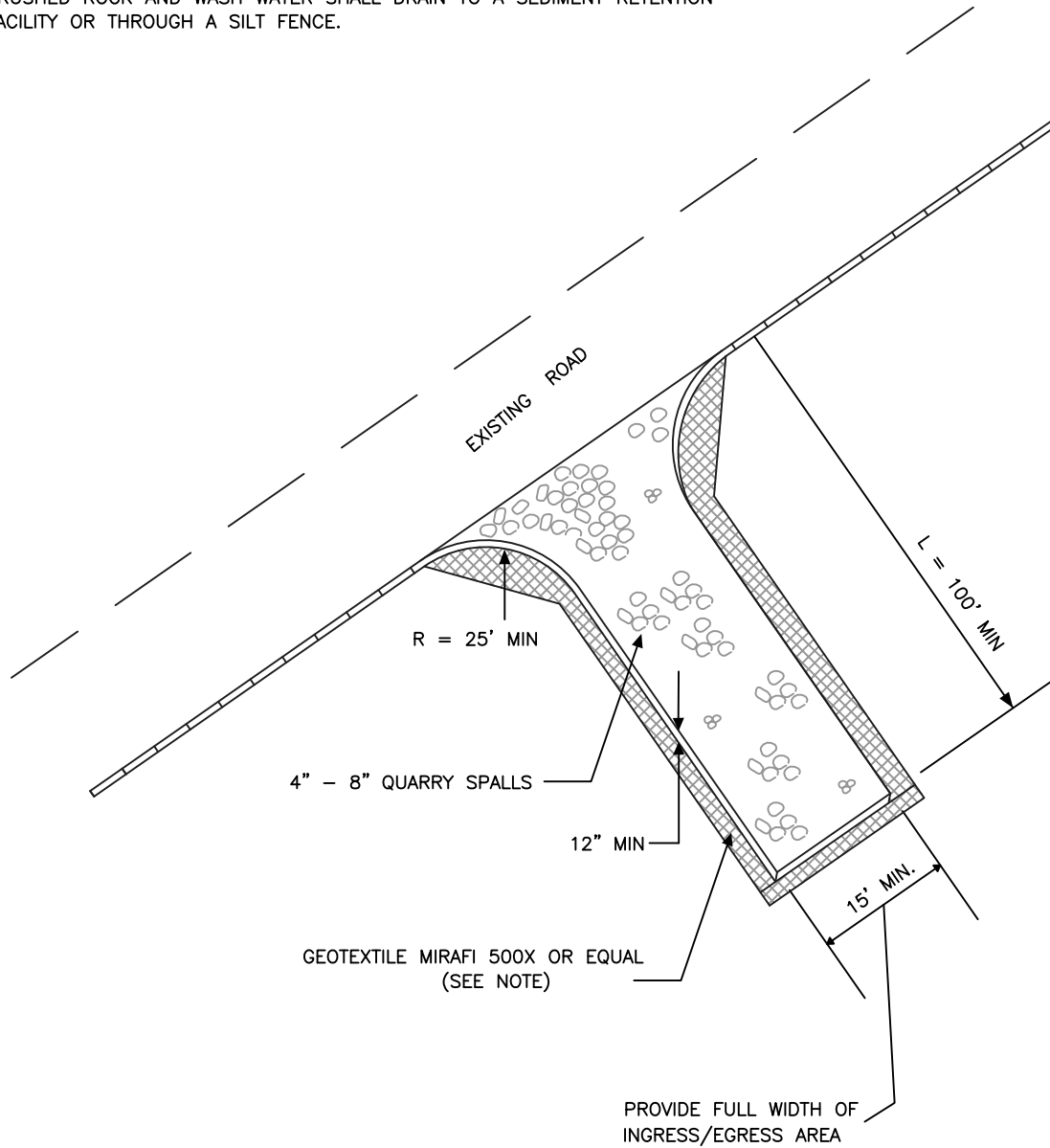


**NOTE:**

1. GEOTEXTILE MIRAFI 500 X OR APPROVED EQUAL SHALL BE PLACED UNDER THE ENTIRETY OF THE TEMPORARY ENTRANCE.
2. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
3. IF THE PAD DOES NOT ADEQUATELY REMOVE THE MUD FROM THE VEHICLE'S WHEELS, THE WHEELS SHALL BE HOSED OFF BEFORE THE VEHICLE ENTERS A PAVED STREET. THE WASHING SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT RETENTION FACILITY OR THROUGH A SILT FENCE.



# CITY OF PUYALLUP

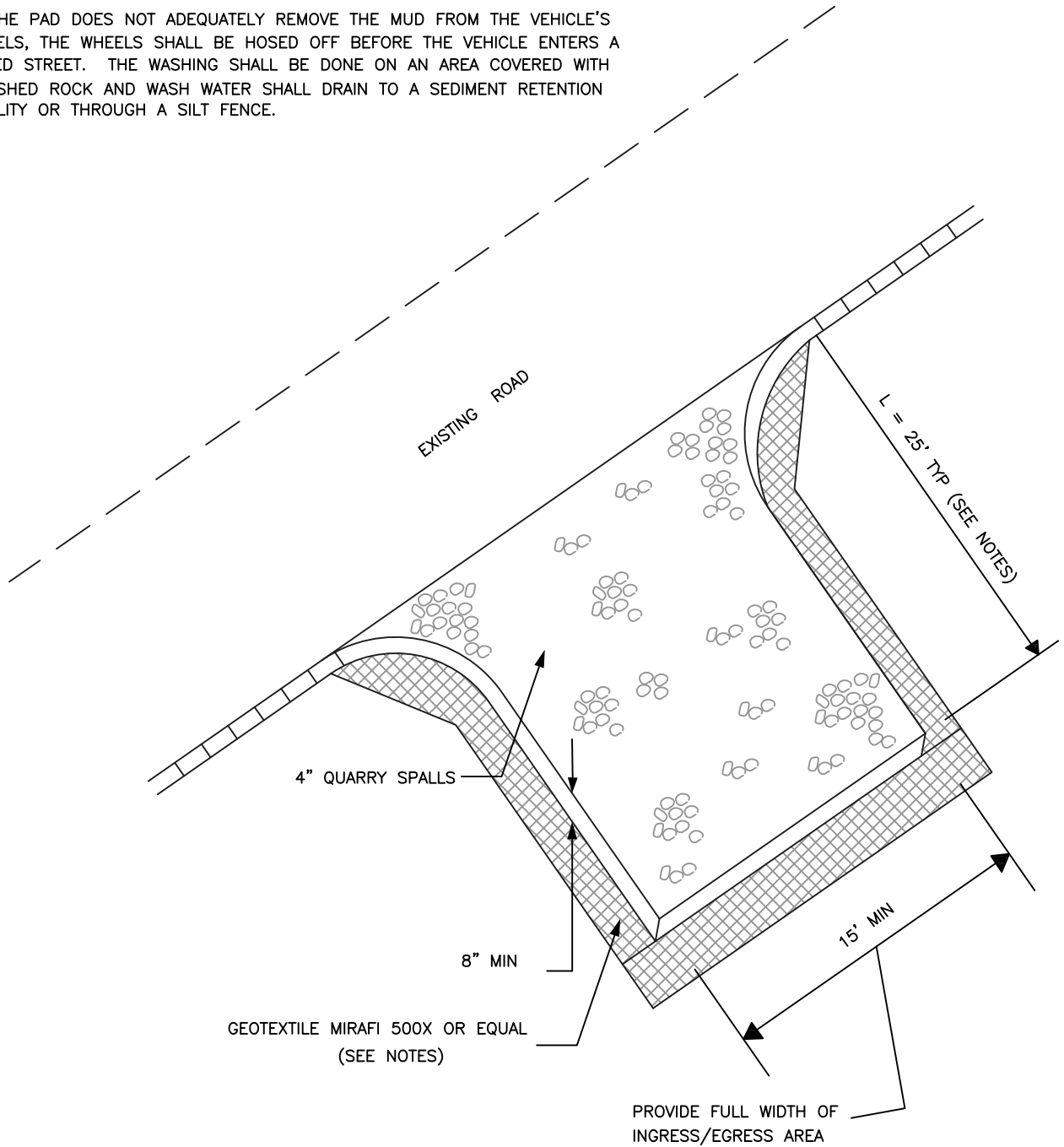
DEVELOPMENT ENGINEERING and  
PUBLIC WORKS DEPARTMENTS

## TEMPORARY CONSTRUCTION ENTRANCE

<small>DRAWN BY</small> JIM ERWIN-SVOBODA	<small>CHECKED BY</small> LINDA LIAN	<small>APPROVED BY</small> COLLEEN HARRIS	<small>REVISED BY</small> XXXX	<small>CITY STANDARD</small>  05.01.01
<small>FILE NAME</small> F:\DWG\COMMON\STDS\CITY\2009\05_GRD\05.01\05.01.01	<small>DATE APPROVED</small> 07/01/2009	<small>DATE REVISED</small> XX/XX/XX	<small>SCALE</small> 1:40	

NOTES:

1. ENTRANCE LENGTH AND WIDTH MAY VARY DEPENDING ON THE SITE.
2. CONTRACTOR SHALL PROVIDE SUFFICIENT ENTRANCE AREA FOR A MINIMUM OF TWO VEHICLES.
3. GEOTEXTILE MIRAFI 500 X OR APPROVED EQUAL SHALL BE PLACED UNDER THE ENTIRETY OF THE TEMPORARY ENTRANCE.
4. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
5. IF THE PAD DOES NOT ADEQUATELY REMOVE THE MUD FROM THE VEHICLE'S WHEELS, THE WHEELS SHALL BE HOSED OFF BEFORE THE VEHICLE ENTERS A PAVED STREET. THE WASHING SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT RETENTION FACILITY OR THROUGH A SILT FENCE.



# CITY OF PUYALLUP

DEVELOPMENT ENGINEERING and  
PUBLIC WORKS DEPARTMENTS

## TEMPORARY CONSTRUCTION ENTRANCE (RESIDENTIAL ONLY)

**DRAWN BY**  
JIM ERWIN-SVOBODA

**CHECKED BY**  
LINDA LIAN

**APPROVED BY**  
COLLEEN HARRIS

**REVISED BY**  
XXXX

**CITY  
STANDARD**

**FILE NAME**  
F:\DWG\COMMON\STDS\CITY\2009\05\_GRD\05.01\05.01.02

**DATE APPROVED**  
07/01/2009

**DATE REVISED**  
XX/XX/XX

**SCALE**  
1:10

**05.01.02**

1. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.
2. ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITEE.
3. THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
4. APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTORS, CHANNELS, OR RETENTION FACILITIES.
5. ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITEE BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.
6. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.
7. NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.



# CITY OF PUYALLUP

DEVELOPMENT ENGINEERING and  
PUBLIC WORKS DEPARTMENTS

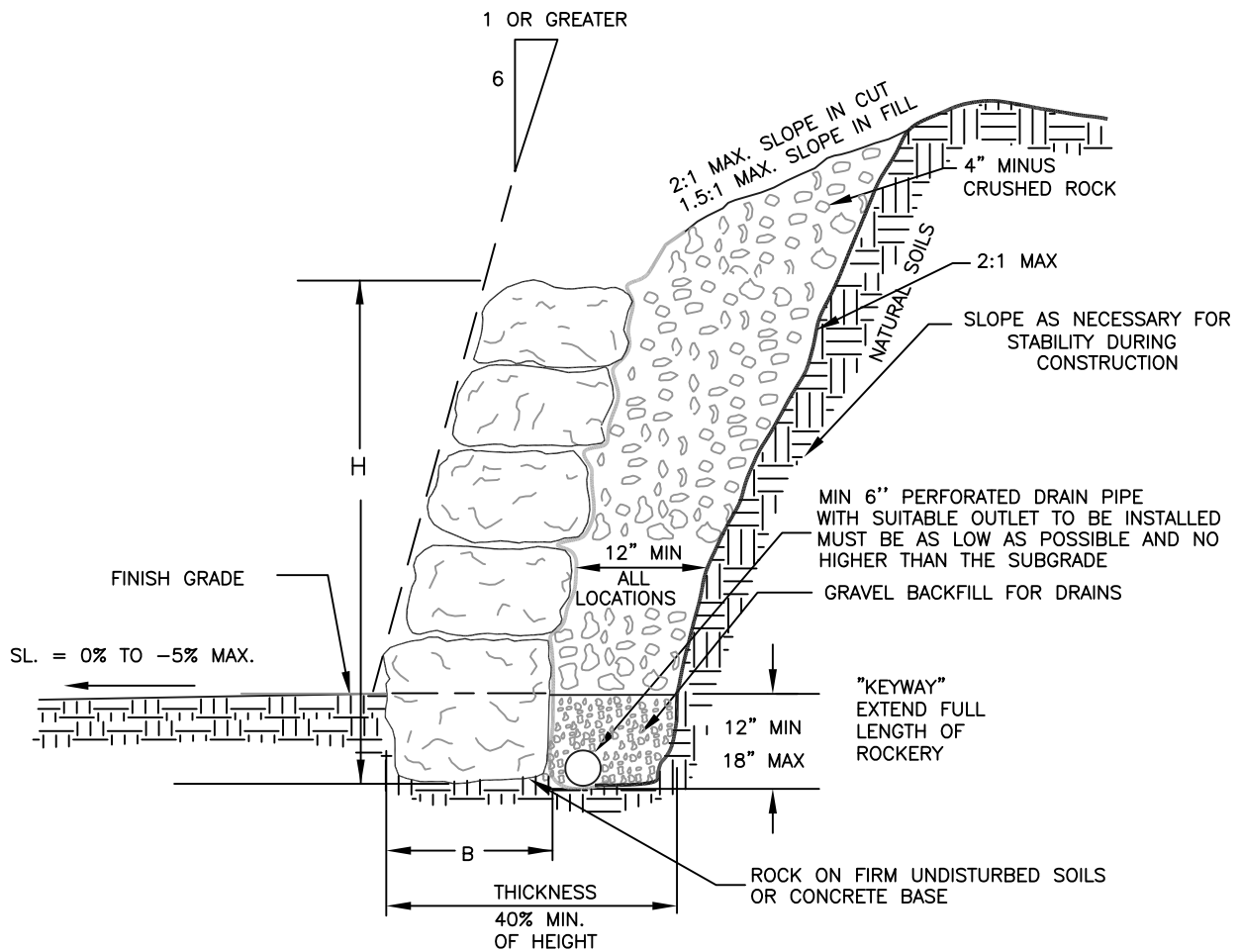
## GRADING, EROSION, AND SEDIMENTATION CONTROL NOTES

<i>DRAWN BY</i> JIM ERWIN-SVOBODA	<i>CHECKED BY</i> LINDA LIAN	<i>APPROVED BY</i> COLLEEN HARRIS	<i>REVISED BY</i> LINDA LIAN	<i>CITY STANDARD</i>
<i>FILE NAME</i> F:\DWG\COMMON\STDS\CITY\2009\05_GRD\05.01\05.02.01	<i>DATE APPROVED</i> 07/01/2009	<i>DATE REVISED</i> 11/18/2014	<i>SCALE</i> 1:1	<b>05.02.01</b>

ROCK WALL SECTION	MAXIMUM HEIGHT
FILL SECTION	4 FEET
CUT SECTION WITH LOOSELY COMPACTED SOILS	4 FEET

NOTE: ANY STRUCTURE 4' OR HIGHER REQUIRES A CITY OF PUYALLUP BUILDING PERMIT AND IS NOT COVERED BY THIS DETAIL.

ROCKERY HEIGHT(H) IN FEET	MIN. ROCK DIMENSION(B) IN FEET
0 - 4	1.5



# CITY OF PUYALLUP

DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

## ROCK RETAINING WALL

DRAWN BY  
JIM ERWIN-SVOBODA

CHECKED BY  
LINDA LIAN

APPROVED BY  
COLLEEN HARRIS

REVISED BY  
LINDA LIAN

CITY  
STANDARD

FILE NAME  
F:\DWG\COMMON\STD\SCITY\2009\05\_GRD\05.01\05.03.01

DATE APPROVED  
07/01/2009

DATE REVISED  
03/21/11

SCALE  
1:2

05.03.01

**MATERIALS**

**ROCK QUALITY:** ALL ROCK SHALL BE SOUND, UNWEATHERED, WEATHERING RESISTANT, ANGULAR LEDGE ROCK. THE LONGEST DIMENSION OF ANY INDIVIDUAL ROCK SHOULD NOT EXCEED THREE TIMES ITS SHORTEST DIMENSION. ACCEPTABILITY OF ROCK WILL BE DETERMINED BY LABORATORY TESTS AS HERINAFTER SPECIFIED, GEOLOGIC, EXAMINATION, AND HIDTORICAL USAGE RECORDS.

ALL ROCK DELIVERED TO AND INCORPORATED IN THE PROJECT SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS:

- A) ABSORPTION  
(CORPS OF ENGINEERS CRD-C 107) NOT MORE THAN 3.0%
- B) ACCELERATED EXPANSION (15 DAYS)  
(CDR-C-148) NOT MORE THAN 15.0%

**BREAKDOWN**

THE TEST SAMPLE WILL BE PREPARED AND TESTED IN ACCORDANCE WITH CORPS OF ENGINEERS TESTING PROCEDURE CRD-C-148 "METHOD OF TESTING STONE FOR EXPANSIVE BREAKDOWN ON SOAKING IN ETHYLENE GLYCOL." TEST REQUIREMENTS OF NOT MORE THAN 15% BREAKDOWN WILL BE COMPUTED BY DIVIDING THE NUMBER OF INDIVIDUAL PIECES OF INITIAL SAMPLE SUFFERING BREAKDOWN (THAT IS, SEPARATING INTO TWO OR MORE PIECES) BY THE TOTAL NUMBER OF INITIAL PIECES IN THE SAMPLE.

- C) SOUNDNESS  
(MgSO4 AT 5 CYCLES) NOT GREATER THAN 5% LOSS
- D) UNCONFINED COMPRESSIVE STRENGTH  
ASTM D 2166-66 (REAPPROVED 1979) INTACT STENGTH OF 14,500 OR GREATER

**FREQUENCY OF TESTING:** QUARRY SOURCES OF ROCKERY ROCK SHALL BEGIN A TESTING PROGRAM WHEN EITHER BECOMING A SUPPLIER OR WHEN A NEW AREA OF THE SOURCE PIT IS OPENED. THE TESTS DESCRIBED IN ROCK QUALITY SECTION SHALL BE PERFORMED EVERY FOUR THOUSAND (4000) TONS FOR THE FIRST TWELVE THOUSAND (12000) TONS OF MATERIAL BLASTED AND REMOVED TO ESTABLISH THAT SPECIFIC ROCK SOURCE. THE TESTS SHALL THEN BE PERFORMED ONCE A YEAR OR AT AN APPARENT CHANGE IN MATERIAL. IF PROBLEMS WITH A SPECIFIC AREA IN A PIT OR WITH A PARTICULAR MATERIAL ARE ENCOUNTERED, THE INITIAL TESTING CYLCE SHALL BE RESTARTED.

**ROCK DENSITY:** RECOGNIZING THAT NUMEROUS SOURCES OF ROCK EXIST, AND THAT THE NATURE OF ROCK WILL VARY NOT ONLY BETWEEN SOURCES BUT ALSO WITHIN EACH SOURCE, THE DENSITY OF ROCK SHALL RANGE BETWEEN ONE HUNDRED FIFTY-FIVE (155) AND ONE HUNDRED SIXTY-FIVE (165) PCF. TYPICALLY ROCKS USED FOR ROCKERY CONSTRUCTION SHALL BE SIZED APPROXIMATELY AS FOLLOWS:

<u>ROCK SIZE</u>	<u>ROCK WEIGHT</u>
SMALL ONE MAN	58
LARGE ONE MAN	210
SMALL TWO MAN	265
LARGE TWO MAN	580
SMALL THREE MAN	760
LARGE THREE MAN	1830
SMALL FOUR MAN	3000
LARGE FOUR MAN	4000
FIVE MAN	>5000
SIX MAN	>7000



# CITY OF PUYALLUP

DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

# ROCK RETAINING WALL NOTES

<small>DRAWN BY</small> JIM ERWIN-SVOBODA	<small>CHECKED BY</small> LINDA LIAN	<small>APPROVED BY</small> COLLEEN HARRIS	<small>REVISED BY</small> XXXX	<small>CITY STANDARD</small>
<small>FILE NAME</small> F:\DWG\COMMON\STDS\CITY\2009\05_GRD\05.01\05.03.02	<small>DATE APPROVED</small> 07/01/2009	<small>DATE REVISED</small> XX/XX/XX	<small>SCALE</small> 1:1	<b>05.03.02</b>

TWO AND ONE MAN ROCK, AND SOMETIMES SMALLER, ARE OFTEN USED TO FILL SURFACE GAPS ALONG THE TOP OF THE COMPLETED ROCKERY TO CREATE AN AESTHETICALLY PLEASING SURFACE. THIS IS AN ACCEPTABLE PRACTICE PROVIDED NONE OF THE EVENTS DESCRIBED IN CHANGES TO FINISHED PRODUCT SECTION OCCUR, AND THAT THE OWNER PREVENTS PEOPLE FROM CLIMBING OR WALKING ON THE COMPLETED ROCKERY.

SUBMITTALS: THE ROCK SOURCE SHALL PRESENT CURRENT, OR MOST RECENT, TEST DATA FOR THE TESTING DESCRIBED IN ROCK QUALITY SECTION ON REQUEST BY EITHER THE ROCKERY CONTRACTOR, THE CLIENT, OR THE APPLICABLE MUNICIPALITY.

3.01 ROCKERY CONSTRUCTION:

3.01.1 GENERAL: ROCKERY CONSTRUCTION IS A CRAFT AND DEPENDS LARGELY ON THE SKILL AND EXPERIENCE OF THE BUILDER. A ROCKERY IS A PROTECTIVE SYSTEM WHICH HELPS TO RETARD THE WEATHERING AND EROSION PROCESS ON AN EXPOSED CUT OR FILL SOIL FACE. WHILE BY ITS NATURE (THE MASS, SIZE, AND SHAPE OF THE ROCKS) IT WILL PROVIDE SOME DEGREE OF RETENTION, IT IS NOT A DESIGNED OR ENGINEERED SYSTEM IN THE SENSE A REINFORCED CONCRETE RETAINING WALL WOULD BE CONSIDERED DESIGNED OR ENGINEERED. THE DEGREE OF RETENTION ACHIEVED IS DEPENDANT ON THE SIZE OF ROCK USED; THAT IS, THE MASS OR WEIGHT, AND THE HEIGHT OF THE WALL BEING CONSTRUCTED. THE LARGER THE ROCK, THE MORE COMPETENT THE WALL.

3.01.2 GEOTECHNICAL ENGINEER: THE GEOTECHNICAL ENGINEER RETAINED TO PROVIDE NECESSARY SUPPLEMENTAL ROCKERY CONSTRUCTION GUIDELINES SHALL BE A PRACTICING GEOTECHNICAL/CIVIL ENGINEER LICENSED AS A PROFESSIONAL CIVIL ENGINEER IN THE STATE OF WASHINGTON WHO HAS AT LEAST FOUR YEARS OF PROFESSIONAL EMPLOYMENT AS A GEOTECHNICAL ENGINEER IN RESPONSIBLE CHARGE, INCLUDING EXPERIENCE WITH FILL CONSTRUCTION AND STABILITY AND ROCKERY CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHOULD BE HIRED EITHER BY THE ROCKERY CONTRACTOR OR THE CLIENT.

3.01.3 RESPONSIBILITY: THE ULTIMATE RESPONSIBILITY FOR ROCKERY "DESIGN" AND CONSTRUCTION SHOULD REMAIN WITH THE ROCKERY BUILDER. HOWEVER, ROCKERIES PROTECTING MODERATE TO THICK FILLS, WITH STEEP SLOPING SURFACES ABOVE OR BELOW THEM, WITH MULTIPLE STEPS, WITH FOUNDATIONS OR OTHER LOADS AFFECTING THEM, PROTECTING SANDY OR GRAVELLY SOILS SUBJECT TO RAVELING, WITH SEEPAGE OR WET CONDITIONS, OR THAT ARE MORE THAN EIGHT FEET IN HEIGHT, ALL REPRESENT SPECIAL CONDITIONS AND REQUIRE CONSULTATION AND/OR ADVICE FROM QUALIFIED EXPERTS.



**CITY OF  
PUYALLUP**

DEVELOPMENT ENGINEERING and  
PUBLIC WORKS DEPARTMENTS

**ROCK RETAINING WALL  
NOTES (CONT.)**

<small>DRAWN BY</small> JIM ERWIN-SVOBODA	<small>CHECKED BY</small> LINDA LIAN	<small>APPROVED BY</small> COLLEEN HARRIS	<small>REVISED BY</small> XXXX	<small>CITY STANDARD</small>
<small>FILE NAME</small> F:\DWG\COMMON\STDS\CITY\2009\05_GRD\05.01\05.03.03	<small>DATE APPROVED</small> 07/01/2009	<small>DATE REVISED</small> XX/XX/XX	<small>SCALE</small> 1:1	<b>05.03.03</b>

3.01.4 WORKMANSHIP: ALL WORKMANSHIP IS GUARANTEED BY THE ROCKERY CONTRACTOR AND ALL MATERIALS ARE GUARANTEED BY SUPPLYING QUARRY FOR A PERIOD OF SIX YEARS FROM DATE OF COMPLETION OF ERECTION, PROVIDING NO MODIFICATION OR CHANGES TO THE CONDITIONS EXISTING AT THE TIME OF COMPLETION ARE MADE.

3.01.5 CHANGES TO FINISHED PRODUCT: SUCH CHANGES INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, EXCAVATION OF DITCHES OR TRENCHES WITHIN A DISTANCE OF LESS THAN 1.5 TIMES THE ROCKERY HEIGHT MEASURED FROM THE TOE OF THE ROCKERY, REMOVAL OF ANY MATERIAL FROM THE SUBGRADE IN FRONT OF THE ROCKERY, EXCAVATION AND/OR REMOVAL OF MATERIAL FROM ANY LOCATION BEHIND THE ROCKERY WITHIN A DISTANCE AT LEAST EQUAL TO THE ROCKERY'S HEIGHT, THE ADDITION OF ANY SURCHARGE OR OTHER LOADS WITHIN A SIMILAR DISTANCE OF THE TOP OF THE ROCKERY, OR SURFACE OR SUBSURFACE WATER FORCED, DIRECTED, OR OTHERWISE CAUSED TO FLOW BEHIND THE ROCKERY IN ANY QUANTITY.

3.01.6 SLOPES: SLOPES ABOVE ROCKERIES SHOULD BE KEPT AS FLAT AS POSSIBLE, BUT SHOULD NOT EXCEED 2:1 (HORIZONTAL:VERTICAL) UNLESS THE ROCKERY IS DESIGNED SPECIFICALLY TO PROVIDE SOME RESTRAINT TO THE LOAD IMPOSED BY THE SLOPE. ANY SLOPE EXISTING ABOVE A COMPLETED ROCKERY SHOULD BE PROVIDED WITH A VEGETATIVE COVER BY THE OWNER TO HELP REDUCE THE POTENTIAL FOR SURFACE WATER FLOW INDUCED EROSION. IT SHOULD CONSIST OF A DEEP ROOTED, RAPID GROWTH VEGETATIVE MAT AND TYPICALLY WILL BE PLACED BY HYDROSEEDING AND COVERED WITH A MULCH.

IT IS OFTEN USEFUL TO OVERLAY THE SEED AND MULCH WITH EITHER PEGGED IN-PLACE JUTE MATTING, OR SOME OTHER FORM OF APPROVED GEOTECHNICAL FABRIC, TO HELP MAINTAIN THE SEED IN-PLACE UNTIL THE ROOT MAT HAS ANY OPPORTUNITY TO GERMINATE AND TAKE HOLD.

3.01.7 MONITORING: ON COMPLETION OF THE ROCKERY, THE GEOTECHNICAL ENGINEER SHALL SUBMIT TO THE CLIENT, THE ROCKERY CONTRACTOR, AND TO THE APPROPRIATE MUNICIPALITY, COPIES OF HIS ROCKERY EXAMINATION REPORTS ALONG WITH A FINAL REPORT SUMMARIZING ROCKERY CONSTRUCTION.

3.01.8 FILL COMPACTION: WHERE ROCKERIES ARE CONSTRUCTED IN FRONT OF A FILL, IT IS IMPERATIVE THAT THE OWNER ENSURE THE FILL BE PLACED AND COMPACTED IN A MANNER THAT WILL PROVIDE A COMPETENT FILL MASS. TO ACHIEVE THIS GOAL, ALL FILL SHOULD CONSIST OF RELATIVELY CLEAN, ORGANIC AND DEBRIS FREE, GRANULAR MATERIALS WITH A MAXIMUM SIZE OF FOUR INCHES. IDEALLY, BUT PARTICULARLY IF PLACEMENT AND COMPACTION IS TO TAKE PLACE DURING THE WET SEASON, THEY SHOULD CONTAIN NO MORE THAN FIVE PERCENT FINES (SILT AND CLAY SIZE PARTICLES PASSING THE NUMBER 200 MESH SIEVE).

ALL FILLS SHOULD BE PLACED IN THIN LIFTS NOT EXCEEDING TEN INCHES IN LOOSE THICKNESS. EACH LIFT SHOULD BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM TESTING METHOD D-1557-78 (MODIFIED PROCTOR), BEFORE ANY ADDITIONAL FILL IS PLACED AND COMPACTED. IN-PLACE DENSITY TESTS SHOULD BE PERFORMED AT RANDOM LOCATIONS WITHIN EACH LIFT OF THE FILL TO VERIFY THIS DEGREE OF COMPACTION IS BEING ACHIEVED.



# CITY OF PUYALLUP

DEVELOPMENT ENGINEERING and  
PUBLIC WORKS DEPARTMENTS

## ROCK RETAINING WALL NOTES (CONT.)

<small>DRAWN BY</small> JIM ERWIN-SVOBODA	<small>CHECKED BY</small> LINDA LIAN	<small>APPROVED BY</small> COLLEEN HARRIS	<small>REVISED BY</small> XXXX	<small>CITY STANDARD</small>
<small>FILE NAME</small> F:\DWG\COMMON\STDS\CITY\2009\05_GRD\05.01\05.03.04	<small>DATE APPROVED</small> 07/01/2009	<small>DATE REVISED</small> XX/XX/XX	<small>SCALE</small> 1:1	05.03.04



3.01.9 ROCK SELECTION: THE CONTRACTOR SHOULD HAVE SUFFICIENT SPACE AVAILABLE SO THAT HE CAN SELECT FROM AMONG A NUMBER OF STOCKPILED ROCKS FOR EACH SPACE IN THE ROCKERY TO BE FILLED. ROCKS WHICH HAVE SHAPES WHICH DO NOT MATCH THE SPACES OFFERED BY THE PREVIOUS COURSE OF ROCK SHOULD BE PLACED ELSEWHERE TO OBTAIN A BETTER FIT. ROCK SHOULD BE OF A GENERALLY CUBICAL, TABULAR OR SEMI-RECTANGULAR SHAPE. ANY ROCKS OF BASICALLY ROUNDED OR TETRAHEDRAL FROM SHOULD BE REJECTED OR USED FOR FILLING LARGE VOID SPACES.

SMALLER ROCKS (ONE TO TWO-MAN SIZE, OR SMALLER) ARE OFTEN USED TO CREATE AN AESTHETICALLY PLEASING "TOP EDGE" TO A ROCKERY. THIS IS ACCEPTABLE PROVIDED NONE OF THE EVENTS DESCRIBED IN SECTION 3.01.5 OCCUR, AND THAT PEOPLE ARE PREVENTED FROM CLIMBING OR WALKING ON THE FINISHED ROCKERY. THIS IS THE OWNER'S RESPONSIBILITY.

ROCK PLACEMENT: THE FIRST COURSE OF ROCK SHOULD BE PLACED ON FIRM UNYIELDING SOIL. THERE SHOULD BE FULL CONTACT BETWEEN THE ROCK AND SOIL, WHICH MAY REQUIRE SHAPING OF THE GROUND SURFACE OR SLAMMING OR DROPPING THE ROCKS INTO PLACE AND TAMP CRUSHED ROCK INTO THE SUBGRADE TO TIGHTEN IT UP. THE BOTTOM OF THE FIRST COURSE OF ROCK SHOULD BE MINIMUM OF TWELVE (12) INCHES BELOW THE LOWEST ADJACENT SITE GRADE.

AS THE ROCKERY IS CONSTRUCTED, THE ROCKS SHOULD BE PLACED SO THAT THERE ARE NO CONTINUOUS JOINT PLANES IN EITHER THE VERTICAL OR LATERAL DIRECTION. EACH ROCK SHOULD BEAR ON AT LEAST TWO ROCKS BELOW IT. ROCKS SHOULD BE PLACED SO THAT THERE IS SOME BEARING BETWEEN FLAT ROCK FACES RATHER THAN ON JOINTS. JOINTS BETWEEN COURSES SHOULD SLOPE DOWNWARD TOWARDS THE MATERIAL BEING PROTECTED (AWAY FROM THE FACE OF THE ROCKERY).

3.01.10 VOIDS: WHERE VOIDS OF GREATER THAN SIX INCHES IN DIMENSION EXIST IN THE FACE OF ROCKERY THEY SHOULD BE VISUALLY EXAMINED TO DETERMINE IF CONTACT BETWEEN THE ROCKS EXISTS WITHIN THE THICKNESS OF THE ROCKERY. IF CONTACT DOES EXIST, NO FURTHER ACTION IS REQUIRED. HOWEVER, IF THERE IS NO ROCK CONTACT WITHIN THE ROCKERY THICKNESS THE VOID SHOULD BE "CHINKED" WITH A SMALLER PIECE OF ROCK. IF A VOID OF GREATER THAN SIX INCHES EXISTS IN THE REAR FACE OF THE ROCKERY, IT SHOULD BE "CHINKED" WITH A SMALLER ROCK.

3.01.11 SURFACE DRAINAGE: IT IS THE OWNER'S RESPONSIBILITY TO INTERCEPT SURFACE DRAINAGE FROM ABOVE THE ROCKERY AND DIRECT IT AWAY FROM THE ROCKERY TO A POSITIVE AND PERMANENT DISCHARGE WELL BELOW AND BEYOND THE TOE OF THE WALL. USE OF OTHER DRAINAGE CONTROL MEASURES SHOULD BE DETERMINED ON A CASE-BY-CASE BASIS BY THE GEOTECHNICAL ENGINEER PRIOR TO BIDDING ON THE PROJECT.



# CITY OF PUYALLUP

DEVELOPMENT ENGINEERING and  
PUBLIC WORKS DEPARTMENTS

## ROCK RETAINING WALL NOTES (CONT.)

<small>DRAWN BY</small> JIM ERWIN-SVOBODA	<small>CHECKED BY</small> LINDA LIAN	<small>APPROVED BY</small> COLLEEN HARRIS	<small>REVISED BY</small> XXXX	<small>CITY STANDARD</small>
<small>FILE NAME</small> F:\DWG\COMMON\STDS\CITY\2009\05_GRD\05.01\05.03.05	<small>DATE APPROVED</small> 07/01/2009	<small>DATE REVISED</small> XX/XX/XX	<small>SCALE</small> 1:1	05.03.05