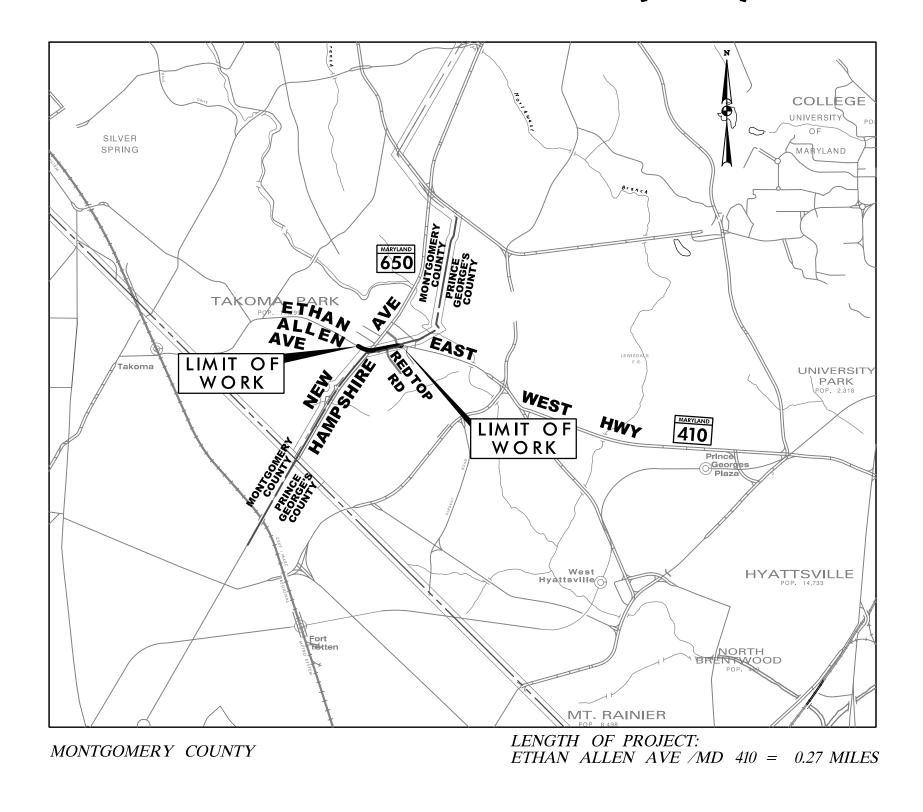
CITY OF TAKOMA PARK

HOUSING AND COMMUNITY DEVELOPMENT ETHAN ALLEN GATEWAY STREETSCAPE

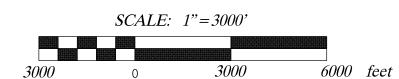
SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

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1	WATER MAIN RELOCATION PLAN



HORIZONTAL DATUM	NAD 83 /91	
VERTICAL DATUM	NGVD 29	



ROADWAY	ETHAN ALLEN A	VENUE /MD 410
CONTROLS / YEARS	2013	2033
AVERAGE DAILY TRAFFIC (A.D.T.)	20,700	25,300
DESIGN HOURLY VOLUME (D.H.V.)	8%	8%
DIRECTIONAL DISTRIBUTION	52%	52%
% TRUCKS – A.D.T.	2%	2%
% TRUCKS – D.H.V.	2%	2%
DESIGN SPEED M. P. H.	35 M.	P. H.
FUNCTIONAL CLASSIFICATION	URBAN OTHER PR	RINCIPAL ARTERIAL
CONTROL OF ACCESS	NC	NE
INTENSITY OF DEVELOPMENT	URE	BAN
TERRAIN	ROLI	

30 M.P.H.

ANTICIPATED POSTED SPEED

DESIGN DESIGNATION

REVISIONS		

AASHTO DESIGN CRITERIA

THIS PROJECT WAS DESIGNED IN ACCORDANCE WITH THE 2001 PUBLICATION OF AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS."

STANDARD SPECIFICATIONS BOOK. BOOK OF STANDARDS AND MUTCD

ALL WORK ON THIS PROJECT SHALL CONFORM TO: THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION'S SPECIFICATIONS ENTITLED STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS DATED JULY 2008, REVISIONS THEREOF OR ADDITIONS THERETO; HIGHWAYS AND INCIDENTAL STRUCTURES AND THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

RIGHT OF WAY

RIGHT OF WAY LINES SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THEY ARE NOT OFFICIAL. FOR OFFICIAL RIGHT OF WAY, SEE THE APPROPRIATE RIGHT OF WAY PLATS.

UTILITIES

THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE OF THE ACCURACY OF SAID LOCATIONS.

COMPLETENESS OF DOCUMENTS

THE CITY OF TAKOMA PARK SHALL ONLY BE RESPONSIBLE FOR THE COMPLETENESS OF DOCUMENTS OBTAINED DIRECTLY FROM THE CITY OF TAKOMA PARK, FAILURE TO ATTACH ADDENDA MAY CAUSE THE BID TO BE IRREGULAR

ADA COMPLIANCE

THE DESIGN OF THIS PROJECT HAS INCORPORATED FACILITIES FOR THE ELDERLY AND HANDICAPPED IN COMPLIANCE WITH STATE AND FEDERAL LEGISLATION

ENVIRONMENTAL INFORMATION

ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED FOR THIS CONTRACT SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF TAKOMA PARK MUNICIPAL CODE TITLE 16 (SECTIONS 16.04.210 THROUGH 16.04.260).

SEDIMENT AND EROSION CONTROL REGULATIONS WILL BE STRICTLY ENFORCED DURING CONSTRUCTION.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDER DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND SEVEN DAYS (7) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

OWNERS / DEVELOPERS CERTIFICATION

I / WE HEREBY CERTIFY THAT ANY CLEARING, GRADING. CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN. AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.



5/2/16

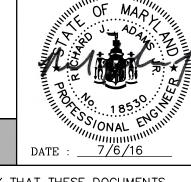
Erkin Ozberk (301) 891–7213 Printed Name and Title

Project Manager City of Takoma Park

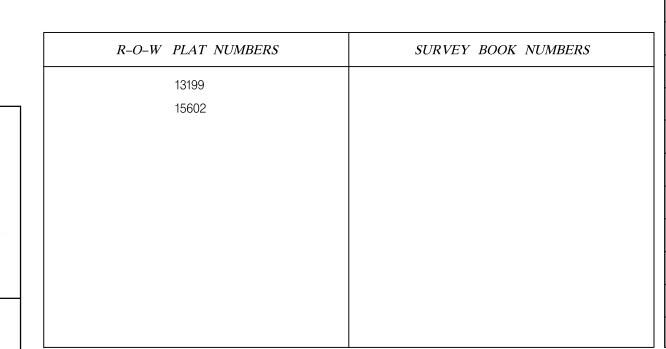
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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18530, EXPIRATION DATE: DECEMBER, 15, 2017.



BOOK NO.

INDEXED

- 2. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST HOLES BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCE IS LESS THAN TWELVE (12) INCHES, THEN CONTACT THE CITY OF TAKOMA PARK PROJECT MANAGER AND THE APPROPRIATE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.
- 3. ORIGINAL SURVEY WAS PERFORMED BY OTHERS DATED 2011. SUPPLEMENTAL SURVEY WAS PERFORMED BY RK&K DATED NOVEMBER 2013.
- 4. THE CONTRACTOR SHALL CALL "MISS UTILITY" AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION WORK AT 1-800-257-7777.
- 5. REPAIRS TO UTILITIES OR PROPERTY DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
- 6. ADJUSTMENT, CONSTRUCTION AND/OR RELOCATION OF WSSC FACILITIES SHALL BE IN ACCORDANCE WITH THE CONDITIONS, SPECIFICATIONS AND DETAILS CONTAINED HEREIN.

- 7. THE EXACT LOCATION AND TYPE OF SEDIMENT CONTROL DEVICES WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER, WHO RESERVES THE RIGHT TO ORDER ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES.
- 8. CONSTRUCTION EQUIPMENT SHALL HAVE TREADS /TIRES CLEANED PRIOR TO LEAVING THE LOD. ALL MATERIAL REMOVAL /LOAD OUT SHALL BE LIFTED FROM THE LOD. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE ROAD MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING OR SWEEPING.
- 9. SAW CUTS WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO OTHER RELATED ITEMS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- 10. REFER TO THE CONTRACT DOCUMENTS FOR SOIL BORING AND PAVEMENT CORE DATA.
- 11. ADA WAIVERS WILL BE SECURED FROM SHA FOR THE CONCRETE SIDEWALK WHERE THE WIDTHS ARE LESS THAN THE REQUIRED 60" MINIMUM.
- 12. ALL WORK ON THIS PROJECT SHALL CONFORM TO THE 2008 MSHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS AND THE LATEST VERSION OF THE MARYLAND MUTCD.
- 13. EXISTING PAVEMENT CROSS-SLOPES AND BREAK POINTS SHALL BE MAINTAINED EXCEPT WHERE WEDGE AND LEVELING IS SPECIFIED IN THE PLANS FOR CONSTRUCTION OF PARKING LANES.
- 14. PAVEMENT RESURFACING SHALL BE COMPLETED WITHIN FOURTEEN (14) CALENDAR DAYS AFTER GRINDING. PAVEMENT GRINDING OPERATIONS SHALL NOT BEGIN UNLESS THERE IS SUFFICIENT TIME TO RESURFACE THE ROADWAY BEFORE COLD WEATHER. SEE SP509 - GRINDING ASPHALT PAVEMENT.

ABBREVIATIONS

Concrete Pipe

H.P. High Point

A.A.S.H.T.C	D American Association of State Highway	IN	Inch
	Transportation Officials	I.S.T	Inlet Sediment Trap
ABAND	Abandoned	INV	Invert
ADT	Average Daily Traffic	J.B	Junction Box
AHD	-	K	K Inlet
APPROX	Approximate	L	Length
	Auxiliary	L.F	Linear Feet
	Baseline	L.L	Liquid Limit
_	Back /Book		Limit of Disturbance
	Bituminous		Light Pole
	Bituminous Concrete	LT.	_
	Bench Mark		Maryland–National Capital Park
BOT		111 1101 1 0 1	and Planning Commission
	Center of Curve	MAC	Macadam
	Utility Cabinet		Moisture Content
	Cable Television	MAX	
			Maximum Dry Content
_	Cartaria Bearing Ratio		-
_	Centerline	MOD	
CL		MIN	
	Chainlink Fence	N	
	Corrugated Metal Pipe		Northbound
	Corrugated Metal Pipe Arch	N.E	
C.O	Cleanout		Non-Plastic
COMB	Combination	O.C	On Center
CONC	Concrete	OHE	Overhead Electric
CONSTR	Construction	O.M	Optimum Moisture
COR	Corner	PAV'T	Pavement
CORR	Correction	P.C	Point of Curvature
DC	Degree of Curve	P.C.C	Point of Compound Curvature
	Design Hourly Volume	P/C	Point of Crown
	Drop Inlet	R	Plate
	Diameter	PED	Utility Pedestal
	Double Opening		Profile Grade Elevation
	Department of Permitting Services		Profile Grade Line
E			Profile Ground Line
E			Point of Rotation
	External Distance		Plasticity Index
EA			Point of Intersection
	Eastbound		Point On Curve
	Elevation		Point On Tangent
			9
E.R.C.C.P.	Elliptical Reinforced Cement		Proposed
F0	Concrete Pipe		Point of Reverse Curve
	End Section	PT	
EX. or EXIS	•		Point of Tangency
FT			Point of Vertical Curve
F or FL			Polyvinyl Chloride
	Flat Bottom Ditch		Point of Vertical Intersection
	Fire Hydrant		Point of Vertical Reverse Curve
	Forward		Point of Vertical Tangency
G	Gas	R	
G.V	Gas Valve	RELOC	Relocated
H.B	Handbox	R.F	Rock Fragments
	High Density Polyetheylene Pipe	RT	_
	Headwall	RW or R/W	3
	Horizontal Ellipitical Reinforced		Right of Way

R.C.P	Reinforced Cement Pipe
	Reinforced Cement Concrete Pipe
	Rock Quality Desgnation
R.M	
S	South
	Sanitary Sewer
	Southbound
	Storm Drain
	Surface Drain Ditch
	Super Elevation
	Silt Fence
	Square Feet
SHLD.	·
SHT	
	Structural Plate Pipe
	Standard Penetration Testing
	Standard Fenerication resumgStopping Sight Distance
	Super Silt Fence
STD	
STA.	
	Single Opening
	Square Yards
	Stormwater Management
	Tangent
T	•
	Top of Cover
	Top of Grate
	Traverse Line
	Top of Manhole
TRAV	
	Temporary Swale
	Top of Slab
T.S	·
TYP	
	Under Drain
	Underground
	Utility Pole
	United States Department
	of Agriculture
	Vertical Clearance
V.C.L	Vertical Curve Length
W	Water
	West
WB	Westbound
WB	Wetland Buffer
W.M	Water Meter
W.S	Wrapped Steel
W.S.S.C	Washington Suburban Sanitation Commission
W.V	Water Valve
X-SLOPE	Cross Slope
	SEAL

LEGEND	
φ . ν . ν . ν . ν	CONCRETE SIDEWALK
	FULL DEPTH ASPHALT PAVEMENT
	CONCRETE ENTRANCE
	PAVEMENT GRINDING & RESURFACING
	PAVEMENT OR SIDEWALK REMOVAL
	P.C.C. BUS STOP PAD
	UNIT PAVER - TYPE 2
	FENCE LINE
	EXISITING RIGHT OF WAY LINE
303 ———————————————————————————————————	BASELINE OF CONSTRUCTION
₽	FIRE HYDRANT
I5" RCP I	EXISTING STORM DRAIN PIPE
	EXISTING INLET
PEP-801415 -4181	UTILITY POLE
— — G — —	EXISTING GAS MAIN
C-3 •	ROADWAY BORING PLAN LOCATION
	UTILITY TEST HOLE LOCATION

— — SAN — — EXISTING SEWER MAIN — — w — — EXISTING WATER MAIN STORM DRAIN MANHOLE SANITARY SEWER MANHOLE TELEPHONE MANHOLE MANHOLE (OTHER) WATER VALVE WATER METER HB HANDBOX DRAINAGE STRUCTURE IDENTIFICATION PROPOSED DRAINAGE PIPE HEDGE

> INDEX OF SHEETS, GENERAL NOTES, ABBREVIATIONS

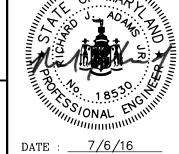
ETHAN ALLEN GATEWAY STREETSCAPE

AB-01

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: <u>NTS</u>

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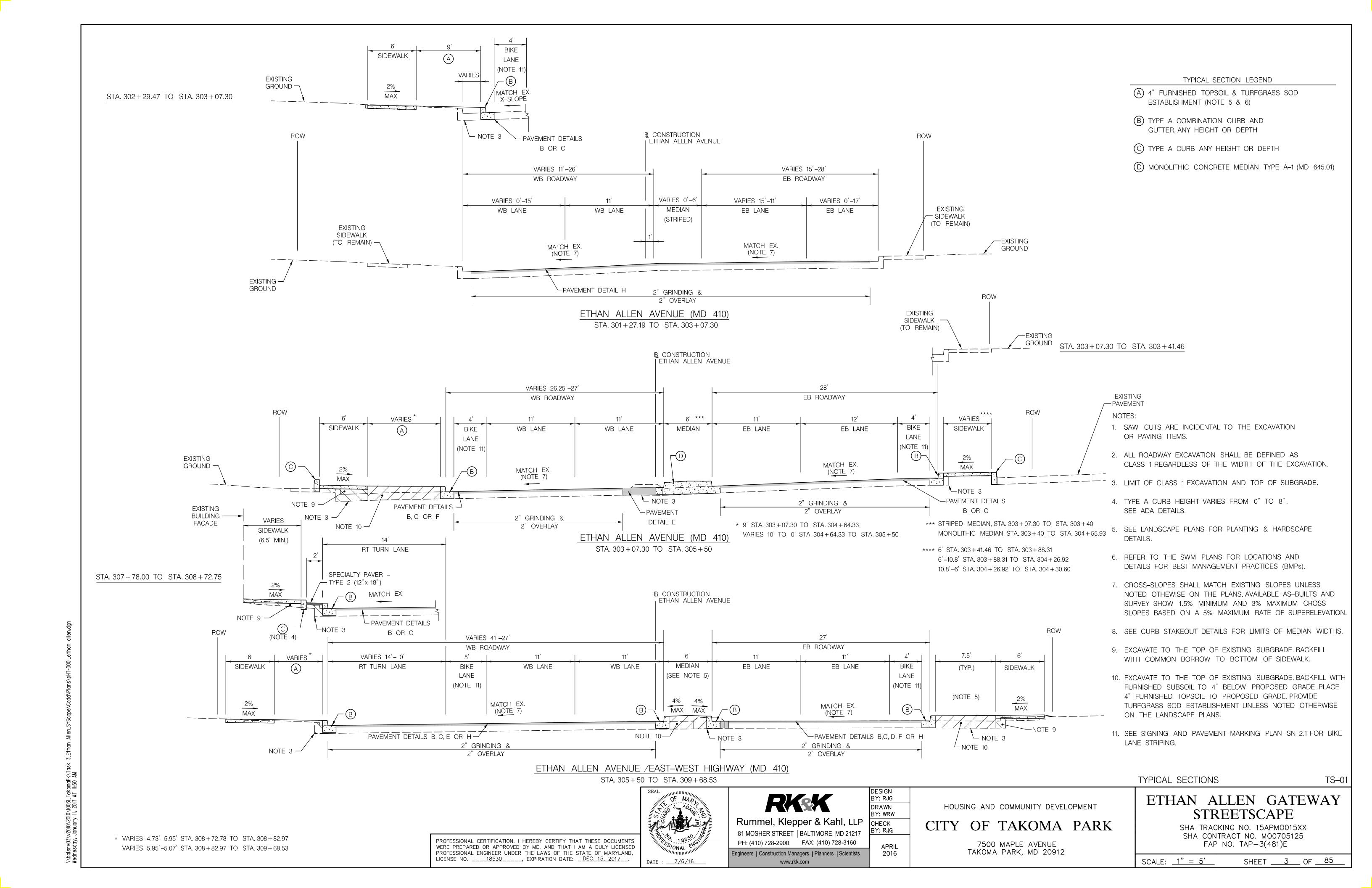
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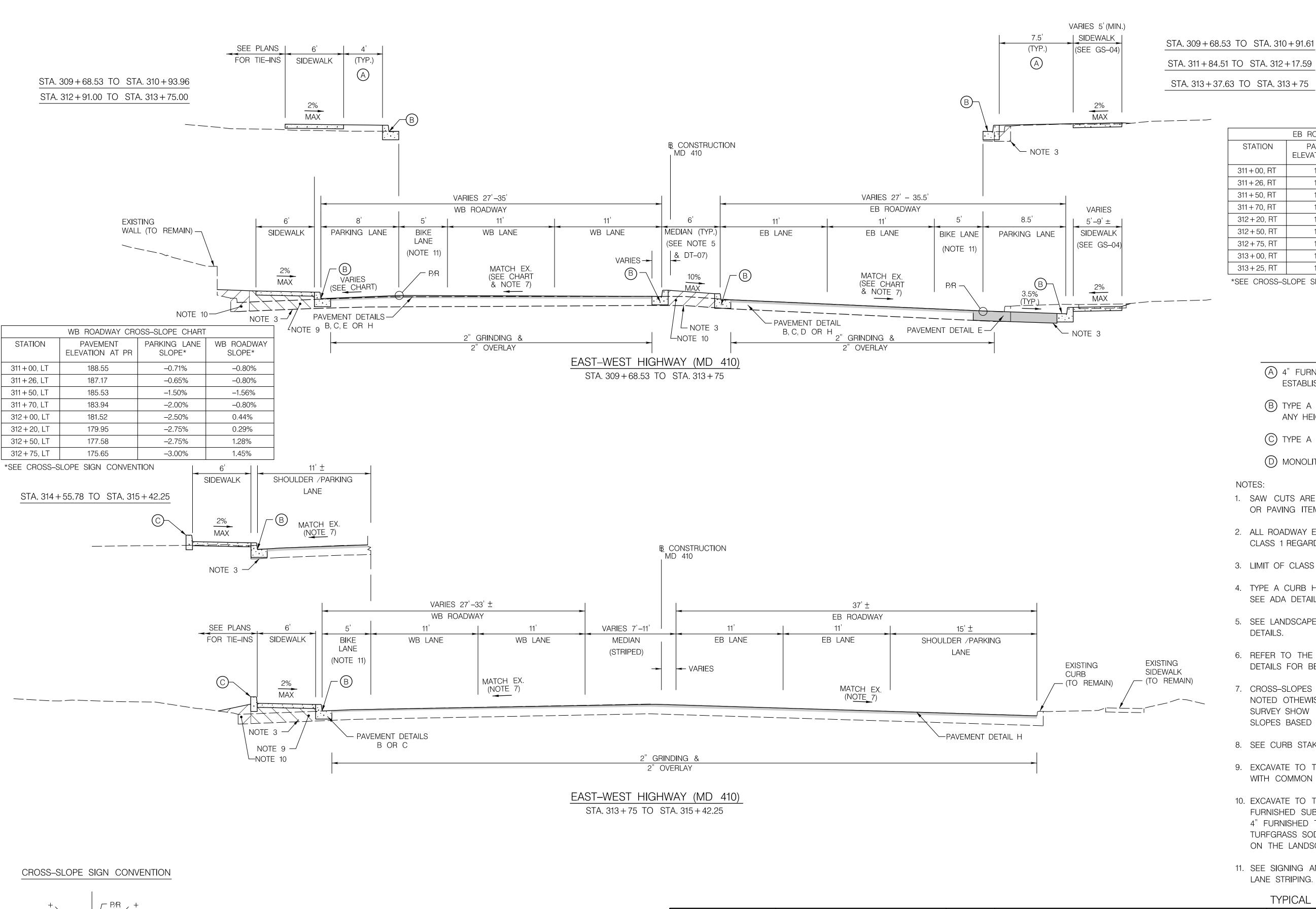
2016

HOUSING AND COMMUNITY DEVELOPMENT CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

SHEET <u>2</u> OF <u>85</u>





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PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,

LICENSE NO. _____18530 _____, EXPIRATION DATE: __DEC. 15. 2017

EB ROADWAY CROSS-SLOPE CHART PARKING LANE | EB ROADWAY STATION PAVEMENT ELEVATION AT PR SLOPE* SLOPE* 311 + 00, RT 186.92 -3.50% 4.00% 311 + 26, RT 185.32 -3.50% 4.55% 311 + 50, RT 183.65 -3.50% 4.00% 311 + 70, RT 182.41 -3.50% 3.56% 312 + 20, RT 178.62 -3.50% 4.00% 312 + 50, RT 176.51 -3.50% 4.73% 312 + 75, RT 174.42 -3.50% 4.90%

*SEE CROSS-SLOPE SIGN CONVENTION

172.61

170.87

TYPICAL SECTION LEGEND

-3.50%

-3.50%

3.47%

3.23%

- (A) 4" FURNISHED TOPSOIL & TURFGRASS SOD ESTABLISHMENT (NOTE 5 & 6)
- (B) TYPE A COMBINATION CURB AND GUTTER, ANY HEIGHT OR DEPTH
- C TYPE A CURB ANY HEIGHT OR DEPTH
- D MONOLITHIC CONCRETE MEDIAN TYPE A-1 (MD 645.01)

- 1. SAW CUTS ARE INCIDENTAL TO THE EXCAVATION OR PAVING ITEMS.
- 2. ALL ROADWAY EXCAVATION SHALL BE DEFINED AS CLASS 1 REGARDLESS OF THE WIDTH OF THE EXCAVATION.
- 3. LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE.
- 4. TYPE A CURB HEIGHT VARIES FROM 0" TO 8". SEE ADA DETAILS.
- 5. SEE LANDSCAPE PLANS FOR PLANTING & HARDSCAPE DETAILS.
- 6. REFER TO THE SWM PLANS FOR LOCATIONS AND DETAILS FOR BEST MANAGEMENT PRACTICES (BMPs).
- 7. CROSS-SLOPES SHALL MATCH EXISTING SLOPES UNLESS NOTED OTHEWISE ON THE PLANS. AVAILABLE AS-BUILTS AND SURVEY SHOW 1.5% MINIMUM AND 3% MAXIMUM CROSS SLOPES BASED ON A 5% MAXIMUM RATE OF SUPERELEVATION.
- 8. SEE CURB STAKEOUT DETAILS FOR LIMITS OF MEDIAN WIDTHS.
- 9. EXCAVATE TO TOP OF EXISTING SUBGRADE. BACKFILL WITH COMMON BORROW TO SIDEWALK SUBGRADE.
- 10. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH FURNISHED SUBSOIL TO 4" BELOW PROPOSED GRADE. PLACE 4" FURNISHED TOPSOIL TO PROPOSED GRADE. PROVIDE TURFGRASS SOD ESTABLISHMENT UNLESS NOTED OTHERWISE ON THE LANDSCAPE PLANS.
- 11. SEE SIGNING AND PAVEMENT MARKING PLAN SN-2.1 FOR BIKE LANE STRIPING.

TYPICAL SECTIONS

TS-02

ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APM0015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>4</u> OF <u>85</u> SCALE: 1" = 5'

DATE: <u>7/6/16</u>

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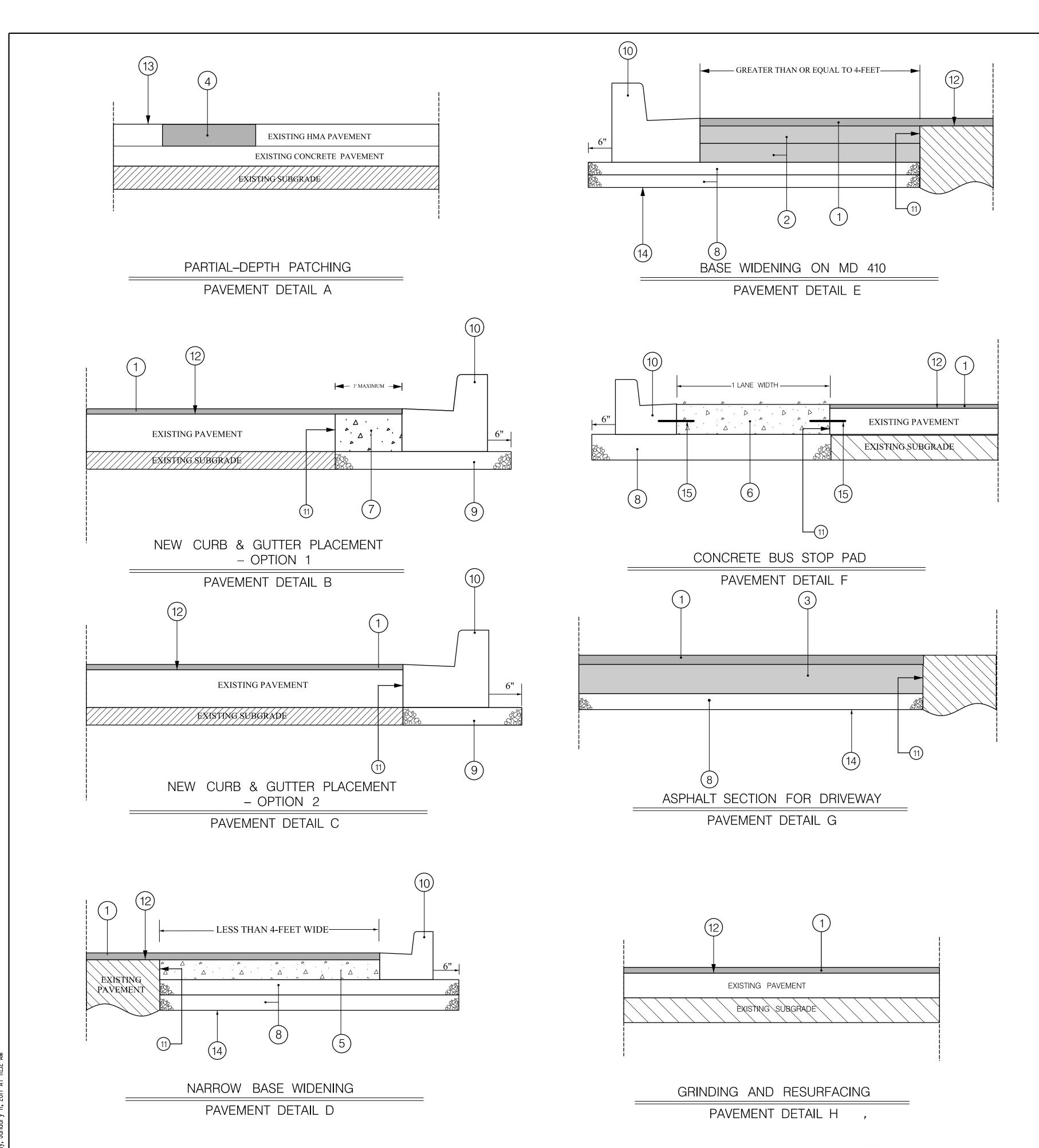
DESIGN BY: RJG DRAWN BY: WRW CHECK Y: RJG APRIL

2016

CITY OF TAKOMA PARK

HOUSING AND COMMUNITY DEVELOPMENT

7500 MAPLE AVENUE TAKOMA PARK, MD 20912



PAVEMENT LEGEND

- (1) 2.0" SUPERPAVE ASPHALT MIX 9.5 mm FOR SURFACE, HDFV, PG64E-22, LEVEL 2
- 2) 4" SUPERPAVE ASPHALT MIX 19.0 mm FOR BASE, PG 64S-22, LEVEL 2
- 3" SUPERPAVE ASPHALT MIX 19.0 mm FOR BASE, PG 64S-22, LEVEL 2
- (VARIABLE DEPTH) SUPERPAVE ASPHALT MIX 25.0 mm FOR PARTIAL-DEPTH PATCH, PG-64S-22, LEVEL 2 (3" MINIMUM LIFT, 5" MAXIMUM LIFT) (SEE NOTE 1, 3, & 5)
- 5) 8" PLAIN PORTLAND CEMENT CONCRETE MIX NO. 9
- (6) 9" PLAIN PORTLAND CEMENT CONCRETE MIX NO. 9 (SEE NOTE 8)
- (7) 8" PLAIN PORTLAND CEMENT CONCRETE MIX NO. 3 (SEE NOTE 7)
- (8) 6" GRADED AGGREGATE BASE COURSE
- (9) 6" GRADED AGGREGATE BASE COURSE (INCIDENTAL TO CURB & GUTTER)
- STANDARD CURB AND GUTTER/MONOLITHIC MEDIAN
- FULL-DEPTH SAW CUT INCIDENTAL TO FULL-DEPTH PATCH, CURB AND GUTTER AND EXCAVATION ITEMS
- TOP OF EXISTING PAVEMENT AFTER 2" CARBIDE GRINDING
- TOP OF EXISTING PAVEMENT BEFORE 2" CARBIDE GRINDING
- TOP OF SUBGRADE AND LIMIT OF EXCAVATION (SEE NOTE 6)
- LONGITUDINAL TIE-BAR (SEE NOTE 8)

PAVEMENT DETAIL NOTES

- 1. BASED ON INFORMATION FROM PAVEMENT BORING AND CONSTRUCTION HISTORY, MD 410 WITHIN THE PROJECT LIMITS HAS THE FOLLOWING PAVEMENT STRUCTURE;
 - * 2" TO 5" HMA OVER 8" JOINTED PLAIN CONCRETE PAVEMENT OVER 4" TO 10" AGGREGATE
- 2. FOR WEDGE/LEVEL MAX. 2" LIFT USE SUPERPAVE ASPHALT MIX 9.5 mm FOR WEDGE/LEVEL, PG 64S-22, LEVEL 2.
- SQUARE-OFF FOUR SIDES OF THE PATCH WITH VERTICAL FACE.
- 4. REMOVE AND DISPOSE OF ALL SOFT AND UNSTABLE MATERIAL PER SECTION 208 OF THE MDSHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, JULY 2008.
- 5. PARTIAL-DEPTH PATCHING WILL BE TO AN ESTIMATED DEPTH OF 5" OR TO THE TOP OF EXISTING CONCRETE PAVEMENT, WHICHEVER OCCURS FIRST.
- 6. IN AREAS WHERE EXISTING PAVEMENT IS BEING REMOVED, THE LIMIT OF EXCAVATION SHALL BE AT THE BOTTOM OF THE BOUND MATERIALS IN THE EXISTING PAVEMENT OR AT THE TOP OF SUBGRADE, WHICHEVER IS LOWER.
- 7. THIS WORK IS TO BE DONE AT THE CONTRACTOR'S OPTION. AN ADDITIONAL 1' WIDTH (MAXIMUM) EXCAVATION MAY BE USED FOR CURB & GUTTER FORM PLACEMENT. THE ADDITIONAL EXCAVATION WIDTH IS TO BE FILLED WITH A MINIMUM OF 6" GAB AND 8" JOINTED PLAIN PORTLAND CEMENT CONCRETE MIX NO. 3, TO THE BOTTOM OF THE FINAL ASPHALT SURFACE LAYER. PAYMENT SHALL BE INCIDENTAL TO THE LINEAR FOOT ITEM FOR CURB & GUTTER. TRANSVERSE JOINTS SHALL MATCH THOSE OF THE CURB & GUTTER. DOWEL BARS ARE NOT NECESSARY.
- 8. PCC BUS PAD CONSTRUCTION NOTES:
 - * LOAD TRANSFER DEVICES #8 PLAIN/SMOOTH DOWEL BAR, 18" LONG, PLACED 12" CENTER TO CENTER AT ALL TRANSVERSE JOINTS EXCEPT AT CONCRETE/ASPHALT TRANSVERSE JOINTS, PLACED 6" FROM JOINT
 - * MAXIMUM TRANSVERSE JOINTS SPACING SHALL BE 15 FEET WITH NO MID SLAB REINFORCEMENT.
 - * LONGITUDINAL TIE DEVICES (SLAB/CURB INTERFACE) SHALL BE #4 BARS-14" LONG (J) BARS, PLACED 36" CENTER TO CENTER.
 - * PORTLAND CEMENT CONCRETE BUS STOP PAD DIMENSION SHALL BE 100 FEET IN LENGTH BY ONE LAND WIDTH
 - * TRANSVERSE JOINTS SHALL BE SINGLE 1/8 INCHES SAW-CUT TO A DEPTH OF 2 INCHES AS PER SECTION 520 AND SHALL NOT BE SEALED.
 - * REFER TO STANDARD NO. MD-577-.01 THROUGH MD-577.06 AND MD-577.08

PAVEMENT DETAILS

DT-01

DESIGN BY: SHA DRAWN BY: WRW CHECK BY: RJG

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

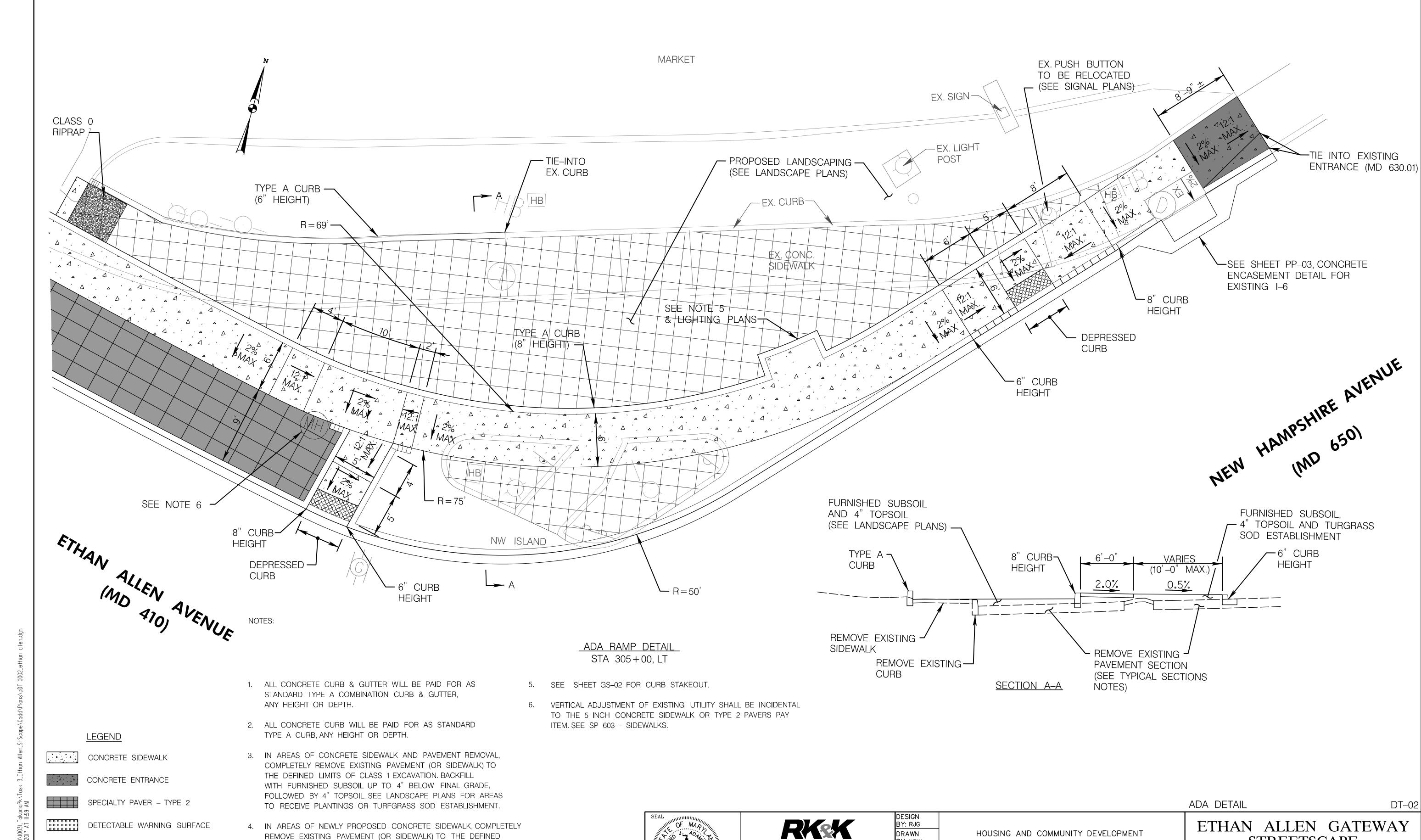
7500 MAPLE AVENUE TAKOMA PARK, MD 20912 ETHAN ALLEN GATEWAY STREETSCAPE

> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>5</u> OF <u>85</u>

APRIL

SCALE: <u>NTS</u>



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3Y: RJG

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HOUSING AND COMMUNITY DEVELOPMENT

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STREETSCAPE

SHA TRACKING NO. 15APMO015XX

SHA CONTRACT NO. MO0705125

SCALE: 1" = 5'

FAP NO. TAP-3(481)E

SHEET <u>6</u> OF <u>85</u>

TAPERED CURB

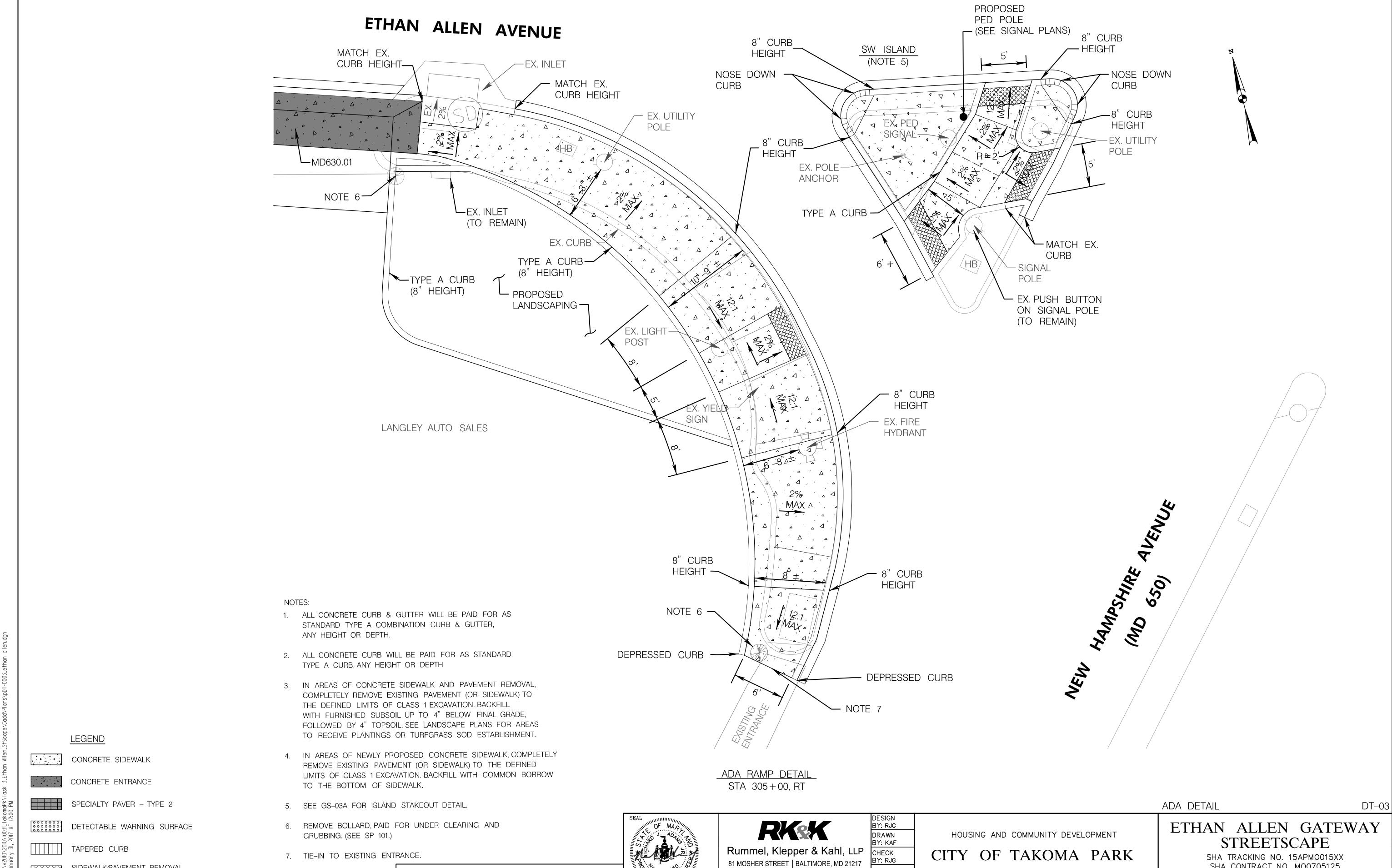
SIDEWALK/PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED

TO THE BOTTOM OF SIDEWALK.

LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH COMMON BORROW

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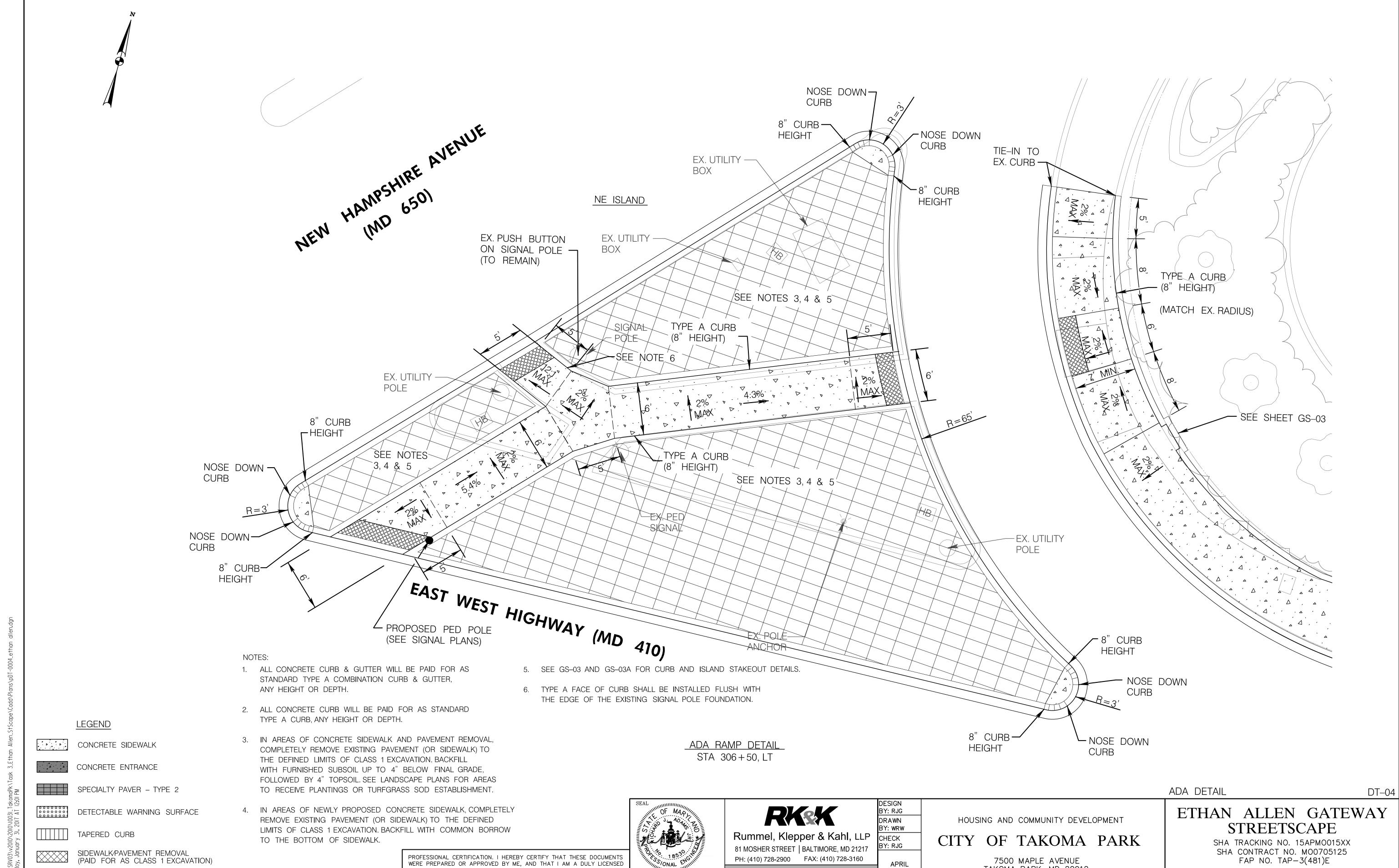
SHA CONTRACT NO. MO0705125

SCALE: 1" = 5'

FAP NO. TAP-3(481)E

SHEET ____7__ OF ___85__

SIDEWALK/PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)



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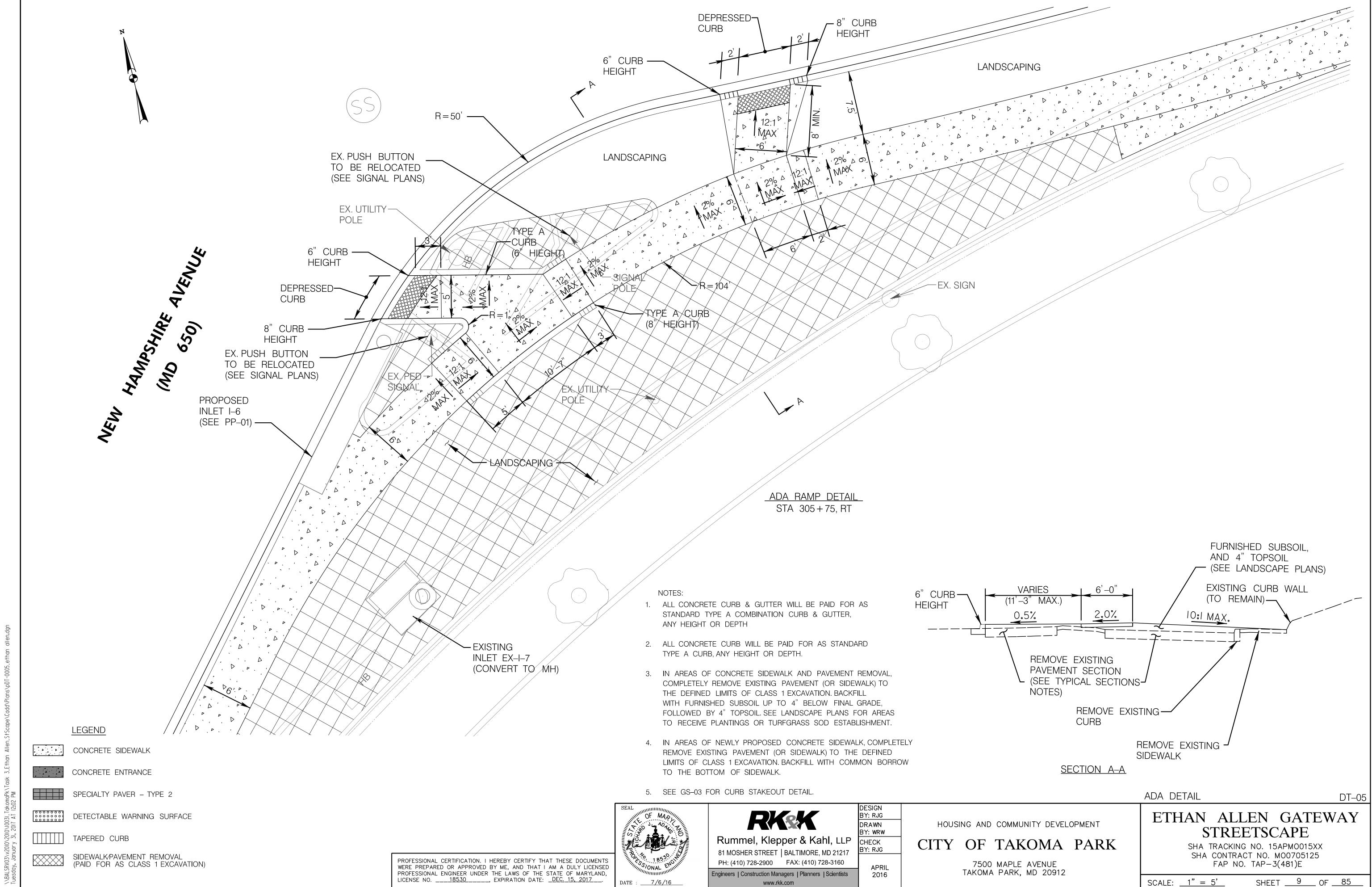
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TAKOMA PARK, MD 20912

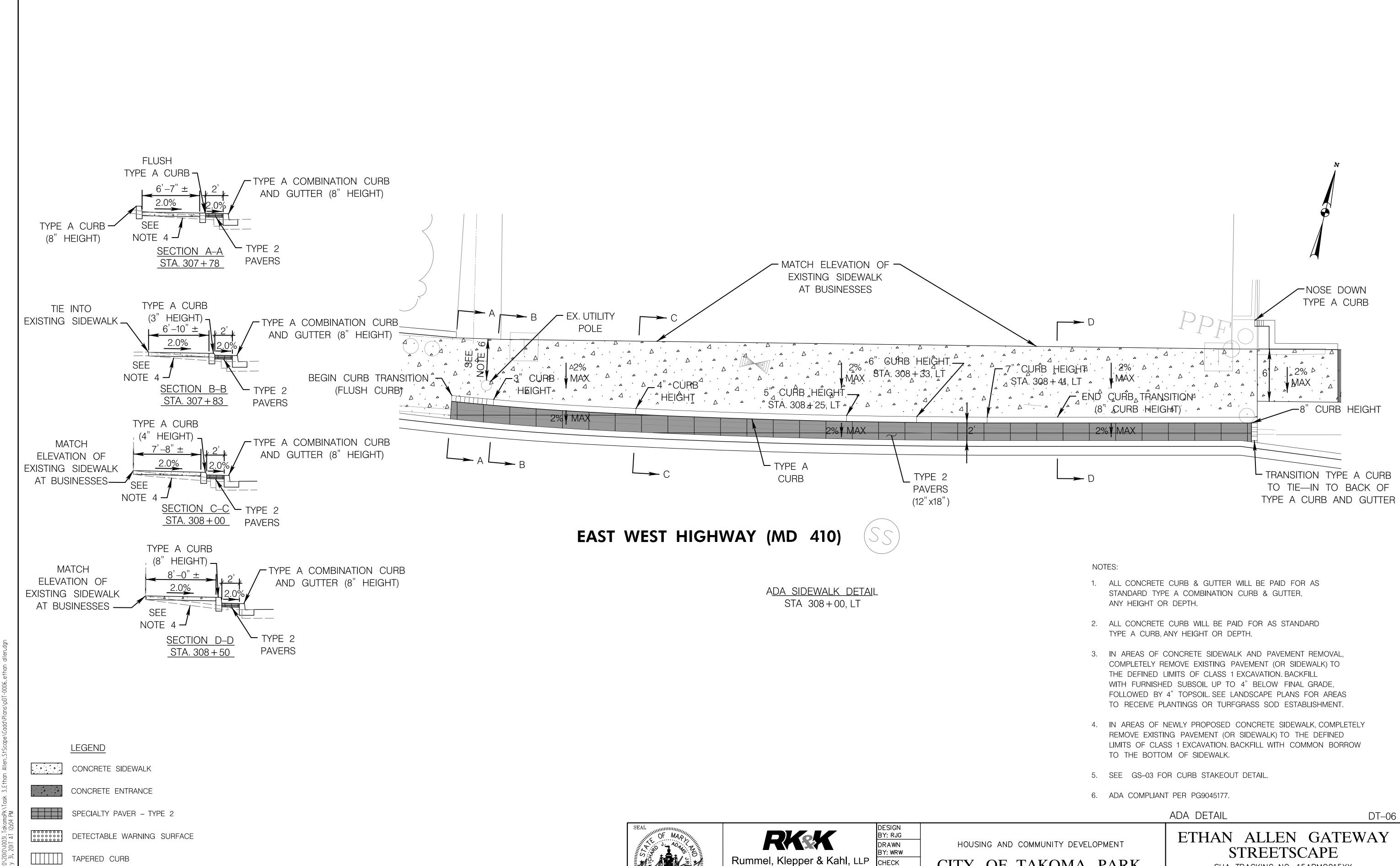
SHEET <u>8</u> OF <u>85</u>

SCALE: 1" = 5'

PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. ____18530 _____, EXPIRATION DATE: _DEC. 15, 2017 ___.



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CHECK

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2016

CITY OF TAKOMA PARK

7500 MAPLE AVENUE

TAKOMA PARK, MD 20912

SHA TRACKING NO. 15APMO015XX

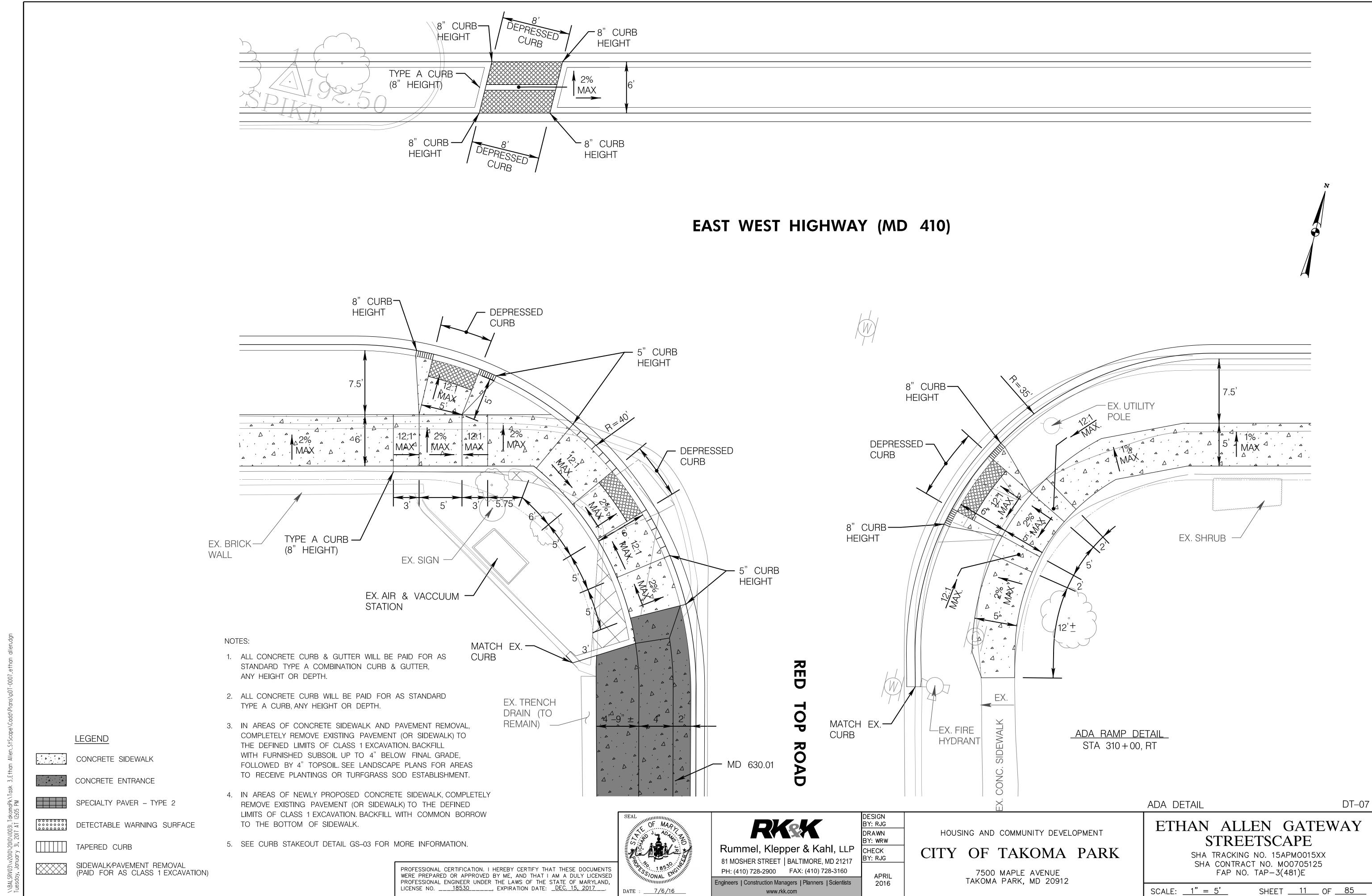
SHA CONTRACT NO. MO0705125

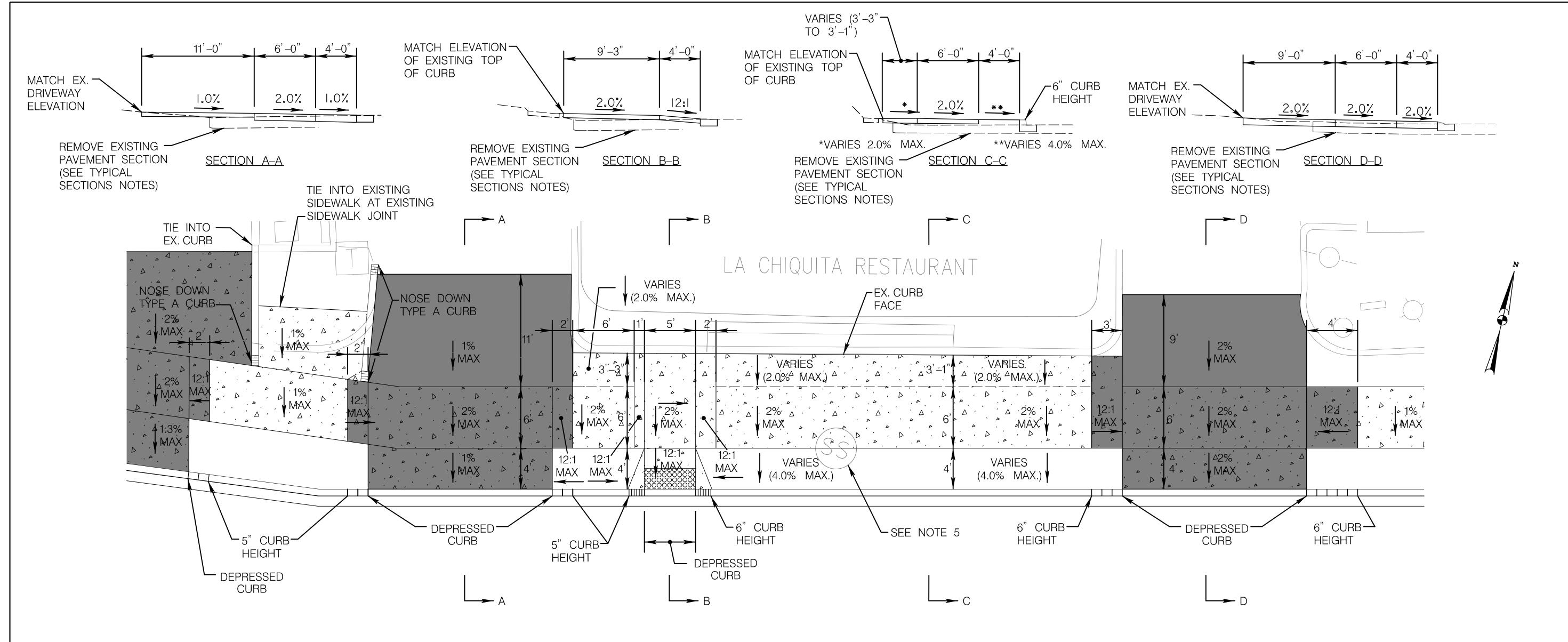
SCALE: 1" = 5'

FAP NO. TAP-3(481)E

SHEET <u>10</u> OF <u>85</u>

SIDEWALK/PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)





EAST WEST HIGHWAY (MD 410)

ADA RAMP DETAIL STA 310 + 00, LT

NOTES:

- 1. ALL CONCRETE CURB & GUTTER WILL BE PAID FOR AS STANDARD TYPE A COMBINATION CURB & GUTTER, ANY HEIGHT OR DEPTH.
- 2. ALL CONCRETE CURB WILL BE PAID FOR AS STANDARD TYPE A CURB, ANY HEIGHT OR DEPTH.
- 3. IN AREAS OF CONCRETE SIDEWALK AND PAVEMENT REMOVAL, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH FURNISHED SUBSOIL UP TO 4" BELOW FINAL GRADE, FOLLOWED BY 4" TOPSOIL. SEE LANDSCAPE PLANS FOR AREAS TO RECEIVE PLANTINGS OR TURFGRASS SOD ESTABLISHMENT.
- 4. IN AREAS OF NEWLY PROPOSED CONCRETE SIDEWALK, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH COMMON BORROW TO THE BOTTOM OF SIDEWALK.
- 5. VERTICAL ADJUSTMENT OF EXISTING UTILITY SHALL BE INCIDENTAL TO 5 INCH CONCRETE SIDEWALK PAY ITEM. SEE SP 603.

DATE: <u>7/6/16</u>

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HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE

ADA DETAIL

DT-08

ETHAN ALLEN GATEWAY STREETSCAPE

> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 5'SHEET <u>12</u> OF <u>85</u>

LEGEND

CONCRETE SIDEWALK

CONCRETE ENTRANCE

DRIVEWAY PAVING (PAVEMENT DETAIL G)

SPECIALTY PAVER - TYPE 2

DETECTABLE WARNING SURFACE

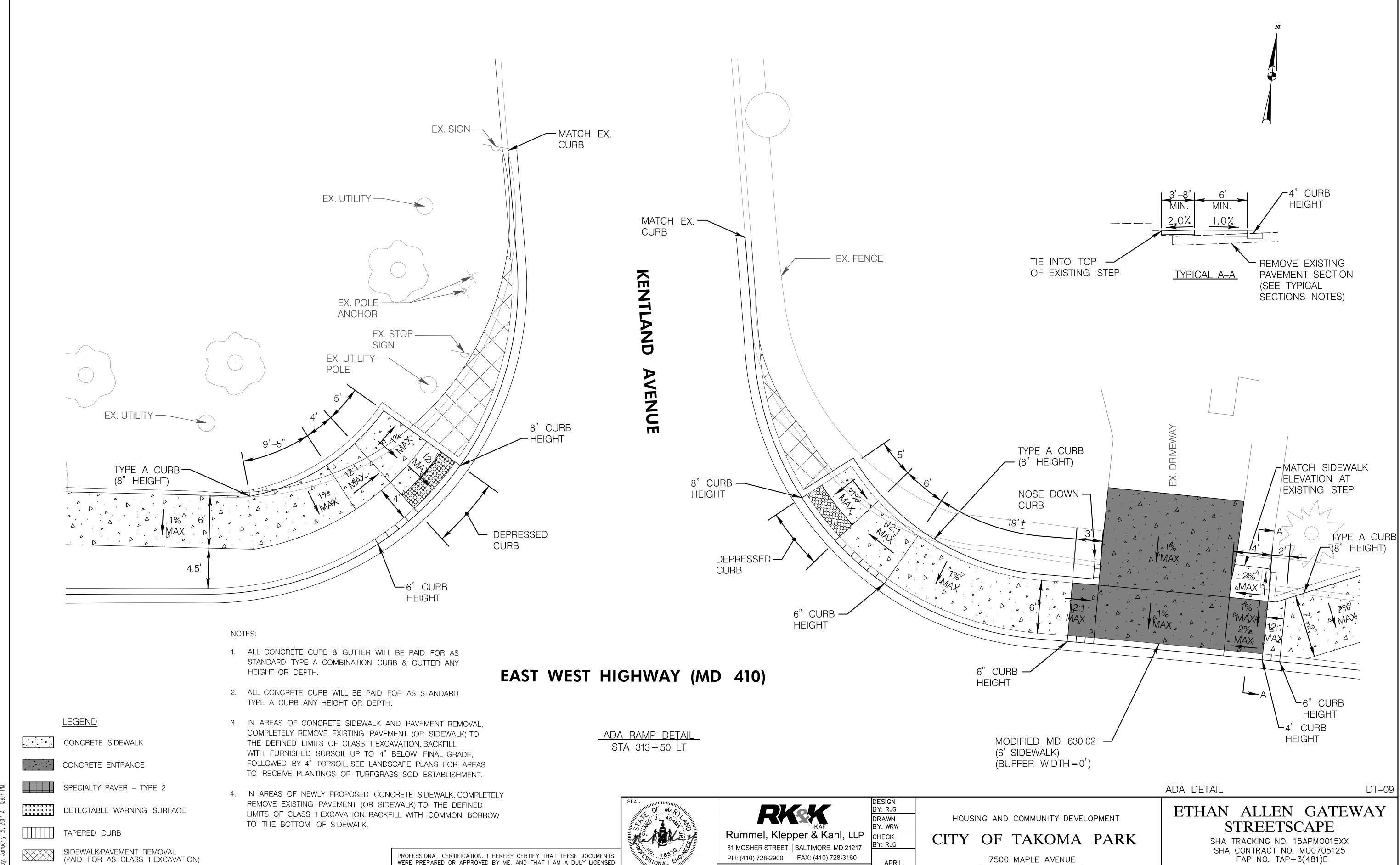
TAPERED CURB

SIDEWALK/PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530 _____, EXPIRATION DATE: _DEC. 15, 2017

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SCALE: 1" = 5'

SHEET <u>13</u> OF <u>85</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530 ______, EXPIRATION DATE: _DEC. 15, 2017 ___.

SIDEWALK/PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

(PAVEMENT DETAIL G)

CONCRETE SIDEWALK

CONCRETE ENTRANCE

SPECIALTY PAVER - TYPE 2

DETECTABLE WARNING SURFACE

TAPERED CURB

SIDEWALK PAVEMENT/REMOVAL (PAID FOR AS CLASS I EXCAVATION)

PCC BUS STOP PAD (PAVEMENT DETAIL F)

3. IN AREAS OF CONCRETE SIDEWALK AND PAVEMENT REMOVAL, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH FURNISHED SUBSOIL UP TO 4" BELOW FINAL GRADE, FOLLOWED BY 4" TOPSOIL. SEE LANDSCAPE PLANS FOR AREAS TO RECEIVE PLANTINGS OR TURFGRASS SOD ESTABLISHMENT.

4. IN AREAS OF NEWLY PROPOSED CONCRETE SIDEWALK, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH COMMON BORROW TO THE BOTTOM OF SIDEWALK.

5. SEE CURB STAKEOUT DETAIL GS-02 FOR MORE INFORMATION.

ADA SIDEWALK DETAIL

STA 304+00, LT

DATE : ____7/6/16

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HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

BUS STOP DETAIL

DT-10

ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 5'SHEET <u>14</u> OF <u>85</u>

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APRIL 2016

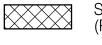
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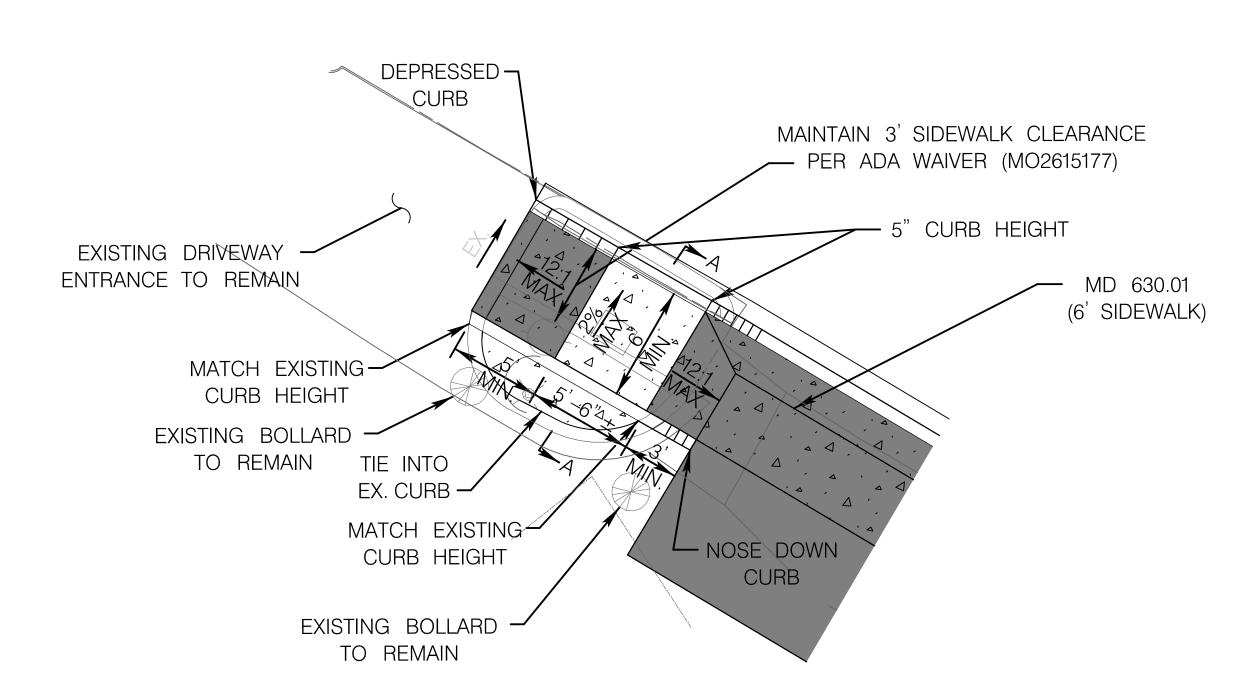












TYPE A CURB (4" HEIGHT) TIE INTO TOP TYPE A COMBINATION CURB -OF EXISTING CURB AND GUTTER (5" HEIGHT) REMOVE EXISTING SIDEWALK (SEE TYPICAL SECTIONS NOTES) <u>SECTION A-A</u>

ADA SIDEWALK DETAIL STA. 303 + 50, RT

LEGEND

2" GRINDING AND RESURFACING

DRIVEWAY PAVING (PAVEMENT DETAIL G)

CONCRETE SIDEWALK

CONCRETE ENTRANCE

SPECIALTY PAVER - TYPE 2

DETECTABLE WARNING SURFACE

TAPERED CURB

SIDEWALK REMOVAL (PAID FOR AS CLASS I EXCAVATION)

NOTES:

- 1. ALL CONCRETE CURB & GUTTER WILL BE PAID FOR AS STANDARD TYPE A COMBINATION CURB & GUTTER, ANY HEIGHT OR DEPTH.
- 2. ALL CONCRETE CURB WILL BE PAID FOR AS STANDARD TYPE A CURB, ANY HEIGHT OR DEPTH.
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- 4. IN AREAS OF NEWLY PROPOSED CONCRETE SIDEWALK, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH COMMON BORROW TO THE BOTTOM OF SIDEWALK.
- 5. SEE CURB STAKEOUT DETAIL GS-02 FOR ADDITIONAL INFORMATION.

DATE: <u>7/6/16</u>

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CITY OF TAKOMA PARK

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ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

DT-11

SHEET <u>15</u> OF <u>85</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. ____18530 _____, EXPIRATION DATE: _DEC. 15, 2017 ___.

SCALE: 1" = 5'

ADA DETAIL

U-HAUL

NOTES:

- 1. ALL CONCRETE CURB & GUTTER WILL BE PAID FOR AS STANDARD TYPE A COMBINATION CURB & GUTTER, ANY HEIGHT OR DEPTH.
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- 4. IN AREAS OF NEWLY PROPOSED CONCRETE SIDEWALK, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS 1 EXCAVATION. BACKFILL WITH COMMON BORROW TO THE BOTTOM OF SIDEWALK.
- 5. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON SPECIALTY PAVERS - TYPE 2.
- 6. INSTALL I-2 SUCH THAT TOP SLAB HAS A 2% MAX CROSS-SLOPE.

ADA SIDEWALK DETAIL STA 307 + 50, RT

<u>LEGEND</u>

CONCRETE SIDEWALK

CONCRETE ENTRANCE

SPECIALTY PAVER - TYPE 2

DETECTABLE WARNING SURFACE



SIDEWALK PAVEMENT/REMOVAL (PAID FOR AS CLASS I EXCAVATION)

TAPERED CURB



PLAIN PCC BUS STOP PAD (PAVEMENT DETAIL F)

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HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

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ETHAN ALLEN GATEWAY STREETSCAPE

BUS STOP DETAIL

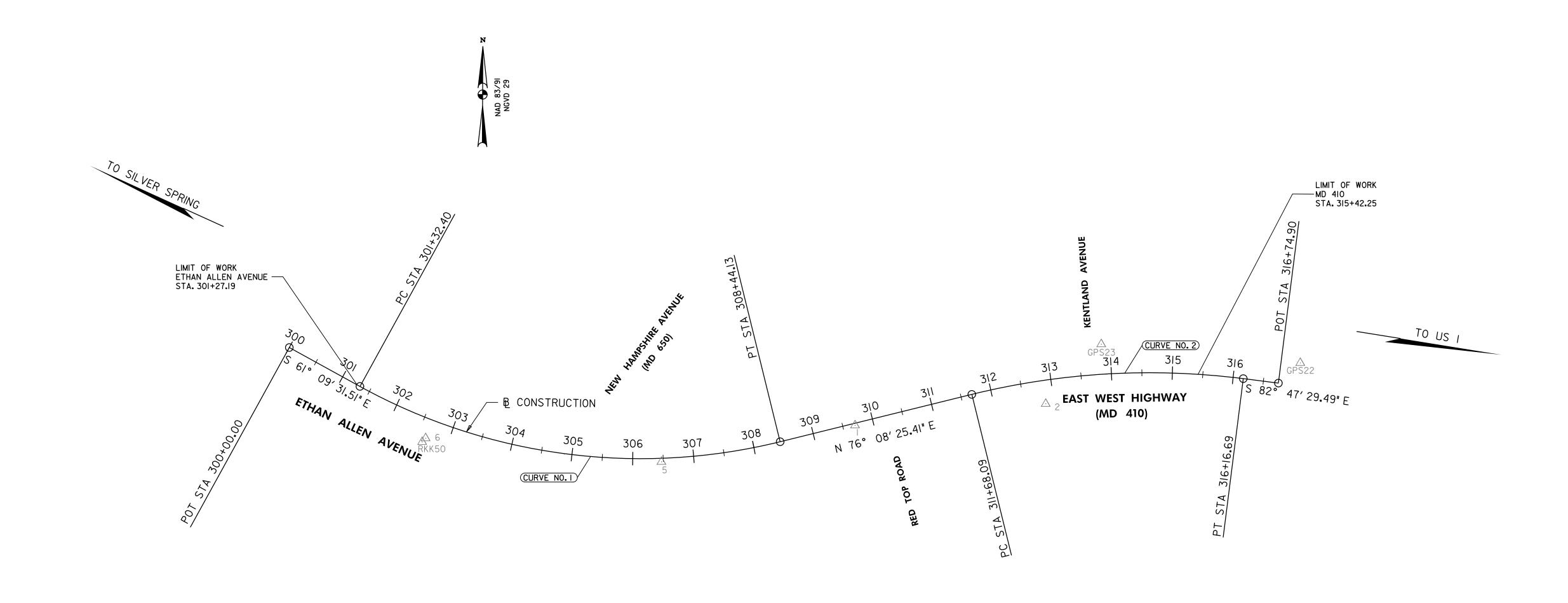
SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

DT-12

SCALE: 1" = 5'SHEET <u>16</u> OF <u>85</u>

BASELINE CONTROL COORDINATES					
STATION	NORTH	EAST			
POT STA. 300+00.00	476,769.1240	1,313,467.5981			
PC STA. 301+32.40	476,705.2565	1,313,583.5747			
PISTA. 305+05.71	476,525.1788	1,313,910.5770			
PT STA. 308+44.13	476,614.6023	1,314,273.0159			
PC STA. 311+68.09	476,692.2031	1,314,587.5370			
PISTA. 313+94.95	476,746.5468	1,314,807.7955			
PT STA. 316+16.69	476,718.0800	1,315,032.8658			
POT STA. 316+74.90	476,710.7760	1,315,090.6138			

TRAVERSE POINTS					
POINT NO.	NORTH	EAST	ELEVATION	PLAN SHEET NO.	
2	476,676.7050	1,314,708.7270	174.03	PS-4	
GPS22	476,743.7500	1,315,126.4320	151.86	PS-4	
I	476,641.4673	1,314,395.8567	192.50	PS-3	
5	476,581.6511	1,314,078.2156	195.10	PS-2	
6	476,620.2684	1,313,691.3631	201.44	PS-2	
GPS23	476,774.5460	1,314,799.8200	166.83	PS-4	
RKK50	476,614.1445	1,313,685.7101	201.61	PS-2	



1. THE ORIGINAL SURVEY WAS COMPLETED BY OTHERS IN 2011 AND SUPPLEMENTAL SURVEY WAS COMPLETED BY RK&K IN NOVEMBER 2013.

DATE : ___7/6/16

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APRIL

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

ETHAN ALLEN GATEWAY STREETSCAPE

GEOMETRY PLAN & SURVEY CONTROL GS-01

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. M00705125 FAP NO. TAP-3(481)E

SHEET ____17__ OF ___85 SCALE: 1" = 100'

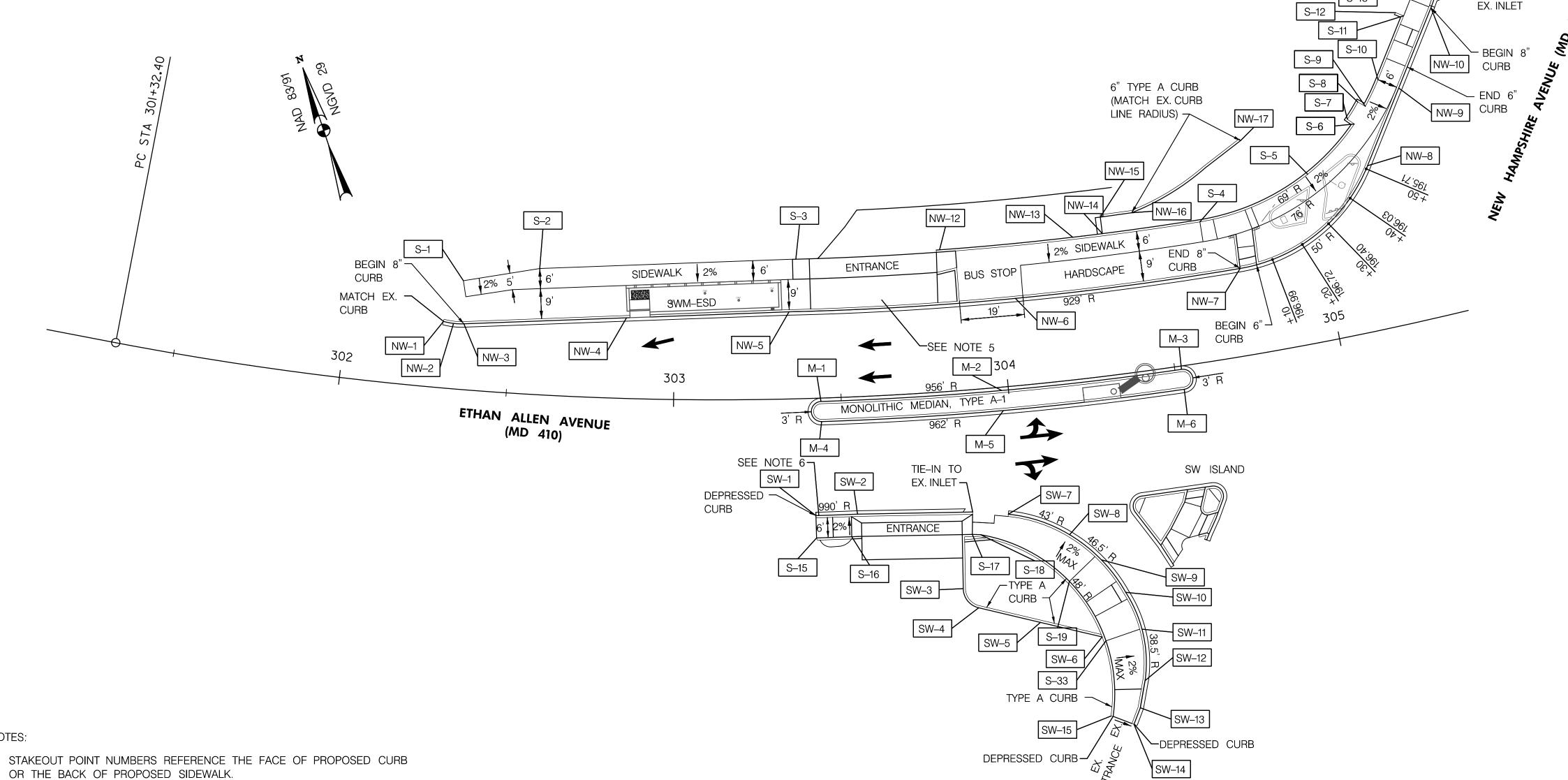
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7500 MAPLE AVENUE TAKOMA PARK, MD 20912

	MEDIAN STAKEOUT CHART					
POINT	STATION AND	EDGE OF	воттом		DINATES	
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING	
M-I	303+43.96, I.00' RT	199.20	199.16	476,623.51	1,313,778.36	
M-2	303+97 . 97 , 1 . 00′ RT	198.58	198.54	476,609.95	1,313,830.69	
M-3	304+51 . 97 , 1 . 00′ RT	197.95	197.91	476,599.37	1,313,883.69	
M-4	303+43 . 97 , 7 . 00′ RT	199.25	199.21	476,617.75	1,313,776.71	
M-5	303+97 . 94 , 7 . 00′ RT	198.77	198.73	476,604.11	1,313,829.32	
M-6	304+51 . 92 , 7 . 00′ RT	198.34	198.30	476,593.47	1,313,882.64	

	NW CORN	IER CURB	STAKEC	OUT CH	ART
POINT	STATION AND	EDGE OF	воттом	COORI	DINATES
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING
NW-I	302+29.47, 19.80' L	T MATCH EX.	MATCH EX.	476,681.06	1,313,678.58
NW-2	302+32.60, 19.47′ L	_T 200 . 37	200.33	476,679.56	1,313,681.27
NW-3	302+35.74, 19.60′ L	_T 200 . 28	200.24	476,678.49	1,313,7684.16
NW-4	302+85.24, 24.06′	LT 199 . 24	199.20	476,665.19	1,313,730.87
NW-5	303+35.07, 26.00′	LT 198 . 56	198.52	476,651.90	1,313,777.58
NW-6	304+04.68, 26.00′	LT 198 . 00	197.96	476,634.84	1,313,843.09
NW-7	304+74.29, 26.00'	LT 197 . 15	197.11	476,622.60	1,313,909.68
NW-8	305+19 . 22 , 48 . 84′ L	T 195.72	195.68	476,640.02	1,313,955.29
NW-9	305+34.37, 69.40'	LT 194 . 79	194.75	476,659.19	1,313,971.31
NW-IO	305+50.79, 90.36	LT 193 . 65	193.61	476,679.00	1,313,987.86
NW-II	305+64.74, 107.23'	LT MATCH EX.	MATCH EX.	476,695.12	1,314,001.32
NW-12	303+82.54, 42.34′ (_T -	198.51	476,665.61	1,313,826.03
NW-I3	304+24.34, 42.34′ (_T -	198.45	476,646.91	1,313,865.01
NW-14	304+33.65, 42.34′ (LT -	197.96	476,645.20	1,313,873.75
NW-15	304+33.65, 47.31' L	_T -	-	476,650.09	1,313,874.68
NW-16	304+43.60, 47.36	LT -	-	476,648.42	1,313,883.98
NW-17	304+81.26, 63.58' L	_T -	-	476,658.86	1,313,921.56

SI	SIDEWALK STAKEOUT CHART				
POINT	STATION AND	COORE	INATES		
NO.	OFFSET	NORTHING	EASTING		
S-I	302+34 . 51 , 32 . 42′ LT	476,690.78	1,313,688.00		
S-2	302+57.83, 37.65' LT	476,687.20	1,313,710.79		
S-3	303+37.57, 41.66' LT	476,666.22	1,313,784.36		
S-4	304+64.33, 41.67' LT	476,639.53	1,313,902.52		
S-5	305+00.22, 49.99' LT	476,643.11	1,313,937.51		
S-6	305+17.94, 61.84' LT	476,653.07	1,313,955.38		
S-7	305+16.09, 62.55′ LT	476,655.06	1,313,953.85		
S-8	305+20 . 56 , 68 . 01′ LT	476,658.97	1,313,958.41		
S-9	305+22.60, 66.30' LT	476,657.09	1,313,960.14		
S-I0	305+28.47, 73.20' LT	476,663.46	1,313,966.19		
S-II	305+41.41, 89.99' LT	476,679.23	1,313,979.35		
S-I2	305+39.II, 9I.47' LT	476,680.86	1,313,977.40		
S-I3	305+50.II, 101.40' LT	476,690.06	1,313,987.97		
S-14	305+57 . 90 , III . 75′ LT	476,699.96	1,313,995.52		
S-I5	303+41.46, 41.67' RT	476,585.18	1,313,764.54		
S-I6	303+51 . 52 , 41.67′ RT	476,582.29	1,313,774.64		
S-I7	303+85.96, 43.17' RT	476,571.83	1,313,809.09		
S-18	303+88.3I, 43.37′ RT	476,570.97	1,313,811.39		
S-I9	304+12.16, 59.65′ RT	476,549.53	1,313,832.31		
S-20	304+20 . 50 , 78 . 47′ RT		1,313,837.21		



	SW CORNER	CURB :	STAKEO	UT CHA	RT
POINT	STATION AND	EDGE OF	воттом	COORE	DINATES
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING
SW-I	303+41.46, 35.00′ RT	199.51	MATCH EX.	476,591.58	1,313,766.41
SW-2	303+53.44, 35.00′ RT	199.57	199.53	476,588.17	1,313,778.36
SW-3	303+82 . 26 , 59 . 01′ RT	-	200.04	476,557.27	1,313,801.51
SW-4	303+86.19, 65.07' RT	-	200.33	476,550.39	1,313,804.13
SW-5	304+02.98, 70.97′ RT	-	200.78	476,540.57	1,313,820.31
SW-6	304+19.58, 77.18' RT	-	201.37	476,530.74	1,313,836.49
SW-7	303+96.72, 37.96′ RT	MATCH EX.	MATCH EX.	476,574.22	1,313,821.17
SW-8	304+13 . 58 , 45 . 80′ RT	199.97	199.93	476,562.77	1,313,836.66
SW-9	304+21.79, 54.29' RT	200.30	200.26	476,552.69	1,313,843.39
SW-10	304+27 . 50 , 64 . 78′ RT	200.70	200.66	476,541.22	1,313,847.28
SW-II	304+30.76, 76.29' RT	201.33	201.29	476,529.25	1,313,848.52
SW-12	304+29 . 86 , 91 . 62′ RT	202.09	202.05	476,514.39	1,313,844.64
SW-13	304+27 . 69 , 99 . 50′ RT	202.41	202.37	476,507.12	1,313,840.78
SW-14	304+25.48, 104.17' RT	MATCH EX.	MATCH EX.	476,503.01	1,313,837.47
SW-15	304+19.55, 100.93′ RT	MATCH EX.	MATCH EX.	476,507.48	1,313,831.68

NOTES:

- 1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB
- 2. RADII REFERENCE THE FACE OF PROPOSED CURB.
- 3. SEE SHEET GS-03A FOR SW ISLAND STAKEOUT.
- 4. ALL PROPOSED SIDEWALK SHALL HAVE A 2% (MAX) CROSS SLOPE. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.
- 5. SEE DT-10 FOR CROSS SLOPES AT BUS STOP AND ENTRANCE.
- 6. SEE DT-11 FOR CROSS SLOPES AT SIDEWALK TIE-IN.



RKSK

BY: RJG APRIL 2016

DESIGN BY: RJG HOUSING AND COMMUNITY DEVELOPMENT DRAWN BY: WRW CHECK

TIE-IN TO EX. CURB AT DRIVEWAY

CITY OF TAKOMA PARK

ETHAN ALLEN GATEWAY STREETSCAPE

CURB STAKEOUT DETAIL

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

GS-02

SHEET <u>18</u> OF <u>85</u> SCALE: 1" = 20'

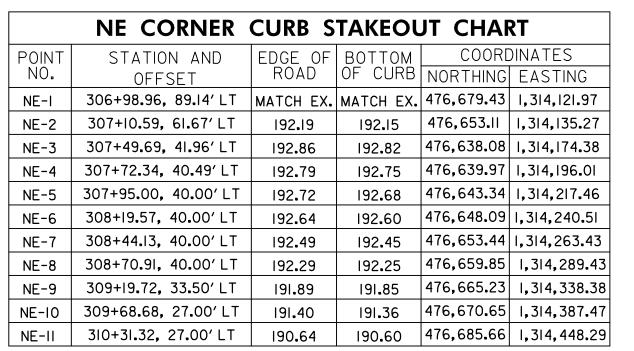
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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED



SIDEWALK STAKEOUT CHART

S-31 | 307+89.20, 56.54' RT | 476,547.41 | 1,314,229.70 S-32 | 307+89.20, 48.17' RT | 476,555.63 | 1,314,228.17 S-33 | 308+55.74, 48.17' RT | 476,570.62 | 1,314,295.82 S-34 | 308+60.74, 49.42' RT | 476,570.60 | 1,314,300.98 S-35 | 308+66.50, 49.42' RT | 476,571.98 | 1,314,306.57 S-36 | 308+71.50, 48.17' RT | 476,574.39 | 1,314,311.12

6. SEE DT-12 FOR CROSS SLOPES AT BUS STOP

7. SEE DT-06 FOR CROSS SLOPES OF SIDEWALK IN FRONT OF BUILDING

STATION AND

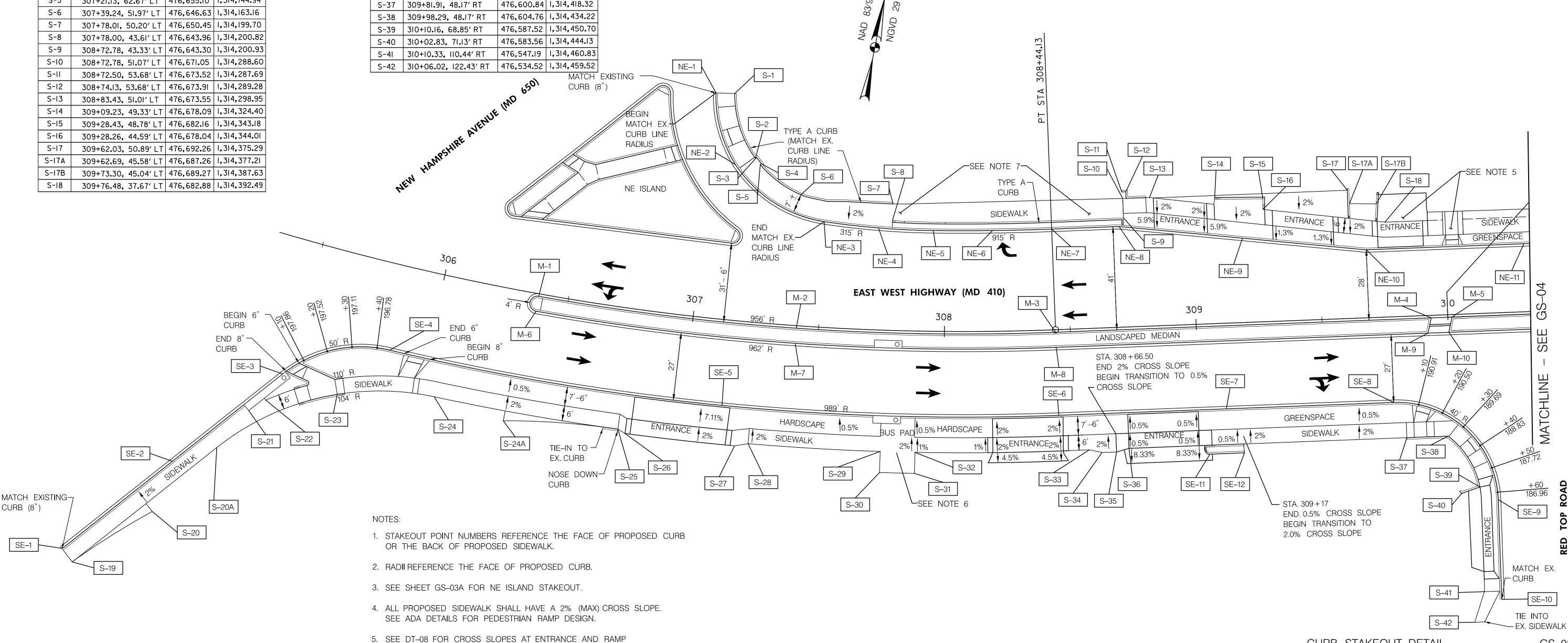
POINT NO.

COORDINATES

			·
SI	DEWALK STAKE	OUT CH	ART
POINT	STATION AND	COORE	INATES
NO.	OFFSET	NORTHING	EASTING
S-I	307+07.12, 89.71'LT	476,680.69	1,314,129.28
S-2	307+18.78, 64.91'LT	476,657.15	1,314,142.53
S-3	307+19 . 27 , 65 . 33′ LT	476,657.62	1,314,142.94
S-4	307+21 . 54 , 62 . 97′ LT	476,655.51	1,314,145.30
S-5	307+21.13, 62.67' LT	476,655.10	1,314,144.94
S-6	307+39.24, 51.97′ LT	476,646.63	1,314,163.16
S-7	307+78.01, 50.20' LT	476,650.45	1,314,199.70
S-8	307+78.00, 43.61'LT	476,643.96	1,314,200.82
S-9	308+72.78, 43.33′ LT	476,643.30	1,314,200.93
S-I0	308+72.78, 51.07' LT	476,671.05	1,314,288.60
S-II	308+72 . 50 , 53 . 68′ LT	476,673.52	1,314,287.69
S-I2	308+74.I3, 53.68' LT	476,673.91	1,314,289.28
S-I3	308+83.43, 51.01'LT	476,673.55	1,314,298.95
S-14	309+09.23, 49.33' LT	476,678.09	1,314,324.40
S-I5	309+28.43, 48.78' LT	476,682.16	1,314,343.18
S-I6	309+28 . 26 , 44 . 59′ LT	476,678.04	1,314,344.01
S-17	309+62 . 03 , 50 . 89′ LT	476,692.26	1,314,375.29
S-I7A	309+62 . 69 , 45 . 58′ LT	476,687.26	1,314,377.21
S-17B	309+73 . 30 , 45 . 04′ LT	476,689.27	1,314,387.63
S-18	309+76.48, 37.67' LT	476,682.88	1,314,392.49

	J J J J I J I J I J J J J J J J J J J J		
NO.	OFFSET	NORTHING	EASTING
-19	304+96.03, 149.69′ RT	476,445.40	1,313,909.14
5-20	305+17 . 12 , 120 . 82′ RT	476,471.41	1,313,936.29
-20A	305+32 . 54 , 89 . 05′ RT	476,501.46	1,313,956.25
·2I	305+39.95, 7I.4I' RT	476,518.40	1,313,965.69
22	305+45.02, 65.60' RT	476,523.82	1,313,971.54
3	305+70.18, 56.02' RT	476,531.80	1,313,998.80
24	306+05.97, 48.17' RT	476,538.66	1,314,036.74
łΑ	306+33.31, 52.17′ RT	476,534.86	1,314,065.54
25	306+75.5I, 48.I7' RT	476,540.83	1,314,110.79
-26	306+79.36, 49.50' RT	476,539.71	1,314,113.86
S-27	307+21.01, 49.50' RT	476,543.70	1,314,157.49
S-28	307+26.03, 48.17' RT	476,545.63	1,314,162.58
S-29	307+76.08, 48.17′ RT	476,553.20	1,314,214.60
S-30	307+76.08, 56.54′ RT	476,544.94	1,314,216.02
		4-0 - 4- 4:	1 714 000 70

	SE CORNER C	CURB ST	AKEOU	T CHAR	Т
POINT	STATION AND	EDGE OF	BOTTOM		DINATES
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING
SE-I	304+91 . 20 , 145 . 90′ RT	MATCH EX.	MATCH EX.	476,449.86	1,313,904.09
SE-2	305+18 . 62 , 99 . 41′ RT	200.30	200.26	476,492.55	1,313,940.08
SE-3	305+48.48, 53.77′ RT	198.23	198.19	476,535.35	1,313,975.95
SE-4	305+85.56, 34.00′ RT	196.63	196.59	476,553.21	1,314,015.72
SE-5	307+14.85, 34.00′ RT	193.90	193.86	476,558.40	1,314,149.40
SE-6	308+44.13, 34.00′ RT	192.99	192.95	476,581.59	1,314,281.16
SE-7	309+10.68, 34.00' RT	192.31	192,27	476,597.53	1,314,345.77
SE-8	309+77.23, 34.00′ RT	191.22	191.18	476,613.47	1,314,410.38
SE-9	310+17.23, 74.13' RT	186.78	186.74	476,584.10	1,314,458.83
SE-IO	310+17.10, 113.77′ RT	MATCH EX.	MATCH EX.	476,545.57	1,314,468.20
SE-II	309+03 . 49 , 51 . 70′ RT	-	192.27	476,578.62	1,314,343.03
SE-I2	309+17 . 23 , 51 . 70′ RT	_	191.81	476,581.92	1,314,356.37



ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

GS-03

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530______, EXPIRATION DATE: _DEC. 15, 2017___. DATE: <u>7/6/16</u>

BY: RJG DRAWN BY: WRW Rummel, Klepper & Kahl, LLP CHECK Y: RJG 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160 **APRIL**

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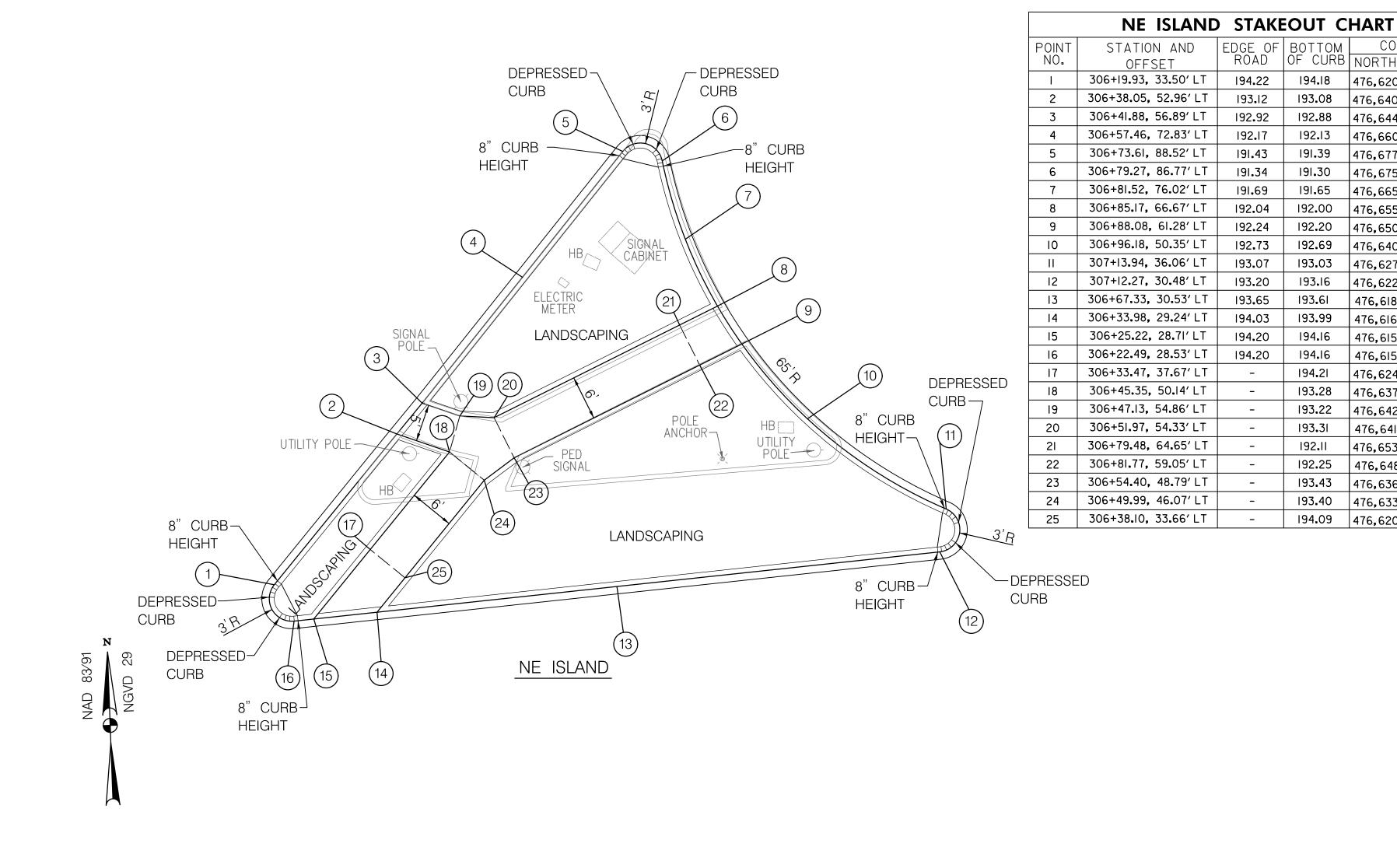
HOUSING AND COMMUNITY DEVELOPMENT CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

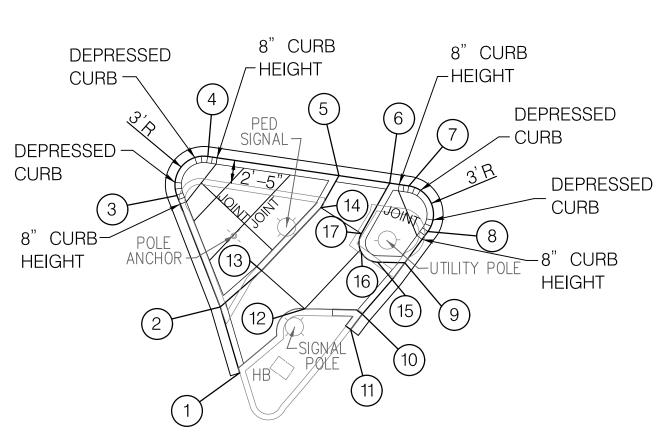
SCALE: 1" = 20'

CURB STAKEOUT DETAIL

SHEET <u>19</u> OF <u>85</u>



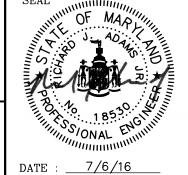
SW ISLAND STAKEOUT CHART							
POINT	STATION AND	EDGE_OF	воттом	COORE	DINATES		
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING		
1	304+41 . 86 , 58 . 63′ RT	MATCH EX.	MATCH EX.	476,544.43	1,313,863.44		
2	304+38.96, 52.14′ RT	200.64	200.60	476,551.36	1,313,861.60		
3	304+32.98, 4I.38′ RT	200.06	200.02	476,563.09	1,313,857.41		
4	304+35.4I, 36.85′ RT	199.78	199.74	476,567.07	1,313,860.75		
5	304+48.70, 36.77' RT	199.70	199.66	476,564.69	1,313,874.34		
6	304+53.85, 36.79' RT	199.63	199.59	476,563.77	1,313,879.61		
7	304+55.80, 36.81' RT	199.66	199.62	476,563.42	1,313,881.60		
8	304+58.30, 41.25′ RT	199.89	199.85	476,558.61	1,313,883.45		
9	304+56.44, 44.80′ RT	200.09	200.05	476,555.43	1,313,880.96		
10	304+52 . 96 , 50 . 72′ RT	200.39	200.35	476,550.18	1,313,876.38		
П	304+52 . 04 , 52 . 47′ RT	MATCH EX.	MATCH EX.	476,548.63	1,313,875.12		
12	304+47 . 24 , 51 . 03′ RT	-	200.41	476,550.91	1,313,870.38		
13	304+42.46, 47.74′ RT	-	200.31	476,555.03	1,313,866.01		
14	304+47.38, 40.35′ RT	-	199.96	476,561.41	1,313,872,37		
15	304+53.76, 45.13′ RT	-	200.27	476,555.56	1,313,878.13		
16	304+52 . 02 , 44 . 37′ RT	-	200.31	476,556.61	1,313,876.46		
17	304+51.75, 42.42′ RT	_	200.17	476,558.58	1,313,876.51		



SW ISLAND

NOTES:

- 1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB.
- 2. RADII REFERENCE THE FACE OF PROPOSED CURB.
- 3. ALL PROPOSED SIDEWALK SHALL HAVE A 2% (MAX) CROSS SLOPE. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.
- 4. PROVIDE CONTROL JOINTS FOR SW CONCRETE ISLAND. SAWCUTS FOR CONTROL JOINTS WILL BE INCIDENTAL TO CONCRETE SIDEWALK PAY ITEM.



RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160 Engineers | Construction Managers | Planners | Scientists

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DESIGN BY: RJG DRAWN BY: WRW CHECK 3Y: RJG

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912 ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>20</u> OF <u>85</u> SCALE: 1" = 10'

GS-03A

EDGE OF BOTTOM COORDINATES ROAD OF CURB NORTHING EASTING

192.13

191.39

191.65

193.61

193.99

194.16

194.16

193.22

193.31

192.11

194.22

193.12

192.92

192.17

191.43

191.34

191.69

192.04

192,24

192.73

193.07

193.20

193.65

194.03

194.20

194.20

-

-

194.18 | 476,620.32 | 1,314,050.82

193.08 | 476,640.06 | 1,314,067.79

192.88 | 476,644.09 | 1,314,071.29

191.30 | 476,675.65 | 1,314,104.34

192.00 | 476,655.99 | 1,314,111.21 192.20 | 476,650.83 | 1,314,114.33

192.69 | 476,640.57 | 1,314,122.83

193.03 | 476,627.97 | 1,314,141.08 193.16 | 476,622.26 | 1,314,140.06

193.28 | 476,637.45 | 1,314,074.78

192.25 | 476,648.16 | 1,314,108.60

193.43 | 476,636.43 | 1,314,083.41

193.40 | 476,633.54 | 1,314,079.33

194.09 | 476,620.77 | 1,314,068.35

476,660.58 1,314,085.19

476,677.06 1,314,099.09

476,665.07 1,314,107.15

| 476,618.82 | 1,314,096.70

476,616.26 1,314,064.47

476,615.59 1,314,055.98

476,615.38 1,314,053.33

476,624.68 1,314,063.80

476,642.22 1,314,076.29

476,641.87 | 1,314,080.88

476,653.60 1,314,106.06

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530______, EXPIRATION DATE: _DEC. 15, 2017___.

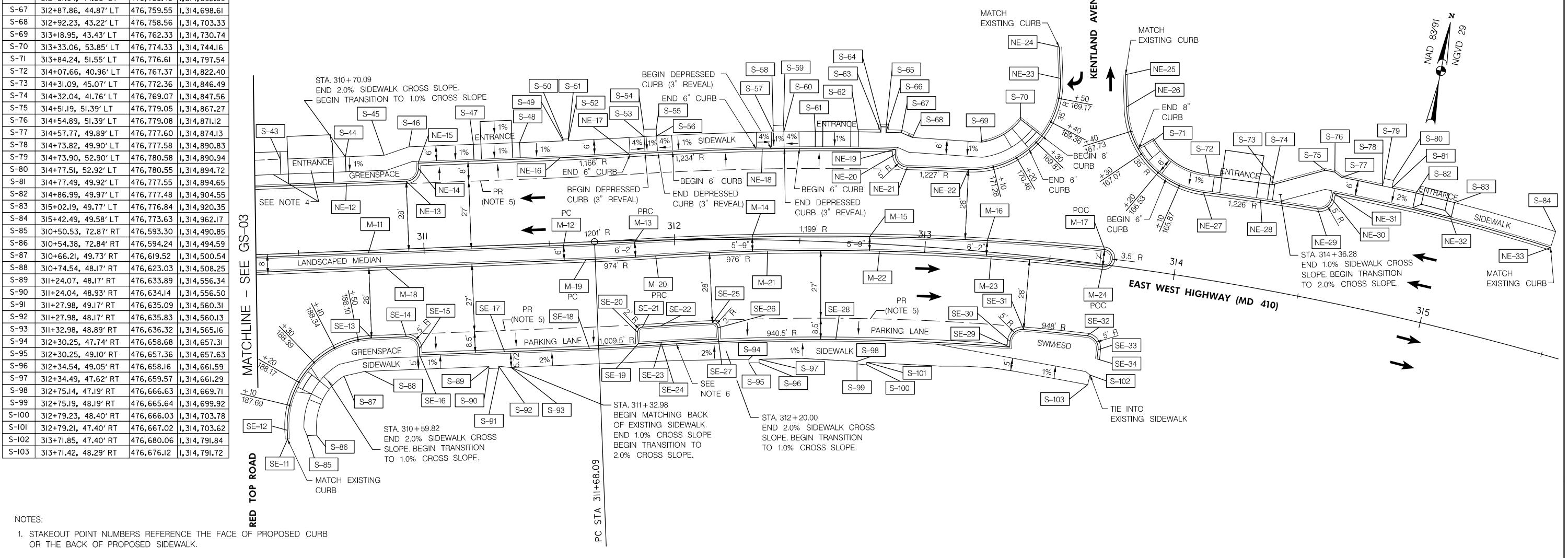
APRIL 2016

NOTES:

S	IDEWALK STAK		HART		NE CURB ST	TAKEOU'	T CHAR	T (CON	ΓΈ
	(CONT	′D)		POINT	STATION AND	EDGE OF	воттом	COORE	ANIC
POINT	STATION AND	COORE	INATES	NO.	OFFSET	ROAD	OF CURB	NORTHING	ΕA
NO.	OFFSET	NORTHING	EASTING	NE-I2	310+70.09, 27.00' LT	189.64	189.60	476,694.94	1,3
S-43	310+44.09, 37.67' LT	476,699.08	1,314,458.13	NE-I3	310+93.96, 27.00' LT	188.83	188.79	476,700.66	1,3
S-44	310+70.09, 37.67' LT	476,705.30	1,314,483.38	NE-14	310+98.96, 32.00' LT	188.51	188.47	476,706.71	1,3
S-45	310+85.56, 37.67' LT	476,709.01	1,314,498.39	NE-15	310+98.96, 34.00' LT	_	188.46	476,708.66	1,3
S-46	310+95.56, 40.67' LT	476,714.31	1,314,507.38	NE-16	3II+55.7I, 34.00' LT	184.95	184.91	476,722.25	1,3
S-47	311+21 . 29 , 40 . 67′ LT	476,720.48	1,314,532.36	NE-I7	3II+82.83, 34.42' LT	182.75	182.71	476,729.16	1,3
S-48	311+39.74, 40.67' LT	476,724.90	1,314,550.28	NE-18	312+34.40, 36.29' LT	178.62	178.58	476,741.99	1,3
S-49	311+57.14, 40.67' LT	476,729.06	1,314,567.17	NE-19	312+85.91, 38.13' LT	-	174.51	476,752.59	1,3
S-50	311+57.14, 41.38' LT	476,729.76	1,314,567.00	NE-20	312+85.98, 36.12' LT	174.54	174.50	476,750.61	1,31
S-5I	311+59 . 14 , 41 . 38′ LT	476,730.24	1,314,568.94	NE-2I	312+91.00, 31.30' LT	174.23	174.19	476,746.58	1,31
S-52	311+59.14, 40.67' LT	476,729.55	1,314,569.11	NE-22	313+14.75, 32.13' LT	172,20	172.16	476,750.60	1,3
S-53	311+88.76, 41.31'LT	476,737.25	1,314,598.43	NE-23	313+46.45, 71.74' LT	169.16	169.12	476,793.55	1,3
S-54	311+88.66, 44.27' LT	476,740.12	1,314,597.67	NE-24	313+44.74, 84.15' LT	MATCH EX.	MATCH EX.	476,793.55	1,3
S-55	311+93 . 50 , 44 . 20′ LT	476,741.16	1,314,602.58	NE-25	313+70.62, 76.28' LT	MATCH EX.	MATCH EX.	476,800.27	1,3
S-56	311+93 . 59 , 41 . 48′ LT	476,738.53	1,314,603.27	NE-26	313+72.57, 63.63' LT	168.02	167.98	476,787.81	1,3
S-57	312+38.59, 43.II'LT	476,649.49	1,314,648.54	NE-27	314+06.41, 34.24' LT	165.11	165.07	476,760.60	1,3
S-58	312+38.47, 45.61′ LT	476,751.92	1,314,647.97	NE-28	314+28.70, 34.97' LT	163.41	163.37	476,762.19	1,31
S-59	312+42 . 39 , 45 . 98′ LT	476,753.02	1,314,651.90	NE-29	314+51.09, 35.70' LT	161.66	161.62	476,763.36	1,31
S-60	312+42.64, 43.26′ LT	476,750.39	1,314,652.64	NE-30	314+55.78, 40.68' LT	161.09	161.05	476,768.38	1,3
S-6I	312+54.73, 43.69' LT	476,753.01	1,314,664.89	NE-3I	314+55.78, 43.23' LT	-	161.02	476,770.93	1,3
S-62	312+71.31, 44.28' LT	476,756.40	1,314,681.75	NE-32	315+02.22, 43.10' LT	158.05	158.01	476,770.18	1,3
S-63	312+79 . 97 , 44 . 59′ LT	476,758.08	1,314,690.57	NE-33	315+42.25, 41.92' LT	MATCH EX.	MATCH EX.	476,766.99	1,3
S-64	312+79.90, 46.74' LT	476,760.19	1,314,690.18		1		1		
S-65	312+81.88, 46.81'LT	476,760.56	1,314,692.20						
S-66	312+81.94, 44.66′ LT	476,758.45	1,314,692.59						

	SE CURB STAKEOUT CHART (CONT'D)							
POINT	STATION AND	EDGE_OF	воттом		DINATES			
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING			
SE-II	310+42.79, 73.91' RT	MATCH EX.	MATCH EX.	476,590.43	1,314,483.60			
SE-I2	310+42.76, 70.47′ RT	187.11	187.07	476,593.77	1,314,482.74			
SE-I3	310+77.76, 35.00' RT	187.86	187.82	476,636.58	1,314,508.22			
SE-14	310+91 . 61 , 35 . 00′ RT	187.30	187.26	476,639.90	1,314,521.67			
SE-I5	310+96.61, 40.00' RT	186.81	186.77	476,636.25	1,314,527.73			
SE-I6	310+96.61, 42.50′ RT	-	186.72	476,633.82	1,314,528.32			
SE-I7	3II+30.52, 42.50′ RT	184.74	184.70	476,641.94	1,314,561.24			
SE-18	311+64.42, 42.49' RT	182.50	182.46	476,650.07	1,314,594.16			
SE-19	311+84.51, 41.20' RT	-	181.06	476,655.90	1,314,612.84			
SE-20	311+84.39, 36.69' RT	181.62	181.58	476,660.27	1,314,611.70			
SE-2I	311+86.37, 34.64′ RT	181.18	181.13	476,662.70	1,314,613.12			
SE-22	3II+93.78, 34.32′ RT	180.60	180.56	476,664.60	1,314,620.0			
SE-23	3II+94.II, 40.82' RT	-	180.51	476,658.34	1,314,621.80			
SE-24	311+94.16, 41.82' RT	-	180.47	476,657.37	1,314,622.0			
SE-25	312+15.19, 33.34' RT	178.99	178.95	476,669.95	1,314,640.2			
SE-26	312+17.34, 35.23' RT	178.64	178.60	476,668.51	1,314,642.63			
SE-27	312+17.59 39.74' RT	-	178.54	476,664.14	1,314,643.7			
SE-28	312+65.95 38.87' RT	174.90	174.86	476,673.45	1,314,689.6			
SE-29	313+37.63 36.97' RT	-	169.42	476,684.49	1,314,758.24			
SE-30	313+37 . 51 34 . 64′ RT	169.78	169.74	476,686.79	1,314,757.88			
SE-3I	313+42.55, 29.38' RT	169.72	169.68	476,692.53	1,314,762.23			
SE-32	313+68.60, 28.97' RT	167.69	167.65	476,695.17	1,314,787.52			
SE-33	313+673.81, 33.93' RT	167.00	166.96	476,690.62	1,314,792.90			
SE-34	313+73.86, 37.62' RT	MATCH EX.	MATCH EX.	476,686.93	1,314,793.2			

	MEDIAN STA	AKEOUT	CHART	(CONT	"D)
POINT	STATION AND	EDGE OF	воттом	COORI	DINATES
NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING
M-II	310+77.82, 1.00' RT	189.28	189.24	476,669.61	1,314,500.14
M-12	3II+55.7I, I.00′ RT	184.73	184.69	476,688.27	1,314,575.76
M-13	3II+84.08, 0.56′ RT	182.75	182.71	476,695.39	1,314,603.21
M-14	312+30.95, 1.14′ LT	179.34	179.30	476,706.81	1,314,648.72
M-15	312+77 . 76 , 2 . 82′ LT	175.78	175.74	476,716.44	1,314,694.63
M-16	313+24.51, 4.45′ LT	171.91	171.87	476,724.27	1,314,740.89
M-17	313+71.20, 6.05′ LT	168.45	168.41	476,730.29	1,314,787.42
M-18	310+84.35, 7.00' RT	188.64	188.60	476,665.35	1,314,507.92
M-19	3II+64.42, 7.00' RT	183.71	183.67	476,684.53	1,314,585.66
M-20	3II+92.38, 6.36′ RT	181.73	181.17	476,691.58	1,314,612.58
M-2I	312+37.17, 4.40' RT	178.57	178.53	476,702.52	1,314,666.85
M-22	312+81 . 91 , 2 . 84′ RT	175.09	175.05	476,711.47	1,314,699.58
M-23	313+26.61, 1.69' RT	171.59	171.55	476,718.41	1,314,743.67
M-24	313+71.29, 0.93' RT	168.31	168.27	476,723.33	1,314,788.03



5. SEE TYPICAL SECTIONS FOR PARKING LANE CROSS-SLOPES AND ELEVATIONS AT THE POINT OF ROTATION (PR).

2. RADII REFERENCE THE FACE OF PROPOSED CURB.

4. SEE DT-08 FOR CROSS SLOPES AT ENTRANCE.

SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

6. MAINTAIN GUTTER PAN FLOW LINE BETWEEN SE-19 AND SE-27.

3. ALL PROPOSED SIDEWALK SHALL HAVE A 2% (MAX) CROSS SLOPE.

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. ____18530 _____, EXPIRATION DATE: _DEC. 15, 2017 ___.

DATE: <u>7/6/16</u>

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Engineers | Construction Managers | Planners | Scientists

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DESIGN BY: RJG DRAWN BY: WRW CHECK BY: RJG

APRIL

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE

TAKOMA PARK, MD 20912

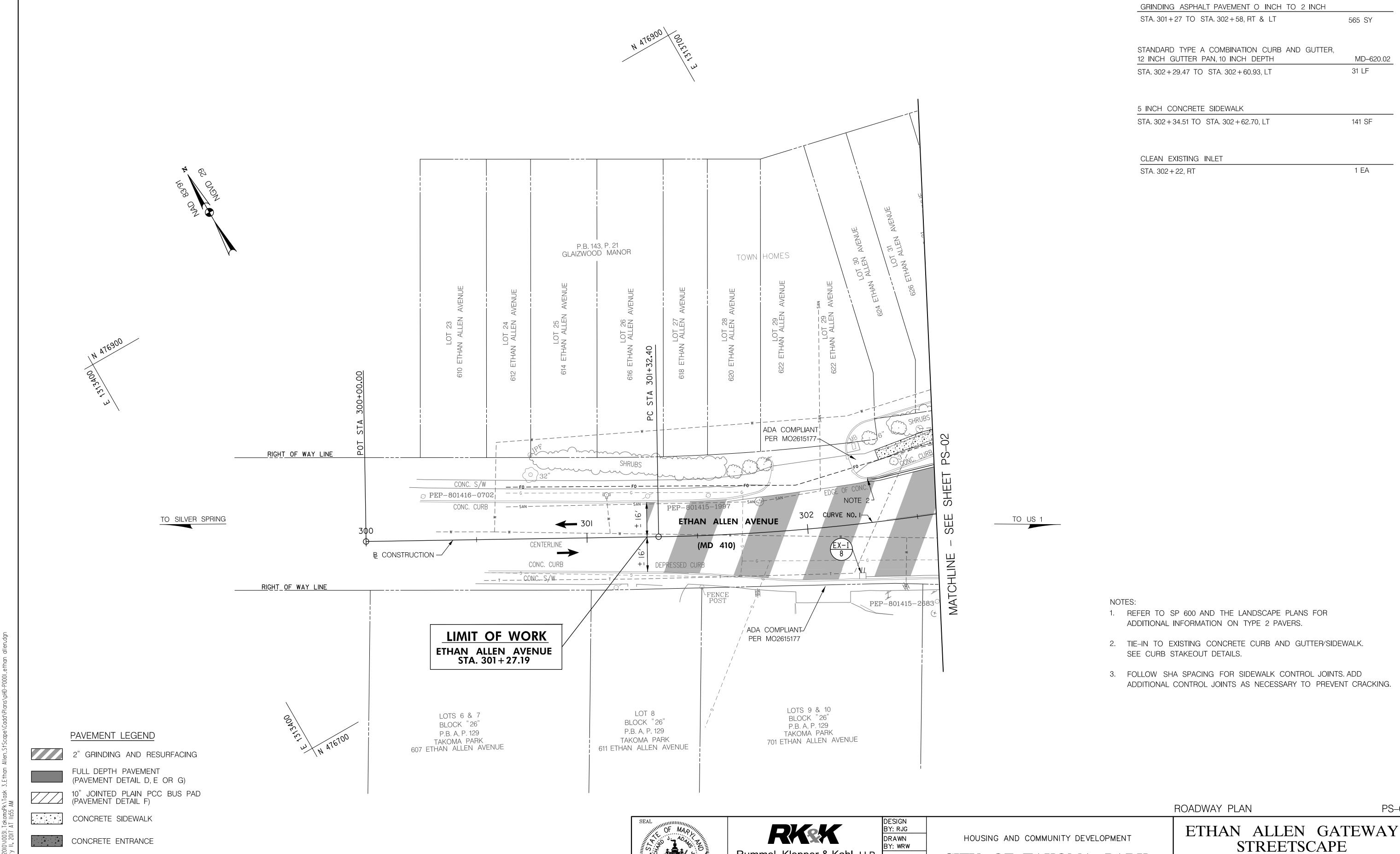
ETHAN ALLEN GATEWAY STREETSCAPE

CURB STAKEOUT DETAIL

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

GS-04

SCALE: 1" = 20'SHEET <u>21</u> OF <u>85</u>



DATE : ____7/6/16

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PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530______, EXPIRATION DATE: __DEC. 15. 2017___.

Rummel, Klepper & Kahl, LLP

81 MOSHER STREET | BALTIMORE, MD 21217

PH: (410) 728-2900 FAX: (410) 728-3160

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3Y: RJG

APRIL

2016

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

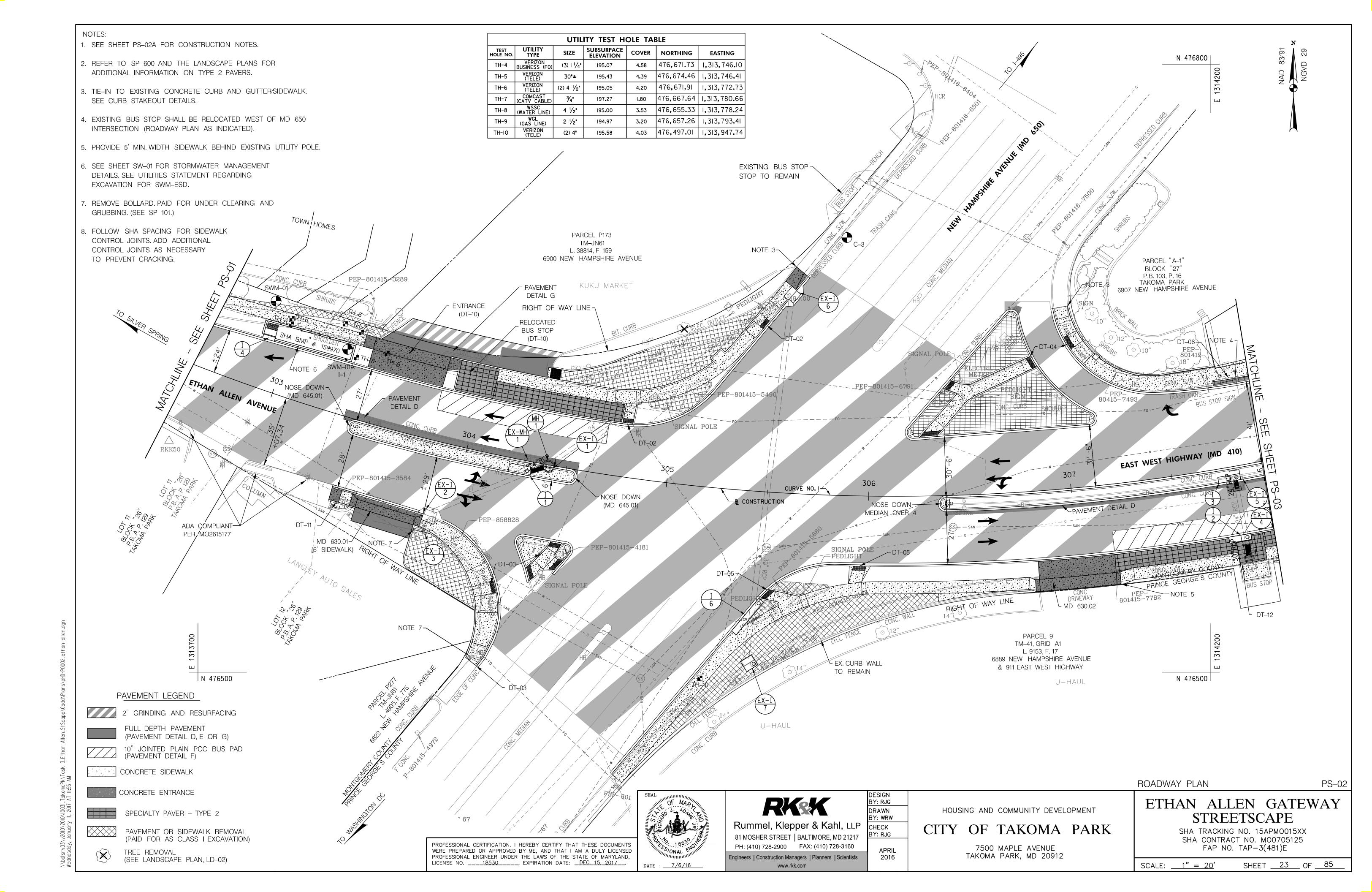
SPECIALTY PAVER - TYPE 2

PAVEMENT OR SIDEWALK REMOVAL

(PAID FOR AS CLASS I EXCAVATION)

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>22</u> OF <u>85</u> SCALE: 1" = 20'



CLEAN EXISTING INLET

1 EA STA. 303 + 89, RT STA. 303 + 90, RT 1 EA STA. 305 + 44, RT 1 EA 1 EA STA. 305 + 71, LT

DATE : <u>7/6/16</u>



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DESIGN BY: RJG DRAWN BY: WRW CHECK BY: RJG APRIL

2016

HOUSING AND COMMUNITY DEVELOPMENT

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

CITY OF TAKOMA PARK

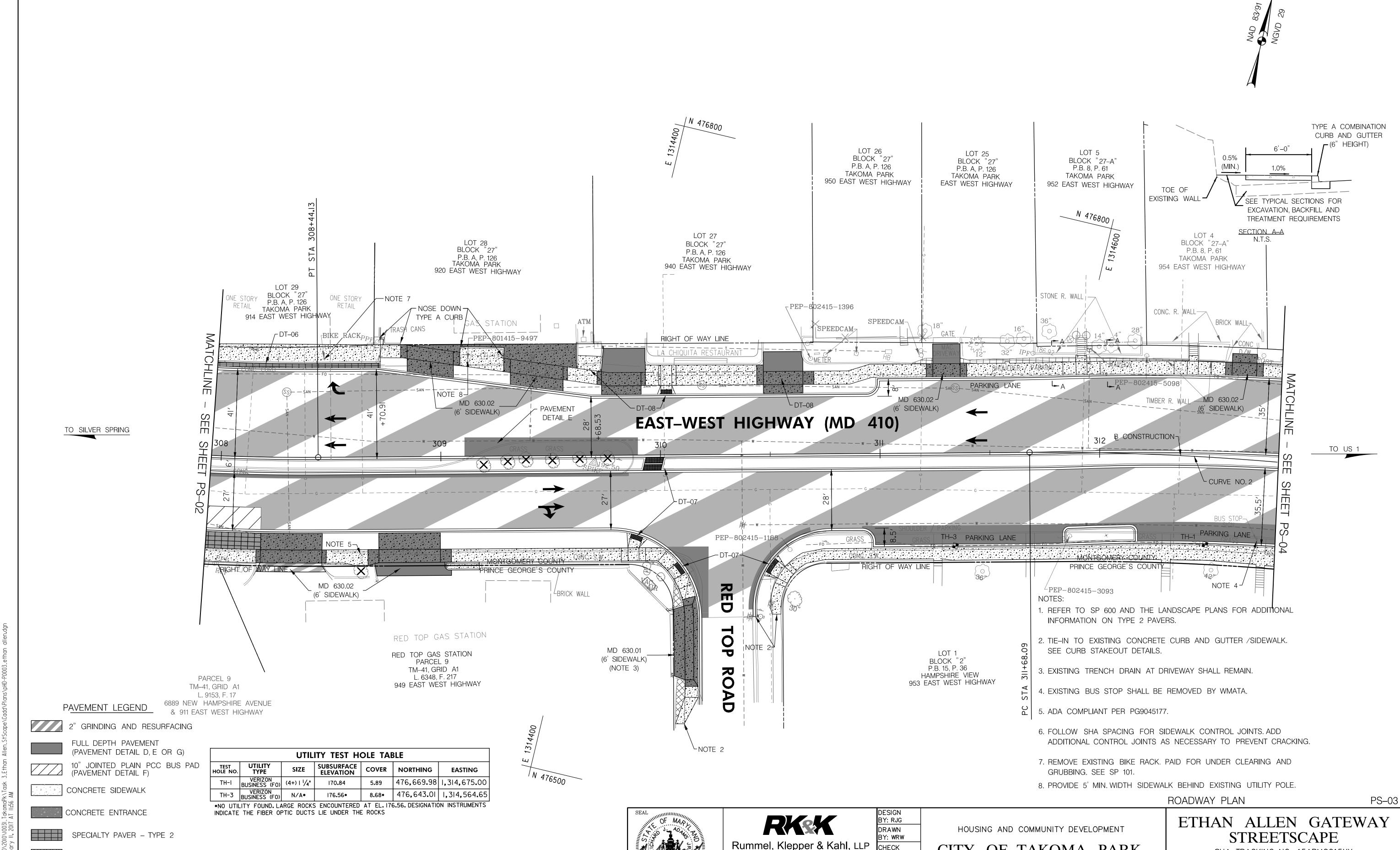
ETHAN ALLEN GATEWAY STREETSCAPE

PS-02A

ROADWAY PLAN

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>24</u> OF <u>85</u> SCALE: 1" = 20'



TREE REMOVAL (SEE LANDSCAPE PLAN, LD-03)

PAVEMENT OR SIDEWALK REMOVAL

(PAID FOR AS CLASS I EXCAVATION)

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DATE: <u>7/6/16</u>

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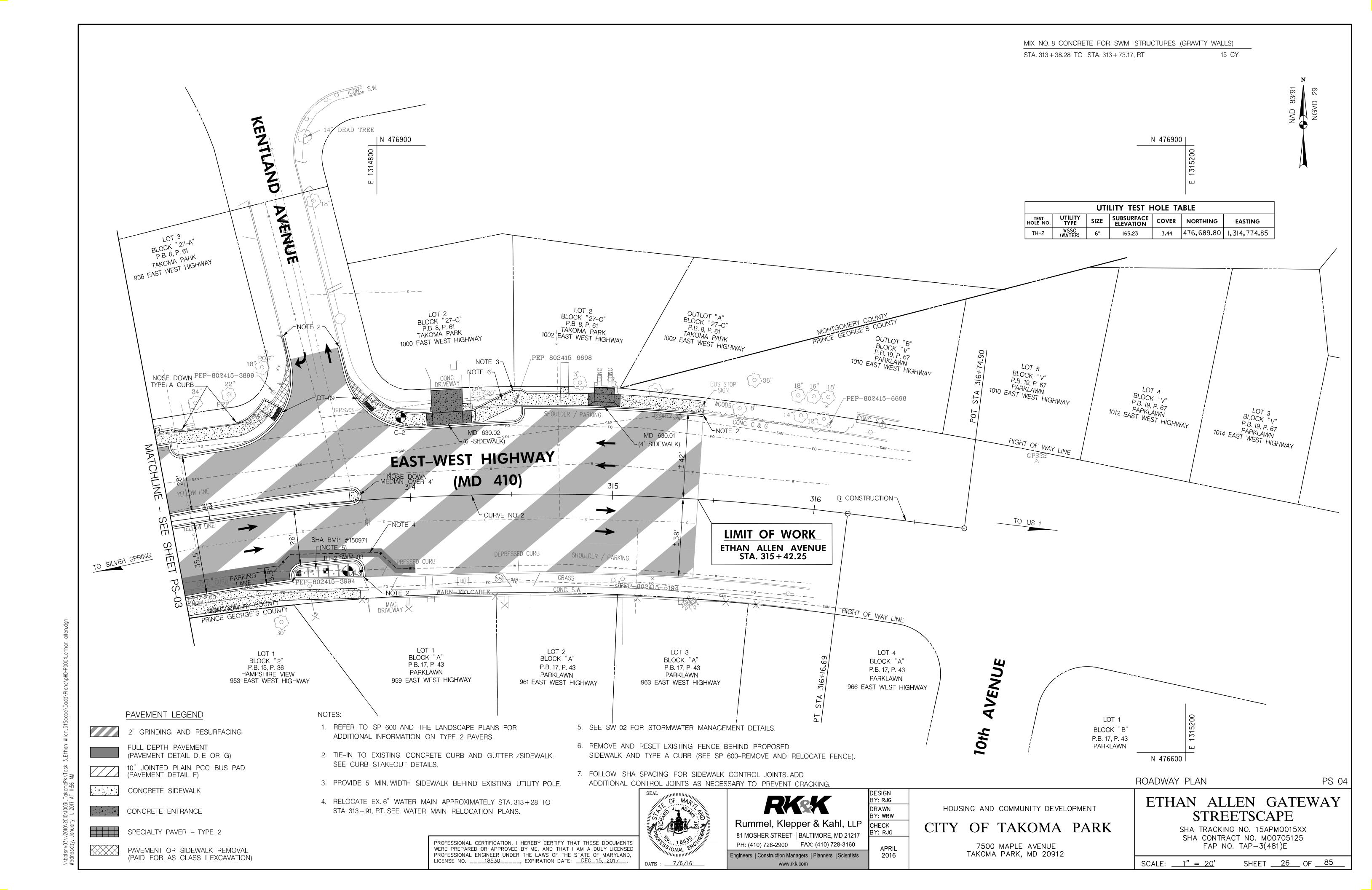
CHECK Y: RJG **APRIL** 2016

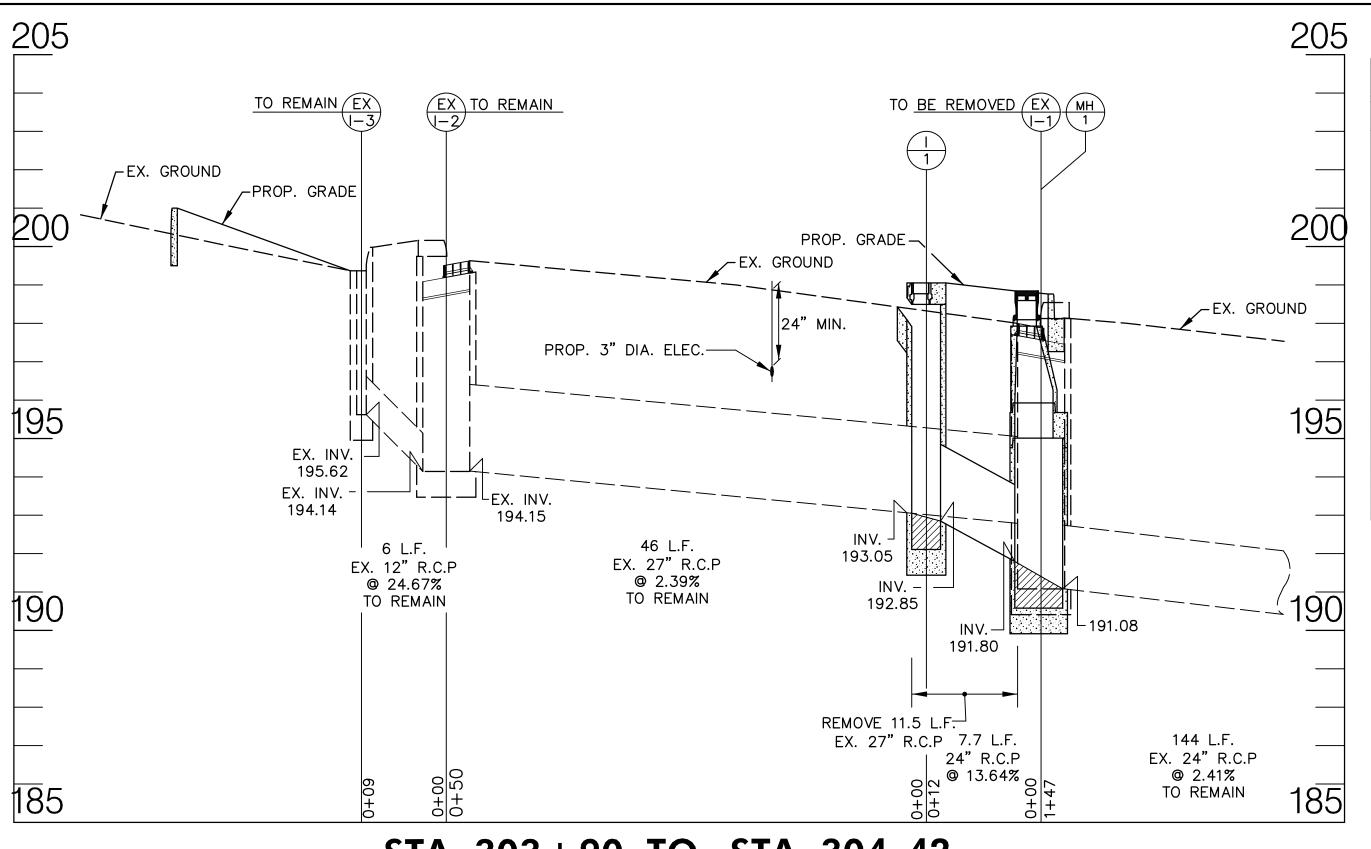
CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912 ETHAN ALLEN GATEWAY

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>25</u> OF <u>85</u> SCALE: 1" = 20'



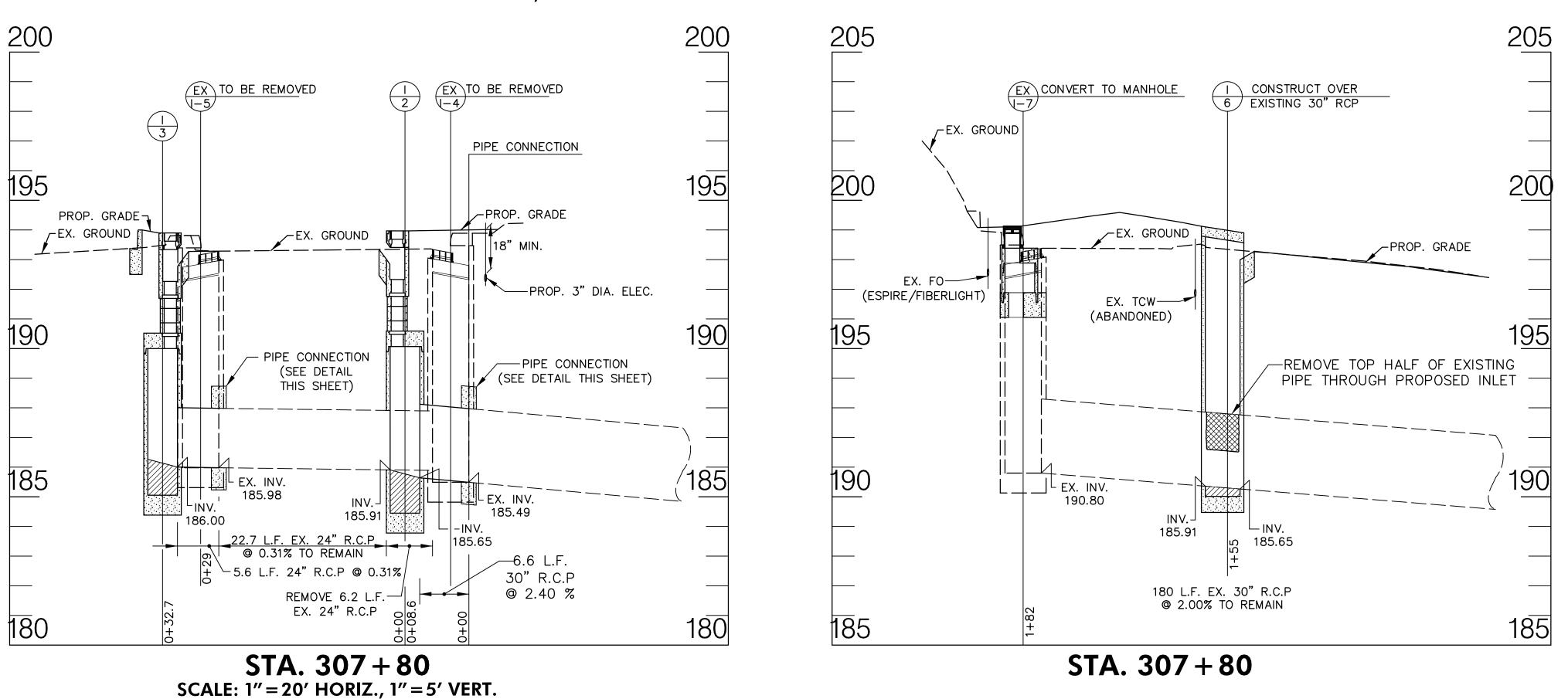


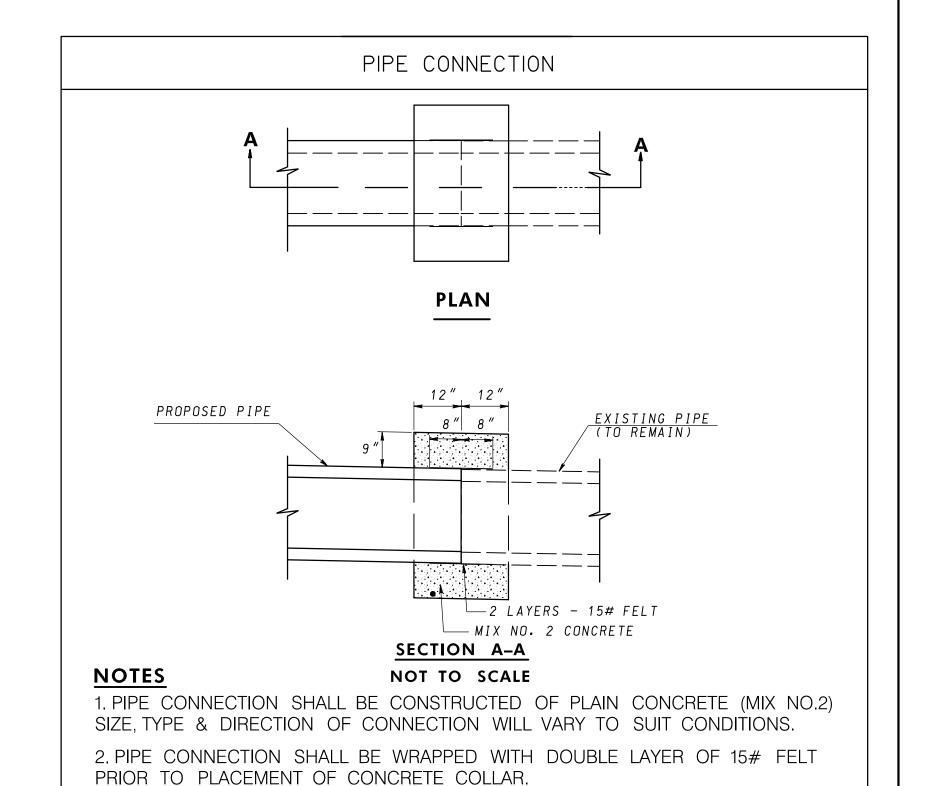
	DRAINAGE STRUCTURE SCHEDULE							
NO.	TYPE	LOCATION	T.C./T.G./T.S.	INV. OUT	BASELINE	REMARKS		
EX I-I	SPECIAL CLASS "H" COMBINATION INLET	STA. 304+41, I'RT	198.52	191.08	MD 410	TO BE REMOVED		
EX 1-2	SPECIAL CLASS "H" COMBINATION INLET	STA. 303+90, 37'RT	200.18	194.15	MD 410	TO REMAIN		
EX I-3	MODIFIED CLASS "I" INLET	STA. 303+89, 45'RT	199.37	195.62	MD 410	TO REMAIN		
EX 1-4	SPECIAL CLASS "H" COMBINATION INLET	STA. 307+80, 43' RT	193.90	185.49	MD 410	TO BE REMOVED		
EX I-5	SPECIAL CLASS "H" COMBINATION INLET	STA. 307+80, 9'RT	193.79	185.98	MD 410	TO BE REMOVED		
EX I-6	SPECIAL CLASS "H" COMBINATION INLET	STA. 305+56, 98'LT	194.00	UNKNOWN	MD 410	TO REMAIN		
EX I-7	SPECIAL CLASS "H" COMBINATION INLET	STA. 305+47, 85' RT	198.91	190.80	MD 410	CONVERT TO MANHOLE - PROP. T/S=199.10		
EX I-8	SINGLE WR INLET	STA. 302+22, 25' RT	201.61	198.51	MD 410	TO BE REMOVED		
EX MH-I	EXISTING MANHOLE - TYPE UNKNOWN	STA. 304+30, I'LT	198.65	196.38	MD 410	TO BE REMOVED		
1-1	SPECIAL A-IO INLET (SEE DETAIL)	STA. 304+29.00, 6.00' RT	199.03	192.85	MD 410	WIDTH = 3'-0", POURED CONCRETE WALLS		
1-2	MD 374.51 10' COG INLET	STA. 307+81, 35.00' RT	193.97	185.65	MD 410	PROVIDE 4' X 4' BASE UNIT		
1-3	MD 374.51 10' COG INLET	STA. 307+81, 8.00' RT	193.90	186.00	MD 410	PROVIDE 4' X 4' BASE UNIT		
1-4	MD 374.68 5' COG-COS OPENING'	STA. 302+89.40, 24.32' LT	199.63	198.53	MD 410	PROVIDE 2' WIDE TOP SLAB		
1-5	NOT USED							
I-6	SPECIAL A-20 INLET (SEE DETAIL)	STA. 305+48, 54.40′ RT	198.72	185.65	MD 410	WIDTH = 3'-0", POURED CONCRETE WALLS'		
MH-I	MD 384.03 60" DIAMETER PRECAST MANHOLE	STA. 304+41.06, 0.69' LT	198.84	191.08	MD 410			

OMIT GUTTER DEPRESSION. MAINTAIN NORMAL $\frac{1}{2}$ /FOOT GUTTER CROSS SLOPE. PROVIDE ALTERNATE TOP SLAB NOSING PER MD-374.55-OI. CONSTRUCT PROPOSED INLET OVER EXISTING 30" RCP.

PIPE SCHEDULE							
FROM	ТО	SIZE/TYPE	LENGTH	SLOPE	INT. INV.	DIS. INV.	
EX I-6	MH-I	EXISTING 24" RCP (TO REMAIN)	144'	2.421%	191.08	187.60	
MH-I	1-1	24" RCP	7.7′	13.64%	192.85	191.80	
1-1	EX I-2	EXISTING 27" RCP (TO REMAIN)	46′	2.39%	194.15	193.05	
EX I-2	EX 1-3	EXISTING 12" RCP (TO REMAIN)	6′	24.67%	195.62	194.14	
CONN.	I-2	PROP 30" RCP	6.6′	2.40%	185.91	185.65	
I-2	1-3	EX/PROP 24" RCP	28.3′	0.31%	186.00	185.91	
333	EX I-8	EXISTING 15" RCP	UNK	UNK	UNK	198.51	
EX I-6	EX 1-7	EXISTING 30" RCP (TO REMAIN)	180′	2.00%	190.80	187.20	
CONSTRU	CT PROP	OSED INLET I-6 OVER EXISTING I	PIPE.			-	

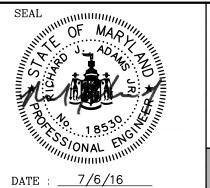
STA. 303 + 90 TO STA. 304-42 SCALE: 1'' = 20' HORIZ., 1'' = 5' VERT.





3. NEW PIPE STUB SHALL MATCH THE SIZE, TYPE, DIRECTION AND SLOPE

STORM DRAIN PROFILES, SCHEDULES & DETAILS PP-01



RKSK DRAWN Rummel, Klepper & Kahl, LLP CHECK 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160

BY: CLW HOUSING AND COMMUNITY DEVELOPMENT

TAKOMA PARK, MD 20912

CITY OF TAKOMA PARK

7500 MAPLE AVENUE

ETHAN ALLEN GATEWAY STREETSCAPE

> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>27</u> OF <u>85</u>

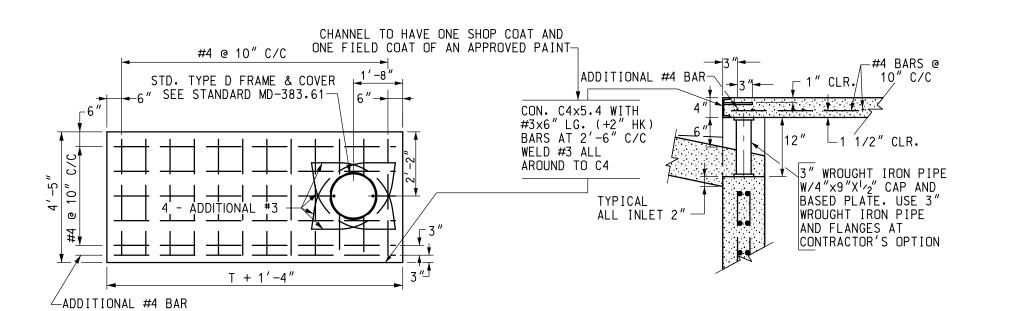
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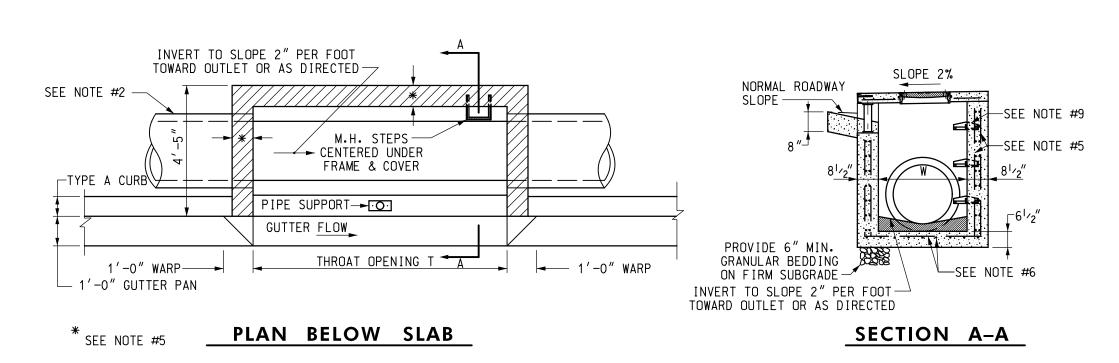
OF THE EXISTING PIPE AT THE PIPE CONNECTION.

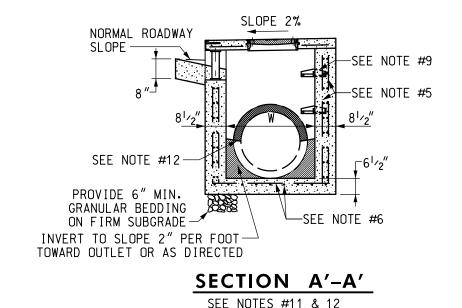
SCALE: AS SHOWN

SECTION THROUGH PIPE SUPPORT



DESIGNATION	′ T ′	NUMBER OF PIPE
		SUPPORTS
A-5	5′-0″	0
A-10	10'-0"	1
A-20	20'-0"	3
PIPE SUPPORTS SH	HALL BE SPA	ACED AT 5' C/C





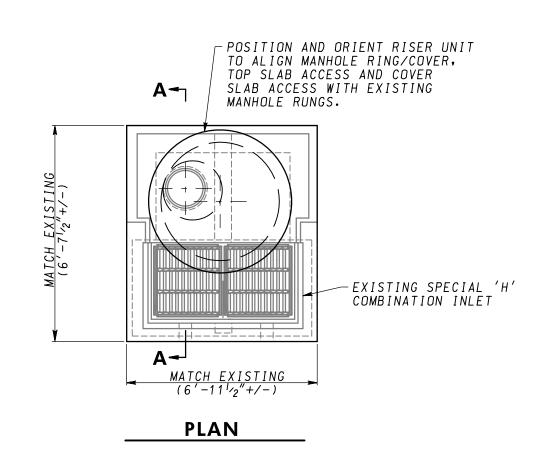
NOT TO SCALE

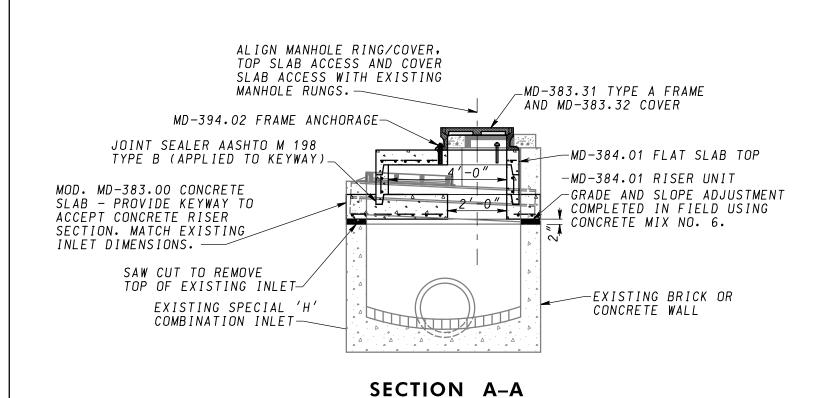
GENERAL NOTES

PLAN TOP SLAB

- 1. CONCRETE TO BE MIX NO. 2 (3,000 PSI).
- 2. SIZE, TYPE, AND DIRECTION OF INLET CONNECTION WILL VARY TO SUIT CONDITIONS.
- 3. SEE SHA LATEST SPECIFICATIONS FOR INLETS.
- 4. CURB OPENING SHOULD NOT ENCROACH ON CROSSWALK AREAS.
- 5. WHEN "A" IS LESS THAN 7'-0", WALL REINFORCEMENT SHALL BE ONE LAYER OF NO. 4 DEFORMED BARS @ 6" C/C, TWO WAYS, AND HAVE 3" COVER. WHEN "A" IS GREATER THAN 7'-0" AND LESS THAN THE 15'-0", WALL REINFORCEMENT TO BE TWO LAYERS OF NO. 4 DEFORMED BARS @ 6" C/C, TWO WAYS, ON INSIDE AND OUTSIDE OF WALL WITH 2" COVER.
- 6. BASE REINFORCEMENT SHALL BE ONE LAYER OF NO. 4 DEFORMED BARS @ 6" C/C , TWO WAYS, WITH 2" COVER FROM TOP OF BASE.
- 7. PLACE EXPANSION MATERIAL (SAME TYPE APPROVED FOR PAYMENT) AS INDICATED.
- 8. ANGLES AND ANCHOR BOLTS TO BE GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER WELDING.
- 9. LADDER RUNGS SHALL BE IN ACCORDANCE WITH STD MD 383.91 AND MD 383.92 OR AS DIRECTED BY THE ENGINEER.
- 10. FROM THE CURB LINE, INLET HAS BEEN DESIGNED FOR HS-25 LOADING ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR A MAXIMUM DEPTH OF 15'-0"
- 11. SUBSTITUTE SECTION A-A WITH A'-A' WHERE EXISTING PIPE ALIGNMENT AND GRADE THROUGH PROPOSED INLET WILL REMAIN UNCHANGED.
- 12. BREAK OUT TOP HALF OF EXISTING PIPE THROUGH PROPOSED INLET.
- 13. VERIFY CLEARANCE OF OVERHEAD UTILITIES, SUBMIT SHOP DRAWING FOR APPROVAL TO USE OPTIONAL CONSTRUCTION JOINT, IF NECESSARY,

EXISTING I-7 CONVERSION TO MANHOLE





NOT TO SCALE

GENERAL NOTES

- 1. MANHOLE MODIFICATION SHALL BE CONSTRUCTED OF
- REINFORCED CONCRETE (MIX NO. 6).
- 2. MAINTAIN/RECONNECT ANY EXISTING PAVEMENT UNDERDRAIN CONNECTIONS AS REQUIRED.

STORM DRAIN DETAILS

PP-02

DATE: <u>7/6/16</u>

RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160 Engineers | Construction Managers | Planners | Scientists

BY: CLW DRAWN BY: CLW CHECK BY: RJG

HOUSING AND COMMUNITY DEVELOPMENT CITY OF TAKOMA PARK

TAKOMA PARK, MD 20912

7500 MAPLE AVENUE

ETHAN ALLEN GATEWAY STREETSCAPE

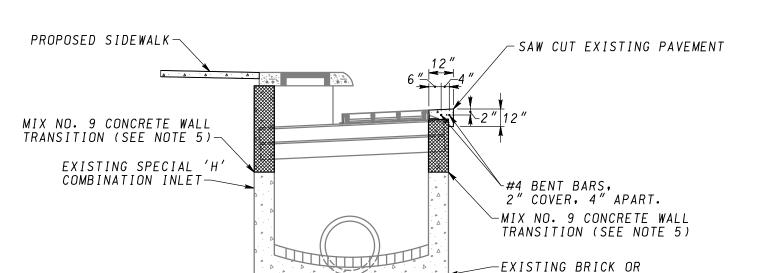
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APRIL 2016

SCALE: AS SHOWN



CONCRETE WALL

PLAN

SECTION A-A

NOT TO SCALE

GENERAL NOTES

- 1. FLARED CONCRETE ENCASEMENT FOR GRATE INLETS WILL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF MIX 9 CONCRETE FOR MISCELLANEOUS STRUCTURES. PAYMENT WILL BE FULL COMPENSATION FOR SAW CUTS, EXCAVATION, MIX 9 CONCRETE, REINFORCEMENT, REMOVING AND RESETTING OF FRAME & GRATE AND SUPPORT BEAM, AND FOR ALL MATERIAL, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.
- 2. ELEVATION OF EXISTING FRAME AND GRATE SHALL MATCH THE EXISTING PAVEMENT ELEVATION. IF NEEDED, ADJUST ELEVATION USING MIX NO. 9 CONCRETE PRIOR TO INSTALLING FLARED CONCRETE COLLAR.
- 3. SURFACE OF CONCRETE TO BE SLOPED TO MATCH PAVEMENT AND GUTTER CROSS SECTION.
- 4. PLACE 1/4" EXPANSION JOINT MATERIAL BETWEEN ENDS OF INLET CURB AND NEW CURB.
- 5. INLETS WITH EXISTING BRICK WALLS REQUIRE A CONCRETE TRANSITION PRIOR TO FLARED CONCRETE COLLAR INSTALLATION, LIMITS OF TRANSITION FROM EXISTING BRICK WALL TO BE DETERMINED BY THE ENGINEER.
- 6. FRAMES AND GRATES DAMAGED DURING FLARED CONCRETE COLLAR INSTALLATION SHALL BE REPLACED. SEE MD-379.05-01.
- 7. INLET SLABS THAT ARE FOUND TO BE DAMAGED AND IN NEED OF REPLACEMENT, AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION, SHALL BE REPLACED TO MATCH EXISTING.

DATE : <u>7/6/16</u>

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DESIGN BY: CLW DRAWN BY: CLW CHECK BY: RJG

APRIL

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

HOUSING AND COMMUNITY DEVELOPMENT

STORM DRAIN DETAILS

PP-03

ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: AS SHOWN

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2016

SHA BMP #150970

LEGEND

SWM-01A

SWM SOIL BORING

LANDSCAPED AREA – SEE LANDSCAPE PLANS.

4" - 7" ROUNDED RIVER STONE (SEE SP 316)

2"-3" ROUNDED RIVER STONE & HIGH FLOW TREATMENT MEDIA (HFTM) (SEE SP 316)

FULL DEPTH PAVEMENT

CONCRETE ENTRANCE

OBSERVATION WELL

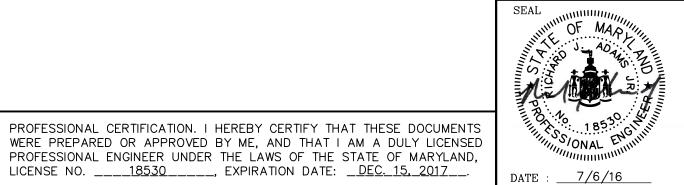
CONCRETE SIDEWALK

PAVEMENT OR SIDEWALK REMOVAL (PAID FOR AS CLASS I EXCAVATION)

NOTES:

1. SEE SW-03 AND SW-04 FOR SECTION DETAILS.

2. THE ROCKS FOR ROUNDED RIVER STONE MAY VARY IN COLOR, BUT SHALL BE LIMITED TO GRAY OR BROWN TONES. WHITE COLORED ROCKS WILL NOT BE ACCEPTABLE. SAMPLES OF THE STONE TAKEN DIRECTLY FOR THE SOURCE SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING ANY STONE MATERIAL. IF THE STONE IS FOUND TO BE UNSATISFACTORY, THE CONTRACTOR SHALL PROVIDE SAMPLES FOR ALTERNATIVE SOURCES UNTIL THE MATERIAL IS FOUND TO BE ACCEPTABLE TO THE ENGINEER.



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DRAWN BY: CLW CHECK 3Y: RJG APRIL Engineers | Construction Managers | Planners | Scientists

DESIGN BY: CLW

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

As-Built Inspection Tabulations/Checklist for BMP Number: SHA BMP #150970 Accepted by City of Takoma Park:

MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE				
Excavated to proper size and location							
Underdrain system and/ or observation well installed according to plans							
Placement of geotextiles and filter fabric according to plans							
Placement of gravel diaphragm							
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan							
Composition of Filter Media							

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10 The As-Built Inspector is to verify the construction activities while activity is performed as listed above.

As-Built Inspection Tabulations/Checkli	SHA BMP #150970	
Accepted by City of Takoma:		
Name	 Date	

MICROBIORETENTION TABULATIONS					
ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	24 SF				
Forebay Volume	9.6 CF				
Filter Bed Area (L x W)	39' x 8.33'				
Filter Bed Surface Elevation	198.00				
Filter Inlet Pipe Size	5' COG				
Filter Inlet Pipe Invert	198.53				
Outlet Pipe Size	Twin 4" PVC				
Outlet Pipe Elevation	198.50				
Observation well installed according to plans	N/A				

STORMWATER MANAGEMENT AS-BUILT CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the plans included under the Maryland Department of the Environment Approval, Number __ - SF -__ except as noted in green on the "AS BUILT" drawings. Furthermore, the green-noted exceptions do not adversely affect the design and/or the intended performance of the facility (facilities).

SHA BMP #150970

Facility Identification (Identify Each Facility Individually by BMP Number)

Name (Printed)

Signature

Maryland Registration Number

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO THE CITY OF TAKOMA PARK ALONG WITH THIS CERTIFICATION.

STORMWATER MANAGEMENT PLAN

ETHAN ALLEN GATEWAY

SW-01

STREETSCAPE SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>29</u> OF <u>85</u>

SCALE: 1" = 5'

SHA BMP #150971

LEGEND

SWM SOIL BORING

4" - 7" ROUNDED RIVER STONE (SEE SP 316)

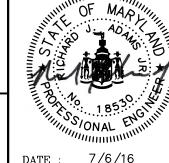
FULL DEPTH PAVEMENT

CONCRETE ENTRANCE

PAVEMENT OR SIDEWALK REMOVAL

- 1. SEE SW-03 AND SW-04 FOR SECTION DETAILS.
- 2. THE ROCKS FOR ROUNDED RIVER STONE MAY VARY IN COLOR, BUT SHALL BE LIMITED TO GRAY OR BROWN TONES. WHITE COLORED ROCKS WILL NOT BE ACCEPTABLE. SAMPLES OF THE STONE TAKEN DIRECTLY FOR THE SOURCE SHALL BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING ANY STONE MATERIAL. IF THE STONE IS FOUND TO BE UNSATISFACTORY, THE CONTRACTOR SHALL PROVIDE SAMPLES FOR ALTERNATIVE SOURCES UNTIL THE MATERIAL IS FOUND TO BE ACCEPTABLE TO THE ENGINEER.
- 3. EX. 6" WATER MAIN APPROXIMATELY STA. 313 + 28 TO STA. 313 + 91, RT. TO BE RELOCATED UNDER THIS CONTRACT. REMOVE EX. 6" WATER MAIN WITHIN LIMITS OF BMP #150971. CAP OR PLUG ALL OPEN ENDS OF WATER MAIN PIPE TO BE ABANDONED IN PLACE.

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530______, EXPIRATION DATE: _DEC. 15, 2017___.



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DESIGN BY: CLW DRAWN BY: CLW CHECK BY: RJG

HOUSING AND COMMUNITY DEVELOPMENT CITY OF TAKOMA PARK

As-Built Inspection Tabulations/Checklist for BMP Number: SHA BMP #150971 Accepted by City of Takoma Park:

MIRCORIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DAT
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
,			

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10 The As-Built Inspector is to verify the construction activities while activity is performed as listed above.

As-Built Inspection Tabulations/Checklist for BMP Number:		SHA BMP #150971
Accepted by City of Takoma Park:		
Name	 Date	

MICROBIORETENTION TABULATIONS

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	17 SF				
Forebay Volume	6.8CF				
Filter Bed Area (L x W)	29.5' x 6.7' (Ave)				
Filter Bed Surface Elevation	VARIES				
Filter Inlet Pipe Size	4" PVC				
Filter Inlet Pipe Invert In	169.77				
Filter Inlet Pipe Invert Out	169.41				
Outlet Pipe Size	Twin 4" PVC				
Outlet Pipe Elevation	169.06				
Observation well installed according to plans	N/A				

STORMWATER MANAGEMENT AS-BUILT CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the plans included under the Maryland Department of the Environment Approval, Number __ - SF -__ except as noted in green on the "AS BUILT" drawings. Furthermore, the green-noted exceptions do not adversely affect the design and/or the intended performance of the facility (facilities).

SHA BMP #150971

Facility Identification (Identify Each Facility Individually by BMP Number)

Name (Printed)

Maryland Registration Number

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

Signature

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO THE CITY OF TAKOMA PARK ALONG WITH THIS CERTIFICATION.

STORMWATER MANAGEMENT PLAN

ETHAN ALLEN GATEWAY STREETSCAPE

SW-02

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>30</u> OF <u>85</u> SCALE: 1" = 5'

DATE: <u>7/6/16</u>

APRIL

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

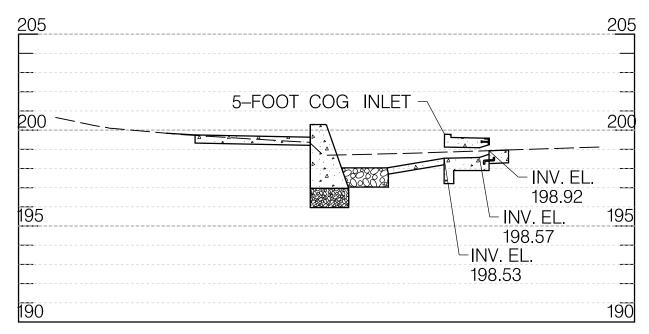
OBSERVATION WELL

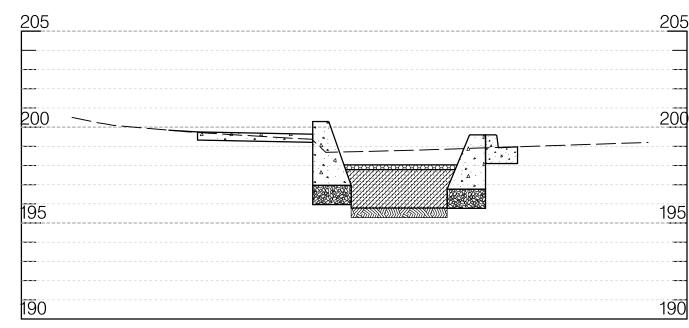
LANDSCAPED AREA – SEE LANDSCAPE PLANS.

2"-3" ROUNDED RIVER STONE & HIGH FLOW TREATMENT MEDIA (HFTM) (SEE SP 316)

CONCRETE SIDEWALK

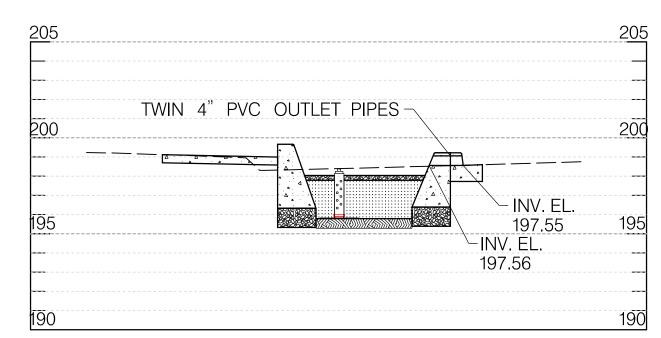
(PAID FOR AS CLASS I EXCAVATION)





SECTION B-B

SECTION C-C



SECTION D-D

SHA BMP #150970 (STA. 303 + 00, LT)

NOTES:

1. SEE SHEET SW-01 FOR SWM PLAN AND SW-04 FOR DETAILS.

LEGEND

SURFACE COVER /PLANTINGS (SEE LANDSCAPE PLANS)

2" - 3" ROUNDED RIVER STONE

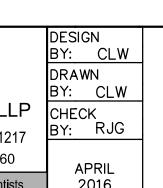
RAIN GARDEN SOIL MIX (RGSM)

4" - 7" ROUNDED RIVER STONE

ROTOTILLED SUBGRADE

DATE : <u>7/6/16</u>





HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE

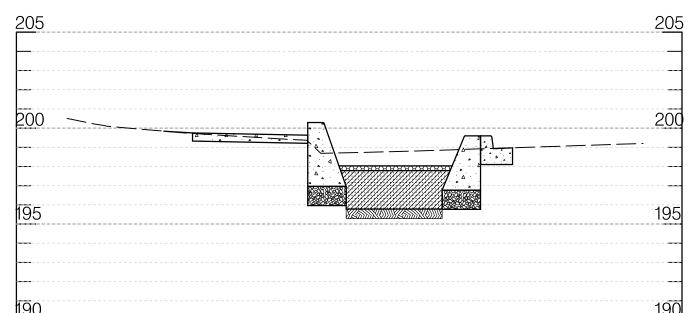
ETHAN ALLEN GATEWAY STREETSCAPE

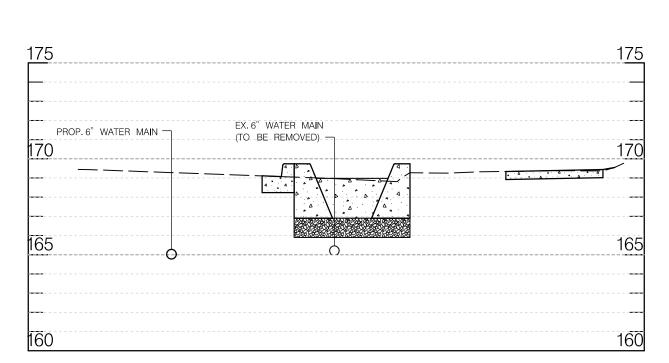
SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SW-03

SCALE: <u>1"=5'</u>

SECTION A-A





SINGLE 4" PVC INLET PIPE

169.42 -

EX. 6" WATER MAIN (TO BE REMOVED) —

SECTION F-F

PROP. 6" WATER MAIN -

SECTION H-H

SHA BMP #150971 (STA.313 + 50, RT)

NOTES:

- 1. SEE SHEET SW-02 FOR SWM PLAN AND SW-04 FOR DETAILS.
- 2. EX. 6" WATER MAIN APPROXIMATELY STA. 313 + 28 TO STA. 313 + 91, RT. TO BE RELOCATED UNDER THIS CONTRACT. REMOVE EX. 6" WATER MAIN WITHIN LIMITS OF BMP #150971. CAP OR PLUG ALL OPEN ENDS OF WATER MAIN PIPE TO BE ABANDONED IN PLACE.

SURFACE COVER /PLANTINGS

RIVER STONE
TWIN 4" PVC OUTLET PIPES 7

EX. 6" WATER MAIN ---(TO BE REMOVED)

SECTION G-G

-(SEE_LANDSCAPE_PLANS)

2" – 3" ROUNDED

SECTION E-E

4" - 7" ROUNDED

G

HIGH FLOW TREATMENT MEDIA (HFTM)

(SEE LANDSCAPE PLANS)

GRADED AGGREGATE BASE

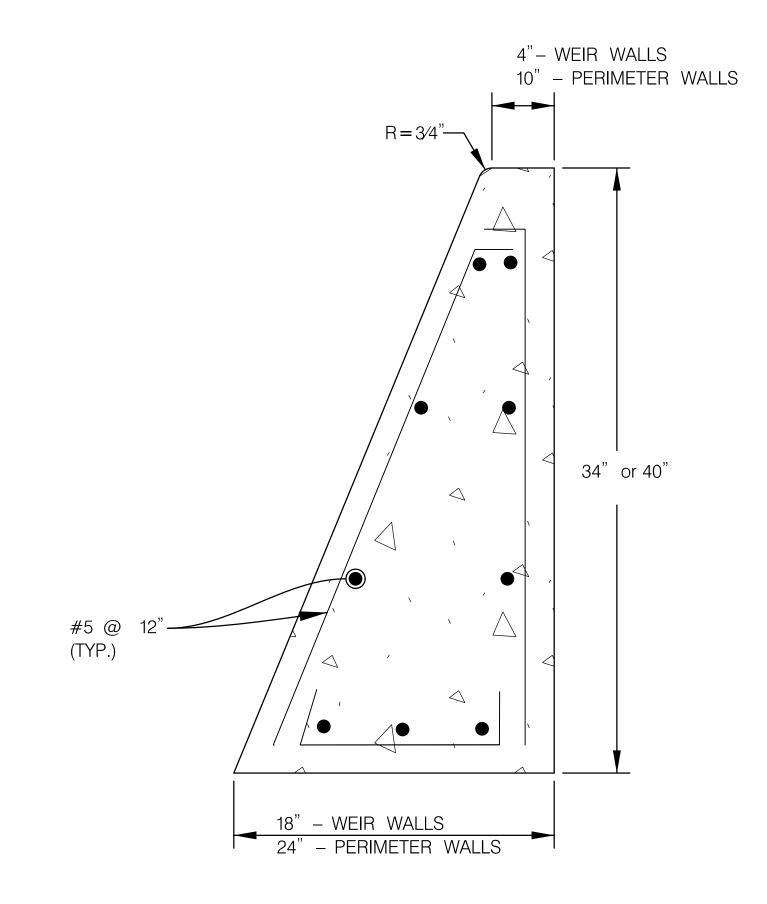
2016

TAKOMA PARK, MD 20912

STORMWATER MANAGEMENT DETAILS

SHEET <u>31</u> OF <u>85</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530______, EXPIRATION DATE: __DEC. 15. 2017___.



MICRO-BIORETENTION SECTION

NOT TO SCALE

CONCRETE GRAVITY WALL

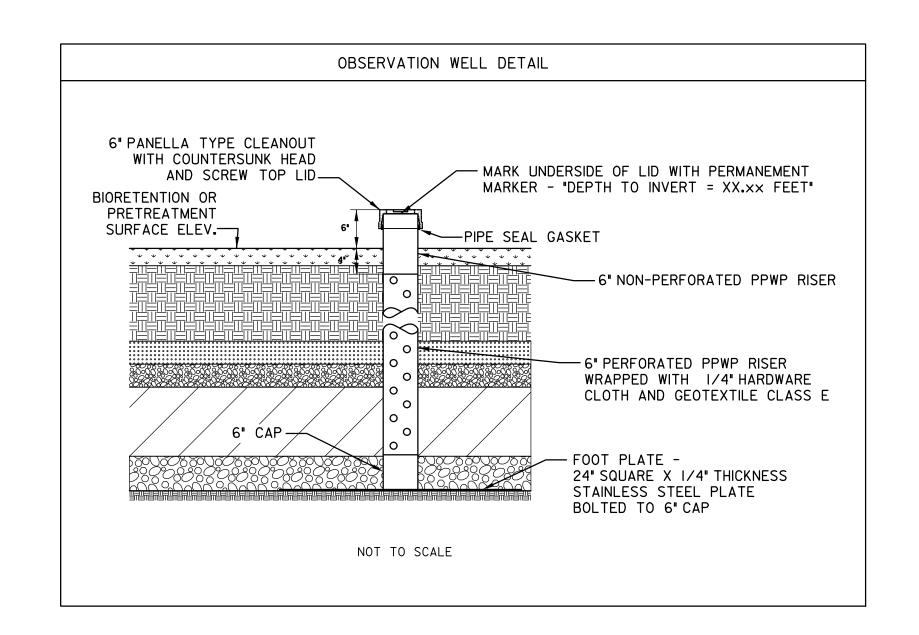
NOT TO SCALE

GENERAL NOTES:

1. ALL STRUCTURE CONCRETE SHALL BE fc = 4.000 PSI.

2. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60 (fy = 60.0 KSI). MINIMUM COVER FOR ANY BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED, WITH THE EXCEPTION OF BARS AT THE BOTTOM AND SIDE OF ALL FOOTINGS WHICH SHALL HAVE 3 INCHES MINIMUM COVER. ALL BAR LAP SPLICES SHALL BE 9 INCHES UNLESS OTHERWISE NOTED.

3. EXPANSION JOINTS SHALL BE 1/2" PREFORMED NON-EXTRUDING JOINT FILLER AND CONFORM TO AASHTO M 153.



STORMWATER MANAGEMENT DETAILS

SW-04

DATE: <u>7/6/16</u>

RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160 Engineers | Construction Managers | Planners | Scientists

DESIGN BY: CLW DRAWN BY: CLW CHECK **APRIL**

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

ETHAN ALLEN GATEWAY STREETSCAPE

> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SHEET <u>32</u> OF <u>85</u> SCALE: <u>NTS</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530 _____, EXPIRATION DATE: __DEC. 15, 2017 ____

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7500 MAPLE AVENUE TAKOMA PARK, MD 20912 2016

1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTYOEIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.

THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS: 2.1. AT THE REQUIRED PRE-CONSTRUCTION MEETING. 2.2. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY. 2.3. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED

2.4. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).

2.5. PRIOR TO FINAL ACCEPTANCE.

THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.

INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS

THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.

THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLIED

6.1. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND 6.2. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

ALL OTHER DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

7. THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THE THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.

PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL, USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOP DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15. THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR

INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY. 10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY

11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN THREE (3) CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.

SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS

TIME PERIOD AS WELL. NO PERMANENT CUT OF FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.

THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECT BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.

FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THEN END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.

SEDIMENT TRAPS OR BASINS ARE NO PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION, NO BUILDING MAY BE CONSTRUCTION WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.

17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT. 18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED

19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND. 20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION

AND SEDIMENT CONTROL. 21. SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE WET STORAGE DEPTH

FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR. 22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A

FLOODPLAIN.

23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.

24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS

UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. 25. OFF SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.

26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED: 26.1. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR 26.2. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR

26.3. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.

REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.

27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF

DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.

28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREA WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS."

OWNER'S / DEVELOPER'S CERTIFICATION

/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE ERKIN OZBERK PROJECT MANAGER CITY OF TAKOMA PARK (301) 891-7213 PRINTED NAME AND TITLE

DESIGN CERTIFICATION

HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN DESIGN

PRINTED NAME AND TITLE

MARYLAND P.E. #18530 REGISTRATION NUMBER

CERTIFICATION OF THE QUANTITIES

HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 2,150 CUBIC YARDS OF EXCAVATION, 1,890 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THE PLANS HAS BEEN DETERMINED TO BE

RICHARD J. ADAMS, JR., P.E

PRINTED NAME AND TITLE

MARYLAND P.E. #18530 REGISTRATION NUMBER

MISS UTILITY

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

TREE CANOPY REQUIREMENTS TABLE To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Managemen plan set for all projects.

Exempt: Yes X No I If exempt under Section 55-5 of the Code, please check the applicable exemption category below.

Total Property Area	Total Disturbed Area	
square feet	square feet	
Shade Trees Required	Shade Trees Proposed to be Planted	
Fee in Lieu (Trees Required – Trees Planted) x \$250	\$	

Area (sq. of Disturb	ft.) of the Limits pance	Number of Shade Trees Required		
FROM	<u>TO</u>			
1	6,000	3		
6,001	8,000	6		
8,001	12,000	9		
12,001	14,000	12		
14,001	40,000	15		
		A CONTRACTOR OF THE CONTRACTOR		

If the square footage of the limits of disturbance is more than 40,000, then the number of shade trees required must be calculated using the following formula:

(Number of Square Feet in Limits of Disturbance $\div 40,000$) × 15

EXEMPTION CATEGORIES: 55-5(a) any activity that is subject to Article II of

55-5(b) any commercial logging or timber narvesting operation with an approved exemption from necessary permits: Article II of Chapter 22A; 55-5(f) any activity conducted by the County Parks

55-5(g) routine or emergency maintenance of an existing stormwater management facility, including an existing access road, if the person performing the

aintenance has obtained all required permits; 55-5(h) any stream restoration project if the person performing the work has obtained all 55-5(i) cutting or clearing any tree to comply with applicable provisions of any federal, state, or local law joverning safety of dams;

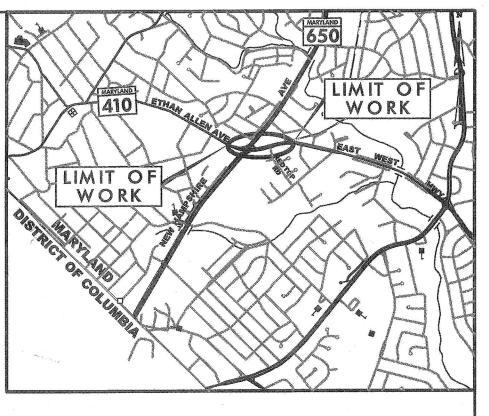
X OTHER: Specify per Section 55-5 of the Code.

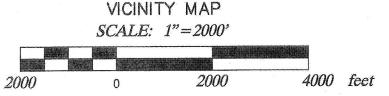
Project is located in City of Takoma Park

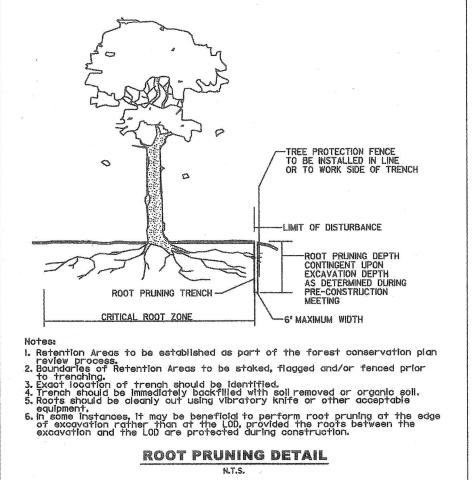
RELATED REQUIRED PERMITS To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects. IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT REQD EXPIRATION TYPE OF PERMIT NOT PERMIT # WORK RESTRICTION DATES REQD DATE MCDPS X Floodplain District VATERWAYS/WETLAND(S X Corps of Engineers X MDE MDE Water Qualit X Certification X MDE Dam Safety **DNR Roadside Tree Care Approval Date** 2015-1152 09/14/2015 **DPS Roadside Tree Approval Date** Protection Plan N.P.D.E.S. DATE FILED NOTICE OF INTENT 10/20/2015

X

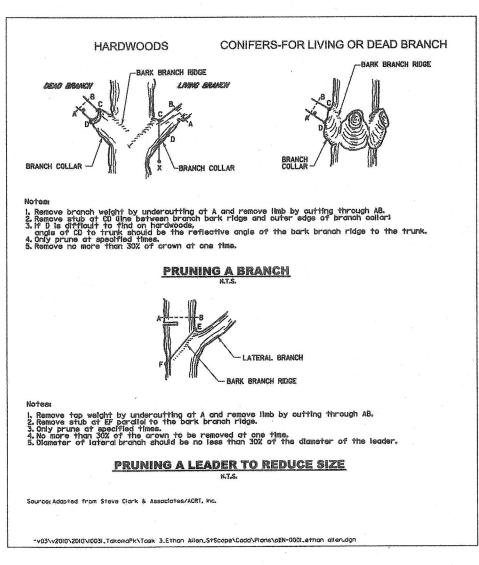
OTHERS (Please List):





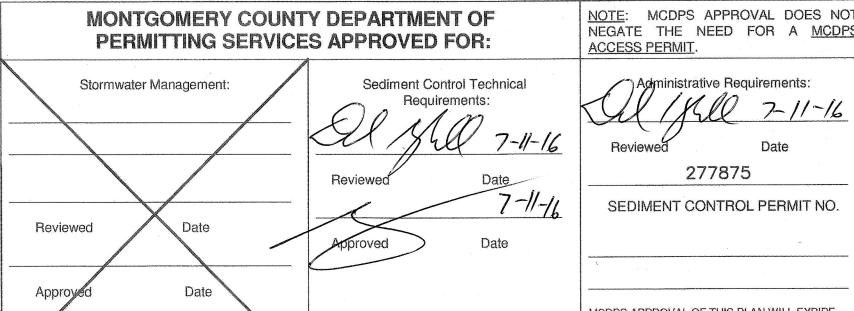


Source: Adapted from Steve Clark & Associates/ACRT, Inc., and Forest Conservation Manual, 1991 -v03\v2010\2010\1003I_TakomaPk\Task 3_Ethan Allen_StSaape\Cadd\Plans\pEN-000I_et†an allen.dgn



SEDIMENT AND EROSION CONTROL NOTES

EN-01 SC #1 OF #16



NEGATE THE NEED FOR A MCDPS ACCESS PERMIT. aministrative Requirements:

277875

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.

81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160

ngineers | Construction Managers | Planners | Scientists www.rkk.com

DESIGN BY: CLW DRAWN BY: CLW CHECK Y: RJG

DATE: 12/15/2017.

CITY OF TAKOMA PARK 7500 MAPLE AVENUE

HOUSING AND COMMUNITY DEVELOPMENT

TAKOMA PARK, MD 20912

SM FILE#

ETHAN ALLEN GATEWAY **STREETSCAPE**

STA. 301+27.19 TO STA. 315+42.25 STREETS ONLY

SCALE: AS SHOWN

RKSK Rummel, Klepper & Kahl, LLP

2016

I HEREBY CERTIFY THAT THESE

DOCUMENTS WERE PREPARED OR

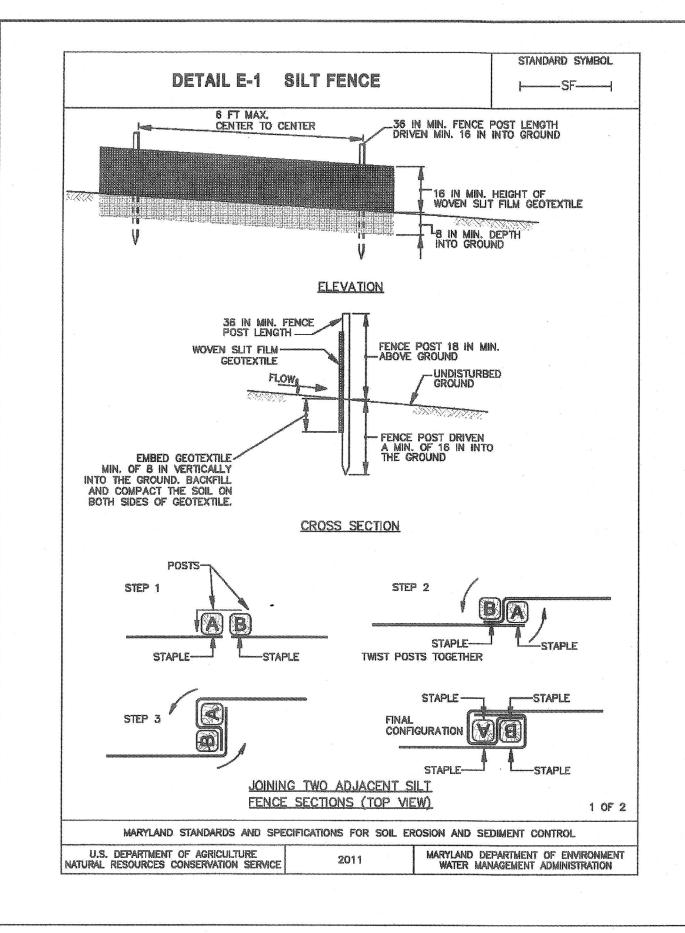
LICENSED PROFESSIONAL ENGINEER

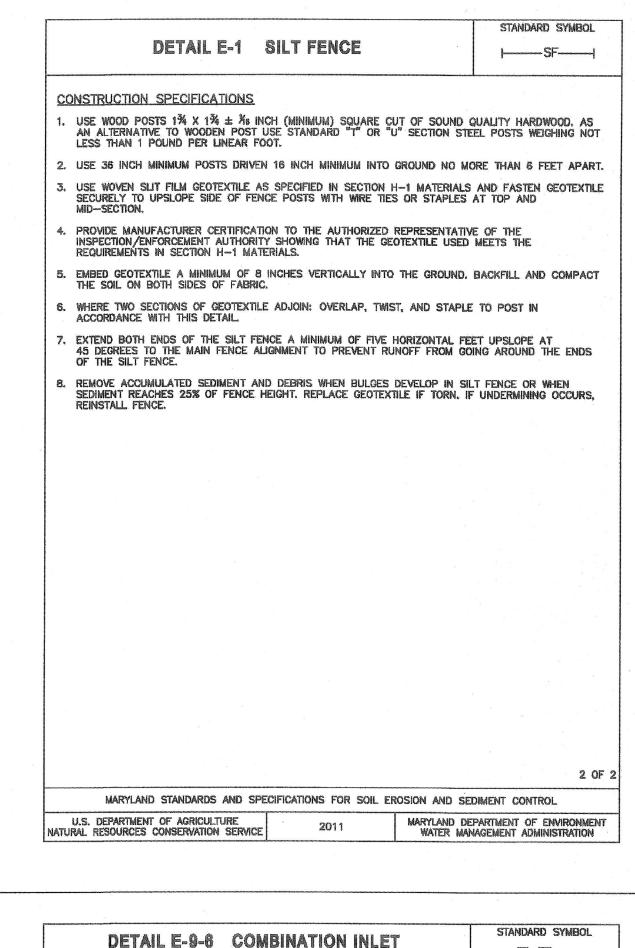
UNDER THE LAWS OF THE STATE OF

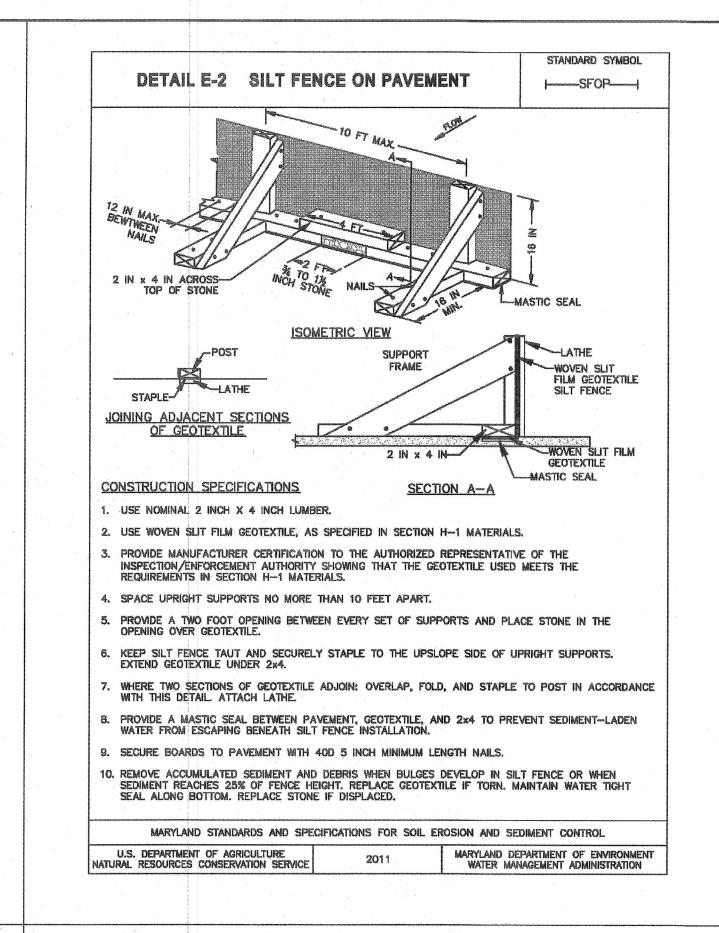
APPROVED BY ME, AND THAT I AM A DULY

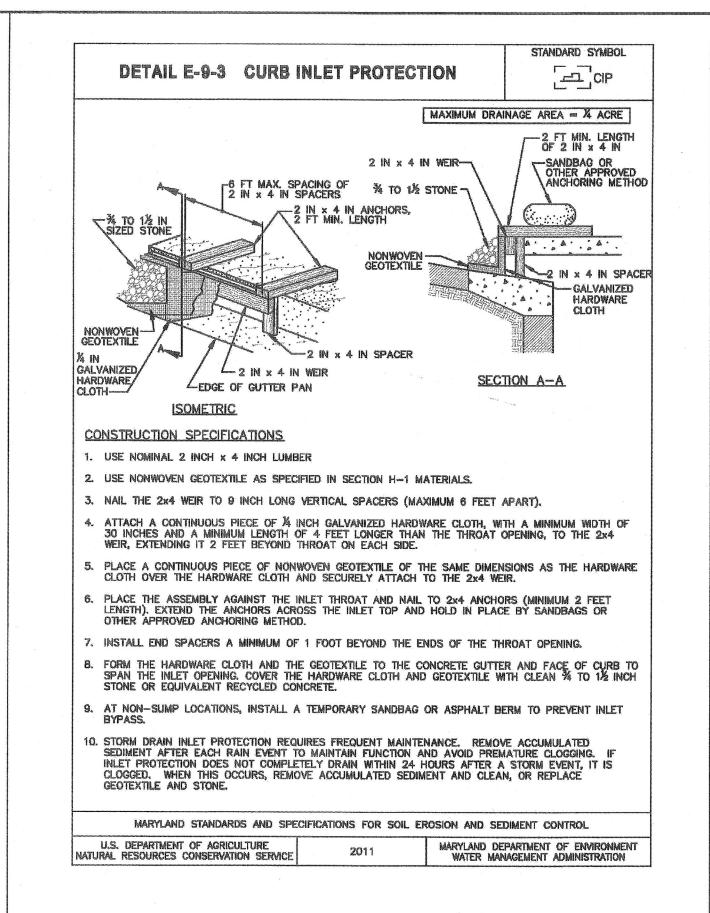
MARYLAND, LICENSE NO. 18530, EXPIRATION

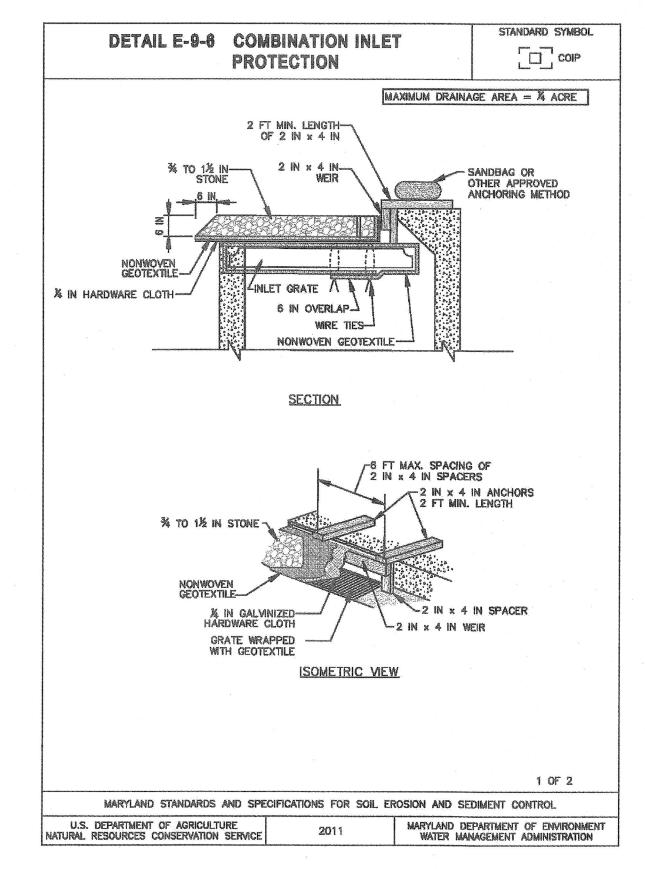
SHEET <u>33</u> OF <u>85</u>

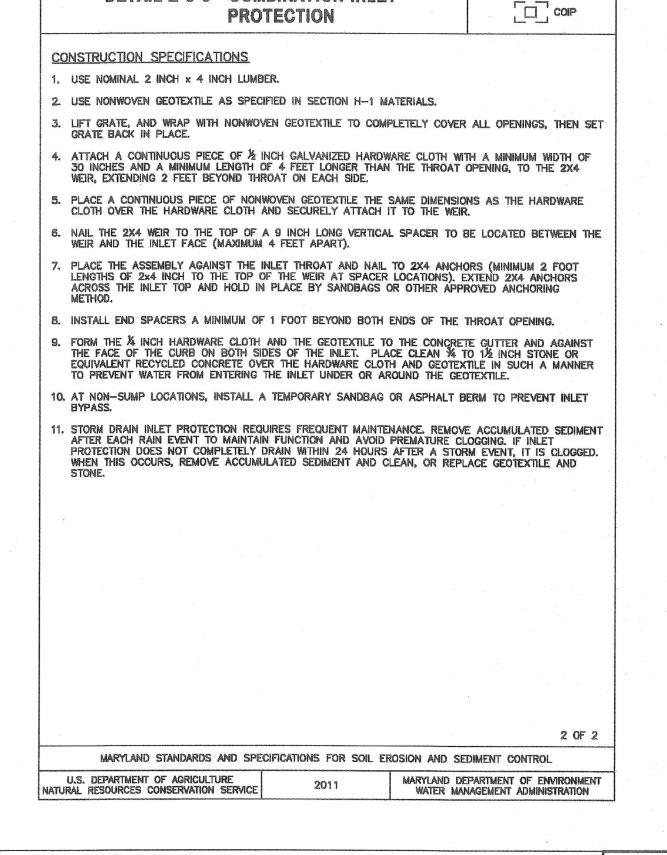


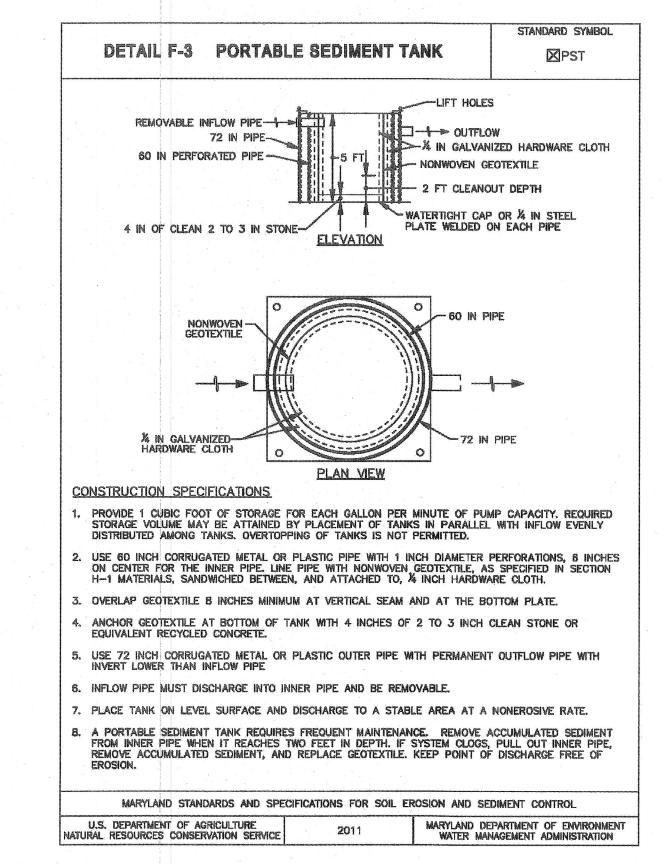


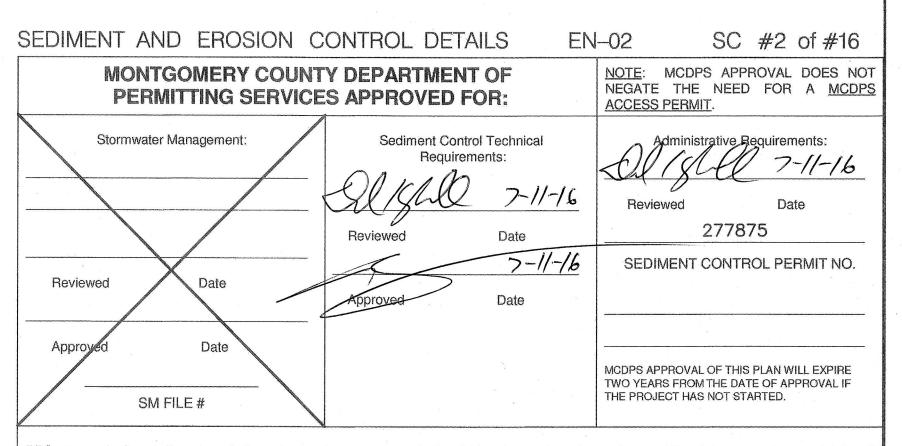












DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.





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BY: CLW DRAWN BY: CLW CHECK 3Y: RJG

2016

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

TAKOMA PARK, MD 20912

7500 MAPLE AVENUE

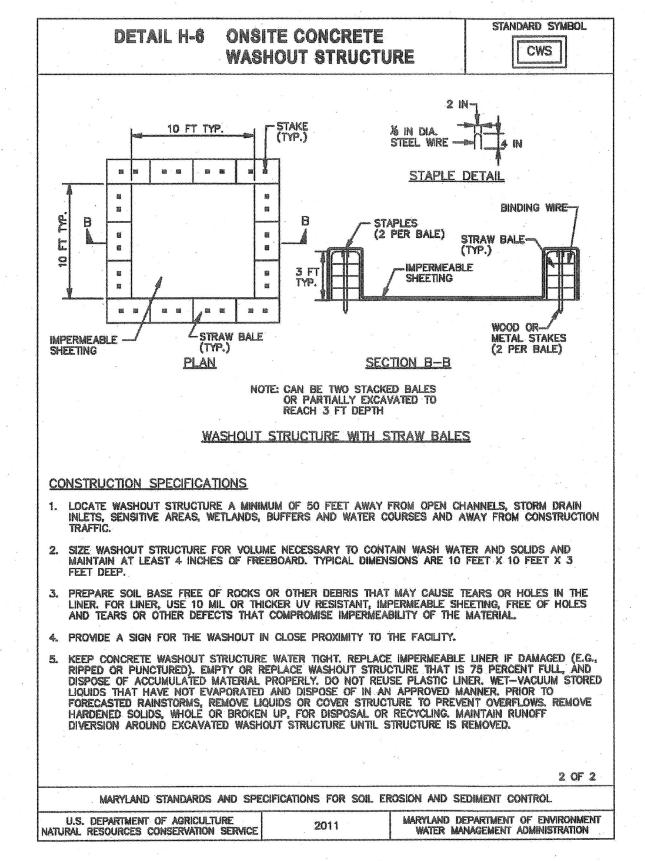
ETHAN ALLEN GATEWAY STREETSCAPE

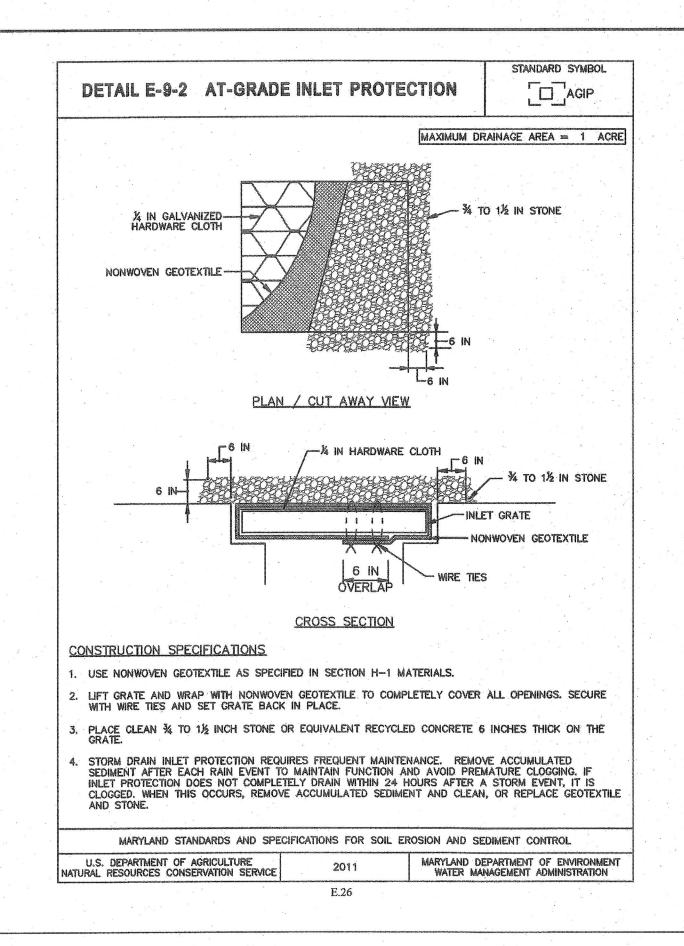
> STA. 301+27.19 TO STA. 315+42.25 STREETS ONLY

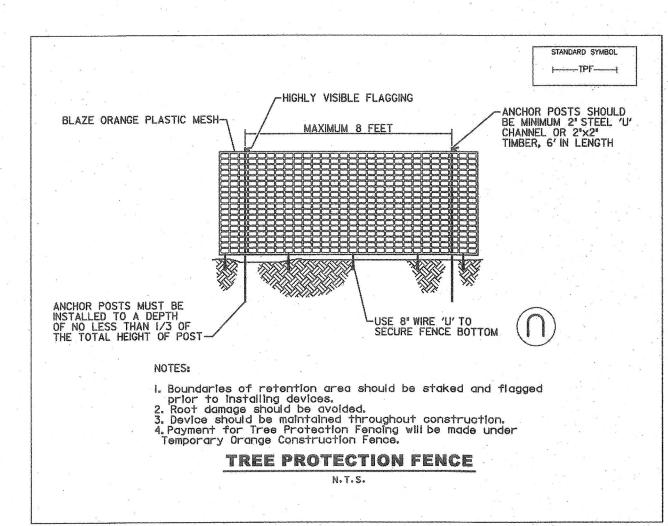
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. <u>18530</u>, EXPIRATION DATE: <u>DEC. 15, 2017</u>

SCALE: AS SHOWN

SHEET <u>34</u> OF <u>85</u>







SEQUENCE OF CONSTRUCTION PRIOR TO CLEARING TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICE (MCDPS) SEDIMENT CONTROL INSPECTOR (240) 777-0311 (48 HOURS NOTICE), THE OWNER'S REPRESENTATIVE, THE CITY OF TAKOMA PARK INSPECTOR (48 HOURS NOTICE). AND THE SITE ENGINEER. IN ORDER FOR THE MEETING TO OCCUR. THE APPLICANT MUST PROVIDE ONE PAPER SET OF APPROVED SEDIMENT CONTROL PLANS TO THE MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRECONSTRUCTION MEETING. IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RESCHEDULED PRIOR TO COMMENCING ANY WORK.

SEQUENCE OF CONSTRUCTION (CONT)

- 2. THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED SHALL BE INSTALLED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
- 3. CLEAR AND GRADE FOR INSTALLATION OF SEDIMENT CONTROL MEASURES.
- 4. INSTALL SEDIMENT CONTROL DEVICES AS PER PHASE.
- 5. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED. THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR CLEARING.

STAGE 1 CONSTRUCTION:

PHASE 1A 1-1. CLEAR AND GRADE FOR INSTALLATION OF PHASE 1A SEDIMENT CONTROL DEVICES

1-2. INSTALL INLET PROTECTION AT EX I-1 AND EX I-5.

1-3. ONCE THE PHASE 1A SEDIMENT CONTROL DEVICES ARE INSTALLED. THE PERMITTEE MUST OBTAIN WRITTEN APPROIVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING. GRUBBING OR GRADING

1-4. COMMENCE DEMOLITION OF EXISTING MEDIAN WITHIN THE LIMITS OF PHASE 1A CONSTRUCTION.

1-5. AS WORK PROGRESSES, REPLACE EX I-1 WITH I-1 AND MH-1. PROVIDE INLET PROTECTION AT I-1. REPLACE EX I-2 WITH I-3. PROVIDE INLET PROTECTION AT 1-3.

1-6. CONTINUE CONSTRUCTION OF RELOCATED MEDIAN AND FULL DEPTH PAVEMENT CONSTRUCTION AS SHOWN.

1-7. AT THE CONCLUSION OF PHASE 1A, PROVIDE TEMPORARY VEGETATED STABILIZATION TO ALL LANDSCAPING AREAS.

1-8. WITH PRIOR WRITTEN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, REMAINING PHASE 1A SEDIMENT CONTROL MEASURES MAY BE REMOVED.

- 1-9. CLEAR AND GRADE FOR INSTALLATION OF PHASE 1B SEDIMENT CONTROL DEVIICES
- 1-10. PHASE 1B WORK WILL PROCEED WITHOUT ACTIVE SEDIMENT CONTROL DEVICES. LIMIT TO WORK AREAS THAT CAN BE STABILIZED AT THE END OF EACH DAY.
- 1-11. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FOR THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING. GRUBBING OR GRADING.

1-12. COMMENCE DEMOLITION OF EXISTING ISLANDS AND CURB/GUTTER, SIDEWALKS WITHIN THE LIMITS OF PHASE 1B CONSTRUCTION.

1-13. CONSTRUCT MODIFIED ISLAND, ROADWAY WIDENING AND WATER MAIN RELOCATION AS SHOWN. PROVIDE TEMPORARY PLUG FITTINGS FOR INFLOW AND OUTFLOW PIPE AT BMP#150971 (STA. 313+50, RT).

1-14. AT THE CONCLUSION OF PHASE 1B, PROVIDE TEMPORARY VEGETATED STABILIZATION TO ALL LANDSCAPING AREAS.

1-15. WITH PRIOR WRITTEN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, REMAINING PHASE 1B SEDIMENT CONTROL MEASURES MAY BE REMOVED.

PHASE 1C

- 1-16. CLEAR AND GRADE FOR INSTALLATION OF PHASE 1C SEDIMENT CONTROL DEVICES
- 1-17. PHASE 10 WORK WILL PROCEED WITHOUT ACTIVE SEDIMENT CONTROL DEVICES. LIMIT TO WORK AREAS THAT CAN BE STABILIZED AT THE END OF EACH DAY.
- 1-18. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBATING WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING OR GRADING.

1-19. COMMENCE DEMOLITION OF EXISTING MEDIAN WITHIN THE LIMITS OF PHASE 1C CONSTRUCTION.

1-20. CONSTRUCT MODIFIED MEDIAN AS SHOWN

1-21. AT THE CONCLUSION OF PHASE 1C, PROVIDE TEMPORARY VEGETATED STABILIZATION TO ALL LANDSCAPING AREAS.

1-22. WITH PRIOR WRITTEN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, REMAINING PHASE 1C SEDIMENT CONTROL MEASURES MAY BE REMOVED.

STAGE 2 CONSTRUCTION

PHASE 2A 2-1. CLEAR AND GRADE FOR INSTALLATION OF PHASE 2A SEDIMENT CONTROL DEVICES

2-2. INSTALL INLET PROTECTION AT EX 1-6. 2-3. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING

WITH ANY ADDITIONAL CLEARING, GRUBBING OR GRADING. 2-4. COMMENCE DEMOLITION OF EXISTING CURB/GUTTER AND SIDEWALKS WITHIN THE LIMITS OF PHASE 2A CONSTRUCTION.

2-5. CONTINUE CONSTRUCTION OF ROADWAY AND FULL DEPTH PAVEMENT CONSTRUCTION AS SHOWN. CONSTRUCT INLET I-4, PROVIDING TEMPORARY BULKHEAD. PROVIDE TEMPORARY PLUG FITTING FOR OUTLET PIPE AT BMP# 150970 (STA. 303+00, LT).

2-6. AT THE CONCLUSION OF PHASE 2A, PROVIDE TEMPORARY VEGETATED STABILIZATION TO ALL LANDSCAPING AREAS.

2-7. WITH PRIOR WRITTEN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, REMAINING PHASE 2A SEDIMENT CONTROL MEASURES MAY BE REMOVED.

PHASE 2B

- 2-8. CLEAR AND GRADE FOR INSTALLATION OF PHASE 2B SEDIMENT CONTROL DEVICES 2-9. INSTALL INLET PROTECTION AT EX I-2, EX I-3, EX I-4, I-7 AND EX I-8. INSTALL
- 2-10. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FOR THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING OR GRADING.

2-11. COMMENCE DEMOLITION OF EXISTING CURB/GUTTER AND SIDEWALKS WITHIN THE LIMITS OF PHASE 2B CONSTRUCTION.

- 2-12. AS WORK PROGRESSES, REPLACE EX 1-8 WITH 1-5. PROVIDE INLET PROTECTION AT I-5. REPLACE EX I-4 WITH I-2. PROVIDE INLET PROTECTION AT I-2. CONSTRUCT I-6 AND 5" CONCRETE DITCH TO EX I-7. MAINTAINING INLET PROTECTION AT EX 1 - 7
- 2-13. CONTINUE CONSTRUCTION OF ROADWAY AND FULL DEPTH PAVEMENT CONSTRUCTION AS SHOWN.

SILT FENCE ON PAVEMENT SFOP-5.

- 2-14. AT THE CONCLUSION OF PHASE 2B, PROVIDE TEMPORARY VEGETATED STABILIZATION TO ALL LANDSCAPING AREAS.
- 2-15. WITH PRIOR WRITTEN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, REMAINING PHASE 2B SEDIMENT CONTROL MEASURES MAY BE REMOVED, EXCEPT INLET PROTECTION AT EX 1-3 AND EX 1-7

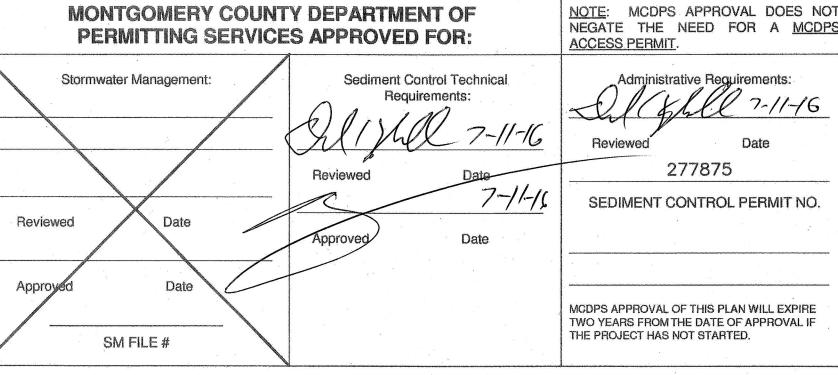
STAGE 3 CONSTRUCTION:

- 3-1. STAGE 3 CONSTRUCTION IS TO COMPLETED USING DAILY STABILIZATION TECHIQUES
- 3-2. COMMENCE CONSTRUCTION OF PCC BUS PADS AND RESURFACING OPERATIONS.
- 3-3. COMMENCE CONSTRUCTION OF BMP#150970 (STA. 303+00, LT) AND BMP#150971 (STA. 313+50, RT), RETAINING TEMPORARY PLUG FITTINGS AND TEMPORARY BULKHEAD AS PREVIOUSLY PROVIDED.
- 3-4. UPON COMPLETION OF BMP #150970 (STA. 303+00, LT) AND BMP #150971 (STA. 313+50, RT) CONSTRUCTION AND ESTABLISHMENT OF PERMANENT LANDSCAPING, REMOVE TEMPORARY PLUG FITTINGS AND BULKHEAD AND PLACE FACILITIES INTO SERVICE.
- 3-5. COMMENCE WITH INSTALLATION OF PERMANENT LANDSCAPING AS SHOWN ON PLANS.
- 3-6. AT THE CONCLUSION OF PHASE 3, PROVIDE PERMANENT VEGETATED STABILIZATION TO ALL LANDSCAPING AREAS.
- 3-6. WITH PRIOR WRITTEN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, REMAINING SEDIMENT CONTROL MEASURES MAY BE REMOVED

SEDIMENT AND EROSION CONTROL

DETAILS/SEQUENCE OF CONSTRUCTION

SC #3 OF #16 EN--03



DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.

HOUSING AND COMMUNITY DEVELOPMENT CITY OF TAKOMA PARK

7500 MAPLE AVENUE

ETHAN ALLEN GATEWAY **STREETSCAPE**

STA. 301+27.19 TO STA. 315+42.25 STREETS ONLY

SCALE: AS SHOWN

SHEET <u>35</u> OF <u>85</u>

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APRIL 2016

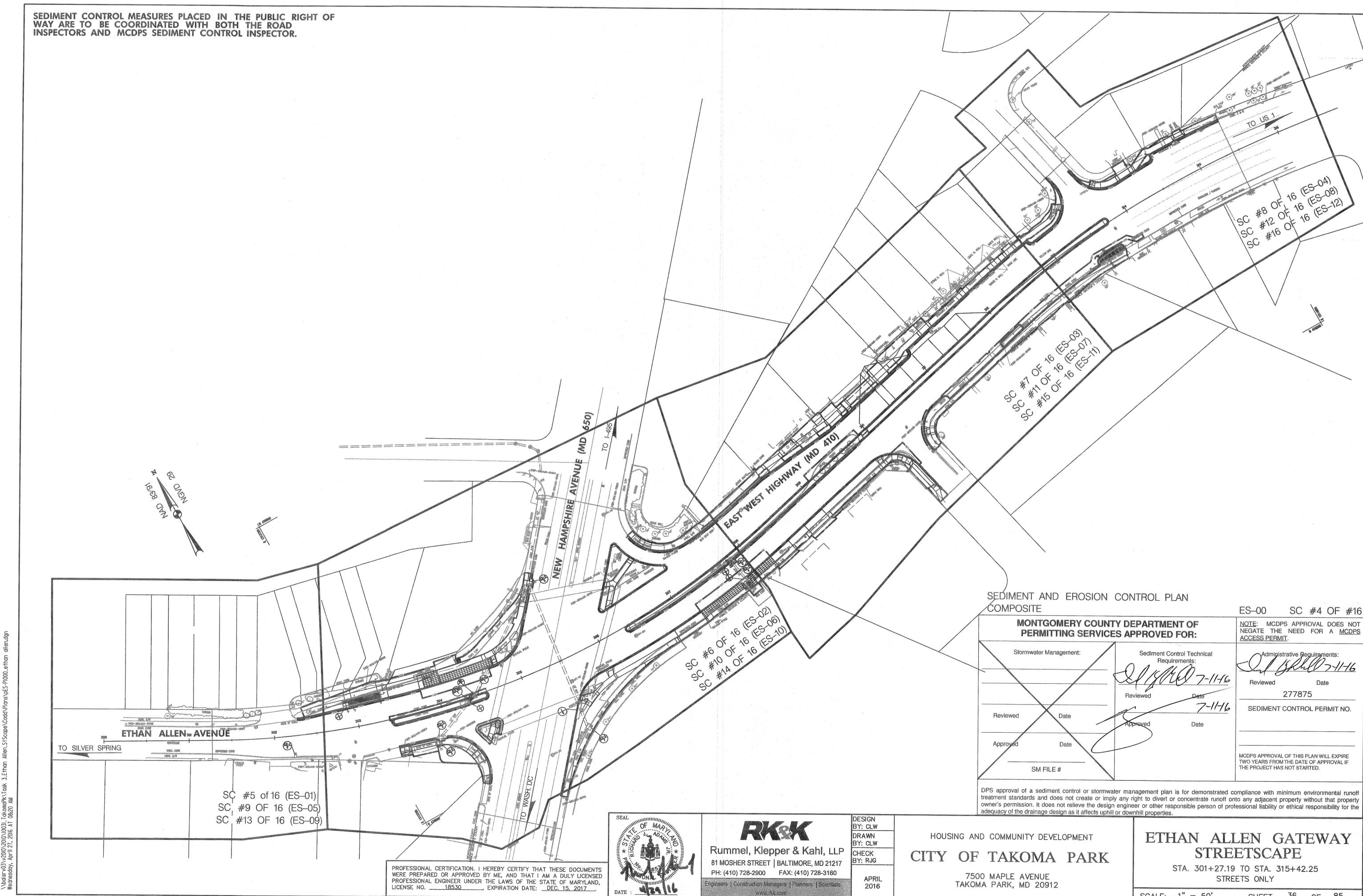
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BY: CLW

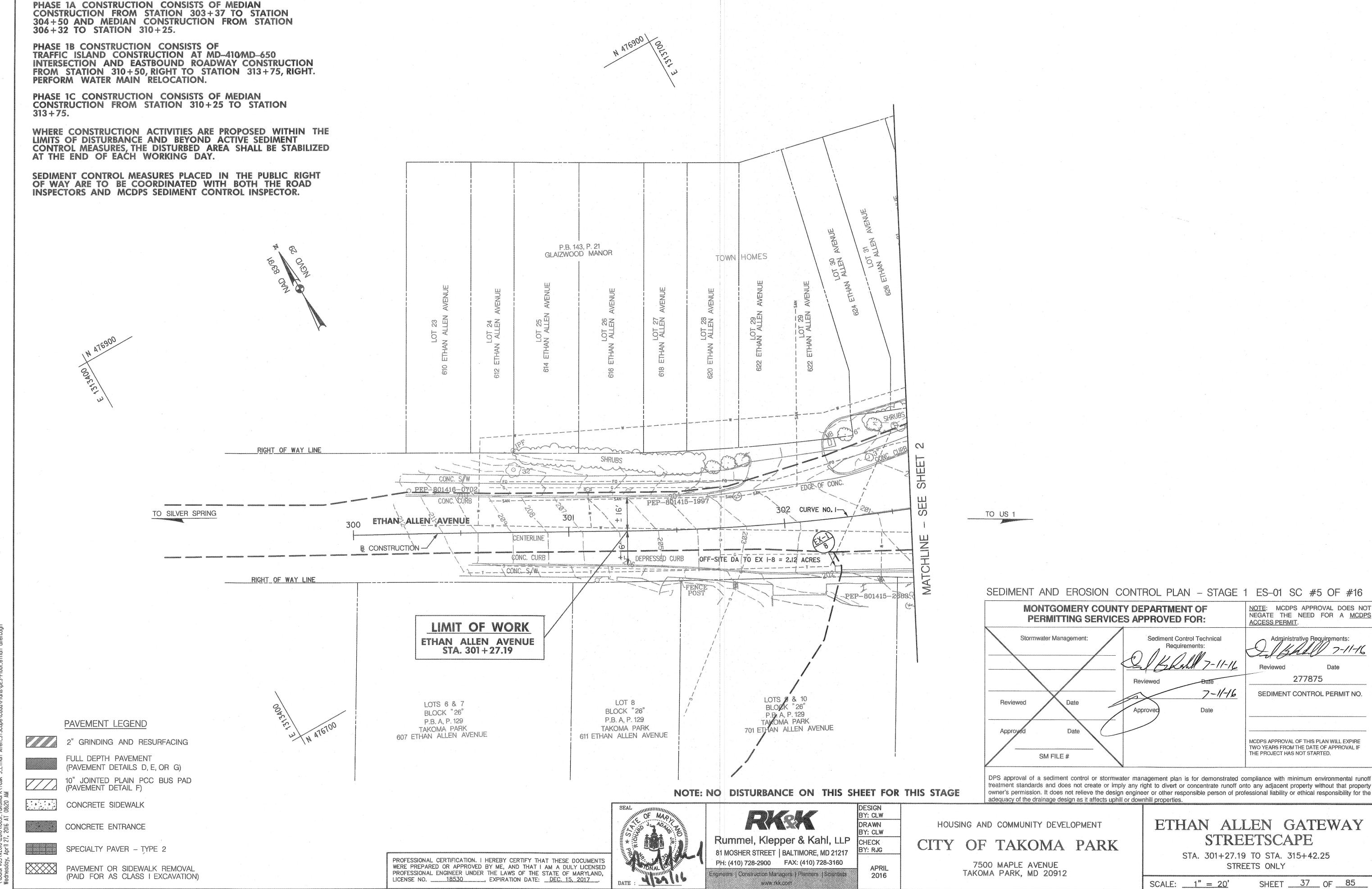
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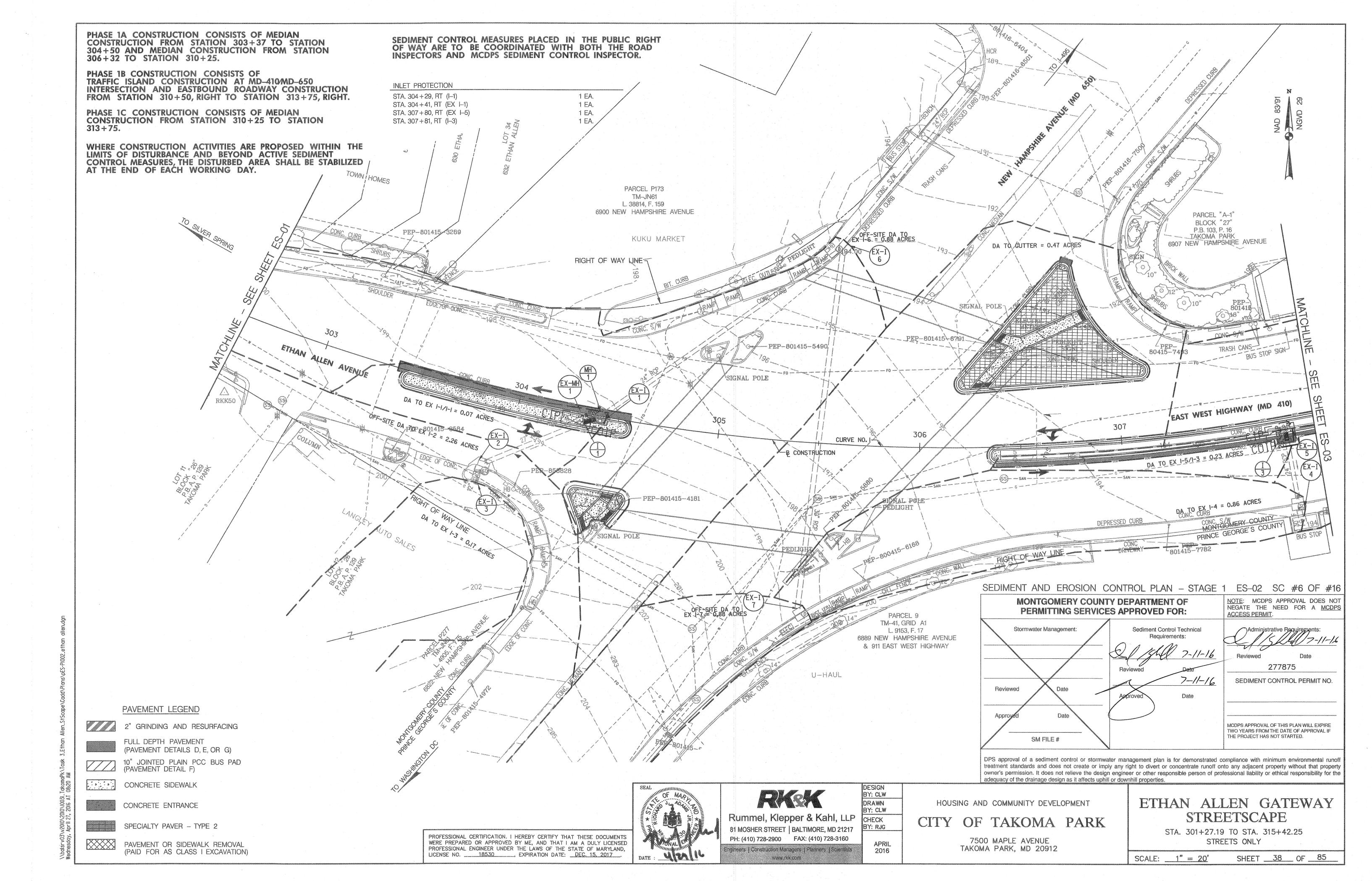
TAKOMA PARK, MD 20912

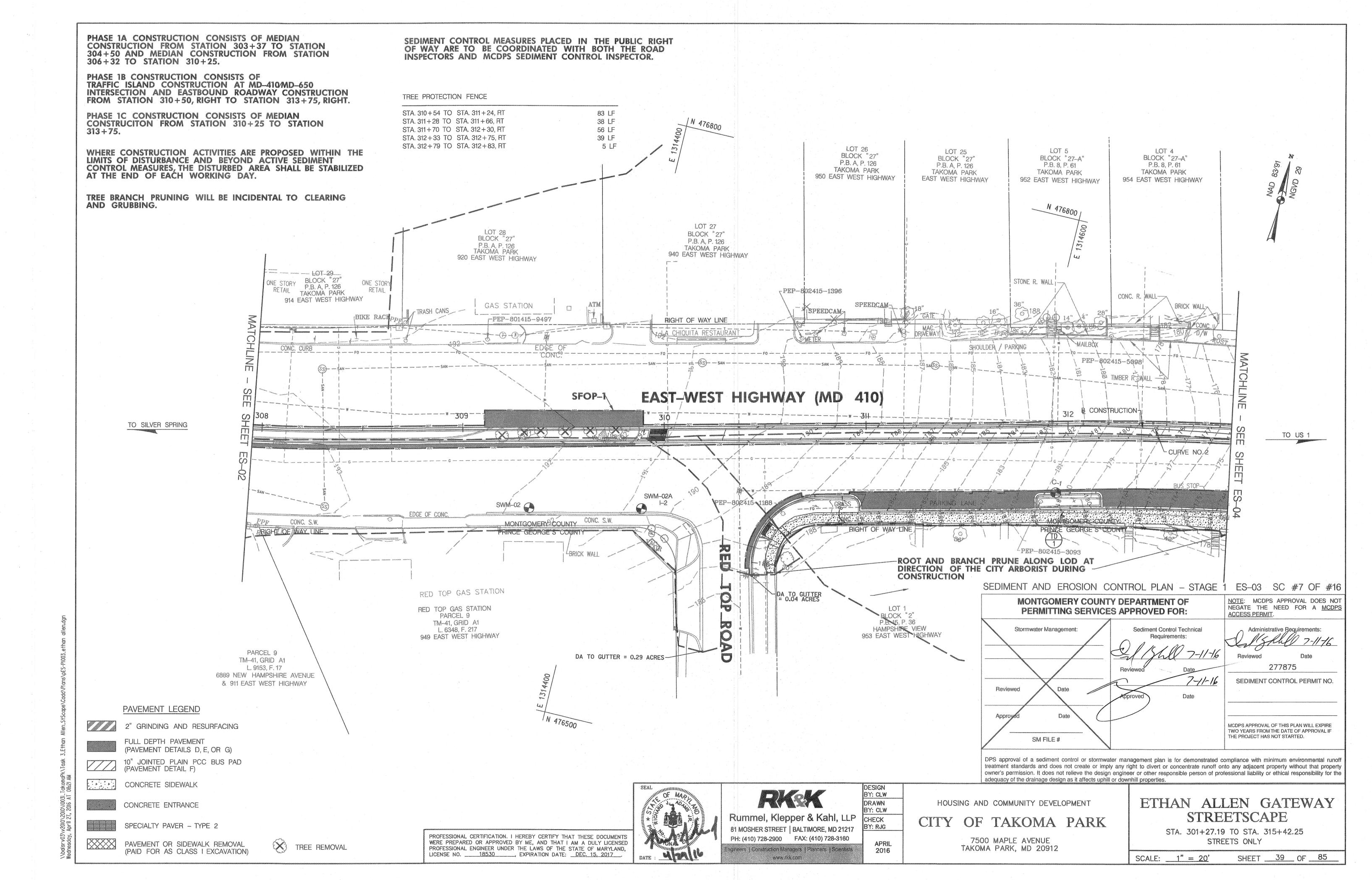


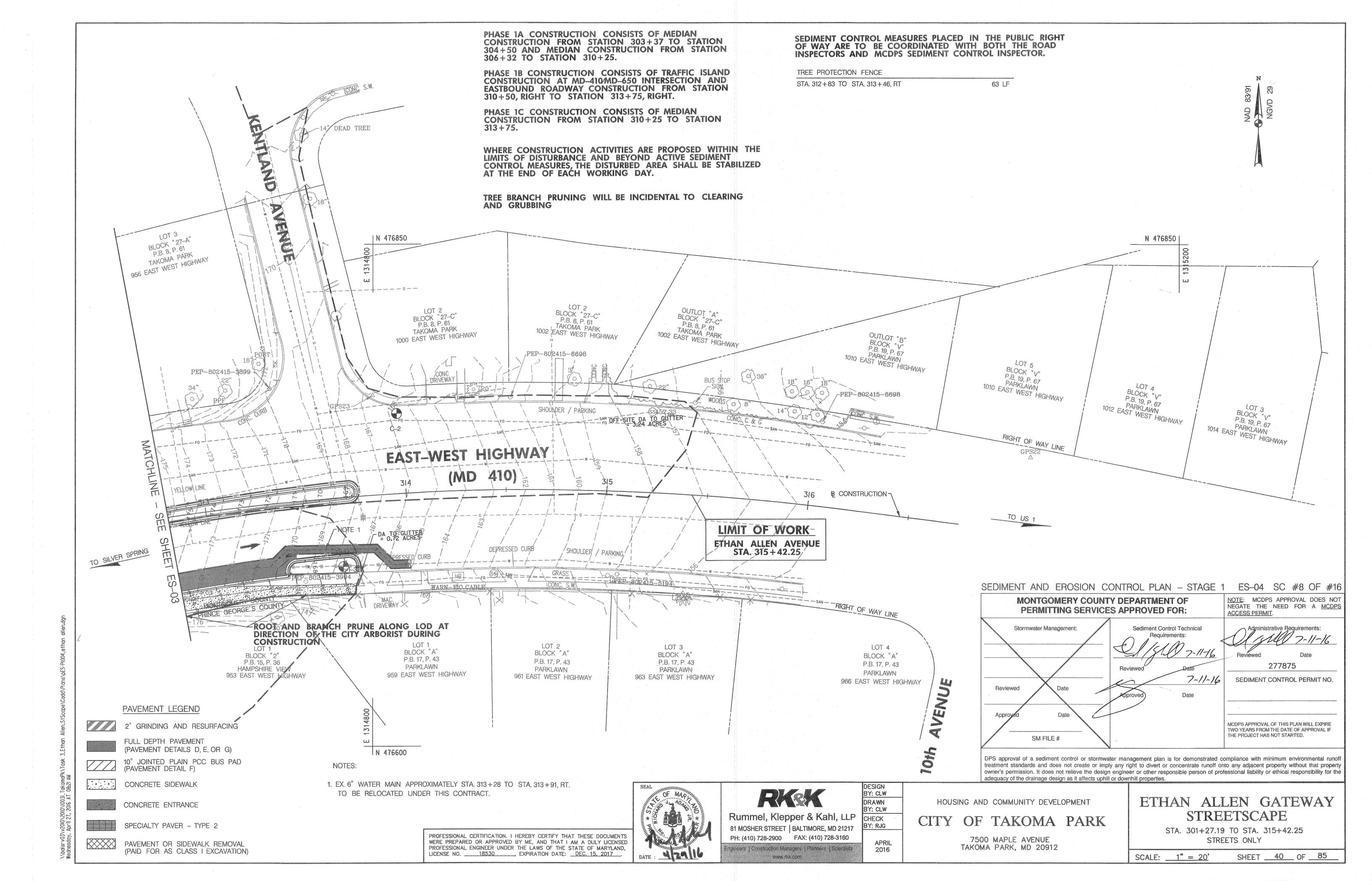
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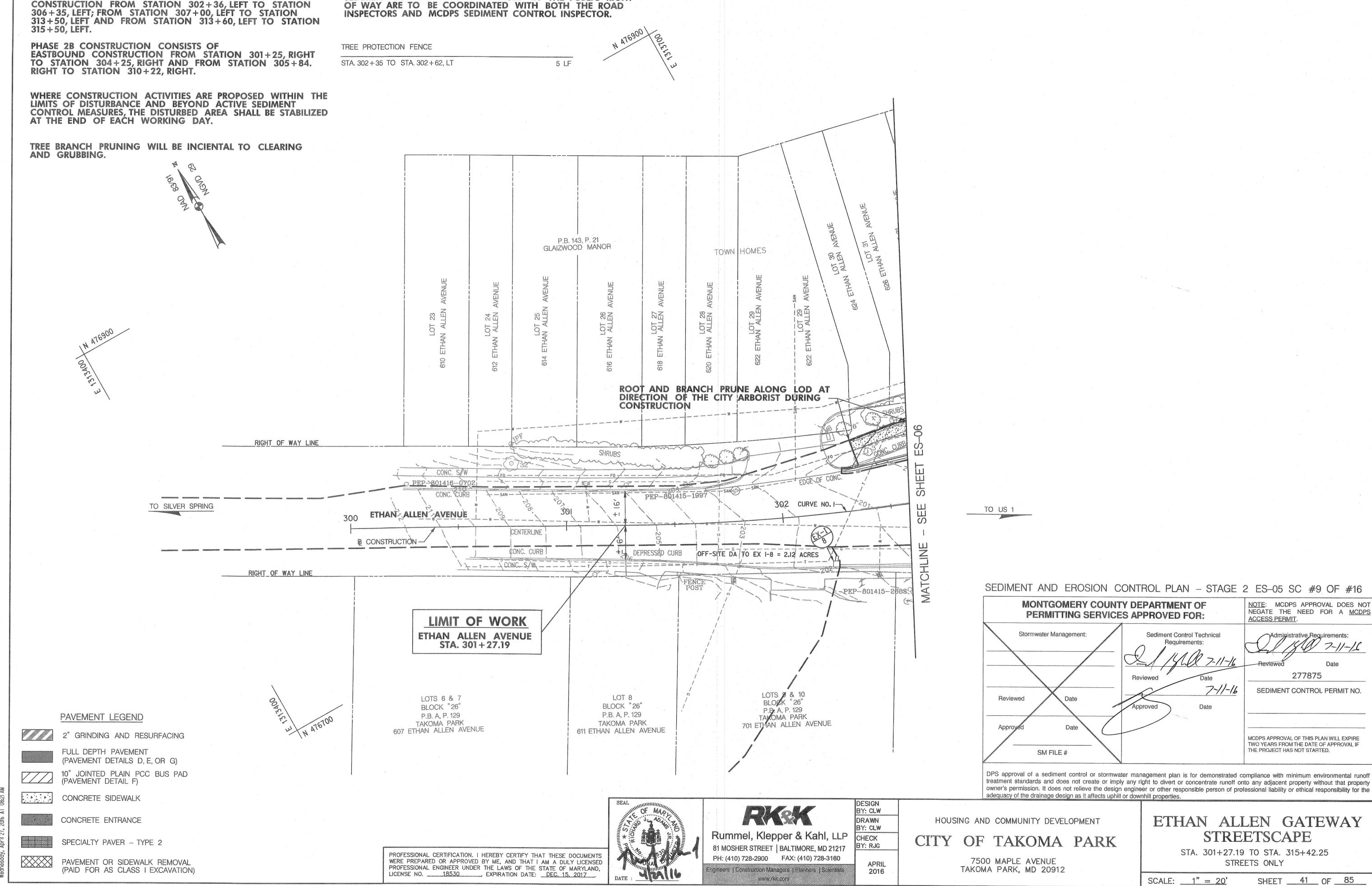


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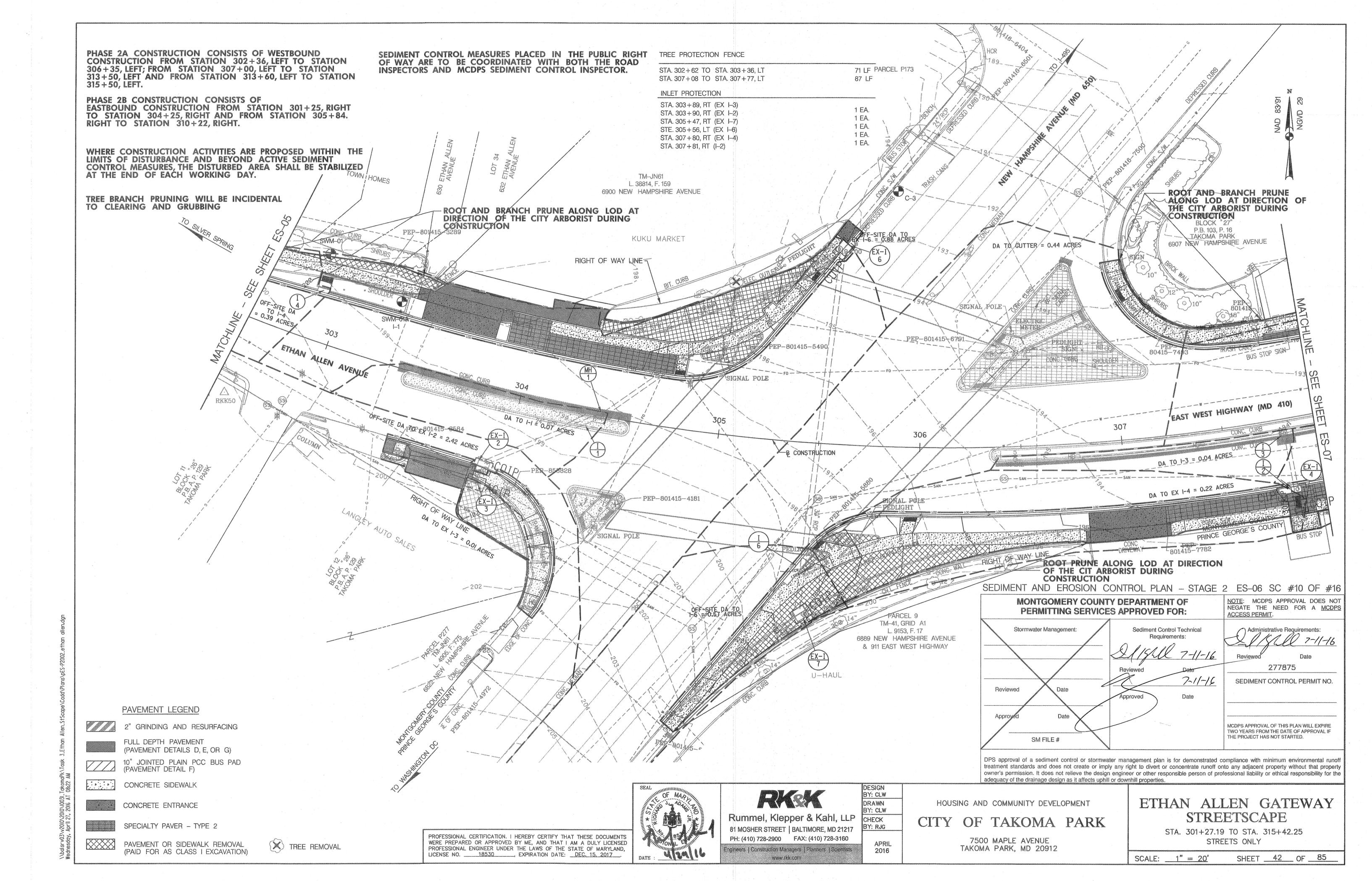


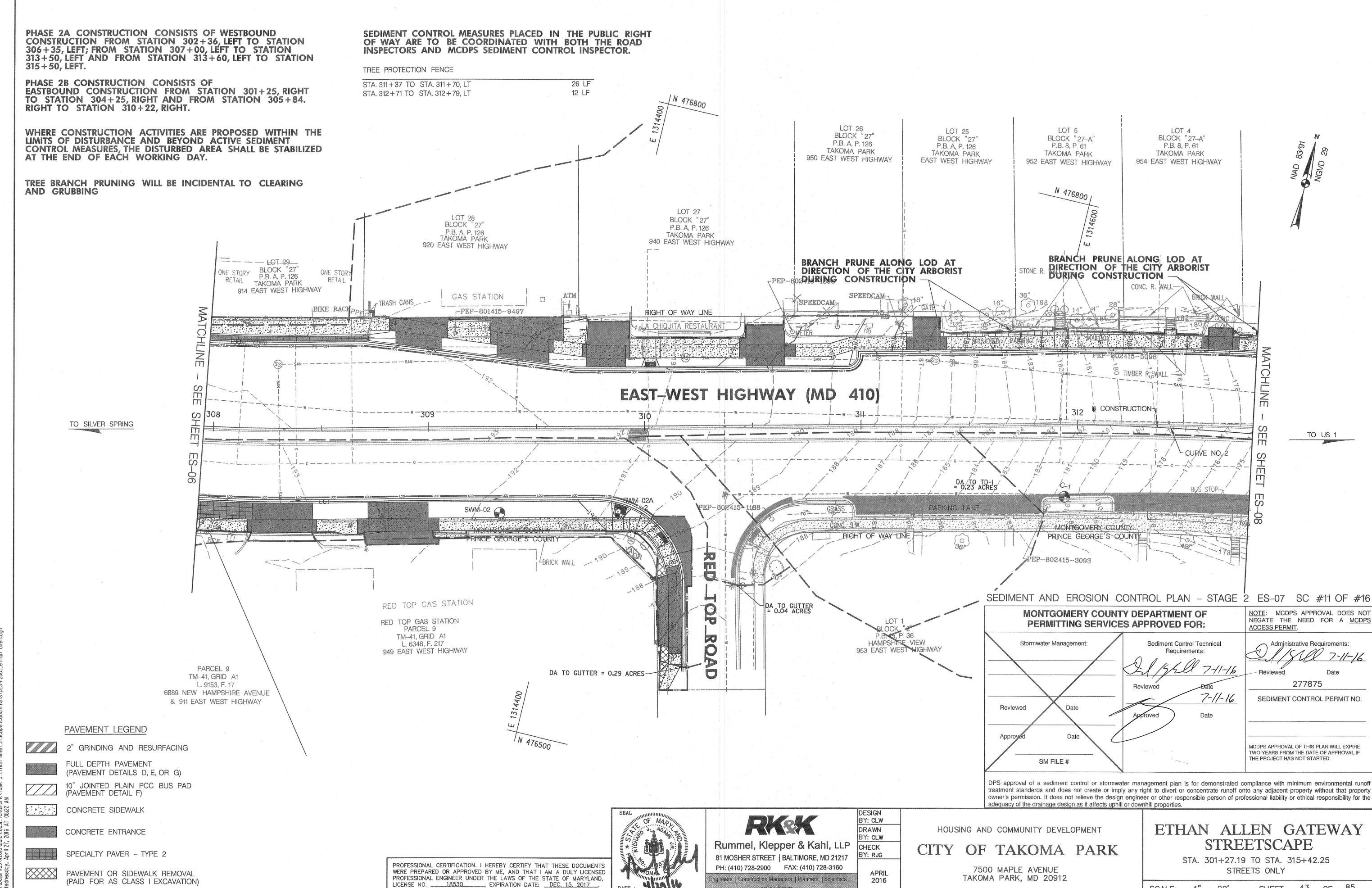


SEDIMENT CONTROL MEASURES PLACED IN THE PUBLIC RIGHT

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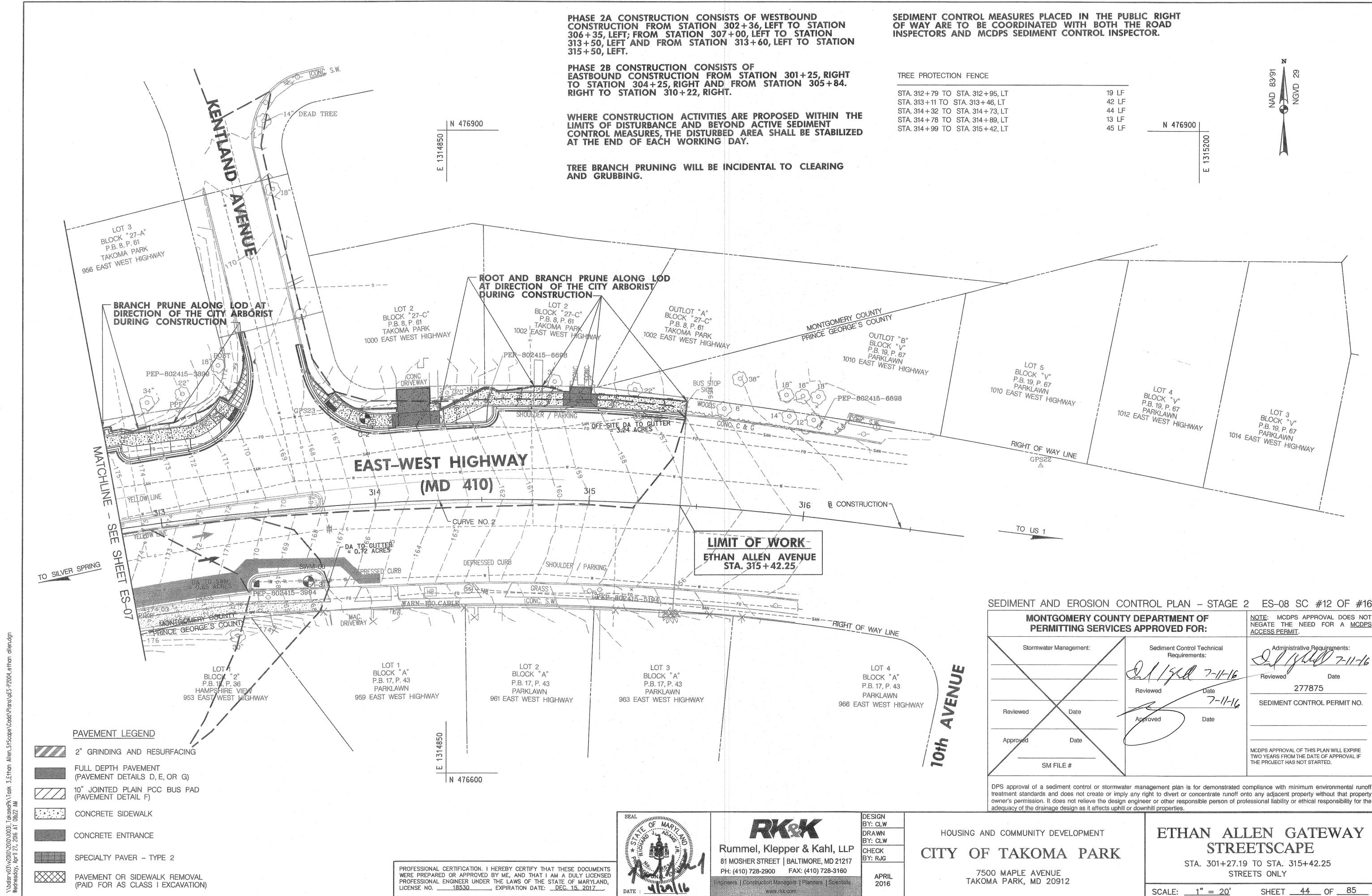
PHASE 2A CONSTRUCTION CONSISTS OF WESTBOUND

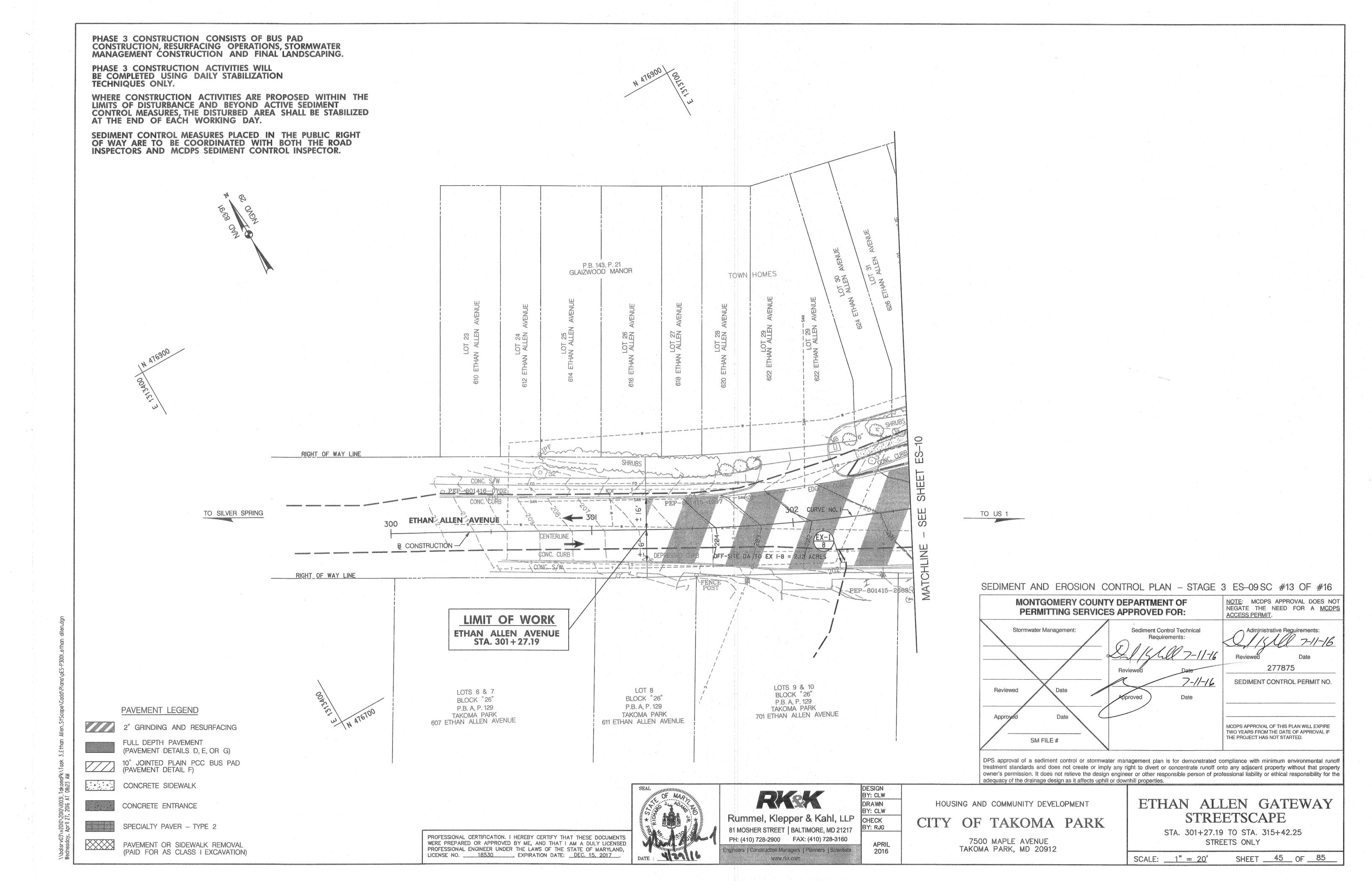


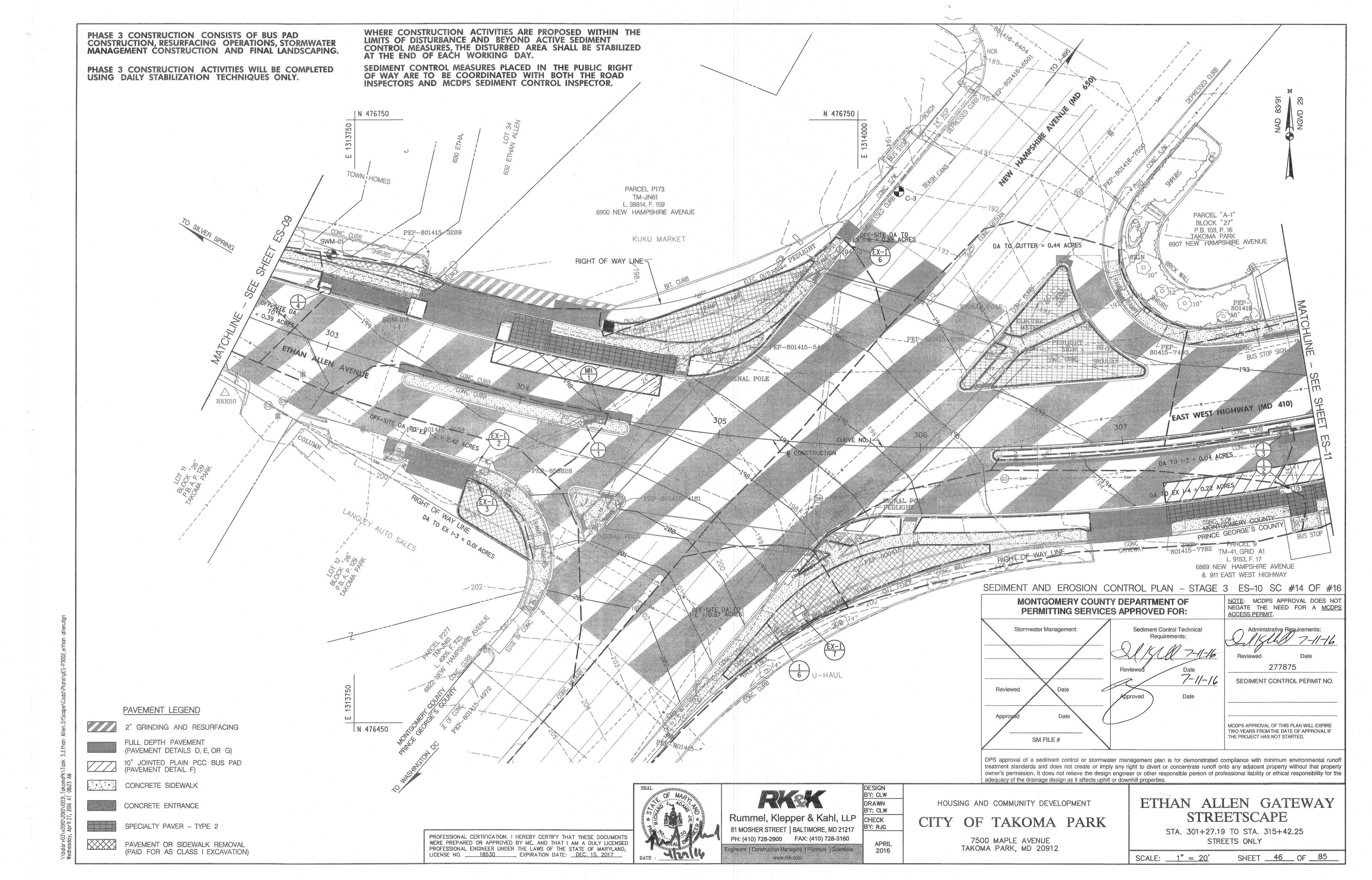


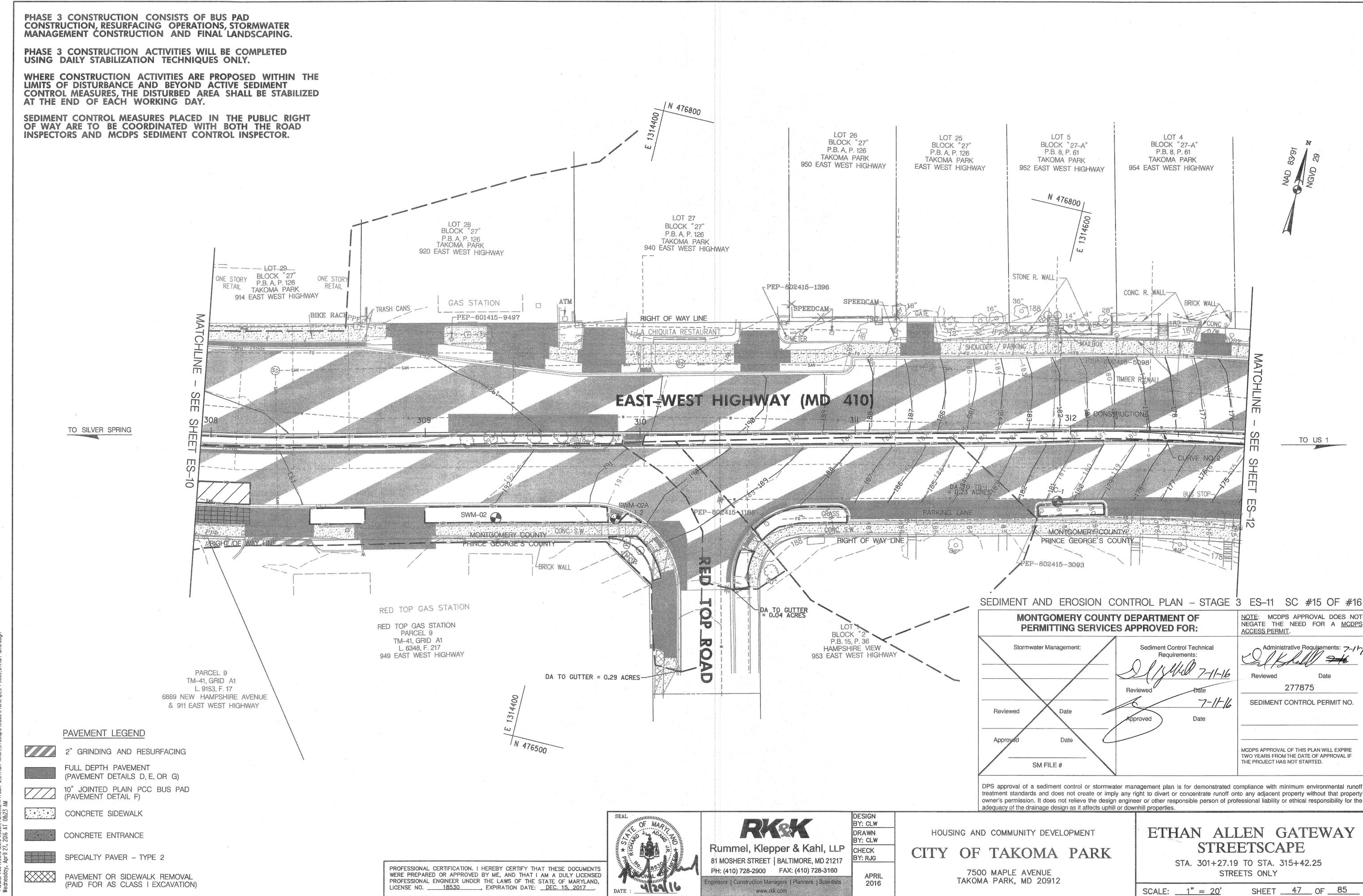
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SHEET 43 OF 85

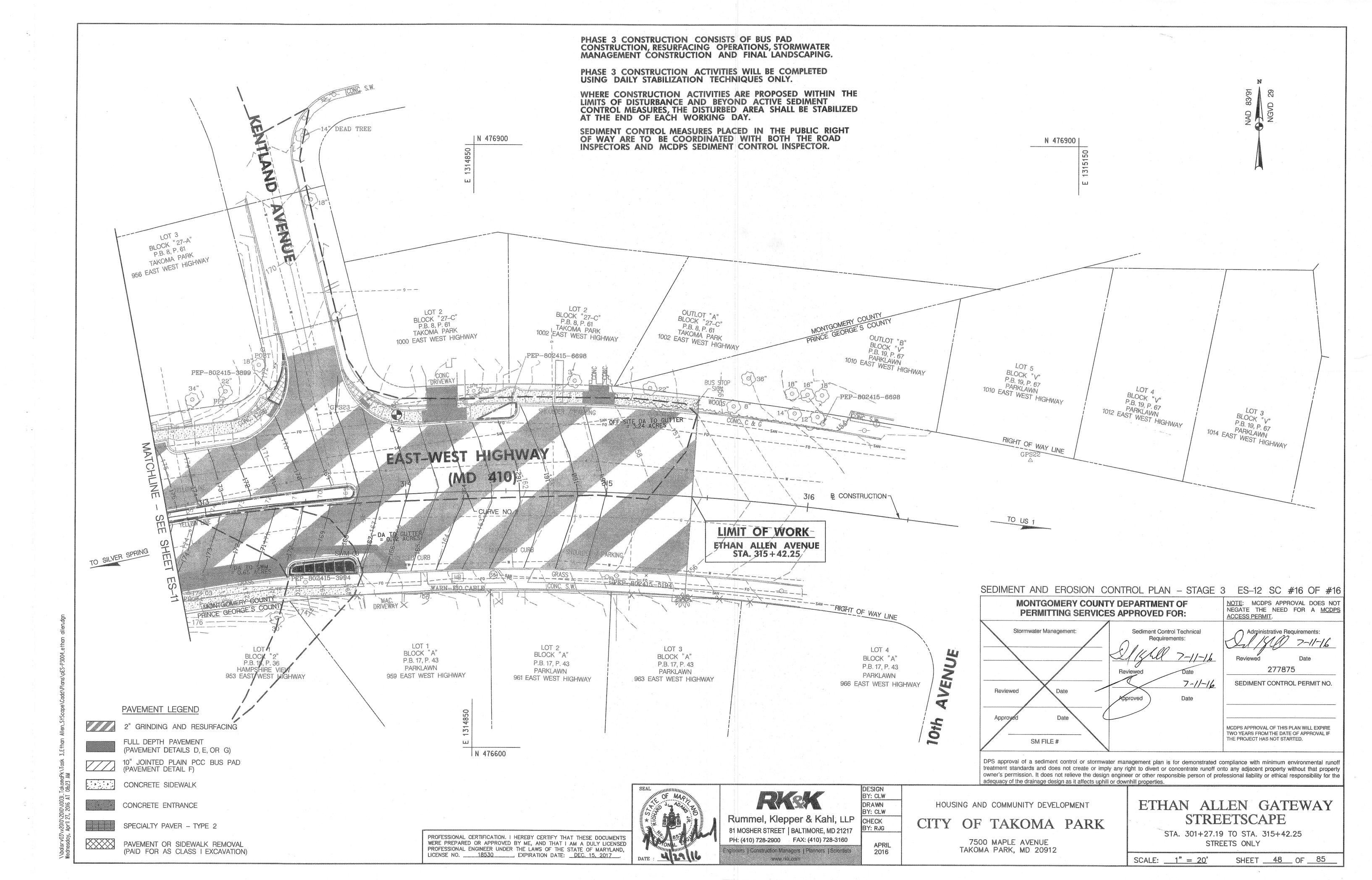








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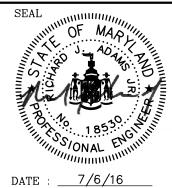
TRAFFIC CONTROL GENERAL NOTES

- 1. MAINTAIN ACCESS TO ALL ROADWAYS AND DRIVEWAY ENTRANCES AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 2. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST VERSION OF FHWA'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AS WELL AS MDSHA'S "BOOK OF STANDARDS" AND "SUPPLEMENT TO MUTCD"
- 3. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED OFF THE TRAVEL LANES AND PEDESTRIAN FACILITIES AT ALL TIMES.
- 4. ALL TEMPORARY SIGNS SHALL BE INSTALLED IN ACCORDANCE TO THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION MATERIALS, SECTION 104.08 AND SHALL MEET CURRENT MDSHA MATERIAL AND REFLECTIVITY REQUIREMENTS.
- 5. EXISTING REGULATORY SIGNS IN THE WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS DIRECTED BY THE ENGINEER. SIGNS THAT ARE NOT APPLICABLE SHALL BE REMOVED OR COMPLETELY COVERED WITH NONTRANSPARENT MATERIAL.
- 6. REFER TO SP 104 FOR WORK RESTRICTIONS AND TEMPORARY LANE /SHOULDER CLOSURE SCHEDULE.
- 7. NOTIFY JAMIE IPA CEPLER AT THE WASHINGTON METROPOLITAN TRANSIT AUTHORITY (WMATA) TWO WEEKS IN ADVANCE OF ANY IMPACTS TO EXISTING BUS STOPS WITHIN THE PROJECT LIMITS. (202) 962-6085.
- 8. LONGITUDINAL DISTANCES OF ALL TEMPORARY SIGNING AND CHANNELIZING DEVICES MAY BE ADJUSTED DUE TO INTERSECTING STREETS, DRIVEWAYS, AND/OR FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- 9. REFER TO SPI 104.31 FOR ACCESSIBLE PEDESTRIAN MAINTENANCE OF TRAFFIC.
- 10. ALL TRAVEL LANES SHALL BE A MINIMUM OF 10' WIDE ALONG MD 410 AND 11' WIDE ALONG MD 650 DURING CONSTRUCTION.
- 11. MISS UTILITY SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
- 12. COORDINATE CONSTRUCTION ACTIVITIES WITH PEPCO, WHO WILL PERFORM LIGHTING MODIFICATIONS TO COBRA HEADS ON EXISTING UTILITY POLES. INSTALLATION OF ORNAMENTAL LIGHTING SHALL BE COMPLETED BY THE CONTRACTOR.

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS (TTCTA)

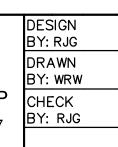
FOR PHASE 1, 2, AND 3 THE FOLLOWING TTCTA FROM THE SHA BOOK OF STANDARDS ARE TO BE FOLLOWED AS APPROPRIATE:

- MD 104.02-02, MD 104.03-02, AND MD-104.04-02 SHOULDER WORK
- MD 104.03-10, MD 104.03-12, AND MDE 104.03-14 INTERSECTION LANE CLOSURES
- MD 104.06-01 TO MD 104.06-04 - INSTALLING AND REMOVING CLOSURE SETUPS
- PEDESTRIAN AND CURB LANE CONTROL MD 104.06-09A TO MD 104.06-09D
- MD 104.01-28 AND MD 104.06-15 TO MD 104.06-19 PAVEMENT EDGE DROP-OFFS





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CITY OF TAKOMA PARK

ETHAN ALLEN GATEWAY STREETSCAPE

MT-01

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

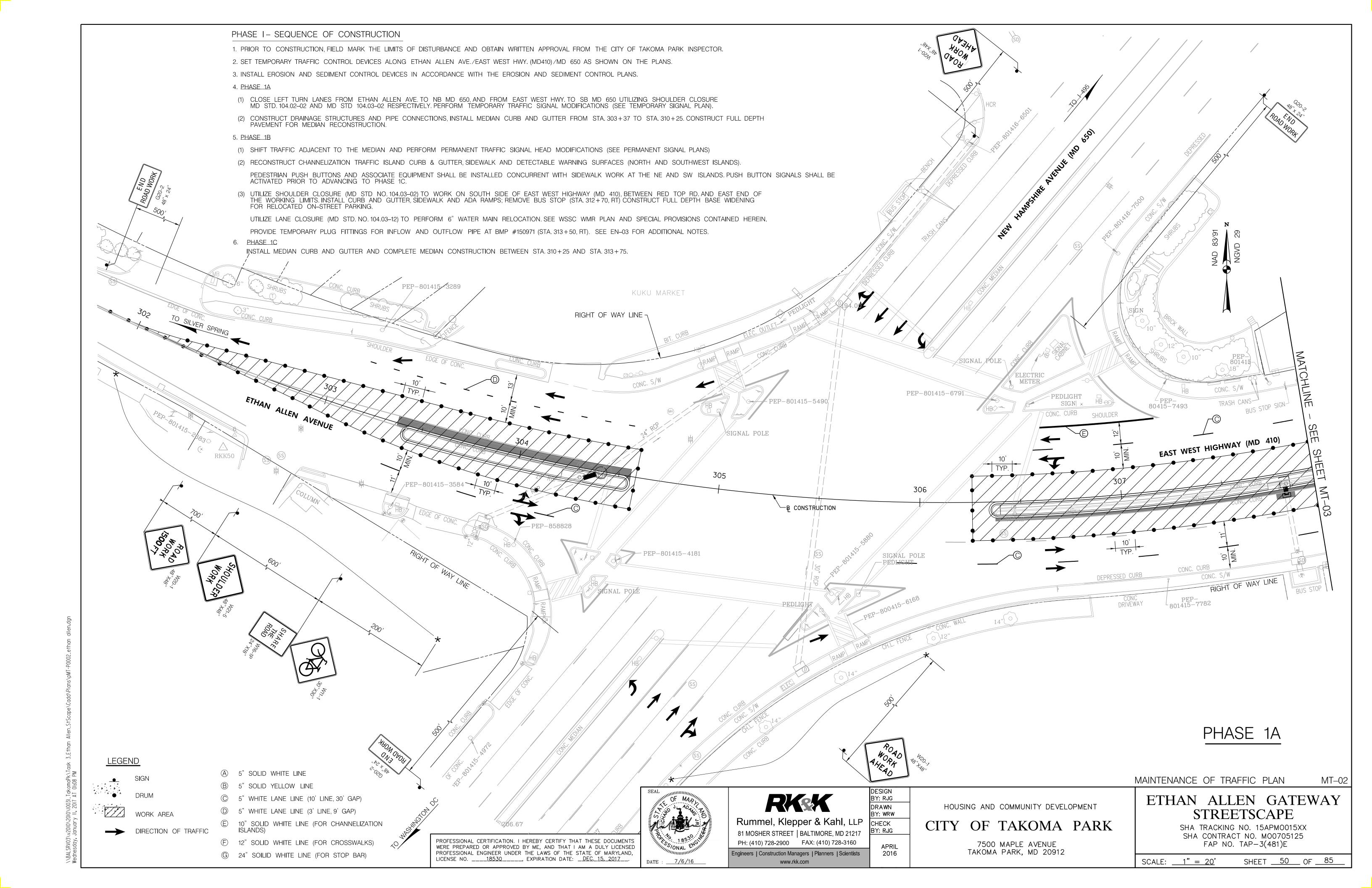
SHEET <u>49</u> OF <u>85</u> SCALE: <u>NTS</u>

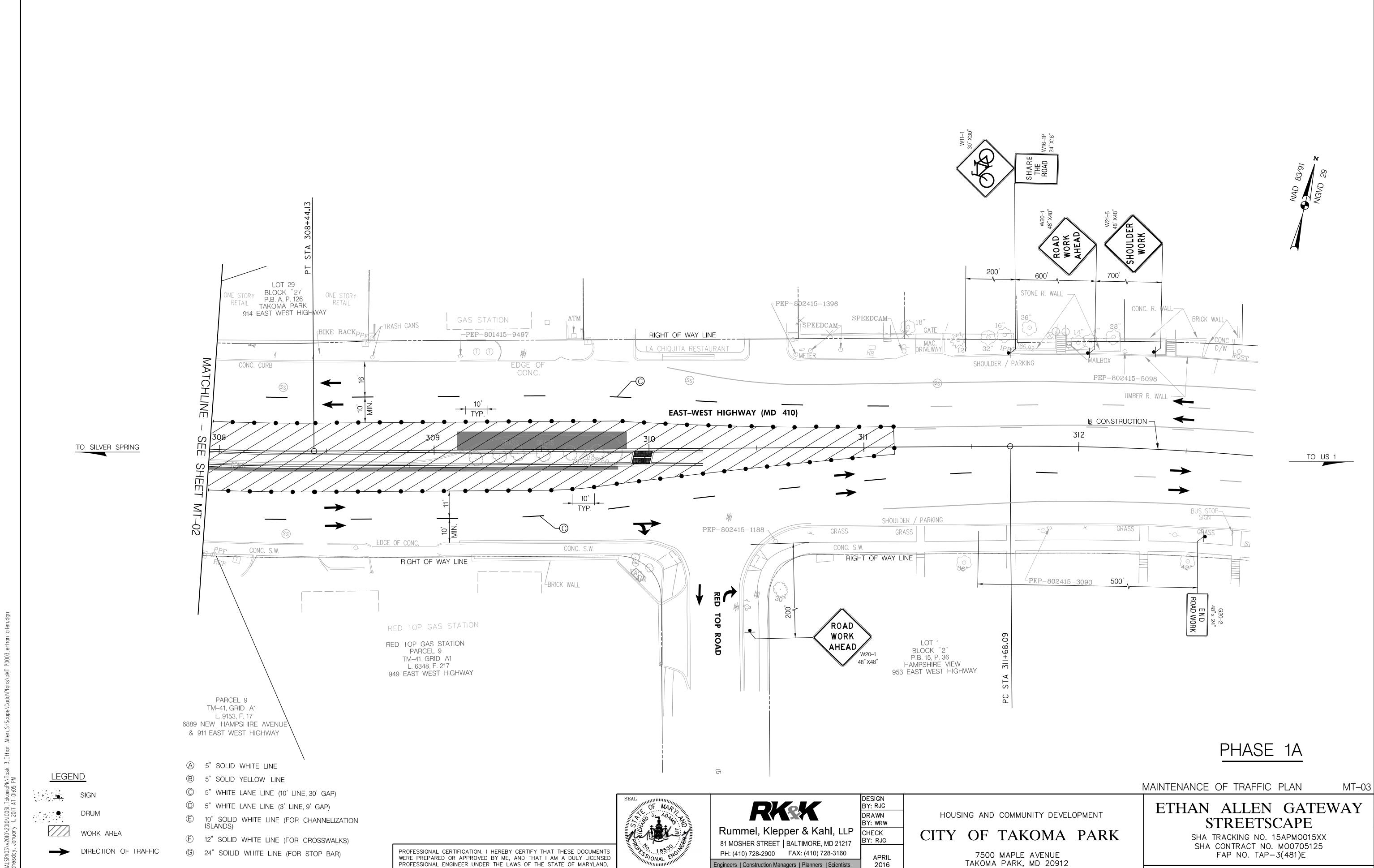
MOT GENERAL NOTES AND DETAILS

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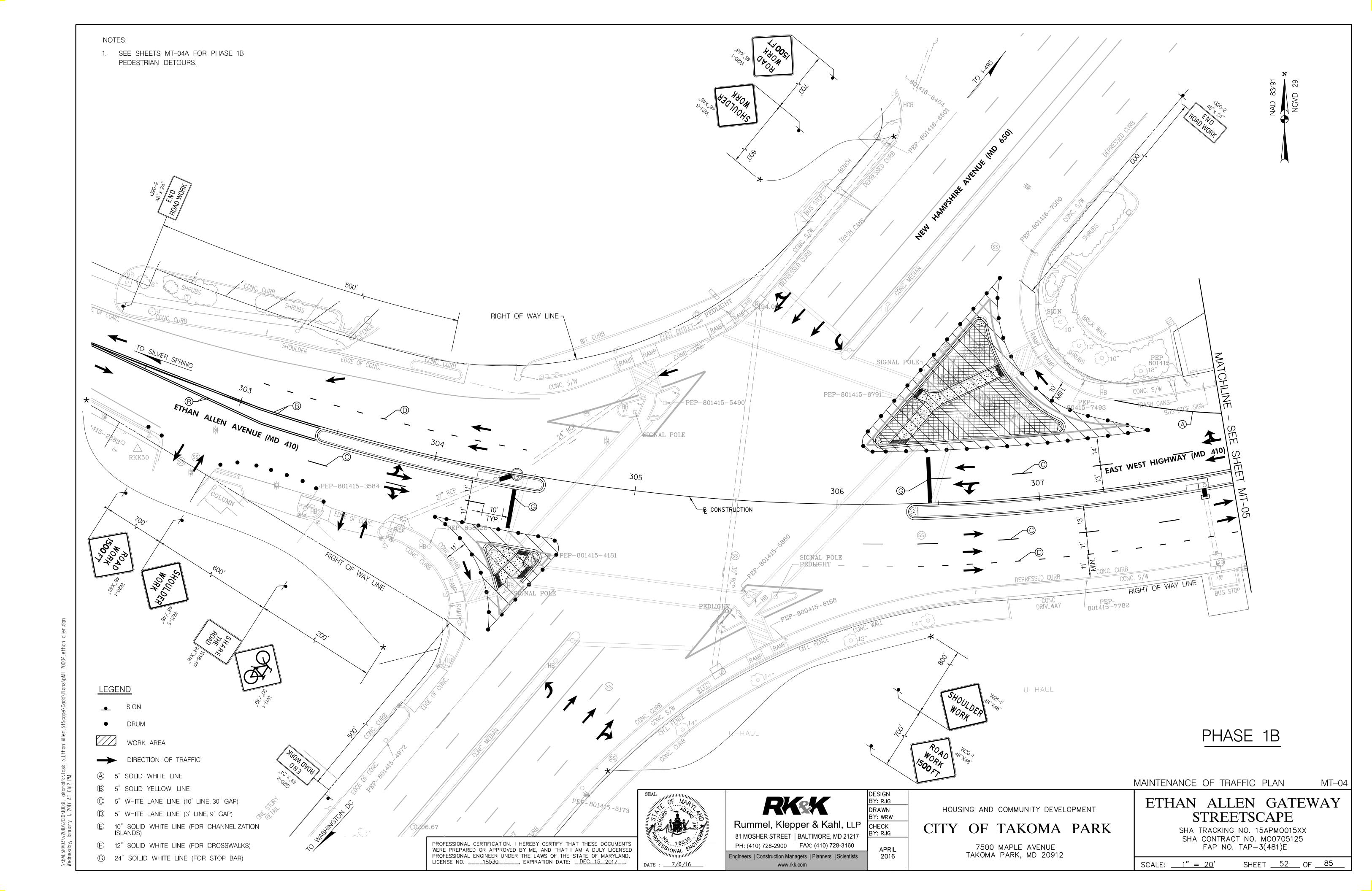
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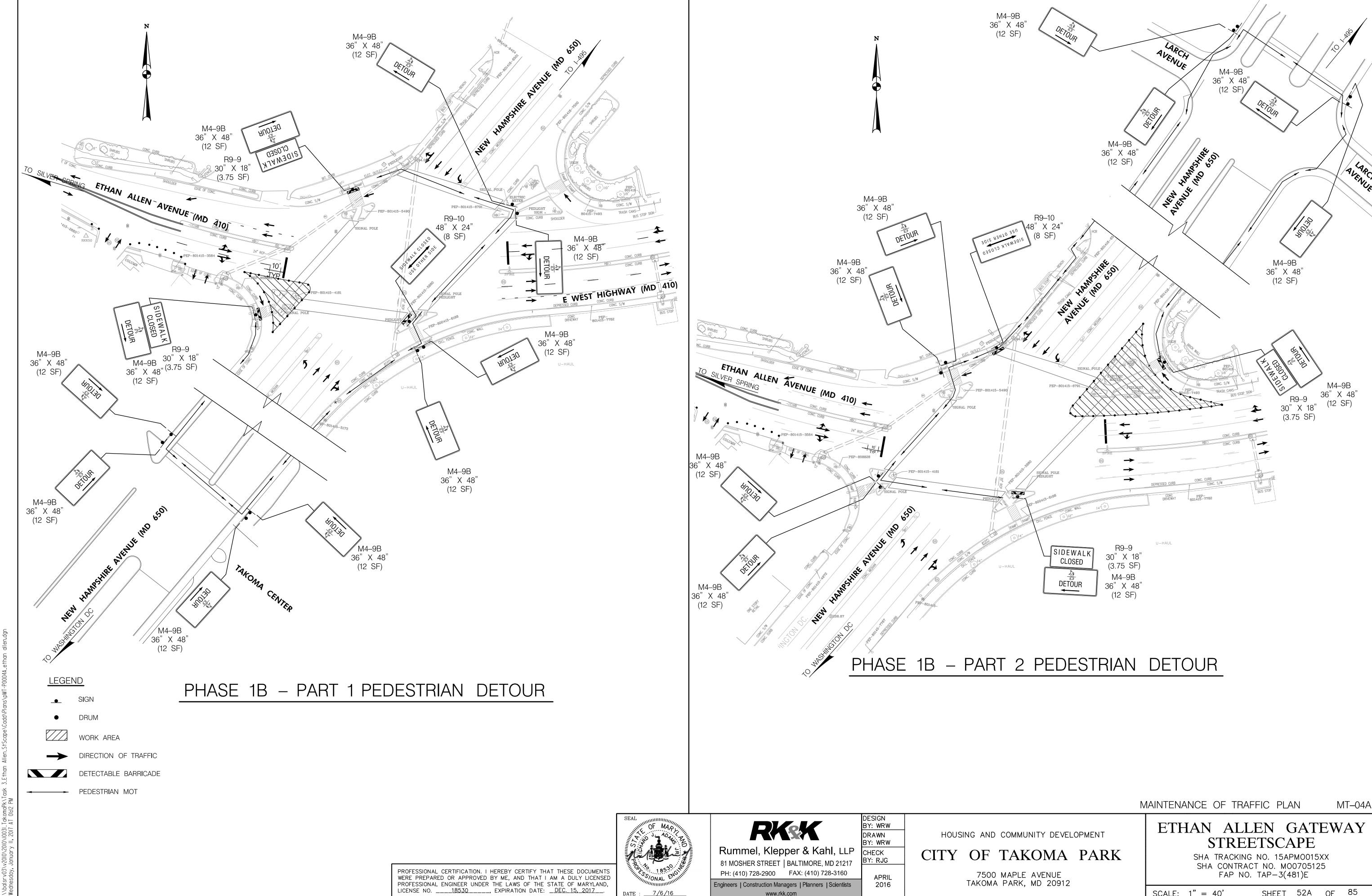
2016

SHEET ____51__ OF ___85__

SCALE: 1" = 20'

PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____18530______, EXPIRATION DATE: __DEC. 15. 2017___.



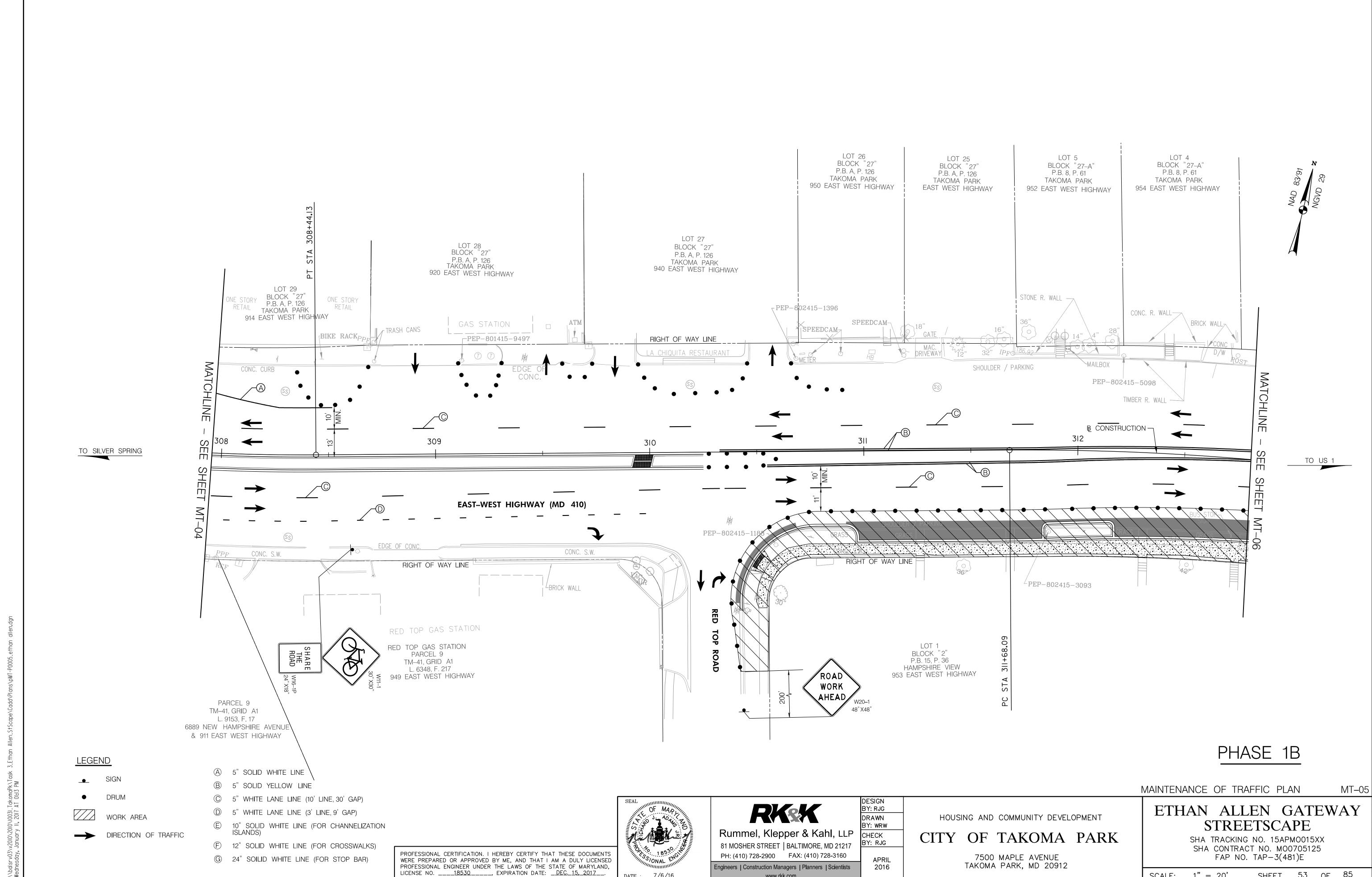


APRIL

SHEET <u>52A</u> OF <u>85</u>

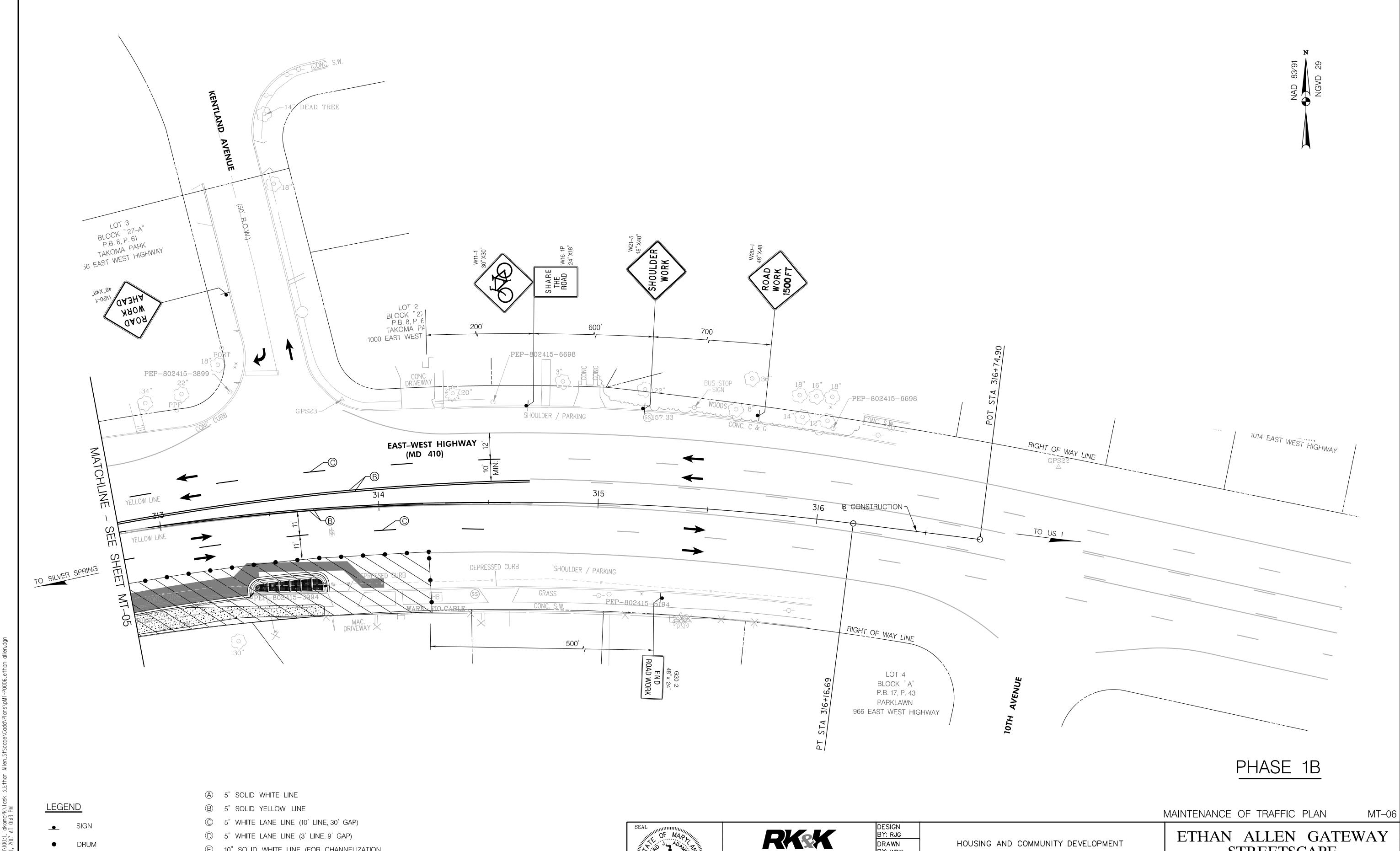
SCALE: 1" = 40'

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SHEET <u>53</u> OF <u>85</u>



WORK AREA

DIRECTION OF TRAFFIC

(E) 10" SOLID WHITE LINE (FOR CHANNELIZATION ISLANDS)

(F) 12" SOLID WHITE LINE (FOR CROSSWALKS)

© 24" SOILID WHITE LINE (FOR STOP BAR)

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DATE : ___7/6/16

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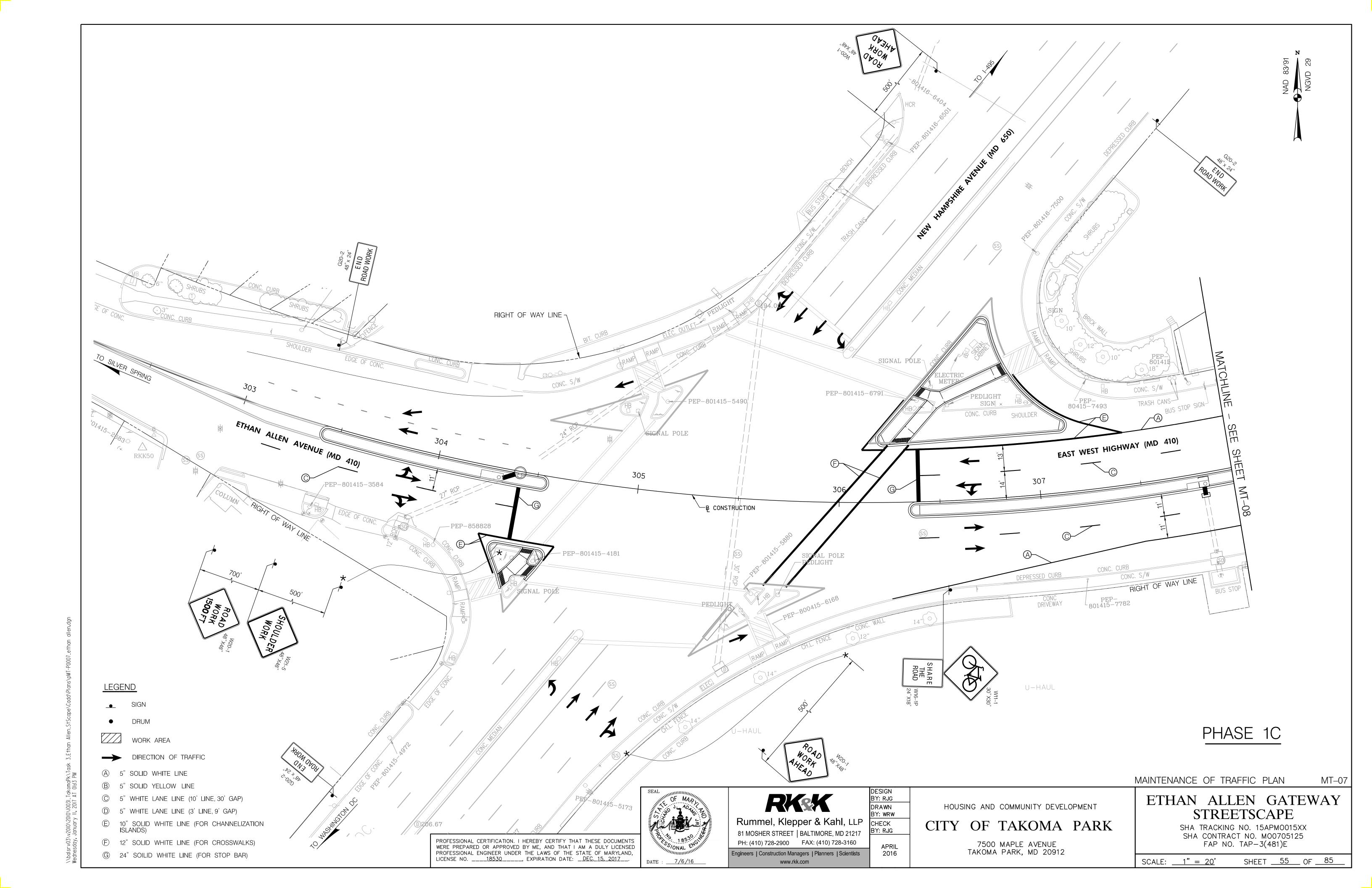
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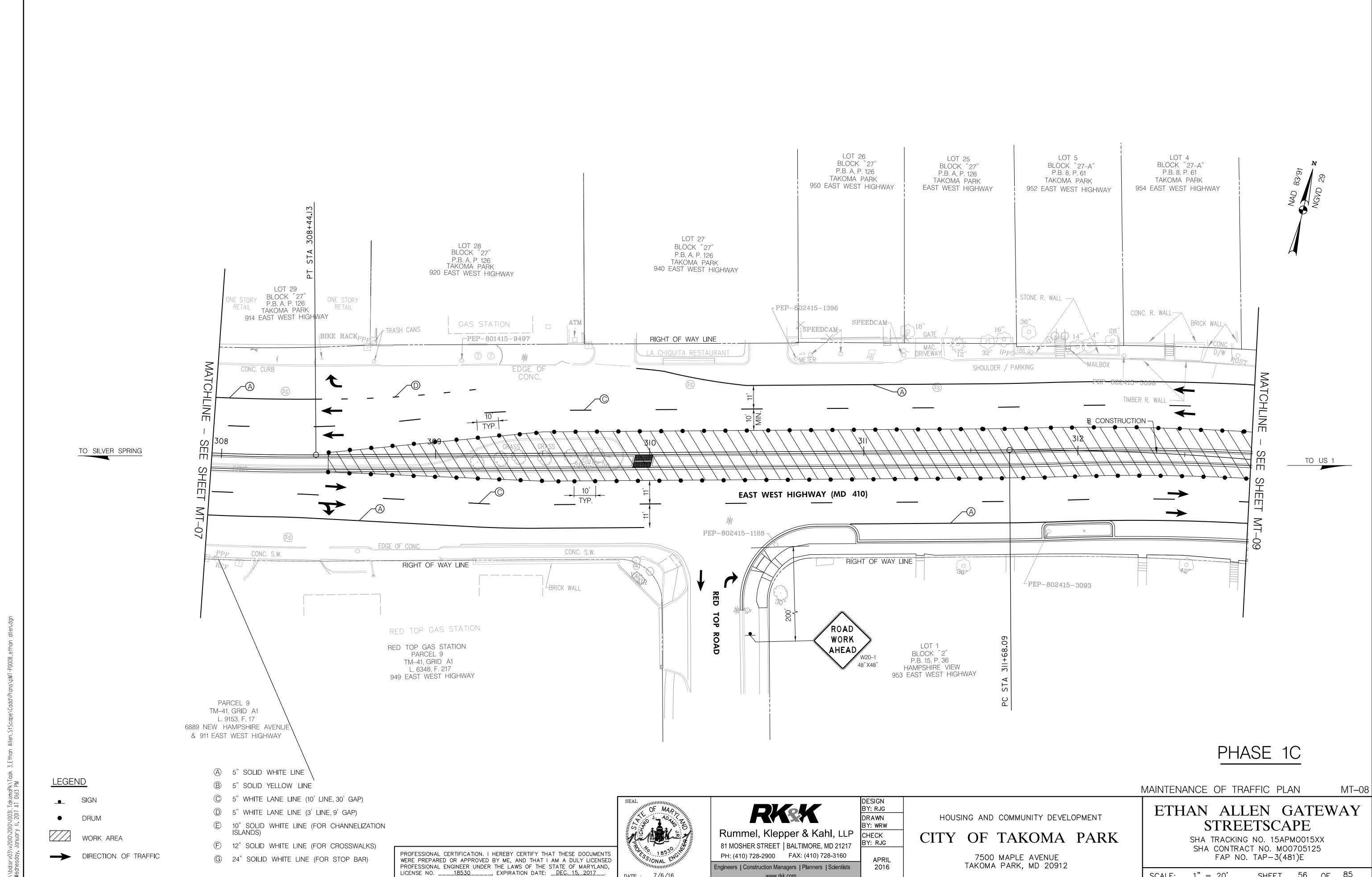
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STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

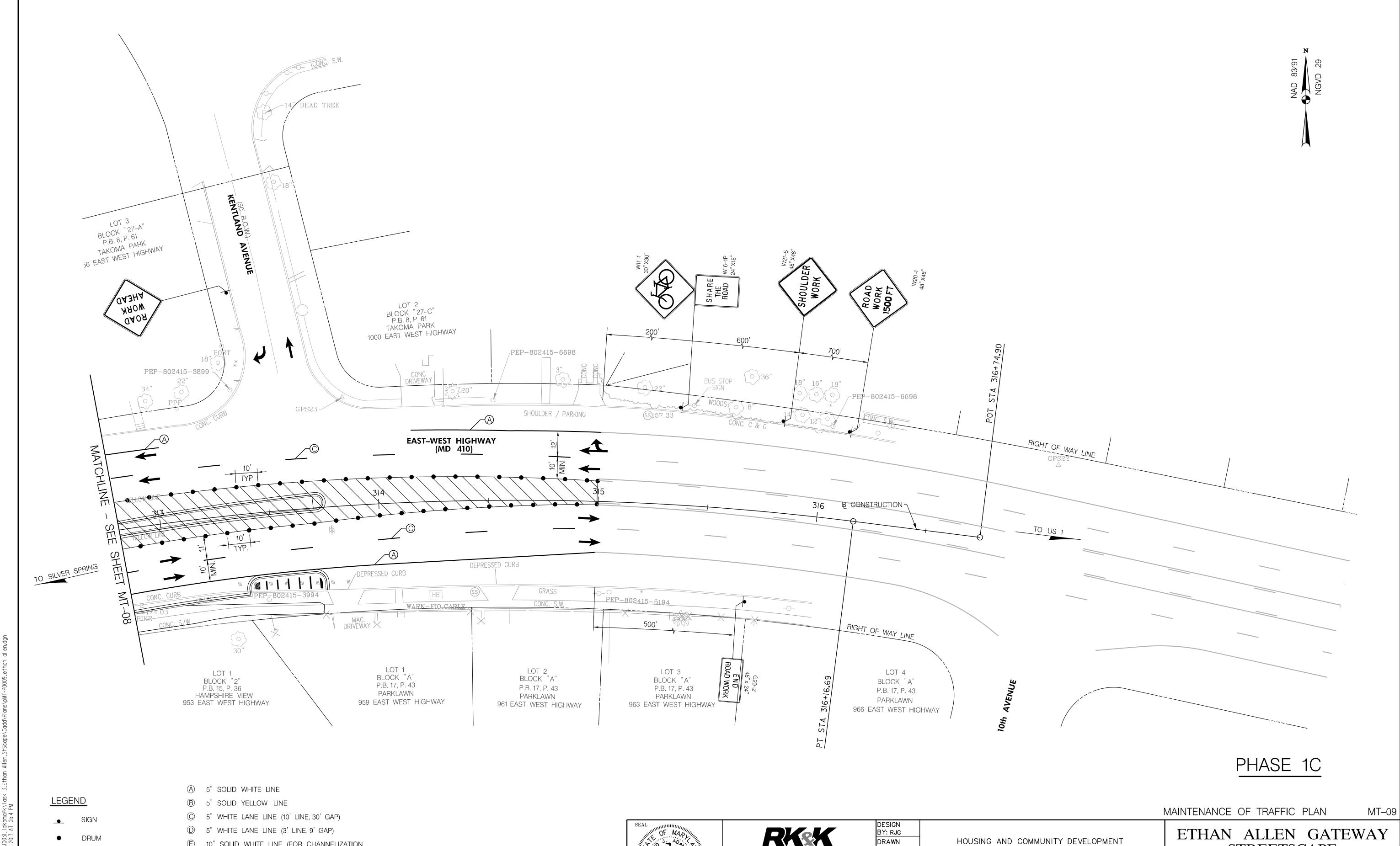
SHEET <u>54</u> OF <u>85</u> SCALE: 1" = 20'





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SHEET <u>56</u> OF <u>85</u>



© 10" SOLID WHITE LINE (FOR CHANNELIZATION ISLANDS)

WORK AREA DIRECTION OF TRAFFIC

(F) 12" SOLID WHITE LINE (FOR CROSSWALKS) © 24" SOILID WHITE LINE (FOR STOP BAR)



DATE : ___7/6/16

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APRIL

2016

CITY OF TAKOMA PARK

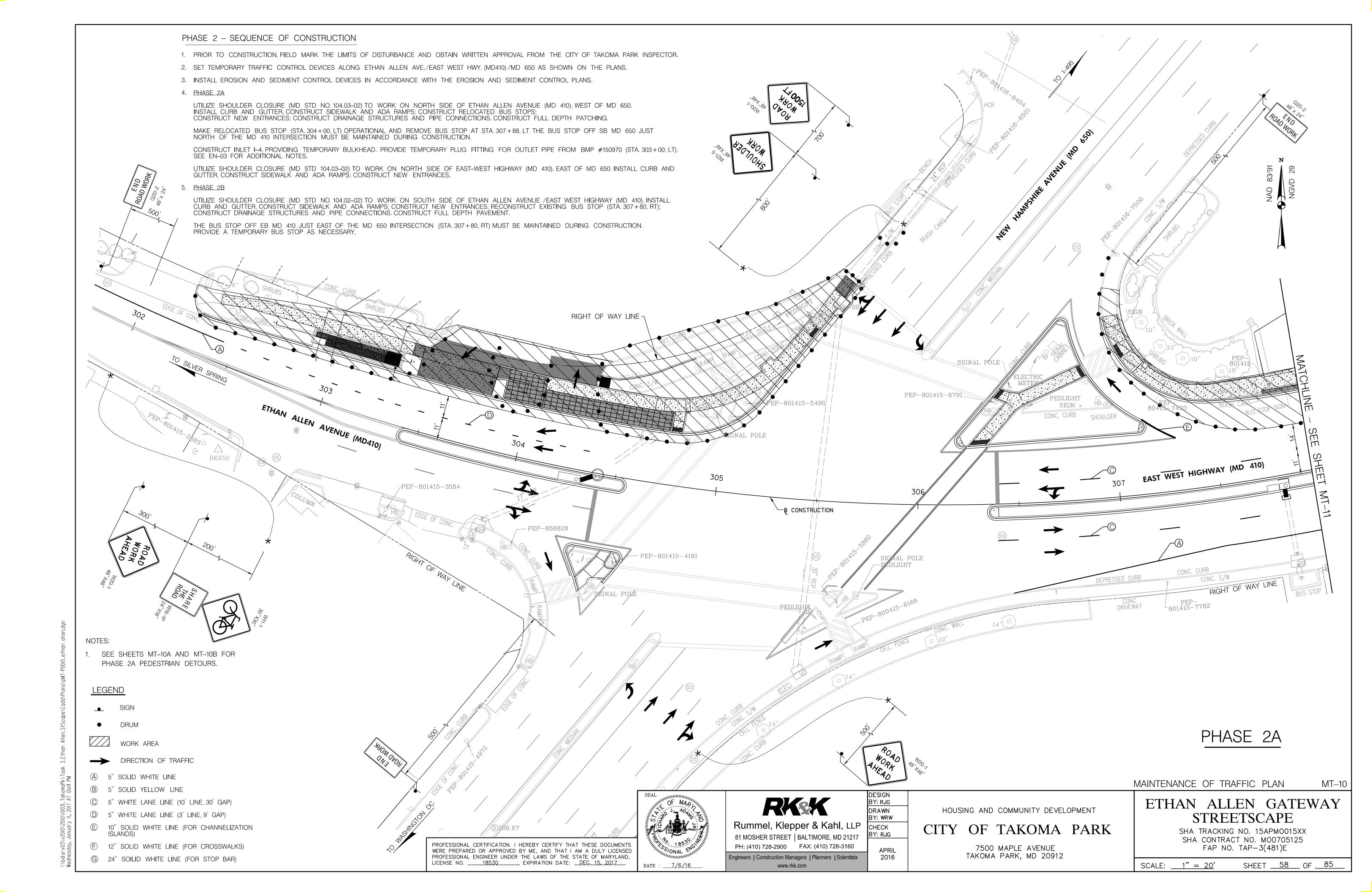
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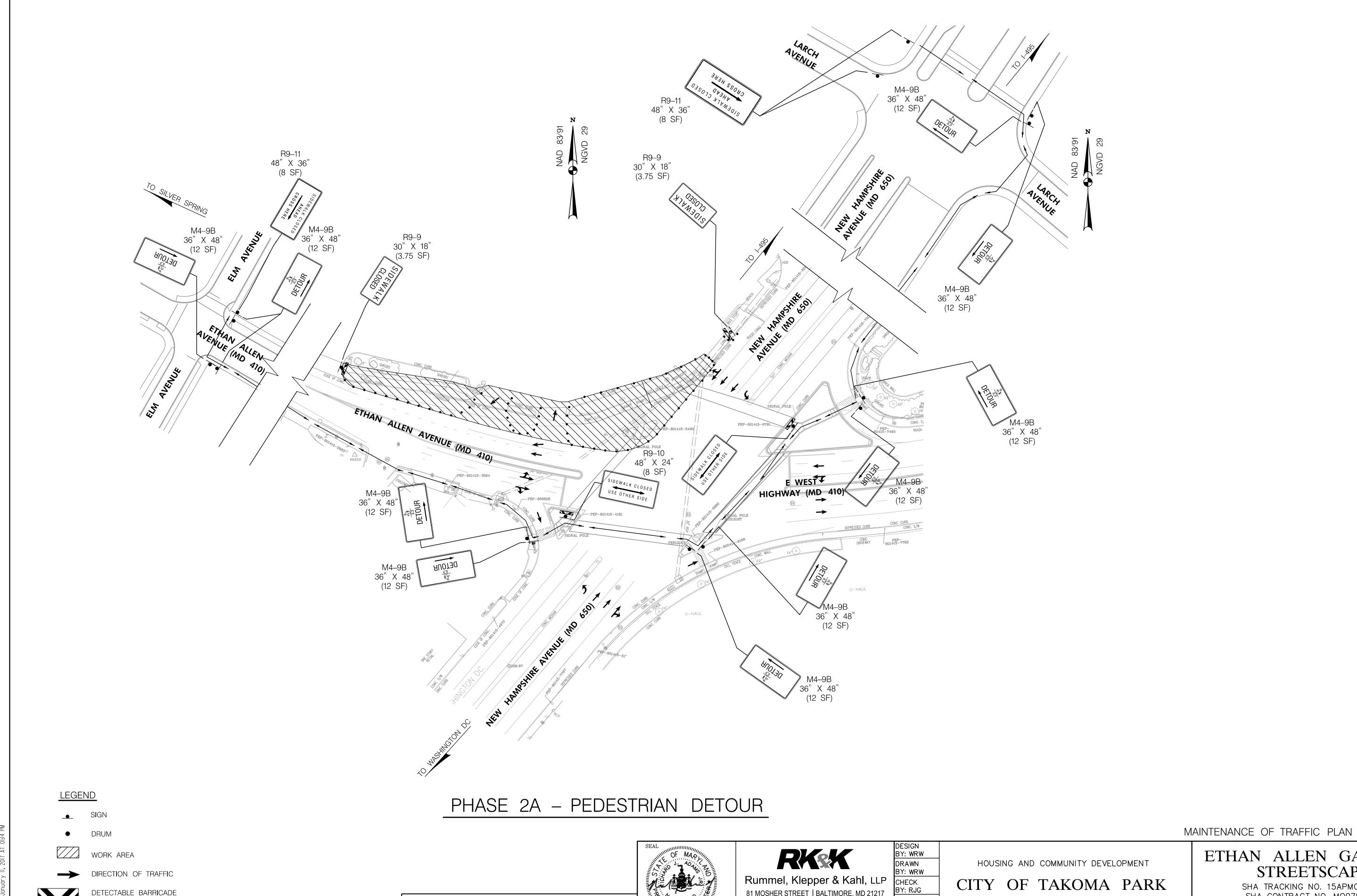
STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 20'

SHEET <u>57</u> OF <u>85</u>





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APRIL

2016

DETECTABLE BARRICADE

PEDESTRIAN MOT

ETHAN ALLEN GATEWAY STREETSCAPE

MT-10A

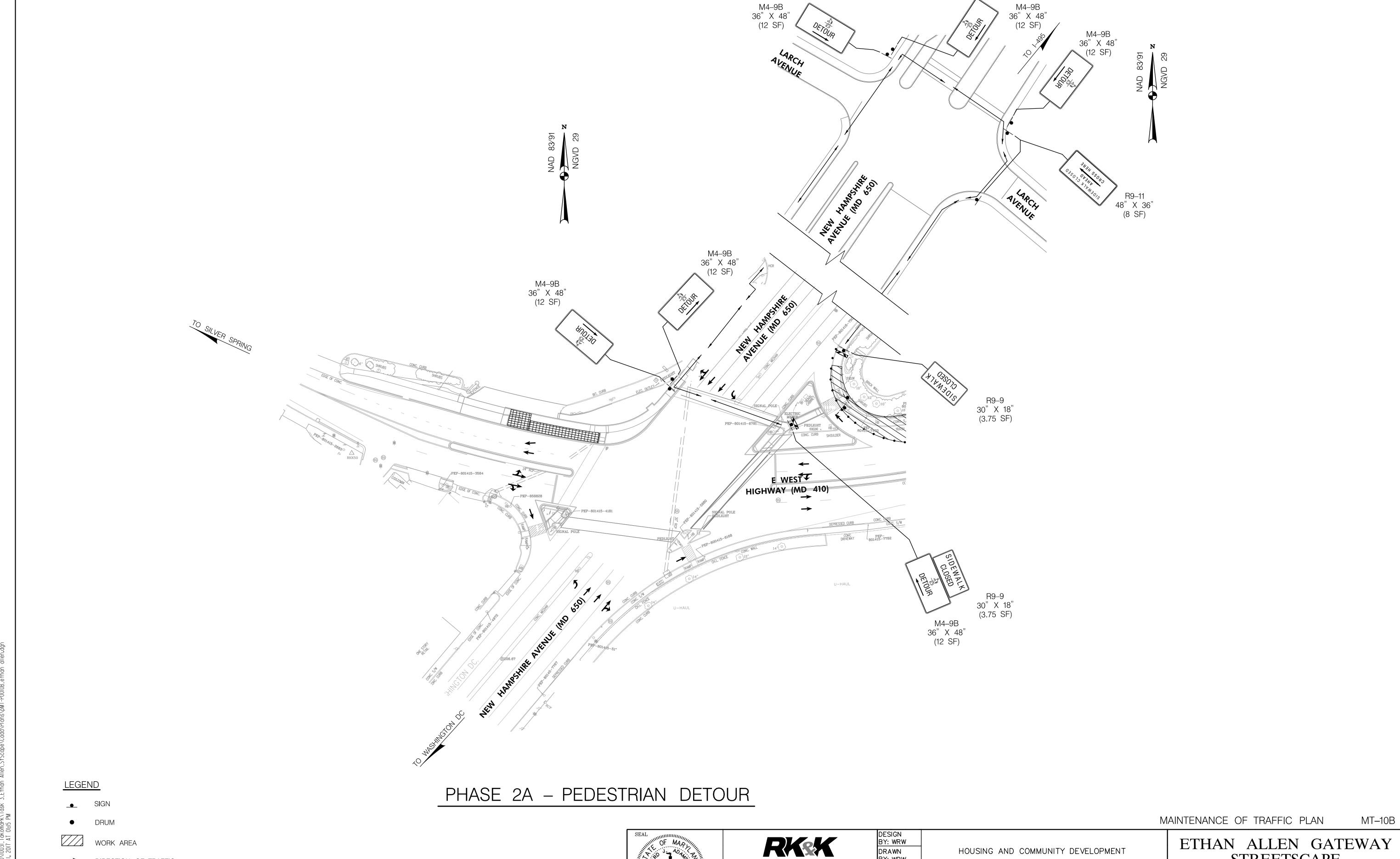
SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. M00705125 FAP NO. TAP-3(481)E

SCALE: 1" = 40'

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

SHEET <u>58A</u> OF <u>85</u>



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DIRECTION OF TRAFFIC

DETECTABLE BARRICADE

PEDESTRIAN MOT

SHA TRACKING NO. 15APM0015XX SHA CONTRACT NO. M00705125 FAP NO. TAP-3(481)E

STREETSCAPE

SCALE: 1" = 40'

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

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DATE : ____7/6/16

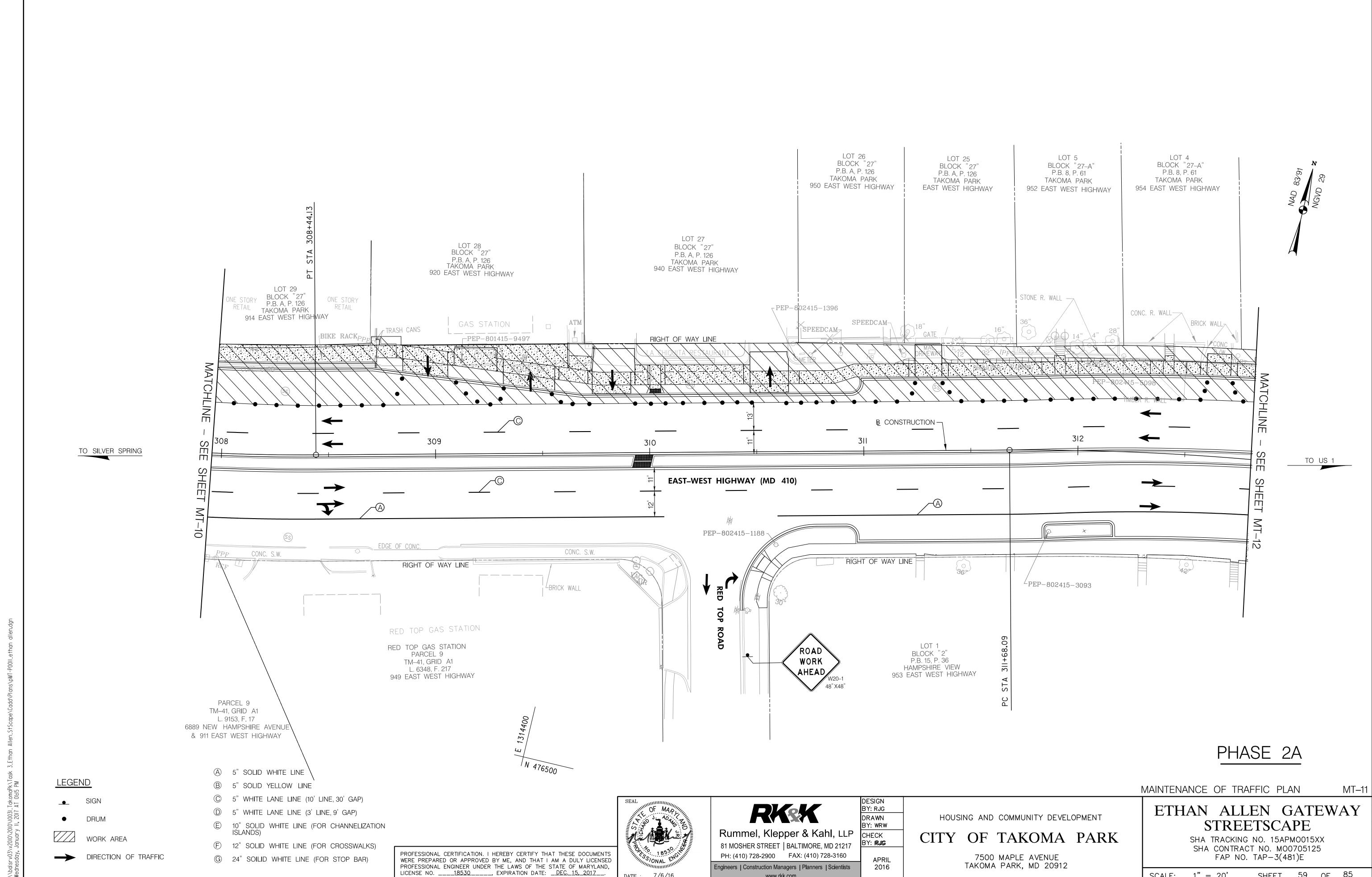
BY: WRW

CHECK BY: RJG

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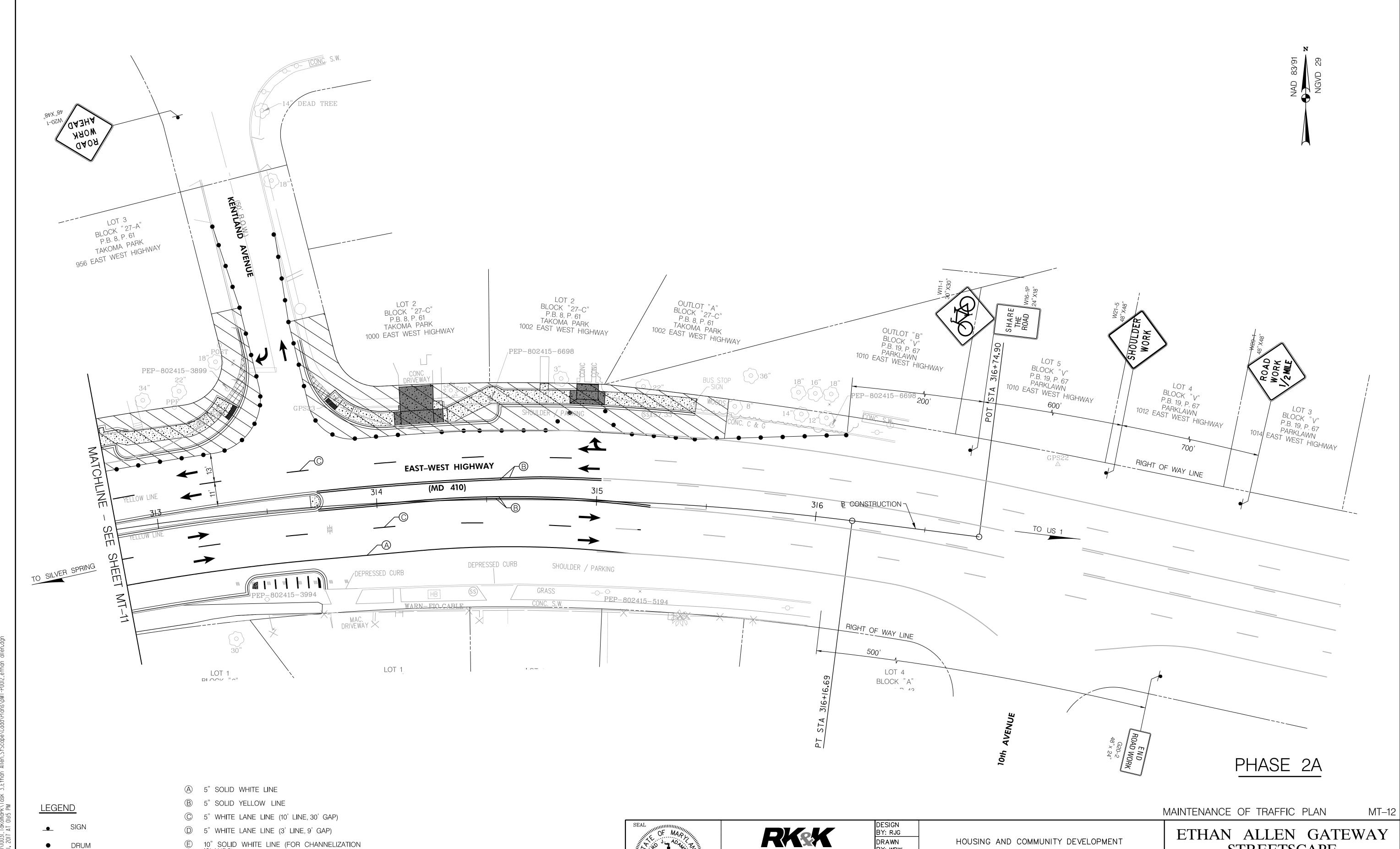
2016

SHEET <u>58B</u> OF <u>85</u>



www.rkk.com

SHEET <u>59</u> OF <u>85</u>



HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

STREETSCAPE

SHA TRACKING NO. 15APMO015XX

SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 20'

SHEET <u>60</u> OF <u>85</u>

DRAWN

CHECK

Rummel, Klepper & Kahl, LLP

81 MOSHER STREET | BALTIMORE, MD 21217

PH: (410) 728-2900 FAX: (410) 728-3160

Engineers | Construction Managers | Planners | Scientists

www.rkk.com

BY: WRW

Y: RJG

APRIL

2016

WORK AREA

DIRECTION OF TRAFFIC

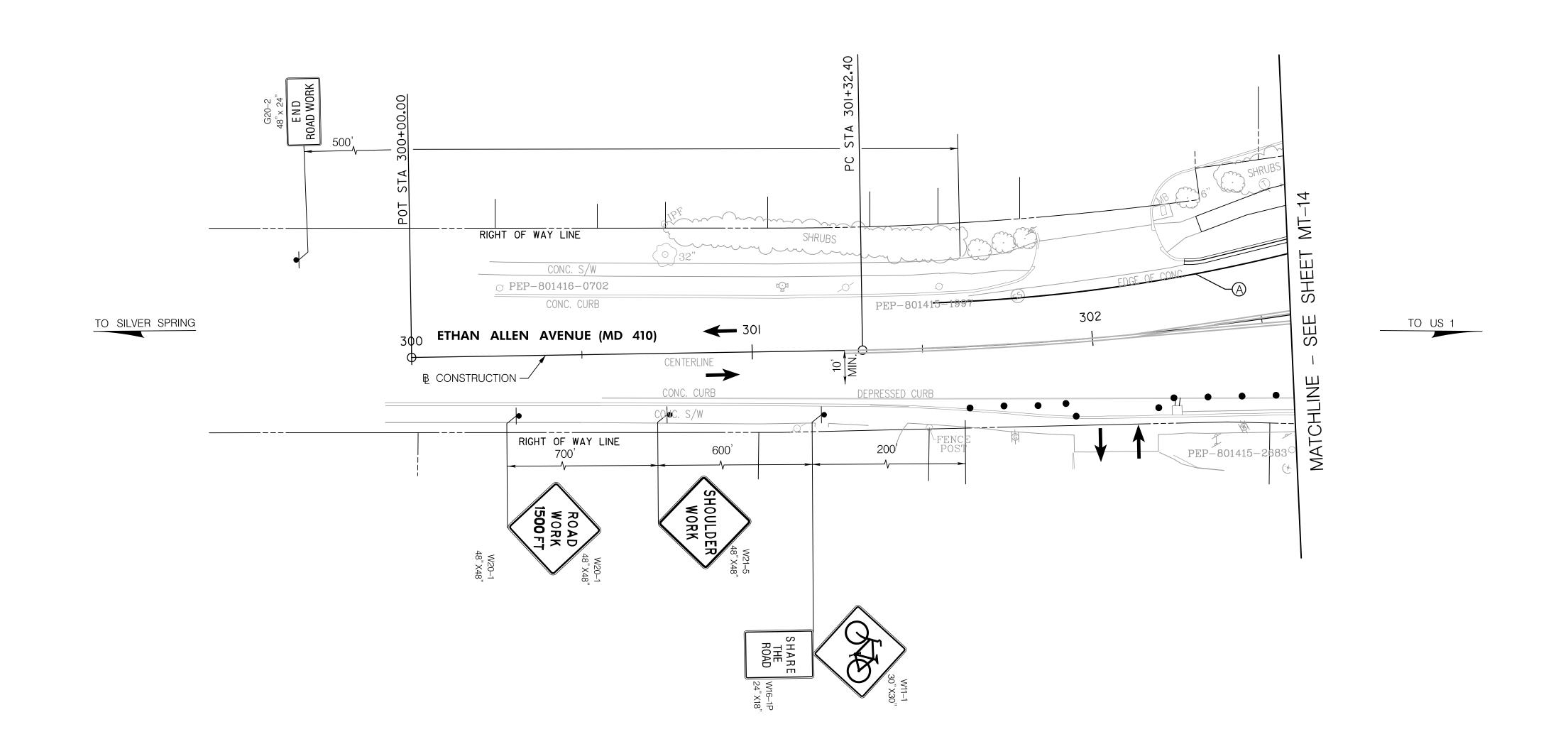
© 10" SOLID WHITE LINE (FOR CHANNELIZATION ISLANDS)

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. ______18530_______, EXPIRATION DATE: __DEC._15,_2017____.

(F) 12" SOLID WHITE LINE (FOR CROSSWALKS)

© 24" SOILID WHITE LINE (FOR STOP BAR)

TOWN HOMES



PHASE 2B

LEGEND

__ SIGN

DRUM

WORK AREA

DIRECTION OF TRAFFIC

B 5" SOLID YELLOW LINE © 5" WHITE LANE LINE (10' LINE, 30' GAP)

A 5" SOLID WHITE LINE

D 5" WHITE LANE LINE (3' LINE, 9' GAP)

© 10" SOLID WHITE LINE (FOR CHANNELIZATION ISLANDS)

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RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217

DRAWN BY: WRW CHECK BY: RJG PH: (410) 728-2900 FAX: (410) 728-3160 APRIL Engineers | Construction Managers | Planners | Scientists 2016

DESIGN BY: RJG

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

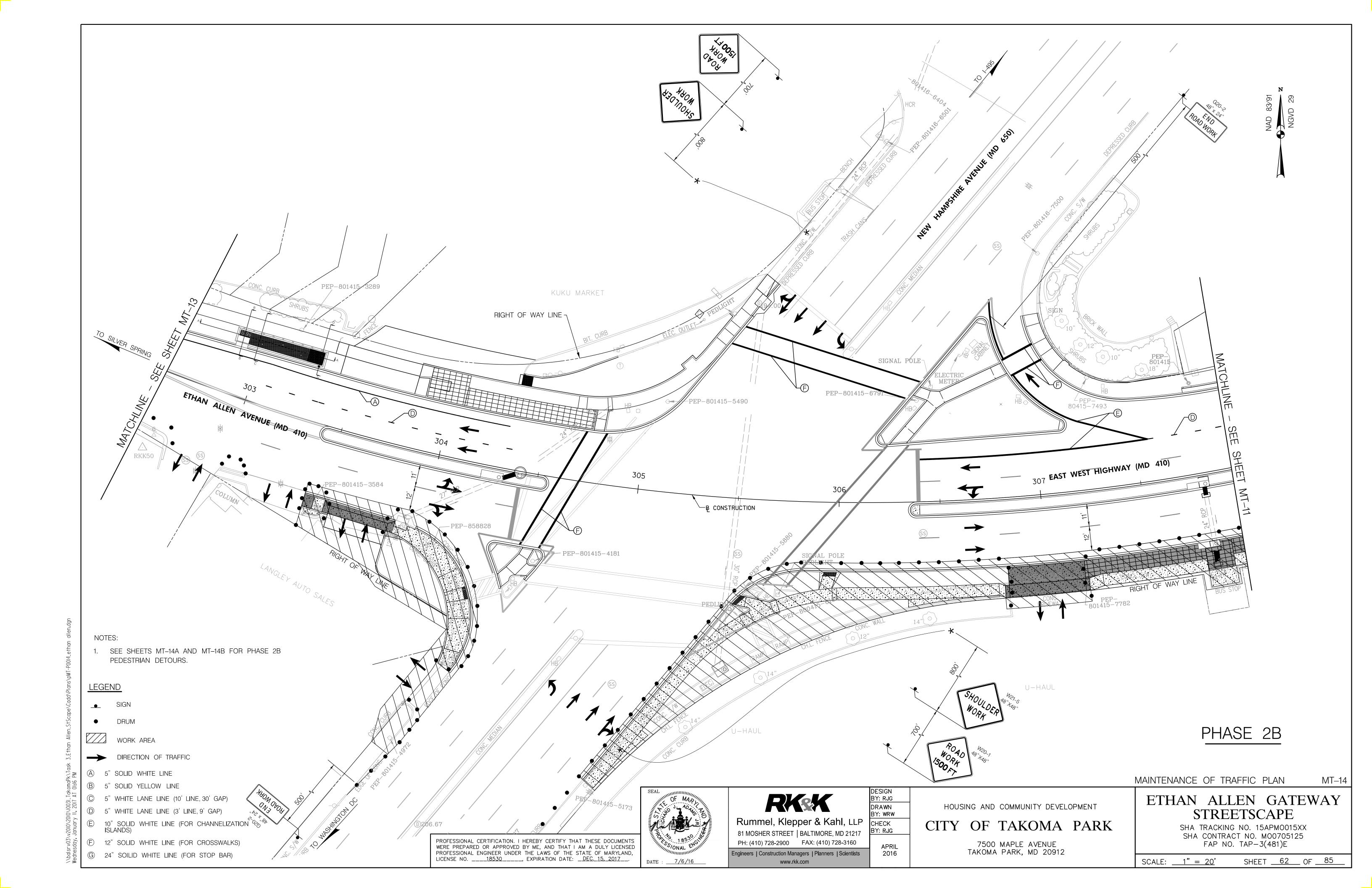
MAINTENANCE OF TRAFFIC PLAN ETHAN ALLEN GATEWAY

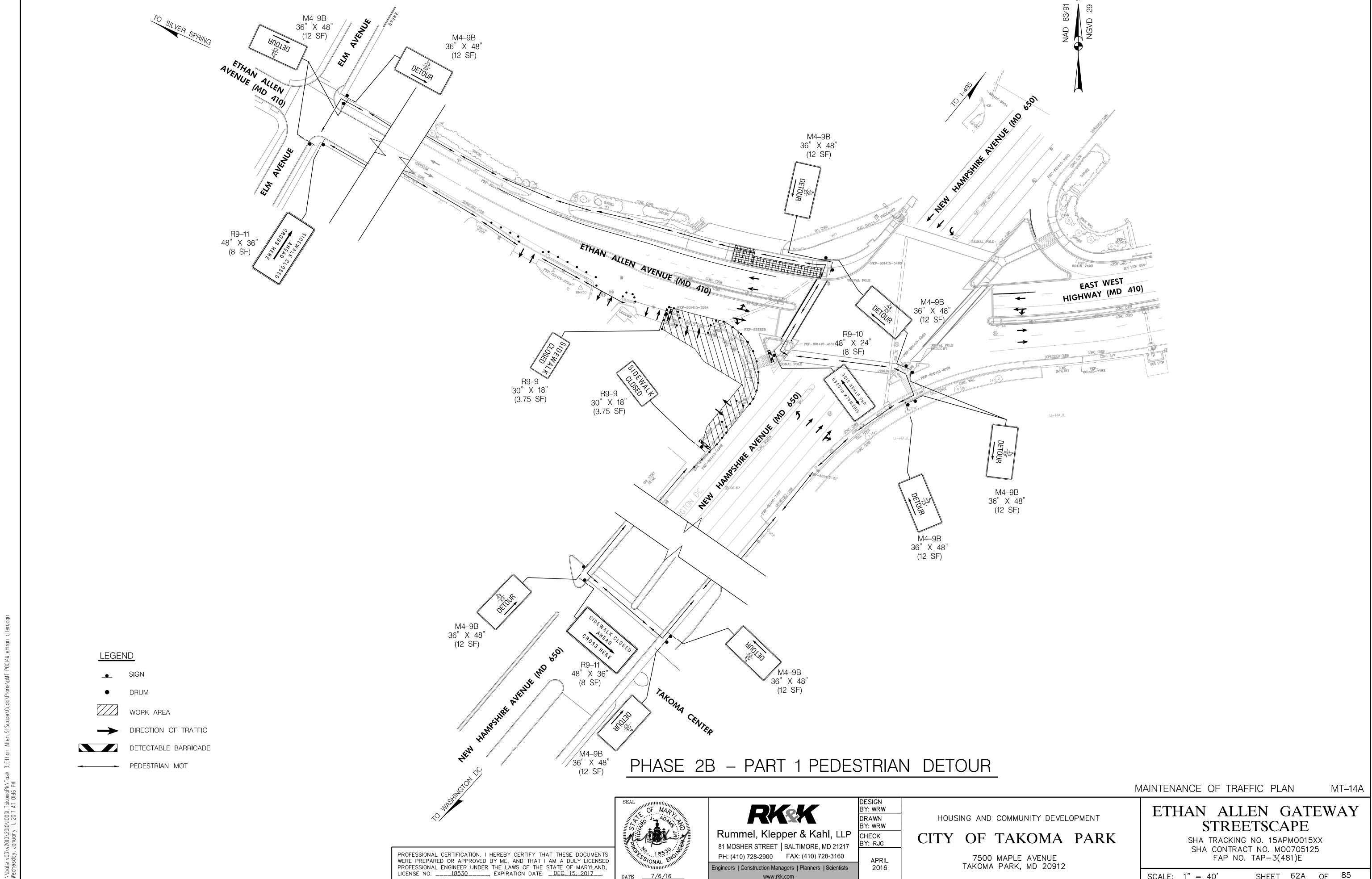
STREETSCAPE SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 20'

SHEET <u>61</u> OF <u>85</u>

MT-13





DATE : <u>7/6/16</u>

APRIL

2016

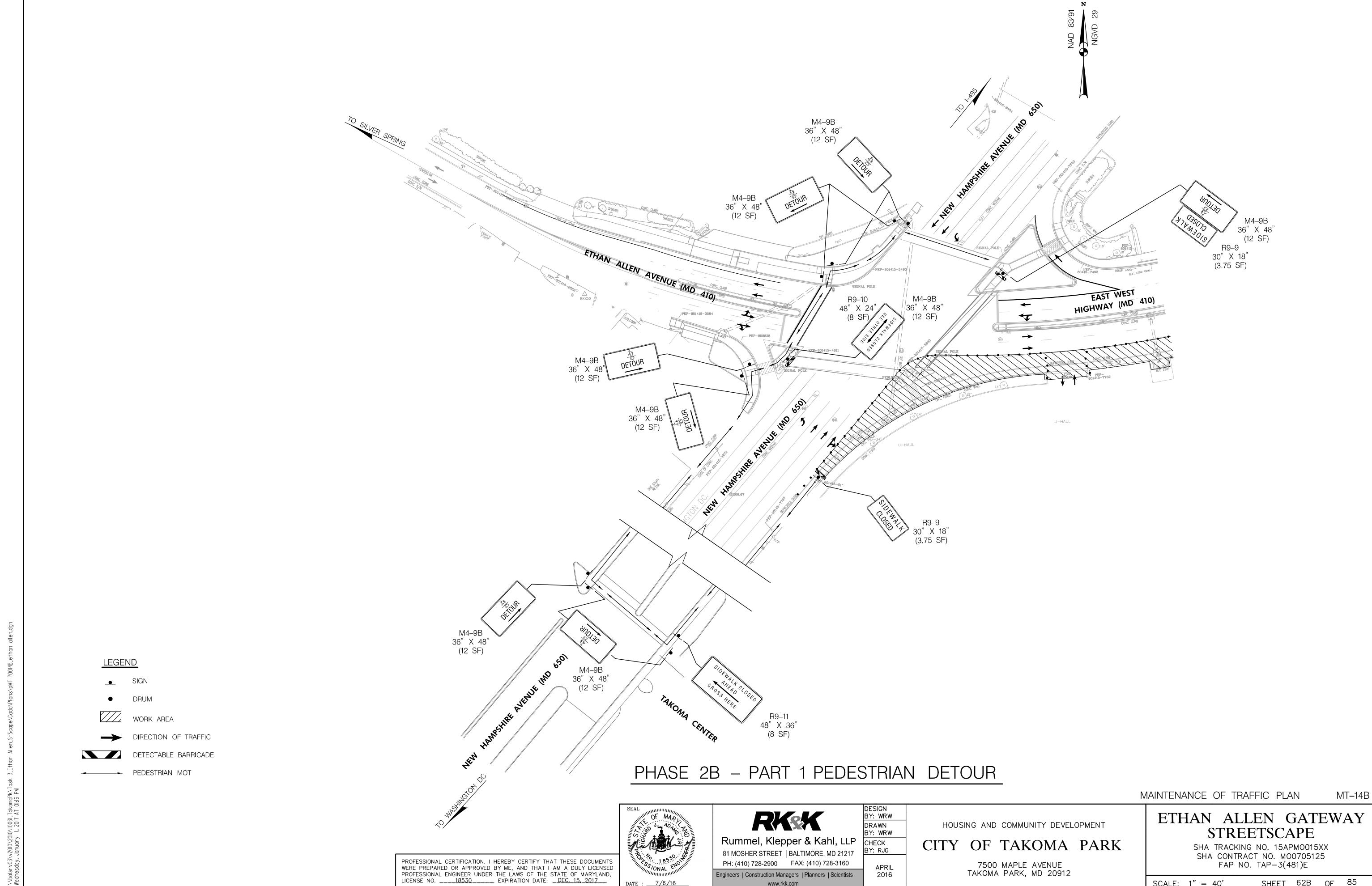
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SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 40'

SHEET <u>62A</u> OF <u>85</u>



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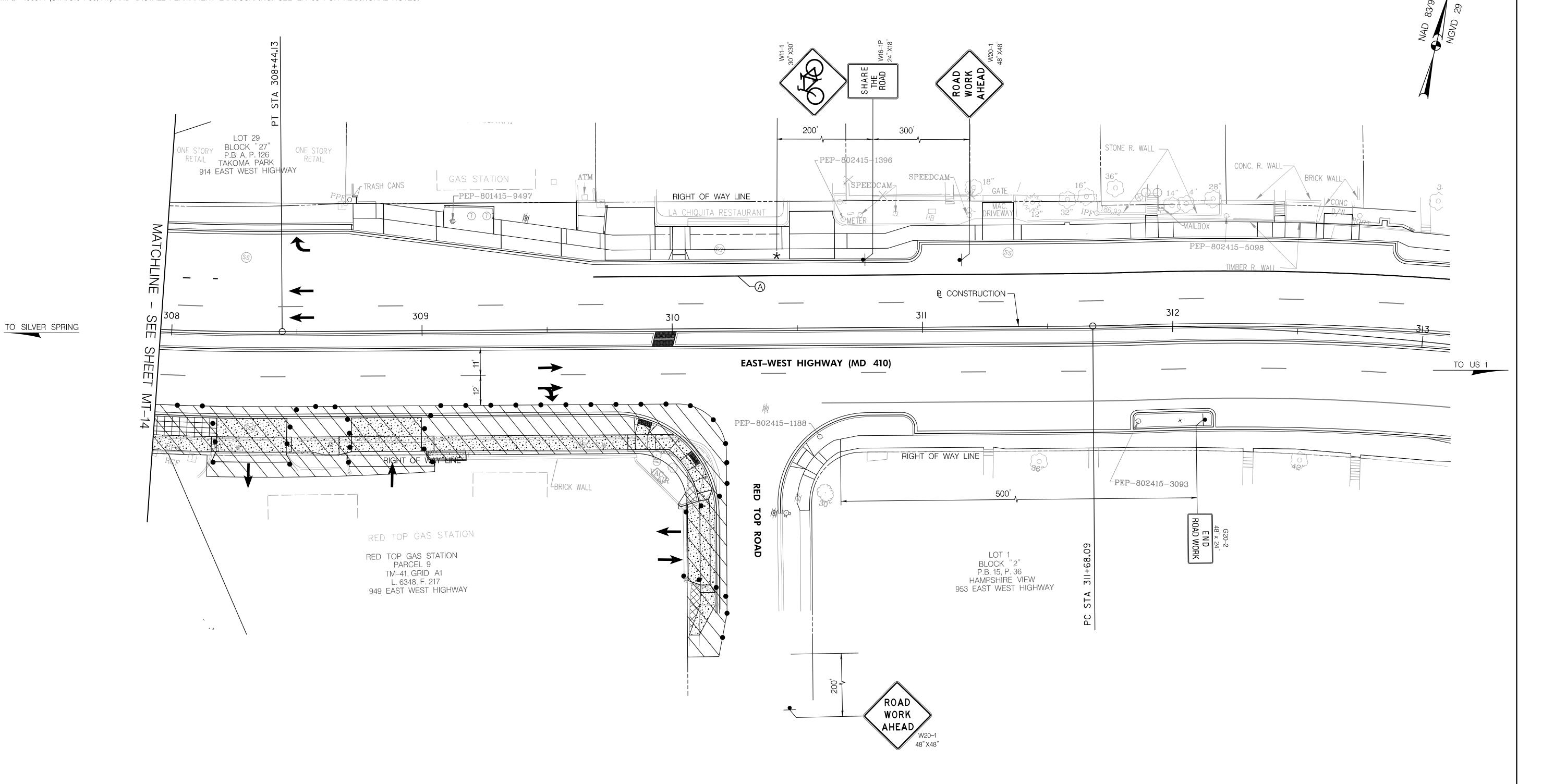
www.rkk.com

SCALE: 1" = 40'

SHEET <u>62B</u> OF <u>85</u>

PHASE 3 - SEQUENCE OF CONSTRUCTION

- 1. UTILIZE LANE CLOSURE (MD STD. NO. 104.03-12) DURING WEEKENDS TO CONSTRUCT PCC BUS PADS. PERFORM RESURFACING OPERATIONS.
- 2. UTILIZE RIGHT LANE CLOSURES (MD STD. NO. 104.03-06) TO CONSTRUCT BMP# 150970 (STA. 303 + 00, LT) AND BMP# 150971 (STA. 313 + 50, RT) AND INSTALL PERMANENT LANDSCAPING. SEE EN-03 FOR ADDITIONAL NOTES.



LEGEND

DRUM

DIRECTION OF TRAFFIC

WORK AREA

A 5" SOLID WHITE LINE

B 5" SOLID YELLOW LINE

© 5" WHITE LANE LINE (10' LINE, 30' GAP)

D 5" WHITE LANE LINE (3' LINE, 9' GAP)

E 10" SOLID WHITE LINE (FOR CHANNELIZATION ISLANDS)

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BY: RJG DRAWN BY: WRW CHECK BY: RJG APRIL

2016

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

MAINTENANCE OF TRAFFIC PLAN ETHAN ALLEN GATEWAY

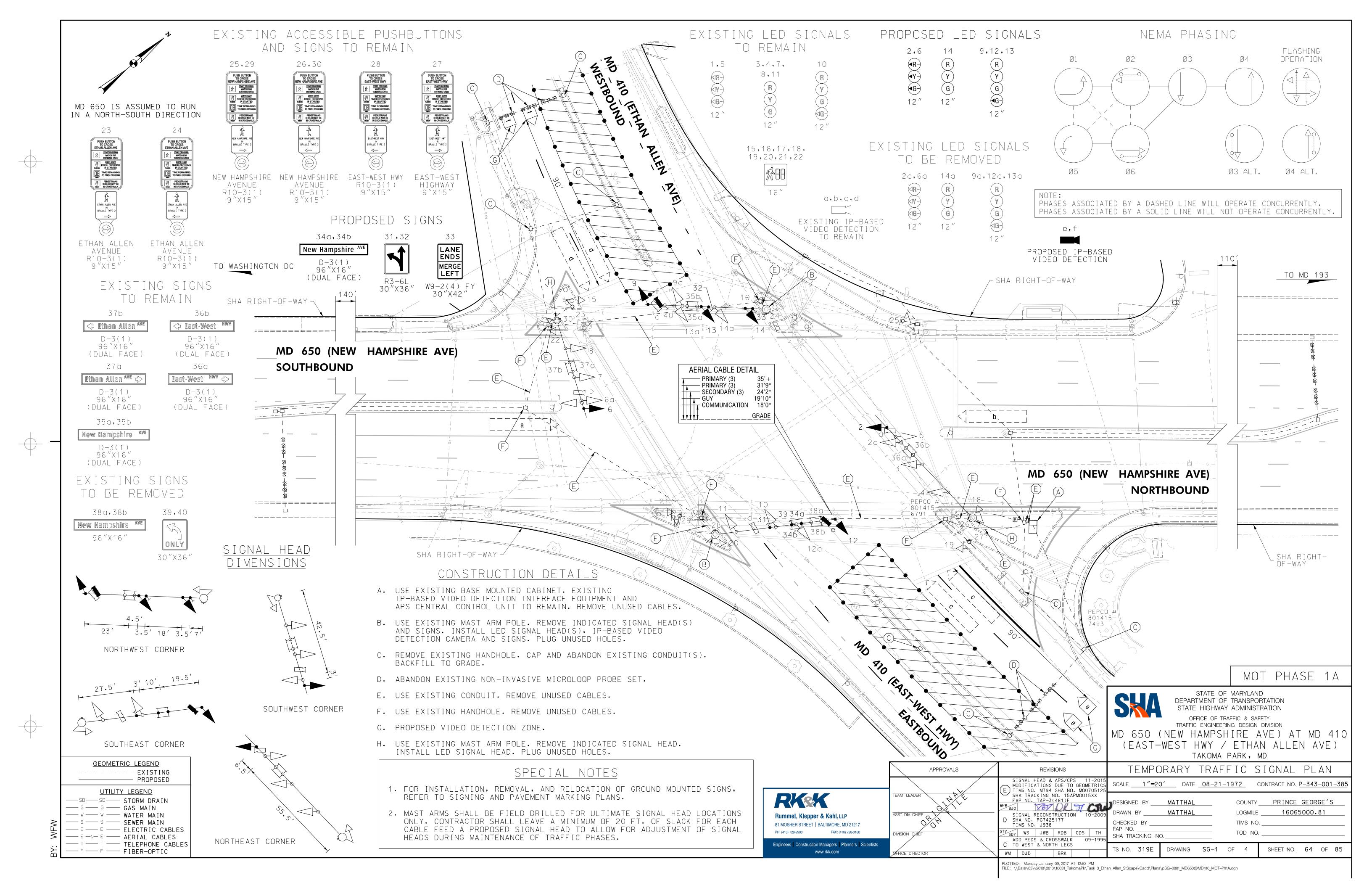
STREETSCAPE SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

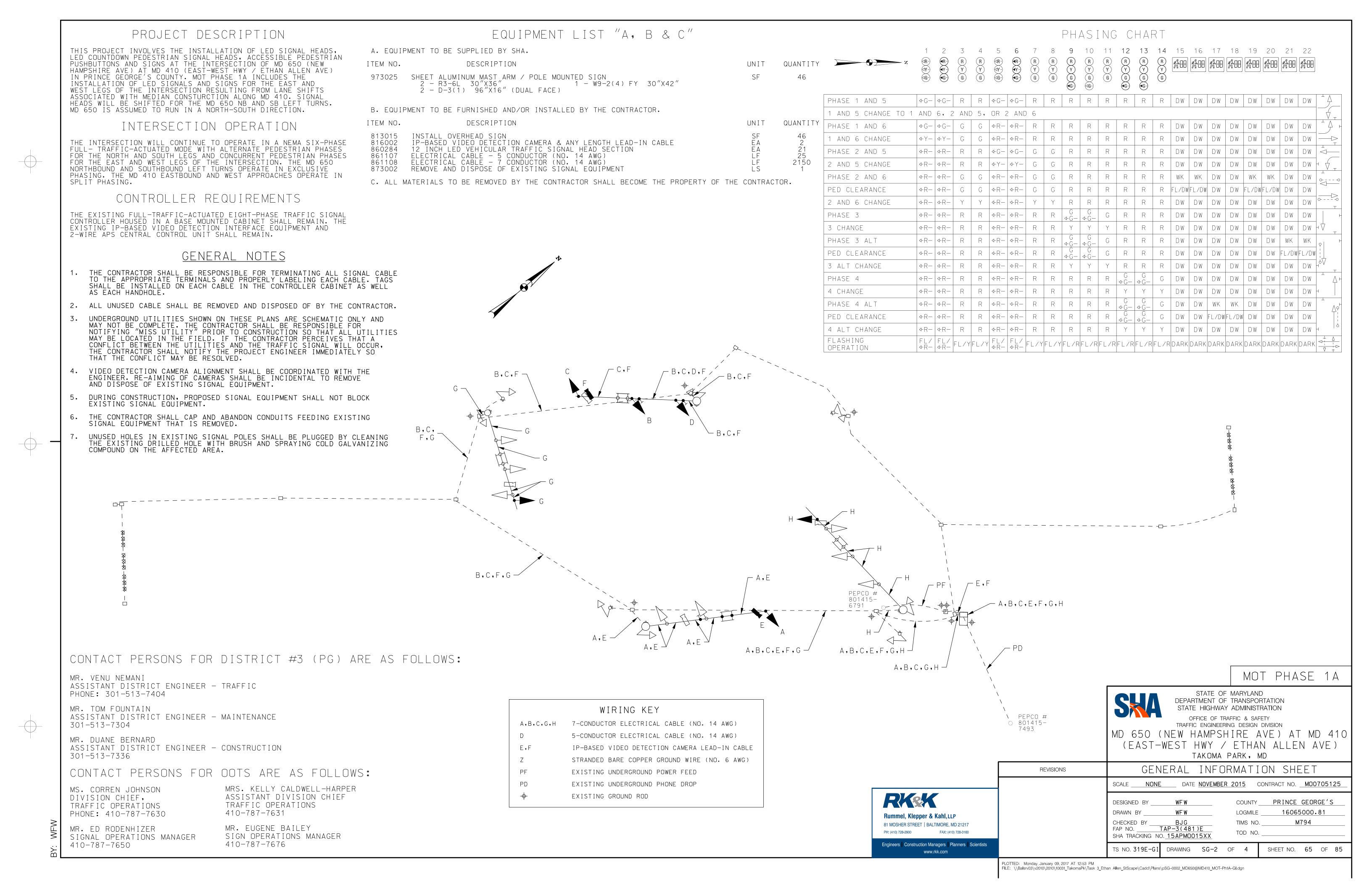
PHASE 2B

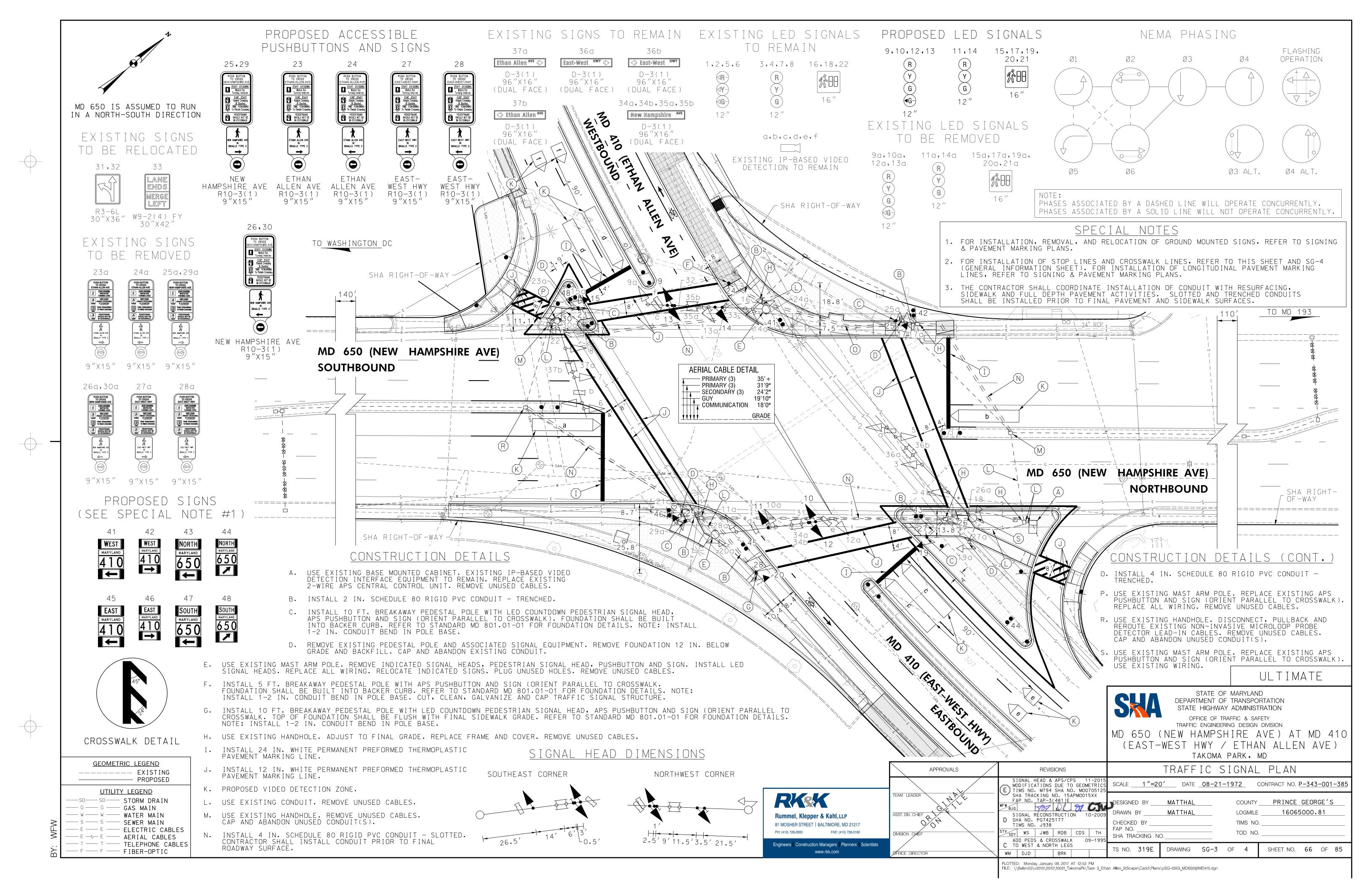
SCALE: 1" = 20'SHEET <u>63</u> OF <u>85</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS

MT-15







R Y G

R Y G

R Y G

AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND

| 4R- | 4R- |

14R-14R-1

QUANTITY

PHASE 1 AND 5

PHASE 1 AND 6

I AND 6 CHANGE

PHASE 2 AND 5

2 AND 5 CHANGE

PHASE 2 AND 6

PED CLEARANCE

PHASE 3

3 CHANGE

PHASE 4

4 CHANGE

PHASE 4 ALT

PED CLEARANCE

4 ALT CHANGE

CC,DD,EE,FF,GG,HH

PEPCO #

o 801415-

7493

FLASHING

OPERATION

PHASE 3 ALT

PED CLEARANCE

3 ALT CHANGE

2 AND 6 CHANGE

SF

— T,CC,Z

A,B,H,J,N,

W,X,FF,GG

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R Y G

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 $R \mid R \mid 4R - \mid 4R - \mid R \mid R \mid R \mid R \mid R$

R Y G

R R R Y Y G G G G

G | R | R | R | R | R | R | FL/DW|FL/DW| DW | DW | FL/DW|FL/DW| DW | DW

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Y | DW | DW | DW | DW | DW | DW | DW

G | DW | DW |FL/DW|FL/DW| DW | DW | DW | DW

9 10 11 12 13 14 15 16 17 18 19 20 21 22

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE FULL- TRAFFIC-ACTUATED MODE WITH ALTERNATE PEDESTRIAN PHASES FOR THE NORTH AND SOUTH LEGS AND CONCURRENT PEDESTRIAN PHASES FOR THE EAST AND WEST LEGS OF THE INTERSECTION. THE MD 650 NORTHBOUND AND SOUTHBOUND LEFT TURNS OPERATE IN EXCLUSIVE PHASING. THE MD 410 EASTBOUND AND WEST APPROACHES OPERATE IN SPLIT PHASING.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT-PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL REMAIN. THE EXISTING IP-BASED VIDEO DETECTION INTERFACE EQUIPMENT SHALL REMAIN. THE EXISTING APS CENTRAL CONTROL UNIT SHALL BE REMOVED. A NEW 2-WIRE APS CENTRAL CONTROL UNIT SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY SHA.

	WIRING KEY
A,B,C,D, E,F,G	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
K,L,M,O,P, Q,R,S,T,V	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
U,W,X,Y, AA,BB,CC	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
DD,EE,FF, GG,HH,	IP-BASED VIDEO DETECTION CAMERA LEAD-IN CABLES
H,J,N	DISCONNECT, PULLBACK, AND REROUTE EXISTING NON-INVASIVE MICROLOOP PROBE LEAD-IN CABLES
Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
EX	USE EXISTING CABLES
PF	EXISTING UNDERGROUND POWER FEED
PD	EXISTING UNDERGROUND PHONE DROP
-	EXISTING GROUND ROD
+	PROPOSED GROUND ROD

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR. ITEM NO. DESCRIPTION 585625

SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN

DESCRIPTION

DD, EE -

A. EQUIPMENT TO BE SUPPLIED BY SHA.

6 - R10 - 3(1) 9'' X 15'

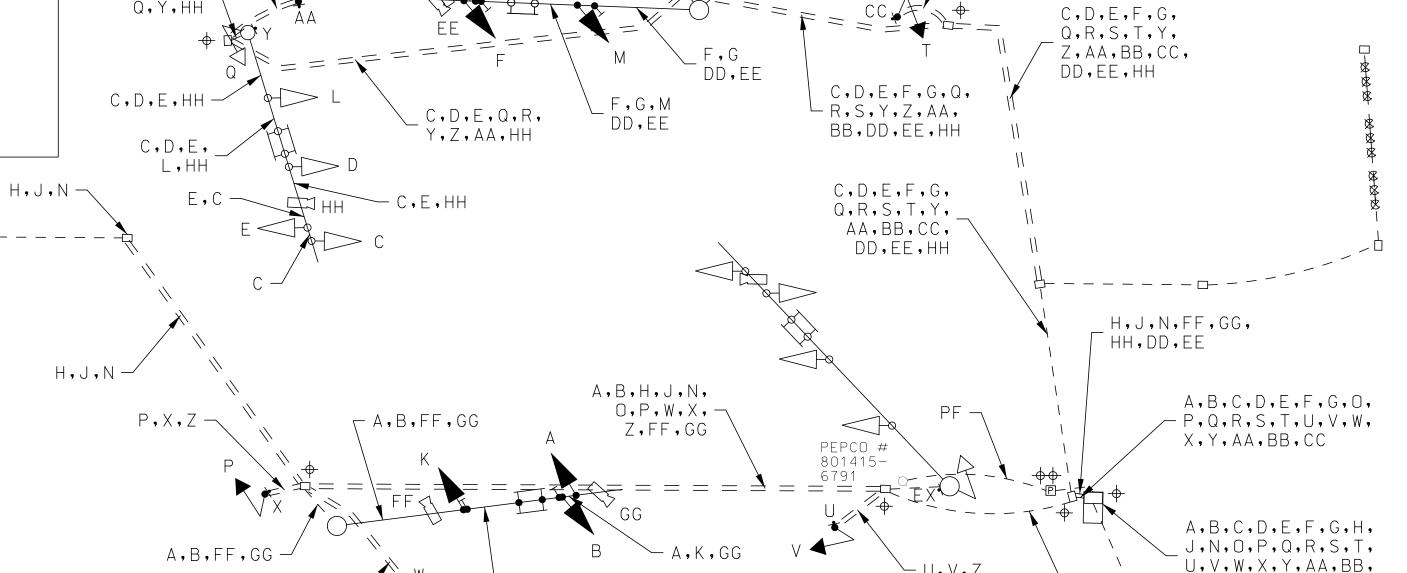
ITEM NO.

R,AA,Z

C, D, E,

QUANTIT UNIT INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES 170 1775 800000 IP-BASED VIDEO DETECTION CAMERA LEAD-IN CABLE 801004 CONCRETE FOR SIGNAL FOUNDATION 595 NO. 6 AWG STRANDED BARE COPPER GROUND WIRE 802501 ADJUST HANDHOLE TO GRADE AND REPLACE FRAME AND COVER 140 2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED 95 455 24 805155 RELOCATE EXISTING OVERHEAD SIGNAL SIGN INCLUDING NEW MOUNTING HARDWARE 813007 INSTALL GROUND MOUNTED SIGN 813014 10 FOOT BREAKAWAY PEDESTAL POLE 818004 DISCONNECT, PULL-BACK AND REROUTE CABLES 1980 822510 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION 860284 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD 860285 CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE 860292 ECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG) 1905 2005 LECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) 861107 2700 861108 ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS 865210 865300 2-WIRE APS CENTRAL CONTROL UNIT REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



F,G,S

CONTACT PERSONS FOR DISTRICT #3 (PG) ARE AS FOLLOWS:

MR. VENU NEMANI ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: 301-513-7404

MR. TOM FOUNTAIN

ASSISTANT DISTRICT ENGINEER - MAINTENANCE 301-513-7304

MR. DUANE BERNARD ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 301-513-7336

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MS. CORREN JOHNSON DIVISION CHIEF, TRAFFIC OPERATIONS PHONE: 410-787-7630

MR. ED RODENHIZER

410-787-7650

MRS. KELLY CALDWELL-HARPER ASSISTANT DIVISION CHIEF TRAFFIC OPERATIONS 410-787-7631

MR. EUGENE BAILEY SIGN OPERATIONS MANAGER SIGNAL OPERATIONS MANAGER 410-787-7676

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MD 650 (NEW HAMPSHIRE AVE):

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS NEW HAMPSHIRE AT EAST-WEST AND ETHAN ALLEN. WAIT."

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

SPECIAL NOTES

TO CROSS MD 410 (EAST-WEST HWY):

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS EAST-WEST AT NEW HAMPSHIRE. WAIT.

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS MD 410 (ETHAN ALLEN AVE):

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS ETHAN ALLEN AT NEW HAMPSHIRE. WAIT.

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE. TAGS SHALL BE INSTALLED ON EACH CABLE IN THE CONTROLLER CABINET AS WELL AS EACH HANDHOLE.
- 3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- NO. 6 AWG STRANDED BARE COPPER GROUND WIRE INSTALLED IN EACH HANDHOLE SHALL CONNECT THE GROUNDING LUG ON THE LID / COLLAR TO THE GROUND ROD IN THE BASE OF THE HANDHOLE TO PROPERLY GROUND THE STRUCTURE.
- UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 6. ALL PEDESTAL FOUNDATION TOPS SHALL BE INSTALLED FLUSH WITH SIDEWALK GRADE.
- 7. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MDMUTCD CHAPTER 4E "PEDESTRIAN CONTROL FEATURES" AND FIGURES 4E-3 AND 4E-4, AND THE LATEST NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- 8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- 9. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
- 10. PUSHBUTTON ARROWS AND SIGNS ARE TO BE ORIENTED PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED. 11. VIDEO DETECTION CAMERA REALIGNMENT SHALL BE COORDINATED WITH THE ENGINEER, RE-AIMING

OF CAMERAS SHALL BE INCIDENTAL TO REMOVE AND DISPOSE EXISTING SIGNAL EQUIPMENT.

- 12. DURING CONSTRUCTION, PROPOSED SIGNAL EQUIPMENT SHALL NOT BLOCK EXISTING SIGNAL EQUIPMENT.
- 13. THE CONTRACTOR SHALL CAP AND ABANDON CONDUITS FEEDING EXISTING SIGNAL EQUIPMENT THAT IS REMOVED.
- 14. THE CONTRACTOR SHALL CONTACT ED RODENHIZER AT THE SIGNAL SHOP (410-787-7652) TO DELIVER APS EQUIPMENT FOR TESTING.

15. HAND DIGGING FOR INSTALLATION OR REMOVAL OF SIGNAL EQUIPMENT, SIGNS, CURB AND IDEWALK SHALL BE INCIDENTAL TO THE TEMS IN THE EQUIPMENT LIST. NO

16. UNUSED HOLES IN EXISTING SIGNAL POLES SHALL BE PLUGGED BY CLEANING THE EXISTING DRILLED HOLE WITH BRUSH AND SPRAYING COLD GALVANIZING COMPOUND ON THE AFFECTED AREA.

ADDITIONAL COMPENSATION WILL BE PROVIDED FOR HAND DIGGING.

TS NO. 319E-GI

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

ULTIMATE

SHEET NO. 67 OF 85

OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 650 (NEW HAMPSHIRE AVE) AT MD 410 (EAST-WEST HWY / ETHAN ALLEN AVE)

TAKOMA PARK, MD GENERAL INFORMATION SHEET **REVISIONS**

RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217 FAX: (410) 728-3160 PH: (410) 728-2900 Engineers | Construction Managers | Planners | Scientists www.rkk.com

NONE DATE NOVEMBER 2015 CONTRACT NO. MO0705125 PRINCE GEORGE'S DESIGNED BY WFW COUNTY WFW 16065000.81 DRAWN BY LOGMILE BJG TAP-3(481)E M794 TIMS NO. CHECKED BY FAP NO. TOD NO. SHA TRACKING NO. 15APMO015XX

DRAWING SG-4 OF 4

LOTTED: Monday, January 09, 2017 AT 12:53 PM E: \\Balsrv03\v2010\2010\10031 TakomaPk\Task 3 Ethan Allen StScape\Cadd\Plans\pSG-0004 MD650@MD410-Gl.dgn

-(+)

PROPOSED LED TYPE III COBRAHEAD LUMINAIRE ON EXISTING UTILITY POLE φ (LUMINAIRE, ARM AND CABLES FURNISHED AND INSTALLED BY PEPCO)

PROPOSED 60W LED TYPE III PENDANT LUMINAIRE ON 12' DECORATIVE POLE

 \bigcirc PROPOSED 75W LED TYPE III PENDANT LUMINAIRE ON 30' DECORATIVE POLE

E PROPOSED LIGHTING MANHOLE

PROPOSED LIGHTING HANDBOX

PROPOSED 3" SCHEDULE 80 PVC CONDUIT - TRENCHED :====UNLESS OTHERWISE NOTED

PROPOSED 4" SCHEDULE 80 PVC CONDUIT - BORED

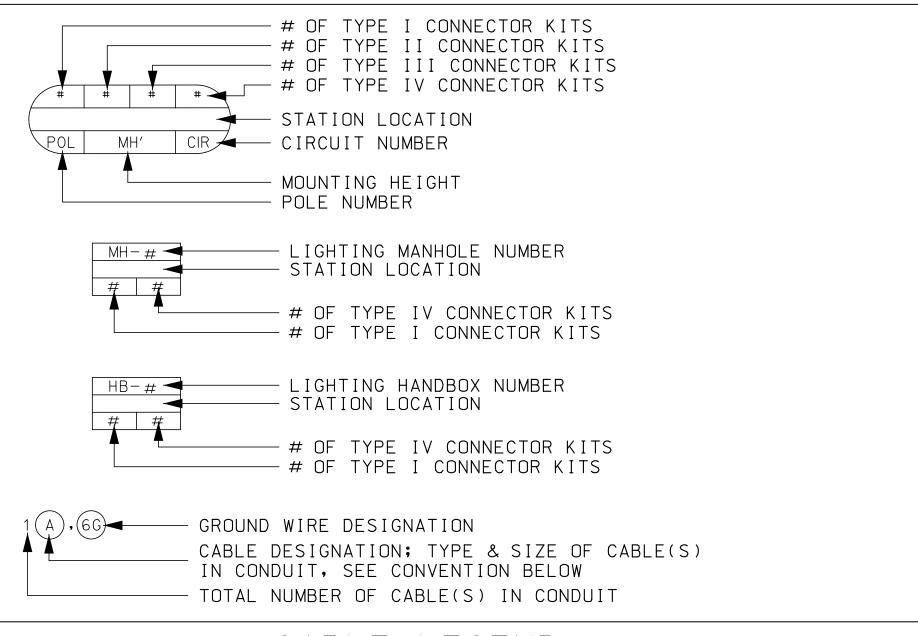
PROPOSED 100 AMP BASE MOUNTED METERED SERVICE PEDESTAL WITH PHOTO CONTROL (120/240 VOLT, 1 PHASE 3 WIRE SYSTEM)

EXISTING LIGHT STRUCTURE TO BE REMOVED

EXISTING PEPCO OVERHEAD ELECTRIC

EXISTING PRIVATE HPS LUMINAIRE AND POLE TO REMAIN

CONVENTIONS



CABLE LEGEND

- (A) 1/C #2 AWG ELECTRICAL CABLE
- (B) 1/C #6 AWG ELECTRICAL CABLE
- (C) 1/C #10 AWG ELECTRICAL CABLE
- (2G) NO. 2 STRANDED BARE COPPER GROUND WIRE
- (6G) NO. 6 STRANDED BARE COPPER GROUND WIRE
- (10G) NO. 10 COPPER GROUND WIRE
- * SPLICE SHALL BE FUSED

- 1. DECORATIVE POLES, LUMINAIRES AND ARMS SHALL BE AS SPECIFIED ON SHEET LT-07.
- 2. LIGHTING MANHOLE SHALL BE IN ACCORDANCE WITH MD 811.04, INSTALLED WITH CONCRETE COLLARS, LIGHTING HANDBOXES SHALL BE IN ACCORDANCE WITH THE HANDBOX DETAIL SHOWN ON SHEET LT-08.
- 3. THE PROPOSED ROADWAY LIGHTING SHALL BE 120/240V WITH AN OPERATING VOLTAGE OF 240V.
- 4. BASE MOUNTED METERED SERVICE PEDESTAL SHALL BE SHALL BE FURNISHED WITH PHOTOCELL, 100 AMP CONTACTOR, DISCONNECT SWITCH, AND A MINIMUM OF 12 PHOTO-CONTROLLED SLOTS.
- 5. ALL LIGHT POLE FOUNDATIONS, MANHOLES, HANDBOXES, AND SERVICE PEDESTAL FOUNDATIONS SHALL BE FURNISHED WITH A GROUND ROD. CONNECTION BETWEEN GROUND RODS AND GROUND WIRE SHALL BE BY EXOTHERMIC WELD.
- 6. THE CONTRACTOR SHALL CAP AND ABANDON ALL EXISTING CONDUITS AND REMOVE ALL EXISTING CABLES THAT ARE NO LONGER IN USE.
- 7. THE CONTRACTOR SHALL INSTALL ALL LIGHT POLE FOUNDATIONS, HANDBOXES AND MANHOLES FLUSH WITH FINAL GRADE.
- 8. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF TAKOMA PARK TO ARRANGE FOR THE LIGHTING CABINETS TO BE ENERGIZED UPON COMPLETION OF WORK.
- 9. THE CONTRACTOR SHALL INSTALL DUCT / CONDUIT END SEALS IN ALL LIGHT POLES AND ALL MANHOLES. END SEALS SHALL BE INCIDENTAL TO PERTINENT BID ITEMS.
- 10. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE LIGHTING EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 11. THE CONTRACTOR SHALL USE MAINTENANCE OF TRAFFIC TEMPLATES AS PER THE LATEST EDITION OF THE MARYLAND BOOK OF STANDARDS.

- 12. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN CASE OF DAMAGE TO AN EXISTING FACILITY.
- 13. THE CONTRACTOR SHALL REPLACE ALL CONCRETE GUTTERS, FLUMES, UNDERDRAINS AND OTHER CONCRETE STRUCTURES DAMAGED OR REMOVED DURING THE INSTALLATION OF FOUNDATIONS AND CONDUIT.
- 14. CONDUCTORS SHALL NOT BE SPLICED EXCEPT IN STRUCTURES, MANHOLES AND PULL OR JUNCTION BOXES. ALL MANHOLES, CONDUITS UNDER PAVEMENT, LIGHTING STRUCTURES, ETC. SHALL BE STAKED OUT AND EVERY LOCATION APPROVED BY THE ENGINEER BEFORE ANY WORK IS DONE.
- 15. UPON RECEIVING NOTICE TO PROCEED, THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE LOCAL UTILITY COMPANY, THE PROJECT ENGINEER AND THE TRAFFIC OPERATIONS DIVISION TO INSURE THAT POWER IS AVAILABLE WHEN REQUIRED.
- 16. ALL TRENCHING MUST BE BACKFILLED AND RESTORED TO ITS ORIGINAL CONDITION ON THE SAME WORKING DAY ON WHICH IT WAS OPENED. AREAS WHICH ARE NOT RESEEDED, MULCHED OR SODDED MUST BE COVERED TO PREVENT EROSION. ALL SOIL NOT USED FOR BACKFILL MUST BE REMOVED ON THE SAME WORKING DAY.
- 17. ALL SOIL REMOVED FOR HANDBOXES, FOUNDATIONS, ETC. MUST BE COVERED TO PREVENT EROSION. SOIL NOT USED FOR BACKFILL MUST BE DISPOSED OF AS APPROVED BY THE ENGINEER ON THE SAME WORKING DAY THE BACKFILL IS COMPLETED.
- 18. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF LIGHT POLE FOUNDATIONS, MANHOLES, CONDUITS AND DUCT CABLES WITH THE INSTALLATION OF PROPOSED DRAINAGE STRUCTURES, IF THE CONTRACTOR PERCEIVES THAT A CONFLICT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 19. ALL CABLE ENERGIZING PROPOSED LIGHTING STRUCTURES SHALL BE NEW.
- 20, SPLICES IN HANDBOXES MAY BE FUSED, AS NOTED ON THE PLANS, DUE TO SMALL POLE BASE OF DECORATIVE LIGHT POLES. ALL CONNECTOR KITS SHALL BE SUBMERSIBLE. SEE SHEET LT-07 FOR POLE DETAILS.
- 21. CONTRACTOR SHALL INSTALL THREE RUNS OF #10 AWG BETWEEN LUMINAIRE AND LIGHT POLE BASE. ONE RUN SHALL INCLUDE GREEN INSULATION AND SHALL BE CONNECTED TO THE GROUNDING LUG OR GROUND ROD TO PROVIDE GROUNDING FOR THE LUMINAIRE.
- 22. LIGHTING FOUNDATIONS SHALL BE IN ACCORDANCE WITH MD 801.02, AND SHALL BE FLUSH WITH SIDEWALK FINAL GRADE.

INDEX OF SHEETS

LT-01: GENERAL NOTES AND QUANTITIES

LT-02 TO LT-05: LIGHTING PLAN SHEETS

LT-06: POLE AND PANELBOARD SCHEDULES

LT-07: LUMINAIRE AND POLE DETAILS

LT-08: LIGHTING HANDBOX DETAILS

LT-09: SERVICE PEDESTAL DETAILS

ITEM NO.

811003

832016

832018

832019

834001

834002

834003

834004

837001

860296

RKSK

PH: (410) 728-2900 FAX: (410) 728-3160

Engineers | Construction Managers | Planners | Scientists

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SUMMARY OF LIGHTING QUANTITIES DESCRIPTION

FURNISH AND INSTALL ELECTRICAL MANHOLE

CABLE - 1 CONDUCTOR, NO 6 AWG, TYPE USE, 600V

CABLE - 1 CONDUCTOR, NO 2 AWG, TYPE USE, 600V

GROUND ROD $-\frac{3}{4}$ INCH DIAMETER X 10 FOOT LENGTH

REMOVE AND DISPOSE OF LIGHTING STRUCTURE

CABLE - 1 CONDUCTOR, NO 10 AWG, TYPE THWN/THHN, 600V

800000 12 FT DECORATIVE ALUMINUM POLE - 24 IN. DECORATIVE ARM 800000 30 FT DECORATIVE STEEL POLE - 30 IN. DECORATIVE ARM 800000 60W DECORATIVE PENDANT LUMINAIRE (TYPE III, 49LED, 350MA, 4000K) 75W DECORATIVE PENDANT LUMINAIRE (TYPE III, 63LED, 350MA, 4000K) 800000 800000 FURNISH AND INSTALL LIGHTING HANDBOX BASE MOUNTED METERED SERVICE PEDESTAL WITH PHOTO CONTROL 800000 CONCRETE FOR LIGHT FOUNDATION 801003 NO. 6 AWG STRANDED BARE COPPER GROUND WIRE 802501 802503 NO. 2 AWG STRANDED BARE COPPER GROUND WIRE 805118 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED 805135 3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED 805140 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED

MARYLAND SHA OOTS APPROVALS

DRAWN BY: SLM

BY: SM/SLM CHECK Y: SM 81 MOSHER STREET | BALTIMORE, MD 21217

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

CONNECTOR KIT - TYPE

CONNECTOR KIT - TYPE II

CONNECTOR KIT - TYPE IV

CONNECTOR KIT - TYPE III

7500 MAPLE AVENUE

LIGHTING PLAN

ETHAN ALLEN GATEWAY **STREETSCAPE**

UNIT

QUANTITY

21

18

2440

60

440

2000

20

8750

120 2150

12

18

12

39

LT-01

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: NONE SHEET <u>68</u> OF <u>85</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. ___21454 ______, EXPIRATION DATE: ___01/03/2017 ___

NOVEMBER

TAKOMA PARK, MD 20912

<u>Cable legend</u>

- A) 1/C #2 AWG ELECTRICAL CABLE
- (B) 1/C #6 AWG ELECTRICAL CABLE
- (C) 1/C #10 AWG ELECTRICAL CABLE
- (2G) NO. 2 STRANDED BARE COPPER GROUND WIRE
- (6G) NO. 6 STRANDED BARE COPPER GROUND WIRE
- (10G) NO. 10 COPPER GROUND WIRE
- * SPLICE SHALL BE FUSED

NOTES:

1.P-1 AND P-2 SHALL BE FURNISHED AND INSTALLED BY PEPCO FORCES ON EXISTING PEPCO UTILITY POLES.



RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160 NOVEMBER 2015 Engineers | Construction Managers | Planners | Scientists

DESIGN BY: SM/SLM DRAWN BY: SLM CHECK BY: SM

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. M00705125 FAP NO. TAP-3(481)E

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. ___21454 _______, EXPIRATION DATE: ___01/03/2017 ___.

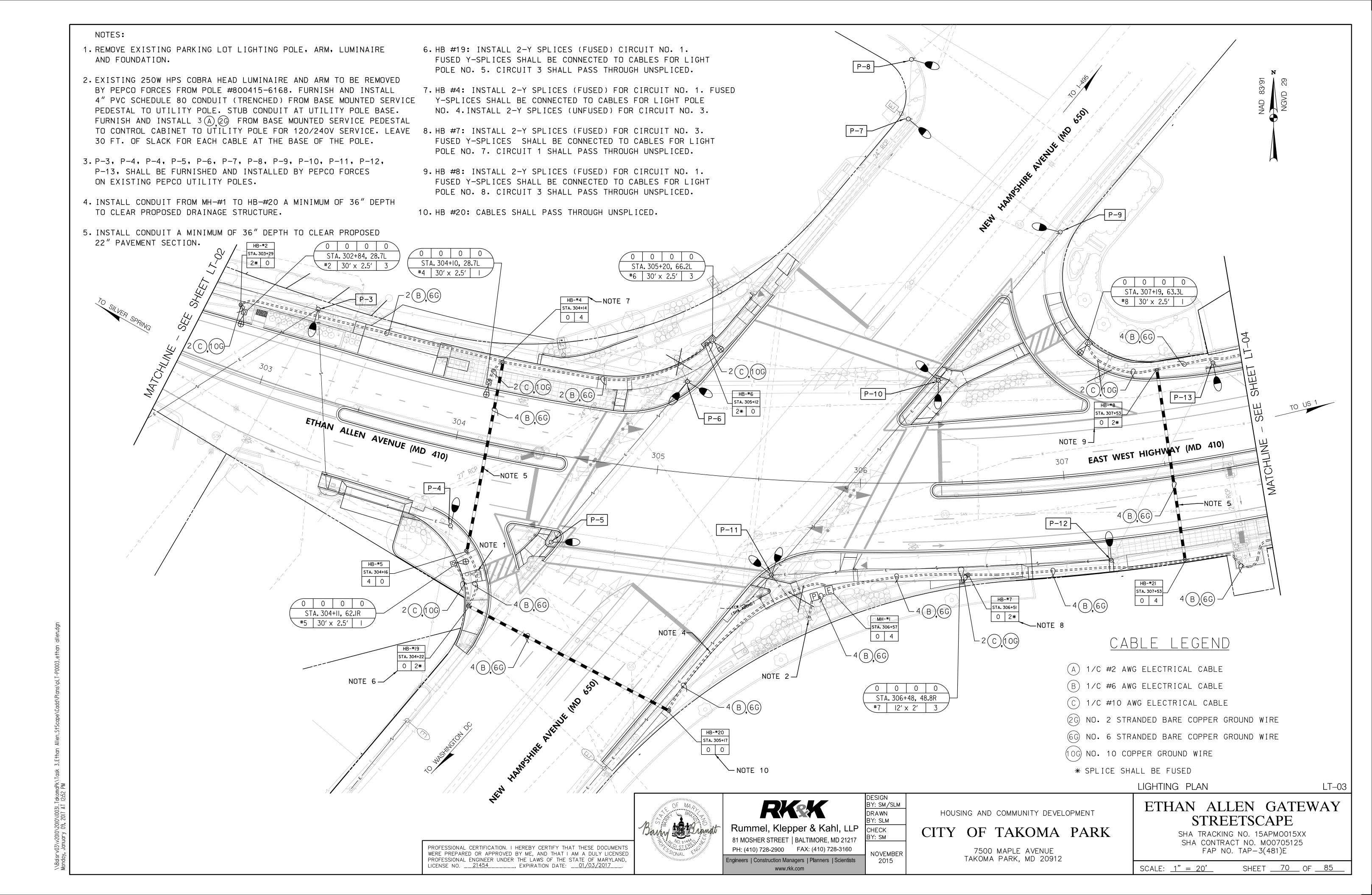
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7500 MAPLE AVENUE TAKOMA PARK, MD 20912

LIGHTING PLAN

SCALE: 1" = 20'SHEET <u>69</u> OF <u>85</u>

LT-02



2. HB #10: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 3. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 10. CIRCUIT 1 SHALL PASS THROUGH UNSPLICED.

3. HB #12: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 1. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 12. CIRCUIT 3 SHALL PASS THROUGH UNSPLICED.

4. HB #9: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 1. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 9. CIRCUIT 3 SHALL PASS THROUGH UNSPLICED.

(2G) NO. 2 STRANDED BARE COPPER GROUND WIRE

(6G) NO. 6 STRANDED BARE COPPER GROUND WIRE

(10G) NO. 10 COPPER GROUND WIRE

* SPLICE SHALL BE FUSED

5. HB #11: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 3. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 11. CIRCUIT 1 SHALL PASS THROUGH UNSPLICED.

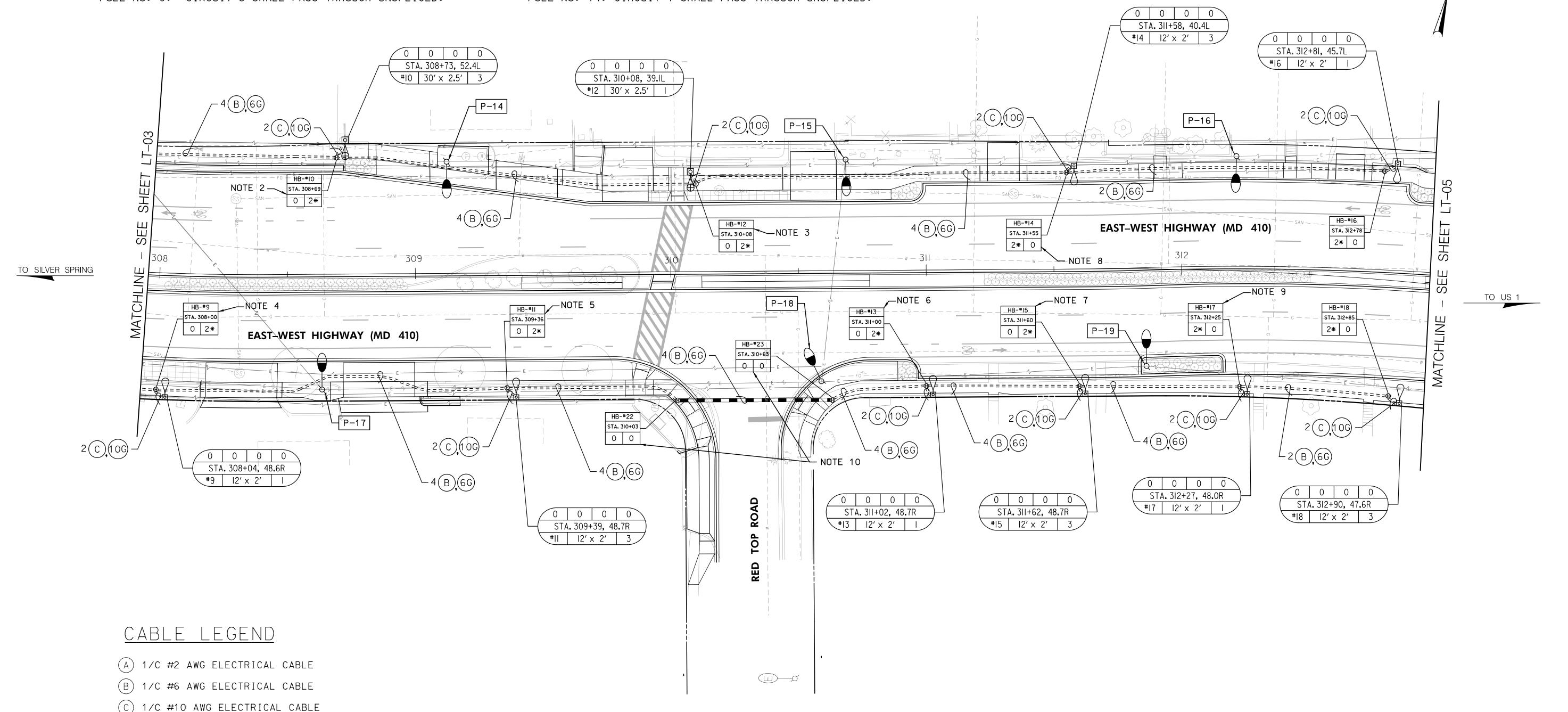
6. HB #13: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 1. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 13. CIRCUIT 3 SHALL PASS THROUGH UNSPLICED.

7. HB #15: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 3. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 15. CIRCUIT 1 SHALL PASS THROUGH UNSPLICED.

8. HB #14: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 3. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 14. CIRCUIT 1 SHALL PASS THROUGH UNSPLICED.

9. HB #17: INSTALL 2-Y SPLICES (FUSED) FOR CIRCUIT NO. 1. FUSED Y-SPLICES SHALL BE CONNECTED TO CABLES FOR LIGHT POLE NO. 17. CIRCUIT 3 SHALL PASS THROUGH UNSPLICED.

10. HB #22 & HB #23: CABLES SHALL PASS THROUGH HANDBOX UNSPLICED.



LIGHTING PLAN

LT-04

ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX

SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1" = 20'

SHEET <u>71</u> OF <u>85</u>

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. __21454 _____, EXPIRATION DATE: __01/03/2017 ___.

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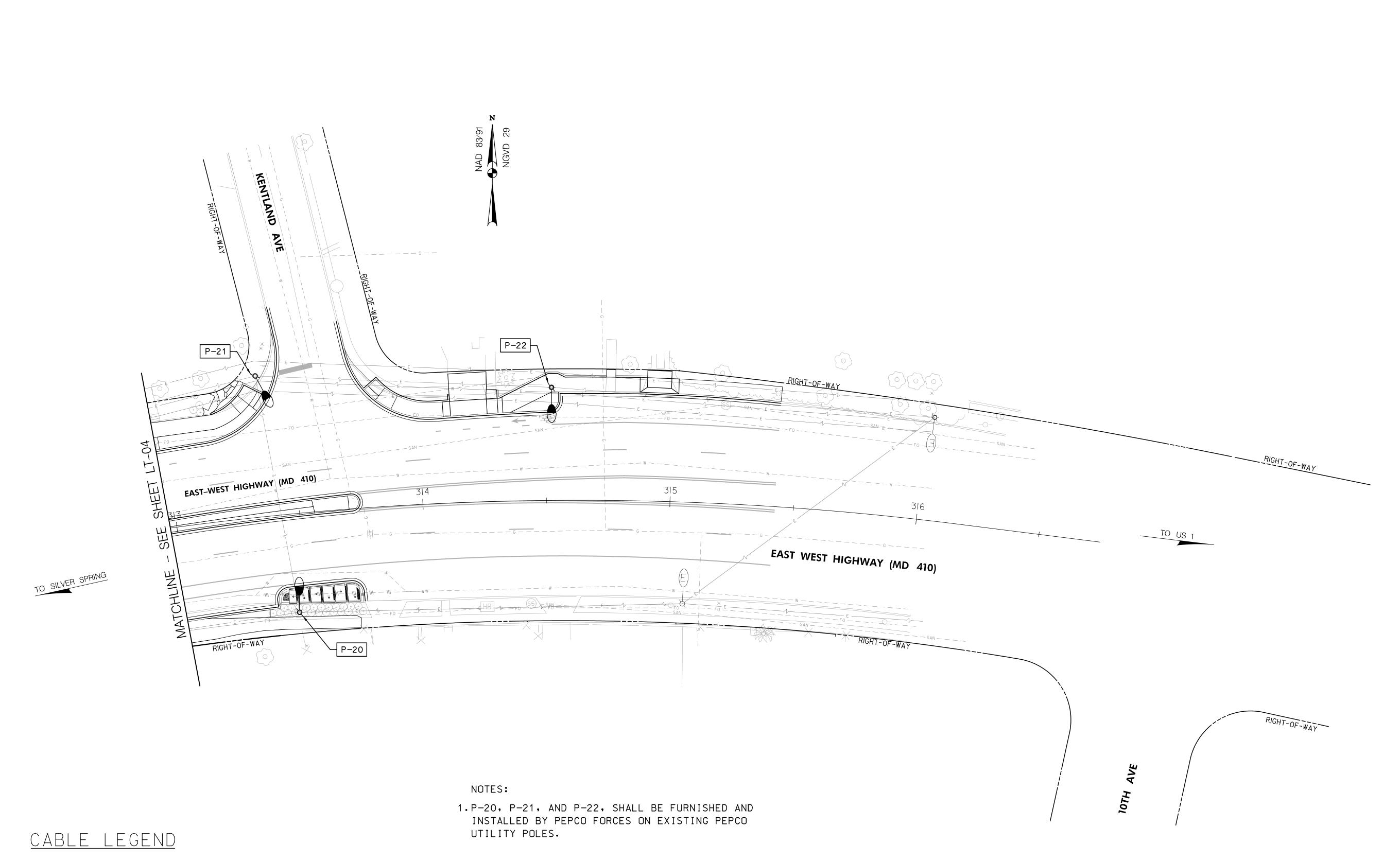
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BY: SM/SLM

HOUSING AND COMMUNITY DEVELOPMENT



- (A) 1/C #2 AWG ELECTRICAL CABLE
- (B) 1/C #6 AWG ELECTRICAL CABLE
- (C) 1/C #10 AWG ELECTRICAL CABLE
- (2G) NO. 2 STRANDED BARE COPPER GROUND WIRE
- (6G) NO. 6 STRANDED BARE COPPER GROUND WIRE
- (10G) NO. 10 COPPER GROUND WIRE
- * SPLICE SHALL BE FUSED

RKK Rummel, Klepper & Kahl, LLP

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DESIGN BY: SM/SLM DRAWN BY: SLM CHECK BY: SM

NOVEMBER 2015

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

LIGHTING PLAN

LT-05

ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

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7500 MAPLE AVENUE TAKOMA PARK, MD 20912

SCALE: 1" = 20'

SHEET <u>72</u> OF <u>85</u>

LIGHT POLE SCHEDULE						
POLE NUMBER	POLE HEIGHT	STATION	OFFSET	LUMINAIRE TYPE/ WATTAGE	DRAWING NUMBER	
L-2	30 FT.	302+23	28.8′ BT	63 LED/75	LT-3	
L-4	30 FT.	304+10	28.7′ LT	63 LED/75	LT-3	
L-5	30 FT.	30 3+32	62.9′ RT	63 LED/75	LT-3	
L-6	30 FT.	305+20	66.2′ LT	63 LED/75	LT-3	
L-7	12 FT.	306+48	48.8′ RT	49 LED/60	LT-3	
L-8	30 FT.	307+19	63.3′ LT	63 LED/75	LT-3	
L-9	12 FT.	308+04	48.6′ RT	49 LED/60	LT-4	
L-10	30 FT.	308+73	52.4′ LT	63 LED/75	LT-4	
L-11	12 FT.	309+39	48.7′ RT	49 LED/60	LT-4	
L-12	30 FT.	310+08	39.1′ LT	63 LED/75	LT-4	
L-13	12 FT.	311+02	48.7′ RT	49 LED/60	LT-4	
L-14	12 FT.	311+58	40.4′ LT	49 LED/60	LT-4	
L-15	12 FT.	311+62	48.7′ RT	49 LED/60	LT-4	
L-16	12 FT.	312+81	45.7′ LT	49 LED/60	LT-4	
L-17	12 FT.	312+27	48.0' RT	49 LED/60	LT-4	
L-18	12 FT.	312+90	47.6′ RT	49 LED/60	LT-4	

PEPCO LIGHTING SCHEDULE								
FIXTURE NUMBER	PEPCO POLE #	STATION	OFFSET	ARM LENGTH	TYPE/WATTAGE/LUMENS	DRAWING NUMBER		
P-1	PEP-801416-0702	300+26	20.0' LT	6 FT.	30B-LED/70W/7085	LT-2		
P-2	PEP-801415-1997	301+56	18.1′ LT	6 FT.	30B-LED/70W/7085	LT-2		
P-3	PEP-801415-3289	303+16	41.7′ LT	6 FT.	30B-LED/70W/7085	LT-3		
P-4	PEP-858828	304+07	44.2′ LT	6 FT.	40B-LED/143W/12920	LT-3		
P-5	PEP-801415-4181	304+54	42.7′ RT	20 FT.	40B-LED/143W/12920	LT-3		
P-6	PEP-801415-5490	305+09	44.7′ LT	2-20 FT.	40B-LED/143W/12920	LT-3		
P-7	PEP-801416-6501	N/A	N/A	6 FT.	30B-LED/70W/7085	LT-3		
P-8	PEP-801416-6404	N/A	N/A	6 FT.	30B-LED/70W/7085	LT-3		
P-9	PEP-801416-7500	N/A	N/A	6 FT.	30B-LED/70W/7085	LT-3		
P-10	PEP-801415-6791	306+39	50.3′ LT	NOTE 2	40B-LED/143W/12920	LT-3		
P-11	PEP-801415-5880	305+59	46.8′ RT	2-20 FT.	40B-LED/143W/12920	LT-3		
P-12	PEP-801415-7782	307+19	44.0' RT	30 IN.	30B-LED/70W/7085	LT-3		
P-13	PEP-801415	307+82	45.0′ LT	6 FT.	40B-LED/143W/12920	LT-3		
P-14	PEP-801415-9497	309+13	43.7′ LT	10 FT.	40B-LED/143W/12920	LT-4		
P-15	PEP-802415-1396	310+69	43.5′ LT	8 FT.	40B-LED/143W/12920	LT-4		
P-16	PEP-802415-5098	312+20	44.9′ LT	30 IN.	30B-LED/70W/7085	LT-4		
P-17	PEP-XXXX285	308+63	45.1′ RT	30 IN.	30B-LED/70W/7085	LT-4		
P-18	PEP-802415-1188	310+59	43.2′ RT	30 IN.	40B-LED/143W/12920	LT-4		
P-19	PEP-802415-3093	311+87	38.0′ LT	30 IN.	30B-LED/70W/7085	LT-4		
P-20	PEP-802415-3994	313+46	39.9′ RT	30 IN.	40B-LED/143W/12920	LT-5		
P-21	PEP-802415-3899	313+38	57.1′ LT	10 FT.	40B-LED/143W/12920	LT-5		
P-22	PEP-802415-6698	314+52	45.8′ LT	16 FT.	40B-LED/143W/12920	LT-5		

NOTES: 1. LUMINAIRE, ARM AND CABLES FURNISHED AND INSTALLED BY PEPCO FORCES. LUMINAIRE SHALL BE 4000K CCT AND TYPE III DISTRIBUTION.

2. FOR P-10, ARM PERPENDICULAR TO MD 650 SHALL BE 16'. ARM PERPENDICULAR TO MD 410 SHALL BE 20'.

PROPOSED PANEL SCHEDULE

SERVICE 100 AMP 120/240 VOLTS, 1 PHASE, 3 WIRE SYSTEM		LUMINAIRE VOLTAGE, 240 VOLTS		BREAKERS 100 AMP MAIN BREAKER 100 AMP 2P CONTACTOR			NEMA 4X ENCLOSURE	
CIRCUIT	EQUIPMENT SERVED	CONNECTED LOAD				BRANCH CIRCUIT BREAKERS		REMARKS
NUMBER		KW	AMPS	VOLTS	NUMBER OF POLES	FRAME SIZE	TRIP SIZE	
1.	POLE NUMBERS: L-4, L-5, L-8, L-9, L-12, L-13, L-16, L-17	0.56	2.32	1/240	2	100	20	3 - 60W LED 5 - 75W LED
2.	SPARE	_	_	_	2	100	20	_
3.	POLE NUMBERS: L-2, L-6, L-7, L-10, L-11, L-14, L-15, L-18	0.54	2.25	1/240	2	100	20	4 - 60W LED 4 - 75W LED
4.	SPARE	_	_	_	2	100	20	_
5.	PHOTOCELL	_	_	1/120	1	100	10	_
<u> </u>								

TOTAL 1.10 4.57

LIGHTING PLAN - POLE AND PANELBOARD SCHEDULES

ETHAN ALLEN GATEWAY STREETSCAPE

LT-06

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. M00705125 FAP NO. TAP-3(481)E

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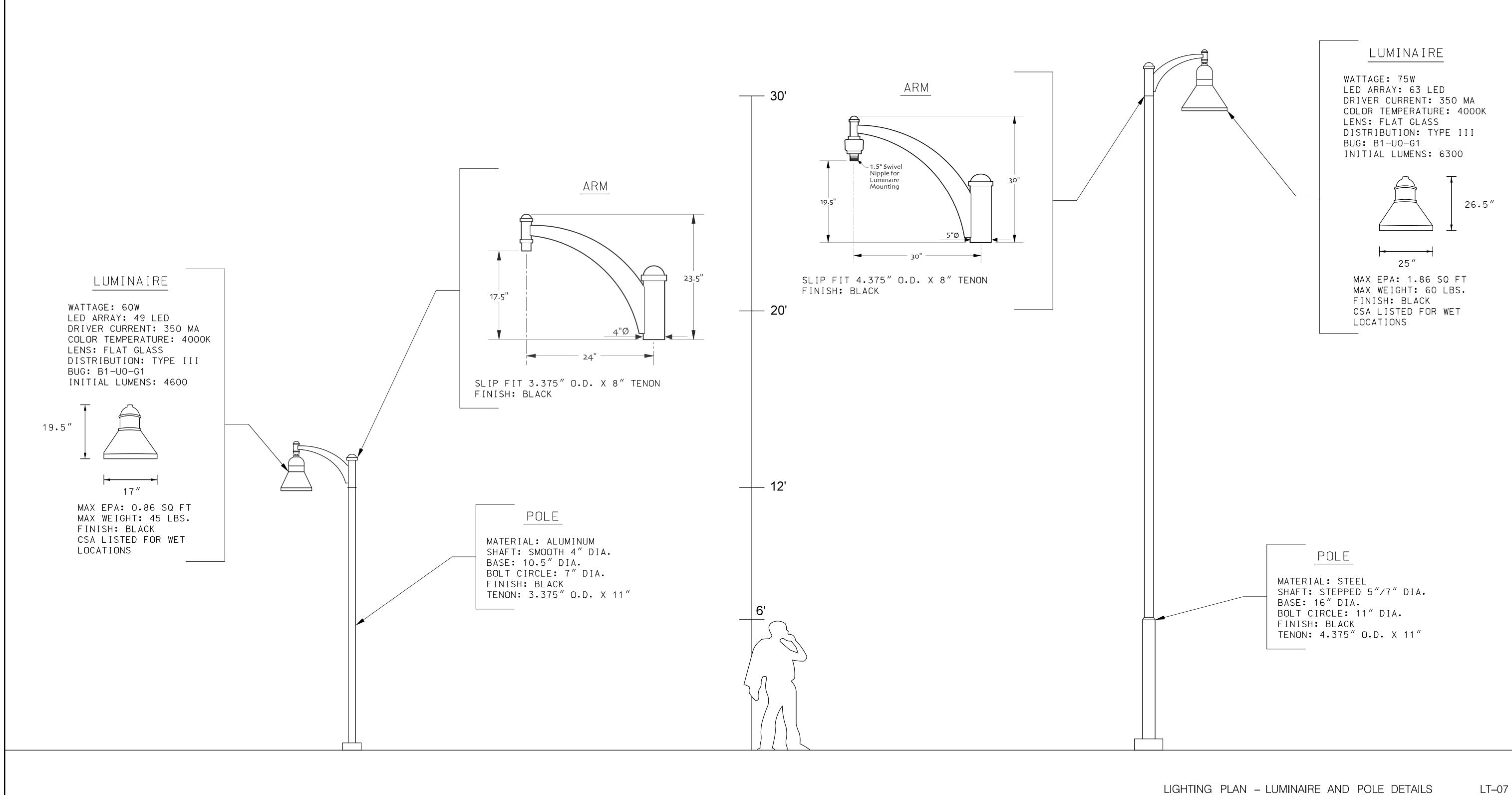
DESIGN BY: SM/SLM DRAWN BY: SLM CHECK BY: SM NOVEMBER 2015

CITY OF TAKOMA PARK

HOUSING AND COMMUNITY DEVELOPMENT

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

DECORATIVE LIGHTING DETAILS



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HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

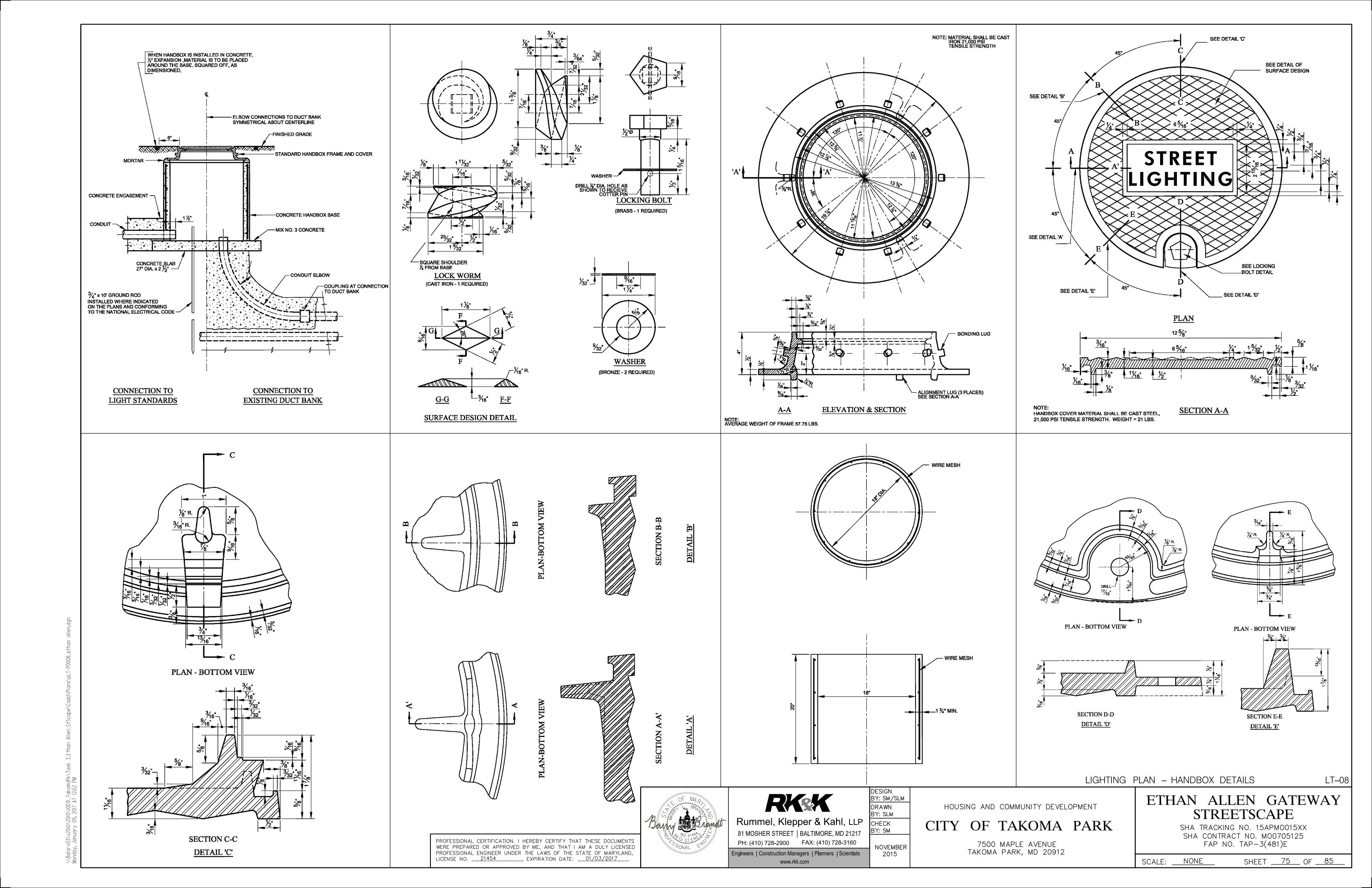
ETHAN ALLEN GATEWAY STREETSCAPE

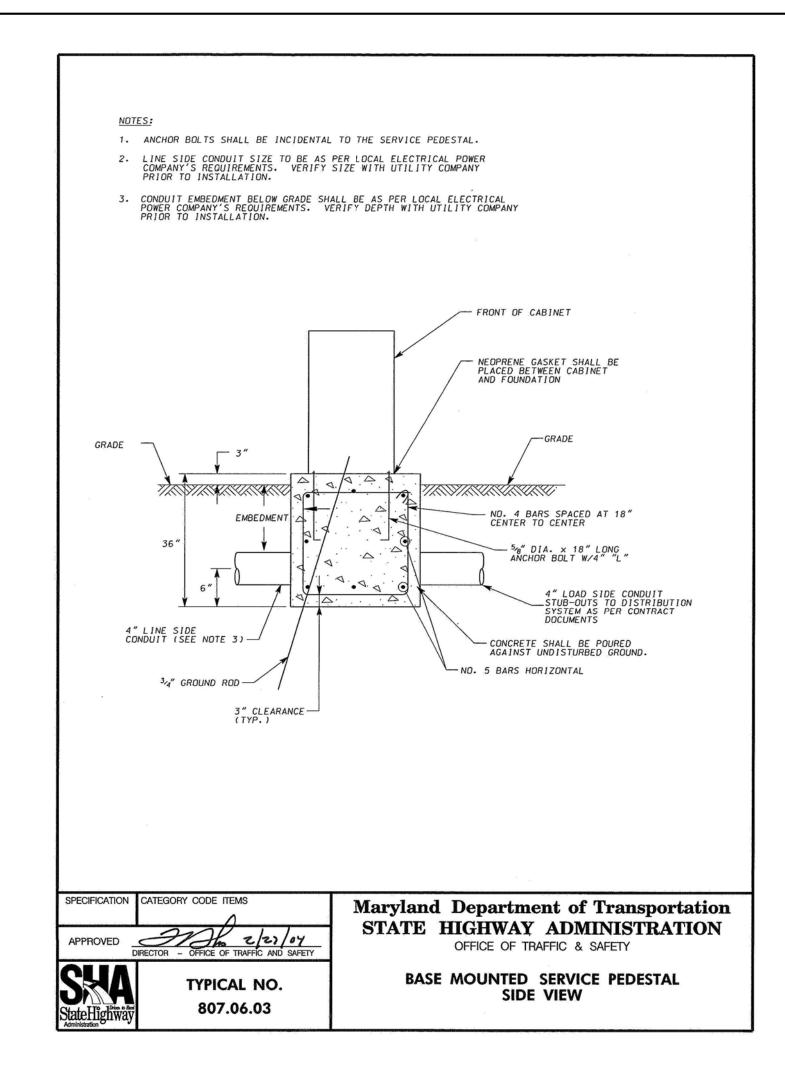
> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

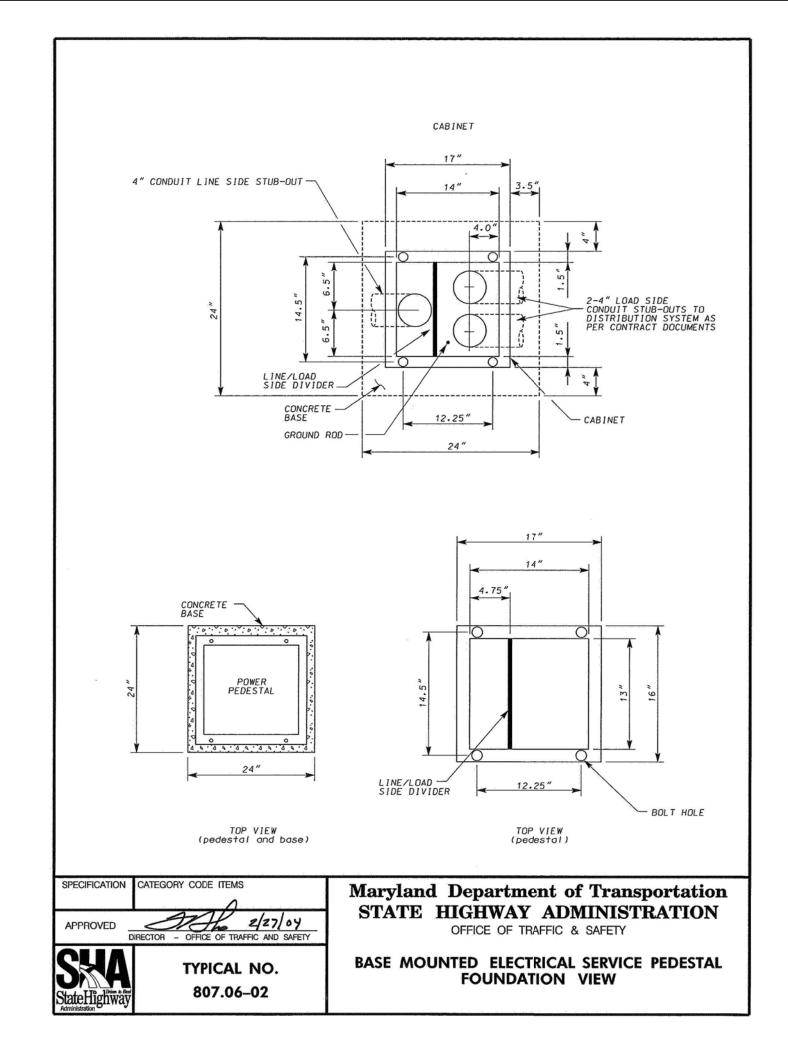
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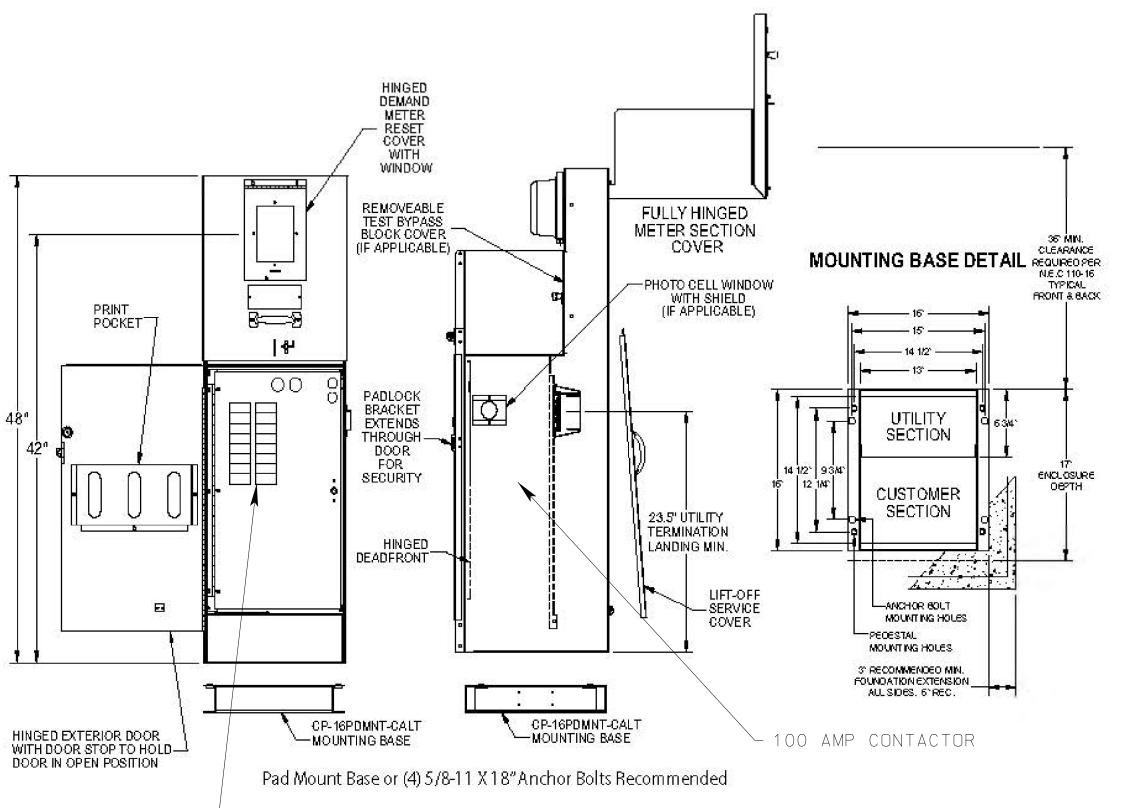
SCALE: NONE

SHEET <u>74</u> OF <u>85</u>









LOAD CENTER WITH A MINIMUM OF 12 PHOTO-CONTROLLED SLOTS



NOTES

- 1. COORDINATE METER INSTALLATION WITH PEPCO. CONTACT MS. AMY MOLLOHAN AT 301.548.4355 OR AMOIIOhan@pepco.com.
- 2. INSTALL SERVICE PEDESTAL SUCH THAT PHOTOCELL IS FACING AWAY FROM ONCOMIING HEADLIGHTS.
- 3. SERVICE PEDESTAL SHALL INCLUDE 100 AMP MAIN BREAKER, PHOTOCELL, ON-AUTO-OFF SWITCH AND 100 AMP CONTACTOR.

LIGHTING PLAN - SERVICE PEDESTAL DETAILS

LT-09

BEAN DO 21454 S. W. STERE SOUNAL

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NOVEMBER

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

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ETHAN ALLEN GATEWAY STREETSCAPE

SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: NONE SHEET 76 OF 85

<u>DESIGN</u>

MDSHA - "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2011 EDITION AND SUBSEQUENT REVISIONS. (MdMUTCD)

A A S H T O - "HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE" -1997

A A S H T O - "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS", 2001 EDITION (CATEGORY II FOR ALL OVERHEAD AND CANTILEVER SIGN STRUCTURES).

MATERIALS AND CONSTRUCTION

MDSHA - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS", 2008 EDITION AND SUBSEQUENT SUPPLEMENTS.

DESIGN WIND

100 MPH - WOOD SUPPORTS IO YEAR RECURRENCE INTERVAL

100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS IO YEAR RECURRENCE INTERVAL

100 MPH - OVERHEAD AND CANTILEVER STRUCTURES 50 YEAR RECURRENCE INTERVAL

DESIGN STRESS

SOIL BEARING PRESSURE - S = 3,000 P.S.F. (ASSUMED) SEE MATERIAL & CONSTRUCTION ABOVE AND SPECIAL PROVISIONS FOR DESIGN STRESSES FOR STRUCTURAL STEEL, ALUMINUM, REINFORCING STEEL AND CONCRETE.

CHAMFER

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER.

CLASSIFICATION OF SIGNS

SIGNS ARE DIVIDED INTO TWO (2) GENERAL CATEGORIES.

I. GUIDE SIGNS A) STRUCTURAL TYPES

> OH - OVERHEAD C - CANTILEVER

GM - GROUND MOUNT. BREAKAWAY OR NON-BREAKWAY BM - BRIDGE MOUNTED

2. STANDARD SIGNS (REGULATORY, WARNING, ETC.) A) STRUCTURAL TYPES

WOOD SUPPORTS SQUARE TUBE

B) PANELS

ALL DISTRICTS

MATERIAL - EXTRUDED ALUMINUM COPY - DIRECT APPLIED

I) HIGH INTENSITY (NEW SIGNS AND REVISIONS TO EXISTING SIGNS)

B) PANELS MATERIAL - SHEET ALUMINUM COPY - DIRECT APPLIED

IDENTIFICATION OF SIGNS AND PANELS

GUIDE SIGNS

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS. (GM-I, GM-2, GM-3, etc) SIGNS ON STRUCTURES ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR.

STANDARD SIGNS

STANDARD SIGNS ARE IDENTIFIED BY PANEL NUMBERS AND ARE CLASSIFIED AS FOLLOWS R - REGULATORY

W - WARNING

M - ROUTE MARKERS AND ACCESSORIES

A LOWER CASE LETTER. (OH-Ia, OH-Ib, OH-Ic)

D - DESTINATION AND MILEAGE PANELS

S - SCHOOL

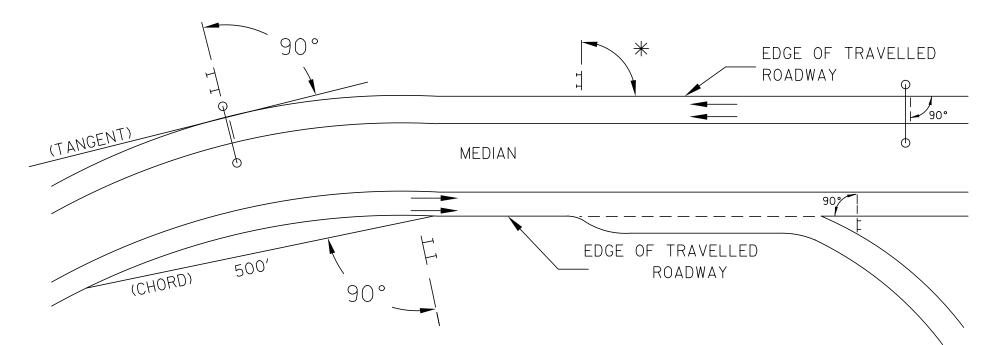
PANELS SHALL BE DESIGNATED TO AGREE WITH MARYLAND STANDARD SIGN BOOK. EACH STANDARD SIGN IS IDENTIFIED FIRST BY THE SHEET NUMBER, THEN BY THE NUMERICAL ORDER OF THE SIGN AS IT APPEARS ON THE PLAN. FOR EXAMPLE SHEET SN 2.1-101,102,103, ETC. SHEET SN 2.2-201,202,203,ETC.

PANEL LAYOUT AND ALPHABETS

I. GUIDE SIGN PANEL LAYOUTS ARE BASED ON THE A.A.S.H.T.O. MANUALS NOTED ABOVE. 2. STANDARD SIGN PANEL LAYOUTS ARE BASED ON THE MdMUTCD WITH SPECIFICATIONS DETAILED IN THE MARYLAND STATE HIGHWAY ADMINISTRATION PUBLICATION, "STANDARD SIGN BOOK", AVAILABLE ONLINE @ https:/www.marylandroads.com/businesswithsha/ bizStdsSpecs/desManualStdPub/publicationsonline/oots/internet_signbook.asp

REFLECTORIZATION

BACKGROUNDS, BORDERS, TEXTS AND ALL OTHER ELEMENTS OF SIGN PANELS SHALL BE REFLECTORIZED EXCEPT WHERE NOTED. REFER TO PROJECT REQUIREMENTS FOR MORE DETAIL. ORIENTATION OF SIGN FACES



* UNDER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 93° AWAY FROM THE ROAD TO AVOID SPECULAR REFLECTION AS INDICATED IN 813.03 OF THE MARYLAND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

OVER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 90°

SIGN LOCATIONS

I. GUIDE SIGNS ARE LOCATED ON THE PLANS BY DIMENSION TO SURVEY STATIONS, OR WHEN NECESSARY, TO IDENTIFIABLE PHYSICAL FEATURES. 2. ALL CHANGES IN THE LOCATIONS OF SIGNS AS SHOWN ON THE PLAN SHALL HAVE THE

PRIOR APPROVAL OF THE ENGINEER.

EXISTING UTILITIES

THE ENGINEER DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION SHOWN ON THE PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING FACILITIES WHICH MIGHT BE AFFECTED BY THIS WORK OR HIS OPERATION.

ROADSIDE SIGNS

I. VERTICAL ALIGNMENT

POSITION PANEL SO FACE IS PLUMB.

2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE)

A) ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY VARIES WITH DISTANCE FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - SEE DIAGRAM.

B) ON THE INSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL MAKES AN ANGLE OF 90° WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500' IN ADVANCE OF SIGN.

C) ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION.

D) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

OVERHEAD SIGNS

I. VERTICAL ALIGNMENT

POSITION PANELS FOR ALL OVERHEAD STRUCTURES SO THAT PANEL FACE IS PLUMB. 2. OVERHEAD SIGN STRUCTURES SHALL NOT BE ERECTED WITHOUT ATTACHING LUMINAIRES. SUPPORTS, AND/OR SIGNS.

3. HORIZONTAL ALIGNMENT

A) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE NORMAL EDGE OF ROADWAY, IF ON A STRAIGHT ROADWAY SECTION.

B) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT SIGN LOCATION, IF ON A HORIZONTAL CURVE. C) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL

EDGE OF THE MAINLINE ROADWAY.

4. VERTICAL CLEARANCE A) OVERHEAD SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 17'-9" FROM ROADWAY TO

THE BOTTOM OF LIGHT FIXTURES, ALL LIGHT FIXTURES ARE TO BE AT THE SAME ELEVATION, B) IF THE CONTRACTOR CANNOT OBTAIN 17'-9" (SEE 3A) CLEARANCE, HE IS TO CEASE WORK AND CONTACT THE PROJECT ENGINEER FOR FURTHER INSTRUCTIONS. THE PROJECT ENGINEER

MAY CONTACT THE TRAFFIC ENGINEERING DESIGN DIVISION FOR ASSISTANCE. C) ON ALL OVERHEAD SIGNS, THE MINIMUM CLEARANCE TO BOTTOM OF SIGN: 20'-9".

PROJECT REQUIREMENTS

ALL NEW SIGNS ON THIS PROJECT SHALL BE FABRICATED FROM SHEETING WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER:

I. SHEETING SHALL MEET THE REQUIREMENTS OF SECTIONS 813 AND 950.03 OF MDSHA'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (JULY 2008) AND SUBSEQUENT REVISIONS

2. LISTED ON MDSHA OFFICE OF TRAFFIC AND SAFETY'S QUALIFIED PRODUCTS LIST (QPL)

PROJECT REQUIREMENTS CONT'D

3. THE FOLLOWING TYPES OF SHEETING SHALL BE USED FOR THE SPECIFIED SIGN CLASSIFICATIONS

A) GUIDE. EXIT GORE. AND GENERAL INFORMATION SIGNS- RETROREFLECTIVE SHEETING FOR GUIDE SIGNS, EXIT GORE, AND GENERAL INFORMATION (INCLUDES WHITE ON GREEN, WHITE ON BLUE, WHITE ON BROWN AND THE REVERSE OF THESE COLORS) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX LEGEND ON ASTM TYPE IX BACKGROUND. REGULATORY AND WARNING MESSAGES WITHIN GUIDE SIGNS SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING.

B) WARNING SIGNS - RETROREFLECTIVE SHEETING FOR BLACK ON FLUORESCENT YELLOW WARNING SIGNS SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING, REGULATORY MESSAGES WITHIN WARNING SIGNS SHALL FOLLOW THE GUIDELINES FOR REGULATORY SIGNS.

C) SCHOOL SIGNS - RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS (BLACK ON FLUORESCENT YELLOW AND BLACK ON FLUORESCENT YELLOW GREEN) SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING, REGULATORY MESSAGES WITHIN SCHOOL SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

D) REGULATORY SIGNS - FALL INTO THREE SUBCATEGORIES:

i. "RED" REGULATORY SIGNS (STOP, YIELD, DO NOT ENTER AND WRONG WAY) RETROREFLECTIVE SHEETING FOR THESE SIGNS AND THEIR SUPPLEMENTAL PANELS (INCLUDES WHITE ON RED AND RED ON WHITE) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX SHEETING.

ii. ALL R7 AND R8 SERIES PARKING RELATED SIGNS AND THEIR SUPPLEMENTAL PANELS, NO TRESPASSING SIGNS, AND SIGNS DIRECTED AT PEDESTRIANS AND BICYCLISTS ONLY (INCLUDES RED ON WHITE. GREEN ON WHITE. BLUE ON WHITE. BLACK ON WHITE AND THE REVERSE OF THESE COLORS) SHALL BE ASTM TYPE I LEGEND ON ASTM TYPE I BACKGROUND.

iii. ALL OTHER REGULATORY SIGNS - RETROREFLECTIVE SHEETING FOR THESE SIGNS AND THEIR SUPPLEMENTAL PANELS (INCLUDES BLACK ON WHITE) SHALL BE NON-REFLECTIVE BLACK LEGEND ON ASTM TYPE IV BACKGROUND. WHERE RED IS SPECIFIED, OR WHERE THE COLOR OF THE SIGN IS WHITE ON BLACK, THE LEGEND SHALL BE ASTM TYPE IV RETROREFLECTIVE SHEETING ON NON-REFLECTIVE BLACK BACKGROUND. WARNING MESSAGES WITHIN REGULATORY SIGNS SHALL FOLLOW THE GUIDELINES FOR WARNING SIGNS.

E) ROUTE MARKERS - RETROREFLECTIVE SHEETING FOR ROUTE MARKERS (INCLUDES BLACK ON WHITE , GREEN ON WHITE, WHITE ON GREEN, WHITE ON RED/BLUE) SHALL MEET THE REQUIREMENTS OF GUIDE SIGNS ABOVE WHEN SPECIFIED AS THE LEGEND OF A GUIDE SIGN. RETROREFLECTIVE SHEETING FOR ALL INDEPENDENT ROUTE MARKERS AND THEIR AUXILIARY PANELS SHALL BE ASTM TYPE IV AND/OR NON-REFLECTIVE BLACK LEGEND ON ASTM TYPE IV BACKGROUND.

F) LOGOS AND/OR GRAPHICS - WITHIN SIGNS SHALL FOLLOW THE GUIDELINES FOR THE RESPECTIVE SIGN CLASSIFICATION UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.

G) CIVIL DEFENSE SIGNS AND OTHER SIGNS - NOT SPECIFICALLY FALLING INTO ONE OF THE CATEGORIES ABOVE, SHALL FOLLOW THE GUIDELINES FOR THE SIGN CLASSIFICATION THAT MOST CLOSELY MATCHES THE COLOR(S) OF THE PROPOSED SIGN.

4. THE FOLLOWING MINIMUM THICKNESS SHALL BE USED FOR THE APPROPRIATE WIDTH OF SHEET ALUMINUM BLANKS.

LONGEST DIMENSION

MINIMUM THICKNESS

UP TO 12"..... ...0.040" GREATER THAN 12" TO 24".....0.063" ...0.080" GREATER THAN 24" TO 36"..... GREATER THAN 36" TO 48"...... ...0.100" OVER 48"..... ..0.125"

GENERAL NOTES AND PROPOSALS

ETHAN ALLEN GATEWAY **STREETSCAPE**

> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

NONE SCALE:

MARYLAND SHA OOTS APPROVALS

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. __21454_____, EXPIRATION DATE: __01/03/2017___.





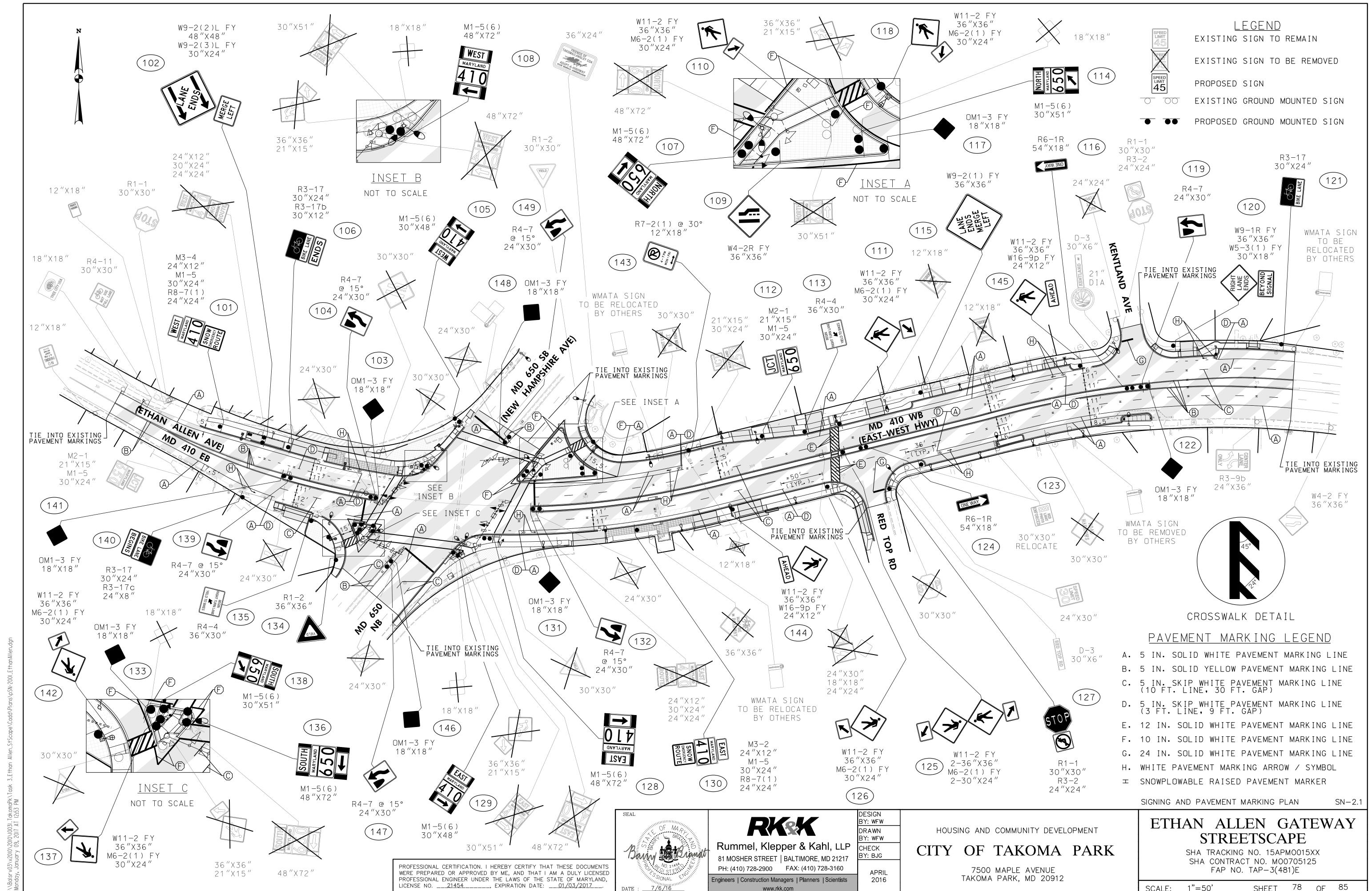
DESIGN BY: WFW DRAWN BY: WFW CHECK Y: BJG APRIL

2016

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

HOUSING AND COMMUNITY DEVELOPMENT



LICENSE NO. ___21454 ______, EXPIRATION DATE: ___01/03/2017

SCALE: <u>1"=50'</u>

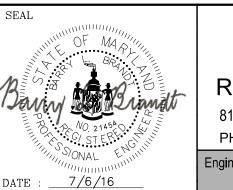
SHEET <u>78</u> OF <u>85</u>

CODE	DESCRIPTION	UNIT	CATEGORY	CODE	DESCRIPTION	UNIT	CATEGORY
NO.	DESCRIPTION	UNIT	CODE	NO.	DESCRIPTION	UNII	CODE
1	SHEET ALUMINUM SIGNS	SF	801605	21			
2	WOOD SIGN SUPPORTS 4 INCH X 4 INCH	LF	801104	22			
3	WOOD SIGN SUPPORTS 4 INCH X 6 INCH	LF	801106	23			
4	RELOCATE EXISTING GROUND MOUNTED SIGN	SF	813023	24			
5	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS	SF	801711	25			
6	SNOWPLOWABLE RAISED PAVEMENT MARKERS	EA	585340	26			
7	5 INCH WHITE PERMANENT PREFORMED PATTERNED REFLECTIVE PAVEMENT MARKINGS	LF	585600	27			
8	10 INCH WHITE PERMANENT PREFORMED PATTERNED REFLECTIVE PAVEMENT MARKINGS	LF	585602	28			
9	5 INCH YELLOW PERMANENT PREFORMED PATTERNED REFLECTIVE PAVEMENT MARKINGS	LF	585604	29			
10	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	585625	30			
11	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	SF	585627	31			
12	SQUARE PERFORATED TUBULAR STEEL SIGN POSTS	EA	801130	32			
13	SQUARE TUBULAR STEEL ANCHOR BASES	EA	801135	33			
14	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	585621	34			
15				35			
16				36			
17				37			
18				38			
19				39			
20				40			

GENERAL NOTES

- 1. FOR CROSSWALKS AND STOP LINES LOCATED AT THE MD 650 AT MD 410 INTERSECTION, REFER TO TRAFFIC SIGNAL PLANS FOR CONSTRUCTION DETAILS AND QUANTITIES.
- 2. NEW CROSSWALKS, STOP LINES, HATCHING, AND BIKE LANE SYMBOLS SHALL BE HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING MATERIAL.
- 3. ALL LONGITUDINAL PAVEMENT MARKING LINES SHALL BE PERMANENT PREFORMED PATTERNED PAVEMENT MARKING MATERIAL.
- 4. NEW PAVEMENT MARKINGS SHALL TRANSITION TO TIE INTO EXISTING MARKINGS, AS DIRECTED BY THE ENGINEER.
- 5. ALL PROPOSED YELLOW SIGNS SHALL BE OF FLUORESCENT YELLOW COLOR.
- 6. FOR TEMPORARY SIGNING AND PAVEMENT MARKINGS DURING MAINTENANCE OF TRAFFIC PHASES, PLEASE REFER TO TRAFFIC
- 7. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD, IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE SIGN STRUCTURES WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 8. ALL WOOD SIGN SUPPORTS INSTALLED IN CONCRETE, PAVEMENT, OR BRICK SHALL HAVE SLEEVED FOUNDATIONS AND CONFORM TO STANDARDS MD 812.05-01 AND MD 812.05-02. THE SLEEVED FOUNDATION IS INCIDENTAL TO THE WOOD SIGN SUPPORT.
- 9. PROPOSED R4-7 "KEEP RIGHT" SIGNS SHOULD BE LONGITUDINALLY LOCATED 6 FT, TO 10 FT, FROM THE NOSE OF MEDIAN OR ISLAND, OM1-3 OBJECT MARKER SIGNS SHOULD BE LOCATED 2 FT, FROM THE NOSE OF MEDIAN OR ISLAND, PER MDMUTCD FIGURE 2B-10b.

SIGNING AND PAVEMENT MARKING QUANTITY TABULATION SN-11.1



RKSK Rummel, Klepper & Kahl, LLP 81 MOSHER STREET | BALTIMORE, MD 21217 PH: (410) 728-2900 FAX: (410) 728-3160 Engineers | Construction Managers | Planners | Scientists 2016

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HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE

ETHAN ALLEN GATEWAY STREETSCAPE

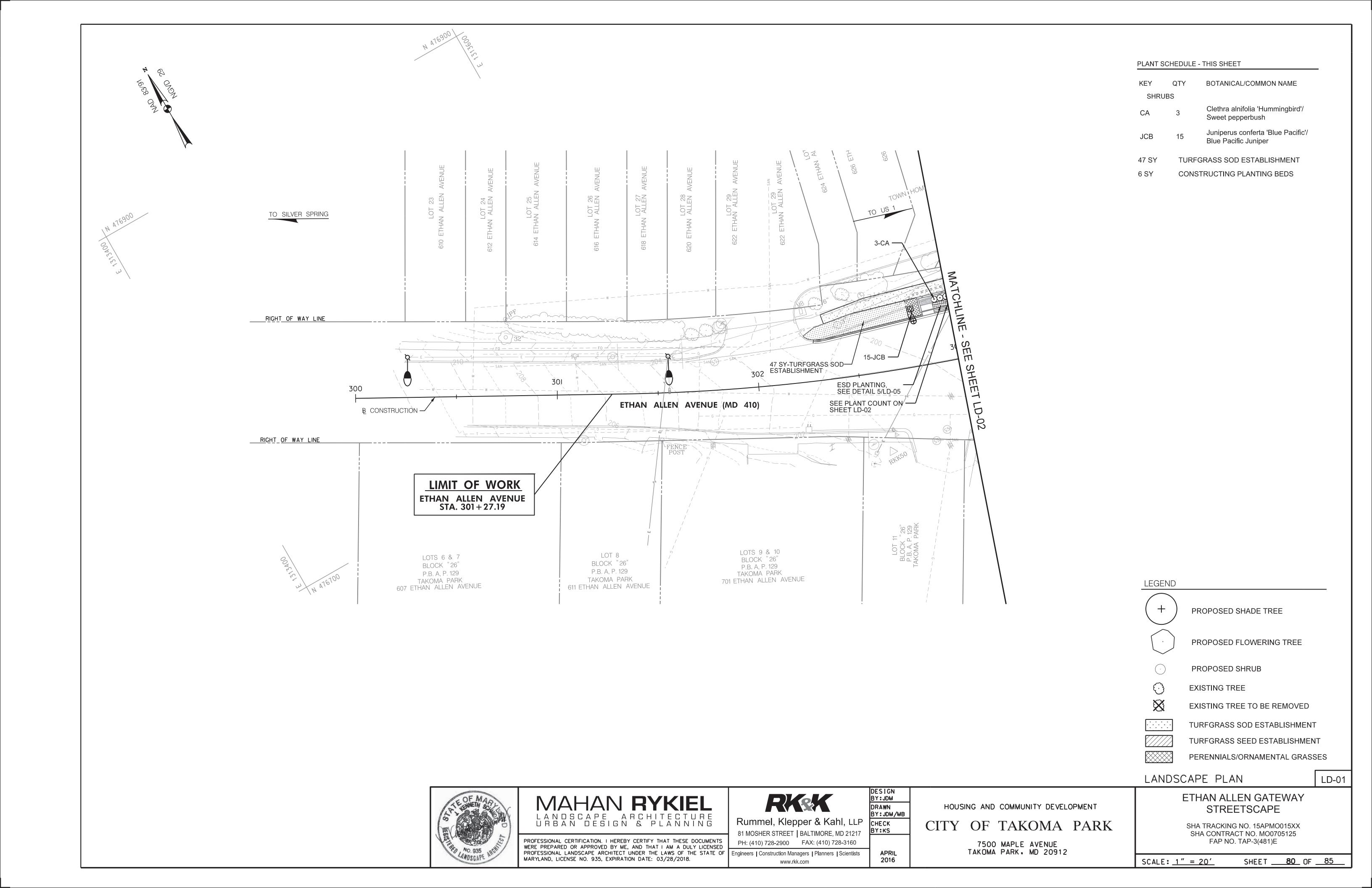
SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

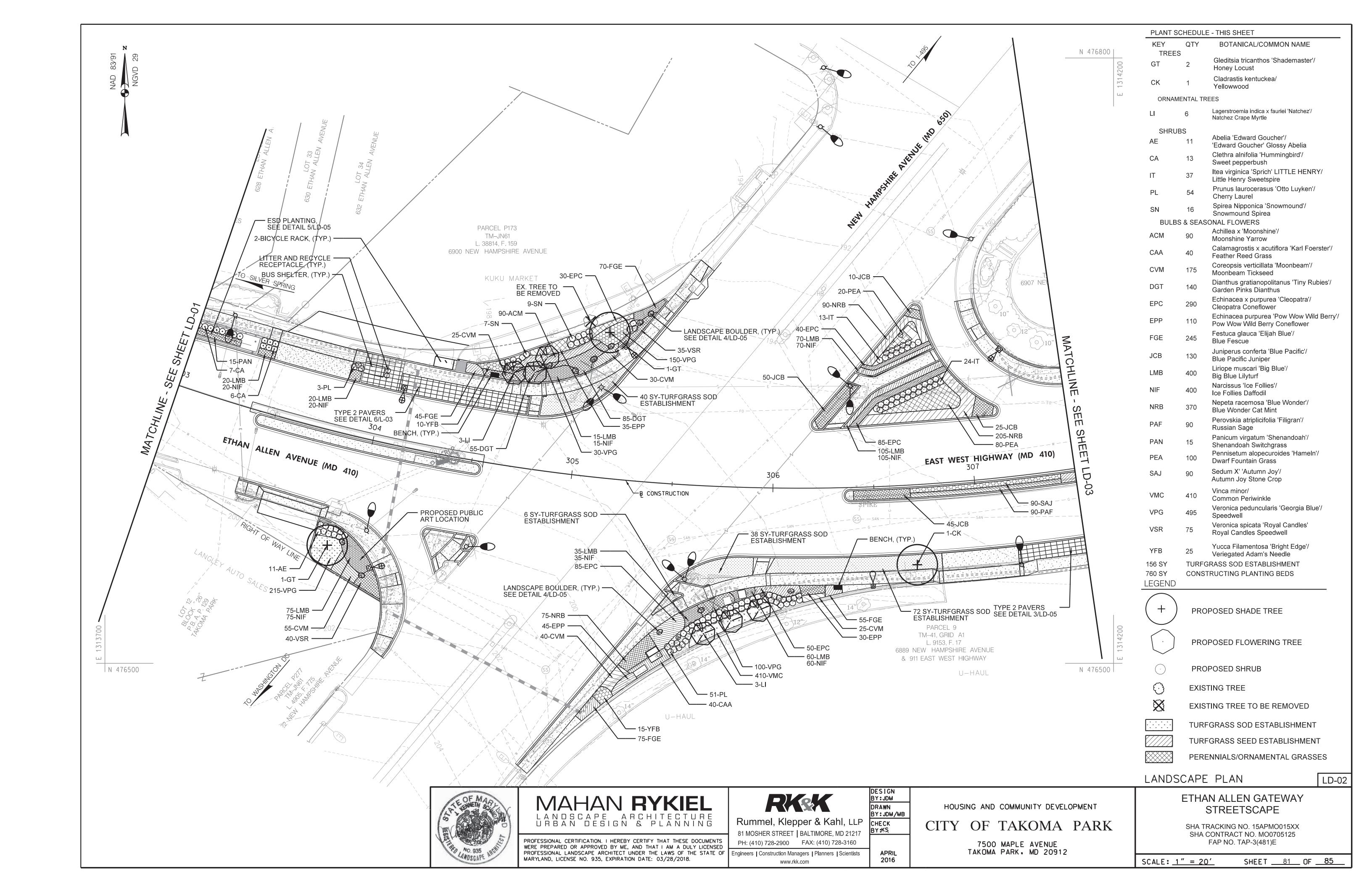
SHEET <u>79</u> OF <u>85</u> NONE SCALE:

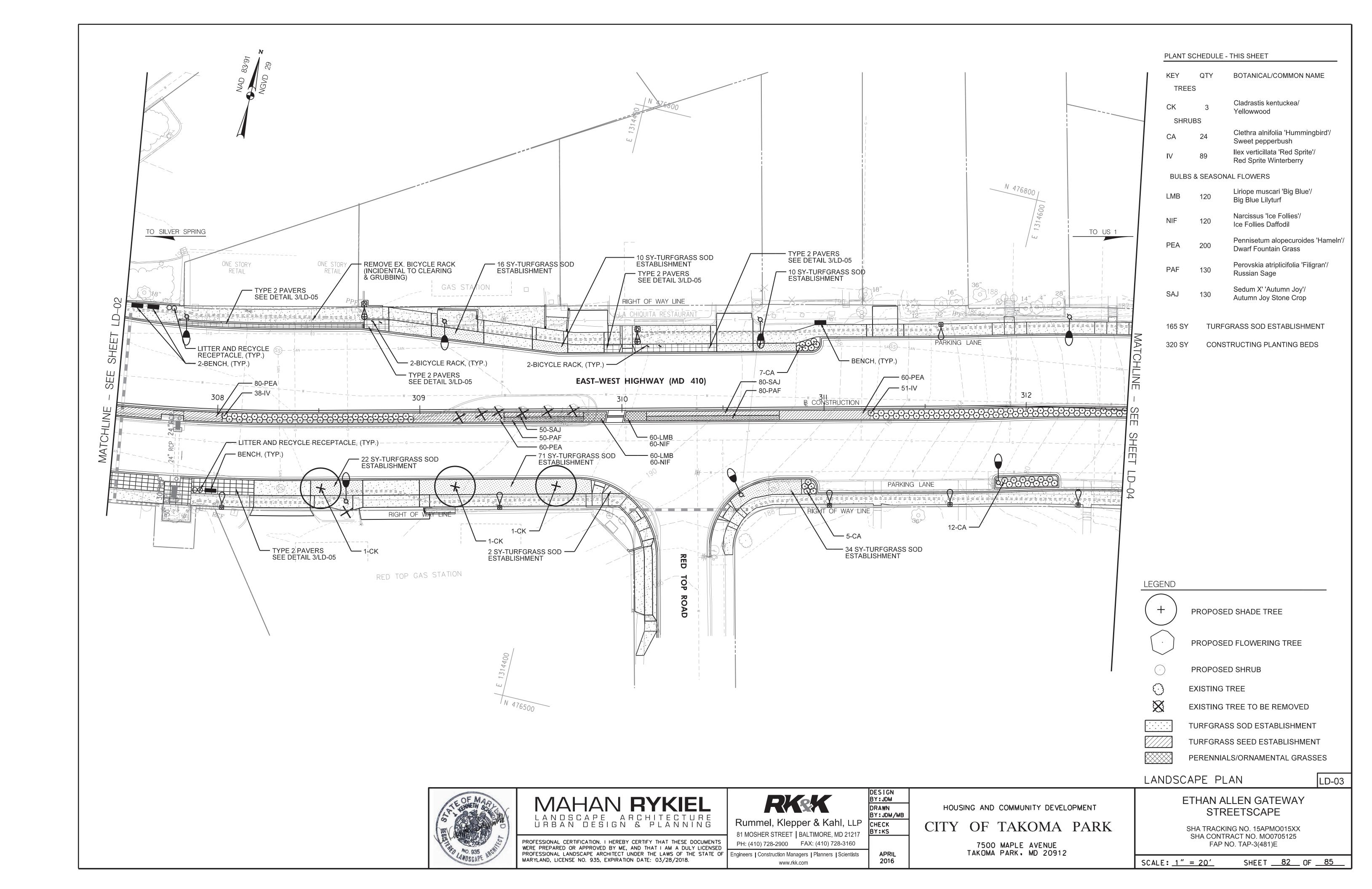
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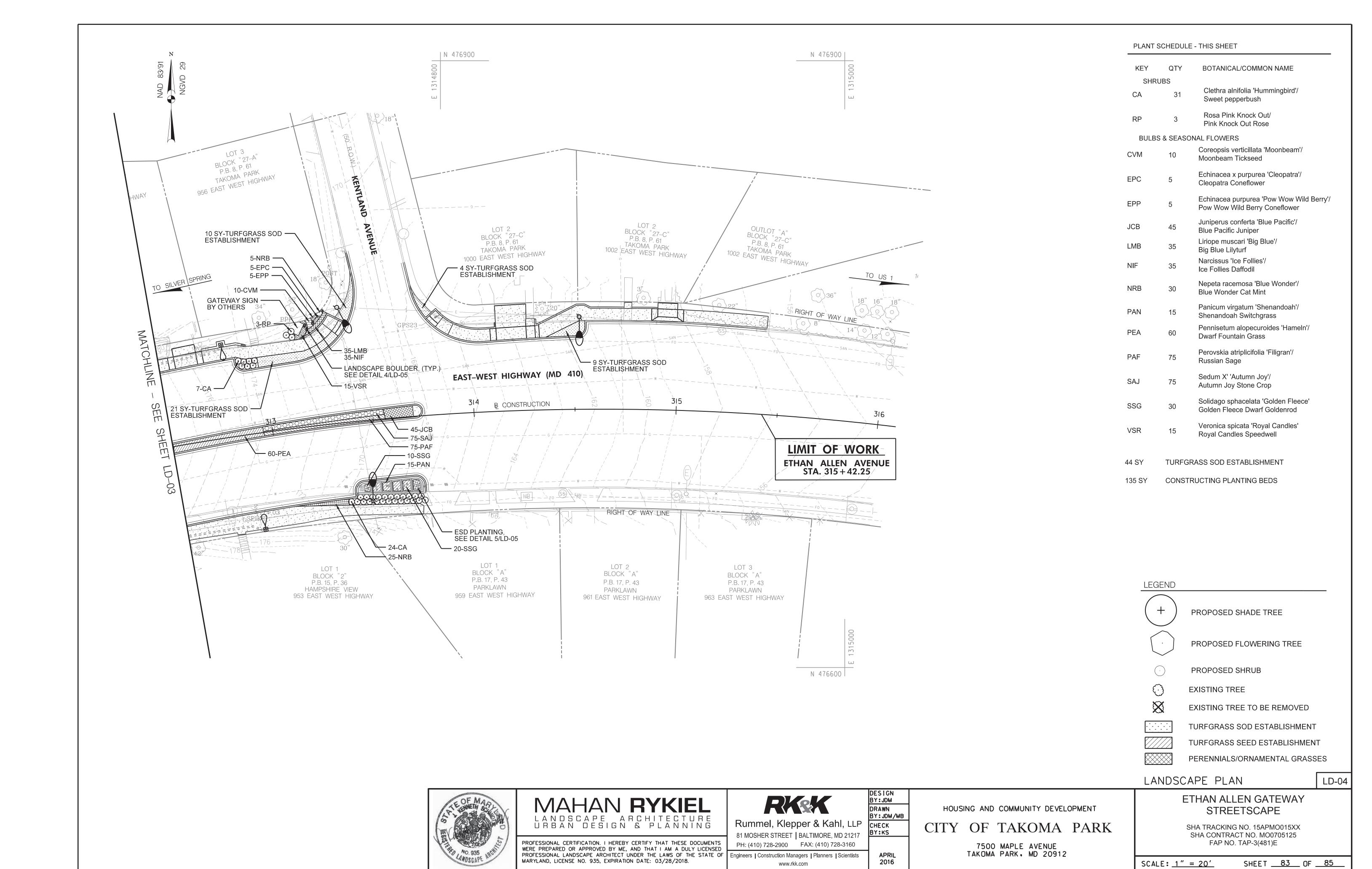
APRIL

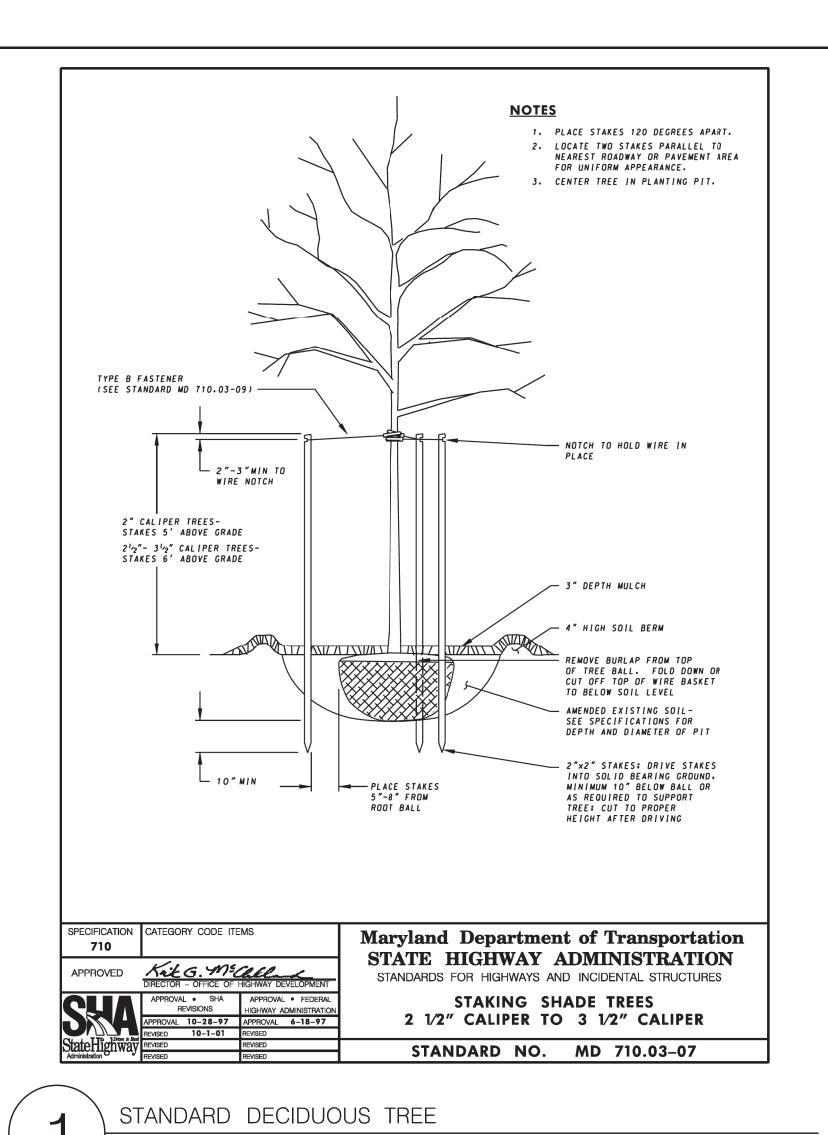
TAKOMA PARK, MD 20912











BOULDER NOTES

@ PLANTING

5' MAX.

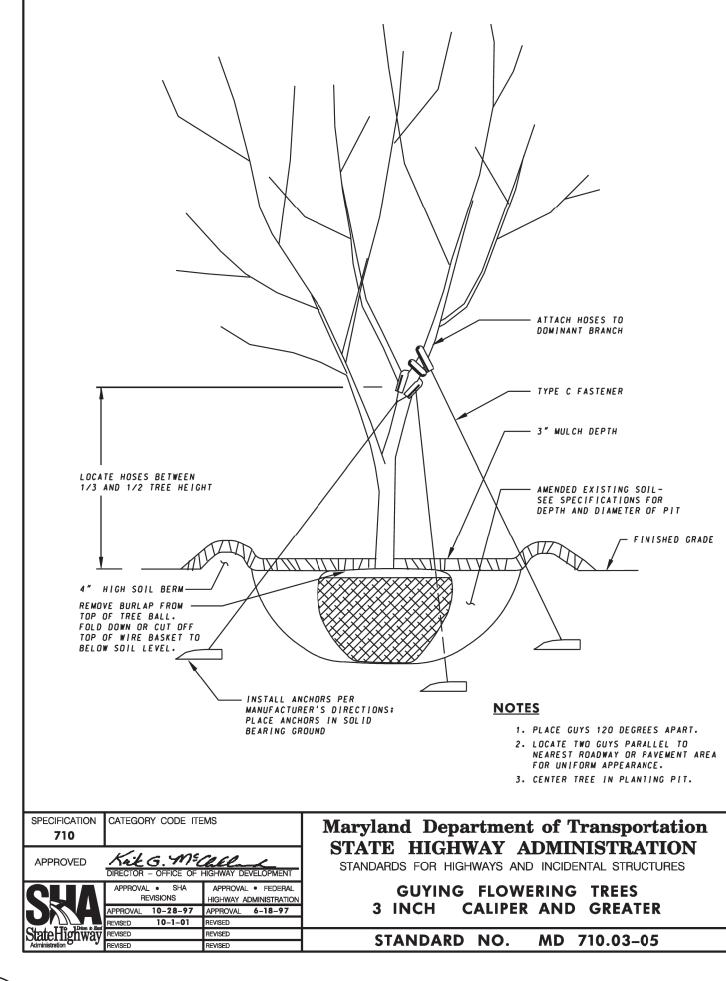
1. CONTRACTOR MUST SELECT BOULDERS TO MATCH INDIGENOUS STONE TO AREA. SEE SPECIFICATIONS FOR TYPES AND SIZES.

2. SET ALL BOULDERS 2/3 ABOVE FINISH GRADE, 1/3 BELOW GRADE; AT SLOPED AREAS, SET BOULDERS 1/2 BELOW GRADE AT STEEPEST POINT.

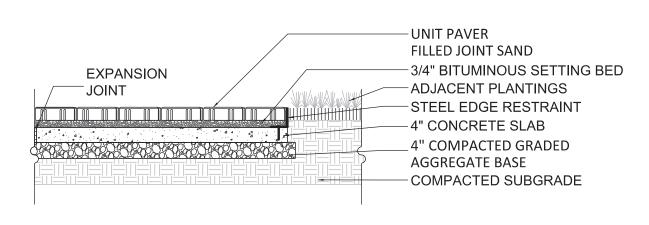
3. BOULDER TO BE PLACED BY STRAPS OR CABLES W/ CARPET TO PREVENT SCARRING. BOULDERS W/ EXCESSIVE SCARRING WILL BE REJECTED.

BACKFILL WITH EXCAVATED SOIL

LANDSCAPE BOULDER IN PLANTING BED



DETAILS 1 AND 2 ARE FOR INFORMATIONAL USE ONLY AND CONSTRUCTION AND BID PRICE SHALL REFLECT THE LATEST VERSION LOCATED ON SHA'S WEBPAGE AT: HTTP://WWW.ROADS.MARYLAND.GOV/INDEX.ASPX?PAGELD=689

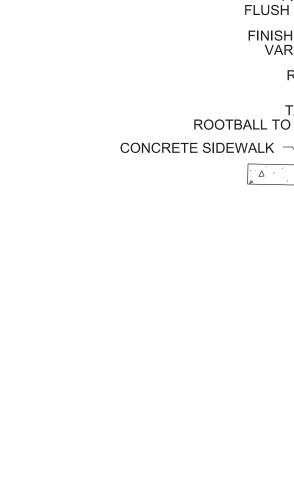


SEE SP600 - (UNIT PAVERS) FOR MORE INFORMATION

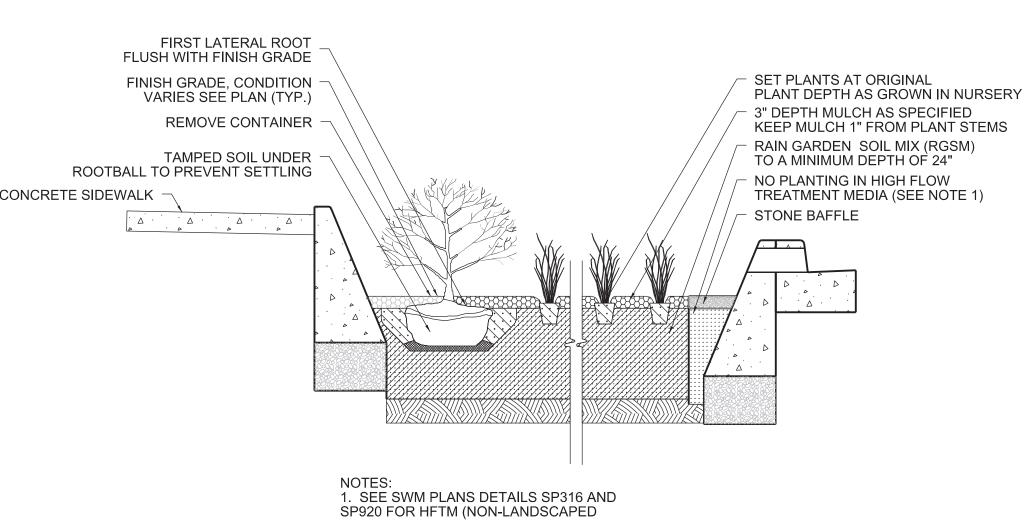
PAVER TYPE 2 - PREST PAVER

SCALE: N.T.S.

ORNAMENTAL TREE



SCALE: N.T.S.



1. SEE SWM PLANS DETAILS SP316 AND SP920 FOR HFTM (NON-LANDSCAPED 2. REFÉR TO SP316 AND SP920 FOR RAIN GARDEN SOIL MIX (RGSM).

ESD PLANTING

SCALE: N.T.S.

ADJACENT PLANTING, SEE PLANTING PLAN BOULDER, SIZE VARIES;

- COMPACTED SUBGRADE

SEE PLAN FOR LOCATIONS

> MAHAN RYKIEL LANDSCAPE ARCHITECTURE URBAN DESIGN & PLANNING

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF | Engineers | Construction Managers | Planners | Scientists MARYLAND, LICENSE NO. 935, EXPIRATION DATE: 03/28/2018.

RKSK

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DESIGN BY:JDM DRAWN BY:JDM/MB CHECK BY:KS

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912 LANDSCAPE DETAILS

LD-05

ETHAN ALLEN GATEWAY STREETSCAPE

> SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125 FAP NO. TAP-3(481)E

SCALE: 1'' = 20'SHEET <u>84</u> OF <u>85</u>

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APRIL 2016

MAST	rfr Pi	ANT	SCHED	III F

QTY

ORNAMENTAL TREES

TREES

SHRUBS

CA

SN

GT

BOTANICAL/COMMON NAME

Honey Locust

Yellowwood

Cladrastis kentuckea/

Natchez Crape Myrtle

Abelia 'Edward Goucher'/

Sweet pepperbush

Little Henry Sweetspire

Red Sprite Winterberry

Cherry Laurel

Snowmound Spirea

Rosa Pink Knock Out/

Pink Knock Out Rose

llex verticillata 'Red Sprite'/

'Edward Goucher' Glossy Abelia

Itea virginica 'Sprich' LITTLE HENRY/

Prunus laurocerasus 'Otto Luyken'/

Spirea Nipponica 'Snowmound'/

Clethra alnifolia 'Hummingbird'/

Gleditsia tricanthos 'Shademaster'/

Lagerstroemia indica x fauriei 'Natchez'/

SIZE

2.5" Cal.

3" Cal.

#5 / 24" Ht.

#5 / 24" Ht.

#3 / 18" Ht.

#5 / 24" Ht.

#5 / 24" Ht.

#3 / 18" Ht.

#3 / 18" Ht.

ROOT

B&B

B&B

Cont.

Cont.

Cont.

Cont.

Cont.

REMARKS

Multi-stem, 3-5 Stems,

One male Winterberry

per 6-10 female plants

5' Clear trunk

MASTER	PLANT	SCHEDULE	- CONT

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT	REMARKS
ORN	AMENTAL C	GRASSES, PERENNIALS AND SEASONAL BU	LBS		
ACM	90	Achillea x 'Moonshine'/ Moonshine Yarrow	#1	Cont.	Plant 18" o.c.
CAA	40	Calamagrostis x acutiflora 'Karl Foerster'/ Feather Reed Grass	#1	Cont.	Plant 24" o.c.
CVM	185	Coreopsis verticillata 'Moonbeam'/ Moonbeam Tickseed	#1	Cont.	Plant 18" o.c.
DGT	140	Dianthus gratianopolitanus 'Tiny Rubies'/ Garden Pinks Dianthus	#1	Cont.	Plant 18" o.c.
EPC	295	Echinacea x purpurea 'Cleopatra'/ Cleopatra Coneflower	#1	Cont.	Plant 18" o.c.
EPP	115	Echinacea purpurea 'Pow Wow Wild Berry', Pow Wow Wild Berry Coneflower	/ #1	Cont.	Plant 18" o.c.
FGE	245	Festuca glauca 'Elijah Blue'/ Blue Fescue	#1	Cont.	Plant 12" o.c.
JCB	190	Juniperus conferta 'Blue Pacific'/ Blue Pacific Juniper	#1	Cont.	Plant 24" o.c.
LMB	555	Liriope muscari 'Big Blue'/ Big Blue Lilyturf	#1	Cont.	Plant 12" o.c.
NIF	555	Narcissus 'Ice Follies'/ Ice Follies Daffodil	#1	Cont.	Plant 12" o.c.
NRB	400	Nepeta racemosa 'Blue Wonder'/	#1	Cont	Plant 18" o.c

Blue Wonder Cat Mint

#1

MASTER PLANT SCHEDULE - CONT.

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT	REMARKS
ORNA	MENTAL G	RASSES, PERENNIALS AND SEASONAL	BULBS		
PAF	295	Perovskia atriplicifolia 'Filigran'/ Russian Sage	#1	Cont.	Plant 24" o.c.
PAN	30	Panicum virgatum 'Shenandoah'/ Shenandoah Switchgrass	#1	Cont.	Plant 36" o.c.
PEA	360	Pennisetum alopecuroides 'Hameln'/ Dwarf Fountain Grass	#1	Cont.	Plant 24" o.c.
SAJ	295	Sedum X' 'Autumn Joy'/ Autumn Joy Stone Crop	#1	Cont.	Plant 18" o.c.
SSG	30	Solidago sphacelata 'Golden Fleece' Golden Fleece Dwarf Goldenrod	#1	Cont.	Plant 18" o.c.
VMC	410	Vinca minor/ Common Periwinkle	#1	Cont.	Plant 12' o.c.
VPG	495	Veronica peduncularis 'Georgia Blue'/ Speedwell	#1	Cont.	Plant 12" o.c.
VSR	90	Veronica spicata 'Royal Candles'/ Royal Candles Speedwell	#1	Cont.	Plant 18" o.c.
YFB	25	Yucca Filamentosa 'Bright Edge'/ Veriegated Adam's Needle	#1	Cont.	Plant 24" o.c.
412 SY	TURFO	GRASS SOD ESTABLISHMENT			

1,221 SY CONSTRUCTING PLANTING BEDS

MASTER PLANT SCHEDULE

MAHAN RYKIEL LANDSCAPE ARCHITECTURE URBAN DESIGN & PLANNING

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 935, EXPIRATION DATE: 03/28/2016.



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DESIGN BY:JDM DRAWN BY:JDM/MB CHECK BY:KS

Plant 18" o.c.

HOUSING AND COMMUNITY DEVELOPMENT

CITY OF TAKOMA PARK

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

LANDSCAPE SCHEDULE

ETHAN ALLEN GATEWAY

LD-06

STREETSCAPE SHA TRACKING NO. 15APMO015XX SHA CONTRACT NO. MO0705125

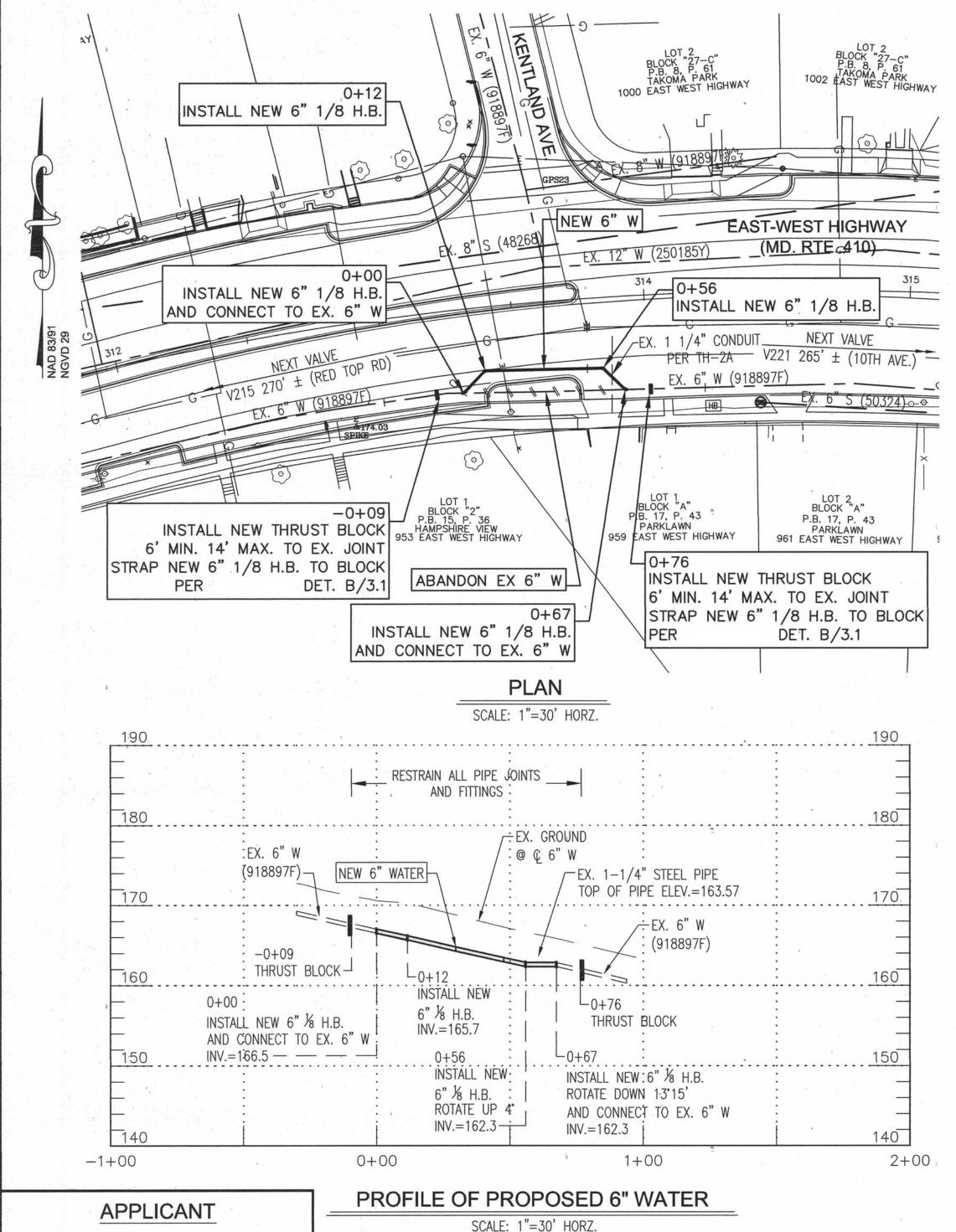
FAP NO. TAP-3(481)E

SCALE: 1" = 20' SHEET <u>85</u> OF <u>85</u>

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APRIL 2016

6" WATER MAIN RELOCATION EAST-WEST HIGHWAY (MD. ROUTE 410) CHILLUM, PRINCE GEORGE'S COUNTY, MARYLAND CONTRACT RE7902A14



GENERAL NOTES - INSPECTION ONLY (WATER)

- ALL WATER MAINS SHALL BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA C105 METHOD A AFTER PIPE HAS BEEN ASSEMBLED IN TRENCH, INSPECT POLYETHYLENE ENCASEMENT FOR DAMAGE
- NOTIFY WSSC'S SYSTEMS INSPECTION GROUP AT (301) 206-7336 AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION. INSPECTION OF MATERIALS REQUIRED FOR THE PROJECT SHALL TAKE
- EXPENSE TO WSSC IN ACCORDANCE WITH THE LATEST EDITION OF THE WSSC SEP GENERAL CONDITIONS AND STANDARD SPECIFICATIONS CONTAINED HEREIN
- STAKEOUT FOR THE PROPOSED RELOCATION SHALL BE PROVIDED BY THE APPLICANT'S ENGINEER.
- NOTIFY THE WSSC ENVIRONMENTAL GROUP (301) 206-8077 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE SEDIMENT CONTROL PERMIT WILL BE ISSUED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
- UPON COMPLETION OF CONSTRUCTION THE APPLICANT'S CONTRACTOR SHALL PREPARE AS BUILTS
- ALL EXISTING WATER MAIN VALVES NECESSARY FOR SHUTDOWN OF WATER MAINS ON THIS CONTRACT SHALL BE LOCATED AND CHECKED FOR OPERATION BY WSSC CUSTOMER CARE GROUP PRIOR TO THE START OF CONSTRUCTION.

- 14. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE WSSC'S SEP
- DIAMETER, AND OUT OF ROUNDNESS OF THE EXISTING PIPE WHERE THE NEW PIPING WILL CONNECT. PRIOR TO ORDERING ANY NEW MATERIAL. UPON DELIVERY OF REQUIRED MATERIALS AND PRIOR TO THE REMOVAL OF EXISTING PIPING, THE CONTRACTOR SHALL CONFIRM THAT ALL MATERIAL FITS
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING STAGING AREA(S) AND MOBILIZATION TO AND FROM SUCH AREA AT NO ADDITIONAL COST TO THE COMMISSION.

RES	TORATION SCHE	DULE
AREA	GRADING TYPE	RESTORATION
ALL AREAS	" "	"A" OR PAVING

BLOCKING NOTES

- RESTRAIN ALL PIPES, AND HORIZONTAL BENDS WHERE NOTED ON PLAN, SEE SPECIFICATIONS CONTAINED HEREIN.
- BOTTOM SURFACE AND FRONT FACE OF BLOCK SHALL REST AGAINST UNDISTURBED EARTH OR COMPACTED CRUSHED STONE BLOCKING IN THE DIRECTION OF THRUST WITH CRUSHED STONE (GRADE #3 OR #4) COMPACTED AS STRUCTURAL FILL IN
- ALL REINFORCED CONCRETE BLOCKING SHALL OBTAIN A COMPRESSIVE STRENGTH OF 4000 P.S.I. BEFORE LOADING
- SEE COATING NOTES ON THIS SHEET FOR COATING EXPOSED METAL ASSOCIATED WITH BLOCKING, RESTRAINING, ETC.
- CONCRETE BLOCKING FOR FITTINGS IS NOT REQUIRED ON PIPE FITTINGS THAT ARE RESTRAINED PER THE LIMITS SHOWN ON

SUGGESTED SEQUENCE OF CONSTRUCTION

- INSTALL THRUST BLOCKS ON EXISTING 6" PIPES AT THE FOLLOWING LOCATIONS: EAST-WEST HIGHWAY STA. -0+09 AND
- INSTALL NEW 6" 1/8 HORIZONTAL BENDS AND NEW 6" WATER MAIN FROM STA. 0+12 TO STA. 0+56.
- MAXIMUM 8 HR SHUT DOWN. CLOSE VALVES V215 & V 221. INSTALL NEW 6" 1/8 HORIZONTAL BENDS AND NEW 6" WATER MAIN FROM STA. 0+00 TO STA. 0+12 AND FROM STA. 0+56 TO STA, 0+67, CONNECT TO EX 6" W. REOPEN VALVES
- RESTORE THE AREA.

VERTICAL CONTROL

THE LOCATION AND ELEVATION OF BENCH MARKS ARE SHOWN ON THESE PLANS. ALL ELEVATIONS SHOWN ON THESE WATER MAIN RELOCATION PLANS ARE BASED ON NGVD 29. USE ONLY THE NGVD 29 DATUM BENCH MARKS INCLUDED ON THE PLANS FOR STAKEOUT OF THE WATER MAIN.

LEGEND

EXISTING UTILITIES MARKED THUS TO BE ABANDONED

INSPECTION ONLY

SLIGO CREEK DRAINAGE BASIN

MERCADO

CONSULTANTS, INC.

PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 38630 EXP. DATE: 04/08/16

RELOCATIONS UNIT UNIT COORDINATOR

VICINITY MAP

PERMIT REQUIREMENTS

*TO BE ACQUIRED BY APPLICANT

TOWN NOTIFICATION

AS BUILT DATA

DRAWING INDEX

INFRASTRUCTURE SYSTEMS GROUP

Plans/Profiles/Details

REVISIONS

GROUP LEADER

WETLANDS / WATERWAYS

M.N.C.P.&P.C.

STATE HGWY, ADM

STATE BD. HEALTH

MONTGOMERY CO.

SED. CONTROL

P.G.CO.D.P.W.&T.

M.D. D.O.E. - WMA

CONTRACT MANAGER

CONTRACTOR

DATE STARTED

DATE COMPLETED

TYPE PIPE W. TYPE MANHOLES DATE FINALED

FINALED BY

Drawing No.

DATE

INSPECTOR

L&G

NOT REQ'D

REQ'D

REVISIONS

CONTRACT RE7902A14 200'S 208NE01 NO OF

GRAPHIC SCALE SCALE: 1"=30' (HORZ.) SCALE: 1"=10' (VERT.)

WALLACE ENGINEERS-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS

> WALLACE MONTGOMERY 10150 YORK ROAD - SUITE 200 HUNT VALLEY, MARYLAND 21030

IENGINEER:

MERCADO CONSULTANTS, INC. 17830 NEW HAMPSHIRE AVE. SUITE 200 ASHTON, MD 21117

WASHINGTON SUBURBAN SANITARY COMMISSION

PRESSURE ZONE = 320A

1"=10' VERT.



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ADDRESS:

EAST-WEST HIGHWAY 6" WATER RELOCATION EAST-WEST HIGHWAY (MD. ROUTE 410)

CHILLUM ELECTION DISTRICT NO. 17

PRINCE GEORGE'S COUNTY, MARYLAND

CITY OF TAKOMA PARK

HOUSING AND COMMUNITY DEVELOPMENT

7500 MAPLE AVE.

TAKOMA PARK, MD. 20912

PROJECT MANAGER: MR. ERKIN OZBERK

PHONE: 301-891-7213