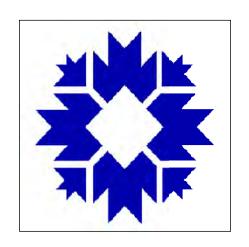
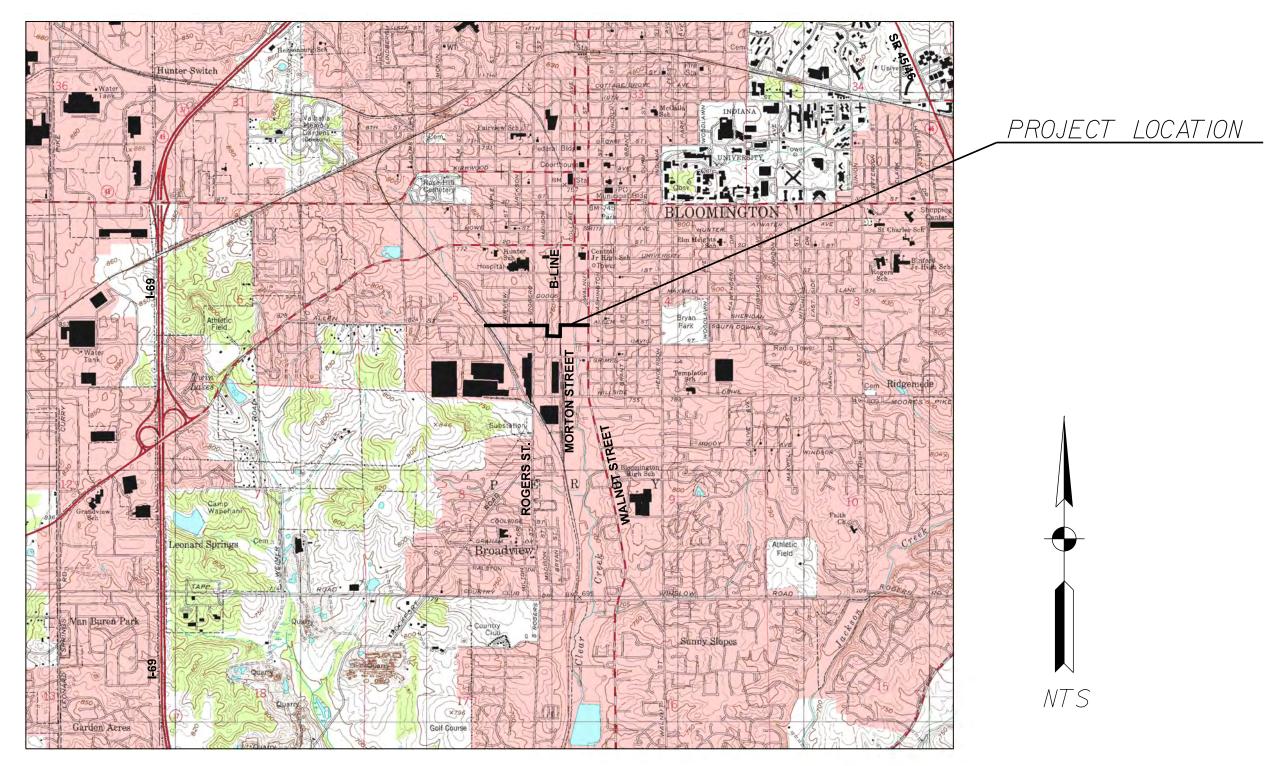
## CITY OF BLOOMINGTON DEPARTMENT OF ENGINEERING



# WEST ALLEN STREET GREENWAY PATTERSON DRIVE TO WALNUT STREET



PROJECT LOCATION MAP
CITY OF BLOOMINGTON, MONROE COUNTY

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS CURRENT EDITION TO BE USED WITH THESE PLANS.

PREPARED BY:



1321 Laurel Oak Drive Avon, Indiana 46123

(317)370-9672



#### UTILITIES CABLE TELEVISION TELEPHONE/COMMUNICATIONS (CONT.) DUKE (DISTRIBUTION) AT & T COMCAST ATTN: STEVE McARTOR ATTN: CHRISTINA GIROD PRIMARY: JOHN HALL 2450 SOUTH HENDERSON ST. 16475 SOUTH PARK DRIVE (812) 334-4742 ALT:TOD MOORE BLOOMINGTON, IN 47401 WESTFIELD, IN 46074 (812) 360-3090 (812) 334-4718 (812) 273-9596 4517 INDIANA BELL COURT christina.girod@@duke-energy.com BLOOMINGTON, IN 47408 STORM/SANITARY/WATER CENTERPOINT ENERGY CITY OF BLOOMINGTON UTILITIES SMITHVILLE TELEPHONE CO. ATTN: ARIEL THOMAS ATTN.: PHIL PEDEN 205 SOUTH MADISON ATTN: JOE BRYNIARSKI 600 E. MILLER DRIVE 1600 W. TEMPERANCE ST. BLOOMINGTON, IN 47404 BLOOMINGTON, IN 47401 ELLETTSVILLE, IN 47429-0729 (812) 330-4018 (812) 349-3634 (812) 935-2262 ariel.thomas@centerpoint.com pedenp@bloomington.in.gov joe.bryniarski@smithville.com 24-HR CONTROL OPERATOR FOR SERVICE RELOCATIONS (812) 339-1444 CITY OF BLOOMINGTON (48 HOUR NOTICE NEEDED) CITY OF BLOOMINGTON STREET DEPARTMENT ATTN: TELEPHONE/COMMUNICATIONS ATTN: FREDDIE LOVE US SIGNAL 1981 S. HENDERSON STREET ATTN: JOHN LUNDELL BLOOMINGTON DIGITAL UNDERGROUND BLOOMINGTON, IN 47401 20110NIA AVENUE SW ATTN.: RICK DIETZ (812) 349-3448 GRAND RAPIDS, MI 49503 ITS DEPT., CITY HALL freddie.love@bloomington.in.gov (616) 988-7117 401 N. MORTON ST. jlundell@ussignal.com SUITE 150 ZAYO ATTH: WAYLON HIGGINS BLOOMINGTON, IN 47404 CENTURYLINK 9209 CASTLE GATE DRIVE (812) 349-3485 (FORMERLY LEVEL 3 AND GTE) INDIANAPOLIS, IN 46256 ATTN: DEWAYNE HAMILTON (765) 341-1199 4625 WEST 86TH STREET waylon.higgins@zayo.com INDIANAPOLIS, IN 46268 (317) 966-3356 dewayne.hamilton@centurylink.com

	GENERAL NOTES
/	ALL REMOVAL AND EXCAVATION ITEMS ARE TO BE PAID AS CLEARING,
2	ALL RADII ARE TO BACK OF CURB LINE.
3	<u>USE OF INDOT STANDARD SPECIFICATIONS:</u> UNLESS OTHERWISE PROVIDED IN THESE PLANS OR THE TECHNICAL SPECIFICATIONS, MATERIALS AND WORKMANSHIP OF THE WORK SHALL BE AS REQUIRED BY THE CURRENT EDITION OF THE INDOT STANDARD SPECIFICATIONS.
4	<u>USE OF PROPERTY:</u> NO MATERIALS OR EQUIPMENT SHALL BE STORED IN A LOCATION OR MANNER WHICH PRESENTS A HAZARD TO THE PUBLIC OR THE ENVIRONMENT.THE SAFEGUARD OF MATERIALS REMAINING IN THESE AREAS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5	COORDINATION OF DRAWINGS, TECHNICAL SPECIFICATIONS AND STANDARD SPECIFICATIONS: THE CONTRACT DOCUMENTS WHICH ARE LISTED IN THE AGREEMENT ARE INTENDED TO BE COMPLEMENTARY AND TO DESCRIBE AND PROVIDE FOR COMPLETE WORK. A REQUIREMENT APPEARING IN ONE IS BINDING AS THOUGH OCCURRING IN ALL. IN CASE OF DISCREPANCY, THE FOLLOWING ORDER OF PRECEDENCE WILL APPLY:  I.CONSTRUCTION AGREEMENT,  2.INSTRUCTIONS TO BIDDERS,  3.SUPPLEMENTARY GENERAL CONDITIONS,  4.PERMITS ISSUED BY FED/STATE/LOCAL AGENCIES  5.TECHNICAL SPECIFICATIONS,  6.GENERAL CONDITIONS,  7.PROJECT DRAWINGS,  8.STANDARD SPECIFICATIONS AS PUBLISHED BY THE INDIANA DEPARTMENT OF TRANSPORTATION, CURRENT EDITION.
6	PRESENCE OF UTILITIES: MOST OF THIS PROJECT IS PRESENTED ON A GIS BASE MAP AND UTILITIES ARE NOT SHOWN. EXISTING UTILITIES THAT ARE SHOWN ON PLANS ARE APPROXIMATED IN ACCORDANCE WITH AVAILABLE RECORDSLOCATOR'S MARKINGS, AND PHYSICAL EVIDENCE. OTHER UTILITIES MAY ALSO BE PRESENT. EXACT LOCATIONS AND ELEVATIONS ARE TO BE DETERMINED BY CONTRACTOR.
7	<u>UTILITY LOCATIONS:</u> CONTRACTOR IS REQUIRED BY LAW TO NOTIFY INDIANA UNDERGROUND LOCATION SERVICE AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING ANY EXCAVATION WORK.CONTACT NUMBER IS 811. OTHER LOCAL UTILITIES MAY NOT BE SUBSCRIBERS AND MUST BE CONTACTED INDIVIDUALLY FOR LOCATE REQUESTS.
8	INCIDENTAL WORK: ALL WORK SHOWN OR SPECIFIED IN THE CONTRACT DOCUMENTS AND OTHER WORK WHICH MAY BE INCIDENTAL TO THE DENOTED WORK SHALL BE CONSIDERED TO BE INCLUDED IN THE TOTAL CONTRACT LUMP SUM PRICE.
9	STAKING: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STAKING.

	INDEX
SHEET NO.	DRAWINGS INDEX
/	TITLE SHEET
2	INDEX / GENERAL NOTES / LEGEND / UTILITY DATA
3 - 5	TYPICAL DETAILS
6 - 12	GREENWAY PLANS - ALLEN STREET
13	INTERSECTION DETAIL
14	MAINTENANCE OF TRAFFIC PLANS

## GENERAL LEGEND (EXISTING SCREENED, PROPOSED IN BOLD)

$\Rightarrow$	LIGHT POLE	WM	WATER METER
	WATER VALVE		GAS VALVE
	INLETS	[GM]	GAS METER
(FH)	HYDRANT	B	BOLLARD
	T0550	$DS_{\Diamond}$	DOWNSPOUT
	TREES	——————————————————————————————————————	STORM
_0_	SIGN	——————————————————————————————————————	UNDERGROUND ELECTRIC
	3707	——————————————————————————————————————	UNDERGROUND TELEPHONE
Ø	POWER POLE		OVERHEAD UTILITY
ST SA	MANHOLE (STORM, SANITARY)		WATERMAINS/WATER LINES
		——————————————————————————————————————	GAS MAINS/LINE
(PH)	TELECOM MANHOLES		GUARDRAIL
AC	AIR CONDITIONER	×	WOOD FENCE
Tel.	TELE. RISER		

RAIN GARDEN PREFABRICATED STRUCTURE REQUIREMENTS:

ELEC. RISER

MAILBOX

TELECOM MANHOLES

PARKING METER

PROJECT INCLUDES 2 EACH PRETREATMENT SEDIMENT AND TRASH TRAPS.
THESE SHALL BE RAIN GUARDIAN "TURRET" MODEL UNITS AS MANUFACTURED
BY RINKER MATERIALS.
FOR MORE INFORMATION
www.RainGuardian.biz

## MAINTENANCE OF TRAFFIC AND EROSION CONTROL ITEMS

INDOT STANDARD DRUM WITH STEADY BURN LIGHTS

TEMPORARY CONSTRUCTION FENCING, 48" MESH, ORANGE, ON TEMPORARY STANDS

H BARRICADE (TYPE III)

CONSTRUCTION SIGNS (SHAPE PER MUTCD)

## PROPOSED ITEMS

--- EXISTING R/W

(12) CONCRETE CURB, MOUNTABLE PROFILE

(13) CONCRETE CURB

(14) REINFORCED CONCRETE CURB

(26) NURSERY SODDED AREA - INCLUDED UP TO 6" TOPSOIL UNLESS OTHERWISE NOTED

(38) 24" WHITE LINES FOR CROSSWALKS OR STOP BARS, THERMOPLASTIC

(41) 4" YELLOW, SOLID LINE, THERMOPLASTIC

(43) 4", GREENWAY RIBBON MARKING, THERMOPLASTIC

(44) BIKE SYMBOLS, THERMOPLASTIC

(45) WHITE CHEVRONS (FOR BIKE ROUTE), THERMOPLASTIC

6) SPEED CUSHION MARKINGS, THERMOPLASTIC

(50) REMOVE EXISTING SIGN AND POST

6) RESET EXISTING SIGN ON NEW TYPE I POST WITH UNREINFORCED ANCHOR BASE

(62) NEW SIGN ON TYPE I POST WITH UNREINFORCED ANCHOR BASE

) CENTER CURB, B, MODIFIED

CONSTRUCTION LIMITS

CAST STEEL DETECTABLE WARNING PLATES (ON RADIUS,

IF RADIUS LABELLED)

CONCRETE SIDEWALK 4" ON

(F) CONCRETE SIDEWALK, 4" ON 4" COMPACTED AGGREGATE

(F6) CONCRETE SIDEWALK, 6" ON

4" COMPACTED AGGREGATE

PCCP FOR PATCHING 12" WITH 15" HMA

P PCCP FOR PATCHING, 12" WITH 1.5" HMA OVERLAY

(CR) RAMP, CONCRETE INCLUDING METAL DETECTABLE WARNING PLATES
6"THICK ON 4" COMPACTED AGGREGATE BASE NO. 53s

(T4) NEW TREE, 2" MIN. CALIPER, AMELANCHIER X GRANDIFLORA

(CROSS OF ALLEGHENY SERVICE BERRY AND DOWNY SERVICE BERRY)

RI) MILL 1.0" AND RESURFACE/WEDGE UP TO 1.5" HMA SURFACE, B

No.

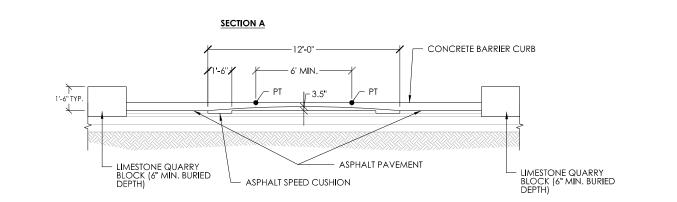
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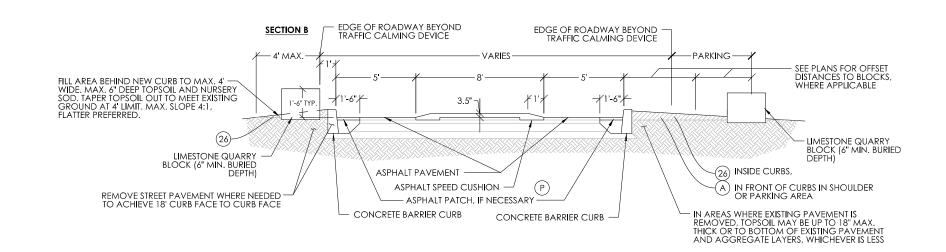
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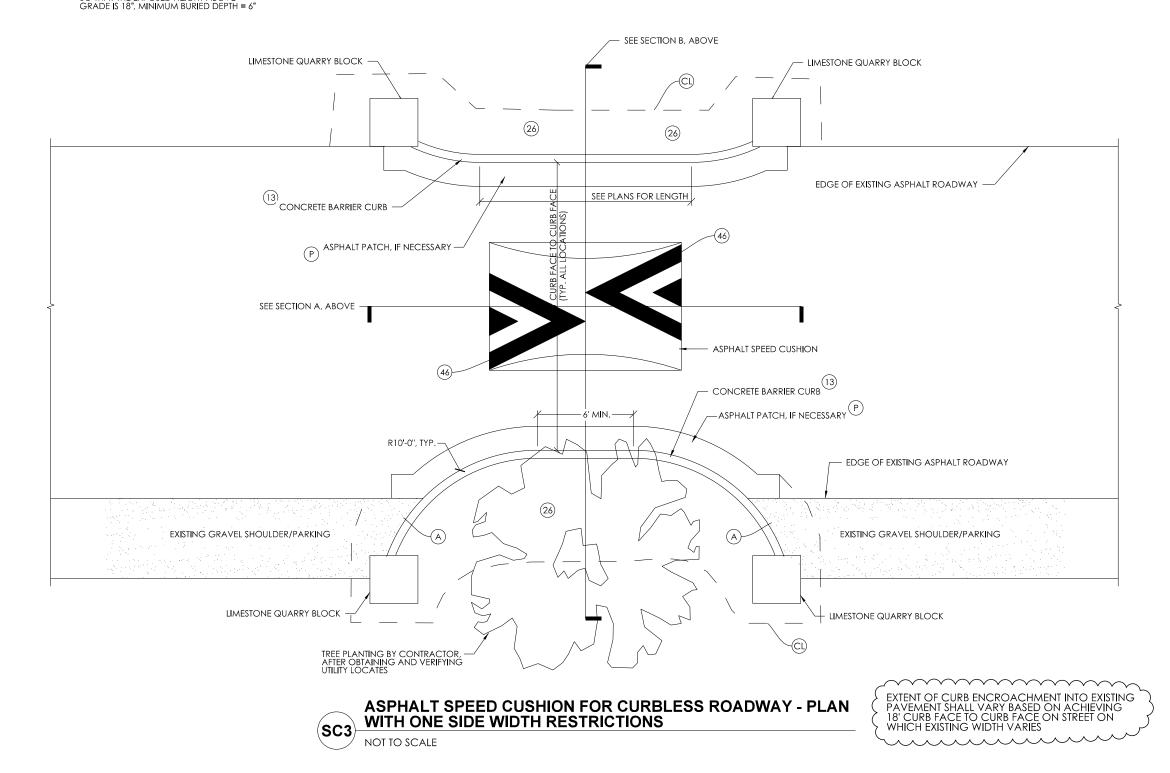
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CITY OF BLOOMINGTON		240
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UTILITY DATA		2
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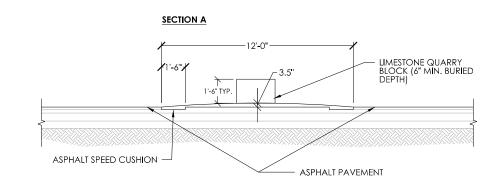


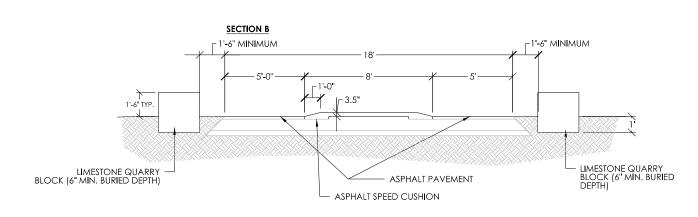




LIMESTONE BLOCK INFO:
LIMESTONE QUARRY BLOCKS MAY VARY IN
SIZE WITHIN THE RANGES STIPULATED BELOW:
1. LENGTH: 24" MIN. - 36" MAX.
2. WIDTH: 24" MIN. - 30" MAX.
3. HEIGHT: 24" MIN. - 30" MAX.
NOTE THAT QUARRY BLOCK SHALL BE BURIED
SO THAT THE EXPOSED HEIGHT ABOVE
GRADE IS 18", MINIMUM BURIED DEPTH = 6"

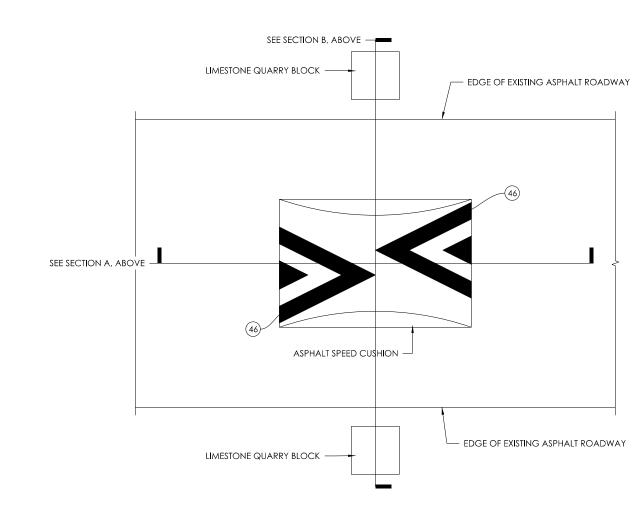




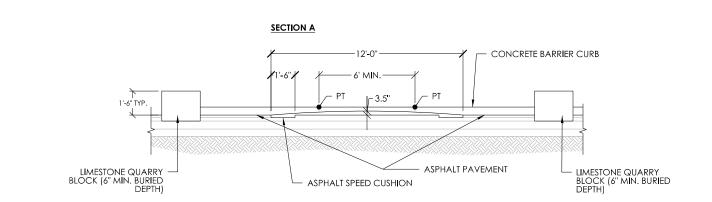


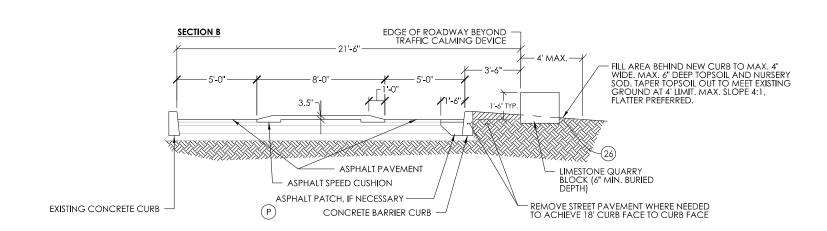






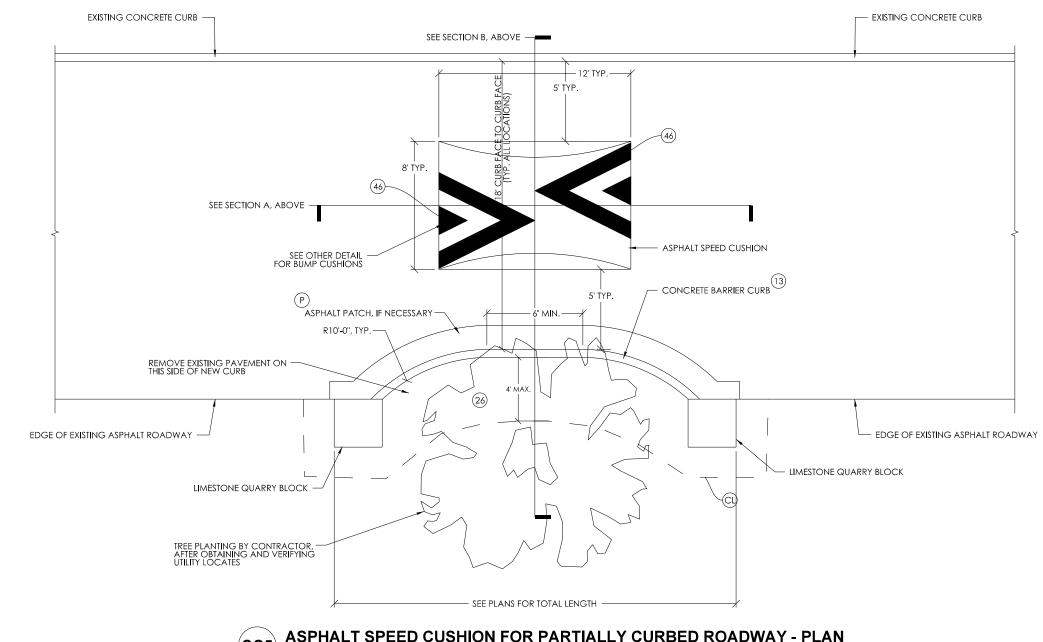




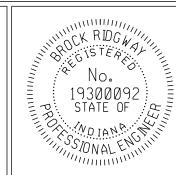






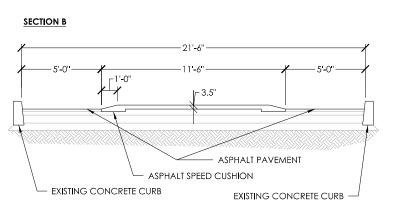


(SCE)	ASPHALT SPEED CUSHION FOR PARTIALLY CURBED RUADWAY - PLA
	NOT TO SCALE
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RECOMMENDED FOR APPROVAL	J Li	Jun DESIGN ENGINEER	10-19-2022 DATE	
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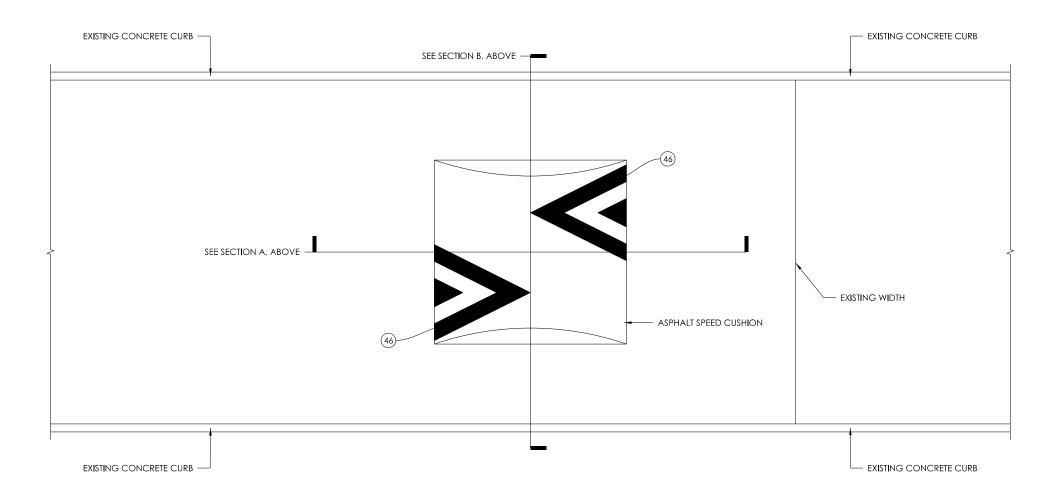
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CITY OF BLOOMINGTON	AS NOTED	240
DEPARTMENT OF ENGINEERING	VERTICAL SCALE	
GREENWAY TREATMENT DETAILS		SHEET NUMBER
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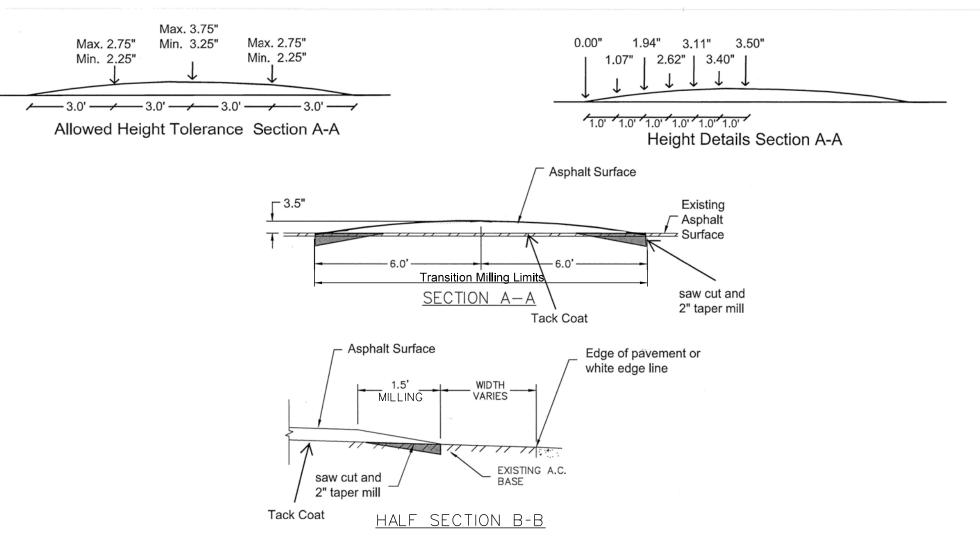
EXISTING CONCRETE CURB —

SC6 ASPHALT SPEED CUSHION FOR FULLY CURBED ROADWAY - SECTION

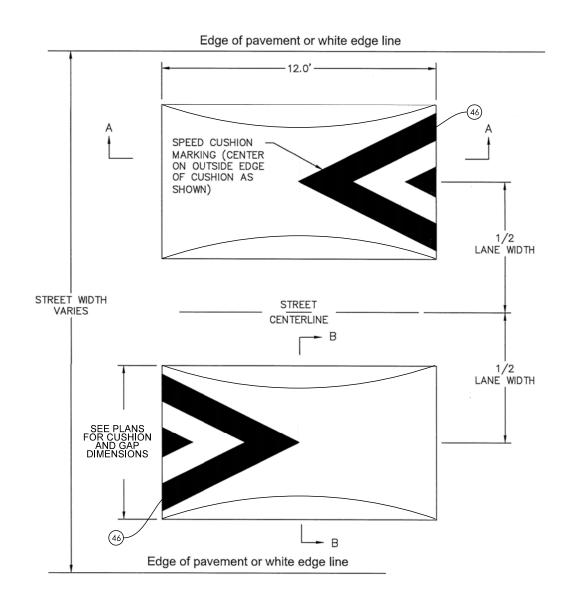
NOT TO SCALE

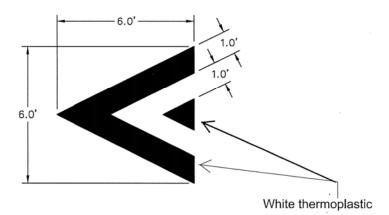


SC6 ASPHALT SPEED CUSHION FOR FULLY CURBED ROADWAY - PLAN
NOT TO SCALE



#### SPEED CUSHION HEIGHT TOLERANCES NOT TO SCALE





SPEED CUSHION MARKING
NOT TO SCALE

ASPHALT SPEED CUSHION FOR INSTALLATIONS
WITHOUT BUMPOUTS - TWIN CUSHION INSTALLATION



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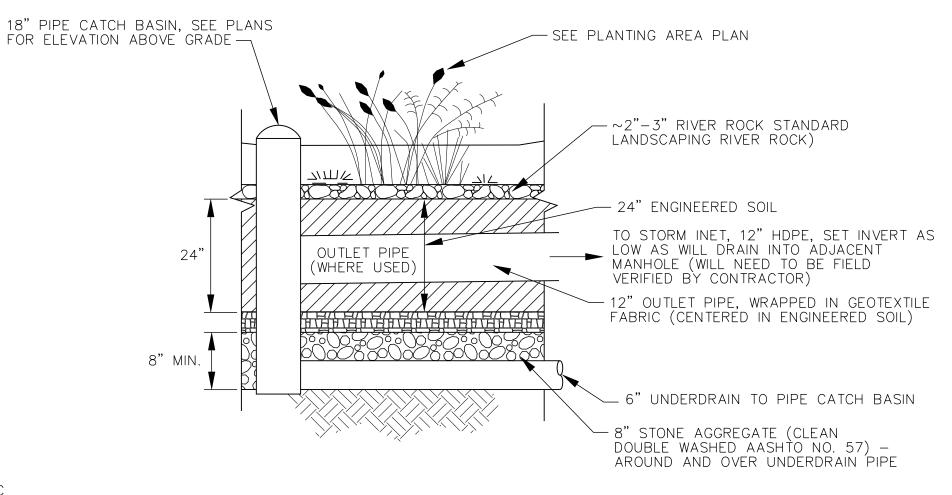
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DEPARTMENT OF ENGINEERING	VERTICAL SCALE	
GREENWAY TREATMENT DETAILS		SHEET NUMBER
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PAVEMENT MARKINGS AND SIGNS SHALL BE INSTALLED BEFORE OPENING ANY LANE TO TRAFFIC THAT IS OCCUPIED BY A SPEED CUSHION. TEMPORARY MARKINGS MAY BE USED UP TO TWO WEEKS IN LIEU OF PERMANENT MARKINGS NO ADDITIONAL PAYMENT WILL BE MADE FOR TEMPORARY MARKINGS.

ENGINEERED SOIL SPECIFICATION ENGINEERED SOIL MIX SHALL BE 24" DEEP. BIORETENTION SOIL SHALL BE PROVIDED IN ACCORDANCE WITH APPENDIX F OF THE CITY OF BLOOMINGTON RAINWATER MANAGEMENT GUIDE - SHOULD GENERALLY BE LOAMY SAND WITH THE FOLLOWING COMPOSITION: 85% TO 88% WASHED, COARSE SAND, 8% TO 12% SOIL FINES AND 3% TO 5% ORGANIC MATTER FROM PINE BARK, WITH A P-INDEX BETWEEN 10 AND 30. A MINIMUM INFILTRATION RATE OF 0.5 INCHES PER HOUR, AND A CLAY CONTENT OF LESS THAN 6%. THE MIXTURE SHALL BE WELL BLENDED TO PRODUCE A HOMOGENEOUS MIX. THE FINAL MIX TO BE DETERMINED BY THE ENGINEER BASED ON SAMPLES AND TEST RESULTS SUBMITTED.

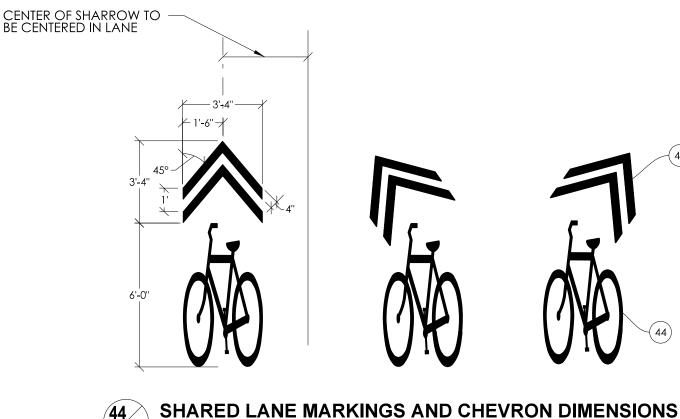
#### RAINGARDEN NOTES:

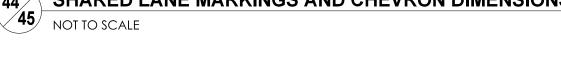
- 1. RAINGARDENS WITHOUT UNDERDRAINS OR OVERFLOW STRUCTURES SHALL INCLUDE ONLY THE 24" ENGINEERED SOIL OVERTOPPED WITH A WEED PREVENTATIVE GEOFABRIC AND 2"-3" OF RIVERROCK COVER.
- 2. GEOFABRIC TO BE CUT OUT FOR PLANTINGS.
- 3. RIPRAP-RIVER ROCK AT ENTRY AND EXIT POINTS SHALL BE LARGER AGGREGATE THAN LANDSCAPING RIVER ROCK BUT OF SAME COLORS AND SHAPE (COBBLE STONES, ETC.)
- 4. RIVER ROCK AND RIPRAP-RIVER ROCK TO BE APPROVED IN ADVANCE BY ENGINEER.
- 5. EACH END OF UNDERDRAINS SHALL HAVE A VERTICAL CLEANOUT WITH CAP EXTENDED ABOVE GRADE.

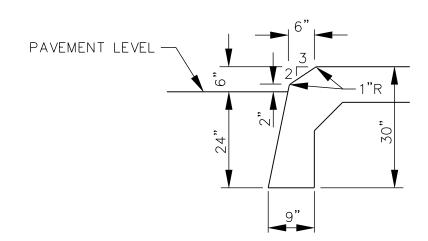


#### RAINGARDEN SECTION FOR LOCATIONS WITH **UNDERDRAIN AND OVERFLOW TO STORM SEWER**

PIPE CATCH BASIN (OVERFLOW STRUCTURE) TO RECEIVE WATER FROM UNDERDRAIN PIPES, BUT THE OUTLET PIPE TO THE STORM SYSTEM SHALL BE FIELD DETERMINED TO FLOW TO ADJACENT MANHOLE. IT MAY BE HIGHER THAN UNDERDRAINS SUCH THAT THE UNDERDRAINS ARE FULL PRIOR TO SURCHARGING INTO MANHOLE.

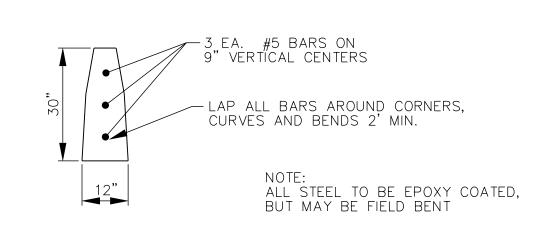




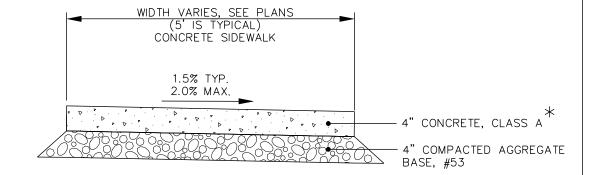


## **CONCRETE CURB (MOUNTABLE PROFILE)**

WHERE THIS PROFILE IS USED, IT IS PAID AS PART OF CENTER CURB, E









#### SIDEWALK JOINT NOTES:

(F6) denotes 6" thick sidewalk

- 1. INSTALL 1/2" PREFORMED JOINT FILLER BETWEEN SIDEWALKS AND ANY OTHER FIXED FEATURES (CURBS, STEPS, RAMPS, BUILDINGS, ETC.)
- 2. IN EACH SIDEWALK SEGMENT, TOOL CONSTRUCTION JOINTS AT EVEN SPACING BUT NO MORE THAN 6' MAXIMUM APART. INSTALL AN EXPANSION JOINT WITH 1/2" PREFORMED JOINT FILLER AT A MAXIMUM SPACING EVERY 30' IN SIDEWALKS, AND AT EACH SIDEWALK CONNECTION TO OTHER SIDEWALKS, AT CURBS, AND AT RAMPS.
- 3. CONTRACTION AND EXPANSION JOINTS SHALL BE INSTALLED BY TOOLING, BUT FINAL SURFACE SHALL BE BROOM FINISHED. NO "WINDOW-PANE" OR SIMILAR TOOLING SHALL BE USED.

#### CONCRETE SLAB JOINT NOTES:

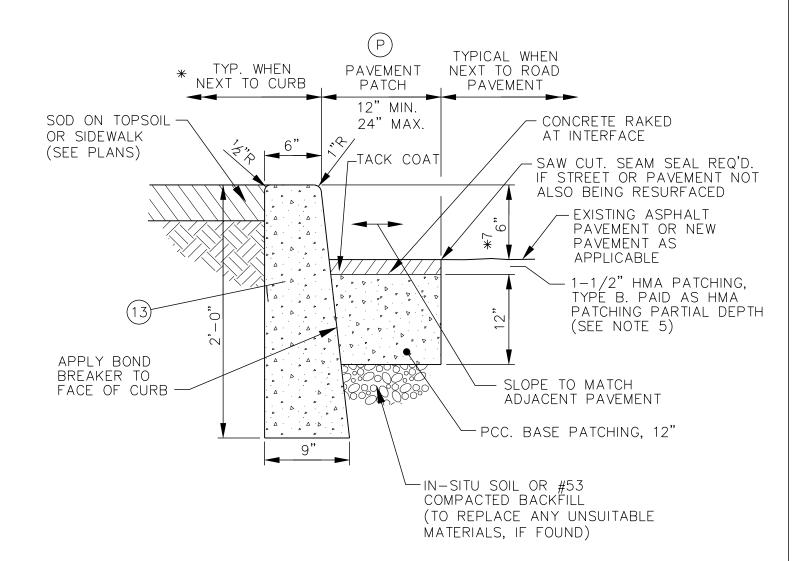
1. CONCRETE SLAB CONSTRUCTION AND EXPANSION JOINTS SHALL BE IN ACCORDANCE WITH INDOT STANDARDS.

#### **CURB JOINT NOTES:**

- 1. ALL CURBS SHALL RECEIVE A FULL DEPTH EXPANSION JOINT FORMED WITH 1/2" PREFORMED JOINT FILLER AT THE FOLLOWING LOCATIONS:
- EVERY EXPANSION JOINT IN ADJACENT SIDEWALKS OR MEDIAN BUFFER STRIP
- AT EACH RADIUS POINT
- ON EITHER SIDE OF CURB INLETS OR OTHER CASTINGS - AT SAWCUT, LIMITS OF REMOVAL TO ANY EXISTING CURB
- AT 100' MAXIMUM INTERVALS, IF NO OTHER JOINTS NEEDED
- 2. CURBS & COMBINED CURB AND GUTTER SHALL RECEIVE A TOOLED CONTRACTION JOINT AT 20' MAXIMUM SPACING.

#### CURB RAMPS AND TRUNCATED DOMES:

1. RAMPS TO BE CONSTRUCTED AT A MAXIMUM 12:1 SLOPE TO A LANDING AREA FOR ENTRY ONTO ROADWAY PER PLANS.

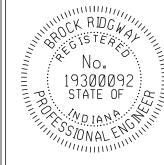


## PAVEMENT PATCH / CONCRETE CURB (VERTICAL)

### NOTES:

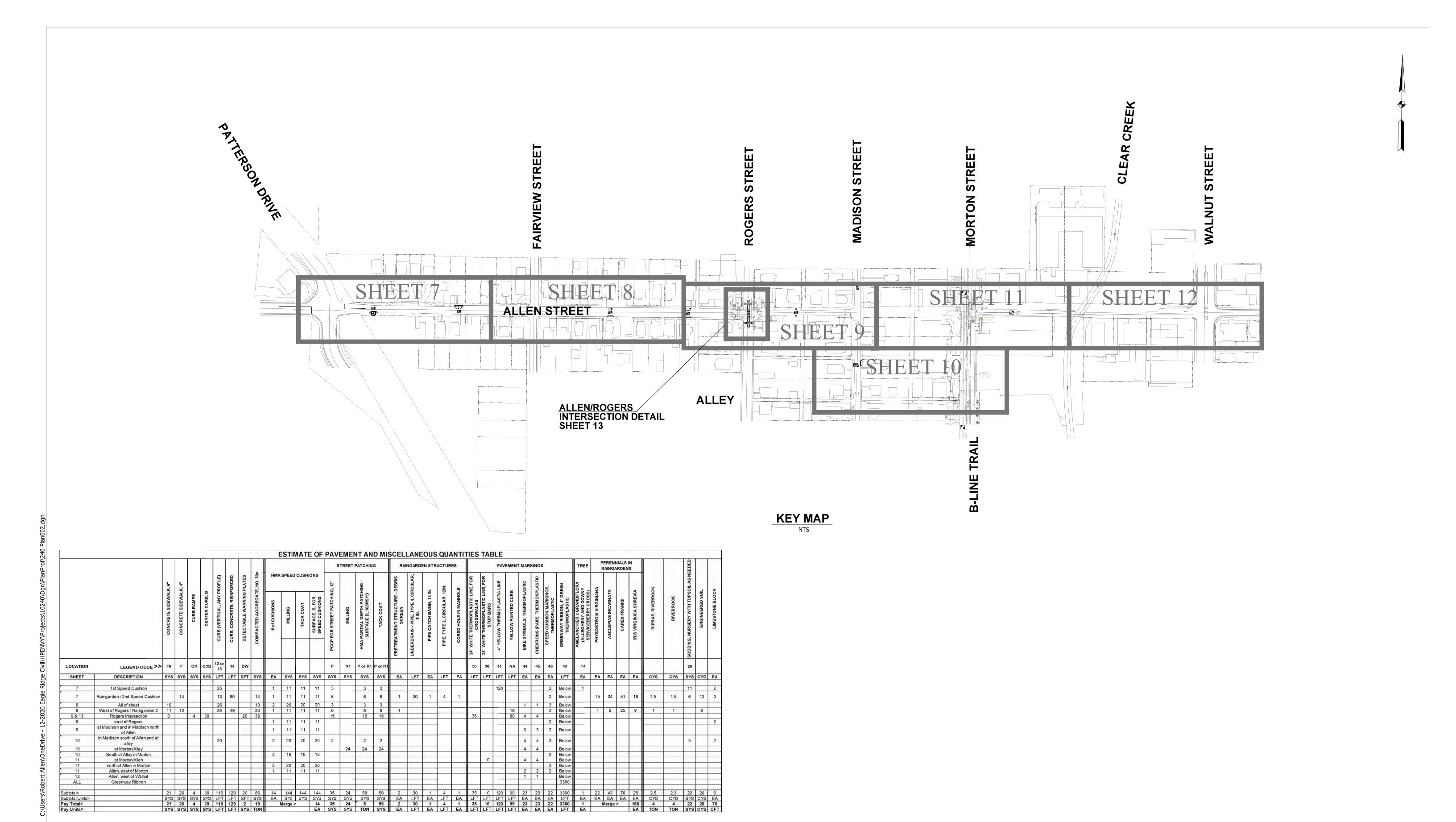
- \* 1. AREA BEHIND CURBS TO RECEIVE TREATMENT AS SHOWN ON PLANS.
- 2. REFER TO CURB JOINTS NOTES FOR CURB JOINTING.
- 3. PAVEMENT PATCHING MAY NOT BE REQUIRED IF EXISTING PAVEMENT CAN BE REMOVED TO A CLEAN AND STRAIGHT EDGE AT FRONT OF PROPOSED CURB OR GUTTER. OWNER APPROVAL
- 4. PAVEMENT PATCHING REQUIRED WHEREVER PAVEMENT IS CUT, AND WHERE EXISTING PAVEMENT IS DAMAGED TO COMPLETE THE REQUIRED CURB, DRIVE OR SIDEWALK WORK.
- 5. CONTRACTOR SHALL ASSUME THEY ARE TO PLACE THE ASPHALT OVERLAY ON ALL PATCHED AREAS UNLESS OTHERWISE DIRECTED.
- 6. PATCHING PORTION OF THIS DETAIL TO ALSO BE USED WITH (14) REINFORCED CONCRETE CURB FOR RAINGARDENS.
- 7. CURB HEIGHT VARIES, CHECK PLANS FOR VARIATIONS FROM 6",

OTHER TYPICAL HEIGHT IS 6".



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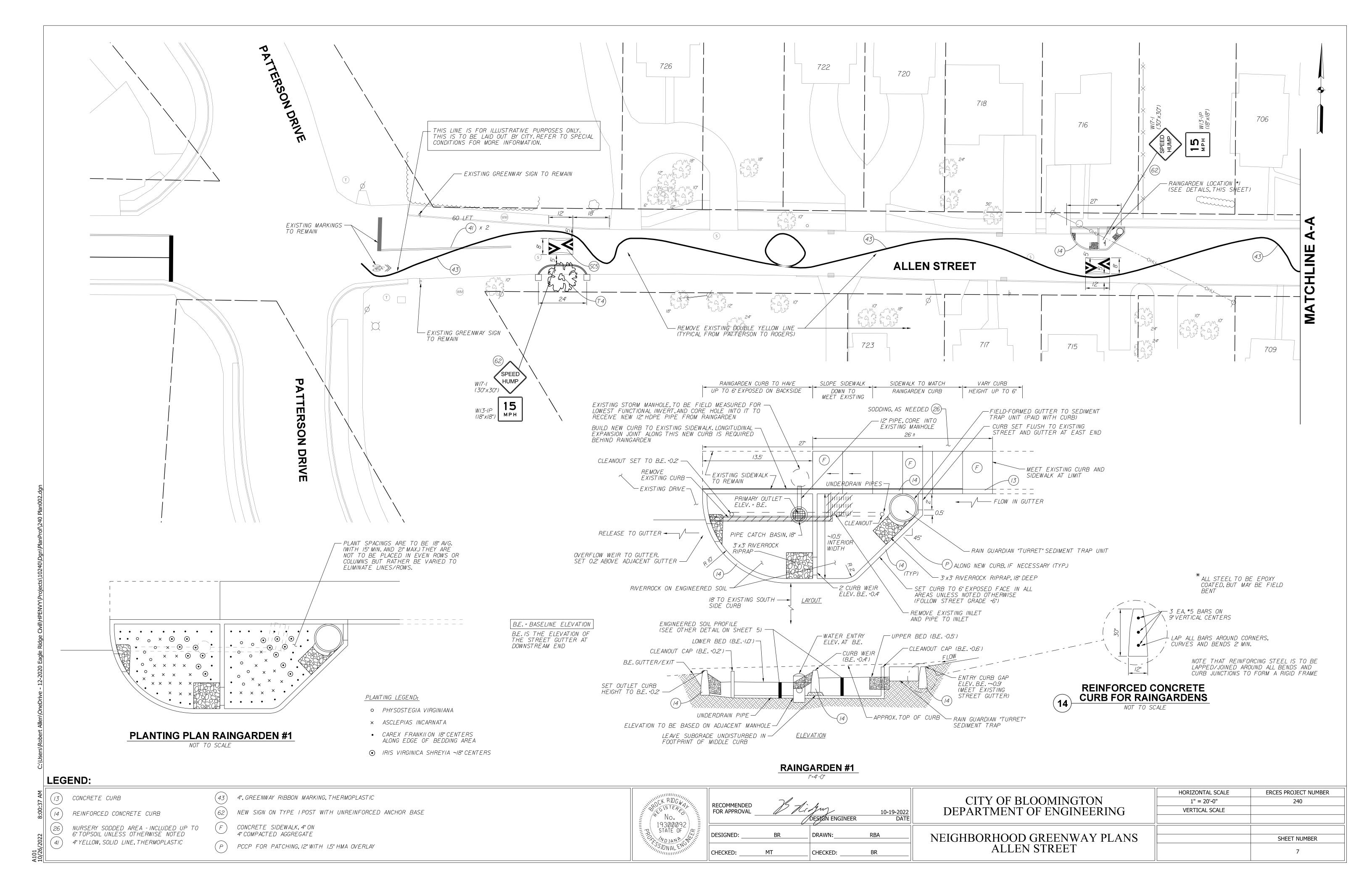
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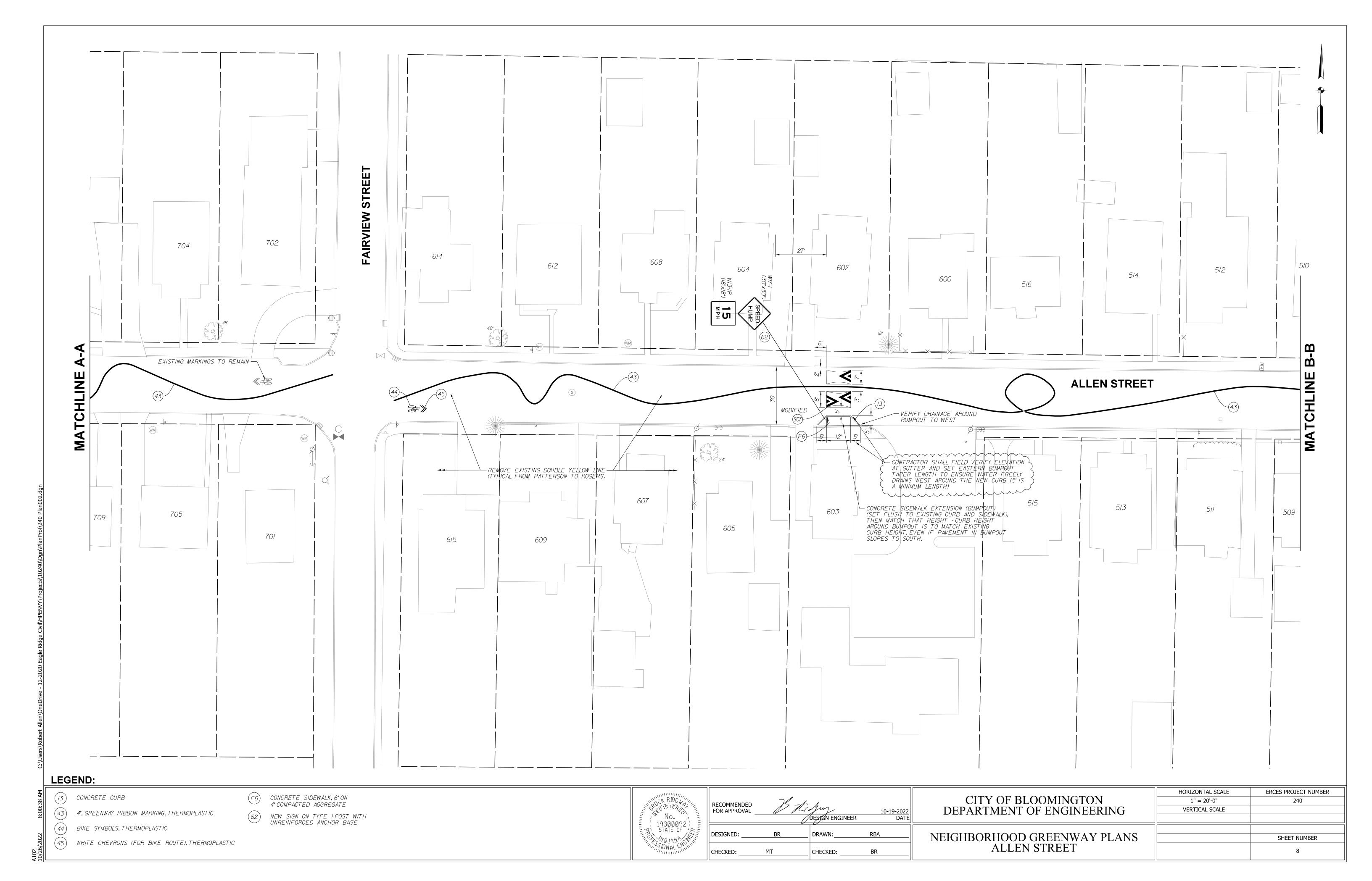


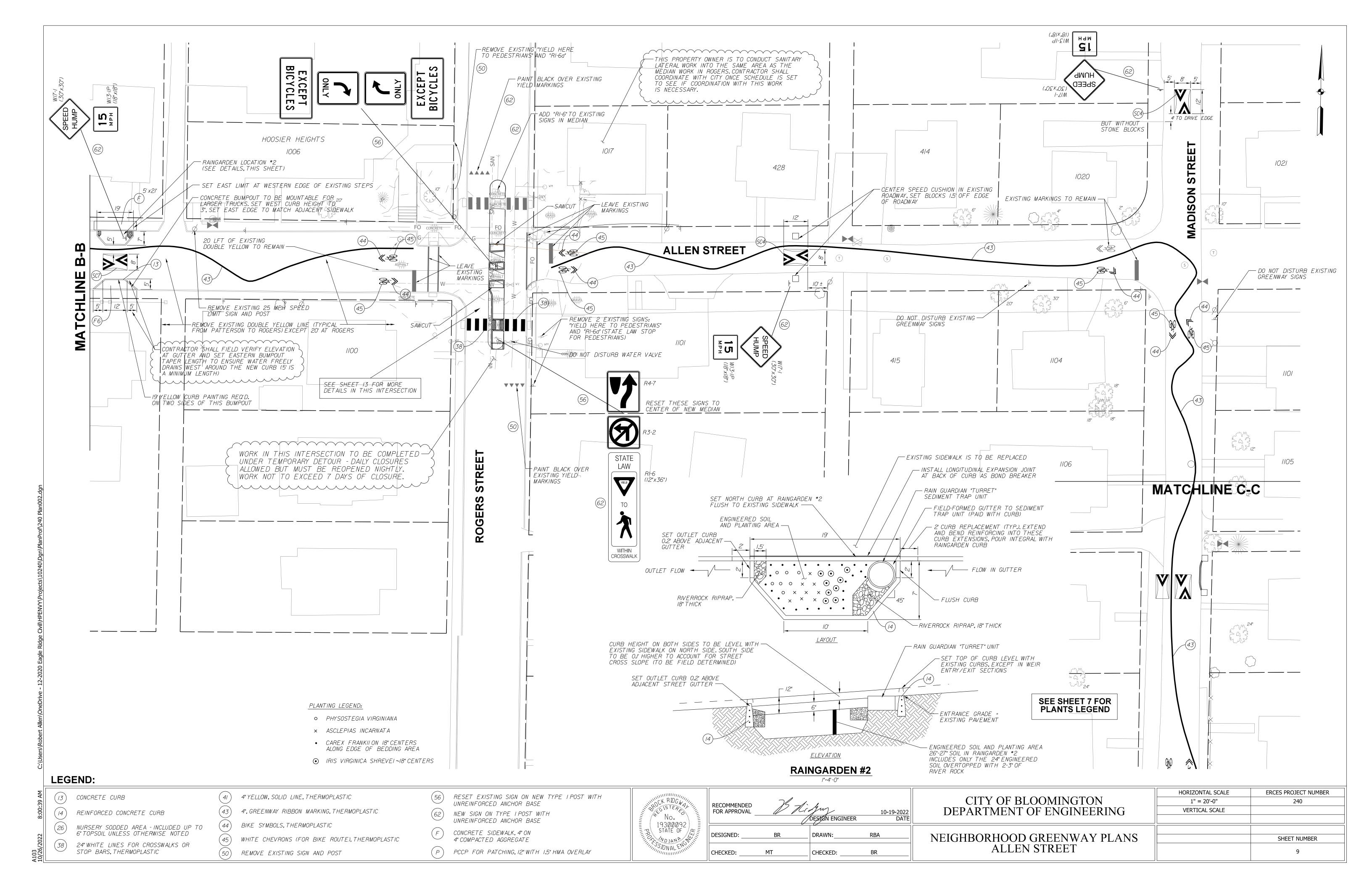
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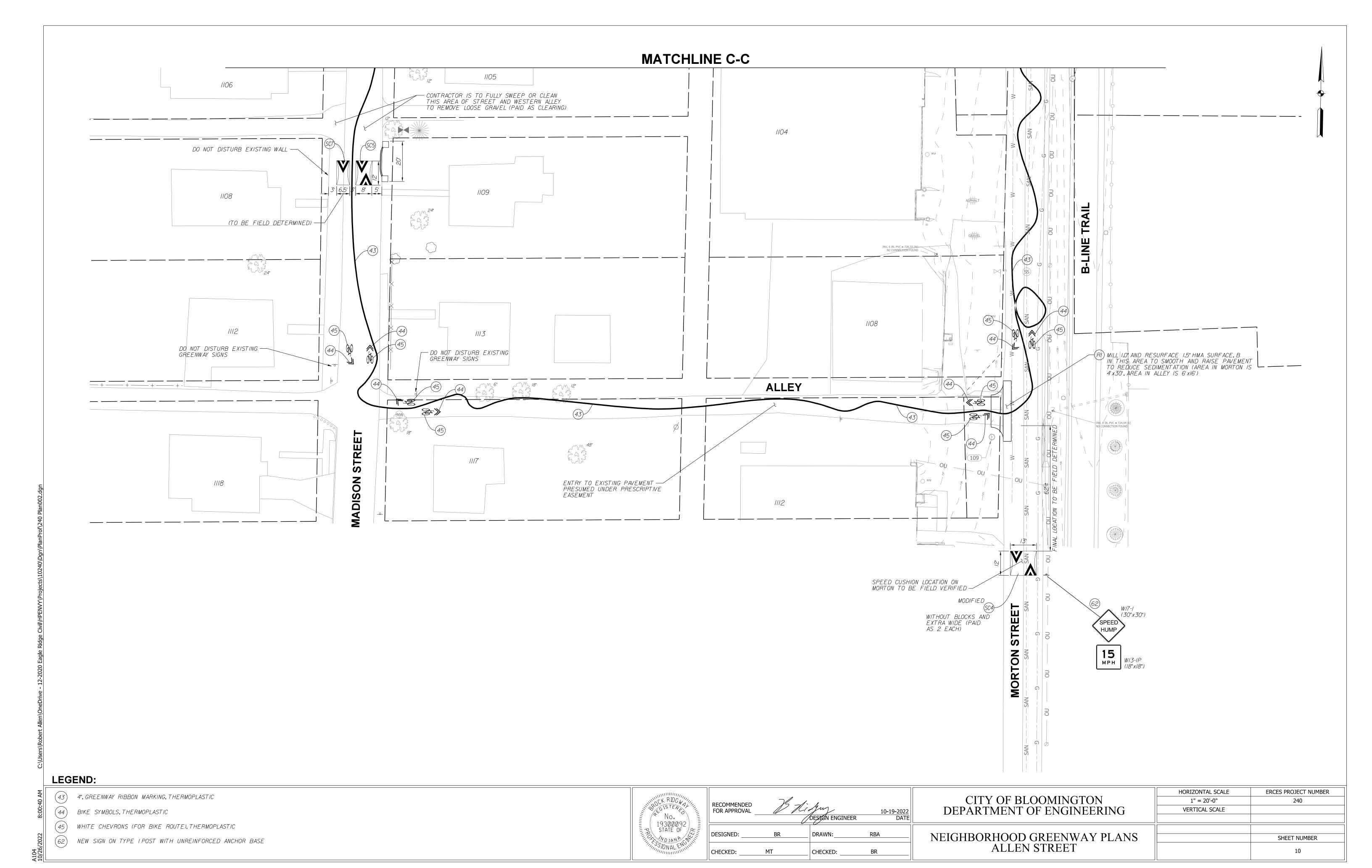
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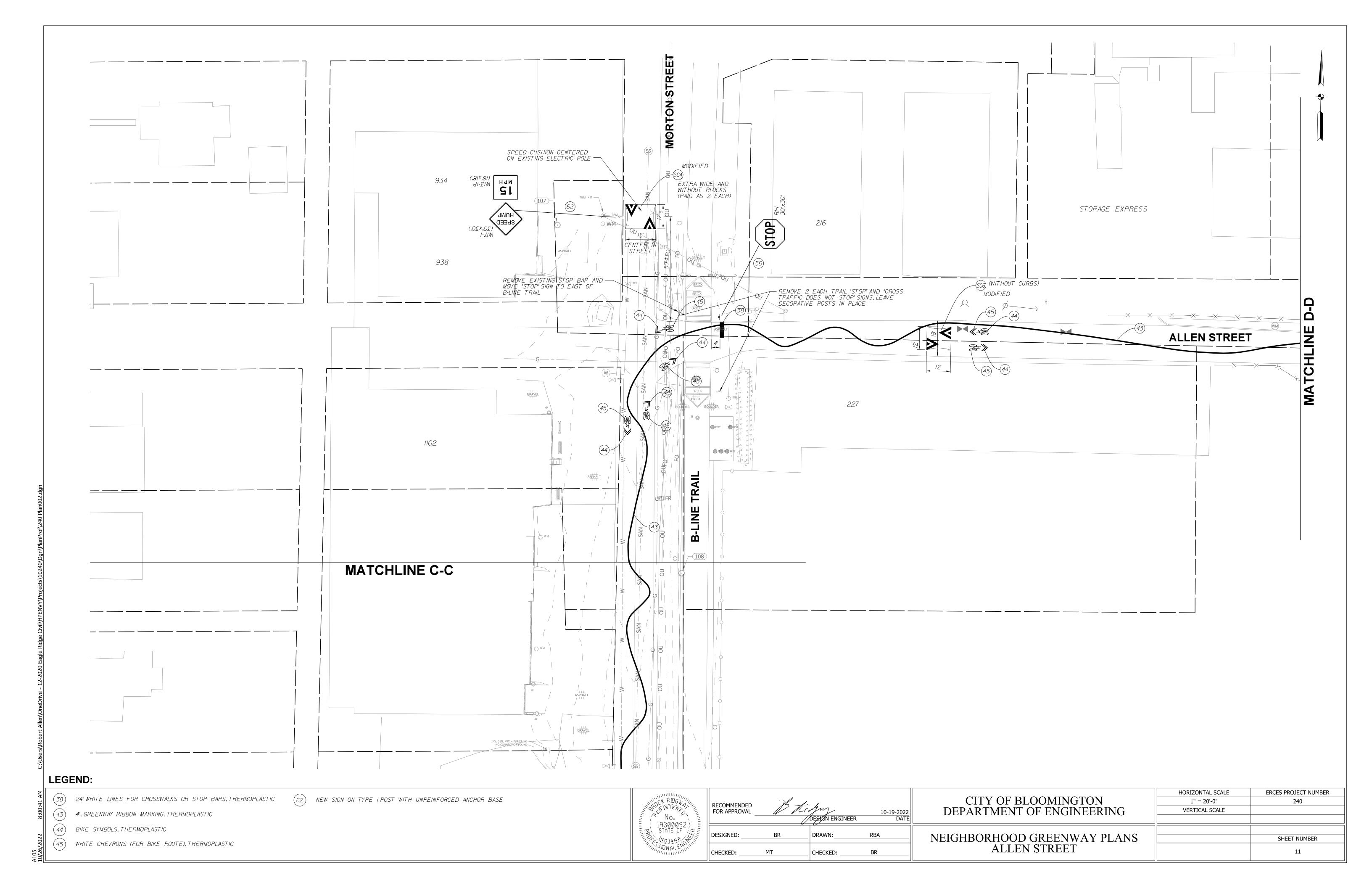
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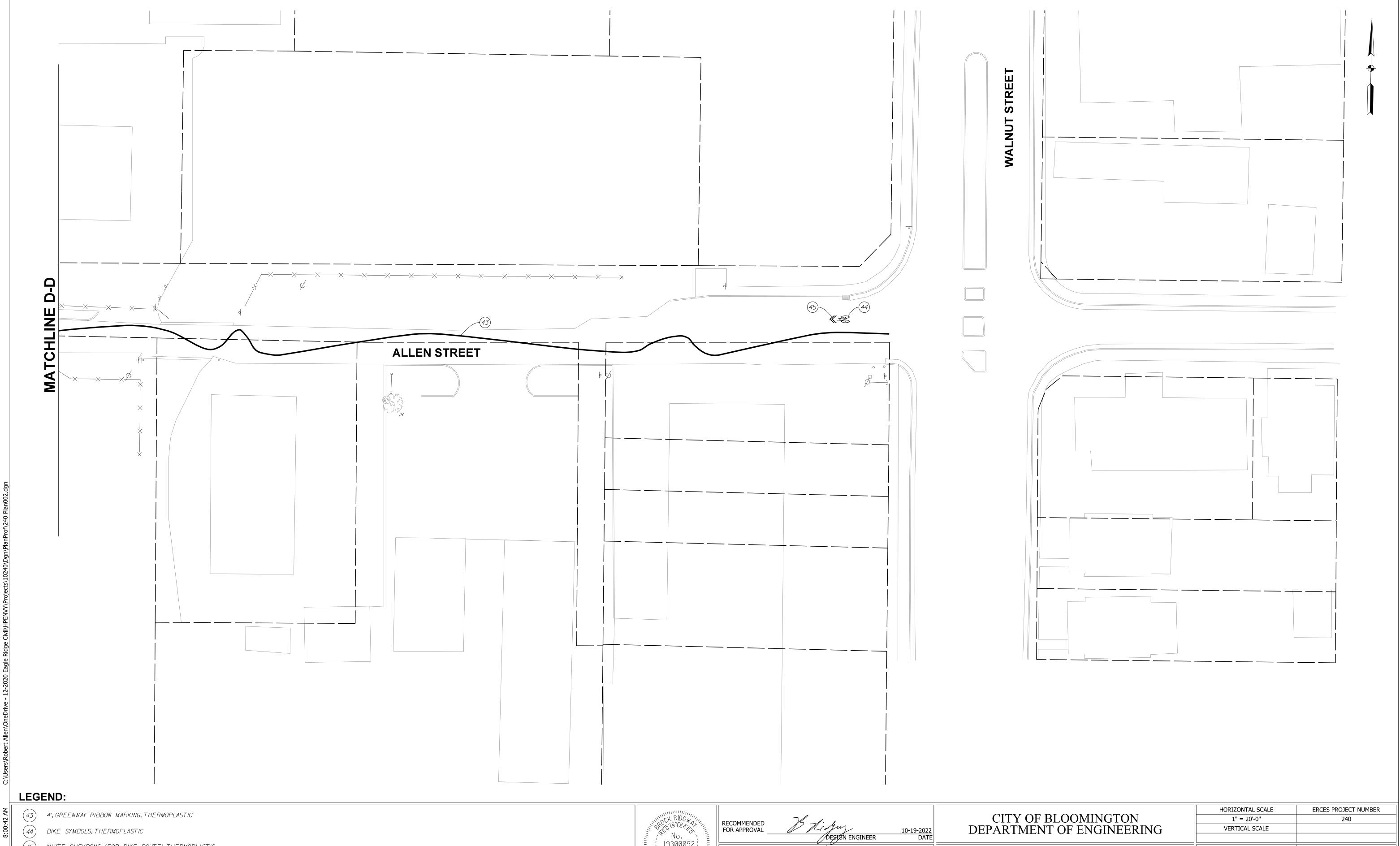












CHECKED:

CHECKED:

NEIGHBORHOOD GREENWAY PLANS ALLEN STREET

SHEET NUMBER

/2022 8:00

45) WHITE CHEVRONS (FOR BIKE ROUTE), THERMOPLASTIC

