

PH1 + PH2 FINAL TREE CANOPY COVERAGE / SOIL VOLUME AREA
Scale: 1:300

CANOPY COVERAGE CALCULATION

| Area | Tree Quantity | Soil Volume (m³) | Design Soil Volume | Soil Adequacy percentage |
|---|---------------|------------------|--------------------|--------------------------|
| AREA A - 10 existing conifers | 10 | 180.0 | 162.0 | 90% |
| AREA B - 1 ornamental tree | 1 | 20.0 | 19.8 | 99% |
| AREA C - 1 ornamental tree | 1 | 20.0 | 19.6 | 98% |
| AREA D - 2 ornamental trees | 2 | 24.0 | 24.0 | 100% |
| AREA E - 1 ornamental tree, 5 small ornamental trees | 6 | 50.0 | 47.6 | 95% |
| AREA F - 1 small tree | 1 | 25.0 | 23.0 | 92% |
| AREA G - 7 medium trees, 3 small trees, 6 ornamental trees, 3 ornamental conifers | 19 | 279.0 | 300.0 | 108% |
| AREA H - 1 small tree | 1 | 15.0 | 14.0 | 93% |
| AREA I - 3 ornamental trees | 3 | 36.0 | 32.0 | 89% |
| AREA J - 3 ornamental trees | 3 | 36.0 | 29.0 | 81% |
| AREA K - 2 ornamental trees, 2 small ornamental conifers | 4 | 38.0 | 34.0 | 89% |
| AREA L - 3 ornamental trees | 3 | 36.0 | 34.2 | 95% |

LEGEND

- SOIL VOLUME EXTENTS FOR TREE PLANTING
- TREE CANOPY EXTENT AT MATURITY

SOIL VOLUME CALCULATION

| Soil Volume Area, Tree Quantity and Size | Tree Quantity | OTTAWA Target Soil Volume (m³) | Design Soil Volume | Soil Adequacy percentage |
|--|---------------|--------------------------------|--------------------|--------------------------|
| AREA A - 10 existing conifers plant bed (162 sq m x 1 ave metre deep) | 10 | 180.0 | 162.0 | 90% |
| AREA B - 1 ornamental tree plant bed (22 sq m x 0.9 ave metre deep) | 1 | 20.0 | 19.8 | 99% |
| AREA C - 1 ornamental tree plant bed (28 sq m x 0.7 ave metre deep) | 1 | 20.0 | 19.6 | 98% |
| AREA D - 2 ornamental trees plant bed (30 sq m x 0.8 ave metre deep) | 2 | 24.0 | 24.0 | 100% |
| AREA E - 1 ornamental tree, 5 small ornamental trees plant bed (68 sq m x 0.7 ave metre deep) | 6 | 50.0 | 47.6 | 95% |
| AREA F - 1 small tree plant bed (22 sq m x 1 ave metre deep) | 1 | 25.0 | 23.0 | 92% |
| AREA G - 7 medium trees, 3 small trees, 6 ornamental trees, 3 ornamental conifers plant bed (500 sq m x 0.6 ave metre deep) | 19 | 279.0 | 300.0 | 108% |
| AREA H - 1 small tree plant bed (20 sq m x 0.7 ave metre deep) | 1 | 15.0 | 14.0 | 93% |
| AREA I - 3 ornamental trees plant bed (32 sq m x 1 metre deep) | 3 | 36.0 | 32.0 | 89% |
| AREA J - 3 ornamental trees plant bed (29 sq m x 1 metre deep) | 3 | 36.0 | 29.0 | 81% |
| AREA K - 2 ornamental trees, 2 small ornamental conifers plant bed (34 sq m x 1 metre deep) | 4 | 38.0 | 34.0 | 89% |
| AREA L - 3 ornamental trees plant bed (38 sq m x 0.9 metre deep) | 3 | 36.0 | 34.2 | 95% |

* Small ornamental trees with growth 8cm-15cm DBH using 'How much soil to grow a big tree' by DeepRoot as guide

LANDSCAPE / PLANTING PLAN
Scale: 1:200

| Plant List ID | Qty | Botanical Name | Common Name | Scheduled Size | Remarks |
|---|-----|--|--|----------------|-------------------|
| MEDIUM TREES: 9 - 13.5m ht, 8.5 - 20m Ø canopy | | | | | |
| Agl | 2 | Aesculus glabra | Ohio Buckeye | 50mm caliper | WB, Staked |
| GbAG | 2 | Ginkgo biloba 'Autumn Gold' | Autumn Gold Maidenhair Tree | 60mm caliper | WB, Staked |
| GtI | 2 | Gleditsia triacanthos var. inermis 'Impcole' | Imperial Honeylocust | 70mm caliper | WB, Staked |
| UF | 1 | Ulmus minor x parvifolia 'Frontier' | Frontier Elm | 60mm caliper | WB, Staked |
| SMALL TREES: 6 - 8m ht, 6 - 8m Ø canopy | | | | | |
| CcgC | 2 | Crataegus sp. 'Thornless Crusader' | Thornless Crusader Cockspur Hawth | 45mm caliper | WB, Staked |
| ORNAMENTAL TREES: 4 - 7m ht, 4 - 6m Ø canopy (6m ht max under power lines) | | | | | |
| AcB | 6 | Amelanchier canadensis 'Ballarina' | Ballarina Serviceberry (tree form) | 50mm caliper | WB, Staked |
| JvSR | 2 | Juniperus virginiana 'Skyrocket' (J. scopulorum) | Skyrocket Juniper | 150cm stem | Potted |
| MHG | 4 | Malus x 'Harvest Gold' | Harvest Gold Crabapple | 50mm caliper | WB, Staked |
| MRB | 4 | Malus x 'Royal Beauty' | Royal Beauty Crabapple | 45mm caliper | WB, Staked |
| SrIS | 2 | Syringia reticulata 'Ivory Silk' | Ivory Silk Tree Lilac | 50mm caliper | WB, Staked |
| SMALL ORNAMENTAL TREES: <4.5m ht, <4.5m Ø canopy | | | | | |
| CaW* | 2 | Caragana arborescens 'Walker' | Walker's Weeping Peashrub | 125cm STEM | WB, Specimen |
| MaP | 1 | Malus alba 'Pendula' | Weeping Malberry, male | 150cm stem | Fruitless, B&B |
| MsR | 2 | Malus sargentii 'Rosea' | Pink Flowering Crabapple | 45mm caliper | WB, Staked |
| PqYB | 4 | Picea glauca 'Yukon. Blue' | Yukon Blue White Spruce | 75cm spd | WB, Staked |
| SHRUBS | | | | | |
| HpFL | 6 | Hydrangea paniculata 'Fire Light' | Fire Light pannicle hydrangea | 2 gallon pot | 0.9m o.c. |
| JcPP | 4 | Juniperus communis 'Pencil Point' | Pencil Point Juniper | 150cm stem | Potted |
| PoTW | 6 | Phlox paniculata 'Tiny Wine' | Tiny Wine Dwarf Ninebark | 50cm ht. | Potted |
| SbA | 13 | Spiraea bumalda 'Anthony Waterer' | Anthony Waterer Spiraea | 50cm ht. | Potted, 0.9m o.c. |
| SbG | 13 | Spiraea bumalda 'Goldflame' | Goldflame Spiraea | 50cm ht. | 0.9m o.c. |
| SJS | 3 | Spiraea japonica 'Shirobana' | Shirobana Spiraea | 50cm ht. | 0.8m o.c. |
| SpMK | 5 | Syringia patula 'Miss Kim' | Miss Kim Dwarf Lilac | 100cm ht. | 3 gallon Pot |
| PERENNIALS | | | | | |
| PvA | 351 | Ornamental grasses | Karl Foerster Feather Reed Grass, Blue Fescue | 150mm pot | 40-60cm o.c. |
| PvB | 263 | Sun flowering perennials | Coneflower, Black-eyed Susan, Spiked Speedwell, Sea Thrift, Beebalm, Daylily, Siberian Iris, Cardinal Flower, Ozark Sundrops | 150mm pot | 80cm o.c. |

LEGEND

- PHASING
- PROPERTY LINE
- 7.5m GEOTECHNICAL BUILDING OFFSET
- 4.5m GEOTECHNICAL BUILDING OFFSET
- HYDRO LINE
- PAVERS
- HYDRO LINE HEIGHT RESTRICTED AREA
- SOD
- ORNAMENTAL GRASSES
- PERENNIALS
- EXISTING TREES TO REMAIN
- TREE PROTECTION FENCE
- CRITICAL ROOT ZONE

NOTE:
THIS PLAN IS ISSUED FOR SITE PLAN CONTROL SUBMISSION ONLY. ADDITIONAL DETAILING AND SPECIFICATIONS ARE REQUIRED PRIOR TO TENDERING OR CONSTRUCTION.

NOTE:
THIS PLAN TO BE READ IN CONJUNCTION WITH TCR BY DENDRON FORESTRY SERVICES. EXISTING TREES TO BE PRESERVED AND PROTECTED AS PER TCR.

SERVICING INFORMATION SHOWN AS REFERENCE ONLY. REFER TO CIVIL DRAWINGS.

GENERAL NOTES
 .1 All general site information and conditions compiled from existing plans, surveys and consultant's field notes. Report all discrepancies prior to any work. No responsibility is born by the Consultant for unknown subsurface conditions.
 .2 The location of the utilities is approximate only, and the exact location should be determined by consulting the municipal authorities and utility companies concerned. The Contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.
 .3 All dimensions shown are to be verified on site prior to any construction. No deviations are to be made from the layouts as shown on this plan without prior consultation with the Landscape Architect and Owner.
 .4 Obtain approval of the Consultant(s) for granular base and layout of all pavement areas prior to construction.
 .5 Stake planting locations and receive approval of Landscape Architect, prior to excavation of any planting pits. No substitutions of plant material shall be made without prior approval of the Landscape Architect.
 .6 Where clay is encountered proper drainage must be ensured in tree/shrub pits, prior to planting. Have method approved by Landscape Architect.
 .7 Maintain positive surface runoff through the entire construction period.
 .8 Reinstall all areas and items damaged as a result of construction activities.

CLIENT / OWNER :

| NUMBER | REVISION / MILESTONE / FAT SALLANT | DATE | BY (VMD) | INITIALS |
|--------|------------------------------------|------------|----------|----------|
| 6 | | | | |
| 5 | Re-Issued for SPC | 2023/12/21 | MR | |
| 4 | Re-Issued for SPC | 2023/10/05 | MR | |
| 3 | Re-Issued for SPC | 2023/06/27 | MR | |
| 2 | Re-Issued for SPC | 2023/06/09 | MR | |
| 1 | Issued for SPC | 2023/06/09 | MR | |

DESIGNED BY / CONSULTANT: M. Ruhland
 DRAWN BY / DESIGNED PAR: T. Frost
 CHECKED BY / VERIFY PAR: M. Ruhland
 SCALE: 1/8"=1'-0"

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ARCHITECT: T. Frost
 CONSULTANT: M. Ruhland

PROJECT / LOCATION
LANDRIC HOMES SEMIS & STACKED TOWN HOMES
 6001 - 6005 RENAUD ROAD
 OTTAWA, ONTARIO

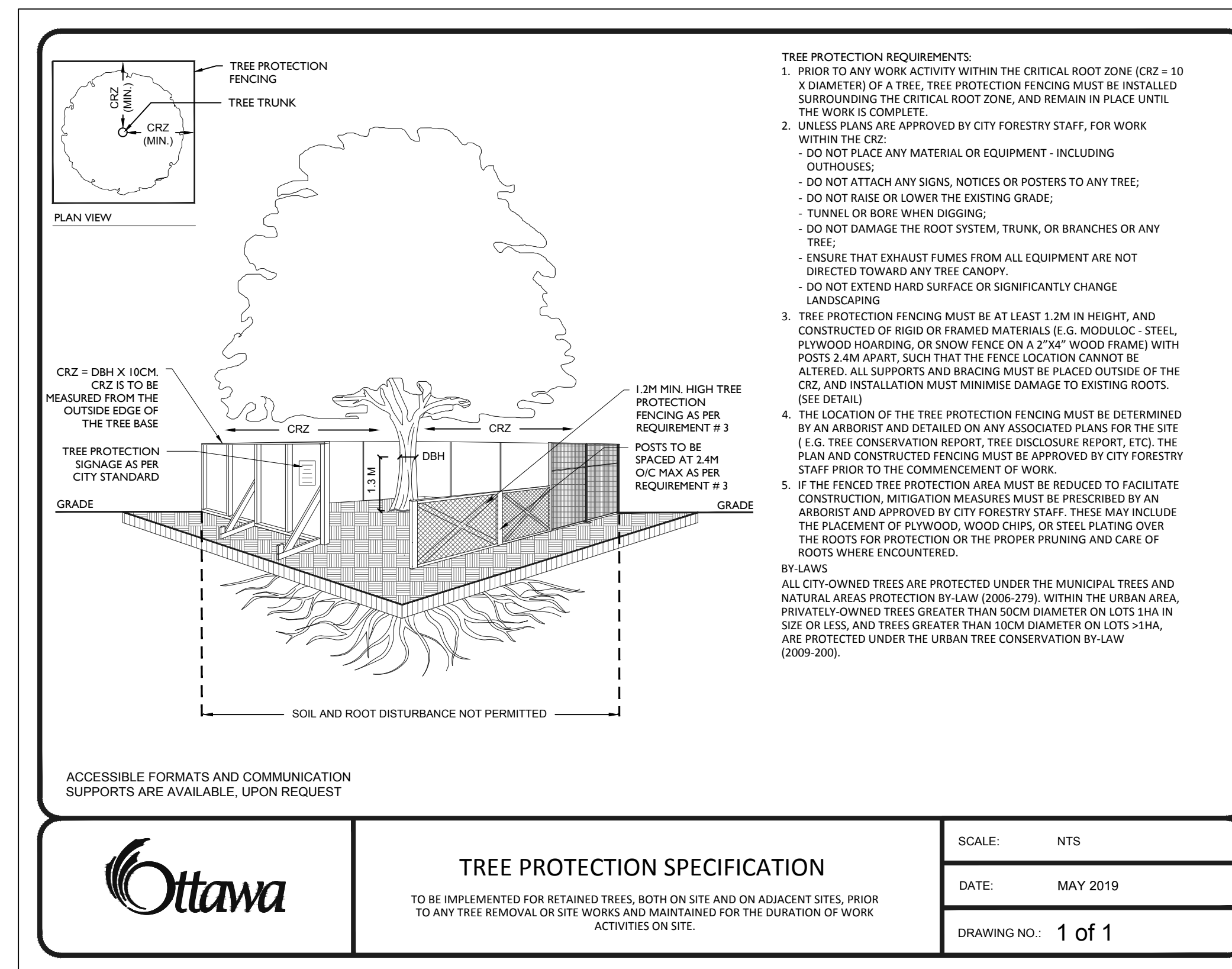
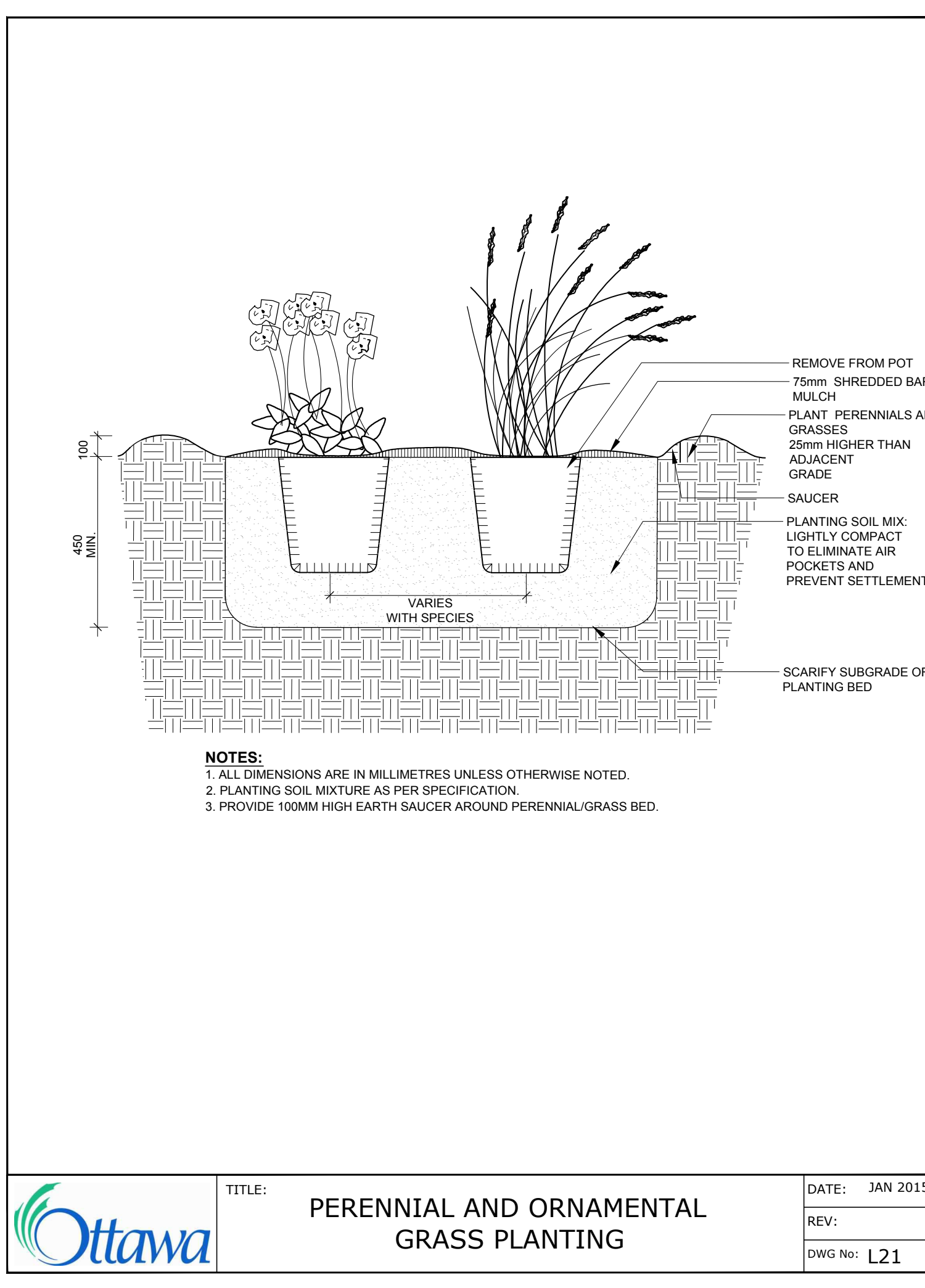
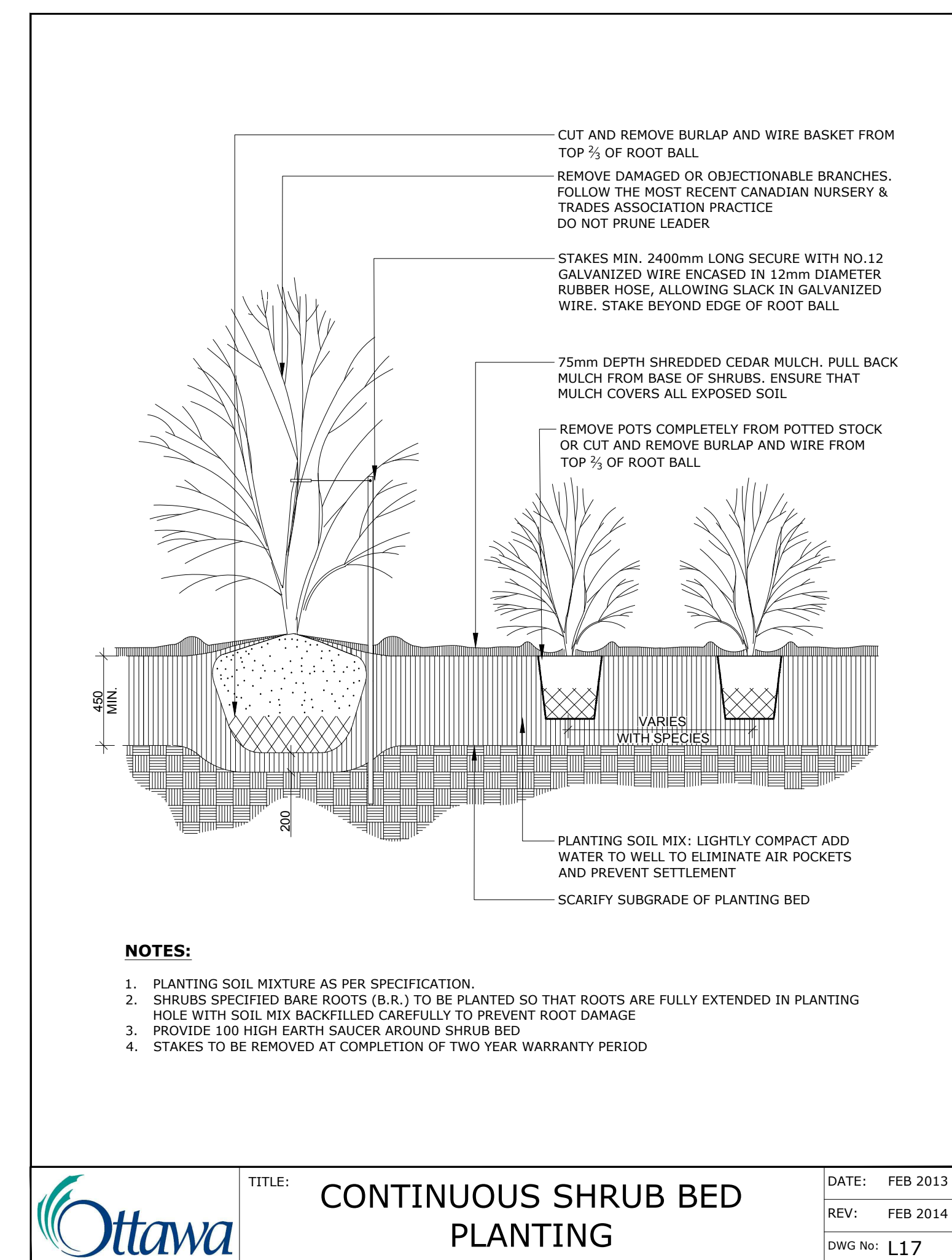
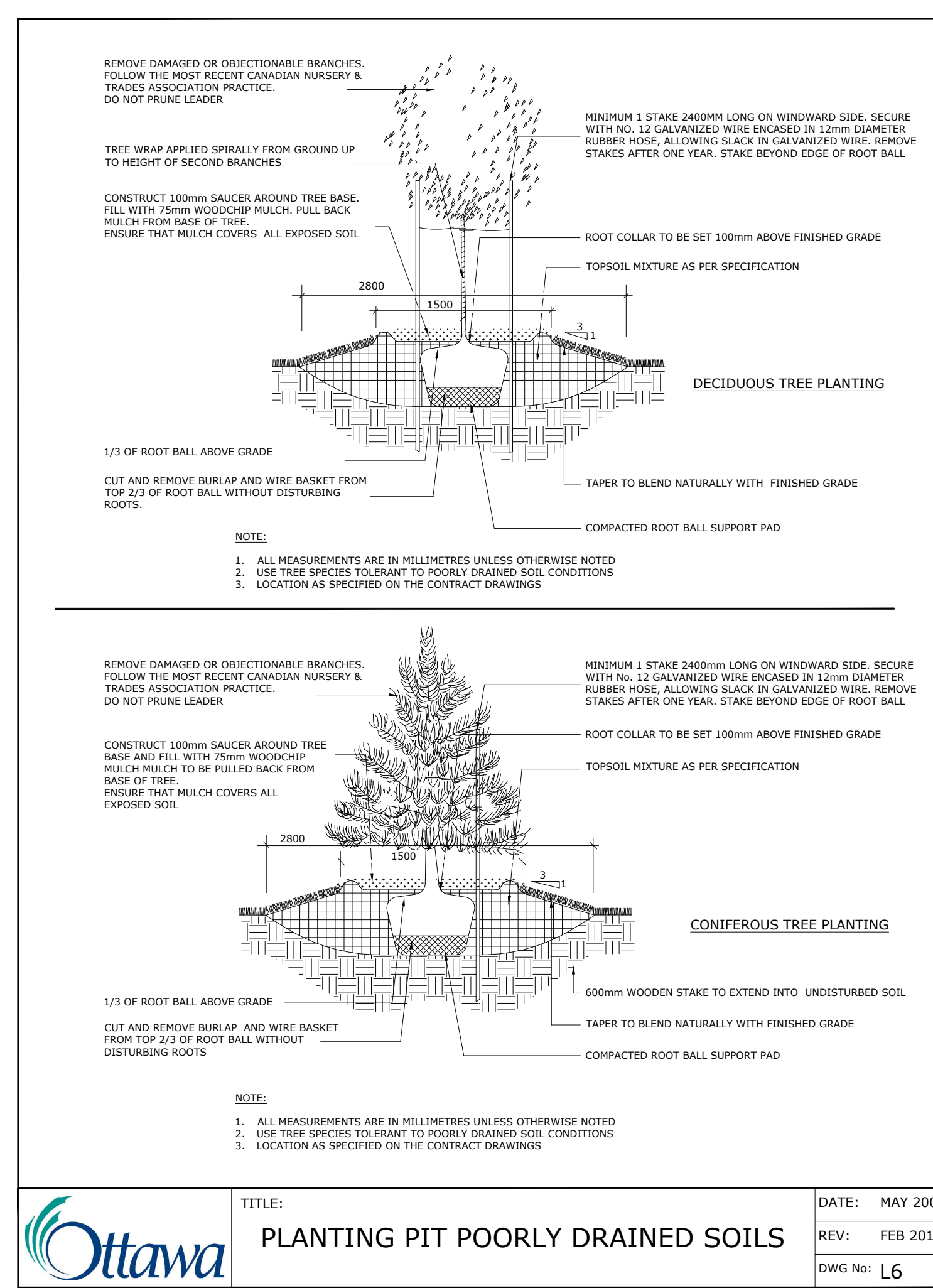
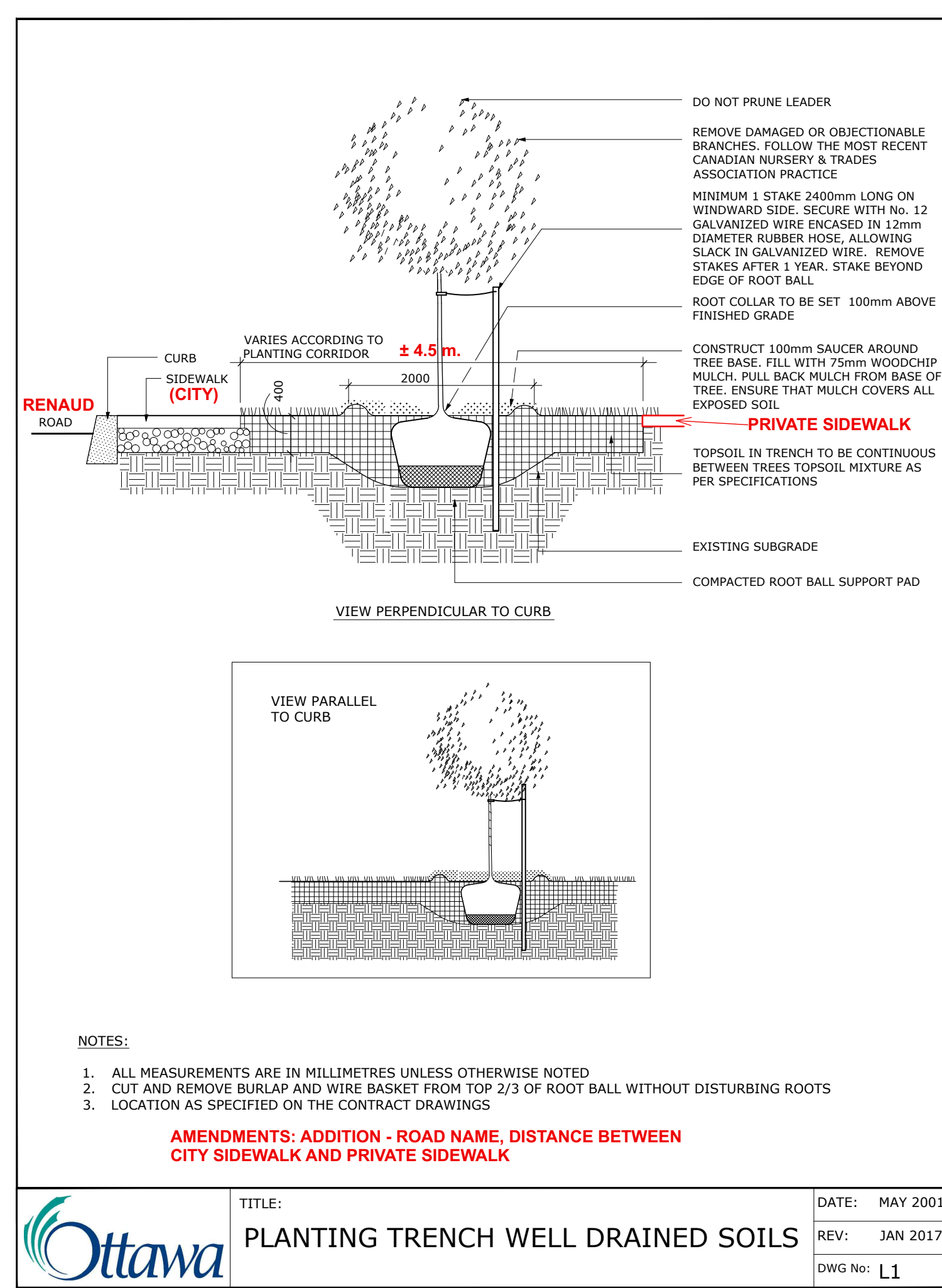
DRAWING
LANDSCAPE / PLANTING PLAN, TREE CANOPY COVERAGE / SOIL VOLUME

PROJECT NO. 21-1660
 SHEET NO. **L-01**

TREE SOIL VOLUME REQUIREMENTS:
STANDARD TREE SOIL VOLUMES QUANTITIES
INCLUDE THE TOP 900-1000mm OF
SOIL EXISTING SUBSOIL LAYER TO CALCULATE
TOTAL SOIL VOLUMES REQUIRED BY CITY OF
OTTAWA FOR SUSTAINABLE TREE GROWTH.
WHERE LARGER SOFT AREAS ARE AVAILABLE,
THE TOP 400-500mm LAYER IS USED TO
CALCULATE SOIL VOLUMES.

WHERE EXISTING MATERIAL BELOW THE
SPECIFIED TOPSOIL IS NOT CONDUCTIVE TO
TREE GROWTH, AN ADDITIONAL LAYER OF
PLANTING MEDIUM IS TO BE INSTALLED BELOW
SPECIFIED TOPSOIL DEPTH TO OBTAIN THE
SOIL VOLUME DEPTH REQUIRED.

REFER TO SOIL VOLUME CHART AND PLANS
FOR AREA WHERE TREE SOIL VOLUMES ARE
REQUIRED.



CLIENT / OWNER :



| | | | |
|---|-------------------|------------|----|
| 6 | | | |
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DESIGNED BY / CONSULTANT: M. Ruhland
CHECKED BY / VERIFYING P.A.R.: M. Ruhland
DRAWN BY / DESIGNED P.A.R.: T. Frost
SCALE: 1/8"=1'-0"

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PROJECT / LOCATION
LANDRIC HOMES SEMIS & STACKED TOWN HOMES

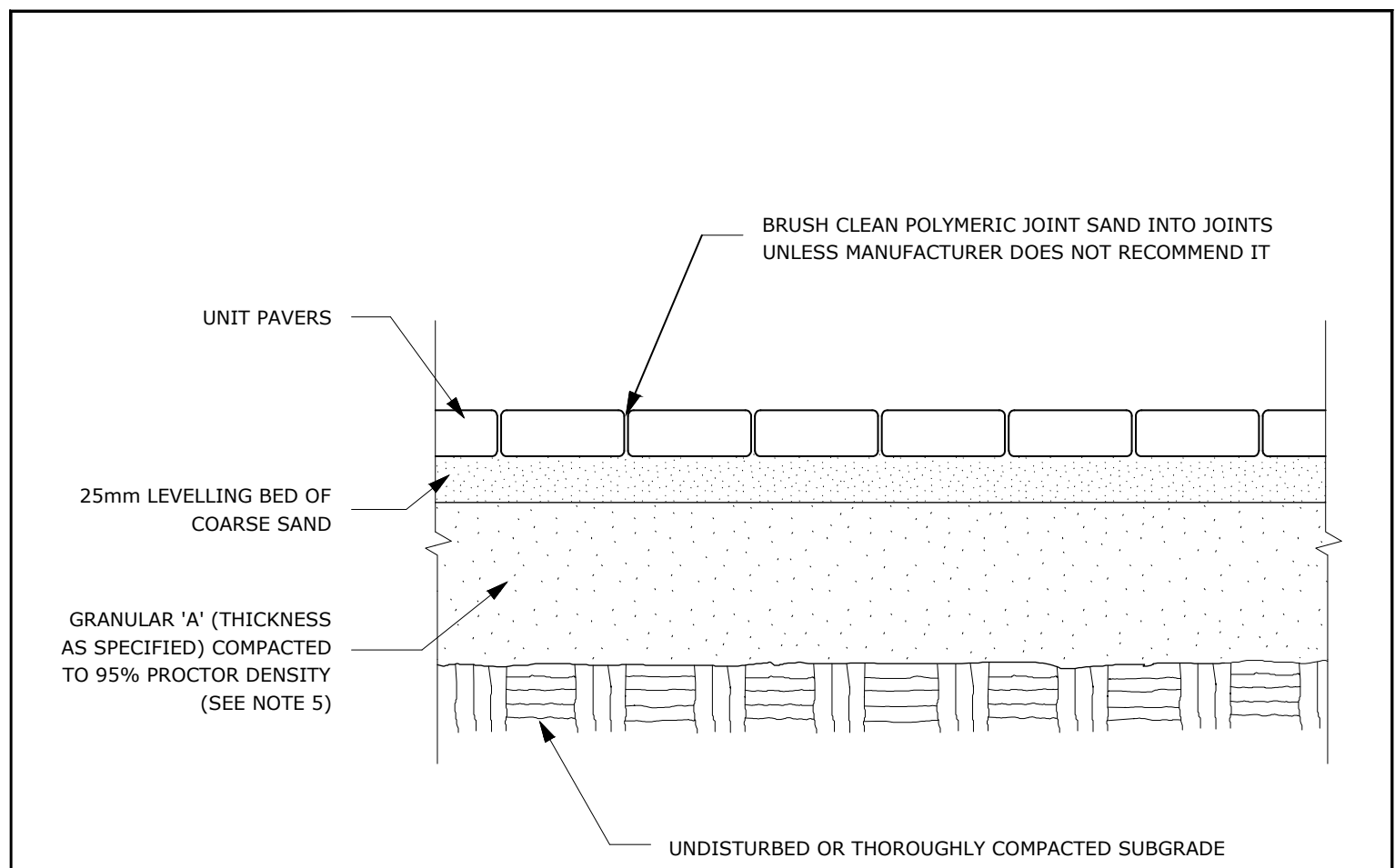
6001 - 6005 RENAUD ROAD
OTTAWA, ONTARIO

DRAWING

DETAILS

PROJECT NO. 21-1660
SHEET NO. **L-02**

D07-12-21-0239



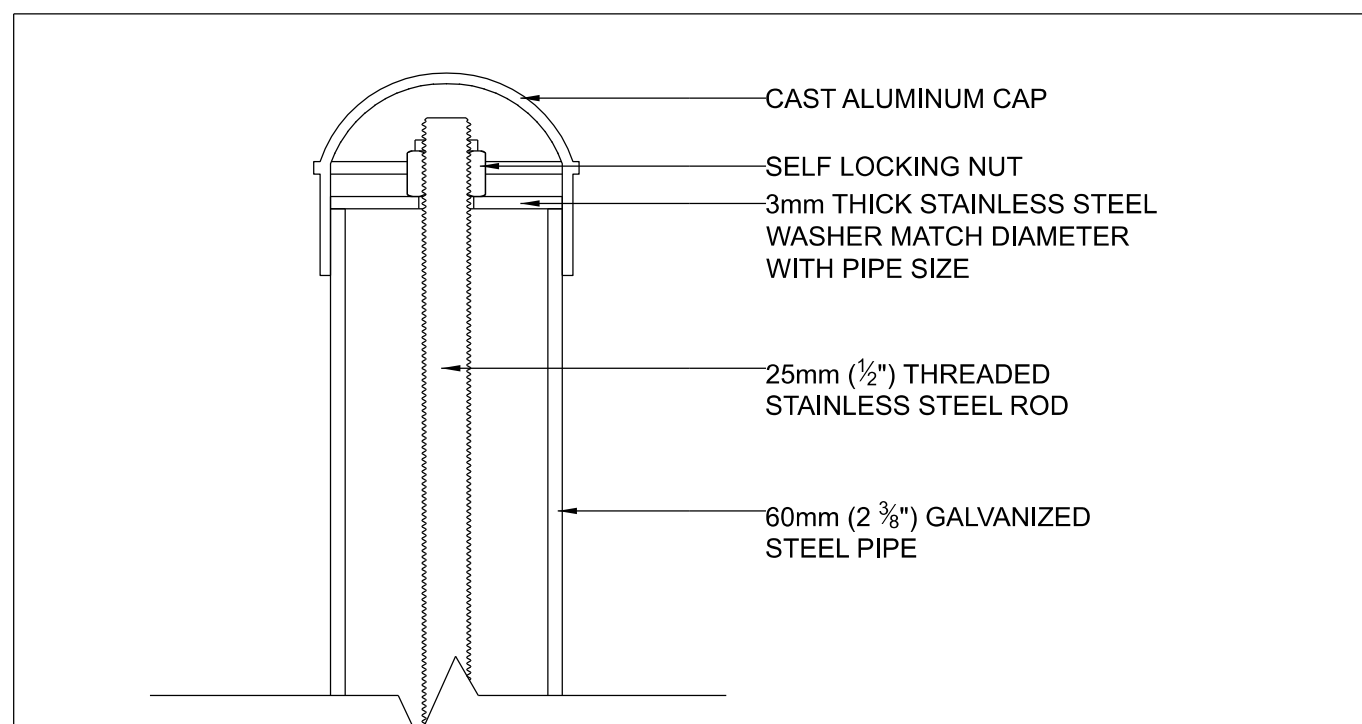
NOTES:

1. THE LEVELING COURSE (BEDDING SAND) SHALL BE PLACED LOOSE, IN A UNIFORM LAYER AT A MAXIMUM DEPTH OF 25mm TO ACHIEVE THE FINAL COMPACTED THICKNESS AND GRADE AS SPECIFIED
2. INSTALL SOLID EDGE RESTRAINT BETWEEN UNIT PAVERS AND ANY SOFT SURFACE (SOD, PLANTING BED, ETC.)
3. UNIT PAVERS ARE THEN PLACED ON TOP OF THE LEVELING COURSE AND ADDITIONAL SAND SWEEPED BETWEEN THE UNIT PAVERS
4. THE UNIT PAVERS ARE THEN VIBRATED INTO PLACE WITH A VIBRA-PLATE AND WATER IS ADDED TO ASSIST IN THE SETTLING OF THE JOINT SAND
5. GRANULAR 'A' DEPTH TO BE 100mm FOR PEDESTRIAN AREAS AND 150mm FOR VEHICULAR ACCESSES. OR AS RECOMMENDED BY GEOTECHNICAL INVESTIGATION
6. USE OF THIS DETAIL REQUIRES THE PRIOR APPROVAL OF THE GENERAL MANAGER

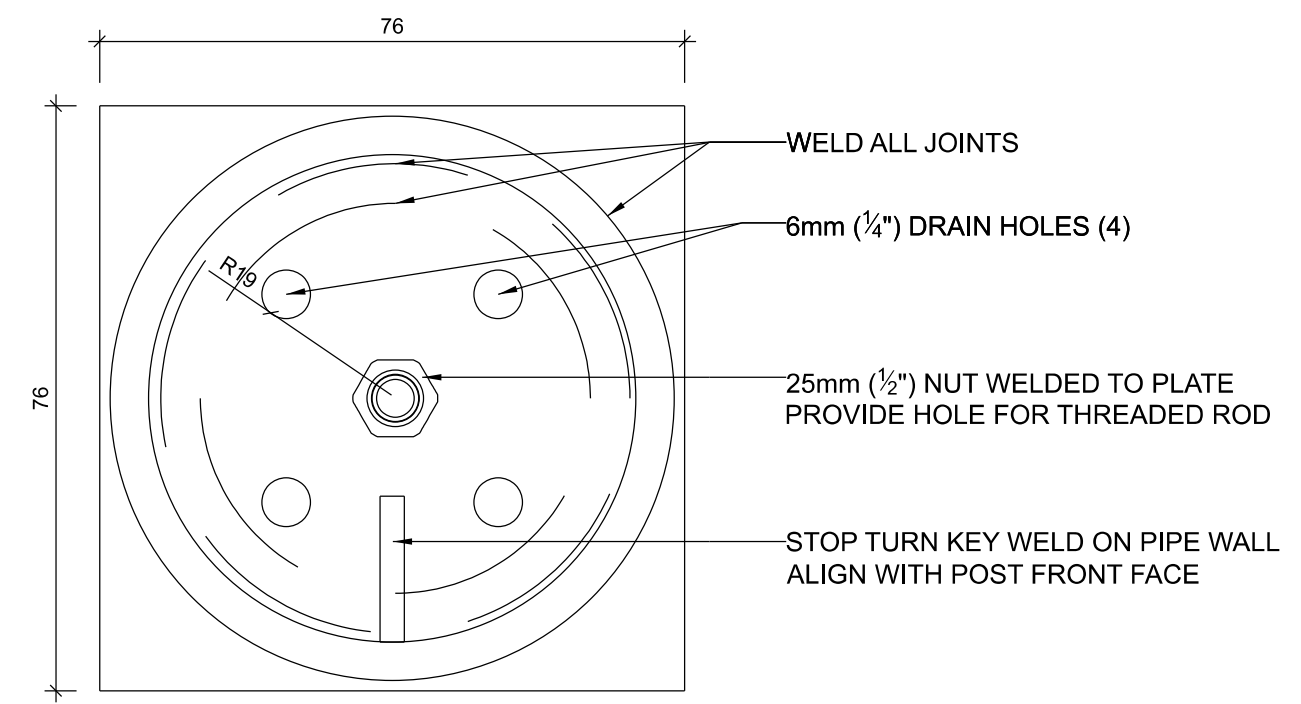


TITLE: UNIT PAVING - ON GRANULAR BASE
 DATE: MAY 2001
 REV: FEB 2016
 DWG No: SC9

ADDITIONAL NOTES FOR NUMBER 5:
 PRECAST PAVERS IN PEDESTRIAN AREAS WHERE NORMAL SNOW REMOVALS ARE DONE IS TO RECEIVE A MINIMUM 200mm GRANULAR 'A'. FURTHER ADJUSTMENTS TO BE SPECIFIED IN RELATION TO SITE CONDITIONS AND GEOTECHNICAL RECOMMENDATIONS.



POST TOP SECTION DETAIL



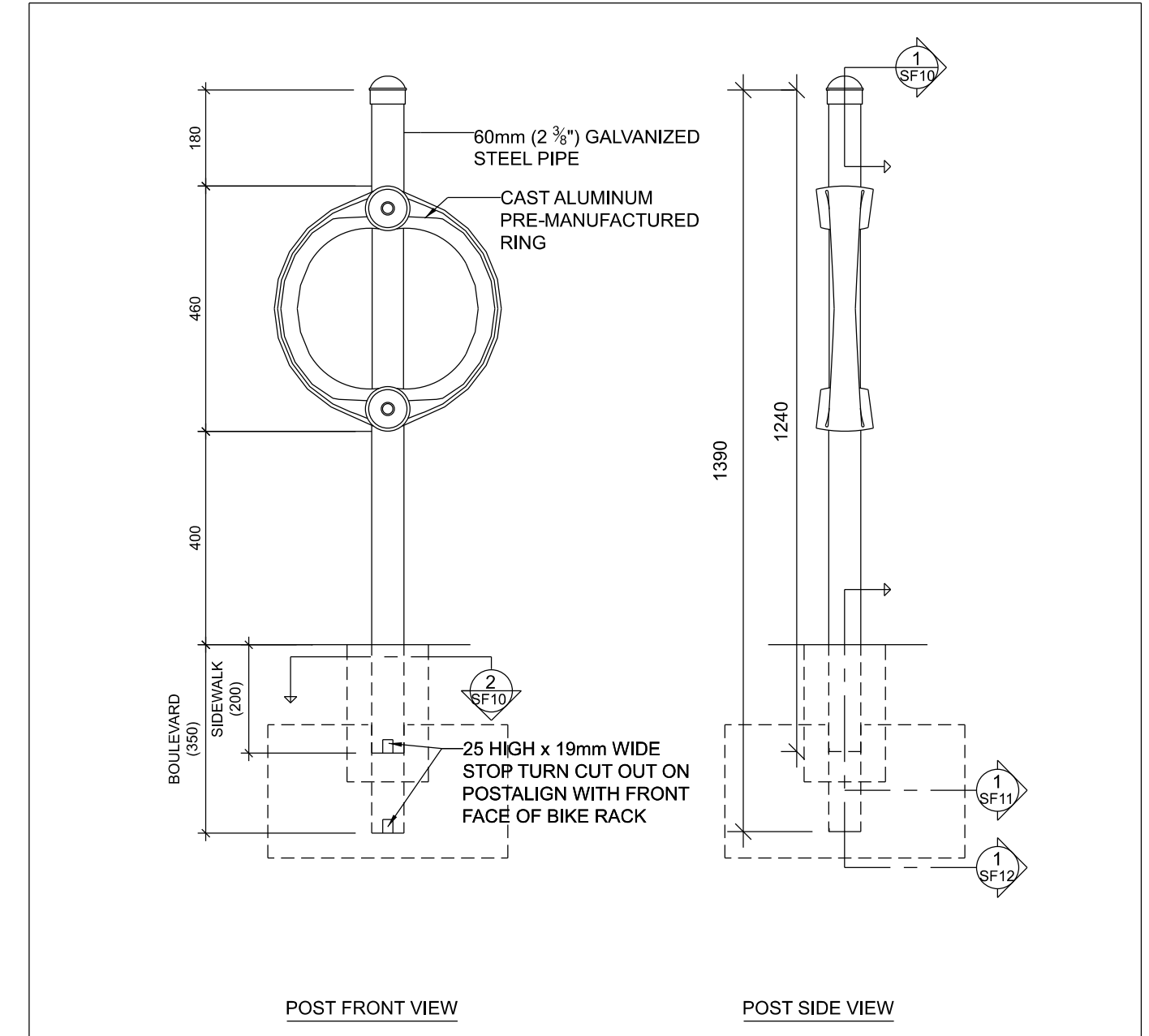
BASE PLATE SECTION DETAIL

N.T.S.



BIKE RACK DETAILS TYPICAL

DATE: MARCH 2019
 REV. DATE: MARCH 2019
 DWG. No.: SF10



POST FRONT VIEW

POST SIDE VIEW

FINISHES GENERAL:
 ALL THREADED ROD, WASHERS AND NUTS ARE TO BE STAINLESS STEEL
 ALL STEEL BELOW GRADE MUST BE GALVANIZED

POST FINISHES ARE AS FOLLOWS:
 TYPE A
 STEEL POST TO RECEIVE GALVANIZED FINISH
 CAST ALUMINUM CAP AND RING TO REMAIN UNFINISHED
 TYPE B
 STEEL POST TO RECEIVE POWDER COATED PAINT FINISH
 CAST ALUMINUM CAP AND RING TO RECEIVE POWDER COATED PAINT FINISH

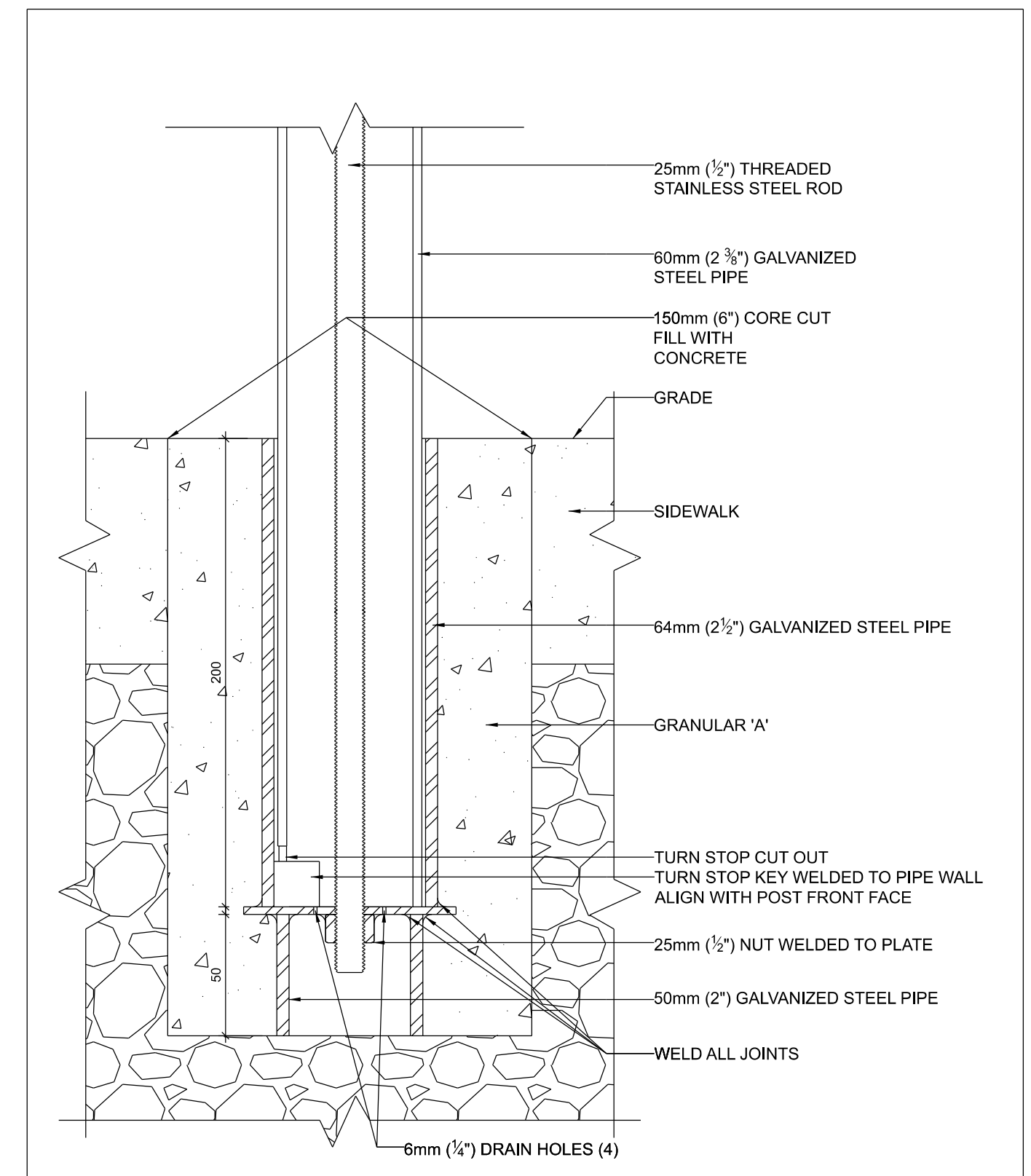
QUANTITIES OF EACH TYPE WILL BE SPECIFIED IN THE CONTRACT

N.T.S.



POST AND RING BIKE RACK

DATE: MARCH 2019
 REV. DATE: MARCH 2019
 DWG. No.: SF9



POST BASE SECTION DETAIL

N.T.S.



BIKE RACK SIDEWALK INSTALLATION

DATE: MARCH 2019
 REV. DATE: MARCH 2019
 DWG. No.: SF11

CLIENT / OWNER :



| | | | |
|---|-------------------|------------|----|
| 6 | | | |
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| | |
|--------------------------|--------------------------|
| DESIGNED BY / CONCUI PAR | CHECKED BY / VERIFIE PAR |
| M. Ruhland | M. Ruhland |
| DESIGN BY / DESSINE PAR | SCALE / ECHELLE |
| T. Frost | |

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PROJECT / LOCATION
**LANDRIC HOMES
 SEMIS & STACKED TOWN HOMES**

6001 - 6005 RENAUD ROAD
 OTTAWA, ONTARIO

DRAWING
DETAILS

PROJECT NO.
 21-1660

SHEET NO.
L-03

D07-12-21-0239