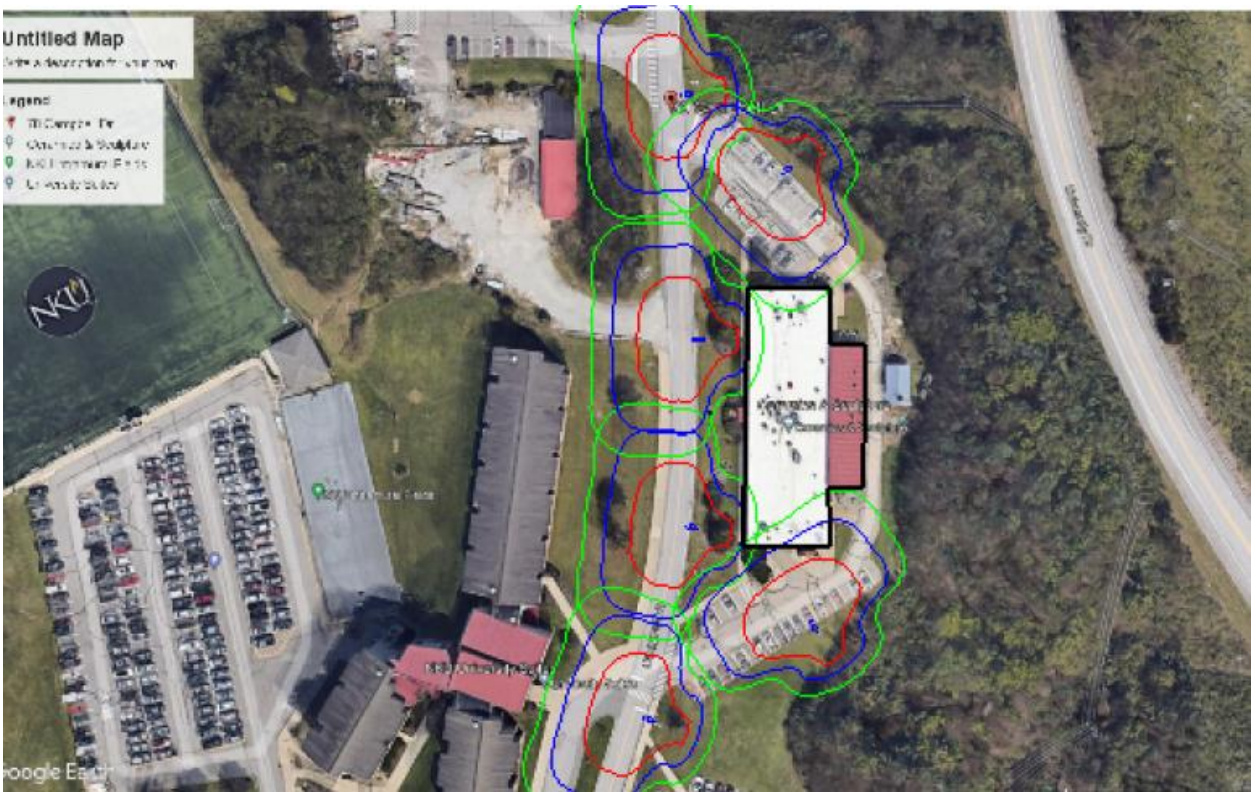
ATTACHMENT A

LOCATIONS & SCOPE OF WORK - NKU LED Roadway Lighting

1. **Campbell Drive – In front of Operations Building**
    a. Replace (1) Single Head with New Pole & LED Head
        i. Illuminates drive lane
    b. Replace (1) Single Head with New Pole & LED Head
        i. Illuminates drive lane

2. **<u>Campbell Drive – in front of ceramics building across from University Suites</u>**

    a. Replace (1) Single Head with New Pole with (2) LED Heads (double)
        i. One head illuminates cross walk to ceramics
        ii. Other head illuminate's crosswalk to university suites.
        iii. NOTE: Currently no pole (see orange cone in picture) as old one fell down. Demo old base and pour new one for new installation of single head.
    b. Replace (1) Single Head with New Pole & (1) LED Heads
        i. Ceramics Parking Lot
    c. Replace (1) Single Head with New Pole & (1) LED Heads
        i. Ceramics Parking Lot
    d. Remove (1) Single Head Replace (1) Single Head with New Pole & LED Head
        i. Illuminates Drive Lane
    e. Remove (1) Single Head & Replace (1) Single Head with New Pole & LED Head
        i. Illuminates Drive Lane
    f. Remove (1) Double Head with 2 heads Replace (1) Single Head with New Pole & LED Head
        i. Illuminates drive lane



2. **<u>Campbell Drive – in front of ceramics building across from University Suites</u>**

g. Disconnect & remove (1) single Head and demo base and straw & seed
    i. See picture below in Red
    ii. Disconnect & remove (1) single Head and demo base and straw & seed

iii. See picture below in Red

h. <u>Along Campbell Drive – parking lot "U" area across from University Suites</u>

1. Replace (1) Single Head with New Pole & (2) LED Heads (double)
    i. One head illuminates cross walk
    ii. Other head illuminates' part of parking lot
2. Replace (1) Double Head with New Pole & (2) LED Heads (double)
    i. One head illuminates Drive lane
    ii. Other head illuminates' part of parking lot
3. Remove (1) Single Head fixtures (on University Suites side of road)
    i. Demo Base area down to below sod and re-seed and straw.
4. Remove (1) Single Head fixtures (on University Suites side of road)
    i. Demo Base area down to below sod and re-seed and straw.
5. Remove (1) Single Head fixtures (Lot U)
    i. Demo Base area down to below ground and cap w gravel & concrete.

i. **<u>Along Campbell Drive – parking lot "U" area across from University Suites</u>**

a. Replace (1) Single Head with New Pole & (1) LED Head
    i. illuminates' back side of parking lot
b. Replace (1) Single Head with New Pole & (1) LED Head
    i. illuminates' back side of parking lot

j. **<u>Kenton Drive</u>** – in front of the Science Center. Demo concrete base to below asphalt/concrete turf base and refill & compact to match finish.

1. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head
2. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head
3. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head

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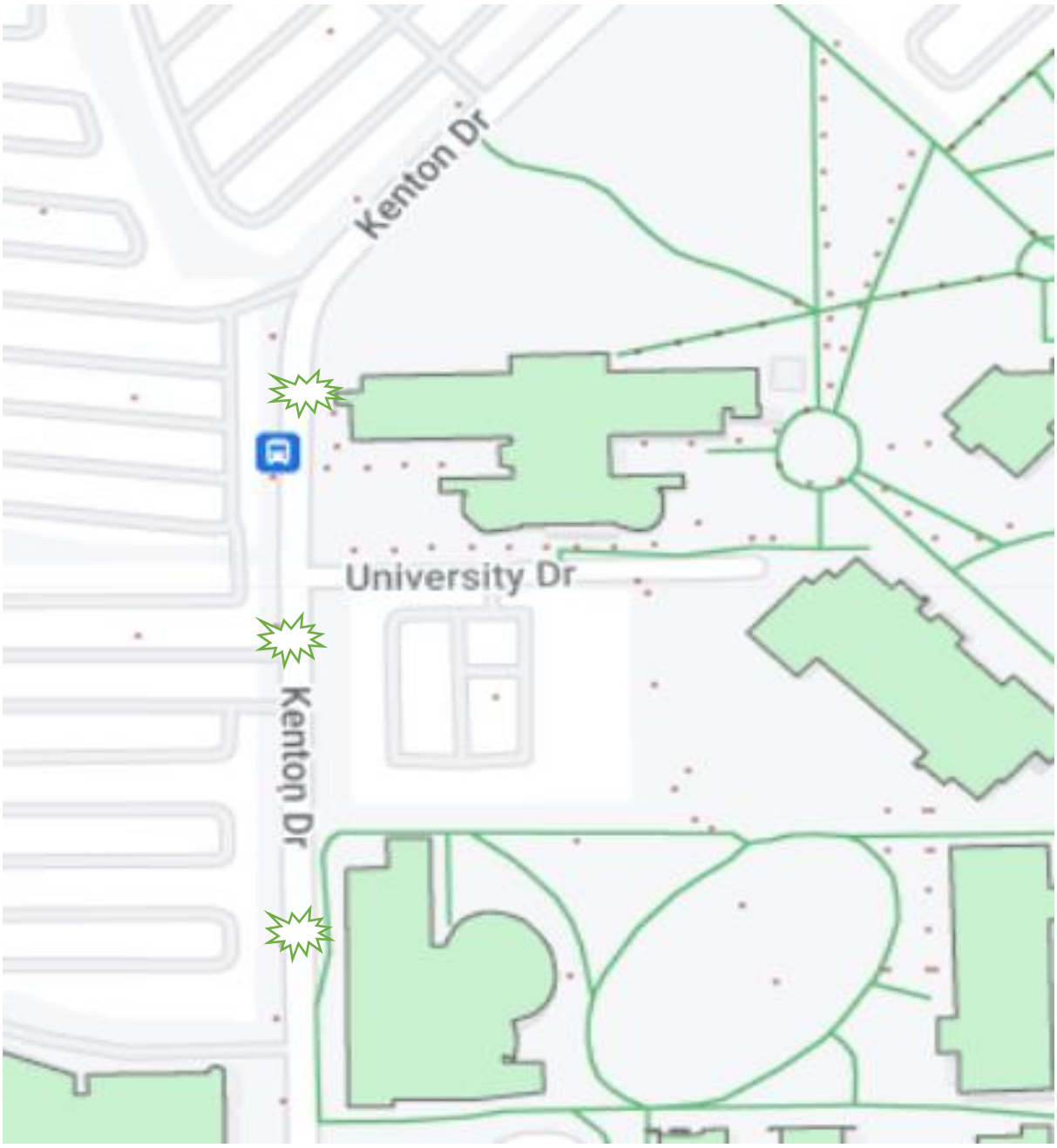

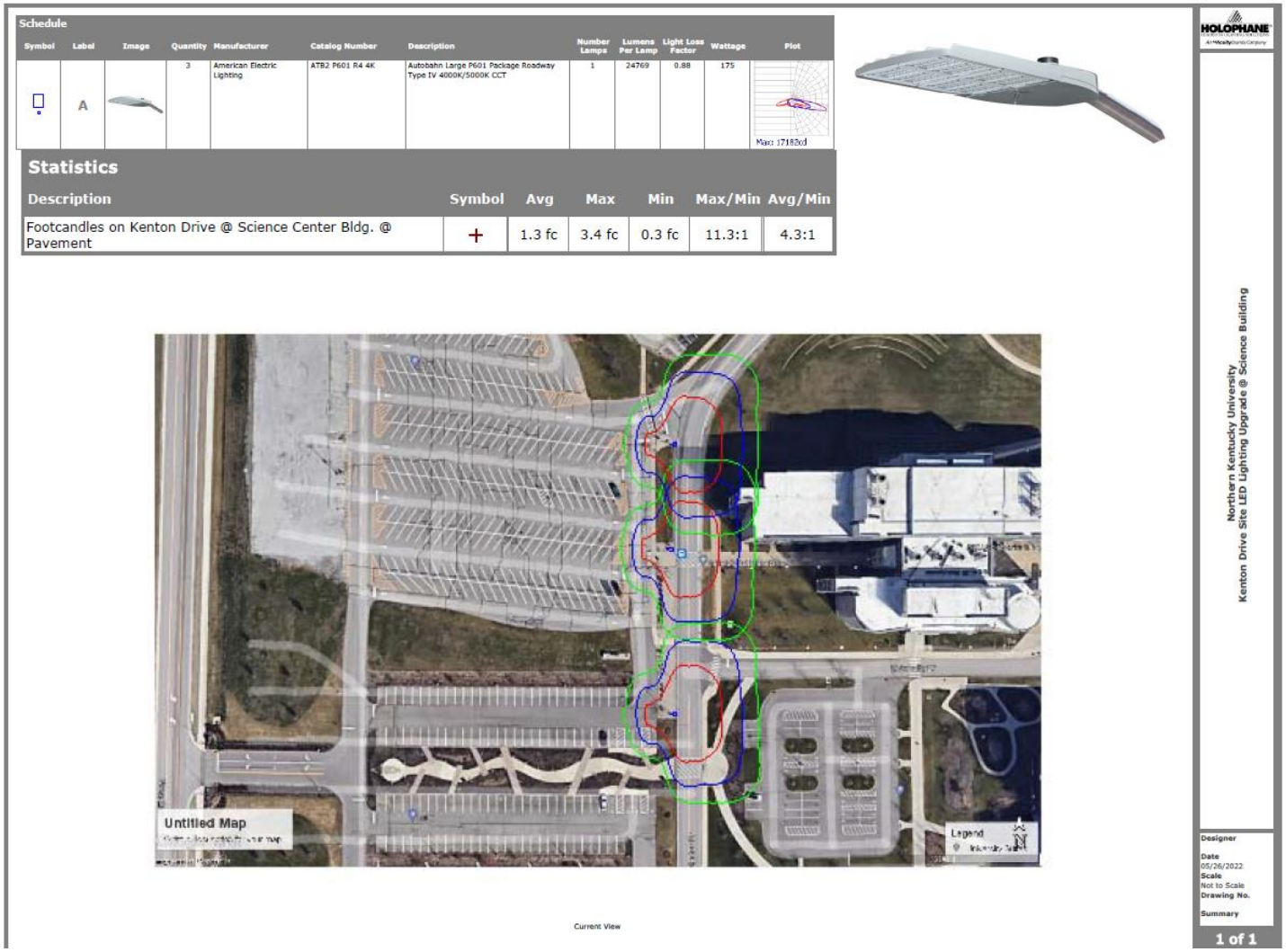

Schedule

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
	A		3	American Electric Lighting	AT82 P601 R4 4K	Autobahn Large P601 Package Roadway Type IV 4000K/5000K CCT	1	24769	0.88	175	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Footcandles on Kenton Drive @ Science Center Bldg. @ Pavement	+	1.3 fc	3.4 fc	0.3 fc	11.3:1	4.3:1

k. **<u>Albright Health Center –</u>** Grant Drive - Demo concrete base to below asphalt/concrete turf base and refill & compact to match finish.

a) Remove (1) Pole with (2) heads. Demo old base and Repour new base and (1) Single Head with New Pole & (1) LED Head
   i) Head to illuminate drive lane in front of health center.
b) Remove (1) Pole with (2) heads. Demo old base and Repour new base and (1) Single Head with New Pole & (1) LED Head
   i) Head to illuminate Albright loading dock area

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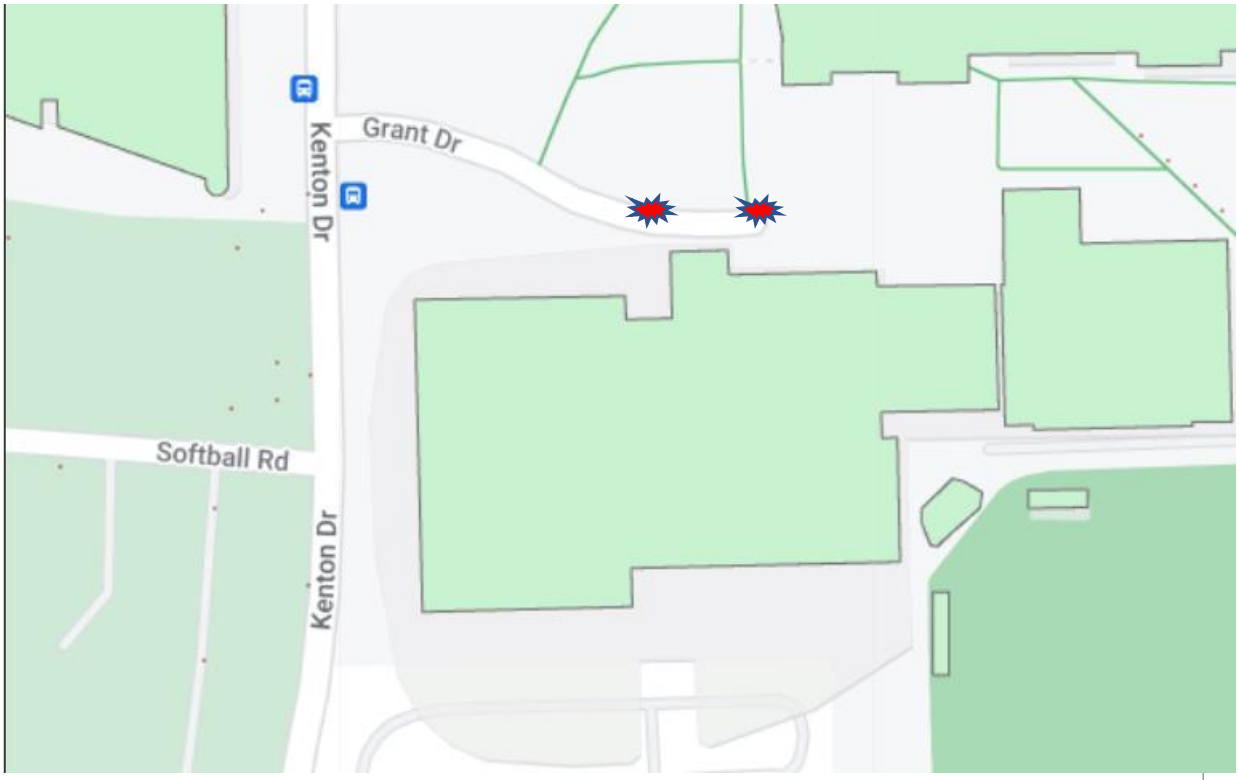
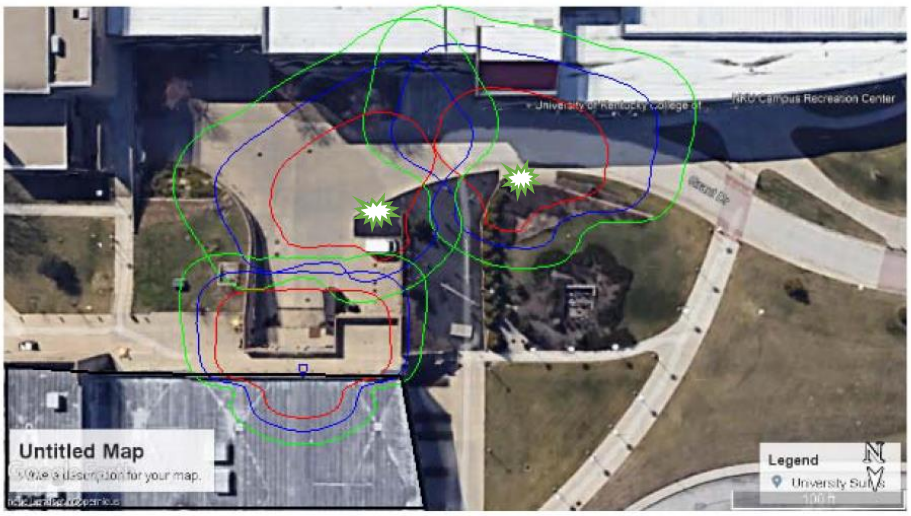


Schedule

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Number Lamps	Light Loss Factor	Lumens Per Lamp	Description	Wattage	Plot
□	A		2	American Electric	ATB2 P601 R4 4K	1	0.88	24769	Autobahn Large P601 Package Roadway Type IV 4000K/5000K CCT	175	Max: 1718cd

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Footcandles on Grant Drive Loading Dock Area @ Pavement	+	1.6 fc	8.9 fc	0.3 fc	29.7:1	5.3:1



HOLOPHANE

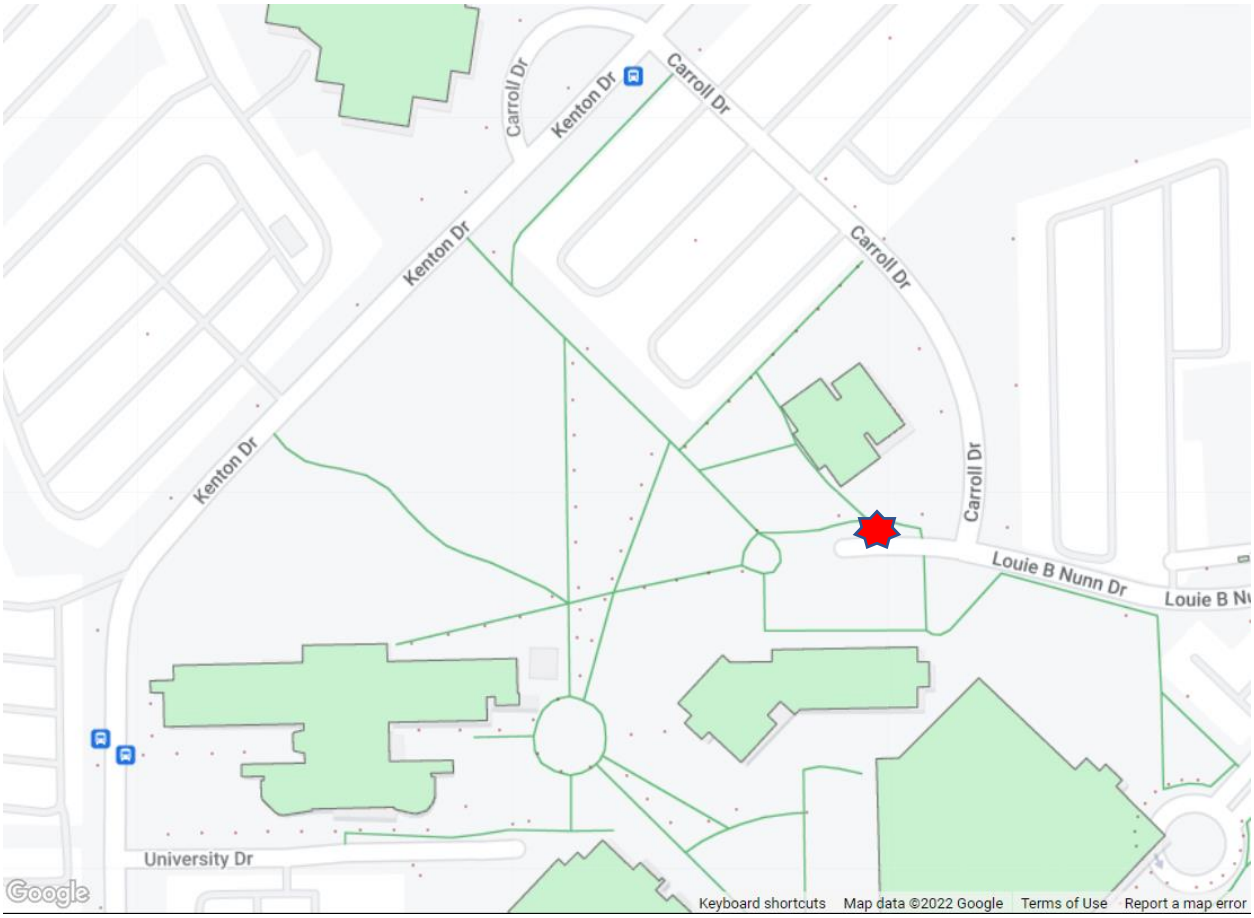
Northern Kentucky University
Grant Drive Loading Dock Area

Designer
Date
05/26/2022
Scale
Not to Scale
Drawing No.
Summary

1 of 1

Current View

l. **Lucas Admin Center –** Access road between field & Lucas Admin Center off campus dr
   a. Remove (1) single headed pole. Demo concrete base to below asphalt/concrete and refill & compact to match finish.



m. LOT E off Carroll Drive

1. Remove (1) Single Head (already illuminated by Hi-Mast Light)
   i. Noted by RED DOT in below picture
2. Remove (1) Single Head (already illuminated by Hi-Mast Light)
   i. Noted by RED DOT in below picture
3. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head. Noted by WHITE DOT in below picture
4. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head. Noted by WHITE DOT in below picture
5. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head. Noted by WHITE DOT in below picture
6. Remove (1) Pole & Head – Demo old base and Repour new base and (1) Single Head with New Pole & LED Head. Noted by WHITE DOT in below picture

Total Counts

One for One (new pole & single head)	= 15
One for two (new pole w 2 heads)	= 3
Two for one (new pole w 1 head)	= 3
Disconnect & Remove (no new LED head)	= 8
Total Pole Count	= 21
Total LED head Count	= 24