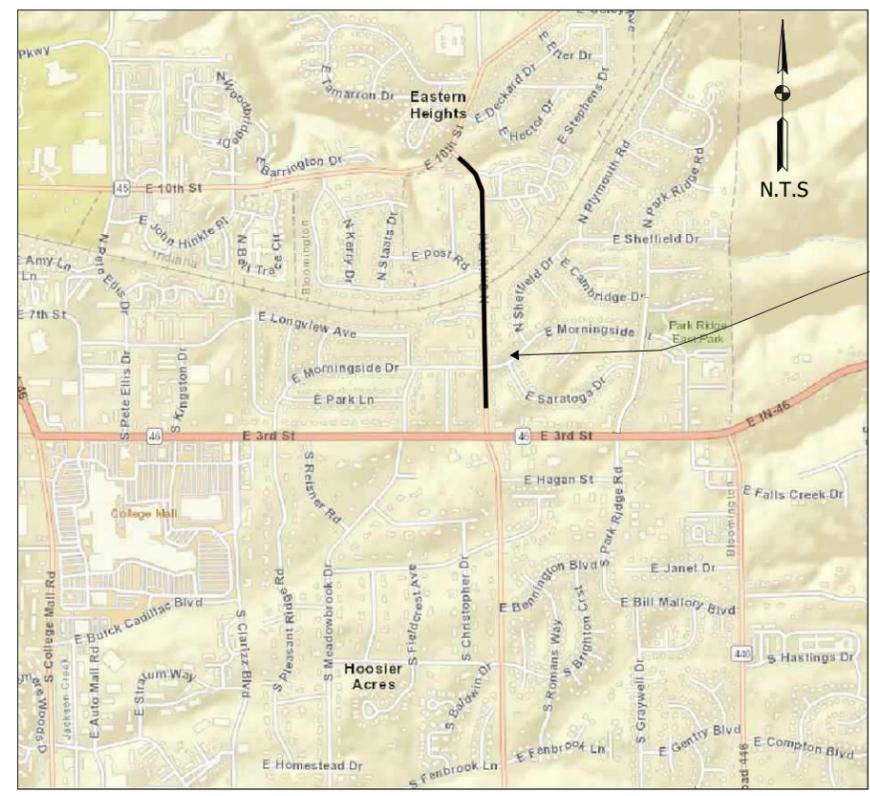




SMITH ROAD RESURFACING

NORTH SMITH ROAD FROM EAST 3RD STREET TO EAST 10TH STREET

MILLING, HMA PAVEMENT, CURB, SIDEWALK, CURB RAMPS AND PAVEMENT MARKING REPLACEMENT.



PROJECT LOCATION

CITY OF BLOOMINGTON
MONROE COUNTY
INDIANA

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
AND CURRENT SUPPLEMENTS THERETO, TO
BE USED WITH THESE PLANS



RECOMMENDED FOR APPROVAL	<i>Neil H. Kopper</i>	5/27/2022
	ENGINEER	DATE
DESIGNED:	NHK	DRAWN: NHK
CHECKED:	ASC	CHECKED: ASC

**CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT**

SMITH ROAD RESURFACING

HORIZONTAL SCALE	BRIDGE FILE
VERTICLE SCALE	DESIGNATION
SURVEY BOOK	SHEETS
CONTRACT	01 of 09 PROJECT

Notes:

- > Quantities and locations of C1, C2, S4, and CR shown on plan sheets are approximate. Precise locations to be coordinated onsite with City. Elevations shall generally match existing conditions with adjustments as necessary to result in positive stormwater drainage and PROWAG compliance. C1 and C2 shall be installed on 6" compacted aggregate if existing base is unsuitable.
- > PP shall follow Asphalt Surface Street Cut Repair detail. Flowable fill is not required when there is no trench. Asphalt sealer at joints is not applicable if area is included within surface overlay. PP locations are not specified on plan sheets. PP shall be 12" width when used adjacent to new C1, C2, or CR, installation. Contractor shall minimize disruption to adjacent landscaping. Any disturbed landscape areas shall receive mulched seeding.
- > Sidewalks and Curb Ramps shall comply with PROWAG and INDOT standard details. Detectable Warning Surfaces shall comply with the City's approved material list.
- > Indiana Department of Transportation Standard Specifications Current Edition and any supplements thereof are to be used with these plans.
- > Contractor shall contact Indiana Underground Location Service prior to commencing excavation work.
- > Blue raised pavement markers shall be installed adjacent to existing fire hydrants.
- > All longline pavement markings are dimensioned to face of curb (FOC) and center of stripe. For double lane lines, dimensions are to the point midway between the two lines.
- > Maintenance of traffic (vehicular and pedestrian): Continuous maintenance of access to businesses and residences shall be provided along with protection of the public from construction activities at all times. Temporary traffic control shall be provided by the contractor and shall be in accordance with the latest edition of the Indiana MUTCD. During paving operations, the Contractor is required to provide temporary traffic control consistent with short-duration or mobile operations. During concrete operations requiring use of the roadway, the Contractor is required to provide temporary traffic control consistent with a lane closure on a two-lane road using flaggers. The contractor shall limit blocking the existing sidewalk to only times necessitated by sidewalk construction work. Appropriate pedestrian maintenance of traffic signage shall be in place during any sidewalk disruptions. A pedestrian walkaround consistent with City of Bloomington Municipal Code 12.08.110 shall be provided if a portion of the sidewalk is closed for more than 48 hours.
- > Contractor shall be responsible for keeping the project site in a neat and safe condition at all times.

Item Labels:

- S4 Sidewalk Concrete, 4" on 4" compacted aggregate
- K1 Mill 1.5", Pave 165# HMA Surface Type B
- C1 Standing Curb, see detail
- C2 2' Concrete Curb and Gutter, see detail
- CR Concrete Curb Ramp, 6" on 4" compacted aggregate with detectable warnings
- PP Pavement Patch, see detail
- BL Bicycle Lane Marking, see detail
- BS Bicycle Shared Lane Marking, see detail
- 04 4" Double Yellow Thermoplastic, 4" gap between lines
- 10 6" White Thermoplastic, bike lane line
- 17 24" White Thermoplastic, stop bar
- 18 6" White Thermoplastic, crosswalk line
- 19 24" White Thermoplastic, crosswalk line
- RP Blue Snowplowable Raised Pavement Marker

NOTES:

1. A SURFACE PATCH SHALL BE EXTENDED TO ADJACENT SEAM IF ANOTHER SEAM IS WITHIN 2' OF PATCH AREA.
2. CONTACT STREET DEPARTMENT (812-349-3448) IF USING PLATE DURING WINTER.
3. CONTRACTOR SHALL FOLLOW ALL MUTCD GUIDELINES.
4. ALLOW ADEQUATE CURE TIME BEFORE PERMITTING TRAFFIC ON CONCRETE.
5. ALLOW ADEQUATE CURE TIME BEFORE PLACING COMPACTED ASPHALT SURFACE ON CONCRETE.

EDGES SAW CUT AND SEALED WITH ASPHALT SEALER

EXISTING ASPHALT SURFACE

EXISTING BASE ON UNDISTURBED SUB GRADE

1-1/2 TO 2" COMPACTED ASPHALT SURFACE

9" MINIMUM 4000 psi CONCRETE

FLOWABLE FILL

8" TRENCH WIDTH

8" CUT BACK

ASPHALT SURFACE STREET CUT REPAIR

CITY OF BLOOMINGTON
STANDARD ROADWAY
STREET CUT REPAIR DETAILS
STANDARD DRAWING SC-2

REGISTERED PROFESSIONAL ENGINEER
No. 11500386
STATE OF INDIANA
ANDREW SCOTT C. BORNER
DATE: 10/27/2017

COMBINED CONCRETE CURB AND GUTTER (VERTICAL)

INDIANA DEPARTMENT OF TRANSPORTATION
COMBINED CONCRETE CURB AND GUTTER
SEPTEMBER 2011
STANDARD DRAWING NO. E 605-CCCG-01

REGISTERED PROFESSIONAL ENGINEER
No. 9750
STATE OF INDIANA
RICHARD L. VANCLEAVE
DESIGN STANDARDS ENGINEER
DATE: 09/01/11

REGISTERED PROFESSIONAL ENGINEER
No. 9750
STATE OF INDIANA
MARK A. MILLER
CHIEF HIGHWAY ENGINEER
DATE: 09/01/11

CONCRETE CURB (VERTICAL)

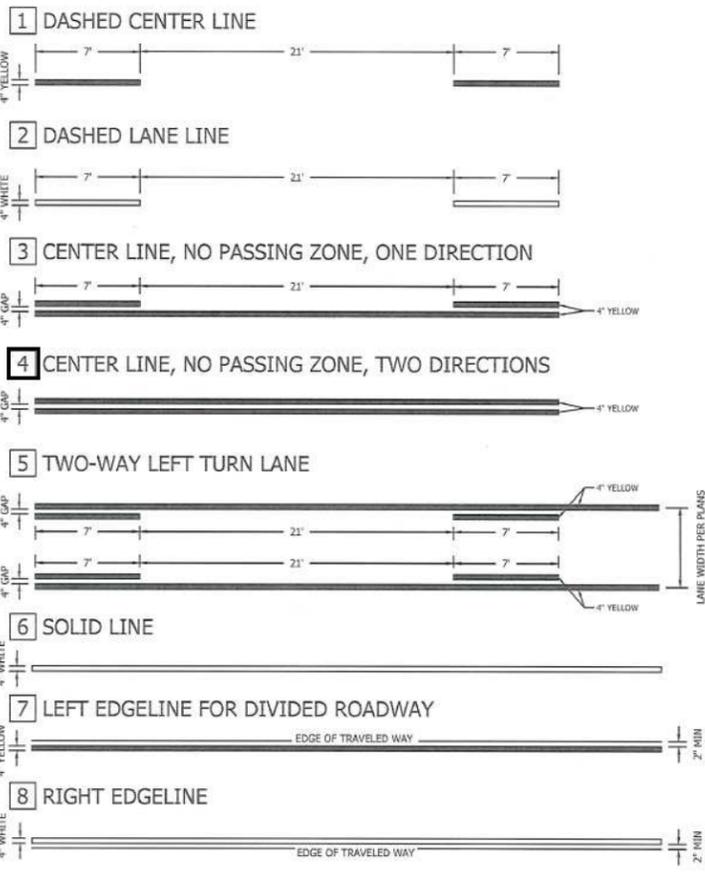
INDIANA DEPARTMENT OF TRANSPORTATION
CONCRETE AND HMA CURBS AND SAWED JOINTS
SEPTEMBER 2014
STANDARD DRAWING NO. E-605-CCSJ-01

REGISTERED PROFESSIONAL ENGINEER
No. 9750
STATE OF INDIANA
RICHARD L. VANCLEAVE
DESIGN STANDARDS ENGINEER
DATE: 06/20/13

REGISTERED PROFESSIONAL ENGINEER
No. 9750
STATE OF INDIANA
MARK A. MILLER
CHIEF ENGINEER
DATE: 09/26/13

6" or more match existing conditions

	RECOMMENDED FOR APPROVAL	5/27/2022	CITY OF BLOOMINGTON ENGINEERING DEPARTMENT SMITH ROAD RESURFACING	HORIZONTAL SCALE	BRIDGE FILE
	ENGINEER	DATE		AS NOTED	N/A
DESIGNED: NHK	DRAWN: NHK			VERTICLE SCALE	DESIGNATION
CHECKED: ASC	CHECKED: ASC			N/A	N/A
				SURVEY BOOK	SHEETS
				N/A	02 of 09
				CONTRACT	PROJECT
				N/A	

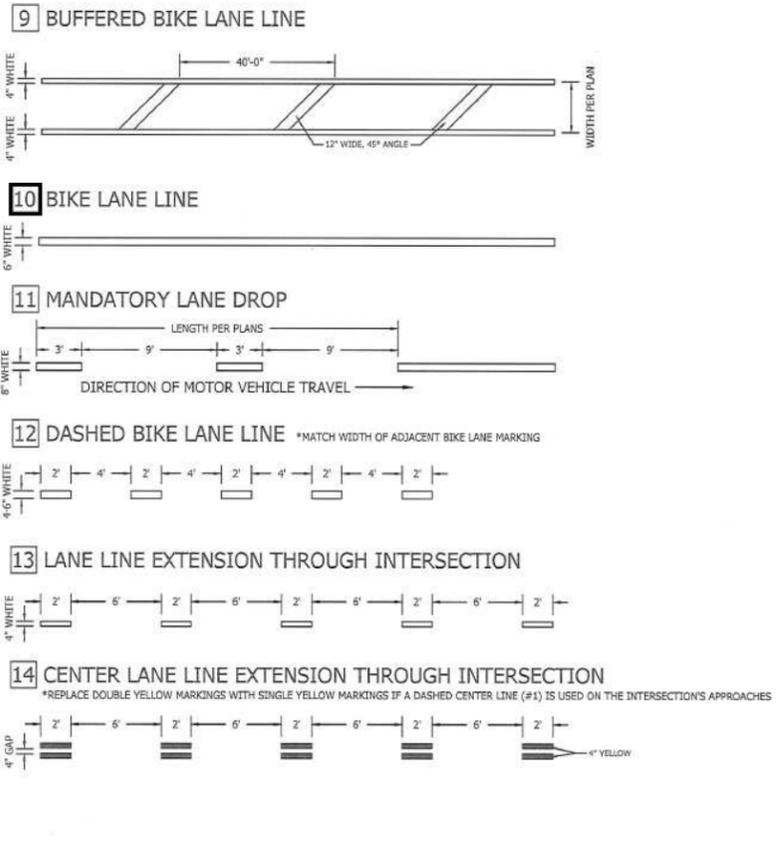


NOTES:
 1. BASIC COLOR RULE: WHITE LINES SEPARATE TRAFFIC IN THE SAME DIRECTION; YELLOW LINES SEPARATE TRAFFIC IN OPPOSING DIRECTIONS. BLACK MARKINGS MAY BE USED TO OUTLINE WHITE OR YELLOW MARKINGS WHERE A LIGHT COLORED SURFACE DOES NOT PROVIDE SUFFICIENT CONTRAST.
 2. SHOWN DIMENSIONS ASSUME FRESH SURFACES, MATCH EXISTING DIMENSIONS IF MAINTENANCE EFFORT.

CITY OF BLOOMINGTON
 STANDARD TRAFFIC PAVEMENT MARKING DETAILS
 STANDARD DRAWING NO.- PM-1

ANDREW SCOTT C. DOR
 REGISTERED No. 11500386
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

ENGINEER
 DATE 8/21/2018

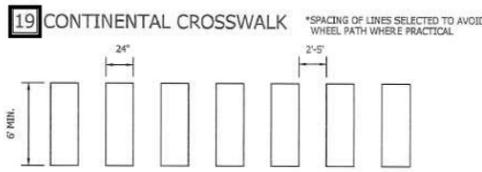
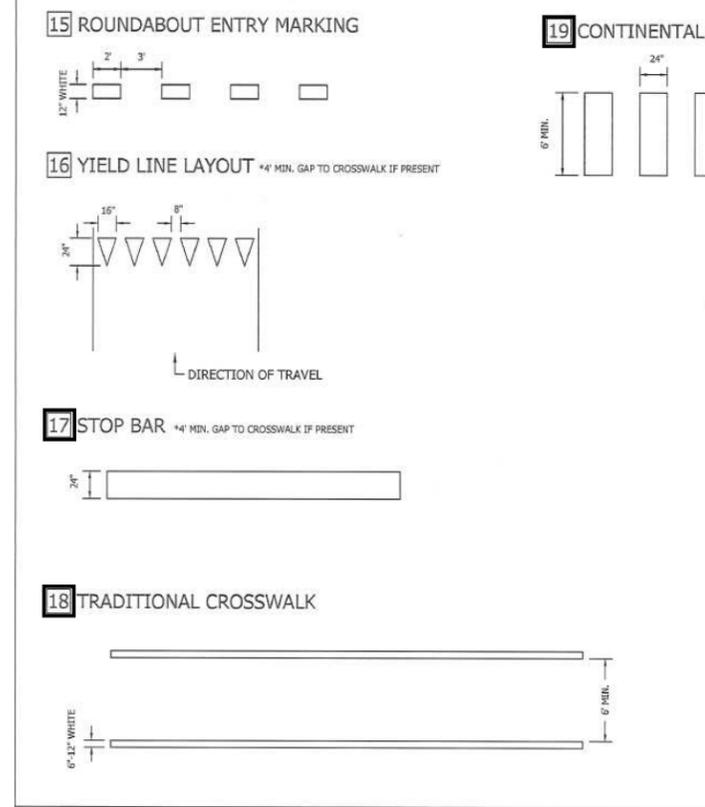


NOTES:
 1. BASIC COLOR RULE: WHITE LINES SEPARATE TRAFFIC IN THE SAME DIRECTION; YELLOW LINES SEPARATE TRAFFIC IN OPPOSING DIRECTIONS. BLACK MARKINGS MAY BE USED TO OUTLINE WHITE OR YELLOW MARKINGS WHERE A LIGHT COLORED SURFACE DOES NOT PROVIDE SUFFICIENT CONTRAST.
 2. SHOWN DIMENSIONS ASSUME FRESH SURFACES, MATCH EXISTING DIMENSIONS IF MAINTENANCE EFFORT.

CITY OF BLOOMINGTON
 STANDARD TRAFFIC PAVEMENT MARKING DETAILS
 STANDARD DRAWING NO.- PM-2

ANDREW SCOTT C. DOR
 REGISTERED No. 11500386
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

ENGINEER
 DATE 8/21/2018

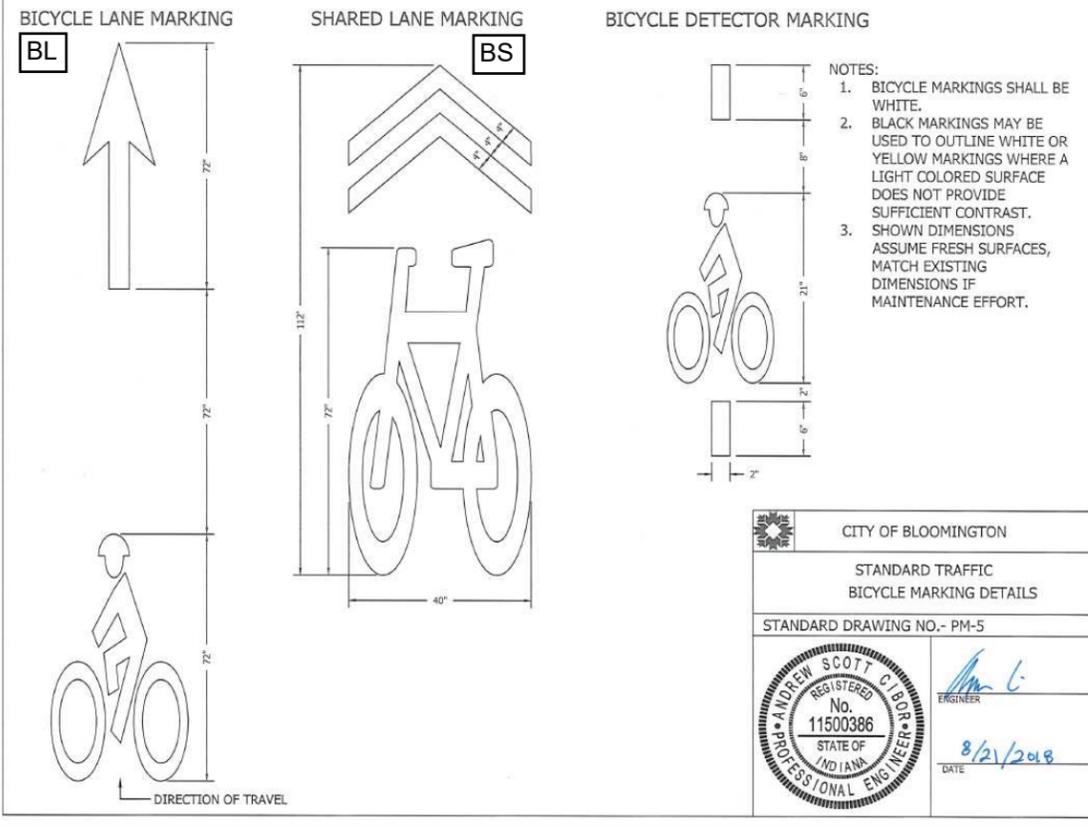


NOTES:
 1. BASIC COLOR RULE: WHITE LINES SEPARATE TRAFFIC IN THE SAME DIRECTION; YELLOW LINES SEPARATE TRAFFIC IN OPPOSING DIRECTIONS. BLACK MARKINGS MAY BE USED TO OUTLINE WHITE OR YELLOW MARKINGS WHERE A LIGHT COLORED SURFACE DOES NOT PROVIDE SUFFICIENT CONTRAST.
 2. SHOWN DIMENSIONS ASSUME FRESH SURFACES, MATCH EXISTING DIMENSIONS IF MAINTENANCE EFFORT.

CITY OF BLOOMINGTON
 STANDARD TRAFFIC PAVEMENT MARKING DETAILS
 STANDARD DRAWING NO.- PM-3

ANDREW SCOTT C. DOR
 REGISTERED No. 11500386
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

ENGINEER
 DATE 8/21/2018



NOTES:
 1. BICYCLE MARKINGS SHALL BE WHITE.
 2. BLACK MARKINGS MAY BE USED TO OUTLINE WHITE OR YELLOW MARKINGS WHERE A LIGHT COLORED SURFACE DOES NOT PROVIDE SUFFICIENT CONTRAST.
 3. SHOWN DIMENSIONS ASSUME FRESH SURFACES, MATCH EXISTING DIMENSIONS IF MAINTENANCE EFFORT.

CITY OF BLOOMINGTON
 STANDARD TRAFFIC BICYCLE MARKING DETAILS
 STANDARD DRAWING NO.- PM-5

ANDREW SCOTT C. DOR
 REGISTERED No. 11500386
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

ENGINEER
 DATE 8/21/2018

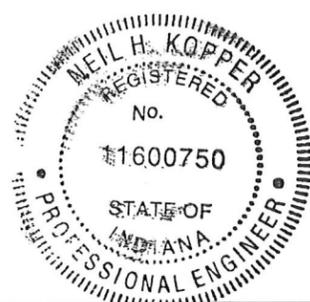
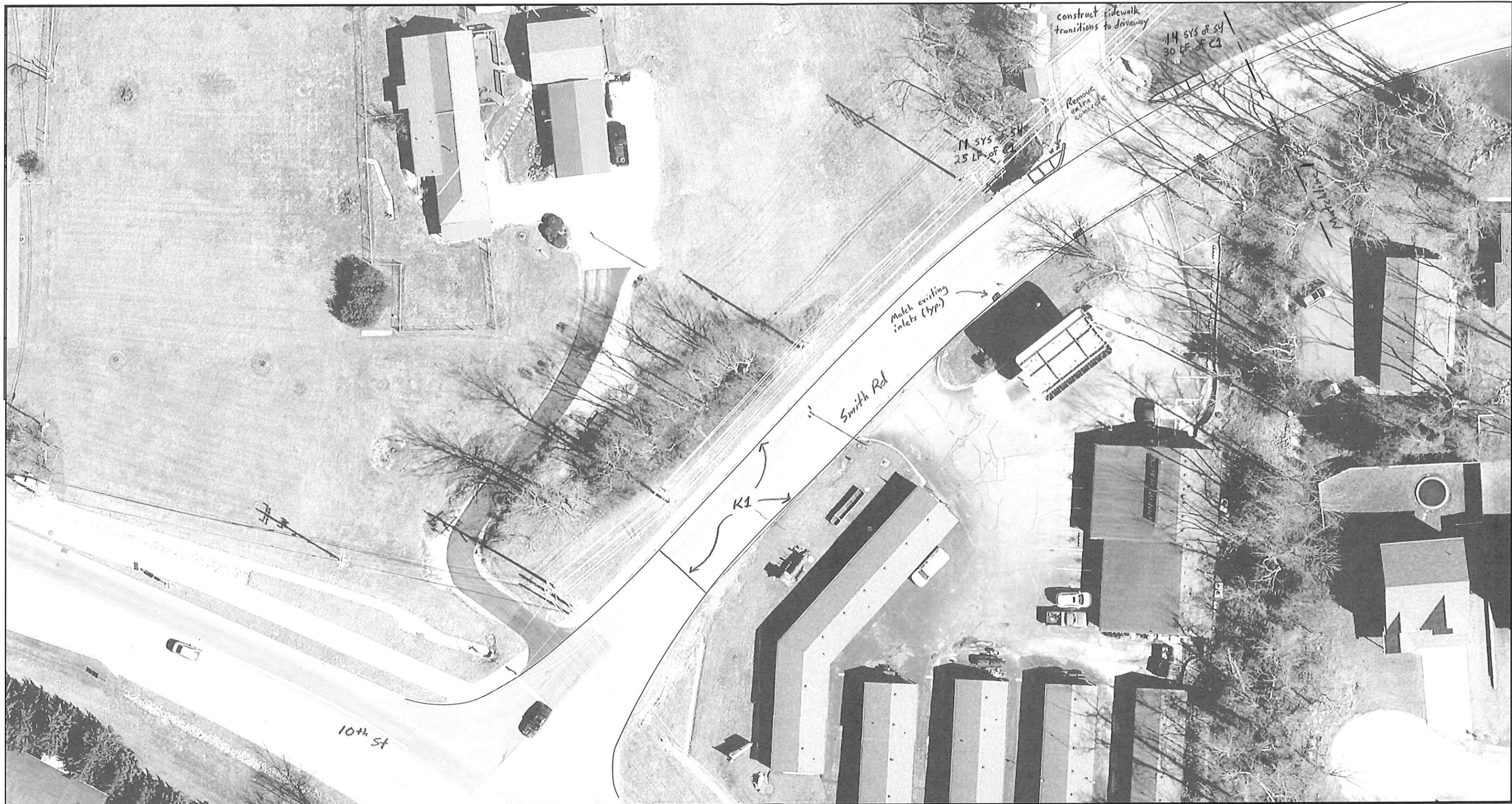
NEIL H. KOPPER
 REGISTERED No. 11600750
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: [Signature] 5/27/2022
 ENGINEER DATE

DESIGNED: NHK DRAWN: NHK
 CHECKED: ASC CHECKED: ASC

CITY OF BLOOMINGTON
 ENGINEERING DEPARTMENT
 SMITH ROAD RESURFACING

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	N/A
VERTICLE SCALE	DESIGNATION
N/A	N/A
SURVEY BOOK	SHEETS
N/A	03 of 09
CONTRACT	PROJECT
N/A	



Smith Road (3rd to 10th)

Resurfacing, Curb Ramps, Restriping

Recommended for approval: *Neil Kopper* 5/27/2022
 Senior Project Engineer Date

Designed: NHK Drawn: NHK
 Checked: ASC Checked: ASC



Engineering Department



City of Bloomington



Sheet 4 of 9
 Site Plan



Note - slope of curb ramp turning space at Grandview may be up to 5% measured parallel to Smith.



Smith Road (3rd to 10th)

Resurfacing, Curb Ramps, Restriping

Recommended for approval: [Signature] 5/27/2022
Senior Project Engineer Date

Designed: NHK Drawn: NHK
Checked: ASC Checked: ASC



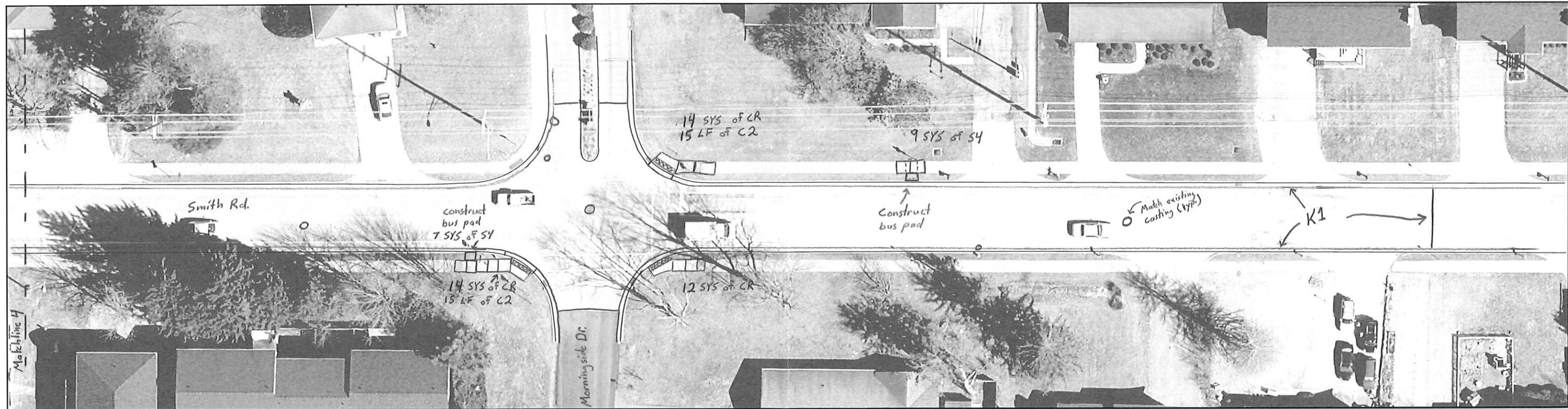
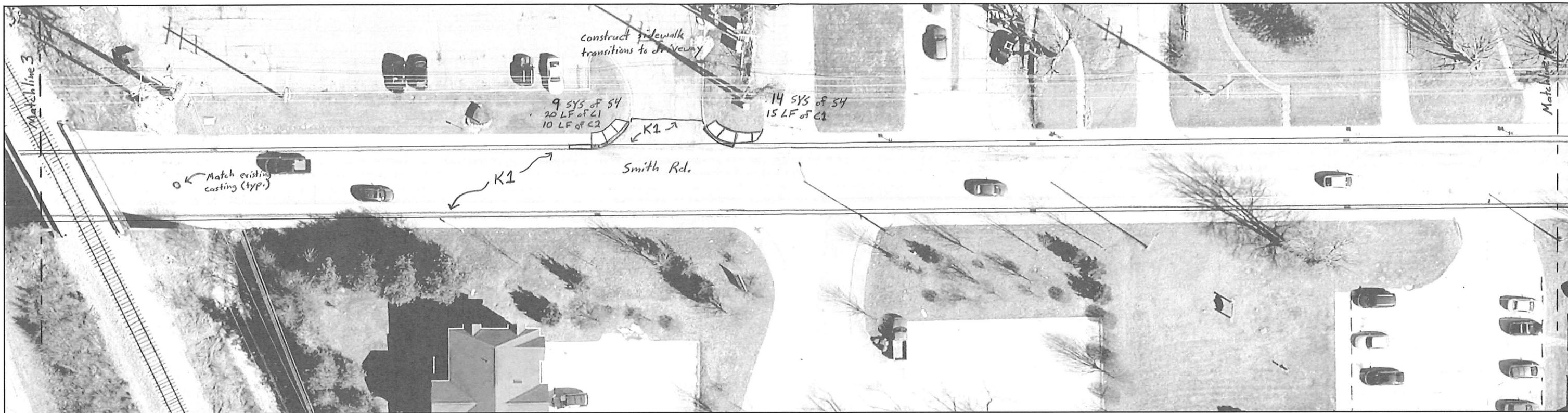
Engineering Department



City of Bloomington



Sheet 5 of 9
Site Plan



5'x8' bus pad to be 2% slope perpendicular to curb and match road grade parallel to curb.



Smith Road (3rd to 10th)

Resurfacing, Curb Ramps, Restriping

Recommended for approval: Neil Kopper 5/29/2022
Senior Project Engineer Date

Designed: NHK Drawn: NHK
Checked: ASC Checked: ASC

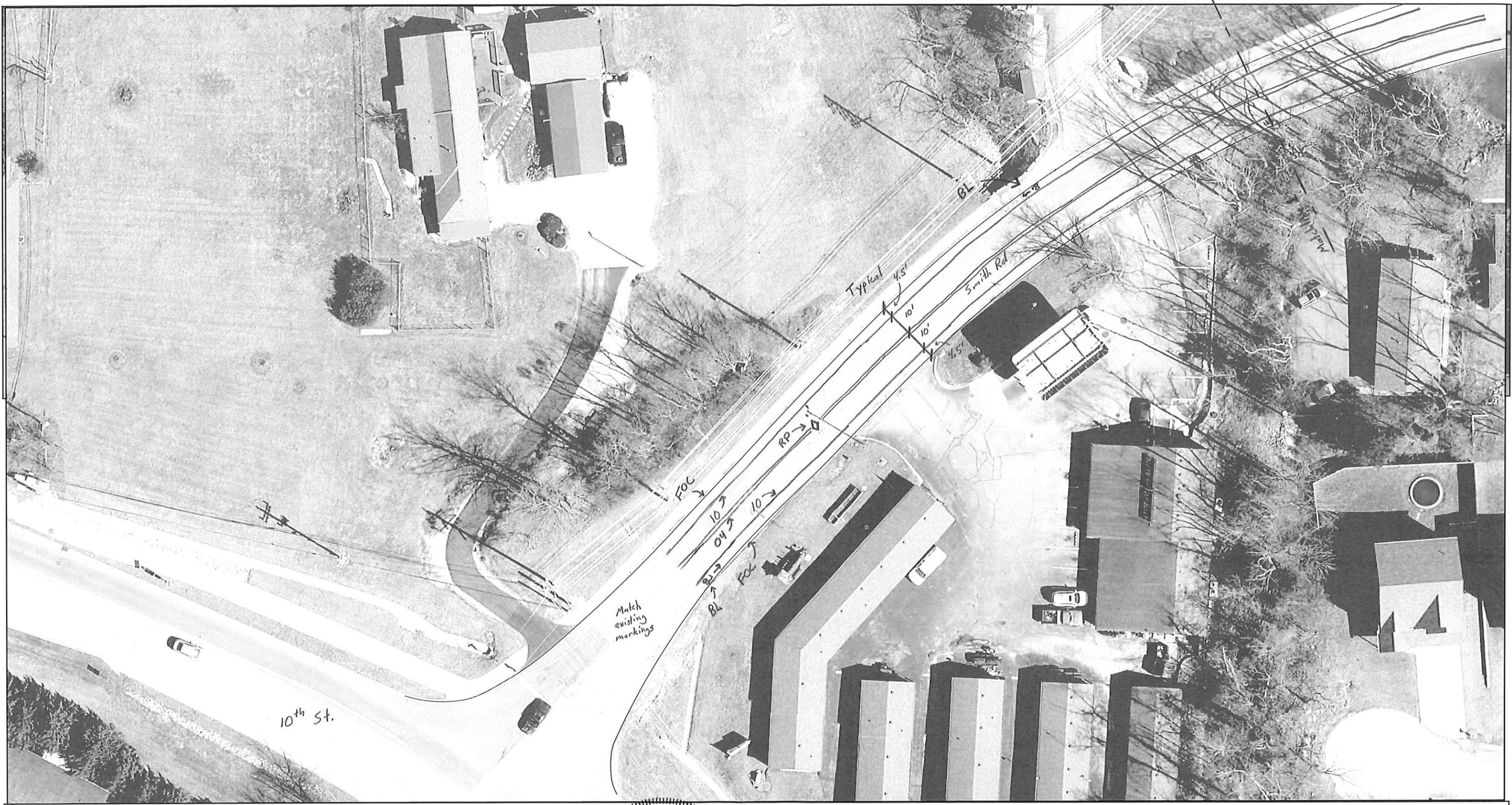


Engineering Department

City of Bloomington



Sheet 6 of 9
Site Plan

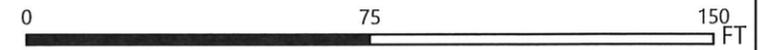


Smith Road (3rd to 10th)

Resurfacing, Curb Ramps, Restriping

Recommended for approval: *[Signature]* 5/25/2022
 Senior Project Engineer Date

Designed: *NHK* Drawn: *NHK*
 Checked: *ASC* Checked: *ASC*



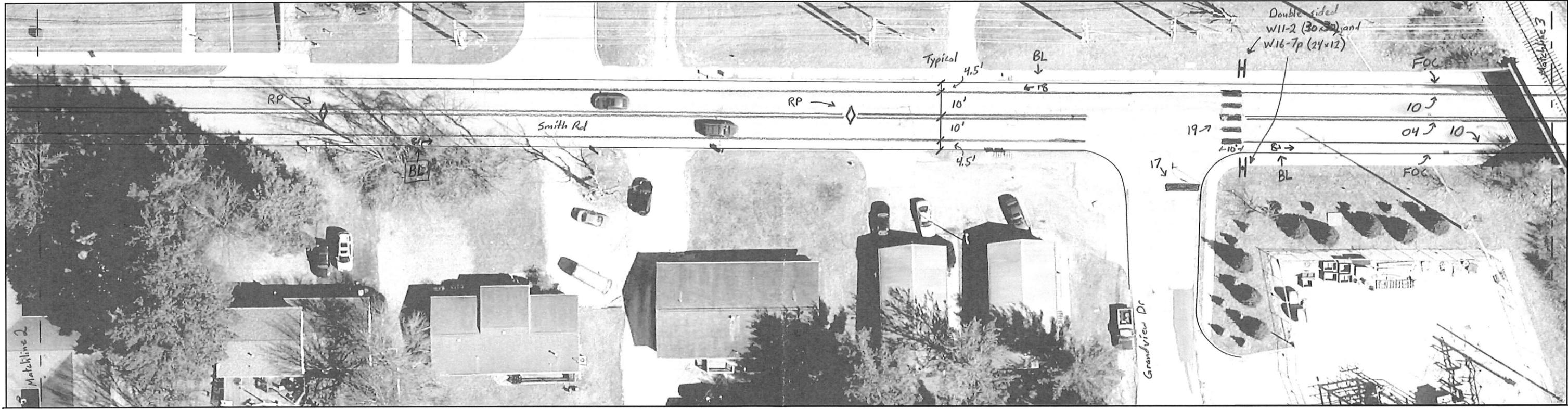
Engineering Department



City of Bloomington



Sheet 7 of 9
 Markings + Signs



Smith Road (3rd to 10th)

Resurfacing, Curb Ramps, Restriping

Recommended for approval: *[Signature]* 5/22/2022
Senior Project Engineer Date

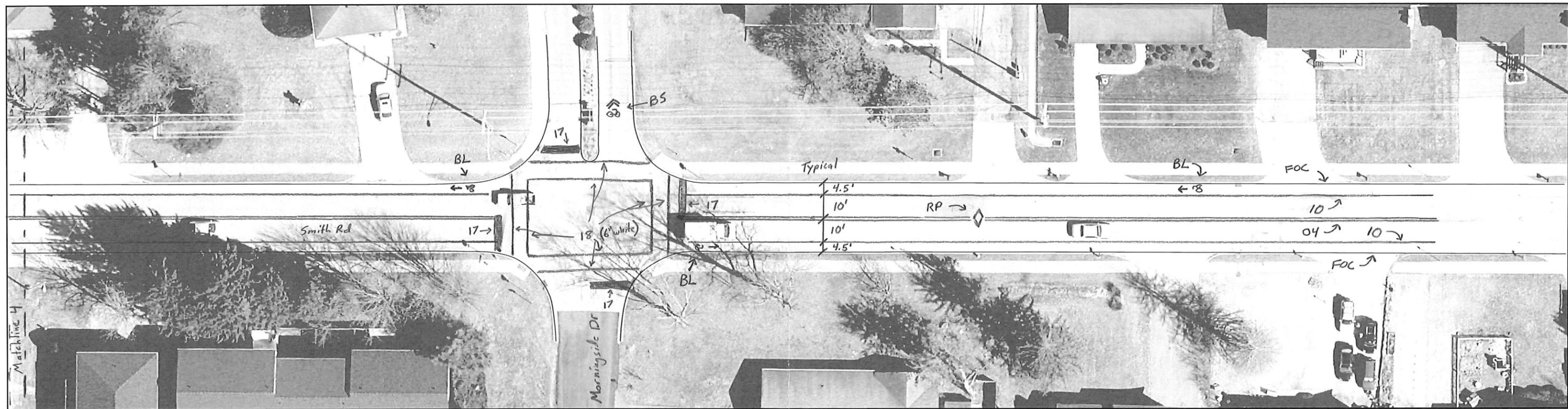
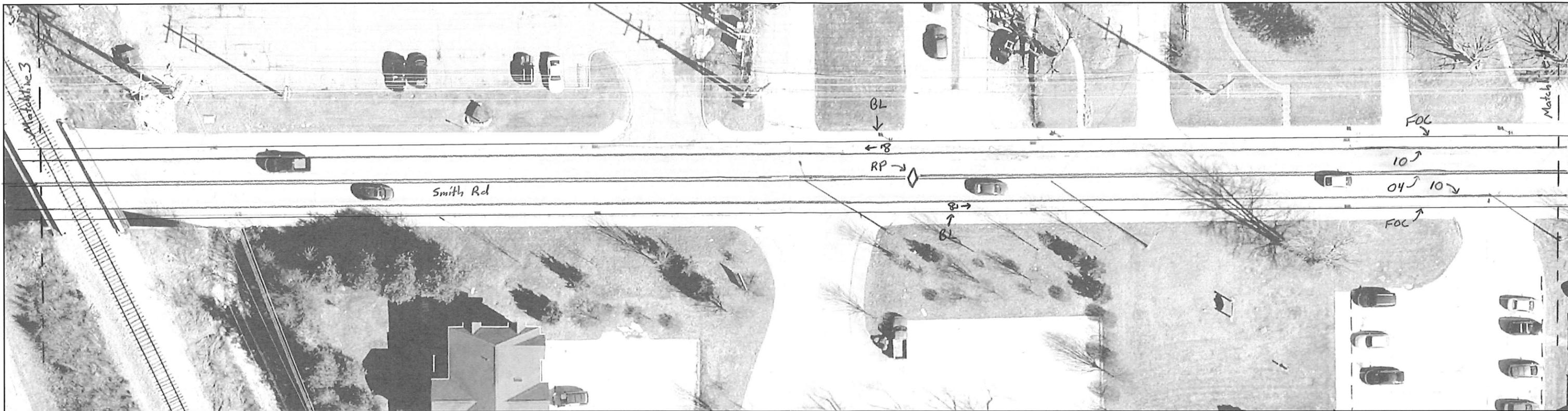
Designed: *NHK* Drawn: *NHK*
Checked: *ASC* Checked: *ASC*



Engineering Department



Sheet 8 of 9
Markings & Signs

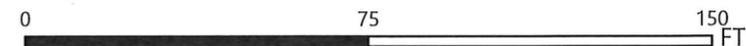


Smith Road (3rd to 10th)

Resurfacing, Curb Ramps, Restriping

Recommended for approval: *Neil H. Kopper* 5/27/2022
 Senior Project Engineer Date

Designed: NHK Drawn: NHK
 Checked: ASC Checked: ASC



Engineering Department

City of Bloomington



Sheet 9 of 9
 Markings & Signs