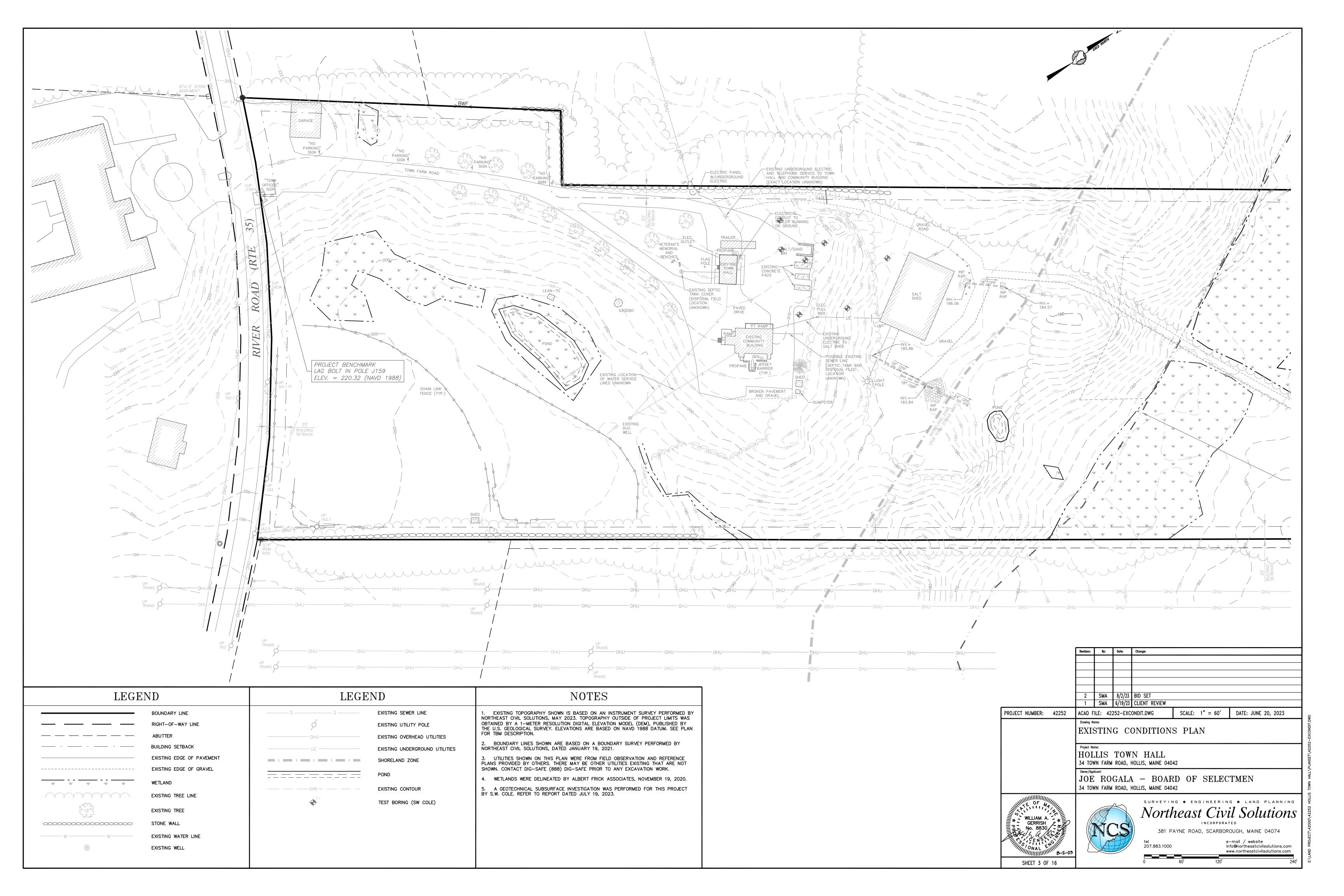
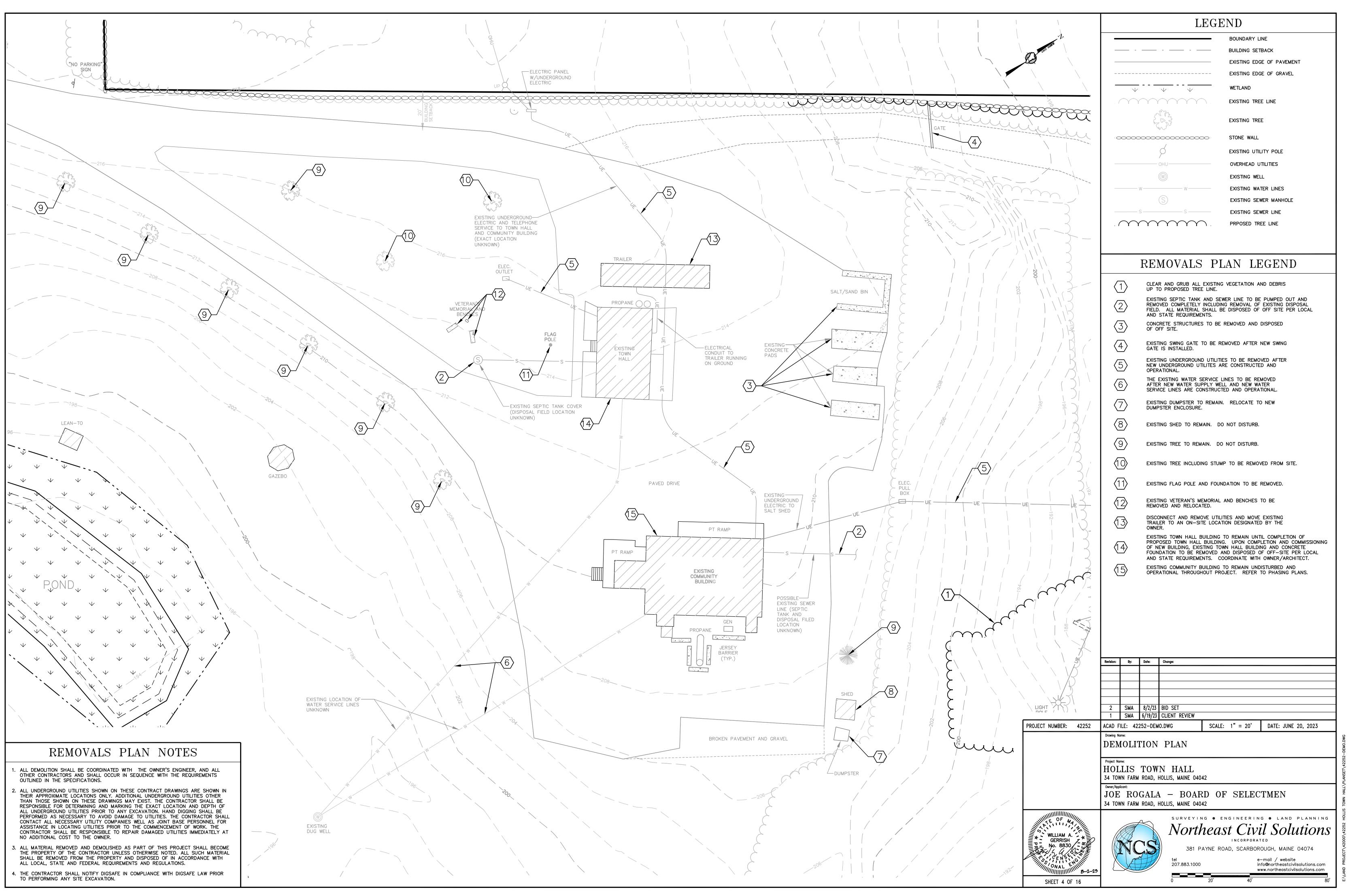
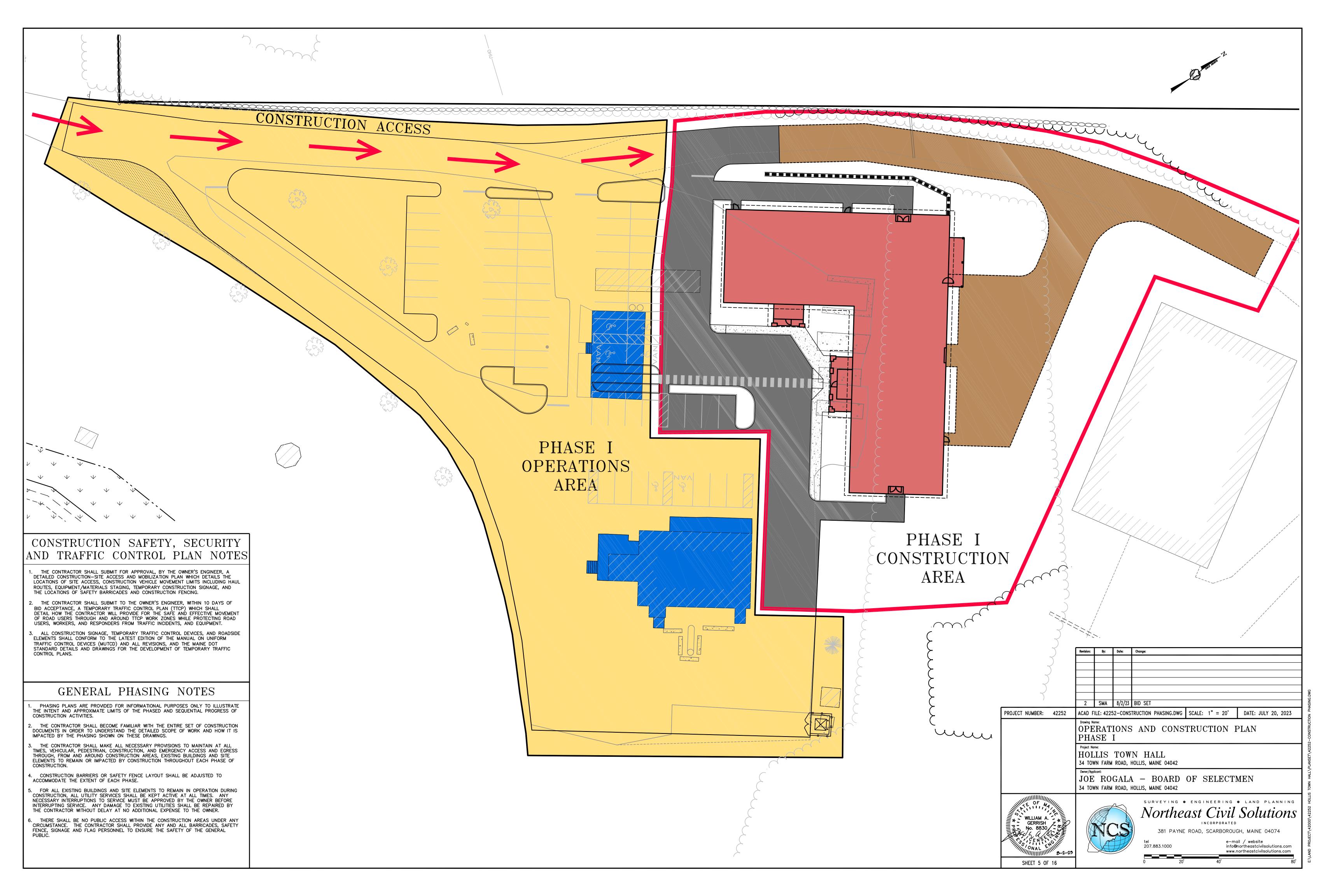
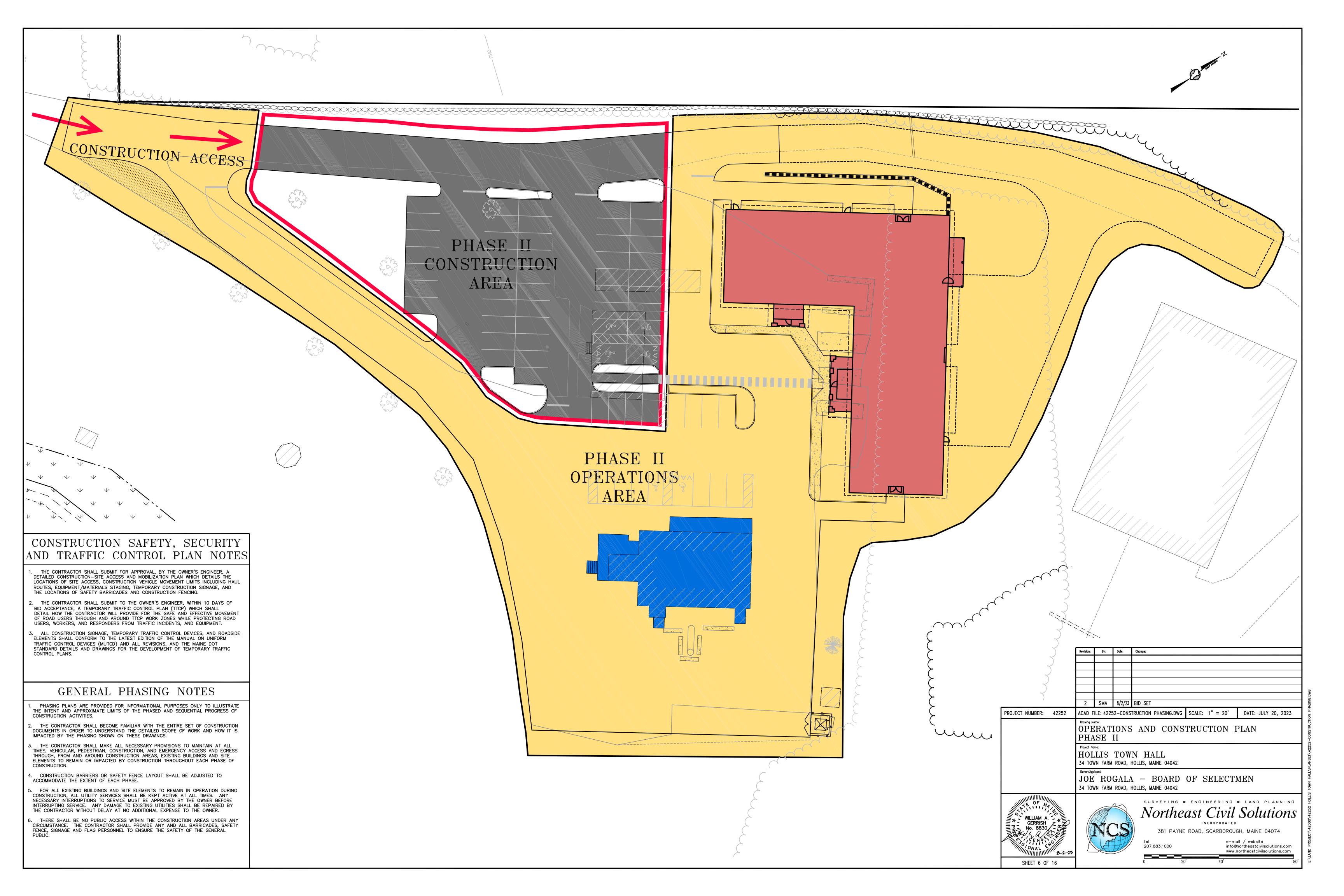


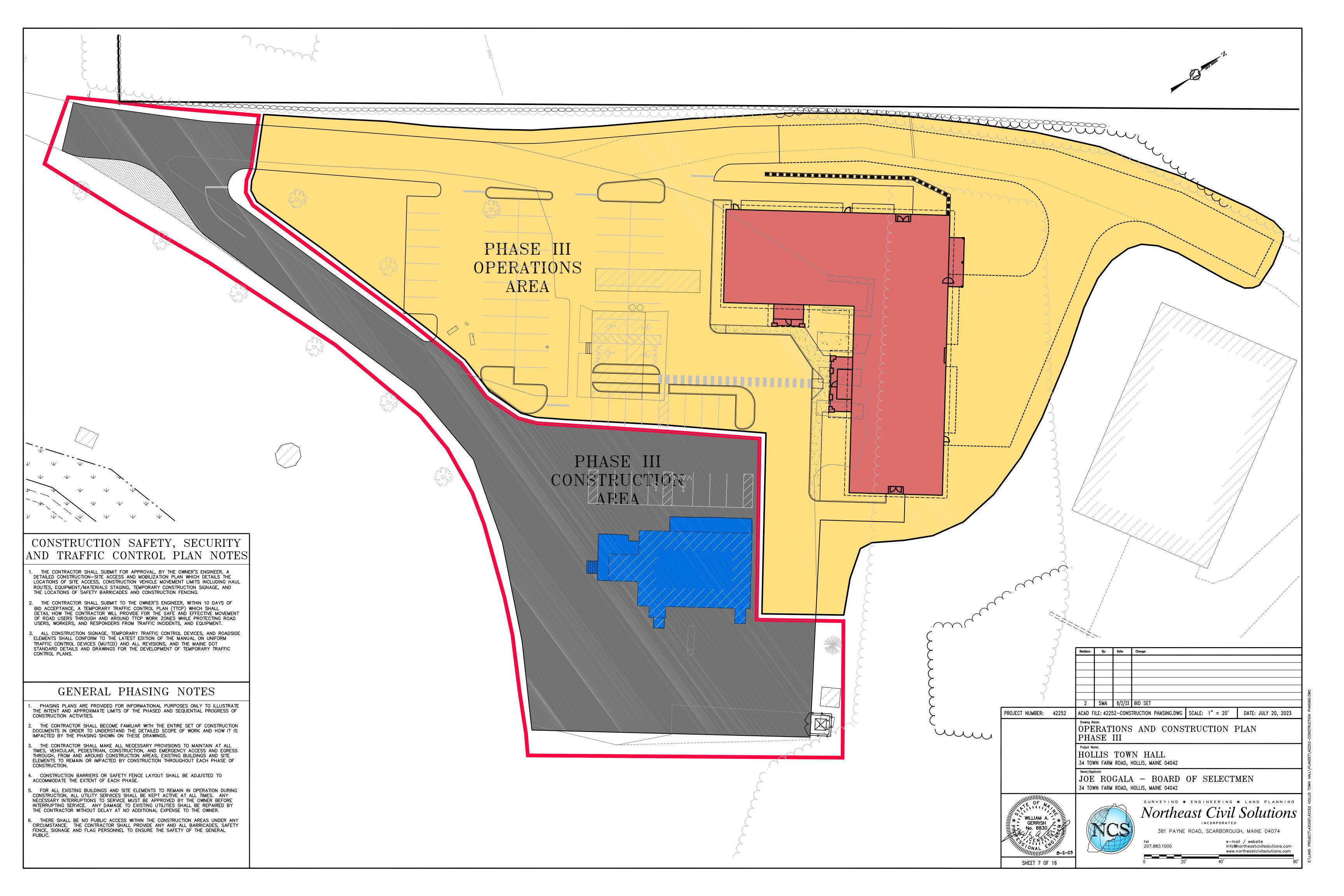
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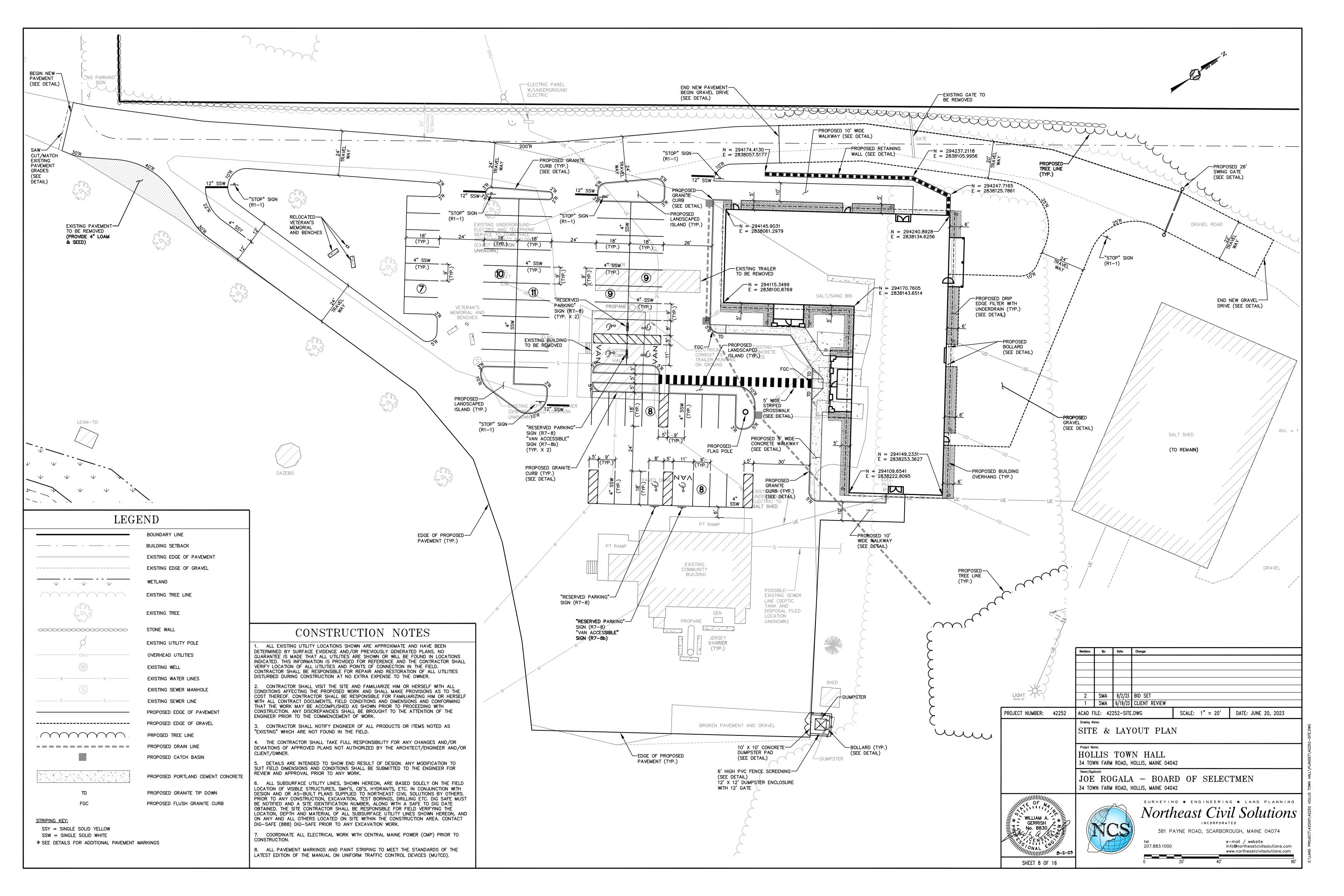


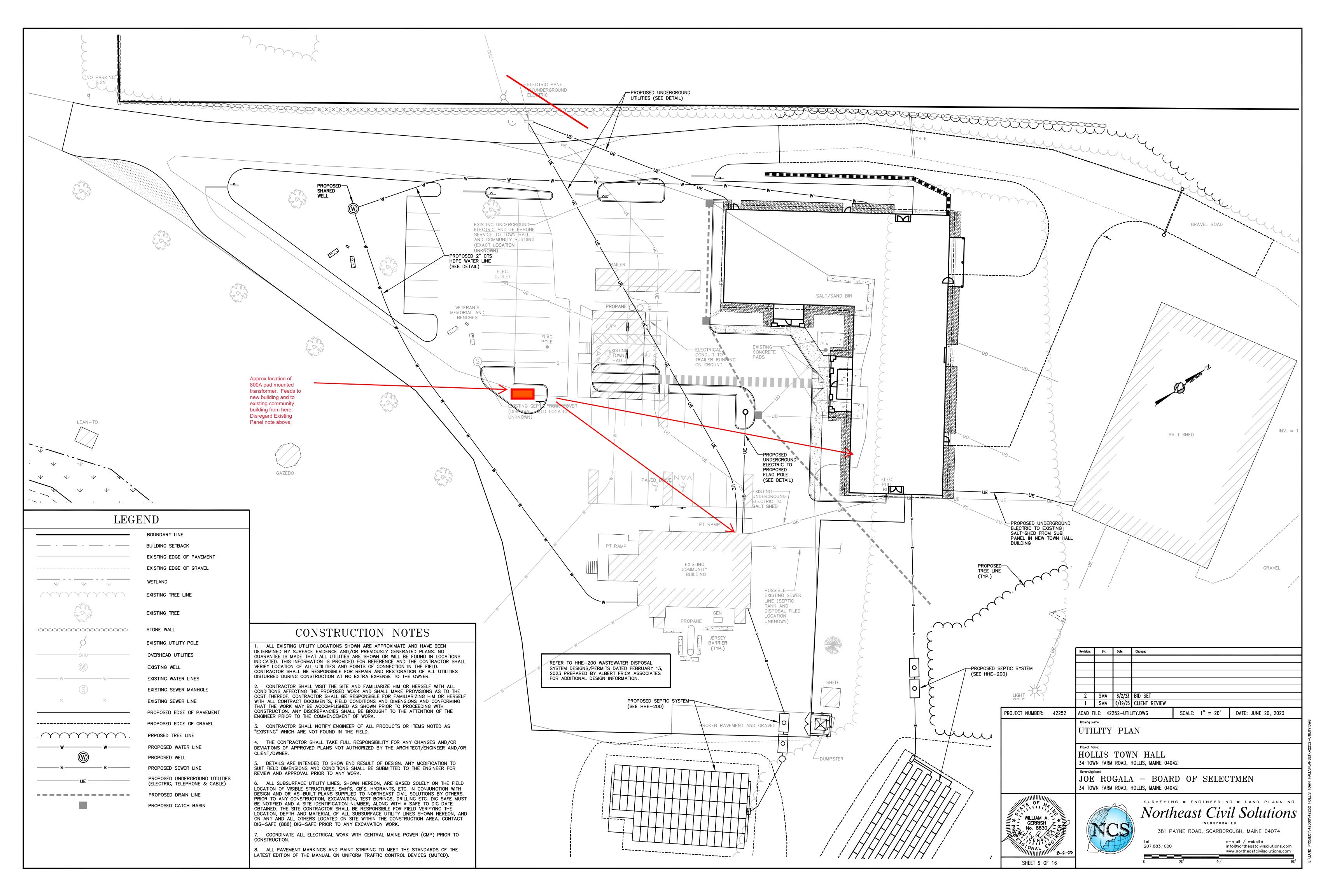


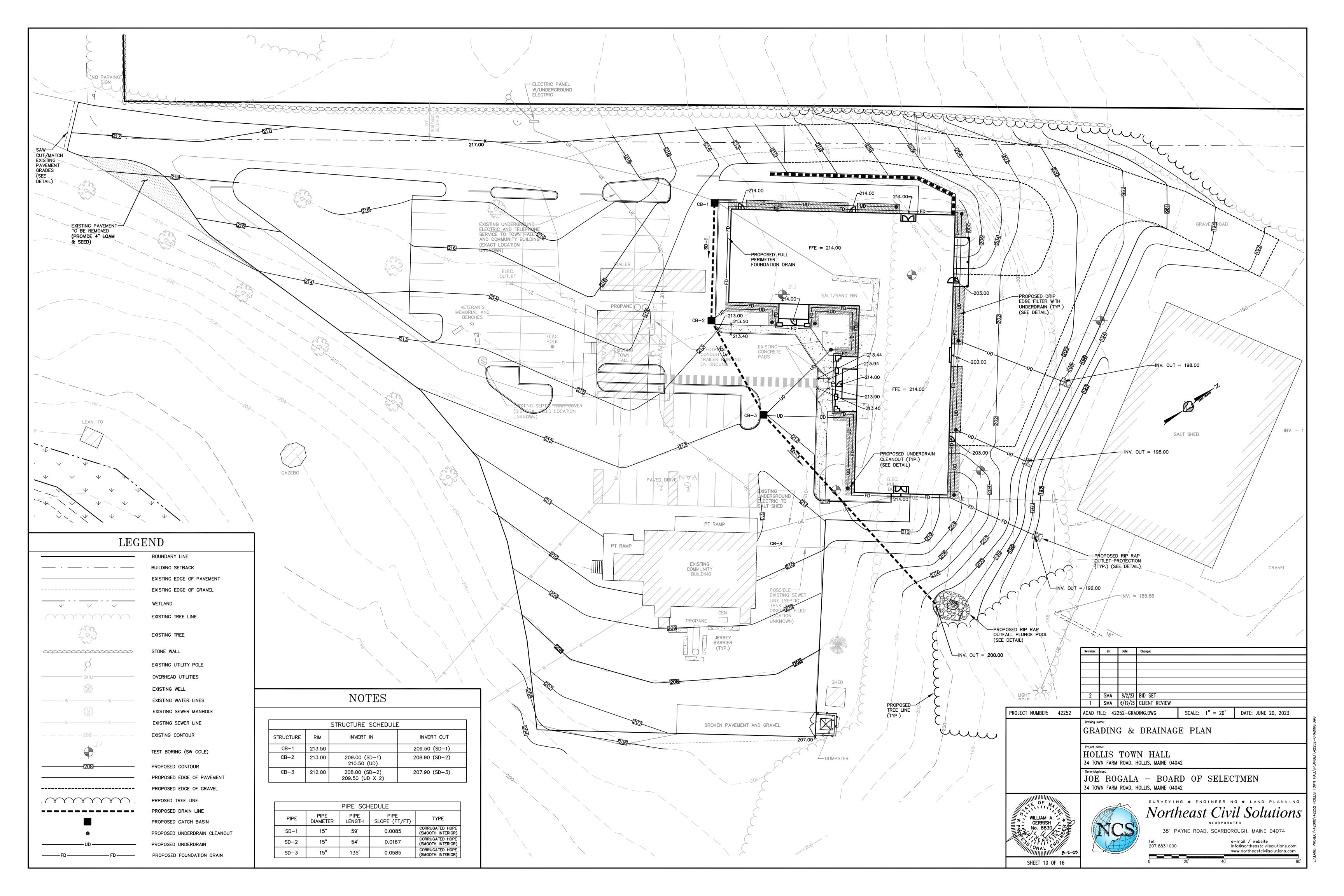


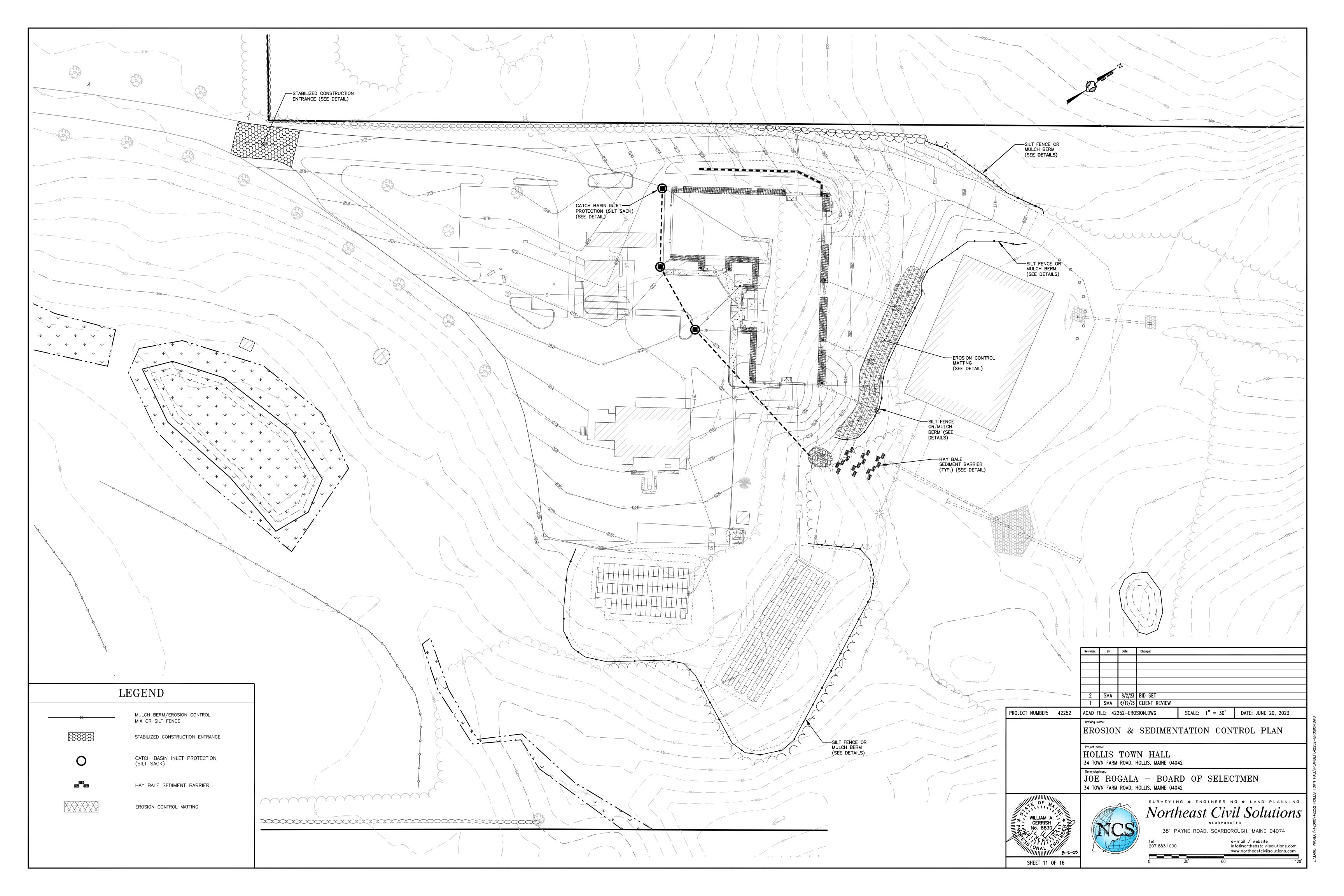












SEDIMENTATION AND EROSION FOR THIS PROJECT IS BASED UPON SOUND CONSERVATION PRACTICES, AND ADHERES TO THE STANDARDS DETAILED IN MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP) BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED OCTÒBER 2016. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE AFOREMENTIONED PUBLICATION AND COMPLY WITH THE PRACTICES PRESENTED THEREIN.

A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 M.R.S. \$480—B. FROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED. ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES

1 EROSION AND SEDIMENTATION CONTROL

POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES. CONTROL STORMWATER DISCHARGES. INCLUDING BOTH PEAK FLOW RATES AND VOLUME. TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED

AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

- SEDIMENT BARRIERS, PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWNGRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE MAINTAIN THE SEDIMENT BARRIERS BY REMOVING ACCUMULATED SEDIMENT, OR REMOVING AND REPLACING THE BARRIER, UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE
- STABILIZED CONSTRUCTION ENTRANCE, PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN BY A GEOTEXTILE FILTER FABRIC, USED TO PREVENT TRAFFIC FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.
- TEMPORARY STABILIZATION. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
- 1.5 REMOVAL OF TEMPORARY MEASURES. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND
- PERMANENT STABILIZATION. IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS: AND SCHEDULE SODDING. PLANTING. AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC. EXCESSIVE PEDESTRIAN TRAFFIC. AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO
- SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
- SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS 1.6.2 THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
- PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
- RIP RAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST I SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE
- AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND). PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
- PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN
- DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION. WITH A WELL-GRADED RIPRAP LINING. TURF REINFORCEMENT MAT. OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING. UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.
- WINTER CONSTRUCTION. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS
- SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF FACH CONSTRUCTION DAY AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF
- SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF
- DITCH. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.
- SLOPES. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL 1.7.4 SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.
- STORMWATER CHANNELS. DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME RUN-OFF. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED. THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER SECTION 1.6.7 ABOVE.
- THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.
- WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN 1/4 ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.

- SEDIMENT BASINS. SEDIMENT BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2—YEAR, 24—HOUR STORM OR PROVIDE FOR 3.600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE FROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST 1/2 OF THE DESIGN CAPACITY OF THE BASIN. THE USE OF CATIONIC TREATMENT CHEMICALS. SUCH AS POLYMERS. FLOCCULANTS. OR OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE DESIGNED TO REDUCE TURBIDITY IN STORMWATER MUST RECEIVE PRIOR APPROVAL FROM THE DEPARTMENT. WHEN REQUESTING APPROVAL TO USE CATIONIC TREATMENT CHEMICALS. YOU MUST DESCRIBE APPROPRIATE CONTROLS AND IMPLEMENTATION PROCEDURES TO ENSURE THE USE WILL NOT LEAD TO A VIOLATION OF WATER QUALITY STANDARDS. IN ADDITION, YOU MUST SPECIFY THE TYPE(S) OF SOIL LIKELY TO BE TREATED ON THE SITE. CHEMICALS TO BE USED AND HOW THEY AR TO BE APPLIED AND IN WHAT QUANTITY. ANY MANUFACTURER'S RECOMMENDATIONS, AND ANY TRAINING HAD BY PERSONNEL WHO WILL HANDLE AND APPLY THE
- ROADS. GRAVEL AND PAVED ROADS MUST BE DESIGNED AND CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET GUTTERS.
- CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNINTENDED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY. AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM FLEVATION OF STORAGE BEHIND THE CULVERT, CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES. SUCH AS APRONS. TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER
- PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. THE PARKING AREA'S SUBBASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY—PASS OF RUNOFF TO OTHER AREAS.

INSPECTION AND MAINTENANCE

- DURING CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.
- INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS 2.1.1 AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE
- MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS. THE DATE(S) O THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS. MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL, MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE. BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST B PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
- POST-CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET AFTER
- PLAN. CARRY OUT AN APPROVED INSPECTION AND MAINTENANCE PLAN THAT IS CONSISTENT WITH THE MINIMUM REQUIREMENTS OF THIS SECTION. THE PLAN MUST ADDRESS INSPECTION AND MAINTENANCE OF THE PROJECT'S PERMANENT EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT SYSTEM.
- INSPECTION AND MAINTENANCE. ALL MEASURES MUST BE MAINTAINED IN 2.2.2 EFFECTIVE OPERATING CONDITION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL. INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. THE FOLLOWING AREAS, FACILITIES, AND MEASURES MUST BE INSPECTED AND IDENTIFIED DEFICIENCIES MUST BE CORRECTED. AREAS, FACILITIES, AND MEASURES OTHER THAN THOSE LISTED BELOW MAY ALSO REQUIRE INSPECTION ON A SPECIFIC SITE. INSPECTION OR MAINTENANCE TASKS OTHER THAN THOSE DISCUSSED BELOW MUST BE INCLUDED IN THE MAINTENANCE PLAN DEVELOPED FOR A SPECIFIC
- INSPECT VEGETATED AREAS, PARTICULARLY SLOPES AND EMBANKMENTS, EARLY IN THE GROWING SEASON OR AFTER HEAVY RAINS TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. REPLANT BARE AREAS OR AREAS WITH SPARSE GROWTH. WHERE RILL EROSION IS EVIDENT. ARMOF THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE FROSIVE FLOWS TO ON-SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOWS. SEE PERMANENT STABILIZATION STANDARDS IN SECTION 1.6.
- INSPECT DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW, REMOVE ACCUMULATED SEDIMENTS AND DEBRIS TO CONTROL VECETATED GROWTH THAT COULD OBSTRUCT FLOW AND TO REPAIR ANY EROSION OF THE DITCH LINING VEGETATED DITCHES MUST BE MOWED AT LEAST ANNUALLY OR OTHERWISE MAINTAINED TO CONTROL THE GROWTH OF WOODY VEGETATION AND MAINTAIN FLOW CAPACITY ANY WOODY VEGETATION GROWING THROUGH RIPRAP LININGS MUST ALSO BE REMOVED. REPAIR ANY SLUMPING SIDE SLOPES AS SOON AS PRACTICABLE. IF THE DITCH HAS A RIPRAP LINING, REPLACE RIPRAP OF AREAS WHERE ANY UNDERLYING FILTER FABRIC OR UNDERDRAIN GRAVEL S SHOWING THROUGH THE STONE OR WHERE STONES HAVE DISLODGED. THE CHANNEL MUST RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDESLOPES.
- INSPECT CULVERTS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW; REMOVE ACCUMULATED SEDIMENTS AND DEBRIS AT THE INLET, AT THE OUTLET, AND WITHIN THE CONDUIT; AND TO REPAIR ANY EROSION DAMAGE AT THE CULVERT'S INLET AND OUTLET
- INSPECT AND CLEAN OUT CATCH BASINS. CLEAN-OUT MUST INCLUDE THE REMOVAL AND LEGAL DISPOSAL OF ANY ACCUMULATED SEDIMENTS AND DEBRIS AT THE BOTTOM OF THE BASIN, AT ANY INLET GRATES, AT ANY INFLOW CHANNELS TO THE BASIN. AND AT ANY PIPES BETWEEN BASINS, IF THE BASIN OUTLET IS DESIGNED TO TRAP FLOATABLE MATERIALS. THEN REMOVE THE FLOATING DEBRIS AND ANY FLOATING OILS (USING OIL-ABSORPTIVE PADS).
- INSPECT RESOURCE AND TREATMENT BUFFERS ONCE A YEAR FOR EVIDENCE OF EROSION, CONCENTRATING FLOW, AND ENCROACHMENT BY DEVELOPMENT. IF FLOWS ARE CONCENTRATING WITHIN A BUFFER, SITE GRADING, LEVEL SPREADERS, OR DITCH TURN-OUTS MUST BE USED TO ENSURE A MORE EVEN DISTRIBUTION OF FLOW INTO A BUFFER. CHECK DOWN SLOPE OF ALL SPREADERS AND TURN-OUTS FOR EROSION. IF EROSION IS PRESENT. ADJUST OR MODIFY THE SPREADER'S OR TURNOUT'S LIP TO ENSURE A BETTER DISTRIBUTION OF FLOW INTO A BUFFER. CLEAN-OUT ANY ACCUMULATION OF SEDIMENT WITHIN THE SPREADER BAYS OR TURN-OUT POOLS.
- INSPECT AT LEAST ONCE PER YEAR, EACH STORMWATER MANAGEMENT POND OR BASIN, INCLUDING THE POND'S EMBANKMENTS, OUTLET STRUCTURE, AND EMERGENCY SPILLWAY, REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE POND. CONTROL WOODY VEGETATION ON THE POND'S EMBANKMENTS.
- INSPECT AT LEAST ONE PER YEAR, EACH UNDERDRAINED FILTER. INCLUDING THE FILTER EMBANKMENTS. VEGETATION, UNDERDRAIN PIPING. AND OVERFLOW SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE FILTER. IF NEEDED. REHABILITATE ANY CLOGGED. SURFACE LININGS. AND FLUSH UNDERDRAIN PIPING.
- INSPECT EACH MANUFACTURED SYSTEM INSTALLED ON THE SITE, INCLUDING THE SYSTEM'S INLET, TREATMENT CHAMBER(S), AND OUTLET AT LEAST ONCE PER YEAR, OR IN ACCORDANCE WITH THE MAINTENANCE GUIDELINES RECOMMENDED BY THE MANUFACTURER BASED ON THE ESTIMATED RUNOFF AND POLLUTANT LOAD EXPECTED TO THE SYSTEM FROM THE PROJECT. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS, DEBRIS, AND CONTAMINATED WATERS FROM THE SYSTEM AND, IF APPLICABLE, REMOVE AND REPLACE ANY CLOGGED OR SPENT FILTER MEDIA.

2.2.3 REGULAR MAINTENANCE

- CLEAR ACCUMULATIONS OF WINTER SAND IN PARKING LOTS AND ALONG ROADWAYS AT LEAST ONCE A YEAR. PREFERABLY IN THE SPRING. ACCUMULATIONS ON PAVEMENT MAY BE REMOVED BY PAVEMENT SWEEPING ACCUMULATIONS OF SAND ALONG ROAD SHOULDERS MAY BE REMOVED BY GRADING EXCESS SAND TO THE PAVEMENT EDGE AND REMOVING IT MANUALLY OR BY A FRONT-END LOADER. GRADING OF GRAVEL ROADS, GRADING OF THE GRAVEL SHOULDERS OF GRAVEL OR PAVED ROADS, MUST E ROUTINELY PERFORMED TO ENSURE THAT STORMWATER DRAINS MMEDIATELY OFF THE ROAD SURFACE TO ADJACENT BUFFER AREAS OF STABLE DITCHES, AND IS NOT IMPEDED BY ACCUMULATIONS OF GRADED MATERIAL ON THE ROAD SHOULDER OR BY EXCAVATION OF FALSE DITCHES IN THE SHOULDER. IF WATER BARS OR OPEN-TOP CULVERTS ARE USED TO DIVERT RUNOFF FROM ROAD SURFACES, CLEAN-OUT ANY SEDIMENTS WITHIN OR AT THE OUTLET OF THESE STRUCTURES TO RESTORE THEIR FUNCTION.
- MANAGE EACH BUFFER'S VEGETATION CONSISTENTLY WITH THE REQUIREMENTS IN ANY DEED RESTRICTIONS FOR THE BUFFER. WOODED BUFFERS MUST REMAIN FULLY WOODED AND HAVE NO DISTURBANCE TO THE DUFF LAYER, VEGETATION IN NON-WOODED BUFFERS MAY NOT BE CUT MORE THAN THREE TIMES PER YEAR, AND MAY NOT BE CUT SHORTER THAN
- DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING INSPECTIONS, MAINTENANCE, AND ANY CORRECTIVE ACTIONS TAKEN. THE LOG MUST INCLUDE THE DATE ON WHICH EACH INSPECTION OR MAINTENANCE TASK WAS PERFORMED A DESCRIPTION OF THE INSPECTION FINDINGS OR MAINTENANCE COMPLETED, AND THE NAME OF THE INSPECTOR OR MAINTENANCE PERSONNEL PERFORMING THE TASK. IF A MAINTENANCE TASK REQUIRES THE CLEAN-OUT OF ANY SEDIMENT OR DEBRIS, INDICATE WHERE THE SEDIMENT AND DEBRIS WAS DISPOSED AFTER REMOVAL. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST FIVE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

DURATION OF MAINTENANCE. PERFORM MAINTENANCE AS DESCRIBED AND REQUIRED IN

THE PERMIT UNLESS AND UNTIL THE SYSTEM IS FORMALLY ACCEPTED BY THE MUNICIPALITY OR QUASI-MUNICIPAL DISTRICT, OR IS PLACED UNDER THE JURISDICTION OF A LEGALLY CREATED ASSOCIATION THAT WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM, IF A MUNICIPALITY OR QUASI-MUNICIPAL DISTRICT CHOOSES TO ACCEPT A STORMWATER MANAGEMENT SYSTEM, OR A COMPONENT OF A STORMWATER SYSTEM, IT MUST PROVIDE A LETTER TO THE DEPARTMENT STATING THAT IT ASSUMES RESPONSIBILITY FOR THE SYSTEM. THE LETTER MUST SPECIFY THE COMPONENTS OF THE SYSTEM FOR WHICH THE MUNICIPALITY OR DISTRICT WILL ASSUME RESPONSIBILITY, AND THAT THE MUNICIPALITY OR DISTRICT AGREES TO MAINTAIN THOSE COMPONENTS OF THE SYSTEM IN COMPLIANCE WITH DEPARTMENT STANDARDS. UPON SUCH ASSUMPTION OF RESPONSIBILITY, AND APPROVAL BY THE DEPARTMENT, THE MUNICIPALITY, QUASI-MUNICIPAL DISTRICT, OR ASSOCIATION BECOMES A CO-PERMITTEE FOR THIS PURPOSE ONLY AND MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THE PERMIT.

HOUSEKEEPING

- SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.
- GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS. TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.
- FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST FMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BU' OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS. THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT
- DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES. FOUNDATIONS. COFFER DAMS. PONDS. AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT
- AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE

DISCHARGES FROM FIREFIGHTING ACTIVITY;

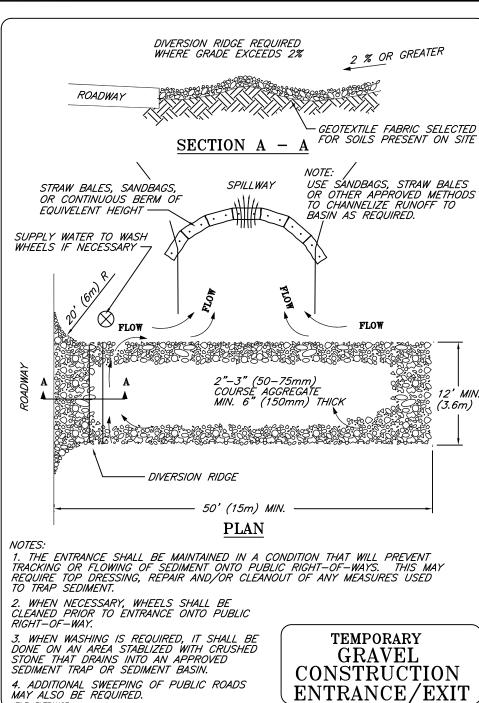
WASHING IS PROHIBITED):

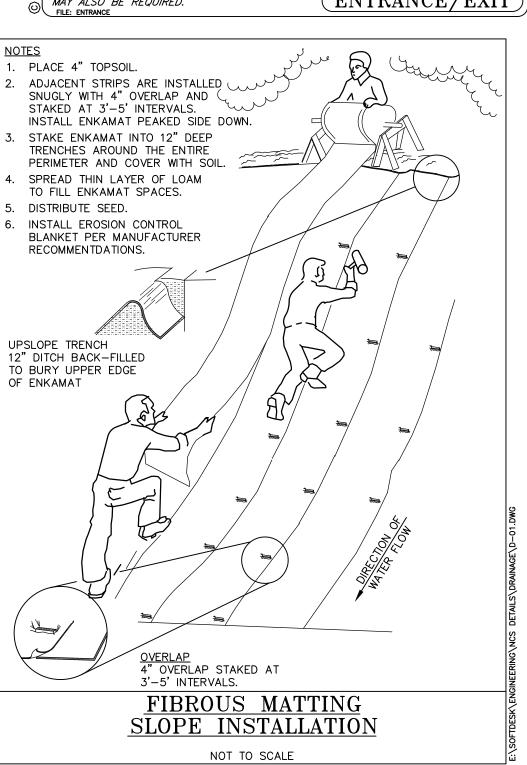
- FIRE HYDRANT FLUSHINGS: VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION
- DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT
- REMOVAL, THAT DOES NOT INVOLVE DETERGENTS; PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLÉSS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
- UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE; UNCONTAMINATED GROUNDWATER OR SPRING WATER; FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED; UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX
- POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND LANDSCAPE IRRIGATION.
- UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX OF (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING
- 3.7.1 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; 3.7.3 SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING;
- 3.7.4 TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE

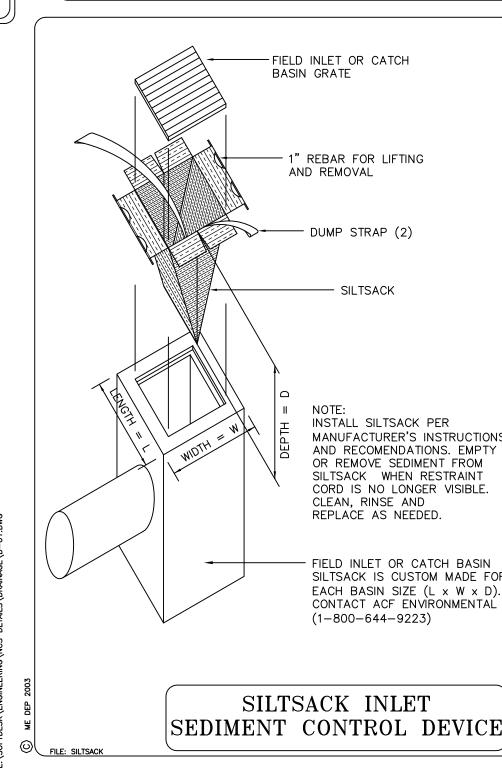
BASIC STANDARDS - EROSION CONTROL MEASURES:

MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.

GENERAL NOTE: ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET MDOT ITEM 656.





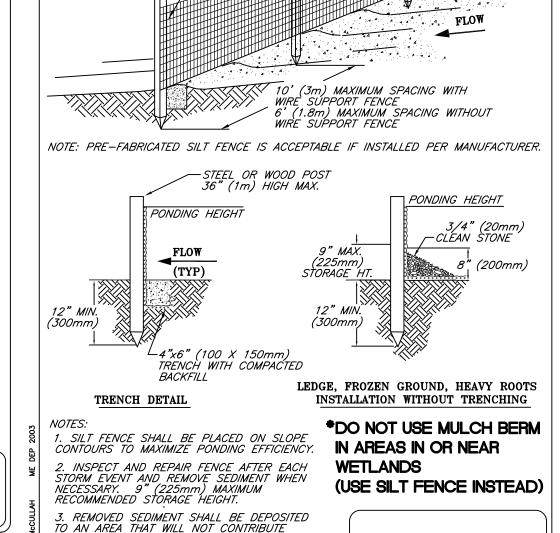


NOTE: INSTALL EROSION MATTING ON SLOPES GREATER THAN 3:1 OR AS SHOWN ON PLAN.

∟1.0 X D (12" MIN.) **ELEVATION** GEOTEXTILE FILTER FABRIC BENEATH STONE -LAYER THICKNESS BASED ON LINDISTLIBBED SOILS OR 6' OF 4"-MINLIS 2.25 X D50 BANK RUN GRAVEL FREE OF FINES, CLAYS, SILTS. SECTION N APRON LENGTH PER DESIGN 'D' = PIPE DIAMETER NOTES: 1. CONSULT WITH IF&W IF FISH PASSAGE WILL BE INHIBITED DURING LOW FLOWS. 3. IN DEFINED CHANNELS, APRON SHALL EXTEND FULL WIDTH OF BOTTOM AND ONE FOOT ABOVE MAX. TAILWATER OR UP TO BANK FULL, WHICHEVER IS LESS. PIPE INLET/OUTLET PROTECTION (RIP RAP) シ<u> FILE: OUTLETAPRON</u>

2. REFER TO DESIGN NOTES AND LIMITATIONS IN TEXT ON PIPE OUTLET PROTECTION.

FILE: SILTFENC MANUFACTURER'S INSTRUCTIONS



NEEDED WITHOUT WIRE MESH SUPPORT—

ATTACH FILTER FABRIC

SIDE OF POST-

SECURELY TO UPSTREAM

PONDING IS ANTICIPATED OR OCCURS—

OUBLE NUMBER OF STAKES FOR SUPPORT.

FROSION CONTROL MIX BERMS

DIMENT OFF—SITE AND CAN BE PERMANENTLY

4. DO NOT PLACE SILT FENCE IN STREAMS OR CONCENTRATED FLOW CONDITIONS.

FROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE PROJECT SITE IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

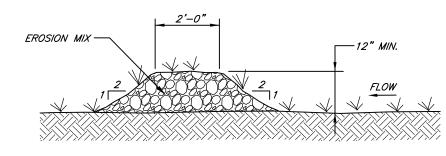
EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKSLESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:

• THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS. • PARTICLE SIZE BY WEIGHT SHALL BE 100 % PASSING A 6" SCREEN AND A MINIMUM OF 70 %, MAXIMUM OF 85%, PASSING A 0.75" SCREEN. • THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.

• LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX. • SOLUBLE SALTS CONTENT SHALL BE < 4.0 MMHOS/CM • THE PH SHOULD FALL BETWEEN 5.0 AND 8.0.

• THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH LINDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS • ON SLOPES LESS THAN 5 % OR AT THE BOTTOM OF STEEPER SLOPES (<2:1) UP TO 20 FEET LONG. THE BARRIER MUST BE A MINIMUM OF 12" HIGH. AS MEASURED ON THE UPHILL SIDE OF THE BARRIER AND A MINIMUM OF TWO FEET WIDE. ON LONGER OR STEEPER SLOPES, THE BARRIER SHOULD BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF. • FROZEN GROUND, OUTCROPS OF BEDROCK AND VERY ROOTED FORESTED AREAS ARE LOCATIONS

TERE BERMS OF EROSION CONTROL MIX ARE MOST PRACTICAL AND EFFECTIV OTHER BMPS SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM (I.E., A LARGE UP GRADIENT CONTRIBUTING WATERSHED).



* FOR USE AS REINFORCED MULCH BERM 2 ROWS OF EROSION MIX MUST BE INSTALLED SUPPORTED BY A MINIMUM OF 1 ROW OF HAY BALES UPSTREAM.

MULCH BERM

SILT FENCE

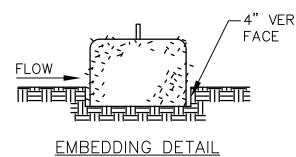
- 1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE
- ADJACENT BALES. 2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4". 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS FLOW DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL
- BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER. 4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS DIRECTED BY PROJECT ENGINEER.
- 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

ANGLE FIRST STAKE

TOWARD PREVIOUSLY

ANCHORING DETAIL

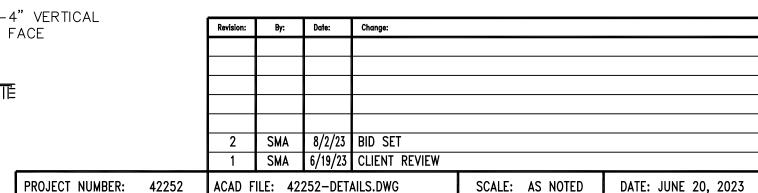
LAID BALE

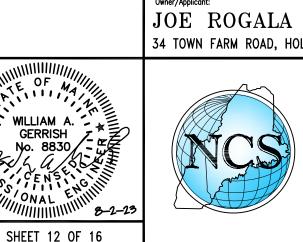


WIRE OR NYLON BOUND HAY BALES PLACED ON THE CONTOUR 2 REBARS. STEEL PICKETS OR 2"x 2" HARDWOOD STAKES DRIVEN

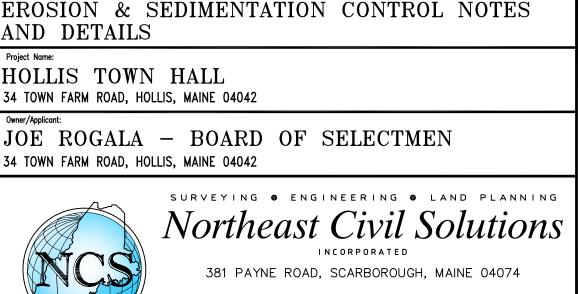
1 1/2' TO 2' IN GROUND

HAY BALE SEDIMENT BARRIER NOT TO SCALE

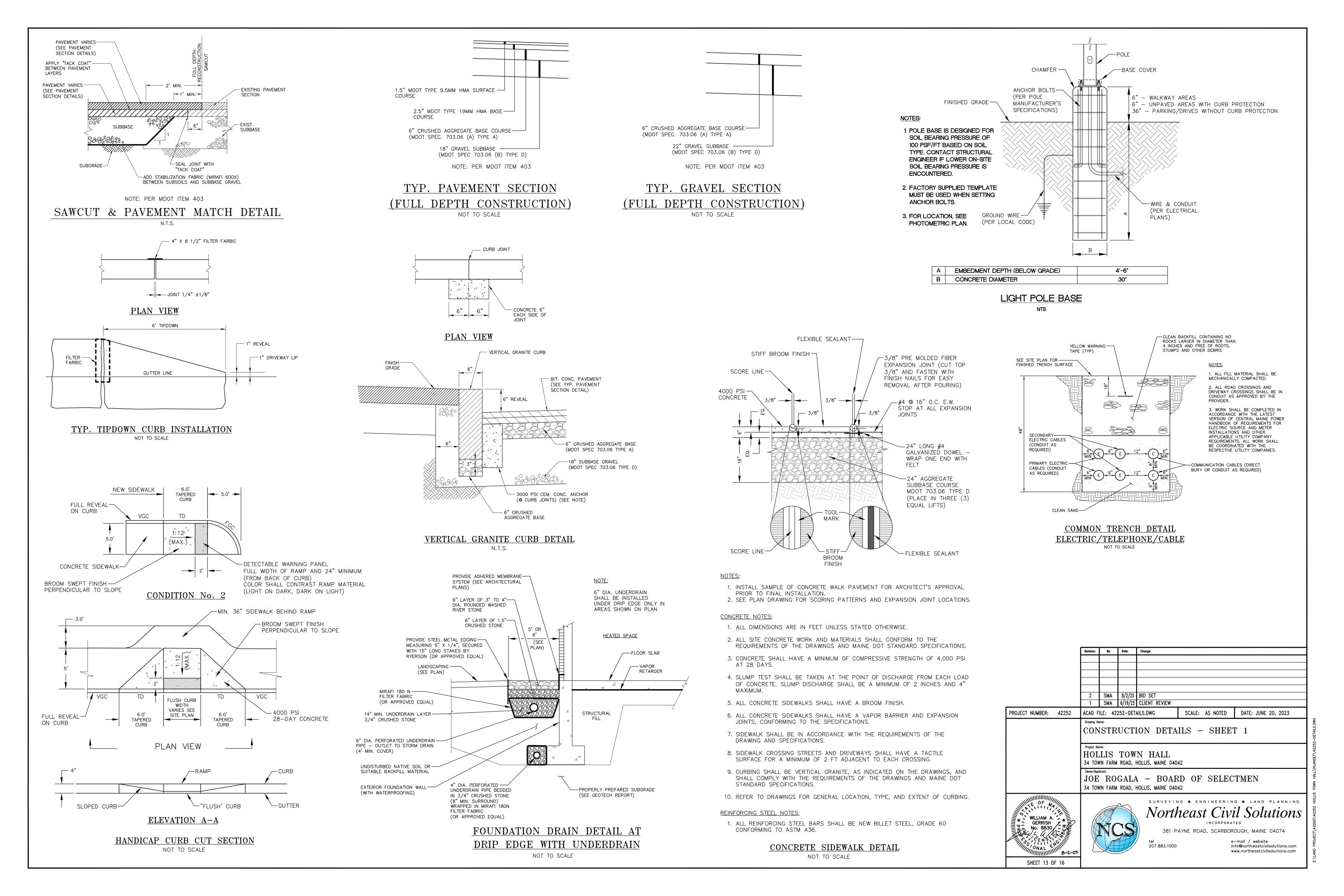


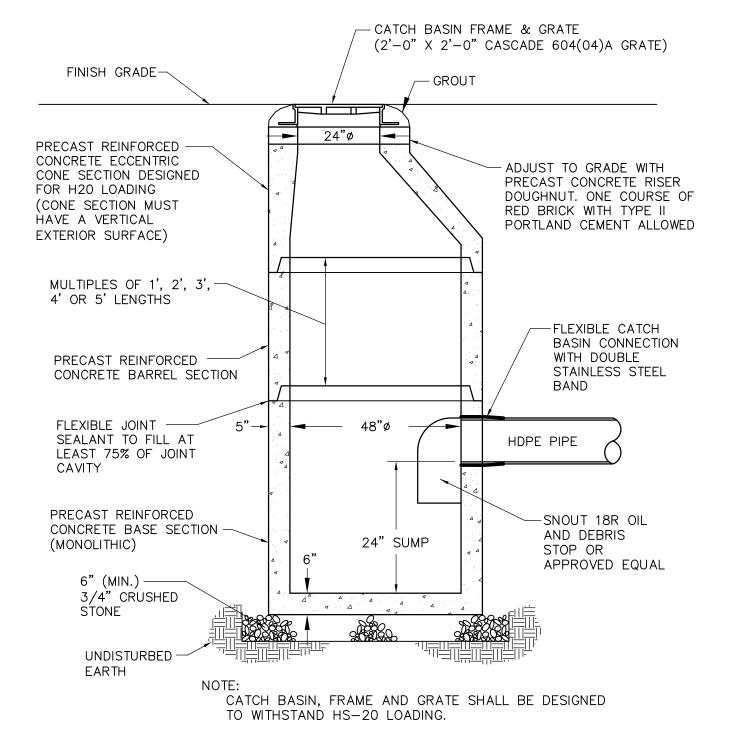






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PER MDOT ITEM 604.04

PRECAST CONCRETE CATCH BASIN DETAIL

N.T.S.

PREMANUFACTURED SWING -7

- YELLOW AND BLACK

RAILS FULL LENGTH

- CHAIN OR LATCH W/

SWING GATE DETAIL

N.T.S.

WEATHER PROOF KEY LOCK

REFLECTIVE TAPE TOP

6'-0" MAX.

-9 G.A. VINYL COATED GALV.

 \sim 3/8" TRUSS ROD

─1 5/8"ø BRACE RAIL

STEEL FABRIC 2" MESH -

__1 5/8"ø TOP RAIL

∕-3"ø PULL POST

NO. 7 G.A.— TENSION WIRE

GATE CONSTRUCTED OF

4"ø GALV. STEEL

☐ 18"ø SONOTUBE

6'-0" MAX.

1'0" O.C. MAX. (POSTŚ)

— 2" MAX 1"MIN

ALL FENCE POSTS TO BE DRILLED

WALL (SEE DETAIL)

AND GROUTED INTO RETAINING

 \sim 2-1/2"ø LINE POST

(TYP.)

W/4000 PSI CONCRETE

BIT. WEARING ----COURSE — BIT. BASE COURSE 4"LOAM -CRUSHED AGGREGATE BASE COURSE (MDOT SPEC. 703.06 TYPE A) 95% COMPACTION. -CRUSHED AGGREGATE BORROW SUBBASE (MDOT SPEC. 703.06 TYPE D) - COMMON BORROW MAX. MAX. -3/4" CRUSHED STONE BÉDDING MATERIAL TO TRENCH WALLS AND TO SPRINGLINE NOTE: ALL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM PROCTOR

TYPICAL STORMWATER TRENCH SECTION NOT TO SCALE

— 4"ø GALV. STEEL GATE

POST (TYP.) BOTH SIDES

--- HITCHING POSTS

BOTH SIDES (TYP.)

—ALL TERMINAL, CORNER, ANGLE, PULL

AND LINE POSTS, TOP RAILS, TRUSS

RODS, FABRIC TIES, BRACE RODS,

RELATED HARDWARE TO BE VINYL

TENSION WIRE AND ALL OTHER

COATED PER SPECIFICATIONS.

-3"ø TERMINAL POST

WITH CAP (ACORN)

-STRETCHER BAR

-1/4"x3/4" BAR

STRETCHER

BANDS

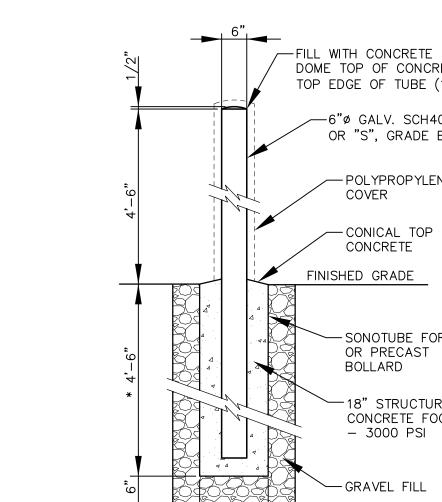
DENSITY (MODIFIED)

-FILL WITH CONCRETE DOME TOP OF CONCRETE ABOVE TOP EDGE OF TUBE (1/2" MIN.)—6"ø GALV. SCH40 A53 TYPE "E" OR "S", GRADE B TUBE STEEL — POLYPROPYLENE COVER CONCRETE-- ISOLATION JOINT FINISHED GRADE -SONOTUBE FORM OR PRECAST BOLLARD -18" STRUCTURAL CONCRETE FOOTING - 3000 PSI -GRAVEL FILL

1. PLACE BOLLARDS AS SHOWN IN PLAN VIEW AND/OR ACCESSIBLE PARKING LAYOUT DETAIL.

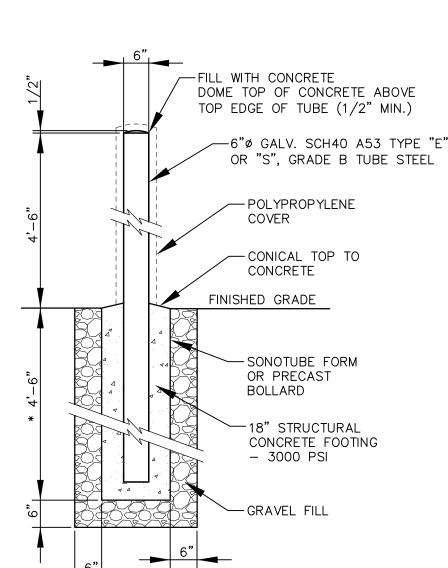
- 2. BOLLARDS PLACED IN/AT DUMPSTER ENCLOSURE:
 - A. INSIDE: 6' TO CENTERLINE FROM FENCE SIDES (2 BOLLARDS); 1.0' TO CENTERLINE FROM BACK OF FENCE
 - B. OUTSIDE: AS SHOWN AT DETAIL (1 PER CORNER AT FRONT)

DUMPSTER SLAB BOLLARD DETAIL

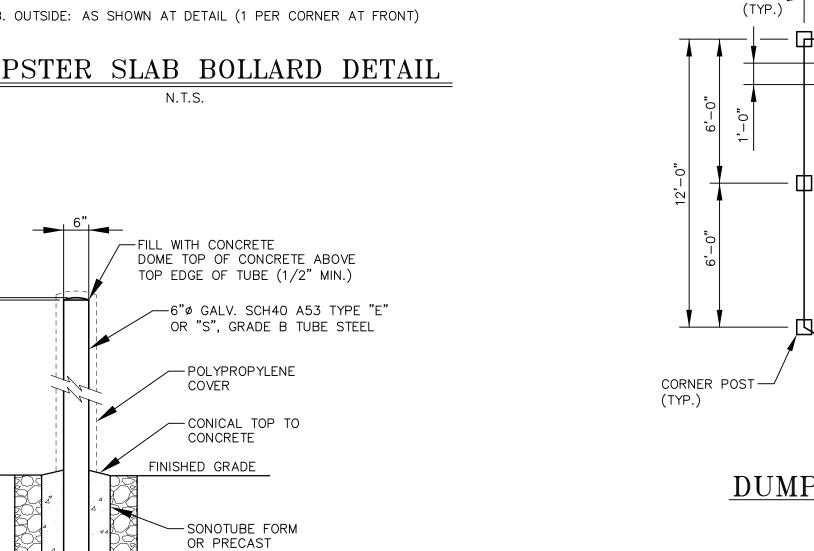


NOTES; 1. PLACE BOLLARDS AS SHOWN IN PLAN VIEW AND/OR

BOLLARD DETAIL N.T.S.



ACCESSIBLE PARKING LAYOUT DETAIL.



#4 @12 EW--COMPACTED STRUCTURAL FILL -COMPACTED SUBGRADE <u>SECTION</u>

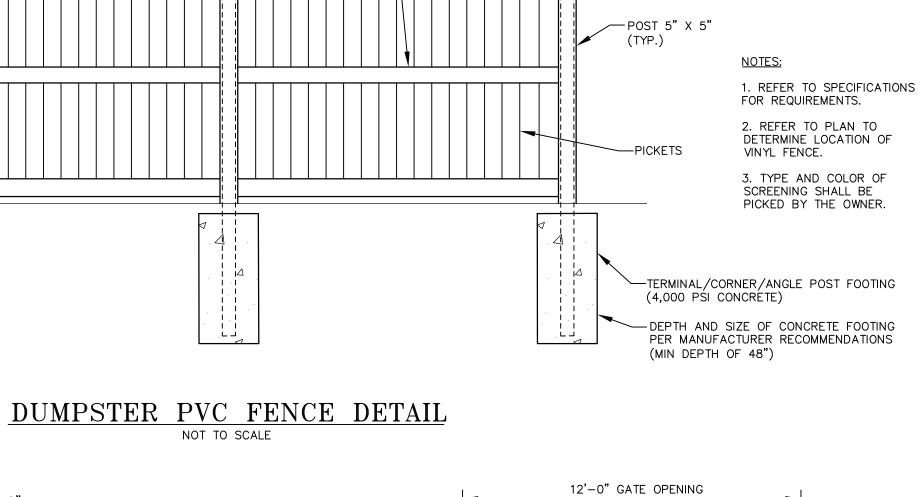
- 1. PROVIDE 1/2" PER FOOT SLOPE AWAY FROM PADS WITHIN 10'-0" OF ALL PAD ÉDGES.
- 2. ALL SITE CONCRETE WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE DRAWINGS AND MAINE DOT STANDARD SPECIFICATIONS.
- CONCRETE SHALL HAVE A MINIMUM OF COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
- SLUMP TEST SHALL BE TAKEN AT THE POINT OF DISCHARGE FROM EACH LOAD OF CONCRETE. SLUMP DISCHARGE SHALL BE A MINIMUM OF 2 INCHES AND 4" MAXIMUM.

REINFORCING STEEL NOTES:

1. ALL REINFORCING STEEL BARS SHALL BE NEW BILLET STEEL, GRADE 60 CONFORMING TO ASTM A36.

DUMPSTER/EQUIPMENT PAD DETAIL

NOT TO SCALE

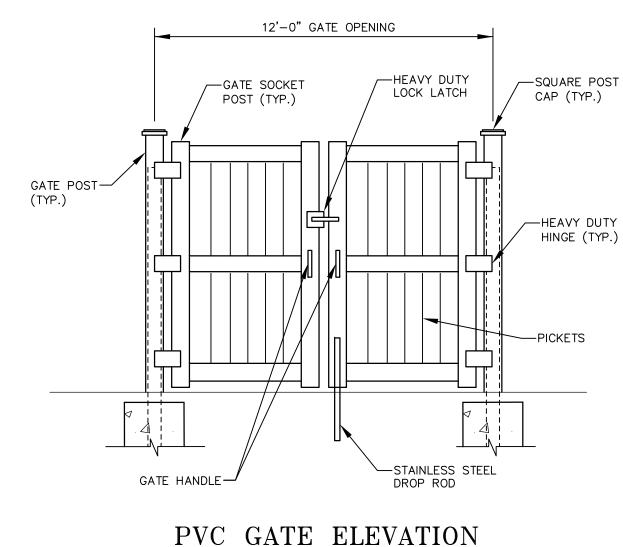


-SQUARE POST

CAP (TYP.)

5 1/2" TOP RAIL

5 1/2" CENTER RAIL



NOT TO SCALE

DUMPSTER PAD PLAN VIEW NOT TO SCALE

12'-0"

6'-0"

6'-0"

—BOLLARD (TYP.)

FENCE

(TYP.)

DUMPSTER PAD

-APPROX. LIMTS

OF DUMPSTER

∕— GATE

(SEE DETAIL)

6' HIGH PVC

LINE POST 8'-0" O.C. MAX.

NEW SQUARE GALVANIZED— STEEL POST AT ALL

CORNERS AND GATE POSTS

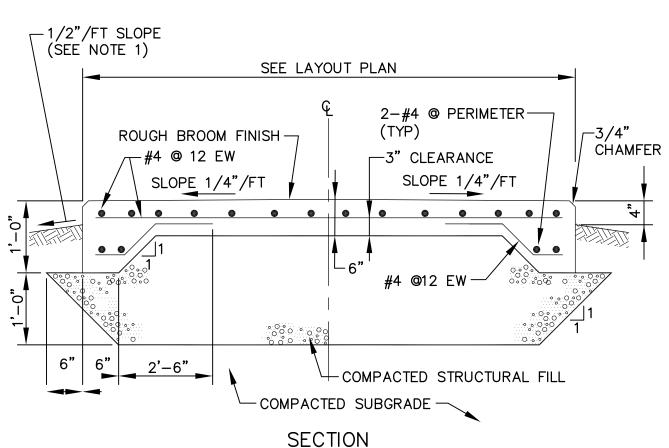
5 1/2" BOTTOM RAIL

EXSITING —

GRADE

(PER MANUFACTURER'S

RECOMMENDATIONS)

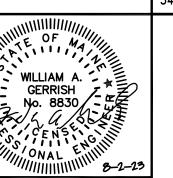


2 SMA 8/2/23 BID SET

By: Date: Change:

SMA 6/19/23 CLIENT REVIEW SCALE: AS NOTED DATE: JUNE 20, 2023 ACAD FILE: 42252-DETAILS.DWG PROJECT NUMBER: 42252

CONSTRUCTION DETAILS - SHEET 2 HOLLIS TOWN HALL 34 TOWN FARM ROAD, HOLLIS, MAINE 04042 JOE ROGALA - BOARD OF SELECTMEN 34 TOWN FARM ROAD, HOLLIS, MAINE 04042



SHEET 14 OF 16

Northeast Civil Solutions 381 PAYNE ROAD, SCARBOROUGH, MAINE 04074

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1. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

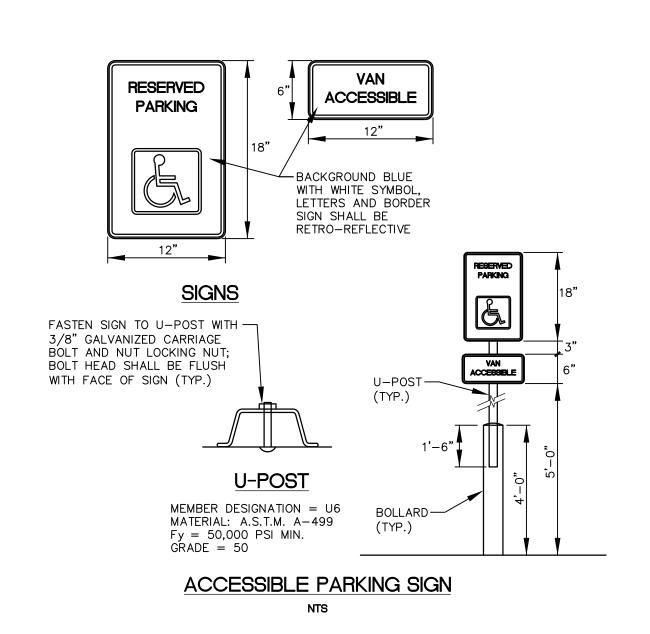
- 2. WHERE FENCE LINE HAS A CHANGE IN DIRECTION OF 15 DEGREES OR MORE, CORNER POSTS WITH BRACING SHALL BE ERECTED.
- 3. DIAGONAL BRACING AND CENTER BRACE TO BE ERECTED AT ALL GATE POSTS.

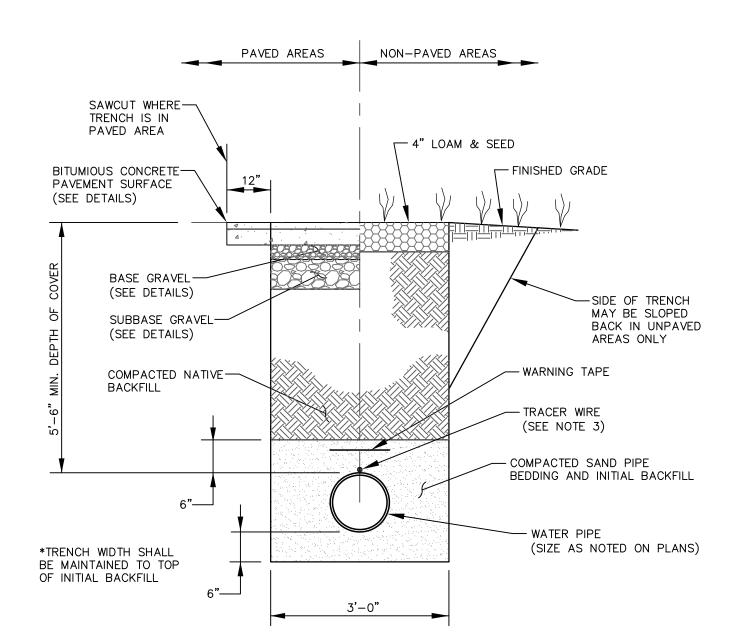
CHAIN LINK FENCE DETAIL

NOT TO SCALE

TRAFFIC SIGNS										
IDENTIFICATION	SIGN	SIGN	POST PER	TEXT	NUMBER OF	SIGN SQ.	REMARKS			
NUMBER	HEIGHT	WIDTH	SIGN	IEAI	SIGNS REQ'D.	NOM. AREA	TOTAL AREA	TEMP ITTO		
R1-1	30"	30"	1	STOP	5	6.25	31.25	PER MUTCD		
R7–8	18"	12"	1	PARKING W	4	1.5	6.0	PER MUTCD		
R7-8b	6"	12"	1	VAN ACCESSIBLE	2	0.5	1.0	PER MUTCD		

NOTE: ALL SIGNS SHALL CONFORM TO MUTCD STANDARDS AND MDOT ITEM 645

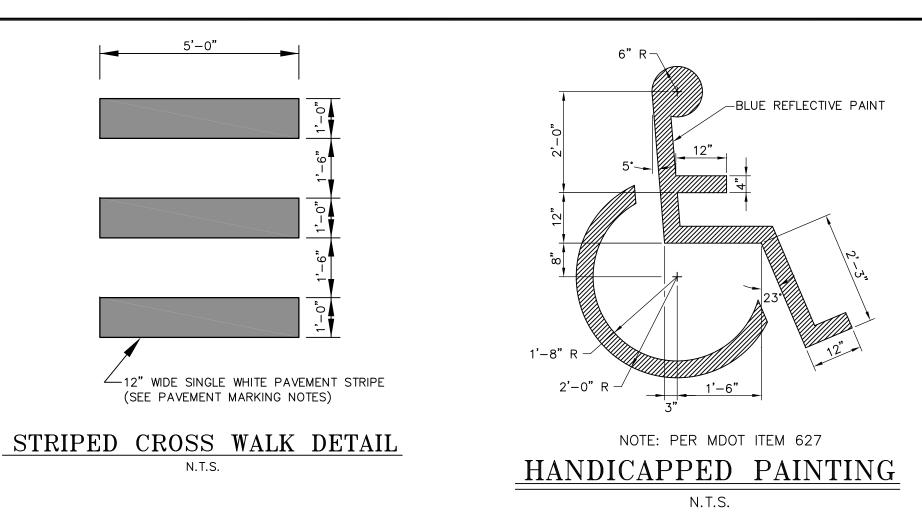




SAND AND BACKFILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 12 INCHES IN DEPTH AND SHALL BE COMPACTED TO A MINIMUM OF 92 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557. BASE AND SUBBASE MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN DEPTH AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.

2. NONMETALLIC PIPE SHALL BE PARALLELED BY A METALLIC TRACER WIRE GROUNDED TO METAL AT BOTH ENDS. TRACER WIRE SHALL BE 12 AWG STRANDED COPPER WITH AN HMV-PE JACKET.

WATER TRENCH



PAVEMENT MARKING NOTES:

- 1. ALL PAVEMENT MARKING WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES **MUTCD** AND MDOT ITEM 627.
- 2. WORDS AND SYMBOLS SHALL BE CENTERED LATERALLY WITHIN THE LANE. THE LONGITUDINAL DIMENSION SHALL BE PARALLEL TO THE LANE.
- 3. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
- 4. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED ADJACENT TO A BROKEN LANE LINE. A TURN ARROW SHALL PRECEED THE WORD "ONLY".
- 5. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS). HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE.
- 6. PREFORMED TAPE WORDS AND SYMBOLS SHALL BE PRE-CUT, EITHER BY THE MANUFACTURER OR THE CONTRACTOR.
- 7. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS.

ITEM #A-10

WEIGHT - SEE CHART BELOW

TOP VIEW

1'-7 1/2

-LIQUID LEVEL

WEIGHT

(LBS)

11,220

SECTION

FLUSH WITH FINISHED GRADES

ITEM #

A-1004

REGULAR | HEAVY DUTY DESIGN NOTES:

SEALANT.

CENTERS EACH WAY.

ITEM #

18" DIA OPENING-(TYP. 3 PLACES)

ALTERNAT

KNOCK OUTS

3 PLACES

INLET

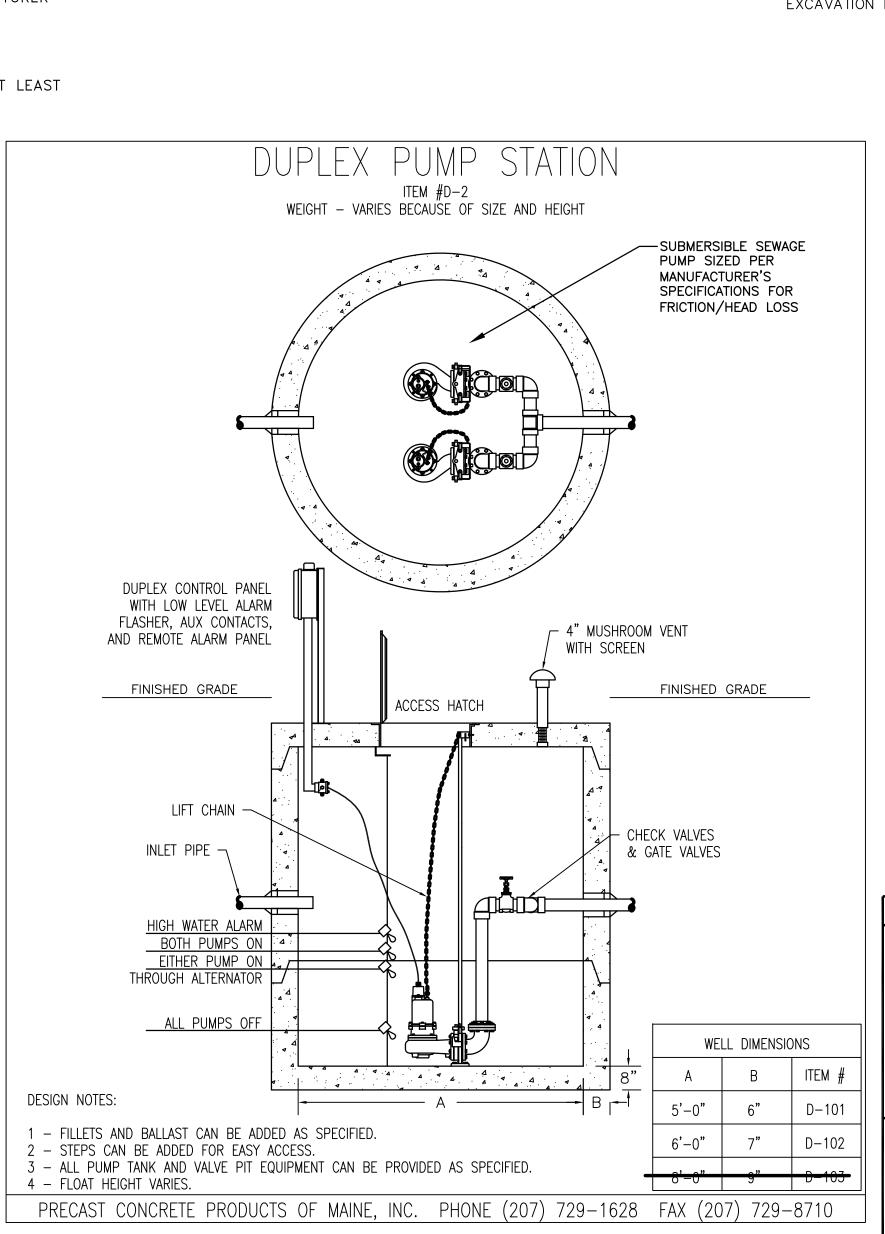
4" INLET-\

CAPACITY

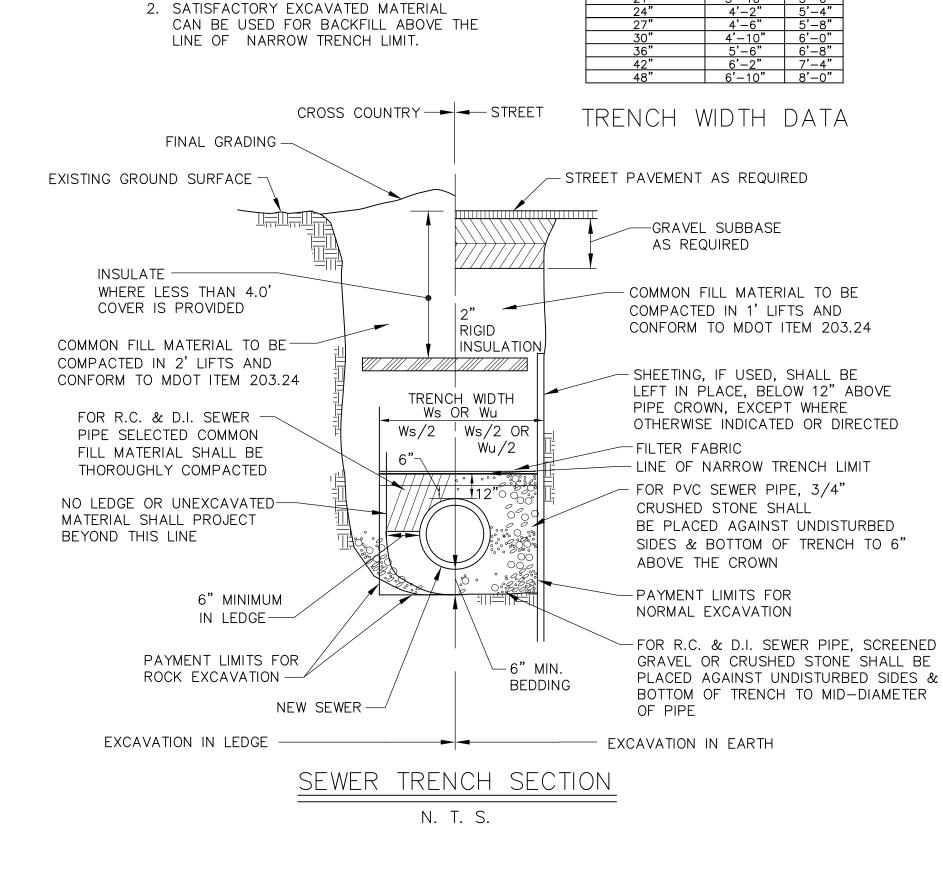
(GALLONS)

1" TAPER¬— 5" —

8. LONGITUDINAL SPACING BETWEEN SUCCESSIVE WORDS AND/OR SYMBOLS SHOULD BE AT LEAST 4 TIMES THE HEIGHT OF THE LARGEST CHARACTER.



SEWER PUMP STATION

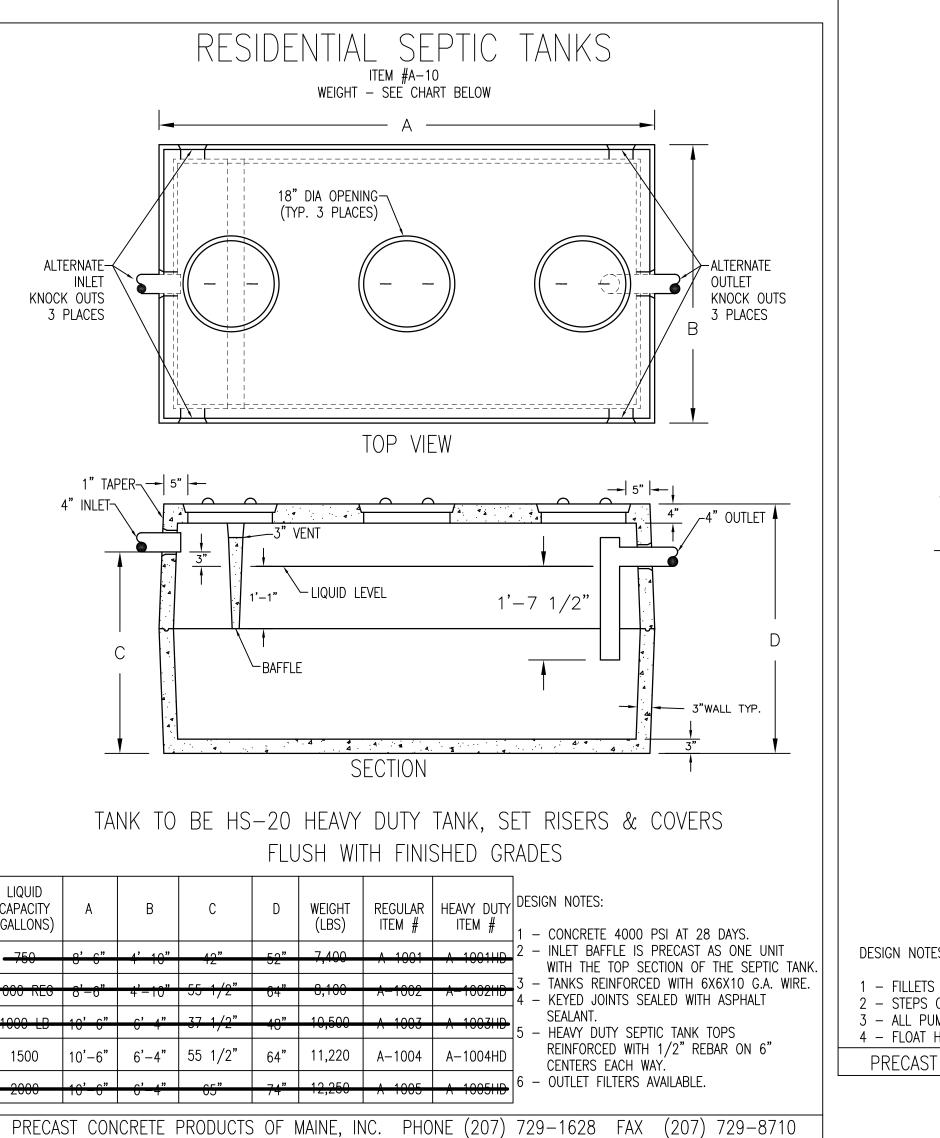


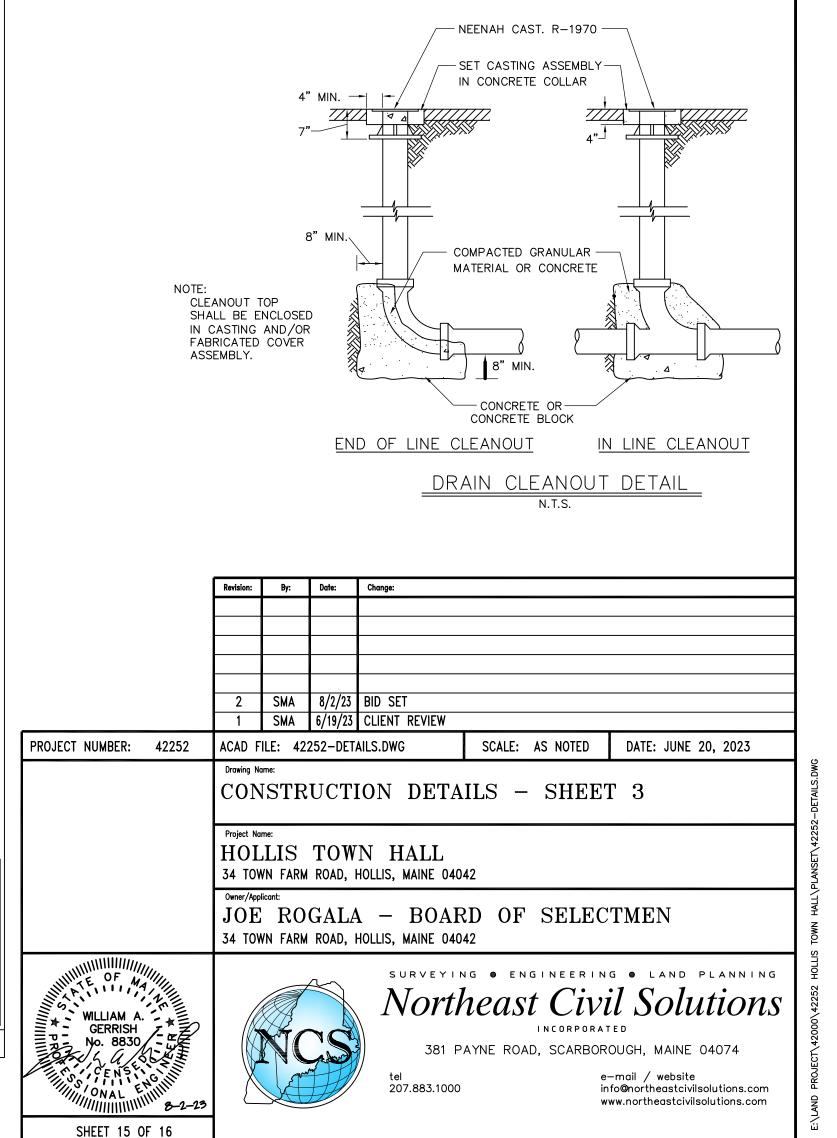
NOTES:

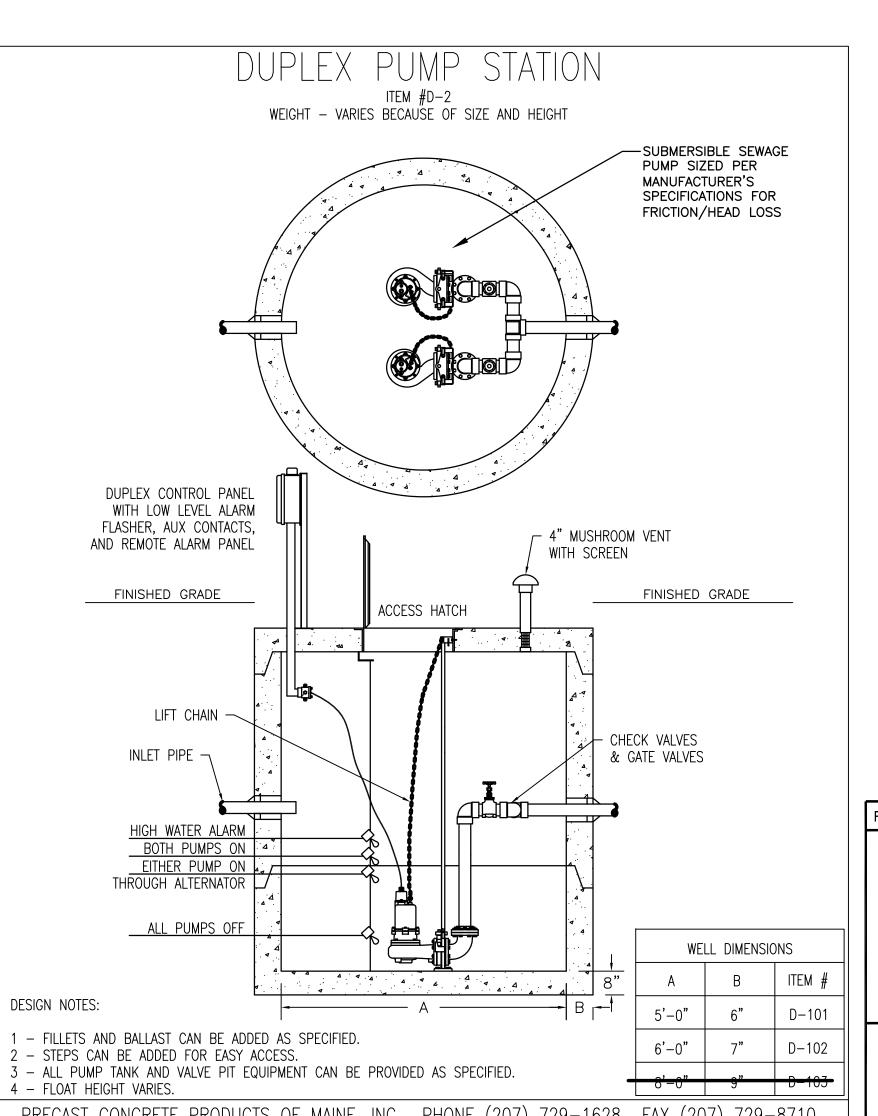
1. TRENCHES LOCATED ON THE ROAD

AS STREET EXCEPT FOR PAVING

SHOULDER SHALL BE TREATED THE SAME







CONSTRUCTION NOTES

1. <u>REFERENCE STANDARDS</u>: STATE OF MAINE, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, MARCH 2020, INCLUDING THE LATEST REVISIONS OF ADOPTED SUPPLEMENTAL SPECIFICATIONS.

2. <u>UNDERGROUND UTILITIES:</u> ALL UTILITIES SHOWN ARE LOCATED APPROXIMATELY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO EXCAVATION. LOCATIONS SHOWN ARE BASED ON PHYSICAL LOCATIONS AND/OR REFERENCE DRAWINGS. THE CONTRACTOR SHALL CONTACT DIG SAFE (888–344–7233) PRIOR TO THE COMMENCEMENT OF WORK. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

3. <u>EROSION CONTROL</u>: EROSION CONTROL MEASURES SHALL FOLLOW STANDARDS AND SPECIFICATIONS CONTAINED IN THE MAINE EROSION AND SEDIMENTATION CONTROL BMP'S DATED OCTOBER 2016, WHICH CAN BE FOUND ON THE MAINE DEP WEBSITE AT www.maine.gov/dep/land/erosion/escbmps/. RFER TO EROSION AND SEDIMENTATION PLANS, NOTES AND DETAILS.

4. <u>WASTE DISPOSAL AREA:</u> THERE IS NO DESIGNATED WASTE DISPOSAL AREA ON THE PROPERTY. ALL EXCAVATED MATERIAL NOT SUITABLE FOR REUSE ON THE PROJECT SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. REFER TO DEMOLITION PLAN.

5. <u>DEMOLITION</u>: ANY BUILDINGS AND MISCELLANEOUS STRUCTURES THAT ARE SHOWN ON THE PLANS TO BE REMOVED SHALL BE DEMOLISHED OR REMOVED, AND ALL MATERIALS THEREFROM SHALL BE REMOVED FROM THE SITE. THE REMAINING OR EXISTING FOUNDATIONS AND LIKE STRUCTURES SHALL BE DESTROYED BY BREAKING OUT OR BREAKING DOWN THE MATERIALS TO A DEPTH AT LEAST 4 FEET BELOW THE EXISTING SURROUNDING GROUND. ANY BROKEN CONCRETE, BLOCKS, OR OTHER DEBRIS SHALL BE REMOVED AND DISPOSED OF, AND THE HOLES OR OPENINGS SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND PROPERLY COMPACTED. ALL DEMOLITION DEBRIS SHALL BE DISPOSED OF OFF—SITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. REFER TO DEMOLITION PLAN.

6. <u>PROJECT PHASING</u>: THE EXISTING HOLLIS TOWN HALL AND COMMUNITY BUILDING SHALL REMAIN OPEN AND OPERATIONAL THROUGHOUT THE COURSE OF THIS PROJECT. THE CONTRACTOR SHALL PHASE ALL WORK ON THIS PROJECT TO ALLOW SAFE AND CONVENIENT ACCESS TO THE FACILITY AT ALL TIMES TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. THE CONTRACTOR SHALL PROVIDE EMPLOYEE AND PUBLIC PARKING WITHIN THE EXISTING LOT TO THE GREATEST EXTENT PRACTICABLE THROUGHOUT CONSTRUCTION. THIS SHALL INCLUDE A MINIMUM OF TWO HANDICAP PARKING SPACES AND HANDICAP ACCESS TO THE BUILDINGS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING PLAN TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION. REFER TO OPERATIONS AND CONSTRUCTION PHASING PLANS

7. <u>CONTRACTOR STAGING:</u> CONTRACTOR PARKING AND EQUIPMENT STAGING AREA SHALL BE COORDINATED IN ADVANCE WITH THE OWNER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED BY THE CONTRACTOR AT THE COMPLETION OF WORK.

8. EXCAVATION WORK: A GEOTECHNICAL SUBSURFACE INVESTIGATION WAS COMPLETED FOR THE SITE BY S.W. COLE ENGINEERING OF GRAY MAINE. REFER TO REPORT DATED JULY 19, 2023. ALL EXISTING UNSUITABLE FILL MATERIAL AND BURIED ORGANICS ENCOUNTERED DURING EXCAVATION OPERATIONS SHALL BE REMOVED AND BACKFILLED WITH COMPACTED GRANULAR FILL. THE CONTRACTOR SHALL EXERCISE CARE DURING EXCAVATION TO MINIMIZE DISTURBANCE OF SUBGRADE SOILS. THE SITE ENGINEER (NORTHEAST CIVIL SOLUTIONS) SHALL BE CONTACTED IMMEDIATELY SHOULD THE SUBGRADE BECOME YIELDING OR DIFFICULT TO WORK. THE CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING OF SUBGRADE SOILS DURING CONSTRUCTION. BEDROCK REMOVAL SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE S.W. COLE REPORT. EXCESS EXCAVATED MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

9. <u>FILL AND COMPACTION:</u> COMMON FILL MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 12 INCHES IN DEPTH AND SHALL BE COMPACTED TO A MINIMUM OF 92 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.

10. <u>BASE AND SUBBASE:</u> BASE AND SUBBASE MATERIAL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN DEPTH AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM

11. <u>TOPSOIL:</u> ALL EXISTING TOPSOIL SHALL BE STRIPPED AND STOCKPILED AT A LOCATION APPROVED BY THE OWNER PRIOR TO EXCAVATION. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF PAVEMENT SHALL BE RESTORED WITH LOAM AND SEED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

11.01 MATERIAL

A. TOPSOIL SHALL BE FRIABLE, FERTILE, NATURAL FREE—DRAINING SCREENED LOAM, TYPICAL OF THE LOCALITY; FREE OF SUBSOIL, ROOTS, GRASS, STICKS, WEEDS, CLAY, SOD LUMPS, DEBRIS AND STONES LARGER THAN 1—INCH IN MAXIMUM DIMENSION. SOIL SHALL NOT BE EXCESSIVELY ACID OR ALKALINE, NOR CONTAIN TOXIC MATERIAL HARMFUL TO PLANT GROWTH.

B. FERTILIZER SHALL BE A COMPLETE COMMERCIAL FERTILIZER, 10-10-10 GRADE, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

- C. LIME SHALL BE GROUND LIMESTONE CONTAINING NOT LESS THAN 95% CALCIUM AND MAGNESIUM CARBONATES.
- D. SEED SHALL BE FROM THE SAME OR PREVIOUS YEAR'S CROP AND SHALL HAVE NOT MORE THAN 1% WEED CONTENT.
- E CEED MIX

MDOT METHOD 1-PARK MIXTURE SHALL BE USED ON LOAM AREAS. PERCENT GERMINATION SHALL BE GREATER THAN 80%; PURE LIVE SEED SHALL BE GREATER THAN 85%; PERCENT PURITY SHALL BE GREATER THAN 85%; AND WEED SEED SHALL BE LESS THAN 1%.

KIND OF SEED	PERCENT BY WEI
CREEPING RED FESCUE KENTUCKY BLUEGRASS CHEWINGS FESCUE PERENNIAL RYEGRASS ANNUAL RYEGRASS	45% 25% 15% 10% 5%
TOTAL	100%

F. HAY MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME MOWINGS, REASONABLY FREE FROM SWAMP GRASS, WEEDS, TWIGS, DEBRIS OR OTHER DELETERIOUS MATERIAL. IT SHALL BE FREE FROM ROT OR MOLD.

G. MULCH ANCHORING: WHEN MULCH MUST BE HELD IN PLACE, MULCH NETTING (PAPER, TWINE, PLASTIC, OR PLASTIC AND WOOD FIBER) SHALL BE USED.

11.02 EXECUTION

A. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED FOR SEED OR GROUND COVER AND REMOVE ALL RUBBISH, STICKS, ROOTS, AND STONES LARGER THAN 1 INCH IN MAXIMUM DIMENSION. SPREAD AND LIGHTLY COMPACT THE LOAM TO FINISHED GRADE AS SHOWN ON THE DRAWINGS. WHEN FINISHED GRADES ARE NOT INDICATED, THEY SHALL BE UNIFORM BETWEEN THE POINTS FOR WHICH FINISHED GRADES ARE GIVEN, OR FROM SUCH POINTS TO EXISTING GRADES, EXCEPT THAT THE TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. COMPACTED LOAM SHALL NOT BE LESS THAN 4 INCHES IN DEPTH. NO LOAM SHALL BE SPREAD IN WATER OR WHILE FROZEN OR MUDDY.

B. AFTER THE LOAM IS PLACED AND BEFORE IT IS RAKED TO TRUE LINES AND ROLLED, SPREAD LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE—HALF THE DEPTH OF THE LOAM.

C. UNIFORMLY SPREAD FERTILIZER AND IMMEDIATELY MIX WITH THE UPPER 2 INCHES OF LOAM.

D. IMMEDIATELY FOLLOWING THIS PREPARATION, UNIFORMLY APPLY THE SEED EVENLY IN TWO (2) INTERSECTING DIRECTIONS AND LIGHTLY RAKE THE SEED INTO THE SURFACE. LIGHTLY ROLL THE SURFACE AND WATER WITH A FINE SPRAY.

E. SEED SHALL BE SOWN IN A FAVORABLE SEASON AS APPROVED BY THE ENGINEER. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER WHEN GROUND IS FROZEN, EXCESSIVELY WET OR OTHERWISE UNTILLABLE.

F. PROMPTLY THEREAFTER OR WITHIN 24 HOURS AFTER THE SEEDING OPERATION, LIGHTLY AND UNIFORMLY MULCH THE AREA

G. ANCHOR MULCH ON ALL SLOPES EXCEEDING 5% AND OTHER AREAS AS REQUIRED.

H. PROTECT AGAINST WASHOUTS BY AN APPROVED METHOD. ANY WASHOUT WHICH OCCURS SHALL BE REGRADED AND RESEEDED AT THE CONTRACTOR'S EXPENSE UNTIL A GOOD GROWTH IS ESTABLISHED.

11.03 APPLICATION RATES, UNLESS OTHERWISE SHOWN ON THE DRAWINGS:

WITH HAY. SPREAD HAY BY HAND OR WITH MACHINE.

A. PLACE LOAM TO A MINIMUM DEPTH OF 4 INCHES, OR AS SHOWN ON THE DRAWINGS.

B. APPLY LIME AT THE RATE OF 75 TO 100 LBS PER 1,000 SQUARE FEET.

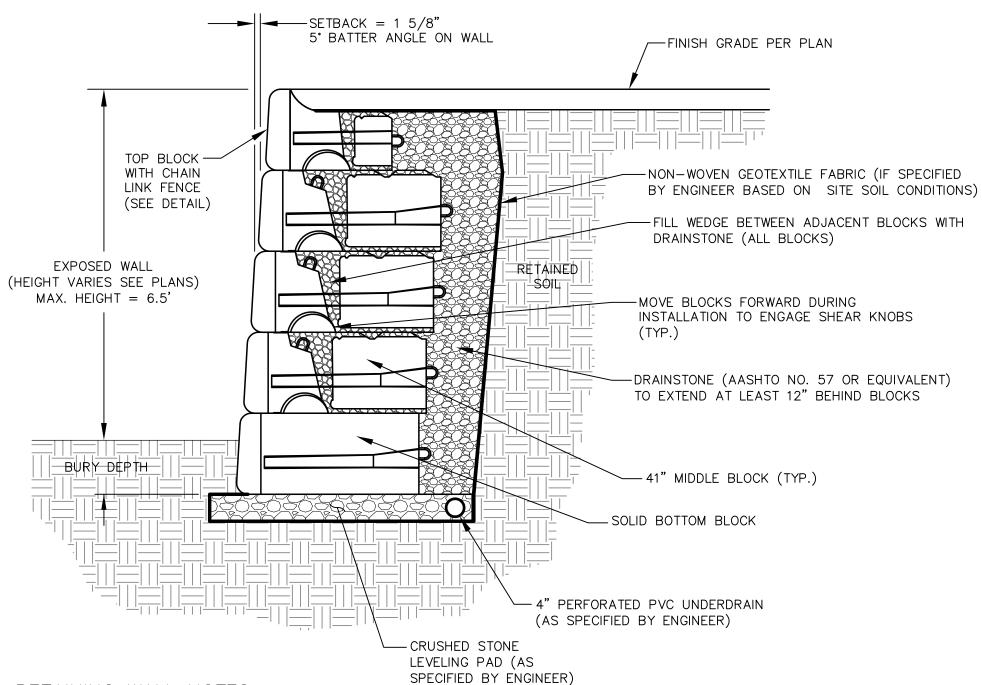
C. APPLY FERTILIZER AT THE RATE OF 30 LBS PER 1,000 SQUARE FEET, UNLESS SHOWN OTHERWISE IN THE DRAWINGS.

D. APPLY SEED AT A RATE OF AT LEAST 1 LB PER 1,000 SQUARE FEET.

E. APPLY MULCH AT THE RATE OF 90 LBS PER 1,000 SQUARE FEET.

11.04 MAINTENANCE

A. KEEP ALL SEEDED AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA SEEDED. MAINTAIN THESE AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE OF GROWTH BY THE ENGINEER. THE MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.



RETAINING WALL NOTES:

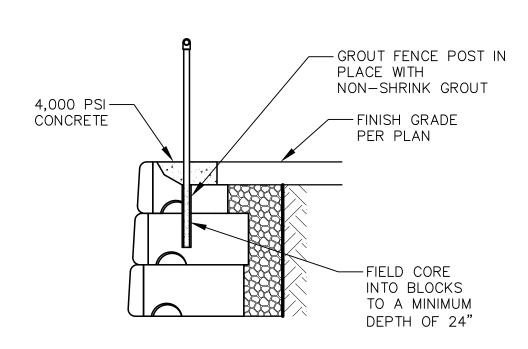
--- 2:1 SLOPE OR FLATTER

— SETTLING BASIN

1. PROPOSED RETAINING WALL DETAILS ARE BASED ON DRAWINGS PROVIDED BY REDI-ROCK.

2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS INCLUDING DESIGN DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY THE RESPONSIBLE DESIGN PROFESSIONAL.

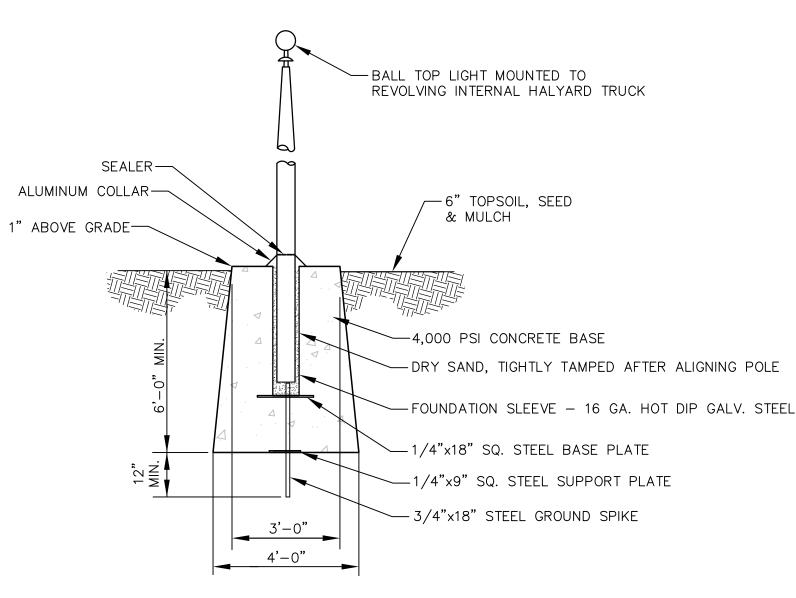
TYPICAL GRAVITY WALL DETAIL



NOTES:

- 1. MAXIMUM SPACING OF FENCE POSTS INSTALLED IN RETAINING WALL SHALL BE 6'-0".
- 2. CORE DRILL A MINIMUM OF 24" INTO SOLID PORTION OF CONCRETE BLOCKS AND A MINIMUM OF 2" LARGER THAN THE POST DIAMETER.
- 3. ALL POSTS SHALL BE GROUTED IN PLACE WITH NON—SHRINK GROUT. PROVIDE A 12" DIAMETER CONCRETE PAD AROUND EACH POST TO FINISH GRADE.

GROUTED FENCE POST CONNECTION INTO RETAINING WALL DETAIL



NOTES:

1. 40' ALUMINUM FLAGPOLE SHALL BE TRADITIONAL STYLE; COLOR: SATIN; WITH REVOLVING NON-FOULING INTERVAL HALYARD TRUCK, MODEL EXC40 IH AS MANUFACTURED BY THE ELDER FLAG MANUFACTURING CO. INC., OR APPROVED EQUAL.

2. BALL BEACON LIGHT SHALL BE BALL TOP LIGHT WITH EIGHT (8) ULTRA BRIGHT 8MM LED LIGHTS AND PHOTO SENSOR. BEACON SHALL BE DESIGNED TO ROTATE WITH THE HALYARD TRUCK.

3. FLAGPOLE ASSEMBLY SHALL BE DESIGNED TO WITHSTAND 120 MPH WINDS (FLAGGED).

40' ALUMINUM FLAGPOLE DETAIL

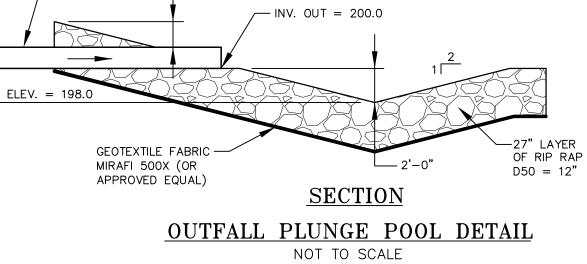
NOT TO SCALE

	2	SMA	8/2/23					
	1	SMA	6/19/23	CLIENT REVIEW				
PROJECT NUMBER: 42252	ACAD F	ILE: 42	252-DET	AILS.DWG	SCALE: AS NOTED	DATE: JUNE 20, 2023		
	CONSTRUCTION DETAILS — SHEET 4							
	HOL	TOJECT Name: OLLIS TOWN HALL TOWN FARM ROAD, HOLLIS, MAINE 04042						
	Owner/Applicant: JOE ROGALA — BOARD OF SELECTMEN 34 TOWN FARM ROAD, HOLLIS, MAINE 04042							
WILLIAM A. ** GERRISH No. 8830						il Solutions		

info@northeastcivilsolutions.com www.northeastcivilsolutions.com

By: Date: Change:

SHEET 16 OF 16



PLAN VIEW

CONCENTRATED -