



Vermont Agency of Transportation

# Design-Build Definitions

Wherever in these Design Build Definitions or in other Design Build Contract Documents the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows. In addition, all definitions contained in other Design Build Contract documents shall apply.

ACCEPTANCE DATE - Date noted in the Completion and Acceptance memorandum on which designated responsible Agency personnel have accepted the completeness and quality of all material incorporated in and work performed to complete the project(s).

ACTUAL COMPLETION DATE – Date noted in the Completion and Acceptance memorandum on which designated responsible Agency personnel have reviewed the project(s) and determined that all Contract work is complete and all Contract requirements have been met.

ACT OF GOD - An “Act of God” means an earthquake, flood, cyclone, or other cataclysmic phenomena of nature beyond the ability of a prudent Contractor to foresee and make preparation to defend against damage.

ADMINISTRATIVE SUBMITTALS – Submittals of administrative information required following Execution of the Design-Build Contract but prior to Authorization to Design and Construct. Requirements of the administrative submittals are defined in the RFP.

AGENCY or VTRANS - Agency of Transportation, State of Vermont (VAOT or VTrans).

AGGREGATE - Inert material such as sand, gravel, crushed gravel, broken stone, or crushed stone, or a combination thereof.

ALTERNATIVE TECHNICAL CONCEPT (ATC) – Any innovative deviations from the BTC, which are consistent with the standards set forth in the Contract Documents, which may either result in improved best value or a shorter Project duration and which will not reduce but may increase the quality or functionality of the facility.

APPROVED PRODUCTS LIST (APL) – A listing of products and materials that have been tested and/or evaluated by the Materials and Research Section and have been deemed satisfactory for use on Agency projects without additional certification requirements. This definition refers to the current APL in the year that materials are being installed.

AUTHORIZATION TO DESIGN AND CONSTRUCTION – The on which the Design-Builder has received approval and Release for Construction of all Administrative Submittals.

## AUTHORIZED REPRESENTATIVE -

Contractor's – An individual registered with the Office of Contract Administration having the legal authority to sign Contract documents on behalf of the Contractor.

Agency's – The Director of Program Development's Duly Authorized Representative(s) who are responsible for engineering supervision of the construction project.

BASE COURSE - The layer or layers of specified or selected material of designed thickness on a subbase to support a surface course.

BASE TECHNICAL CONCEPT (BTC) – The contents and requirements of the procurement documents, inclusive of the BTC Plans, collectively form the "Base Technical Concept", or "BTC".

BEST VALUE – The overall combination of quality, price and other elements of the required services that, in total, are in the best interest relative to VTrans' needs, as determined by VTrans and defined in the solicitation.

BID – See "Proposal".

BID BOND (PROPOSAL GUARANTY) – The security furnished with a bid to ensure that the bidder will enter into a contract if the Bidder's proposal is accepted by the Agency.

BIDDER – Any company, firm, partnership, joint venture, corporation, association, or other entity that formally submits a Design-Build Proposal in response to the solicitation for the Work contemplated, or for any portion thereof, acting directly or through a duly authorized representative. Typically "Bidder" terms are used prior to the execution of the Design-Build Contract.

BOARD - Transportation Board of the State of Vermont or its successor.

**BRIDGE** - A structure, including supports, erected over a depression or an obstruction such as water, a highway, or a railway, having a track or passageway for carrying traffic or other moving loads and having a clear span of more than 6.1 m (20 feet) [1.8 m (6 feet) on Non-Federal-Aid projects] measured along the center of the roadway between abutments, spring lines of arches, extreme ends of openings for multiple boxes, or multiple pipes where the clear distance between openings is less than 50 percent of the smaller contiguous opening.

Bridge Length – The dimension of a structure measured along the center of the roadway between backs of abutment backwalls or between the ends of a bridge floor, whichever is greater.

Bridge Width – The clear dimension of structure measured at right angles to the center of the roadway between the inner faces of parapet or railing.

**CALENDAR DAY** - Any day shown on the calendar, beginning and ending at midnight.

**CFR** – Code of Federal Regulations.

**CHANGE (RFQ/RFP)** – A supplement to the original Request for Qualifications or Request for Proposal covering additions, deletions, corrections, changes or clarifications in the qualification or procurement conditions that may be issued prior to the Technical Proposal submission date.

**CHANGE ORDER/SUPPLEMENTAL AGREEMENT** - A written agreement made and entered into by and between the Contractor and the Agency covering work not otherwise provided for in the Contract, revisions in or amendments to the terms of the Contract or conditions specifically described in the Contract Documents as requiring a change order or Supplemental Agreement. Change Orders/Supplemental Agreements constitute amendments to the original Contract once properly signed and executed.

**CHANNEL** - A natural or artificial water course.

**CHIEF ENGINEER** - See **DIRECTOR OF PROGRAM DEVELOPMENT**.

CHIEF OF UTILITIES AND PERMITS – The Agency’s authorized representative to Release for Construction temporary and permanent utility relocation plans to assure conflicting utility facilities are relocated appropriately as part of the project work.

CLAIM -

Contractor’s Claim – A claim by the Contractor for adjustment or dispute under Subsection 105.20 of these Special Provisions.

DAMAGE CLAIM – A claim by an individual or entity for damage to property or for personal injury.

Labor And Materials Claim – A claim by a subcontractor, supplier, or other entity covered by 19 V.S.A. Section 10(9) for monies claimed to be due and payable.

CLEAR ZONE - The roadside border area starting at the edge of the traveled way available for use by errant vehicles. Specified clear zones are as shown in the Plans.

COLLUSION - A secret agreement among two or more persons for a deceitful or fraudulent purpose.

CONDUIT - A tube used for carrying, holding, and protecting electrical or other utilities.

CONSTRUCTION AREA - The entire portion of a project site within the right-of-way and easement limits during construction.

CONSTRUCTION EASEMENT - See EASEMENT

CONSTRUCTION ENGINEER - The duly authorized representative of the Agency responsible for engineering supervision of a specific project after the Contract has been signed and until project completion and final acceptance.

CONSTRUCTION ENVIRONMENTAL ENGINEER – The Agency’s authorized representative of the Construction Section to provide guidance and technical assistance to Resident Engineers in order to assure compliance with environmental regulations.

CONSTRUCTION MANAGER – Team member of the Design-Builder, who shall be on the Project site for the duration of all construction operations, shall be responsible for managing all construction activities during the construction process, including all QC activities. This individual shall also implement the Traffic Control Plan for the project and be the key point of contact for issues arising relative to the traffic control. This individual shall be able to demonstrate relevant licensing, certification(s), and training.

CONSTRUCTION SERVICES ENGINEER – The duly authorized representative of the Construction Engineer for the purposes of providing expertise in matters of claims, specifications, policy, procedures, and Contract finals.

CONTRACT - The written agreement between the Agency and the Contractor setting forth the obligations of the parties relative to the performance of the work.

The Contract includes the documents stipulated in Part 3 of the RFP, Notice to Proceed, and any supplemental agreements that are required to complete the work in an acceptable manner. It shall be inclusive, but not limited to the RFP, RFP Changes, the most recent revision of the VTrans Standard Specifications for Construction; General Special Provisions; Supplemental Specifications; Special Provisions; the Agency's RFQ and RFP; the Design-Builder's SOQ and Proposal; any Clarification document finalized by the Agency; any and all pertinent supporting documents, and plans; and the accepted Administrative Submittals.

CONTRACT BONDS - The approved forms of security, signed and furnished by the Contractor and the Contractor's surety or sureties, guaranteeing complete performance of the Contract, compliance with the Contract, and the payment of all legal debts pertaining to the construction of the project or work.

CONTRACT COMPLETION DATE - The calendar date by which the work shall be completed. If the Contract is a duration type Contract, the Notice to Proceed shall also indicate the Contract Completion Date.

CONTRACT DOCUMENTS - See CONTRACT.

CONTRACT DURATION - The number of working days or calendar days allowed for completion of the Contract.

CONTRACT ITEM - A specific unit of work for which a price is provided in the Contract.

CONTRACT NOTICE TO PROCEED - Written notice to the Contractor stipulating the date on which the Contractor can begin work on the Project and from which date Contract duration can be charged.

CONTRACTOR - The Design-Builder (as defined in other Contract documents) which is a party to the Contract with the Agency which is undertaking the performance of the work under the terms of the Contract and acting directly or through its agent(s) or employee(s). The term "Contractor" means the prime Contractor as differentiated from a subcontractor. All Contractors must be registered with the Secretary of State. The Contractor will act in an independent capacity and not as officers or employees of the State.

CONTRACT PLANS - The Contract drawings prepared by the Contractor that show the location, character, and dimensions of the work, including layouts, profiles, cross-sections, and other details. See also PLANS.

CPM (CRITICAL PATH METHOD) – A Schedule that must depict work activities in a time-based, logic diagram format showing the relationship with preceding and succeeding activities with the critical path clearly indicated.

DESIGN-BUILD (D-B) CONTRACT – A written agreement executed between the State and a Design-Builder that sets forth the obligations of the Design-Builder, including, but not limited to, the performance of work, furnishing of materials and labor, quality of the materials, and basis of payment to both design and construct the Work specified to be performed in the Contract. Oral representations or promises shall not be considered a part of the Contract.

DESIGN-BUILDER – The Bidder who executes the Contract with the Agency is the Design-Builder. The Design-Builder shall be a company, firm, partnership, joint venture, corporation, association, or other entity permitted by law to practice engineering, and construction contracting in the State of Vermont. The Design-Builder shall have the capability, in all respects, to perform fully the contract requirements and have the business integrity and reliability which will assure good faith performance.

DESIGN-BUILD PROJECT MANAGER – The Key Person, a team member of the Design-Builder, who shall be responsible for the overall management, scheduling, design, construction, quality management and contract administration for the Project.

DESIGNER – The team member(s) of the Design-Builder responsible for the final design of the Project to be constructed.

DESIGN MANAGER – The Key Person of the Design-Builder, who shall be responsible for coordinating all individual design disciplines, including design of traffic control and ensuring the overall Project design is in conformance with the Contract Documents. The Design Manager shall be responsible for establishing and overseeing Design Quality for all pertinent disciplines involved in the design of the Project, including: review of design, working plans and drawings, specifications, and constructability for the Project. This individual shall be a licensed Professional Engineer in the State of Vermont.

DETOUR - A temporary route to carry traffic.

DIAMETER NOMINAL (DN) — The metric version of nominal pipe size (NPS), applying to all plumbing, gas, oil, drainage, and other piping used in the project.

DIRECTOR or DIRECTOR OF PROGRAM DEVELOPMENT – Director of the Program Development Division of the Agency.

Wherever the terms “Director,” “Chief Engineer,” “Director of Engineering and Construction,” “Director of Construction and Maintenance,” or “Director of Project Development” appear in the Contract Document, they shall be read as, and shall mean, “Director of Program Development.”

DISTRICT TRANSPORTATION ADMINISTRATOR (DTA) - The duly authorized representative of the Agency for a maintenance district subdivision of the State who is responsible for maintenance of State transportation facilities.

DRAFT SPECIAL PROVISIONS – Additions and revisions to the Standard Specifications, Supplemental Specifications, General Special Provisions, Plans, or other documents that are proposed by the Design-Builder, but have not been approved by the Agency.



DRAINAGE - The system of pipes, drainage ways, ditches, and structures by which surface or subsurface waters are collected and conducted from the project area or a transportation facility.

EARTH – See SOIL.

EASEMENT (RIGHT-OF-WAY) - A right acquired to use or control property outside of the established right-of-way limits for a designated purpose.

EMBANKMENT - That portion of a filled area situated between the previously existing ground level and the subgrade (roadbed).

ENCROACHMENT - Use of highway right-of-way or easement unlawfully and/or without authority or permission.

ENGINEER – See RESIDENT ENGINEER.

ENGINEER OF RECORD – The Engineer of Record for the Project shall be the Design-Manager.

ENGLISH – Other than when referring to the English language, the U.S. Customary Units of Measurement.

ENVIRONMENTAL COMMITMENTS – The term environmental commitments includes any action that (1) is intended to avoid, minimize, and mitigate environmental impacts of a project, and (2) is required to be implemented as a condition of project approval as part of the environmental review, clearance or permitting process required for this project. These actions shall be compiled into a list of items that will be defined as the Environmental Commitments.

ENVIRONMENTAL COMMITMENTS OFFICER (ECO) – The Key Person who shall be the environmental lead for the Design-Builder and the single point of contact for all matters relating to the project environmental review, clearances and permitting, compiling the environmental commitments and conformance to the commitments. The ECO shall be independent from the Construction Contractor and the QAM firm.

EQUIPMENT - All machinery, instruments, tools, vehicles, and apparatus together with the necessary supplies for upkeep and maintenance, for the proper construction and acceptable completion of the work.

**EXTRA WORK** - An item of work not provided for in the Contract as awarded but determined by the Engineer to be essential to the satisfactory completion of the Contract. Extra Work shall be performed at agreed upon prices or on a force account basis as provided in the Contract.

**EXTRA WORK ORDER** - A form used to provide for the performance of work or furnishing of materials involving Extra Work.

**FEDERAL AVIATION ADMINISTRATION** - The agency within the US Department of Transportation, Washington, D.C., with authority concerning airports and aviation.

**FEDERAL HIGHWAY ADMINISTRATION** - The agency within the US Department of Transportation, Washington, D.C., with authority concerning highways.

**FEDERAL RAILROAD ADMINISTRATION** - The agency within the US Department of Transportation, Washington, D.C., with authority concerning railroads.

**FEDERAL TRANSIT ADMINISTRATION** - The agency within the US Department of Transportation, Washington, D.C., with authority concerning public transit.

**FINAL ESTIMATE** - A compilation of item quantities prepared upon completion of the Contract stating the whole amount of work done by the Contractor and the final amount to be paid under the Contract.

**FINALS ENGINEER** – The duly authorized representative of the Construction Engineer responsible for handling all issues related to finalizing a Contract.

**FORCE ACCOUNT** - Prescribed Extra Work paid for on the basis of actual costs, including appropriate extra work, as defined in Subsection 109.06.

**GENERAL SPECIAL PROVISIONS** - Additions and revisions to the Standard Specifications for Construction approved pursuant to the Specification approval process.

**GRADE SEPARATION** - A crossing of two or more transportation facilities at different elevations.

**HAZARDOUS MATERIALS AND WASTE COORDINATOR** – The Agency's duly authorized Hazardous Materials and Waste Coordinator.

HOLIDAYS - In the State of Vermont, "Holidays" occur on:

New Years Day	January 1
M.L.King's Birthday	Third Monday in January
President's Day	Third Monday in February
Town Meeting Day	First Tuesday in March
Memorial Day	Last Monday in May
Independence Day	July 4
Bennington Battle Day	August 16
Labor Day	First Monday in September
Veteran's Day	November 11
Thanksgiving Day	Fourth Thursday and Friday in November
Christmas Day	December 25

If a Holiday falls on a Sunday, the following Monday shall be considered the Holiday; if a Holiday falls on a Saturday, the Friday immediately preceding shall be considered the Holiday.

INDEPENDENT ASSURANCE PROGRAM – Activities that are an unbiased and independent evaluation of all the sampling and testing procedures used in the acceptance program.

INSPECTOR - An authorized representative of the Engineer assigned to make detailed inspections of Contract performance.

INTERDEPENDENT ATC – A grouping of Alternative Technical Concepts composed of multiple deviations from the Base Technical Concept whose implementation is dependent on all components being approved.

KEY PERSONNEL - Individuals designated as Key Personnel pursuant to the RFQ for this project.

LABORATORY - The Agency's Materials and Research Section Central Laboratory or any other testing laboratory which may be designated by the Engineer.

LIQUIDATED DAMAGES - The charge assessed to the Contractor pursuant to the Contract because the Contractor did not complete the Contract within the Contract time or by the Contract completion date, not as a penalty but as an assessment of damages that are impossible or difficult to determine with accuracy.

LOAD TICKET - A ticket accompanying a load of material and indicating the gross weight of the load less the tare weight of the delivery vehicle, and other information as specified and/or as required by the Engineer.

MASS - The words "mass" and "weight" are used interchangeably. Mass must be converted to force (by multiplying by gravity) before computing structural reactions, shears, moments, or internal stresses.

MATERIALS - Any substance(s) specified for use in the construction of the project and its appurtenances.

MATERIALS ENGINEER - The duly authorized representative of the Agency responsible for advising VTrans' Project Manager and Resident Engineer with regard to the acceptance of materials specified in contract.

MEDIAN - Unless different in context, the portion of a divided highway separating opposing traveled ways.

METRIC TON - A unit of measure equivalent to 1000 kg, denoted in the Contract Documents as "Metric Ton" or "T." See also TON.

NON-PARTICIPATING - Designates work in which the cost is not shared by the Federal and/or State Government.

OSHA – United States Department of Labor's Occupational Safety & Health Administration, including but not limited to OSHA-approved state plans such as the Vermont Occupational Safety & Health Administration (VOSHA).

PAY ITEM - See CONTRACT ITEM.

PAVEMENT STRUCTURE - The combination of subbase, base course, and surface course (wearing course or travel course) placed on a subgrade to support the traffic load and distribute it to the roadbed.

PLANS - The plans and drawings that show the location, character, sequence, and dimensions of the work, including layouts, profiles, cross-sections, and other details.

Contract Plans - See CONTRACT PLANS.

Standard Drawings – See STANDARD DRAWINGS.

POINT OF CONTACT (POC) – The duly authorized representative of the Agency who is solely responsible for all communication between the Agency and all interested parties.

PLANT INSPECTOR - An authorized representative of the Agency assigned to perform detailed inspections of methods and materials at plants, including bituminous, concrete, and structural steel assembly plants.

PROFESSIONAL ENGINEER - A qualified registered Professional Engineer licensed in the State of Vermont or eligible to practice engineering in the State of Vermont under the transient practice provisions of Title 26 VSA Section 1181a.

PROFILE GRADE - The trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal centerline. Depending on the context, “profile grade” means either the elevation at one or more points or the gradient of such trace.

PROJECT - Work specified to be performed in the Design-Build Contract that VTrans is authorized by law to undertake.

PROJECT MANAGER (PM) – VTrans’ designee for managing all phases of contract procurement, project development and administering the Design-Build contract. This individual is responsible for managing the procurement development, proposal evaluation, contract execution, project scope, project schedule, and project budget.

PROPOSAL – Separately sealed technical and price information submitted by a Bidder in response to a Request for Proposal (RFP) to perform the Work at the price set forth therein; valid only when properly signed and guaranteed. This documentation includes the Technical and Price Proposals required by the RFP. The pricing of a prospective Design-Builder’s Proposal shall be considered a “Bid”.

QUALIFIED PRODUCTS LIST (QPL) – A listing of protective coatings for steel for bridges that have been tested and/or evaluated by the North East Protective Coating Committee (NEPCOAT) and have been deemed satisfactory for use on Agency projects without additional certification requirements.

QUALITY ASSURANCE MANAGER (QAM) – The QAM is a representative of the Engineer and is responsible for providing representation and oversight for continuous quality assurance monitoring and inspection for 100 percent of all construction activities related to the project, both onsite and offsite, and testing of all materials used. The QAM will also monitor the contractors QC program.

QUALITY ASSURANCE (QA) – All those planned and systematic actions necessary to provide confidence that a product or service will satisfy given requirements for quality.

QUALITY CONTROL (QC) – All Design-Builder/vendor operational techniques and activities that are performed or conducted to demonstrate fulfillment of the contract requirements.

REGIONAL CONSTRUCTION ENGINEER - The duly authorized representative of the Agency for a Construction regional subdivision of the State who is responsible for administering and overseeing construction contracts.

RELEASE FOR CONSTRUCTION – VTrans concurrence that components of the Project including, but not limited to: Design, Specifications, Plans and Working Drawings are in general conformance with the Contract requirements. RELEASE FOR CONSTRUCTION is not an acceptance or approval by VTrans for any portion of the Work.

REQUEST FOR PROPOSAL (RFP) – All documents, whether attached or incorporated by reference, utilized for soliciting a proposal. The advertisement of the RFP initiates the second phase of a two-phase selection process.

REQUEST FOR QUALIFICATIONS (RFQ) – All documents, whether attached or incorporated by reference, utilized for soliciting Bidders to submit specific qualifications/ certifications for a project. The RFQ initiates the first phase of a two-phase selection process for the purpose of qualifying interested Bidders for short-list consideration.

RESIDENT ENGINEER or ENGINEER - VTrans' designee for managing all phases of active project construction and administration once the Design-Build Contract is awarded. The "Resident Engineer" has the exclusive authority for the acceptance of all work and materials for the Project.

RIGHT-OF-WAY - The land or property, or interests therein, devoted to transportation purposes.

ROADBED - The graded surface prepared as a foundation for the pavement structure and shoulders of a transportation facility. (See also: SUBGRADE).

ROADSIDE - The area adjoining the outer edge of the traveled way or shoulder of a highway. Extensive median areas between the roadways of a divided highway may also be considered roadside.

ROADWAY - The portion of a highway within limits of construction.

ROADWAY, TRAFFIC, AND SAFETY ENGINEER – The Agency's duly authorized representative responsible for advising VTrans' Project Manager and Resident Engineer with regard to the design aspects of roadway, traffic, and safety projects. (Sometimes referred to as the "Roadway Program Manager" or "Highway Safety & Design Engineer").

SAFETY OFFICER -

Contractor's - An individual designated by the Contractor charged to assure that all construction operations under the Contract are performed safely and according to all VOSHA regulations.

Agency's - The Agency's duly authorized Occupational Safety Coordinator whose job duties include safety inspection of Agency construction projects.

SCHEDULE OF WORK - The approved CPM chart Baseline Schedule prepared and submitted by the Contractor as required by the Contract documents.

SECRETARY - The appointed head of the Agency of Transportation of the State of Vermont.

SHORT-LIST – The qualifying list of Bidders presented in ranked order as determined by SOQ evaluation to advance to the next phase of the selection process. Only Short-listed Bidders will be invited to submit proposals in response to the RFP.

SHOULDER - The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

SIDEWALK - That portion of the roadway primarily constructed for the use of pedestrians.

SLOPES - The inclined areas extending from the shoulders to the previously existing surface of the ground.

SOIL (EARTH) - Sediments or other unconsolidated accumulations of solid particles produced by the chemical and physical disintegration of rocks and which may or may not contain organic matter.

SOLICITATION – All documents comprising the RFQ and RFP.

SPECIAL PROVISIONS - Additions and revisions to the Standard Specifications for Construction, Supplemental Specifications, and General Special Provisions applicable to the Contract, as well as other provisions specific to the Contract.

SPECIALTY ITEM - Work that requires highly specialized knowledge, ability or equipment not ordinarily available in contracting organizations qualified to bid on the Contract as a whole; in general specialty items are limited to minor components of the overall Contract.

SPECIFICATIONS - The compilation of provisions and requirements for the performance of prescribed work including the Selecting Contractors and Specifications for Contractor Services document including Customary State Contract Provisions and Revised Customary State Contract Provisions, Standard Specifications, Supplemental Specifications, General Special Provisions, Special Provisions, Plans, and other documents that are part of a particular contract.

STANDARD DRAWINGS - Agency approved drawings used for typical repetitive use, showing details to be used where appropriate.



STANDARD SPECIFICATIONS or STANDARD SPECIFICATIONS FOR CONSTRUCTION - The book entitled Standard Specifications for Construction, as approved for general application and repetitive use in Agency construction contracts.

STATE - Unless different in context, the State of Vermont acting through its Agency of Transportation and authorized representative(s).

STATEMENT OF QUALIFICATIONS (SOQ) – The formal documentation submitted by a Bidder in response to an RFQ. Information must be limited to qualification and experience as specified in the RFQ.

STRUCTURAL CONCRETE ENGINEER – The Agency's duly authorized representative of the Materials and Research Section responsible for the supervision of plant inspectors utilized at precast and/or prestressed concrete plants and for review of all Portland cement concrete mix designs.

STRUCTURAL EMBANKMENT AREA - The cross-sectional area of an embankment situated between the lines projected downward from the outer edges of the subgrade on a 1:1.5 (vertical:horizontal) slope to the intersection with the previously existing ground.

STRUCTURES ENGINEER - The Agency's duly authorized representative responsible for review of structural engineering for the project. (Sometimes called the "Structures Program Manager.")

SUBBASE - The layer or layers of specified or selected material of designated thickness placed to support a base and/or surface course.

SUBCONSULTANT – An individual or legal entity to which the Designer sublets a part of the Work included in a contract.

SUBCONTRACTOR - An individual or legal entity to whom or which the Contractor sublets part of the work.

SUBGRADE - The graded surface prepared as a foundation for the pavement structure and shoulders of a transportation facility. (See also: ROADBED).

**SUBSTANTIAL COMPLETION DATE** - The date when, each element of highway, street, and structure is completed to allow the safe use by the travelling public. Each highway and street shall be open to the required number of lanes and widths (including shoulders), to allow full vehicle capacity to utilize the infrastructure. In general, the work is considered substantially complete when the work meets the following minimum criteria: 1) All courses of permanent pavement are complete; 2) permanent curbing and sidewalks are placed; 3) all permanent project drainage is complete; 4) guardrail and terminal sections are properly installed; 5) permanent pavement markings are in place; 6) permanent regulatory and warning signs are installed; 7) permanent highway lighting is operational; 8) all project grading is completed including side slopes, removal of crossovers, and removal of lane shifts; and 9) all quality control and quality assurance documents, including materials testing results and materials certifications have been approved and accepted by the Engineer.

**SUBSTRUCTURE** - All of that part of a structure below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames; included are backwalls, wingwalls, and wing protection railings.

**SUPERINTENDENT** - The Contractor's authorized representative in responsible charge of the work. For the purpose of these Specifications, the Superintendent shall be the same individual defined in other Contract documents as the Design-Builder's Construction Manager.

**SUPERSTRUCTURE** - All that part of a structure supported by the substructure, excluding the approach slabs.

**SUPPLEMENTAL AGREEMENT**- See CHANGE ORDER/ SUPPLEMENTAL AGREEMENT.

**SUPPLEMENTAL SPECIFICATIONS** - Specifications so designated that are not included in the Standard Specifications, General Special Provisions, or Special Provisions.

**SURETY** - The individual, partnership, firm, or corporation, or any acceptable combination thereof, other than the Contractor, executing the bond or bonds furnished by the Contractor. Surety Companies must be authorized to do business in the state of Vermont [See 19 VSA Section 10 (8)].

**SURFACE COURSE** - The uppermost component of a pavement structure, also called the wearing course or travel surface.

**TECHNICAL EVALUATION COMMITTEE (TEC)** – The Committee appointed by the Director of Program Development to review and evaluate the Design-Build Proposals. The Committee members will be limited to VTrans staff, unless otherwise approved by the Director.

**TON** - The word “ton” by itself is a unit of measure equivalent to 2000 pounds. See also “METRIC TON.”

**TRAFFIC ENGINEER** – See ROADWAY, TRAFFIC, AND SAFETY ENGINEER.

**TRAVELED WAY** - The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

**UNIT PRICE** - The Contract price for one unit of work, as defined by the Contract.

**U.S.C.** – United States Code.

**UTILITY** - The privately, publicly, or cooperatively owned lines, facilities, and systems for producing, transmitting, or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including publicly owned fire and police signal systems and street lighting systems, which directly or indirectly serve the public or any part thereof. The term “utility” shall also mean the utility company, inclusive of any wholly owned or controlled subsidiary.

**VERIFICATION SAMPLING AND TESTING** – Sampling and testing performed by qualified testing personnel employed by the Agency or its designated agent, excluding the contractor and vendor, to validate the quality of the product.

**V.S.A.** – Vermont Statutes Annotated.

**VTRANS OR AGENCY** – The State of Vermont Agency of Transportation or any duly authorized representative thereof.

**WEIGHT** - In these Specifications, the words “weight” and “mass” are used interchangeably.

WEIGHTS AND MEASURES – The Vermont Department of Agriculture, Division of Weights and Measures.

WORK - The furnishing of all design, labor, materials, equipment, and incidentals necessary or convenient to the successful completion of the project and carrying out of the duties and obligations imposed by the Contract.

WORKING DAY - A calendar day on which construction operations could proceed as determined by the Engineer; unless excepted, "Working Day" excludes Saturdays, Sundays, and Holidays.

WORKING DRAWINGS - Supplemental design sheets or similar data which the Contractor is required to submit to the Engineer such as stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, and bending diagrams for reinforcing steel.

WRITTEN ORDER - A statement in writing from the Resident Engineer to the Contractor that:

- (a) Authorizes or directs work to be done that is not part of the Contract, including method of payment.
- (b) Informs the Contractor of work that is not being accomplished according to the Plans and these Specifications, and directs corrective action.
- (c) Documents quantities to be paid for designated Contract items.
- (d) Directs that safety, environmental, or other requirements or measures be followed.
- (e) Directs that certain work or all work be stopped or discontinued.
- (f) Brings to the Contractor's attention any other information or concerns that the Engineer may wish to emphasize.