

EXCAVATION/SITE PLANS

OF TAX MAP #1, LOT #2 GRANITE STREET, ALLENSTOWN, N.H. MERRIMACK COUNTY

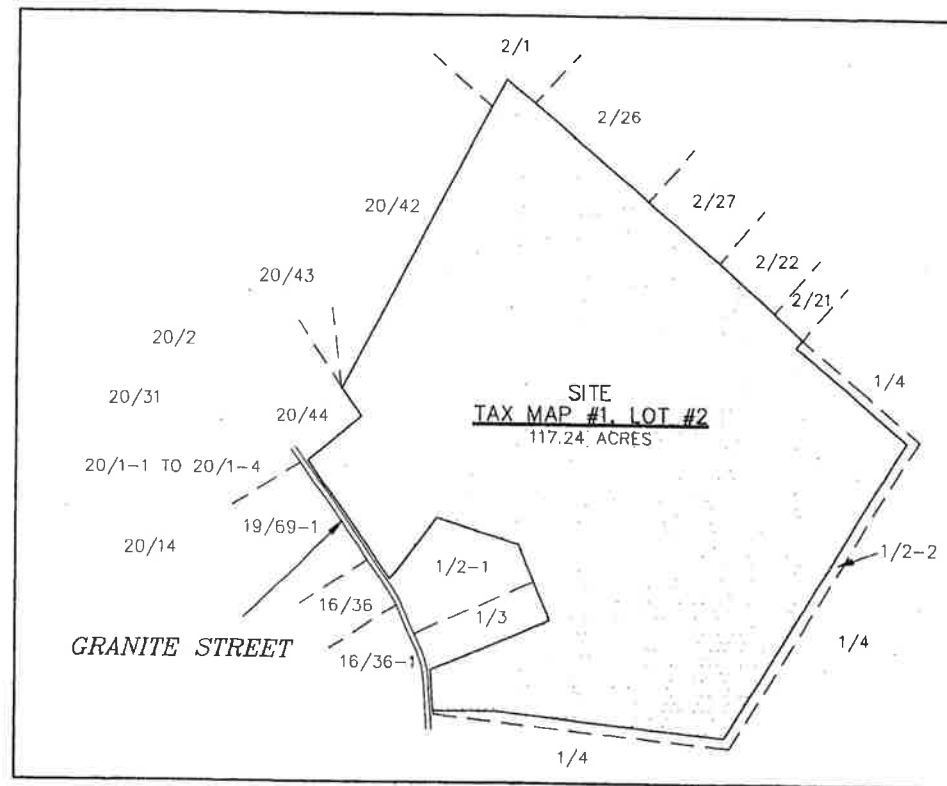
PREPARED FOR

TAMCHAR INC.

OCTOBER 30, 1999 - LAST REVISION JULY 29, 2000

ABUTTER'S LIST FOR TAX MAP #1, LOT #2

MAP	LOT	LOT OWNER/ADDRESS
19	69-1	PARKER REAL ESTATE TRUST
16	36	C/O RICHARD BAILEY 66 PLEASANT ST. HOOKSETT, NH 03106
16	36-1	CATHOLIC BISHOP OF MANCHESTER 153 ASH ST. MANCHESTER, NH 03104
1	2-1	TOWN OF ALLENSTOWN
1	3	16 SCHOOL ST. ALLENSTOWN, NH 03275
2	21	
20	44	RICHARD & MARY FLEURY 181 GRANITE ST. ALLENSTOWN, NH 03275
20	42	BENJAMIN JR. & LORRAINE FONTAINE 195 GRANITE ST. ALLENSTOWN, NH 03275
2	1	RITA A. FLORDE 7 MIDDLE ST. PEMBROKE, NH 03275
2	25	NORTHEAST GRANITE, INC. 24 TONCA DRIVE BOW, NH 03304
2	27	RICHARD P. BAILEY & CATHLEEN B. SCRUTON 66 PLEASANT ST. HOOKSETT, NH 03106
2	22	JEFFREY & RACHEL D. EAMES C/O MOUNTAIN LAND & TIMBER 34 HOWARD LANE EPSOM, NH 03234
1	4	STEPHEN HYNES (TRUSTEE)
1	2-2	HOLIDAY ACRES JOINT VENTURE TRUST 1571 BELLEVUE, STE. 210 W. VANCOUVER, BC
20	1-1	ROSE GOVE 21 HERITAGE DRIVE ALLENSTOWN, NH 03275
20	1-2	JUDITH BOSKA & BOB HIBBARD KENNEY ROAD LOUDON, NH 03301
20	1-3	EDWARDS WIENS 19 HERITAGE DRIVE ALLENSTOWN, NH 03275
20	1-4	DEBORAH WEST-NOLL 4 OLD TOWN ROAD WEARE, NH 03281
20	2	TRUSTEE OF MADELINE MEYER 103 CLARK ROAD, UNIT # 5 PO BOX 1920 WOLFEBORO, NH 03894-1920
20	14	DIMITRIOS NIKITAS 21 DYSON DRIVE SALEM, NH 03079
20	31	JOHN & PATRICIA FLEWELLING 206 PAQUETTE AVE MANCHESTER, NH 03104
20	43	EDWARD & SYBIL HUGGINS 189 GRANITE STREET ALLENSTOWN, NH 03275



LOCUS MAP SCALE: 1" = 400'

SHT NO.

CONTENTS

- 1
- 2
- 3
- 4
- 5A&5B
- 6
- 7
- 8

- COVER SHEET
- EXCAVATION/SITE PLAN-OVERVIEW W/NOTES
- SCALE/CRUSHING PADS & POND DETAIL SITE PLAN
- SHOP/SEPTIC DESIGN DETAIL SITE PLAN
- CONSTRUCTION DETAILS
- EROSION CONTROL DETAILS
- OPERATION & REMOVAL PHASES
- CROSS SECTIONS

- OWNER OF RECORD OF TAX MAP #1, LOT #2: TAMCHAR INC., 156 EATON HILL ROAD, P.O. BOX 266, AUBURN N.H. 03032 (TEL#: 603-483-2400)
- EXCAVATOR: CHARLES THIERRIAULT, TAMCHAR INC., 156 EATON HILL ROAD, P.O. BOX 221, AUBURN, N.H. 03032 (TEL#: 603-483-2400)
- DRAINAGE ENGINEER: HAROLD R. WOOD JR., PE #5511, 23 LONG HILL ROAD, RAYMOND N.H. 03077 (TEL#: 603-895-4788)
- PROJECT CONSULTANT/WETLAND SCIENTIST #29/SEPTIC SYSTEM DESIGNER #973: ALDEN BEAUCHEMIN/KEYLAND ENTERPRISES, 76 SOUTH STATE STREET CONCORD, N.H. 03301 (TEL#: 603-224-7587)
- WETLAND CONSULTANT: PETER STODDARD, 218 FOX HOLLOW WAY, MANCHESTER, N.H. 03104 (TEL#: 603-490-4653)
- CAD DRAFTING: ERIC SHERBLOM, 12 EAST SIDE DRIVE, CONCORD N.H. 03301



I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

DATE _____ LICENSED LAND SURVEYOR



APPROVED BY THE TOWN OF ALLENSTOWN PLANNING BOARD

DATE _____ CHAIRMAN _____



GENERAL NOTES

- TOTAL ACRES OF PARCEL: 117.24 ACRES
- PARCEL IS LOCATED WITHIN THE OPEN SPACE/FARM ZONE WITH INDUSTRIAL ZONE ON OPPOSITE SIDE OF GRANITE STREET
- PROPOSED USE: EXISTING EXCAVATION/MATERIAL PROCESSING & CRUSHING OPERATION WAS APPROVED ON 3/6/98 FOR REMOVAL OF FILL, GRAVEL, STONE, OR LOAM FROM THE PREMISES, ETC. THE CURRENT APPLICATION IS FOR THE FOLLOWING: A) EXCAVATION APPROVAL IS BEING UPDATED TO MEET REQUIREMENTS OF RSA 155-E, B) PLANS ARE BEING SUBMITTED TO SHOW DETAILS FOR SCALE, CRUSHER PADS, DRIVE LOCATION, SEDIMENT PONDS, AND NECESSARY VISUAL BUFFERS. (APPROVAL OF SHOP AREA IS CONTINGENT UPON ADDITIONAL APPROVAL OF THE SHOP AREA SITE PLAN.)
- THIS PLAN SHALL SUPERSEDE PREVIOUSLY APPROVED SITE PLAN FOR TAMCHAR INC., DATED OCTOBER 5, 1997, AMENDED 2/12/98 BY KEYLAND ENTERPRISES, RECORDED IN MERRIMACK COUNTY REGISTRY OF DEEDS AS PLAN #14275.
- 36 ACRES± TO BE EXCAVATED FOR EXCAVATION/MATERIAL OPERATION, 7 ACRES± TO BE DISTURBED AND STABILIZED FOR SHOP AREA, AND 3.5 ACRES± TO BE DISTURBED AND STABILIZED FOR POND AREA.
- BUILDING SETBACKS ARE: 20 FEET FROM ANY STREET, AND 30 FEET FROM ANY REAR OR SIDE LOT LINE.
- EXCAVATION AREA TO PROVIDE PORT-A-POTTY OR ACCESS TO FUTURE SHOP SERVICED BY PRIVATE ON-SITE WELL AND SEPTIC SERVICE.
- SOIL BOUNDARIES HAVE BEEN TRANSFERRED FROM MERRIMACK COUNTY SOIL MAPS.
- FOR DETAILS OF BOUNDARIES, SEE BOUNDARY PLAN BY ERIC MITCHELL & ASSOCIATES, INC., DATED NOVEMBER 20, 1998 RECORDED IN MERRIMACK COUNTY REGISTRY OF DEEDS AS PLAN #14719.
- WETLANDS ON-SITE HAVE BEEN DELINEATED BY PETER STODDARD, AND FIELD VERIFIED BY ALDEN BEAUCHEMIN/KEYLAND ENTERPRISES, WETLAND SCIENTIST #29, USING STANDARDS ADOPTED BY THE STATE OF N.H. WETLANDS BUREAU, SPECIFICALLY, THE TECHNIQUES OUTLINED IN "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL," TECHNICAL REPORT Y-87-1, (JANUARY 1987) AND THE MANUAL, "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND" (MAY 1, 1995) PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.
- FOR DETAILS OF EXISTING RIGHT OF WAY SEE DEED OF VICTOR J. MULHAIRE, JAMES VIAR (NOW NORTHEAST GRANITE), MERRIMACK COUNTY REGISTRY OF DEEDS, BOOK 946, PAGE 67.

OPERATIONAL NOTES

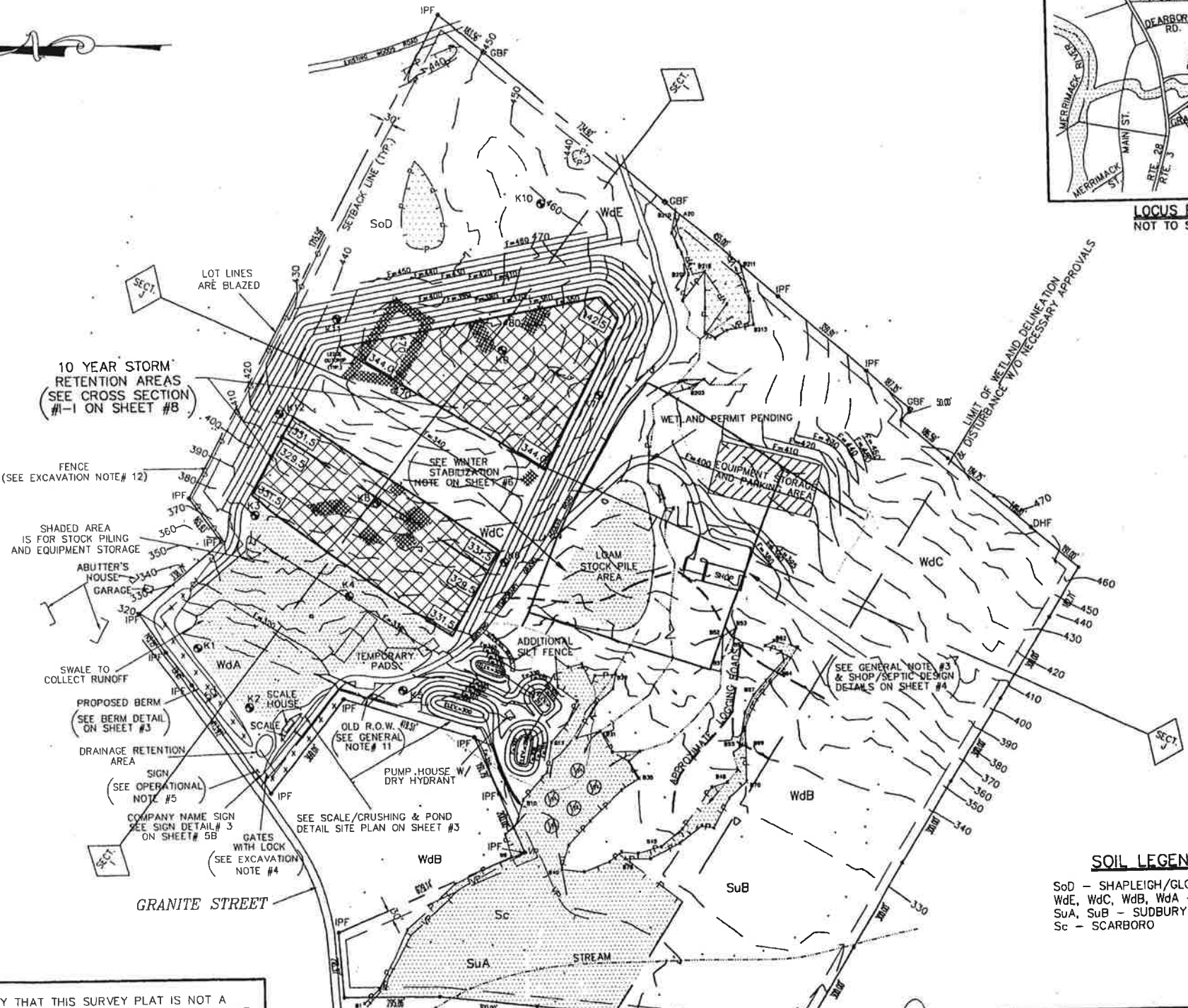
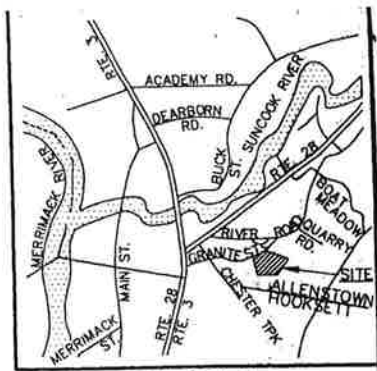
- NORMAL OPERATION HOURS FOR SALES AND TRUCKING OF RAW OR PROCESSED MATERIAL ARE MONDAY THROUGH SATURDAY 7A.M.-5P.M. WITH LIMITED MAINTENANCE ON EQUIPMENT ON EVENINGS AND WEEKENDS IF NECESSARY.
- CRUSHING, DRILLING, AND BLASTING SHALL BE DONE BETWEEN 7A.M. - 5P.M. WEEKDAYS AND NOT ON WEEKENDS. ALL THE ADJUTER'S SHALL BE NOTIFIED ON THE DAY WHEN AN EXPLOSIVE BLAST WILL OCCUR AT LEAST TWO HOURS BEFORE THE BLAST TIME. ANY ONE ELSE REQUESTING NOTICE OF AN EXPLOSIVE BLAST SHALL BE NOTIFIED THE DAY BEFORE A BLAST.
- AT LEAST 80 COMMERCIAL TRUCKS ARE ANTICIPATED PER DAY ENTERING/LEAVING. THE MAXIMUM NUMBER OF COMMERCIAL TRUCK TRAFFIC ENTERING AND EXITING THE PROPERTY FOR HAULING MATERIALS OR MAINTENANCE SHALL NOT EXCEED 100 TRUCKS PER DAY ROUND TRIP.
- THE ACCESS TO THE GRAVEL REMOVAL AREAS SHALL HAVE A LOCKING GATE, WITH LOCK BOX AND A KEY SUPPLIED TO TOWN POLICE AND FIRE DEPARTMENT FOR EMERGENCY ACCESS.
- A SIGN IS TO BE PLACED AT EXIT RESTRICTING TRUCKING TOWARDS RTE. 3 ONLY. (SEE SIGN DETAIL #1 ON SHEET #5B) IN ADDITION, A SIGN SHALL BE PLACED NEAR VISITORS PARKING RESTRICTING UNAUTHORIZED PERSONS BEYOND THIS POINT. (SEE SIGN DETAIL #2 ON SHEET #5B)
- TEMPORARY CRUSHER SHALL BE SET UP TO MANUFACTURER SPECIFICATIONS. THE CRUSHER MAY BE MOVED AS NECESSARY, BUT NOT TO LOCATIONS THAT CAUSE AN INCREASE IN THE SOUND LEVEL, FROM ORIGINAL INTENT, TOWARDS GRANITE STREET ADJUTERS.
- ALL PAVEMENT ON THE PROPERTY SHALL BE SWEEPED AT LEAST WEEKLY. ALL SPILLAGE OR DEBRIS LEFT ON TOWN ROADS SHALL BE CLEANED UP IMMEDIATELY.

EXCAVATION NOTES

- ALL EXCAVATION OPERATIONS SHALL COMPLY WITH RSA 155-E REGULATIONS.
- VEGETATION SHALL BE MAINTAINED OR PROVIDED WITHIN THE BUFFER AREAS REQUIRED WITHIN 10 FT. ALONG THE PROPERTY LINE, AND WITHIN 25 FT. OF STREAMS AND WETLANDS GREATER THAN 5 ACRES. (NOTE: IF AN ADJUTER OBJECTS TO THE EXCAVATION, THE SETBACK FROM THEIR PROPERTY IS AT LEAST 50 FT.)
- PRIOR TO COMMENCING EXCAVATION, THE EDGE OF THE WETLANDS MUST BE CLEARLY MARKED IN THE FIELD, AND SILT FENCE AS SHOWN ON PLAN SHALL BE INSTALLED AND CLEANED PERIODICALLY AS NECESSARY.
- REMOVE THE TREE STUMPS IN AREAS TO BE DISTURBED ONLY. ALL AREAS DISTURBED SHALL BE STABILIZED WITH NECESSARY EROSION CONTROL DEVICES. (SEE SHEET #6 FOR EROSION CONTROL DETAILS)
- PRIOR TO THE REMOVAL OF TOPSOIL OR OTHER OVERBURDEN MATERIAL FROM ANY LAND AREA THAT HAS NOT YET BEEN EXCAVATED, THE EXCAVATOR SHALL FILE A RECLAMATION BOND OR OTHER SECURITY AS REQUIRED BY THE ALLENSTOWN PLANNING BOARD, SUFFICIENT TO INSURE THE RECLAMATION OF THE LAND AREA TO BE EXCAVATED.
- TO PREVENT DUST FROM BLOWING INTO RESIDENTIAL ADJUTERS, STRIP AND STOCK PILE LOAM IN NON-WETLAND AREAS ONLY, AS FAR AWAY FROM AND OUT OF SIGHT OF, RESIDENTIAL ADJUTERS.
- PIT OPERATIONS AND INTERIM GRADES SHALL BE DONE THAT ALL RUNOFF IS KEPT WITHIN THE PIT AREAS.
- DRAINAGE SHALL BE MAINTAINED SO AS TO PREVENT THE ACCUMULATION OF FREESTANDING WATER FOR PROLONGED PERIODS. EXCAVATION PRACTICES WHICH RESULT IN CONTINUED SILTATION OF SURFACE WATERS OR ANY DEGRADATION OF WATER QUALITY OF ANY PUBLIC OR PRIVATE WATER SUPPLIES ARE PROHIBITED.
- NO FUELS, LUBRICANTS, OR OTHER TOXIC OR POLLUTING MATERIALS SHALL BE STORED ON-SITE UNLESS IN COMPLIANCE WITH STATE LAWS OR RULES PERTAINING TO SUCH MATERIALS.
- NOISE LEVELS OF CRUSHER ARE OUTLINED IN CRUSHER SPECIFICATIONS ATTACHED. A BERM WITH PLANTINGS SHALL BE CONSTRUCTED FOR MAXIMUM NOISE ABATEMENT.
- WATER TRUCK SHALL BE ON SITE DURING OPERATION TO MAINTAIN DUST CONTROL AS NECESSARY.
- WHERE TEMPORARY SLOPES WILL EXCEED A GRADE OF 1:1, A FENCE OR OTHER SUITABLE BARRICADE SHALL BE ERRECTED AT THE TOP OF THE SLOPE TO WARN OF DANGER OR LIMIT ACCESS TO THE SITE. FENCING ALONG A PROPERTY BOUNDARY SHALL BE A PERMANENT CHAIN LINK FENCE WHEN SLOPES EXCEED A GRADE OF 1:1.
- ALL EXISTING RESIDENCES SHALL BE 150 FEET FROM EDGE OF EXCAVATION.
- AFTER ALL AREAS HAVE BEEN STABILIZED, SILT AND DUST FENCING WILL BE REMOVED.

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DATE _____ LICENSED LAND SURVEYOR

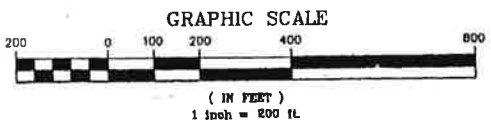
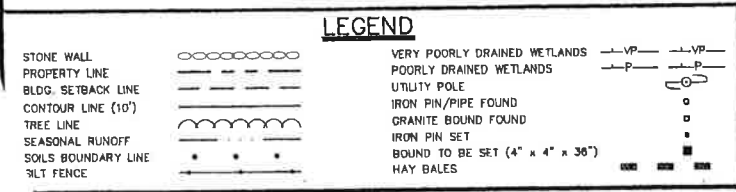


LOCUS PLAN
NOT TO SCALE

SOIL LEGEND
SoD - SHAPLEIGH/GLOUCESTER
WdE, WdC, WdB, WdA - WINDSOR
SuA, SuB - SUDBURY
Sc - SCARBORO

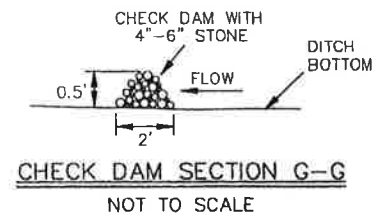
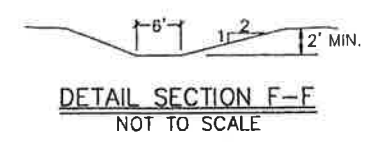
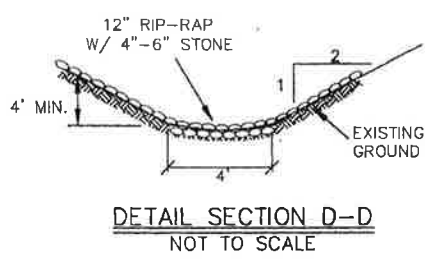
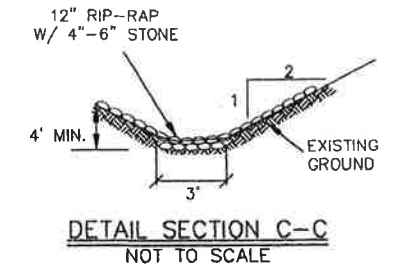
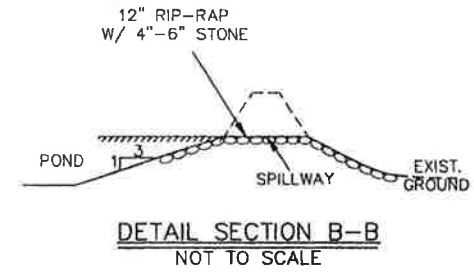
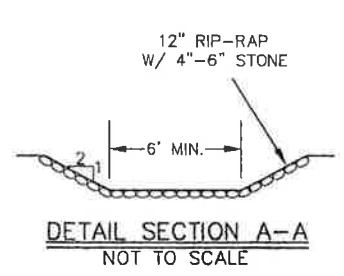
APPROVED BY THE TOWN OF ALLENSTOWN PLANNING BOARD

DATE _____ CHAIRMAN _____

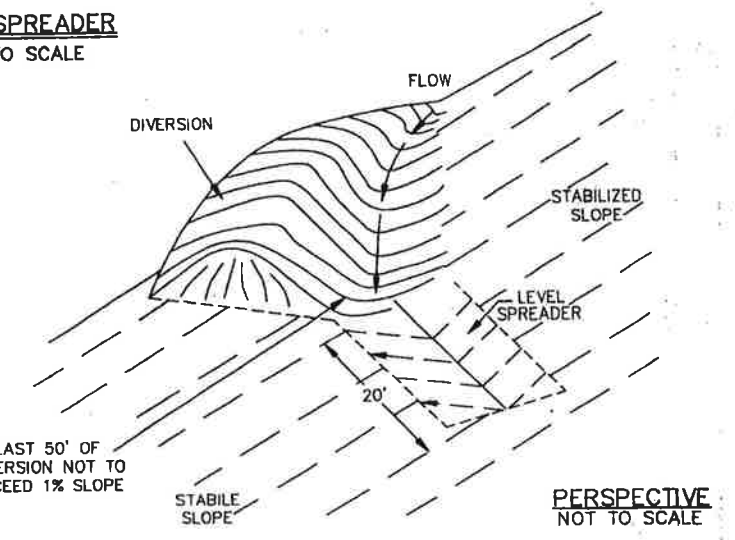
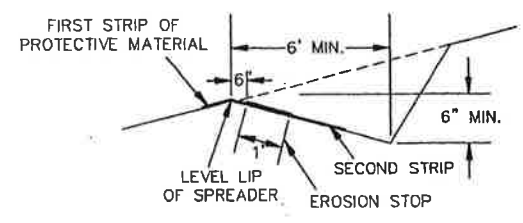


NO.	DATE	REVISION	BY
1	10/30/99	AMENDED TO ADDRESS SITE SPECIFIC & SEA CONSULTANTS INC. CONCERNS	AMB
2	12/8/99	AMENDED TO SHOW DRAINAGE RETENTION IN PIT AREA & CHANGED GEN. NOTES 3&4	AMB
3	1/3/00	CORRECTED LOG RD & STONE WALLS DETAIL	AMB
4	1/4/00	AMENDED STORM & WASH PONDS	AMB
5	2/15/00	AMENDED GENERAL & EXCAVATION NOTES, SHOW FENCE, CORRECT SETBACKS	AMB
6	7/29/00	AMEND OPERATIONAL NOTES # 2, 3 & 7	AMB

EXCAVATION/SITE PLAN-OVERALL VIEW
GRANITE STREET, ALLENSTOWN, N.H.
MAP #1, LOT #2
PREPARED FOR
TAMCHAR, INC.
PREPARED BY KEYLAND ENTERPRISES
OCTOBER 30, 1999 SCALE: 1" = 200'



LEVEL SPREADER
NOT TO SCALE

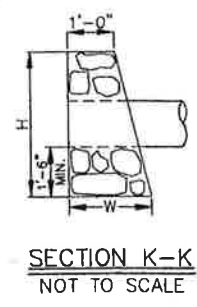
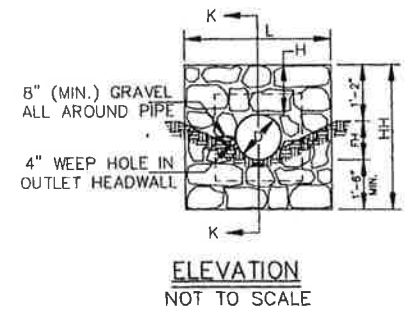


CONSTRUCTION SEQUENCE

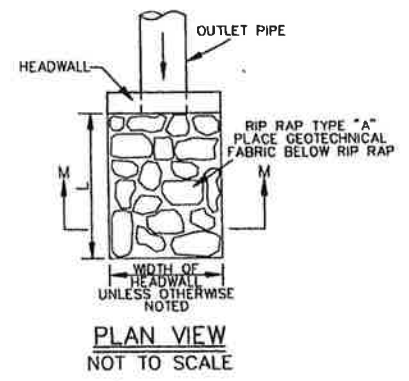
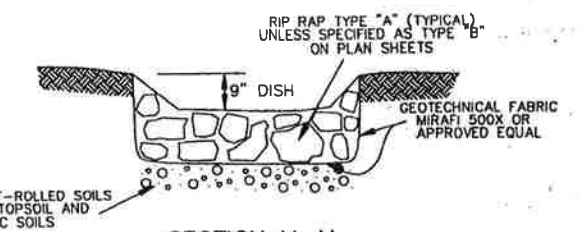
- 1) CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- 2) LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
- 3) AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A SILT TRENCH ONE FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP.
- 4) THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EXCELSIOR MATTING ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES.
- 5) THE ENTRANCE CHANNEL TO THE LEVEL SPREADER SHALL NOT EXCEED A ONE PERCENT GRADE FOR AT LEAST FIFTY FEET BEFORE ENTERING INTO THE SPREADER.
- 6) THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RECONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- 7) PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.

MORTAR RUBBLE MASONRY HEADWALL
NOT TO SCALE

DIAMETER D INCHES	LENGTH OF BARS	HEADER LENGTH L	HEADER HEIGHT HH	FILL HEIGHT FH	H	WIDTH AT BOTTOM OF HEADER W
15	5'-8"	6'-0"	4'-3"	1'-7"	1'-6"	2'-0 3/4"
18	5'-8"	7'-0"	4'-6"	1'-10"	1'-6"	2'-1 1/2"
21	7'-8"	9'-0"	5'-0"	2'-0"	1'-6"	2'-2"
24	8'-8"	11'-0"	5'-0"	2'-4"	1'-6"	2'-3"
27	9'-8"	12'-0"	5'-6"	2'-6"	1'-6"	2'-4"
30	10'-8"	13'-0"	5'-6"	2'-10"	1'-6"	2'-4 1/2"
36	11'-8"	14'-0"	6'-0"	2'-10"	1'-6"	2'-6"



PIPE DIAMETER	OF L (FT.)
15	10
18	15
21	18
24	20
27	22
30	25
36	25



APPROVED BY THE TOWN OF:
ALLENSTOWN PLANNING BOARD

DATE _____ CHAIRMAN _____

LEGEND

STONE WALL		VERY POORLY DRAINED WETLANDS	
PROPERTY LINE		POORLY DRAINED WETLANDS	
BLDG. SETBACK LINE		UTILITY POLE	
CONTOUR LINE (10')		IRON PIN/PIPE FOUND	
TREE LINE		GRANITE BOUND FOUND	
SEASONAL RUNOFF		IRON PIN SET	
SOILS BOUNDARY LINE		BOUND TO BE SET (4" x 4" x 36")	
SILT FENCE		HAY BALES	

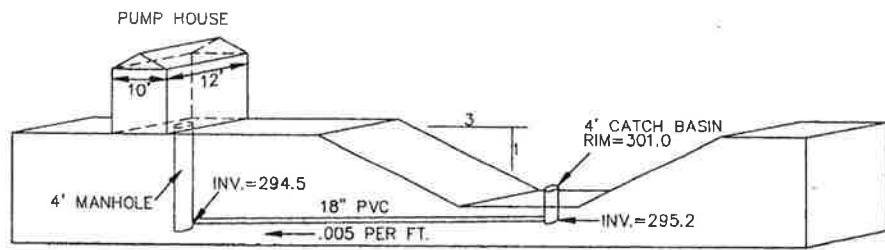
KEYLAND ENTERPRISES

SEPTIC SYSTEM DESIGN • SITE EVALUATIONS
LAND PLANNING • ENVIRONMENTAL PERMITTING

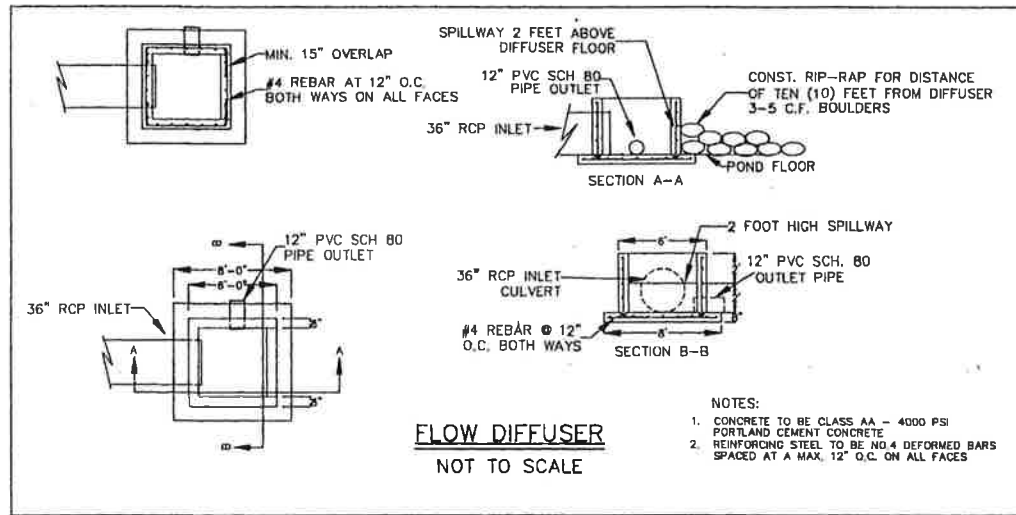
78 SQ. STATE STREET, CONCORD, NH, 03301, (603)-224-7587

NO.	DATE	REVISION	BY

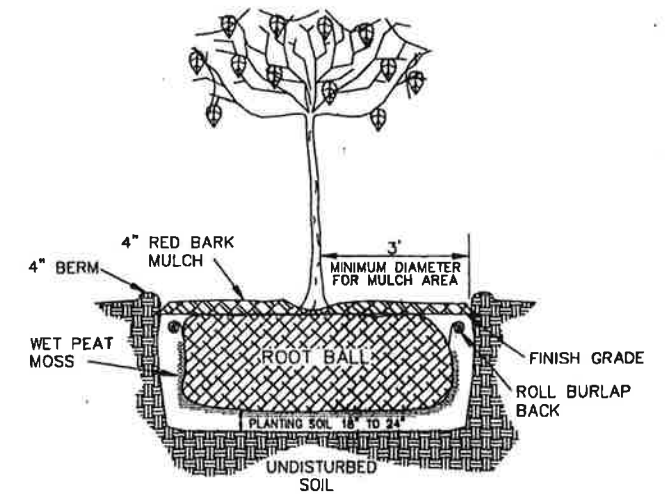
DETAIL SHEET A
GRANITE STREET, ALLENSTOWN, N.H.
MAP #1, LOT #2
PREPARED FOR
TAMCHAR, INC.
PREPARED BY KEYLAND ENTERPRISES
OCTOBER 30, 1999



PUMP HOUSE/POND DETAIL
NOT TO SCALE



FLOW DIFFUSER
NOT TO SCALE

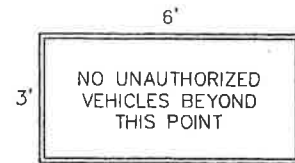


TREE PLANTING DETAIL
NOT TO SCALE

STANDARD
NO RIGHT TURN SIGN

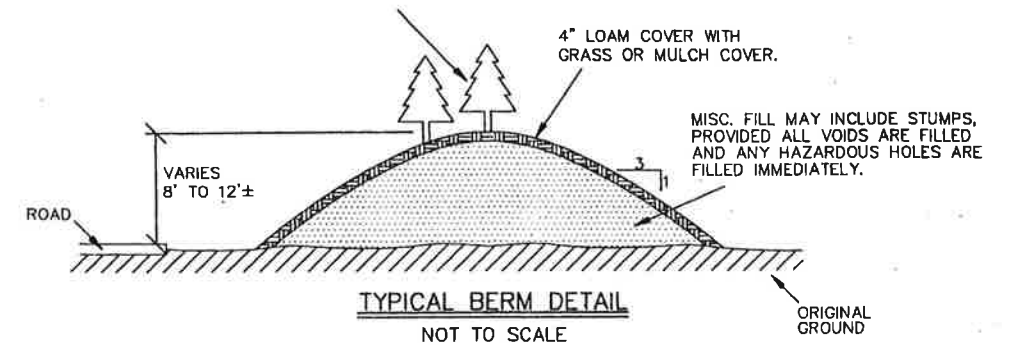


SIGN DETAIL #1
NOT TO SCALE

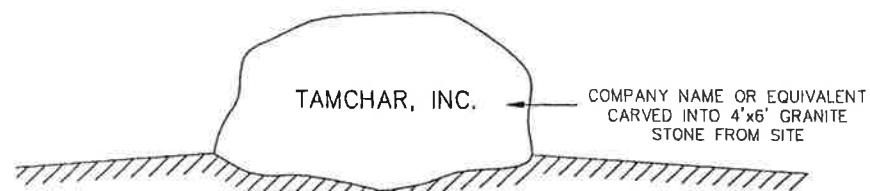


SIGN DETAIL #2
NOT TO SCALE

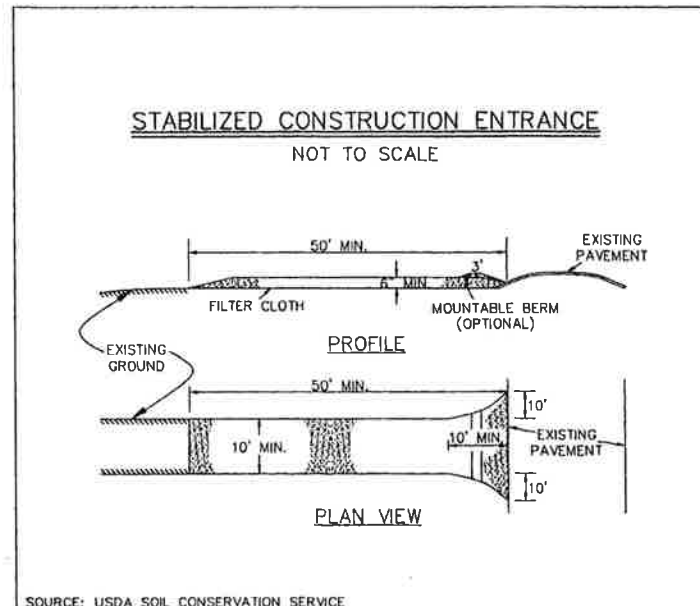
WHITE PINE & NATIVE TREES & VEGETATION SHALL BE PLANTED & SPACED 15' O.C. AS NECESSARY TO CREATE A VISUAL BUFFER TO BE PLANTED IN FALL (SEPTEMBER 1ST TO OCTOBER 30TH) OR SPRING (APRIL 1ST TO JUNE 30TH)



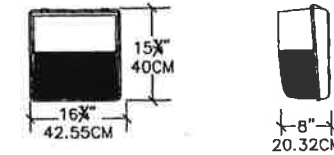
TYPICAL BERM DETAIL
NOT TO SCALE



SIGN DETAIL #3
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



TYPE: LITHONIA HI-TEK OR EQUIVALENT
STYLE: TWH
WATTAGE: 250W

LIGHT DETAIL
NOT TO SCALE

APPROVED BY THE TOWN OF
ALLENSTOWN PLANNING BOARD

DATE _____ CHAIRMAN _____

LEGEND

STONE WALL	○○○○○○○○	VERY POORLY DRAINED WETLANDS	---VP---VP---
PROPERTY LINE	=====	POORLY DRAINED WETLANDS	---P---P---
BLDG. SETBACK LINE	=====	UTILITY POLE	○
CONTOUR LINE (10')	~~~~~	IRON PIN/PIPE FOUND	○
TREE LINE		GRANITE BOUND FOUND	○
SEASONAL RUNOFF	~~~~~	IRON PIN SET	○
SOILS BOUNDARY LINE	-----	BOUND TO BE SET (4" x 4" x 36")	■
SILT FENCE	-----	HAY BALES	■

NO.	DATE	REVISION	BY
1	2/15/00	ADD SIGN DETAIL # 3, AMEND BERM DETAIL	AMB
2	4/8/00	AMEND BERM DETAIL	AMB

DETAIL SHEET B
GRANITE STREET, ALLENSTOWN, N.H.
MAP #1, LOT #2
PREPARED FOR
TAMCHAR, INC.
PREPARED BY KEYLAND ENTERPRISES
OCTOBER 30, 1999

GENERAL

EROSION AND SEDIMENTATION CONTROL PRACTICES INCLUDE THE USE OF THE FOLLOWING (STRAW BALE BARRIERS, SILT FENCE BARRIERS, TEMPORARY OR ROCK LINED SWALES, DIVERSIONS WITH LEVEL SPREADERS) ALL EROSION CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS CONTAINED IN THE "EROSION AND SEDIMENT CONTROL HANDBOOK FOR DEVELOPING AREAS OF NEW HAMPSHIRE" DATED MAY 1981, BY USDA - SCS. (AVAILABLE FROM THE LOCAL USDA - SCS OFFICE IN MILFORD, NH.)

IN ADDITION, SNOW FENCING SHALL BE REQUIRED AS NECESSARY TO REDUCE CROSS WINDS FROM BLOWING SAND OR DUST TOWARDS ADJUTER'S HOUSES.

A STABILIZATION CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED OF 2-3 INCH STONE ACROSS THE FULL WIDTH OF THE VEHICLE INGRESS EGRESS AREA. THE STONE PAD SHOULD BE AT LEAST 30 FEET LONG, 24 FEET WIDE AND AT LEAST 8 INCHES THICK. ADDITIONAL STONE MAY HAVE TO BE ADDED PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE PAD. THE INTENT OF THIS CONSTRUCTION SITE ENTRANCE TREATMENT IS TO MINIMIZE THE AMOUNT OF SOIL CARRIED OFF SITE AND/OR ONTO LOCAL ROADS BY VARIOUS CONSTRUCTION EQUIPMENT AND TRUCKS. (SEE STABILIZED CONSTRUCTION ENTRANCE DETAIL ON DETAIL SHEET.)

SPECIAL WINTER STABILIZATION

- 1) ALL SLOPES AND EASILY ERODIBLE AREAS SHALL BE MULCHED WITH HAY AND TRACKED IN WITH EQUIPMENT. SNOW SLOPES WILL NOT BE FINISH GRADED, LOADED, OR SEEDED UNTIL SPRING.
- 2) LOAM PILE AND INACTIVE PILES OF SOIL CONSTRUCTION MATERIAL SHALL BE STABILIZED WITH HAY MULCH AND SURROUNDED WITH SILT FENCE.

STRUCTURAL MEASURES

STRAW BALE BARRIERS/SILT SCREEN FENCES: STRAW BALE BARRIERS AND/OR SILT SCREEN FENCES ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY TO INTERCEPT AND FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF, OR AS SEDIMENT TRAPS IN SMALL SWALES. STRAW BALES HAVE A USEFUL LIFE OF THREE MONTHS WHEN WET AND THEREFORE MUST BE INSPECTED AND REPAIRED OR REPLACED PERIODICALLY. SILT SCREEN FENCES WILL FUNCTION SIX MONTHS OR LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS. (SEE DETAILS FOR ADDITIONAL INFORMATION.)

DIVERSIONS: TEMPORARY AND/OR PERMANENT DIVERSIONS ARE TO BE INSTALLED AS SHOWN ON THE PLAN. A DIVERSION IS AN EARTH CHANNEL WITH A SUPPORTING RIDGE OF COMPACTED SOIL ON THE LOWER SIDE CONSTRUCTED ACROSS THE SLOPE. DIVERSIONS ARE TO BE USED TO INTERCEPT AND DIVERT WATER FROM AN AREA WHERE IT IS IN EXCESS AND ERODIVE TO AREAS WHERE IT CAN BE USED OR DISPOSED OF SAFELY. DIVERSIONS ARE INTENDED TO DIVERT WATER FROM UNDISTURBED AREAS AND PREVENT IT FROM ENTERING A DISTURBED AREA OR DIVERT WATER FROM THE CONSTRUCTION SITE FLOWING ONTO SENSITIVE AREA OR ADJACENT PROPERTY (SEE DETAIL FOR ADDITIONAL INFORMATION.)

SWALES: TEMPORARY AND/OR PERMANENT SWALES ARE TO BE INSTALLED AS SHOWN ON THE PLAN. SWALES ARE USED TO CONVERT SHEET FLOW TO CHANNEL FLOW AND CONVEY THE RUNOFF TO A PERMANENT CHANNEL, STORM DRAIN, OR DETENTION/SEDIMENT STRUCTURE. SWALES ARE INTENDED TO INTERCEPT RUNOFF AND DIVERT IT FROM AN EXPOSED OR NEWLY SEDED SLOPE TOWARD AN ACCEPTABLE OUTLET (SWALE, SEDIMENTATION POND, ETC.) OR TO REDUCE THE VELOCITY OF RUNOFF FLOWING DOWN FROM A DRAINAGE AREA. (SEE DETAIL FOR ADDITIONAL INFORMATION.)

DETENTION/SEDIMENTATION BASINS: PERMANENT DETENTION/SEDIMENTATION BASINS ARE TO BE INSTALLED AS SHOWN ON THE PLAN. THESE STRUCTURES HAVE A TWOFOLD PURPOSE: ONE IS TO DETAIN STORM WATER PEAK FLOWS FOR FLOOD CONTROL AND SECONDLY TO PROVIDE "OF THE SITE RUNOFF BEFORE IT IS DISCHARGED FROM THE BASIN TO AN EXISTING WATER FEATURE OR OTHER DRAINAGE SYSTEM. TREATMENT IN A DETENTION/SEDIMENTATION BASIN WOULD CONSIST OF ANY NUMBER OF OTHER MEASURES TO FILTER OR CAUSE TO SETTLE OUT ANY SEDIMENT OR OTHER DEBRIS FROM THE RUNOFF WATER UNDER NORMAL (NON-FLOOD) CONDITIONS.

VEGETATIVE MEASURES

TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEEDING. THE STOCK PILE WILL NOT BE COMPACTED AND SHALL BE STABILIZED AGAINST EROSION WITH TEMPORARY SEEDING.

- TEMPORARY SEEDING:
- A) BEDDING: REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT THREE INCHES TO PREPARE SEED BED AND MIX THE FERTILIZER INTO THE SOIL.
 - B) FERTILIZER: FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING TILLED INTO THE SOIL. A 10-10-10 MIX OF FERTILIZER SHOULD BE APPLIED AT A RATE OF 300 POUNDS PER ACRE (OR 7 POUNDS PER 1,000 S.F.)
 - C) SEED MIXTURE: USE ANY OF THE FOLLOWING:

SPECIES	SEEDING RATE		DATES	DEPTH
	PER ACRE	PER 1000 S.F.		
WINTER RYE	112 LBS.	2.5 LBS.	8/15 - 9/5	1 INCH
GRASS	80 LBS.	2.0 LBS.	8/15 - 9/5	1 INCH
RYEGRASS	40 LBS.	1.0 LBS.	4/15 - 8/15	1 INCH

D) MULCHING: WHERE IT IS IMPRACTICAL TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEEDING AREA SHOULD BE MULCHED TO FACILITATE GERMINATION. MULCH IN THE FORM OF HAY OR STRAW SHOULD BE APPLIED AT A RATE OF 70 TO 90 LBS. PER 1,000 S.F.

- PERMANENT SEEDING:
- A) BEDDING: STONES LARGER THAN FOUR INCHES, TRASH, ROOTS, AND OTHER DEBRIS THAT WILL INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE THE SOIL SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION.
 - B) FERTILIZER: LIME AND FERTILIZER SHOULD BE APPLIED EVENLY OVER THE AREA PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

- AGRICULTURAL LIMESTONE @ 100 LBS. PER 1,000 S.F.
- 10-20-20 FERTILIZER @ 12 LBS. PER 1,000 S.F.

C) SEED MIXTURE: (RECOMMENDED)

TYPE	SEEDING RATE		USE
	LBS. PER ACRE	LBS. PER 1,000 S.F.	
I. CREEPING BEO FESCUE	20	0.45	STEEP CUTS AND FILLS
II. CREEPING BEO FESCUE	20	0.45	DETENTION BASINS
III. CREEPING BEO FESCUE	2	0.05	AND SWALES
TOTAL	42	0.95	
IV. CREEPING BEO FESCUE	50	1.15	ALL OTHER AREAS
KENTUCKY BLUEGRASS	50	1.15	
TOTAL	100	2.30	

D) MULCHING: MULCH SHOULD BE USED ON HIGHLY ERODIBLE SOIL ON CRITICALLY ERODING AREAS, AND ON AREAS WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT.

TYPE	RATE PER 1,000 S.F.	USE AND COMMENTS
HAY OR STRAW	70 TO 90 LBS.	MUST BE DRY AND FREE OF MOULD. MAY BE USED WITH PLANTINGS.
WOOD CHIPS OR BARK MULCH	180 TO 220 LBS.	USED MOSTLY WITH TREES AND SHRUBS PLANTINGS.
WATE AND FIBROUS MATTING	AS PER MANUFACTURERS SPECIFICATIONS	USED IN SLOPE AREAS TO WATER COURSED AND OTHER AREAS.
CRUSHED STONE	SPREAD MORE THAN 1/2" TO 1 1/2" DIA.	EFFECTIVE IN CONTROLLING MOISTURE AND WATER EROSION.

MAINTENANCE

E) SOODING: SOODING IS DONE WHERE IT IS DESIRABLE TO RAPIDLY ESTABLISH COVER ON A DISTURBED AREA. SOODING AN AREA MAY BE SUBSTITUTED FOR PERMANENT SEEDING PROCEDURES ANY WHERE ON SITE. BED PREPARATION, FERTILIZING, AND PLACEMENT OF SOO SHALL BE PERFORMED ACCORDING TO THE S.C.S. HANDBOOK.

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED:

- 1) SEED AREAS WILL BE FERTILIZED AND BE SEEDS AS NECESSARY TO INSURE VEGETATION ESTABLISHMENT.
- 2) ADDITIONAL STONE MAY HAVE TO BE ADDED TO THE CONSTRUCTION ENTRANCE, ROCK LINED SWALES, ETC. PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE EROSION CONTROL STRUCTURE.
- 3) ALL DIVERSIONS AND SWALES WILL BE CHECKED REGULARLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
- 4) ALL STRAW BALE BARRIERS AND SILT SCREEN FENCES WILL BE CHECKED REGULARLY. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER.
- 5) THE SEDIMENTATION OR DETENTION/SEDIMENTATION BASINS WILL BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN THE DESIGN CAPACITY.

CONSTRUCTION SEQUENCE

- 1) CUT AND CLEAR TREES ONLY TO LIMIT CUT/FILL SLOPES.
- 2) CONSTRUCT TEMPORARY SEDIMENT AND EROSION CONTROL FACILITIES. SEDIMENT AND EROSION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS. REMOVE AND STOCKPILE LOAM ON-SITE FOR REUSE ON-SITE. SEED AND MULCH STOCKPILE. SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUN OFF INTO THEM.
- 3) CLEAR, CUT AND DISPOSE OF DEBRIS. DISPOSAL OF DEBRIS SHALL MEET LOCAL, STATE AND FEDERAL REQUIREMENTS.
- 4) CONSTRUCT DRAINAGE SYSTEMS.
- 5) CONSTRUCT DRIVES AND PARKING AREAS TO THE FIRST WORK UNIT. ALL DRIVES AND PARKING AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- 6) BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE LOADED, SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
- 7) CONSTRUCT TEMPORARY DIVERSION CHANNELS, AS REQUIRED.
- 8) DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- 9) INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION MEASURES.
- 10) COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 11) REMOVE TEMPORARY EROSION CONTROL MEASURES.

RIPRAP SPECIFICATIONS

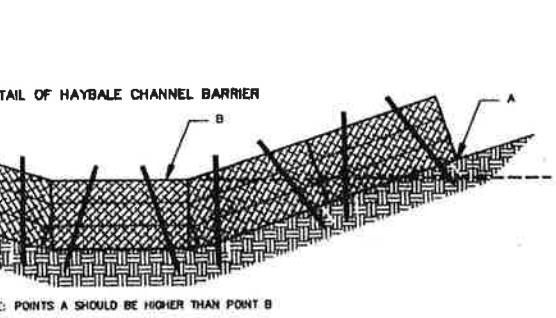
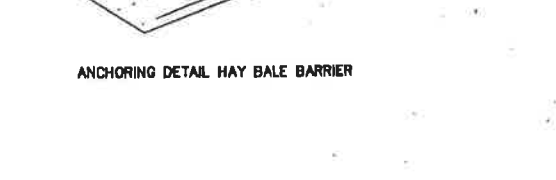
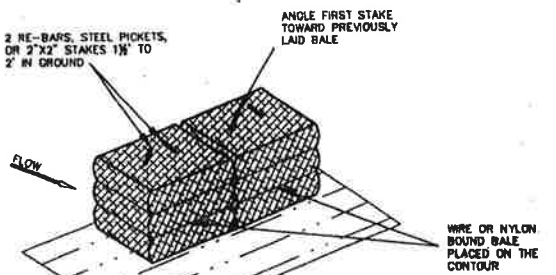
- 1.1 THIS WORK SHALL BE CONSIST OF A PROTECTIVE COVERING OF STONE CONSTRUCTED AT THE LOCATIONS SHOWN ON THE PLANS.
- 2.1 FIELD STONE, QUARRY STONE, OR ROCK FRAGMENTS USED FOR RIPRAP SHALL BE SOUND OF APPROVED QUALITY, FREE FROM STRUCTURAL DEFECTS, HAVING APPROXIMATELY RECTANGULAR SHAPES WITH ONE REASONABLY FLAT SIDE FOR THE TOP SURFACE, AND HAVE MINIMUM DIMENSIONS AND VOLUMES AS LISTED BELOW:
 - A) RIP RAP "A": 1" THICK, 75% OF THE STONES SHALL HAVE A MINIMUM VOLUME OF 2 CUBIC FEET; THE REMAINDER SHALL HAVE A MINIMUM VOLUME OF 1/2 CUBIC FEET.
 - B) RIP RAP "B": 1 1/2" THICK, 75% SHALL HAVE A MINIMUM VOLUME OF 8 CUBIC FEET.
 - C) RIP RAP "C": 2" THICK, 75% SHALL HAVE A MINIMUM VOLUME OF 12 CUBIC FEET.
 - D) RIP RAP "D": 2 1/2" THICK, 75% SHALL HAVE A MINIMUM VOLUME OF 18 CUBIC FEET.
- 2.2 GRAVEL BLANKET MATERIAL SHALL CONFORM TO N.H.D.O.T. 209.2.1.1.2 CONSTRUCTION REQUIREMENTS.
- 3.1 RIPRAP STONES SHALL BE INDIVIDUALLY LAID UPWARD FROM THE TOE OF THE SLOPE WITH THE LARGER STONES AT THE TOE OF THE SLOPE. THE STONES SHALL BE LAID WITH CLOSE JOINTS ROUGHLY PERPENDICULAR TO THE SLOPE. OPEN JOINTS SHALL BE FILLED WITH SPALLS.
- 3.2 WHEN GRAVEL BLANKET IS SHOWN, THE GRAVEL SHALL BE PLACED IN LAYERS NOT EXCEEDING 12" DEPTH UNLESS OTHERWISE ORDERED.
- 3.3 THE FINISHED SURFACE SHALL BE REASONABLY UNIFORM IN APPEARANCE, APPROXIMATELY PARALLEL TO AND WITHIN 6" OF THE LINES AND GRADES SHOWN.

INSTALLATION PROCEDURE FOR CHANNEL FLOW APPLICATIONS

- 1) EXCAVATE A 4 INCH DEEP TRENCH THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER. PLACE BALES IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE FLOW, AND WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING EACH ONE ANOTHER.
- 2) PLACE BALES IN THE TRENCH WITH THEIR ENDS TIGHTLY ABUTTING. CORNER ABUTMENT IS NOT ACCEPTABLE. A TIGHT FIT IS IMPORTANT TO PREVENT SEDIMENT FROM ESCAPING THROUGH THE SPACES BETWEEN THE BALES. EXTEND THE BARRIER TO SUCH A LENGTH THAT THE BOTTOM OF THE END BALES ARE AT A HIGHER ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT-LADEN RUN-OFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT. ROCK PLACED BELOW THE MIDDLE BALE WILL DISSIPATE THE ENERGY OF THE FALLING WATER AND REDUCE DOWNSTREAM EROSION.
- 3) ALL BALES MUST BE EITHER WIRE-BOUND OR STRING-TIED. INSTALL BALES SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. IF THE BINDING IS PLACED IN CONTACT WITH THE SOIL, IT WILL SOON DISINTEGRATE AND CAUSE THE BALE TO FALL APART.
- 4) SECURELY ANCHOR EACH BALE BY DRIVING AT LEAST TWO STAKES THROUGH THE BALE. DRIVE THE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. DRIVE THE STAKES AT LEAST 1 1/2 FEET INTO THE GROUND. WOOD STAKES, 2 BY 2 INCHES BY 4 FEET ARE BEST. REBARS ALSO CAN BE USED AS STAKES, BUT ARE NOT RECOMMENDED BECAUSE THEY CAN BE HAZARD TO EQUIPMENT WHEN THE BALES DISINTEGRATE.
- 5) FILL ANY GAPS BETWEEN BALES BY WEDGING LOOSE STRAW BETWEEN THE BALES. LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL FROM A STRAW BARRIER TENDS TO INCREASE BARRIER EFFICIENCY, IT IS PICKED UP BY RUNOFF AND TRANSPORTED TO HOLES IN THE BARRIER, WHICH IT TENDS TO SEAL.
- 6) BACKFILL THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT IT. THE BACKFILL SOIL SHOULD CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE OF THE BARRIER AND SHOULD BE BUILT UP TO 4 INCHES ABOVE THE GROUND ON THE UPHILL SIDE OF THE BALES. ROCK PLACED BELOW THE MIDDLE BALE WILL DISSIPATE THE ENERGY OF THE FALLING WATER AND REDUCE DOWNSTREAM EROSION.
- 7) INSPECT AND REPAIR OR REPLACE DAMAGED BALES PROMPTLY. STRAW BALES TYPICALLY DETERIORATE WITHIN THREE MONTHS WHEN WET. REMOVE THE STRAW BALES WHEN THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

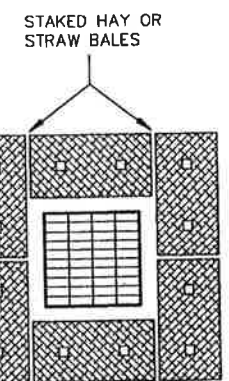
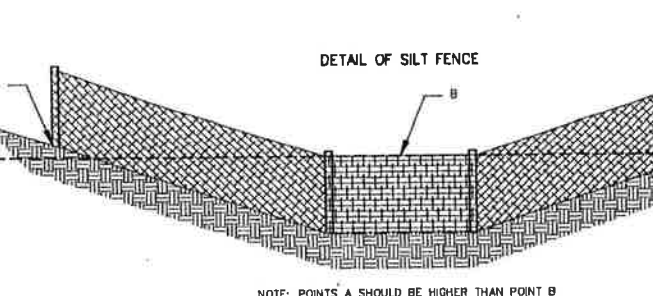
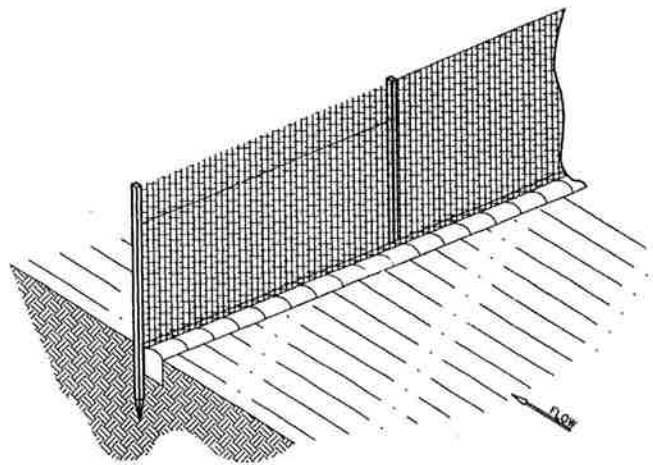
INSTALLATION PROCEDURE FOR SHEET FLOW APPLICATIONS

- 1) EXCAVATE A 4 INCH DEEP TRENCH THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER. THE BARRIER SHOULD FOLLOW THE SLOPE CONTOUR. IF THE BARRIER IS AT THE TOE OF A SLOPE, PLACE IT 5 TO 6 FEET AWAY FROM THE SLOPE IF POSSIBLE. THIS PLACEMENT WILL PROVIDE ACCESS FOR MAINTENANCE BEFORE IT REACHES THE BARRIER.
- 2) PLACE BALES IN THE TRENCH WITH THEIR ENDS TIGHTLY ABUTTING. CORNER ABUTMENT IS NOT ACCEPTABLE. A TIGHT FIT IS IMPORTANT TO PREVENT SEDIMENT FROM ESCAPING THROUGH THE SPACES BETWEEN THE BALES.
- 3) ALL BALES MUST BE EITHER WIRE-BOUND OR STRING-TIED. INSTALL BALES SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. IF THE BINDING IS PLACED IN CONTACT WITH THE SOIL, IT WILL SOON DISINTEGRATE AND CAUSE THE BALE TO FALL APART.
- 4) SECURELY ANCHOR EACH BALE BY DRIVING AT LEAST TWO STAKES THROUGH THE BALE. DRIVE THE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. DRIVE THE STAKES AT LEAST 1 1/2 FEET INTO THE GROUND. WOOD STAKES, 2 BY 2 INCHES BY 4 FEET ARE BEST. REBARS ALSO CAN BE USED AS STAKES, BUT ARE NOT RECOMMENDED BECAUSE THEY CAN BE HAZARD TO EQUIPMENT WHEN THE BALES DISINTEGRATE.
- 5) FILL ANY GAPS BETWEEN BALES BY WEDGING LOOSE STRAW BETWEEN THE BALES. LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL FROM A STRAW BARRIER TENDS TO INCREASE BARRIER EFFICIENCY, IT IS PICKED UP BY RUNOFF AND TRANSPORTED TO HOLES IN THE BARRIER, WHICH IT TENDS TO SEAL.
- 6) BACKFILL THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT IT. THE BACKFILL SOIL SHOULD CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE OF THE BARRIER AND SHOULD BE BUILT UP TO 4 INCHES ABOVE THE GROUND ON THE UPHILL SIDE OF THE BALES.
- 7) INSPECT AND REPAIR OR REPLACE DAMAGED BALES PROMPTLY. STRAW BALES TYPICALLY DETERIORATE WITHIN THREE MONTHS WHEN WET. REMOVE THE STRAW BALES WHEN THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.



INSTALLATION PROCEDURE

- 1) LAYOUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SWALES, CURVE THE FENCE LINE UPSLOPE AT SIDES TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE. THE SIDES SHOULD BE HIGHER THAN THE CENTER AS ILLUSTRATED. SPACE POSTS A MAXIMUM OF 10 FEET APART AND DRIVE THEM AT LEAST 12 INCHES INTO THE GROUND. (WHEN EXTRA-STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING MUST NOT EXCEED 8 FEET.) POSTS FOR SILT FENCES CAN BE EITHER 4 INCH DIAMETER WOOD OR 1.33 LB./FT. STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE BY 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
- 2) FASTEN HEAVY WIRE MESH SECURELY TO THE UPSLOPE SIDE OF THE POSTS. USE HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG AND THE WIRES OR HOOD RINGS EXTEND THE WIRE 8 INCHES INTO THE TRENCH. WIRE FENCE REINFORCEMENT FOR SILT FENCES MUST BE A MINIMUM OF 42 INCHES WIDE, BE A MINIMUM OF 14 GAUGE, AND HAVE A MAXIMUM MESH SPACING OF 8 INCHES. THE 42 INCH LENGTH IS NEEDED SO THAT 8 INCHES CAN BE EXTENDED INTO THE TRENCH AND LEAVE A 36 INCH SUPPORT FENCE ABOVE THE GROUND. (NOTE: WHEN EXTRA-STRENGTH FABRIC IS USED AND FENCE POSTS ARE MORE CLOSELY SPACED, THE WIRE MESH CAN BE OMITTED.)
- 3) FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND IT TO 6 TO 8 INCHES INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 INCHES. DO NOT STAPLE FABRIC ONTO TREES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPlice THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM 6 INCHES OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST.
- 4) BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.



APPROVED BY THE TOWN OF ALLENSTOWN PLANNING BOARD

DATE _____ CHAIRMAN _____

LEGEND

STONE WALL	—○—○—○—○—	VERY POORLY DRAINED WETLANDS	—VP—VP—
PROPERTY LINE	—○—○—○—○—	POORLY DRAINED WETLANDS	—P—P—
B.L.D. SETBACK LINE	—○—○—○—○—	UTILITY POLE	—○—
CONTOUR LINE (1')	—○—○—○—○—	IRON PIPE FOUND	—○—
CONTOUR LINE (10')	—○—○—○—○—	BOUND FOUND	—○—
TREE LINE	—○—○—○—○—	DRILL HOLE FOUND	—○—
SEASONAL RUNOFF	—○—○—○—○—	BOUND TO BE SET (4" x 4" x 36")	—○—
SOILS BOUNDARY LINE	—○—○—○—○—		

KEYLAND ENTERPRISES

78 SO. STATE STREET, CONCORD, NH 03301, (603)-224-7587

NO.	DATE	REVISION	BY
1	12/1/99	ADD CATCH BASIN DETAIL & CORRECT ERRORS	AMB
2	12/2/99	WINTER STABILIZATION NOTE	AMB
3	4/18/00	AMEND GENERAL NOTE TO ADDRESS CROSS WINDS	AMB

SOIL EROSION AND SEDIMENT CONTROL NOTES

FOR TAMCHAR, INC. MAP #1, LOT #2 GRANITE STREET, ALLENSTOWN

OPERATION AND REMOVAL PHASES

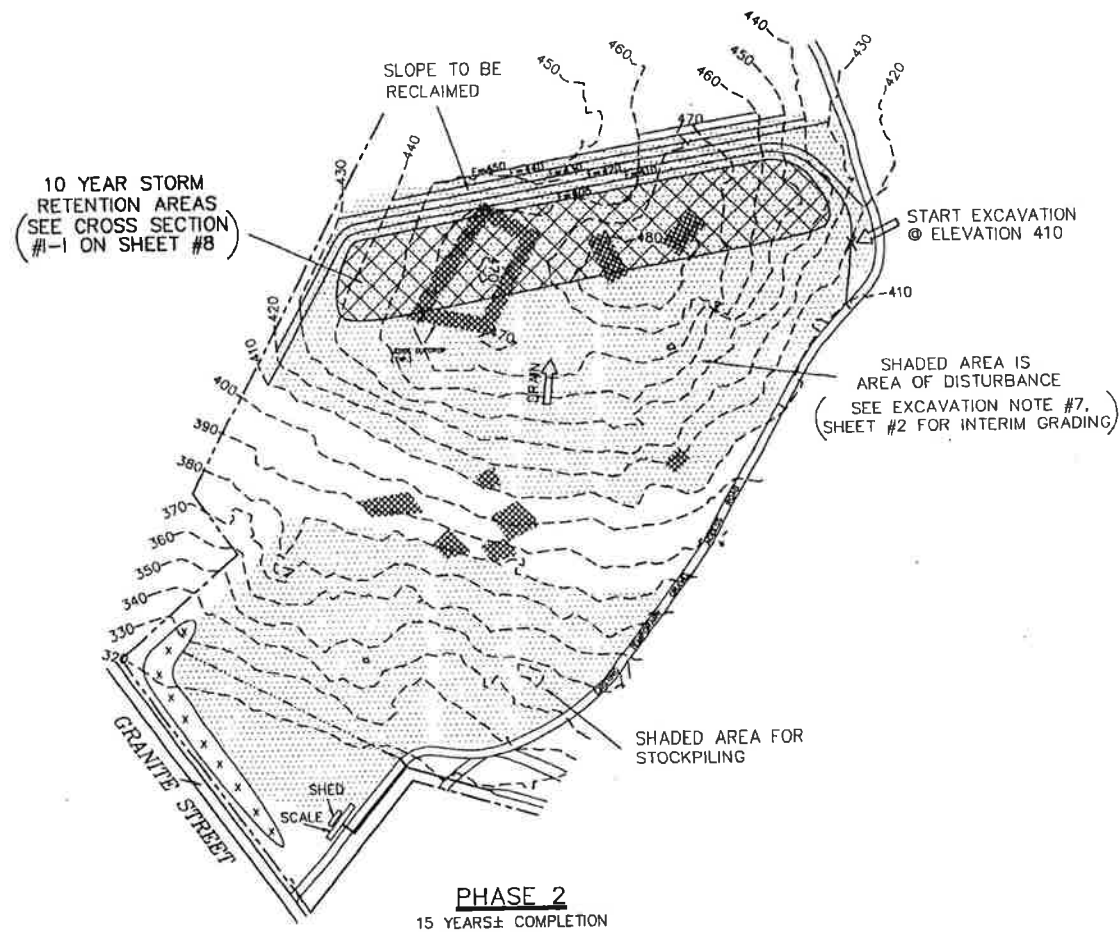
THE FOLLOWING ARE THE PHASES FOR OPERATION AND REMOVAL. AFTER EACH PHASE IS COMPLETED, IT SHALL BE CONFIRMED BY THE TOWN PLANNING BOARD PRIOR TO STARTING NEXT PHASE.

- PHASE 1) COMPLETE SCALE, CONSTRUCT BERM WITH VEGETATIVE BUFFERS, CONSTRUCT TEMPORARY SEDIMENTATION PONDS, AND INSTALL EROSION AND DUST CONTROL AS NECESSARY.
- PHASE 2) START IN SOUTH EAST CORNER OF PROPOSED REMOVAL AREA AT APPROXIMATE ELEVATION OF 410. WORK WILL PROCEED WITH A MAXIMUM OF A 60' VERTICAL FACE, TOWARDS THE NORTH WEST UNTIL ENTIRE AREA IS AT GRADE OF ELEVATION 410.
- PHASE 3) START AT GRADE LEVEL 320 IN NORTH WEST CORNER OF PROPOSED LEDGE REMOVAL AREA AND WORK TOWARDS SOUTH EAST. WORK WILL PROCEED UP HILL AT A 1% SLOPE UNTIL REACHING SOUTH EAST CORNER AT APPROXIMATE GRADE ELEVATION OF 340.
- PHASE 4) START IN NORTH WEST CORNER AT GRADE ELEVATION 340 AND WORK TOWARDS THE NORTH EAST CORNER. WORK WILL PROCEED UNTIL REACHING NORTH EAST CORNER OF PROPERTY AT A GRADE ELEVATION OF 345.

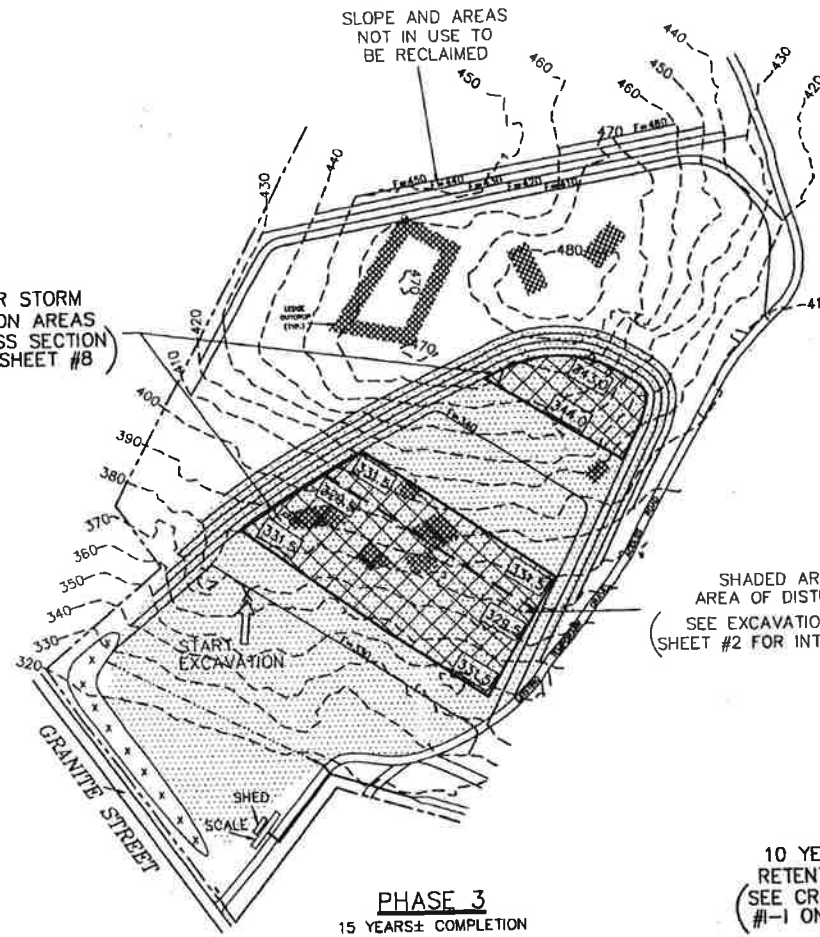
RECLAMATION STANDARDS

WITHIN 12 MONTHS AFTER THE EXPIRATION DATE IN A PERMIT ISSUED UNDER THIS CHAPTER, OR OF THE COMPLETION OF ANY EXCAVATION, WHICHEVER OCCURS FIRST, THE OWNER OF THE EXCAVATED LAND SHALL HAVE COMPLETED THE RECLAMATION OF THE AREAS AFFECTED BY THE EXCAVATION TO MEET EACH OF THE FOLLOWING MINIMUM STANDARDS:

- 1) EXCEPT FOR EXPOSED ROCK LEDGE, ALL AREAS WHICH HAVE BEEN AFFECTED BY THE EXCAVATION OR OTHERWISE STRIPPED OF VEGETATION SHALL BE SPREAD WITH TOP-SOIL OR STRIPPINGS, IF ANY, BUT IN ANY CASE COVERED BY SOIL CAPABLE OF SUSTAINING VEGETATION, AND SHALL BE PLANTED WITH SEEDLINGS OR GRASS SUITABLE TO PREVENT EROSION.
- 2) EARTH AND VEGETATIVE DEBRIS RESULTING FROM THE EXCAVATION SHALL BE REMOVED OR OTHERWISE LAWFULLY DISPOSED OF.
- 3) ALL SLOPES, EXCEPT FOR EXPOSED LEDGE, SHALL BE GRADED TO NATURAL REPOSE FOR THE SOIL TYPE OF WHICH THEY ARE COMPOSED SO AS TO CONTROL EROSION OR AT A RATIO OF HORIZONTAL TO VERTICAL PROPOSED BY THE OWNER AND APPROVED BY THE REGULATOR. CHANGES OF SLOPE SHALL NOT BE ABRUPT, BUT SHALL BLEND WITH THE SURROUNDING TERRAIN.
- 4) THE ELIMINATION OF ANY STANDING BODIES OF WATER CREATED IN THE THE EXCAVATIONS PROJECT AS MAY CONSTITUTE A HAZARD TO HEALTH AND SAFETY.
- 5) THE TOPOGRAPHY OF THE LAND SHALL BE LEFT SO THAT WATER DRAINING FROM THE SITE LEAVES THE PROPERTY AT THE ORIGINAL, NATURAL DRAINAGE POINTS AND IN THE NATURAL PROPORTIONS OF FLOW.
- 6) NO SEWAGE SLUDGE, PAPER MILL SLUDGE, OR OTHER SLUDGE OR SEPTAGE SHALL BE USED IN THE RECLAMATION OF EXCAVATED OR DISTURBED AREAS.



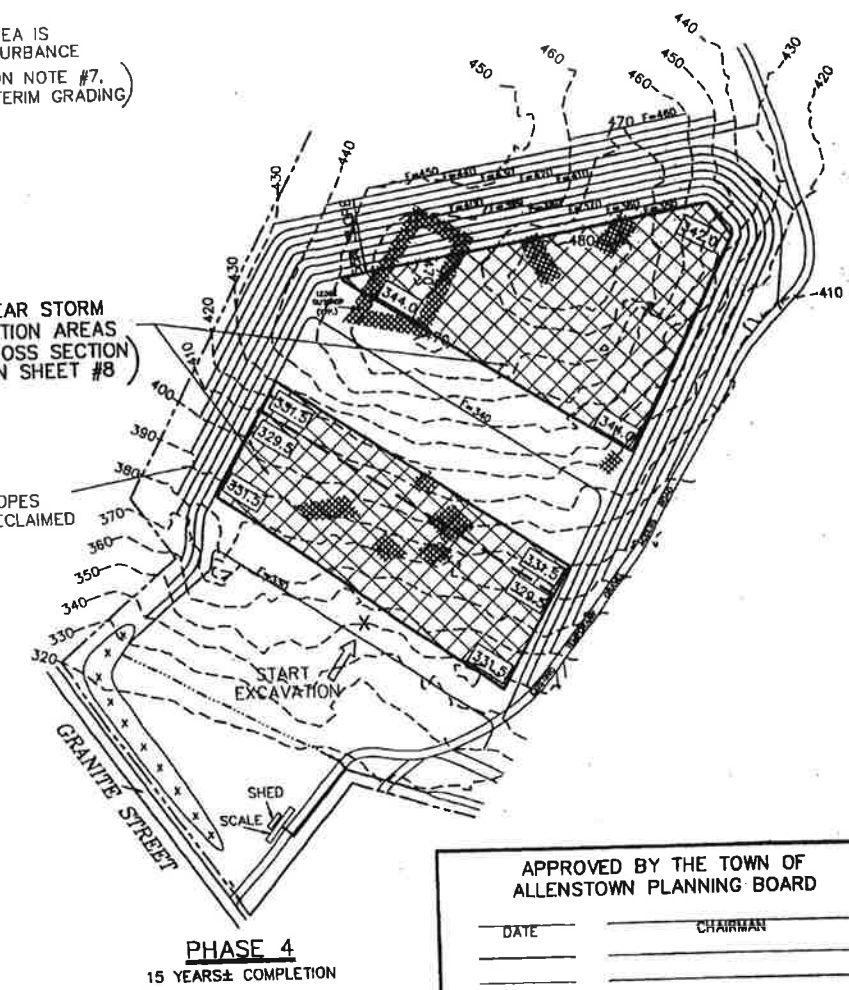
10 YEAR STORM RETENTION AREAS (SEE CROSS SECTION #1-1 ON SHEET #8)



SHADED AREA IS AREA OF DISTURBANCE (SEE EXCAVATION NOTE #7, SHEET #2 FOR INTERIM GRADING)

10 YEAR STORM RETENTION AREAS (SEE CROSS SECTION #1-1 ON SHEET #8)

FINAL SLOPES TO BE RECLAIMED

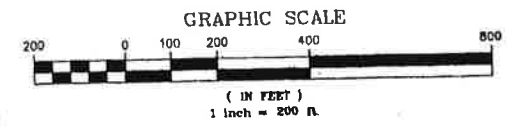


APPROVED BY THE TOWN OF ALLENSTOWN PLANNING BOARD

DATE _____ CHAIRMAN _____

LEGEND

STONE WALL	○○○○○○○○	VERY POORLY DRAINED WETLANDS	- - - - -
PROPERTY LINE	-----	POORLY DRAINED WETLANDS	- - - - -
BLDG. SETBACK LINE	-----	UTILITY POLE	○
CONTOUR LINE (10')	-----	IRON PIN/PIPE FOUND	○
TREE LINE	-----	GRANITE BOUND FOUND	○
SEASONAL RUNOFF	-----	IRON PIN SET	○
SOILS BOUNDARY LINE	-----	BOUND TO BE SET (4" x 4" x 36")	○
SILT FENCE	-----	HAY BALES	■



NO.	DATE	REVISION	BY
1	12/8/99	AMENDED TO SHOW DRAINAGE RETENTION IN PIT AREA	AMB
2	2/15/00	REMOVE REFERENCE TO CHAIRPERSON	AMB
3	4/6/00	AMEND PHASE 1 NOTE	AMB
4	7/29/00	ADD RECLAMATION NOTICE 6	AMB

OPERATION AND REMOVAL PHASES
GRANITE STREET, ALLENSTOWN, N.H.
MAP #1, LOT #2
PREPARED FOR
TAMCHAR, INC.
PREPARED BY KEYLAND ENTERPRISES
OCTOBER 30, 1999 SCALE: 1" = 200'

