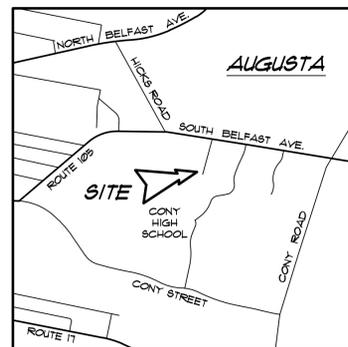


NOTES

- 1) THE PURPOSE OF THIS PLAN IS TO SERVE AS A VISUAL AID IN DETERMINING THE SITE'S DEVELOPMENT POTENTIAL AND OBTAIN THE NECESSARY PERMITS FOR PROJECT APPROVAL. BOUNDARY INFORMATION WAS TAKEN FROM CITY OF AUGUSTA PARCELS AS MAPPED ON THE MAINE OFFICE OF G.I.S. WEBSITE.
- 2) ALL BOOK AND PAGE NUMBERS REFER TO THE KENNEBEC COUNTY REGISTRY OF DEEDS.
- 3) OWNER OF RECORD - KENNEBEC COMMUNITY CHURCH
DEED REFERENCE - BOOK 11609, PAGE 211
TAX MAP 10, LOT 19A
- 4) PARCEL AREA = 10.86 ACRES (PER TAX MAP)
- 5) THE PARCEL IS LOCATED IN THE LOW DENSITY RESIDENTIAL (RA) ZONING DISTRICT.
- 6) THE PARCEL IS NOT LOCATED WITHIN A 100-YEAR FLOOD HAZARD AREA AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL #23011C 0520D, DATED JUNE 16, 2011.
- 7) THE LOCATION, DEPTH, SIZE AND EXISTENCE OF ALL UNDERGROUND UTILITY LINES, TANKS AND/OR STRUCTURES WAS NOT DETERMINED. THE CONTRACTOR SHALL CONTACT DIGSAFE/ON-TARGET PRIOR TO EXCAVATION TO DETERMINE ACTUAL LOCATION OF PUBLIC AND PRIVATE UTILITIES INT HE PROJECT AREA.



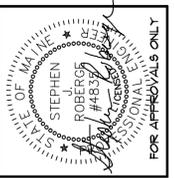
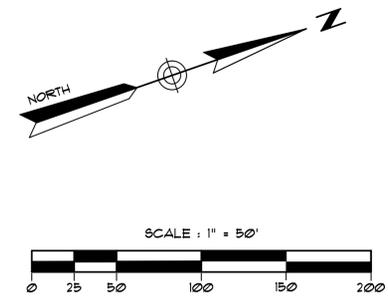
LOCATION MAP

SITE TABULATIONS

BUILDINGS	0.25 acre	2.3%
EXISTING PAVEMENT	1.14 acre	10.5%
TOTAL EXISTING IMPERVIOUS	1.39 acre	12.8%
PROPOSED PAVEMENT	0.61 acre	5.6%
GREEN SPACE (POST PROJECT)	8.86 acre	81.6%
TOTAL AREA	10.86 acres	100%
TOTAL DISTURBED AREA	0.99 ac / 43,250 sf	
TOTAL PARKING SPACES	= 170	

LEGEND

- BOUNDARY LINE (SURVEYED PARCEL)
- BOUNDARY LINE (OTHER)
- NOW OR FORMERLY
- BOOK AND PAGE NUMBER
- RECENTLY CUT TREELINE
- PROPOSED TREE LINE
- PROPOSED CHAIN LINK FENCE
- PROPOSED PAVEMENT



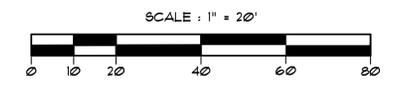
REV.	BY:	DATE:	DESCRIPTION:
1	SJR	MAY 20, 2016	NEW PARKING LOT/POND LAYOUT, ADJUST SITE TABS
			CHANGES:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SJR ENGINEERING, INC.

SJR ENGINEERING, INC.
21 MATFLOWER ROAD
AUGUSTA, MAINE 04330
(207) 622-1616 tel & fax
steve@sjreng.com

SITE OVERVIEW PLAN
PARKING LOT EXPANSION
PREPARED FOR
KENNEBEC COMMUNITY CHURCH
20 SAINT ANDREWS STREET - AUGUSTA, MAINE

DATE	PROJECT
MAY 2016	2016-14
DRAWN BY	SCALE
SJR	1" = 20'



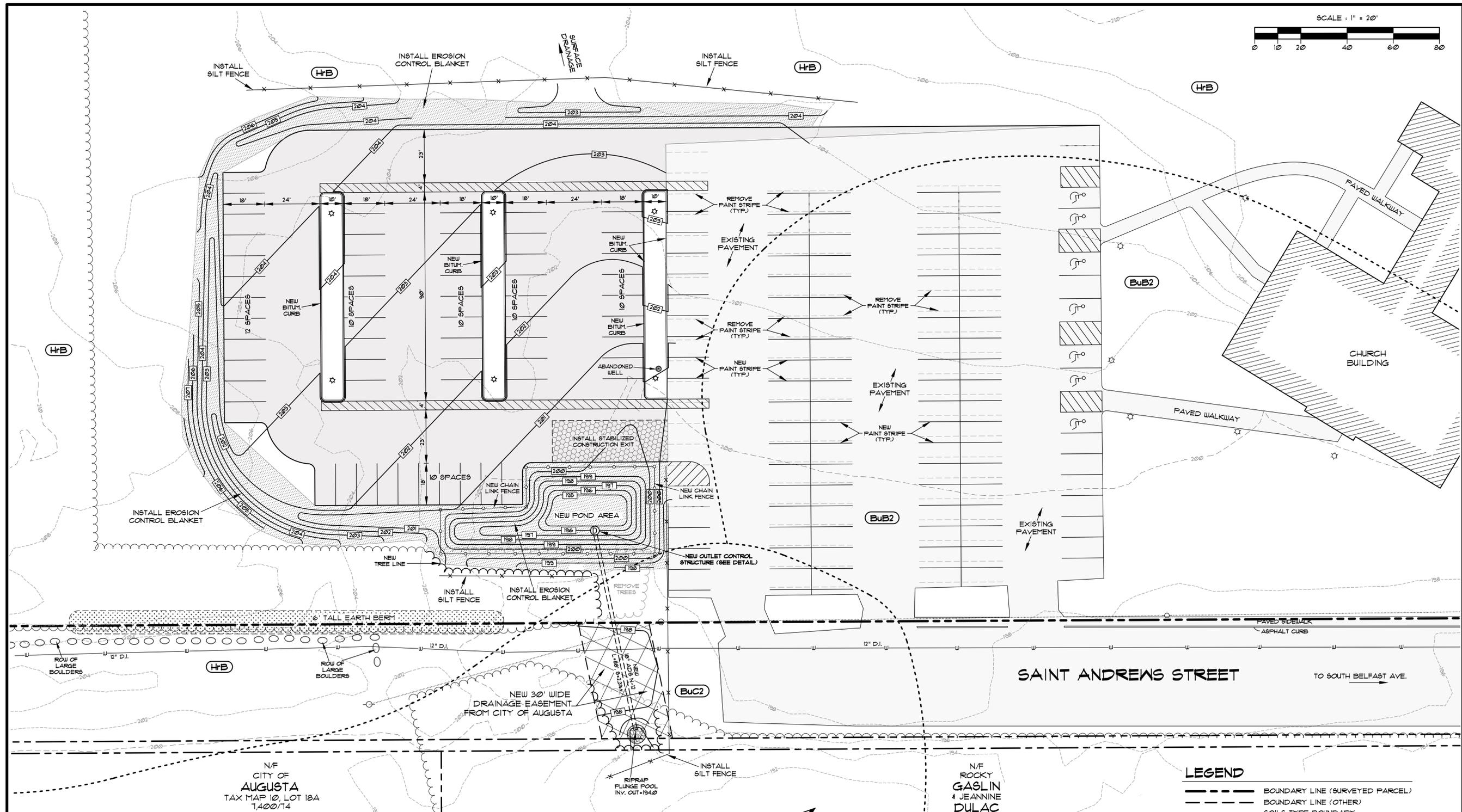
REV.	BY:	DATE:	DESCRIPTION:
1	SJR	MAY 29, 2016	NEW PARKING LOT/FOND LAYOUT, ADJUST SITE TABS
			CHANGES:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SJR ENGINEERING, INC.

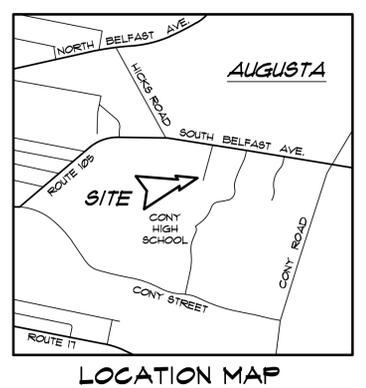
SJR ENGINEERING, INC.
 21 MATFLOWER ROAD
 AUGUSTA, MAINE 04330
 (207) 622-1616 tel & fax
 steve@sjreng.com

**TOPOGRAPHIC SITE PLAN
 PARKING LOT EXPANSION
 PREPARED FOR
 KENNEBEC COMMUNITY CHURCH
 20 SAINT ANDREWS STREET - AUGUSTA, MAINE**

DATE	PROJECT
MAY 2016	2016-14
DRAWN BY	SCALE
SJR	1" = 20'



- NOTES**
- 1) THE PURPOSE OF THIS PLAN IS TO SERVE AS A VISUAL AID IN DETERMINING THE SITE'S DEVELOPMENT POTENTIAL AND OBTAIN THE NECESSARY PERMITS FOR PROJECT APPROVAL. BOUNDARY INFORMATION WAS TAKEN FROM AUGUSTA PARCEL MAPPING FROM THE MAINE OFFICE OF G.I.S. WEBSITE. TOPOGRAPHIC INFORMATION WAS TAKEN FROM 2' LIDAR CONTOURS OBTAINED FROM THE OFFICE OF MAINE G.I.S.
 - 2) ALL BOOK AND PAGE NUMBERS REFER TO THE KENNEBEC COUNTY REGISTRY OF DEEDS.
 - 3) OWNER OF RECORD - KENNEBEC COMMUNITY CHURCH
 DEED REFERENCE - BOOK 11,603, PAGE 271
 TAX MAP 10, LOT 18A
 - 4) PARCEL AREA = 10.86 ACRES (PER TAX MAP)
 - 5) THE PARCEL IS LOCATED IN THE LOW DENSITY RESIDENTIAL (RA) ZONING DISTRICT.
 - 6) THE PARCEL IS NOT LOCATED WITHIN A 100-YEAR FLOOD HAZARD AREA AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL #23011C #2301D, DATED JUNE 16, 2011.
 - 7) THE LOCATION, DEPTH, SIZE AND EXISTENCE OF ALL UNDERGROUND UTILITY LINES, TANKS AND/OR STRUCTURES WAS NOT DETERMINED. THE CONTRACTOR SHALL CONTACT DIGSAFE/ON-TARGET PRIOR TO EXCAVATION TO DETERMINE ACTUAL LOCATION OF PUBLIC AND PRIVATE UTILITIES IN THE PROJECT AREA.



SITE TABULATIONS

BUILDINGS	0.25 acres	2.3%
EXISTING PAVEMENT	1.14 acres	10.5%
TOTAL EXISTING IMPERVIOUS	1.39 acres	12.8%
PROPOSED PAVEMENT	0.61 acres	5.6%
GREEN SPACE (POST PROJECT)	8.86 acres	81.6%
TOTAL AREA	10.86 acres	100%
TOTAL DISTURBED AREA	0.99 ac/ 43,250 sf	
TOTAL PARKING SPACES	= 110	

APPROVAL

APPROVED BY THE CITY OF AUGUSTA PLANNING BOARD

 CHAIRMAN

 DATE

LEGEND

---	BOUNDARY LINE (SURVEYED PARCEL)
- - - - -	BOUNDARY LINE (OTHER)
.....	SOILS TYPE BOUNDARY
N/F	NOW OR FORMERLY
2178/189	BOOK AND PAGE NUMBER
☆	EXISTING LIGHT POLE
○	FUTURE LIGHT POLE
○	UTILITY POLE WITH OVERHEAD WIRES
~~~~~	EXISTING TREE LINE
~~~~~	NEW TREE LINE
~~~~~	TREELINE TO BE REMOVED
---	PROPOSED CONTOUR
---	EXISTING CONTOUR
---	EXISTING WATER LINE
---	NEW CHAIN LINK FENCE
▨	EXISTING BUILDING
▨	EXISTING PAVEMENT
▨	PROPOSED PAVEMENT
HrB	HOLLIS FINE SANDY LOAM, 3-8% SLOPES
BuB2	BUXTON SILT LOAM, 3-8% SLOPES, ERODED
BuC2	BUXTON SILT LOAM, 8-15% SLOPES, ERODED



# EROSION AND SEDIMENT CONTROL PRACTICES

THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR DEALING WITH SOIL EROSION DURING AND AFTER THE CONSTRUCTION OF THE PARKING LOT EXPANSION AT THE KENNEBEC COMMUNITY CHURCH CONSTRUCTION SITE. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AS CONTAINED IN THE CURRENT EDITION (DATED MARCH 2015) OF "BEST MANAGEMENT PRACTICES" BY THE SOIL AND WATER CONSERVATION DISTRICT AND ADOPTED BY THE MAINE DEP.

CONSTRUCTION IS EXPECTED TO BEGIN SPRING OF 2016 AFTER OBTAINING PERMITS FOR APPROVAL FROM THE CITY OF AUGUSTA. OFFICIAL ATTENTION SHOULD BE GIVEN TO THE SECTIONS PERTAINING TO FALL AND WINTER SEEDING AS THE PROJECT MAY OVERLAP INTO THE 2017 CONSTRUCTION SEASON.

THE PRINCIPAL EROSION CONTROL DEVICES WILL BE HAY BALE BARRIERS, SILT FENCES, RIPRAP, MULCH, EROSION CONTROL BLANKETS, AND SEED PROTECTIVE TREES, HOUSES, AND DRAINAGE PATHS FROM THE REGION UNDERGOING CONSTRUCTION. STEEP SLOPES SHALL BE DRESSED WITH BIODEGRADABLE EROSION CONTROL NETTING. OTHER FEATURES SUCH AS GRASSSED WATERWAYS AND LANDSCAPING WILL BE CONSTRUCTED AS PERMANENT EROSION CONTROLS.

## STRUCTURAL MEASURES

HAY BALE BARRIERS SHALL BE PLACED ALONG THE CONTOUR AND PERPENDICULAR TO THE PREDOMINANT SLOPE OF THE LAND ON THE DOWNSLOPE SIDE BEHIND INDIVIDUAL HOUSES AND/OR ROAD CONSTRUCTION. BALES ARE TO BE STAKED AND EMBEDDED 4" INTO THE SOIL WITH ENDS TIGHTLY ADJUTING ADJACENT BALES. IN AREAS OF SIGNIFICANT EROSION, PLACEMENT OF FILTER FABRIC ALONG UPHILL SIDE OF HAY BALE IS FRUDENT.

SILT FENCING SHALL BE INSTALLED ALONG THE CONTOUR AND PERPENDICULAR TO THE PREDOMINANT SLOPE OF THE LAND JUST BEYOND THE DOWNSLOPE LIMITS OF CLEARING AND GRUBBING AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE AND STREAMS WHERE INDICATED ON THE PLAN TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. INSTALLATION SHALL BE AS SHOWN ON THE PLANS OR APPROVED ETC.

RIPRAP MATERIALS SHALL BE PLACED AS SHOWN IN ALL INLETS/OUTLETS OF PIPE CULVERTS. THESE STRUCTURES WILL PROTECT FROM STORMWATER OUTLETS AND MINIMIZE THE POTENTIAL FOR DOWNSTREAM EROSION BY REDUCING THE VELOCITY OF CONCENTRATED STORMWATER FLOWS. AVERAGE DESIGN SIZE STONE, D50, SHALL BE AS CALLED OUT IN THE DETAIL ON THE PLANS. LARGEST SIZE OF STONE IN THE RIPRAP IS TO BE 15 TIMES THE D50 SIZE.

PROTECTIVE MATS ON STEEP SLOPES WILL AID IN CONTROLLING EROSION ON CRITICAL AREAS DURING THE ESTABLISHMENT PERIOD OF VEGETATION. JUTE EROSION CONTROL MATS ARE SHOWN ON THE PLAN.

NATURALLY VEGETATED BUFFERS AND GRASS FILTER STRIPS REMOVE SEDIMENT AND OTHER POLLUTANTS FROM RUNOFF BY INFILTRATION, DEPOSITION, ABSORPTION AND DECOMPOSITION. FILTERS ARE EFFECTIVE ONLY IF USED TO REMOVE SEDIMENT FROM SHEET (OVERLAND) FLOW.

RIPRAP SWALES (DITCHES) SHALL BE PLACED AS SHOWN ON THE DRAWINGS. THESE SWALES ARE A MINIMUM OF TWO FEET IN DEPTH AND HAVE D50 STONE SIZE THAT IS DESIGNED TO WITHSTAND THE MAXIMUM ALLOWABLE VELOCITY FOR THE WATERWAY. STONES ARE TO BE PLACED ON A 6" GRAVEL BEDDING OR GEOTEXTILE FABRIC SUCH AS MIRAFI 140N.

DIVERSION DITCHES ARE TO BE CREATED WHERE INDICATED ON PLANS TO DIVERT STORMWATER RUNOFF AWAY FROM UNPROTECTED OR STEEP SLOPES TO A STABILIZED OUTLET. BERRS ARE TO BE A MINIMUM OF 1' DEEP AND 8" WIDE. GRADES OF DIVERSION BERRS IS NOT TO EXCEED 2% UNLESS APPROPRIATE STRUCTURAL MEASURES (GRAVEL FILTERS) ARE TAKEN. DISTURBED AREAS ARE TO BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION.

A STONE CHECK DAM IS A FILTERING AND ENERGY DISSIPATION DEVICE THAT LIMITS THE EROSION PROCESS. THESE DAMS ARE 2'-3" CRUSHED STONE, 24" IN HEIGHT AND ARE PLACED IN DRAINAGE DITCHES AS A TEMPORARY EROSION CONTROL MEASURE. THE DAMS ARE TO BE REMOVED PRIOR TO FINAL ACCEPTANCE OF THE PROJECT AND RIPRAP INSTALLED IN ITS PLACE. (SEE TYPICAL DETAIL).

STABILIZED CONSTRUCTION ENTRANCE IS TO BE PLACED DURING CONSTRUCTION, WHERE TRAFFIC IS ENTERING OR LEAVING CONSTRUCTION SITE. THIS WILL REDUCE OR ELIMINATE THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. A 8" THICK LAYER OF 1/2"-3" CRUSHED STONE 50" IN LENGTH HAS BEEN DESIGNED AND SHOWN ON THE PLAN. (SEE TYPICAL DETAIL).

LEVEL SPREADERS ARE USED TO CONVERT CHANNELIZED RUNOFF TO SHEET FLOW. SINCE THE SPREADER IS BUILT AT ZERO PERCENT GRADE, IT SIGNIFICANTLY REDUCES THE VELOCITY OF THE CHANNELIZED FLOW AND ALLOWS IT TO BE DISCHARGED AT NON-EROSIVE VELOCITIES ONTO UNDISTURBED AREAS THAT HAVE EXISTING VEGETATION CAPABLE OF PREVENTING EROSION. THEY CAN BE USED WITH RUNOFF INTO A NATURALLY VEGETATED BUFFER AREA. THIS PROCEDURE IS AN EFFECTIVE METHOD FOR REDUCING THE EXPORT OF PHOSPHORUS FROM A DEVELOPED SITE.

## VEGATATIVE MEASURES

1. TOPSOIL ON STOCKPILES AT A STABLE LOCATION ON SITE AND COVERED WITH ANCHORED MULCH FOR TEMPORARY EROSION CONTROL.

2. IF ANY DISTURBED AREA OF SOIL WILL BE LEFT BARE FOR MORE THAN TWO WEEKS, OR IF CONSTRUCTION IS TO BE COMPLETED IN FIFTEEN OVER AN EXTENDED PERIOD, TEMPORARY SEEDING AND MULCHING SHALL COMMENCE IMMEDIATELY FOLLOWING INITIAL FINE GRADING OF SITE. IN SENSITIVE AREAS (WITHIN 25' OF WETLANDS OR STREAMS) TEMPORARY MULCH MUST APPLIED WITHIN 1 DAYS OR PRIOR TO ANY STORM EVENT ON ALL DISTURBED SURFACES. IT SHALL BE MAINTAINED AND RESEEDED AS NECESSARY TO INSURE GOOD VEGETATIVE COVER FOR THE ENTIRE DURATION OF CONSTRUCTION SEED WILL BE SELECTED FROM THE FOLLOWING TABLE, ACCORDING TO THE TIME OF THE YEAR.

### TEMPORARY SEED MIXTURE

SEED	LBs ACRE	LBs 10000 SF	RECOMMENDED SEEDING DATE
WINTER RYE	12	2.6	8/15 - 10/1
GRASS OR ANNUAL RYEGRASS	80	1.8	4/1 - 7/1 AND 8/15 - 9/15
SUDANGRASS	40	0.3	5/15 - 8/15
PERENNIAL RYEGRASS	40	0.3	8/15 - 9/15
TEMPORARY MULCH WITH OR WITHOUT DORMANT SEEDING			WINTER MULCH 10/1 - 4/1 RATE

MULCH WILL BE APPLIED WITH SEEDING ACCORDING TO MULCH TABLE. IF IT IS NOT POSSIBLE TO SEED 45 DAYS OR MORE PRIOR TO FROST, THEN DORMANT SEEDING AND ANCHORED MULCH SHALL BE APPLIED.

3. PERMANENT SEEDINGS OF GRASS COVER SHALL BE APPLIED TO ALL DISTURBED AREAS. ALL SURFACE WATER CONTROL MEASURES AND FINAL LAND GRADING IN THE VICINITY SHOULD BE COMPLETED. GROUND PREPARATION SHALL INCLUDE TILLING TO A MINIMUM 3" DEPTH OF FINE BUT FRIBLABLE SOIL FREE OF CLODS OR STONES. PERMANENT SEED SHALL BE SELECTED ACCORDING TO ITS FINAL DESTINATION. (SEE PERMANENT SEED MIXTURE TABLE).

4. ALL SEEDING WILL REQUIRE MULCH. MULCH PROVIDES SEVERAL BENEFITS: CONSERVES MOISTURE, PREVENTS SURFACE CRACKING, IMPROVES WATER QUALITY, REDUCES RUNOFF AND EROSION CONTROLS WEEDS, AND HELPS ESTABLISH PLANT COVER. MULCH SHALL BE APPLIED ACCORDING TO THE FOLLOWING TABLES.

### PERMANENT SEED MIXTURE

MIXTURE	APPLICATION RATE	
	PARKS & LAWNS LBs/10000 SF	ROADSIDE AREAS, DITCHES BASINS LBs/10000 SF
KENTUCKY BLUEGRASS	.46	.46
CREeping RED FESCUE	.46	.05
PERENNIAL RYEGRASS	.11	.46
REDTOP		
TALL FESCUE		
TOTAL SEED RATE	1.03	0.97

NOTE:  
1. THE CONTRACTOR MAY WISH TO FINAL SEED FROM 10/1 TO 1/1 WITH THE SAME SOIL PREPARATIONS. SEEDING MIXES (DOUBLING THE SEED RATE) AND MULCHING, BUT IT MAY RESULT IN WINTER KILL. VEGETATION MUST BE INSPECTED AND RESEEDED AS NECESSARY IN THE FOLLOWING SPRING TO ASSURE GOOD VEGETATIVE COVER.

2. NO SEEDING SHALL BE PERMITTED ON THE SNOW.

3. MULCH SHALL BE APPLIED AFTER ALL SEED APPLICATIONS.

4. PERMANENT SEEDINGS SHOULD BE MADE 45 DAYS OR MORE PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING AFTER THE FIRST KILLING FROST.

## MAINTENANCE

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

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE 75% VEGETATIVE ESTABLISHMENT.

AT A MINIMUM, THE HAY BALE/SILT FENCE BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND IMMEDIATELY FOLLOWING ALL SIGNIFICANT RAINFALL OR SNOW MELT. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6 SIX INCHES AND REGRADED ONTO THE SITE.

DIVERSION DITCHES AND SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL PROPOSED TEMPORARY AND PERMANENT EROSION CONTROL MEASURES INCLUDING VEGETATION. THE CONTRACTOR MUST INSTALL ALL REQUIRED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR MUST INCORPORATE ALL OTHER SITE IMPROVEMENTS, RESTRICTIONS, CONSTRUCTION LIMITS, DRAINAGE IMPROVEMENTS, VEGETATED BUFFERS, PROPOSED LANDSCAPING, ETC. THE CONTRACTOR MUST OBTAIN A COMPLETE SET OF PLANS, REPORTS AND DOCUMENTS PERTAINING TO THE PROJECT BEFORE BEGINNING CONSTRUCTION.

ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND THE SITE IS PERMANENTLY STABILIZED.

## WINTER CONSTRUCTION (WHEN APPLICABLE)

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE 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. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, OR RIPRAP. RIPRAP OR GRAVEL BASE ON A ROAD, 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 EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS/10000 SF. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDING UPON THE ACTUAL SITE AND WEATHER CONDITIONS.

CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

## SOIL STOCKPILES

Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 150 lbs/10000 sf. (3 tons per acre) or with a four-inch (4") layer of woodchipse erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpile will not be placed (even covered with hay or straw) within 100 feet from any natural resources.

## NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY 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 EROSION CONTROL MATS.

DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (IE. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE 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 SHALL CONSIST OF EROSION CONTROL FILTER BERRS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

## MULCHING

ALL AREA SHALL BE CONSIDERED TO BE DENIED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 10000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS/10000 SF. OR 15 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION.

AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY 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 WITH STRAW OR HAY AT A RATE OF 150 LB. PER 10000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED SO THAT THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

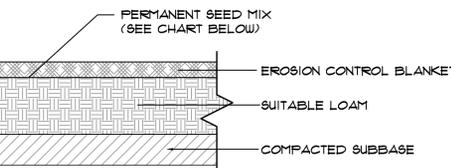
BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACKING INTO THE SURFACE OR WOOD CELLULOSE FIBER. THE MULCH COVER IS SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE. AFTER NOVEMBER 1, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

## MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/10000 SF ON ALL SLOPES GREATER THAN 8%.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGEWAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.

EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGEWAYS WITH SLOPES 8% OR GREATER. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.



PERMANENT SEED MIX	APPLICATION RATE
KENTUCKY BLUEGRASS	.46
CREeping RED FESCUE	.46
PERENNIAL RYEGRASS	.11
TOTAL SEED RATE	1.03

## LOAM & SEED DETAIL

NOT TO SCALE

## STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

### STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS:

THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE CONTRACTOR FAILS TO STABILIZE A DITCH OR CHANNEL BY GRASS BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER. INSTALL A SOD LINING IN THE DITCH. THE CONTRACTOR WILL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL ROLL THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

INSTALL A STONE LINING IN THE DITCH: THE CONTRACTOR WILL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 15. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

### STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES:

THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE CONTRACTOR WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS: BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 10000 SQUARE FEET AND APPLY EROSION CONTROL MATS (OR MULCH WITH JUTE NETTING) OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR SHALL COVER THE SLOPE WITH AN ADDITIONAL LAYER OF WINTER MULCH APPLICATION, STONE RIPRAP, OR WOODCHIPS COMPOST AS DESCRIBED BELOW.

STABILIZE THE SLOPE WITH SOD: THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR FINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33%.

STABILIZE THE SLOPE WITH WOODCHIPS COMPOST: THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOODCHIPS COMPOST ON THE SLOPE BY NOVEMBER 15, PRIOR TO PLACING THE WOODCHIPS COMPOST. THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE CONTRACTOR WILL NOT USE WOODCHIPS COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH STONE RIPRAP: THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

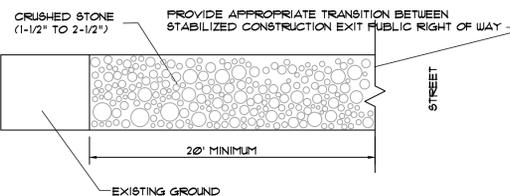
3. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION: BY OCTOBER 1, THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 10000 SQUARE FEET. LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 15 POUNDS PER 10000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC OR JUTE NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BY NOVEMBER 15, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ONE OF THE ITEMS BELOW OF THIS STANDARD.

STABILIZE THE SOIL WITH SOD: THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE AFFLICANT FINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

STABILIZE THE SOIL WITH MULCH: BY NOVEMBER 15, THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 10000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH THE AFFLICANT WILL ANCHOR THE MULCH WITH PLASTIC OR JUTE NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

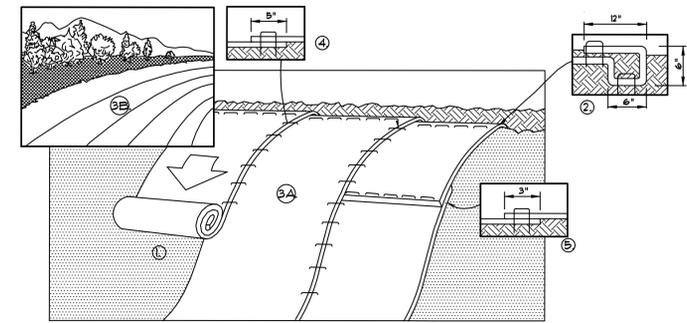
NOTE  
AREAS WITHIN 100' OF A WETLAND NOT BEING WORKED UPON SHALL BE SEEDED WITHIN 7 DAYS OF DISTURBANCE.



- STONE SIZE - AASHTO DESIGNATION M 43, SIZE 5 (2 1/2" - 1 1/2") USE CRUSHED STONE
- LENGTH - AS EFFECTIVE BUT NOT LESS THAN 50'
- THICKNESS - NOT LESS THAN 6"
- WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS
- WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS TO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
- MAINTENANCE - THE STABILIZED CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURED USES TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT OF WAYS MUST BE REMOVED IMMEDIATELY.

## STABILIZED CONSTRUCTION EXIT DETAIL

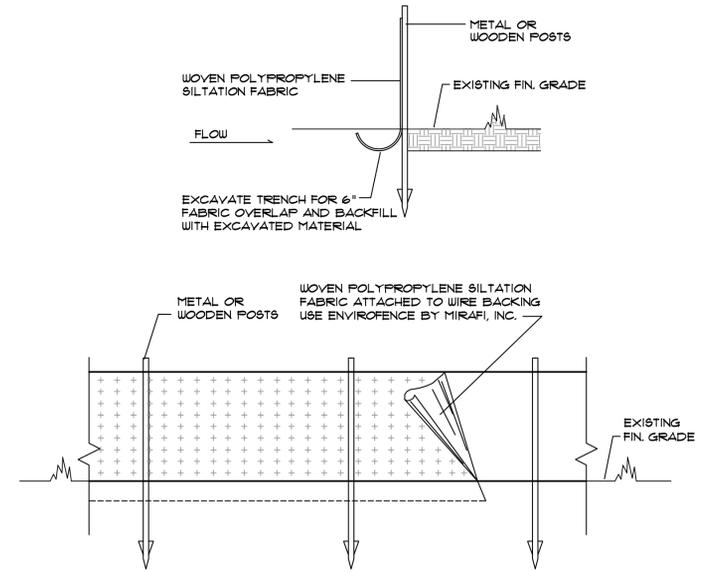
NOT TO SCALE



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPliced DOWN THE SLOPE MUST BE PLACED END OVER END (SINGLE STAPLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART, ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

## EROSION CONTROL BLANKET DETAIL

NOT TO SCALE



NOTE: SILTATION FABRIC WITH INTEGRAL MESH AND POSTS MAY BE USED

## SILT FENCE DETAIL

NOT TO SCALE

NOTE

REFERENCE IS MADE TO THE BEST MANAGEMENT PRACTICE FOR EROSION AND SEDIMENT CONTROL: B-1 SEDIMENT BARRIERS



FOR APPROVAL ONLY

REV.	BY:	DATE:	CHANGES:

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**CONSTRUCTION NOTES & DETAILS**  
PARKING LOT EXPANSION  
PREPARED FOR  
KENNEBEC COMMUNITY CHURCH  
20 SAINT ANDREWS STREET - AUGUSTA, MAINE

DATE	PROJECT
MAY 2016	2016-14
DRAWN BY	SCALE
SJR	1" = 20'