where $I(d) = I \otimes_{\mathcal{O}} \mathcal{O}(d)$ and the maps in this sequence are

$$\eta \longrightarrow \eta G \oplus -\eta F, \qquad \eta \in \mathcal{O}(r),$$
$$\zeta \oplus \psi \longrightarrow F\zeta + G\psi, \qquad \zeta \in \mathcal{O}(k),\ \psi \in \mathcal{O}(\ell),$$

where F, G are considered as global sections of $\mathcal{O}(m)$, $\mathcal{O}(n)$, respectively.

Γ

By the proof on P660, since f & g have no common component by assumption, $\{f, g\}$ is a regular sequence, and so I is a sheaf of regular ideals.
Consider the following sequence

$$0 \longrightarrow \mathcal{O}(rH) \longrightarrow \mathcal{O}(kH) \oplus \mathcal{O}(\ell H) \longrightarrow I(F,G) \otimes \mathcal{O}(dH) \to 0$$
$$\eta \longmapsto (\eta\, \sigma_G\ ,\ -\eta\, \sigma_F)$$
$$(\zeta,\ \psi) \longmapsto \sigma_F \zeta + \sigma_G \psi$$

σ_F, σ_G are global sections of $\mathcal{O}(mH)$, $\mathcal{O}(nH)$ respectively.
Note

$$\begin{tikzcd} {[mH]|_U} \arrow[r] \arrow[d] & U \times \mathbb{C} \arrow[dl] \\ U & \end{tikzcd}$$

$\Rightarrow \sigma_F|_U \longleftrightarrow F : U \longrightarrow \mathbb{C}$
$\Rightarrow (\sigma_F)_x \longleftrightarrow F_x \in \mathcal{O}_x.$

Similary for $[nH]$. $(\sigma_G)_x \longleftrightarrow G_x \in \mathcal{O}_x.$