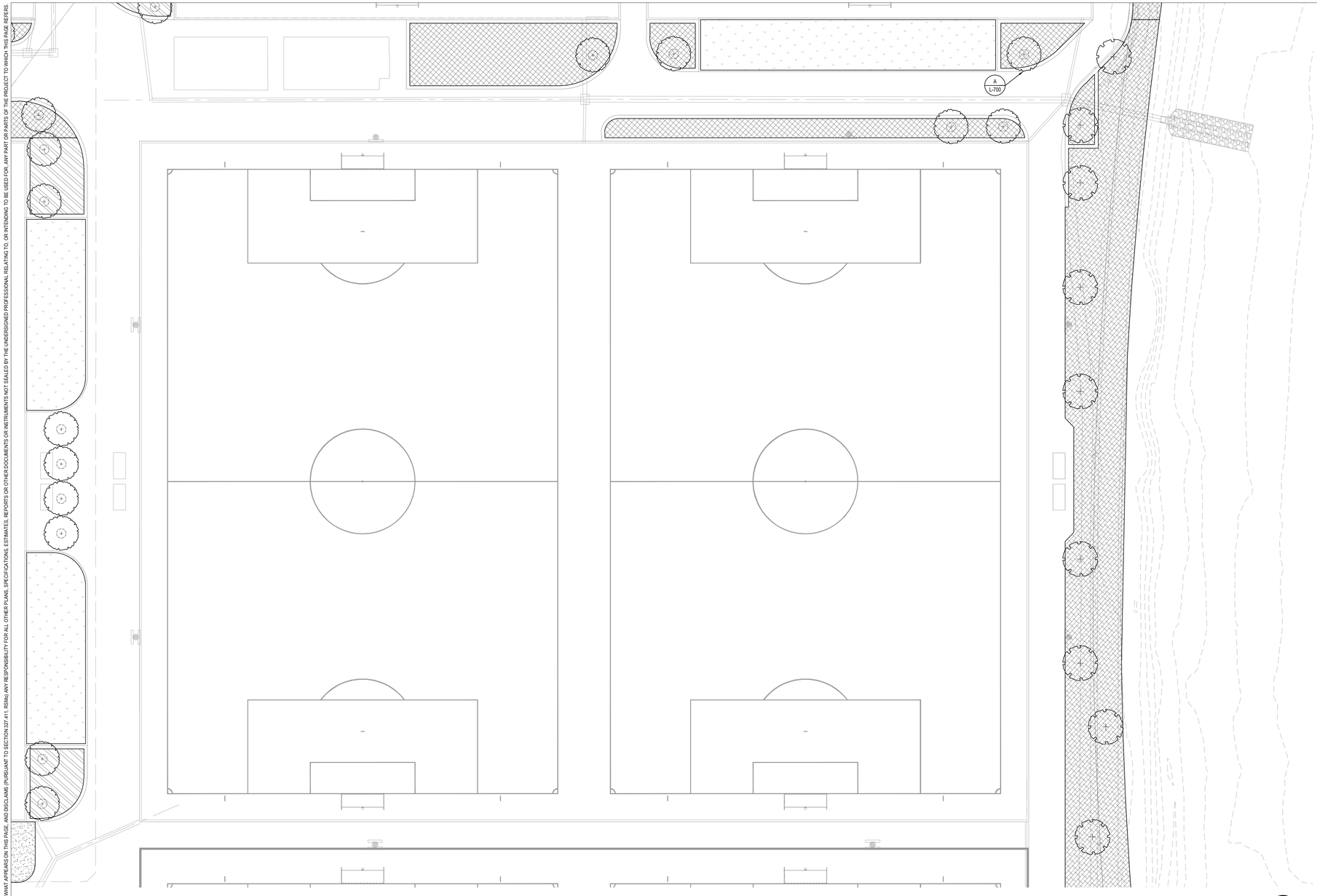
JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY:

SHEET NO:

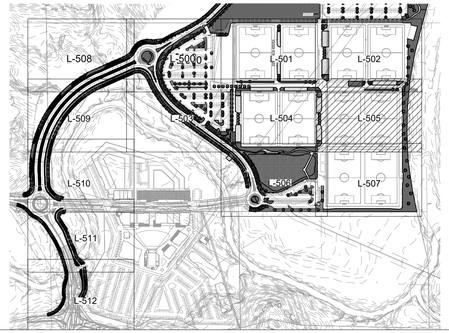
L-504

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



A LANDSCAPE PLAN
0'-1" = 30'-0"

KEY PLAN



10' 30'
0 20' 60'
NORTH

CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

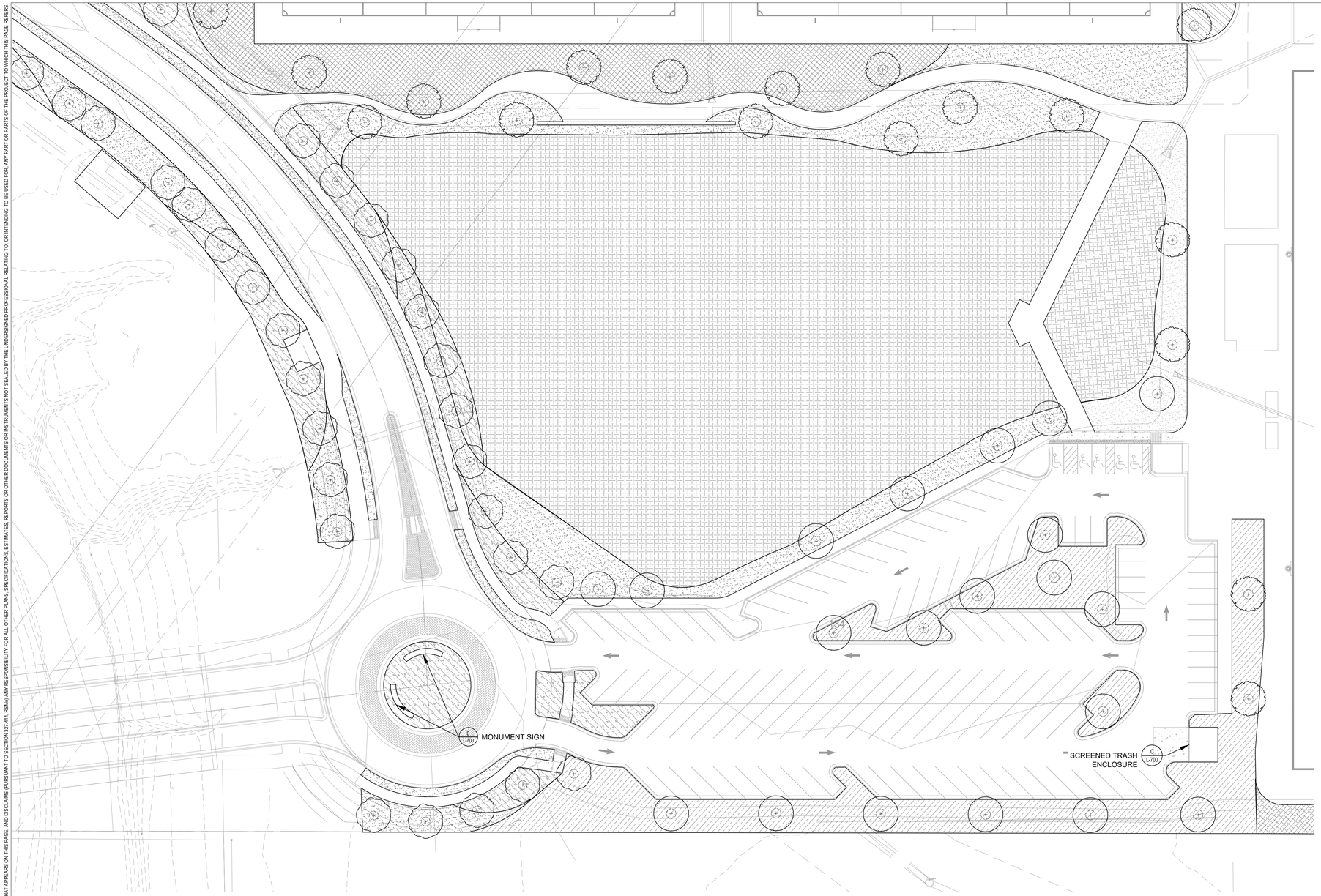
PROFESSIONAL SEAL:

DRAWING TITLE:
LANDSCAPE PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:
L-505

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

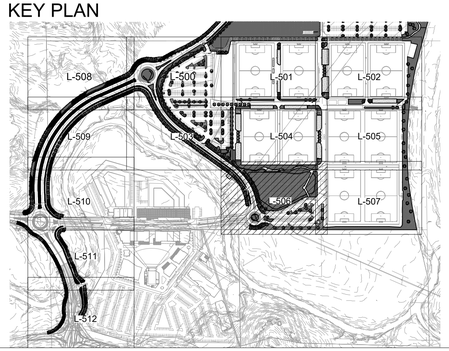


A

LANDSCAPE PLAN

0'-1" = 30'-0"

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

LANDSCAPE PLAN

JOB NO: 1197 SCALE:

DATE: 05.15.2019 DRAWN BY:

SHEET NO:

L-506

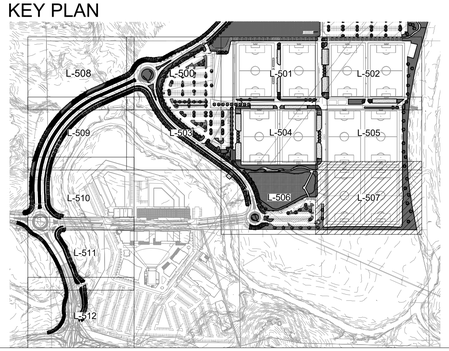


A LANDSCAPE PLAN
0'-1" = 30'-0"

0' 10' 20' 30' 60'

NORTH

KEY PLAN



CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"– 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NATURALISTIC AREA TREES
* 2"– 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS
SYMPHYOTRICHUM OBLONGIFOLIUM / FALL ASTER

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:
LANDSCAPE PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:
L-507

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

CONCEPT PLANT SCHEDULE LEE'S SUMMIT

PROMENADE TREES
* 2"-- 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
ACER TRUNCATUM / SHANTUNG MAPLE
CERCIS CANADENSIS / EASTERN REDBUD
ZELKOVA SERRATA / SAWLEAF ZELKOVA

PARKING LOT TREES
* 2"-- 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
GINKGO BILOBA / MAIDENHAIR TREE

STREET TREES
* 2"-- 2.5" CALIPER TREES
SPECIES BELOW:
GLEDITSIA TRIACANTHOS INERMIS / THORNLESS COMMON HONEYLOCUST
GYMNOCLADUS DIOICA / KENTUCKY COFFEE TREE
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

NOTE:
TREES PROVIDED FOR EACH 30 FEET OF STREET FRONTAGE.

NATURALISTIC AREA TREES
* 2"-- 2.5" CALIPER DECIDIOUS TREES
* 1.5" CALIPER ORNAMENTAL TREES
SPECIES BELOW:
CELTIS OCCIDENTALIS / COMMON HACKBERRY
CERCIS CANADENSIS / EASTERN REDBUD
QUERCUS BICOLOR / SWAMP WHITE OAK
QUERCUS RUBRA / RED OAK

SCREENING TREES
* EVERGREENS W/ MIN. HEIGHT OF 8`
SPECIES BELOW:
THUJA OCCIDENTALIS / AMERICAN ARBORVITAE

ARTIFICIAL TURF
PRACTICE AREAS W/ SAME MATERIAL AS SPORTS FIELDS
-

TURF
SOD
-

PARKING MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

NOTE:
MATURE HEIGHT OF PLANTS MEETS / OR EXCEEDS TWO AND ONE-HALF FEET REQUIREMENTS

RIVER ROAD MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
ARUNCUS DIOICUS / BRIDE`S FEATHERS
CORNUS ALBA / TATARIAN DOGWOOD
EUTROCHIUM PURPUREUM / SWEET JOE PYE WEED
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
POLYGONATUM ODORATUM `VARIEGATUM` / SOLOMON`S-SEAL
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

NOTE:
MEETS / OR EXCEEDS ONE SHRUB FOR EACH 20 FEET OF STREET FRONTAGE. MATURE HEIGHT OF PLANTS MEETS / OR EXCEEDS TWO AND ONE-HALF FEET REQUIREMENTS FOR PARKING SCREENING

PARKWAY MIX
* PLUGS @ 12" O.C.
SPECIES BELOW:
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
MONARDA BRADBURIANA / EASTERN BEE BALM
PANICUM VIRGATUM / SWITCH GRASS
RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SORGHASTRUM NUTANS / INDIAN GRASS

NOTE:
MEETS / OR EXCEEDS ONE SHRUB FOR EACH 20 FEET OF STREET FRONTAGE. MATURE HEIGHT OF PLANTS MEETS / OR EXCEEDS TWO AND ONE-HALF FEET REQUIREMENTS FOR PARKING SCREENING

PROMENADE N-S
* PLUGS @ 12" O.C.
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
CORNUS ALBA / TATARIAN DOGWOOD
PHYSOCARPUS OPULIFOLIUS `NANUS` / DWARF NINEBARK
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS
SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PROMENADE E-W
* PLUGS @ 12" O.C.
SPECIES BELOW:
BOUTELOUA CURTIPENDULA / SIDE OATS GRAMA
BOUTELOUA GRACILIS / BLUE GRAMA
ECHINACEA PURPUREA / PURPLE CONEFLOWER
HYDRANGEA ARBORESCENS / WILD HYDRANGEA
LIATRIS SCARIOSA NOVAE-ANGLIAE / NEW ENGLAND BLAZING ASTER
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

WETLAND MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS INCARNATA / SWAMP MILKWEED
CAREX GRAYI / MORNING STAR SEDGE
CAREX HAYDENII / HAYDEN`S SEDGE
CAREX STRICTA / TUSSOCK SEDGE
LOBELIA CARDINALIS / CARDINAL FLOWER
PANICUM VIRGATUM / SWITCH GRASS
SILPHIUM LACINIATUM / COMPASS PLANT
SORGHASTRUM NUTANS / INDIAN GRASS

PRAIRIE MIX
* SEED MIX
SPECIES BELOW:
ASCLEPIAS TUBEROSA / BUTTERFLY MILKWEED
BAPTISIA AUSTRALIS / BLUE WILD INDIGO
CEANOTHUS AMERICANUS / NEW JERSEY TEA
HAMAMELIS VERNALIS `AMETHYST` / AMETHYST VERNAL WITCHHAZEL
PANICUM VIRGATUM / SWITCH GRASS
SCHIZACHYRIUM SCOPARIUM / LITTLE BLUESTEM GRASS

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex
Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

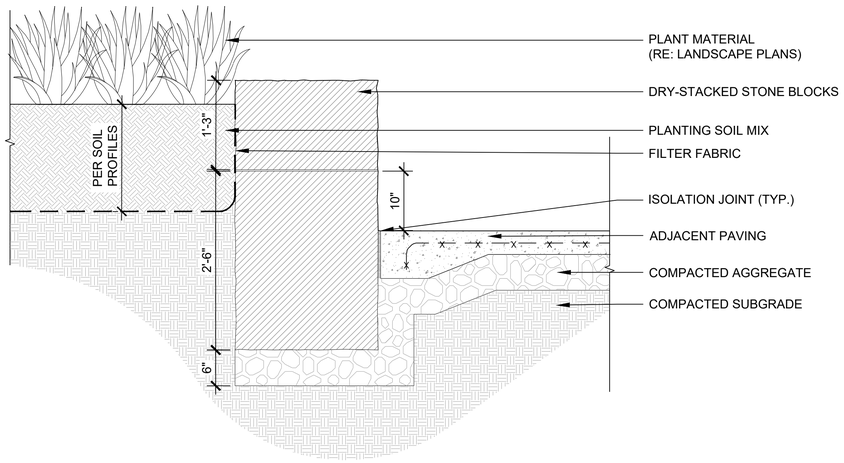
PROFESSIONAL SEAL:

DRAWING TITLE:
LANDSCAPE SCHEDULE

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

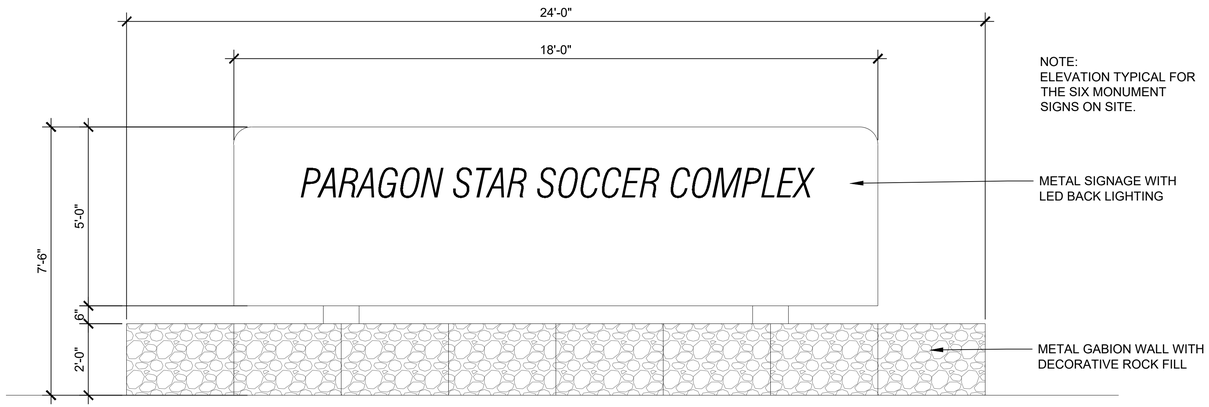
SHEET NO:
L-513

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



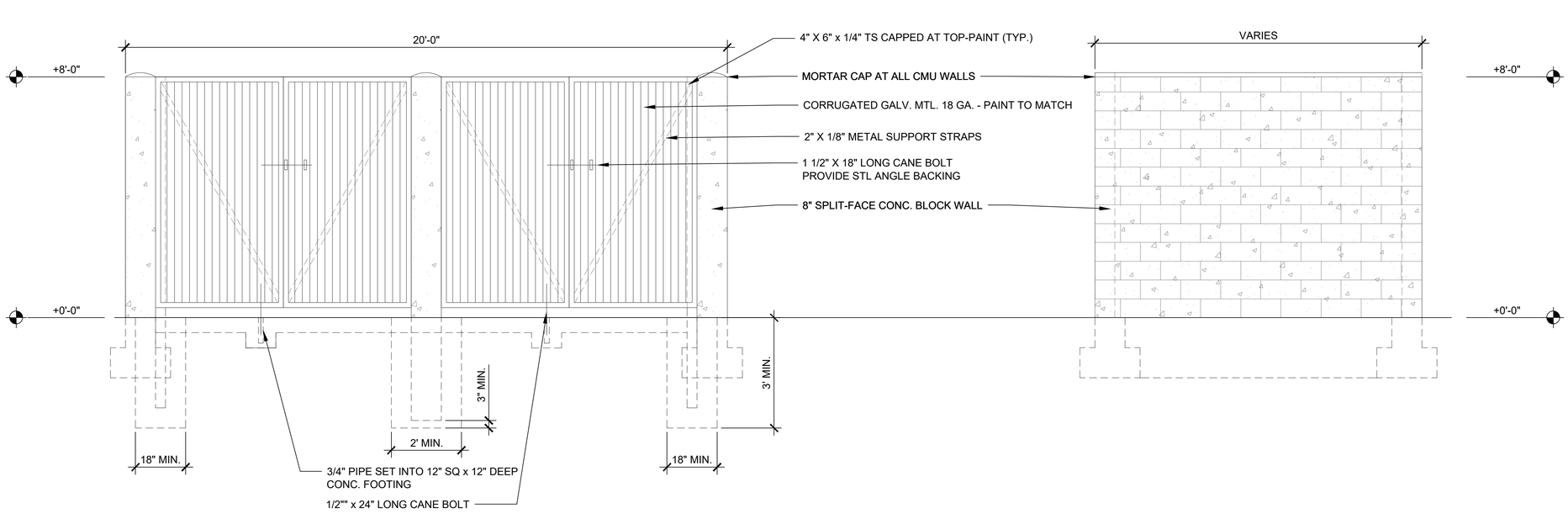
A SECTION - DRYSTACKED STONE WALL TYPICAL

1" = 1'-0"



B ELEVATION - TYPICAL MONUMENT SIGNAGE

1/2" = 1'-0"



C ELEVATION - TYPICAL TRASH ENCLOSURE

1/2" = 1'-0"

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:

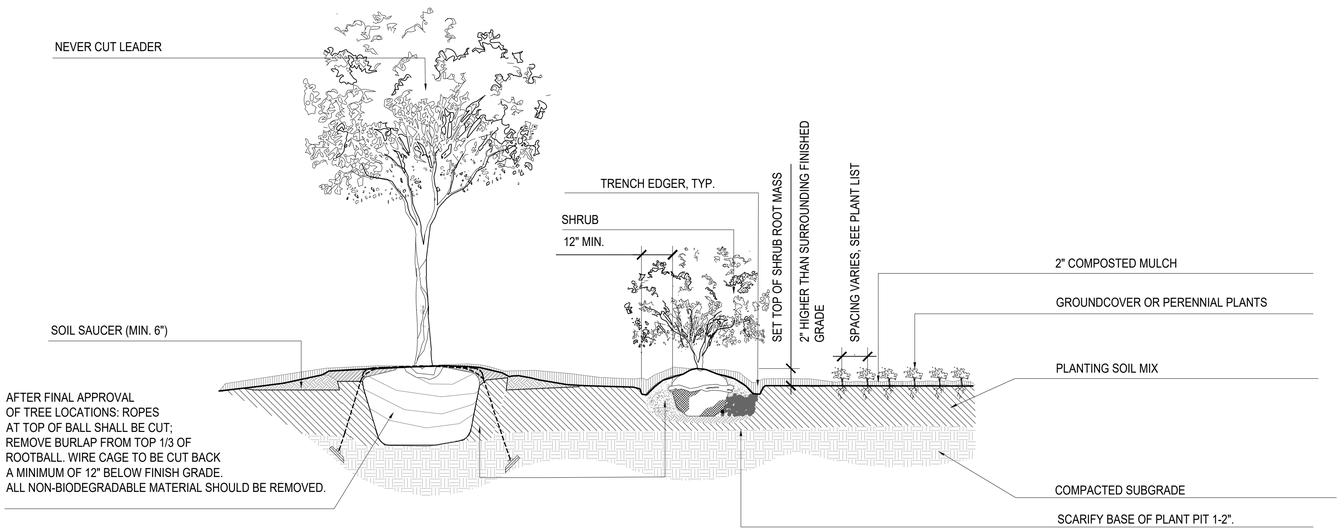
SITE DETAILS

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:

L-700

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



A

PLANTING DETAIL - STANDARD FOR REFERENCE

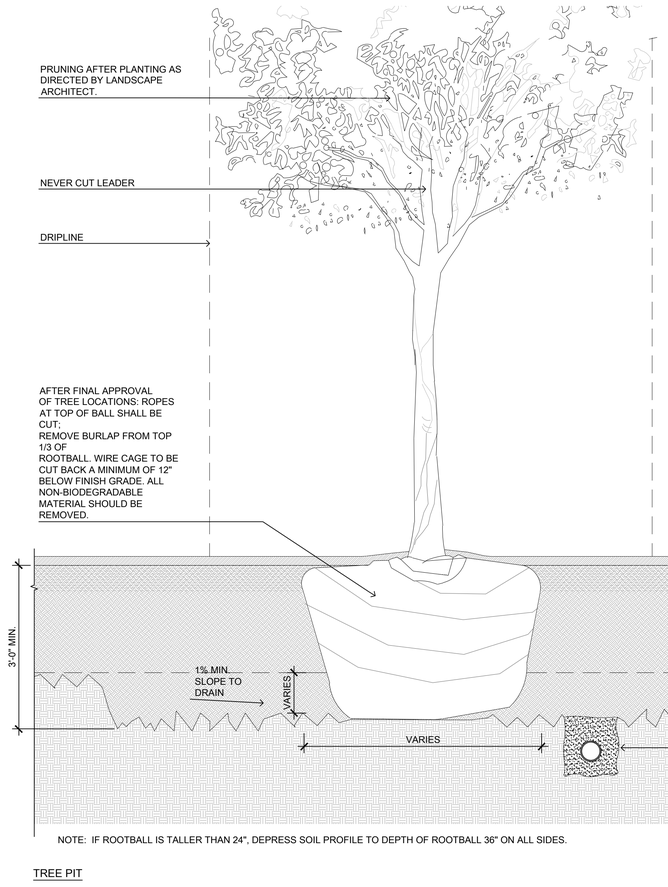
1" = 1'-0"

EVERGREEN & DECIDUOUS TREES:
1. TREES SHALL BEAR SAME RELATION TO FINISHED GRADE AS THEY DID TO PREVIOUSLY EXISTING GRADE ON SITE OR IN NURSERY.
2. DO NOT ALLOW AIR POCKETS TO FORM IN SOIL WHEN BACKFILLING.
3. TREE STAKING/GUYING SHOULD BE REVIEWED WITH LANDSCAPE ARCHITECT WHEN CONTRACTOR DEEMS IT NECESSARY.
5. ROOT FLARE OF TREE TO BE SET NO MORE THAN 2" ABOVE FINISHED GRADE IN BORDERS & MASS PLANTINGS.
6. TREES PLANTED WITHIN OR ADJACENT TO PAVING SHALL BE PLANTED WITH ROOT FLARE NO MORE THAN 1" ABOVE ADJACENT GRADE.
7. EVERGREEN TREES WITH TIGHTLY SHEARED FORM WILL BE REJECTED.
8. IF PITS ARE MACHINE EXCAVATED, & GLAZING IS PRONOUNCED, ALL SIDES OF PIT ARE TO BE SCARIFIED.
9. SOAK PLANTS WITH WATER IMMEDIATELY AFTER INSTALLATION.

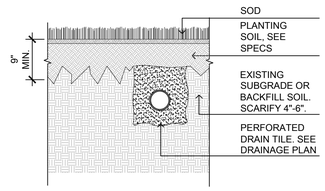
SHRUBS:
1. DO NOT ALLOW AIR POCKETS TO FORM IN SOIL WHILE BACKFILLING.
2. SOAK PLANTS WITH WATER IMMEDIATELY AFTER INSTALLATION.
3. DO NOT BREAK ROOTBALL.
4. IF B&B MATERIAL, REMOVE BURLAP & STRING FROM AROUND TOP 1/3 OF ROOTBALL. IF CONTAINERIZED, LOOSEN ROOT MASS SIGNIFICANTLY BY HAND OR CUT ROOT MASS VERTICALLY WITH KNIFE ON 4 SIDES TO A DEPTH OF 1" & CUT BOTTOM OF ROOT MASS IN SAME MANNER IN AN 'X' PATTERN.

PERENNIALS & GROUNDCOVER:
1. DO NOT ALLOW AIR POCKETS TO FORM IN SOIL WHILE BACKFILLING.
2. SOAK PLANTS IMMEDIATELY WITH WATER AFTER INSTALLATION.
3. LOOSEN ROOT MASS SIGNIFICANTLY BY HAND OR CUT ROOT MASS VERTICALLY WITH KNIFE ON 4 SIDES TO A DEPTH OF 1" & CUT BOTTOM OF ROOT MASS IN SAME MANNER IN AN 'X' PATTERN.
4. PLANT APPROXIMATELY 1" ABOVE PLANTING MEDIA TO ALLOW FOR TYPICAL DRESSING OF MULCH.
5. SOAK PLANTS WITH WATER IMMEDIATELY AFTER INSTALLATION.

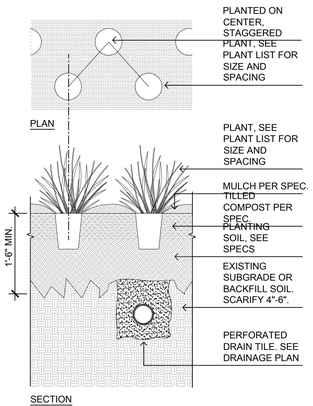
NOTE: ALL TREES ON GRADE SHALL HAVE ROOTBALL ANCHORING SYSTEM



TREE PIT



LAWN



PLANTING BED - PERENNIALS AND SHRUBS

B

SOIL PROFILES

3/4" = 1'-0"

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

DRAWING TITLE:
PLANTING DETAILS

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY:

SHEET NO:
L-800

ELECTRICAL SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED. V2.01

STANDARD MOUNTING HEIGHTS

AUDIBLE APPLIANCES (CENTERLINE)	84"
ALARMS	48"
ANNUNCIATOR PANELS (DISPLAY)	60"
CONTROLS (TOP OF DEVICE)	48"
EXIT SIGNS (WALL MOUNTED)	80"
FIRE ALARM ANNUNCIATOR PANEL (DISPLAY)	60"
FIRE ALARM BELL (EXTERIOR) (CENTERLINE)	120"
FIRE ALARM CONTROL PANEL/UNIT (DISPLAY)	60"
INTERCOM (AFEA ONLY)	36"
INTERCOMS (TOP OF DEVICE)	48"
PULL STATIONS (TOP OF DEVICE)	48"
PHOTOCELLS	144"
RECEPTACLES	16"
RECEPTACLES (EXTERIOR)	24"
RECEPTACLES (GARAGES)	24"
RECEPTACLES (POOLS)	27"
RECEPTACLES (ABOVE COUNTER)	+6" ABOVE BACKSPLASH/COUNTER, 40" MAX
RECEPTACLES IN EQUIPMENT ROOMS	44"
REMOTE INDICATING LIGHT (EQUIPMENT ROOMS)	48"
REMOTE INDICATING LIGHT (FINISHED AREAS)	CEILING
SAFETY SWITCHES (TOP OF DEVICE)	48"
STARTERS (TOP OF DEVICE)	48"
SWITCHES (TOP OF DEVICE)	44"
TELEPHONE, DATA OUTLETS	SAME AS ADJACENT DEVICE, UNO
TELEPHONE TERMINAL BOARD (BOTTOM)	6"
TELEVISION OUTLETS	REFER TO ARCH DRAWINGS
VISIBLE APPLIANCES (CENTERLINE)	84"

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNO IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG) TO BOTTOM OF OUTLET BOX. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ABBREVIATIONS

AF	AMPERE FRAME SIZE
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AS	AMPERE SWITCH
AT	AMPERE TRIP SETTING
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO VISUAL
BAS	BUILDING AUTOMATION SYSTEM
BKR	BREAKER
C	CONDUIT
CAT	CATEGORY
CATV	CABLE TELEVISION SYSTEM
CCTV	CLOSED CIRCUIT TELEVISION
CD	CANDELA
CKT	CIRCUIT
CODE	APPLICABLE CODE ADOPTED BY JURISDICTION
CT	CURRENT TRANSFORMER
CTR	CENTER
CVD	CUMULATIVE VOLTAGE DROP
DEMO	DEMOLITION
DPDT	DOUBLE-POLE, DOUBLE-THROW
DPST	DOUBLE-POLE, SINGLE-THROW
(E)	EXISTING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCA	FAULT CURRENT AMPS AVAILABLE
FCU	FAN COIL UNIT
FF	FINISHED FLOOR
FLA	FULL LOAD AMPS
FLR	FLOOR
GC	GENERAL CONTRACTOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GES	GROUNDING ELECTRODE SYSTEM
GFR	GROUND FAULT RELAY
G	GROUND
IG	ISOLATED GROUND
ISC	SHORT CIRCUIT CURRENT
JB/J-BOX	JUNCTION BOX
LF	LINEAR FEET
LRA	LOCKED ROTOR AMPS
LTG/LTS	LIGHTING/LIGHTS
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MFR	MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTD	MOUNTED
N/A	NOT APPLICABLE
NF	NON-FUSED
NL	NIGHT LIGHT (24HR ON)
NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY (CSA,ETL,NSF,UL)
OS	OCCUPANCY SENSOR
P	POLE
PART	PARTIAL CIRCUIT
PH/Ø	PHASE
PNL	PANEL
PNLBD	PANELBOARD
PROVIDE	FURNISH AND INSTALL
PT	POTENTIAL TRANSFORMER
QTY	QUANTITY
RCPT	RECEPTACLE
RELO	RELOCATE
RLA	RUNNING LOAD AMPS
RTU	ROOFTOP UNIT
SCCR	SHORT-CIRCUIT CURRENT RATING
SD	SMOKE DUCT DETECTOR
SF	SQUARE FEET
SPDT	SINGLE-POLE, DOUBLE-THROW
SPST	SINGLE-POLE, SINGLE-THROW
ST	SHUNT TRIP
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TL	TWISTLOCK
TMGB	TELECOMMUNICATIONS MAIN GROUND BUS BAR
TX	TRANSFORMER
TYP	TYPICAL
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
VD	VOLTAGE DROP
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
W/	WITH
WP	WEATHER PROOF
WR	WEATHER RESISTANT
WT	WATERTIGHT
XP	EXPLOSION-PROOF

ANNOTATION

- MECHANICAL OR FIRE PROTECTION PLAN NOTE CALLOUT
- PLUMBING PLAN NOTE CALLOUT
- ELECTRICAL OR FIRE ALARM PLAN NOTE CALLOUT
- TECHNOLOGY PLAN CALLOUT
- PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES
- EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- CONNECTION POINT OF NEW WORK TO EXISTING
- DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- SECTION CUT DESIGNATION

CIRCUITING & WIRING

- HOMERUN TO PANELBOARD. INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION. REFER TO PANELBOARD SCHEDULES FOR BRANCH CIRCUIT CONDUCTOR SIZES. (7, 5, 3 OR P1-3,5,7 P1)
- CIRCUIT CONTINUATION OR PARTIAL CIRCUIT
- CONDUIT CONCEALED
- CONDUIT IN/UNDER FLOOR/GROUND CONSTRUCTION
- EXPOSED CONDUIT
- FLEXIBLE CONDUIT
- LOW VOLTAGE CABLE (NOT ROUTED IN CONDUIT)
- CONDUIT TURNING DOWN
- CONDUIT TURNING UP
- CONNECTION POINT OR EQUIPMENT TERMINATION
- EQUIPMENT TERMINATION

CONDUCTOR TICK MARK LEGEND

WHERE TICK MARKS ARE SHOWN, THE FOLLOWING SHALL GOVERN:

- SWITCHED HOT (PHASE) CONDUCTORS (SHOWN TRAILING NEUTRAL)
- NEUTRAL (GROUNDED) CONDUCTOR
- UNSWITCHED HOT (PHASE) CONDUCTORS (SHOWN LEADING NEUTRAL)
- NOTE: HASH MARKS INDICATE QUANTITY OF CONDUCTORS
- EQUIPMENT GROUNDING CONDUCTOR IN CONDUIT (GREEN INSULATION OR BARE)
- ISOLATED GROUNDING CONDUCTOR IN CONDUIT (GREEN INSULATION WITH YELLOW TRACER)

BRANCH CIRCUIT CONDUCTOR TABLE

WHERE TICK MARKS ARE NOT SHOWN, THE FOLLOWING SHALL GOVERN:

# OF POLES	HOT (PHASE)*	NEUTRAL (GROUNDED)**	GROUNDING***
1P	(1)	(1) UNO	(1)
2P	(2)	(1) UNO	(1)
3P	(3)	(1) UNO	(1)

* PROVIDE ADDITIONAL CONDUCTORS THROUGH ENTIRE CIRCUIT (SWITCHED, UNSWITCHED/EM, ETC.) AS INDICATED THROUGHOUT CONSTRUCTION DOCUMENTS AND AS REQUIRED FOR A COMPLETE AND WORKING SYSTEM.

** REFER TO SPECIFICATIONS FOR LIMITATIONS ON SHARING NEUTRAL (GROUNDED) CONDUCTORS. DO NOT CIRCUIT AS A MULTI-WIRE BRANCH CIRCUIT, UNO.

*** PROVIDE ADDITIONAL ISOLATED GROUNDING CONDUCTORS WHERE INDICATED.

REFER TO SPECIFICATIONS, PLANS, NOTES, WIRING AND CONTROL DIAGRAMS FOR ADDITIONAL CIRCUITING REQUIREMENTS.

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	———	NEW	———
DEMOLISH	- - - - - - - - - -	FUTURE	- - - - - - - - - -

LIGHTING

(REFER TO LIGHT FIXTURE SCHEDULE FOR MORE INFO)

- LIGHT FIXTURE
  - a = SWITCHED BY SWITCH "a"
  - A = LIGHT FIXTURE TYPE "A"
  - = WALL MOUNT
  - = ARROW INDICATES AIMING DIRECTION
- LIGHT FIXTURE CIRCUITED AS A NIGHT LIGHT (NL)
- EMERGENCY LIGHT FIXTURE WITH EMERGENCY LIGHTING BATTERY PACK OR CONNECTED TO EMERGENCY SOURCE
- NIGHT LIGHT/EMERGENCY LIGHT FIXTURE WITH EMERGENCY BATTERY PACK OR CONNECTED TO EMERGENCY SOURCE
- LIGHT FIXTURE WITH DUAL BALLASTS CIRCUITED SEPARATELY (SHADING IMPLIES EMERGENCY LIGHT FIXTURE)
- LIGHTING TRACK WITH LIGHT FIXTURE TYPES AS INDICATED
- MIRROR LIGHTS
- EXTERIOR SITE PARKING LOT LIGHT FIXTURE
- EXTERIOR PEDESTRIAN POST TOP LIGHT FIXTURE
- EXTERIOR LIT BOLLARD LIGHT FIXTURE
- EXIT SIGN - CEILING / WALL MOUNTED, ARROWS AS INDICATED, FACE HATCHED
- EMERGENCY LIGHTING UNIT EQUIPMENT WITH BATTERY PACK - CEILING/WALL MOUNTED
- AFEA (AREA FOR EVACUATION ASSISTANCE) SIGN - CEILING/WALL MOUNTED, ARROWS AS INDICATED

POWER EQUIPMENT & DEVICES

- ELECTRICAL PANELBOARD (SURFACE OR FLUSH MOUNT)
- TERMINAL CABINET (SURFACE OR FLUSH MOUNT), TYPE AS NOTED
- PLYWOOD TERMINAL BOARD FOR TELEPHONE SYSTEM, UNO. SIZE AS NOTED
- SWITCHBOARD OR MOTOR CONTROL CENTER ON HOUSEKEEPING PAD
- ELECTRICAL DISTRIBUTION PANELBOARD
- TRANSFORMER
- MOTOR
- 200/3/150/3R — DISCONNECT SWITCH - "200/3/150/3R" DENOTES AMPERES/POLE/FUSE/NEMA ENCLOSURE RATING, NF= NON-FUSED, CB= CIRCUIT BREAKER (200/3/CB), NO VALUE (200/3/150) FOR NEMA ENCLOSURE MEANS STANDARD NEMA 1 RATING
- 30/3/150/3R — COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER "30/3/15\1/3R" DENOTES AMPERES/POLE/FUSE/NEMA STARTER SIZE/NEMA ENCLOSURE RATING. NF= NON-FUSED, CB= CIRCUIT BREAKER (30/3/CB/1), NO VALUE (200/3/150/1) FOR NEMA ENCLOSURE MEANS STANDARD NEMA 1 ENCLOSURE RATING
- MAGNETIC MOTOR STARTER, NEMA SIZE AS NOTED. 3-POLE, UNO
- MANUAL MOTOR STARTER DISCONNECT
- FRACTIONAL HORSEPOWER MANUAL CONTROLLER
- INTEGRAL HORSEPOWER MANUAL CONTROLLER
- VFD — VARIABLE FREQUENCY DRIVE
- RELAY OR CONTACTOR (IN SCHEMATICS)
- CONTACTOR (SIZE, COIL VOLTAGE AND NUMBER OF POLES AS INDICATED)
- TS — TIME SWITCH
- PC — PHOTOCELL
- INDICATING LIGHT
- EMERGENCY POWER OFF BUTTON
- STOP-START PUSH BUTTON CONTROL STATION
- HAND-OFF-AUTO PUSH BUTTON CONTROL STATION
- MUSHROOM-TYPE PUSH BUTTON
- OVERHEAD PADDLE FAN

LIGHTING CONTROL DEVICES, WIRING DEVICES & BOXES

- SINGLE POLE SWITCH (NO LETTER DESIGNATION)
- SWITCH LETTER DESIGNATIONS AS FOLLOWS:
  - 2 = TWO POLE
  - 3 = THREE-WAY
  - 4 = FOUR-WAY
  - D = DIMMER
  - F = FAN SPEED CONTROL
  - K = KEYED
  - LV = LOW VOLTAGE
  - OS = OCCUPANCY SENSOR
  - P = SPECIFIED PILOT LIGHT
  - VS = VACANCY SENSOR
  - WP = WEATHER PROOF
- ALC — AUTOMATIC LOAD CONTROL RELAY
- BTS — BRANCH CIRCUIT TRANSFER SWITCH
- SIMPLEX RECEPTACLE - NEMA 5-20R, UNO
- DUPLEX RECEPTACLE - NEMA 5-20R, UNO
- DOUBLE DUPLEX RECEPTACLE - NEMA 5-20R, UNO
- SPECIAL RECEPTACLE - NEMA TYPE AS NOTED
- TWIST-LOCK TYPE RECEPTACLE
- GFCI OR GFCI — GFCI TYPE RECEPTACLE*
- ISOLATED GROUND TYPE RECEPTACLE*
- EM OR EM — EMERGENCY RECEPTACLE*
- RECEPTACLE INSTALLED ABOVE COUNTER OR BACKSPLASH*
- RECEPTACLE INSTALLED IN CEILING*
- RECEPTACLE INSTALLED IN FLOOR*
- RECEPTACLE INSTALLED VIA DROP CORD*
- WRWP — RECEPTACLE LETTER DESIGNATIONS AS FOLLOWS:
  - C = AUTOMATICALLY CONTROLLED
  - CH = CLOCK HANGER TYPE
  - D = DEMOLISHED
  - E/TREX = EXISTING
  - EM = EMERGENCY POWER
  - GFCI = GROUND-FAULT CIRCUIT INTERRUPTER
  - H = HORIZONTALLY MOUNTED
  - IG = ISOLATED GROUND
  - R = RELOCATED
  - S = MANUALLY SWITCHED
  - TR = TAMPER RESISTANT
  - TV = TELEVISION
  - USB = USB/DUPLEX
  - WP = WEATHER PROOF COVER
  - WR = WEATHER RESISTANT
- MULTI-OUTLET ASSEMBLY
- TELEPHONE OUTLET
- DATA OUTLET
- MULTI-SERVICE OUTLET; TELEPHONE AND DATA
  - ABOVE COUNTER, TYP
  - WALL, TYP
  - FLOOR, TYP
- A — MULTI-SERVICE POWER POLE WITH TELEPHONE, DATA AND POWER OUTLETS A = TYPE. REFER TO PLANS, SCHEDULES AND SPECIFICATIONS
- A — MULTI-SERVICE FLOOR BOX WITH TELEPHONE, DATA AND POWER OUTLETS A = TYPE, REFER TO PLANS, SCHEDULES AND SPECIFICATIONS
- A — POKE THROUGH, A = TYPE, REFER TO PLANS, SCHEDULES AND SPECIFICATIONS
- THERMOSTAT
- J — JUNCTION BOX/OUTLET BOX
- BLANK FACE GFCI FEED THROUGH DEVICE

REFER TO LIGHTING CONTROL DEVICE SCHEDULE FOR ADDITIONAL DEVICE SYMBOLS AND DEFINITIONS SPECIFIC TO THIS PROJECT.

*SYMBOL DEMONSTRATED WITH DUPLEX RECEPTACLE, WHEN USED IN COMBINATION WITH OTHER DEVICES MEANING IS SIMILAR FOR THOSE DEVICE TYPES.

SIGNALING

- B — SIGNALING BELL
- B — SIGNALING BUZZER
- T — LV TRANSFORMER

ELECTRICAL ONE-LINE & RISER DIAGRAM

- SWITCH (RATING AS INDICATED)
- DRAWOUT CIRCUIT BREAKER (RATINGS AS INDICATED)
- FUSED SWITCH (RATING, POLES AND FUSE TYPE AS INDICATED)
- COMBINATION FUSED SWITCH/STARTER AND STARTER SIZE
- CIRCUIT BREAKER (RATINGS AS INDICATED)
- COMBINATION CIRCUIT BREAKER/STARTER AND STARTER SIZE
- PANELBOARD, SINGLE OR MULTI-SECTION (REFER TO SCHEDULES)
- ISOLATED POWER PANELBOARD W/ INTEGRAL TRANSFORMER (REFER TO SCHEDULES)
- TRANSFORMER (TYPE AND RATINGS AS INDICATED)
- SHIELDED TRANSFORMER (TYPE AND RATINGS AS INDICATED)
- ATS — AUTOMATIC TRANSFER SWITCH (RATINGS AS INDICATED)
- ATS/BYPASS — AUTOMATIC TRANSFER SWITCH WITH BYPASS (RATINGS AS INDICATED)
- GENERATOR (RATINGS AS INDICATED)
- NON-SEPARATELY DERIVED SOURCE
- OR
- SEPARATELY DERIVED SOURCE
- MDP — SWITCHGEAR, SWITCHBOARD AND/OR DISTRIBUTION PANELBOARD (TYPE, RATING, DEVICES AND ACCESSORIES AS INDICATED)
- COMBINATION DIGITAL VOLT METER/AMMETER
- ### — CIRCUIT IDENTIFICATION (REFER TO CIRCUIT SCHEDULE)
- GFR — GROUND FAULT RELAY
- PFR — PHASE FAILURE RELAY
- KK# — KIRK-KEY INTERLOCK (# INDICATES KEY PAIR)
- ST — SHUNT TRIP
- AM — AMMETER (RANGE AS SPECIFIED OR REQUIRED)
- VM — VOLTMETER (RANGE AS SPECIFIED OR REQUIRED)
- UTILITY METER M — UTILITY METER (AS REQUIRED BY UTILITY)
- AS — AMMETER SWITCH
- VS — VOLTMETER SWITCH
- WH D 15 — WATT-HOUR METER, "D" DENOTES DEMAND REGISTER, "15" DENOTES MINUTES OF DEMAND INTERVAL
- CURRENT TRANSFORMER RATING AS SPECIFIED OR REQUIRED
- POTENTIAL TRANSFORMER RATING AS SPECIFIED OR REQUIRED
- SPD — SURGE-PROTECTIVE DEVICE
- GROUND CONNECTION
- GROUND CONNECTION WITH TEST WELL
- GROUND ROD
- LIGHTNING ARRESTER
- CAPACITOR
- CONTACT (OPEN OR CLOSED)
- HEATER
- MOTOR
- ## — BLOCK LOAD KW OR KVA
- ×F# ×FP# — FAULT POINT REFERENCED IN SHORT CIRCUIT CURRENT AND VOLTAGE DROP SPREADSHEET

APPLICABLE ELECTRICAL CODES:

NOTE: PROJECT IS DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES. THIS IS NOT AN EXHAUSTIVE LIST. PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS AND LOCAL REQUIREMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL CODE: 2011 NATIONAL ELECTRICAL CODE, (NFPA 70)

BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE

ENERGY CODE: 2012 INTERNATONAL ENERGY CONSERVATION CODE

ELECTRICAL SUPPLEMENTAL SPECIFICATIONS:

1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS. AS APPLICABLE, REVIEW THE LANDLORD CRITERIA, GENERAL NOTES, OTHER TRADE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMITTING BID.
2. ALL WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES AS WELL AS APPLICABLE INDUSTRY STANDARDS. ALL EQUIPMENT SHALL BEAR LABELS FOR THE USE INTENDED BY AN AHJ ACCEPTED NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL), SUCH AS UL OR ETL. THE FINAL ELECTRICAL INSTALLATION OF THE FACILITY OCCUPIED BY OWNER SHALL BE FREE FROM ELECTRICAL DEFECTS TO THE SATISFACTION OF THE AHJ, OWNER, ARCHITECT AND ENGINEER.
3. COORDINATE EXACT LOCATION AND REQUIREMENTS OF ALL LIGHT FIXTURES, ELECTRICAL EQUIPMENT AND ELECTRICAL DEVICES WITH CIVIL DRAWINGS, EXISTING CONDITIONS AND OTHER TRADES PRIOR TO ROUGH-IN. PROVIDE ALL NECESSARY DEVICES, CORDS, PLUGS, DISCONNECTS AND FINAL CONNECTIONS TO ELECTRICAL EQUIPMENT FOR PROPER OPERATION IN ACCORDANCE WITH CODE, OWNER AND MANUFACTURER REQUIREMENTS.
4. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC/SCHEMATIC IN NATURE AND REPRESENT THE GENERAL SCOPE OF WORK. IT IS NOT WITHIN THE SCOPE OF THE ELECTRICAL DRAWINGS TO SHOW ALL NECESSARY RACEWAY ROUTING, BENDS, OFFSETS, PULL BOXES AND OBSTRUCTIONS. CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND WIRING DEVICES WITH OTHER TRADES PRIOR TO INSTALLATION AND INSTALL ALL WORK TO CONFORM TO THE OWNER REQUIREMENTS.
5. ALL CONDUCTOR AND CONDUIT LENGTHS SHOWN IN THESE DESIGN DOCUMENTS ARE INTENDED SOLELY FOR USE IN THE DESIGN CALCULATIONS BY THE DESIGN PROFESSIONAL, UNLESS NOTED OTHERWISE. LENGTHS SHOWN SHALL NOT BE USED TO ASSIST IN THE BIDDING TAKEOFF PROCESS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MATERIAL QUANTITIES REQUIRED TO BID AND CONSTRUCT THE COMPLETE PROJECT.
6. ALL APPLICABLE SWITCHES, RECEPTACLES, OUTLETS, AND CONTROLS SHALL BE PLACED AT HEIGHTS THAT ARE IN ACCORDANCE WITH ADA ACCESSIBILITY GUIDELINES.
7. ALL WP OUTLET BOX HOODS SHALL BE "EXTRA-DUTY" AND "WHILE-IN-USE COVER" TYPE. OUTLET BOX HOODS SHALL BE LOW PROFILE WHEREVER PRACTICABLE, UNLESS NOTED OTHERWISE. THE USE OF LARGE BUBBLE COVERS SHALL BE AVOIDED ON THE EXTERIOR OF THE BUILDING OR BEHIND EQUIPMENT IN ORDER TO PREVENT DAMAGE TO THE COVER AND TO ALLOW THE EQUIPMENT TO BE LOCATED CLOSE TO THE WALL.
8. FLEXIBLE CONDUIT IS ONLY PERMITTED WHERE SPECIFICALLY ALLOWED IN THE CONSTRUCTION DOCUMENTS; GENERALLY WHERE CONCEALED FROM VIEW OR EXPOSED FINAL CONNECTIONS TO LIGHT FIXTURES AND EQUIPMENT IN LENGTHS OF 6'-0" OR LESS.
9. ALL EMPTY CONDUIT/RACEWAY SHALL BE INSTALLED WITH PULL STRINGS. TERMINATE CONDUIT STUB-UP WITH A NYLON BUSHING.
10. WHERE PRACTICABLE, ALL UNDER-FLOOR/UNDER-GROUND CONDUITS/RACEWAY SHALL BE INSTALLED A MINIMUM OF 24" BELOW BOTTOM OF SLAB/PAVING/GRADE, UNLESS NOTED OTHERWISE. NOTE: THE DESIGN INTENT FOR INSTALLING ELECTRICAL CIRCUITRY AT THIS DEPTH IS TO PROTECT THE ELECTRICAL CIRCUITRY FROM DAMAGE DUE TO FUTURE WORK.
11. PROVIDE LABEL AT EACH RECEPTACLE COVER PLATE WITH THE RESPECTIVE "PNLBD-CKT#" DESIGNATION. COORDINATE EXACT LABEL REQUIREMENTS WITH THE OWNER PRIOR TO INSTALLATION. REFER TO THE SPECIFICATIONS FOR MORE INFORMATION.
12. MULTIWIRE BRANCH CIRCUITS ARE NOT ALLOWED, UNLESS NOTED OTHERWISE.
13. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR ALL CIRCUITS, UNLESS NOTED OTHERWISE.

SITE ELECTRICAL GENERAL NOTES:

1. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE THE EXACT LOCATION OF ALL SITE LIGHTING POLES, SIGNAGE, UNDERGROUND UTILITIES, CONDUITS, CIRCUITRY, TRANSFORMERS AND OTHER EQUIPMENT WITH CIVIL DRAWINGS, LANDSCAPING DRAWINGS AND OWNER PRIOR TO INSTALLATION.
2. COORDINATE ALL SITE ELECTRICAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER INFORMATION AND OTHER TRADES AND ADJUST ELECTRICAL PROVISIONS AS REQUIRED TO MEET REQUIREMENTS.
3. SITE ELECTRICAL CONDUITS SHALL BE 1" MINIMUM, UNLESS NOTED OTHERWISE. WHERE PRACTICABLE, ALL SITE ELECTRICAL CONDUITS SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE, UNLESS NOTED OTHERWISE. COORDINATE EXACT CONDUIT ROUTING WITH EXISTING OBSTRUCTIONS AND OTHER TRADES AND ADJUST AS NECESSARY.
4. CAP AND MARK ALL UNDERGROUND CONDUITS PROVIDED FOR FUTURE USE AND INCLUDE PULL STRINGS. PROVIDE DIMENSIONED LOCATIONS OF TERMINATION POINTS ON AS-BUILT DRAWINGS AND SUBMIT TO OWNER.
5. MINIMUM WIRE SIZE FOR SITE ELECTRICAL CIRCUITS SHALL BE #10 AWG CU, UNLESS NOTED OTHERWISE. ALL SITE ELECTRICAL BRANCH CIRCUIT WIRING SHALL BE SIZED SUCH THAT THE MAXIMUM BRANCH CIRCUIT VOLTAGE DROP IS LESS THAN 3 PERCENT. FEEDER CIRCUITS TO SPORTS LIGHTING POLES SHALL BE SIZED SUCH THAT THE MAXIMUM VOLTAGE DROP IS LESS THAN 5 PERCENT.
6. PROVIDE SPLICE AND PULL BOXES FOR SITE LIGHTING AND SITE ELECTRICAL POWER TO LIMIT MAXIMUM CONDUIT RUN TO 300'. PLACE BOXES IN A PLANTER AREA CLEAR OF VEGETATION WHEREVER PRACTICABLE; (COORDINATE EXACT LOCATION WITH CIVIL, LANDSCAPE CONTRACTOR AND OWNER). BOXES SHALL BE SUITABLE FOR LOCATION AND PROPERLY SIZED FOR QUANTITY AND SIZE OF CONDUITS IN AND OUT AND SHALL BE MARKED "ELECTRICAL". NOT ALL OF THESE BOXES ARE SHOWN ON SITE ELECTRICAL DRAWINGS; CONTRACTOR SHALL PROVIDE LOCATION ON AS-BUILT DRAWINGS AND SUBMIT TO OWNER. SPLICE BOX SHALL BE APPROPRIATE FOR LOCATION AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SPLICE BOX SHALL HAVE A MINIMUM NOMINAL SIZE OF 12"X12"X12", SHALL BE AN OPEN BOTTOM NRTL LISTED UNDERGROUND ENCLOSURE, AND SHALL AT A MINIMUM BE TIER 15 TRAFFIC RATED.
7. THE SITE PARKING LOT LIGHTING IS DESIGNED TO MEET THE FOLLOWING CRITERIA EXCEPT WHERE LIMITED BY SITE CONSTRAINTS AND LOCAL REQUIREMENTS:
   - A. MINIMUM MAINTAINED HORIZONTAL ILLUMINATION LEVEL AT FINISHED GRADE OF 2 FC AT ALL PAVED PARKING AND WALKING SURFACES.
   - B. MAX/MIN RATIO FOR EACH AREA SHALL BE LESS THAN 10:1.
   - C. PHOTOMETRIC CALCULATION GRID SHALL NOT EXCEED A 10' X 10' SPACING FOR PARKING LOT.
   - D. THE TOTAL LIGHT LOSS FACTOR USED FOR THE CALCULATIONS SHALL BE .72 OF INITIAL LUMEN OUTPUT FOR LED SOURCES, UNLESS NOTED OTHERWISE.
   - E. MAXIMUM LUMINAIRE MOUNTING HEIGHT (INCLUDING POLE AND BASE) OF 28' ABOVE FINISHED GRADE FOR PARKING LOT LIGHTING.
8. REFER TO SPECIFICATION 265668 EXTERIOR ATHLETIC FIELD LIGHTING FOR SPECIFIC REQUIREMENTS FOR FIELD LIGHTING.
9. CONDUITS SHALL NOT BE ROUTED UNDER ANY ATHLETIC FIELD PLAYING SURFACES.
10. ATHLETIC FIELD LIGHTS SHALL NOT BE USED FOR GENERAL ILLUMINTION DURING THE CONSTRUCTION PROCESS WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklew&ms.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY SUBMITTAL
ANDREA C. MULVANY
LICENSE # PE-2013039892

IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DRAWING TITLE:

ELECTRICAL SYMBOLS AND LEGENDS

JOB NO: 1197 SCALE: N/A

DATE: 05.15.2019 DRAWN BY: LKV

SHEET NO:

E-000

HENDERSON ENGINEERS
1801 MAIN STREET, SUITE 300
KANSAS CITY, MO 64108
TEL 816.663.8700 FAX 816.663.8701
WWW.HENDERSONENGINEERS.COM
1850004412
MO. CORPORATE NUMBER: E-556D
EXPIRES 12/31/20

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

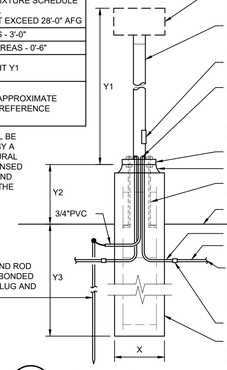
LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER/MODEL #	LAMPS NO.	LAMPS TYPE	LAMPS VOLT	INPUT WATTS	INPUT VA	DESCRIPTION
S1	MCGRAW-EDISON GLEON-AF-03-LED-480-T4W-BK	-	LED BY MANUFACTURER 4000K, 70 CRI 18,045 LUMENS 400,000 HRS	480	166	166	LED PARKING LOT FIXTURE. PROVIDE WITH 25' ALUMINUM POLE ON 3' BASE.
S2	MCGRAW-EDISON (2) GLEON-AF-03-LED-480-T4W-BK	-	LED BY MANUFACTURER 4000K, 70 CRI 36,090 LUMENS 400,000 HRS	480	332	332	LED PARKING LOT FIXTURE. PROVIDE (2) HEAD PER POLE AT 180 DEGREES. PROVIDE WITH 25' ALUMINUM POLE ON 3' BASE.

TABLE OF DIMENSIONS*	
X	POLE HEIGHT < 16' = 1'-6"
	POLE HEIGHT > 16' = 2'-0"
Y1	REFER TO LIGHT FIXTURE SCHEDULE FOR POLE HEIGHT. Y1 + Y2 SHALL NOT EXCEED 28'-0" AFG
Y2	VEHICULAR AREAS - 3'-0"
	NON-VEHICULAR AREAS - 0'-6"
Y3	1/4 OF POLE HEIGHT Y1

* NOTE:
ALL DIMENSIONS ARE APPROXIMATE AND ARE SHOWN FOR REFERENCE ONLY.

POLE FOUNDATION SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL OR CIVIL ENGINEER LICENSED IN THE PROJECT STATE AND SUBMITTED AS PART OF THE SUBMITTAL PROCESS.



2 POLE BASE DETAIL
NO SCALE

GENERAL NOTES:

1. REFER TO SHEET E000 FOR GENERAL NOTES.

KEYNOTES:

1 PROVIDE 4-CIRCUIT POWER SUPPLY AS APPROVED BY THE CITY OF LEE'S SUMMIT:

MILLBANK	CP3B51C15AAOLSMO
MYERS	MEUG16-M100-LEES
PACIFIC UTILITY (PUP)	USP16-M2100-112C-MODOT

FUSED CONTACTORS ARE NOT PERMITTED. REFER TO CIVIL DRAWINGS FOR EXACT LOCATION.

2 PROVIDE PHOTOELECTRIC CELLS AS APPROVED BY THE CITY OF LEE'S SUMMIT:

AMERICAN ELECTRIC LIGHTING (AEL)	DPR124-2.6-TJPK
AREA LIGHTING RESEARCH (ALR)	2190-NP3
AREA LIGHTING RESEARCH (ALR)	SST-PV-IES

REFER TO CIVIL DRAWINGS FOR EXACT LOCATION.

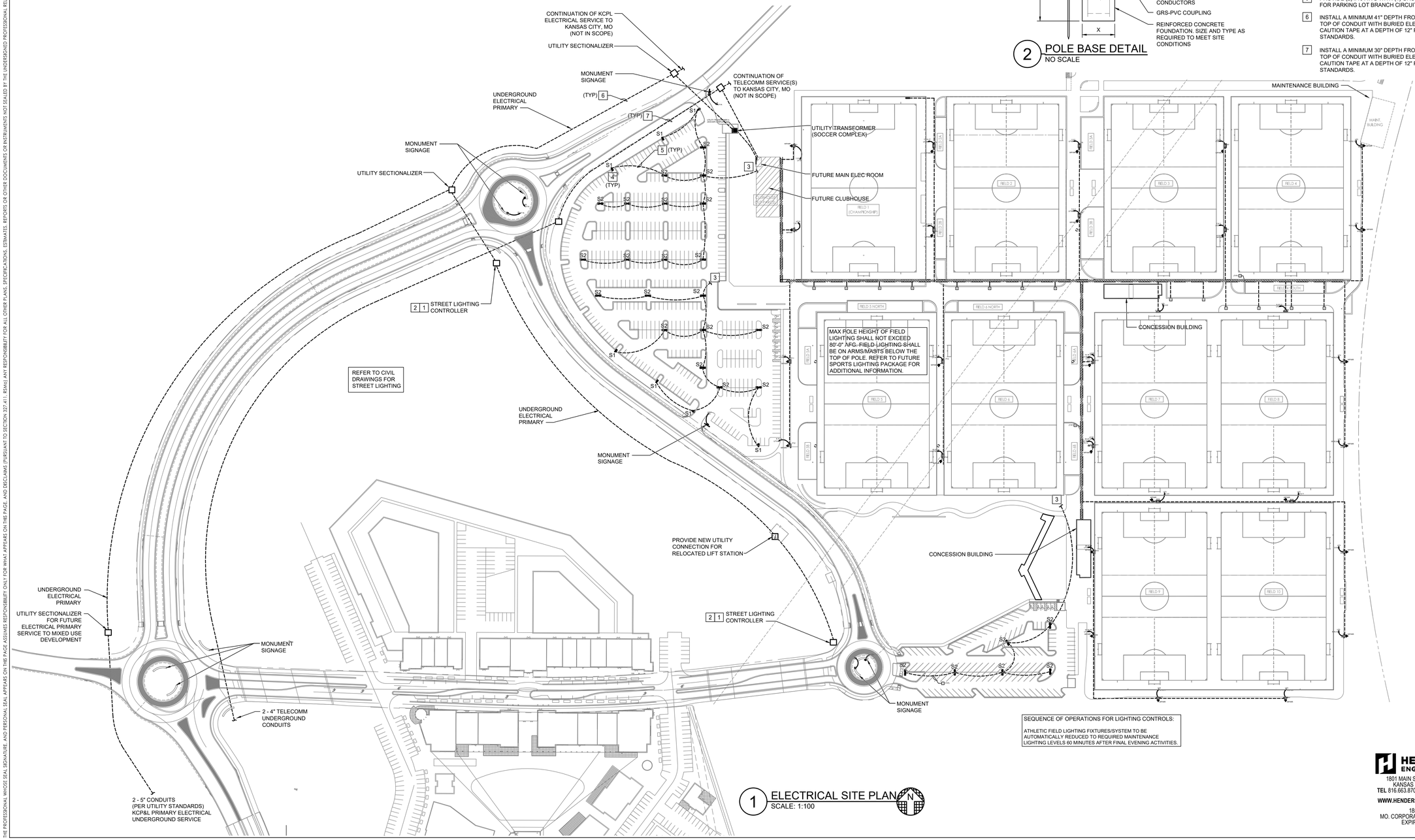
3 ROUTE PARKING LOT LIGHTING CONDUIT TO FUTURE BUILDING AS INDICATED AND STUB UP FOR CONNECTION TO PANELBOARD. PANELBOARD AND LIGHTING CONTROLS TO BE PROVIDED IN FUTURE BID PACKAGE. REFER TO FUTURE BID PACKAGE FOR EXACT LOCATION.

4 REFER TO DETAIL 2, SHEET E100 FOR POLE BASE DETAIL.

5 PROVIDE (2) #10 AWG WITH (1) GROUND IN 1" CONDUIT FOR PARKING LOT BRANCH CIRCUITRY.

6 INSTALL A MINIMUM 41" DEPTH FROM FINAL GRADE TO TOP OF CONDUIT WITH BURIED ELECTRIC LINE PLASTIC CAUTION TAPE AT A DEPTH OF 12" PER UTILITY STANDARDS.

7 INSTALL A MINIMUM 30" DEPTH FROM FINAL GRADE TO TOP OF CONDUIT WITH BURIED ELECTRIC LINE PLASTIC CAUTION TAPE AT A DEPTH OF 12" PER UTILITY STANDARDS.



SEQUENCE OF OPERATIONS FOR LIGHTING CONTROLS:

ATHLETIC FIELD LIGHTING FIXTURES/SYSTEM TO BE AUTOMATICALLY REDUCED TO REQUIRED MAINTENANCE LIGHTING LEVELS 60 MINUTES AFTER FINAL EVENING ACTIVITIES.

1 ELECTRICAL SITE PLAN
SCALE: 1:100

HENDERSON ENGINEERS
1801 MAIN STREET, SUITE 300
KANSAS CITY, MO 64108
TEL 816.663.8700 FAX 816.663.8701
WWW.HENDERSONENGINEERS.COM
1850004412
MO. CORPORATE NUMBER: E-556D
EXPIRES 12/31/20

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY SUBMITTAL
ANDREA C. MULVANY
LICENSE # PE-2013039892

IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DRAWING TITLE:

ELECTRICAL SITE PLAN

JOB NO: 1197 SCALE: 1:100
DATE: 05.15.2019 DRAWN BY: LKV

SHEET NO:

E-100

THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER/MODEL #	LAMPS NO.	LAMPS TYPE	LAMPS VOLT	INPUT WATTS	INPUT VA	DESCRIPTION
S1	MCGRAW-EDISON GLEON-AF-03-LED-480-T4W-BK	-	LED BY MANUFACTURER 4000K, 70 CRI 18,045 LUMENS 400,000 HRS	480	166	166	LED PARKING LOT FIXTURE. PROVIDE WITH 25' ALUMINUM POLE ON 3' BASE.
S2	MCGRAW-EDISON (2) GLEON-AF-03-LED-480-T4W-BK	-	LED BY MANUFACTURER 4000K, 70 CRI 36,090 LUMENS 400,000 HRS	480	332	332	LED PARKING LOT FIXTURE. PROVIDE (2) HEAD PER POLE AT 180 DEGREES. PROVIDE WITH 25' ALUMINUM POLE ON 3' BASE.

REFER TO "MEP SUPPLEMENTAL INFORMATION" PACKET FOR PARKING LOT LIGHT FIXTURE CUT SHEET AND PERFORMANCE DATA.

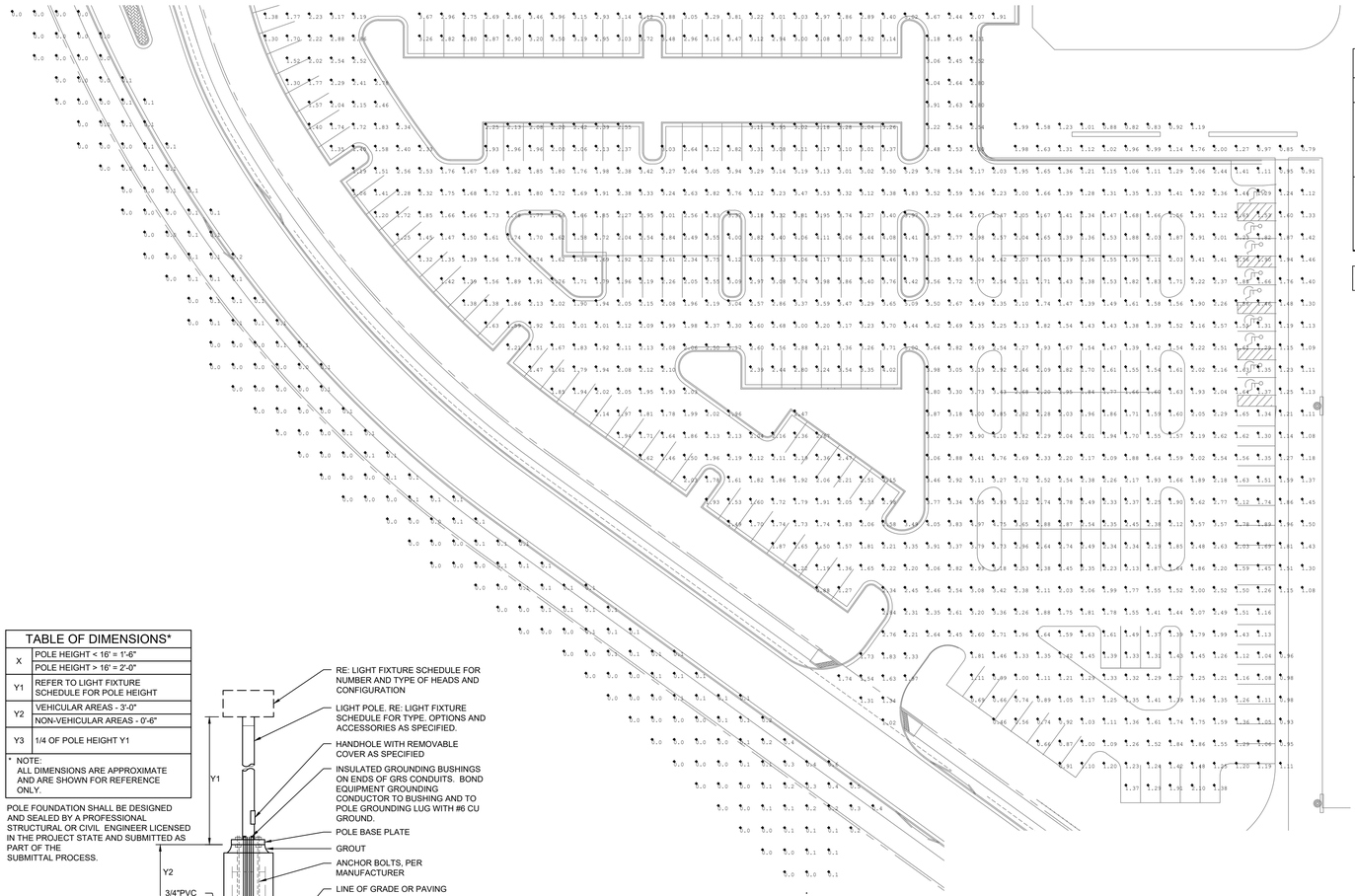
Luminaire Schedule

Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
◘	120	GLEON-AF-03-LED-E1-T4W	SINGLE	N.A.	0.720	GLEON-AF-03-LED-E1-T4W

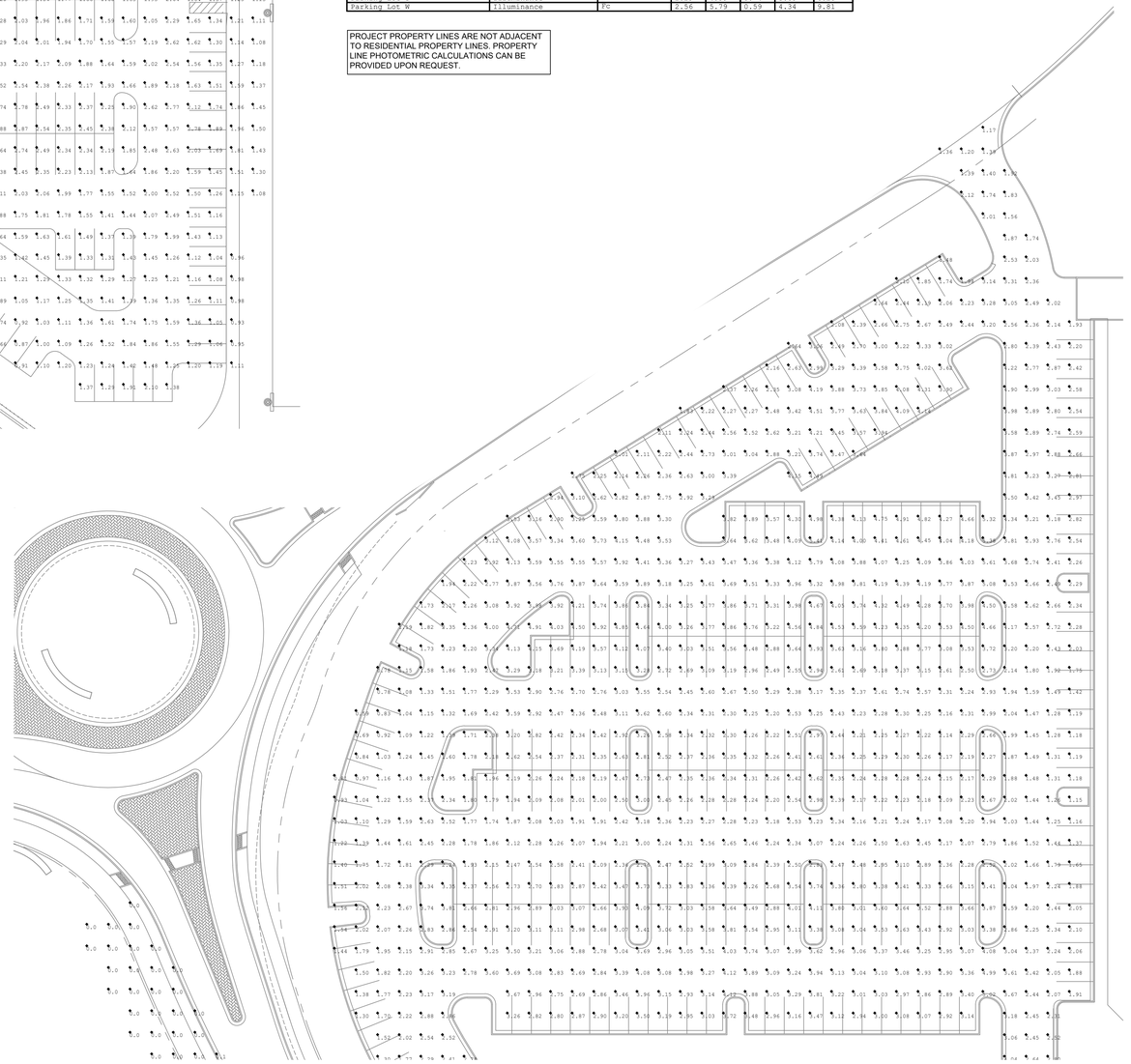
Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Boundary Line to Residential	Illuminance	Fc	0.08	0.16	0.02	4.00	18.00
Parking Lot S	Illuminance	Fc	2.29	4.59	0.74	3.09	6.20
Parking Lot W	Illuminance	Fc	2.56	5.79	0.59	4.34	9.81

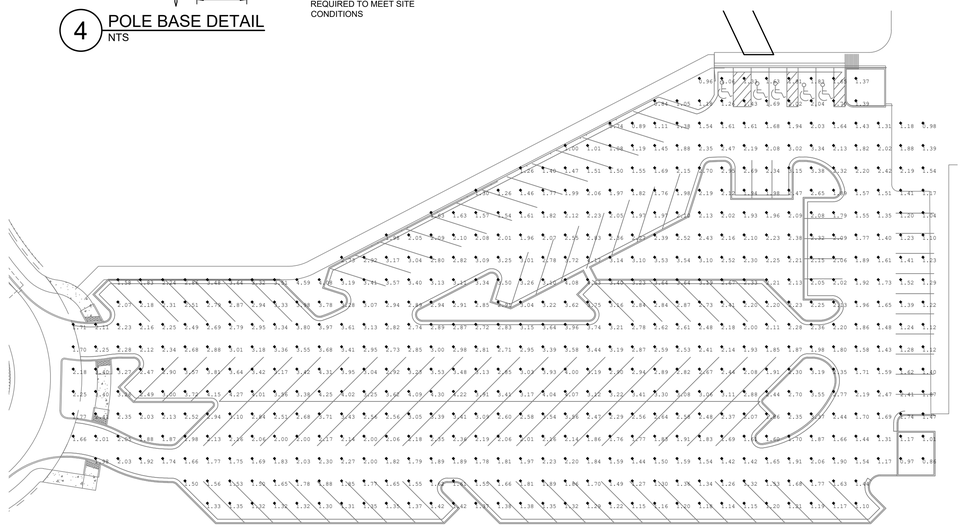
PROJECT PROPERTY LINES ARE NOT ADJACENT TO RESIDENTIAL PROPERTY LINES. PROPERTY LINE PHOTOMETRIC CALCULATIONS CAN BE PROVIDED UPON REQUEST.



2 WEST PARKING LOT PHOTOMETRIC PLAN - SOUTH
SCALE: 1" = 30'-0"



1 WEST PARKING LOT PHOTOMETRIC PLAN - NORTH
SCALE: 1" = 30'-0"

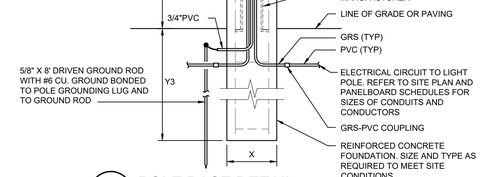


3 SOUTH PARKING LOT PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"

TABLE OF DIMENSIONS*	
X	POLE HEIGHT < 16' = 1'-6"
	POLE HEIGHT > 16' = 2'-0"
Y1	REFER TO LIGHT FIXTURE SCHEDULE FOR POLE HEIGHT
Y2	VEHICULAR AREAS - 3'-0"
	NON-VEHICULAR AREAS - 0'-6"
Y3	1/4 OF POLE HEIGHT Y1

* NOTE:
ALL DIMENSIONS ARE APPROXIMATE AND ARE SHOWN FOR REFERENCE ONLY.

POLE FOUNDATION SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL OR CIVIL ENGINEER LICENSED IN THE PROJECT STATE AND SUBMITTED AS PART OF THE SUBMITTAL PROCESS.



4 POLE BASE DETAIL
NTS

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY SUBMITTAL
ANDREA C. MULVANY
LICENSE # PE-2013039892

IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DRAWING TITLE:

PHOTOMETRIC PLAN

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: LKV

SHEET NO:

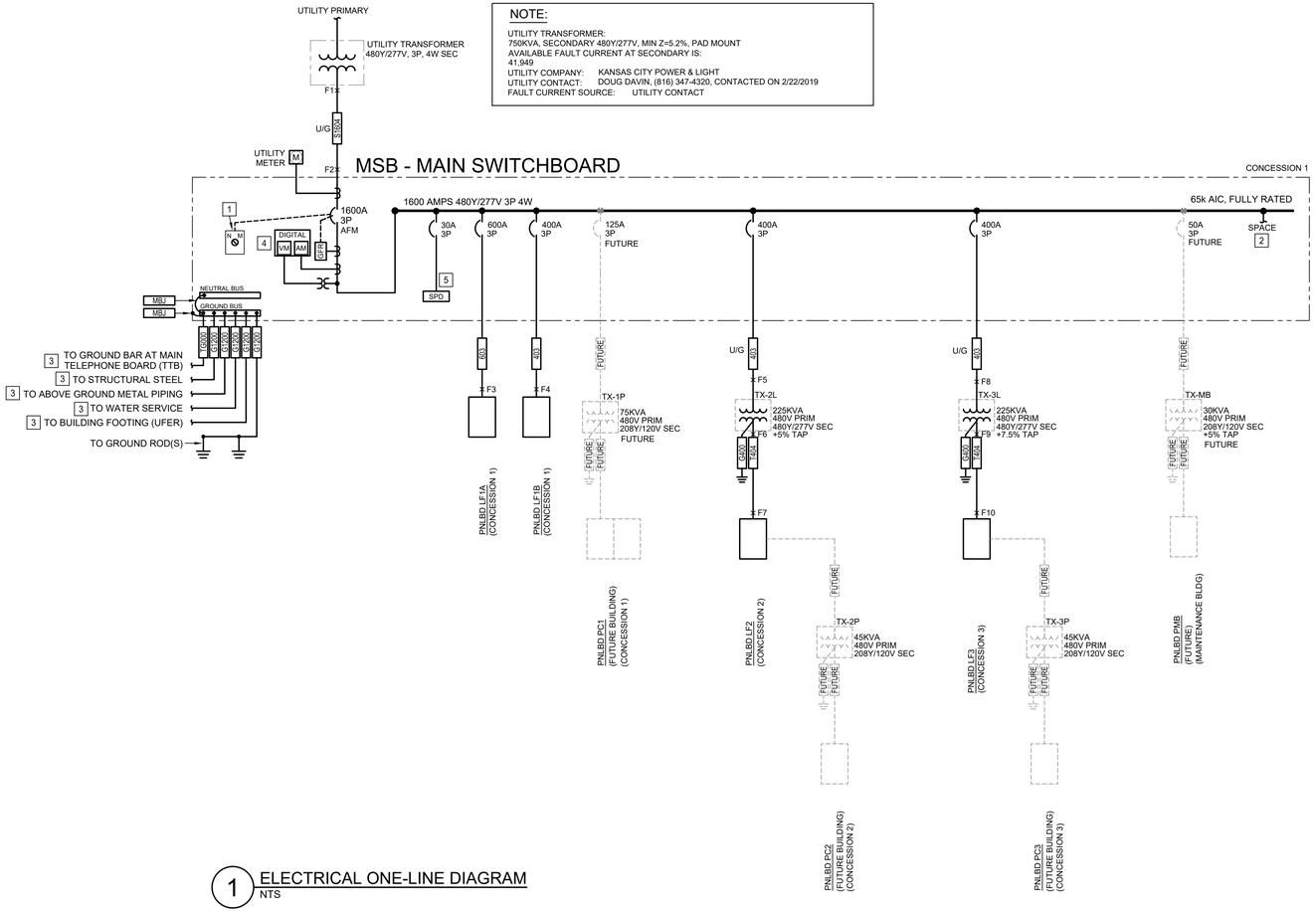
E-200

HENDERSON ENGINEERS
1801 MAIN STREET, SUITE 300
KANSAS CITY, MO 64108
TEL 816.663.8700 **FAX** 816.663.8701
WWW.HENDERSONENGINEERS.COM

1850004412
MO. CORPORATE NUMBER: E-556D
EXPIRES 12/31/20

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



NOTE:

UTILITY TRANSFORMER:
750KVA, SECONDARY 480Y/277V, MIN Z=5.2%, PAD MOUNT
AVAILABLE FAULT CURRENT AT SECONDARY IS:
41,949
UTILITY COMPANY: KANSAS CITY POWER & LIGHT
UTILITY CONTACT: DOUG DAVIN, (816) 347-4320, CONTACTED ON 2/22/2019
FAULT CURRENT SOURCE: UTILITY CONTACT

1 ELECTRICAL ONE-LINE DIAGRAM
NTS

BUILDING ELECTRICAL SERVICE LOAD SUMMARY			
BUILDING OCCUPANCY TYPE:	A	SERVICE DESCRIPTION:	
BUILDING SQUARE FOOTAGE:	0	480Y/277V, 3PH	
LOAD DESCRIPTION		Connected KVA	Demand FACTOR	Demand KVA
HVAC - SUMMER		0.00	100%	0.00
HVAC - WINTER		0.00	100%	0.00
LIGHTING (PER NEC-220)		0.00	125%	0.00
RECEPTACLES		0.00	100%;50%	0.00
KITCHEN EQUIPMENT		0.00	100%	0.00
MOTOR LOADS		0.00	100%	0.00
LARGEST MOTOR LOAD		0.00	125%	0.00
SUPPLEMENTAL ELECTRIC HEAT		0.00	100%	0.00
MISCELLANEOUS EQUIPMENT		0.00	100%	0.00
EXTERIOR LIGHTING		797.82	125%	997.27
TOTAL LOAD		805.02	KVA	1006.27
TOTAL AMPACITY		968.29	AMPS	1210.36
SERVICE AMPACITY		1600	AMPS	1600.00
SPARE CAPACITY			AMPS	390

CIRCUIT SCHEDULE:

ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS. COPPER CONDUCTORS ARE BASED ON THHN/THWN-2 INSULATION. ALUMINUM CONDUCTORS (PREFIX "A") ARE BASED ON XHHW-2 INSULATION. FOR ANY OTHER CONDITIONS ALLOWED PER SPECIFICATIONS, OR FOR TERMINATIONS OR INSULATION TYPES RATED LESS THAN 75 DEG C, MODIFY SIZES ACCORDING TO NFPA 70.

- 403 — 400A, (2) 2" C, EACH W/ (3)#3/0, (1)#3G
- 603 — 600A, (2) 3" C, EACH W/ (3)-350kcmil, (1)#1G
- FUTURE — FUTURE FEEDER IN SUBSEQUENT DESIGN PACKAGE
- G1200 — GND, #3/0 COPPER GROUND, 1" C
- G400 — GND, #1/0 COPPER GROUND, 1" C
- MBJ — MAIN BONDING JUMPER
- S1604 — 1600A, (5) 3" C, EACH W/ (4)-400kcmil
- T404 — 400A (2) 2" C, EACH W/ (4)#3/0, (1)#2G
- TG000 — COMM GND, #3/0 COPPER GROUND, 3/4" C

ONELINE DIAGRAM KEYED NOTES:

1. PROVIDE ENERGY-REDUCING MAINTENANCE SYSTEM FOR ARC FLASH MITIGATION. PROVIDE CONTROL UNIT WITH NORMAL/MAINTENANCE SELECTOR SWITCH AND ALL REQUIRED WIRING BETWEEN SELECTOR SWITCH AND CIRCUIT BREAKER. PROVIDE WITH BLUE STROBE ENABLED WHEN IN MAINTENANCE MODE.
2. PROVIDE UNUSED SPACES IN DISTRIBUTION PANELBOARDS WITH FULL BUSSING FOR FUTURE INSTALLATION OF DEVICES. TYPICAL FOR ALL DISTRIBUTION TYPE PANELBOARDS.
3. GROUNDING TO BUILDING STRUCTURE TO BE PROVIDED IN FUTURE DESIGN PACKAGE.
4. PROVIDE BOARD MOUNTED DIGITAL DEMAND METER. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. PROVIDE SURGE PROTECTIVE DEVICE (SPD) INTEGRAL TO DISTRIBUTION BOARD. COORDINATE OVERCURRENT PROTECTION DEVICE SIZE WITH SPD SUBMITTAL INFORMATION AND PROVIDE AS REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

ONELINE DIAGRAM GENERAL NOTES:

1. REFER TO SHEETS E0-0 FOR ADDITIONAL GENERAL NOTES.
2. CIRCUIT BREAKERS DENOTED WITH 'AFM' SHALL BE ADJUSTABLE TRIP TYPE BREAKER COMPATIBLE WITH ARC FLASH MITIGATION SYSTEM. INCLUDE SYSTEM INFORMATION AND DEVICE SETTINGS IN OPERATIONS AND MAINTENANCE MANUAL UPON COMPLETION OF PROJECT.
3. F## INDICATES FAULT POINT. REFER TO TABLES ON E300 FOR AVAILABLE FAULT CURRENT AND CUMULATIVE VOLTAGE DROP AT FAULT POINTS.

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER/MODEL #	LAMPS NO.	LAMPS TYPE	VOLT	INPUT WATTS	INPUT VA	DESCRIPTION
S1	MCGRAW-EDISON GLEON-AF-03-LED-480-T4W-BK	-	LED BY MANUFACTURER 4000K, 70 CRI 18,045 LUMENS 400,000 HRS	480	166	166	LED PARKING LOT FIXTURE. PROVIDE WITH 25' ALUMINUM POLE ON 3' BASE.
S2	MCGRAW-EDISON (2) GLEON-AF-03-LED-480-T4W-BK	-	LED BY MANUFACTURER 4000K, 70 CRI 36,090 LUMENS 400,000 HRS	480	332	332	LED PARKING LOT FIXTURE. PROVIDE (2) HEAD PER POLE AT 180 DEGREES. PROVIDE WITH 25' ALUMINUM POLE ON 3' BASE.

Short-Circuit and Voltage Drop Calculations

Distances are for calculation purposes only and shall not be used for contractor takeoffs nor bidding - Contractor shall notify Engineer of any field condition that results in a change of 10% or greater circuit distance

The following calculations are based on the "Point-by-Point" method where:
$ISC_{(2)} = ISC_{(1)} \times M_{(1)}$ M= 1/(1+f)
$ISC_{(1)}$ = short circuit current at fault point 1
$ISC_{(2)}$ = short circuit current at fault point 2

Feeder: $f_{(1&2)} = \frac{1.732 \times L \times Isc}{C \times E}$
Feeder: $f_{(1&2)} = \frac{2 \times L \times Isc}{C \times E}$

XFMR: $f_{(1&2)} = \frac{IP(scaix\ Vp \times 1.73 \times \%Z}{100,000 \times KVA}$
XFMR: $f_{(1&2)} = \frac{IP(scaix\ Vp \times \%Z}{100,000 \times KVA}$

$IS_{(sec)} = \frac{Vp \times M \times IP_{(pri)}}{Vs}$

VOLTAGE DROP (3Ø):
%VD= ((R x cos(arccos(pf)) + X x sin (arccos(pf))) x L/# x I x 1.73) / E
VOLTAGE DROP (1Ø):
%VD= ((R x cos(arccos(pf)) + X x sin(arccos(pf))) x 2 x L/# x I) / E

IP = Primary short circuit current
Vp = Primary voltage
IS= Secondary short circuit current
Vs= Secondary voltage
L = Length of circuit
C = "C" Factor from Bussman table where "C" = 1 / impedance per linear foot
E = Line to line volts

%VD CUM= Cumulative Voltage Drop from Fault Point 1 to Fault Point #
R= resistance in ohms per LF
X= reactances in ohms per LF

Feeder Types =
NM - Non Magnetic Conduit, M - Magnetic Conduit, FB - Feeder Busway, PB - Plug-in Busway, TX - Transformer

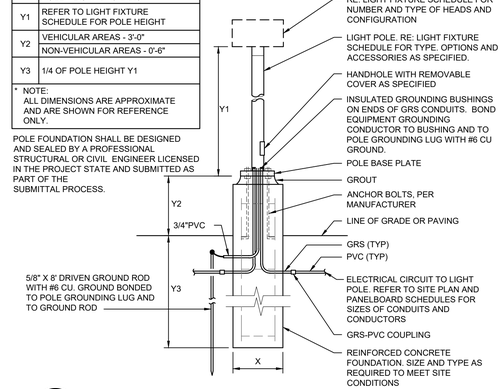
Date of Calculations: 12/19/2018
System Voltage: 480Y/277V - 3 phase

Fault Point (F#)	Bus/Feeder Description	Source (Fault Point)	Phase	Source Isc (amps)	Feeder: Conduit Type/ TX	Material	Quantity of Parallel Sets and Bus/ Phase & Neutral Size			Conductor 'C' Value	Busway 'C' Value	L-L Voltage (E)	Circuit Length (L)	Load Power Factor (pf)	Circuit Load (Amperage)	Conductor: Resistance (R)	Reactance (X)	Arccos (pf) (Radians)	Transformer: Type	Degree Rise	kVA	New Xfmr Z	Existing Xfmr Z	Secondary Voltage	Tap Setting	f	M	Fault Current (amps)	Voltage Drop (%VD)	Cumulative Voltage Drop (%VD)	Fault Point (F#)
1	Utility Service Point			41,949 at the secondary of the utility transformer																										Source Isc + 6X Motor Contribution =	41949		1
	Motor Contribution			The connected full load motor amps (includes compressors) on the system																												
2	MSB	1	3	41949	NM	CU	5	Set(s) of	400	kcmil	24297	--	--	480	30	0.9	1280	0.000033	0.000040	0.451027								0.037	0.96	40437	-0.13%	-0.13%	2
3	LF1A	2	3	40437	M	CU	2	Set(s) of	350	kcmil	19704	--	--	480	5	0.95	480	0.000039	0.000050	0.317560								0.019	0.98	39702	-0.02%	-0.15%	3
4	LF1B	2	3	40437	M	CU	2	Set(s) of	3/0	AWG	12844	--	--	480	10	0.95	320	0.000079	0.000052	0.317560								0.057	0.95	38264	-0.05%	-0.18%	4
5	TX-2L (PRIM)	2	3	40437	NM	CU	2	Set(s) of	3/0	AWG	13923	--	--	480	1075	0.95	320	0.000077	0.000042	0.317560								5.633	0.15	6096	-5.35%	-5.48%	5
6	TX-2L (SEC)	5	3	6096	TX									480							DOE	150	225	4.29		480	0.075	0.966	0.51	3100		2.02%	6
7	LF2	6	3	3100	M	CU	2	Set(s) of	3/0	AWG	12844	--	--	480	5	0.95	320	0.000079	0.000052	0.317560								0.002	1.00	3094	-0.03%	1.99%	7
8	TX-3L (PRIM)	2	3	40437	NM	CU	2	Set(s) of	3/0	AWG	13923	--	--	480	1485	0.95	320	0.000077	0.000042	0.317560								7.782	0.11	4605	-7.40%	-7.53%	8
9	TX-3L (SEC)	8	3	4605	TX									480							DOE	150	225	4.29		480	0.1	0.730	0.58	2662		2.47%	9
10	LF3	9	3	2662	M	CU	2	Set(s) of	3/0	AWG	12844	--	--	480	5	0.95	320	0.000079	0.000052	0.317560								0.002	1.00	2657	-0.03%	2.45%	10

TABLE OF DIMENSIONS*	
X	POLE HEIGHT < 16' = 1'-6"
	POLE HEIGHT > 16' = 2'-0"
Y1	REFER TO LIGHT FIXTURE SCHEDULE FOR POLE HEIGHT
Y2	VEHICULAR AREAS - 3'-0"
	NON-VEHICULAR AREAS - 0'-6"
Y3	1/4 OF POLE HEIGHT Y1

* NOTE:
ALL DIMENSIONS ARE APPROXIMATE AND ARE SHOWN FOR REFERENCE ONLY.

POLE FOUNDATION SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL OR CIVIL ENGINEER LICENSED IN THE PROJECT STATE AND SUBMITTED AS PART OF THE SUBMITTAL PROCESS.



2 PARKING LOT POLE BASE DETAIL
NTS

HENDERSON ENGINEERS
1801 MAIN STREET, SUITE 300
KANSAS CITY, MO 64108
TEL 816.663.8700 FAX 816.663.8701
WWW.HENDERSONENGINEERS.COM
1859004412
MO. CORPORATE NUMBER: E-556D
EXPIRES 12/31/20

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY SUBMITTAL
ANDREA C. MULVANY
LICENSE # PE-2013039892
IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DRAWING TITLE:
ELECTRICAL ONE-LINE DIAGRAM & DETAILS

JOB NO: 1197 SCALE: N/A
DATE: 05.15.2019 DRAWN BY: LKV

SHEET NO:
E-200

PLUMBING SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED. V2.01

STANDARD MOUNTING HEIGHTS

REFER TO THE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHTS. UNO, INSTALL PLUMBING FIXTURES WITH THE MOUNTING HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.

LAVATORY OR SINK	
STANDARD HEIGHT	31" FLOOR TO RIM
ADA ACCESSIBLE	34" FLOOR TO RIM
CHILD HEIGHT	24" FLOOR TO RIM
URINAL	
STANDARD HEIGHT	24" FLOOR TO RIM
ADA ACCESSIBLE	17" FLOOR TO RIM
CHILD HEIGHT	14" FLOOR TO RIM
WATER CLOSET	
STANDARD HEIGHT	15" FLOOR TO RIM
ADA ACCESSIBLE	17" TO 19" FLOOR TO TOP OF SEAT
CHILD HEIGHT	10" FLOOR TO RIM
WATER COOLER OR DRINKING FOUNTAIN	
STANDARD HEIGHT	41" FLOOR TO SPOUT
ADA ACCESSIBLE	36" FLOOR TO SPOUT
CHILD HEIGHT	30" FLOOR TO SPOUT
SHOWER VALVES	
STANDARD HEIGHT - MEN	48" FLOOR TO CENTERLINE
STANDARD HEIGHT - WOMEN	42" FLOOR TO CENTERLINE
ADA ACCESSIBLE	38" MIN TO 48" MAX FLOOR TO CENTERLINE
SHOWER HEADS	
MEN	6'-6" FLOOR TO CENTERLINE
WOMEN	6'-0" FLOOR TO CENTERLINE
TUB VALVES	
STANDARD HEIGHT	32" FLOOR TO CENTERLINE
ADA ACCESSIBLE	CENTER BETWEEN GRAB BAR AND TUB RIM
CLINIC SERVICE SINKS	30" FLOOR TO RIM
SURGEON'S SCRUB-UP SINKS	35" FLOOR TO FRONT RIM
ICE MAKER OUTLET BOXES	24" FLOOR TO CENTER OF BOX
WASHING MACHINE OUTLET BOXES	42" FLOOR TO RIM
JANITOR'S SINK FAUCET FITTINGS	42" FLOOR TO CENTERLINE
HOSE BIBBS	36" AFF TO CENTERLINE
NON FREEZE WALL HYDRANTS	18" AFG TO CENTERLINE

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS OR ELSEWHERE. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ANNOTATION

- (1) PLUMBING PLAN NOTE CALLOUT
- (1) PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES
- 1 EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- CU 1 MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR PROVIDED UNO)
- CONNECTION POINT OF NEW WORK TO EXISTING
- 1 / P1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- 1 / P1 SECTION CUT DESIGNATION

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
BAS	BUILDING AUTOMATION SYSTEM
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BTU	BRITISH THERMAL UNIT
CP	CONDENSATE PUMP
CPVC	CHLORINATED POLYVINYL CHLORIDE
CU	COPPER
DI	DUCTILE IRON
DN	DOWN
DFU	DRAINAGE FIXTURE UNIT
DS	DOWNSPOUT
(E)	EXISTING
EMS	ENERGY MANAGEMENT SYSTEM
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
FFA	FROM FLOOR ABOVE
FFB	FROM FLOOR BELOW
FF	FINISHED FLOOR
FL	FLOW LINE
FLA	FULL LOAD AMPS
FLR	FLOOR
GPM	GALLONS PER MINUTE
HD	HEAD, HUB DRAIN
HZ	HERTZ
IE	INVERT ELEVATION
IN WC	INCHES OF WATER COLUMN
JB	JUNCTION BOX
J-BOX	JUNCTION BOX
KW	KILOWATT
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MH	MANHOLE
MIN	MINIMUM
N/C	NORMALLY CLOSED
N/O	NORMALLY OPEN
NIC	NOT IN CONTRACT
ORD	OVERFLOW ROOF DRAIN
PDI	PLUMBING DRAINAGE INSTITUTE
PH/Ø	PHASE
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SF	SQUARE FEET
SP	SUMP PUMP
SS	STAINLESS STEEL, SANITARY SEWER, SOIL STACK
TDH	TOTAL DYNAMIC HEAD
TFA	TO FLOOR ABOVE
TFB	TO FLOOR BELOW
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
VCP	VITRIFIED CLAY PIPE
VFD	VARIABLE FREQUENCY DRIVE
VS	VENT STACK
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WC	WATER COLUMN
WS	WASTE STACK
WSFU	WATER SUPPLY FIXTURE UNIT
WVS	WASTE VENT STACK

PIPING SYMBOLS

- OXYGEN OUTLET
- NITROUS OXIDE OUTLET
- MEDICAL AIR OUTLET
- NITROGEN OUTLET
- MEDICAL VACUUM INLET
- FLOOR SINK (FS), SIZE & TYPE
- FLOOR DRAIN (FD), SIZE & TYPE
- ROOF DRAIN (RD), SIZE & TYPE
- BALL VALVE
- CONTROL VALVE
- SHUTOFF VALVE
- CHECK VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- WATER METER
- STRAINER
- STRAINER WITH BLOWOFF
- RELIEF/SAFETY VALVE
- SOLENOID VALVE
- PRESSURE REDUCING VALVE
- GAS PRESSURE REGULATOR
- THERMOSTATIC MIXING VALVE
- PA PIPE ANCHOR
- EJ EXPANSION JOINT
- BACKFLOW PREVENTER
- PRESSURE GAUGE
- THERMOMETER
- UNION
- FLANGE CONNECTION
- HOSE BIBB (HB)
- NONFREEZE WALL HYDRANT (NW)
- MANUAL / AUTOMATIC AIR VENT OR VACUUM RELIEF VALVE
- PRESSURE / VACUUM SWITCH
- CLEANOUT
- CAP
- WALL CLEANOUT (WCO)
- FLOOR CLEANOUT (FCO)
- EXTERIOR CLEANOUT (ECO)
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- ELBOW UP WITH SHUT-OFF VALVE (SOV)
- ELBOW DOWN WITH SHUT-OFF VALVE (SOV)
- TEE UP WITH SHUT-OFF VALVE (SOV)
- TEE DOWN WITH SHUT-OFF VALVE (SOV)
- "A" WATER HAMMER ARRESTER (WHA) WITH PDI SIZES, (A, B, C, D, & E)
- RECIRCULATION PUMP
- P-TRAP
- GAS COCK
- TRAP PRIMER
- TRAP PRIMER WITH DISTRIBUTION UNIT

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINE-TYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	———	NEW	———
DEMOLISH	- - - - - - - - - -	FUTURE	– – – – – – – –

PIPING LINETYPES

- CW — DOMESTIC COLD WATER (CW)
- SCW — SOFTENED COLD WATER (SCW)
- HW — DOMESTIC HOT WATER (HW)
- HWR — DOMESTIC HOT WATER RECIRC. (HWR)
- 140° — 140° DOMESTIC HOT WATER (140°)
- T — TRAP PRIMER LINE (T)
- S — SOIL PIPING - ABOVE FLOOR (S)
- S — SOIL PIPING - BELOW FLOOR (S)
- W — WASTE PIPING - ABOVE FLOOR (W)
- W — WASTE PIPING - BELOW FLOOR (W)
- GW — GREASE WASTE - ABOVE FLOOR (GW)
- GW — GREASE WASTE - BELOW FLOOR (GW)
- CGWV — COMBINATION GREASE WASTE AND VENT (CGWV)
- CWV — COMBINATION WASTE AND VENT (CWV)
- ST — STORM DRAIN - ABOVE FLOOR (ST)
- ST — STORM DRAIN - BELOW FLOOR (ST)
- OST — OVERFLOW STORM DRAIN - ABOVE FLOOR (OST)
- VBG — VENT BELOW GRADE (VBG)
- VBF — VENT BELOW FLOOR (VBF)
- ID — INDIRECT DRAIN (ID)
- CDH — CONDENSATE DRAIN - HIGH EFFICIENCY RTU (CDH)
- CD — CONDENSATE DRAIN (CD)
- ACD — AUXILIARY CONDENSATE DRAIN (ACD)
- SPD — SUMP OR SEWAGE PUMP DISCHARGE (SPD)
- G — NATURAL GAS (G)
- G — NATURAL GAS ON ROOF (G)
- MPG — MEDIUM PRESSURE NATURAL GAS (MPG)
- MPG — MEDIUM PRESSURE NATURAL GAS ON ROOF (MPG)
- NPW — NON POTABLE WATER (NPW)
- LPG — LIQUIFIED PETROLEUM GAS (LPG)
- WS — WATER SERVICE (WS)
- FP — FIRE PROTECTION (FP)
- PD — CONDENSATE PUMP DISCHARGE (PD)
- V — VENT PIPING (V)
- AW — ACID WASTE - ABOVE FLOOR (AW)
- AW — ACID WASTE - BELOW FLOOR (AW)
- AV — ACID VENT (AV)
- CA — COMPRESSED AIR (CA)
- MA — MEDICAL AIR (MA)
- MV — MEDICAL VACUUM (MV)
- N2 — NITROGEN (N2)
- N2O — NITROUS OXIDE (N2O)
- O2 — OXYGEN (O2)
- EV — EVAC/WAGD (EV)
- CO2 — CARBON DIOXIDE (CO2)
- AI — MEDICAL AIR INTAKE (AI)
- VE — MEDICAL VACUUM EXHAUST (VE)
- HE — HELIUM (HE)
- IA — INSTRUMENT AIR (IA)
- IV — INSTRUMENT VACUUM (IV)
- DA — DENTAL AIR (DA)
- DV — DENTAL VACUUM (DV)
- FW1 — FILTERED WATER (FW1)
- FW2 — FILTERED WATER W/ SCALE INHIBITOR (FW2)
- RO — REVERSE OSMOSIS (RO)
- ROR — REVERSE OSMOSIS REMINERALIZATION (ROR)

GENERAL NOTES:

1. PROVIDE A CONSTRUCTION RECORD SET OF "AS-BUILT" DOCUMENTS TO THE ARCHITECT REFLECTING ANY VARIANCES OF INSTALLED PIPING LOCATIONS OR EQUIPMENT CONTRARY TO THE CONSTRUCTION DOCUMENTS, REFER TO SPECIFICATIONS.
2. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
3. PROVIDE TO THE ARCHITECT A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS, REFER TO SPECIFICATIONS.
4. PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
5. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
6. DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL LOCATION OF PIPE ROUTING.
7. INSTALL CONCEALED PIPING TIGHT TO THE STRUCTURE AND AS HIGH AS POSSIBLE. INSTALL EXPOSED PIPING TIGHT TO THE STRUCTURE, WALL OR CEILING AND AS HIGH AS POSSIBLE. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS.
8. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
9. PIPING IN FINISHED AREAS SHALL BE ROUTED CONCEALED; EXPOSED PIPING, WHERE NECESSARY, SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO WALLS.
10. COORDINATE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
11. COORDINATE PIPING INSTALLATION WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THROUGH GRADE BEAMS, FOOTING, ETC. WHERE REQUIRED AND AS NOTED ON PLANS. COORDINATE SLEEVE INSTALLATIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR AND GENERAL CONTRACTOR BEFORE CONCRETE IS INSTALLED.
12. CLEAN FAUCET AERATORS AND PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.
13. PROVIDE TRAP PRIMERS WHERE REQUIRED BY LOCAL AUTHORITIES.
14. COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
15. COORDINATE ALL ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 2' CLEARANCE FROM ALL OTHER EQUIPMENT.
16. PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON AT SLAB ON GRADE. SEE SPECIFICATION SECTION 15400 FOR MORE INFORMATION.
17. WATER HAMMER ARRESTORS SHALL BE SIZE "A" UNLESS NOTED OTHERWISE.

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements
1401 NW View High Dr, Lee's Summit, MO 64081
Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY SUBMITTAL
JAMES J. DIETZ
LICENSE # PE-2007020258

IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DRAWING TITLE:

PLUMBING SYMBOLS & NOTES

JOB NO: 1197 SCALE:
DATE: 05.15.2019 DRAWN BY: SNG

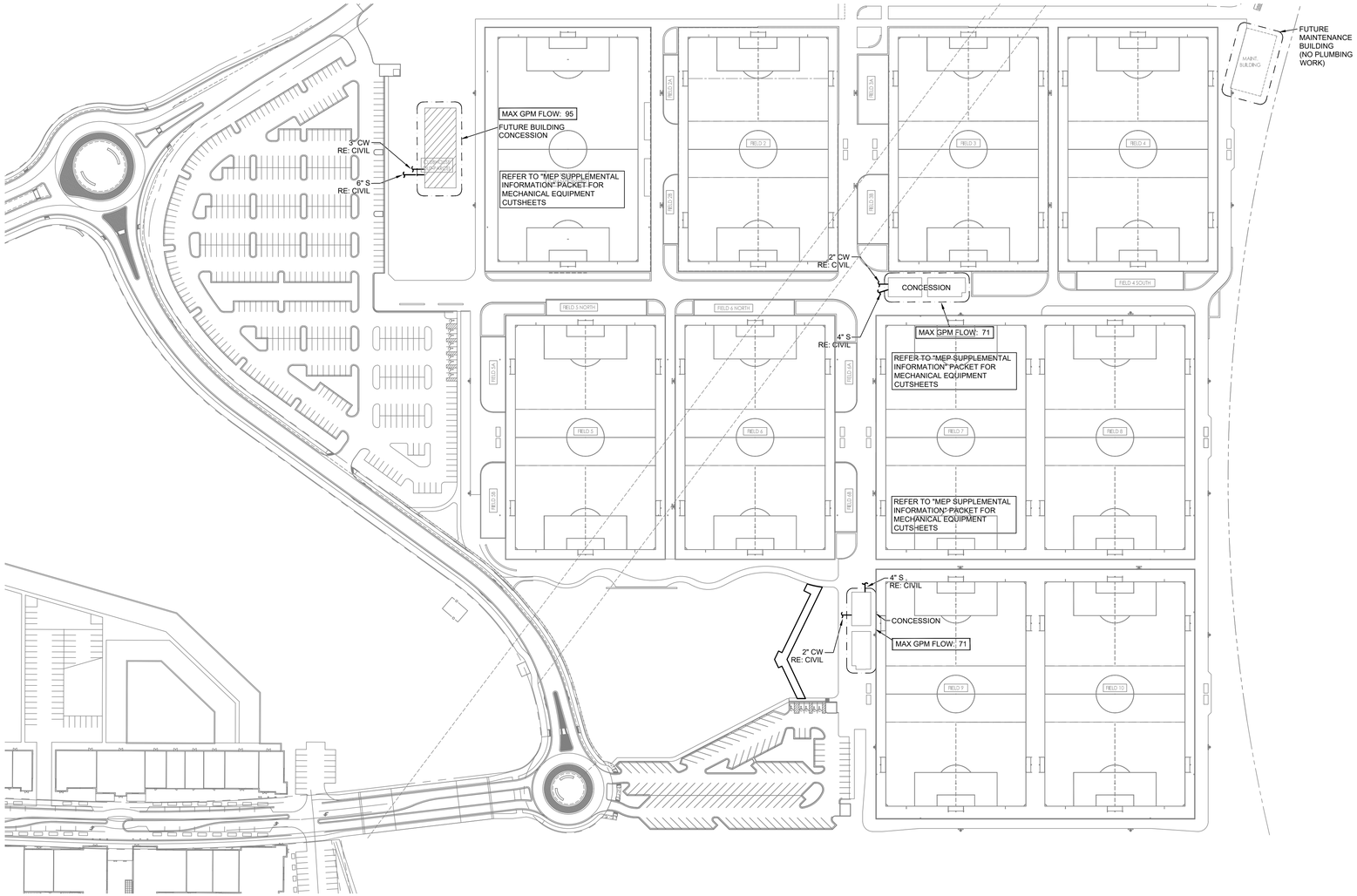
SHEET NO:

P-000

HENDERSON ENGINEERS
1801 MAIN STREET, SUITE 300
KANSAS CITY, MO 64108
TEL 816.563.8700 **FAX** 816.563.8701
WWW.HENDERSONENGINEERS.COM
1850004412
MO. CORPORATE NUMBER: E-556D
EXPIRES 12/31/20

THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMo) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



1 PLUMBING SITE PLAN
SCALE: 1:100

CIVIL ENGINEERING
GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LANDSCAPE ARCHITECTURE
LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

LANDSCAPE ARCHITECTURE
Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerrschaudt.com
MO Certificate of Authority #2019004088

MEP ENGINEERING
HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

ARCHITECTURE
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex & Associated Improvements

1401 NW View High Dr, Lee's Summit, MO 64081

Final Development Plan - RESUBMITTAL

ISSUE:

PROFESSIONAL SEAL:

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF PRELIMINARY SUBMITTAL
JAMES J. DIETZ
LICENSE # PE-2007020258

IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

DRAWING TITLE:

PLUMBING SITE PLAN

JOB NO: 1197 SCALE: 1:100

DATE: 05.15.2019 DRAWN BY: SNG

SHEET NO:

P-001

HENDERSON ENGINEERS
1801 MAIN STREET, SUITE 300
KANSAS CITY, MO 64108
TEL 816.563.8700 **FAX** 816.563.8701
WWW.HENDERSONENGINEERS.COM
1850004412
MO. CORPORATE NUMBER: E-556D
EXPIRES 12/31/20