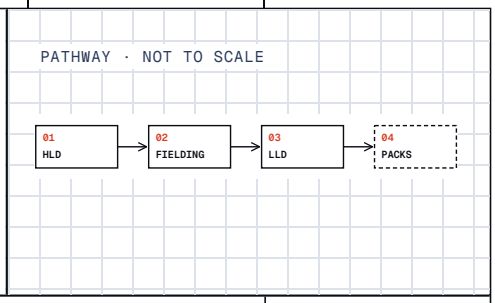
LAYERSPEC · FIBER · DESIGN GATES

HLD and LLD deliverable checklist

Use this sheet for sign-off at three gates of a fiber design: HLD, fielding return, and LLD issue.



PROJECT	GATE	REVIEWER	DATE
	☐ HLD ☐ FIELDING ☐ LLD		

01 HLD sign-off — 12 ITEMS

- [ ] Client spec and spec version are named on the cover sheet
- [ ] Every location in scope is served and counted
- [ ] Topology and PON or active Ethernet architecture are stated
- [ ] Split strategy is defined for each serving area
- [ ] Fiber counts and cable sizes are set by tier
- [ ] Spare fiber per tier is stated
- [ ] Hub, OLT, cabinet, and interconnection locations are marked
- [ ] Preliminary BOM and cost estimate are marked preliminary
- [ ] Route alternatives are included only if ordered and priced
- [ ] Assumptions list covers pole condition, conduit, crossings, and QL-D records-only underground data
- [ ] Naming conventions, coordinate reference system, and GIS attribute schema are fixed
- [ ] Change path for field findings is agreed

02 Fielding return — 6 ITEMS

- [ ] Record and photos exist for every pole and structure on the route
- [ ] Pole owner, ID, height, class, attachments, spans, and clearances are logged
- [ ] Underground conflicts and crossings are logged with data quality level
- [ ] Each broken HLD assumption is flagged against the HLD
- [ ] Base map is built from survey data
- [ ] Files are delivered in the agreed format and coordinate system

03 LLD issue — 12 ITEMS

- [ ] Every reroute is logged against the HLD with its reason
- [ ] Pole, vault, and handhole placement is final
- [ ] Fiber and port assignment is traced from OLT port to terminal
- [ ] Splice schedule matches assignment, closure by closure
- [ ] Slack loop locations are marked
- [ ] Ground rod locations are marked
- [ ] Optical loss budget is run on real lengths, splices, and connectors
- [ ] Loss budget sits inside the optic class, 28 dB for GPON Class B+
- [ ] Procurement-level BOM ties to the design
- [ ] GIS design files open with complete attributes
- [ ] CAD is supplied where the client requires it
- [ ] QC record is complete and design freeze status is stated

04 Scope boundary — 6 ITEMS

Confirm who owns each of these, often bought as separate services.

- [ ] Construction packs, including conduit and bore profiles
- [ ] Permit drawings and permitting
- [ ] Make-ready design
- [ ] Traffic control plans
- [ ] As-builts
- [ ] PE stamp, only where a permit or construction pack needs one

NOTES

Stage names follow the FBA Building Better Broadband pathway. This sheet is informational, not engineering advice.

layer-spec.com/tools/hld-lld-deliverable-checklist/

LayerSpec

SHEET TITLE	
HLD / LLD DELIVERABLE CHECKLIST	
DWG NO. LS-T-02	REV A · 2026-11
SIZE A4	SHEET 1 OF 1