Standards and Specifications Changes & Updates
2018 Edition

The following updates/changes to the Town of Erie's Standards and Specifications for Design and Construction of Public Improvements have been PROPOSED:

COVER SHEET-

- Updated edition date.

TABLE OF CONTENTS-

- None

SECTIONS-

- In all sections references to "Public Works Director" or "Director of Public Works" has been updated to "Town Engineer" to reflect changes in the Town organizational structure.
- All sections were adjusted and pages renumbered for proper page breaks

SECTION 100- *Title, Scope and General Requirements*

- **Paragraph 110.00** – Update 2017 Edition to 2018 Edition

SECTION 200 – *Acceptance Procedures*

- **222.00 – Construction Acceptance Procedures – Mylars – Remove**

SECTION 300 – *Site Work and Earthwork*

- **344.00 – Proof Rolling**

  2017 Edition:

  Proof rolling may be required to determine whether certain areas of subgrade meet compaction requirements. Where required by the Public Works Director, proof rolling shall be carried out as designated with a loaded 2,000 gallon single axle water truck. No separate payment shall be made for proof rolling operations.

  Areas of subgrade exposed and not previously disturbed but found to be weak and/or to fail the test shall, at the direction of the Public Works Director, be excavated, scarified, wetted if necessary, and recompacted with suitable backfill material to the requirements for density and moisture. The Contractor shall be compensated for this work either at applicable unit bid prices or by change order.

  Areas of subgrade already worked but upon proof rolling are found to be weak and/or fail the test shall be ripped, scarified, wetted if necessary, and recompacted to requirements for density and moisture at the Contractor's expense.

Proposed for 2018 Edition:
Proof rolling shall be required on all subgrades and aggregate base course or where required by the Town Engineer to locate weak areas. Proof rolling shall be carried out as designated with a fully loaded 2,000 gallon single axle water truck. No separate payment shall be made for proof rolling operations.

Areas of subgrade exposed and not previously disturbed but found to be weak and/or fail the test shall, at the direction of the Town Engineer, be excavated, scarified, wetted if necessary, and compacted with suitable backfill material to the requirements for density and moisture. After density and moisture requirements have been met, failed areas will require a subsequent proof roll. The Contractor shall be compensated for this work either at applicable unit bid prices or by change order.

Areas of subgrade already conditioned but upon proof rolling are found to be weak and/or fail the test shall be ripped, scarified, wetted if necessary, and compacted to requirements for density and moisture. After density and moisture requirements have been met, failed areas will require a subsequent proof roll. All reconditioning will be at the contractor's expense.

All proof rolls will be voided after twenty four (24) hours or a weather event.

SECTION 400 – *Concrete Work*

- **No Changes**

SECTION 500 – *Town Street Construction*

- **538.00 – Subgrade**
  2017 Edition:
  Soft and yielding material and portions of the subgrade which show deflection will be scarified and re-rolled or will be removed and replaced with subgrade course material, then placed and compacted as specified herein. Subgrade will not be approved for base course construction until it is uniformly stable and unyielding.

  Proposed for 2018 Edition:
  Soft and yielding material and portions of the subgrade which show deflection will be scarified and re-rolled or will be removed and replaced with subgrade course material, then placed and compacted as specified herein. Subgrade will not be approved for base course construction until it is uniformly stable.

SECTION 600 – *Water Supply Facilities*

- **632.10 –** Add to the Table of Contents

- **632.18 – Tracer Wire and Warning Tape**
  2017 Edition:
  A No. 14 AWG insulated; multi-strand copper wire shall be attached to all pipes, for the purpose of future location, as detailed in the Standard Drawings. A three (3) inch wide, detachable warning tape shall be installed above all pipe, for the purpose of warning of location of buried pipeline as detailed in the Standard Drawings. Certification of continuity testing required at time of Substantial Completion/Construction Acceptance.

Proposed for 2018 Edition:

A No. 12 AWG insulated, single strand copper wire shall be attached to all pipes, for the purpose of future locating, as detailed in the Standard Drawings. A three (3) inch wide, detachable warning tape shall be installed above all pipe, for the purpose of warning of location of buried pipeline as detailed in the Standard Drawings. Certification of continuity testing required at time of Substantial Completion/Construction Acceptance.

- **633.13 – Disinfection and Flushing of Mains**

2017 Edition:

633.13 Disinfection and Flushing of Mains (original)

Disinfection and flushing shall be done in accordance with the requirements of the Colorado Department of Health and the procedure set forth in AWWA C651, "Standard for Disinfecting Water Mains".

The chlorine solution shall be retained in the line for at least twenty-four (24) hours. The chlorine residual at the pipe extremities and other representative points shall be at least fifty (50) parts per million at the end of the twenty-four (24) hour period. If the test is unsatisfactory, the disinfection shall be repeated until a fifty (50) parts per million chlorine residual is obtained.

Following chlorination, the main shall be thoroughly flushed through all extremities until the water runs clear with no chlorine residual in excess of that carried in the existing system. As a minimum, the total capacity of that portion of the line(s) being tested must be flushed.

The line shall be tested for turbidity . If the test is unsatisfactory, the line shall be flushed again. If the turbidity test fails a second time the line shall be re-chlorinated as noted above and then re-flushed.

Two twenty-four (24) hour Bacteriological tests for total coli-form bacteria shall be performed a minimum of 24 hours apart. If this test fails, the line shall be re-chlorinated, re-flushed and then retested.

The Contractor shall take all necessary precautions to prevent the flow of strong chlorine solution into existing water facilities and shall assume all responsibility for damages done by heavily chlorinated water. No water mains shall be placed in service or tapped until a written release is obtained from the public health authority having jurisdiction and a copy of that release furnished to the Public Works Director.

Proposed for 2018 Edition:

633.13 Disinfection and Flushing of Mains and Fire Lines (proposed change)

All mains and fire lines shall be disinfected in accordance with the requirements of the Colorado Department of Health and the procedure set forth in AWWA C651, "Standard for Disinfecting Water Mains".

The chlorine solution shall be retained in the line for at least twenty-four (24) hours. The chlorine residual at the pipe extremities and other representative points shall be at least twenty five (25) parts per million at the end of the twenty-four (24) hour period. If the test is

unsatisfactory, the disinfection shall be repeated until a twenty five (25) parts per million chlorine residual is obtained.

Following chlorination, the main shall be thoroughly flushed through all extremities until the water runs clear with no chlorine residual in excess of that carried in the existing system. As a minimum, the total capacity of that portion of the line(s) being tested must be flushed.

The line shall be tested for turbidity at the discretion of the Town Engineer. If the test is above one (1) NTU, the line shall be flushed again. If the turbidity test fails a second time the line shall be re-chlorinated as noted above and then re-flushed.

Two twenty-four (24) hour Bacteriological tests, from multiple points to be determined by the Town Engineer, for total coli-form bacteria shall be performed a minimum of 24 hours apart. If either of these tests fail, the line shall be re-chlorinated, re-flushed and then retested.

The Contractor shall take all necessary precautions to prevent the flow of strong chlorine solution into existing water facilities and shall assume all responsibility for damages done by heavily chlorinated water. No water mains shall be placed in service or tapped until a written release is obtained from the public health authority having jurisdiction and a copy of that release furnished to the Town Engineer.

- **633.14 – Leakage**

2017 Edition:

Pressure and leakage tests shall not be conducted until the line has passed all required disinfection tests.

Proposed for 2018 Edition:

Pressure and leakage tests shall be conducted before the line has passed all required disinfection tests. All bacteriological testing will follow pressure testing and leak repairs.

- **642.02 A. – Service Lines**

2017 Edition:

A. Seamless copper tube of the type designated as "Type K" (soft) in the industry shall be used for service lines three (3/4) fourths inch through three (3) inches.

Proposed for 2018 Edition:

A. Seamless copper tube of the type designated as "Type K" (soft) in the industry shall be used for service lines three fourths inch (3/4") through two inches (2").

- **642.14 – Residential Meter Pits and Covers**

2017 Edition:

Meter pits shall be PVC or HDPE, four (4) foot PVC twenty (20) inches diameter pit in accordance with ASTM/D1505 and ASTM/D746.

Proposed for 2018 Edition:

Meter pits shall be PVC or HDPE, four (4) foot tall, 24 inch diameter body, twenty (20) inch diameter top opening in accordance with ASTM/D1505 and ASTM/D746.

SECTION 700 – *Sanitary Sewer Facilities*

- **732.05 – Manhole Base Slabs and Base Beams**

  2017 Edition:

  Manhole base slabs may be poured in place or precast. Where possible, inverts will be the PVC pipe with the top half cut out. The slab shall be designed to uniformly support the earth load and any other reasonable loads that may occur. The minimum slab thickness shall be six (6) inches. The minimum reinforcement shall be welded wire fabric, 4x4/W4xW4. Splicing of the welded wire fabric shall be by lapping one space and securing the wire mesh together. All wire fabric shall conform to the requirements of the "Wire Reinforcement Institute, Inc."

  Proposed for 2018 Edition:

  Manhole base slabs may be poured in place or precast. Where possible, inverts will be the PVC pipe with the top half cut out. The slab shall be designed to uniformly support the earth load and any other reasonable loads that may occur. The minimum slab thickness shall be six (6) inches. The minimum reinforcement will be #4 Rebar grid on one (1) foot centers.

- **732.10 – Steel Casings and Spacers for Bores**

  2017 Edition:

  The four (4) runners shall be eleven (11) inches long as a minimum and manufactured of high abrasion resistant. Low coefficient of friction, Utra High Molecular Wight Polymer (UHMW) or Glass Filled Polymer. Runner heights shall be set to center the carrier pipe in the casing.

  Proposed for 2018 Edition:

  The four (4) runners shall be eleven (11) inches long as a minimum and manufactured of high abrasion resistant, low coefficient of friction, Ultra High Molecular Weight Polymer (UHMW) or Glass Filled Polymer. Runner heights shall be set to center the carrier pipe in the casing.

SECTION 800 – *Storm Drainage Facilities*

- **No Changes**

SECTION 900 – *Traffic Control Devices*

- **925.00**

  Reference to Director of Community Development is changed to Director of Planning and Development

SECTION 1000 – *Parks*

- All references to “Parks & Recreation Director” or “Director of Parks & Recreation” has been updated to “Assistant to the Town Administrator – Community Services” to reflect changes in the Town organizational structure.

- **1042.02 – Booster Fertilizer**

  2017 Edition:

  > All fertilizer will meet the requirements of Section 1020.00, Topsoil Preparation, of these STANDARDS AND SPECIFICATIONS. A booster fertilizer with a ratio of 4-2-1 NPK, with a sample chemical analysis of Nitrogen 20, Phosphorous 10, Potash 5 with three percent (3%) iron will be applied at a rate of five (5) pounds per one thousand (1,000) square feet immediately prior to sodding. For Buffalograss sod, the rate of fertilization shall be two (2) pounds per one thousand (1,000) square feet.

Proposed for 2018 Edition:

All fertilizer will meet the requirements of Section 1020.00, Topsoil Preparation, of these STANDARDS AND SPECIFICATIONS. Apply, an 18-46-0 starter fertilizer at a rate of 1 (one) pound per 1,000 (one thousand) square feet having the following composition by weight: Nitrogen, eighteen percent (18%), and phosphoric acid (P205), forty-six percent (46%). These elements may be organic, inorganic, or a combination of the two, and shall be measured according to the methods of the Association of Official Analytical Chemists. Or, follow the site specific fertilization requirements outlined in the approved construction drawings or landscape plans.

- **1051.02 – General**

2017 Edition:

Proposed for 2018 Edition:

Irrigation systems shall be designed to deliver at least 1½ inches of weekly precipitation with each individual control zone operating only between the hours of 10 p.m. and 5 a.m. unless specifically approved otherwise, planting beds shall be zoned and controlled separately from turf areas.

Locate irrigation point of connection and electrical components together in mulched beds, including the controller, master valve, flow sensor and backflow preventer.

The following irrigation design information shall be provided prior to design approval:

1. Location, sizing, and materials descriptions of all system components, including service lines, water meters, delivery lines, RPZ backflow prevention devices, automatic controller(s) and wires, mainline and lateral piping, control valves, isolation valves, quick coupling valves, and sprinkler heads.
2. Location of plant material on the irrigation plan relative to the irrigation system.
3. Each control valve shall be labeled displaying valve size, total zone flow in GPM and an identification number and/or letter.
4. Friction Loss Worksheet proving that ample pressure is delivered to the last head of the worst case or most critical zone.
5. Seasonal Operating Schedule that proves that the system is capable of watering the landscape with 1.5” of water per week within the 49-hour watering window.
6. If requested, a water budget shall be provided showing total estimated gallons used per month.

- **1051.02 – Coverage**

2017 Edition:

For permanent irrigation systems, system must be designed to provide 100% head to head coverage with matched precipitation rates. For temporary irrigation systems, irrigation heads must reach at least 80% of the distance to the next head. Shrub and perennial beds are to be zoned separately. Heads shall not overspray walkways, pavements or other hard surfaces. Spray radius of heads will be limited to water only areas intended to be watered.

Proposed for 2018 Edition:

For permanent irrigation systems, system must be designed to provide 100% head to head coverage with matched precipitation rates. For temporary irrigation systems, shrub and perennial beds are to

be zoned separately. Heads shall not overspray walkways, pavements or other hard surfaces. Spray radius of heads will be limited to water only areas intended to be watered.

- **1052.08 – Booster Pump**

2017 Edition:

The requirement for a booster pump will be determined by the Town water main static pressure and the design requirements of the irrigation system. When a booster pump is needed, it will be a Peerless-type P.E. or approved equal, with magnetic starter and heater and a time delay circuit. The heater, starter, and time delay will be approved by the Town prior to installation.

Proposed for 2018 Edition:

The requirement for a booster pump will be determined by the Town water main static pressure and the design requirements of the irrigation system. When hydraulic analysis indicates that a booster pump is required, it shall be a Rain Bird CRE Series pump or approved equivalent, with magnetic starter, heater, and pump bypass piping and approved by the Development Engineering Manager prior to installation.

- **1052.10 – Controllers**

2017 Edition:

The controller will be Hunter ACC or approved equal electrical type, compatible with operating 24- volt electric solenoid zone valves. It will feature a pump start, manual advance switch, lightning protection, manual operating mode and weatherproof turf cabinet. The included Hunter Smart Port (ROAM-WH) shall be installed on the exterior of pedestal/cabinet. Hunter ACC-COM-GPRS communication module shall be installed at all properties that are specified as Town maintained. Each controller shall have a Rain Bird WR2-RFC wireless rain/freeze click. Each controller will have a minimum of four (4) extra stations, and will not exceed forty-eight (48) stations. Controllers will be properly grounded with an eight (8) foot ground rod. When the controller is not installed in a pump house, it will be mounted on a turf pedestal and enclosed in a strong box or similar type enclosure if needed. All installation shall be in accordance with the Standard Drawings.

Proposed for 2018 Edition:

The controller will be Rain Bird ESP-LXD with communication components for decoder system or Rain Bird ESP-LXM and communication components for conventional wire. Unless otherwise noted on the plans, the 120 volt electrical power to the automatic controller location to be furnished by others. The final electric hook-up shall be the responsibility of the Irrigation Contractor. If two wire systems are not fitting to the system needed, another the Rain Bird Controller ESP-LXM with conventional wiring will be used. Controllers will be capable of communicating with offsite central control system. Each controller shall have a Rain Bird WR2-RFC wireless rain/freeze click. Each controller will have a minimum of four (4) extra stations, and will not exceed forty-eight (48) stations. Controllers will be properly grounded with an eight (8) foot ground rod. When the controller is not installed in a pump house, it will be mounted on a turf pedestal and enclosed in a strong box or similar type enclosure if needed. All installation shall be in accordance with the Standard Drawings

- **1052.12 – Heads**

2017 Edition:

In turf areas, Rain Bird Falcon6504-NP(NP if used with non-potable water), 8005-NP, 5004-PLPC(FC)-SAM-R-NP-, and 5500-NP or approved equal gear driven rotary heads will be used.

Each head will be installed on a swing joint consisting of schedule forty (40) PVC fittings and schedule eighty (80) PVC nipples. Swing pipe is not permitted on any gear driven rotors Heads installed in Town-maintained and Town-owned, HOA-maintained sites must be stainless steel (designated with SS). For all other applications, plastic heads are acceptable. Heads must be installed plumb and level with finish grade and in accordance with the Standard Drawings.

In small turf areas where pop-up spray heads are needed, Rain Bird 1806 SAM-PRS series or approved equal will be used. In turf areas with head spacing between fifteen (15) and Thirty (30) feet, Hunter's MP Rotator nozzle paired with PROS-06-PRS40-CV body will be used. No VAN adjustable nozzles unless in approved locations. Heads must be installed plumb and level with finish grade.

Proposed for 2018 Edition:

In turf areas, Rain Bird Falcon 6504-NP (NP if used with non-potable water), 8005-NP, 5000 -PL-PC (FC)-SAM-R-NP-, and, 5000 -NP or approved equal gear driven rotary heads will be used. Each head will be installed on a swing joint consisting of schedule forty (40) PVC fittings and schedule eighty (80) PVC nipples. Swing pipe is not permitted on any gear driven rotors Heads installed in Town-maintained and Town-owned, HOA-maintained sites must be stainless steel (designated with SS). For all other applications, plastic heads are acceptable. Heads must be installed plumb and level with finish grade and in accordance with the Standard Drawings.

1. Irrigation heads shall be spaced such that they provide a minimum of head-to-head coverage for the nozzle selected at the pressure required. Kicker heads shall not be used; head spacing shall be adjusted to eliminate the need for kickers.
2. In turf areas 30 feet or wider use Rain Bird 5505 and 8005 series rotor heads. In turf areas smaller than 30 feet use Rain Bird RD 1806 heads (RD-06-S-P30-F) with Rain Bird U-Series nozzles. Irrigation heads shall be installed for head-to-head coverage and matched precipitation nozzling.
    a. Always use the head's bottom inlet; never use automatic drains.
    b. Use Rain Bird RD 1812 heads (RD-12-S-P45-F) for the irrigation of all medians with a planted area of 15' or less, or approved equal. Check with the Senior Landscape Architect for the best nozzle to use on a case by case basis.
3. Design Sports Fields with the Rain Bird 8005 head at a minimum of 60 psi operating pressure. Use the #12 nozzle and a head spacing of 55 feet.
4. All irrigation heads shall have check valves to avoid low head drainage. If necessary on steep slopes, stronger check valves shall be installed in the lateral line to prevent low head drainage
5. Pressure at the base of all heads within a single zone shall not vary more than 10%. The system shall be designed in such a manner that the following minimum pressures are delivered to each head, including the most critical, worst case zone: 60 psi for Rain Bird 8005's, 50 psi for Rain Bird 5000's and 30 psi for Rain Bird RD 1806's with U-Series nozzles.

In small turf areas where pop-up spray heads are needed, Rain Bird 1806 SAM-PRS series or approved equal will be used. Heads must be installed plumb and level with finish grade.

- **1052.13 – Field Wiring**

Proposed for 2018 Edition:

Two-Wire: The Rain Bird controller shall be capable of two-wire decoder control of up to 99 stations via a plug-in decoder output module. Each path may extend up to 10,000 ft. to the end of the wire run over 12 AWG (l.5mm dia.) wire, or 15,000 ft. over 10 AWG (2mm dia.)

1. The wire paths shall be twisted pair; solid-core, color-coded red/blue pairs with each conductor in a polyethylene jacket suitable for direct burial.
2. All connections in the two-wire paths (outside the controller enclosure) shall be made with 3M DBR-6 waterproof, strain relieving direct burial connectors, or exact equals. Decoder output to solenoid connections shall be made with 3M DBY waterproof, strain-relieving connectors or exact equals. No substitution of wire or wire connection specifications is permissible. All connections, tees, and splices shall be positioned in valve boxes in valve boxes for future location and service.
3. One Decoder per valve, installed in the valve box is required unless otherwise approved.
4. The installer shall provide adequate earth ground (not to exceed I 0 Ohms) and connect it to one of the decoder ground leads every 750 ft., or every 10th decoder module, whichever is shorter. Also install on each dead end of the wire path.
5. The decoders and Sensor Decoders shall be UL and c-UL listed, and shall be CE and C approved.
6. Unless otherwise noted on the plans, the 120 volt electrical power to the automatic controller location to be furnished by others. The final electric hook-up shall be the responsibility of the Irrigation Contractor.
7. If two wire systems are not fitting to the system needed, another the Rain Bird Controller ESP-LXM with conventional wiring will be used.
8. Controllers will be capable of communicating with offsite Rain Bird communication components.

- **1052.15 – Quick Coupler Valves**

2017 Edition:

Each system will have a minimum of one quick coupler valve located adjacent to the downstream side of the backflow preventer. This valve will be a Rain Bird No.44QC (or approved equivalent). It will be installed in a ten (10) inch diameter round locking valve box as manufactured by Rain Bird over 3" of ¾" gravel. All quick couplers will be installed with a swing joint. All quick couplers will be staked with re-bar secured to the quick coupler with two (2) stainless steel screw clamps to prevent turning or twisting during use. Installation shall be in accordance with the Standard Drawings.

Proposed for 2018 Edition:

Each system will have a minimum of one quick coupler valve located adjacent to the downstream side of the backflow preventer. This valve will be a Rain Bird No.44QC (or approved equivalent). It will be installed in a ten (10) inch diameter round locking valve box as manufactured by Rain Bird over 3" of ¾" gravel. All quick couplers will be installed with a swing joint. The quick coupler valve shall be connected to the mainline using a pre-manufactured PVC swing joint and shall be equipped with a rubber cover and solid brass body with anti-rotation stabilizing wings.

- **1084.01 Spine Trail**

2017 Edition:

Spine Trails consist of a wide concrete trail (8'-10') with an attached crusher fines trail (4'). In areas with low water conditions that may experience regular flooding, a ten foot (10') concrete trail may substitute for the standard spine trail configuration of a concrete trail with an attached crusher fines trail.

Proposed for 2018 Edition:

Spine Trails consist of a wide concrete trail (8'-10') with an attached crusher fines trail (4'). In areas with low water conditions that may experience regular flooding, or turf areas that are permanently irrigated, a ten foot (10') or wider concrete trail may be substituted for the standard spine trail configuration of a concrete trail with an attached crusher fines trail.

SECTION 1100 – *Traffic Signals*

- **1119.00 – Controller and Cabinet**

2017 Edition:

Controller cabinets shall have a powder coated finish, "silver wheel" in color, with anti-graffiti coating.

Proposed for 2018 Edition:

Controller cabinets shall have a powder coated finish, "silver wheel" in color, with anti-graffiti coating. All cabinets and conduits into the cabinet shall be made to be rodent resistant.

2017 Edition:

A controller shall consist of a complete electrical mechanism to control the operation of traffic control signals, including the timing mechanism and all necessary auxiliary equipment. Controllers shall be 170EHC11. All equipment furnished shall be the manufacturers' latest, current production model, complete with all standard accessories, tested and delivered by domestic manufacture who is regularly engaged in the construction of such equipment. Each cabinet shall be furnished with a full complement of auxiliary equipment (loop amps, load switch, etc.) regardless of specific intersection design.

Proposed for 2018 Edition:

A controller shall consist of a complete electrical mechanism to control the operation of traffic control signals, including the timing mechanism and all necessary auxiliary equipment. Controllers shall be Econolite Cobalt-C. All equipment furnished shall be the manufacturers' latest, current production model, complete with all standard accessories, tested and delivered by domestic manufacture who is regularly engaged in the construction of such equipment. Each cabinet shall be furnished with a full complement of auxiliary equipment (loop amps, load switch, etc.) regardless of specific intersection design.

STANDARD DETAILS:

- All Changes/Updates to Details in 2018 Edition will have the Approval of the Town Engineer.

Curb/Gutter and Sidewalk Details

- **SW13 –** Changed to SW13A
- **SW13A** – Changed from a 5'-0" minimum to 7'-0" minimum
- **SW13B** – Added New Detail - **Mountable Curb**

Streets Details

- **ST15A –** Remove "Rivets" /Sign Installations

Sanitary Sewer Details

- **SS10 –** Changed Schedule 40 PVC to SDR 35 PVC

Storm Sewer Details

- **STM14** – Flared End Section Riprap

Water Details

- **W5 –** Changed "Restraing" to "Restrain"
- **W30 –**Replaced Denver Water Inspector with Design Engineer
- **W32A –**Updated Thermoweld to Wire nut & gelpack
- **W35 –** Updated #2 – 14 AWG wire to 12 AWG wire

Parks Details

- **P07 –** Quick coupling Valve Assembly. Previous version of P07 has been deleted and replaced.
- **Standard Landscape Detail Sheet –**
  Change: SOD SHALL CONSIST OF A BLEND OF AT LEAST THREE (3) VARIETIES OF BLUEGRASS.
  To: SOD SHALL CONSIST OF A BLEND OF AT LEAST FOUR (4) VARIETIES OF BLUEGRASS

Traffic Signal Details

- No Changes

GENERAL NOTES:

Construction

- No Changes

Grading

- No Changes

Parks

- Landscape Material Specifications – SOD
  2017 Edition:
  SOD SHALL CONSIST OF A BLEND OF AT LEAST THREE (3) VARIETIES OF BLUEGRASS.
  Proposed for 2018 Edition:
  SOD SHALL CONSIST OF A BLEND OF AT LEAST FOUR (4) VARIETIES OF BLUEGRASS.

Roadway

- No Changes

Sewer

- No Changes

Storm Drain

- No Changes

Water

- No Changes