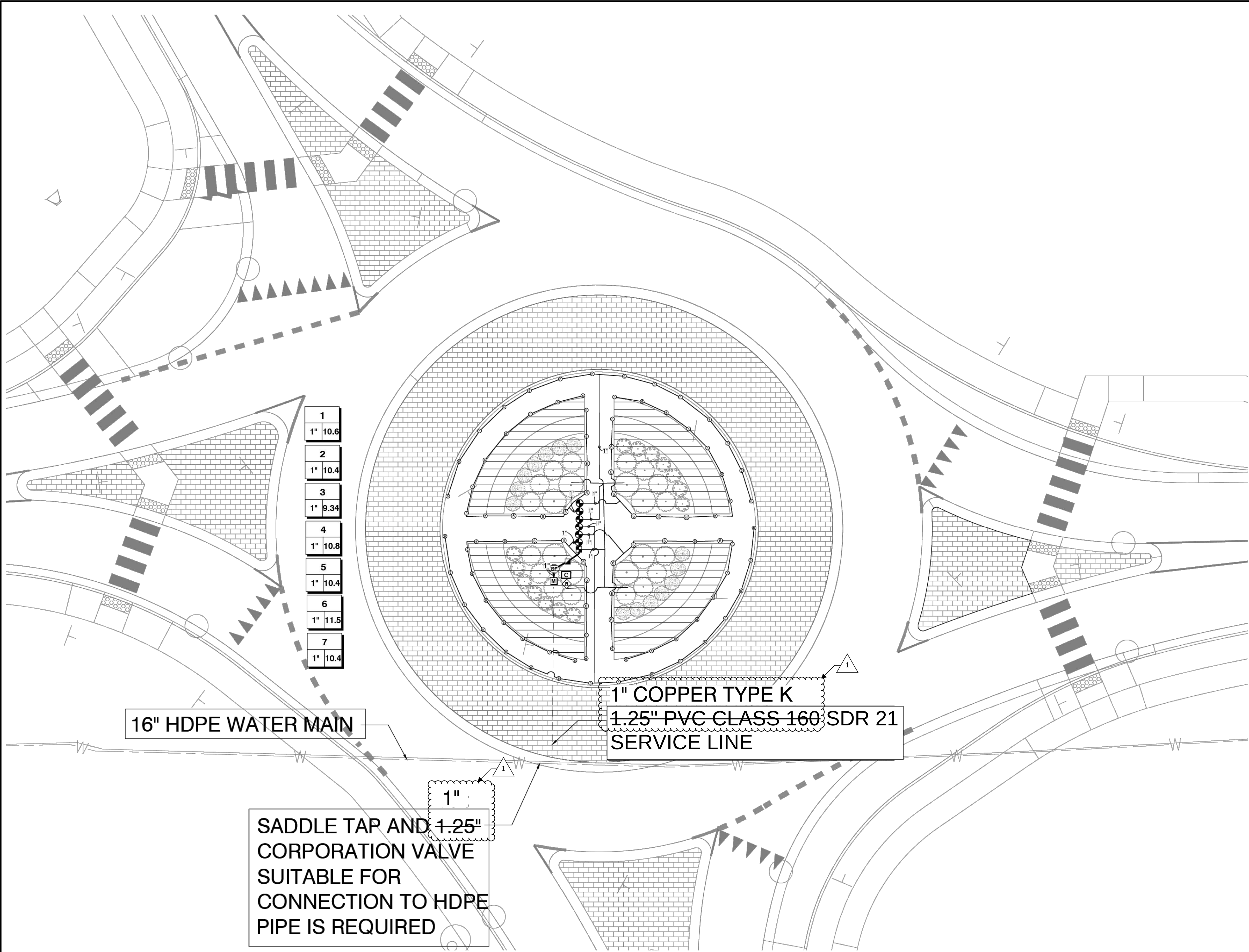




16" HDPE WATER MAIN

1" COPPER TYPE K
1.25" PVC CLASS 160 SDR 21
SERVICE LINE

SADDLE TAP AND 1.25"
CORPORATION VALVE
SUITABLE FOR
CONNECTION TO HDPE
PIPE IS REQUIRED

1
1" 10.6
2
1" 10.4
3
1" 9.34
4
1" 10.8
5
1" 10.4
6
1" 11.5
7
1" 10.4

IRRIGATION SCHEDULE		
SYMBOL	MANUFACTURER/MODEL	QTY
⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯	Hunter PROS-04-PRS40 adjustable arc	91
SYMBOL	MANUFACTURER/MODEL	QTY
■	Hunter ICZ-101-40 1"	1
▨	Area to Receive Dripline Hunter HDL-09-18-PC	1,038 l.f.
SYMBOL	MANUFACTURER/MODEL	QTY
⊙	Hunter PGM-100G 1"	6
▣	Hunter HQ-5RC 1"	1
⊕	Wilkins 975XL 1"	1
⊞	Hunter P2C-400	1
⊟	Hunter WR-CLIK	1
⊠	Water Meter 1"	1
—	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	636.9 l.f.
- - -	Irrigation Mainline: PVC Class 160 SDR 26 1"	55.3 l.f.
Valve Callout		
#	Valve Number	
#	Valve Flow	
#	Valve Size	

CRITICAL ANALYSIS

Generated: 2024-09-06

P.O.C. NUMBER: 01
Water Source Information:

FLOW AVAILABLE
Water Meter Size: 1"
Flow Available: 29.42 GPM

PRESSURE AVAILABLE
Static Pressure at POC: 70 PSI
Elevation Change: 5.00 ft
Service Line Size: 1 1/4"
Length of Service Line: 20 ft
Pressure Available: 67 PSI

DESIGN ANALYSIS
Maximum Station Flow: 11.52 GPM
Flow Available at POC: 29.42 GPM
Residual Flow Available: 17.9 GPM

Critical Station: 7
Design Pressure: 30 PSI
Friction Loss: 0.14 PSI
Fittings Loss: 0.01 PSI
Elevation Loss: 0 PSI
Loss through Valve: 8.23 PSI
Pressure Req. at Critical Station: 38.4 PSI
Loss for Fittings: 0 PSI
Loss for Main Line: 0.63 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 11.6 PSI
Loss for Water Meter: 0.74 PSI
Critical Station Pressure at POC: 51.4 PSI
Pressure Available: 67 PSI
Residual Pressure Available: 15.6 PSI

DATE	REVISION
10/1/2024	Material and size update for tap, valve and service line.



RECOMMENDED FOR APPROVAL	<i>Luke A. Kessler</i> LANDSCAPE ARCHITECT	7/15/2024 DATE
DESIGNED:	CN	DRAWN: CN
CHECKED:	LK	CHECKED: LK

CITY OF GREENFIELD
IRRIGATION PLANS

HORIZONTAL SCALE	BRIDGE FILE
SEE SCALE BAR	N/A
VERTICAL SCALE	DESIGNATION
N/A	2205FFE
SURVEY BOOK	SHEETS
N/A	27 of 56
CONTRACT	PROJECT
R-43589/A	2022.02696



LIGHT POLE SCHEDULE								
LUMINAIRE NO.	BRANCH CIRCUIT A-1	A1-1	A1-2	A1-3	A1-4	A1-5	A1-6	A1-7
*LUMINAIRE TYPE	LED - 122W	LED - 122W	LED - 122W	LED - 122W	LED - 122W	LED - 122W	LED - 122W	LED - 122W
CIRCUIT CONNECTION	B	R	B	R	B	R	B	R
CONNECTION TYPE	Type 1	Type 2	Type 2	Type 2	Type 2	Type 2	Type 2	Type 1
SET BACK FROM	EDGE OF PAVEMENT	-	-	-	-	-	-	-
	RAMP	"PR-S-3-A"	"PR-S-3-A"	"PR-S-3-A"	"PR-S-3-A"	"PR-S-3-A"	"PR-S-3-A"	"PR-S-3-A"
POLE SETBACK (FT)	77.8' RT.	30.8' LT.	43.5' RT.	111.2' RT.	79.7' RT.	21.9' RT.	58.1' LT.	87.5' LT.
BASE TYPE	TRANSFORMER	TRANSFORMER	TRANSFORMER	TRANSFORMER	TRANSFORMER	TRANSFORMER	TRANSFORMER	TRANSFORMER
BREAKWAY POLE BASE (Y/N)	N	N	N	N	N	N	N	N
MAST ARM LENGTH (FT)	8	8	8	8	8	8	8	8
LUMINAIRE E.M.H. (FT)	30	30	30	30	30	30	30	30
NUMBER OF LUMINAIRES	1	1	1	1	1	1	1	1
IES DISTRIBUTION TYPE	III	III	III	III	III	III	III	III

*LUMINAIRE TYPE: C3 (122W) LED = GE Evolve ERLH_14C340.ies
B = Black Circuit; R = Red Circuit

GENERAL NOTES FOR CONTRACTOR

1. The location of all underground and overhead utilities shown on this plan are based on topographic survey.
2. It will be the Contractor's responsibility to field verify all utility locations prior to any excavation associated with the lighting construction.
3. Contractor shall contact the design engineer to resolve any observed conflicts/discrepancies with these utilities.
4. Contractor shall use the Type B handhole in the center island for spot lighting (See landscaping plans for replacement information).
5. Contractor shall coordinate with the City of Greenfield to obtain the required light poles and luminaires.

LEGEND

- Luminaire, 122W LED, Type 3 Distribution on Conventional Light Pole, 30' Mounting Height and 8' Mast Arm with Non-Breakaway base (See General Note No. 5.)
- 4-1C No. 4 CU Conductor in Plastic Duct in 2" Galvanized Steel Conduit (PVC Conduit)
- 4-1C No. 4 CU Conductor in Plastic Duct in Trench
- Cable Duct Marker
- Proposed Service Point A, Type II, 120/240V
- 4-1C No. 4 CU Conductor in Plastic Duct in 2" Galvanized Steel Conduit (PVC Conduit) (Circuit A-2 Only)
- Proposed Lighting Circuit Number
- Handhole (Type as shown)

Note:
All proposed asymmetric conventional lighting luminaires are to be GE Evolve ERLH models, 122 W, Type III Distribution, as listed in INDOT's LED Approved Luminaire List.

SERVICE POINT AMP TABLE							
SERVICE POINT	MAIN BREAKER	BRANCH CIRCUIT	COMPUTED AMPS		COMPUTED AMPS TOTAL	MAX VOLTAGE DROP (%)	BRANCH CIRCUIT BREAKER
A, TYPE II 240V	100 AMP	A-1	2.03	2.03	4.06	0.27	2-30 AMP

DESIGN DATA TABLE										
CRITERIA		ROUNDABOUT FORTVILLE PIKE & CR 300 N	EAST LEG CROSSWALK-1	EAST LEG CROSSWALK-2	WEST LEG CROSSWALK-1	WEST LEG CROSSWALK-2	NORTH LEG CROSSWALK-1	NORTH LEG CROSSWALK-2	SOUTH LEG CROSSWALK-1	SOUTH LEG CROSSWALK-2
INITIAL LAMP LUMENS	-	14000	14000	14000	14000	14000	14000	14000	14000	14000
AVERAGE MAINTAINED ILLUMINANCE (Fc)	0.8 (min.)	2.0	1.1	1.3	1.2	1.4	1.1	1.4	1.4	1.2
LUMINAIRE DIRT DEPRECIATION FACTOR (LDD)	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
LIGHT LOSS FACTOR (LLF)	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
UNIFORMITY RATIO (AVE/MIN)	4.0:1 (max.)	2.5:1	1.1:1	1.2:1	1.3:1	1.3:1	1.1:1	1.4:1	1.2:1	1.3:1
MOUNTING HEIGHT (Ft.)	-	30	30	30	30	30	30	30	30	30
LUMINAIRE CLASSIFICATION	-	Type III	Type III	Type III	Type III	Type III	Type III	Type III	Type III	Type III

DATE	REVISION
10/1/2024	Cable duct markers added at the end of conduits.
10/1/2024	Additional general note added for the Contractor.
10/1/2024	Galvanized conduit replaced with PVC conduit.



RECOMMENDED FOR APPROVAL		6/07/2024
DESIGNED:	ASI	DRAWN:
CHECKED:	MSS	CHECKED:

CITY OF GREENFIELD
LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2205FFE
SURVEY BOOK	SHEETS
N/A	29 of 56
CONTRACT	PROJECT
N/A	2205FFE