

**CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
OAKLAND BEACH INTERCEPTOR
CONTRACT 101
ADDENDUM NO. 1**

April 28, 2021

The following information is provided as part of the Contract Documents as Addendum No. 1.

Project Comments

Comment 1: For the first bypass location from SMH1 to SMH3:

- a. For the flow from the 10" Force Main that we will be extending:
 - i. Do the pumps at the pump station have the capability of providing the additional friction loss needed to extend the discharge line? This will include approximately 10 VF of elevation increase in addition to the friction loss from extending the pipe by approximately 600 LF.
 - ii. What is the estimated flow from the 10" force main?
 - iii. Does the discharge line need to be rated for a minimum working pressure?

- b. For the flow from the 12" Force Main that we will be extending:
 - i. Do the pumps at the pump station have the capability of providing the additional friction loss needed to extend the discharge line? This will include approximately 10 VF of elevation increase in addition to the friction loss from extending the pipe by approximately 600 LF.
 - ii. What is the estimated flow from the 12" force main?
 - iii. Does the discharge line need to be rated for a minimum working pressure?

Response: Existing pump capacities may be not sufficient to handle the addition static head and friction head losses resulting from extending the discharge line. Therefore, the Contractor shall design pump systems to bypass 800 gpm for the 10-inch force main and 2000 gpm for the 12-inch force main. The discharge line does not need to be rated for a minimum working pressure. However, flow rates through bypass pipe must be adequate to provide proper cleaning velocities.

Comment 2: On Drawings 3 + 4 for the Second Bypass Setup from SMH4 to SMH10:

- a. The discharge pipe for the main discharge from SMH4 to SMH10 shows 2000 GPM on Drawing 3. Should this pipe actually be capable of handling flows up to 2900 GPM? (Based on flows listed on the drawings?) Or should this pipe actually be capable of handling flows up to 2690 GPM (Based on flows listed in the Bypass Flow Summary Chart?)

Response: The pump bypass summary table has been revised on Plan Sheet 7 of 9.

Comment 3: For the final bypass location from SMH14A to SMH21"

- a. For the 6" Force Main that will be re-routed to SMH14:
 - i. What is the estimated flow from the 6" force main?
- b. Where is SMH14B on the drawing (shown as a bypass location on the bypass flow summary chart)? It appears the 18" sewer flows into SMH14A? If the 18" sewer flows into SMH14A as does the 24" sewer, does the bypass system from SMH 14A need to be capable of handling 5070 GPM? (3770 GPM + 1300 GPM listed in bypass flow summary chart)
- c. On Drawing 6, it shows a bypass at SMH18A, which is not listed on the bypass flow summary chart

Response: The pump bypass table has been revised on Plan Sheet 7 of 9.

Comment 4: Is there flow data available for these lines.

Response: There is no measured flow data available for these sewer mains.

Comment 5: Can you provide a plan holder list.

Response: There is no plan holder list. The City does not require a login to download the documents.

Project Plans

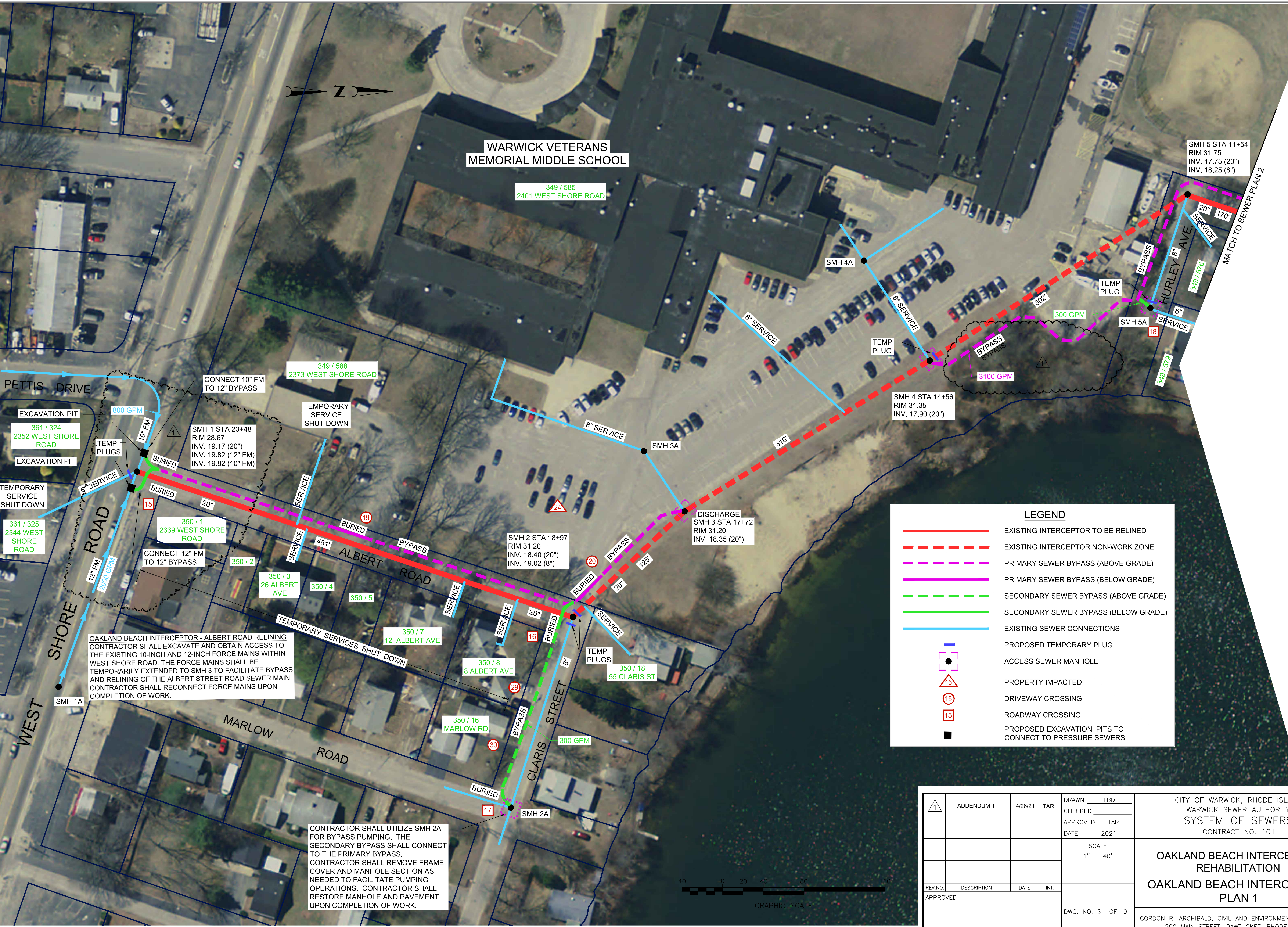
1. Replace Plan Sheet Nos. 3, 5, and 7 with the attached Addendum No. 1 - Plans Sheets.
2. The contractor shall complete work within 120 days. Any reference to 90 days for completion shall be deleted and replace with 120 days.



WARWICK VETERANS
MEMORIAL MIDDLE SCHOOL

349 / 585
2401 WEST SHORE ROAD

SMH 5 STA 11+54
RIM 31.75
INV. 17.75 (20")
INV. 18.25 (8")

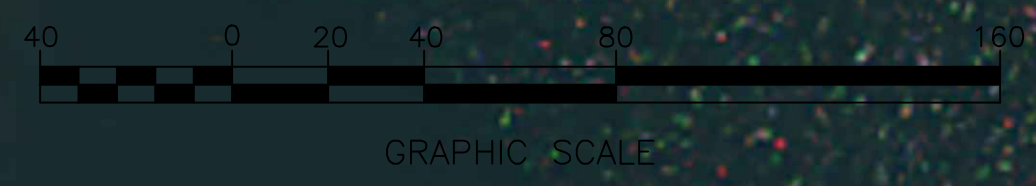


OAKLAND BEACH INTERCEPTOR - ALBERT ROAD RELINING
CONTRACTOR SHALL EXCAVATE AND OBTAIN ACCESS TO THE EXISTING 10-INCH AND 12-INCH FORCE MAINS WITHIN WEST SHORE ROAD. THE FORCE MAINS SHALL BE TEMPORARILY EXTENDED TO SMH 3 TO FACILITATE BYPASS AND RELINING OF THE ALBERT STREET ROAD SEWER MAIN. CONTRACTOR SHALL RECONNECT FORCE MAINS UPON COMPLETION OF WORK.

CONTRACTOR SHALL UTILIZE SMH 2A FOR BYPASS PUMPING. THE SECONDARY BYPASS SHALL CONNECT TO THE PRIMARY BYPASS. CONTRACTOR SHALL REMOVE FRAME, COVER AND MANHOLE SECTION AS NEEDED TO FACILITATE PUMPING OPERATIONS. CONTRACTOR SHALL RESTORE MANHOLE AND PAVEMENT UPON COMPLETION OF WORK.

LEGEND

- EXISTING INTERCEPTOR TO BE RELINED
- - - EXISTING INTERCEPTOR NON-WORK ZONE
- - - PRIMARY SEWER BYPASS (ABOVE GRADE)
- PRIMARY SEWER BYPASS (BELOW GRADE)
- - - SECONDARY SEWER BYPASS (ABOVE GRADE)
- SECONDARY SEWER BYPASS (BELOW GRADE)
- EXISTING SEWER CONNECTIONS
- PROPOSED TEMPORARY PLUG
- ACCESS SEWER MANHOLE
- △ PROPERTY IMPACTED
- DRIVEWAY CROSSING
- ROADWAY CROSSING
- PROPOSED EXCAVATION PITS TO CONNECT TO PRESSURE SEWERS

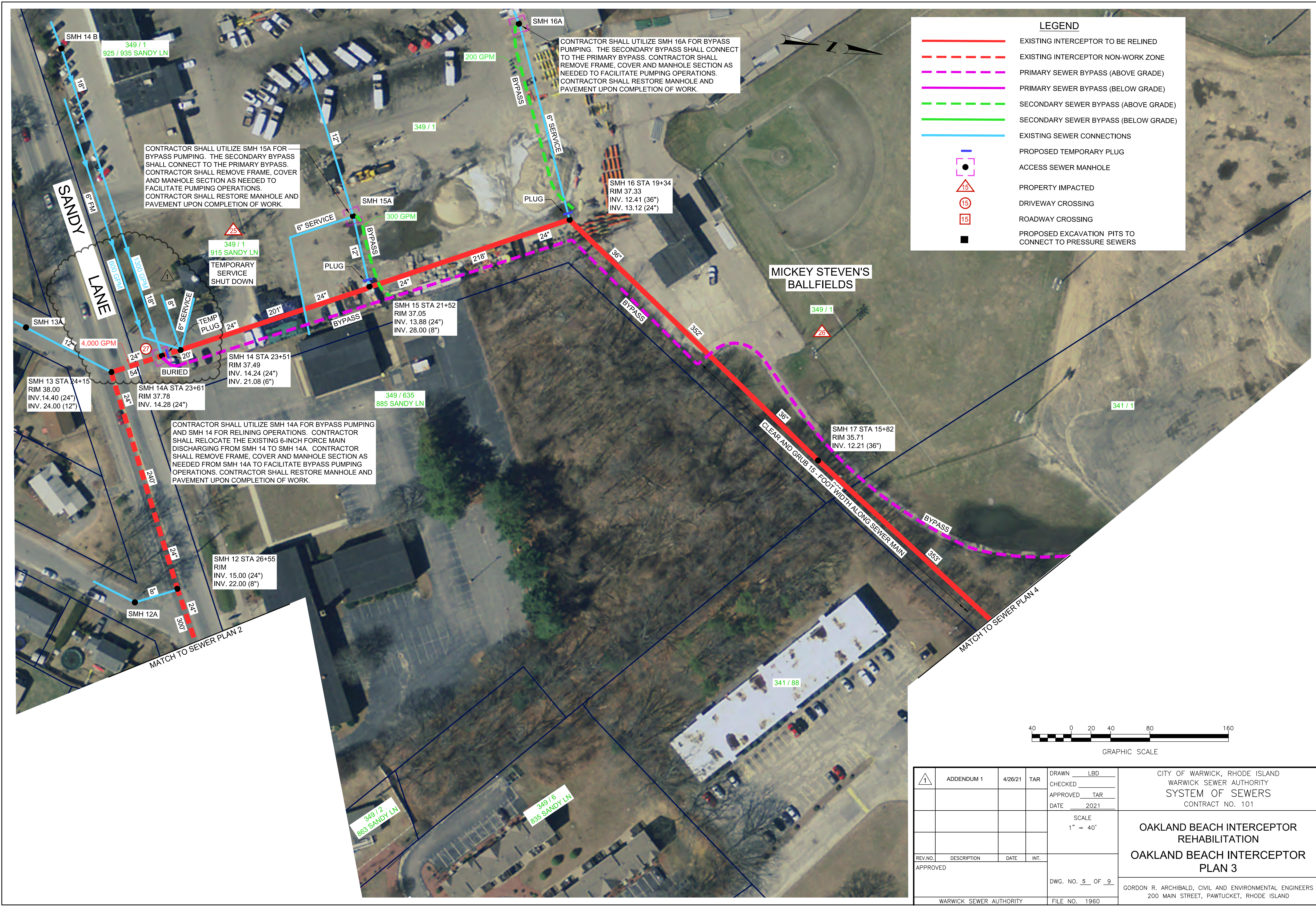


ADDENDUM 1	4/26/21	TAR	DRAWN LBD
			CHECKED
			APPROVED TAR
			DATE 2021
			SCALE 1" = 40'
REV. NO.	DESCRIPTION	DATE	INT.
APPROVED			
			DWG. NO. 3 OF 9
			FILE NO. 1960

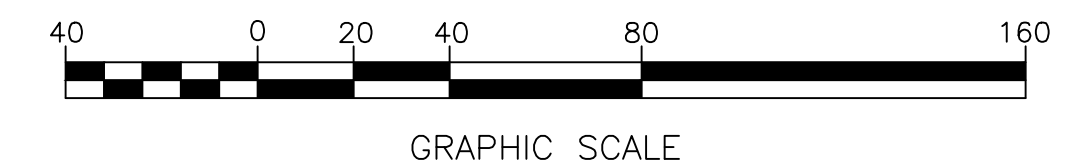
CITY OF WARWICK, RHODE ISLAND
WARWICK SEWER AUTHORITY
SYSTEM OF SEWERS
CONTRACT NO. 101

**OAKLAND BEACH INTERCEPTOR
REHABILITATION
OAKLAND BEACH INTERCEPTOR
PLAN 1**

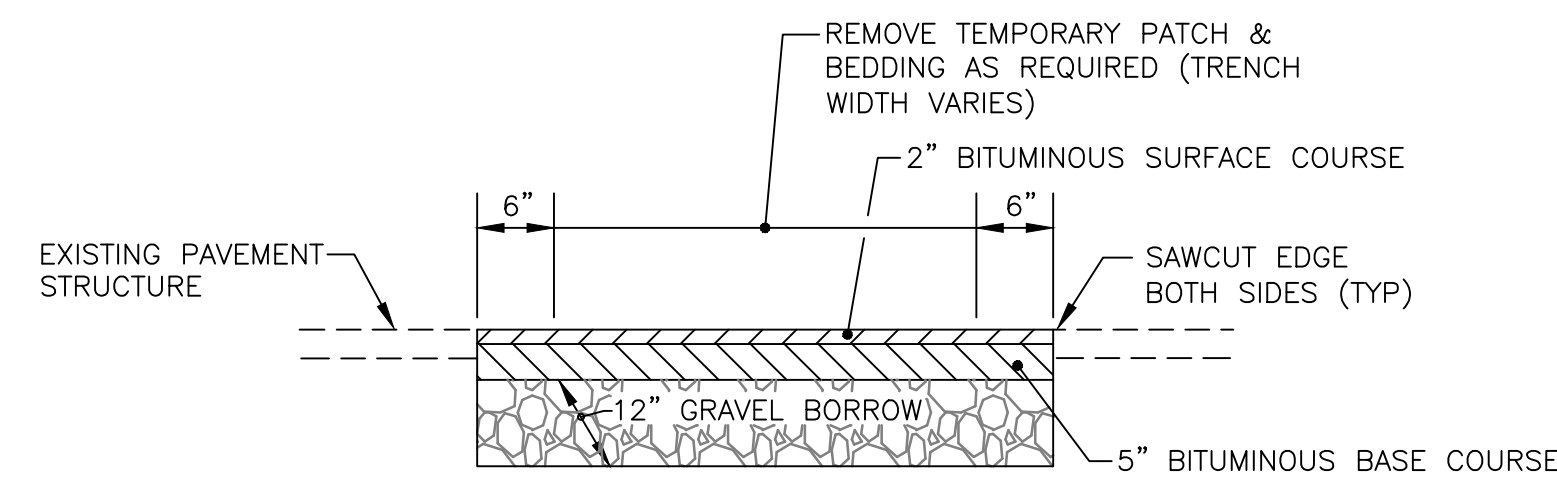
GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS
200 MAIN STREET, PAWTUCKET, RHODE ISLAND



LEGEND	
	EXISTING INTERCEPTOR TO BE RELINED
	EXISTING INTERCEPTOR NON-WORK ZONE
	PRIMARY SEWER BYPASS (ABOVE GRADE)
	PRIMARY SEWER BYPASS (BELOW GRADE)
	SECONDARY SEWER BYPASS (ABOVE GRADE)
	SECONDARY SEWER BYPASS (BELOW GRADE)
	EXISTING SEWER CONNECTIONS
	PROPOSED TEMPORARY PLUG
	ACCESS SEWER MANHOLE
	PROPERTY IMPACTED
	DRIVEWAY CROSSING
	ROADWAY CROSSING
	PROPOSED EXCAVATION PITS TO CONNECT TO PRESSURE SEWERS

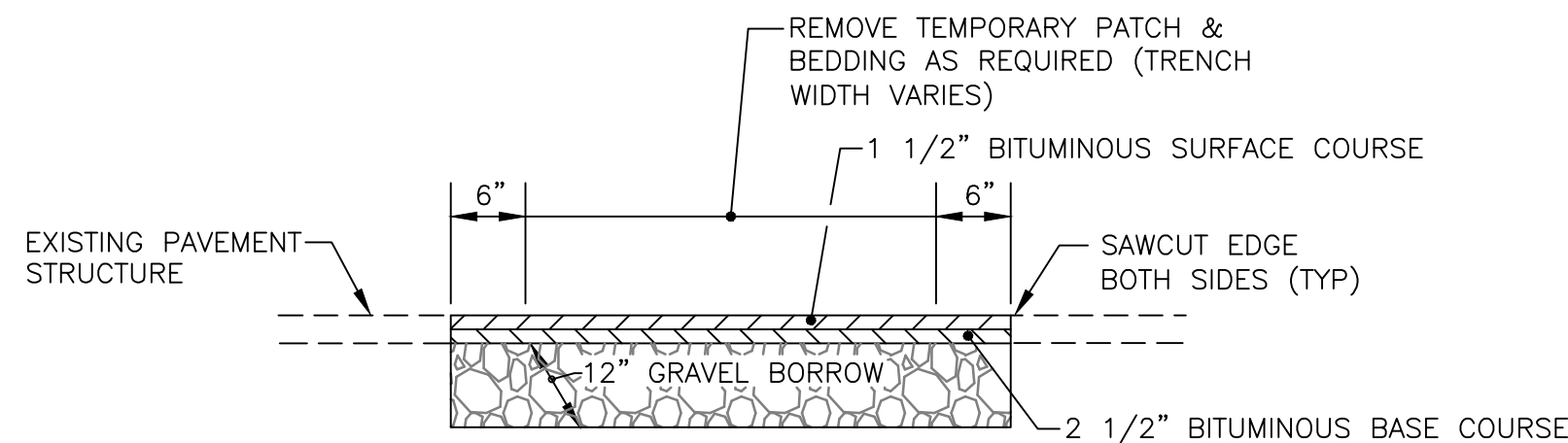


	ADDENDUM 1	4/26/21	TAR	DRAWN <u> LBD </u>	CITY OF WARWICK, RHODE ISLAND WARWICK SEWER AUTHORITY SYSTEM OF SEWERS CONTRACT NO. 101
				CHECKED <u> </u>	
				APPROVED <u> TAR </u>	
				DATE <u> 2021 </u>	OAKLAND BEACH INTERCEPTOR REHABILITATION OAKLAND BEACH INTERCEPTOR PLAN 3
				SCALE 1" = 40'	
REV. NO.	DESCRIPTION	DATE	INT.	DWG. NO. <u> 5 </u> OF <u> 9 </u>	GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS 200 MAIN STREET, PAWTUCKET, RHODE ISLAND
APPROVED				FILE NO. 1960	
WARWICK SEWER AUTHORITY					



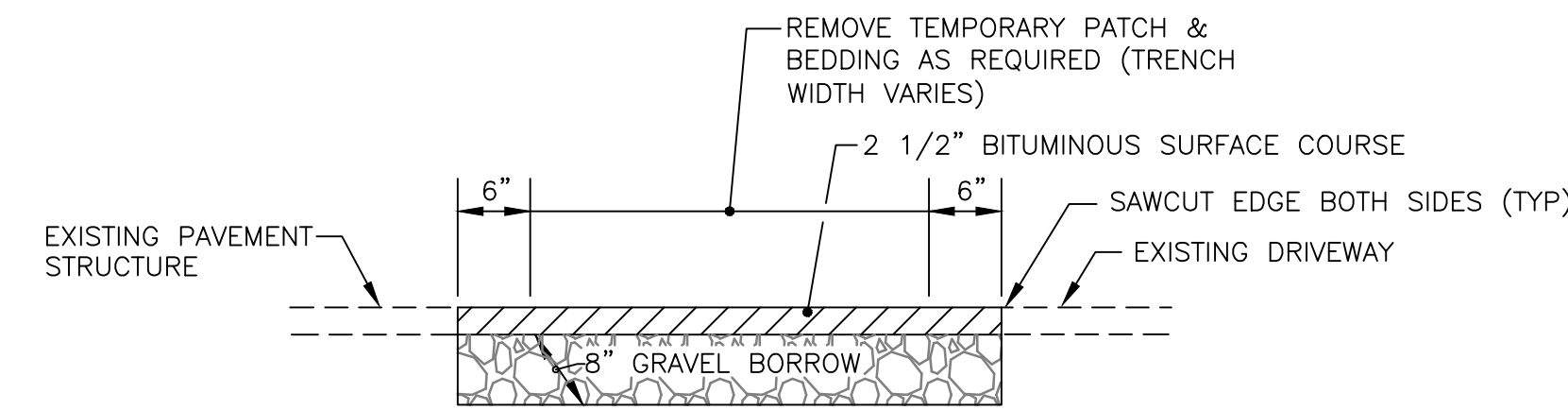
**PERMANENT PAVEMENT RESTORATION
(STATE ROADS)**

NOT TO SCALE



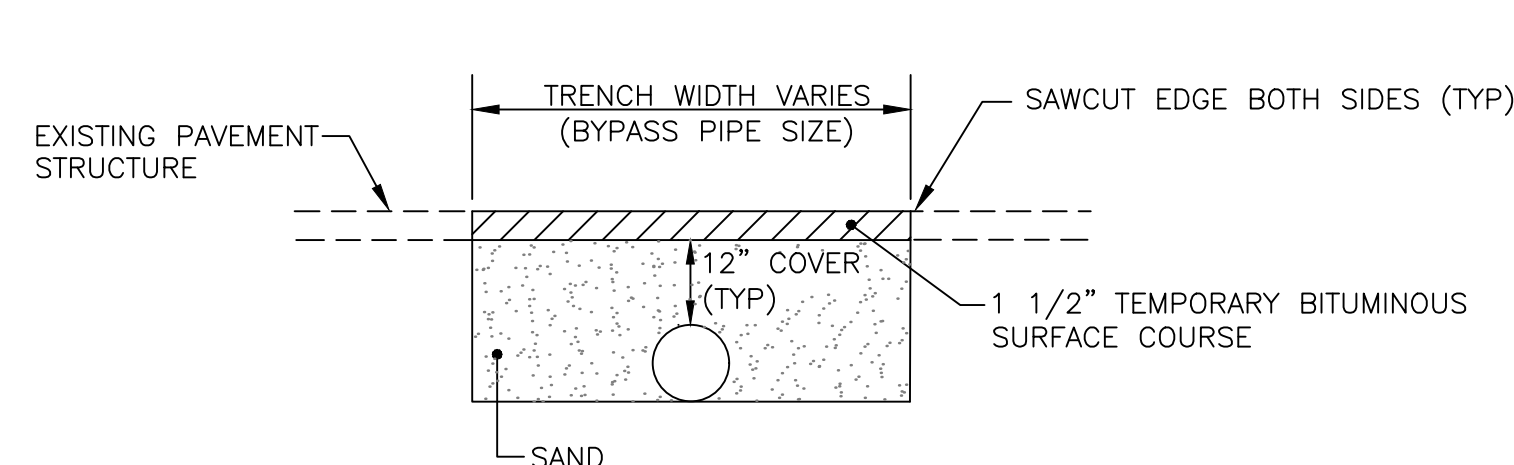
**PERMANENT PAVEMENT RESTORATION
(CITY STREETS)**

NOT TO SCALE



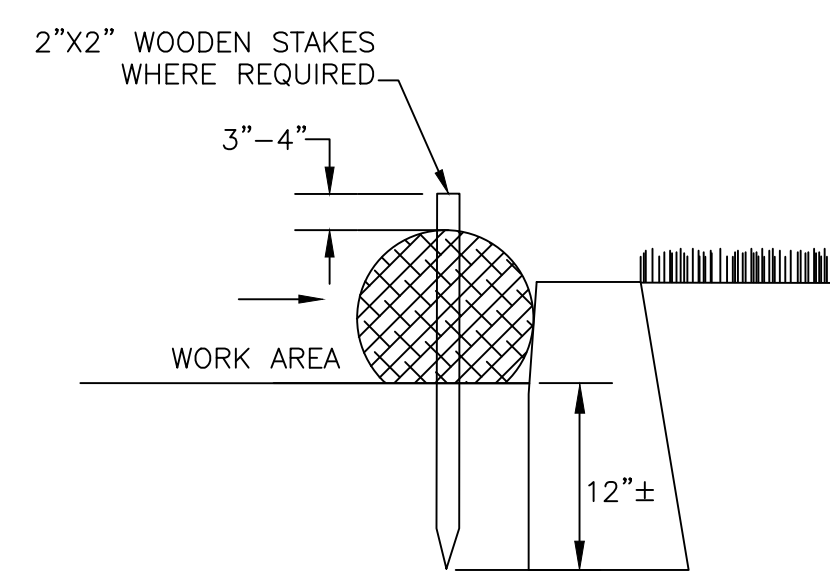
**PERMANENT PAVEMENT RESTORATION
(DRIVEWAYS)**

NOT TO SCALE



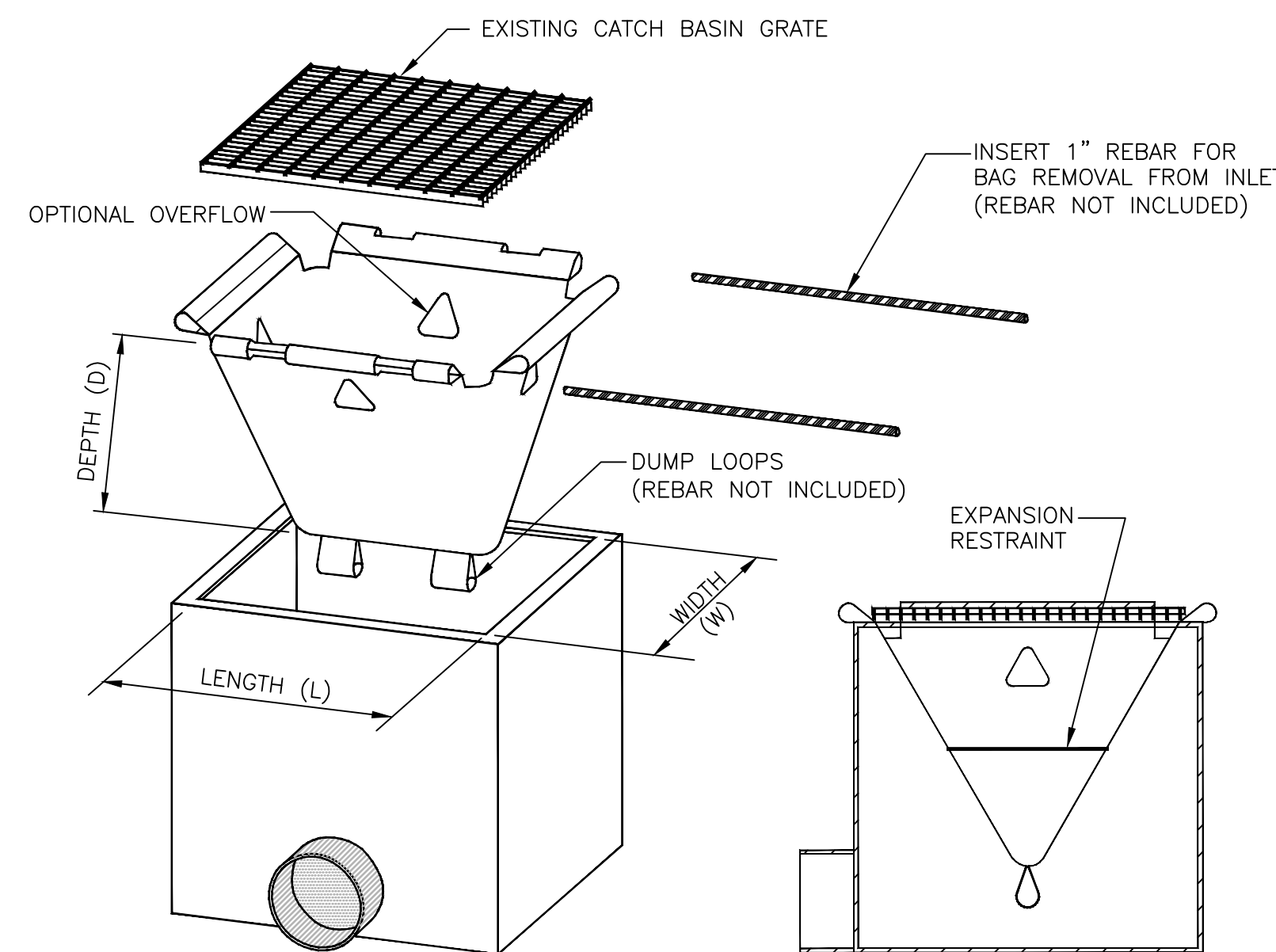
BYPASS PIPE TRENCH DETAIL

NOT TO SCALE



**8-INCH COMPOST
FILTER SOCK DETAIL**

NOT TO SCALE



CATCH BASIN PROTECTION DETAIL

NOT TO SCALE

BYPASS FLOW SUMMARY CHART OAKLAND BEACH INTERCEPTOR									
PUMP BYPASS	BYPASS LOCATION	BYPASS START AND END	PLAN SHEET	INFLOW PIPE DIAMETER (INCH)	APPROXIMATE INFLOW ELEVATION (FEET)	APPROXIMATE SLOPE	ESTIMATE MAXIMUM FLOW RATE (GPM)	APPROXIMATE SURFACE ELEVATION (FEET)	APPROXIMATE BYPASS LENGTH (FEET)
PRIMARY	SMH NO. 1 / EXCAVATION PIT	SMH NO. 3 / PRIMARY BYPASS	3	10 FORCE MAIN	20	NA	800	31	600
SECONDARY	SMH NO. 1 / EXCAVATION PIT	SMH NO. 1 / PRIMARY BYPASS	3	12 FORCE MAIN	20	NA	2,000	29	30
SECONDARY	SMH NO. 2A	SMH NO. 2 / PRIMARY BYPASS	3	8	19	0.004	300	31	210
TOTAL FLOW AT DISCHARGE SMH NO. 3							3,100		
PRIMARY	SMH NO. 4	SMH NO. 10 / PRIMARY BYPASS	3	20	18	0.0014	3,100	34	1510
SECONDARY	SMH NO. 5A	SMH NO. 5A / PRIMARY BYPASS	3	8	18	0.004	300	32	10
SECONDARY	SMH NO. 7A	SMH NO. 7 / PRIMARY BYPASS	4	8	19	0.004	300	26	50
SECONDARY	SMH NO. 9A	SMH NO. 9 / PRIMARY BYPASS	4	8	24	0.004	300	33	100
TOTAL FLOW AT DISCHARGE SMH NO. 10							4,000		
PRIMARY	SMH NO. 13	SMH NO. 13 / PRIMARY BYPASS	5	24	14	0.0022	4,000	32	2130
SECONDARY	SMH NO. 14B	SMH NO. 14B / PRIMARY BYPASS	5	18	22	0.0012	1,300	37	160
SECONDARY	SMH NO. 14	SMH NO. 14 / PRIMARY BYPASS	5	6 FORCE MAIN	30	NA	600	37	10
SECONDARY	SMH NO. 15A	SMH NO. 15 / PRIMARY BYPASS	5	8	28	0.004	300	37	70
SECONDARY	SMH NO. 16A	SMH NO. 16 / PRIMARY BYPASS	5	6	29	0.01	200	37	200
SECONDARY	SMH NO. 18A	SMH NO. 18A / PRIMARY BYPASS	6	8	15	0.004	300	35	200
SECONDARY	SMH NO. 20A	SMH NO. 20 / PRIMARY BYPASS	6	21	18	0.001	2,000	31	80
TOTAL FLOW AT DISCHARGE SMH NO. 21							8,700		

PROPERTIES IMPACTED BY OAKLAND BEACH INTERCEPTOR REHABILITATIONS				
24	2401 WEST SHORE ROAD	349/585	BYPASS/ACCESS SEWER MANHOLE	WARWICK VETS. MIDDLE SCHOOL
25	SANDY LANE	349/001	BYPASS/ACCESS SEWER MANHOLE	CITY OF WARWICK, FIRE STATION, DPW, BALLFIELD
26	CEDAR SWAMP ROAD	341/001	BYPASS	CITY OF WARWICK, BALLFIELD/PARK
27	CEDAR SWAMP ROAD	341/149	BYPASS	CITY OF WARWICK, PARK
28	815 SANDY LANE	341/88	BYPASS	BENDETSON RICHARD K TRUSTEE

OAKLAND BEACH INTERCEPTOR - DRIVEWAY CROSSINGS IMPACTS						
NO.	PROPERTY ADDRESS	PROP. ID	TYPE	OWNER	TREATMENT	REASON
19	2373 WEST SHORE ROAD	349/588	DRIVEWAY	CITY OF WARWICK	BURIED	FIRE TRUCKS
20	2401 WEST SHORE ROAD	349/585	DRIVEWAY	WARWICK VETS. MIDDLE SCHOOL	BURIED	SCHOOL BUSES
21	73 ARMORY DR.	349/648	DRIVEWAY	MOODY, CLAIRE L	NONE	CLOSED DRIVEWAY
22	63 ARMORY DR.	349/649	DRIVEWAY	BEDARD, TIMOTHY	NONE	CLOSED DRIVEWAY
23	51 ARMORY DR.	349/650	DRIVEWAY	IOVINO, ROBERT J	NONE	CLOSED DRIVEWAY
24	41 ARMORY DR.	349/651	DRIVEWAY	DELUCA, BRIAN M	NONE	CLOSED DRIVEWAY
25	31 ARMORY DR.	349/652	DRIVEWAY	JONES, NOELIA M	NONE	CLOSED DRIVEWAY
26	21 ARMORY DR.	349/653	DRIVEWAY	DUNCAN, FREDERICK W III	NONE	CLOSED DRIVEWAY
27	SANDY LN	349/001	DRIVEWAY - 1	CITY OF WARWICK, FIRE STATION	BURIED	FIRE TRUCKS
29	8 ALBERT AVENUE	350/008	DRIVEWAY	CAROLAN, JAMES A JR	RAMPED	RES. DR./BYPASS SMALL
30	1 MARLOW ROAD	350/016	DRIVEWAY	GILBERT, LEONA B	RAMPED	RES. DR./BYPASS SMALL

OAKLAND BEACH INTERCEPTOR - ROADWAY CROSSINGS				
NO.	LOCATION	REFERENCE	TREATMENT	REASON
15	ALBERT ROAD.	SMH No. 1	BURIED	FIRE TRUCKS/SCHOOL BUSES
16	CLARIS STREET	SMH No. 2	BURIED	FIRE TRUCKS/SCHOOL BUSES
17	CLARIS STREET	SMH No. 2A	BURIED	CITY STREET
18	HURLEY AVENUE	SMH No. 5A	BURIED	CITY STREET
19	ARMORY DR.	SMH No. 7A	BURIED	CITY STREET
20	SCOLLY ST	ARMORY DRIVE	BURIED	CITY STREET
21	SCOLLY ST	SMH No. 9A	BURIED	CITY STREET
22	SANDY LANE	SMH No. 10	BURIED	CITY STREET
23	CEDAR SWAMP ROAD	SMH No. 20A	BURIED	CITY STREET

1	ADDENDUM 1	4/26/21	TAR	DRAWN LBD	CITY OF WARWICK, RHODE ISLAND WARWICK SEWER AUTHORITY SYSTEM OF SEWERS CONTRACT NO. 101
				CHECKED	
				APPROVED TAR	OAKLAND BEACH INTERCEPTOR REHABILITATION DETAILS - 1
				DATE 2021	
				SCALE AS NOTED	GORDON R. ARCHIBALD, CIVIL AND ENVIRONMENTAL ENGINEERS 200 MAIN STREET, PAWTUCKET, RHODE ISLAND
				DWG. NO. 7 OF 9	
REV. NO.	DESCRIPTION	DATE	INT.		
APPROVED					
WARWICK SEWER AUTHORITY				FILE NO. 1960	