TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE I RECONSTRUCTION
& SAFE ROUTES PROJECT

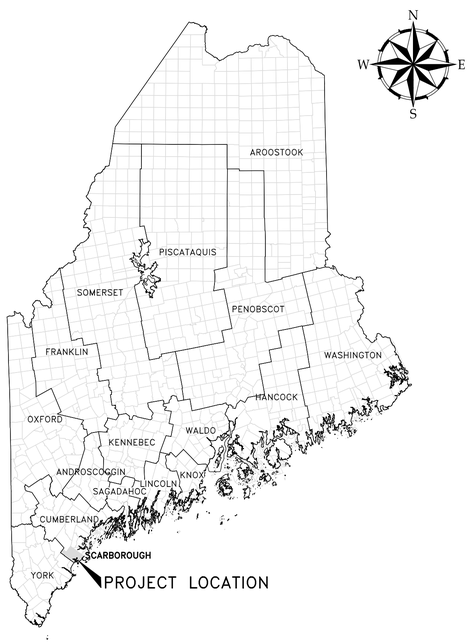
SAFE ROUTES TO SCHOOL
MDOT WIN: 018889.00
PROJECT LENGTH: 0.78 MILES

PHASE I RECONSTRUCTION
PROJECT LENGTH: 0.82 MILES

W&C PROJECT NO. 227433.63 & 227433.66

APRIL 2017

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION



PROJECT LOCATION MAP

50 0 50 100
scale mile

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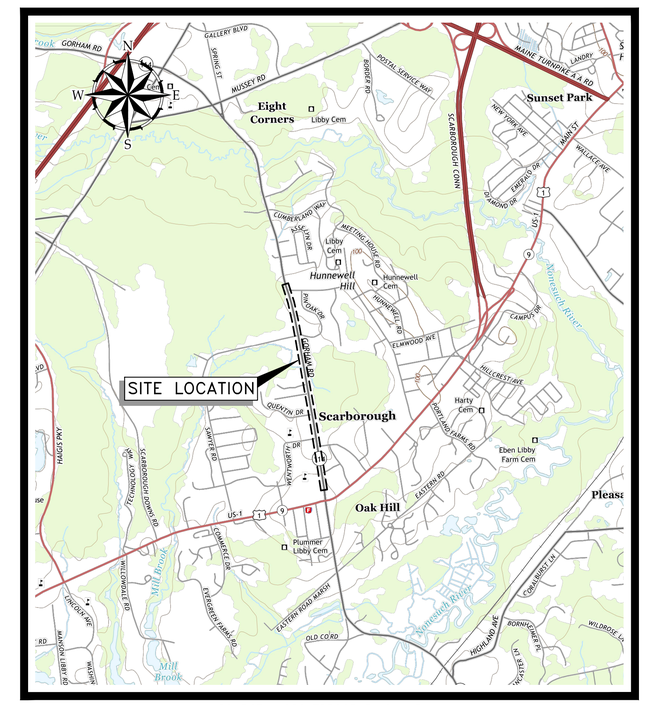

SOURCE: USGS TOPOGRAPHIC MAP

SITE LOCATION MAP

1/2 0 1/2 1
scale mile

2000 0 2000 4000
scale feet

\\Woodardcurran.net\Shared\Projects\227433 Scarborough-Eng Cons Svcs\wip\63 Gorhom Road Phase 1 Final Design\Drawings\GENERAL\227433.63 Cover.dwg, Apr 10, 2017 – 3:33pm

22x34 SHEET
1:1

GENERAL NOTES:

1. SITE AND TOPOGRAPHIC DATA PROVIDED BY OWEN HASKELL, INC. OF FALMOUTH, MAINE AS A RESULT OF A FIELD SURVEY CONDUCTED IN OCTOBER AND NOVEMBER 2015.
2. VERTICAL DATUM IS REFERENCED NAVD 88, DERIVED FROM STATIC GPS OBSERVATIONS. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
3. THE UTILITY LOCATIONS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR. CONTACT THE TOWN IMMEDIATELY UPON DISCOVERING ANY CONFLICTS WITH EXISTING AND PROPOSED UTILITY LOCATIONS. NOT ALL EXISTING UTILITIES ARE SHOWN ON PLANS.
4. CLEAN AND/OR FLUSH ALL MANHOLES, CATCH BASINS, AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED.
5. COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES AND TOWN. CONTACTS ARE LISTED IN SPECIFICATIONS. NOTIFY UTILITY COMPANIES WITHIN 48 HOURS OF WORK ACTIVITY ADJACENT TO THOSE UTILITIES.
6. CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO COMMENCING WORK, ALLOWING SUFFICIENT TIME TO LOCATE AND MARK THE LOCATION OF BURIED UTILITIES. CONTRACTOR SHALL CONTACT "DIG SAFE", TELEPHONE 811, PRIOR TO EXCAVATION.
7. RESTORE ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL FINISH (GRAVEL, PAVEMENT, GRASS, ETC.). RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, AND LAWNS DAMAGED BY CONSTRUCTION ACTIVITIES OUTSIDE OF LIMITS OF WORK INDICATED ON THE PLANS SHALL BE PERFORMED AT NO ADDITIONAL COST TO OWNER. ANY CURB DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND AND SHALL CONFORM TO TOWN OF SCARBOROUGH AND MAINE DOT SPECIFICATIONS AT NO ADDITIONAL COST TO OWNER.
8. PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE PROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY A LICENSED LAND SURVEYOR ACCEPTABLE TO THE TOWN.
9. EXISTING FACILITIES (I.E. TREES, POLES, LIGHT POSTS, CATCH BASINS, ETC.) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION. TOWN RETAINS RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES. CONTRACTOR SHALL DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF TOWN AT CONTRACTOR'S EXPENSE.
10. ALL TREES NOT NOTED TO BE REMOVED OR RELOCATED SHALL BE PROTECTED BY CONTRACTOR DURING CONSTRUCTION.
11. DO NOT PARK, IMPEDE ACCESS TO, OR STORE EQUIPMENT ON ADJACENT TOWN OR PRIVATELY OWNED LOTS, UNLESS PERMISSION HAS BEEN GRANTED IN WRITING BY TOWN AND/OR LAND OWNER.
12. COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LANDOWNERS AT LEAST TWO DAYS (48 HOURS) PRIOR TO DISRUPTION. ALL UTILITY COORDINATION IS RESPONSIBILITY OF CONTRACTOR.
13. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
14. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
15. THE CONTRACTOR SHALL OBTAIN A TOWN STREET OPENING PERMIT BEFORE BEGINNING CONSTRUCTION. THE FEE FOR THIS PERMIT WILL BE WAIVED BY THE TOWN.
16. UPON COMPLETION OF CONSTRUCTION, A COMPLETE SET OF "RECORD" DRAWINGS THAT REFLECT ANY AND ALL MODIFICATIONS TO THE SANITARY SEWER SYSTEM, STORM SEWER SYSTEM AND ANY OTHER UTILITY INSTALLATIONS OR ALTERATIONS WITHIN THE PROJECT LIMITS BE SUBMITTED TO THE DIVISION. THESE DRAWINGS SHALL BE SUBMITTED IN BOTH DIGITAL AND HARD COPY FORMAT AS DEFINED IN THE SPECIFICATIONS PRIOR TO PAYMENT OF FINAL RETAINAGE.
17. WORK IS IN CLOSE PROXIMITY TO EXISTING UTILITIES. PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION SHALL BE INCIDENTAL TO THE PAY ITEM UNDER WHICH WORK TO INSTALL SAID UTILITY IS PERFORMED.
18. FOR TEST PIT LOCATIONS SHOWN ON PLANS, FIELD VERIFY UTILITY ELEVATIONS PRIOR TO ORDERING CATCH BASIN & MANHOLE STRUCTURES. NOTIFY ENGINEER OF ANY CONFLICTS.
19. CONTACT TOWN OF SCARBOROUGH ENGINEER PRIOR TO CUTTING ROOTS, TRIMMING BRANCHES, OR DISTURBING TREES THAT NOT HAVE BEEN NOTED FOR REMOVAL ON THE PLANS.
20. PROVIDE 4-INCHES OF LOAM AND SEED IN ALL LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATIONS, UNLESS OTHERWISE NOTED AS SOD.
21. MUNICIPAL FIRE ALARM AND DATA CABLES LOCATED ABOVE GROUND, ATTACHED TO THE UTILITY POLES, AND SHALL BE PROTECTED.
22. EXISTING 16" WATERMAIN SHOWN ON PLANS IS BASED ON GROUND SURVEY CONDUCTED BY OWEN HASKELL, INC. OF FALMOUTH IN OCTOBER AND NOVEMBER 2015 AND SUPPLEMENTED WITH PLANS PROVIDED BY THE PORTLAND WATER DISTRICT (PWD), DATED FEBRUARY 1950. WATERMAIN DEPTHS SHOWN IN PROFILE ARE APPROXIMATE AND BASED ON THE FEBRUARY 1950 PWD PLANS AND SHOULD BE FIELD VERIFIED THROUGH TEST PITS IN ADVANCE OF PERFORMING EXCAVATION IN PROXIMITY TO THE WATER MAIN.
23. TREES AND SHRUBS ARE NOT SHOWN ON PLANS, CONTRACTOR SHOULD ANTICIPATE PLANTING 20 TREES AND 15 SHRUBS PRIOR TO SUBSTANTIAL COMPLETION PER CONSTRUCTION DOCUMENTS. EXACT LOCATIONS WILL BE DECIDED BETWEEN OWNER AND CONTRACTOR.

SYMBOLS

DESCRIPTION	EXISTING	PROPOSED
SANITARY SEWER MANHOLE		
STORM DRAIN MANHOLE		DMH
CATCH BASIN W/ HEADSTONE		
CATCH BASIN, FIELD INLET		
AREA DRAIN		
UTILITY POLE W/GUY		
UTILITY POLE		
LIGHT POLE		
PEDESTRIAN SIGNAL		
WATER GATE		
GAS GATE	GG	
GAS WITNESS	GW	
WATER BELL	WB	
WATER MANHOLE	WMH	
HYDRANT		
SIGN		
MAILBOX		
CONIFEROUS TREE		
DECIDUOUS TREE		
IRON PIN (FOUND)	IPF	
MONUMENTS (FOUND)	MF	
DETECTABLE WARNING SURFACE		
FULL DEPTH PAVEMENT RECLAMATION		
BITUMINOUS SIDEWALK		
BITUMINOUS SIDEWALK W/PERMEABLE BASE		
CONCRETE		
BITUMINOUS DRIVEWAY APRON		
COMPOST INSLOPE "BIO-BUFFER"		
EXISTING BITUMINOUS PAVEMENT DEMOLITION		
EXISTING BITUMINOUS PAVEMENT DEMOLITION AND COMPOST INSLOPE "BIO-BUFFER"		
EMBEDED NATURAL STONE LINING		

LINE TYPES

DESCRIPTION	EXISTING
CONTOUR (1' INTERVAL)	122
CONTOUR (INDEX)	120
SANITARY SEWER	S
STORM DRAIN	SD
UNDERDRAIN	UD
WATER MAIN	W
UNDERGROUND ELECTRIC	E
GAS LINE	G
OVERHEAD ELECTRIC	OE
PROPERTY LINE	
RIGHT OF WAY	
EASEMENT	
EDGE OF VEGETATION	
FENCE	X
CENTERLINE	
RETAINING WALL	
STONEWALL	
CURB	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	

DESCRIPTION	PROPOSED
INDEX CONTOUR	50
INTERVAL CONTOUR	49
STORM DRAIN	SD
UNDERDRAIN	UD
WATER MAIN	W
EDGE OF PAVEMENT	
SLIP FORM CONCRETE CURB	
SLOPED GRANITE CURB	

ABBREVIATIONS

&	AND
A.G.	ABOVE GROUND
BIT	BITUMINOUS
B/W	BETWEEN
CB	CATCH BASIN
CI	CAST IRON
CMP	CENTRAL MAINE POWER
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
DI	DUCTILE IRON
DIA.	DIAMETER
DMH	DRAIN MANHOLE
DTL.	DETAIL
E	UNDERGROUND ELECTRICAL
EL.	ELEVATION
E.O.P.	EDGE OF PAVEMENT
EXIST.	EXISTING
FF	FINISH FLOOR
FT	FOOT/FEET
G	GAS MAIN
GS	GAS SERVICE
GALV.	GALVANIZED
GRAN.	GRANITE
HDPE	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
INV.	INVERT
LF	LINEAR FEET
MAX.	MAXIMUM
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
MIN.	MINIMUM
MON	MONUMENT
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NR	NO REFUSAL
N.T.S.	NOT TO SCALE
OE	OVERHEAD ELECTRIC
OH	OVERHEAD
±	PLUS OR MINUS
LLS	LICENSED LAND SURVEYOR
PROP.	PROPOSED
PT.	POINT
PVC	POLYVINYL CHLORIDE
R.O.W.	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
REINF.	REINFORCED
REQ'D	REQUIRED
S	SLOPE (FT./FT.)
S	SEWER
SD	STORM DRAIN
SMH	SEWER MANHOLE
SCH	SCHEDULE
STA.	STATION
TYP.	TYPICAL
U.P.	UTILITY POLE
U.N.O.	UNLESS NOTED OTHERWISE
VC	VITRIFIED CLAY
VIT.	VITRIFIED CLAY
W	WEST
W	WATER
W/	WITH
W	WATERMAIN
WS	WATER SERVICE
WV	WATER VALVE

SHEET INDEX

GENERAL

G-00	COVER SHEET
G-01	GENERAL NOTES, LEGEND, ABBREVIATIONS, AND SHEET INDEX
G-02	KEY PLAN

SURVEY

C-101	EXISTING CONDITIONS PLAN – 1 STA. 69+36 TO STA. 79+00
C-102	EXISTING CONDITIONS PLAN – 2 STA. 79+00 TO STA. 88+50
C-103	EXISTING CONDITIONS PLAN – 3 STA. 88+50 TO STA. 99+00
C-104	EXISTING CONDITIONS PLAN – 4 STA. 99+00 TO STA. 109+00
C-105	EXISTING CONDITIONS PLAN – 5 STA. 109+00 TO STA. 119+00
C-106	EXISTING CONDITIONS PLAN – 6 STA. 119+00 TO STA. 124+50

CIVIL

C-201	PHASE 1 RECONSTRUCTION STA. 69+00 TO STA. 74+00
C-202	PHASE 1 RECONSTRUCTION STA. 74+00 TO STA. 79+00
C-203	PHASE 1 RECONSTRUCTION STA. 79+00 TO STA. 84+00
C-204	PHASE 1 RECONSTRUCTION STA. 84+00 TO STA. 88+50
C-205	PHASE 1 RECONSTRUCTION STA. 88+50 TO STA. 94+00
C-206	PHASE 1 RECONSTRUCTION STA. 94+00 TO STA. 99+00
C-207	PHASE 1 RECONSTRUCTION STA. 99+00 TO STA. 103+50
C-208	PHASE 1 RECONSTRUCTION STA. 103+50 TO STA. 109+00
C-209	PHASE 1 RECONSTRUCTION STA. 109+00 TO STA. 111+24
C-210	SAFE ROUTES PLAN STA. 79+00 TO STA. 84+00
C-211	SAFE ROUTES PLAN STA. 84+00 TO STA. 88+50
C-212	SAFE ROUTES PLAN STA. 88+50 TO STA. 94+00
C-213	SAFE ROUTES PLAN STA. 94+00 TO STA. 99+00
C-214	SAFE ROUTES PLAN STA. 99+00 TO STA. 103+50
C-215	SAFE ROUTES PLAN STA. 103+50 TO STA. 109+00
C-216	SAFE ROUTES PLAN STA. 109+00 TO STA. 114+00
C-217	SAFE ROUTES PLAN STA. 114+00 TO STA. 119+00
C-218	SAFE ROUTES PLAN STA. 119+00 TO STA. 124+50
C-219	LAYOUT PLAN – 1 (TO BE PROVIDED AT A LATER DATE)
C-220	LAYOUT PLAN – 2 (TO BE PROVIDED AT A LATER DATE)
C-221	LAYOUT PLAN – 3 (TO BE PROVIDED AT A LATER DATE)
C-222	LAYOUT PLAN – 4 (TO BE PROVIDED AT A LATER DATE)
C-223	LAYOUT PLAN – 5 (TO BE PROVIDED AT A LATER DATE)
C-224	LAYOUT PLAN – 6 (TO BE PROVIDED AT A LATER DATE)
C-300	CROSS SECTIONS – 1
C-301	CROSS SECTIONS – 2
C-302	CROSS SECTIONS – 3
C-303	CROSS SECTIONS – 4
C-304	CROSS SECTIONS – 5
C-305	CROSS SECTIONS – 6
C-306	CROSS SECTIONS – 7
C-307	CROSS SECTIONS – 8
C-308	CROSS SECTIONS – 9
C-400	CIVIL DETAILS – 1
C-401	CIVIL DETAILS – 2
C-402	CIVIL DETAILS – 3
C-403	CIVIL DETAILS – 4
C-404	CIVIL DETAILS – 5

ELECTRICAL

E-101	ELECTRICAL LEGEND & POWER PLAN
E-102	DETAILS AND SCHEDULES
E-103	LIGHTING PLAN

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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DRAWN BY: JBC | 227433.63 G-01.dwg

GENERAL NOTES, LEGEND, ABBREVIATIONS, AND SHEET INDEX

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: NONE
SHEET: 1 OF 49

G-01

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22x34 SHEET
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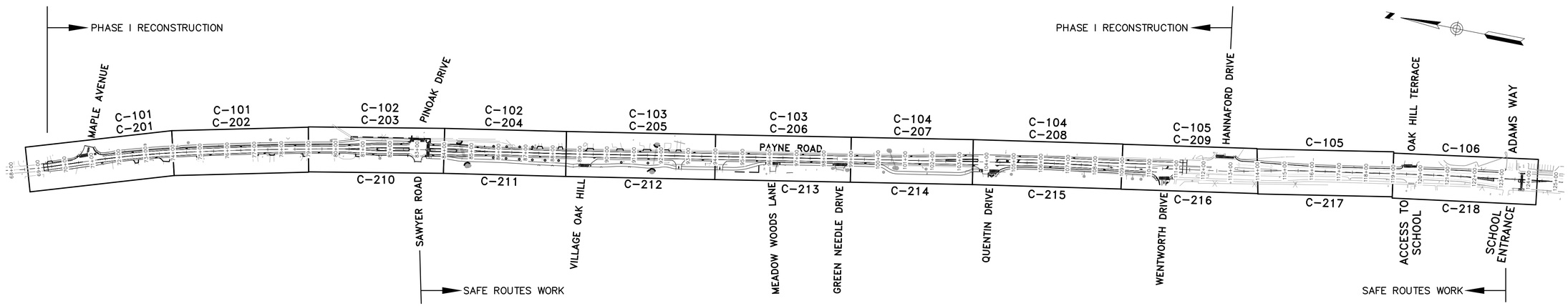

KEY PLAN

SCALE: 1" = 200'

NOTE:

- PHASE I RECONSTRUCTION AND SAFE ROUTES WORK WILL BE CONDUCTED CONCURRENTLY BUT UNDER A SEPARATE CONTRACT AND ARE SHOWN ON SEPARATE SHEETS FOR CLARITY.

200' 0 200' 400'

BAR SCALE
1" = 200'
CHECK GRAPHIC SCALE BEFORE USING

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227433.63 G-02.dwg

KEY PLAN

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE I RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 200'
SHEET: 2 OF 49

G-02

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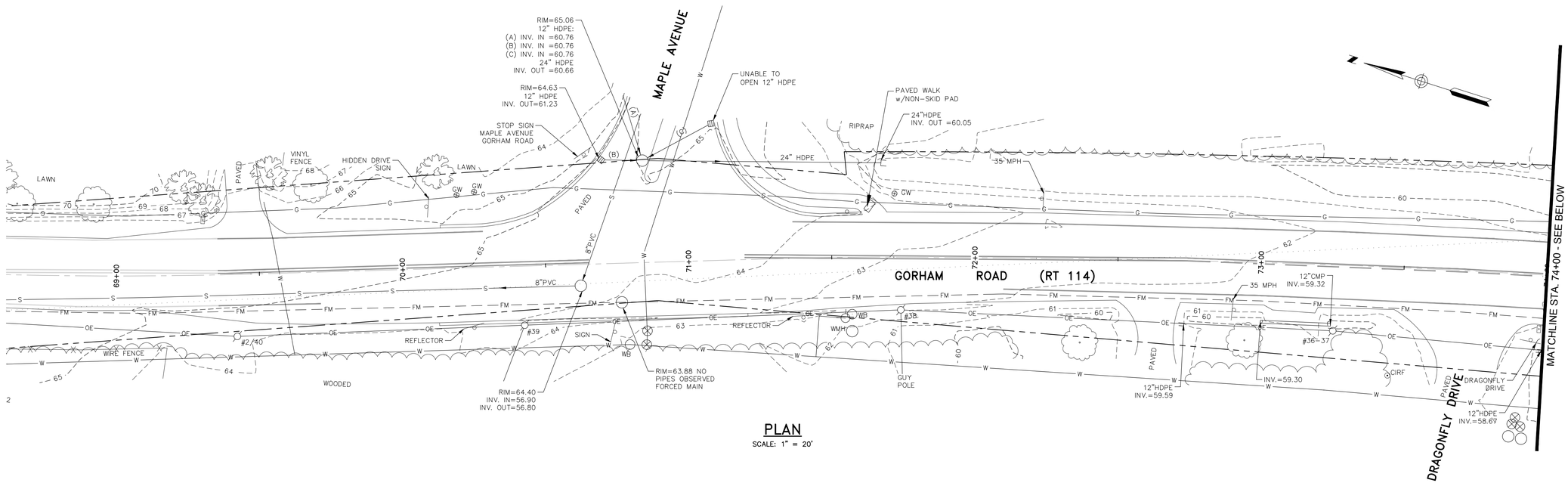
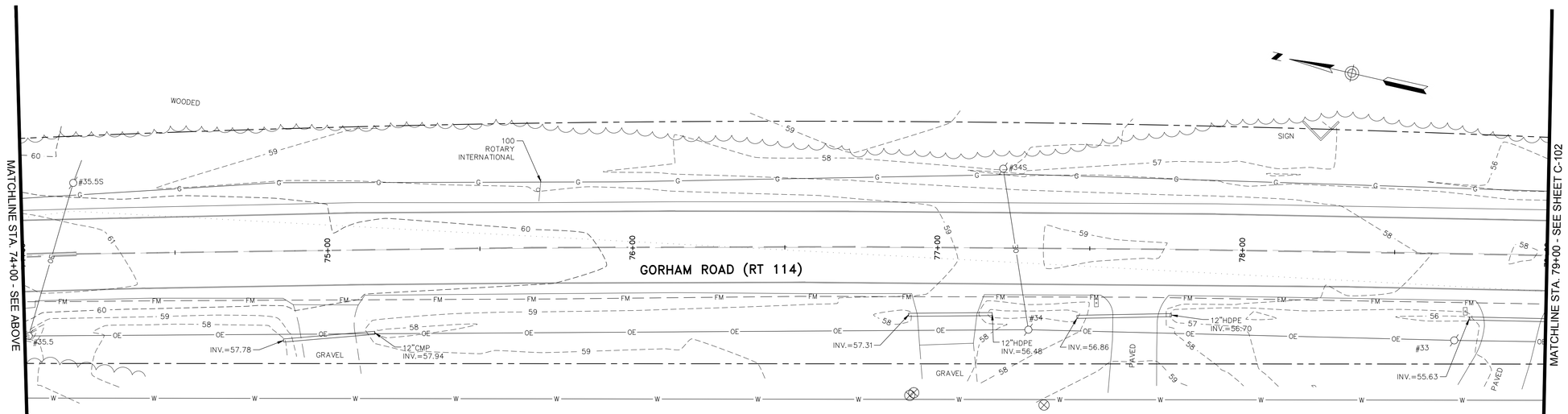


PLAN

SCALE: 1" = 20'



PLAN

SCALE: 1" = 20'

PLAN REFERENCES:

1. "ROAD IN SCARBOROUGH FROM OAK HILL TO WESTBROOK" BY WINSLOW SURVEYOR DATED NOVEMBER 28, 1927 RECORDED IN THE CUMBERLAND COUNTY COMMISSIONERS OFFICE BOOK 5, PAGE 11.

2. "PLAN OF A PORTION OF THE GORHAM ROAD IN THE TOWN OF SCARBOROUGH AS REDEFINED BY THE COUNTY COMMISSIONERS OF CUMBERLAND COUNTY AUGUST 3, 1949" BY HARLAN H. SWEETSER ENG. DATED OCTOBER 1949 RECORDED IN THE CUMBERLAND COUNTY COMMISSIONERS OFFICE BOOK 6, PAGE 4–0.

3. "MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP" S.H.C. FILE NO. 3–197 DATED JUNE 1966 RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 77, PAGES 6–8.

4. "MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP" S.H.C. FILE NO. 3–218 DATED SEPTEMBER 1971 RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 111, PAGE 79.

5. "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP" D.O.T. FILE NO. 3–389 DATED JUNE 1991.

6. "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP" D.O.T. FILE NO. 3–453 DATED JUNE 1999.

7. "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP" D.O.T. FILE NO. 3–396 DATED MAY 1992.

NOTES:

1. BEARINGS ARE BASED ON MAINE WEST STATE PLANE COORDINATE SYSTEM NAD 83, DERIVED FROM STATIC GPS OBSERVATIONS. PROJECT SCALE FACTOR = 0.999966377
2. ELEVATIONS ARE BASED ON NAVD 88, DERIVED FROM STATIC GPS OBSERVATIONS.
3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1–888–DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

20' 0 20' 40'

BAR SCALE
1" = 20'
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REV	DESCRIPTION	DATE

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DRAWN BY: JBC
CHECKED BY: DAS
227433.63 C-101 - C-106*.dwg

EXISTING CONDITIONS PLAN - 1
STA. 69+36 TO STA. 79+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 3 OF 49

C-101

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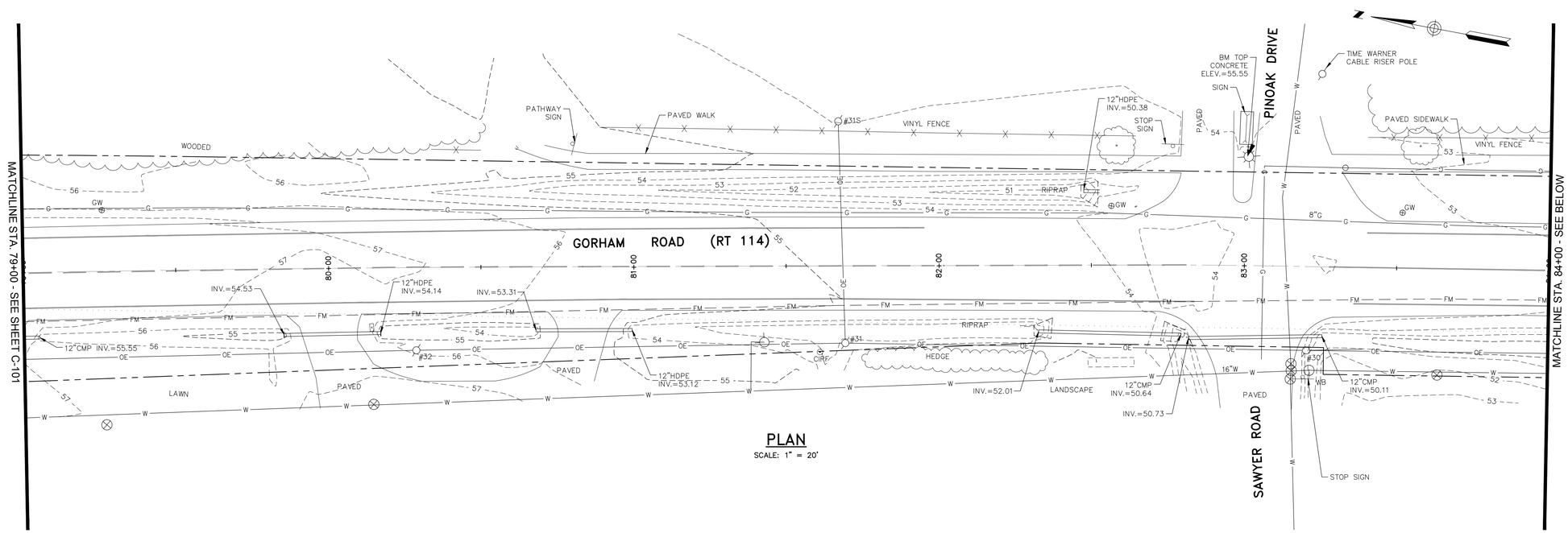
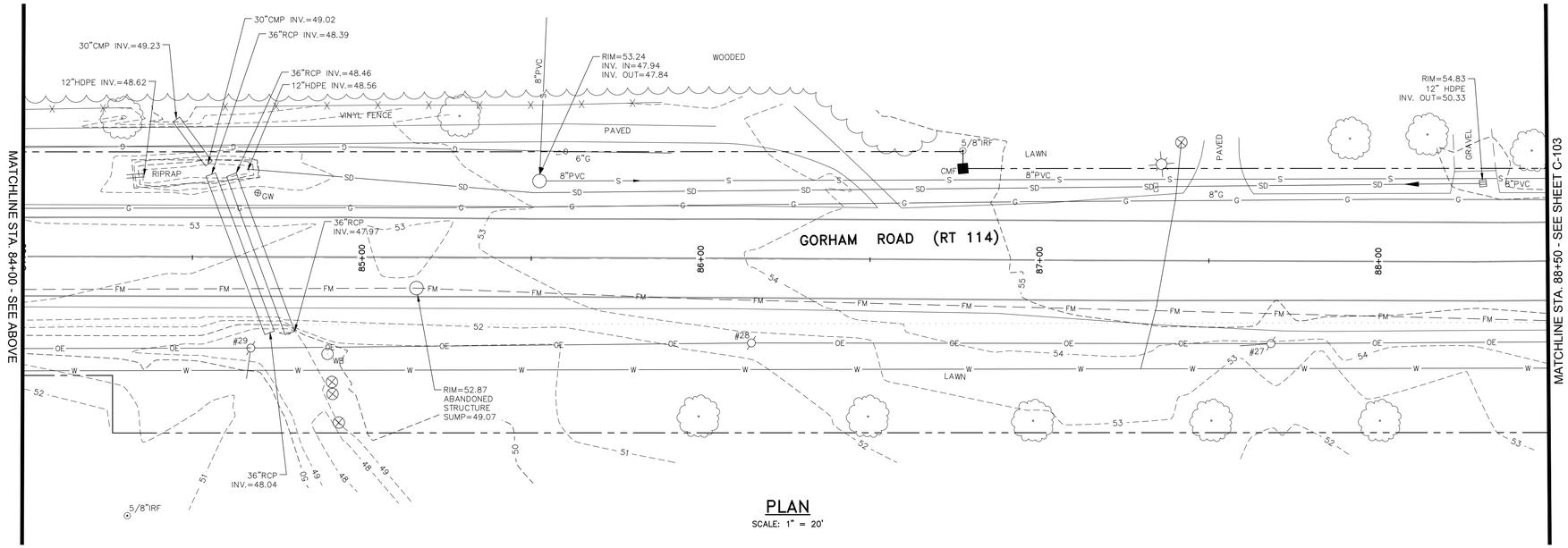
22x34 SHEET
1:1



PLAN

SCALE: 1" = 20'



PLAN

SCALE: 1" = 20'

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20' 0 20' 40'
BAR SCALE
1" = 20'
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227433.63_C-101 - C-106*.dwg

EXISTING CONDITIONS PLAN - 2
STA. 79+00 TO STA. 88+50

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 4 OF 49

C-102

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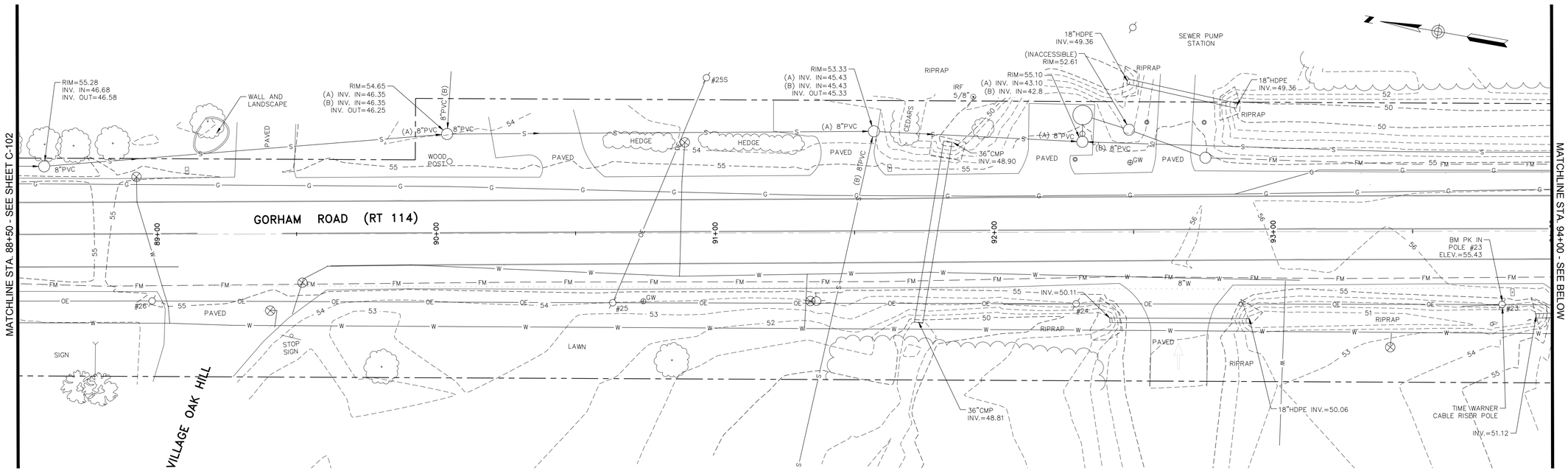
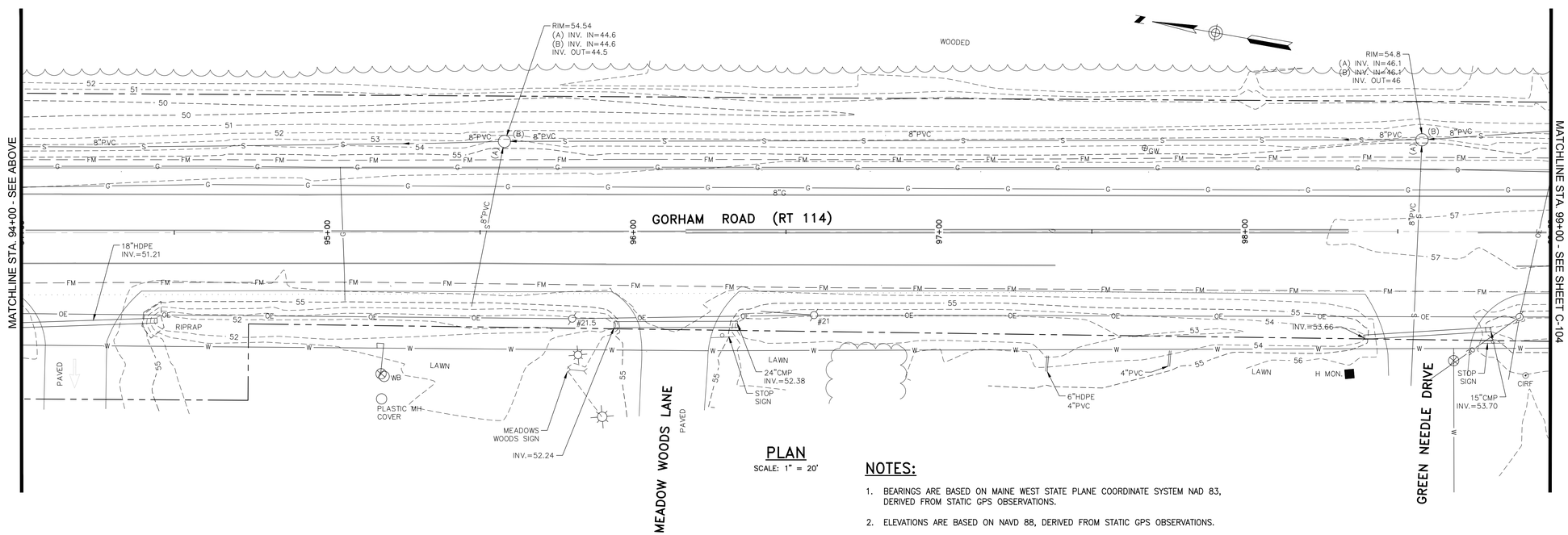


PLAN

SCALE: 1" = 20'



PLAN

SCALE: 1" = 20'

NOTES:

1. BEARINGS ARE BASED ON MAINE WEST STATE PLANE COORDINATE SYSTEM NAD 83, DERIVED FROM STATIC GPS OBSERVATIONS.
2. ELEVATIONS ARE BASED ON NAVD 88, DERIVED FROM STATIC GPS OBSERVATIONS.
3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

20' 0 20' 40'

BAR SCALE
1" = 20'
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REV	DESCRIPTION	DATE

DESIGNED BY: DAS
DRAWN BY: JBC
CHECKED BY: DAS
227433.63 C-101 - C-106*.dwg

EXISTING CONDITIONS PLAN - 3
STA. 88+50 TO STA. 99+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

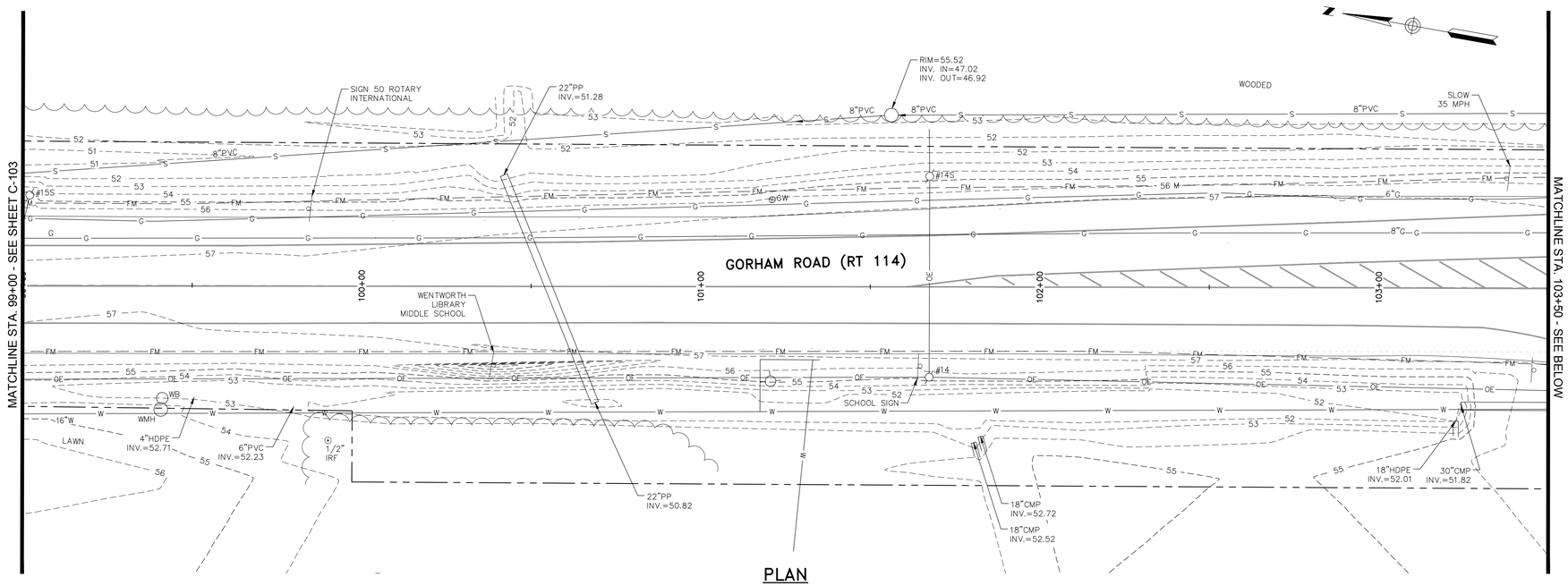
GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 5 OF 49

C-103

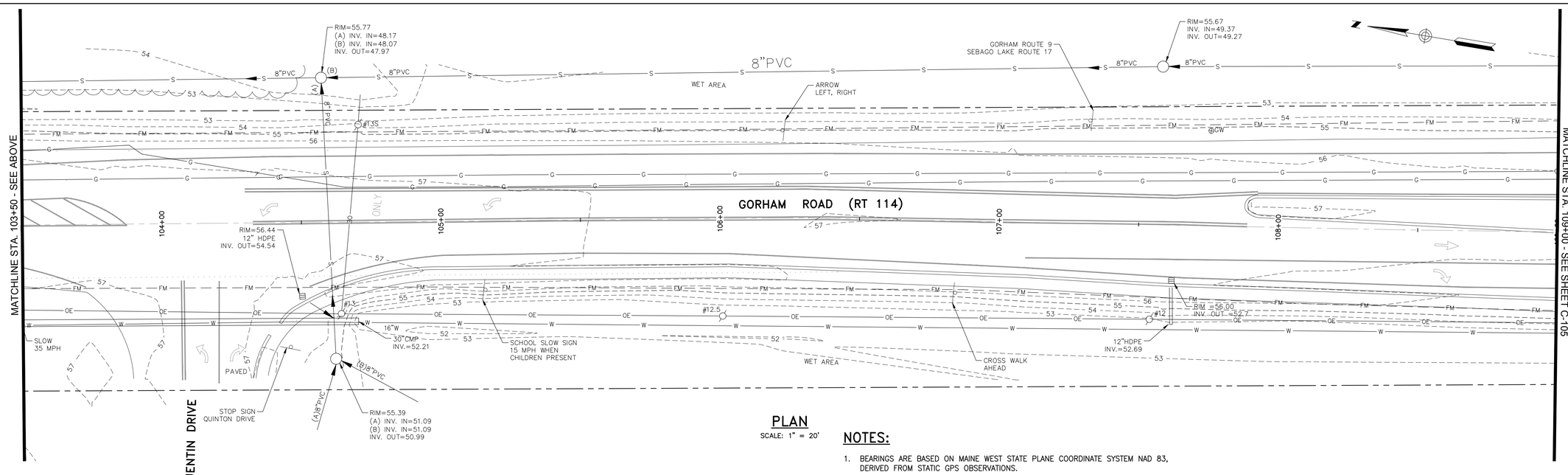
\\Woodardcurran.net\Shared\Projects\227433 Scarborough-Eng Cons Svcs\zip\63 Gorham Road Phase 1 Final Design\Drawings\SURVEY\227433.63 C-101 - C-106.dwg, Apr 10, 2017 - 2:18pm

22x34 SHEET
1:1



PLAN

SCALE: 1" = 20'



PLAN

SCALE: 1" = 20'

NOTES:

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20' 0 20' 40'

BAR SCALE
1" = 20'
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CHECKED BY: DAS
227433.63 C-101 - C-106*.dwg

EXISTING CONDITIONS PLAN - 4
STA. 99+00 TO STA. 109+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 6 OF 49

C-104

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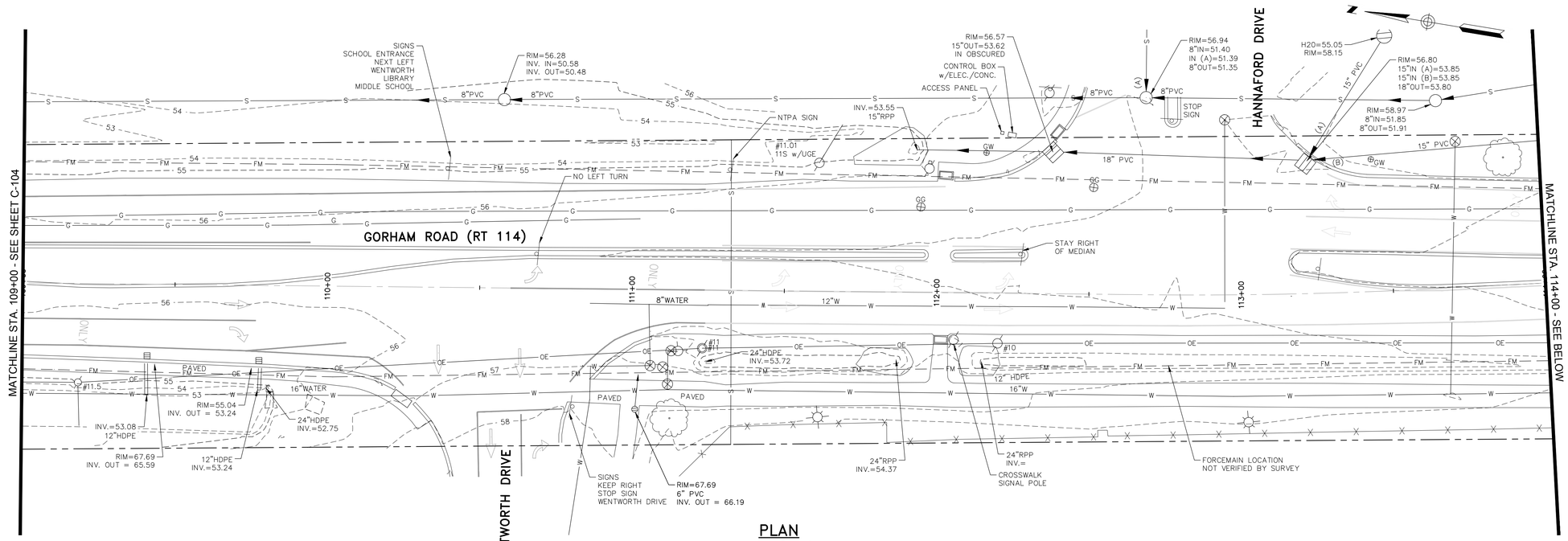
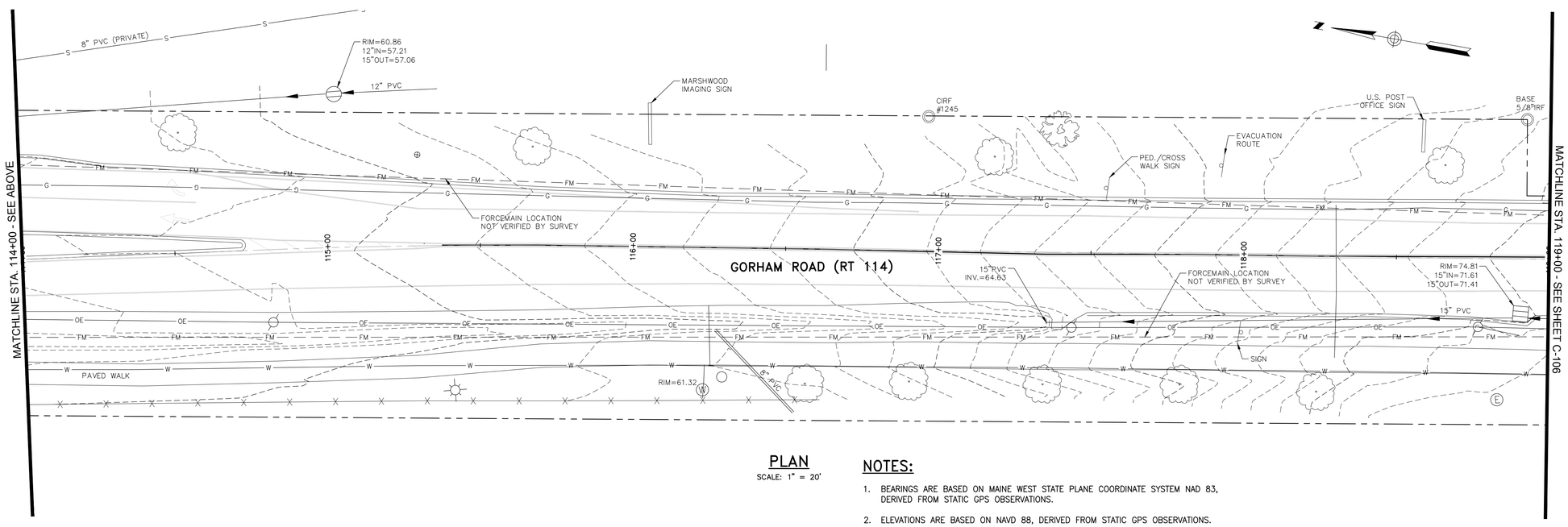
22x34 SHEET
1:1

22x34 SHEET
1:1



PLAN

SCALE: 1" = 20'



PLAN

SCALE: 1" = 20'

NOTES:

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20' 0 20' 40'

BAR SCALE
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CHECKED BY: DAS
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EXISTING CONDITIONS PLAN - 5
STA. 109+00 TO STA. 119+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 7 OF 49

C-105

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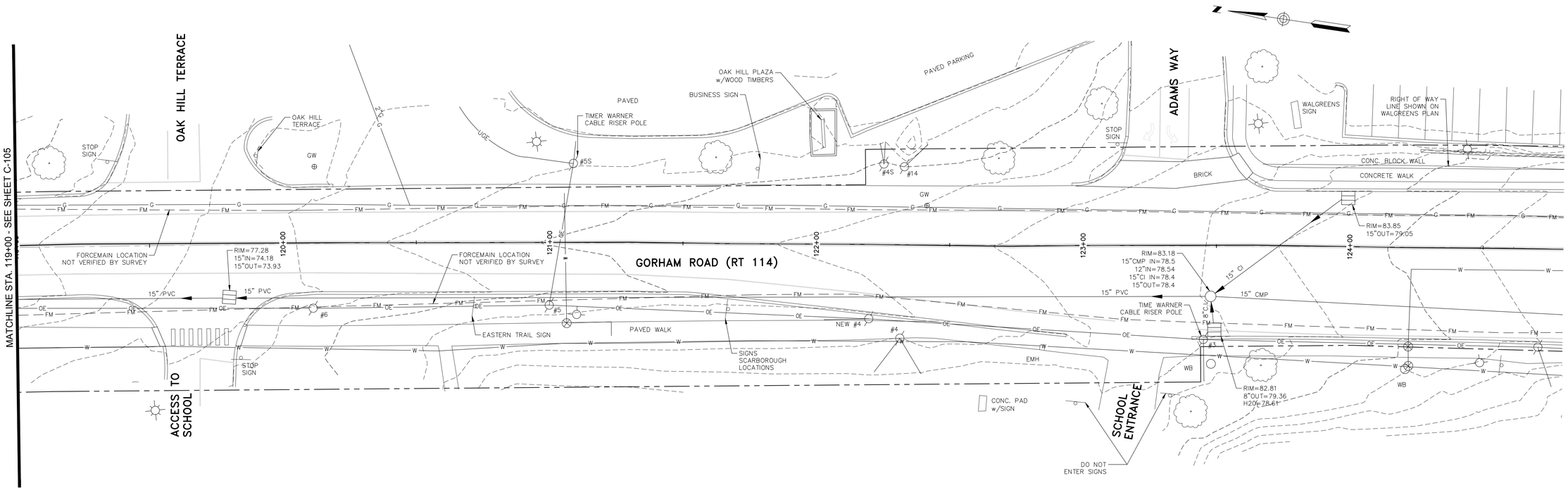

PLAN

SCALE: 1" = 20'

NOTES:

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20' 0 20' 40'

BAR SCALE
1" = 20'
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EXISTING CONDITIONS PLAN - 6
STA. 119+00 TO STA. 124+50

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 8 OF 49

C-106

22x34 SHEET
1:1

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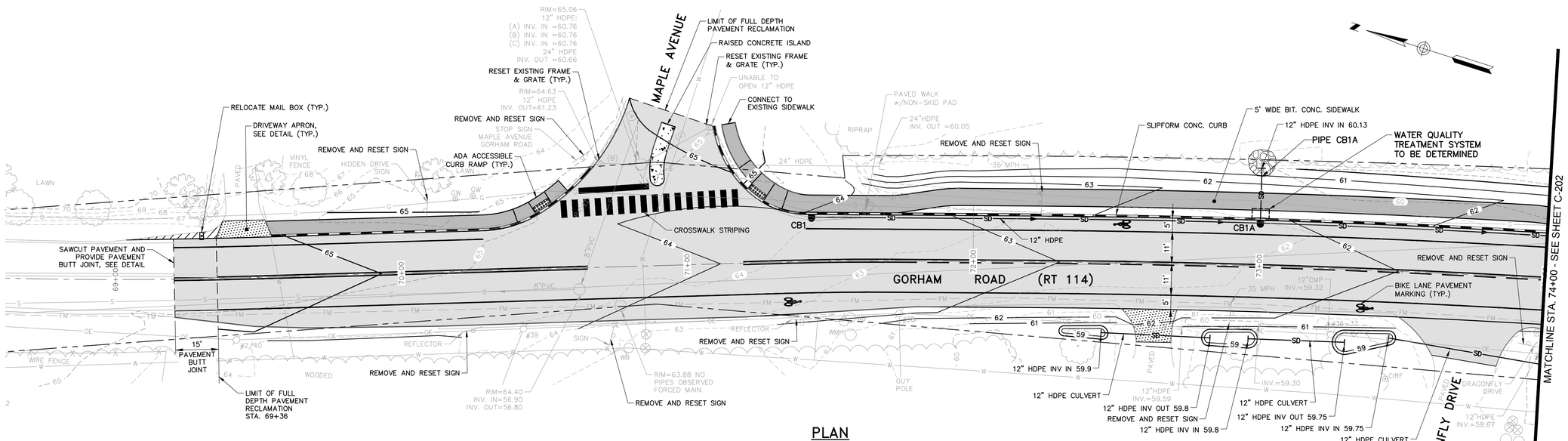
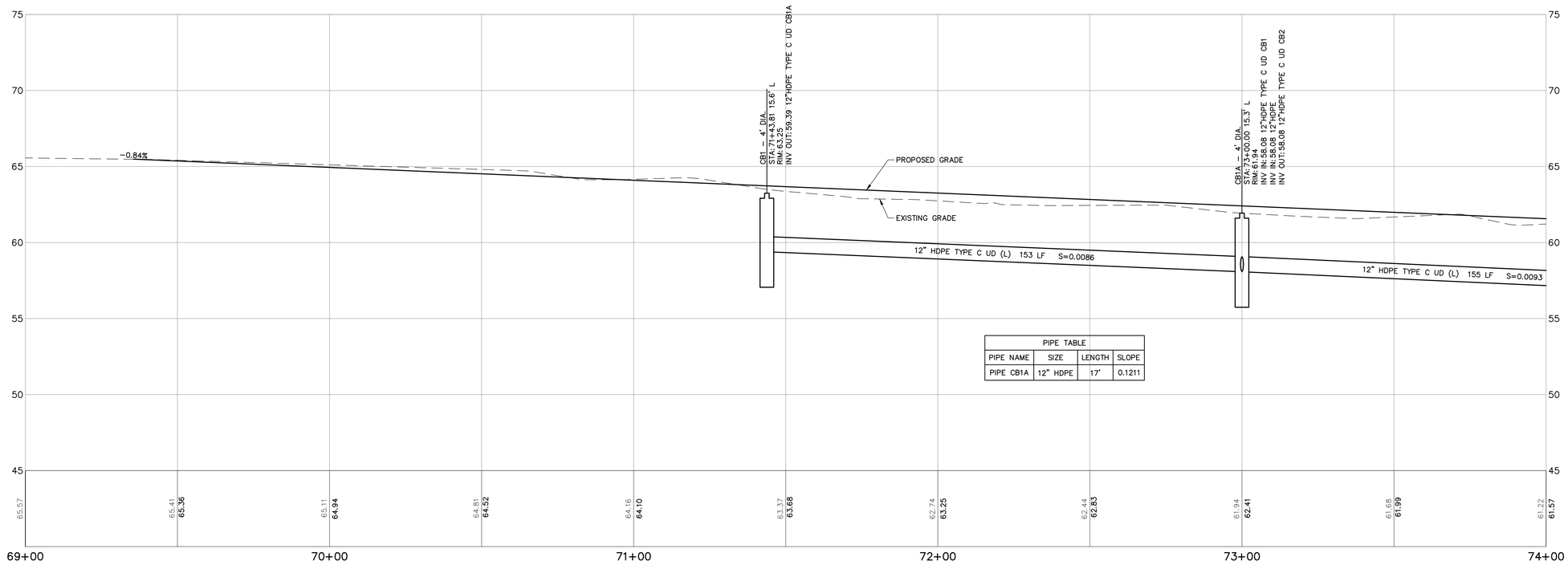


PLAN

SCALE: 1" = 20'



PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB1A	12" HDPE	17'	0.1211

PROFILE STA. 69+00 TO STA. 74+00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

22x34 SHEET
1:1

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1	REVISED PER CLIENT COMMENTS	3/8/2017

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DRAWN BY: JBC | 227433.63 C-201 – C-205.dwg

PHASE 1 RECONSTRUCTION
STA. 69+00 TO STA. 74+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 9 OF 49

C-201

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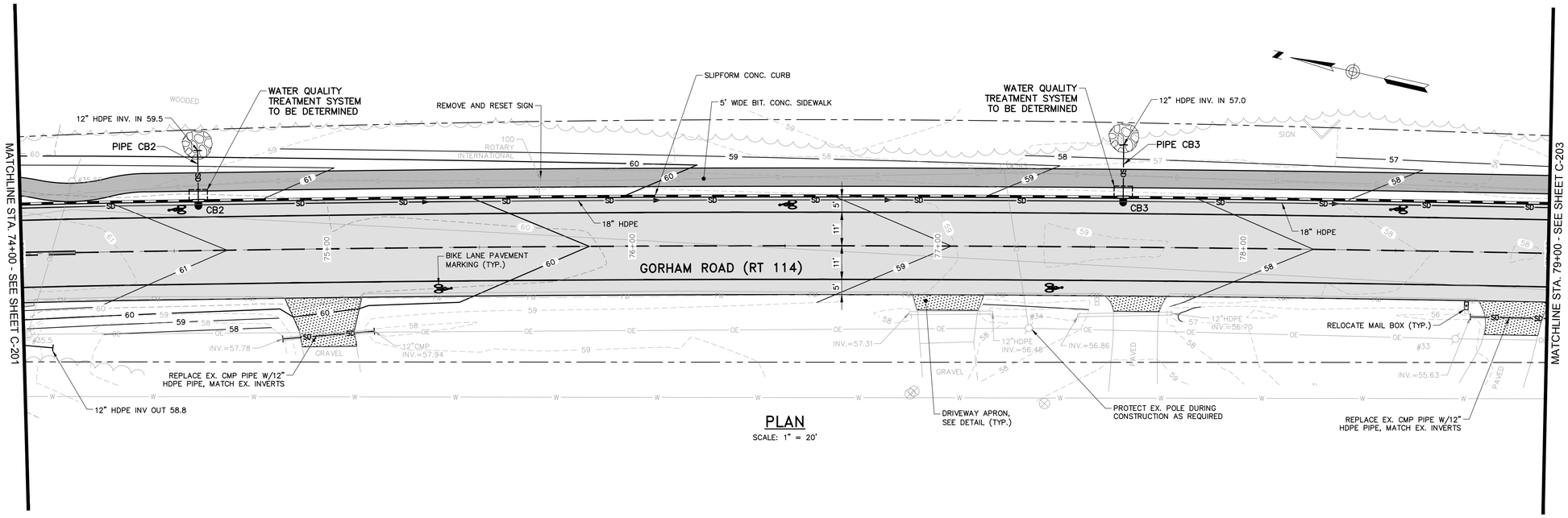
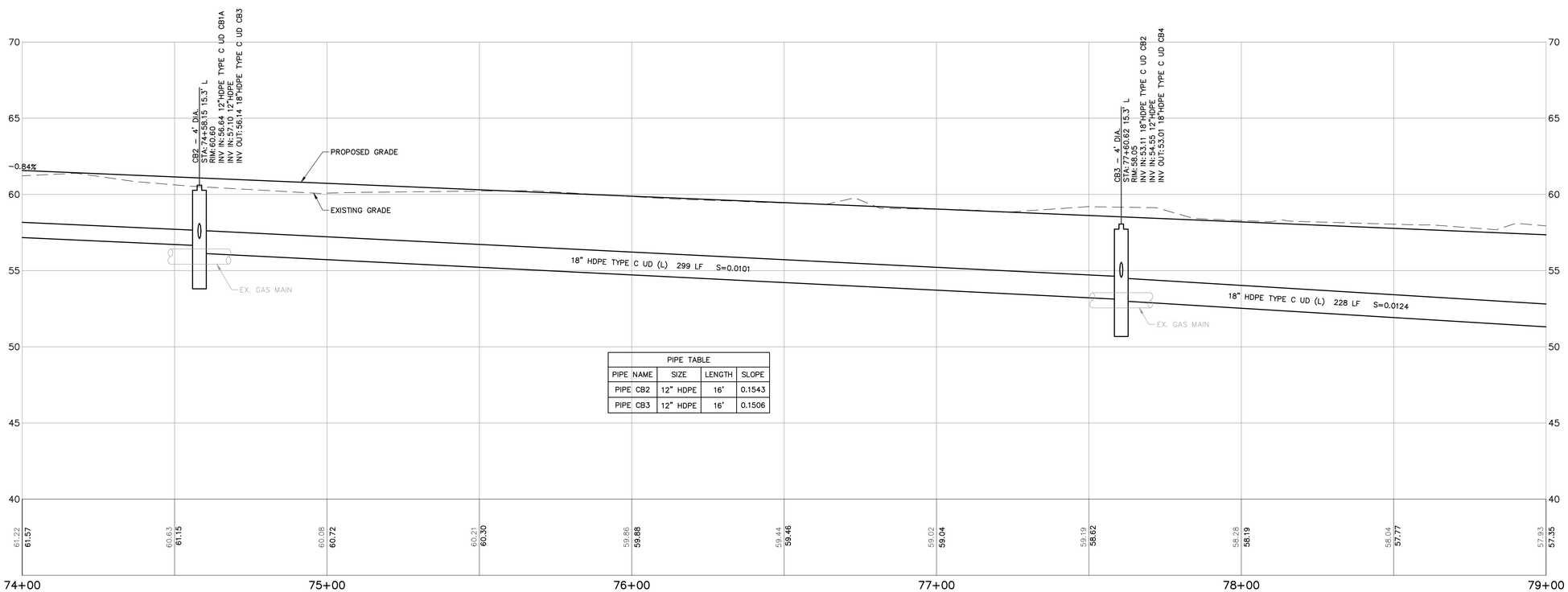


PLAN

SCALE: 1" = 20'



PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB2	12" HDPE	16'	0.1543
PIPE CB3	12" HDPE	16'	0.1506

PROFILE STA. 74+00 TO STA. 79+00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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CHECKED BY: DAS
227433.63 C-201 - C-205.dwg

PHASE 1 RECONSTRUCTION
STA. 74+00 TO STA. 79+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 10 OF 49

C-202

22x34 SHEET
1:1

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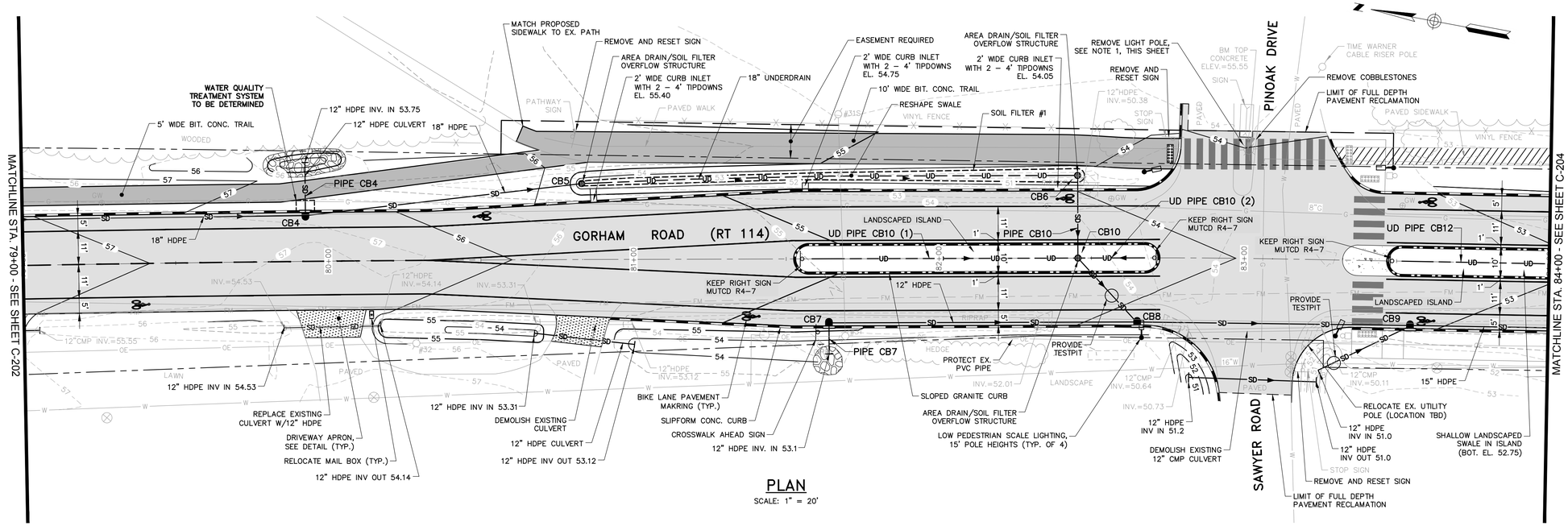
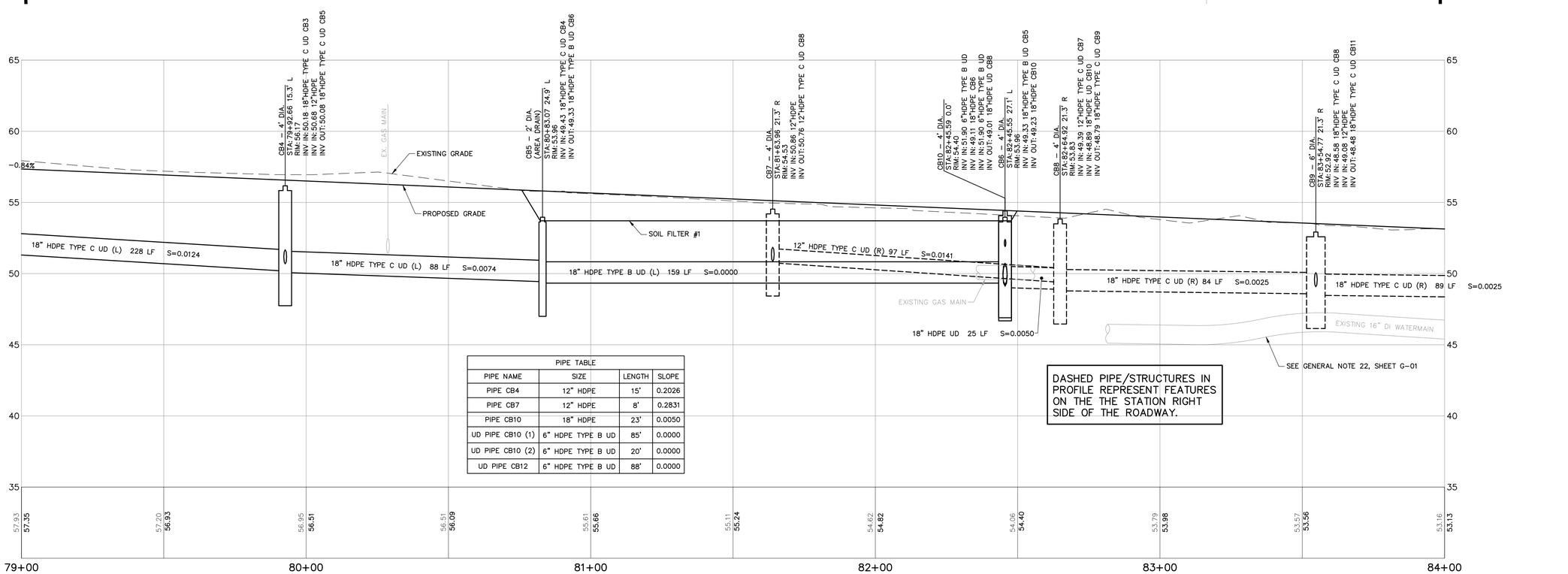


PLAN

SCALE: 1" = 20'



PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB4	12" HDPE	15'	0.2026
PIPE CB7	12" HDPE	8'	0.2831
PIPE CB10	18" HDPE	23'	0.0050
UD PIPE CB10 (1)	6" HDPE TYPE B UD	85'	0.0000
UD PIPE CB10 (2)	6" HDPE TYPE B UD	20'	0.0000
UD PIPE CB12	6" HDPE TYPE B UD	88'	0.0000

DASHED PIPE/STRUCTURES IN PROFILE REPRESENT FEATURES ON THE THE STATION RIGHT SIDE OF THE ROADWAY.

PROFILE STA. 79+00 TO STA. 84+00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

NOTE:

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES, POLE AND POLE BASE. EXISTING WIRE SHALL BE REMOVED, COMPLETE BACK TO TAP LOCATION IN NEXT EXISTING LIGHT POLE. EXISTING CONDUIT(S) TO BE CAPPED AND ABANDONED IN PLACE. COORDINATE TEMPORARY DE-ENERGIZATION OF LIGHTING POWER WITH PROPERTY OWNER PRIOR TO DEMOLITION.

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

20' 0 20' 40'
BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

22x34 SHEET
1:1

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REV	DESCRIPTION	DATE

DESIGNED BY: DAS
DRAWN BY: JBC
CHECKED BY: DAS/BSS
227433.63 C-201 – C-205.dwg

PHASE 1 RECONSTRUCTION
STA. 79+00 TO STA. 84+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 11 OF 49

C-203

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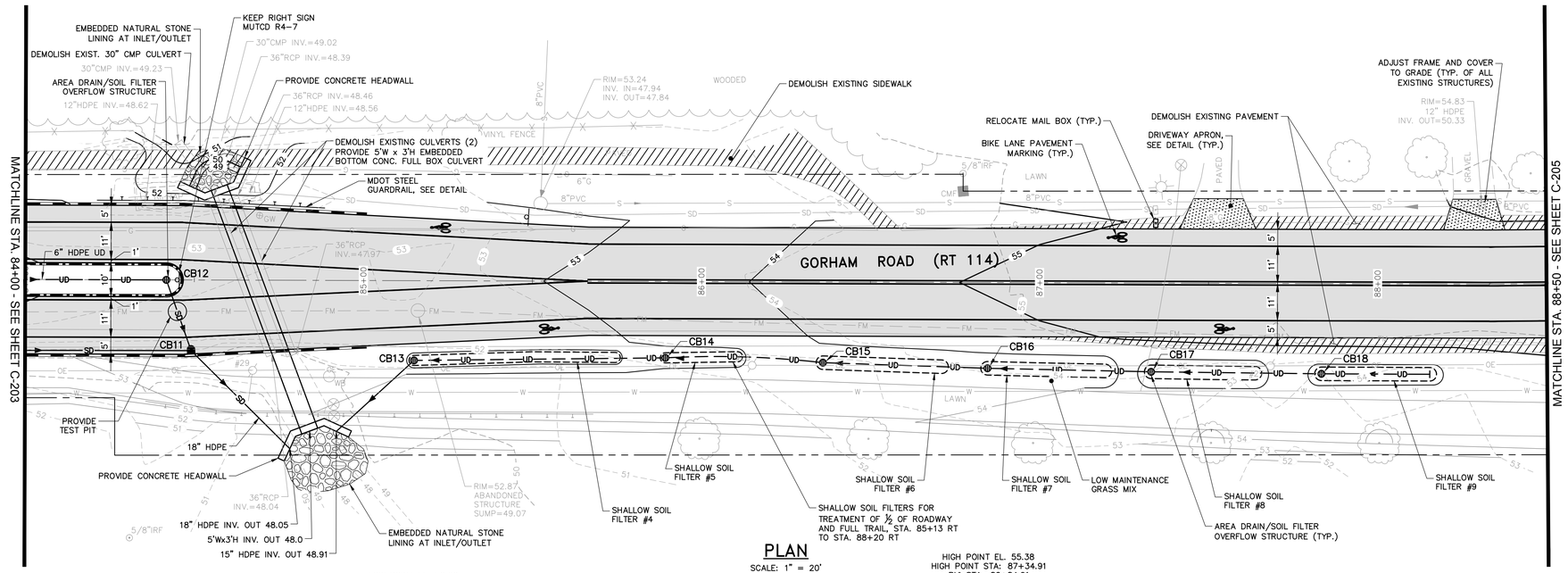
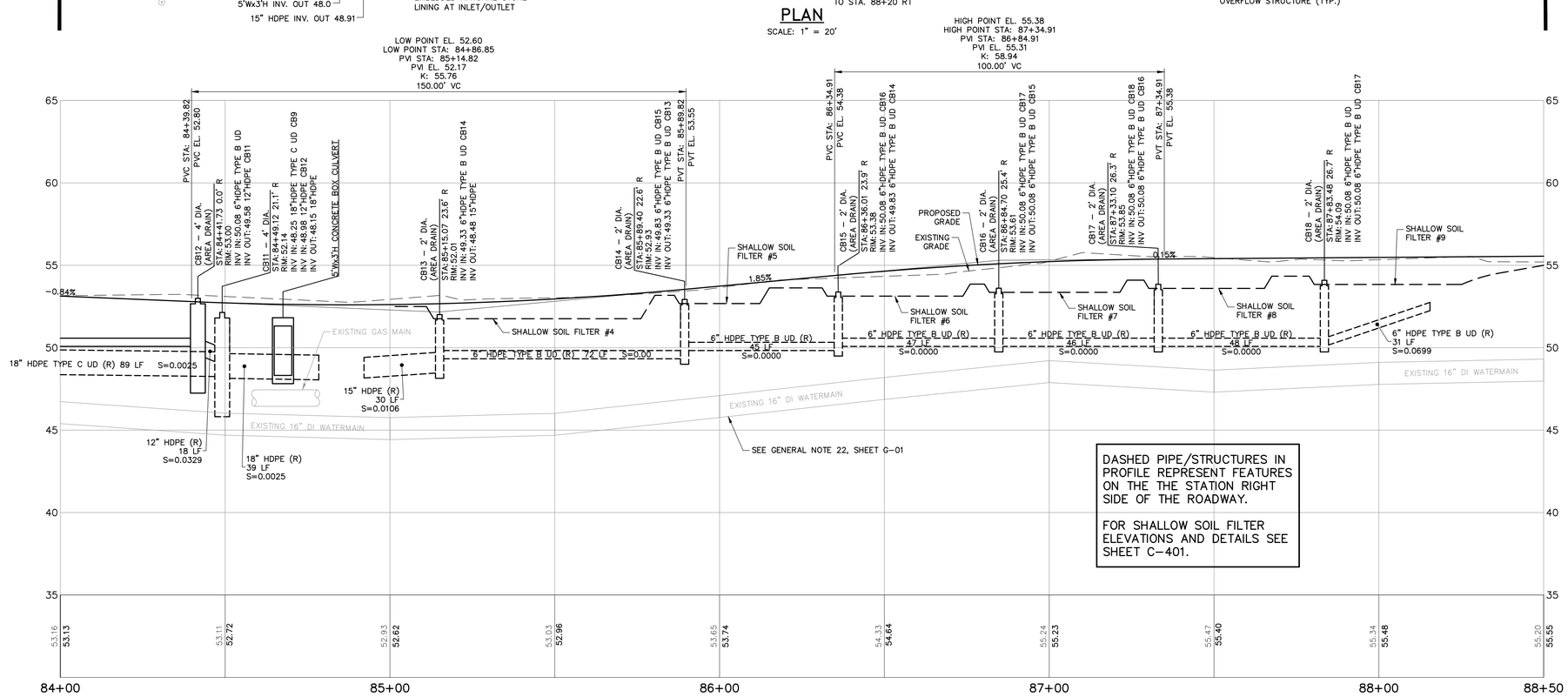


PLAN

SCALE: 1" = 20'



PROFILE STA. 84+00 TO STA. 88+50

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

DASHED PIPE/STRUCTURES IN PROFILE REPRESENT FEATURES ON THE THE STATION RIGHT SIDE OF THE ROADWAY.

FOR SHALLOW SOIL FILTER ELEVATIONS AND DETAILS SEE SHEET C-401.

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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REV.	DESCRIPTION	DATE

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DRAWN BY: JBC
27743.63 C-201 – C-205.dwg

PHASE 1 RECONSTRUCTION
STA. 84+00 TO STA. 88+50

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 12 OF 49

C-204

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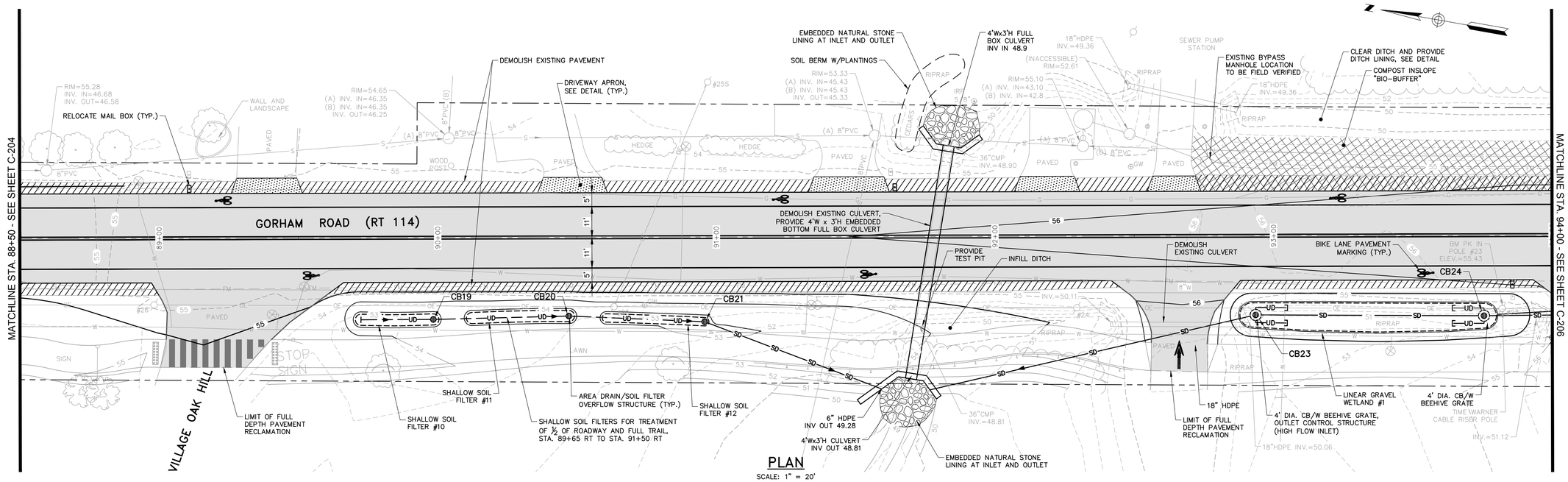
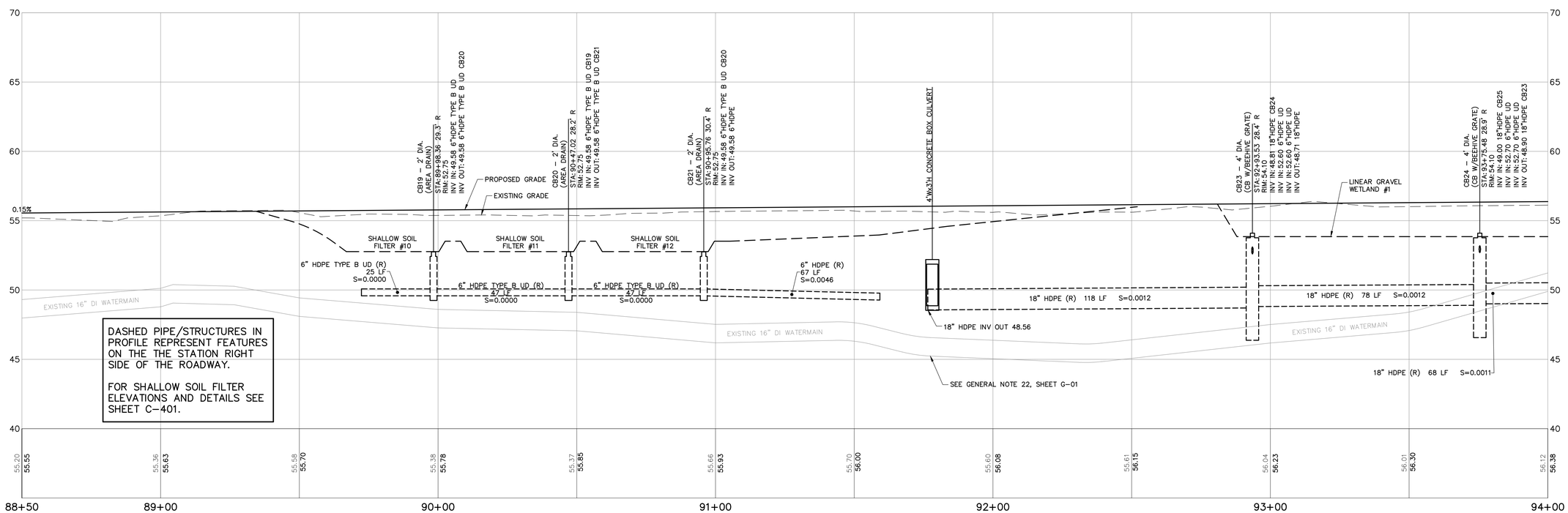


PLAN

SCALE: 1" = 20'



DASHED PIPE/STRUCTURES IN PROFILE REPRESENT FEATURES ON THE THE STATION RIGHT SIDE OF THE ROADWAY.

FOR SHALLOW SOIL FILTER ELEVATIONS AND DETAILS SEE SHEET C-401.

PROFILE STA. 88+50 TO STA. 94+00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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CHECKED BY: DAS/BSS
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PHASE 1 RECONSTRUCTION
STA. 88+50 TO STA. 94+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 13 OF 49

C-205

22x34 SHEET
1:1

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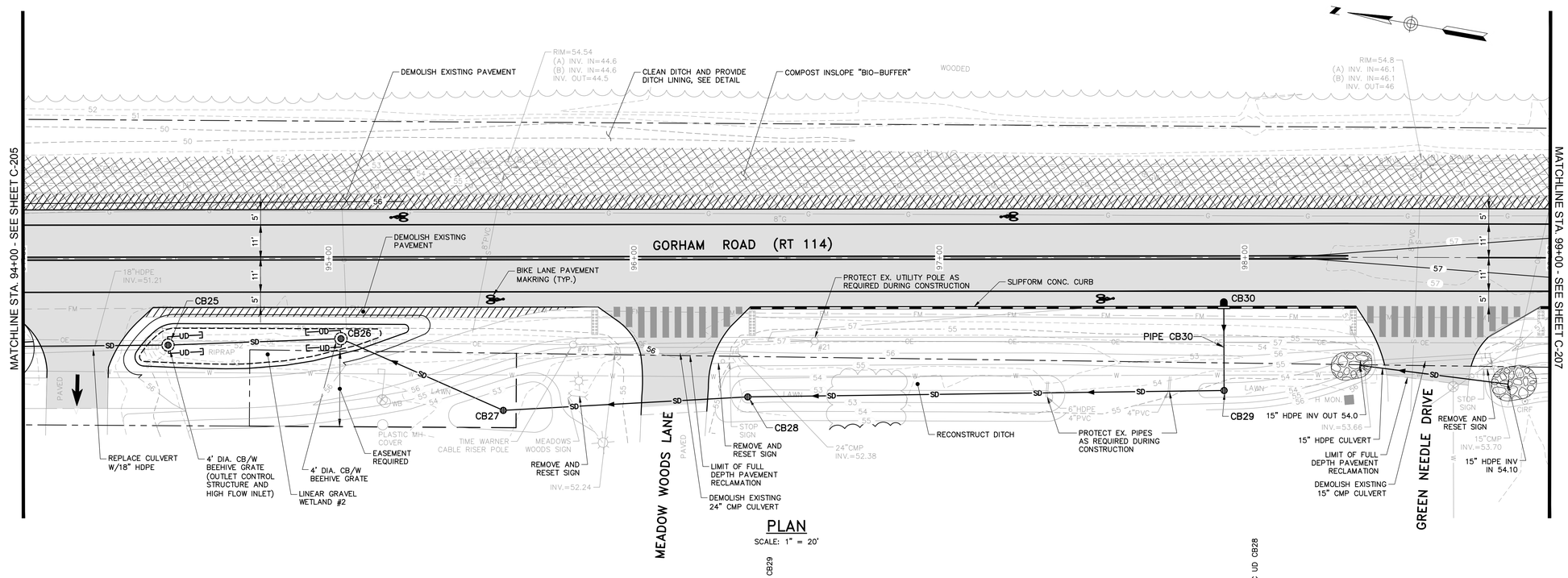
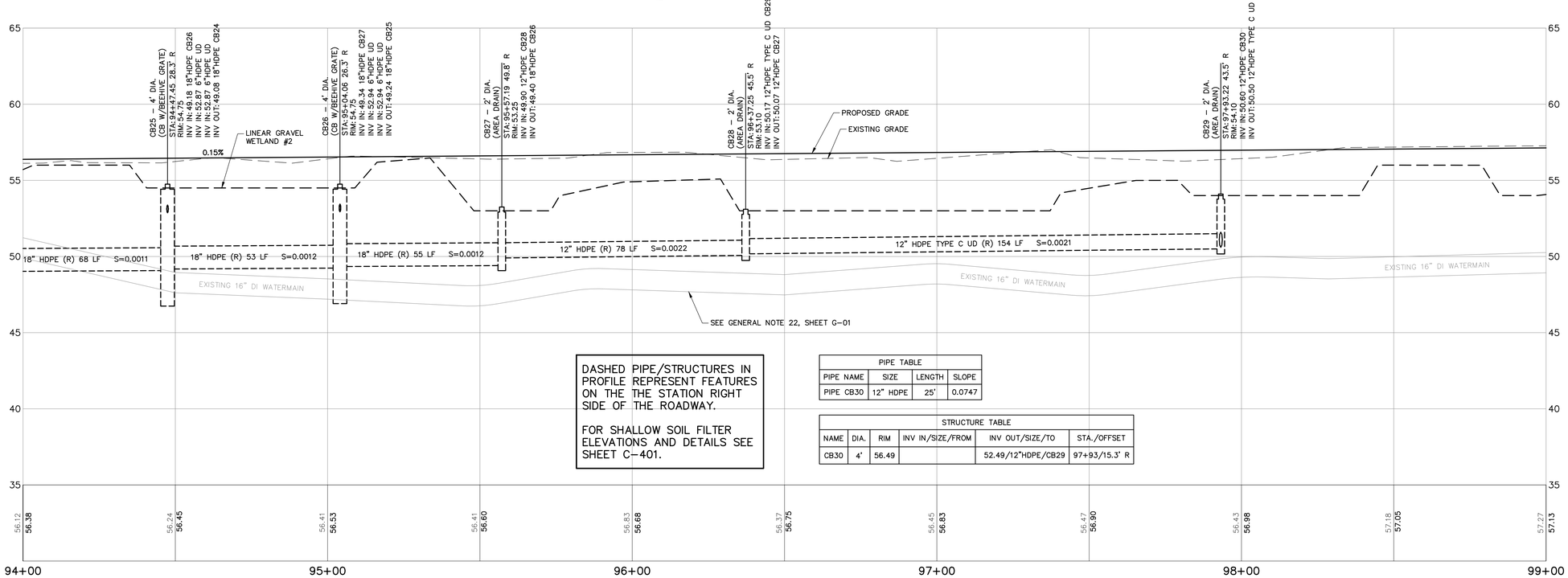


PLAN

SCALE: 1" = 20'



DASHED PIPE/STRUCTURES IN PROFILE REPRESENT FEATURES ON THE THE STATION RIGHT SIDE OF THE ROADWAY.

FOR SHALLOW SOIL FILTER ELEVATIONS AND DETAILS SEE SHEET C-401.

PIPE TABLE

PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB30	12" HDPE	25'	0.0747

STRUCTURE TABLE

NAME	DIA.	RIM	INV IN/SIZE/FROM	INV OUT/SIZE/TO	STA./OFFSET
CB30	4'	56.49		52.49/12"HDPE/CB29	97+93/15.3' R

PROFILE STA. 94+00 TO STA. 99+00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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CHECKED BY: DAS
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PHASE 1 RECONSTRUCTION
STA. 94+00 TO STA. 99+00

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 14 OF 49

C-206

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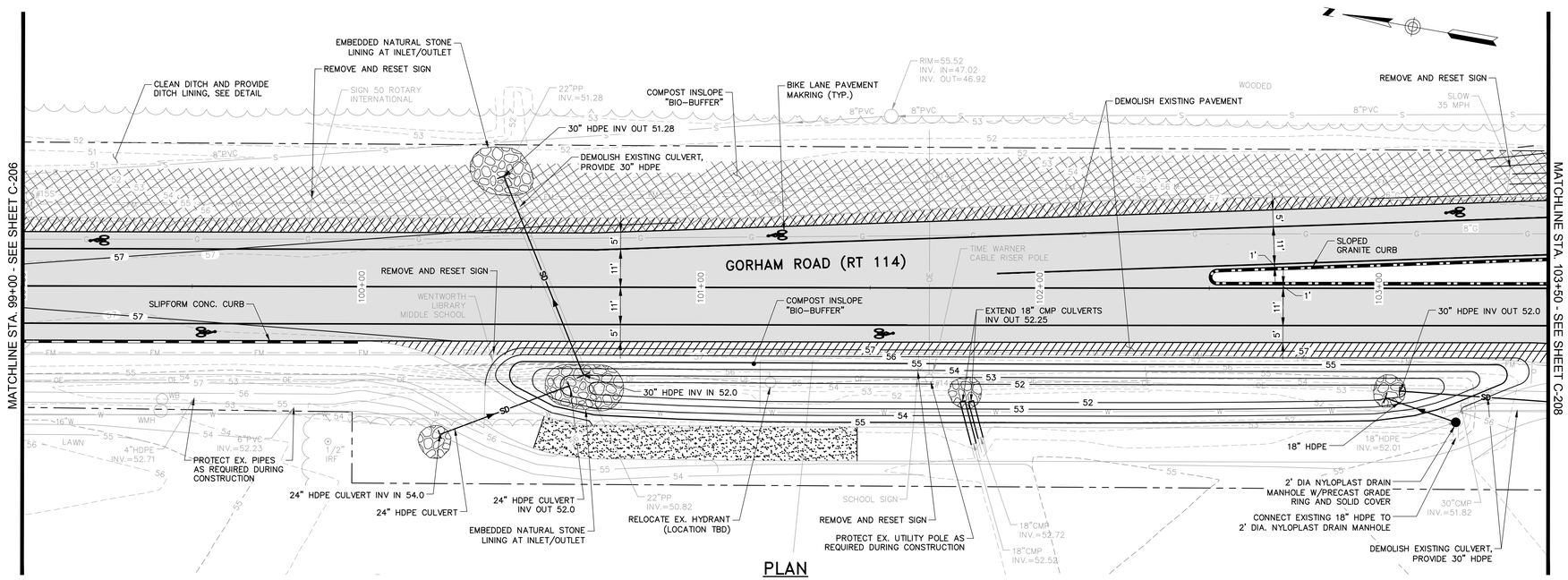

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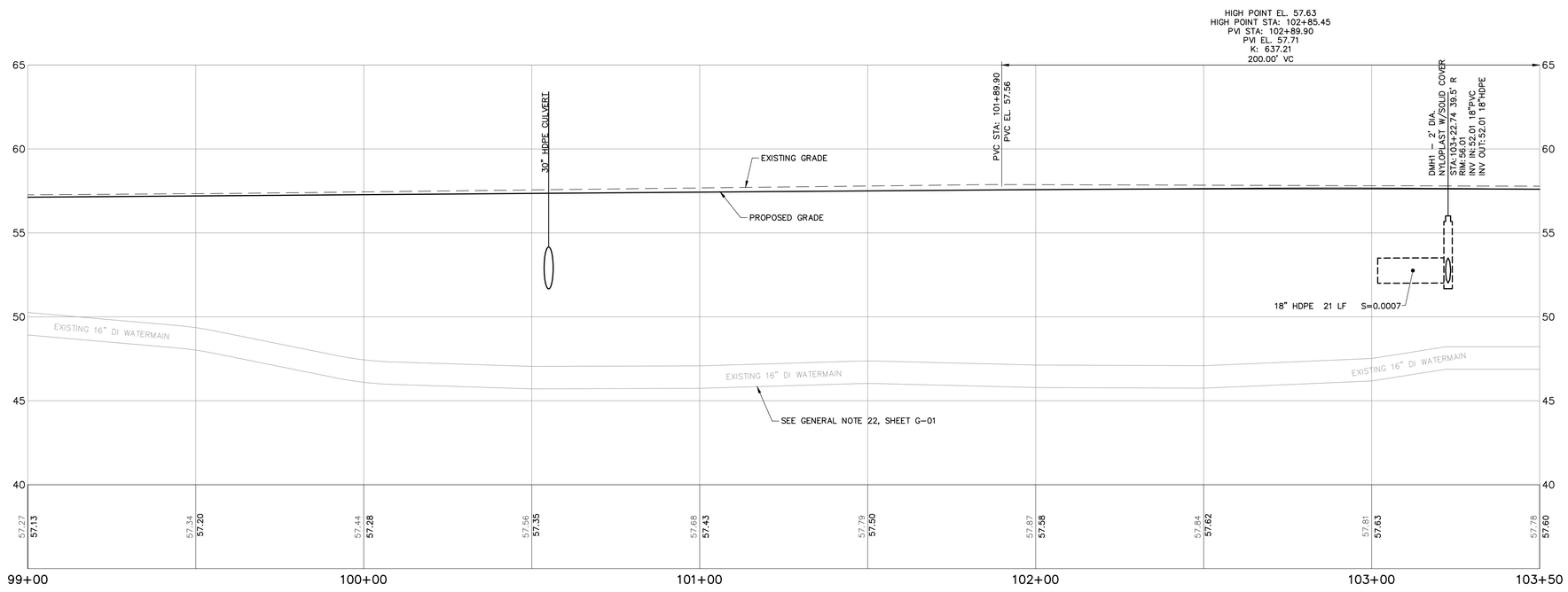

PROFILE STA. 99+00 TO STA. 103+50

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

20' 0 20' 40'
BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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PHASE 1 RECONSTRUCTION
STA. 99+00 TO STA. 103+50

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

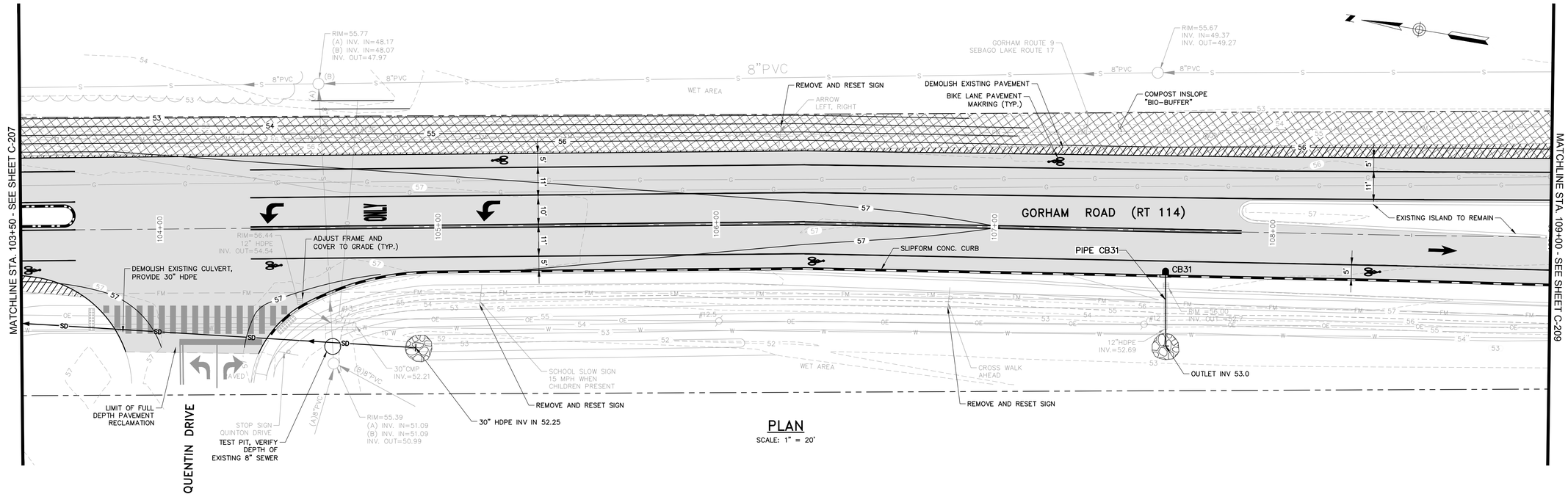
JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 15 OF 49

C-207

22x34 SHEET
1:1

\\Woodardcurran.net\Shared\Projects\227433 Scarborough-Eng Cons Svcs\wip\63 Gorham Road Phase 1 Final Design\Drawings\CIVIL\227433.63 C-206 - C-209 & C-213 - C-218.dwg, Apr 10, 2017 - 1:19pm

22x34 SHEET
1:1



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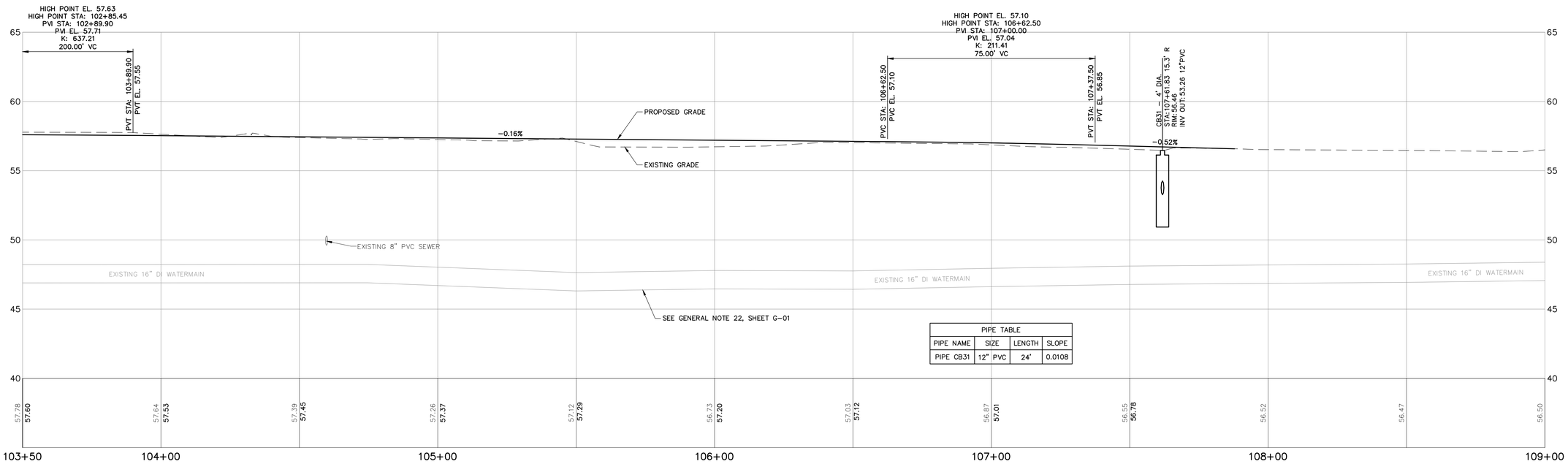

PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB31	12" PVC	24'	0.0108

PROFILE STA. 103+50 TO STA. 109+00

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

20' 0 20' 40'
BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

FULL DEPTH RECLAMATION OF ROADWAY PAVEMENT, EDGE TO EDGE.

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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PHASE 1 RECONSTRUCTION
STA. 103+50 TO STA. 109+00

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 16 OF 49

C-208

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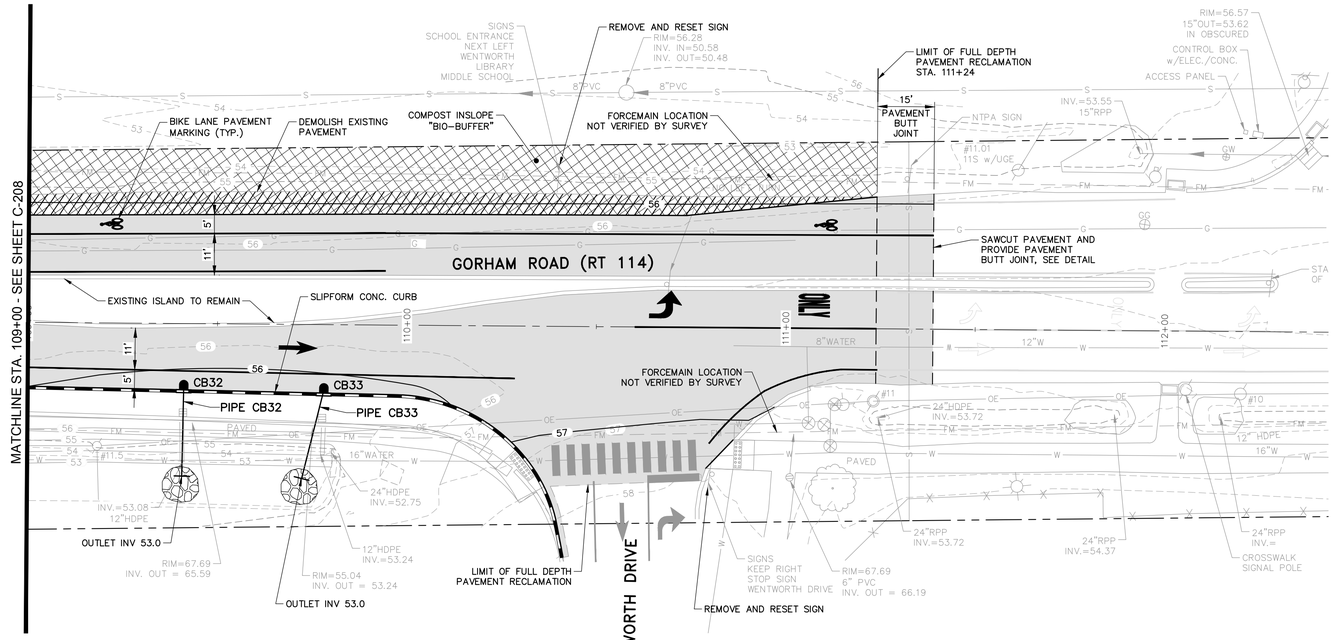

PLAN

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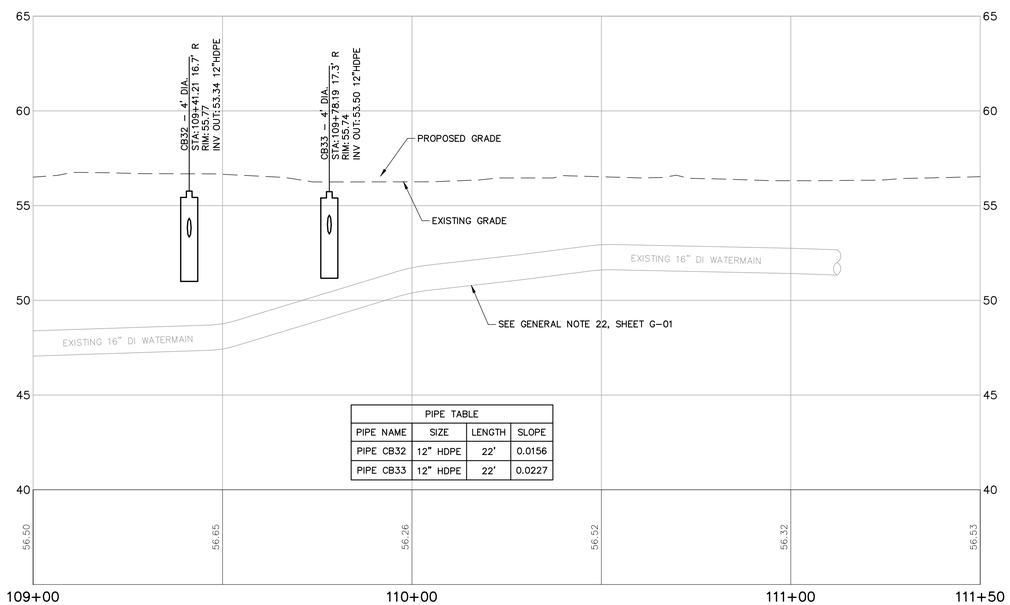

PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB32	12" HDPE	22'	0.0156
PIPE CB33	12" HDPE	22'	0.0227

PROFILE STA. 109+00 TO STA. 111+50

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

20' 0 20' 40'
BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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PHASE 1 RECONSTRUCTION
STA. 109+00 TO STA. 111+24

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 17 OF 49

C-209

22x34 SHEET
1:1

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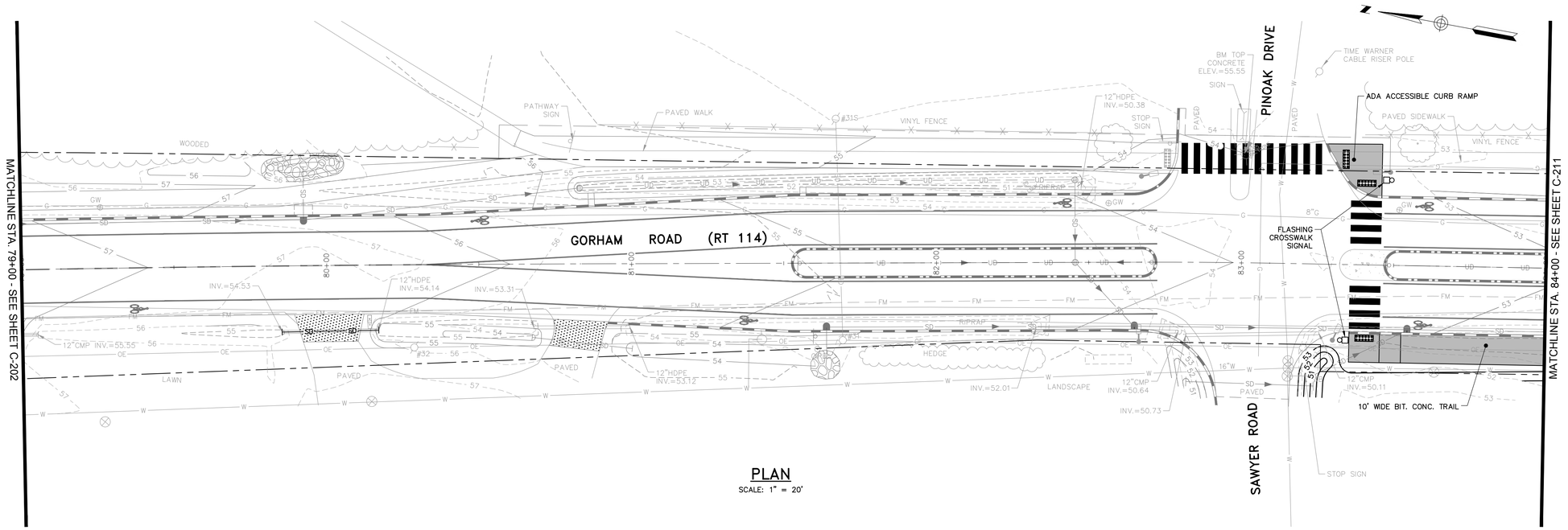

PLAN
SCALE: 1" = 20'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
STA. 79+00 TO STA. 84+00

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GORHAM ROAD
PHASE I RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 18 OF 49

C-210

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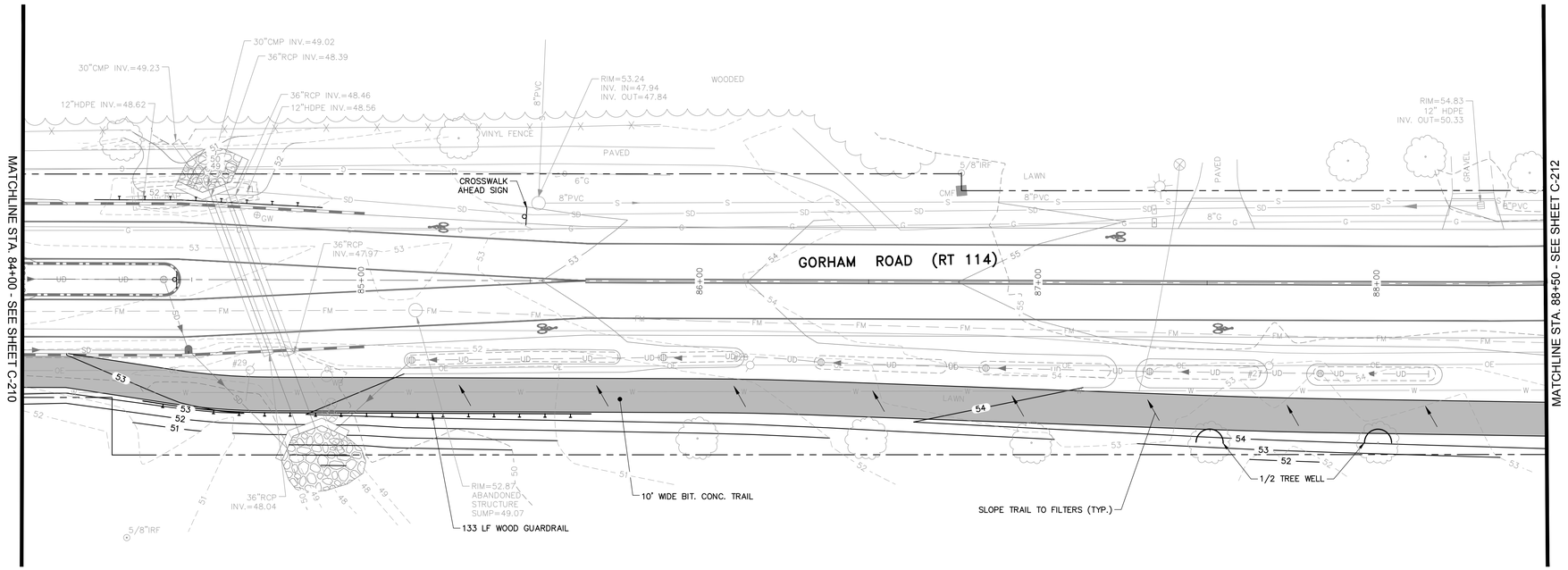

PLAN

SCALE: 1" = 20'

20' 0 20' 40'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
STA. 84+00 TO STA. 88+50

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 19 OF 49

C-211

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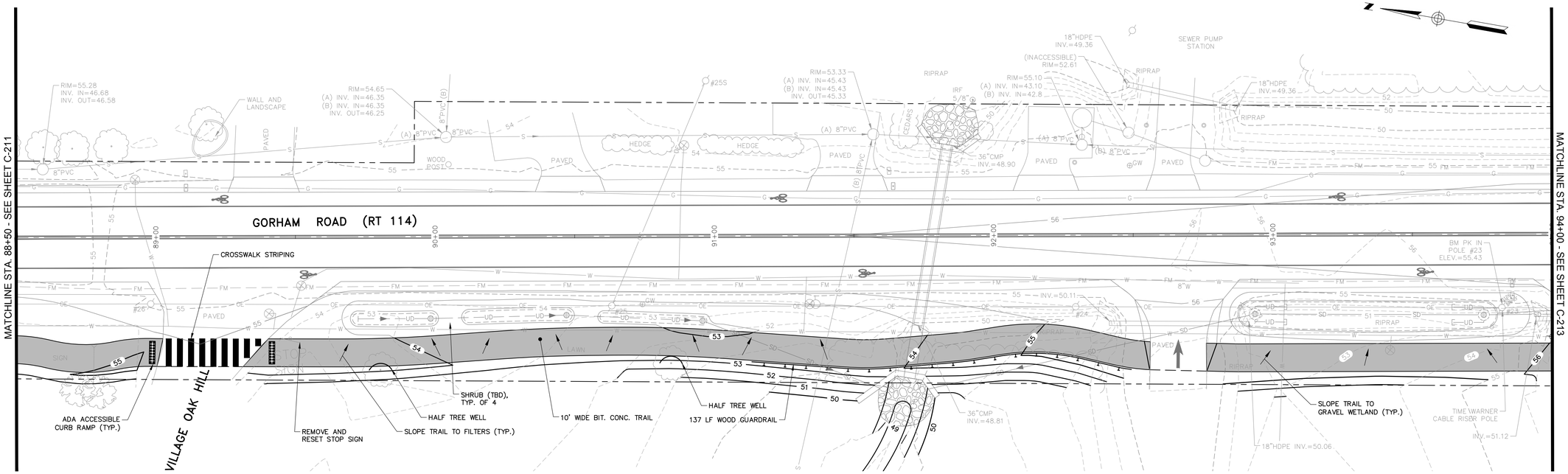

PLAN

SCALE: 1" = 20'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 20 OF 49

C-212

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22x34 SHEET
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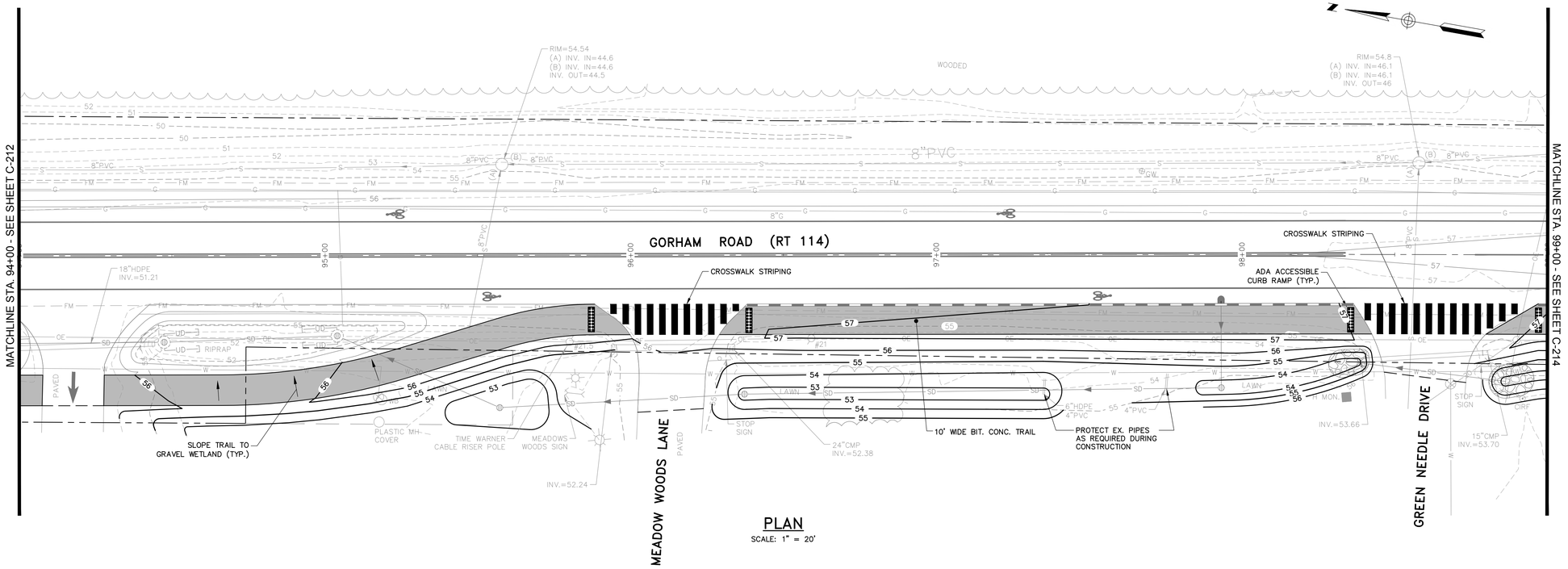

PLAN

SCALE: 1" = 20'

BAR SCALE
1" = 20'
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SAFE ROUTES PLAN
STA. 94+00 TO STA. 99+00

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 21 OF 49

C-213

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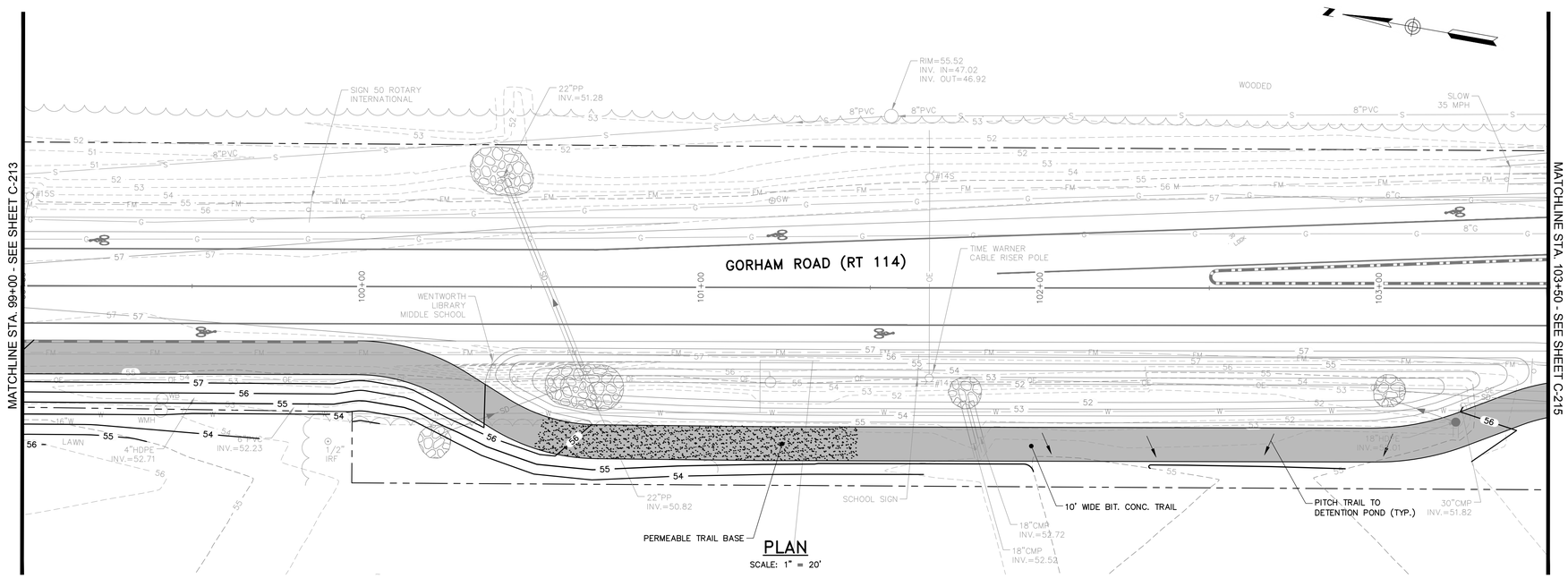

PLAN

SCALE: 1" = 20'

20' 0 20' 40'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 22 OF 49

C-214

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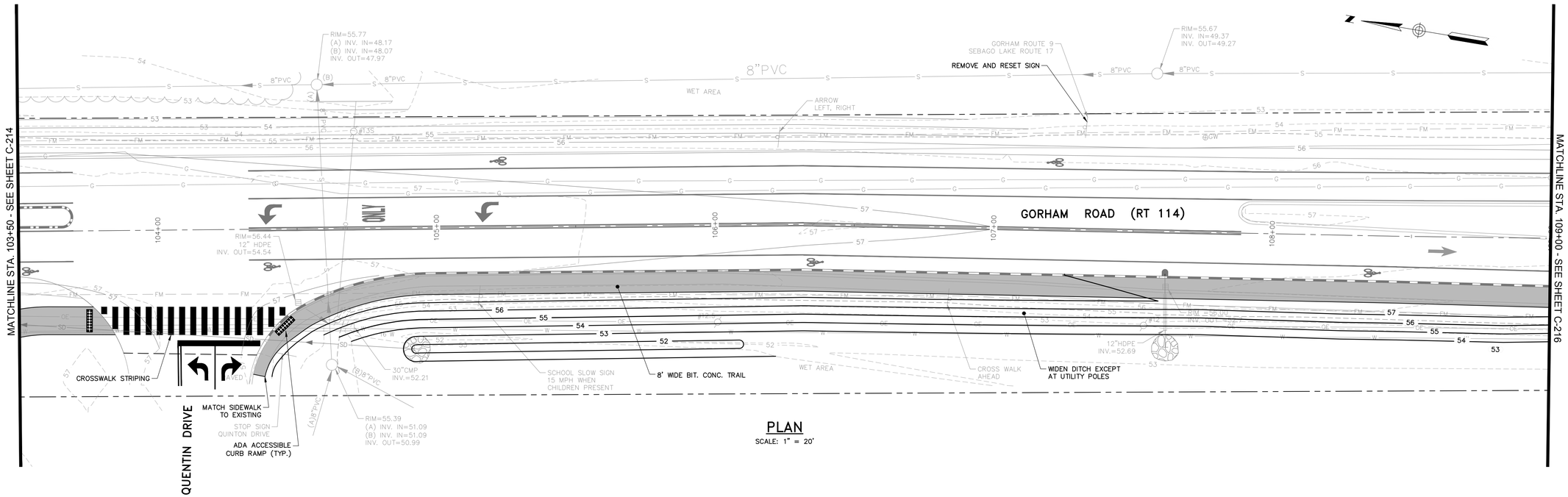

PLAN

SCALE: 1" = 20'

20' 0 20' 40'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
STA. 103+50 TO STA. 109+00

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 23 OF 49

C-215

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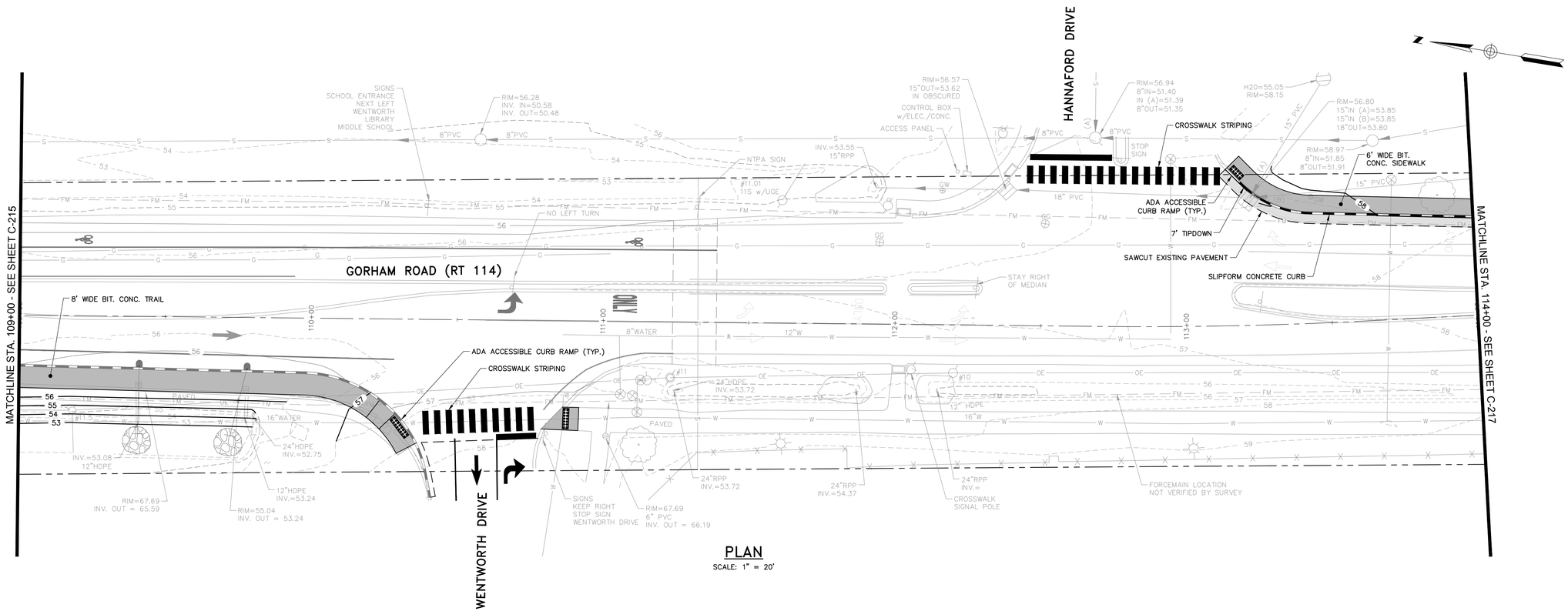

PLAN

SCALE: 1" = 20'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
STA. 109+00 TO STA. 114+00

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 24 OF 49

C-216

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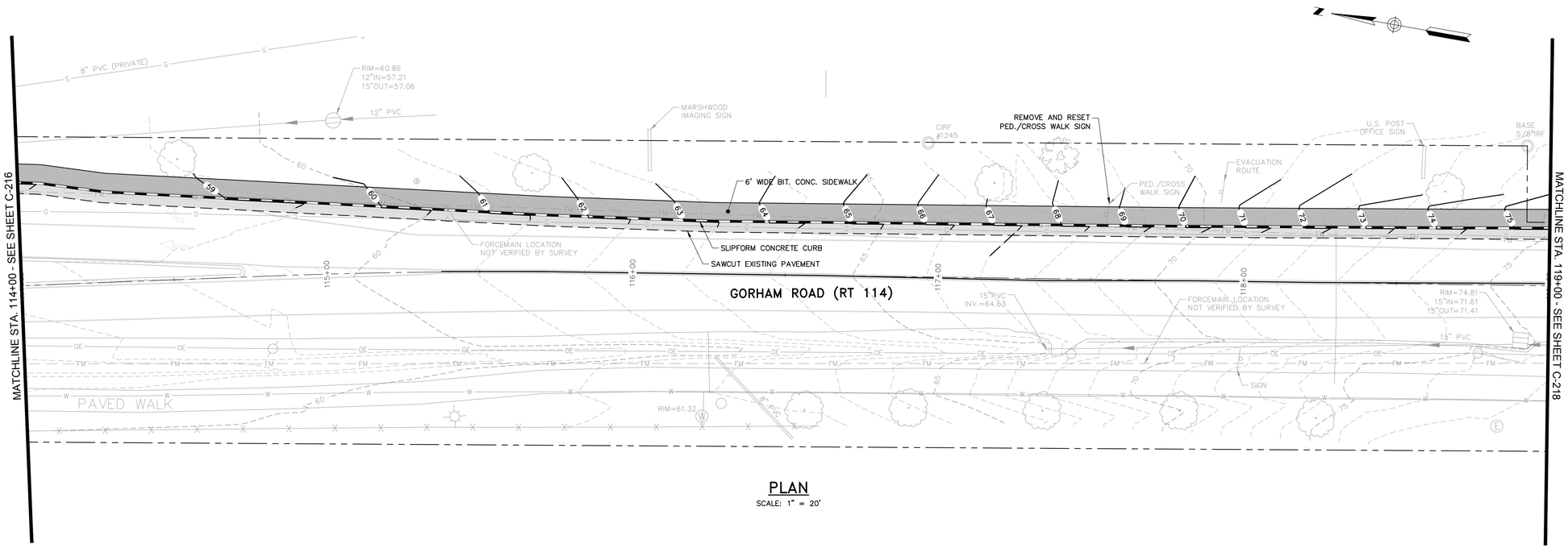

PLAN

SCALE: 1" = 20'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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SAFE ROUTES PLAN
STA. 114+00 TO STA. 119+00

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GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 25 OF 49

C-217

22x34 SHEET
1:1

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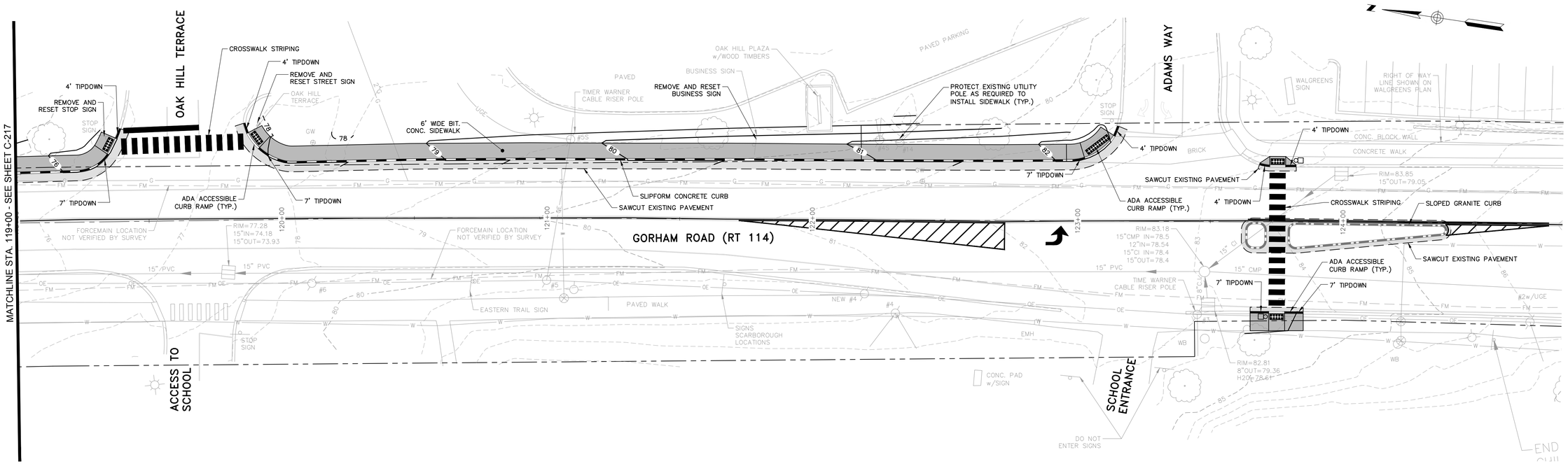
22x34 SHEET
1:1



PLAN

SCALE: 1" = 20'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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REV	DESCRIPTION	DATE

DESIGNED BY: DAS
DRAWN BY: JBC
CHECKED BY: DAS
227433.63 C-206 - C-209.dwg

SAFE ROUTES PLAN
STA. 119+00 TO STA. 124+50

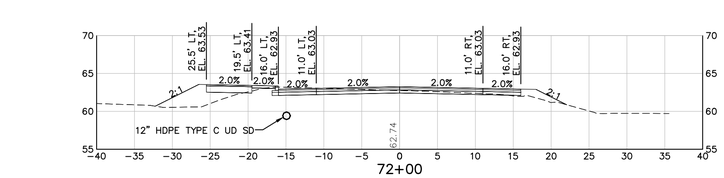
TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 26 OF 49

C-218

\\Woodardcurran.net\Shared\Projects\227433 Scarborough-Eng Cons Svcs\wip\63 Gorham Road Phase 1 Final Design\Drawings\CIVIL\227433.63 C-206 - C-209 & C-213 - C-218.dwg, Apr 10, 2017 - 1:21pm



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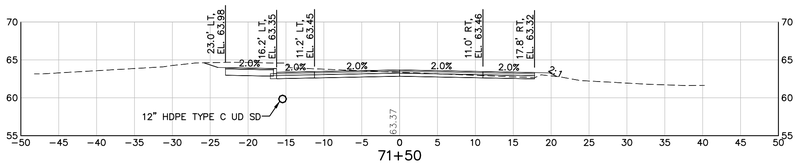

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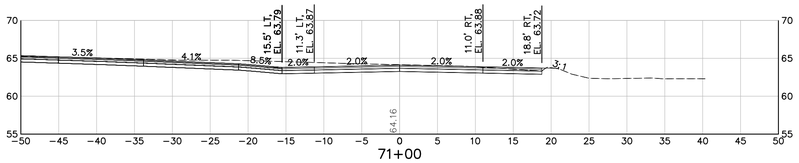

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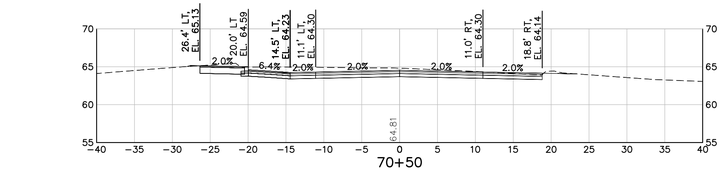

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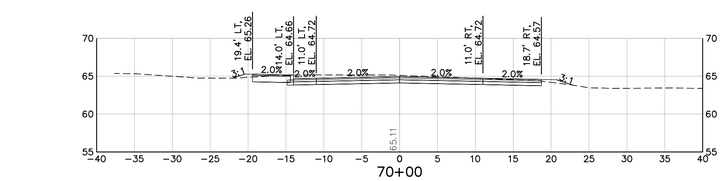

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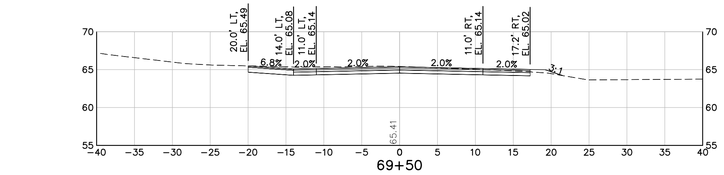

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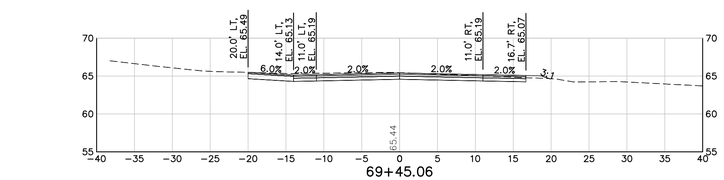

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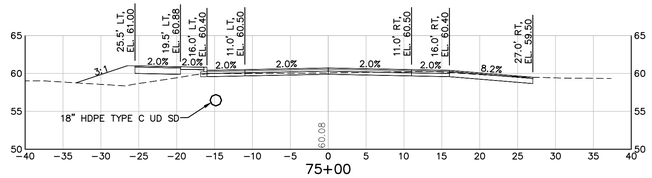

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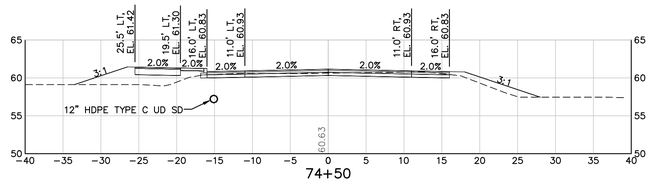

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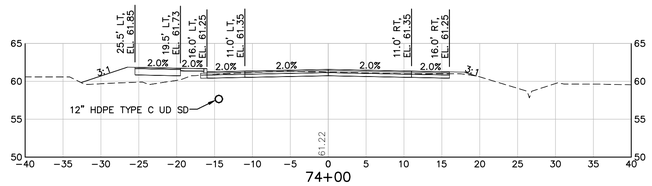

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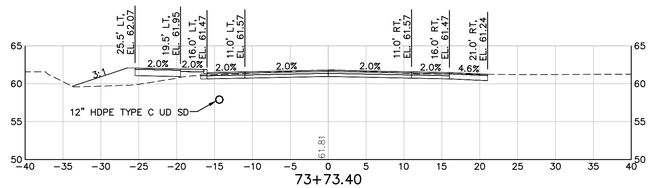

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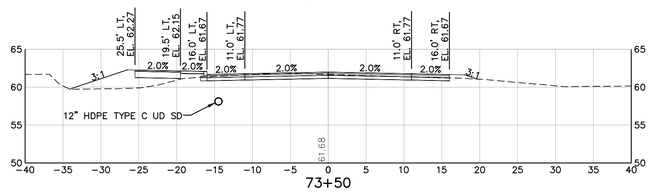

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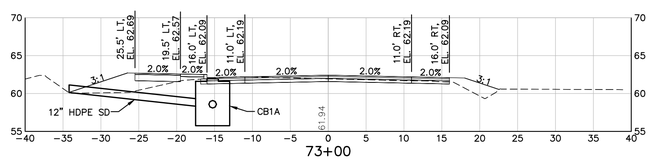

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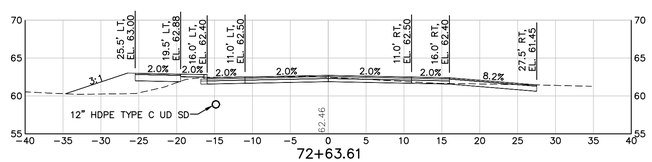

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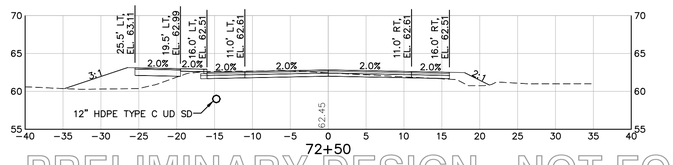

72+50

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10' 0 10' 20'

BAR SCALE
1" = 10'
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CHECKED BY: DAS
227433.63 CROSS SECTION*.dwg

CROSS SECTIONS - 1

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 33 OF 49

C-300

22x34 SHEET
1:1

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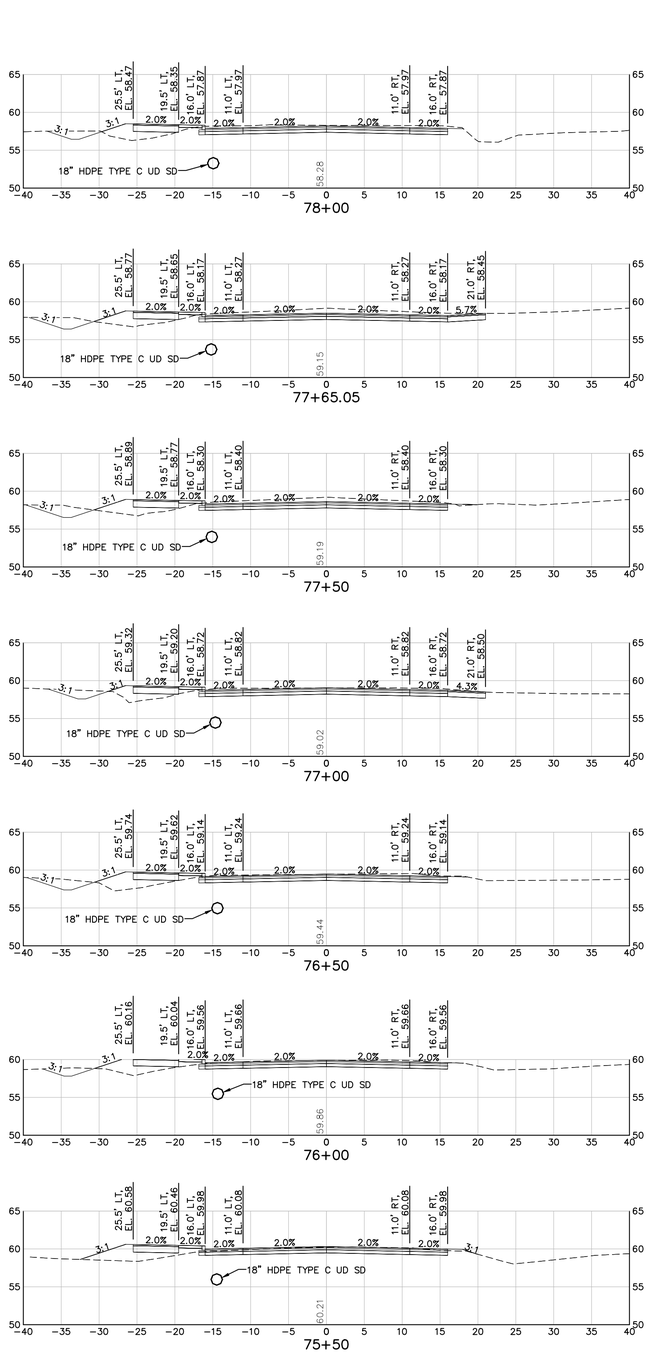

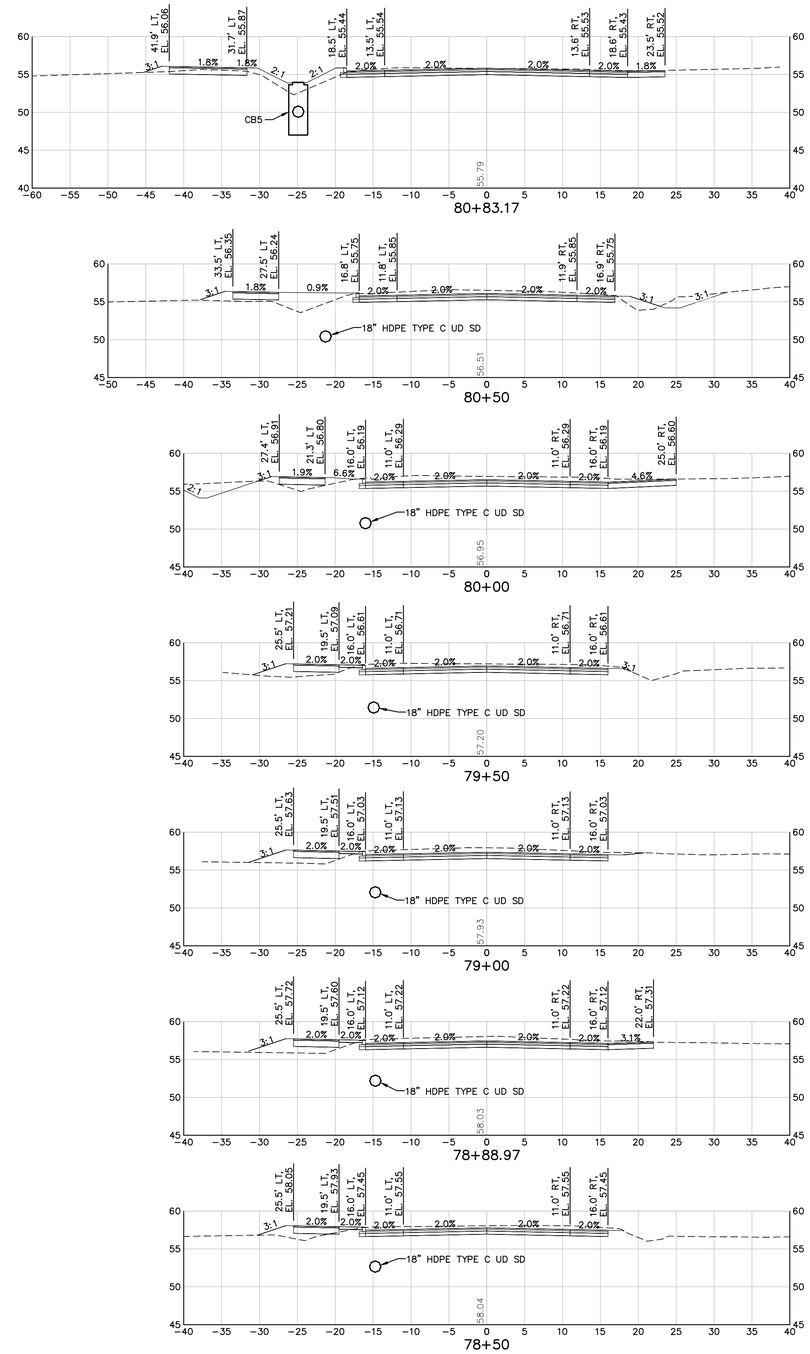

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BAR SCALE
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CROSS SECTIONS - 2

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 34 OF 49

C-301

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22x34 SHEET
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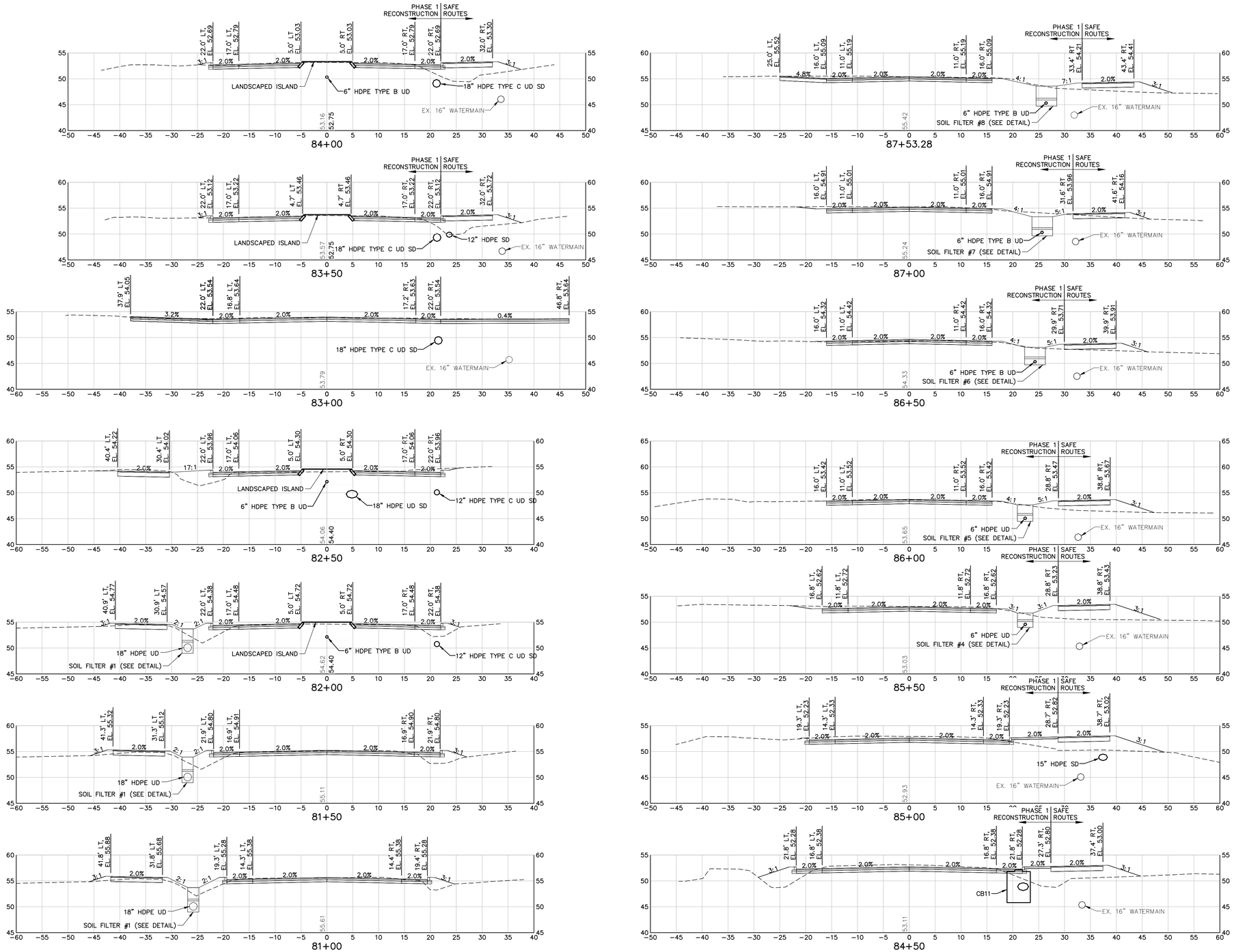

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10' 0 10' 20'

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CROSS SECTIONS - 3

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 35 OF 49

C-302

22x34 SHEET
1:1

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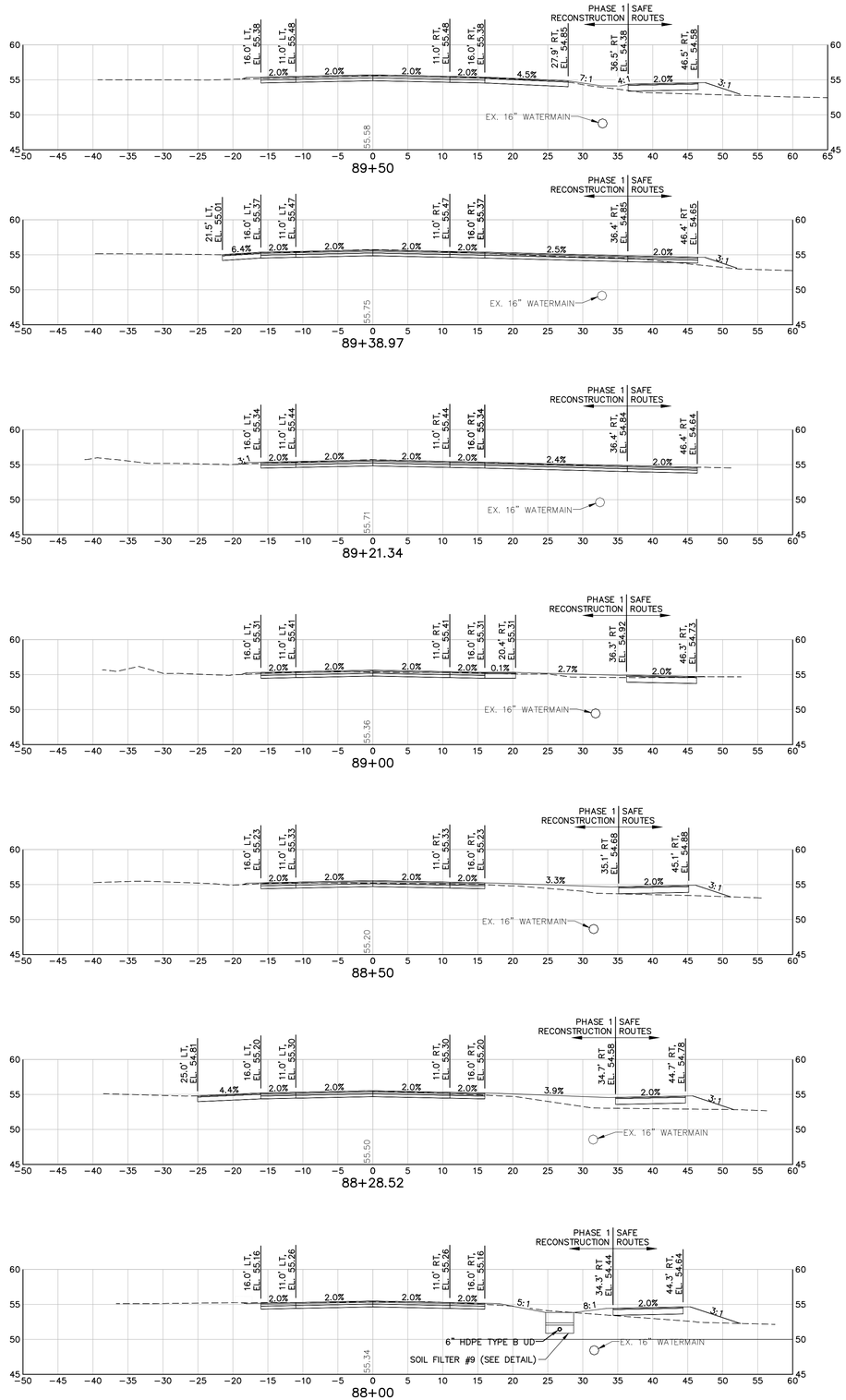

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10' 0 10' 20'
BAR SCALE
1" = 10'
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CROSS SECTIONS - 4

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 36 OF 49

C-303

22x34 SHEET
1:1

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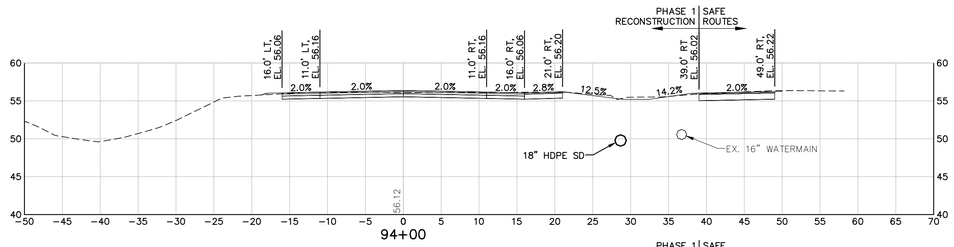

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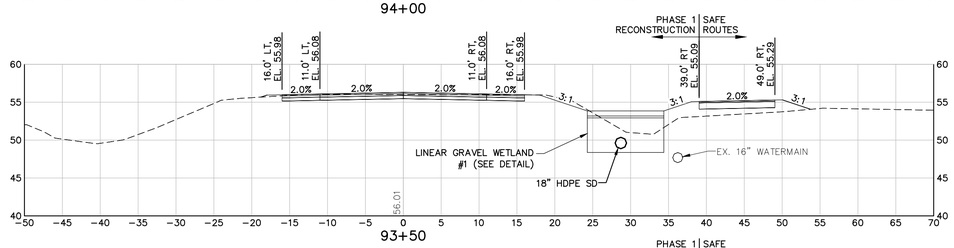

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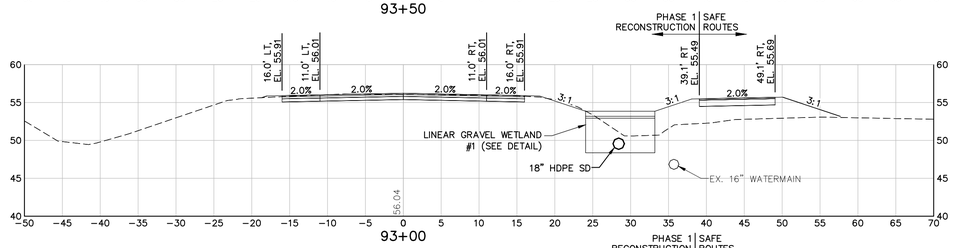

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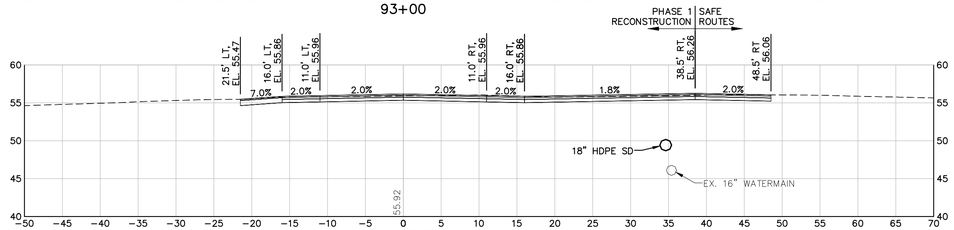

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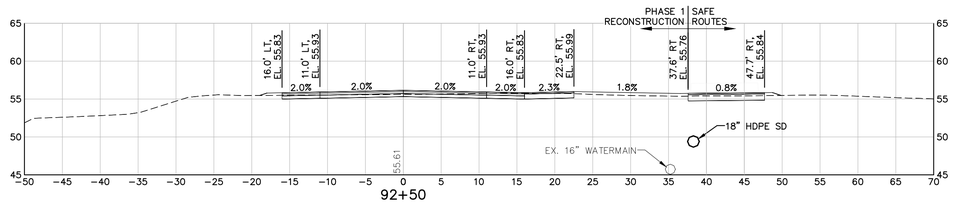

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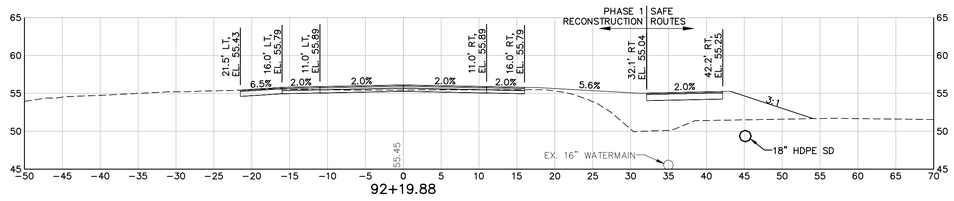

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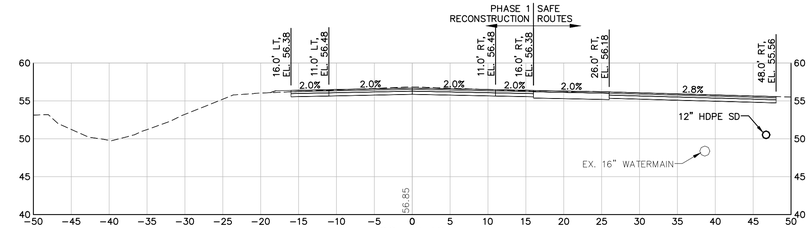

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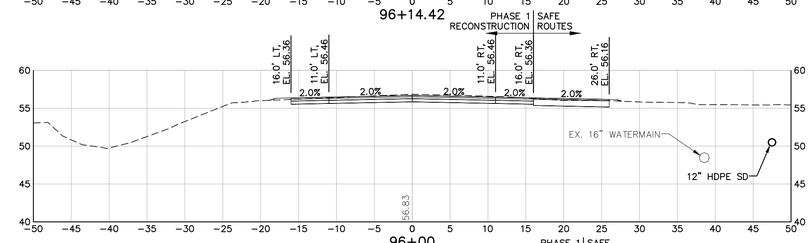

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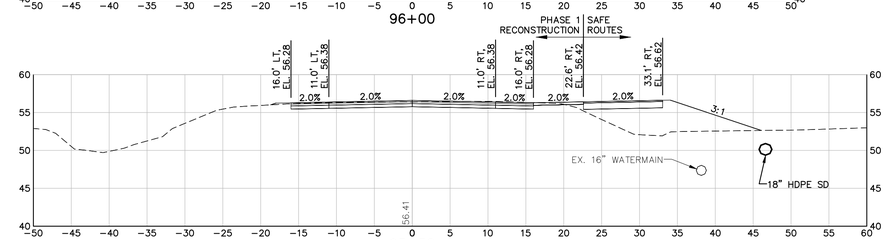

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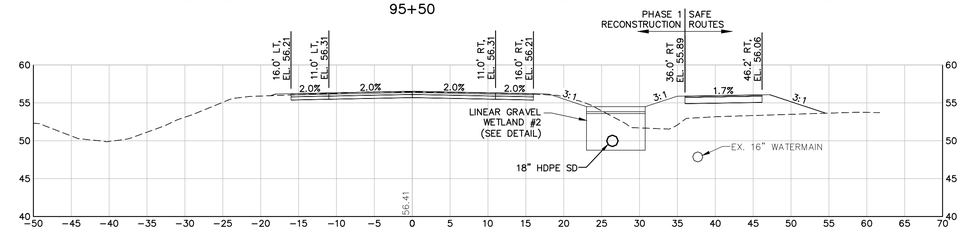

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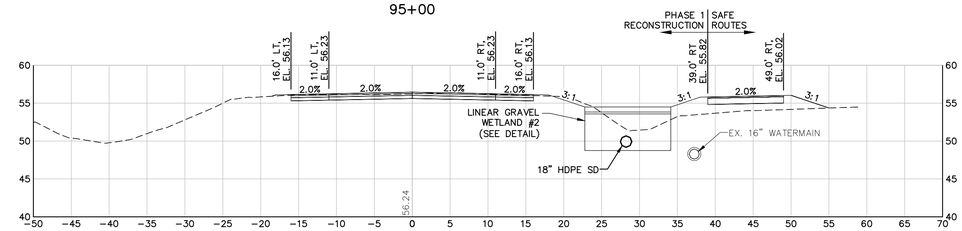

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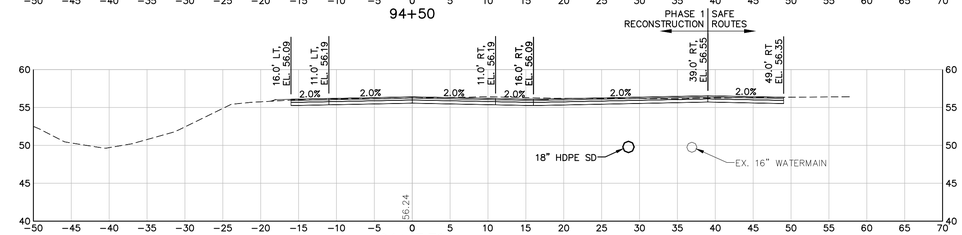

94+17.79

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10' 0 10' 20'

BAR SCALE
1" = 10'
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REV	DESCRIPTION	DATE

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DRAWN BY: JBC
CHECKED BY: DAS
227433.63 CROSS SECTIONS*.dwg

CROSS SECTIONS - 5

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 37 OF 49

C-304

22x34 SHEET
1:1

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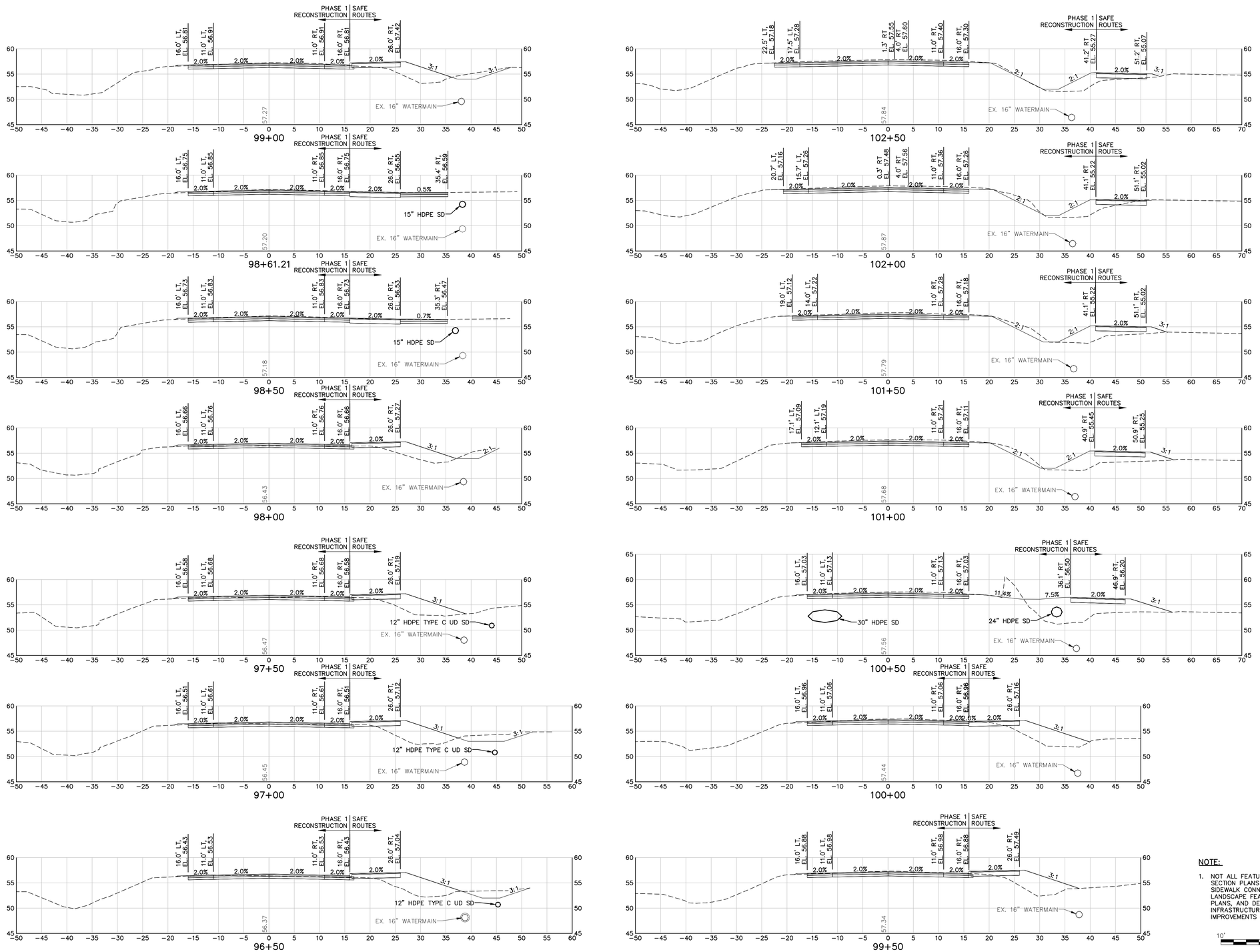

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10' 0 10' 20'

BAR SCALE
1" = 10'
CHECK GRAPHIC SCALE BEFORE USING

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

22x34 SHEET
1:1

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CHECKED BY: DAS
227433.63 CROSS SECTION*.dwg

CROSS SECTIONS - 6

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 38 OF 49

C-305

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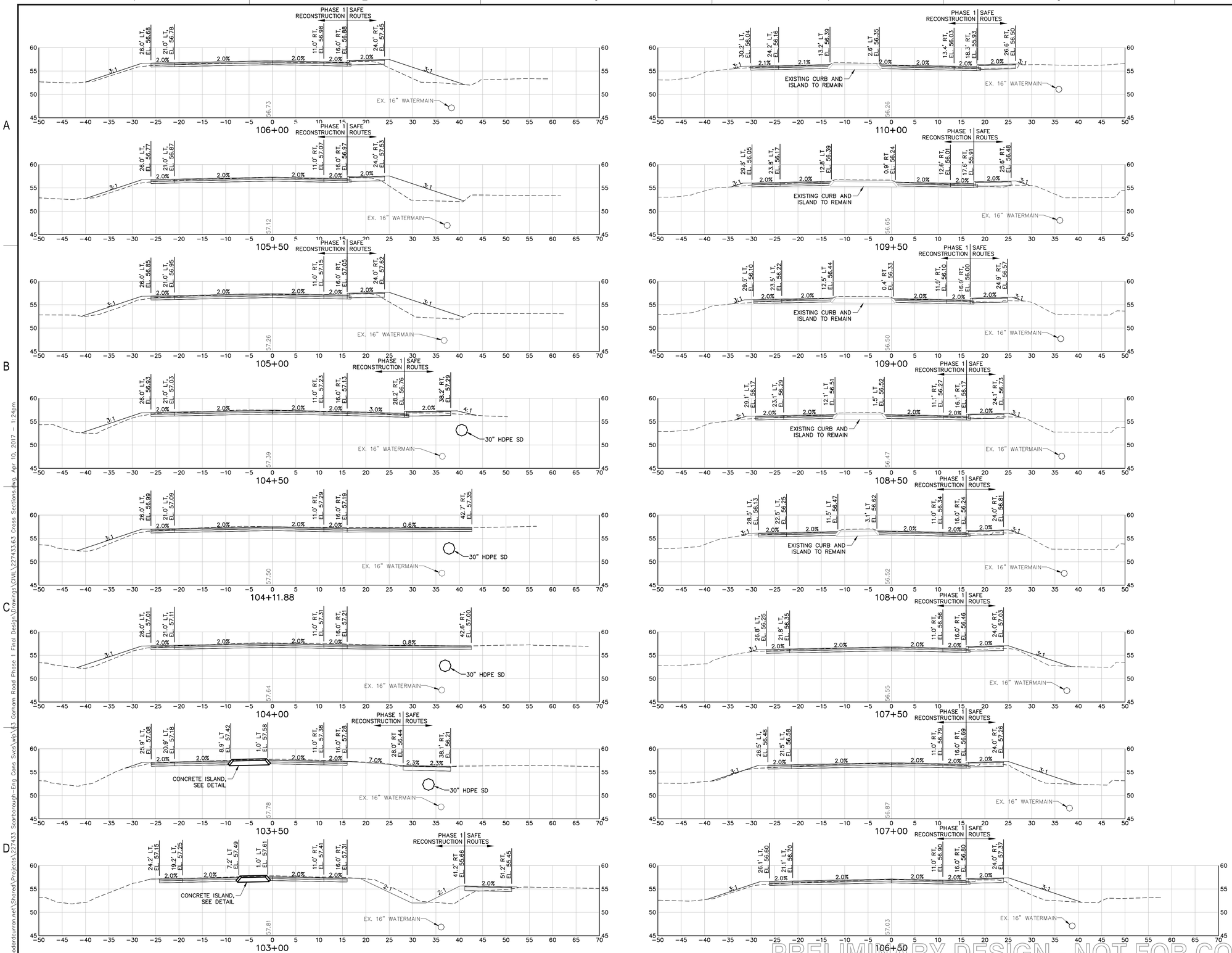

NOTE:

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10' 0 10' 20'
BAR SCALE
1" = 10'
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REV	DESCRIPTION	DATE

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DRAWN BY: JBC
CHECKED BY: DAS
227433.63 CROSS SECTION*.dwg

CROSS SECTIONS - 7

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 39 OF 49

C-306

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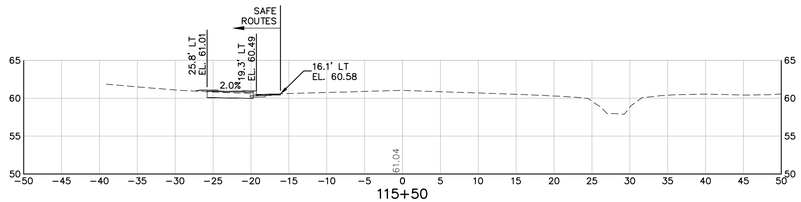

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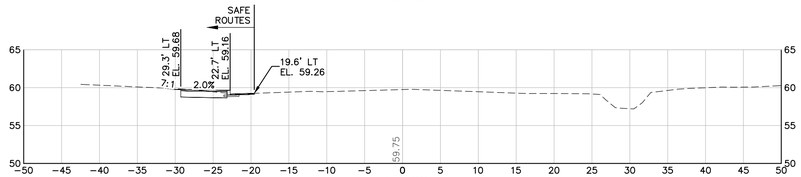

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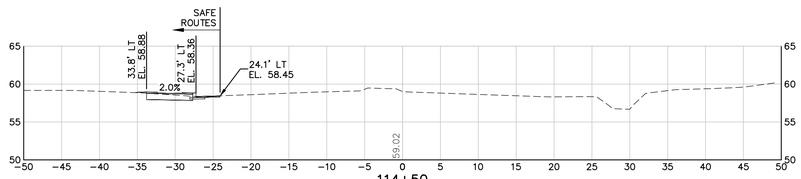

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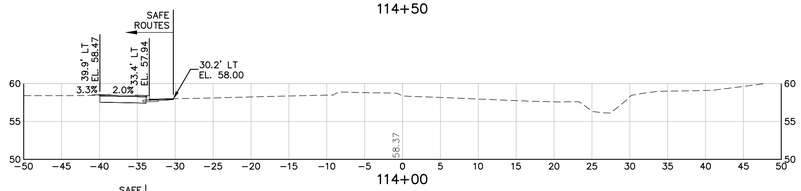

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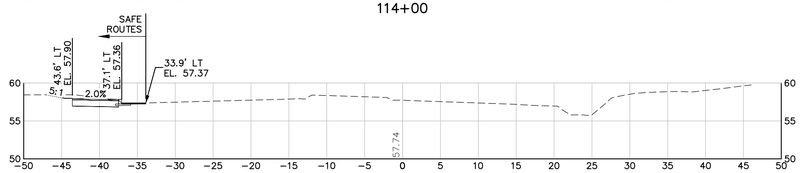

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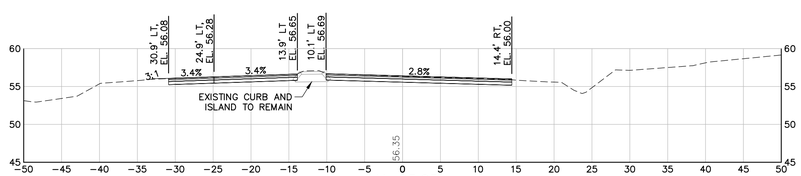

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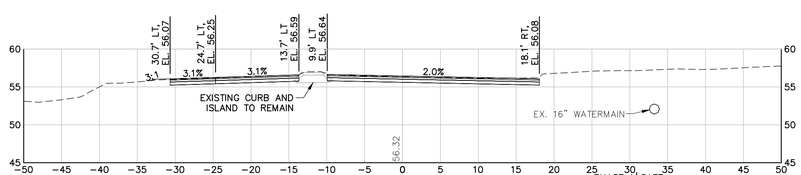

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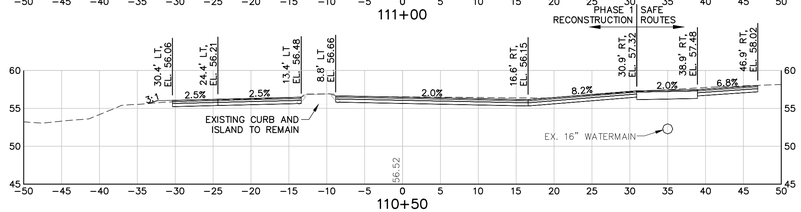

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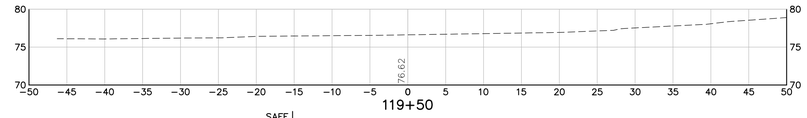

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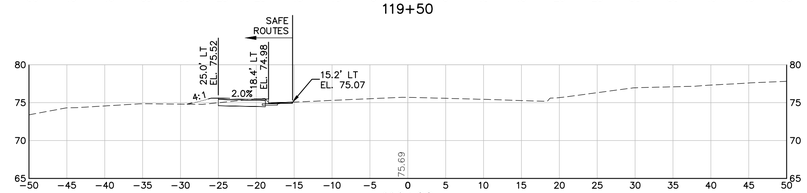

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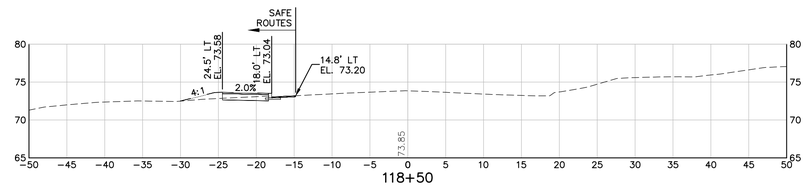

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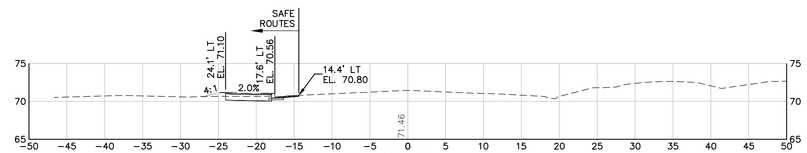

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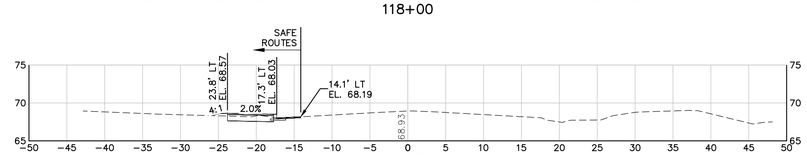

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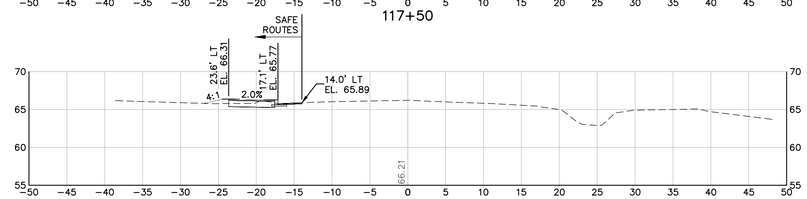

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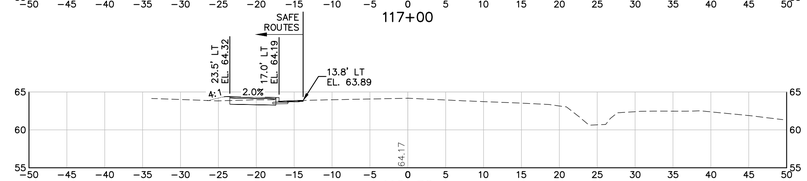

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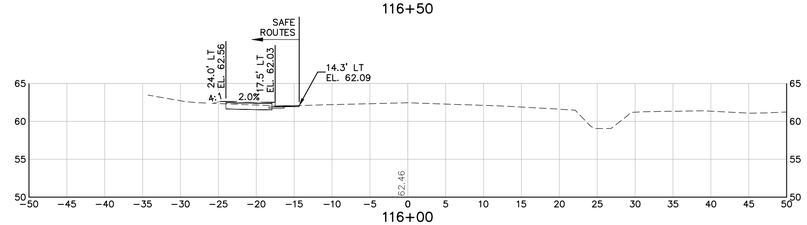

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10' 0 10' 20'

BAR SCALE
1" = 10'
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22x34 SHEET
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CHECKED BY: DAS
227433.63 CROSS SECTIONS*.dwg

CROSS SECTIONS - 8

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 40 OF 49

C-307

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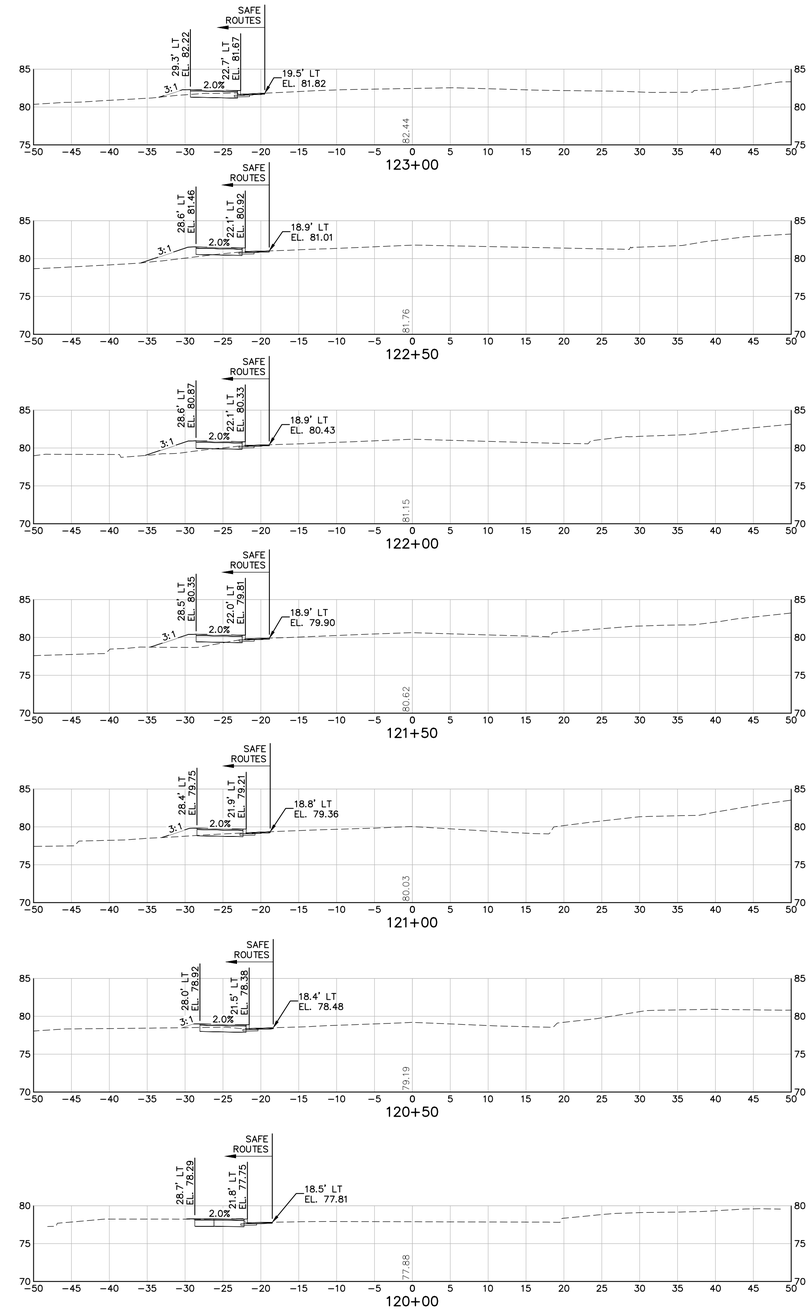

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CROSS SECTIONS - 9

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 10'
SHEET: 41 OF 49

C-308

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22x34 SHEET
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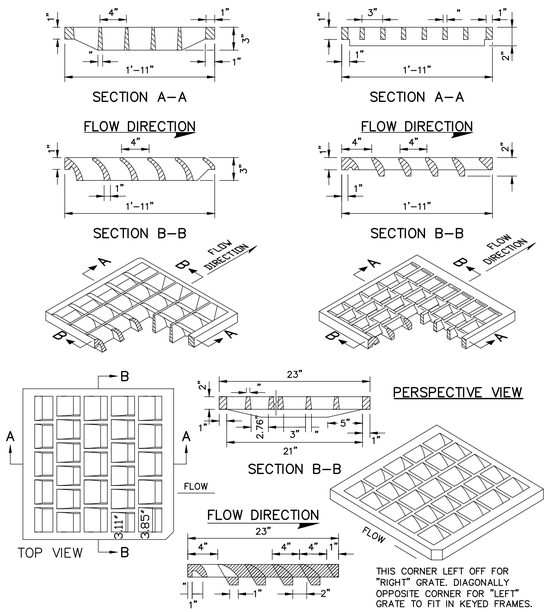
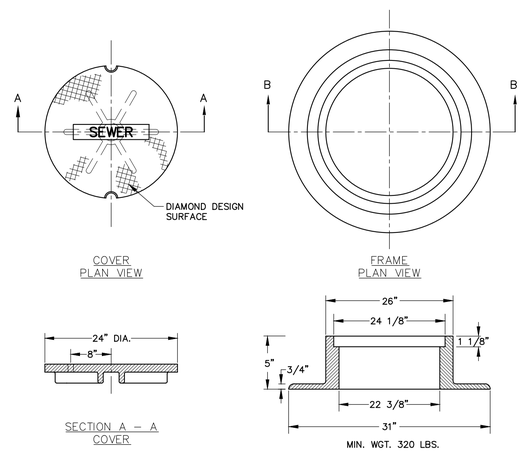


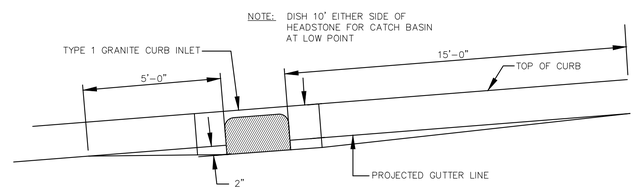
NOTES:
TO BE USED WHERE PARALLEL BAR GRATES WOULD PRESENT A HAZARD TO BICYCLE TRAFFIC. FOR USE ON CATCH BASIN TYPES: A1–C, A2–C, A5–C, B1–C, B2–C, B5–C, F3–C, F4–C, F5–C, F6–C.

"CASCADE–TYPE" GRATES
N.T.S.

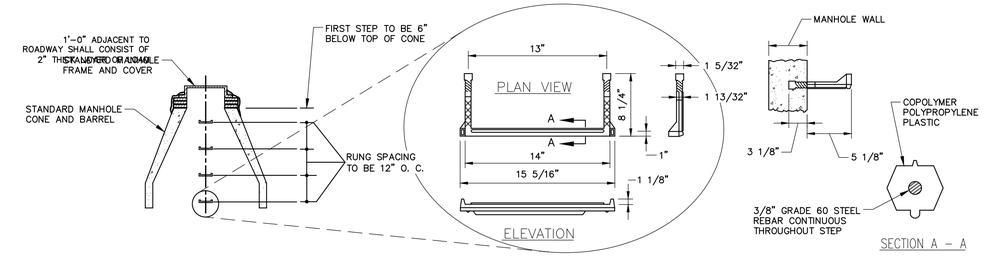


NOTE:
ALL MANHOLE COVERS SHALL BE SOLID.

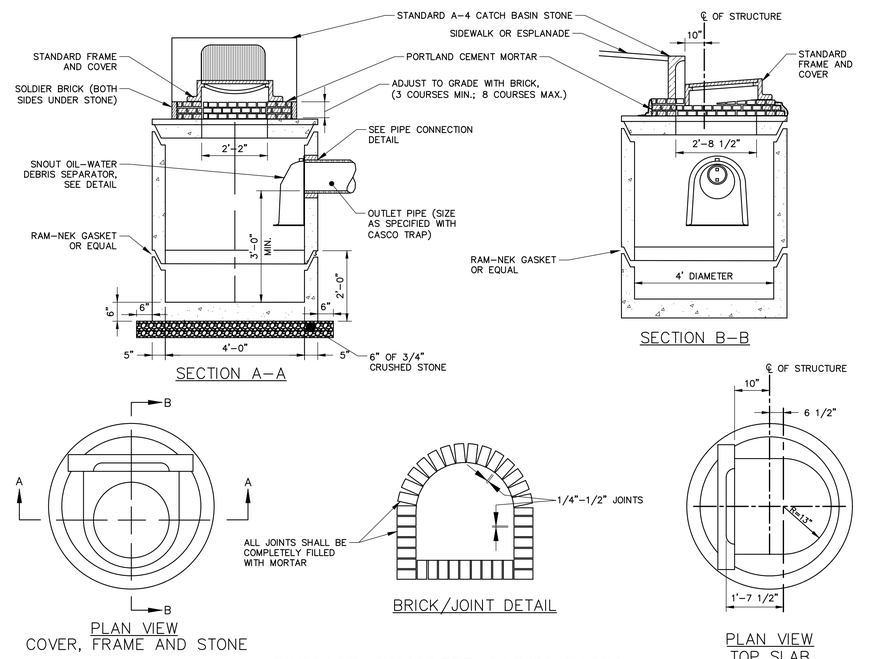
CAST IRON MANHOLE FRAME AND COVER
N.T.S.



TYPICAL PAVEMENT GRADING FOR CATCH BASINS
N.T.S.



PLASTIC MANHOLE STEPS
N.T.S.



PRECAST CONCRETE CATCH BASIN
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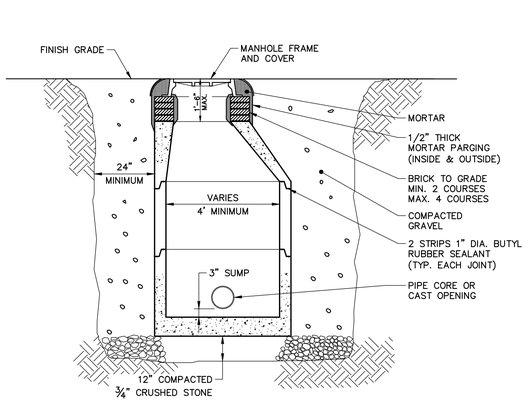
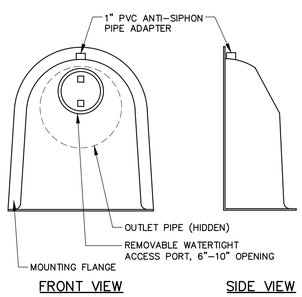


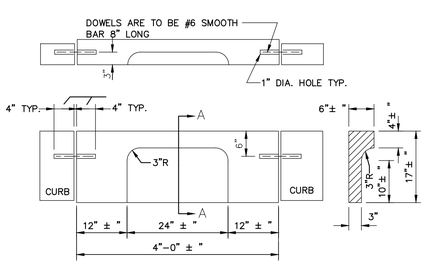
PRECAST CONCRETE DRAINAGE MANHOLE
N.T.S.



NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY BEST MANAGEMENT PRODUCTS, INC. OR PRE–APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI–SIPHON VENT PIPE AND ELBOW.
4.
5. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOUT SIZE ALWAYS LARGER THAN PIPE SIZE).
6. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
7. THE ANTI–SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
8. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
9. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8' STAINLESS STEEL BOLTS AND OIL–RESISTANT GASKET AS SUPPLIED BY MANUFACTURER.
10. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE: INSTALLATION INSTRUCTIONS, PVC ANTI–SIPHON VENT PIPE AND ADAPTER, OIL–RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING, 3/8" STAINLESS STEEL BOLTS, AND ANCHOR SHIELDS.

SNOUT OIL–WATER–DEBRIS SEPARATOR DETAIL
N.T.S.



TYPE 1 GRANITE CURB INLET
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CHECKED BY: DAS
227433.63 DETAILS.dwg

CIVIL DETAILS - 1

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 42 OF 49

C-400

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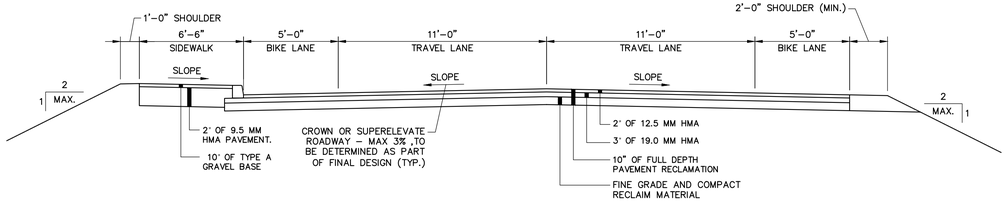
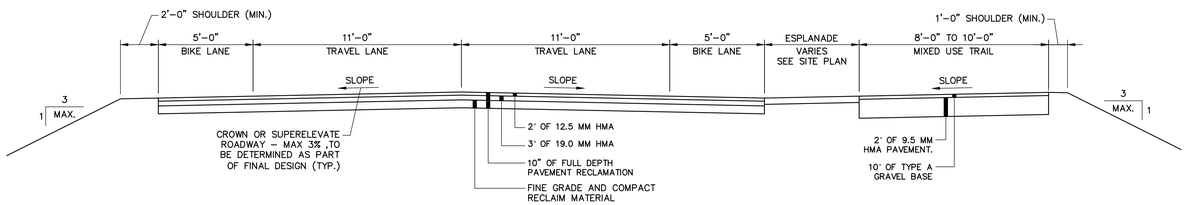


TYPICAL ROADWAY CROSS SECTION
MAPLE AVENUE TO PINOAK DRIVE/SAWYER ROAD

SCALE: N.T.S.

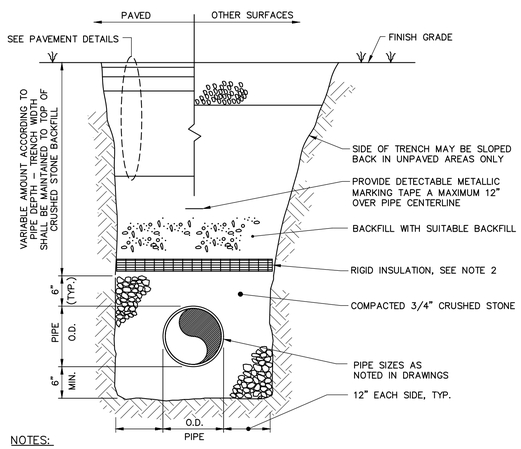


TYPICAL ROADWAY CROSS SECTION
PINOAK DRIVE/SAWYER ROAD TO WENTWORTH DRIVE

SCALE: N.T.S.

NOTE:

ROADWAY RECLAMATION DEPTH AND PROPOSED PAVEMENT DEPTH SHALL BE FURTHER EVALUATED AS PART OF FINAL DESIGN.

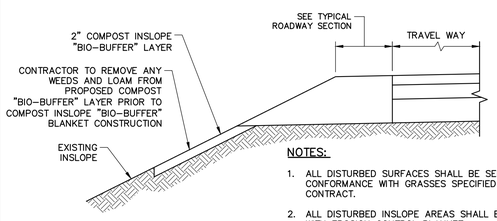


NOTES:

1. MAINTAIN UNIFORM TRENCH WIDTH TO 6" OVER PIPE.
2. PROVIDE RIGID INSULATION, 2" THICKNESS, FOR ALL PIPING WITH LESS THAN 5'-0" OF COVER TO TOP OF PIPE (WATER). INSULATE PER MDOT SECT 653. EXTEND INSULATION 18" OUT FROM EDGE OF PIPE. WHERE INSULATION IS REQUIRED, TRENCH WIDTH MUST EXTEND 18" MIN. FROM OUTSIDE EDGE OF PIPE.
3. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE O.S.H.A. SAFETY REGULATIONS. ALL SUCH TRENCH PROTECTION TO BE RESPONSIBILITY OF CONTRACTOR.

SINGLE PIPE TRENCH DETAIL

N.T.S.

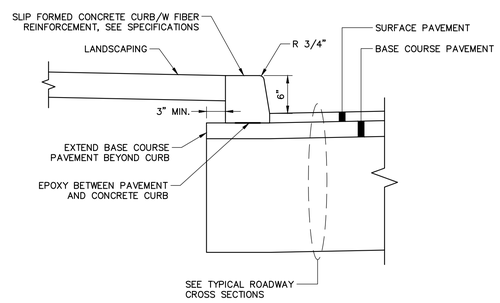


NOTES:

1. ALL DISTURBED SURFACES SHALL BE SEEDED IN CONFORMANCE WITH GRASSES SPECIFIED IN THE CONTRACT.
2. ALL DISTURBED INSLOPE AREAS SHALL BE STABILIZED WITH EROSION CONTROL BLANKET.
3. COMPOST INSLOPE "BIO-BUFFER" BLANKET SHALL BE A MAXIMUM OF TWENTY FEET WIDE OR THE WIDTH OF EXISTING INSLOPE.

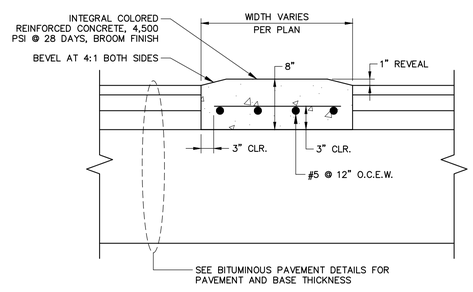
COMPOST INSLOPE "BIO-BUFFER"

N.T.S.



SLIP FORM CONCRETE CURB DETAIL
(PAVEMENT RECONSTRUCTION)

N.T.S.

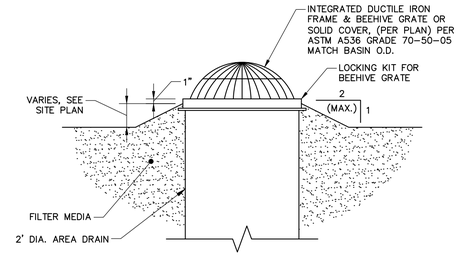


NOTE:

1. PROVIDE PERPENDICULAR SAWCUT CONTROL JOINTS 2" DEEP EVERY 5', INFILL WITH BACKER ROD AND POLYURETHANE SEALANT.
2. INTEGRAL COLOR SHALL BE SCOFIELD INTEGRAL COLOR SG OR APPROVED EQUAL. COLOR TO BE SELECTED BY OWNER.

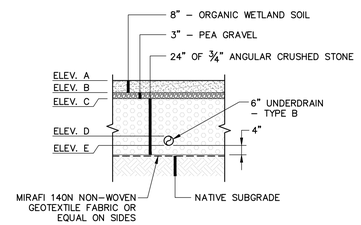
RAISED CONCRETE ISLAND DETAIL

N.T.S.



AREA DRAIN GRADING DETAIL

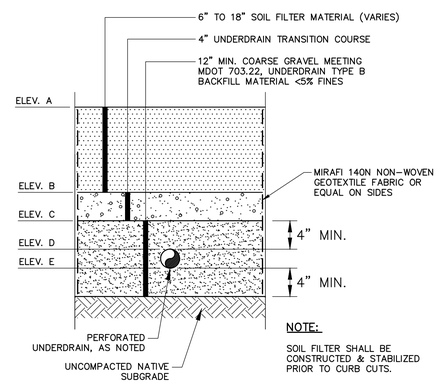
N.T.S.



LINEAR GRAVEL WETLAND TABLE					
WETLAND NO.	ELEV. A	ELEV. B	ELEV. C	ELEV. D	ELEV. E
1	53.85	53.18	52.93	VARIES	VARIES
2	54.50	53.83	53.58	VARIES	VARIES

LINEAR GRAVEL WETLAND DETAIL

N.T.S.



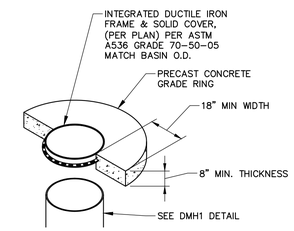
NOTE:

SOIL FILTER SHALL BE CONSTRUCTED & STABILIZED PRIOR TO CURB CUTS.

SOIL FILTER TABLE					
FILTER NO.	ELEV. A	ELEV. B	ELEV. C	ELEV. D	ELEV. E
1	53.71	51.50	51.16	50.83	49.33
4	51.76	50.50	50.16	49.83	49.33
5	52.68	51.00	50.66	50.33	49.83
6	53.13	51.25	50.91	50.58	50.08
7	53.36	51.25	50.91	50.58	50.08
8	53.60	51.25	50.91	50.58	50.08
9	53.84	52.37	52.03	51.70	51.20
10	52.77	50.75	50.41	50.08	49.58
11	52.77	50.75	50.41	50.08	49.58
12	52.77	50.75	50.41	50.08	49.58

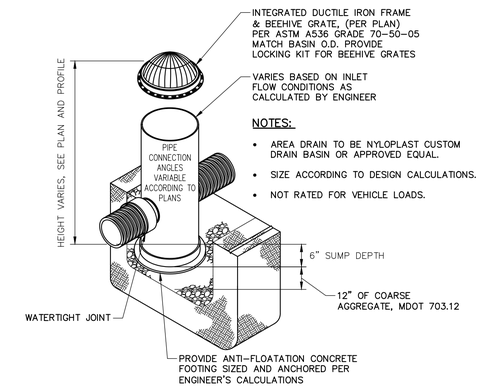
SOIL FILTER DETAIL

N.T.S.



PRECAST CONCRETE GRADE RING

N.T.S.

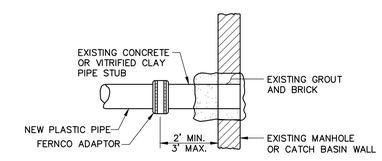


NOTES:

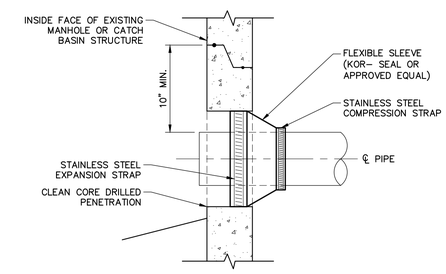
- AREA DRAIN TO BE NYLOPLAST CUSTOM DRAIN BASIN OR APPROVED EQUAL.
- SIZE ACCORDING TO DESIGN CALCULATIONS.
- NOT RATED FOR VEHICLE LOADS.

2' DIA AREA DRAIN DETAIL

N.T.S.



METHOD 4 – NEW PIPE TO EXISTING STRUCTURE STUB



METHOD 3 – NEW PIPE INTO EXISTING STRUCTURE

NOTE:

EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION. IF PIPE DIAMETER IS SO LARGE THAT CORE DRILLING IS PROHIBITED, THE CONTRACTOR MAY SAW CUT THE STRUCTURE TO CREATE PIPE OPENING. THE NEW OPENING MUST THEN BE SEALED AND WATERTIGHT BOTH INSIDE AND OUTSIDE THE STRUCTURE.

PLASTIC PIPE CONNECTIONS

N.T.S.

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CHECKED BY: DAS
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CIVIL DETAILS - 2

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 43 OF 49

C-401

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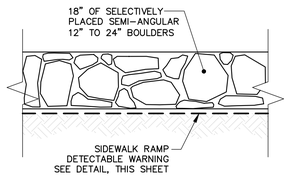
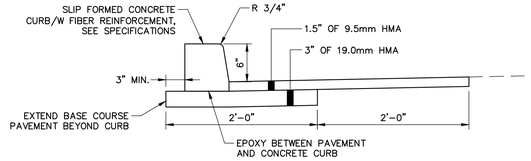
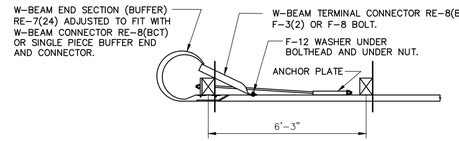
22x34 SHEET
1:1

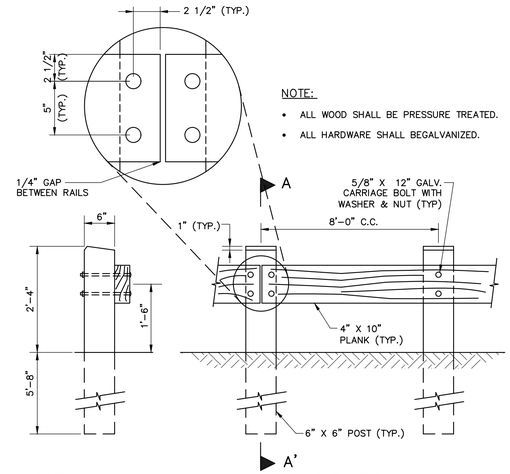


EMBEDDED NATURAL STONE LINING
N.T.S.



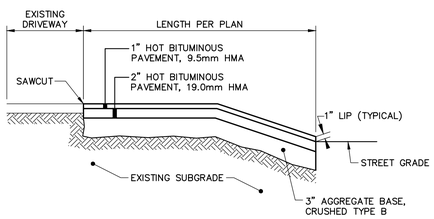
SLIP FORM CONCRETE CURB DETAIL (EXISTING PAVEMENT)
N.T.S.





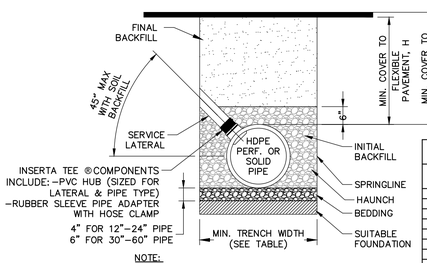
NOTE:
- ALL WOOD SHALL BE PRESSURE TREATED.
- ALL HARDWARE SHALL BEGALVANIZED.

WOOD GUARDRAIL
N.T.S.



BITUMINOUS DRIVEWAY DETAIL
N.T.S.

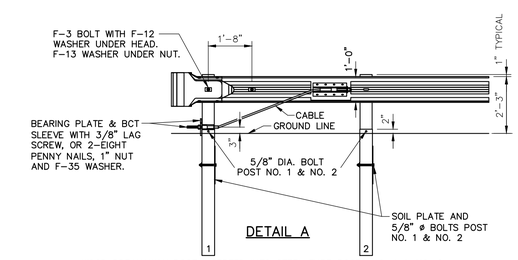
NOTE: AGGREGATE TYPES PER MDOT SECTION 304.02



MINIMUM TRENCH WIDTHS	
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

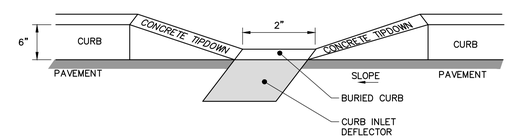
NOTE:
1. THE INSERTA TEE® CONNECTION SHOULD NOT BE PLACED AT AN ANGLE EXCEEDING 45° FROM THE SPRINGLINE. GREATER ANGLES ARE SUBJECT TO DESIGN ENGINEER APPROVAL AND MAY REQUIRE PREMIUM BACKFILL.

INSERTA-TEE CONNECTION DETAIL
N.T.S.

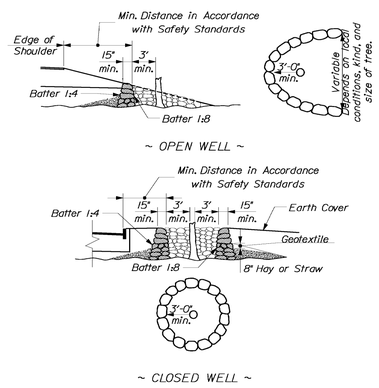


WOOD BREAKAWAY POST INSERTED INTO STEEL TUBE POSTS NO. 1 & NO. 2. TRIM POSTS ON ALL 4 SIDES TO PROVIDE 1/8" CLEARANCE ON THE INSERTED PORTION OF THE POST.

MDOT STEEL GUARDRAIL
N.T.S.

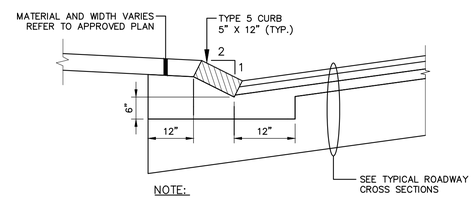


CURB INLET WITH TIPDOWNS
N.T.S.



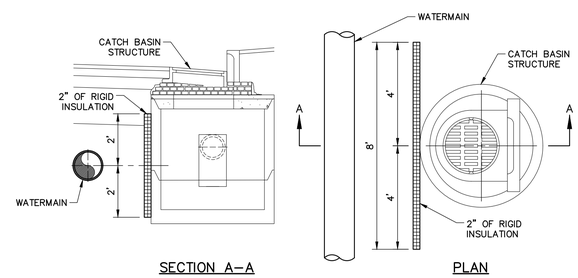
NOTES:
1. Selected ledge excavation, crushed stone or other porous material shall be used to fill around the old ground area of the tree from the tree well to the perimeter of the branches.
2. A Geotextile to prevent infiltration of fines shall be placed over the rock fill.
3. If drainage away from the tree well is necessary, Underdrain Outlet Pipe shall be used, and will be paid for under Item 605.10 6" Underdrain Outlet.
4. The Tree Wells shall be paid for under Item 610.09 Hand Laid Riprap.

TREE WELL DETAIL
N.T.S.



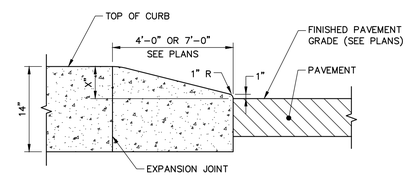
NOTE:
INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.

SLOPED GRANITE CURB DETAL
N.T.S.

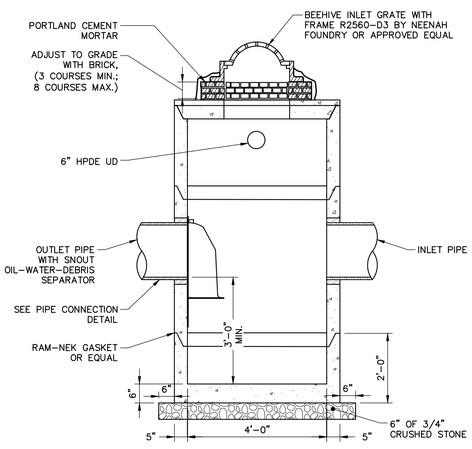


NOTE:
DETAIL APPLICABLE AT ALL LOCATIONS WHERE WATER MAIN IS 4' OR LESS AWAY FROM CB STRUCTURE.

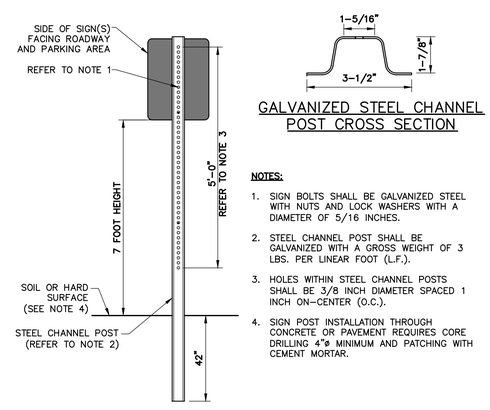
INSULATION BETWEEN WATERMAIN AND STRUCTURE DETAIL
N.T.S.



CONCRETE TIPDOWN
N.T.S.



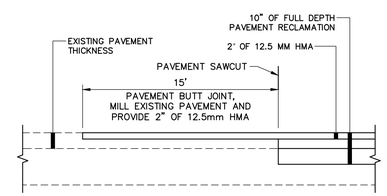
OUTLET CONTROL STRUCTURE
N.T.S.



GALVANIZED STEEL CHANNEL POST CROSS SECTION

NOTES:
1. SIGN BOLTS SHALL BE GALVANIZED STEEL WITH NUTS AND LOCK WASHERS WITH A DIAMETER OF 5/16 INCHES.
2. STEEL CHANNEL POST SHALL BE GALVANIZED WITH A GROSS WEIGHT OF 3 LBS. PER LINEAR FOOT (L.F.).
3. HOLES WITHIN STEEL CHANNEL POSTS SHALL BE 3/8 INCH DIAMETER SPACED 1 INCH ON-CENTER (O.C.).
4. SIGN POST INSTALLATION THROUGH CONCRETE OR PAVEMENT REQUIRES CORE DRILLING 4"ø MINIMUM AND PATCHING WITH CEMENT MORTAR.

SIGN POST DETAIL
N.T.S.



PAVEMENT BUTT JOINT DETAIL
N.T.S.

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CIVIL DETAILS - 3

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 44 OF 49

C-402

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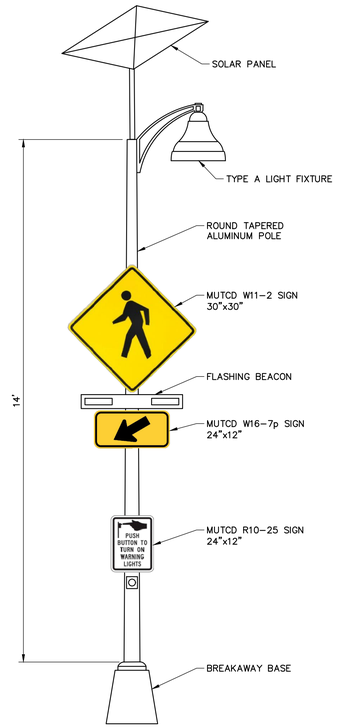
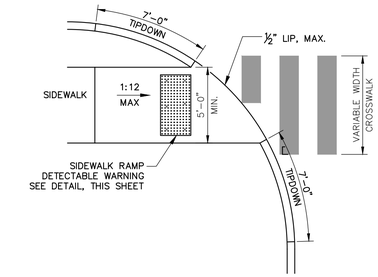


FLASHING CROSSWALK SIGNAGE DETAIL

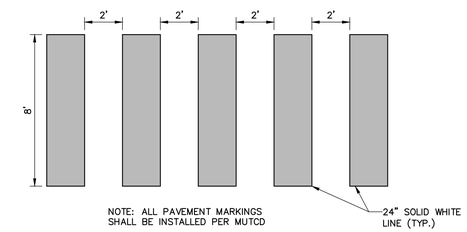
N.T.S.



ADA RAMP AT THRU STREET

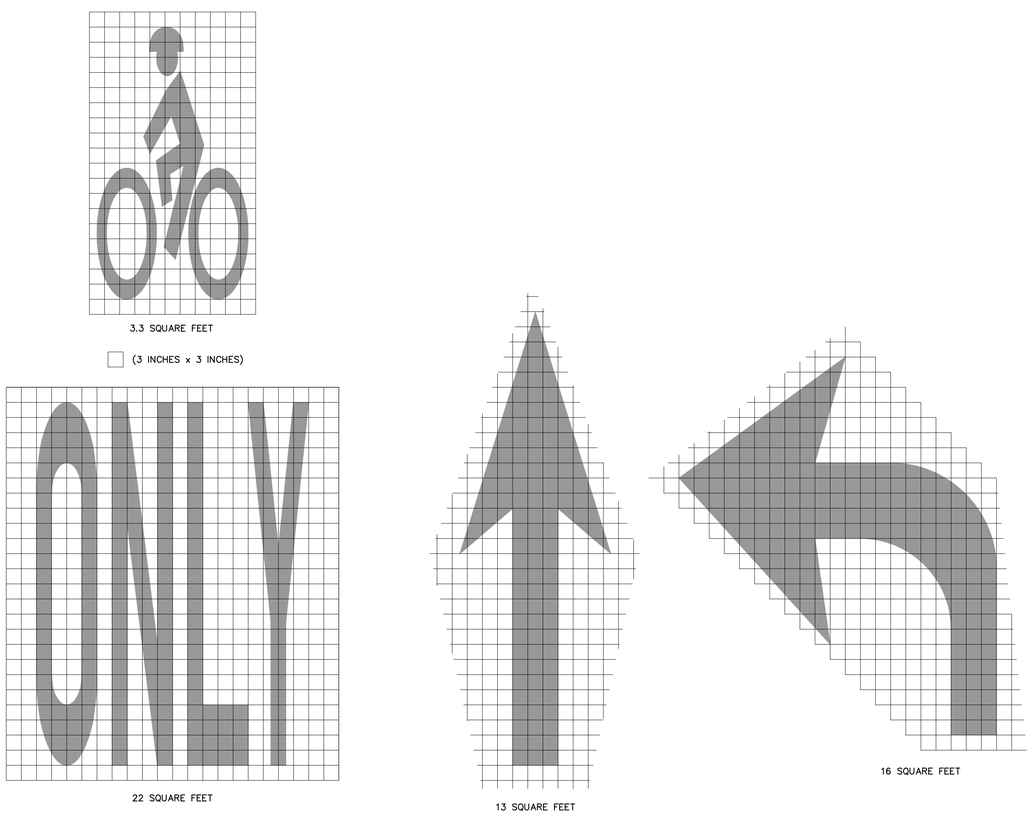
ADA PEDESTRIAN RAMP

N.T.S.



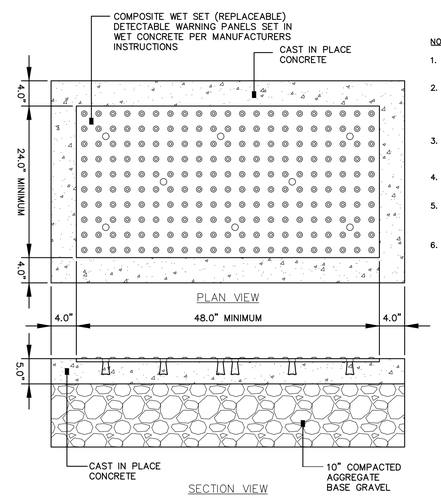
CROSSWALK DETAIL

N.T.S.



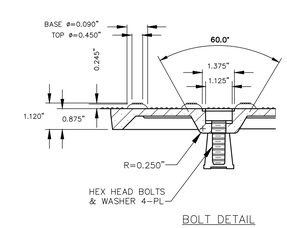
PAVEMENT MARKINGS

N.T.S.



NOTES:

1. COMPOSITE WET SET (REPLACEABLE) DETECTABLE WARNING PANELS SHALL BE AS MANUFACTURED BY ADA SOLUTIONS, INC. (WWW.ADATILE.COM), OR APPROVED EQUAL.
2. CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MAINE D.O.T. CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE CONCRETE SHALL BE SEALED PRIOR TO SETTING PANELS. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A GROOVED EDGE BETWEEN THE PANEL AND CONCRETE, ALONG WITH A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
3. TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
4. FEDERAL YELLOW COLORED (#33538) PANELS SHALL BE USED. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
5. SIZE: THE DETECTABLE WARNING PANEL(S) SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
6. ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.



SIDEWALK RAMP DETECTABLE WARNING PANEL

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CIVIL DETAILS - 4

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 45 OF 49

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22x34 SHEET
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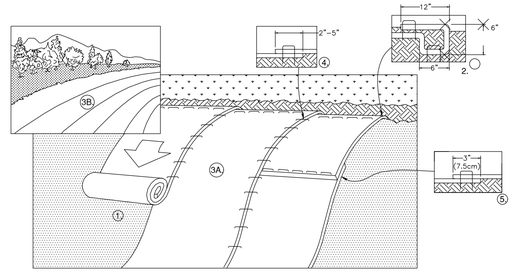


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED AS WELL AS REMOVING ANY PROTRUDING ROCKS, STUMPS OR ROOTS. DURING THE GROWING SEASON (APRIL 15– SEPTEMBER 15) USE RECP'S ON THE BASE OF GRASSED WATERWAYS, SOIL SLOPES HAVING A GRADE GREATER THAT 15%, OR ANYWHERE WHERE HAY MULCH HAS PROVEN TO BE INEFFECTIVE AT CONTROLLING SHEET EROSION. RECP'S ARE A MANUFACTURED COMBINATION OF MULCH AND NETTING DESIGNED TO PREVENT EROSION AND RETAIN SOIL MOISTURE. FOR OVER WINTER PROTECTION, APPLY RECP'S ON THE BASE AND SIDE SLOPES OF GRASSED WATERWAYS AND ON SLOPES STEEPER THAN AN 8% GRADE.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED. TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP's WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.
6. UNTIL GRASS IS ABUNDANT, INSPECT PERIODICALLY AND AFTER EACH RAINSTORM TO CHECK FOR EROSION. IMMEDIATELY REPAIR AND ADD MORE MULCH UNTIL GRASSES ARE FIRMLY ESTABLISHED. DO NOT MOW THE FIRST YEAR.

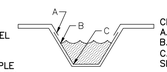
ROLLED EROSION CONTROL MATTING

N.T.S.

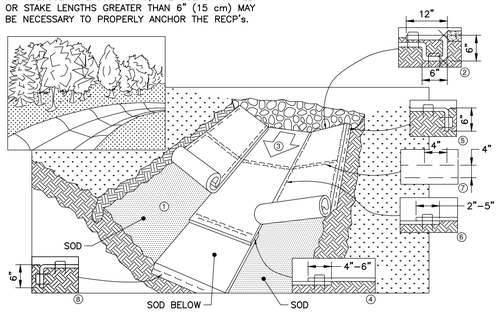
NOTE:

* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

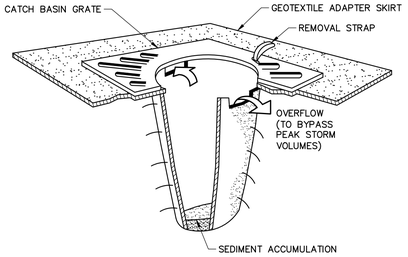


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SOD. PROVIDE SOD BELOW TRM.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMAPCT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" (10 CM –15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (5 CM –12.5 CM) (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M – 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE:
* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

TURF REINFORCING MATTING

N.T.S.



NOTES:

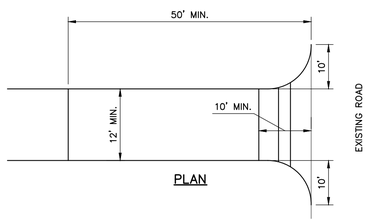
CATCH BASIN PROTECTION TO BE "SILTSACK" (BY ACF ENVIRONMENTAL) OR "STREAM GUARD" (BY FOSS ENVIRONMENTAL SERVICES).

INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.

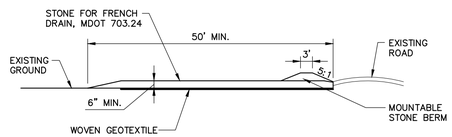
INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.

TEMPORARY INLET PROTECTION

N.T.S.



PLAN



PROFILE

NOTES:

- CONSTRUCTION ENTRANCES MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
- WHEEL WASH PITS MAY ALSO BE USED, IF APPROVED.

MAINTENANCE: INSPECT FOR EFFECTIVE REMOVAL OF SOIL FROM VEHICLES PRIOR TO LEAVING THE SITE. SWEEP ANY SOIL FROM ADJACENT ROADWAYS.

REMOVAL: AT LEAST ONE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL ALL AREAS OF THE SITE ARE STABILIZED. UPON REMOVAL OF STABILIZED CONSTRUCTION ENTRANCE, A REINFORCED MAINTENANCE ACCESS SHALL BE INSTALLED, SEE DETAIL

STABILIZED CONSTRUCTION ENTRANCE DETAIL

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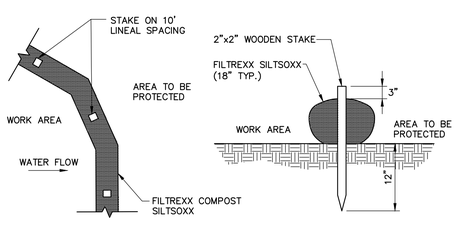


PLAN VIEW SECTION

SEDIMENT BARRIER – SILTSOXX

N.T.S.
(FOR USE AROUND STAGING/ ACCESS AREAS)

EROSION AND SEDIMENT CONTROL NOTES

Temporary Erosion Control

Contractor shall prepare and submit a soil erosion and water pollution control plan to engineer in accordance with Section 656.

Measure	Dates For Use	Timing, Activity, and Location
Sedimentation Barrier	ALL	Before soil disturbance, install downhill of areas to be disturbed and around material stockpiles.
Up–slope Diversion	ALL	Before soil disturbance, install uphill of areas to be disturbed and material stockpiles.
Catch Basin Protection	ALL	Before soil or pavement disturbance, install ACF Environmental, Inc. High Flow Siltsack, Siltsaver Inlet Filter. or equal, installed per manufacturer's requirements.
Dust Control	ALL	During dry weather, apply water and calcium chloride to control dust.
Temporary Seeding	April 15 to Oct. 1	Soil stockpiles that are not covered and disturbed areas that will not be disturbed again within 14 days. If grass growth provides less than 95% soil coverage by Nov. 1, apply mulch and anchor with erosion control blanket.
Mulch	April 15 to Sept. 15	On all areas of exposed soil prior to rain events apply 100–150 lbs (2.5 bales) per 1,000 sq ft. by mechanical blower.
Winter Mulch	Sept. 16 to Oct. 31	On all areas of exposed soil prior to precipitation apply 150 to 170 lbs. mulch (4 bales) per 1,000 sq. ft. by mechanical blower, Erosion control blanket may be used as a substitute for winter mulch.
	Nov. 1 to April 14	On all areas of exposed soil, apply 150 to 170 lbs. mulch (4 bales) per 1,000 sq. ft. and anchor with netting at the end of each working day. Erosion control blanket may be used as a substitute for winter mulch.
Inspections	Until site is permanently stabilized	Inspect the erosion and sedimentation control measures daily, and maintain and repair as necessary.

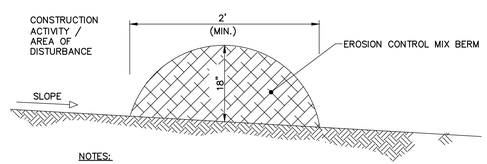
Permanent Erosion Control:

Measure	Dates For Use	Timing, Activity, and Location
Permanent Seeding	April 15 to Sept. 15	On final grade areas, within 7 days of grade preparation, prepare topsoil, followed by seed and mulch application.
Dormant Seeding	Sept. 16 to April 15	On final grade areas, with prepared topsoil. Apply seed at double the specified rate on bare soil, and follow with an application of winter mulch.
Ground Cover, Trees, Shrubs	April 15 to Nov. 1	Install with final landscaping.
Permanent Mulch	ALL	Install with final landscaping.

Inspections:

Regular inspections of all erosion and sedimentation controls shall be made at least weekly and prior to and following storm events. Minimum inspections shall be made as listed in the table below.

Inspected Item	Look For
Mulched Surfaces	Thin mulch or inadequate application. Wind movement.
Seeded Surfaces	Poor seed germination. Loss of mulch. Development of rivulets.
Sediment Barrier	Sediment build–up to one half the height of the barrier. Undermining of the barrier. Supporting stakes loose, toppled, or unmarked. Breaks in barrier.
Perimeter Diversion	Discharge is to stabilized area. Erosion or breaks in barrier. Supporting stakes loose, toppled or unmarked.
Catch Basin Protection	Sediment build–up and structure blockages. Slow flow/Ponding water. Breaks in fabric or voids in barrier.
Construction Entrance	Sedimentation of roadways. Off–site dust complaints.



NOTES:

Erosion Control Mix Berms

Erosion control mix can be manufactured on or off the project site. It must consist primarily of organic material and may include: shredded bark, stump grindings, composted bark, or acceptable manufactured products. Wood and bark chips, ground construction debris or reprocessed wood products will not be acceptable as the organic component of the mix.

Composition

Erosion control mix shall contain a well–graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth. The mix composition shall meet the following standards:

- The organic matter content shall be between 80 and 100%, dry weight basis.
- Particle size by weight shall be 100 % passing a 6" screen and a minimum of 70%, maximum of 85%, passing a 0.75" screen.
- The organic portion needs to be fibrous and elongated.
- Large portions of silts, clays or fine sands are not acceptable in the mix.
- Soluble salts content shall be < 4.0 mmhos/cm.
- The pH should fall between 5.0 and 8.0.

SEDIMENT BARRIER – EROSION CONTROL MIX BERM

N.T.S.
(FOR USE AROUND STAGING/ ACCESS AREAS)

EROSION AND SEDIMENTATION CONTROL NOTES

TEMPORARY EROSION CONTROL MEASURES MAY INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCES, HYDRAULIC MULCH, HAY AND STRAW MULCH, EROSION CONTROL BLANKET, TURF REINFORCED MATTING, RIPRAP AND TEMPORARY SEEDING. TEMPORARY SEDIMENT CONTROL MEASURES INCLUDE THE USE OF SILT FENCE, EROSION CONTROL MIX BERMS, PLUNGE POOLS, CHECK DAMS, SEDIMENT TRAPS, CATCHBASIN SEDIMENT COLLECTION BAGS AND GEOTEXTILE FILTER BAGS. PERMANENT MEASURES INCLUDE THE USE OF RIPRAP AT EXPOSED STORMDRAIN AND CULVERT INLETS AND OUTLETS, ARMORED SWALES AND SLOPES AND PERMANENT VEGETATION.

GENERAL

A. THE PROJECT SHALL CONFORM WITH THE STANDARDS OF THE MAINE CONSTRUCTION GENERAL PERMIT, IF APPLICABLE.

B. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK PUBLISHED BY THE MAINE DEP UNLESS OTHERWISE NOTED IN THESE PLANS. HTTP://WWW.MAINE.GOV/DEP/BLWQ/DOCSTAND/ESCBMPS/

C. ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.

D. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.

E. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE SITE WHENEVER POSSIBLE WHILE ALLOWING PROPER SITE DEVELOPMENT.

F. CONSTRUCTION STAGING SHALL BE CONDUCTED IN A WAY TO MINIMIZE THE POTENTIAL FOR STORMWATER RUN–ON TO DISTURBED AREAS.

G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:

i. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS THAT 90% OF THE DISTURBED AREA IS COVERED WITH REASONABLY THICK UNIFORM STAND OF PERMANENT GRASS SPECIES, FREE FROM SIZABLE THIN OR BARE SPOTS.
ii. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THAT COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE OFF.
iii. FOR MULCHED AREAS, PERMANENT STABILIZATION MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL.
iv. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL–GRADED GRAVEL OR APPROVED GEOTEXTILE. STONE MUST BE SIZED APPROPRIATELY AND IN ACCORDANCE WITH SECTION E–6 OF THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL.
v. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE ASPHALT BINDER COURSE.
vi. FOR OPEN CHANNELS, LEVEL SPREADERS, ENGINEERED BUFFERS OR OTHER DESIGNED STORMWATER CONVEYANCE STRUCTURE, PERMANENT STABILIZATION MEANS THE CHANNELIZED AREA(S) IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH APPROVED RIPRAP, OR WITH OTHER NON–EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE SHALL BE NO EVIDENCE OF SLUMPING, UNDERCUTTING OR DOWNCUTTING OF THE DESIGNED CHANNEL.

H. IF THE AREA WILL REMAIN UNWORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, AND WILL NOT BE BUILT ON, THEN IMMEDIATELY PROVIDE PERMANENT STABILIZATION USING VEGETATION THROUGH PLANTING, SEEDING, SOD OR THROUGH THE USE OF PERMANENT MULCH OR RIPRAP. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS. AMEND AREAS OF DISTURBED, OVERLY–COMPACTED SUBSOIL WITH TOPSOIL OR COMPOST AND LIGHTLY TILL 2–3" OF SOIL AMENDMENTS INTO THE TOP 8" OF SOIL.

I. PERMANENT SEEDING SPECIFICATION: UNLESS OTHERWISE NOTED ON LANDSCAPE PLAN, IT IS RECOMMENDED THAT PERMANENT SEEDING BE COMPLETED BETWEEN APRIL 1 AND AUGUST 15 OF EACH YEAR. LATE SEASON SEEDING MAY BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDED WITH AROOSTOOK WINTER RYE OR MULCHED AT SPECIFIED RATES. SEE WINTER SEEDING AND MULCHING SPECIFICATIONS FOR STABILIZATION AFTER NOVEMBER 1.

i. APPLY TOPSOIL TO A DEPTH OF 4 INCHES. IN COMPACTED AREAS TILL 2–3" OF COMPOST INTO UPPER 8" OF DISTURBED SOIL AND THEN APPLY 4 INCHES OF TOPSOIL.
ii. APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 33 LBS PER 1000 SQUARE FEET AND GRANULAR, COMMERCIAL–GRADE FERTILIZER 10–10–10 AT A RATE OF 18 LBS PER 1000 SQUARE FEET.
iii. UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2.5 BALES PER 1000 SQUARE FEET AND ANCHOR AS NECESSARY.
iv. THE SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
   1. 10% CREEPING RED FESCUE
   2. 25% KENTUCKY BLUEGRASS
   3. 60% PERENNIAL RYE GRASS
   4. 5% ANNUAL RYEGRASS
v. THE SEED MIXTURE FOR NON–LAWN AREAS WITH LOW–MAINTENANCE SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
   1. 50% CREEPING RED FESCUE
   2. 25% TALL FESCUE
   3. 10% ANNUAL RYEGRASS
   4. 10% WHITE CLOVER
   5. 5% RED TOP

J. PROTECT ALL SEEDED AREAS WITH MULCH OR EROSION CONTROL BLANKET IN AREAS OF SHEET OR CONCENTRATED FLOWS. MULCH ALL AREAS SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. SCHEDULE SEEDING OR SODDING TO AVOID FAILURE DUE TO SUMMER DROUGHT AND FALL FROST. NEWLY SEEDED AREAS SHOULD BE PROTECTED FROM VEHICLE TRAFFIC, PEDESTRIAN TRAFFIC AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE OR SURFACE EROSION IS EVIDENT.

K. DITCH LININGS AND RIPRAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF THE CULVERT.

L. EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1, IN THE BASE OF DITCHES AND ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (WETLANDS AND WATER RESOURCES). EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL. EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

M. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURE UPON STABILIZATION OF PROJECT AREA & COST SHALL BE INCIDENTAL TO CONTRACT.

WINTER CONDITIONS

A. WINTER CONSTRUCTION IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 1. IF AREAS WITHIN THE CONSTRUCTION AREA ARE NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES OUTLINED ABOVE BY NOVEMBER 15 THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS.

GOOD HOUSEKEEPING AND POLLUTION PREVENTION

A. SPILL PREVENTION CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER RUNOFF AND APPROPRIATE SPILL PREVENTION, CONTAINMENT AND RESPONSE PLANNING AND IMPLEMENTATION.

B. DURING CONSTRUCTION, PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUND OR SURFACE WATERS MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO INFILTRATION AREAS. AN "INFILTRATION AREA" IS ANY ARE OF THE SITE THAT BY DESIGN, OR AS A RESULTS OF SOIL AND TOPOGRAPHY, ACCUMULATES RUNOFF THAT INFILTRATES IN THE SOIL. DIKES, BERMS, SUMPS AND OTHER FORMS OF TEMPORARY SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

C. LOCATE ALL MATERIAL STOCKPILES WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.

D. TAKE ALL REASONABLE MEASURES TO MINIMIZE DUST RESULTING FROM THE PROJECT. OIL MAY NOT BE USED FOR DUST CONTROL.

E. LOCATE ALL LITTER, CONSTRUCTION DEBRIS AND CONSTRUCTION CHEMICALS WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.

F. TRENCH OR FOUNDATION DE–WATERING MUST BE SPREAD THROUGH SUFFICIENT NATURAL BUFFERS THAT HAVE CAPACITY TO INFILTRATE THE PUMPED WATER OR SHOULD BE PUMPED TO DESIGNED CONSTRUCTION DEWATERING DEVICES AS DESCRIBED IN THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK.

G. SEDIMENTS AND SOIL MATERIALS SHOULD BE SWEPT FROM PAVED SURFACES AT THE END OF EACH WORKDAY OR PRIOR TO RAIN EVENTS, WHENEVER POSSIBLE.

INSPECTION AND MAINTENANCE

A. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT, THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK AND ANY MUNICIPAL REQUIREMENTS MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF ADDITIONAL BMPS OR MODIFICATIONS TO BMPS ARE NECESSARY, THE MODIFICATIONS MUST BE IMPLEMENTED WITH 7 CALENDAR DAYS OR PRIOR TO ANY PRECIPITATION EVENT. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

B. AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT BY THE CONTRACTOR, SUMMARIZING THE SCOPE OF THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO THE OPERATION OF EROSION AND SEDIMENT CONTROL BMPS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE CONSTRUCTION AREA. THE INSPECTION LOG SHOULD BE DELIVERED TO THE PROPERTY OWNER OR RESPONSIBLE CONTRACTING ENTITY UPON COMPLETION OF THE PROJECT.

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

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Portland, Maine 04102
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REV	DESCRIPTION	DATE

DESIGNED BY: DAS
DRAWN BY: JBC
CHECKED BY: DAS
227433.63 DETAILS.dwg

CIVIL DETAILS - 5

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: AS NOTED
SHEET: 46 OF 49

C-404

\\Woodardcurran.net\Shared\Projects\227433 Scarborough-Eng Cons Svcs\wip\33 Gorham Road Phase 1 Final Design\Drawings\CIVIL\227433.63 Details.dwg, April 10, 2017 – 1:25pm

22x34 SHEET
1:1

GENERAL

- WIRING IN RACEWAY CONCEALED UNDERGROUND OR UNDERSLAB, MINIMUM 3/4"C
- CONDUIT TURNING UP
- POWER COMPANY METER
- KEYED NOTE TAG
- REVISION TRIANGLE
- POLE MOUNTED SITE LIGHTING FIXTURE — ab — FIXTURE TYPE (SEE LIGHT FIXTURE SCHEDULE)
- FLASHING CROSSWALK BEACON

GROUNDING

- BARE COPPER GROUND CABLE. (SIZE 4/0 UNLESS OTHERWISE NOTED)
- 3/4ø X 10'-0" LONG GROUND ROD. (10'-0" MINIMUM LENGTH)
- EQUIPMENT BOLTED CONNECTION OR APPROVED EQUAL.
- CADWELD EXOTHERMIC CONNECTION
- GROUND

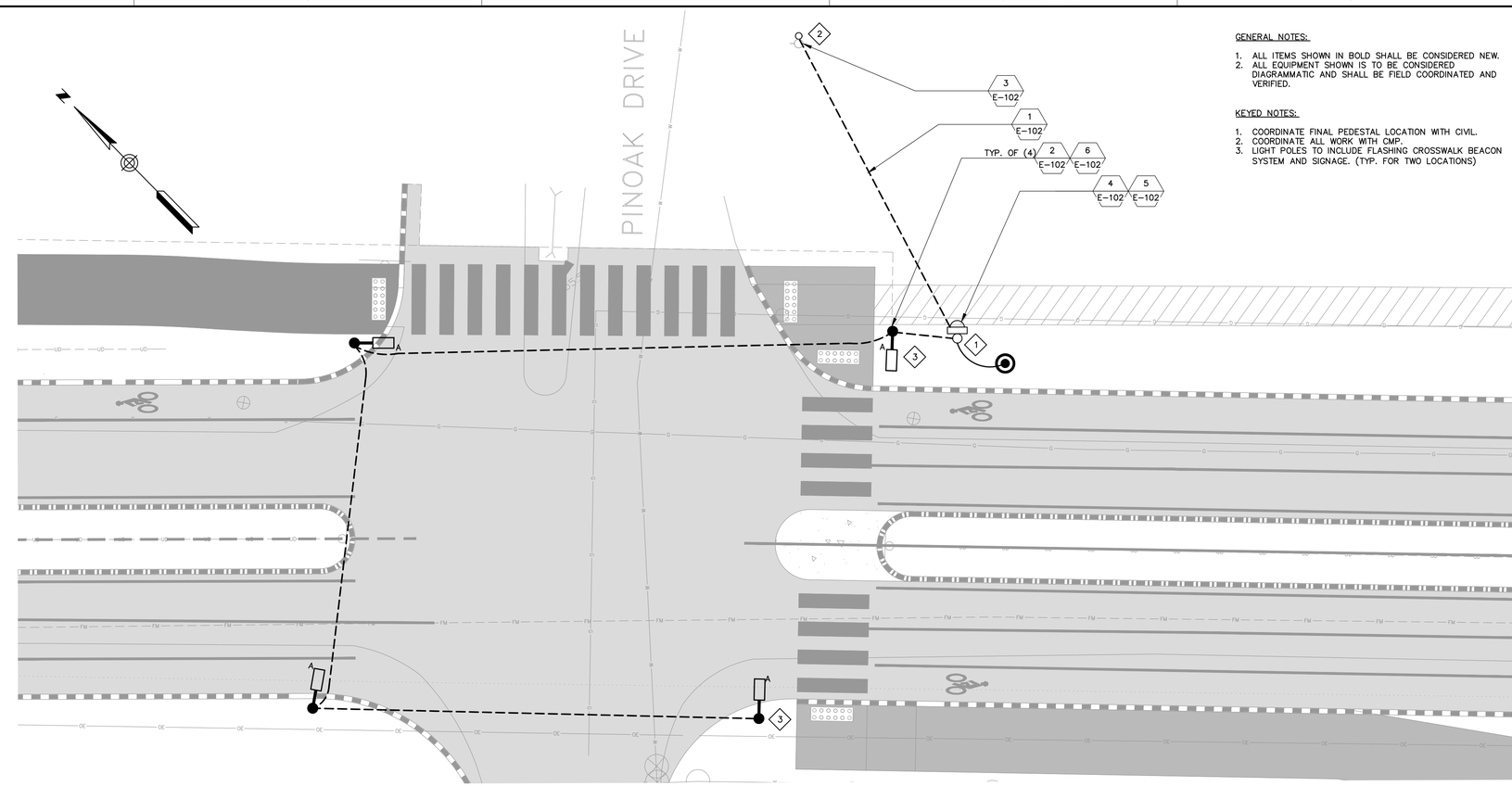
MISCELLANEOUS

B / 80.01 — DETAIL # / SHEET # — SECTION CALL OUT

1 / X-0X — DETAIL CALL OUT

ABBREVIATIONS

A,AMP	AMPERES
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPT CAPACITY
AWG	AMERICAN WIRE GAUGE
BFG	BELOW FINISHED GRADE
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CL	CENTER LINE
CKT	CIRCUIT
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
E.C.	ELECTRICAL CONTRACTOR
EMT	ELECTRIC METALLIC TUBING
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FWE	FURNISHED WITH EQUIPMENT
G.C.	GENERAL CONTRACTOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
G,GND	GROUND
HP	HORSEPOWER
HZ	FREQUENCY IN CYCLES/SECOND
IG	ISOLATED GROUND
IMT	INTERMEDIATE METALLIC CONDUIT
JBOX	JUNCTION BOX
K	KILO
KCMIL	1000 CIRCULAR MILS
KVA	KILOVOLT AMPERE
KVAR	KILOVOLT AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
MCC	MOTOR CONTROL CENTER
MCB	MAIN CIRCUIT BREAKER
MFG	MANUFACTURER
MH	MANHOLE
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTR	MOTOR
MV	MEDIUM VOLTAGE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEUT	NEUTRAL
NO	NORMALLY OPEN
OL	OVERLOAD ELEMENT
PF	POWER FACTOR
PH	PHASE
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RGS	RIGID STEEL CONDUIT
RTD	RESISTANCE TEMPERATURE DETECTOR
SEC	SECONDARY
SS	STAINLESS STEEL
SV	SOLENOID VALVE
TEMP	TEMPERATURE
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UG	UNDERGROUND
UPS	UNINTERRUPTED POWER SUPPLY
V	VOLTS
VA	VOLT-AMPERES
VAR	VOLT-AMPERE REACTIVE
W	WATT
WM	WATT METER



GENERAL NOTES:

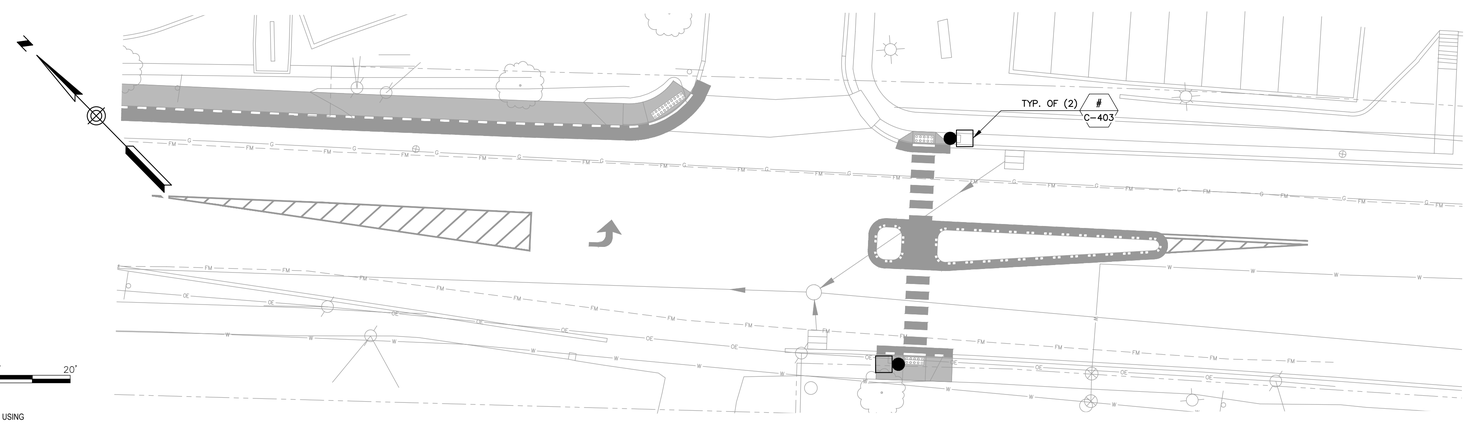
1. ALL ITEMS SHOWN IN BOLD SHALL BE CONSIDERED NEW.
2. ALL EQUIPMENT SHOWN IS TO BE CONSIDERED DIAGRAMMATIC AND SHALL BE FIELD COORDINATED AND VERIFIED.

KEYED NOTES:

1. COORDINATE FINAL PEDESTAL LOCATION WITH CIVIL.
2. COORDINATE ALL WORK WITH CMP.
3. LIGHT POLES TO INCLUDE FLASHING CROSSWALK BEACON SYSTEM AND SIGNAGE. (TYP. FOR TWO LOCATIONS)

PINOAK/SAWYER ROAD AND GORHAM ROAD INTERSECTION POWER PLAN

SCALE: 1" = 10'-0"



BAR SCALE 1" = 10' — 10' 0 10' 20'
CHECK GRAPHIC SCALE BEFORE USING

BAR SCALE 1" = 20' — 20' 0 20' 40'
CHECK GRAPHIC SCALE BEFORE USING

ADAMS WAY AND SCHOOL ENTRANCE INTERSECTION CROSSING SIGNAL PLAN

SCALE: 1" = 20'-0"

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CHECKED BY: SEH
227433.63 E-101.dwg

ELECTRICAL LEGEND & POWER PLAN

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: AS NOTED
SHEET: 47 OF 49

E-101

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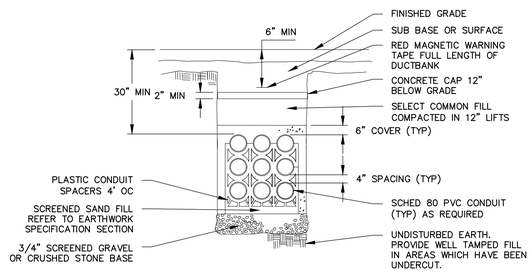
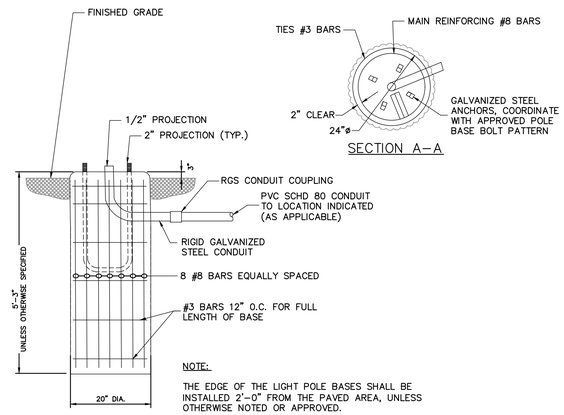


NOTES:

1. QUANTITY OF DUCTS IS SHOWN DIAGRAMMATICALLY TO REPRESENT GENERAL DUCT BANK CONSTRUCTION ARRANGEMENT AND REQUIREMENTS. QUANTITY OF DUCTS SHALL BE AS SHOWN ON PLANS.
2. CONCRETE CAP TO BE PROVIDED UNDER ROADWAY(S) AND PARKING LOTS WITHIN 3'-0" OF EDGE OF PAVEMENT.

1 / E-101 TYPICAL SAND ENCASED/CONCRETE CAPPED UNDERGROUND DUCT BANK DETAIL

SCALE: NO SCALE

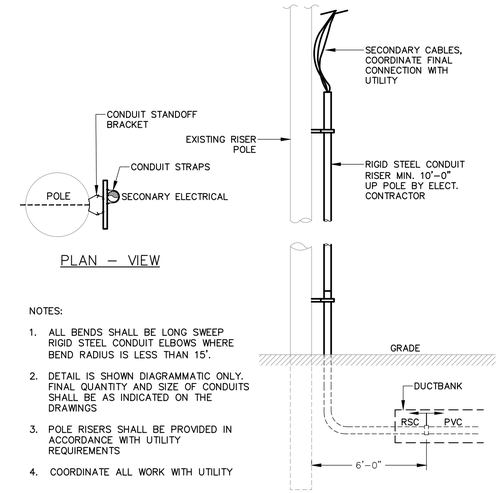


NOTE:

THE EDGE OF THE LIGHT POLE BASES SHALL BE INSTALLED 2'-0" FROM THE PAVED AREA, UNLESS OTHERWISE NOTED OR APPROVED.

2 / E-101 POLE BASE DETAIL

SCALE: NO SCALE

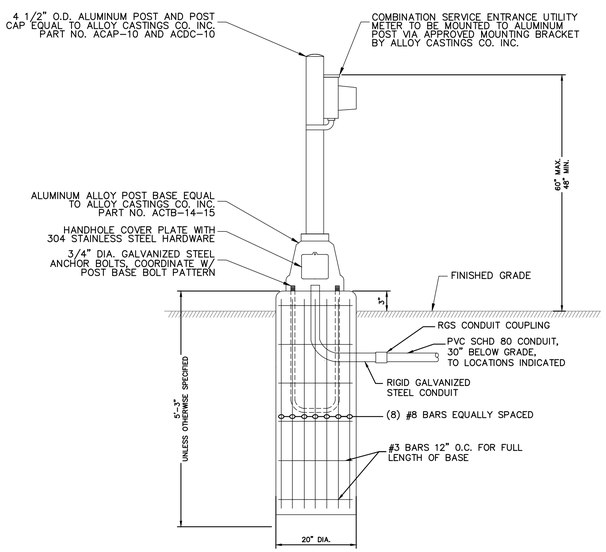


NOTES:

1. ALL BENDS SHALL BE LONG SWEEP RIGID STEEL CONDUIT ELBOWS WHERE BEND RADIUS IS LESS THAN 15'.
2. DETAIL IS SHOWN DIAGRAMMATIC ONLY. FINAL QUANTITY AND SIZE OF CONDUITS SHALL BE AS INDICATED ON THE DRAWINGS
3. POLE RISERS SHALL BE PROVIDED IN ACCORDANCE WITH UTILITY REQUIREMENTS
4. COORDINATE ALL WORK WITH UTILITY

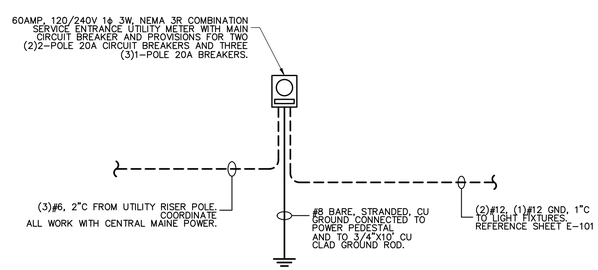
3 / E-101 RISER POLE DETAIL

SCALE: NO SCALE



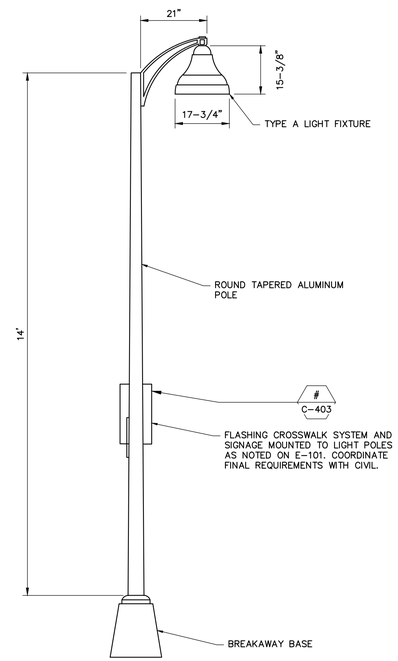
4 / E-101 POWER PEDESTAL DETAIL

SCALE: NO SCALE



5 / E-101 POWER RISER DIAGRAM

SCALE: NO SCALE



6 / E-101 LIGHT POLE DETAIL

SCALE: NTS

LIGHT FIXTURE SCHEDULE

ALL FIXTURES SHALL BE FURNISHED COMPLETE WITH ALL HARDWARE, LAMPS, HANGERS, FITTINGS, ETC., FOR A COMPLETE AND PROPER INSTALLATION.

TYPE	MANUFACTURER	CATALOG NUMBER	LAMP TYPE	LAMP WATT	LAMP NO.	VOLTAGE	MTG.	REMARKS/RECOMMENDATIONS
	EXTERIOR POLE MOUNTED LED SITE LIGHTING FIXTURE W/TYPE XXX DISTRIBUTION							
A	ERA ACORN/ERA BELL LED WITH PICOEMITTER, TYPE 3 DISTRIBUTION	FIXTURE: #1SA/BE173E35/60L5K120/DB/A-30/HA11S POLE: #PRA14-6188/A/DB	LED	68W	60 LEDS	120V	POLE MOUNTED, SEE REMARKS FOR DETAILS	1. TYPE 'A': POLE SHALL BE 14'-0", ROUND TAPERED ALUMINUM. (14' MOUNTING HEIGHT EXCLUDES 3'-0" POLE BASE) 2. PROVIDE FIXTURES WITH 21" BRACKET ARM (TO BE ADJUSTED FOR FINAL FIXTURE SELECTION) 3. AFFIX POLE TO BREAKAWAY BASE WITH A CONCRETE FOUNDATION BASE REVEL.

LIGHT FIXTURE SCHEDULE

SCALE: NOT TO SCALE

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DETAILS AND SCHEDULES

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

JOB NO.: 227433.63 & 66
DATE: APRIL 2017
SCALE: 1" = 20'
SHEET: 48 OF 49

E-102

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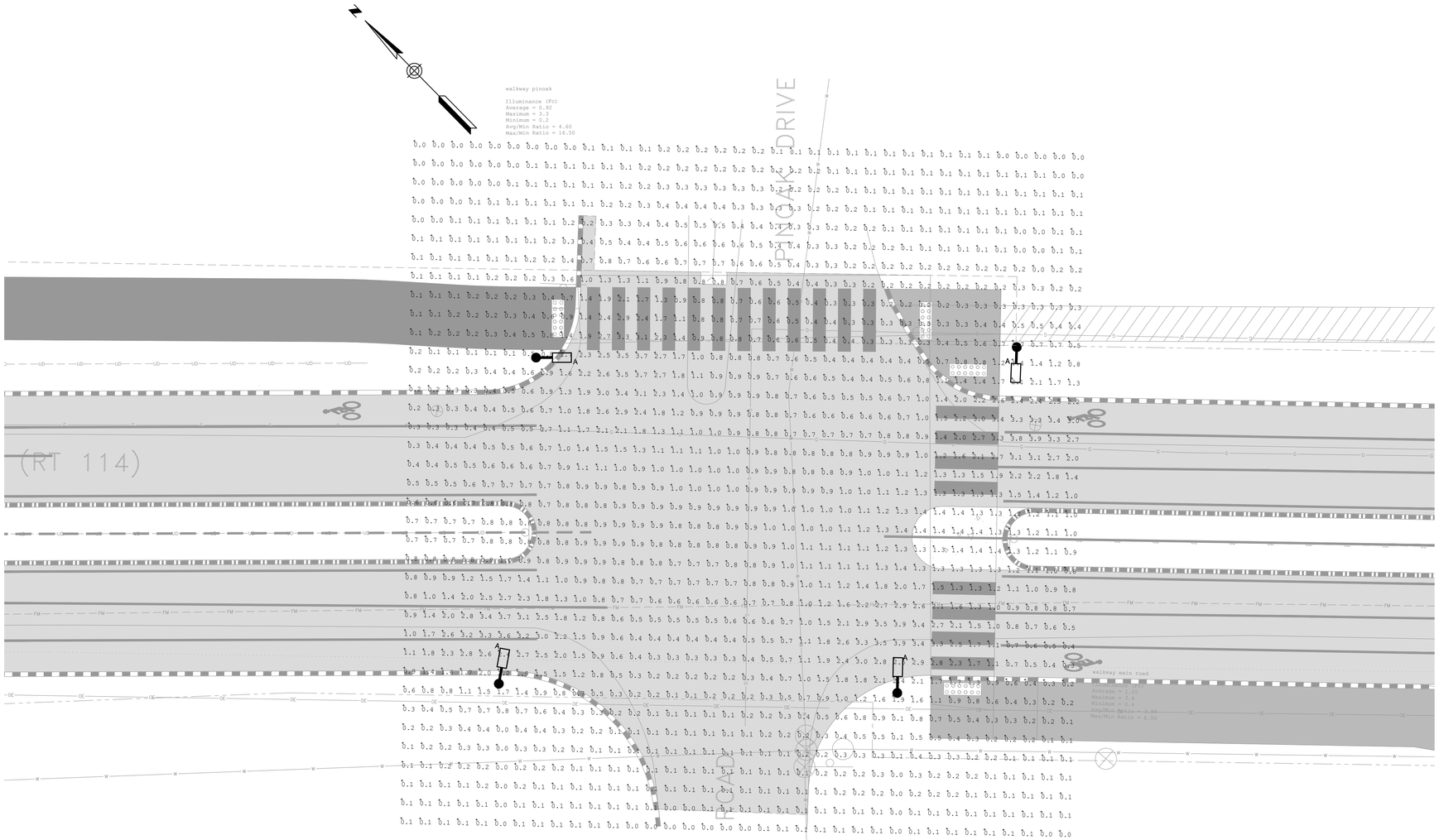
22x34 SHEET
1:1

GENERAL NOTES:

1. PHOTOMETRIC PLAN INCLUDED FOR REFERENCE ONLY.



PINOAK/SAWYER ROAD AND GORHAM ROAD INTERSECTION PHOTOMETRIC PLAN

SCALE: 1" = 10'-0"

10' 0 10' 20'

BAR SCALE
1" = 10'
CHECK GRAPHIC SCALE BEFORE USING

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LIGHTING PLAN

TOWN OF SCARBOROUGH, MAINE
PLANNING & PUBLIC WORKS DEPARTMENT

GORHAM ROAD
PHASE 1 RECONSTRUCTION
& SAFE ROUTES PROJECT

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E-103

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