November 28, 2023

City of Calabasas Community Development,
Planning Division
ATTN:
Tom Bartlett, AICP, City Planner
100 Civic Center Way Calabasas, CA 91302

Cc: Jacob Lukiewski, M3 Civil Engineers
Geoff Sheldon, Architect, Topanga Architecture

Re: **RE: Supplemental Information for the November 16th Planning Commission Meeting**
Response To Questions and Comments from Commissioners
at the November 16, 2023, Planning Commission Meeting
and
Request for Distribution of
attached 3462 Lilac Trail,
Supplemental Civil Engineer Letter, dated November 22, 2023.

Dear Tom,

At the public hearing, before the Planning Commission on **November 16, 2023**, the Commission requested that we provide further information on the issues outlined in this Memo.

The Planning Commission requested that we work with the Planning Department to address outstanding questions raised by the Commission.

Our responses to the Commissions' questions about Hydrology issues, are provided herein in summary.

Per our recent discussions, please find attached the supplemental letter from our Civil Engineer dated November 22, 2023, regarding the hydrology and the retaining wall designed for the rear part of

the house.

As discussed, please forward the letter from our Engineer, to the Planning Commission for their consideration, prior to the Planning Commission meeting on December 7, 2023.

After plan review, by the Planning Commission; we plan to proceed with the more detailed construction plan, required to obtain building permits.

Please advise the Commissioners that, during the construction stage, we plan to utilize a specialized Waterproofing Contractor, for review of the Retaining Wall discussed herein, and other areas.

Please advise if we should provide the project Engineering and Geology plans and reports, to the Commissioners, for the December 7, 2023, Meeting, which were provided to the Planning Department, during the application process.

We wish to request time to participate in the upcoming December 7, 2023, Planning Commission Meeting; to provide our presentation and our responses to questions and comments by Commissioners.

Thank you very much.

Sincerely,

Norman Dornfest, CPA, MBA

President

Grand Eagle, Inc.

Attachment: 3462 Lilac Trail,
Supplemental Civil Engineer Letter, dated November 22, 2023.

M³ CIVIL

CONSULTING CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS

November 22, 2023
Work Order No. 19.33

Norman Dornfest
23371 Mulholland Drive, Suite 372
Woodland Hills, CA 91364

RE: Wall Sub-Drainage System
Proposed Single Family Residence, Attached Garage & ADU
3462 Lilac Trail, Calabasas, CA 91302

The intent of this document is to assist in clarifying a planning commissioner's question regarding retaining wall subdrainage / hydrostatic relief from the proposed structures at the subject site.

Geosystems' (soils engineer of record) July 19, 2023 report cites many recommendations to mitigate any potential sub-surface groundwater / seepage, uphill / behind the proposed retaining structures.

In addition to details "Plate RD-2", "Plate SD-1 and SD-2" (see attached hereto), the report has also included a potentially high ground water table (of 50-feet below grade) into their slope stability analysis.

In addition to the above noted Soils Engineer of Record recommendations, the Soils Engineer also cites the requirements for standard / regular waterproofing at the back of all subterranean portions of retaining walls. The requirement for waterproofing is also supported by both myself the Civil Engineer of Record and cited on the architectural plans as well.

On the basis of the above, the Site nor the design appears to require any special (non-regular) retaining wall waterproofing, back-drain, sub-drain, French-drain and/or other hydrostatic relief system. It is not a typical standard of industry to include specific waterproofing details on entitlement level plans for approval, however it is standard of industry to include them with construction level plans and specifications, which will be required at the building permitting approval stage of the development.

Limits and Liability
The evaluations, conclusions and recommendations submitted in this letter are based in part on our review of the site specific soils report. We have strived to provide our services in accordance with generally accepted engineering practices in this community at this time, but we make no warranty, either express or implied.

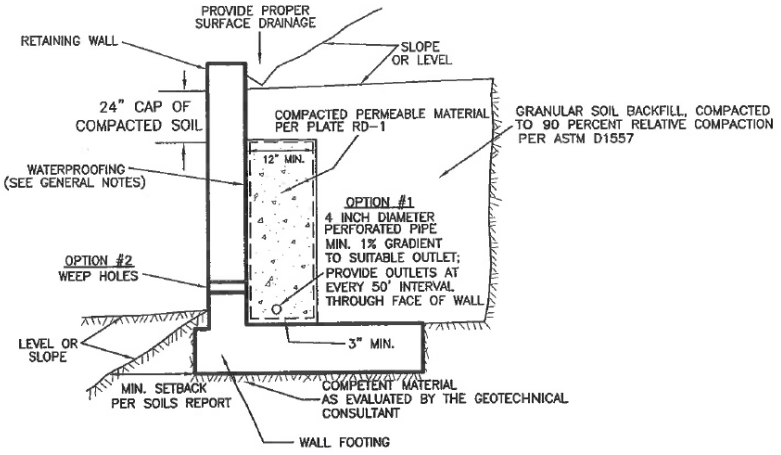
Respectfully Submitted,

Jacob G. Lukiewski, RCE 71534
Principal

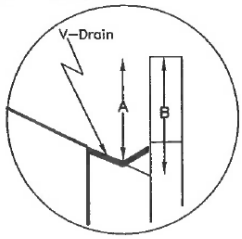
4000 CALLE TECATE, SUITE 108 • CAMARILLO, CA 93012
TELEPHONE (805) 445-4404 • FAX (805) 445-4401 • E-MAIL: JACOB@M3CIVIL.COM

UNCONFINED BACKFILL AND SUBDRAIN OPTIONS FOR RETAINING WALLS

(Space between back of wall and face of excavation is greater than 24–inches)



TYPICAL FREEBOARD DETAIL



* wall design (and height of freeboard) must take into account minimum 2% gradient of v–drain.

* height of freeboard equal to distance "A" (plus thickness of v–drain), not "B".

GENERAL NOTES:

*Retaining wall plans should be reviewed and approved by the geotechnical engineer.

*These details apply only to retaining walls not surcharged by adjacent structures or adverse geology. See text of report for specific backfill recommendations if these conditions exist.

*Walls over 12 feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements may be necessary (see text of report).

*Waterproofing should be provided where moisture intrusion through the wall is undesirable.

*Waterproofing of the walls is not under purview of the geotechnical engineer or geologist.

*All drains should have a gradient of 1 percent minimum.

*Outlet portion of the subdrain should have a 4–inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding) and must remain clear at all times.

*Other subdrain/backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

*Additional or revised backfilling and compaction procedures may be required by the local governing agency.

OPTION #1: Perforated Pipe

The following plastic subdrain pipes are acceptable. All pipe should be SDR35:

a. Acrylonitrile Butadiene Styrene (ABS): ASTM D2661, D2680 and D2751;
b. Polyvinyl Chloride (PVC): ASTM D2665, D2729, D3033 and D3034;
c. Polyethylene (PE): ASTM D2239, D3035 and F810.

Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120–degree arc in two rows at 3–inch on center (staggered).

OPTION #2: Weepholes

Weepholes should be 3–inch minimum diameter and provided at 10–foot maximum intervals. If exposure is permitted, weepholes should be located no more than 12–inches above finished grade. If exposure is not permitted, such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk discharging through the curb face or equivalent should be provided. For a basement–type wall, a perforated pipe subdrain system should be provided (see Option #1).

GRAVEL AND FILTER MATERIAL SPECIFICATIONS

1) All gravel or Class 2 Filter Material should be compacted at every 2–feet of vertical elevation rise using vibratory compaction equipment. All placement and compaction of backfill should be observed and verified by our field representative.

2) Gradation: Caltrans Class 2 Permeable Filter Material Gradation Per Caltrans Specifications

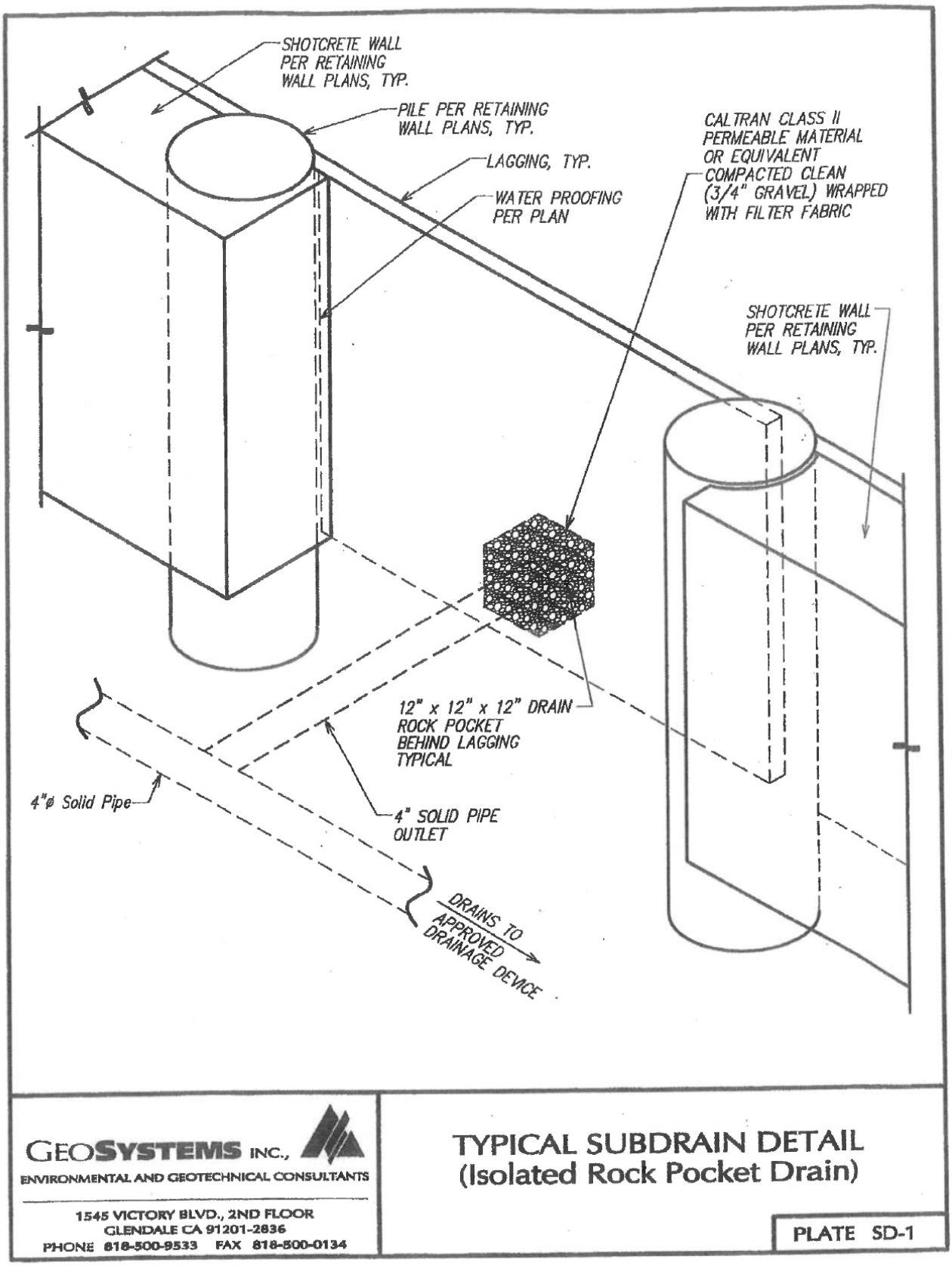
Sieve Size	Percent Passing
1"	100
3/4"	90–100
3/8"	40–100
No. 4	25–40
No. 8	18–33
No. 30	5–15
No. 50	0–7
No. 200	0–3

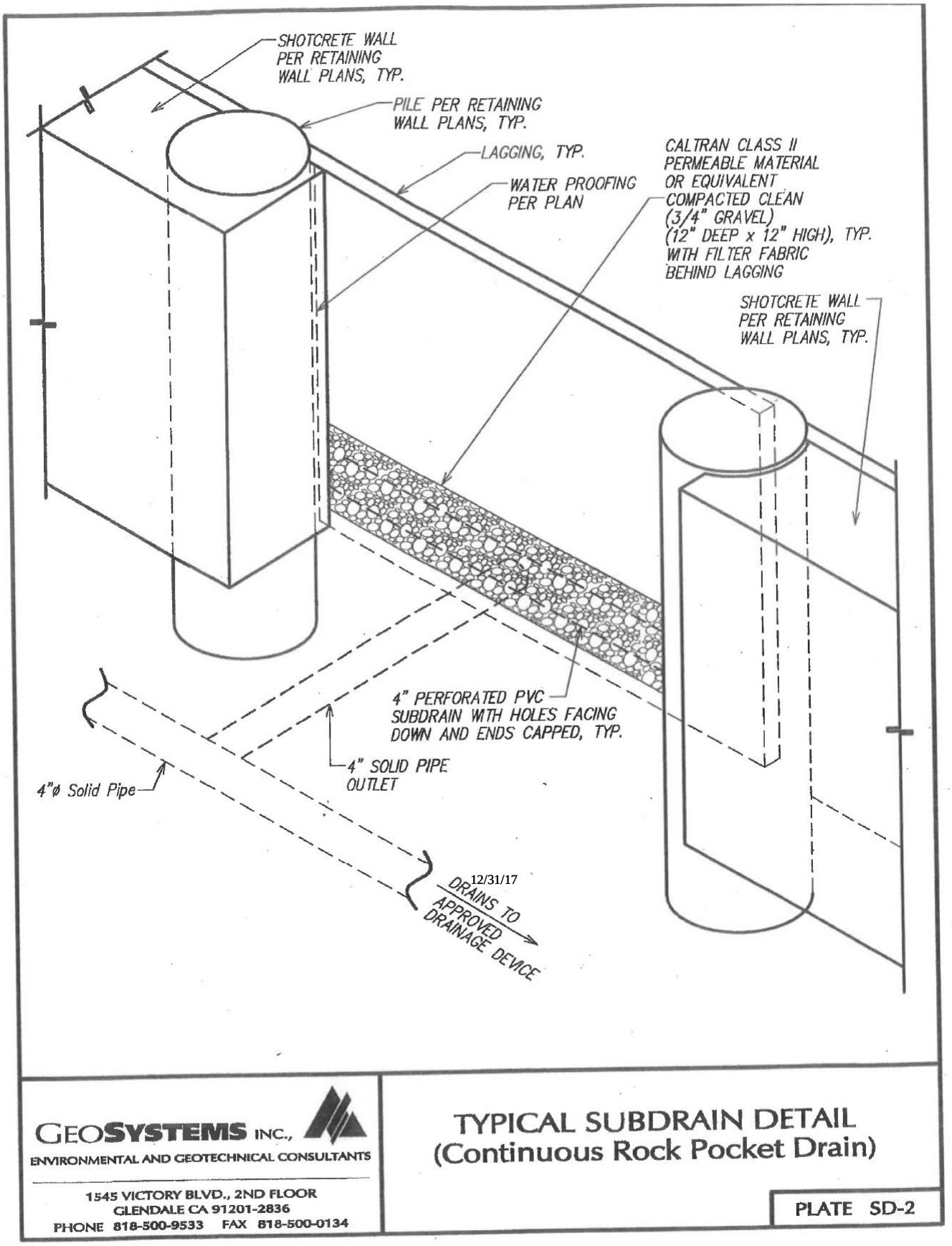
GEOSYSTEMS, INC.
ENVIRONMENTAL, ENGINEERING GEOLOGY AND GEOTECHNICAL ENGINEERING
1545 Victory Blvd., 2nd Floor, Glendale, CA 91201
PHONE 818-500-9533 FAX 818-500-0134

FREEBOARD DETAIL AND RETAINING WALL BACKFILL AND SUBDRAIN DETAIL FOR WALLS WITH BACKFILL WIDTH GREATER THAN 2' (UNCONFINED BACKFILL CONDITIONS)

PLATE RD-2

\\geoserv\company\Drawing Templates\RD–1 & RD–2 revised 12–13–18 r13.dwg


SHOTCRETE WALL PER RETAINING WALL PLANS, TYP.
PILE PER RETAINING WALL PLANS, TYP.
LAGGING, TYP.
WATER PROOFING PER PLAN
CALTRAN CLASS II PERMEABLE MATERIAL OR EQUIVALENT COMPACTED CLEAN (3/4" GRAVEL) WRAPPED WITH FILTER FABRIC
SHOTCRETE WALL PER RETAINING WALL PLANS, TYP.
12" x 12" x 12" DRAIN ROCK POCKET BEHIND LAGGING TYPICAL
4"ø Solid Pipe
4" SOLID PIPE OUTLET
DRAINS TO APPROVED DRAINAGE DEVICE
GEOSYSTEMS INC.,
ENVIRONMENTAL AND GEOTECHNICAL CONSULTANTS
1545 VICTORY BLVD., 2ND FLOOR
GLENDALE CA 91201-2836
PHONE 818-500-9533 FAX 818-500-0134
TYPICAL SUBDRAIN DETAIL
(Isolated Rock Pocket Drain)
PLATE SD-1


SHOTCRETE WALL PER RETAINING WALL PLANS, TYP.
PILE PER RETAINING WALL PLANS, TYP.
LAGGING, TYP.
WATER PROOFING PER PLAN
CALTRAN CLASS II PERMEABLE MATERIAL OR EQUIVALENT COMPACTED CLEAN (3/4" GRAVEL) (12" DEEP x 12" HIGH), TYP. WITH FILTER FABRIC BEHIND LAGGING
SHOTCRETE WALL PER RETAINING WALL PLANS, TYP.
4" PERFORATED PVC SUBDRAIN WITH HOLES FACING DOWN AND ENDS CAPPED, TYP.
4" SOLID PIPE OUTLET
4"ø Solid Pipe
12/31/17
DRAINS TO APPROVED DRAINAGE DEVICE
GEOSYSTEMS INC.,
ENVIRONMENTAL AND GEOTECHNICAL CONSULTANTS
1545 VICTORY BLVD., 2ND FLOOR
GLENDALE CA 91201-2836
PHONE 818-500-9533 FAX 818-500-0134
TYPICAL SUBDRAIN DETAIL
(Continuous Rock Pocket Drain)
PLATE SD-2