PART LOT 27148

FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO

CITY OF HAMILTON UNDERGROUND ELECTRIC REQUIREMENTS

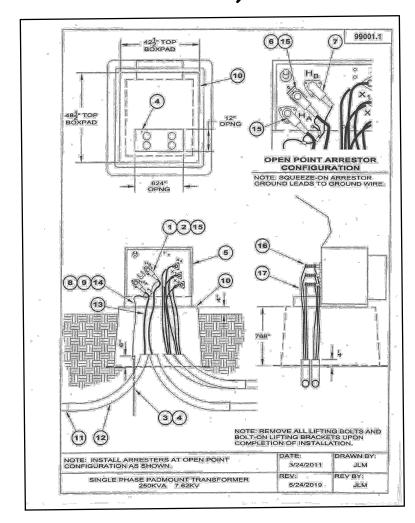
Developer/Contractor Responsibilities

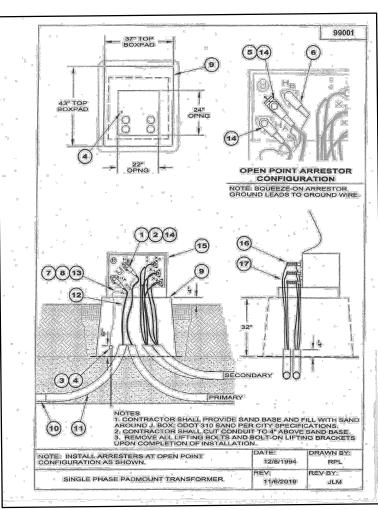
- Provide utility easements along the perimeter of the development (10' wide) and along all street frontage (8' wide) adjacent to the right of way line. All conduit, junction boxes, and transformer pads shall be installed at the center of the utility easement.
- Provide trenching, backfilling, and boring.
 - Conduit installed by boring shall be Dura-line Smoothwall HDPE or Blue Diamond HDPE, or approved equal; SDR-13.5, color shall be red.
 - o Conduits (2 or more) installed in a single bore under areas subject to vehicular traffic shall have voids pumped with controlled density fill (CDF), or shall be installed in a casing pipe (HDPE).
- Provide and install schedule 40 PVC conduits, size as specified, for all primary and secondary conductors installed by trenching.
 - Conduits shall be separated by 2" minimum.
 - At intersections with other utilities and secondary electric, primary conduit shall maintain a 12" clearance and shall pass under other utilities where needed to maintain clearances.
 - o Concrete encased conduit shall maintain a 3" clearance.
 - o Conduit shall maintain a 36" clearance from water mains and gas lines on parallel runs.
- Provide and install schedule 40 PVC or galvanized steel elbows as specified. Verify required locations for galvanized steel elbows. All elbows shall be 90°, 36" bend radius, and shall be installed
- All PVC conduit joints shall be cleaned, primed, and glued.
- Primary electric conduit trench shall have a minimum depth of 48" below finished grade.
 - o At open trench construction, conduit under areas subject to vehicular traffic shall be encased in concrete at least four-inch thickness above, and two-inch thickness on sides, between and below conduits. Concrete shall be Class 'C' specification.
 - o Conduit not under areas subject to vehicular traffic shall be covered with 12" minimum of ODOT 310 sand before backfilling with clean, native excavated material. Optional - CLSM Class 50.
- Secondary electric conduit trench shall have a minimum depth of 36" below finished grade.
 - o Secondary conduits under areas subject to vehicular traffic shall be encased in concrete of the same thickness, strength and specification as used for primary conduits.
 - Secondary conduits not under areas subject to vehicular traffic shall be covered with 12"
- minimum of ODOT 310 sand before backfilling. Optional CLSM Class 50. • Each conduit shall be swabbed and have a minimum 200-lb test pull string installed
- Provide and install a plug at each end of conduit and maintain the accessibility of the pull string. Plugs shall be IPEX Scepter, or approved equivalent
- Construct transformer pad using Class 'C' or 4000 psi concrete, on ODOT 304 compacted gravel base.
- Provide level areas at transformer boxpads and junction boxes with ODOT 310 sand.
- Install all transformer boxpads, junction boxes, and ground rods, as well as standoff brackets, conduit straps, and bolts on riser poles. (These items to be provided by the City.)
- . Spare conduits that are installed for future connections shall be stubbed-up above grade, plugged, and covered with a secondary junction box to be provided by the City.
- Provide and install red underground electric warning tape or foil 12" minimum above conduits. • Contact City Electric Engineering Department for conduit inspection a minimum of 24 hours before
- covering conduit. ALL CONDUIT MUST BE INSPECTED BEFORE COVERING!
- Install conductors for service laterals from transformer or secondary junction box to proposed residence. Contact City of Hamilton, Building Department for inspection of the residential service laterals.

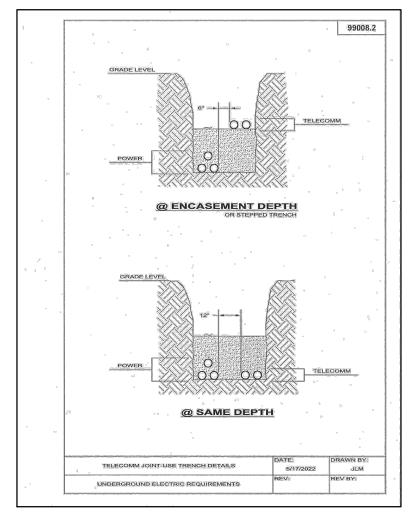
City of Hamilton Responsibilities

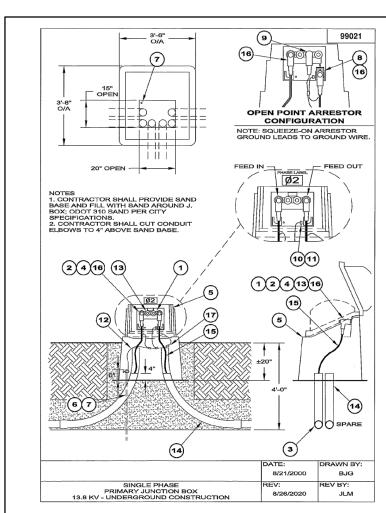
- Provide drawings, specifications, and copies of City of Hamilton Electrical Construction Standards for all
- Provide fiberglass transformer boxpads, junction boxes, ground rods, ground wire loops, ground clamps, as well as standoff brackets, conduit straps, and bolts and deliver to jobsite.
- Inspect all conduit, junction box and transformer boxpad installations before covering and/or backfilling.
- Inspect form and reinforcement placement for concrete transformer pad before concrete pour.
- Install all primary and secondary conductors, except for service laterals. Install and maintain streetlights on dedicated City of Hamilton streets.

M:\util-depts\ENGINEER\Electric Engineering Procedures\Electric Forms\Underground Elect Reg = Residential.doc



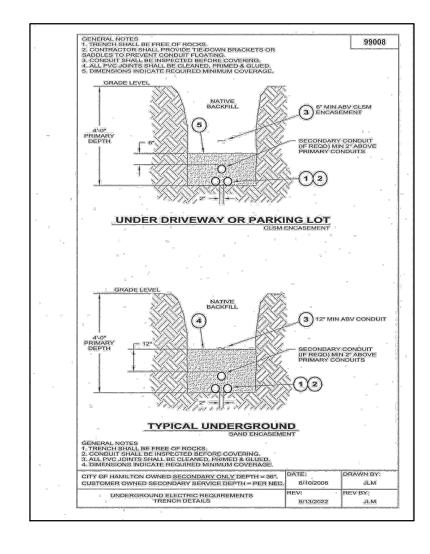






REVISIONS

DWG.: *RB-PLPN*



DETAILS 310 GORHAM DRIVE

PART LOT 27148 FIRST WARD. SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO



Abercrombie & Associates, Inc.

Civil Engineering + Surveying 8111 Cheviot Road, Suite 200 •Cincinnati, Ohio 45247 513-385-5757 • www.abercrombie-associates.co

24-0022-1 4-9-24

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BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON, OHIO 45040

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON, OHIO 45013

PART LOT 27148

FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO

GAS NOTES:

- 1. AN OPERATOR QUALIFIED CONTRACTOR (OQ) MUST INSTALL THE GAS SERVICE FROM THE CURB VALVE TO THE METER.
- 2. THE GAS SERVICE IS TO BE DIRECT BURY.
- 3. THE GAS CURB VALVE CANNOT BE LOCATED IN THE PUBLIC SIDEWALK OR DRIVEWAY.
- 4. THE GAS SERVICE SHOULD NOT RUN THROUGH THE CONCRETE DRIVEWAY.
- 5. THE TYPICAL GAS SERVICE SIZE FOR A SINGLE FAMILY RESIDENCE IS 1 1/8"-INCH.
- 6. THE TYPICAL GAS METER SIZE FOR A SINGLE FAMILY RESIDENCE IS 250 CFH.
- 7. OUR RECORDS INDICATE THERE IS NOT A GAS SERVICE STUB. GAS SERVICE CAN BE CONNECTED TO THE EXISTING MAIN. FIELD VERIFICATION IS NEEDED.
- 8. THE GAS SERVICE TO BE INSTALLED SHALL BE IN DIRECT LINE WITH THE GAS METER. COORDINATION BETWEEN THE OQ CONTACTOR, THE INTERIOR GAS PLUMBING CONTRACTOR AND THE CITY'S GAS DISTRIBUTION DEPARTMENT IS
- 9. CONTACT THE CITY'S GAS DISTRIBUTION DEPARTMENT AT 513-785-7550 IF THE GAS CURB VALVE/BOX CANNOT BE LOCATED.

- 1. THE WATER SERVICE FROM THE WATER MAIN TO THE METER MUST BE TYPE K COPPER OR DUCTILE IRON, CLASS 53. WE DO NOT RECOMMEND THE USE OF POLYETHYLENE PIPE FOR THE WATER SUPPLY DISTRIBUTION SYSTEM ON THIS JOB DUE TO THE CITY'S DISINFECTION PROCESS.
- 2. THE WATER CURB VALVE CANNOT BE LOCATED IN THE PUBLIC SIDEWALK OR DRIVEWAY.
- 3. THE WATER SERVICE SHOULD NOT RUN THROUGH THE CONCRETE DRIVEWAY.
- 4. THE CONTRACTOR MUST FOLLOW THE CITY OF HAMILTON'S WATER MAIN AND WATER SERVICE TESTING PROCEDURES.
- 5. THE TYPICAL WATER SERVICE SIZE FOR A SINGLE FAMILY RESIDENCE IS 3/4-INCH.
- 6. THE TYPICAL WATER METER SIZE FOR A SINGLE FAMILY RESIDENCE IS 3/4-INCH.
- 7. OUR RECORDS INDICATE THERE IS NOT A WATER SERVICE STUB. WATER SERVICE CAN BE CONNECTED TO EXISTING MAIN. FIFLD VERIFICATION IS NEEDED.

SANITARY SEWER NOTES:

- 1. THE SANITARY LATERAL MUST BE AT LEAST 6-INCHES WITH A MINIMUM 2% SLOPE.
- 2. THE SANITARY SEWER LATERAL MATERIAL MUST BE SDR-26.
- 3. THE SANITARY LATERAL SHOULD NOT GO THROUGH THE DRIVEWAY.
- 4. ADD A CLEANOUT AT THE R/W OR EASEMENT AND ANY BENDS IN THE SANITARY LATERAL. USE A COUNTERSUNK HEAD WHEN A RAISED HEAD IS CONSIDERED TO BE A TRIP HAZARD. CLEANOUTS CANNOT BE LOCATED IN THE PUBLIC SIDEWALK OR DRIVEWAY.
- 5. THE MINIMUM VERTICAL DIFFERENCE BETWEEN THE FINISHED FLOOR ELEVATION OF THE LOWEST LEVEL AND THE CROWN OF THE SANITARY SEWER MAIN IS 3-FT.
- 6. IF IT IS NECESSARY TO TAP THE SANITARY SEWER MAIN, A FACTORY WYE MUST BE USED.
- 7. OUR RECORDS INDICATE THERE IS NOT AN EXISTING 6-INCH SANITARY SEWER LATERAL STUB. SANITARY LATERAL CAN BE CONNECTED TO THE MAIN. FIELD VERIFICATION NEEDED.

EROSION NOTES:

BUILDER IS RESPONSIBLE FOR ALL INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL AS LISTED BELOW.

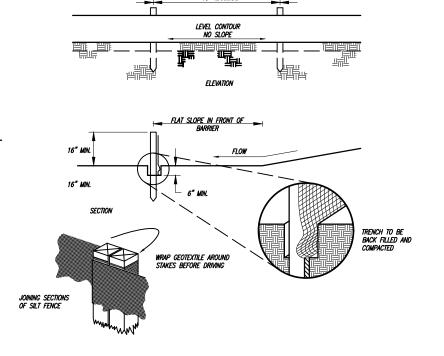
ALL GRADED AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE IN ACCORDANCE WITH STATE HIGHWAY ITEM 659.

EROSION CONTROL WILL BE ACCOMPLISHED BY STRATEGICALLY PLACING STRAW WATTLES OR FIBER ROLLS IN SWALES AND RUNOFF AREAS. STRAW WATTLES OR FIBER ROLLS TO BE REPLACED AND EXPANDED AS NECESSARY TO AFFORD NECESSARY CONTROL.

STRAW WATTLES OR FIBER ROLLS TO BE INSTALLED PER MANUFACTURER **SPECIFICATIONS**

- ALL EROSION CONTROL MEASURES MUST BE IN PLACE PRIOR TO ANY STRIPPING OF VEGETATION OR EXCAVATION. NOTES:
- 1. BUILDER TO VERIFY THE LOCATION AND ELEVATION OF ALL SANITARY AND WATER SERVICE LATERALS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE DIFFERENT FROM PLAN, CONTACT THE ENGINEER/SURVEYOR.
- 2 UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM SUBDIVISION DEVELOPMENT PLANS.
- 3. DOWNSPOUTS TO DISCHARGE ONTO SPLASH BLOCKS UNLESS OTHERWISE NOTED.

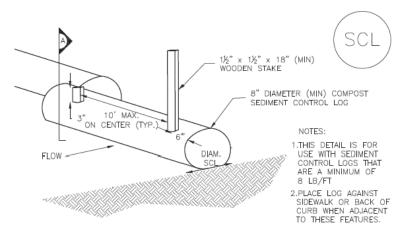
SPECIFICATIONS *FOR* SILT FENCE

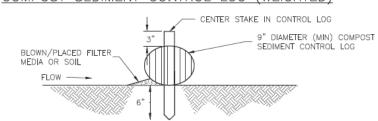


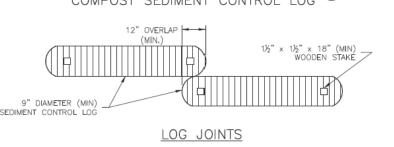
SEE PAGES 117-121 OF THE RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMMATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION, SECOND EDITION 1996, MANUAL FOR SILT FENCE SPECIFICATIONS.

GORHAM DRIVE REMOVE EX. GUARDRAIL 12'0" ⁴ PROPOSED CONC. APRON SHALL MEET CITY OF HAMILTON R.O.W. CONCRETE STANDARDS AND BE INSPECTED BY ENGINEERING DEPT.

APRON DETAIL

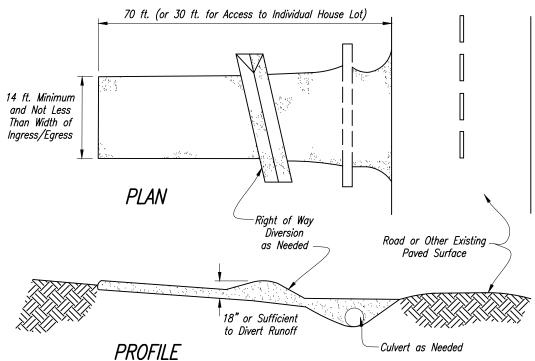






SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

CONSTRUCTION ENTRANCE DETAIL



SEE THE RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION MANUAL, CURRENT EDITION, FOR CONSTRUCTION ENTRANCE SPECIFICATIONS.

NOTES 310 GORHAM DRIVE

REVISIONS PART LOT 27148 FIRST WARD. SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO Abercrombie & Associates, Inc.

Civil Engineering + Surveying 8111 Cheviot Road, Suite 200 •Cincinnati, Ohio 45247

513-385-5757 • www.abercrombie-associates.com JOB.NO.

24-0022-1 4-9-24 DWG.: *RB-PLPN*

BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON, OHIO 45040

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON, OHIO 45013 TITLE SHEET.....PAGE 1 DETAILS SHEET.....PAGE 2-4 PLOT PLAN.....PAGE 5

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Specifications Permanent Seeding

2. Materials

* Straw-If straw is used it shall be

the rate of 2 tons/ac. or 90

unrotted small-grain straw applied at

lb./1,000 sq. ft. (two to three bales).

The mulch shall be spread uniformly

by hand or mechanically so the soil

surface is covered. For uniform

divide area into approximately

distribution of hand-spread mulch,

1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each

* Hydroseeders-If wood cellulose fiber

is used, it shall be used at 2,000 lb./ac/ or 46 lb./1,000 sq. ft.

* Other-Other acceptable mulches

include mulch mattings applied according to manufacturer's

recommendations or wood chips

3. Straw Mulch Anchoring Methods

immediately to minimize loss by wind

similar type tool shall be set straight

mechanically anchored shall not be

* Mulch Nettings—Netting shall be

finely chopped but, generally, be left

used according to the manufacturer's

recommendations. Netting may be

necessary to hold mulch in place in

areas of concentrated runoff and on

* Asphalt Emulsion-Asphalt shall be

manufacturer or at the rate of 160

* Synthetic Binders-Synthetic binders

* Wood Cellulose Fiber-Wood cellulose

fiber binder shall be applied at a net

dry weight of 750 lb./ac. The wood

water and the mixture shall contain a

cellulose fiber shall be mixed with

1. Permanent seeding shall include

adverse site conditions as needed for

2. Excessive irrigation rates shall be

avoided and irrigation monitored to

prevent erosion and damage from

irrigation to establish vegetation

during dry or hot weather or on

adequate moisture for seed

germination and plant growth.

maximum of 50 lbs./100 gal.

applied as recommended by the

such as Acrylic DLR (Agri-Tac),

equivalent may be used at rates

recommended by manufacturer.

Straw mulch shall be anchored

* Mechanical-A disk, crimper, or

to punch or anchor the mulch

material into the soil. Straw

applied at 6 tons/ac.

SITE PREPARATION

- 1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing
- 2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation
- 3. Resoil shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

- 1. Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lbs./1,000 sq. ft. or 2 tons/ac.
- 2. Fertilizer-Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac/ of 10-10-10 or 12-12-12 analysis.
- 3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or Aug. 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillage/ seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

DORMANT SEEDINGS

- 1. Seedings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate, but probably will not be
- 2. The following methods may be
- * From October 1 through November 20, prepare the seedbed, and the required amounts of lime and fertilizer, then mulch and anchor After November 20, and before March 15, broadcast the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this
- * From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase
- * Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed
- * Where feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller or light drag. On sloping land, seeding operations should be on the contour where feasible.
- 1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall

Specifications Permanent Seeding

- 1. Permanent seeding shall not be considered established for at least 1 full year from the time of planting. Seeded areas shall be inspected for failure and reestablished as needed. Depending on site conditions, it may be necessary to irrigate, fertilize. overseed, or reestablish plantings in order to provide permanent vegetation for adequate erosion control.
- 2. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

| Mixture | Formula | lb./ac. | lb./1.000 ft. ² | Time | Mowing |
|---|----------|---------|----------------------------|--|--------------------------|
| Creeping Red Fescue Ryegrass Kentucky Bluegrass | 10-10-10 | 500 | 12 | | Not closer than 3" |
| Tall Fescue | 10-10-10 | 500 | 12 | Fall, yearly or as needed. | Not closer than 4" |
| Dwarf Fescue | 10-10-10 | 500 | 12 | | Not closer than 2" |
| Crown Verch Fescue | 0-20-20 | 400 | 10 | Spring, yearly following establish— | Do not mow |
| Flat Pea Fescue | 0-20-20 | 400 | 10 | ment and every 4-7 yr. thereafter. | Do not mow |

Specifications Temporary Seeding

| Temporary Seeding Species Selection | | | | | |
|---|---------------------|----------------------------|--------------|--|--|
| Seeding Dates | Species | lb./1.000 ft. ² | Per Ac. | | |
| March 1 to August 15 | Oats | 3 | 4 bushel | | |
| | Tall Fescus | 1 | 40 lb. | | |
| | Annual Ryegrass | 1 | 40 lb. | | |
| | Perennial Ryegrass | 1 | 40 lb. | | |
| | Tall Fescus | 1 | 40 lb. | | |
| | Annual Ryegrass | 1 | 40 lb. | | |
| August 16 to November 1 | Rye | 3 | 2 bushel | | |
| | Tall Fescus | 1 | 40 lb. | | |
| | Annual Ryegrass | 1 | 40 lb. | | |
| | Wheat | 3 | 2 bushel | | |
| | Tall Fescus | 1 | 40 lb. | | |
| | Annual Ryegrass | 1 | 40 lb. | | |
| | Perennial Ryegrass | 1 | 40 lb. | | |
| | Tall Fescus | 1 | 40 lb. | | |
| | Annual Ryegrass | 1 | 40 lb. | | |
| November 1 to Spring Seeding | Use mulch only, sod | ding practices or dom | nant seeding | | |
| Note: Other approved seed species may be substituted. | | | | | |

| | Pern | nanent Seeding | | | |
|--|------------------------------------|-----------------------------|------------------------------|--|--|
| 0 1 1 1 | See | eding Rate | | | |
| Seed Mix | lb./ac. lb./1.000 ft. ² | | Notes: | | |
| | (| General Use | | | |
| Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass | 20-40 10-20 10-20 | 1/2-1 1/4-1/2 1/4-1/2 | | | |
| Tall Fescue | 40 | 1 | | | |
| Dwarf Fescue | 40 | 1 | | | |
| | Steep Bo | anks or Cut SI | opes | | |
| Tall Fescue | 40 | 1 | | | |
| Crown Vetch Tall Fescue | 10 20 | 1/4 1/2 | Do not seed later than Augus | | |
| Tall Fescue | 20 20 | 1/2 1/2 | Do not seed later than Augus | | |
| | Road D | itches and Swo | oles | | |
| Tall Fescue | 40 | 1 | | | |
| Dwarf Fescue Kentucky Bluegrass | 90 5 | 2 1/4 | | | |
| | | Lawns | | | |
| Kentucky Bluegrass Perennial Ryegrass | 60 60 | 1 1/2 1 1/2 | | | |
| Kentucky Bluegrass Creeping Red Fescue | 60 60 | 1 1/2 1 1/2 | For shaded areas | | |

- 1. Structural erosion and sediment control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction site.
- 2. Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 45 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days. Several applications of temporary seeding are necessary on typical construction projects.
- 3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.
- 4. Soil Amendments-Applications of temporary vegetation shall establish adequate stands of vegetation that may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.
- 5. Seeding Method-Seed shall be applied uniformly with a cyclone seeder, drill, cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking and dragging and then lightly tamped into place using a roller or cultipacker. If fertilizer will be mixed on site and the seeding shall be done

MULCHING TEMPORARY SEEDING

- hydroseeding is used, the seed and immediately and without interruption.

1. Applications of temporary seeding shall include mulch that shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization.

2. Materials:

- * Straw-If straw is used, it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lbs./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45 lb. bales of straw in each section.
- * Hydroseeders-If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
- * Other-Other acceptable mulches include mulch matting applied ക്ക്ക് to manufacturer's recommendations or wood chips applied at 6 tons/ac.
- 3. Straw mulch shall be anchored immediately to minimize loss by wind

CITY OF HAMILTON, BUTLER COUNTY, OHIO

PART 10T 27148

FIRST WARD, SOUTH SIDE

SECTION-35, TOWN-4, RANGE-5

BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON. OHIO 45040

Specifications

Mulchina

4. Anchoring Methods:

longer than 6 in.

critical slopes.

* Mechanical-A disk, crimper, or

to punch or anchor the mulch

material into the soil. Straw

similar type tool shall be set straight

mechanically anchored shall not be

* Mulch Nettings—Netting shall be

used according to the manufacturer's

recommendations. Netting may be

necessary to hold mulch in place in

areas of concentrated runoff and on

* Asphalt Emulsion—Asphalt shall be

manufacturer or at the rate of 160

* Synthetic Binders—Synthetic binders such as Acrylic DLR (Agri—Tac),

* Wood Cellulose Fiber-Wood cellulose

fiber binder shall be applied at a net

dry weight of 750 lb./ac. The wood

cellulose fiber shall be mixed with

water and the mixture shall

contain a maximum of 50

lbs./100 gal.

DCA-70. Petroset, Terra Tack or

equivalent may be used at rates

recommended by manufacturer.

applied as recommended by the

finely chopped but generally, be left

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON. OHIO 45013

Specifications

- 1. Mulch and/or other appropriate vegetative práctices shall be applied to disturbed areas within 7 days of grading if the area is to remain dormant (undisturbed) for more than 45 days or on areas and portions of the site which can be brought to final grade.
- 2. Mulch shall consist of one of the
- * Straw-Straw shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lbs./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45 b. bales of straw in each section.
- * Hydroseeders-Wood cellulose fiber should be used at 2,000 lb./ac. or 46 lbs./1,000 sq. ft.
- * Other-Other acceptable mulches include mulch matting applied according to manufacturer's recommendations or wood chips applied at 10-20 tons/ac.
- 3. Mulch Anchoring-Mulch shall be anchored immediately to minimize loss by wind or runoff. The following are accepted methods for anchoring mulch:

- * Mechanical-Use a disk, crimper, or similar type tool set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but generally be left longer
- * Mulch Nettings—Use according to the manufacturer's recommendations, following all placement and anchoring suggestions. Use in areas of water concentration and steep slopes to hold mulch in place.
- * Asphalt Emulsion—For straw mulch, apply at the rate of 160 gal. /ac. (0.1 gal. /sy) into the mulch as it is being applied or as recommended by the manufacturer.
- * Synthetic Binders-For straw mulch, synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equivalent may be used at rates recommended by manufacturer.
- * Wood Cellulose Fiber-Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 lb./acre. The wood $\hat{}$ cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs./100 gal.

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Sodding

MATERIALS

- 1. Sod shall be harvested, delivered and installed within a period of 48 hrs. Sod not transplanted within this period shall be inspected and approved prior to installation.
- 2. The sod shall be kept moist and covered during hauling and preparation for placement on the sod bed.
- 3. Sod shall be machine cut at a uniform soil thickness of 0.75 in... plus or minus 0.25 in., at the time of cutting. Measurements for thickness shall exclude top growth and thatch.

SITE PREPARATION

- 1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
- 2. The area shall be graded and resoiling shall be done where

3. Soil Amendments:

- * Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lbs./1,000 sq. ft. or 2 tons/ac.
- * Fertilizer-Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be ft. or 500 lb./ac. of 10-10-10 or
- * The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth
- 4. Before laying sod, the surface shall be uniformly graded and cleared of all debris, stones and clods larger than 3 in. in diameter.

SOD INSTALLATION

- 1. During periods of excessively high temperatures, the soil shall be lightly irrigated immediately prior to laying
- 2. Sod shall not be placed on frozen
- 3. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered in a brick—like pattern. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would dry the roots.
- 4. On sloping areas where erosion may be a problem, sod shall be laid with the long edge parallel to the contour and with staggered joints. The sod shall be secured with pegs
- 5. As sodding is completed in any one section, the entire area shall be rolled or tamped to ensure solid contact of roots with the soil surface. Sod shall be watered immediately after rolling or tamping until the sod and soil surface below the sod is thoroughly wet. The operations of laying, tamping and irrigating for any place of sod shall be completed within 8 hrs.

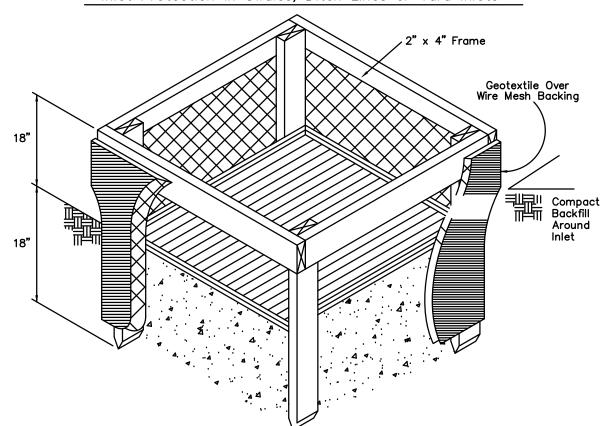
- 1. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a
- 2. After the first week, sod shall be watered as necessary to maintain adequate moisture and to ensure
- 3. The first mowing shall not be attempted until sod is firmly rooted.

710 CODUMA DOME

| | | 310 | GURHAM DE | RIVE | | | |
|---------------|------------------|---|---|----------------------|----|---|--|
| REVISIONS | | PART LOT 27148 FIRST WARD, SOUTH SIDE SECTION—35, TOWN—4, RANGE—5 CITY OF HAMILTON, BUTLER COUNTY, OHIO | | | | | |
| | | 4 | Abercror & Assoc | | C. | | |
| | | | Civil Engineelad, Suite 200 •Cind • www.abercrombie | cinnati, Ohio 452 | Ü | | |
| DWG.: RB-PLPN | SCALE N/A | DATE 4-9-24 | JOB.NO. 24-0022-1 | drawn <i>G.R.</i> | 3 | 5 | |

Specifications

Inlet Protection in Swales, Ditch Lines or Yard Inlets



- 1. Inlet protection shall be constructed either before upslope land disturbance begins or before the storm drain becomes
- 2. The earth around the inlet shall be excavated completely to a depth
- 3. The wooden frame shall be constructed of 2-by-4 in. construction grade lumber. The 2-by-4 in. posts shall be driven 1 ft. into the ground at four corners of the inlet and the top portion of 2-by-4 in. frame assembled using the overlap joint shown. The top of the frame shall be at least 6 in. below adjacent roads if ponded water would pose a safety hazard to
- 4. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the
- 5. Geotextile shall have an equivalent opening size of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. shall extend from the top of the notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
- 6. Backfill shall be placed around the inlet in compacted 6-in. layers until the earth is even with notch elevation on ends and top elevation
- 7. A compacted earth dike or a check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression and if runoff bypassing the inlet will not flow to a settling pond. The top of the earth dikes shall be at least 6 in. higher than the top of the

Specifications

Curb Inlet Protection PLAN VIEW

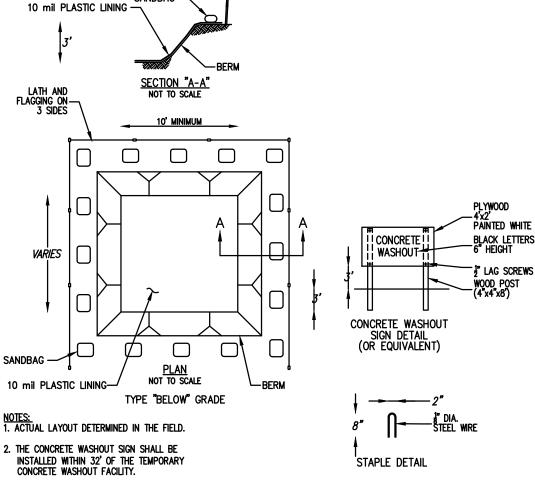
1. Inlet protection shall be constructed either before upslope land disturbance begins or before the storm drain becomes operational.

ELEVATION

- 2. The wooden frame is to be constructed of 2-by-4 in. construction grade lumber. The end spacers shall be a minimum of 1 ft. beyond both ends of the throat opening. The anchors shall be nailed to 2-by-4 in. stakes driven on the opposite side of the curb.
- 3. The wire mesh shall be of sufficient strength to support fabric and stone. It shall be a continuous piece with a minimum width of 30 in. and 4 ft. longer than the throat length of the inlet, 2 ft. on each
- 4. Geotextile cloth shall have an equivalent opening size (EOS) of 20-40 sieve and be resistant to sunlight. It shall be at least the same size as the wire mesh.
- 5. The wire mesh and geotextile cloth shall be formed to the concrete gutter and against the face of the curb on both sides of the inlet and securely fastened to the 2-by-4 in.

SECTION

6. Two-inch stone shall be placed over the wire mesh and geotextile in such a manner as to prevent water from entering the inlet under or around the geotextile cloth.



CONCRETE WASHOUT DETAIL N.T.S.

BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON. OHIO 45040

PART LOT 27148

FIRST WARD, SOUTH SIDE

SECTION-35, TOWN-4, RANGE-5

CITY OF HAMILTON, BUTLER COUNTY, OHIO

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON, OHIO 45013

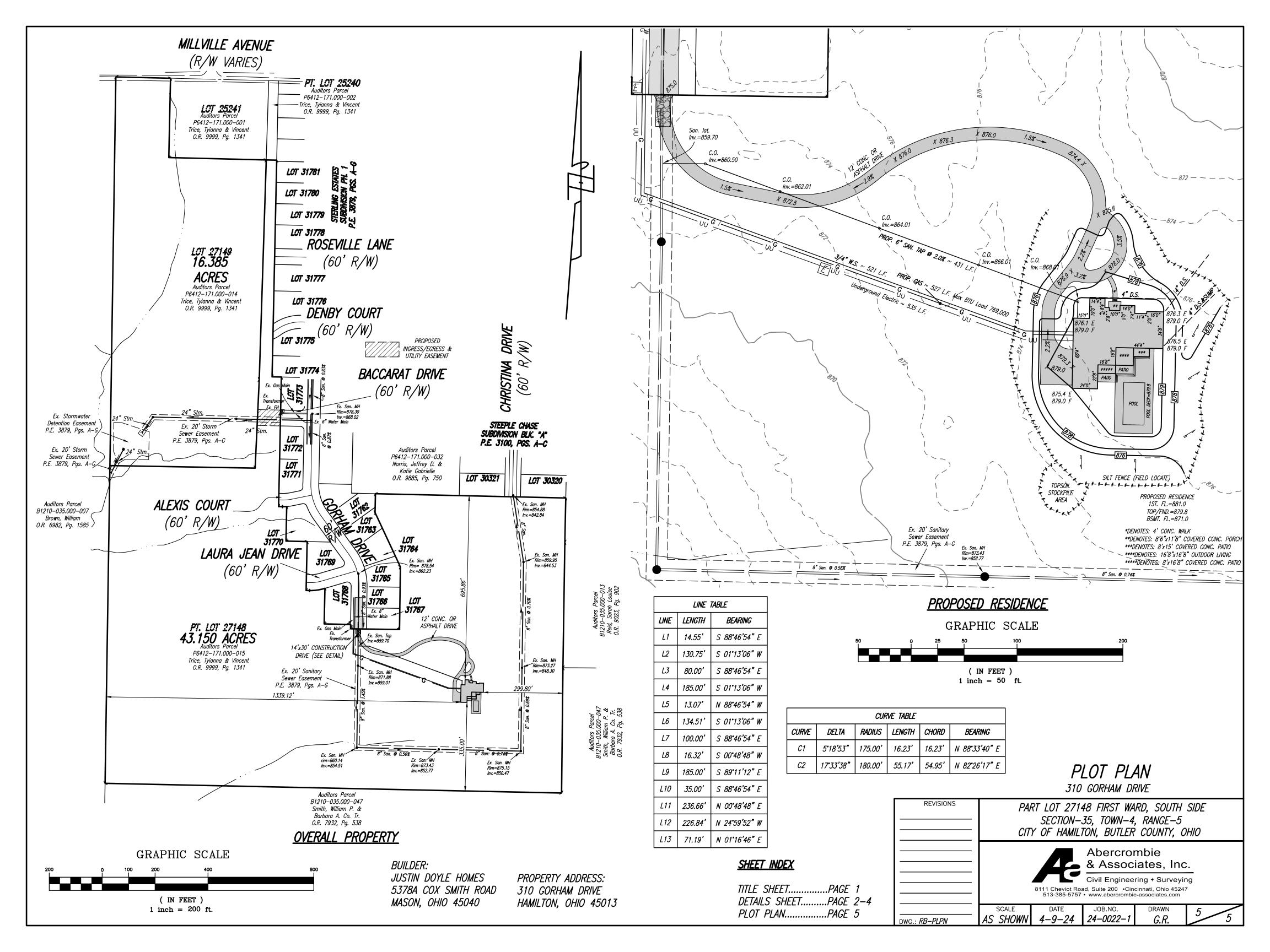
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DWG.: *RB-PLPN*

DETAILS

310 GORHAM DRIVE **REVISIONS** PART LOT 27148 FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO Abercrombie & Associates, Inc. Civil Engineering + Surveying 8111 Cheviot Road, Suite 200 •Cincinnati, Ohio 45247 513-385-5757 • www.abercrombie-associates.com JOB.NO. 24-0022-1 4-9-24



LOT 27149

FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO

GAS NOTES:

- 1. AN OPERATOR QUALIFIED CONTRACTOR (OQ) MUST INSTALL THE GAS SERVICE FROM THE CURB VALVE TO THE METER.
- 2. THE GAS SERVICE IS TO BE DIRECT BURY.
- 3. THE GAS CURB VALVE CANNOT BE LOCATED IN THE PUBLIC SIDEWALK OR DRIVEWAY.
- 4. THE GAS SERVICE SHOULD NOT RUN THROUGH THE CONCRETE DRIVEWAY.
- 5. THE TYPICAL GAS SERVICE SIZE FOR A SINGLE FAMILY RESIDENCE IS 1 1/8"-INCH.
- 6. THE TYPICAL GAS METER SIZE FOR A SINGLE FAMILY RESIDENCE IS 250 CFH.
- 7. OUR RECORDS INDICATE THERE IS NOT A GAS SERVICE STUB. SERVICE CAN BE CONNECTED TO EXISTING MAIN. FIELD VERIFICATION IS NEEDED.
- 8. THE GAS SERVICE TO BE INSTALLED SHALL BE IN DIRECT LINE WITH THE GAS METER. COORDINATION BETWEEN THE OQ CONTACTOR, THE INTERIOR GAS PLUMBING CONTRACTOR AND THE CITY'S GAS DISTRIBUTION DEPARTMENT IS NEEDED.
- 9. CONTACT THE CITY'S GAS DISTRIBUTION DEPARTMENT AT 513-785-7550 IF THE GAS CURB VALVE/BOX CANNOT BE LOCATED.

WATER NOTES:

- 1. THE WATER SERVICE FROM THE WATER MAIN TO THE METER MUST BE TYPE K COPPER OR DUCTILE IRON, CLASS 53. WE DO NOT RECOMMEND THE USE OF POLYETHYLENE PIPE FOR THE WATER SUPPLY DISTRIBUTION SYSTEM ON THIS JOB DUE TO THE CITY'S DISINFECTION PROCESS.
- 2. THE WATER CURB VALVE CANNOT BE LOCATED IN THE PUBLIC SIDEWALK OR
- 3. THE WATER SERVICE SHOULD NOT RUN THROUGH THE CONCRETE DRIVEWAY.
- 4. THE CONTRACTOR MUST FOLLOW THE CITY OF HAMILTON'S WATER MAIN AND WATER SERVICE TESTING PROCEDURES.
- 5. THE TYPICAL WATER SERVICE SIZE FOR A SINGLE FAMILY RESIDENCE IS 3/4-INCH.
- 6. THE TYPICAL WATER METER SIZE FOR A SINGLE FAMILY RESIDENCE IS 3/4-INCH.
- 7. OUR RECORDS INDICATE THERE IS NOT A WATER SERVICE STUB. SERVICE CAN BE CONNECTED TO EXISTING MAIN. FIELD VERIFICATION IS NEEDED.

SANITARY SEWER NOTES:

- 1. THE SANITARY LATERAL MUST BE AT LEAST 6-INCHES WITH A MINIMUM 2%
- 2. THE SANITARY SEWER LATERAL MATERIAL MUST BE SDR-26.
- 3. THE SANITARY LATERAL SHOULD NOT GO THROUGH THE DRIVEWAY.
- 4. ADD A CLEANOUT AT THE R/W OR EASEMENT AND ANY BENDS IN THE SANITARY LATERAL. USE A COUNTERSUNK HEAD WHEN A RAISED HEAD IS CONSIDERED TO BE A TRIP HAZARD. CLEANOUTS CANNOT BE LOCATED IN THE PUBLIC SIDEWALK OR DRIVEWAY.
- 5. THE MINIMUM VERTICAL DIFFERENCE BETWEEN THE FINISHED FLOOR ELEVATION OF THE LOWEST LEVEL AND THE CROWN OF THE SANITARY SEWER MAIN IS 3-FT.
- 6. IF IT IS NECESSARY TO TAP THE SANITARY SEWER MAIN, A FACTORY WYE
- 7. OUR RECORDS INDICATE THERE IS NOT AN EXISTING 6—INCH SANITARY SEWER LATERAL STUB. FIELD VERIFICATION NEEDED.

EROSION NOTES:

BUILDER IS RESPONSIBLE FOR ALL INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL AS LISTED BELOW.

ALL GRADED AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE IN ACCORDANCE WITH STATE HIGHWAY ITEM 659.

EROSION CONTROL WILL BE ACCOMPLISHED BY STRATEGICALLY PLACING STRAW WATTLES OR FIBER ROLLS IN SWALES AND RUNOFF AREAS. STRAW WATTLES OR FIBER ROLLS TO BE REPLACED AND EXPANDED AS NECESSARY TO AFFORD NECESSARY CONTROL.

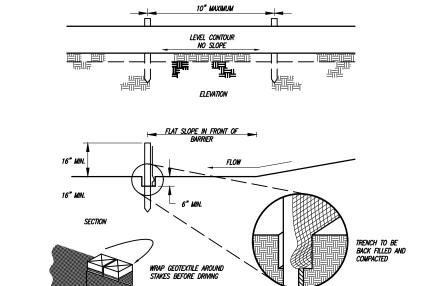
STRAW WATTLES OR FIBER ROLLS TO BE INSTALLED PER MANUFACTURER **SPECIFICATIONS**

ALL EROSION CONTROL MEASURES MUST BE IN PLACE PRIOR TO ANY STRIPPING OF VEGETATION OR EXCAVATION.

NOTES:

- 1. BUILDER TO VERIFY THE LOCATION AND ELEVATION OF ALL SANITARY AND WATER SERVICE LATERALS PRIOR TO CONSTRUCTION. IF FIELD CONDITIONS ARE DIFFERENT FROM PLAN, CONTACT THE ENGINEER/SURVEYOR.
- 2 UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM SUBDIVISION DEVELOPMENT PLANS.

SPECIFICATIONS FOR SILT FENCE



SEE PAGES 117—121 OF THE RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION, SECOND FDITION 1996, MANUAL FOR SILT FENCE SPECIFICATIONS.

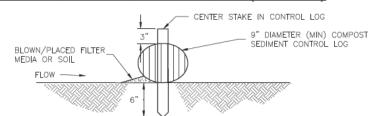
BACCARAT DRIVE

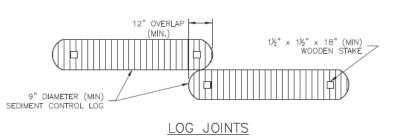
SHALL MEET CITY OF HAMILTON R.O.W. CONCRETE STANDARDS

> AND BE INSPECTED BY ENGINEERING DEPT.

APRON DETAIL

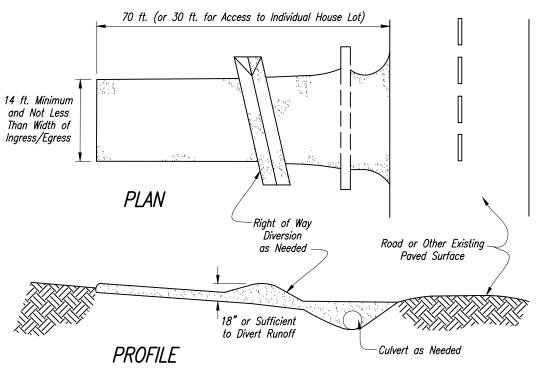
COMPOST SEDIMENT CONTROL LOG (WEIGHTED)





SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

CONSTRUCTION ENTRANCE DETAIL

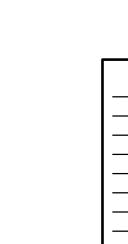


SEE THE RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION MANUAL, CURRENT EDITION, FOR CONSTRUCTION ENTRANCE SPECIFICATIONS.

PLOT PLAN 1580 BACCARAT DRIVE PROPOSED CONC. APRON

REVISIONS

DWG.: *RB-PLPN*



LOT 27149 FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO



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24-0022 4-9-24

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BUILDER: JUSTIN DOYLE HOMES

5378A COX SMITH ROAD MASON, OHIO 45040

PROPERTY ADDRESS: 1580 BACCARAT DRIVE HAMILTON, OHIO 45013

LOT 27149

FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO

CITY OF HAMILTON UNDERGROUND ELECTRIC REQUIREMENTS

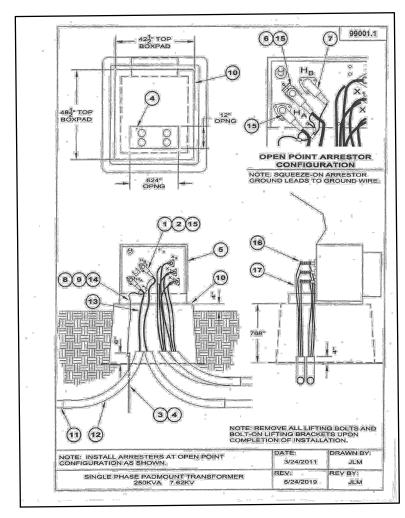
Developer/Contractor Responsibilities

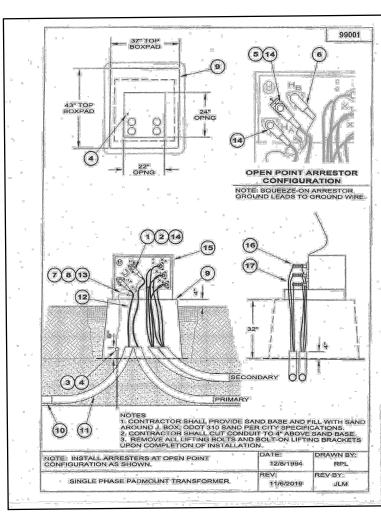
- Provide utility easements along the perimeter of the development (10' wide) and along all street frontage (8' wide) adjacent to the right of way line. All conduit, junction boxes, and transformer pads shall be installed at the center of the utility easement.
- Provide trenching, backfilling, and boring.
 - o Conduit installed by boring shall be Dura-line Smoothwall HDPE or Blue Diamond HDPE, or approved equal; SDR-13.5, color shall be red.
 - o Conduits (2 or more) installed in a single bore under areas subject to vehicular traffic shall have voids pumped with controlled density fill (CDF), or shall be installed in a casing pipe (HDPE).
- Provide and install schedule 40 PVC conduits, size as specified, for all primary and secondary conductors installed by trenching.
 - o Conduits shall be separated by 2" minimum.
 - At intersections with other utilities and secondary electric, primary conduit shall maintain a 12"
 - clearance and shall pass under other utilities where needed to maintain clearances. o Concrete encased conduit shall maintain a 3" clearance.
 - o Conduit shall maintain a 36" clearance from water mains and gas lines on parallel runs.
- Provide and install schedule 40 PVC or galvanized steel elbows as specified. Verify required locations for galvanized steel elbows. All elbows shall be 90°, 36" bend radius, and shall be installed
- All PVC conduit joints shall be cleaned, primed, and glued.
- Primary electric conduit trench shall have a minimum depth of 48" below finished grade.
 - At open trench construction, conduit under areas subject to vehicular traffic shall be encased in concrete at least four-inch thickness above, and two-inch thickness on sides, between and below conduits. Concrete shall be Class 'C' specification.
 - o Conduit not under areas subject to vehicular traffic shall be covered with 12" minimum of ODOT 310 sand before backfilling with clean, native excavated material. Optional - CLSM Class 50.
- Secondary electric conduit trench shall have a minimum depth of 36" below finished grade.
 - o Secondary conduits under areas subject to vehicular traffic shall be encased in concrete of the same thickness, strength and specification as used for primary conduits.
 - Secondary conduits not under areas subject to vehicular traffic shall be covered with 12"
- minimum of ODOT 310 sand before backfilling. Optional CLSM Class 50. • Each conduit shall be swabbed and have a minimum 200-lb test pull string installed
- Provide and install a plug at each end of conduit and maintain the accessibility of the pull string. Plugs shall be IPEX Scepter, or approved equivalent
- Construct transformer pad using Class 'C' or 4000 psi concrete, on ODOT 304 compacted gravel base.
- Provide level areas at transformer boxpads and junction boxes with ODOT 310 sand.
- Install all transformer boxpads, junction boxes, and ground rods, as well as standoff brackets, conduit straps, and bolts on riser poles. (These items to be provided by the City.)
- . Spare conduits that are installed for future connections shall be stubbed-up above grade, plugged, and covered with a secondary junction box to be provided by the City.
- Provide and install red underground electric warning tape or foil 12" minimum above conduits.
- Contact City Electric Engineering Department for conduit inspection a minimum of 24 hours before covering conduit. ALL CONDUIT MUST BE INSPECTED BEFORE COVERING!
- Install conductors for service laterals from transformer or secondary junction box to proposed residence.
- Contact City of Hamilton, Building Department for inspection of the residential service laterals.

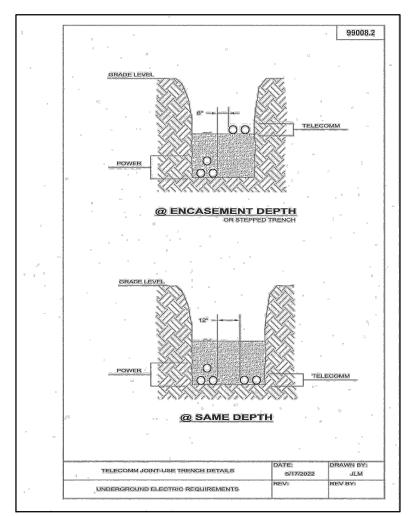
City of Hamilton Responsibilities

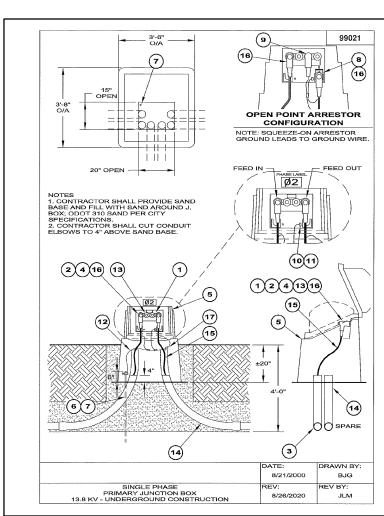
- Provide drawings, specifications, and copies of City of Hamilton Electrical Construction Standards for all
- Provide fiberglass transformer boxpads, junction boxes, ground rods, ground wire loops, ground clamps, as well as standoff brackets, conduit straps, and bolts and deliver to jobsite.
- Inspect all conduit, junction box and transformer boxpad installations before covering and/or backfilling.
- Inspect form and reinforcement placement for concrete transformer pad before concrete pour.
- Install all primary and secondary conductors, except for service laterals. Install and maintain streetlights on dedicated City of Hamilton streets.

M:\util-depts\ENGINEER\Electric Engineering Procedures\Electric Forms\Underground Elect Reg = Residential.doc



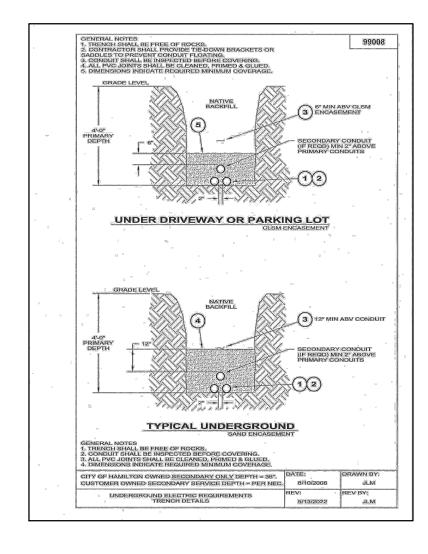






REVISIONS

DWG.: *RB-PLPN*



PLOT PLAN

1580 BACCARAT DRIVE

4-9-24

PART LOT 27148 FIRST WARD, SOUTH SIDE SECTION-35, TOWN-4, RANGE-5 CITY OF HAMILTON, BUTLER COUNTY, OHIO



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24-0022-1

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BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON, OHIO 45040

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON, OHIO 45013

Specifications Permanent Seeding

2. Materials

* Straw-If straw is used it shall be

the rate of 2 tons/ac. or 90

unrotted small-grain straw applied at

lb./1,000 sq. ft. (two to three bales).

The mulch shall be spread uniformly

by hand or mechanically so the soil

surface is covered. For uniform

divide area into approximately

distribution of hand-spread mulch,

1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each

* Hydroseeders-If wood cellulose fiber

is used, it shall be used at 2,000

lb./ac/ or 46 lb./1,000 sq. ft.

include mulch mattings applied according to manufacturer's

recommendations or wood chips

3. Straw Mulch Anchoring Methods

immediately to minimize loss by wind

similar type tool shall be set straight

mechanically anchored shall not be

* Mulch Nettings—Netting shall be

finely chopped but, generally, be left

used according to the manufacturer's

recommendations. Netting may be

necessary to hold mulch in place in

areas of concentrated runoff and on

* Asphalt Emulsion-Asphalt shall be

manufacturer or at the rate of 160

* Synthetic Binders-Synthetic binders

* Wood Cellulose Fiber-Wood cellulose

fiber binder shall be applied at a net

dry weight of 750 lb./ac. The wood

water and the mixture shall contain a

cellulose fiber shall be mixed with

1. Permanent seeding shall include

adverse site conditions as needed for

2. Excessive irrigation rates shall be

avoided and irrigation monitored to

prevent erosion and damage from

irrigation to establish vegetation

during dry or hot weather or on

adequate moisture for seed

germination and plant growth.

maximum of 50 lbs./100 gal.

applied as recommended by the

such as Acrylic DLR (Agri-Tac),

equivalent may be used at rates

recommended by manufacturer.

Straw mulch shall be anchored

* Mechanical-A disk, crimper, or

to punch or anchor the mulch

material into the soil. Straw

applied at 6 tons/ac.

* Other-Other acceptable mulches

SITE PREPARATION

- 1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing
- 2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.
- 3. Resoil shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

- 1. Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lbs./1,000 sq. ft. or 2 tons/ac.
- 2. Fertilizer-Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac/ of 10-10-10 or 12-12-12 analysis.
- 3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or Aug. 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillage/ seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

DORMANT SEEDINGS

- 1. Seedings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate, but probably will not be
- 2. The following methods may be
- * From October 1 through November 20, prepare the seedbed, and the required amounts of lime and fertilizer, then mulch and anchor After November 20, and before March 15, broadcast the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this
- * From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase
- * Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist
- * Where feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller or light drag. On sloping land, seeding operations should be on the contour where feasible.
- 1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall

Specifications Permanent Seeding

1. Permanent seeding shall not be considered established for at least 1 full year from the time of planting. Seeded areas shall be inspected for failure and reestablished as needed. Depending on site conditions, it may be necessary to irrigate, fertilize. overseed, or reestablish plantings in order to provide permanent vegetation for adequate erosion control.

2. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

| Mixture | Formula | lb./ac. | lb./1.000 ft. ² | Time | Mowing |
|---|----------|---------|----------------------------|--|--------------------------|
| Creeping Red Fescue Ryegrass Kentucky Bluegrass | 10-10-10 | 500 | 12 | | Not closer than 3" |
| Tall Fescue | 10-10-10 | 500 | 12 | Fall, yearly or as needed. | Not closer than 4" |
| Dwarf Fescue | 10-10-10 | 500 | 12 | | Not closer than 2" |
| Crown Verch Fescue | 0-20-20 | 400 | 10 | Spring, yearly following establish— | Do not mow |
| Flat Pea Fescue | 0-20-20 | 400 | 10 | ment and every 4-7 yr. thereafter. | Do not mow |

Specifications Temporary Seeding

| Temporary Seeding Species Selection | | | | | | |
|---|---------------------|----------------------------|-------------|--|--|--|
| Seeding Dates | Species | lb./1.000 ft. ² | Per Ac. | | | |
| March 1 to August 15 | Oats | 3 | 4 bushel | | | |
| | Tall Fescus | 1 | 40 lb. | | | |
| | Annual Ryegrass | 1 | 40 lb. | | | |
| | Perennial Ryegrass | 1 | 40 lb. | | | |
| | Tall Fescus | 1 | 40 lb. | | | |
| | Annual Ryegrass | 1 | 40 lb. | | | |
| August 16 to November 1 | Rye | 3 | 2 bushel | | | |
| | Tall Fescus | 1 | 40 lb. | | | |
| | Annual Ryegrass | 1 | 40 lb. | | | |
| | Wheat | 3 | 2 bushel | | | |
| | Tall Fescus | 1 | 40 lb. | | | |
| | Annual Ryegrass | 1 | 40 lb. | | | |
| | Perennial Ryegrass | 1 | 40 lb. | | | |
| | Tall Fescus | 1 | 40 lb. | | | |
| | Annual Ryegrass | 1 | 40 lb. | | | |
| November 1 to Spring Seeding | Use mulch only, sod | ding practices or dom | ant seeding | | | |
| Note: Other approved seed species may be substituted. | | | | | | |

| | Pern | nanent Seeding | | |
|--|------------------------------------|-----------------------------|-------------------------------|--|
| 0 1 1 1 | See | eding Rate | | |
| Seed Mix | lb./ac. lb./1.000 ft. ² | | Notes: | |
| | (| General Use | | |
| Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass | 20-40 10-20 10-20 | 1/2-1 1/4-1/2 1/4-1/2 | | |
| Tall Fescue | 40 | 1 | | |
| Dwarf Fescue | 40 | 1 | | |
| | Steep Bo | anks or Cut SI | opes | |
| Tall Fescue | 40 | 1 | | |
| Crown Vetch Tall Fescue | 10 20 | 1/4 1/2 | Do not seed later than August | |
| Tall Fescue | 20 20 | 1/2 1/2 | Do not seed later than August | |
| | Road D | itches and Swo | oles | |
| Tall Fescue | 40 | 1 | | |
| Dwarf Fescue Kentucky Bluegrass | 90 5 | 2 1/4 | | |
| | | Lawns | | |
| Kentucky Bluegrass Perennial Ryegrass | 60 60 | 1 1/2 1 1/2 | | |
| Kentucky Bluegrass Creeping Red Fescue | 60 60 | 1 1/2 1 1/2 | For shaded areas | |

1. Structural erosion and sediment control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction site.

2. Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 45 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days. Several applications of temporary seeding are necessary on typical construction projects.

3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.

4. Soil Amendments-Applications of temporary vegetation shall establish adequate stands of vegetation that may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.

5. Seeding Method-Seed shall be applied uniformly with a cyclone seeder, drill, cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking and dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and fertilizer will be mixed on site and the seeding shall be done immediately and without interruption.

MULCHING TEMPORARY SEEDING

- 1. Applications of temporary seeding shall include mulch that shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization.
- 2. Materials:
- * Straw-If straw is used, it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lbs./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45 lb. bales of straw in each section.
- * Hydroseeders-If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
- * Other-Other acceptable mulches include mulch matting applied ക്ക്ക് to manufacturer's recommendations or wood chips applied at 6 tons/ac.
- 3. Straw mulch shall be anchored immediately to minimize loss by wind

CITY OF HAMILTON, BUTLER COUNTY, OHIO

10T 27149

FIRST WARD, SOUTH SIDE

SECTION-35, TOWN-4, RANGE-5

BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON. OHIO 45040

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON. OHIO 45013

Specifications Mulchina

4. Anchoring Methods:

longer than 6 in.

critical slopes.

* Mechanical-A disk, crimper, or

to punch or anchor the mulch

material into the soil. Straw

similar type tool shall be set straight

mechanically anchored shall not be

* Mulch Nettings—Netting shall be

used according to the manufacturer's

recommendations. Netting may be

necessary to hold mulch in place in

areas of concentrated runoff and on

* Asphalt Emulsion—Asphalt shall be

manufacturer or at the rate of 160

* Synthetic Binders—Synthetic binders such as Acrylic DLR (Agri—Tac),

* Wood Cellulose Fiber-Wood cellulose

fiber binder shall be applied at a net

dry weight of 750 lb./ac. The wood

cellulose fiber shall be mixed with

water and the mixture shall

contain a maximum of 50

lbs./100 gal.

DCA-70, Petroset, Terra Tack or

equivalent may be used at rates

recommended by manufacturer.

applied as recommended by the

finely chopped but generally, be left

- 1. Mulch and/or other appropriate vegetative práctices shall be applied to disturbed areas within 7 days of grading if the area is to remain dormant (undisturbed) for more than 45 days or on areas and portions of the site which can be brought to final grade.
- 2. Mulch shall consist of one of the
- * Straw-Straw shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lbs./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45 b. bales of straw in each section.
- * Hydroseeders-Wood cellulose fiber should be used at 2,000 lb./ac. or 46 lbs./1,000 sq. ft.
- * Other-Other acceptable mulches include mulch matting applied according to manufacturer's recommendations or wood chips applied at 10-20 tons/ac.
- 3. Mulch Anchoring-Mulch shall be anchored immediately to minimize loss by wind or runoff. The following are accepted methods for anchoring mulch:

- * Mechanical—Use a disk, crimper, or similar type tool set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but generally be left longer
- * Mulch Nettings—Use according to the manufacturer's recommendations, following all placement and anchoring suggestions. Use in areas of water concentration and steep slopes to hold mulch in place.
- * Asphalt Emulsion—For straw mulch, apply at the rate of 160 gal. /ac. (0.1 gal. /sy) into the mulch as it is being applied or as recommended by the manufacturer.
- * Synthetic Binders-For straw mulch, synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equivalent may be used at rates recommended by manufacturer.
- * Wood Cellulose Fiber-Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 lb./acre. The wood $\hat{}$ cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs./100 gal.

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> **Specifications** Sodding

MATERIALS

- 1. Sod shall be harvested, delivered and installed within a period of 48 hrs. Sod not transplanted within this period shall be inspected and approved prior to installation.
- 2. The sod shall be kept moist and covered during hauling and preparation for placement on the sod bed.
- 3. Sod shall be machine cut at a uniform soil thickness of 0.75 in.. plus or minus 0.25 in., at the time of cutting. Measurements for thickness shall exclude top growth and thatch.

SITE PREPARATION

- 1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
- 2. The area shall be graded and resoiling shall be done where
- 3. Soil Amendments:
- * Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lbs./1,000 sq. ft. or 2 tons/ac.
- * Fertilizer-Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1.000 sa. ft. or 500 lb./ac. of 10-10-10 or 12-12-12 analysis.
- * The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth
- 4. Before laying sod, the surface shall be uniformly graded and cleared of all debris, stones and clods larger than 3 in. in diameter.

SOD INSTALLATION

- 1. During periods of excessively high temperatures, the soil shall be lightly irrigated immediately prior to laying
- 2. Sod shall not be placed on frozen
- 3. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered in a brick—like pattern. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would dry the roots.
- 4. On sloping areas where erosion may be a problem, sod shall be laid with the long edge parallel to the contour and with staggered joints. The sod shall be secured with pegs
- 5. As sodding is completed in any one section, the entire area shall be rolled or tamped to ensure solid contact of roots with the soil surface. Sod shall be watered immediately after rolling or tamping until the sod and soil surface below the sod is thoroughly wet. The operations of laying, tamping and irrigating for any place of sod shall be completed within 8 hrs.

SOD MAINTENANCE

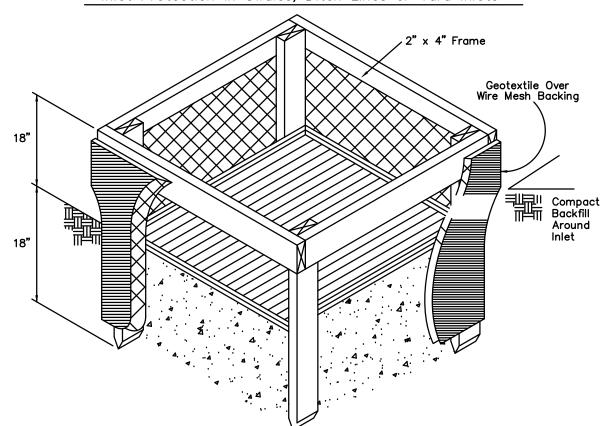
- 1. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4 in.
- 2. After the first week, sod shall be watered as necessary to maintain adequate moisture and to ensure
- 3. The first mowing shall not be attempted until sod is firmly rooted.

1500 DACCADAT DOILE

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| REVISIONS | | PART LOT 27148 FIRST WARD, SOUTH SIDE SECTION—35, TOWN—4, RANGE—5 CITY OF HAMILTON, BUTLER COUNTY, OHIO | | | | |
| | | 4 | Abercroi & Assoc | | C. | |
| | | | Civil Enginee ad, Suite 200 •Cin. • www.abercrombie | cinnati, Ohio 452 | J | |
| DWG.: RB-PLPN | SCALE N/A | DATE 4-9-24 | JOB.NO. 24-0022-1 | drawn <i>G.R</i> . | 3 | 5 |

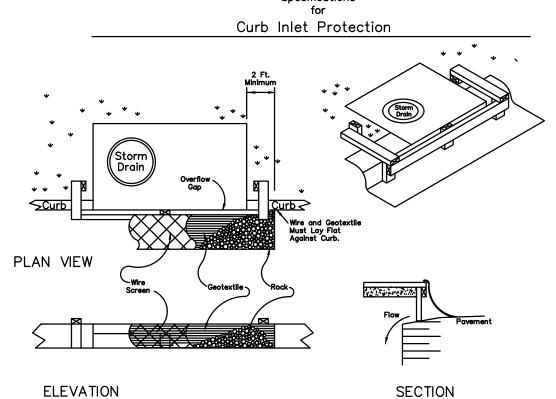
Specifications

Inlet Protection in Swales, Ditch Lines or Yard Inlets



- 1. Inlet protection shall be constructed either before upslope land disturbance begins or before the storm drain becomes operational.
- 2. The earth around the inlet shall be excavated completely to a depth of at least 18 in.
- 3. The wooden frame shall be constructed of 2-by-4 in. construction grade lumber. The 2-by-4 in. posts shall be driven 1 ft. into the ground at four corners of the inlet and the top portion of 2-by-4 in. frame assembled using the overlap joint shown. The top of the frame shall be at least 6 in. below adjacent roads if ponded water would pose a safety hazard to
- 4. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the
- 5. Geotextile shall have an equivalent opening size of 20—40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 in. below the inlet notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
- 6. Backfill shall be placed around the inlet in compacted 6—in. layers until the earth is even with notch elevation on ends and top elevation on sides.
- 7. A compacted earth dike or a check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression and if runoff bypassing the inlet will not flow to a settling pond. The top of the earth dikes shall be at least 6 in higher than the top of the

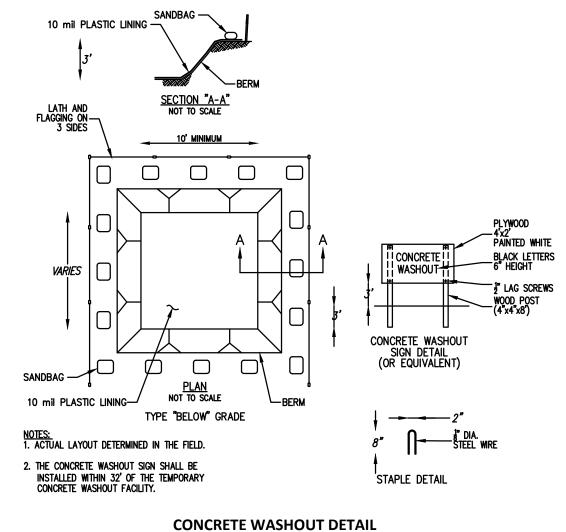
Specifications



1. Inlet protection shall be constructed either before upslope land disturbance begins or before the

storm drain becomes operational.

- 2. The wooden frame is to be constructed of 2-by-4 in. construction grade lumber. The end spacers shall be a minimum of 1 ft. beyond both ends of the throat opening. The anchors shall be nailed to 2-by-4 in. stakes driven on the opposite side of the curb.
- 3. The wire mesh shall be of sufficient strength to support fabric and stone. It shall be a continuous piece with a minimum width of 30 in. and 4 ft. longer than the throat length of the inlet, 2 ft. on each side.
- 4. Geotextile cloth shall have an equivalent opening size (EOS) of 20-40 sieve and be resistant to sunlight. It shall be at least the same size as the wire mesh.
- 5. The wire mesh and geotextile cloth shall be formed to the concrete gutter and against the face of the curb on both sides of the inlet and securely fastened to the 2-by-4 in.
- 6. Two—inch stone shall be placed over the wire mesh and geotextile in such a manner as to prevent water from entering the inlet under or around the geotextile cloth.



N.T.S.

BUILDER: JUSTIN DOYLE HOMES 5378A COX SMITH ROAD MASON, OHIO 45040

LOT 27149

FIRST WARD, SOUTH SIDE

SECTION-35, TOWN-4, RANGE-5

CITY OF HAMILTON, BUTLER COUNTY, OHIO

PROPERTY ADDRESS: 310 GORHAM DRIVE HAMILTON, OHIO 45013

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DETAILS 580 BACCARAT DRIVE

| | | 1580 | O BACCARAT | DRIVE | | |
|--------------------|---------------------|---|--|-------------------|-----|---|
| REVISIONS | | ART LOT 271: SECTION— TY OF HAMIL | 35, TOWN-4, | , RANGE-5 | ; | |
| | | 4 | Abercror & Associ | | C. | |
| | | | Civil Engineer ad, Suite 200 •Cinc • www.abercrombie | cinnati, Ohio 452 | · · | |
| G.: <i>RB-PLPN</i> | SCALE N/A | DATE 4-9-24 | JOB.NO. 24-0022-1 | drawn <i>G.R.</i> | 4 | 5 |

