

OPERABLE UNIT 1 REMEDIATION CALLAHAN MINE SUPERFUND PROJECT

BROOKSVILLE, MAINE

NOVEMBER 2010



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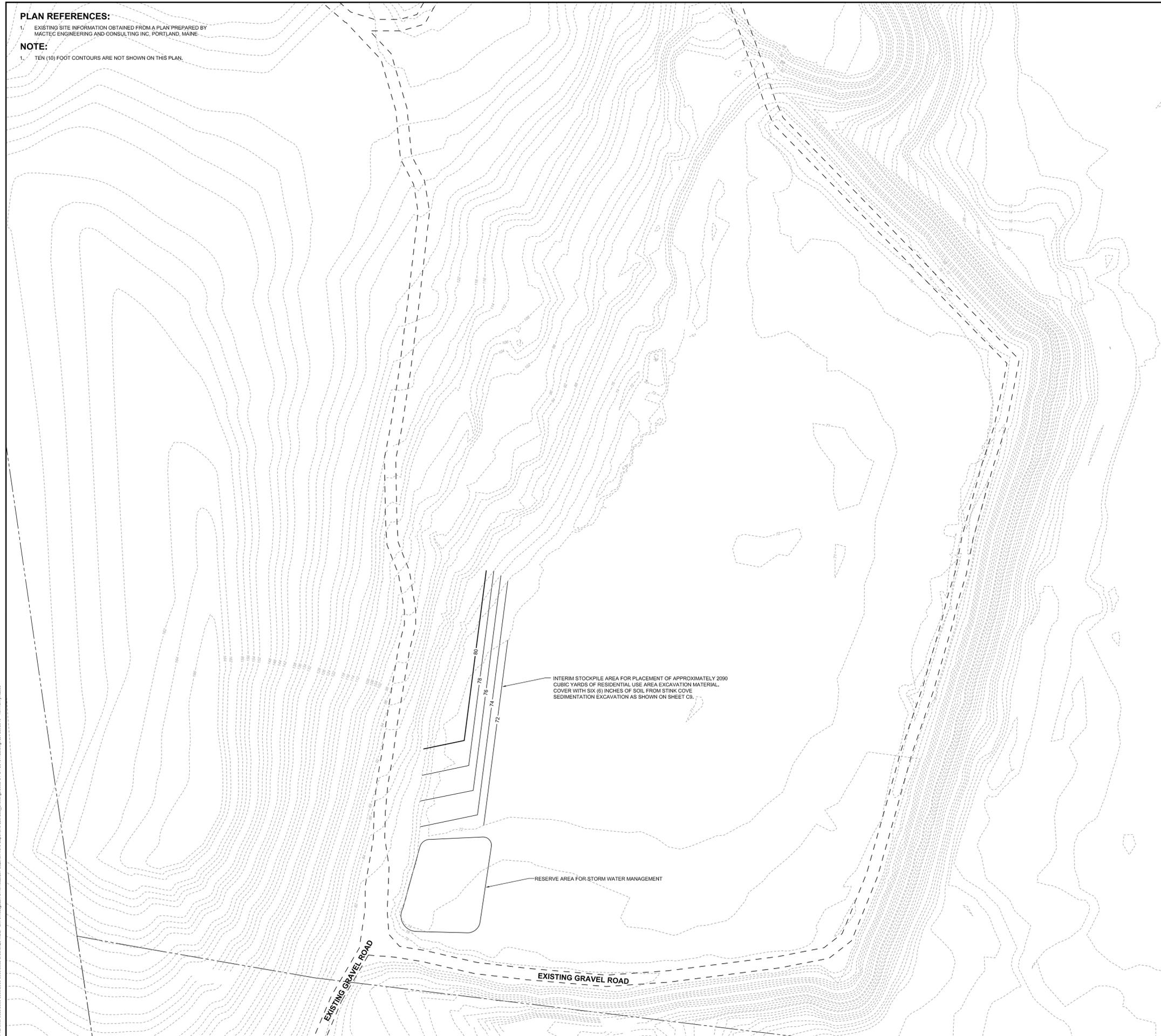
PROGRESS PRINTS
November 29, 2010

PLAN REFERENCES:

1. EXISTING SITE INFORMATION OBTAINED FROM A PLAN PREPARED BY MACTEC ENGINEERING AND CONSULTING INC. PORTLAND, MAINE.

NOTE:

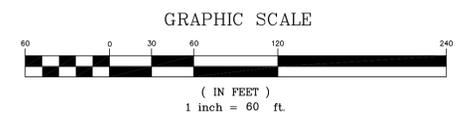
1. TEN (10) FOOT CONTOURS ARE NOT SHOWN ON THIS PLAN.



LEGEND:

- 3/4" CAPPED IRON ROD TO BE SET/PREVIOUSLY SET (PLS #2365)
- IRON ROD/PIPE FOUND
- UTILITY POLE
- EDGE OF PAVEMENT
- - - EDGE OF GRAVEL
- · - · - CENTERLINE
- · - · - APPROXIMATE PROPERTY LINE
- · - · - EASEMENT BOUNDARY
- · - · - OHU
- · - · - OVERHEAD UTILITIES
- · - · - TOP OF BANK
- · - · - CHAIN LINK FENCE
- · - · - TIE LINE
- · - · - EXISTING 2 FOOT CONTOUR
- ▨ PROPOSED REMEDIATION LIMITS
- ▩ PROPOSED TAILINGS AND CONFINEMENT LIMITS
- 102 — PROPOSED 2 FOOT CONTOUR
- - - 100 - - - PROPOSED 10 FOOT CONTOUR

INTERIM STOCKPILE PLAN FOR RESIDENTIAL USE AREA EXCAVATION MATERIAL
 (FORMER TAILINGS IMPOUNDMENT AREA)
 CALLAHAN MINE - SUPERFUND SITE
 BROOKSVILLE, MAINE



CES INC
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PROJECT: OPERABLE UNIT 1 REMEDIATION
 CALLAHAN MINE SUPERFUND SITE
 SHEET TITLE: INTERIM STOCKPILE PLAN FOR RESIDENTIAL USE AREA EXCAVATION MATERIAL

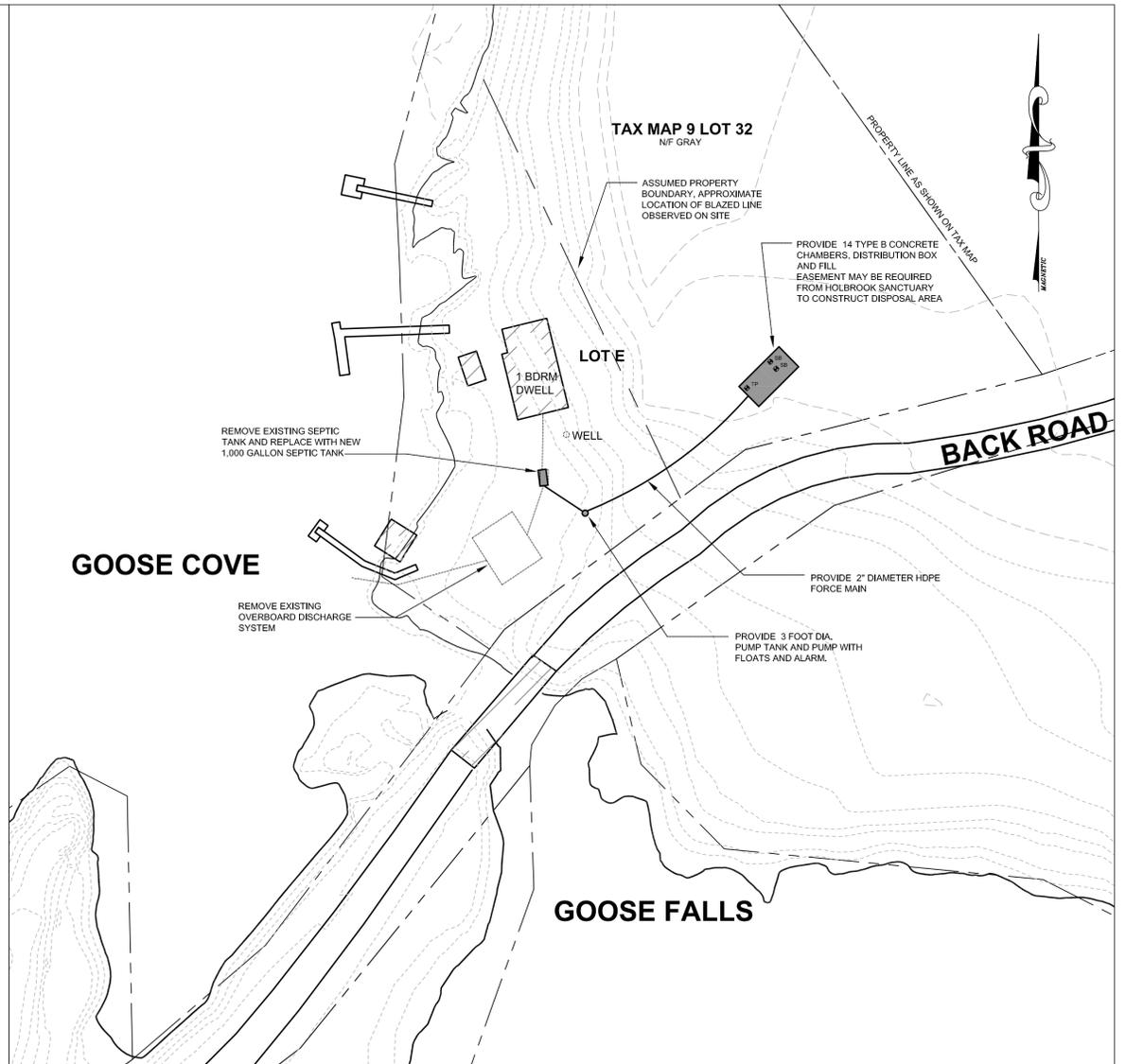
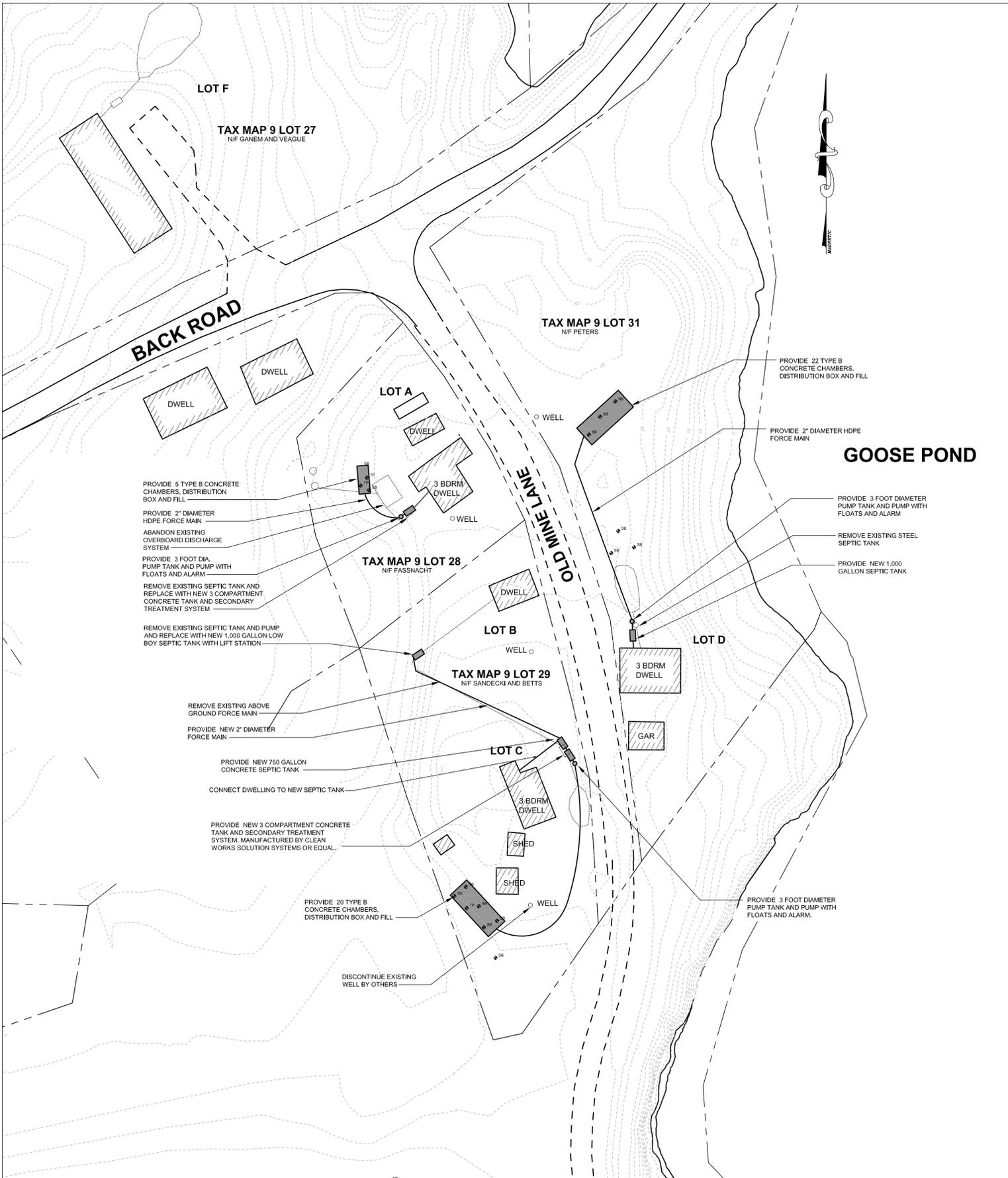
NO.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY



HORIZONTAL SCALE:	1"=60'
VERTICAL SCALE:	
DATE:	11/23/2010
DRAWN BY:	DWCUNM
DESIGNED BY:	MACTEC/CES
CHECKED BY:	DSB/DSP
APPROVED BY:	DSP
DWG TITLE:	
JOB NUMBER:	5992
DRAWING NUMBER:	

PLAN REFERENCES:

1) EXISTING SITE INFORMATION OBTAINED FROM A PLAN PREPARED BY
MAGTEC ENGINEERING AND CONSULTING INC. PORTLAND, MAINE



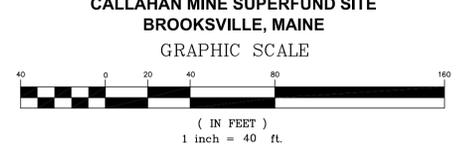
NOTES:

1. PROPERTY BOUNDARIES OBTAINED FROM THE TOWN OF BROOKSVILLE TAX MAPS. BOUNDARIES INDICATED ON THIS PLAN SHALL BE CONSIDERED APPROXIMATE.
2. REFER TO HHE-200 FORMS FOR PROPOSED SUBSURFACE WASTEWATER DISPOSAL DESIGNS

LEGEND:

- 3/4" CAPPED IRON ROD TO BE SET/PREVIOUSLY SET (PLS #2365)
- IRON ROD/PIPE FOUND
- UTILITY POLE
- EDGE OF PAVEMENT
- - - EDGE OF GRAVEL
- - - CENTERLINE
- - - APPROXIMATE PROPERTY LINE
- - - EASEMENT BOUNDARY
- OHU — OVERHEAD UTILITIES
- TOP OF BANK
- CHAIN LINK FENCE
- TIE LINE
- - - 102 - - - EXISTING 2 FOOT CONTOUR
- PROPOSED DISPOSAL AREA

PROPOSED RECONSTRUCTION OF DAMAGED WASTEWATER TREATMENT AND DISPOSAL PLAN



PROGRESS PRINTS
November 29, 2010

207-688-4294 • 207-688-4291
 207-252-2270 • 207-252-2327
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 207-798-1540 • 207-376-1398
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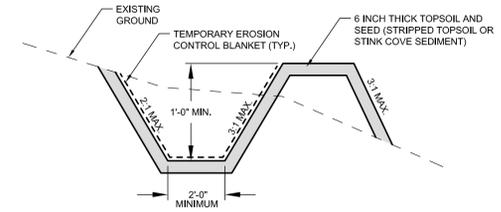
CES INC
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486 South Main Street
 Portland, ME 04102
 67 Dulaney Street
 Portland, ME 04106
 549 Main Street
 Scarborough, ME 04074
 186 Center Street
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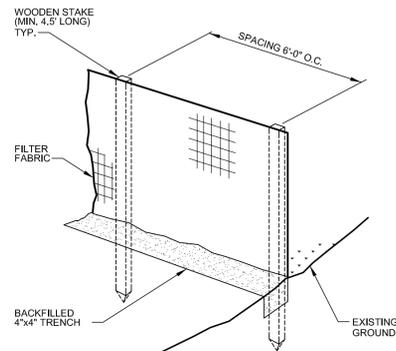
JOB TITLE	OPERABLE UNIT 1 REMEDIATION	DATE	CHECKED BY	DRAWN BY	DESCRIPTION
SHEET TITLE	CALLAHAN MINE SUPERFUND SITE				
PROPOSED RECONSTRUCTION OF DAMAGED WASTEWATER TREATMENT AND DISPOSAL PLAN					
HORIZONTAL SCALE	1"=40'	DATE:	11/18/2010	DRAWN BY:	JNM
VERTICAL SCALE:		DESIGNED BY:	DC	CHECKED BY:	TN
		APPROVED BY:	TN	DWG TITLE:	TN
		JOB NUMBER:	5992	DRAWING NUMBER:	C5

EROSION CONTROL NOTES

- 1) ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENTATION CONTROL BMPs, PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION.
- 2) SILT FENCE WILL BE INSPECTED, REPLACED AND/OR REPAIRED IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR LOSS OF SERVICEABILITY DUE TO SEDIMENT ACCUMULATION. AT A MINIMUM, ALL EROSION CONTROL DEVICES WILL BE OBSERVED WEEKLY.
- 3) DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO CONSTRUCTION SITE.
- 4) SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE SUBCONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY A SUITABLE GROWTH OF GRASS. ONCE A SUITABLE GROWTH OF GRASS HAS BEEN OBTAINED, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BY THE SUBCONTRACTOR. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THEY ARE REMOVED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, SEEDED, AND MULCHED IMMEDIATELY.
- 5) ALL DISTURBED AREAS WILL BE STABILIZED AS FOLLOWS:
4" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM SURFACE. LOAM AREAS WILL BE SEEDED WITH A MIXTURE OF 83% CREEPING RED FESCUE AND 17% RYE GRASS AT A RATE OF 3 LBS PER 1,000 SQUARE FEET. HAY MULCH SHALL BE APPLIED AT A RATE OF 90 LBS PER 1,000 SQUARE FEET.
- 6) A SUITABLE BINDER SUCH AS CURASOL OR TERRTACK WILL BE USED ON THE HAY MULCH FOR WIND CONTROL.
- 7) IF FINAL SEEDING OF DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15th OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SEEDED WITH WINTER RYE AT THE RATE OF 112 POUNDS PER ACRE OR 3 POUNDS PER 1000 SQUARE FEET. THE RYE SEEDING WILL BE PRECEDED BY AN APPLICATION OF 3 TONS OF LIME AND 800 LBS. OF 10-20-20 FERTILIZER OR ITS EQUIVALENT. MULCH WILL BE APPLIED AT A RATE OF 90 POUNDS PER 1000 SQUARE FEET.
- 8) IF THE RYE SEEDING CANNOT BE COMPLETED BY OCTOBER 1st OR IF THE RYE DOES NOT MAKE ADEQUATE GROWTH BY DECEMBER 1st, THEN ON THOSE DATES, HAY MULCH WILL BE APPLIED AT 150 POUNDS PER 1000 SQUARE FEET.
- 9) CONTRACTOR SHALL PLANT TREES AND VEGETATION IN ACCORDANCE WITH THE REVEGETATION PLAN.
- 10) INTERIOR SILT FENCES ALONG CONTOUR DIVIDING FLAT AND STEEP SLOPES, AREAS WITH DIFFERENT DISTURBANCE SCHEDULES, AROUND TEMPORARY STOCKPILES OR IN OTHER UNSPECIFIED POSSIBLE CIRCUMSTANCES SHOULD BE CONSIDERED BY THE SUBCONTRACTOR. THE INTENT OF SUCH INTERIOR SILT FENCES IS TO LIMIT SEDIMENT TRANSPORT WITHIN THE SITE TOWARD THE PROTECTED CATCH BASIN INLETS TO MINIMIZE SEDIMENT REMOVAL REQUIRED BY THE EROSION CONTROL NOTE 9 PROTECTIONS AND EXTEND LIFE OF SUCH DEVICES.
- 11) THE SUBCONTRACTOR SHALL PROVIDE A SEDIMENT BASIN FOR ALL WATER PUMPED FROM EXCAVATIONS. BASIN SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES". THE CONTRACTOR SHALL SUBMIT FOR REVIEW/APPROVAL PRIOR TO BEGINNING ANY PROJECT WORK.

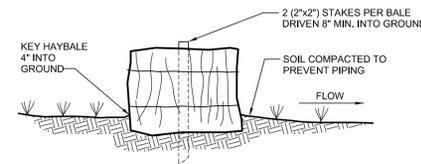


CONCEPTUAL DIVERSION SWALE
NTS

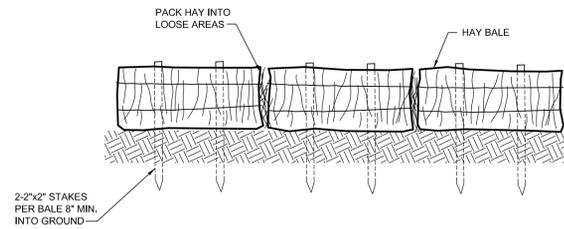


- NOTES:
1. KEY FABRIC IN A 4"x4" TRENCH W/BACKFILL
 2. SILT FENCE SHALL BE A 3' FENCE WITH A MINIMUM GRAB STRENGTH OF 120 LBS.

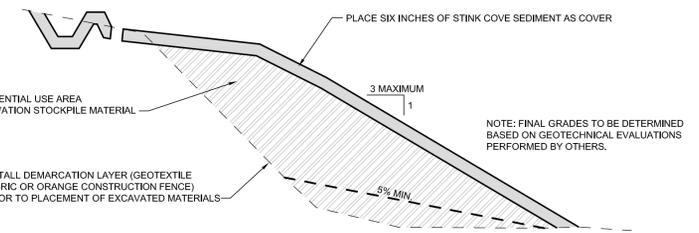
SILT FENCE DETAIL
NTS



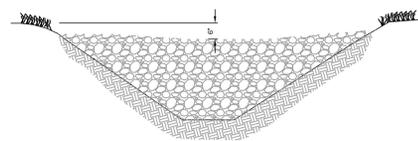
HAY BALE KEYING DETAIL
NTS



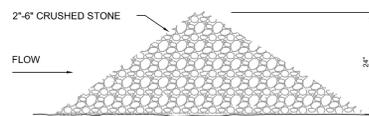
HAY BALE BARRIER DETAIL
NTS



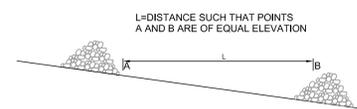
CONCEPTUAL TAILINGS IMPOUNDMENT INTERIM STOCKPILE SECTION
NTS



ELEVATION

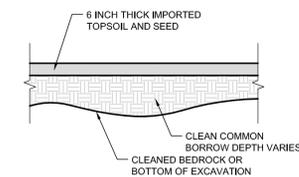


CROSS SECTION



SPACING

STONE CHECK DAM DETAIL
NTS



RESIDENTIAL VEGETATION RESTORATION DETAIL
NTS

720-258-4254 F. 207-688-4491
207-258-2570 F. 207-258-4307
207-786-8412 F. 207-786-8414
207-786-8412 F. 207-786-8414
207-786-8412 F. 207-786-8414
207-786-8412 F. 207-786-8414



JOB TITLE: OPERABLE UNIT 1 REMEDIATION
SHEET TITLE: CALLAHAN MINE SUPERFUND SITE
DRAWN BY: []
CHECKED BY: []
DATE: []
DESCRIPTION: []

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HORIZONTAL SCALE:	AS NOTED
VERTICAL SCALE:	N/A
DATE:	OCT. 27, 2010
DRAWN BY:	DWC
DESIGNED BY:	DWC/AKQ
CHECKED BY:	DSP
APPROVED BY:	DSP
DWG TITLE:	
JOB NUMBER:	5992
DRAWING NUMBER:	C9