

CONSTRUCTION DRAWINGS

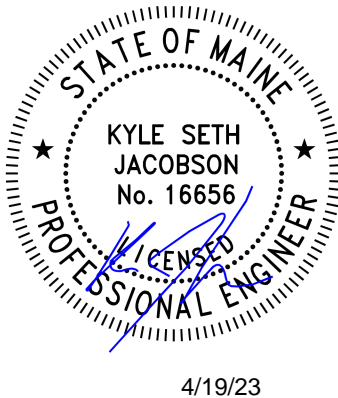
FOR

SPURWINK ROAD IMPROVEMENTS

PHASE 1

SCARBOROUGH, MAINE

APRIL 2023



REV.	DATE	REVISION DESCRIPTION
0	4/19/23	ISSUED FOR BID

DESIGNED BY: KSJ
DRAWN BY: KSJ
CHECKED BY: PJC
DATE: 4/19/2023
FILE NAME: 4444-0004 COV02.dwg

PROJECT NAME:

SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

CLIENT:

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

COVER
SHEET

SHEET NO:

C-001

PROFESSIONAL CONTACTS:

OWNER :
SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, ME 04074
(207) 730-4401
CONTACT: DOUG HOWARD, DIRECTOR

ENGINEERING & DESIGN:
ST.GERMAIN
846 MAIN STREET
WESTBROOK, ME 04092
(207) 591-7000
CONTACT: KYLE JACOBSON, PE#16656

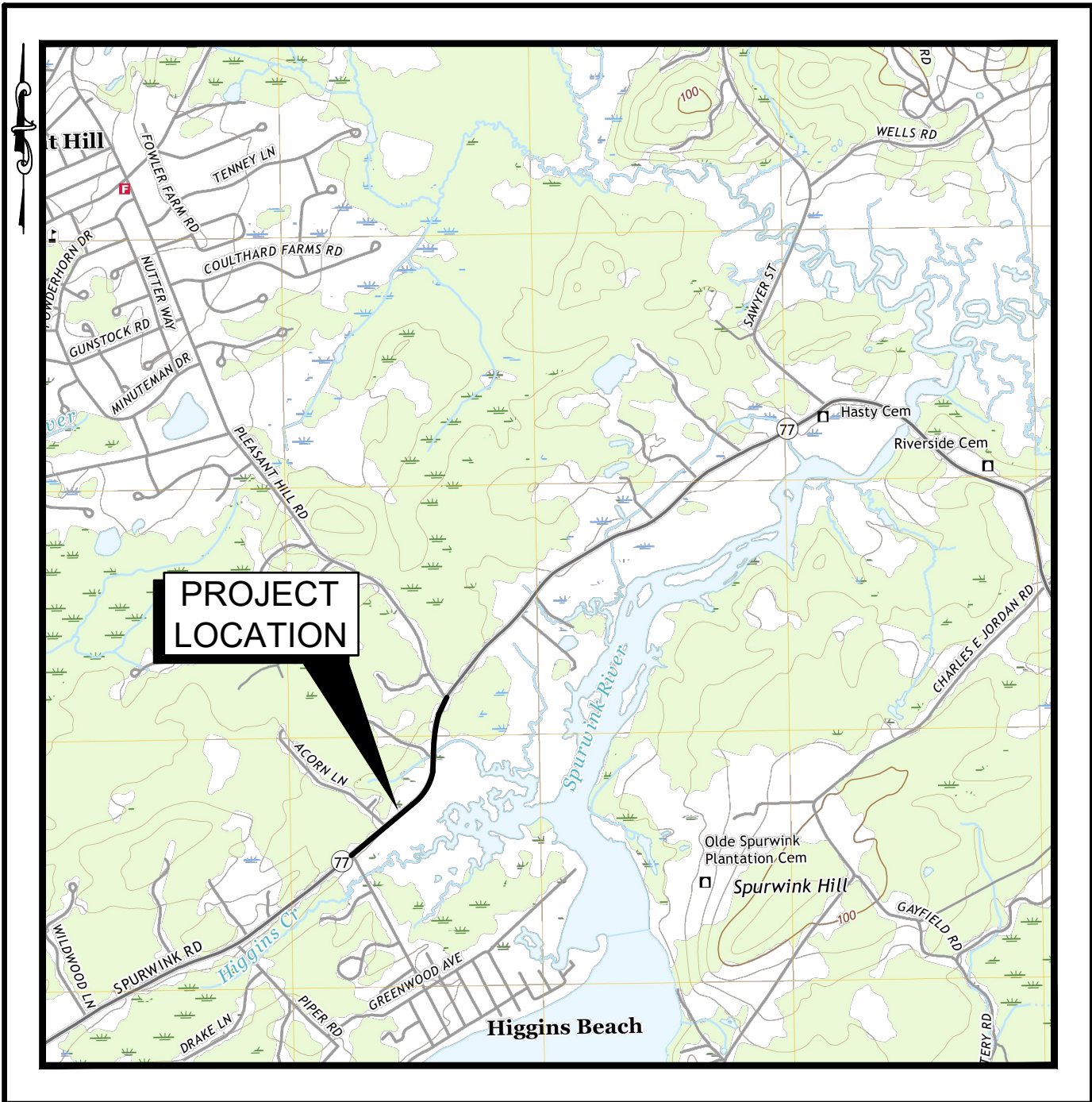
SURVEYOR:
NORTHERN SURVEY ENGINEERING, LLC
41 CHURCH ROAD
BRUNSWICK, ME 04011
(207) 440-3487
CONTACT: SEAN PIERCE, PLS#2517

GEOTECHNICAL ENGINEER:
SUMMIT GEOENGINEERING SERVICES
173 PLEASANT STREET
ROCKLAND, ME 04841
(207) 446-0808
CONTACT: ERIKA STEWART, PE#15008

WETLAND SCIENTIST:
MAINELY SOILS, LLC
440 SWAMP ROAD
DURHAM, ME 04222
(207) 650-4313
CONTACT: ALEX FINAMORE, LSE#391, CWS#267

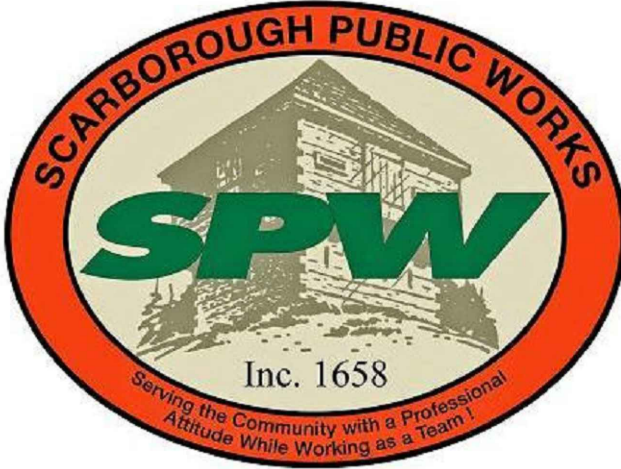
DRAWING LIST:

- | | |
|-----------|---|
| C-001 | COVER SHEET |
| C-002 | GENERAL NOTES & LEGEND |
| ----- | BOUNDARY & EXISTING CONDITIONS SURVEY (2 SHEETS) |
| C-201 | SPURWINK ROAD PLAN & PROFILE STA 0+00 TO STA 7+00 |
| C-202 | SPURWINK ROAD PLAN & PROFILE STA 7+00 TO STA 14+00 |
| C-203 | SPURWINK ROAD PLAN & PROFILE STA 14+00 TO STA 21+00 |
| C-204 | SPURWINK ROAD PLAN & PROFILE STA 21+00 TO STA 28+00 |
| C-301-302 | LAYOUT, MARKING, & EROSION CONTROL PLAN (2 SHEETS) |
| C-401 | OCEAN AVENUE INTERSECTION PLAN |
| C-402 | PLEASANT HILL ROAD INTERSECTION PLAN |
| C-403 | ACORN LANE INTERSECTION PLAN |
| C-501 | EROSION & SEDIMENTATION CONTROL NOTES & DETAILS |
| C-502 | DETAILS |
| C-503 | DETAILS |



SITE LOCATION MAP

SCALE: 1" = 2,000'±
SOURCE: USGS, PROUTS NECK, MAINE, QUADRANGLE, DATED 201



GENERAL NOTES:

1. BOUNDARY, TOPOGRAPHIC, AND EXISTING CONDITIONS PROVIDED BY NORTHERN SURVEY ENGINEERING, LLC OF BRUNSWICK, MAINE AS A RESULT OF A FIELD SURVEY CONDUCTED IN AUGUST AND SEPTEMBER 2021.
2. VERTICAL DATUM IS REFERENCED TO NAVD88, DERIVED FROM STATIC GPS OBSERVATIONS. HORIZONTAL DATUM IS REFERENCED TO MAINE STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
3. NATURAL RESOURCES DELINEATED BY ALEX FINAMORE, CWS OF MAINELY SOILS, LLC IN SEPTEMBER 2021.
4. PORTIONS OF THE PROJECT ARE LOCATED WITHIN A FEDERAL EMERGENCY MANAGEMENT AGENCY SPECIAL FLOOD HAZARD ZONE PER PRELIMINARY FLOOD INSURANCE RATE MAP DATABASE 23005C_PRELIMDB DATED AUGUST 30, 2019.
5. THE UTILITY LOCATIONS SHOWN 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.
6. CLEAN AND/OR FLUSH ALL MANHOLES, CATCH BASINS, AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED.
7. COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES, AND SCARBOROUGH PUBLIC WORKS. CONTACTS ARE LISTED IN SPECIFICATIONS. NOTIFY UTILITY COMPANIES WITHIN 48 HOURS OF WORK ACTIVITY ADJACENT TO THOSE UTILITIES OR PER UTILITY REQUIREMENTS.
8. 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 PRIOR TO EXCAVATION.
9. 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.
10. 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.
11. EXISTING FACILITIES (I.E., TREES, POLES, LIGHT POSTS, CATCH BASINS, MAIL BOXES, SIGNS, RETAINING WALLS, ETC) SHALL BE PROTECTED DURING CONSTRUCTION. TOWN RETAINS RIGHT TO KEEP ANY AN ALL REMOVED FACILITIES. CONTRACTOR SHALL DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF THE TOWN AT THE CONTRACTOR'S EXPENSE.
12. ALL TREES NOT NOTED TO BE REMOVED OR RELOCATED SHALL BE PROTECTED BY CONTRACTOR DURING CONSTRUCTION.
13. 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.
14. COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LANDOWNERS AT LEAST TWO DAYS (48 HOURS) PRIOR TO DISRUPTION. ALL UTILITY COORDINATION IS THE RESPONSIBILITY OF CONTRACTOR.
15. 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.
16. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
17. CONTRACTOR SHALL OBTAIN A TOWN STREET OPENING PERMIT BEFORE BEGINNING CONSTRUCTION.
18. 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 ALTERATION WITHIN THE PROJECT LIMITS MUST BE SUBMITTED TO THE TOWN. THESE DRAWINGS SHALL BE SUBMITTED IN BOTH DIGITAL AND HARD COPY FORMAT AS DEFINED IN THE SPECIFICATIONS PRIOR TO PAYMENT OF FINAL RETAINAGE.
19. 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.
20. FIELD VERIFY UTILITY ELEVATIONS PRIOR TO ORDERING CATCH BASIN AND MANHOLE STRUCTURES. NOTIFY ENGINEER OF ANY CONFLICTS.
21. CONTACT TOWN OF SCARBOROUGH ENGINEER PRIOR TO CUTTING ROOTS, TRIMMING BRANCHES, OR DISTURBING TREES THAT HAVE NOT BEEN NOTED FOR REMOVAL ON THE PLANS.
22. PROVIDE 4-INCHES OF LOAM AND SEED IN ALL LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATIONS, UNLESS OTHERWISE NOTED AS SOD.
23. MUNICIPAL FIRE ALARM AND DATA CABLES ARE LOCATED ABOVEGROUND ATTACHED TO THE UTILITY POLES AND SHALL BE PROTECTED.
24. EXISTING WATER MAIN SHOWN ON PLANS IS BASED ON GROUND SURVEY CONDUCTED BY NORTHERN SURVEY ENGINEERING, LLC IN AUGUST AND SEPTEMBER 2021 AND SUPPLEMENTED WITH PLANS PROVIDED BY THE PORTLAND WATER DISTRICT. WATER MAIN DEPTHS SHOWN IN PROFILE ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED THROUGH TEST PITS IN ADVANCE OF PERFORMING EXCAVATION IN PROXIMITY TO THE WATER MAIN.

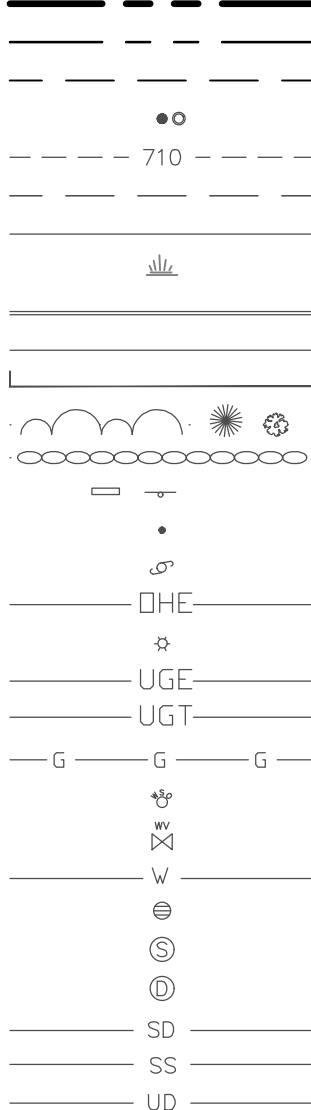
ABBREVIATIONS:

- & AC AG BIT B/W CB CI CMP CONC DI DIA DMH DTL E EG EL EOP EXIST FO FFE FT G GS GALV GRAN HDPE HMA HYD INV LF MAX MDOT MIN MM MON NIC NO NR NTS OHE OH PROP PT PVC PWD ROW RCP REINF REQD S SD SS SMH SCH STA TYP UP VC W W/ WM WS WV
- AND ASBESTOS CEMENT ABOVEGROUND BITUMINOUS BETWEEN CATCH BASIN CAST IRON CENTRAL MAINE POWER CORRUGATED METAL PIPE CONCRETE DUCTILE IRON DIAMETER DRAIN MANHOLE DETAIL UNDERGROUND ELECTRICAL EXISTING GRADE ELEVATION EDGE OF PAVEMENT EXISTING FINISHED GRADE FINISHED FLOOR ELEVATION FOOT/FEET GAS MAIN GAS SERVICE GALVANIZED GRANITE HIGH DENSITY POLYETHYLENE HOT MIX ASPHALT HYDRANT INVERT LINEAR FEET MAXIMUM MAINE DEPARTMENT OF TRANSPORTATION MINIMUM MILLIMETER MONUMENT NOT IN CONTRACT NUMBER NO REFUSAL NOT TO SCALE OVERHEAD ELECTRIC OVERHEAD PROPOSED POINT POLYVINYL CHLORIDE PORTLAND WATER DISTRICT RIGHT-OF-WAY REINFORCED CONCRETE PIPE REINFORCED REQUIRED SEWER STORM DRAIN SANITARY SEWER SEWER MANHOLE SCHEDULE STATION TYPICAL UTILITY POLE VITRIFIED CLAY WATER WITH WATER MAIN WATER SERVICE WATER VALVE

LEGEND

- PROPERTY LINE/ROW ADJACENT PROPERTY LINE SETBACKS MONUMENTS CONTOURS EDGE OF GRAVEL EDGE OF PAVEMENT WETLAND SYMBOL CURB PAVEMENT STRIPING BUILDINGS TREES/TREELINE STONEWALL SIGNS BOLLARDS UTILITY POLE OVERHEAD ELECTRIC LIGHTS UNDERGROUND ELECTRIC UNDERGROUND TELECOMMUNICATIONS GAS LINE WATER SHUTOFF WATER VALVE WATER LINE CATCH BASIN SEWER MANHOLE DRAIN MANHOLE STORM DRAIN LINE SANITARY SEWER LINE UNDERDRAIN LINE TRAFFIC FLOW DIRECTION SNOW STORAGE AREA SEDIMENT BARRIER INLET PROTECTION FENCE CONCRETE GRAVEL SURFACE RIPRAP ASPHALT PAVEMENT SOIL BORING WETLAND IMPACTS DRIVEWAY PAVING GUARDRAIL MAILBOX

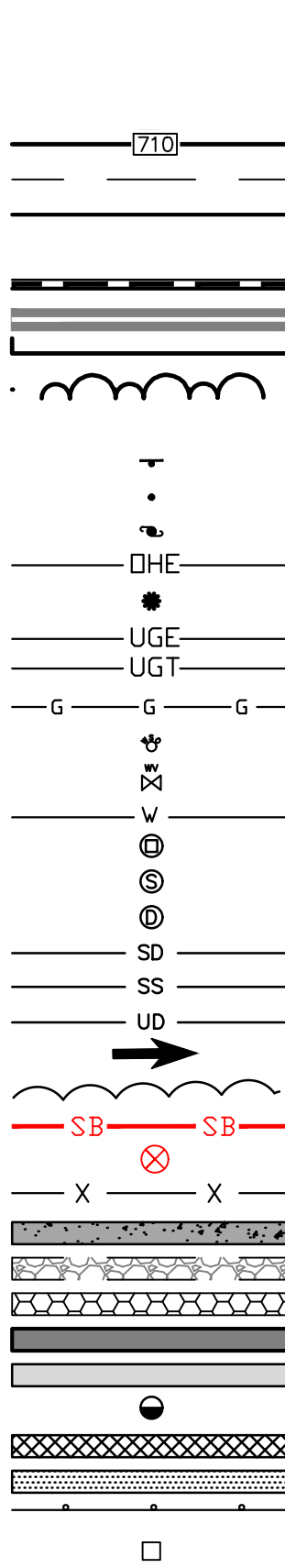
EXISTING



SCARBOROUGH WATER DISTRICT



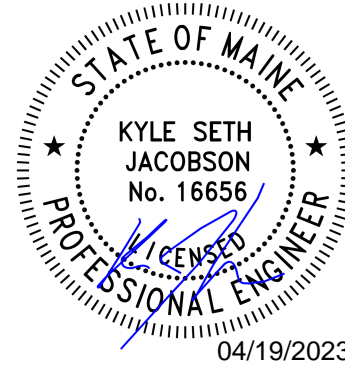
PROPOSED



ALIGNMENT LINE DATA				
LINE #	LENGTH	BEARING	ALIGNMENT NAME	
L1	441.92'	N51°19'06"E	Spurwink Road	
L2	727.71'	N49°09'26"E	Spurwink Road	
L3	395.16'	N2°50'47"E	Spurwink Road	

ALIGNMENT CURVE DATA				
CURVE #	RADIUS	LENGTH	DELTA	ALIGNMENT NAME
C1	1500.00'	56.57'	2°09'40"	Spurwink Road
C2	600.00'	484.97'	46°18'39"	Spurwink Road
C3	1100.00'	724.98'	37°45'43"	Spurwink Road

Structure Table	
Structure Name	Structure Details
CB#1	RIM = 18.004 SUMP = 12.300 Pipe 7+12_1 INV IN = 15.400 12" HDPE INV IN = 15.500 Pipe -7+12_2 INV OUT = 15.300
CB#2	RIM = 14.652 SUMP = 8.650 Pipe - (11) INV OUT = 12.000
CB#3	RIM = 14.451 SUMP = 8.450 Pipe - (13) INV OUT = 11.380
CB#4	RIM = 13.050 SUMP = 5.720 Pipe - (13) INV IN = 7.820 Pipe - (14) INV OUT = 7.720
CB#5	RIM = 21.132 SUMP = 15.550 Pipe - (15) INV IN = 17.650 Pipe - (16) INV OUT = 17.550



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PROJECT NAME:

SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

CLIENT:

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

GENERAL
NOTES &
LEGEND

SHEET NO:

C-002





N/F
JOHN CLOUTIER
MELISSA CLOUTIER
100 SPURWINK RD.
MAP R99, LOT 23A
BK. 25891, PG. 11

N/F
CHARLES A. TARLING
MARTHA I. TARLING
3 INDIAN ROCK RD.
MAP R99, LOT 24
BK. 13000, PG. 14

N/F
THERESA A. CLOUTIER
111 SPURWINK RD.
MAP R99, LOT 17
BK. 18451, PG. 262

N/F
UNITED STATES OF AMERICA
135 SPURWINK RD.
MAP R99, LOT 9
BK. 4014, PG. 13

N/F
EDWARD C. OSGOOD
JANE B. OSGOOD
103 SPURWINK RD.
MAP R99, LOT 19
BK. 3142, PG. 619

N/F
DAVID R. BENEMAN
CHRISTINE T. BENEMAN
105 SPURWINK RD.
MAP R99, LOT 18
BK. 11498, PG. 247

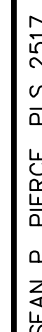
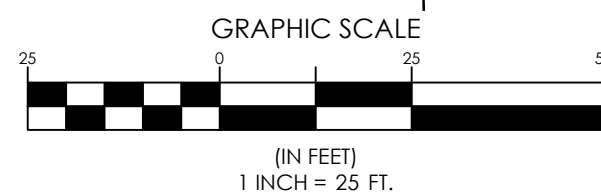
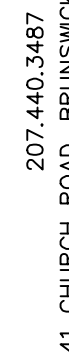
N/F
DAVID A. GROSS
KATHRYN L. GROSS
2 INDIAN ROCK RD.
MAP R99, LOT 25
BK. 26557, PG. 1

N/F
JOHN D. MCCLEAN
JUNE L. MCCLEAN
122 SPURWINK RD.
MAP R99, LOT 48
BK 12515 PG 180

N/F
AARON R. COWELL
SARAH ELIZABETH OVERSTREET
119 SPURWINK RD.
MAP R99, LOT 13
BK. 35386, PG. 274

N/F
M. FORD, SR.
SPURWINK RD.
R99, LOT 12
32710 PG. 67

N/F
FREDERICK HOWARD SCHAFFER
CHUYN CHENG
115 SPURWINK RD.
MAP R99, LOT 15
BK. 35110, PG. 137

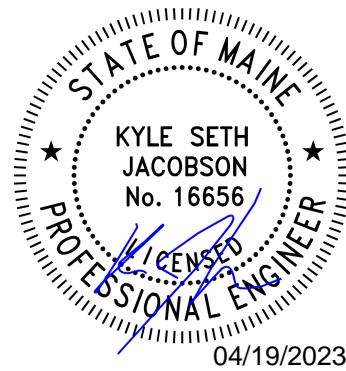
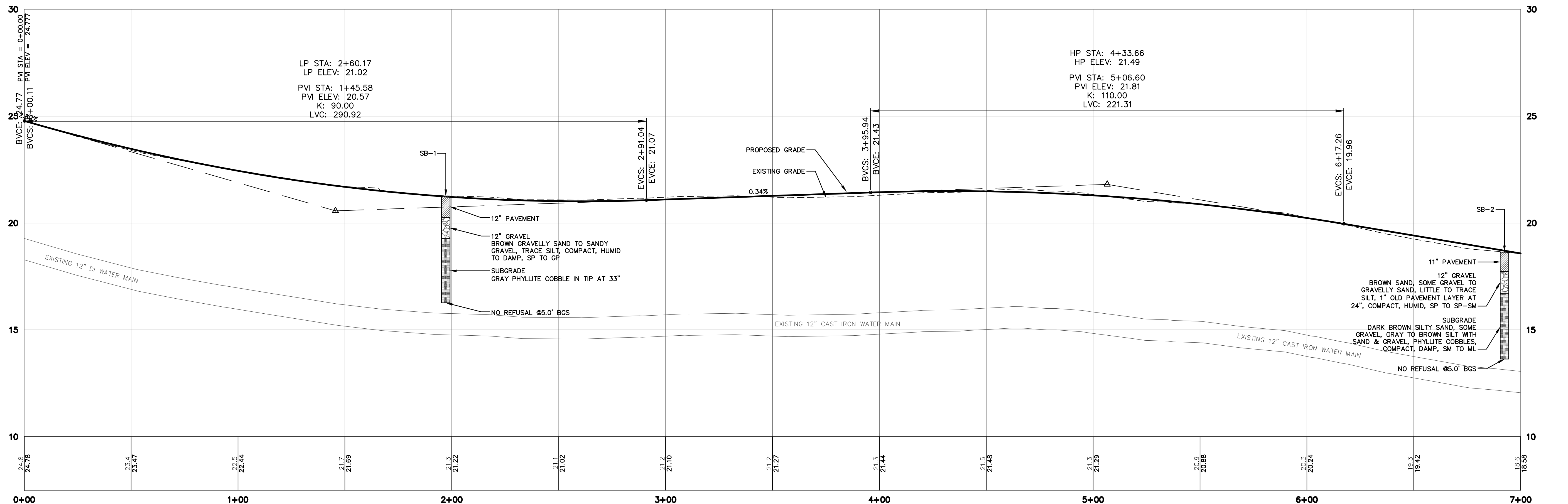
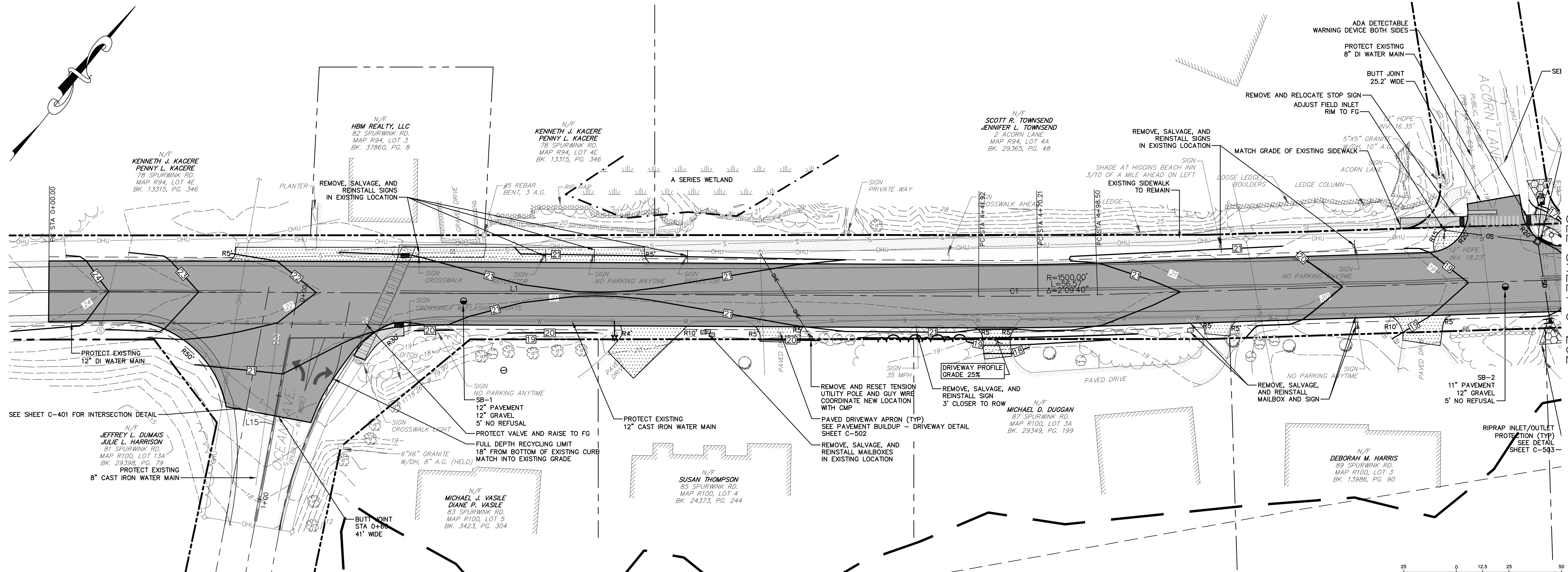
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RIGHT OF WAY RECORD:
CUMBERLAND COUNTY COMMISSIONER
VOL. 24D. PG. 1349

BOUNDARY & EXISTING CONDITIONS SURVEY
OF:
ROUTE 77 - SPURWINK ROAD
OCEAN AVENUE TO CAPE ELIZABETH
SCARBOROUGH, MAINE 04070
FOR:
TOWN OF SCARBOROUGH
259 E. ROUTE 1

DRAWN	CHECKED
SPP	NSE
PROJECT NO.	DATE
21102	01/24/20
SHEET SIZE	SCALE
24" X 36"	1" = 20'

M:_Cad Drawings - Dwg\Active Dwg\4444 Town of Scarborough\4444-0004 Spurwink Rd\DWG\4444-0004_GRA14.dwg 4/19/2023 10:54:05 AM



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IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

CLIENT:

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

**SPURWINK ROAD
PLAN & PROFILE
STA 0+00 TO
STA 7+00**

SHEET NO:

C-201

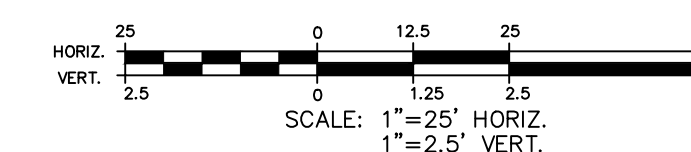
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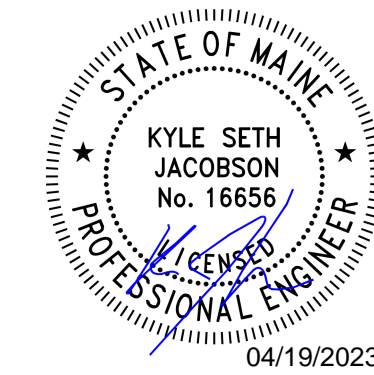
SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SPURWINK ROAD
PLAN & PROFILE
STA 7+00 TO
STA 14+00

C-202





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PROJECT NAME:

SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

CLIENT:

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

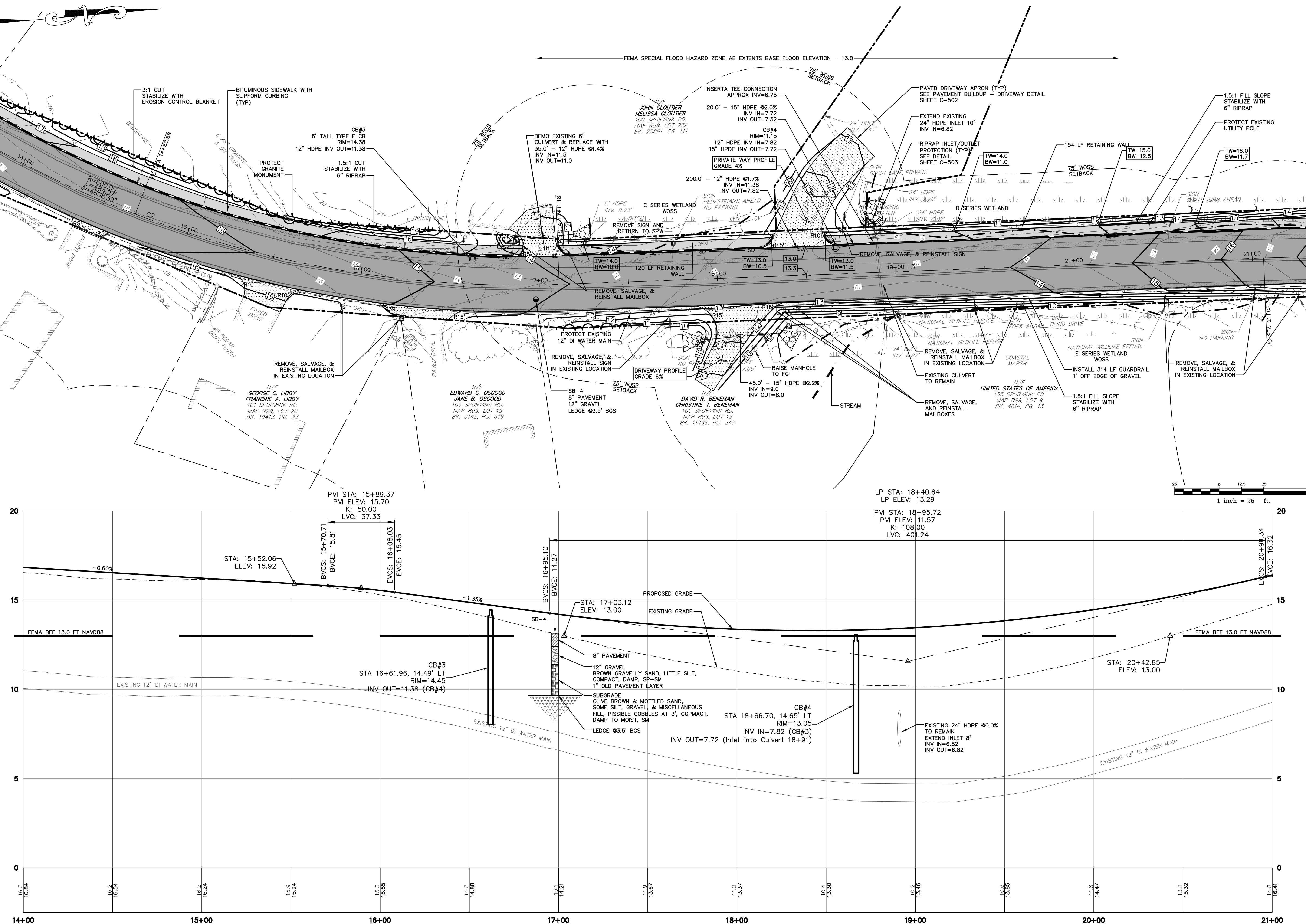
SPURWINK ROAD
PLAN & PROFILE
STA 14+00 TO
STA 21+00

SHEET NO:

C-203

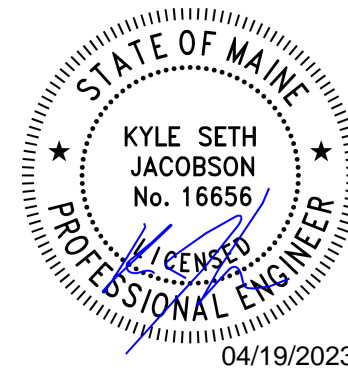
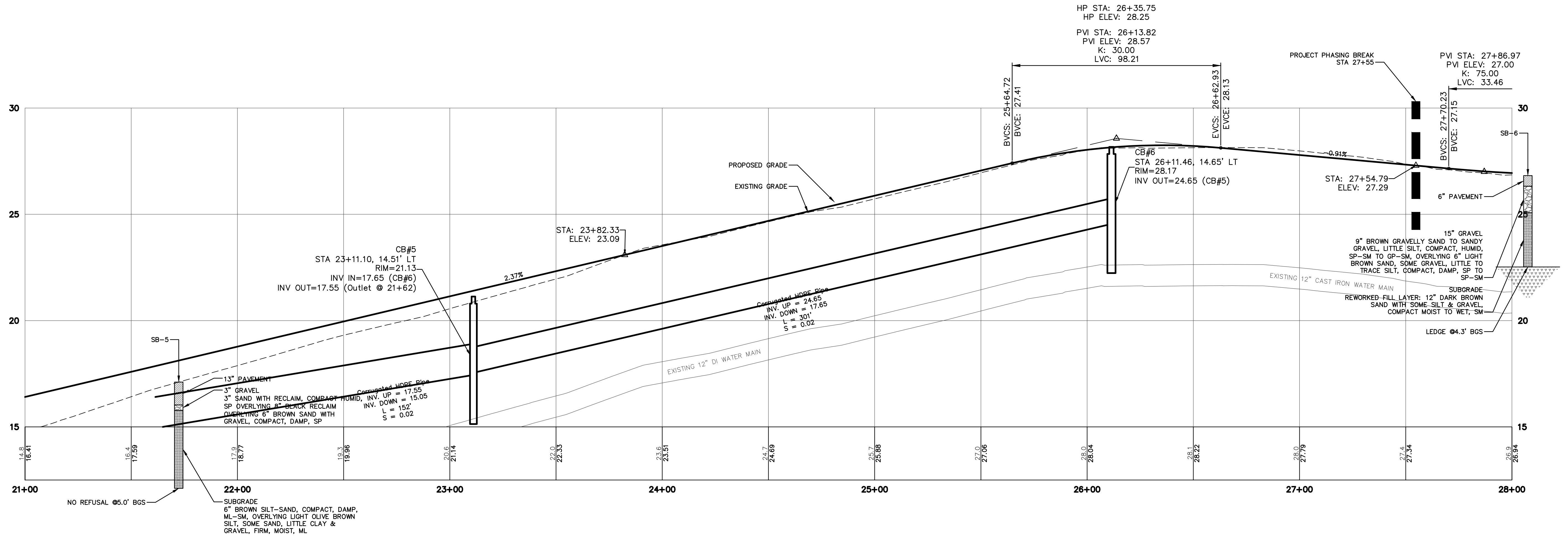
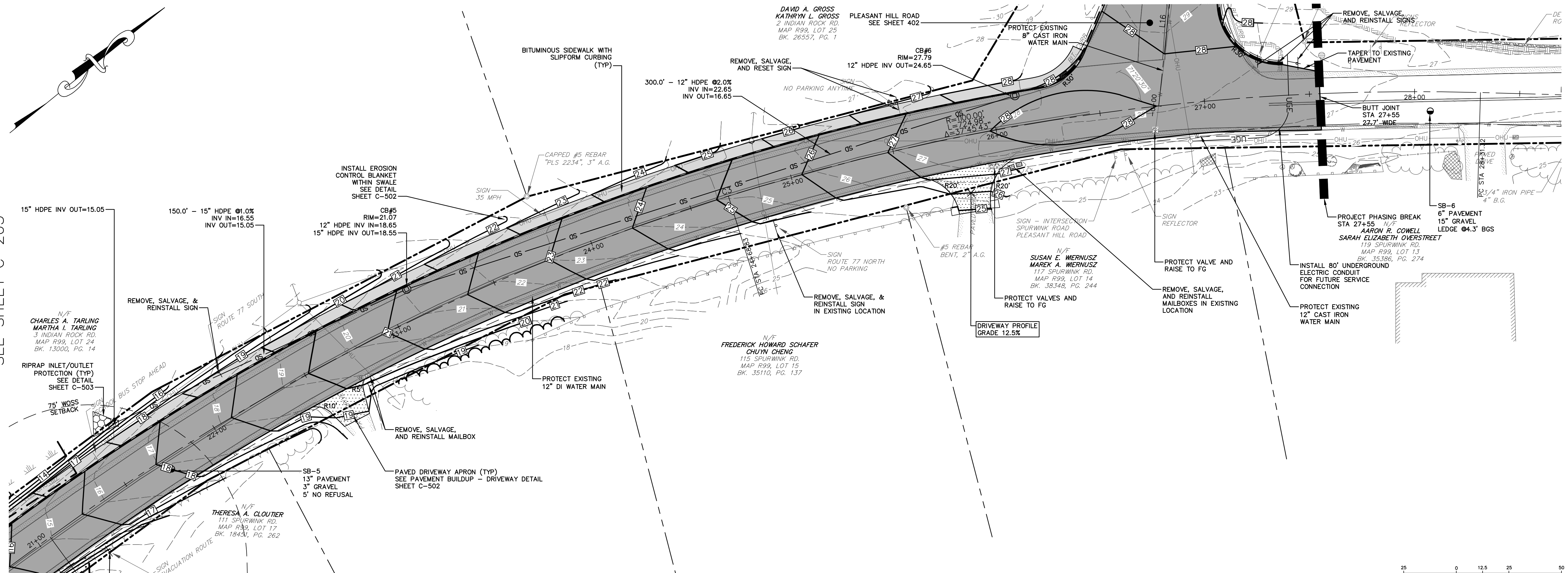
SEE SHEET C-202

SEE SHEET C-204



M:_Cad Drawings - Dwg\Active Dwg\4444 Town of Scarborough\4444-0004 Spurwink rd\DWG\4444-0004_GRA14.dwg 4/19/2023 10:55:26 AM

SEE SHEET C-203



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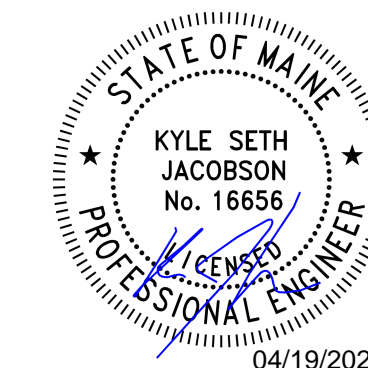
CLIENT:

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

SPURWINK ROAD
PLAN & PROFILE
STA 21+00 TO
STA 28+00

SHEET NO:



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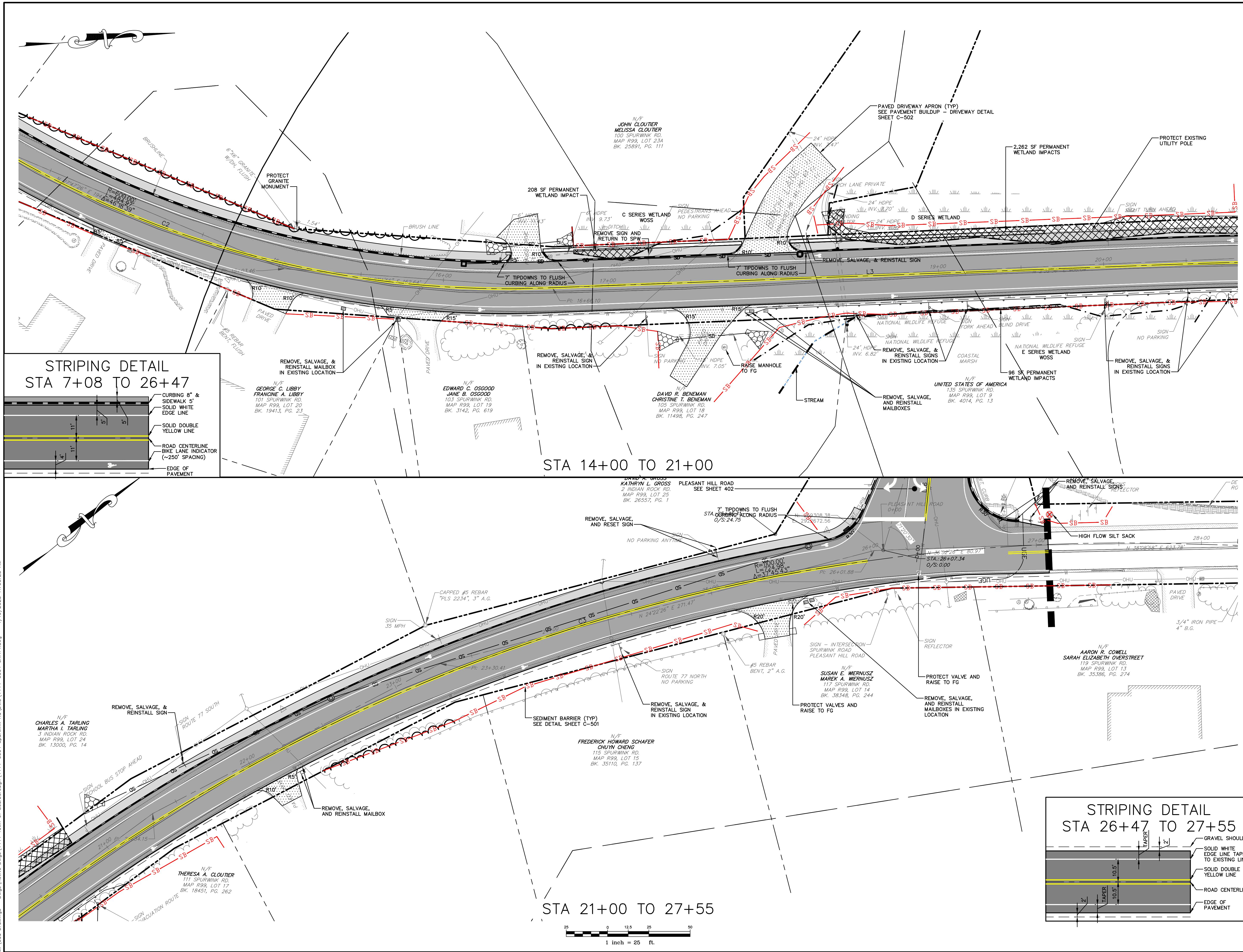
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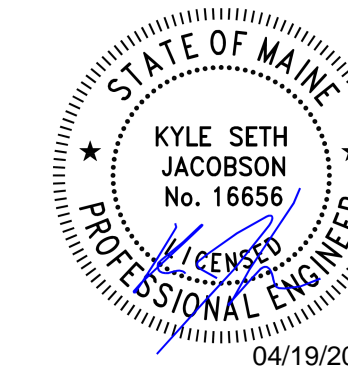
SHEET TITLE:

LAYOUT,
MARKING, &
EROSION
CONTROL
PLAN

SHEET NO:

C-302





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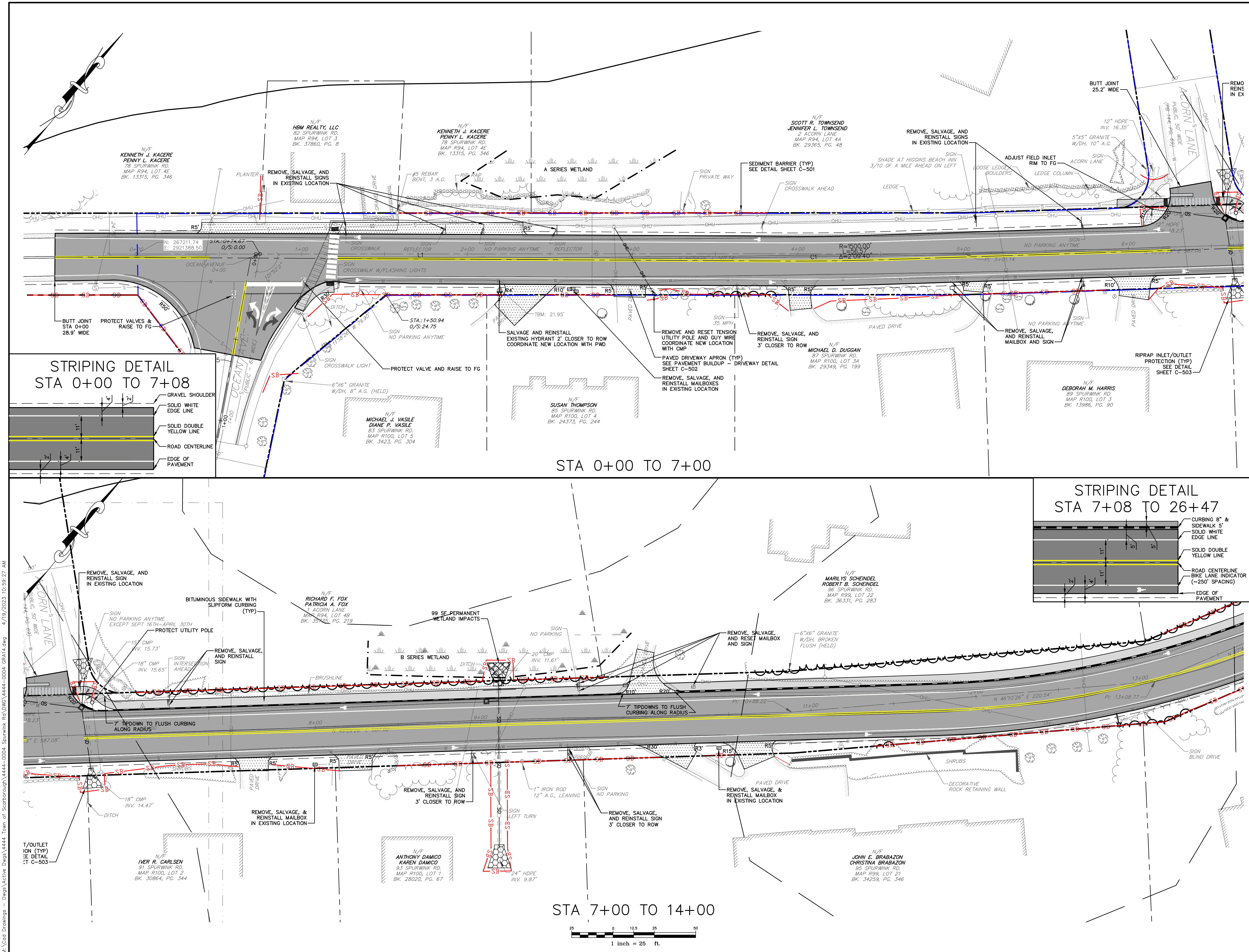
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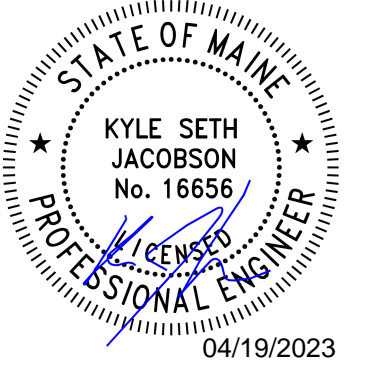
LAYOUT,
MARKING, &
EROSION
CONTROL
PLAN

SHEET NO:

C-301



M:_Cod Drawings - Dwg\Active Dwg\4444 Town of Scarborough\4444-0004 Spurwink Rd.DWG 4444-0004 GRA14.dwg 4/19/2023 10:59:27 AM



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SCARBOROUGH, MAINE

CLIENT: _____

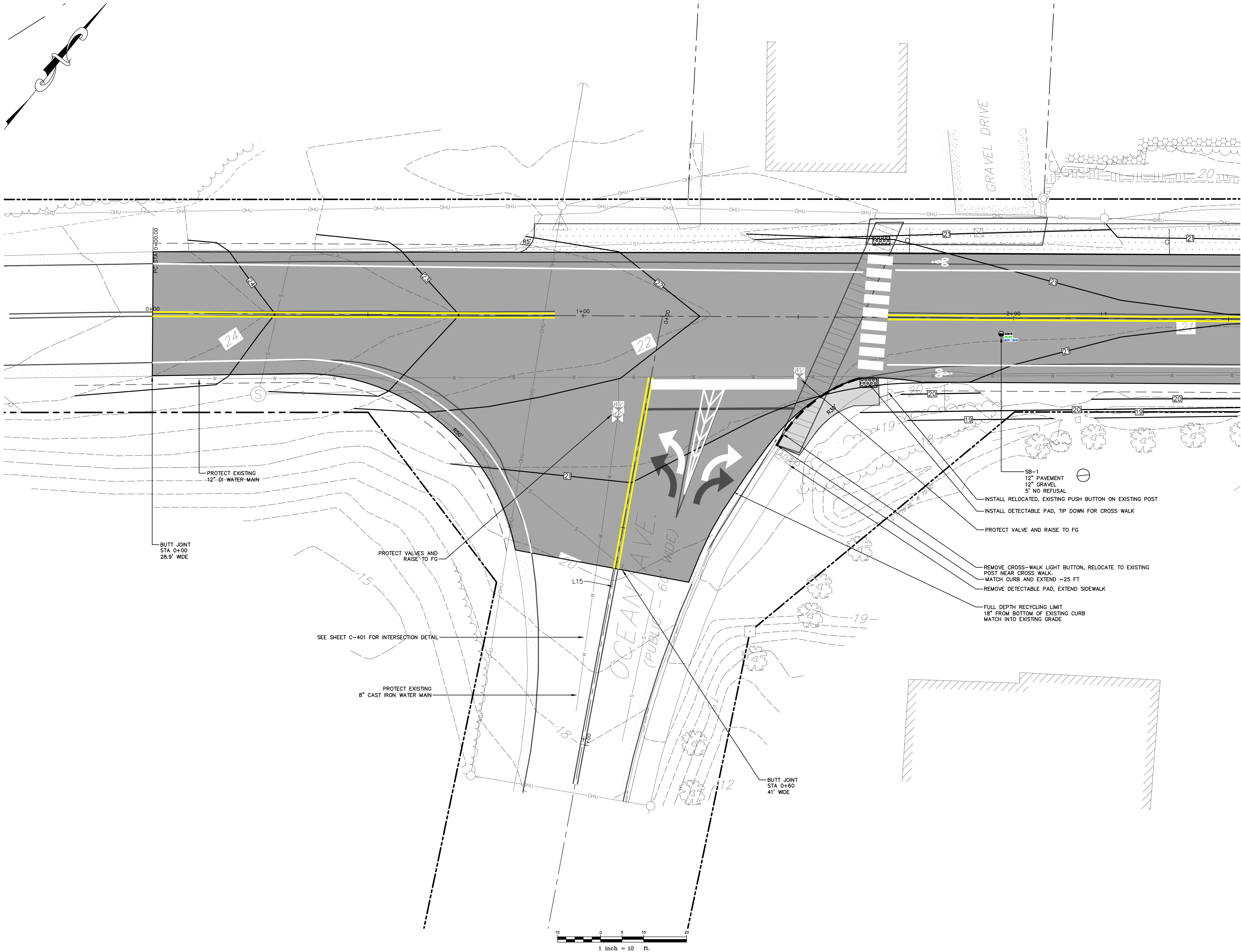
SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE: _____

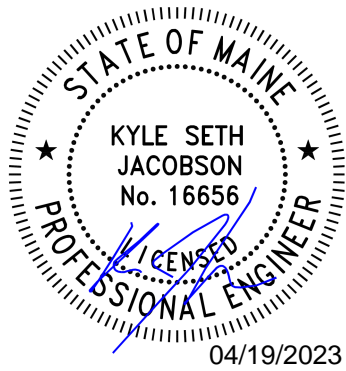
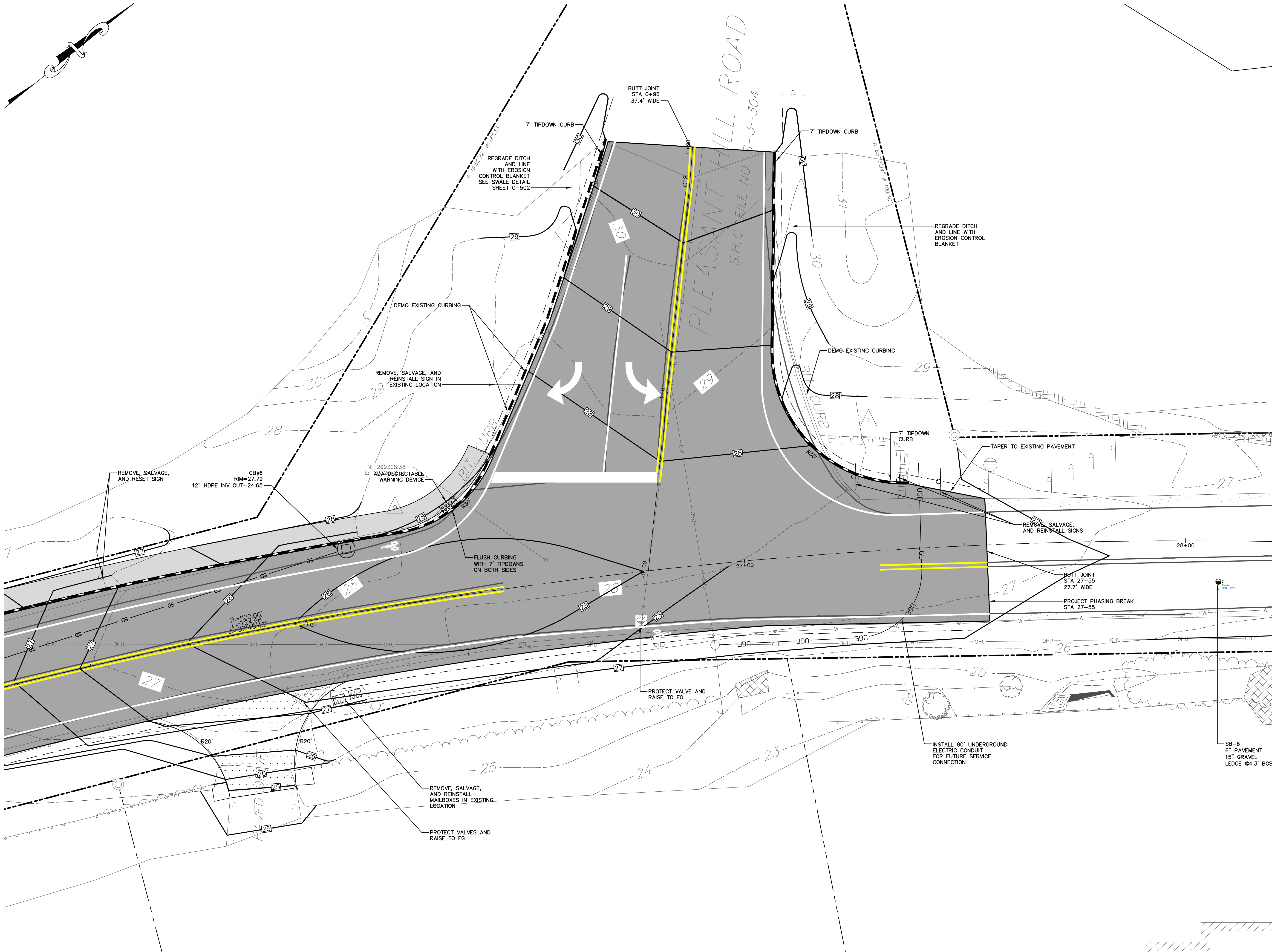
OCEAN AVENUE INTERSECTION PLAN

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C-401



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REV.	DATE	REVISION DESCRIPTION
0	4/19/23	ISSUED FOR BID

DESIGNED BY: KSJ
DRAWN BY: KSJ
CHECKED BY: PJC
DATE: 4/19/2023
FILE NAME: 4444-0004 GRA14.dwg

PROJECT NAME:

SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

CLIENT:

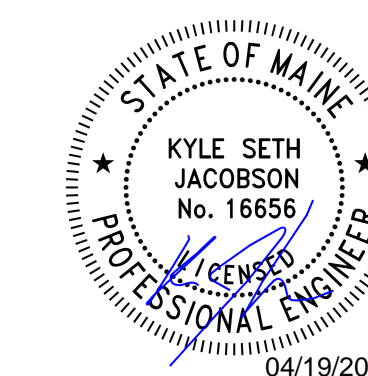
SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

PLEASANT HILL
ROAD
INTERSECTION
PLAN

SHEET NO:

C-402



REV.	DATE	REVISION DESCRIPTION
0	4/19/23	ISSUED FOR BID

DESIGNED BY: KSJ
DRAWN BY: KSJ
CHECKED BY: PJC
DATE: 4/19/2023
FILE NAME: 4444-0004 GRA14.dwg

PROJECT NAME:

SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

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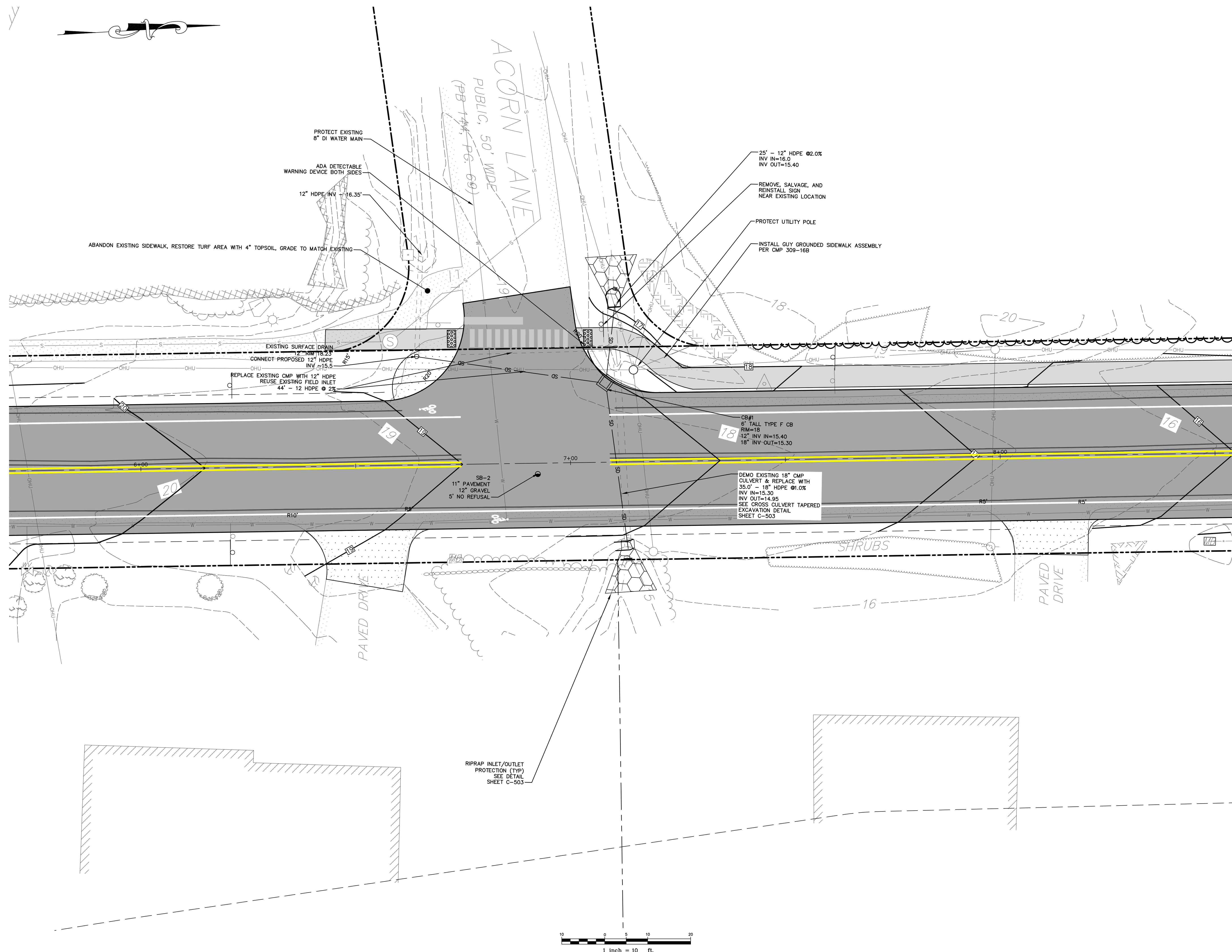
SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

SHEET TITLE:

ACORN ROAD INTERSECTION PLAN

SHEET NO:

C-403



EROSION AND SEDIMENTATION CONTROL NOTES

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF SEDIMENT BARRIER, EROSION CONTROL MIX, STONE CHECK DAMS, HAY BALE BARRIERS, CATCH BASIN INLET BARRIERS, CATCH BASIN SEDIMENT COLLECTION BAGS, EROSION CONTROL BLANKET, AND TEMPORARY SEEDING AND MULCHING AS REQUIRED. PERMANENT DEVICES INCLUDE THE USE OF RIP RAP AT EXPOSED STORM DRAIN AND CULVERT INLETS AND OUTLETS, RIP RAPPED SLOPES, AND PERMANENT VEGETATION.

A. GENERAL

- IT IS ANTICIPATED THAT CONSTRUCTION WILL BEGIN IN THE SPRING OF 2023 FOLLOWING RECEIPT OF NECESSARY PERMITS.
- THE PROJECT SHALL CONFORM TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARDS PERFORMANCE FOR EXCAVATIONS FOR CLAY, TOPSOIL, OR SILT IN ACCORDANCE WITH STATE EROSION CONTROL LAW 38 MRSA 420-C.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES (BMP) PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MAY 2003, OR AS CURRENTLY REVISED.
- ANY CONTRACTOR EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERSONNEL AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING DURING CONSTRUCTION FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.
- 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 ACCEPTABLE PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:
 - FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS 90% COVERAGE OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR KILLING OF THE TOPSOIL.
 - FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
 - FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH MULCH. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE BMP APPLICATION RATES AND LIMITATIONS.
 - FOR AREAS STABILIZED WITH RIP RAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIP RAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIP RAP. STONE MUST BE SIZED APPROPRIATELY.
 - FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
 - FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIP RAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN CUTTING OF THE CHANNEL.

B. EROSION AND SEDIMENTATION CONTROL MEASURES

- REMOVAL OF SOD, TREES, BUSHES AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT.
- GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN APPROVED MANNER.
- ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STOCKPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE WILL RESULT. IF A STOCKPILE IS NECESSARY, THE SIDE SLOPES OF THE TOPSOIL STOCKPILE WILL NOT EXCEED 2:1. TOPSOIL STOCKPILES WILL BE TEMPORARILY SEEDED WITH AROOSTOOK RYE, ANNUAL OR PERENNIAL RYE GRASS (DEPENDENT ON DATE SEEDING) WITHIN 7 DAYS OF FORMATION, OR TEMPORARILY MULCHED IF SEEDING CANNOT BE DONE WITHIN THE RECOMMENDED SEEDING DATES.
- TEMPORARY DIVERSION BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY.
- TEMPORARY STABILIZATION SHALL BE CONDUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, PRIOR TO ANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN LASTING MORE THAN ONE DAY. TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-ERODIBLE COVER. AREAS WITHIN 75 FEET OF WETLANDS SHALL BE TEMPORARILY STABILIZED WITHIN 48 HOURS OR PRIOR TO RAIN EVENT.
- APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
- TEMPORARY SEEDING SPECIFICATIONS: WHERE THE SEED BED HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 4 INCHES BEFORE APPLYING SEED. UNIFORMLY APPLY SEED AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.

RECOMMENDED TEMPORARY SEEDING DATES AND APPLICATION RATES ARE AS FOLLOWS:

- AROOSTOOK RYE: RECOMMENDED SEEDING DATES: 8/15 - 10/1
APPLICATION RATE: 112 LBS./ACRE
- ANNUAL RYE GRASS: RECOMMENDED SEEDING DATES: 4/1 - 7/1
APPLICATION RATE: 40 LBS./ACRE
- PERENNIAL RYE GRASS: RECOMMENDED SEEDING DATES: 8/15 - 9/15
APPLICATION RATE: 40 LBS./ACRE
- IF THE AREA WILL REMAIN UNWORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO STABILIZATION USING VEGETATION THROUGH PLANTING, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH OR RIP RAP. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS. AMEND AREAS OF DISTURBED SUBSOIL WITH TOP SOIL OR OTHER ORGANIC AMENDMENTS. PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS, AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. SOIL MUST BE REWORKED AND THE AREA RE-STABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT.
 - PERMANENT SEEDING SPECIFICATION: IF A LANDSCAPE PLAN HAS BEEN PREPARED FOR THE PROJECT, SOIL PREPARATION AND SEEDING SPECIFICATIONS OF THAT PLAN SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING SPECIFICATIONS. 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 SEED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEED WITH AROOSTOOK RYE OR MULCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1.

- APPLY TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES. MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 6 INCHES.
- UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES. APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
- THE SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
 - 10 % CREEPING RED FESCUE
 - 30 % KENTUCKY BLUEGRASS
 - 60 % PERENNIAL RYE GRASS
- THE SEED MIXTURE FOR WET AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
 - 50 % REED CANARY GRASS
 - 25 % RED TOP
 - 15 % CREEPING RED FESCUE
 - 10 % PERENNIAL RYE GRASS

- MULCH ALL AREAS SEED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH.
- DITCH LININGS, STONE CHECK DAMS, AND RIP RAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF CULVERT.
- RIP RAP REQUIRED AT CULVERTS AND STORM DRAIN INLETS AND OUTLETS SHALL CONSIST OF FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. STONES SHALL WEIGH FROM 10 LBS. TO 200 LBS. AND 50% OF THE STONES BY VOLUME SHALL EXCEED A UNIT WEIGHT OF APPROXIMATELY 50 LBS.
- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1, IN THE BASE OF DITCHES NOT OTHERWISE PROTECTED, AND ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (E.G. WETLANDS AND WATER BODIES). EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- TEMPORARY CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

C. HOUSEKEEPING

- 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 STORM WATER, AND APPROPRIATE SIFT, PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
- GROUNDWATER PROTECTION, DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAMINANT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
- FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
- DEBRIS AND OTHER MATERIAL, LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER, MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- TRENCH OR FORMATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, MUST BE FILTERED THROUGH A DIRT BAG, HAYBALE CORRAL OR OTHER SILTATION BASIN PRIOR TO DISCHARGE.

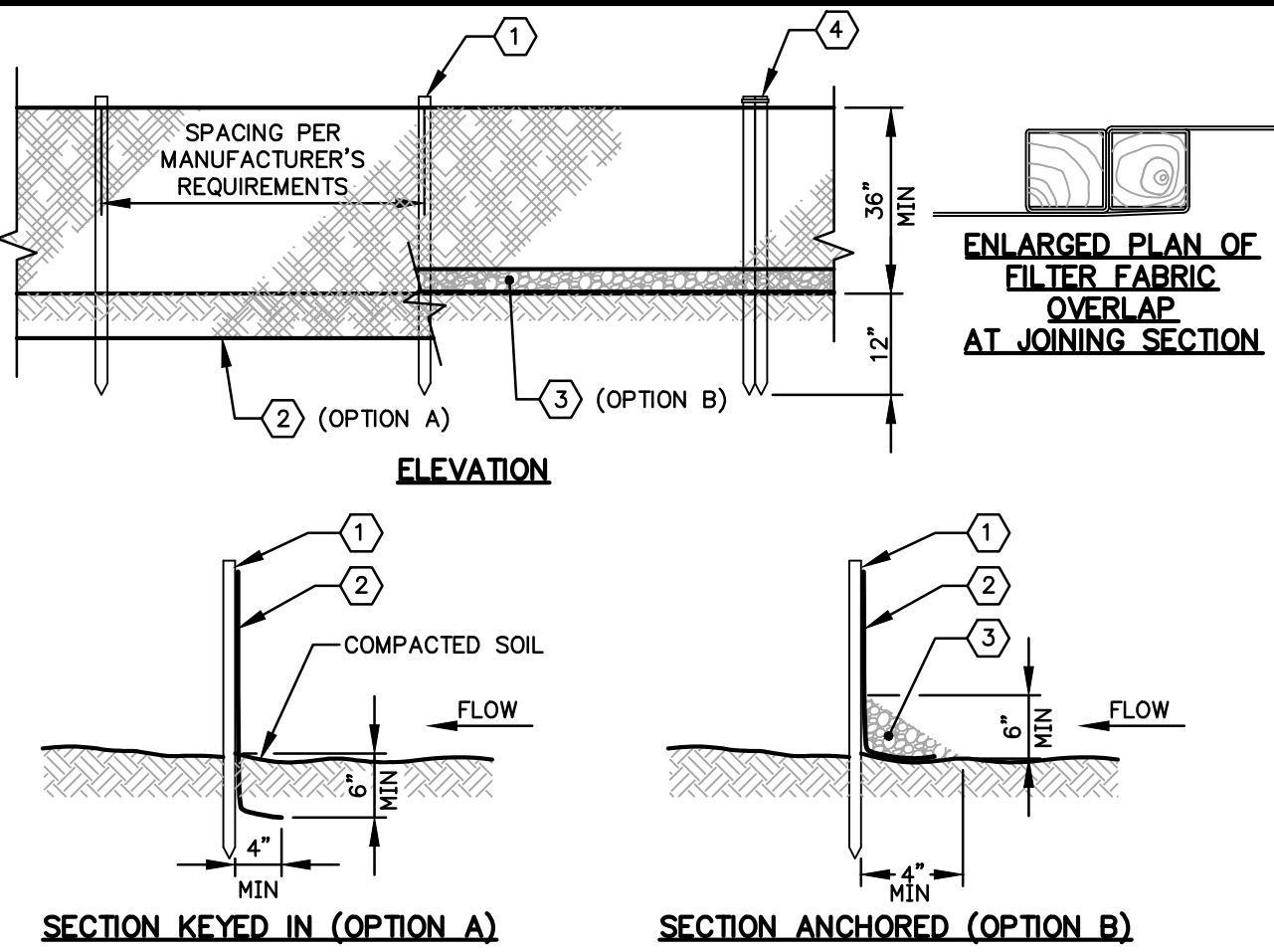
D. INSPECTION AND MAINTENANCE

- INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORMWATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE EROSION MAY ENTER OR EXIT AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER STORM EVENTS, PRIOR TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORM WATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT AND ANY DEP OR MUNICIPAL COMPLAINT DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPs THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.

E. WINTER CONSTRUCTION EROSION AND SEDIMENTATION CONTROL NOTES

THE WINTER CONSTRUCTION PERIOD TYPICALLY BEGINS IN EARLY NOVEMBER AND ENDS IN MID APRIL. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER, OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS TO OCCUR DURING THE FOLLOWING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AN AREA SHALL BE CONSIDERED DENuded UNTIL THE SUBBASE GRAVEL IS INSTALLED IN THE ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEED, AND MULCHED. A COVER OF EROSION CONTROL MIX IS THE PREFERRED TEMPORARY MULCH DURING WINTER CONDITIONS.

- NATURAL RESOURCE PROTECTION: ANY AREAS WITHIN 75 FEET FROM ANY REGULATED NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER. DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (FOR EXAMPLE, SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY REGULATED NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE REGULATED NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.
- SEDIMENT BARRIERS: DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.
- MULCHING: ALL AREAS SHALL BE CONSIDERED TO BE DENuded UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCHES THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. SNOW MUST BE REMOVED DOWN TO A ONE-INCH DEPTH PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERTY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACKING OR WOOD CELLULOSE FIBER, THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.
- SOIL STOCKPILING: STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STACKING AND RE-ESTABLISH PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED WITHIN 100 FEET FROM ANY REGULATED NATURAL RESOURCE.
- SEEDING: BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOOMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF DORMANT SEEDING IS USED, ALL DISTURBED AREAS SHALL RECEIVE 4 INCHES OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS PER 1,000 S.F. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75%) IN THE SPRING SHALL BE REVEGETATED.
- OVER-WINTER STABILIZATION OF DITCHES AND CHANNELS: ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED BY NOVEMBER 1. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A GRASS-LINED DITCH OR CHANNEL IS STABILIZED BY SEPTEMBER 1, THEN EITHER A SOD LINING SHALL BE INSTALLED PRIOR TO OCTOBER 1 OR THE DITCH MUST BE LINED WITH STONE RIPRAP BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE PRIOR TO NOVEMBER 1.
- OVER-WINTER STABILIZATION OF DISTURBED SLOPES: ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEED AND MULCHED BY SEPTEMBER 1. ALL AREAS HAVING A GRADE STEEPER THAN 8% SHALL BE CONSIDERED A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN THE SLOPE SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS BY OCTOBER 1, SOD BY OCTOBER 1, EROSION CONTROL MIX BY NOVEMBER 1, OR STONE RIPRAP BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.
- OVER-WINTER STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN THE AREA SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION BY OCTOBER 1, SOD BY OCTOBER 1, OR MULCH BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.
- MAINTENANCE: MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

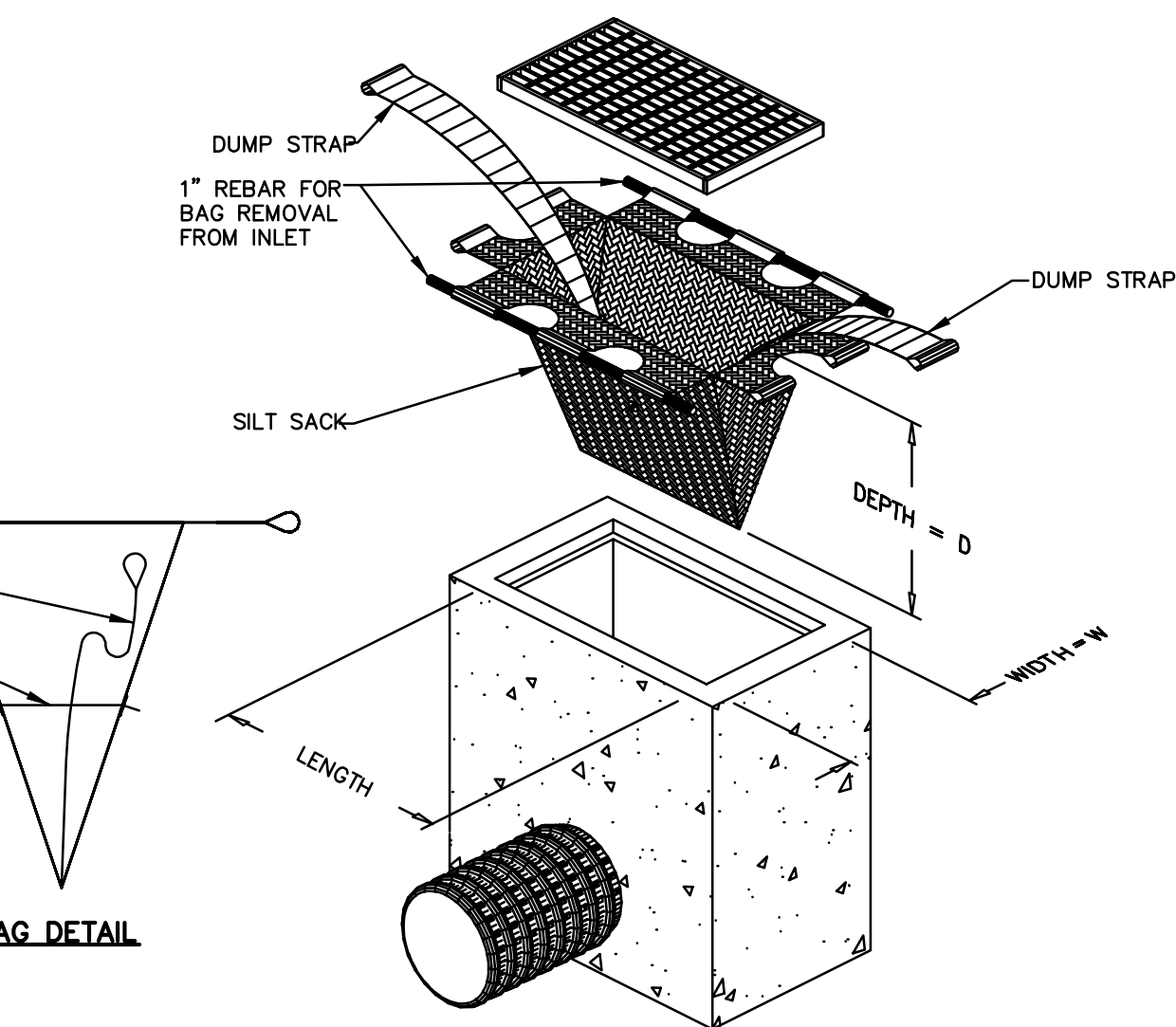


NOTES:

- 1.25"x1.25" OAK STAKES EMBEDDED A MINIMUM OF 12" INTO THE GROUND.
- FILTER FABRIC TO BE SEDIMENTATION CONTROL FABRIC MIRAFI 100X OR EQUIVALENT.
- 1" CRUSHED STONE ANCHORING MATERIAL.
- OVERLAP AT JOINING SECTION AS SHOWN. A COUPLER CAN BE AN ACCEPTABLE DEVICE USED TO TIE THE OAK STAKES TOGETHER.
- INSTALLATION/PLACEMENT OF THE PERIMETER SILT FENCE SHALL BE IN ACCORDANCE WITH MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES AND SOIL EROSION & SEDIMENT CONTROL PLAN.

SILT FENCE

NOT TO SCALE

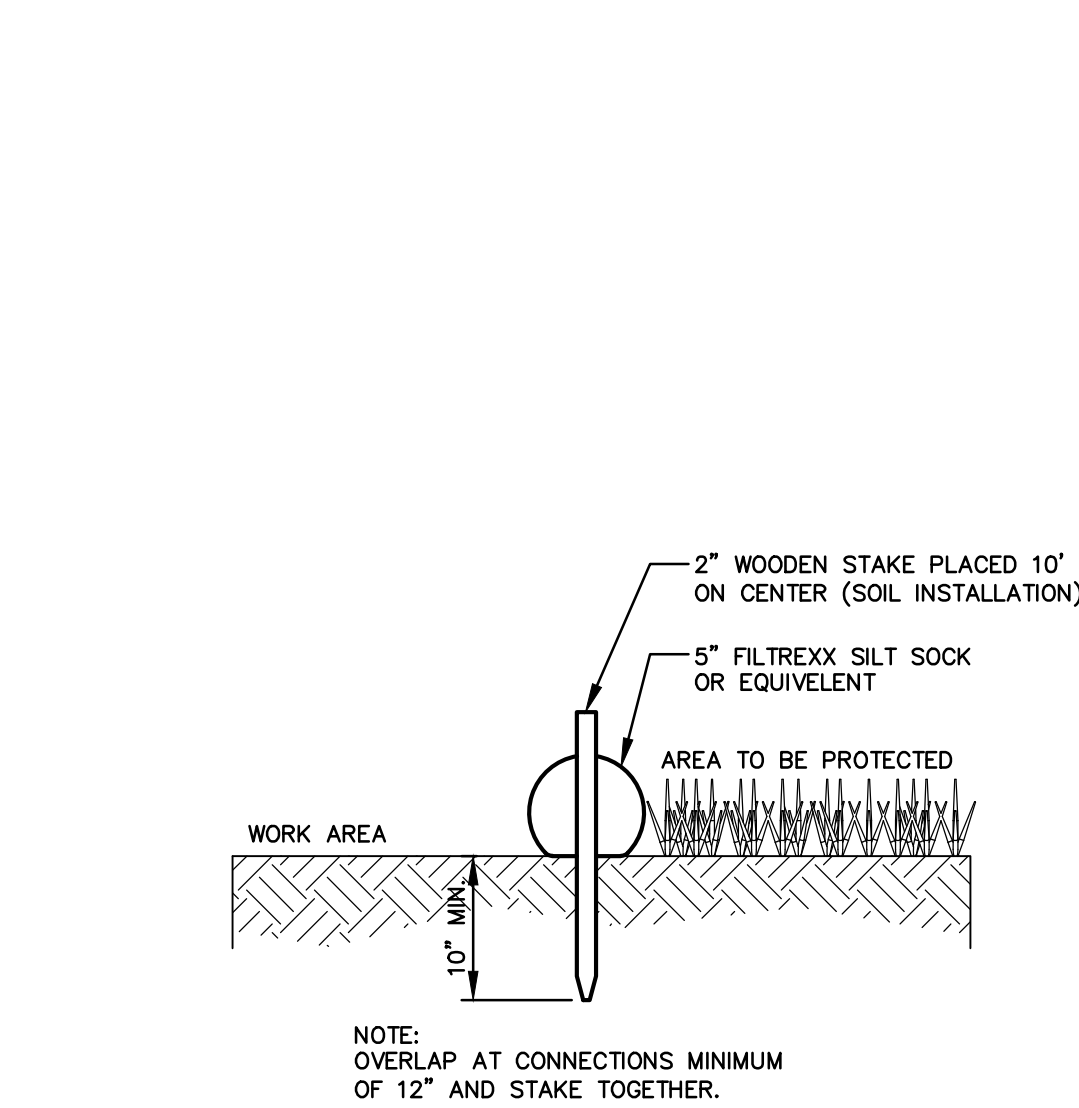


MAINTENANCE SCHEDULE:

- EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT.
- IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
- THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

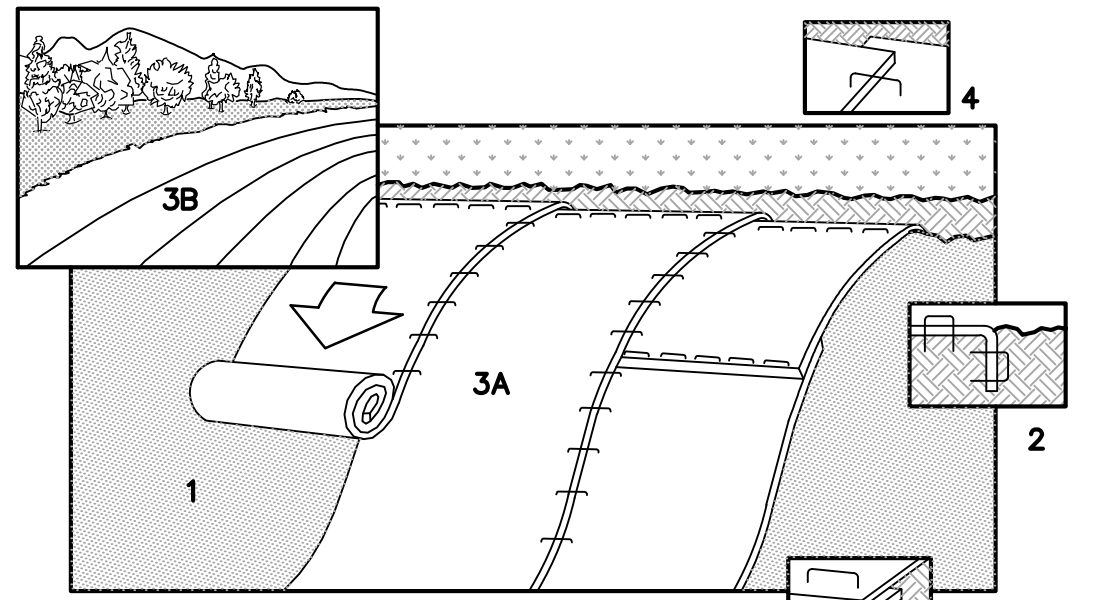
SILTSACK DETAIL

NOT TO SCALE



SEDIMENT BARRIER (SILT SOCK)

NOT TO SCALE



NOTE:

REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS. BLANKET TO BE A BIODEGRADABLE DOUBLE NET STRAW MAT.

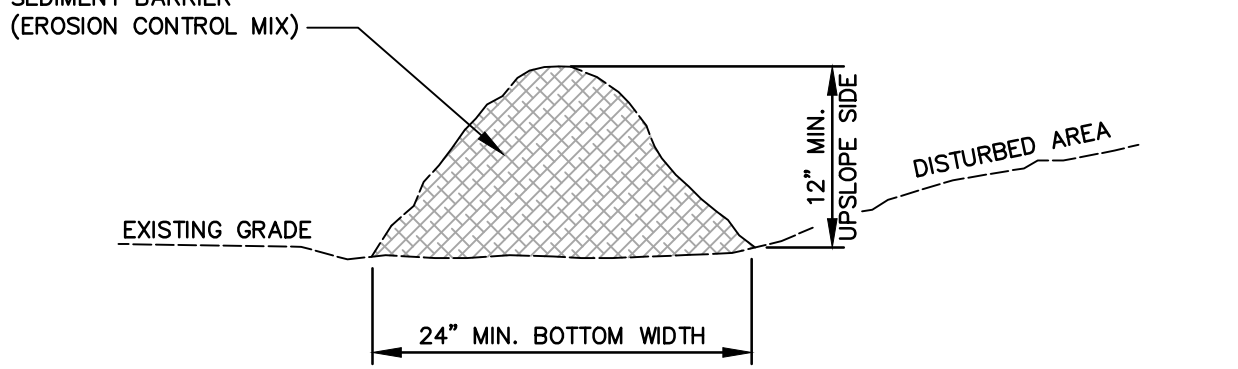
INSTALLATION STEPS:

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
- WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

EROSION CONTROL BLANKET

(SLOPE INSTALLATION)

NOT TO SCALE

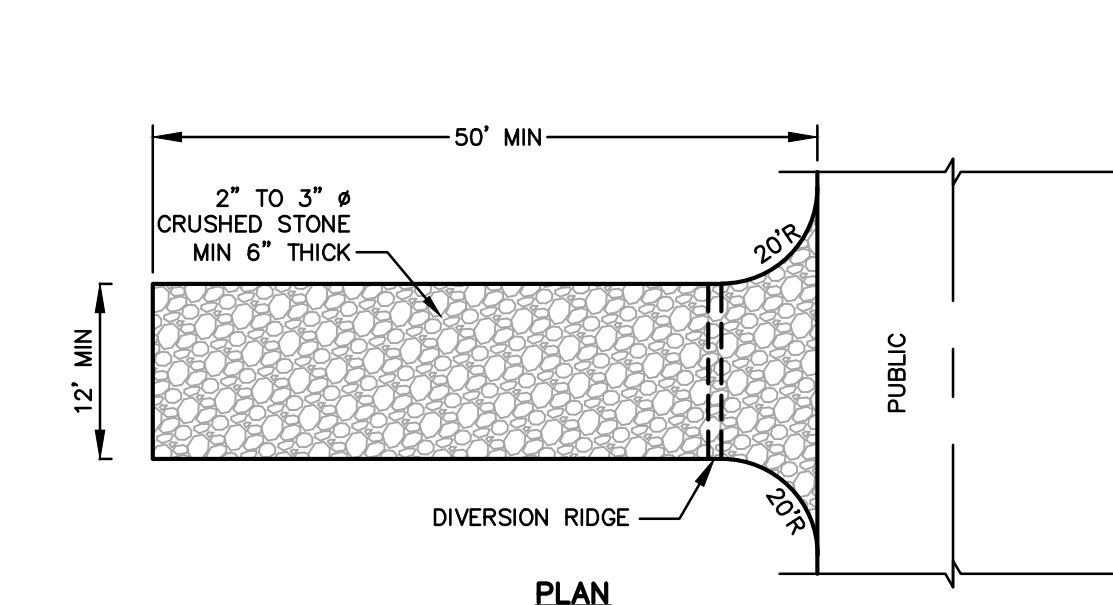


IN ORDER FOR EROSION CONTROL MIX TO BE USED IN LIEU OF SILT FENCE IT MUST MEET THE FOLLOWING STANDARDS:

- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 50 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.
- THE EROSION CONTROL MIX SHALL CONTAIN A WELL GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH.
- PLACE BARRIER ALONG A RELATIVELY FLAT CONTOUR. CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES WHERE FINES CAN WASH UNDER THE BARRIER THROUGH GRASS BLADES AND BRANCHES.
- PLACEMENT OF BARRIER SHOULD BE:
 - AT TOE OF THE SLOPE.
 - ON FROZEN GROUND, BEDROCK, OR ROOTED FORESTED AREAS.
 - AT THE EDGE OF GRAVEL AND AREAS UNDER CONSTRUCTION.
- BARRIER SHALL NOT BE USED ADJACENT TO WETLANDS.
- REMOVE SEDIMENT DEPOSITS WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- WHEN BARRIER IS DECOMPOSED, CLOGGED WITH SEDIMENT, ERODED, OR INEFFECTIVE, IT MUST BE REPLACED OR REPAIRED. THE BARRIER SHOULD BE RESHAPED AS NECESSARY.

EROSION CONTROL MIX BERM

NOT TO SCALE



NOTES:

- USE 2" TO 3" # CRUSHED STONE OR ACCEPTABLE ON-SITE MATERIAL.
- GEOTEXTILE FILTER (MIRAFI 600X OR APPROVED EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE.
- LENGTH - 50' MINIMUM.
- THICKNESS - NOT LESS THAN 6".
- PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY INGRESS OR EGRESS.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR CLOGGING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC REPAIR AND TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN COMPLETE, CONTRACTOR TO REMOVE STONE AND GRADE SUBBASE TO MATCH EXISTING OR PROPOSED GRADES. FINAL TREATMENT AS SHOWN ON PLANS OR OTHERWISE DIRECTED.

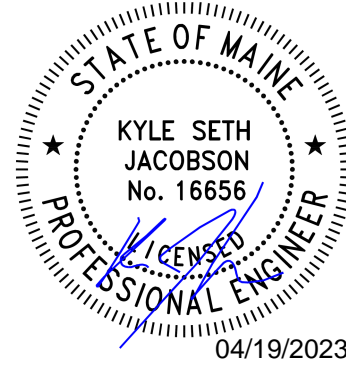
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

St Germain

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REV.	DATE	REVISION DESCRIPTION
0	4/19/23	ISSUED FOR BID

DESIGNED BY: KSJ
DRAWN BY: KSJ
CHECKED BY: PJC
DATE: 4/19/2023
FILE NAME: 4444-0004 DET02.dwg

PROJECT NAME:

SPURWINK ROAD
IMPROVEMENTS - PHASE 1
SCARBOROUGH, MAINE

CLIENT:

SCARBOROUGH PUBLIC WORKS
20 WASHINGTON AVENUE
SCARBOROUGH, MAINE

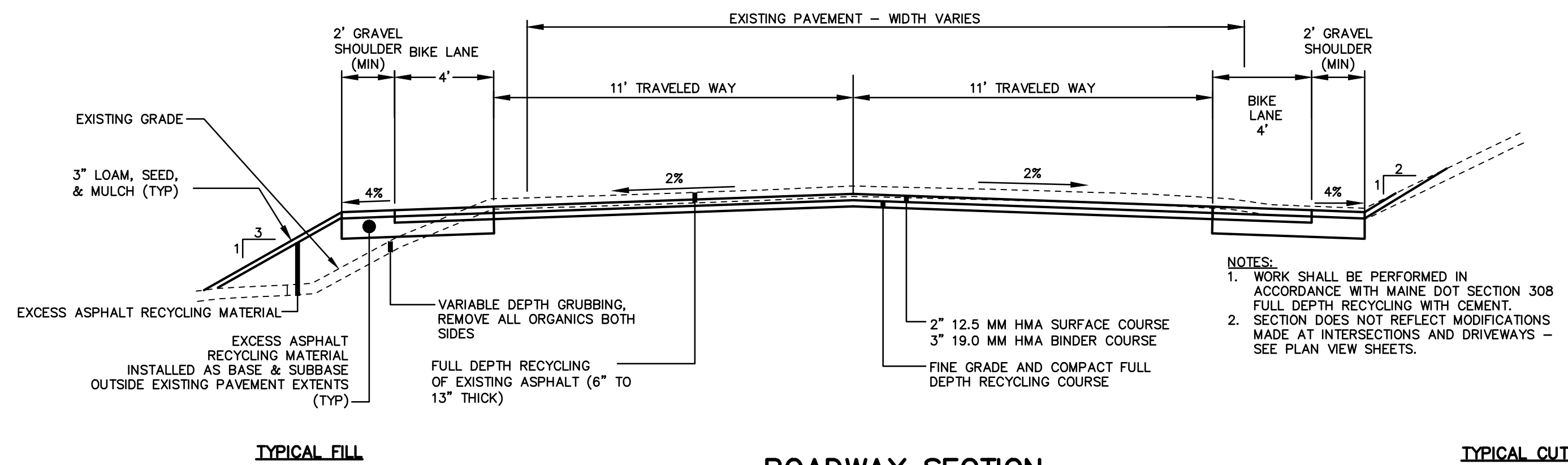
SHEET TITLE:

EROSION &
SEDIMENTATION
CONTROL NOTES
& DETAILS

SHEET NO:

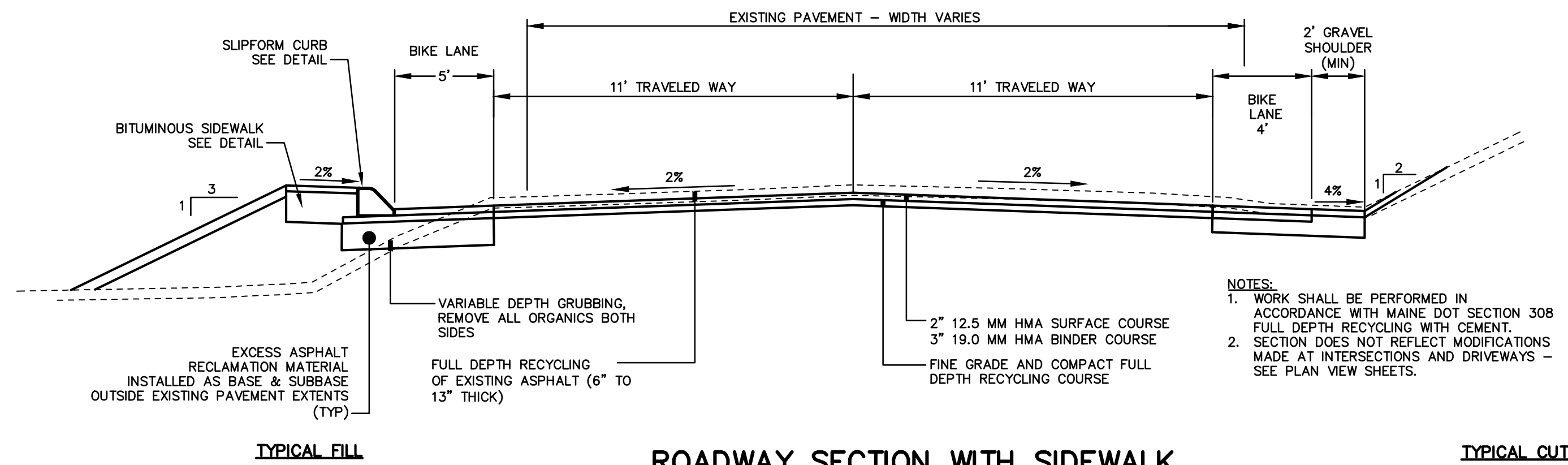
C-501

M:_Cod Drawings - Dwg\Active Dwg\4444 - 0004 Spurwink Rd\DWG\4444-0004 DET02.dwg 4/19/2023 11:13:04 AM



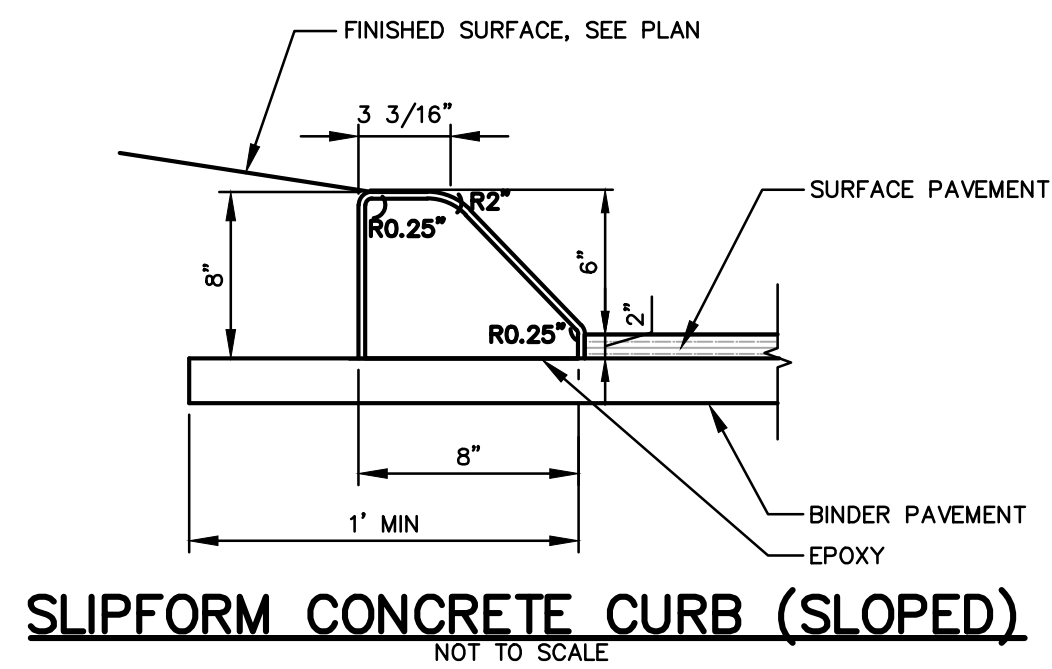
ROADWAY SECTION
NOT TO SCALE
STA 0+00 TO 7+08 &
STA 26+47 TO 27+55

TYPICAL CUT

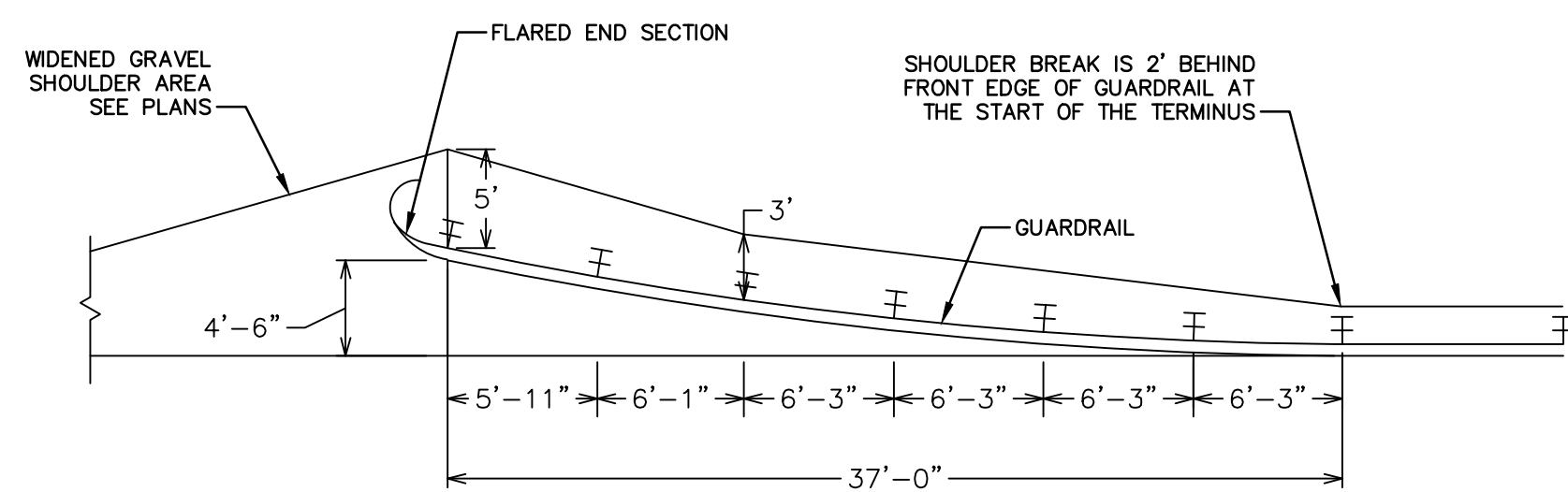


ROADWAY SECTION WITH SIDEWALK
NOT TO SCALE
STA 7+08 TO 26+47

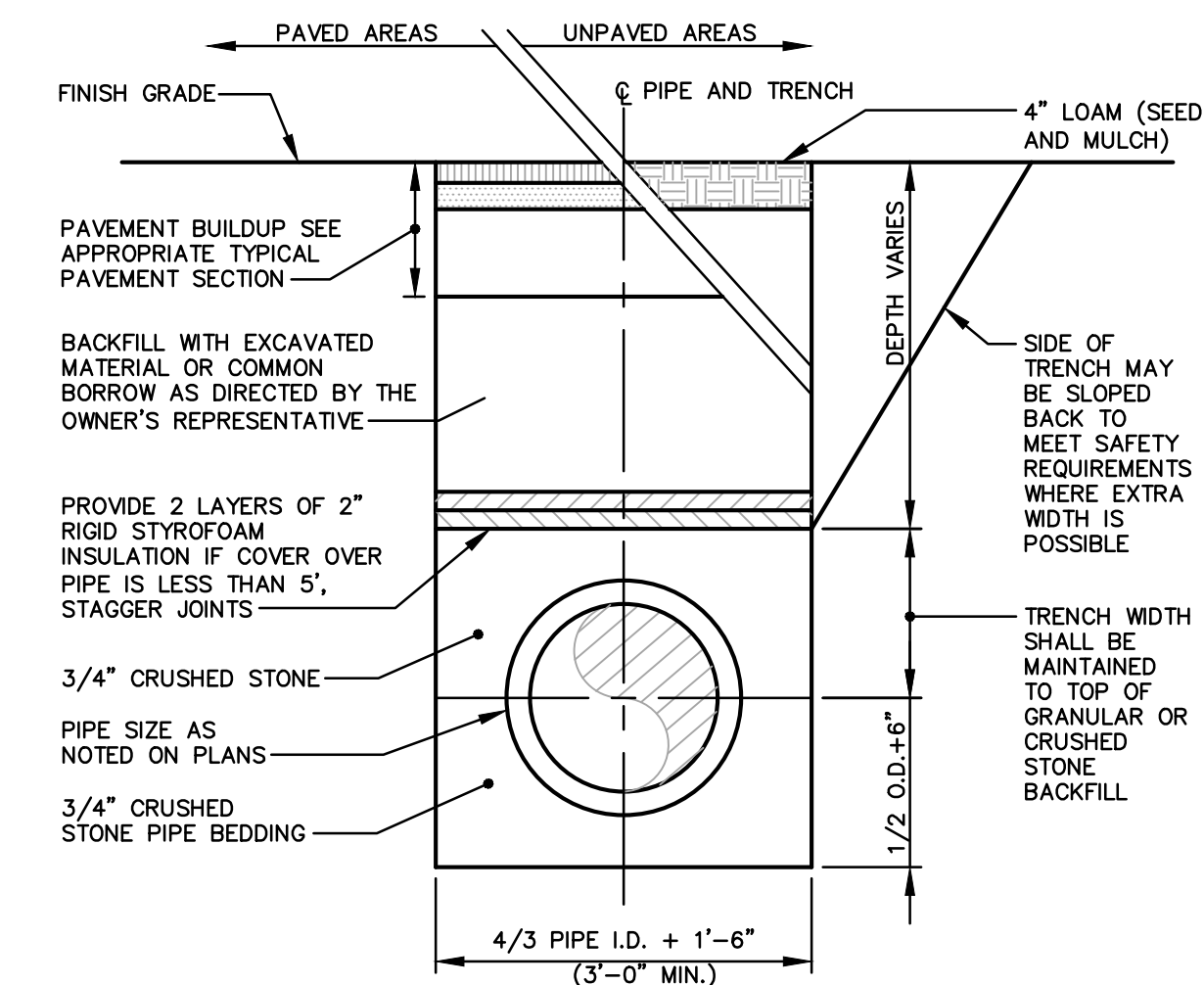
TYPICAL CUT



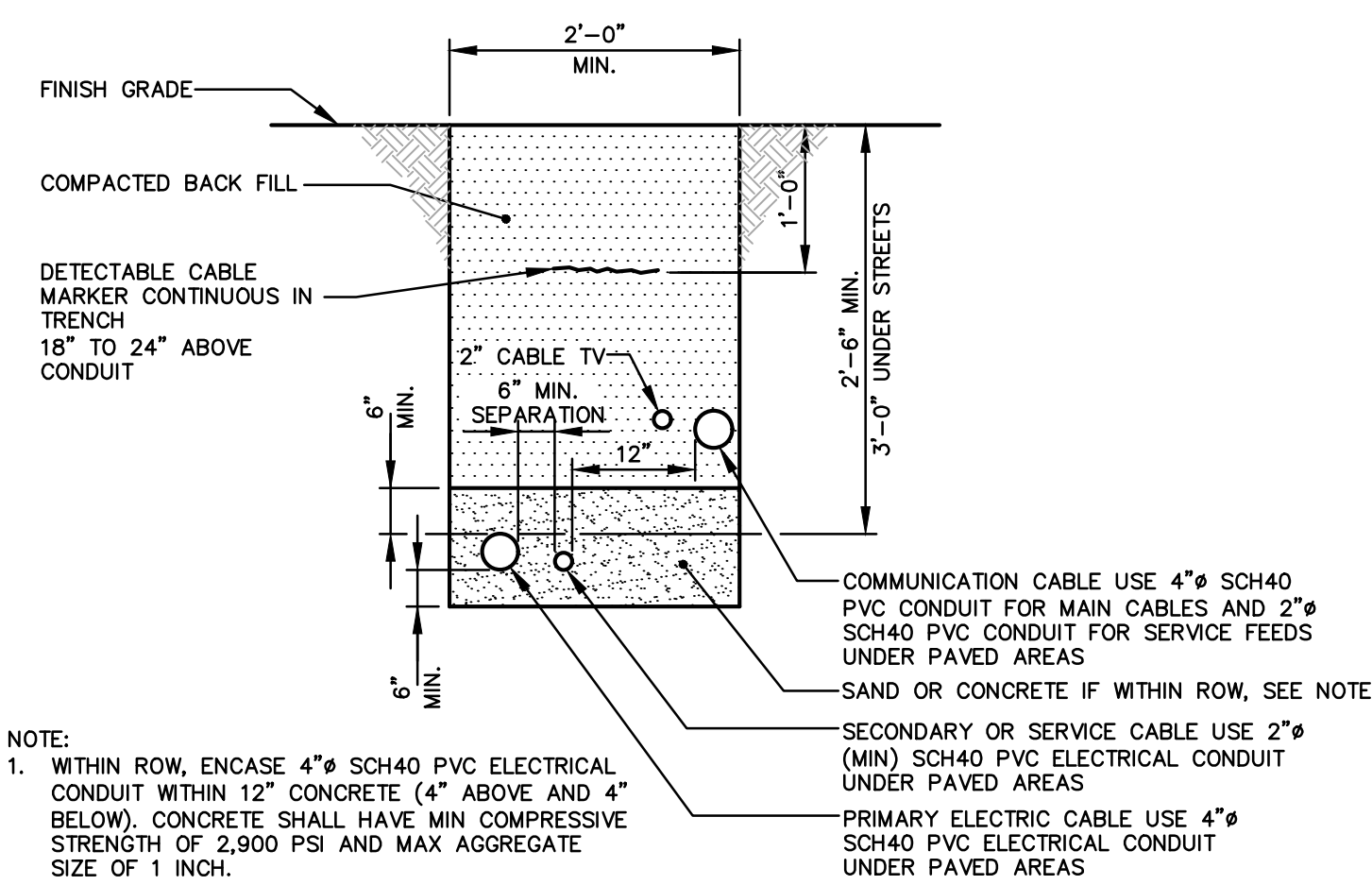
SLIPFORM CONCRETE CURB (SLOPED)
NOT TO SCALE



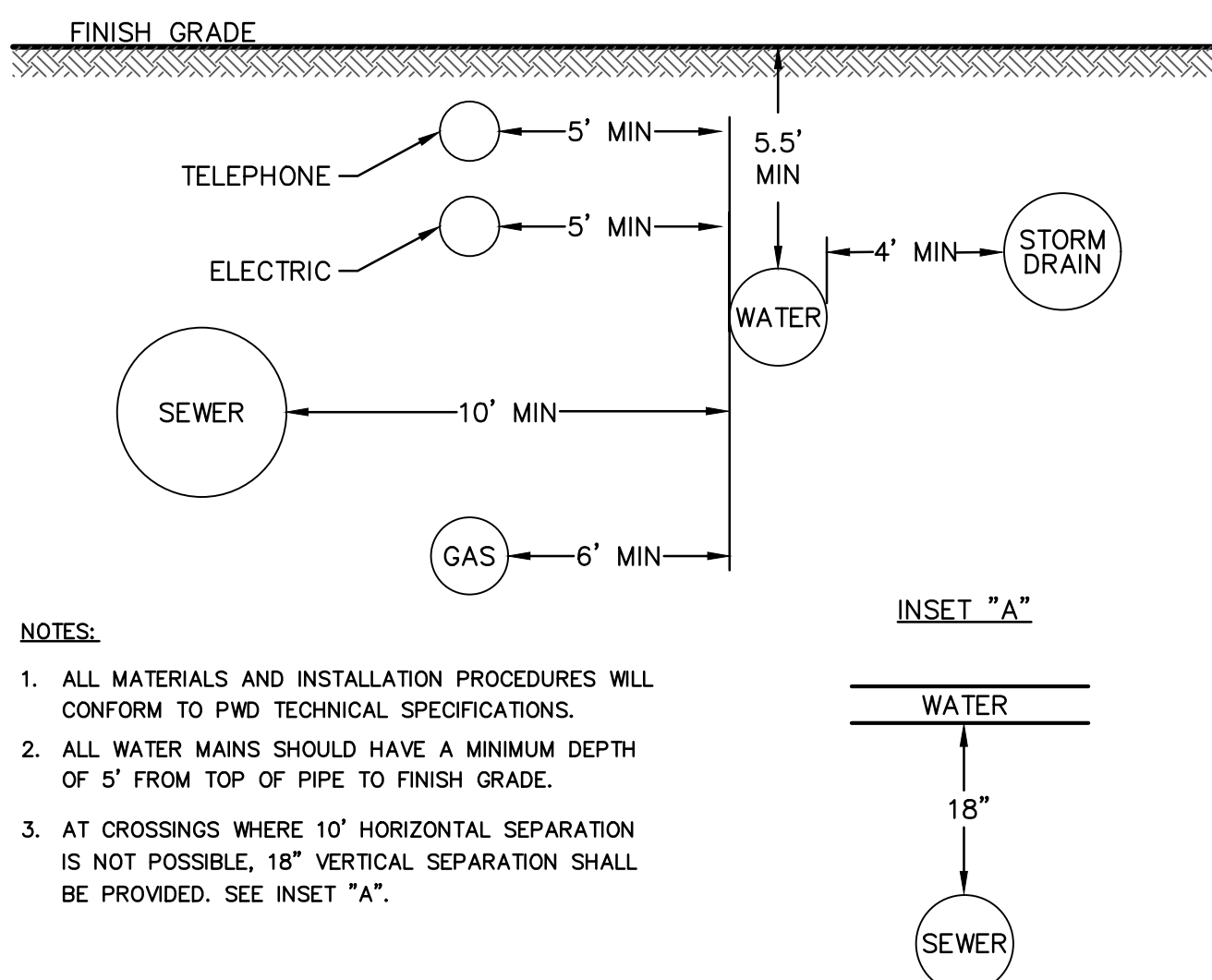
GUARDRAIL TERMINAL ALIGNMENT DETAIL
NOT TO SCALE



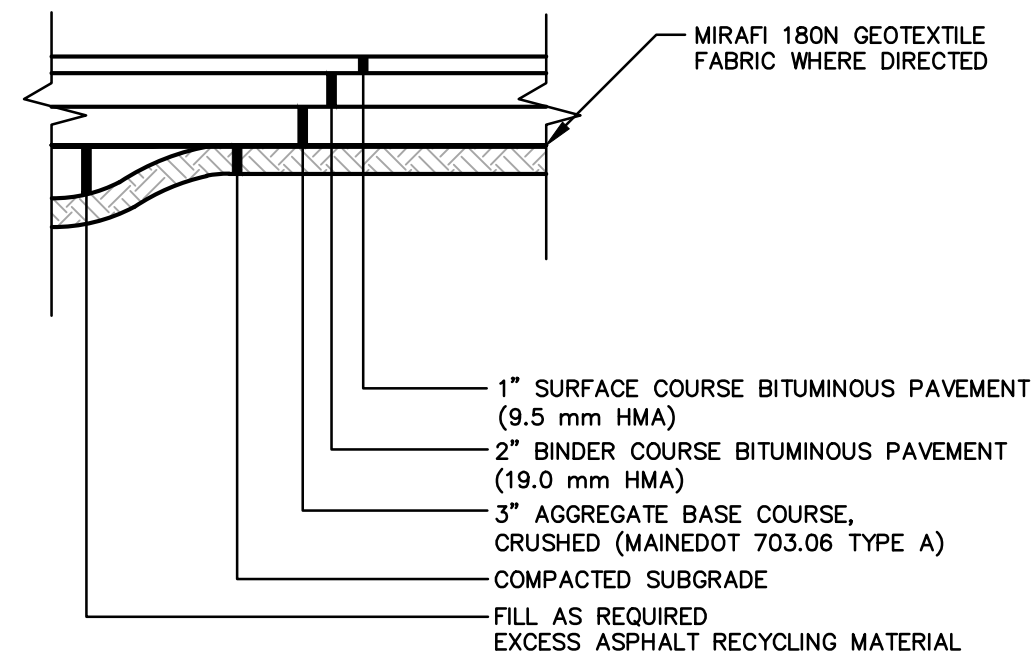
TYPICAL TRENCH SECTION
NOT TO SCALE



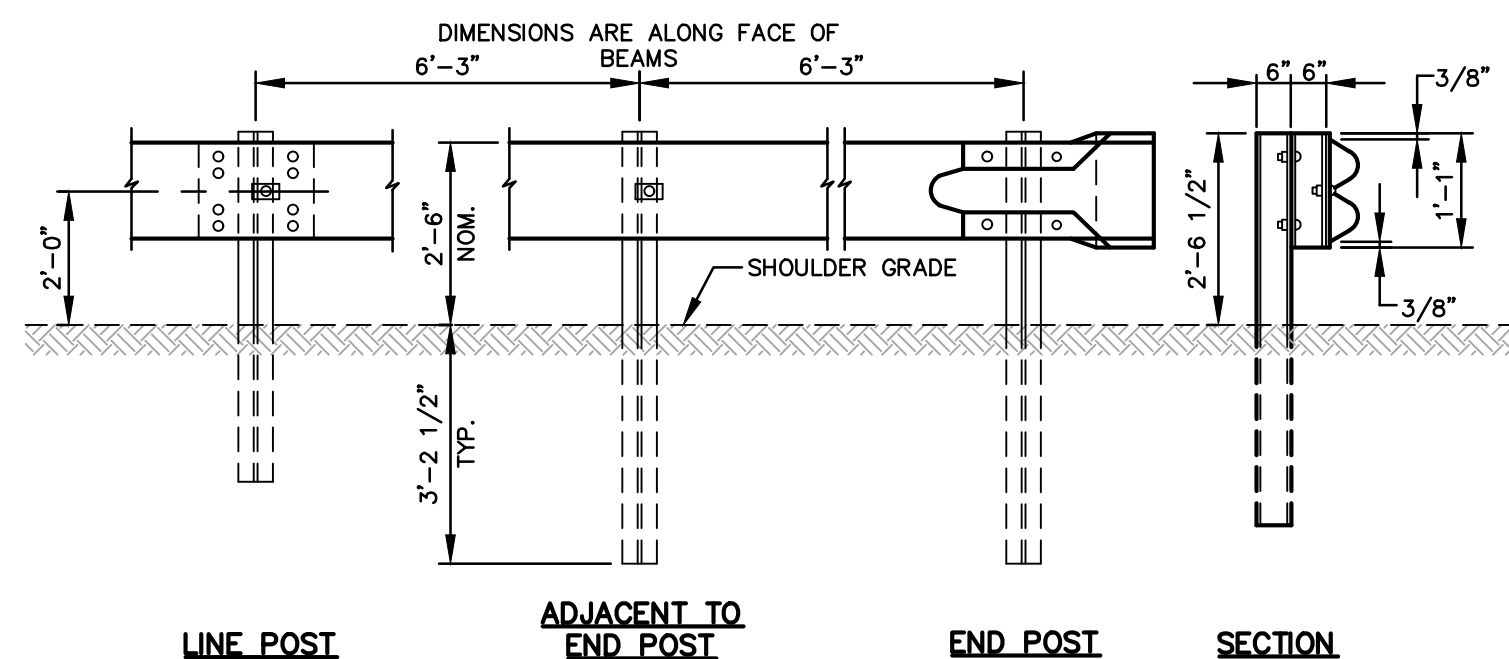
**UNDERGROUND ELECTRICAL
& TELEPHONE CONDUIT**
NOT TO SCALE



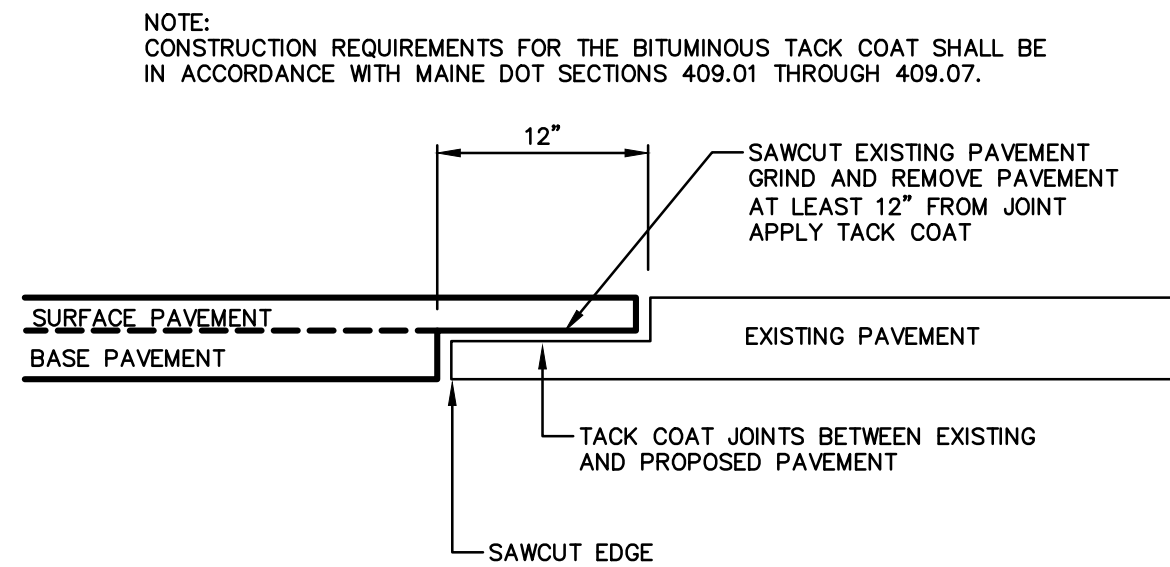
WATER SERVICE SEPARATION DETAIL
NOT TO SCALE



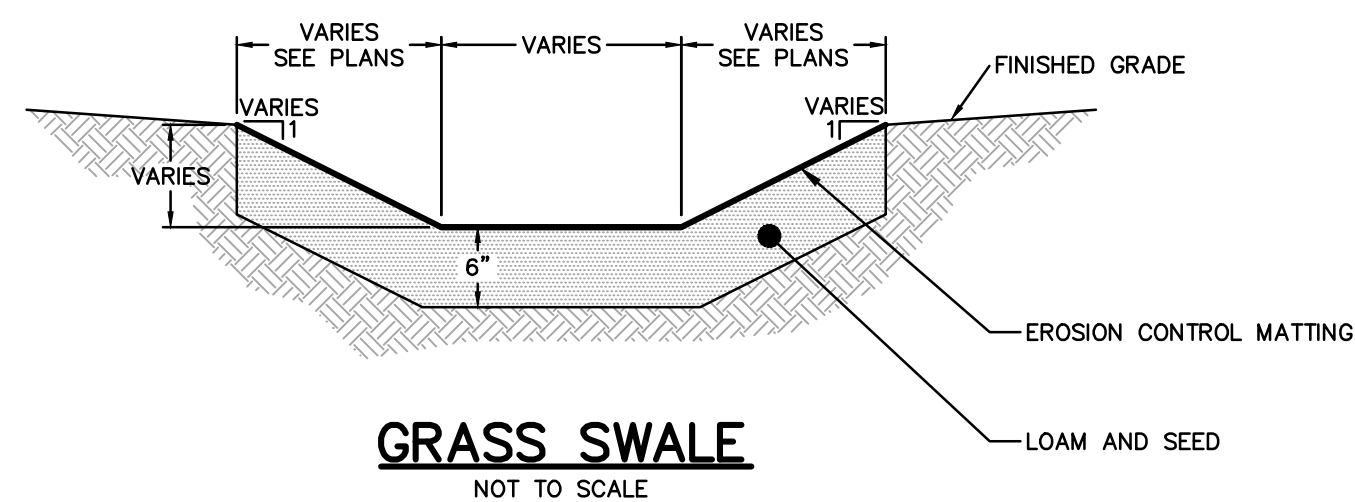
PAVEMENT BUILDUP - DRIVEWAY
NOT TO SCALE



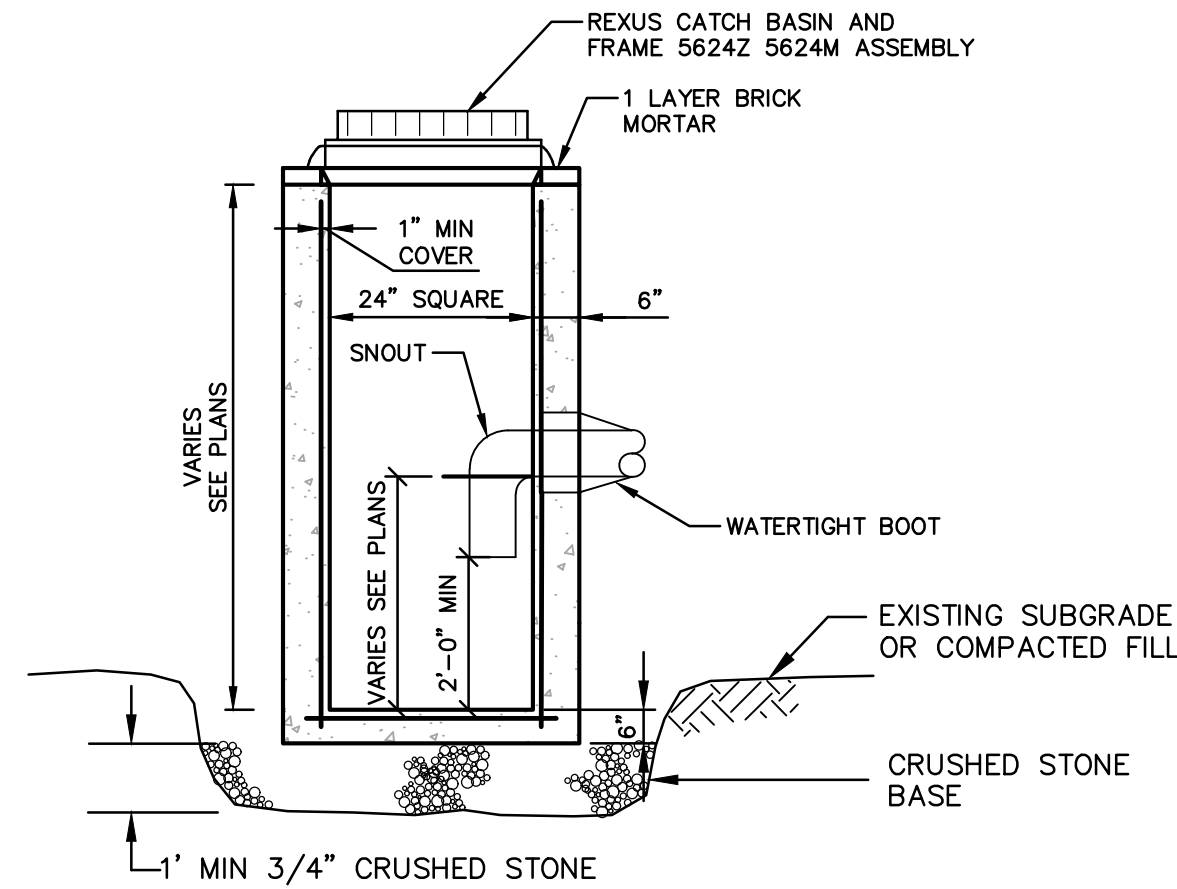
BEAM GUARDRAIL
NOT TO SCALE



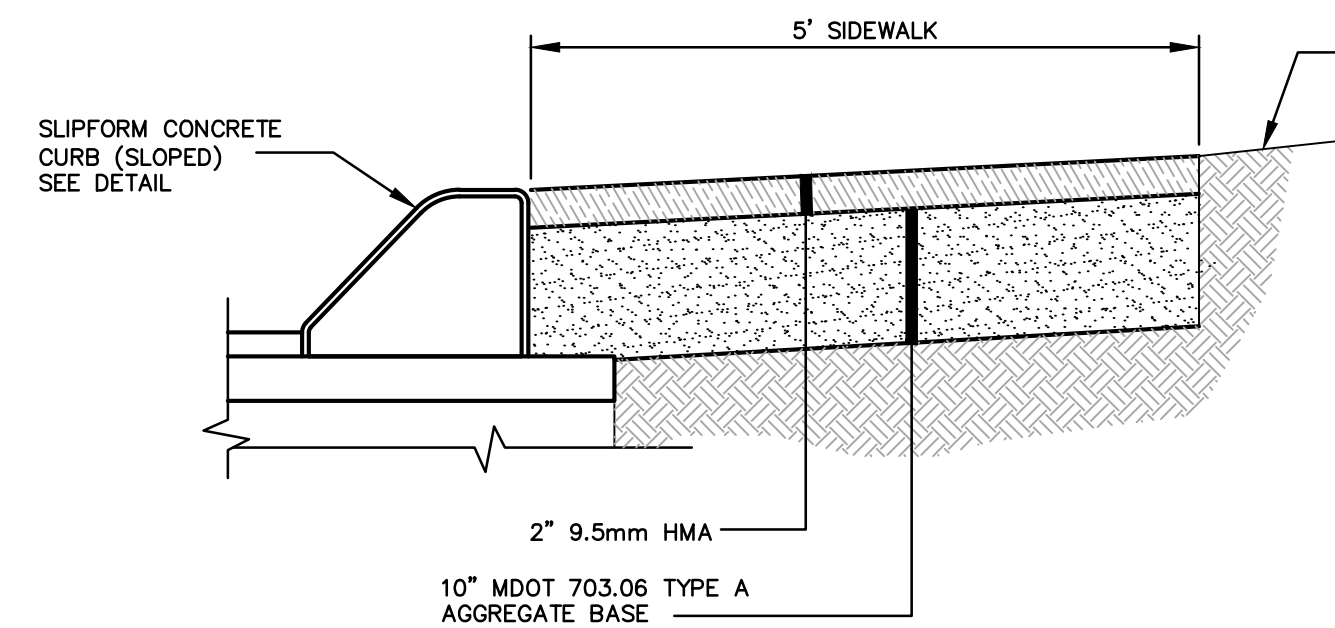
BUTT JOINT DETAIL
NOT TO SCALE



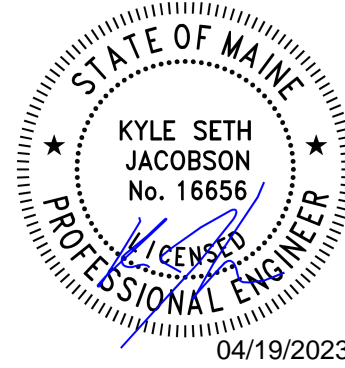
GRASS SWALE
NOT TO SCALE



CATCH BASIN - TYPE F
NOT TO SCALE



BITUMINOUS SIDEWALK
NOT TO SCALE



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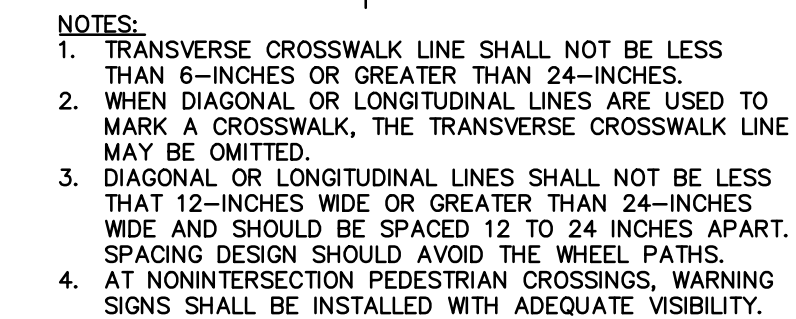
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SHEET TITLE:

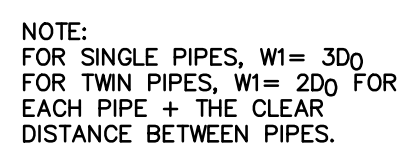
DETAILS

SHEET NO:

C-502



CROSSWALK MARKINGS DETAIL



TYPE ID.	APRON DIM. (FEET)		D50 RIPRAP SIZE (IN)	DEPTH (IN)
	W2	L		
6"	7	6	6	10
12"	12	10	6	14
15"	12	10	6	14
18"	12	10	6	14
24"	14	12	6	14

CULVERT NOTES:

1. THE CULVERT SHALL BE BEDDED ON A ONE FOOT LAYER OF COMPACTED GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL.
2. RIPRAP WILL BE USED TO INSLOPE AROUND THE CULVERT ENDS AT BOTH THE INLET AND OUTLET.



STRAIGHT ARROW
NOT TO SCALE

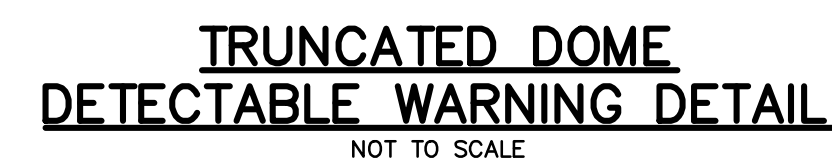
LEFT TURN ARROW
NOT TO SCALE



- NOTES:

1. EXCAVATE TO BOTTOM OF 3/4" CRUSHED STONE LAYER BENEATH WALL AND PROOF ROLL WITH VIBRATORY PLATE COMPACTOR.
 2. PLACE CRUSHED STONE AND BOTTOM BLOCK.
 3. PLACE CRUSHED STONE AND WALL BACKFILL TO TOP OF THE BOTTOM BLOCK.
 4. PLACE GEGRID ON TOP OF BOTTOM BLOCK. PULL GEGRID TAUGHT PRIOR TO BACKFILLING.
 5. ALL WALL BACKFILL SHALL BE PLACED IN A MAXIMUM OF 12" LIFTS AND SHALL BE COMPACTED BY MAKING A MINIMUM OF 4 PASSES USING A VIBRATORY PLATE COMPACTOR.
 6. WALL BACKFILL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS (MDOT 703.19 GRANULAR BORROW).
- | | <u>SIEVE SIZE</u> | <u>% FINER</u> |
|----------------------|-------------------|----------------|
| UNDISTURBED
EARTH | 3" | 100 |
| | No.40 | 0-70 |
| | No.200 | 0-7 |
7. CRUSHED STONE SHALL MEET THE GRADATION REQUIREMENTS OR MDOT 703.13 CRUSHED STONE 3/4".
 8. GEGRID SHALL CONSIST OF MIRAFI 3XT OR APPROVED EQUIVALENT.
 9. APPROVED WALL MANUFACTURERS INCLUDE STONE STRONG, VERSA-LOK, KEYSTONE, WESA, OR EQUAL.

SIEVE SIZE	% FINER
3"	100
No.40	0-70
No.200	0-7



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SHEET NO:

C-503