

# HARPER

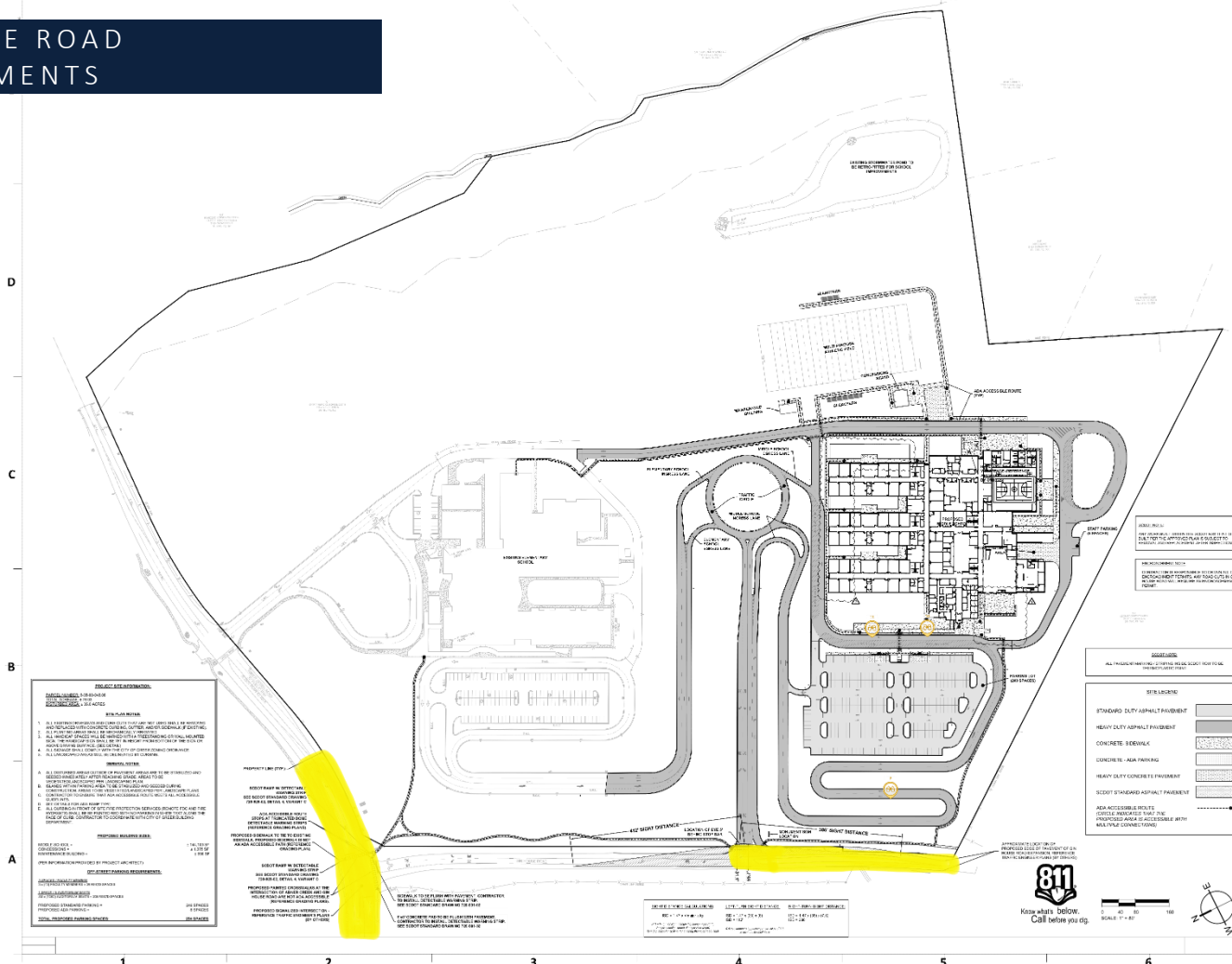
GENERAL CONTRACTORS

SUNGATE DESIGN GROUP

## GIN HOUSE ROADWAY IMPROVEMENTS



# GIN HOUSE ROAD IMPROVEMENTS



- PROJECT INFORMATION**
- PROJECT NO. 2022-001  
 SHEET NO. 1 OF 1  
 DATE: 08/15/2022
- DESIGNER**
1. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.  
 2. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.  
 3. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.  
 4. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.  
 5. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.
- GENERAL NOTES**
1. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.  
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 5. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.
- PROPOSED IMPROVEMENTS**
1. ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE IN FEET AND INCHES.  
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- LEGEND**
- EXISTING: EXISTING ASPHALT PAVEMENT  
 NEW: NEW CITY ASPHALT PAVEMENT  
 CONCRETE SIDEWALK  
 CONCRETE ADA PARKING  
 SEED OIL STANDARD ASPHALT PAVEMENT  
 ADA ACCESSIBLE BRICKS  
 CONCRETE SIDEWALK  
 CONCRETE ADA PARKING  
 SEED OIL STANDARD ASPHALT PAVEMENT  
 ADA ACCESSIBLE BRICKS



Spartanburg  
 County District  
 5 Schools



12000 MARKET STREET, SUITE 100  
 GREENSBORO, NORTH CAROLINA 27409  
 TEL: 760.214.1400 FAX: 760.214.1401  
 WWW.LS3P.COM



12000 MARKET STREET, SUITE 100  
 GREENSBORO, NORTH CAROLINA 27409

## Spartanburg 5 New Middle School

222 GIN HOUSE RD  
 GREENSBORO, NC 27405

**REVISION HISTORY**

NO.	DATE	DESCRIPTION
1	08/15/2022	ISSUED FOR PERMIT
2	08/15/2022	ISSUED FOR PERMIT
3	08/15/2022	ISSUED FOR PERMIT

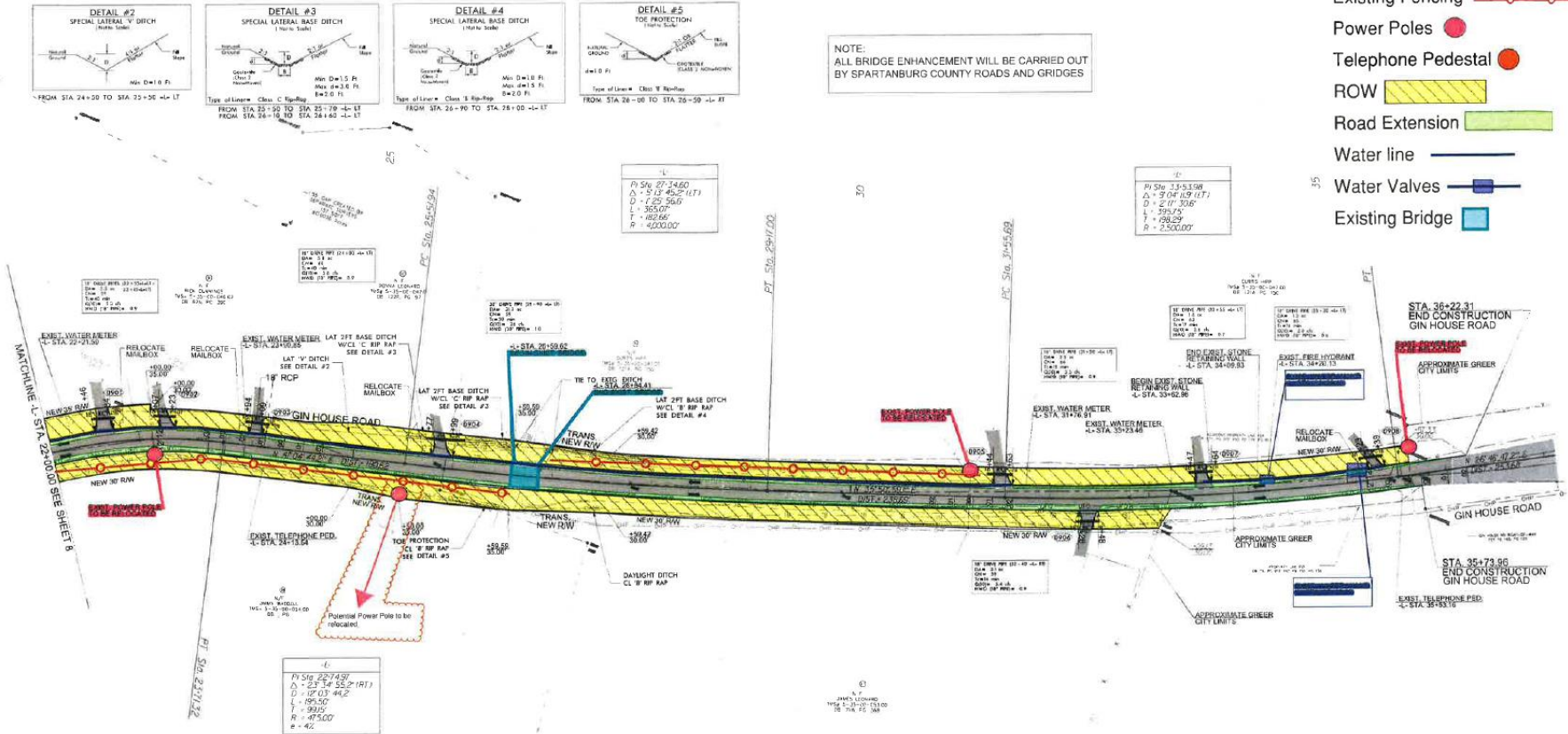
SHEET NAME: OVERALL SITE PLAN  
 ORIS SUBMISSION: 2021.10.19  
 CURRENT: 2022.08.09  
 SHEET: C5.0  
 SCALE FOR CONSTRUCTION

# GIN HOUSE ROAD IMPROVEMENTS

## LEGEND:

- Existing Fencing
- Power Poles
- Telephone Pedestal
- ROW
- Road Extension
- Water line
- Water Valves
- Existing Bridge

NOTE:  
ALL BRIDGE ENHANCEMENT WILL BE CARRIED OUT  
BY SPARTANBURG COUNTY ROADS AND GRIDGES

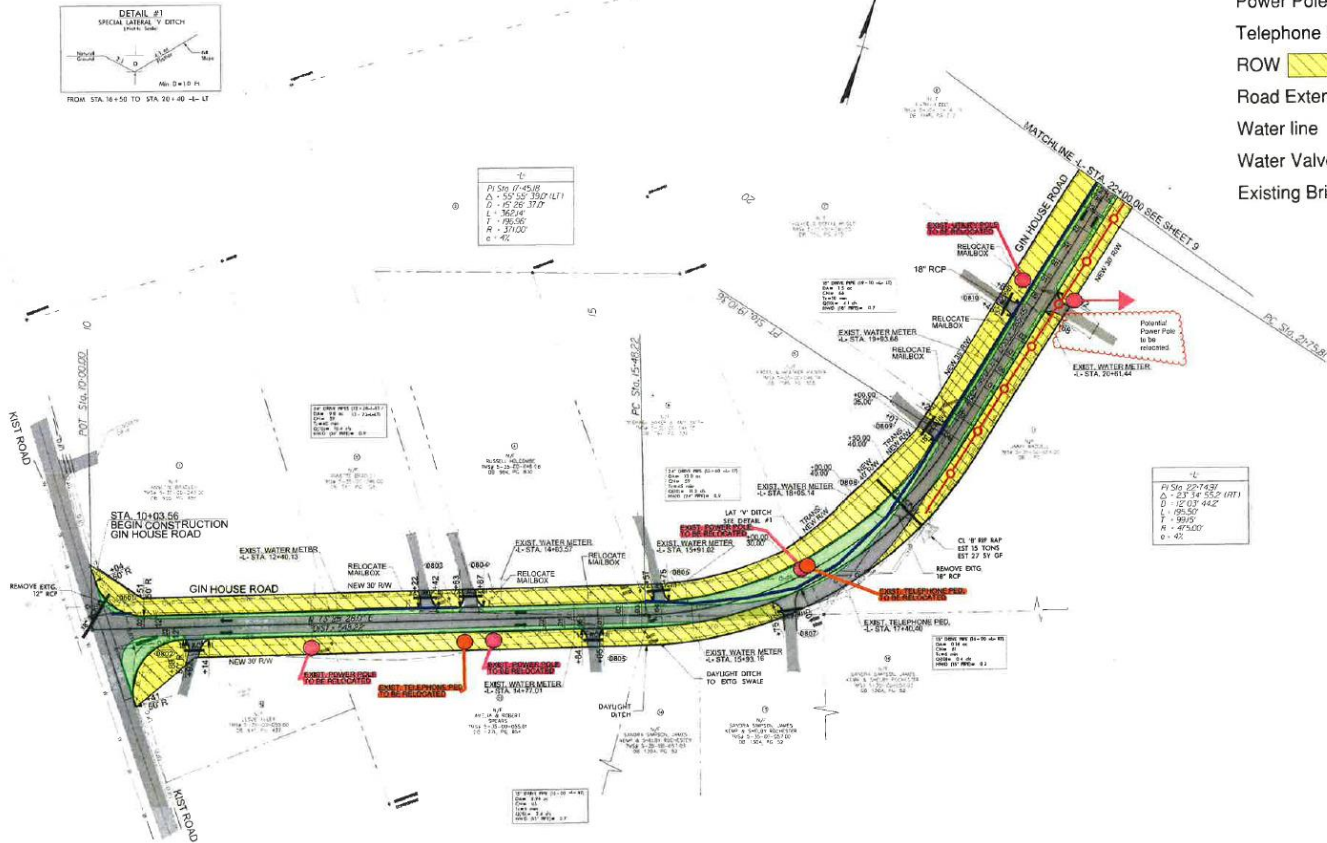


Curve Data:  
 P1 Sta 27+34.60  
 $\Delta = 51.2^\circ 45.2' 11.17''$   
 $D = 125.56.0'$   
 $L = 365.0'$   
 $T = 102.66'$   
 $R = 4000.00'$

Curve Data:  
 P1 Sta 27+43.97  
 $\Delta = 3^\circ 04' 19.17''$   
 $D = 2^\circ 07' 53.00''$   
 $L = 398.75'$   
 $T = 98.29'$   
 $R = 2500.00'$

Curve Data:  
 P1 Sta 27+43.97  
 $\Delta = 23^\circ 34' 55.2' 19.17''$   
 $D = 10^\circ 03' 44.2''$   
 $L = 185.50'$   
 $T = 90.00'$   
 $R = 475.00'$   
 $\theta = 46'$

# GIN HOUSE ROAD IMPROVEMENTS



## LEGEND:

- Existing Fencing
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# TRAFFIC SIGNAL

## SIGNAL EQUIPMENT

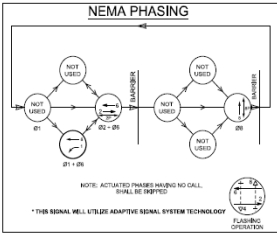
ONE (1) NEW 33A SIGNAL CABINET WITH 2075 CONTROLLER & 3000 CONTROLLER WITH FLASHER, SIGNAL MONITOR UNIT, AND BASEMOUNTED 33A CABINET.

CABINET: EXT: PROP:   
VEHICLE SIGNALS: EXT: PROP:

HEAD NUMBER	2P	2	3	6	8	8	8	8	2P	8P
LENS	R	R	R	R	R	R	R	R		
PHASE	2P	2	3	6	8	8	8	8	2P	8P
SIZE	12"	12"	12"	12"	12"	12"	12"	12"	16"	16"
COUNTY	1	1	1	1	1	1	1	1	2	2
Q.L. 81-402 (FVA)	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.	Q.L.C.

METAL POLES W/O MAST ARMS: EXT: PROP:   
METAL POLES W/ MAST ARMS: EXT: PROP:   
SPICE BOXES AS NECESSARY: EXT: PROP:   
INDUCTANCE LOOPS AS NECESSARY: EXT: PROP:

## NEMA PHASING



## LEGEND:

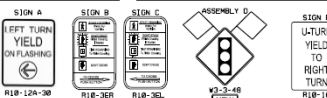
Road Extension   
Electrical for Traffic Signal

## LOOP DETECTOR INSTALLATION CHART

PHASE	DETECTOR	WIRED	TO PHASES	OPERATION	SPECIAL FEATURES	LOOP DESIGN
1A	1	-	1	X	X	QUAD
2A	2	-	2	X	X	QUAD
6A	3	-	6	X	X	QUAD
8A	4	-	8	X	X	QUAD
8B	1	-	8	X	X	QUAD

## TABLE OF OPERATION

SIGNAL HEAD #	01	02	03	04	05	06	07	08	09	10
1,2P	RY	RY	RY	RY	RY	RY	RY	RY	RY	RY
2	R	G	R	G	R	G	R	G	R	G
2,3CON	R	G	R	G	R	G	R	G	R	G
6	G	R	G	R	G	R	G	R	G	R
8	R	R	G	R	R	G	R	R	G	R
8,1CON	R	R	G	R	R	G	R	R	G	R
2P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
8P	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW



## SIGNAL INSTALLATION NOTES

- ALL SIGNAL HEADS SHALL BE COVERED WITH BURIAL UNTIL THE SIGNAL HAS BEEN TESTED AND IS READY TO BE PLACED IN OPERATION.
  - CONTRACTOR SHALL COORDINATE WITH EXISTING UTILITIES ON POLE, CABINET, FIBER OPTIC CONDUIT, AND SPICE BOX PLACEMENT.
  - INSTALL RETROREFLECTIVE BACKPLATES ON ALL SIGNAL HEADS.
  - CONTRACTOR SHALL COORDINATE WITH SCDDT DISTRICT 3 STAFF FOR IMPLEMENTATION OF SIGNAL TIMINGS.
- FOUNDATION NOTES**
- ALL BACKCOURTWAY SHOWN IS APPROXIMATE.
  - ALL EQUIPMENT, MATERIALS AND INSTALLATION PROCEDURES SHALL ADHERE TO THE SCDDT SIGNAL EQUIPMENT SPECIFICATIONS. FOR THE LATEST VERSION CONTACT SCDDT TRAFFIC ENGINEERING IN COLUMBIA AT 803-733-4494.
  - ALL PAVEMENT MARKINGS (REMOVAL AND REPLACEMENT, AS SHOWN ON PLANS, ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL INSTALLATION AND REMOVAL SHALL BE PER SCDDT STANDARDS.
  - PROPOSED PAVEMENT MARKINGS ARE ILLUSTRATED BY DASH LINES/STYLS. REFERENCE ROADWAY PLANS TO ENSURE CONFORMANCE.
  - CONTACT SCDDT DISTRICT 3 SIGNAL SHOP TO SCHEDULE PRELIMINARY INSPECTION AT SPECIFIC MEETINGS TO DISCUSS SIGNAL CONSTRUCTION MEETINGS SHALL BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE.
  - MEETINGS WITH SIGNAL CONTRACTOR BEFORE ANY WORK COMMENCES.
  - INSTALLATION OF CONDUITS, CABLES, AND FOUNDATIONS.
  - INSTALLATION OF SIGNAL HEADS.
  - INSTALLATION OF VEHICLE DETECTOR LOOPS.
  - SIGNAL HEADS PLACED IN OPERATION.
  - REMOVE FLAGS AND NEW ASSEMBLY AFTER SIGNAL HAS BEEN IN OPERATION FOR TWO MONTHS, SEE ASSEMBLY 02.

NOTE: THIS TRAFFIC SIGNAL IS PART OF AN ADAPTIVE SIGNAL SYSTEM.

## SIGNAL TIMINGS

	PHASE	1	2	6	8
WALK	-	7	-	7	-
DOOR WALK	-	25	-	18	-
MIN INITIAL	-	4	15	15	4
MAX INITIAL	-	-	-	-	-
ADDSRV	-	4	-	-	-
VEH EXT	3.0	0.0	6.0	3.0	-
TIME 2P/8P REDUC	-	-	-	-	-
TIME TO REDUC	-	-	-	-	-
MIN GAP	3.0	3.0	3.0	3.0	-
MAX LIMIT	20	60	60	30	-
MAXIMUM 2	-	-	-	-	-
YELLOW	3.0	4.0	4.7	3.0	-
RED CLEAR	3.4	1.0	1.0	3.4	-
RECALL	-	MIN	MIN	-	-

NOTE: USE THE LEFT TURN CLEARANCE TIMES WHEN THE LEFT TURN PHASE TERMINATES, AS THE PARENT PHASE TERMINATES, USE THE PARENT PHASE CLEARANCE TIMES FOR THE YELLOW ARROW AND RED ARROW.



IMPACT  
NO. 2018-001  
DATE: 01/11/2018

## TRAFFIC SIGNAL PLAN

Abrer Creek Road S-63  
State Road S-42-618

Planning District: District 3  
Sponsoring County: Greater SC

Plan Date: April 28, 2021  
Reviewed By: PP  
Impact No: 20044

Rev. No. 1  
By: [Signature]  
Date: [Date]  
Description of Revision: [Description]



TEAMS ID: TS XXXXX





## COST

Original Allowance – November 2021	\$1,000,000
Adjustment to Allowance – February 9, 2023	\$269,354
<ul style="list-style-type: none"><li>▪ Extended commencement date</li><li>▪ Allowances for mailboxes, site fencing, rock</li><li>▪ Asphalt and fuel cost increases</li><li>▪ Added erosion control &amp; storm</li></ul>	
<hr/>	
Gin House Road Improvements Final Pricing	\$1,269,354

## SCHEDULE

Right of way procurement	June 2023
Utilities Relocation	60 Days
Roadway Construction	155 Days

HARPER

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GENERAL CONTRACTORS

More than anything, **we build trust.**