2022 ANNUAL CURB REPLACEMENT PROGRAM

CONTRACT #2022-53
TOWNSHIP OF OLD BRIDGE
MIDDLESEX COUNTY, NJ



MAYOR OWEN HENRY

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BUSINESS ADMINISTRATOR

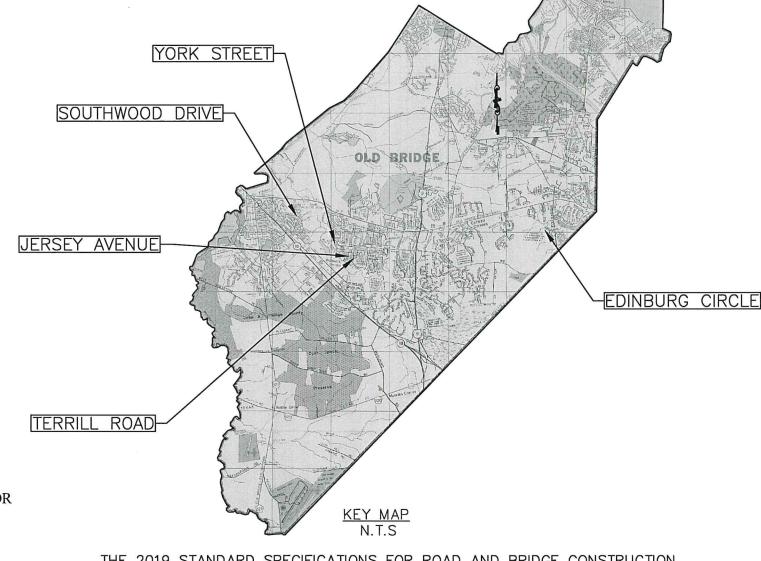
HIMANSHU S. SHAH, BUSINESS ADMINISTRATOR

TOWNSHIP ENGINEER

NICOLE S. SHAPIRO, PE, PP, CME

TOWNSHIP CLERK

KATHRYN HUTCHINSON, RMC



THE 2019 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION AS AMENDED BY THE SUPPLEMENTARY SPECIFICATIONS TO GOVERN.

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TRAFFIC CONTROL PLAN
SOIL EROSION SEDIMENT CONTROL NOTES & DETAILS

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TOWNSHIP OF OLD BRIDGE DEPARTMENT OF ENGINEERING

One Old Bridge Plaza
Old Bridge, New Jersey 08857
Tel. 732-721-5600 Fax 732-607-7978

NICOLE S. SHAPIRO
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE No. 24GE04622100

2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53

CONTRACT No: 2022-53
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COVER SHEET

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SHEET:

	2022 ANNUAL CURB REPLACEMENT PROGRAM - ESTIMATE AND DISTRIBUTION OF QUANTITIES								
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	Edinburg Circle Sidewalk Replacement at Dwelling #39 Ward 2	Jersey Avenue Whole Street Ward 5	Southwood Drive Dwelling #90, #92, #94, and #96 Ward 5	Terrill Road Part - Adams Street to Cindy Street Ward 5	York Street Part - Peter Place to Utica Avenue Ward 5	If and Where Directed
1	MAINTENANCE & PROTECTION OF TRAFFIC	L.S.	1						
	6" x 8" x 18" CONCRETE VERTICAL CURB	L.F.	4,750		1,190	203	1755	1505	97
3	GRANITE BLOCK CURB	L.F.	20			12			8
4	CONCRETE SIDEWALK, 4" THICK	S.Y.	120	23	36		45		16
5	CONCRETE SIDEWALK, REINFORCED, 6" THICK	S.Y.	60		24		12	11	13
6	CONCRETE DRIVEWAY, REINFORCED, 6" THICK	S.Y.	680		136	16	261	227	40
7	DETECTABLE WARNING SURFACE	S.Y.	4		2		2		
8	HOT MIX ASPHALT DRIVEWAY, 3" THICK	S.Y.	20			16			4
9	8" PERFORATED HIGH DENSITY POLYETHYLENE UNDERDRAIN PIPE, TYPE 'P'	L.F.	80				68		12
10	10" PERFORATED HIGH DENSITY POLYETHYLENE UNDERDRAIN PIPE, TYPE 'P'	L.F.	260	124 2			171	74	15
11	INLET, TYPE "A"	UNIT	1				1		
	SUMP PUMP PIPE CONNECTION WITH CLEANOUT ASSEMBLY	UNIT	7				6	1	
13	SUMP PUMP PIPE CONNECTION WITHOUT CLEANOUT ASSEMBLY	UNIT	2				2		
14	BICYCLE SAFE GRATE	UNIT	7		1		4	2	
15	CURB PIECE	UNIT	11		2		5	4	
16	SET INLET TYPE "B", CASTING, WITH DRIVEWAY ACCESS PLATE	UNIT	1				1		
17	RESET INLET CASTING	UNIT	1						1
18	RECONSTRUCTED INLET, TYPE "B", USING EXISTING CASTING	UNIT	1						1
19	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	10			4			6
20	HOT MIX ASPHALT 19M64 BASE COURSE	TON	370		80	9	130	110	41
21	TREE REMOVAL, OVER 18" TO 24" DIAMETER	UNIT	1						1

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2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53

ESTIMATE AND DISTRIBUTION OF QUANTITIES

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CURB

- THE CONTRACTOR SHALL NOTIFY THE OLD BRIDGE TOWNSHIP ENGINEERING AND POLICE DEPARTMENTS 72 HOURS PRIOR TO THE START OF ANY WORK.
- THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE TOWNSHIP ENGINEERING DEPARTMENT. SCHEDULING AND REVISED SCHEDULES ARE REQUIRED TO BE SUBMITTED IN WRITTEN FORM.
- THE PROJECT SHALL BE COMPLETED WITHIN 60 DAYS OF THE NOTICE TO PROCEED.
- CONSTRUCTION ACTIVITIES SHALL ONLY BE ALLOWED BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM AS PER OLD BRIDGE TOWNSHIP NOISE ORDINANCE. CONSTRUCTION IS ONLY PERMITTED MONDAY THROUGH FRIDAY. NO WORK SHALL COMMENCE ON A SATURDAY, SUNDAY, OR A HOLIDAY RECOGNIZED BY THE TOWNSHIP.
- THE CONTRACTOR SHALL MAKE PROVISIONS FOR MATERIAL AND EQUIPMENT STORAGE. THE CONTRACTOR SHALL COORDINATE THE STORAGE OF MATERIAL AND EQUIPMENT WITH THE ENGINEER AND POLICE DEPARTMENT. THE CONTRACTOR SHALL NOT PLACE EQUIPMENT, TOOLS, MATERIALS, OR OTHER CONSTRUCTION RELATED ITEMS ON PRIVATE PROPERTY. ALL COSTS FOR MATERIAL AND EQUIPMENT STORAGE SHALL BE INCLUDED IN THE VARIOUS BID ITEMS OF THIS CONTRACT.
- 6. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE M.U.T.C.D. AND MUNICIPAL TRAFFIC ORDINANCES. AT A MINIMUM, THE CONTRACTOR SHALL HAVE ALL ROAD CLOSED SIGNS WITH BARRICADES AND BARRELS AT THE PROJECT LIMITS. SEE PROJECT SPECIFICATIONS FOR ALL OTHER REQUIREMENTS OF MAINTENANCE AND PROTECTION OF TRAFFIC. THE FOLLOWING SHOULD BE NOTED BY THE CONTRACTOR:
- FLAGGERS ARE REQUIRED FOR ALL WORK LOCATED AT ROADWAY INTERSECTIONS. THE FLAGGER SHALL BE EQUIPPED WITH A STOP/SLOW PADDLE. FLAGS ARE NOT PERMITTED
- ENGINEER MAY HALT CONSTRUCTION AT ANY TIME IF THE CONTRACTOR FAILS TO PROVIDE ADEQUATE AND SAFE TEMPORARY TRAFFIC CONTROL.
- 7. LOCAL RESIDENT ACCESS AS WELL AS ACCESS FOR SCHOOL BUSES, EMERGENCY VEHICLES, GARBAGE TRUCKS, AND MAIL CARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF THEIR WORK. OLD BRIDGE TOWNSHIP WILL NOT ACCEPT OR MAKE PAYMENT FOR DAMAGED, VANDALIZED, OR POOR QUALITY WORK. ALL WORK MUST BE CONSTRUCTED AND FINISHED TO THE SATISFACTION OF THE ENGINEER.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL AREAS DAMAGED, DISTURBED, OR AFFECTED BY CONSTRUCTION. ALL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE VARIOUS BID ITEMS OF THIS CONTRACT. RESTORATION SHALL BE DONE IMMEDIATELY OR AT THE END OF THE PROJECT, AS DIRECTED BY THE ENGINEER. THIS INCLUDES BUT IS NOT LIMITED TO:
- RESETTING, RELOCATING, REPAIRING, OR REPLACING ALL CURB, PAVEMENT, MAILBOXES, LAMP POSTS, DRIVEWAYS, UTILITIES, SPRINKLERS, INVISIBLE DOG FENCES, AND ANY OTHER SURROUNDING AREAS
- RESETTING ALL MAILBOXES TO ENSURE THE FACE OF THE MAILBOX IS SIX INCHES BEHIND THE EDGE OF PAVEMENT.
- TOPSOILING, SEEDING, FERTILIZING, AND MULCHING LAWN AREAS.
- SITE RESTORATION OF ALL OTHER AREAS IN KIND.
- COORDINATING WITH PROPERTY OWNERS AS NECESSARY. 9.5.
- 10. AL MATERIALS AND CONSTRUCTION FOR THE IMPROVEMENTS SHOWN SHALL BE IN ACCORDANCE WITH THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019", AS AMENDED.

- THE CONTRACTOR SHALL REVIEW ALL SITES AND EXAMINE ALL PLAN SHEETS AND PROJECT SPECIFICATIONS PRIOR TO BIDDING, TO FAMILIARIZE THEMSELVES COMPLETELY WITH THE ACTUAL WORKING CONDITIONS, AND TO ASSURE A COMPLETE UNDERSTANDING OF ALL FACTORS TO BE CONSIDERED IN ACCOMPLISHING THE WORK AS DESCRIBED IN THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP AND ENGINEER IMMEDIATELY OF ANY ERRORS OR DISCREPANCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON THIS PROJECT. THE CONTRACTOR IS REQUIRED TO COMPLY WITH ALL PROVISIONS OF THE SOIL EROSION AND SEDIMENT CONTROL PLANS. IF NEEDED, ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE INSTALLED WHERE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL MEET WITH AN OLD BRIDGE TOWNSHIP REPRESENTATIVE FOR A PRE-CONSTRUCTION MEETING AND IN-FIELD MEETING TO MARK-OUT ALL CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION.

LEGEND (EXISTING)

★ LIGHT POLE

■ ■ INLET

STORM MANHOLE

(S) SANITARY MANHOLE

-O- HYDRANT

→ CULVERT/HEADWALL WATER VALVE (T) TELEPHONE POLE

UTILITY POLE SIGN & POST

LEGEND (PROPOSED):

MILLING

CONCRETE DRIVEWAY, REINFORCED, 6" THICK

BASE REPAIR

CONCRETE SIDEWALK, REINFORCED, 6" THICK

CONCRETE SIDEWALK, 4" THICK

☑ HMA DRIVEWAY, 3" THICK

INLET

SIGN & POST

SURVEY NOTES:

EXISTING ROADS, CURBING, SEWERS, DRIVEWAYS, SIDEWALK, AND OTHER EXISTING SITE FEATURES WERE TAKEN FROM TOWNSHIP AERIAL IMAGES, TOPOGRAPHICAL MAPS, TAX MAPS, AND FIELD INSPECTIONS. NOT ALL EXISTING SITE FEATURES ARE SHOWN. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS IN THE EVENT OF A DISCREPANCY AT NO ADDITIONAL COST TO THE TOWNSHIP.

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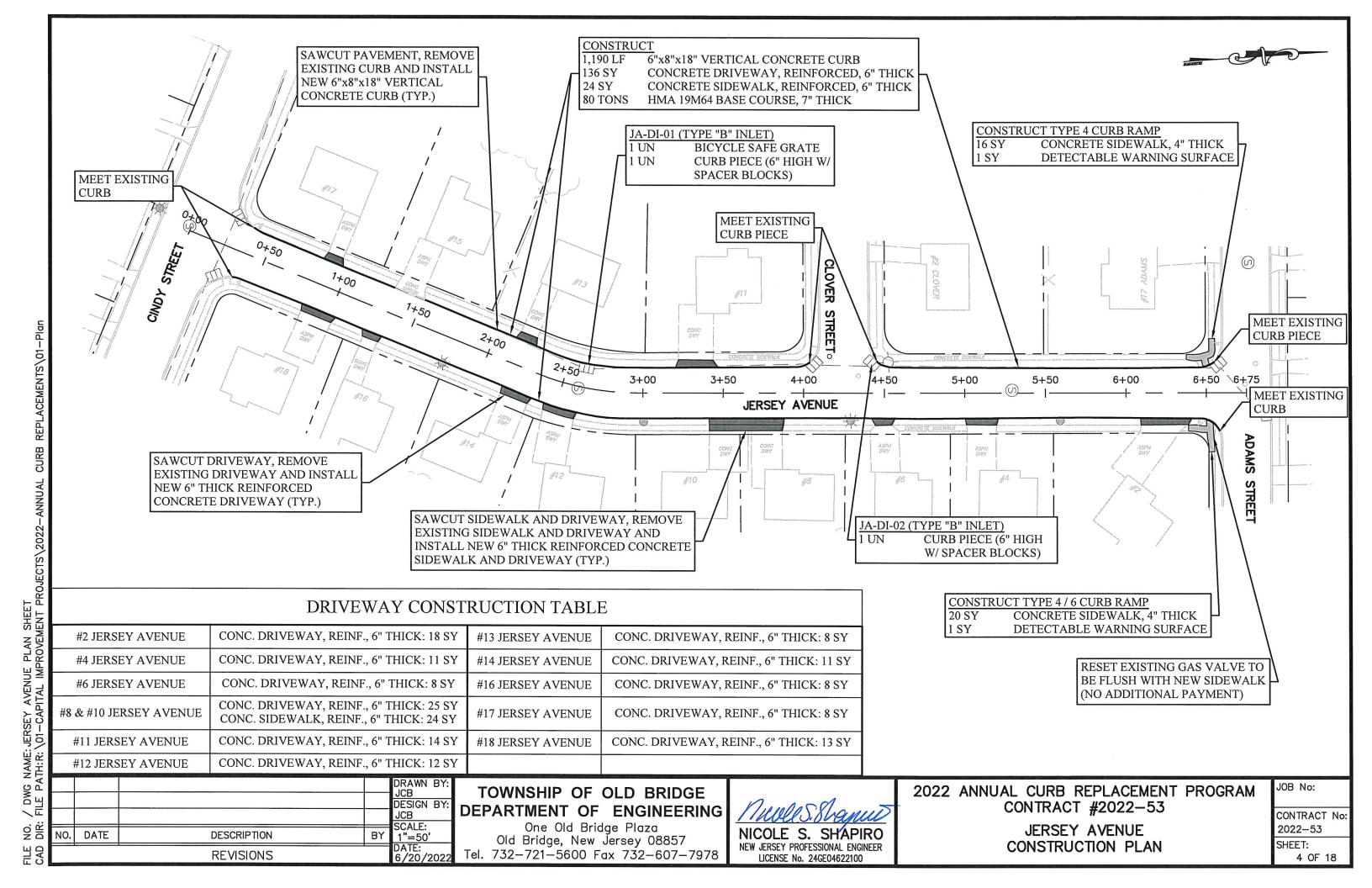
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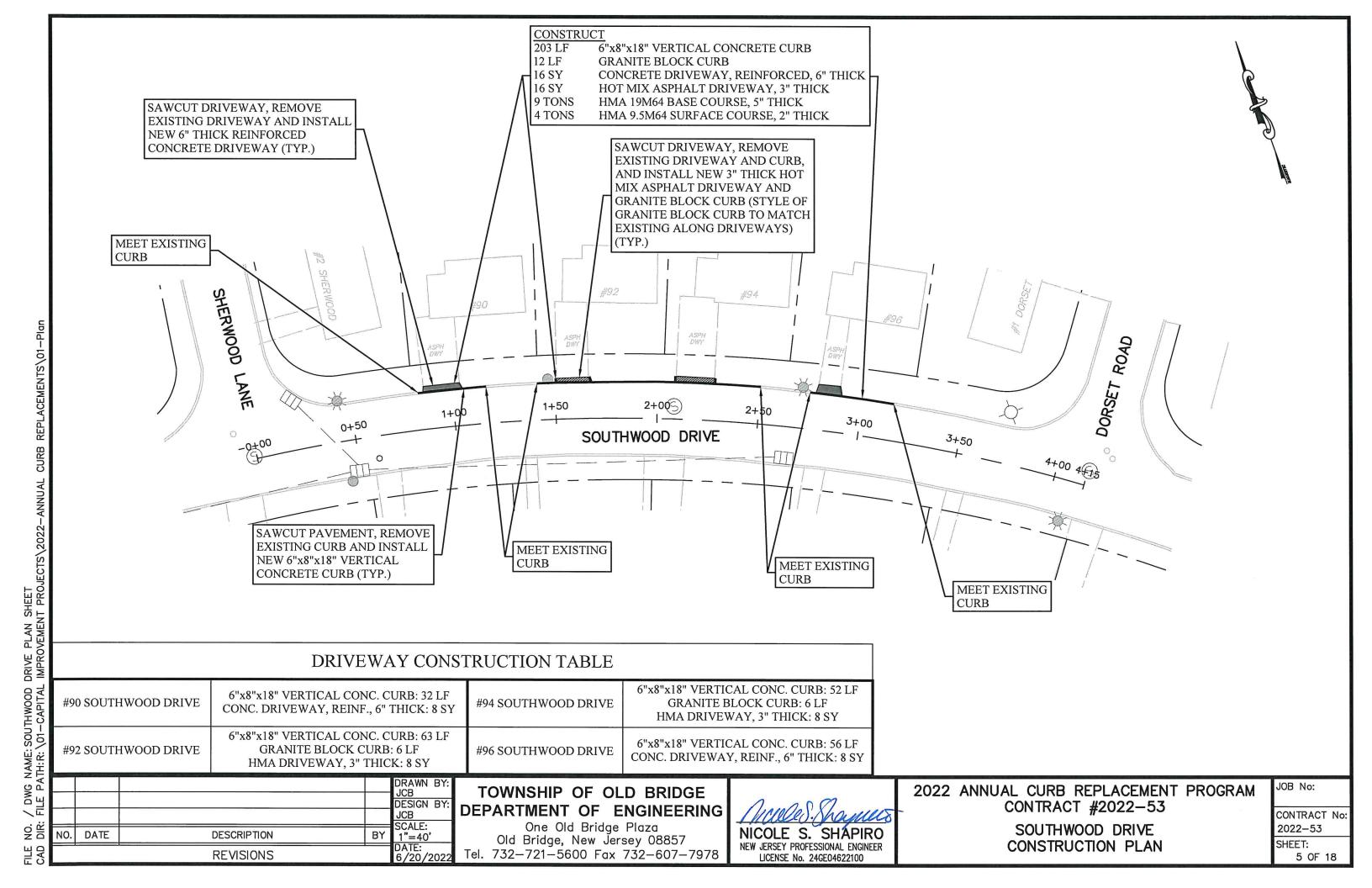
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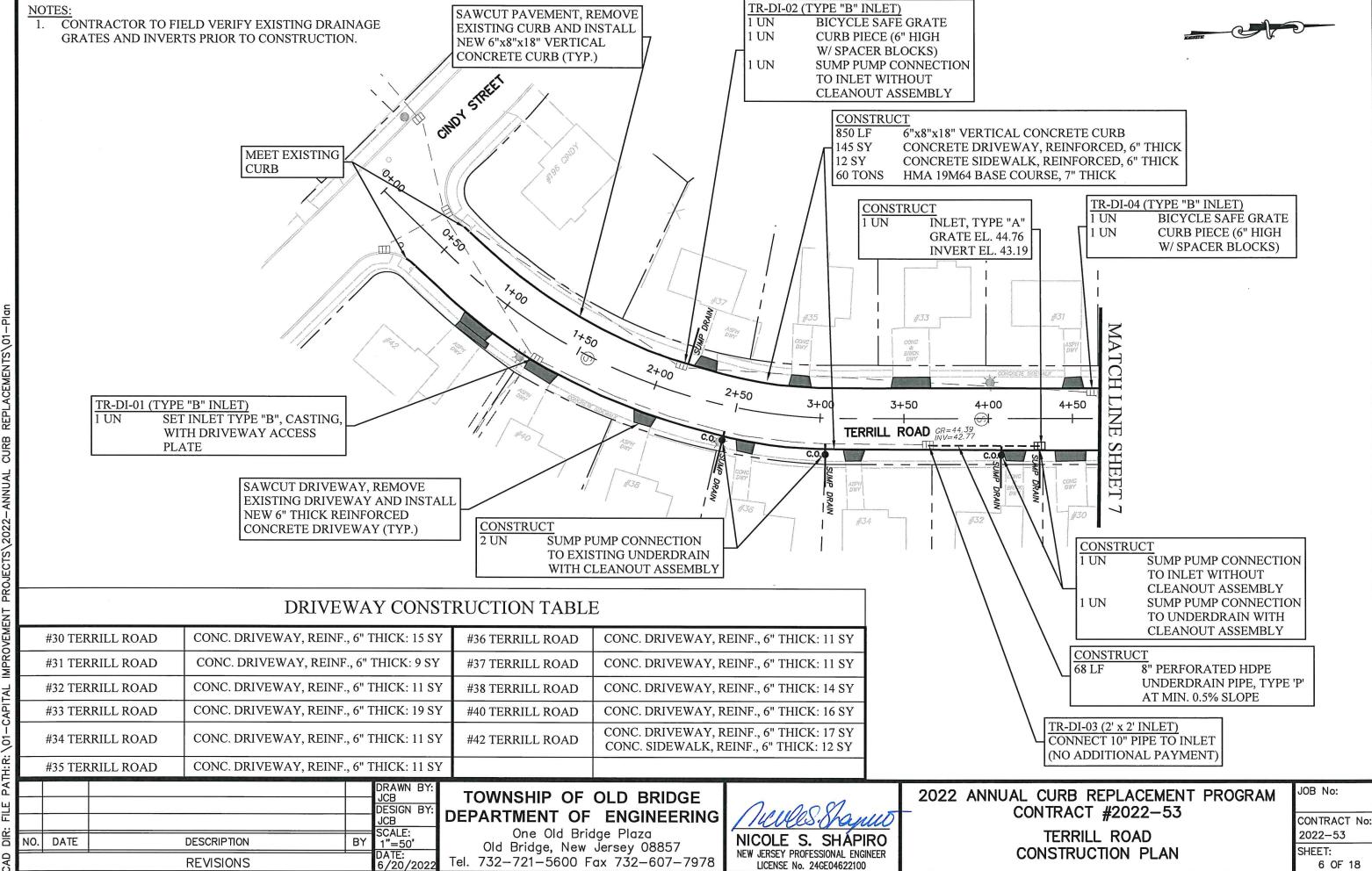
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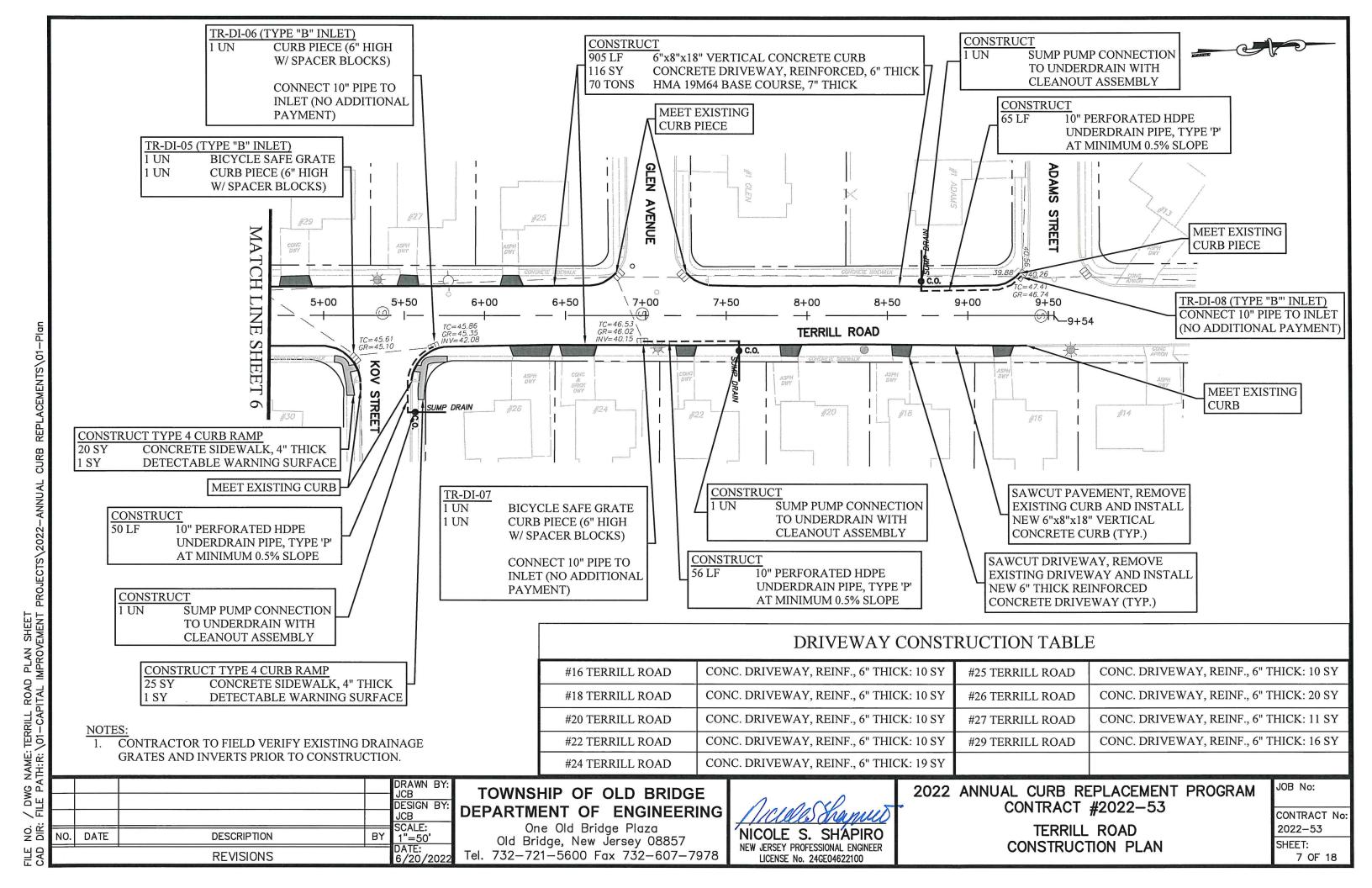


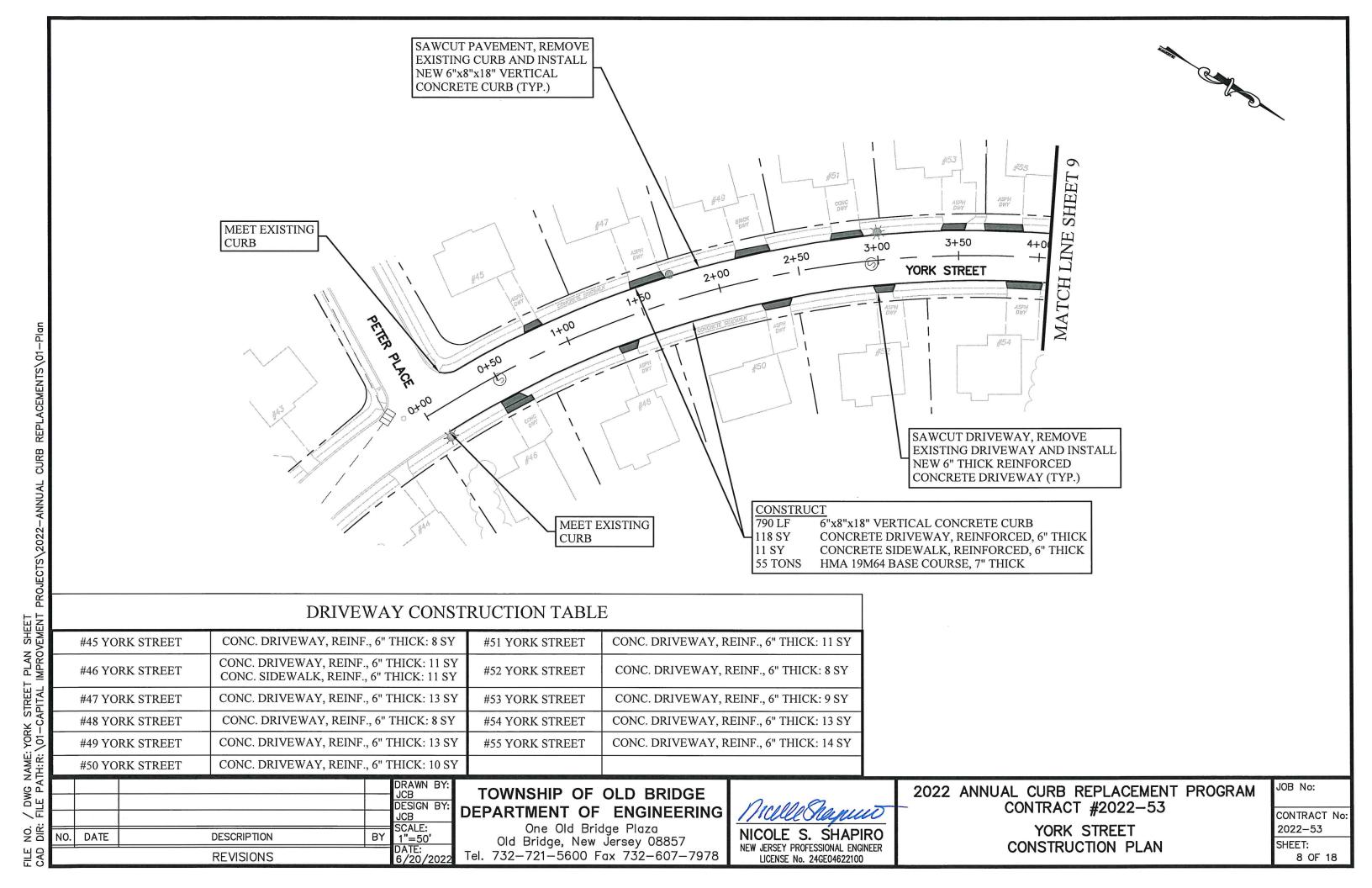


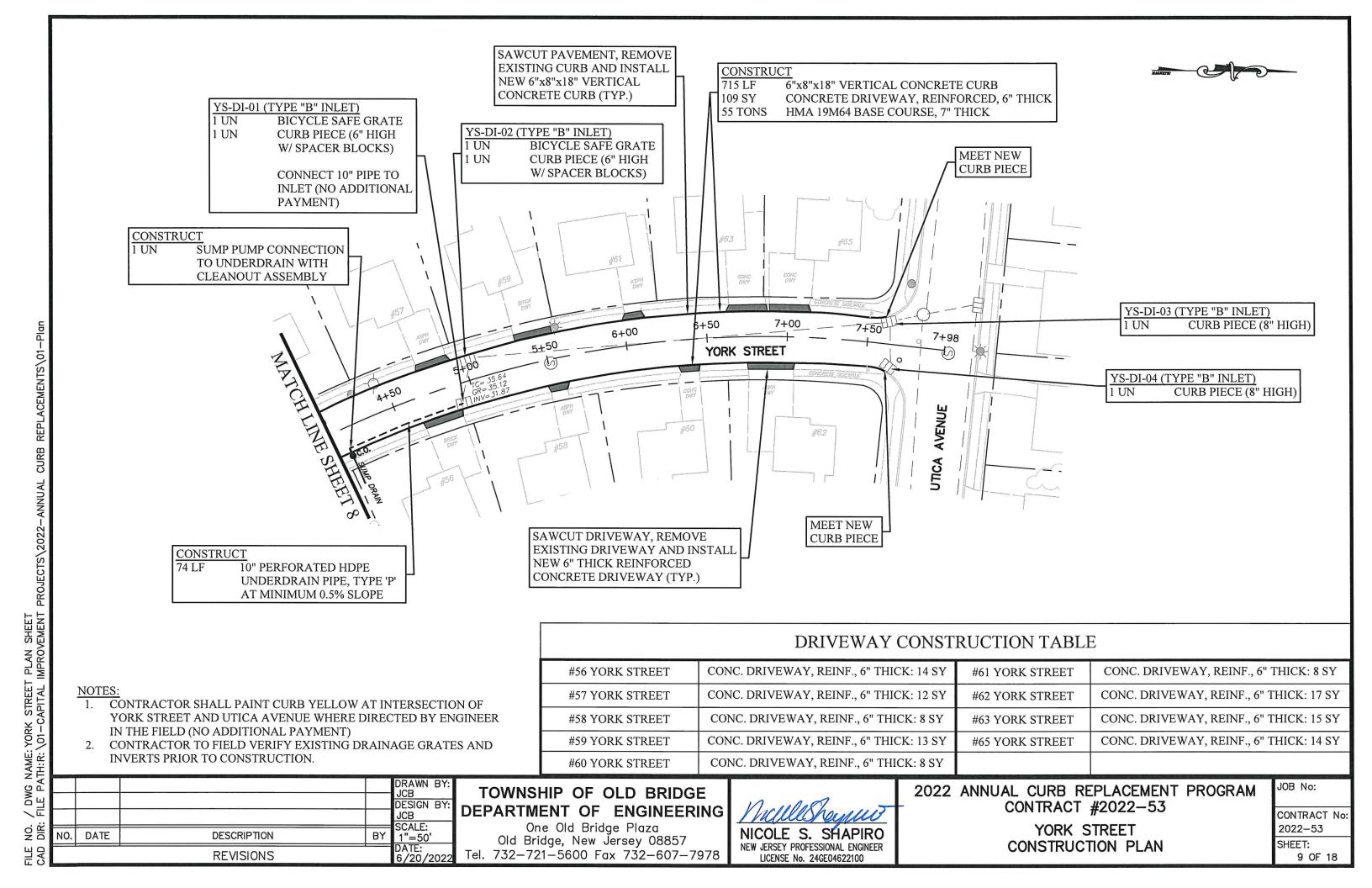


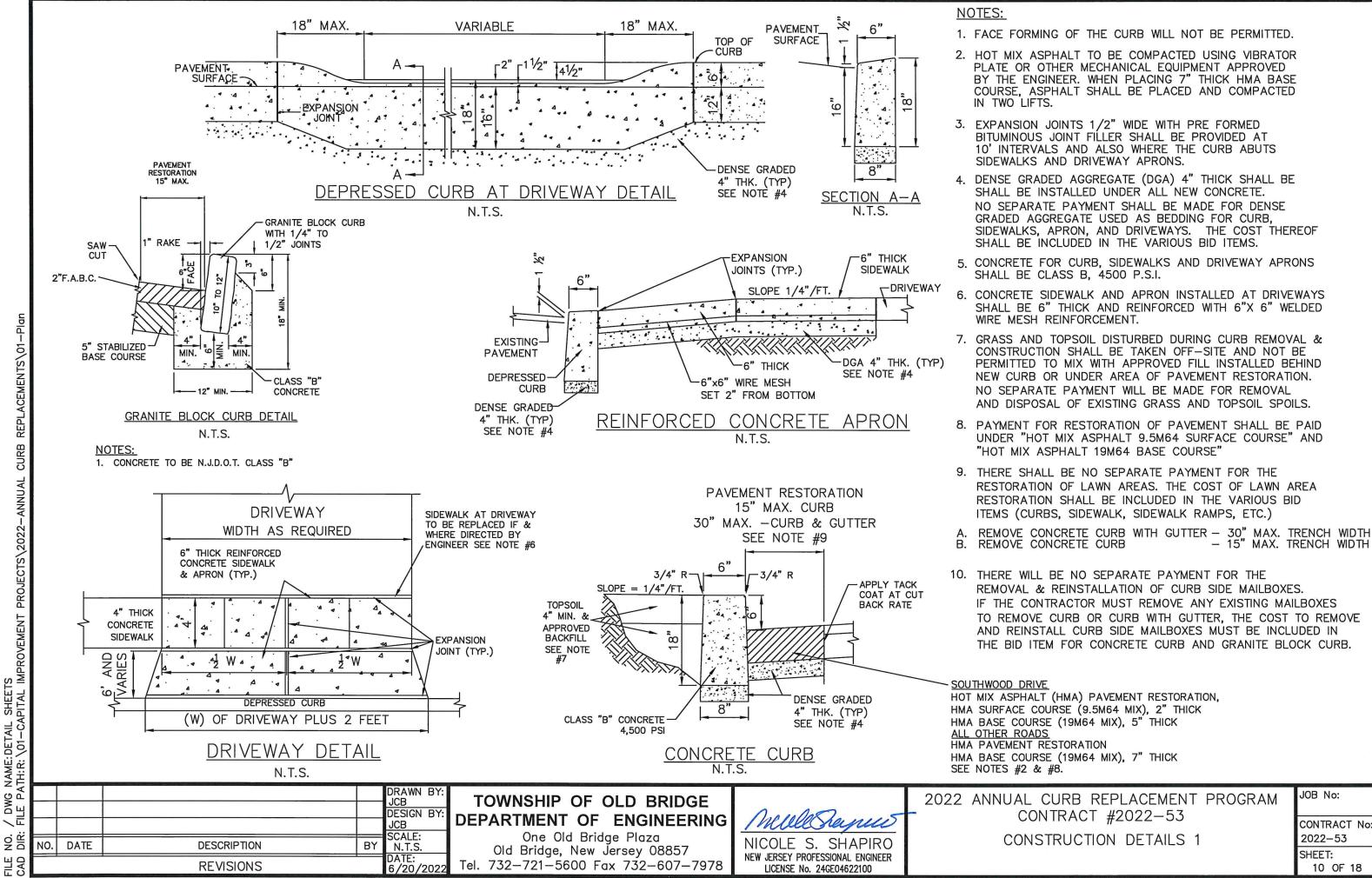
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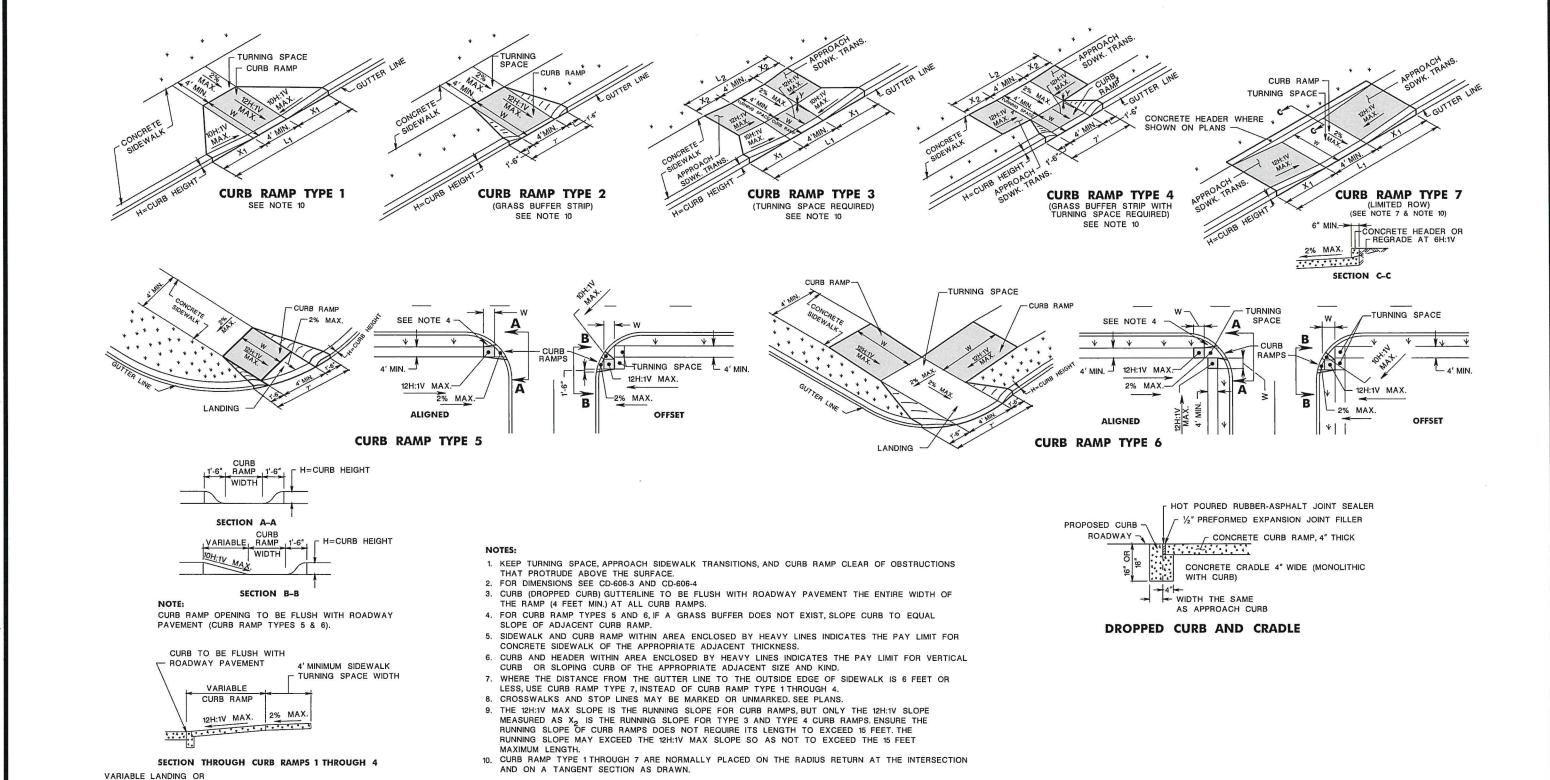
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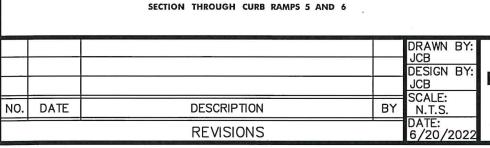












2% MAX.

VARIABLE CURB RAME 12H:1V MAX.

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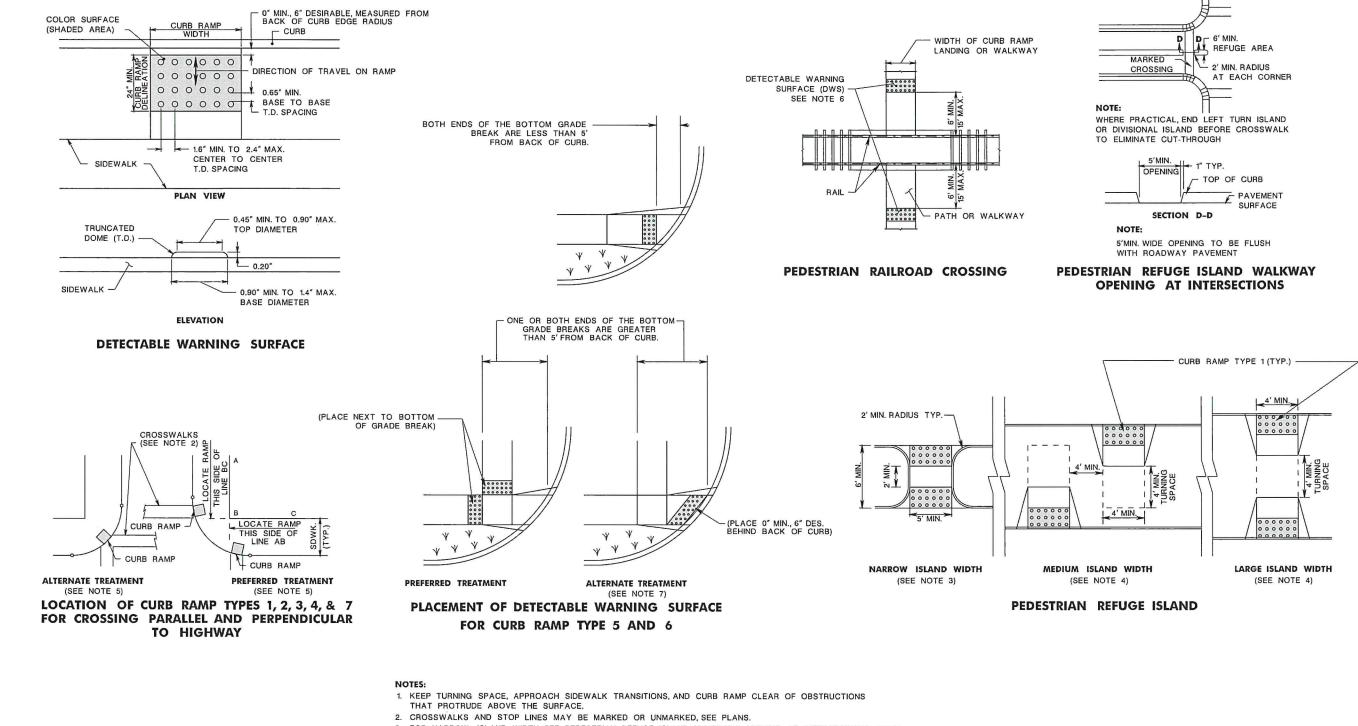
NICOLE S. SHAPIRO **NEW JERSEY PROFESSIONAL ENGINEER** LICENSE No. 24GE04622100

2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53 CONSTRUCTION DETAILS 2

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- 3. FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
- 4. FOR MEDIUM AND LARGE ISLAND WIDTH, SEE CURB RAMP TYPE 1 ON CD-606-1.
- 5. CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4, & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
- 6. IF A CURB RAMP IS REQUIRED, THE LOCATION OF THE DETECTABLE WARNING SURFACE MUST BE AT THE BOTTOM OF THE RAMP AND WITHIN THE REQUIRED DISTANCE FROM THE RAIL.
- 7. A STANDARD DETECTABLE WARNING (DWS) SURFACE IS NOT AVAILABLE TO FIT THIS APPLICATION, AND THEREFORE ONE WILL NEED TO BE CUSTOMIZED. THE DWS SHOULD COVER THE ENTIRE WIDTH OF THE RAMP. THE ROWS OF DOMES ON THE DWS SHOULD FOLLOW THE DIRECTION OF TRAVEL OF THE RAMP, SO PEDESTRIANS WHO USE MOBILE DEVICES CAN TRACK BETWEEN THE DOMES.

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2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53

CONSTRUCTION DETAILS 3

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CURB

HMA DRIVEWAY REPAIR DETAIL

N.T.S.

NOTE:

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FILE

 NO SEPARATE PAYMENT SHALL BE MADE FOR DENSE GRADED AGGREGATE INSTALLED UNDER HMA DRIVEWAYS. THE COST THEREOF SHALL BE INCLUDED IN THE COST FOR HMA DRIVEWAY.

REMOVE AND REPLACE 6" OR 8" CURB PIECE WITH CAMPBELL

TYPE "N-ECO" #2618 OR APPROVED EQUAL
(INCLUDES SPACER BLOCKS WHERE REQUIRED)

REMOVE AND REPLACE GRATE
WITH CAMPBELL BICYCLE SAFE
GRATE #2617 OR APPROVED
EQUAL.

PAVEMENT
OR GRADE

EXISTING
CURB

STORM SEWER TYPE "B" INLET

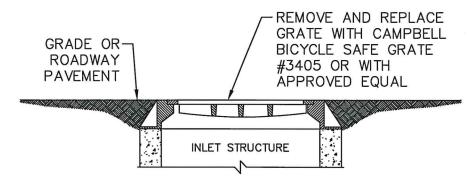
CURB PIECE AND GRATE RETROFIT DETAIL

& RESET INLET FRAME USING MORTAR & BLOCK

N.T.S.

NOTE: 1. CURB PIECE RETROFIT MAY REQUIRE SPACER BLOCKS WHEN REPLACING AN 8" OR LARGER CURB PIECE WITH ECO-STYLE. CURB PIECE REPLACEMENT WILL INCLUDE THE COST OF ANY REQUIRED SPACER BLOCKS.

-RESET INLET FRAME USING MORTAR AND BLOCKS TO PROVIDE 6" CURB FACE IF AND WHERE DIRECTED.



STORM SEWER TYPE "A" INLET GRATE RETROFIT DETAIL N.T.S.

EXISTING CURB

EXISTING

PAVEMENT

CONCRETE SIDEWALK 4" THICK

4' SIDEWALK

1/4" PER FT.

1/4" PER FT.

4" TOPSOIL

(TYP)

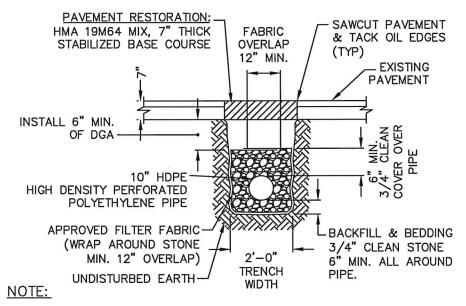
4" THICK, DGA

4,500 PSI, CLASS "B"

NOTE:

EXPANSION JOINTS FOR SIDEWALK SHALL BE PROVIDED AT TWENTY (20) FEET INTERVALS AND WHERE THE NEW CONCRETE ABUTS EXISTING CONCRETE IT SHALL BE FILLED WITH PRE FORMED BITUMINOUS CELLULAR TYPE JOINT FILLER, 1/2" THICK. OPEN JOINTS AND EXPANSION MATERIAL SHALL BE FULL DEPTH AND WIDTH OF SIDEWALK.

SIDEWALK DETAIL N.T.S.



- COMPACT BOTTOM OF PIPE TRENCH BEFORE THE INSTALLATION OF UNDERDRAIN PIPE.
- 2. THE PAY ITEM FOR UNDERDRAIN PIPE SHALL INCLUDE ALL EXCAVATION, STONE BACKFILL, PIPE, ADAPTORS, FABRIC TACK OIL CONNECTION TO INLET AND ALL WORK NECESSARY FOR THE PROPER INSTALLATION OF THE UNDERDRAIN. PAVEMENT RESTORATION SHALL BE PAID UNDER "HOT MIX ASPHALT 9.5M64 SURFACE COURSE" AND "HOT MIX ASPHALT 19M64 BASE COURSE" AS APPLICABLE.

UNDERDRAIN TYPE "P"
(IN PAVED AREAS)
N.T.S.

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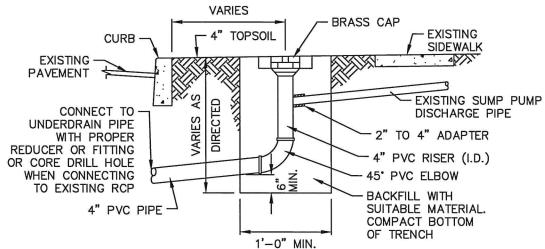
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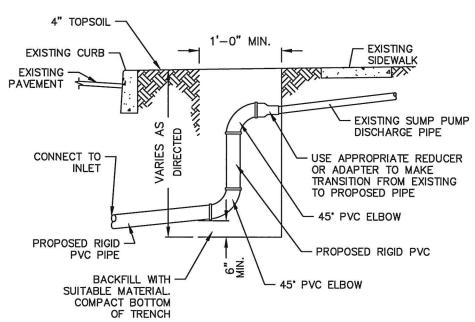
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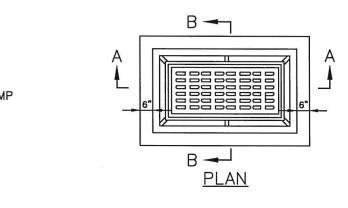
SUMP PUMP PIPE CONNECTION WITH CLEAN OUT

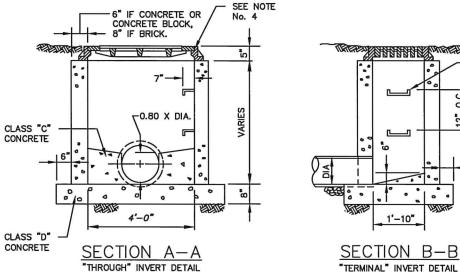


NOTE:

- ALL CONNECTIONS MUST BE SEALED, SLEEVING OF LARGER DIAMETER PIPES WILL BE CONSIDER AN INAPPROPRIATE CONNECTION AND NOT ACCEPTED.
- DURING THE COURSE OF CONSTRUCTION, THE ENGINEER MAY DIRECT THE CONTRACTOR TO INCREASE OR REDUCE THE NUMBER OF SUMP PUMP CONNECTIONS FROM THAT WHICH IS LISTED IN THE BID SCHEDULE.

SUMP PUMP PIPE CONNECTION WITHOUT CLEAN OUT N.T.S.



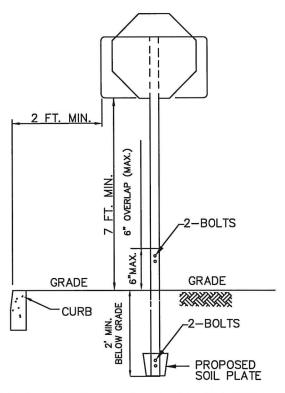




GENERAL NOTES:

- FOOTING TO BE N.J.D.O.T. CLASS "B" CONC. (4500 PSI MIN.)
- IF WALL CONSTRUCTION IS OTHER THAN CONCRETE THE OUTSIDE WALL SHALL BE PLASTERED WITH 1/2* THICK CEMENT PLASTER
- FRAME AND GRATE TO BE NO. 2617 AS MANUFACTURED BY CAMPBELL FOUNDRY Co., OR EQUAL.
- PROVIDE 7/8" DIA. ALUMINUM LADDER RUNGS, 12" O.C.
- ALL STORM SEWER PIPE SHALL HAVE A 6" STONE BEDDING TO 1/2 DIAMETER OF PIPE.

- INLETS 0' TO 8' DEEP SHALL BE SINGLE WALL CONSTRUCTION (6"). INLETS 8' TO 12' DEEP SHALL BE DOUBLE WALL CONSTRUCTION (12").
- 7. ALL GRATES TO BE "BICYCLE SAFE"
- HEADPIECE AND GRATE TO BE STAMPED WITH "DRAINS TO WATERWAYS" OR APPROVED EQUAL.
- 9. ALL CASTINGS TO BE MANUFACTURED IN AMERICA. (I.E.— MADE IN U.S.A)
- 10. REMOVED CASTINGS AND GRATES ARE THE PROPERTY OF OLD BRIDGE TOWNSHIP, AND WILL BE TRANSPORTED TO AND STACKED AT THE OLD BRIDGE TOWNSHIP PUBLIC WORKS YARD BY THE CONTRACTOR. COST TO BE INCLUDED IN THE BID ITEM FOR CURB PIECE AND BICYCLE SAFE GRATE.

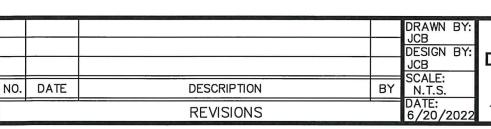


BREAK AWAY SIGN POST WITH SOIL PLATE 30" X 30" OR SMALLER N.T.S.

NOTES:

LADDER RUNGS

ANY POLE MOUNTED SIGNS THAT ARE REMOVED FROM THE GROUND DURING THE COURSE OF CONSTRUCTION MUST BE RETROFITTED WITH A "BREAK AWAY" DESIGN POLE AND FITTED WITH A SOIL PLATE.



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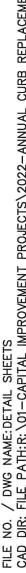


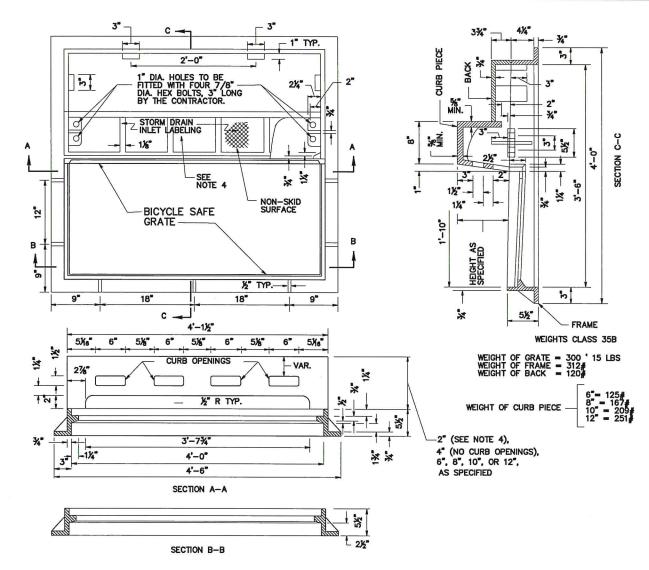
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CONSTRUCTION DETAILS 5

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NOTES

- 1. DIMENSIONS, WEIGHTS AND OTHER CRITERIA SHOWN ON THESE DETAILS ARE FOR CLASS 30B CAST IRON ONLY
- THE CLEAR SPACE IN THE CURB OPENING OR EACH INDIVIDUAL CLEAR SPACE, IF THE CURB OPENING HAS TWO OR MORE CLEAR SPACES, MUST HAVE AN AREA OF NO MORE THAN SEVEN (7.0) SQUARE INCHES, OR BE NO GREATER THAN TWO (2.0) INCHES ACROSS THE SMALLEST DIMENSION.
- 3. STORM DRAIN INLET LABEL TO READ "NO DUMPING, DRAINS TO WATERWAYS" OR OTHERWISE APPROVED BY THE RE. INCLUDE FISH LOGOS ON BOTH SIDES OF THE LABEL
- 4. FOR 2" CURB PIECE, USE DRIVEWAY ACCESS PLATE (SEE DETAIL)
- TYPE "B" INLET CASTING TO BE CAMPBELL FOUNDRY NO. 2618 OR APPROVED EQUAL TYPE "E" INLET CASTING TO BE CAMPBELL FOUNDRY NO. 3425.
- 6. INLET CURB PIECE TO BE OF TYPE NOTED ON PLAN, CAMPBELL FOUNDRY, OR APPROVED EQUAL:
 6.1 NON-MOUNTABLE: TYPE "N" (HEIGHT AS NOTED)
 6.2 MOUNTABLE: TYPE "4-7-9"
 6.3 DRIVEWAY ACCESS PLATE

TYPE "B" INLET CASTING DETAIL N.T.S.

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PIRO NGINEER

SECTION A-A 21%" 47¾" FRONT ELEVATION PLAN 201/16" -174" SECTION B-B WEIGHT OF PLATE = 300 LBS SECTION C-C FRONT ELEVATION

DRIVEWAY ACCESS PLATE FOR INLET TYPE "B" CASTING N.T.S.

NOTES:

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P222222

HOLE

- 1. USE DRIVEWAY ACCESS PLATE ON TYPE B INLET WHERE CURB PIECE HEIGHT OF 2 INCHES IS REQUIRED AT DRIVEWAYS, AT GUIDE RAIL TERMINALS, OR AS NOTED ON THE PLANS.
- 2. THE NEW INLET TYPE B CASTING WILL BE FITTED WITH DRIVEWAY ACCESS PLATE IN LIEU OF CURB PIECE. PAYMENT WILL BE MADE UNDER EITHER "SET INLET TYPE B, CASTING".
- 3. SEE INLET TYPE B CASTING DETAIL OR INLET TYPE C CASTING DETAIL
- 4. CONTRACTOR SHALL SUBMIT SHOP DRAWING OR SUBMITTAL FOR REVIEW PRIOR TO PURCHASE BY THE CONTRACTOR,

2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53

CONSTRUCTION DETAILS 6

CONTRACT No 2022-53

JOB No:

- DRIVEWAY ACCESS PLATE

2022-53 SHEET: 15 OF 18

DETAIL SHEETS \\ \01-CAPITAL IMPROVEMENT

WG NAME:

END DETOUR M4 - 8a [24" x 18"] (3 S.F.)

M4 - 11 (S) [48" x 36"] (12 S.F.)

SPEED

LIMIT

R2 - 1 [36" x 48"]

(12 S.F.)

R2 - 1 (S) [48" x 60"]

(20 S.F.)

DO

NOT

PASS

R4 - 1 [24" x 30"]

(5 S.F.)

ROAD

CLOSED

R11 - 2 [48" x 30"]

(10 S.F.)

ROAD CLOSED

_MILES AHEAD

LOCAL TRAFFIC ONLY

R11 - 3 [60" x 30"]

(12.5 S.F.)

ROAD CLOSED

TO

THRU TRAFFIC

R11 - 4 [60" x 30"]

(12.5 S.F.)

(L OR R) W1 - 4a [48" x 48"] (16 S.F.)

(L OR R)

W1- 6 [48" x 24"]

(8 S.F.)

W1 - 6 (S) [60" x 30"]

(12.5 S.F.)

(L OR R)

W4 - 2 [48" x 48"]

(16 S.F.)

ROAD

NARROWS

W5 - 1(S) [48" x 48"]



W13 - 1 [18" x 18"] (2.3 S.F.) W20 - 7a [48" x 48"]



W20 - 1A [48" x 48"] (16 S.F.)

DETOUR

W20 - 2 [48" x 48"]

(16 S.F.)

ROAD

CLOSED

W20 - 3 [48" x 48"]

(16 S.F.)



W21 - 5 (S) [48" x 48"]



GROOVED

PAVEMENT

AHEAD

BUMP

W8 -1 (S) [48" x 48"]

(16 S.F.)

M4 - 9N [30" x 12" MIN.]

(2.5 S.F.) (SIZE WILL VARY WITH LENGTH OF STREET NAME)

STREET NAME SIGN TO BE USED IN CONJUNCTION WITH M4 - 9 SIGNS BLACK ON ORANGE

KEEP

RIGHT

[24" x 24"]

(4 S.F.)

[30" x 30"] (S)

(6.3 S.F.)

KEEP

LEFT

[24" x 24"] (4 S.F.)

[30" x 30"] (S)

(6.3 S.F.)



W8 - 15P [36" x 30"] (7.5 S.F.)

W8 - 15F [48" x 48"]

(16 S.F.)



W8 - 15 [48" x 48"] (16 S.F.)



W99 - 2 [48" x 48"] (16 S.F.)

THE BORDER, THE WORDS "GIVE US A", "SLOW DOWN!", AND THE BRAKE PEDAL ARE BLACK; LEAVING THE WORD "BRAKE" ORANGE.

GENERAL NOTES:

- DIMENSIONS, COLORS, AND DETAILS OF VARIOUS SIZE SIGNS AND ACCESSORY PANELS TO FOLLOW STANDARDS IN THE CURRENT "STANDARD HIGHWAY SIGN PUBLICATION" AND THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- (S) REPRESENTS A SPECIAL SIZE SIGN.
- LETTERS AND NUMERALS TO CONFORM TO THE CURRENT MANUAL, "STANDARD ALPHABETS FOR HIGHWAY SIGNS" U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
- OBTAIN RE'S APPROVAL FOR THE DISTANCE TO BE USED ON THE ADVANCE WARNING SIGNS AND FOR THE SPEED LIMIT TO BE USED ON THE R2-1 SIGN.
- DISTANCE LEGEND: SIGN NUMBER FOLLOWED BY A LETTER AND DISTANCE, ARE THE SIGN PLACEMENTS FOR USE WITH TCD-3 THROUGH TCD-21 AND PROJECT SPECIFIC PLANS. ALL DISTANCES ARE FROM THE TRANSITION OR POINT OF RESTRICTION.



BACKING MATERIAL

- USE ALUMINUM FLAT SHEET OF ALLOY AND TEMPER 5052-H38 OR 6061-T6 :
- A. 0.10" THICK FOR ALL CONSTRUCTION SIGNS EXCEPT SIGNS SHOWN MOUNTED ON BREAKAWAY BARRICADES.
- B. 0.024" THICK FOR ALL CONSTRUCTION SIGNS SHOWN MOUNTED ON BREAKAWAY BARRICADES.

TEMPORARY SIGN SUPPORTS

- USE WELL SEASONED LUMBER FOR SIGN SUPPORTS, FREE OF SPLITS, KNOTS AND WARPS, OR OF STEEL COMPONENTS.
- WOOD POSTS TO HAVE A UNIFORM CROSS-SECTION AND NOT TO EXCEED THE FOLLOWING DIMENSIONS FOR:

SINGLE POST = $4" \times 6"$ TWO POSTS = 3" x 6" OR 4" x 5" THREE POSTS = 3" x 5" OR 4" x 4"

4" X 6" WOOD POSTS TO BE MODIFIED BY DRILLING 11/2 INCH DIAMETER HOLES 4 INCHES AND 18 INCHES ABOVE THE GROUND LINE AND PERPENDICULAR TO THE ROADWAY CENTERLINE.

- NO BRACING IS PERMITTED. VERTICAL CLEARANCES FOR SIGNS MOUNTED ON WOOD SUPPORTS TO BE 7 FOOT MINIMUM. EMBEDMENT DEPTH FOR THE WOOD POST NOT TO EXCEED 3.5 FEET.
- USE STEEL POSTS IN ACCORDANCE WITH THE STANDARD DETAIL FOR U-POST SIGN SUPPORT.
- TEMPORARY SIGN SUPPORTS NOT MEETING THIS CRITERIA TO BE SHIELDED BY A LONGITUDINAL BARRIER OR CRASH CUSHIONS.
- USE WOOD POST ONLY ON TEMPORARY SIGN SUPPORT

SIGN FACES

USE SIGN FACES OF ASTM D4956 TYPE VII OR VIII FLUORESCENT ORANGE SHEETING.

SECURELY FASTEN ALL SIGNS TO THEIR SUPPORTS WITH BOLTS, NUTS, AND WASHERS, AS SPECIFIED.



W6 - 3 [48" x 48"] (16 S.F.)

BE

PREPARED

TO STOP

W20 - 7b [48" x 48"]

(16 S.F.)



W20 - 4 [48" x 48"] (16 S.F.)



(L OR R) (CENTER) W20 - 5 [48" x 48"] (16 S.F.)

DESIGN BY JCB SCALE: NO. DATE DESCRIPTION BY N.T.S. DATE: REVISIONS 6/20/202

(6 S.F.)

TOWNSHIP OF OLD BRIDGE DEPARTMENT OF ENGINEERING

One Old Bridge Plaza Old Bridge, New Jersey 08857 Tel. 732-721-5600 Fax 732-607-7978



NOTE:

2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53 CONSTRUCTION DETAILS 7

CONTRACT No 2022-53

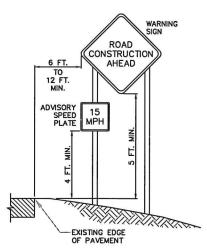
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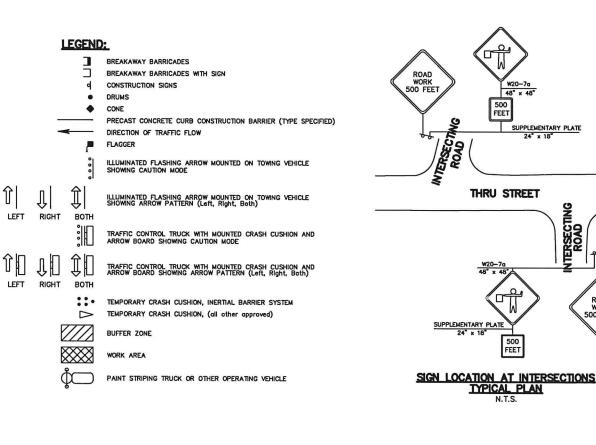
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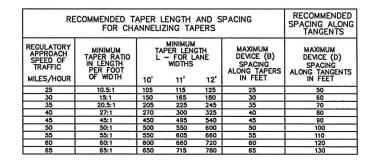
GENERAL NOTES:

- ALL CONSTRUCTION SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AS AMENDED.
- ADVANCE WARNING SIGNS AND TAPERS SHALL EXTENDED AS SIGHT DISTANCES REQUIRE TO ADJUST FOR REDUCED VISIBILITY DUE TO THE HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
- CONSTRUCTION SIGNS W8-9A AND W8-14A SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE DONE AS DIRECTED BY THE ENGINEER.
- CONSTRUCTION SIGNS R11-4 SHALL BE PLACED AT THE FIRST INTERSECTING STREET FROM THE CONSTRUCTION SITE AT THE TIME OF CONSTRUCTION ON THE SIDE STREETS.
- 5. 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE, THERE SHALL BE WI-6 MOUNTED ON A BREAKAWAY BARRICADE CENTERED ON THE CLOSED WIDTH.
- CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
- TRAFFIC FINES DOUBLED IN WORK AREA R(NJ)5-17 SIGN SHALL BE LOCATED 500 FEET AFTER FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA.
- 8. CONSTRUCTION ZONE SPEED LIMIT SHALL BE DETERMINED BY THE REGIONAL TRAFFIC ENGINEER AT THE TIME OF CONSTRUCTION.
- THE SPEED LIMIT R2-1 (BLACK ON WHITE) OR W13-1 (BLACK ON ORANGE) SIGN SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE REGIONAL TRAFFIC ENGINEER.
- 10. A REDUCED SPEED AHEAD SIGN, R2—Sa(S) (BLACK ON WHITE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2—1 OR W13—1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
- 11. POLICE OR TRAFFIC DIRECTORS SHALL BE USED TO ASSIST IN CONTROLLING TRAFFIC
- 12. CONES MAY BE SUBSTITUTED FOR DRUMS UPON APPROVAL OF THE ENGINEER.
- THE MINIMUM UNOBSTRUCTED LANE WIDTH SHALL BE 11 FEET. LANE WIDTH IS DEFINED AS THE WIDTH FROM THE EDGE OF DEVICE TO CENTER OF LANE LINE.
- ALL CONFLICTING STRIPES SHALL BE REMOVED.
- REMOVABLE PAVEMENT MARKING TAPE OR OTHER MEANS OF TRAFFIC CONTROL SHALL BE UTILIZED WHERE LANE SHIFTS ARE REQUIRED ON INTERMEDIATE OR TOP PAVEMENT LAYERS OR ON EXISTING PAVEMENTS NOT BEING REPAVED.
- UNLESS OTHERWISE SPECIFIED, TRAFFIC PAINT SHALL BE USED WHEN TRAFFIC STRIPES OR TRAFFIC MARKINGS ARE REQUIRED ON INTERMEDIATE PAVEMENT LAYERS THAT NEED TO BE OPENED TO TRAFFIC DUE TO STAGE CONSTRUCTION.
- 17. ALL LANE CLOSURES AND DETOURING SHALL BE COORDINATED WITH THE TOWNSHIP OF OLD BRIDGE POLICE DEPARTMENT. TELEPHONE (732) 721-5600 x3820, SGT. AARON MATIKONIS



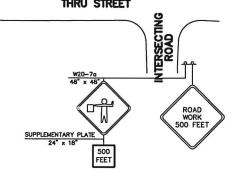




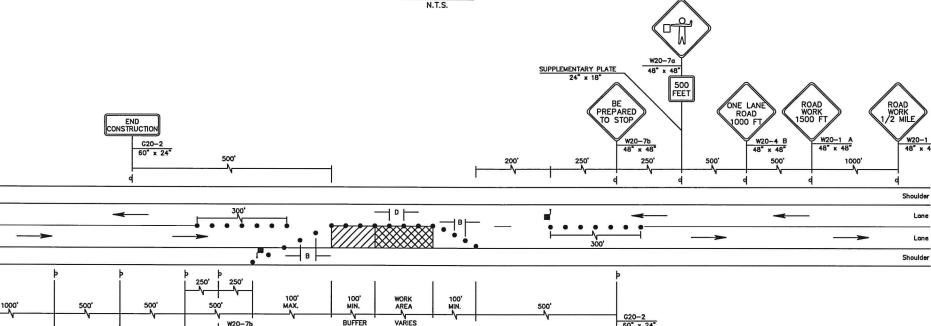


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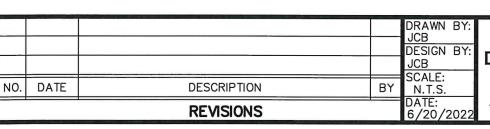
SEE RECOMMENDED TAPER LENGTH



THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.



2 LANES. UNDIVIDED. LANE & SHOULDER CLOSING W/FLAGGING
TYPICAL PLAN



TOWNSHIP OF OLD BRIDGE DEPARTMENT OF ENGINEERING

Shoulder

One Old Bridge Plaza Old Bridge, New Jersey 08857 Tel. 732-721-5600 Fax 732-607-7978

NICOLE S. SHAPIRO NEW JERSEY PROFESSIONAL ENGINEER LICENSE No. 24GE04622100

SUPPLEMENTARY PLATE

500 FEET

2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53 TRAFFIC CONTROL PLAN

END ONSTRUCTION

JOB No: CONTRACT No 2022-53

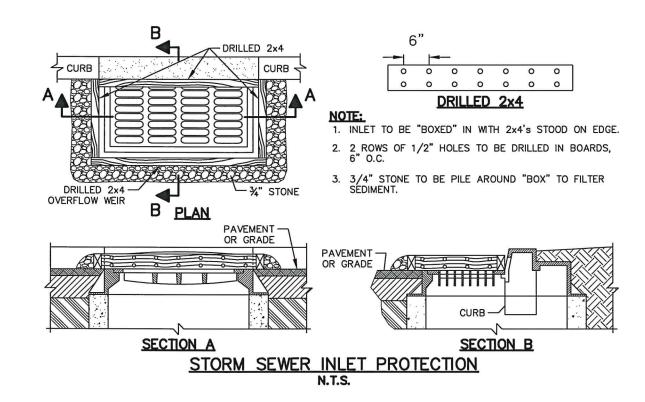
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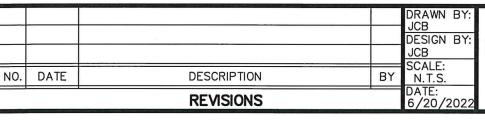
SOIL EROSION AND SEDIMENT CONTROL NOTES:

- 1. The Freehold Soil Conservation District shall be notified seventy—two (72) hours in advance of any land disturbing activity.
- 2. All work is to be done in accordance with the State Standards for Soil Erosion and Sediment Control of New Jersey.
- 3. All Soil Erosion and Sediment Control practices are to be installed prior to any major soil disturbance, or in their proper sequence, and maintained until permanent protection is established.
- 4. Any changes to the Certified Soil Erosion and Sediment Control Plans will require the submission of revised Soil Erosion and Sediment Control Plans to the District for re—certification. The revised plans must meet all current State Soil Erosion and Sediment Control Standards.
- 5. In that N.J.S.A 4:24—39 et. Seq. requires that no Certificates of Occupancy be issued before the provisions of the Certified Plan for Erosion Control have been complied with for permanent measures. All site work and all work around individual lots in subdivisions, will have to be completed prior to the District issuing a Report of Compliance for the issuance of a Certificate of Occupancy by the Municipality.
- 6. Any disturbed areas that will be left exposed more than thirty (30) days, and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of temporary cover, the disturbed areas will be mulched with straw, or equivalent material, at a rate of 2 to 2 ½ tons per acre, according to State Standard for Stabilization with Mulch Only.
- 7. Immediately following initial disturbance or rough grading, all critical areas subject to erosion (i.e. steep slopes and roadway embankments) will receive temporary seeding in combination with straw mulch or a suitable equivalent, at a rate of 1 ½ to 2 tons per acre, according to State Standards.
- 8. A sub-base course will be applied immediately following rough grading and installation of improvements to stabilize streets, roads, driveways, and parking areas. In areas where no utilities are present, the sub-base shall be installed within fifteen (15) days of the preliminary grading.
- 9. Any steep slopes receiving pipeline installation will be backfilled and stabilized daily, as the installation continues (i.e. slopes grater than 3:1).
- 10. The Standard for Stabilized Construction Access requires the installation of a pad of clean crushed stone at points where traffic will be accessing the construction site. After interior roadways are paved, individual lots require a stabilized construction entrance consisting of one inch to two inch (1" 2") stone for a minimum length of ten feet (10') equal to the lot entrance width. All other access points shall be blocked off.
- 11. All soil washed, dropped, spilled, or tracked outside the limit of disturbance or onto public right—of—ways will be removed immediately.
- 12 Permanent vegetation is to be seeded or sodded on all exposed areas within ten (10) days after final grading.
- 13. At the time that site preparation for permanent vegetative stabilization is going to be accomplished, any soil that will not provide a suitable environment to support adequate vegetative ground cover shall be removed or treated in such a way that it will permanently adjust the soil conditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be employed.
- 14. In accordance with the Standard for Management of High Acid Producing Soils, any soil having a pH of 4 or less or containing iron sulfides shall be covered with a minimum of twelve (12) inches of soil having a pH of 5 or more prior to seedbed preparation. Areas where trees or shrubs are to be planted shall be covered with a minimum of twenty—four (24) inches of soil having a pH of 5 or more.
- 15. Conduit Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational.

- 16. Unfiltered dewatering is not permitted. Necessary precautions must be taken during all dewatering operations to minimize sediment transfer. Any dewatering methods used must be in accordance with the Standard for Dewatering.
- 17. Should the control of dust at the site be necessary, the site will be sprinkled until the surface is wet, temporary vegetative cover shall be established or mulch shall be applied as required by the Standard for Dust Control.
- 18. Stockpile and staging locations established in the field shall be placed within the limit of disturbance according to the certified plan. Staging and stockpiles not located within the limit of disturbance will require certification of a revised Soil Erosion and Sediment Control Plan. Certification of a new Soil Erosion and Sediment Control Plan may be required for these activities if an area greater than 5,000 square feet is disturbed.
- 19. All soil stockpiles are to be temporarily stabilized in accordance with Soil Erosion and Sediment Control note #6.
- 20. The property owner shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.

Freehold Soil Conservation District 4000 Kozloski Road Freehold, NJ 07728 (732) 683-8500, fax (732) 683-9140 Email: info@freeholdscd.org.





TOWNSHIP OF OLD BRIDGE DEPARTMENT OF ENGINEERING

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2022 ANNUAL CURB REPLACEMENT PROGRAM CONTRACT #2022-53
SOIL EROSION & SEDIMENT CONTROL

NOTES & DETAILS

JOB No:

CONTRACT No 2022-53 SHEET:

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