

SIMPSON DRIVE

IRRIGATION CLOCK

EXIST. ASPHALT

REBAR LAYOUT FOR NEW CONCRETE WORK (NTS)

DETAIL AT NEW AND EXISTING CONCRETE JOINT (NTS)

MEMORIAL GARDEN

CULINARY ARTS GARDEN

WAREHOUSE

FACILITIES/M&O OFFICES

HARDSCAPE PROJECT GENERAL NOTES

- SEE SPECIFIC SPECIFICATIONS FOR HARDSCAPE MATERIALS AND INSTALLATION PROCEDURES.
 - CONTRACTOR TO LOCATE AND PROTECT-IN-PLACE ALL UTILITIES IN AREAS TO BE BACKFILLED AND PREPARED FOR HARDSCAPE.
- ALL NEW CONCRETE TO BE SLOPED AWAY FROM ANY BUILDING STRUCTURES.
- ALL NEW CONCRETE TO BE INSTALLED TO PREVENT PONDING AT ANY SURFACES INCLUDING BUT NOT LIMITED TO JOINTS AT NEW AND EXISTING CONCRETE.
- WHERE POURING NEW CONCRETE ADJACENT TO EXISTING USE #4 x 12" REBAR EPOXIED INTO IMBEDS 6" DEEP 18" ON CENTER, NO CLOSER THAN 12" FROM EDGE OF NEW CONCRETE. (SEE DETAILS SHEET 2).
- WHERE NEW CONCRETE MEETS EXISTING CONCRETE AND WHERE POURED UP TO BUILDINGS USE 1/2" THICK NON-BITUMINOUS EXPANSION JOINTS.
- ALL AREAS RECEIVING CONCRETE OR DG SHALL BE BACKFILLED WITH NATIVE SOIL (ON SITE) IN 8" LOOSE LIFTS COMPACTED TO 95%.
- AREAS RECEIVING CONCRETE SHALL BE BACKFILLED TO A MAXIMUM HEIGHT THAT ALLOWS FOR 4" OF BASE MATERIAL COMPACTED TO A MINIMUM OF 95% AND 4" OF CONCRETE TO ACHIEVE REQUIRED FINISHED SURFACE ELEVATION.
- AREAS RECEIVING DG SHALL BE BACKFILLED TO A MAXIMUM HEIGHT THAT ALLOWS FOR 4" OF DG TO ACHIEVE REQUIRED FINISHED SURFACE ELEVATION COMPACTED TO A MIN. OF 95%.

LEGEND

- AREA TO REPLACE CONCRETE FROM NEW BLDG. FACE TO EXTENT OF CUT.
- AREA TO RECEIVE NEW CONCRETE
- AREA TO REMOVE AND REPLACE WITH NEW CONCRETE
- AREA TO RECEIVE DECOMPOSED GRANITE (DG)
- AREA TO RECEIVE 3/4" CRUSHED GRAVEL

SECTION 33 10 40
STABILIZED DECOMPOSED GRANITE SURFACING

PART 1 - GENERAL

1.1. SUMMARY

A. Section Includes:

- Grading
- Base Material
- Decomposed Granite (DG), crushed aggregate
- Forming/finishing
- Seed Control

1.2. ACTION SUBMITTALS

A. Product Data: Manufacturer's literature completely describing all components of the decomposed granite surfacing system, including:

- Preparation instructions and recommendations
- Installation methods and specific procedures
- Sample verification
- Submittals of each of the following:
 - Preparation samples of each color and color of decomposed granite surfacing material
 - Grading material, with type not less than 12 inches long
 - Seed control agent, 12 inches long with manufacturer's product details attached

1.3. QUALITY ASSURANCE

A. Manufacturer:

1. Manufacturer's Certificate of Approval (MCA) for the decomposed granite surfacing system

B. Contractor:

1. New to one of the following for the installation of all portions of the work associated with the decomposed granite surfacing system:

- Class "A" General Engineering Contractor
- Class "C" Concrete Contractor
- Class "C-2" Landscaping Contractor

2. Contractor must have a minimum of seven (7) years' experience in decomposed granite surfacing installation (including but not limited to):

- Grading and preparation of subgrade
- Placement and compaction of decomposed granite surfacing material
- Seed control application

3. Single Source Responsibility: Obtain each type of decomposed granite surfacing from single manufacturer.

4. Delivery, Storage, and Handling:

A. Request Materials:

1. Based on delivery of materials only in unopened and undamaged containers bearing the brand name and manufacturer's identification

B. Materials:

1. Each lot of decomposed granite surfacing material arriving at the job site in bulk shall be accompanied by delivery tickets containing the following information:

- Quantity
- Brand name and manufacturer's identification
- Seed name and manufacturer's identification

2. Protect decomposed granite surfacing materials from contamination and ready for installation.

Store under cover.

1.5. PRODUCT COMPLETION

A. Surface to receive decomposed granite surfacing shall be first free and true and all other foreign matter, which may impair the proper installation of the surfacing system.

B. The final finished surface of the decomposed granite surfacing shall be uniformly and accurately finished with standing water.

Perform work in dry weather unless a sufficiently stable base is properly prepared.

1.6. PRODUCTS

1.1. ACCEPTABLE MANUFACTURER

A. Manufacturer: "Proterra Stabilized" Decomposed Granite Surfacing System by the following:

1. 144 Mainway, 17000 Santa Monica Blvd., Santa Monica, CA 90405 Tel: (310) 310-1547 Fax: (310) 310-1547
2. Western Materials, 20000 Avenue Sherman, Unit 205, Valencia, CA 91355 (888) 864-9994

B. Substitutions: Permissible with prior approval of the Client's design representative.

1.2. STABILIZED DECOMPOSED GRANITE SURFACING MATERIAL

A. Decomposed Granite and Crushed Stone Aggregate:

1. DG shall have a 20% maximum gradation, produced from naturally flaked granite with enough fines to produce a smooth walking surface. Subgrade should be free from dry loess, organic matter, and deleterious material (leaves). Mix of coarse sand and rock dust are not acceptable
2. Use a single source for all materials (including fines)
3. Gravel: 1/4" maximum size, with 10% fines
4. Crushed Stone: 1/4" maximum size, with 10% fines

1.3. SEED CONTROL MATERIALS

A. Base Material:

1. 1/2" Green Rock, Inc. "Natural and Hard" or equivalent material
2. Base material shall be 100% recycled material
3. Base material shall be 100% recycled material

1.4. ACCESSORIES

A. Water:

1. Clean and potable, free from contaminants that would be deleterious to the decomposed granite surfacing.

B. Forming/finishing:

1. Where straight edges are required (around buildings) use 2x4 composite lumber spaced at a maximum of 2' on center (OC).

2. For pathways and outdoor seating areas use 4" composite lumber spaced at a maximum of 1' on center (OC).

3. Slates for forming/finishing shall be composite material a minimum of 1/4" thick. Slates shall be driven in by hand.

4. Slates shall be secured by wedging/finishing with coated deck screws (to prohibit rusting and decomposing).

5. New/used or composite landscape fabric.

6. Use of areas receiving decomposed granite.

7. Level seed control agent a minimum of 1/2 inches outside of edge/form boards.

1.5. EXECUTION

1.1. EXAMINATION

A. Examine area and conditions under which work of this section will be performed.

B. Work project site with facilities Engineer for layout of new items of equipment to accomplish a timely and proper completion of work.

C. Lay out work prior to the commencement of installation.

1.2. PREPARATION

A. Surface Preparation:

1. Areas to be replaced by building:
 - a) Shall be excavated to minimum 12" depth, with native soil (on site) used
 - b) Each 12" shall be backfilled with 1/2" loose lifts, compacted to 95%
 - c) Final lift of native soil shall be 1/2" loose lift, compacted to 95%
2. Pathways and Outdoor Seating Area:
 - a) Shall be excavated to minimum 12" depth, with native soil (on site) used
 - b) Each 12" shall be backfilled with 1/2" loose lifts, compacted to 95%
 - c) Final lift of native soil shall be 1/2" loose lift, compacted to 95%

1.3. INSTALLATION

A. Seed Control Fabric:

1. Seed Control Fabric to be set on top of base material.

2. Wet seed control fabric a minimum of 1/2 inches with water before laying out on areas receiving decomposed granite.

B. Forming/finishing:

1. Forming/finishing for DG adjacent to buildings shall be straight and true, installed parallel to building lines with 1/4" gap on all sides.

2. Slates shall be driven in to secure top of slates are even with top of forming/finishing.

3. Slates shall be secured by wedging/finishing with coated deck screws (to prohibit rusting and decomposing).

4. Slates shall be driven in to secure top of slates are even with top of forming/finishing.

5. Slates shall be secured by wedging/finishing with coated deck screws (to prohibit rusting and decomposing).

C. Base Material:

1. Areas to be replaced by building:

- a) Place the subgrade course aggregate free from ridges, depressions or hollows. Rake and compact to 1/2" loose lift
- b) Place the base material shall be high enough to allow for a 2% slope away from any portion of adjacent building for drainage to the decomposed granite

2. Pathways and Outdoor Seating Area:

- a) Place the subgrade course aggregate free from ridges, depressions or hollows. Rake and compact to 1/2" loose lift
- b) Place the base material shall be high enough to allow for a 2% slope away from any portion of adjacent building for drainage to the decomposed granite

3. Light spray surface area following compaction. Do not disturb aggregate surface with spray nozzle.

1.4. INSTALLATION OF DECOMPOSED GRANITE SURFACING

A. Spread decomposed granite surfacing material evenly and smoothly before compacting. Spread evenly.

B. Wet the mix to ensure water has penetrated the full depth of the decomposed granite surfacing material to top form surface. Smooth surface with across edge of 2x4 minimum. Compact each to minimum 95% density.

C. Grade and smooth to the required elevation, compact final lift with 2 ton drum roller or compactor.

D. Surface shall follow grades per plans. Remove crown, allow 1/2% crown pitch.

E. Compact surface shall be at least 2 inches and shall have depression or hollow greater than 1/4 inch in 10 feet.

1.5. INSTALLATION TO FINISHES

A. Subgrade Course plus or minus 1/2 inch.

B. Subgrade Course plus or minus 1/2 inch.

C. Decomposed Granite Surface: Smoothness: Produce a surface smoothness within 1/4 inch tolerance over 10 feet of length.

1.6. CLEANUP AND PROTECTION

A. Thoroughly clean all areas where work has occurred. Remove from site excess material, debris and rubbish.

B. Take all precautions necessary to protect completed work until Substantial Completion of project.

PRINTED SHEET SIZE = 30"x42"

PRINTED SCALE = 1/16" = 1' - 0"

SECTION 33 10 40
CONCRETE PAVING

PART 1 - GENERAL

1.1. SUMMARY

A. Section Includes:

- Provide concrete paving, both in new and existing areas, as indicated on the drawings
- Formwork, including all materials, labor, and equipment
- Formwork, including all materials, labor, and equipment
- Formwork, including all materials, labor, and equipment
- Formwork, including all materials, labor, and equipment

1.2. ACTION SUBMITTALS

A. Product Data: Manufacturer's specifications and installation instructions for each type of concrete paving material.

B. Contractor's Certificate of Approval (MCA) for the concrete paving system

C. Contractor's Certificate of Approval (MCA) for the concrete paving system

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