



BELMONT PLANNING BOARD

CONSTRUCTION & SECURITY MANUAL

**Belmont Land Use Office
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SECTION 1. DEFINITIONS

The following definitions shall apply throughout this document:

Approved Plans: Complete set of drawings demonstrating the overall design intent and layout of the proposed improvements prepared by the Design Engineer and approved and signed by the Planning Board or appropriate Town Official(s).

Contractor: The person or company representing the Owner/Developer who is responsible for the construction of the proposed development in accordance with the approved plans.

Construction Inspections: Frequent detailed inspections conducted by the Design Engineer, at the cost of the Owner/Developer, to certify compliance with the approved plans, recommend field changes, produce interim and final plan, report and security adjustment documents.

Construction Layout: Establishment and maintenance of all horizontal and vertical layout control, bench marks and structure locations to assure that all improvements will conform to the locations, lines, levels and grades as indicated on the approved plans.

Construction & Security Manual: Belmont Planning Board Construction & Security Manual, also referred to as the Manual.

Construction Observations: Independent milestone observations conducted by the Board or its Agent, at the cost of the Owner/Developer, for the purpose of evaluating Inspection Reports and Security needs.

Construction Observation Security: Monies placed in escrow with the Board to cover all costs related to independent construction observations.

Construction Observer: Planning Board staff or other appointed Agent to perform construction observations, also referred to as the Observer.

Design Engineer: The person or company representing the Owner/Developer who is responsible for the engineering of the proposed development in accordance with the approved plans.

Independent Consultant: Private individual or firm contracted by the Town to provide independent plan or other technical review and/or on-site construction observation under the direction of the Project Administrator, also referred to as Consultant.

Owner/Developer: Person or company financially responsible for the proposed development.

Planning Board: Town of Belmont Planning Board also referred to as the Board.

Record Surveyor: The person or company representing the Owner/Developer who is responsible for the surveying of the proposed development in accordance with the approved plans.

Town: Town of Belmont, New Hampshire

Project Administrator: Town representative responsible for the overall project administration, also referred to as the Administrator.

SECTION 2. INTRODUCTION

The purpose of this Manual is to present the overall intent and procedures related to construction, security and project administration in the Town of Belmont. The procedures are based upon the Town of Belmont Zoning Ordinance, Subdivision Regulations, Site Plan Regulations, Driveway and Utility Regulations, Road Acceptance/Layout Policies, Federal & State regulations, Ordinance Governing Work in Public Ways and specific conditions applied to all permits and approvals.

Plan reviews and/or construction observations will be performed on various types of projects including, but not limited to:

1. Regulated Site Development
2. Subdivisions
3. Roadway and Utility Improvements

The Board will assign a Project Administrator (Administrator) to the project. As necessary, the Administrator will assign an Independent Consultant (Consultant), Construction Observer (Observer) and/or other staff to act as the Board's representative(s) on the project including, but not limited to plan review and construction observation services.

This Manual briefly outlines the organization, communication and relationships involved in, and the funding mechanism for the plan review and construction monitoring process including but not limited to Town Departments, Observer, Consultant, Owner/Developer, Design Engineer, Record Surveyor and Contractor.

After this Manual has been presented, reviewed and discussed at the project preconstruction meeting, all interested parties will sign and date the Project Signatures page located at the end of this document, acknowledging receipt and understanding of the document.

If specific project questions, concerns or comments arise from this document, the Owner/Developer is responsible to notify the Administrator in writing of each specific question, concern or comment prior to the start of construction. If necessary, an additional meeting of all interested parties will be held to address each specific question, concern or comment.

SECTION 3. ESCROW

The primary purposes for requiring security are to protect the Town from costs incurred by the proposed private development, to protect the safety and interests of future owners/users of the improvements, and to assure the integrity of the completed project as approved. All costs to establish, administer, amend and close security accounts shall be borne by the applicant. The Design Engineer shall utilize at a minimum the Board's security spreadsheet format to submit estimates and requests for adjustments. Estimates shall include a 15% contingency. The Board shall establish the total required security value based on this and other information available. A positive balance shall be maintained by the applicant in the required escrow account(s) at all times. Funds remaining in the escrow account(s) upon successful completion shall be returned to the Owner/Developer.

A. PLAN/TECHNICAL REVIEW

The Consultant shall estimate the cost of the review, the Board shall set the amount of the required escrow, the Owner/Developer shall deposit the necessary funds with the Board and the Administrator shall oversee the payment of the independent plan review. Upon receipt of the funds the Administrator shall authorize the reviewer to commence.

B. CONSTRUCTION OBSERVATION

Based on the approved plans, the appointed Observer shall estimate the cost of the review, the Board shall set the amount of the required escrow, the Owner/Developer shall deposit the necessary funds with the Board and the Administrator shall oversee the payment of all construction observations. Escrow shall be in place prior to the Preconstruction Meeting.

C. CLOSURE/ABANDONMENT

The Design Engineer shall submit the estimated cost to secure and close the site in the instance that the Owner/Developer disturbs the site but is then unwilling or unable to complete the project. The estimate shall be based on having the largest approved area disturbed and the cost for regrading, vegetating, and providing appropriate closure drainage for the site. No credit shall be given for onsite materials or Owner/Developer participation in the work. Estimate shall detail all components by unit/cost based on current NH DOT unit costs when available (subject to approval by the Board). The Board shall set the amount of the required escrow and the Owner/Developer shall deposit the necessary funds with the Board. Escrow shall be in place prior to the Preconstruction Meeting.

D. IMPROVEMENTS

When required, the Owner/Developer shall secure the full cost of all required improvements. Based on the approved plans, the Design Engineer shall submit the estimated cost of all required improvements. No credit shall be given for onsite materials or Owner/Developer participation in the work. Estimate shall detail all components by unit/cost based on current NH DOT unit costs when available (subject to approval by Board). The Board shall set the amount of the required escrow and the Owner/Developer shall deposit the necessary funds with the Board.

E. EARTH EXCAVATION RECLAMATION

Owner/Excavator shall submit estimate for total reclamation cost detailing all components by unit/cost based on current NH DOT unit costs when available (subject to approval by Board), and amount of area currently open and proposed to be open through the next Compliance Hearing. The Board shall establish total required security value based on this and other information available.

F. ESCROW FORMS

Funds paid for the purpose of Construction Observations or Independent Reviews are required in the form of cash or check. Acceptable forms of escrow/security/surety are limited to Irrevocable Letters of Credit and Cash.

1. Cash or Letter of Credit:

- a. Cash or check made payable to the Town of Belmont. Cash shall be held in accordance with RSA 673:16.
- b. Letter of Credit language requires pre-approval of the Board (sample available). Letters shall include a self-call clause.

G. ESCROW INCREASES, RELEASES AND REDUCTIONS**1. Increases:**

The Board may require the Design Engineer to submit an updated estimate and increase the total required security for projects not completed within one year of the date of the original security estimate or where construction or material unit cost changes occur.

Earth Excavation Reclamation: The Board may require the Owner/Excavator to submit an updated estimate and an increase in the total required security for reclamation not completed within two years of the date of the original security estimate or where reclamation changes occur.

2. Releases/Reductions:

Cash and Letter of Credit Releases/Reductions Request process:

- a. Design Engineer shall certify in writing (copy to Observer and Administrator):
 1. work to be released is completed in accordance with approved plans
 2. value of work to be released based on original job estimate including confirmation of quantities.
 3. value of remaining security is sufficient to complete project including retainage
- b. Design Engineer shall obtain successful report of work to be released by Observer.
- c. Request shall use at a minimum the Board's spreadsheet format and include narrative description of work completed/to be completed. All applicable test results shall be included.

- d. Release requests will only be considered for work completed and shall not include stockpiled materials that have not been incorporated into the project.
- e. Short-term Retainage (10%) will be held on all releases until the Temporary Certificate of Performance is issued (completion of all required conditions/improvements).
- f. Long-term Retainage (2%) will be held on all releases until the Final Certificate of Performance is issued (minimum one year and successful operation of all conditions/improvements)
- g. Full or partial release of the project security may occur with the Temporary Certificate of Performance, but shall occur no later than issuance of the Final Certificate of Performance.
- h. The Board is not required to accept release requests more frequently than every 60 days and the Board will make every effort to process requests within 30 days of receipt of a completed request. Escrow reduction calculations do not take into consideration any amount due the contractor. That is a contractual matter between the developer and the contractor.
- i. Record drawings are required for the entire scope of the improvements prior to final release.
- j. Additional Record Documentation may include paving slips and other invoices for materials installed.
- k. Earth Excavation Reclamation: Owner/Excavator shall obtain successful inspection of reclamation work to be released by Board's Observer. Applicant/Engineer shall certify in writing:
 - 1. work to be released is completed in accordance with approved plans
 - 2. value of work to be released based on original job estimate
 - 3. value of remaining security is sufficient to complete project

Request shall include narrative description of reclamation completed/to be completed.

H. ESCROW LAPSE

Should for any reason the applicant allow required security to lapse, either through his/her own action or fault, through action of a court because of bankruptcy, or for any other reason, the Town shall act to revoke the project approval, issue a cease and desist order, cancel all building permits that have been issued, but upon which work has not started; refuse to issue additional building permits; and pursue all other remedies allowed by law.

SECTION 4. INDEPENDENT PLAN REVIEW

In the instance that an independent review of plans or other information is required, the Administrator will assign a reviewer and the Owner/Developer shall submit one copy of all applicable information and plans to the reviewer. Upon successful completion of the review the Owner/Developer shall submit the resulting plans to the Town. Independent reviews may be required prior to, or as a condition of approval. However, all reviews of the initial plans shall be completed prior to the Preconstruction Meeting. In the instance that field changes are requested during construction, additional independent plan reviews may be required. The costs for independent reviews are borne by the Owner/Developer.

A. No preconstruction meeting will take place until the following minimum requirements have been established:

1. Project plans have been approved by all applicable Town Departments and signed by the Planning Board or appropriate Town Official(s).
2. All applicable project permits have been obtained from all local, state and federal agencies and are on file with the Town.
3. All applicable project security has been accepted and is on file with the Town.
4. All application, plan review and permit fees have been paid to the appropriate Town Departments.
5. Construction Observation Security has been paid to the Town.

B. A preconstruction meeting is mandatory. The Owner/Developer shall request a preconstruction meeting with the Administrator prior to the start of any cutting, clearing or construction. The Administrator will schedule the preconstruction meeting date, time and meeting location. The following interested parties shall be invited to attend the meeting:

1. All Town Departments affected by the proposed project
2. Administrator
3. Construction Observation Representative
4. Owner/Developer
5. Design Engineer and Record Surveyor
6. Contractor
7. All Utility Companies affected by the proposed project

At least seven (7) working days prior to start of site activity, the Owner/Developer shall notify the Administrator in writing of the date and time when the proposed work will start. Notification will be addressed to:

Belmont Town Planner and Construction Observer
Land Use Office
P.O. Box 310
Belmont, NH 03220

- C.** All preconstruction meetings will take place at the Belmont Corner Meeting House. The overall purpose and intent of the preconstruction meeting will include but not be limited to the following:
- 1.** Introductions
 - 2.** Design, concept, scope and objectives
 - 3.** Approved plans and Town Construction Standards
 - 4.** Owner/Developer to provide project contact list & emergency numbers
 - 5.** Town to provide project contact list & emergency numbers
 - 6.** Project organization, responsibilities & communications
 - 7.** Construction sequence and schedule

- 8.** Contractor representative named & assigned to be on site throughout the course of construction
- 9.** Project permitting & special interests
- 10.** Coordination & notification of all affected Utility Companies
- 11.** Access to Work
- 12.** Layout of Work
- 13.** Construction Observations
- 14.** Field Changes
- 15.** Testing
- 16.** Submittals/shop drawings/certificates of compliance
- 17.** Construction Inspection Checklist Worksheet
- 18.** Requirements of Project Acceptance (Final Inspection, Record Drawings, etc.)

SECTION 6. NOTIFICATION, ACCESS & LAYOUT**A. NOTIFICATION**

The Owner/Developer is responsible to provide the Observer with a complete project schedule at the preconstruction meeting. During the course of the work, if the Contractor requires a schedule change, the Contractor must provide a revised schedule for review and comment to the Observer prior to the proposed change.

The Owner/Developer will be provided with a list of milestone observations and is responsible for all construction observation requests. The Owner/Developer will request construction observations at least 48 hours in advance. Failure to properly communicate the construction schedule and observation requests with the Observer will decrease the likelihood of timely construction observations and may impact acceptance of work.

Construction observation cancellations must be received by the Observer at least 24 hours prior to the scheduled observation or will be subject to minimum charges. Failure to notify the Observer that construction observations are not required is also subject to a minimum charge.

B. ACCESS TO WORK

The Owner/Developer shall provide the Town and the Observer safe and full access to all project construction operations at all times.

C. CONSTRUCTION LAYOUT

The Owner/Developer is responsible to provide construction layout for the project. The Design Engineer or Record Land Surveyor shall perform initial project layout in accordance with the approved plans. A competent skilled foreman shall perform subsequent project layout. The Owner/Developer may be required to enlist the Design Engineer or Record Land Surveyor to reestablish project centerline/layout as construction continues to ensure compliance with approved plans.

Orange construction fencing shall be erected around the entire perimeter of area to be disturbed. No encroachment outside of fenced area is permitted without prior approval of the Town in conjunction with review by project engineer.

Line, grade and location of roadways, treatment swales, utility easements, sidewalks, guardrail, curbing, drainage, utilities and no cut zones shall be provided with staked offsets. Project perimeter fencing and layout shall be maintained throughout the duration of the project. The Observer has the right to stop construction if he/she observes the layout is either missing or incorrectly staked. Layout and grade stakes shall be clearly marked and identified.

SECTION 7: DESIGN ENGINEER - CONSTRUCTION INSPECTIONS & DRAWINGS

It is the Owner/Developer's responsibility to make certain that both the Design Engineer and Record Surveyor remain intimately involved in the day-to-day construction activities to perform all required construction inspections, participate in all field change requests, certify all construction (periodically as may be requested and finally), and to produce all required escrow reduction requests and record drawings. All work is to be inspected by the Design Engineer/Record Surveyor as applicable. All improvement certifications are to be made under the stamp of the Design Engineer and/or Record Surveyor as applicable. Certifications shall be based on timely on-site observations. After-the-fact methods of certifying work are not an accepted method of certification.

The inspections are intended to provide the evidence upon which the Design Engineer shall certify to the Board that construction complies with all applicable plans, approvals, standards and laws. Such inspections shall also be the basis for the Design Engineer to evaluate change-orders, recommendations on security adjustments and to complete project end reports and plans.

The following section briefly describes the construction inspection checklist. This checklist is intended as a tool to aid the Owner/Developer monitor construction progress and does not replace conditions of approval or the applicable Town Regulation or State law.

The Design Engineer shall monitor and observe the following using his/her judgment to establish the schedule of inspections necessary to be able to certify compliance.

- A. Soil Erosion & Sediment Control Methods** - Implementation of all project Soil Erosion & Sediment Control Methods prior to the start of clearing & grubbing construction and maintenance of same throughout the project.
- B. Noise and Dust Control** - Activities of noise and dust control throughout the duration of the project to ensure that all reasonable and/or required measures are taken.
- C. Wetland Delineation** – Confirm delineation is clearly marked initially and throughout the project.
 - 1.** All wetlands on and adjacent to the project shall be delineated by a NH Licensed Wetlands Scientist prior to any construction activity on site. Wetland flagging shall remain in place for the duration of construction. The Town may order re-flagging if necessary.
- D. Clearing & Grubbing** – Clearing & grubbing prior to the start of subgrade construction.
 - 1.** All topsoil shall be removed from roadway limits and stockpiled for reuse on project. Topsoil shall be reused on the project to ensure minimum topsoil depths as shown on the approved plans.

All local, State and Federal Regulations shall be followed when disposing of stumps and other debris. No stumps or other debris shall be disposed of adjacent

to wetlands, roadways, or building foundations. The Observer may require submittal of a materials disposal plan.

- E. Subgrade Construction** - Existing ground has been grubbed, stripped and removal of unsuitable material has been completed.
1. Subgrade construction (fill operations) shall not begin until existing ground has been grubbed, stripped and removal of unsuitable material has been completed
- F. Blasting** – Blasting plan and pre-blast survey & meeting.
1. The Owner/Developer shall prepare and submit to the Design Engineer a blasting plan and pre-blast survey. A pre-blast meeting shall be conducted prior to the start of any blasting activities. The Contractor is responsible for making all required notifications, including the Belmont Fire and Police Department of the proposed blasting area and blasting times and complying with all applicable State and Federal Rules.
- G. Utility Construction** - Utility construction including but not limited to drainage, water and sanitary sewer construction; utility main and utility service connections.
1. The Design Engineer, with the assistance of the Contractor shall document ties to key utility components. The Design Engineer shall submit the documentation to the Observer for review and approval and to the Board as requested or upon final completion of the project.
 2. No work shall be permanently back-filled until construction inspections have been performed including but not limited to the excavation, material placement, compaction and back-filling operations related to utility construction.
 3. Construction of private utility infrastructure for compliance with approved plans and Town construction standards. The Owner/Developer will be responsible to see that as-built plans of all private utility construction are maintained for inclusion into final project record plan.
 4. In general, all utility construction shall conform to the requirements and specifications of the appropriate utility company and Town standards. All public and private utility construction shall be included in the record plan as required by the Board. Only Town authorized personnel shall operate water and sewer valves and shutoffs. Individuals operating valves, shutoffs and connecting temporary water lines to hydrants without permission are subject to fines in accordance with the rules and regulations promulgated by the Belmont Water Department.
- H. Subgrade Preparation**
1. Subgrade preparation may not commence until all underground utility construction has been completed within the project right of way. Phased construction is only permitted if/when approved by the Board.
 2. Subgrade preparation for material, line, grade, crown, compaction and conformance with the approved plans prior to the start of gravel placement.
 3. Compaction testing shall be performed as required by the Design Engineer and/or Observer and the cost shall be borne by the Owner/Developer.

- I. Bank Run Gravel Base Placement** - Bank Run gravel base placement for material, shape, grade, crown, compaction and conformance with the approved plans prior to the start of crushed gravel placement.
1. No select materials shall be placed until all underground utility work has been constructed and has passed all required testing (video, pressure, deflection, etc).
 2. The Design Engineer is responsible to provide the Observer with a sieve and proctor analysis report of the proposed gravel base material at least 48 hours prior to the start of Bank Run gravel base placement. If the Design Engineer does not adhere to the 48 hour submission, the Observer has the authority to delay placement of the material.
 3. Additional sieve analysis of the gravel base material shall be performed during placement operations at the discretion of the Observer.
 4. Compaction testing shall be performed as required by the Design Engineer and/or Observer, and the cost will be borne by the Owner/Developer.
- J. Crushed Gravel Placement** - Crushed gravel placement for material, shape, grade, crown, compaction and conformance with the approved plans prior to the start of paving operations.
1. The Design Engineer is responsible to provide the Observer with a sieve and proctor analysis report of the proposed crushed gravel material at least 48 hours prior to the start of crushed gravel placement. If the Design Engineer does not adhere to the 48 hour submission, the Observer has the authority to delay placement of the material.
 2. Additional sieve analysis of the crushed gravel material may be performed during placement operations at the discretion of the Design Engineer and/or Observer.
 3. Compaction testing shall be performed prior to paving operations and at the discretion of the Observer, and the cost will be borne by the Owner/Developer.
- K. Paving Operations** - The paving operation process for conformance with the approved plans and Town construction standards.
1. Prior to placing of any mix, a pre-paving conference shall be held to discuss and approve the paving schedule, source of mix, type and amount of equipment to be used, sequence of paving pattern, rate of mix supply, traffic control and general conformity of the operation.
 2. Special attention shall be made to the paving pattern sequence to minimize cold joints.
 3. The Owner/Developer is responsible to provide the Design Engineer with pavement batch slips as paving progresses.
- L. Curbing and Sidewalk** - Construction and installation of required curbing and sidewalks for compliance with approved plans, ADA requirements and Town Standards.
- M. Driveways** - Construction and installation of all curb cuts and driveways for compliance with approved plans, Driveway Permits and Town Regulations.

- N. Traffic Control Devices** - Construction of traffic control devices for compliance with the approved plans including but not limited to the following: pavement markings, street signs, signalization, traffic calming devices, curbing and sidewalks.
1. If the proposed project involves construction within the travel way, the Contractor is responsible for preparing a Traffic Control Plan (TCP). The plan must be in accordance with the latest edition of the MUTCD and must be prepared by a qualified traffic control designer. The Contractor cannot design the TCP. The TCP must be submitted to the Town at least two (2) weeks prior to the work being performed.
- O. Turf Establishment** - Turf establishment for compliance with approved plans and Town Standards.
- P. Street Trees and Landscaping** - Installation and planting of the required street trees and all landscape plantings for compliance with the approved plans, Town Standards and Regulations.
- Q. Monumentation** - Material & placement of monumentation for compliance with the approved plans.
1. The Record Surveyor shall provide certification of the material and placement of monuments to the Town as indicated on the approved plans. All monumentation shall be clearly staked after placement.
- R. Miscellaneous Site Features** - Construction and installation of streetlights, site lighting, guardrails, retaining walls, dumpster pads and screens, traffic signage, traffic striping, fencing and any other features required for compliance with approved plans, Town construction standards and all applicable State and local Regulations.
- S. Record Drawings**
1. The Design Engineer shall be responsible for the preparation of a record construction drawing for all improvements.
 2. Such plans are required before the Planning Board will issue a Temporary Certificate of Performance; and a Final Certificate of Performance is required in order to petition the Board of Selectmen to accept any improvements (see attached Acceptance Sequence).
 3. Record Drawings are required at least two (2) weeks prior to the Final Walkthrough.
 4. Record Drawings are required for the entire scope of the improvements and shall meet the following requirements:
 - a. Plans shall be sealed and signed by a professional surveyor or engineer licensed by the State of NH.
 - b. Sheet size shall be 22" x 34".
 - c. Plan scale shall not exceed 1 inch = 50 feet. Profile horizontal scale shall match plan scale with a horizontal to vertical scale ratio of 5:1.

- d.** Two paper original record drawings shall be submitted. Plans shall be reproducible in black/white, e.g. through the use of differentiating graphics (pre/post contours dashed/solid), identifying notes, etc.
- e.** Plans for highways shall be submitted in electronic form tied to state plane coordinates. A minimum of two points with state plane coordinates, located within the project, shall be shown on the plan.
- f.** Proposed elevations for road centerline at fifty foot stations shall be shown on the profile. As-built elevations shall appear in parentheses next to the proposed elevations. As-built vertical curve information shall appear on the profile.
- g.** Horizontal alignment of the street centerline with tie in to intersecting streets, edges of pavement, width of shoulders, sidewalks, shoulder breaks, centerline of ditches and bottom and top of slopes (all with spot elevations), shall be shown on the plan.
- h.** The location of the right of way and all monuments delineating the right of way shall be shown on the plan. The location of all utility, slope, drainage and sight distance easements shall appear on the plan.
- i.** The location of fire cisterns including exposed fill and vent pipes, bollards and turnout areas shall appear on the plan.
- j.** All storm and sanitary sewer structures and piping shall appear on the plan and profile. As-built elevations shall appear in parentheses next to the proposed elevations for pipe inverts, structure rims and pipe outlets at headwalls and ditch lines. Indicate size and type of material for all piping and structures.
- k.** The location of water mains, water services, bends, valves, hydrants, and blow offs.
- l.** The location of all water and sewer service laterals shall be shown to the limit of the street right of way. Indicate the size and type of material.
- m.** The location of surface runoff retention/detention ponds, water quality swales, water quality facilities, erosion stone, etc. shall be shown on the plan. Elevation information in the form of spot elevations and/or contours indicating the as-built grading shall appear on the plan.
- n.** A statement that sight distance requirements at all affected intersections have been determined post construction, meet the Town requirements for sight distance and have been observed in the field by a Town representative or the Town's Consulting Engineer.
- o.** Location of all visible roadway components including but not limited to utility poles, guardrail, curbing, drive aprons and drive culverts, lighting and landscaping.
- p.** Location of all private utilities such as gas, electric, telephone and cable conduit, transformer pads, junction boxes and services stubs.

SECTION 8. CONSTRUCTION OBSERVATIONS

Construction Observations are milestone observations conducted by the Town or its Observer, at the cost of the Owner/Developer as an independent review of the project development and solely for the purpose of evaluating the reasonableness of documents and certifications submitted by the Owner/Developer and the design/construction team and to review general conformance with the plans. Such Observations shall not take the place of Construction Inspections. The Construction Observer is not responsible for quantities, record drawings, or final construction certification. Construction Observations shall be conducted at intervals appropriate to the stage of construction in order to observe the progress and quality of the work completed by the Contractor. Such Observations are not intended to be an exhaustive check or a detailed inspection of the Contractor's work but rather are to allow the Observer to become generally familiar with the work in progress and to determine, in general, if the work is proceeding in accordance with the approved plans. Such Observations shall assist the Board in evaluating Construction Inspection reports, and field change and security adjustment requests. They are not inspections for the applicant in place of the Design Engineer or Record Surveyor. Timely notice shall be provided for all construction observation required by the Observer. Responsibilities of the Observer may include, but are not limited to the following tasks:

A. Construction Administration Services

- Review Applicant's escrow estimate
- Attend a Pre-Construction Conference and prepare meeting notes for distribution
- Review construction materials and project submittals for conformance upon request
- Review escrow release requests and provide recommendations based on accepted work
- Communications with Town, Contractor, Design Engineer, Owner/Developer and Record Surveyor concerning execution of the work
- Prepare a project punch list once the project is substantially completed
- Review record drawings to be submitted by the Design Engineer
- Provide Project Closeout letter
- Coordination with other agencies having jurisdiction

B. Construction Observation Services

- Perform periodic site visits to observe and document construction activities of site improvements. A field report will be provided for each site visit.
- Confirm compliance with applicable permit conditions.
- It is anticipated that the project will be visited at the following milestones:
 - Erosion control measures
 - Drainage system (including pipes, structures and culverts)
 - Water and Sewer distribution systems
 - Fire Protection measures
 - Fill material and placement
 - Roadway and parking subgrade materials
 - Roadway and parking gravel materials
 - Compaction efforts
 - Pavement installations

- Coordination of site visits and reviews with other agencies having jurisdiction
- Complete final site visit and walk through prior to project close out and one-year evaluation

C. Responsibilities Not Included (unless separately contracted)

- Topographic or boundary services
- Design Services
- Design Review Services for Site Plan
- Geotechnical or subsurface services
- Review of traffic improvements or other offsite improvements
- Review of electrical system (building or site)
- Review for code compliance
- Review of building or other related components

Construction observation SHALL NOT imply partial or final acceptance of the project in part or as a whole. The Owner/Developer, Design Engineer and Contractor are responsible for complete, accurate and timely project completion in accordance with the approved plans. The Observer shall review project submittals and make recommendations to the Administrator for approval or rejection. Project submittals may include product data, material test results, certificates of compliance, and other data, which the Contractor is required to submit, but only for the limited purpose of checking for conformance with the approved plans.

SECTION 9. TESTING & FIELD CHANGES**A. TESTING**

The Design Engineer is responsible for monitoring all independent testing with respect to material, compaction and utilities to determine compliance with all applicable Town and State regulations including but not limited to the following: materials, drainage, sanitary sewer and water. The Owner/Developer is responsible for all testing costs associated with the project construction. The Observer or Administrator may require additional testing as deemed necessary including but not limited to the following: gradations, compaction, vibration, noise, and pavement/concrete testing.

B. FIELD CHANGES

The Design Engineer may suggest/discuss minor project changes in the field with the Observer which **do not** alter the design intent, compromise public safety or costs and comply with all applicable Town regulations. Minor changes are to be documented in the field by the Observer and included on the Record plans prepared by the Record Surveyor.

The Design Engineer may also suggest/discuss major project changes in the field with the Observer which will alter the basic design intent or affect public safety or costs and comply with all applicable Town regulations. However, any such proposed major field changes must be submitted in writing before the work starts to the Administrator for review and comment and may require Board approval.

SECTION 10. PROJECT CLOSE OUT & ACCEPTANCE OF IMPROVEMENTS**A. CLOSEOUT PROCESS**

The project Owner/Developer is responsible to schedule an on-site project closeout meeting upon substantial completion of construction. The purpose of the meeting will be to prepare a punch list of remaining work items. The Observer will prepare the punch list from outstanding work items discussed and field confirmed. The project close out meeting should include but not be limited to the following interested parties:

1. Owner/Developer
2. Design Engineer
3. Record Surveyor
4. Contractor
5. Administrator
6. Applicable Town Department representatives
7. Observer

B. CLOSEOUT DOCUMENTATION

1. Certification that all punch list items have been completed.
2. Final survey monumentation.
3. Easements.
4. Record Drawings.
5. Complete 1-year warranty walkthrough.

C. FINAL WALKTHROUGH (PROJECT COMPLETION & ONE-YEAR REVIEW)

The Owner/Developer shall be responsible for scheduling a final walkthrough to review the completed project and compile any punch list items. The Observer is responsible for compiling all punch list items and a written summary shall be distributed to all involved parties. The Design Engineer is responsible for ensuring that the punch list items are completed in accordance with the approved design drawings and the Town Standards.

D. ACCEPTANCE OF IMPROVEMENTS

Upon successful project completion and the required waiting period, the Owner/Developer may request in writing the Town's acceptance of public improvements (see Acceptance Sequence attached). Written requests for acceptance of public improvements, including all required forms, documents and fees shall be made to:

Belmont Board of Selectmen
P.O. Box 310
Belmont, NH 03220

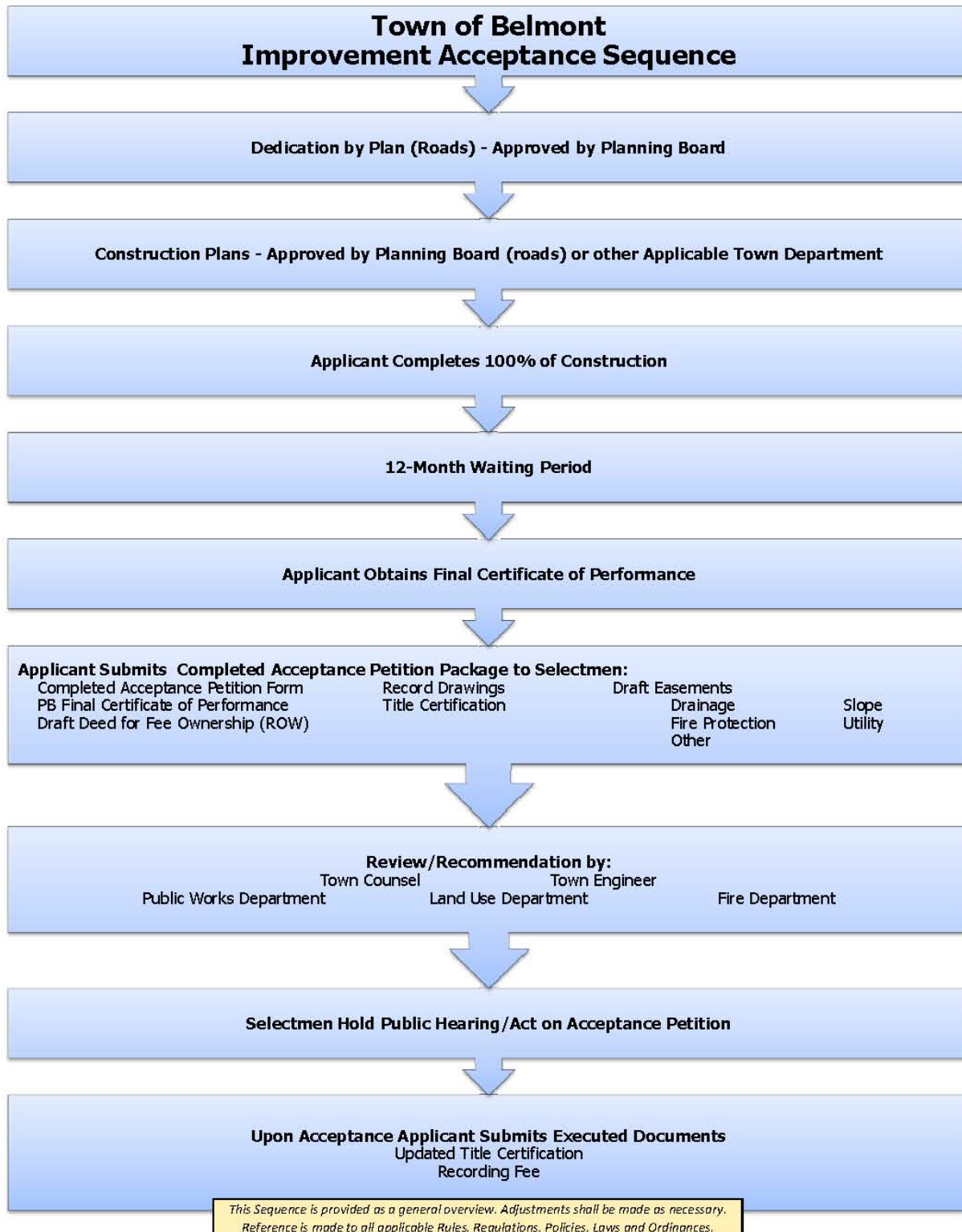
CONSTRUCTION INSPECTION CHECKLIST WORKSHEET

PROJECT INFORMATION:

Project:_____ Location:_____

Owner/Developer:_____ Contractor:_____

Construction Item	Date	Signatures		Comments
		Contractor	Design Engineer	
Stormwater & Erosion Control Facilities				
Clear & Grub				
Subgrade Construction				
Blasting				
Utility Const:				
Sewer				
Drainage				
Water				
Private Utilities				
Subgrade Prep				
Gravel Base				
Crushed Gravel				
Paving:				
Base Paving				
Top Paving				
Traffic Control:				
Pvmt Markings				
Signage				
Traffic Signals				
Street Lights				
Curbing				
Sidewalks				
Driveways				
Turf Establishment				
Landscaping				
Monumentation				
Record Drawings				
Other:				



Security Reduction Request No. 1

Application Period:
From Contractor:
Contract:

Application Date:
Via Engineer:

Contractor's Project No.
Owner's Project No.

Change Order (Adjustment) Summary		Payment Summary	Security Reductions
1. Original Contract Price (Security Amount)			1
2. Net Adjustments			2
3. Current Security Amount (Line 1+2)			3
4. Total completed and stored			4
5. Total Retainage			5
6. Amount Eligible for Reduction (Line 4-5)			6
7. Less Previous Reductions			7
8. Amount Reduced this Application			8
9. Balance to Finish plus Retainage			9
10. Total			10
11. Net Adjustments			11
12. Total			12
13. Total			13
14. Total			14
15. Total			15
16. Total			16
17. Total			17
18. Total			18
19. Total			19
20. Total			20
21. Total			21
22. Total			22
23. Total			23
24. Total			24
25. Total			25
26. Total			26
27. Total			27
28. Total			28
29. Total			29
30. Total			30
31. Total			31
32. Total			32
33. Total			33
34. Total			34
35. Total			35
36. Total			36
37. Total			37
38. Total			38
39. Total			39
40. Total			40
41. Total			41
42. Total			42
43. Total			43
44. Total			44
45. Total			45
46. Total			46
47. Total			47
48. Total			48
49. Total			49
50. Total			50
51. Total			51
52. Total			52
53. Total			53
54. Total			54
55. Total			55
56. Total			56
57. Total			57
58. Total			58
59. Total			59
60. Total			60
61. Total			61
62. Total			62
63. Total			63
64. Total			64
65. Total			65
66. Total			66
67. Total			67
68. Total			68
69. Total			69
70. Total			70
71. Total			71
72. Total			72
73. Total			73
74. Total			74
75. Total			75
76. Total			76
77. Total			77
78. Total			78
79. Total			79
80. Total			80
81. Total			81
82. Total			82
83. Total			83
84. Total			84
85. Total			85
86. Total			86
87. Total			87
88. Total			88
89. Total			89
90. Total			90
91. Total			91
92. Total			92
93. Total			93
94. Total			94
95. Total			95
96. Total			96
97. Total			97
98. Total			98
99. Total			99
100. Total			100

Contractor's Certifications

All Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By: _____ (Date)

Payment of: \$0.00 (Line 8 or other - attach explanation of other amount)

is recommended by: _____ (Date)

Payment of: _____ (Date)

is approved by: _____ (Date)

TOWN OF BELMONT SAMPLE SECURITY ESTIMATE WORKSHEET
SUBDIVISION, ROADWAY CONSTRUCTION & NON- RESIDENTIAL DEVELOPMENT

PROJECT NAME:

Tax Map _____

OWNER/DEVELOPER:

Lot No.: _____

PREPARED BY:

Release No. _____

DATE:

Date: _____

Sample Items	Quantity	Unit	Unit Price (see note 1)	Total Price	% Complete (to date)	Total Release	Previous Release Amount	Release (This Est.)	Value Remaining
EARTH WORK									
Clearing & Grubbing				\$ -		\$ -		\$ -	\$ -
Common Excavation(Det. Ponds)				\$ -		\$ -	\$ -	\$ -	\$ -
Ledge Excavation (Bulk)				\$ -		\$ -	\$ -	\$ -	\$ -
Ledge Excavation (Trench)				\$ -		\$ -	\$ -	\$ -	\$ -
Common Excavation				\$ -		\$ -	\$ -	\$ -	\$ -
Common Borrow				\$ -		\$ -	\$ -	\$ -	\$ -
Bank Run Gravel				\$ -		\$ -	\$ -	\$ -	\$ -
Crushed Gravel				\$ -		\$ -	\$ -	\$ -	\$ -
Road Base Material				\$ -		\$ -	\$ -	\$ -	\$ -
Fine Grading				\$ -		\$ -	\$ -	\$ -	\$ -
PAVING (MACHINE METHOD)									
Less than 1,000 Tons				\$ -		\$ -	\$ -	\$ -	\$ -
Greater than 1,000 Tons				\$ -		\$ -	\$ -	\$ -	\$ -
Greater than 2,000 Tons				\$ -		\$ -	\$ -	\$ -	\$ -
3" Bituminous Pavement				\$ -		\$ -	\$ -	\$ -	\$ -
3" Pedestrian Walk Pav. (4' Wide)				\$ -		\$ -	\$ -	\$ -	\$ -
PAVING (HAND METHOD)						\$ -	\$ -	\$ -	\$ -
All amounts				\$ -		\$ -	\$ -	\$ -	\$ -
CURBING									
Pavement Marking				\$ -		\$ -	\$ -	\$ -	\$ -
Bituminous				\$ -		\$ -	\$ -	\$ -	\$ -
Granite				\$ -		\$ -	\$ -	\$ -	\$ -
LOAM & SEED				\$ -		\$ -	\$ -	\$ -	\$ -
LANDSCAPING									
Trees (2-1/2" cal.)				\$ -		\$ -	\$ -	\$ -	\$ -
Shrubs (3' high)				\$ -		\$ -	\$ -	\$ -	\$ -
LIGHTING(ESTIMATE REQD.)									
UG Conduit System (light post only)				\$ -		\$ -	\$ -	\$ -	\$ -
PSNH - Utility Poles O.H.				\$ -		\$ -	\$ -	\$ -	\$ -
Metrocast Cable Conduit				\$ -		\$ -	\$ -	\$ -	\$ -
Verizon Telephone Conduit U.G.				\$ -		\$ -	\$ -	\$ -	\$ -

Sample Items	Quantity	Unit	Unit Price (see note 1)	Total Price	% Complete (to date)	Total Release	Previous Release Amount	Release (This Est.)	Value Remaining
STORM DRAINAGE									
15" (Class III RCP or Equiv.)				\$ -		\$ -		\$ -	\$ -
18" (Class III RCP or Equiv.)				\$ -		\$ -	\$ -	\$ -	\$ -
30" to 36" (Class III RCP or Equiv.)				\$ -		\$ -	\$ -	\$ -	\$ -
36" & above (Class III RCP or Equiv.)				\$ -		\$ -	\$ -	\$ -	\$ -
Catch Basins				\$ -		\$ -	\$ -	\$ -	\$ -
6" underdrain				\$ -		\$ -	\$ -	\$ -	\$ -
Headwalls (up to 36" Pipe)				\$ -		\$ -	\$ -	\$ -	\$ -
End Sections (up to 36" Pipe)				\$ -		\$ -	\$ -	\$ -	\$ -
Outlet Structures/Vault Structures				\$ -		\$ -	\$ -	\$ -	\$ -
Rip Rap (Stone Fill - Type C)				\$ -		\$ -	\$ -	\$ -	\$ -
EROSION CONTROL									
Silt Fence				\$ -		\$ -		\$ -	\$ -
Hay Bales/Checkdams				\$ -		\$ -	\$ -	\$ -	\$ -
Stabilized Construct. Entrance				\$ -		\$ -	\$ -	\$ -	\$ -
SURVEY MARKERS									
Granite Monuments				\$ -		\$ -	\$ -	\$ -	\$ -
Pins				\$ -		\$ -	\$ -	\$ -	\$ -
TRAFFIC SIGNS				\$ -		\$ -	\$ -	\$ -	\$ -
GUARDRAIL				\$ -		\$ -	\$ -	\$ -	\$ -
SANITARY SEWER						\$ -	\$ -	\$ -	\$ -
<i>(Not Included in Security Estimate)</i>						\$ -	\$ -		
WATER SYSTEM									
<i>(Not Included in Security Estimate)</i>						\$ -	\$ -		
Miscellaneous (see attached)						\$ -	\$ -	\$ -	\$ -
1. Record Drawings				\$ -		\$ -	\$ -	\$ -	\$ -
2. Easements				\$ -		\$ -	\$ -	\$ -	\$ -
3. Design Engineer Fee				\$ -		\$ -	\$ -	\$ -	\$ -
4				\$ -		\$ -	\$ -	\$ -	\$ -
SUBTOTAL:				\$ -		\$ -	\$ -	\$ -	\$ -
CONTINGENCY 15%				\$ -		\$ -	\$ -		\$ -
TOTAL:						\$ -	\$ -	\$ -	\$ -
Notes:									
1. Unit Prices, where applicable, are to be based upon latest NHDOT weighted Unit Prices and projects of similar size and nature.									

CONSTRUCTION & SECURITY MANUAL SIGNATURES

Project:_____ Location:_____

Owner/Developer:_____ Contractor:_____

The following interested parties have received and reviewed this document at a preconstruction meeting for the above referenced project and hereby acknowledge receipt, review and acceptance of all requirements herein this document, not in part but in whole, by signing below:

Construction Observer_____
Date_____
Owner/Developer_____
Date_____
Design Engineer_____
Date_____
Record Surveyor_____
Date_____
Contractor_____
Date_____
Administrator_____
Date_____
Utilities_____
Date_____
Utilities_____
Date_____
Utilities_____
Date