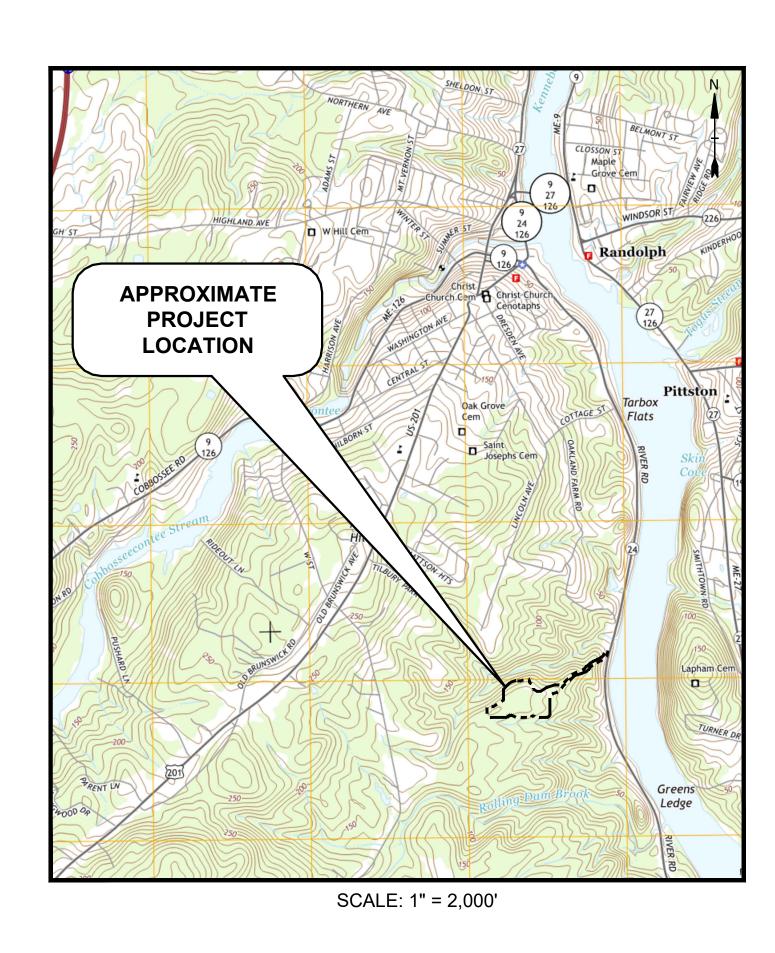
RIVER ROAD SOLAR PROJECT

PERMIT DRAWINGS

GARDINER, MAINE SEPTEMBER 13, 2021

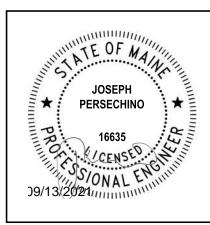
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER	9/13/2021
G-100	NOTES & LEGEND SHEET	9/13/2021
C-100	OVERALL EXISTING CONDITIONS & SITE PREPARATION PLAN	9/13/2021
C-101 TO C-103	EXISTING CONDITIONS & SITE PREPARATION PLAN	9/13/2021
C-200	OVERALL SITE, GRADING, DRAINAGE, EROSION CONTROL PLAN & UTILITY PLAN	9/13/2021
C-201 TO C-203	SITE, GRADING, DRAINAGE, EROSION CONTROL PLAN & UTILITY PLAN	9/13/2021
C-501	EROSION CONTROL NOTES & DETAILS SHEET	9/13/2021
C-502 TO C-503	CIVIL DETAIL SHEET	9/13/2021



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CIVIL ENGINEER TIGHE & BOND

TIGHE & BOND
2 MONUMENT SQUARE, SUITE #302
PORTLAND, MAINE 04101



JOSEPH PERSECHINO, PE



DEVELOPER

RE GARDINER SOLAR LLC 758 WESTBROOK STREET SOUTH PORTLAND, MAINE 04106



451 PRESUMPSCOT STREET PORTLAND, MAINE 04103



SITE DATA:

LOCATION: TAX MAP 23, LOT 17 GARDINER, MAINE

ZONING DISTRICT: RURAL

ALLOWED USE(S): AGRICULTURE, TIMBER OPERATIONS, RESOURCE EXTRACTION ACTIVITIES, OPEN SPACE, UNDEVELOPED LAND, LOW DENSITY RESIDENTIAL, TYPICAL RURAL-BASED COMMERCIAL ACTIVITIES.

MINIMUM SETBACKS	REQUIRED	PROPOSE
• ROAD:	50/75 FT	>50/75 F
• SIDE:	30 FT	>30 FT
• REAR:	30 FT	>30 FT
• SHORE:	100 FT	>100 FT

GENERAL NOTES:

- 1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
- 2. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE TOWN OF GARDINER.
- 3. THE CONTRACTOR SHALL EMPLOY A MAINE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND
- 4. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH AND COMPLY WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
- 6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR AND COMPLY WITH ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
- 7. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
- 8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE TOWN OF GARDINER DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION.
- 9. FOLLOWING THE COMPLETION OF CONSTRUCTION, GRASS WITHIN THE LIMIT OF THE SOLAR PROJECT SHALL NOT BE MOWED OR GRAZED MORE THAN TWICE PER YEAR. GRASS SHALL NOT BE GRAZED TO BARE GROUND.
- 10. CONTRACTOR TO SUBMIT AS-BUILT DRAWING SETS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A MAINE LICENSED LAND SURVEYOR.

DEMOLITION NOTES:

- 1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
- 2. TREE STUMPS WITHIN FENCE LINE SHALL BE REMOVED TO 3' DEPTH BELOW FINISH GRADE.
- 3. TREE STUMPS OUTSIDE OF FENCE LINE SHALL BE REMOVED TO FINISH GRADE.
- 4. ANY TREE LIMBS OR STUMPS NOT TAKEN OFF SITE FOR LOGGING PURPOSES SHALL BE MULCHED IN PLACE.
- 5. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
- 6. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
- 7. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 8. SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
- 10. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND
- SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE. 11. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE
- 12. CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A MAINE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.

GRADING AND DRAINAGE NOTES:

1. COMPACTION REQUIREMENTS: BELOW PAVED OR CONCRETE AREAS 95%

TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95%

BELOW LOAM AND SEED AREAS 90% * ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR

- ASTM-2922. 2. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SEED AND MULCH.
- 3. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MAINE DOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.

EROSION CONTROL NOTES:

- 1. THE CONTRACTOR SHALL INSTALL A SILT SOCK BARRIER OR DOUBLE EROSION CONTROL BERM IN
- AREAS UPSTREAM OF A PROTECTED RESOURCE AREA. 2. SEE SHEET C-501 FOR COMPLETE EROSION CONTROL NOTES AND DETAILS.

DRAWINGS AND THE APPLICABLE UTILITY COMPANIES.

UTILITY NOTES:

- COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
- 2. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
- 3. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH
- 4. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.

EXISTING CONDITIONS PLAN NOTES:

- 1. EXISTING CONDITIONS ARE BASED ON A FIELD SURVEY BY BOYNTON & PICKET L.L.C., DATED DECEMBER 1, 2020. EXISTING CONTOURS ACQUIRED FROM MEGIS.
- 2. APPROXIMATE PROPERTY LINE PROVIDED BY TETRA TECH, INC. DATED SEPTEMBER 1ST, 2020. PROPERTY LINE ACQUIRED FROM MEGIS.
- 3. WETLAND DELINEATION PROVIDED BY TETRA TECH, INC. DATED NOVEMBER 9, 2020.
- 4. FEMA FLOODPLAIN INFORMATION EXPORTED FROM FEMA DATABASE ON JULY 30, 2021.
- 5. EXISTING OVERHEAD WIRE AND UTILITY POLES PROVIDED BY REVISION, LLC DATED AUGUST 11,

REFERENCE PLANS:

- 1. "SKETCH OF RIVER AVENUE TOPO/SURVEY" PREPARED BY BOYNTON & PICKET L.L.C. DATED DECEMBER
- 2. "FLOOD INSURANCE RATE MAP, PANEL 659 OF 775, MAP NUMBER 23011C0659D" EFFECTIVE DATE JUNE 16, 2011.
- 3. THE MAINE OFFICE OF GIS (MEGIS), ONLINE MAPS & SERVICES.

LEGEND \square _____POHW_____ —PE-----. .125.50 TBR

O.C.

FES

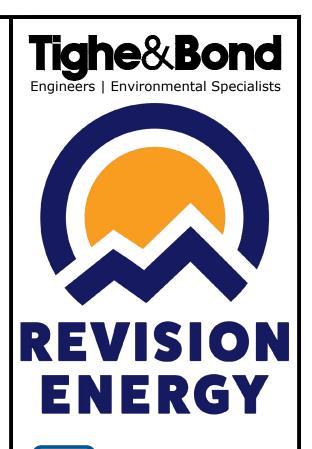
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APPROXIMATE LIMIT OF WORK APPROXIMATE PROPERTY LINE (MEGIS) LOCAL SETBACK EXISTING OVERHEAD WIRE EXISTING TREE LINE STREAM LIMIT OF DELINEATED WETLAND LIMIT OF DELINEATED WETLAND SYMBOL 75' ENVIRONMENTAL BUFFER HIGH WATER LINE (MEGIS) 250' SHORELAND PROTECTION BUFFER FEMA ZONE X 100-YR FLOOD ZONE EXISTING FENCE PROPOSED FENCE EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR APPROXIMATE DRAIN LINE PROPOSED DRAIN LINE PROPOSED FLARED END SECTION PROPOSED OVERHEAD ELECTRICAL LINE PROPOSED ELECTRICAL CONDUIT PROPOSED SILT SOCK PROPOSED DOUBLE ROW SILT SOCK PROPOSED CONSTRUCTION ENTRANCE PROPOSED TREE LINE PROPOSED CLEARING PROPOSED RIP RAP PROPOSED SPOT GRADE PROPOSED SLOPE ARROW PROPOSED BITUMINOUS PAVEMENT

PROPOSED GRAVEL ROAD PROPOSED UTILITY POLE EXISTING UTILITY POLE PROPOSED SOLAR MODULE TO BE REMOVED PROPOSED OVERHEAD WIRE POHW OVERHEAD WIRE OHW ON CENTER FLARED END SECTION PROPOSED UNDERDRAIN REINFORCED CONCRETE PIPE LINEAR FEET HIGH POINT



TETRA TECH



PERMIT SET NOT FOR CONSTRUCTION

|River Road |Solar Project

RE Gardiner Solar LLC

Gardiner, Maine

1ARK	DATE	DESCRIPTION
ROJECT NO:		R5051-002
ATE:		09/13/2021
ILE:	R5051-	002_C-DSGN-COPY.DWG

CHECKED: JMP APPROVED: GENERAL NOTES AND

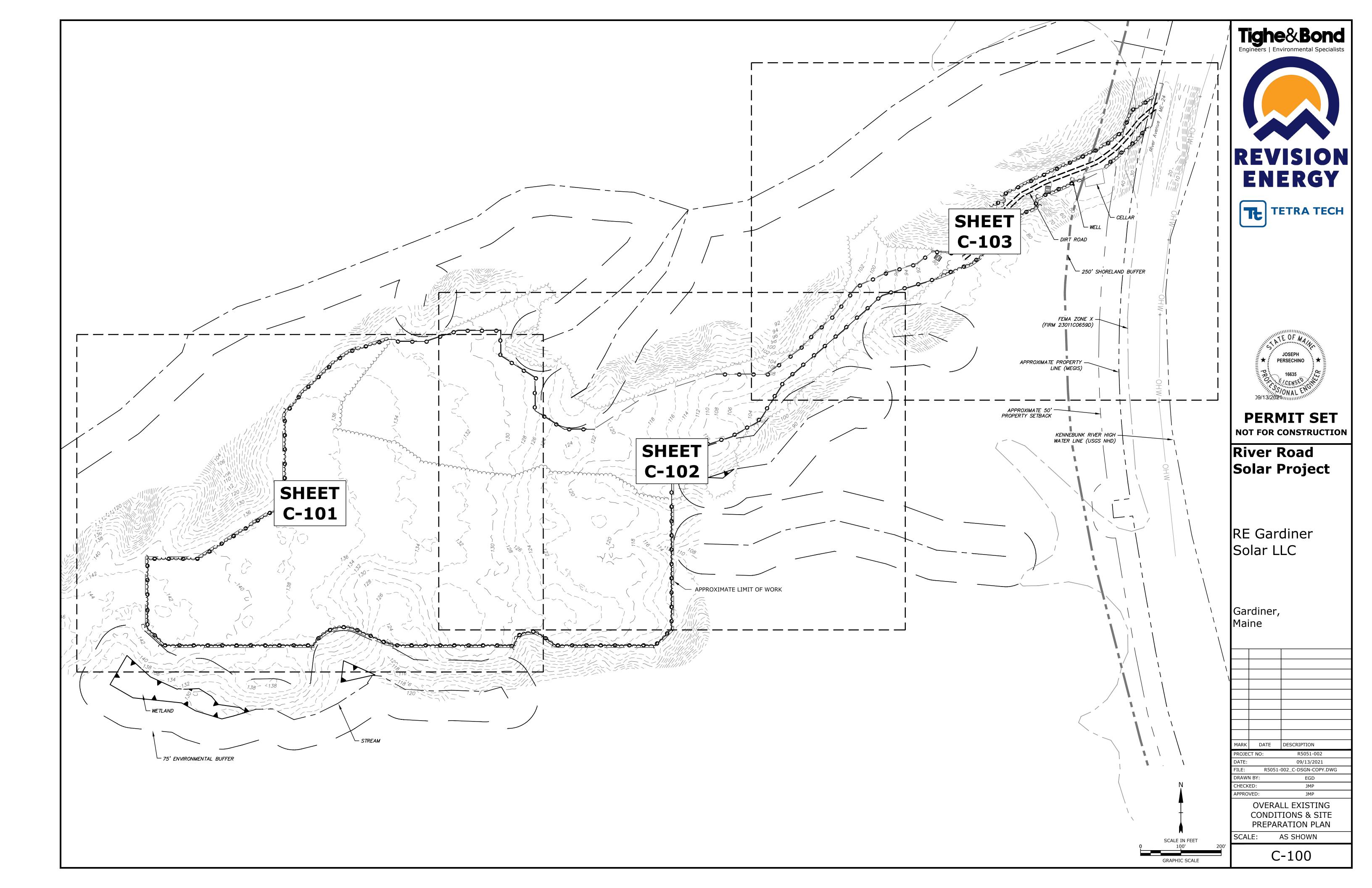
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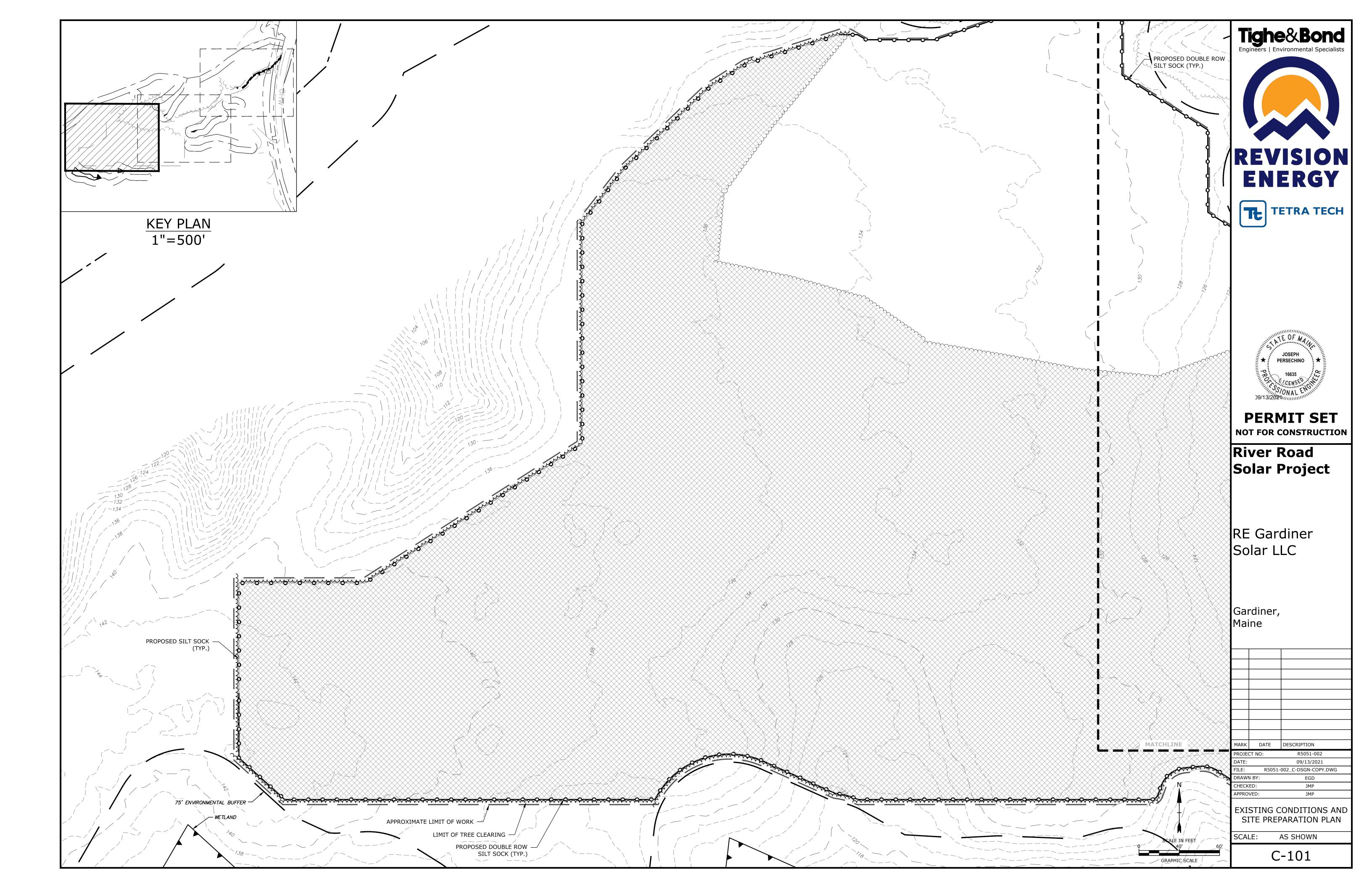
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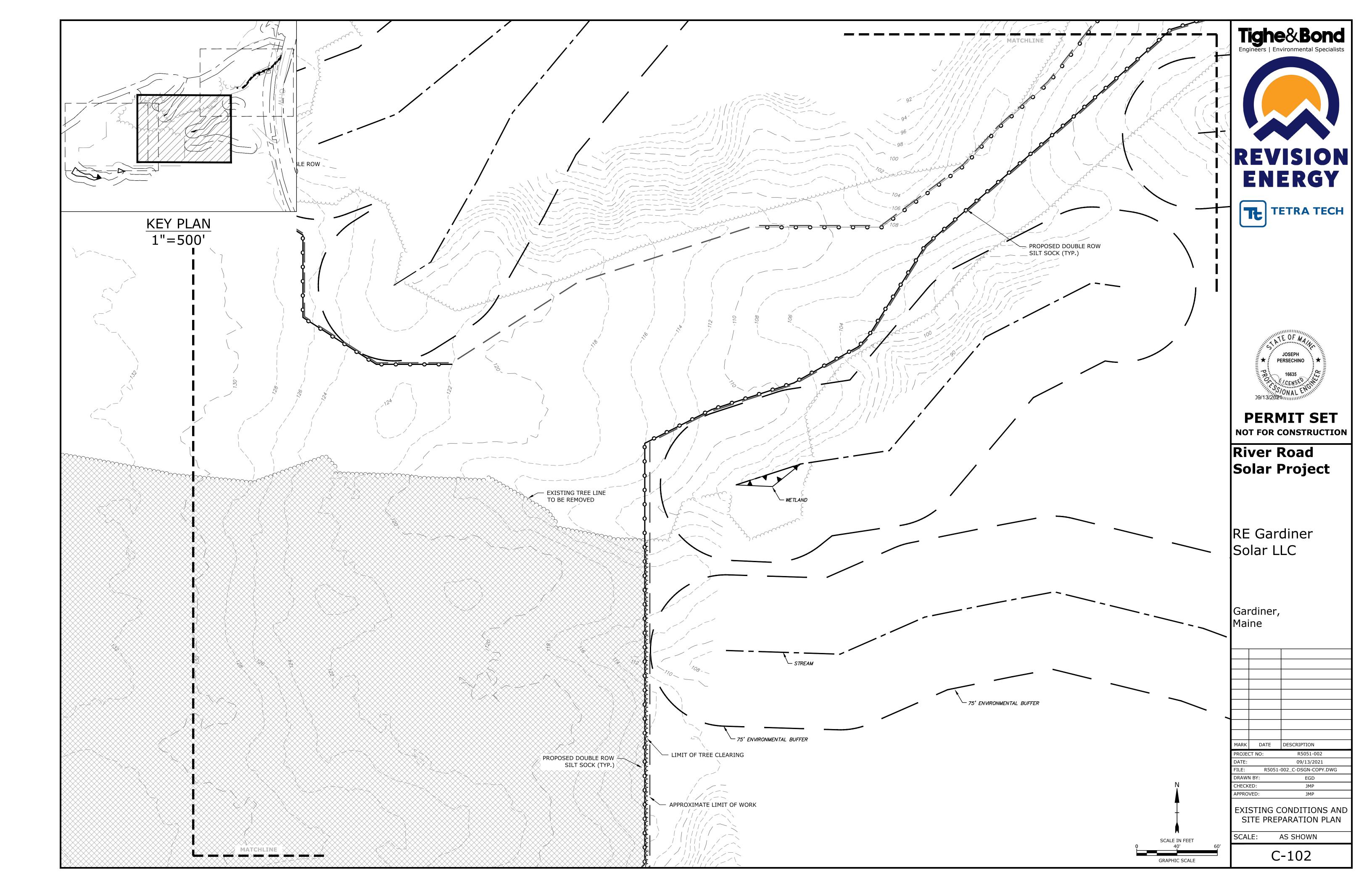
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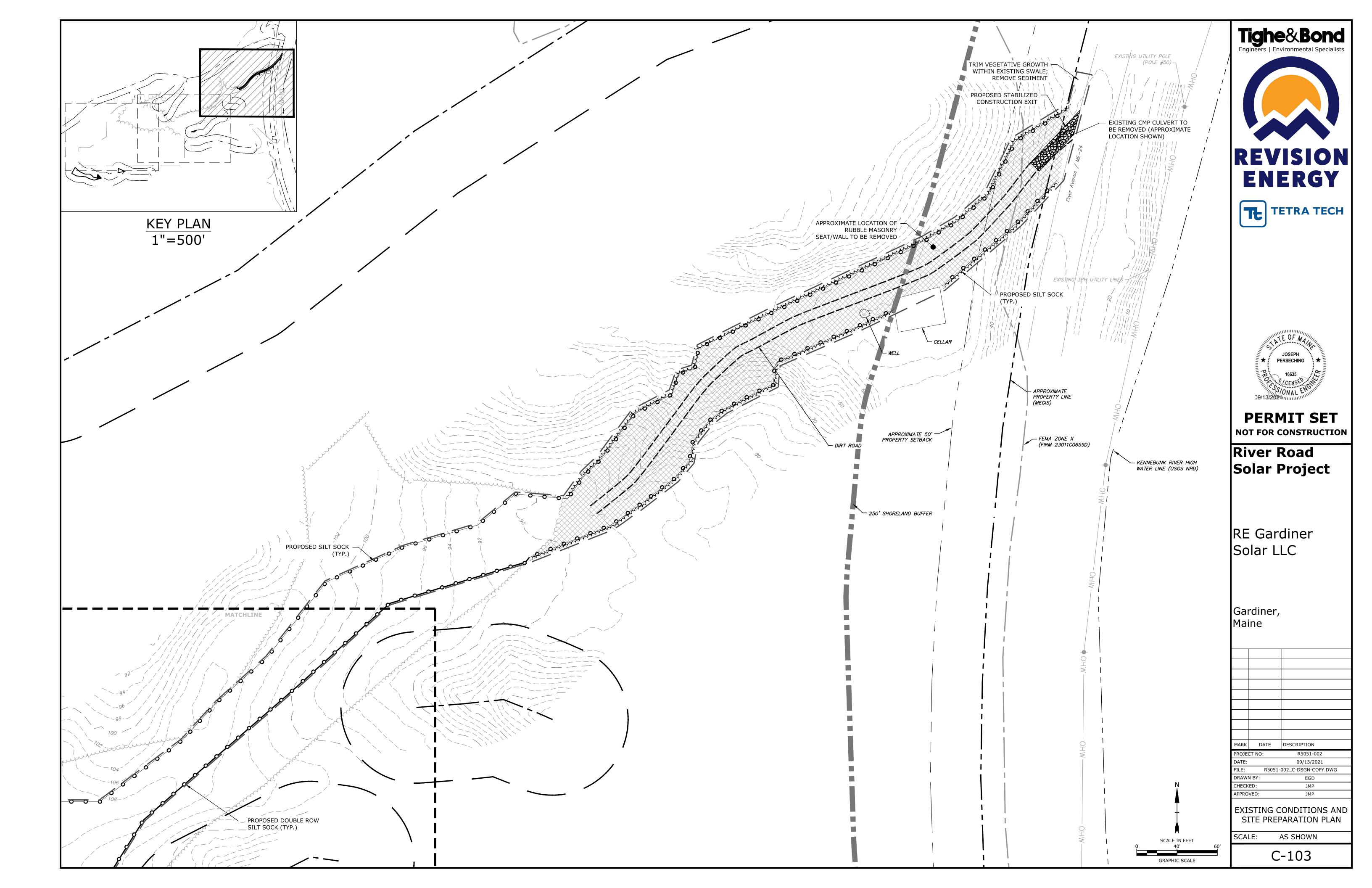
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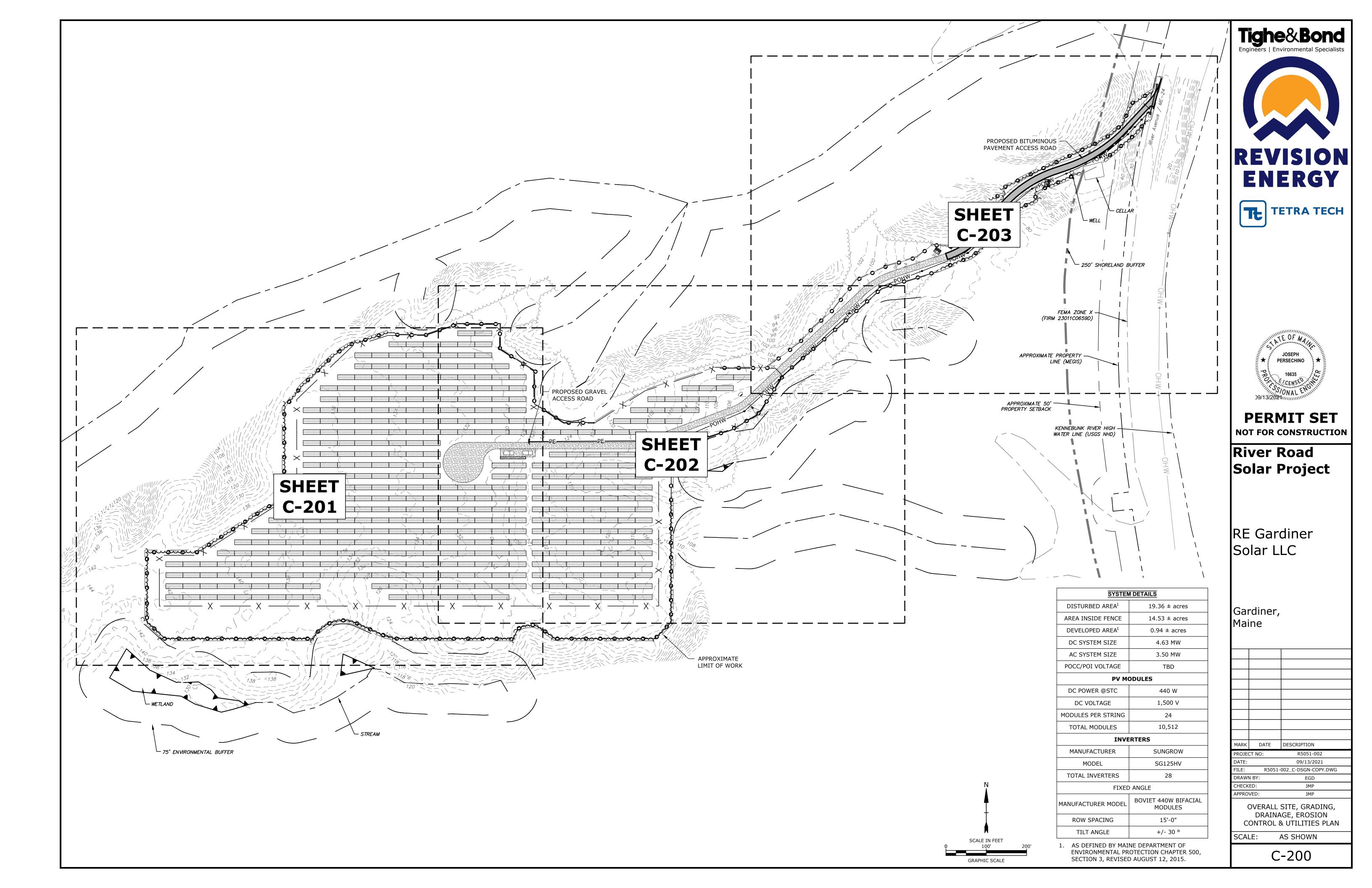
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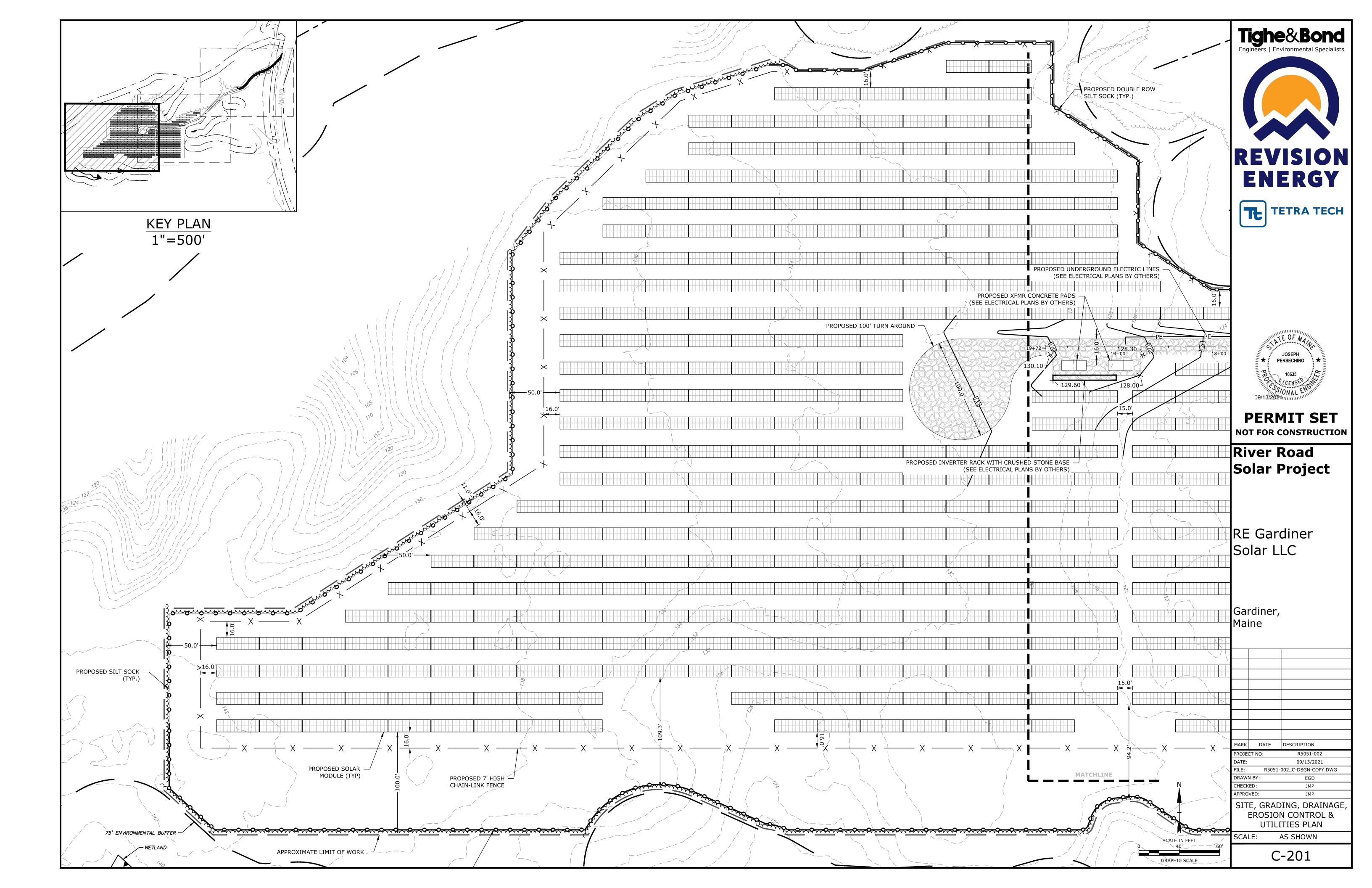


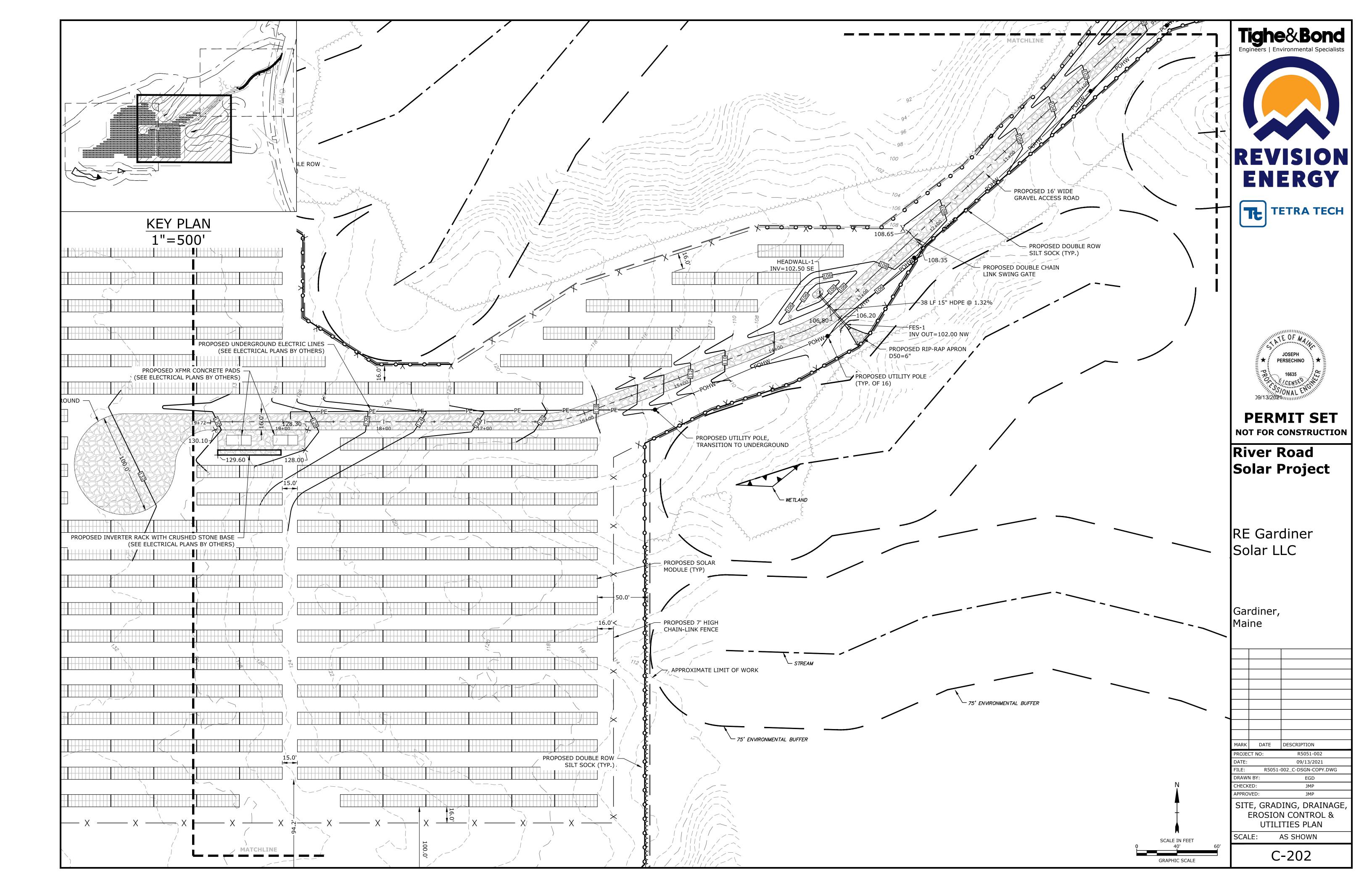


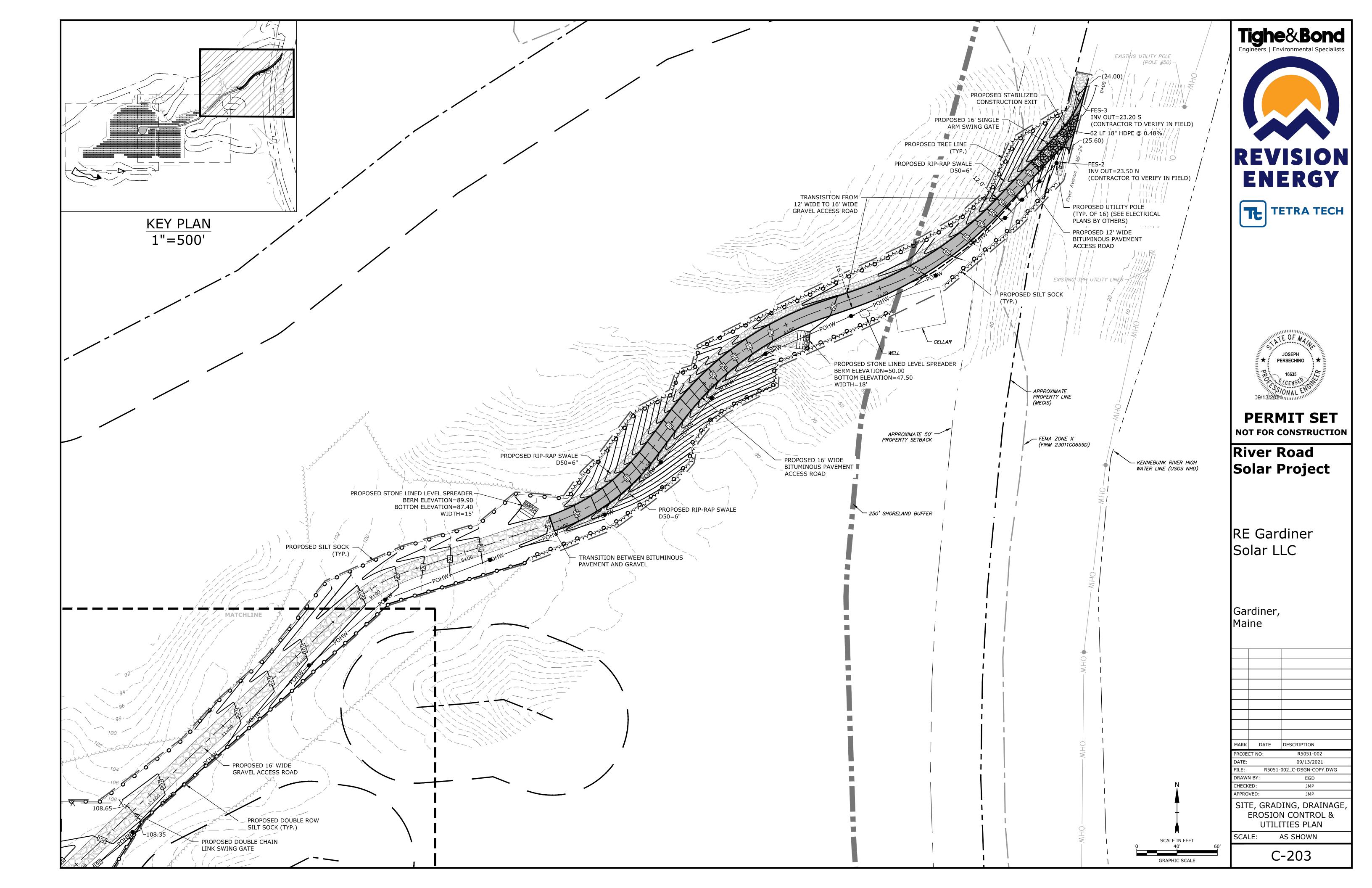












GENERAL PROJECT INFORMATION RE GARDINER SOLAR, LL 758 WESTBROOK STREET SOUTH PORTLAND, MAINE 04106

RIVER ROAD SOLAR PROJECT

PROJECT ADDRESS: RIVER ROAD GARDINER, MAINE, 04345 PROJECT MAP / LOT: MAP 23 / LOT 17

PROJECT LATITUDE: 44° 12' 26.967"N

PROJECT LONGITUDE: 69° 45' 52.945"W

THE PROJECT CONSISTS OF SOLAR ENERGY SYSTEM DEVELOPMENT. THE WORK IS ANTICIPATED TO START IN MAY OF 2022 AND BE COMPLETED BY OCTOBER OF 2022.

<u>DISTURBED AREA</u>
THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 19.36 ACRES.

NAME OF RECEIVING WATERS
THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO UNNAMED WETLANDS AND ULTIMATELY FLOWS TO THE KENNEBEC RIVER.

- CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

 1. CONSTRUCT TEMPORARY SEDIMENT AND EROSION CONTROL FACILITIES. EROSION AND SEDIMENT MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF.
- TEMPORARY SEDIMENTATION BASIN(S) SHALL BE INSTALLED AT LOCATION(S) DETERMINED BY A PROFESSIONAL ENGINEER. BASINS TO BE SIZED PER CHAPTER 500 APPENDIX A(9).
- CLEAR AND DISPOSE OF DEBRIS. STUMP GRINDINGS MAY BE USED FOR EROSION CONTROL BERMS IN COMBINATION WITH SILT FENCE. THE USE OF THESE TYPES OF BERMS IS PREFERRED TO ENHANCE THE EROSION CONTROL
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED,
- GRADE AND GRAVEL ROADWAYS ALL ROADS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED
- CONSTRUCT SOLAR ARRAY, FENCING, AND EQUIPMENT PADS.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. . DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL
- MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- 10. COMPLETE PERMANENT SEEDING. 11. REMOVE TRAPPED SEDIMENTS FROM EROSION CONTROL BARRIERS AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

THE CONSTRUCTION SEQUENCE SHALL LIMIT THE DURATION AND AREA OF DISTURBANCE.

THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY (DACF), DIVISION OF ANIMAL AND PLANT HEALTH CHAPTER 273 RELATIVE TO INVASIVE SPECIES.

- EROSION CONTROL NOTES:

 1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICS MANUAL.
- PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL
- THE CONTRACTOR SHALL AVOID DISTURBING THE EXISTING DRAINAGEWAYS TO THE EXTENT PRACTICABLE DISTURBED OR ERODING DRAINAGEWAYS SHALL BE STABILIZED USING RIP-RAP OR OTHER APPROVED LINING.
- THE CONTRACTOR SHALL INSTALL STONE CHECK DAMS IN THE EXISTING AND PROPOSED DRAINAGEWAYS AS
- THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING SILT FENCES, MULCI-
- BERMS, AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK THE CONTRACTOR SHALL INSTALL A DOUBLE SEDIMENT BARRIER (I.E. SILT SOCK AND EROSION CONTROL BERM PER
- DETAIL SHOWN ON THIS SHEET) IN AREAS WITHIN 25 FT OF A PROTECTED RESOURCE AREA. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, AND/OR SILT SOCKS SHALL BE MAINTAINED FOR THE
- DURATION OF THE PROJECT UNTIL ALL AREAS HAVE BEEN STABILIZED. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE SEED AND MULCH 10. INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN 0STORM OF 0.25 INCH
- OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- .1. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

- AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED: A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN GRAVEL ROAD AREAS;
- B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED; C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
- D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- WINTER STABILIZATION PRACTICES:
- A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE
- COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS; ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION
- CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS AFTER NOVEMBER 15, INCOMPLETE ROAD SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL, OR IF CONSTRUCTION IS TO
- CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT; STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
- A. TEMPORARY SEEDING; B. MULCHING.
- WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
- DURING CONSTRUCTION. RUNOFF SHALL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE SHALL BE FILTERED THROUGH SILT FENCES, MULCH
- THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15.

- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS,
- COVERING LOADED DUMP TRUCKS LEAVING THE SITE AND TEMPORARY MUI CHING

DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

- LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, CULVERTS, AND DELINEATED WETLANDS.
- ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET
- PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE
- INSPECTED AT THE END OF EACH WORKING DAY PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF SITE VEHICLE TRACKING:

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO ANY EXCAVATION ACTIVITIES.

CONCRETE WASHOUT AREA:

- THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY: IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO
- HANDLE ANTICIPATED WASHOUT WATER;
- CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS:
- INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE

<u>EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES</u>

FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.

THE CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL BE

THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:

- OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
- AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR:
- A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES; IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

- A. SEEDBED PREPARATION: APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3)

TWO (2) INCHES BEFORE APPLYING LIME AND SEED.

- UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER. HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING. C. MAINTENANCE
- TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE OVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
- VEGETATIVE PRACTICE A. FOR PERMANENT MEASURES AND PLANTINGS.
- LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
- SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER
- HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED A SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT A RATE OF

SHEEP FESCUE 35% +/- 4% RED TOP 5% +/- 2% 6% +/- 2% ANNUAL RYE 19% +/- 2%

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW,

DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL) A. FOLLOW PERMANENT MEASURES FOR SLOPE, LIME AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

- FIRE HYDRANT FLUSHINGS
- VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMITS
- ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE
- PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS
- ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE
- UNCONTAMINATED GROUND WATER OR SPRING WATER
- FOUNDATION OR FOOTING DRAINS -NOT CONTAMINATED
- 10. UNCONTAMINATED EXCAVATION DEWATERING 11. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHINGS

- JNAUTHORIZED NON-STORMWATER DISCHARGES

 .. WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS
- FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE
- SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING

4. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE

- CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES
- THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER
- A. GOOD HOUSEKEEPING THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE DURING THE CONSTRUCTION
- ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- HAZARDOUS PRODUCTS THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS: PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION

SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S

C. PRODUCT SPECIFICATION PRACTICES THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:

RECOMMENDED METHODS OF DISPOSAL.

- PETROLEUM PRODUCTS a. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE
- MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- PAINTS: a. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR
- STATE AND LOCAL REGULATIONS. D. SPILL CONTROL PRACTICES IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS

ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

- SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP: MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE

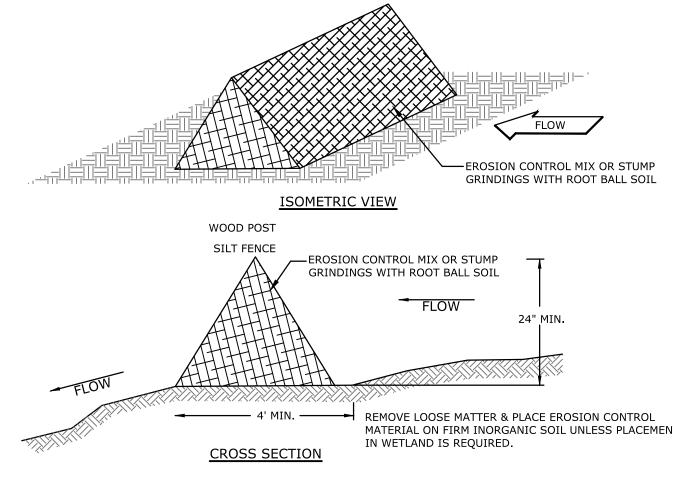
THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE

- CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL
- PREVENTION AND CLEANUP COORDINATOR. E. VEHICLE FUELING AND MAINTENANCE PRACTICE CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT
- AN OFF-SITE FACILITY. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED.
- CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA. CONTRACTOR SHALL VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE.
- CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

- ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT: http://www.maine.gov/dep/spills/emergspillresp LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF
- THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1). DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT MAY VIOLATE STATE WATER QUALITY

RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE PESTICIDE REQUIREMENTS.

- STANDARDS AND THE NATURAL RESOURCES PROTECTION ACT. TO PREVENT CONSTRUCTION WASTE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISION OF RULES RELATED TO SOLID, UNIVERSAL, AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT
- DEWATERING CONTROLS ARE DISCUSSED IN THE "MAINE EROSION AND SEDIMENT CONTROL BMPS, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



1. EROSION CONTROL MIX SHALL MEET REQUIREMENTS OF MAINE DEP EROSION AND SEDIMENT CONTROL BMP

2. EROSION CONTROL MIX MATERIAL TO BE FREE OF INVASIVE SPECIES SEED OR MATTER. DO NOT PLACE EROSION CONTROL MIX BERMS IN WETLAND SETBACKS BEYOND THE LIMIT OF WORK. MIX MAY CONSIST OF STUMP

A. BURY THE TOP END OF THE JUTE

STRIPS IN A TRENCH 6 INCHES OR

MORE IN DEPTH

B. TAMP THE TRENCH FULL OF SOIL.

SECURE WITH ROW OF STAPLES, 6

INCH SPACING, 4 INCHES DOWN

FROM THE TRENCH.

STAKES/STAPLES SHALL BE PLACED NO MORE THAN 3 FT. APART VERTICALLY, AND 1 FT. APART HORIZONTALLY.

TYPICAL EROSION CONTROL BLANKET

BLANKETS SHALL BE ROLLED OUT LOOSELY WITH 3-4 STAPLES PER SQUARE YARD TO MAINTAIN DIRECT SOIL CONTACT. DO

C. OVERLAP-BURY UPPER END OF

LOWER STRIP AS IN "A" AND "B".

OVERLAP END OF TOP AND STAPLE.

D. EROSION STOP- FOLD OF JUTE

EROSION CONTROL BLANKET SHALL BE INSTALLED VERTICALLY DOWNSLOPE.

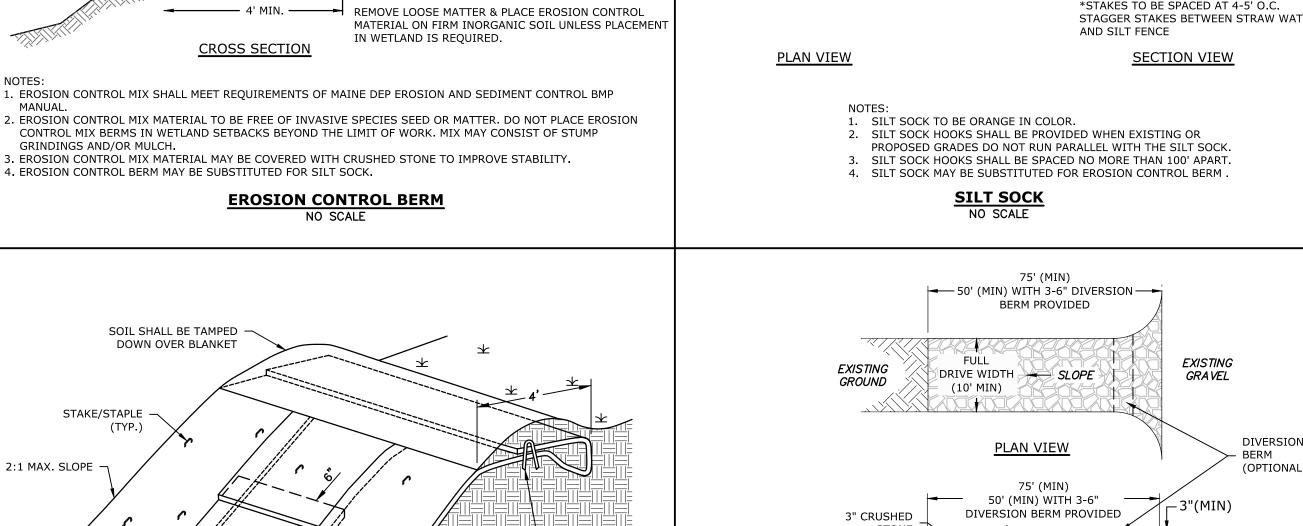
NOT STRETCH THE BLANKETS.

SLOPE SURFACE SHALL BE FREE OF STICKS, ROCKS, AND OTHER OBSTRUCTIONS.

DOUBLE ROW OF STAPLES.

BURIED IN SLIT TRENCH AND TAMPED;

3. EROSION CONTROL MIX MATERIAL MAY BE COVERED WITH CRUSHED STONE TO IMPROVE STABILITY.



OVERLAP OF

OR MORE

STAPLE OUTSIDE

EDGE ON 2 INCH

CENTERS.

JUTE STRIPES

WHERE TWO

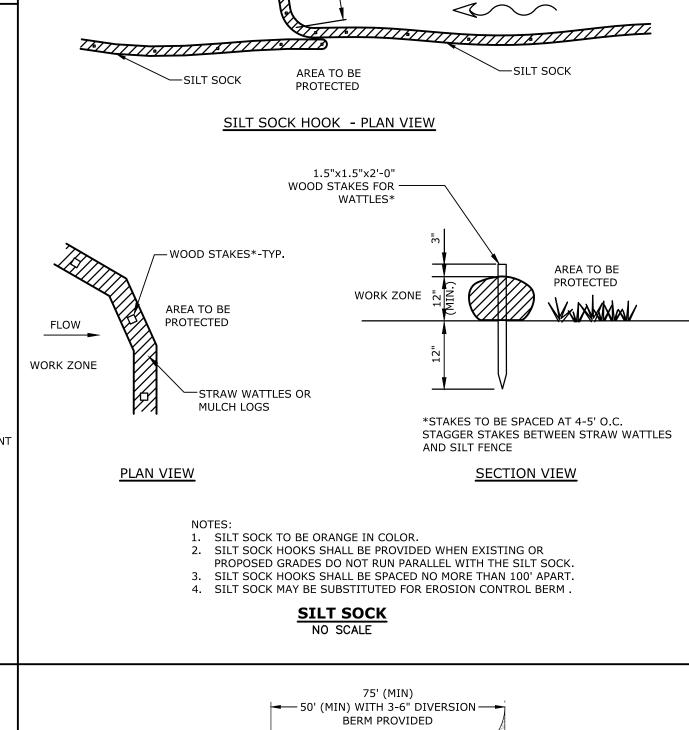
STRIP WIDTH

ARE REQUIRED

STAPLE ON 18

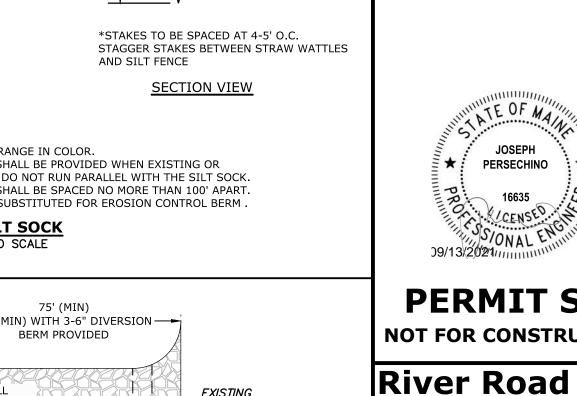
INCH CENTERS

PROGRESSES



WORK ZONE

SILT SOCK HOOK



EXISTING PAVEMENT

MIRAFI FW-700

OR EOUAL



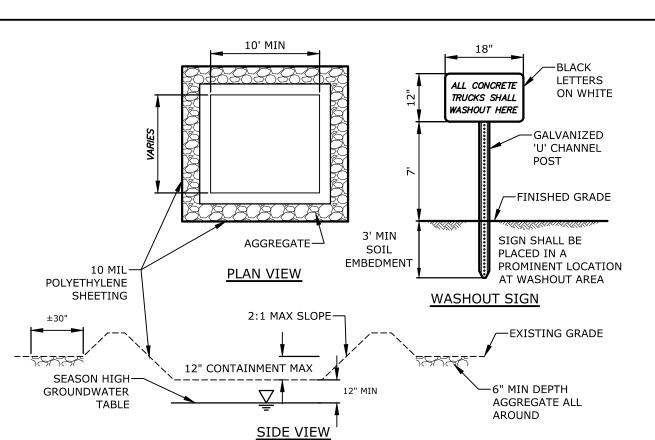
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT FROM THE SITE, WHEN WASHING IS REQUIRED, IT SHALL BE DONE SO RUNOFF DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS

6" (MIN)

EXISTING GROUND

STABILIZED CONSTRUCTION EXIT

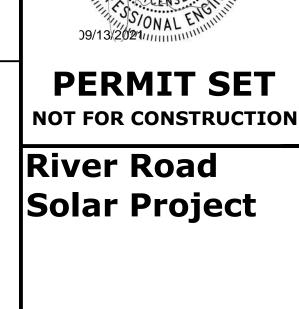
SECTION VIEW



- . CONTAINMENT SHALL BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
- 2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY TO COMPLETELY CONTAIN THE LIQUID WASTES 3. WASHOUT SHALL BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FUL . WASHOUT AREAS SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS

5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION

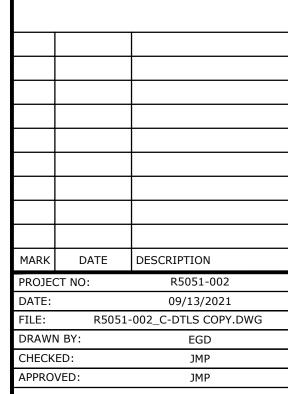
6. AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY. **CONCRETE WASHOUT AREA**



ENERGY

RE Gardiner

Gardiner



CIVIL EROSION CONTROL **NOTES & DETAILS SHEET**

SCALE: AS SHOWN C-501

