Claims:

1. A modular assembly for managing the flow of fluid beneath a ground surface, the assembly comprising:

a first precast concrete module comprising a first deck portion having a first top deck surface, opposing spaced-apart sidewalls integrally formed with and extending downward from opposing longitudinal sides of the first deck portion to respective bottom edges, and at least one open end, the opposing spaced-apart sidewalls sloping outward and away from one another as they extend downward from the first deck portion to the respective bottom edges;

at least one shoulder extending outward from at least one of the opposing spaced-apart first sidewalls; and

a link slab supported by the at least one shoulder and comprising a top slab surface being flush with the first top deck surface;

wherein:

the first deck portion and the opposing spaced-apart sidewalls define an interior fluid passageway with respect to the first module, the interior fluid passageway having a top portion adjacent an underside of the first deck portion and a bottom portion adjacent the respective bottom edges of the opposing sidewalls, the interior fluid passageway having a flared configuration which widens as it extends from the top portion to the bottom portion; and

the interior fluid passageway defines a longitudinal flow path.

2. The assembly of claim 1 further comprising at least one seat extending inward from the opposing spaced-apart sidewalls.

3. The assembly of claim 1, wherein the opposing spaced-apart sidewalls each comprise at least one lateral opening therethrough, the at least one lateral opening defining a lateral fluid channel that is in fluid communication with the interior fluid passageway, the lateral fluid channel defining a lateral flow path through the assembly.

4. The assembly of claim 3, wherein the at least one lateral opening is located adjacent the respective bottom edges of the opposing sidewalls.

5. The assembly of claim 3, wherein the at least one lateral opening is elevated from the respective bottom edges of the opposing sidewalls.

6. The assembly of claim 1 further comprising:

a second precast concrete module comprising a second deck portion having a second top deck surface and a first sidewall integrally formed with and extending downward from a first longitudinal side of the second deck portion to a bottom edge;

at least one shoulder extending outward from the first sidewall of the second module;

wherein:

the first sidewall of the second precast concrete module is laterally adjacent to a first sidewall of the opposing spaced-apart sidewalls of the first precast concrete module;

the link slab and the first sidewalls of the first and second modules define an exterior passageway between the first module and the second module;

the exterior fluid passageway defines a second longitudinal flow path;

the exterior passageway is in fluid communication with the lateral fluid channel and the internal fluid passageway; and

the link slab is supported by the second module with the top slab surface being flush with the first and second top deck surfaces.

7. The assembly of claim 6, wherein the exterior fluid passageway has a top portion adjacent an underside of the link slab and a bottom portion adjacent the respective bottom edge of the first sidewalls of the first and second module, the exterior

fluid passageway having a tapered configuration which narrows as it extends from the top portion to the bottom portion.

8. The assembly of claim 1 further comprising a leg integrally formed with and extending downward from the link slab.

9. A modular assembly for managing the flow of fluid beneath a ground surface, the assembly comprising:

a plurality of precast concrete modules each comprising a deck portion comprising a top deck surface, opposing spaced-apart sidewalls integrally formed with and extending downward from opposing longitudinal side edges of the deck portion to respective bottom edges, at least one open end, and at least one shoulder extending outward from the opposing spaced-apart sidewalls, the opposing spaced-apart sidewalls sloping outward and away from one another as they extend downward from the first deck portion to the respective bottom edges;

a plurality of link slabs each supported by the at least one shoulder and comprising a top slab surface;

an inlet port; and

an outlet port;

wherein:

each module comprises an interior fluid passageway, which defines a longitudinal flow path, the interior fluid passageway being defined by an underside of the deck portion and an interior surface of the opposing spaced-apart sidewalls, the interior fluid passageway having a top portion adjacent the underside of the deck portion and a bottom portion adjacent the respective bottom edges of the opposing sidewalls, the interior fluid passageway having a flared configuration which widens as it extends from the top portion to the bottom portion;

at least some of the modules comprising a lateral fluid passageway which defines a lateral flow path, the lateral fluid passageway being defined by lateral openings extending through the opposing sidewalls of

the at least some of the modules, the lateral fluid passageway being in fluid commination with the interior fluid passageway;

a first predefined number of the plurality of modules arranged side-by-side to form at least one row in a lateral direction; and

a second predefined number of the plurality of modules arranged end-to-end to form at least one column in a longitudinal direction.

10. The assembly of claim 9, wherein the outlet port is smaller than the inlet port.

11. The assembly of claim 9, wherein the inlet port is located in the deck portion of at least one of the plurality of modules.

12. The assembly of claim 9, wherein the outlet port is located in a floor defined by the assembly.

13. The assembly of claim 9 further comprising:

an outer perimeter comprising a plurality of perimeter precast concrete modules and a perimeter wall;

wherein:

each perimeter module comprises a solid external sidewall and an external open end; and

the perimeter wall at least partially encloses the external open end of each perimeter module.

14. The assembly of claim 9 wherein the plurality of precast concrete modules is comprised of a hollow core material and prestressed concrete.

15. A method for making a precast concrete module for use in a modular assembly for managing the flow of water beneath a ground surface, the method comprising the steps of:

positioning a bulkhead along a central longitudinal axis defined by a lower portion of a mold, the bulkhead comprising at least two side portions, each side portion defining a bulkhead notched section that defines a seat void to form at least one seat of the module;

rotating at least two opposing arms comprising at least two distal ends to a first position;

supporting a lid on the at least two distal ends;

engaging the at least two opposing arms against the lid;

introducing concrete into a void defined by the bulkhead and the mold;

allowing the concrete to harden;

rotating the at least two opposing arms to a second position; and

separating a formed module from the mold.

16. The method of claim 15, wherein the at least two opposing arms define at least one arm notched section that defines at least one shoulder void to form at least one shoulder of the module.

17. The method of claim 16, wherein the at least one arm notched section is aligned with at least one bulkhead notched section defined by at least two side portions of the bulkhead.

18. The method of claim 15, wherein the at least two opposing arms are hingedly secured to the lower portion.

19. The method of claim 15, wherein the step of engaging the at least two opposing arms against the lid comprises engaging the at least two opposing arms against the lid with a fastening device and securing the at least two opposing arms with a plurality of latches.

20. The method of claim 19, wherein the step of rotating the at least two opposing arms to a second position further comprises the step of unfastening the

fastening device and releasing the at least two opposing arms from the plurality of latches.