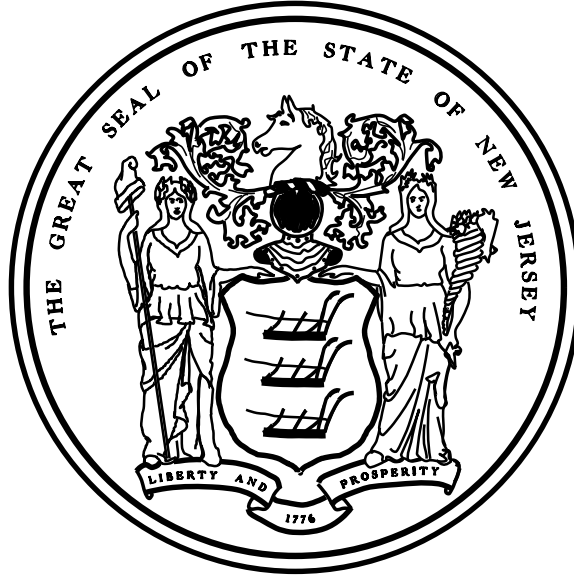


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UTILITIES AND SERVICES
CABLE COMCAST FRED CONTEH REGIONAL CONSTRUCTION ENGINEERING MANAGER CENTRAL NEW JERSEY ALFRED_CONTEH@CABLE.COMCAST.COM
ELECTRIC JCP&L HARVEY M. LOCKLEY JCP&L ENGINEERING SERVICES 101 CRAWFORD'S CORNER ROAD BLD. #1, FIFTH FL. SUITE 1-511 HOLMDEL, NJ. 07733 OFFICE: (732) 212-4262 FAX: (330) 245-5635
GAS PAUL KOSTYZ NJS/NJN DESIGN MANAGER 275 CENTENNIAL AVE PISCATAWAY, NJ 08854 OFFICE: (732)-317-7125 MOBILE: (201)-852-7431 PAUL.KOSTYZ@ALTICETECHSERVICESUSA.COM
TELEPHONE VERIZON THOMAS GRABOWSKI PUBLIC REQUIREMENTS ENGINEER CENTRALIZED ENGINEERING SERVICES VERIZON COMMUNICATIONS - NJ 657 FLORIDA GROVE RD HOPELAWN, NJ 08861 732-874-6187 THOMAS.J.GRABOWSKI@VERIZON.COM
TELEPHONE AT&T DENNIS HERRMANN PROJECT MANAGER JOEMAX TELECOM, LLC 281 BROWERTOWN ROAD, SUITE 201 WOODLAND PARK, NJ 07424 609-331-2407 DHERRMANN@JOEMAXTELECOM.COM
WATER NJAWC MELISSA A. HAZELTON ENGINEERING SPECIALIST NEW JERSEY AMERICAN WATER COMPANY, INC. 1025 LAUREL OAK DRIVE VOORHEES, NJ 08043 P: 856-782-2327 F: 856-782-2481 E: MELISSA.HAZELTON@AMWATER.COM

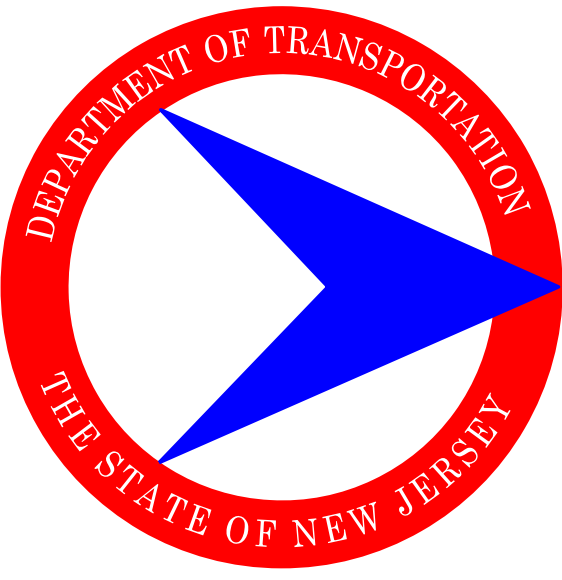
STANDARD ROADWAY CONSTRUCTION – TRAFFIC CONTROL – BRIDGE CONSTRUCTION DETAILS BOOKLET 2016, ELECTRICAL BOOKLET 2011 ARE APPLICABLE TO THIS PROJECT EXCEPT FOR TRAFFIC DETAILS CONTAINED HEREIN.



State of New Jersey Department of Transportation

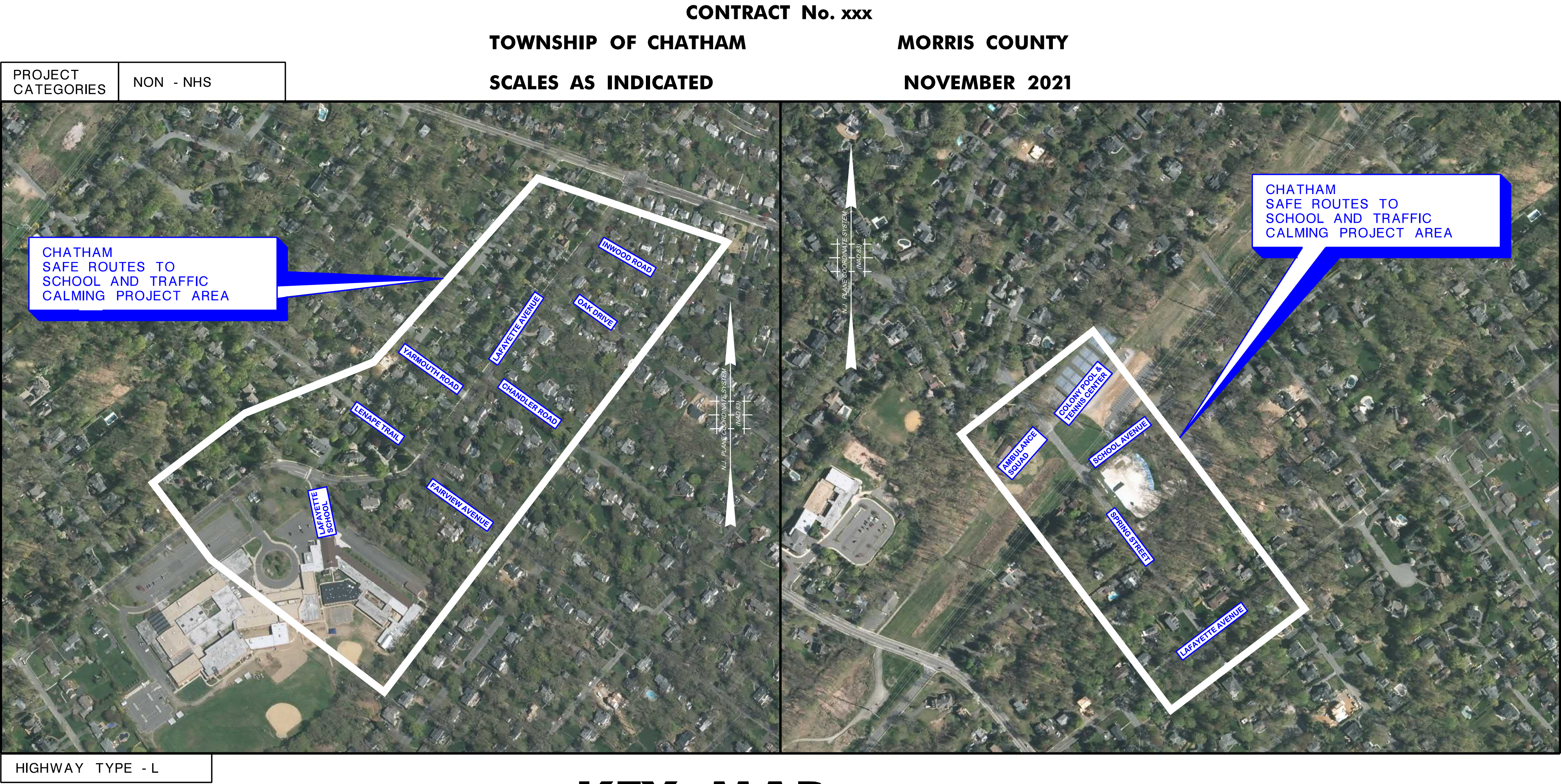
PLANS OF

CHATHAM SAFE ROUTES TO SCHOOL LAFAYETTE AVENUE AND SPRING STREET



STATE	FEDERAL PROJECT NO.
N.J.	HSP 7937 (101) CON

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	KEY
2	ESTIMATED-DISTRIBUTION OF QUANTITIES
3	CONSTRUCTION LEGEND
4	GENERAL NOTES
5	TYPICAL SECTIONS
6 - 10	CONSTRUCTION PLANS
11	ENVIRONMETAL PLANS
12 - 19	CURB RAMP LAYOUT DETAILS
20 - 25	CONSTRUCTION DETAILS
26	DETOUR PLAN
27 - 28	TRAFFIC CONTROL AND STAGING PLANS



STANDARD ROADWAY CONSTRUCTION – TRAFFIC CONTROL – BRIDGE CONSTRUCTION DETAILS BOOKLET 2019, AND STANDARD ELECTRICAL DETAILS BOOKLET, 2019, ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

MID-POINT OF TANGENT
LONGITUDE – 74 ° 24'1.8"
LATITUDE – 48 ° 43'58.6"

KEY MAP

IH ENGINEERS, P.C.

EDUARDO L. SZMURLO

NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

TOTAL LENGTH OF THE PROJECT = 2750 LIN. FT. OR 0.52 MILES

TOTAL LENGTH OF FEDERAL PROJECT No. = 2750 LIN. FT. OR 0.52 MILES

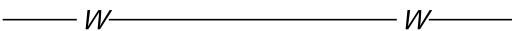
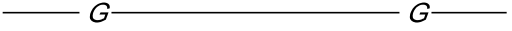
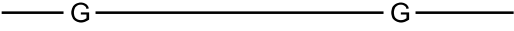
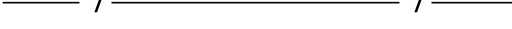
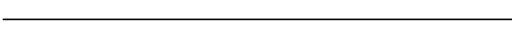
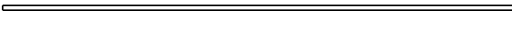
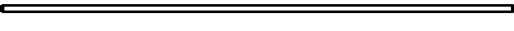
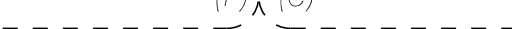
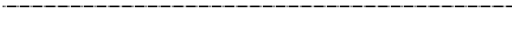
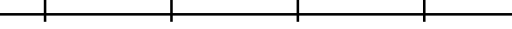
Approved by _____ Date _____

Township of Chatham

2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS
FOR ROAD AND BRIDGE CONSTRUCTION (US CUSTOMARY ENGLISH UNITS)
AND CURRENT SUPPLEMENTARY SPECIFICATIONS THERETO TO GOVERN

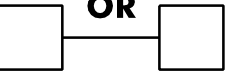
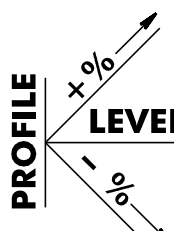
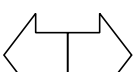
TOWNSHIP OF CHATHAM

MORRIS COUNTY

Linear Features		
Existing	PROPOSED	
 W	 W	Water Main (Size)
 G	 G	Gas Main (Size)
 T	 T	Telephone Conduit
 E	 E	Electric Conduit (Highway or Utility)
 CTV	 CTV	Cable TV
 FO	 FO	Fiber Optic
 ITS	 ITS	Intelligent Transportation System (Wires & Cables)
 (Size & Type)	 (SIZE & TYPE)	Sanitary Sewers or Storm Drains
		Pavements (Concrete or Bituminous)
		Shoulders
		Curbs
 (F) (C)	 (C) (F)	Slopes (Cut & Fill)
		Base Line
		Twp., City, County Lines
 Existing R.O.W. Line	 PROPOSED R.O.W. LINE	Right of Way Lines (Access Permitted)
 Existing R.O.W. & No Access Line	 PROP. R.O.W. & NO ACCESS LINE	Right of Way Lines (No Access)
		Easements
		Property Line
 - x - x - x - x - x -		Fence (Size & Type)
		Reset Fence
		Beam Guide Rail
		Reset Beam Guide Rail
		Noise Walls
		Wetland Limit Line
		Silt Fence
 Ditch	 DITCH	Ditches
		Railroad Tracks
	 PRESERVE EXISTING VEGETATION	Tree Line
		Mean High Water Line
		Tidelands Line

Topographical Features		
Existing	PROPOSED	
		Inlets (Label Type)
 "ES"	 "ES"	Inlets (Type ES)
		Manholes (Label Type or Utility)
		Reset (Inlets or Manholes)
		Reconstructed (Inlets or Manholes)
		Cast Iron Extension (Frame or Ring) (Inlet or Manhole)
		New Manhole Casting, Square Frame, Circular Cover
		R.C. End Section or C.M. Headwall
		Headwalls
		Headwalls & Aprons
		Water Gate Valves
		Reset Water Gate Valves
		Gas Gate Valves
		Reset Gas Gate Valves
 Hyd.		Hydrants
		Reset Hydrants
		Utility Pole (Type & Number)
 TEMP		Temporary Utility Pole
 J.B.	 J.B.	Traffic Signal
 J.B.	 J.B.	Junction Box
 J.B. & Light	 J.B.	Fiber Optic Junction Box
		Junction Box Foundation
		Signs
		Vertical Panels
		Camera (With Blind Spot)
		Dynamic Message Sign (DMS)

Topographical Features		
Existing	PROPOSED	
		Guide Rail End Terminals
		Beam Guide Rail Anchorages
 Man.		Monuments
		ROW Monument (ROW Control Points)
		Test Pit
 Boring Number	 BORING NUMBER	Borings (Boring Number)
		Deciduous Tree (Size, Kind)
		Evergreen Tree (Size, Kind)
		Shrub
		Hedge
		Wetland
Double Reference Codes		
EDQR	ESTIMATE AND DISTRIBUTION OF QUANTITIES - ROADWAY	
TS	TYPICAL SECTIONS	
PSI	PLAN SHEET INDEX	
C	CONSTRUCTION PLANS	
EP	ENVIRONMENTAL PLANS & SOIL EROSION & SEDIMENT CONTROL PLANS	
D	DRAINAGE PLANS	
DTL	CONSTRUCTION DETAILS	
P	PROFILES	
T	TIES	
G	GRADES	
TC	TRAFFIC CONTROL AND STAGING PLANS	
TSP	TRAFFIC SIGNAL PLANS	
E	ELECTRICAL PLANS	
HL	HIGHWAY LIGHTING PLANS	
ITS	INTELLIGENT TRANSPORTATION SYSTEM PLANS	
SL	SIGN LOCATION PLANS	
TSS	TRAFFIC SIGNING AND STRIPING PLANS	
STD	SIGN TEXT DETAILS	
L	LANDSCAPE PLANS	
MS	METHOD OF CROSS SECTIONS	
X	CROSS SECTIONS	
EQB	ESTIMATE OF QUANTITIES - BRIDGE	
B	BRIDGE PLANS	

Miscellaneous Symbols		
	Items With No Alternate	
	Alternate Items	For Alternate Pipe Items (C) = Concrete (M) = Metal
	Milling	
	Building to be Demolished	
	Removal of Concrete Base Course & Concrete Surface Courses	
	Building to be Removed & Paid for Under Clearing Site	
	Demolition No. & Parcel No. of Building to be Demolished	
	PROFILE LEVEL LINE	
	High Point	
	Low Point	
	Bench Mark	

GENERAL NOTES:

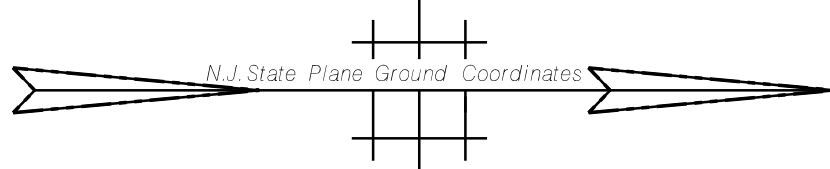
- MAPPING FOR MAJORITY OF THE LOCATIONS INCLUDED IN THIS PROJECT WAS DEVELOPED BY GEOD CORPORATION, IN AUGUST, 2018.
- HORIZONTAL DATUM: NAD83(2011) NJ2900
- VERTICAL DATUM: NAVD88
- PROPERTY AND RIGHT-OF-WAY LINES SHOWN ON THESE PLANS ARE APPROXIMATE LOCATIONS BASED ON THE CURRENT TAX MAPS OF THE BOROUGH OF WHARTON, MORRIS COUNTY, NEW JERSEY. PROPERTY AND RIGHT-OF-WAY LINES ARE SHOWN FOR GRAPHICAL INFORMATION ONLY AND HAVE NOT BEEN FIELD VERIFIED.
- FOR ADDITIONAL GENERAL NOTES, SEE GN-1.

ABBREVIATIONS USED IN THIS CONTRACT			
AH., BK.	AHEAD, BACK	J.B.	JUNCTION BOX
B.L.	BASELINE	LT., RT.	LEFT, RIGHT
B.M.	BENCH MARK	L.O.P.	LIMIT OF PAVEMENT (PAVING)
B.T.	BELL TELEPHONE	L.O.M.	LIMIT OF MILLING
BIT., BITUM.	BITUMINOUS	M.B.	MAILBOX
BLDG.	BUILDING	M.P.	MILE POST
C., C.L.	CENTERLINE	MAX.	MAXIMUM
C.I.P.	CAST IRON PIPE	MIN.	MINIMUM
D.I.P.	DUCTILE IRON PIPE	NO.	NUMBER
CONC.	CONCRETE	N.T.S.	NOT TO SCALE
CULV.	CULVERT	PAV'T.	PAVEMENT
D, DIA.	DIAMETER	PERF.	PERFORATED
D.C.	DROP CURB	P.G.L.	PROFILE GRADE LINE
DE	DITCH EXCAVATION	P.L.	PROPERTY LINE, PROFILE LINE
DEP., DP	DEPRESSED CURB	PK	PARKER KAYLON MASONRY NAIL
DH	DRILL HOLE	POC, P.O.C.	POINT ON CURVE
DWY	DRIVEWAY	POL, P.O.L.	POINT ON LINE
E.B., W.B., N.B., S.B.	EASTBOUND, WESTBOUND	POT, P.O.T.	POINT ON TANGENT
	NORTHBOUND, SOUTHBOUND	PRC, P.R.C.	POINT OF REVERSE CURVE
	ELEVATION	PROP.	PROPOSED
EL., ELEV.	EXISTING	PT, P.T.	POINT OF TANGENCY
EXIST.	GRATE	PVC, P.V.C.	POLYVINYL CHLORIDE PIPE,
GR.	HEIGHT		POINT OF VERTICAL CURVATURE
HT.	HEADWALL	PVI, P.V.I.	POINT OF VERTICAL INTERSECTION
H.W.	HYDRANT	PVT, P.V.T.	POINT OF VERTICAL TANGENCY, PAVEMENT
HYD.	INVERT	R	RADIUS
INV.	IRON PIN	RCCP, R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
IP			

ABBREVIATIONS USED IN THIS CONTRACT	
RCP, R.C.P.	REINFORCED CONCRETE PIPE
RMC, R.M.C.	RIGID METALLIC CONDUIT
RNMC, R.N.M.C.	RIGID NON-METALLIC CONDUIT
ROW, R.O.W.	RIGHT OF WAY
R.R.	RAILROAD
RTE., RT.	ROUTE
SAN.	SANITARY
SDWALK	SIDEWALK
S.H.D.	STATE HIGHWAY DEPARTMENT
SHLD.	SHOULDER
S.L.	SURVEY LINE
S.O.D.	SUBBASE OUTLET DRAIN
STY.	STORY
T	TANGENT
TBA	TO BE ABANDONED
TBR	TO BE REMOVED
TEL.	TELEPHONE
TEMP.	TEMPORARY
THK., TH.	THICK
TYP.	TYPICAL
U.D.	UNDERDRAIN
UP, U.P.	UTILITY POLE
VAR.	VARIABLE, VARIES
WM	WATER METER

ELECTRICAL PLAN ABBREVIATIONS

CF	CUTOFF LUMINAIRE, TYPE
E	EXPRESSWAY LUMINAIRE
ID	IMAGE DETECTOR
IDC	IMAGE DETECTOR CABLE
JBF	JUNCTION BOX FOUNDATION
L	LUMINAIRE
LMA-A	LIGHTING MAST ARM, ALUMINUM
LMA-S	LIGHTING MAST ARM, STEEL
LSA	LIGHTING STANDARD, ALUMINUM
LSF	LIGHTING STANDARD, FIBERGLASS
LSS	LIGHTING STANDARD, STEEL
MAS	MAST ARM SIGN
MSC II	MEDIUM SEMI-CUTOFF LUMINAIRE, TYPE 2
MSC III	MEDIUM SEMI-CUTOFF LUMINAIRE, TYPE 3
PB	PUSH BUTTON
PSH	PEDESTRIAN SIGNAL HEAD
PSS	PEDESTRIAN SIGNAL STANDARD
TSH	TRAFFIC SIGNAL HEAD
TSMA-A	TRAFFIC SIGNAL MAST ARM, ALUMINUM
TSMA-S	TRAFFIC SIGNAL MAST ARM, STEEL
TSS-C	TRAFFIC SIGNAL STANDARD, ALUMINUM "C"
TSS-K	TRAFFIC SIGNAL STANDARD, ALUMINUM "K"
TSS-S	TRAFFIC SIGNAL STANDARD, STEEL
TSS-SC	TRAFFIC SIGNAL STANDARD, STEEL COMBINATION
TSS-T	TRAFFIC SIGNAL STANDARD, ALUMINUM "T"
UL-P	UNDERDECK LIGHTING, TYPE "P"
UL-W	UNDERDECK LIGHTING, TYPE "W"
V	VERTICAL LUMINAIRE

	Proposed Bridge
	Concrete Bridge Approach
	North Arrow To Be Used On Standard Construction Sheets Where Bearings Refer To N. J. State Plane Ground Coordinates
N.T.S.	CL-1 CL-1
NEW JERSEY DEPARTMENT OF TRANSPORTATION	
CONSTRUCTION LEGEND	
CHATHAM SAFE ROUTES TO SCHOOL LAFAYETTE AVENUE AND SPRING STREET	
IH ENGINEERS, P.C.	
EDUARDO L. SZMURLO	
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100	
3 28	

GENERAL NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY THE TYPE AND THE LOCATIONS OF UNDERGROUND UTILITIES, AND TO PROTECT THEM IN PLACE. CALL BEFORE YOU DIG 811 OR 1-800-272-1000 FOR UTILITY LOCATIONS. (THE LOCATIONS OF GRAVITY SEWER MAINS ARE NOT IDENTIFIED BY THE STATE'S ONE CALL SYSTEM (811), THE CONTRACTOR IS RESPONSIBLE FOR LOCATING GRAVITY SEWER MAINS BY COORDINATING WITH LOCAL MUNICIPALITY.)
2. CONTRACTOR TO REPLACE DAMAGED SIDEWALK AT LOCATIONS INDICATED ON THE PLANS. LIMITS OF SIDEWALK REPLACEMENT MAY BE EXTENDED TO THE NEXT JOINT OR AS DIRECTED BY THE RE ON AN IF AND WHERE BASIS, FOR PAY ITEM 606012. CONSTRUCTION JOINTS FOR SIDEWALK ARE SHOWN ON THE PLAN ONLY AT THE LOCATIONS WHERE NEW CURB RAMPS ARE PROPOSED AND ONLY TO SHOW THE GRADE BREAK LOCATIONS.
3. CONTRACTOR SHALL REPLACE THE CURB AS INDICATED IN THE PLANS. THE LIMIT OF REPLACEMENT MAY BE EXTENDED TO THE NEXT JOINT IF THIS REQUIRES MODIFYING THE LIMIT OF CURB REPLACEMENT WITH UP TO 3'. PAYMENT FOR ADDITIONAL WORK IS ON AN IF AND WHERE BASIS, FOR PAY ITEM 607018.
4. SIGN REMOVAL AND SIGN RESETTNG SHALL BE PAID UNDER PAY ITEM 201003P CLEARING SITE. RELOCATION OF EXISTING YARD BASIN AND TREATMENT OF LANDSCAPE OR REMOVING, RELOCATING LANDSCAPE LIGHTS SHALL BE PAID UNDER PAY ITEM 201003P CLEARING SITE.
5. PRIOR TO WORK ON THE NEW CURB RAMPS, THE CONTRACTOR SHALL ENSURE THAT ALL THE MANHOLES, VALVES, AND PULL BOXES CAN BE RESET AS SHOWN ON THE PLAN. IF AN ELEMENT CANNOT BE RESET, THE CONTRACTOR SHALL INFORM THE RE AND PROCEED ACCORDING TO HIS DIRECTIONS.
6. PRIOR TO WORK ON THE NEW CURB RAMPS, THE CONTRACTOR SHALL VERIFY IN THE FIELD THAT NO LOW POINT OR FLAT GUTTER LINE EXIST WITHIN THE LIMITS OF PROPOSED CURB. IF A LOW POINT OR A FLAT GUTTER LINE ARE IDENTIFIED THE CONTRACTOR SHALL INFORM THE RE AND PROCEED ACCORDING TO HIS DIRECTIONS. CONTRACTOR'S WORK SHALL NOT RESULT IN ROADWAY PONDING AT ANY LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ROADWAY PONDING CREATED BY CONTRACTOR'S WORK AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE RE.
7. PRIOR TO REMOVING EXISTING CURB AND SIDEWALK, IT IS THE CONTRACTOR'S REASONABILITY TO IDENTIFY AND SET THE REFERENCE POINTS FOR CONSTRUCTION OF THE NEW CURB RAMP.
8. MINOR RE-GRADING AND LANSCAPING ADJACENT TO PROPOSED CURB AND SIDEWALK WILL BE PAID UNDER THE PAY ITEM 805003M TURF REPAIR STRIP.
9. CONSTRUCTION STAGING SHALL MAINTAIN ACCESS TO RESIDENCES AT ALL TIMES.
10. AT ALL LOCATIONS WHERE SIDEWALK IS REMOVED, IT SHALL BE REPLACED WITH TOPSOILING, 4" THICK (PAY ITEM 804006P) FERTILIZING AND SEEDING, TYPE D (PAY ITEM 806015P), AND STRAW MULCHING (PAY ITEM 809003M). QUANTITIES ARE SHOWN ON THE CONSTRUCTION PLANS ONLY AT THE CORNERS WHERE MORE THAN 1 SY OF SIDEWALK IS REMOVED. THE ADDITIONAL QUANTITIES NEEDED FOR REPLACING THE SIDEWALK AT THE LOCATIONS WHERE LESS THAN 1 SY OF SIDEWALK IS REMOVED, WILL BE PAID ON IF AND WHERE BASIS, PAY ITEMS 804000P, 806015P, AND 809003M.
11. ALL ADA RAMP FLARES ARE GRASS FLARES UNLESS NOTED OTHERWISE.

GN-1
GN-1

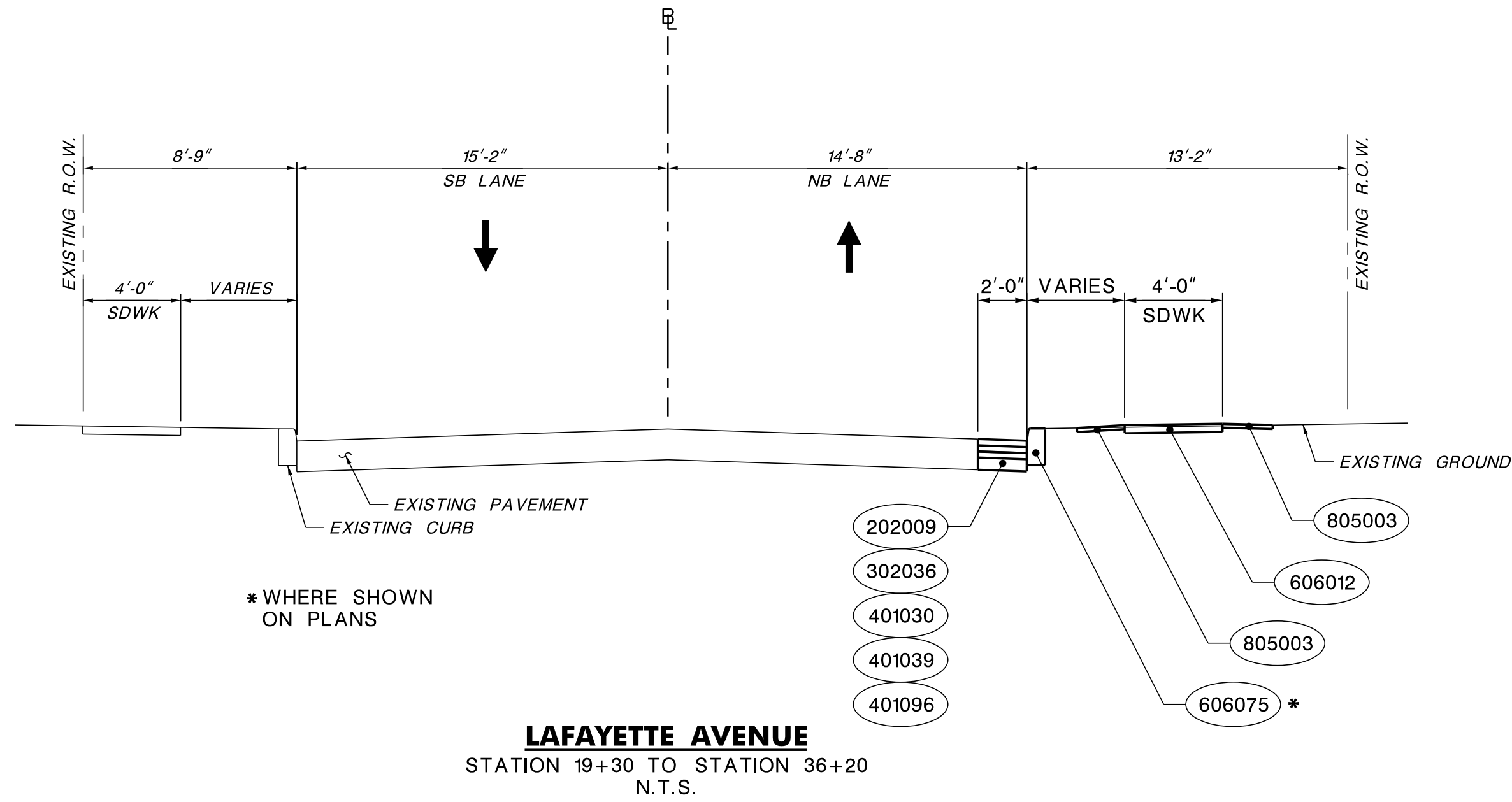
NEW JERSEY DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

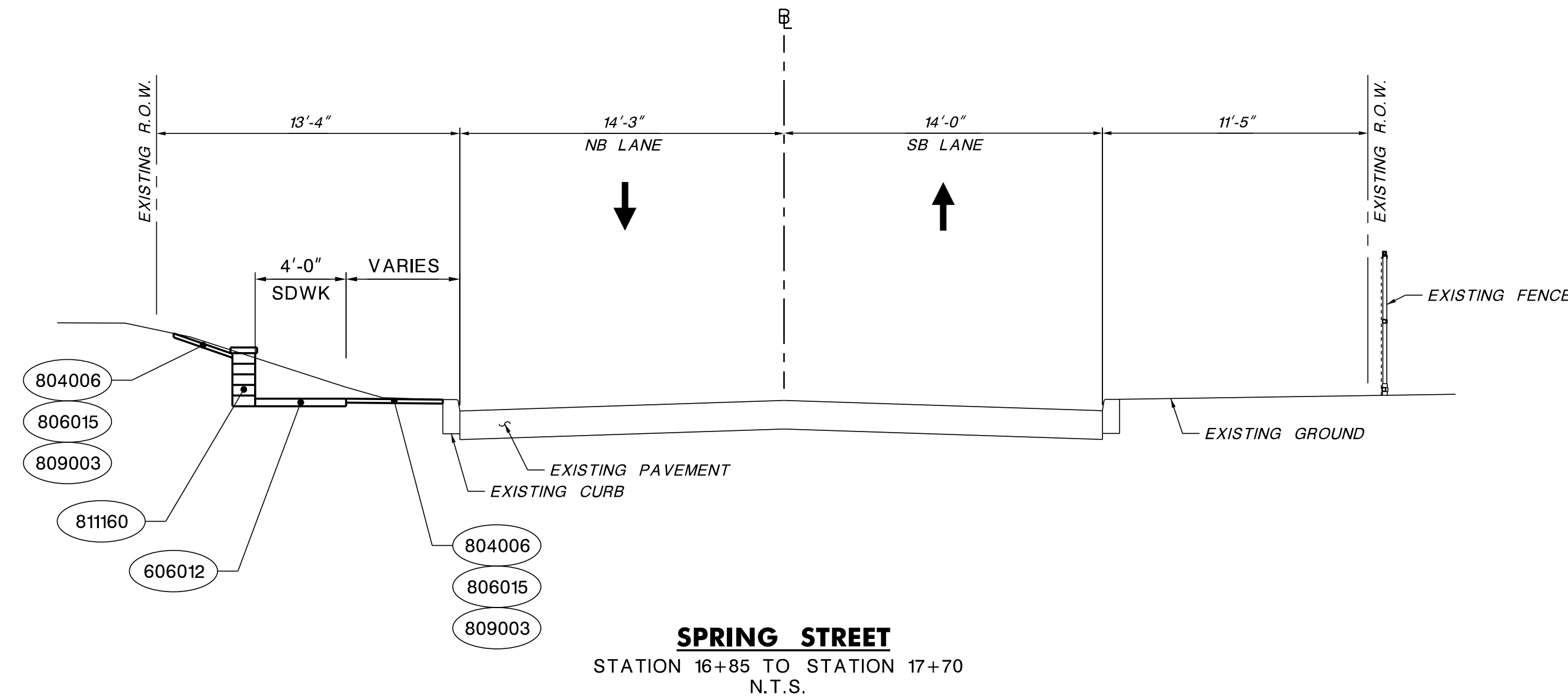
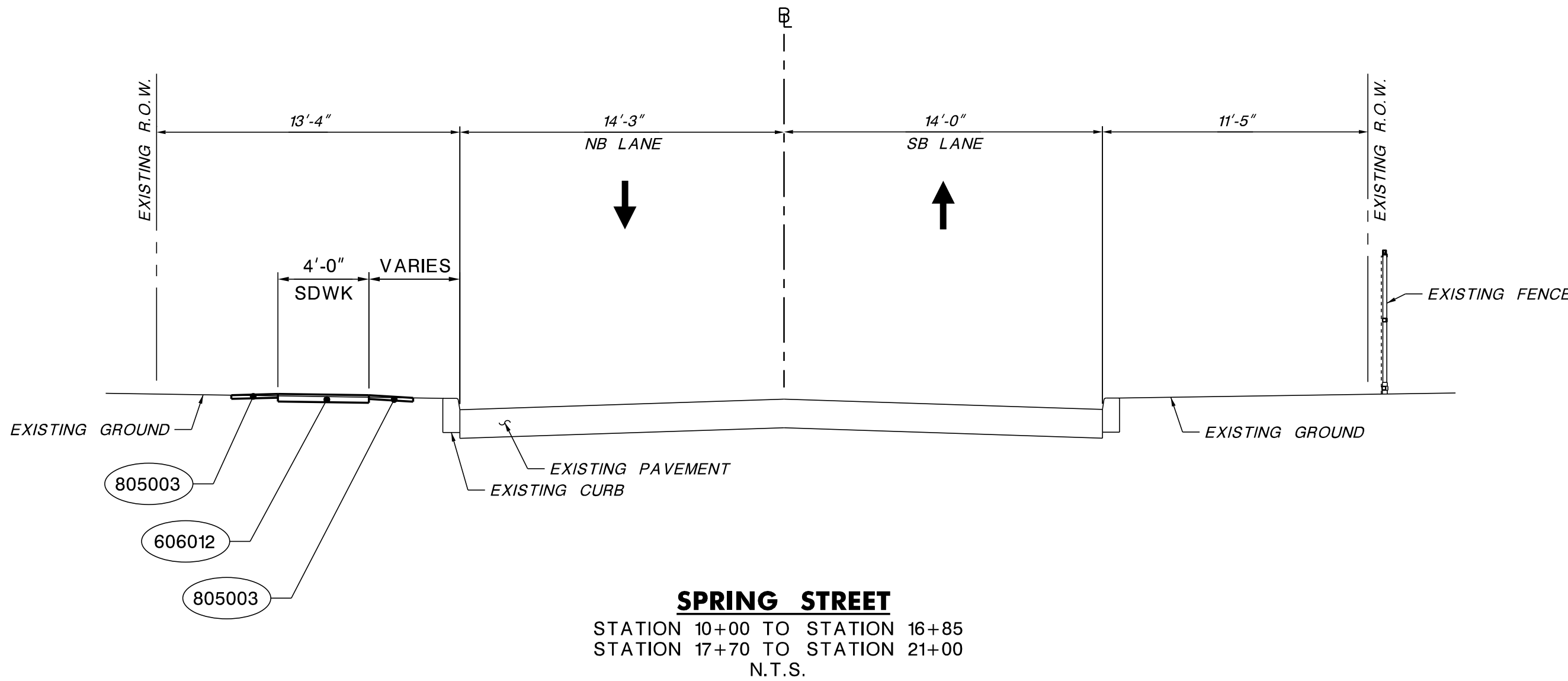
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

TOWNSHIP OF CHATHAM



MORRIS COUNTY



PROPOSED MATERIALS

ITEM NO.	DESCRIPTION
202009P	EXCAVATION, UNCLASSIFIED
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK
401030M	TACK COAT
401039M	HOT MIX ASPHALT 9.5 L 64 SURFACE COURSE
401096M	HOT MIX ASPHALT 19 M 64 BASE COURSE
606012P	CONCRETE SIDEWALK, 4" THICK
606075P	CONCRETE ISLAND, 4" THICK
804006P	TOPSOILING, 4" THICK
805003M	TURF REPAIR STRIP
806015P	FERTILIZING AND SEEDING, TYPE D
809003M	STRAW MULCHING
811160	STONE LANDSCAPE WALL

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

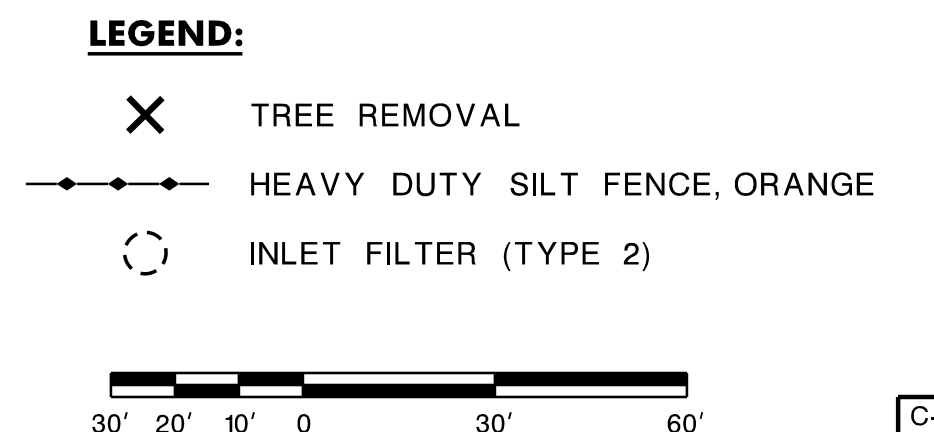
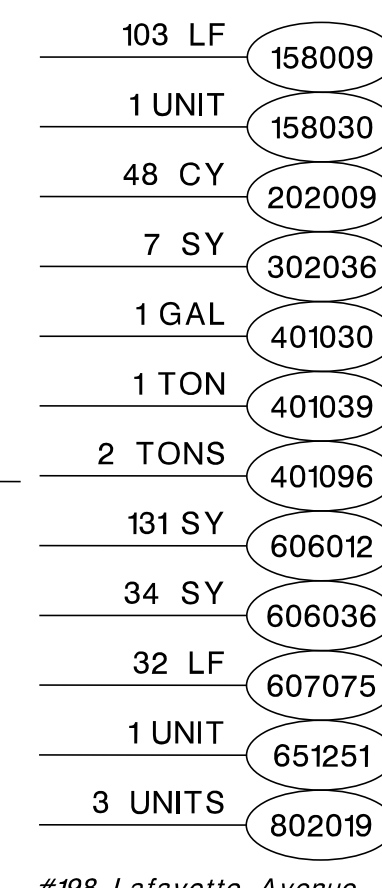
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

TS-1
TS-1

39 LF	158009
17 CY	202009
40 SY	302036
2 GALS	401030
2 TONS	401039
11 TONS	401096
(CURB RAMP) 27 SY	606012
(CURB RAMP) 4 SY	606084
(CURB RAMP) 180 LF	607075
64 LF	610017



IH ENGINEERS, P.C.

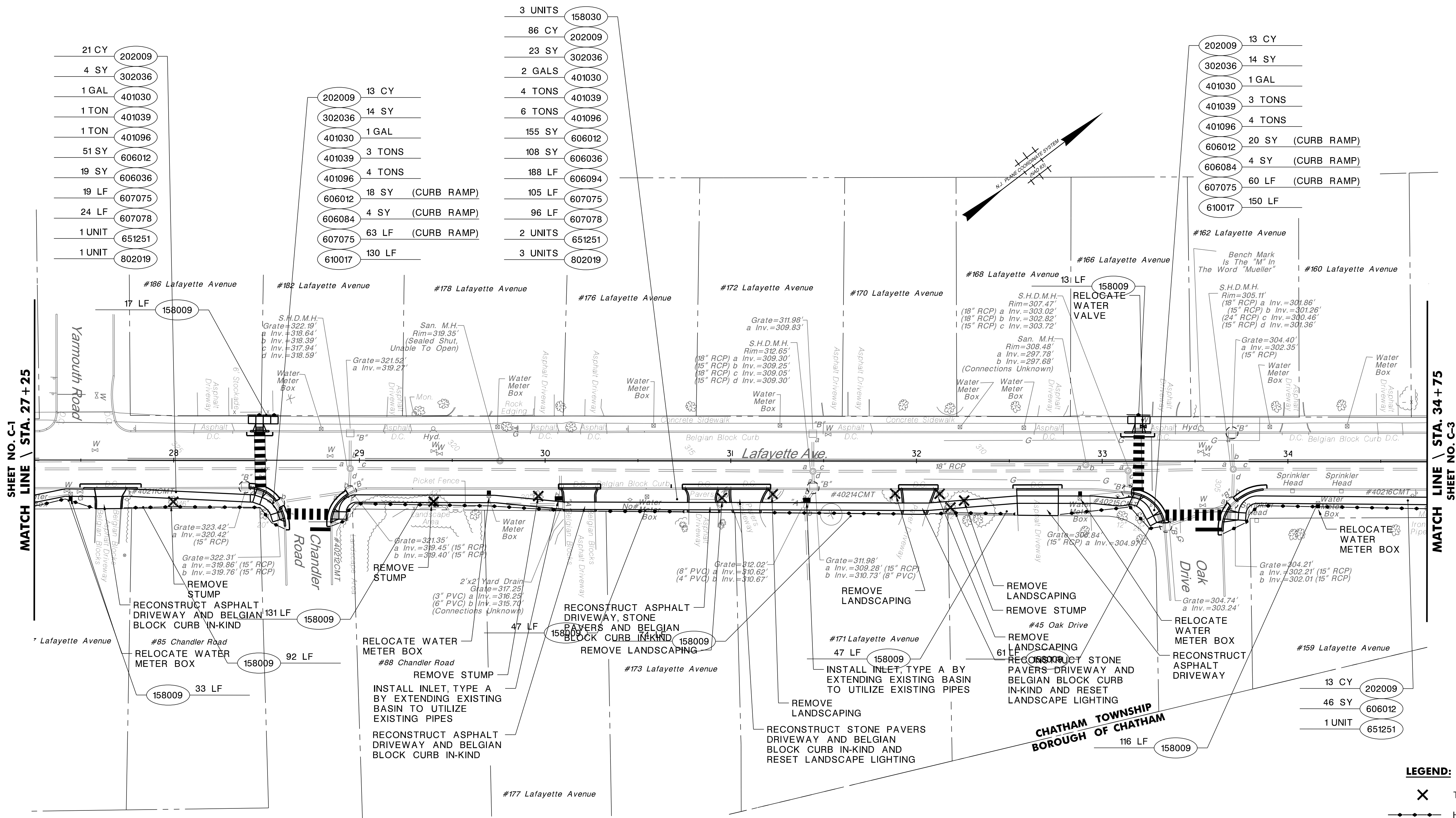
 EDUARDO L. SZMURLO

 NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE0424100

9/7/2022
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USER: mmaraue

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ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
158009M	HEAVY DUTY SILT FENCE, ORANGE	631 LF
158030M	INLET FILTER, TYPE 2, 2'x4'	3 UNITS
202009P	EXCAVATION, UNCLASSIFIED	146 CY
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	55 SY
401030M	TACK COAT	6 GALS
401039M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE (2" THICK)	11 TONS
401096M	HOT MIX ASPHALT 19 M 64 INTERMEDIATE COURSE (5" THICK)	15 TONS
606012P	CONCRETE SIDEWALK, 4" THICK	290 SY
606036P	HOT MIX ASPHALT DRIVEWAY, 4" THICK	127 SY
606084P	DETECTABLE WARNING SURFACE	8 SY
606094P	GRANITE PAVING	188 SY
607075P	GRANITE CURB	247 LF
607078P	GRANITE CURB RESET	120 LF
610017M	TRAFFIC MARKING LINES, 24"	280 LF
651251M	RESET WATER METER BOX	4 UNITS
802019M	STUMP REMOVAL	4 UNITS

LEGEND:

- X TREE REMOVAL
- HEAVY DUTY SILT FENCE, ORANGE
- () INLET FILTER (TYPE 2)



NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN

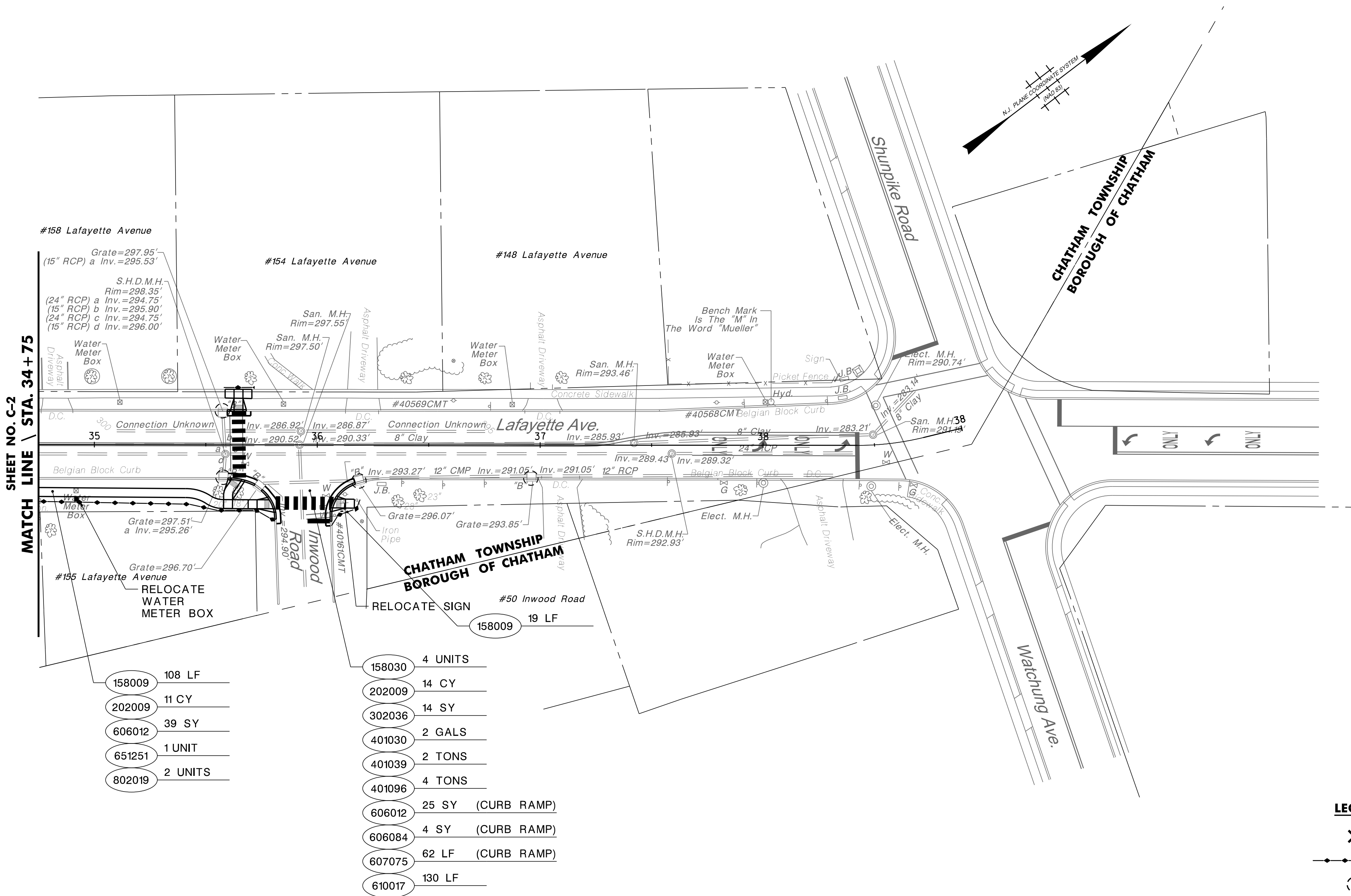
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

EDUARDO L. SZMURLO

NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
158009M	HEAVY DUTY SILT FENCE, ORANGE	141 LF
158030M	INLET FILTER, TYPE 2, 2'x4'	4 UNITS
202009P	EXCAVATION, UNCLASSIFIED	25 CY
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	14 SY
401030M	TACK COAT	2 GALS
401039M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE (2" THICK)	2 TONS
401096M	HOT MIX ASPHALT 19 M 64 INTERMEDIATE COURSE (5" THICK)	4 TONS
606012P	CONCRETE SIDEWALK, 4" THICK	64 SY
606084P	DETECTABLE WARNING SURFACE	4 SY
607075P	GRANITE CURB	62 LF
610017M	TRAFFIC MARKING LINES, 24"	130 LF
651251M	RESET WATER METER BOX	1 UNIT
802019M	STUMP REMOVAL	2 UNITS



- LEGEND:**
- X TREE REMOVAL
 - HEAVY DUTY SILT FENCE, ORANGE
 - () INLET FILTER (TYPE 2)



NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN

CHATHAM SAFE ROUTES TO SCHOOL
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158009	206 LF
202009	22 CY
602213	1 UNIT
606012	81 SY

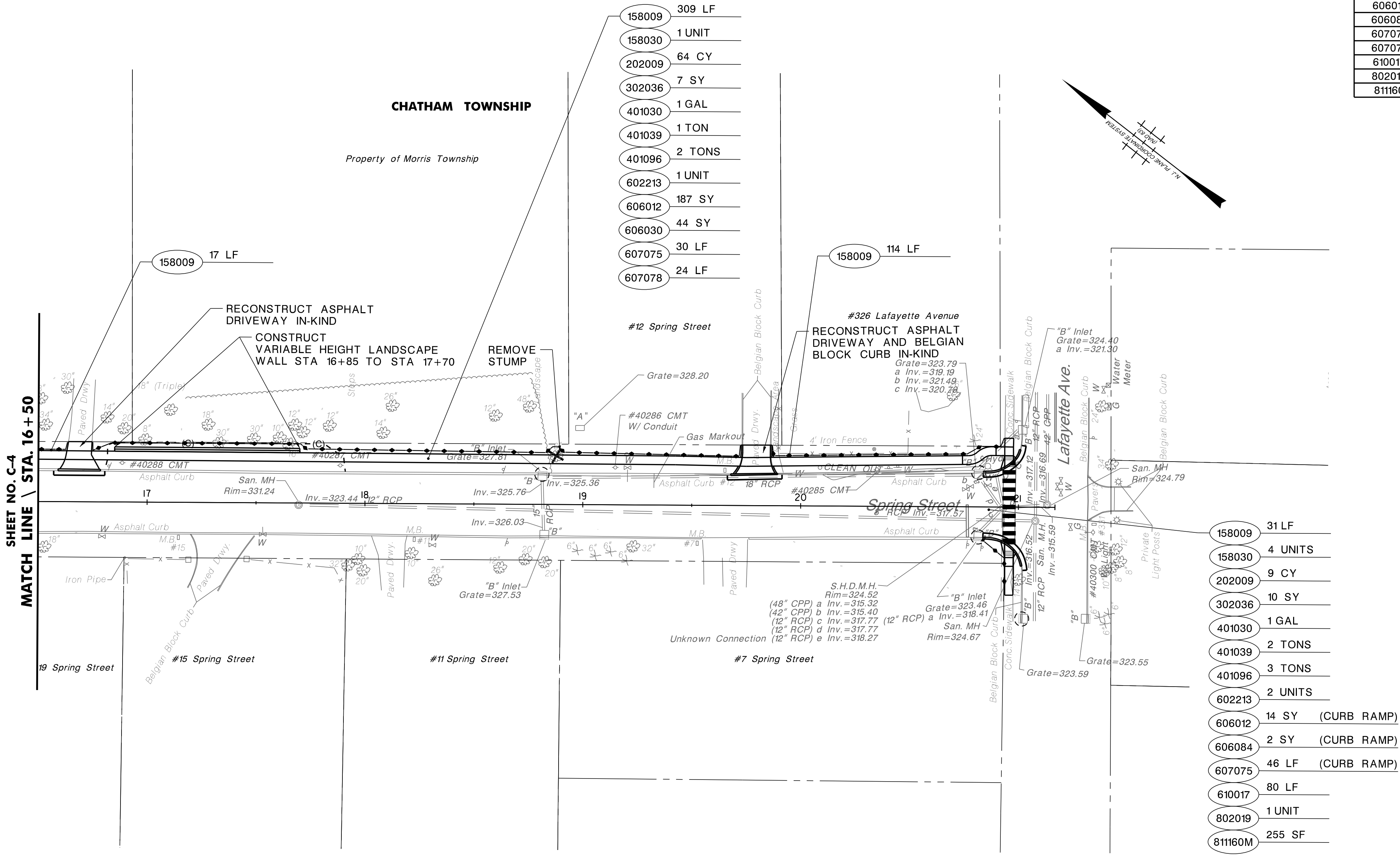


NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

$$\frac{9}{28}$$

 TREE REMOVAL
 HEAVY DUTY SILT FENCE, ORANGE
 INLET FILTER (TYPE 2)

ITEM NO.	TO BE CONSTRUCTED	CONTRACT QUANTITY
158009M	HEAVY DUTY SILT FENCE, ORANGE	471 LF
158030M	INLET FILTER, TYPE 2, 2'x4'	5 UNITS
202009P	EXCAVATION, UNCLASSIFIED	73 CY
302036P	DENSE-GRADED AGGREGATE BASE COURSE, 6" THICK	17 SY
401030M	TACK COAT	2 GALS
401039M	HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE (2" THICK)	3 TONS
401096M	HOT MIX ASPHALT 19 M 64 INTERMEDIATE COURSE (5" THICK)	5 TONS
602213M	CURB PIECE	3 UNITS
606030P	HOT MIX ASPHALT DRIVEWAY, 1½" THICK	44 SY
606012P	CONCRETE SIDEWALK, 4" THICK	201 SY
606084P	DETECTABLE WARNING SURFACE	2 SY
607075P	GRANITE CURB	76 LF
607078P	RESET GRANITE CURB	24 LF
610017M	TRAFFIC MARKING LINES, 24"	80 LF
802019M	STUMP REMOVAL	1 UNIT
811160M	STONE LANDSCAPE WALL	255 LF



LEGEND:

- X TREE REMOVAL
- HEAVY DUTY SILT FENCE, ORANGE
- INLET FILTER (TYPE 2)



C-5
C-5

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

MORRIS COUNTY SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL NOTES

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, AND WILL BE IN PLACE PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) DAYS AND NOT SUBJECTED TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR HAY AND TACKED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. SEE NOTE 22 BELOW.
- PERMANENT VEGETATION IS TO BE ESTABLISHED ON EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH IS TO BE USED FOR PROTECTION UNTIL VEGETATION IS ESTABLISHED. SEE NOTE 23 BELOW.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS (STEEP SLOPES, SANDY SOILS, WET CONDITIONS) SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN ACCORDANCE WITH NOTE 22 BELOW.
- TEMPORARY DIVERSION BERMS ARE TO BE INSTALLED ON ALL CLEARED ROADWAYS AND EASEMENT AREAS. SEE THE DIVERSION DETAIL.
- PERMANENT SEEDING AND STABILIZATION TO BE IN ACCORDANCE WITH THE "STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION". SPECIFIED RATES AND LOCATIONS SHALL BE ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN.
- THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SO THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
- ALL SEDIMENTATION STRUCTURES (SILT FENCE, INLET FILTERS, AND SEDIMENT BASINS) WILL BE INSPECTED AND MAINTAINED DAILY.
- STOCKPILES SHALL NOT BE LOCATED WITHIN 50% OF A FLOODPLAIN, SLOPE, DRAINAGE FACILITY, OR ROADWAY. ALL STOCKPILES BASES SHALL HAVE A SILT FENCE PROPERLY ENTRENCHED AT THE TOE OF SLOPE.
- A STABILIZED CONSTRUCTION ACCESS WILL BE INSTALLED, WHENEVER AN EARTHEN ROAD INTERSECTS WITH A PAVED ROAD. SEE THE STABILIZED CONSTRUCTION ACCESS DETAIL AND CHART FOR DIMENSIONS.
- ALL NEW ROADWAYS WILL BE TREATED WITH SUITABLE SUB BASE UPON ESTABLISHMENT OF FINAL GRADE ELEVATIONS.
- PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- BEFORE DISCHARGE POINTS BECOME OPERATIONAL, ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AS REQUIRED.
- ALL DEWATERING OPERATIONS MUST BE DISCHARGED DIRECTLY INTO A SEDIMENT FILTER AREA. THE FILTER SHOULD BE COMPOSED OF A FABRIC OR APPROVED MATERIAL. SEE THE DEWATERING DETAIL.
- ALL SEDIMENT BASINS WILL BE CLEANED WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. A CLEAN OUT ELEVATION WILL BE IDENTIFIED ON THE PLAN AND A MARKER INSTALLED ON THE SIDE.
- DURING AND AFTER CONSTRUCTION, THE APPLICANT WILL BE RESPONSIBLE FOR THE MAINTENANCE AND UPKEEP OF THE DRAINAGE STRUCTURES, VEGETATION COVER, AND ANY OTHER MEASURES DEEMED APPROPRIATE BY THE DISTRICT. SAID RESPONSIBILITY WILL END WHEN COMPLETED WORK IS APPROVED BY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT.
- ALL TREES OUTSIDE THE DISTURBANCE LIMIT INDICATED ON THE SUBJECT PLAN OR THOSE TREES WITHIN THE DISTURBANCE AREA WHICH ARE DESIGNATED TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH TREE PROTECTION DEVICES. SEE THE TREE PROTECTION DETAIL.
- THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON SITE OR OFF SITE EROSION PROBLEMS DURING CONSTRUCTION.
- THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE, AND A PRE-CONSTRUCTION MEETING HELD.
- CONTRACTOR TO SET UP A MEETING WITH THE INSPECTOR FOR PERIODIC INSPECTIONS OF THE TEMPORARY SEDIMENT BASIN PRIOR TO AND DURING ITS CONSTRUCTION.

- TOPSOIL STOCKPILE PROTECTION
 - APPLY GROUND LIMESTONE AT A RATE OF 90 1BS PER 1000SQ. FT.
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 1BS PER 1000 SQ. FT.
 - APPLY PERENNIAL RYEGRASS SEED AT 11B PER 1000 SQ. FT.
 - MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 1BS PER 1000SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
 - PROPERTY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE BOTTOM OF THE STOCKPILE.
- TEMPORARY STABILIZATION SPECIFICATIONS
 - APPLY GROUND LIMESTONE AT A RATE OF 90 1BS PER 1000SQ. FT.
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 1BS PER 1000 SQ. FT.
 - APPLY PERENNIAL RYEGRASS SEED AT 11B PER 1000 SQ. FT.
 - MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 1BS PER 1000SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
- PERMANENT STABILIZATION SPECIFICATIONS
 - APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED)
 - APPLY GROUND LIMESTONE AT A RATE OF 90 1BS PER 1000SQ. FT. AND WORK FOUR INCHES INTO SOIL
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 1BS PER 1000 SQ. FT.
 - APPLY HARD FESCUE SEED AT 2.7 1BS PER 1000SQ. FT. AND CREEPING RED FESCUE SEED AT 0.7 1BS PER 1000 SQ. FT. AND PERENNIAL RYEGRASS SEED AT 0.25 1BS PER 1000 SQ. FT.
 - MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 1BS PER 1000SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
- 48 HOURS PRIOR TO ANY SOIL DISTURBANCE, NOTICE IN WRITING, SHALL BE GIVEN TO THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AND A PRE-CONSTRUCTION MEETING HELD.

NOTES FOR ROAD WORK

- THE CONTRACTOR SHALL PREPARE A PLAN FOR THE PROPER DEWATERING OF EACH STREAM CROSSING PRIOR TO EXCAVATING THE STREAM BED. PLAN SHALL BE FORWARDED TO THE ENGINEER AND MORRIS COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL. THE DISTRICT SHALL BE NOTIFIED FOR INSPECTION PRIOR TO EACH STREAM CROSSING CONSTRUCTION.
- ANY AREAS USED FOR THE CONTRACTOR'S STAGING, INCLUDING BUT NOT LIMITED TO, TEMPORARY STORAGE OF STOCKPILED MATERIALS (E.G. CRUSHED STONE, QUARRY PROCESS STONE, SELECT FILL, EXCAVATED MATERIALS, ETC.), SHALL BE ENTIRELY PROTECTED BY A SILT FENCE ALONG THE LOW ELEVATION SIDE TO CONTROL SEDIMENT RUNOFF.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE MORRIS COUNTY SOIL CONSERVATION DISTRICT OF ANY STAGING AND/OR STOCKPILE LOCATION AREAS AND FOR OBTAINING A SOIL EROSION AND SEDIMENT CONTROL CERTIFICATION FOR THESE AREAS.
- A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET SHALL BE INSTALLED AT THE CONTRACTOR'S STAGING YARD AND/OR STOCKPILE AREAS TO PREVENT OFF-SITE TRACING OF SEDIMENT BY CONSTRUCTION VEHICLES ONTO PUBLIC ROADS. BLANKET SHALL BE 15'x50'x6" (MINIMUM), CRUSHED STONE 2 1/2" IN DIAMETER. SAID BLANKET SHALL BE UNDERLAIN WITH A SUITABLE SYNTHETIC SEDIMENT FILTER FABRIC AND MAINTAINED IN GOOD ORDER.

ENVIRONMENTAL COMMITMENTS

- ENVIRONMENTAL COMMITMENTS (REFER TO MOA STIPULATIONS OR OTHER CONDITIONS NOTED IN SECTION D, IF APPLICABLE; PERMIT CONDITIONS, ETC.):
 - BEST MANAGEMENT PRACTICES WILL BE UTILIZED FOR THIS PROJECT
 - CONSTRUCTION STAGING ACTIVITIES (INCLUDING THE STORAGE OF EQUIPMENT/VEHICLES/MATERIALS) ARE PROHIBITED IN ENVIRONMENTALLY SENSITIVE AREAS. IF THE CONTRACTOR WISHES TO USE THESE AREAS OR ACCESS THESE AREAS FOR ANY REASON, ALL APPROPRIATE PERMITS AND APPROVALS MUST BE OBTAINED PRIOR TO SUCH USE.
 - IF THE PROPOSED ACTIVITIES INCLUDE DIRECT CONTACT WITH THE INLETS, THEY MUST BE RETROFITTED TO MEET THE NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM (NJPDES) STORMWATER REQUIREMENTS.
 - GENERAL AVOIDANCE AND MINIMIZATION MEASURE 1 ENSURE ALL OPERATORS, EMPLOYEES, AND CONTRACTORS WORKING IN AREAS OF KNOWN OR PRESUMES BAT HABITAT ARE AWARE OF ALL FHWA/FRA/FTA (TRANSPORTATION AGENCIES) ENVIRONMENTAL COMMITMENTS, INCLUDING ALL APPLICABLE AMMS.
 - TREE REMOVAL AVOIDANCE AND MINIMIZATION MEASURE 1 MODIFY ALL PHASES/ASPECTS OF THE PROJECT (E.G., TEMPORARY WORK AREAS, ALIGNMENTS) TO AVOID TREE REMOVAL WHERE PRACTICABLE.
 - TREE REMOVAL AVOIDANCE AND MINIMIZATION MEASURE 2 APPLY TIME OF YEAR RESTRICTIONS FOR TREE REMOVAL WHEN BATS ARE NOT LIKELY TO BE PRESENT, OR LIMIT TREE REMOVAL TO 10 OR FEWER TREES PER PROJECT AT ANY TIME OF THE YEAR WITHIN 100 FEET OF EXISTING ROAD/RAIL SURFACE AND OUTSIDE OF THE DOCUMENTED ROOSTING/FORAGING HABITAT OR TRAVEL CORRIDORS; VISUAL EMERGENCE SURVEY MUST BE CONDUCTED WITH NO BATS OBSERVED.
 - TREE REMOVAL AVOIDANCE AND MINIMIZATION MEASURE 3 ENSURE TREE REMOVAL IS LIMITED TO THAT SPECIFIES IN PROJECT PLANS AND UNSURE THAT CONTRACTORS UNDERSTAND CLEARING LIMITS AND HOW THEY ARE MARKED IN THE FIELD (E.G., INSTALL BRIGHT COLORED FLAGGING/FENCING PRIOR TO ANY TREE CLEARING TO ENSURE CONTRACTORS STAY WITHIN CLEARING LIMITS).
 - TREE REMOVAL AVOIDANCE AND MINIMIZATION MEASURE 4 DO NOT REMOVE DOCUMENTED INDIANA BAT OR NLEB ROOSTS THAT ARE STILL SUITABLE FOR ROOSTING, OR TREES WITHIN 0.25 MILES OF ROOSTS, OR DOCUMENTED FORAGING HABITAT ANY TIME OF YEAR.
 - IF THERE ARE ANY CHANGES TO THE PROPOSED ACTIVITIES, THE CHANGES MUST BE REEVALUATED BY BEPR TO DETERMINE THE NEED FOR ADDITIONAL REGULARITY COMPLIANCE.

SOIL COMPACTION TESTING REQUIREMENTS

- SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
- AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
- COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
- IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION'S. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

SOIL COMPACTION TESTING REQUIREMENTS

A: PROBING WIRE TEST (SEE DETAIL)
B: HAND-HELD PENETROMETER (SEE DETAIL)
C: TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
D: NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)

NOTE:
ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.

SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

PROCEDURES FOR SOIL COMPACTION MITIGATION

PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAY BE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

SIMPLIFIED TESTING METHODS:

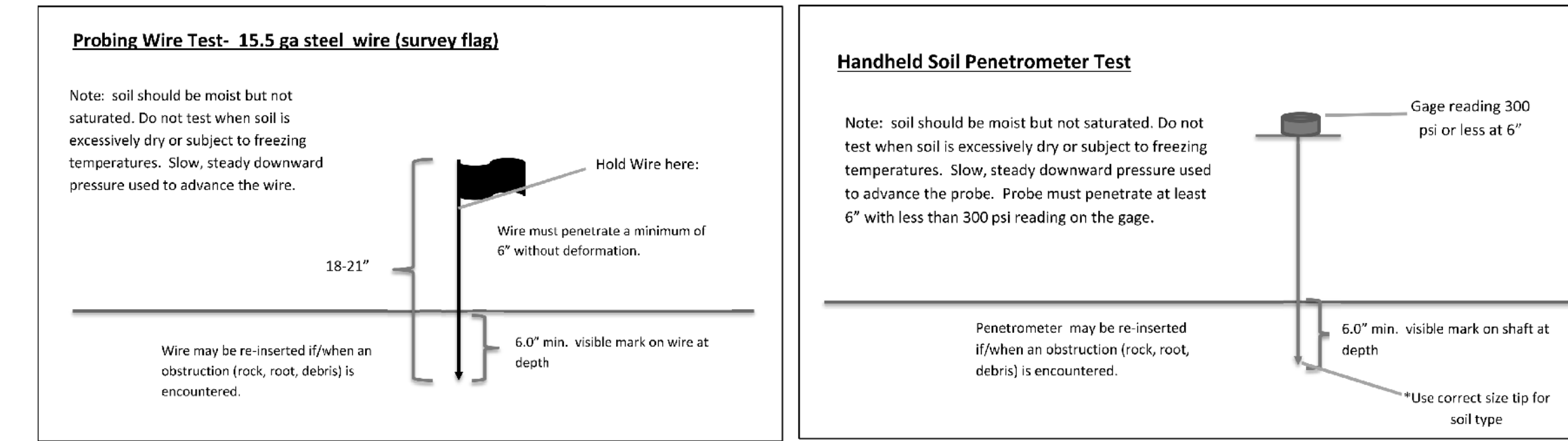
PROBING WIRE TEST- 15.5 GA STEEL WIRE (SURVEY FLAG)

NOTE:
SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE WIRE.

HANDHELD SOIL PENETROMETER TEST:

NOTE:
SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE PROBE. PROBE MUST PENETRATE AT LEAST 6" WITH LESS THAN 300 PSI READING ON THE GAGE.

Simplified Testing Methods



EP-1
EP-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

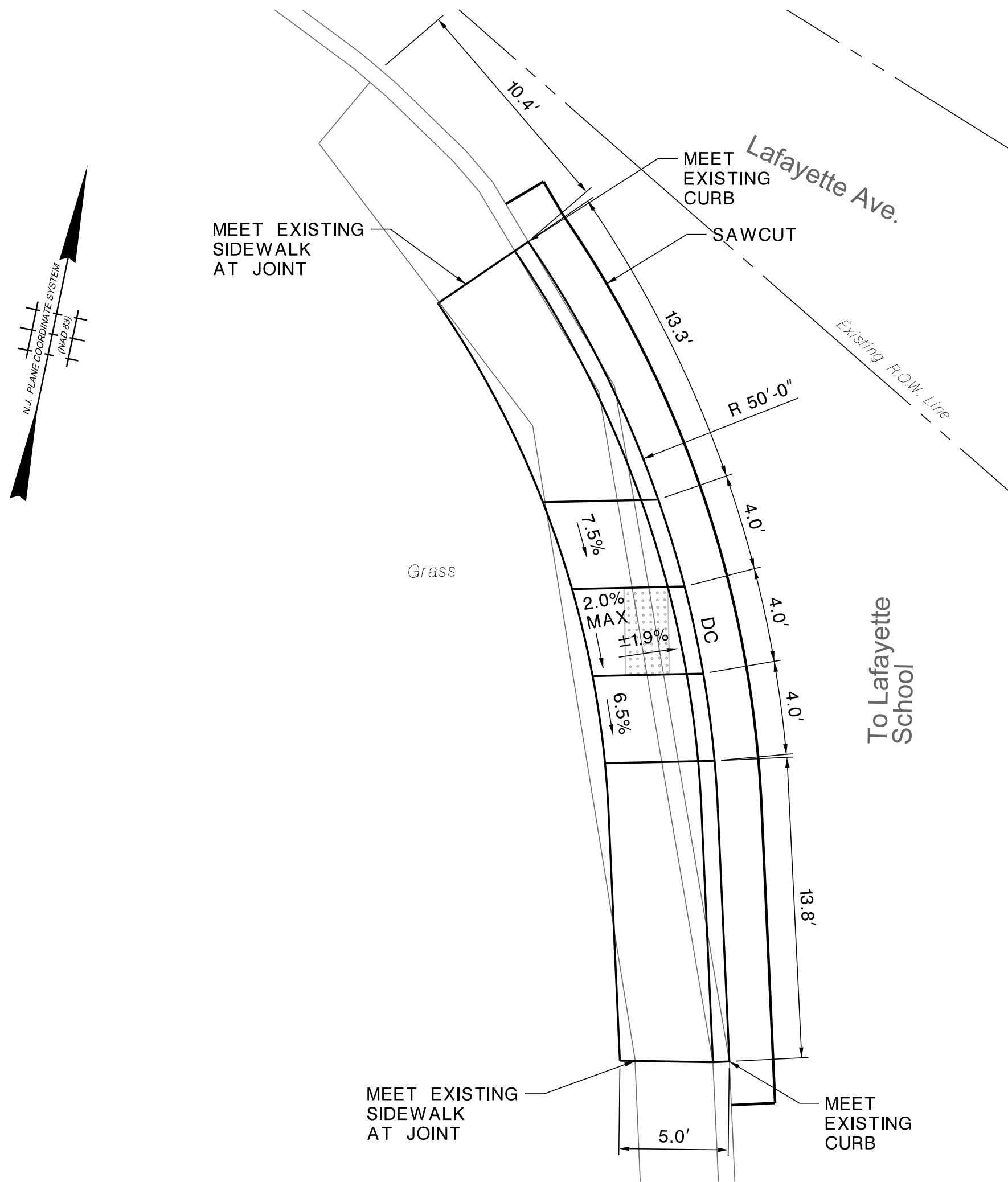
ENVIRONMENTAL GENERAL NOTES

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

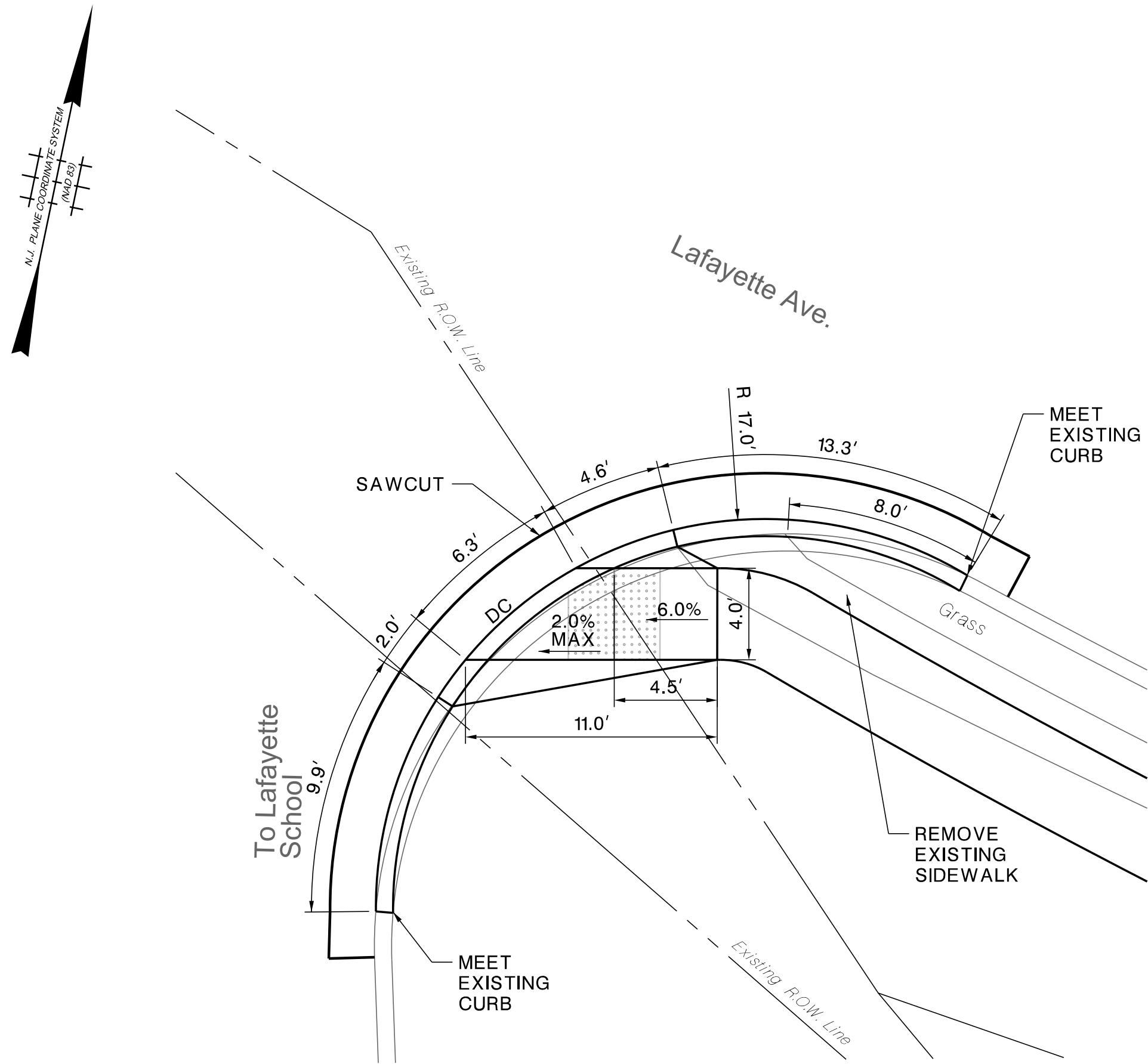
IH ENGINEERS, P.C.

EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

11
28



CURB RAMP TYPE 7
W=5.0'
LAFAYETTE AVE & LAFAYETTE SCHOOL DRIVEWAY
NW CORNER DETAIL
1" = 5'



CURB RAMP TYPE 5
W=4.5'
LAFAYETTE AVE & LAFAYETTE SCHOOL DRIVEWAY
NE CORNER DETAIL
1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE GRASS SHALL BE 1.5 FEET



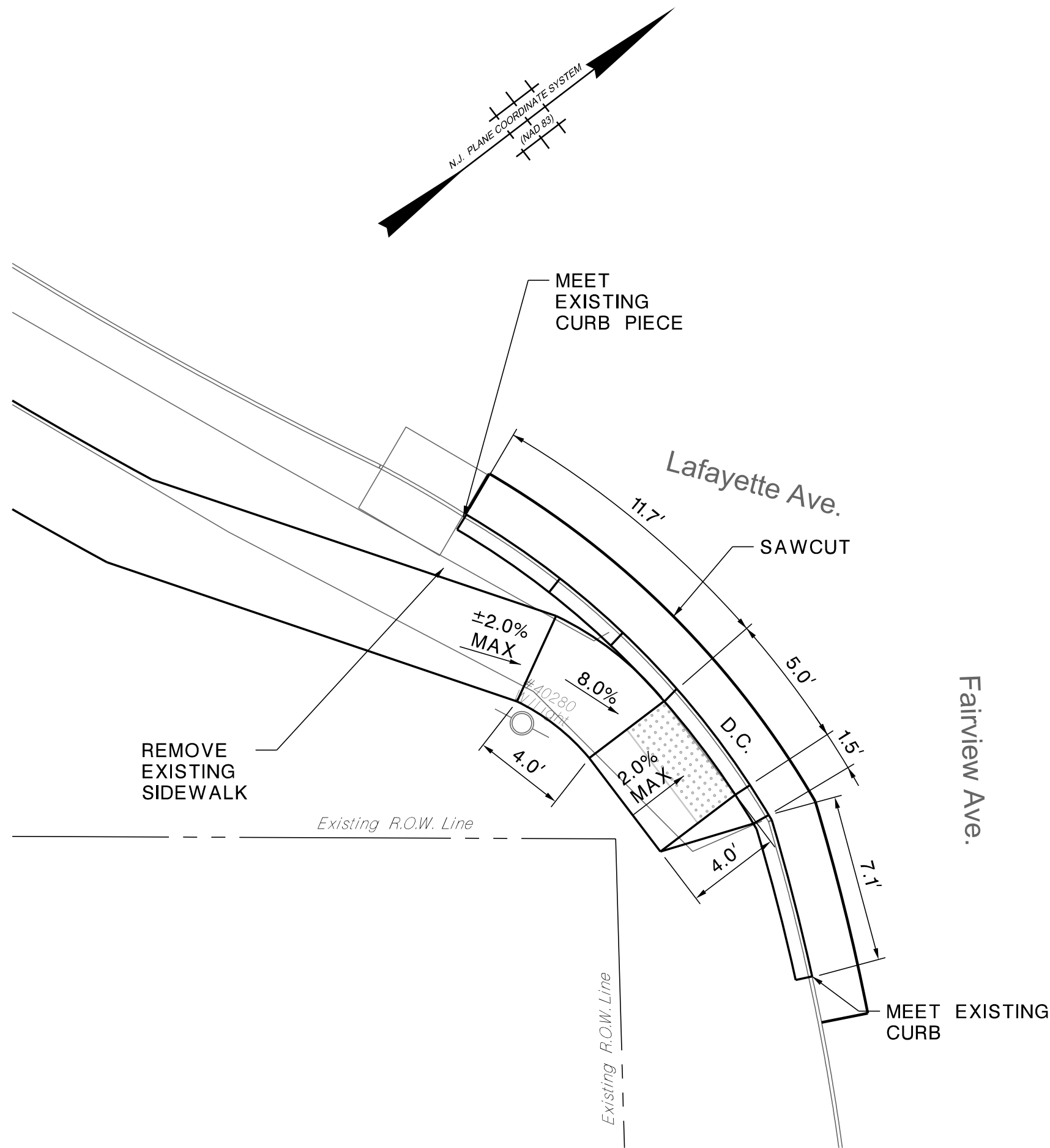
ADA-1
ADA-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

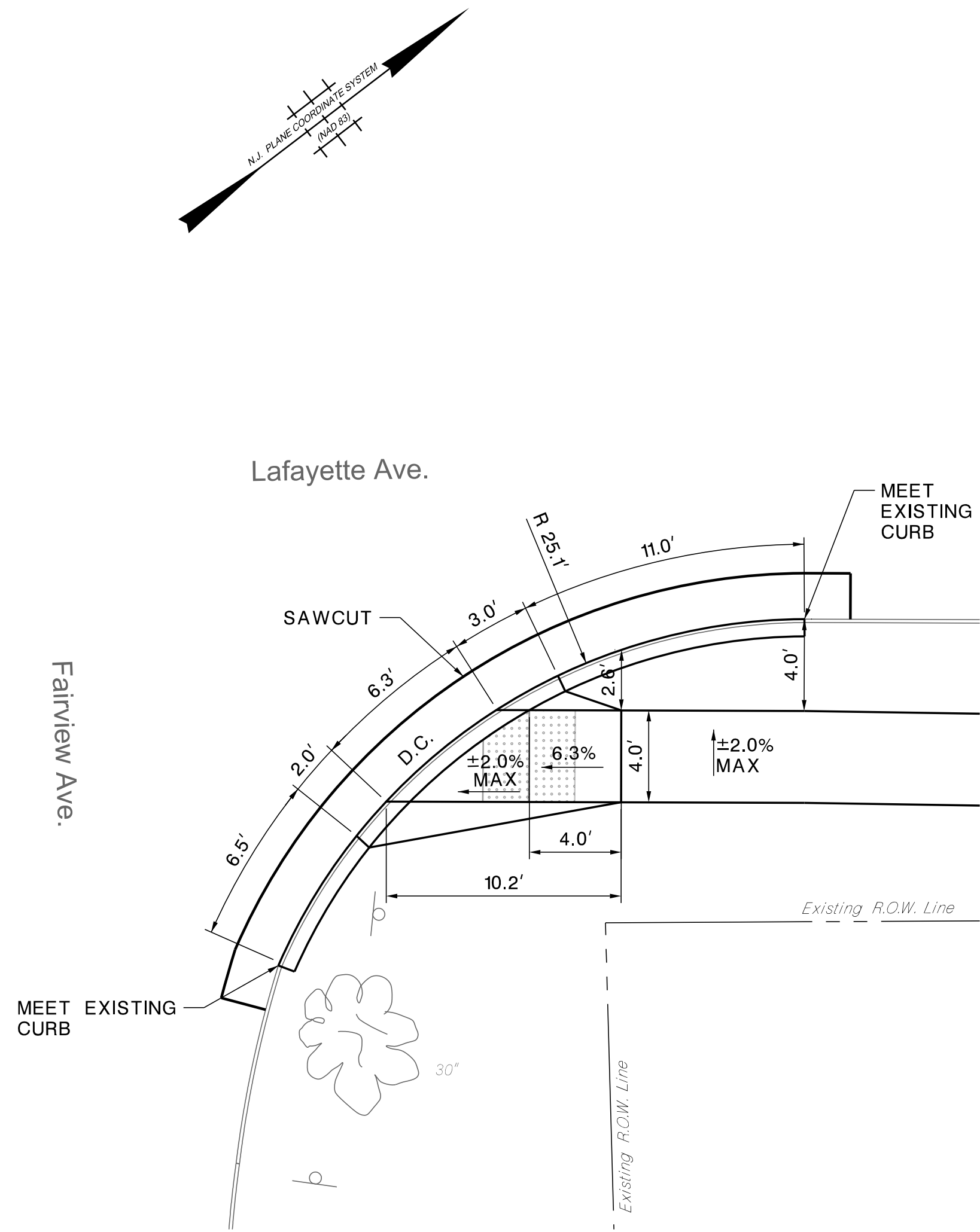
CURB RAMP LAYOUT DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



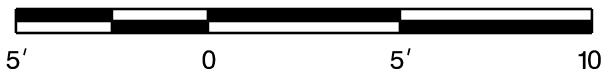
CURB RAMP TYPE 5
W=4.8'
LAFAYETTE AVE & FAIRVIEW AVE
SW CORNER DETAIL
1" = 5'



CURB RAMP TYPE 5
W=4.0'
LAFAYETTE AVE & FAIRVIEW AVE
SE CORNER DETAIL
1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP ADJACENT TO THE GRASS SHALL BE 1.5 FEET



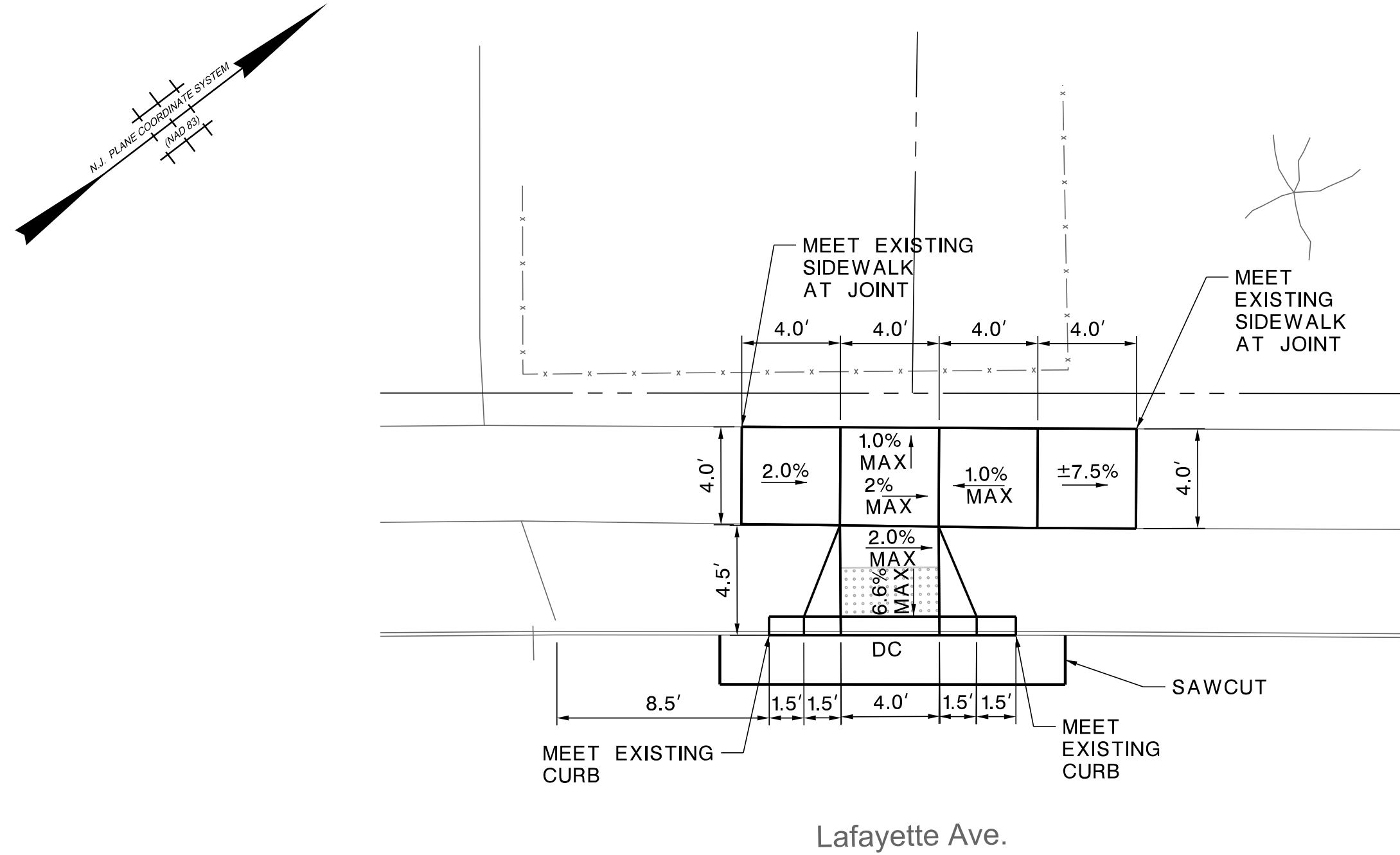
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

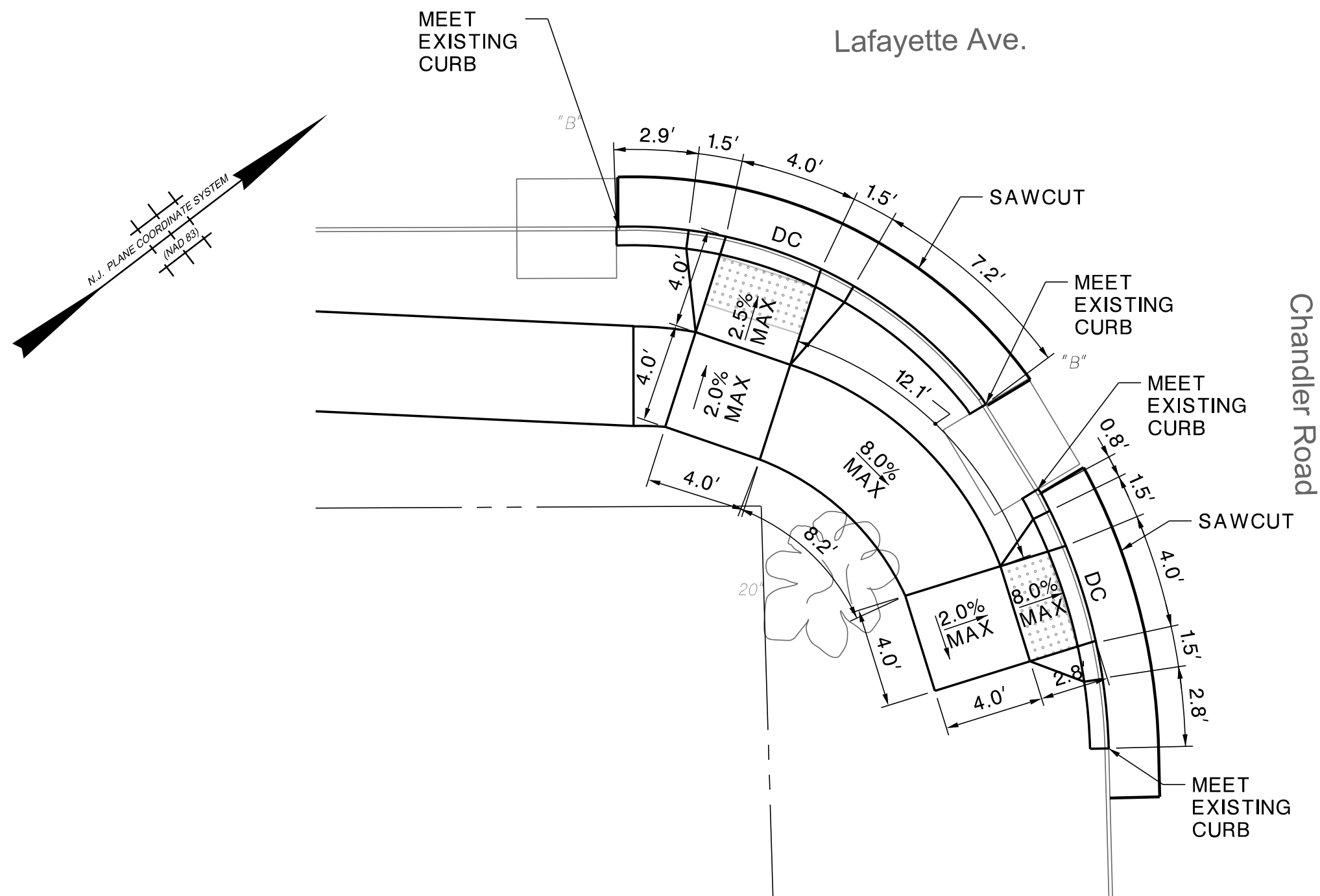
CURB RAMP LAYOUT DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

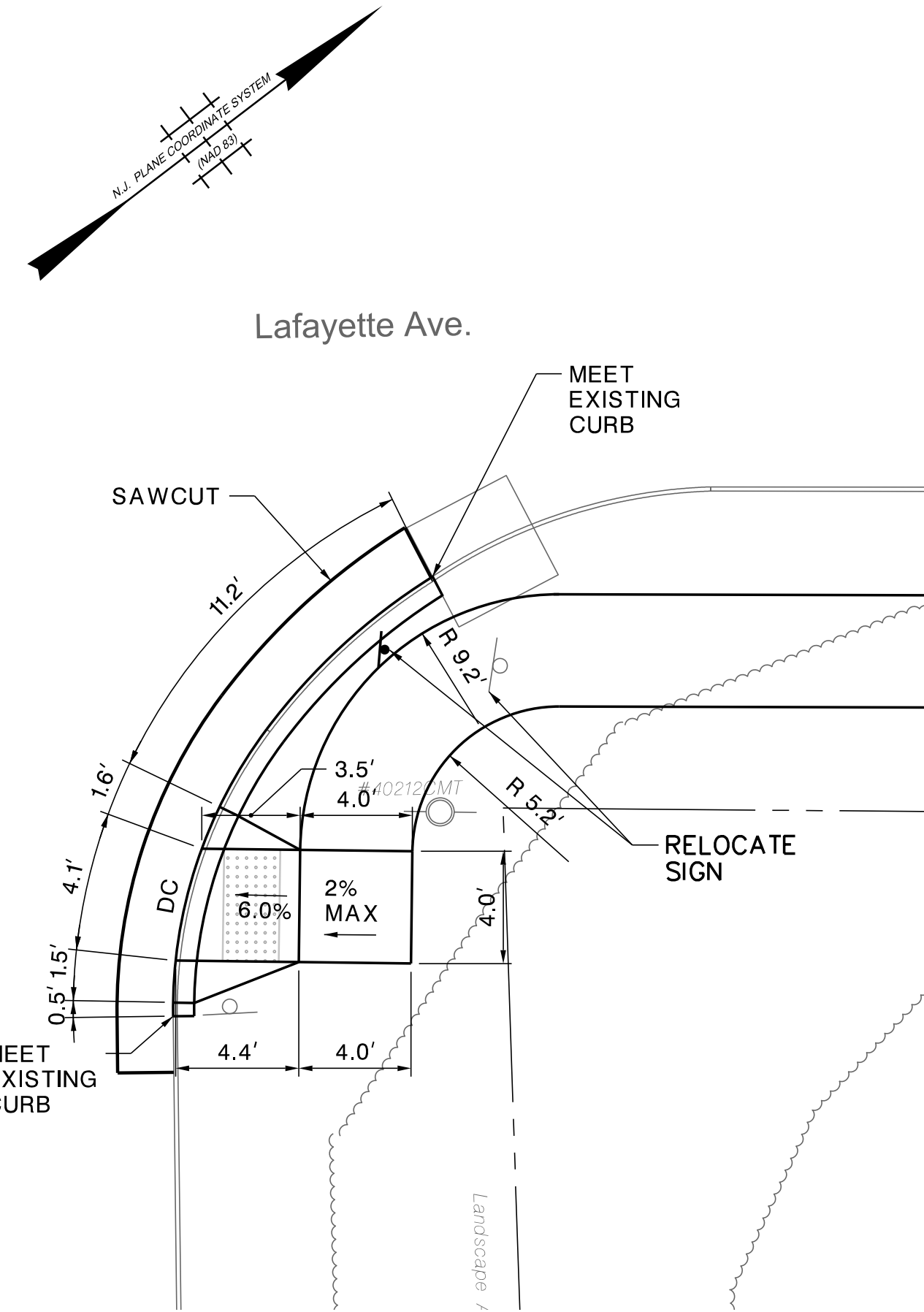
IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



CURB RAMP TYPE 4
W=4.5'
LAFAYETTE AVE & CHANDLER RD
NW CORNER DETAIL
1" = 5'



CURB RAMP TYPE 4
W=4.0' & W=4.4'
LAFAYETTE AVE & CHANDLER RD
SW CORNER DETAIL
1" = 5'



CURB RAMP TYPE 4
W=3.5'
LAFAYETTE AVE & CHANDLER RD
SE CORNER DETAIL
1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE GRASS SHALL BE 1.5 FEET



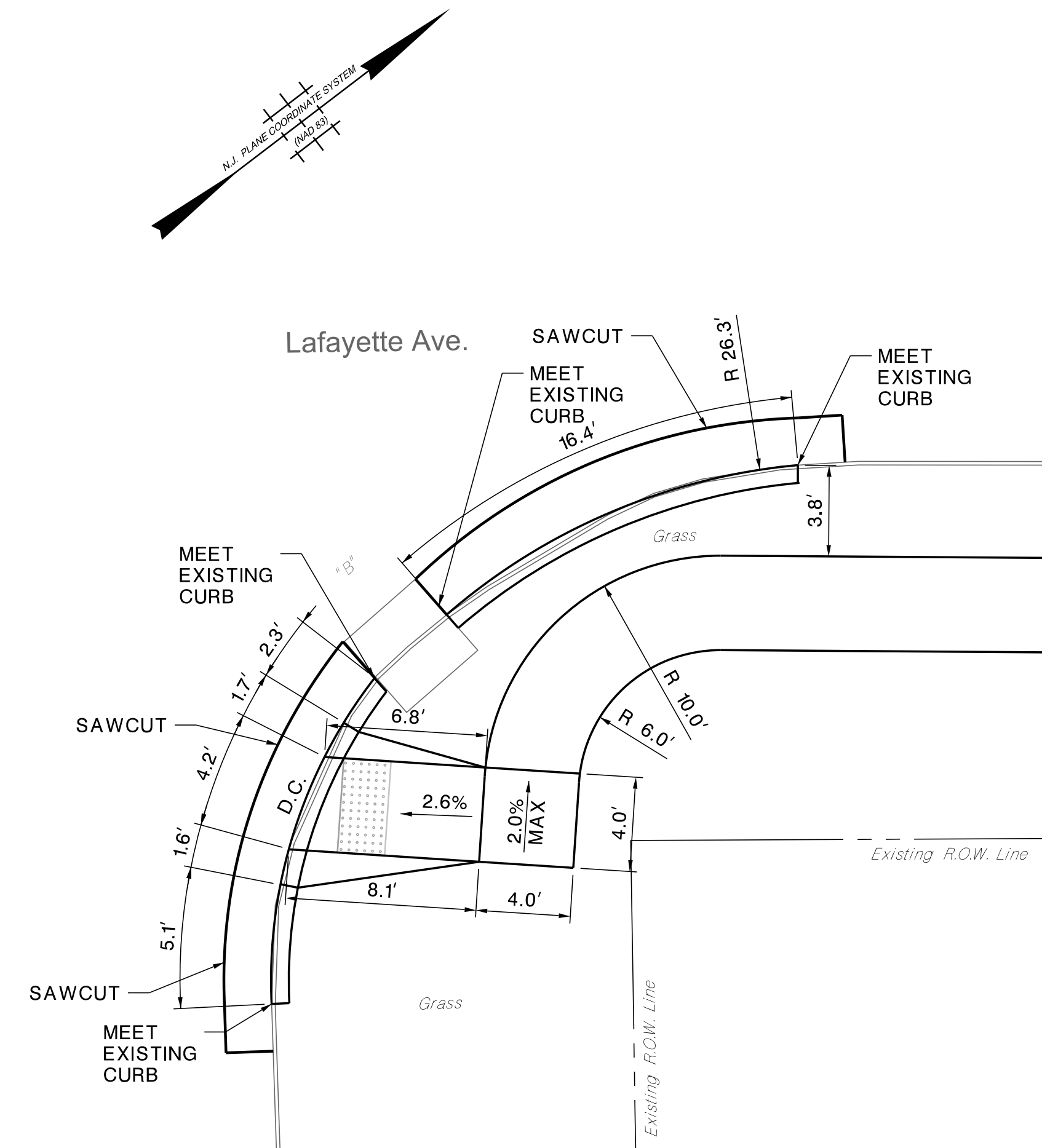
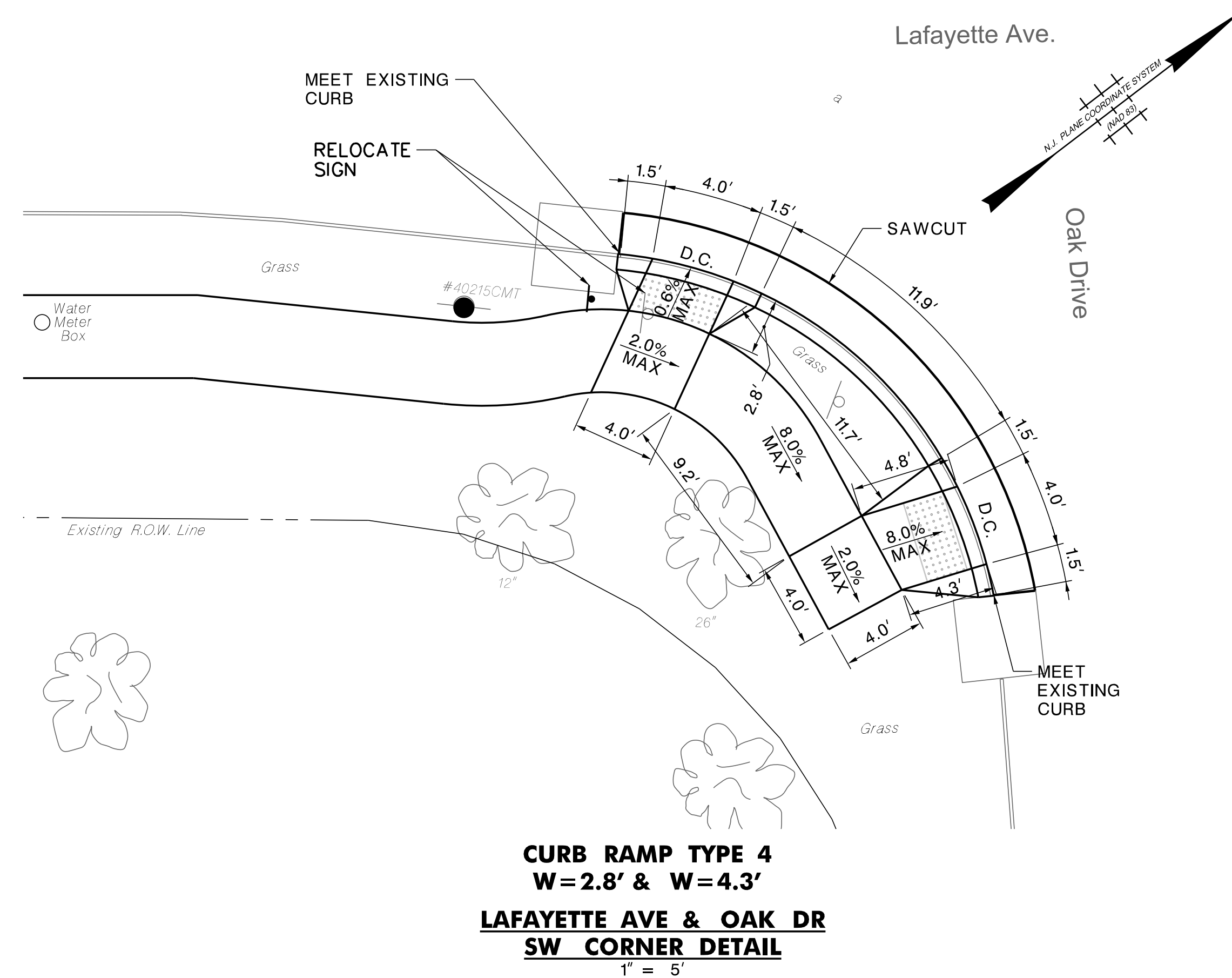
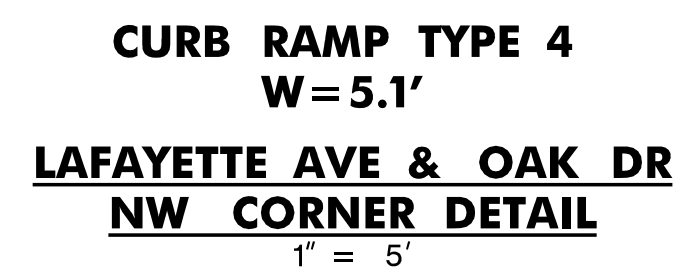
ADA-3
ADA-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CURB RAMP LAYOUT DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



CURB RAMP TYPE 4
W=6.8'
LAFAYETTE AVE & OAK DR
SE CORNER DETAIL
1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE Grass SHALL BE 1.5 FEET



ADA-4
ADA-8

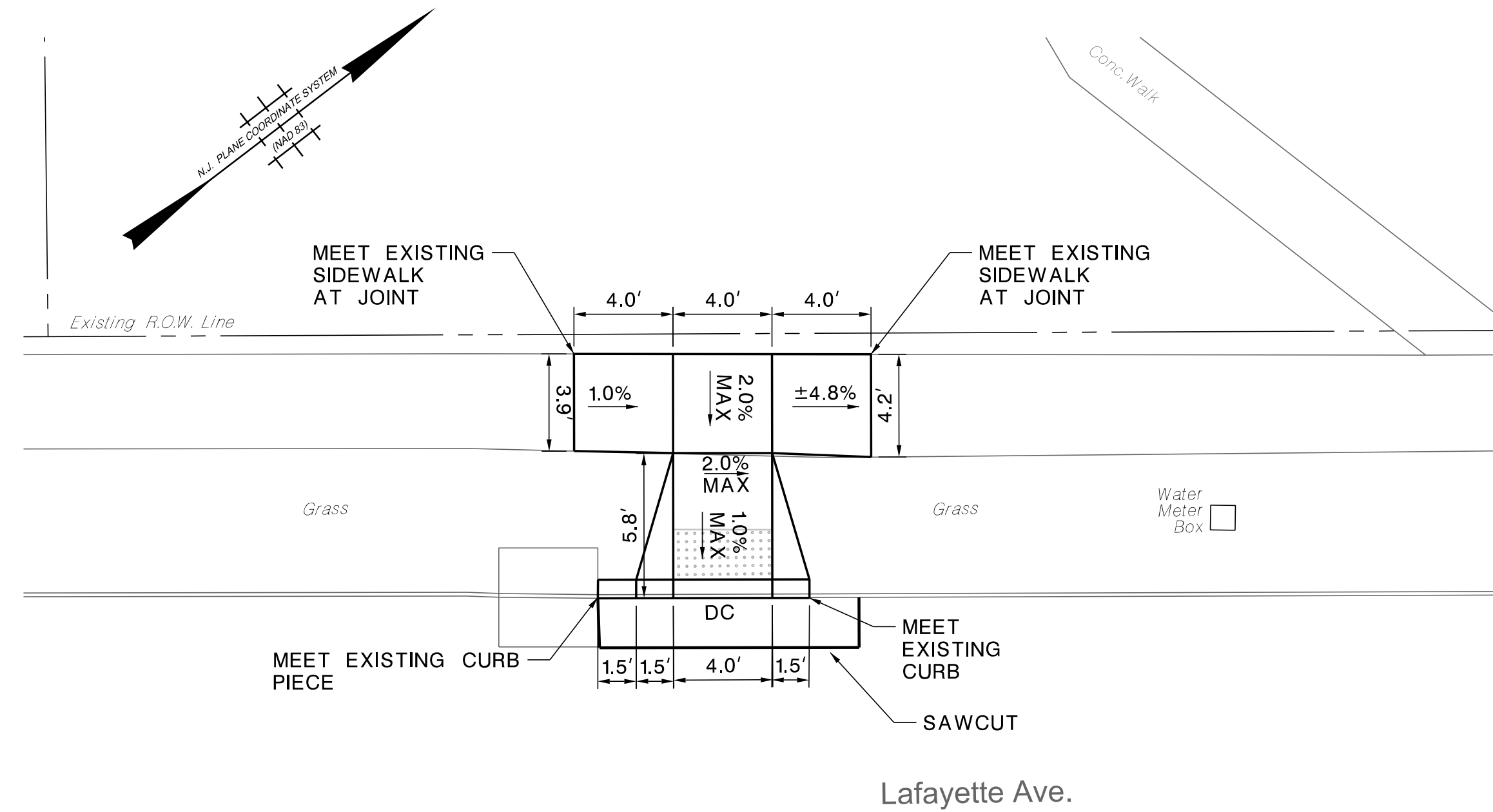
NEW JERSEY DEPARTMENT OF TRANSPORTATION

CURB RAMP LAYOUT DETAILS

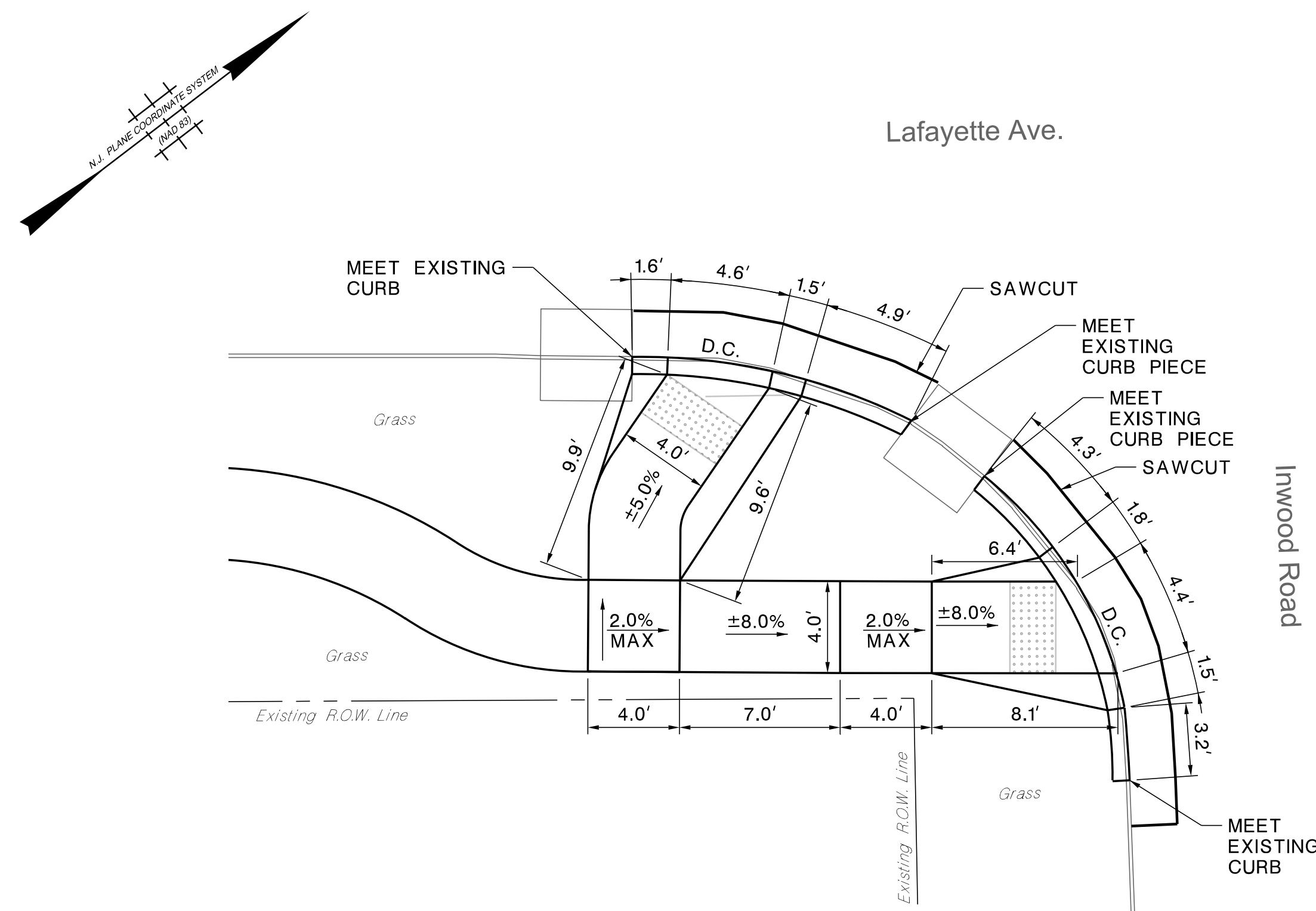
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

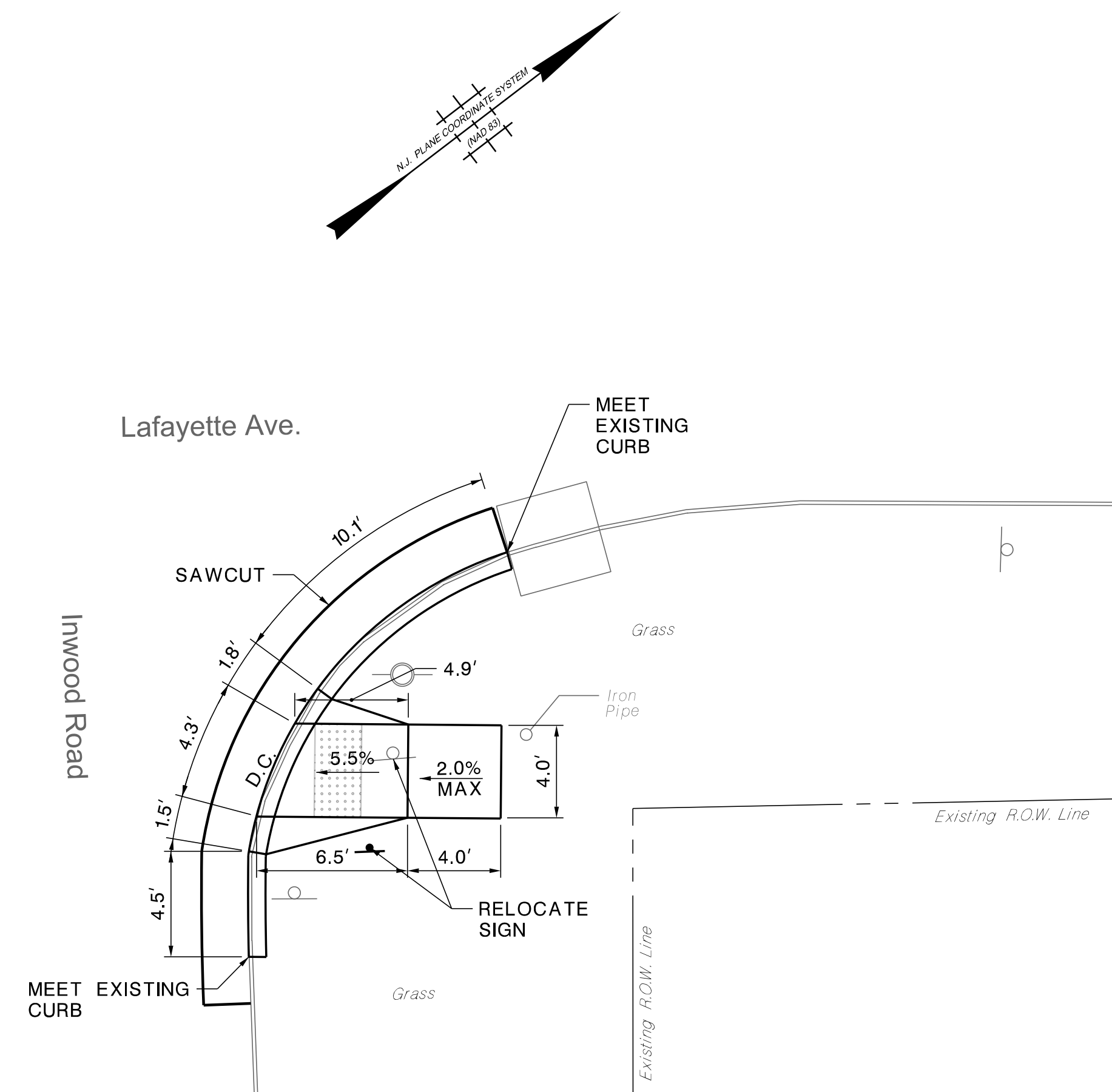
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



CURB RAMP TYPE 4
W = 5.8'
LAFAYETTE AVE & INWOOD RD
NW CORNER DETAIL
1" = 5'



CURB RAMP TYPE 2/4
W=4.9' & W=6.4'
LAFAYETTE AVE & INWOOD RD
SW CORNER DETAIL
 1" = 5'



CURB RAMP TYPE 5
W=4.9'

LAFAYETTE AVE & INWOOD RD
SE CORNER DETAIL

1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE GRASS SHALL BE 1.5 FEET



ADA-5
ADA-8

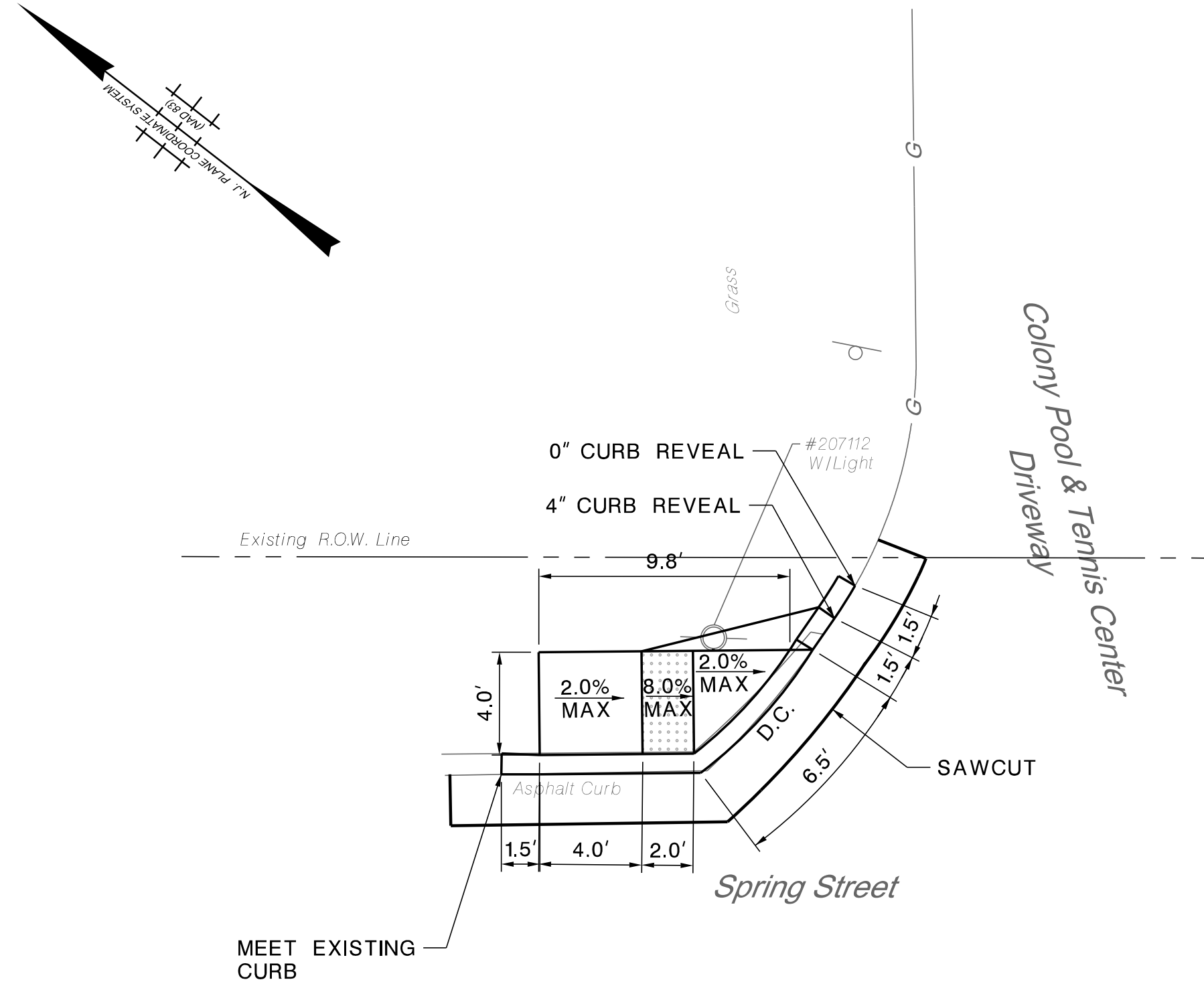
NEW JERSEY DEPARTMENT OF TRANSPORTATION

CURB RAMP LAYOUT DETAILS

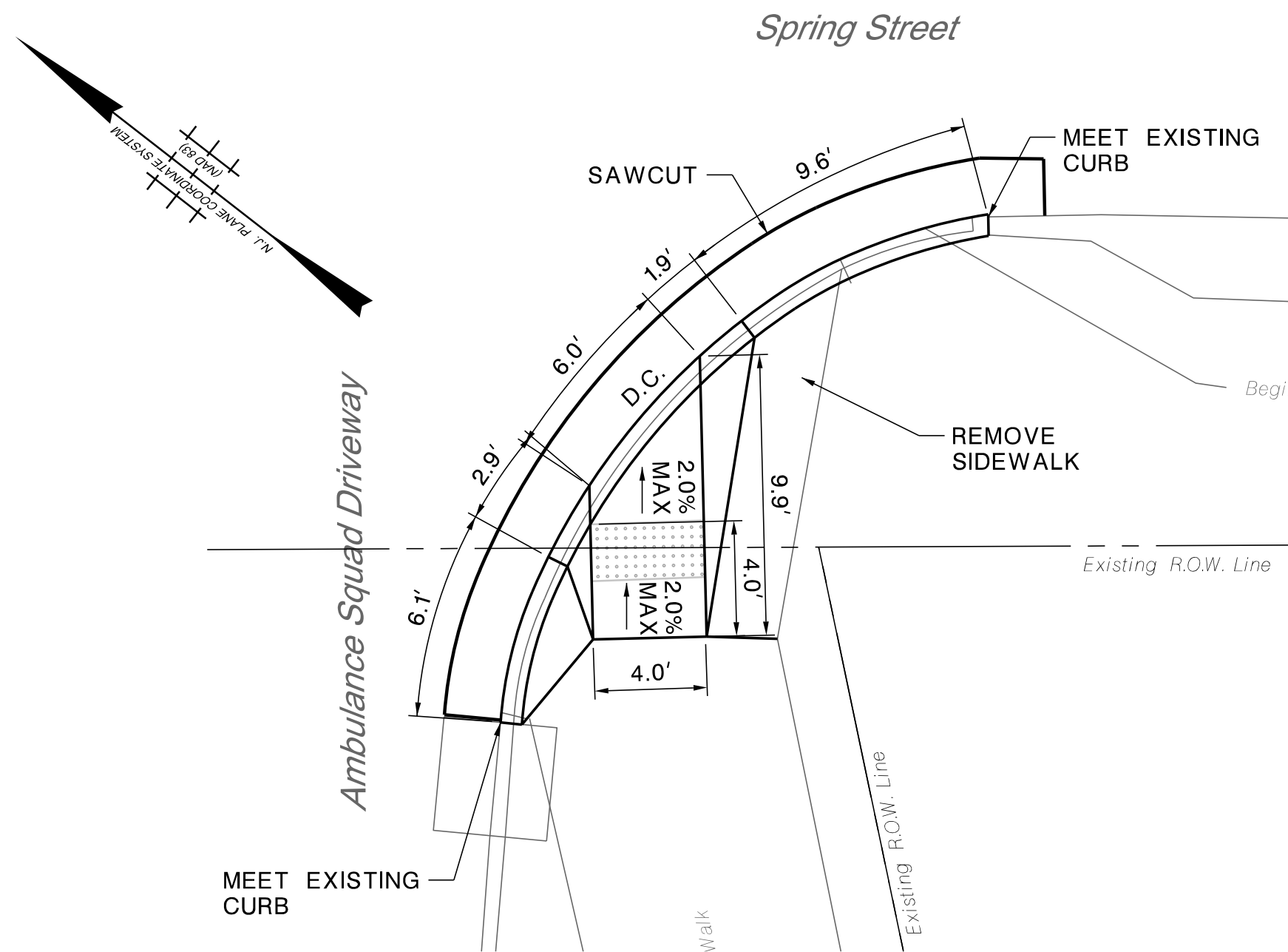
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

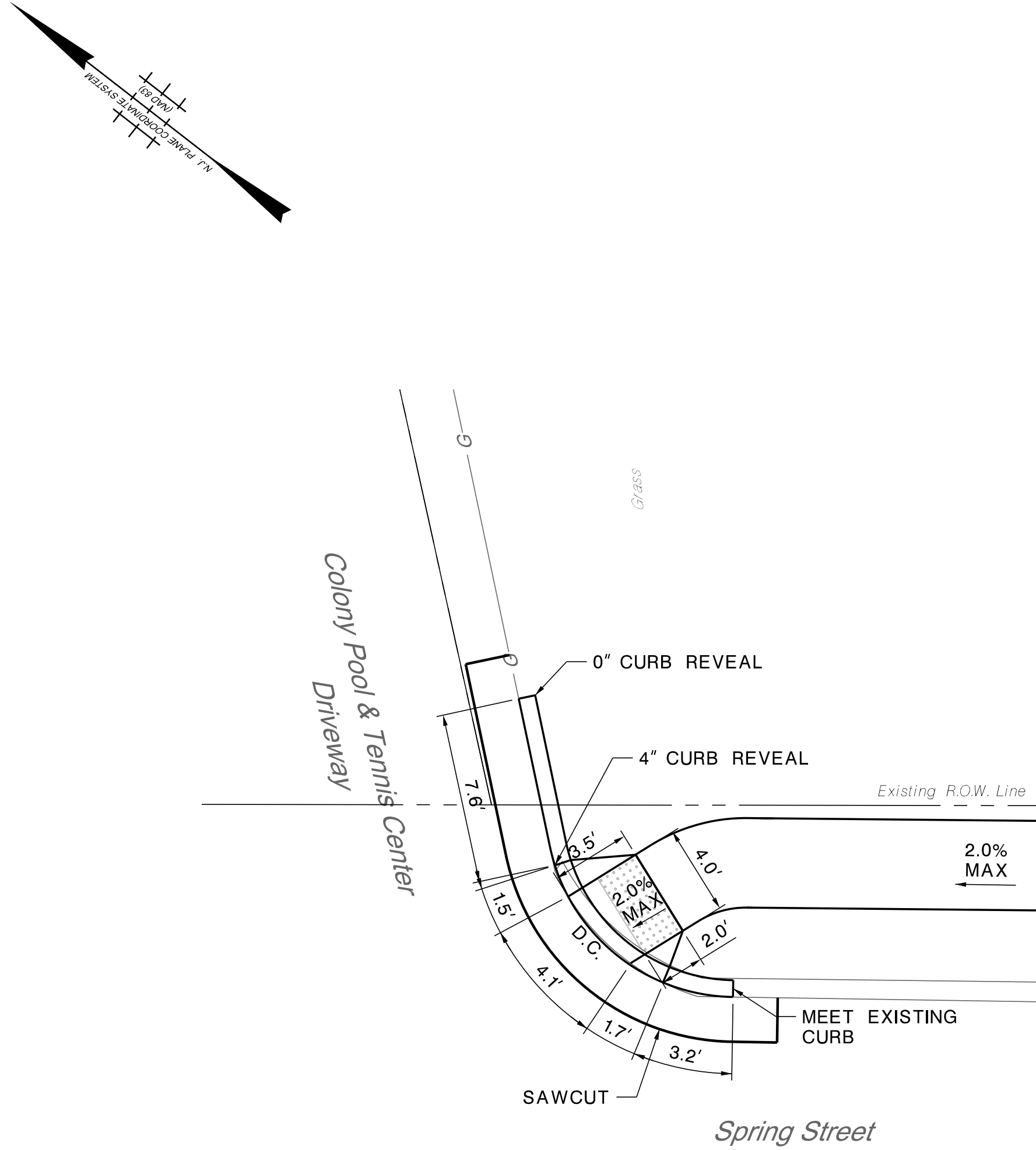
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



CURB RAMP TYPE 5
W=2.0'
SPRING ST & TOWNSHIP DRIVEWAYS
NW CORNER DETAIL
1" = 5'



CURB RAMP TYPE 5
W=4.0'
SPRING ST & TOWNSHIP DRIVEWAYS
SE CORNER DETAIL
1" = 5'



CURB RAMP TYPE 5
W=2.0'
SPRING ST & TOWNSHIP DRIVEWAYS
NE CORNER DETAIL
1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE GRASS SHALL BE 1.5 FEET



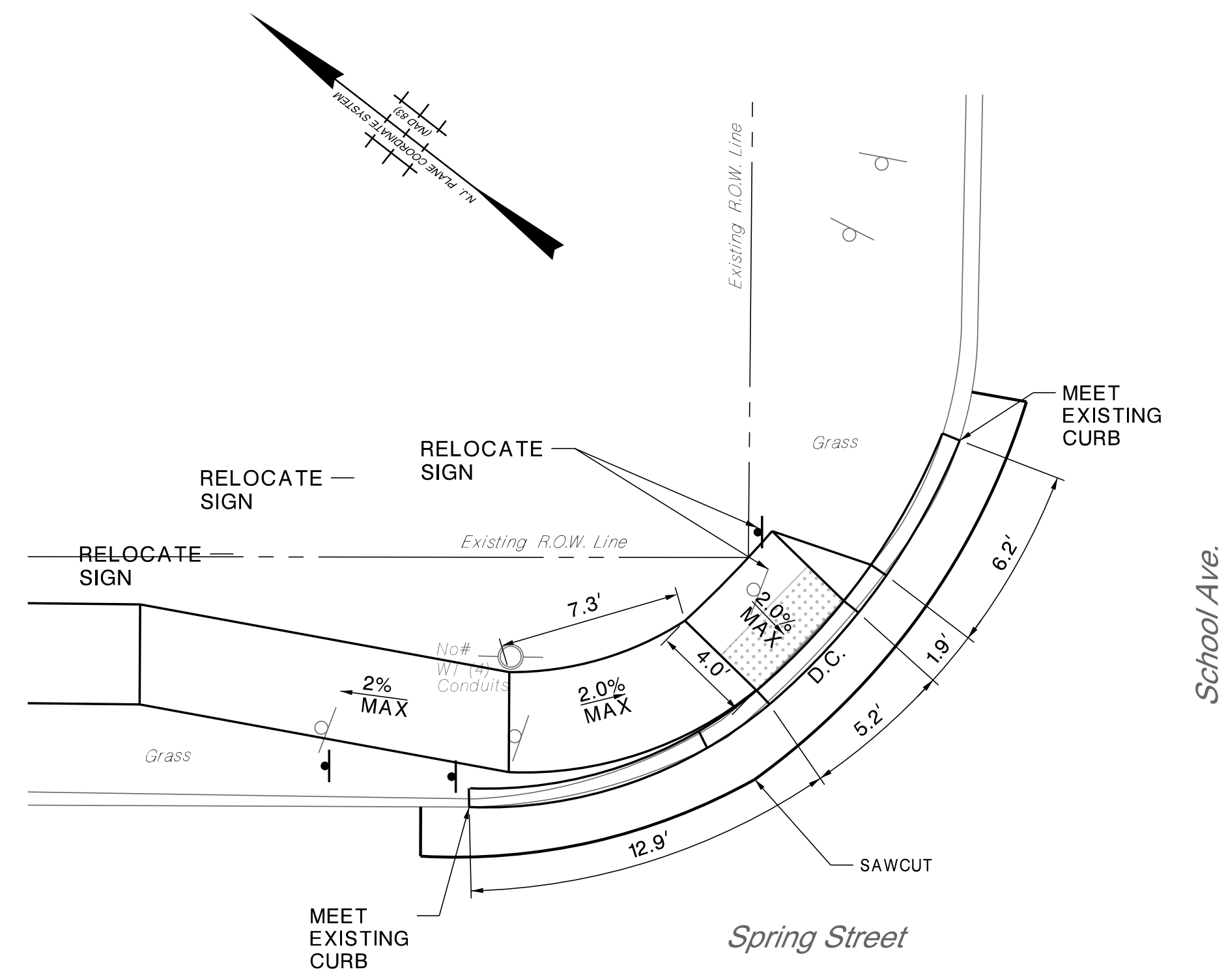
ADA-6
ADA-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CURB RAMP LAYOUT DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

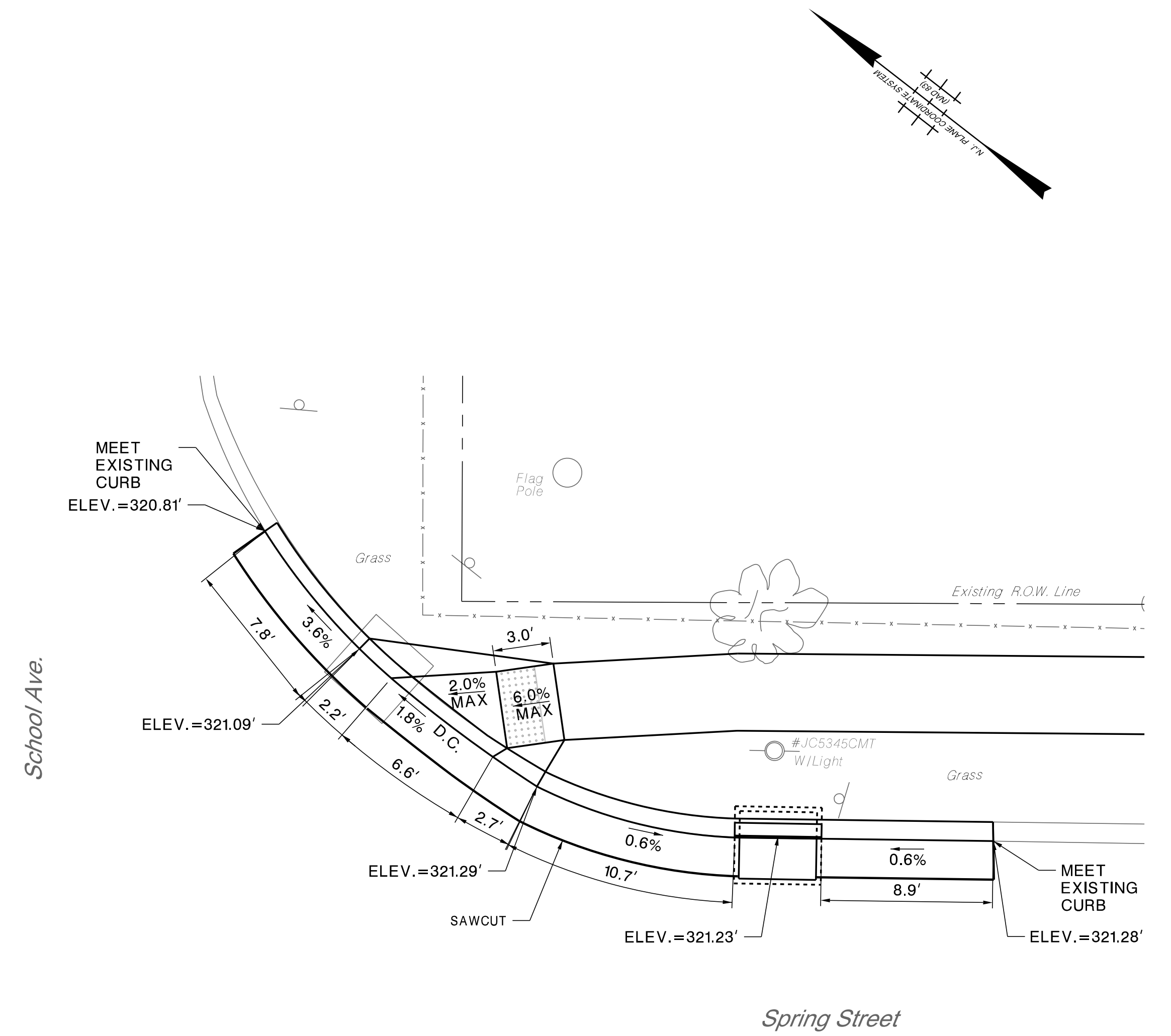
IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



CURB RAMP TYPE 5
W = 4.8'

SPRING ST & SCHOOL AVE
NW CORNER DETAIL

1" = 5'



CURB RAMP TYPE 5
W=3.0'

SPRING ST & SCHOOL AVE
NE CORNER DETAIL

1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE GRASS SHALL BE 1.5 FEET



DA-7
ADA-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

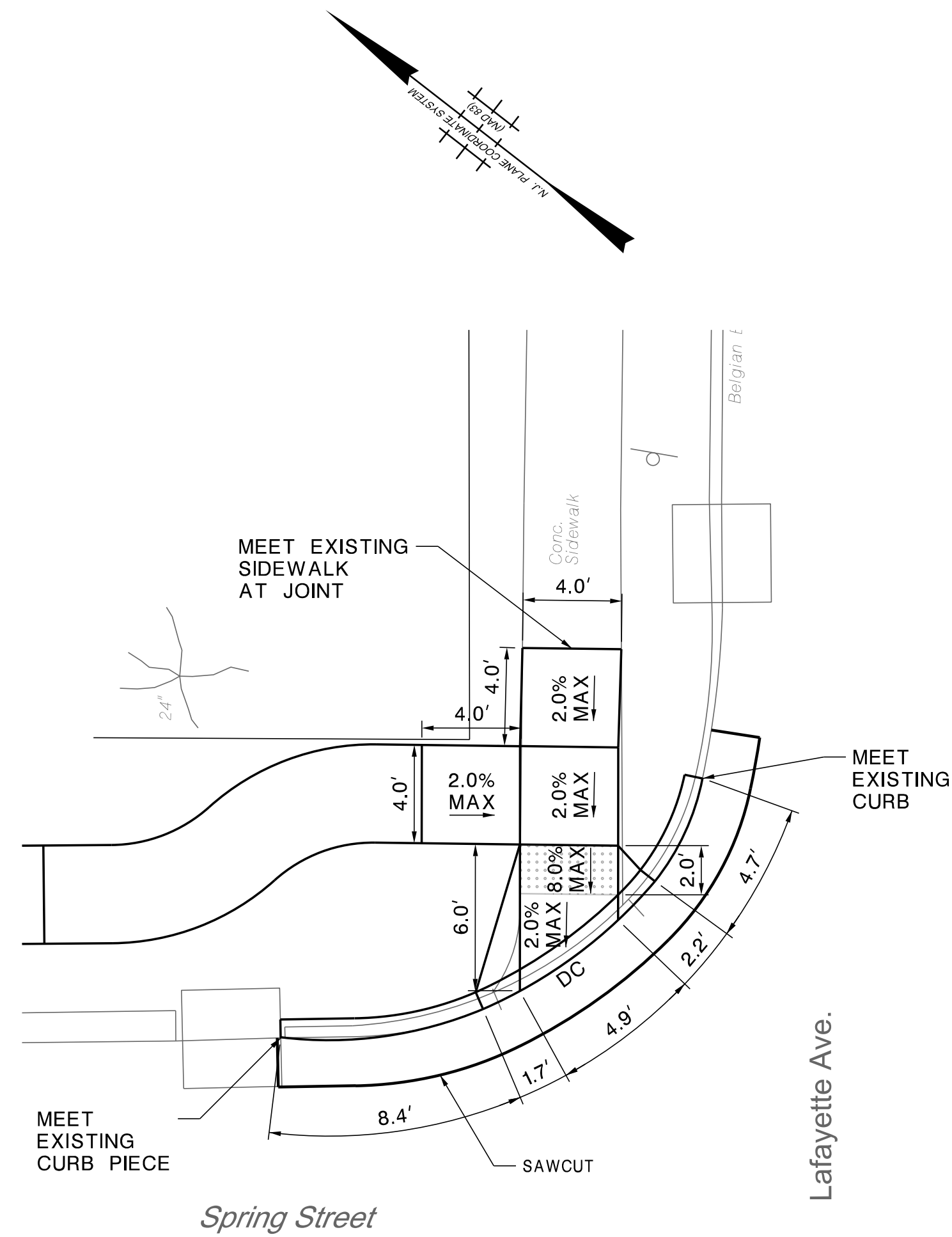
CURB RAMP LAYOUT DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

EDUARDO L. SZMURLO

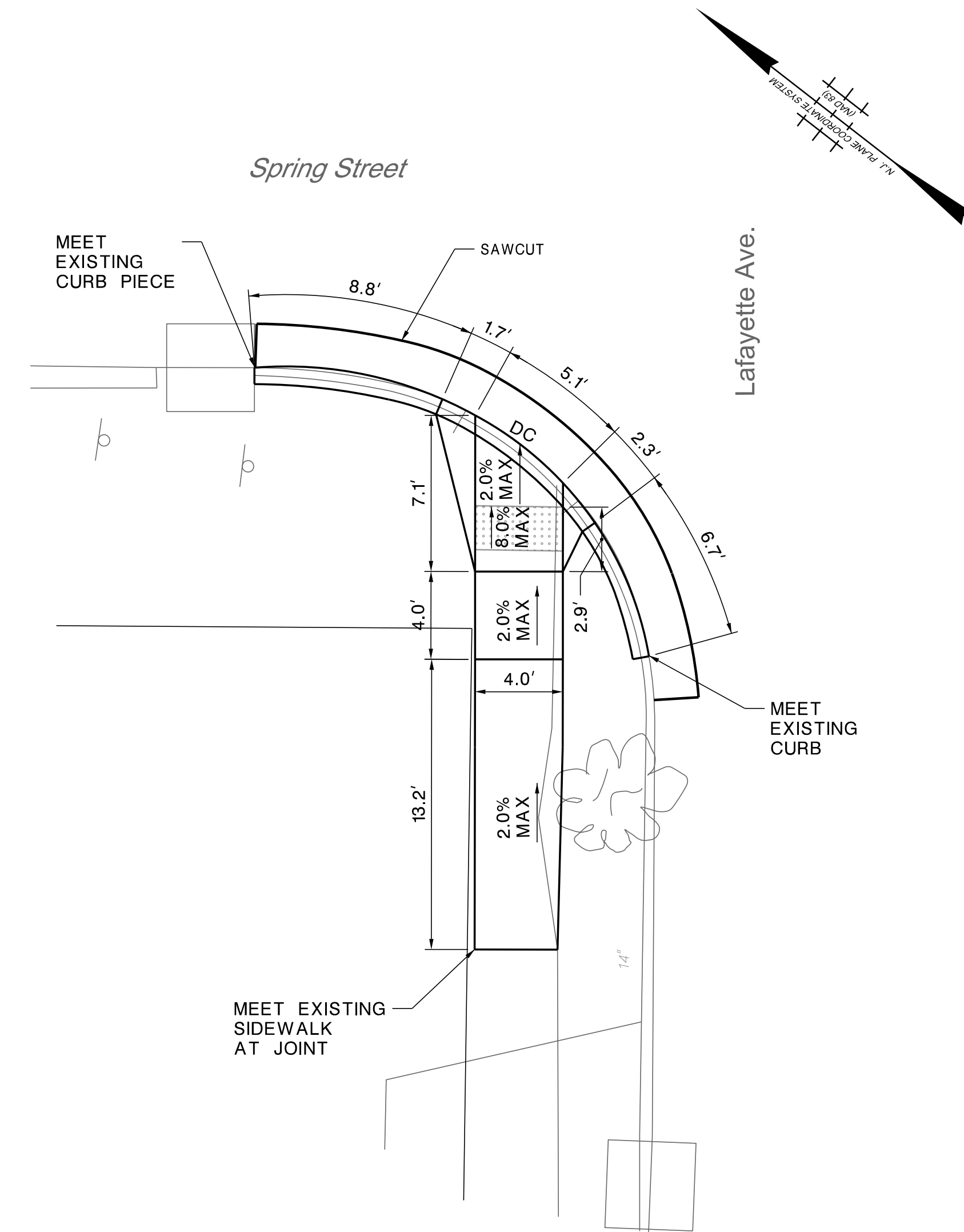
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



CURB RAMP TYPE 4
W=2.0'

SPRING ST & LAFAYETTE AVE
SW CORNER DETAIL

1' = 5'



CURB RAMP TYPE 5
W=2.9'

SPRING ST & LAFAYETTE AVE
NW CORNER DETAIL

1" = 5'

NOTE:

1. CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.
2. IF NOT OTHERWISE NOTED ON THE PLAN, THE LENGTH OF THE VERTICAL CURB TRANSITION FOR THE CURB RAMP FLARE ADJACENT TO THE GRASS SHALL BE 1.5 FEET



ADA-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CURB RAMP LAYOUT DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

 EDUARDO L. SZMURLO

 NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

- A. CONSTRUCTION OF ALL CURBS SHALL CONFORM TO NJDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019 EDITION, SECTION 607, AND SUPPLEMENTS THERETO, AND SHALL MEET THE TOWNSHIP ENGINEER'S APPROVAL. ALL CONCRETE TO BE USED SHALL BE CLASS B AS SPECIFIED IN NJDOT STANDARDS AND SPECIFICATIONS THERETO
- B. GRANITE CURBS SHALL HAVE A TEN-INCH TO TWELVE-INCH CERVICAL LENGTH
- C. CURBS SHALL BE SET IN A CLASS B CONCRETE BASE AT LEAST FOUR INCHES THICK IN FRONT AND REAR OF THE GRANITE BLOCK AND AT LEAST SIX INCHES THICK BELOW THE BLOCK. THE COMBINED BLOCK AND CONCRETE BASE SHALL HAVE A MINIMUM VERTICAL DIMENSION OF 18 INCHES
- D. CURBS SHALL HAVE A SIX-INCH EXPOSED VERTICAL FACE ABOVE THE FINISHED PAVEMENT SURFACE
- E. JOINTS SHALL MEASURE $\frac{3}{8}$ " INCH TO $\frac{1}{2}$ " IN WIDTH
- F. THE CURB HEIGHT AT ALL DRIVEWAY OPENINGS SHALL BE LOWERED TO A POINT TWO INCHES ABOVE THE FINISHED PAVEMENT SURFACE
- G. THE CURBING SHALL BE DESIGNED TO PROVIDE BARRIER-FREE CURB RAMPS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN STANDARDS FOR CURB RAMPS AS PER THE AMERICAN WITH DISABILITIES ACT.

H. SIDEWALKS SHALL BE REQUIRED ALONG BOTH SIDES OF A STREET IN ALL COMMERCIAL SUBDIVISIONS, UNLESS WAIVED BY THE APPROVING AUTHORITY. A MINIMUM WALKWAY WIDTH OF FOUR FEET SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BOROUGH ENGINEER AND IN CONFORMANCE WITH THIS CHAPTER OF THE CODE OF THE BOROUGH OF WHARTON

I. WHERE EXTRA WIDTH HAS BEEN DEDICATED FOR WIDENING OF EXISTING STREETS, LOTS SHALL BEGIN AT SUCH NEW LINE AND ALL SETBACKS SHALL BE MEASURED FROM SUCH NEW LINE

J. WHERE THE PROPERTY TO BE SUBDIVIDED IS NEXT TO OR INCLUDES A RAILROAD RIGHT-OF-WAY, SUITABLE PROVISIONS SHALL BE MADE FOR SUCH THINGS AS ROAD CROSSINGS, SCREENING OR BUFFERS, FREIGHT ACCESS, WARNING SIGNALS, AND SIGNS IN RECOGNITION OF THE RELATIONSHIP BETWEEN THE RAILROAD AND THE SUBDIVISION

K. CURBING. CURBING SHALL BE REPAIRED ON BOTH SIDES OF ALL STREETS WITHIN A SUBDIVISION. BELGIAN (GRANITE) BLOCK CURBS SHALL BE USED ON ALL TOWNSHIP STREETS ACCORDING TO THE FOLLOWING STANDARDS

1. CONSTRUCTION OF ALL CURBS SHALL CONFORM TO NJDOT STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019 SECTION 607, AND SUPPLEMENTS THERETO, AND SHALL MEET THE TOWNSHIP ENGINEER'S APPROVAL. ALL CONCRETE TO BE USED SHALL BE CLASS B AS SPECIFIED IN NJDOT STANDARDS AND SPECIFICATIONS THERETO
2. GRANITE CURBS SHALL HAVE A TEN-INCH TO TWELVE INCH VERTICAL LENGTH
3. CURBS SHALL BE SET IN B CLASS BE CONCRETE BASE AT LEAST FOUR INCHES THICK IN FRONT AND REAR OF THE GRANITE BLOCK AND AT LEAST SIX INCHES THICK BELOW THE BLOCK. THE COMBINED BLOCK AND CONCRETE BASE SHALL HAVE A MINIMUM VERTICAL DIMENSION OF 18 INCHES
4. CURBS SHALL HAVE A SIX-INCH EXPOSTED VERTICAL FACE ABOVE THE FINISHED PAVEMENT SURFACE
5. JOINTS SHALL MEASURE $\frac{3}{8}$ " TO $\frac{1}{2}$ " IN WIDTH
6. THE CURB HEIGHT AT ALL DRIVEWAY OPENINGS SHALL BE LOWERED TO A POINT TWO INCHES ABOVE THE FINISHED PAVEMENT
7. THE CURBING SHALL BE DESIGNED TO PROVIDE BARRIER-FREE CURB RAMPS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN STANDARDS FOR CURB RAMPS FOR THE PHYSICALLY HANDICAPPED OF THE NEW EJRSY DEPARTMENT OF TRANSPORTATION

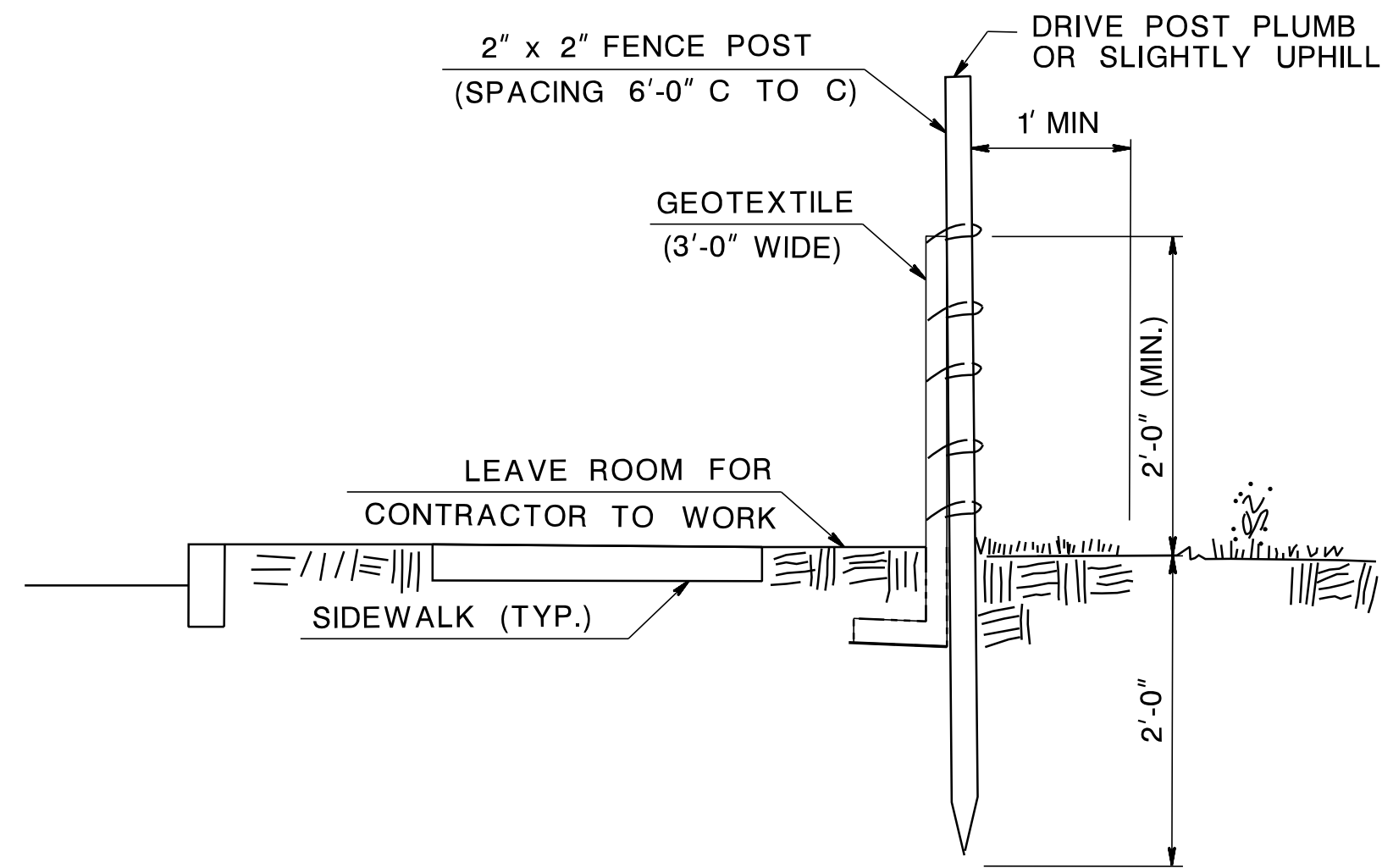
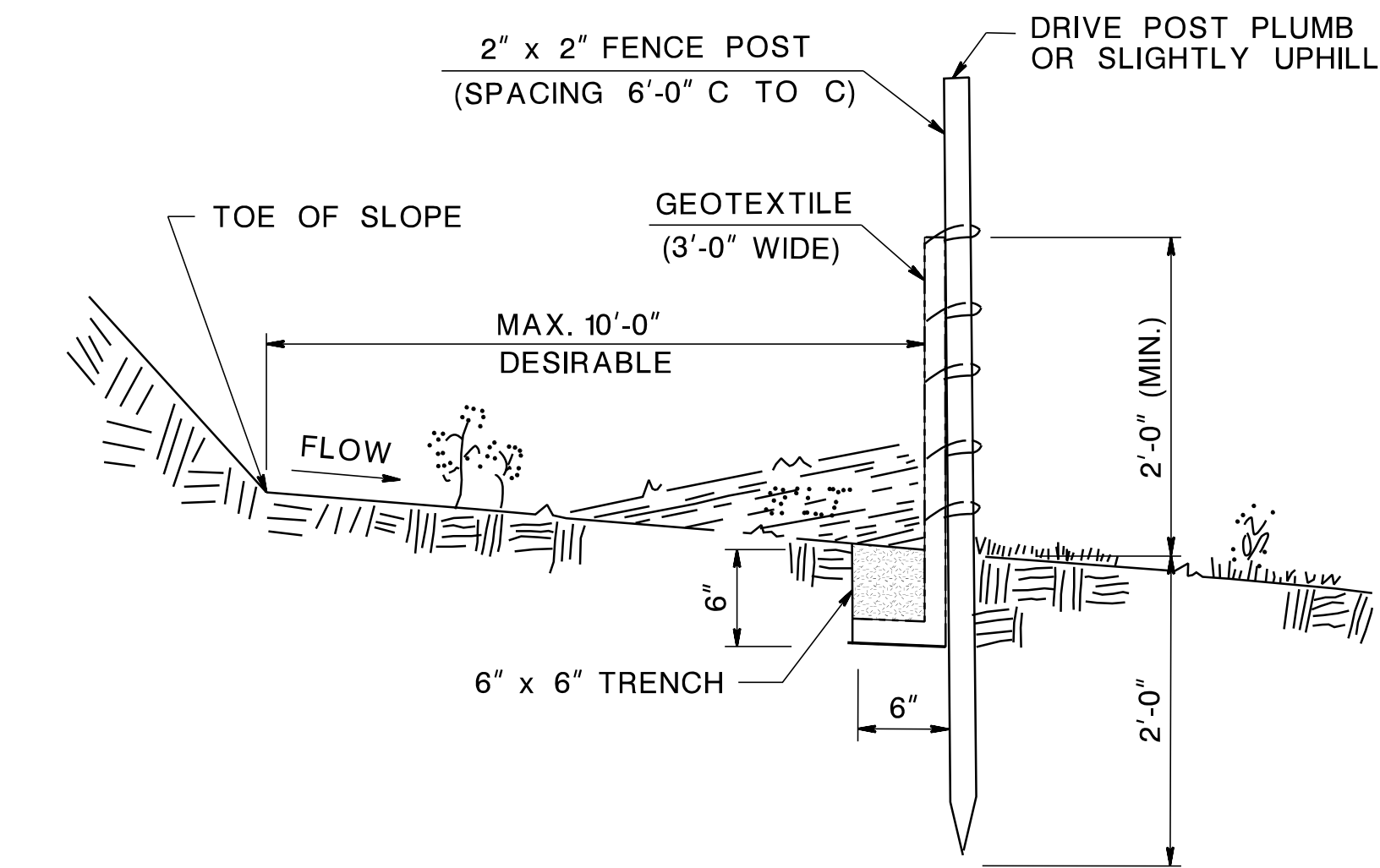


- NOTES:**
1. THICKNESS OF BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES.
 2. CONSULT ICPI TECH SPEC 2 FOR GUIDELINES ON SPECIFICATIONS FOR BASE MATERIALS, SUBGRADE SOIL AND BASE COMPACTION.



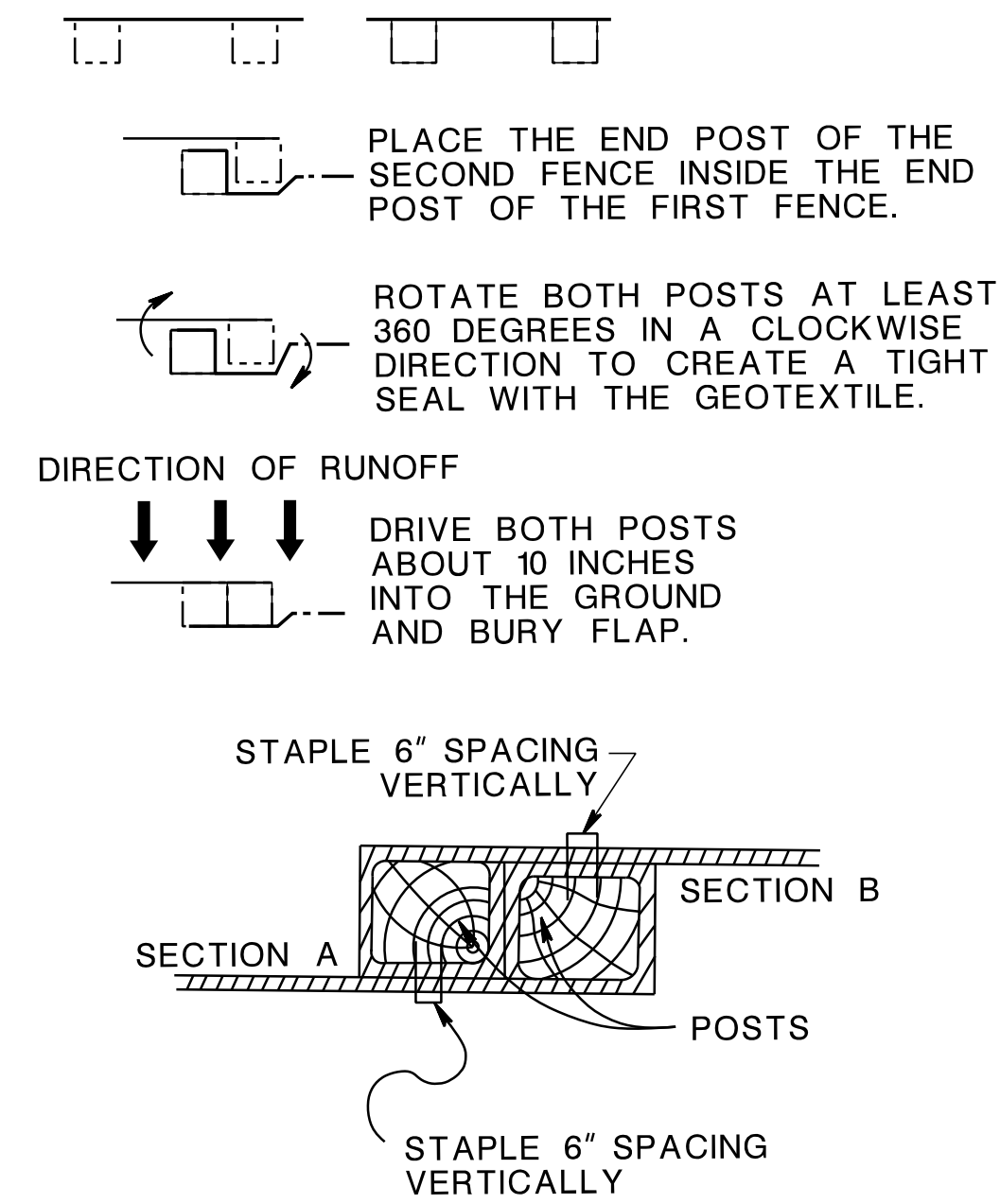
NOTE:
INCLUDE GEOSYNTHETIC REINFORCEMENT/
GEOGRID AND/OR FILTER FABRIC IF
RE COMMANDED BY MANUFACTURER



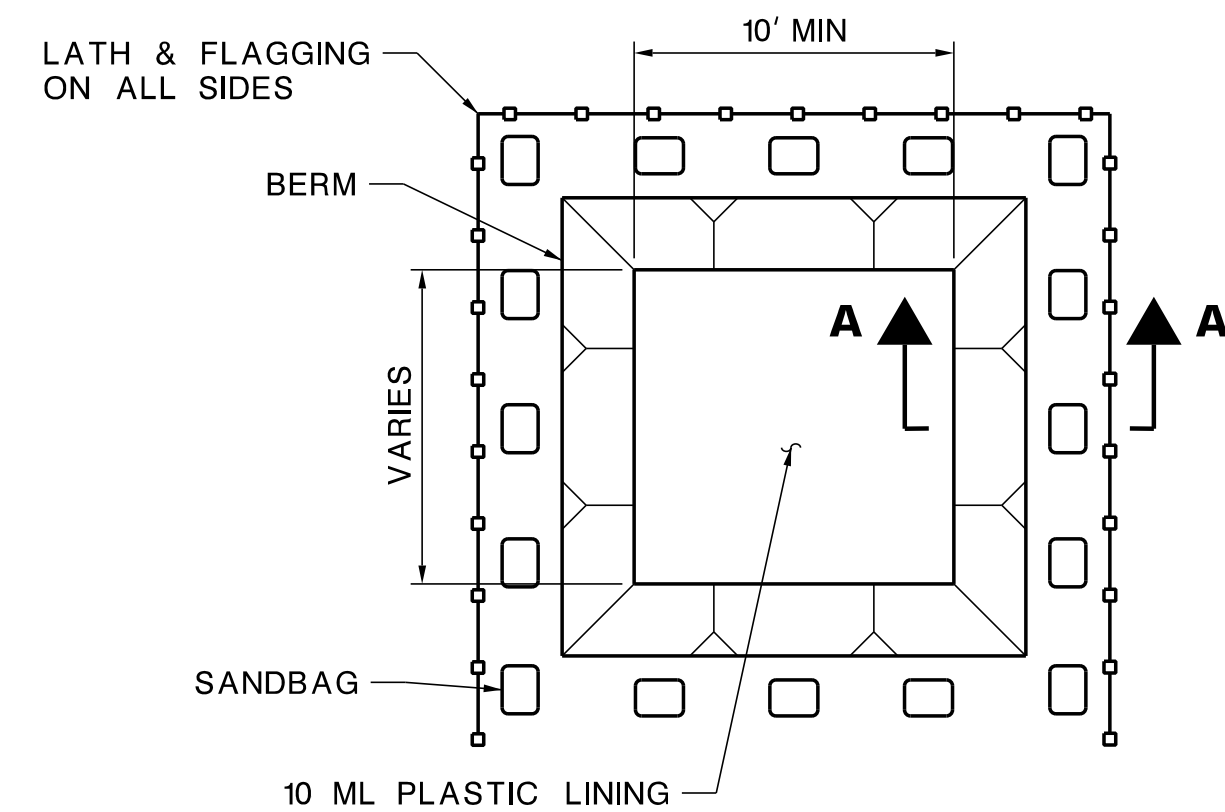


1. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1½".
2. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED. FASTENED TO FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
3. A GEOTEXTILE FABRIC RECOMMENDED FOR SUCH USE BY THE MANUFACTURER SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHER ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH,

SILT FENCE

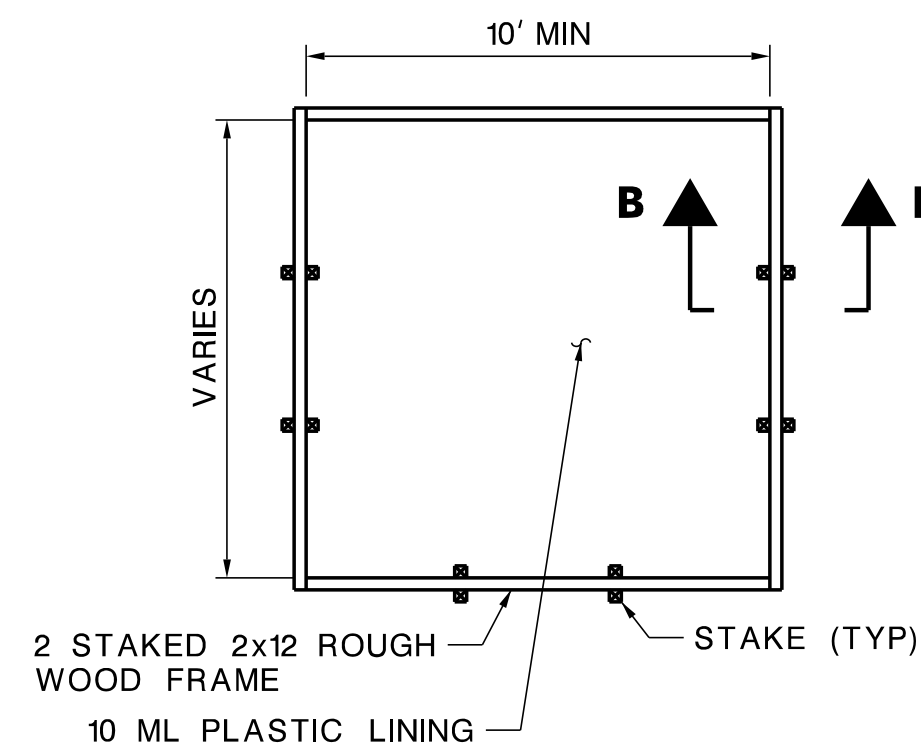


ATTACHING TWO SILT FENCES



PLAN

(TYPE BELOW GRADE)



PLAN

(TYPE BELOW GRADE)

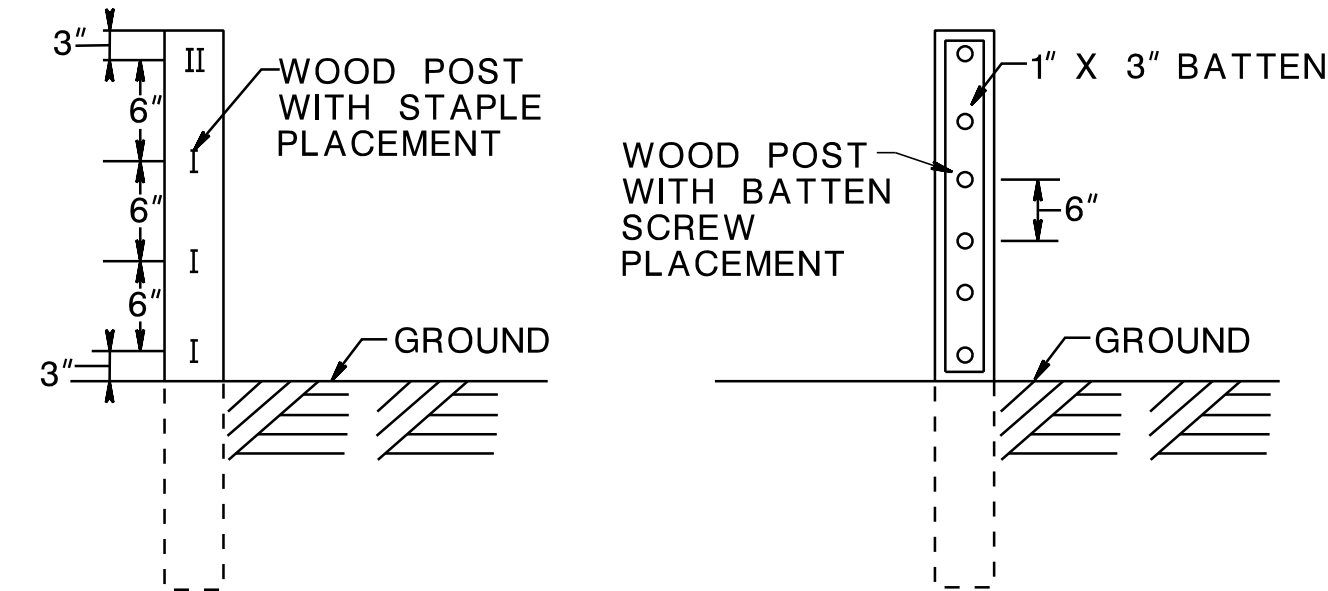
CONCRETE WASTE MANAGEMENT DETAILS

FASTENERS FOR WOOD POSTS

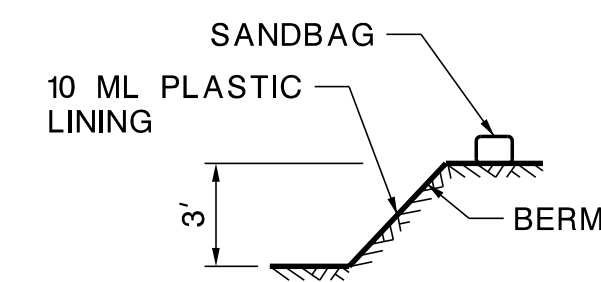
	<u>GAUGE</u>	<u>CROWN</u>	<u>LEGS</u>	<u>STAPLES / POST</u>
WIRE STAPLES	17 MIN.	3/4" WIDE	1/2" LONG	5 MIN.
		<u>LENGTH</u>	<u>PHILLIPS HEADS</u>	<u>SCREW / POST</u>
SCREWS		2" WIDE	2" LONG	6 MIN.

SOURCE: GA SWCC

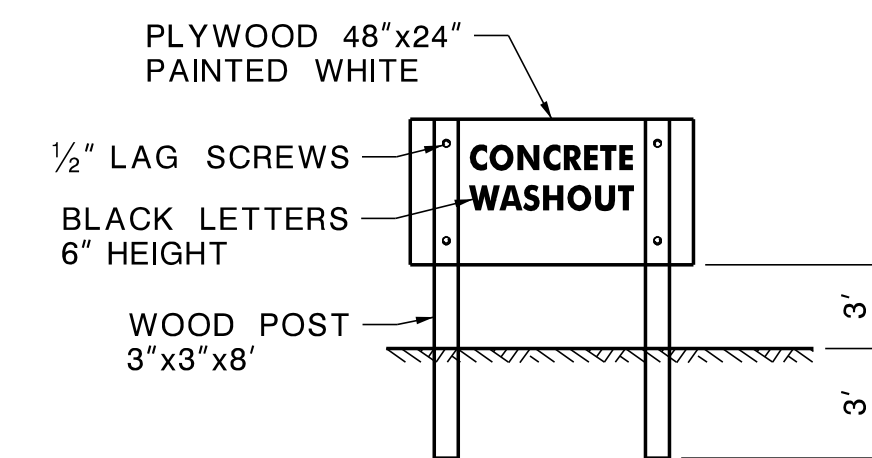
FASTENER PLACEMENT



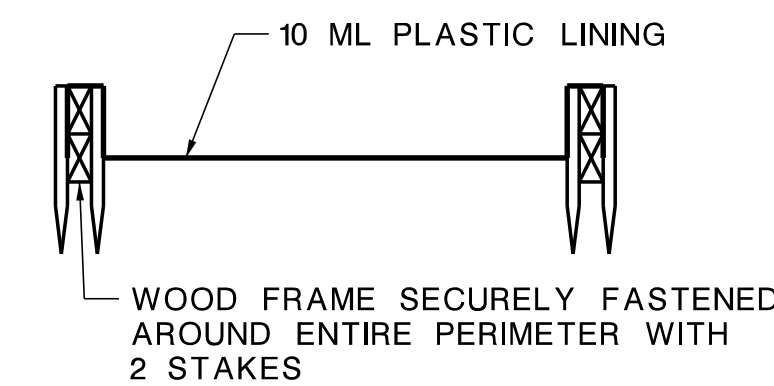
SILT FENCE FASTENER REQUIREMENTS



SECTION A-A



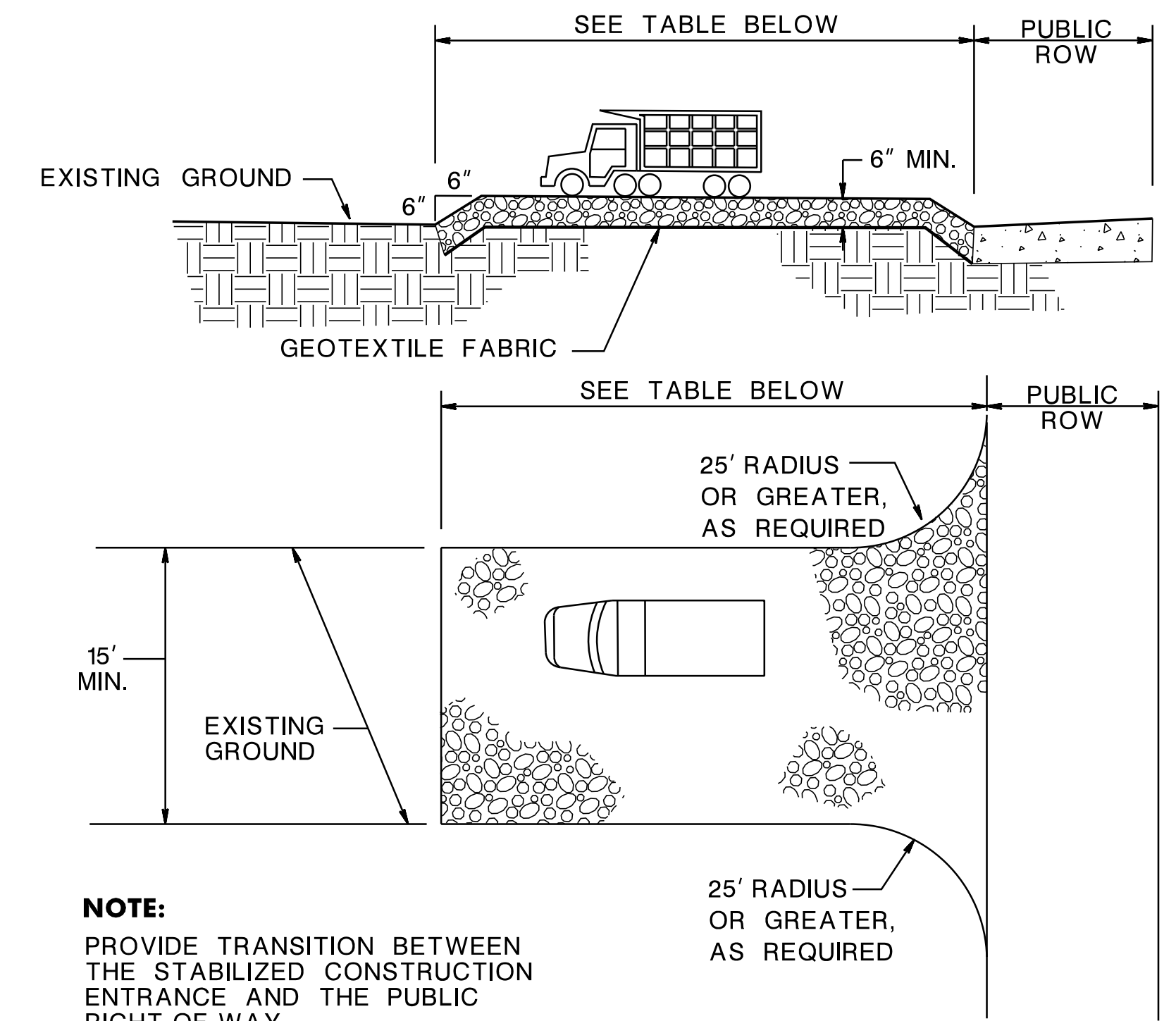
CONCRETE WASHOUT SIGN DETAIL



SECTION B-B

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



NOTE:
PROVIDE TRANSITION BETWEEN
THE STABILIZED CONSTRUCTION
ENTRANCE AND THE PUBLIC
RIGHT-OF-WAY.

PROFILE AND PLAN VIEW

PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0% TO 2%	50 FEET	100 FEET
2% TO 5%	100 FEET	200 FEET
>5%	* ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE	

*AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER
GOVERNING AUTHORITY

STABILIZED CONSTRUCTION DRIVEWAY

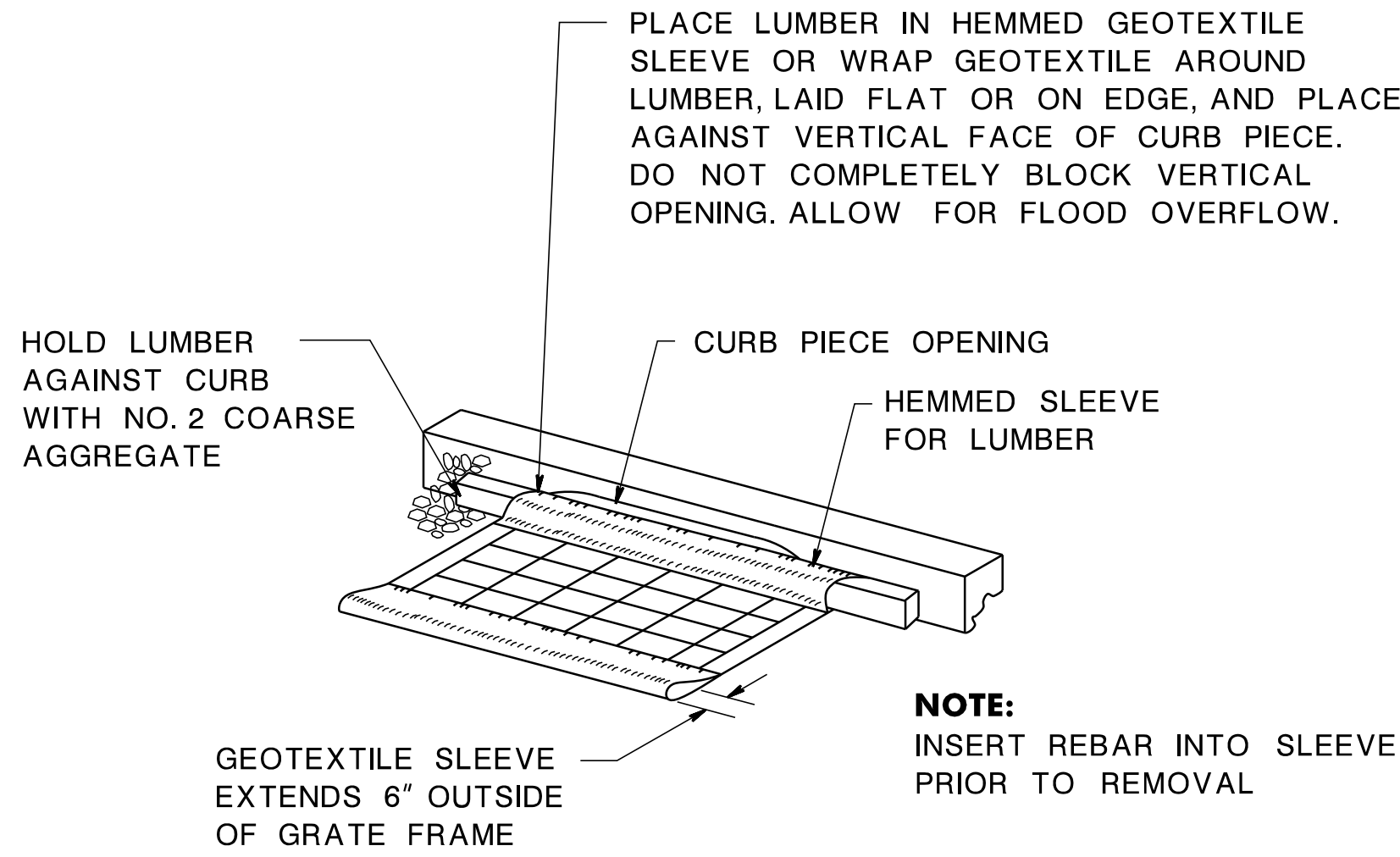
CONSTRUCTION DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

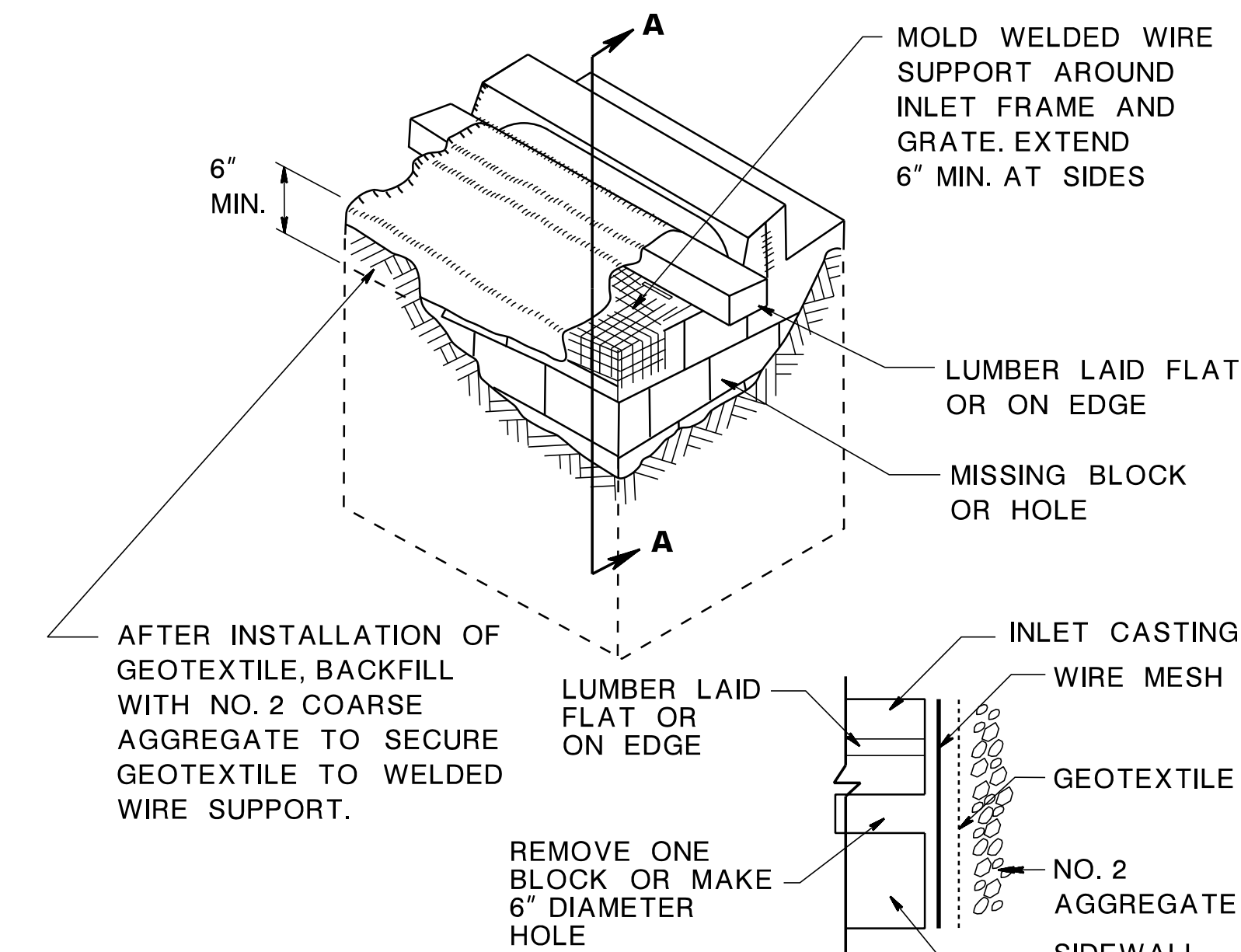
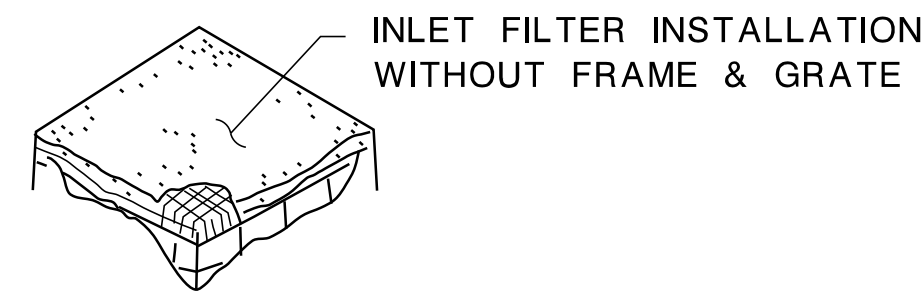
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EDUARDO L. SZMURLO

NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



EXISTING INLET



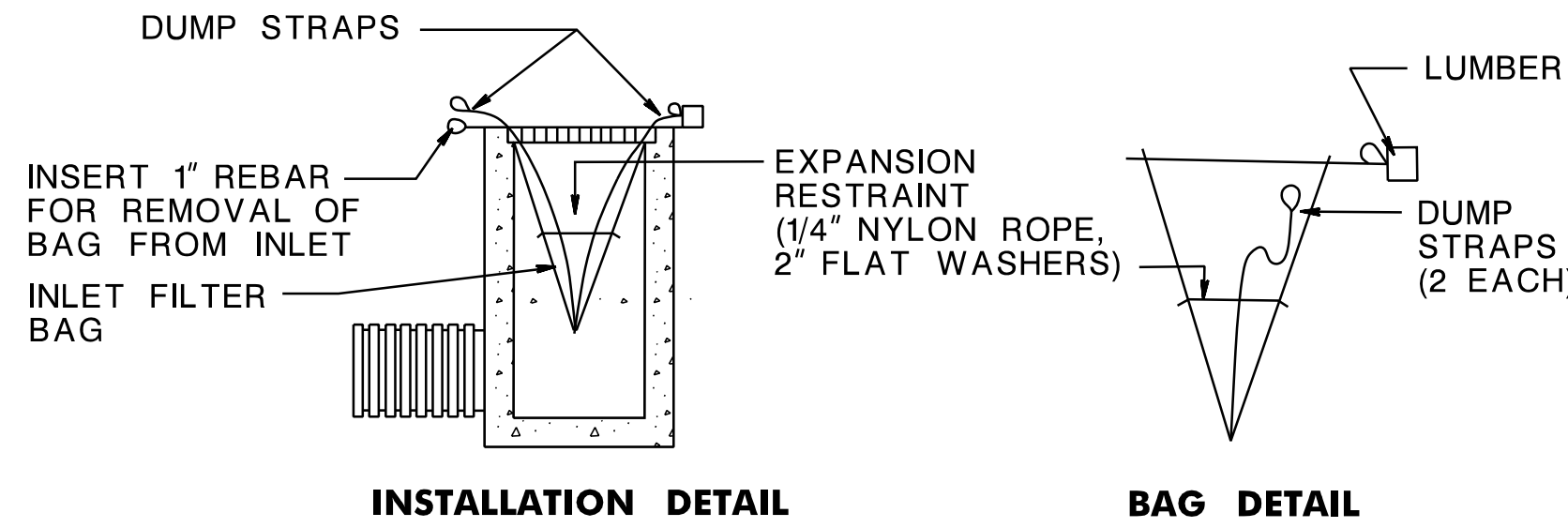
SECTION A-A

NEW CONSTRUCTION

INLET FILTERS, TYPE 1

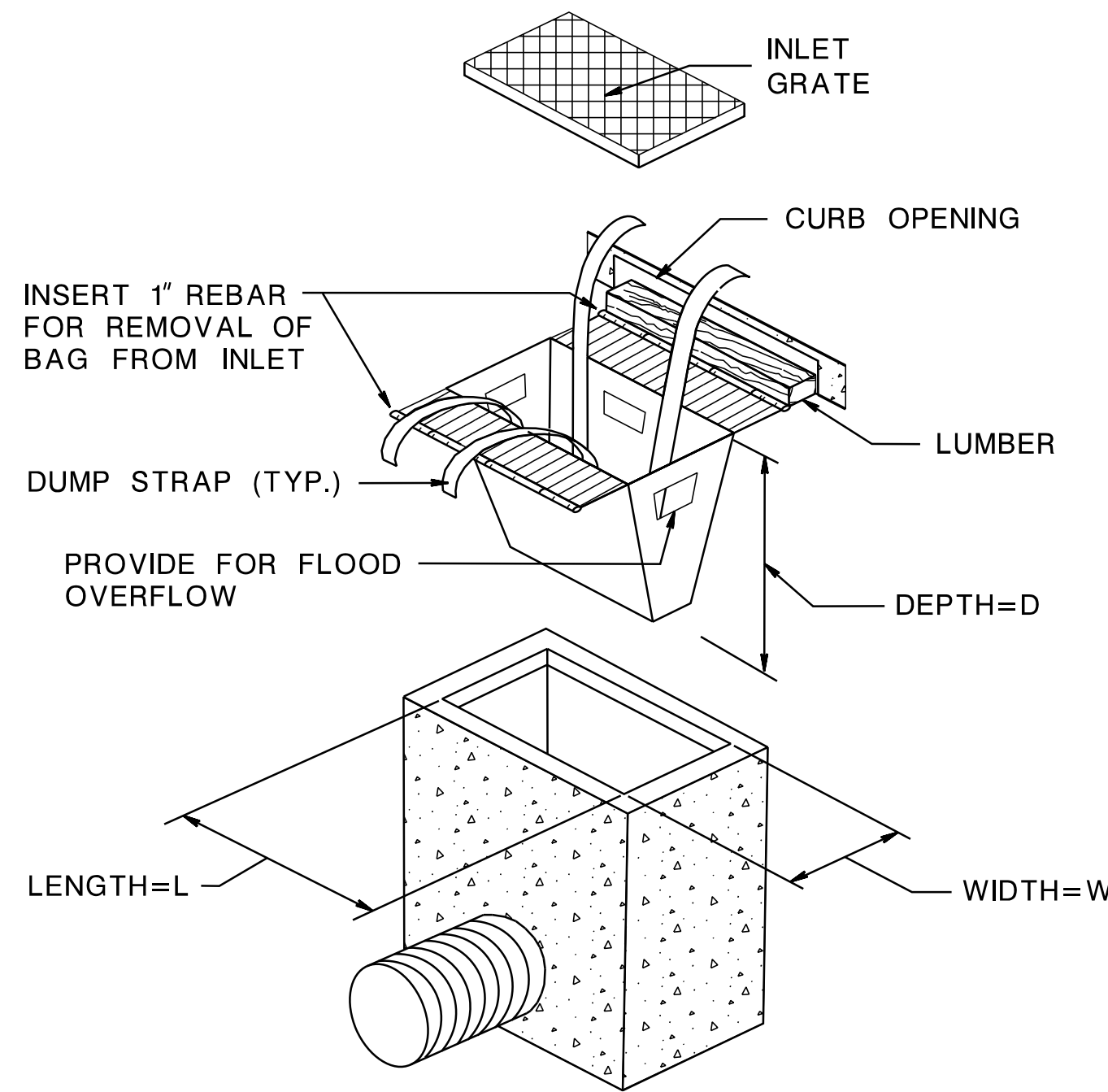
NOTES:

1. CONTRACTOR IS TO CLEAN INLET FILTERS AFTER EVERY STORM.
2. IF BOTTOM OF ROADWAY BOX IS BELOW TOP OF GRATE, CONSTRUCT OPENINGS IN INLET WALL TO ALLOW WATER TO FLOW IN, COVER OPENINGS WITH WELDED WIRE SUPPORT AND FILTER FABRIC.
3. INSPECTION SHALL BE FREQUENT, MAINTENANCE, REPAIR AND REPLACEMENT SHALL BE MADE PROM PLY, AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARDS INLET HAS BEEN STABILIZED.
4. TWO TRAFFIC COMES TO BE PLACED ON EACH SIDE OF INLET.

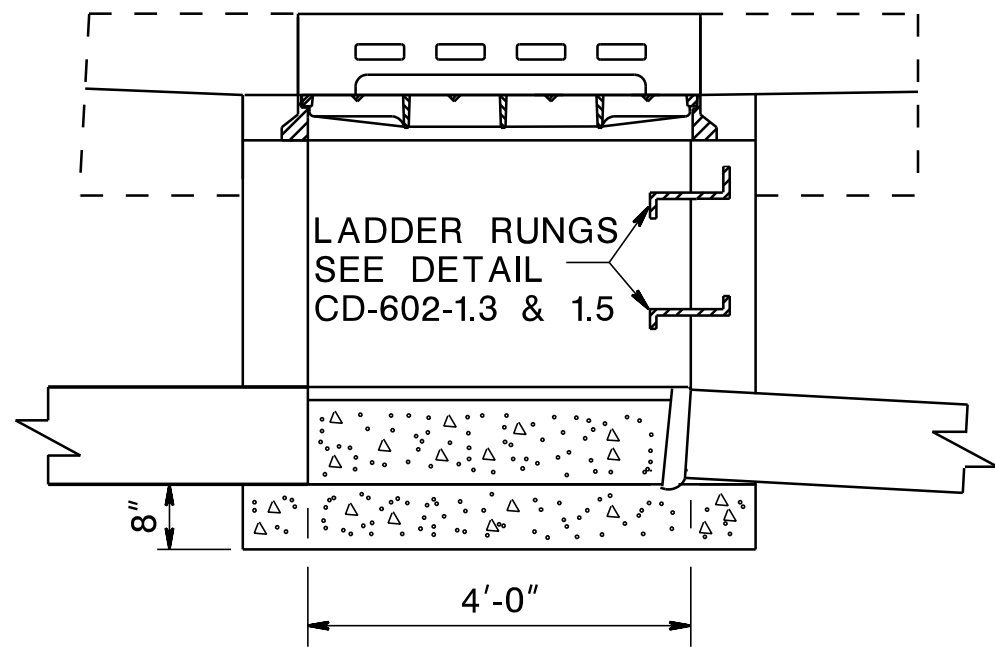
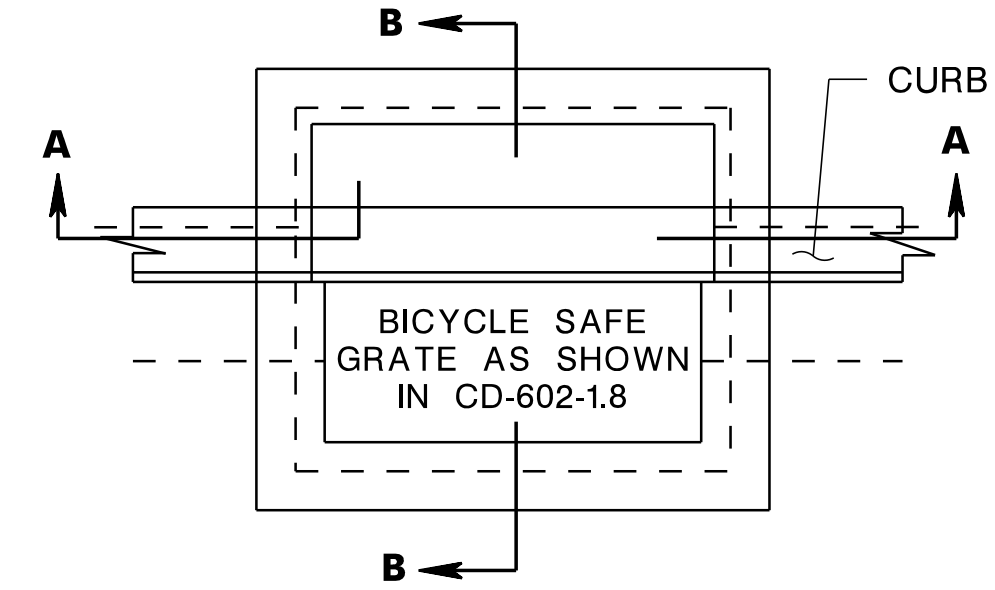


INSTALLATION DETAIL

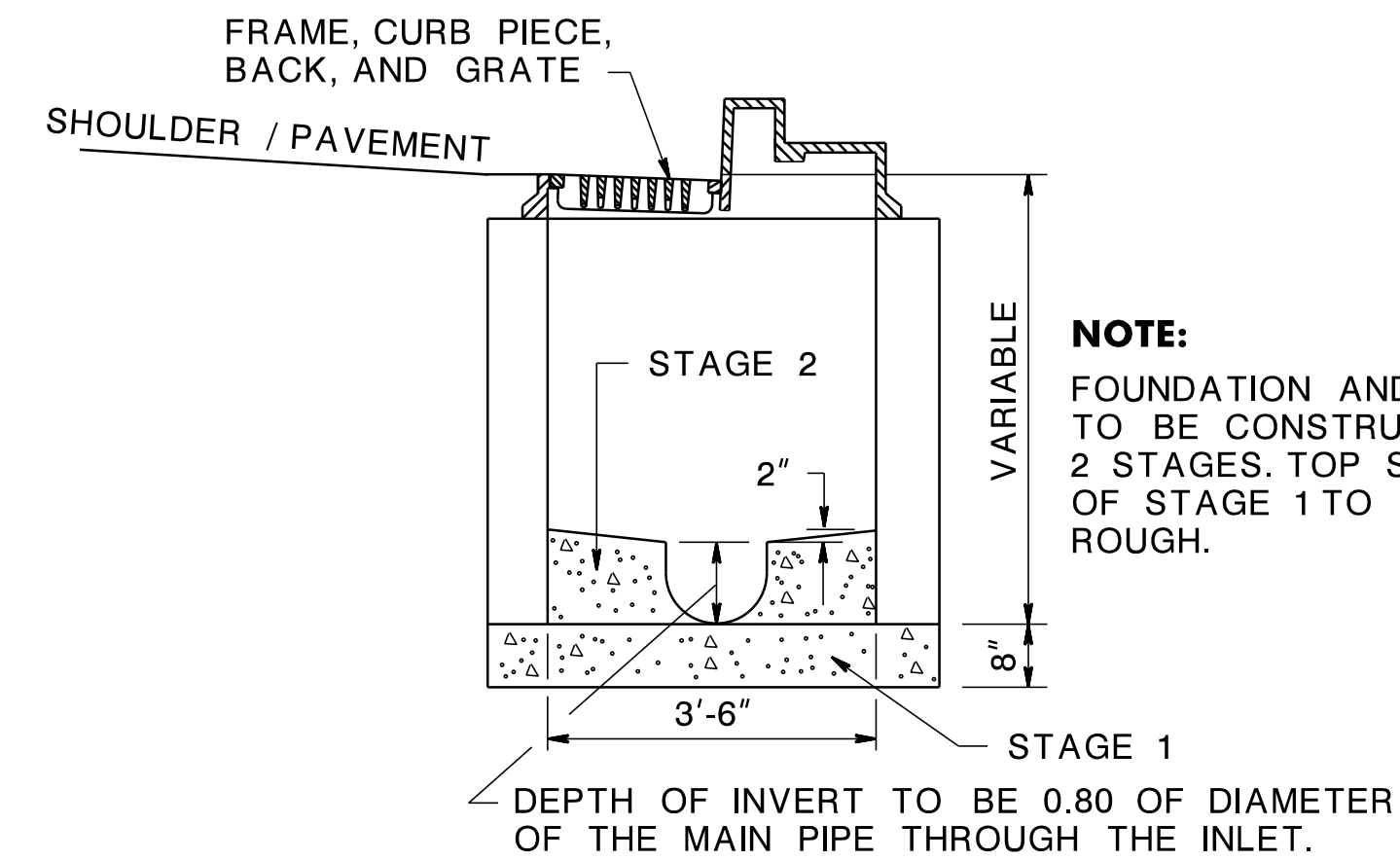
BAG DETAIL



INLET FILTERS, TYPE 2, 2' X 4'



SECTION A-A



SECTION B-B

INLET TYPE B

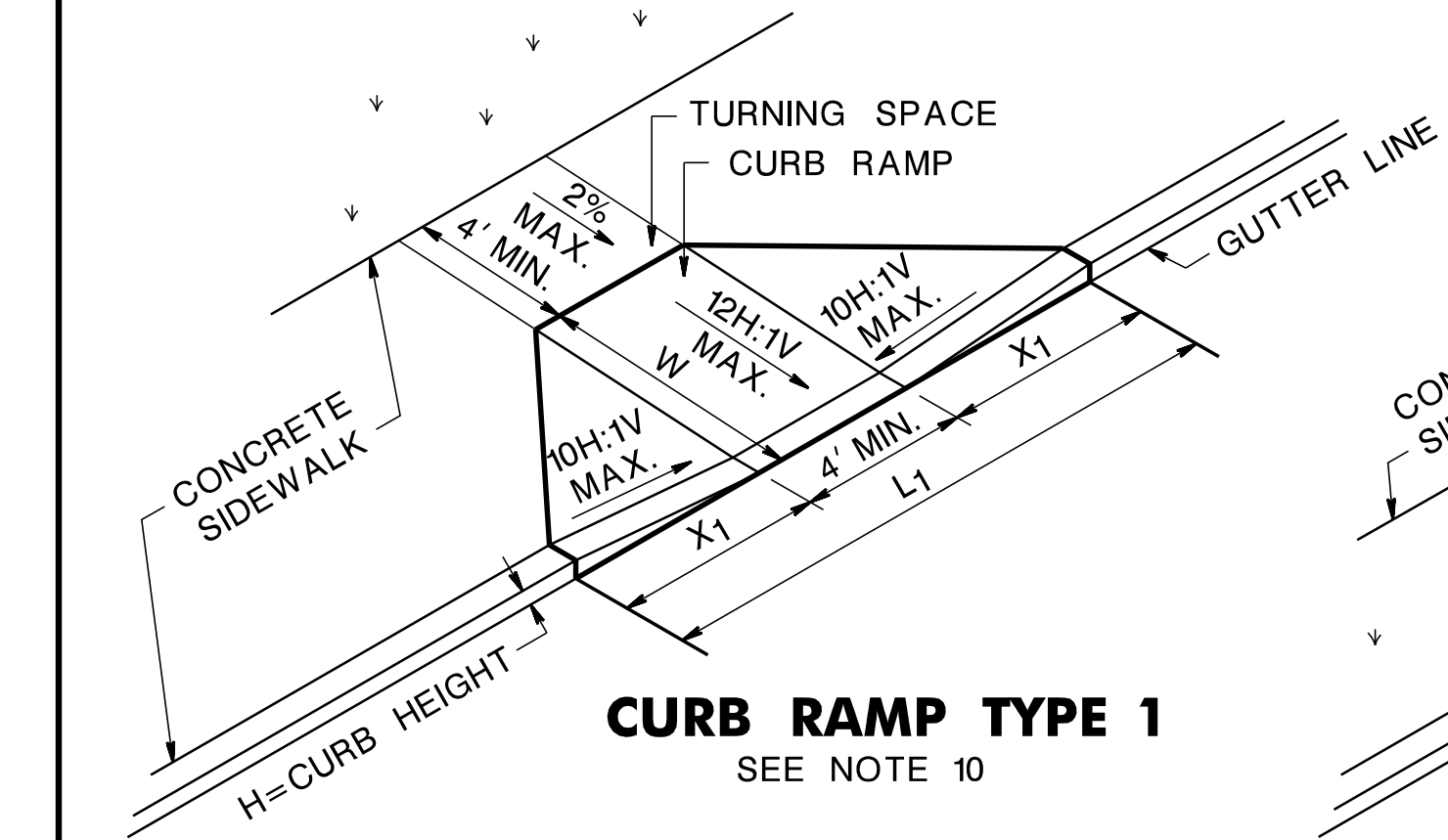
CONSTRUCTION DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

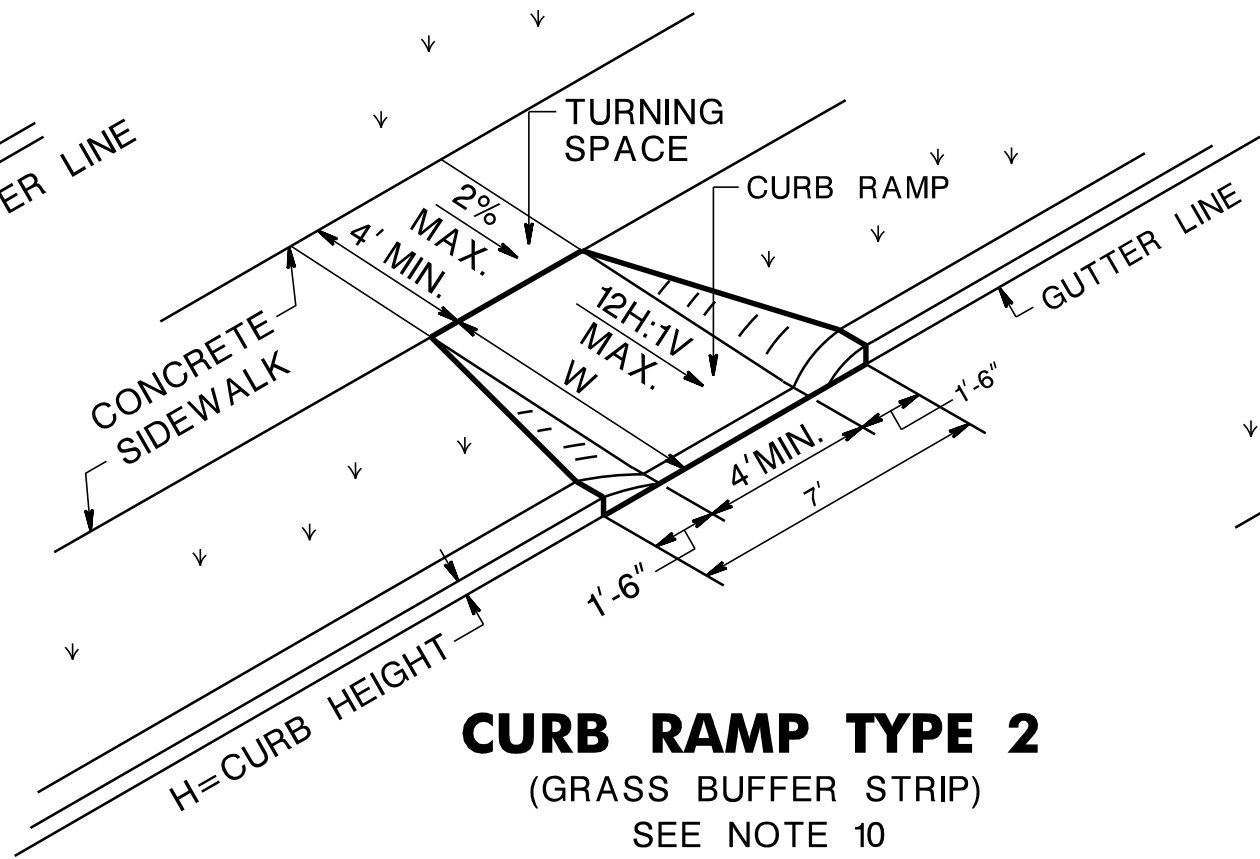
IH ENGINEERS, P.C.

EDUARDO L. SZMURLO

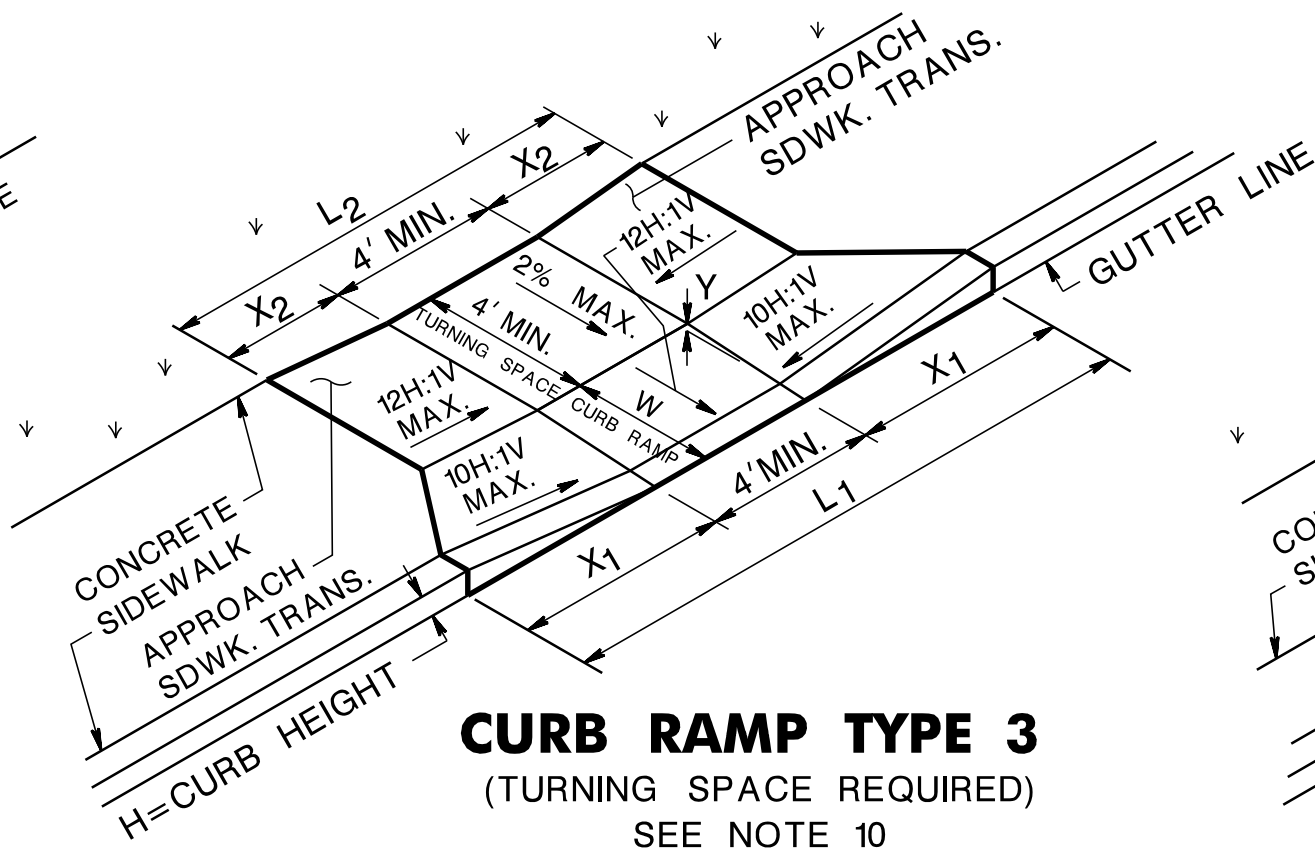
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100



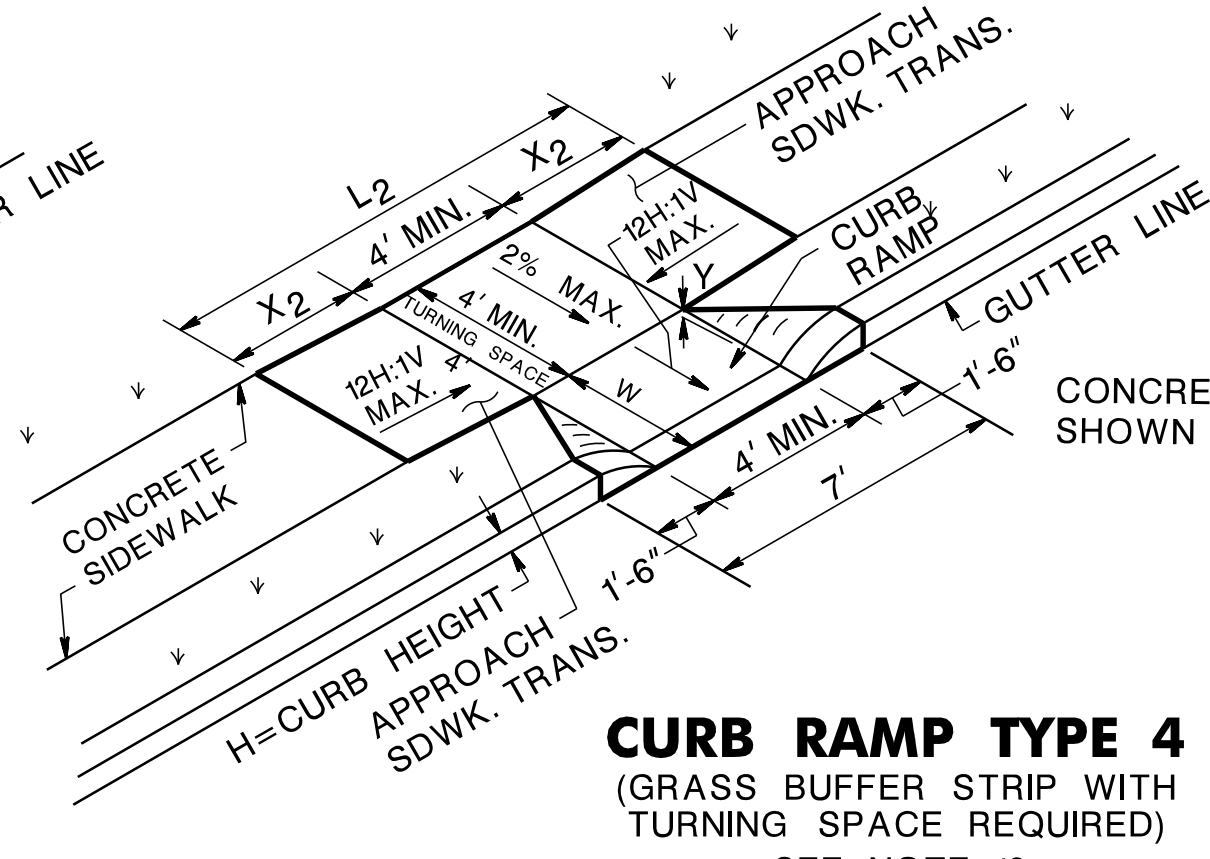
CURB RAMP TYPE 1
SEE NOTE 10



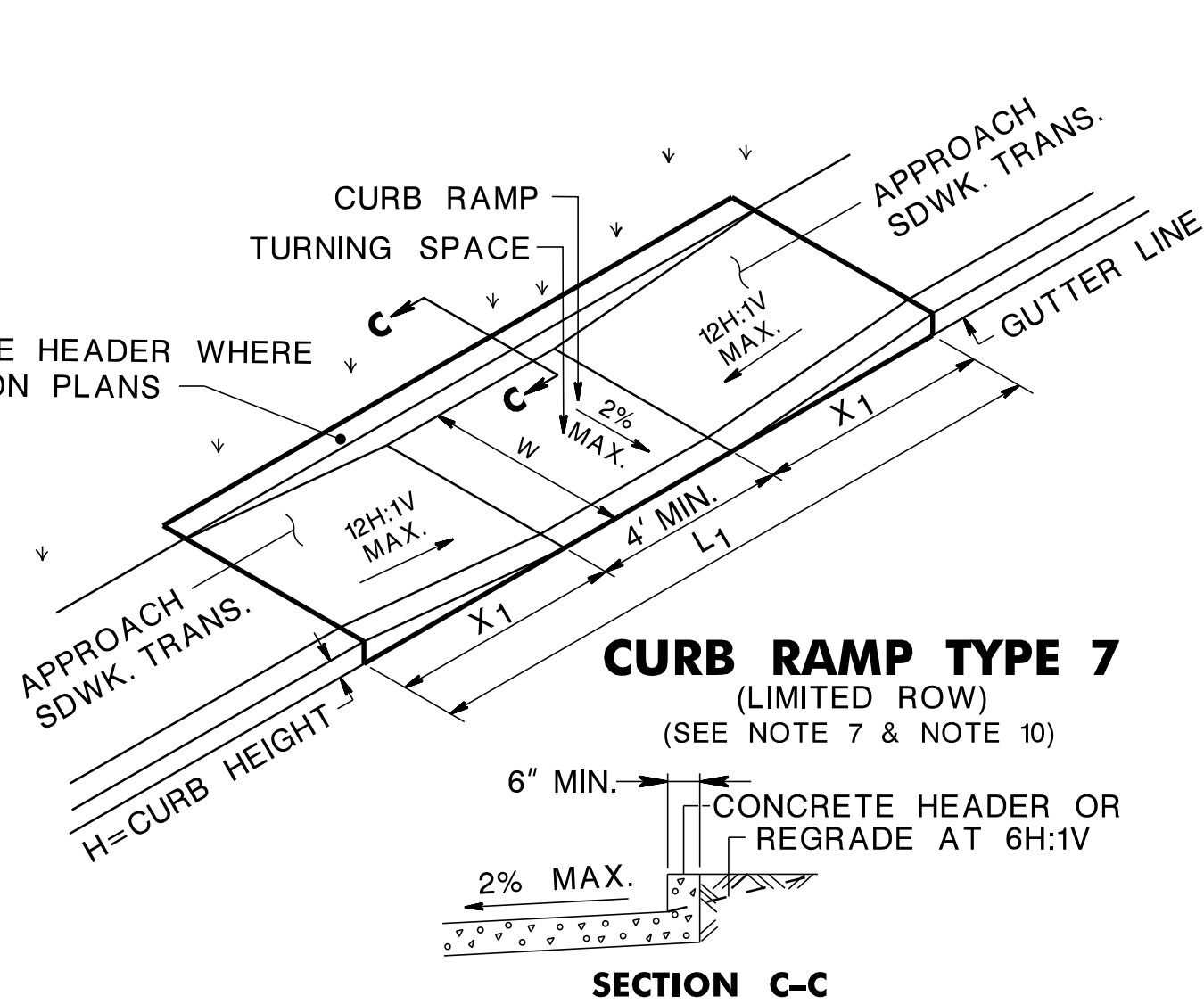
CURB RAMP TYPE 2
(GRASS BUFFER STRIP)
SEE NOTE 10



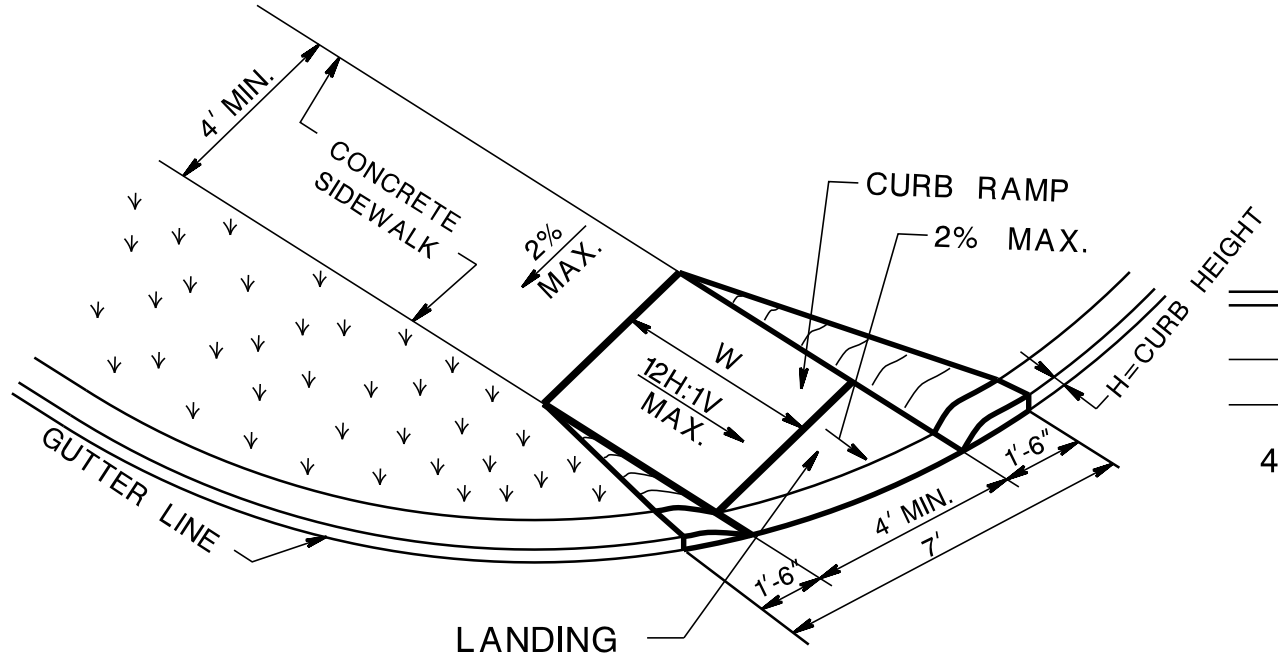
CURB RAMP TYPE 3
(TURNING SPACE REQUIRED)
SEE NOTE 10



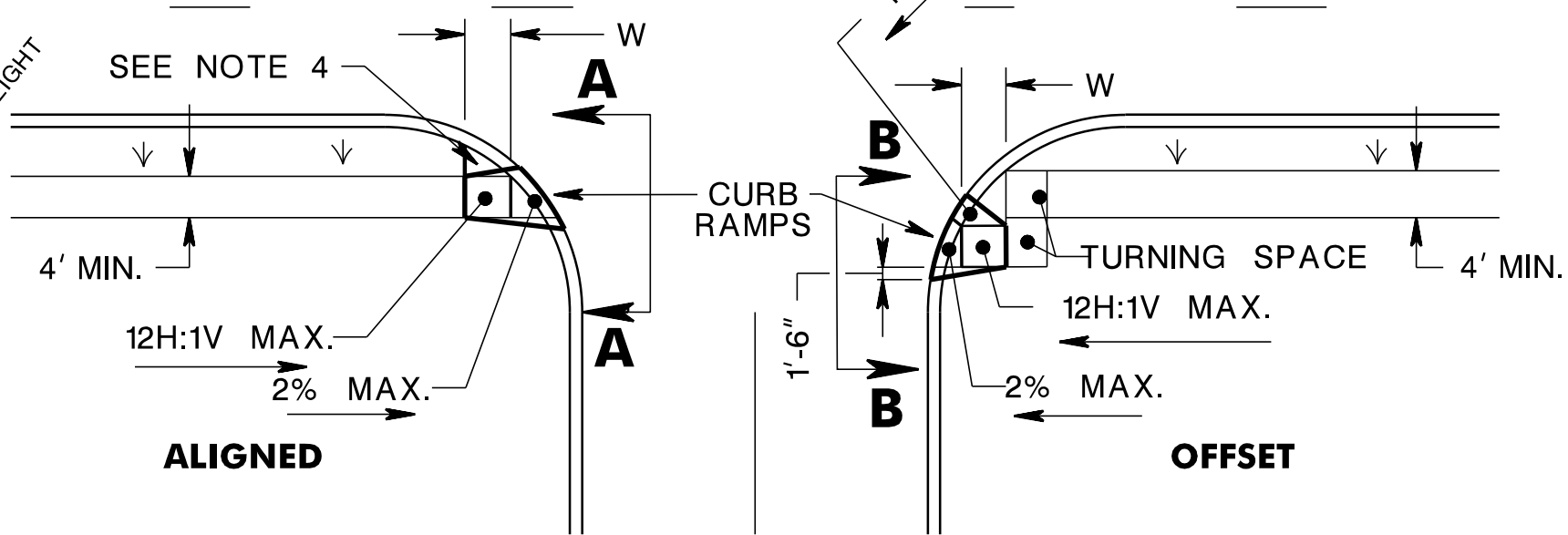
CURB RAMP TYPE 4
(GRASS BUFFER STRIP WITH
TURNING SPACE REQUIRED)
SEE NOTE 10



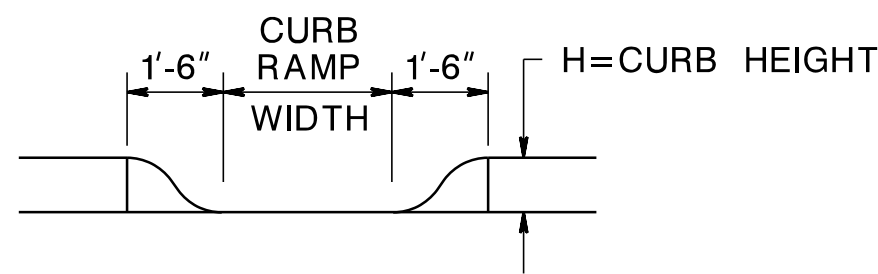
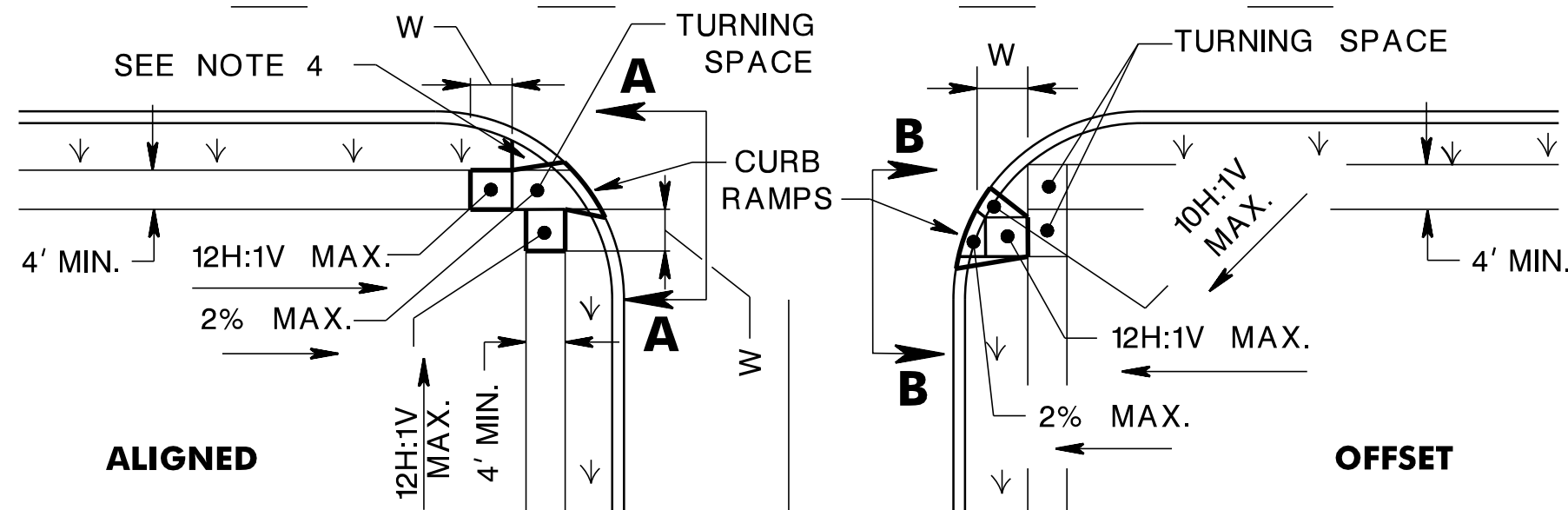
CURB RAMP TYPE 7
(LIMITED ROW)
(SEE NOTE 7 & NOTE 10)



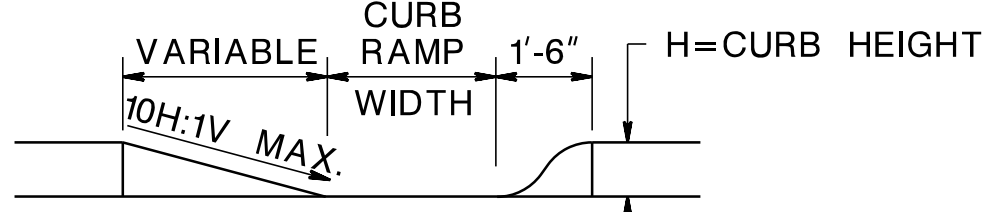
CURB RAMP TYPE 5



CURB RAMP TYPE 6

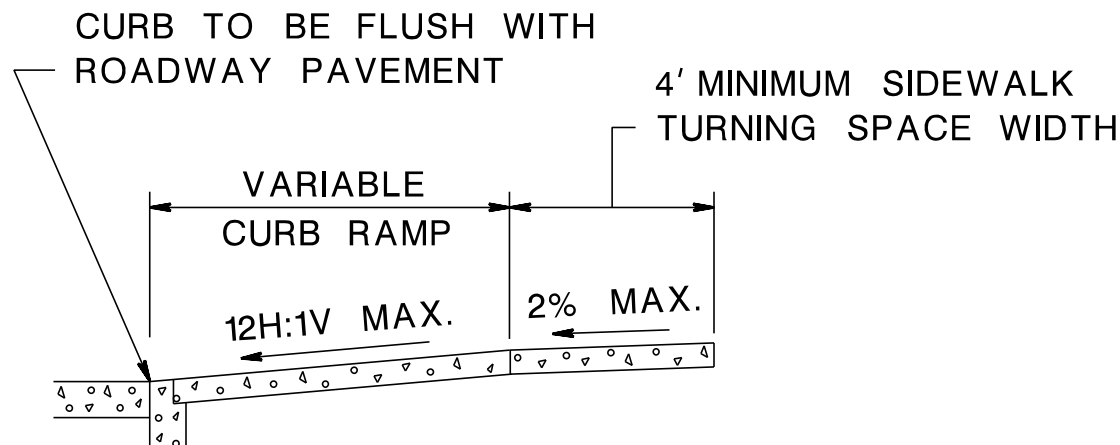


SECTION A-A

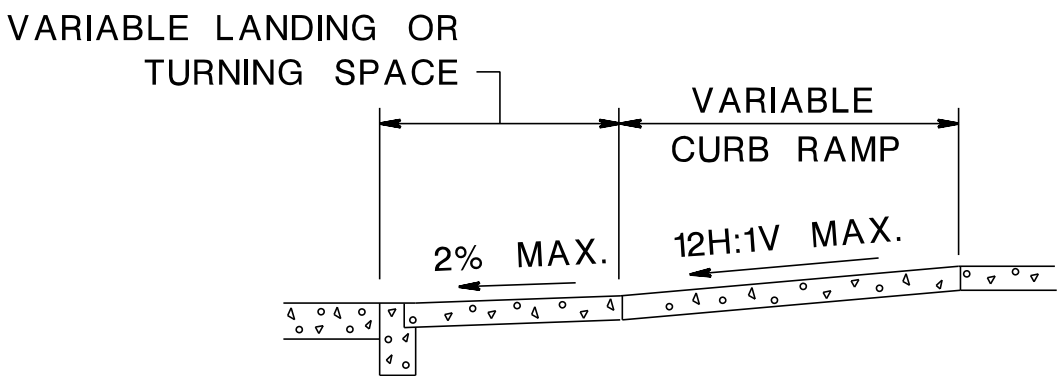


SECTION B-B

NOTE:
CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



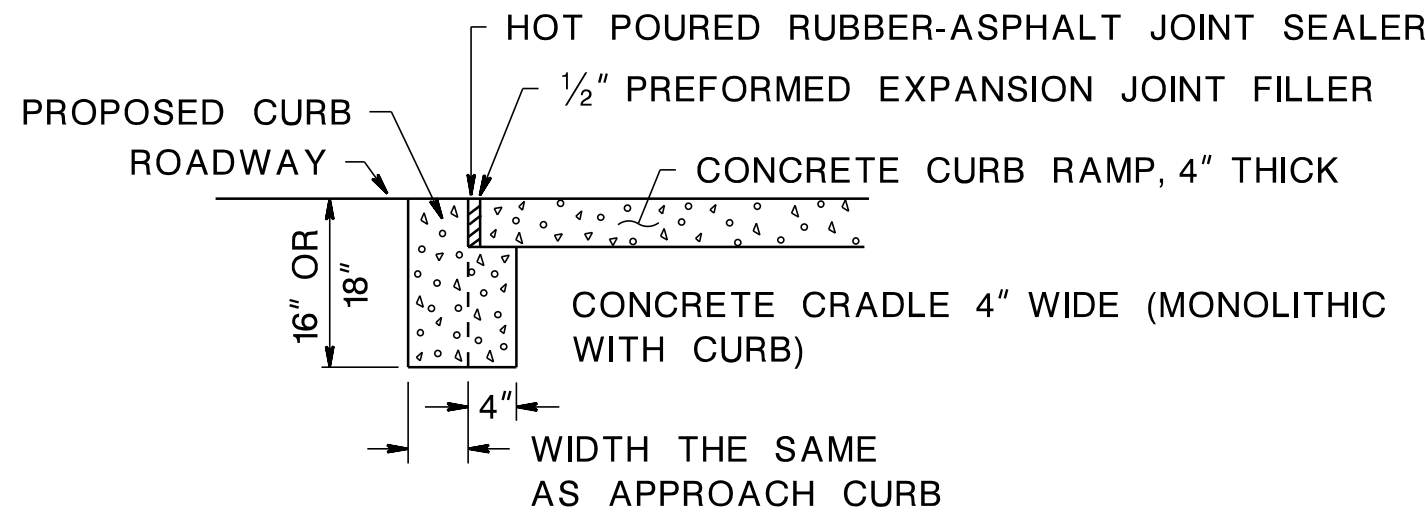
SECTION THROUGH CURB RAMPS 1 THROUGH 4



SECTION THROUGH CURB RAMPS 5 AND 6

NOTES:

1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
2. FOR DIMENSIONS SEE CD-606-3 AND CD-606-4
3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT THE ENTIRE WIDTH OF THE RAMP (4 FEET MIN.) AT ALL CURB RAMPS.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, USE CURB RAMP TYPE 7, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
9. THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X_2 IS THE RUNNING SLOPE FOR TYPE 3 AND TYPE 4 CURB RAMPS. ENSURE THE RUNNING SLOPE OF CURB RAMPS DOES NOT REQUIRE ITS LENGTH TO EXCEED 15 FEET. THE RUNNING SLOPE MAY EXCEED THE 12H:1V MAX SLOPE SO AS NOT TO EXCEED THE 15 FEET MAXIMUM LENGTH.
10. CURB RAMP TYPE 1 THROUGH 7 ARE NORMALLY PLACED ON THE RADIUS RETURN AT THE INTERSECTION AND ON A TANGENT SECTION AS DRAWN.



DROPPED CURB AND CRADLE

CONCRETE SIDEWALK
(PUBLIC SIDEWALK CURB RAMP)

N.T.S.

DTL-4
DTL-6

CD-606-1

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.
DAVID X. CHIU
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE03885900

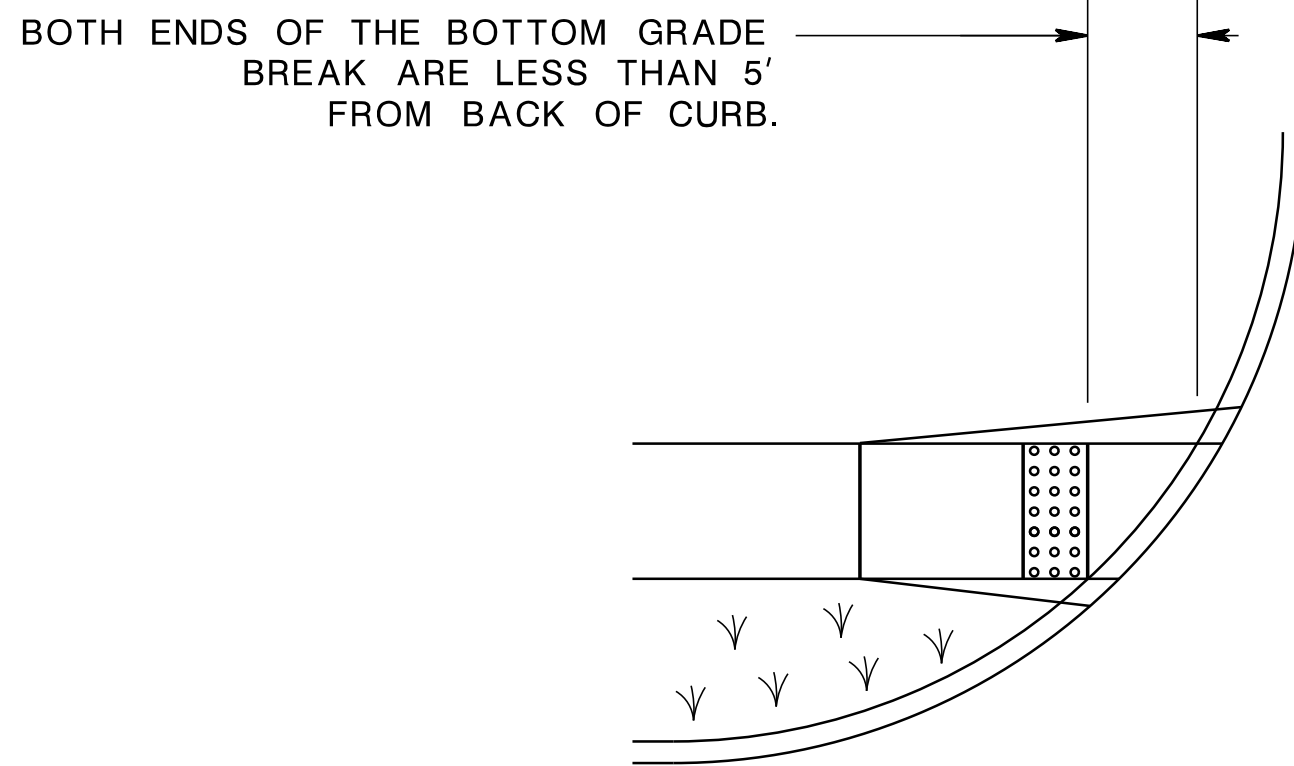
CURB RAMPS

CD-606-1.1

PLAN VIEW

ELEVATION

DETECTABLE WARNING SURFACE



ALTERNATE TREATMENT
(SEE NOTE 5)

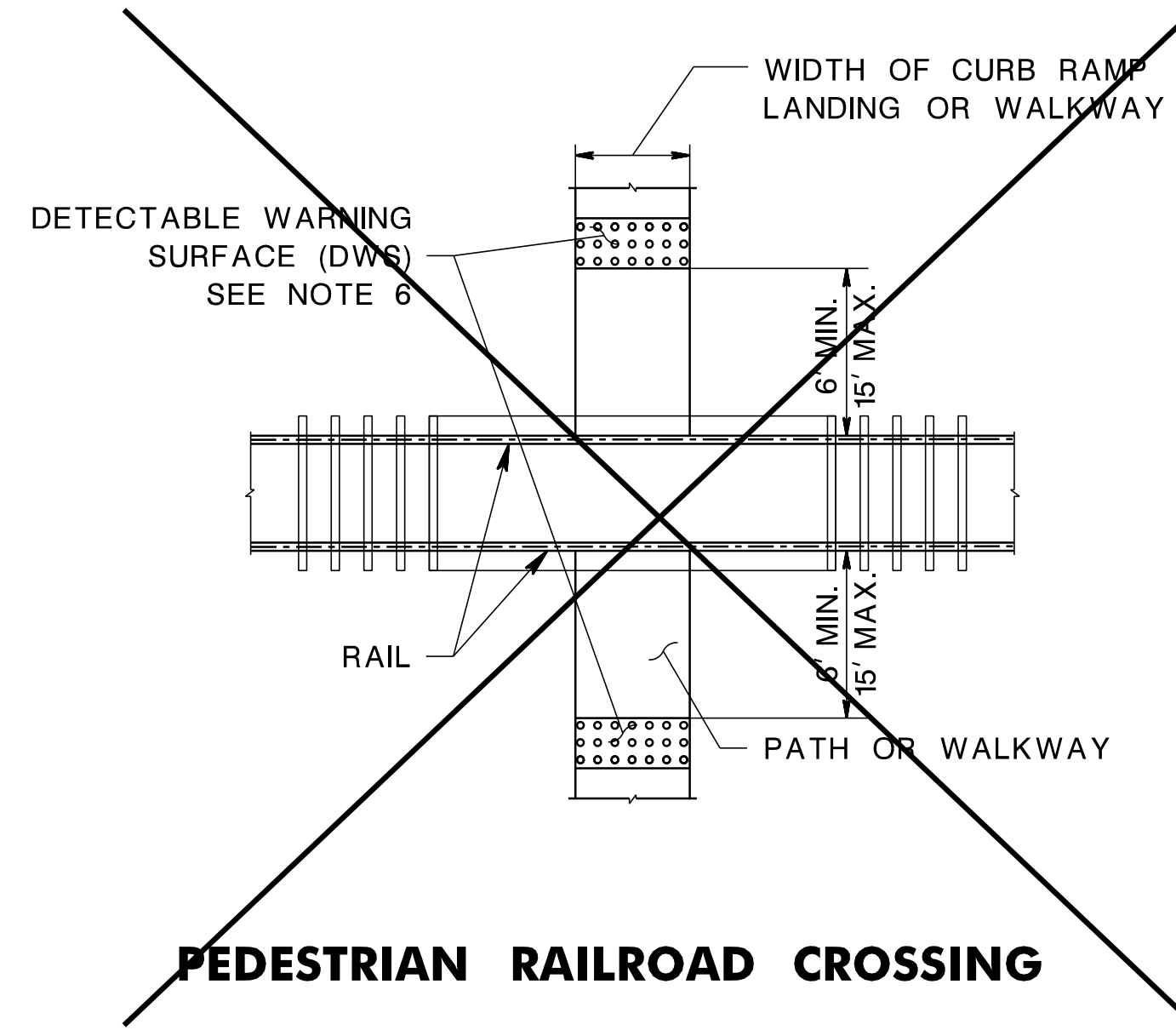
PREFERRED TREATMENT
(SEE NOTE 5)

LOCATION OF CURB RAMP TYPES 1, 2, 3, 4, & 7 FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY

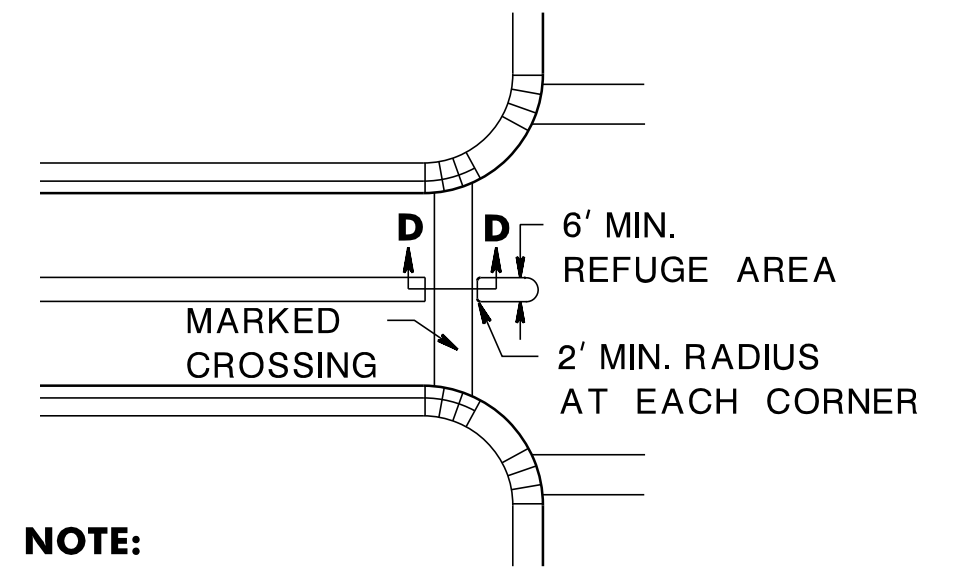
PREFERRED TREATMENT

ALTERNATE TREATMENT
(SEE NOTE 7)

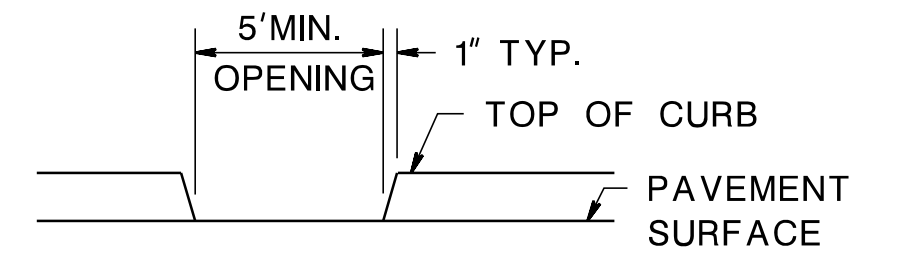
PLACEMENT OF DETECTABLE WARNING SURFACE FOR CURB RAMP TYPE 5 AND 6



~~PEDESTRIAN~~ RAILROAD CROSSING



NOTE:
WHERE PRACTICAL, END LEFT TURN ISLAND
OR DIVISIONAL ISLAND BEFORE CROSSWALK
TO ELIMINATE CUT-THROUGH



SECTION D-D

NOTE:
5'MIN. WIDE OPENING TO BE FLUSH
WITH ROADWAY PAVEMENT

PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS

NARROW ISLAND WIDTH
(SEE NOTE 3)

MEDIUM ISLAND WIDTH
(SEE NOTE 4)

LARGE ISLAND WIDTH
(SEE NOTE 4)

PEDESTRIAN REFUGE ISLAND

DETECTABLE WARNING SURFACE

N.T.S.

DTL-5
DTL-6

CD-606-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

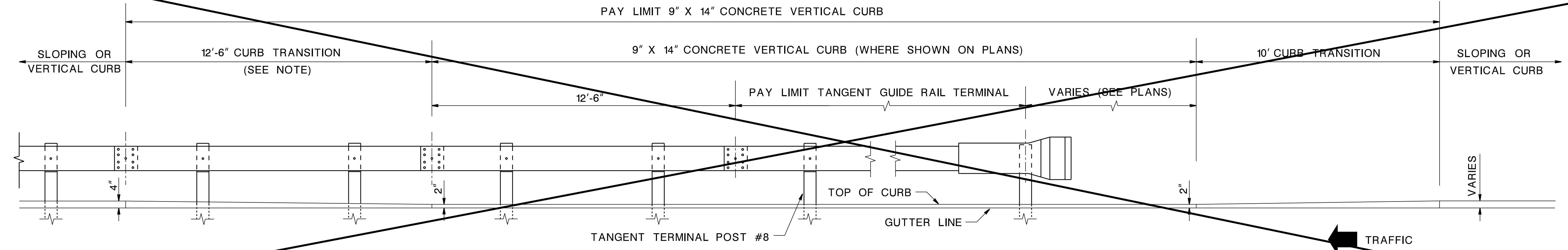
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

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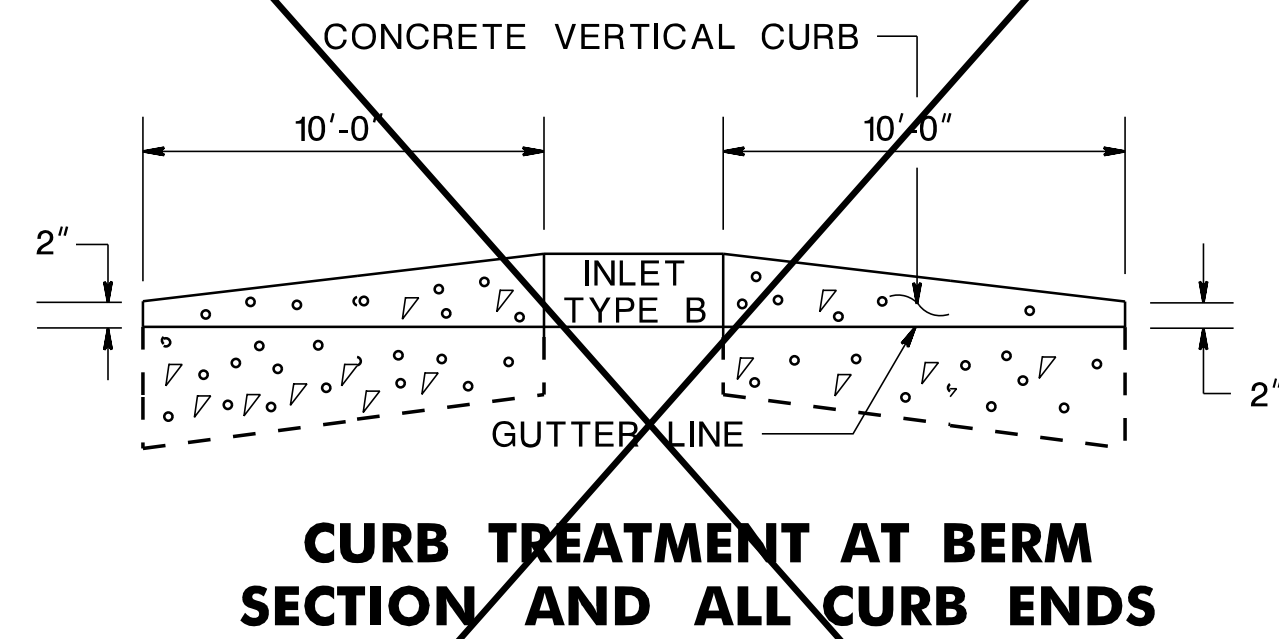
CD-606-2.1

BCD607-07-TRANSITION WITH GUIDE RAIL REVISED
BCD7D-06-TRANSITION WITH GUIDE RAIL ADDED
BCD7D-02-MASH TITLE ADDED
BCD607-07-ORIGINAL SHEET

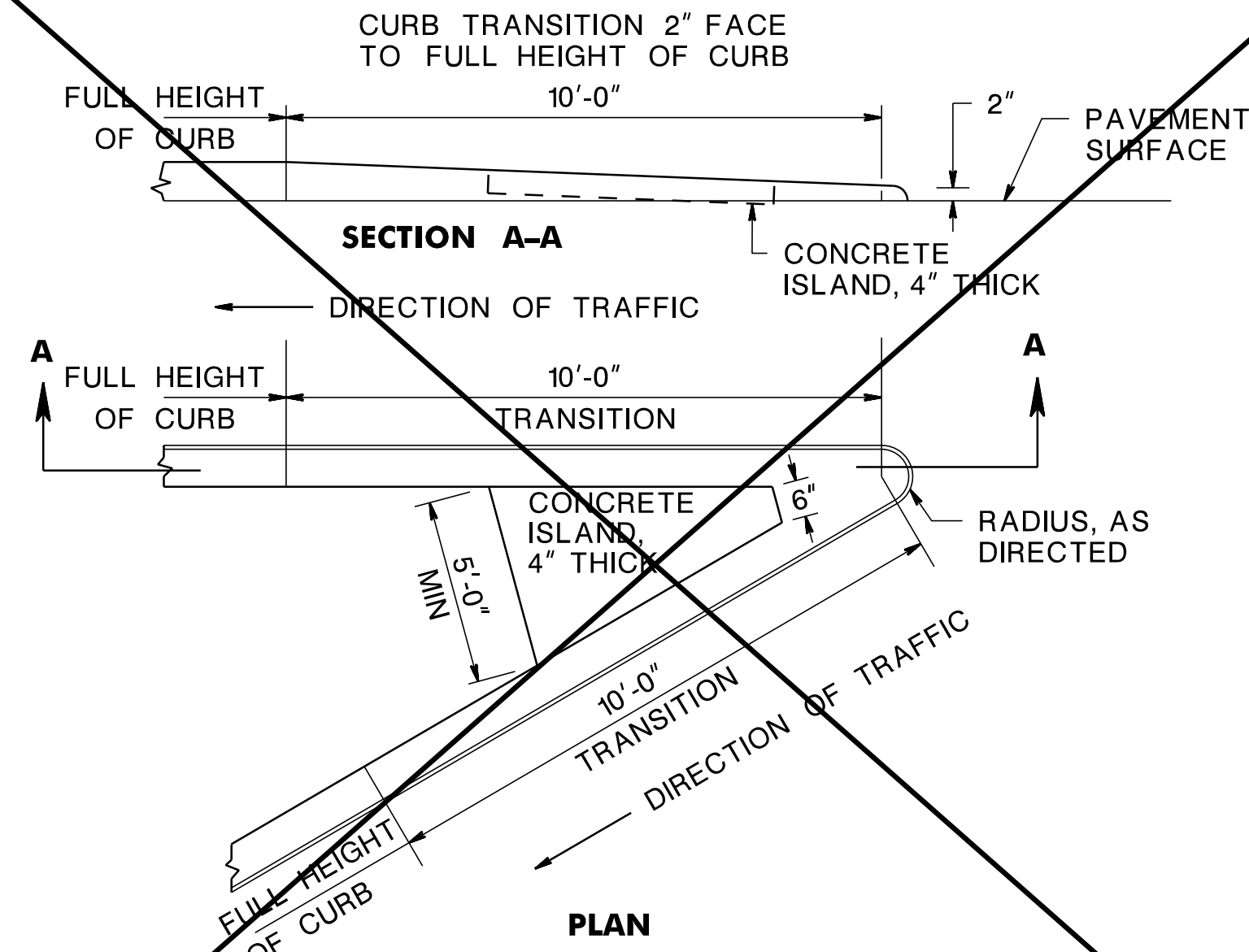


METHOD OF TRANSITIONING TO 2" VERTICAL CURB AT A TANGENT GUIDE RAIL TERMINAL

CD-607-2.1

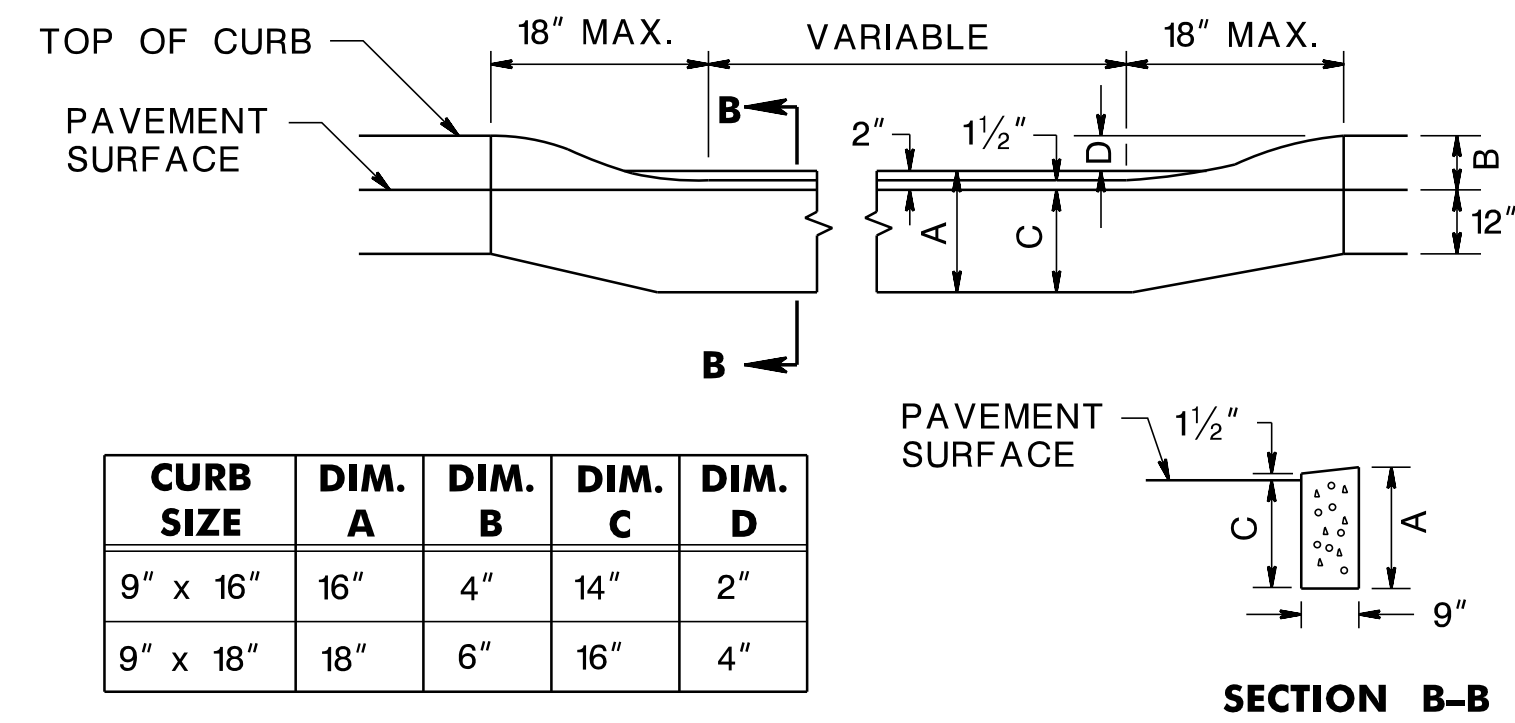


CURB TREATMENT AT BERM SECTION AND ALL CURB ENDS



APPROACH CURBED GORE AREA TREATMENT

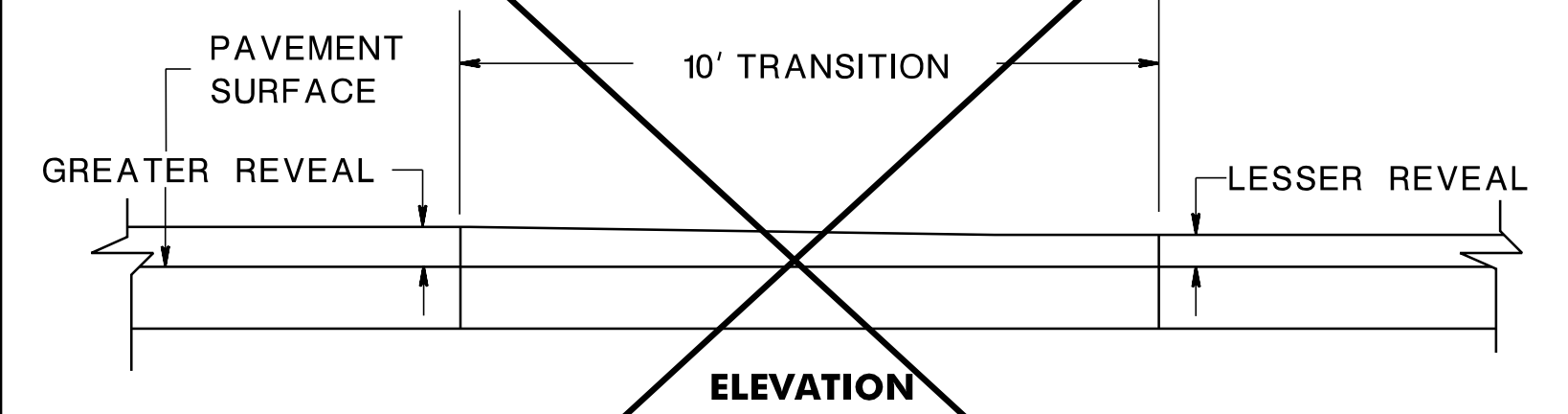
CD-607-2.3



CURB SIZE	DIM. A	DIM. B	DIM. C	DIM. D
9" x 16"	16"	4"	14"	2"
9" x 18"	18"	6"	16"	4"

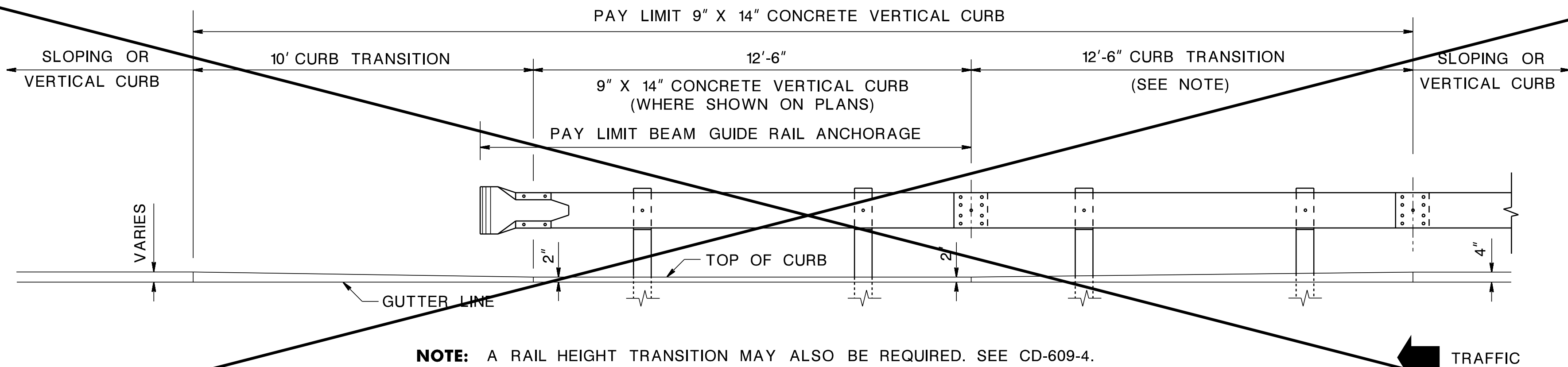
METHOD OF DEPRESSING CURB AT DRIVEWAYS

CD-607-2.4



LINEAR CURB TRANSITION

CD-607-2.5



METHOD OF TRANSITIONING TO 2" VERTICAL CURB AT A BEAM GUIDE RAIL ANCHORAGE

CD-607-2.6

CURB TRANSITIONS

N.T.S.

DTL-6
DTL-6

CD-607-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

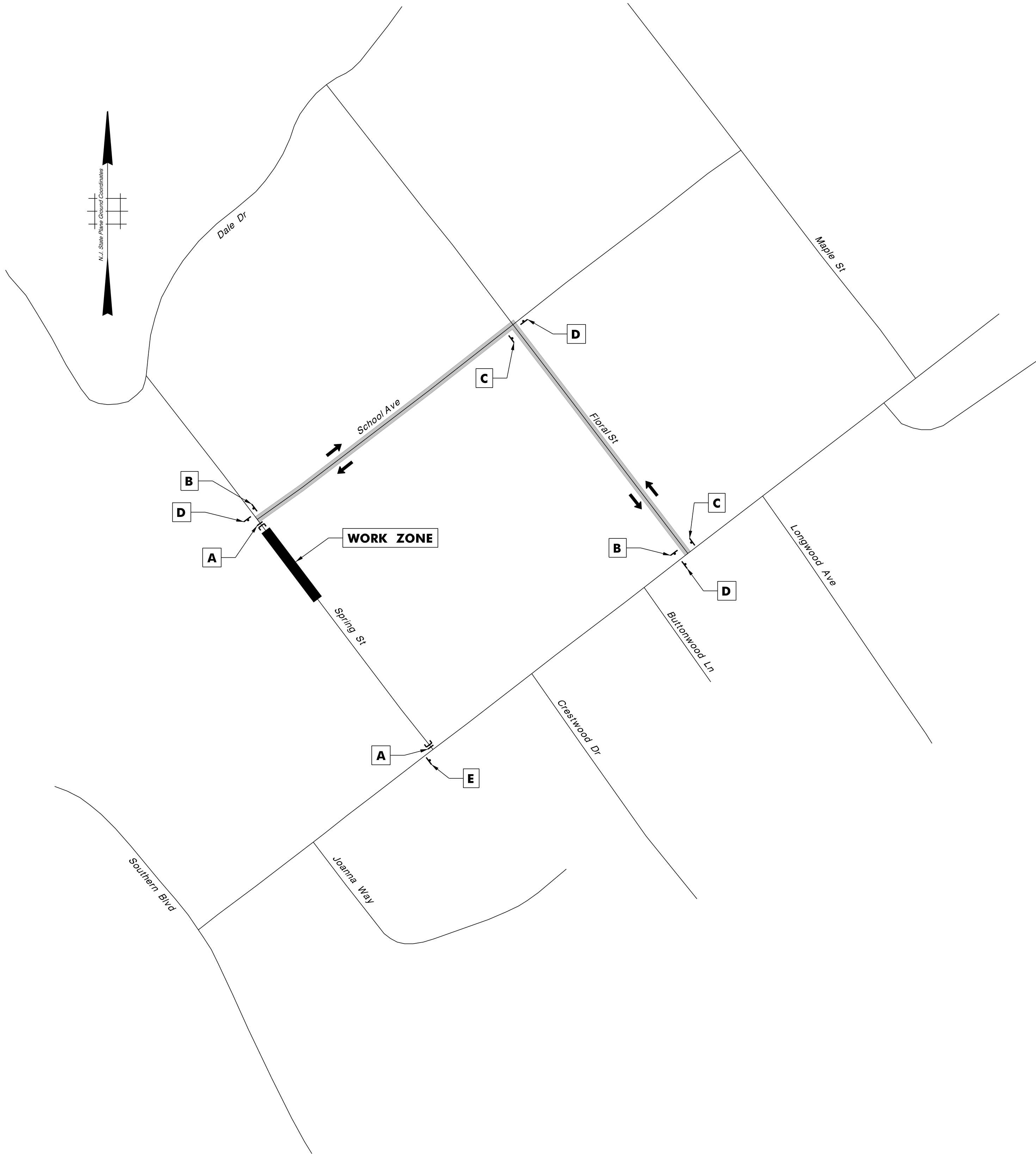
IH ENGINEERS, P.C.

DAVID X. CHIU

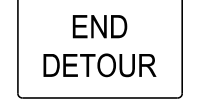
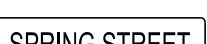
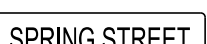
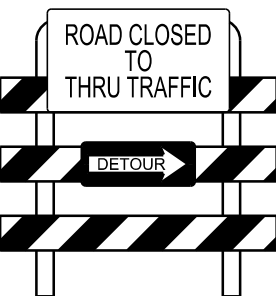
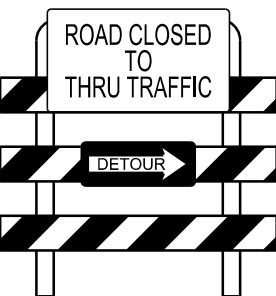
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE03885900

TOWNSHIP OF CHATHAM

MORRIS COUNTY



SIGN LOCATION TABLE

LOCATION	SIGN
A	
B	
C	
D	
E	
F	

DETOUR PLAN

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN

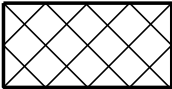
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.

EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

TC-1
TC-2

LEGEND

-  BREAKAWAY BARRICADES
-  BREAKAWAY BARRICADES WITH SIGN
-  CONSTRUCTION SIGNS
-  CONES
-  DIRECTION OF TRAFFIC FLOW
-  WORK AREA

GENERAL NOTES

- ADVANCE WARNING SIGNS DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT THE DIRECTION OF THE RE, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
- PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
- RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-IF SIGN (ROAD WORK AHEAD) AS A MINIMUM.
- ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE RE.
- MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS", UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE RE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON AT LEAST 6H : 1V SLOPE BEFORE THE END OF EACH WORK DAY. OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE SHALL BE BACKFILLED.
- WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RE.
- WHERE REQUIRED, THE CONTRACTOR SHALL PROVIDE TEMPORARY SOLUTIONS FOR MAINTAINING ADEQUATE DRAINAGE DURING CONSTRUCTION OPERATION.
- ACCESS TO ALL DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.
- THE PROPOSED WORK MUST BE COORDINATED WITH ANY OTHER PROJECTS THAT MAY BE UNDERWAY AT THE SAME TIME NEAR THE PROJECT AREA.

TC-2
TC-3

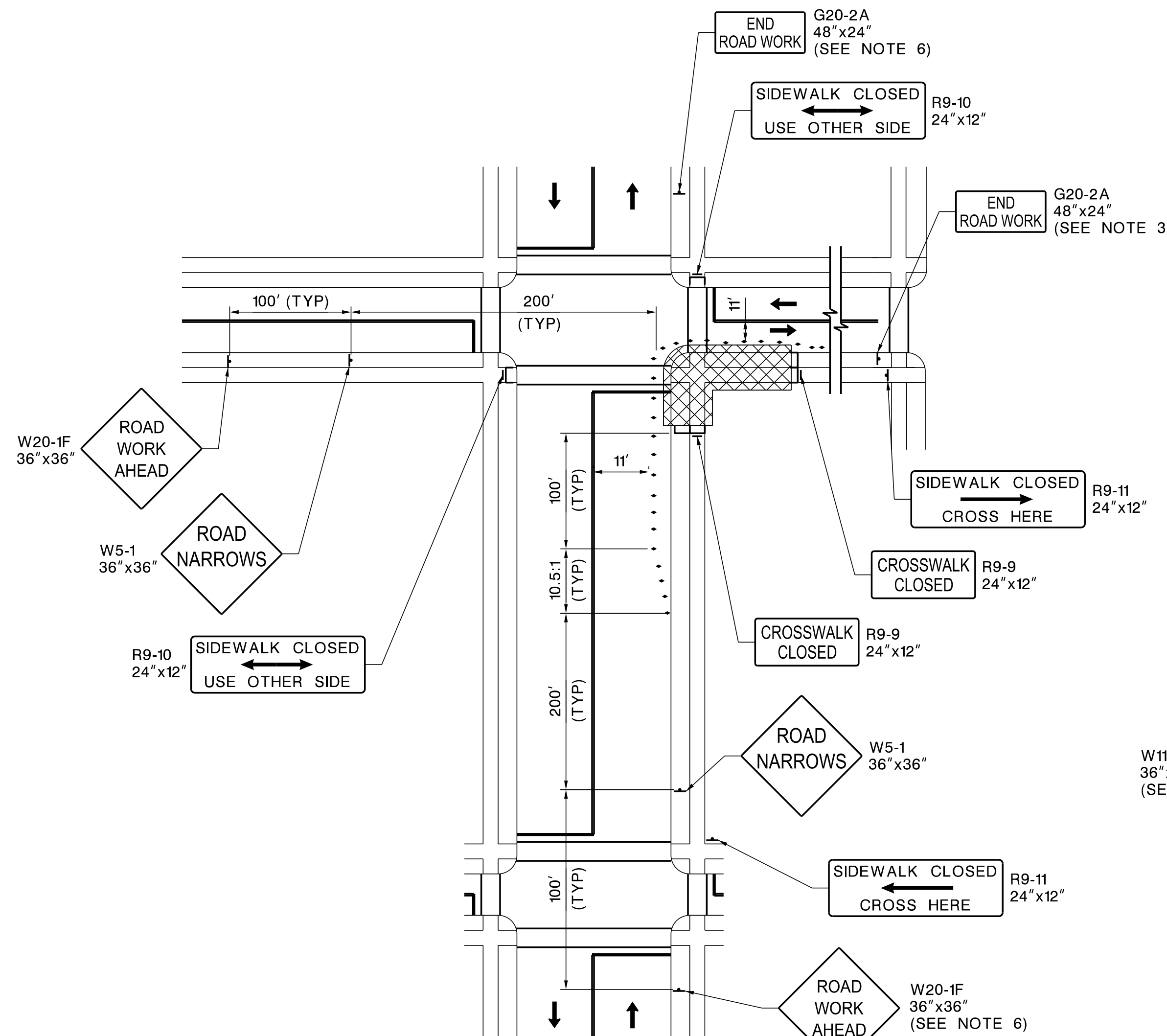
NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN

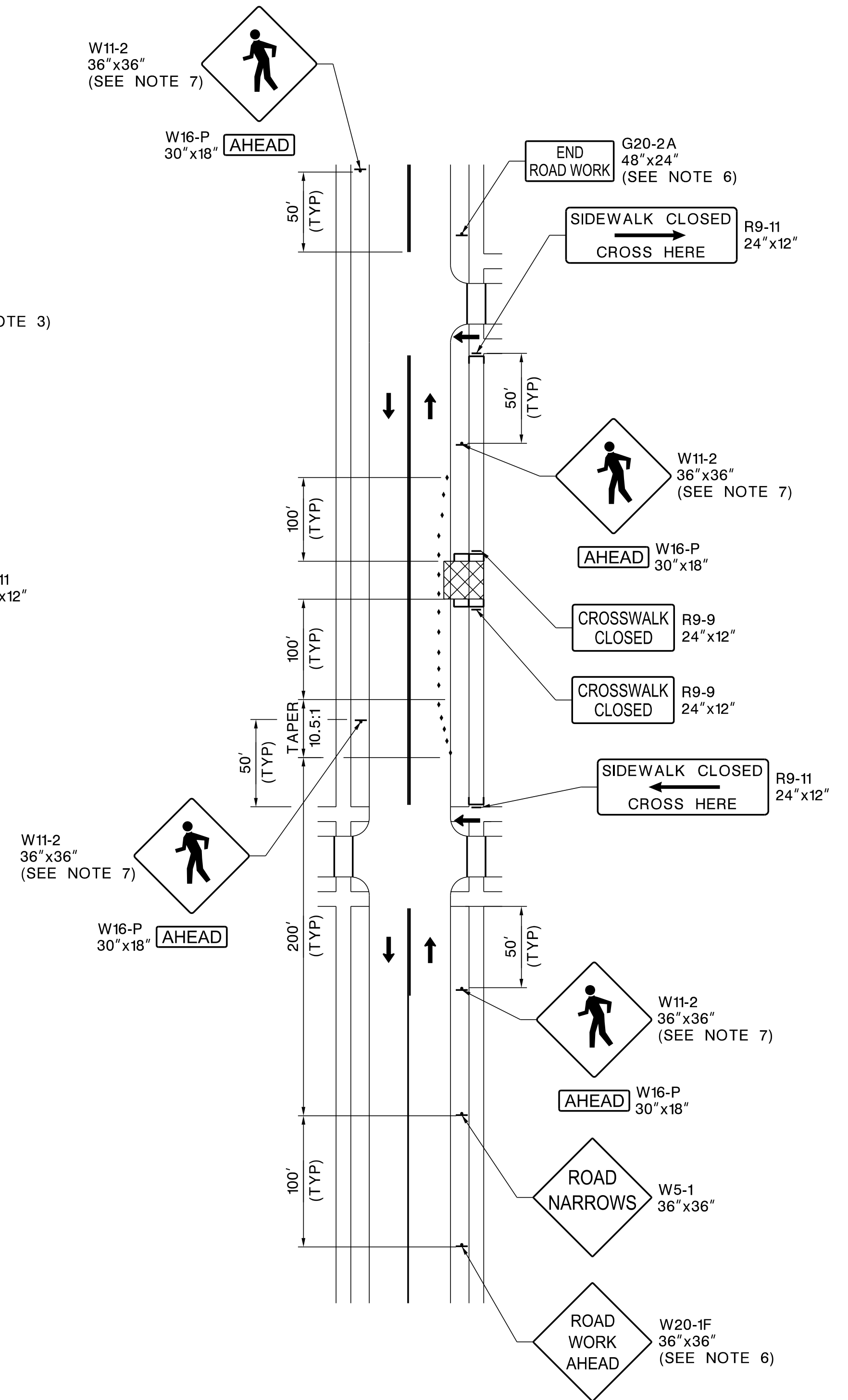
CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

IH ENGINEERS, P.C.
EDUARDO L. SZMURLO
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE04424100

1. WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
2. TYPICAL DISTANCE BETWEEN CONES IS 12'.
3. THE RECOMMENDED LANE WIDTH IN THE PROXIMITY OF THE WORK ZONE IS 11'. THE TEMPORARY LANE WIDTH MAY BE REDUCED TO 10' WITH THE RE APPROVAL.
4. BEFORE BEGINNING WORK AT ANY INTERSECTION, THE CONTRACTOR SHALL COORDINATE WITH THE BOROUGH TO IMPLEMENT TEMPORARY PARKING RESTRICTION FOR MINIMUM 300' IN ADVANCE OF THE WORK ZONE.
5. MULTIPLE WORK ZONES CAN BE SET UP ALONG THE SAME STREET ONLY IF ADEQUATE PEDESTRIAN DETOUR AND/OR SIDEWALK DIVERSION CAN BE IMPLEMENTED FOR EACH WORK ZONE.
6. INSTALL W20-1 AND G20-2A ONLY AT THE BEGINNING AND RESPECTIVELY AT THE END OF THE CORRIDOR, IF MORE THAN ONE INTERSECTION IS IMPROVED ALONG THE SAME STREET.
7. IF THE APPROACH IS STOP CONTROLLED INSTALLATION OF W11-2/W16-9P IS OPTIONAL.



TYPICAL CROSSWALK CLOSURE – PEDESTRIAN DETOURS
AND TRAFFIC CONTROL
NOT TO SCALE



TYPICAL SIDEWALK DETOURS AND TRAFFIC CONTROL

SIGN DESIGNATION	MESSAGE	SIZE INXIN	AREA SQFT	TOTAL	
				QUANTITY	AREA
G20-2A	END ROAD WORK	48 x 24	8	3	24
R9-9	SIDEWALK CLOSED	24 x 12	2	4	8
R9-10	SIDEWALK CLOSED (ARROWS) USE OTHER SIDE	24 x 12	2	2	4
R9-11(L)	SIDEWALK CLOSED (LEFT ARROW) CROSS HERE	24 x 12	2	2	4
R9-11(R)	SIDEWALK CLOSED (RIGHT ARROW) CROSS HERE	24 x 12	2	1	2
R9-11a(R)	SIDEWALK CLOSED AHEAD (RIGHT ARROW) CROSS HERE	24 x 18	3	1	3
W5-1	ROAD NARROWS	36 x 36	9	3	27
W11-2	PEDESTRIAN TRAFFIC	36 x 36	9	4	36
W16-9P	AHEAD	30 x 18	4.5	4	18
W20-1F	ROAD WORK AHEAD	36 x 36	9	3	27
		TOTAL		27	153

IN ADDITION TO THE QUANTITY SHOWN IN THE TABLE ABOVE, 50 SQUARE FEET OF SIGNS ARE ADDED TO THE PAY ITEM PAY ITEM 159012M CONSTRUCTION SIGNS, TO ACCOUNT FOR ANY OTHER SIGNS REQUIRED BY THE THE BOROUGH OF WHARTON AND NOT SHOWN ON THESE PLANS.

TRAFFIC CONTROL AND STAGING PLAN

CHATHAM SAFE ROUTES TO SCHOOL
LAFAYETTE AVENUE AND SPRING STREET

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